

# **NIMS GUIDE TO THE G29 ORBIT**

**Original: November 2000**

**Revised: October 2001**

**VERSION DATE: 011031**

**G29 Encounter starts 12/26/00,**

**G29 Playback starts 02/05/01**

## Foreword to the Revised Edition

This document was originally published by the NIMS team as a preview to data acquisition for one orbit. It has been revised and corrected after data receipt and systematic processing for inclusion on the CD-ROMs containing NIMS Experimental Data Records (EDRs) and Systematic Data Products (Cubes). It is also available on the NIMS website in both PostScript (PS) and Portable Document Format (PDF) form. Some material in the original document has been omitted, and a chapter added describing the data actually returned.

The aim of this guide is to provide detailed information on the various NIMS observations and calibrations. Also included in this document is background information on the orbit. A brief overview of the guide is given below. Please refer to the beginning of each chapter for a detailed list of contents.

Chapter 1 gives a brief introduction to the orbit. Chapter 2 gives an overview and summarizes the NIMS science objectives using tables, spreadsheets and timelines. Chapter 3 contains diagrams of various aspects of spacecraft geometry. Chapter 4 summarizes the NIMS observations in terms of a comprehensive sequence summary and a NIMS Observation Table (Obstab). Chapter 5 is a collection of the Detailed Observation Designs made up of OAPEL forms and POINTER plots. Chapter 6 contains plots of the NIMS wavelength edit tables used. Chapter 7 summarizes the NIMS data return from the orbit.

For more information, please refer to the Galileo Orbit Planning Guide (OPG) and the Galileo Orbit Activity Plan (OAP) for this orbit. Both of these documents are produced by the Galileo Project.

For more information on the NIMS instrument, please refer to the NIMS instrument paper: R.W. Carlson, P.R. Weissman, W.D. Smythe, J.C. Mahoney and the NIMS Science and Engineering Teams, "Near-infrared Mapping Spectrometer Experiment on Galileo", Space Science Reviews, Vol 60, pp 457-502, 1992.

## Acknowledgements

The NIMS observations in this guide were designed by the NIMS Science Coordinators: Kevin Baines, John Hui, Rosaly Lopes-Gautier, Adriana Ocampo and Marcia Segura. Materials were also provided by Elias Barbinis, Paul Herrera, Bob Mehlman, Jim Shirley, Al Stevenson and Bill Smythe. Some figures and plots produced by various members of the Galileo Project were incorporated into this guide. Frank Leader provided some materials and edited the guide under the direction of Bob Mehlman and Bill Smythe.

## Foreword

This document serves as a guide to the G29 Orbit for the NIMS Team. The aim of this guide is to provide detailed information on the various NIMS G29 observations and calibrations. Also included in this document is background information on the G29 orbit. This guide was produced before the start of the G29 orbit. After analysis of the NIMS G29 data is complete, it will be revised and corrected. A brief overview of the guide is given below. Please refer to the beginning of each chapter for a detailed list of contents.

Chapter 1 gives a brief introduction to the G29 orbit. Chapter 2 gives an overview of the G29 orbit and summarizes the NIMS science objectives for the G29 orbit using tables, spreadsheets and timelines. Chapter 3 contains diagrams of various aspects of spacecraft geometry for the G29 orbit. Chapter 4 summarizes the NIMS G29 observations in terms of a comprehensive sequence summary and a NIMS Observation Table (Obstab). Chapter 5 is a collection of the Detailed Observation Designs made up of OAPEL forms and POINTER plots. Chapter 6 contains plots of the NIMS wavelength edit tables used during the G29 orbit.

For more information on the G29 orbit, please refer to the Galileo Orbit Planning guide and the Galileo Orbit Activity Plan for the G29 Orbit. Both of these documents are produced by the Galileo Project.

For more information on the NIMS instrument, please refer to the NIMS instrument paper: R.W. Carlson, P.R. Weissman, W.D. Smythe, J.C. Mahoney and the NIMS Science and Engineering Teams, "Near-infrared Mapping Spectrometer Experiment on Galileo", Space Science Reviews, Vol 60, pp 457-502, 1992.

## Table of Contents

|     | Chapter                            | Page |
|-----|------------------------------------|------|
| 1.0 | Introduction .....                 | 1-01 |
| 2.0 | Orbit Overview .....               | 2-01 |
| 3.0 | Orbit Geometries .....             | 3-01 |
| 4.0 | Sequence Summary .....             | 4-01 |
| 5.0 | Detailed Observation Designs ..... | 5-01 |
| 6.0 | Edit Tables .....                  | 6-01 |
| 7.0 | Data Return .....                  | 7-01 |

# Chapter 1 - Introduction

## Contents

|     | Sub-Section                          | Page |
|-----|--------------------------------------|------|
| 1.0 | Contents .....                       | 1    |
| 1.1 | Introduction .....                   | 2    |
| 1.2 | G29A Overview Timeline, Part 1 ..... | 3    |
| 1.3 | G29A Overview Timeline, Part 2 ..... | 4    |
| 1.4 | G29B Overview Timeline .....         | 5    |
| 1.5 | G29C Overview Timeline, Part 1 ..... | 6    |
| 1.6 | G29C Overview Timeline, Part 2 ..... | 7    |
| 1.7 | G29D Overview Timeline .....         | 8    |
| 1.8 | G29 Major Events list .....          | 9-10 |

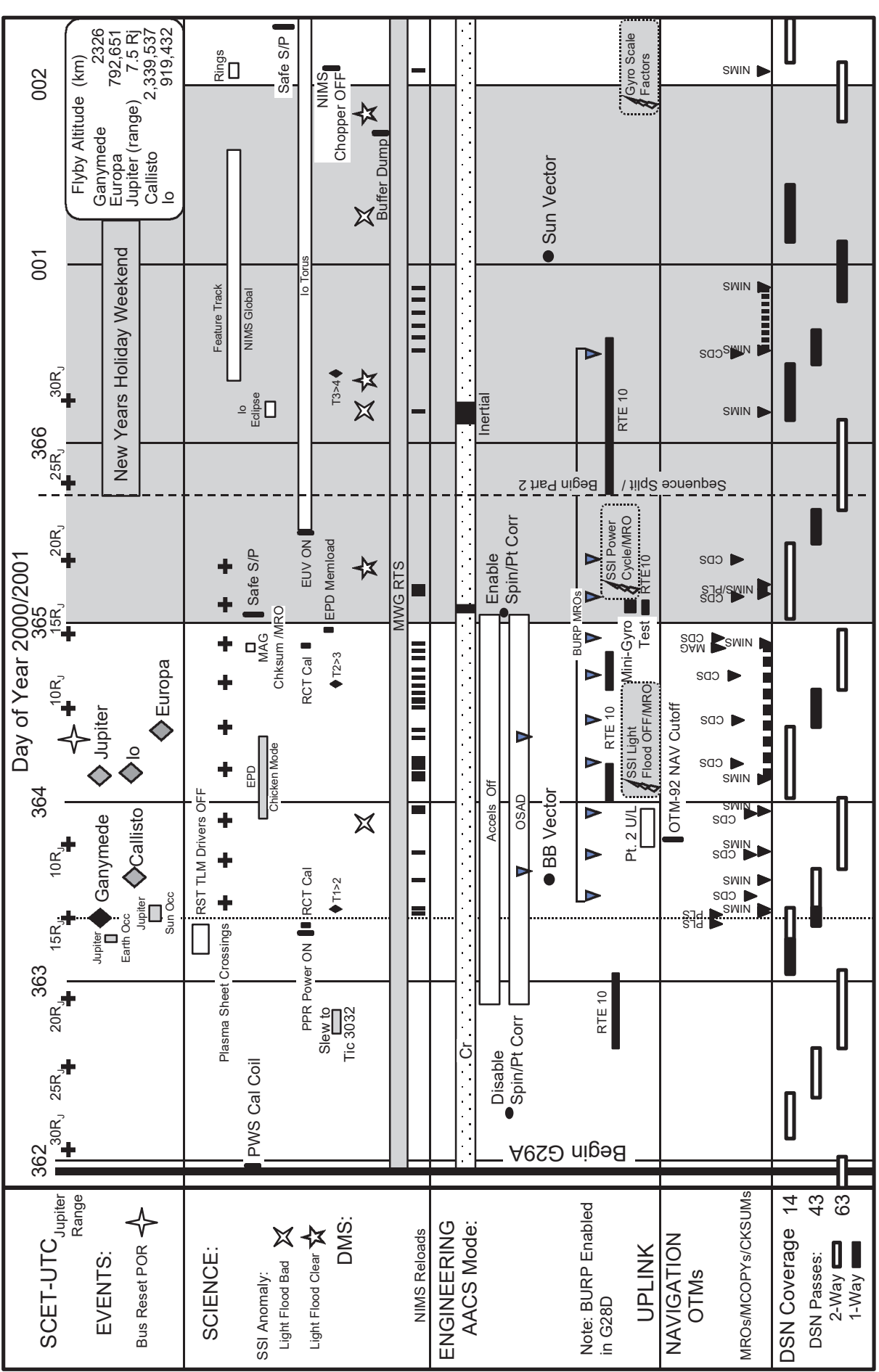
## Introduction

This G29 orbit is the twenty-ninth of twenty-nine orbits in Galileo's Tour of the Jovian system and the third orbit in the Galileo Millennium Mission (GMM). G29 is a Ganymede Flyby.

There are 36 autonomous reloads of the NIMS RAM code from CDS planned during the G29A encounter period, one just before each science observation. These reloads are in response to the on-going flight-anomalies where the NIMS RAM code takes some bit hits and halts the instrument during when the spacecraft is close to Jupiter. NIMS personnel will monitor the NIMS engineering telemetry data on a regular schedule to track the instrument's status.

The G29 orbit is divided into 4 sequence loads: one Encounter Load (G29A) and three Orbital Cruise Loads (G29B, G29C and G29D). The G29A load begins on D361 (12/26/00) and ends on D036 (02/05/01). This load contains the flyby of Ganymede. The Cruise Loads G29B, G29C and G29D run from D036 to D142. Playback of the recorded data takes place during the Cruise phase, G29B, G29C and G29D. A high-level overview timeline of the G29 orbit can be found on the following eight pages.

# G29A Encounter Overview

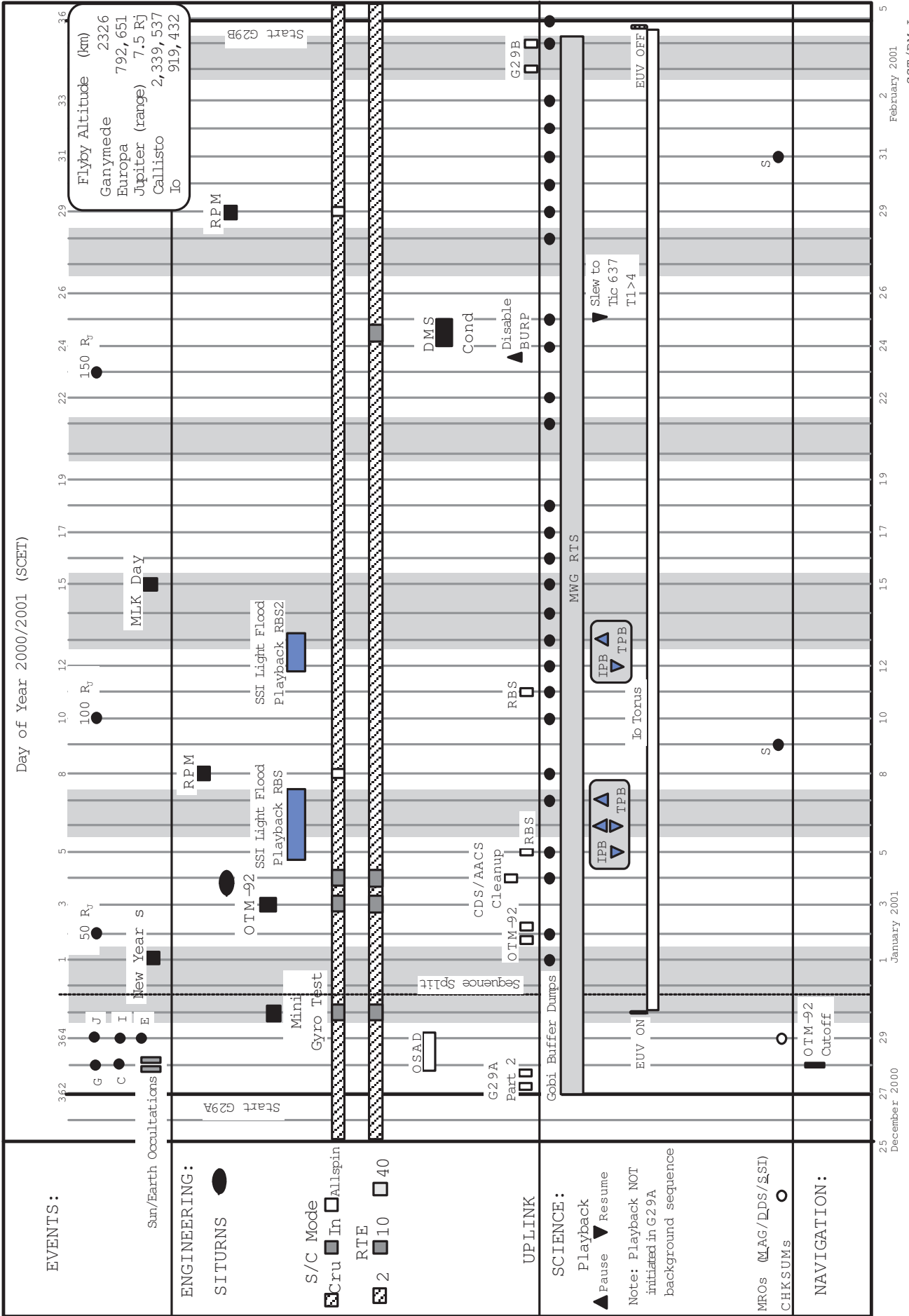


December 27      28      29      30      31      January 1  
 Wednesday      Thursday      Friday      Saturday      Sunday      Monday

BMcL/SSST  
01/02/01

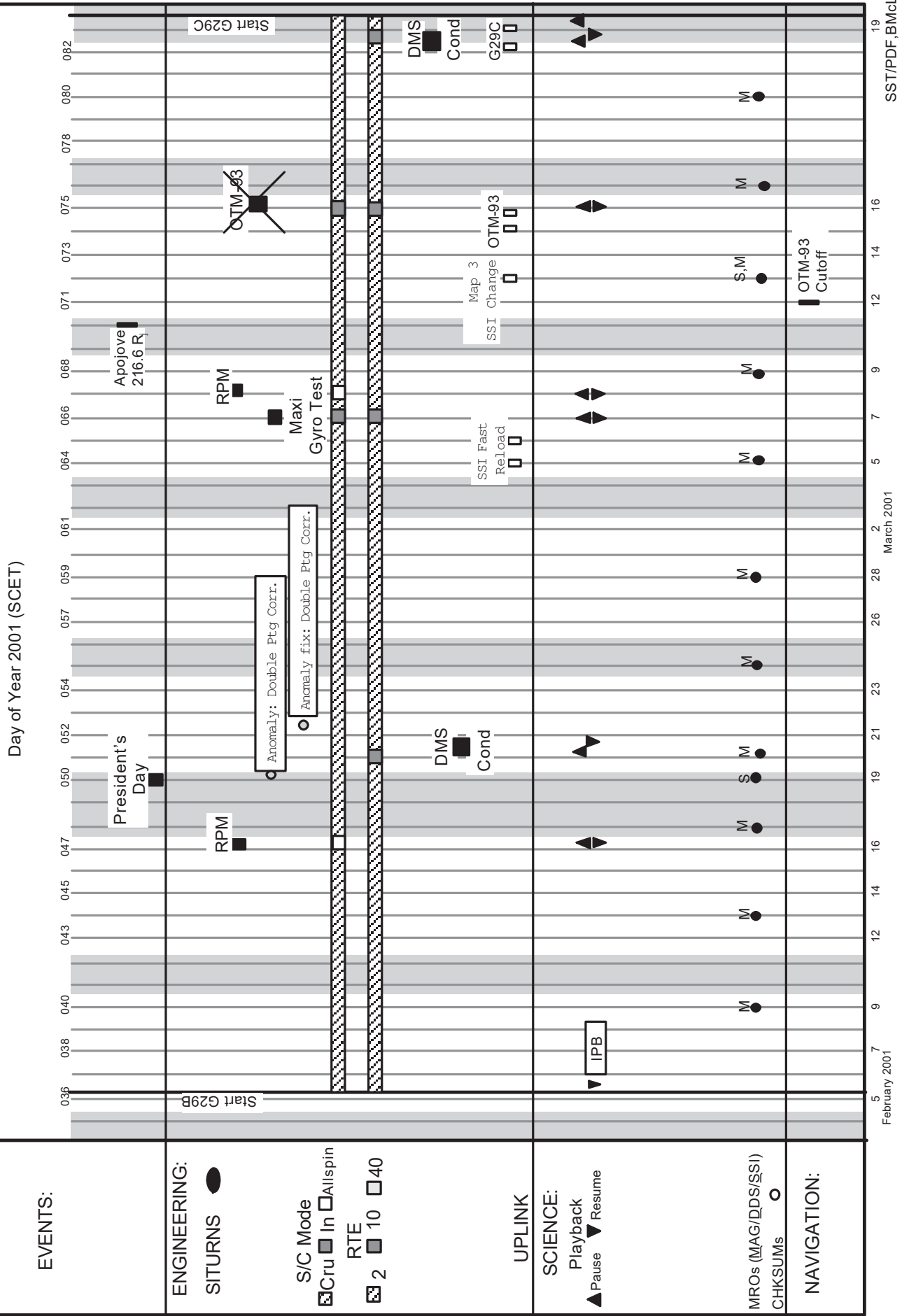
Note: One Bus Reset POR occurred during the encounter time period, which was properly handled by the on-board recovery routine.  
 The time was: 00-364/08:35:00 SCET.  
 SSI Light Flood Anomaly changes occurred at 363/~2130 (bad), 365/~0730 (good), 366/~0409 (bad), 364/~0848 (good), 364/~0626 (bad), and 001/~1946 (good).

# G29A Sequence Overview -Part 2

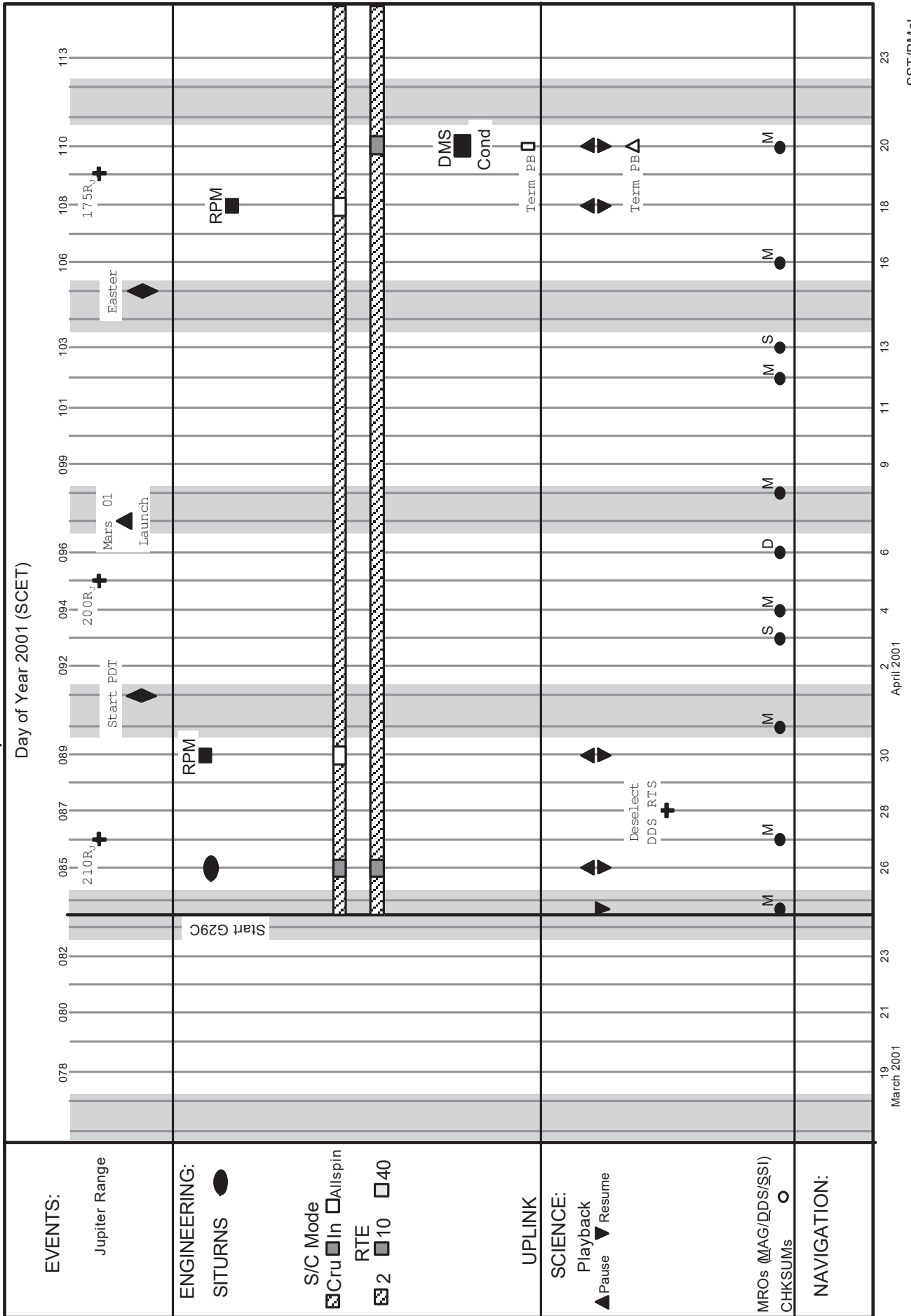




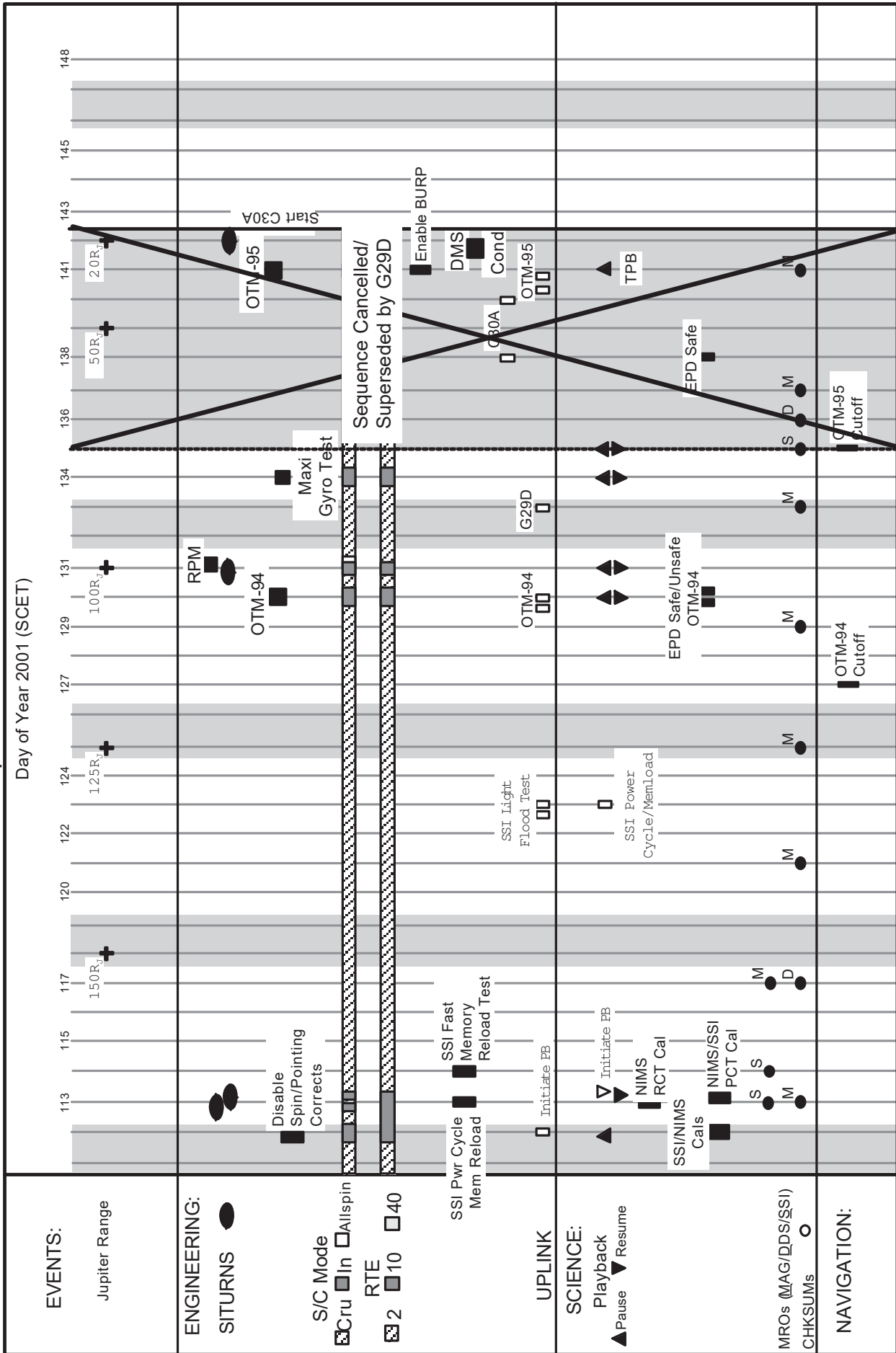
# G29B Sequence Overview



# G29C Sequence Overview - Part 1



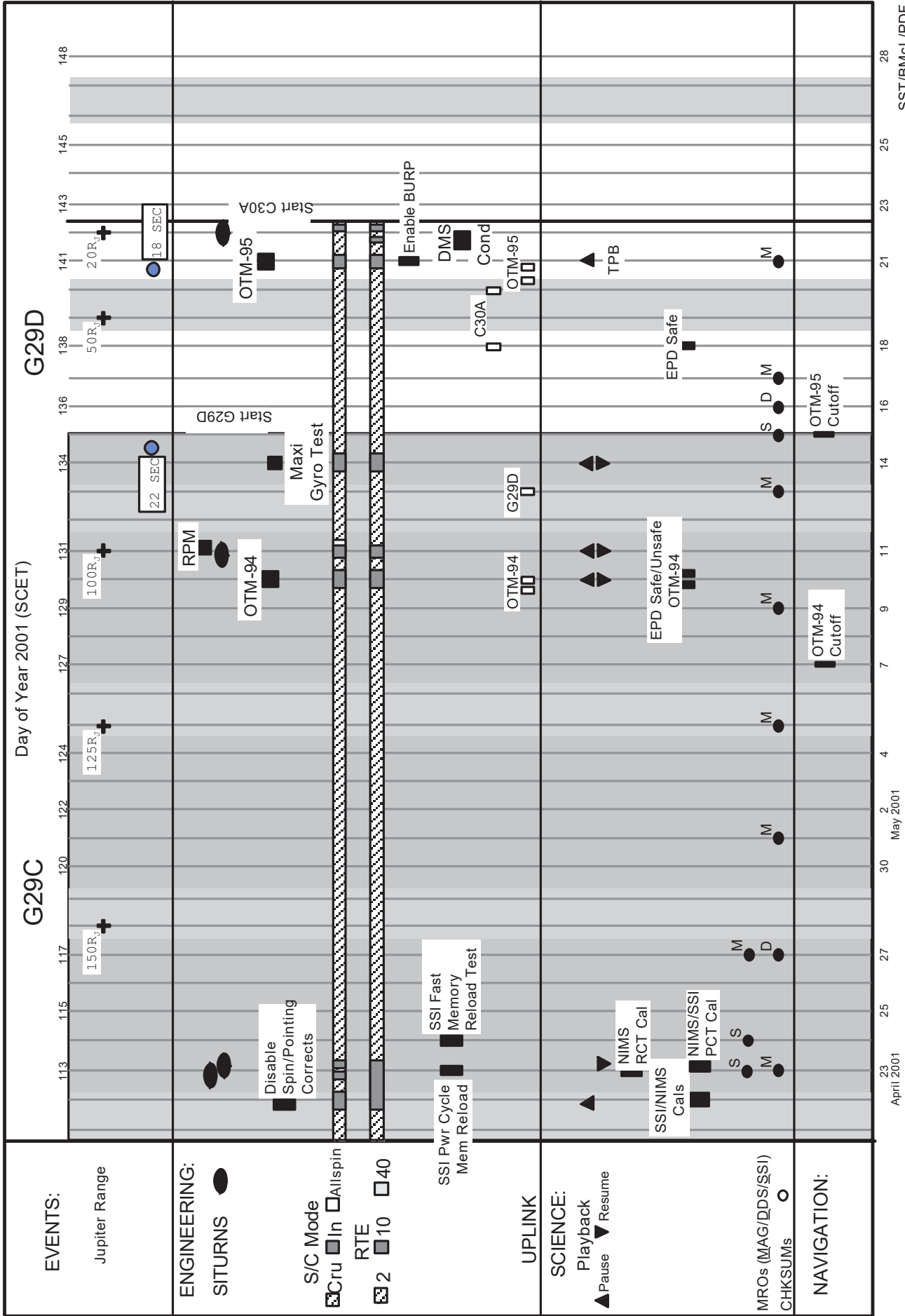
# G29C Sequence Overview - Part 2



SST/BMcL  
06/05/01

Note: This sequence was superseded (GCANCL) by G29D at 01-135/00:05:10.066 to update telemetry for solar conjunction and changes in station coverage.

# G29D Sequence Overview



## Introduction

The following table lists the major events during G29, including NIMS Real Time observations, in UTC.

|          |                 |                                |
|----------|-----------------|--------------------------------|
| 12/26/00 | 00-361/22:30:00 | G29 Encounter Start            |
| 12/28/00 | 00-363/09:03:07 | NIMS RAM Reload 01             |
| 12/28/00 | 00-363/08:25:05 | G28 Ganymede Closest Approach  |
| 12/28/00 | 00-363/10:30:09 | NIMS RAM Reload 02             |
| 12/28/00 | 00-363/13:40:37 | NIMS RAM Reload 03             |
| 12/28/00 | 00-363/13:42:35 | Callisto Closest Approach      |
| 12/28/00 | 00-363/17:13:35 | NIMS RAM Reload 04             |
| 12/28/00 | 00-363/22:33:06 | NIMS RAM Reload 05             |
| 12/28/00 | 00-363/23:12:01 | NIMS RAM Reload 06             |
| 12/29/00 | 00-364/03:33:43 | Io Closest Approach            |
| 12/29/00 | 00-364/03:34:38 | PJ-29 Jupiter Closest Approach |
| 12/29/00 | 00-364/03:04:34 | NIMS RAM Reload 07             |
| 12/29/00 | 00-364/03:47:33 | NIMS RAM Reload 08             |
| 12/29/00 | 00-364/03:56:39 | NIMS RAM Reload 09             |
| 12/29/00 | 00-364/04:21:14 | NIMS R/T Select 29JNNEBRLT01   |
| 12/29/00 | 00-364/04:40:08 | NIMS RAM Reload 10             |
| 12/29/00 | 00-364/04:46:31 | NIMS R/T Select 29JNNTZRLT01   |
| 12/29/00 | 00-364/05:00:21 | NIMS RAM Reload 11             |
| 12/29/00 | 00-364/05:06:44 | NIMS R/T Select 29JNSTZRLT01   |
| 12/29/00 | 00-364/05:21:35 | NIMS RAM Reload 12             |
| 12/29/00 | 00-364/05:56:59 | NIMS RAM Reload 13             |
| 12/29/00 | 00-364/09:40:26 | NIMS RAM Reload 14             |
| 12/29/00 | 00-364/03:37:43 | Europa Closest Approach        |
| 12/29/00 | 00-364/09:46:49 | NIMS R/T Select 29JNNTZRLT02   |
| 12/29/00 | 00-364/10:01:59 | NIMS R/T Select 29JNSTZRLT02   |
| 12/29/00 | 00-364/12:43:27 | NIMS RAM Reload 15             |
| 12/29/00 | 00-364/13:07:01 | NIMS R/T Select 29JNLIMBRT01   |
| 12/29/00 | 00-364/13:24:54 | NIMS RAM Reload 16             |
| 12/29/00 | 00-364/13:46:08 | NIMS RAM Reload 17             |
| 12/29/00 | 00-364/14:07:41 | NIMS R/T Select 29JNLIMBRT02   |
| 12/29/00 | 00-364/14:46:48 | NIMS RAM Reload 18             |
| 12/29/00 | 00-364/15:08:21 | NIMS R/T Select 29JNLIMBRT03   |
| 12/29/00 | 00-364/15:47:28 | NIMS RAM Reload 19             |
| 12/29/00 | 00-364/16:47:07 | NIMS RAM Reload 20             |
| 12/29/00 | 00-364/17:50:49 | NIMS RAM Reload 21             |
| 12/29/00 | 00-364/18:10:21 | NIMS R/T Select 29JNLIMBRT06   |
| 12/29/00 | 00-364/19:09:41 | NIMS RAM Reload 22             |
| 12/29/00 | 00-364/19:31:14 | NIMS R/T Select 29JNLIMBRT07   |
| 12/29/00 | 00-364/20:10:21 | NIMS RAM Reload 23             |
| 12/29/00 | 00-364/21:10:01 | NIMS RAM Reload 24             |
| 12/29/00 | 00-364/22:10:41 | NIMS RAM Reload 25             |
| 12/30/00 | 00-365/04:24:47 | NIMS RAM Reload 26             |
| 12/30/00 | 00-365/04:30:09 | NIMS R/T Select 29JNSTZRLT03   |
| 12/30/00 | 00-365/04:41:59 | NIMS RAM Reload 27             |
| 12/30/00 | 00-366/04:00:21 | NIMS RAM Reload 28             |
| 12/30/00 | 00-366/12:26:55 | NIMS RAM Reload 29             |
| 12/30/00 | 00-366/14:08:01 | NIMS RAM Reload 30             |
| 12/30/00 | 00-366/15:49:08 | NIMS RAM Reload 31             |
| 12/30/00 | 00-366/17:28:13 | NIMS RAM Reload 32             |
| 12/30/00 | 00-366/19:08:19 | NIMS RAM Reload 33             |
| 12/30/00 | 00-366/20:49:26 | NIMS RAM Reload 34             |
| 01/02/01 | 01-002/01:56:32 | NIMS RAM Reload 35             |

|          |                 |                         |
|----------|-----------------|-------------------------|
| 02/05/01 | 01-036/20:20:00 | Start G29 Playback      |
| 04/22/01 | 01-112/20:02:08 | NIMS RAM Reload 36      |
| 04/22/01 | 01-112/20:03:00 | NIMS CRUISE CALIBRATION |
| 05/21/01 | 01-141/12:44:27 | End G29 Playback        |

## Chapter 2 - Orbit Overview

### Contents

|      | Sub-Section                                | Page  |
|------|--|-------|
| 2.0  | Contents .....                             | 1     |
| 2.1  | Introduction to Chapter 2 .....            | 2     |
| 2.2  | NIMS Science Objectives .....              | 3     |
| 2.3  | NIMS Calibrations .....                    | 3     |
| 2.4  | Early Data Return .....                    | 3     |
| 2.5  | G29 Playback .....                         | 3     |
| 2.6  | NIMS Time-ordered Listing .....            | 4-6   |
| 2.7  | NIMS G29 Observation Geometry Plot .....   | 7     |
| 2.8  | NIMS Calibration Geometry Plot .....       | 8     |
| 2.9  | NIMS G29 Input Spreadsheet .....           | 9     |
| 2.10 | NIMS G29 Resource Usage Spreadsheets ..... | 10-11 |
| 2.11 | NIMS G29 Observing Geometry Table .....    | 12-14 |
| 2.12 | G29 Encounter Timeline .....               | 15-31 |
| 2.13 | G29 Tapemap .....                          | 32    |
| 2.14 | G29 Playback Schedule .....                | 33-42 |
| 2.15 | NIMS G29 Mosaic Summary .....              | 43-47 |

## Introduction to Chapter 2

This chapter gives an overview of the NIMS observations in the G29 Orbit.

The text on page 3 summarizes the NIMS science objectives for G29. The NIMS calibrations are discussed on page 3. Early data return and G29 playback are also discussed on page 3.

The table on pages 4 through 6 is a time-ordered listing of the NIMS Oapels for G29.

The plot on page 7 shows the geometry of the NIMS G29 observations using a north trajectory pole view projection. The plot on page 8 shows the geometry of the NIMS G29 calibrations.

The spreadsheet on page 9 summarizes the various inputs for the NIMS G29 Observations. The spreadsheet on pages 10 and 11 summarizes the resource usage for the NIMS G29 observations.

The table on pages 12 through 14 lists various NIMS G29 observing parameters: target latitude/longitude, range, cone angle, incidence angle (light), emission angle (view) and phase angle.

The timeline on pages 15 through 31 shows the placement of the G29 observations for all instruments during the G29 Encounter Period.

The tapemap on page 32 shows the placement of the G29 observations on the spacecraft's tape recorder.

The timeline on pages 33 through 42 shows the preliminary G29 playback schedule.

The NIMS G29 mosaic designs are summarized on pages 43 through 47 in time-order.



## NIMS G29 SCIENCE OVERVIEW

### Jupiter Science

There are thirty-three Jupiter observations in G29. Eleven are realtime and twenty-two are recorded. Two of the realtime observations look at the Northern Temperate Zone (NTZ), three more look at the Southern Temperate Zone (STZ), one looks at the Northern Equatorial Belt (NEB) and five look at the limb near the northern aurora (LIMBRT). Ten of the recorded observations look at the South Polar Aurora zone (AURORA), covering all 360 degrees of longitude in similar geometries. Two look at the Great Red Spot Wake region (GRWAKE). Two others look at the hot spot region (HTSPOT). One looks at the white oval region (WTOVAL) and another (JUPNTZ) is a long latitudinal strip across the NTZ. Six recorded observations (GLOBAL) build up a global map covering all 360 degrees of longitude of Jupiter at 60 degree intervals.

### Io Science

Three distant observation monitor Io's activity (IWATCH).

### Europa Science

There is a single global Europa observation in G29.

### Ganymede Science

There are four observations of Ganymede in G29. REGION01 is a moderate resolution observation. GLOBAL01 and GLOBAL02 combine to make a global map of the Jupiter-facing hemisphere of Ganymede. GLOBAL03 is a single swath global map of the same region of Ganymede but at lower resolution.

### Callisto Science

There is a single low-resolution global map of Callisto for comparison with Cassini observations.

### Calibration

There are four NIMS calibration observations planned for G29: one PCT cal, one RCT cal, one star cal and one dark calibration of all four gain states. All calibrations were recorded during Cruise.

### Cassini Coordination.

Observations were added to the G29 orbit to coordinate with the Cassini flyby of Jupiter.

### Early Data Return

There are eleven realtime observations in G29, all of Jupiter.

### G29 Playback

G29 playback is split into two passes through the tape.

G29 Time-Ordered Listing

| OAPEL         | Start (UTC)     | End (UTC)       | Duration     |
|---------------|-----------------|-----------------|--------------|
| 29GNREGION01  | 00-363/10:00:08 | 00-363/10:16:19 | 000/00:16:10 |
| 29NNGLOBAL01- | 00-363/13:46:37 | 00-363/13:48:39 | 000/00:02:01 |
| 29CNGLOBAL01  | 00-363/13:48:39 | 00-363/14:08:52 | 000/00:20:13 |
| 29NNGLOBAL01- | 00-363/17:19:58 | 00-363/17:21:59 | 000/00:02:01 |
| 29GNGLOBAL01  | 00-363/17:21:59 | 00-363/17:36:09 | 000/00:14:09 |
| 29NNGLOBAL02- | 00-363/17:34:07 | 00-363/17:36:09 | 000/00:02:01 |
| 29GNGLOBAL02  | 00-363/17:36:09 | 00-363/18:06:29 | 000/00:30:20 |
| 29NNGLOBAL03- | 00-363/22:38:28 | 00-363/22:40:29 | 000/00:02:01 |
| 29GNGLOBAL03- | 00-363/22:40:29 | 00-363/22:56:40 | 000/00:16:10 |
| 29NNIWATCH01- | 00-363/23:20:56 | 00-363/23:22:57 | 000/00:02:01 |
| 29INIWATCH01  | 00-363/23:22:57 | 00-363/23:30:02 | 000/00:07:04 |
| 29NNHTSPOT01- | 00-364/03:11:28 | 00-364/03:13:29 | 000/00:02:01 |
| 29JNHTSPOT01  | 00-364/03:13:29 | 00-364/03:33:43 | 000/00:20:13 |
| 29NNIWATCH02- | 00-364/03:55:57 | 00-364/03:57:59 | 000/00:02:01 |
| 29INIWATCH02  | 00-364/03:57:59 | 00-364/04:05:03 | 000/00:07:04 |
| 29NNHTSPOT02- | 00-364/04:04:03 | 00-364/04:06:04 | 000/00:02:01 |
| 29JNHTSPOT02  | 00-364/04:06:04 | 00-364/04:21:14 | 000/00:15:10 |
| 29NNNEBRLT01- | 00-364/04:23:15 | 00-364/04:25:17 | 000/00:02:01 |
| 29JNNEBRLT01  | 00-364/04:25:17 | 00-364/04:40:27 | 000/00:15:10 |
| 29NNNTZRLT01- | 00-364/04:48:32 | 00-364/04:50:33 | 000/00:02:01 |
| 29JNNTZRLT01  | 00-364/04:50:33 | 00-364/05:05:43 | 000/00:15:10 |
| 29NNSTZRLT01- | 00-364/05:08:45 | 00-364/05:10:47 | 000/00:02:01 |
| 29JNSTZRLT01  | 00-364/05:10:47 | 00-364/05:25:57 | 000/00:15:10 |
| 29NNHTSPOT03- | 00-364/05:28:59 | 00-364/05:31:00 | 000/00:02:01 |
| 29JNHTSPOT03  | 00-364/05:31:00 | 00-364/05:46:10 | 000/00:15:10 |
| 29NNGRWAKE01- | 00-364/06:03:21 | 00-364/06:05:23 | 000/00:02:01 |
| 29JNGRWAKE01  | 00-364/06:05:23 | 00-364/06:25:36 | 000/00:20:13 |
| 29NNNEBRLT02- | 00-364/09:00:18 | 00-364/09:02:19 | 000/00:02:01 |
| 29JNNEBRLT02  | 00-364/09:02:19 | 00-364/09:17:29 | 000/00:15:10 |
| 29NNNTZRLT02- | 00-364/09:48:50 | 00-364/09:50:51 | 000/00:02:01 |
| 29JNNTZRLT02  | 00-364/09:50:51 | 00-364/10:06:01 | 000/00:15:10 |
| 29NNSTZRLT02- | 00-364/10:04:00 | 00-364/10:06:01 | 000/00:02:01 |
| 29JNSTZRLT02  | 00-364/10:06:01 | 00-364/10:21:11 | 000/00:15:10 |

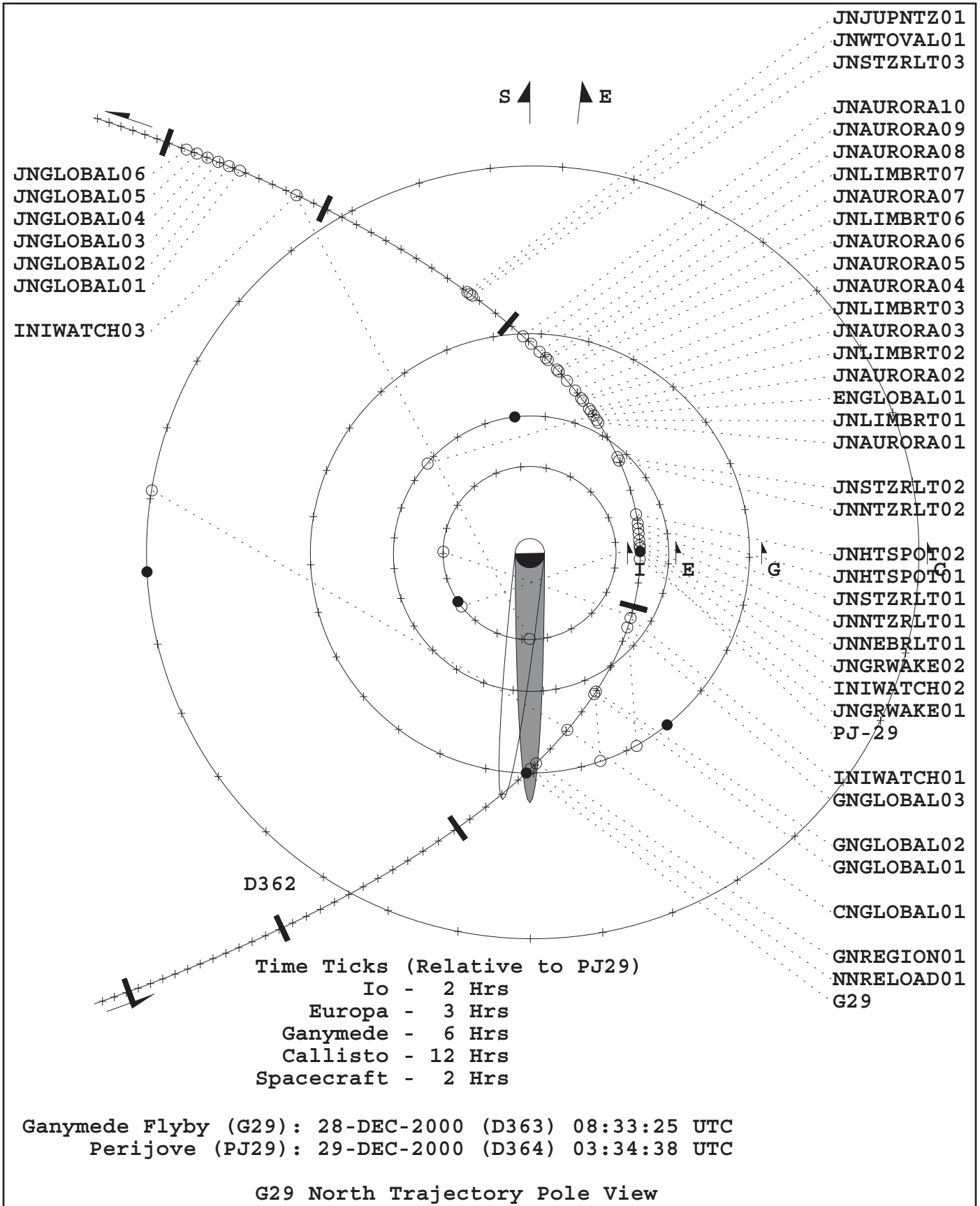
G29 Time-Ordered Listing

| OAPEL         | Start (UTC)     | End (UTC)       | Duration     |
|---------------|-----------------|-----------------|--------------|
| 29NNAURORA01- | 00-364/12:53:52 | 00-364/12:55:53 | 000/00:02:01 |
| 29JNAURORA01  | 00-364/12:55:53 | 00-364/13:10:03 | 000/00:14:09 |
| 29JNLIMBRT01  | 00-364/13:11:03 | 00-364/13:21:10 | 000/00:10:06 |
| 29NNGLOBAL01- | 00-364/13:28:15 | 00-364/13:30:16 | 000/00:02:01 |
| 29ENGLOBAL01  | 00-364/13:30:16 | 00-364/13:46:27 | 000/00:16:10 |
| 29NNAURORA02- | 00-364/13:54:32 | 00-364/13:56:33 | 000/00:02:01 |
| 29JNAURORA02  | 00-364/13:56:33 | 00-364/14:10:43 | 000/00:14:09 |
| 29JNLIMBRT02  | 00-364/14:11:43 | 00-364/14:21:50 | 000/00:10:06 |
| 29NNAURORA03- | 00-364/14:55:12 | 00-364/14:57:13 | 000/00:02:01 |
| 29JNAURORA03  | 00-364/14:57:13 | 00-364/15:11:23 | 000/00:14:09 |
| 29JNLIMBRT03  | 00-364/15:12:23 | 00-364/15:22:30 | 000/00:10:06 |
| 29NNAURORA04- | 00-364/15:55:52 | 00-364/15:57:53 | 000/00:02:01 |
| 29JNAURORA04  | 00-364/15:57:53 | 00-364/16:12:03 | 000/00:14:09 |
| 29JNLIMBRT04  | 00-364/16:13:03 | 00-364/16:23:10 | 000/00:10:06 |
| 29NNAURORA05- | 00-364/16:56:32 | 00-364/16:58:33 | 000/00:02:01 |
| 29JNAURORA05  | 00-364/16:58:33 | 00-364/17:12:43 | 000/00:14:09 |
| 29JNLIMBRT05  | 00-364/17:13:43 | 00-364/17:23:50 | 000/00:10:06 |
| 29NNAURORA06- | 00-364/17:57:12 | 00-364/17:59:13 | 000/00:02:01 |
| 29JNAURORA06  | 00-364/17:59:13 | 00-364/18:13:23 | 000/00:14:09 |
| 29JNLIMBRT06  | 00-364/18:14:23 | 00-364/18:24:30 | 000/00:10:06 |
| 29NNAURORA07- | 00-364/19:18:05 | 00-364/19:20:07 | 000/00:02:01 |
| 29JNAURORA07  | 00-364/19:20:07 | 00-364/19:34:16 | 000/00:14:09 |
| 29JNLIMBRT07  | 00-364/19:35:17 | 00-364/19:45:23 | 000/00:10:06 |
| 29NNAURORA08- | 00-364/20:18:45 | 00-364/20:20:47 | 000/00:02:01 |
| 29JNAURORA08  | 00-364/20:20:47 | 00-364/20:34:56 | 000/00:14:09 |
| 29JNLIMBRT08  | 00-364/20:35:57 | 00-364/20:46:03 | 000/00:10:06 |
| 29NNAURORA09- | 00-364/21:19:25 | 00-364/21:21:27 | 000/00:02:01 |
| 29JNAURORA09  | 00-364/21:21:27 | 00-364/21:35:36 | 000/00:14:09 |
| 29NNAURORA10- | 00-364/22:20:05 | 00-364/22:22:07 | 000/00:02:01 |
| 29JNAURORA10  | 00-364/22:22:07 | 00-364/22:36:16 | 000/00:14:09 |
| 29NNNEBRLT03- | 00-365/04:02:51 | 00-365/04:04:53 | 000/00:02:01 |
| 29JNNEBRLT03  | 00-365/04:04:53 | 00-365/04:20:03 | 000/00:15:10 |
| 29NNNTZRLT03- | 00-365/04:19:02 | 00-365/04:21:03 | 000/00:02:01 |

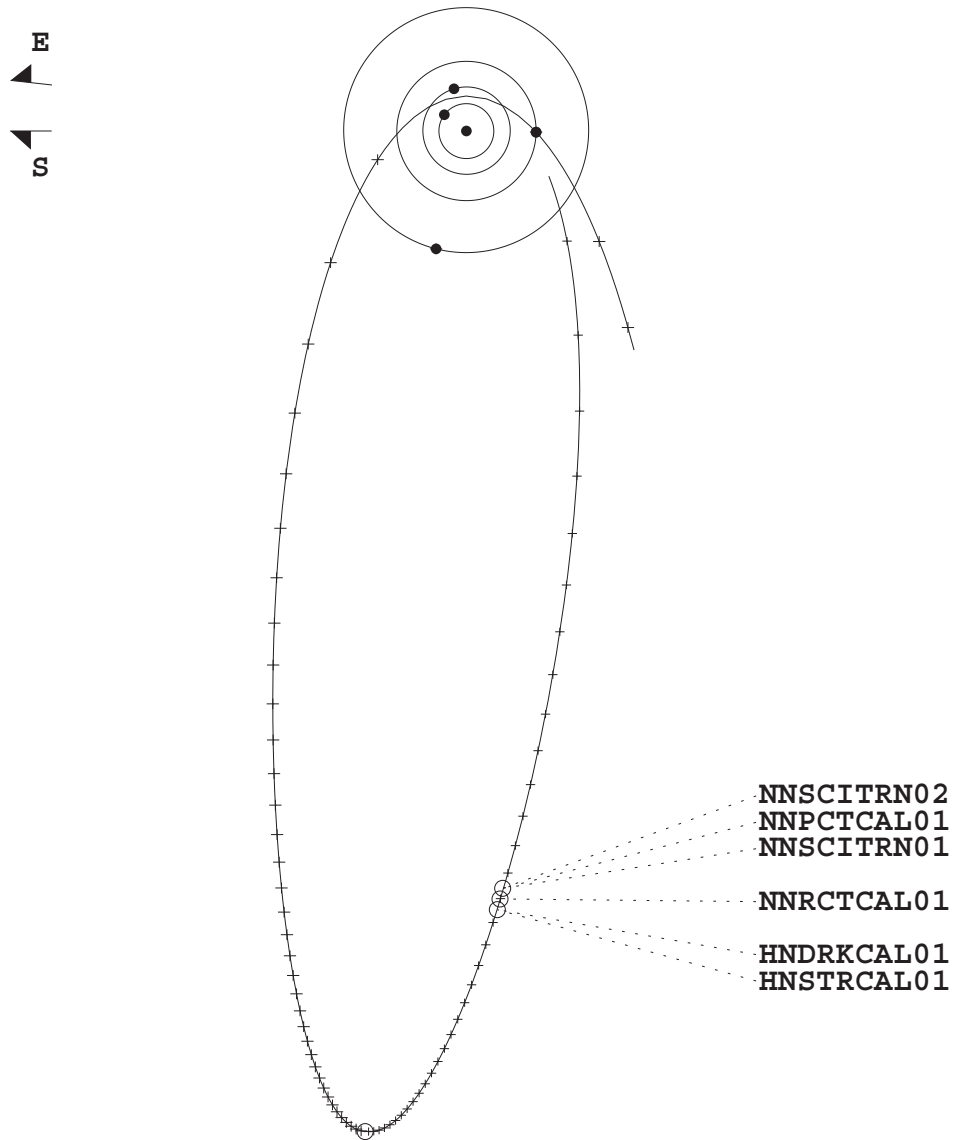
G29 Time-Ordered Listing

| OAPEL         | Start (UTC)     | End (UTC)       | Duration     |
|---------------|-----------------|-----------------|--------------|
| 29JNNTZRLT03  | 00-365/04:21:03 | 00-365/04:35:13 | 000/00:14:09 |
| 29NNSTZRLT03- | 00-365/04:33:11 | 00-365/04:35:13 | 000/00:02:01 |
| 29JNSTZRLT03  | 00-365/04:35:13 | 00-365/04:49:22 | 000/00:14:09 |
| 29NNGRWAKE02- | 00-365/04:48:21 | 00-365/04:50:23 | 000/00:02:01 |
| 29JNGRWAKE02  | 00-365/04:50:23 | 00-365/05:10:36 | 000/00:20:13 |
| 29NNJUPNTZ01- | 00-365/05:08:35 | 00-365/05:10:36 | 000/00:02:01 |
| 29JNJUPNTZ01  | 00-365/05:10:36 | 00-365/05:25:46 | 000/00:15:10 |
| 29NNIWATCH03- | 00-366/04:03:41 | 00-366/04:05:43 | 000/00:02:01 |
| 29INIWATCH03  | 00-366/04:14:49 | 00-366/04:21:53 | 000/00:07:04 |
| 29NNGLOBAL01- | 00-366/12:33:17 | 00-366/12:35:19 | 000/00:02:01 |
| 29JNGLOBAL01  | 00-366/12:35:19 | 00-366/12:50:29 | 000/00:15:10 |
| 29NNGLOBAL02- | 00-366/14:13:23 | 00-366/14:15:25 | 000/00:02:01 |
| 29JNGLOBAL02  | 00-366/14:15:25 | 00-366/14:30:35 | 000/00:15:10 |
| 29NNGLOBAL03- | 00-366/15:53:29 | 00-366/15:55:31 | 000/00:02:01 |
| 29JNGLOBAL03  | 00-366/15:55:31 | 00-366/16:10:41 | 000/00:15:10 |
| 29NNGLOBAL04- | 00-366/17:33:35 | 00-366/17:35:37 | 000/00:02:01 |
| 29JNGLOBAL04  | 00-366/17:35:37 | 00-366/17:50:47 | 000/00:15:10 |
| 29NNGLOBAL05- | 00-366/19:13:41 | 00-366/19:15:43 | 000/00:02:01 |
| 29JNGLOBAL05  | 00-366/19:15:43 | 00-366/19:30:53 | 000/00:15:10 |
| 29NNGLOBAL06- | 00-366/20:53:47 | 00-366/20:55:49 | 000/00:02:01 |
| 29JNGLOBAL06  | 00-366/20:55:49 | 00-366/21:10:59 | 000/00:15:10 |
| 29NNCHOPOF01- | 01-002/02:06:54 | 01-002/02:08:57 | 000/00:02:03 |
| 29HNSTRCAL01- | 01-112/20:01:26 | 01-112/20:12:49 | 000/00:11:23 |
| 29HNRKCAL01-  | 01-112/20:17:37 | 01-112/20:30:41 | 000/00:13:04 |
| 29NNRCTCAL01- | 01-113/04:05:45 | 01-113/16:54:12 | 000/14:48:27 |
| 29NNPCTCAL01- | 01-113/22:39:41 | 01-114/01:06:37 | 000/02:26:56 |

# NIMS G29 OBSERVATIONS



# NIMS G29 CALIBRATIONS



Time Ticks (Relative to G29)  
Spacecraft - 2 Days

Ganymede Flyby (G29): 28-DEC-2000 (D363) 08:33:25 UTC  
Perijove (PJ29): 29-DEC-2000 (D364) 03:34:38 UTC

G29 North Trajectory Pole View

# G29 NIMS INPUTS

| Activity ID  | Observation Title       | NIMS Edit   |             | NIMS PB | Mode       | Gain | Grating |        | Record | PSID |
|--------------|-------------------------|-------------|-------------|---------|------------|------|---------|--------|--------|------|
|              |                         | Table       | Table       |         |            |      | Start   | Offset |        |      |
| 29GNREGION01 | Ganymede Region Obs     | G29GLM442   | G29GLMFG288 | LM      | 2          | 0    | 4       | MPW    | DA     |      |
| 29CNGLOBAL01 | Callisto Global Obs     | G29CLM442   | G29CLMFG288 | LM      | 4          | 0    | 4       | MPW    | DB     |      |
| 29NGLOBAL01  | Ganymede Global Obs 01  | G29GLMFG252 | G29GLMFG252 | LM      | 2          | 0    | 4       | LPU    | DC     |      |
| 29NGLOBAL02  | Ganymede Global Obs 02  | G29GLMFG252 | G29GLMFG252 | LM      | 2          | 0    | 4       | LPU    | DD     |      |
| 29NGLOBAL03  | Ganymede Global Obs 03  | G29GLMFG252 | G29GLMFG252 | LM      | 2          | 0    | 4       | LPU    | DE     |      |
| 29GINWATCH01 | Io Monitoring 01        | G29ILM442   | G29ILMFG288 | LM      | 2          | 0    | 4       | MPW    | DF     |      |
| 29JNGRWAKE01 | Jupiter GRS Wake Obs 01 | G29JLM240   | G29JLMFG48  | LM      | 2          | 0    | 4       | LPU    | DG     |      |
| 29INIWATCH02 | Io Monitoring 02        | G29ILM442   | G29ILMFG288 | LM      | 2          | 0    | 4       | MPW    | DH     |      |
| 29JNGRWAKE02 | Jupiter GRS Wake Obs 02 | G29JLMFG240 | G29JLMFG48  | LM      | 2          | 0    | 4       | LPU    | DI     |      |
| 29JNNEBRLT01 | Jupiter R/T NEB Obs 01  | G29JLM442   |             | LM      | 2          | 0    | 4       | R/T    | DJ     |      |
| 29JNNTZRLT01 | Jupiter R/T MTZ Obs 01  | G29JLM442   |             | LM      | 2          | 0    | 4       | R/T    | DK     |      |
| 29JNSTZRLT01 | Jupiter R/T STZ Obs 01  | G29JLM442   |             | LM      | 2          | 0    | 4       | R/T    | DL     |      |
| 29JNHTSPOT01 | Jupiter Hot Spot Obs 01 | G29JLMFG240 | G29JLMFG48  | LM      | 2          | 0    | 4       | LPU    | DM     |      |
| 29JNHTSPOT02 | Jupiter Hot Spot Obs 02 | G29JLM240   |             | LM      | 2          | 0    | 4       | LPU    | DN     |      |
| 29JNNTZRLT02 | Jupiter R/T NTZ Obs 02  | G29JLM442   |             | LM      | 2          | 0    | 4       | R/T    | DP     |      |
| 29JNSTZRLT02 | Jupiter R/T STZ Obs 02  | G29JLM442   |             | LM      | 2          | 0    | 4       | R/T    | DQ     |      |
| 29JNAURORA01 | Jupiter Aurora Obs 01   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | DR     |      |
| 29JNLIWBRT01 | Jupiter R/T Limb Obs 01 | G29JLM442   |             | LM      | 4          | 0    | 4       | R/T    | DS     |      |
| 29ENGLOBAL01 | Europa Global Obs       | G29ELM442   | G29ELMFG288 | LM      | 3          | 0    | 4       | MPW    | DT     |      |
| 29JNAURORA02 | Jupiter Aurora Obs 02   | G29JLM240   |             | LM      | 4          | 0    | 4       | LPU    | DU     |      |
| 29JNLIWBRT02 | Jupiter R/T Limb Obs 02 | G29JLM442   |             | LM      | 4          | 0    | 4       | R/T    | DV     |      |
| 29JNAURORA03 | Jupiter Aurora Obs 03   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | DX     |      |
| 29JNLIWBRT03 | Jupiter R/T Limb Obs 03 | G29JLM442   |             | LM      | 4          | 0    | 4       | R/T    | DY     |      |
| 29JNAURORA04 | Jupiter Aurora Obs 04   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | DZ     |      |
| 29JNAURORA05 | Jupiter Aurora Obs 05   | G29JLM240   |             | LM      | 4          | 0    | 4       | LPU    | EB     |      |
| 29JNAURORA06 | Jupiter Aurora Obs 06   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | ED     |      |
| 29JNLIWBRT06 | Jupiter R/T Limb Obs 06 | G29JLM442   |             | LM      | 4          | 0    | 4       | R/T    | EE     |      |
| 29JNAURORA07 | Jupiter Aurora Obs 07   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | EF     |      |
| 29JNLIWBRT07 | Jupiter R/T Limb Obs 07 | G29JLM442   |             | LM      | 4          | 0    | 4       | R/T    | EG     |      |
| 29JNAURORA08 | Jupiter Aurora Obs 08   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | EH     |      |
| 29JNAURORA09 | Jupiter Aurora Obs 09   | G29JLMFG240 | G29JLMFG72  | LM      | 4          | 0    | 4       | LPU    | EK     |      |
| 29JNAURORA10 | Jupiter Aurora Obs 10   | G29JLM240   |             | LM      | 4          | 0    | 4       | LPU    | EL     |      |
| 29JNSTZRLT03 | Jupiter R/T STZ Obs 03  | G29JLM442   |             | LM      | 2          | 0    | 4       | R/T    | EP     |      |
| 29JNWTVAL01  | Jupiter White Oval Obs  | G29JLMFG240 | G29JLMFG48  | LM      | 2          | 0    | 4       | LPU    | EQ     |      |
| 29JNJUPNTZ01 | Jupiter NTZ Obs         | G29JLM240   | G29JLMFG24  | LM      | 2          | 0    | 4       | LPU    | ER     |      |
| 29INIWATCH03 | Io Monitoring 03        | G29ILM442   | G29ILMFG288 | LM      | 2          | 0    | 4       | MPW    | ES     |      |
| 29JNGLOBAL01 | Jupiter Global Map 01   | G29JXM10    | G29JXMFG9   | XM      | 2          | 0    | 4       | LPU    | ET     |      |
| 29JNGLOBAL02 | Jupiter Global Map 02   | G29JXMFG10  | G29JXMFG9   | XM      | 2          | 0    | 4       | LPU    | EU     |      |
| 29JNGLOBAL03 | Jupiter Global Map 03   | G29JXMFG10  | G29JXMFG9   | XM      | 2          | 0    | 4       | LPU    | EV     |      |
| 29JNGLOBAL04 | Jupiter Global Map 04   | G29JXMFG10  | G29JXMFG9   | XM      | 2          | 0    | 4       | LPU    | EW     |      |
| 29JNGLOBAL05 | Jupiter Global Map 05   | G29JXMFG10  | G29JXMFG9   | XM      | 2          | 0    | 4       | LPU    | EX     |      |
| 29JNGLOBAL06 | Jupiter Global Map 06   | G29JXMFG10  | G29JXMFG9   | XM      | 2          | 0    | 4       | LPU    | EY     |      |
| 29HNSTRCAL01 | Star Calibration        | G29HLMFG442 | G29HLMFG144 | LM      | 4          |      |         |        | DA     |      |
| 29HNDRKCAL01 | Dark Calibration        | G29HLMFG442 | G29HLMFG360 | LM      | 1, 2, 3, 4 |      |         |        | DB     |      |
| 29NNRCTCAL01 | RCT Calibration         | G29HLMFG442 | G29HLMFG216 | LM      | 1          |      |         |        | DC     |      |
| 29NNPCTCAL01 | PCT Calibration         | G29HLMFG442 | G29HLMFG192 | LM      | 4          |      |         |        | DD     |      |

# G29 RESOURCES

| Activity ID   | Mode | Record Format | Obs. Cost (tracks) | Obs. Cost (ticks) | Number Wavelengths Returned | Record (sec.) | Obs PB (sec) | Selected             |                         | Obs Cycle time (sec) |
|---------------|------|---------------|--------------------|-------------------|-----------------------------|---------------|--------------|----------------------|-------------------------|----------------------|
|               |      |               |                    |                   |                             |               |              | Bits to sBOT (MBITS) | Bits to Tape BOT (Mbit) |                      |
| 29GNREGION01  | LM   | MPW           | 0.1362             | 794               | 288                         | 900           | 479          | 5.52                 | 10.37                   | 8.667                |
| 29CNGLOBAL01  | LM   | MPW           | 0.0193             | 112               | 288                         | 125           | 123          | 1.42                 | 1.44                    | 8.667                |
| 29GNGLOBAL01  | LM   | LPU           | 0.0245             | 143               | 252                         | 600           | 588          | 3.63                 | 3.70                    | 8.667                |
| 29GNGLOBAL02  | LM   | LPU           | 0.0249             | 145               | 252                         | 610           | 608          | 3.75                 | 3.76                    | 8.667                |
| 29GNGLOBAL03  | LM   | LPU           | 0.0195             | 113               | 252                         | 475           | 463          | 2.86                 | 2.93                    | 8.667                |
| 29INIWATCH01  | LM   | MPW           | 0.0283             | 165               | 288                         | 185           | 180          | 2.07                 | 2.13                    | 8.667                |
| 29JNGRWAKE01  | LM   | LPU           | 0.0462             | 269               | 50                          | 1140          | 1140         | 7.03                 | 7.03                    | 8.667                |
| 29JINIWATCH02 | LM   | MPW           | 0.0291             | 169               | 288                         | 190           | 188          | 2.17                 | 2.19                    | 8.667                |
| 29JNGRWAKE02  | LM   | LPU           | 0.0349             | 204               | 48                          | 860           | 848          | 5.23                 | 5.30                    | 8.667                |
| 29JNNEBRLT01  | LM   | R/T           |                    |                   | 130                         |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNNTZRLT01  | LM   | R/T           |                    |                   | 130                         |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNSTZRLT01  | LM   | R/T           |                    |                   | 130                         |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNHTSPOT01  | LM   | LPU           | 0.0349             | 204               | 48                          | 860           | 848          | 5.23                 | 5.30                    | 8.667                |
| 29JNHTSPOT02  | LM   | LPU           | 0.0341             | 199               | 100                         | 840           | 840          | 5.18                 | 5.18                    | 8.667                |
| 29JNNTZRLT02  | LM   | R/T           |                    |                   | 130                         |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNSTZRLT02  | LM   | R/T           |                    |                   | 130                         |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNAURORA01  | LM   | LPU           | 0.0297             | 173               | 72                          | 730           | 718          | 4.43                 | 4.50                    | 8.667                |
| 29JNLIMBRT01  | LM   | R/T           |                    |                   | 80                          |               |              | 0.00                 | 0.00                    | 8.667                |
| 29ENGGLOBAL01 | LM   | MPW           | 0.0276             | 161               | 288                         | 180           | 178          | 2.05                 | 2.07                    | 8.667                |
| 29JNAURORA02  | LM   | LPU           | 0.0317             | 185               | 50                          | 780           | 780          | 4.81                 | 4.81                    | 8.667                |
| 29JNLIMBRT02  | LM   | R/T           |                    |                   | 80                          |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNAURORA03  | LM   | LPU           | 0.0296             | 172               | 72                          | 727           | 724          | 4.47                 | 4.48                    | 8.667                |
| 29JNLIMBRT03  | LM   | R/T           |                    |                   | 80                          |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNAURORA04  | LM   | LPU           | 0.0317             | 185               | 72                          | 780           | 726          | 4.48                 | 4.81                    | 8.667                |
| 29JNAURORA05  | LM   | LPU           | 0.0317             | 185               | 50                          | 780           | 780          | 4.81                 | 4.81                    | 8.667                |
| 29JNAURORA06  | LM   | LPU           | 0.0317             | 185               | 72                          | 780           | 608          | 3.75                 | 4.81                    | 8.667                |
| 29JNLIMBRT06  | LM   | R/T           |                    |                   | 80                          |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNAURORA07  | LM   | LPU           | 0.0317             | 185               | 72                          | 780           | 731          | 4.51                 | 4.81                    | 8.667                |
| 29JNLIMBRT07  | LM   | R/T           |                    |                   | 80                          |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNAURORA08  | LM   | LPU           | 0.0317             | 185               | 72                          | 780           | 734          | 4.53                 | 4.81                    | 8.667                |
| 29JNAURORA09  | LM   | LPU           | 0.0317             | 185               | 72                          | 780           | 776          | 4.79                 | 4.81                    | 8.667                |
| 29JNAURORA10  | LM   | LPU           | 0.0317             | 185               | 50                          | 780           | 780          | 4.81                 | 4.81                    | 8.667                |
| 29JNSTZRLT03  | LM   | R/T           |                    |                   | 130                         |               |              | 0.00                 | 0.00                    | 8.667                |
| 29JNWTOVAL01  | LM   | LPU           | 0.0394             | 230               | 48                          | 972           | 967          | 5.96                 | 6.00                    | 8.667                |
| 29JNJUPNTZ01  | LM   | LPU           | 0.0341             | 199               | 100                         | 840           | 840          | 5.18                 | 5.18                    | 8.667                |
| 29INIWATCH03  | LM   | MPW           | 0.0253             | 148               | 288                         | 165           | 161          | 1.85                 | 1.90                    | 8.667                |
| 29JNGLOBAL01  | XM   | LPU           | 0.0269             | 157               | 7                           | 660           | 660          | 4.07                 | 4.07                    | 0.333                |
| 29JNGLOBAL02  | XM   | LPU           | 0.0263             | 153               | 9                           | 646           | 634          | 3.91                 | 3.98                    | 0.333                |
| 29JNGLOBAL03  | XM   | LPU           | 0.0263             | 153               | 9                           | 646           | 634          | 3.91                 | 3.98                    | 0.333                |
| 29JNGLOBAL04  | XM   | LPU           | 0.0263             | 153               | 9                           | 646           | 634          | 3.91                 | 3.98                    | 0.333                |
| 29JNGLOBAL05  | XM   | LPU           | 0.0269             | 157               | 9                           | 660           | 635          | 3.92                 | 4.07                    | 0.333                |
| 29JNGLOBAL06  | XM   | LPU           | 0.0263             | 153               | 9                           | 646           | 634          | 3.91                 | 3.98                    | 0.333                |
| 29HNSTRCAL01  | LM   | MPW           |                    |                   | 144                         | 360           | 193          | 2.22                 |                         | 8.667                |
| 29HNDKCAL01   | LM   | MPW           |                    |                   | 360                         | 360           | 240          | 2.76                 |                         | 8.667                |
| 29NNRCTCAL01  | LM   | MPW           |                    |                   | 216                         | 606           | 604          | 6.96                 |                         | 8.667                |
| 29NNPCTCAL01  | LM   | MPW           |                    |                   | 288                         | 121           | 63           | 0.73                 |                         | 8.667                |
| 29NNPCTCAL01  | LM   | MPW           |                    |                   | 216                         | 606           | 306          | 3.53                 |                         | 8.667                |



# G29 RESOURCES

| Activity ID  | AACS Mbits | Comp | Thold | RT BTG       | Total BTG (Mbits) | Data Reduction Factor | Pass |
|--------------|------------|------|-------|--------------|-------------------|-----------------------|------|
|              | c 2.5      |      |       | (w/4% ohead) | (sBOT/BTG)        |                       |      |
| 29GNREGION01 | 0.03       | 1.79 |       |              | 1.850             | 2.98                  | 1    |
| 29CNGLOBAL01 | 0.01       | 1.76 |       |              | 0.483             | 2.93                  | 1    |
| 29GNGLOBAL01 | 0.03       | 1.52 |       |              | 2.340             | 1.55                  | 1    |
| 29GNGLOBAL02 | 0.04       | 2    |       |              |                   |                       | 1    |
| 29GNGLOBAL03 | 0.03       | 1.34 |       |              | 2.090             | 1.37                  | 1    |
| 29INIWATCH01 | 0.01       | 1.44 |       |              | 0.864             | 2.40                  | 1    |
| 29JNGRWAKE01 | 0.07       | 1.5  |       |              |                   |                       | 2    |
| 29INIWATCH02 | 0.01       | 1.27 |       |              | 1.023             | 2.12                  | 1    |
| 29JNGRWAKE02 | 0.05       | 1.32 |       |              | 0.740             | 7.07                  | 1    |
| 29JNNEBRLT01 | 0.00       |      |       |              |                   |                       |      |
| 29JNNTZRLT01 | 0.00       |      |       |              |                   |                       |      |
| 29JNSTZRLT01 | 0.00       |      |       |              |                   |                       |      |
| 29JNHTSPOT01 | 0.05       | 1.37 |       |              | 0.713             | 7.34                  | 1    |
| 29JNHTSPOT02 | 0.05       | 1.2  |       |              |                   |                       | 2    |
| 29JNNTZRLT02 | 0.00       |      |       |              |                   |                       |      |
| 29JNSTZRLT02 | 0.00       |      |       |              |                   |                       |      |
| 29JNAURORA01 | 0.04       | 1.32 |       |              | 0.940             | 4.71                  | 1    |
| 29JNLIMBRT01 | 0.00       |      |       |              |                   |                       |      |
| 29ENGLOBAL01 | 0.01       | 1.45 |       |              | 0.848             | 2.42                  | 1    |
| 29JNAURORA02 | 0.04       | 1.7  |       |              |                   |                       | 2    |
| 29JNLIMBRT02 | 0.00       |      |       |              |                   |                       |      |
| 29JNAURORA03 | 0.04       | 1.35 |       |              | 0.927             | 4.82                  | 1    |
| 29JNLIMBRT03 | 0.00       |      |       |              |                   |                       |      |
| 29JNAURORA04 | 0.04       | 1.41 |       |              | 0.890             | 5.03                  | 1    |
| 29JNAURORA05 | 0.04       | 1.7  |       |              |                   |                       | 2    |
| 29JNAURORA06 | 0.04       | 1.68 |       |              | 0.625             | 6.00                  | 1    |
| 29JNLIMBRT06 | 0.00       |      |       |              |                   |                       |      |
| 29JNAURORA07 | 0.04       | 1.53 |       |              | 0.826             | 5.46                  | 1    |
| 29JNLIMBRT07 | 0.00       |      |       |              |                   |                       |      |
| 29JNAURORA08 | 0.04       | 1.49 |       |              | 0.851             | 5.32                  | 1    |
| 29JNAURORA09 | 0.04       | 1.49 |       |              | 0.900             | 5.32                  | 1    |
| 29JNAURORA10 | 0.04       | 1.7  |       |              |                   |                       | 2    |
| 29JNSTZRLT03 | 0.00       |      |       |              |                   |                       |      |
| 29JNWTOVAL01 | 0.06       | 1.82 |       |              | 0.612             | 9.74                  | 1    |
| 29JNJUPNTZ01 | 0.05       | 1.5  |       |              |                   |                       | 2    |
| 29INIWATCH03 | 0.01       | 2.91 |       |              | 0.382             | 4.85                  | 1    |
| 29JNGLOBAL01 | 0.04       | 1.8  |       |              |                   |                       | 2    |
| 29JNGLOBAL02 | 0.04       | 2.12 |       |              | 1.681             | 2.33                  | 1    |
| 29JNGLOBAL03 | 0.04       | 2.13 |       |              | 1.673             | 2.34                  | 1    |
| 29JNGLOBAL04 | 0.04       | 2.16 |       |              | 1.650             | 2.37                  | 1    |
| 29JNGLOBAL05 | 0.04       | 2.23 |       |              | 1.601             | 2.45                  | 1    |
| 29JNGLOBAL06 | 0.04       | 2.43 |       |              | 1.467             | 2.67                  | 1    |
| 29HNSTRCAL01 |            | 2.49 |       |              | 0.268             | 8.30                  | 1    |
| 29HNDKCAL01  |            | 4.26 |       |              | 0.487             | 5.68                  | 1    |
| 29NNRCTCAL01 |            | 4.32 |       |              | 0.725             | 9.60                  | 1    |
| 29NNPCTCAL01 |            | 2.2  |       |              |                   |                       | 1    |
| 29NNPCTCAL01 |            | 2.52 |       |              | 0.629             | 5.60                  | 1    |

NIMS G29 OBSERVING GEOMETRY

| OAPEL        | Latitude<br>(deg) | Longitude<br>(deg) | Range<br>(km) | Cone<br>(deg) | Light<br>(deg) | View<br>(deg) | Phase<br>(deg) |
|--------------|-------------------|--------------------|---------------|---------------|----------------|---------------|----------------|
| 29GNREGION01 | -35 to +9         | 355 to 35          | 79 to 90K     | 169           | 2 to 35        | 0 to 33       | 1 to 2         |
| 29CNGLOBAL01 | -90 to +90        | 290 to 110         | 2340K         | 71            | 29 to 170      | 13 to 90      | 120            |
| 29GNGLOBAL01 | -25 to +90        | 290 to 110         | 346 to 353K   | 169           | 26 to 89       | 30 to 90      | 4              |
| 29GNGLOBAL02 | -90 to +30        | 290 to 110         | 355 to 363K   | 169           | 29 to 92       | 26 to 90      | 3              |
| 29GNGLOBAL03 | -90 to +90        | 300 to 120         | 593 to 603K   | 166           | 2 to 92        | 2 to 90       | 4              |
| 29INIWATCH01 | -90 to +90        | 290 to 110         | 968K          | 82            | 19 to 168      | 7 to 90       | 109            |
| 29JNGRWAKE01 | -18 to -11        | 57 to 71           | 470 to 488K   | 96            | 47 to 74       | 25 to 52      | 94             |
| 29INIWATCH02 | -90 to +90        | 290 to 110         | 920K          | 119           | 8 to 160       | 6 to 90       | 71             |
| 29JNGRWAKE02 | -17 to -10        | 56 to 71           | 487 to 511K   | 101           | 25 to 44       | 50 to 72      | 90             |
| 29JNNEBRLT01 | +7 to +9          | 74 to 92           | 478 to 501K   | 105           | 25 to 51       | 36 to 62      | 87             |
| 29JNNTZRLT01 | +7 to +9          | 110 to 121         | 471 to 482K   | 110           | 46 to 64       | 18 to 36      | 81             |
| 29JNSTZRLT01 | -26 to -24        | 106 to 121         | 483 to 500K   | 112           | 40 to 59       | 37 to 55      | 79             |
| 29JNHTSPOT01 | +3 to +12         | 123 to 131         | 481 to 495K   | 115           | 32 to 50       | 28 to 44      | 76             |
| 29JNHTSPOT02 | +1 to +10         | 120 to 134         | 500 to 522K   | 118           | 8 to 30        | 44 to 65      | 73             |
| 29JNNTZRLT02 | +19 to +21        | 201 to 238         | 585 to 634K   | 144           | 17 to 46       | 53 to 92      | 47             |

NIMS G29 OBSERVING GEOMETRY

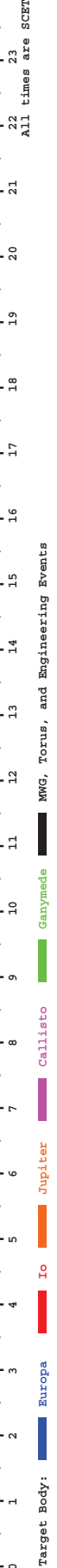
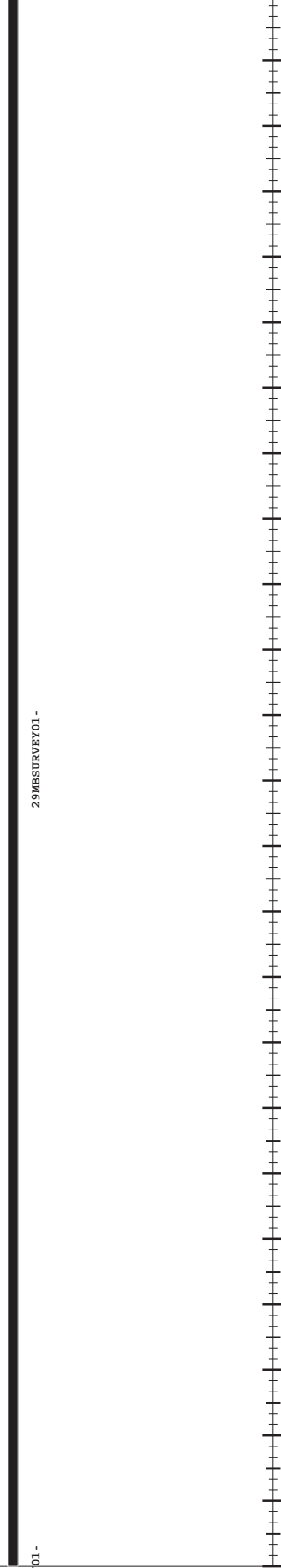
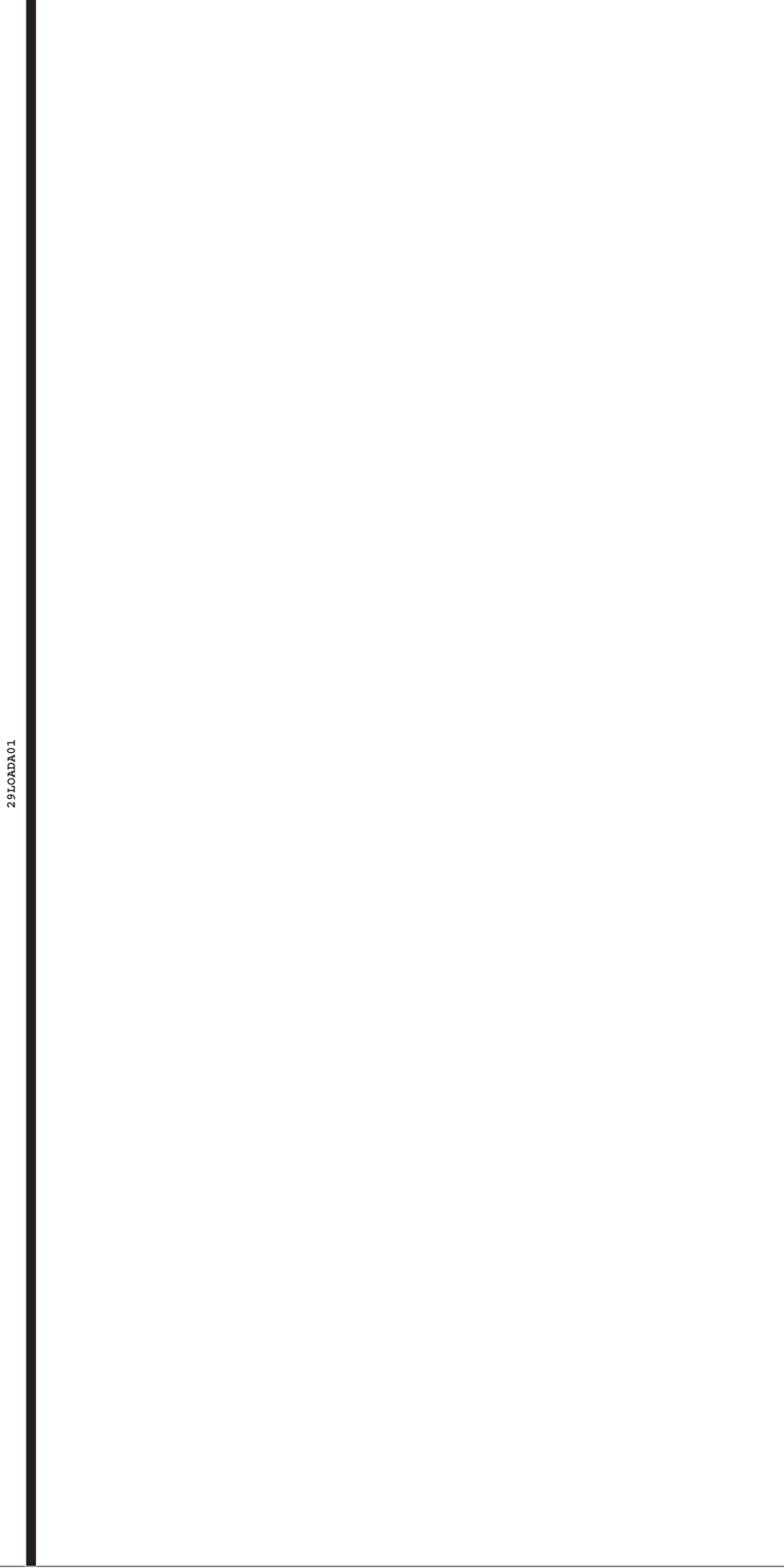
| OAPEL        | Latitude<br>(deg) | Longitude<br>(deg) | Range<br>(km) | Cone<br>(deg) | Light<br>(deg) | View<br>(deg) | Phase<br>(deg) |
|--------------|-------------------|--------------------|---------------|---------------|----------------|---------------|----------------|
| 29JNSTZRLT02 | -27 to -25        | 230 to 249         | 590 to 618K   | 145           | 29 to 38       | 51 to 73      | 45             |
| 29JNAURORA01 | -90 to -60        | 19 to 56           | 702 to 709K   | 164           | 75 to 83       | 74 to 76      | 25             |
| 29JNLIMBRT01 | +54 to +68        | 69 to 109          | 710 to 733K   | 168           | 75 to 97       | 72 to 93      | 24             |
| 29ENGLOBAL01 | -90 to +90        | 220 to 40          | 838K          | 118           | 7 to 162       | 7 to 90       | 73             |
| 29JNAURORA02 | -90 to -60        | 53 to 95           | 737 to 743K   | 167           | 75 to 85       | 74 to 79      | 21             |
| 29JNLIMBRT02 | +54 to +68        | 105 to 142         | 746 to 767K   | 172           | 75 to 96       | 73 to 93      | 20             |
| 29JNAURORA03 | -90 to -60        | 88 to 126          | 772 to 781    | 170           | 77 to 81       | 75 to 78      | 17             |
| 29JNLIMBRT03 | +54 to +68        | 141 to 175         | 784 to 803K   | 176           | 75 to 94       | 75 to 93      | 16             |
| 29JNAURORA04 | -90 to -60        | 109 to 181         | 812 to 823K   | 172           | 78 to 88       | 77 to 84      | 13             |
| 29JNAURORA05 | -90 to -64        | 158 to 232         | 840 to 871K   | 173           | 70 to 94       | 70 to 92      | 10             |
| 29JNAURORA06 | -90 to -55        | 19 1to 264         | 888 to 901K   | 172           | 80 to 89       | 80 to 86      | 8              |
| 29JNLIMBRT06 | +50 to +65        | 237 to 277         | 888 to 913K   | 174           | 66 to 89       | 70 to 92      | 8              |
| 29JNAURORA07 | -90 to -60        | 235 to 290         | 930 to 941K   | 170           | 74 to 79       | 75 to 78      | 4              |
| 29JNLIMBRT07 | +51 to +66        | 283 to 322         | 939 to 962K   | 171           | 66 to 88       | 71 to 92      | 7              |
| 29JNAURORA08 | -90 to -55        | 266 to 318         | 965 to 975K   | 168           | 72 to 75       | 72 to 75      | 2              |

NIMS G29 OBSERVING GEOMETRY

| OAPEL        | Latitude<br>(deg) | Longitude<br>(deg) | Range<br>(km) | Cone<br>(deg) | Light<br>(deg) | View<br>(deg) | Phase<br>(deg) |
|--------------|-------------------|--------------------|---------------|---------------|----------------|---------------|----------------|
| 29JNAURORA09 | -90 to -55        | 300 to 357         | 1003 to 1015K | 166           | 71 to 75       | 71 to 76      | 3              |
| 29JNAURORA10 | -90 to -50        | 345 to 30          | 1039 to 1055K | 164           | 70 to 76       | 71 to 79      | 5              |
| 29JNSTZRLT03 | -29 to -24        | 221 to 252         | 1245 to 1270K | 153           | 33 to 60       | 41 to 72      | 15             |
| 29JNWTOVAL01 | -39 to -27        | 213 to 260         | 1253 to 1280K | 154           | 36 to 60       | 35 to 72      | 15             |
| 29JNJUPNTZ01 | +16 to +28        | 170 to 241         | 1259 to 1272K | 155           | 19 to 53       | 22 to 44      | 15             |
| 29INIWATCH03 | -90 to +90        | 239 to 59          | 2436K         | 141           | 10 to 117      | 17 to 90      | 27             |
| 29JNGLOBAL01 | -90 to +90        | 180 to 336         | 2300K         | 131           | 3 to 122       | 0 to 90       | 36             |
| 29JNGLOBAL02 | -90 to +90        | 240 to 30          | 2370K         | 130           | 3 to 123       | 0 to 91       | 37             |
| 29JNGLOBAL03 | -90 to +90        | 280 to 90          | 2410K         | 130           | 5 to 123       | 0 to 91       | 37             |
| 29JNGLOBAL04 | -90 to +90        | 340 to 150         | 2470K         | 129           | 5 to 127       | 0 to 91       | 38             |
| 29JNGLOBAL05 | -90 to +90        | 30 to 210          | 2510K         | 128           | 5 to 128       | 0 to 90       | 38             |
| 29JNGLOBAL06 | -90 to +90        | 90 to 270          | 2540K         | 128           | 2 to 128       | 0 to 91       | 39             |
| 29HNSTRCAL01 | --                | --                 | --            | 130           | --             | --            | --             |
| 29HNDKCAL01  | --                | --                 | --            | 130           | --             | --            | --             |

**G29 ENCOUNTER**  
**Plot Time: 00-362/00:00:00.000 to 00-363/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:54**

**GEM: G29**

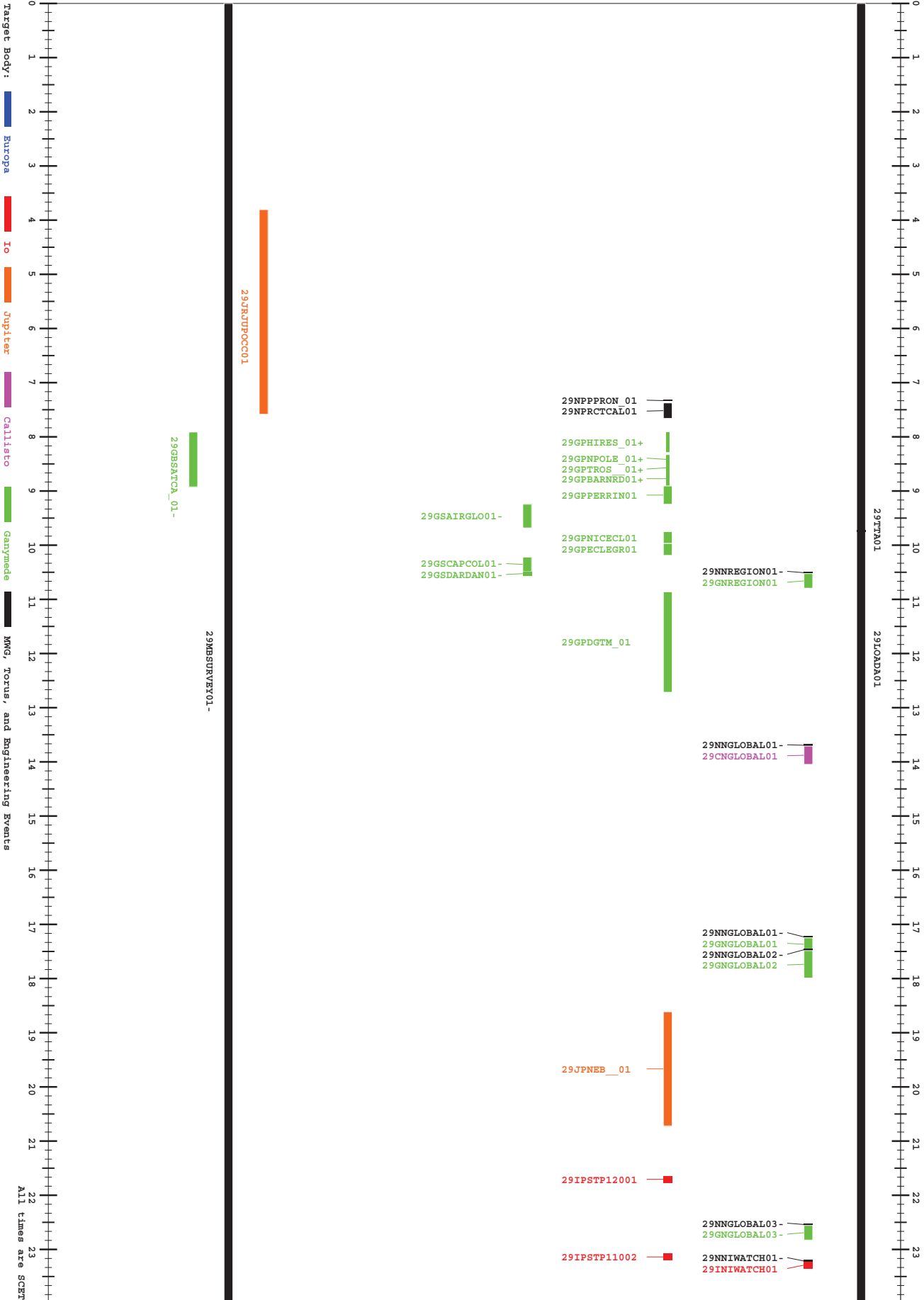


All times are SGT

Geometric Events MWG Observations RS UVS/EUV Observations SSI Observations PPR Observations NIMS Observations

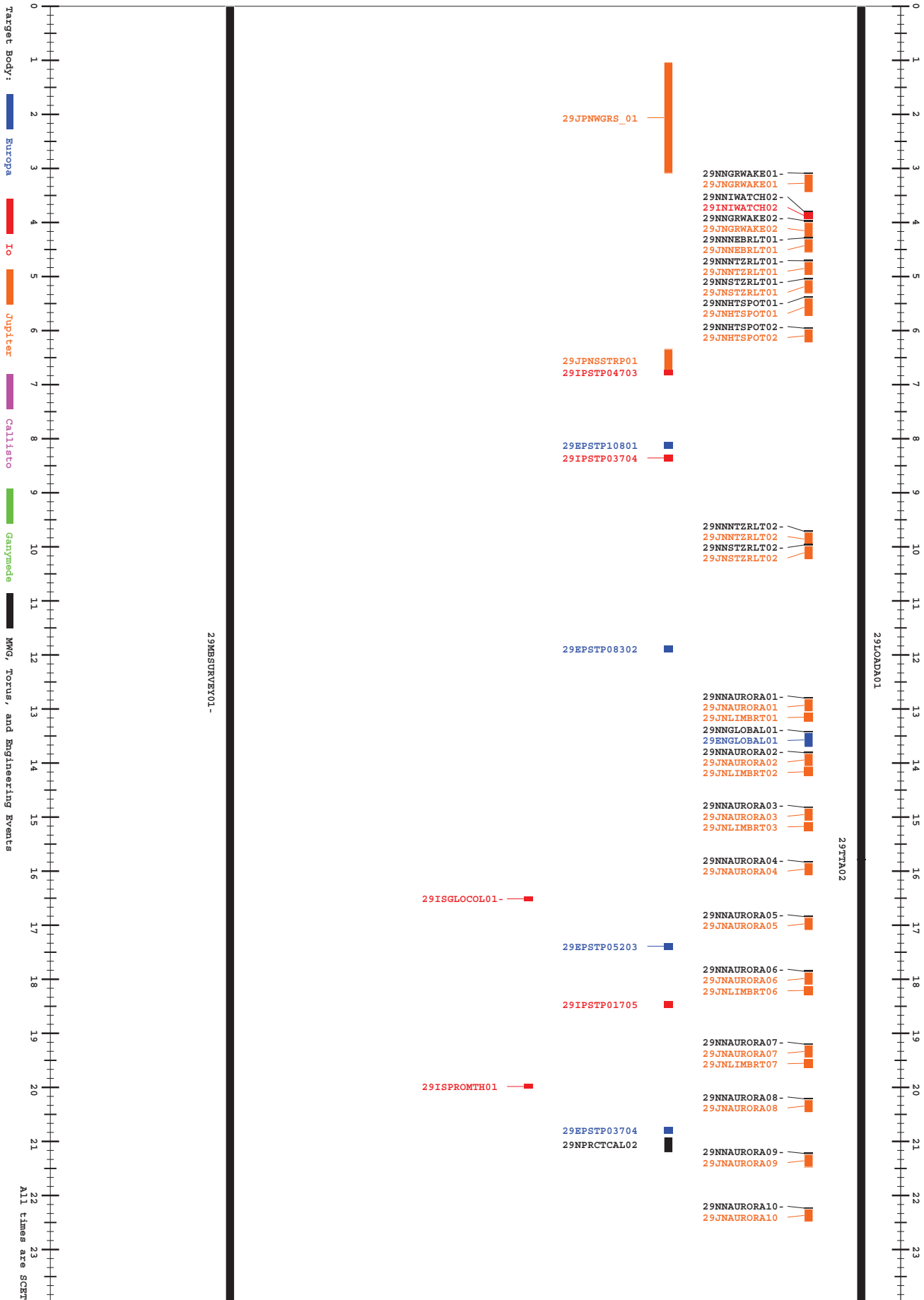
G29 ENCOUNTER  
Plot Time: 00-363/00:00:00.000 to 00-364/00:00:00.000  
Date of Plot: 5-Dec-100 9:47:54

GEMM: G29



Geometric Events MWG Observations RS UVS/EUV Observations SSI Observations PPR Observations NIMS Observations

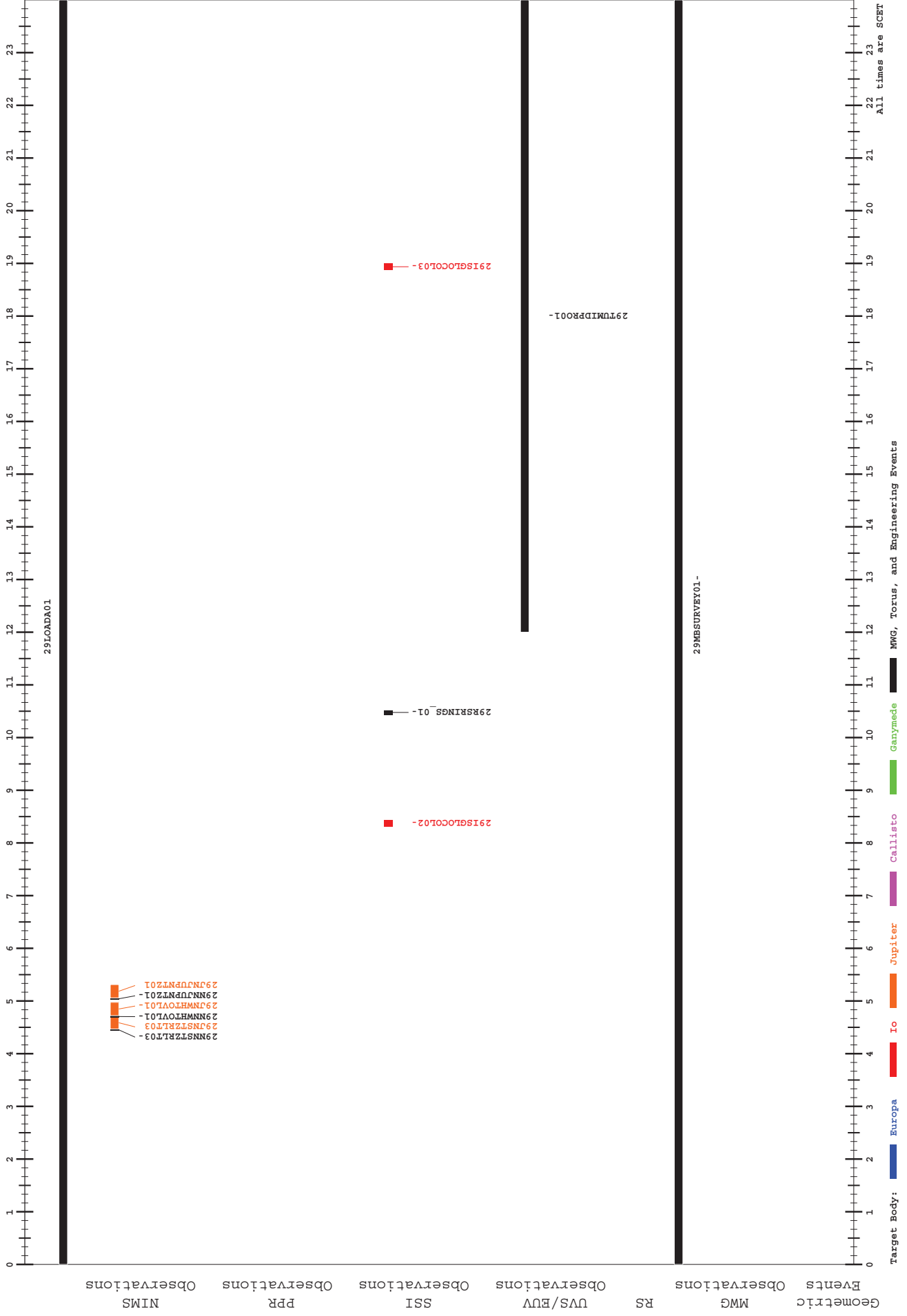
G29 ENCOUNTER  
Plot Time: 00-364/00:00:00.000 to 00-365/00:00:00.000  
Date of Plot: 5-Dec-100 9:47:54



GEM: G29

# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 00-365/00:00:00.000 to 470-366/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:54**



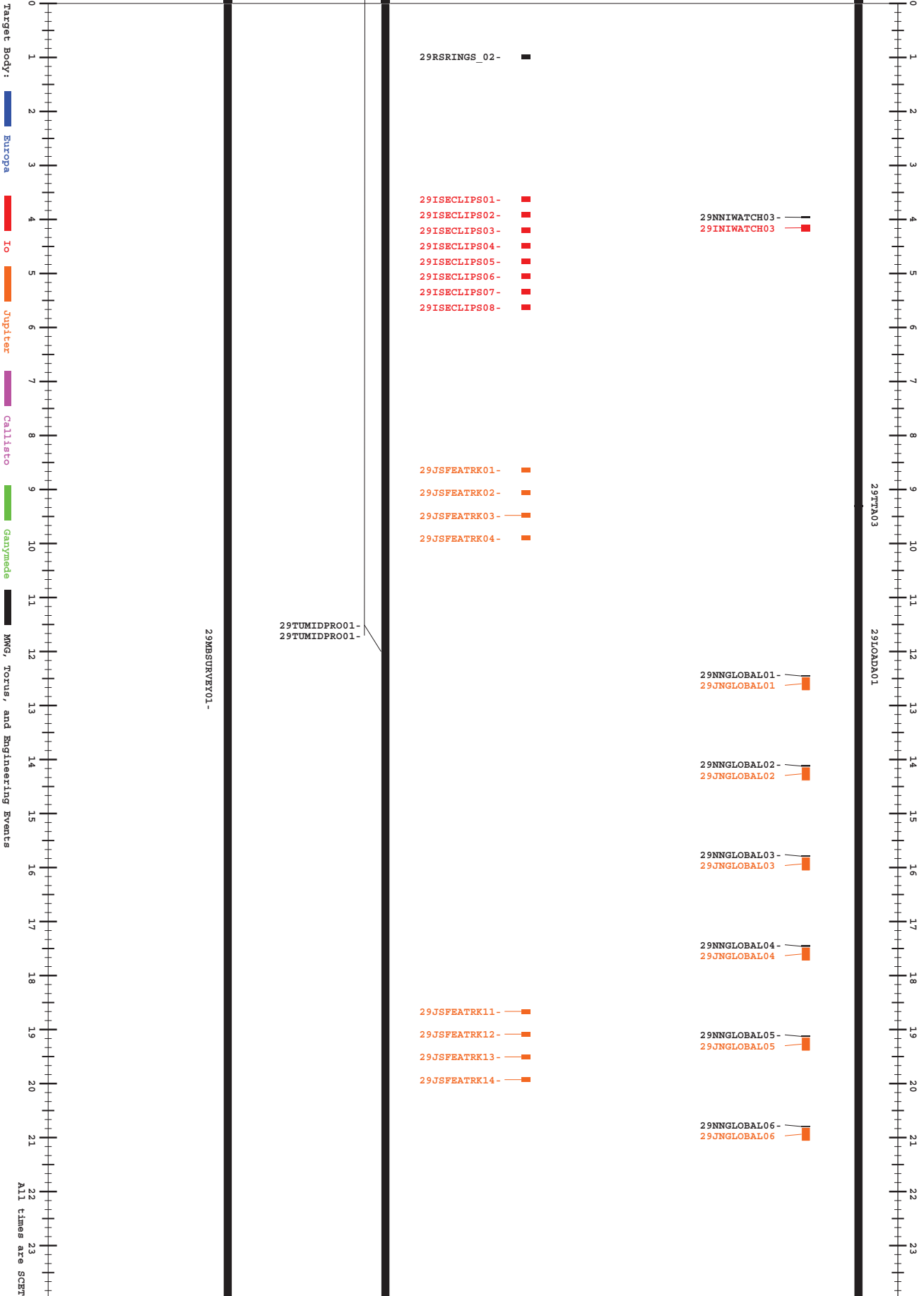
All times are SCF



Geometric Events      MWG Observation      RS      UVS/EUV Observations      SSI Observations      PPR Observations      NIMS Observations

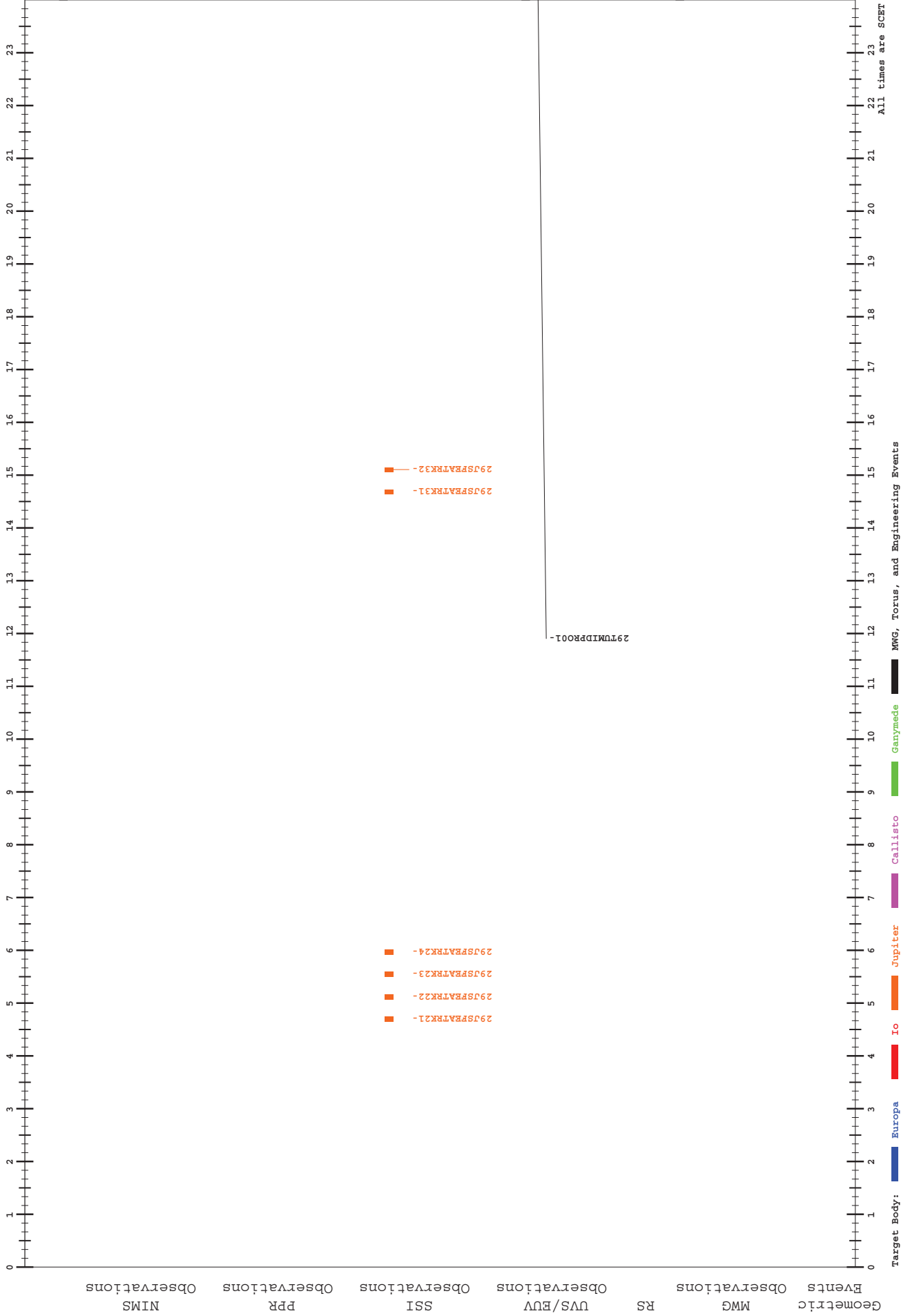
G29 ENCOUNTER  
Plot Time: 00-366/00:00:00.000 to 1-1/00:00:00.000  
Date of Plot: 5-Dec-100 9:47:55

GEM: G29



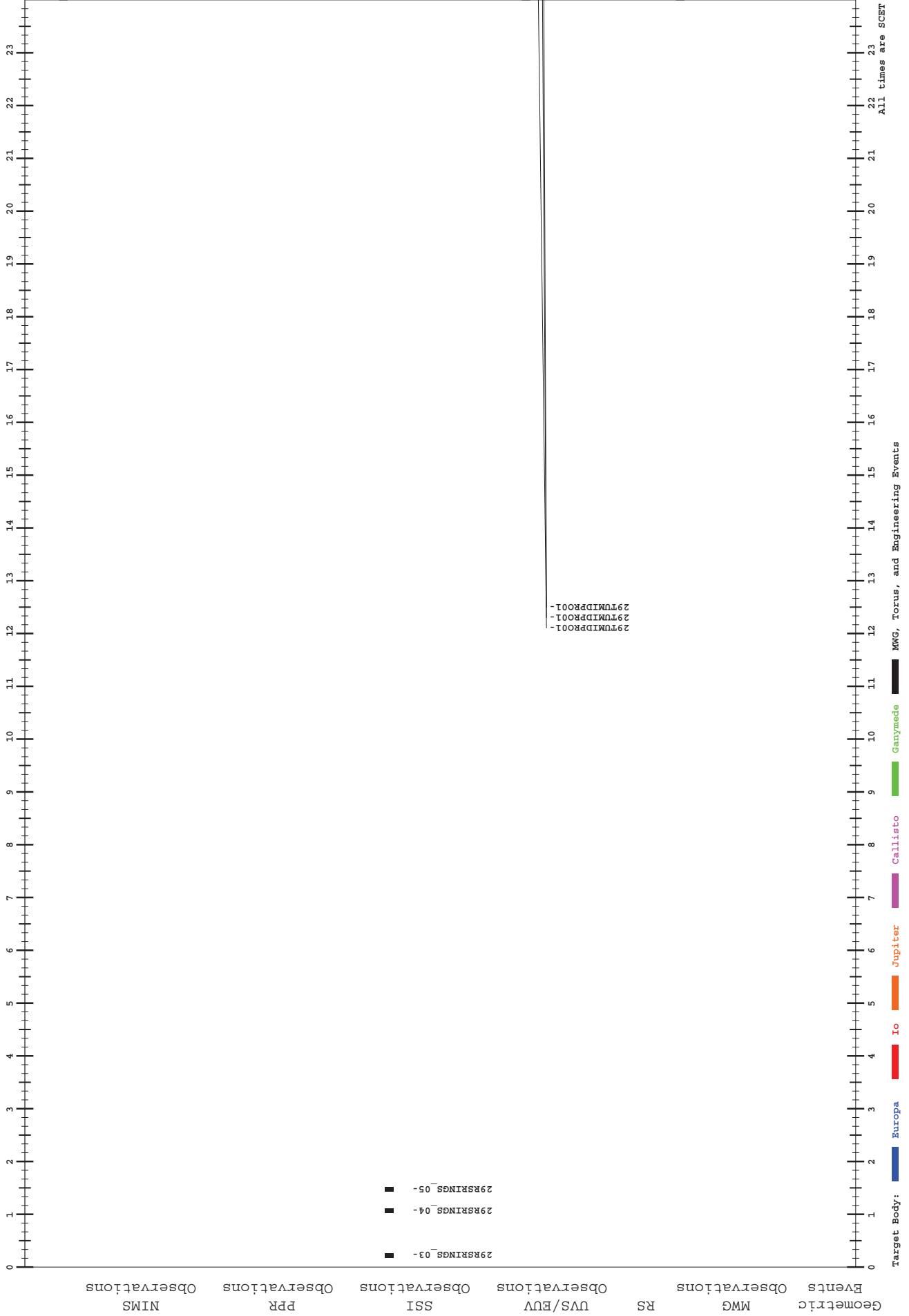
# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 1-1/00:00:00.000 to 1-2/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:55**



# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 1-2/00:00:00.000 to 1-3/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:55**



Geometric Observations  
MWG Observations  
RS  
UVS/EUV Observations  
SSI Observations  
PPR Observations  
NIMS Observations

12-21

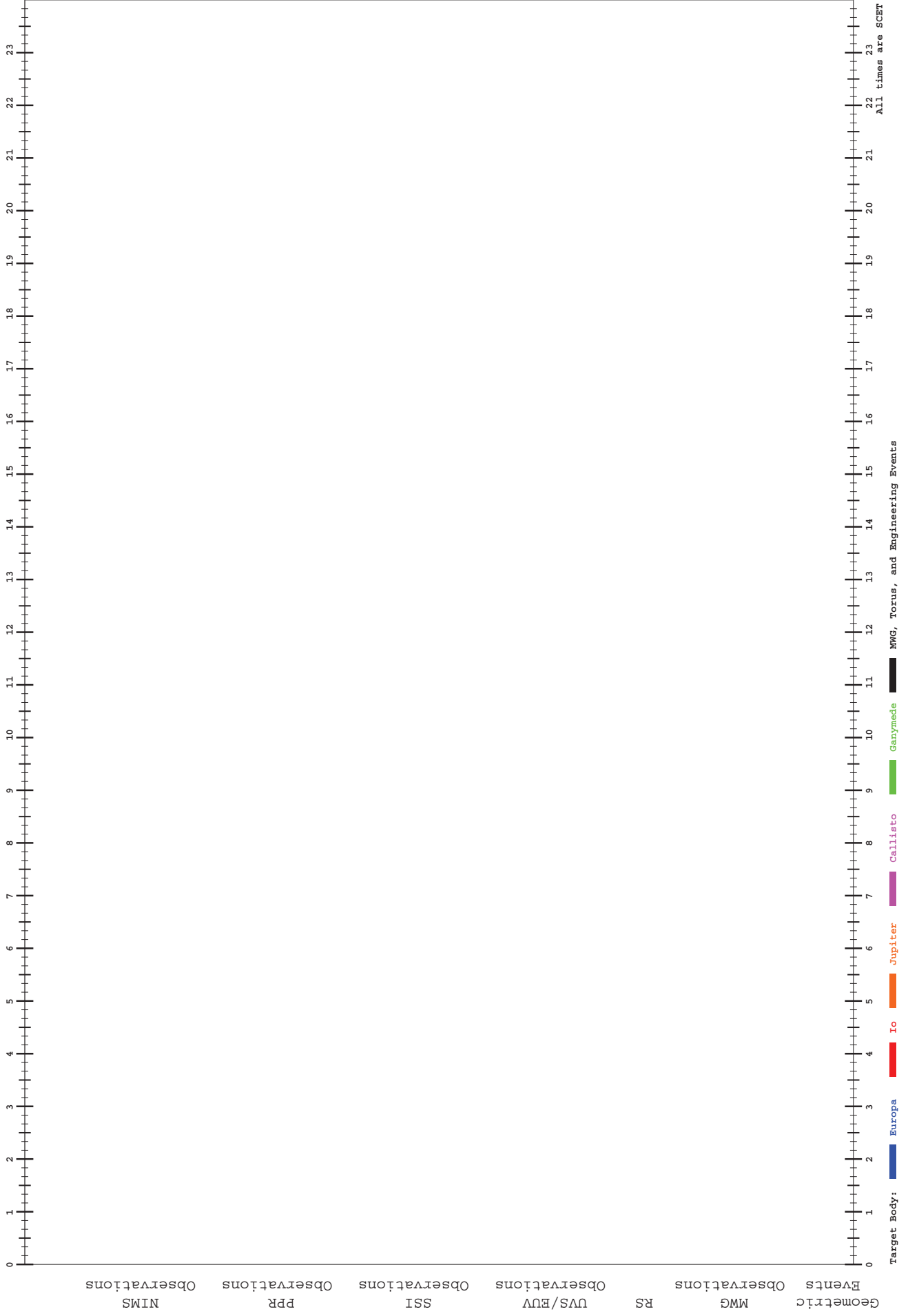
29SRINGS\_03 - ■  
29SRINGS\_04 - ■  
29SRINGS\_05 - ■

29TUMIDPROO1-  
29TUMIDPROO1-  
29TUMIDPROO1-

Target Body: Europa Jupiter Callisto Ganymede MWG, Forus, and Engineering Events  
All times are SCFR

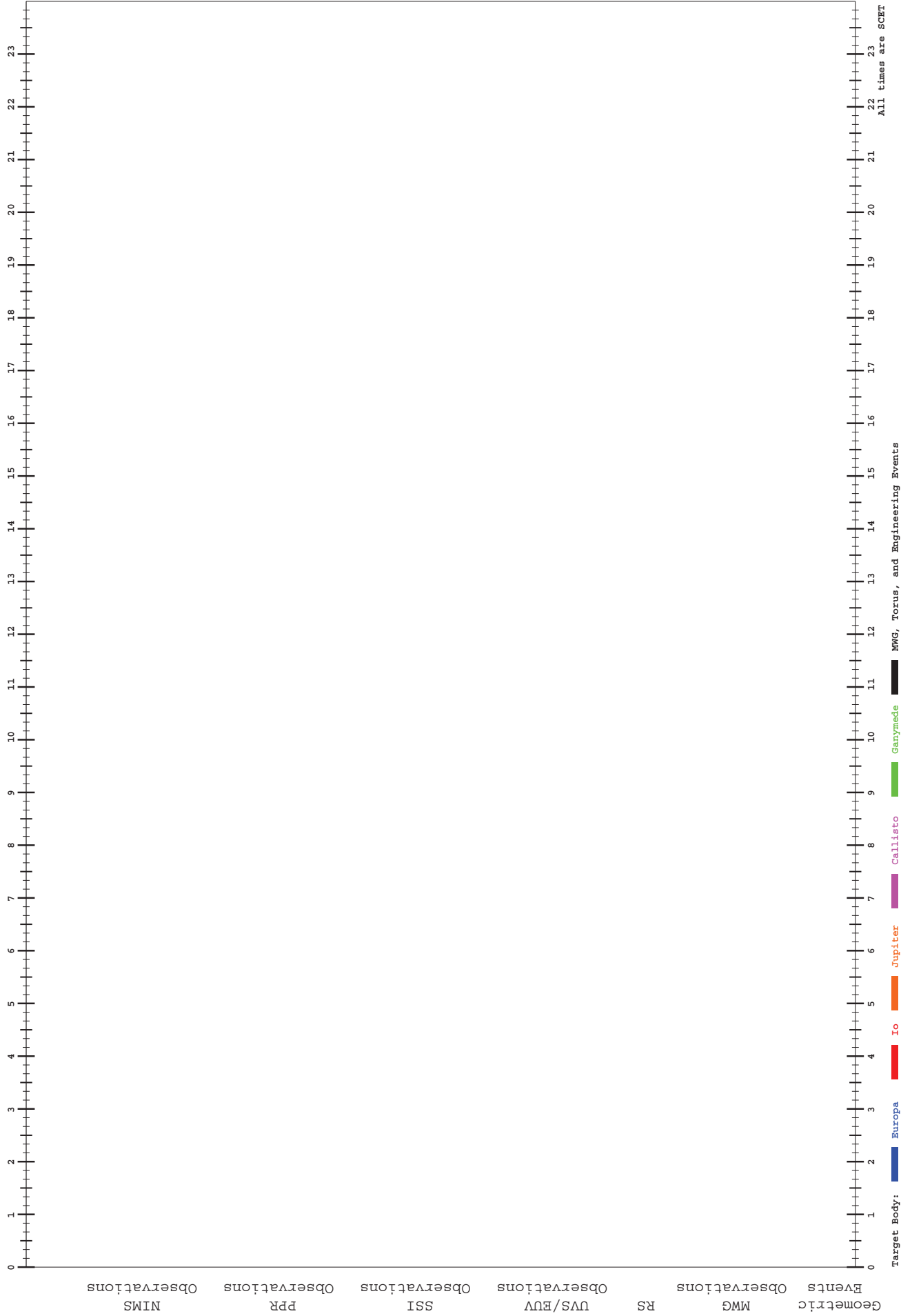
# GEM: G29

G29 ENCOUNTER  
Plot Time: 1-3/00:00:00.000 to 1-4/00:00:00.000  
Date of Plot: 5-Dec-100 9:47:55



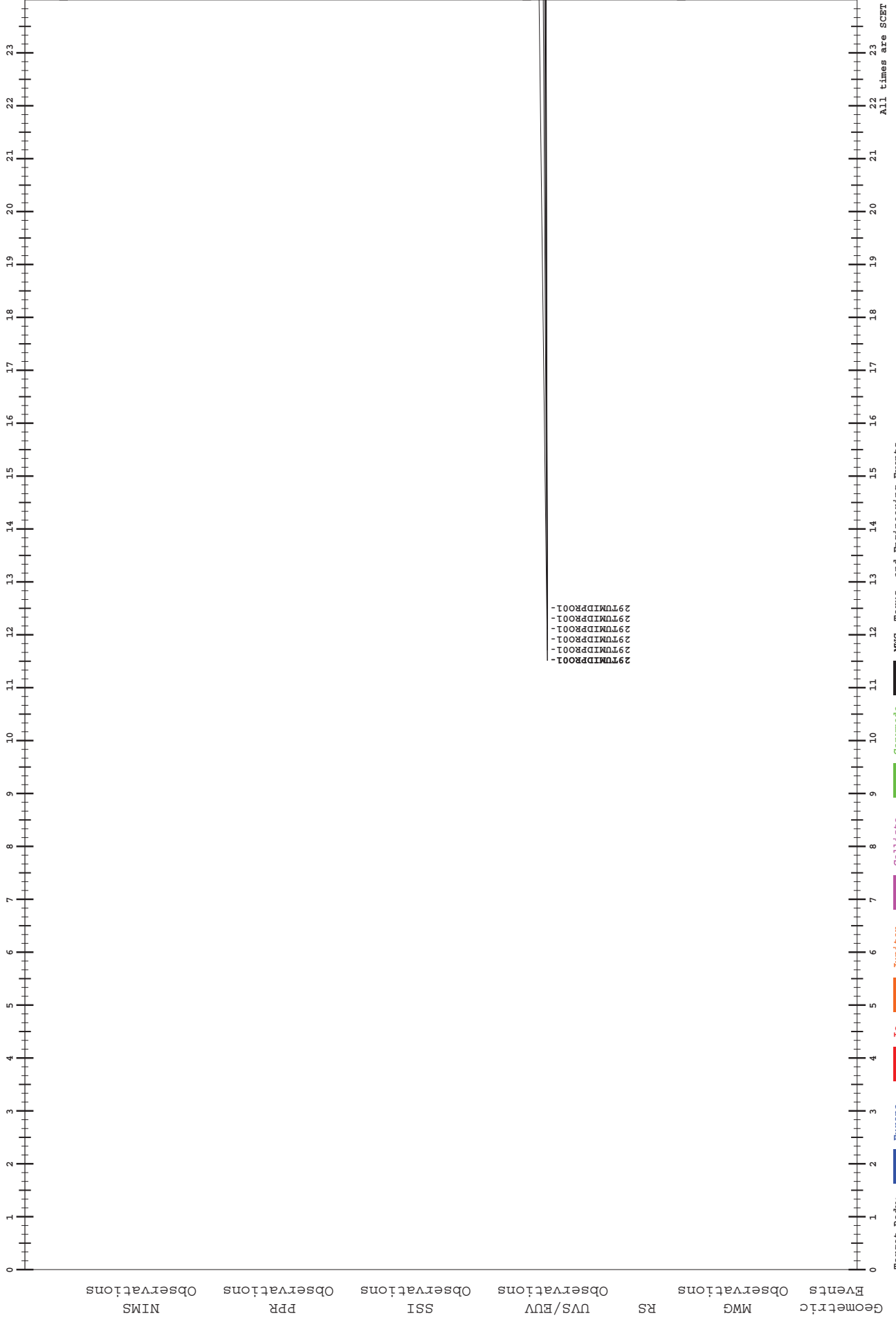
# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 1-4/00:00:00.000 to 1-5/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:56**



# GEM: G29

G29 ENCOUNTER  
Plot Time: 1-5/00:00:00.000 to 1-6/00:00:00.000  
Date of Plot: 5-Dec-100 9:47:56



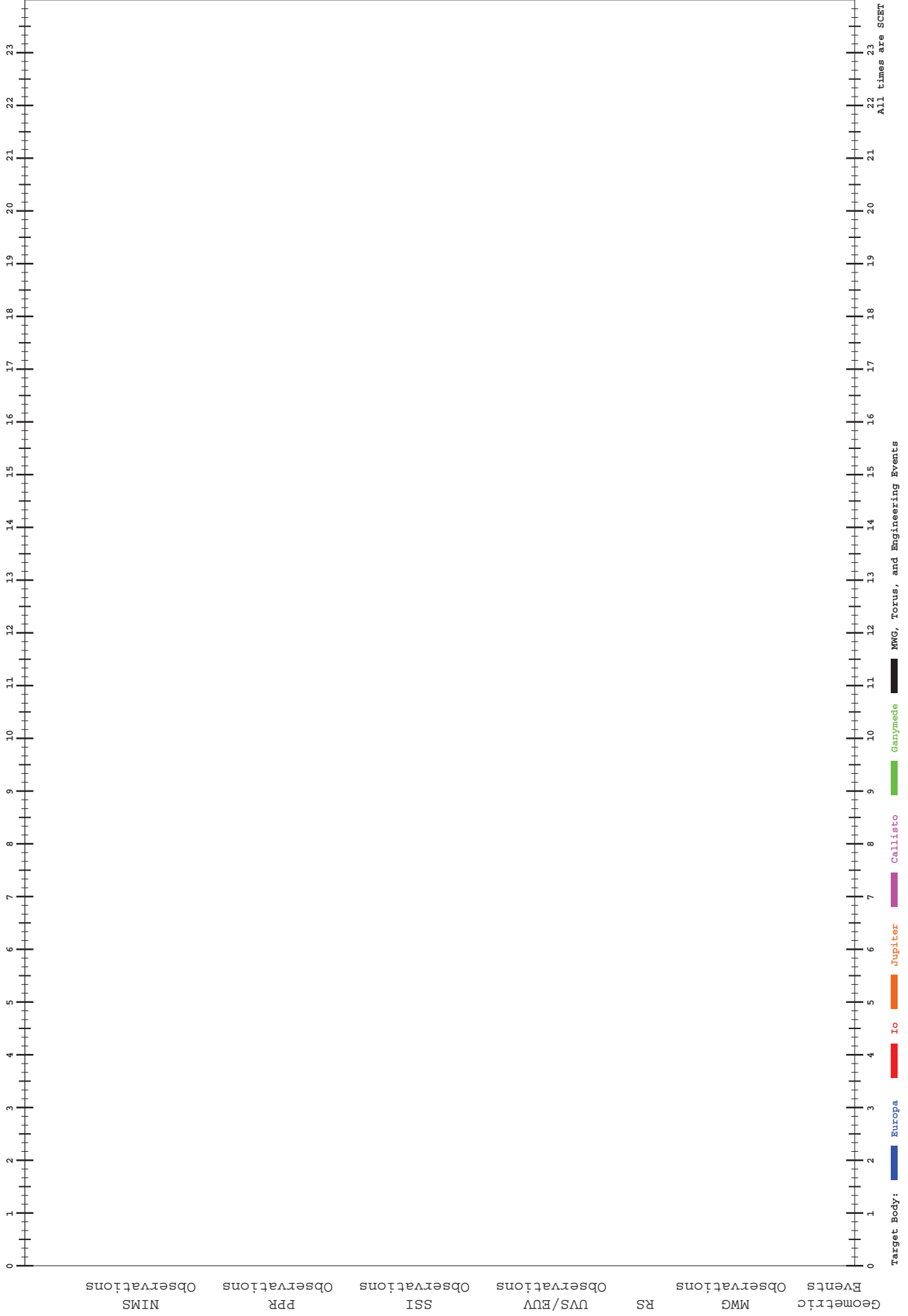
Geometric Observations  
 MWG Observations  
 RS  
 UVS/EUV Observations  
 SSI Observations  
 PPR Observations  
 NIMS Observations

Target Body: Europa Jupiter Callisto Ganymede MWG, Forus, and Engineering Events

All times are SCF

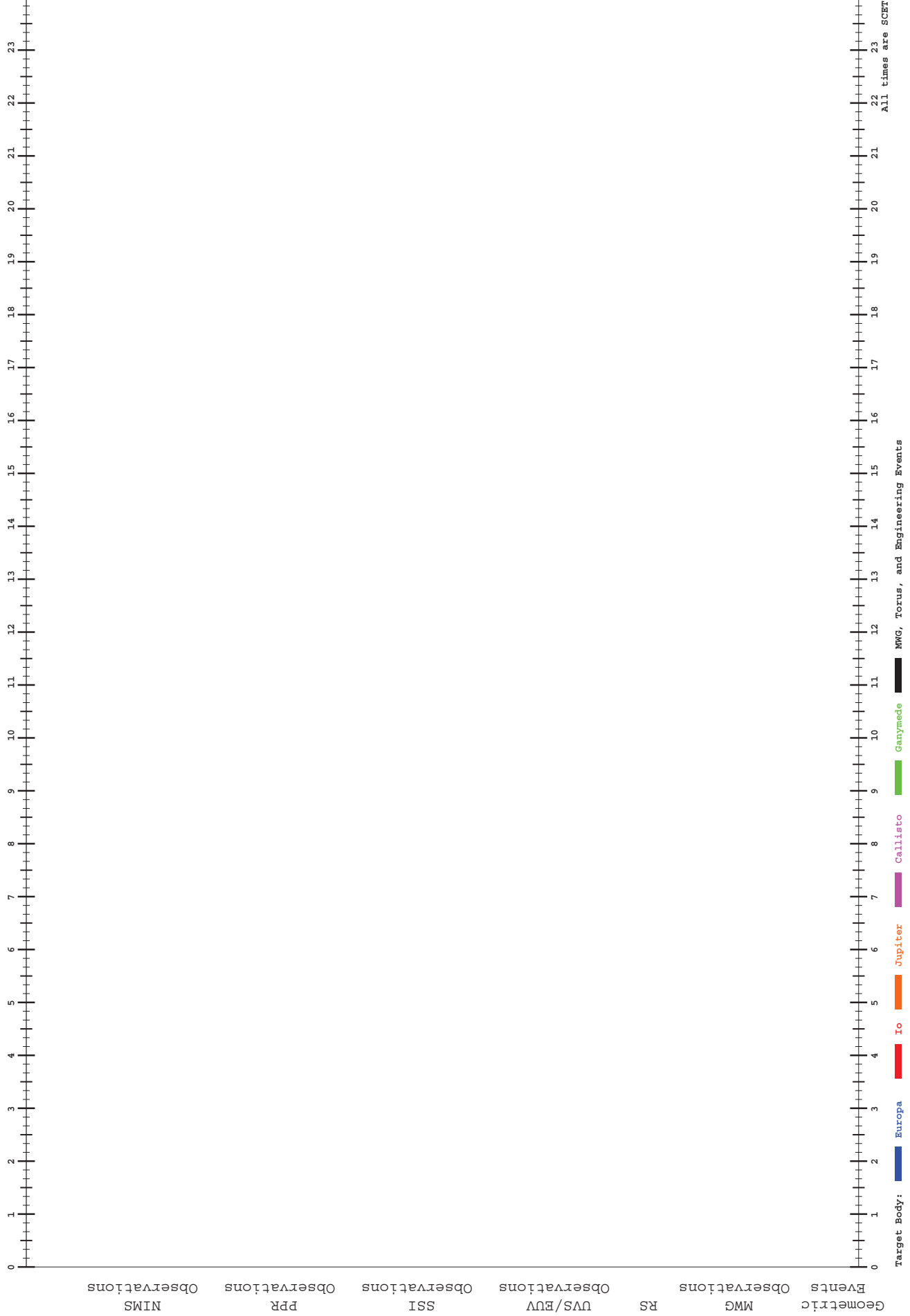
# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 1-6/00:00:00.000 to 1-7/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:56**



# GEM: G29

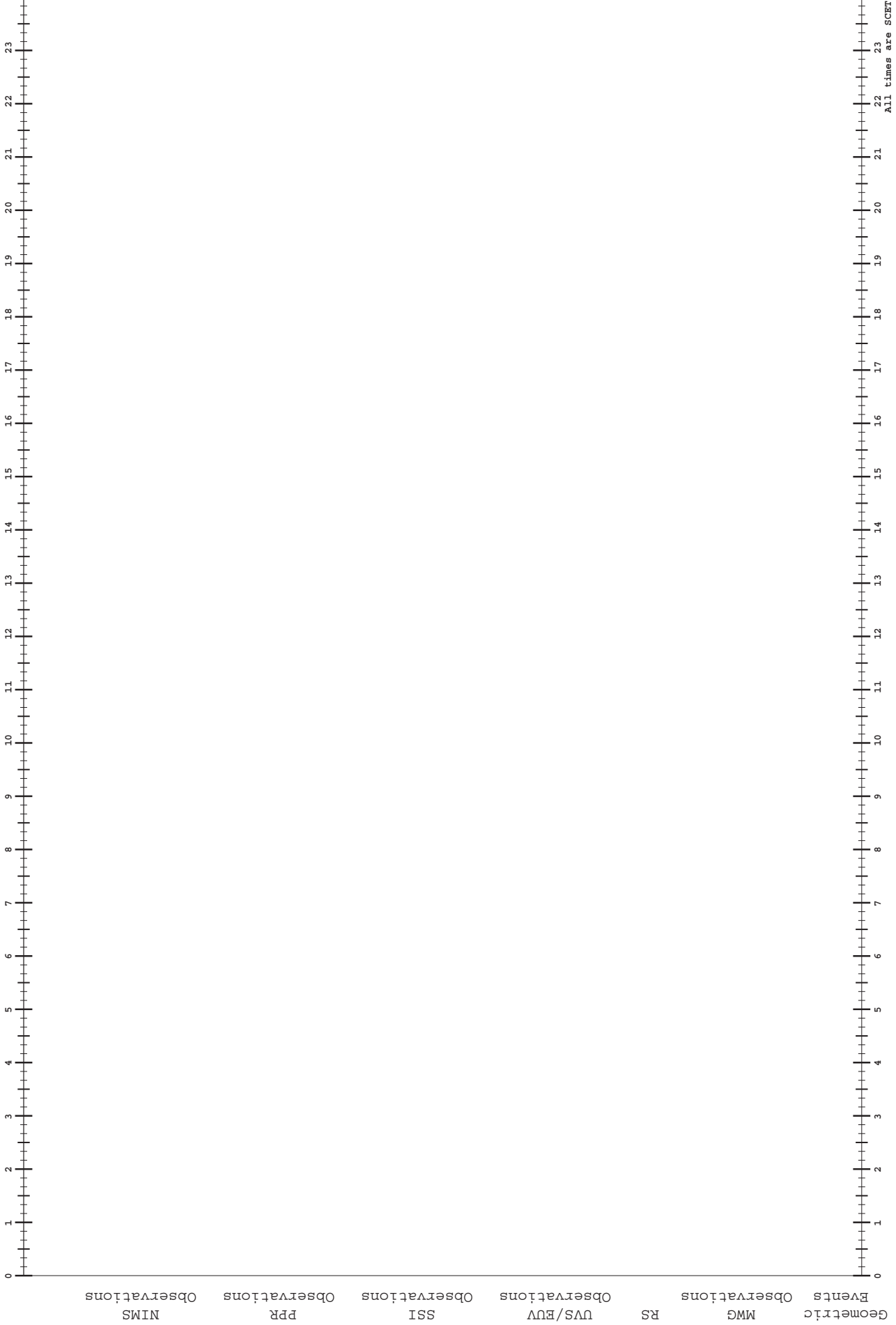
**G29 ENCOUNTER**  
**Plot Time: 1-7/00:00:00.000 to 1-8/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:56**





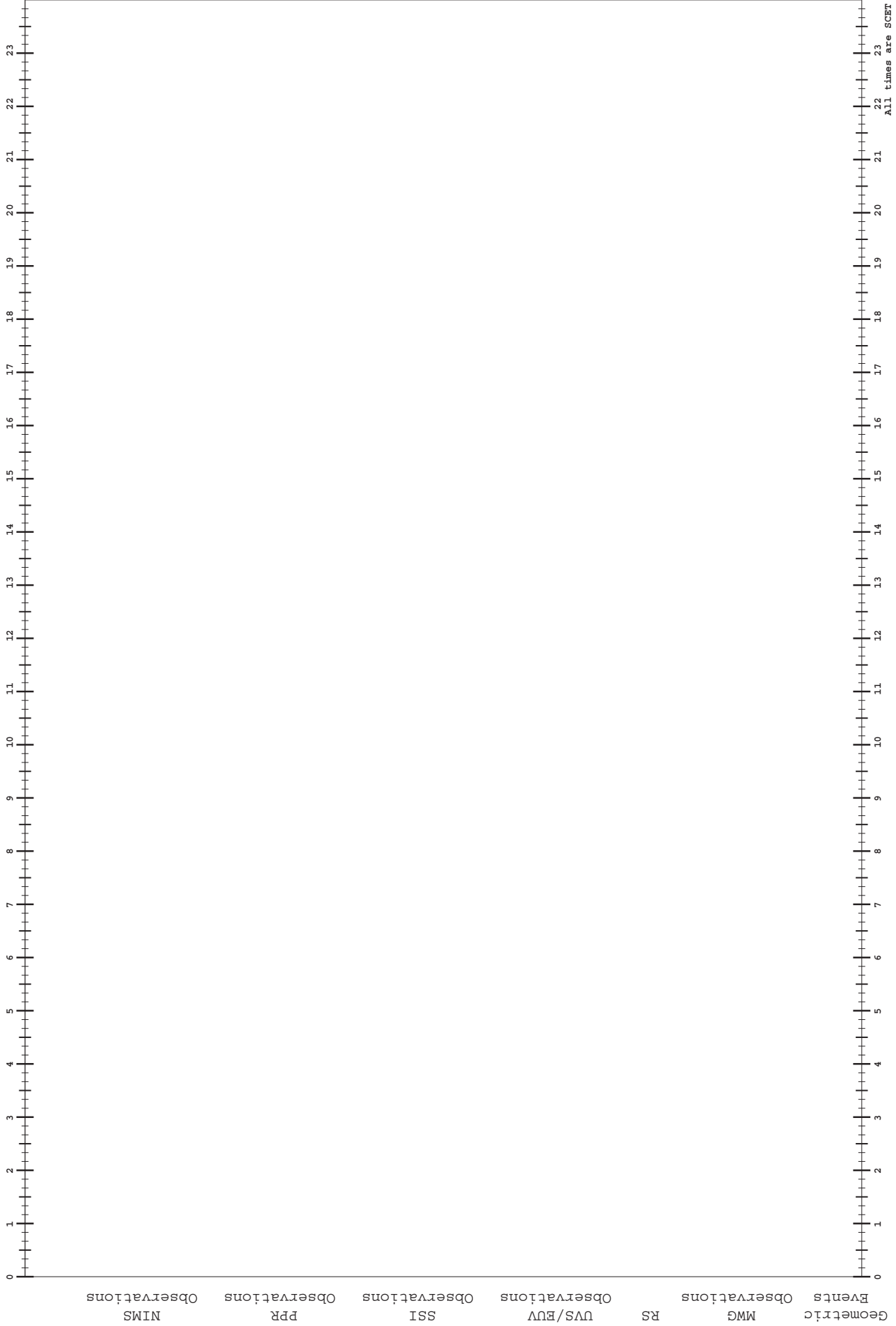
# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 1-8/00:00:00.000 to 1-9/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:56**



# GEM: G29

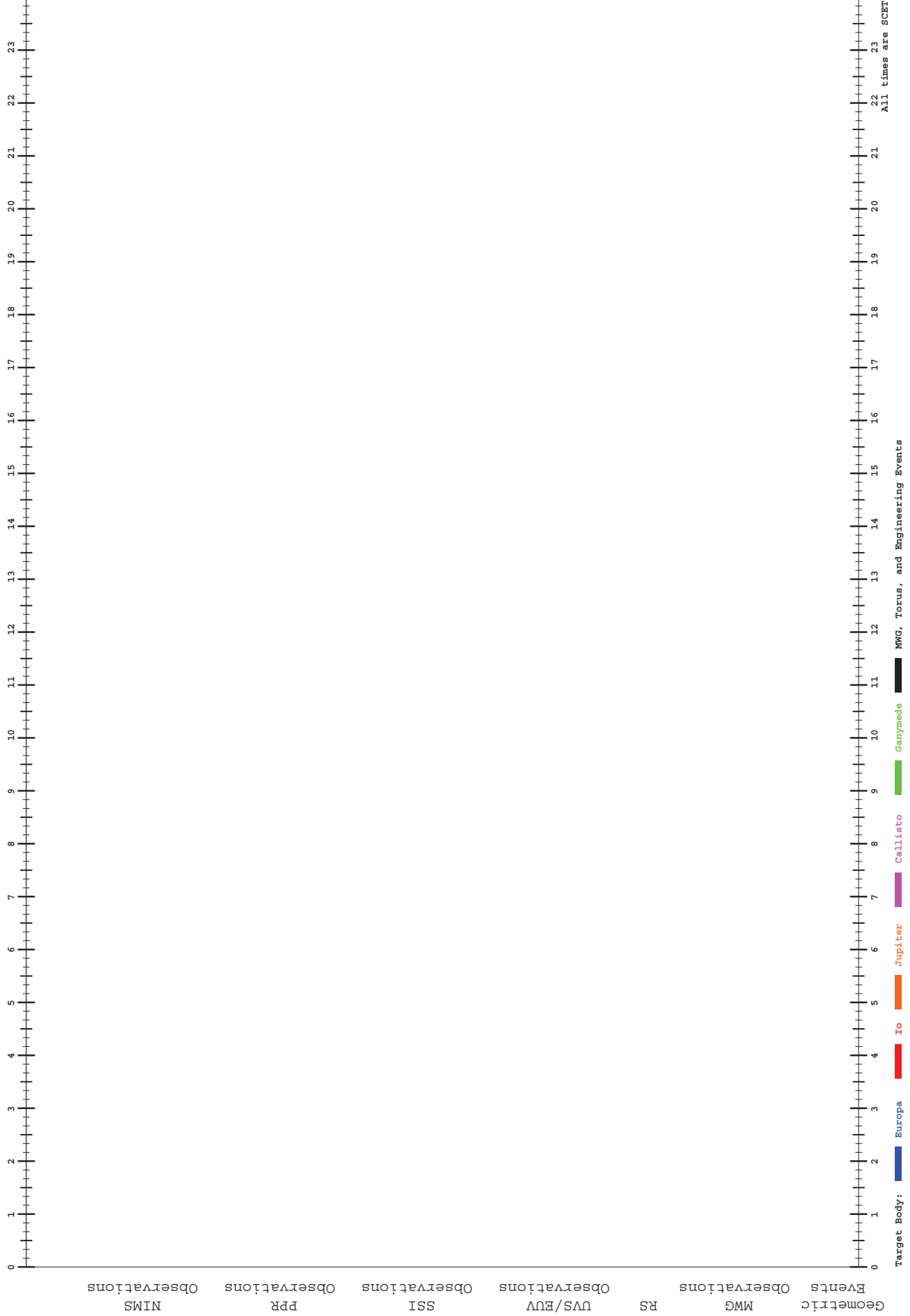
**G29 ENCOUNTER**  
**Plot Time: 1-9/00:00:00.000 to 1-10/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:56**



All times are SCF

# GEM: G29

G29 ENCOUNTER  
Plot Time: 1-10/00:00:00.000 to 1-11/00:00:00.000  
Date of Plot: 5-Dec-100 9:47:57



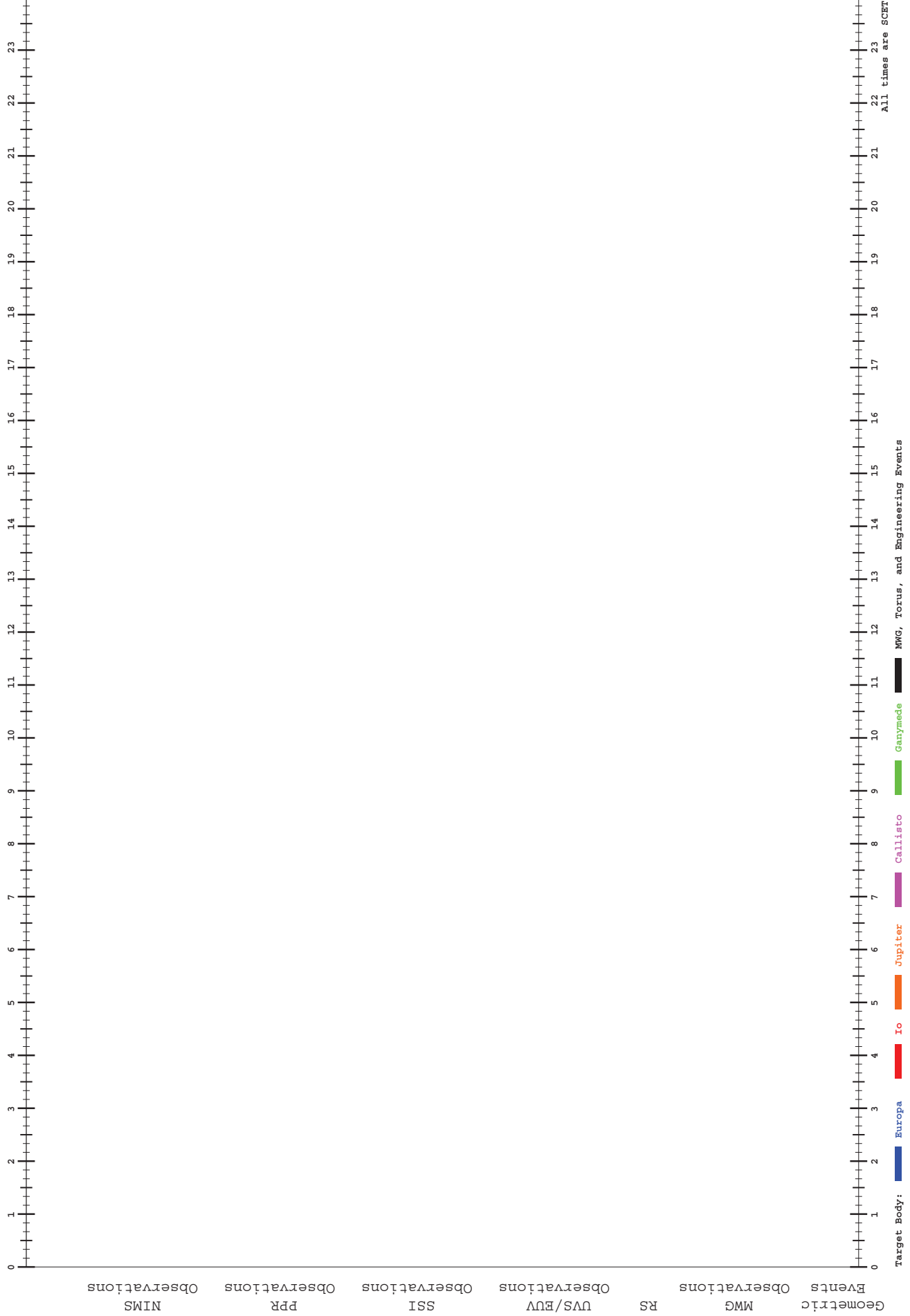
Geometric Events  
MWG Observations  
RS  
UVS/EUV Observations  
SSI Observations  
PPR Observations  
NIMS Observations

Target Body: Europa Jupiter Callisto Ganymede MWG, Torus, and Engineering Events

All times are SCT

# GEM: G29

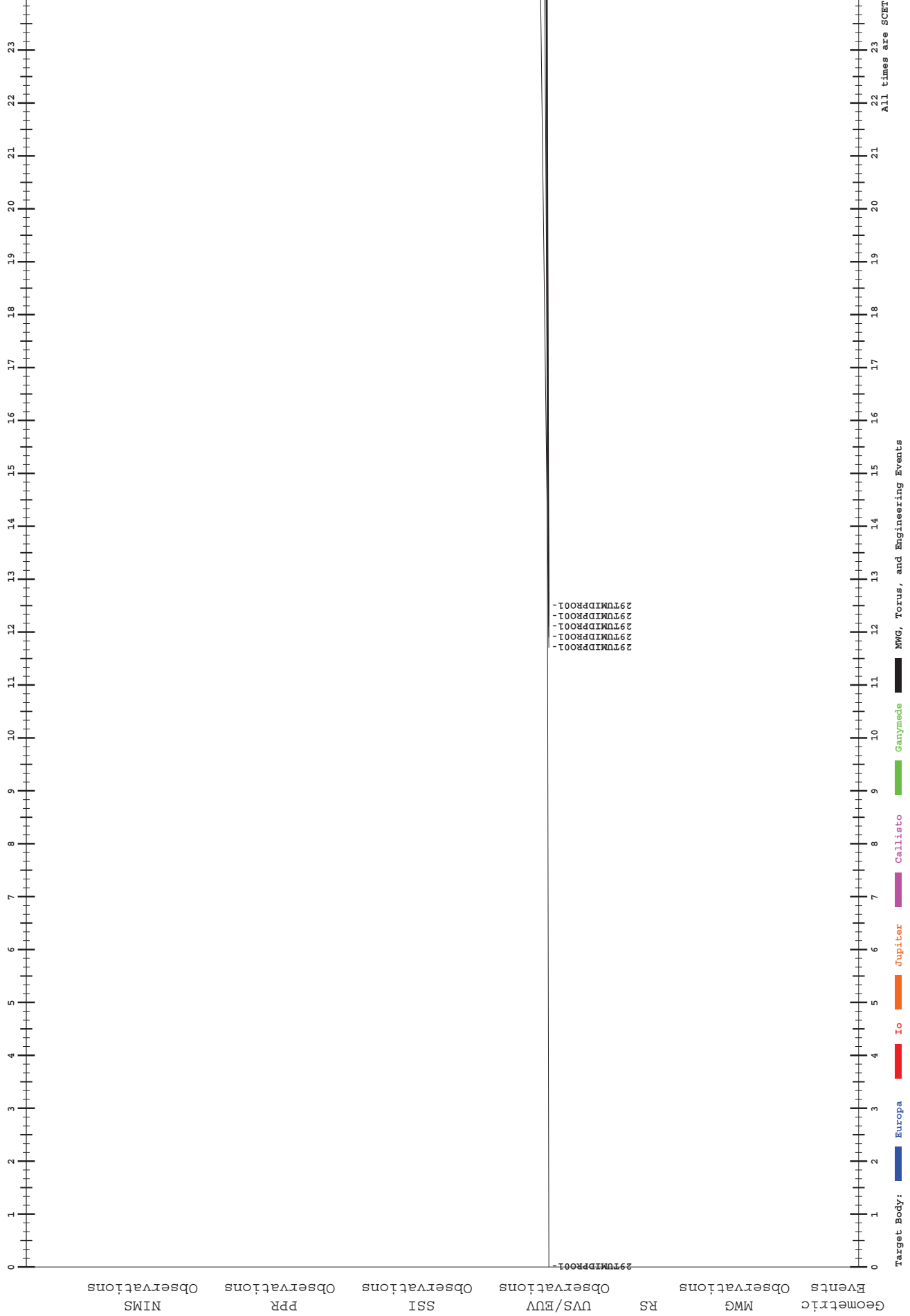
**G29 ENCOUNTER**  
**Plot Time: 1-11/00:00:00.000 to 1-12/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:57**



Geometric Observations  
MWG Observations  
RS  
UVS/EUV Observations  
SSI Observations  
PPR Observations  
NIMS Observations

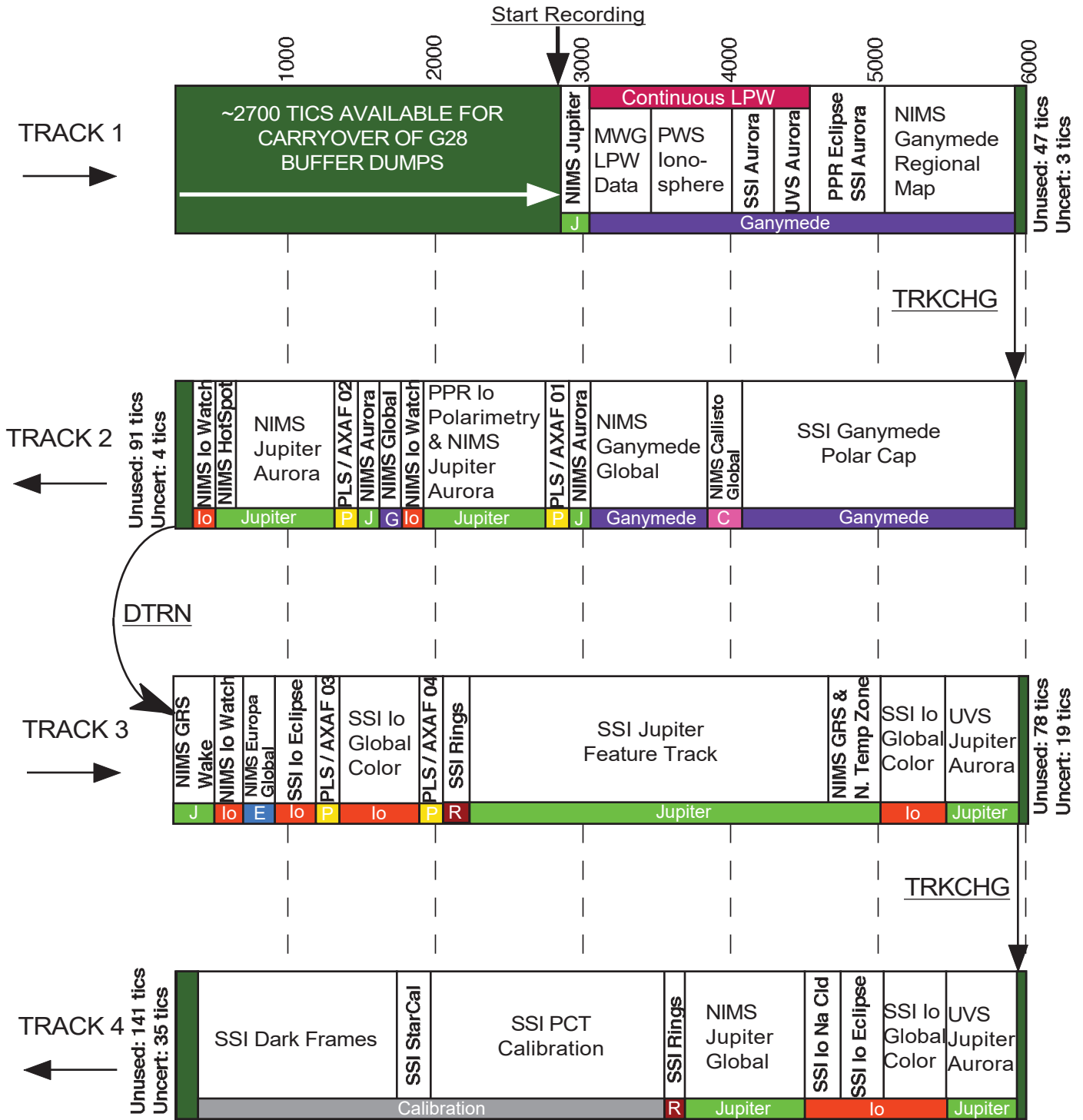
# GEM: G29

**G29 ENCOUNTER**  
**Plot Time: 1-12/00:00:00.000 to 1-13/00:00:00.000**  
**Date of Plot: 5-Dec-100 9:47:57**



All times are SGT

# G29 ENCOUNTER HIGH-LEVEL TAPEMAP

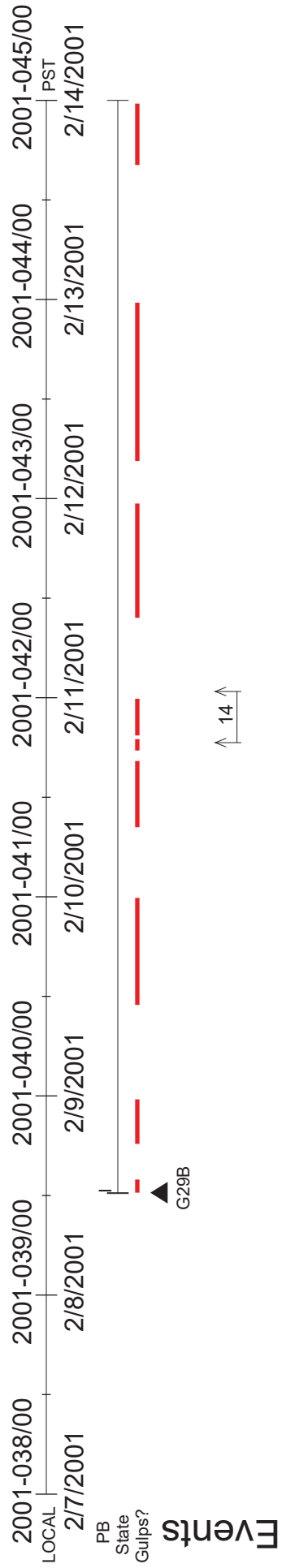


J. Gross, 6/7/99

# G29PED

Playback / Date Returned

2-33

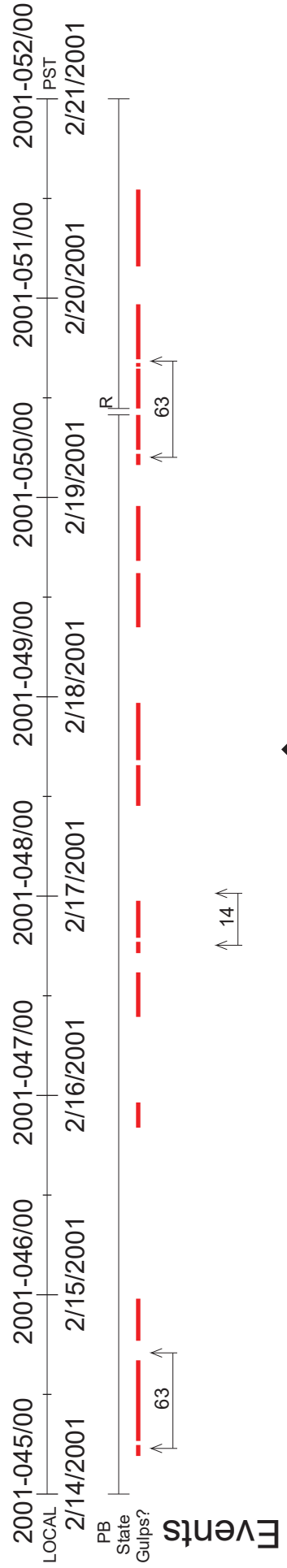


# G29PED

4095/1 4108/1  
29GPPERRIN01-  
4115/1 5968/1  
29GSAIRGLO01

Playback / Date Returned

2-34





# G29PED

5969/2  
 29GPNICECL01-  
 5965/2  
 29GPECLEGR01-  
 5956/2

29GSCAPCOL01

4454/2

4448/2

29GSDARDAN01

3829/2

3828/2  
 29GNREGION01-

Playback / Date Returned

Seg 3, Pass 1

2001-052/00 2001-053/00 2001-054/00 2001-055/00 2001-056/00 2001-057/00 2001-058/00 2001-059/00  
 LOCAL 2/21/2001 2/22/2001 2/23/2001 2/24/2001 2/25/2001 2/26/2001 2/27/2001 2/28/2001  
 PST

PB State Gulps? R

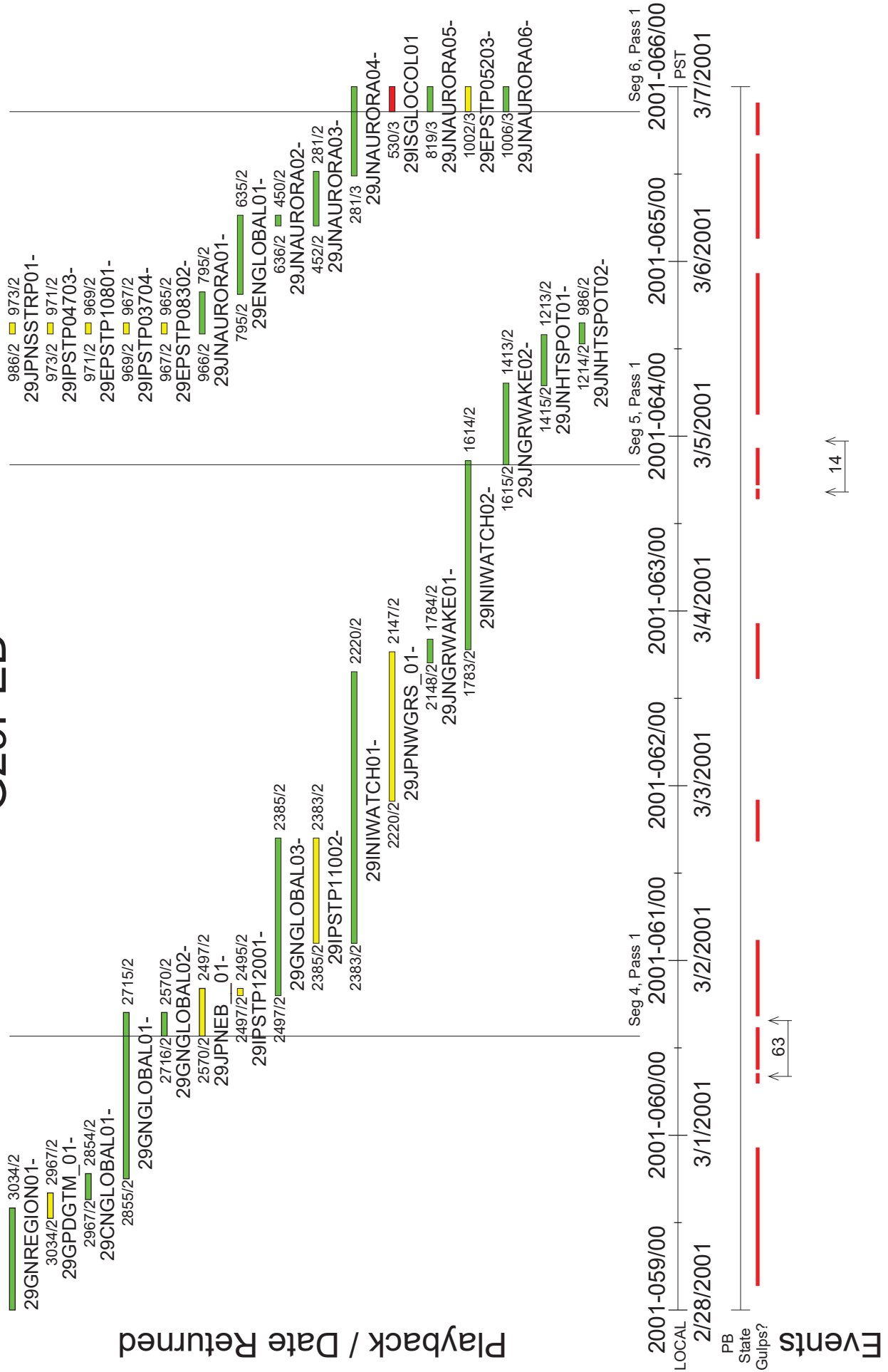
↑ 14 ↑

↑ 63 ↑

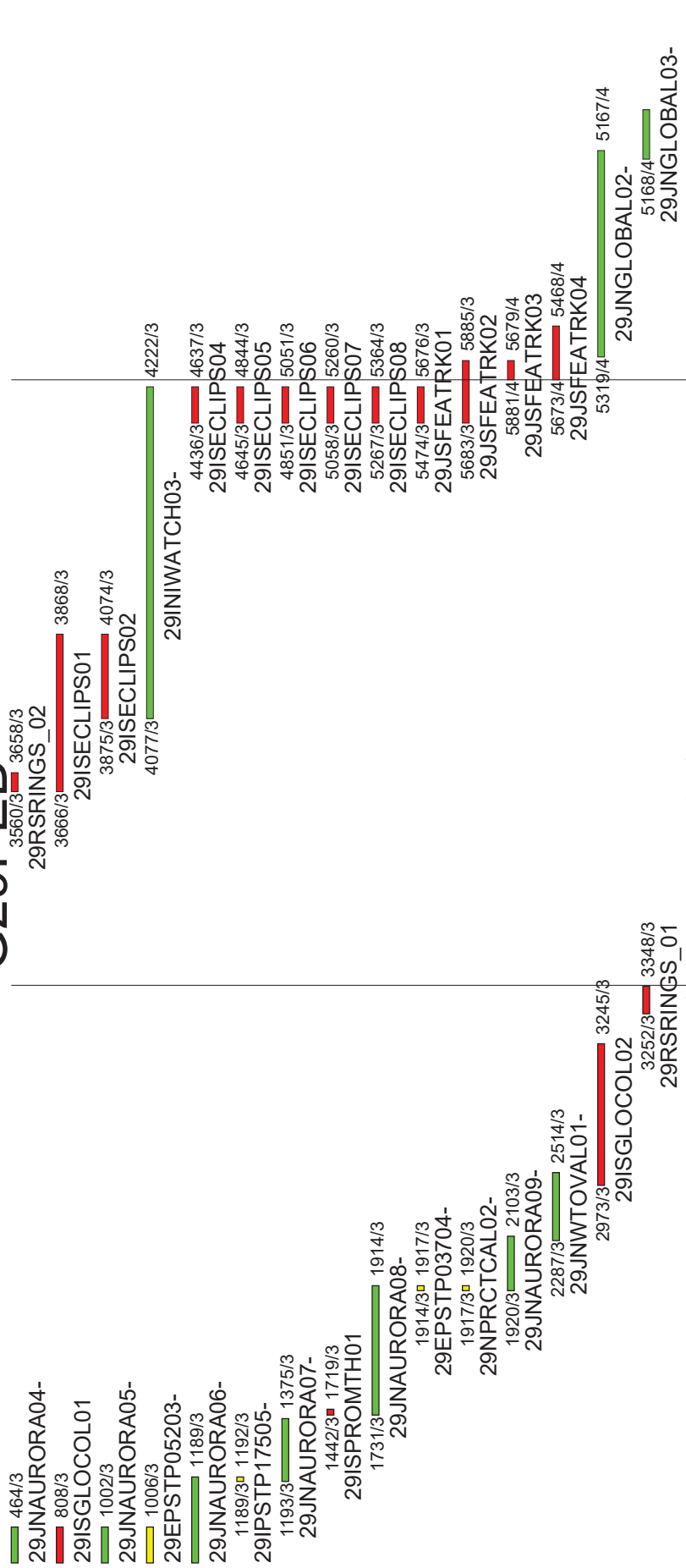
210 RJ

↑ 14 ↑

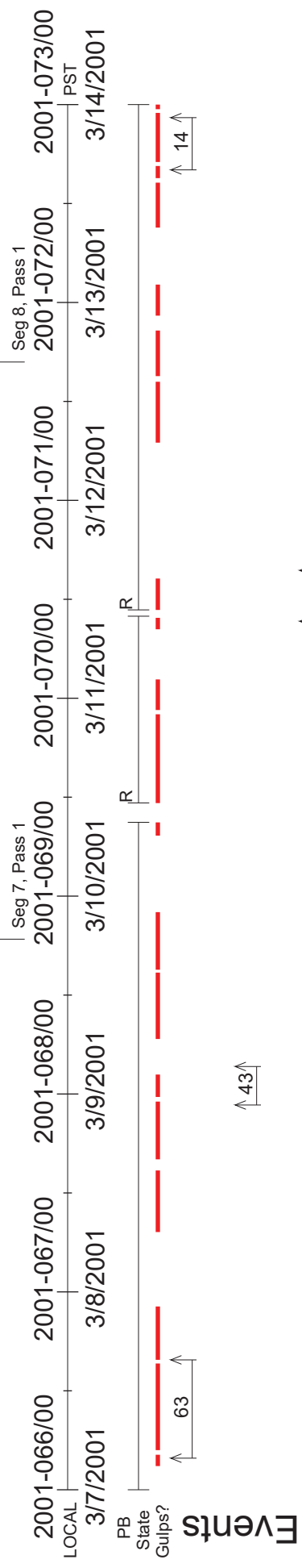
# G29PED



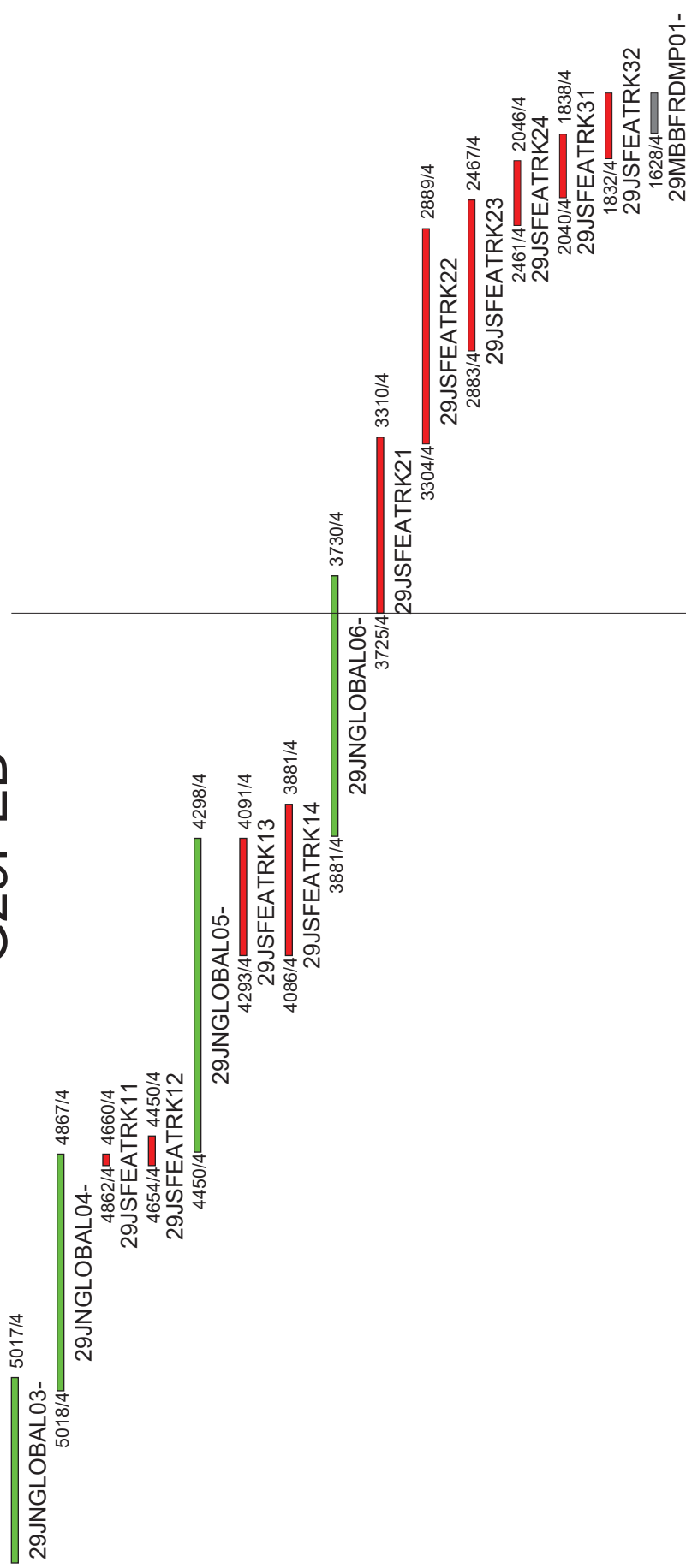
# G29PED



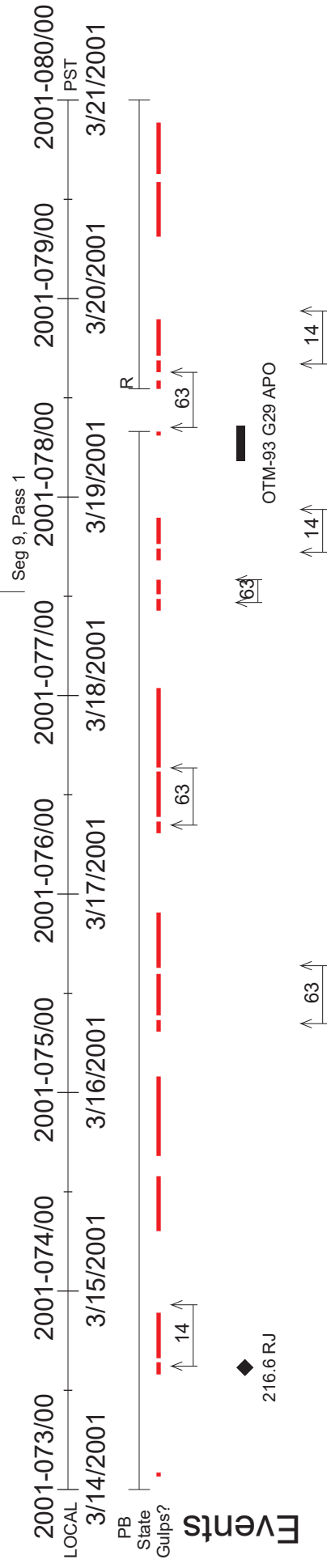
Playback / Date Returned



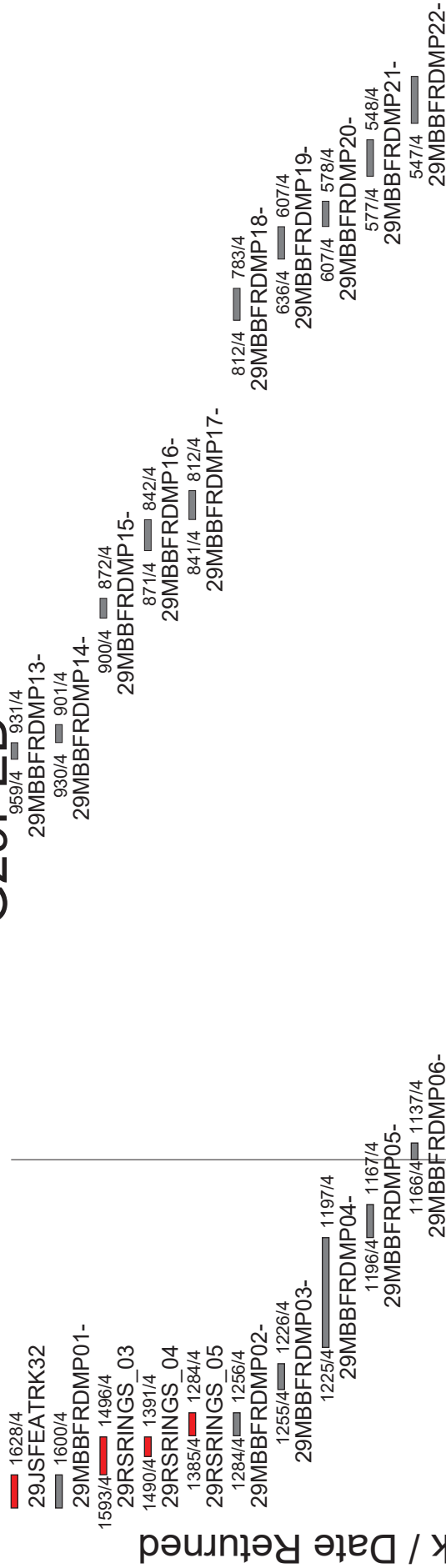
# G29PED



2 - 38



# G29PED



Playback / Date Returned

Seg 10, Pass 1



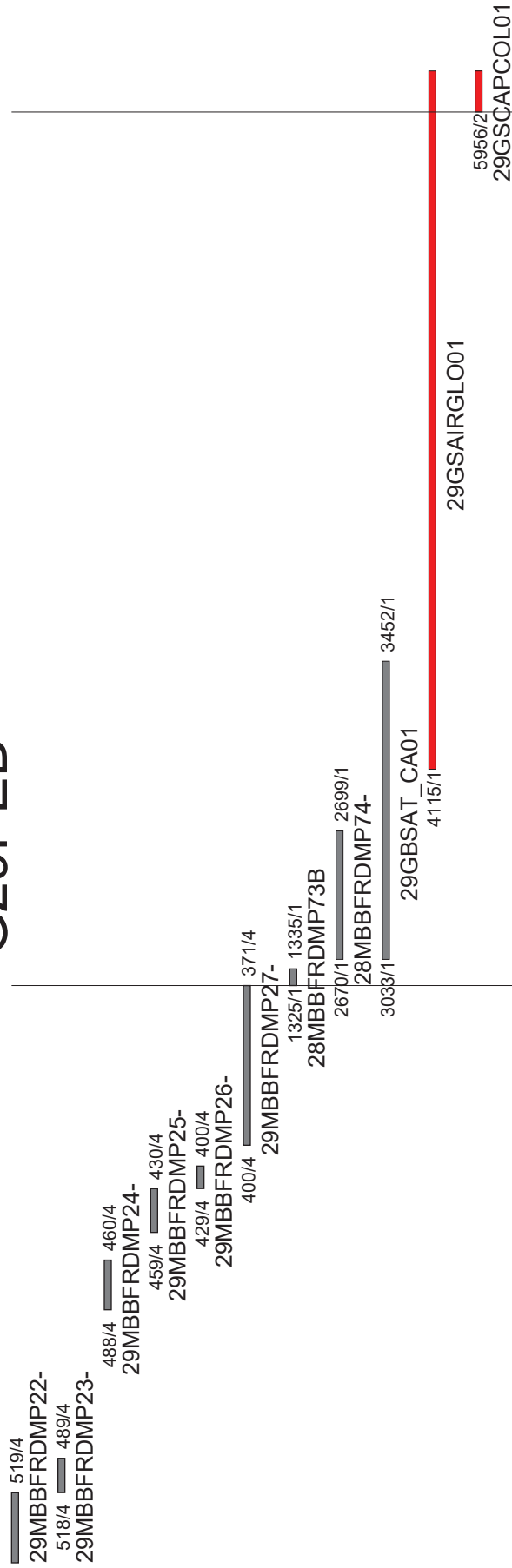
Events  
PB State  
Gulps?

63

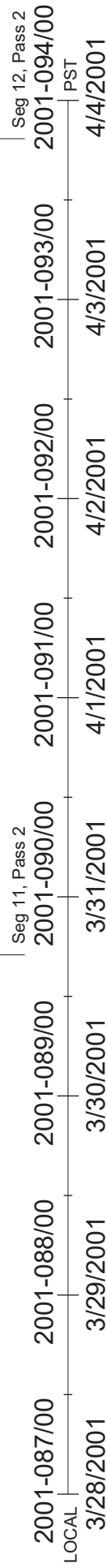
14

43

# G29PED

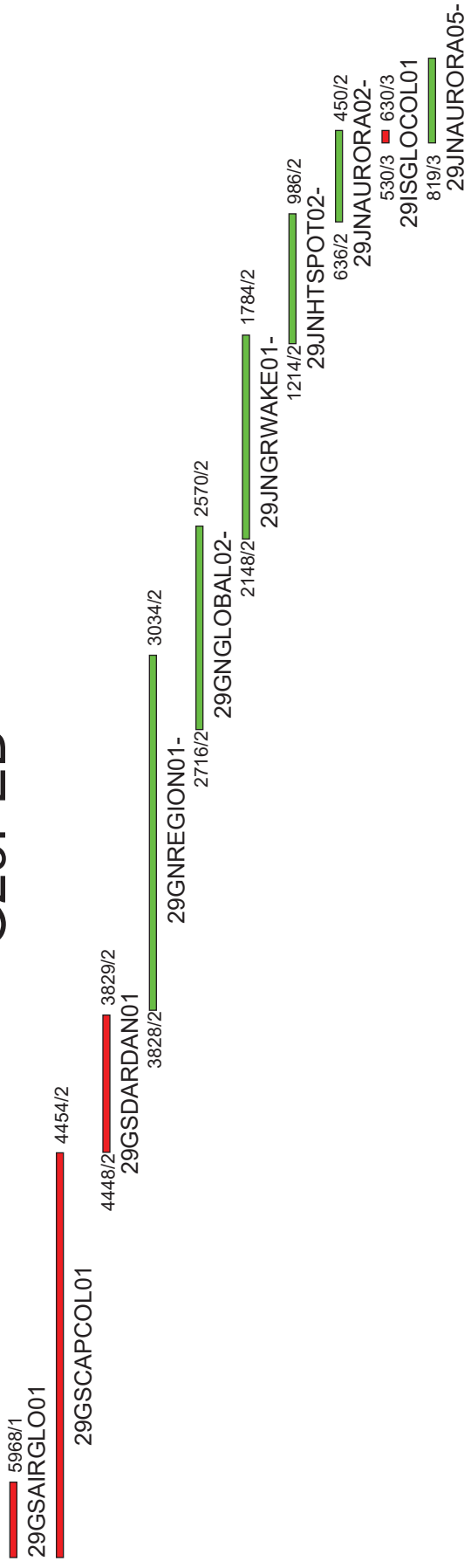


Playback / Date Returned

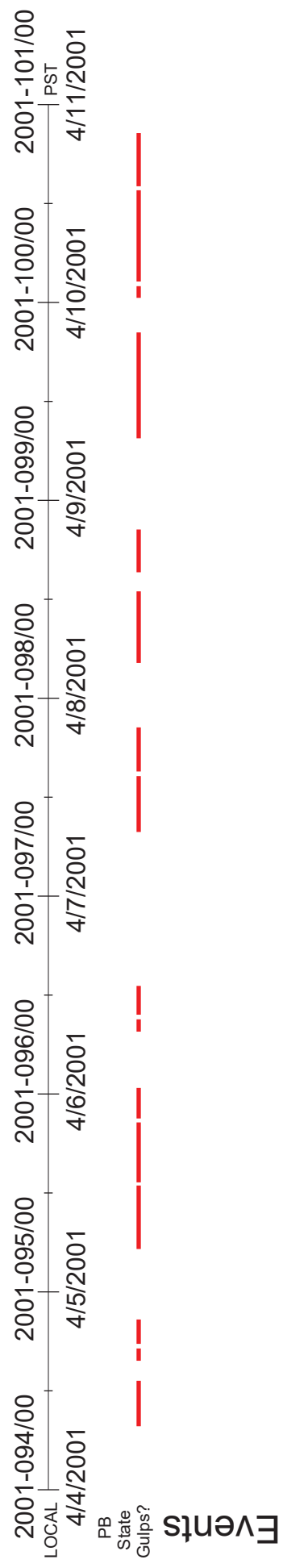


Events

# G29PED



Playback / Date Returned



# G29PED

3304/4 2889/4  
 29JSFEATR22  
 2883/4 2467/4  
 29JSFEATR23  
 2461/4 2046/4  
 29JSFEATR24  
 2040/4 1838/4  
 29JSFEATR31  
 1832/4 1628/4  
 29JSFEATR32  
 1593/4 1496/4  
 29RSRINGS\_03  
 1490/4 1391/4  
 29RSRINGS\_04  
 1385/4 1284/4  
 29RSRINGS\_05  
 400/4 371/4  
 29MBBFRDMP27-

3356/3 3452/3  
 29ISGLOC03  
 3560/3 3658/3  
 29RSRINGS\_02  
 3666/3 3764/3  
 29ISECLIPS01  
 5683/3 5885/3  
 29JSFEATR02  
 5881/4 5679/4  
 29JSFEATR03  
 5673/4 5468/4  
 29JSFEATR04  
 5469/4  
 29JGLOBAL01-  
 4862/4 4660/4  
 29JSFEATR11  
 4654/4 4450/4  
 29JSFEATR12  
 4293/4 4091/4  
 29JSFEATR13  
 4086/4 3881/4  
 29JSFEATR14  
 3725/4 3310/4  
 29JSFEATR21

1002/3  
 29JNAURORA05-  
 2103/3 2286/3  
 29JNAURORA10-  
 2515/3 2966/3  
 29JNJUPNTZ01-  
 3252/3 3348/3  
 29RSRINGS\_01  
 3356/3 3452/3  
 29ISGLOC03  
 3560/3 3658/3  
 29RSRINGS\_02  
 3666/3 3764/3  
 29ISECLIPS01  
 5683/3 5885/3  
 29JSFEATR02  
 5881/4 5679/4  
 29JSFEATR03  
 5673/4 5468/4  
 29JSFEATR04  
 5469/4  
 29JGLOBAL01-  
 4862/4 4660/4  
 29JSFEATR11  
 4654/4 4450/4  
 29JSFEATR12  
 4293/4 4091/4  
 29JSFEATR13  
 4086/4 3881/4  
 29JSFEATR14  
 3725/4 3310/4  
 29JSFEATR21

Playback / Date Returned

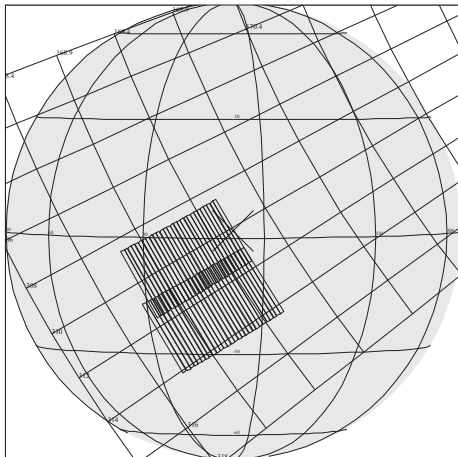
2001-101/00 2001-102/00 2001-103/00 2001-104/00 2001-105/00 2001-106/00 2001-107/00 2001-108/00  
 LOCAL 4/11/2001 4/12/2001 4/13/2001 4/14/2001 4/15/2001 4/16/2001 4/17/2001 4/18/2001 PST

PB  
 State  
 Gulps?

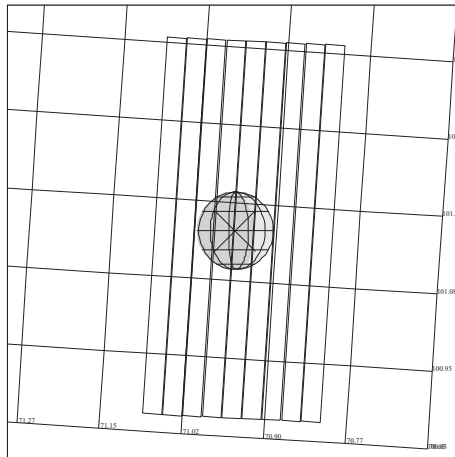
Events



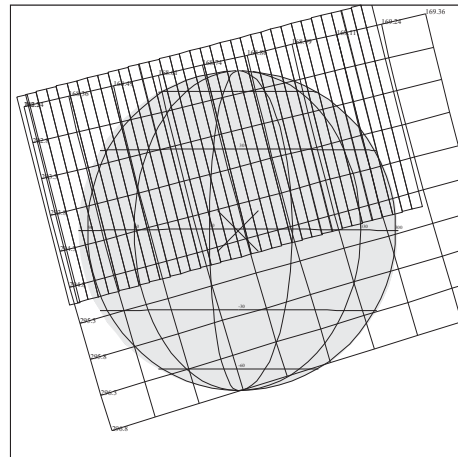
# G29 NIMS A



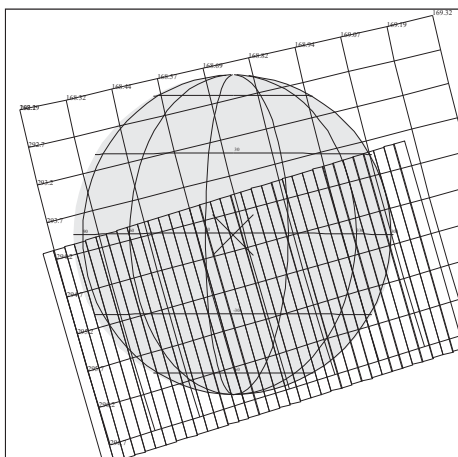
**29GNREGION01**  
**00-363/10:31:29**



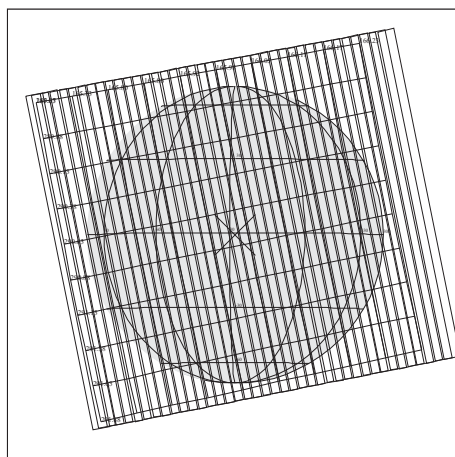
**29CNGLOBAL01**  
**00-363/13:42:35**



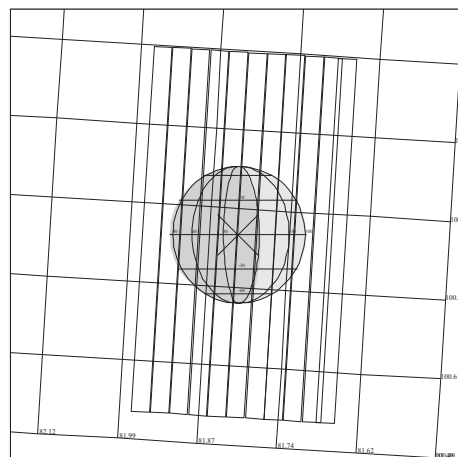
**29GNGLOBAL01**  
**00-363/17:14:55**



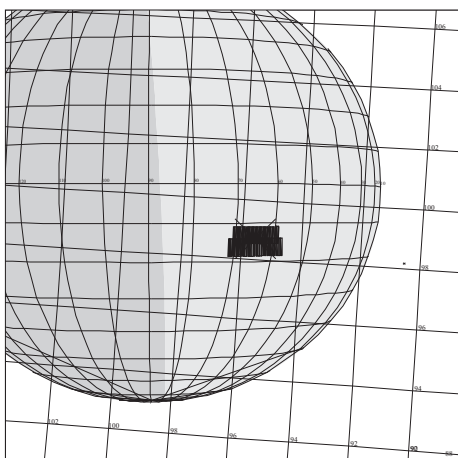
**29GNGLOBAL02**  
**00-363/17:29:04**



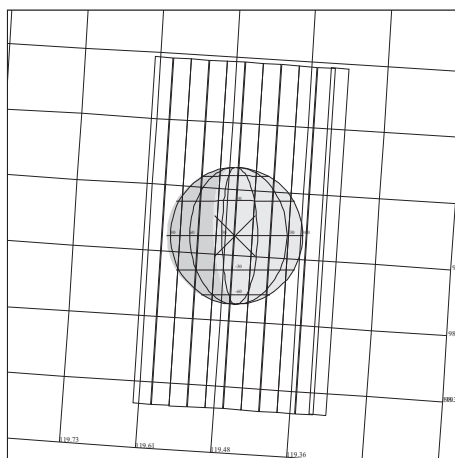
**29GNGLOBAL03**  
**00-363/22:33:25**



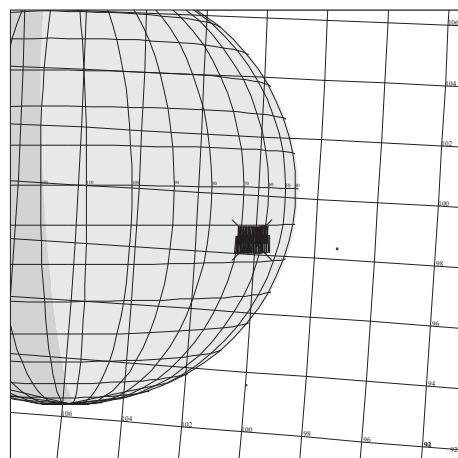
**29INIWATCH01**  
**00-363/23:13:51**



**29JNGRWAKE01**  
**00-364/03:06:25**

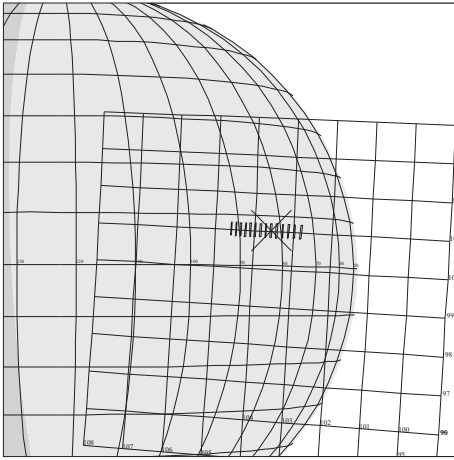


**29INIWATCH02**  
**00-364/03:48:53**

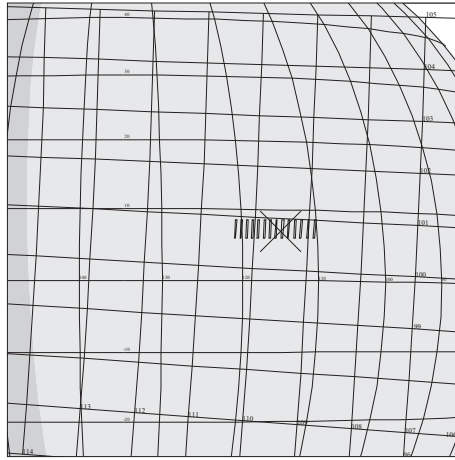


**29JNGRWAKE02**  
**00-364/04:00:00**

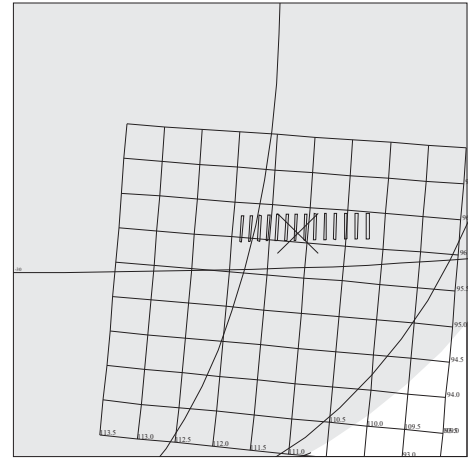
# G29 NIMS B



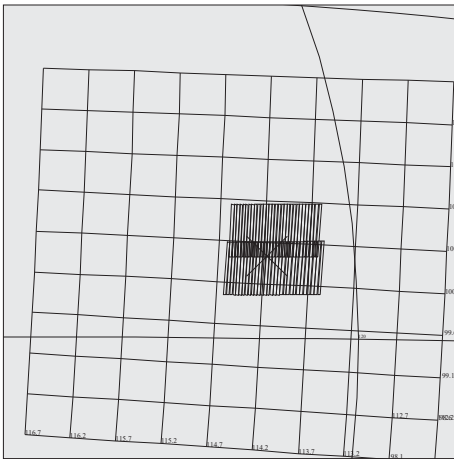
**29JNNEBRLT01**  
**00-364/04:18:12**



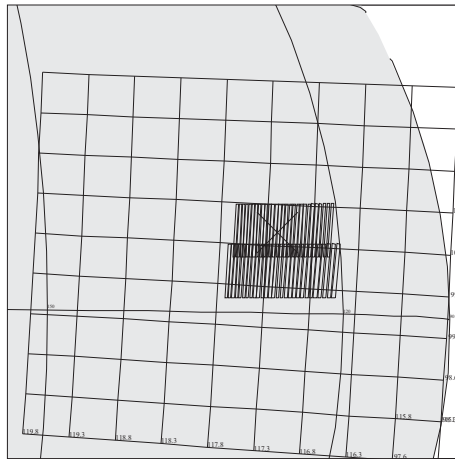
**29JNNTZRLT01**  
**00-364/04:43:29**



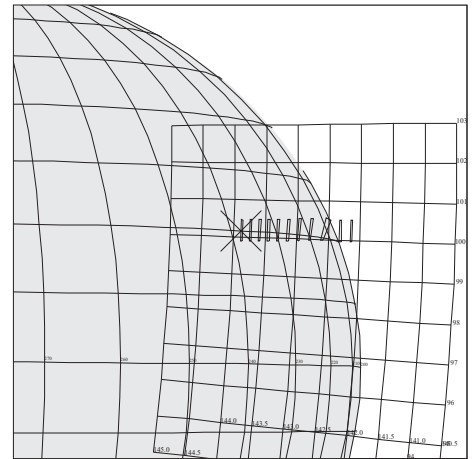
**29JNSTZRLT01**  
**00-364/05:03:42**



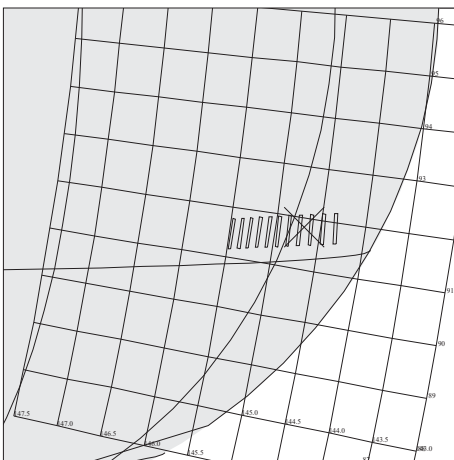
**29JNHTSPOT01**  
**00-364/05:23:55**



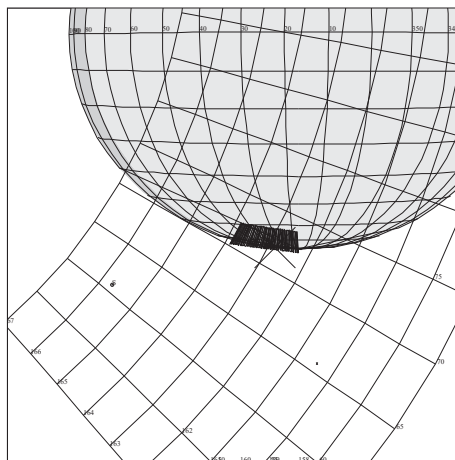
**29JNHTSPOT02**  
**00-364/05:58:18**



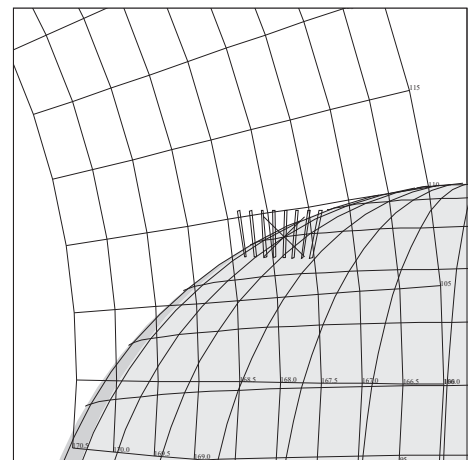
**29JNNTZRLT02**  
**00-364/09:43:47**



**29JNSTZRLT02**  
**00-364/09:58:57**

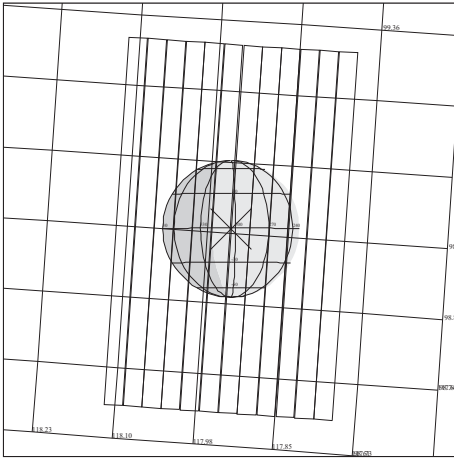


**29JNAURORA01**  
**00-364/12:48:49**

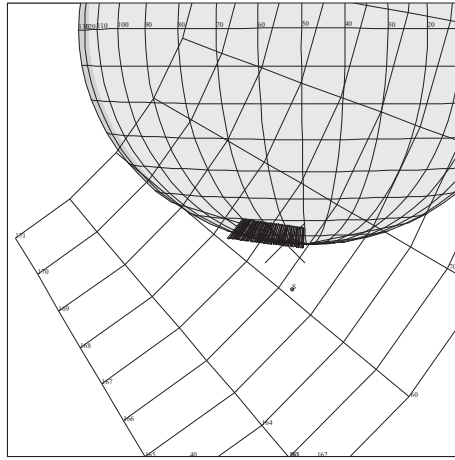


**29JNLIMBRT01**  
**00-364/13:03:59**

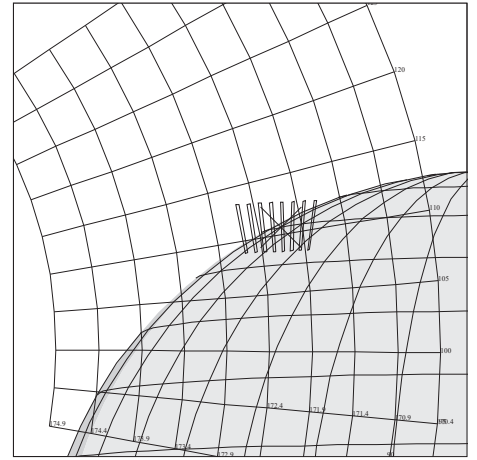
# G29 NIMS C



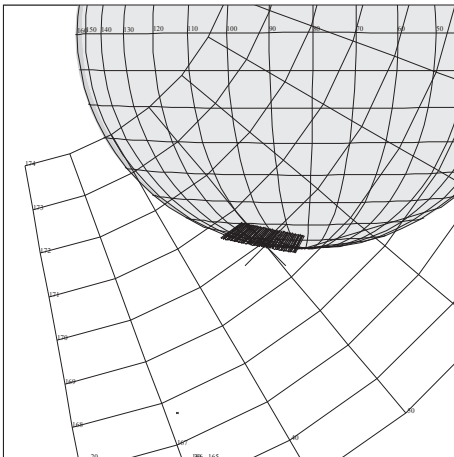
**29ENGLOBAL01**  
**00-364/13:26:13**



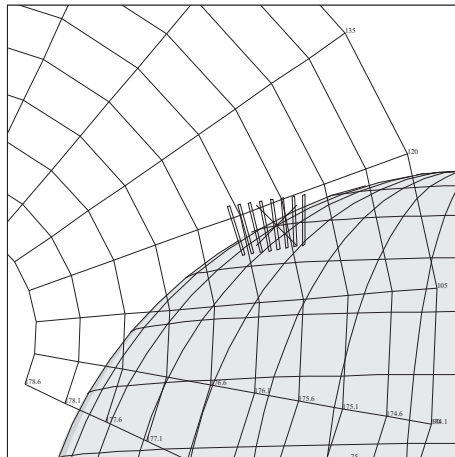
**29JNAURORA02**  
**00-364/13:49:29**



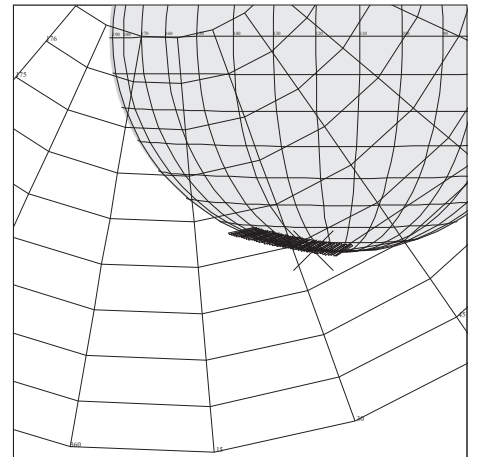
**29JNLIMBRT02**  
**00-364/14:04:39**



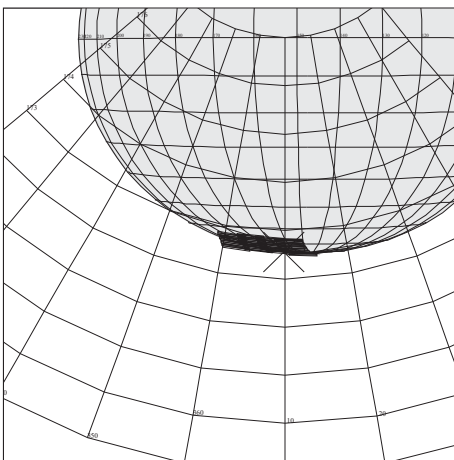
**29JNAURORA03**  
**00-364/14:50:09**



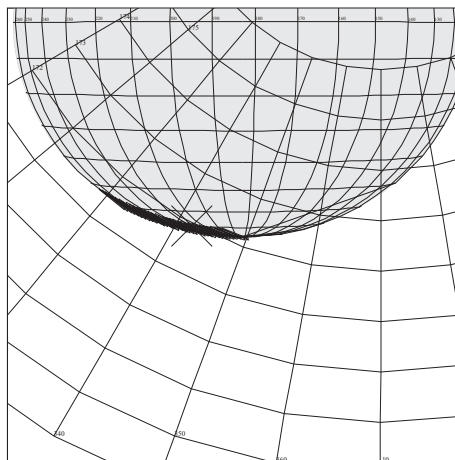
**29JNLIMBRT03**  
**00-364/15:05:19**



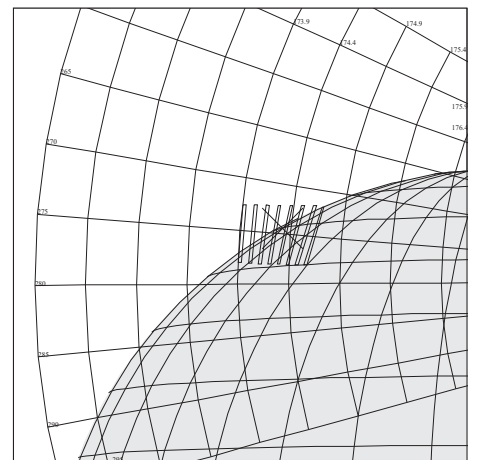
**29JNAURORA04**  
**00-364/15:50:49**



**29JNAURORA05**  
**00-364/16:51:29**

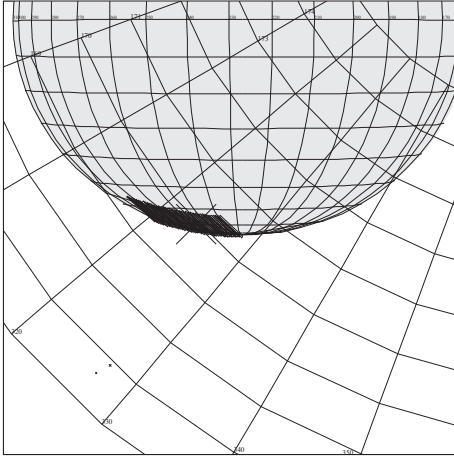


**29JNAURORA06**  
**00-364/17:52:09**

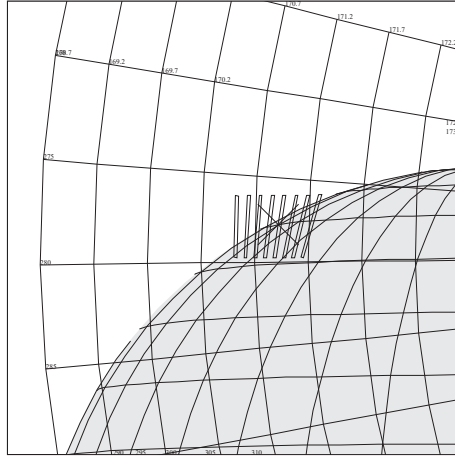


**29JNLIMBRT06**  
**00-364/18:07:19**

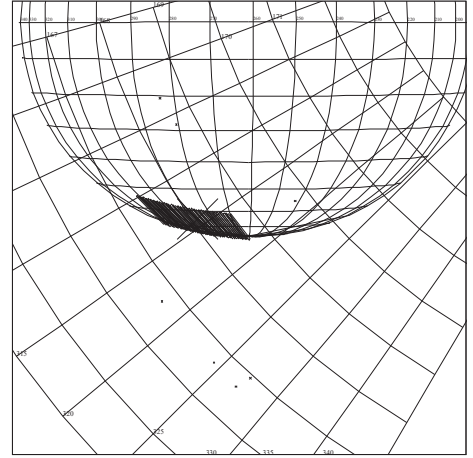
# G29 NIMS D



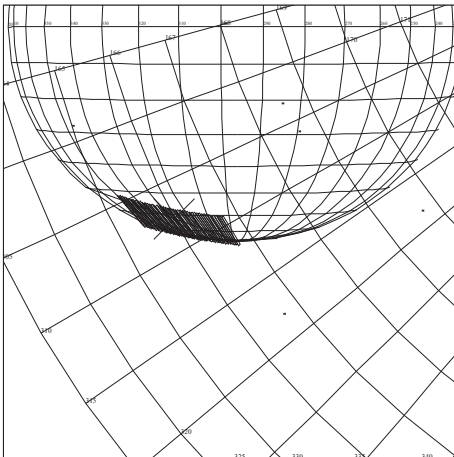
**29JNAURORA07**  
**00-364/19:13:02**



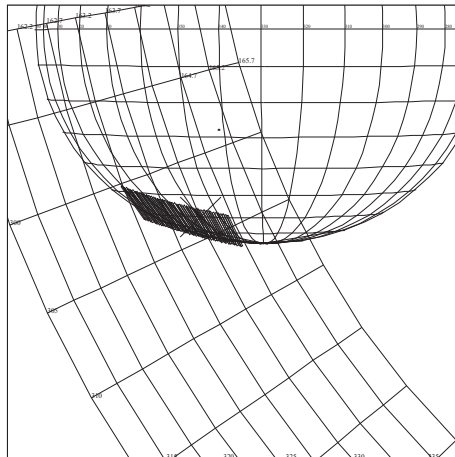
**29JNLIMBRT07**  
**00-364/19:28:12**



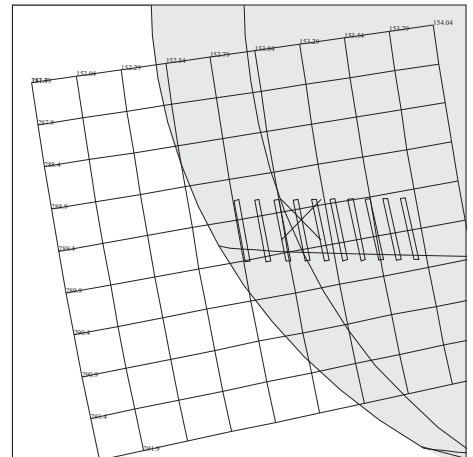
**29JNAURORA08**  
**00-364/20:13:42**



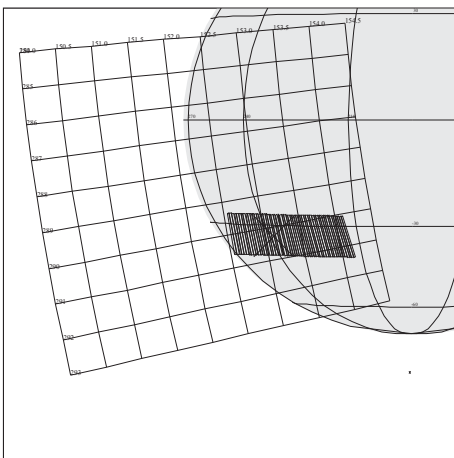
**29JNAURORA09**  
**00-364/21:14:22**



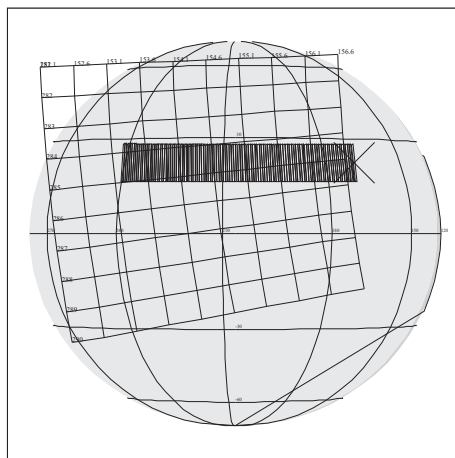
**29JNAURORA10**  
**00-364/22:15:02**



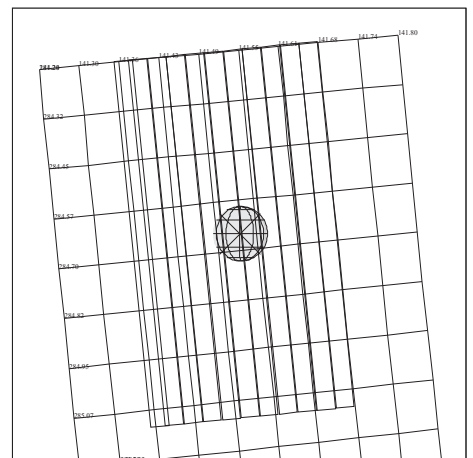
**29JNSTZRLT03**  
**00-365/04:28:08**



**29JNWTOVAL01**  
**00-365/04:43:18**



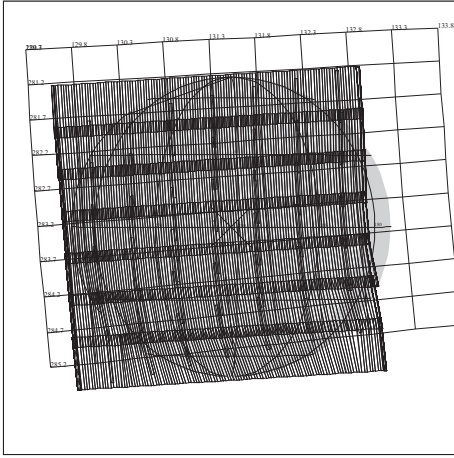
**29JNJUPNTZ01**  
**00-365/05:03:31**



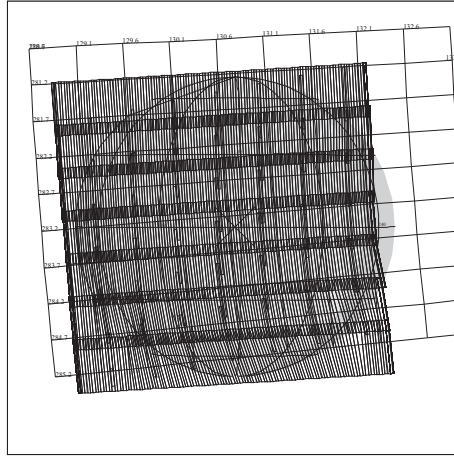
**29INIWATCH03**  
**00-366/04:05:43**



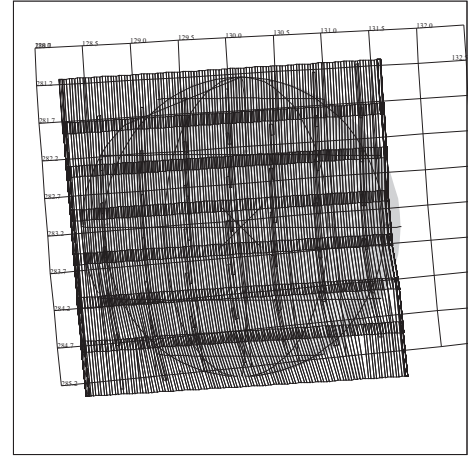
# G29 NIMS E



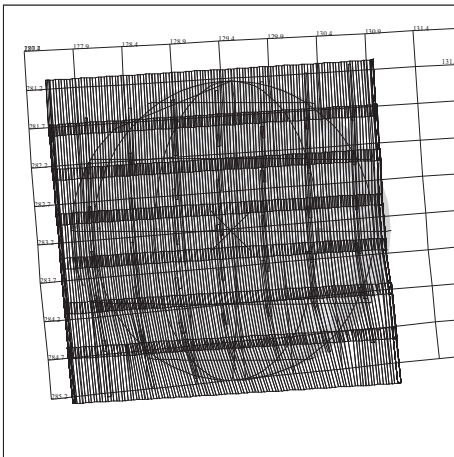
**29JNGLOBAL01**  
**00-366/12:28:14**



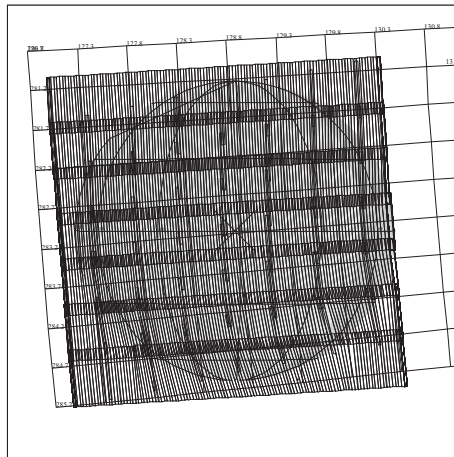
**29JNGLOBAL02**  
**00-366/14:08:20**



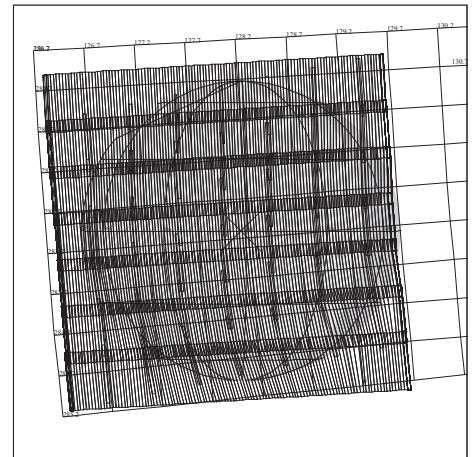
**29JNGLOBAL03**  
**00-366/15:48:26**



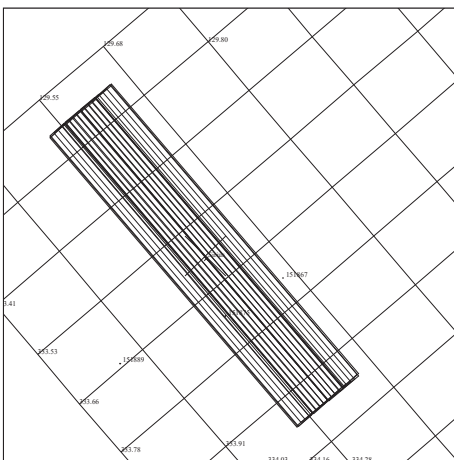
**29JNGLOBAL04**  
**00-366/17:28:32**



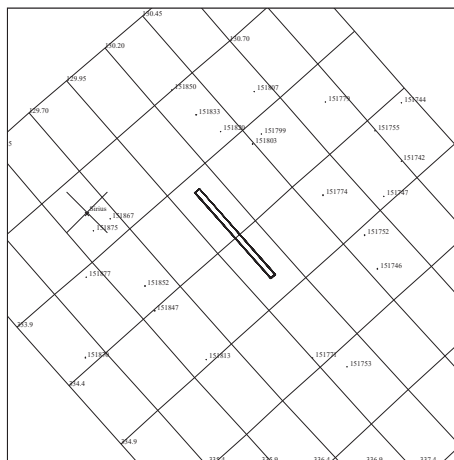
**29JNGLOBAL05**  
**00-366/19:08:38**



**29JNGLOBAL06**  
**00-366/20:48:44**



**29HNSTRCAL01**  
**01-112/20:01:21**



**29HNDRCAL01**  
**01-112/20:17:37**

## Chapter 3 - Orbit Geometries

### Contents

| Sub-Section   | Page |
|---|------|
| 3.0 Contents .....                                    | 1    |
| 3.1 Introduction to Chapter 3 .....                   | 2    |
| 3.2 g29 North Trajectory Pole View (apo to apo) ..    | 3    |
| 3.3 g29 North Trajectory Pole View (+/- 5 days) ..    | 4    |
| 3.4 g29 North Trajectory Pole View (+/- 2 days) ..    | 5    |
| 3.5 g29 North Trajectory Pole View (+/- 1 day) ...    | 6    |
| 3.7 Ganymede North Trajectory Pole View (+/- 6 hours) | 7    |
| 3.8 Ganymede North Trajectory Pole View (+/- 1 hour)  | 8    |
| 3.9 Ganymede Groundtrack at Closest Approach .....    | 9    |
| 3.10 Jupiter Groundtrack at Closest Approach .....    | 10   |

### Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the g29 Orbit.

The figure on page 3 is a North Trajectory Pole View of the g29 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the g29 Orbit from +/- 5 days of Ganymede closest approach.

The figure on page 5 is a North Trajectory Pole View of the g29 Orbit from +/- 2 days of Ganymede closest approach.

The figure on page 6 is a North Trajectory Pole View of the g29 Orbit from +/- 1 day of Ganymede closest approach.

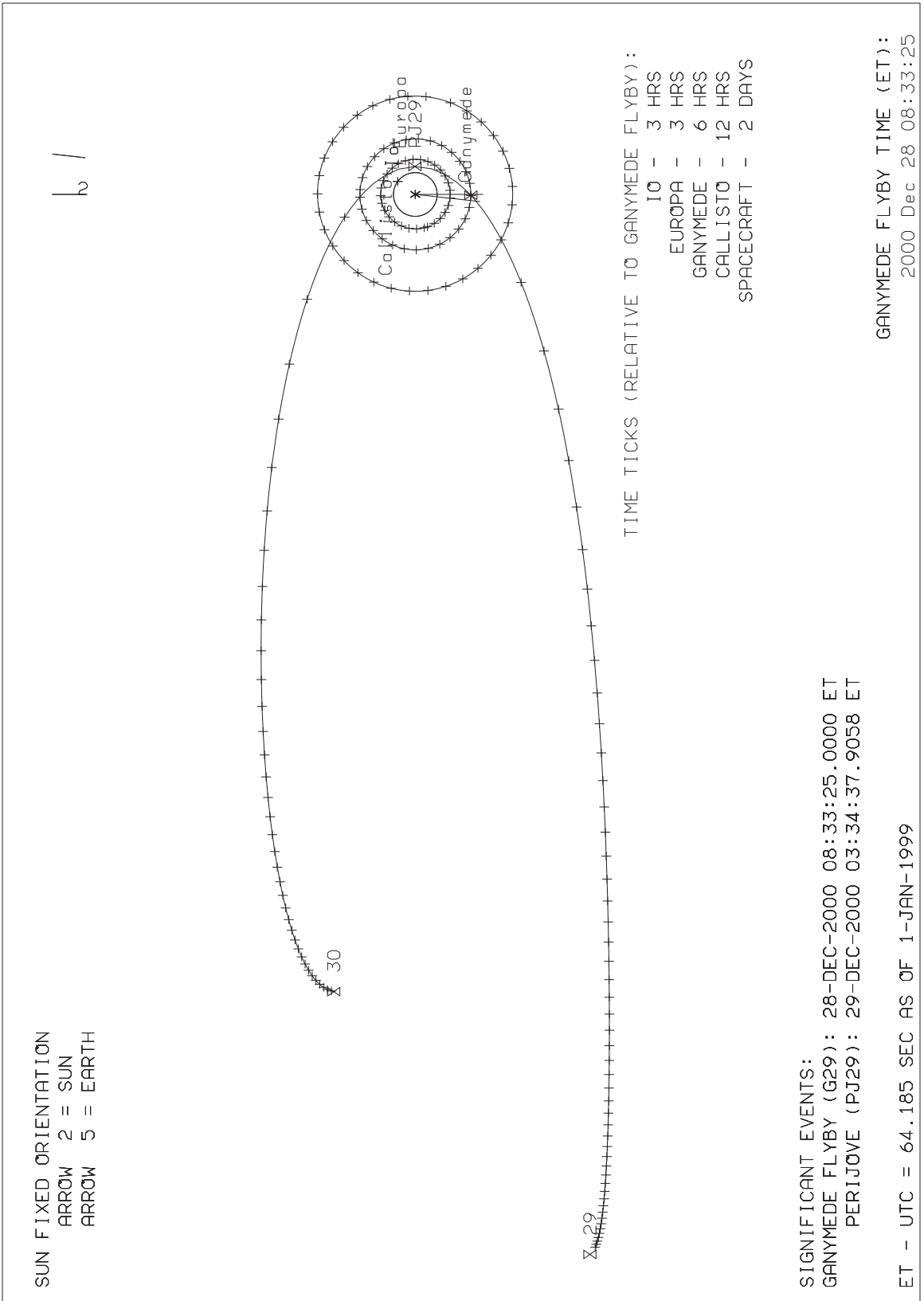
The figure on page 7 is a North Trajectory Pole View of the g29 Orbit from +/- 6 hours of Ganymede closest approach.

The figure on page 8 is a North Trajectory Pole View of the g29 Orbit from +/- 1 hour of Ganymede closest approach.

The figure on page 9 shows the spacecraft's groundtrack on Ganymede at Ganymede closest approach.

The figure on page 10 shows the spacecraft's groundtrack on Jupiter at Jupiter closest approach.

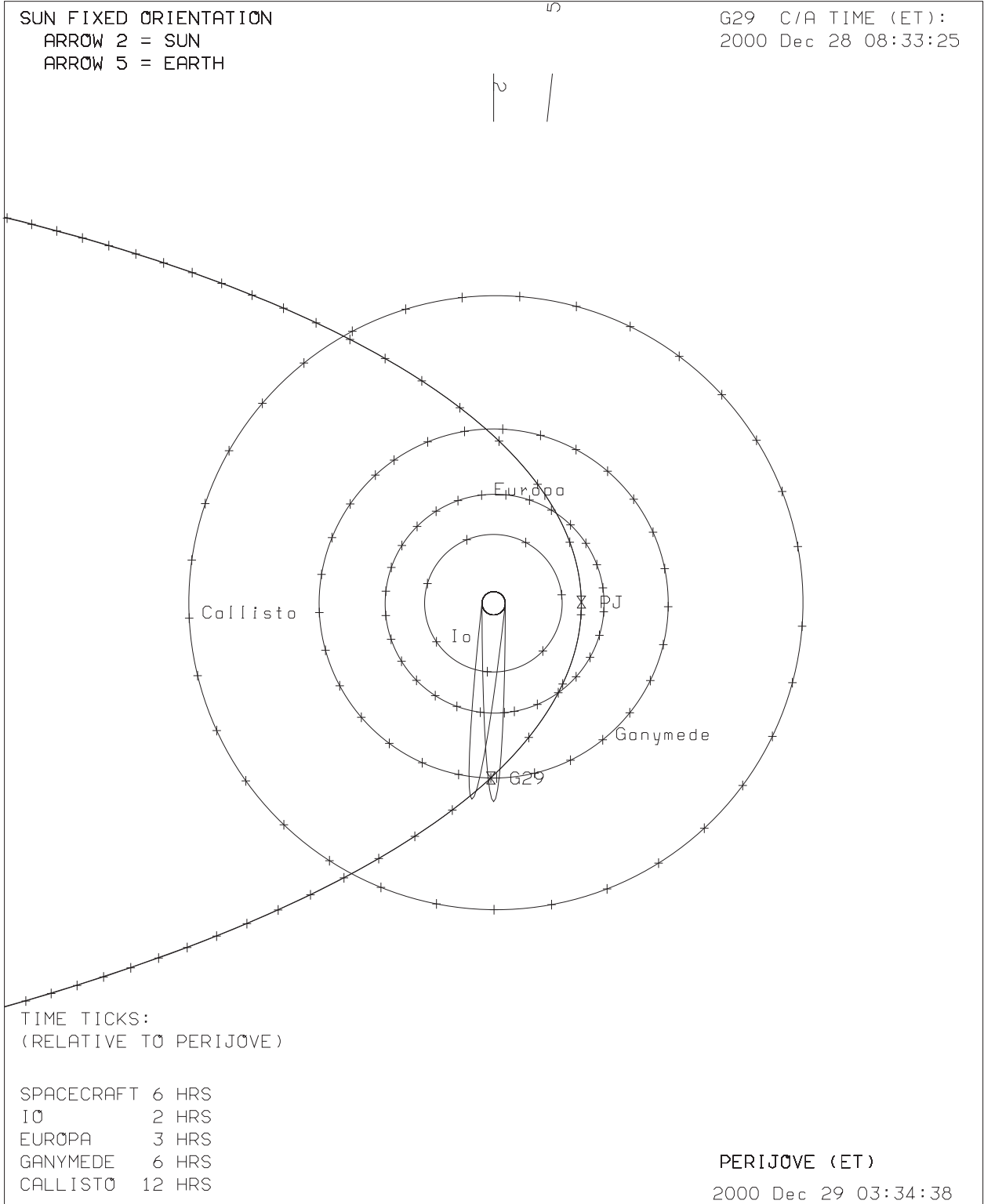
# Jupiter 29: North Traj Pole View (Ganymede29 Apo to Apo)



NAV May 21, 2000



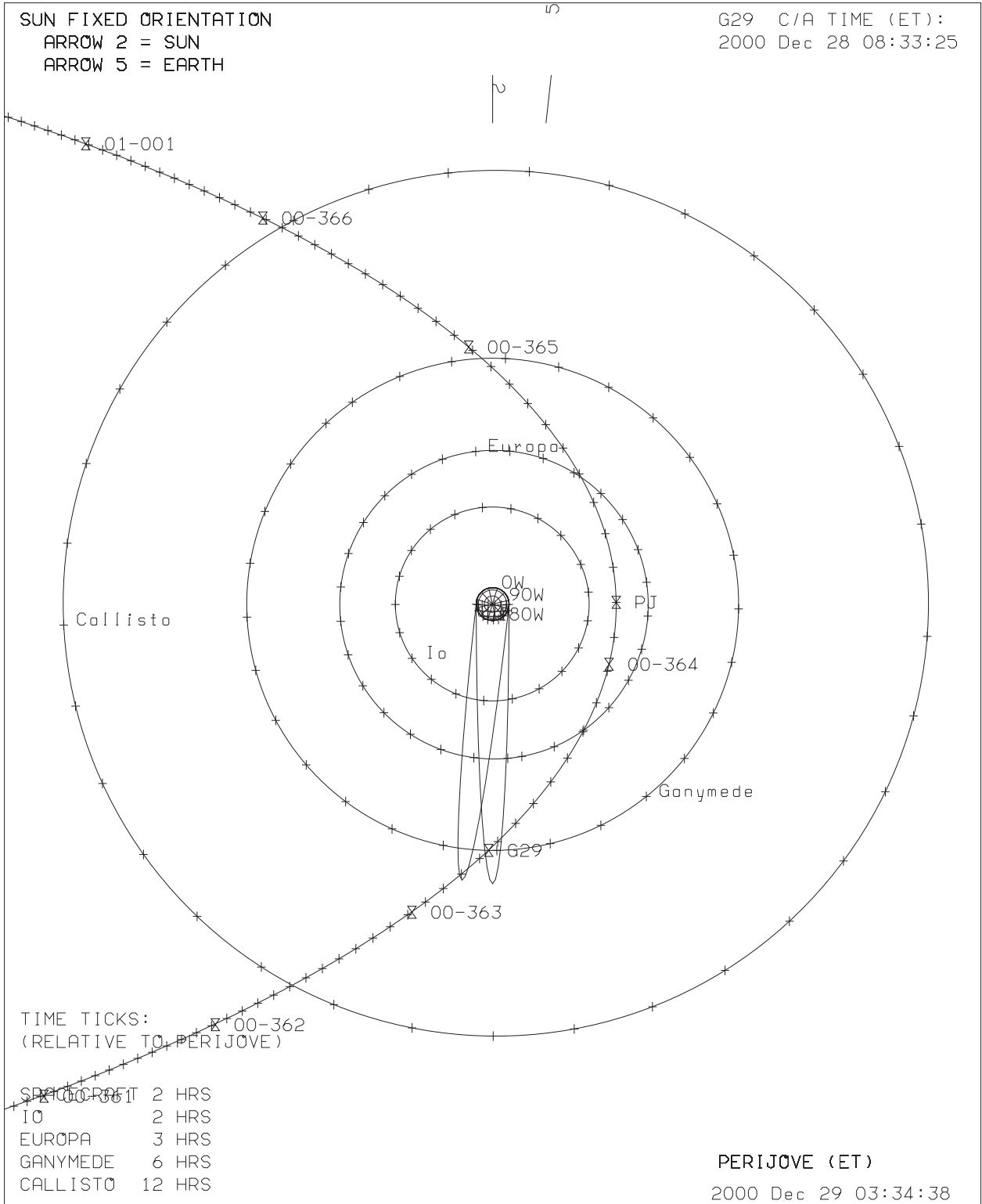
# JUPITER 29: N. TRAJ. POLE VIEW (+/- 5 DAYS)



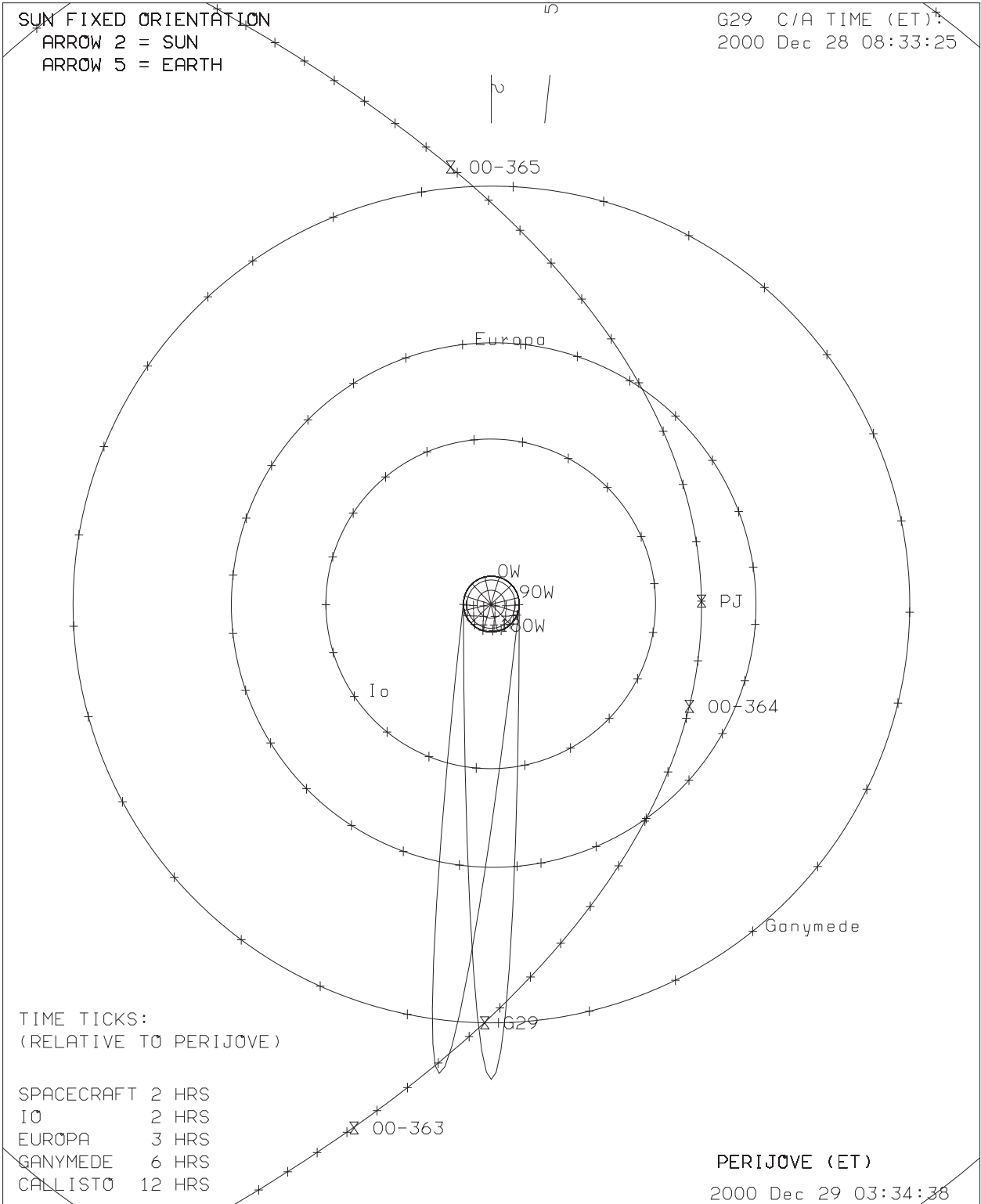
GMM-000407

NAV Apr 18, 2000

# JUPITER 29: N. TRAJ. POLE VIEW (+/- 2 DAYS)



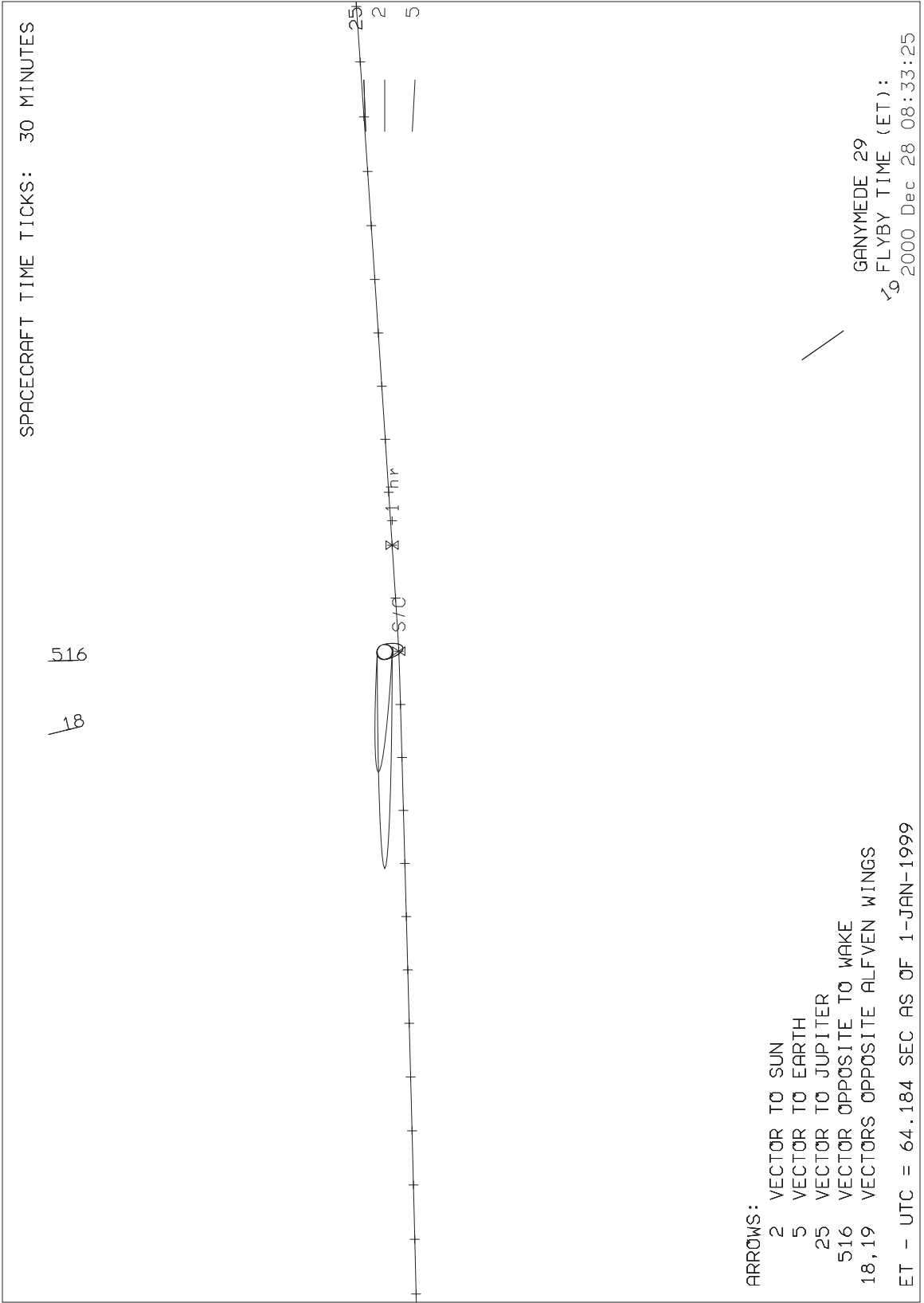
# JUPITER 29: N. TRAJ. POLE VIEW (+/- 1 DAY)



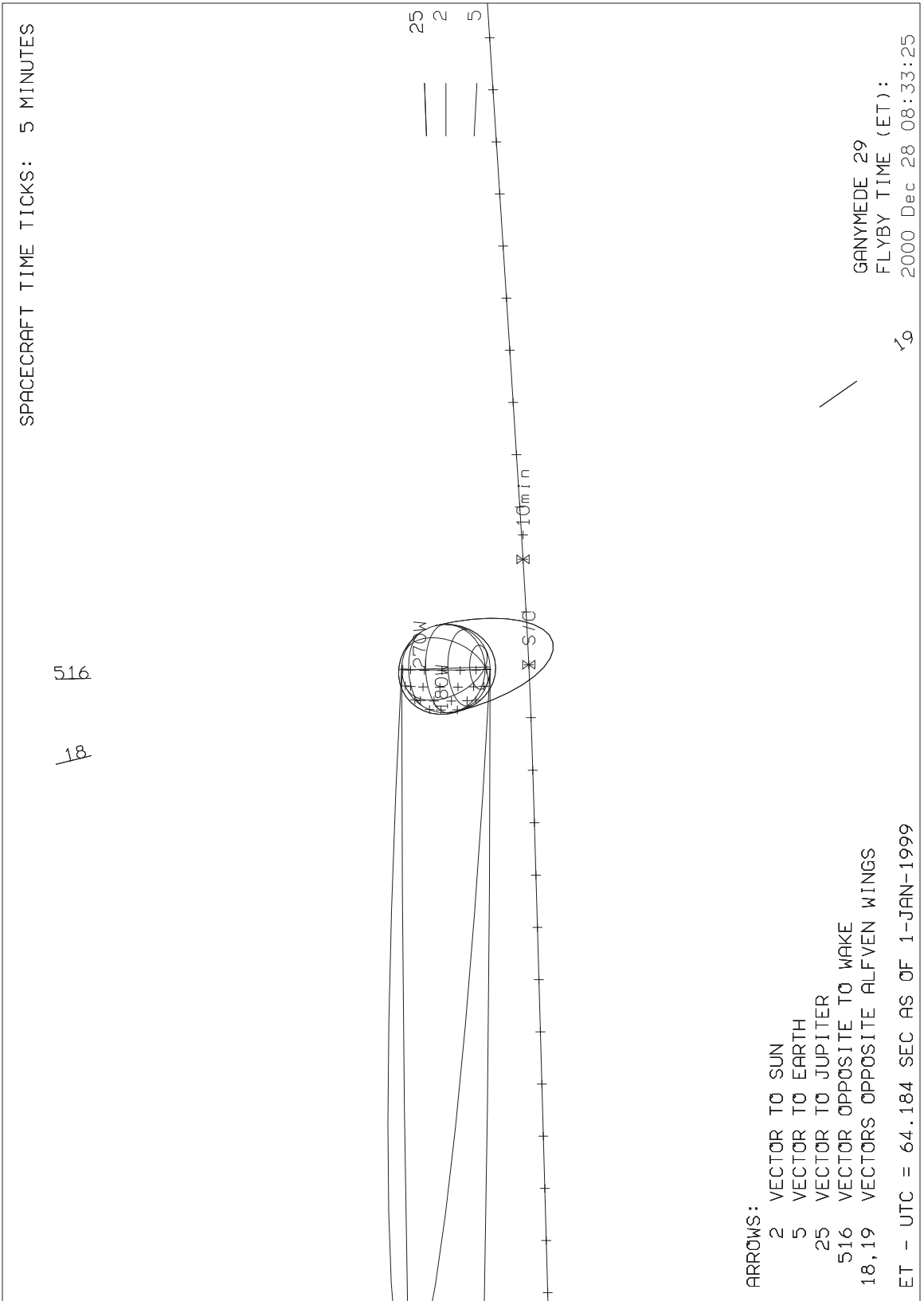
GMM-000407

NAV Apr 18, 2000

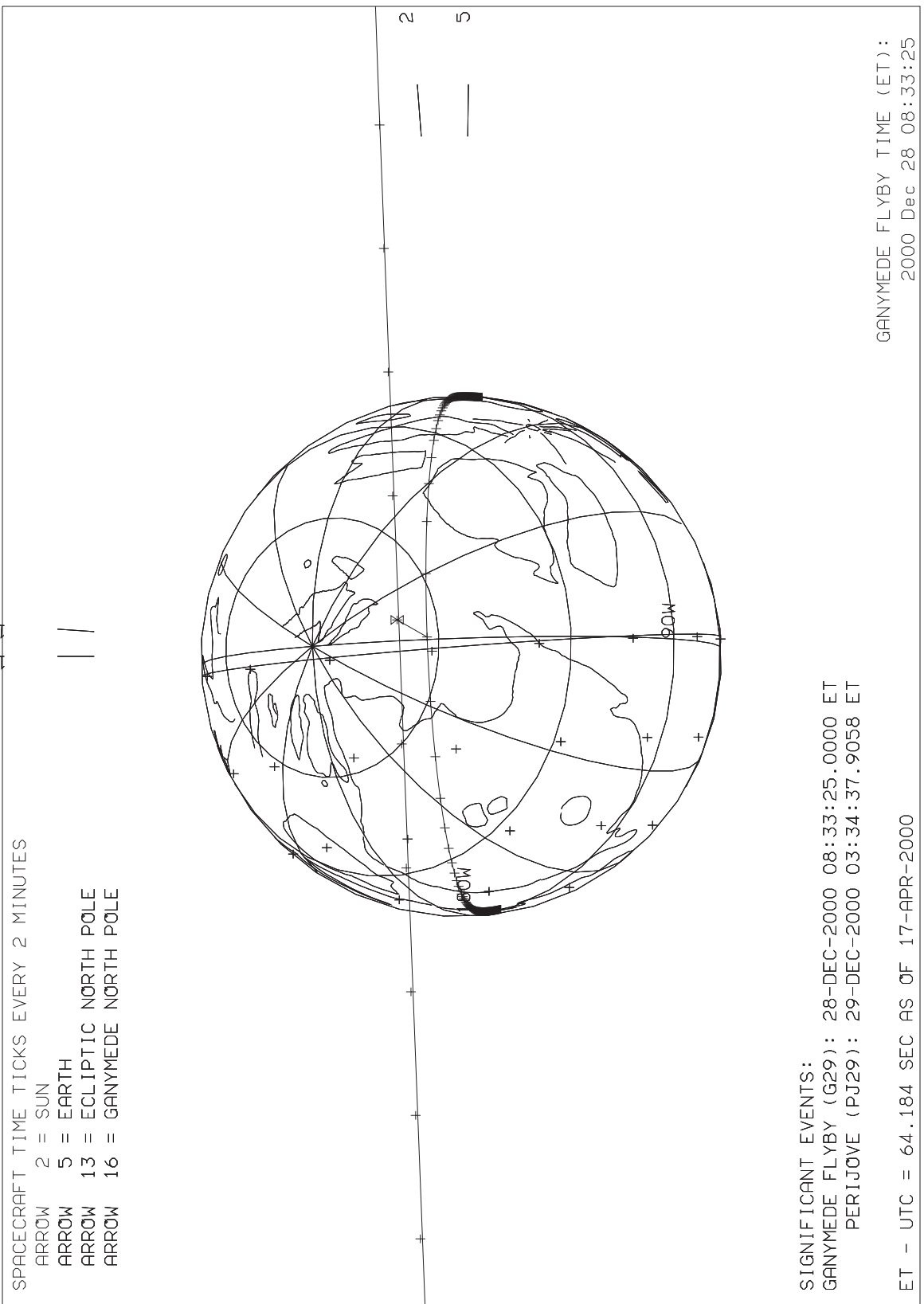
# GANYMEDE 29: N. TRAJ POLE VIEW (+/- 6 HRS)



GANYMEDE 29: N. TRAJ POLE VIEW (+/- 1 HR)



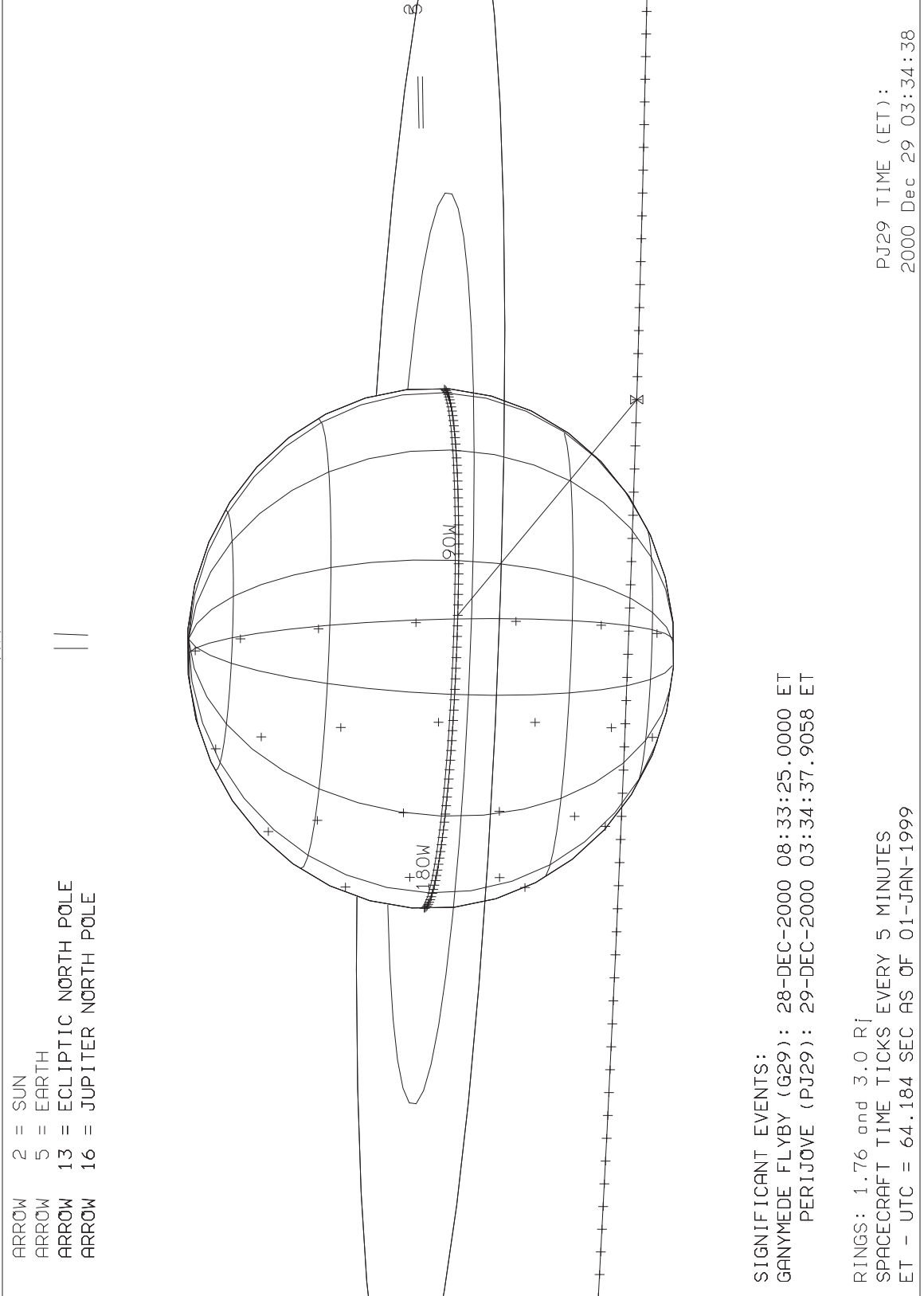
# GANYMEDE 29: GROUNDTRACK AT CLOSEST APPROACH



SIGNIFICANT EVENTS:  
 GANYMEDE FLYBY (G29): 28-DEC-2000 08:33:25.0000 ET  
 PERIJOVE (PJ29): 29-DEC-2000 03:34:37.9058 ET

ET - UTC = 64.184 SEC AS OF 17-APR-2000

# JUPITER 29: GROUNDTRACK AT CLOSEST APPROACH



ARROW 2 = SUN  
 ARROW 5 = EARTH  
 ARROW 13 = ECLIPTIC NORTH POLE  
 ARROW 16 = JUPITER NORTH POLE

SIGNIFICANT EVENTS:  
 GANYMEDE FLYBY (G29): 28-DEC-2000 08:33:25.0000 ET  
 PERIJOVE (PJ29): 29-DEC-2000 03:34:37.9058 ET

RINGS: 1.76 and 3.0 R<sub>J</sub>  
 SPACECRAFT TIME TICKS EVERY 5 MINUTES  
 ET - UTC = 64.184 SEC AS OF 01-JAN-1999

PJ29 TIME (ET):  
 2000 Dec 29 03:34:38

NAV Apr 17, 2000

## Chapter 4 - NIMS Observation Summaries

### Contents

|     | Sub-Section                            | Page    |
|-----|--|---------|
| 4.0 | Contents .....                         | 1       |
| 4.1 | Introduction to Chapter 4 .....        | 2       |
| 4.2 | NIMS Sequence Summary .....            | 3-129   |
| 4.3 | NIMS Individual Obstab Summaries ..... | 130-178 |
| 4.4 | NIMS OBSTAB (Returned) .....           | 179-186 |



## Introduction to Chapter 4

This chapter summarizes the NIMS G29 observations in terms of a comprehensive sequence summary, Individual Obstab Summaries and a NIMS Obstab (Observation Table).

The NIMS Sequence Summary is a time-ordered listing of all spacecraft activity pertinent to NIMS operations for the G29 Sequence. The information in this summary is derived from the G29 SEFs (Spacecraft Event File) and PBTs (Playback Tables) with inputs from the NIMS Science Coordinators regarding the start time and duration of the NIMS observations. There are twelve columns of information in this table:

- 1) Line - Line Count.
- 2) YR - Year.
- 3) DOY - Day of Year.
- 4) Time - SCET Time (UTC).
- 5) PSID - Parameter Set ID of the SEF line.
- 6) Command - Command name from the SEF.
- 7) Parameters - Parameters from the above Command Line.
- 8) Description - Description of the above Command for NIMS.
- 9) GCM - NIMS Gain, Chopper mode, Instrument Mode.  
Gain = 1,2,3 or 4.  
Chopper Mode = R (Reference) or 6 (63Hz).  
Instrement Mode = 0-15
- 10) GO - NIMS Grating Offset.
- 11) GS - NIMS Grating Start Position.
- 12) RIM,MF,I - SCLK of the Command Line (RIM:MF:RTI)

An additional line is inserted into this table at the start and stop times of each NIMS Observation (Opel) to bracket the commands which affect each NIMS Observation. The NIMS Playback Select and DeSelect times are also inserted into this table to correlate the playback requests with the observations.

The Individual Obstab Summaries are expansions of the NIMS Obstab to one page per Obstab entry for ease in reading the NIMS Obstab.

The NIMS Obstab (Observation Table) is a time-ordered listing of the NIMS obsrvation parameters for use by downlink data processing of the NIMS G29 data. It is also derived from the G29 SEFs and PBTs. Each Obstab entry is 512 bytes long but is presented here as 4 lines of 128 characters per entry.

| Sequence: |    | G29A-AR |              | Created: 5/25/01 |                          | Begin: 00-361/22:30:00                    |     | Finish: 01-036/20:00:00 |    |                |      |
|-----------|----|---------|--------------|------------------|--------------------------|---|-----|-------------------------|----|----------------|------|
| Line      | YR | DOY     | SCET - GMT   | PSID             | Command Parameters       | Description                               | GCM | GO                      | GS | RIM            | MF I |
| 1         | 0  | 361     | 22:29:59.933 |                  | DMS: : READY             | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 400 | 4                       | 0  | 5,838,482:30:0 |      |
| 2         | 0  | 361     | 22:30:00.000 | 20A3EX           | 37HR Initial Condition   | Replacement Heaters OFF                   | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 3         | 0  | 361     | 22:30:00.000 | 20A3EY           | 37C1PR Initial Condition | Optics Heater 1 OFF (primary relay)       | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 4         | 0  | 361     | 22:30:00.000 | 20A3EZ           | 37C2PR Initial Condition | Optics Heater 2 OFF (primary relay)       | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 5         | 0  | 361     | 22:30:00.000 | 20A3FA           | 37F1PR Initial Condition | Radiator Flash Heater OFF (primary relay) | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 6         | 0  | 361     | 22:30:00.000 | 20A3FB           | 37F2PR Initial Condition | Shield Flash Heater OFF (primary relay)   | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 7         | 0  | 361     | 22:30:00.000 | 20A3FD           | 40HRPR Initial Condition | PCT Heater OFF (primary relay)            | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 8         | 0  | 361     | 22:30:00.000 | 20A3FE           | 40T1PR Initial Condition | PCT Heater 1 OFF (primary relay)          | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 9         | 0  | 361     | 22:30:00.000 | 20A3FF           | 40T2R Initial Condition  | PCT Heater 2 OFF                          | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 10        | 0  | 361     | 22:30:00.000 | 20A3EW           | 37A Initial Condition    | NIMS Power ON                             | 400 | 4                       | 0  | 5,838,482:30:1 |      |
| 11        | 0  | 361     | 22:30:39.266 | 432JA6B          | 6RTDS2 NIMDSL,AACNCG,RT  | NIMS R/T DESELECT                         | 400 | 4                       | 0  | 5,838,482:89:0 |      |
| 12        | 0  | 361     | 22:31:00.600 | 20OA6A           | 6HICON                   |   | 400 | 4                       | 0  | 5,838,483:30:0 |      |
| 13        | 0  | 361     | 22:31:02.600 | 488AA6A          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,838,483:33:0 |      |
| 14        | 0  | 361     | 23:01:43.266 | 488AA6B          | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,838,513:04:0 |      |
| 15        | 0  | 362     | 03:05:22.600 | 488AA6C          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,838,754:62:0 |      |
| 16        | 0  | 362     | 04:11:39.266 | 488AA6D          | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,838,820:21:0 |      |
| 17        | 0  | 362     | 04:45:18.600 | 488AB6A          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,838,853:47:0 |      |
| 18        | 0  | 362     | 10:34:14.533 | 488AB6B          | 6TMSED NORM,AL3          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,198:56:0 |      |
| 19        | 0  | 362     | 10:51:18.533 | 488AC6A          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,215:45:0 |      |
| 20        | 0  | 362     | 11:51:39.200 | 488AC6B          | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,275:16:0 |      |
| 21        | 0  | 362     | 12:35:18.533 | 488AC6C          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,318:32:0 |      |
| 22        | 0  | 362     | 14:33:10.533 | 488AC6D          | 6TMSED NORM,AL3          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,434:84:0 |      |
| 23        | 0  | 362     | 14:59:59.866 | 488AC6E          | 6TMSED NORM,AH3          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,461:41:0 |      |
| 24        | 0  | 362     | 15:45:42.533 | 488AD6A          | 6TMSED NORM,AH4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,506:60:0 |      |
| 25        | 0  | 362     | 16:01:40.533 | 488AD6B          | 6TMSED FILL,AH4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,522:41:0 |      |
| 26        | 0  | 362     | 16:50:19.200 | 488AD6C          | 6TMSED NORM,AH4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,839,570:51:0 |      |
| 27        | 0  | 362     | 16:59:51.866 | 465KA6A          | 6DMST                    | 3032 DMS Slew to TIC                      | 400 | 4                       | 0  | 5,839,580:00:0 |      |
| 28        | 0  | 362     | 16:59:51.866 |                  | DMS: : *TURNARND         | P7, TRACK 1, FWD, TIC 202.12 +/-          | 400 | 4                       | 0  | 5,839,580:00:0 |      |
| 29        | 0  | 362     | 16:59:51.866 |                  | DMS: : *SLEW-TIC         | P7, TRACK 1, FWD, TIC 202.12 +/-          | 400 | 4                       | 0  | 5,839,580:00:0 |      |
| 30        | 0  | 362     | 16:59:51.866 |                  | DMS: : *E4-DELAY         | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 400 | 4                       | 0  | 5,839,580:00:0 |      |
| 31        | 0  | 362     | 16:59:58.533 |                  | DMS: : *RUNUP            | P7, TRACK 1, FWD, TIC 202.12 +/-          | 400 | 4                       | 0  | 5,839,580:10:0 |      |
| 32        | 0  | 362     | 16:59:59.933 |                  | DMS: : *AT_SPD           | P7, TRACK 1, FWD, TIC *202.24 +/-         | 400 | 4                       | 0  | 5,839,580:12:1 |      |
| 33        | 0  | 362     | 20:21:04.000 |                  | DMS: : *RUNDOWN          | P7, TRACK 1, FWD, TIC *3029.94 +/-        | 400 | 4                       | 0  | 5,839,778:90:2 |      |
| 34        | 0  | 362     | 20:21:05.200 |                  | DMS: : *READY            | RDY, TRACK 1, FWD, TIC *3030.00 +/-       | 400 | 4                       | 0  | 5,839,779:01:0 |      |
| 35        | 0  | 362     | 21:09:59.866 | 20TO4A           | 7SAFE STOP               | S/P NO MOVEMENT                           | 400 | 4                       | 0  | 5,839,827:35:0 |      |
| 36        | 0  | 362     | 21:10:49.866 | 20TO4B           | 7SLEW DIS,POS.0.0        | Stator movement                           | 400 | 4                       | 0  | 5,839,828:19:0 |      |
| 37        | 0  | 362     | 21:10:55.866 | 20TO4E           | 7STAR 1,1610,278.815,3   | Star catalog update                       | 400 | 4                       | 0  | 5,839,828:28:0 |      |
| 38        | 0  | 362     | 21:10:57.866 | 20TO4F           | 7STAR 2,9000,2.664,14.   | Star catalog update                       | 400 | 4                       | 0  | 5,839,828:31:0 |      |
| 39        | 0  | 362     | 21:10:59.866 | 20TO4G           | 7STAR 3,1610,278.815,3   | Star catalog update                       | 400 | 4                       | 0  | 5,839,828:34:0 |      |
| 40        | 0  | 362     | 21:11:01.866 | 20TO4H           | 7STAR 4,9000,2.664,14.   | Star catalog update                       | 400 | 4                       | 0  | 5,839,828:37:0 |      |
| 41        | 0  | 362     | 21:11:03.866 | 20TO4I           | 7STAR 5,1610,278.815,3   | Star catalog update                       | 400 | 4                       | 0  | 5,839,828:40:0 |      |
| 42        | 0  | 362     | 21:11:05.866 | 20TO4J           | 7STAR 6,9000,2.664,14.   | Star catalog update                       | 400 | 4                       | 0  | 5,839,828:43:0 |      |
| 43        | 0  | 362     | 21:15:02.533 | 432OB431A6A      | 6RCDSL DDSNCG,PLSNCG,EP  | Record Deselect (DDS o                    | 400 | 4                       | 0  | 5,839,832:34:0 |      |
| 44        | 0  | 362     | 21:15:03.200 | 432OB6A          | 6RTSL1                   | R/T Select of DDS and                     | 400 | 4                       | 0  | 5,839,832:35:0 |      |
| 45        | 0  | 363     | 00:59:59.866 | 488AE6A          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,840,054:78:0 |      |
| 46        | 0  | 363     | 02:26:41.200 | 488AE6B          | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,840,140:54:0 |      |
| 47        | 0  | 363     | 03:00:20.533 | 488AE6C          | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,840,173:80:0 |      |
| 48        | 0  | 363     | 03:38:02.533 | 488AE6D          | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 400 | 4                       | 0  | 5,840,211:15:0 |      |
| 49        | 0  | 363     | 07:18:19.866 | 20UE4A           | 7SCAN NORM,66.462,20.9   | Check S/P Position                        | 400 | 4                       | 0  | 5,840,429:03:0 |      |
| 50        | 0  | 363     | 07:22:20.533 | 192GA4A          | 7CONE 9.0.0.0            | Check S/P Position                        | 400 | 4                       | 0  | 5,840,433:00:0 |      |
| 51        | 0  | 363     | 07:29:25.200 | 176GA6A          | 6TMREC BPT               | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 400 | 4                       | 0  | 5,840,440:00:0 |      |
| 52        | 0  | 363     | 07:31:39.866 | 176GA6B          | 6TMREC NRC               | NO RECORD Record Mode Change              | 400 | 4                       | 0  | 5,840,442:20:0 |      |
| 53        | 0  | 363     | 07:31:41.866 |                  | DMS: : *E4-DELAY         | RDY, TRACK 1, FWD, TIC 3030.00 +/-        | 400 | 4                       | 0  | 5,840,442:23:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters      | Description                          | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|-------------------------|--------------------------------------|-----|----|----|----------------|------|
| 54   | 0  | 363 | 07:31:41.866 | 50ZZ6XX         | 6DMSC R7,0              | DMS Control Tape runup 7.68kps       | 400 | 4  | 0  | 5,840,442:23:0 |      |
| 55   | 0  | 363 | 07:31:48.533 |                 | DMS: : *RUNUP           | R7, TRACK 1, FWD, TIC 3030.00 +/-    | 400 | 4  | 0  | 5,840,442:33:0 |      |
| 56   | 0  | 363 | 07:31:49.933 |                 | DMS: : *AT SPD          | R7, TRACK 1, FWD, TIC *3030.12 +/-   | 400 | 4  | 0  | 5,840,442:35:1 |      |
| 57   | 0  | 363 | 07:31:51.866 |                 | DMS: : *RECORD          | R7, TRACK 1, FWD, TIC *3030.57 +/-   | 400 | 4  | 0  | 5,840,442:38:0 |      |
| 58   | 0  | 363 | 07:32:03.200 | 50ZZ6RD         | 6DMSC RDY,0             | DMS Control Tape stop                | 400 | 4  | 0  | 5,840,442:55:0 |      |
| 59   | 0  | 363 | 07:32:03.200 |                 | DMS: : *RUNDOWN         | R7, TRACK 1, FWD, TIC *3033.23 +/-   | 400 | 4  | 0  | 5,840,442:55:0 |      |
| 60   | 0  | 363 | 07:32:04.400 |                 | DMS: : *READY           | R7, TRACK 1, FWD, TIC *3033.29 +/-   | 400 | 4  | 0  | 5,840,442:56:8 |      |
| 61   | 0  | 363 | 07:34:28.533 | 192GA4B         | 7CONE 9,0,90,0          | Check S/P Position                   | 400 | 4  | 0  | 5,840,445:00:0 |      |
| 62   | 0  | 363 | 07:54:31.200 |                 | DMS: : *E4-DELAY        | RDY, TRACK 1, FWD, TIC 3033.29 +/-   | 400 | 4  | 0  | 5,840,464:75:0 |      |
| 63   | 0  | 363 | 07:54:31.200 | 175TA422A6A     | 6DMSC R7,1              | DMS Control Tape runup 7.68kbp       | 400 | 4  | 0  | 5,840,464:75:0 |      |
| 64   | 0  | 363 | 07:54:37.866 |                 | DMS: : *RUNUP           | R7, TRACK 1, FWD, TIC 3033.29 +/-    | 400 | 4  | 0  | 5,840,464:85:0 |      |
| 65   | 0  | 363 | 07:54:39.200 | 282NA431A6A     | 6RCSEL DDSNCG,PLSSEL,EP | Record Select (DDS onl)              | 400 | 4  | 0  | 5,840,464:87:0 |      |
| 66   | 0  | 363 | 07:54:39.200 | 175TA176A6A     | 6TMREC LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD    | 400 | 4  | 0  | 5,840,464:87:0 |      |
| 67   | 0  | 363 | 07:54:39.266 |                 | DMS: : *AT SPD          | R7, TRACK 1, FWD, TIC 3033.41 +/-    | 400 | 4  | 0  | 5,840,464:87:1 |      |
| 68   | 0  | 363 | 07:54:39.266 |                 | DMS: : *RECORD          | R7, TRACK 1, FWD, TIC *3033.41 +/-   | 400 | 4  | 0  | 5,840,464:87:1 |      |
| 69   | 0  | 363 | 07:54:41.200 | 165GA4A         | 7SCAN NORM,248.313999,  | Check S/P Position                   | 400 | 4  | 0  | 5,840,464:90:0 |      |
| 70   | 0  | 363 | 07:54:41.866 | 431MA6A         | 6RCSEL DDSNCG,PLSNCG,EP | Record Select (DDS onl)              | 400 | 4  | 0  | 5,840,465:00:0 |      |
| 71   | 0  | 363 | 07:55:31.866 | 488AF6A         | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan               | 400 | 4  | 0  | 5,840,465:75:0 |      |
| 72   | 0  | 363 | 08:00:36.533 | 117GA           | CSMOS GS                | **** GROUP START CSMOS               | 400 | 4  | 0  | 5,840,470:77:0 |      |
| 73   | 0  | 363 | 08:00:44.533 | 165GA4B         | 7VECT                   | Inert vect update UTC                | 400 | 4  | 0  | 5,840,470:89:0 |      |
| 74   | 0  | 363 | 08:00:45.866 | 117GA105A106A4A | 7STRP 0,0,0,0,0,0,0,0,  | Slew =0,0,9                          | 400 | 4  | 0  | 5,840,471:00:0 |      |
| 75   | 0  | 363 | 08:02:43.200 | 117GA105A106B4A | 7STRP -0,0003,0,0001,0  | Slew =12,01                          | 400 | 4  | 0  | 5,840,472:85:0 |      |
| 76   | 0  | 363 | 08:02:55.866 | 117GA105A106B4B | 7STRP -0,359147,0,1226  | Slew =0,0,9                          | 400 | 4  | 0  | 5,840,473:13:0 |      |
| 77   | 0  | 363 | 08:15:52.533 | 117GA11A        | CSMOS GE                | **** GROUP END CSMOS                 | 400 | 4  | 0  | 5,840,485:86:0 |      |
| 78   | 0  | 363 | 08:19:57.866 | 165GB4A         | 7SCAN NORM,308.675999,  | Check S/P Position                   | 400 | 4  | 0  | 5,840,489:90:0 |      |
| 79   | 0  | 363 | 08:21:50.533 | 117GB           | CSMOS GS                | **** GROUP START CSMOS               | 400 | 4  | 0  | 5,840,491:77:0 |      |
| 80   | 0  | 363 | 08:21:58.533 | 165GB4B         | 7VECT                   | Inert vect update UTC                | 400 | 4  | 0  | 5,840,491:89:0 |      |
| 81   | 0  | 363 | 08:21:59.866 | 117GB105A106A4A | 7STRP -0,049039,0,01,0  | Slew =,1,61                          | 400 | 4  | 0  | 5,840,492:00:0 |      |
| 82   | 0  | 363 | 08:22:03.200 | 428JA6A         | 6RCCLR                  |                                      | 400 | 4  | 0  | 5,840,492:05:0 |      |
| 83   | 0  | 363 | 08:22:03.866 | 428JA6B         | 6RCSET                  |                                      | 400 | 4  | 0  | 5,840,492:06:0 |      |
| 84   | 0  | 363 | 08:22:42.533 | 117GB105A106A4B | 7STRP 0,050042,-0,0103  | Slew =12,01                          | 400 | 4  | 0  | 5,840,492:84:0 |      |
| 85   | 0  | 363 | 08:22:56.533 | 117GB105A106A4C | 7STRP -0,049039,0,01,0  | Slew =,1,61                          | 400 | 4  | 0  | 5,840,492:85:0 |      |
| 86   | 0  | 363 | 08:23:39.200 | 117GB105A106A4D | 7STRP 0,050042,-0,0103  | Slew =12,01                          | 400 | 4  | 0  | 5,840,493:58:0 |      |
| 87   | 0  | 363 | 08:23:53.200 | 117GB105A106A4E | 7STRP -0,049039,0,01,0  | Slew =,1,61                          | 400 | 4  | 0  | 5,840,493:79:0 |      |
| 88   | 0  | 363 | 08:24:25.200 | 175NA422A6A     | 6DMSC R115,1            | DMS Control                          | 400 | 4  | 0  | 5,840,494:36:0 |      |
| 89   | 0  | 363 | 08:24:25.200 |                 | DMS: : *RUNDOWN         | R7, TRACK 1, FWD, TIC *3451.99 +/-   | 400 | 4  | 0  | 5,840,494:36:0 |      |
| 90   | 0  | 363 | 08:24:26.400 |                 | DMS: : *RUNUP           | R115, TRACK 1, FWD, TIC *3452.05 +/- | 400 | 4  | 0  | 5,840,494:37:8 |      |
| 91   | 0  | 363 | 08:24:30.400 |                 | DMS: : *RECORD          | R115, TRACK 1, FWD, TIC *3458.35 +/- | 400 | 4  | 0  | 5,840,494:43:8 |      |
| 92   | 0  | 363 | 08:24:30.400 |                 | DMS: : *AT SPD          | R115, TRACK 1, FWD, TIC 3458.35 +/-  | 400 | 4  | 0  | 5,840,494:43:8 |      |
| 93   | 0  | 363 | 08:24:30.533 | 175NA176A6A     | 6TMREC HPW              | 115:2 KBPS PWS RECORD                | 400 | 4  | 0  | 5,840,494:44:0 |      |
| 94   | 0  | 363 | 08:24:35.866 | 117GB105A106A4F | 7STRP 0,050042,-0,0103  | Record Mode Change                   | 400 | 4  | 0  | 5,840,494:52:0 |      |
| 95   | 0  | 363 | 08:24:49.866 | 117GB105A106A4G | 7STRP -0,049039,0,01,0  | Slew =12,01                          | 400 | 4  | 0  | 5,840,494:73:0 |      |
| 96   | 0  | 363 | 08:25:31.866 |                 | DMS: : *RUNDOWN         | R115, TRACK 1, FWD, TIC *3674.44 +/- | 400 | 4  | 0  | 5,840,495:45:0 |      |
| 97   | 0  | 363 | 08:25:31.866 | 175B422A6A      | 6DMSC R7,1              | DMS Control Tape runup 7.68kbp       | 400 | 4  | 0  | 5,840,495:45:0 |      |
| 98   | 0  | 363 | 08:25:32.533 | 117GB105A106A4H | 7STRP 0,050042,-0,0103  | Slew =12,01                          | 400 | 4  | 0  | 5,840,495:46:0 |      |
| 99   | 0  | 363 | 08:25:33.066 |                 | DMS: : *RUNUP           | R7, TRACK 1, FWD, TIC *3675.44 +/-   | 400 | 4  | 0  | 5,840,495:46:8 |      |
| 100  | 0  | 363 | 08:25:34.466 |                 | DMS: : *RECORD          | R7, TRACK 1, FWD, TIC *3675.56 +/-   | 400 | 4  | 0  | 5,840,495:48:9 |      |
| 101  | 0  | 363 | 08:25:34.466 |                 | DMS: : *AT SPD          | R7, TRACK 1, FWD, TIC 3675.56 +/-    | 400 | 4  | 0  | 5,840,495:48:9 |      |
| 102  | 0  | 363 | 08:25:34.533 | 175TB176A6A     | 6TMREC LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD    | 400 | 4  | 0  | 5,840,495:49:0 |      |
| 103  | 0  | 363 | 08:25:46.533 | 117GB105A106A4I | 7STRP -0,049039,0,01,0  | Slew =,1,61                          | 400 | 4  | 0  | 5,840,495:67:0 |      |
| 104  | 0  | 363 | 08:26:29.200 | 117GB105A106A4J | 7STRP 0,050042,-0,0103  | Slew =12,01                          | 400 | 4  | 0  | 5,840,496:40:0 |      |
| 105  | 0  | 363 | 08:26:43.200 | 117GB105A106A4K | 7STRP -0,049039,0,01,0  | Slew =,1,61                          | 400 | 4  | 0  | 5,840,496:61:0 |      |
| 106  | 0  | 363 | 08:27:25.866 | 117GB105A106B4A | 7STRP -0,266022,0,2573  | Slew =12,01                          | 400 | 4  | 0  | 5,840,497:34:0 |      |
| 107  | 0  | 363 | 08:28:02.533 | 117GB105A106B4B | 7STRP 0,0,0,0,0,0,0,0,  | Slew =,1,61                          | 400 | 4  | 0  | 5,840,497:89:0 |      |
| 108  | 0  | 363 | 08:29:02.533 | 117GB11A        | CSMOS GE                | **** GROUP END CSMOS                 | 400 | 4  | 0  | 5,840,498:88:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description            | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|------------------------|------|----|----|----------------|------|
| 109  | 0  | 363 | 08:29:08.533 | 428JB6A         | 6RCCLR  |                  |                        | 400  | 4  | 0  | 5,840,499:06:0 |      |
| 110  | 0  | 363 | 08:29:37.866 | 165GC4A         | 7SCAN   | NORM,56.622,-39. | Check S/P Position     | 400  | 4  | 0  | 5,840,499:50:0 |      |
| 111  | 0  | 363 | 08:31:57.200 | 117GC           | CSMOS   | GS               | **** GROUP START CSMOS | 400  | 4  | 0  | 5,840,501:77:0 |      |
| 112  | 0  | 363 | 08:32:05.200 | 165GC4B         | 7VECT   |                  | Inert vect update UTC  | 400  | 4  | 0  | 5,840,501:89:0 |      |
| 113  | 0  | 363 | 08:32:06.533 | 117GC105A106A4B | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,502:00:0 |      |
| 114  | 0  | 363 | 08:32:24.533 | 117GC105A106A4B | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,502:27:0 |      |
| 115  | 0  | 363 | 08:32:40.533 | 117GC105A106A4C | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,502:51:0 |      |
| 116  | 0  | 363 | 08:32:58.533 | 117GC105A106A4D | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,502:78:0 |      |
| 117  | 0  | 363 | 08:33:14.533 | 117GC105A106A4E | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,503:11:0 |      |
| 118  | 0  | 363 | 08:33:32.533 | 117GC105A106A4F | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,503:38:0 |      |
| 119  | 0  | 363 | 08:33:48.533 | 117GC105A106A4G | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,503:62:0 |      |
| 120  | 0  | 363 | 08:34:06.533 | 117GC105A106A4H | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,503:89:0 |      |
| 121  | 0  | 363 | 08:34:22.533 | 117GC105A106A4I | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,504:22:0 |      |
| 122  | 0  | 363 | 08:34:40.533 | 117GC105A106A4J | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,504:49:0 |      |
| 123  | 0  | 363 | 08:34:56.533 | 117GC105A106A4K | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,504:73:0 |      |
| 124  | 0  | 363 | 08:35:14.533 | 117GC105A106A4L | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,505:09:0 |      |
| 125  | 0  | 363 | 08:35:30.533 | 117GC105A106A4M | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,505:33:0 |      |
| 126  | 0  | 363 | 08:35:48.533 | 117GC105A106A4N | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,505:60:0 |      |
| 127  | 0  | 363 | 08:36:04.533 | 117GC105A106A4O | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,505:84:0 |      |
| 128  | 0  | 363 | 08:36:22.533 | 117GC105A106A4P | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,506:20:0 |      |
| 129  | 0  | 363 | 08:36:38.533 | 117GC105A106A4Q | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,506:44:0 |      |
| 130  | 0  | 363 | 08:36:56.533 | 117GC105A106A4R | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,506:71:0 |      |
| 131  | 0  | 363 | 08:37:12.533 | 117GC105A106A4S | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,507:04:0 |      |
| 132  | 0  | 363 | 08:37:30.533 | 117GC105A106A4T | 7STRP   | 0.003,-0.014751, | Slew = 12.01           | 400  | 4  | 0  | 5,840,507:31:0 |      |
| 133  | 0  | 363 | 08:37:46.533 | 117GC105A106A4U | 7STRP   | -0.004,0.015001, | Slew = 2.01            | 400  | 4  | 0  | 5,840,507:55:0 |      |
| 134  | 0  | 363 | 08:38:04.533 | 117GC11A        | CSMOS   | GE               | **** GROUP END CSMOS   | 400  | 4  | 0  | 5,840,507:82:0 |      |
| 135  | 0  | 363 | 08:39:10.533 | 165GD4A         | 7SCAN   | NORM,51.771,-4.7 | Check S/P Position     | 400  | 4  | 0  | 5,840,508:90:0 |      |
| 136  | 0  | 363 | 08:41:03.200 | 117GD           | CSMOS   | GS               | **** GROUP START CSMOS | 400  | 4  | 0  | 5,840,510:77:0 |      |
| 137  | 0  | 363 | 08:41:11.200 | 165GD4B         | 7VECT   |                  | Inert vect update UTC  | 400  | 4  | 0  | 5,840,510:89:0 |      |
| 138  | 0  | 363 | 08:41:12.533 | 117GD105A106A4B | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,511:00:0 |      |
| 139  | 0  | 363 | 08:41:33.200 | 117GD105A106A4B | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,511:31:0 |      |
| 140  | 0  | 363 | 08:41:47.866 | 117GD105A106A4C | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,511:53:0 |      |
| 141  | 0  | 363 | 08:42:08.533 | 117GD105A106A4D | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,511:84:0 |      |
| 142  | 0  | 363 | 08:42:23.200 | 117GD105A106A4E | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,512:15:0 |      |
| 143  | 0  | 363 | 08:42:43.866 | 117GD105A106A4F | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,512:46:0 |      |
| 144  | 0  | 363 | 08:42:58.533 | 117GD105A106A4G | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,512:68:0 |      |
| 145  | 0  | 363 | 08:43:19.200 | 117GD105A106A4H | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,513:08:0 |      |
| 146  | 0  | 363 | 08:43:33.866 | 117GD105A106A4I | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,513:30:0 |      |
| 147  | 0  | 363 | 08:43:54.533 | 117GD105A106A4J | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,513:61:0 |      |
| 148  | 0  | 363 | 08:44:09.200 | 117GD105A106A4K | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,513:83:0 |      |
| 149  | 0  | 363 | 08:44:29.866 | 117GD105A106A4L | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,514:23:0 |      |
| 150  | 0  | 363 | 08:44:44.533 | 117GD105A106A4M | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,514:45:0 |      |
| 151  | 0  | 363 | 08:45:05.200 | 117GD105A106A4N | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,514:76:0 |      |
| 152  | 0  | 363 | 08:45:19.866 | 117GD105A106A4O | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,515:07:0 |      |
| 153  | 0  | 363 | 08:45:40.533 | 117GD105A106A4P | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,515:38:0 |      |
| 154  | 0  | 363 | 08:45:55.200 | 117GD105A106A4Q | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,515:60:0 |      |
| 155  | 0  | 363 | 08:46:15.866 | 117GD105A106A4R | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,516:00:0 |      |
| 156  | 0  | 363 | 08:46:30.533 | 117GD105A106A4S | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,516:22:0 |      |
| 157  | 0  | 363 | 08:46:51.200 | 117GD105A106A4T | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,516:53:0 |      |
| 158  | 0  | 363 | 08:47:05.866 | 117GD105A106A4U | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,516:75:0 |      |
| 159  | 0  | 363 | 08:47:26.533 | 117GD105A106A4V | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,517:15:0 |      |
| 160  | 0  | 363 | 08:47:41.200 | 117GD105A106A4W | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,517:37:0 |      |
| 161  | 0  | 363 | 08:48:01.866 | 117GD105A106A4X | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,517:68:0 |      |
| 162  | 0  | 363 | 08:48:16.533 | 117GD105A106A4Y | 7STRP   | -0.025005,-0.005 | Slew = 1.61            | 400  | 4  | 0  | 5,840,517:90:0 |      |
| 163  | 0  | 363 | 08:48:37.200 | 117GD105A106A4Z | 7STRP   | 0.024955,0.0065, | Slew = 12.01           | 400  | 4  | 0  | 5,840,518:30:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                                | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|---------|------------------|--|------|----|----|----------------|------|
| 164  | 0  | 363 | 08:48:51.866 | 117GD105A106A4AA | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,518:52:0 |      |
| 165  | 0  | 363 | 08:49:12.533 | 117GD105A106A4AB | 7STRP   | 0.024955,0.0065, | Slew =12.01                                | 400  | 4  | 0  | 5,840,518:83:0 |      |
| 166  | 0  | 363 | 08:49:27.200 | 117GD105A106A4AC | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,519:14:0 |      |
| 167  | 0  | 363 | 08:49:47.866 | 117GD105A106A4AD | 7STRP   | 0.024955,0.0065, | Slew =12.01                                | 400  | 4  | 0  | 5,840,519:45:0 |      |
| 168  | 0  | 363 | 08:50:02.533 | 117GD105A106A4AE | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,519:67:0 |      |
| 169  | 0  | 363 | 08:50:23.200 | 117GD105A106A4AF | 7STRP   | 0.024955,0.0065, | Slew =12.01                                | 400  | 4  | 0  | 5,840,520:07:0 |      |
| 170  | 0  | 363 | 08:50:37.866 | 117GD105A106A4AG | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,520:29:0 |      |
| 171  | 0  | 363 | 08:50:58.533 | 117GD105A106A4AH | 7STRP   | 0.024955,0.0065, | Slew =12.01                                | 400  | 4  | 0  | 5,840,520:60:0 |      |
| 172  | 0  | 363 | 08:51:13.200 | 117GD105A106A4AI | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,520:82:0 |      |
| 173  | 0  | 363 | 08:51:33.866 | 117GD105A106A4AJ | 7STRP   | 0.024955,0.0065, | Slew =12.01                                | 400  | 4  | 0  | 5,840,521:22:0 |      |
| 174  | 0  | 363 | 08:51:48.533 | 117GD105A106A4AK | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,521:44:0 |      |
| 175  | 0  | 363 | 08:52:09.200 | 117GD105A106A4AL | 7STRP   | 0.024955,0.0065, | Slew =12.01                                | 400  | 4  | 0  | 5,840,521:75:0 |      |
| 176  | 0  | 363 | 08:52:23.866 | 117GD105A106A4AM | 7STRP   | -0.025005,-0.005 | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,522:06:0 |      |
| 177  | 0  | 363 | 08:52:44.533 | 117GD105A106B4A  | 7STRP   | -0.080171,0.0683 | Slew =12.01                                | 400  | 4  | 0  | 5,840,522:37:0 |      |
| 178  | 0  | 363 | 08:53:13.866 | 117GD105A106B4B  | 7STRP   | 0.0,0.0,0.0,0.0, | Slew =, 1.61                               | 400  | 4  | 0  | 5,840,522:81:0 |      |
| 179  | 0  | 363 | 08:54:14.533 | 117GD11A         | CSMOS   | GE               | ***** GROUP END CSMOS                      | 400  | 4  | 0  | 5,840,523:81:0 |      |
| 180  | 0  | 363 | 08:55:21.200 | 165GE4A          | 7SCAN   | NORM,65.587,14.6 | Check S/P Position                         | 400  | 4  | 0  | 5,840,524:90:0 |      |
| 181  | 0  | 363 | 08:55:23.866 | 432OC431A6A      | 6RCDSL  | DDSNCG,PLSNCG,EP | Record Deselect (DDS o                     | 400  | 4  | 0  | 5,840,525:03:0 |      |
| 182  | 0  | 363 | 08:55:23.866 | 175TB422A6B      | 6DMSC   | RDY,0            | DMS Control Tape stop                      | 400  | 4  | 0  | 5,840,525:03:0 |      |
| 183  | 0  | 363 | 08:55:23.866 |                  | DMS:    | : *RUNDOWN       | R/T, TRACK 1, FWD, TIC *4094.95 +/-        | 400  | 4  | 0  | 5,840,525:03:0 |      |
| 184  | 0  | 363 | 08:55:24.533 | 432OC6A          | 6RTSL1  |                  | R/T Select of DDS and                      | 400  | 4  | 0  | 5,840,525:04:0 |      |
| 185  | 0  | 363 | 08:55:25.066 |                  | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC *4095.01 +/-        | 400  | 4  | 0  | 5,840,525:04:8 |      |
| 186  | 0  | 363 | 08:55:27.866 | 282NB431A6A      | 6RCDSL  | DDSNCG,PLSDSL,EP | Record Deselect (DDS o                     | 400  | 4  | 0  | 5,840,525:09:0 |      |
| 187  | 0  | 363 | 08:55:31.866 | 176GE6A          | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 400  | 4  | 0  | 5,840,525:15:0 |      |
| 188  | 0  | 363 | 08:56:16.533 | 282NB432A41A6A   | 6RCDSL  | DDSNCG,PLSDSL,EP | Record Deselect (DDS o                     | 400  | 4  | 0  | 5,840,525:82:0 |      |
| 189  | 0  | 363 | 08:56:17.200 | 282NB432A6A      | 6RTSL1  |                  | R/T Select of DDS and                      | 400  | 4  | 0  | 5,840,525:83:0 |      |
| 190  | 0  | 363 | 08:57:13.866 | 117GE            | CSMOS   | GS               | ***** GROUP START CSMOS                    | 400  | 4  | 0  | 5,840,526:77:0 |      |
| 191  | 0  | 363 | 08:57:21.866 | 165GE4B          | 7VECT   |                  | Inert vect update UTC                      | 400  | 4  | 0  | 5,840,526:89:0 |      |
| 192  | 0  | 363 | 08:57:23.200 | 117GE105A106A4A  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,527:00:0 |      |
| 193  | 0  | 363 | 08:57:58.533 | 117GE105A106A4B  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,527:53:0 |      |
| 194  | 0  | 363 | 08:58:18.533 | 117GE105A106A4C  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,527:83:0 |      |
| 195  | 0  | 363 | 08:58:53.866 | 117GE105A106A4D  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,528:45:0 |      |
| 196  | 0  | 363 | 08:59:13.866 | 117GE105A106A4E  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,528:75:0 |      |
| 197  | 0  | 363 | 08:59:49.200 | 117GE105A106A4F  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,529:37:0 |      |
| 198  | 0  | 363 | 09:00:09.200 | 117GE105A106A4G  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,529:67:0 |      |
| 199  | 0  | 363 | 09:00:44.533 | 117GE105A106A4H  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,530:29:0 |      |
| 200  | 0  | 363 | 09:01:04.533 | 117GE105A106A4I  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,530:59:0 |      |
| 201  | 0  | 363 | 09:01:39.866 | 117GE105A106A4J  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,531:21:0 |      |
| 202  | 0  | 363 | 09:01:59.866 | 117GE105A106A4K  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,531:51:0 |      |
| 203  | 0  | 363 | 09:02:35.200 | 117GE105A106A4L  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,532:13:0 |      |
| 204  | 0  | 363 | 09:02:55.200 | 117GE105A106A4M  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 400  | 4  | 0  | 5,840,532:43:0 |      |
| 205  | 0  | 363 | 09:03:07.000 | 29NNRELOAD01-    |         | *****START*****  |  | 400  | 4  | 0  | :              |      |
| 206  | 0  | 363 | 09:03:07.200 | 20FZ5A           | 37PL    |                  | Program Load (halts microprocessor & unwri | 4    | 0  | 0  | 5,840,532:61:0 |      |
| 207  | 0  | 363 | 09:03:10.533 | 20FZ5B           | 37MRL   |                  | Memory Realocate (software operates from R | 4    | 0  | 0  | 5,840,532:66:0 |      |
| 208  | 0  | 363 | 09:03:13.866 | 20FZ6A           | 6MCPY   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4    | 0  | 0  | 5,840,532:71:0 |      |
| 209  | 0  | 363 | 09:03:23.866 | 20FZ6B           | 6MCPY   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4    | 0  | 0  | 5,840,532:86:0 |      |
| 210  | 0  | 363 | 09:03:30.533 | 117GE105A106A4N  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 400  | 4  | 0  | 5,840,533:05:0 |      |
| 211  | 0  | 363 | 09:03:37.866 | 20FZ5C           | 37IRT   |                  | Instrument Reset (goes into POR state)     | 4    | 0  | 0  | 5,840,533:16:0 |      |
| 212  | 0  | 363 | 09:03:41.200 | 20FZ5D           | 37MN    |                  | Memory Normal (software operates from ROM) | 260  | 4  | 0  | 5,840,533:21:0 |      |
| 213  | 0  | 363 | 09:03:50.533 | 117GE105A106A4O  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 260  | 4  | 0  | 5,840,533:35:0 |      |
| 214  | 0  | 363 | 09:04:21.200 | 20FZ4A           | 37IST   | 1,2,0,OFF,0,1,0  | Chopper ON, Sync, Chopper (RefGain State   | 2R0  | 4  | 0  | 5,840,533:81:0 |      |
| 215  | 0  | 363 | 09:04:25.866 | 117GE105A106A4P  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 2R0  | 4  | 0  | 5,840,533:88:0 |      |
| 216  | 0  | 363 | 09:04:45.866 | 117GE105A106A4Q  | 7STRP   | -0.041023,0.0281 | Slew =, 3.41                               | 2R0  | 4  | 0  | 5,840,534:27:0 |      |
| 217  | 0  | 363 | 09:05:21.200 | 117GE105A106A4R  | 7STRP   | 0.042025,-0.0266 | Slew =12.01                                | 2R0  | 4  | 0  | 5,840,534:80:0 |      |
| 218  | 0  | 363 | 09:05:23.866 | 127FZ            | NIMSTAB | GS               | %%%%GROUP START TAB                        | 2R0  | 4  | 0  | 5,840,534:84:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                               | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|---------|------------------|---|------|----|----|----------------|------|
| 219  | 0  | 363 | 09:05:23.866 | 127FZ4A          | 37IOP   | 3.0              | Long Map, Grating Start Position =00      | 2R3  | 4  | 0  | 5,840,534:84:0 |      |
| 220  | 0  | 363 | 09:05:24.533 | 127FZ4B          | 37ETB   | 04,C4,35,FF,FF   | Loads wavelength edit table               | 2R3  | 4  | 0  | 5,840,534:85:0 |      |
| 221  | 0  | 363 | 09:05:25.000 | 29NNRELOAD01-    |         | *****STOP*****   |   | 2R3  | 4  | 0  | :              |      |
| 222  | 0  | 363 | 09:05:32.533 | 127FZ11A         | NIMSTAB | GE               | %%GROUP END TAB                           | 2R3  | 4  | 0  | 5,840,535:06:0 |      |
| 223  | 0  | 363 | 09:05:41.200 | 117GE105A106A4S  | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,535:19:0 |      |
| 224  | 0  | 363 | 09:06:16.533 | 117GE105A106A4T  | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,535:72:0 |      |
| 225  | 0  | 363 | 09:06:36.533 | 117GE105A106A4U  | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,536:11:0 |      |
| 226  | 0  | 363 | 09:07:11.866 | 117GE105A106A4V  | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,536:64:0 |      |
| 227  | 0  | 363 | 09:07:31.866 | 117GE105A106A4W  | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,537:03:0 |      |
| 228  | 0  | 363 | 09:08:06.533 |                  | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 4095.01 +/-        | 2R3  | 4  | 0  | 5,840,537:55:0 |      |
| 229  | 0  | 363 | 09:08:06.533 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3  | 4  | 0  | 5,840,537:55:0 |      |
| 230  | 0  | 363 | 09:08:07.200 | 117GE105A106A4X  | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,537:56:0 |      |
| 231  | 0  | 363 | 09:08:13.200 |                  | DMS:    | :*RUNUP          | R7, TRACK 1, FWD, TIC 4095.01 +/-         | 2R3  | 4  | 0  | 5,840,537:65:0 |      |
| 232  | 0  | 363 | 09:08:14.600 |                  | DMS:    | :*AT_SPD         | R7, TRACK 1, FWD, TIC *4095.13 +/-        | 2R3  | 4  | 0  | 5,840,537:67:1 |      |
| 233  | 0  | 363 | 09:08:27.200 | 117GE105A106A4Y  | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,537:86:0 |      |
| 234  | 0  | 363 | 09:08:31.866 |                  | DMS:    | :*RECORD         | R7, TRACK 1, FWD, TIC *4099.18 +/-        | 2R3  | 4  | 0  | 5,840,538:02:0 |      |
| 235  | 0  | 363 | 09:08:54.533 |                  | DMS:    | :*RUNDOWN        | R7, TRACK 1, FWD, TIC *4104.49 +/-        | 2R3  | 4  | 0  | 5,840,538:36:0 |      |
| 236  | 0  | 363 | 09:08:54.533 | 50ZZ6RE          | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,538:36:0 |      |
| 237  | 0  | 363 | 09:08:55.733 |                  | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *4104.55 +/-       | 2R3  | 4  | 0  | 5,840,538:37:8 |      |
| 238  | 0  | 363 | 09:09:02.533 | 117GE105A106A4Z  | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,538:48:0 |      |
| 239  | 0  | 363 | 09:09:22.533 | 117GE105A106A4AA | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,538:78:0 |      |
| 240  | 0  | 363 | 09:09:57.866 | 117GE105A106A4AB | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,539:40:0 |      |
| 241  | 0  | 363 | 09:10:17.866 | 117GE105A106A4AC | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,539:70:0 |      |
| 242  | 0  | 363 | 09:10:53.200 | 117GE105A106A4AD | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,540:32:0 |      |
| 243  | 0  | 363 | 09:11:13.200 | 117GE105A106A4AE | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,540:62:0 |      |
| 244  | 0  | 363 | 09:11:48.533 | 117GE105A106A4AF | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,541:24:0 |      |
| 245  | 0  | 363 | 09:12:08.533 | 117GE105A106A4AG | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,541:54:0 |      |
| 246  | 0  | 363 | 09:12:43.866 | 117GE105A106A4AH | 7STRP   | 0.042025,-0.0266 | Slew = 12.01                              | 2R3  | 4  | 0  | 5,840,542:16:0 |      |
| 247  | 0  | 363 | 09:13:03.866 | 117GE105A106A4AI | 7STRP   | -0.041023,0.0281 | Slew = 3.41                               | 2R3  | 4  | 0  | 5,840,542:46:0 |      |
| 248  | 0  | 363 | 09:13:39.200 | 117GE11A         | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3  | 4  | 0  | 5,840,543:08:0 |      |
| 249  | 0  | 363 | 09:14:41.200 | 165IA4A          | CSMOS   | NORM,61,46,21,52 | Check S/P Position                        | 2R3  | 4  | 0  | 5,840,544:10:0 |      |
| 250  | 0  | 363 | 09:15:14.533 | 176GE6B          | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3  | 4  | 0  | 5,840,544:60:0 |      |
| 251  | 0  | 363 | 09:15:16.533 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3  | 4  | 0  | 5,840,544:63:0 |      |
| 252  | 0  | 363 | 09:15:16.533 |                  | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 4104.55 +/-        | 2R3  | 4  | 0  | 5,840,544:63:0 |      |
| 253  | 0  | 363 | 09:15:23.200 |                  | DMS:    | :*RUNUP          | R7, TRACK 1, FWD, TIC 4104.55 +/-         | 2R3  | 4  | 0  | 5,840,544:73:0 |      |
| 254  | 0  | 363 | 09:15:24.600 |                  | DMS:    | :*AT_SPD         | R7, TRACK 1, FWD, TIC *4104.67 +/-        | 2R3  | 4  | 0  | 5,840,544:75:1 |      |
| 255  | 0  | 363 | 09:15:26.533 |                  | DMS:    | :*RECORD         | R7, TRACK 1, FWD, TIC *4105.12 +/-        | 2R3  | 4  | 0  | 5,840,544:78:0 |      |
| 256  | 0  | 363 | 09:15:42.533 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,545:11:0 |      |
| 257  | 0  | 363 | 09:15:42.533 |                  | DMS:    | :*RUNDOWN        | R7, TRACK 1, FWD, TIC *4108.87 +/-        | 2R3  | 4  | 0  | 5,840,545:11:0 |      |
| 258  | 0  | 363 | 09:15:43.733 |                  | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *4108.93 +/-       | 2R3  | 4  | 0  | 5,840,545:12:8 |      |
| 259  | 0  | 363 | 09:16:34.533 | 165IA4B          | 7VECT   |                  | Inert vect update UTC                     | 2R3  | 4  | 0  | 5,840,545:89:0 |      |
| 260  | 0  | 363 | 09:18:29.866 | 175IA422A6A      | 6DMSC   | R115,1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,547:80:0 |      |
| 261  | 0  | 363 | 09:18:29.866 |                  | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 4108.93 +/-        | 2R3  | 4  | 0  | 5,840,547:80:0 |      |
| 262  | 0  | 363 | 09:18:31.200 | 118QA            | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,840,547:82:0 |      |
| 263  | 0  | 363 | 09:18:36.533 |                  | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 4108.93 +/-       | 2R3  | 4  | 0  | 5,840,547:90:0 |      |
| 264  | 0  | 363 | 09:18:39.866 | 175IA176A6A      | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,548:04:0 |      |
| 265  | 0  | 363 | 09:18:40.533 |                  | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *4115.23 +/-      | 2R3  | 4  | 0  | 5,840,548:05:0 |      |
| 266  | 0  | 363 | 09:18:40.533 |                  | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 4115.23 +/-       | 2R3  | 4  | 0  | 5,840,548:05:0 |      |
| 267  | 0  | 363 | 09:18:41.200 | 118QA110A111A4A  | 7STRP   | -0.0044,0.006805 | Slew = 2,8,4                              | 2R3  | 4  | 0  | 5,840,548:06:0 |      |
| 268  | 0  | 363 | 09:18:51.866 | 118QA11A         | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,840,548:22:0 |      |
| 269  | 0  | 363 | 09:19:07.866 | 175IA422A6B      | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,548:46:0 |      |
| 270  | 0  | 363 | 09:19:07.866 |                  | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *4211.33 +/-      | 2R3  | 4  | 0  | 5,840,548:46:0 |      |
| 271  | 0  | 363 | 09:19:09.066 |                  | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *4212.33 +/-       | 2R3  | 4  | 0  | 5,840,548:47:8 |      |
| 272  | 0  | 363 | 09:20:42.533 | 118IA            | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,840,550:06:0 |      |
| 273  | 0  | 363 | 09:21:01.866 |                  | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 4212.33 +/-        | 2R3  | 4  | 0  | 5,840,550:35:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|----------------|------|
| 274  | 0  | 363 | 09:21:01.866 | 175JA422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,550:35:0 |      |
| 275  | 0  | 363 | 09:21:08.533 |                 | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 42:12.33 +/-      | 2R3 | 4  | 0  | 5,840,550:45:0 |      |
| 276  | 0  | 363 | 09:21:11.866 | 175JA176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,550:50:0 |      |
| 277  | 0  | 363 | 09:21:12.533 |                 | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 42:18.63 +/-      | 2R3 | 4  | 0  | 5,840,550:51:0 |      |
| 278  | 0  | 363 | 09:21:12.533 |                 | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *42:18.63 +/-     | 2R3 | 4  | 0  | 5,840,550:51:0 |      |
| 279  | 0  | 363 | 09:21:35.200 | 118JA110A111A4A | 7STRP   | -0.0044,0.006805 | Slew =, 8.11                              | 2R3 | 4  | 0  | 5,840,550:85:0 |      |
| 280  | 0  | 363 | 09:21:39.866 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *43:14.72 +/-     | 2R3 | 4  | 0  | 5,840,551:01:0 |      |
| 281  | 0  | 363 | 09:21:39.866 | 175JA422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,551:01:0 |      |
| 282  | 0  | 363 | 09:21:41.066 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *43:15.72 +/-      | 2R3 | 4  | 0  | 5,840,551:02:8 |      |
| 283  | 0  | 363 | 09:22:02.533 | 175JB422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,551:35:0 |      |
| 284  | 0  | 363 | 09:22:02.533 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 43:15.72 +/-       | 2R3 | 4  | 0  | 5,840,551:35:0 |      |
| 285  | 0  | 363 | 09:22:09.200 |                 | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 43:15.72 +/-      | 2R3 | 4  | 0  | 5,840,551:45:0 |      |
| 286  | 0  | 363 | 09:22:12.533 | 175JB176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,551:50:0 |      |
| 287  | 0  | 363 | 09:22:13.200 |                 | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *43:22.02 +/-     | 2R3 | 4  | 0  | 5,840,551:51:0 |      |
| 288  | 0  | 363 | 09:22:13.200 |                 | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 43:22.02 +/-      | 2R3 | 4  | 0  | 5,840,551:51:0 |      |
| 289  | 0  | 363 | 09:22:40.533 | 175JB422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,552:01:0 |      |
| 290  | 0  | 363 | 09:22:40.533 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *44:18.12 +/-     | 2R3 | 4  | 0  | 5,840,552:01:0 |      |
| 291  | 0  | 363 | 09:22:41.733 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *44:19.12 +/-      | 2R3 | 4  | 0  | 5,840,552:02:8 |      |
| 292  | 0  | 363 | 09:23:03.200 | 175JC422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,552:35:0 |      |
| 293  | 0  | 363 | 09:23:03.200 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 44:19.12 +/-       | 2R3 | 4  | 0  | 5,840,552:35:0 |      |
| 294  | 0  | 363 | 09:23:09.866 |                 | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 44:19.12 +/-      | 2R3 | 4  | 0  | 5,840,552:45:0 |      |
| 295  | 0  | 363 | 09:23:13.200 | 175JC176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,552:50:0 |      |
| 296  | 0  | 363 | 09:23:13.866 |                 | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 44:25.42 +/-      | 2R3 | 4  | 0  | 5,840,552:51:0 |      |
| 297  | 0  | 363 | 09:23:13.866 |                 | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *44:25.42 +/-     | 2R3 | 4  | 0  | 5,840,552:51:0 |      |
| 298  | 0  | 363 | 09:23:41.200 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *45:21.51 +/-     | 2R3 | 4  | 0  | 5,840,553:01:0 |      |
| 299  | 0  | 363 | 09:23:41.200 | 175JC422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,553:01:0 |      |
| 300  | 0  | 363 | 09:23:42.400 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *45:22.51 +/-      | 2R3 | 4  | 0  | 5,840,553:02:8 |      |
| 301  | 0  | 363 | 09:24:03.866 | 175JV422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,553:35:0 |      |
| 302  | 0  | 363 | 09:24:03.866 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 45:22.51 +/-       | 2R3 | 4  | 0  | 5,840,553:35:0 |      |
| 303  | 0  | 363 | 09:24:10.533 |                 | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 45:22.51 +/-      | 2R3 | 4  | 0  | 5,840,553:45:0 |      |
| 304  | 0  | 363 | 09:24:13.866 | 175JV176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,553:50:0 |      |
| 305  | 0  | 363 | 09:24:14.533 |                 | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 45:28.81 +/-      | 2R3 | 4  | 0  | 5,840,553:51:0 |      |
| 306  | 0  | 363 | 09:24:14.533 |                 | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *45:28.81 +/-     | 2R3 | 4  | 0  | 5,840,553:51:0 |      |
| 307  | 0  | 363 | 09:24:41.866 | 175JV422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,554:01:0 |      |
| 308  | 0  | 363 | 09:24:41.866 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *46:24.90 +/-     | 2R3 | 4  | 0  | 5,840,554:01:0 |      |
| 309  | 0  | 363 | 09:24:43.066 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *46:25.90 +/-      | 2R3 | 4  | 0  | 5,840,554:02:8 |      |
| 310  | 0  | 363 | 09:25:04.533 | 175JW422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,554:35:0 |      |
| 311  | 0  | 363 | 09:25:04.533 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 46:25.90 +/-       | 2R3 | 4  | 0  | 5,840,554:35:0 |      |
| 312  | 0  | 363 | 09:25:11.200 |                 | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 46:25.90 +/-      | 2R3 | 4  | 0  | 5,840,554:45:0 |      |
| 313  | 0  | 363 | 09:25:14.533 | 175JW176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,554:50:0 |      |
| 314  | 0  | 363 | 09:25:15.200 |                 | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *46:32.20 +/-     | 2R3 | 4  | 0  | 5,840,554:51:0 |      |
| 315  | 0  | 363 | 09:25:15.200 |                 | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 46:32.20 +/-      | 2R3 | 4  | 0  | 5,840,554:51:0 |      |
| 316  | 0  | 363 | 09:25:42.533 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *47:28.30 +/-     | 2R3 | 4  | 0  | 5,840,555:01:0 |      |
| 317  | 0  | 363 | 09:25:42.533 | 175JW422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,555:01:0 |      |
| 318  | 0  | 363 | 09:25:43.733 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *47:29.30 +/-      | 2R3 | 4  | 0  | 5,840,555:02:8 |      |
| 319  | 0  | 363 | 09:26:05.200 | 175JX422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,555:35:0 |      |
| 320  | 0  | 363 | 09:26:05.200 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 47:29.30 +/-       | 2R3 | 4  | 0  | 5,840,555:35:0 |      |
| 321  | 0  | 363 | 09:26:11.866 |                 | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 47:29.30 +/-      | 2R3 | 4  | 0  | 5,840,555:45:0 |      |
| 322  | 0  | 363 | 09:26:15.200 | 175JX176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,555:50:0 |      |
| 323  | 0  | 363 | 09:26:15.866 |                 | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 47:35.60 +/-      | 2R3 | 4  | 0  | 5,840,555:51:0 |      |
| 324  | 0  | 363 | 09:26:15.866 |                 | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *47:35.60 +/-     | 2R3 | 4  | 0  | 5,840,555:51:0 |      |
| 325  | 0  | 363 | 09:26:43.200 | 175JX422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,556:01:0 |      |
| 326  | 0  | 363 | 09:26:43.200 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *48:31.69 +/-     | 2R3 | 4  | 0  | 5,840,556:01:0 |      |
| 327  | 0  | 363 | 09:26:44.400 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *48:32.69 +/-      | 2R3 | 4  | 0  | 5,840,556:02:8 |      |
| 328  | 0  | 363 | 09:27:05.866 | 175JY422A6A     | 6DMSC   | R115.1           | DMS Control                               | 2R3 | 4  | 0  | 5,840,556:35:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID           | Command Parameters     | Description                               | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|------------------------|---|------|----|----|----------------|------|
| 329  | 0  | 363 | 09:27:05.866 |                | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 4832.69 +/-        | 2R3  | 4  | 0  | 5,840,556:35:0 |      |
| 330  | 0  | 363 | 09:27:12.533 |                | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 4832.69 +/-       | 2R3  | 4  | 0  | 5,840,556:45:0 |      |
| 331  | 0  | 363 | 09:27:15.866 | 175JY176A6A    | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,556:50:0 |      |
| 332  | 0  | 363 | 09:27:16.533 |                | DMS: :*AT_SPD          | R115, TRACK 1, FWD, TIC 4838.99 +/-       | 2R3  | 4  | 0  | 5,840,556:51:0 |      |
| 333  | 0  | 363 | 09:27:16.533 |                | DMS: :*RECORD          | R115, TRACK 1, FWD, TIC *4838.99 +/-      | 2R3  | 4  | 0  | 5,840,556:51:0 |      |
| 334  | 0  | 363 | 09:27:43.866 | 175JY422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,557:01:0 |      |
| 335  | 0  | 363 | 09:27:43.866 |                | DMS: :*RUNDOWN         | R115, TRACK 1, FWD, TIC *4935.08 +/-      | 2R3  | 4  | 0  | 5,840,557:01:0 |      |
| 336  | 0  | 363 | 09:27:45.066 |                | DMS: :*READY           | RDY, TRACK 1, FWD, TIC *4936.08 +/-       | 2R3  | 4  | 0  | 5,840,557:02:8 |      |
| 337  | 0  | 363 | 09:28:06.533 | 175JE422A6A    | 6DMSC R115,1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,557:35:0 |      |
| 338  | 0  | 363 | 09:28:06.533 |                | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 4936.08 +/-        | 2R3  | 4  | 0  | 5,840,557:35:0 |      |
| 339  | 0  | 363 | 09:28:13.200 |                | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 4936.08 +/-       | 2R3  | 4  | 0  | 5,840,557:45:0 |      |
| 340  | 0  | 363 | 09:28:16.533 | 175JE176A6A    | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,557:50:0 |      |
| 341  | 0  | 363 | 09:28:17.200 |                | DMS: :*RECORD          | R115, TRACK 1, FWD, TIC *4942.38 +/-      | 2R3  | 4  | 0  | 5,840,557:51:0 |      |
| 342  | 0  | 363 | 09:28:17.200 |                | DMS: :*AT_SPD          | R115, TRACK 1, FWD, TIC 4942.38 +/-       | 2R3  | 4  | 0  | 5,840,557:51:0 |      |
| 343  | 0  | 363 | 09:28:44.533 |                | DMS: :*RUNDOWN         | R115, TRACK 1, FWD, TIC *5038.48 +/-      | 2R3  | 4  | 0  | 5,840,558:01:0 |      |
| 344  | 0  | 363 | 09:28:44.533 | 175JE422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,558:01:0 |      |
| 345  | 0  | 363 | 09:28:45.733 |                | DMS: :*READY           | RDY, TRACK 1, FWD, TIC *5039.48 +/-       | 2R3  | 4  | 0  | 5,840,558:02:8 |      |
| 346  | 0  | 363 | 09:28:47.866 | 118JA          | SMOS GS                |   | 2R3  | 4  | 0  | 5,840,558:06:0 |      |
| 347  | 0  | 363 | 09:29:07.200 |                | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 5039.48 +/-        | 2R3  | 4  | 0  | 5,840,558:35:0 |      |
| 348  | 0  | 363 | 09:29:07.200 | 175JR422A6A    | 6DMSC R115,1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,558:35:0 |      |
| 349  | 0  | 363 | 09:29:08.533 | 118IA11A       | SMOS GE                |   | 2R3  | 4  | 0  | 5,840,558:37:0 |      |
| 350  | 0  | 363 | 09:29:13.866 |                | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 5039.48 +/-       | 2R3  | 4  | 0  | 5,840,558:45:0 |      |
| 351  | 0  | 363 | 09:29:17.200 | 175JR176A6A    | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,558:50:0 |      |
| 352  | 0  | 363 | 09:29:17.866 |                | DMS: :*RECORD          | R115, TRACK 1, FWD, TIC *5045.78 +/-      | 2R3  | 4  | 0  | 5,840,558:51:0 |      |
| 353  | 0  | 363 | 09:29:17.866 |                | DMS: :*AT_SPD          | R115, TRACK 1, FWD, TIC *5045.78 +/-      | 2R3  | 4  | 0  | 5,840,558:51:0 |      |
| 354  | 0  | 363 | 09:29:40.533 | 118JA110A11A4A | 7STRP 0.008,0.0027,168 | Slew =,8.11                               | 2R3  | 4  | 0  | 5,840,558:85:0 |      |
| 355  | 0  | 363 | 09:29:45.200 | 175JR422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,559:01:0 |      |
| 356  | 0  | 363 | 09:29:45.200 |                | DMS: :*RUNDOWN         | R115, TRACK 1, FWD, TIC *5141.87 +/-      | 2R3  | 4  | 0  | 5,840,559:01:0 |      |
| 357  | 0  | 363 | 09:29:46.400 |                | DMS: :*READY           | RDY, TRACK 1, FWD, TIC *5142.87 +/-       | 2R3  | 4  | 0  | 5,840,559:02:8 |      |
| 358  | 0  | 363 | 09:30:07.866 | 175JS422A6A    | 6DMSC R115,1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,559:35:0 |      |
| 359  | 0  | 363 | 09:30:07.866 |                | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 5142.87 +/-        | 2R3  | 4  | 0  | 5,840,559:35:0 |      |
| 360  | 0  | 363 | 09:30:14.533 |                | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 5142.87 +/-       | 2R3  | 4  | 0  | 5,840,559:45:0 |      |
| 361  | 0  | 363 | 09:30:17.866 | 175JS176A6A    | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,559:50:0 |      |
| 362  | 0  | 363 | 09:30:18.533 |                | DMS: :*AT_SPD          | R115, TRACK 1, FWD, TIC 5149.17 +/-       | 2R3  | 4  | 0  | 5,840,559:51:0 |      |
| 363  | 0  | 363 | 09:30:18.533 |                | DMS: :*RECORD          | R115, TRACK 1, FWD, TIC *5149.17 +/-      | 2R3  | 4  | 0  | 5,840,559:51:0 |      |
| 364  | 0  | 363 | 09:30:45.866 | 175JS422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,560:01:0 |      |
| 365  | 0  | 363 | 09:30:45.866 |                | DMS: :*RUNDOWN         | R115, TRACK 1, FWD, TIC *5245.27 +/-      | 2R3  | 4  | 0  | 5,840,560:01:0 |      |
| 366  | 0  | 363 | 09:30:47.066 |                | DMS: :*READY           | RDY, TRACK 1, FWD, TIC *5246.27 +/-       | 2R3  | 4  | 0  | 5,840,560:02:8 |      |
| 367  | 0  | 363 | 09:31:08.533 | 175JF422A6A    | 6DMSC :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 5246.27 +/-        | 2R3  | 4  | 0  | 5,840,560:35:0 |      |
| 368  | 0  | 363 | 09:31:08.533 |                | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 5246.27 +/-       | 2R3  | 4  | 0  | 5,840,560:35:0 |      |
| 369  | 0  | 363 | 09:31:15.200 |                | DMS: :*READY           | RDY, TRACK 1, FWD, TIC 5246.27 +/-        | 2R3  | 4  | 0  | 5,840,560:45:0 |      |
| 370  | 0  | 363 | 09:31:18.533 | 175JF176A6A    | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,560:50:0 |      |
| 371  | 0  | 363 | 09:31:19.200 |                | DMS: :*RECORD          | R115, TRACK 1, FWD, TIC *5252.57 +/-      | 2R3  | 4  | 0  | 5,840,560:51:0 |      |
| 372  | 0  | 363 | 09:31:19.200 |                | DMS: :*AT_SPD          | R115, TRACK 1, FWD, TIC 5252.57 +/-       | 2R3  | 4  | 0  | 5,840,560:51:0 |      |
| 373  | 0  | 363 | 09:31:46.533 |                | DMS: :*RUNDOWN         | R115, TRACK 1, FWD, TIC *5348.66 +/-      | 2R3  | 4  | 0  | 5,840,561:01:0 |      |
| 374  | 0  | 363 | 09:31:46.533 | 175JF422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,561:01:0 |      |
| 375  | 0  | 363 | 09:31:47.733 |                | DMS: :*READY           | RDY, TRACK 1, FWD, TIC *5349.66 +/-       | 2R3  | 4  | 0  | 5,840,561:02:8 |      |
| 376  | 0  | 363 | 09:32:09.200 |                | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 5349.66 +/-        | 2R3  | 4  | 0  | 5,840,561:35:0 |      |
| 377  | 0  | 363 | 09:32:09.200 | 175JT422A6A    | 6DMSC R115,1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,561:35:0 |      |
| 378  | 0  | 363 | 09:32:15.866 |                | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 5349.66 +/-       | 2R3  | 4  | 0  | 5,840,561:45:0 |      |
| 379  | 0  | 363 | 09:32:19.200 | 175JT176A6A    | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,561:50:0 |      |
| 380  | 0  | 363 | 09:32:19.866 |                | DMS: :*AT_SPD          | R115, TRACK 1, FWD, TIC 5355.96 +/- 1     | 2R3  | 4  | 0  | 5,840,561:51:0 |      |
| 381  | 0  | 363 | 09:32:19.866 |                | DMS: :*RECORD          | R115, TRACK 1, FWD, TIC *5355.96 +/-      | 2R3  | 4  | 0  | 5,840,561:51:0 |      |
| 382  | 0  | 363 | 09:32:47.200 |                | DMS: :*RUNDOWN         | R115, TRACK 1, FWD, TIC *5452.05 +/- 1    | 2R3  | 4  | 0  | 5,840,562:01:0 |      |
| 383  | 0  | 363 | 09:32:47.200 | 175JT422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,562:01:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID           | Command | Parameters       | Description                               | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|---------|------------------|---|------|----|----|----------------|------|
| 384  | 0  | 363 | 09:32:48.400 |                | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *5453.05 +/- 1     | 2R3  | 4  | 0  | 5,840,562:02:8 |      |
| 385  | 0  | 363 | 09:33:09.866 |                | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 5453.05 +/- 1      | 2R3  | 4  | 0  | 5,840,562:35:0 |      |
| 386  | 0  | 363 | 09:33:09.866 | 175JU422A6A    | 6DMSC   | R115.1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,562:35:0 |      |
| 387  | 0  | 363 | 09:33:16.533 |                | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 5453.05 +/- 1     | 2R3  | 4  | 0  | 5,840,562:45:0 |      |
| 388  | 0  | 363 | 09:33:19.866 | 175JU176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,562:50:0 |      |
| 389  | 0  | 363 | 09:33:20.533 |                | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 5459.35 +/- 1     | 2R3  | 4  | 0  | 5,840,562:51:0 |      |
| 390  | 0  | 363 | 09:33:20.533 |                | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *5459.35 +/- 1    | 2R3  | 4  | 0  | 5,840,562:51:0 |      |
| 391  | 0  | 363 | 09:33:47.866 |                | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *5555.45 +/- 1    | 2R3  | 4  | 0  | 5,840,563:01:0 |      |
| 392  | 0  | 363 | 09:33:47.866 | 175JU422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,563:01:0 |      |
| 393  | 0  | 363 | 09:33:49.066 |                | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *5556.45 +/- 1     | 2R3  | 4  | 0  | 5,840,563:02:8 |      |
| 394  | 0  | 363 | 09:34:10.533 |                | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 5556.45 +/- 1      | 2R3  | 4  | 0  | 5,840,563:35:0 |      |
| 395  | 0  | 363 | 09:34:10.533 | 175QC422A6A    | 6DMSC   | R115.1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,563:35:0 |      |
| 396  | 0  | 363 | 09:34:17.200 |                | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 5556.45 +/- 1     | 2R3  | 4  | 0  | 5,840,563:45:0 |      |
| 397  | 0  | 363 | 09:34:20.533 | 175QC176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,563:50:0 |      |
| 398  | 0  | 363 | 09:34:21.200 |                | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 5562.75 +/- 1     | 2R3  | 4  | 0  | 5,840,563:51:0 |      |
| 399  | 0  | 363 | 09:34:21.200 |                | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *5562.75 +/- 1    | 2R3  | 4  | 0  | 5,840,563:51:0 |      |
| 400  | 0  | 363 | 09:34:48.533 | 175QC422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,564:01:0 |      |
| 401  | 0  | 363 | 09:34:48.533 |                | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *5658.84 +/- 1    | 2R3  | 4  | 0  | 5,840,564:01:0 |      |
| 402  | 0  | 363 | 09:34:49.733 |                | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *5659.84 +/- 1     | 2R3  | 4  | 0  | 5,840,564:02:8 |      |
| 403  | 0  | 363 | 09:35:11.200 |                | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 5659.84 +/- 1      | 2R3  | 4  | 0  | 5,840,564:35:0 |      |
| 404  | 0  | 363 | 09:35:11.200 | 175QE422A6A    | 6DMSC   | R115.1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,564:35:0 |      |
| 405  | 0  | 363 | 09:35:17.866 |                | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 5659.84 +/- 1     | 2R3  | 4  | 0  | 5,840,564:45:0 |      |
| 406  | 0  | 363 | 09:35:21.200 | 175QE176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,564:50:0 |      |
| 407  | 0  | 363 | 09:35:21.866 |                | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 5666.14 +/- 1     | 2R3  | 4  | 0  | 5,840,564:51:0 |      |
| 408  | 0  | 363 | 09:35:21.866 |                | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *5666.14 +/- 1    | 2R3  | 4  | 0  | 5,840,564:51:0 |      |
| 409  | 0  | 363 | 09:35:49.200 |                | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *5762.23 +/- 1    | 2R3  | 4  | 0  | 5,840,565:01:0 |      |
| 410  | 0  | 363 | 09:35:49.200 | 175QE422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,565:01:0 |      |
| 411  | 0  | 363 | 09:35:50.400 |                | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *5763.23 +/- 1     | 2R3  | 4  | 0  | 5,840,565:02:8 |      |
| 412  | 0  | 363 | 09:36:12.533 | 118JA11A       | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,840,565:36:0 |      |
| 413  | 0  | 363 | 09:37:42.533 |                | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 5763.23 +/- 1      | 2R3  | 4  | 0  | 5,840,566:80:0 |      |
| 414  | 0  | 363 | 09:37:42.533 | 175QF422A6A    | 6DMSC   | R115.1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,566:80:0 |      |
| 415  | 0  | 363 | 09:37:49.200 |                | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 5763.23 +/- 1     | 2R3  | 4  | 0  | 5,840,566:90:0 |      |
| 416  | 0  | 363 | 09:37:52.533 | 175QF176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,567:04:0 |      |
| 417  | 0  | 363 | 09:37:53.200 |                | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 5769.53 +/- 1     | 2R3  | 4  | 0  | 5,840,567:05:0 |      |
| 418  | 0  | 363 | 09:37:53.200 |                | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *5769.53 +/- 1    | 2R3  | 4  | 0  | 5,840,567:05:0 |      |
| 419  | 0  | 363 | 09:37:53.866 | 118QB          | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,840,567:06:0 |      |
| 420  | 0  | 363 | 09:38:15.866 | 118QB110A11A4A | 7STRP   | 0.008,0.0027,32, | Slew =2,8.3                               | 2R3  | 4  | 0  | 5,840,567:39:0 |      |
| 421  | 0  | 363 | 09:38:20.533 | 175QF422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,567:46:0 |      |
| 422  | 0  | 363 | 09:38:20.533 |                | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *5865.63 +/- 1    | 2R3  | 4  | 0  | 5,840,567:46:0 |      |
| 423  | 0  | 363 | 09:38:21.733 |                | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *5866.63 +/- 1     | 2R3  | 4  | 0  | 5,840,567:47:8 |      |
| 424  | 0  | 363 | 09:38:26.533 | 118QB11A       | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,840,567:55:0 |      |
| 425  | 0  | 363 | 09:40:14.533 | 175QK422A6A    | 6DMSC   | R115.1           | DMS Control                               | 2R3  | 4  | 0  | 5,840,569:35:0 |      |
| 426  | 0  | 363 | 09:40:14.533 |                | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 5866.63 +/- 1      | 2R3  | 4  | 0  | 5,840,569:35:0 |      |
| 427  | 0  | 363 | 09:40:21.200 |                | DMS:    | :*RUNUP          | R115, TRACK 1, FWD, TIC 5866.63 +/- 1     | 2R3  | 4  | 0  | 5,840,569:45:0 |      |
| 428  | 0  | 363 | 09:40:24.533 | 175QK176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,840,569:50:0 |      |
| 429  | 0  | 363 | 09:40:25.200 |                | DMS:    | :*AT_SPD         | R115, TRACK 1, FWD, TIC 5872.93 +/- 1     | 2R3  | 4  | 0  | 5,840,569:51:0 |      |
| 430  | 0  | 363 | 09:40:25.200 |                | DMS:    | :*RECORD         | R115, TRACK 1, FWD, TIC *5872.93 +/- 1    | 2R3  | 4  | 0  | 5,840,569:51:0 |      |
| 431  | 0  | 363 | 09:40:52.533 |                | DMS:    | :*RUNDOWN        | R115, TRACK 1, FWD, TIC *5969.02 +/- 1    | 2R3  | 4  | 0  | 5,840,570:01:0 |      |
| 432  | 0  | 363 | 09:40:52.533 | 175QK422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,570:01:0 |      |
| 433  | 0  | 363 | 09:40:53.733 |                | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *5970.02 +/- 1     | 2R3  | 4  | 0  | 5,840,570:02:8 |      |
| 434  | 0  | 363 | 09:42:53.200 |                | DMS:    | :*READY          | RDY, TRACK *2, *REV, TIC 5970.02 +/- 1    | 2R3  | 4  | 0  | 5,840,572:00:0 |      |
| 435  | 0  | 363 | 09:42:53.200 | 465KB6A        | 6DMSC   | RDY,2            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,840,572:00:0 |      |
| 436  | 0  | 363 | 09:44:53.866 | 165GU4A        | 7SCAN   | NORM,61.146,19.7 | Check S/P Position                        | 2R3  | 4  | 0  | 5,840,573:90:0 |      |
| 437  | 0  | 363 | 09:44:54.533 | 176GU6A        | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3  | 4  | 0  | 5,840,574:00:0 |      |
| 438  | 0  | 363 | 09:46:46.533 | 117GU          | CSMOS   | GS               | ***** GROUP START CSMOS                   | 2R3  | 4  | 0  | 5,840,575:77:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|---------|------------------|---|-----|----|----|----------------|------|
| 439  | 0  | 363 | 09:46:55.866 | 117GU105A106A4A  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,576:00:0 |      |
| 440  | 0  | 363 | 09:47:16.533 | 117GU105A106A4B  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,576:31:0 |      |
| 441  | 0  | 363 | 09:47:37.200 | 117GU105A106A4C  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,576:62:0 |      |
| 442  | 0  | 363 | 09:47:57.866 | 117GU105A106A4D  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,577:02:0 |      |
| 443  | 0  | 363 | 09:48:18.533 | 117GU105A106A4E  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,577:33:0 |      |
| 444  | 0  | 363 | 09:48:39.200 | 117GU105A106A4F  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,577:64:0 |      |
| 445  | 0  | 363 | 09:48:59.866 | 117GU105A106A4G  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,578:04:0 |      |
| 446  | 0  | 363 | 09:49:20.533 | 117GU105A106A4H  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,578:35:0 |      |
| 447  | 0  | 363 | 09:49:41.200 | 117GU105A106A4I  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,578:66:0 |      |
| 448  | 0  | 363 | 09:50:01.866 | 117GU105A106A4J  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,579:06:0 |      |
| 449  | 0  | 363 | 09:50:22.533 | 117GU105A106A4K  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,579:37:0 |      |
| 450  | 0  | 363 | 09:50:43.200 | 117GU105A106A4L  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,579:68:0 |      |
| 451  | 0  | 363 | 09:51:03.866 | 117GU105A106A4M  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,580:08:0 |      |
| 452  | 0  | 363 | 09:51:24.533 | 117GU105A106A4N  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,580:39:0 |      |
| 453  | 0  | 363 | 09:51:45.200 | 117GU105A106A4O  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,580:70:0 |      |
| 454  | 0  | 363 | 09:52:05.866 | 117GU105A106A4P  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,581:10:0 |      |
| 455  | 0  | 363 | 09:52:26.533 | 117GU105A106A4Q  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,581:41:0 |      |
| 456  | 0  | 363 | 09:52:47.200 | 117GU105A106A4R  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,581:72:0 |      |
| 457  | 0  | 363 | 09:53:07.866 | 117GU105A106A4S  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,582:12:0 |      |
| 458  | 0  | 363 | 09:53:28.533 | 117GU105A106A4T  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,582:43:0 |      |
| 459  | 0  | 363 | 09:53:49.200 | 117GU105A106A4U  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,582:74:0 |      |
| 460  | 0  | 363 | 09:54:09.866 | 117GU105A106A4V  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,583:14:0 |      |
| 461  | 0  | 363 | 09:54:30.533 | 117GU105A106A4W  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,583:45:0 |      |
| 462  | 0  | 363 | 09:54:51.200 | 117GU105A106A4X  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,583:76:0 |      |
| 463  | 0  | 363 | 09:55:11.866 | 117GU105A106A4Y  | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,584:16:0 |      |
| 464  | 0  | 363 | 09:55:32.533 | 117GU105A106A4Z  | 7STRP   | 0.019002,0.02287 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,584:47:0 |      |
| 465  | 0  | 363 | 09:55:53.200 | 117GU105A106A4AA | 7STRP   | -0.020603,-0.022 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,584:78:0 |      |
| 466  | 0  | 363 | 09:56:13.866 | 117GU105A106B4A  | 7STRP   | 0.027707,0.01775 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,585:18:0 |      |
| 467  | 0  | 363 | 09:56:36.533 | 117GU105A106B4B  | 7STRP   | -0.023104,-0.024 | Slew = 8.61                               | 2R3 | 4  | 0  | 5,840,585:52:0 |      |
| 468  | 0  | 363 | 09:56:59.200 | 117GU11A         | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | 5,840,585:86:0 |      |
| 469  | 0  | 363 | 09:57:29.200 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5,840,586:40:0 |      |
| 470  | 0  | 363 | 09:57:29.200 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 5970.02 +/- 1     | 2R3 | 4  | 0  | 5,840,586:40:0 |      |
| 471  | 0  | 363 | 09:57:30.600 |                  | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *5970.14 +/- 1      | 2R3 | 4  | 0  | 5,840,586:42:1 |      |
| 472  | 0  | 363 | 09:57:32.533 | 176GU6B          | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5,840,586:45:0 |      |
| 473  | 0  | 363 | 09:57:35.866 |                  | DMS:    | : *US RD         | P7, TRACK 1, FWD, TIC *5971.38 +/- 1      | 2R3 | 4  | 0  | 5,840,586:50:0 |      |
| 474  | 0  | 363 | 09:57:37.066 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *5971.44 +/- 1    | 2R3 | 4  | 0  | 5,840,586:51:8 |      |
| 475  | 0  | 363 | 09:57:38.466 |                  | DMS:    | : *AT SPD        | R7, TRACK 2, REV, TIC *5971.32 +/- 1      | 2R3 | 4  | 0  | 5,840,586:53:9 |      |
| 476  | 0  | 363 | 09:57:54.533 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *5967.55 +/- 1      | 2R3 | 4  | 0  | 5,840,586:78:0 |      |
| 477  | 0  | 363 | 09:58:02.533 | 165GV4A          | 7SCAN   | NORM,61.16,20.53 | Check S/P Position                        | 2R3 | 4  | 0  | 5,840,586:90:0 |      |
| 478  | 0  | 363 | 09:58:16.533 | 50ZZ6RE          | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,587:20:0 |      |
| 479  | 0  | 363 | 09:58:16.533 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *5962.39 +/- 1      | 2R3 | 4  | 0  | 5,840,587:20:0 |      |
| 480  | 0  | 363 | 09:58:17.733 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *5962.33 +/- 1     | 2R3 | 4  | 0  | 5,840,587:21:8 |      |
| 481  | 0  | 363 | 09:58:35.200 | 176GV6A          | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | 5,840,587:48:0 |      |
| 482  | 0  | 363 | 09:59:55.200 | 117GV            | CSMOS   | GS               | ***** GROUP START CSMOS                   | 2R3 | 4  | 0  | 5,840,588:77:0 |      |
| 483  | 0  | 363 | 10:00:04.533 | 117GV105A106A4A  | 7STRP   | -0.061578,-0.064 | Slew = 0.1,8                              | 2R3 | 4  | 0  | 5,840,589:00:0 |      |
| 484  | 0  | 363 | 10:02:59.866 | 117GV105A106A4B  | 7STRP   | 0.060975,0.06029 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,591:81:0 |      |
| 485  | 0  | 363 | 10:03:39.866 | 117GV105A106A4C  | 7STRP   | -0.061578,-0.064 | Slew = 0.1,8                              | 2R3 | 4  | 0  | 5,840,592:50:0 |      |
| 486  | 0  | 363 | 10:06:35.200 | 117GV105A106A4D  | 7STRP   | 0.060975,0.06029 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,840,595:40:0 |      |
| 487  | 0  | 363 | 10:07:15.200 | 117GV105A106A4E  | 7STRP   | -0.061578,-0.064 | Slew = 0.1,8                              | 2R3 | 4  | 0  | 5,840,596:09:0 |      |
| 488  | 0  | 363 | 10:10:10.533 | 117GV11A         | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | 5,840,598:90:0 |      |
| 489  | 0  | 363 | 10:11:09.866 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5,840,599:88:0 |      |
| 490  | 0  | 363 | 10:11:09.866 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 5962.33 +/- 1     | 2R3 | 4  | 0  | 5,840,599:88:0 |      |
| 491  | 0  | 363 | 10:11:11.266 |                  | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *5962.45 +/- 1      | 2R3 | 4  | 0  | 5,840,599:90:1 |      |
| 492  | 0  | 363 | 10:11:13.200 | 176GV6B          | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5,840,600:02:0 |      |
| 493  | 0  | 363 | 10:11:16.533 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *5963.69 +/- 1      | 2R3 | 4  | 0  | 5,840,600:07:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                               | GCM | GO | GS | RIM       | MF I |
|------|----|-----|--------------|-----------------|------------------------|---|-----|----|----|-----------|------|
| 494  | 0  | 363 | 10:11:17.733 |                 | DMS: :*RUNUP           | R7, TRACK *2, *REV, TIC *5963.75 +/- 1    | 2R3 | 4  | 0  | 5,840,600 | 08:8 |
| 495  | 0  | 363 | 10:11:19.133 |                 | DMS: :*AT SPD          | R7, TRACK 2, REV, TIC *5963.63 +/- 1      | 2R3 | 4  | 0  | 5,840,600 | 10:9 |
| 496  | 0  | 363 | 10:11:35.200 |                 | DMS: :*RECORD          | R7, TRACK 2, REV, TIC *5959.86 +/- 1      | 2R3 | 4  | 0  | 5,840,600 | 35:0 |
| 497  | 0  | 363 | 10:11:57.200 |                 | DMS: :*RUNDOWN         | R7, TRACK 2, REV, TIC *5954.71 +/- 1      | 2R3 | 4  | 0  | 5,840,600 | 68:0 |
| 498  | 0  | 363 | 10:11:57.200 | 50ZZ6RD         | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,600 | 68:0 |
| 499  | 0  | 363 | 10:11:58.400 |                 | DMS: :*READY           | RDY, TRACK 2, REV, TIC *5954.65 +/- 1     | 2R3 | 4  | 0  | 5,840,600 | 69:8 |
| 500  | 0  | 363 | 10:13:12.533 | 165IC4A         | 7SCAN NORM,64.316999,2 | Check S/P Position                        | 2R3 | 4  | 0  | 5,840,601 | 90:0 |
| 501  | 0  | 363 | 10:16:10.533 | 175IC422A6A     | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R3 | 4  | 0  | 5,840,604 | 84:0 |
| 502  | 0  | 363 | 10:16:10.533 |                 | DMS: :*US-RUNUP        | P7, TRACK *1, *FWD, TIC 5954.65 +/- 1     | 2R3 | 4  | 0  | 5,840,604 | 84:0 |
| 503  | 0  | 363 | 10:16:11.933 |                 | DMS: :*US_AT_SP        | P7, TRACK 1, FWD, TIC *5954.77 +/- 1      | 2R3 | 4  | 0  | 5,840,604 | 86:1 |
| 504  | 0  | 363 | 10:16:13.866 | 165IC4B         | 7VECT                  | Inert track update UTC                    | 2R3 | 4  | 0  | 5,840,604 | 89:0 |
| 505  | 0  | 363 | 10:16:17.200 |                 | DMS: :*US_RD           | P7, TRACK 1, FWD, TIC *5956.00 +/- 1      | 2R3 | 4  | 0  | 5,840,605 | 03:0 |
| 506  | 0  | 363 | 10:16:18.400 |                 | DMS: :*RUNUP           | R115, TRACK *2, *REV, TIC *5956.06 +/- 1  | 2R3 | 4  | 0  | 5,840,605 | 04:8 |
| 507  | 0  | 363 | 10:16:21.866 | 175IC176A6A     | 6TMREC HIM             | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,840,605 | 10:0 |
| 508  | 0  | 363 | 10:16:22.400 |                 | DMS: :*RECORD          | R115, TRACK 2, REV, TIC *5949.76 +/- 1    | 2R3 | 4  | 0  | 5,840,605 | 10:8 |
| 509  | 0  | 363 | 10:16:22.400 |                 | DMS: :*AT SPD          | R115, TRACK 2, REV, TIC 5949.76 +/- 1     | 2R3 | 4  | 0  | 5,840,605 | 10:8 |
| 510  | 0  | 363 | 10:17:09.866 | 118IC           | SMOS GS                |   | 2R3 | 4  | 0  | 5,840,605 | 82:0 |
| 511  | 0  | 363 | 10:17:15.866 | 176IC6A         | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,606 | 00:0 |
| 512  | 0  | 363 | 10:17:19.866 | 118IC110A111A4A | 7STRP -0.007,0.0,546,0 | Slew = 3.51                               | 2R3 | 4  | 0  | 5,840,606 | 06:0 |
| 513  | 0  | 363 | 10:17:46.533 |                 | DMS: :*RUNDOWN         | R115, TRACK 2, REV, TIC *5653.98 +/- 1    | 2R3 | 4  | 0  | 5,840,606 | 46:0 |
| 514  | 0  | 363 | 10:17:46.533 | 175IC422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,606 | 46:0 |
| 515  | 0  | 363 | 10:17:47.733 |                 | DMS: :*READY           | RDY, TRACK 2, REV, TIC *5652.98 +/- 1     | 2R3 | 4  | 0  | 5,840,606 | 47:8 |
| 516  | 0  | 363 | 10:19:12.533 |                 | DMS: :*US-RUNUP        | P7, TRACK *1, *FWD, TIC 5652.98 +/- 1     | 2R3 | 4  | 0  | 5,840,607 | 84:0 |
| 517  | 0  | 363 | 10:19:12.533 | 175IV422A6A     | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R3 | 4  | 0  | 5,840,607 | 84:0 |
| 518  | 0  | 363 | 10:19:13.933 |                 | DMS: :*US_AT_SP        | P7, TRACK 1, FWD, TIC *5653.10 +/- 1      | 2R3 | 4  | 0  | 5,840,607 | 86:1 |
| 519  | 0  | 363 | 10:19:19.200 |                 | DMS: :*US_RD           | P7, TRACK 1, FWD, TIC *5654.33 +/- 1      | 2R3 | 4  | 0  | 5,840,608 | 03:0 |
| 520  | 0  | 363 | 10:19:20.400 |                 | DMS: :*RUNUP           | R115, TRACK *2, *REV, TIC *5654.39 +/- 1  | 2R3 | 4  | 0  | 5,840,608 | 04:8 |
| 521  | 0  | 363 | 10:19:23.866 | 175IV176A6A     | 6TMREC HIM             | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,840,608 | 10:0 |
| 522  | 0  | 363 | 10:19:24.400 |                 | DMS: :*AT SPD          | R115, TRACK 2, REV, TIC 5648.09 +/- 1     | 2R3 | 4  | 0  | 5,840,608 | 10:8 |
| 523  | 0  | 363 | 10:19:24.400 |                 | DMS: :*RECORD          | R115, TRACK 2, REV, TIC *5648.09 +/- 1    | 2R3 | 4  | 0  | 5,840,608 | 10:8 |
| 524  | 0  | 363 | 10:20:17.866 | 176IV6A         | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,609 | 00:0 |
| 525  | 0  | 363 | 10:20:21.866 | 118IC110A111B4A | 7STRP 0.00775,0.007003 | Slew = 8.11                               | 2R3 | 4  | 0  | 5,840,609 | 06:0 |
| 526  | 0  | 363 | 10:20:48.533 | 175IV422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,609 | 46:0 |
| 527  | 0  | 363 | 10:20:48.533 |                 | DMS: :*RUNDOWN         | R115, TRACK 2, REV, TIC *5352.31 +/- 1    | 2R3 | 4  | 0  | 5,840,609 | 46:0 |
| 528  | 0  | 363 | 10:20:49.733 |                 | DMS: :*READY           | RDY, TRACK 2, REV, TIC *5351.31 +/- 1     | 2R3 | 4  | 0  | 5,840,609 | 47:8 |
| 529  | 0  | 363 | 10:22:14.533 | 175IW422A6A     | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R3 | 4  | 0  | 5,840,610 | 84:0 |
| 530  | 0  | 363 | 10:22:14.533 |                 | DMS: :*US-RUNUP        | P7, TRACK *1, *FWD, TIC 5351.31 +/- 1     | 2R3 | 4  | 0  | 5,840,610 | 86:1 |
| 531  | 0  | 363 | 10:22:15.933 |                 | DMS: :*US_AT_SP        | P7, TRACK 1, FWD, TIC *5351.43 +/- 1      | 2R3 | 4  | 0  | 5,840,611 | 03:0 |
| 532  | 0  | 363 | 10:22:21.200 |                 | DMS: :*US_RD           | P7, TRACK 1, FWD, TIC *5352.67 +/- 1      | 2R3 | 4  | 0  | 5,840,611 | 03:0 |
| 533  | 0  | 363 | 10:22:22.400 |                 | DMS: :*RUNUP           | R115, TRACK *2, *REV, TIC *5352.73 +/- 1  | 2R3 | 4  | 0  | 5,840,611 | 04:8 |
| 534  | 0  | 363 | 10:22:25.866 | 175IW176A6A     | 6TMREC HIM             | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,840,611 | 10:0 |
| 535  | 0  | 363 | 10:22:26.400 |                 | DMS: :*RECORD          | R115, TRACK 2, REV, TIC *5346.43 +/- 1    | 2R3 | 4  | 0  | 5,840,611 | 10:8 |
| 536  | 0  | 363 | 10:22:26.400 |                 | DMS: :*AT SPD          | R115, TRACK 2, REV, TIC 5346.43 +/- 1     | 2R3 | 4  | 0  | 5,840,611 | 10:8 |
| 537  | 0  | 363 | 10:23:19.866 | 176IW6A         | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,840,612 | 00:0 |
| 538  | 0  | 363 | 10:23:23.866 | 118IC110A111B4B | 7STRP -0.007,0.0,546,0 | Slew = 3.51                               | 2R3 | 4  | 0  | 5,840,612 | 06:0 |
| 539  | 0  | 363 | 10:23:50.533 |                 | DMS: :*RUNDOWN         | R115, TRACK 2, REV, TIC *5050.65 +/- 1    | 2R3 | 4  | 0  | 5,840,612 | 46:0 |
| 540  | 0  | 363 | 10:23:50.533 | 175IW422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,612 | 46:0 |
| 541  | 0  | 363 | 10:23:51.733 |                 | DMS: :*READY           | RDY, TRACK 2, REV, TIC *5049.65 +/- 1     | 2R3 | 4  | 0  | 5,840,612 | 47:8 |
| 542  | 0  | 363 | 10:25:16.533 | 175IX422A6A     | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R3 | 4  | 0  | 5,840,613 | 84:0 |
| 543  | 0  | 363 | 10:25:16.533 |                 | DMS: :*US-RUNUP        | P7, TRACK *1, *FWD, TIC 5049.65 +/- 1     | 2R3 | 4  | 0  | 5,840,613 | 84:0 |
| 544  | 0  | 363 | 10:25:17.933 |                 | DMS: :*US_AT_SP        | P7, TRACK 1, FWD, TIC *5049.77 +/- 1      | 2R3 | 4  | 0  | 5,840,613 | 86:1 |
| 545  | 0  | 363 | 10:25:23.200 |                 | DMS: :*US_RD           | P7, TRACK 1, FWD, TIC *5051.00 +/- 1      | 2R3 | 4  | 0  | 5,840,614 | 03:0 |
| 546  | 0  | 363 | 10:25:24.400 |                 | DMS: :*RUNUP           | R115, TRACK *2, *REV, TIC *5051.06 +/- 1  | 2R3 | 4  | 0  | 5,840,614 | 04:8 |
| 547  | 0  | 363 | 10:25:27.866 | 175IX176A6A     | 6TMREC HIM             | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,840,614 | 10:0 |
| 548  | 0  | 363 | 10:25:28.400 |                 | DMS: :*RECORD          | R115, TRACK 2, REV, TIC *5044.76 +/- 1    | 2R3 | 4  | 0  | 5,840,614 | 10:8 |

| Line | YR | DOY | SCET - GMT   | PSID           | Command Parameters     | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|----------------|------------------------|--|-----|----|----------------|----------------|------|
| 549  | 0  | 363 | 10:25:28.400 |                | DMS: : *AT_SPD         | R115, TRACK 2, REV, TIC 5044.76 +/- 1      | 2R3 | 4  | 0              | 5,840,614:10:8 |      |
| 550  | 0  | 363 | 10:26:21.866 | 176IX6A        | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R3 | 4  | 0              | 5,840,615:00:0 |      |
| 551  | 0  | 363 | 10:26:52.533 |                | DMS: : *RUNDOWN        | R115, TRACK 2, REV, TIC *4748.98 +/- 1     | 2R3 | 4  | 0              | 5,840,615:46:0 |      |
| 552  | 0  | 363 | 10:26:52.533 | 175IX422A6B    | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,840,615:46:0 |      |
| 553  | 0  | 363 | 10:26:53.733 |                | DMS: : *READY          | P7, TRACK 2, REV, TIC *4747.98 +/- 1       | 2R3 | 4  | 0              | 5,840,615:47:8 |      |
| 554  | 0  | 363 | 10:28:18.533 |                | DMS: : *US-RUNUP       | R7, TRACK *1, *FWD, TIC 4747.98 +/- 1      | 2R3 | 4  | 0              | 5,840,616:84:0 |      |
| 555  | 0  | 363 | 10:28:18.533 | 175Y422A6A     | 6DMSC R115,0           | DMS Control Tape runup 115.2kb             | 2R3 | 4  | 0              | 5,840,616:84:0 |      |
| 556  | 0  | 363 | 10:28:19.933 |                | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *4748.10 +/- 1       | 2R3 | 4  | 0              | 5,840,616:86:1 |      |
| 557  | 0  | 363 | 10:28:25.200 |                | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *4749.33 +/- 1       | 2R3 | 4  | 0              | 5,840,617:03:0 |      |
| 558  | 0  | 363 | 10:28:26.400 |                | DMS: : *RUNUP          | R115, TRACK *2, *REV, TIC *4749.39 +/- 1   | 2R3 | 4  | 0              | 5,840,617:04:8 |      |
| 559  | 0  | 363 | 10:28:29.866 | 175Y176A6A     | 6TMREC HIM             | 115.2 KBPS SSI + NIMS RECORD Record Mode   | 2R3 | 4  | 0              | 5,840,617:10:0 |      |
| 560  | 0  | 363 | 10:28:30.400 |                | DMS: : *AT_SPD         | R115, TRACK 2, REV, TIC 4743.09 +/- 1      | 2R3 | 4  | 0              | 5,840,617:10:8 |      |
| 561  | 0  | 363 | 10:28:30.400 |                | DMS: : *RECORD         | R115, TRACK 2, REV, TIC *4743.09 +/- 1     | 2R3 | 4  | 0              | 5,840,617:10:8 |      |
| 562  | 0  | 363 | 10:29:23.866 | 176Y6A         | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R3 | 4  | 0              | 5,840,618:00:0 |      |
| 563  | 0  | 363 | 10:29:27.866 | 118IC11A       | SMOS GE                | Check S/P Position                         | 2R3 | 4  | 0              | 5,840,618:06:0 |      |
| 564  | 0  | 363 | 10:29:30.533 | 165IB4A        | 7SCAN RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,840,618:10:0 |      |
| 565  | 0  | 363 | 10:29:54.533 | 175Y422A6B     | 6DMSC RDY,0            | NORM,64,549999,2                           | 2R3 | 4  | 0              | 5,840,618:46:0 |      |
| 566  | 0  | 363 | 10:29:54.533 |                | DMS: : *RUNDOWN        | R115, TRACK 2, REV, TIC *4447.31 +/- 1     | 2R3 | 4  | 0              | 5,840,618:46:0 |      |
| 567  | 0  | 363 | 10:29:55.733 |                | DMS: : *READY          | RDY, TRACK 2, REV, TIC *4446.31 +/- 1      | 2R3 | 4  | 0              | 5,840,618:47:8 |      |
| 568  | 0  | 363 | 10:30:09.000 | 29NNREGION01-  | -----START-----        |  | 2R3 | 4  | 0              | :              |      |
| 569  | 0  | 363 | 10:30:09.866 | 20DA5A         | 37PL                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,840,618:69:0 |                |      |
| 570  | 0  | 363 | 10:30:17.200 | 20DA5B         | 37MRL                  | Memory Realocate (software operates from R | 4   | 0  | 5,840,618:80:0 |                |      |
| 571  | 0  | 363 | 10:30:25.200 | 20DA6A         | 6MCOPI NIMS            | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,840,619:01:0 |                |      |
| 572  | 0  | 363 | 10:30:35.200 | 20DA6B         | 6MCOPI NIMS            | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,840,619:16:0 |                |      |
| 573  | 0  | 363 | 10:30:45.200 | 20DA5C         | 37IRT                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,840,619:31:0 |                |      |
| 574  | 0  | 363 | 10:30:46.533 | 20DA5D         | 37MIN                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,840,619:33:0 |      |
| 575  | 0  | 363 | 10:31:17.866 | 20DA4A         | 37IST 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,840,619:80:0 |      |
| 576  | 0  | 363 | 10:31:18.000 | 29NNREGION01-  | -----STOP-----         |  | 2R0 | 4  | 0              | :              |      |
| 577  | 0  | 363 | 10:31:20.533 | 175IB422A6A    | 6DMSC R115,0           | DMS Control Tape runup 115.2kb             | 2R0 | 4  | 0              | 5,840,619:84:0 |      |
| 578  | 0  | 363 | 10:31:20.533 |                | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 4446.31 +/- 1      | 2R0 | 4  | 0              | 5,840,619:84:0 |      |
| 579  | 0  | 363 | 10:31:21.933 |                | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *4446.43 +/- 1       | 2R0 | 4  | 0              | 5,840,619:86:1 |      |
| 580  | 0  | 363 | 10:31:22.533 | 118IB          | SMOS GS                |  | 2R0 | 4  | 0              | 5,840,619:87:0 |      |
| 581  | 0  | 363 | 10:31:23.866 | 165IB4B        | 7VECT                  | Inert vect update UTC                      | 2R0 | 4  | 0              | 5,840,619:89:0 |      |
| 582  | 0  | 363 | 10:31:27.200 |                | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *4447.67 +/- 1       | 2R0 | 4  | 0              | 5,840,620:03:0 |      |
| 583  | 0  | 363 | 10:31:28.400 |                | DMS: : *RUNUP          | R115, TRACK *2, *REV, TIC *4447.73 +/- 1   | 2R0 | 4  | 0              | 5,840,620:04:8 |      |
| 584  | 0  | 363 | 10:31:29.199 | 29NNREGION01-  | -----START-----        |  | 2R0 | 4  | 0              | :              |      |
| 585  | 0  | 363 | 10:31:31.866 | 175IB176A6A    | 6TMREC HIM             | 115.2 KBPS SSI + NIMS RECORD Record Mode   | 2R0 | 4  | 0              | 5,840,620:10:0 |      |
| 586  | 0  | 363 | 10:31:32.400 |                | DMS: : *RECORD         | R115, TRACK 2, REV, TIC *4441.43 +/- 1     | 2R0 | 4  | 0              | 5,840,620:10:8 |      |
| 587  | 0  | 363 | 10:31:32.400 |                | DMS: : *AT_SPD         | R115, TRACK 2, REV, TIC 4441.43 +/- 1      | 2R0 | 4  | 0              | 5,840,620:10:8 |      |
| 588  | 0  | 363 | 10:31:32.533 | 118IB110A11A4A | 7STRP -0,007,0,0003,18 | Slew =3,2,8                                | 2R0 | 4  | 0              | 5,840,620:11:0 |      |
| 589  | 0  | 363 | 10:32:21.200 | 125DA4A        | 37IST 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,840,620:84:0 |      |
| 590  | 0  | 363 | 10:32:21.200 | 125DA          | NIMSINIT GS            | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,840,620:84:0 |      |
| 591  | 0  | 363 | 10:32:21.200 | 125DA11A       | NIMSINIT GE            | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,840,620:84:0 |      |
| 592  | 0  | 363 | 10:33:21.866 | 127DA4A        | 37IOP 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,840,621:84:0 |      |
| 593  | 0  | 363 | 10:33:21.866 | 127DA          | NIMSTAB GS             | %%%%% GROUP START TAB                      | 2R3 | 4  | 0              | 5,840,621:84:0 |      |
| 594  | 0  | 363 | 10:33:22.533 | 127DA4B        | 37ETB 04,C4,35,FF,FF   | Loads wavelenght edit table                | 2R3 | 4  | 0              | 5,840,621:85:0 |      |
| 595  | 0  | 363 | 10:33:30.533 | 127DA11A       | NIMSTAB GE             | %%%%% GROUP END TAB                        | 2R3 | 4  | 0              | 5,840,622:06:0 |      |
| 596  | 0  | 363 | 10:33:33.866 | 118IB11A       | SMOS GE                |  | 2R3 | 4  | 0              | 5,840,622:11:0 |      |
| 597  | 0  | 363 | 10:34:26.533 | 165DA4A        | 7SCAN NORM,64,384999,2 | Check S/P Position                         | 2R3 | 4  | 0              | 5,840,622:90:0 |      |
| 598  | 0  | 363 | 10:34:28.533 | 175IB422A6B    | 6DMSC RDY,0            | R115, TRACK 2, REV, TIC *3822.21 +/- 1     | 2R3 | 4  | 0              | 5,840,623:02:0 |      |
| 599  | 0  | 363 | 10:34:28.533 |                | DMS: : *READY          | RDY, TRACK 2, REV, TIC *3821.21 +/- 1      | 2R3 | 4  | 0              | 5,840,623:03:8 |      |
| 600  | 0  | 363 | 10:34:29.733 |                | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 3821.21 +/- 1      | 2R3 | 4  | 0              | 5,840,624:69:0 |      |
| 601  | 0  | 363 | 10:36:13.866 |                | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 3821.21 +/- 1      | 2R3 | 4  | 0              | 5,840,624:69:0 |      |
| 602  | 0  | 363 | 10:36:13.866 | 175DA422A6A    | 6DMSC R28,0            | DMS Control Tape runup 28.8kbp             | 2R3 | 4  | 0              | 5,840,624:69:0 |      |
| 603  | 0  | 363 | 10:36:15.266 |                | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *3821.33 +/- 1       | 2R3 | 4  | 0              | 5,840,624:71:1 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|--------------------------|---|-----|----|----|----------------|------|
| 604  | 0  | 363 | 10:36:19.200 | 117DA           | CSMOS GS                 | ***** GROUP START CSMOS                   | 2R3 | 4  | 0  | 5,840,624:77:0 |      |
| 605  | 0  | 363 | 10:36:20.533 |                 | DMS: : *US_RD            | P7, TRACK 1, FWD, TIC *3822.56 +/- 1      | 2R3 | 4  | 0  | 5,840,624:79:0 |      |
| 606  | 0  | 363 | 10:36:21.733 |                 | DMS: : *RUNUP            | R28, TRACK *2, *REV, TIC *3822.62 +/- 1   | 2R3 | 4  | 0  | 5,840,624:80:8 |      |
| 607  | 0  | 363 | 10:36:25.200 | 175DA176A6A     | 6TMREC MPW               | 28.8 KBPS PWS + NIMS RECORD Record Mode C | 2R3 | 4  | 0  | 5,840,624:86:0 |      |
| 608  | 0  | 363 | 10:36:25.733 |                 | DMS: : *RECORD           | R28, TRACK 2, REV, TIC *3821.12 +/- 1     | 2R3 | 4  | 0  | 5,840,624:86:8 |      |
| 609  | 0  | 363 | 10:36:25.733 |                 | DMS: : *AT_SPD           | R28, TRACK 2, REV, TIC 3821.12 +/- 1      | 2R3 | 4  | 0  | 5,840,624:86:8 |      |
| 610  | 0  | 363 | 10:36:27.200 | 165DA4B         | 7VECT                    | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,840,624:89:0 |      |
| 611  | 0  | 363 | 10:36:27.866 | 29GNREGION01-   | NIMPBK 301DA             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 612  | 0  | 363 | 10:36:28.533 | 117DA105A106A4A | 7STRP -0.014101,0.0,0.0, | Slew = 0.03                               | 2R3 | 4  | 0  | 5,840,625:00:0 |      |
| 613  | 0  | 363 | 10:36:43.866 | 29GNREGION01-   | NIMPBK 301FA             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 614  | 0  | 363 | 10:36:53.200 | 29GNREGION01-   | DESELC 300FA             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 615  | 0  | 363 | 10:44:22.533 | 117DA105A106A4B | 7STRP 0.014201,0.00750   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,632:74:0 |      |
| 616  | 0  | 363 | 10:44:26.533 | 29GNREGION01-   | DESELC 300DA             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 617  | 0  | 363 | 10:44:31.200 | 29GNREGION01-   | NIMPBK 301EZ             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 618  | 0  | 363 | 10:44:39.200 | 117DA105A106A4C | 7STRP -0.014101,0.0,0.0, | Slew = 0.03                               | 2R3 | 4  | 0  | 5,840,633:08:0 |      |
| 619  | 0  | 363 | 10:47:39.866 | 29GNREGION01-   | -----STOP-----           |   | 2R3 | 4  | 0  | :              | :    |
| 620  | 0  | 363 | 10:51:01.800 | 29GNREGION01-   | NIMPBK 301FN             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 621  | 0  | 363 | 10:51:17.200 | 29GNREGION01-   | DESELC 300FN             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 622  | 0  | 363 | 10:51:25.866 | 29GNREGION01-   | DESELC 300EZ             | GANYMEDE REGION OBSERVATION               | 2R3 | 4  | 0  | :              | :    |
| 623  | 0  | 363 | 10:51:28.533 |                 | DMS: : *RUNDOWN          | R28, TRACK 2, REV, TIC *3027.65 +/- 1     | 2R3 | 4  | 0  | 5,840,639:76:0 |      |
| 624  | 0  | 363 | 10:51:28.533 | 175DA422A6B     | 6DMSC RDY,0              | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,639:76:0 |      |
| 625  | 0  | 363 | 10:51:29.733 |                 | DMS: : *READY            | RDY, TRACK 2, REV, TIC *3027.35 +/- 1     | 2R3 | 4  | 0  | 5,840,639:77:8 |      |
| 626  | 0  | 363 | 10:51:41.200 | 488AF6B         | 6TMSED FILL,AL4          | Sci. Eng. and D/L Chan                    | 2R3 | 4  | 0  | 5,840,640:04:0 |      |
| 627  | 0  | 363 | 10:52:33.200 | 117DA11A        | CSMOS GE                 | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | 5,840,640:82:0 |      |
| 628  | 0  | 363 | 10:52:38.533 | 165GG4A         | 7SCAN NORM,65.834,23.7   | Check S/P Position                        | 2R3 | 4  | 0  | 5,840,640:90:0 |      |
| 629  | 0  | 363 | 10:53:39.866 | 176GG6A         | 6TMREC BPT               | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | 5,840,642:00:0 |      |
| 630  | 0  | 363 | 10:54:31.200 | 117GG           | CSMOS GS                 | ***** GROUP START CSMOS                   | 2R3 | 4  | 0  | 5,840,642:77:0 |      |
| 631  | 0  | 363 | 10:54:40.533 | 117GG105A106A4A | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,643:00:0 |      |
| 632  | 0  | 363 | 10:56:47.866 | 117GG105A106A4B | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,645:09:0 |      |
| 633  | 0  | 363 | 10:57:19.200 | 117GG105A106A4C | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,645:56:0 |      |
| 634  | 0  | 363 | 10:59:26.533 | 117GG105A106A4D | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,647:65:0 |      |
| 635  | 0  | 363 | 10:59:57.866 | 117GG105A106A4E | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,648:21:0 |      |
| 636  | 0  | 363 | 11:02:05.200 | 117GG105A106A4F | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,650:30:0 |      |
| 637  | 0  | 363 | 11:02:36.533 | 117GG105A106A4G | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,650:77:0 |      |
| 638  | 0  | 363 | 11:04:43.866 | 117GG105A106A4H | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,652:86:0 |      |
| 639  | 0  | 363 | 11:05:15.200 | 117GG105A106A4I | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,653:42:0 |      |
| 640  | 0  | 363 | 11:06:14.533 | 50ZZ6XX         | DMS: : *US-RUNUP         | P7, TRACK *1, *FWD, TIC 3027.35 +/- 1     | 2R3 | 4  | 0  | 5,840,654:40:0 |      |
| 641  | 0  | 363 | 11:06:14.533 | 50ZZ6XX         | 6DMSC R7,0               | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5,840,654:40:0 |      |
| 642  | 0  | 363 | 11:06:15.933 |                 | DMS: : *US_AT_SP         | P7, TRACK 1, FWD, TIC *3027.47 +/- 1      | 2R3 | 4  | 0  | 5,840,654:42:1 |      |
| 643  | 0  | 363 | 11:06:21.200 |                 | DMS: : *US_RD            | P7, TRACK 1, FWD, TIC *3028.70 +/- 1      | 2R3 | 4  | 0  | 5,840,654:50:0 |      |
| 644  | 0  | 363 | 11:06:22.400 |                 | DMS: : *RUNUP            | R7, TRACK *2, *REV, TIC *3028.76 +/- 1    | 2R3 | 4  | 0  | 5,840,654:51:8 |      |
| 645  | 0  | 363 | 11:06:23.800 |                 | DMS: : *AT_SPD           | R7, TRACK 2, REV, TIC *3028.64 +/- 1      | 2R3 | 4  | 0  | 5,840,654:53:9 |      |
| 646  | 0  | 363 | 11:06:39.866 |                 | DMS: : *RECORD           | R7, TRACK 2, REV, TIC *3024.87 +/- 1      | 2R3 | 4  | 0  | 5,840,654:78:0 |      |
| 647  | 0  | 363 | 11:07:02.533 |                 | DMS: : *RUNDOWN          | R7, TRACK 2, REV, TIC *3019.56 +/- 1      | 2R3 | 4  | 0  | 5,840,655:21:0 |      |
| 648  | 0  | 363 | 11:07:02.533 | 50ZZ6RE         | 6DMSC RDY,0              | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,840,655:21:0 |      |
| 649  | 0  | 363 | 11:07:03.733 |                 | DMS: : *READY            | RDY, TRACK 2, REV, TIC *3019.50 +/- 1     | 2R3 | 4  | 0  | 5,840,655:22:8 |      |
| 650  | 0  | 363 | 11:07:22.533 | 117GG105A106A4J | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,655:51:0 |      |
| 651  | 0  | 363 | 11:07:53.866 | 117GG105A106A4K | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,656:07:0 |      |
| 652  | 0  | 363 | 11:10:01.200 | 117GG105A106A4L | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,658:16:0 |      |
| 653  | 0  | 363 | 11:10:32.533 | 117GG105A106A4M | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,658:63:0 |      |
| 654  | 0  | 363 | 11:12:39.866 | 117GG105A106A4N | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,660:72:0 |      |
| 655  | 0  | 363 | 11:13:11.200 | 117GG105A106A4O | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,661:28:0 |      |
| 656  | 0  | 363 | 11:15:18.533 | 117GG105A106A4P | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,663:37:0 |      |
| 657  | 0  | 363 | 11:15:49.866 | 117GG105A106A4Q | 7STRP -0.016001,0.0373   | Slew = 1.83                               | 2R3 | 4  | 0  | 5,840,663:84:0 |      |
| 658  | 0  | 363 | 11:17:57.200 | 117GG105A106A4R | 7STRP 0.016952,-0.0375   | Slew =12.01                               | 2R3 | 4  | 0  | 5,840,666:02:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                            | GCIM | GO | GS | RIM       | MF I |
|------|----|-----|--------------|------------------|---------|------------------|--|------|----|----|-----------|------|
| 659  | 0  | 363 | 11:18:28.533 | 117GG105A106A4S  | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,666 | 49:0 |
| 660  | 0  | 363 | 11:19:16.533 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 3019.50 +/- 1  | 2R3  | 4  | 0  | 5,840,667 | 30:0 |
| 661  | 0  | 363 | 11:19:16.533 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3  | 4  | 0  | 5,840,667 | 30:0 |
| 662  | 0  | 363 | 11:19:17.933 |                  | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *3019.62 +/- 1   | 2R3  | 4  | 0  | 5,840,667 | 32:1 |
| 663  | 0  | 363 | 11:19:23.200 |                  | DMS:    | : *US RD         | P7, TRACK 1, FWD, TIC *3020.86 +/- 1   | 2R3  | 4  | 0  | 5,840,667 | 40:0 |
| 664  | 0  | 363 | 11:19:24.400 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *3020.92 +/- 1 | 2R3  | 4  | 0  | 5,840,667 | 41:8 |
| 665  | 0  | 363 | 11:19:25.800 |                  | DMS:    | : *AT SPD        | R7, TRACK 2, REV, TIC *3020.80 +/- 1   | 2R3  | 4  | 0  | 5,840,667 | 43:9 |
| 666  | 0  | 363 | 11:19:41.866 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *3017.03 +/- 1   | 2R3  | 4  | 0  | 5,840,667 | 68:0 |
| 667  | 0  | 363 | 11:20:04.533 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3  | 4  | 0  | 5,840,668 | 11:0 |
| 668  | 0  | 363 | 11:20:04.533 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *3011.72 +/- 1   | 2R3  | 4  | 0  | 5,840,668 | 11:0 |
| 669  | 0  | 363 | 11:20:05.733 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *3011.66 +/- 1  | 2R3  | 4  | 0  | 5,840,668 | 12:8 |
| 670  | 0  | 363 | 11:20:35.866 | 117GG105A106A4T  | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,668 | 58:0 |
| 671  | 0  | 363 | 11:21:07.200 | 117GG105A106A4U  | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,669 | 14:0 |
| 672  | 0  | 363 | 11:23:14.533 | 117GG105A106A4V  | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,671 | 23:0 |
| 673  | 0  | 363 | 11:23:45.866 | 117GG105A106A4W  | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,671 | 70:0 |
| 674  | 0  | 363 | 11:25:53.200 | 117GG105A106A4X  | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,673 | 79:0 |
| 675  | 0  | 363 | 11:26:24.533 | 117GG105A106A4Y  | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,674 | 35:0 |
| 676  | 0  | 363 | 11:28:31.866 | 117GG105A106A4Z  | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,676 | 44:0 |
| 677  | 0  | 363 | 11:29:03.200 | 117GG105A106A4AA | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,677 | 00:0 |
| 678  | 0  | 363 | 11:29:59.866 | 480SA6A          | 6MROH   | 44,23E8.0,A2     | read from LLM2A44,23E8.0,A2            | 2R3  | 4  | 0  | 5,840,677 | 85:0 |
| 679  | 0  | 363 | 11:31:10.533 | 117GG105A106A4AB | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,679 | 09:0 |
| 680  | 0  | 363 | 11:31:41.866 | 117GG105A106A4AC | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,679 | 56:0 |
| 681  | 0  | 363 | 11:32:18.533 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3  | 4  | 0  | 5,840,680 | 20:0 |
| 682  | 0  | 363 | 11:32:18.533 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 3011.66 +/- 1  | 2R3  | 4  | 0  | 5,840,680 | 20:0 |
| 683  | 0  | 363 | 11:32:19.933 |                  | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *3011.78 +/- 1   | 2R3  | 4  | 0  | 5,840,680 | 22:1 |
| 684  | 0  | 363 | 11:32:25.200 |                  | DMS:    | : *US RD         | P7, TRACK 1, FWD, TIC *3013.01 +/- 1   | 2R3  | 4  | 0  | 5,840,680 | 30:0 |
| 685  | 0  | 363 | 11:32:26.400 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *3013.07 +/- 1 | 2R3  | 4  | 0  | 5,840,680 | 31:8 |
| 686  | 0  | 363 | 11:32:27.800 |                  | DMS:    | : *AT SPD        | R7, TRACK 2, REV, TIC *3012.95 +/- 1   | 2R3  | 4  | 0  | 5,840,680 | 33:9 |
| 687  | 0  | 363 | 11:32:43.866 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *3009.19 +/- 1   | 2R3  | 4  | 0  | 5,840,680 | 58:0 |
| 688  | 0  | 363 | 11:33:06.533 | 50ZZ6RE          | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3  | 4  | 0  | 5,840,681 | 01:0 |
| 689  | 0  | 363 | 11:33:06.533 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *3003.87 +/- 1   | 2R3  | 4  | 0  | 5,840,681 | 01:0 |
| 690  | 0  | 363 | 11:33:07.733 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *3003.81 +/- 1  | 2R3  | 4  | 0  | 5,840,681 | 02:8 |
| 691  | 0  | 363 | 11:33:49.200 | 117GG105A106A4AD | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,681 | 65:0 |
| 692  | 0  | 363 | 11:34:20.533 | 117GG105A106A4AE | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,682 | 21:0 |
| 693  | 0  | 363 | 11:35:20.533 | 488AF6C          | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                 | 2R3  | 4  | 0  | 5,840,683 | 20:0 |
| 694  | 0  | 363 | 11:36:27.866 | 117GG105A106A4AF | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,684 | 30:0 |
| 695  | 0  | 363 | 11:36:39.866 | 480SA6B          | 6MROH   | 45,23E8.0,B2     | read from LLM2B45,23E8.0,B2            | 2R3  | 4  | 0  | 5,840,684 | 48:0 |
| 696  | 0  | 363 | 11:36:59.200 | 117GG105A106A4AG | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,684 | 77:0 |
| 697  | 0  | 363 | 11:39:06.533 | 117GG105A106A4AH | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,686 | 86:0 |
| 698  | 0  | 363 | 11:39:37.866 | 117GG105A106A4AI | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,687 | 42:0 |
| 699  | 0  | 363 | 11:41:45.200 | 117GG105A106A4AJ | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,689 | 51:0 |
| 700  | 0  | 363 | 11:42:16.533 | 117GG105A106A4AK | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,690 | 07:0 |
| 701  | 0  | 363 | 11:44:23.866 | 117GG105A106A4AL | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,692 | 16:0 |
| 702  | 0  | 363 | 11:44:55.200 | 117GG105A106A4AM | 7STRP   | -0.016001,0.0373 | Slew = 1.83                            | 2R3  | 4  | 0  | 5,840,692 | 63:0 |
| 703  | 0  | 363 | 11:45:21.200 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 3003.81 +/- 1  | 2R3  | 4  | 0  | 5,840,693 | 11:0 |
| 704  | 0  | 363 | 11:45:21.200 | 50ZZ6XX          | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3  | 4  | 0  | 5,840,693 | 11:0 |
| 705  | 0  | 363 | 11:45:22.600 |                  | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *3003.93 +/- 1   | 2R3  | 4  | 0  | 5,840,693 | 13:1 |
| 706  | 0  | 363 | 11:45:27.866 |                  | DMS:    | : *US RD         | P7, TRACK 1, FWD, TIC *3005.17 +/- 1   | 2R3  | 4  | 0  | 5,840,693 | 21:0 |
| 707  | 0  | 363 | 11:45:29.066 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *3005.23 +/- 1 | 2R3  | 4  | 0  | 5,840,693 | 22:8 |
| 708  | 0  | 363 | 11:45:30.466 |                  | DMS:    | : *AT SPD        | R7, TRACK 2, REV, TIC *3005.11 +/- 1   | 2R3  | 4  | 0  | 5,840,693 | 24:9 |
| 709  | 0  | 363 | 11:45:45.866 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *3001.50 +/- 1   | 2R3  | 4  | 0  | 5,840,693 | 48:0 |
| 710  | 0  | 363 | 11:46:08.533 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2996.19 +/- 1   | 2R3  | 4  | 0  | 5,840,693 | 82:0 |
| 711  | 0  | 363 | 11:46:08.533 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3  | 4  | 0  | 5,840,693 | 82:0 |
| 712  | 0  | 363 | 11:46:09.733 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2996.13 +/- 1  | 2R3  | 4  | 0  | 5,840,693 | 83:8 |
| 713  | 0  | 363 | 11:47:02.533 | 117GG105A106A4AN | 7STRP   | 0.016952,-0.0375 | Slew = 12.01                           | 2R3  | 4  | 0  | 5,840,694 | 72:0 |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|------------------|---------|------------------|--|-----|----|----|----------------|-----|
| 714  | 0  | 363 | 11:47:33.866 | 117GG105A106A4AO | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,695:28:0 |     |
| 715  | 0  | 363 | 11:49:41.200 | 117GG105A106A4AP | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,697:37:0 |     |
| 716  | 0  | 363 | 11:50:12.533 | 117GG105A106A4AQ | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,697:84:0 |     |
| 717  | 0  | 363 | 11:52:19.866 | 117GG105A106A4AR | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,700:02:0 |     |
| 718  | 0  | 363 | 11:52:51.200 | 117GG105A106A4AS | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,700:49:0 |     |
| 719  | 0  | 363 | 11:54:58.533 | 117GG105A106A4AT | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,702:58:0 |     |
| 720  | 0  | 363 | 11:55:29.866 | 117GG105A106A4AU | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,703:14:0 |     |
| 721  | 0  | 363 | 11:57:37.200 | 117GG105A106A4AV | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,705:23:0 |     |
| 722  | 0  | 363 | 11:58:08.533 | 117GG105A106A4AW | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,705:70:0 |     |
| 723  | 0  | 363 | 11:58:23.200 | 50ZZ6XX          | 6DMS    | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,840,706:01:0 |     |
| 724  | 0  | 363 | 11:58:23.200 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2996.13 +/- 1  | 2R3 | 4  | 0  | 5,840,706:01:0 |     |
| 725  | 0  | 363 | 11:58:24.600 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2996.25 +/- 1   | 2R3 | 4  | 0  | 5,840,706:03:1 |     |
| 726  | 0  | 363 | 11:58:29.866 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2997.48 +/- 1   | 2R3 | 4  | 0  | 5,840,706:11:0 |     |
| 727  | 0  | 363 | 11:58:31.066 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2997.54 +/- 1 | 2R3 | 4  | 0  | 5,840,706:12:8 |     |
| 728  | 0  | 363 | 11:58:32.466 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2997.42 +/- 1   | 2R3 | 4  | 0  | 5,840,706:14:9 |     |
| 729  | 0  | 363 | 11:58:48.533 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2993.66 +/- 1   | 2R3 | 4  | 0  | 5,840,706:39:0 |     |
| 730  | 0  | 363 | 11:59:11.200 | 50ZZ6RE          | 6DMS    | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,840,706:73:0 |     |
| 731  | 0  | 363 | 11:59:11.200 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2988.34 +/- 1   | 2R3 | 4  | 0  | 5,840,706:73:0 |     |
| 732  | 0  | 363 | 11:59:12.400 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2988.28 +/- 1  | 2R3 | 4  | 0  | 5,840,706:74:8 |     |
| 733  | 0  | 363 | 12:00:15.866 | 117GG105A106A4AX | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,707:79:0 |     |
| 734  | 0  | 363 | 12:00:47.200 | 117GG105A106A4AY | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,708:35:0 |     |
| 735  | 0  | 363 | 12:02:54.533 | 117GG105A106A4AZ | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,710:44:0 |     |
| 736  | 0  | 363 | 12:03:25.866 | 117GG105A106A4BA | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,711:00:0 |     |
| 737  | 0  | 363 | 12:05:33.200 | 117GG105A106A4BB | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,713:09:0 |     |
| 738  | 0  | 363 | 12:06:04.533 | 117GG105A106A4BC | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,713:56:0 |     |
| 739  | 0  | 363 | 12:08:11.866 | 117GG105A106A4BD | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,715:65:0 |     |
| 740  | 0  | 363 | 12:08:43.200 | 117GG105A106A4BE | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,716:21:0 |     |
| 741  | 0  | 363 | 12:10:50.533 | 117GG105A106A4BF | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,718:30:0 |     |
| 742  | 0  | 363 | 12:11:21.866 | 117GG105A106A4BG | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,718:77:0 |     |
| 743  | 0  | 363 | 12:11:25.200 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2988.28 +/- 1  | 2R3 | 4  | 0  | 5,840,718:82:0 |     |
| 744  | 0  | 363 | 12:11:25.200 | 50ZZ6XX          | 6DMS    | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,840,718:82:0 |     |
| 745  | 0  | 363 | 12:11:26.600 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2988.40 +/- 1   | 2R3 | 4  | 0  | 5,840,718:84:1 |     |
| 746  | 0  | 363 | 12:11:31.866 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2989.64 +/- 1   | 2R3 | 4  | 0  | 5,840,719:01:0 |     |
| 747  | 0  | 363 | 12:11:33.066 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2989.70 +/- 1 | 2R3 | 4  | 0  | 5,840,719:02:8 |     |
| 748  | 0  | 363 | 12:11:34.466 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2989.58 +/- 1   | 2R3 | 4  | 0  | 5,840,719:04:9 |     |
| 749  | 0  | 363 | 12:11:50.533 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2985.81 +/- 1   | 2R3 | 4  | 0  | 5,840,719:29:0 |     |
| 750  | 0  | 363 | 12:12:13.200 | 50ZZ6RD          | 6DMS    | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,840,719:63:0 |     |
| 751  | 0  | 363 | 12:12:13.200 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2980.50 +/- 1   | 2R3 | 4  | 0  | 5,840,719:63:0 |     |
| 752  | 0  | 363 | 12:12:14.400 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2980.44 +/- 1  | 2R3 | 4  | 0  | 5,840,719:64:8 |     |
| 753  | 0  | 363 | 12:13:29.200 | 117GG105A106A4BH | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,720:86:0 |     |
| 754  | 0  | 363 | 12:14:00.533 | 117GG105A106A4BI | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,721:42:0 |     |
| 755  | 0  | 363 | 12:16:07.866 | 117GG105A106A4BJ | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,723:51:0 |     |
| 756  | 0  | 363 | 12:16:39.200 | 117GG105A106A4BK | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,724:07:0 |     |
| 757  | 0  | 363 | 12:18:46.533 | 117GG105A106A4BL | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,726:16:0 |     |
| 758  | 0  | 363 | 12:19:17.866 | 117GG105A106A4BM | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,726:63:0 |     |
| 759  | 0  | 363 | 12:21:25.200 | 117GG105A106A4BN | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,728:72:0 |     |
| 760  | 0  | 363 | 12:21:56.533 | 117GG105A106A4BO | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,729:28:0 |     |
| 761  | 0  | 363 | 12:24:03.866 | 117GG105A106A4BP | 7STRP   | 0.016952,-0.0375 | Slew =12.01                            | 2R3 | 4  | 0  | 5,840,731:37:0 |     |
| 762  | 0  | 363 | 12:24:27.866 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2980.44 +/- 1  | 2R3 | 4  | 0  | 5,840,731:73:0 |     |
| 763  | 0  | 363 | 12:24:27.866 | 50ZZ6XX          | 6DMS    | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,840,731:73:0 |     |
| 764  | 0  | 363 | 12:24:29.266 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2980.56 +/- 1   | 2R3 | 4  | 0  | 5,840,731:75:1 |     |
| 765  | 0  | 363 | 12:24:34.533 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2981.79 +/- 1   | 2R3 | 4  | 0  | 5,840,731:83:0 |     |
| 766  | 0  | 363 | 12:24:35.200 | 117GG105A106A4BQ | 7STRP   | -0.016001,0.0373 | Slew =, 1.83                           | 2R3 | 4  | 0  | 5,840,731:84:0 |     |
| 767  | 0  | 363 | 12:24:35.733 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2981.85 +/- 1 | 2R3 | 4  | 0  | 5,840,731:84:8 |     |
| 768  | 0  | 363 | 12:24:37.133 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2981.73 +/- 1   | 2R3 | 4  | 0  | 5,840,731:86:9 |     |



| Line | YR | DOY | SCET - GMT   | PSID             | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|------------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 769  | 0  | 363 | 12:24:52.533 |                  | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC *2978.12 +/- 1       | 2R3 | 4  | 0              | 5,840,732:19:0 |      |
| 770  | 0  | 363 | 12:25:15.200 | 50ZZ6RE          | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,840,732:53:0 |      |
| 771  | 0  | 363 | 12:25:15.200 |                  | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2972.81 +/- 1       | 2R3 | 4  | 0              | 5,840,732:53:0 |      |
| 772  | 0  | 363 | 12:25:16.400 |                  | DMS:     | : *READY         | RDY, TRACK 2, REV, TIC *2972.75 +/- 1      | 2R3 | 4  | 0              | 5,840,732:54:8 |      |
| 773  | 0  | 363 | 12:26:42.533 | 117GG105A106A4BR | 7STRP    | 0.016952,-0.0375 | Slew =12.01                                | 2R3 | 4  | 0              | 5,840,734:02:0 |      |
| 774  | 0  | 363 | 12:27:13.866 | 117GG105A106A4BS | 7STRP    | -0.016001,0.0373 | Slew =, 1.83                               | 2R3 | 4  | 0              | 5,840,734:49:0 |      |
| 775  | 0  | 363 | 12:29:21.200 | 117GG105A106A4BT | 7STRP    | 0.016952,-0.0375 | Slew =12.01                                | 2R3 | 4  | 0              | 5,840,736:58:0 |      |
| 776  | 0  | 363 | 12:29:52.533 | 117GG105A106A4BU | 7STRP    | -0.016001,0.0373 | Slew =, 1.83                               | 2R3 | 4  | 0              | 5,840,737:14:0 |      |
| 777  | 0  | 363 | 12:31:59.866 | 117GG105A106A4BV | 7STRP    | 0.016952,-0.0375 | Slew =12.01                                | 2R3 | 4  | 0              | 5,840,739:23:0 |      |
| 778  | 0  | 363 | 12:32:31.200 | 117GG105A106A4BW | 7STRP    | -0.016001,0.0373 | Slew =, 1.83                               | 2R3 | 4  | 0              | 5,840,739:70:0 |      |
| 779  | 0  | 363 | 12:34:38.533 | 117GG105A106A4BX | 7STRP    | 0.016952,-0.0375 | Slew =12.01                                | 2R3 | 4  | 0              | 5,840,741:79:0 |      |
| 780  | 0  | 363 | 12:35:09.866 | 117GG105A106A4BY | 7STRP    | -0.016001,0.0373 | Slew =, 1.83                               | 2R3 | 4  | 0              | 5,840,742:35:0 |      |
| 781  | 0  | 363 | 12:37:17.200 | 117GG105A106A4BZ | 7STRP    | 0.016952,-0.0375 | Slew =12.01                                | 2R3 | 4  | 0              | 5,840,744:44:0 |      |
| 782  | 0  | 363 | 12:37:29.866 | 50ZZ6XX          | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,840,744:63:0 |      |
| 783  | 0  | 363 | 12:37:29.866 |                  | DMS:     | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC *2972.75 +/- 1     | 2R3 | 4  | 0              | 5,840,744:63:0 |      |
| 784  | 0  | 363 | 12:37:31.266 |                  | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2972.87 +/- 1       | 2R3 | 4  | 0              | 5,840,744:65:1 |      |
| 785  | 0  | 363 | 12:37:36.533 |                  | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC *2974.11 +/- 1       | 2R3 | 4  | 0              | 5,840,744:73:0 |      |
| 786  | 0  | 363 | 12:37:37.733 |                  | DMS:     | : *RUNUP         | R7, TRACK *2, *REV, TIC *2974.17 +/- 1     | 2R3 | 4  | 0              | 5,840,744:74:8 |      |
| 787  | 0  | 363 | 12:37:39.133 |                  | DMS:     | : *AT_SPD        | R7, TRACK 2, REV, TIC *2974.05 +/- 1       | 2R3 | 4  | 0              | 5,840,744:76:9 |      |
| 788  | 0  | 363 | 12:37:48.533 | 117GG105A106A4CA | 7STRP    | -0.016001,0.0373 | Slew =, 1.83                               | 2R3 | 4  | 0              | 5,840,745:00:0 |      |
| 789  | 0  | 363 | 12:37:55.200 |                  | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC *2970.28 +/- 1       | 2R3 | 4  | 0              | 5,840,745:10:0 |      |
| 790  | 0  | 363 | 12:38:17.866 |                  | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2964.97 +/- 1       | 2R3 | 4  | 0              | 5,840,745:44:0 |      |
| 791  | 0  | 363 | 12:38:17.866 | 50ZZ6RD          | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,840,745:44:0 |      |
| 792  | 0  | 363 | 12:38:19.066 |                  | DMS:     | : *READY         | RDY, TRACK 2, REV, TIC *2964.91 +/- 1      | 2R3 | 4  | 0              | 5,840,745:45:8 |      |
| 793  | 0  | 363 | 12:39:55.866 | 117GG105A106A4CB | 7STRP    | 0.016952,-0.0375 | Slew =12.01                                | 2R3 | 4  | 0              | 5,840,747:09:0 |      |
| 794  | 0  | 363 | 12:40:27.200 | 117GG105A106A4CC | 7STRP    | -0.016001,0.0373 | Slew =, 1.83                               | 2R3 | 4  | 0              | 5,840,747:56:0 |      |
| 795  | 0  | 363 | 12:42:34.533 | 117GG11A         | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,840,749:65:0 |      |
| 796  | 0  | 363 | 12:43:21.866 | 176GG6B          | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0              | 5,840,750:45:0 |      |
| 797  | 0  | 363 | 12:43:23.866 | 50ZZ6XX          | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,840,750:48:0 |      |
| 798  | 0  | 363 | 12:43:23.866 |                  | DMS:     | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC *2964.91 +/- 1     | 2R3 | 4  | 0              | 5,840,750:48:0 |      |
| 799  | 0  | 363 | 12:43:25.266 |                  | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2965.03 +/- 1       | 2R3 | 4  | 0              | 5,840,750:50:1 |      |
| 800  | 0  | 363 | 12:43:30.533 |                  | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC *2966.26 +/- 1       | 2R3 | 4  | 0              | 5,840,750:58:0 |      |
| 801  | 0  | 363 | 12:43:31.733 |                  | DMS:     | : *RUNUP         | R7, TRACK *2, *REV, TIC *2966.32 +/- 1     | 2R3 | 4  | 0              | 5,840,750:59:8 |      |
| 802  | 0  | 363 | 12:43:33.133 |                  | DMS:     | : *AT_SPD        | R7, TRACK 2, REV, TIC *2966.20 +/- 1       | 2R3 | 4  | 0              | 5,840,750:61:9 |      |
| 803  | 0  | 363 | 12:43:33.866 |                  | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC *2966.03 +/- 1       | 2R3 | 4  | 0              | 5,840,750:63:0 |      |
| 804  | 0  | 363 | 12:43:48.533 |                  | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2962.59 +/- 1       | 2R3 | 4  | 0              | 5,840,750:85:0 |      |
| 805  | 0  | 363 | 12:43:48.533 | 50ZZ6RE          | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,840,750:85:0 |      |
| 806  | 0  | 363 | 12:43:49.733 |                  | DMS:     | : *READY         | RDY, TRACK 2, REV, TIC *2962.53 +/- 1      | 2R3 | 4  | 0              | 5,840,750:86:8 |      |
| 807  | 0  | 363 | 13:40:37.000 | 29NNGLOBAL01-    |          | -----START-----  |  | 2R3 | 4  | 0              | :              |      |
| 808  | 0  | 363 | 13:40:37.200 | 20DB5A           | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,840,807:11:0 |                |      |
| 809  | 0  | 363 | 13:40:45.200 | 20DB5B           | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,840,807:23:0 |                |      |
| 810  | 0  | 363 | 13:40:54.533 | 20DB6A           | 6MCOPY   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,840,807:37:0 |                |      |
| 811  | 0  | 363 | 13:41:04.533 | 20DB6B           | 6MCOPY   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,840,807:52:0 |                |      |
| 812  | 0  | 363 | 13:41:14.533 | 20DB5C           | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,840,807:67:0 |                |      |
| 813  | 0  | 363 | 13:41:17.866 | 20DB5D           | 37MIN    |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,840,807:72:0 |      |
| 814  | 0  | 363 | 13:41:45.866 | 20DB4A           | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,840,808:23:0 |      |
| 815  | 0  | 363 | 13:41:46.000 | 29NNGLOBAL01-    |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              |      |
| 816  | 0  | 363 | 13:42:30.533 | 165DB4A          | 7SCAN    | NORM,311.087997, | Check S/P Position                         | 2R0 | 4  | 0              | 5,840,808:90:0 |      |
| 817  | 0  | 363 | 13:42:35.200 | 29CNGLOBAL01-    |          | -----START-----  |  | 2R0 | 4  | 0              | :              |      |
| 818  | 0  | 363 | 13:43:27.200 | 125DB11A         | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,840,809:84:0 |      |
| 819  | 0  | 363 | 13:43:27.200 | 125DB            | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,840,809:84:0 |      |
| 820  | 0  | 363 | 13:43:27.200 | 125DB4A          | 37IST    | 0,2,0,OFF,0,1,1  | Gain State 4                               | 4R0 | 4  | 0              | 5,840,809:84:0 |      |
| 821  | 0  | 363 | 13:45:28.533 | 127DB            | NIMSTAB  | GS               | %%%% GROUP START TAB                       | 4R0 | 4  | 0              | 5,840,811:84:0 |      |
| 822  | 0  | 363 | 13:45:28.533 | 127DB4A          | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 5,840,811:84:0 |      |
| 823  | 0  | 363 | 13:45:29.200 | 127DB4B          | 37ETB    | 04,C4,35,FF,FF   | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,840,811:85:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|--------------------------|--|-----|----|----------------|----------------|------|
| 824  | 0  | 363 | 13:45:37.200 | 127DB11A        | NIMSTAB GE               | %%%GROUP END TAB                           | 4R3 | 4  | 0              | 5,840,812:06:0 |      |
| 825  | 0  | 363 | 13:46:19.200 |                 | DMS: : *US-RUNUP         | P7, TRACK *1, *FWD, TIC 2962.53 +/- 1      | 4R3 | 4  | 0              | 5,840,812:69:0 |      |
| 826  | 0  | 363 | 13:46:19.200 | 175DB422A6A     | 6DMSC R28.0              | DMS Control Tape runup 28.8kbp             | 4R3 | 4  | 0              | 5,840,812:69:0 |      |
| 827  | 0  | 363 | 13:46:20.600 |                 | DMS: : *US_AT_SP         | P7, TRACK 1, FWD, TIC *2962.65 +/- 1       | 4R3 | 4  | 0              | 5,840,812:71:1 |      |
| 828  | 0  | 363 | 13:46:24.533 | 117DB           | CSMOS GS                 | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 5,840,812:77:0 |      |
| 829  | 0  | 363 | 13:46:25.866 |                 | DMS: : *US_RD            | P7, TRACK 1, FWD, TIC *2963.89 +/- 1       | 4R3 | 4  | 0              | 5,840,812:79:0 |      |
| 830  | 0  | 363 | 13:46:27.066 |                 | DMS: : *RUNUP            | R28, TRACK *2, *REV, TIC *2963.95 +/- 1    | 4R3 | 4  | 0              | 5,840,812:80:8 |      |
| 831  | 0  | 363 | 13:46:30.533 | 175DB176A6A     | 6TMREC MPW               | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 4R3 | 4  | 0              | 5,840,812:86:0 |      |
| 832  | 0  | 363 | 13:46:31.066 |                 | DMS: : *AT_SPD           | R28, TRACK 2, REV, TIC 2962.45 +/- 1       | 4R3 | 4  | 0              | 5,840,812:86:8 |      |
| 833  | 0  | 363 | 13:46:31.066 |                 | DMS: : *RECORD           | R28, TRACK 2, REV, TIC *2962.45 +/- 1      | 4R3 | 4  | 0              | 5,840,812:86:8 |      |
| 834  | 0  | 363 | 13:46:33.200 | 29CNGLOBAL01-   | NIMPBK 301DB             | CALLISTO GLOBAL OBSERVATION                | 4R3 | 4  | 0              | :              |      |
| 835  | 0  | 363 | 13:46:33.866 | 117DB105A106A4A | 75TRP -0.003,0,0,0,0,0   | Slew =0.02                                 | 4R3 | 4  | 0              | 5,840,813:00:0 |      |
| 836  | 0  | 363 | 13:48:36.533 | 29CNGLOBAL01-   | DESEL 300DB              | CALLISTO GLOBAL OBSERVATION                | 4R3 | 4  | 0              | :              |      |
| 837  | 0  | 363 | 13:48:39.200 | 175DB422A6B     | 6DMSC RDY,0              | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,840,815:06:0 |      |
| 838  | 0  | 363 | 13:48:39.200 |                 | DMS: : *RUNDOWN          | R28, TRACK 2, REV, TIC *2849.83 +/- 1      | 4R3 | 4  | 0              | 5,840,815:06:0 |      |
| 839  | 0  | 363 | 13:48:40.400 |                 | DMS: : *READY            | R28, TRACK 2, REV, TIC *2849.53 +/- 1      | 4R3 | 4  | 0              | 5,840,815:07:8 |      |
| 840  | 0  | 363 | 13:49:08.533 | 117DB11A        | CSMOS GE                 | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,840,815:50:0 |      |
| 841  | 0  | 363 | 13:59:59.866 | 481UB4A         | 7VECT BB1                | Inert vect update UTC                      | 4R3 | 4  | 0              | 5,840,826:26:0 |      |
| 842  | 0  | 363 | 14:02:48.533 | 29CNGLOBAL01-   | -----STOP-----           |  | 4R3 | 4  | 0              | :              |      |
| 843  | 0  | 363 | 14:28:54.533 | 488AG6A         | 6TMSED NORM,AL3          | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0              | 5,840,854:80:0 |      |
| 844  | 0  | 363 | 15:45:42.533 | 488AG6B         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0              | 5,840,930:76:0 |      |
| 845  | 0  | 363 | 16:01:42.533 | 488AG6C         | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0              | 5,840,946:60:0 |      |
| 846  | 0  | 363 | 16:45:21.200 | 488AG6D         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0              | 5,840,989:75:0 |      |
| 847  | 0  | 363 | 16:59:59.866 | 480SB6A         | 6MROH 44,23E8,0,A2       | read from LLM2A44,23E8,0,A2                | 4R3 | 4  | 0              | 5,841,004:28:0 |      |
| 848  | 0  | 363 | 17:06:39.866 | 480SB6B         | 6MROH 45,23E8,0,B2       | read from LLM2B45,23E8,0,B2                | 4R3 | 4  | 0              | 5,841,010:82:0 |      |
| 849  | 0  | 363 | 17:13:35.000 | 29NNGLOBAL01-   | -----START-----          |  | 4R3 | 4  | 0              | :              |      |
| 850  | 0  | 363 | 17:13:35.866 | 20DC5A          | 37PL                     | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,017:69:0 |                |      |
| 851  | 0  | 363 | 17:13:43.200 | 20DC5B          | 37MRL                    | Memory Realocate (software operates from R | 4   | 0  | 5,841,017:80:0 |                |      |
| 852  | 0  | 363 | 17:13:51.200 | 20DC6A          | 6MCOPI NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,018:01:0 |                |      |
| 853  | 0  | 363 | 17:14:01.200 | 20DC6B          | 6MCOPI NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,018:16:0 |                |      |
| 854  | 0  | 363 | 17:14:11.200 | 20DC5C          | 37IRT                    | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,018:31:0 |                |      |
| 855  | 0  | 363 | 17:14:12.533 | 20DC5D          | 37MN                     | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,018:33:0 |      |
| 856  | 0  | 363 | 17:14:43.866 | 20DC4A          | 37IST 1,2,0,OFF,0,0,0    | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,018:80:0 |      |
| 857  | 0  | 363 | 17:14:44.000 | 29NNGLOBAL01-   | -----STOP-----           |  | 2R0 | 4  | 0              | :              |      |
| 858  | 0  | 363 | 17:14:50.533 | 165DC4A         | 75SCAN NORM,65,473,24.6  | Check SIP Position                         | 2R0 | 4  | 0              | 5,841,018:90:0 |      |
| 859  | 0  | 363 | 17:14:55.199 | 29NNGLOBAL01-   | -----START-----          |  | 2R0 | 4  | 0              | :              |      |
| 860  | 0  | 363 | 17:15:47.200 | 125DC           | NIMSINIT GS              | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,019:84:0 |      |
| 861  | 0  | 363 | 17:15:47.200 | 125DC4A         | 37IST 0,2,0,OFF,0,1,0    | Gain State 2                               | 2R0 | 4  | 0              | 5,841,019:84:0 |      |
| 862  | 0  | 363 | 17:15:47.200 | 125DC11A        | NIMSINIT GE              | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,019:84:0 |      |
| 863  | 0  | 363 | 17:16:47.866 | 127DC           | NIMSTAB GS               | %%GROUP START TAB                          | 2R0 | 4  | 0              | 5,841,020:84:0 |      |
| 864  | 0  | 363 | 17:16:47.866 | 127DC4A         | 37IOP 3.0                | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,020:84:0 |      |
| 865  | 0  | 363 | 17:16:48.533 | 127DC4B         | 37ETB 0A,CA,18,39,FF,1   | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,020:85:0 |      |
| 866  | 0  | 363 | 17:16:56.533 | 127DC11A        | NIMSTAB GE               | %%GROUP END TAB                            | 2R3 | 4  | 0              | 5,841,021:06:0 |      |
| 867  | 0  | 363 | 17:18:41.866 | 175DC422A6A     | 6DMSC R7,0               | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,022:73:0 |      |
| 868  | 0  | 363 | 17:18:41.866 |                 | DMS: : *US-RUNUP         | P7, TRACK *1, *FWD, TIC 2849.53 +/- 1      | 2R3 | 4  | 0              | 5,841,022:73:0 |      |
| 869  | 0  | 363 | 17:18:43.266 |                 | DMS: : *US_AT_SP         | P7, TRACK 1, FWD, TIC *2849.65 +/- 1       | 2R3 | 4  | 0              | 5,841,022:75:1 |      |
| 870  | 0  | 363 | 17:18:44.533 | 117DC           | CSMOS GS                 | **** GROUP START CSMOS                     | 2R3 | 4  | 0              | 5,841,022:77:0 |      |
| 871  | 0  | 363 | 17:18:48.533 |                 | DMS: : *US_RD            | P7, TRACK 1, FWD, TIC *2850.89 +/- 1       | 2R3 | 4  | 0              | 5,841,022:83:0 |      |
| 872  | 0  | 363 | 17:18:49.733 |                 | DMS: : *RUNUP            | R7, TRACK *2, *REV, TIC *2850.95 +/- 1     | 2R3 | 4  | 0              | 5,841,022:84:8 |      |
| 873  | 0  | 363 | 17:18:50.533 | 175DC176A6A     | 6TMREC LPU               | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R3 | 4  | 0              | 5,841,022:86:0 |      |
| 874  | 0  | 363 | 17:18:51.133 |                 | DMS: : *AT_SPD           | R7, TRACK 2, REV, TIC 2850.83 +/- 1        | 2R3 | 4  | 0              | 5,841,022:86:9 |      |
| 875  | 0  | 363 | 17:18:51.133 |                 | DMS: : *RECORD           | R7, TRACK 2, REV, TIC *2850.83 +/- 1       | 2R3 | 4  | 0              | 5,841,022:86:9 |      |
| 876  | 0  | 363 | 17:18:53.200 | 29NNGLOBAL01-   | NIMPBK 301DC             | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 877  | 0  | 363 | 17:18:53.866 | 117DC105A106A4A | 75TRP -0.017702,0,0,0,0, | Slew =0.03                                 | 2R3 | 4  | 0              | 5,841,023:00:0 |      |
| 878  | 0  | 363 | 17:20:27.200 | 29NNGLOBAL01-   | NIMPBK 301FB             | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM | MF I           |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|-----|----------------|
| 879  | 0  | 363 | 17:20:38.533 | 29NGLOBAL01-    | DESEL   | 300FB            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 880  | 0  | 363 | 17:22:54.533 | 29NGLOBAL01-    | NIMPBK  | 301EG            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 881  | 0  | 363 | 17:23:20.400 | 29NGLOBAL01-    | NIMPBK  | 301FO            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 882  | 0  | 363 | 17:24:02.400 | 29NGLOBAL01-    | DESEL   | 300FO            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 883  | 0  | 363 | 17:26:37.866 | 29NGLOBAL01-    | DESEL   | 300EG            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 884  | 0  | 363 | 17:28:41.200 | 29NGLOBAL01-    | DESEL   | 300DC            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 885  | 0  | 363 | 17:28:51.200 | 117DC11A        | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | :   | 5,841,032:77:0 |
| 886  | 0  | 363 | 17:28:51.200 | 175DC6A         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | :   | 5,841,032:77:0 |
| 887  | 0  | 363 | 17:28:51.200 |                 | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2710.18 +/- 1      | 2R3 | 4  | 0  | :   | 5,841,032:77:0 |
| 888  | 0  | 363 | 17:28:52.400 | 175DC422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | :   | 5,841,032:77:0 |
| 889  | 0  | 363 | 17:28:52.400 |                 | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2710.12 +/- 1     | 2R3 | 4  | 0  | :   | 5,841,032:78:8 |
| 890  | 0  | 363 | 17:28:59.866 | 165DD4A         | 7SCAN   | NORM,65.502999,2 | Check S/P Position                        | 2R3 | 4  | 0  | :   | 5,841,032:90:0 |
| 891  | 0  | 363 | 17:29:04.532 | 29NGLOBAL01-    |         | -----STOP-----   |   | 2R3 | 4  | 0  | :   | :              |
| 892  | 0  | 363 | 17:29:04.532 | 29NGLOBAL02-    |         | -----START-----  |   | 2R3 | 4  | 0  | :   | :              |
| 893  | 0  | 363 | 17:31:50.533 |                 | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2710.12 +/- 1     | 2R3 | 4  | 0  | :   | 5,841,035:73:0 |
| 894  | 0  | 363 | 17:31:50.533 | 175DD422A6A     | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | :   | 5,841,035:73:0 |
| 895  | 0  | 363 | 17:31:51.933 |                 | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2710.24 +/- 1      | 2R3 | 4  | 0  | :   | 5,841,035:75:1 |
| 896  | 0  | 363 | 17:31:53.200 | 117DD           | CSMOS   | GS               | ***** GROUP START CSMOS                   | 2R3 | 4  | 0  | :   | 5,841,035:77:0 |
| 897  | 0  | 363 | 17:31:57.200 |                 | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2711.48 +/- 1      | 2R3 | 4  | 0  | :   | 5,841,035:83:0 |
| 898  | 0  | 363 | 17:31:58.400 |                 | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2711.54 +/- 1    | 2R3 | 4  | 0  | :   | 5,841,035:84:8 |
| 899  | 0  | 363 | 17:31:59.200 | 175DD176A6A     | 6TMREC  | LPU              | 7.68 KBPS NIMS-JVS-PPR RECORD Record Mode | 2R3 | 4  | 0  | :   | 5,841,035:86:0 |
| 900  | 0  | 363 | 17:31:59.800 |                 | DMS:    | : *AT SPD        | R7, TRACK 2, REV, TIC 2711.42 +/- 1       | 2R3 | 4  | 0  | :   | 5,841,035:86:9 |
| 901  | 0  | 363 | 17:31:59.800 |                 | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2711.42 +/- 1      | 2R3 | 4  | 0  | :   | 5,841,035:86:9 |
| 902  | 0  | 363 | 17:32:01.866 | 29NGLOBAL02-    | NIMPBK  | 301DD            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 903  | 0  | 363 | 17:32:02.533 | 117DD105A106A4A | 7STRP   | -0.017802,0.0,0, | Slew = 0.03                               | 2R3 | 4  | 0  | :   | 5,841,036:00:0 |
| 904  | 0  | 363 | 17:35:11.200 | 29NGLOBAL02-    | NIMPBK  | 301FP            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 905  | 0  | 363 | 17:35:45.200 | 29NGLOBAL02-    | DESEL   | 300FF            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 906  | 0  | 363 | 17:41:59.866 | 117DD11A        | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | :   | 5,841,045:77:0 |
| 907  | 0  | 363 | 17:42:09.866 | 29NGLOBAL02-    | DESEL   | 300DD            | GANYMEDE GLOBAL OBSERVATION               | 2R3 | 4  | 0  | :   | :              |
| 908  | 0  | 363 | 17:42:19.866 |                 | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2566.09 +/- 1      | 2R3 | 4  | 0  | :   | 5,841,046:16:0 |
| 909  | 0  | 363 | 17:42:19.866 | 175DD422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | :   | 5,841,046:16:0 |
| 910  | 0  | 363 | 17:42:19.866 | 175DD6A         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | :   | 5,841,046:16:0 |
| 911  | 0  | 363 | 17:42:21.066 |                 | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2566.03 +/- 1     | 2R3 | 4  | 0  | :   | 5,841,046:17:8 |
| 912  | 0  | 363 | 17:59:24.532 | 29NGLOBAL02-    |         | -----STOP-----   |   | 2R3 | 4  | 0  | :   | :              |
| 913  | 0  | 363 | 18:36:44.466 | 165GH4A         | 7SCAN   | NORM,285.551998, | Check S/P Position                        | 2R3 | 4  | 0  | :   | 5,841,099:90:0 |
| 914  | 0  | 363 | 18:39:47.133 | 176GH6A         | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | :   | 5,841,103:00:0 |
| 915  | 0  | 363 | 18:40:38.466 | 117GH           | CSMOS   | GS               | ***** GROUP START CSMOS                   | 2R3 | 4  | 0  | :   | 5,841,103:77:0 |
| 916  | 0  | 363 | 18:40:47.800 | 117GH105A106A4A | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,104:00:0 |
| 917  | 0  | 363 | 18:42:21.800 | 117GH105A106A4B | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,105:50:0 |
| 918  | 0  | 363 | 18:42:37.800 | 117GH105A106A4C | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,105:74:0 |
| 919  | 0  | 363 | 18:44:11.800 | 117GH105A106A4D | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,107:33:0 |
| 920  | 0  | 363 | 18:44:27.800 | 117GH105A106A4E | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,107:57:0 |
| 921  | 0  | 363 | 18:46:01.800 | 117GH105A106A4F | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,109:16:0 |
| 922  | 0  | 363 | 18:46:17.800 | 117GH105A106A4G | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,109:40:0 |
| 923  | 0  | 363 | 18:47:51.800 | 117GH105A106A4H | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,110:90:0 |
| 924  | 0  | 363 | 18:48:07.800 | 117GH105A106A4I | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,111:23:0 |
| 925  | 0  | 363 | 18:49:41.800 | 117GH105A106A4J | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,112:73:0 |
| 926  | 0  | 363 | 18:49:57.800 | 117GH105A106A4K | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,113:06:0 |
| 927  | 0  | 363 | 18:51:31.800 | 117GH105A106A4L | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,114:56:0 |
| 928  | 0  | 363 | 18:51:47.800 | 117GH105A106A4M | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,114:80:0 |
| 929  | 0  | 363 | 18:53:21.800 | 117GH105A106A4N | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | :   | 5,841,116:39:0 |
| 930  | 0  | 363 | 18:53:37.800 | 117GH105A106A4O | 7STRP   | 0.0,-0.027913,0, | Slew = 0.42                               | 2R3 | 4  | 0  | :   | 5,841,116:63:0 |
| 931  | 0  | 363 | 18:53:41.133 |                 | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2566.03 +/- 1     | 2R3 | 4  | 0  | :   | 5,841,116:68:0 |
| 932  | 0  | 363 | 18:53:41.133 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | :   | 5,841,116:68:0 |
| 933  | 0  | 363 | 18:53:42.533 |                 | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2566.15 +/- 1      | 2R3 | 4  | 0  | :   | 5,841,116:70:1 |

| Line | YR | DOY | SCET - GMT   | PSID             | Command Parameters     | Description                            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|------------------------|--|-----|----|----|----------------|------|
| 934  | 0  | 363 | 18:53:47.800 |                  | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2567.39 +/- 1   | 2R3 | 4  | 0  | 5,841,116:78:0 |      |
| 935  | 0  | 363 | 18:53:49.000 |                  | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2567.45 +/- 1 | 2R3 | 4  | 0  | 5,841,116:79:8 |      |
| 936  | 0  | 363 | 18:53:50.400 |                  | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC *2567.33 +/- 1   | 2R3 | 4  | 0  | 5,841,116:81:9 |      |
| 937  | 0  | 363 | 18:54:09.133 |                  | DMS: : *RECORD         | R7, TRACK 2, REV, TIC *2562.93 +/- 1   | 2R3 | 4  | 0  | 5,841,117:19:0 |      |
| 938  | 0  | 363 | 18:54:31.800 |                  | DMS: : *RUNDOWN        | R7, TRACK 2, REV, TIC *2557.62 +/- 1   | 2R3 | 4  | 0  | 5,841,117:53:0 |      |
| 939  | 0  | 363 | 18:54:31.800 | 50ZZ6RD          | 6DMSC RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,117:53:0 |      |
| 940  | 0  | 363 | 18:54:33.000 |                  | DMS: : *READY          | RDY, TRACK 2, REV, TIC *2557.56 +/- 1  | 2R3 | 4  | 0  | 5,841,117:54:8 |      |
| 941  | 0  | 363 | 18:55:11.800 | 117GH105A106A4P  | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,118:22:0 |      |
| 942  | 0  | 363 | 18:55:27.800 | 117GH105A106A4Q  | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,118:46:0 |      |
| 943  | 0  | 363 | 18:57:01.800 | 117GH105A106A4R  | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,120:05:0 |      |
| 944  | 0  | 363 | 18:57:17.800 | 117GH105A106A4S  | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,120:29:0 |      |
| 945  | 0  | 363 | 18:58:51.800 | 117GH105A106A4T  | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,121:79:0 |      |
| 946  | 0  | 363 | 18:59:07.800 | 117GH105A106A4U  | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,122:12:0 |      |
| 947  | 0  | 363 | 19:00:41.800 | 117GH105A106A4V  | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,123:62:0 |      |
| 948  | 0  | 363 | 19:00:57.800 | 117GH105A106A4W  | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,123:86:0 |      |
| 949  | 0  | 363 | 19:02:31.800 | 117GH105A106A4X  | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,125:45:0 |      |
| 950  | 0  | 363 | 19:02:47.800 | 117GH105A106A4Y  | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,125:69:0 |      |
| 951  | 0  | 363 | 19:04:21.800 | 117GH105A106A4Z  | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,127:28:0 |      |
| 952  | 0  | 363 | 19:04:37.800 | 117GH105A106A4AA | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,127:52:0 |      |
| 953  | 0  | 363 | 19:06:11.800 | 117GH105A106A4AB | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,129:11:0 |      |
| 954  | 0  | 363 | 19:06:27.800 | 117GH105A106A4AC | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,129:35:0 |      |
| 955  | 0  | 363 | 19:08:01.800 | 117GH105A106A4AD | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,130:85:0 |      |
| 956  | 0  | 363 | 19:08:05.133 | 50ZZ6XX          | 6DMSC R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,130:90:0 |      |
| 957  | 0  | 363 | 19:08:05.133 |                  | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2557.56 +/- 1  | 2R3 | 4  | 0  | 5,841,130:90:0 |      |
| 958  | 0  | 363 | 19:08:06.533 |                  | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2557.68 +/- 1   | 2R3 | 4  | 0  | 5,841,131:01:1 |      |
| 959  | 0  | 363 | 19:08:11.800 |                  | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2558.92 +/- 1   | 2R3 | 4  | 0  | 5,841,131:09:0 |      |
| 960  | 0  | 363 | 19:08:13.000 |                  | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2558.98 +/- 1 | 2R3 | 4  | 0  | 5,841,131:10:8 |      |
| 961  | 0  | 363 | 19:08:14.400 |                  | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC *2558.86 +/- 1   | 2R3 | 4  | 0  | 5,841,131:12:9 |      |
| 962  | 0  | 363 | 19:08:17.800 | 117GH105A106A4AE | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,131:18:0 |      |
| 963  | 0  | 363 | 19:08:33.133 |                  | DMS: : *RECORD         | R7, TRACK 2, REV, TIC *2554.47 +/- 1   | 2R3 | 4  | 0  | 5,841,131:41:0 |      |
| 964  | 0  | 363 | 19:08:55.800 |                  | DMS: : *RUNDOWN        | R7, TRACK 2, REV, TIC *2549.15 +/- 1   | 2R3 | 4  | 0  | 5,841,131:75:0 |      |
| 965  | 0  | 363 | 19:08:55.800 | 50ZZ6RE          | 6DMSC RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,131:75:0 |      |
| 966  | 0  | 363 | 19:08:57.000 |                  | DMS: : *READY          | RDY, TRACK 2, REV, TIC *2549.09 +/- 1  | 2R3 | 4  | 0  | 5,841,131:76:8 |      |
| 967  | 0  | 363 | 19:09:51.800 | 117GH105A106A4AF | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,132:68:0 |      |
| 968  | 0  | 363 | 19:10:07.800 | 117GH105A106A4AG | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,133:01:0 |      |
| 969  | 0  | 363 | 19:11:41.800 | 117GH105A106A4AH | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,134:51:0 |      |
| 970  | 0  | 363 | 19:11:57.800 | 117GH105A106A4AI | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,134:75:0 |      |
| 971  | 0  | 363 | 19:13:31.800 | 117GH105A106A4AJ | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,136:34:0 |      |
| 972  | 0  | 363 | 19:13:47.800 | 117GH105A106A4AK | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,136:58:0 |      |
| 973  | 0  | 363 | 19:15:21.800 | 117GH105A106A4AL | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,138:17:0 |      |
| 974  | 0  | 363 | 19:15:37.800 | 117GH105A106A4AM | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,138:41:0 |      |
| 975  | 0  | 363 | 19:17:11.800 | 117GH105A106A4AN | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,140:00:0 |      |
| 976  | 0  | 363 | 19:17:27.800 | 117GH105A106A4AO | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,140:24:0 |      |
| 977  | 0  | 363 | 19:19:01.800 | 117GH105A106A4AP | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,141:74:0 |      |
| 978  | 0  | 363 | 19:19:17.800 | 117GH105A106A4AQ | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,142:07:0 |      |
| 979  | 0  | 363 | 19:20:51.800 | 117GH105A106A4AR | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,143:57:0 |      |
| 980  | 0  | 363 | 19:21:07.800 | 117GH105A106A4AS | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,143:81:0 |      |
| 981  | 0  | 363 | 19:22:29.800 |                  | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2549.09 +/- 1  | 2R3 | 4  | 0  | 5,841,145:22:0 |      |
| 982  | 0  | 363 | 19:22:29.800 | 50ZZ6XX          | 6DMSC R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,145:22:0 |      |
| 983  | 0  | 363 | 19:22:31.200 |                  | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2549.21 +/- 1   | 2R3 | 4  | 0  | 5,841,145:32:1 |      |
| 984  | 0  | 363 | 19:22:36.466 |                  | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2550.45 +/- 1   | 2R3 | 4  | 0  | 5,841,145:32:1 |      |
| 985  | 0  | 363 | 19:22:37.666 |                  | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2550.51 +/- 1 | 2R3 | 4  | 0  | 5,841,145:33:8 |      |
| 986  | 0  | 363 | 19:22:39.066 |                  | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC *2550.39 +/- 1   | 2R3 | 4  | 0  | 5,841,145:35:9 |      |
| 987  | 0  | 363 | 19:22:41.800 | 117GH105A106A4AT | 7STRP 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,145:40:0 |      |
| 988  | 0  | 363 | 19:22:57.800 | 117GH105A106A4AU | 7STRP 0.0,-0.027913,0  | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,145:64:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|---------|------------------|--|-----|----|----|----------------|------|
| 989  | 0  | 363 | 19:22:57.800 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2546.00 +/- 1   | 2R3 | 4  | 0  | 5,841,145:04:0 |      |
| 990  | 0  | 363 | 19:23:20.466 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2540.68 +/- 1   | 2R3 | 4  | 0  | 5,841,146:07:0 |      |
| 991  | 0  | 363 | 19:23:20.466 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,146:07:0 |      |
| 992  | 0  | 363 | 19:23:21.666 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2540.62 +/- 1  | 2R3 | 4  | 0  | 5,841,146:08:8 |      |
| 993  | 0  | 363 | 19:24:31.800 | 117GH105A106A4AV | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,147:23:0 |      |
| 994  | 0  | 363 | 19:24:47.800 | 117GH105A106A4AW | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,147:47:0 |      |
| 995  | 0  | 363 | 19:26:21.800 | 117GH105A106A4AX | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,149:06:0 |      |
| 996  | 0  | 363 | 19:26:37.800 | 117GH105A106A4AY | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,149:30:0 |      |
| 997  | 0  | 363 | 19:28:11.800 | 117GH105A106A4AZ | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,150:80:0 |      |
| 998  | 0  | 363 | 19:28:27.800 | 117GH105A106A4BA | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,151:13:0 |      |
| 999  | 0  | 363 | 19:30:01.800 | 117GH105A106A4BB | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,152:63:0 |      |
| 1000 | 0  | 363 | 19:30:17.800 | 117GH105A106A4BC | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,152:87:0 |      |
| 1001 | 0  | 363 | 19:31:51.800 | 117GH105A106A4BD | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,154:46:0 |      |
| 1002 | 0  | 363 | 19:32:07.800 | 117GH105A106A4BE | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,154:70:0 |      |
| 1003 | 0  | 363 | 19:33:41.800 | 117GH105A106A4BF | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,156:29:0 |      |
| 1004 | 0  | 363 | 19:33:57.800 | 117GH105A106A4BG | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,156:53:0 |      |
| 1005 | 0  | 363 | 19:35:31.800 | 117GH105A106A4BH | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,158:12:0 |      |
| 1006 | 0  | 363 | 19:35:47.800 | 117GH105A106A4BI | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,158:36:0 |      |
| 1007 | 0  | 363 | 19:36:54.466 | 50ZZ6XX          | 6DMSC   | RDY,0            | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,159:45:0 |      |
| 1008 | 0  | 363 | 19:36:55.866 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC *2540.62 +/- 1 | 2R3 | 4  | 0  | 5,841,159:45:0 |      |
| 1009 | 0  | 363 | 19:36:55.866 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2540.74 +/- 1   | 2R3 | 4  | 0  | 5,841,159:47:1 |      |
| 1010 | 0  | 363 | 19:37:01.133 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2541.98 +/- 1   | 2R3 | 4  | 0  | 5,841,159:55:0 |      |
| 1011 | 0  | 363 | 19:37:02.333 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2542.04 +/- 1 | 2R3 | 4  | 0  | 5,841,159:56:8 |      |
| 1012 | 0  | 363 | 19:37:03.733 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2541.92 +/- 1   | 2R3 | 4  | 0  | 5,841,159:58:9 |      |
| 1013 | 0  | 363 | 19:37:21.800 | 117GH105A106A4BJ | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,159:86:0 |      |
| 1014 | 0  | 363 | 19:37:22.466 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2537.53 +/- 1   | 2R3 | 4  | 0  | 5,841,159:87:0 |      |
| 1015 | 0  | 363 | 19:37:37.800 | 117GH105A106A4BK | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,160:19:0 |      |
| 1016 | 0  | 363 | 19:37:45.133 | 50ZZ6RE          | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,160:30:0 |      |
| 1017 | 0  | 363 | 19:37:45.133 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2532.22 +/- 1   | 2R3 | 4  | 0  | 5,841,160:30:0 |      |
| 1018 | 0  | 363 | 19:37:46.333 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2532.16 +/- 1  | 2R3 | 4  | 0  | 5,841,160:31:8 |      |
| 1019 | 0  | 363 | 19:39:11.800 | 117GH105A106A4BL | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,161:09:0 |      |
| 1020 | 0  | 363 | 19:39:27.800 | 117GH105A106A4BM | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,162:02:0 |      |
| 1021 | 0  | 363 | 19:41:01.800 | 117GH105A106A4BN | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,163:52:0 |      |
| 1022 | 0  | 363 | 19:41:17.800 | 117GH105A106A4BO | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,163:76:0 |      |
| 1023 | 0  | 363 | 19:42:51.800 | 117GH105A106A4BP | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,165:35:0 |      |
| 1024 | 0  | 363 | 19:43:07.800 | 117GH105A106A4BQ | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,165:59:0 |      |
| 1025 | 0  | 363 | 19:44:41.800 | 117GH105A106A4BR | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,167:18:0 |      |
| 1026 | 0  | 363 | 19:44:57.800 | 117GH105A106A4BS | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,167:42:0 |      |
| 1027 | 0  | 363 | 19:46:31.800 | 117GH105A106A4BT | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,169:01:0 |      |
| 1028 | 0  | 363 | 19:46:47.800 | 117GH105A106A4BU | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,169:25:0 |      |
| 1029 | 0  | 363 | 19:48:21.800 | 117GH105A106A4BV | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,170:75:0 |      |
| 1030 | 0  | 363 | 19:48:37.800 | 117GH105A106A4BW | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,171:08:0 |      |
| 1031 | 0  | 363 | 19:50:11.800 | 117GH105A106A4BX | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,172:58:0 |      |
| 1032 | 0  | 363 | 19:50:27.800 | 117GH105A106A4BY | 7STRP   | 0.0.-0.027913,0. | Slew =0.42                             | 2R3 | 4  | 0  | 5,841,172:82:0 |      |
| 1033 | 0  | 363 | 19:51:19.133 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC *2532.16 +/- 1 | 2R3 | 4  | 0  | 5,841,173:68:0 |      |
| 1034 | 0  | 363 | 19:51:19.133 | 50ZZ6XX          | 6DMSC   | RDY,0            | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,173:68:0 |      |
| 1035 | 0  | 363 | 19:51:20.533 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2532.28 +/- 1   | 2R3 | 4  | 0  | 5,841,173:70:1 |      |
| 1036 | 0  | 363 | 19:51:25.800 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2533.51 +/- 1   | 2R3 | 4  | 0  | 5,841,173:78:0 |      |
| 1037 | 0  | 363 | 19:51:27.000 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2533.57 +/- 1 | 2R3 | 4  | 0  | 5,841,173:79:8 |      |
| 1038 | 0  | 363 | 19:51:28.400 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2533.45 +/- 1   | 2R3 | 4  | 0  | 5,841,173:81:9 |      |
| 1039 | 0  | 363 | 19:51:47.133 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2529.06 +/- 1   | 2R3 | 4  | 0  | 5,841,174:19:0 |      |
| 1040 | 0  | 363 | 19:52:01.800 | 117GH105A106A4BZ | 7STRP   | 0.00015,0.027943 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,174:41:0 |      |
| 1041 | 0  | 363 | 19:52:09.800 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,174:53:0 |      |
| 1042 | 0  | 363 | 19:52:09.800 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2523.75 +/- 1   | 2R3 | 4  | 0  | 5,841,174:53:0 |      |
| 1043 | 0  | 363 | 19:52:11.000 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2523.69 +/- 1  | 2R3 | 4  | 0  | 5,841,174:54:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                           | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|---------|------------------|---------------------------------------|-----|----|----|----------------|------|
| 1044 | 0  | 363 | 19:52:17.800 | 117GH105A106A4CA | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,174.65:0 |      |
| 1045 | 0  | 363 | 19:53:51.800 | 117GH105A106A4CB | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,176.24:0 |      |
| 1046 | 0  | 363 | 19:54:07.800 | 117GH105A106A4CC | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,176.48:0 |      |
| 1047 | 0  | 363 | 19:55:41.800 | 117GH105A106A4CD | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,178.07:0 |      |
| 1048 | 0  | 363 | 19:55:57.800 | 117GH105A106A4CE | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,178.31:0 |      |
| 1049 | 0  | 363 | 19:57:31.800 | 117GH105A106A4CF | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,179.81:0 |      |
| 1050 | 0  | 363 | 19:57:47.800 | 117GH105A106A4CG | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,180.14:0 |      |
| 1051 | 0  | 363 | 19:59:21.800 | 117GH105A106A4CH | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,181.64:0 |      |
| 1052 | 0  | 363 | 19:59:37.800 | 117GH105A106A4CI | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,181.88:0 |      |
| 1053 | 0  | 363 | 20:01:11.800 | 117GH105A106A4CJ | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,183.47:0 |      |
| 1054 | 0  | 363 | 20:01:27.800 | 117GH105A106A4CK | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,183.71:0 |      |
| 1055 | 0  | 363 | 20:03:01.800 | 117GH105A106A4CL | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,185.30:0 |      |
| 1056 | 0  | 363 | 20:03:17.800 | 117GH105A106A4CM | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,185.54:0 |      |
| 1057 | 0  | 363 | 20:04:51.800 | 117GH105A106A4CN | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,187.13:0 |      |
| 1058 | 0  | 363 | 20:05:07.800 | 117GH105A106A4CO | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,187.37:0 |      |
| 1059 | 0  | 363 | 20:05:43.800 | 50ZZ6XX          | 6DMSC   | R7.0             | DMS Control                           | 2R3 | 4  | 0  | 5.841,188.00:0 |      |
| 1060 | 0  | 363 | 20:05:43.800 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1,*FWD, TIC 2523.69 +/- 1  | 2R3 | 4  | 0  | 5.841,188.00:0 |      |
| 1061 | 0  | 363 | 20:05:45.200 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2523.81 +/- 1  | 2R3 | 4  | 0  | 5.841,188.02:1 |      |
| 1062 | 0  | 363 | 20:05:50.466 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2525.04 +/- 1  | 2R3 | 4  | 0  | 5.841,188.10:0 |      |
| 1063 | 0  | 363 | 20:05:51.666 |                  | DMS:    | : *RUNUP         | R7, TRACK *2,*REV, TIC *2525.10 +/- 1 | 2R3 | 4  | 0  | 5.841,188.11:8 |      |
| 1064 | 0  | 363 | 20:05:53.066 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2524.98 +/- 1  | 2R3 | 4  | 0  | 5.841,188.13:9 |      |
| 1065 | 0  | 363 | 20:06:11.800 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2520.59 +/- 1  | 2R3 | 4  | 0  | 5.841,188.42:0 |      |
| 1066 | 0  | 363 | 20:06:34.466 | 50ZZ6RE          | 6DMSC   | RDY,0            | DMS Control                           | 2R3 | 4  | 0  | 5.841,188.76:0 |      |
| 1067 | 0  | 363 | 20:06:34.466 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2515.28 +/- 1  | 2R3 | 4  | 0  | 5.841,188.76:0 |      |
| 1068 | 0  | 363 | 20:06:35.666 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2515.22 +/- 1 | 2R3 | 4  | 0  | 5.841,188.77:8 |      |
| 1069 | 0  | 363 | 20:06:41.800 | 117GH105A106A4CP | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,188.87:0 |      |
| 1070 | 0  | 363 | 20:06:57.800 | 117GH105A106A4CQ | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,189.20:0 |      |
| 1071 | 0  | 363 | 20:08:31.800 | 117GH105A106A4CR | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,190.70:0 |      |
| 1072 | 0  | 363 | 20:08:47.800 | 117GH105A106A4CS | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,191.03:0 |      |
| 1073 | 0  | 363 | 20:10:21.800 | 117GH105A106A4CT | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,192.53:0 |      |
| 1074 | 0  | 363 | 20:10:37.800 | 117GH105A106A4CU | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,192.77:0 |      |
| 1075 | 0  | 363 | 20:12:11.800 | 117GH105A106A4CV | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,194.36:0 |      |
| 1076 | 0  | 363 | 20:12:27.800 | 117GH105A106A4CW | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,194.60:0 |      |
| 1077 | 0  | 363 | 20:14:01.800 | 117GH105A106A4CX | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,196.19:0 |      |
| 1078 | 0  | 363 | 20:14:17.800 | 117GH105A106A4CY | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,196.43:0 |      |
| 1079 | 0  | 363 | 20:15:51.800 | 117GH105A106A4CZ | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,198.02:0 |      |
| 1080 | 0  | 363 | 20:16:07.800 | 117GH105A106A4DA | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,198.26:0 |      |
| 1081 | 0  | 363 | 20:17:41.800 | 117GH105A106A4DB | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,199.76:0 |      |
| 1082 | 0  | 363 | 20:17:57.800 | 117GH105A106A4DC | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,200.09:0 |      |
| 1083 | 0  | 363 | 20:19:31.800 | 117GH105A106A4DD | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,201.59:0 |      |
| 1084 | 0  | 363 | 20:19:47.800 | 117GH105A106A4DE | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,201.83:0 |      |
| 1085 | 0  | 363 | 20:20:07.800 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1,*FWD, TIC 2515.22 +/- 1  | 2R3 | 4  | 0  | 5.841,202.22:0 |      |
| 1086 | 0  | 363 | 20:20:07.800 | 50ZZ6XX          | 6DMSC   | R7.0             | DMS Control                           | 2R3 | 4  | 0  | 5.841,202.22:0 |      |
| 1087 | 0  | 363 | 20:20:09.200 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2515.34 +/- 1  | 2R3 | 4  | 0  | 5.841,202.24:1 |      |
| 1088 | 0  | 363 | 20:20:14.466 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2516.57 +/- 1  | 2R3 | 4  | 0  | 5.841,202.32:0 |      |
| 1089 | 0  | 363 | 20:20:15.666 |                  | DMS:    | : *RUNUP         | R7, TRACK *2,*REV, TIC *2516.63 +/- 1 | 2R3 | 4  | 0  | 5.841,202.33:8 |      |
| 1090 | 0  | 363 | 20:20:17.066 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2516.51 +/- 1  | 2R3 | 4  | 0  | 5.841,202.35:9 |      |
| 1091 | 0  | 363 | 20:20:35.800 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2512.12 +/- 1  | 2R3 | 4  | 0  | 5.841,202.64:0 |      |
| 1092 | 0  | 363 | 20:20:58.466 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2506.81 +/- 1  | 2R3 | 4  | 0  | 5.841,203.07:0 |      |
| 1093 | 0  | 363 | 20:20:58.466 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control                           | 2R3 | 4  | 0  | 5.841,203.07:0 |      |
| 1094 | 0  | 363 | 20:20:59.666 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2506.75 +/- 1 | 2R3 | 4  | 0  | 5.841,203.08:8 |      |
| 1095 | 0  | 363 | 20:21:21.800 | 117GH105A106A4DF | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,203.42:0 |      |
| 1096 | 0  | 363 | 20:21:37.800 | 117GH105A106A4DG | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,203.66:0 |      |
| 1097 | 0  | 363 | 20:23:11.800 | 117GH105A106A4DH | 7STRP   | 0.00015,0.027943 | Slew = 12.01                          | 2R3 | 4  | 0  | 5.841,205.25:0 |      |
| 1098 | 0  | 363 | 20:23:27.800 | 117GH105A106A4DI | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                           | 2R3 | 4  | 0  | 5.841,205.49:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|------------------|---------|------------------|---|-----|----|----|----------------|------|
| 1099 | 0  | 363 | 20:25:01.800 | 117GH105A106A4DJ | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,207:08:0 |      |
| 1100 | 0  | 363 | 20:25:17.800 | 117GH105A106A4DK | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,207:32:0 |      |
| 1101 | 0  | 363 | 20:26:51.800 | 117GH105A106A4DL | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,208:82:0 |      |
| 1102 | 0  | 363 | 20:27:07.800 | 117GH105A106A4DM | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,209:15:0 |      |
| 1103 | 0  | 363 | 20:28:41.800 | 117GH105A106A4DN | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,210:65:0 |      |
| 1104 | 0  | 363 | 20:28:57.800 | 117GH105A106A4DO | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,210:89:0 |      |
| 1105 | 0  | 363 | 20:30:31.800 | 117GH105A106A4DP | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,212:48:0 |      |
| 1106 | 0  | 363 | 20:30:47.800 | 117GH105A106A4DQ | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,212:72:0 |      |
| 1107 | 0  | 363 | 20:32:21.800 | 117GH105A106A4DR | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,214:31:0 |      |
| 1108 | 0  | 363 | 20:32:37.800 | 117GH105A106A4DS | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,214:55:0 |      |
| 1109 | 0  | 363 | 20:34:11.800 | 117GH105A106A4DT | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,216:14:0 |      |
| 1110 | 0  | 363 | 20:34:27.800 | 117GH105A106A4DU | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,216:38:0 |      |
| 1111 | 0  | 363 | 20:34:32.466 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2506.75 +/- 1     | 2R3 | 4  | 0  | 5.841,216:45:0 |      |
| 1112 | 0  | 363 | 20:34:32.466 | 50ZZ6XX          | 6DMSC   | R7.0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5.841,216:45:0 |      |
| 1113 | 0  | 363 | 20:34:33.866 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2506.87 +/- 1      | 2R3 | 4  | 0  | 5.841,216:47:1 |      |
| 1114 | 0  | 363 | 20:34:39.133 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2508.10 +/- 1      | 2R3 | 4  | 0  | 5.841,216:55:0 |      |
| 1115 | 0  | 363 | 20:34:40.333 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2508.16 +/- 1    | 2R3 | 4  | 0  | 5.841,216:56:8 |      |
| 1116 | 0  | 363 | 20:34:41.733 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2508.04 +/- 1      | 2R3 | 4  | 0  | 5.841,216:58:9 |      |
| 1117 | 0  | 363 | 20:35:00.466 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2503.65 +/- 1      | 2R3 | 4  | 0  | 5.841,216:87:0 |      |
| 1118 | 0  | 363 | 20:35:23.133 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2498.34 +/- 1      | 2R3 | 4  | 0  | 5.841,217:30:0 |      |
| 1119 | 0  | 363 | 20:35:23.133 | 50ZZ6RE          | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5.841,217:30:0 |      |
| 1120 | 0  | 363 | 20:35:24.333 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2498.28 +/- 1     | 2R3 | 4  | 0  | 5.841,217:31:8 |      |
| 1121 | 0  | 363 | 20:36:01.800 | 117GH105A106A4DV | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,217:88:0 |      |
| 1122 | 0  | 363 | 20:36:17.800 | 117GH105A106A4DW | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,218:21:0 |      |
| 1123 | 0  | 363 | 20:37:51.800 | 117GH105A106A4DX | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,219:71:0 |      |
| 1124 | 0  | 363 | 20:38:07.800 | 117GH105A106A4DY | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,220:04:0 |      |
| 1125 | 0  | 363 | 20:39:41.800 | 117GH105A106A4DZ | 7STRP   | 0.00015,0.027943 | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,221:54:0 |      |
| 1126 | 0  | 363 | 20:39:57.800 | 117GH105A106A4EA | 7STRP   | 0.0,-0.027913.0, | Slew = 0.42                               | 2R3 | 4  | 0  | 5.841,221:78:0 |      |
| 1127 | 0  | 363 | 20:41:31.800 | 117GH11A         | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | 5.841,223:37:0 |      |
| 1128 | 0  | 363 | 20:43:38.466 | 176GH6B          | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5.841,225:45:0 |      |
| 1129 | 0  | 363 | 20:43:40.466 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2498.28 +/- 1     | 2R3 | 4  | 0  | 5.841,225:48:0 |      |
| 1130 | 0  | 363 | 20:43:40.466 | 50ZZ6XX          | 6DMSC   | R7.0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5.841,225:48:0 |      |
| 1131 | 0  | 363 | 20:43:41.866 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2498.40 +/- 1      | 2R3 | 4  | 0  | 5.841,225:50:1 |      |
| 1132 | 0  | 363 | 20:43:47.133 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2499.64 +/- 1      | 2R3 | 4  | 0  | 5.841,225:58:0 |      |
| 1133 | 0  | 363 | 20:43:48.333 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2499.70 +/- 1    | 2R3 | 4  | 0  | 5.841,225:59:8 |      |
| 1134 | 0  | 363 | 20:43:49.733 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2499.58 +/- 1      | 2R3 | 4  | 0  | 5.841,225:61:9 |      |
| 1135 | 0  | 363 | 20:43:50.466 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2499.40 +/- 1      | 2R3 | 4  | 0  | 5.841,225:63:0 |      |
| 1136 | 0  | 363 | 20:44:07.133 | 50ZZ6RD          | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5.841,225:88:0 |      |
| 1137 | 0  | 363 | 20:44:07.133 |                  | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2495.50 +/- 1      | 2R3 | 4  | 0  | 5.841,225:88:0 |      |
| 1138 | 0  | 363 | 20:44:08.333 |                  | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2495.44 +/- 1     | 2R3 | 4  | 0  | 5.841,225:89:8 |      |
| 1139 | 0  | 363 | 21:38:44.466 | 165GJ4A          | 7SCAN   | NORM,309.544998, | Check S/P Position                        | 2R3 | 4  | 0  | 5.841,279:90:0 |      |
| 1140 | 0  | 363 | 21:41:47.133 | 176GJ6A          | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | 5.841,283:00:0 |      |
| 1141 | 0  | 363 | 21:42:38.466 | 117GJ            | CSMOS   | GS               | ***** GROUP START CSMOS                   | 2R3 | 4  | 0  | 5.841,283:77:0 |      |
| 1142 | 0  | 363 | 21:42:47.800 | 117GJ105A106A4A  | 7STRP   | 0.0016,-0.0034,0 | Slew = 0.08                               | 2R3 | 4  | 0  | 5.841,284:00:0 |      |
| 1143 | 0  | 363 | 21:43:36.466 | 117GJ105A106A4B  | 7STRP   | 0.0003,0.0033,0, | Slew =12.01                               | 2R3 | 4  | 0  | 5.841,284:73:0 |      |
| 1144 | 0  | 363 | 21:43:49.800 | 117GJ105A106A4C  | 7STRP   | 0.0016,-0.0034,0 | Slew = 0.08                               | 2R3 | 4  | 0  | 5.841,285:02:0 |      |
| 1145 | 0  | 363 | 21:44:38.466 | 117GJ11A         | CSMOS   | GE               | ***** GROUP END CSMOS                     | 2R3 | 4  | 0  | 5.841,285:75:0 |      |
| 1146 | 0  | 363 | 21:46:19.800 | 176GJ6B          | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5.841,287:45:0 |      |
| 1147 | 0  | 363 | 21:46:21.800 | 50ZZ6XX          | 6DMSC   | R7.0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5.841,287:48:0 |      |
| 1148 | 0  | 363 | 21:46:21.800 |                  | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2495.44 +/- 1     | 2R3 | 4  | 0  | 5.841,287:48:0 |      |
| 1149 | 0  | 363 | 21:46:23.200 |                  | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2495.56 +/- 1      | 2R3 | 4  | 0  | 5.841,287:50:1 |      |
| 1150 | 0  | 363 | 21:46:28.466 |                  | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2496.79 +/- 1      | 2R3 | 4  | 0  | 5.841,287:58:0 |      |
| 1151 | 0  | 363 | 21:46:29.666 |                  | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2496.85 +/- 2    | 2R3 | 4  | 0  | 5.841,287:59:8 |      |
| 1152 | 0  | 363 | 21:46:31.066 |                  | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2496.73 +/- 2      | 2R3 | 4  | 0  | 5.841,287:61:9 |      |
| 1153 | 0  | 363 | 21:46:31.800 |                  | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2496.56 +/- 2      | 2R3 | 4  | 0  | 5.841,287:63:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters      | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|-------------------------|--|-----|----|----------------|----------------|------|
| 1154 | 0  | 363 | 21:46:44.466 |                 | DMS: : *RUNDOWN         | R7, TRACK 2, REV, TIC *2493.59 +/- 2       | 2R3 | 4  | 0              | 5,841,287:82:0 |      |
| 1155 | 0  | 363 | 21:46:44.466 | 50Z6RE          | 6DMSC RDY,0             | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,287:82:0 |      |
| 1156 | 0  | 363 | 21:46:45.666 |                 | DMS: : *READY           | RDY, TRACK 2, REV, TIC *2493.53 +/- 2      | 2R3 | 4  | 0              | 5,841,287:83:8 |      |
| 1157 | 0  | 363 | 22:29:59.800 | 480SC6A         | 6MROH 44,23E8,0,A2      | read from LLM2A44,23E8,0,A2                | 2R3 | 4  | 0              | 5,841,330:62:0 |      |
| 1158 | 0  | 363 | 22:33:06.000 | 29NNGLOBAL03-   | -----START-----         |  | 2R3 | 4  | 0              | :              |      |
| 1159 | 0  | 363 | 22:33:06.466 | 20DE5A          | 37PL                    | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,333:69:0 |                |      |
| 1160 | 0  | 363 | 22:33:13.800 | 20DE5B          | 37MRL                   | Memory Realocate (software operates from R | 4   | 0  | 5,841,333:80:0 |                |      |
| 1161 | 0  | 363 | 22:33:20.466 | 165DE4A         | 75SCAN NORM,68,737,25.0 | Check S/P Position                         | 4   | 0  | 5,841,333:90:0 |                |      |
| 1162 | 0  | 363 | 22:33:21.800 | 20DE6A          | 6MCOPI NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,334:01:0 |                |      |
| 1163 | 0  | 363 | 22:33:25.199 | 29NNGLOBAL03-   | -----START-----         |  | 4   | 0  | :              |                |      |
| 1164 | 0  | 363 | 22:33:31.800 | 20DE6B          | 6MCOPI NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,334:16:0 |                |      |
| 1165 | 0  | 363 | 22:33:41.800 | 20DE5C          | 37IRT                   | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,334:31:0 |                |      |
| 1166 | 0  | 363 | 22:33:43.133 | 20DE5D          | 37MNI                   | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,334:33:0 |      |
| 1167 | 0  | 363 | 22:34:14.466 | 20DE4A          | 37IST 1,2,0,OFF,0,0,0   | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,334:80:0 |      |
| 1168 | 0  | 363 | 22:34:15.000 | 29NNGLOBAL03-   | -----STOP-----          |  | 2R0 | 4  | 0              | :              |      |
| 1169 | 0  | 363 | 22:35:17.800 | 125DE4A         | 37IST 0,2,0,OFF,0,1,0   | Gain State 2                               | 2R0 | 4  | 0              | 5,841,335:84:0 |      |
| 1170 | 0  | 363 | 22:35:17.800 | 125DE11A        | NIMSINIT GE             | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,335:84:0 |      |
| 1171 | 0  | 363 | 22:35:17.800 | 125DE           | NIMSINIT GS             | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,335:84:0 |      |
| 1172 | 0  | 363 | 22:36:18.466 | 127DE           | NIMSSTAB GS             | %%%% GROUP START TAB                       | 2R0 | 4  | 0              | 5,841,336:84:0 |      |
| 1173 | 0  | 363 | 22:36:18.466 | 127DE4A         | 37IOP 3,0               | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,336:84:0 |      |
| 1174 | 0  | 363 | 22:36:19.133 | 127DE4B         | 37ETB 0A,CA,18,39,FF,1  | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,336:85:0 |      |
| 1175 | 0  | 363 | 22:36:27.133 | 127DE11A        | NIMSSTAB GE             | %%%% GROUP END TAB                         | 2R3 | 4  | 0              | 5,841,337:06:0 |      |
| 1176 | 0  | 363 | 22:36:39.800 | 480SC6B         | 6MROH 45,23E8,0,B2      | read from LLM2B45,23E8,0,B2                | 2R3 | 4  | 0              | 5,841,337:25:0 |      |
| 1177 | 0  | 363 | 22:37:11.800 | 175DE422A6A     | 6DMSC R7,0              | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,337:73:0 |      |
| 1178 | 0  | 363 | 22:37:11.800 |                 | DMS: : *US-RUNUP        | P7, TRACK *1, *FWD, TIC *2493.53 +/- 2     | 2R3 | 4  | 0              | 5,841,337:73:0 |      |
| 1179 | 0  | 363 | 22:37:13.200 |                 | DMS: : *US_AT_SP        | P7, TRACK 1, FWD, TIC *2493.65 +/- 2       | 2R3 | 4  | 0              | 5,841,337:75:1 |      |
| 1180 | 0  | 363 | 22:37:14.466 | 117DE           | CSMOS GS                | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,841,337:77:0 |      |
| 1181 | 0  | 363 | 22:37:18.466 |                 | DMS: : *US_RD           | P7, TRACK 1, FWD, TIC *2494.89 +/- 2       | 2R3 | 4  | 0              | 5,841,337:83:0 |      |
| 1182 | 0  | 363 | 22:37:19.666 |                 | DMS: : *RUNUP           | R7, TRACK *2, *REV, TIC *2494.95 +/- 2     | 2R3 | 4  | 0              | 5,841,337:84:8 |      |
| 1183 | 0  | 363 | 22:37:20.466 | 175DE176A6A     | 6TMREC LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R3 | 4  | 0              | 5,841,337:86:0 |      |
| 1184 | 0  | 363 | 22:37:21.066 |                 | DMS: : *RECORD          | R7, TRACK 2, REV, TIC *2494.83 +/- 2       | 2R3 | 4  | 0              | 5,841,337:86:9 |      |
| 1185 | 0  | 363 | 22:37:21.066 |                 | DMS: : *AT SPD          | R7, TRACK 2, REV, TIC *2494.83 +/- 2       | 2R3 | 4  | 0              | 5,841,337:86:9 |      |
| 1186 | 0  | 363 | 22:37:23.133 | 29NNGLOBAL03-   | NIMPBK 301DE            | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 1187 | 0  | 363 | 22:37:23.800 | 117DE105A106A4A | 7STRP -0.013501,-0.000  | Slew = 0.02                                | 2R3 | 4  | 0              | 5,841,338:00:0 |      |
| 1188 | 0  | 363 | 22:39:06.466 | 29NNGLOBAL03-   | NIMPBK 301EA            | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 1189 | 0  | 363 | 22:39:41.800 | 29NNGLOBAL03-   | DESEL 300EA             | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 1190 | 0  | 363 | 22:41:50.466 | 29NNGLOBAL03-   | NIMPBK 301EC            | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 1191 | 0  | 363 | 22:42:04.466 | 29NNGLOBAL03-   | DESEL 300EC             | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 1192 | 0  | 363 | 22:45:06.466 | 29NNGLOBAL03-   | DESEL 300DE             | GANYMEDE GLOBAL OBSERVATION                | 2R3 | 4  | 0              | :              |      |
| 1193 | 0  | 363 | 22:45:16.466 |                 | DMS: : *RUNDOWN         | R7, TRACK 2, REV, TIC *2383.40 +/- 2       | 2R3 | 4  | 0              | 5,841,345:72:0 |      |
| 1194 | 0  | 363 | 22:45:16.466 | 175DE6A         | 6TMREC NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0              | 5,841,345:72:0 |      |
| 1195 | 0  | 363 | 22:45:16.466 | 175DE422A6B     | 6DMSC RDY,0             | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,345:72:0 |      |
| 1196 | 0  | 363 | 22:45:17.666 |                 | DMS: : *READY           | RDY, TRACK 2, REV, TIC *2383.34 +/- 2      | 2R3 | 4  | 0              | 5,841,345:73:8 |      |
| 1197 | 0  | 363 | 22:48:44.466 | 117DE11A        | CSMOS GE                | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,349:20:0 |      |
| 1198 | 0  | 363 | 22:49:35.866 | 29NNGLOBAL03-   | -----STOP-----          |  | 2R3 | 4  | 0              | :              |      |
| 1199 | 0  | 363 | 23:04:41.133 | 165GK4A         | 75SCAN NORM,320,386997, | Check S/P Position                         | 2R3 | 4  | 0              | 5,841,364:90:0 |      |
| 1200 | 0  | 363 | 23:07:43.800 | 176GK6A         | 6TMREC BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 2R3 | 4  | 0              | 5,841,368:00:0 |      |
| 1201 | 0  | 363 | 23:08:35.133 | 117GK           | CSMOS GS                | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,841,368:77:0 |      |
| 1202 | 0  | 363 | 23:08:44.466 | 117GK105A106A4A | 7STRP 0.0016,-0.0033,0  | Slew = 0.08                                | 2R3 | 4  | 0              | 5,841,369:00:0 |      |
| 1203 | 0  | 363 | 23:09:33.133 | 117GK105A106A4B | 7STRP 0.0004,0.0032,0,  | Slew =12.01                                | 2R3 | 4  | 0              | 5,841,369:73:0 |      |
| 1204 | 0  | 363 | 23:09:46.466 | 117GK105A106A4C | 7STRP 0.0016,-0.0033,0  | Slew =,0.08                                | 2R3 | 4  | 0              | 5,841,370:02:0 |      |
| 1205 | 0  | 363 | 23:10:35.133 | 117GK11A        | CSMOS GE                | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,370:75:0 |      |
| 1206 | 0  | 363 | 23:12:01.000 | 29NNIWATCH01-   | -----START-----         |  | 2R3 | 4  | 0              | :              |      |
| 1207 | 0  | 363 | 23:12:01.133 | 20DF5A          | 37PL                    | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,372:22:0 |                |      |
| 1208 | 0  | 363 | 23:12:02.466 | 20DF5B          | 37MRL                   | Memory Realocate (software operates from R | 4   | 0  | 5,841,372:24:0 |                |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|--------------------|--|-----|----|----------------|----------------|------|
| 1209 | 0  | 363 | 23:12:04.466 | 20DF6A          | 6MCPY NIMS         | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,372:27:0 |                |      |
| 1210 | 0  | 363 | 23:12:14.466 | 20DF6B          | 6MCPY NIMS         | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,372:42:0 |                |      |
| 1211 | 0  | 363 | 23:12:16.466 | 176GK6B         | 6TMREC             | NO RECORD Record Mode Change               | 4   | 0  | 5,841,372:45:0 |                |      |
| 1212 | 0  | 363 | 23:12:18.466 |                 | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 2383.34 +/- 2      | 4   | 0  | 5,841,372:48:0 |                |      |
| 1213 | 0  | 363 | 23:12:18.466 | 50ZZ6XX         | 6DMSC              | DMS Control Tape runup 7.68kps             | 4   | 0  | 5,841,372:48:0 |                |      |
| 1214 | 0  | 363 | 23:12:19.866 |                 | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *2383.46 +/- 2       | 4   | 0  | 5,841,372:50:1 |                |      |
| 1215 | 0  | 363 | 23:12:25.133 |                 | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *2384.70 +/- 2       | 4   | 0  | 5,841,372:58:0 |                |      |
| 1216 | 0  | 363 | 23:12:26.333 |                 | DMS: : *RUNUP      | R7, TRACK *2, *REV, TIC *2384.76 +/- 2     | 4   | 0  | 5,841,372:59:8 |                |      |
| 1217 | 0  | 363 | 23:12:27.733 |                 | DMS: : *AT_SPD     | R7, TRACK 2, REV, TIC *2384.64 +/- 2       | 4   | 0  | 5,841,372:61:9 |                |      |
| 1218 | 0  | 363 | 23:12:27.800 | 20DF5C          | 37IRT              | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,372:62:0 |                |      |
| 1219 | 0  | 363 | 23:12:28.466 |                 | DMS: : *RECORD     | R7, TRACK 2, REV, TIC *2384.47 +/- 2       | 4   | 0  | 5,841,372:63:0 |                |      |
| 1220 | 0  | 363 | 23:12:31.133 | 20DF5D          | 37MN               | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,372:67:0 |      |
| 1221 | 0  | 363 | 23:12:41.133 | 50ZZ6RD         | 6DMSC              | DMS Control Tape stop                      | 260 | 4  | 0              | 5,841,372:82:0 |      |
| 1222 | 0  | 363 | 23:12:41.133 |                 | DMS: : *RUNDOWN    | R7, TRACK 2, REV, TIC *2381.50 +/- 2       | 260 | 4  | 0              | 5,841,372:82:0 |      |
| 1223 | 0  | 363 | 23:12:42.333 |                 | DMS: : *READY      | RDY, TRACK 2, REV, TIC *2381.44 +/- 2      | 260 | 4  | 0              | 5,841,372:83:8 |      |
| 1224 | 0  | 363 | 23:13:02.466 | 20DF4A          | 37IST              | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,373:23:0 |      |
| 1225 | 0  | 363 | 23:13:03.000 | 29NNIWATC01-    | -----STOP-----     |  | 2R0 | 4  | 0              | :              |      |
| 1226 | 0  | 363 | 23:13:47.133 | 165DF4A         | 75SCAN             | NORM,321.767998,                           | 2R0 | 4  | 0              | 5,841,373:90:0 |      |
| 1227 | 0  | 363 | 23:13:51.800 | 29NIWATC01-     | -----START-----    |  | 2R0 | 4  | 0              | :              |      |
| 1228 | 0  | 363 | 23:15:44.466 | 125DF4A         | 37IST              | Gain State 2                               | 2R0 | 4  | 0              | 5,841,375:84:0 |      |
| 1229 | 0  | 363 | 23:15:44.466 | 125DF           | NIMSINIT           | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,375:84:0 |      |
| 1230 | 0  | 363 | 23:15:44.466 | 125DF11A        | NIMSINIT           | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,375:84:0 |      |
| 1231 | 0  | 363 | 23:16:45.133 | 127DF           | NIMSTAB            | %%%GROUP START TAB                         | 2R0 | 4  | 0              | 5,841,376:84:0 |      |
| 1232 | 0  | 363 | 23:16:45.133 | 127DF4A         | 37IOP              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,376:84:0 |      |
| 1233 | 0  | 363 | 23:16:45.800 | 127DF4B         | 37ETB              | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,376:85:0 |      |
| 1234 | 0  | 363 | 23:16:53.800 | 127DF11A        | NIMSTAB            | %%%GROUP END TAB                           | 2R3 | 4  | 0              | 5,841,377:06:0 |      |
| 1235 | 0  | 363 | 23:17:35.800 |                 | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 2381.44 +/- 2      | 2R3 | 4  | 0              | 5,841,377:69:0 |      |
| 1236 | 0  | 363 | 23:17:35.800 | 175DF422A6A     | 6DMSC              | DMS Control Tape runup 28.8kbp             | 2R3 | 4  | 0              | 5,841,377:69:0 |      |
| 1237 | 0  | 363 | 23:17:37.200 |                 | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *2381.56 +/- 2       | 2R3 | 4  | 0              | 5,841,377:71:1 |      |
| 1238 | 0  | 363 | 23:17:41.133 | 117DF           | CSMOS              | **** GROUP START CSMOS                     | 2R3 | 4  | 0              | 5,841,377:77:0 |      |
| 1239 | 0  | 363 | 23:17:42.466 |                 | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *2382.79 +/- 2       | 2R3 | 4  | 0              | 5,841,377:79:0 |      |
| 1240 | 0  | 363 | 23:17:43.666 |                 | DMS: : *RUNUP      | R28, TRACK *2, *REV, TIC *2382.85 +/- 2    | 2R3 | 4  | 0              | 5,841,377:80:8 |      |
| 1241 | 0  | 363 | 23:17:47.133 | 175DF176A6A     | 6TMREC             | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 2R3 | 4  | 0              | 5,841,377:86:0 |      |
| 1242 | 0  | 363 | 23:17:47.666 |                 | DMS: : *AT_SPD     | R28, TRACK 2, REV, TIC 2381.35 +/- 2       | 2R3 | 4  | 0              | 5,841,377:86:8 |      |
| 1243 | 0  | 363 | 23:17:47.666 |                 | DMS: : *RECORD     | R28, TRACK 2, REV, TIC *2381.35 +/- 2      | 2R3 | 4  | 0              | 5,841,377:86:8 |      |
| 1244 | 0  | 363 | 23:17:49.133 | 165DF4B         | 7VECT              | Inert vect update UTC                      | 2R3 | 4  | 0              | 5,841,377:89:0 |      |
| 1245 | 0  | 363 | 23:17:49.800 | 29NIWATC01-     | NIMPBK             | IO MONITORING OBSERVATION                  | 2R3 | 4  | 0              | :              |      |
| 1246 | 0  | 363 | 23:17:50.466 | 117DF105A106A4A | 7STRP              | Slew = 0.03                                | 2R3 | 4  | 0              | 5,841,378:00:0 |      |
| 1247 | 0  | 363 | 23:18:49.800 | 29NIWATC01-     | NIMPBK             | IO MONITORING OBSERVATION                  | 2R3 | 4  | 0              | :              |      |
| 1248 | 0  | 363 | 23:19:53.800 | 29NIWATC01-     | DESEL              | IO MONITORING OBSERVATION                  | 2R3 | 4  | 0              | :              |      |
| 1249 | 0  | 363 | 23:20:49.133 | 117DF11A        | CSMOS              | **** GROUP END CSMOS                       | 2R3 | 4  | 0              | 5,841,380:86:0 |      |
| 1250 | 0  | 363 | 23:20:49.800 | 29NIWATC01-     | DESEL              | IO MONITORING OBSERVATION                  | 2R3 | 4  | 0              | :              |      |
| 1251 | 0  | 363 | 23:20:52.466 |                 | DMS: : *RUNDOWN    | R28, TRACK 2, REV, TIC *2218.93 +/- 2      | 2R3 | 4  | 0              | 5,841,381:00:0 |      |
| 1252 | 0  | 363 | 23:20:52.466 | 175DF422A6B     | 6DMSC              | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,381:00:0 |      |
| 1253 | 0  | 363 | 23:20:53.666 |                 | DMS: : *READY      | RDY, TRACK 2, REV, TIC *2218.63 +/- 2      | 2R3 | 4  | 0              | 5,841,381:01:8 |      |
| 1254 | 0  | 363 | 23:20:56.467 | 29NIWATC01-     | -----STOP-----     |  | 2R3 | 4  | 0              | :              |      |
| 1255 | 0  | 363 | 23:59:59.800 | 488AH6A         | 6TMSED             | Sci, Eng, and D/L Chan                     | 2R3 | 4  | 0              | 5,841,419:63:0 |      |
| 1256 | 0  | 364 | 01:01:58.466 | 165GI4A         | 75SCAN             | Check S/P Position                         | 2R3 | 4  | 0              | 5,841,480:90:0 |      |
| 1257 | 0  | 364 | 01:01:59.133 | 176GI6A         | 6TMREC             | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 2R3 | 4  | 0              | 5,841,481:00:0 |      |
| 1258 | 0  | 364 | 01:02:50.466 | 117GI           | CSMOS              | **** GROUP START CSMOS                     | 2R3 | 4  | 0              | 5,841,481:77:0 |      |
| 1259 | 0  | 364 | 01:02:50.800 | 117GI105A106A4A | 7STRP              | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,482:00:0 |      |
| 1260 | 0  | 364 | 01:05:49.800 | 117GI105A106A4B | 7STRP              | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,484:73:0 |      |
| 1261 | 0  | 364 | 01:06:06.466 | 117GI105A106A4C | 7STRP              | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,485:07:0 |      |
| 1262 | 0  | 364 | 01:08:56.466 | 117GI105A106A4D | 7STRP              | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,487:80:0 |      |
| 1263 | 0  | 364 | 01:09:13.133 | 117GI105A106A4E | 7STRP              | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,488:14:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|--|-----|----|----|----------------|------|
| 1264 | 0  | 364 | 01:12:03.133 | 117G105A106A4F  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,490:87:0 |      |
| 1265 | 0  | 364 | 01:12:19.800 | 117G105A106A4G  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,491:21:0 |      |
| 1266 | 0  | 364 | 01:15:09.800 | 117G105A106A4H  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,494:03:0 |      |
| 1267 | 0  | 364 | 01:15:26.466 | 117G105A106A4I  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,494:28:0 |      |
| 1268 | 0  | 364 | 01:15:53.133 |                 | DMS:    | :US-RUNUP        | P7, TRACK *1, *FWD, TIC 2218.63 +/- 2  | 2R3 | 4  | 0  | 5,841,494:68:0 |      |
| 1269 | 0  | 364 | 01:15:53.133 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,494:68:0 |      |
| 1270 | 0  | 364 | 01:15:54.533 |                 | DMS:    | :US AT SP        | P7, TRACK 1, FWD, TIC *2218.75 +/- 2   | 2R3 | 4  | 0  | 5,841,494:70:1 |      |
| 1271 | 0  | 364 | 01:15:59.800 |                 | DMS:    | :US RD           | P7, TRACK 1, FWD, TIC *2219.98 +/- 2   | 2R3 | 4  | 0  | 5,841,494:78:0 |      |
| 1272 | 0  | 364 | 01:16:01.000 |                 | DMS:    | :RUNUP           | R7, TRACK *2, *REV, TIC *2220.04 +/- 2 | 2R3 | 4  | 0  | 5,841,494:79:8 |      |
| 1273 | 0  | 364 | 01:16:02.400 |                 | DMS:    | :AT SPD          | R7, TRACK 2, REV, TIC *2219.92 +/- 2   | 2R3 | 4  | 0  | 5,841,494:81:9 |      |
| 1274 | 0  | 364 | 01:16:21.133 |                 | DMS:    | :RECORD          | R7, TRACK 2, REV, TIC *2215.53 +/- 2   | 2R3 | 4  | 0  | 5,841,495:19:0 |      |
| 1275 | 0  | 364 | 01:16:43.800 |                 | DMS:    | :RUNDOWN         | R7, TRACK 2, REV, TIC *2210.22 +/- 2   | 2R3 | 4  | 0  | 5,841,495:53:0 |      |
| 1276 | 0  | 364 | 01:16:43.800 | 50ZZ6RE         | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,495:53:0 |      |
| 1277 | 0  | 364 | 01:16:45.000 |                 | DMS:    | :READY           | RDY, TRACK 2, REV, TIC *2210.16 +/- 2  | 2R3 | 4  | 0  | 5,841,495:54:8 |      |
| 1278 | 0  | 364 | 01:18:16.466 | 117G105A106A4J  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,497:10:0 |      |
| 1279 | 0  | 364 | 01:18:33.133 | 117G105A106A4K  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,497:35:0 |      |
| 1280 | 0  | 364 | 01:21:23.133 | 117G105A106A4L  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,500:17:0 |      |
| 1281 | 0  | 364 | 01:21:39.800 | 117G105A106A4M  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,500:42:0 |      |
| 1282 | 0  | 364 | 01:24:29.800 | 117G105A106A4N  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,503:24:0 |      |
| 1283 | 0  | 364 | 01:24:46.466 | 117G105A106A4O  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,503:49:0 |      |
| 1284 | 0  | 364 | 01:27:36.466 | 117G105A106A4P  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,506:31:0 |      |
| 1285 | 0  | 364 | 01:27:53.133 | 117G105A106A4Q  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,506:56:0 |      |
| 1286 | 0  | 364 | 01:30:17.133 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,508:90:0 |      |
| 1287 | 0  | 364 | 01:30:17.133 |                 | DMS:    | :US-RUNUP        | P7, TRACK *1, *FWD, TIC 2210.16 +/- 2  | 2R3 | 4  | 0  | 5,841,508:90:0 |      |
| 1288 | 0  | 364 | 01:30:18.533 |                 | DMS:    | :US AT SP        | P7, TRACK 1, FWD, TIC *2210.28 +/- 2   | 2R3 | 4  | 0  | 5,841,509:01:1 |      |
| 1289 | 0  | 364 | 01:30:23.800 |                 | DMS:    | :US RD           | P7, TRACK 1, FWD, TIC *2211.52 +/- 2   | 2R3 | 4  | 0  | 5,841,509:09:0 |      |
| 1290 | 0  | 364 | 01:30:25.000 |                 | DMS:    | :RUNUP           | R7, TRACK *2, *REV, TIC *2211.58 +/- 2 | 2R3 | 4  | 0  | 5,841,509:10:8 |      |
| 1291 | 0  | 364 | 01:30:26.400 |                 | DMS:    | :AT SPD          | R7, TRACK 2, REV, TIC *2211.46 +/- 2   | 2R3 | 4  | 0  | 5,841,509:12:9 |      |
| 1292 | 0  | 364 | 01:30:43.133 | 117G105A106A4R  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,509:38:0 |      |
| 1293 | 0  | 364 | 01:30:45.133 |                 | DMS:    | :RECORD          | R7, TRACK 2, REV, TIC *2207.06 +/- 2   | 2R3 | 4  | 0  | 5,841,509:41:0 |      |
| 1294 | 0  | 364 | 01:30:59.800 | 117G105A106A4S  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,509:63:0 |      |
| 1295 | 0  | 364 | 01:31:07.800 | 50ZZ6RD         | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,509:75:0 |      |
| 1296 | 0  | 364 | 01:31:07.800 |                 | DMS:    | :RUNDOWN         | R7, TRACK 2, REV, TIC *2201.75 +/- 2   | 2R3 | 4  | 0  | 5,841,509:75:0 |      |
| 1297 | 0  | 364 | 01:31:09.000 |                 | DMS:    | :READY           | RDY, TRACK 2, REV, TIC *2201.69 +/- 2  | 2R3 | 4  | 0  | 5,841,509:76:8 |      |
| 1298 | 0  | 364 | 01:33:49.800 | 117G105A106A4T  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,512:45:0 |      |
| 1299 | 0  | 364 | 01:34:06.466 | 117G105A106A4U  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,512:70:0 |      |
| 1300 | 0  | 364 | 01:36:56.466 | 117G105A106A4V  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,515:52:0 |      |
| 1301 | 0  | 364 | 01:37:13.133 | 117G105A106A4W  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,515:77:0 |      |
| 1302 | 0  | 364 | 01:40:03.133 | 117G105A106A4X  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,518:59:0 |      |
| 1303 | 0  | 364 | 01:40:19.800 | 117G105A106A4Y  | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,518:84:0 |      |
| 1304 | 0  | 364 | 01:41:41.133 | 488AH6B         | 6TMSD   | FILL,AH4         | Sci, Eng, and D/L Chan                 | 2R3 | 4  | 0  | 5,841,520:24:0 |      |
| 1305 | 0  | 364 | 01:43:09.800 | 117G105A106A4Z  | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,521:66:0 |      |
| 1306 | 0  | 364 | 01:43:26.466 | 117G105A106A4AA | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,522:00:0 |      |
| 1307 | 0  | 364 | 01:44:41.800 |                 | DMS:    | :US-RUNUP        | P7, TRACK *1, *FWD, TIC 2201.69 +/- 2  | 2R3 | 4  | 0  | 5,841,523:22:0 |      |
| 1308 | 0  | 364 | 01:44:41.800 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,523:22:0 |      |
| 1309 | 0  | 364 | 01:44:43.200 |                 | DMS:    | :US AT SP        | P7, TRACK 1, FWD, TIC *2201.81 +/- 2   | 2R3 | 4  | 0  | 5,841,523:24:1 |      |
| 1310 | 0  | 364 | 01:44:48.466 |                 | DMS:    | :US RD           | P7, TRACK 1, FWD, TIC *2203.05 +/- 2   | 2R3 | 4  | 0  | 5,841,523:32:0 |      |
| 1311 | 0  | 364 | 01:44:49.666 |                 | DMS:    | :RUNUP           | R7, TRACK *2, *REV, TIC *2203.11 +/- 2 | 2R3 | 4  | 0  | 5,841,523:33:8 |      |
| 1312 | 0  | 364 | 01:44:51.066 |                 | DMS:    | :AT SPD          | R7, TRACK 2, REV, TIC *2202.99 +/- 2   | 2R3 | 4  | 0  | 5,841,523:35:9 |      |
| 1313 | 0  | 364 | 01:45:09.800 |                 | DMS:    | :RECORD          | R7, TRACK 2, REV, TIC *2198.60 +/- 2   | 2R3 | 4  | 0  | 5,841,523:64:0 |      |
| 1314 | 0  | 364 | 01:45:32.466 | 50ZZ6RE         | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,524:07:0 |      |
| 1315 | 0  | 364 | 01:45:32.466 |                 | DMS:    | :RUNDOWN         | R7, TRACK 2, REV, TIC *2193.28 +/- 2   | 2R3 | 4  | 0  | 5,841,524:07:0 |      |
| 1316 | 0  | 364 | 01:45:33.666 |                 | DMS:    | :READY           | RDY, TRACK 2, REV, TIC *2193.22 +/- 2  | 2R3 | 4  | 0  | 5,841,524:08:8 |      |
| 1317 | 0  | 364 | 01:46:16.466 | 117G105A106A4AB | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,524:73:0 |      |
| 1318 | 0  | 364 | 01:46:33.133 | 117G105A106A4AC | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,525:07:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|--|-----|----|----|----------------|------|
| 1319 | 0  | 364 | 01:49:23.133 | 117G105A106A4AD | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,527:80:0 |      |
| 1320 | 0  | 364 | 01:49:39.800 | 117G105A106A4AE | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,528:14:0 |      |
| 1321 | 0  | 364 | 01:52:29.800 | 117G105A106A4AF | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,530:87:0 |      |
| 1322 | 0  | 364 | 01:52:46.466 | 117G105A106A4AG | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,531:21:0 |      |
| 1323 | 0  | 364 | 01:55:36.466 | 117G105A106A4AH | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,534:03:0 |      |
| 1324 | 0  | 364 | 01:55:53.133 | 117G105A106A4AJ | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,534:28:0 |      |
| 1325 | 0  | 364 | 01:58:43.133 | 117G105A106A4AK | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,537:10:0 |      |
| 1326 | 0  | 364 | 01:58:59.800 | 117G105A106A4AL | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,537:35:0 |      |
| 1327 | 0  | 364 | 01:59:06.466 |                 | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2193.22 +/- 2  | 2R3 | 4  | 0  | 5,841,537:45:0 |      |
| 1328 | 0  | 364 | 01:59:06.466 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,537:45:0 |      |
| 1329 | 0  | 364 | 01:59:07.866 |                 | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2193.34 +/- 2   | 2R3 | 4  | 0  | 5,841,537:47:1 |      |
| 1330 | 0  | 364 | 01:59:13.133 |                 | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2194.58 +/- 2   | 2R3 | 4  | 0  | 5,841,537:55:0 |      |
| 1331 | 0  | 364 | 01:59:14.333 |                 | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2194.64 +/- 2 | 2R3 | 4  | 0  | 5,841,537:56:8 |      |
| 1332 | 0  | 364 | 01:59:15.733 |                 | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2194.52 +/- 2   | 2R3 | 4  | 0  | 5,841,537:58:9 |      |
| 1333 | 0  | 364 | 01:59:34.466 |                 | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2190.13 +/- 2   | 2R3 | 4  | 0  | 5,841,537:87:0 |      |
| 1334 | 0  | 364 | 01:59:57.133 | 50ZZ6RD         | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,538:30:0 |      |
| 1335 | 0  | 364 | 01:59:57.133 |                 | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2184.81 +/- 2   | 2R3 | 4  | 0  | 5,841,538:30:0 |      |
| 1336 | 0  | 364 | 01:59:58.333 |                 | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2184.75 +/- 2  | 2R3 | 4  | 0  | 5,841,538:31:8 |      |
| 1337 | 0  | 364 | 02:01:49.800 | 117G105A106A4AL | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,540:17:0 |      |
| 1338 | 0  | 364 | 02:02:06.466 | 117G105A106A4AM | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,540:42:0 |      |
| 1339 | 0  | 364 | 02:04:56.466 | 117G105A106A4AN | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,543:24:0 |      |
| 1340 | 0  | 364 | 02:05:13.133 | 117G105A106A4AO | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,543:49:0 |      |
| 1341 | 0  | 364 | 02:08:03.133 | 117G105A106A4AP | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,546:31:0 |      |
| 1342 | 0  | 364 | 02:08:19.800 | 117G105A106A4AQ | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,546:56:0 |      |
| 1343 | 0  | 364 | 02:11:09.800 | 117G105A106A4AR | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,549:38:0 |      |
| 1344 | 0  | 364 | 02:11:26.466 | 117G105A106A4AS | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,549:63:0 |      |
| 1345 | 0  | 364 | 02:13:31.133 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,551:68:0 |      |
| 1346 | 0  | 364 | 02:13:31.133 |                 | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2184.75 +/- 2  | 2R3 | 4  | 0  | 5,841,551:68:0 |      |
| 1347 | 0  | 364 | 02:13:32.533 |                 | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2184.87 +/- 2   | 2R3 | 4  | 0  | 5,841,551:70:1 |      |
| 1348 | 0  | 364 | 02:13:37.800 |                 | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2186.11 +/- 2   | 2R3 | 4  | 0  | 5,841,551:78:0 |      |
| 1349 | 0  | 364 | 02:13:39.000 |                 | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2186.17 +/- 2 | 2R3 | 4  | 0  | 5,841,551:79:8 |      |
| 1350 | 0  | 364 | 02:13:40.400 |                 | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2186.05 +/- 2   | 2R3 | 4  | 0  | 5,841,551:81:9 |      |
| 1351 | 0  | 364 | 02:13:59.133 |                 | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2181.66 +/- 2   | 2R3 | 4  | 0  | 5,841,552:19:0 |      |
| 1352 | 0  | 364 | 02:14:16.466 | 117G105A106A4AT | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,552:45:0 |      |
| 1353 | 0  | 364 | 02:14:21.800 |                 | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2176.35 +/- 2   | 2R3 | 4  | 0  | 5,841,552:53:0 |      |
| 1354 | 0  | 364 | 02:14:21.800 | 50ZZ6RE         | 6DMSC   | RDY,0            | DMS Control Tape stop                  | 2R3 | 4  | 0  | 5,841,552:53:0 |      |
| 1355 | 0  | 364 | 02:14:23.000 |                 | DMS:    | : *READY         | RDY, TRACK 2, REV, TIC *2176.29 +/- 2  | 2R3 | 4  | 0  | 5,841,552:54:8 |      |
| 1356 | 0  | 364 | 02:14:33.133 | 117G105A106A4AU | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,552:70:0 |      |
| 1357 | 0  | 364 | 02:17:23.133 | 117G105A106A4AV | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,555:52:0 |      |
| 1358 | 0  | 364 | 02:17:39.800 | 117G105A106A4AW | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,555:77:0 |      |
| 1359 | 0  | 364 | 02:20:29.800 | 117G105A106A4AX | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,558:59:0 |      |
| 1360 | 0  | 364 | 02:20:46.466 | 117G105A106A4AY | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,558:84:0 |      |
| 1361 | 0  | 364 | 02:23:36.466 | 117G105A106A4AZ | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,561:66:0 |      |
| 1362 | 0  | 364 | 02:23:53.133 | 117G105A106A4BA | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,562:00:0 |      |
| 1363 | 0  | 364 | 02:25:20.466 | 488AH6C         | 6TMSED  | NORM,AH4         | Sci, Eng, and D/L Chan                 | 2R3 | 4  | 0  | 5,841,563:40:0 |      |
| 1364 | 0  | 364 | 02:26:43.133 | 117G105A106A4BB | 7STRP   | 0.011,0.050774,0 | Slew =12.01                            | 2R3 | 4  | 0  | 5,841,564:73:0 |      |
| 1365 | 0  | 364 | 02:26:59.800 | 117G105A106A4BC | 7STRP   | -0.006,-0.051045 | Slew = 0.31                            | 2R3 | 4  | 0  | 5,841,565:07:0 |      |
| 1366 | 0  | 364 | 02:27:55.800 |                 | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 2176.29 +/- 2  | 2R3 | 4  | 0  | 5,841,566:00:0 |      |
| 1367 | 0  | 364 | 02:27:55.800 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps         | 2R3 | 4  | 0  | 5,841,566:00:0 |      |
| 1368 | 0  | 364 | 02:27:57.200 |                 | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *2176.41 +/- 2   | 2R3 | 4  | 0  | 5,841,566:02:1 |      |
| 1369 | 0  | 364 | 02:28:02.466 |                 | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *2177.64 +/- 2   | 2R3 | 4  | 0  | 5,841,566:10:0 |      |
| 1370 | 0  | 364 | 02:28:03.666 |                 | DMS:    | : *RUNUP         | R7, TRACK *2, *REV, TIC *2177.70 +/- 2 | 2R3 | 4  | 0  | 5,841,566:11:8 |      |
| 1371 | 0  | 364 | 02:28:05.066 |                 | DMS:    | : *AT_SPD        | R7, TRACK 2, REV, TIC *2177.58 +/- 2   | 2R3 | 4  | 0  | 5,841,566:13:9 |      |
| 1372 | 0  | 364 | 02:28:23.800 |                 | DMS:    | : *RECORD        | R7, TRACK 2, REV, TIC *2173.19 +/- 2   | 2R3 | 4  | 0  | 5,841,566:42:0 |      |
| 1373 | 0  | 364 | 02:28:46.466 |                 | DMS:    | : *RUNDOWN       | R7, TRACK 2, REV, TIC *2167.88 +/- 2   | 2R3 | 4  | 0  | 5,841,566:76:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID             | Command Parameters     | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|------------------|------------------------|--|-----|----|----------------|----------------|------|
| 1374 | 0  | 364 | 02:28:46.466 | 50ZZ6RD          | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,566:76:0 |      |
| 1375 | 0  | 364 | 02:28:47.666 |                  | DMS: : *READY          | RDY, TRACK 2, REV, TIC *2167.82 +/- 2      | 2R3 | 4  | 0              | 5,841,566:77:8 |      |
| 1376 | 0  | 364 | 02:29:49.800 | 117G1105A106A4BD | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,567:80:0 |      |
| 1377 | 0  | 364 | 02:30:06.466 | 117G1105A106A4BE | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,568:14:0 |      |
| 1378 | 0  | 364 | 02:32:56.466 | 117G1105A106A4BF | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,570:87:0 |      |
| 1379 | 0  | 364 | 02:33:13.133 | 117G1105A106A4BG | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,571:21:0 |      |
| 1380 | 0  | 364 | 02:36:03.133 | 117G1105A106A4BH | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,574:03:0 |      |
| 1381 | 0  | 364 | 02:36:19.800 | 117G1105A106A4BI | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,574:28:0 |      |
| 1382 | 0  | 364 | 02:39:09.800 | 117G1105A106A4BJ | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,577:10:0 |      |
| 1383 | 0  | 364 | 02:39:26.466 | 117G1105A106A4BK | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,577:35:0 |      |
| 1384 | 0  | 364 | 02:42:16.466 | 117G1105A106A4BL | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,580:17:0 |      |
| 1385 | 0  | 364 | 02:42:19.800 | 50ZZ6XX          | 6DMSC R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,580:22:0 |      |
| 1386 | 0  | 364 | 02:42:19.800 |                  | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2167.82 +/- 2      | 2R3 | 4  | 0              | 5,841,580:22:0 |      |
| 1387 | 0  | 364 | 02:42:21.200 |                  | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2167.94 +/- 2       | 2R3 | 4  | 0              | 5,841,580:24:1 |      |
| 1388 | 0  | 364 | 02:42:26.466 |                  | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2169.17 +/- 2       | 2R3 | 4  | 0              | 5,841,580:32:0 |      |
| 1389 | 0  | 364 | 02:42:27.666 |                  | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2169.23 +/- 2     | 2R3 | 4  | 0              | 5,841,580:33:8 |      |
| 1390 | 0  | 364 | 02:42:29.066 |                  | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC *2169.11 +/- 2       | 2R3 | 4  | 0              | 5,841,580:35:9 |      |
| 1391 | 0  | 364 | 02:42:33.133 | 117G1105A106A4BM | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,580:42:0 |      |
| 1392 | 0  | 364 | 02:42:47.800 |                  | DMS: : *RECORD         | R7, TRACK 2, REV, TIC *2164.72 +/- 2       | 2R3 | 4  | 0              | 5,841,580:64:0 |      |
| 1393 | 0  | 364 | 02:43:10.466 | 50ZZ6RE          | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,581:07:0 |      |
| 1394 | 0  | 364 | 02:43:10.466 |                  | DMS: : *RUNDOWN        | R7, TRACK 2, REV, TIC *2159.41 +/- 2       | 2R3 | 4  | 0              | 5,841,581:07:0 |      |
| 1395 | 0  | 364 | 02:43:11.666 |                  | DMS: : *READY          | RDY, TRACK 2, REV, TIC *2159.35 +/- 2      | 2R3 | 4  | 0              | 5,841,581:08:8 |      |
| 1396 | 0  | 364 | 02:45:23.133 | 117G1105A106A4BN | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,583:24:0 |      |
| 1397 | 0  | 364 | 02:45:39.800 | 117G1105A106A4BO | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,583:49:0 |      |
| 1398 | 0  | 364 | 02:48:29.800 | 117G1105A106A4BP | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,586:31:0 |      |
| 1399 | 0  | 364 | 02:48:46.466 | 117G1105A106A4BQ | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,586:56:0 |      |
| 1400 | 0  | 364 | 02:51:36.466 | 117G1105A106A4BR | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,589:38:0 |      |
| 1401 | 0  | 364 | 02:51:53.133 | 117G1105A106A4BS | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,589:63:0 |      |
| 1402 | 0  | 364 | 02:54:43.133 | 117G1105A106A4BT | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,592:45:0 |      |
| 1403 | 0  | 364 | 02:54:59.800 | 117G1105A106A4BU | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,592:70:0 |      |
| 1404 | 0  | 364 | 02:56:44.466 |                  | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2159.35 +/- 2      | 2R3 | 4  | 0              | 5,841,594:45:0 |      |
| 1405 | 0  | 364 | 02:56:44.466 | 50ZZ6XX          | 6DMSC R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,594:45:0 |      |
| 1406 | 0  | 364 | 02:56:45.866 |                  | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2159.47 +/- 2       | 2R3 | 4  | 0              | 5,841,594:47:1 |      |
| 1407 | 0  | 364 | 02:56:51.133 |                  | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2160.70 +/- 2       | 2R3 | 4  | 0              | 5,841,594:55:0 |      |
| 1408 | 0  | 364 | 02:56:52.333 |                  | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2160.76 +/- 2     | 2R3 | 4  | 0              | 5,841,594:56:8 |      |
| 1409 | 0  | 364 | 02:56:53.733 |                  | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC *2160.64 +/- 2       | 2R3 | 4  | 0              | 5,841,594:58:9 |      |
| 1410 | 0  | 364 | 02:57:12.466 |                  | DMS: : *RECORD         | R7, TRACK 2, REV, TIC *2156.25 +/- 2       | 2R3 | 4  | 0              | 5,841,594:87:0 |      |
| 1411 | 0  | 364 | 02:57:35.133 | 50ZZ6RD          | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,595:30:0 |      |
| 1412 | 0  | 364 | 02:57:35.133 |                  | DMS: : *RUNDOWN        | R7, TRACK 2, REV, TIC *2150.94 +/- 2       | 2R3 | 4  | 0              | 5,841,595:30:0 |      |
| 1413 | 0  | 364 | 02:57:36.333 |                  | DMS: : *READY          | RDY, TRACK 2, REV, TIC *2150.88 +/- 2      | 2R3 | 4  | 0              | 5,841,595:31:8 |      |
| 1414 | 0  | 364 | 02:57:49.800 | 117G1105A106A4BV | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,595:52:0 |      |
| 1415 | 0  | 364 | 02:58:06.466 | 117G1105A106A4BW | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,595:77:0 |      |
| 1416 | 0  | 364 | 03:00:56.466 | 117G1105A106A4BX | 7STRP 0.011,0.050774,0 | Slew = 12.01                               | 2R3 | 4  | 0              | 5,841,598:59:0 |      |
| 1417 | 0  | 364 | 03:01:13.133 | 117G1105A106A4BY | 7STRP -0.006,-0.051045 | Slew = 0.31                                | 2R3 | 4  | 0              | 5,841,598:84:0 |      |
| 1418 | 0  | 364 | 03:04:03.133 | 117G111A         | CSMOS GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,601:66:0 |      |
| 1419 | 0  | 364 | 03:04:34.000 | 29NNGRWAKE01-    | -----START-----        |  | 2R3 | 4  | 0              | :              |      |
| 1420 | 0  | 364 | 03:04:34.466 | 20DG5A           | 37PL                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,602:22:0 |                |      |
| 1421 | 0  | 364 | 03:04:35.800 | 20DG5B           | 37MRL                  | Memory Realocate (software operates from R | 4   | 0  | 5,841,602:24:0 |                |      |
| 1422 | 0  | 364 | 03:04:37.800 | 20DG6A           | 6MCOPY NIMS            | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,602:27:0 |                |      |
| 1423 | 0  | 364 | 03:04:47.800 | 20DG6B           | 6MCOPY NIMS            | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,602:42:0 |                |      |
| 1424 | 0  | 364 | 03:05:01.133 | 20DG5C           | 37IRT                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,602:62:0 |                |      |
| 1425 | 0  | 364 | 03:05:04.466 | 20DG5D           | 37MNI                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,602:67:0 |      |
| 1426 | 0  | 364 | 03:05:35.800 | 20DG4A           | 37IST                  | Chopper ON, Sync, Chopper (Ref)Gain State  | 2R0 | 4  | 0              | 5,841,603:23:0 |      |
| 1427 | 0  | 364 | 03:05:36.000 | 29NNGRWAKE01-    | -----STOP-----         |  | 2R0 | 4  | 0              | :              |      |
| 1428 | 0  | 364 | 03:05:50.466 | 176G16B          | 6TMREC                 | NO RECORD Record Mode Change               | 2R0 | 4  | 0              | 5,841,603:45:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                                  | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|------------------------|--|-----|----|----------------|----------------|------|
| 1429 | 0  | 364 | 03:05:52.466 |                 | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2150.88 +/- 2        | 2R0 | 4  | 0              | 5,841,603:48:0 |      |
| 1430 | 0  | 364 | 03:05:52.466 | 50ZZ6XX         | 6DMSC R7.0             | DMS Control Tape runup 7.68kps               | 2R0 | 4  | 0              | 5,841,603:48:0 |      |
| 1431 | 0  | 364 | 03:05:53.866 |                 | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2151.00 +/- 2         | 2R0 | 4  | 0              | 5,841,603:50:1 |      |
| 1432 | 0  | 364 | 03:05:59.133 |                 | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2152.23 +/- 2         | 2R0 | 4  | 0              | 5,841,603:58:0 |      |
| 1433 | 0  | 364 | 03:06:00.333 |                 | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2152.29 +/- 2       | 2R0 | 4  | 0              | 5,841,603:59:8 |      |
| 1434 | 0  | 364 | 03:06:01.733 |                 | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC *2152.17 +/- 2         | 2R0 | 4  | 0              | 5,841,603:61:9 |      |
| 1435 | 0  | 364 | 03:06:02.466 |                 | DMS: : *RECORD         | R7, TRACK 2, REV, TIC *2152.00 +/- 2         | 2R0 | 4  | 0              | 5,841,603:63:0 |      |
| 1436 | 0  | 364 | 03:06:19.133 | 50ZZ6RE         | 6DMSC RDY,0            | DMS Control Tape stop                        | 2R0 | 4  | 0              | 5,841,603:88:0 |      |
| 1437 | 0  | 364 | 03:06:19.133 |                 | DMS: : *RUNDOWN        | R7, TRACK 2, REV, TIC *2148.10 +/- 2         | 2R0 | 4  | 0              | 5,841,603:88:0 |      |
| 1438 | 0  | 364 | 03:06:20.333 |                 | DMS: : *READY          | RDY, TRACK 2, REV, TIC *2148.04 +/- 2        | 2R0 | 4  | 0              | 5,841,603:89:8 |      |
| 1439 | 0  | 364 | 03:06:20.466 | 165DG4A         | 75SCAN                 | NORM,355.964996, Check S/P Position          | 2R0 | 4  | 0              | 5,841,603:90:0 |      |
| 1440 | 0  | 364 | 03:06:25.133 | 29JNGRWAKE01-   | -----START-----        |  | 2R0 | 4  | 0              | :              |      |
| 1441 | 0  | 364 | 03:07:12.466 | 117DG           | CSMOS GS               | ***** GROUP START CSMOS                      | 2R0 | 4  | 0              | 5,841,604:77:0 |      |
| 1442 | 0  | 364 | 03:07:17.133 | 127DG4A         | 37IOP 3.0              | Long Map, Grating Start Position =00         | 2R3 | 4  | 0              | 5,841,604:84:0 |      |
| 1443 | 0  | 364 | 03:07:17.133 | 127DG           | NIMSTAB GS             | %%%%%% GROUP START TAB                       | 2R3 | 4  | 0              | 5,841,604:84:0 |      |
| 1444 | 0  | 364 | 03:07:17.800 | 127DG4B         | 37ETB                  | 07,C7,30,3C,D7,0 Loads wavelength edit table | 2R3 | 4  | 0              | 5,841,604:85:0 |      |
| 1445 | 0  | 364 | 03:07:21.133 |                 | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2148.04 +/- 2        | 2R3 | 4  | 0              | 5,841,604:90:0 |      |
| 1446 | 0  | 364 | 03:07:21.133 | 175DG422A6A     | 6DMSC R7.0             | DMS Control Tape runup 7.68kps               | 2R3 | 4  | 0              | 5,841,604:90:0 |      |
| 1447 | 0  | 364 | 03:07:21.800 | 117DG105A106A4A | 75TRP -0.00775,0.0012, | Slew =0.01                                   | 2R3 | 4  | 0              | 5,841,605:00:0 |      |
| 1448 | 0  | 364 | 03:07:22.533 |                 | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2148.16 +/- 2         | 2R3 | 4  | 0              | 5,841,605:01:1 |      |
| 1449 | 0  | 364 | 03:07:25.800 | 127DG11A        | NIMSTAB GE             | %%%%%% GROUP END TAB                         | 2R3 | 4  | 0              | 5,841,605:06:0 |      |
| 1450 | 0  | 364 | 03:07:27.800 |                 | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2149.39 +/- 2         | 2R3 | 4  | 0              | 5,841,605:09:0 |      |
| 1451 | 0  | 364 | 03:07:29.000 |                 | DMS: : *RUNUP          | R7, TRACK *2, *REV, TIC *2149.45 +/- 2       | 2R3 | 4  | 0              | 5,841,605:10:8 |      |
| 1452 | 0  | 364 | 03:07:29.800 | 175DG176A6A     | 6TMREC LPU             | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode    | 2R3 | 4  | 0              | 5,841,605:12:0 |      |
| 1453 | 0  | 364 | 03:07:30.400 |                 | DMS: : *AT_SPD         | R7, TRACK 2, REV, TIC 2149.33 +/- 2          | 2R3 | 4  | 0              | 5,841,605:12:9 |      |
| 1454 | 0  | 364 | 03:07:30.400 |                 | DMS: : *RECORD         | R7, TRACK 2, REV, TIC *2149.33 +/- 2         | 2R3 | 4  | 0              | 5,841,605:12:9 |      |
| 1455 | 0  | 364 | 03:07:31.133 | 29JNGRWAKE01-   | NIMPBK 301DG           | JUPITER GRS WAKE OBSERVATION                 | 2R3 | 4  | 0              | :              |      |
| 1456 | 0  | 364 | 03:20:22.466 | 117DG105A106A4B | 75TRP 0.027007,-0.009, | Slew =12.01                                  | 2R3 | 4  | 0              | 5,841,617:79:0 |      |
| 1457 | 0  | 364 | 03:20:34.466 | 117DG105A106A4C | 75TRP -0.00775,0.0012, | Slew =0.01                                   | 2R3 | 4  | 0              | 5,841,618:06:0 |      |
| 1458 | 0  | 364 | 03:26:38.466 | 29JNGRWAKE01-   | -----STOP-----         |  | 2R3 | 4  | 0              | :              |      |
| 1459 | 0  | 364 | 03:33:17.133 | 29JNGRWAKE01-   | DESEL 300DG            | JUPITER GRS WAKE OBSERVATION                 | 2R3 | 4  | 0              | :              |      |
| 1460 | 0  | 364 | 03:33:27.133 | 175DG422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                        | 2R3 | 4  | 0              | 5,841,630:73:0 |      |
| 1461 | 0  | 364 | 03:33:27.133 |                 | DMS: : *RUNDOWN        | R7, TRACK 2, REV, TIC *1784.47 +/- 2         | 2R3 | 4  | 0              | 5,841,630:73:0 |      |
| 1462 | 0  | 364 | 03:33:27.133 | 175DG6A         | 6TMREC NRC             | NO RECORD Record Mode Change                 | 2R3 | 4  | 0              | 5,841,630:73:0 |      |
| 1463 | 0  | 364 | 03:33:28.333 |                 | DMS: : *READY          | RDY, TRACK 2, REV, TIC *1784.41 +/- 2        | 2R3 | 4  | 0              | 5,841,630:74:8 |      |
| 1464 | 0  | 364 | 03:33:35.133 | 117DG11A        | CSMOS GE               | ***** GROUP END CSMOS                        | 2R3 | 4  | 0              | 5,841,630:85:0 |      |
| 1465 | 0  | 364 | 03:47:33.000 | 29NNIWATC02-    | -----START-----        |  | 2R3 | 4  | 0              | :              |      |
| 1466 | 0  | 364 | 03:47:33.800 | 20DH5A          | 37PL                   | Program Load (halts microprocessor & unwri   | 4   | 0  | 5,841,644:69:0 |                |      |
| 1467 | 0  | 364 | 03:47:41.133 | 20DH5B          | 37MRL                  | Memory Realocate (software operates from R   | 4   | 0  | 5,841,644:80:0 |                |      |
| 1468 | 0  | 364 | 03:47:49.133 | 20DH6A          | 6MCOPY NIMS            | NIMS,1000,LLM1A,7300,77F7                    | 4   | 0  | 5,841,645:01:0 |                |      |
| 1469 | 0  | 364 | 03:47:59.133 | 20DH6B          | 6MCOPY NIMS            | NIMS,1598,LLM1A,77F8,781D                    | 4   | 0  | 5,841,645:16:0 |                |      |
| 1470 | 0  | 364 | 03:48:09.133 | 20DH5C          | 37IRT                  | Instrument Reset (goes into POR state)       | 4   | 0  | 5,841,645:31:0 |                |      |
| 1471 | 0  | 364 | 03:48:10.466 | 20DH5D          | 37MN                   | Memory Normal (software operates from ROM)   | 260 | 4  | 0              | 5,841,645:33:0 |      |
| 1472 | 0  | 364 | 03:48:41.800 | 20DH4A          | 37IST 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)              | 2R0 | 4  | 0              | 5,841,645:80:0 |      |
| 1473 | 0  | 364 | 03:48:42.000 | 29NNIWATC02-    | -----STOP-----         |  | 2R0 | 4  | 0              | :              |      |
| 1474 | 0  | 364 | 03:48:48.466 | 165DH4A         | 75SCAN                 | NORM,356.681999, Check S/P Position          | 2R0 | 4  | 0              | 5,841,645:90:0 |      |
| 1475 | 0  | 364 | 03:48:53.133 | 29NNIWATC02-    | -----START-----        |  | 2R0 | 4  | 0              | :              |      |
| 1476 | 0  | 364 | 03:49:45.133 | 125DH4A         | 37IST 0,2,0,OFF,0,1,0  | Gain State 2                                 | 2R0 | 4  | 0              | 5,841,646:84:0 |      |
| 1477 | 0  | 364 | 03:49:45.133 | 125DH11A        | NIMSINIT GE            | ##### GROUP END INIT                         | 2R0 | 4  | 0              | 5,841,646:84:0 |      |
| 1478 | 0  | 364 | 03:49:45.133 | 125DH           | NIMSINIT GS            | ##### GROUP START INIT                       | 2R0 | 4  | 0              | 5,841,646:84:0 |      |
| 1479 | 0  | 364 | 03:50:45.800 | 127DH           | NIMSTAB GS             | %%%%%% GROUP START TAB                       | 2R0 | 4  | 0              | 5,841,647:84:0 |      |
| 1480 | 0  | 364 | 03:50:45.800 | 127DH4A         | 37IOP 3.0              | Long Map, Grating Start Position =00         | 2R3 | 4  | 0              | 5,841,647:84:0 |      |
| 1481 | 0  | 364 | 03:50:46.466 | 127DH4B         | 37ETB 04,C4,35,FF,FF   | Loads wavelength edit table                  | 2R3 | 4  | 0              | 5,841,647:85:0 |      |
| 1482 | 0  | 364 | 03:50:54.466 | 127DH11A        | NIMSTAB GE             | %%%%%% GROUP END TAB                         | 2R3 | 4  | 0              | 5,841,648:06:0 |      |
| 1483 | 0  | 364 | 03:52:37.133 | 175DH422A6A     | 6DMSC R28.0            | DMS Control Tape runup 28.8kbp               | 2R3 | 4  | 0              | 5,841,649:69:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|--|-----|----|----------------|----------------|------|
| 1484 | 0  | 364 | 03:52:37.133 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1,*FWD, TIC 1784.41 +/- 2       | 2R3 | 4  | 0              | 5,841,649:69:0 |      |
| 1485 | 0  | 364 | 03:52:38.533 |                 | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *1784.53 +/- 2       | 2R3 | 4  | 0              | 5,841,649:71:1 |      |
| 1486 | 0  | 364 | 03:52:42.466 | 117DH           | CSMOS   | GS               | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,841,649:77:0 |      |
| 1487 | 0  | 364 | 03:52:43.800 |                 | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *1785.77 +/- 2       | 2R3 | 4  | 0              | 5,841,649:79:0 |      |
| 1488 | 0  | 364 | 03:52:45.000 |                 | DMS:    | :*RUNUP          | R28, TRACK *2,*REV, TIC *1785.83 +/- 2     | 2R3 | 4  | 0              | 5,841,649:80:8 |      |
| 1489 | 0  | 364 | 03:52:48.466 | 175DH176A6A     | 6TMREC  | MPW              | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 2R3 | 4  | 0              | 5,841,649:86:0 |      |
| 1490 | 0  | 364 | 03:52:49.000 |                 | DMS:    | :*RECORD         | R28, TRACK 2, REV, TIC *1784.33 +/- 2      | 2R3 | 4  | 0              | 5,841,649:86:8 |      |
| 1491 | 0  | 364 | 03:52:49.000 |                 | DMS:    | :*AT_SPD         | R28, TRACK 2, REV, TIC 1784.33 +/- 2       | 2R3 | 4  | 0              | 5,841,649:86:8 |      |
| 1492 | 0  | 364 | 03:52:50.466 | 165DH4B         | 7VECT   |                  | Inert vect update UTC                      | 2R3 | 4  | 0              | 5,841,649:89:0 |      |
| 1493 | 0  | 364 | 03:52:51.800 | 29NIWAT02-      | NIMPBK  | 301DH            | IO MONITOR OBSERVATION                     | 2R3 | 4  | 0              | :              |      |
| 1494 | 0  | 364 | 03:52:51.800 | 117DH105A106A4A | 75TRP   | -0.0052,0.0,0.0, | Slew =,0.03                                | 2R3 | 4  | 0              | 5,841,650:00:0 |      |
| 1495 | 0  | 364 | 03:55:50.466 | 117DH11A        | CSMOS   | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,652:86:0 |      |
| 1496 | 0  | 364 | 03:55:57.799 | 29NIWAT02-      |         | -----STOP-----   |  | 2R3 | 4  | 0              | :              |      |
| 1497 | 0  | 364 | 03:55:59.133 | 29NIWAT02-      | DESELC  | 300DH            | IO MONITORING OBSERVATION                  | 2R3 | 4  | 0              | :              |      |
| 1498 | 0  | 364 | 03:56:01.800 |                 | DMS:    | :*RUNDOWN        | R28, TRACK 2, REV, TIC *1614.87 +/- 2      | 2R3 | 4  | 0              | 5,841,653:12:0 |      |
| 1499 | 0  | 364 | 03:56:01.800 | 175DH422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,653:12:0 |      |
| 1500 | 0  | 364 | 03:56:03.000 |                 | DMS:    | :*READY          | RDY, TRACK 2, REV, TIC *1614.57 +/- 2      | 2R3 | 4  | 0              | 5,841,653:13:8 |      |
| 1501 | 0  | 364 | 03:56:39.000 | 29NNGRWAKE02-   |         | -----START-----  |  | 2R3 | 4  | 0              | :              |      |
| 1502 | 0  | 364 | 03:56:39.800 | 20DI5A          | 37PL    |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,653:69:0 |                |      |
| 1503 | 0  | 364 | 03:56:47.133 | 20DI5B          | 37MRL   |                  | Memory Realocate (software operates from R | 4   | 0  | 5,841,653:80:0 |                |      |
| 1504 | 0  | 364 | 03:56:55.133 | 20DI6A          | 6MCOPY  | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,654:01:0 |                |      |
| 1505 | 0  | 364 | 03:57:05.133 | 20DI6B          | 6MCOPY  | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,654:16:0 |                |      |
| 1506 | 0  | 364 | 03:57:15.133 | 20DI5C          | 37IRT   |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,654:31:0 |                |      |
| 1507 | 0  | 364 | 03:57:16.466 | 20DI5D          | 37MN    |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,654:33:0 |      |
| 1508 | 0  | 364 | 03:57:47.800 | 20DI4A          | 37IST   | 1,2,0,OFF,0,1,0  | Chopper ON, Sync, Chopper (RefGain State   | 2R0 | 4  | 0              | 5,841,654:80:0 |      |
| 1509 | 0  | 364 | 03:58:51.133 | 127DI4A         | 37IOP   | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,655:84:0 |      |
| 1510 | 0  | 364 | 03:58:51.133 | 127DI           | NIMSTAB | GS               | %%%%%%%% GROUP START TAB                   | 2R3 | 4  | 0              | 5,841,655:84:0 |      |
| 1511 | 0  | 364 | 03:58:51.800 | 127DI4B         | 37ETB   | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,655:85:0 |      |
| 1512 | 0  | 364 | 03:58:52.000 | 29NNGRWAKE02-   |         | -----STOP-----   |  | 2R3 | 4  | 0              | :              |      |
| 1513 | 0  | 364 | 03:58:55.133 | 165DI4A         | 75CAN   | NORM,339.910999, | Check S/P Position                         | 2R3 | 4  | 0              | 5,841,655:90:0 |      |
| 1514 | 0  | 364 | 03:58:59.800 | 127DI11A        | NIMSTAB | GE               | %%%%%%%% GROUP END TAB                     | 2R3 | 4  | 0              | 5,841,656:06:0 |      |
| 1515 | 0  | 364 | 03:59:44.466 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1,*FWD, TIC 1614.57 +/- 2       | 2R3 | 4  | 0              | 5,841,656:73:0 |      |
| 1516 | 0  | 364 | 03:59:44.466 | 175DI422A6A     | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,656:73:0 |      |
| 1517 | 0  | 364 | 03:59:45.866 |                 | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *1614.69 +/- 2       | 2R3 | 4  | 0              | 5,841,656:75:1 |      |
| 1518 | 0  | 364 | 03:59:47.133 | 117DI           | CSMOS   | GS               | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,841,656:77:0 |      |
| 1519 | 0  | 364 | 03:59:51.133 |                 | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *1615.93 +/- 2       | 2R3 | 4  | 0              | 5,841,656:83:0 |      |
| 1520 | 0  | 364 | 03:59:52.333 |                 | DMS:    | :*RUNUP          | R7, TRACK *2,*REV, TIC *1615.99 +/- 2      | 2R3 | 4  | 0              | 5,841,656:84:8 |      |
| 1521 | 0  | 364 | 03:59:53.133 | 175DI176A6A     | 6TMREC  | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R3 | 4  | 0              | 5,841,656:86:0 |      |
| 1522 | 0  | 364 | 03:59:53.733 |                 | DMS:    | :*AT_SPD         | R7, TRACK 2, REV, TIC 1615.87 +/- 2        | 2R3 | 4  | 0              | 5,841,656:86:9 |      |
| 1523 | 0  | 364 | 03:59:53.733 |                 | DMS:    | :*RECORD         | R7, TRACK 2, REV, TIC *1615.87 +/- 2       | 2R3 | 4  | 0              | 5,841,656:86:9 |      |
| 1524 | 0  | 364 | 03:59:55.800 | 29JNGRWAKE02-   | NIMPBK  | 301DI            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1525 | 0  | 364 | 03:59:56.466 | 117DI105A106A4A | 75TRP   | -0.00415,0.001,0 | Slew =,0.01                                | 2R3 | 4  | 0              | 5,841,657:00:0 |      |
| 1526 | 0  | 364 | 04:00:00.466 | 29JNGRWAKE02-   |         | -----START-----  |  | 2R3 | 4  | 0              | :              |      |
| 1527 | 0  | 364 | 04:05:07.133 | 29JNGRWAKE02-   | NIMPBK  | 301EJ            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1528 | 0  | 364 | 04:06:53.800 | 29JNGRWAKE02-   | DESELC  | 300EJ            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1529 | 0  | 364 | 04:06:55.133 | 117DI105A106A4B | 75TRP   | 0.017502,-0.007, | Slew =12.01                                | 2R3 | 4  | 0              | 5,841,663:82:0 |      |
| 1530 | 0  | 364 | 04:07:07.133 | 117DI105A106A4C | 75TRP   | -0.00415,0.001,0 | Slew =,0.01                                | 2R3 | 4  | 0              | 5,841,664:09:0 |      |
| 1531 | 0  | 364 | 04:08:51.800 | 29JNGRWAKE02-   | NIMPBK  | 301DJ            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1532 | 0  | 364 | 04:09:17.800 | 29JNGRWAKE02-   | DESELC  | 300DJ            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1533 | 0  | 364 | 04:09:43.800 | 29JNGRWAKE02-   | NIMPBK  | 301DK            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1534 | 0  | 364 | 04:10:18.466 | 29JNGRWAKE02-   | DESELC  | 300DK            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1535 | 0  | 364 | 04:11:01.800 | 29JNGRWAKE02-   | NIMPBK  | 301DL            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1536 | 0  | 364 | 04:12:15.800 | 29JNGRWAKE02-   | DESELC  | 300DL            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1537 | 0  | 364 | 04:14:03.800 | 29JNGRWAKE02-   | DESELC  | 300DI            | JUPITER GRS WAKE OBSERVATION               | 2R3 | 4  | 0              | :              |      |
| 1538 | 0  | 364 | 04:14:05.800 | 117DI11A        | CSMOS   | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,671:00:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters      | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|-------------------------|--|-----|----|----------------|----------------|------|
| 1539 | 0  | 364 | 04:14:13.800 |                 | DMS: *RUNDOWN           | R7, TRACK 2, REV, TIC *1414.29 +/- 2       | 2R3 | 4  | 0              | 5,841,671:12:0 |      |
| 1540 | 0  | 364 | 04:14:13.800 | 175DI6A         | 6TMREC NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0              | 5,841,671:12:0 |      |
| 1541 | 0  | 364 | 04:14:13.800 | 175DI422A6B     | 6DMSC RDY,0             | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,671:12:0 |      |
| 1542 | 0  | 364 | 04:14:15.000 |                 | DMS: *READY             | RDY, TRACK 2, REV, TIC *1414.23 +/- 2      | 2R3 | 4  | 0              | 5,841,671:13:8 |      |
| 1543 | 0  | 364 | 04:18:07.800 | 165DJ4A         | 7SCAN NORM,342.389999,  | Check S/P Position                         | 2R3 | 4  | 0              | 5,841,674:90:0 |      |
| 1544 | 0  | 364 | 04:18:12.466 | 29JNNEBRLT01-   | -----START-----         |  | 2R3 | 4  | 0              | :              |      |
| 1545 | 0  | 364 | 04:18:12.466 | 29JNGRWAKE02-   | -----STOP-----          |  | 2R3 | 4  | 0              | :              |      |
| 1546 | 0  | 364 | 04:18:59.800 | 117DJ           | CSMOS GS                | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,841,675:77:0 |      |
| 1547 | 0  | 364 | 04:19:09.133 | 117DJ105A106A4A | 7STRP -0.00835,-0.0015  | Slew =0.01                                 | 2R3 | 4  | 0              | 5,841,676:00:0 |      |
| 1548 | 0  | 364 | 04:20:05.133 | 127DJ           | NIMSTAB GS              | %%/%/% GROUP START TAB                     | 2R3 | 4  | 0              | 5,841,676:84:0 |      |
| 1549 | 0  | 364 | 04:20:05.133 | 127DJ4A         | 37IOP 3.0               | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,676:84:0 |      |
| 1550 | 0  | 364 | 04:20:05.800 | 127DJ4B         | 37ETB 07,C7,1A,3C,D7,1  | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,676:85:0 |      |
| 1551 | 0  | 364 | 04:20:13.800 | 127DJ11A        | NIMSTAB GE              | %%/%/% GROUP END TAB                       | 2R3 | 4  | 0              | 5,841,677:06:0 |      |
| 1552 | 0  | 364 | 04:21:05.800 | 125DJ4A         | 37IST 0.2,0,OFF,0,1,0   | Gain State 2                               | 2R3 | 4  | 0              | 5,841,677:84:0 |      |
| 1553 | 0  | 364 | 04:21:05.800 | 125DJ           | NIMSINIT GS             | ##### GROUP START INIT                     | 2R3 | 4  | 0              | 5,841,677:84:0 |      |
| 1554 | 0  | 364 | 04:21:14.466 | 432DJ6A         | 6RTSL2 NIMSEL,AACNCG,RT | NIMS R/T SELECT                            | 2R3 | 4  | 0              | 5,841,678:06:0 |      |
| 1555 | 0  | 364 | 04:22:06.466 | 125DJ4B         | 37MB 11,1,0,0,0,0       | Selects mirror (spatial) edit table        | 2R3 | 4  | 0              | 5,841,678:84:0 |      |
| 1556 | 0  | 364 | 04:22:06.466 | 125DJ11A        | NIMSINIT GE             | ##### GROUP END INIT                       | 2R3 | 4  | 0              | 5,841,678:84:0 |      |
| 1557 | 0  | 364 | 04:31:19.800 | 432EJ6A         | 6RTDS2 NIMDSL,AACNCG,RT | NIMS R/T DESELECT                          | 2R3 | 4  | 0              | 5,841,688:04:0 |      |
| 1558 | 0  | 364 | 04:33:11.133 | 117DJ11A        | CSMOS GE                | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,689:80:0 |      |
| 1559 | 0  | 364 | 04:33:22.466 | 29JNNEBRLT01-   | -----STOP-----          |  | 2R3 | 4  | 0              | :              |      |
| 1560 | 0  | 364 | 04:40:08.000 | 29NNNTZRLT01-   | -----START-----         |  | 2R3 | 4  | 0              | :              |      |
| 1561 | 0  | 364 | 04:40:08.466 | 20DK5A          | 37PL                    | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,696:69:0 |                |      |
| 1562 | 0  | 364 | 04:40:15.800 | 20DK5B          | 37MRL                   | Memory Realocate (software operates from R | 4   | 0  | 5,841,696:80:0 |                |      |
| 1563 | 0  | 364 | 04:40:23.800 | 20DK6A          | 6MCPY NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,697:01:0 |                |      |
| 1564 | 0  | 364 | 04:40:33.800 | 20DK6B          | 6MCPY NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,697:16:0 |                |      |
| 1565 | 0  | 364 | 04:40:43.800 | 20DK5C          | 37IRT                   | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,697:31:0 |                |      |
| 1566 | 0  | 364 | 04:40:45.133 | 20DK5D          | 37MN                    | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,697:33:0 |      |
| 1567 | 0  | 364 | 04:41:16.466 | 20DK4A          | 37IST 1,2,0,OFF,0,0,0   | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,697:80:0 |      |
| 1568 | 0  | 364 | 04:41:17.000 | 29NNNTZRLT01-   | -----STOP-----          |  | 2R0 | 4  | 0              | :              |      |
| 1569 | 0  | 364 | 04:43:20.466 | 125DK4A         | 37IST 0.2,0,OFF,0,1,0   | Gain State 2                               | 2R0 | 4  | 0              | 5,841,699:84:0 |      |
| 1570 | 0  | 364 | 04:43:20.466 | 125DK           | NIMSINIT GS             | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,699:84:0 |      |
| 1571 | 0  | 364 | 04:43:24.466 | 165DK4A         | 7SCAN NORM,347.617996,  | Check S/P Position                         | 2R0 | 4  | 0              | 5,841,699:90:0 |      |
| 1572 | 0  | 364 | 04:43:29.132 | 29JNNTZRLT01-   | -----START-----         |  | 2R0 | 4  | 0              | :              |      |
| 1573 | 0  | 364 | 04:44:16.466 | 117DK           | CSMOS GS                | ***** GROUP START CSMOS                    | 2R0 | 4  | 0              | 5,841,700:77:0 |      |
| 1574 | 0  | 364 | 04:44:21.133 | 125DK4B         | 37MB 11,1,0,0,0,0       | Selects mirror (spatial) edit table        | 2R0 | 4  | 0              | 5,841,700:84:0 |      |
| 1575 | 0  | 364 | 04:44:21.133 | 125DK11A        | NIMSINIT GE             | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,700:84:0 |      |
| 1576 | 0  | 364 | 04:44:25.800 | 117DK105A106A4A | 7STRP -0.0084,0.0,0,0,  | Slew =0.01                                 | 2R0 | 4  | 0              | 5,841,701:00:0 |      |
| 1577 | 0  | 364 | 04:45:21.800 | 127DK4A         | 37IOP 3.0               | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,701:84:0 |      |
| 1578 | 0  | 364 | 04:45:21.800 | 127DK           | NIMSTAB GS              | %%/%/% GROUP START TAB                     | 2R3 | 4  | 0              | 5,841,701:84:0 |      |
| 1579 | 0  | 364 | 04:45:22.466 | 127DK4B         | 37ETB 07,C7,1A,3C,D7,1  | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,701:85:0 |      |
| 1580 | 0  | 364 | 04:45:30.466 | 127DK11A        | NIMSTAB GE              | %%/%/% GROUP END TAB                       | 2R3 | 4  | 0              | 5,841,702:06:0 |      |
| 1581 | 0  | 364 | 04:46:31.133 | 432DK6A         | 6RTSL2 NIMSEL,AACNCG,RT | NIMS R/T SELECT                            | 2R3 | 4  | 0              | 5,841,703:06:0 |      |
| 1582 | 0  | 364 | 04:56:36.466 | 432EK6A         | 6RTDS2 NIMDSL,AACNCG,RT | NIMS R/T DESELECT                          | 2R3 | 4  | 0              | 5,841,713:04:0 |      |
| 1583 | 0  | 364 | 04:58:29.800 | 117DK11A        | CSMOS GE                | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,841,714:83:0 |      |
| 1584 | 0  | 364 | 04:58:39.132 | 29JNNTZRLT01-   | -----STOP-----          |  | 2R3 | 4  | 0              | :              |      |
| 1585 | 0  | 364 | 04:59:59.800 | 488AH6D         | NORM,AL4                | Sci, Eng, and D/L Chan                     | 2R3 | 4  | 0              | 5,841,716:36:0 |      |
| 1586 | 0  | 364 | 05:00:21.000 | 29NNNTZRLT01-   | -----START-----         |  | 2R3 | 4  | 0              | :              |      |
| 1587 | 0  | 364 | 05:00:21.800 | 20DL5A          | 37PL                    | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,716:69:0 |                |      |
| 1588 | 0  | 364 | 05:00:29.133 | 20DL5B          | 37MRL                   | Memory Realocate (software operates from R | 4   | 0  | 5,841,716:80:0 |                |      |
| 1589 | 0  | 364 | 05:00:37.133 | 20DL6A          | 6MCPY NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,717:01:0 |                |      |
| 1590 | 0  | 364 | 05:00:47.133 | 20DL6B          | 6MCPY NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,717:16:0 |                |      |
| 1591 | 0  | 364 | 05:00:57.133 | 20DL5C          | 37IRT                   | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,717:31:0 |                |      |
| 1592 | 0  | 364 | 05:00:58.466 | 20DL5D          | 37MN                    | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,717:33:0 |      |
| 1593 | 0  | 364 | 05:01:29.800 | 20DL4A          | 37IST 1,2,0,OFF,0,0,0   | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,717:80:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 1594 | 0  | 364 | 05:01:30.000 | 29NNSTZRLT01-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              | :    |
| 1595 | 0  | 364 | 05:03:33.800 | 125DL4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,841,719:84:0 |      |
| 1596 | 0  | 364 | 05:03:33.800 | 125DL           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,719:84:0 |      |
| 1597 | 0  | 364 | 05:03:37.800 | 165DL4A         | 7SCAN    | NORM,351.030998, | Check S/P Position                         | 2R0 | 4  | 0              | 5,841,719:90:0 |      |
| 1598 | 0  | 364 | 05:03:42.466 | 29JNSTZRLT01-   |          | -----START-----  |  | 2R0 | 4  | 0              | :              | :    |
| 1599 | 0  | 364 | 05:04:29.800 | 117DL           | CSMOS    | GS               | **** GROUP START CSMOS                     | 2R0 | 4  | 0              | 5,841,720:77:0 |      |
| 1600 | 0  | 364 | 05:04:34.466 | 125DL4B         | 37MB     | 11,11,0,0,0,0    | Selects mirror (spatial) edit table        | 2R0 | 4  | 0              | 5,841,720:84:0 |      |
| 1601 | 0  | 364 | 05:04:34.466 | 125DL11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,720:84:0 |      |
| 1602 | 0  | 364 | 05:04:39.133 | 117DL105A106A4A | 7STRP    | -0.0084,0.002,0, | Slew = 0.01                                | 2R0 | 4  | 0              | 5,841,721:00:0 |      |
| 1603 | 0  | 364 | 05:05:35.133 | 127DL           | NIMSTAB  | GS               | %% %% % GROUP START TAB                    | 2R0 | 4  | 0              | 5,841,721:84:0 |      |
| 1604 | 0  | 364 | 05:05:35.133 | 127DL4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,721:84:0 |      |
| 1605 | 0  | 364 | 05:05:35.800 | 127DL4B         | 37ETB    | 07,C7,1A,3C,D7,1 | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,721:85:0 |      |
| 1606 | 0  | 364 | 05:05:43.800 | 127DL11A        | NIMSTAB  | GE               | %% %% % GROUP END TAB                      | 2R3 | 4  | 0              | 5,841,722:06:0 |      |
| 1607 | 0  | 364 | 05:06:44.466 | 432DL6A         | 6RTSL2   | NIMSEL,AACNCG,RT | NIMS R/T SELECT                            | 2R3 | 4  | 0              | 5,841,723:06:0 |      |
| 1608 | 0  | 364 | 05:14:59.800 | 480SD6A         | 6MROH    | 44,23E8,0,A2     | read from LLM2A44,23E8,0,A2                | 2R3 | 4  | 0              | 5,841,731:21:0 |      |
| 1609 | 0  | 364 | 05:16:49.800 | 432EL6A         | 6RTDS2   | NIMDSL,AACNCG,RT | NIMS R/T DESELECT                          | 2R3 | 4  | 0              | 5,841,733:04:0 |      |
| 1610 | 0  | 364 | 05:18:45.133 | 117DL11A        | CSMOS    | GE               | **** GROUP END CSMOS                       | 2R3 | 4  | 0              | 5,841,734:86:0 |      |
| 1611 | 0  | 364 | 05:18:52.466 | 29JNSTZRLT01-   |          | -----STOP-----   |  | 2R3 | 4  | 0              | :              | :    |
| 1612 | 0  | 364 | 05:21:35.000 | 29NNHTSPOT01-   |          | -----START-----  |  | 2R3 | 4  | 0              | :              | :    |
| 1613 | 0  | 364 | 05:21:35.800 | 20DM5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,737:69:0 |                |      |
| 1614 | 0  | 364 | 05:21:39.800 | 480SD6B         | 6MROH    | 45,23E8,0,B2     | read from LLM2B45,23E8,0,B2                | 4   | 0  | 5,841,737:75:0 |                |      |
| 1615 | 0  | 364 | 05:21:43.133 | 20DM5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,841,737:80:0 |                |      |
| 1616 | 0  | 364 | 05:21:51.133 | 20DM6A          | 6MCOPI   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,738:01:0 |                |      |
| 1617 | 0  | 364 | 05:22:01.133 | 20DM6B          | 6MCOPI   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,738:16:0 |                |      |
| 1618 | 0  | 364 | 05:22:11.133 | 20DM5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,738:31:0 |                |      |
| 1619 | 0  | 364 | 05:22:12.466 | 20DM5D          | 37MIN    |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,738:33:0 |      |
| 1620 | 0  | 364 | 05:22:43.800 | 20DM4A          | 37IST    | 1,2,0,OFF,0,1,0  | Chopper ON, Sync, Chopper (Ref)Gain State  | 2R0 | 4  | 0              | 5,841,738:80:0 |      |
| 1621 | 0  | 364 | 05:22:44.000 | 29NNHTSPOT01-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              | :    |
| 1622 | 0  | 364 | 05:23:47.133 | 127DM4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,739:84:0 |      |
| 1623 | 0  | 364 | 05:23:47.133 | 127DM           | NIMSTAB  | GS               | %% %% % GROUP START TAB                    | 2R3 | 4  | 0              | 5,841,739:84:0 |      |
| 1624 | 0  | 364 | 05:23:47.800 | 127DM4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,739:85:0 |      |
| 1625 | 0  | 364 | 05:23:51.133 | 165DM4A         | 7SCAN    | NORM,351.328999, | Check S/P Position                         | 2R3 | 4  | 0              | 5,841,739:90:0 |      |
| 1626 | 0  | 364 | 05:23:55.799 | 29JNHSTPOT01-   |          | -----START-----  |  | 2R3 | 4  | 0              | :              | :    |
| 1627 | 0  | 364 | 05:23:55.800 | 127DM11A        | NIMSTAB  | GE               | %% %% % GROUP END TAB                      | 2R3 | 4  | 0              | 5,841,740:06:0 |      |
| 1628 | 0  | 364 | 05:24:40.466 | 175DM422A6A     | 6DMSC    | R7,0             | P7, TRACK *1, *FWD, TIC 1414.23 +/- 2      | 2R3 | 4  | 0              | 5,841,740:73:0 |      |
| 1629 | 0  | 364 | 05:24:41.866 | 117DM           | DMS:     | : *US, AT SP     | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,740:73:0 |      |
| 1630 | 0  | 364 | 05:24:43.133 | 117DM           | CSMOS    | GS               | P7, TRACK 1, FWD, TIC *1414.35 +/- 2       | 2R3 | 4  | 0              | 5,841,740:75:1 |      |
| 1631 | 0  | 364 | 05:24:47.133 | 117DM           | DMS:     | : *US, RD        | **** GROUP START CSMOS                     | 2R3 | 4  | 0              | 5,841,740:77:0 |      |
| 1632 | 0  | 364 | 05:24:47.133 | 117DM           | DMS:     | : *RUNUP         | P7, TRACK 1, FWD, TIC *1415.58 +/- 2       | 2R3 | 4  | 0              | 5,841,740:83:0 |      |
| 1633 | 0  | 364 | 05:24:48.333 | 175DM176A6A     | 6TMREC   | LPU              | R7, TRACK *2, *REV, TIC *1415.64 +/- 2     | 2R3 | 4  | 0              | 5,841,740:84:8 |      |
| 1634 | 0  | 364 | 05:24:49.133 | 175DM176A6A     | 6TMREC   | RDC              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R3 | 4  | 0              | 5,841,740:86:0 |      |
| 1635 | 0  | 364 | 05:24:49.733 | 117DM           | DMS:     | : *AT SPD        | R7, TRACK 2, REV, TIC 1415.52 +/- 2        | 2R3 | 4  | 0              | 5,841,740:86:9 |      |
| 1636 | 0  | 364 | 05:24:49.733 | 117DM           | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC *1415.52 +/- 2       | 2R3 | 4  | 0              | 5,841,740:86:9 |      |
| 1637 | 0  | 364 | 05:24:51.800 | 29JNHSTPOT01-   | NIMPBK   | 301DM            | JUPITER HOTSPOT OBSERVATION                | 2R3 | 4  | 0              | :              | :    |
| 1638 | 0  | 364 | 05:24:52.466 | 117DM105A106A4A | 7STRP    | -0.00505,0,0,0,0 | Slew = 0.01                                | 2R3 | 4  | 0              | 5,841,741:00:0 |      |
| 1639 | 0  | 364 | 05:27:52.466 | 29JNHSTPOT01-   | NIMPBK   | 301DO            | JUPITER HOTSPOT OBSERVATION                | 2R3 | 4  | 0              | :              | :    |
| 1640 | 0  | 364 | 05:28:16.466 | 29JNHSTPOT01-   | DESEL    | 300DO            | JUPITER HOTSPOT OBSERVATION                | 2R3 | 4  | 0              | :              | :    |
| 1641 | 0  | 364 | 05:33:21.133 | 117DM105A106A4B | 7STRP    | 0.016501,-0.008, | Slew =12.01                                | 2R3 | 4  | 0              | 5,841,749:35:0 |      |
| 1642 | 0  | 364 | 05:33:33.800 | 117DM105A106A4C | 7STRP    | -0.00505,0,0,0,0 | Slew = 0.01                                | 2R3 | 4  | 0              | 5,841,749:54:0 |      |
| 1643 | 0  | 364 | 05:38:59.800 | 29JNHSTPOT01-   | DESEL    | 300DM            | JUPITER HOTSPOT OBSERVATION                | 2R3 | 4  | 0              | :              | :    |
| 1644 | 0  | 364 | 05:39:09.800 | 175DM6A         | 6TMREC   | RDC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0              | 5,841,755:12:0 |      |
| 1645 | 0  | 364 | 05:39:09.800 | 175DM422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,755:12:0 |      |
| 1646 | 0  | 364 | 05:39:09.800 | 117DM           | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC *1213.94 +/- 2       | 2R3 | 4  | 0              | 5,841,755:12:0 |      |
| 1647 | 0  | 364 | 05:39:11.000 | 117DM           | DMS:     | : *READY         | RDY, TRACK 2, REV, TIC *1213.88 +/- 2      | 2R3 | 4  | 0              | 5,841,755:13:8 |      |
| 1648 | 0  | 364 | 05:42:02.466 | 117DM11A        | CSMOS    | GE               | **** GROUP END CSMOS                       | 2R3 | 4  | 0              | 5,841,757:89:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MFI |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|-----|
| 1649 | 0  | 364 | 05:44:09.132 | 29JNHTSPOT01-   |          | -----STOP-----   |  | 2R3 | 4  | 0              | :              | :   |
| 1650 | 0  | 364 | 05:56:59.000 | 29NNHTSPOT02-   |          | -----START-----  |  | 2R3 | 4  | 0              | :              | :   |
| 1651 | 0  | 364 | 05:56:59.133 | 20DN5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,772:89:0 |                |     |
| 1652 | 0  | 364 | 05:57:06.466 | 20DN5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,841,772:80:0 |                |     |
| 1653 | 0  | 364 | 05:57:14.466 | 20DN6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,773:01:0 |                |     |
| 1654 | 0  | 364 | 05:57:24.466 | 20DN6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,773:16:0 |                |     |
| 1655 | 0  | 364 | 05:57:34.466 | 20DN5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,773:31:0 |                |     |
| 1656 | 0  | 364 | 05:57:35.800 | 20DN5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,773:33:0 |     |
| 1657 | 0  | 364 | 05:58:07.133 | 20DN4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,773:80:0 |     |
| 1658 | 0  | 364 | 05:58:08.000 | 29NNHTSPOT02-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              | :   |
| 1659 | 0  | 364 | 05:58:13.800 | 165DN4A         | 7SCAN    | NORM,354,223999, | Check S/P Position                         | 2R0 | 4  | 0              | :              | :   |
| 1660 | 0  | 364 | 05:58:18.466 | 29JNHTSPOT02-   |          | -----START-----  |  | 2R0 | 4  | 0              | :              | :   |
| 1661 | 0  | 364 | 05:59:10.466 | 125DN11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,774:84:0 |     |
| 1662 | 0  | 364 | 05:59:10.466 | 125DN           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,774:84:0 |     |
| 1663 | 0  | 364 | 05:59:10.466 | 125DN4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,841,774:84:0 |     |
| 1664 | 0  | 364 | 06:00:11.133 | 127DN4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,775:84:0 |     |
| 1665 | 0  | 364 | 06:00:11.133 | 127DN           | NIMSTAB  | GS               | %%%% GROUP START TAB                       | 2R3 | 4  | 0              | 5,841,775:84:0 |     |
| 1666 | 0  | 364 | 06:00:11.800 | 127DN4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,775:85:0 |     |
| 1667 | 0  | 364 | 06:00:19.800 | 127DN11A        | NIMSTAB  | GE               | %%%% GROUP END TAB                         | 2R3 | 4  | 0              | 5,841,776:06:0 |     |
| 1668 | 0  | 364 | 06:02:05.133 | 175DN422A6A     | 6DMSC    | R7,0             | P7, TRACK *1, *FWD, TIC 1213.88 +/- 2      | 2R3 | 4  | 0              | 5,841,777:73:0 |     |
| 1669 | 0  | 364 | 06:02:06.533 | 175DN422A6A     | DMS:     | : *US_RUNUP      | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,777:73:0 |     |
| 1670 | 0  | 364 | 06:02:06.533 | 175DN422A6A     | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *1214.00 +/- 2       | 2R3 | 4  | 0              | 5,841,777:75:0 |     |
| 1671 | 0  | 364 | 06:02:07.800 | 117DN           | CSMOS    | GS               | **** GROUP START CSMOS                     | 2R3 | 4  | 0              | 5,841,777:77:0 |     |
| 1672 | 0  | 364 | 06:02:11.800 |                 | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC *1215.24 +/- 2       | 2R3 | 4  | 0              | 5,841,777:83:0 |     |
| 1673 | 0  | 364 | 06:02:13.000 |                 | DMS:     | : *RUNUP         | R7, TRACK *2, *REV, TIC *1215.30 +/- 2     | 2R3 | 4  | 0              | 5,841,777:84:8 |     |
| 1674 | 0  | 364 | 06:02:13.800 | 175DN176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-JVS-PPR RECORD Record Mode  | 2R3 | 4  | 0              | 5,841,777:86:0 |     |
| 1675 | 0  | 364 | 06:02:14.400 |                 | DMS:     | : *AT_SPD        | R7, TRACK 2, REV, TIC 1215.18 +/- 2        | 2R3 | 4  | 0              | 5,841,777:86:9 |     |
| 1676 | 0  | 364 | 06:02:14.400 |                 | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC *1215.18 +/- 2       | 2R3 | 4  | 0              | 5,841,777:86:9 |     |
| 1677 | 0  | 364 | 06:02:16.466 | 29JNHTSPOT02-   | NIMPBK   | 301DN            | JUPITER HOT SPOT OBSERVATION               | 2R3 | 4  | 0              | :              | :   |
| 1678 | 0  | 364 | 06:02:17.133 | 117DN105A106A4A | 75TRP    | -0.00475,0,0,0,0 | Slew =0.01                                 | 2R3 | 4  | 0              | 5,841,778:00:0 |     |
| 1679 | 0  | 364 | 06:10:15.133 | 117DN105A106A4B | 75TRP    | 0.017502,-0.0085 | Slew =12.01                                | 2R3 | 4  | 0              | 5,841,785:80:0 |     |
| 1680 | 0  | 364 | 06:10:28.466 | 117DN105A106A4C | 75TRP    | -0.00475,0,0,0,0 | Slew =0.01                                 | 2R3 | 4  | 0              | 5,841,786:09:0 |     |
| 1681 | 0  | 364 | 06:11:55.800 | 29JNHTSPOT02-   | NIMPBK   | 301FQ            | JUPITER HOT SPOT OBSERVATION               | 2R3 | 4  | 0              | :              | :   |
| 1682 | 0  | 364 | 06:12:17.800 | 29JNHTSPOT02-   | DESEL    | 300FQ            | JUPITER HOT SPOT OBSERVATION               | 2R3 | 4  | 0              | :              | :   |
| 1683 | 0  | 364 | 06:13:28.466 | 29JNHTSPOT02-   |          | -----STOP-----   |  | 2R3 | 4  | 0              | :              | :   |
| 1684 | 0  | 364 | 06:18:16.466 | 29JNHTSPOT02-   | DESEL    | 300DN            | JUPITER HOT SPOT OBSERVATION               | 2R3 | 4  | 0              | :              | :   |
| 1685 | 0  | 364 | 06:18:26.466 | 175DN422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,793:89:0 |     |
| 1686 | 0  | 364 | 06:18:26.466 | 117DN11A        | CSMOS    | GE               | **** GROUP END CSMOS                       | 2R3 | 4  | 0              | 5,841,793:89:0 |     |
| 1687 | 0  | 364 | 06:18:26.466 | 175DN6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0              | 5,841,793:89:0 |     |
| 1688 | 0  | 364 | 06:18:26.466 |                 | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC * 987.35 +/- 2       | 2R3 | 4  | 0              | 5,841,793:89:0 |     |
| 1689 | 0  | 364 | 06:18:27.666 |                 | DMS:     | : *READY         | RDY, TRACK 2, REV, TIC * 987.29 +/- 2      | 2R3 | 4  | 0              | 5,841,793:90:8 |     |
| 1690 | 0  | 364 | 06:19:27.800 | 165GL4A         | 7SCAN    | NORM,358.505997, | Check S/P Position                         | 2R3 | 4  | 0              | 5,841,794:90:0 |     |
| 1691 | 0  | 364 | 06:19:28.466 | 176GL6A         | 6TMREC   | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 2R3 | 4  | 0              | 5,841,795:00:0 |     |
| 1692 | 0  | 364 | 06:20:19.800 | 117GL           | CSMOS    | GS               | **** GROUP START CSMOS                     | 2R3 | 4  | 0              | 5,841,795:77:0 |     |
| 1693 | 0  | 364 | 06:20:29.133 | 117GL105A106A4A | 75TRP    | 0.03101,-0.23347 | Slew = 0.21                                | 2R3 | 4  | 0              | 5,841,796:00:0 |     |
| 1694 | 0  | 364 | 06:36:41.133 | 50ZZ6XX         | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,812:02:0 |     |
| 1695 | 0  | 364 | 06:36:41.133 |                 | DMS:     | : *US_RUNUP      | P7, TRACK *1, *FWD, TIC 987.29 +/- 2       | 2R3 | 4  | 0              | 5,841,812:02:0 |     |
| 1696 | 0  | 364 | 06:36:42.533 |                 | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC * 987.41 +/- 2       | 2R3 | 4  | 0              | 5,841,812:04:1 |     |
| 1697 | 0  | 364 | 06:36:47.800 |                 | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC * 988.65 +/- 2       | 2R3 | 4  | 0              | 5,841,812:12:0 |     |
| 1698 | 0  | 364 | 06:36:49.000 |                 | DMS:     | : *RUNUP         | R7, TRACK *2, *REV, TIC * 988.71 +/- 2     | 2R3 | 4  | 0              | 5,841,812:13:8 |     |
| 1699 | 0  | 364 | 06:36:50.400 |                 | DMS:     | : *AT_SPD        | R7, TRACK 2, REV, TIC * 988.59 +/- 2       | 2R3 | 4  | 0              | 5,841,812:15:9 |     |
| 1700 | 0  | 364 | 06:37:16.466 |                 | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC * 982.48 +/- 2       | 2R3 | 4  | 0              | 5,841,812:55:0 |     |
| 1701 | 0  | 364 | 06:37:39.133 |                 | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC * 977.16 +/- 2       | 2R3 | 4  | 0              | 5,841,812:89:0 |     |
| 1702 | 0  | 364 | 06:37:39.133 | 50ZZ6RD         | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,812:89:0 |     |
| 1703 | 0  | 364 | 06:37:40.333 |                 | DMS:     | : *READY         | RDY, TRACK 2, REV, TIC * 977.10 +/- 2      | 2R3 | 4  | 0              | 5,841,812:90:8 |     |



| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|----------------|------|
| 1704 | 0  | 364 | 06:43:43.800 | 117GL11A        | CSMOS   | GE               | **** GROUP END                            | 2R3 | 4  | 0  | 5,841,818:90:0 |      |
| 1705 | 0  | 364 | 06:44:44.466 | 165GM4A         | 7SCAN   | NORM,17.744,9.77 | Check S/P Position                        | 2R3 | 4  | 0  | 5,841,819:90:0 |      |
| 1706 | 0  | 364 | 06:45:15.133 | 176GL6B         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5,841,820:45:0 |      |
| 1707 | 0  | 364 | 06:45:17.133 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5,841,820:48:0 |      |
| 1708 | 0  | 364 | 06:45:17.133 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC *977.10 +/- 2     | 2R3 | 4  | 0  | 5,841,820:48:0 |      |
| 1709 | 0  | 364 | 06:45:18.533 |                 | DMS:    | :*US.AT.SP       | P7, TRACK 1, FWD, TIC *977.22 +/- 2       | 2R3 | 4  | 0  | 5,841,820:50:1 |      |
| 1710 | 0  | 364 | 06:45:23.800 |                 | DMS:    | :*US.RD          | P7, TRACK 1, FWD, TIC *978.46 +/- 2       | 2R3 | 4  | 0  | 5,841,820:58:0 |      |
| 1711 | 0  | 364 | 06:45:25.000 |                 | DMS:    | :*RUNUP          | R7, TRACK *2, *REV, TIC *978.52 +/- 2     | 2R3 | 4  | 0  | 5,841,820:59:8 |      |
| 1712 | 0  | 364 | 06:45:26.400 |                 | DMS:    | :*AT.SP          | R7, TRACK 2, REV, TIC *978.40 +/- 2       | 2R3 | 4  | 0  | 5,841,820:61:9 |      |
| 1713 | 0  | 364 | 06:45:27.133 |                 | DMS:    | :*RECORD         | R7, TRACK 2, REV, TIC *978.23 +/- 2       | 2R3 | 4  | 0  | 5,841,820:63:0 |      |
| 1714 | 0  | 364 | 06:45:42.466 | 50ZZ6RE         | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,841,820:86:0 |      |
| 1715 | 0  | 364 | 06:45:42.466 |                 | DMS:    | :*RUNDOWN        | R7, TRACK 2, REV, TIC *974.63 +/- 2       | 2R3 | 4  | 0  | 5,841,820:86:0 |      |
| 1716 | 0  | 364 | 06:45:43.666 |                 | DMS:    | :*READY          | RDY, TRACK 2, REV, TIC *974.57 +/- 2      | 2R3 | 4  | 0  | 5,841,820:87:8 |      |
| 1717 | 0  | 364 | 06:46:46.466 | 176GM6A         | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | 5,841,822:00:0 |      |
| 1718 | 0  | 364 | 06:47:37.800 | 117GM           | CSMOS   | GS               | **** GROUP START CSMOS                    | 2R3 | 4  | 0  | 5,841,822:77:0 |      |
| 1719 | 0  | 364 | 06:47:47.133 | 117GM105A106A4A | 7STRP   | 0.0015,-0.0033,0 | Slew = 0.12                               | 2R3 | 4  | 0  | 5,841,823:00:0 |      |
| 1720 | 0  | 364 | 06:48:36.466 | 117GM105A106A4B | 7STRP   | -0.0002,0.0032,0 | Slew = 12.01                              | 2R3 | 4  | 0  | 5,841,823:74:0 |      |
| 1721 | 0  | 364 | 06:48:49.800 | 117GM105A106A4C | 7STRP   | 0.0015,-0.0033,0 | Slew = 0.12                               | 2R3 | 4  | 0  | 5,841,824:03:0 |      |
| 1722 | 0  | 364 | 06:49:39.133 | 117GM11A        | CSMOS   | GE               | **** GROUP END CSMOS                      | 2R3 | 4  | 0  | 5,841,824:77:0 |      |
| 1723 | 0  | 364 | 06:51:21.133 | 176GM6B         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5,841,826:45:0 |      |
| 1724 | 0  | 364 | 06:51:21.133 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC *974.57 +/- 2     | 2R3 | 4  | 0  | 5,841,826:48:0 |      |
| 1725 | 0  | 364 | 06:51:21.133 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5,841,826:48:0 |      |
| 1726 | 0  | 364 | 06:51:22.533 |                 | DMS:    | :*US.AT.SP       | P7, TRACK 1, FWD, TIC *974.69 +/- 2       | 2R3 | 4  | 0  | 5,841,826:50:1 |      |
| 1727 | 0  | 364 | 06:51:27.800 |                 | DMS:    | :*US.RD          | P7, TRACK 1, FWD, TIC *975.93 +/- 2       | 2R3 | 4  | 0  | 5,841,826:58:0 |      |
| 1728 | 0  | 364 | 06:51:29.000 |                 | DMS:    | :*RUNUP          | R7, TRACK *2, *REV, TIC *975.99 +/- 2     | 2R3 | 4  | 0  | 5,841,826:59:8 |      |
| 1729 | 0  | 364 | 06:51:30.400 |                 | DMS:    | :*AT.SP          | R7, TRACK 2, REV, TIC *975.87 +/- 2       | 2R3 | 4  | 0  | 5,841,826:61:9 |      |
| 1730 | 0  | 364 | 06:51:31.133 |                 | DMS:    | :*RECORD         | R7, TRACK 2, REV, TIC *975.69 +/- 2       | 2R3 | 4  | 0  | 5,841,826:63:0 |      |
| 1731 | 0  | 364 | 06:51:43.800 |                 | DMS:    | :*RUNDOWN        | R7, TRACK 2, REV, TIC *972.73 +/- 2       | 2R3 | 4  | 0  | 5,841,826:82:0 |      |
| 1732 | 0  | 364 | 06:51:43.800 | 50ZZ6RD         | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,841,826:82:0 |      |
| 1733 | 0  | 364 | 06:51:45.000 |                 | DMS:    | :*READY          | RDY, TRACK 2, REV, TIC *972.67 +/- 2      | 2R3 | 4  | 0  | 5,841,826:83:8 |      |
| 1734 | 0  | 364 | 08:03:36.466 | 165GN4A         | 7SCAN   | NORM,322.584999, | Check S/P Position                        | 2R3 | 4  | 0  | 5,841,897:90:0 |      |
| 1735 | 0  | 364 | 08:06:39.133 | 176GN6A         | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | 5,841,901:00:0 |      |
| 1736 | 0  | 364 | 08:07:30.466 | 117GN           | CSMOS   | GS               | **** GROUP START CSMOS                    | 2R3 | 4  | 0  | 5,841,901:77:0 |      |
| 1737 | 0  | 364 | 08:07:39.800 | 117GN105A106A4A | 7STRP   | 0.0013,-0.0037,0 | Slew = 0.08                               | 2R3 | 4  | 0  | 5,841,902:00:0 |      |
| 1738 | 0  | 364 | 08:08:29.133 | 117GN105A106A4B | 7STRP   | 0.0007,0.0036,0, | Slew = 12.01                              | 2R3 | 4  | 0  | 5,841,902:74:0 |      |
| 1739 | 0  | 364 | 08:08:45.133 | 117GN105A106A4C | 7STRP   | 0.0013,-0.0037,0 | Slew = 0.08                               | 2R3 | 4  | 0  | 5,841,903:07:0 |      |
| 1740 | 0  | 364 | 08:09:34.466 | 117GN11A        | CSMOS   | GE               | **** GROUP END CSMOS                      | 2R3 | 4  | 0  | 5,841,903:81:0 |      |
| 1741 | 0  | 364 | 08:11:11.800 | 176GN6B         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5,841,905:45:0 |      |
| 1742 | 0  | 364 | 08:11:13.800 | 50ZZ6XX         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 2R3 | 4  | 0  | 5,841,905:48:0 |      |
| 1743 | 0  | 364 | 08:11:13.800 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC *972.67 +/- 2     | 2R3 | 4  | 0  | 5,841,905:48:0 |      |
| 1744 | 0  | 364 | 08:11:15.200 |                 | DMS:    | :*US.AT.SP       | P7, TRACK 1, FWD, TIC *972.79 +/- 2       | 2R3 | 4  | 0  | 5,841,905:50:1 |      |
| 1745 | 0  | 364 | 08:11:20.466 |                 | DMS:    | :*US.RD          | P7, TRACK 1, FWD, TIC *974.02 +/- 2       | 2R3 | 4  | 0  | 5,841,905:58:0 |      |
| 1746 | 0  | 364 | 08:11:21.666 |                 | DMS:    | :*RUNUP          | R7, TRACK *2, *REV, TIC *974.08 +/- 2     | 2R3 | 4  | 0  | 5,841,905:59:8 |      |
| 1747 | 0  | 364 | 08:11:23.066 |                 | DMS:    | :*AT.SP          | R7, TRACK 2, REV, TIC *973.96 +/- 2       | 2R3 | 4  | 0  | 5,841,905:61:9 |      |
| 1748 | 0  | 364 | 08:11:23.800 |                 | DMS:    | :*RECORD         | R7, TRACK 2, REV, TIC *973.79 +/- 2       | 2R3 | 4  | 0  | 5,841,905:63:0 |      |
| 1749 | 0  | 364 | 08:11:36.466 |                 | DMS:    | :*RUNDOWN        | R7, TRACK 2, REV, TIC *970.82 +/- 2       | 2R3 | 4  | 0  | 5,841,905:82:0 |      |
| 1750 | 0  | 364 | 08:11:36.466 | 50ZZ6RE         | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,841,905:82:0 |      |
| 1751 | 0  | 364 | 08:11:37.666 |                 | DMS:    | :*READY          | RDY, TRACK 2, REV, TIC *970.76 +/- 2      | 2R3 | 4  | 0  | 5,841,905:83:8 |      |
| 1752 | 0  | 364 | 08:18:46.466 | 165GO4A         | 7SCAN   | NORM,28.707,14.2 | Check S/P Position                        | 2R3 | 4  | 0  | 5,841,912:90:0 |      |
| 1753 | 0  | 364 | 08:21:49.133 | 176GO6A         | 6TMREC  | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C | 2R3 | 4  | 0  | 5,841,916:00:0 |      |
| 1754 | 0  | 364 | 08:22:40.466 | 117GO           | CSMOS   | GS               | **** GROUP START CSMOS                    | 2R3 | 4  | 0  | 5,841,916:77:0 |      |
| 1755 | 0  | 364 | 08:22:49.800 | 117GO105A106A4A | 7STRP   | 0.0014,-0.003,0, | Slew = 0.15                               | 2R3 | 4  | 0  | 5,841,917:00:0 |      |
| 1756 | 0  | 364 | 08:23:40.466 | 117GO105A106A4B | 7STRP   | -0.00035,0.0029, | Slew = 12.01                              | 2R3 | 4  | 0  | 5,841,917:76:0 |      |
| 1757 | 0  | 364 | 08:23:55.133 | 117GO105A106A4C | 7STRP   | 0.0014,-0.003,0, | Slew = 0.15                               | 2R3 | 4  | 0  | 5,841,918:07:0 |      |
| 1758 | 0  | 364 | 08:24:45.800 | 117GO11A        | CSMOS   | GE               | **** GROUP END CSMOS                      | 2R3 | 4  | 0  | 5,841,918:83:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 1759 | 0  | 364 | 08:26:21.800 | 176GO6B         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0              | 5,841,920:45:0 |      |
| 1760 | 0  | 364 | 08:26:23.800 |                 | DMS:     | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 970.76 +/- 2       | 2R3 | 4  | 0              | 5,841,920:48:0 |      |
| 1761 | 0  | 364 | 08:26:23.800 | 50ZZ6XX         | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0              | 5,841,920:48:0 |      |
| 1762 | 0  | 364 | 08:26:25.200 |                 | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC * 970.88 +/- 2       | 2R3 | 4  | 0              | 5,841,920:50:1 |      |
| 1763 | 0  | 364 | 08:26:30.466 |                 | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC * 972.11 +/- 2       | 2R3 | 4  | 0              | 5,841,920:58:0 |      |
| 1764 | 0  | 364 | 08:26:31.666 |                 | DMS:     | : *RUNUP         | R7, TRACK *2, REV, TIC * 972.17 +/- 2      | 2R3 | 4  | 0              | 5,841,920:59:8 |      |
| 1765 | 0  | 364 | 08:26:33.066 |                 | DMS:     | : *AT_SPD        | R7, TRACK 2, REV, TIC * 972.05 +/- 2       | 2R3 | 4  | 0              | 5,841,920:61:9 |      |
| 1766 | 0  | 364 | 08:26:33.800 |                 | DMS:     | : *RECORD        | R7, TRACK 2, REV, TIC * 971.88 +/- 2       | 2R3 | 4  | 0              | 5,841,920:63:0 |      |
| 1767 | 0  | 364 | 08:26:46.466 | 50ZZ6RD         | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,841,920:82:0 |      |
| 1768 | 0  | 364 | 08:26:46.466 |                 | DMS:     | : *RUNDOWN       | R7, TRACK 2, REV, TIC * 968.91 +/- 2       | 2R3 | 4  | 0              | 5,841,920:82:0 |      |
| 1769 | 0  | 364 | 08:26:47.666 |                 | DMS:     | : *READY         | R7, TRACK 2, REV, TIC * 968.85 +/- 2       | 2R3 | 4  | 0              | 5,841,920:83:8 |      |
| 1770 | 0  | 364 | 08:50:49.133 | 432OZ431A6A     | 6RCDSL   | DDSNCG,PLSNCG,EP | Record Deselect (DDS o                     | 2R3 | 4  | 0              | 5,841,944:62:0 |      |
| 1771 | 0  | 364 | 08:50:49.800 | 432OZ6A         | 6RTSL1   |                  | R/T Select of DDS and                      | 2R3 | 4  | 0              | 5,841,944:63:0 |      |
| 1772 | 0  | 364 | 09:40:26.000 | 29NNNTZRLT02-   |          | -----START-----  |  | 2R3 | 4  | 0              | :              |      |
| 1773 | 0  | 364 | 09:40:26.466 | 20DP5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,841,993:69:0 |                |      |
| 1774 | 0  | 364 | 09:40:33.800 | 20DP5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,841,993:80:0 |                |      |
| 1775 | 0  | 364 | 09:40:41.800 | 20DP6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,841,994:01:0 |                |      |
| 1776 | 0  | 364 | 09:40:51.800 | 20DP6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,841,994:16:0 |                |      |
| 1777 | 0  | 364 | 09:41:01.800 | 20DP5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,841,994:31:0 |                |      |
| 1778 | 0  | 364 | 09:41:03.133 | 20DP5D          | 37MIN    |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,841,994:33:0 |      |
| 1779 | 0  | 364 | 09:41:34.466 | 20DP4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,841,994:80:0 |      |
| 1780 | 0  | 364 | 09:41:35.000 | 29NNNTZRLT02-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              |      |
| 1781 | 0  | 364 | 09:43:02.466 | 488AI6A         | 6TMSED   | NORM,AL5         | Sci. Eng. and D/L Chan                     | 2R0 | 4  | 0              | 5,841,996:30:0 |      |
| 1782 | 0  | 364 | 09:43:38.466 | 125DP4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,841,996:84:0 |      |
| 1783 | 0  | 364 | 09:43:38.466 | 125DP           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,841,996:84:0 |      |
| 1784 | 0  | 364 | 09:43:42.466 | 165DP4A         | 7SCAN    | NORM,17.764,12.3 | Check S/P Position                         | 2R0 | 4  | 0              | 5,841,996:90:0 |      |
| 1785 | 0  | 364 | 09:43:47.132 | 29JNNTZRLT02-   |          | -----START-----  |  | 2R0 | 4  | 0              | :              |      |
| 1786 | 0  | 364 | 09:44:39.133 | 125DP11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,841,997:84:0 |      |
| 1787 | 0  | 364 | 09:44:39.133 | 125DP4B         | 37MB     | 11,11,0,0,0,0    | Selects mirror (spatial) edit table        | 2R0 | 4  | 0              | 5,841,997:84:0 |      |
| 1788 | 0  | 364 | 09:45:39.800 | 127DP4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,841,998:84:0 |      |
| 1789 | 0  | 364 | 09:45:39.800 | 127DP           | NIMSTAB  | GS               | %% %% %% GROUP START TAB                   | 2R3 | 4  | 0              | 5,841,998:84:0 |      |
| 1790 | 0  | 364 | 09:45:40.466 | 127DP4B         | 37ETB    | 07,C7,1A,3C,D7,1 | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,841,998:85:0 |      |
| 1791 | 0  | 364 | 09:45:48.466 | 127DP11A        | NIMSTAB  | GE               | %% %% %% GROUP END TAB                     | 2R3 | 4  | 0              | 5,841,999:06:0 |      |
| 1792 | 0  | 364 | 09:46:49.133 | 432DP6A         | 6RTSL2   | NIMSEL,AACNCG,RT | NIMS R/T SELECT                            | 2R3 | 4  | 0              | 5,842,000:06:0 |      |
| 1793 | 0  | 364 | 09:47:36.466 | 117DP           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,842,000:77:0 |      |
| 1794 | 0  | 364 | 09:47:45.800 | 117DP105A106A4A | 7STRP    | -0.013201,0,0,0, | Slew =,0.02                                | 2R3 | 4  | 0              | 5,842,001:00:0 |      |
| 1795 | 0  | 364 | 09:56:54.466 | 432EP6A         | 6RTDS2   | NIMDSL,AACNCG,RT | NIMS R/T DESELECT                          | 2R3 | 4  | 0              | 5,842,010:04:0 |      |
| 1796 | 0  | 364 | 09:58:53.133 | 117DP11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,842,012:00:0 |      |
| 1797 | 0  | 364 | 09:58:57.132 | 29JNNTZRLT02-   |          | -----START-----  |  | 2R3 | 4  | 0              | :              |      |
| 1798 | 0  | 364 | 09:58:57.132 | 29JNNTZRLT02-   |          | -----STOP-----   |  | 2R3 | 4  | 0              | :              |      |
| 1799 | 0  | 364 | 09:59:53.133 | 165DQ4A         | 7SCAN    | NORM,21.613,8.66 | Check S/P Position                         | 2R3 | 4  | 0              | 5,842,012:90:0 |      |
| 1800 | 0  | 364 | 10:00:49.800 | 125DQ4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R3 | 4  | 0              | 5,842,013:84:0 |      |
| 1801 | 0  | 364 | 10:00:49.800 | 125DQ           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R3 | 4  | 0              | 5,842,013:84:0 |      |
| 1802 | 0  | 364 | 10:01:50.466 | 125DQ4B         | 37MB     | 11,11,0,0,0,0    | Selects mirror (spatial) edit table        | 2R3 | 4  | 0              | 5,842,014:84:0 |      |
| 1803 | 0  | 364 | 10:01:50.466 | 125DQ11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R3 | 4  | 0              | 5,842,014:84:0 |      |
| 1804 | 0  | 364 | 10:01:59.133 | 432DQ6A         | 6RTSL2   | NIMSEL,AACNCG,RT | NIMS R/T SELECT                            | 2R3 | 4  | 0              | 5,842,015:06:0 |      |
| 1805 | 0  | 364 | 10:02:46.466 | 117DQ           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,842,015:77:0 |      |
| 1806 | 0  | 364 | 10:02:51.133 | 127DQ4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,842,015:84:0 |      |
| 1807 | 0  | 364 | 10:02:51.133 | 127DQ           | NIMSTAB  | GS               | %% %% %% GROUP START TAB                   | 2R3 | 4  | 0              | 5,842,015:84:0 |      |
| 1808 | 0  | 364 | 10:02:51.800 | 127DQ4B         | 37ETB    | 07,C7,1A,3C,D7,1 | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,842,015:85:0 |      |
| 1809 | 0  | 364 | 10:02:55.800 | 117DQ105A106A4A | 7STRP    | -0.0066,0.0026,0 | Slew =,0.01                                | 2R3 | 4  | 0              | 5,842,016:00:0 |      |
| 1810 | 0  | 364 | 10:02:59.800 | 127DQ11A        | NIMSTAB  | GE               | %% %% %% GROUP END TAB                     | 2R3 | 4  | 0              | 5,842,016:06:0 |      |
| 1811 | 0  | 364 | 10:08:01.800 | 432EQ6A         | 6RTDS2   | NIMDSL,AACNCG,RT | NIMS R/T DESELECT                          | 2R3 | 4  | 0              | 5,842,021:04:0 |      |
| 1812 | 0  | 364 | 10:14:03.133 | 117DQ11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,842,027:00:0 |      |
| 1813 | 0  | 364 | 10:14:07.132 | 29JNNTZRLT02-   |          | -----STOP-----   |  | 2R3 | 4  | 0              | :              |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----|----------------|------|
| 1814 | 0  | 364 | 10:59:27.800 | 488AI6B         | 6TMSED   | FILL,AL5         | Sci, Eng, and D/L Chan                     | 2R3 | 4  | 0  | 5,842,071:83:0 |      |
| 1815 | 0  | 364 | 10:59:59.800 | 480SE6A         | 6MROH    | 44.23E8.0,A2     | read from LLM2A44.23E8.0,A2                | 2R3 | 4  | 0  | 5,842,072:40:0 |      |
| 1816 | 0  | 364 | 11:06:39.800 | 480SE6B         | 6MROH    | 45.23E8.0,B2     | read from LLM2B45.23E8.0,B2                | 2R3 | 4  | 0  | 5,842,079:03:0 |      |
| 1817 | 0  | 364 | 11:28:33.800 | 488AI6C         | 6TMSED   | NORM,AL5         | Sci, Eng, and D/L Chan                     | 2R3 | 4  | 0  | 5,842,100:63:0 |      |
| 1818 | 0  | 364 | 11:51:06.466 | 165GP4A         | 7SCAN    | NORM,346.025997, | Check S/P Position                         | 2R3 | 4  | 0  | 5,842,122:90:0 |      |
| 1819 | 0  | 364 | 11:54:09.133 | 176GP6A         | 6TMREC   | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 2R3 | 4  | 0  | 5,842,126:00:0 |      |
| 1820 | 0  | 364 | 11:55:00.466 | 117GP           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 2R3 | 4  | 0  | 5,842,126:77:0 |      |
| 1821 | 0  | 364 | 11:55:09.800 | 117GP105A106A4A | 7STRP    | 0.0013,-0.0035,0 | Slew = 0.08                                | 2R3 | 4  | 0  | 5,842,127:00:0 |      |
| 1822 | 0  | 364 | 11:55:59.133 | 117GP105A106A4B | 7STRP    | 0.0003,0.0034,0, | Slew =12.01                                | 2R3 | 4  | 0  | 5,842,127:74:0 |      |
| 1823 | 0  | 364 | 11:56:14.466 | 117GP105A106A4C | 7STRP    | 0.0013,-0.0035,0 | Slew = 0.08                                | 2R3 | 4  | 0  | 5,842,128:06:0 |      |
| 1824 | 0  | 364 | 11:57:03.800 | 117GP11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0  | 5,842,128:80:0 |      |
| 1825 | 0  | 364 | 11:58:41.800 | 176GP6B         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0  | 5,842,130:45:0 |      |
| 1826 | 0  | 364 | 11:58:43.800 | 50ZZ6XX         | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 2R3 | 4  | 0  | 5,842,130:48:0 |      |
| 1827 | 0  | 364 | 11:58:43.800 |                 | DMS:     | :*US-RUNUP       | P7, TRACK *1,*FWD, TIC 968.85 +/- 2        | 2R3 | 4  | 0  | 5,842,130:48:0 |      |
| 1828 | 0  | 364 | 11:58:45.200 |                 | DMS:     | :*US AT SP       | P7, TRACK 1, FWD, TIC * 968.97 +/- 2       | 2R3 | 4  | 0  | 5,842,130:50:1 |      |
| 1829 | 0  | 364 | 11:58:50.466 |                 | DMS:     | :*US RD          | P7, TRACK 1, FWD, TIC * 970.21 +/- 2       | 2R3 | 4  | 0  | 5,842,130:58:0 |      |
| 1830 | 0  | 364 | 11:58:51.666 |                 | DMS:     | :*RUNUP          | R7, TRACK *2,*REV, TIC * 970.27 +/- 2      | 2R3 | 4  | 0  | 5,842,130:59:8 |      |
| 1831 | 0  | 364 | 11:58:53.066 |                 | DMS:     | :*AT SPD         | R7, TRACK 2, REV, TIC * 970.15 +/- 2       | 2R3 | 4  | 0  | 5,842,130:61:9 |      |
| 1832 | 0  | 364 | 11:58:53.800 |                 | DMS:     | :*RECORD         | R7, TRACK 2, REV, TIC * 969.98 +/- 2       | 2R3 | 4  | 0  | 5,842,130:63:0 |      |
| 1833 | 0  | 364 | 11:59:06.466 | 50ZZ6RE         | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0  | 5,842,130:82:0 |      |
| 1834 | 0  | 364 | 11:59:06.466 |                 | DMS:     | :*RUNDOWN        | R7, TRACK 2, REV, TIC * 967.01 +/- 2       | 2R3 | 4  | 0  | 5,842,130:82:0 |      |
| 1835 | 0  | 364 | 11:59:07.666 |                 | DMS:     | :*READY          | R7, TRACK 2, REV, TIC * 966.95 +/- 2       | 2R3 | 4  | 0  | 5,842,130:83:8 |      |
| 1836 | 0  | 364 | 12:43:27.000 | 29NNAURORA01-   |          | -----START-----  |  | 2R3 | 4  | 0  | :              |      |
| 1837 | 0  | 364 | 12:43:27.133 | 20DR5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 0  | 5,842,174:69:0 |      |
| 1838 | 0  | 364 | 12:43:34.466 | 20DR5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 0  | 5,842,174:80:0 |      |
| 1839 | 0  | 364 | 12:43:42.466 | 20DR6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 0  | 5,842,175:01:0 |      |
| 1840 | 0  | 364 | 12:43:52.466 | 20DR6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 0  | 5,842,175:16:0 |      |
| 1841 | 0  | 364 | 12:44:02.466 | 20DR5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 0  | 5,842,175:31:0 |      |
| 1842 | 0  | 364 | 12:44:09.133 | 20DR5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0  | 5,842,175:41:0 |      |
| 1843 | 0  | 364 | 12:44:35.133 | 20DR4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0  | 5,842,175:80:0 |      |
| 1844 | 0  | 364 | 12:44:36.000 | 29NNAURORA01-   |          | -----STOP-----   |  | 2R0 | 4  | 0  | :              |      |
| 1845 | 0  | 364 | 12:45:38.466 | 125DR11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0  | 5,842,176:84:0 |      |
| 1846 | 0  | 364 | 12:45:38.466 | 125DR           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0  | 5,842,176:84:0 |      |
| 1847 | 0  | 364 | 12:45:38.466 | 125DR4A         | 37IST    | 0,2,0,OFF,0,1,1  | Gain State 4                               | 4R0 | 4  | 0  | 5,842,176:84:0 |      |
| 1848 | 0  | 364 | 12:47:39.800 | 127DR4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 4R3 | 4  | 0  | 5,842,178:84:0 |      |
| 1849 | 0  | 364 | 12:47:39.800 | 127DR           | NIMSTAB  | GS               | %%%%%% GROUP START TAB                     | 4R3 | 4  | 0  | 5,842,178:84:0 |      |
| 1850 | 0  | 364 | 12:47:40.466 | 127DR4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 4R3 | 4  | 0  | 5,842,178:85:0 |      |
| 1851 | 0  | 364 | 12:47:48.466 | 127DR11A        | NIMSTAB  | GE               | %%%%%% GROUP END TAB                       | 4R3 | 4  | 0  | 5,842,179:06:0 |      |
| 1852 | 0  | 364 | 12:48:44.466 | 165DR4A         | 7SCAN    | NORM,41.509,13.5 | Check S/P Position                         | 4R3 | 4  | 0  | 5,842,179:90:0 |      |
| 1853 | 0  | 364 | 12:50:34.466 | 29NNAURORA01-   |          | -----START-----  |  | 4R3 | 4  | 0  | :              |      |
| 1855 | 0  | 364 | 12:50:34.466 | 175DR422A6A     | DMS:     | :*US-RUNUP       | P7, TRACK *1,*FWD, TIC 966.95 +/- 2        | 4R3 | 4  | 0  | 5,842,181:73:0 |      |
| 1856 | 0  | 364 | 12:50:35.866 | 117DR           | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 4R3 | 4  | 0  | 5,842,181:73:0 |      |
| 1857 | 0  | 364 | 12:50:37.133 |                 | DMS:     | :*US AT SP       | P7, TRACK 1, FWD, TIC * 967.07 +/- 2       | 4R3 | 4  | 0  | 5,842,181:75:1 |      |
| 1858 | 0  | 364 | 12:50:41.133 |                 | CSMOS    | GS               | ***** GROUP START CSMOS                    | 4R3 | 4  | 0  | 5,842,181:77:0 |      |
| 1859 | 0  | 364 | 12:50:42.333 |                 | DMS:     | :*US RD          | P7, TRACK 1, FWD, TIC * 968.30 +/- 2       | 4R3 | 4  | 0  | 5,842,181:83:0 |      |
| 1860 | 0  | 364 | 12:50:43.133 | 175DR176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3 | 4  | 0  | 5,842,181:84:8 |      |
| 1861 | 0  | 364 | 12:50:43.733 |                 | DMS:     | :*AT SPD         | R7, TRACK 2, REV, TIC 968.24 +/- 2         | 4R3 | 4  | 0  | 5,842,181:86:9 |      |
| 1862 | 0  | 364 | 12:50:43.733 |                 | DMS:     | :*RECORD         | R7, TRACK 2, REV, TIC * 968.24 +/- 2       | 4R3 | 4  | 0  | 5,842,181:86:9 |      |
| 1863 | 0  | 364 | 12:50:45.800 | 29NNAURORA01-   | NIMPBK   | 301DR            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0  | 5,842,181:86:9 |      |
| 1864 | 0  | 364 | 12:50:46.466 | 117DR105A106A4A | 7STRP    | -0.013801,0.0041 | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0  | 5,842,182:00:0 |      |
| 1865 | 0  | 364 | 13:02:43.133 | 29NNAURORA01-   | DESEL    | 300DR            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0  | :              |      |
| 1866 | 0  | 364 | 13:02:51.133 | 117DR11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 4R3 | 4  | 0  | :              |      |
| 1867 | 0  | 364 | 13:02:53.133 |                 | DMS:     | :*RUNDOWN        | R7, TRACK 2, REV, TIC * 797.29 +/- 2       | 4R3 | 4  | 0  | 5,842,193:89:0 |      |
| 1868 | 0  | 364 | 13:02:53.133 | 175DR6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 4R3 | 4  | 0  | 5,842,193:89:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters        | Description                                | GCIM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|-------------------|--|------|----|----------------|----------------|------|
| 1869 | 0  | 364 | 13:02:53.133 | 175DR422A0B     | 6DMSC    | RDY,0             | DMS Control Tape stop                      | 4R3  | 4  | 0              | 5,842,193:89:0 |      |
| 1870 | 0  | 364 | 13:02:54.333 |                 | DMS:     | : *READY          | RDY, TRACK 2, REV, TIC * 797.23 +/- 2      | 4R3  | 4  | 0              | 5,842,193:90:8 |      |
| 1871 | 0  | 364 | 13:02:58.466 | 29JNAUJORA01-   |          | -----STOP-----    | Check S/P Position                         | 4R3  | 4  | 0              | :              |      |
| 1872 | 0  | 364 | 13:03:54.466 | 165DS4A         | 7SCAN    | NORM,40,917,23.4  |  | 4R3  | 4  | 0              | 5,842,194:90:0 |      |
| 1873 | 0  | 364 | 13:03:59.133 | 29JNLIMBRT01-   |          | -----START-----   |  | 4R3  | 4  | 0              | :              |      |
| 1874 | 0  | 364 | 13:04:51.133 | 125DS4A         | 37IST    | 0,2,0,OFF,0,1,1   | Gain State 4                               | 4R3  | 4  | 0              | 5,842,195:84:0 |      |
| 1875 | 0  | 364 | 13:04:51.133 | 125DS           | NIMSINIT | GS                | ##### GROUP START INIT                     | 4R3  | 4  | 0              | 5,842,195:84:0 |      |
| 1876 | 0  | 364 | 13:04:51.133 | 125DS11A        | NIMSINIT | GE                | ##### GROUP END INIT                       | 4R3  | 4  | 0              | 5,842,195:84:0 |      |
| 1877 | 0  | 364 | 13:05:47.133 | 117DS           | CSMOS    | GS                | ***** GROUP START CSMOS                    | 4R3  | 4  | 0              | 5,842,196:77:0 |      |
| 1878 | 0  | 364 | 13:05:56.466 | 117DS105A106A4A | 7STRP    | -0.0095,-0.002,0  | Slew =0.02                                 | 4R3  | 4  | 0              | 5,842,197:00:0 |      |
| 1879 | 0  | 364 | 13:06:52.466 | 127DS4A         | 37IOP    | 3,0               | Long Map, Grating Start Position =00       | 4R3  | 4  | 0              | 5,842,197:84:0 |      |
| 1880 | 0  | 364 | 13:06:52.466 | 127DS           | NIMSTAB  | GS                | %%%% GROUP START TAB                       | 4R3  | 4  | 0              | 5,842,197:84:0 |      |
| 1881 | 0  | 364 | 13:06:53.133 | 127DS4B         | 37ETB    | 07,C,7,14,00,FF,2 | Loads wavelength edit table                | 4R3  | 4  | 0              | 5,842,197:85:0 |      |
| 1882 | 0  | 364 | 13:07:01.133 | 127DS11A        | NIMSTAB  | GE                | %%%% GROUP END TAB                         | 4R3  | 4  | 0              | 5,842,198:06:0 |      |
| 1883 | 0  | 364 | 13:07:01.133 | 432DS6A         | 6RTSL2   | NIMSEL,AACNCG,RT  | NIMS R/T SELECT                            | 4R3  | 4  | 0              | 5,842,198:06:0 |      |
| 1884 | 0  | 364 | 13:12:03.133 | 432ES6A         | 6RTDS2   | NIMDSL,AACNCG,RT  | NIMS R/T DESELECT                          | 4R3  | 4  | 0              | 5,842,203:04:0 |      |
| 1885 | 0  | 364 | 13:13:58.466 | 117DS11A        | CSMOS    | GE                | ***** GROUP END CSMOS                      | 4R3  | 4  | 0              | 5,842,204:86:0 |      |
| 1886 | 0  | 364 | 13:14:05.799 | 29JNLIMBRT01-   |          | -----STOP-----    |  | 4R3  | 4  | 0              | :              |      |
| 1887 | 0  | 364 | 13:24:54.000 | 29NNGLOBAL01-   |          | -----START-----   |  | 4R3  | 4  | 0              | :              |      |
| 1888 | 0  | 364 | 13:24:54.466 | 20DT5A          | 37PL     |                   | Program Load (halts microprocessor & unwri | 4    | 0  | 5,842,215:69:0 |                |      |
| 1889 | 0  | 364 | 13:25:01.800 | 20DT5B          | 37MRL    |                   | Memory Realocate (software operates from R | 4    | 0  | 5,842,215:80:0 |                |      |
| 1890 | 0  | 364 | 13:25:09.800 | 20DT6A          | 6MCOPI   | NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4    | 0  | 5,842,216:01:0 |                |      |
| 1891 | 0  | 364 | 13:25:19.800 | 20DT6B          | 6MCOPI   | NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4    | 0  | 5,842,216:16:0 |                |      |
| 1892 | 0  | 364 | 13:25:29.800 | 20DT5C          | 37IRT    |                   | Instrument Reset (goes into POR state)     | 4    | 0  | 5,842,216:31:0 |                |      |
| 1893 | 0  | 364 | 13:25:31.133 | 20DT5D          | 37MIN    |                   | Memory Normal (software operates from ROM) | 260  | 4  | 0              | 5,842,216:33:0 |      |
| 1894 | 0  | 364 | 13:26:02.466 | 20DT4A          | 37IST    | 1,2,0,OFF,0,0,0   | Chopper ON, Sync, Chopper (Ref)            | 2R0  | 4  | 0              | 5,842,216:80:0 |      |
| 1895 | 0  | 364 | 13:26:03.000 | 29NNGLOBAL01-   |          | -----STOP-----    |  | 2R0  | 4  | 0              | :              |      |
| 1896 | 0  | 364 | 13:26:09.133 | 165DT4A         | 7SCAN    | NORM,355.199997,  | Check S/P Position                         | 2R0  | 4  | 0              | 5,842,216:90:0 |      |
| 1897 | 0  | 364 | 13:26:13.799 | 29ENGLOBAL01-   |          | -----START-----   |  | 2R0  | 4  | 0              | :              |      |
| 1898 | 0  | 364 | 13:27:05.800 | 125DT           | NIMSINIT | GS                | ##### GROUP START INIT                     | 2R0  | 4  | 0              | 5,842,217:84:0 |      |
| 1899 | 0  | 364 | 13:27:05.800 | 125DT4A         | 37IST    | 0,2,0,OFF,0,1,0   | Gain State 2                               | 2R0  | 4  | 0              | 5,842,217:84:0 |      |
| 1900 | 0  | 364 | 13:27:05.800 | 125DT11A        | NIMSINIT | GE                | ##### GROUP END INIT                       | 2R0  | 4  | 0              | 5,842,217:84:0 |      |
| 1901 | 0  | 364 | 13:28:05.800 | 33A4A           | 37IST    | 0,2,0,OFF,0,1,1   | Gain State 4                               | 4R0  | 4  | 0              | 5,842,218:83:0 |      |
| 1902 | 0  | 364 | 13:29:07.133 | 127DT           | NIMSTAB  | GS                | %%%% GROUP START TAB                       | 4R0  | 4  | 0              | 5,842,219:84:0 |      |
| 1903 | 0  | 364 | 13:29:07.133 | 127DT4A         | 37IOP    | 3,0               | Long Map, Grating Start Position =00       | 4R3  | 4  | 0              | 5,842,219:84:0 |      |
| 1904 | 0  | 364 | 13:29:07.800 | 127DT4B         | 37ETB    | 04,C,4,35,FF,FF   | Loads wavelength edit table                | 4R3  | 4  | 0              | 5,842,219:85:0 |      |
| 1905 | 0  | 364 | 13:29:15.800 | 127DT11A        | NIMSTAB  | GE                | %%%% GROUP END TAB                         | 4R3  | 4  | 0              | 5,842,220:06:0 |      |
| 1906 | 0  | 364 | 13:29:57.800 | 175DT422A6A     | 6DMSC    | R28,0             | DMS Control Tape runup 28.8kbp             | 4R3  | 4  | 0              | 5,842,220:69:0 |      |
| 1907 | 0  | 364 | 13:29:57.800 |                 | DMS:     | : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 797.23 +/- 2       | 4R3  | 4  | 0              | 5,842,220:69:0 |      |
| 1908 | 0  | 364 | 13:29:59.200 |                 | DMS:     | : *US_AT_SP       | P7, TRACK 1, FWD, TIC * 797.35 +/- 2       | 4R3  | 4  | 0              | 5,842,220:71:1 |      |
| 1909 | 0  | 364 | 13:30:03.133 | 117DT           | CSMOS    | GS                | ***** GROUP START CSMOS                    | 4R3  | 4  | 0              | 5,842,220:77:0 |      |
| 1910 | 0  | 364 | 13:30:04.466 |                 | DMS:     | : *US_RD          | P7, TRACK 1, FWD, TIC * 798.58 +/- 2       | 4R3  | 4  | 0              | 5,842,220:79:0 |      |
| 1911 | 0  | 364 | 13:30:05.666 |                 | DMS:     | : *RUNUP          | R28, TRACK *2, REV, TIC * 798.64 +/- 2     | 4R3  | 4  | 0              | 5,842,220:80:8 |      |
| 1912 | 0  | 364 | 13:30:09.133 | 175DT176A6A     | 6TMREC   | MPW               | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 4R3  | 4  | 0              | 5,842,220:86:0 |      |
| 1913 | 0  | 364 | 13:30:09.666 |                 | DMS:     | : *AT SPD         | R28, TRACK 2, REV, TIC 797.14 +/- 2        | 4R3  | 4  | 0              | 5,842,220:86:8 |      |
| 1914 | 0  | 364 | 13:30:09.666 |                 | DMS:     | : *RECORD         | R28, TRACK 2, REV, TIC * 797.14 +/- 2      | 4R3  | 4  | 0              | 5,842,220:86:8 |      |
| 1915 | 0  | 364 | 13:30:11.133 | 165DT4B         | 7VECT    |                   | Inert vect update UTC                      | 4R3  | 4  | 0              | 5,842,220:89:0 |      |
| 1916 | 0  | 364 | 13:30:11.133 | 29ENGLOBAL01-   | NIMPBK   | 301DT             | EUROPA GLOBAL OBSERVATION                  | 4R3  | 4  | 0              | :              |      |
| 1917 | 0  | 364 | 13:30:12.466 | 117DT105A106A4A | 7STRP    | -0.006,0,0,0,0,0  | Slew =0.03                                 | 4R3  | 4  | 0              | 5,842,221:00:0 |      |
| 1918 | 0  | 364 | 13:31:45.800 | 29ENGLOBAL01-   | NIMPBK   | 301DP             | EUROPA GLOBAL OBSERVATION                  | 4R3  | 4  | 0              | :              |      |
| 1919 | 0  | 364 | 13:31:57.800 | 29ENGLOBAL01-   | DESEL    | 300DP             | EUROPA GLOBAL OBSERVATION                  | 4R3  | 4  | 0              | :              |      |
| 1920 | 0  | 364 | 13:33:09.800 | 29ENGLOBAL01-   | DESEL    | 300DT             | EUROPA GLOBAL OBSERVATION                  | 4R3  | 4  | 0              | :              |      |
| 1921 | 0  | 364 | 13:33:12.466 |                 | DMS:     | : *RUNDOWN        | R28, TRACK 2, REV, TIC * 636.48 +/- 2      | 4R3  | 4  | 0              | 5,842,223:88:0 |      |
| 1922 | 0  | 364 | 13:33:12.466 | 175DT422A6B     | 6DMSC    | RDY,0             | DMS Control Tape stop                      | 4R3  | 4  | 0              | 5,842,223:88:0 |      |
| 1923 | 0  | 364 | 13:33:13.666 |                 | DMS:     | : *READY          | RDY, TRACK 2, REV, TIC * 636.18 +/- 2      | 4R3  | 4  | 0              | 5,842,223:89:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|------|----|----|----------------|------|
| 1924 | 0  | 364 | 13:33:26.466 | 488A16D         | 6TMSED   | NORM,AL4         | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0  | 5,842,224:18:0 |      |
| 1925 | 0  | 364 | 13:33:37.800 | 117DT11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 4R3  | 4  | 0  | 5,842,224:35:0 |      |
| 1926 | 0  | 364 | 13:42:24.466 | 29ENGLOBAL01-   |          | -----STOP-----   |  | 4R3  | 4  | 0  | :::            |      |
| 1927 | 0  | 364 | 13:46:08.000 | 29NNAURORA02-   |          | -----START-----  |  | 4R3  | 4  | 0  | :::            |      |
| 1928 | 0  | 364 | 13:46:08.466 | 20DU5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4R3  | 4  | 0  | 5,842,236:69:0 |      |
| 1929 | 0  | 364 | 13:46:15.800 | 20DU5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4R3  | 4  | 0  | 5,842,236:80:0 |      |
| 1930 | 0  | 364 | 13:46:22.466 | 165DU4A         | 75SCAN   | NORM,45.797,15.0 | Check S/P Position                         | 4R3  | 4  | 0  | 5,842,236:90:0 |      |
| 1931 | 0  | 364 | 13:46:23.800 | 20DU6A          | 6MCOPI   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4R3  | 4  | 0  | 5,842,237:01:0 |      |
| 1932 | 0  | 364 | 13:46:33.800 | 20DU6B          | 6MCOPI   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4R3  | 4  | 0  | 5,842,237:16:0 |      |
| 1933 | 0  | 364 | 13:46:43.800 | 20DU5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4R3  | 4  | 0  | 5,842,237:31:0 |      |
| 1934 | 0  | 364 | 13:46:50.466 | 20DU5D          | 37MIN    |                  | Memory Normal (software operates from ROM) | 260  | 4  | 0  | 5,842,237:41:0 |      |
| 1935 | 0  | 364 | 13:47:16.466 | 20DU4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0  | 4  | 0  | 5,842,237:80:0 |      |
| 1936 | 0  | 364 | 13:47:17.000 | 29NNAURORA02-   |          | -----STOP-----   |  | 2R0  | 4  | 0  | :::            |      |
| 1937 | 0  | 364 | 13:48:19.800 | 125DU4A         | 37IST    | 0,2,0,OFF,0,1,1  | Gain State 4                               | 4R0  | 4  | 0  | 5,842,238:84:0 |      |
| 1938 | 0  | 364 | 13:48:19.800 | 125DU11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 4R0  | 4  | 0  | 5,842,238:84:0 |      |
| 1939 | 0  | 364 | 13:48:19.800 | 125DU           | NIMSINIT | GS               | ##### GROUP START INIT                     | 4R0  | 4  | 0  | 5,842,238:84:0 |      |
| 1940 | 0  | 364 | 13:49:20.466 | 127DU4A         | 37IOP    | 3.0              | Long Map, Grating Start Position =00       | 4R3  | 4  | 0  | 5,842,239:84:0 |      |
| 1941 | 0  | 364 | 13:49:20.466 | 127DU           | NIMSTAB  | GS               | %%%% GROUP START TAB                       | 4R3  | 4  | 0  | 5,842,239:84:0 |      |
| 1942 | 0  | 364 | 13:49:21.133 | 127DU4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 4R3  | 4  | 0  | 5,842,239:85:0 |      |
| 1943 | 0  | 364 | 13:49:29.132 | 29JNAURORA02-   |          | -----START-----  |  | 4R3  | 4  | 0  | :::            |      |
| 1944 | 0  | 364 | 13:49:29.133 | 127DU11A        | NIMSTAB  | GE               | %%%% GROUP END TAB                         | 4R3  | 4  | 0  | 5,842,240:06:0 |      |
| 1945 | 0  | 364 | 13:50:13.800 |                 | DMS:     | :*US-RUNUP       | P7, TRACK *1,*FWD,TIC 636.18 +/- 2         | 4R3  | 4  | 0  | 5,842,240:73:0 |      |
| 1946 | 0  | 364 | 13:50:13.800 | 175DU422A6A     | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 4R3  | 4  | 0  | 5,842,240:73:0 |      |
| 1947 | 0  | 364 | 13:50:15.200 |                 | DMS:     | :*US_AT_SP       | P7, TRACK 1, FWD,TIC * 636.30 +/- 2        | 4R3  | 4  | 0  | 5,842,240:75:1 |      |
| 1948 | 0  | 364 | 13:50:16.466 | 117DU           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 4R3  | 4  | 0  | 5,842,240:77:0 |      |
| 1949 | 0  | 364 | 13:50:20.466 |                 | DMS:     | :*US_RD          | P7, TRACK 1, FWD,TIC * 637.53 +/- 2        | 4R3  | 4  | 0  | 5,842,240:83:0 |      |
| 1950 | 0  | 364 | 13:50:21.666 |                 | DMS:     | :*RUNUP          | P7, TRACK *2,*REV,TIC * 637.59 +/- 2       | 4R3  | 4  | 0  | 5,842,240:84:8 |      |
| 1951 | 0  | 364 | 13:50:22.466 | 175DU176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3  | 4  | 0  | 5,842,240:86:0 |      |
| 1952 | 0  | 364 | 13:50:23.066 |                 | DMS:     | :*AT_SPD         | R7, TRACK 2, REV,TIC 637.47 +/- 2          | 4R3  | 4  | 0  | 5,842,240:86:9 |      |
| 1953 | 0  | 364 | 13:50:23.066 |                 | DMS:     | :*RECORD         | R7, TRACK 2, REV,TIC * 637.47 +/- 2        | 4R3  | 4  | 0  | 5,842,240:86:9 |      |
| 1954 | 0  | 364 | 13:50:25.133 | 29JNAURORA02-   | NIMPBK   | 301DU            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0  | :::            |      |
| 1955 | 0  | 364 | 13:50:25.800 | 117DU105A106A4A | 75TRP    | -0.014001,0.0070 | Slew =0.04                                 | 4R3  | 4  | 0  | 5,842,241:00:0 |      |
| 1956 | 0  | 364 | 14:03:23.133 | 29JNAURORA02-   | DESEL    | 300DU            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0  | :::            |      |
| 1957 | 0  | 364 | 14:03:31.133 | 117DU11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 4R3  | 4  | 0  | 5,842,253:86:0 |      |
| 1958 | 0  | 364 | 14:03:33.133 | 175DU6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 4R3  | 4  | 0  | 5,842,253:89:0 |      |
| 1959 | 0  | 364 | 14:03:33.133 | 175DU422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 4R3  | 4  | 0  | 5,842,253:89:0 |      |
| 1960 | 0  | 364 | 14:03:33.133 |                 | DMS:     | :*RUNDOWN        | R7, TRACK 2, REV,TIC * 452.30 +/- 2        | 4R3  | 4  | 0  | 5,842,253:89:0 |      |
| 1961 | 0  | 364 | 14:03:34.333 |                 | DMS:     | :*READY          | RDY, TRACK 2, REV,TIC * 452.24 +/- 2       | 4R3  | 4  | 0  | 5,842,253:90:8 |      |
| 1962 | 0  | 364 | 14:03:38.466 | 29JNAURORA02-   |          | -----STOP-----   |  | 4R3  | 4  | 0  | :::            |      |
| 1963 | 0  | 364 | 14:04:34.466 | 165DV4A         | 75SCAN   | NORM,45.455,24.4 | Check S/P Position                         | 4R3  | 4  | 0  | 5,842,254:90:0 |      |
| 1964 | 0  | 364 | 14:04:39.132 | 29JNLIMBRT02-   |          | -----START-----  |  | 4R3  | 4  | 0  | :::            |      |
| 1965 | 0  | 364 | 14:06:27.133 | 117DV           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 4R3  | 4  | 0  | 5,842,256:77:0 |      |
| 1966 | 0  | 364 | 14:06:31.800 | 125DV           | NIMSINIT | GS               | ##### GROUP START INIT                     | 4R3  | 4  | 0  | 5,842,256:84:0 |      |
| 1967 | 0  | 364 | 14:06:31.800 | 125DV4A         | 37IST    | 0,2,0,OFF,0,1,1  | Gain State 4                               | 4R3  | 4  | 0  | 5,842,256:84:0 |      |
| 1968 | 0  | 364 | 14:06:31.800 | 125DV11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 4R3  | 4  | 0  | 5,842,256:84:0 |      |
| 1969 | 0  | 364 | 14:06:32.466 | 117DV105A106A4A | 75TRP    | -0.0093,-0.0014, | Slew =0.02                                 | 4R3  | 4  | 0  | 5,842,257:00:0 |      |
| 1970 | 0  | 364 | 14:07:32.466 | 127DV4A         | 37IOP    | 3.0              | Long Map, Grating Start Position =00       | 4R3  | 4  | 0  | 5,842,257:84:0 |      |
| 1971 | 0  | 364 | 14:07:32.466 | 127DV           | NIMSTAB  | GS               | %%%% GROUP START TAB                       | 4R3  | 4  | 0  | 5,842,257:84:0 |      |
| 1972 | 0  | 364 | 14:07:33.133 | 127DV4B         | 37ETB    | 07,C7,14,00,FF,2 | Loads wavelength edit table                | 4R3  | 4  | 0  | 5,842,257:85:0 |      |
| 1973 | 0  | 364 | 14:07:41.133 | 432DV6A         | 6RTSL2   | NIMSEL,AACNCG,RT | NIMS RT SELECT                             | 4R3  | 4  | 0  | 5,842,258:06:0 |      |
| 1974 | 0  | 364 | 14:07:41.133 | 127DV11A        | NIMSTAB  | GE               | %%%% GROUP END TAB                         | 4R3  | 4  | 0  | 5,842,258:06:0 |      |
| 1975 | 0  | 364 | 14:12:43.133 | 432EV6A         | 6RTDS2   | NIMDSL,AACNCG,RT | NIMS RT DESELECT                           | 4R3  | 4  | 0  | 5,842,263:04:0 |      |
| 1976 | 0  | 364 | 14:14:38.466 | 117DV11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 4R3  | 4  | 0  | 5,842,264:86:0 |      |
| 1977 | 0  | 364 | 14:14:45.799 | 29JNLIMBRT02-   |          | -----STOP-----   |  | 4R3  | 4  | 0  | :::            |      |
| 1978 | 0  | 364 | 14:46:48.000 | 29NNAURORA03-   |          | -----START-----  |  | 4R3  | 4  | 0  | :::            |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters | Description                                | GCM | GO  | GS | RIM            | MIF I          |
|------|----|-----|--------------|-----------------|--------------------|--|-----|-----|----|----------------|----------------|
| 1979 | 0  | 364 | 14:46:48.466 | 20DX5A          | 37PL               | Program Load (halts microprocessor & unwri |     | 4   | 0  | 5,842,296:69:0 |                |
| 1980 | 0  | 364 | 14:46:55.800 | 20DX5B          | 37MRL              | Memory Realocate (software operates from R |     | 4   | 0  | 5,842,296:80:0 |                |
| 1981 | 0  | 364 | 14:47:03.800 | 20DX6A          | 6MCOPI NIMS        | NIMS,1000,LLM1A,7300,77F7                  |     | 4   | 0  | 5,842,297:01:0 |                |
| 1982 | 0  | 364 | 14:47:13.800 | 20DX6B          | 6MCOPI NIMS        | NIMS,1598,LLM1A,77F8,781D                  |     | 4   | 0  | 5,842,297:16:0 |                |
| 1983 | 0  | 364 | 14:47:23.800 | 20DX5C          | 37IRT              | Instrument Reset (goes into POR state)     |     | 4   | 0  | 5,842,297:31:0 |                |
| 1984 | 0  | 364 | 14:47:30.466 | 20DX5D          | 37MIN              | Memory Normal (software operates from ROM) |     | 260 | 4  | 0              | 5,842,297:41:0 |
| 1985 | 0  | 364 | 14:47:56.466 | 20DX4A          | 37IST              | Chopper ON, Sync, Chopper (Ref)            |     | 2R0 | 4  | 0              | 5,842,297:80:0 |
| 1986 | 0  | 364 | 14:47:57.000 | 29NNAURORA03-   | -----STOP-----     |  |     | 2R0 | 4  | 0              | :              |
| 1987 | 0  | 364 | 14:48:03.133 | 165DX4A         | 75SCAN             | NORM,49.712,16.4                           |     | 2R0 | 4  | 0              | 5,842,297:90:0 |
| 1988 | 0  | 364 | 14:50:00.466 | 125DX4A         | 37IST              | 0.2,0,OFF,0,1,1                            |     | 4R0 | 4  | 0              | 5,842,299:84:0 |
| 1989 | 0  | 364 | 14:50:00.466 | 125DX11A        | NIMSINIT GE        | ##### GROUP END INIT                       |     | 4R0 | 4  | 0              | 5,842,299:84:0 |
| 1990 | 0  | 364 | 14:50:00.466 | 125DX           | NIMSINIT GS        | ##### GROUP START INIT                     |     | 4R0 | 4  | 0              | 5,842,299:84:0 |
| 1991 | 0  | 364 | 14:50:09.132 | 29JNAURORA03-   | -----START-----    |  |     | 4R0 | 4  | 0              | :              |
| 1992 | 0  | 364 | 14:51:01.133 | 127DX           | NIMSTAB GS         | %%%%%%%% GROUP START TAB                   |     | 4R0 | 4  | 0              | 5,842,300:84:0 |
| 1993 | 0  | 364 | 14:51:01.133 | 127DX4A         | 37IOP              | 3.0  |     | 4R3 | 4  | 0              | 5,842,300:84:0 |
| 1994 | 0  | 364 | 14:51:01.800 | 127DX4B         | 37ETB              | 07,C7,30,3C,D7,0                           |     | 4R3 | 4  | 0              | 5,842,300:85:0 |
| 1995 | 0  | 364 | 14:51:09.800 | 127DX11A        | NIMSTAB GE         | %%%%%%%% GROUP END TAB                     |     | 4R3 | 4  | 0              | 5,842,301:06:0 |
| 1996 | 0  | 364 | 14:51:54.466 | 175DX422A6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps             |     | 4R3 | 4  | 0              | 5,842,301:73:0 |
| 1997 | 0  | 364 | 14:51:54.466 |                 | DMS: *US-RUNUP     | P7, TRACK *1, *FWD, TIC 452.24 +/- 2       |     | 4R3 | 4  | 0              | 5,842,301:73:0 |
| 1998 | 0  | 364 | 14:51:55.866 |                 | DMS: *US_AT SP     | P7, TRACK 1, FWD, TIC * 452.36 +/- 2       |     | 4R3 | 4  | 0              | 5,842,301:75:1 |
| 1999 | 0  | 364 | 14:51:57.133 | 117DX           | CSMOS              | ***** GROUP START CSMOS                    |     | 4R3 | 4  | 0              | 5,842,301:77:0 |
| 2000 | 0  | 364 | 14:52:01.133 |                 | DMS: *US RD        | P7, TRACK 1, FWD, TIC * 453.60 +/- 2       |     | 4R3 | 4  | 0              | 5,842,301:83:0 |
| 2001 | 0  | 364 | 14:52:02.333 |                 | DMS: *RUNUP        | R7, TRACK *2, REV, TIC * 453.66 +/- 2      |     | 4R3 | 4  | 0              | 5,842,301:84:8 |
| 2002 | 0  | 364 | 14:52:03.133 | 175DX176A6A     | 6TMREC LPU         | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  |     | 4R3 | 4  | 0              | 5,842,301:86:0 |
| 2003 | 0  | 364 | 14:52:03.733 |                 | DMS: *AT SPD       | R7, TRACK 2, REV, TIC 453.54 +/- 2         |     | 4R3 | 4  | 0              | 5,842,301:86:9 |
| 2004 | 0  | 364 | 14:52:03.733 |                 | DMS: *RECORD       | R7, TRACK 2, REV, TIC * 453.54 +/- 2       |     | 4R3 | 4  | 0              | 5,842,301:86:9 |
| 2005 | 0  | 364 | 14:52:05.800 | 29JNAURORA03-   | NIMPBK 301DX       | JUPITER AURORA OBSERVATION                 |     | 4R3 | 4  | 0              | :              |
| 2006 | 0  | 364 | 14:52:06.466 | 117DX105A106A4A | 75TRP              | -0.013601,0.0099                           |     | 4R3 | 4  | 0              | 5,842,302:00:0 |
| 2007 | 0  | 364 | 14:52:22.466 | 488A16E         | 6TMSED NORM,AL3    | Slew =,0.08                                |     | 4R3 | 4  | 0              | 5,842,302:24:0 |
| 2008 | 0  | 364 | 14:59:59.800 | 488AJ6A         | 6TMSED NORM,AH3    | Sci, Eng, and D/L Chan                     |     | 4R3 | 4  | 0              | 5,842,309:73:0 |
| 2009 | 0  | 364 | 15:04:09.800 | 29JNAURORA03-   | DESEL 300DX        | JUPITER AURORA OBSERVATION                 |     | 4R3 | 4  | 0              | :              |
| 2010 | 0  | 364 | 15:04:11.133 | 117DX11A        | CSMOS GE           | ***** GROUP END CSMOS                      |     | 4R3 | 4  | 0              | 5,842,313:86:0 |
| 2011 | 0  | 364 | 15:04:11.800 |                 | DMS: *RUNDOWN      | R7, TRACK 2, REV, TIC * 282.89 +/- 2       |     | 4R3 | 4  | 0              | 5,842,313:87:0 |
| 2012 | 0  | 364 | 15:04:11.800 | 175DX6A         | 6TMREC NRC         | NO RECORD Record Mode Change               |     | 4R3 | 4  | 0              | 5,842,313:87:0 |
| 2013 | 0  | 364 | 15:04:11.800 | 175DX422A6B     | 6DMSC RDY,0        | DMS Control Tape stop                      |     | 4R3 | 4  | 0              | 5,842,313:87:0 |
| 2014 | 0  | 364 | 15:04:13.000 |                 | DMS: *READY        | RDY, TRACK 2, REV, TIC * 282.83 +/- 2      |     | 4R3 | 4  | 0              | 5,842,313:88:8 |
| 2015 | 0  | 364 | 15:04:18.466 | 29JNAURORA03-   | -----STOP-----     |  |     | 4R3 | 4  | 0              | :              |
| 2016 | 0  | 364 | 15:05:14.466 | 165DY4A         | 75SCAN             | NORM,49.45,25.18                           |     | 4R3 | 4  | 0              | 5,842,314:90:0 |
| 2017 | 0  | 364 | 15:05:19.132 | 29JNLIMBRT03-   | -----START-----    |  |     | 4R3 | 4  | 0              | :              |
| 2018 | 0  | 364 | 15:07:07.133 | 117DY           | CSMOS GS           | ***** GROUP START CSMOS                    |     | 4R3 | 4  | 0              | 5,842,316:77:0 |
| 2019 | 0  | 364 | 15:07:11.800 | 125DY4A         | 37IST              | 0.2,0,OFF,0,1,1                            |     | 4R3 | 4  | 0              | 5,842,316:84:0 |
| 2020 | 0  | 364 | 15:07:11.800 | 125DY           | NIMSINIT GS        | ##### GROUP START INIT                     |     | 4R3 | 4  | 0              | 5,842,316:84:0 |
| 2021 | 0  | 364 | 15:07:11.800 | 125DY11A        | NIMSINIT GE        | ##### GROUP END INIT                       |     | 4R3 | 4  | 0              | 5,842,316:84:0 |
| 2022 | 0  | 364 | 15:07:16.466 | 117DY105A106A4A | 75TRP              | -0.0095,-0.0008,                           |     | 4R3 | 4  | 0              | 5,842,317:00:0 |
| 2023 | 0  | 364 | 15:08:12.466 | 127DY4A         | 37IOP              | 3.0  |     | 4R3 | 4  | 0              | 5,842,317:84:0 |
| 2024 | 0  | 364 | 15:08:12.466 | 127DY           | NIMSTAB GS         | Long Map, Grating Start Position =00       |     | 4R3 | 4  | 0              | 5,842,317:84:0 |
| 2025 | 0  | 364 | 15:08:13.133 | 127DY4B         | 37ETB              | 07,C7,14,00,FF,2                           |     | 4R3 | 4  | 0              | 5,842,317:85:0 |
| 2026 | 0  | 364 | 15:08:21.133 | 127DY11A        | NIMSTAB GE         | %%%%%%%% GROUP END TAB                     |     | 4R3 | 4  | 0              | 5,842,318:06:0 |
| 2027 | 0  | 364 | 15:08:21.133 | 432DY6A         | 6RTSL2             | NIMSEL,AACNCG,RT                           |     | 4R3 | 4  | 0              | 5,842,318:06:0 |
| 2028 | 0  | 364 | 15:13:23.133 | 432EY6A         | 6RTDS2             | NIMDSL,AACNCG,RT                           |     | 4R3 | 4  | 0              | 5,842,323:04:0 |
| 2029 | 0  | 364 | 15:15:18.466 | 117DY11A        | CSMOS GE           | ***** GROUP END CSMOS                      |     | 4R3 | 4  | 0              | 5,842,324:86:0 |
| 2030 | 0  | 364 | 15:15:25.799 | 29JNLIMBRT03-   | -----STOP-----     |  |     | 4R3 | 4  | 0              | :              |
| 2031 | 0  | 364 | 15:45:42.466 | 488AJ6B         | 6TMSED NORM,AH4    | Sci, Eng, and D/L Chan                     |     | 4R3 | 4  | 0              | 5,842,355:01:0 |
| 2032 | 0  | 364 | 15:46:42.466 | 465KC6A         | 6DMSC RDY,3        | DMS Control Tape stop                      |     | 4R3 | 4  | 0              | 5,842,356:00:0 |
| 2033 | 0  | 364 | 15:46:42.466 |                 | DMS: : READY       | RDY, TRACK *3, *FWD, TIC 282.83 +/- 2      |     | 4R3 | 4  | 0              | 5,842,356:00:0 |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters       | Description                                | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|--------------------------|--|-----|----|----|----------------|------|
| 2034 | 0  | 364 | 15:47:28.000 | 29NNAURORA04-   | -----START-----          |  | 4R3 | 4  | 0  | :              | :    |
| 2035 | 0  | 364 | 15:47:28.466 | 20DZ5A          | 37PL                     | Program Load (halts microprocessor & unwri | 4R3 | 4  | 0  | 5,842,356:69:0 |      |
| 2036 | 0  | 364 | 15:47:35.800 | 20DZ5B          | 37MRL                    | Memory Realocate (software operates from R | 4R3 | 4  | 0  | 5,842,356:80:0 |      |
| 2037 | 0  | 364 | 15:47:43.800 | 20DZ6A          | 6MCOPY NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4R3 | 4  | 0  | 5,842,357:01:0 |      |
| 2038 | 0  | 364 | 15:47:53.800 | 20DZ6B          | 6MCOPY NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4R3 | 4  | 0  | 5,842,357:16:0 |      |
| 2039 | 0  | 364 | 15:48:03.800 | 20DZ5C          | 37IRT                    | Instrument Reset (goes into POR state)     | 4R3 | 4  | 0  | 5,842,357:31:0 |      |
| 2040 | 0  | 364 | 15:48:10.466 | 20DZ5D          | 37MNI                    | Memory Normal (software operates from ROM) | 260 | 4  | 0  | 5,842,357:41:0 |      |
| 2041 | 0  | 364 | 15:48:36.466 | 20DZ4A          | 37IST 1,2,0,OFF,0,0,0    | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0  | 5,842,357:80:0 |      |
| 2042 | 0  | 364 | 15:48:37.000 | 29NNAURORA04-   | -----STOP-----           |  | 2R0 | 4  | 0  | :              | :    |
| 2043 | 0  | 364 | 15:48:43.133 | 165DZ4A         | 75SCAN NORM,53,759,17.6  | Check S/P Position                         | 2R0 | 4  | 0  | 5,842,357:90:0 |      |
| 2044 | 0  | 364 | 15:49:39.800 | 125DZ4A         | 37IST 0,2,0,OFF,0,1,1    | Gain State 4                               | 4R0 | 4  | 0  | 5,842,358:84:0 |      |
| 2045 | 0  | 364 | 15:49:39.800 | 125DZ11A        | NIMSINIT GE              | ##### GROUP END INIT                       | 4R0 | 4  | 0  | 5,842,358:84:0 |      |
| 2046 | 0  | 364 | 15:49:39.800 | 125DZ           | NIMSINIT GS              | ##### GROUP START INIT                     | 4R0 | 4  | 0  | 5,842,358:84:0 |      |
| 2047 | 0  | 364 | 15:50:49.132 | 29JNAURORA04-   | -----START-----          |  | 4R0 | 4  | 0  | :              | :    |
| 2048 | 0  | 364 | 15:51:41.133 | 127DZ4A         | 37IOP 3S                 | Long Map, Grating Start Position =00       | 4R3 | 4  | 0  | 5,842,360:84:0 |      |
| 2049 | 0  | 364 | 15:51:41.133 | 127DZ           | NIMSTAB GS               | %%%%% GROUP START TAB                      | 4R3 | 4  | 0  | 5,842,360:84:0 |      |
| 2050 | 0  | 364 | 15:51:41.800 | 127DZ4B         | 37ETB 07,C7,30,3C,D7,0   | Loads wavelength edit table                | 4R3 | 4  | 0  | 5,842,360:85:0 |      |
| 2051 | 0  | 364 | 15:51:49.800 | 127DZ11A        | NIMSTAB GE               | %%%%% GROUP END TAB                        | 4R3 | 4  | 0  | 5,842,361:06:0 |      |
| 2052 | 0  | 364 | 15:52:35.133 |                 | DMS: :*E4-DELAY          | RDY, TRACK *1, FWD, TIC 282.83 +/- 2       | 4R3 | 4  | 0  | 5,842,361:74:0 |      |
| 2053 | 0  | 364 | 15:52:35.133 | 175DZ422A6A     | 6DMSC R7,3               | DMS Control                                | 4R3 | 4  | 0  | 5,842,361:74:0 |      |
| 2054 | 0  | 364 | 15:52:37.133 | 117DZ           | CSMOS GS                 | ***** GROUP START CSMOS                    | 4R3 | 4  | 0  | 5,842,361:77:0 |      |
| 2055 | 0  | 364 | 15:52:41.800 |                 | DMS: :*RUNUP             | R7, TRACK *3, FWD, TIC 282.83 +/- 2        | 4R3 | 4  | 0  | 5,842,361:84:0 |      |
| 2056 | 0  | 364 | 15:52:43.133 | 175DZ176A6A     | 6TMREC LPU               | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3 | 4  | 0  | 5,842,361:86:0 |      |
| 2057 | 0  | 364 | 15:52:43.200 |                 | DMS: :*AT SPD            | R7, TRACK 3, FWD, TIC 282.95 +/- 2         | 4R3 | 4  | 0  | 5,842,361:86:1 |      |
| 2058 | 0  | 364 | 15:52:43.200 |                 | DMS: :*RECORD            | R7, TRACK 3, FWD, TIC * 282.95 +/- 2       | 4R3 | 4  | 0  | 5,842,361:86:1 |      |
| 2059 | 0  | 364 | 15:52:45.800 | 29JNAURORA04-   | NIMPBK 30IDZ             | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0  | :              | :    |
| 2060 | 0  | 364 | 15:52:46.466 | 117DZ105A106A4A | 75TRP -0.013007,0.0261   | Slew = 0.26                                | 4R3 | 4  | 0  | 5,842,362:00:0 |      |
| 2061 | 0  | 364 | 16:04:51.133 | 29JNAURORA04-   | DESEL 300DZ              | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0  | :              | :    |
| 2062 | 0  | 364 | 16:04:51.133 | 117DZ11A        | CSMOS GE                 | ***** GROUP END CSMOS                      | 4R3 | 4  | 0  | 5,842,373:86:0 |      |
| 2063 | 0  | 364 | 16:04:58.466 | 29JNAURORA04-   | -----STOP-----           |  | 4R3 | 4  | 0  | :              | :    |
| 2064 | 0  | 364 | 16:05:43.800 | 175DZ422A6B     | 6DMSC RDY,0              | DMS Control Tape stop                      | 4R3 | 4  | 0  | 5,842,374:74:0 |      |
| 2065 | 0  | 364 | 16:05:43.800 |                 | DMS: :*RUNDOWN           | R7, TRACK 3, FWD, TIC * 465.91 +/- 2       | 4R3 | 4  | 0  | 5,842,374:74:0 |      |
| 2066 | 0  | 364 | 16:05:43.800 | 175DZ6A         | 6TMREC NRC               | NO RECORD Record Mode Change               | 4R3 | 4  | 0  | 5,842,374:74:0 |      |
| 2067 | 0  | 364 | 16:05:45.000 |                 | DMS: :*READY             | RDY, TRACK 3, FWD, TIC * 465.97 +/- 2      | 4R3 | 4  | 0  | 5,842,374:75:8 |      |
| 2068 | 0  | 364 | 16:06:41.133 | 488AJ6C         | 6TMSED FILL,AH4          | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0  | 5,842,375:69:0 |      |
| 2069 | 0  | 364 | 16:28:49.800 | 165ID4A         | 75SCAN NORM,74,957999,2  | Check S/P Position                         | 4R3 | 4  | 0  | 5,842,397:60:0 |      |
| 2070 | 0  | 364 | 16:32:04.466 | 118ID           | SMOS GS                  |  | 4R3 | 4  | 0  | 5,842,400:79:0 |      |
| 2071 | 0  | 364 | 16:32:11.133 | 165ID4B         | 7VECT                    | Inert vect update UTC                      | 4R3 | 4  | 0  | 5,842,400:89:0 |      |
| 2072 | 0  | 364 | 16:32:11.133 | 175ID422A6A     | 6DMSC R806.3             | DMS Control                                | 4R3 | 4  | 0  | 5,842,400:89:0 |      |
| 2073 | 0  | 364 | 16:32:11.133 |                 | DMS: :*E4-DELAY          | RDY, TRACK *1, FWD, TIC 465.97 +/- 2       | 4R3 | 4  | 0  | 5,842,400:89:0 |      |
| 2074 | 0  | 364 | 16:32:14.466 | 118ID110A111A4A | 75TRP -0.0038,0.0,0.26,0 | Slew = 1.91                                | 4R3 | 4  | 0  | 5,842,401:03:0 |      |
| 2075 | 0  | 364 | 16:32:17.800 |                 | DMS: :*RUNUP             | R806, TRACK *3, FWD, TIC 465.97 +/- 2      | 4R3 | 4  | 0  | 5,842,401:08:0 |      |
| 2076 | 0  | 364 | 16:32:22.466 | 175ID176A6A     | 6TMREC IM8               | 806.4 KBPS IMAGE RECORD Record Mode Chang  | 4R3 | 4  | 0  | 5,842,401:15:0 |      |
| 2077 | 0  | 364 | 16:32:23.066 |                 | DMS: :*AT SPD            | R806, TRACK 3, FWD, TIC 531.97 +/- 2       | 4R3 | 4  | 0  | 5,842,401:15:9 |      |
| 2078 | 0  | 364 | 16:32:23.066 |                 | DMS: :*RECORD            | R806, TRACK 3, FWD, TIC * 531.97 +/- 2     | 4R3 | 4  | 0  | 5,842,401:15:9 |      |
| 2079 | 0  | 364 | 16:32:23.133 | 118ID110A111A4B | 75TRP 0.0038,0.0,0.0,0.0 | Slew = 1.91                                | 4R3 | 4  | 0  | 5,842,401:16:0 |      |
| 2080 | 0  | 364 | 16:32:27.133 | 175ID422A6B     | 6DMSC RDY,0              | DMS Control Tape stop                      | 4R3 | 4  | 0  | 5,842,401:22:0 |      |
| 2081 | 0  | 364 | 16:32:27.133 |                 | DMS: :*RUNDOWN           | R806, TRACK 3, FWD, TIC * 632.05 +/- 2     | 4R3 | 4  | 0  | 5,842,401:22:0 |      |
| 2082 | 0  | 364 | 16:32:29.866 |                 | DMS: :*READY             | RDY, TRACK 3, FWD, TIC * 643.55 +/- 2      | 4R3 | 4  | 0  | 5,842,401:26:1 |      |
| 2083 | 0  | 364 | 16:32:31.800 | 118ID110A111A4C | 75TRP -0.0038,0.0,0.26,0 | Slew = 1.91                                | 4R3 | 4  | 0  | 5,842,401:29:0 |      |
| 2084 | 0  | 364 | 16:32:37.133 |                 | DMS: :*E4-DELAY          | RDY, TRACK *1, FWD, TIC 643.55 +/- 2       | 4R3 | 4  | 0  | 5,842,401:37:0 |      |
| 2085 | 0  | 364 | 16:32:37.133 | 175QD422A6A     | 6DMSC R806.3             | DMS Control                                | 4R3 | 4  | 0  | 5,842,401:37:0 |      |
| 2086 | 0  | 364 | 16:32:40.466 | 118ID110A111A4D | 75TRP 0.0038,0.0,0.0,0.0 | Slew = 1.91                                | 4R3 | 4  | 0  | 5,842,401:42:0 |      |
| 2087 | 0  | 364 | 16:32:43.800 |                 | DMS: :*RUNUP             | R806, TRACK *3, FWD, TIC 643.55 +/- 2      | 4R3 | 4  | 0  | 5,842,401:47:0 |      |
| 2088 | 0  | 364 | 16:32:48.466 | 175QD176A6A     | 6TMREC IM8               | 806.4 KBPS IMAGE RECORD Record Mode Chang  | 4R3 | 4  | 0  | 5,842,401:54:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 2089 | 0  | 364 | 16:32:49.066 |                 | DMS:     | :*RECORD         | R806, TRACK 3, FWD, TIC * 709.55 +/- 2     | 4R3 | 4  | 0              | 5,842,401:54:9 |      |
| 2090 | 0  | 364 | 16:32:49.066 |                 | DMS:     | :*AT SPD         | R806, TRACK 3, FWD, TIC 709.55 +/- 2       | 4R3 | 4  | 0              | 5,842,401:54:9 |      |
| 2091 | 0  | 364 | 16:32:49.133 | 118ID110A111A4E | 7STRP    | -0.0038,0.0,26.0 | Slew = 1.91                                | 4R3 | 4  | 0              | 5,842,401:55:0 |      |
| 2092 | 0  | 364 | 16:32:53.133 |                 | DMS:     | :*RUNDOWN        | R806, TRACK 3, FWD, TIC * 809.62 +/- 2     | 4R3 | 4  | 0              | 5,842,401:61:0 |      |
| 2093 | 0  | 364 | 16:32:53.133 | 175QD422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,401:61:0 |      |
| 2094 | 0  | 364 | 16:32:55.866 |                 | DMS:     | :*READY          | RDY, TRACK 3, FWD, TIC * 821.12 +/- 3      | 4R3 | 4  | 0              | 5,842,401:65:1 |      |
| 2095 | 0  | 364 | 16:32:57.800 | 118ID111A       | SMOS     | GE               |  | 4R3 | 4  | 0              | 5,842,401:68:0 |      |
| 2096 | 0  | 364 | 16:40:20.466 | 488AJ6D         | 6TMSED   | NORM,AH4         | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0              | 5,842,409:04:0 |      |
| 2097 | 0  | 364 | 16:47:07.000 | 29NNAURORA05-   |          | -----START-----  |  | 4R3 | 4  | 0              | :              |      |
| 2098 | 0  | 364 | 16:47:07.800 | 20EB5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,842,415:69:0 |                |      |
| 2099 | 0  | 364 | 16:47:15.133 | 20EB5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,842,415:80:0 |                |      |
| 2100 | 0  | 364 | 16:47:23.133 | 20EB6A          | 6MCOPI   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,842,416:01:0 |                |      |
| 2101 | 0  | 364 | 16:47:33.133 | 20EB6B          | 6MCOPI   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,842,416:16:0 |                |      |
| 2102 | 0  | 364 | 16:47:43.133 | 20EB5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,842,416:31:0 |                |      |
| 2103 | 0  | 364 | 16:47:49.800 | 20EB5D          | 37MNI    |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,842,416:41:0 |      |
| 2104 | 0  | 364 | 16:48:15.800 | 20EB4A          | 37IST    | 1.2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,842,416:80:0 |      |
| 2105 | 0  | 364 | 16:48:16.000 | 29NNAURORA05-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              |      |
| 2106 | 0  | 364 | 16:48:22.466 | 165EB4A         | 7SCAN    | NORM,56.545,18.3 | Check S/P Position                         | 2R0 | 4  | 0              | 5,842,416:90:0 |      |
| 2107 | 0  | 364 | 16:49:19.133 | 125EB           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,842,417:84:0 |      |
| 2108 | 0  | 364 | 16:49:19.133 | 125EB4A         | 37IST    | 0.2,0,OFF,0,1,1  | Gain State 4                               | 4R0 | 4  | 0              | 5,842,417:84:0 |      |
| 2109 | 0  | 364 | 16:49:19.133 | 125EB11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 4R0 | 4  | 0              | 5,842,417:84:0 |      |
| 2110 | 0  | 364 | 16:51:20.466 | 127EB           | NIMSTAB  | GS               | ##### GROUP START TAB                      | 4R0 | 4  | 0              | 5,842,419:84:0 |      |
| 2111 | 0  | 364 | 16:51:20.466 | 127EB4A         | 37IOP    | 3.0              | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 5,842,419:84:0 |      |
| 2112 | 0  | 364 | 16:51:21.133 | 127EB4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,842,419:85:0 |      |
| 2113 | 0  | 364 | 16:51:29.133 | 29NNAURORA05-   |          | -----START-----  |  | 4R3 | 4  | 0              | :              |      |
| 2114 | 0  | 364 | 16:51:29.133 | 127EB11A        | NIMSTAB  | GE               | ##### GROUP END TAB                        | 4R3 | 4  | 0              | 5,842,420:06:0 |      |
| 2115 | 0  | 364 | 16:52:14.466 | 175EB422A6A     | 6DMSC    | R7,3             | DMS Control                                | 4R3 | 4  | 0              | 5,842,420:74:0 |      |
| 2116 | 0  | 364 | 16:52:14.466 |                 | DMS:     | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 821.12 +/- 3       | 4R3 | 4  | 0              | 5,842,420:74:0 |      |
| 2117 | 0  | 364 | 16:52:16.466 | 117EB           | CSMOS    | GS               | ##### GROUP START CSMOS                    | 4R3 | 4  | 0              | 5,842,420:77:0 |      |
| 2118 | 0  | 364 | 16:52:21.133 |                 | DMS:     | :*RUNUP          | R7, TRACK *3, FWD, TIC 821.12 +/- 3        | 4R3 | 4  | 0              | 5,842,420:84:0 |      |
| 2119 | 0  | 364 | 16:52:22.466 | 175EB176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3 | 4  | 0              | 5,842,420:86:0 |      |
| 2120 | 0  | 364 | 16:52:22.533 |                 | DMS:     | :*RECORD         | R7, TRACK 3, FWD, TIC * 821.24 +/- 3       | 4R3 | 4  | 0              | 5,842,420:86:1 |      |
| 2121 | 0  | 364 | 16:52:22.533 |                 | DMS:     | :*AT SPD         | R7, TRACK 3, FWD, TIC 821.24 +/- 3         | 4R3 | 4  | 0              | 5,842,420:86:1 |      |
| 2122 | 0  | 364 | 16:52:25.133 | 29NNAURORA05-   | NIMPBK   | 301EB            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2123 | 0  | 364 | 16:52:25.800 | 117EB105A106A4A | 7STRP    | -0.0054,0.0,0,0  | Slew =0.03                                 | 4R3 | 4  | 0              | 5,842,421:00:0 |      |
| 2124 | 0  | 364 | 16:55:29.800 | 117EB105A106A4B | 7STRP    | 0.0056,0.005003, | Slew =12.01                                | 4R3 | 4  | 0              | 5,842,424:03:0 |      |
| 2125 | 0  | 364 | 16:55:46.466 | 117EB105A106A4C | 7STRP    | -0.0054,0.0,0,0  | Slew =0.03                                 | 4R3 | 4  | 0              | 5,842,424:28:0 |      |
| 2126 | 0  | 364 | 16:58:50.466 | 117EB105A106A4D | 7STRP    | 0.0056,0.005003, | Slew =12.01                                | 4R3 | 4  | 0              | 5,842,427:31:0 |      |
| 2127 | 0  | 364 | 16:59:07.133 | 117EB105A106A4E | 7STRP    | -0.0054,0.0,0,0  | Slew =0.03                                 | 4R3 | 4  | 0              | 5,842,427:56:0 |      |
| 2128 | 0  | 364 | 16:59:59.800 | 480SF6A         | 6MROH    | 44:23E8,0,A10    | read from LLM2A44,23E8,0,A1                | 4R3 | 4  | 0              | 5,842,428:44:0 |      |
| 2129 | 0  | 364 | 17:01:19.800 | 480SF6B         | 6MROH    | 45:23E8,0,B10    | read from LLM2B45,23E8,0,B1                | 4R3 | 4  | 0              | 5,842,429:73:0 |      |
| 2130 | 0  | 364 | 17:02:11.133 | 117EB105A106A4F | 7STRP    | 0.0056,0.005003, | Slew =12.01                                | 4R3 | 4  | 0              | 5,842,430:59:0 |      |
| 2131 | 0  | 364 | 17:02:27.800 | 117EB105A106A4G | 7STRP    | -0.0054,0.0,0,0  | Slew =0.03                                 | 4R3 | 4  | 0              | 5,842,430:84:0 |      |
| 2132 | 0  | 364 | 17:05:21.133 | 29NNAURORA05-   | DESEL    | 300EB            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2133 | 0  | 364 | 17:05:23.133 |                 | DMS:     | :*RUNDOWN        | R7, TRACK 3, FWD, TIC *1004.20 +/- 3       | 4R3 | 4  | 0              | 5,842,433:74:0 |      |
| 2134 | 0  | 364 | 17:05:23.133 | 175EB6A         | 6TMREC   | RDY,0            | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,433:74:0 |      |
| 2135 | 0  | 364 | 17:05:23.133 | 175EB422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,433:74:0 |      |
| 2136 | 0  | 364 | 17:05:24.333 |                 | DMS:     | :*READY          | RDY, TRACK 3, FWD, TIC *1004.26 +/- 3      | 4R3 | 4  | 0              | 5,842,433:75:8 |      |
| 2137 | 0  | 364 | 17:05:31.800 | 117EB11A        | CSMOS    | GE               | ##### GROUP END CSMOS                      | 4R3 | 4  | 0              | 5,842,433:87:0 |      |
| 2138 | 0  | 364 | 17:05:38.466 | 29NNAURORA05-   |          | -----STOP-----   |  | 4R3 | 4  | 0              | :              |      |
| 2139 | 0  | 364 | 17:20:43.800 | 165GQ4A         | 7SCAN    | NORM,14,527,8.37 | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,448:90:0 |      |
| 2140 | 0  | 364 | 17:23:46.466 | 176GQ6A         | 6TMREC   | BPT              | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 4R3 | 4  | 0              | 5,842,452:00:0 |      |
| 2141 | 0  | 364 | 17:24:37.800 | 117GQ           | CSMOS    | GS               | ##### GROUP START CSMOS                    | 4R3 | 4  | 0              | 5,842,452:77:0 |      |
| 2142 | 0  | 364 | 17:24:47.133 | 117GQ105A106A4A | 7STRP    | 0.0009,-0.0033,0 | Slew = 0.11                                | 4R3 | 4  | 0              | 5,842,453:00:0 |      |
| 2143 | 0  | 364 | 17:25:35.800 | 117GQ105A106A4B | 7STRP    | -0.0003,0.0032,0 | Slew =12.01                                | 4R3 | 4  | 0              | 5,842,453:73:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 2144 | 0  | 364 | 17:25:52.466 | 117GQ105A106A4C | 7STRP    | 0.0009,-0.0033,0 | Slew =0.11                                 | 4R3 | 4  | 0              | 5,842,454:07:0 |      |
| 2145 | 0  | 364 | 17:26:41.133 | 117GQ11A        | CSMOS    | GE               | ***** GROUP END                            | 4R3 | 4  | 0              | 5,842,454:80:0 |      |
| 2146 | 0  | 364 | 17:28:19.133 | 176GQ6B         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,456:45:0 |      |
| 2147 | 0  | 364 | 17:28:21.133 | 50ZZ6XX         | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 4R3 | 4  | 0              | 5,842,456:48:0 |      |
| 2148 | 0  | 364 | 17:28:21.133 |                 | DMS:     | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 1004.26 +/- 3      | 4R3 | 4  | 0              | 5,842,456:48:0 |      |
| 2149 | 0  | 364 | 17:28:27.800 |                 | DMS:     | :*RUNUP          | R7, TRACK *3, FWD, TIC 1004.26 +/- 3       | 4R3 | 4  | 0              | 5,842,456:58:0 |      |
| 2150 | 0  | 364 | 17:28:29.200 |                 | DMS:     | :*AT SPD         | R7, TRACK 3, FWD, TIC *1004.38 +/- 3       | 4R3 | 4  | 0              | 5,842,456:60:1 |      |
| 2151 | 0  | 364 | 17:28:31.133 |                 | DMS:     | :*RECORD         | R7, TRACK 3, FWD, TIC *1004.83 +/- 3       | 4R3 | 4  | 0              | 5,842,456:63:0 |      |
| 2152 | 0  | 364 | 17:28:43.800 |                 | DMS:     | :*RUNDOWN        | R7, TRACK 3, FWD, TIC *1007.80 +/- 3       | 4R3 | 4  | 0              | 5,842,456:82:0 |      |
| 2153 | 0  | 364 | 17:28:43.800 | 50ZZ6RD         | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,456:82:0 |      |
| 2154 | 0  | 364 | 17:28:45.000 |                 | DMS:     | :*READY          | RDY, TRACK 3, FWD, TIC *1007.86 +/- 3      | 4R3 | 4  | 0              | 5,842,456:83:8 |      |
| 2155 | 0  | 364 | 17:50:49.000 | 29NNAUORORA06-  |          | -----START-----  |  | 4R3 | 4  | 0              | :              |      |
| 2156 | 0  | 364 | 17:50:49.800 | 20ED5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,842,478:69:0 |                |      |
| 2157 | 0  | 364 | 17:50:57.133 | 20ED5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,842,478:80:0 |                |      |
| 2158 | 0  | 364 | 17:51:05.133 | 20ED6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,842,479:01:0 |                |      |
| 2159 | 0  | 364 | 17:51:15.133 | 20ED6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,842,479:16:0 |                |      |
| 2160 | 0  | 364 | 17:51:25.133 | 20ED5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,842,479:31:0 |                |      |
| 2161 | 0  | 364 | 17:51:31.800 | 20ED5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,842,479:41:0 |      |
| 2162 | 0  | 364 | 17:51:57.800 | 20ED4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,842,479:80:0 |      |
| 2163 | 0  | 364 | 17:51:58.000 | 29NNAUORORA06-  |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              |      |
| 2164 | 0  | 364 | 17:52:09.132 | 29JNAUORORA06-  |          | -----START-----  |  | 2R0 | 4  | 0              | :              |      |
| 2165 | 0  | 364 | 17:53:01.133 | 125ED           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,842,480:84:0 |      |
| 2166 | 0  | 364 | 17:53:01.133 | 125ED11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,842,480:84:0 |      |
| 2167 | 0  | 364 | 17:53:01.133 | 125ED4A         | 37IST    | 0,2,0,OFF,0,1,1  | Gain State 4                               | 4R0 | 4  | 0              | 5,842,480:84:0 |      |
| 2168 | 0  | 364 | 17:53:12.466 | 165ED4A         | 7SCAN    | NORM,58.421,18.5 | Check S/P Position                         | 4R0 | 4  | 0              | 5,842,481:10:0 |      |
| 2169 | 0  | 364 | 17:54:01.800 | 127ED4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 5,842,481:84:0 |      |
| 2170 | 0  | 364 | 17:54:01.800 | 127ED           | NIMSTAB  | GS               | ##### GROUP START TAB                      | 4R3 | 4  | 0              | 5,842,481:84:0 |      |
| 2171 | 0  | 364 | 17:54:02.466 | 127ED4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,842,481:85:0 |      |
| 2172 | 0  | 364 | 17:54:10.466 | 127ED11A        | NIMSTAB  | GE               | ##### GROUP END TAB                        | 4R3 | 4  | 0              | 5,842,482:06:0 |      |
| 2173 | 0  | 364 | 17:55:56.466 |                 | DMS:     | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 1007.86 +/- 3      | 4R3 | 4  | 0              | 5,842,483:74:0 |      |
| 2174 | 0  | 364 | 17:55:56.466 | 175ED422A6A     | 6DMSC    | R7,3             | DMS Control                                | 4R3 | 4  | 0              | 5,842,483:74:0 |      |
| 2175 | 0  | 364 | 17:55:58.466 | 117ED           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 4R3 | 4  | 0              | 5,842,483:77:0 |      |
| 2176 | 0  | 364 | 17:56:03.133 |                 | DMS:     | :*RUNUP          | R7, TRACK *3, FWD, TIC 1007.86 +/- 3       | 4R3 | 4  | 0              | 5,842,483:84:0 |      |
| 2177 | 0  | 364 | 17:56:04.466 | 175ED176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3 | 4  | 0              | 5,842,483:86:0 |      |
| 2178 | 0  | 364 | 17:56:04.533 |                 | DMS:     | :*RECORD         | R7, TRACK 3, FWD, TIC *1007.98 +/- 3       | 4R3 | 4  | 0              | 5,842,483:86:1 |      |
| 2179 | 0  | 364 | 17:56:04.533 |                 | DMS:     | :*AT SPD         | R7, TRACK 3, FWD, TIC 1007.98 +/- 3        | 4R3 | 4  | 0              | 5,842,483:86:1 |      |
| 2180 | 0  | 364 | 17:56:07.133 | 29JNAUORORA06-  | NIMPBK   | 301ED            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2181 | 0  | 364 | 17:56:07.800 | 117ED105A106A4A | 7STRP    | -0.0072,-0.05100 | Slew =0.58                                 | 4R3 | 4  | 0              | 5,842,484:00:0 |      |
| 2182 | 0  | 364 | 17:57:06.466 | 29JNAUORORA06-  | NIMPBK   | 301DS            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2183 | 0  | 364 | 17:57:51.133 | 29JNAUORORA06-  | DESELC   | 300DS            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2184 | 0  | 364 | 17:59:59.800 | 488AJ6E         | 6TMSED   | NORM,AL4         | Sci, Eng, and D/L Chan                     | 4R3 | 4  | 0              | 5,842,487:75:0 |      |
| 2185 | 0  | 364 | 18:06:11.133 | 117ED11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 4R3 | 4  | 0              | 5,842,493:86:0 |      |
| 2186 | 0  | 364 | 18:06:15.133 | 29JNAUORORA06-  | DESELC   | 300ED            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2187 | 0  | 364 | 18:06:18.466 | 29JNAUORORA06-  |          | -----STOP-----   |  | 4R3 | 4  | 0              | :              |      |
| 2188 | 0  | 364 | 18:07:14.466 | 165EE4A         | 7SCAN    | NORM,60.003,26.8 | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,494:90:0 |      |
| 2189 | 0  | 364 | 18:07:19.132 | 29JNLIMBRT06-   |          | -----START-----  |  | 4R3 | 4  | 0              | :              |      |
| 2190 | 0  | 364 | 18:09:05.133 |                 | DMS:     | :*RUNDOWN        | R7, TRACK 3, FWD, TIC *1190.93 +/- 3       | 4R3 | 4  | 0              | 5,842,496:74:0 |      |
| 2191 | 0  | 364 | 18:09:05.133 | 175ED6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,496:74:0 |      |
| 2192 | 0  | 364 | 18:09:05.133 | 175ED422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,496:74:0 |      |
| 2193 | 0  | 364 | 18:09:06.333 |                 | DMS:     | :*READY          | RDY, TRACK 3, FWD, TIC *1190.99 +/- 3      | 4R3 | 4  | 0              | 5,842,496:75:8 |      |
| 2194 | 0  | 364 | 18:09:07.133 | 117EE           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 4R3 | 4  | 0              | 5,842,496:77:0 |      |
| 2195 | 0  | 364 | 18:09:16.466 | 117EE105A106A4A | 7STRP    | 0.0095,0,0,0,0,0 | Slew =0.02                                 | 4R3 | 4  | 0              | 5,842,497:00:0 |      |
| 2196 | 0  | 364 | 18:10:12.466 | 127EE4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 5,842,497:84:0 |      |
| 2197 | 0  | 364 | 18:10:12.466 | 127EE           | NIMSTAB  | GS               | ##### GROUP START TAB                      | 4R3 | 4  | 0              | 5,842,497:84:0 |      |
| 2198 | 0  | 364 | 18:10:13.133 | 127EE4B         | 37ETB    | 07,C7,14,00,FF,2 | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,842,497:85:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|------------------------|--|-----|----|----------------|----------------|------|
| 2199 | 0  | 364 | 18:10:21.133 | 127EE11A        | NIMSTAB GE             | %%%GROUP END TAB                           | 4R3 | 4  | 0              | 5,842,498:06:0 |      |
| 2200 | 0  | 364 | 18:10:21.133 | 432EE6A         | NIMSELAACNCG,RT        | NIMS R/T SELECT                            | 4R3 | 4  | 0              | 5,842,498:06:0 |      |
| 2201 | 0  | 364 | 18:15:23.133 | 432FE6A         | NIMDSL,ACNCG,RT        | NIMS R/T DESELECT                          | 4R3 | 4  | 0              | 5,842,503:04:0 |      |
| 2202 | 0  | 364 | 18:17:18.466 | 117EE11A        | CSMOS GE               | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,842,504:86:0 |      |
| 2203 | 0  | 364 | 18:17:25.799 | 29JNLIMBRT06-   | -----STOP-----         |  | 4R3 | 4  | 0              | 0              |      |
| 2204 | 0  | 364 | 18:25:26.466 | 165GF4A         | NORM,83.002999,2       | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,512:90:0 |      |
| 2205 | 0  | 364 | 18:28:29.133 | 176GR6A         | 6TMREC BPT             | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 4R3 | 4  | 0              | 5,842,516:00:0 |      |
| 2206 | 0  | 364 | 18:29:20.466 | 117GF           | CSMOS GS               | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 5,842,516:77:0 |      |
| 2207 | 0  | 364 | 18:29:29.800 | 117GF105A106A4A | 7STRP -0.001,0.00245,0 | Slew = 0.12                                | 4R3 | 4  | 0              | 5,842,517:00:0 |      |
| 2208 | 0  | 364 | 18:30:18.466 | 117GF105A106A4B | 7STRP 0.00115,-0.00245 | Slew =12.01                                | 4R3 | 4  | 0              | 5,842,517:73:0 |      |
| 2209 | 0  | 364 | 18:30:31.800 | 117GF105A106A4C | 7STRP -0.001,0.00245,0 | Slew =0.12                                 | 4R3 | 4  | 0              | 5,842,518:02:0 |      |
| 2210 | 0  | 364 | 18:31:20.466 | 117GF11A        | CSMOS GE               | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,842,518:75:0 |      |
| 2211 | 0  | 364 | 18:33:01.800 | 176GR6B         | 6TMREC NRC             | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,520:45:0 |      |
| 2212 | 0  | 364 | 18:33:03.800 | DMS: :*E4-DELAY |                        | RDY, TRACK *1, FWD, TIC 1190.99 +/- 3      | 4R3 | 4  | 0              | 5,842,520:48:0 |      |
| 2213 | 0  | 364 | 18:33:03.800 | 6DMSC R7,0      |                        | DMS Control Tape runup 7.68kps             | 4R3 | 4  | 0              | 5,842,520:48:0 |      |
| 2214 | 0  | 364 | 18:33:10.466 | DMS: :*RUNUP    |                        | R7, TRACK *3, FWD, TIC 1190.99 +/- 3       | 4R3 | 4  | 0              | 5,842,520:58:0 |      |
| 2215 | 0  | 364 | 18:33:11.866 | DMS: :*AT SPD   |                        | R7, TRACK 3, FWD, TIC *1191.11 +/- 3       | 4R3 | 4  | 0              | 5,842,520:60:1 |      |
| 2216 | 0  | 364 | 18:33:13.800 | DMS: :*RECORD   |                        | R7, TRACK 3, FWD, TIC *1191.57 +/- 3       | 4R3 | 4  | 0              | 5,842,520:63:0 |      |
| 2217 | 0  | 364 | 18:33:26.466 | 6DMSC RDY,0     |                        | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,520:82:0 |      |
| 2218 | 0  | 364 | 18:33:26.466 | DMS: :*RUNDOWN  |                        | R7, TRACK 3, FWD, TIC *1194.53 +/- 3       | 4R3 | 4  | 0              | 5,842,520:82:0 |      |
| 2219 | 0  | 364 | 18:33:27.666 | DMS: :*READY    |                        | RDY, TRACK 3, FWD, TIC *1194.59 +/- 3      | 4R3 | 4  | 0              | 5,842,520:83:8 |      |
| 2220 | 0  | 364 | 19:09:41.000 | 29NNAURORA07-   | -----START-----        |  | 4R3 | 4  | 0              | 0              |      |
| 2221 | 0  | 364 | 19:09:41.800 | 20EF5A          | 37PL                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,842,556:69:0 |                |      |
| 2222 | 0  | 364 | 19:09:49.133 | 20EF5B          | 37MRL                  | Memory Realocate (software operates from R | 4   | 0  | 5,842,556:80:0 |                |      |
| 2223 | 0  | 364 | 19:09:57.133 | 20EF6A          | 6MCPY NIMS             | NIMS,1000,LLM1A,7300,77FF                  | 4   | 0  | 5,842,557:01:0 |                |      |
| 2224 | 0  | 364 | 19:10:07.133 | 20EF6B          | 6MCPY NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,842,557:16:0 |                |      |
| 2225 | 0  | 364 | 19:10:17.133 | 20EF5C          | 37IRT                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,842,557:31:0 |                |      |
| 2226 | 0  | 364 | 19:10:23.800 | 20EF5D          | 37MN                   | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,842,557:41:0 |      |
| 2227 | 0  | 364 | 19:10:49.800 | 20EF4A          | 37IST                  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,842,557:80:0 |      |
| 2228 | 0  | 364 | 19:10:50.000 | 29NNAURORA07-   | -----STOP-----         |  | 2R0 | 4  | 0              | 0              |      |
| 2229 | 0  | 364 | 19:10:56.466 | 165EF4A         | 7SCAN NORM,62.164,19.5 | Check S/P Position                         | 2R0 | 4  | 0              | 5,842,557:90:0 |      |
| 2230 | 0  | 364 | 19:11:53.133 | 125EF11A        | NIMSINIT GE            | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,842,558:84:0 |      |
| 2231 | 0  | 364 | 19:11:53.133 | 125EF4A         | 37IST 0.2,0,OFF,0,1,1  | Gain State 4                               | 4R0 | 4  | 0              | 5,842,558:84:0 |      |
| 2232 | 0  | 364 | 19:11:53.133 | 125EF           | NIMSINIT GS            | ##### GROUP START INIT                     | 4R0 | 4  | 0              | 5,842,558:84:0 |      |
| 2233 | 0  | 364 | 19:13:02.466 | 29JNAURORA07-   | -----START-----        |  | 4R0 | 4  | 0              | 0              |      |
| 2234 | 0  | 364 | 19:13:54.466 | 127EF           | NIMSTAB GS             | %%%%GROUP START TAB                        | 4R0 | 4  | 0              | 5,842,560:84:0 |      |
| 2235 | 0  | 364 | 19:13:54.466 | 127EF4A         | 37IOP 3.0              | Long Map. Grating Start Position =00       | 4R3 | 4  | 0              | 5,842,560:84:0 |      |
| 2236 | 0  | 364 | 19:13:55.133 | 127EF4B         | 37ETB 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,842,560:85:0 |      |
| 2237 | 0  | 364 | 19:14:03.133 | 127EF11A        | NIMSTAB GE             | %%%%GROUP END TAB                          | 4R3 | 4  | 0              | 5,842,561:06:0 |      |
| 2238 | 0  | 364 | 19:14:48.466 | 175EF422A6A     | 6DMSC R7,3             | DMS Control                                | 4R3 | 4  | 0              | 5,842,561:74:0 |      |
| 2239 | 0  | 364 | 19:14:48.466 | DMS: :*E4-DELAY |                        | RDY, TRACK *1, FWD, TIC 1194.59 +/- 3      | 4R3 | 4  | 0              | 5,842,561:74:0 |      |
| 2240 | 0  | 364 | 19:14:50.466 | CSMOS GS        |                        | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 5,842,561:77:0 |      |
| 2241 | 0  | 364 | 19:14:55.133 | DMS: :*RUNUP    |                        | R7, TRACK *3, FWD, TIC 1194.59 +/- 3       | 4R3 | 4  | 0              | 5,842,561:84:0 |      |
| 2242 | 0  | 364 | 19:14:56.466 | 175EF176A6A     | 6TMREC LPU             | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3 | 4  | 0              | 5,842,561:86:0 |      |
| 2243 | 0  | 364 | 19:14:56.533 | DMS: :*RECORD   |                        | R7, TRACK 3, FWD, TIC *1194.71 +/- 3       | 4R3 | 4  | 0              | 5,842,561:86:1 |      |
| 2244 | 0  | 364 | 19:14:56.533 | DMS: :*AT SPD   |                        | R7, TRACK 3, FWD, TIC 1194.71 +/- 3        | 4R3 | 4  | 0              | 5,842,561:86:1 |      |
| 2245 | 0  | 364 | 19:14:59.133 | 29JNAURORA07-   | NIMPBK 301EF           | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | 0              |      |
| 2246 | 0  | 364 | 19:14:59.800 | 117EF105A106A4A | 7STRP -0.021003,-0.031 | Slew =0.23                                 | 4R3 | 4  | 0              | 5,842,562:00:0 |      |
| 2247 | 0  | 364 | 19:27:04.466 | 117EF11A        | CSMOS GE               | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,842,573:86:0 |      |
| 2248 | 0  | 364 | 19:27:10.466 | 29JNAURORA07-   | DESEL 300EF            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | 0              |      |
| 2249 | 0  | 364 | 19:27:11.799 | 29JNAURORA07-   | -----STOP-----         |  | 4R3 | 4  | 0              | 0              |      |
| 2250 | 0  | 364 | 19:27:57.133 | 175EF422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,574:74:0 |      |
| 2251 | 0  | 364 | 19:27:57.133 | 175EF6A         | 6TMREC NRC             | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,574:74:0 |      |
| 2252 | 0  | 364 | 19:27:57.133 | DMS: :*RUNDOWN  |                        | R7, TRACK 3, FWD, TIC *1377.67 +/- 3       | 4R3 | 4  | 0              | 5,842,574:74:0 |      |
| 2253 | 0  | 364 | 19:27:58.333 | DMS: :*READY    |                        | RDY, TRACK 3, FWD, TIC *1377.73 +/- 3      | 4R3 | 4  | 0              | 5,842,574:75:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters         | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|--------------------|--|-----|----|----------------|----------------|------|
| 2254 | 0  | 364 | 19:28:03.800 | 125EG4A         | 37IST    | 0,2,0,OFF,0,1,1    | Gain State 4                               | 4R3 | 4  | 0              | 5,842,574:84:0 |      |
| 2255 | 0  | 364 | 19:28:03.800 | 125EG11A        | NIMSINIT | GE                 | ##### GROUP END INIT                       | 4R3 | 4  | 0              | 5,842,574:84:0 |      |
| 2256 | 0  | 364 | 19:28:03.800 | 125EG           | NIMSINIT | GS                 | ##### GROUP START INIT                     | 4R3 | 4  | 0              | 5,842,574:84:0 |      |
| 2257 | 0  | 364 | 19:28:07.800 | 165EG4A         | 75SCAN   | NORM,63.825,27.2   | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,574:90:0 |      |
| 2258 | 0  | 364 | 19:28:12.466 | 29JNLIMBRT07-   |          | -----START-----    |  | 4R3 | 4  | 0              | :              |      |
| 2259 | 0  | 364 | 19:29:04.466 | 127EG           | NIMSTAB  | GS                 | %%-%-% GROUP START TAB                     | 4R3 | 4  | 0              | 5,842,575:84:0 |      |
| 2260 | 0  | 364 | 19:29:04.466 | 127EG4A         | 37IOP    | 3,0                | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 5,842,575:84:0 |      |
| 2261 | 0  | 364 | 19:29:05.133 | 127EG4B         | 37ETB    | 07,C7,14,00,FF,2   | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,842,575:85:0 |      |
| 2262 | 0  | 364 | 19:29:13.133 | 127EG11A        | NIMSTAB  | GE                 | %%-%-% GROUP END TAB                       | 4R3 | 4  | 0              | 5,842,576:06:0 |      |
| 2263 | 0  | 364 | 19:30:00.466 | 117EG           | CSMOS    | GS                 | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 5,842,576:77:0 |      |
| 2264 | 0  | 364 | 19:30:09.800 | 117EG105A106A4A | 75STRP   | 0,0095,0,0,0,0,0   | Slew =,0.02                                | 4R3 | 4  | 0              | 5,842,577:00:0 |      |
| 2265 | 0  | 364 | 19:31:14.466 | 432EG6A         | 6RTSL2   | NIMSELAACNCG,RT    | NIMS R/T SELECT                            | 4R3 | 4  | 0              | 5,842,578:06:0 |      |
| 2266 | 0  | 364 | 19:36:16.466 | 432FG6A         | 6RTDS2   | NIMDSL, AACNCG, RT | NIMS R/T DESELECT                          | 4R3 | 4  | 0              | 5,842,583:04:0 |      |
| 2267 | 0  | 364 | 19:38:11.800 | 117EG11A        | CSMOS    | GE                 | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,842,584:86:0 |      |
| 2268 | 0  | 364 | 19:38:19.132 | 29JNLIMBRT07-   |          | -----STOP-----     |  | 4R3 | 4  | 0              | :              |      |
| 2269 | 0  | 364 | 19:57:07.133 | 165IS4A         | 75SCAN   | NORM,88.167999,2   | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,603:60:0 |      |
| 2270 | 0  | 364 | 20:00:19.800 | 175IS422A6A     | 6DMSC    | R806.3             | DMS Control                                | 4R3 | 4  | 0              | 5,842,606:76:0 |      |
| 2271 | 0  | 364 | 20:00:19.800 |                 | DMS:     | :*E4-DELAY         | RDY, TRACK *1, FWD, TIC 1377.73 +/- 3      | 4R3 | 4  | 0              | 5,842,606:76:0 |      |
| 2272 | 0  | 364 | 20:00:26.466 |                 | DMS:     | :*RUNUP            | R806, TRACK *3, FWD, TIC 1377.73 +/- 3     | 4R3 | 4  | 0              | 5,842,606:86:0 |      |
| 2273 | 0  | 364 | 20:00:28.466 | 165IS4B         | 7VECT    |                    | Inert vect update UTC                      | 4R3 | 4  | 0              | 5,842,606:89:0 |      |
| 2274 | 0  | 364 | 20:00:31.133 | 175IS176A6A     | 6TMREC   | IM8                | 806.4 KBPS IMAGE RECORD Record Mode Chang  | 4R3 | 4  | 0              | 5,842,607:02:0 |      |
| 2275 | 0  | 364 | 20:00:31.733 |                 | DMS:     | :*AT SPD           | R806, TRACK 3, FWD, TIC 1443.73 +/- 3      | 4R3 | 4  | 0              | 5,842,607:02:0 |      |
| 2276 | 0  | 364 | 20:00:31.733 |                 | DMS:     | :*RECORD           | R806, TRACK 3, FWD, TIC *1443.73 +/- 3     | 4R3 | 4  | 0              | 5,842,607:02:9 |      |
| 2277 | 0  | 364 | 20:00:33.800 | 118IS           | SMOS     | GS                 |  | 4R3 | 4  | 0              | 5,842,607:06:0 |      |
| 2278 | 0  | 364 | 20:00:35.800 | 175IS422A6B     | 6DMSC    | RDY,0              | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,607:09:0 |      |
| 2279 | 0  | 364 | 20:00:35.800 |                 | DMS:     | :*RUNDOWN          | R806, TRACK 3, FWD, TIC *1543.81 +/- 3     | 4R3 | 4  | 0              | 5,842,607:09:0 |      |
| 2280 | 0  | 364 | 20:00:38.533 |                 | DMS:     | :*READY            | RDY, TRACK 3, FWD, TIC *1555.31 +/- 3      | 4R3 | 4  | 0              | 5,842,607:13:1 |      |
| 2281 | 0  | 364 | 20:00:45.800 |                 | DMS:     | :*E4-DELAY         | RDY, TRACK *1, FWD, TIC 1555.31 +/- 3      | 4R3 | 4  | 0              | 5,842,607:24:0 |      |
| 2282 | 0  | 364 | 20:00:45.800 | 175IU422A6A     | 6DMSC    | R806.3             | DMS Control                                | 4R3 | 4  | 0              | 5,842,607:24:0 |      |
| 2283 | 0  | 364 | 20:00:49.133 | 118IS110A111A4A | 75STRP   | 0,0038,0,0,26,0,   | Slew =,1.91                                | 4R3 | 4  | 0              | 5,842,607:29:0 |      |
| 2284 | 0  | 364 | 20:00:52.466 |                 | DMS:     | :*RUNUP            | R806, TRACK *3, FWD, TIC 1555.31 +/- 3     | 4R3 | 4  | 0              | 5,842,607:34:0 |      |
| 2285 | 0  | 364 | 20:00:57.133 | 175IU176A6A     | 6TMREC   | IM8                | 806.4 KBPS IMAGE RECORD Record Mode Chang  | 4R3 | 4  | 0              | 5,842,607:41:0 |      |
| 2286 | 0  | 364 | 20:00:57.733 |                 | DMS:     | :*AT SPD           | R806, TRACK 3, FWD, TIC 1621.31 +/- 3      | 4R3 | 4  | 0              | 5,842,607:41:9 |      |
| 2287 | 0  | 364 | 20:00:57.733 |                 | DMS:     | :*RECORD           | R806, TRACK 3, FWD, TIC *1621.31 +/- 3     | 4R3 | 4  | 0              | 5,842,607:41:9 |      |
| 2288 | 0  | 364 | 20:00:57.800 | 118IS11A        | SMOS     | GE                 |  | 4R3 | 4  | 0              | 5,842,607:42:0 |      |
| 2289 | 0  | 364 | 20:01:01.800 |                 | DMS:     | :*RUNDOWN          | R806, TRACK 3, FWD, TIC *1721.38 +/- 3     | 4R3 | 4  | 0              | 5,842,607:48:0 |      |
| 2290 | 0  | 364 | 20:01:01.800 | 175IU422A6B     | 6DMSC    | RDY,0              | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,607:48:0 |      |
| 2291 | 0  | 364 | 20:01:04.533 |                 | DMS:     | :*READY            | RDY, TRACK 3, FWD, TIC *1732.88 +/- 4      | 4R3 | 4  | 0              | 5,842,607:52:1 |      |
| 2292 | 0  | 364 | 20:10:21.000 | 29NNAUJORA08-   |          | -----START-----    |  | 4R3 | 4  | 0              | :              |      |
| 2293 | 0  | 364 | 20:10:21.800 | 20EH5A          | 37PL     |                    | Program Load (halts microprocessor & unwri | 4   | 0  | 5,842,616:69:0 |                |      |
| 2294 | 0  | 364 | 20:10:29.133 | 20EH5B          | 37MRL    |                    | Memory Realocate (software operates from R | 4   | 0  | 5,842,616:80:0 |                |      |
| 2295 | 0  | 364 | 20:10:37.133 | 20EH6A          | 6MCOPY   | NIMS               | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,842,617:01:0 |                |      |
| 2296 | 0  | 364 | 20:10:47.133 | 20EH6B          | 6MCOPY   | NIMS               | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,842,617:16:0 |                |      |
| 2297 | 0  | 364 | 20:10:57.133 | 20EH5C          | 37IRT    |                    | Instrument Reset (goes into POR state)     | 4   | 0  | 5,842,617:31:0 |                |      |
| 2298 | 0  | 364 | 20:11:03.800 | 20EH5D          | 37MIN    |                    | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,842,617:41:0 |      |
| 2299 | 0  | 364 | 20:11:29.800 | 20EH4A          | 37IST    | 1,2,0,OFF,0,0,0    | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,842,617:80:0 |      |
| 2300 | 0  | 364 | 20:11:30.000 | 29NNAUJORA08-   |          | -----STOP-----     |  | 2R0 | 4  | 0              | :              |      |
| 2301 | 0  | 364 | 20:11:36.466 | 165EH4A         | 75SCAN   | NORM,64.719999,2   | Check S/P Position                         | 2R0 | 4  | 0              | 5,842,617:90:0 |      |
| 2302 | 0  | 364 | 20:12:33.133 | 125EH4A         | 37IST    | 0,2,0,OFF,0,1,1    | Gain State 4                               | 4R0 | 4  | 0              | 5,842,618:84:0 |      |
| 2303 | 0  | 364 | 20:12:33.133 | 125EH11A        | NIMSINIT | GE                 | ##### GROUP END INIT                       | 4R0 | 4  | 0              | 5,842,618:84:0 |      |
| 2304 | 0  | 364 | 20:12:33.133 | 125EH           | NIMSINIT | GS                 | ##### GROUP START INIT                     | 4R0 | 4  | 0              | 5,842,618:84:0 |      |
| 2305 | 0  | 364 | 20:13:42.466 | 29JNAUJORA08-   |          | -----START-----    |  | 4R0 | 4  | 0              | :              |      |
| 2306 | 0  | 364 | 20:14:34.466 | 127EH           | NIMSTAB  | GS                 | %%-%-% GROUP START TAB                     | 4R0 | 4  | 0              | 5,842,620:84:0 |      |
| 2307 | 0  | 364 | 20:14:34.466 | 127EH4A         | 37IOP    | 3,0                | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 5,842,620:84:0 |      |
| 2308 | 0  | 364 | 20:14:35.133 | 127EH4B         | 37ETB    | 07,C7,30,3C,D7,0   | Loads wavelength edit table                | 4R3 | 4  | 0              | 5,842,620:85:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|------------------------|--|-----|----|----------------|----------------|------|
| 2309 | 0  | 364 | 20:14:43.133 | 127EH11A        | NIMSTAB GE             | %%%GROUP END TAB                           | 4R3 | 4  | 0              | 5,842,621:06:0 |      |
| 2310 | 0  | 364 | 20:15:28.466 | 175EH422A6A     | 6DMSC R7.3             | DMS Control                                | 4R3 | 4  | 0              | 5,842,621:74:0 |      |
| 2311 | 0  | 364 | 20:15:28.466 | 117EH           | DMS: :E4-DELAY         | RDY, TRACK *1, FWD, TIC 1732.88 +/- 4      | 4R3 | 4  | 0              | 5,842,621:74:0 |      |
| 2312 | 0  | 364 | 20:15:30.466 | 117EH           | CSMOS GS               | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 5,842,621:77:0 |      |
| 2313 | 0  | 364 | 20:15:35.133 | 175EH176A6A     | DMS: :RUNUP            | R7, TRACK *3, FWD, TIC 1732.88 +/- 4       | 4R3 | 4  | 0              | 5,842,621:84:0 |      |
| 2314 | 0  | 364 | 20:15:36.466 | 175EH176A6A     | 6TMREC LPU             | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 4R3 | 4  | 0              | 5,842,621:86:0 |      |
| 2315 | 0  | 364 | 20:15:36.533 | 175EH176A6A     | DMS: :AT SPD           | R7, TRACK 3, FWD, TIC 1733.00 +/- 4        | 4R3 | 4  | 0              | 5,842,621:86:1 |      |
| 2316 | 0  | 364 | 20:15:36.533 | 175EH176A6A     | DMS: :RECORD           | R7, TRACK 3, FWD, TIC *1733.00 +/- 4       | 4R3 | 4  | 0              | 5,842,621:86:1 |      |
| 2317 | 0  | 364 | 20:15:39.133 | 29JNAURORA08-   | NIMPBK 301EH           | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2318 | 0  | 364 | 20:15:39.800 | 117EH105A106A4A | 7STRP -0.024705,-0.025 | Slew =-0.16                                | 4R3 | 4  | 0              | 5,842,622:00:0 |      |
| 2319 | 0  | 364 | 20:19:57.800 | 29JNAURORA08-   | NIMPBK 301DY           | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2320 | 0  | 364 | 20:20:17.800 | 29JNAURORA08-   | DESEL 300DY            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2321 | 0  | 364 | 20:27:47.133 | 117EH11A        | CSMOS GE               | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,842,633:90:0 |      |
| 2322 | 0  | 364 | 20:27:51.799 | 29JNAURORA08-   | -----STOP-----         |  | 4R3 | 4  | 0              | :              |      |
| 2323 | 0  | 364 | 20:27:53.133 | 29JNAURORA08-   | DESEL 300EH            | JUPITER AURORA OBSERVATION                 | 4R3 | 4  | 0              | :              |      |
| 2324 | 0  | 364 | 20:28:37.133 | 175EH6A         | DMS: :RUNDOWN          | R7, TRACK 3, FWD, TIC *1915.96 +/- 4       | 4R3 | 4  | 0              | 5,842,634:74:0 |      |
| 2325 | 0  | 364 | 20:28:37.133 | 175EH6A         | 6TMREC NRC             | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,634:74:0 |      |
| 2326 | 0  | 364 | 20:28:37.133 | 175EH422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,634:74:0 |      |
| 2327 | 0  | 364 | 20:28:38.333 | 20MC6A          | DMS: :READY            | RDY, TRACK 3, FWD, TIC *1916.02 +/- 4      | 4R3 | 4  | 0              | 5,842,634:75:8 |      |
| 2328 | 0  | 364 | 20:38:02.466 | 480MB6A         | 6CKSUM MAG,4040.46F0   | read from LLM1A12,2282.0,A2                | 4R3 | 4  | 0              | 5,842,645:06:0 |      |
| 2329 | 0  | 364 | 20:38:59.133 | 480MB6A         | 6MROH 12,2282.0,A2     | 12 read from LLM1A12,2282.0,A2             | 4R3 | 4  | 0              | 5,842,645:06:0 |      |
| 2330 | 0  | 364 | 20:38:59.133 | 480MB6          | 6MROH                  | read from LLM1A12,2282.0,A2                | 4R3 | 4  | 0              | 5,842,645:06:0 |      |
| 2331 | 0  | 364 | 20:44:58.466 | 165GR4A         | 7SCAN NORM,28.664,14.0 | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,650:90:0 |      |
| 2332 | 0  | 364 | 20:48:01.133 | 176GS6A         | 6TMREC BPT             | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 4R3 | 4  | 0              | 5,842,654:00:0 |      |
| 2333 | 0  | 364 | 20:48:52.466 | 117GR           | CSMOS GS               | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 5,842,654:77:0 |      |
| 2334 | 0  | 364 | 20:49:01.800 | 117GR105A106A4A | 7STRP 0.0006,-0.0024,0 | Slew =,0.12                                | 4R3 | 4  | 0              | 5,842,655:00:0 |      |
| 2335 | 0  | 364 | 20:49:50.466 | 117GR105A106A4B | 7STRP 0.0002,0.0022,0  | Slew =,0.12                                | 4R3 | 4  | 0              | 5,842,655:73:0 |      |
| 2336 | 0  | 364 | 20:50:05.800 | 117GR105A106A4C | 7STRP 0.0006,-0.0024,0 | Slew =,0.12                                | 4R3 | 4  | 0              | 5,842,656:05:0 |      |
| 2337 | 0  | 364 | 20:50:54.466 | 117GR11A        | CSMOS GE               | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 5,842,656:78:0 |      |
| 2338 | 0  | 364 | 20:52:35.800 | 176GS6B         | 6TMREC NRC             | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,658:45:0 |      |
| 2339 | 0  | 364 | 20:52:35.800 | 50ZZ6XX         | DMS: :E4-DELAY         | RDY, TRACK *1, FWD, TIC 1916.02 +/- 4      | 4R3 | 4  | 0              | 5,842,658:48:0 |      |
| 2340 | 0  | 364 | 20:52:35.800 | 50ZZ6XX         | 6DMSC R7.0             | DMS Control Tape runup 7.68kps             | 4R3 | 4  | 0              | 5,842,658:48:0 |      |
| 2341 | 0  | 364 | 20:52:42.466 | 50ZZ6XX         | DMS: :RUNUP            | R7, TRACK *3, FWD, TIC 1916.02 +/- 4       | 4R3 | 4  | 0              | 5,842,658:58:0 |      |
| 2342 | 0  | 364 | 20:52:43.866 | 50ZZ6XX         | DMS: :AT SPD           | R7, TRACK 3, FWD, TIC *1916.14 +/- 4       | 4R3 | 4  | 0              | 5,842,658:60:1 |      |
| 2343 | 0  | 364 | 20:52:45.800 | 50ZZ6XX         | DMS: :RECORD           | R7, TRACK 3, FWD, TIC *1916.59 +/- 4       | 4R3 | 4  | 0              | 5,842,658:63:0 |      |
| 2344 | 0  | 364 | 20:52:58.466 | 50ZZ6RD         | 6DMSC RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,658:82:0 |      |
| 2345 | 0  | 364 | 20:52:58.466 | 50ZZ6RD         | DMS: :RUNDOWN          | R7, TRACK 3, FWD, TIC *1919.56 +/- 4       | 4R3 | 4  | 0              | 5,842,658:82:0 |      |
| 2346 | 0  | 364 | 20:52:59.666 | 50ZZ6RD         | DMS: :READY            | RDY, TRACK 3, FWD, TIC *1919.62 +/- 4      | 4R3 | 4  | 0              | 5,842,658:83:8 |      |
| 2347 | 0  | 364 | 20:55:05.800 | 192GT4A         | 7CONE 9.0,0.0          | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,661:00:0 |      |
| 2348 | 0  | 364 | 21:02:10.466 | 176GT6A         | 6TMREC BPT             | 7.68 KBPS PPR BURST TO TAPE Record Mode C  | 4R3 | 4  | 0              | 5,842,668:00:0 |      |
| 2349 | 0  | 364 | 21:04:25.133 | 176GT6B         | 6TMREC NRC             | NO RECORD Record Mode Change               | 4R3 | 4  | 0              | 5,842,670:20:0 |      |
| 2350 | 0  | 364 | 21:04:27.133 | 50ZZ6XX         | 6DMSC R7.0             | DMS Control Tape runup 7.68kps             | 4R3 | 4  | 0              | 5,842,670:23:0 |      |
| 2351 | 0  | 364 | 21:04:27.133 | 50ZZ6XX         | DMS: :E4-DELAY         | RDY, TRACK *1, FWD, TIC 1919.62 +/- 4      | 4R3 | 4  | 0              | 5,842,670:23:0 |      |
| 2352 | 0  | 364 | 21:04:33.800 | 50ZZ6XX         | DMS: :RUNUP            | R7, TRACK *3, FWD, TIC 1919.62 +/- 4       | 4R3 | 4  | 0              | 5,842,670:33:0 |      |
| 2353 | 0  | 364 | 21:04:35.200 | 50ZZ6XX         | DMS: :AT SPD           | R7, TRACK 3, FWD, TIC *1919.74 +/- 4       | 4R3 | 4  | 0              | 5,842,670:35:1 |      |
| 2354 | 0  | 364 | 21:04:37.133 | 50ZZ6XX         | DMS: :RECORD           | R7, TRACK 3, FWD, TIC *1920.19 +/- 4       | 4R3 | 4  | 0              | 5,842,670:38:0 |      |
| 2355 | 0  | 364 | 21:04:48.466 | 50ZZ6RE         | DMS: :RUNDOWN          | R7, TRACK 3, FWD, TIC *1922.85 +/- 4       | 4R3 | 4  | 0              | 5,842,670:55:0 |      |
| 2356 | 0  | 364 | 21:04:48.466 | 50ZZ6RE         | 6DMSC RDY,0            | DMS Control Tape stop                      | 4R3 | 4  | 0              | 5,842,670:55:0 |      |
| 2357 | 0  | 364 | 21:04:49.666 | 50ZZ6RE         | DMS: :READY            | RDY, TRACK 3, FWD, TIC *1922.91 +/- 4      | 4R3 | 4  | 0              | 5,842,670:56:8 |      |
| 2358 | 0  | 364 | 21:07:13.800 | 192GT4B         | 7CONE 9.0,90.0         | Check S/P Position                         | 4R3 | 4  | 0              | 5,842,673:00:0 |      |
| 2359 | 0  | 364 | 21:10:00.000 | 29NNAURORA09-   | -----START-----        |  | 4R3 | 4  | 0              | :              |      |
| 2360 | 0  | 364 | 21:10:01.133 | 20EK5A          | 37PL                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,842,675:69:0 |                |      |
| 2361 | 0  | 364 | 21:10:08.466 | 20EK5B          | 37MRL                  | Memory Realocate (software operates from R | 4   | 0  | 5,842,675:80:0 |                |      |
| 2362 | 0  | 364 | 21:10:16.466 | 20EK6A          | 6MCOPY NIMS            | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,842,676:01:0 |                |      |
| 2363 | 0  | 364 | 21:10:26.466 | 20EK6B          | 6MCOPY NIMS            | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,842,676:16:0 |                |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters | Description                                | GCM | GO  | GS | RIM            | MFI            |
|------|----|-----|--------------|-----------------|--------------------|--|-----|-----|----|----------------|----------------|
| 2364 | 0  | 364 | 21:10:36.466 | 20EK5C          | 37IRT              | Instrument Reset (goes into POR state)     |     | 4   | 0  | 5,842,676:31:0 |                |
| 2365 | 0  | 364 | 21:10:43.133 | 20EK5D          | 37MNM              | Memory Normal (software operates from ROM) |     | 260 | 4  | 0              | 5,842,676:41:0 |
| 2366 | 0  | 364 | 21:11:09.133 | 20EK4A          | 37IST              | Chopper ON, Sync, Chopper (Ref)            |     | 2R0 | 4  | 0              | 5,842,676:80:0 |
| 2367 | 0  | 364 | 21:11:10.000 | 29NNAURORA09-   |                    | -----STOP-----                             |     | 2R0 | 4  | 0              | :              |
| 2368 | 0  | 364 | 21:12:12.466 | 125EK           | NIMSINIT           | ##### GROUP START INIT                     |     | 2R0 | 4  | 0              | 5,842,677:84:0 |
| 2369 | 0  | 364 | 21:12:12.466 | 125EK4A         | 37IST              | Gain State 4                               |     | 4R0 | 4  | 0              | 5,842,677:84:0 |
| 2370 | 0  | 364 | 21:12:12.466 | 125EK11A        | NIMSINIT           | ##### GROUP END INIT                       |     | 4R0 | 4  | 0              | 5,842,677:84:0 |
| 2371 | 0  | 364 | 21:13:17.133 | 165EK4A         | 75SCAN             | NORM,67.172999,2                           |     | 4R0 | 4  | 0              | 5,842,678:90:0 |
| 2372 | 0  | 364 | 21:14:13.800 | 127EK           | NIMSTAB            | GS   |     | 4R0 | 4  | 0              | 5,842,679:84:0 |
| 2373 | 0  | 364 | 21:14:13.800 | 127EK4A         | 37IOP              | 07,C7,30,3C,D7,0                           |     | 4R3 | 4  | 0              | 5,842,679:84:0 |
| 2374 | 0  | 364 | 21:14:14.466 | 127EK4B         | 37ETB              | Long Map, Grating Start Position =00       |     | 4R3 | 4  | 0              | 5,842,679:85:0 |
| 2375 | 0  | 364 | 21:14:22.466 | 127EK11A        | NIMSTAB            | GE   |     | 4R3 | 4  | 0              | 5,842,680:06:0 |
| 2376 | 0  | 364 | 21:14:22.466 | 29JNAUROA09-    |                    | -----START-----                            |     | 4R3 | 4  | 0              | :              |
| 2377 | 0  | 364 | 21:17:09.133 |                 | DMS:               | *E4-DELAY                                  |     | 4R3 | 4  | 0              | 5,842,682:74:0 |
| 2378 | 0  | 364 | 21:17:09.133 | 175EK422A6A     | 6DMSC              | R7,3                                       |     | 4R3 | 4  | 0              | 5,842,682:74:0 |
| 2379 | 0  | 364 | 21:17:11.133 | 117EK           | CSMOS              | GS   |     | 4R3 | 4  | 0              | 5,842,682:77:0 |
| 2380 | 0  | 364 | 21:17:15.800 |                 | DMS:               | *RUNUP                                     |     | 4R3 | 4  | 0              | 5,842,682:84:0 |
| 2381 | 0  | 364 | 21:17:17.133 | 175EK176A6A     | 6TMREC             | LPU  |     | 4R3 | 4  | 0              | 5,842,682:86:0 |
| 2382 | 0  | 364 | 21:17:17.200 |                 | DMS:               | *RECORD                                    |     | 4R3 | 4  | 0              | 5,842,682:86:1 |
| 2383 | 0  | 364 | 21:17:17.200 |                 | DMS:               | *AT SPD                                    |     | 4R3 | 4  | 0              | 5,842,682:86:1 |
| 2384 | 0  | 364 | 21:17:19.800 | 29JNAUROA09-    | NIMPBK             | 301EK                                      |     | 4R3 | 4  | 0              | :              |
| 2385 | 0  | 364 | 21:17:20.466 | 117EK105A106A4A | 75STRP             | -0.028808,-0.024                           |     | 4R3 | 4  | 0              | 5,842,683:00:0 |
| 2386 | 0  | 364 | 21:28:31.799 | 29JNAUROA09-    |                    | -----STOP-----                             |     | 4R3 | 4  | 0              | :              |
| 2387 | 0  | 364 | 21:30:15.800 | 29JNAUROA09-    | DESELC             | 300EK                                      |     | 4R3 | 4  | 0              | :              |
| 2388 | 0  | 364 | 21:30:17.800 | 175EK422A6B     | 6DMSC              | RDY,0                                      |     | 4R3 | 4  | 0              | 5,842,695:74:0 |
| 2389 | 0  | 364 | 21:30:17.800 | 175EK6A         | 6TMREC             | NRC  |     | 4R3 | 4  | 0              | 5,842,695:74:0 |
| 2390 | 0  | 364 | 21:30:17.800 |                 | DMS:               | *RUNDOWN                                   |     | 4R3 | 4  | 0              | 5,842,695:74:0 |
| 2391 | 0  | 364 | 21:30:19.000 |                 | DMS:               | *READY                                     |     | 4R3 | 4  | 0              | 5,842,695:75:8 |
| 2392 | 0  | 364 | 21:30:28.466 | 117EK11A        | CSMOS              | GE   |     | 4R3 | 4  | 0              | 5,842,695:90:0 |
| 2393 | 0  | 364 | 21:59:59.800 | 480SG6A         | 6MROH              | 44,23E8,0,A2                               |     | 4R3 | 4  | 0              | 5,842,725:17:0 |
| 2394 | 0  | 364 | 22:06:39.800 | 480SG6B         | 6MROH              | 45,23E8,0,B2                               |     | 4R3 | 4  | 0              | 5,842,731:71:0 |
| 2395 | 0  | 364 | 22:10:41.000 | 29NNAUROA10-    |                    | -----START-----                            |     | 4R3 | 4  | 0              | :              |
| 2396 | 0  | 364 | 22:10:41.133 | 20EL5A          | 37PL               | Program Load (halts microprocessor & unwri |     | 4   | 0  | 5,842,735:69:0 |                |
| 2397 | 0  | 364 | 22:10:48.466 | 20EL5B          | 37MRL              | Memory Realocate (software operates from R |     | 4   | 0  | 5,842,735:80:0 |                |
| 2398 | 0  | 364 | 22:10:56.466 | 20EL6A          | 6MCPY              | NIMS,1000,LLM1A,7300,77F7                  |     | 4   | 0  | 5,842,736:01:0 |                |
| 2399 | 0  | 364 | 22:11:06.466 | 20EL6B          | 6MCPY              | NIMS,1598,LLM1A,77F8,781D                  |     | 4   | 0  | 5,842,736:16:0 |                |
| 2400 | 0  | 364 | 22:11:16.466 | 20EL5C          | 37IRT              | Instrument Reset (goes into POR state)     |     | 4   | 0  | 5,842,736:31:0 |                |
| 2401 | 0  | 364 | 22:11:23.133 | 20EL5D          | 37MNM              | Memory Normal (software operates from ROM) |     | 260 | 4  | 0              | 5,842,736:41:0 |
| 2402 | 0  | 364 | 22:11:49.133 | 20EL4A          | 37IST              | Chopper ON, Sync, Chopper (Ref)            |     | 2R0 | 4  | 0              | 5,842,736:80:0 |
| 2403 | 0  | 364 | 22:11:50.000 | 29NNAUROA10-    |                    | -----STOP-----                             |     | 2R0 | 4  | 0              | :              |
| 2404 | 0  | 364 | 22:11:55.800 | 165EL4A         | 75SCAN             | NORM,69.778,21.1                           |     | 2R0 | 4  | 0              | 5,842,736:90:0 |
| 2405 | 0  | 364 | 22:12:52.466 | 125EL4A         | 37IST              | 0.2,0,OFF,0,1,1                            |     | 4R0 | 4  | 0              | 5,842,737:84:0 |
| 2406 | 0  | 364 | 22:12:52.466 | 125EL           | NIMSINIT           | GS   |     | 4R0 | 4  | 0              | 5,842,737:84:0 |
| 2407 | 0  | 364 | 22:12:52.466 | 125EL11A        | NIMSINIT           | GE   |     | 4R0 | 4  | 0              | 5,842,737:84:0 |
| 2408 | 0  | 364 | 22:14:53.800 | 127EL           | NIMSTAB            | GS   |     | 4R0 | 4  | 0              | 5,842,739:84:0 |
| 2409 | 0  | 364 | 22:14:53.800 | 127EL4A         | 37IOP              | 3.0  |     | 4R3 | 4  | 0              | 5,842,739:84:0 |
| 2410 | 0  | 364 | 22:14:54.466 | 127EL4B         | 37ETB              | 07,C7,30,3C,D7,0                           |     | 4R3 | 4  | 0              | 5,842,739:85:0 |
| 2411 | 0  | 364 | 22:15:02.466 | 29JNAUROA10-    |                    | -----START-----                            |     | 4R3 | 4  | 0              | :              |
| 2412 | 0  | 364 | 22:15:02.466 | 127EL11A        | NIMSTAB            | GE   |     | 4R3 | 4  | 0              | 5,842,740:06:0 |
| 2413 | 0  | 364 | 22:15:47.800 |                 | DMS:               | *E4-DELAY                                  |     | 4R3 | 4  | 0              | 5,842,740:74:0 |
| 2414 | 0  | 364 | 22:15:47.800 | 175EL422A6A     | 6DMSC              | R7,3                                       |     | 4R3 | 4  | 0              | 5,842,740:74:0 |
| 2415 | 0  | 364 | 22:15:49.800 | 117EL           | CSMOS              | GS   |     | 4R3 | 4  | 0              | 5,842,740:77:0 |
| 2416 | 0  | 364 | 22:15:54.466 |                 | DMS:               | *RUNUP                                     |     | 4R3 | 4  | 0              | 5,842,740:84:0 |
| 2417 | 0  | 364 | 22:15:55.800 | 175EL176A6A     | 6TMREC             | LPU  |     | 4R3 | 4  | 0              | 5,842,740:86:0 |
| 2418 | 0  | 364 | 22:15:55.866 |                 | DMS:               | *AT SPD                                    |     | 4R3 | 4  | 0              | 5,842,740:86:1 |



| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters      | Description                                | GCIM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|-------------------------|--|------|----|----------------|----------------|------|
| 2419 | 0  | 364 | 22:15:55.866 |                 | DMS: : *RECORD          | R7, TRACK 3, FWD, TIC *2106.16 +/- 4       | 4R3  | 4  | 0              | 5,842,740:86:1 |      |
| 2420 | 0  | 364 | 22:15:58.466 | 29JNAURORA10-   | NIMPBK 301EL            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0              | :              |      |
| 2421 | 0  | 364 | 22:15:59.133 | 117EL105A106A4A | 7STRP -0.029008,-0.023  | Slew =0,0,1                                | 4R3  | 4  | 0              | 5,842,741:00:0 |      |
| 2422 | 0  | 364 | 22:17:15.133 | 29JNAURORA10-   | NIMPBK 301FR            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0              | :              |      |
| 2423 | 0  | 364 | 22:17:33.800 | 29JNAURORA10-   | DESELC 300FR            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0              | :              |      |
| 2424 | 0  | 364 | 22:19:51.133 | 29JNAURORA10-   | NIMPBK 301FS            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0              | :              |      |
| 2425 | 0  | 364 | 22:27:27.133 | 29JNAURORA10-   | DESELC 300FS            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0              | :              |      |
| 2426 | 0  | 364 | 22:28:54.466 | 29JNAURORA10-   | DESELC 300EL            | JUPITER AURORA OBSERVATION                 | 4R3  | 4  | 0              | :              |      |
| 2427 | 0  | 364 | 22:28:56.466 | 175EL422A6B     | 6DMSC RDY,0             | DMS Control Tape stop                      | 4R3  | 4  | 0              | 5,842,753:74:0 |      |
| 2428 | 0  | 364 | 22:28:56.466 | 175EL6A         | 6TMREC                  | NO RECORD Record Mode Change               | 4R3  | 4  | 0              | 5,842,753:74:0 |      |
| 2429 | 0  | 364 | 22:28:56.466 |                 | DMS: : *RUNDOWN         | R7, TRACK 3, FWD, TIC *2289.11 +/- 4       | 4R3  | 4  | 0              | 5,842,753:74:0 |      |
| 2430 | 0  | 364 | 22:28:57.666 |                 | DMS: : *READY           | RDY, TRACK 3, FWD, TIC *2289.17 +/- 4      | 4R3  | 4  | 0              | 5,842,753:75:8 |      |
| 2431 | 0  | 364 | 22:29:04.466 | 117EL11A        | CSMOS GE                | ***** GROUP END CSMOS                      | 4R3  | 4  | 0              | 5,842,753:86:0 |      |
| 2432 | 0  | 364 | 22:29:11.799 | 29JNAURORA10-   | *****STOP*****          |  | 4R3  | 4  | 0              | :              |      |
| 2433 | 0  | 364 | 22:41:39.133 | 488AK6A         | FILL,AL4                | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0              | 5,842,766:35:0 |      |
| 2434 | 0  | 365 | 00:24:55.133 | 432OU431A6A     | 6RCDSL DDSNCG,PLSNCG,EP | Record Deselect (DDS o                     | 4R3  | 4  | 0              | 5,842,868:47:0 |      |
| 2435 | 0  | 365 | 00:24:55.800 | 432OU6A         | 6RTSL1                  | R/T Select of DDS and                      | 4R3  | 4  | 0              | 5,842,868:48:0 |      |
| 2436 | 0  | 365 | 00:45:18.466 | 488AK6B         | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0              | 5,842,888:62:0 |      |
| 2437 | 0  | 365 | 00:59:59.800 | 20TS4A          | 7SAFE STOP              | S/P NO MOVEMENT                            | 4R3  | 4  | 0              | 5,842,903:19:0 |      |
| 2438 | 0  | 365 | 01:00:49.800 | 20TS4B          | DIS,POS,0,0             | Stator movement                            | 4R3  | 4  | 0              | 5,842,904:03:0 |      |
| 2439 | 0  | 365 | 01:00:57.800 | 20TS4F          | 7STAR 1,1610,278,814,3  | Star catalog update                        | 4R3  | 4  | 0              | 5,842,904:15:0 |      |
| 2440 | 0  | 365 | 01:00:59.800 | 20TS4G          | 7STAR 2,383,331,275,-4  | Star catalog update                        | 4R3  | 4  | 0              | 5,842,904:18:0 |      |
| 2441 | 0  | 365 | 01:01:01.800 | 20TS4H          | 7STAR 3,147,167,865,20  | Star catalog update                        | 4R3  | 4  | 0              | 5,842,904:21:0 |      |
| 2442 | 0  | 365 | 01:01:03.800 | 20TS4I          | 4,0,0,0,0,0             | Star catalog update                        | 4R3  | 4  | 0              | 5,842,904:24:0 |      |
| 2443 | 0  | 365 | 01:01:05.800 | 20TS4J          | 5,0,0,0,0,0             | Star catalog update                        | 4R3  | 4  | 0              | 5,842,904:27:0 |      |
| 2444 | 0  | 365 | 01:01:07.800 | 20TS4K          | 6,0,0,0,0,0             | Star catalog update                        | 4R3  | 4  | 0              | 5,842,904:30:0 |      |
| 2445 | 0  | 365 | 01:05:02.466 | 432OE431A6A     | 6RCDSL DDSNCG,PLSNCG,EP | Record Deselect (DDS o                     | 4R3  | 4  | 0              | 5,842,908:18:0 |      |
| 2446 | 0  | 365 | 01:05:03.133 | 432OE6A         | 6RTSL1                  | R/T Select of DDS and                      | 4R3  | 4  | 0              | 5,842,908:19:0 |      |
| 2447 | 0  | 365 | 01:15:57.133 | 20UO4A          | 7SAFE UNSTOW            | S/P TO 153 deg cone                        | 4R3  | 4  | 0              | 5,842,918:90:0 |      |
| 2448 | 0  | 365 | 01:22:59.800 | 488AK6C         | 6TMSED NORM,AH4         | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0              | 5,842,925:87:0 |      |
| 2449 | 0  | 365 | 01:51:42.466 | 488AK6D         | 6TMSED FILL,AH4         | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0              | 5,842,954:32:0 |      |
| 2450 | 0  | 365 | 01:58:59.800 | 20SV4I          | 7MODE INT               | AACS INERTIAL MODE                         | 4R3  | 4  | 0              | 5,842,961:51:0 |      |
| 2451 | 0  | 365 | 02:13:59.800 | 20SV4K          | INIT,POS,17,45          | Stator movement                            | 4R3  | 4  | 0              | 5,842,976:36:0 |      |
| 2452 | 0  | 365 | 02:25:21.133 | 488AK6E         | 6TMSED NORM,AH4         | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0              | 5,842,987:57:0 |      |
| 2453 | 0  | 365 | 02:25:59.800 | 20SV4L          | DIS,POS,0,0             | Stator movement                            | 4R3  | 4  | 0              | 5,842,988:24:0 |      |
| 2454 | 0  | 365 | 02:32:59.800 | 20SV4M          | INIT,NEG,17,45          | Stator movement                            | 4R3  | 4  | 0              | 5,842,995:17:0 |      |
| 2455 | 0  | 365 | 02:44:59.800 | 20SV4N          | DIS,POS,0,0             | Stator movement                            | 4R3  | 4  | 0              | 5,843,007:05:0 |      |
| 2456 | 0  | 365 | 02:56:59.800 | 20SV4AH         | 7MODE CRU               | AACS CRUISE MODE                           | 4R3  | 4  | 0              | 5,843,018:84:0 |      |
| 2457 | 0  | 365 | 03:32:59.800 | 488AL6A         | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                     | 4R3  | 4  | 0              | 5,843,054:48:0 |      |
| 2458 | 0  | 365 | 03:44:59.800 | 480SH6A         | 6MROH 44,23E8,0,A2      | read from LLM2A44,23E8,0,A2                | 4R3  | 4  | 0              | 5,843,066:36:0 |      |
| 2459 | 0  | 365 | 03:51:39.800 | 480SH6B         | 6MROH 45,23E8,0,B2      | read from LLM2B45,23E8,0,B2                | 4R3  | 4  | 0              | 5,843,072:90:0 |      |
| 2460 | 0  | 365 | 04:24:47.000 | 29NNSTZRLT03-   | *****START*****         |  | 4R3  | 4  | 0              | :              |      |
| 2461 | 0  | 365 | 04:24:47.733 | 20EP5A          | 37PL                    | Program Load (halts microprocessor & unwri | 4    | 0  | 5,843,105:69:0 |                |      |
| 2462 | 0  | 365 | 04:24:55.066 | 20EP5B          | 37MRL                   | Memory Relocate (software operates from R  | 4    | 0  | 5,843,105:80:0 |                |      |
| 2463 | 0  | 365 | 04:25:03.066 | 20EP6A          | 6MCOPI NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4    | 0  | 5,843,106:01:0 |                |      |
| 2464 | 0  | 365 | 04:25:13.066 | 20EP6B          | 6MCOPI NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4    | 0  | 5,843,106:16:0 |                |      |
| 2465 | 0  | 365 | 04:25:23.066 | 20EP5C          | 37IRT                   | Instrument Reset (goes into POR state)     | 4    | 0  | 5,843,106:31:0 |                |      |
| 2466 | 0  | 365 | 04:25:24.400 | 20EP5D          | 37MN                    | Memory Normal (software operates from ROM) | 260  | 4  | 0              | 5,843,106:33:0 |      |
| 2467 | 0  | 365 | 04:25:55.733 | 20EP4A          | 37IST 1,2,0,OFF,0,0,0   | Chopper ON, Sync, Chopper (Ref)            | 2R0  | 4  | 0              | 5,843,106:80:0 |      |
| 2468 | 0  | 365 | 04:25:56.000 | 29NNSTZRLT03-   | *****STOP*****          |  | 2R0  | 4  | 0              | :              |      |
| 2469 | 0  | 365 | 04:27:59.733 | 125EP4A         | 37IST 0,2,0,OFF,0,1,0   | Gain State 2                               | 2R0  | 4  | 0              | 5,843,108:84:0 |      |
| 2470 | 0  | 365 | 04:27:59.733 | 125EP           | NIMSINIT GS             | ##### GROUP START INIT                     | 2R0  | 4  | 0              | 5,843,108:84:0 |      |
| 2471 | 0  | 365 | 04:28:03.733 | 165EP4A         | 7SCAN NORM,83,547999,2  | Check S/P Position                         | 2R0  | 4  | 0              | 5,843,108:90:0 |      |
| 2472 | 0  | 365 | 04:28:08.466 | 29JNSTZRLT03-   | *****START*****         |  | 2R0  | 4  | 0              | :              |      |
| 2473 | 0  | 365 | 04:29:00.400 | 125EP4B         | 37MB 11,11,0,0,0,0      | Selects mirror (spatial) edit table        | 2R0  | 4  | 0              | 5,843,109:84:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----|----------------|-----|
| 2474 | 0  | 365 | 04:29:00.400 | 125EP11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0  | 5,843,109:84:0 |     |
| 2475 | 0  | 365 | 04:30:01.066 | 127EP           | NIMSTAB  | GS               | %%GROUP START TAB                          | 2R0 | 4  | 0  | 5,843,110:84:0 |     |
| 2476 | 0  | 365 | 04:30:01.066 | 127EP4A         | 37IOP    | 3.0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0  | 5,843,110:84:0 |     |
| 2477 | 0  | 365 | 04:30:01.733 | 127EP4B         | 37ETB    | 07,C7,1A,3C,D7,1 | Loads wavelength edit table                | 2R3 | 4  | 0  | 5,843,110:85:0 |     |
| 2478 | 0  | 365 | 04:30:09.733 | 127EP11A        | NIMSTAB  | GE               | %%GROUP END TAB                            | 2R3 | 4  | 0  | 5,843,111:06:0 |     |
| 2479 | 0  | 365 | 04:30:09.733 | 432ET6A         | 6RTSL2   | NIMSEL,AACNCG,RT | NIMS R/T SELECT                            | 2R3 | 4  | 0  | 5,843,111:06:0 |     |
| 2480 | 0  | 365 | 04:31:57.733 | 117EP           | CSMOS    | GS               | **** GROUP START CSMOS                     | 2R3 | 4  | 0  | 5,843,112:77:0 |     |
| 2481 | 0  | 365 | 04:32:07.066 | 117EP105A106A4A | 7STRP    | 0.018002,0.003,0 | Slew =,0.03                                | 2R3 | 4  | 0  | 5,843,113:00:0 |     |
| 2482 | 0  | 365 | 04:40:15.066 | 432FT6A         | 6RTDS2   | NIMDSL,AACNCG,RT | NIMS R/T DESELECT                          | 2R3 | 4  | 0  | 5,843,121:04:0 |     |
| 2483 | 0  | 365 | 04:41:59.000 | 29NNWHTOVL01-   |          | -----START ----- |  | 2R3 | 4  | 0  | :              |     |
| 2484 | 0  | 365 | 04:41:59.066 | 20EQ5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 0  | 5,843,122:89:0 |     |
| 2485 | 0  | 365 | 04:42:06.400 | 20EQ5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 0  | 5,843,122:80:0 |     |
| 2486 | 0  | 365 | 04:42:13.733 | 117EP11A        | CSMOS    | GE               | **** GROUP END CSMOS                       | 4   | 0  | 0  | 5,843,123:00:0 |     |
| 2487 | 0  | 365 | 04:42:14.400 | 20EQ6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 0  | 5,843,123:01:0 |     |
| 2488 | 0  | 365 | 04:42:17.799 | 29JNWTZRLT03-   |          | -----STOP -----  |  | 4   | 0  | :  |                |     |
| 2489 | 0  | 365 | 04:42:24.400 | 20EQ6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 0  | 5,843,123:16:0 |     |
| 2490 | 0  | 365 | 04:42:34.400 | 20EQ5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 0  | 5,843,123:31:0 |     |
| 2491 | 0  | 365 | 04:42:35.733 | 20EQ5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0  | 5,843,123:33:0 |     |
| 2492 | 0  | 365 | 04:43:07.066 | 20EQ4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0  | 5,843,123:80:0 |     |
| 2493 | 0  | 365 | 04:43:08.000 | 29NNWHTOVL01-   |          | -----STOP -----  |  | 2R0 | 4  | 0  | :              |     |
| 2494 | 0  | 365 | 04:43:13.733 | 165EQ4A         | 7SCAN    | NORM,83.745,23.8 | Check S/P Position                         | 2R0 | 4  | 0  | 5,843,123:90:0 |     |
| 2495 | 0  | 365 | 04:43:18.466 | 29JNWTZRLT01-   |          | -----START ----- |  | 2R0 | 4  | 0  | :              |     |
| 2496 | 0  | 365 | 04:44:10.400 | 125EQ11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0  | 5,843,124:84:0 |     |
| 2497 | 0  | 365 | 04:44:10.400 | 125EQ           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0  | 5,843,124:84:0 |     |
| 2498 | 0  | 365 | 04:44:10.400 | 125EQ4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0  | 5,843,124:84:0 |     |
| 2499 | 0  | 365 | 04:45:11.066 | 127EQ           | NIMSTAB  | GS               | %%GROUP START TAB                          | 2R0 | 4  | 0  | 5,843,125:84:0 |     |
| 2500 | 0  | 365 | 04:45:11.066 | 127EQ4A         | 37IOP    | 3.0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0  | 5,843,125:84:0 |     |
| 2501 | 0  | 365 | 04:45:11.733 | 127EQ4B         | 37ETB    | 07,C7,30,3C,D7,0 | Loads wavelength edit table                | 2R3 | 4  | 0  | 5,843,125:85:0 |     |
| 2502 | 0  | 365 | 04:45:19.733 | 127EQ11A        | NIMSTAB  | GE               | %%GROUP END TAB                            | 2R3 | 4  | 0  | 5,843,126:06:0 |     |
| 2503 | 0  | 365 | 04:47:05.733 | 175EQ422A6A     | 6DMSC    | R7,3             | DMS Control                                | 2R3 | 4  | 0  | 5,843,127:74:0 |     |
| 2504 | 0  | 365 | 04:47:05.733 | 117EQ           | DMS:     | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 2289.17 +/- 4      | 2R3 | 4  | 0  | 5,843,127:74:0 |     |
| 2505 | 0  | 365 | 04:47:07.733 | 117EQ           | CSMOS    | GS               | **** GROUP START CSMOS                     | 2R3 | 4  | 0  | 5,843,127:77:0 |     |
| 2506 | 0  | 365 | 04:47:12.400 | 175EQ176A6A     | DMS:     | :*RUNUP          | R7, TRACK *3, FWD, TIC 2289.17 +/- 4       | 2R3 | 4  | 0  | 5,843,127:84:0 |     |
| 2507 | 0  | 365 | 04:47:13.733 | 175EQ176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R3 | 4  | 0  | 5,843,127:86:0 |     |
| 2508 | 0  | 365 | 04:47:13.800 | 117EQ           | DMS:     | :*RECORD         | R7, TRACK 3, FWD, TIC *2289.29 +/- 4       | 2R3 | 4  | 0  | 5,843,127:86:1 |     |
| 2509 | 0  | 365 | 04:47:13.800 | 117EQ           | DMS:     | :*AT_SPD         | R7, TRACK 3, FWD, TIC 2289.29 +/- 4        | 2R3 | 4  | 0  | 5,843,127:86:1 |     |
| 2510 | 0  | 365 | 04:47:16.400 | 29JNWTZRLT01-   | NIMPBK   | 301EQ            | JUPITER WHITE OVAL OBSERVATION             | 2R3 | 4  | 0  | :              |     |
| 2511 | 0  | 365 | 04:47:17.066 | 117EQ105A106A4A | 7STRP    | 0.028908,0.006,0 | Slew =,0.03                                | 2R3 | 4  | 0  | 5,843,128:00:0 |     |
| 2512 | 0  | 365 | 04:50:15.733 | 29JNWTZRLT01-   | NIMPBK   | 301EI            | JUPITER WHITE OVAL OBSERVATION             | 2R3 | 4  | 0  | :              |     |
| 2513 | 0  | 365 | 04:50:47.733 | 29JNWTZRLT01-   | DESEL    | 300EI            | JUPITER WHITE OVAL OBSERVATION             | 2R3 | 4  | 0  | :              |     |
| 2514 | 0  | 365 | 04:52:18.400 | 29JNWTZRLT01-   | NIMPBK   | 301EM            | JUPITER WHITE OVAL OBSERVATION             | 2R3 | 4  | 0  | :              |     |
| 2515 | 0  | 365 | 04:52:54.400 | 29JNWTZRLT01-   | DESEL    | 300EM            | JUPITER WHITE OVAL OBSERVATION             | 2R3 | 4  | 0  | :              |     |
| 2516 | 0  | 365 | 04:58:28.466 | 29JNWTZRLT01-   |          | -----STOP -----  |  | 2R3 | 4  | 0  | :              |     |
| 2517 | 0  | 365 | 05:03:23.733 | 29JNWTZRLT01-   | DESEL    | 300EQ            | JUPITER WHITE OVAL OBSERVATION             | 2R3 | 4  | 0  | :              |     |
| 2518 | 0  | 365 | 05:03:25.733 | 175EQ422A6B     | DMS:     | :*RUNDOWN        | R7, TRACK 3, FWD, TIC *2517.09 +/- 4       | 2R3 | 4  | 0  | 5,843,143:88:0 |     |
| 2519 | 0  | 365 | 05:03:25.733 | 175EQ422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0  | 5,843,143:88:0 |     |
| 2520 | 0  | 365 | 05:03:25.733 | 175EQ6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R3 | 4  | 0  | 5,843,143:88:0 |     |
| 2521 | 0  | 365 | 05:03:26.933 | 117EQ11A        | DMS:     | :*READY          | RDY, TRACK 3, FWD, TIC *2517.15 +/- 4      | 2R3 | 4  | 0  | 5,843,143:89:8 |     |
| 2522 | 0  | 365 | 05:03:27.733 | 29JNWTZRLT01-   | CSMOS    | GE               | **** GROUP END CSMOS                       | 2R3 | 4  | 0  | 5,843,144:00:0 |     |
| 2523 | 0  | 365 | 05:03:31.799 | 29JNWTZRLT01-   |          | -----START ----- |  | 2R3 | 4  | 0  | :              |     |
| 2524 | 0  | 365 | 05:04:23.733 | 125ER           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R3 | 4  | 0  | 5,843,144:84:0 |     |
| 2525 | 0  | 365 | 05:04:23.733 | 125ER4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R3 | 4  | 0  | 5,843,144:84:0 |     |
| 2526 | 0  | 365 | 05:04:23.733 | 125ER11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R3 | 4  | 0  | 5,843,144:84:0 |     |
| 2527 | 0  | 365 | 05:04:27.733 | 165ER4A         | 7SCAN    | NORM,79.384999,2 | Check S/P Position                         | 2R3 | 4  | 0  | 5,843,144:90:0 |     |
| 2528 | 0  | 365 | 05:05:24.400 | 127ER4A         | 37IOP    | 3.0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0  | 5,843,145:84:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|----------------|------|
| 2529 | 0  | 365 | 05:05:24.400 | 127ER           | NIMSTAB | GS               | %%%GROUP START TAB                        | 2R3 | 4  | 0  | 5,843,145:84:0 |      |
| 2530 | 0  | 365 | 05:05:25.066 | 127ER4B         | 37ETB   | 07,C7,30,3C,D7,0 | Loads wavelength edit table               | 2R3 | 4  | 0  | 5,843,145:85:0 |      |
| 2531 | 0  | 365 | 05:05:33.066 | 127ER11A        | NIMSTAB | GE               | %%%%GROUP END TAB                         | 2R3 | 4  | 0  | 5,843,146:06:0 |      |
| 2532 | 0  | 365 | 05:07:19.066 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 2517.15 +/- 4     | 2R3 | 4  | 0  | 5,843,147:74:0 |      |
| 2533 | 0  | 365 | 05:07:19.066 | 175ER422A6A     | 6DMSC   | R7,3             | DMS Control                               | 2R3 | 4  | 0  | 5,843,147:74:0 |      |
| 2534 | 0  | 365 | 05:07:21.066 | 117ER           | CSMOS   | GS               | **** GROUP START CSMOS                    | 2R3 | 4  | 0  | 5,843,147:77:0 |      |
| 2535 | 0  | 365 | 05:07:25.733 |                 | DMS:    | :*RUNUP          | R7, TRACK *3, FWD, TIC 2517.15 +/- 4      | 2R3 | 4  | 0  | 5,843,147:84:0 |      |
| 2536 | 0  | 365 | 05:07:27.066 | 175ER176A6A     | 6TMREC  | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode | 2R3 | 4  | 0  | 5,843,147:86:0 |      |
| 2537 | 0  | 365 | 05:07:27.133 |                 | DMS:    | :*AT_SPD         | R7, TRACK 3, FWD, TIC 2517.27 +/- 4       | 2R3 | 4  | 0  | 5,843,147:86:1 |      |
| 2538 | 0  | 365 | 05:07:27.133 |                 | DMS:    | :*RECORD         | R7, TRACK 3, FWD, TIC *2517.27 +/- 4      | 2R3 | 4  | 0  | 5,843,147:86:1 |      |
| 2539 | 0  | 365 | 05:07:29.733 | 29JNJUPNTZ01-   | NIMPBK  | 301ER            | JUPITER NTZ OBSERVATION                   | 2R3 | 4  | 0  | :              |      |
| 2540 | 0  | 365 | 05:07:30.400 | 117ER105A106A4A | 75STRP  | -0.058015,-0.006 | Slew = 0.03                               | 2R3 | 4  | 0  | 5,843,148:00:0 |      |
| 2541 | 0  | 365 | 05:10:39.000 | 29JNJUPNTZ01-   | NIMPBK  | 301FT            | JUPITER NTZ OBSERVATION                   | 2R3 | 4  | 0  | :              |      |
| 2542 | 0  | 365 | 05:12:03.000 | 29JNJUPNTZ01-   | DESELC  | 300FT            | JUPITER NTZ OBSERVATION                   | 2R3 | 4  | 0  | :              |      |
| 2543 | 0  | 365 | 05:18:41.799 | 29JNJUPNTZ01-   |         |                  | -----STOP-----                            | 2R3 | 4  | 0  | :              |      |
| 2544 | 0  | 365 | 05:38:23.000 | 29JNJUPNTZ01-   | NIMPBK  | 300FU            | JUPITER NTZ OBSERVATION                   | 2R3 | 4  | 0  | :              |      |
| 2545 | 0  | 365 | 05:39:33.066 | 29JNJUPNTZ01-   | DESELC  | 300ER            | JUPITER NTZ OBSERVATION                   | 2R3 | 4  | 0  | :              |      |
| 2546 | 0  | 365 | 05:39:33.066 | 29JNJUPNTZ01-   | DESELC  | 300ER            | JUPITER NTZ OBSERVATION                   | 2R3 | 4  | 0  | :              |      |
| 2547 | 0  | 365 | 05:39:35.066 | 175ER6A         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 2R3 | 4  | 0  | 5,843,179:66:0 |      |
| 2548 | 0  | 365 | 05:39:35.066 | 175ER422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,843,179:66:0 |      |
| 2549 | 0  | 365 | 05:39:35.066 |                 | DMS:    | :*RUNDOWN        | R7, TRACK 3, FWD, TIC *2969.13 +/- 4      | 2R3 | 4  | 0  | 5,843,179:66:0 |      |
| 2550 | 0  | 365 | 05:39:36.266 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *2969.19 +/- 4     | 2R3 | 4  | 0  | 5,843,179:67:8 |      |
| 2551 | 0  | 365 | 05:39:51.733 | 117ER11A        | CSMOS   | GE               | **** GROUP END CSMOS                      | 2R3 | 4  | 0  | 5,843,180:00:0 |      |
| 2552 | 0  | 365 | 08:18:41.066 | 165IE4A         | 7SCAN   | NORM,90.266,25.3 | Check S/P Position                        | 2R3 | 4  | 0  | 5,843,337:07:0 |      |
| 2553 | 0  | 365 | 08:20:41.733 | 118IE           | SMOS    | GS               |   | 2R3 | 4  | 0  | 5,843,339:06:0 |      |
| 2554 | 0  | 365 | 08:21:28.400 | 165IE4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,843,339:76:0 |      |
| 2555 | 0  | 365 | 08:21:31.733 | 118IE110A111A4A | 75STRP  | 0.0038,0.0,182,0 | Slew = 1.91                               | 2R3 | 4  | 0  | 5,843,339:81:0 |      |
| 2556 | 0  | 365 | 08:21:35.066 | 175IE422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,843,339:86:0 |      |
| 2557 | 0  | 365 | 08:21:35.066 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 2969.19 +/- 4     | 2R3 | 4  | 0  | 5,843,339:86:0 |      |
| 2558 | 0  | 365 | 08:21:41.733 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 2969.19 +/- 4    | 2R3 | 4  | 0  | 5,843,340:05:0 |      |
| 2559 | 0  | 365 | 08:21:45.066 | 175IE176A6A     | 6TMREC  | HIM              | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,843,340:10:0 |      |
| 2560 | 0  | 365 | 08:21:45.733 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 2975.49 +/- 4     | 2R3 | 4  | 0  | 5,843,340:11:0 |      |
| 2561 | 0  | 365 | 08:21:45.733 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *2975.49 +/- 4    | 2R3 | 4  | 0  | 5,843,340:11:0 |      |
| 2562 | 0  | 365 | 08:22:23.066 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *3106.74 +/- 4    | 2R3 | 4  | 0  | 5,843,340:67:0 |      |
| 2563 | 0  | 365 | 08:22:23.066 | 175IE422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,843,340:67:0 |      |
| 2564 | 0  | 365 | 08:22:24.266 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *3107.74 +/- 4     | 2R3 | 4  | 0  | 5,843,340:68:8 |      |
| 2565 | 0  | 365 | 08:22:32.400 | 118IE110A111A4B | 75STRP  | -0.0038,0.0,0,0  | Slew = 1.91                               | 2R3 | 4  | 0  | 5,843,340:81:0 |      |
| 2566 | 0  | 365 | 08:23:33.066 | 118IE110A111A4C | 75STRP  | 0.0038,0.0,182,0 | Slew = 1.91                               | 2R3 | 4  | 0  | 5,843,341:81:0 |      |
| 2567 | 0  | 365 | 08:23:36.400 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 3107.74 +/- 4     | 2R3 | 4  | 0  | 5,843,341:86:0 |      |
| 2568 | 0  | 365 | 08:23:36.400 | 175IR422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,843,341:86:0 |      |
| 2569 | 0  | 365 | 08:23:43.066 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 3107.74 +/- 4    | 2R3 | 4  | 0  | 5,843,342:05:0 |      |
| 2570 | 0  | 365 | 08:23:46.400 | 175IR176A6A     | 6TMREC  | HIM              | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,843,342:10:0 |      |
| 2571 | 0  | 365 | 08:23:47.066 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *3114.04 +/- 4    | 2R3 | 4  | 0  | 5,843,342:11:0 |      |
| 2572 | 0  | 365 | 08:23:47.066 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 3114.04 +/- 4     | 2R3 | 4  | 0  | 5,843,342:11:0 |      |
| 2573 | 0  | 365 | 08:24:24.400 | 175IR422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,843,342:67:0 |      |
| 2574 | 0  | 365 | 08:24:24.400 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *3245.29 +/- 4    | 2R3 | 4  | 0  | 5,843,342:67:0 |      |
| 2575 | 0  | 365 | 08:24:25.600 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *3246.29 +/- 4     | 2R3 | 4  | 0  | 5,843,342:68:8 |      |
| 2576 | 0  | 365 | 08:24:33.733 | 118IE11A        | SMOS    | GE               |   | 2R3 | 4  | 0  | 5,843,342:81:0 |      |
| 2577 | 0  | 365 | 08:29:59.733 | 480SI6A         | 6MROH   | 44,23E8,0,A2     | read from LLM2A44,23E8,0,A2               | 2R3 | 4  | 0  | 5,843,348:24:0 |      |
| 2578 | 0  | 365 | 08:36:39.733 | 480SI6B         | 6MROH   | 45,23E8,0,B2     | read from LLM2B45,23E8,0,B2               | 2R3 | 4  | 0  | 5,843,354:78:0 |      |
| 2579 | 0  | 365 | 10:23:34.400 | 488AM6A         | 6TMSED  | NORM,AL,3        | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,460:54:0 |      |
| 2580 | 0  | 365 | 10:27:00.400 | 165IK4A         | 7SCAN   | NORM,83.259999,2 | Check S/P Position                        | 2R3 | 4  | 0  | 5,843,463:90:0 |      |
| 2581 | 0  | 365 | 10:29:55.733 | 175IK422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,843,466:80:0 |      |
| 2582 | 0  | 365 | 10:29:55.733 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 3246.29 +/- 4     | 2R3 | 4  | 0  | 5,843,466:80:0 |      |
| 2583 | 0  | 365 | 10:30:01.733 | 165IK4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,843,466:89:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID           | Command | Parameters        | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|---------|-------------------|---|-----|----|----|----------------|------|
| 2584 | 0  | 365 | 10:30:02.400 |                | DMS:    | :*RUNUP           | R115, TRACK *3, FWD, TIC 3246.29 +/- 4    | 2R3 | 4  | 0  | 5,843,466:90:0 |      |
| 2585 | 0  | 365 | 10:30:05.733 | 175IK176A6A    | 6TMREC  | HMA               | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,843,467:04:0 |      |
| 2586 | 0  | 365 | 10:30:06.400 |                | DMS:    | :*AT SPD          | R115, TRACK 3, FWD, TIC 3252.59 +/- 4     | 2R3 | 4  | 0  | 5,843,467:05:0 |      |
| 2587 | 0  | 365 | 10:30:06.400 |                | DMS:    | :*RECORD          | R115, TRACK 3, FWD, TIC *3252.59 +/- 4    | 2R3 | 4  | 0  | 5,843,467:05:0 |      |
| 2588 | 0  | 365 | 10:30:33.733 |                | DMS:    | :*RUNDOWN         | R115, TRACK 3, FWD, TIC *3348.68 +/- 4    | 2R3 | 4  | 0  | 5,843,467:46:0 |      |
| 2589 | 0  | 365 | 10:30:33.733 | 175IK422A6B    | 6DMSC   | RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,843,467:46:0 |      |
| 2590 | 0  | 365 | 10:30:34.933 |                | DMS:    | :*READY           | RDY, TRACK 3, FWD, TIC *3349.68 +/- 4     | 2R3 | 4  | 0  | 5,843,467:47:8 |      |
| 2591 | 0  | 365 | 10:40:38.400 | 488AM6B        | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,477:43:0 |      |
| 2592 | 0  | 365 | 11:39:29.733 | 488AM6C        | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,535:62:0 |      |
| 2593 | 0  | 365 | 12:01:01.733 | 431ZL6A        | 6RCDSL  | DDSNCG,PLSNCG,EP  | Record Deselect (DDS o                    | 2R3 | 4  | 0  | 5,843,556:89:0 |      |
| 2594 | 0  | 365 | 12:01:03.066 | 432ZL6A        | 6RTSL1  |                   | R/T Select of DDS and                     | 2R3 | 4  | 0  | 5,843,557:00:0 |      |
| 2595 | 0  | 365 | 12:05:09.733 | 20ZM6A         | 6EUVON  |                   |   | 2R3 | 4  | 0  | 5,843,561:06:0 |      |
| 2596 | 0  | 365 | 12:06:06.400 | 431ZM6A        | 6RCSEL  | DDSNCG,PLSNCG,EP  | Record Select (DDS onl                    | 2R3 | 4  | 0  | 5,843,562:00:0 |      |
| 2597 | 0  | 365 | 12:08:35.733 | 488AM6D        | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,564:42:0 |      |
| 2598 | 0  | 365 | 13:59:02.400 | 488AM6E        | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,673:63:0 |      |
| 2599 | 0  | 365 | 14:43:50.400 | 488AN6A        | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,718:00:0 |      |
| 2600 | 0  | 365 | 15:35:02.400 | 488AN6B        | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,768:58:0 |      |
| 2601 | 0  | 365 | 15:56:44.400 | 488AN6C        | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,790:09:0 |      |
| 2602 | 0  | 365 | 16:30:23.733 | 488AN6D        | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,823:35:0 |      |
| 2603 | 0  | 365 | 17:09:59.733 | 488FA6A        | 6TMSED  | NORM,AH4          | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,843,862:50:0 |      |
| 2604 | 0  | 365 | 18:52:25.066 | 165IF4A        | 7SCAN   | NORM,81.776999,2  | Check S/P Position                        | 2R3 | 4  | 0  | 5,843,963:77:0 |      |
| 2605 | 0  | 365 | 18:54:39.733 | 118IF          | SMOS    | GS                |   | 2R3 | 4  | 0  | 5,843,966:06:0 |      |
| 2606 | 0  | 365 | 18:55:26.400 | 165IF4B        | 7VECT   |                   | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,843,966:76:0 |      |
| 2607 | 0  | 365 | 18:55:29.733 | 118IF110A11A4A | 7STRP   | 0.0038,0.0,182,0  | Slew = 1.91                               | 2R3 | 4  | 0  | 5,843,966:81:0 |      |
| 2608 | 0  | 365 | 18:55:33.066 |                | DMS:    | :*E4-DELAY        | RDY, TRACK *1, FWD, TIC 3349.68 +/- 4     | 2R3 | 4  | 0  | 5,843,966:86:0 |      |
| 2609 | 0  | 365 | 18:55:33.066 | 175IF422A6A    | 6DMSC   | R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,843,966:86:0 |      |
| 2610 | 0  | 365 | 18:55:39.733 |                | DMS:    | :*RUNUP           | R115, TRACK *3, FWD, TIC 3349.68 +/- 4    | 2R3 | 4  | 0  | 5,843,967:05:0 |      |
| 2611 | 0  | 365 | 18:55:43.066 | 175IF176A6A    | 6TMREC  | HIM               | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,843,967:10:0 |      |
| 2612 | 0  | 365 | 18:55:43.733 |                | DMS:    | :*RECORD          | R115, TRACK 3, FWD, TIC *3355.98 +/- 4    | 2R3 | 4  | 0  | 5,843,967:11:0 |      |
| 2613 | 0  | 365 | 18:55:43.733 |                | DMS:    | :*AT SPD          | R115, TRACK 3, FWD, TIC 3355.98 +/- 4     | 2R3 | 4  | 0  | 5,843,967:11:0 |      |
| 2614 | 0  | 365 | 18:56:10.400 |                | DMS:    | :*RUNDOWN         | R115, TRACK 3, FWD, TIC *3449.73 +/- 4    | 2R3 | 4  | 0  | 5,843,967:51:0 |      |
| 2615 | 0  | 365 | 18:56:10.400 | 175IF422A6B    | 6DMSC   | RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,843,967:51:0 |      |
| 2616 | 0  | 365 | 18:56:11.600 |                | DMS:    | :*READY           | RDY, TRACK 3, FWD, TIC *3450.73 +/- 4     | 2R3 | 4  | 0  | 5,843,967:52:8 |      |
| 2617 | 0  | 365 | 18:56:30.400 | 118IF110A11A4B | 7STRP   | -0.0038,0.0,0,0,0 | Slew = 1.91                               | 2R3 | 4  | 0  | 5,843,967:81:0 |      |
| 2618 | 0  | 365 | 18:57:31.066 | 118IF110A11A4C | 7STRP   | 0.0038,0.0,182,0  | Slew = 1.91                               | 2R3 | 4  | 0  | 5,843,968:81:0 |      |
| 2619 | 0  | 365 | 18:57:34.400 | 175IT422A6A    | 6DMSC   | R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,843,968:86:0 |      |
| 2620 | 0  | 365 | 18:57:34.400 |                | DMS:    | :*E4-DELAY        | RDY, TRACK *1, FWD, TIC 3450.73 +/- 4     | 2R3 | 4  | 0  | 5,843,968:86:0 |      |
| 2621 | 0  | 365 | 18:57:41.066 |                | DMS:    | :*RUNUP           | R115, TRACK *3, FWD, TIC 3450.73 +/- 4    | 2R3 | 4  | 0  | 5,843,969:05:0 |      |
| 2622 | 0  | 365 | 18:57:44.400 | 175IT176A6A    | 6TMREC  | HIM               | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 2R3 | 4  | 0  | 5,843,969:10:0 |      |
| 2623 | 0  | 365 | 18:57:45.066 |                | DMS:    | :*RECORD          | R115, TRACK 3, FWD, TIC *3457.03 +/- 4    | 2R3 | 4  | 0  | 5,843,969:11:0 |      |
| 2624 | 0  | 365 | 18:57:45.066 |                | DMS:    | :*AT SPD          | R115, TRACK 3, FWD, TIC 3457.03 +/- 4     | 2R3 | 4  | 0  | 5,843,969:11:0 |      |
| 2625 | 0  | 365 | 18:58:11.733 | 175IT422A6B    | 6DMSC   | RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,843,969:51:0 |      |
| 2626 | 0  | 365 | 18:58:11.733 |                | DMS:    | :*RUNDOWN         | R115, TRACK 3, FWD, TIC *3550.78 +/- 4    | 2R3 | 4  | 0  | 5,843,969:51:0 |      |
| 2627 | 0  | 365 | 18:58:12.933 |                | DMS:    | :*READY           | RDY, TRACK 3, FWD, TIC *3551.78 +/- 4     | 2R3 | 4  | 0  | 5,843,969:52:8 |      |
| 2628 | 0  | 365 | 18:58:31.733 | 118IF11A       | SMOS    | GE                |   | 2R3 | 4  | 0  | 5,843,969:81:0 |      |
| 2629 | 0  | 366 | 00:57:34.400 | 165JK4A        | 7SCAN   | NORM,97.132,24,8  | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,324:90:0 |      |
| 2630 | 0  | 366 | 01:00:29.733 |                | DMS:    | :*E4-DELAY        | RDY, TRACK *1, FWD, TIC 3551.78 +/- 4     | 2R3 | 4  | 0  | 5,844,327:80:0 |      |
| 2631 | 0  | 366 | 01:00:29.733 | 175JK422A6A    | 6DMSC   | R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,844,327:80:0 |      |
| 2632 | 0  | 366 | 01:00:35.733 | 165JK4B        | 7VECT   |                   | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,844,327:89:0 |      |
| 2633 | 0  | 366 | 01:00:36.400 |                | DMS:    | :*RUNUP           | R115, TRACK *3, FWD, TIC 3551.78 +/- 4    | 2R3 | 4  | 0  | 5,844,327:90:0 |      |
| 2634 | 0  | 366 | 01:00:39.733 | 175JK176A6A    | 6TMREC  | HMA               | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,328:04:0 |      |
| 2635 | 0  | 366 | 01:00:40.400 |                | DMS:    | :*AT SPD          | R115, TRACK 3, FWD, TIC 3558.08 +/- 4     | 2R3 | 4  | 0  | 5,844,328:05:0 |      |
| 2636 | 0  | 366 | 01:00:40.400 |                | DMS:    | :*RECORD          | R115, TRACK 3, FWD, TIC *3558.08 +/- 4    | 2R3 | 4  | 0  | 5,844,328:05:0 |      |
| 2637 | 0  | 366 | 01:01:07.733 |                | DMS:    | :*RUNDOWN         | R115, TRACK 3, FWD, TIC *3654.18 +/- 4    | 2R3 | 4  | 0  | 5,844,328:46:0 |      |
| 2638 | 0  | 366 | 01:01:07.733 | 175JK422A6B    | 6DMSC   | RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,328:46:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|----------------|------|
| 2639 | 0  | 366 | 01:01:08.933 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *3655.18 +/- 4     | 2R3 | 4  | 0  | 5,844,328:47:8 |      |
| 2640 | 0  | 366 | 02:13:24.400 | 165QG4A         | 7SCAN   | NORM,95.162999,2 | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,399:90:0 |      |
| 2641 | 0  | 366 | 02:44:59.733 | 444SM443A4B     | 7MODE   | INT              | AACS INERTIAL MODE                        | 2R3 | 4  | 0  | 5,844,431:21:0 |      |
| 2642 | 0  | 366 | 02:55:34.400 | 488AO6A         | 6TMSED  | NORM,AH3         | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,844,441:63:0 |      |
| 2643 | 0  | 366 | 03:06:14.400 | 488AO6B         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,844,452:22:0 |      |
| 2644 | 0  | 366 | 03:19:32.400 | 488AO6C         | 6TMSED  | FILL,AH5         | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,844,465:36:0 |      |
| 2645 | 0  | 366 | 03:35:18.400 | 165IG4A         | 7SCAN   | NORM,95.172,24.9 | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,480:90:0 |      |
| 2646 | 0  | 366 | 03:37:19.066 | 165IG4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,844,482:89:0 |      |
| 2647 | 0  | 366 | 03:37:19.733 | 118IG           | SMOS    | GS               |   | 2R3 | 4  | 0  | 5,844,482:90:0 |      |
| 2648 | 0  | 366 | 03:37:29.733 | 118IG110A111A4A | 7STRP   | -0.0038,0.0,166, | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,483:14:0 |      |
| 2649 | 0  | 366 | 03:38:13.733 | 175IG422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,844,483:80:0 |      |
| 2650 | 0  | 366 | 03:38:13.733 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 3655.18 +/- 4     | 2R3 | 4  | 0  | 5,844,483:90:0 |      |
| 2651 | 0  | 366 | 03:38:20.400 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 3655.18 +/- 4    | 2R3 | 4  | 0  | 5,844,483:90:0 |      |
| 2652 | 0  | 366 | 03:38:23.733 | 175IG176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,484:04:0 |      |
| 2653 | 0  | 366 | 03:38:24.400 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *3661.48 +/- 4    | 2R3 | 4  | 0  | 5,844,484:05:0 |      |
| 2654 | 0  | 366 | 03:38:24.400 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 3661.48 +/- 4     | 2R3 | 4  | 0  | 5,844,484:05:0 |      |
| 2655 | 0  | 366 | 03:38:25.066 | 118IG110A111A4B | 7STRP   | 0.0038,0.0,0,0.0 | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,484:06:0 |      |
| 2656 | 0  | 366 | 03:38:51.733 | 175IG422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,484:46:0 |      |
| 2657 | 0  | 366 | 03:38:51.733 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *3757.57 +/- 4    | 2R3 | 4  | 0  | 5,844,484:46:0 |      |
| 2658 | 0  | 366 | 03:38:52.933 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *3758.57 +/- 4     | 2R3 | 4  | 0  | 5,844,484:47:8 |      |
| 2659 | 0  | 366 | 03:39:20.400 | 118IG110A111A4C | 7STRP   | -0.0038,0.0,166, | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,484:89:0 |      |
| 2660 | 0  | 366 | 03:39:45.066 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 3758.57 +/- 4     | 2R3 | 4  | 0  | 5,844,485:35:0 |      |
| 2661 | 0  | 366 | 03:39:45.066 | 175QG422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,844,485:35:0 |      |
| 2662 | 0  | 366 | 03:39:51.733 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 3758.57 +/- 4    | 2R3 | 4  | 0  | 5,844,485:45:0 |      |
| 2663 | 0  | 366 | 03:39:55.066 | 175QG176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,485:50:0 |      |
| 2664 | 0  | 366 | 03:39:55.733 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *3764.87 +/- 4    | 2R3 | 4  | 0  | 5,844,485:51:0 |      |
| 2665 | 0  | 366 | 03:39:55.733 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 3764.87 +/- 4     | 2R3 | 4  | 0  | 5,844,485:51:0 |      |
| 2666 | 0  | 366 | 03:40:15.733 | 118IG11A        | SMOS    | GE               |   | 2R3 | 4  | 0  | 5,844,485:81:0 |      |
| 2667 | 0  | 366 | 03:40:23.066 | 175QG422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,486:01:0 |      |
| 2668 | 0  | 366 | 03:40:23.066 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *3860.97 +/- 4    | 2R3 | 4  | 0  | 5,844,486:01:0 |      |
| 2669 | 0  | 366 | 03:40:24.266 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *3861.97 +/- 4     | 2R3 | 4  | 0  | 5,844,486:02:8 |      |
| 2670 | 0  | 366 | 03:48:38.400 | 488AO6D         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 2R3 | 4  | 0  | 5,844,494:16:0 |      |
| 2671 | 0  | 366 | 03:52:29.733 | 165IH4A         | 7SCAN   | NORM,95.733999,2 | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,497:90:0 |      |
| 2672 | 0  | 366 | 03:54:30.400 | 165IH4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,844,499:90:0 |      |
| 2673 | 0  | 366 | 03:54:31.066 | 118IH           | SMOS    | GS               |   | 2R3 | 4  | 0  | 5,844,500:14:0 |      |
| 2674 | 0  | 366 | 03:54:41.066 | 118IH110A111A4A | 7STRP   | -0.0038,0.0,166, | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,500:80:0 |      |
| 2675 | 0  | 366 | 03:55:25.066 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 3861.97 +/- 4     | 2R3 | 4  | 0  | 5,844,500:80:0 |      |
| 2676 | 0  | 366 | 03:55:25.066 | 175IH422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,844,500:80:0 |      |
| 2677 | 0  | 366 | 03:55:31.733 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 3861.97 +/- 4    | 2R3 | 4  | 0  | 5,844,500:90:0 |      |
| 2678 | 0  | 366 | 03:55:35.066 | 175IH176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,501:04:0 |      |
| 2679 | 0  | 366 | 03:55:35.733 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *3868.27 +/- 4    | 2R3 | 4  | 0  | 5,844,501:05:0 |      |
| 2680 | 0  | 366 | 03:55:35.733 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 3868.27 +/- 4     | 2R3 | 4  | 0  | 5,844,501:05:0 |      |
| 2681 | 0  | 366 | 03:55:36.400 | 118IH110A111A4B | 7STRP   | 0.0038,0.0,0,0.0 | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,501:06:0 |      |
| 2682 | 0  | 366 | 03:56:03.066 | 175IH422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,501:46:0 |      |
| 2683 | 0  | 366 | 03:56:03.066 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *3964.36 +/- 4    | 2R3 | 4  | 0  | 5,844,501:46:0 |      |
| 2684 | 0  | 366 | 03:56:04.266 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *3965.36 +/- 4     | 2R3 | 4  | 0  | 5,844,501:47:8 |      |
| 2685 | 0  | 366 | 03:56:31.733 | 118IH110A111A4C | 7STRP   | -0.0038,0.0,166, | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,501:89:0 |      |
| 2686 | 0  | 366 | 03:56:56.400 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 3965.36 +/- 4     | 2R3 | 4  | 0  | 5,844,502:35:0 |      |
| 2687 | 0  | 366 | 03:56:56.400 | 175QH422A6A     | 6DMSC   | R115.3           | DMS Control                               | 2R3 | 4  | 0  | 5,844,502:35:0 |      |
| 2688 | 0  | 366 | 03:57:03.066 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 3965.36 +/- 4    | 2R3 | 4  | 0  | 5,844,502:45:0 |      |
| 2689 | 0  | 366 | 03:57:06.400 | 175QH176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,502:50:0 |      |
| 2690 | 0  | 366 | 03:57:07.066 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *3971.66 +/- 4    | 2R3 | 4  | 0  | 5,844,502:51:0 |      |
| 2691 | 0  | 366 | 03:57:07.066 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 3971.66 +/- 4     | 2R3 | 4  | 0  | 5,844,502:51:0 |      |
| 2692 | 0  | 366 | 03:57:27.066 | 118IH11A        | SMOS    | GE               |   | 2R3 | 4  | 0  | 5,844,502:81:0 |      |
| 2693 | 0  | 366 | 03:57:34.400 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4067.75 +/- 4    | 2R3 | 4  | 0  | 5,844,503:01:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 2694 | 0  | 366 | 03:57:34.400 | 175QH422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,844,503:01:0 |      |
| 2695 | 0  | 366 | 03:57:35.600 |                 | DMS:     | : *READY         | RDY, TRACK 3, FWD, TIC *4068.75 +/- 4      | 2R3 | 4  | 0              | 5,844,503:02:8 |      |
| 2696 | 0  | 366 | 04:00:21.000 | 29NNIWATCH03-   |          | -----START-----  |  | 2R3 | 4  | 0              | :              | :    |
| 2697 | 0  | 366 | 04:00:21.066 | 20ES5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,844,505:69:0 |                |      |
| 2698 | 0  | 366 | 04:00:28.400 | 20ES5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,844,505:80:0 |                |      |
| 2699 | 0  | 366 | 04:00:36.400 | 20ES6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,844,506:01:0 |                |      |
| 2700 | 0  | 366 | 04:00:46.400 | 20ES6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,844,506:16:0 |                |      |
| 2701 | 0  | 366 | 04:00:56.400 | 20ES5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,844,506:31:0 |                |      |
| 2702 | 0  | 366 | 04:00:57.733 | 20ES5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,844,506:33:0 |      |
| 2703 | 0  | 366 | 04:01:29.066 | 20ES4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,844,506:80:0 |      |
| 2704 | 0  | 366 | 04:01:30.000 | 29NNIWATCH03-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              | :    |
| 2705 | 0  | 366 | 04:02:32.400 | 125ES           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,844,507:84:0 |      |
| 2706 | 0  | 366 | 04:02:32.400 | 125ES11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,844,507:84:0 |      |
| 2707 | 0  | 366 | 04:02:32.400 | 125ES4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,844,507:84:0 |      |
| 2708 | 0  | 366 | 04:03:37.066 | 165ES4A         | 75CAN    | NORM,96.082999,2 | Check S/P Position                         | 2R0 | 4  | 0              | 5,844,508:90:0 |      |
| 2709 | 0  | 366 | 04:04:33.733 | 127ES           | NIMSTAB  | GS               | %%%%%% GROUP START TAB                     | 2R0 | 4  | 0              | 5,844,509:84:0 |      |
| 2710 | 0  | 366 | 04:04:33.733 | 127ES4A         | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,844,509:84:0 |      |
| 2711 | 0  | 366 | 04:04:34.400 | 127ES4B         | 37ETB    | 04,C4,35,FF,FF   | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,844,509:85:0 |      |
| 2712 | 0  | 366 | 04:04:42.400 | 127ES11A        | NIMSTAB  | GE               | %%%%%%% GROUP END TAB                      | 2R3 | 4  | 0              | 5,844,510:06:0 |      |
| 2713 | 0  | 366 | 04:05:25.733 | 175ES422A6A     | 6DMSC    | R28,3            | DMS Control                                | 2R3 | 4  | 0              | 5,844,510:71:0 |      |
| 2714 | 0  | 366 | 04:05:25.733 |                 | DMS:     | : *E4-DELAY      | RDY, TRACK *1, FWD, TIC 4068.75 +/- 4      | 2R3 | 4  | 0              | 5,844,510:71:0 |      |
| 2715 | 0  | 366 | 04:05:29.733 | 117ES           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 2R3 | 4  | 0              | 5,844,510:77:0 |      |
| 2716 | 0  | 366 | 04:05:32.400 |                 | DMS:     | : *RUNUP         | R28, TRACK *3, FWD, TIC 4068.75 +/- 4      | 2R3 | 4  | 0              | 5,844,510:81:0 |      |
| 2717 | 0  | 366 | 04:05:35.733 | 175ES176A6A     | 6TMREC   | MPW              | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 2R3 | 4  | 0              | 5,844,510:86:0 |      |
| 2718 | 0  | 366 | 04:05:36.400 |                 | DMS:     | : *RECORD        | R28, TRACK 3, FWD, TIC *4070.25 +/- 4      | 2R3 | 4  | 0              | 5,844,510:87:0 |      |
| 2719 | 0  | 366 | 04:05:36.400 |                 | DMS:     | : *AT_SPD        | R28, TRACK 3, FWD, TIC 4070.25 +/- 4       | 2R3 | 4  | 0              | 5,844,510:87:0 |      |
| 2720 | 0  | 366 | 04:05:37.733 | 165ES4B         | 7VECT    |                  | Inert vect update UTC                      | 2R3 | 4  | 0              | 5,844,510:89:0 |      |
| 2721 | 0  | 366 | 04:05:38.400 | 29NIWATCH03-    | NIMPBK   | 301ES            | IO MONITOR OBSERVATION                     | 2R3 | 4  | 0              | :              | :    |
| 2722 | 0  | 366 | 04:05:39.066 | 117ES105A106A4A | 75TRP    | -0.0052,0,0,0,0, | Slew = 0.03                                | 2R3 | 4  | 0              | 5,844,511:00:0 |      |
| 2723 | 0  | 366 | 04:05:43.133 | 29NIWATCH03-    |          | -----START-----  |  | 2R3 | 4  | 0              | :              | :    |
| 2724 | 0  | 366 | 04:06:03.066 | 29NIWATCH03-    | NIMPBK   | 301FF            | IO MONITOR OBSERVATION                     | 2R3 | 4  | 0              | :              | :    |
| 2725 | 0  | 366 | 04:06:16.400 | 29NIWATCH03-    | DESEL    | 300FF            | IO MONITOR OBSERVATION                     | 2R3 | 4  | 0              | :              | :    |
| 2726 | 0  | 366 | 04:08:19.733 | 29NIWATCH03-    | DESEL    | 300ES            | IO MONITOR OBSERVATION                     | 2R3 | 4  | 0              | :              | :    |
| 2727 | 0  | 366 | 04:08:21.733 | 175ES422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,844,513:62:0 |      |
| 2728 | 0  | 366 | 04:08:21.733 |                 | DMS:     | : *RUNDOWN       | R28, TRACK 3, FWD, TIC *4215.57 +/- 4      | 2R3 | 4  | 0              | 5,844,513:62:0 |      |
| 2729 | 0  | 366 | 04:08:22.933 |                 | DMS:     | : *READY         | RDY, TRACK 3, FWD, TIC *4215.87 +/- 4      | 2R3 | 4  | 0              | 5,844,513:63:8 |      |
| 2730 | 0  | 366 | 04:08:37.733 | 117ES11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R3 | 4  | 0              | 5,844,513:86:0 |      |
| 2731 | 0  | 366 | 04:09:41.066 | 165I4A          | 75CAN    | NORM,96.297999,2 | Check S/P Position                         | 2R3 | 4  | 0              | 5,844,514:90:0 |      |
| 2732 | 0  | 366 | 04:11:41.733 | 165I4B          | 7VECT    |                  | Inert vect update UTC                      | 2R3 | 4  | 0              | 5,844,516:89:0 |      |
| 2733 | 0  | 366 | 04:11:42.400 | 118I1           | SMOS     | GS               |  | 2R3 | 4  | 0              | 5,844,516:90:0 |      |
| 2734 | 0  | 366 | 04:11:52.400 | 118I110A111A4A  | 75TRP    | -0.0038,0,0,166, | Slew = -1.91                               | 2R3 | 4  | 0              | 5,844,517:14:0 |      |
| 2735 | 0  | 366 | 04:12:36.400 | 175I422A6A      | 6DMSC    | R115,3           | DMS Control                                | 2R3 | 4  | 0              | 5,844,517:80:0 |      |
| 2736 | 0  | 366 | 04:12:36.400 |                 | DMS:     | : *E4-DELAY      | RDY, TRACK *1, FWD, TIC 4215.87 +/- 4      | 2R3 | 4  | 0              | 5,844,517:80:0 |      |
| 2737 | 0  | 366 | 04:12:43.066 |                 | DMS:     | : *RUNUP         | R115, TRACK *3, FWD, TIC 4215.87 +/- 4     | 2R3 | 4  | 0              | 5,844,517:90:0 |      |
| 2738 | 0  | 366 | 04:12:46.400 | 175I176A6A      | 6TMREC   | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R3 | 4  | 0              | 5,844,518:04:0 |      |
| 2739 | 0  | 366 | 04:12:47.066 |                 | DMS:     | : *AT_SPD        | R115, TRACK 3, FWD, TIC 4222.17 +/- 4      | 2R3 | 4  | 0              | 5,844,518:05:0 |      |
| 2740 | 0  | 366 | 04:12:47.066 |                 | DMS:     | : *RECORD        | R115, TRACK 3, FWD, TIC *4222.17 +/- 4     | 2R3 | 4  | 0              | 5,844,518:05:0 |      |
| 2741 | 0  | 366 | 04:12:47.733 | 118I110A111A4B  | 75TRP    | 0.0038,0,0,0,0,0 | Slew = -1.91                               | 2R3 | 4  | 0              | 5,844,518:06:0 |      |
| 2742 | 0  | 366 | 04:12:47.799 | 29NIWATCH03-    |          | -----STOP-----   |  | 2R3 | 4  | 0              | :              | :    |
| 2743 | 0  | 366 | 04:13:14.400 |                 | DMS:     | : *RUNDOWN       | R115, TRACK 3, FWD, TIC *4318.26 +/- 4     | 2R3 | 4  | 0              | 5,844,518:46:0 |      |
| 2744 | 0  | 366 | 04:13:14.400 | 175I422A6B      | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,844,518:46:0 |      |
| 2745 | 0  | 366 | 04:13:15.600 |                 | DMS:     | : *READY         | RDY, TRACK 3, FWD, TIC *4319.26 +/- 4      | 2R3 | 4  | 0              | 5,844,518:47:8 |      |
| 2746 | 0  | 366 | 04:13:43.066 | 118I110A111A4C  | 75TRP    | -0.0038,0,0,166, | Slew = -1.91                               | 2R3 | 4  | 0              | 5,844,518:89:0 |      |
| 2747 | 0  | 366 | 04:14:07.733 | 175Q422A6A      | 6DMSC    | R115,3           | DMS Control                                | 2R3 | 4  | 0              | 5,844,519:35:0 |      |
| 2748 | 0  | 366 | 04:14:07.733 |                 | DMS:     | : *E4-DELAY      | RDY, TRACK *1, FWD, TIC 4319.26 +/- 4      | 2R3 | 4  | 0              | 5,844,519:35:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID           | Command | Parameters       | Description                               | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|---------|------------------|---|------|----|----|----------------|------|
| 2749 | 0  | 366 | 04:14:14.400 |                | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4319.26 +/- 4    | 2R3  | 4  | 0  | 5,844,519:45:0 |      |
| 2750 | 0  | 366 | 04:14:17.733 | 175QJ176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,519:50:0 |      |
| 2751 | 0  | 366 | 04:14:18.400 |                | DMS:    | :*AT SPD         | R115, TRACK *3, FWD, TIC 4325.56 +/- 4    | 2R3  | 4  | 0  | 5,844,519:51:0 |      |
| 2752 | 0  | 366 | 04:14:18.400 |                | DMS:    | :*RECORD         | R115, TRACK *3, FWD, TIC *4325.56 +/- 4   | 2R3  | 4  | 0  | 5,844,519:51:0 |      |
| 2753 | 0  | 366 | 04:14:38.400 | 118I111A       | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,844,519:81:0 |      |
| 2754 | 0  | 366 | 04:14:45.733 | 175QJ422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,520:01:0 |      |
| 2755 | 0  | 366 | 04:14:45.733 |                | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4421.65 +/- 4    | 2R3  | 4  | 0  | 5,844,520:01:0 |      |
| 2756 | 0  | 366 | 04:14:46.933 |                | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *4422.65 +/- 4     | 2R3  | 4  | 0  | 5,844,520:02:8 |      |
| 2757 | 0  | 366 | 04:26:52.400 | 165I44A        | 7SCAN   | NORM,96.863999,2 | Check S/P Position                        | 2R3  | 4  | 0  | 5,844,531:90:0 |      |
| 2758 | 0  | 366 | 04:28:53.066 | 165I44B        | 7VECT   |                  | Inert vect update UTC                     | 2R3  | 4  | 0  | 5,844,533:89:0 |      |
| 2759 | 0  | 366 | 04:28:53.733 | 118I1J         | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,844,533:90:0 |      |
| 2760 | 0  | 366 | 04:29:03.733 | 118I1J10A11A4A | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,534:14:0 |      |
| 2761 | 0  | 366 | 04:29:47.733 | 175I422A6A     | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,534:80:0 |      |
| 2762 | 0  | 366 | 04:29:47.733 |                | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 4422.65 +/- 4     | 2R3  | 4  | 0  | 5,844,534:80:0 |      |
| 2763 | 0  | 366 | 04:29:54.400 |                | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4422.65 +/- 4    | 2R3  | 4  | 0  | 5,844,534:90:0 |      |
| 2764 | 0  | 366 | 04:29:57.733 | 175I1J176A6A   | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,535:04:0 |      |
| 2765 | 0  | 366 | 04:29:58.400 |                | DMS:    | :*AT SPD         | R115, TRACK 3, FWD, TIC 4428.95 +/- 4     | 2R3  | 4  | 0  | 5,844,535:05:0 |      |
| 2766 | 0  | 366 | 04:29:58.400 |                | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *4428.95 +/- 4    | 2R3  | 4  | 0  | 5,844,535:05:0 |      |
| 2767 | 0  | 366 | 04:29:59.066 | 118I1J10A11A4B | 7STRP   | 0.0038,0.0,0.0,0 | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,535:06:0 |      |
| 2768 | 0  | 366 | 04:30:25.733 |                | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4525.05 +/- 4    | 2R3  | 4  | 0  | 5,844,535:46:0 |      |
| 2769 | 0  | 366 | 04:30:25.733 | 175I422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,535:46:0 |      |
| 2770 | 0  | 366 | 04:30:26.933 |                | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *4526.05 +/- 5     | 2R3  | 4  | 0  | 5,844,535:47:8 |      |
| 2771 | 0  | 366 | 04:30:54.400 | 118I1J10A11A4C | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,535:89:0 |      |
| 2772 | 0  | 366 | 04:31:19.066 | 175QJ422A6A    | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,536:35:0 |      |
| 2773 | 0  | 366 | 04:31:19.066 |                | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 4526.05 +/- 5     | 2R3  | 4  | 0  | 5,844,536:35:0 |      |
| 2774 | 0  | 366 | 04:31:25.733 |                | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4526.05 +/- 5    | 2R3  | 4  | 0  | 5,844,536:35:0 |      |
| 2775 | 0  | 366 | 04:31:29.066 | 175QJ176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,536:50:0 |      |
| 2776 | 0  | 366 | 04:31:29.733 |                | DMS:    | :*AT SPD         | R115, TRACK 3, FWD, TIC 4532.35 +/- 5     | 2R3  | 4  | 0  | 5,844,536:51:0 |      |
| 2777 | 0  | 366 | 04:31:29.733 |                | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *4532.35 +/- 5    | 2R3  | 4  | 0  | 5,844,536:51:0 |      |
| 2778 | 0  | 366 | 04:31:49.733 | 118I1J11A      | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,844,536:81:0 |      |
| 2779 | 0  | 366 | 04:31:57.066 | 175QJ422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,537:01:0 |      |
| 2780 | 0  | 366 | 04:31:57.066 |                | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4628.44 +/- 5    | 2R3  | 4  | 0  | 5,844,537:01:0 |      |
| 2781 | 0  | 366 | 04:31:58.266 |                | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *4629.44 +/- 5     | 2R3  | 4  | 0  | 5,844,537:02:8 |      |
| 2782 | 0  | 366 | 04:44:03.733 | 165JG4A        | 7SCAN   | NORM,97.431,24.8 | Check S/P Position                        | 2R3  | 4  | 0  | 5,844,548:90:0 |      |
| 2783 | 0  | 366 | 04:46:04.400 | 165JG4B        | 7VECT   |                  | Inert vect update UTC                     | 2R3  | 4  | 0  | 5,844,550:89:0 |      |
| 2784 | 0  | 366 | 04:46:05.066 | 118I1J         | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,844,550:90:0 |      |
| 2785 | 0  | 366 | 04:46:15.066 | 118JG110A11A4A | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,551:14:0 |      |
| 2786 | 0  | 366 | 04:46:59.066 |                | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 4629.44 +/- 5     | 2R3  | 4  | 0  | 5,844,551:80:0 |      |
| 2787 | 0  | 366 | 04:46:59.066 | 175JG422A6A    | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,551:80:0 |      |
| 2788 | 0  | 366 | 04:47:05.733 |                | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4629.44 +/- 5    | 2R3  | 4  | 0  | 5,844,551:90:0 |      |
| 2789 | 0  | 366 | 04:47:09.066 | 175JG176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,552:04:0 |      |
| 2790 | 0  | 366 | 04:47:09.733 |                | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *4635.74 +/- 5    | 2R3  | 4  | 0  | 5,844,552:05:0 |      |
| 2791 | 0  | 366 | 04:47:09.733 |                | DMS:    | :*AT SPD         | R115, TRACK 3, FWD, TIC 4635.74 +/- 5     | 2R3  | 4  | 0  | 5,844,552:05:0 |      |
| 2792 | 0  | 366 | 04:47:10.400 | 118JG110A11A4B | 7STRP   | 0.0038,0.0,0.0,0 | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,552:06:0 |      |
| 2793 | 0  | 366 | 04:47:37.066 |                | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4731.83 +/- 5    | 2R3  | 4  | 0  | 5,844,552:46:0 |      |
| 2794 | 0  | 366 | 04:47:37.066 | 175JG422A6B    | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,552:46:0 |      |
| 2795 | 0  | 366 | 04:47:38.266 |                | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *4732.83 +/- 5     | 2R3  | 4  | 0  | 5,844,552:47:8 |      |
| 2796 | 0  | 366 | 04:48:05.733 | 118JG110A11A4C | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,552:89:0 |      |
| 2797 | 0  | 366 | 04:48:30.400 |                | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 4732.83 +/- 5     | 2R3  | 4  | 0  | 5,844,553:35:0 |      |
| 2798 | 0  | 366 | 04:48:30.400 | 175QJ422A6A    | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,553:35:0 |      |
| 2799 | 0  | 366 | 04:48:37.066 |                | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4732.83 +/- 5    | 2R3  | 4  | 0  | 5,844,553:45:0 |      |
| 2800 | 0  | 366 | 04:48:40.400 | 175QJ176A6A    | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,553:50:0 |      |
| 2801 | 0  | 366 | 04:48:41.066 |                | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *4739.13 +/- 5    | 2R3  | 4  | 0  | 5,844,553:51:0 |      |
| 2802 | 0  | 366 | 04:48:41.066 |                | DMS:    | :*AT SPD         | R115, TRACK 3, FWD, TIC *4739.13 +/- 5    | 2R3  | 4  | 0  | 5,844,553:51:0 |      |
| 2803 | 0  | 366 | 04:49:01.066 | 118JG11A       | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,844,553:81:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCIM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|------|----|----|----------------|------|
| 2804 | 0  | 366 | 04:49:08.400 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4835.23 +/- 5    | 2R3  | 4  | 0  | 5,844,554:01:0 |      |
| 2805 | 0  | 366 | 04:49:08.400 | 175QM422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,554:01:0 |      |
| 2806 | 0  | 366 | 04:49:09.600 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *4836.23 +/- 5     | 2R3  | 4  | 0  | 5,844,554:02:8 |      |
| 2807 | 0  | 366 | 05:01:15.066 | 165JH4A         | 7SCAN   | NORM,97.999,24.8 | Check S/P Position                        | 2R3  | 4  | 0  | 5,844,565:90:0 |      |
| 2808 | 0  | 366 | 05:03:15.733 | 165JH4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3  | 4  | 0  | 5,844,567:89:0 |      |
| 2809 | 0  | 366 | 05:03:16.400 | 118JH           | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,844,567:90:0 |      |
| 2810 | 0  | 366 | 05:03:26.400 | 118JH110A111A4A | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,568:14:0 |      |
| 2811 | 0  | 366 | 05:04:10.400 | 175JH422A6A     | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,568:80:0 |      |
| 2812 | 0  | 366 | 05:04:10.400 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 4836.23 +/- 5     | 2R3  | 4  | 0  | 5,844,568:80:0 |      |
| 2813 | 0  | 366 | 05:04:17.066 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4836.23 +/- 5    | 2R3  | 4  | 0  | 5,844,568:90:0 |      |
| 2814 | 0  | 366 | 05:04:20.400 | 175JH176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,569:04:0 |      |
| 2815 | 0  | 366 | 05:04:21.066 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *4842.53 +/- 5    | 2R3  | 4  | 0  | 5,844,569:05:0 |      |
| 2816 | 0  | 366 | 05:04:21.066 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 4842.53 +/- 5     | 2R3  | 4  | 0  | 5,844,569:05:0 |      |
| 2817 | 0  | 366 | 05:04:21.733 | 118JH110A111A4B | 7STRP   | 0.0038,0.0,0.0,0 | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,569:06:0 |      |
| 2818 | 0  | 366 | 05:04:48.400 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *4938.62 +/- 5    | 2R3  | 4  | 0  | 5,844,569:46:0 |      |
| 2819 | 0  | 366 | 05:04:48.400 | 175JH422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,569:46:0 |      |
| 2820 | 0  | 366 | 05:04:49.600 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *4939.62 +/- 5     | 2R3  | 4  | 0  | 5,844,569:47:8 |      |
| 2821 | 0  | 366 | 05:05:17.066 | 118JH110A111A4C | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,569:89:0 |      |
| 2822 | 0  | 366 | 05:05:41.733 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 4939.62 +/- 5     | 2R3  | 4  | 0  | 5,844,570:35:0 |      |
| 2823 | 0  | 366 | 05:05:41.733 | 175QN422A6A     | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,570:35:0 |      |
| 2824 | 0  | 366 | 05:05:48.400 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 4939.62 +/- 5    | 2R3  | 4  | 0  | 5,844,570:45:0 |      |
| 2825 | 0  | 366 | 05:05:51.733 | 175QN176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,570:50:0 |      |
| 2826 | 0  | 366 | 05:05:52.400 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *4945.92 +/- 5    | 2R3  | 4  | 0  | 5,844,570:51:0 |      |
| 2827 | 0  | 366 | 05:05:52.400 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 4945.92 +/- 5     | 2R3  | 4  | 0  | 5,844,570:51:0 |      |
| 2828 | 0  | 366 | 05:06:12.400 | 118JH11A        | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,844,570:81:0 |      |
| 2829 | 0  | 366 | 05:06:19.733 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *5042.02 +/- 5    | 2R3  | 4  | 0  | 5,844,571:01:0 |      |
| 2830 | 0  | 366 | 05:06:19.733 | 175QN422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,571:01:0 |      |
| 2831 | 0  | 366 | 05:06:20.933 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *5043.02 +/- 5     | 2R3  | 4  | 0  | 5,844,571:02:8 |      |
| 2832 | 0  | 366 | 05:18:26.400 | 165JH4A         | 7SCAN   | NORM,98.568,24.7 | Check S/P Position                        | 2R3  | 4  | 0  | 5,844,582:90:0 |      |
| 2833 | 0  | 366 | 05:20:27.066 | 165JH4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3  | 4  | 0  | 5,844,584:89:0 |      |
| 2834 | 0  | 366 | 05:20:27.733 | 118JH           | SMOS    | GS               |   | 2R3  | 4  | 0  | 5,844,584:90:0 |      |
| 2835 | 0  | 366 | 05:20:37.733 | 118JH110A111A4A | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,585:14:0 |      |
| 2836 | 0  | 366 | 05:21:21.733 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 5043.02 +/- 5     | 2R3  | 4  | 0  | 5,844,585:80:0 |      |
| 2837 | 0  | 366 | 05:21:21.733 | 175JH422A6A     | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,585:80:0 |      |
| 2838 | 0  | 366 | 05:21:28.400 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 5043.02 +/- 5    | 2R3  | 4  | 0  | 5,844,585:90:0 |      |
| 2839 | 0  | 366 | 05:21:31.733 | 175JH176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,586:04:0 |      |
| 2840 | 0  | 366 | 05:21:32.400 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 5049.32 +/- 5     | 2R3  | 4  | 0  | 5,844,586:05:0 |      |
| 2841 | 0  | 366 | 05:21:32.400 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *5049.32 +/- 5    | 2R3  | 4  | 0  | 5,844,586:05:0 |      |
| 2842 | 0  | 366 | 05:21:33.066 | 118JH110A111A4B | 7STRP   | 0.0038,0.0,0.0,0 | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,586:06:0 |      |
| 2843 | 0  | 366 | 05:21:59.733 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *5145.41 +/- 5    | 2R3  | 4  | 0  | 5,844,586:46:0 |      |
| 2844 | 0  | 366 | 05:21:59.733 | 175JH422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,586:46:0 |      |
| 2845 | 0  | 366 | 05:22:00.933 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *5146.41 +/- 5     | 2R3  | 4  | 0  | 5,844,586:47:8 |      |
| 2846 | 0  | 366 | 05:22:28.400 | 118JH110A111A4C | 7STRP   | -0.0038,0.0,166, | Slew = 1.91                               | 2R3  | 4  | 0  | 5,844,586:89:0 |      |
| 2847 | 0  | 366 | 05:22:53.066 |                 | DMS:    | :*E4-DELAY       | RDY, TRACK *1, FWD, TIC 5146.41 +/- 5     | 2R3  | 4  | 0  | 5,844,587:35:0 |      |
| 2848 | 0  | 366 | 05:22:53.066 | 175QO422A6A     | 6DMSC   | R115,3           | DMS Control                               | 2R3  | 4  | 0  | 5,844,587:35:0 |      |
| 2849 | 0  | 366 | 05:22:59.733 |                 | DMS:    | :*RUNUP          | R115, TRACK *3, FWD, TIC 5146.41 +/- 5    | 2R3  | 4  | 0  | 5,844,587:45:0 |      |
| 2850 | 0  | 366 | 05:23:03.066 | 175QO176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3  | 4  | 0  | 5,844,587:50:0 |      |
| 2851 | 0  | 366 | 05:23:03.733 |                 | DMS:    | :*RECORD         | R115, TRACK 3, FWD, TIC *5152.71 +/- 5    | 2R3  | 4  | 0  | 5,844,587:51:0 |      |
| 2852 | 0  | 366 | 05:23:03.733 |                 | DMS:    | :*AT_SPD         | R115, TRACK 3, FWD, TIC 5152.71 +/- 5     | 2R3  | 4  | 0  | 5,844,587:51:0 |      |
| 2853 | 0  | 366 | 05:23:23.733 | 118JH11A        | SMOS    | GE               |   | 2R3  | 4  | 0  | 5,844,587:81:0 |      |
| 2854 | 0  | 366 | 05:23:31.066 | 175QO422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 2R3  | 4  | 0  | 5,844,588:01:0 |      |
| 2855 | 0  | 366 | 05:23:31.066 |                 | DMS:    | :*RUNDOWN        | R115, TRACK 3, FWD, TIC *5248.80 +/- 5    | 2R3  | 4  | 0  | 5,844,588:01:0 |      |
| 2856 | 0  | 366 | 05:23:32.266 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *5249.80 +/- 5     | 2R3  | 4  | 0  | 5,844,588:02:8 |      |
| 2857 | 0  | 366 | 05:35:37.733 | 165JH4A         | 7SCAN   | NORM,99.136999,2 | Check S/P Position                        | 2R3  | 4  | 0  | 5,844,599:90:0 |      |
| 2858 | 0  | 366 | 05:37:38.400 | 165JH4B         | 7VECT   |                  | Inert vect update UTC                     | 2R3  | 4  | 0  | 5,844,601:89:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID           | Command Parameters      | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|-------------------------|---|-----|----|----|----------------|------|
| 2859 | 0  | 366 | 05:37:39.066 | 118JJ          | SMOS GS                 |   | 2R3 | 4  | 0  | 5,844,601:90:0 |      |
| 2860 | 0  | 366 | 05:37:49.066 | 118JJ10A111A4A | 75STRP -0.0038,0.0,166, | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,602:14:0 |      |
| 2861 | 0  | 366 | 05:38:33.066 | 175JJ422A6A    | 6DMSC R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,844,602:80:0 |      |
| 2862 | 0  | 366 | 05:38:33.066 |                | DMS: :*E4-DELAY         | RDY, TRACK *1, FWD, TIC 5249.80 +/- 5     | 2R3 | 4  | 0  | 5,844,602:80:0 |      |
| 2863 | 0  | 366 | 05:38:39.733 |                | DMS: :*RUNUP            | R115, TRACK *3, FWD, TIC 5249.80 +/- 5    | 2R3 | 4  | 0  | 5,844,602:90:0 |      |
| 2864 | 0  | 366 | 05:38:43.066 | 175JJ176A6A    | 6TMREC HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,603:04:0 |      |
| 2865 | 0  | 366 | 05:38:43.733 |                | DMS: :*RECORD           | R115, TRACK 3, FWD, TIC *5256.10 +/- 5    | 2R3 | 4  | 0  | 5,844,603:05:0 |      |
| 2866 | 0  | 366 | 05:38:43.733 |                | DMS: :*AT_SPD           | R115, TRACK 3, FWD, TIC 5256.10 +/- 5     | 2R3 | 4  | 0  | 5,844,603:05:0 |      |
| 2867 | 0  | 366 | 05:38:44.400 | 118JJ10A111A4B | 75STRP 0.0038,0.0,0.0,0 | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,603:06:0 |      |
| 2868 | 0  | 366 | 05:39:11.066 | 175JJ422A6B    | 6DMSC RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,603:46:0 |      |
| 2869 | 0  | 366 | 05:39:11.066 |                | DMS: :*RUNDOWN          | R115, TRACK 3, FWD, TIC *5352.20 +/- 5    | 2R3 | 4  | 0  | 5,844,603:46:0 |      |
| 2870 | 0  | 366 | 05:39:12.266 |                | DMS: :*READY            | RDY, TRACK 3, FWD, TIC *5353.20 +/- 5     | 2R3 | 4  | 0  | 5,844,603:47:8 |      |
| 2871 | 0  | 366 | 05:39:39.733 | 118JJ10A111A4C | 75STRP -0.0038,0.0,166, | Slew =, 1.91                              | 2R3 | 4  | 0  | 5,844,603:89:0 |      |
| 2872 | 0  | 366 | 05:40:04.400 |                | DMS: :*E4-DELAY         | RDY, TRACK *1, FWD, TIC 5353.20 +/- 5     | 2R3 | 4  | 0  | 5,844,604:35:0 |      |
| 2873 | 0  | 366 | 05:40:04.400 | 175QP422A6A    | 6DMSC R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,844,604:35:0 |      |
| 2874 | 0  | 366 | 05:40:11.066 |                | DMS: :*RUNUP            | R115, TRACK *3, FWD, TIC 5353.20 +/- 5    | 2R3 | 4  | 0  | 5,844,604:45:0 |      |
| 2875 | 0  | 366 | 05:40:14.400 | 175QP176A6A    | 6TMREC HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,604:51:0 |      |
| 2876 | 0  | 366 | 05:40:15.066 |                | DMS: :*RECORD           | R115, TRACK 3, FWD, TIC *5359.50 +/- 5    | 2R3 | 4  | 0  | 5,844,604:51:0 |      |
| 2877 | 0  | 366 | 05:40:15.066 |                | DMS: :*AT_SPD           | R115, TRACK 3, FWD, TIC 5359.50 +/- 5     | 2R3 | 4  | 0  | 5,844,604:51:0 |      |
| 2878 | 0  | 366 | 05:40:35.066 | 118JJ11A       | GE                      | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,604:81:0 |      |
| 2879 | 0  | 366 | 05:40:42.400 | 175QP422A6B    | 6DMSC RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,605:01:0 |      |
| 2880 | 0  | 366 | 05:40:42.400 |                | DMS: :*RUNDOWN          | R115, TRACK 3, FWD, TIC *5455.59 +/- 5    | 2R3 | 4  | 0  | 5,844,605:01:0 |      |
| 2881 | 0  | 366 | 05:40:43.600 |                | DMS: :*READY            | RDY, TRACK 3, FWD, TIC *5456.59 +/- 5     | 2R3 | 4  | 0  | 5,844,605:02:8 |      |
| 2882 | 0  | 366 | 05:44:59.733 | 444SN443A4A    | 7MODE CRU               | AACS CRUISE MODE                          | 2R3 | 4  | 0  | 5,844,609:23:0 |      |
| 2883 | 0  | 366 | 08:36:06.400 | 165IM4A        | 7SCAN NORM,105.381.23.  | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,778:44:0 |      |
| 2884 | 0  | 366 | 08:39:02.400 | 175IM422A6A    | 6DMSC R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,844,781:35:0 |      |
| 2885 | 0  | 366 | 08:39:02.400 |                | DMS: :*E4-DELAY         | RDY, TRACK *1, FWD, TIC 5456.59 +/- 5     | 2R3 | 4  | 0  | 5,844,781:35:0 |      |
| 2886 | 0  | 366 | 08:39:07.733 | 165IM4B        | 7VECT                   | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,844,781:43:0 |      |
| 2887 | 0  | 366 | 08:39:09.066 |                | DMS: :*RUNUP            | R115, TRACK *3, FWD, TIC 5456.59 +/- 5    | 2R3 | 4  | 0  | 5,844,781:45:0 |      |
| 2888 | 0  | 366 | 08:39:12.400 | 175IM176A6A    | 6TMREC HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,781:50:0 |      |
| 2889 | 0  | 366 | 08:39:13.066 |                | DMS: :*RECORD           | R115, TRACK 3, FWD, TIC *5462.89 +/- 5    | 2R3 | 4  | 0  | 5,844,781:51:0 |      |
| 2890 | 0  | 366 | 08:39:13.066 |                | DMS: :*AT_SPD           | R115, TRACK 3, FWD, TIC 5462.89 +/- 5     | 2R3 | 4  | 0  | 5,844,781:51:0 |      |
| 2891 | 0  | 366 | 08:40:10.400 |                | DMS: :*RUNDOWN          | R115, TRACK 3, FWD, TIC *5664.45 +/- 5    | 2R3 | 4  | 0  | 5,844,782:46:0 |      |
| 2892 | 0  | 366 | 08:40:10.400 | 175IM422A6B    | 6DMSC RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,782:46:0 |      |
| 2893 | 0  | 366 | 08:40:11.600 |                | DMS: :*READY            | RDY, TRACK 3, FWD, TIC *5665.45 +/- 5     | 2R3 | 4  | 0  | 5,844,803:44:0 |      |
| 2894 | 0  | 366 | 09:01:23.066 | 165IN4A        | 7SCAN NORM,105.594.23.  | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,806:35:0 |      |
| 2895 | 0  | 366 | 09:04:19.066 | 175IN422A6A    | 6DMSC R115.3            | DMS Control                               | 2R3 | 4  | 0  | 5,844,806:35:0 |      |
| 2896 | 0  | 366 | 09:04:19.066 |                | DMS: :*E4-DELAY         | RDY, TRACK *1, FWD, TIC 5665.45 +/- 5     | 2R3 | 4  | 0  | 5,844,806:35:0 |      |
| 2897 | 0  | 366 | 09:04:24.400 | 165IN4B        | 7VECT                   | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,844,806:43:0 |      |
| 2898 | 0  | 366 | 09:04:25.733 |                | DMS: :*RUNUP            | R115, TRACK *3, FWD, TIC 5665.45 +/- 5    | 2R3 | 4  | 0  | 5,844,806:45:0 |      |
| 2899 | 0  | 366 | 09:04:29.066 | 175IN176A6A    | 6TMREC HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R3 | 4  | 0  | 5,844,806:50:0 |      |
| 2900 | 0  | 366 | 09:04:29.733 |                | DMS: :*RECORD           | R115, TRACK 3, FWD, TIC *5671.75 +/- 5    | 2R3 | 4  | 0  | 5,844,806:51:0 |      |
| 2901 | 0  | 366 | 09:04:29.733 |                | DMS: :*AT_SPD           | R115, TRACK 3, FWD, TIC 5671.75 +/- 5     | 2R3 | 4  | 0  | 5,844,806:51:0 |      |
| 2902 | 0  | 366 | 09:05:27.066 |                | DMS: :*RUNDOWN          | R115, TRACK 3, FWD, TIC *5873.32 +/- 5    | 2R3 | 4  | 0  | 5,844,807:46:0 |      |
| 2903 | 0  | 366 | 09:05:27.066 | 175IN422A6B    | 6DMSC RDY,0             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,807:46:0 |      |
| 2904 | 0  | 366 | 09:05:28.266 |                | DMS: :*READY            | RDY, TRACK 3, FWD, TIC *5874.32 +/- 5     | 2R3 | 4  | 0  | 5,844,807:47:8 |      |
| 2905 | 0  | 366 | 09:17:04.400 |                | DMS: :*READY            | RDY, TRACK *4, *REV, TIC 5874.32 +/- 5    | 2R3 | 4  | 0  | 5,844,819:00:0 |      |
| 2906 | 0  | 366 | 09:17:04.400 | 465KD6A        | 6DMSC RDY,4             | DMS Control Tape stop                     | 2R3 | 4  | 0  | 5,844,819:00:0 |      |
| 2907 | 0  | 366 | 09:26:39.733 | 165IO4A        | 7SCAN NORM,105.802999,  | Check S/P Position                        | 2R3 | 4  | 0  | 5,844,828:44:0 |      |
| 2908 | 0  | 366 | 09:29:34.400 |                | DMS: :*US-RUNUP         | P7, TRACK *1, *FWD, TIC 5874.32 +/- 5     | 2R3 | 4  | 0  | 5,844,831:33:0 |      |
| 2909 | 0  | 366 | 09:29:34.400 | 175IO422A6A    | 6DMSC R115.0            | DMS Control Tape runup 115.2kb            | 2R3 | 4  | 0  | 5,844,831:33:0 |      |
| 2910 | 0  | 366 | 09:29:35.800 |                | DMS: :*US_AT_SP         | P7, TRACK 1, FWD, TIC *5874.44 +/- 5      | 2R3 | 4  | 0  | 5,844,831:35:1 |      |
| 2911 | 0  | 366 | 09:29:41.066 | 165IO4B        | 7VECT                   | Inert vect update UTC                     | 2R3 | 4  | 0  | 5,844,831:43:0 |      |
| 2912 | 0  | 366 | 09:29:41.066 |                | DMS: :*US_RD            | P7, TRACK 1, FWD, TIC *5875.67 +/- 5      | 2R3 | 4  | 0  | 5,844,831:43:0 |      |
| 2913 | 0  | 366 | 09:29:42.266 |                | DMS: :*RUNUP            | R115, TRACK *4, *REV, TIC *5875.73 +/- 5  | 2R3 | 4  | 0  | 5,844,831:44:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|------------------------|--|-----|----|----------------|----------------|------|
| 2914 | 0  | 366 | 09:29:45.733 | 175IO176A6A     | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R3 | 4  | 0              | 5,844,831:50:0 |      |
| 2915 | 0  | 366 | 09:29:46.266 |                 | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *5869.43 +/- 5     | 2R3 | 4  | 0              | 5,844,831:50:8 |      |
| 2916 | 0  | 366 | 09:29:46.266 |                 | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 5869.43 +/- 5      | 2R3 | 4  | 0              | 5,844,831:50:8 |      |
| 2917 | 0  | 366 | 09:30:43.733 |                 | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *5667.40 +/- 5     | 2R3 | 4  | 0              | 5,844,832:46:0 |      |
| 2918 | 0  | 366 | 09:30:43.733 | 175IO422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,844,832:46:0 |      |
| 2919 | 0  | 366 | 09:30:44.933 |                 | DMS: : *READY          | R115, TRACK 4, REV, TIC *5666.40 +/- 5     | 2R3 | 4  | 0              | 5,844,832:47:8 |      |
| 2920 | 0  | 366 | 09:51:56.400 | 165IP4A         | 7SCAN NORM:106.011,23. | Check S/P Position                         | 2R3 | 4  | 0              | 5,844,853:44:0 |      |
| 2921 | 0  | 366 | 09:53:42.400 | 488AP6A         | 6TMSED NORM,AH4        | Sci. Eng. and D/L Chan                     | 2R3 | 4  | 0              | 5,844,855:21:0 |      |
| 2922 | 0  | 366 | 09:54:51.066 |                 | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 5666.40 +/- 5      | 2R3 | 4  | 0              | 5,844,856:33:0 |      |
| 2923 | 0  | 366 | 09:54:51.066 | 175IP422A6A     | 6DMSC R115,0           | DMS Control Tape runup 115.2kb             | 2R3 | 4  | 0              | 5,844,856:33:0 |      |
| 2924 | 0  | 366 | 09:54:52.466 |                 | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *5666.52 +/- 5       | 2R3 | 4  | 0              | 5,844,856:35:1 |      |
| 2925 | 0  | 366 | 09:54:57.733 | 165IP4B         | 7VECT                  | Inert vect update UTC                      | 2R3 | 4  | 0              | 5,844,856:43:0 |      |
| 2926 | 0  | 366 | 09:54:57.733 |                 | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *5667.75 +/- 5       | 2R3 | 4  | 0              | 5,844,856:43:0 |      |
| 2927 | 0  | 366 | 09:54:58.933 |                 | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *5667.81 +/- 5   | 2R3 | 4  | 0              | 5,844,856:44:8 |      |
| 2928 | 0  | 366 | 09:55:02.400 | 175IP176A6A     | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R3 | 4  | 0              | 5,844,856:50:0 |      |
| 2929 | 0  | 366 | 09:55:02.933 |                 | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 5661.51 +/- 5      | 2R3 | 4  | 0              | 5,844,856:50:8 |      |
| 2930 | 0  | 366 | 09:55:02.933 |                 | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *5661.51 +/- 5     | 2R3 | 4  | 0              | 5,844,856:50:8 |      |
| 2931 | 0  | 366 | 09:56:01.066 | 175IP422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R3 | 4  | 0              | 5,844,857:47:0 |      |
| 2932 | 0  | 366 | 09:56:01.066 |                 | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *5457.14 +/- 5     | 2R3 | 4  | 0              | 5,844,857:47:0 |      |
| 2933 | 0  | 366 | 09:56:02.266 |                 | DMS: : *READY          | R115, TRACK 4, REV, TIC *5456.14 +/- 5     | 2R3 | 4  | 0              | 5,844,857:48:8 |      |
| 2934 | 0  | 366 | 10:27:50.400 | 488AP6B         | 6TMSED NORM,AH6        | Sci. Eng. and D/L Chan                     | 2R3 | 4  | 0              | 5,844,888:90:0 |      |
| 2935 | 0  | 366 | 11:59:59.733 | 480SJ6A         | 6MROH 44.23E8.0,A10    | read from LLM2A44.23E8.0,A1                | 2R3 | 4  | 0              | 5,844,980:12:0 |      |
| 2936 | 0  | 366 | 12:01:19.733 | 480SJ6B         | 6MROH 45.23E8.0,B10    | read from LLM2B45.23E8.0,B1                | 2R3 | 4  | 0              | 5,844,981:41:0 |      |
| 2937 | 0  | 366 | 12:26:55.000 | 29NNGLOBAL01-   | -----START-----        |  | 2R3 | 4  | 0              | :              |      |
| 2938 | 0  | 366 | 12:26:55.066 | 20ET5A          | 37PL                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,845,006:69:0 |                |      |
| 2939 | 0  | 366 | 12:27:02.400 | 20ET5B          | 37MRL                  | Memory Realocate (software operates from R | 4   | 0  | 5,845,006:80:0 |                |      |
| 2940 | 0  | 366 | 12:27:10.400 | 20ET6A          | 6MCOPI NIMS            | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,845,007:01:0 |                |      |
| 2941 | 0  | 366 | 12:27:20.400 | 20ET6B          | 6MCOPI NIMS            | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,845,007:16:0 |                |      |
| 2942 | 0  | 366 | 12:27:30.400 | 20ET5C          | 37IRT                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,845,007:31:0 |                |      |
| 2943 | 0  | 366 | 12:27:31.733 | 20ET5D          | 37MNI                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,845,007:33:0 |      |
| 2944 | 0  | 366 | 12:28:03.066 | 20ET4A          | 37IST                  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,845,007:80:0 |      |
| 2945 | 0  | 366 | 12:28:04.000 | 29NNGLOBAL01-   | -----STOP-----         |  | 2R0 | 4  | 0              | :              |      |
| 2946 | 0  | 366 | 12:28:09.733 | 165ET4A         | 7SCAN NORM,109.681,24. | Check S/P Position                         | 2R0 | 4  | 0              | 5,845,007:90:0 |      |
| 2947 | 0  | 366 | 12:28:14.466 | 29JNGLOBAL01-   | -----START-----        |  | 2R0 | 4  | 0              | :              |      |
| 2948 | 0  | 366 | 12:29:06.400 | 125ET           | NIMSINIT GS            | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,845,008:84:0 |      |
| 2949 | 0  | 366 | 12:29:06.400 | 125ET11A        | NIMSINIT GE            | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,845,008:84:0 |      |
| 2950 | 0  | 366 | 12:29:06.400 | 125ET4A         | 37IST 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,845,008:84:0 |      |
| 2951 | 0  | 366 | 12:30:07.066 | 127ET4A         | 37IOP 7,0              | Fixed Map, Grating Start Position =00      | 2R7 | 4  | 0              | 5,845,009:84:0 |      |
| 2952 | 0  | 366 | 12:30:07.066 | 127ET           | NIMSTAB GS             | %%%%%% GROUP START TAB                     | 2R7 | 4  | 0              | 5,845,009:84:0 |      |
| 2953 | 0  | 366 | 12:30:07.733 | 127ET4B         | 37ETB 07,C7,18,3C,D7,0 | Loads wavelength edit table                | 2R7 | 4  | 0              | 5,845,009:85:0 |      |
| 2954 | 0  | 366 | 12:30:15.733 | 127ET11A        | NIMSTAB GE             | %%%%%% GROUP END TAB                       | 2R7 | 4  | 0              | 5,845,010:06:0 |      |
| 2955 | 0  | 366 | 12:32:01.066 |                 | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 5456.14 +/- 5      | 2R7 | 4  | 0              | 5,845,011:73:0 |      |
| 2956 | 0  | 366 | 12:32:01.066 | 175ET422A6A     | 6DMSC R7,0             | DMS Control Tape runup 7.68kps             | 2R7 | 4  | 0              | 5,845,011:73:0 |      |
| 2957 | 0  | 366 | 12:32:02.466 |                 | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *5456.26 +/- 5       | 2R7 | 4  | 0              | 5,845,011:75:1 |      |
| 2958 | 0  | 366 | 12:32:03.733 | 117ET           | CSMOS GS               | ***** GROUP START CSMOS                    | 2R7 | 4  | 0              | 5,845,011:77:0 |      |
| 2959 | 0  | 366 | 12:32:07.733 |                 | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *5457.49 +/- 5       | 2R7 | 4  | 0              | 5,845,011:83:0 |      |
| 2960 | 0  | 366 | 12:32:08.933 |                 | DMS: : *RUNUP          | P7, TRACK *4, *REV, TIC *5457.55 +/- 5     | 2R7 | 4  | 0              | 5,845,011:84:8 |      |
| 2961 | 0  | 366 | 12:32:09.733 | 175ET176A6A     | 6TMREC LPU             | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R7 | 4  | 0              | 5,845,011:86:0 |      |
| 2962 | 0  | 366 | 12:32:10.333 |                 | DMS: : *AT SPD         | R7, TRACK 4, REV, TIC 5457.43 +/- 5        | 2R7 | 4  | 0              | 5,845,011:86:9 |      |
| 2963 | 0  | 366 | 12:32:10.333 |                 | DMS: : *RECORD         | R7, TRACK 4, REV, TIC *5457.43 +/- 5       | 2R7 | 4  | 0              | 5,845,011:86:9 |      |
| 2964 | 0  | 366 | 12:32:12.400 | 29JNGLOBAL01-   | 301ET                  | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 2965 | 0  | 366 | 12:32:13.066 | 117ET105A106A4A | 75TRP 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,012:00:0 |      |
| 2966 | 0  | 366 | 12:33:35.066 | 117ET105A106A4B | 75TRP -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,013:32:0 |      |
| 2967 | 0  | 366 | 12:33:49.733 | 117ET105A106A4C | 75TRP 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,013:54:0 |      |
| 2968 | 0  | 366 | 12:35:11.733 | 117ET105A106A4D | 75TRP -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,014:86:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 2969 | 0  | 366 | 12:35:26.400 | 117ET105A106A4E | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,015:17:0 |      |
| 2970 | 0  | 366 | 12:36:48.400 | 117ET105A106A4F | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,016:49:0 |      |
| 2971 | 0  | 366 | 12:37:03.066 | 117ET105A106A4G | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,016:71:0 |      |
| 2972 | 0  | 366 | 12:38:25.066 | 117ET105A106A4H | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,018:12:0 |      |
| 2973 | 0  | 366 | 12:38:39.733 | 117ET105A106A4I | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,018:34:0 |      |
| 2974 | 0  | 366 | 12:40:01.733 | 117ET105A106A4J | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,019:66:0 |      |
| 2975 | 0  | 366 | 12:40:16.400 | 117ET105A106A4K | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,019:88:0 |      |
| 2976 | 0  | 366 | 12:41:38.400 | 117ET105A106A4L | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,021:29:0 |      |
| 2977 | 0  | 366 | 12:41:53.066 | 117ET105A106A4M | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,021:51:0 |      |
| 2978 | 0  | 366 | 12:42:46.400 | 29JNGLOBAL01-   | DESEL    | 300ET            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 2979 | 0  | 366 | 12:42:56.400 |                 | DMS:     | : *RUNDOWN       | R7, TRACK 4, REV, TIC *5306.01 +/- 5       | 2R7 | 4  | 0              | 5,845,022:55:0 |      |
| 2980 | 0  | 366 | 12:42:56.400 | 175ET422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,845,022:55:0 |      |
| 2981 | 0  | 366 | 12:42:56.400 | 175ET6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R7 | 4  | 0              | 5,845,022:55:0 |      |
| 2982 | 0  | 366 | 12:42:57.600 |                 | DMS:     | : *READY         | RDY, TRACK 4, REV, TIC *5305.95 +/- 5      | 2R7 | 4  | 0              | 5,845,022:56:8 |      |
| 2983 | 0  | 366 | 12:43:15.066 | 117ET11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R7 | 4  | 0              | 5,845,022:83:0 |      |
| 2984 | 0  | 366 | 12:43:24.466 | 29JNGLOBAL01-   |          | -----STOP-----   |  | 2R7 | 4  | 0              | :              |      |
| 2985 | 0  | 366 | 12:57:10.400 | 488AP6C         | 6TMSED   | NORM,MAH5        | Sci, Eng, and D/L Chan                     | 2R7 | 4  | 0              | 5,845,036:62:0 |      |
| 2986 | 0  | 366 | 13:59:59.733 | 488AP6D         | 6TMSED   | NORM,AL5         | Sci, Eng, and D/L Chan                     | 2R7 | 4  | 0              | 5,845,098:74:0 |      |
| 2987 | 0  | 366 | 14:08:01.000 | 29NNGLOBAL02-   |          | -----START-----  |  | 2R7 | 4  | 0              | :              |      |
| 2988 | 0  | 366 | 14:08:01.733 | 20EU5A          | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,845,106:69:0 |                |      |
| 2989 | 0  | 366 | 14:08:09.066 | 20EU5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,845,106:80:0 |                |      |
| 2990 | 0  | 366 | 14:08:15.733 | 165EU4A         | 7SCAN    | NORM,110.44,24.7 | Check S/P Position                         | 4   | 0  | 5,845,106:90:0 |                |      |
| 2991 | 0  | 366 | 14:08:17.066 | 20EU6A          | 6MCOPI   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,845,107:01:0 |                |      |
| 2992 | 0  | 366 | 14:08:20.466 | 29JNGLOBAL02-   |          | -----START-----  |  | 4   | 0  | :              |                |      |
| 2993 | 0  | 366 | 14:08:27.066 | 20EU6B          | 6MCOPI   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,845,107:16:0 |                |      |
| 2994 | 0  | 366 | 14:08:37.066 | 20EU5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,845,107:31:0 |                |      |
| 2995 | 0  | 366 | 14:08:38.400 | 20EU5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,845,107:33:0 |      |
| 2996 | 0  | 366 | 14:09:09.733 | 20EU4A          | 37IST    | 1.2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,845,107:50:0 |      |
| 2997 | 0  | 366 | 14:09:10.000 | 29NNGLOBAL02-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              |      |
| 2998 | 0  | 366 | 14:10:13.066 | 125EU           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,845,108:84:0 |      |
| 2999 | 0  | 366 | 14:10:13.066 | 125EU11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,845,108:84:0 |      |
| 3000 | 0  | 366 | 14:10:13.066 | 125EU4A         | 37IST    | 0.2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,845,108:84:0 |      |
| 3001 | 0  | 366 | 14:11:13.733 | 127EU4A         | 37IOP    | 7.0              | Fixed Map, Grating Start Position =00      | 2R7 | 4  | 0              | 5,845,109:84:0 |      |
| 3002 | 0  | 366 | 14:11:13.733 | 127EU           | NIMSTAB  | GS               | %% %% %% GROUP START TAB                   | 2R7 | 4  | 0              | 5,845,109:84:0 |      |
| 3003 | 0  | 366 | 14:11:14.400 | 127EU4B         | 37ETB    | 07,C7,18,3C,D7.0 | Loads wavelength edit table                | 2R7 | 4  | 0              | 5,845,109:85:0 |      |
| 3004 | 0  | 366 | 14:11:22.400 | 127EU11A        | NIMSTAB  | GE               | %% %% %% GROUP END TAB                     | 2R7 | 4  | 0              | 5,845,110:06:0 |      |
| 3005 | 0  | 366 | 14:12:07.066 | 175EU422A6A     | 6DMSC    | R7.0             | DMS Control Tape runup 7.68kps             | 2R7 | 4  | 0              | 5,845,110:73:0 |      |
| 3006 | 0  | 366 | 14:12:07.066 |                 | DMS:     | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 5305.95 +/- 5      | 2R7 | 4  | 0              | 5,845,110:73:0 |      |
| 3007 | 0  | 366 | 14:12:08.466 |                 | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *5306.07 +/- 5       | 2R7 | 4  | 0              | 5,845,110:75:1 |      |
| 3008 | 0  | 366 | 14:12:09.733 | 117EU           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 2R7 | 4  | 0              | 5,845,110:77:0 |      |
| 3009 | 0  | 366 | 14:12:13.733 |                 | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC *5307.30 +/- 5       | 2R7 | 4  | 0              | 5,845,110:83:0 |      |
| 3010 | 0  | 366 | 14:12:14.933 |                 | DMS:     | : *RUNUP         | P7, TRACK *4, *REV, TIC *5307.36 +/- 5     | 2R7 | 4  | 0              | 5,845,110:84:8 |      |
| 3011 | 0  | 366 | 14:12:15.733 | 175EU176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R7 | 4  | 0              | 5,845,110:86:0 |      |
| 3012 | 0  | 366 | 14:12:16.333 |                 | DMS:     | : *AT_SPD        | R7, TRACK 4, REV, TIC 5307.24 +/- 5        | 2R7 | 4  | 0              | 5,845,110:86:9 |      |
| 3013 | 0  | 366 | 14:12:16.333 |                 | DMS:     | : *RECORD        | R7, TRACK 4, REV, TIC *5307.24 +/- 5       | 2R7 | 4  | 0              | 5,845,110:86:9 |      |
| 3014 | 0  | 366 | 14:12:18.400 | 29JNGLOBAL02-   | NIMPBK   | 301EU            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3015 | 0  | 366 | 14:12:19.066 | 117EU105A106A4A | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,111:00:0 |      |
| 3016 | 0  | 366 | 14:13:41.066 | 117EU105A106A4B | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,112:32:0 |      |
| 3017 | 0  | 366 | 14:13:43.733 | 29JNGLOBAL02-   | NIMPBK   | 301EN            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3018 | 0  | 366 | 14:13:55.733 | 117EU105A106A4C | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,112:54:0 |      |
| 3019 | 0  | 366 | 14:14:01.733 | 29JNGLOBAL02-   | DESEL    | 300EN            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3020 | 0  | 366 | 14:15:17.733 | 117EU105A106A4D | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,113:86:0 |      |
| 3021 | 0  | 366 | 14:15:32.400 | 117EU105A106A4E | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,114:17:0 |      |
| 3022 | 0  | 366 | 14:16:54.400 | 117EU105A106A4F | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,115:49:0 |      |
| 3023 | 0  | 366 | 14:17:09.066 | 117EU105A106A4G | 7STRP    | 0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,115:71:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 3024 | 0  | 366 | 14:18:31.066 | 117EU105A106A4H | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,117:12:0 |      |
| 3025 | 0  | 366 | 14:18:45.733 | 117EU105A106A4I | 7STRP    | 0.058065,0.0,0,0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,117:34:0 |      |
| 3026 | 0  | 366 | 14:19:30.400 | 29JNGLOBAL02-   | NIMPBK   | 301EO            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3027 | 0  | 366 | 14:20:07.733 | 117EU105A106A4J | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,118:66:0 |      |
| 3028 | 0  | 366 | 14:20:22.400 | 117EU105A106A4K | 7STRP    | 0.058065,0.0,0,0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,118:88:0 |      |
| 3029 | 0  | 366 | 14:20:41.733 | 29JNGLOBAL02-   | DESELC   | 300EO            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3030 | 0  | 366 | 14:21:44.400 | 117EU105A106A4L | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,120:29:0 |      |
| 3031 | 0  | 366 | 14:21:59.066 | 117EU105A106A4M | 7STRP    | 0.058065,0.0,0,0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,120:51:0 |      |
| 3032 | 0  | 366 | 14:22:52.400 | 29JNGLOBAL02-   | DESELC   | 300EU            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3033 | 0  | 366 | 14:23:02.400 |                 | DMS:     | : *RUNDOWN       | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | 5,845,121:55:0 |      |
| 3034 | 0  | 366 | 14:23:02.400 | 175EU6A         | 6TMREC   | NRC              | NO RECORD Record Mode Change               | 2R7 | 4  | 0              | 5,845,121:55:0 |      |
| 3035 | 0  | 366 | 14:23:02.400 | 175EU422A6B     | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,845,121:55:0 |      |
| 3036 | 0  | 366 | 14:23:03.600 |                 | DMS:     | : *READY         | RDY, TRACK 4, REV, TIC *5155.76 +/- 5      | 2R7 | 4  | 0              | 5,845,121:56:8 |      |
| 3037 | 0  | 366 | 14:23:21.066 | 117EU11A        | CSMOS    | GE               | ***** GROUP END CSMOS                      | 2R7 | 4  | 0              | 5,845,121:83:0 |      |
| 3038 | 0  | 366 | 14:23:30.466 | 29JNGLOBAL02-   |          | -----STOP-----   |  | 2R7 | 4  | 0              | :              | :    |
| 3039 | 0  | 366 | 14:28:54.333 | 488AP6E         | 6TMSED   | NORM,AL4         | Sci, Eng, and D/L Chan                     | 2R7 | 4  | 0              | 5,845,127:37:0 |      |
| 3040 | 0  | 366 | 14:46:33.000 | 488AQ6A         | 6TMSED   | FILL,AL4         | Sci, Eng, and D/L Chan                     | 2R7 | 4  | 0              | 5,845,144:78:0 |      |
| 3041 | 0  | 366 | 14:56:38.333 | 488AQ6B         | 6TMSED   | FILL,AL5         | Sci, Eng, and D/L Chan                     | 2R7 | 4  | 0              | 5,845,154:76:0 |      |
| 3042 | 0  | 366 | 15:48:21.666 | 165EV4A         | 7SCAN    | NORM,111,106,24, | Check S/P Position                         | 2R7 | 4  | 0              | 5,845,205:90:0 |      |
| 3043 | 0  | 366 | 15:48:26.466 | 29JNGLOBAL03-   |          | -----START-----  |  | 2R7 | 4  | 0              | :              | :    |
| 3044 | 0  | 366 | 15:49:08.000 | 29NNGLOBAL03-   |          | -----START-----  |  | 2R7 | 4  | 0              | :              | :    |
| 3045 | 0  | 366 | 15:49:08.333 | 20EV5A          | 37PL     |                  | Program Load (halts microprocessor & unwr  | 4   | 0  | 5,845,206:69:0 |                |      |
| 3046 | 0  | 366 | 15:49:15.666 | 20EV5B          | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 5,845,206:80:0 |                |      |
| 3047 | 0  | 366 | 15:49:23.666 | 20EV6A          | 6MCPY    | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,845,207:01:0 |                |      |
| 3048 | 0  | 366 | 15:49:33.666 | 20EV6B          | 6MCPY    | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,845,207:16:0 |                |      |
| 3049 | 0  | 366 | 15:49:43.666 | 20EV5C          | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,845,207:31:0 |                |      |
| 3050 | 0  | 366 | 15:49:45.000 | 20EV5D          | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,845,207:33:0 |      |
| 3051 | 0  | 366 | 15:50:16.333 | 20EV4A          | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 5,845,207:50:0 |      |
| 3052 | 0  | 366 | 15:50:17.000 | 29NNGLOBAL03-   |          | -----STOP-----   |  | 2R0 | 4  | 0              | :              | :    |
| 3053 | 0  | 366 | 15:51:19.666 | 125EV           | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 5,845,208:84:0 |      |
| 3054 | 0  | 366 | 15:51:19.666 | 125EV11A        | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 5,845,208:84:0 |      |
| 3055 | 0  | 366 | 15:51:19.666 | 125EV4A         | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 5,845,208:84:0 |      |
| 3056 | 0  | 366 | 15:52:13.000 |                 | DMS:     | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC *5155.76 +/- 5     | 2R0 | 4  | 0              | 5,845,209:73:0 |      |
| 3057 | 0  | 366 | 15:52:13.000 | 175EV422A6A     | 6DMSC    | R7,0             | DMS Control Tape runup 7.68kps             | 2R0 | 4  | 0              | 5,845,209:73:0 |      |
| 3058 | 0  | 366 | 15:52:14.400 |                 | DMS:     | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *5155.88 +/- 5       | 2R0 | 4  | 0              | 5,845,209:75:1 |      |
| 3059 | 0  | 366 | 15:52:15.666 | 117EV           | CSMOS    | GS               | ***** GROUP START CSMOS                    | 2R0 | 4  | 0              | 5,845,209:77:0 |      |
| 3060 | 0  | 366 | 15:52:19.666 |                 | DMS:     | : *US_RD         | P7, TRACK 1, FWD, TIC *5157.12 +/- 5       | 2R0 | 4  | 0              | 5,845,209:83:0 |      |
| 3061 | 0  | 366 | 15:52:20.333 | 127EV4A         | 37IOP    | 7,0              | Fixed Map, Grating Start Position =00      | 2R7 | 4  | 0              | 5,845,209:84:0 |      |
| 3062 | 0  | 366 | 15:52:20.333 | 127EV           | NIMSTAB  | GS               | %%%% GROUP START TAB                       | 2R7 | 4  | 0              | 5,845,209:84:0 |      |
| 3063 | 0  | 366 | 15:52:20.866 |                 | DMS:     | : *RUNUP         | R7, TRACK *4, *REV, TIC *5157.18 +/- 5     | 2R7 | 4  | 0              | 5,845,209:84:8 |      |
| 3064 | 0  | 366 | 15:52:21.000 | 127EV4B         | 37ETB    | 07,C7,18,3C,D7,0 | Loads wavelength edit table                | 2R7 | 4  | 0              | 5,845,209:85:0 |      |
| 3065 | 0  | 366 | 15:52:21.666 | 175EV176A6A     | 6TMREC   | LPU              | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R7 | 4  | 0              | 5,845,209:86:0 |      |
| 3066 | 0  | 366 | 15:52:22.266 |                 | DMS:     | : *AT_SPD        | R7, TRACK 4, REV, TIC *5157.06 +/- 5       | 2R7 | 4  | 0              | 5,845,209:86:9 |      |
| 3067 | 0  | 366 | 15:52:22.266 |                 | DMS:     | : *RECORD        | R7, TRACK 4, REV, TIC *5157.06 +/- 5       | 2R7 | 4  | 0              | 5,845,209:86:9 |      |
| 3068 | 0  | 366 | 15:52:24.333 | 29JNGLOBAL03-   | NIMPBK   | 301EV            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3069 | 0  | 366 | 15:52:25.000 | 117EV105A106A4A | 7STRP    | 0.058065,0.0,0,0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,210:00:0 |      |
| 3070 | 0  | 366 | 15:52:29.000 | 127EV11A        | NIMSTAB  | GE               | %%%% GROUP END TAB                         | 2R7 | 4  | 0              | 5,845,210:06:0 |      |
| 3071 | 0  | 366 | 15:53:41.000 | 29JNGLOBAL03-   | NIMPBK   | 301EP            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3072 | 0  | 366 | 15:53:47.000 | 117EV105A106A4B | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,211:32:0 |      |
| 3073 | 0  | 366 | 15:54:01.666 | 117EV105A106A4C | 7STRP    | 0.058065,0.0,0,0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,211:54:0 |      |
| 3074 | 0  | 366 | 15:54:05.000 | 29JNGLOBAL03-   | DESELC   | 300EP            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3075 | 0  | 366 | 15:54:50.333 | 29JNGLOBAL03-   | NIMPBK   | 301FY            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3076 | 0  | 366 | 15:55:12.333 | 29JNGLOBAL03-   | DESELC   | 300FY            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              | :    |
| 3077 | 0  | 366 | 15:55:23.666 | 117EV105A106A4D | 7STRP    | -0.058065,0.008, | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,212:86:0 |      |
| 3078 | 0  | 366 | 15:55:38.333 | 117EV105A106A4E | 7STRP    | 0.058065,0.0,0,0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,213:17:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters        | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|-------------------|--|-----|----|----------------|----------------|------|
| 3079 | 0  | 366 | 15:57:00.333 | 117EV105A106A4F | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,214:49:0 |      |
| 3080 | 0  | 366 | 15:57:15.000 | 117EV105A106A4G | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,214:71:0 |      |
| 3081 | 0  | 366 | 15:58:37.000 | 117EV105A106A4H | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,216:12:0 |      |
| 3082 | 0  | 366 | 15:58:51.666 | 117EV105A106A4I | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,216:34:0 |      |
| 3083 | 0  | 366 | 16:00:13.666 | 117EV105A106A4J | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,217:66:0 |      |
| 3084 | 0  | 366 | 16:00:28.333 | 117EV105A106A4K | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,217:88:0 |      |
| 3085 | 0  | 366 | 16:01:50.333 | 117EV105A106A4L | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,219:29:0 |      |
| 3086 | 0  | 366 | 16:02:05.000 | 117EV105A106A4M | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,219:51:0 |      |
| 3087 | 0  | 366 | 16:02:58.333 | 29JNGLOBAL03-   | DESEL   | 300EV             | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3088 | 0  | 366 | 16:03:08.333 |                 | DMS:    | : *RUNDOWN        | NO RECORD                                  | 2R7 | 4  | 0              | 5,845,220:55:0 |      |
| 3089 | 0  | 366 | 16:03:08.333 | 175EV6A         | 6TMREC  | NRC               | Record Mode Change                         | 2R7 | 4  | 0              | 5,845,220:55:0 |      |
| 3090 | 0  | 366 | 16:03:08.333 | 175EV422A6B     | 6DMSC   | RDY,0             | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,845,220:55:0 |      |
| 3091 | 0  | 366 | 16:03:09.533 |                 | DMS:    | : *READY          | RDY, TRACK 4, REV, TIC *5005.58 +/- 5      | 2R7 | 4  | 0              | 5,845,220:56:8 |      |
| 3092 | 0  | 366 | 16:03:27.000 | 117EV11A        | CSMOS   | GE                | ***** GROUP END CSMOS                      | 2R7 | 4  | 0              | 5,845,220:83:0 |      |
| 3093 | 0  | 366 | 16:03:36.466 | 29JNGLOBAL03-   |         | -----STOP-----    |  | 2R7 | 4  | 0              | :              |      |
| 3094 | 0  | 366 | 17:28:13.000 | 29NNGLOBAL04-   |         | -----START-----   |  | 2R7 | 4  | 0              | :              |      |
| 3095 | 0  | 366 | 17:28:13.666 | 20EW5A          | 37PL    |                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,845,304:69:0 |                |      |
| 3096 | 0  | 366 | 17:28:21.000 | 20EW5B          | 37MRL   |                   | Memory Realocate (software operates from R | 4   | 0  | 5,845,304:80:0 |                |      |
| 3097 | 0  | 366 | 17:28:27.666 | 165EW4A         | 7SCAN   | NORM,111.802999,  | Check S/P Position                         | 4   | 0  | 5,845,304:90:0 |                |      |
| 3098 | 0  | 366 | 17:28:29.000 | 20EW6A          | 6MCPY   | NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,845,305:01:0 |                |      |
| 3099 | 0  | 366 | 17:28:32.466 | 29JNGLOBAL04-   |         | -----START-----   |  | 4   | 0  | :              |                |      |
| 3100 | 0  | 366 | 17:28:39.000 | 20EW6B          | 6MCPY   | NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,845,305:16:0 |                |      |
| 3101 | 0  | 366 | 17:28:49.000 | 20EW5C          | 37IRT   |                   | Instrument Reset (goes into POR state)     | 4   | 0  | 5,845,305:31:0 |                |      |
| 3102 | 0  | 366 | 17:28:50.333 | 20EW5D          | 37MN    |                   | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,845,305:33:0 |      |
| 3103 | 0  | 366 | 17:29:21.666 | 20EW4A          | 37IST   | 1,2,0,OFF,0,1,0   | Chopper ON, Sync, Chopper (Ref)Gain State  | 2R0 | 4  | 0              | 5,845,305:80:0 |      |
| 3104 | 0  | 366 | 17:29:22.000 | 29NNGLOBAL04-   |         | -----STOP-----    |  | 2R0 | 4  | 0              | :              |      |
| 3105 | 0  | 366 | 17:31:25.666 | 127EW           | NIMSTAB | GS                | %%%%GROUP START TAB                        | 2R0 | 4  | 0              | 5,845,307:84:0 |      |
| 3106 | 0  | 366 | 17:31:25.666 | 127EW4A         | 37IOP   | 7,0               | Fixed Map, Grating Start Position =00      | 2R7 | 4  | 0              | 5,845,307:84:0 |      |
| 3107 | 0  | 366 | 17:31:26.333 | 127EW4B         | 37ETB   | 07,C7,18,3C,D7,0  | Loads wavelength edit table                | 2R7 | 4  | 0              | 5,845,307:85:0 |      |
| 3108 | 0  | 366 | 17:31:34.333 | 127EW11A        | NIMSTAB | GE                | %%%%GROUP END TAB                          | 2R7 | 4  | 0              | 5,845,308:06:0 |      |
| 3109 | 0  | 366 | 17:32:19.000 |                 | DMS:    | : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 5005.58 +/- 5      | 2R7 | 4  | 0              | 5,845,308:73:0 |      |
| 3110 | 0  | 366 | 17:32:19.000 | 175EW422A6A     | 6DMSC   | R7,0              | DMS Control Tape runup 7.68kps             | 2R7 | 4  | 0              | 5,845,308:73:0 |      |
| 3111 | 0  | 366 | 17:32:20.400 |                 | DMS:    | : *US AT SP       | P7, TRACK 1, FWD, TIC *5005.70 +/- 5       | 2R7 | 4  | 0              | 5,845,308:75:1 |      |
| 3112 | 0  | 366 | 17:32:21.666 | 117EW           | CSMOS   | GS                | ***** GROUP START CSMOS                    | 2R7 | 4  | 0              | 5,845,308:77:0 |      |
| 3113 | 0  | 366 | 17:32:25.666 |                 | DMS:    | : *US RD          | P7, TRACK 1, FWD, TIC *5006.93 +/- 5       | 2R7 | 4  | 0              | 5,845,308:83:0 |      |
| 3114 | 0  | 366 | 17:32:26.866 |                 | DMS:    | : *RUNUP          | P7, TRACK *4, *REV, TIC *5006.99 +/- 5     | 2R7 | 4  | 0              | 5,845,308:84:8 |      |
| 3115 | 0  | 366 | 17:32:27.666 | 175EW176A6A     | 6TMREC  | LPU               | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode  | 2R7 | 4  | 0              | 5,845,308:86:0 |      |
| 3116 | 0  | 366 | 17:32:28.266 |                 | DMS:    | : *RECORD         | R7, TRACK 4, REV, TIC *5006.87 +/- 5       | 2R7 | 4  | 0              | 5,845,308:86:9 |      |
| 3117 | 0  | 366 | 17:32:28.266 |                 | DMS:    | : *AT SPD         | R7, TRACK 4, REV, TIC 5006.87 +/- 5        | 2R7 | 4  | 0              | 5,845,308:86:9 |      |
| 3118 | 0  | 366 | 17:32:30.333 | 29JNGLOBAL04-   | NIMPBK  | 301EW             | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3119 | 0  | 366 | 17:32:31.000 | 117EW105A106A4A | 7STRP   | -0.058065,0.0,0.0 | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,309:00:0 |      |
| 3120 | 0  | 366 | 17:33:53.000 | 117EW105A106A4B | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,310:32:0 |      |
| 3121 | 0  | 366 | 17:34:07.666 | 117EW105A106A4C | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,310:54:0 |      |
| 3122 | 0  | 366 | 17:35:29.666 | 117EW105A106A4D | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,311:86:0 |      |
| 3123 | 0  | 366 | 17:35:44.333 | 117EW105A106A4E | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,312:17:0 |      |
| 3124 | 0  | 366 | 17:37:06.333 | 117EW105A106A4F | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,313:49:0 |      |
| 3125 | 0  | 366 | 17:37:21.000 | 117EW105A106A4G | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,313:71:0 |      |
| 3126 | 0  | 366 | 17:38:43.000 | 117EW105A106A4H | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,315:12:0 |      |
| 3127 | 0  | 366 | 17:38:50.333 | 29JNGLOBAL04-   | NIMPBK  | 301FC             | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3128 | 0  | 366 | 17:38:57.666 | 117EW105A106A4I | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,315:34:0 |      |
| 3129 | 0  | 366 | 17:39:10.333 | 29JNGLOBAL04-   | DESEL   | 300FC             | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |
| 3130 | 0  | 366 | 17:40:19.666 | 117EW105A106A4J | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,316:66:0 |      |
| 3131 | 0  | 366 | 17:40:34.333 | 117EW105A106A4K | 7STRP   | 0.058065,0.0,0.0  | Slew =0.76                                 | 2R7 | 4  | 0              | 5,845,316:88:0 |      |
| 3132 | 0  | 366 | 17:41:56.333 | 117EW105A106A4L | 7STRP   | -0.058065,0.008,  | Slew =12.01                                | 2R7 | 4  | 0              | 5,845,318:29:0 |      |
| 3133 | 0  | 366 | 17:42:09.666 | 29JNGLOBAL04-   | NIMPBK  | 301FD             | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                                | GCM | GO | GS             | RIM            | MFI |
|------|----|-----|--------------|-----------------|---------|------------------|--|-----|----|----------------|----------------|-----|
| 3134 | 0  | 366 | 17:42:11.000 | 117EW105A106A4M | 7STRP   | 0.058065,0.0,0.0 | Slew =-0.76                                | 2R7 | 4  | 0              | 5,845,318:51:0 |     |
| 3135 | 0  | 366 | 17:42:28.333 | 29JNGLOBAL04-   | DESEL   | 300FD            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |     |
| 3136 | 0  | 366 | 17:43:04.333 | 29JNGLOBAL04-   | DESEL   | 300EW            | JUPITER GLOBAL OBSERVATION                 | 2R7 | 4  | 0              | :              |     |
| 3137 | 0  | 366 | 17:43:14.333 | 175EW422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,845,319:55:0 |     |
| 3138 | 0  | 366 | 17:43:14.333 | 175EW6A         | 6TMREC  | :*RUNDOWN        | R7, TRACK 4, REV, TIC *4855.45 +/- 5       | 2R7 | 4  | 0              | 5,845,319:55:0 |     |
| 3139 | 0  | 366 | 17:43:14.333 | 175EW6A         | 6TMREC  | NRC              | NO RECORD Record Mode Change               | 2R7 | 4  | 0              | 5,845,319:56:8 |     |
| 3140 | 0  | 366 | 17:43:15.533 | 117EW11A        | DMS:    | :*READY          | RDY, TRACK 4, REV, TIC *4855.39 +/- 5      | 2R7 | 4  | 0              | 5,845,319:56:8 |     |
| 3141 | 0  | 366 | 17:43:33.000 | 117EW11A        | CSMOS   | GE               | ***** GROUP END CSMOS                      | 2R7 | 4  | 0              | 5,845,319:58:0 |     |
| 3142 | 0  | 366 | 17:43:42.466 | 29JNGLOBAL04-   |         | -----STOP-----   |  | 2R7 | 4  | 0              | :              |     |
| 3143 | 0  | 366 | 18:37:43.000 | 165IQ4A         | 7SCAN   | NORM,109.919,22. | Check S/P Position                         | 2R7 | 4  | 0              | 5,845,373:44:0 |     |
| 3144 | 0  | 366 | 18:40:37.666 | 165IQ4A         | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC 4855.39 +/- 5      | 2R7 | 4  | 0              | 5,845,376:33:0 |     |
| 3145 | 0  | 366 | 18:40:37.666 | 175IQ422A6A     | 6DMSC   | R115,0           | DMS Control Tape runup 115.2kb             | 2R7 | 4  | 0              | 5,845,376:33:0 |     |
| 3146 | 0  | 366 | 18:40:39.066 | 165IQ4B         | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *4855.51 +/- 5       | 2R7 | 4  | 0              | 5,845,376:35:1 |     |
| 3147 | 0  | 366 | 18:40:44.333 | 165IQ4B         | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *4856.74 +/- 5       | 2R7 | 4  | 0              | 5,845,376:43:0 |     |
| 3148 | 0  | 366 | 18:40:44.333 | 165IQ4B         | 7VECT   |                  | Inert vect update UTC                      | 2R7 | 4  | 0              | 5,845,376:43:0 |     |
| 3149 | 0  | 366 | 18:40:45.533 | 175IQ176A6A     | DMS:    | :*RUNUP          | R115, TRACK *4, *REV, TIC *4856.80 +/- 5   | 2R7 | 4  | 0              | 5,845,376:44:8 |     |
| 3150 | 0  | 366 | 18:40:49.000 | 175IQ176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R7 | 4  | 0              | 5,845,376:50:8 |     |
| 3151 | 0  | 366 | 18:40:49.533 | 165IZ4A         | DMS:    | :*AT_SPD         | R115, TRACK 4, REV, TIC 4850.50 +/- 5      | 2R7 | 4  | 0              | 5,845,376:50:8 |     |
| 3152 | 0  | 366 | 18:40:49.533 | 165IZ4A         | DMS:    | :*RECORD         | R115, TRACK 4, REV, TIC *4850.50 +/- 5     | 2R7 | 4  | 0              | 5,845,376:50:8 |     |
| 3153 | 0  | 366 | 18:41:47.000 | 175IZ422A6A     | DMS:    | :*RUNDOWN        | R115, TRACK 4, REV, TIC *4648.47 +/- 5     | 2R7 | 4  | 0              | 5,845,377:46:0 |     |
| 3154 | 0  | 366 | 18:41:47.000 | 175IZ422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,845,377:46:0 |     |
| 3155 | 0  | 366 | 18:41:48.200 | 165IZ4B         | DMS:    | :*READY          | RDY, TRACK 4, REV, TIC *4647.47 +/- 6      | 2R7 | 4  | 0              | 5,845,377:47:8 |     |
| 3156 | 0  | 366 | 19:02:59.666 | 165IZ4A         | 7SCAN   | NORM,110.080999, | Check S/P Position                         | 2R7 | 4  | 0              | 5,845,398:44:0 |     |
| 3157 | 0  | 366 | 19:05:54.333 | 165IZ4A         | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC 4647.47 +/- 6      | 2R7 | 4  | 0              | 5,845,401:33:0 |     |
| 3158 | 0  | 366 | 19:05:54.333 | 175IZ422A6A     | 6DMSC   | R115,0           | DMS Control Tape runup 115.2kb             | 2R7 | 4  | 0              | 5,845,401:33:0 |     |
| 3159 | 0  | 366 | 19:05:55.733 | 165IZ4B         | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *4647.59 +/- 6       | 2R7 | 4  | 0              | 5,845,401:35:1 |     |
| 3160 | 0  | 366 | 19:06:01.000 | 165IZ4B         | 7VECT   |                  | Inert vect update UTC                      | 2R7 | 4  | 0              | 5,845,401:43:0 |     |
| 3161 | 0  | 366 | 19:06:01.000 | 165IZ4B         | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *4648.83 +/- 6       | 2R7 | 4  | 0              | 5,845,401:43:0 |     |
| 3162 | 0  | 366 | 19:06:02.200 | 175IZ176A6A     | DMS:    | :*RUNUP          | R115, TRACK *4, *REV, TIC *4648.89 +/- 6   | 2R7 | 4  | 0              | 5,845,401:44:8 |     |
| 3163 | 0  | 366 | 19:06:05.666 | 175IZ176A6A     | 6TMREC  | HMA              | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R7 | 4  | 0              | 5,845,401:50:0 |     |
| 3164 | 0  | 366 | 19:06:06.200 | 165EX4A         | DMS:    | :*AT_SPD         | R115, TRACK 4, REV, TIC 4642.59 +/- 6      | 2R7 | 4  | 0              | 5,845,401:50:8 |     |
| 3165 | 0  | 366 | 19:06:06.200 | 165EX4A         | DMS:    | :*RECORD         | R115, TRACK 4, REV, TIC *4642.59 +/- 6     | 2R7 | 4  | 0              | 5,845,401:50:8 |     |
| 3166 | 0  | 366 | 19:07:04.333 | 175IZ422A6B     | DMS:    | :*RUNDOWN        | R115, TRACK 4, REV, TIC *4438.21 +/- 6     | 2R7 | 4  | 0              | 5,845,402:47:0 |     |
| 3167 | 0  | 366 | 19:07:04.333 | 175IZ422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,845,402:47:0 |     |
| 3168 | 0  | 366 | 19:07:05.533 | 29NNGLOBAL05-   | DMS:    | :*READY          | RDY, TRACK 4, REV, TIC *4437.21 +/- 6      | 2R7 | 4  | 0              | 5,845,402:48:8 |     |
| 3169 | 0  | 366 | 19:08:19.000 | 29NNGLOBAL05-   |         | -----START-----  |  | 2R7 | 4  | 0              | :              |     |
| 3170 | 0  | 366 | 19:08:19.666 | 20EX5A          | 37PL    |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 5,845,403:69:0 |                |     |
| 3171 | 0  | 366 | 19:08:24.333 | 488AQ6C         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                     | 4   | 0  | 5,845,403:76:0 |                |     |
| 3172 | 0  | 366 | 19:08:27.000 | 20EX5B          | 37MRL   |                  | Memory Realocate (software operates from R | 4   | 0  | 5,845,403:80:0 |                |     |
| 3173 | 0  | 366 | 19:08:33.666 | 165EX4A         | 7SCAN   | NORM,112.473,24. | Check S/P Position                         | 4   | 0  | 5,845,403:90:0 |                |     |
| 3174 | 0  | 366 | 19:08:35.000 | 20EX6A          | 6MCPY   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,845,404:01:0 |                |     |
| 3175 | 0  | 366 | 19:08:38.466 | 29JNGLOBAL05-   |         | -----START-----  |  | 4   | 0  | :              |                |     |
| 3176 | 0  | 366 | 19:08:45.000 | 20EX6B          | 6MCPY   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,845,404:16:0 |                |     |
| 3177 | 0  | 366 | 19:08:55.000 | 20EX5C          | 37IRT   |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,845,404:31:0 |                |     |
| 3178 | 0  | 366 | 19:08:56.333 | 20EX5D          | 37MN    |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,845,404:33:0 |     |
| 3179 | 0  | 366 | 19:09:27.666 | 20EX4A          | 37IST   | 1,2,0,OFF,0,1,0  | Chopper ON, Sync, Chopper (Ref)Gain State  | 2R0 | 4  | 0              | 5,845,404:80:0 |     |
| 3180 | 0  | 366 | 19:09:28.000 | 29NNGLOBAL05-   |         | -----STOP-----   |  | 2R0 | 4  | 0              | :              |     |
| 3181 | 0  | 366 | 19:11:31.666 | 127EX           | NIMSTAB | GS               | %%%%%%%% GROUP START TAB                   | 2R0 | 4  | 0              | 5,845,406:84:0 |     |
| 3182 | 0  | 366 | 19:11:31.666 | 127EX4A         | 37IOP   | 7,0              | Fixed Map, Grating Start Position =00      | 2R7 | 4  | 0              | 5,845,406:84:0 |     |
| 3183 | 0  | 366 | 19:11:32.333 | 127EX4B         | 37ETB   | 07,C7,18,3C,D7,0 | Loads wavelength edit table                | 2R7 | 4  | 0              | 5,845,406:85:0 |     |
| 3184 | 0  | 366 | 19:11:40.333 | 127EX11A        | NIMSTAB | GE               | %%%%%%%% GROUP END TAB                     | 2R7 | 4  | 0              | 5,845,407:06:0 |     |
| 3185 | 0  | 366 | 19:12:25.000 | 175EX422A6A     | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps             | 2R7 | 4  | 0              | 5,845,407:73:0 |     |
| 3186 | 0  | 366 | 19:12:25.000 | 117EX           | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC 4437.21 +/- 6      | 2R7 | 4  | 0              | 5,845,407:73:0 |     |
| 3187 | 0  | 366 | 19:12:26.400 | 117EX           | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *4437.33 +/- 6       | 2R7 | 4  | 0              | 5,845,407:75:1 |     |
| 3188 | 0  | 366 | 19:12:27.666 | 117EX           | CSMOS   | GS               | ***** GROUP START CSMOS                    | 2R7 | 4  | 0              | 5,845,407:77:0 |     |

| Line        | YR       | DOY        | SCET - GMT          | PSID                 | Command Parameters     | Description                               | GCM        | GO       | GS       | RIM            | MF I     |
|-------------|----------|------------|---------------------|----------------------|------------------------|---|------------|----------|----------|----------------|----------|
| 3189        | 0        | 366        | 19:12:31.666        |                      | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *4438.56 +/- 6      | 2R7        | 4        | 0        | 5,845.407:83:0 |          |
| 3190        | 0        | 366        | 19:12:32.866        |                      | DMS: : *RUNUP          | R7, TRACK *4, *REV, TIC *4438.62 +/- 6    | 2R7        | 4        | 0        | 5,845.407:84:8 |          |
| 3191        | 0        | 366        | 19:12:33.666        | 175EX176A6A          | 6TMREC LPU             | 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode | 2R7        | 4        | 0        | 5,845.407:86:0 |          |
| 3192        | 0        | 366        | 19:12:34.266        |                      | DMS: : *AT_SPD         | R7, TRACK 4, REV, TIC 4438.50 +/- 6       | 2R7        | 4        | 0        | 5,845.407:86:9 |          |
| 3193        | 0        | 366        | 19:12:34.266        |                      | DMS: : *RECORD         | R7, TRACK 4, REV, TIC *4438.50 +/- 6      | 2R7        | 4        | 0        | 5,845.407:86:9 |          |
| <b>3194</b> | <b>0</b> | <b>366</b> | <b>19:12:36.333</b> | <b>29JNGLOBAL05-</b> | <b>NIMPBK 301EX</b>    | <b>JUPITER GLOBAL OBSERVATION</b>         | <b>2R7</b> | <b>4</b> | <b>0</b> | <b>:</b>       | <b>:</b> |
| 3195        | 0        | 366        | 19:12:37.000        | 117EX105A106A4A      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.408:00:0 |          |
| 3196        | 0        | 366        | 19:13:59.000        | 117EX105A106A4B      | 7STRP -0.058065,0.008, | Slew =12.01                               | 2R7        | 4        | 0        | 5,845.409:32:0 |          |
| 3197        | 0        | 366        | 19:14:13.666        | 117EX105A106A4C      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.409:54:0 |          |
| 3198        | 0        | 366        | 19:15:35.666        | 117EX105A106A4D      | 7STRP -0.058065,0.008, | Slew =12.01                               | 2R7        | 4        | 0        | 5,845.410:86:0 |          |
| 3199        | 0        | 366        | 19:15:50.333        | 117EX105A106A4E      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.411:17:0 |          |
| 3200        | 0        | 366        | 19:17:12.333        | 117EX105A106A4F      | 7STRP -0.058065,0.008, | Slew =12.01                               | 2R7        | 4        | 0        | 5,845.412:49:0 |          |
| 3201        | 0        | 366        | 19:17:27.000        | 117EX105A106A4G      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.412:71:0 |          |
| 3202        | 0        | 366        | 19:18:49.000        | 117EX105A106A4H      | 7STRP -0.058065,0.008, | Slew =12.01                               | 2R7        | 4        | 0        | 5,845.414:12:0 |          |
| 3203        | 0        | 366        | 19:19:03.666        | 117EX105A106A4I      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.414:34:0 |          |
| 3204        | 0        | 366        | 19:20:25.666        | 117EX105A106A4J      | 7STRP -0.058065,0.008, | Slew =12.01                               | 2R7        | 4        | 0        | 5,845.415:66:0 |          |
| 3205        | 0        | 366        | 19:20:40.333        | 117EX105A106A4K      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.415:88:0 |          |
| 3206        | 0        | 366        | 19:22:02.333        | 117EX105A106A4L      | 7STRP -0.058065,0.008, | Slew =12.01                               | 2R7        | 4        | 0        | 5,845.417:29:0 |          |
| 3207        | 0        | 366        | 19:22:17.000        | 117EX105A106A4M      | 7STRP 0.058065,0.0,0,0 | Slew =0.76                                | 2R7        | 4        | 0        | 5,845.417:51:0 |          |
| <b>3208</b> | <b>0</b> | <b>366</b> | <b>19:23:10.333</b> | <b>29JNGLOBAL05-</b> | <b>DESELN 300EX</b>    | <b>JUPITER GLOBAL OBSERVATION</b>         | <b>2R7</b> | <b>4</b> | <b>0</b> | <b>:</b>       | <b>:</b> |
| 3209        | 0        | 366        | 19:23:20.333        | 175EX6A              | 6TMREC NRC             | NO RECORD Record Mode Change              | 2R7        | 4        | 0        | 5,845.418:55:0 |          |
| 3210        | 0        | 366        | 19:23:20.333        |                      | DMS: : *RUNDOWN        | R7, TRACK 4, REV, TIC *4287.08 +/- 6      | 2R7        | 4        | 0        | 5,845.418:55:0 |          |
| 3211        | 0        | 366        | 19:23:20.333        | 175EX422A6B          | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7        | 4        | 0        | 5,845.418:55:0 |          |
| 3212        | 0        | 366        | 19:23:21.533        |                      | DMS: : *READY          | RDY, TRACK 4, REV, TIC *4287.02 +/- 6     | 2R7        | 4        | 0        | 5,845.418:56:8 |          |
| 3213        | 0        | 366        | 19:23:39.000        | 117EX11A             | CSMOS GE               | ***** GROUP END CSMOS                     | 2R7        | 4        | 0        | 5,845.418:83:0 |          |
| <b>3214</b> | <b>0</b> | <b>366</b> | <b>19:23:48.466</b> | <b>29JNGLOBAL05-</b> | <b>-----STOP-----</b>  | <b>Check S/P Position</b>                 | <b>2R7</b> | <b>4</b> | <b>0</b> | <b>:</b>       | <b>:</b> |
| 3215        | 0        | 366        | 19:28:16.333        | 165JM4A              | 7SCAN NORM,110.242,22. |   | 2R7        | 4        | 0        | 5,845.423:44:0 |          |
| 3216        | 0        | 366        | 19:31:11.000        | 175JM422A6A          | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R7        | 4        | 0        | 5,845.426:33:0 |          |
| 3217        | 0        | 366        | 19:31:11.000        |                      | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 4287.02 +/- 6     | 2R7        | 4        | 0        | 5,845.426:33:0 |          |
| 3218        | 0        | 366        | 19:31:12.400        |                      | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *4287.14 +/- 6      | 2R7        | 4        | 0        | 5,845.426:35:1 |          |
| 3219        | 0        | 366        | 19:31:17.666        | 165JM4B              | 7VECT                  | Inert vect update UTC                     | 2R7        | 4        | 0        | 5,845.426:43:0 |          |
| 3220        | 0        | 366        | 19:31:17.666        |                      | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *4288.38 +/- 6      | 2R7        | 4        | 0        | 5,845.426:43:0 |          |
| 3221        | 0        | 366        | 19:31:18.866        |                      | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *4288.44 +/- 6  | 2R7        | 4        | 0        | 5,845.426:44:8 |          |
| 3222        | 0        | 366        | 19:31:22.333        | 175JM176A6A          | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7        | 4        | 0        | 5,845.426:50:0 |          |
| 3223        | 0        | 366        | 19:31:22.866        |                      | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *4282.14 +/- 6    | 2R7        | 4        | 0        | 5,845.426:50:8 |          |
| 3224        | 0        | 366        | 19:31:22.866        |                      | DMS: : *AT_SPD         | R115, TRACK 4, REV, TIC *4282.14 +/- 6    | 2R7        | 4        | 0        | 5,845.426:50:8 |          |
| 3225        | 0        | 366        | 19:32:20.333        |                      | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *4080.11 +/- 6    | 2R7        | 4        | 0        | 5,845.427:46:0 |          |
| 3226        | 0        | 366        | 19:32:20.333        | 175JM422A6B          | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7        | 4        | 0        | 5,845.427:46:0 |          |
| 3227        | 0        | 366        | 19:32:21.533        |                      | DMS: : *READY          | RDY, TRACK 4, REV, TIC *4079.11 +/- 6     | 2R7        | 4        | 0        | 5,845.427:47:8 |          |
| 3228        | 0        | 366        | 19:53:33.000        | 165JN4A              | 7SCAN NORM,110.400999, | Check S/P Position                        | 2R7        | 4        | 0        | 5,845.448:44:0 |          |
| 3229        | 0        | 366        | 19:56:27.666        |                      | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 4079.11 +/- 6     | 2R7        | 4        | 0        | 5,845.451:33:0 |          |
| 3230        | 0        | 366        | 19:56:27.666        | 175JN422A6A          | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R7        | 4        | 0        | 5,845.451:33:0 |          |
| 3231        | 0        | 366        | 19:56:29.066        |                      | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *4079.23 +/- 6      | 2R7        | 4        | 0        | 5,845.451:35:1 |          |
| 3232        | 0        | 366        | 19:56:34.333        |                      | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *4080.46 +/- 6      | 2R7        | 4        | 0        | 5,845.451:43:0 |          |
| 3233        | 0        | 366        | 19:56:34.333        | 165JN4B              | 7VECT                  | Inert vect update UTC                     | 2R7        | 4        | 0        | 5,845.451:43:0 |          |
| 3234        | 0        | 366        | 19:56:35.533        |                      | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *4080.52 +/- 6  | 2R7        | 4        | 0        | 5,845.451:44:8 |          |
| 3235        | 0        | 366        | 19:56:39.000        | 175JN176A6A          | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7        | 4        | 0        | 5,845.451:50:0 |          |
| 3236        | 0        | 366        | 19:56:39.533        |                      | DMS: : *AT_SPD         | R115, TRACK 4, REV, TIC 4074.22 +/- 6     | 2R7        | 4        | 0        | 5,845.451:50:8 |          |
| 3237        | 0        | 366        | 19:56:39.533        |                      | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *4074.22 +/- 6    | 2R7        | 4        | 0        | 5,845.451:50:8 |          |
| 3238        | 0        | 366        | 19:57:37.666        | 175JN422A6B          | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7        | 4        | 0        | 5,845.452:47:0 |          |
| 3239        | 0        | 366        | 19:57:37.666        |                      | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *3869.85 +/- 6    | 2R7        | 4        | 0        | 5,845.452:47:0 |          |
| 3240        | 0        | 366        | 19:57:38.866        |                      | DMS: : *READY          | RDY, TRACK 4, REV, TIC *3868.85 +/- 6     | 2R7        | 4        | 0        | 5,845.452:48:8 |          |
| 3241        | 0        | 366        | 20:48:39.666        | 165EY4A              | 7SCAN NORM,113.177999, | Check S/P Position                        | 2R7        | 4        | 0        | 5,845.502:90:0 |          |
| <b>3242</b> | <b>0</b> | <b>366</b> | <b>20:48:44.466</b> | <b>29JNGLOBAL06-</b> | <b>-----START-----</b> | <b>Strip of Sequence G29A-AR</b>          | <b>2R7</b> | <b>4</b> | <b>0</b> | <b>:</b>       | <b>:</b> |
| <b>3243</b> | <b>0</b> | <b>366</b> | <b>20:49:26.000</b> | <b>29NNGLOBAL06-</b> | <b>-----START-----</b> | <b>Strip of Sequence G29A-AR</b>          | <b>2R7</b> | <b>4</b> | <b>0</b> | <b>:</b>       | <b>:</b> |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters | Description                                     | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|-----------------|--------------------|---|-----|----|----|----------------|-----|
| 3244 | 0  | 366 | 20:49:26.333 | 20EY5A          | 37PL               | Program Load (halts microprocessor & unwri      |     | 4  | 0  | 5,845,503:69:0 |     |
| 3245 | 0  | 366 | 20:49:33.666 | 20EY5B          | 37MRL              | Memory Realocate (software operates from R      |     | 4  | 0  | 5,845,503:80:0 |     |
| 3246 | 0  | 366 | 20:49:41.666 | 20EY6A          | 6MCOPI             | NIMS  |     | 4  | 0  | 5,845,504:01:0 |     |
| 3247 | 0  | 366 | 20:49:51.666 | 20EY6B          | 6MCOPI             | NIMS  |     | 4  | 0  | 5,845,504:16:0 |     |
| 3248 | 0  | 366 | 20:50:01.666 | 20EY5C          | 37IRT              | Instrument Reset (goes into POR state)          |     | 4  | 0  | 5,845,504:31:0 |     |
| 3249 | 0  | 366 | 20:50:03.000 | 20EY5D          | 37MIN              | Memory Normal (software operates from ROM)      | 260 | 4  | 0  | 5,845,504:33:0 |     |
| 3250 | 0  | 366 | 20:50:34.333 | 20EY4A          | 37IST              | Chopper ON, Sync, Chopper (Ref)Gain State       | 2R0 | 4  | 0  | 5,845,504:80:0 |     |
| 3251 | 0  | 366 | 20:50:35.000 | 29NNGLOBAL06-   |                    | -----STOP-----                                  | 2R0 | 4  | 0  | :              | :   |
| 3252 | 0  | 366 | 20:51:37.666 | 127EY4A         | 37IOP              | 7,0 Fixed Map, Grating Start Position =00       | 2R7 | 4  | 0  | 5,845,505:84:0 |     |
| 3253 | 0  | 366 | 20:51:37.666 | 127EY           | NIMSTAB            | GS %%%GROUP START TAB                           | 2R7 | 4  | 0  | 5,845,505:84:0 |     |
| 3254 | 0  | 366 | 20:51:38.333 | 127EY4B         | 37ETB              | 07,C,7,18,3C,D,7,0 Loads wavelength edit table  | 2R7 | 4  | 0  | 5,845,505:85:0 |     |
| 3255 | 0  | 366 | 20:51:46.333 | 127EY11A        | NIMSTAB            | GE %%%GROUP END TAB                             | 2R7 | 4  | 0  | 5,845,506:06:0 |     |
| 3256 | 0  | 366 | 20:52:31.000 | 175EY422A6A     | 6DMSC              | R7,0 DMS Control Tape runup 7.68kps             | 2R7 | 4  | 0  | 5,845,506:73:0 |     |
| 3257 | 0  | 366 | 20:52:31.000 |                 | DMS:               | *US-RUNUP P7, TRACK *1, *FWD, TIC 3868.85 +/- 6 | 2R7 | 4  | 0  | 5,845,506:73:0 |     |
| 3258 | 0  | 366 | 20:52:32.400 |                 | DMS:               | *US_AT_SP P7, TRACK 1, FWD, TIC *3868.97 +/- 6  | 2R7 | 4  | 0  | 5,845,506:75:1 |     |
| 3259 | 0  | 366 | 20:52:33.666 | 117EY           | CSMOS              | GS ***** GROUP START CSMOS                      | 2R7 | 4  | 0  | 5,845,506:77:0 |     |
| 3260 | 0  | 366 | 20:52:37.666 |                 | DMS:               | *US_RD P7, TRACK 1, FWD, TIC *3870.20 +/- 6     | 2R7 | 4  | 0  | 5,845,506:83:0 |     |
| 3261 | 0  | 366 | 20:52:38.866 |                 | DMS:               | *RUNUP R7, TRACK *4, *REV, TIC *3870.26 +/- 6   | 2R7 | 4  | 0  | 5,845,506:84:8 |     |
| 3262 | 0  | 366 | 20:52:39.666 | 175EY176A6A     | 6TMREC             | LPU 7.68 KBPS NIMS-UVS-PPR RECORD Record Mode   | 2R7 | 4  | 0  | 5,845,506:86:0 |     |
| 3263 | 0  | 366 | 20:52:40.266 |                 | DMS:               | *AT SPD R7, TRACK 4, REV, TIC 3870.14 +/- 6     | 2R7 | 4  | 0  | 5,845,506:86:9 |     |
| 3264 | 0  | 366 | 20:52:40.266 |                 | DMS:               | *RECORD R7, TRACK 4, REV, TIC *3870.14 +/- 6    | 2R7 | 4  | 0  | 5,845,506:86:9 |     |
| 3265 | 0  | 366 | 20:52:42.333 | 29JNGLOBAL06-   | NIMPBK             | 301EY JUPITER GLOBAL OBSERVATION                | 2R7 | 4  | 0  | :              | :   |
| 3266 | 0  | 366 | 20:52:43.000 | 117EY105A106A4A | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,507:00:0 |     |
| 3267 | 0  | 366 | 20:54:05.000 | 117EY105A106A4B | 7STRP              | -0.058065,0.008, Slew =12.01                    | 2R7 | 4  | 0  | 5,845,508:32:0 |     |
| 3268 | 0  | 366 | 20:54:19.666 | 117EY105A106A4C | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,508:54:0 |     |
| 3269 | 0  | 366 | 20:55:41.666 | 117EY105A106A4D | 7STRP              | -0.058065,0.008, Slew =12.01                    | 2R7 | 4  | 0  | 5,845,509:86:0 |     |
| 3270 | 0  | 366 | 20:55:56.333 | 117EY105A106A4E | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,510:17:0 |     |
| 3271 | 0  | 366 | 20:57:18.333 | 117EY105A106A4F | 7STRP              | -0.058065,0.008, Slew =12.01                    | 2R7 | 4  | 0  | 5,845,511:49:0 |     |
| 3272 | 0  | 366 | 20:57:33.000 | 117EY105A106A4G | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,511:71:0 |     |
| 3273 | 0  | 366 | 20:58:55.000 | 117EY105A106A4H | 7STRP              | -0.058065,0.008, Slew =12.01                    | 2R7 | 4  | 0  | 5,845,513:12:0 |     |
| 3274 | 0  | 366 | 20:59:09.666 | 117EY105A106A4I | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,513:34:0 |     |
| 3275 | 0  | 366 | 21:00:31.666 | 117EY105A106A4J | 7STRP              | -0.058065,0.008, Slew =12.01                    | 2R7 | 4  | 0  | 5,845,514:66:0 |     |
| 3276 | 0  | 366 | 21:00:37.666 | 29JNGLOBAL06-   | NIMPBK             | 301FE JUPITER GLOBAL OBSERVATION                | 2R7 | 4  | 0  | :              | :   |
| 3277 | 0  | 366 | 21:00:46.333 | 117EY105A106A4K | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,514:88:0 |     |
| 3278 | 0  | 366 | 21:01:28.333 | 29JNGLOBAL06-   | DESELC             | 300FE JUPITER GLOBAL OBSERVATION                | 2R7 | 4  | 0  | :              | :   |
| 3279 | 0  | 366 | 21:02:08.333 | 117EY105A106A4L | 7STRP              | -0.058065,0.008, Slew =12.01                    | 2R7 | 4  | 0  | 5,845,516:29:0 |     |
| 3280 | 0  | 366 | 21:02:23.000 | 117EY105A106A4M | 7STRP              | 0.058065,0.0,0,0 Slew =0.76                     | 2R7 | 4  | 0  | 5,845,516:51:0 |     |
| 3281 | 0  | 366 | 21:03:16.333 | 29JNGLOBAL06-   | DESELC             | 300EY JUPITER GLOBAL OBSERVATION                | 2R7 | 4  | 0  | :              | :   |
| 3282 | 0  | 366 | 21:03:26.333 | 175EY422A6B     | 6DMSC              | RDY,0 DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,845,517:55:0 |     |
| 3283 | 0  | 366 | 21:03:26.333 |                 | DMS:               | *RUNDOWN R7, TRACK 4, REV, TIC *3718.72 +/- 6   | 2R7 | 4  | 0  | 5,845,517:55:0 |     |
| 3284 | 0  | 366 | 21:03:26.333 | 175EY6A         | 6TMREC             | NRC NO RECORD Record Mode Change                | 2R7 | 4  | 0  | 5,845,517:55:0 |     |
| 3285 | 0  | 366 | 21:03:27.533 |                 | DMS:               | *READY RDY, TRACK 4, REV, TIC *3718.66 +/- 6    | 2R7 | 4  | 0  | 5,845,517:56:8 |     |
| 3286 | 0  | 366 | 21:03:45.000 | 117EY11A        | CSMOS              | GE ***** GROUP END CSMOS                        | 2R7 | 4  | 0  | 5,845,517:83:0 |     |
| 3287 | 0  | 366 | 21:03:54.466 | 29JNGLOBAL06-   |                    | -----STOP-----                                  | 2R7 | 4  | 0  | :              | :   |
| 3288 | 1  | 1   | 01:00:00.333 | 481UA4A         | 7VECT              | Inert vect update UTC                           | 2R7 | 4  | 0  | 5,845,751:52:0 |     |
| 3289 | 1  | 1   | 02:12:54.333 | 488AR6A         | 6TMSED             | NORM,AL4 Sci, Eng, and D/L Chan                 | 2R7 | 4  | 0  | 5,845,823:61:0 |     |
| 3290 | 1  | 1   | 02:57:42.333 | 488AR6B         | 6TMSED             | NORM,AL6 Sci, Eng, and D/L Chan                 | 2R7 | 4  | 0  | 5,845,867:89:0 |     |
| 3291 | 1  | 1   | 04:39:19.666 | 165JO4A         | 7SCAN              | NORM,113.467999, Check S/P Position             | 2R7 | 4  | 0  | 5,845,968:44:0 |     |
| 3292 | 1  | 1   | 04:42:14.333 |                 | DMS:               | *US-RUNUP P7, TRACK *1, *FWD, TIC 3718.66 +/- 6 | 2R7 | 4  | 0  | 5,845,971:33:0 |     |
| 3293 | 1  | 1   | 04:42:14.333 | 175JO422A6A     | 6DMSC              | R15,0 DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,845,971:33:0 |     |
| 3294 | 1  | 1   | 04:42:15.733 |                 | DMS:               | *US_AT_SP P7, TRACK 1, FWD, TIC *3718.78 +/- 6  | 2R7 | 4  | 0  | 5,845,971:35:1 |     |
| 3295 | 1  | 1   | 04:42:21.000 | 165JO4B         | 7VECT              | Inert vect update UTC                           | 2R7 | 4  | 0  | 5,845,971:43:0 |     |
| 3296 | 1  | 1   | 04:42:21.000 |                 | DMS:               | *US_RD P7, TRACK 1, FWD, TIC *3720.01 +/- 6     | 2R7 | 4  | 0  | 5,845,971:43:0 |     |
| 3297 | 1  | 1   | 04:42:22.200 |                 | DMS:               | *RUNUP R115, TRACK *4, *REV, TIC *3720.07 +/- 6 | 2R7 | 4  | 0  | 5,845,971:44:8 |     |
| 3298 | 1  | 1   | 04:42:25.666 | 175JO176A6A     | 6TMREC             | HMA 115.2 KBPS IMAGE(1-400J)RECORD Record Mode  | 2R7 | 4  | 0  | 5,845,971:50:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|------------------------|---|-----|----|----|----------------|------|
| 3299 | 1  | 1   | 04:42:26.200 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *3713.77 +/- 6    | 2R7 | 4  | 0  | 5,845,971:50:8 |      |
| 3300 | 1  | 1   | 04:42:26.200 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC *3713.77 +/- 6    | 2R7 | 4  | 0  | 5,845,971:50:8 |      |
| 3301 | 1  | 1   | 04:44:24.333 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *3298.46 +/- 6    | 2R7 | 4  | 0  | 5,845,973:46:0 |      |
| 3302 | 1  | 1   | 04:44:24.333 | 175J0422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,845,973:46:0 |      |
| 3303 | 1  | 1   | 04:44:25.533 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *3297.46 +/- 6     | 2R7 | 4  | 0  | 5,845,973:47:8 |      |
| 3304 | 1  | 1   | 05:04:36.333 | 165JP4A     | 7SCAN NORM,113.598,22. | Check S/P Position                        | 2R7 | 4  | 0  | 5,845,993:44:0 |      |
| 3305 | 1  | 1   | 05:07:31.000 | 175JP422A6A | 6DMSC R115,0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,845,996:33:0 |      |
| 3306 | 1  | 1   | 05:07:31.000 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 3297.46 +/- 6     | 2R7 | 4  | 0  | 5,845,996:33:0 |      |
| 3307 | 1  | 1   | 05:07:32.400 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *3297.58 +/- 6      | 2R7 | 4  | 0  | 5,845,996:35:1 |      |
| 3308 | 1  | 1   | 05:07:37.666 | 165JP4B     | 7VECT                  | Inert vect update UTC                     | 2R7 | 4  | 0  | 5,845,996:43:0 |      |
| 3309 | 1  | 1   | 05:07:37.666 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *3298.81 +/- 6      | 2R7 | 4  | 0  | 5,845,996:43:0 |      |
| 3310 | 1  | 1   | 05:07:38.866 |             | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *3298.87 +/- 6  | 2R7 | 4  | 0  | 5,845,996:44:8 |      |
| 3311 | 1  | 1   | 05:07:42.333 | 175JP176A6A | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7 | 4  | 0  | 5,845,996:50:0 |      |
| 3312 | 1  | 1   | 05:07:42.866 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *3292.57 +/- 6    | 2R7 | 4  | 0  | 5,845,996:50:8 |      |
| 3313 | 1  | 1   | 05:07:42.866 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC *3292.57 +/- 6    | 2R7 | 4  | 0  | 5,845,996:50:8 |      |
| 3314 | 1  | 1   | 05:09:41.000 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *2877.26 +/- 6    | 2R7 | 4  | 0  | 5,845,998:46:0 |      |
| 3315 | 1  | 1   | 05:09:41.000 | 175JP422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,845,998:46:0 |      |
| 3316 | 1  | 1   | 05:09:42.200 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *2876.26 +/- 6     | 2R7 | 4  | 0  | 5,845,998:47:8 |      |
| 3317 | 1  | 1   | 05:29:53.000 | 165JQ4A     | 7SCAN NORM,113.726,22. | Check S/P Position                        | 2R7 | 4  | 0  | 5,846,018:44:0 |      |
| 3318 | 1  | 1   | 05:32:47.666 | 175JQ422A6A | 6DMSC R115,0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,846,021:33:0 |      |
| 3319 | 1  | 1   | 05:32:47.666 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2876.26 +/- 6     | 2R7 | 4  | 0  | 5,846,021:33:0 |      |
| 3320 | 1  | 1   | 05:32:49.066 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2876.38 +/- 6      | 2R7 | 4  | 0  | 5,846,021:35:1 |      |
| 3321 | 1  | 1   | 05:32:54.333 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2877.62 +/- 6      | 2R7 | 4  | 0  | 5,846,021:43:0 |      |
| 3322 | 1  | 1   | 05:32:54.333 | 165JQ4B     | 7VECT                  | Inert vect update UTC                     | 2R7 | 4  | 0  | 5,846,021:43:0 |      |
| 3323 | 1  | 1   | 05:32:55.533 |             | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *2877.68 +/- 6  | 2R7 | 4  | 0  | 5,846,021:44:8 |      |
| 3324 | 1  | 1   | 05:32:59.000 | 175JQ176A6A | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7 | 4  | 0  | 5,846,021:50:0 |      |
| 3325 | 1  | 1   | 05:32:59.533 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 2871.38 +/- 6     | 2R7 | 4  | 0  | 5,846,021:50:8 |      |
| 3326 | 1  | 1   | 05:32:59.533 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *2871.38 +/- 6    | 2R7 | 4  | 0  | 5,846,021:50:8 |      |
| 3327 | 1  | 1   | 05:34:57.666 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *2456.06 +/- 6    | 2R7 | 4  | 0  | 5,846,023:46:0 |      |
| 3328 | 1  | 1   | 05:34:57.666 | 175JQ422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,846,023:46:0 |      |
| 3329 | 1  | 1   | 05:34:58.866 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *2455.06 +/- 6     | 2R7 | 4  | 0  | 5,846,023:47:8 |      |
| 3330 | 1  | 1   | 05:55:09.666 | 165JZ4A     | 7SCAN NORM,113.853,22. | Check S/P Position                        | 2R7 | 4  | 0  | 5,846,043:44:0 |      |
| 3331 | 1  | 1   | 05:58:04.333 | 175JZ422A6A | 6DMSC R115,0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,846,046:33:0 |      |
| 3332 | 1  | 1   | 05:58:04.333 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2455.06 +/- 6     | 2R7 | 4  | 0  | 5,846,046:33:0 |      |
| 3333 | 1  | 1   | 05:58:05.733 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2455.18 +/- 6      | 2R7 | 4  | 0  | 5,846,046:35:1 |      |
| 3334 | 1  | 1   | 05:58:11.000 | 165JZ4B     | 7VECT                  | Inert vect update UTC                     | 2R7 | 4  | 0  | 5,846,046:43:0 |      |
| 3335 | 1  | 1   | 05:58:11.000 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2456.42 +/- 6      | 2R7 | 4  | 0  | 5,846,046:43:0 |      |
| 3336 | 1  | 1   | 05:58:12.200 |             | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *2456.48 +/- 6  | 2R7 | 4  | 0  | 5,846,046:44:8 |      |
| 3337 | 1  | 1   | 05:58:15.666 | 175JZ176A6A | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7 | 4  | 0  | 5,846,046:50:0 |      |
| 3338 | 1  | 1   | 05:58:16.200 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 2450.18 +/- 6     | 2R7 | 4  | 0  | 5,846,046:50:8 |      |
| 3339 | 1  | 1   | 05:58:16.200 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *2450.18 +/- 6    | 2R7 | 4  | 0  | 5,846,046:50:8 |      |
| 3340 | 1  | 1   | 06:00:14.333 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *2034.87 +/- 6    | 2R7 | 4  | 0  | 5,846,048:46:0 |      |
| 3341 | 1  | 1   | 06:00:14.333 | 175JZ422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,846,048:46:0 |      |
| 3342 | 1  | 1   | 06:00:15.533 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *2033.87 +/- 6     | 2R7 | 4  | 0  | 5,846,048:47:8 |      |
| 3343 | 1  | 1   | 08:28:22.333 | 488AS6A     | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,195:01:0 |      |
| 3344 | 1  | 1   | 10:02:14.333 | 488AS6B     | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,287:77:0 |      |
| 3345 | 1  | 1   | 10:26:29.000 | 488AS6C     | 6TMSED FILL,AL4        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,311:75:0 |      |
| 3346 | 1  | 1   | 10:36:22.333 | 488AS6D     | 6TMSED FILL,AL5        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,321:55:0 |      |
| 3347 | 1  | 1   | 14:38:55.000 | 165QA4A     | 7SCAN NORM,116.367,21. | Check S/P Position                        | 2R7 | 4  | 0  | 5,846,561:44:0 |      |
| 3348 | 1  | 1   | 14:41:49.666 | 175QA422A6A | 6DMSC R115,0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,846,564:33:0 |      |
| 3349 | 1  | 1   | 14:41:49.666 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 2033.87 +/- 6     | 2R7 | 4  | 0  | 5,846,564:33:0 |      |
| 3350 | 1  | 1   | 14:41:51.066 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *2033.99 +/- 6      | 2R7 | 4  | 0  | 5,846,564:35:1 |      |
| 3351 | 1  | 1   | 14:41:56.333 | 165QA4B     | 7VECT                  | Inert vect update UTC                     | 2R7 | 4  | 0  | 5,846,564:43:0 |      |
| 3352 | 1  | 1   | 14:41:56.333 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *2035.22 +/- 6      | 2R7 | 4  | 0  | 5,846,564:43:0 |      |
| 3353 | 1  | 1   | 14:41:57.533 |             | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *2035.28 +/- 6  | 2R7 | 4  | 0  | 5,846,564:44:8 |      |



| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|------------------------|---|-----|----|----|----------------|------|
| 3354 | 1  | 1   | 14:42:01.000 | 175QA176A6A | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7 | 4  | 0  | 5,846,564:50:0 |      |
| 3355 | 1  | 1   | 14:42:01.533 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *2028.98 +/- 6    | 2R7 | 4  | 0  | 5,846,564:50:8 |      |
| 3356 | 1  | 1   | 14:42:01.533 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 2028.98 +/- 6     | 2R7 | 4  | 0  | 5,846,564:50:8 |      |
| 3357 | 1  | 1   | 14:42:59.000 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *1826.95 +/- 6    | 2R7 | 4  | 0  | 5,846,565:46:0 |      |
| 3358 | 1  | 1   | 14:42:59.000 | 175QA422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,846,565:46:0 |      |
| 3359 | 1  | 1   | 14:43:00.200 |             | DMS: : *READY          | R115, TRACK 4, REV, TIC *1825.95 +/- 6    | 2R7 | 4  | 0  | 5,846,565:47:8 |      |
| 3360 | 1  | 1   | 15:04:11.666 | 165QB4A     | 7SCAN NORM:116.473,21. | Check S/P Position                        | 2R7 | 4  | 0  | 5,846,586:44:0 |      |
| 3361 | 1  | 1   | 15:07:06.333 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 1825.95 +/- 6     | 2R7 | 4  | 0  | 5,846,589:33:0 |      |
| 3362 | 1  | 1   | 15:07:06.333 | 175QB422A6A | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,846,589:33:0 |      |
| 3363 | 1  | 1   | 15:07:07.733 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *1826.07 +/- 6      | 2R7 | 4  | 0  | 5,846,589:35:1 |      |
| 3364 | 1  | 1   | 15:07:13.000 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *1827.30 +/- 6      | 2R7 | 4  | 0  | 5,846,589:43:0 |      |
| 3365 | 1  | 1   | 15:07:13.000 | 165QB4B     | 7VECT                  | Inert vect update UTC                     | 2R7 | 4  | 0  | 5,846,589:43:0 |      |
| 3366 | 1  | 1   | 15:07:14.200 |             | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *1827.36 +/- 6  | 2R7 | 4  | 0  | 5,846,589:44:8 |      |
| 3367 | 1  | 1   | 15:07:17.666 | 175QB176A6A | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7 | 4  | 0  | 5,846,589:50:0 |      |
| 3368 | 1  | 1   | 15:07:18.200 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *1821.06 +/- 6    | 2R7 | 4  | 0  | 5,846,589:50:8 |      |
| 3369 | 1  | 1   | 15:07:18.200 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 1821.06 +/- 6     | 2R7 | 4  | 0  | 5,846,589:50:8 |      |
| 3370 | 1  | 1   | 15:08:16.333 | 175QB422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,846,590:47:0 |      |
| 3371 | 1  | 1   | 15:08:16.333 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *1616.69 +/- 6    | 2R7 | 4  | 0  | 5,846,590:47:0 |      |
| 3372 | 1  | 1   | 15:08:17.533 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *1615.69 +/- 6     | 2R7 | 4  | 0  | 5,846,590:48:8 |      |
| 3373 | 1  | 1   | 17:33:21.000 | 411JA6A     | 6DMSC R7,0             | DMS Control Tape runup 7.68kps            | 2R7 | 4  | 0  | 5,846,734:00:0 |      |
| 3374 | 1  | 1   | 17:33:21.000 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 1615.69 +/- 6     | 2R7 | 4  | 0  | 5,846,734:00:0 |      |
| 3375 | 1  | 1   | 17:33:22.400 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *1615.81 +/- 6      | 2R7 | 4  | 0  | 5,846,734:02:1 |      |
| 3376 | 1  | 1   | 17:33:27.666 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *1617.04 +/- 6      | 2R7 | 4  | 0  | 5,846,734:10:0 |      |
| 3377 | 1  | 1   | 17:33:28.866 |             | DMS: : *RUNUP          | R7, TRACK *4, *REV, TIC *1617.10 +/- 6    | 2R7 | 4  | 0  | 5,846,734:11:8 |      |
| 3378 | 1  | 1   | 17:33:30.266 |             | DMS: : *AT SPD         | R7, TRACK 4, REV, TIC 1616.98 +/- 6       | 2R7 | 4  | 0  | 5,846,734:13:9 |      |
| 3379 | 1  | 1   | 17:33:30.266 |             | DMS: : *RECORD         | R7, TRACK 4, REV, TIC *1616.98 +/- 6      | 2R7 | 4  | 0  | 5,846,734:13:9 |      |
| 3380 | 1  | 1   | 17:33:31.000 | 411JA6B     | 6TMREC BDT             | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 2R7 | 4  | 0  | 5,846,734:15:0 |      |
| 3381 | 1  | 1   | 17:35:32.333 | 411JA6C     | 6TMREC NRC             | NO RECORD Record Mode Change              | 2R7 | 4  | 0  | 5,846,736:15:0 |      |
| 3382 | 1  | 1   | 17:35:35.000 | 175TC176A6A | 6TMREC LPW             | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 2R7 | 4  | 0  | 5,846,736:19:0 |      |
| 3383 | 1  | 1   | 17:35:35.666 | 175TC422A6A | 6DMSC R7,0             | DMS Control Tape runup 7.68kps            | 2R7 | 4  | 0  | 5,846,736:20:0 |      |
| 3384 | 1  | 1   | 17:35:42.333 | 175TC422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,846,736:30:0 |      |
| 3385 | 1  | 1   | 17:35:42.333 |             | DMS: : *RUNDOWN        | R7, TRACK 4, REV, TIC *1586.03 +/- 6      | 2R7 | 4  | 0  | 5,846,736:30:0 |      |
| 3386 | 1  | 1   | 17:35:43.533 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *1585.97 +/- 6     | 2R7 | 4  | 0  | 5,846,736:31:8 |      |
| 3387 | 1  | 1   | 19:13:20.333 | 488AT6A     | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,832:81:0 |      |
| 3388 | 1  | 1   | 20:24:40.333 | 488AT6B     | 6TMSED FILL,AL5        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,903:40:0 |      |
| 3389 | 1  | 1   | 20:53:46.333 | 488AT6C     | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,846,932:20:0 |      |
| 3390 | 1  | 2   | 00:11:43.000 | 165IL4A     | 7SCAN NORM:120.915,21. | Check S/P Position                        | 2R7 | 4  | 0  | 5,847,127:90:0 |      |
| 3391 | 1  | 2   | 00:14:37.000 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 1585.97 +/- 6     | 2R7 | 4  | 0  | 5,847,130:78:0 |      |
| 3392 | 1  | 2   | 00:14:37.000 | 175IL422A6A | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,847,130:78:0 |      |
| 3393 | 1  | 2   | 00:14:38.400 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *1586.09 +/- 6      | 2R7 | 4  | 0  | 5,847,130:80:1 |      |
| 3394 | 1  | 2   | 00:14:43.666 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *1587.32 +/- 6      | 2R7 | 4  | 0  | 5,847,130:88:0 |      |
| 3395 | 1  | 2   | 00:14:44.333 | 165IL4B     | 7VECT                  | Inert vect update UTC                     | 2R7 | 4  | 0  | 5,847,130:89:0 |      |
| 3396 | 1  | 2   | 00:14:44.866 |             | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *1587.38 +/- 6  | 2R7 | 4  | 0  | 5,847,130:89:8 |      |
| 3397 | 1  | 2   | 00:14:48.333 | 175IL176A6A | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 2R7 | 4  | 0  | 5,847,131:04:0 |      |
| 3398 | 1  | 2   | 00:14:48.866 |             | DMS: : *AT SPD         | R115, TRACK 4, REV, TIC 1581.08 +/- 6     | 2R7 | 4  | 0  | 5,847,131:04:8 |      |
| 3399 | 1  | 2   | 00:14:48.866 |             | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *1581.08 +/- 6    | 2R7 | 4  | 0  | 5,847,131:04:8 |      |
| 3400 | 1  | 2   | 00:15:16.333 |             | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *1484.52 +/- 6    | 2R7 | 4  | 0  | 5,847,131:46:0 |      |
| 3401 | 1  | 2   | 00:15:16.333 | 175IL422A6B | 6DMSC RDY,0            | DMS Control Tape stop                     | 2R7 | 4  | 0  | 5,847,131:46:0 |      |
| 3402 | 1  | 2   | 00:15:17.533 |             | DMS: : *READY          | RDY, TRACK 4, REV, TIC *1483.52 +/- 6     | 2R7 | 4  | 0  | 5,847,131:47:8 |      |
| 3403 | 1  | 2   | 00:53:58.266 | 488AT6D     | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 2R7 | 4  | 0  | 5,847,169:71:0 |      |
| 3404 | 1  | 2   | 01:02:16.266 | 165JL4A     | 7SCAN NORM:121.101999, | Check S/P Position                        | 2R7 | 4  | 0  | 5,847,177:90:0 |      |
| 3405 | 1  | 2   | 01:05:10.266 |             | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 1483.52 +/- 6     | 2R7 | 4  | 0  | 5,847,180:78:0 |      |
| 3406 | 1  | 2   | 01:05:10.266 | 175JL422A6A | 6DMSC R115.0           | DMS Control Tape runup 115.2kb            | 2R7 | 4  | 0  | 5,847,180:78:0 |      |
| 3407 | 1  | 2   | 01:05:11.666 |             | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *1483.64 +/- 6      | 2R7 | 4  | 0  | 5,847,180:80:1 |      |
| 3408 | 1  | 2   | 01:05:16.933 |             | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *1484.88 +/- 6      | 2R7 | 4  | 0  | 5,847,180:88:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID          | Command Parameters     | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|---------------|------------------------|--|-----|----|----------------|----------------|------|
| 3409 | 1  | 2   | 01:05:17.600 | 165JL4B       | 7VECT                  | Inert vect update UTC                      | 2R7 | 4  | 0              | 5,847,180:89:0 |      |
| 3410 | 1  | 2   | 01:05:18.133 |               | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *1484.94 +/- 6   | 2R7 | 4  | 0              | 5,847,180:89:8 |      |
| 3411 | 1  | 2   | 01:05:21.600 | 175JL176A6A   | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R7 | 4  | 0              | 5,847,181:04:0 |      |
| 3412 | 1  | 2   | 01:05:22.133 |               | DMS: : *AT_SPD         | R115, TRACK 4, REV, TIC 1478.64 +/- 6      | 2R7 | 4  | 0              | 5,847,181:04:8 |      |
| 3413 | 1  | 2   | 01:05:22.133 |               | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *1478.64 +/- 6     | 2R7 | 4  | 0              | 5,847,181:04:8 |      |
| 3414 | 1  | 2   | 01:05:49.600 | 175JL422A6B   | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,847,181:46:0 |      |
| 3415 | 1  | 2   | 01:05:49.600 |               | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *1382.07 +/- 6     | 2R7 | 4  | 0              | 5,847,181:46:0 |      |
| 3416 | 1  | 2   | 01:05:50.800 |               | DMS: : *READY          | RDY, TRACK 4, REV, TIC *1381.07 +/- 6      | 2R7 | 4  | 0              | 5,847,181:47:8 |      |
| 3417 | 1  | 2   | 01:26:32.266 | 165JD4A       | 7SCAN NORM,116.872,22. | Check S/P Position                         | 2R7 | 4  | 0              | 5,847,201:90:0 |      |
| 3418 | 1  | 2   | 01:29:26.266 |               | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 1381.07 +/- 6      | 2R7 | 4  | 0              | 5,847,204:78:0 |      |
| 3419 | 1  | 2   | 01:29:26.266 | 175JD422A6A   | 6DMSC R115.0           | DMS Control Tape runup 115.2kb             | 2R7 | 4  | 0              | 5,847,204:78:0 |      |
| 3420 | 1  | 2   | 01:29:27.666 |               | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC *1381.19 +/- 6       | 2R7 | 4  | 0              | 5,847,204:80:1 |      |
| 3421 | 1  | 2   | 01:29:32.933 |               | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC *1382.43 +/- 6       | 2R7 | 4  | 0              | 5,847,204:88:0 |      |
| 3422 | 1  | 2   | 01:29:33.600 | 165JD4B       | 7VECT                  | Inert vect update UTC                      | 2R7 | 4  | 0              | 5,847,204:89:0 |      |
| 3423 | 1  | 2   | 01:29:34.133 |               | DMS: : *RUNUP          | R115, TRACK *4, *REV, TIC *1382.49 +/- 6   | 2R7 | 4  | 0              | 5,847,204:89:8 |      |
| 3424 | 1  | 2   | 01:29:37.600 | 175JD176A6A   | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode  | 2R7 | 4  | 0              | 5,847,205:04:0 |      |
| 3425 | 1  | 2   | 01:29:38.133 |               | DMS: : *RECORD         | R115, TRACK 4, REV, TIC *1376.19 +/- 6     | 2R7 | 4  | 0              | 5,847,205:04:8 |      |
| 3426 | 1  | 2   | 01:29:38.133 |               | DMS: : *AT_SPD         | R115, TRACK 4, REV, TIC 1376.19 +/- 6      | 2R7 | 4  | 0              | 5,847,205:04:8 |      |
| 3427 | 1  | 2   | 01:30:06.266 |               | DMS: : *RUNDOWN        | R115, TRACK 4, REV, TIC *1277.28 +/- 6     | 2R7 | 4  | 0              | 5,847,205:47:0 |      |
| 3428 | 1  | 2   | 01:30:07.466 | 175JD422A6B   | 6DMSC RDY,0            | DMS Control Tape stop                      | 2R7 | 4  | 0              | 5,847,205:48:8 |      |
| 3429 | 1  | 2   | 01:30:07.466 |               | DMS: : *READY          | RDY, TRACK 4, REV, TIC *1276.28 +/- 6      | 2R7 | 4  | 0              | 5,847,205:48:8 |      |
| 3430 | 1  | 2   | 01:34:46.266 | 20KA4B        | 7SAFE                  | S/P TO 153 deg cone                        | 2R7 | 4  | 0              | 5,847,210:12:0 |      |
| 3431 | 1  | 2   | 01:56:32.000 | 29NNRELOAD02- | -----START-----        |  | 2R7 | 4  | 0              | :              |      |
| 3432 | 1  | 2   | 01:56:32.933 | 20FN5A        | 37PL                   | Program Load (halts microprocessor & unwri | 4   | 0  | 5,847,231:61:0 |                |      |
| 3433 | 1  | 2   | 01:56:36.266 | 20FN5B        | 37MRL                  | Memory Realocate (software operates from R | 4   | 0  | 5,847,231:66:0 |                |      |
| 3434 | 1  | 2   | 01:56:39.600 | 20FN6A        | 6MCOPY NIMS            | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 5,847,231:71:0 |                |      |
| 3435 | 1  | 2   | 01:56:49.600 | 20FN6B        | 6MCOPY NIMS            | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 5,847,231:86:0 |                |      |
| 3436 | 1  | 2   | 01:57:03.600 | 20FN5C        | 37IRT                  | Instrument Reset (goes into POR state)     | 4   | 0  | 5,847,232:16:0 |                |      |
| 3437 | 1  | 2   | 01:57:06.933 | 20FN5D        | 37MN                   | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 5,847,232:21:0 |      |
| 3438 | 1  | 2   | 01:57:46.933 | 20FN4A        | 37IST 1,2,0,OFF,0,1,0  | Chopper ON, Sync, Chopper (RefGain State   | 2R0 | 4  | 0              | 5,847,232:81:0 |      |
| 3439 | 1  | 2   | 01:58:49.600 | 127FN         | NIMSTAB GS             | %%%%%% GROUP START TAB                     | 2R0 | 4  | 0              | 5,847,233:84:0 |      |
| 3440 | 1  | 2   | 01:58:49.600 | 127FN4A       | 37IOP 3.0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 5,847,233:84:0 |      |
| 3441 | 1  | 2   | 01:58:50.266 | 127FN4B       | 37ETB 04,C4,35,FF,FF   | Loads wavelength edit table                | 2R3 | 4  | 0              | 5,847,233:85:0 |      |
| 3442 | 1  | 2   | 01:58:58.266 | 127FN11A      | NIMSTAB GE             | %%%%%% GROUP END TAB                       | 2R3 | 4  | 0              | 5,847,234:06:0 |      |
| 3443 | 1  | 2   | 02:03:52.933 | 127FO4A       | 37IOP 0.0              | Safe, Grating Start Position =00           | 2R0 | 4  | 0              | 5,847,238:84:0 |      |
| 3444 | 1  | 2   | 02:03:52.933 | 127FO         | NIMSTAB GS             | %%%%%% GROUP START TAB                     | 2R0 | 4  | 0              | 5,847,238:84:0 |      |
| 3445 | 1  | 2   | 02:03:53.600 | 127FO4B       | 37ETB 04,C4,02,00,00   | Loads wavelength edit table                | 2R0 | 4  | 0              | 5,847,238:85:0 |      |
| 3446 | 1  | 2   | 02:04:01.600 | 127FO11A      | NIMSTAB GE             | %%%%%% GROUP END TAB                       | 2R0 | 4  | 0              | 5,847,239:06:0 |      |
| 3447 | 1  | 2   | 02:04:02.000 | 29NNRELOAD02- | -----STOP-----         |  | 2R0 | 4  | 0              | :              |      |
| 3448 | 1  | 2   | 02:06:54.933 | 125FN4A       | 37IST 1,0,0,OFF,0,0,0  | Chopper ON, Sync, 63Hz (Ref)               | 260 | 4  | 0              | 5,847,241:84:0 |      |
| 3450 | 1  | 2   | 02:06:54.933 | 125FN         | NIMSINIT GS            | ##### GROUP START INIT                     | 260 | 4  | 0              | 5,847,241:84:0 |      |
| 3451 | 1  | 2   | 02:07:55.600 | 125FN4B       | 37IST 1,1,0,OFF,0,0,0  | Chopper OFF, N/A, 63Hz (Ref)               | 200 | 4  | 0              | 5,847,242:84:0 |      |
| 3452 | 1  | 2   | 02:08:56.266 | 125FN11A      | NIMSINIT GE            | ##### GROUP END INIT                       | 200 | 4  | 0              | 5,847,243:84:0 |      |
| 3453 | 1  | 2   | 02:08:56.266 | 125FN4C       | 37MB 0,0,0,0,0,0       | Selects mirror (spatial) edit table        | 200 | 4  | 0              | 5,847,243:84:0 |      |
| 3454 | 1  | 2   | 02:08:57.000 | 29NNCHOP0F01- | -----STOP-----         |  | 200 | 4  | 0              | :              |      |
| 3455 | 1  | 2   | 02:57:42.266 | 488AU6A       | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,292:14:0 |      |
| 3456 | 1  | 2   | 03:09:41.600 | 488AU6B       | 6TMSED FILL,AL5        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,304:01:0 |      |
| 3457 | 1  | 2   | 03:38:47.600 | 488AU6C       | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,332:72:0 |      |
| 3458 | 1  | 2   | 04:09:41.600 | 488AU6D       | 6TMSED FILL,AL5        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,363:32:0 |      |
| 3459 | 1  | 2   | 04:38:47.600 | 488AU6E       | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,392:12:0 |      |
| 3460 | 1  | 2   | 09:08:54.266 | 488AV6A       | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,659:25:0 |      |
| 3461 | 1  | 2   | 10:26:24.933 | 488AV6B       | 6TMSED FILL,AL4        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,735:85:0 |      |
| 3462 | 1  | 2   | 10:36:22.266 | 488AV6C       | 6TMSED FILL,AL5        | Sci, Eng, and D/L Chan                     | 200 | 4  | 0              | 5,847,745:71:0 |      |
| 3463 | 1  | 2   | 17:33:10.266 |               | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 1276.28 +/- 6      | 200 | 4  | 0              | 5,848,158:00:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|----------------|------|
| 3464 | 1  | 2   | 17:33:10.266 | 411JB6A         | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,848,158:00:0 |      |
| 3465 | 1  | 2   | 17:33:11.666 |                 | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *1276.40 +/- 6      | 200 | 4  | 0  | 5,848,158:02:1 |      |
| 3466 | 1  | 2   | 17:33:16.933 |                 | DMS:    | : *US RD         | P7, TRACK 1, FWD, TIC *1277.64 +/- 6      | 200 | 4  | 0  | 5,848,158:10:0 |      |
| 3467 | 1  | 2   | 17:33:18.133 |                 | DMS:    | : *RUNUP         | R7, TRACK 4, *REV, TIC *1277.70 +/- 6     | 200 | 4  | 0  | 5,848,158:11:8 |      |
| 3468 | 1  | 2   | 17:33:19.533 |                 | DMS:    | : *AT SPD        | R7, TRACK 4, REV, TIC 1277.58 +/- 6       | 200 | 4  | 0  | 5,848,158:13:9 |      |
| 3469 | 1  | 2   | 17:33:19.533 |                 | DMS:    | : *RECORD        | R7, TRACK 4, REV, TIC *1277.58 +/- 6      | 200 | 4  | 0  | 5,848,158:13:9 |      |
| 3470 | 1  | 2   | 17:33:20.266 | 411JB6B         | 6TMREC  | BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,848,158:15:0 |      |
| 3471 | 1  | 2   | 17:35:21.600 | 411JB6C         | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,848,160:15:0 |      |
| 3472 | 1  | 2   | 17:35:24.266 | 175TD176A6A     | 6TMREC  | LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,848,160:19:0 |      |
| 3473 | 1  | 2   | 17:35:24.933 | 175TD422A6A     | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,848,160:20:0 |      |
| 3474 | 1  | 2   | 17:35:31.600 |                 | DMS:    | : *RUNDOWN       | R7, TRACK 4, REV, TIC *1246.62 +/- 6      | 200 | 4  | 0  | 5,848,160:30:0 |      |
| 3475 | 1  | 2   | 17:35:31.600 | 175TD422A6B     | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,848,160:30:0 |      |
| 3476 | 1  | 2   | 17:35:32.800 |                 | DMS:    | : *READY         | RDY, TRACK 4, REV, TIC *1246.56 +/- 6     | 200 | 4  | 0  | 5,848,160:31:8 |      |
| 3477 | 1  | 2   | 19:13:15.600 | 488AW6A         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,256:90:0 |      |
| 3478 | 1  | 2   | 20:24:45.600 | 488AW6B         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,327:64:0 |      |
| 3479 | 1  | 2   | 20:46:20.266 | 20UL4B          | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,848,349:04:0 |      |
| 3480 | 1  | 2   | 20:53:51.600 | 488AW6C         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,356:44:0 |      |
| 3481 | 1  | 2   | 21:05:20.266 | 20UL4D          | 7MODE   | INT              | AACS INERTIAL MODE                        | 200 | 4  | 0  | 5,848,367:76:0 |      |
| 3482 | 1  | 2   | 23:52:00.266 | 20UL4F          | 7MODE   | CRU              | AACS CRUISE MODE                          | 200 | 4  | 0  | 5,848,532:61:0 |      |
| 3483 | 1  | 2   | 23:53:00.266 | 488AW6D         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,533:60:0 |      |
| 3484 | 1  | 3   | 00:24:00.266 | 20AA4AA         | 7STAT   | 10.00,301.7175,3 | Stator inertial point                     | 200 | 4  | 0  | 5,848,564:29:0 |      |
| 3485 | 1  | 3   | 00:24:12.266 | 20AA6AA         | 6MROH   | 7.6744,0,A10     | read from AACSA7,6744,0,A10               | 200 | 4  | 0  | 5,848,564:47:0 |      |
| 3486 | 1  | 3   | 00:30:00.266 | 474AA416A4B     | 7MODE   | INT              | AACS INERTIAL MODE                        | 200 | 4  | 0  | 5,848,570:23:0 |      |
| 3487 | 1  | 3   | 00:32:00.266 | 474AA416A4D     | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,848,572:21:0 |      |
| 3488 | 1  | 3   | 00:32:20.266 | 20AA4AD         | 7STAT   | 10.00,301.7175,3 | Stator inertial point                     | 200 | 4  | 0  | 5,848,572:51:0 |      |
| 3489 | 1  | 3   | 00:36:14.266 | 474AA416A4E     | 7BURN   | 301.717499,38.63 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,848,576:38:0 |      |
| 3490 | 1  | 3   | 00:49:04.266 | 20AA4AI         | 7SLEW   | DIS,POS,0,0      | Stator movement                           | 200 | 4  | 0  | 5,848,589:10:0 |      |
| 3491 | 1  | 3   | 00:53:56.266 | 20AA4AJ         | 7MODE   | CRU              | AACS CRUISE MODE                          | 200 | 4  | 0  | 5,848,593:84:0 |      |
| 3492 | 1  | 3   | 00:53:58.266 | 488AW6E         | 6TMSED  | NORM,AH4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,593:87:0 |      |
| 3493 | 1  | 3   | 01:49:36.933 | 432PB431A6A     | 6RCDSL  | DDSNCG,PLSNCG,EP | Record Deselect (DDS o                    | 200 | 4  | 0  | 5,848,648:90:0 |      |
| 3494 | 1  | 3   | 01:49:37.600 | 432PB6A         | 6RTSL1  |                  | R/T Select of DDS and                     | 200 | 4  | 0  | 5,848,649:00:0 |      |
| 3495 | 1  | 3   | 02:53:26.266 | 488AX6A         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,712:10:0 |      |
| 3496 | 1  | 3   | 03:04:46.266 | 488AX6B         | 6TMSED  | FILL,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,723:29:0 |      |
| 3497 | 1  | 3   | 03:33:52.933 | 488AX6C         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,752:10:0 |      |
| 3498 | 1  | 3   | 04:04:46.266 | 488AX6D         | 6TMSED  | FILL,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,782:60:0 |      |
| 3499 | 1  | 3   | 04:33:52.933 | 488AX6E         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,848,811:41:0 |      |
| 3500 | 1  | 3   | 09:08:54.266 | 488AY6A         | 6TMSED  | NORM,AH4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,083:41:0 |      |
| 3501 | 1  | 3   | 10:01:00.266 | 488AY6B         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,134:89:0 |      |
| 3502 | 1  | 3   | 10:09:06.266 | 432OG431A6A     | 6RCDSL  | DDSNCG,PLSNCG,EP | Record Deselect (DDS o                    | 200 | 4  | 0  | 5,849,142:90:0 |      |
| 3503 | 1  | 3   | 10:09:06.933 | 432OG6A         | 6RTSL1  |                  | R/T Select of DDS and                     | 200 | 4  | 0  | 5,849,143:00:0 |      |
| 3504 | 1  | 3   | 10:25:01.600 | 488AY6C         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,158:67:0 |      |
| 3505 | 1  | 3   | 10:27:50.266 | 488AY6D         | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,161:47:0 |      |
| 3506 | 1  | 3   | 10:38:30.200 | 488AY6E         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,172:06:0 |      |
| 3507 | 1  | 3   | 16:58:10.866 | 488AZ6A         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,547:52:0 |      |
| 3508 | 1  | 3   | 18:09:49.533 | 488AZ6B         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,618:39:0 |      |
| 3509 | 1  | 3   | 18:38:55.533 | 488AZ6C         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,647:19:0 |      |
| 3510 | 1  | 3   | 19:53:00.200 | 488AZ6D         | 6TMSED  | NORM,AH5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,849,720:43:0 |      |
| 3511 | 1  | 3   | 20:06:00.200 | 20RP4C          | 7STAT   | 10.00,238.47,-19 | Stator inertial point                     | 200 | 4  | 0  | 5,849,733:30:0 |      |
| 3512 | 1  | 3   | 20:06:12.200 | 20RP6D          | 6MROH   | 7.6744,0,A10     | read from AACSA7,6744,0,A10               | 200 | 4  | 0  | 5,849,733:48:0 |      |
| 3513 | 1  | 3   | 20:25:02.200 | 490UA412A4B     | 7MODE   | INT              | AACS INERTIAL MODE                        | 200 | 4  | 0  | 5,849,752:14:0 |      |
| 3514 | 1  | 3   | 20:30:00.200 | 490UA412A4D     | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,849,757:06:0 |      |
| 3515 | 1  | 3   | 20:30:20.200 | 20RP4D          | 7STAT   | 17.45,238.47,-19 | Stator inertial point                     | 200 | 4  | 0  | 5,849,757:36:0 |      |
| 3516 | 1  | 3   | 20:34:10.200 | 490UA412A4E     | 7VECT   |                  | Inert vect update UTC                     | 200 | 4  | 0  | 5,849,761:17:0 |      |
| 3517 | 1  | 3   | 20:34:14.200 | 490UA412A4F     | 7TJRN   | 2,RTH            | ALERT Thruster                            | 200 | 4  | 0  | 5,849,761:23:0 |      |
| 3518 | 1  | 3   | 20:38:02.200 | 490UA412A406A4A | 7STAR   | 1.383,331.28     | Star catalog update                       | 200 | 4  | 0  | 5,849,765:01:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters | Description                                      | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|--------------------|--|-----|----|----|----------------|------|
| 3519 | 1  | 3   | 20:38:04.200 | 490UA412A406A4B | 7STAR              | 2,253,200.48 Star catalog update                 | 200 | 4  | 0  | 5,849,765:04:0 |      |
| 3520 | 1  | 3   | 20:38:06.200 | 490UA412A406A4C | 7STAR              | 3,128,295.85 Star catalog update                 | 200 | 4  | 0  | 5,849,765:07:0 |      |
| 3521 | 1  | 3   | 20:38:08.200 | 490UA412A406A4D | 7STAR              | 4,0,0,0,0.0 Star catalog update                  | 200 | 4  | 0  | 5,849,765:10:0 |      |
| 3522 | 1  | 3   | 20:38:10.200 | 490UA412A406A4E | 7STAR              | 5,0,0,0,0.0 Star catalog update                  | 200 | 4  | 0  | 5,849,765:13:0 |      |
| 3523 | 1  | 3   | 20:38:12.200 | 490UA412A406A4F | 7STAR              | 6,0,0,0,0.0 Star catalog update                  | 200 | 4  | 0  | 5,849,765:16:0 |      |
| 3524 | 1  | 3   | 20:48:06.200 | 20RP4F          | 7SLEW              | DIS.POS.0.0 Stator movement                      | 200 | 4  | 0  | 5,849,774:88:0 |      |
| 3525 | 1  | 3   | 20:56:10.200 | 490UA412A4G     | 7MODE              | CRU AACRUISE MODE                                | 200 | 4  | 0  | 5,849,782:86:0 |      |
| 3526 | 1  | 3   | 22:09:59.533 | 432O431A6A      | 6RCDSL             | DDSNCG,PLSNCG,EP Record Deselect (DDS o          | 200 | 4  | 0  | 5,849,855:87:0 |      |
| 3527 | 1  | 3   | 22:10:00.200 | 432O16A         | 6RTSL1             | R/T Select of DDS and                            | 200 | 4  | 0  | 5,849,855:88:0 |      |
| 3528 | 1  | 3   | 22:31:00.200 | 488AZ6E         | 6TMSED             | NORM,AL5 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,849,876:67:0 |      |
| 3529 | 1  | 4   | 00:47:34.200 | 488BA6A         | 6TMSED             | NORM,AL4 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,011:73:0 |      |
| 3530 | 1  | 4   | 02:42:46.200 | 488BA6B         | 6TMSED             | NORM,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,125:67:0 |      |
| 3531 | 1  | 4   | 03:01:14.866 | 488BA6C         | 6TMSED             | FILL,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,144:01:0 |      |
| 3532 | 1  | 4   | 03:28:04.200 | 488BA6D         | 6TMSED             | NORM,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,170:49:0 |      |
| 3533 | 1  | 4   | 08:28:22.200 | 488BB6A         | 6TMSED             | NORM,AL5 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,467:49:0 |      |
| 3534 | 1  | 4   | 09:53:42.200 | 488BB6B         | 6TMSED             | NORM,AL4 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,551:85:0 |      |
| 3535 | 1  | 4   | 10:11:14.200 | 488BB6C         | 6TMSED             | FILL,AL4 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,569:25:0 |      |
| 3536 | 1  | 4   | 10:21:26.200 | 488BB6D         | 6TMSED             | FILL,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,850,579:33:0 |      |
| 3537 | 1  | 4   | 17:18:39.533 |                 | DMS:               | :*US-RUNUP P7, TRACK *1, *FWD, TIC 1246.56 +/- 6 | 200 | 4  | 0  | 5,850,992:00:0 |      |
| 3538 | 1  | 4   | 17:18:39.533 | 411JC6A         | 6DMSC              | R7,0 DMS Control Tape runup 7.68kps              | 200 | 4  | 0  | 5,850,992:00:0 |      |
| 3539 | 1  | 4   | 17:18:40.933 |                 | DMS:               | :*US_AT_SP P7, TRACK 1, FWD, TIC *1246.68 +/- 6  | 200 | 4  | 0  | 5,850,992:02:1 |      |
| 3540 | 1  | 4   | 17:18:46.200 |                 | DMS:               | :*US_RD P7, TRACK 1, FWD, TIC *1247.92 +/- 6     | 200 | 4  | 0  | 5,850,992:10:0 |      |
| 3541 | 1  | 4   | 17:18:47.400 |                 | DMS:               | :*RUNUP R7, TRACK 4, *REV, TIC *1247.98 +/- 6    | 200 | 4  | 0  | 5,850,992:11:8 |      |
| 3542 | 1  | 4   | 17:18:48.800 |                 | DMS:               | :*AT_SPD R7, TRACK 4, REV, TIC 1247.86 +/- 6     | 200 | 4  | 0  | 5,850,992:13:9 |      |
| 3543 | 1  | 4   | 17:18:48.800 |                 | DMS:               | :*RECORD R7, TRACK 4, REV, TIC *1247.86 +/- 6    | 200 | 4  | 0  | 5,850,992:13:9 |      |
| 3544 | 1  | 4   | 17:18:49.533 | 411JC6B         | 6TMREC             | BDT 7.68 KBPS BUFFER DUMP TO TAPE Record Mode    | 200 | 4  | 0  | 5,850,992:15:0 |      |
| 3545 | 1  | 4   | 17:20:50.866 | 411JC6C         | 6TMREC             | NRC NO RECORD Record Mode Change                 | 200 | 4  | 0  | 5,850,994:15:0 |      |
| 3546 | 1  | 4   | 17:20:53.533 | 175TE176A6A     | 6TMREC             | LPW 7.68 KBPS LOW RATE SCI PWS RECORD Record     | 200 | 4  | 0  | 5,850,994:19:0 |      |
| 3547 | 1  | 4   | 17:20:54.200 | 175TE422A6A     | 6DMSC              | R7,0 DMS Control Tape runup 7.68kps              | 200 | 4  | 0  | 5,850,994:20:0 |      |
| 3548 | 1  | 4   | 17:21:00.866 |                 | DMS:               | :*RUNDOWN R7, TRACK 4, REV, TIC *1216.90 +/- 6   | 200 | 4  | 0  | 5,850,994:30:0 |      |
| 3549 | 1  | 4   | 17:21:00.866 | 175TE422A6B     | 6DMSC              | RDY,0 DMS Control Tape stop                      | 200 | 4  | 0  | 5,850,994:30:0 |      |
| 3550 | 1  | 4   | 17:21:02.066 |                 | DMS:               | :*READY RDY, TRACK 4, REV, TIC *1216.84 +/- 6    | 200 | 4  | 0  | 5,850,994:31:8 |      |
| 3551 | 1  | 4   | 19:22:11.533 | 488BC6A         | 6TMSED             | NORM,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,851,114:16:0 |      |
| 3552 | 1  | 5   | 01:41:20.800 | 488BD6A         | 6TMSED             | FILL,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,851,489:15:0 |      |
| 3553 | 1  | 5   | 02:08:10.133 | 488BD6B         | 6TMSED             | NORM,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,851,515:63:0 |      |
| 3554 | 1  | 5   | 09:17:26.133 | 488BE6A         | 6TMSED             | NORM,AL5 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,851,940:22:0 |      |
| 3555 | 1  | 5   | 09:58:55.466 | 488BE6B         | 6TMSED             | FILL,AL5 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,851,981:25:0 |      |
| 3556 | 1  | 5   | 10:06:30.133 | 488BE6C         | 6TMSED             | FILL,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,851,988:70:0 |      |
| 3557 | 1  | 5   | 17:06:20.800 |                 | DMS:               | :*US-RUNUP P7, TRACK *1, *FWD, TIC 1216.84 +/- 6 | 200 | 4  | 0  | 5,852,404:00:0 |      |
| 3558 | 1  | 5   | 17:06:22.200 | 411JD6A         | 6DMSC              | R7,0 DMS Control Tape runup 7.68kps              | 200 | 4  | 0  | 5,852,404:00:0 |      |
| 3559 | 1  | 5   | 17:06:22.200 |                 | DMS:               | :*US_AT_SP P7, TRACK 1, FWD, TIC *1216.96 +/- 6  | 200 | 4  | 0  | 5,852,404:02:1 |      |
| 3560 | 1  | 5   | 17:06:27.466 |                 | DMS:               | :*US_RD P7, TRACK 1, FWD, TIC *1218.20 +/- 6     | 200 | 4  | 0  | 5,852,404:10:0 |      |
| 3561 | 1  | 5   | 17:06:28.666 |                 | DMS:               | :*RUNUP R7, TRACK 4, *REV, TIC *1218.26 +/- 6    | 200 | 4  | 0  | 5,852,404:11:8 |      |
| 3562 | 1  | 5   | 17:06:30.066 |                 | DMS:               | :*RECORD R7, TRACK 4, REV, TIC *1218.14 +/- 6    | 200 | 4  | 0  | 5,852,404:13:9 |      |
| 3563 | 1  | 5   | 17:06:30.066 |                 | DMS:               | :*AT_SPD R7, TRACK 4, REV, TIC 1218.14 +/- 6     | 200 | 4  | 0  | 5,852,404:13:9 |      |
| 3564 | 1  | 5   | 17:06:30.800 | 411JD6B         | 6TMREC             | BDT 7.68 KBPS BUFFER DUMP TO TAPE Record Mode    | 200 | 4  | 0  | 5,852,404:15:0 |      |
| 3565 | 1  | 5   | 17:08:32.133 | 411JD6C         | 6TMREC             | NRC NO RECORD Record Mode Change                 | 200 | 4  | 0  | 5,852,406:15:0 |      |
| 3566 | 1  | 5   | 17:08:34.800 | 175TF176A6A     | 6TMREC             | LPW 7.68 KBPS LOW RATE SCI PWS RECORD Record     | 200 | 4  | 0  | 5,852,406:19:0 |      |
| 3567 | 1  | 5   | 17:08:35.466 | 175TF422A6A     | 6DMSC              | R7,0 DMS Control Tape runup 7.68kps              | 200 | 4  | 0  | 5,852,406:20:0 |      |
| 3568 | 1  | 5   | 17:08:42.133 | 175TF422A6B     | 6DMSC              | RDY,0 DMS Control Tape stop                      | 200 | 4  | 0  | 5,852,406:30:0 |      |
| 3569 | 1  | 5   | 17:08:42.133 |                 | DMS:               | :*RUNDOWN R7, TRACK 4, REV, TIC *1187.18 +/- 6   | 200 | 4  | 0  | 5,852,406:30:0 |      |
| 3570 | 1  | 5   | 17:08:43.333 |                 | DMS:               | :*READY RDY, TRACK 4, REV, TIC *1187.12 +/- 6    | 200 | 4  | 0  | 5,852,406:31:8 |      |
| 3571 | 1  | 5   | 19:27:05.466 | 488BF6A         | 6TMSED             | NORM,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,852,543:18:0 |      |
| 3572 | 1  | 5   | 20:41:24.800 | 488BF6B         | 6TMSED             | FILL,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,852,616:64:0 |      |
| 3573 | 1  | 5   | 21:08:14.133 | 488BF6C         | 6TMSED             | NORM,AL6 Sci, Eng. and D/L Chan                  | 200 | 4  | 0  | 5,852,643:21:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters  | Description                               | GCM | GO | GS | RIM       | MF I |
|------|----|-----|--------------|---------|---------|-------------|---|-----|----|----|-----------|------|
| 3574 | 1  | 5   | 23:11:10.800 | 465KX6A | 6DMSC   | P100,1      | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 5,852,764 | 75:0 |
| 3575 | 1  | 5   | 23:11:10.800 |         | DMS:    | : *E4-DELAY | RDY, TRACK *1, *FWD, TIC 1187.12 +/- 6    | 200 | 4  | 0  | 5,852,764 | 75:0 |
| 3576 | 1  | 5   | 23:11:17.466 |         | DMS:    | : *RUNUP    | P100, TRACK 1, FWD, TIC 1187.12 +/- 6     | 200 | 4  | 0  | 5,852,764 | 85:0 |
| 3577 | 1  | 5   | 23:11:21.333 |         | DMS:    | : *AT_SPD   | P100, TRACK 1, FWD, TIC 1192.62 +/- 6     | 200 | 4  | 0  | 5,852,764 | 90:8 |
| 3578 | 1  | 5   | 23:11:21.333 |         | DMS:    | : *P_SLEW   | P100, TRACK 1, FWD, TIC *1192.62 +/- 6    | 200 | 4  | 0  | 5,852,764 | 90:8 |
| 3579 | 1  | 5   | 23:29:42.133 |         | DMS:    | : *RUNDOWN  | P100, TRACK 1, FWD, TIC *4578.87 +/- 6    | 200 | 4  | 0  | 5,852,783 | 13:0 |
| 3580 | 1  | 5   | 23:29:42.133 | 465KX6B | 6DMSC   | RDY,1       | DMS Control Tape stop                     | 200 | 4  | 0  | 5,852,783 | 13:0 |
| 3581 | 1  | 5   | 23:29:43.333 |         | DMS:    | : *READY    | RDY, TRACK 1, FWD, TIC *4579.67 +/- 6     | 200 | 4  | 0  | 5,852,783 | 14:8 |
| 3582 | 1  | 5   | 23:31:34.800 | 465KY6A | 6DMSC   | RDY,2       | DMS Control Tape stop                     | 200 | 4  | 0  | 5,852,785 | 00:0 |
| 3583 | 1  | 5   | 23:31:34.800 |         | DMS:    | : READY     | RDY, TRACK *2, *REV, TIC 4579.67 +/- 6    | 200 | 4  | 0  | 5,852,785 | 00:0 |
| 3584 | 1  | 5   | 23:34:36.800 | 176SP6A | 6TMREC  | IPB         | INITIATE PLAYBACK (PB CONTROL) Record Mod | 200 | 4  | 0  | 5,852,788 | 00:0 |
| 3585 | 1  | 6   | 01:13:10.133 | 488BF6D | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,852,885 | 43:0 |
| 3586 | 1  | 6   | 02:32:06.133 | 488BG6A | 6TMSED  | NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,852,963 | 49:0 |
| 3587 | 1  | 6   | 02:57:49.466 | 488BG6B | 6TMSED  | FILL,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,852,988 | 89:0 |
| 3588 | 1  | 6   | 03:22:22.800 | 488BG6C | 6TMSED  | NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,013 | 24:0 |
| 3589 | 1  | 6   | 07:43:34.066 | 488BG6D | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,271 | 53:0 |
| 3590 | 1  | 6   | 08:44:39.400 | 176SQ6A | 6TMREC  | PPB         | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5,853,332 | 00:0 |
| 3591 | 1  | 6   | 09:51:34.066 | 488BH6A | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,398 | 16:0 |
| 3592 | 1  | 6   | 10:16:32.066 | 488BH6B | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,422 | 79:0 |
| 3593 | 1  | 6   | 10:17:10.066 | 488BH6C | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,423 | 45:0 |
| 3594 | 1  | 6   | 10:25:42.066 | 488BH6D | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,431 | 85:0 |
| 3595 | 1  | 6   | 16:57:00.066 | 488BI6A | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,853,818 | 85:0 |
| 3596 | 1  | 6   | 16:59:05.400 | 176SR6A | 6TMREC  | RPB         | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4  | 0  | 5,853,821 | 00:0 |
| 3597 | 1  | 7   | 02:06:30.066 | 488BJ6A | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,854,362 | 36:0 |
| 3598 | 1  | 7   | 02:32:06.066 | 488BJ6B | 6TMSED  | NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,854,387 | 65:0 |
| 3599 | 1  | 7   | 07:32:54.066 | 488BJ6C | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,854,685 | 19:0 |
| 3600 | 1  | 7   | 09:43:02.066 | 488BK6A | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,854,813 | 83:0 |
| 3601 | 1  | 7   | 09:58:43.400 | 488BK6B | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,854,829 | 39:0 |
| 3602 | 1  | 7   | 09:59:18.066 | 176ST6A | 6TMREC  | TPB         | TERMINATE PLAYBACK (PB CONTROL) Record Mo | 200 | 4  | 0  | 5,854,830 | 00:0 |
| 3603 | 1  | 7   | 10:01:10.066 |         | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 4579.67 +/- 6     | 200 | 4  | 0  | 5,854,831 | 77:0 |
| 3604 | 1  | 7   | 10:01:10.066 | 465KZ6A | 6DMSC   | P7,4        | DMS Control Tape P/B 7.68kbps             | 200 | 4  | 0  | 5,854,831 | 77:0 |
| 3605 | 1  | 7   | 10:01:11.466 |         | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC *4579.79 +/- 6      | 200 | 4  | 0  | 5,854,831 | 79:0 |
| 3606 | 1  | 7   | 10:01:16.733 |         | DMS:    | : *US_RD    | P7, TRACK 1, FWD, TIC 4581.03 +/- 6       | 200 | 4  | 0  | 5,854,831 | 87:0 |
| 3607 | 1  | 7   | 10:01:17.933 |         | DMS:    | : *RUNUP    | P7, TRACK *4, *REV, TIC *4581.09 +/- 6    | 200 | 4  | 0  | 5,854,831 | 88:8 |
| 3608 | 1  | 7   | 10:01:19.333 |         | DMS:    | : *AT_SPD   | P7, TRACK 4, REV, TIC 4580.97 +/- 6       | 200 | 4  | 0  | 5,854,831 | 90:9 |
| 3609 | 1  | 7   | 10:01:19.333 |         | DMS:    | : *P_SLEW   | P7, TRACK 4, REV, TIC *4580.97 +/- 6      | 200 | 4  | 0  | 5,854,831 | 90:9 |
| 3610 | 1  | 7   | 10:02:53.400 |         | DMS:    | : *RUNDOWN  | P7, TRACK 4, REV, TIC *4558.92 +/- 6      | 200 | 4  | 0  | 5,854,833 | 50:0 |
| 3611 | 1  | 7   | 10:02:53.400 | 465KZ6B | 6DMSC   | RDY,4       | DMS Control Tape stop                     | 200 | 4  | 0  | 5,854,833 | 50:0 |
| 3612 | 1  | 7   | 10:02:54.600 |         | DMS:    | : *READY    | RDY, TRACK 4, REV, TIC *4558.86 +/- 6     | 200 | 4  | 0  | 5,854,833 | 51:8 |
| 3613 | 1  | 7   | 10:04:22.066 | 488BK6C | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,854,835 | 01:0 |
| 3614 | 1  | 7   | 10:09:58.066 |         | DMS:    | : *SLEW-TIC | P7, TRACK *2, REV, TIC 4558.86 +/- 6      | 200 | 4  | 0  | 5,854,840 | 50:0 |
| 3615 | 1  | 7   | 10:09:58.066 |         | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 4558.86 +/- 6     | 200 | 4  | 0  | 5,854,840 | 50:0 |
| 3616 | 1  | 7   | 10:09:59.466 |         | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC *4558.98 +/- 6      | 200 | 4  | 0  | 5,854,840 | 52:1 |
| 3617 | 1  | 7   | 10:10:04.733 |         | DMS:    | : *US_RD    | P7, TRACK 1, FWD, TIC *4560.22 +/- 6      | 200 | 4  | 0  | 5,854,840 | 60:0 |
| 3618 | 1  | 7   | 10:10:05.933 |         | DMS:    | : *RUNUP    | P7, TRACK *2, *REV, TIC *4560.28 +/- 6    | 200 | 4  | 0  | 5,854,840 | 61:8 |
| 3619 | 1  | 7   | 10:10:07.333 |         | DMS:    | : *AT_SPD   | P7, TRACK 2, REV, TIC *4560.16 +/- 6      | 200 | 4  | 0  | 5,854,840 | 63:9 |
| 3620 | 1  | 7   | 14:16:00.866 |         | DMS:    | : *RUNDOWN  | P7, TRACK 2, REV, TIC *1102.06 +/- 6      | 200 | 4  | 0  | 5,855,083 | 81:2 |
| 3621 | 1  | 7   | 14:16:02.066 |         | DMS:    | : *READY    | RDY, TRACK 2, REV, TIC *1102.00 +/- 6     | 200 | 4  | 0  | 5,855,083 | 83:0 |
| 3622 | 1  | 7   | 16:59:55.333 |         | DMS:    | : READY     | RDY, TRACK *4, REV, TIC 1102.00 +/- 6     | 200 | 4  | 0  | 5,855,246 | 00:0 |
| 3623 | 1  | 7   | 17:05:59.333 | 411JE6A | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,855,252 | 00:0 |
| 3624 | 1  | 7   | 17:05:59.333 |         | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 1102.00 +/- 6     | 200 | 4  | 0  | 5,855,252 | 00:0 |
| 3625 | 1  | 7   | 17:06:00.733 |         | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC *1102.12 +/- 6      | 200 | 4  | 0  | 5,855,252 | 02:1 |
| 3626 | 1  | 7   | 17:06:06.000 |         | DMS:    | : *US_RD    | P7, TRACK 1, FWD, TIC *1103.35 +/- 6      | 200 | 4  | 0  | 5,855,252 | 10:0 |
| 3627 | 1  | 7   | 17:06:07.200 |         | DMS:    | : *RUNUP    | R7, TRACK *4, *REV, TIC *1103.41 +/- 6    | 200 | 4  | 0  | 5,855,252 | 11:8 |
| 3628 | 1  | 7   | 17:06:08.600 |         | DMS:    | : *AT_SPD   | R7, TRACK 4, REV, TIC 1103.29 +/- 6       | 200 | 4  | 0  | 5,855,252 | 13:9 |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters       | Description                               | GCM | GO | GS | RIM       | MF I |
|------|----|-----|--------------|-------------|---------|------------------|---|-----|----|----|-----------|------|
| 3629 | 1  | 7   | 17:06:08.600 |             | DMS:    | : *RECORD        | R7, TRACK 4, REV, TIC *1103.29 +/- 6      | 200 | 4  | 0  | 5,855,252 | 13:9 |
| 3630 | 1  | 7   | 17:06:09.333 | 411JE6B     | 6TMREC  | BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,855,252 | 15:0 |
| 3631 | 1  | 7   | 17:08:10.666 | 411JE6C     | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,855,254 | 15:0 |
| 3632 | 1  | 7   | 17:08:13.333 | 175TG176A6A | 6TMREC  | LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,855,254 | 19:0 |
| 3633 | 1  | 7   | 17:08:14.000 | 175TG422A6A | 6DMSC   | R7.0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,855,254 | 20:0 |
| 3634 | 1  | 7   | 17:08:20.666 |             | DMS:    | : *RUNDOWN       | R7, TRACK 4, REV, TIC *1072.34 +/- 6      | 200 | 4  | 0  | 5,855,254 | 30:0 |
| 3635 | 1  | 7   | 17:08:20.666 | 175TG422A6B | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,855,254 | 30:0 |
| 3636 | 1  | 7   | 17:08:21.866 |             | DMS:    | : *READY         | RDY, TRACK 4, REV, TIC *1072.28 +/- 6     | 200 | 4  | 0  | 5,855,254 | 31:8 |
| 3637 | 1  | 7   | 19:16:54.000 | 488BL6A     | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,855,381 | 43:0 |
| 3638 | 1  | 8   | 00:30:30.000 | 488BL6B     | 6TMSED  | NORM,AL7         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,855,691 | 57:0 |
| 3639 | 1  | 8   | 05:55:46.000 | 488BM6A     | 6TMSED  | FILL,AL7         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,856,013 | 29:0 |
| 3640 | 1  | 8   | 05:56:54.000 | 488BM6B     | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,856,014 | 40:0 |
| 3641 | 1  | 8   | 13:03:08.666 |             | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 1072.28 +/- 6     | 200 | 4  | 0  | 5,856,436 | 00:0 |
| 3642 | 1  | 8   | 13:03:08.666 | 411JF6A     | 6DMSC   | R7.0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,856,436 | 00:0 |
| 3643 | 1  | 8   | 13:03:10.066 |             | DMS:    | : *US AT SP      | P7, TRACK 1, FWD, TIC *1072.40 +/- 6      | 200 | 4  | 0  | 5,856,436 | 02:1 |
| 3644 | 1  | 8   | 13:03:15.333 |             | DMS:    | : *US RD         | P7, TRACK 1, FWD, TIC *1073.64 +/- 6      | 200 | 4  | 0  | 5,856,436 | 10:0 |
| 3645 | 1  | 8   | 13:03:16.533 |             | DMS:    | : *RUNUP         | R7, TRACK *4, *REV, TIC *1073.70 +/- 6    | 200 | 4  | 0  | 5,856,436 | 11:8 |
| 3646 | 1  | 8   | 13:03:17.933 |             | DMS:    | : *AT SPD        | R7, TRACK 4, REV, TIC 1073.58 +/- 6       | 200 | 4  | 0  | 5,856,436 | 13:9 |
| 3647 | 1  | 8   | 13:03:17.933 |             | DMS:    | : *RECORD        | R7, TRACK 4, REV, TIC *1073.58 +/- 6      | 200 | 4  | 0  | 5,856,436 | 13:9 |
| 3648 | 1  | 8   | 13:03:18.666 | 411JF6B     | 6TMREC  | BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,856,436 | 15:0 |
| 3649 | 1  | 8   | 13:05:20.000 | 411JF6C     | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,856,438 | 15:0 |
| 3650 | 1  | 8   | 13:05:22.666 | 175TH176A6A | 6TMREC  | LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,856,438 | 19:0 |
| 3651 | 1  | 8   | 13:05:23.333 | 175TH422A6A | 6DMSC   | R7.0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,856,438 | 20:0 |
| 3652 | 1  | 8   | 13:05:30.000 |             | DMS:    | : *RUNDOWN       | R7, TRACK 4, REV, TIC *1042.62 +/- 6      | 200 | 4  | 0  | 5,856,438 | 30:0 |
| 3653 | 1  | 8   | 13:05:30.000 | 175TH422A6B | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,856,438 | 30:0 |
| 3654 | 1  | 8   | 13:05:31.200 |             | DMS:    | : *READY         | RDY, TRACK 4, REV, TIC *1042.56 +/- 6     | 200 | 4  | 0  | 5,856,810 | 45:0 |
| 3655 | 1  | 8   | 19:21:48.000 | 488BN6A     | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,856,884 | 53:0 |
| 3656 | 1  | 8   | 20:36:42.666 | 488BN6B     | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,856,911 | 10:0 |
| 3657 | 1  | 8   | 21:03:32.000 | 488BN6C     | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,856,968 | 85:0 |
| 3658 | 1  | 8   | 22:02:00.000 | 20UR4B      | 7SLEW   | DIS,POS:0.0      | Stator movement                           | 200 | 4  | 0  | 5,856,969 | 84:0 |
| 3659 | 1  | 8   | 22:03:00.000 | 20UR4E      | 7MODE   | SPNL             | AACS ALL-SPIN LOW                         | 200 | 4  | 0  | 5,856,971 | 82:0 |
| 3660 | 1  | 8   | 22:05:00.000 | 20UR4E      | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,856,977 | 31:0 |
| 3661 | 1  | 8   | 22:10:30.000 | 20UR4G      | 7VENT   | 0.611,1.333,8    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,977 | 32:0 |
| 3662 | 1  | 8   | 22:10:30.666 | 20UR4H      | 7VENT   | 0.611,10.989,8   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,977 | 32:0 |
| 3663 | 1  | 8   | 22:10:50.666 | 20UR4I      | 7VENT   | 0.611,1.333,6    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,977 | 62:0 |
| 3664 | 1  | 8   | 22:10:51.333 | 20UR4J      | 7VENT   | 0.611,10.989,6   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,977 | 63:0 |
| 3665 | 1  | 8   | 22:11:11.333 | 20UR4K      | 7VENT   | 0.611,1.333,4    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,978 | 02:0 |
| 3666 | 1  | 8   | 22:11:12.000 | 20UR4L      | 7VENT   | 0.611,0.666,5    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,978 | 03:0 |
| 3667 | 1  | 8   | 22:11:22.000 | 20UR4M      | 7VENT   | 0.611,1.333,4    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,978 | 18:0 |
| 3668 | 1  | 8   | 22:11:22.666 | 20UR4N      | 7VENT   | 0.611,0.666,5    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,978 | 19:0 |
| 3669 | 1  | 8   | 22:11:32.666 | 20UR4O      | 7VENT   | 1.211,1.333,10   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,978 | 34:0 |
| 3670 | 1  | 8   | 22:11:33.333 | 20UR4P      | 7VENT   | 1.211,0.666,12   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,978 | 35:0 |
| 3671 | 1  | 8   | 22:13:20.000 | 20UR4S      | 7VENT   | 0.611,1.333,7    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,980 | 13:0 |
| 3672 | 1  | 8   | 22:13:20.666 | 20UR4T      | 7VENT   | 0.611,10.989,7   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,980 | 14:0 |
| 3673 | 1  | 8   | 22:13:40.666 | 20UR4U      | 7VENT   | 0.611,1.333,1    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,980 | 44:0 |
| 3674 | 1  | 8   | 22:13:41.333 | 20UR4V      | 7VENT   | 0.611,10.989,1   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,980 | 45:0 |
| 3675 | 1  | 8   | 22:14:01.333 | 20UR4AC     | 7VENT   | 0.611,1.333,2    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,980 | 75:0 |
| 3676 | 1  | 8   | 22:14:02.000 | 20UR4AD     | 7VENT   | 0.611,0.666,3    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,980 | 76:0 |
| 3677 | 1  | 8   | 22:14:12.000 | 20UR4AE     | 7VENT   | 0.611,1.333,2    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,981 | 00:0 |
| 3678 | 1  | 8   | 22:14:12.666 | 20UR4AF     | 7VENT   | 0.611,0.666,3    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,981 | 01:0 |
| 3679 | 1  | 8   | 22:14:22.666 | 20UR4AW     | 7VENT   | 1.211,1.333,9    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,981 | 16:0 |
| 3680 | 1  | 8   | 22:14:23.333 | 20UR4X      | 7VENT   | 1.211,0.666,11   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,856,981 | 17:0 |
| 3681 | 1  | 8   | 22:15:20.000 | 20UR4Z      | 7MODE   | CRU              | AACS CRUISE MODE                          | 200 | 4  | 0  | 5,856,982 | 11:0 |
| 3682 | 1  | 8   | 22:34:59.333 | 432OK431A6A | 6RCDSL  | DDSNCG,PLSNCG,EP | Record Deselect (DDS o                    | 200 | 4  | 0  | 5,857,001 | 51:0 |
| 3683 | 1  | 8   | 22:35:00.000 | 432OK6A     | 6RTSL1  |                  | R/T Select of DDS and                     | 200 | 4  | 0  | 5,857,001 | 52:0 |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|-------------|--------------------|---|-----|----|----|----------------|-----|
| 3684 | 1  | 8   | 22:40:04.000 | 20UC4A      | 7SAFE STOP         | S/P NO MOVEMENT                           | 200 | 4  | 0  | 5,857,006:53:0 |     |
| 3685 | 1  | 8   | 22:40:54.000 | 20UC4B      | 7SLEW DIS,POS,0.0  | Stator movement                           | 200 | 4  | 0  | 5,857,007:37:0 |     |
| 3686 | 1  | 9   | 00:41:10.000 | 488BN6D     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,126:32:0 |     |
| 3687 | 1  | 9   | 01:48:06.666 | 488BO6A     | 6TMSED FILL,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,192:51:0 |     |
| 3688 | 1  | 9   | 02:12:40.000 | 488BO6B     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,216:77:0 |     |
| 3689 | 1  | 9   | 07:11:33.933 | 488BO6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,512:42:0 |     |
| 3690 | 1  | 9   | 08:14:39.266 | 488BP6A     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,574:78:0 |     |
| 3691 | 1  | 9   | 08:17:41.933 | 488BP6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,577:79:0 |     |
| 3692 | 1  | 9   | 14:07:36.600 | 488BP6C     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,923:85:0 |     |
| 3693 | 1  | 9   | 14:50:13.933 | 488BQ6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,857,966:08:0 |     |
| 3694 | 1  | 9   | 01:47:17.933 | 488BR6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,858,615:85:0 |     |
| 3695 | 1  | 10  | 02:21:25.933 | 488BR6B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,858,649:63:0 |     |
| 3696 | 1  | 10  | 03:36:50.600 | 488BR6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,858,724:25:0 |     |
| 3697 | 1  | 10  | 04:03:39.933 | 488BR6D     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,858,750:73:0 |     |
| 3698 | 1  | 10  | 08:47:33.933 | 488BS6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,859,031:53:0 |     |
| 3699 | 1  | 10  | 09:23:25.266 | 488BS6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,859,067:04:0 |     |
| 3700 | 1  | 10  | 09:30:13.933 | 488BS6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,859,073:71:0 |     |
| 3701 | 1  | 10  | 16:31:04.533 | 411JG6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,859,490:00:0 |     |
| 3702 | 1  | 10  | 16:31:04.533 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 1042.56 +/- 6     | 200 | 4  | 0  | 5,859,490:00:0 |     |
| 3703 | 1  | 10  | 16:31:05.933 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *1042.68 +/- 6      | 200 | 4  | 0  | 5,859,490:02:1 |     |
| 3704 | 1  | 10  | 16:31:11.200 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *1043.92 +/- 6      | 200 | 4  | 0  | 5,859,490:10:0 |     |
| 3705 | 1  | 10  | 16:31:12.400 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC *1043.98 +/- 6    | 200 | 4  | 0  | 5,859,490:11:8 |     |
| 3706 | 1  | 10  | 16:31:13.800 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC *1043.86 +/- 6      | 200 | 4  | 0  | 5,859,490:13:9 |     |
| 3707 | 1  | 10  | 16:31:13.800 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC 1043.86 +/- 6       | 200 | 4  | 0  | 5,859,490:13:9 |     |
| 3708 | 1  | 10  | 16:31:14.533 | 411JG6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,859,490:15:0 |     |
| 3709 | 1  | 10  | 16:33:15.866 | 411JG6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,859,492:15:0 |     |
| 3710 | 1  | 10  | 16:33:18.533 | 175T1176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,859,492:19:0 |     |
| 3711 | 1  | 10  | 16:33:19.200 | 175T1422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,859,492:20:0 |     |
| 3712 | 1  | 10  | 16:33:25.866 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC *1012.90 +/- 6      | 200 | 4  | 0  | 5,859,492:30:0 |     |
| 3713 | 1  | 10  | 16:33:25.866 | 175T1422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,859,492:30:0 |     |
| 3714 | 1  | 10  | 16:33:27.066 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC *1012.84 +/- 6     | 200 | 4  | 0  | 5,859,492:31:8 |     |
| 3715 | 1  | 10  | 21:01:35.200 | 488BT6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,859,757:49:0 |     |
| 3716 | 1  | 11  | 01:43:01.866 | 488BT6B     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,860,035:81:0 |     |
| 3717 | 1  | 11  | 02:12:53.866 | 488BT6C     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,860,065:39:0 |     |
| 3718 | 1  | 11  | 06:56:37.866 | 488BU6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,860,346:04:0 |     |
| 3719 | 1  | 11  | 08:24:42.533 | 488BU6B     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,860,433:14:0 |     |
| 3720 | 1  | 11  | 15:32:15.200 | 411JH6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,860,856:00:0 |     |
| 3721 | 1  | 11  | 15:32:15.200 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 1012.84 +/- 6     | 200 | 4  | 0  | 5,860,856:00:0 |     |
| 3722 | 1  | 11  | 15:32:16.600 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *1012.96 +/- 6      | 200 | 4  | 0  | 5,860,856:02:1 |     |
| 3723 | 1  | 11  | 15:32:21.866 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *1014.20 +/- 6      | 200 | 4  | 0  | 5,860,856:10:0 |     |
| 3724 | 1  | 11  | 15:32:23.066 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC *1014.26 +/- 6    | 200 | 4  | 0  | 5,860,856:11:8 |     |
| 3725 | 1  | 11  | 15:32:24.466 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC 1014.14 +/- 6       | 200 | 4  | 0  | 5,860,856:13:9 |     |
| 3726 | 1  | 11  | 15:32:24.466 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC *1014.14 +/- 6      | 200 | 4  | 0  | 5,860,856:13:9 |     |
| 3727 | 1  | 11  | 15:32:25.200 | 411JH6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,860,856:15:0 |     |
| 3728 | 1  | 11  | 15:34:26.533 | 411JH6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,860,858:15:0 |     |
| 3729 | 1  | 11  | 15:34:29.200 | 175T1176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,860,858:19:0 |     |
| 3730 | 1  | 11  | 15:34:29.866 | 175TJ422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,860,858:20:0 |     |
| 3731 | 1  | 11  | 15:34:36.533 | 175TJ422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,860,858:30:0 |     |
| 3732 | 1  | 11  | 15:34:36.533 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 983.18 +/- 6      | 200 | 4  | 0  | 5,860,858:30:0 |     |
| 3733 | 1  | 11  | 15:34:37.733 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 983.13 +/- 6     | 200 | 4  | 0  | 5,860,858:31:8 |     |
| 3734 | 1  | 11  | 16:56:30.533 | 488BV6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,860,939:30:0 |     |
| 3735 | 1  | 11  | 18:12:00.533 | 488BV6B     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,014:00:0 |     |
| 3736 | 1  | 11  | 18:38:50.533 | 488BV6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,040:49:0 |     |
| 3737 | 1  | 12  | 00:39:01.800 | 488BW6A     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,396:70:0 |     |
| 3738 | 1  | 12  | 01:58:25.800 | 488BW6B     | 6TMSED FILL,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,475:27:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|--------------------|---|-----|----|----|----------------|------|
| 3739 | 1  | 12  | 02:22:59.133 | 488BW6C     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,499:53:0 |      |
| 3740 | 1  | 12  | 06:41:41.800 | 488BX6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,755:41:0 |      |
| 3741 | 1  | 12  | 09:17:25.800 | 488BX6B     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,909:43:0 |      |
| 3742 | 1  | 12  | 09:33:12.466 | 488BX6C     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,925:07:0 |      |
| 3743 | 1  | 12  | 09:38:45.800 | 488BX6D     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,861,930:52:0 |      |
| 3744 | 1  | 12  | 16:40:49.800 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 983.13 +/- 6      | 200 | 4  | 0  | 5,862,348:00:0 |      |
| 3745 | 1  | 12  | 16:40:49.800 | 411J16A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,862,348:00:0 |      |
| 3746 | 1  | 12  | 16:40:51.200 |             | DMS: : *US AT_SP   | P7, TRACK 1, FWD, TIC * 983.24 +/- 6      | 200 | 4  | 0  | 5,862,348:02:1 |      |
| 3747 | 1  | 12  | 16:40:56.466 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 984.48 +/- 6      | 200 | 4  | 0  | 5,862,348:10:0 |      |
| 3748 | 1  | 12  | 16:40:57.666 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 984.54 +/- 6    | 200 | 4  | 0  | 5,862,348:11:8 |      |
| 3749 | 1  | 12  | 16:40:59.066 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 984.42 +/- 6      | 200 | 4  | 0  | 5,862,348:13:9 |      |
| 3750 | 1  | 12  | 16:40:59.066 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC 984.42 +/- 6        | 200 | 4  | 0  | 5,862,348:13:9 |      |
| 3751 | 1  | 12  | 16:40:59.800 | 411J16B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,862,348:15:0 |      |
| 3752 | 1  | 12  | 16:43:01.133 | 411J16C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,862,350:15:0 |      |
| 3753 | 1  | 12  | 16:43:03.800 | 175TK176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,862,350:19:0 |      |
| 3754 | 1  | 12  | 16:43:04.466 | 175TK422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,862,350:20:0 |      |
| 3755 | 1  | 12  | 16:43:11.133 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 953.47 +/- 6      | 200 | 4  | 0  | 5,862,350:30:0 |      |
| 3756 | 1  | 12  | 16:43:11.133 | 175TK422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,862,350:30:0 |      |
| 3757 | 1  | 12  | 16:43:12.333 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 953.41 +/- 6     | 200 | 4  | 0  | 5,862,350:31:8 |      |
| 3758 | 1  | 12  | 16:56:23.133 | 488BY6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,862,363:35:0 |      |
| 3759 | 1  | 12  | 17:03:53.133 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 953.41 +/- 6      | 200 | 4  | 0  | 5,862,370:73:0 |      |
| 3760 | 1  | 12  | 17:03:53.133 | 465KT6A     | 6DMSC P100.4       | DMS Control Tape P/B 100.8kpbs            | 200 | 4  | 0  | 5,862,370:73:0 |      |
| 3761 | 1  | 12  | 17:03:54.533 |             | DMS: : *US AT_SP   | P7, TRACK 1, FWD, TIC * 953.53 +/- 6      | 200 | 4  | 0  | 5,862,370:75:1 |      |
| 3762 | 1  | 12  | 17:03:59.800 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 954.76 +/- 6      | 200 | 4  | 0  | 5,862,370:83:0 |      |
| 3763 | 1  | 12  | 17:04:01.000 |             | DMS: : *RUNUP      | P100, TRACK *4, *REV, TIC * 954.82 +/- 6  | 200 | 4  | 0  | 5,862,370:84:8 |      |
| 3764 | 1  | 12  | 17:04:04.866 |             | DMS: : *AT_SPD     | P100, TRACK 4, REV, TIC 949.32 +/- 7      | 200 | 4  | 0  | 5,862,370:90:6 |      |
| 3765 | 1  | 12  | 17:04:04.866 |             | DMS: : *P_SLEW     | P100, TRACK 4, REV, TIC * 949.32 +/- 6    | 200 | 4  | 0  | 5,862,370:90:6 |      |
| 3766 | 1  | 12  | 17:07:31.800 | 465KT6B     | 6DMSC RDY,4        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,862,374:37:0 |      |
| 3767 | 1  | 12  | 17:07:31.800 |             | DMS: : *RUNDOWN    | P100, TRACK 4, REV, TIC * 312.76 +/- 7    | 200 | 4  | 0  | 5,862,374:37:0 |      |
| 3768 | 1  | 12  | 17:07:33.000 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 311.96 +/- 7     | 200 | 4  | 0  | 5,862,374:38:8 |      |
| 3769 | 1  | 12  | 17:09:08.466 | 465KU6A     | 6DMSC RDY,3        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,862,376:00:0 |      |
| 3770 | 1  | 12  | 17:09:08.466 |             | DMS: : READY       | RDY, TRACK *3, *FWD, TIC 311.96 +/- 7     | 200 | 4  | 0  | 5,862,376:00:0 |      |
| 3771 | 1  | 12  | 17:13:03.800 | 20WP4A      | 7SAFE STOP         | S/P NO MOVEMENT                           | 200 | 4  | 0  | 5,862,379:80:0 |      |
| 3772 | 1  | 12  | 17:13:53.800 | 20WP4B      | 7SLEW DIS,POS,0.0  | Stator movement                           | 200 | 4  | 0  | 5,862,380:64:0 |      |
| 3773 | 1  | 12  | 17:15:12.466 | 176WP6A     | 6TMREC IPB         | INITIATE PLAYBACK (PB CONTROL) Record Mod | 200 | 4  | 0  | 5,862,382:00:0 |      |
| 3774 | 1  | 13  | 01:32:21.800 | 488BZ6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,862,873:63:0 |      |
| 3775 | 1  | 13  | 02:13:07.800 | 488BZ6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,862,914:01:0 |      |
| 3776 | 1  | 13  | 02:22:14.466 | 488BZ6C     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,862,923:02:0 |      |
| 3777 | 1  | 13  | 02:34:13.800 | 488BZ6D     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,862,934:80:0 |      |
| 3778 | 1  | 13  | 03:37:09.800 | 488BZ6E     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,862,997:11:0 |      |
| 3779 | 1  | 13  | 04:03:59.133 | 488CA6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,863,023:59:0 |      |
| 3780 | 1  | 13  | 07:29:35.800 | 176WT6A     | 6TMREC TPB         | TERMINATE PLAYBACK (PB CONTROL) Record Mo | 200 | 4  | 0  | 5,863,227:00:0 |      |
| 3781 | 1  | 13  | 07:34:39.133 | 465KV6A     | 6DMST              | 918 DMS Slew to TIC                       | 200 | 4  | 0  | 5,863,232:00:0 |      |
| 3782 | 1  | 13  | 07:34:39.133 |             | DMS: : *SLEW-TIC   | P7, TRACK *1, FWD, TIC 311.96 +/- 7       | 200 | 4  | 0  | 5,863,232:00:0 |      |
| 3783 | 1  | 13  | 07:34:39.133 |             | DMS: : *E4-DELAY   | RDY, TRACK 1, FWD, TIC 311.96 +/- 7       | 200 | 4  | 0  | 5,863,232:00:0 |      |
| 3784 | 1  | 13  | 07:34:45.800 |             | DMS: : *RUNUP      | P7, TRACK 1, FWD, TIC 311.96 +/- 7        | 200 | 4  | 0  | 5,863,232:10:0 |      |
| 3785 | 1  | 13  | 07:34:47.200 |             | DMS: : *AT_SPD     | P7, TRACK 1, FWD, TIC * 312.08 +/- 7      | 200 | 4  | 0  | 5,863,232:12:1 |      |
| 3786 | 1  | 13  | 08:17:42.600 |             | DMS: : *RUNDOWN    | P7, TRACK 1, FWD, TIC * 915.94 +/- 7      | 200 | 4  | 0  | 5,863,274:53:2 |      |
| 3787 | 1  | 13  | 08:17:43.800 |             | DMS: : *READY      | RDY, TRACK 1, FWD, TIC * 916.00 +/- 7     | 200 | 4  | 0  | 5,863,274:55:0 |      |
| 3788 | 1  | 13  | 08:26:13.800 | 488CA6B     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,863,283:01:0 |      |
| 3789 | 1  | 13  | 09:31:07.066 | 488CA6C     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,863,347:17:0 |      |
| 3790 | 1  | 13  | 09:32:21.733 | 488CA6D     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,863,348:38:0 |      |
| 3791 | 1  | 13  | 09:40:53.733 | 488CA6E     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,863,356:78:0 |      |
| 3792 | 1  | 13  | 14:34:15.733 | 465KW6A     | 6DMSC RDY,4        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,863,647:00:0 |      |
| 3793 | 1  | 13  | 14:34:15.733 |             | DMS: : READY       | RDY, TRACK *4, *REV, TIC 916.00 +/- 7     | 200 | 4  | 0  | 5,863,647:00:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|--------------------|---|-----|----|----|----------------|------|
| 3794 | 1  | 13  | 16:38:37.733 | 411J6A      | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5.863,770:00:0 |      |
| 3795 | 1  | 13  | 16:38:37.733 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 916.00 +/- 7      | 200 | 4  | 0  | 5.863,770:00:0 |      |
| 3796 | 1  | 13  | 16:38:39.133 |             | DMS: : *US AT_SP   | P7, TRACK 1, FWD, TIC * 916.12 +/- 7      | 200 | 4  | 0  | 5.863,770:02:1 |      |
| 3797 | 1  | 13  | 16:38:44.400 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 917.35 +/- 7      | 200 | 4  | 0  | 5.863,770:10:0 |      |
| 3798 | 1  | 13  | 16:38:45.600 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 917.41 +/- 7    | 200 | 4  | 0  | 5.863,770:11:8 |      |
| 3799 | 1  | 13  | 16:38:47.000 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 917.29 +/- 7      | 200 | 4  | 0  | 5.863,770:13:9 |      |
| 3800 | 1  | 13  | 16:38:47.000 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC 917.29 +/- 7        | 200 | 4  | 0  | 5.863,770:13:9 |      |
| 3801 | 1  | 13  | 16:38:47.733 | 411J6B      | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5.863,770:15:0 |      |
| 3802 | 1  | 13  | 16:40:49.066 | 411J6C      | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5.863,772:15:0 |      |
| 3803 | 1  | 13  | 16:40:51.733 | 175TL176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5.863,772:19:0 |      |
| 3804 | 1  | 13  | 16:40:52.400 | 175TL422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5.863,772:20:0 |      |
| 3805 | 1  | 13  | 16:40:59.066 | 175TL422A6B | 6DMSC R7,0         | DMS Control Tape stop                     | 200 | 4  | 0  | 5.863,772:30:0 |      |
| 3806 | 1  | 13  | 16:40:59.066 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 886.34 +/- 7      | 200 | 4  | 0  | 5.863,772:30:0 |      |
| 3807 | 1  | 13  | 16:41:00.266 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 886.28 +/- 7     | 200 | 4  | 0  | 5.863,772:31:8 |      |
| 3808 | 1  | 13  | 18:26:16.400 | 488CB6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.863,876:42:0 |      |
| 3809 | 1  | 14  | 01:25:57.733 | 488CC6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,291:49:0 |      |
| 3810 | 1  | 14  | 02:03:00.400 | 488CC6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,328:16:0 |      |
| 3811 | 1  | 14  | 02:12:07.733 | 488CC6C     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,337:18:0 |      |
| 3812 | 1  | 14  | 02:25:41.733 | 488CC6D     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,350:56:0 |      |
| 3813 | 1  | 14  | 06:22:29.733 | 488CC6E     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,584:74:0 |      |
| 3814 | 1  | 14  | 09:06:45.733 | 488CD6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,747:25:0 |      |
| 3815 | 1  | 14  | 09:27:59.733 | 488CD6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,768:25:0 |      |
| 3816 | 1  | 14  | 09:34:29.733 | 488CD6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.864,774:64:0 |      |
| 3817 | 1  | 14  | 16:35:25.066 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 886.28 +/- 7      | 200 | 4  | 0  | 5.865,191:00:0 |      |
| 3818 | 1  | 14  | 16:35:25.066 | 411JK6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5.865,191:00:0 |      |
| 3819 | 1  | 14  | 16:35:26.466 |             | DMS: : *US AT_SP   | P7, TRACK 1, FWD, TIC * 886.40 +/- 7      | 200 | 4  | 0  | 5.865,191:02:1 |      |
| 3820 | 1  | 14  | 16:35:31.733 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 887.64 +/- 7      | 200 | 4  | 0  | 5.865,191:10:0 |      |
| 3821 | 1  | 14  | 16:35:32.933 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 887.70 +/- 7    | 200 | 4  | 0  | 5.865,191:11:8 |      |
| 3822 | 1  | 14  | 16:35:34.333 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 887.58 +/- 7      | 200 | 4  | 0  | 5.865,191:13:9 |      |
| 3823 | 1  | 14  | 16:35:34.333 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC 887.58 +/- 7        | 200 | 4  | 0  | 5.865,191:13:9 |      |
| 3824 | 1  | 14  | 16:35:35.066 | 411JK6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5.865,191:15:0 |      |
| 3825 | 1  | 14  | 16:37:36.400 | 411JK6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5.865,193:15:0 |      |
| 3826 | 1  | 14  | 16:37:39.066 | 175TM176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5.865,193:19:0 |      |
| 3827 | 1  | 14  | 16:37:39.733 | 175TM422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5.865,193:20:0 |      |
| 3828 | 1  | 14  | 16:37:46.400 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 856.62 +/- 7      | 200 | 4  | 0  | 5.865,193:30:0 |      |
| 3829 | 1  | 14  | 16:37:46.400 | 175TM422A6B | 6DMSC R7,0         | DMS Control Tape stop                     | 200 | 4  | 0  | 5.865,193:30:0 |      |
| 3830 | 1  | 14  | 16:37:47.600 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 856.56 +/- 7     | 200 | 4  | 0  | 5.865,193:31:8 |      |
| 3831 | 1  | 14  | 19:16:09.000 | 488CE6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.865,349:88:0 |      |
| 3832 | 1  | 15  | 00:04:17.666 | 488CE6B     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.865,634:86:0 |      |
| 3833 | 1  | 15  | 00:11:08.333 | 488CE6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.865,641:65:0 |      |
| 3834 | 1  | 15  | 00:45:25.666 | 488CE6D     | 6TMSED NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.865,675:57:0 |      |
| 3835 | 1  | 15  | 06:07:33.666 | 488CF6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.865,994:20:0 |      |
| 3836 | 1  | 15  | 07:43:40.333 | 488CF6B     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.866,089:25:0 |      |
| 3837 | 1  | 15  | 07:45:41.666 | 488CF6C     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.866,091:25:0 |      |
| 3838 | 1  | 15  | 14:06:57.666 | 488CG6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.866,468:32:0 |      |
| 3839 | 1  | 15  | 14:51:05.666 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 856.56 +/- 7      | 200 | 4  | 0  | 5.866,512:00:0 |      |
| 3840 | 1  | 15  | 14:51:05.666 | 411JL6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5.866,512:00:0 |      |
| 3841 | 1  | 15  | 14:51:07.066 |             | DMS: : *US AT_SP   | P7, TRACK 1, FWD, TIC * 856.68 +/- 7      | 200 | 4  | 0  | 5.866,512:02:1 |      |
| 3842 | 1  | 15  | 14:51:12.333 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 857.92 +/- 7      | 200 | 4  | 0  | 5.866,512:10:0 |      |
| 3843 | 1  | 15  | 14:51:13.533 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 857.98 +/- 7    | 200 | 4  | 0  | 5.866,512:11:8 |      |
| 3844 | 1  | 15  | 14:51:14.933 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC 857.86 +/- 7        | 200 | 4  | 0  | 5.866,512:13:9 |      |
| 3845 | 1  | 15  | 14:51:14.933 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 857.86 +/- 7      | 200 | 4  | 0  | 5.866,512:13:9 |      |
| 3846 | 1  | 15  | 14:51:15.666 | 411JL6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5.866,512:15:0 |      |
| 3847 | 1  | 15  | 14:53:17.000 | 411JL6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5.866,514:15:0 |      |
| 3848 | 1  | 15  | 14:53:19.666 | 175TN176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5.866,514:19:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters      | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|-------------------------|---|-----|----|----|----------------|------|
| 3849 | 1  | 15  | 14:53:20.333 | 175TN422A6A | 6DMSC R7,0              | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,866,514:20:0 |      |
| 3850 | 1  | 15  | 14:53:27.000 | 175TN422A6B | 6DMSC RDY,0             | DMS Control Tape stop                     | 200 | 4  | 0  | 5,866,514:30:0 |      |
| 3851 | 1  | 15  | 14:53:27.000 |             | DMS: <b>: *RUNDOWN</b>  | R7, TRACK 4, REV, TIC * 826.90 +/- 7      | 200 | 4  | 0  | 5,866,514:30:0 |      |
| 3852 | 1  | 15  | 14:53:28.200 |             | DMS: <b>: *READY</b>    | RDY, TRACK 4, REV, TIC * 826.84 +/- 7     | 200 | 4  | 0  | 5,866,514:31:8 |      |
| 3853 | 1  | 15  | 15:21:03.666 | 488CG6B     | 6TMSED FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,866,570:38:0 |      |
| 3854 | 1  | 15  | 15:50:09.666 | 488CG6C     | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,866,570:38:0 |      |
| 3855 | 1  | 15  | 15:54:13.666 | 488CG6D     | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,866,574:40:0 |      |
| 3856 | 1  | 15  | 23:52:05.666 | 488CH6A     | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,047:05:0 |      |
| 3857 | 1  | 16  | 00:26:13.666 | 488CH6B     | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,080:74:0 |      |
| 3858 | 1  | 16  | 00:49:41.666 | 488CH6C     | 6TMSED NORM,AL7         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,104:02:0 |      |
| 3859 | 1  | 16  | 01:48:53.000 | 488CH6D     | 6TMSED FILL,AL7         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,162:51:0 |      |
| 3860 | 1  | 16  | 02:13:25.666 | 488CH6E     | 6TMSED NORM,AL7         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,186:76:0 |      |
| 3861 | 1  | 16  | 05:52:37.600 | 488C6A      | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,403:57:0 |      |
| 3862 | 1  | 16  | 08:56:05.600 | 488C6B      | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,585:07:0 |      |
| 3863 | 1  | 16  | 09:12:45.600 | 488C6C      | 6TMSED FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,601:51:0 |      |
| 3864 | 1  | 16  | 09:19:33.600 | 488C6D      | 6TMSED FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,867,608:26:0 |      |
| 3865 | 1  | 16  | 16:19:53.600 |             | DMS: <b>: *US-RUNUP</b> | P7, TRACK *1, *FWD, TIC 826.84 +/- 7      | 200 | 4  | 0  | 5,868,024:00:0 |      |
| 3866 | 1  | 16  | 16:19:53.600 | 411JM6A     | 6DMSC R7,0              | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,868,024:00:0 |      |
| 3867 | 1  | 16  | 16:19:55.000 |             | DMS: <b>: *US_AT_SP</b> | P7, TRACK 1, FWD, TIC * 826.96 +/- 7      | 200 | 4  | 0  | 5,868,024:02:1 |      |
| 3868 | 1  | 16  | 16:20:00.266 |             | DMS: <b>: *US_RD</b>    | P7, TRACK 1, FWD, TIC * 828.20 +/- 7      | 200 | 4  | 0  | 5,868,024:10:0 |      |
| 3869 | 1  | 16  | 16:20:01.466 |             | DMS: <b>: *RUNUP</b>    | P7, TRACK *4, *REV, TIC * 828.26 +/- 7    | 200 | 4  | 0  | 5,868,024:11:8 |      |
| 3870 | 1  | 16  | 16:20:02.866 |             | DMS: <b>: *AT_SPD</b>   | R7, TRACK 4, REV, TIC 828.14 +/- 7        | 200 | 4  | 0  | 5,868,024:13:9 |      |
| 3871 | 1  | 16  | 16:20:02.866 |             | DMS: <b>: *RECORD</b>   | R7, TRACK 4, REV, TIC * 828.14 +/- 7      | 200 | 4  | 0  | 5,868,024:13:9 |      |
| 3872 | 1  | 16  | 16:20:03.600 | 411JM6B     | 6TMREC BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,868,024:15:0 |      |
| 3873 | 1  | 16  | 16:22:04.933 | 411JM6C     | 6TMREC NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,868,026:15:0 |      |
| 3874 | 1  | 16  | 16:22:07.600 | 175TO176A6A | 6TMREC LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,868,026:19:0 |      |
| 3875 | 1  | 16  | 16:22:08.266 | 175TO422A6A | 6DMSC R7,0              | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,868,026:20:0 |      |
| 3876 | 1  | 16  | 16:22:14.933 | 175TO422A6B | 6DMSC RDY,0             | DMS Control Tape stop                     | 200 | 4  | 0  | 5,868,026:30:0 |      |
| 3877 | 1  | 16  | 16:22:14.933 |             | DMS: <b>: *RUNDOWN</b>  | R7, TRACK 4, REV, TIC * 797.18 +/- 7      | 200 | 4  | 0  | 5,868,026:30:0 |      |
| 3878 | 1  | 16  | 16:22:16.133 |             | DMS: <b>: *READY</b>    | RDY, TRACK 4, REV, TIC * 797.13 +/- 7     | 200 | 4  | 0  | 5,868,026:31:8 |      |
| 3879 | 1  | 16  | 19:10:56.266 | 488CJ6A     | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,868,193:15:0 |      |
| 3880 | 1  | 17  | 01:06:45.600 | 488CJ6B     | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,868,545:07:0 |      |
| 3881 | 1  | 17  | 01:40:53.600 | 488CK6A     | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,868,578:76:0 |      |
| 3882 | 1  | 17  | 02:57:36.933 | 488CK6B     | 6TMSED FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,868,654:65:0 |      |
| 3883 | 1  | 17  | 03:24:26.266 | 488CK6C     | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,868,681:22:0 |      |
| 3884 | 1  | 17  | 07:56:21.600 | 488CL6A     | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,868,950:16:0 |      |
| 3885 | 1  | 17  | 09:10:22.933 | 488CL6B     | 6TMSED FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,869,023:35:0 |      |
| 3886 | 1  | 17  | 09:11:01.600 | 488CL6C     | 6TMSED FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,869,024:02:0 |      |
| 3887 | 1  | 17  | 09:19:33.600 | 488CL6D     | 6TMSED FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,869,032:42:0 |      |
| 3888 | 1  | 17  | 16:17:41.533 |             | DMS: <b>: *US-RUNUP</b> | P7, TRACK *1, *FWD, TIC 797.13 +/- 7      | 200 | 4  | 0  | 5,869,446:00:0 |      |
| 3889 | 1  | 17  | 16:17:41.533 | 411JN6A     | 6DMSC R7,0              | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,869,446:00:0 |      |
| 3890 | 1  | 17  | 16:17:42.933 |             | DMS: <b>: *US_AT_SP</b> | P7, TRACK 1, FWD, TIC * 797.24 +/- 7      | 200 | 4  | 0  | 5,869,446:02:1 |      |
| 3891 | 1  | 17  | 16:17:48.200 |             | DMS: <b>: *US_RD</b>    | P7, TRACK 1, FWD, TIC * 798.48 +/- 7      | 200 | 4  | 0  | 5,869,446:10:0 |      |
| 3892 | 1  | 17  | 16:17:49.400 |             | DMS: <b>: *RUNUP</b>    | R7, TRACK *4, *REV, TIC * 798.54 +/- 7    | 200 | 4  | 0  | 5,869,446:11:8 |      |
| 3893 | 1  | 17  | 16:17:50.800 |             | DMS: <b>: *AT_SPD</b>   | R7, TRACK 4, REV, TIC 798.42 +/- 7        | 200 | 4  | 0  | 5,869,446:13:9 |      |
| 3894 | 1  | 17  | 16:17:50.800 |             | DMS: <b>: *RECORD</b>   | R7, TRACK 4, REV, TIC * 798.42 +/- 7      | 200 | 4  | 0  | 5,869,446:13:9 |      |
| 3895 | 1  | 17  | 16:17:51.533 | 411JN6B     | 6TMREC BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,869,446:15:0 |      |
| 3896 | 1  | 17  | 16:19:52.866 | 411JN6C     | 6TMREC NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,869,448:15:0 |      |
| 3897 | 1  | 17  | 16:19:55.533 | 175TP176A6A | 6TMREC LPW              | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,869,448:19:0 |      |
| 3898 | 1  | 17  | 16:19:56.200 | 175TP422A6A | 6DMSC R7,0              | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,869,448:20:0 |      |
| 3899 | 1  | 17  | 16:20:02.866 |             | DMS: <b>: *RUNDOWN</b>  | R7, TRACK 4, REV, TIC * 767.47 +/- 7      | 200 | 4  | 0  | 5,869,448:30:0 |      |
| 3900 | 1  | 17  | 16:20:02.866 | 175TP422A6B | 6DMSC RDY,0             | DMS Control Tape stop                     | 200 | 4  | 0  | 5,869,448:30:0 |      |
| 3901 | 1  | 17  | 16:20:04.066 |             | DMS: <b>: *READY</b>    | RDY, TRACK 4, REV, TIC * 767.41 +/- 7     | 200 | 4  | 0  | 5,869,448:31:8 |      |
| 3902 | 1  | 17  | 19:05:49.533 | 488CM6A     | 6TMSED NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,869,612:26:0 |      |
| 3903 | 1  | 18  | 01:00:21.533 | 488CM6B     | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,869,962:84:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters  | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|-------------|---------|-------------|---|-----|----|----|----------------|-----|
| 3904 | 1  | 18  | 01:45:09.533 | 488CN6A     | 6TMSED  | NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,007:21:0 |     |
| 3905 | 1  | 18  | 05:12:05.533 | 488CN6B     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,211:81:0 |     |
| 3906 | 1  | 18  | 08:45:25.533 | 488CO6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,422:80:0 |     |
| 3907 | 1  | 18  | 09:12:31.533 | 488CO6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,449:62:0 |     |
| 3908 | 1  | 18  | 09:19:33.533 | 488CO6C     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,456:58:0 |     |
| 3909 | 1  | 18  | 16:19:32.200 | 411JO6A     | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,870,872:00:0 |     |
| 3910 | 1  | 18  | 16:19:32.200 |             | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 767.41 +/- 7      | 200 | 4  | 0  | 5,870,872:00:0 |     |
| 3911 | 1  | 18  | 16:19:33.600 |             | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC *767.53 +/- 7       | 200 | 4  | 0  | 5,870,872:02:1 |     |
| 3912 | 1  | 18  | 16:19:38.866 |             | DMS:    | : *US RD    | P7, TRACK 1, FWD, TIC *768.76 +/- 7       | 200 | 4  | 0  | 5,870,872:10:0 |     |
| 3913 | 1  | 18  | 16:19:40.066 |             | DMS:    | : *RUNUP    | R7, TRACK *4, *REV, TIC *768.82 +/- 7     | 200 | 4  | 0  | 5,870,872:11:8 |     |
| 3914 | 1  | 18  | 16:19:41.466 |             | DMS:    | : *AT SPD   | R7, TRACK 4, REV, TIC 768.70 +/- 7        | 200 | 4  | 0  | 5,870,872:13:9 |     |
| 3915 | 1  | 18  | 16:19:41.466 |             | DMS:    | : *RECORD   | R7, TRACK 4, REV, TIC *768.70 +/- 7       | 200 | 4  | 0  | 5,870,872:13:9 |     |
| 3916 | 1  | 18  | 16:19:42.200 | 411JO6B     | 6TMREC  | BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,870,872:15:0 |     |
| 3917 | 1  | 18  | 16:21:43.533 | 411JO6C     | 6TMREC  | NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,870,874:15:0 |     |
| 3918 | 1  | 18  | 16:21:46.200 | 175TQ176A6A | 6TMREC  | LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,870,874:19:0 |     |
| 3919 | 1  | 18  | 16:21:46.866 | 175TQ422A6A | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,870,874:20:0 |     |
| 3920 | 1  | 18  | 16:21:53.533 |             | DMS:    | : *RUNDOWN  | R7, TRACK 4, REV, TIC *737.75 +/- 7       | 200 | 4  | 0  | 5,870,874:30:0 |     |
| 3921 | 1  | 18  | 16:21:53.533 | 175TQ422A6B | 6DMSC   | RDY,0       | DMS Control Tape stop                     | 200 | 4  | 0  | 5,870,874:30:0 |     |
| 3922 | 1  | 18  | 16:21:54.733 |             | DMS:    | : *READY    | RDY, TRACK 4, REV, TIC *737.69 +/- 7      | 200 | 4  | 0  | 5,870,874:31:8 |     |
| 3923 | 1  | 18  | 16:55:42.200 | 488CP6A     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,907:70:0 |     |
| 3924 | 1  | 18  | 18:12:47.533 | 488CP6B     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,870,984:01:0 |     |
| 3925 | 1  | 18  | 18:39:37.533 | 488CP6C     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,010:50:0 |     |
| 3926 | 1  | 18  | 23:22:13.533 | 488CQ6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,290:04:0 |     |
| 3927 | 1  | 19  | 01:21:41.466 | 488CQ6B     | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,408:18:0 |     |
| 3928 | 1  | 19  | 01:49:41.466 | 488CQ6C     | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,435:81:0 |     |
| 3929 | 1  | 19  | 02:00:05.466 | 488CQ6D     | 6TMSED  | FILL,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,446:16:0 |     |
| 3930 | 1  | 19  | 02:14:46.800 | 488CQ6E     | 6TMSED  | NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,460:64:0 |     |
| 3931 | 1  | 19  | 04:35:49.466 | 488CR6A     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,600:18:0 |     |
| 3932 | 1  | 19  | 08:41:09.466 | 488CR6B     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,842:76:0 |     |
| 3933 | 1  | 19  | 09:12:24.800 | 488CR6C     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,873:68:0 |     |
| 3934 | 1  | 19  | 09:19:33.466 | 488CR6D     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,871,880:74:0 |     |
| 3935 | 1  | 19  | 15:10:36.133 | 488CS6A     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,872,228:00:0 |     |
| 3936 | 1  | 20  | 00:51:49.466 | 488CT6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,872,802:76:0 |     |
| 3937 | 1  | 20  | 01:40:53.466 | 488CT6B     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,872,851:33:0 |     |
| 3938 | 1  | 20  | 02:38:29.466 | 488CT6C     | 6TMSED  | NORM,AL7    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,872,908:30:0 |     |
| 3939 | 1  | 20  | 03:25:25.466 | 488CT6D     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,872,954:68:0 |     |
| 3940 | 1  | 20  | 08:36:53.466 | 488CU6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,262:72:0 |     |
| 3941 | 1  | 20  | 08:56:34.800 | 488CU6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,282:24:0 |     |
| 3942 | 1  | 20  | 09:00:21.466 | 488CU6C     | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,286:00:0 |     |
| 3943 | 1  | 20  | 13:18:09.400 | 488CU6D     | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,540:88:0 |     |
| 3944 | 1  | 20  | 13:48:21.400 | 488CU6E     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,570:76:0 |     |
| 3945 | 1  | 20  | 14:31:37.400 | 488CV6A     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,613:57:0 |     |
| 3946 | 1  | 20  | 15:00:43.400 | 488CV6B     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,642:37:0 |     |
| 3947 | 1  | 20  | 15:58:29.400 | 488CV6C     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,873,699:49:0 |     |
| 3948 | 1  | 20  | 23:00:53.400 | 488CW6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,117:27:0 |     |
| 3949 | 1  | 21  | 01:11:01.400 | 488CW6B     | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,246:00:0 |     |
| 3950 | 1  | 21  | 01:36:37.400 | 488CW6C     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,271:29:0 |     |
| 3951 | 1  | 21  | 01:53:04.733 | 488CW6D     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,287:54:0 |     |
| 3952 | 1  | 21  | 02:19:54.066 | 488CW6E     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,314:11:0 |     |
| 3953 | 1  | 21  | 08:30:29.400 | 488CX6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,680:58:0 |     |
| 3954 | 1  | 21  | 09:02:10.733 | 488CX6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,711:89:0 |     |
| 3955 | 1  | 21  | 09:08:53.400 | 488CX6C     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,874,718:56:0 |     |
| 3956 | 1  | 21  | 16:08:53.400 |             | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 737.69 +/- 7      | 200 | 4  | 0  | 5,875,134:00:0 |     |
| 3957 | 1  | 21  | 16:08:53.400 | 411JP6A     | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,875,134:00:0 |     |
| 3958 | 1  | 21  | 16:08:54.800 |             | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC *737.81 +/- 7       | 200 | 4  | 0  | 5,875,134:02:1 |     |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|-------------|--------------------|---|-----|----|----|----------------|-----|
| 3959 | 1  | 21  | 16:09:00.066 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 739.04 +/- 7      | 200 | 4  | 0  | 5,875,134:10:0 |     |
| 3960 | 1  | 21  | 16:09:01.266 |             | DMS: : *RUNUP      | R7, TRACK 4, *REV, TIC * 739.10 +/- 7     | 200 | 4  | 0  | 5,875,134:11:8 |     |
| 3961 | 1  | 21  | 16:09:02.666 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 738.98 +/- 7      | 200 | 4  | 0  | 5,875,134:13:9 |     |
| 3962 | 1  | 21  | 16:09:02.666 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC * 738.98 +/- 7      | 200 | 4  | 0  | 5,875,134:13:9 |     |
| 3963 | 1  | 21  | 16:09:03.400 | 411JP6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,875,134:15:0 |     |
| 3964 | 1  | 21  | 16:11:04.733 | 411JP6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,875,136:15:0 |     |
| 3965 | 1  | 21  | 16:11:07.400 | 175TR176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,875,136:19:0 |     |
| 3966 | 1  | 21  | 16:11:08.066 | 175TR422A6A | 6DMSC R7.0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,875,136:20:0 |     |
| 3967 | 1  | 21  | 16:11:14.733 | 175TR422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,875,136:30:0 |     |
| 3968 | 1  | 21  | 16:11:14.733 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 708.03 +/- 7      | 200 | 4  | 0  | 5,875,136:30:0 |     |
| 3969 | 1  | 21  | 16:11:15.933 |             | DMS: : *READY      | R7, TRACK 4, REV, TIC * 707.97 +/- 7      | 200 | 4  | 0  | 5,875,136:31:8 |     |
| 3970 | 1  | 21  | 18:45:20.066 | 488CY6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,875,288:66:0 |     |
| 3971 | 1  | 22  | 00:36:53.333 | 488CY6B     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,875,636:38:0 |     |
| 3972 | 1  | 22  | 01:30:13.333 | 488CZ6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,875,689:15:0 |     |
| 3973 | 1  | 22  | 08:26:13.333 | 488DA6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,100:54:0 |     |
| 3974 | 1  | 22  | 08:57:03.333 | 488DA6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,131:08:0 |     |
| 3975 | 1  | 22  | 09:04:37.333 | 488DA6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,138:52:0 |     |
| 3976 | 1  | 22  | 16:04:40.000 | 411JQ6A     | 6DMSC R7.0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,876,554:00:0 |     |
| 3977 | 1  | 22  | 16:04:40.000 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 707.97 +/- 7      | 200 | 4  | 0  | 5,876,554:00:0 |     |
| 3978 | 1  | 22  | 16:04:41.400 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC * 708.09 +/- 7      | 200 | 4  | 0  | 5,876,554:02:1 |     |
| 3979 | 1  | 22  | 16:04:46.666 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 709.32 +/- 7      | 200 | 4  | 0  | 5,876,554:10:0 |     |
| 3980 | 1  | 22  | 16:04:47.866 |             | DMS: : *RUNUP      | R7, TRACK 4, *REV, TIC * 709.38 +/- 7     | 200 | 4  | 0  | 5,876,554:11:8 |     |
| 3981 | 1  | 22  | 16:04:49.266 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 709.26 +/- 7      | 200 | 4  | 0  | 5,876,554:13:9 |     |
| 3982 | 1  | 22  | 16:04:49.266 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC * 709.26 +/- 7      | 200 | 4  | 0  | 5,876,554:13:9 |     |
| 3983 | 1  | 22  | 16:04:50.000 | 411JQ6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,876,554:15:0 |     |
| 3984 | 1  | 22  | 16:06:51.333 | 411JQ6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,876,556:15:0 |     |
| 3985 | 1  | 22  | 16:06:54.000 | 175TS176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,876,556:19:0 |     |
| 3986 | 1  | 22  | 16:06:54.666 | 175TS422A6A | 6DMSC R7.0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,876,556:20:0 |     |
| 3987 | 1  | 22  | 16:07:01.333 | 175TS422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,876,556:30:0 |     |
| 3988 | 1  | 22  | 16:07:01.333 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 678.31 +/- 7      | 200 | 4  | 0  | 5,876,556:30:0 |     |
| 3989 | 1  | 22  | 16:07:02.533 |             | DMS: : *READY      | R7, TRACK 4, REV, TIC * 678.25 +/- 7      | 200 | 4  | 0  | 5,876,556:31:8 |     |
| 3990 | 1  | 22  | 17:30:13.333 | 488DB6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,638:56:0 |     |
| 3991 | 1  | 22  | 18:48:16.666 | 488DB6B     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,715:74:0 |     |
| 3992 | 1  | 22  | 19:15:06.000 | 488DB6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,742:31:0 |     |
| 3993 | 1  | 22  | 22:35:17.333 | 488DB6D     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,876,940:30:0 |     |
| 3994 | 1  | 23  | 00:26:13.333 | 488DC6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,050:04:0 |     |
| 3995 | 1  | 23  | 01:43:19.333 | 488DC6B     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,126:27:0 |     |
| 3996 | 1  | 23  | 02:10:09.333 | 488DC6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,152:76:0 |     |
| 3997 | 1  | 23  | 08:19:49.266 | 488DD6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,518:40:0 |     |
| 3998 | 1  | 23  | 08:54:54.600 | 488DD6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,553:13:0 |     |
| 3999 | 1  | 23  | 08:56:05.266 | 488DD6C     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,554:28:0 |     |
| 4000 | 1  | 23  | 09:04:37.266 | 488DD6D     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,562:68:0 |     |
| 4001 | 1  | 23  | 15:00:07.266 | 488DE6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,877,914:31:0 |     |
| 4002 | 1  | 24  | 00:26:13.266 | 488DF6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,878,474:20:0 |     |
| 4003 | 1  | 24  | 01:11:01.266 | 488DF6B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,878,518:48:0 |     |
| 4004 | 1  | 24  | 02:28:26.600 | 488DF6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,878,595:09:0 |     |
| 4005 | 1  | 24  | 02:55:15.933 | 488DF6D     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,878,621:57:0 |     |
| 4006 | 1  | 24  | 04:58:12.600 | 488DF6E     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,878,743:20:0 |     |
| 4007 | 1  | 24  | 12:26:55.266 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 678.25 +/- 7      | 200 | 4  | 0  | 5,879,187:00:0 |     |
| 4008 | 1  | 24  | 12:26:55.266 | 411JR6A     | 6DMSC R7.0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,879,187:00:0 |     |
| 4009 | 1  | 24  | 12:26:56.666 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC * 678.37 +/- 7      | 200 | 4  | 0  | 5,879,187:02:1 |     |
| 4010 | 1  | 24  | 12:27:01.933 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 679.60 +/- 7      | 200 | 4  | 0  | 5,879,187:10:0 |     |
| 4011 | 1  | 24  | 12:27:03.133 |             | DMS: : *RUNUP      | R7, TRACK 4, *REV, TIC * 679.66 +/- 7     | 200 | 4  | 0  | 5,879,187:11:8 |     |
| 4012 | 1  | 24  | 12:27:04.533 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 679.54 +/- 7      | 200 | 4  | 0  | 5,879,187:13:9 |     |
| 4013 | 1  | 24  | 12:27:04.533 |             | DMS: : *AT_SPD     | R7, TRACK 4, REV, TIC * 679.54 +/- 7      | 200 | 4  | 0  | 5,879,187:13:9 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|------------------------|---|-----|----|----|----------------|------|
| 4014 | 1  | 24  | 12:27:05.266 | 411JR6B | 6TMREC BDT             | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,879,187.15:0 |      |
| 4015 | 1  | 24  | 12:29:06.600 | 411JR6C | 6TMREC NRC             | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,879,189.15:0 |      |
| 4016 | 1  | 24  | 12:29:07.266 |         | DMS: : *RUNDOWN        | R7, TRACK 4, REV, TIC * 650.78 +/- 7      | 200 | 4  | 0  | 5,879,189.16:0 |      |
| 4017 | 1  | 24  | 12:29:07.266 | 411JR6D | 6DMSC RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,879,189.16:0 |      |
| 4018 | 1  | 24  | 12:29:08.466 |         | DMS: : *READY          | RDY, TRACK 4, REV, TIC * 650.72 +/- 7     | 200 | 4  | 0  | 5,879,189.17:8 |      |
| 4019 | 1  | 24  | 12:33:59.933 |         | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 650.72 +/- 7      | 200 | 4  | 0  | 5,879,194.00:0 |      |
| 4020 | 1  | 24  | 12:33:59.933 | 465KE6A | 6DMST                  | 324 DMS Slew to TIC                       | 200 | 4  | 0  | 5,879,194.00:0 |      |
| 4021 | 1  | 24  | 12:33:59.933 |         | DMS: : *SLEW-TIC       | P7, TRACK *2, REV, TIC 650.72 +/- 7       | 200 | 4  | 0  | 5,879,194.00:0 |      |
| 4022 | 1  | 24  | 12:34:01.333 |         | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC * 650.84 +/- 7      | 200 | 4  | 0  | 5,879,194.02:1 |      |
| 4023 | 1  | 24  | 12:34:06.600 |         | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC * 652.07 +/- 7      | 200 | 4  | 0  | 5,879,194.10:0 |      |
| 4024 | 1  | 24  | 12:34:07.800 |         | DMS: : *RUNUP          | P7, TRACK *2, REV, TIC * 652.13 +/- 7     | 200 | 4  | 0  | 5,879,194.11:8 |      |
| 4025 | 1  | 24  | 12:34:09.200 |         | DMS: : *AT_SPD         | P7, TRACK 2, REV, TIC * 652.01 +/- 7      | 200 | 4  | 0  | 5,879,194.13:9 |      |
| 4026 | 1  | 24  | 12:57:18.733 |         | DMS: : *RUNDOWN        | P7, TRACK 2, REV, TIC * 326.06 +/- 7      | 200 | 4  | 0  | 5,879,217.05:2 |      |
| 4027 | 1  | 24  | 12:57:19.933 |         | DMS: : *READY          | RDY, TRACK 2, REV, TIC * 326.00 +/- 7     | 200 | 4  | 0  | 5,879,217.07:0 |      |
| 4028 | 1  | 24  | 13:29:36.600 | 465KF6A | 6DMSC RDY,4            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,879,249.00:0 |      |
| 4029 | 1  | 24  | 13:29:36.600 |         | DMS: : READY           | RDY, TRACK *4, REV, TIC 326.00 +/- 7      | 200 | 4  | 0  | 5,879,249.00:0 |      |
| 4030 | 1  | 24  | 13:32:31.933 | 465KG6A | 6DTRN CMD,6DTRN,465KG6 | DMS TRACK TURNAROUND                      | 200 | 4  | 0  | 5,879,251.81:0 |      |
| 4031 | 1  | 24  | 13:32:31.933 |         | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 326.00 +/- 7      | 200 | 4  | 0  | 5,879,251.81:0 |      |
| 4032 | 1  | 24  | 13:32:31.933 |         | DMS: : *DMS-TURN       | P7, TRACK 4, REV, TIC 326.00 +/- 7        | 200 | 4  | 0  | 5,879,251.81:0 |      |
| 4033 | 1  | 24  | 13:32:33.333 |         | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC * 326.12 +/- 7      | 200 | 4  | 0  | 5,879,251.83:1 |      |
| 4034 | 1  | 24  | 13:32:38.600 |         | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC * 327.35 +/- 7      | 200 | 4  | 0  | 5,879,252.00:0 |      |
| 4035 | 1  | 24  | 13:32:39.800 |         | DMS: : *RUNUP          | P7, TRACK *4, *REV, TIC * 327.41 +/- 7    | 200 | 4  | 0  | 5,879,252.01:8 |      |
| 4036 | 1  | 24  | 13:32:41.200 |         | DMS: : *AT_SPD         | P7, TRACK 4, REV, TIC * 327.29 +/- 7      | 200 | 4  | 0  | 5,879,252.03:9 |      |
| 4037 | 1  | 24  | 13:41:44.800 |         | DMS: : *REVERSE        | P7, TRACK 4, REV, TIC * 199.87 +/- 7      | 200 | 4  | 0  | 5,879,261.00:3 |      |
| 4038 | 1  | 24  | 13:41:46.000 |         | DMS: : *RUNUP          | P7, TRACK 1, FWD, TIC 199.81 +/- 7        | 200 | 4  | 0  | 5,879,261.02:1 |      |
| 4039 | 1  | 24  | 13:41:46.000 |         | DMS: : *TURNARND       | P7, TRACK *1, *FWD, TIC * 199.81 +/- 7    | 200 | 4  | 0  | 5,879,261.02:1 |      |
| 4040 | 1  | 24  | 13:41:47.400 |         | DMS: : *AT_SPD         | P7, TRACK 1, FWD, TIC * 199.93 +/- 7      | 200 | 4  | 0  | 5,879,261.04:2 |      |
| 4041 | 1  | 24  | 13:41:59.400 |         | DMS: : *AUTOSTOP       | P7, TRACK 1, FWD, TIC * 202.06 +/- 7      | 200 | 4  | 0  | 5,879,261.22:2 |      |
| 4042 | 1  | 24  | 13:42:00.600 |         | DMS: : *READY          | RDY, TRACK 1, FWD, TIC * 202.12 +/- 7     | 200 | 4  | 0  | 5,879,261.24:0 |      |
| 4043 | 1  | 24  | 18:02:36.533 | 465WA6A | 6DMST                  | 5000 DMS Slew to TIC                      | 200 | 4  | 0  | 5,879,519.00:0 |      |
| 4044 | 1  | 24  | 18:02:36.533 |         | DMS: : *TURNARND       | P7, TRACK 1, FWD, TIC 202.12 +/- 7        | 200 | 4  | 0  | 5,879,519.00:0 |      |
| 4045 | 1  | 24  | 18:02:36.533 |         | DMS: : *SLEW-TIC       | P7, TRACK 1, FWD, TIC 202.12 +/- 7        | 200 | 4  | 0  | 5,879,519.00:0 |      |
| 4046 | 1  | 24  | 18:02:36.533 |         | DMS: : *E4-DELAY       | RDY, TRACK 1, FWD, TIC 202.12 +/- 7       | 200 | 4  | 0  | 5,879,519.00:0 |      |
| 4047 | 1  | 24  | 18:02:43.200 |         | DMS: : *RUNUP          | P7, TRACK 1, FWD, TIC 202.12 +/- 7        | 200 | 4  | 0  | 5,879,519.10:0 |      |
| 4048 | 1  | 24  | 18:02:44.600 |         | DMS: : *AT_SPD         | P7, TRACK 1, FWD, TIC * 202.24 +/- 7      | 200 | 4  | 0  | 5,879,519.12:1 |      |
| 4049 | 1  | 24  | 20:09:57.200 | 488DG6A | 6TMSED NORM,AL6        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,879,644.86:0 |      |
| 4050 | 1  | 24  | 23:43:45.333 |         | DMS: : *RUNDOWN        | P7, TRACK 1, FWD, TIC * 4997.94 +/- 7     | 200 | 4  | 0  | 5,879,856.36:2 |      |
| 4051 | 1  | 24  | 23:43:46.533 |         | DMS: : *READY          | RDY, TRACK 1, FWD, TIC * 4998.00 +/- 7    | 200 | 4  | 0  | 5,879,856.38:0 |      |
| 4052 | 1  | 24  | 23:56:17.866 |         | DMS: : *US-RUNUP       | P7, TRACK 1, FWD, TIC 4998.00 +/- 7       | 200 | 4  | 0  | 5,879,868.73:0 |      |
| 4053 | 1  | 24  | 23:56:17.866 | 465WB6A | 6DMSC P100,4           | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 5,879,868.73:0 |      |
| 4054 | 1  | 24  | 23:56:19.266 |         | DMS: : *US_AT_SP       | P7, TRACK 1, FWD, TIC * 4998.12 +/- 7     | 200 | 4  | 0  | 5,879,868.75:1 |      |
| 4055 | 1  | 24  | 23:56:24.533 |         | DMS: : *US_RD          | P7, TRACK 1, FWD, TIC * 4999.35 +/- 7     | 200 | 4  | 0  | 5,879,868.83:0 |      |
| 4056 | 1  | 24  | 23:56:25.733 |         | DMS: : *RUNUP          | P100, TRACK *4, *REV, TIC * 4999.41 +/- 7 | 200 | 4  | 0  | 5,879,868.84:8 |      |
| 4057 | 1  | 24  | 23:56:29.600 |         | DMS: : *P_SLEW         | P100, TRACK 4, REV, TIC * 4993.91 +/- 7   | 200 | 4  | 0  | 5,879,868.90:6 |      |
| 4058 | 1  | 24  | 23:56:29.600 |         | DMS: : *AT_SPD         | P100, TRACK 4, REV, TIC 4993.91 +/- 7     | 200 | 4  | 0  | 5,879,868.90:6 |      |
| 4059 | 1  | 25  | 00:15:33.200 | 488DG6B | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,879,887.77:0 |      |
| 4060 | 1  | 25  | 00:22:09.866 |         | DMS: : *RUNDOWN        | P100, TRACK 4, REV, TIC * 255.79 +/- 7    | 200 | 4  | 0  | 5,879,894.35:0 |      |
| 4061 | 1  | 25  | 00:22:09.866 | 465WB6B | 6DMSC RDY,4            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,879,894.35:0 |      |
| 4062 | 1  | 25  | 00:22:11.066 |         | DMS: : *READY          | RDY, TRACK 4, REV, TIC * 254.99 +/- 7     | 200 | 4  | 0  | 5,879,894.36:8 |      |
| 4063 | 1  | 25  | 00:41:43.200 | 488DG6C | 6TMSED FILL,AL5        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,879,913.66:0 |      |
| 4064 | 1  | 25  | 00:47:33.200 | 488DG6D | 6TMSED FILL,AL6        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,879,919.45:0 |      |
| 4065 | 1  | 25  | 01:19:56.533 | 488DG6E | 6TMSED NORM,AL6        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,879,951.48:0 |      |
| 4066 | 1  | 25  | 02:38:34.533 | 488DH6A | 6TMSED FILL,AL6        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,880,029.27:0 |      |
| 4067 | 1  | 25  | 02:40:11.200 | 465WC6A | 6DTRN CMD,6DTRN,465WC6 | DMS TRACK TURNAROUND                      | 200 | 4  | 0  | 5,880,030.81:0 |      |
| 4068 | 1  | 25  | 02:40:11.200 |         | DMS: : *US-RUNUP       | P7, TRACK *1, *FWD, TIC 254.99 +/- 7      | 200 | 4  | 0  | 5,880,030.81:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|------------------|--|-----|----|----|----------------|------|
| 4069 | 1  | 25  | 02:40:11.200 |         | DMS:    | :DMS-TURN        | P7, TRACK 4, REV, TIC 254.99 +/-       | 200 | 4  | 0  | 5,880,030:81:0 |      |
| 4070 | 1  | 25  | 02:40:12.600 |         | DMS:    | :US_AT_SP        | P7, TRACK 1, FWD, TIC *255.11 +/-      | 200 | 4  | 0  | 5,880,030:83:1 |      |
| 4071 | 1  | 25  | 02:40:17.866 |         | DMS:    | :US_RD           | P7, TRACK 1, FWD, TIC *256.34 +/-      | 200 | 4  | 0  | 5,880,031:00:0 |      |
| 4072 | 1  | 25  | 02:40:19.066 |         | DMS:    | :RUNUP           | P7, TRACK *4, *REV, TIC *256.40 +/-    | 200 | 4  | 0  | 5,880,031:01:8 |      |
| 4073 | 1  | 25  | 02:40:20.466 |         | DMS:    | :AT_SPD          | P7, TRACK 4, REV, TIC *256.28 +/-      | 200 | 4  | 0  | 5,880,031:03:9 |      |
| 4074 | 1  | 25  | 02:44:09.200 | 488DH6B | 6TMSD   | FILL,AH6         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5,880,034:74:0 |      |
| 4075 | 1  | 25  | 02:44:21.133 |         | DMS:    | :REVERSE         | P7, TRACK 4, REV, TIC *199.87 +/-      | 200 | 4  | 0  | 5,880,035:00:9 |      |
| 4076 | 1  | 25  | 02:44:22.333 |         | DMS:    | :TURNARND        | P7, TRACK *1, *FWD, TIC *199.81 +/-    | 200 | 4  | 0  | 5,880,035:02:7 |      |
| 4077 | 1  | 25  | 02:44:22.333 |         | DMS:    | :RUNUP           | P7, TRACK 1, FWD, TIC 199.81 +/-       | 200 | 4  | 0  | 5,880,035:02:7 |      |
| 4078 | 1  | 25  | 02:44:23.733 |         | DMS:    | :AT_SPD          | P7, TRACK 1, FWD, TIC *199.93 +/-      | 200 | 4  | 0  | 5,880,035:04:8 |      |
| 4079 | 1  | 25  | 02:44:35.733 |         | DMS:    | :AUTOSTOP        | P7, TRACK 1, FWD, TIC *202.06 +/-      | 200 | 4  | 0  | 5,880,035:22:8 |      |
| 4080 | 1  | 25  | 02:44:36.933 |         | DMS:    | :READY           | RDY, TRACK 1, FWD, TIC *202.12 +/-     | 200 | 4  | 0  | 5,880,035:24:6 |      |
| 4081 | 1  | 25  | 02:50:13.866 |         | DMS:    | :E4-DELAY        | RDY, TRACK 1, FWD, TIC 202.12 +/-      | 200 | 4  | 0  | 5,880,040:75:0 |      |
| 4082 | 1  | 25  | 02:50:13.866 | 465WD6A | 6DMSC   | P100,1           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5,880,040:75:0 |      |
| 4083 | 1  | 25  | 02:50:20.533 |         | DMS:    | :RUNUP           | P100, TRACK 1, FWD, TIC 202.12 +/-     | 200 | 4  | 0  | 5,880,040:85:0 |      |
| 4084 | 1  | 25  | 02:50:24.400 |         | DMS:    | :AT_SPD          | P100, TRACK 1, FWD, TIC 207.62 +/-     | 200 | 4  | 0  | 5,880,040:90:8 |      |
| 4085 | 1  | 25  | 02:50:24.400 |         | DMS:    | :P_SLEW          | P100, TRACK 1, FWD, TIC *207.62 +/-    | 200 | 4  | 0  | 5,880,040:90:8 |      |
| 4086 | 1  | 25  | 03:05:24.533 | 488DH6C | 6TMSD   | NORM,AH6         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5,880,055:76:0 |      |
| 4087 | 1  | 25  | 03:22:07.866 |         | DMS:    | :RUNDOWN         | P100, TRACK 1, FWD, TIC *6063.01 +/-   | 200 | 4  | 0  | 5,880,072:34:0 |      |
| 4088 | 1  | 25  | 03:22:07.866 | 465WD6B | 6DMSC   | RDY,1            | DMS Control Tape stop                  | 200 | 4  | 0  | 5,880,072:34:0 |      |
| 4089 | 1  | 25  | 03:22:09.066 |         | DMS:    | :READY           | RDY, TRACK 1, FWD, TIC *6063.81 +/-    | 200 | 4  | 0  | 5,880,072:35:8 |      |
| 4090 | 1  | 25  | 03:37:43.866 |         | DMS:    | :US-RUNUP        | P7, TRACK 1, FWD, TIC 6063.81 +/-      | 200 | 4  | 0  | 5,880,087:73:0 |      |
| 4091 | 1  | 25  | 03:37:43.866 | 465WE6A | 6DMSC   | P100,2           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5,880,087:73:0 |      |
| 4092 | 1  | 25  | 03:37:45.266 |         | DMS:    | :US_AT_SP        | P7, TRACK 1, FWD, TIC *6063.93 +/-     | 200 | 4  | 0  | 5,880,087:75:1 |      |
| 4093 | 1  | 25  | 03:37:50.533 |         | DMS:    | :US_RD           | P7, TRACK 1, FWD, TIC *6065.17 +/-     | 200 | 4  | 0  | 5,880,087:83:0 |      |
| 4094 | 1  | 25  | 03:37:51.733 |         | DMS:    | :RUNUP           | P100, TRACK *2, *REV, TIC *6065.23 +/- | 200 | 4  | 0  | 5,880,087:84:8 |      |
| 4095 | 1  | 25  | 03:37:55.600 |         | DMS:    | :P_SLEW          | P100, TRACK 2, REV, TIC *6059.73 +/-   | 200 | 4  | 0  | 5,880,087:90:6 |      |
| 4096 | 1  | 25  | 03:37:55.600 |         | DMS:    | :AT_SPD          | P100, TRACK 2, REV, TIC 6059.73 +/-    | 200 | 4  | 0  | 5,880,087:90:6 |      |
| 4097 | 1  | 25  | 04:09:51.866 |         | DMS:    | :RUNDOWN         | P100, TRACK 2, REV, TIC *164.96 +/-    | 200 | 4  | 0  | 5,880,119:53:0 |      |
| 4098 | 1  | 25  | 04:09:51.866 | 465WF6A | 6DMSC   | P100,3           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5,880,119:53:0 |      |
| 4099 | 1  | 25  | 04:09:53.066 |         | DMS:    | :RUNUP           | P100, TRACK *3, *FWD, TIC *164.16 +/-  | 200 | 4  | 0  | 5,880,119:54:8 |      |
| 4100 | 1  | 25  | 04:09:56.933 |         | DMS:    | :AT_SPD          | P100, TRACK 3, FWD, TIC 169.66 +/-     | 200 | 4  | 0  | 5,880,119:60:6 |      |
| 4101 | 1  | 25  | 04:09:56.933 |         | DMS:    | :P_SLEW          | P100, TRACK 3, FWD, TIC *169.66 +/-    | 200 | 4  | 0  | 5,880,119:60:6 |      |
| 4102 | 1  | 25  | 04:41:52.533 |         | 6DMSC   | RDY,3            | DMS Control Tape stop                  | 200 | 4  | 0  | 5,880,151:22:0 |      |
| 4103 | 1  | 25  | 04:41:52.533 |         | DMS:    | :RUNDOWN         | P100, TRACK 3, FWD, TIC *6062.38 +/-   | 200 | 4  | 0  | 5,880,151:22:0 |      |
| 4104 | 1  | 25  | 04:41:53.733 |         | DMS:    | :READY           | RDY, TRACK 3, FWD, TIC *6063.18 +/-    | 200 | 4  | 0  | 5,880,151:23:8 |      |
| 4105 | 1  | 25  | 04:56:35.866 |         | DMS:    | :US-RUNUP        | P7, TRACK *1, FWD, TIC 6063.18 +/-     | 200 | 4  | 0  | 5,880,165:73:0 |      |
| 4106 | 1  | 25  | 04:56:35.866 | 465WG6A | 6DMSC   | P100,4           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5,880,165:73:0 |      |
| 4107 | 1  | 25  | 04:56:37.266 |         | DMS:    | :US_AT_SP        | P7, TRACK 1, FWD, TIC *6063.30 +/-     | 200 | 4  | 0  | 5,880,165:75:1 |      |
| 4108 | 1  | 25  | 04:56:42.533 |         | DMS:    | :US_RD           | P7, TRACK 1, FWD, TIC *6064.53 +/-     | 200 | 4  | 0  | 5,880,165:83:0 |      |
| 4109 | 1  | 25  | 04:56:43.733 |         | DMS:    | :RUNUP           | P100, TRACK *4, *REV, TIC *6064.59 +/- | 200 | 4  | 0  | 5,880,165:84:8 |      |
| 4110 | 1  | 25  | 04:56:47.600 |         | DMS:    | :P_SLEW          | P100, TRACK 4, REV, TIC *6059.09 +/-   | 200 | 4  | 0  | 5,880,165:90:6 |      |
| 4111 | 1  | 25  | 04:56:47.600 |         | DMS:    | :AT_SPD          | P100, TRACK 4, REV, TIC 6059.09 +/-    | 200 | 4  | 0  | 5,880,165:90:6 |      |
| 4112 | 1  | 25  | 05:28:43.200 | 465WH6A | 6DMSC   | P100,3           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5,880,197:52:0 |      |
| 4113 | 1  | 25  | 05:28:43.200 |         | DMS:    | :RUNDOWN         | P100, TRACK 4, REV, TIC *166.38 +/-    | 200 | 4  | 0  | 5,880,197:52:0 |      |
| 4114 | 1  | 25  | 05:28:44.400 |         | DMS:    | :RUNUP           | P100, TRACK *3, *FWD, TIC *165.58 +/-  | 200 | 4  | 0  | 5,880,197:53:8 |      |
| 4115 | 1  | 25  | 05:28:48.266 |         | DMS:    | :AT_SPD          | P100, TRACK 3, FWD, TIC 171.08 +/-     | 200 | 4  | 0  | 5,880,197:59:6 |      |
| 4116 | 1  | 25  | 05:28:48.266 |         | DMS:    | :P_SLEW          | P100, TRACK 3, FWD, TIC *171.08 +/-    | 200 | 4  | 0  | 5,880,197:59:6 |      |
| 4117 | 1  | 25  | 05:29:49.200 | 465WH6B | 6DMSC   | RDY,3            | DMS Control Tape stop                  | 200 | 4  | 0  | 5,880,198:60:0 |      |
| 4118 | 1  | 25  | 05:29:49.200 |         | DMS:    | :RUNDOWN         | P100, TRACK 3, FWD, TIC *358.52 +/-    | 200 | 4  | 0  | 5,880,198:60:0 |      |
| 4119 | 1  | 25  | 05:29:50.400 |         | DMS:    | :READY           | RDY, TRACK 3, FWD, TIC *359.32 +/-     | 200 | 4  | 0  | 5,880,198:61:8 |      |
| 4120 | 1  | 25  | 05:30:59.200 | 488DH6D | 6TMSD   | NORM,AL6         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5,880,199:74:0 |      |
| 4121 | 1  | 25  | 05:44:19.200 | 465WI6A | 6DMSC   | RDY,4            | DMS Control Tape stop                  | 200 | 4  | 0  | 5,880,213:00:0 |      |
| 4122 | 1  | 25  | 05:44:19.200 |         | DMS:    | :READY           | RDY, TRACK *4, *REV, TIC 359.32 +/-    | 200 | 4  | 0  | 5,880,213:00:0 |      |
| 4123 | 1  | 25  | 05:45:13.200 | 465WJ6A | 6DTRN   | CMD,6DTRN,465WJ6 | DMS TRACK TURNAROUND                   | 200 | 4  | 0  | 5,880,213:81:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|--------------------|---|-----|----|----|----------------|------|
| 4124 | 1  | 25  | 05:45:13.200 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 359.32 +/-        | 200 | 4  | 0  | 5,880,213:81:0 |      |
| 4125 | 1  | 25  | 05:45:13.200 |             | DMS: : *DMS-TURN   | P7, TRACK 4, REV, TIC 359.32 +/-          | 200 | 4  | 0  | 5,880,213:81:0 |      |
| 4126 | 1  | 25  | 05:45:14.600 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *359.44 +/-         | 200 | 4  | 0  | 5,880,213:83:1 |      |
| 4127 | 1  | 25  | 05:45:19.866 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *360.67 +/-         | 200 | 4  | 0  | 5,880,214:00:0 |      |
| 4128 | 1  | 25  | 05:45:21.066 |             | DMS: : *RUNUP      | P7, TRACK *4, *REV, TIC *360.73 +/-       | 200 | 4  | 0  | 5,880,214:01:8 |      |
| 4129 | 1  | 25  | 05:45:22.466 |             | DMS: : *AT_SPD     | P7, TRACK 4, REV, TIC *360.61 +/-         | 200 | 4  | 0  | 5,880,214:03:9 |      |
| 4130 | 1  | 25  | 05:56:48.266 |             | DMS: : *REVERSE    | P7, TRACK 4, REV, TIC *199.87 +/-         | 200 | 4  | 0  | 5,880,225:31:6 |      |
| 4131 | 1  | 25  | 05:56:49.466 |             | DMS: : *RUNUP      | P7, TRACK 1, FWD, TIC 199.81 +/-          | 200 | 4  | 0  | 5,880,225:33:4 |      |
| 4132 | 1  | 25  | 05:56:49.466 |             | DMS: : *TURNARND   | P7, TRACK *1, *FWD, TIC *199.81 +/-       | 200 | 4  | 0  | 5,880,225:33:4 |      |
| 4133 | 1  | 25  | 05:56:50.866 |             | DMS: : *AT_SPD     | P7, TRACK 1, FWD, TIC *199.93 +/-         | 200 | 4  | 0  | 5,880,225:35:5 |      |
| 4134 | 1  | 25  | 05:57:02.866 |             | DMS: : *AUTOSTOP   | P7, TRACK 1, FWD, TIC *202.06 +/-         | 200 | 4  | 0  | 5,880,225:53:5 |      |
| 4135 | 1  | 25  | 05:57:04.066 |             | DMS: : *READY      | RDY, TRACK 1, FWD, TIC *202.12 +/-        | 200 | 4  | 0  | 5,880,225:55:3 |      |
| 4136 | 1  | 25  | 07:00:53.200 | 488DH6E     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,880,288:66:0 |      |
| 4137 | 1  | 25  | 08:30:29.200 | 488D6A      | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,880,377:31:0 |      |
| 4138 | 1  | 25  | 08:38:54.533 | 488D6B      | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,880,385:61:0 |      |
| 4139 | 1  | 25  | 08:47:33.200 | 488D6C      | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,880,394:20:0 |      |
| 4140 | 1  | 25  | 13:13:15.200 |             | DMS: : *TURNARND   | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 5,880,657:00:0 |      |
| 4141 | 1  | 25  | 13:13:15.200 |             | DMS: : *SLEW-TIC   | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 5,880,657:00:0 |      |
| 4142 | 1  | 25  | 13:13:15.200 | 465KH6A     | 6DMST              | 637 DMS Slew to TIC                       | 200 | 4  | 0  | 5,880,657:00:0 |      |
| 4143 | 1  | 25  | 13:13:15.200 |             | DMS: : *E4-DELAY   | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 200 | 4  | 0  | 5,880,657:00:0 |      |
| 4144 | 1  | 25  | 13:13:21.866 |             | DMS: : *RUNUP      | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 5,880,657:10:0 |      |
| 4145 | 1  | 25  | 13:13:23.266 |             | DMS: : *AT_SPD     | P7, TRACK 1, FWD, TIC *202.24 +/-         | 200 | 4  | 0  | 5,880,657:12:1 |      |
| 4146 | 1  | 25  | 13:44:08.666 |             | DMS: : *RUNDOWN    | P7, TRACK 1, FWD, TIC *634.94 +/-         | 200 | 4  | 0  | 5,880,687:50:2 |      |
| 4147 | 1  | 25  | 13:44:09.866 |             | DMS: : *READY      | RDY, TRACK 1, FWD, TIC *635.00 +/-        | 200 | 4  | 0  | 5,880,687:52:0 |      |
| 4148 | 1  | 25  | 13:49:13.200 |             | DMS: : *SLEW-TIC   | P7, TRACK *2, *REV, TIC 635.00 +/-        | 200 | 4  | 0  | 5,880,692:52:0 |      |
| 4149 | 1  | 25  | 13:49:13.200 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 635.00 +/-        | 200 | 4  | 0  | 5,880,692:52:0 |      |
| 4150 | 1  | 25  | 13:49:14.600 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *635.12 +/-         | 200 | 4  | 0  | 5,880,692:54:1 |      |
| 4151 | 1  | 25  | 13:49:19.866 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *636.35 +/-         | 200 | 4  | 0  | 5,880,692:62:0 |      |
| 4152 | 1  | 25  | 13:49:21.066 |             | DMS: : *RUNUP      | P7, TRACK *2, *REV, TIC *636.41 +/-       | 200 | 4  | 0  | 5,880,692:63:8 |      |
| 4153 | 1  | 25  | 13:49:22.466 |             | DMS: : *AT_SPD     | P7, TRACK 2, REV, TIC *636.29 +/-         | 200 | 4  | 0  | 5,880,692:65:9 |      |
| 4154 | 1  | 25  | 13:52:51.333 |             | DMS: : *RUNDOWN    | P7, TRACK 2, REV, TIC *587.06 +/-         | 200 | 4  | 0  | 5,880,696:15:2 |      |
| 4155 | 1  | 25  | 13:52:52.533 |             | DMS: : *READY      | RDY, TRACK 2, REV, TIC *587.00 +/-        | 200 | 4  | 0  | 5,880,696:17:0 |      |
| 4156 | 1  | 25  | 14:04:49.200 | 465KI6A     | 6DMSC RDY,4        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,880,708:00:0 |      |
| 4157 | 1  | 25  | 14:04:49.200 |             | DMS: : *READY      | RDY, TRACK *4, REV, TIC 587.00 +/-        | 200 | 4  | 0  | 5,880,708:00:0 |      |
| 4158 | 1  | 25  | 15:45:55.866 | 411JS6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,880,808:00:0 |      |
| 4159 | 1  | 25  | 15:45:55.866 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 587.00 +/-        | 200 | 4  | 0  | 5,880,808:00:0 |      |
| 4160 | 1  | 25  | 15:45:57.266 |             | DMS: : *US_AT_SP   | P7, TRACK 1, FWD, TIC *587.12 +/-         | 200 | 4  | 0  | 5,880,808:02:1 |      |
| 4161 | 1  | 25  | 15:46:02.533 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC *588.35 +/-         | 200 | 4  | 0  | 5,880,808:10:0 |      |
| 4162 | 1  | 25  | 15:46:03.733 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC *588.41 +/-       | 200 | 4  | 0  | 5,880,808:11:8 |      |
| 4163 | 1  | 25  | 15:46:05.133 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC *588.29 +/-         | 200 | 4  | 0  | 5,880,808:13:9 |      |
| 4164 | 1  | 25  | 15:46:05.133 |             | DMS: : *AT_SPD     | P7, TRACK 4, REV, TIC 588.29 +/-          | 200 | 4  | 0  | 5,880,808:13:9 |      |
| 4165 | 1  | 25  | 15:46:05.866 | 411JS6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,880,808:15:0 |      |
| 4166 | 1  | 25  | 15:48:07.200 | 411JS6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,880,810:15:0 |      |
| 4167 | 1  | 25  | 15:48:09.866 | 175TT176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,880,810:19:0 |      |
| 4168 | 1  | 25  | 15:48:10.533 | 175TT422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,880,810:20:0 |      |
| 4169 | 1  | 25  | 15:48:17.200 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC *557.34 +/-         | 200 | 4  | 0  | 5,880,810:30:0 |      |
| 4170 | 1  | 25  | 15:48:17.200 | 175TT422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,880,810:30:0 |      |
| 4171 | 1  | 25  | 15:48:18.400 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC *557.28 +/-        | 200 | 4  | 0  | 5,880,810:31:8 |      |
| 4172 | 1  | 25  | 16:54:51.200 | 488DJ6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,880,876:15:0 |      |
| 4173 | 1  | 26  | 00:11:17.200 | 488DK6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,881,307:73:0 |      |
| 4174 | 1  | 26  | 00:34:45.200 | 488DK6B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,881,331:01:0 |      |
| 4175 | 1  | 26  | 08:00:37.133 | 488DL6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,881,771:89:0 |      |
| 4176 | 1  | 26  | 08:41:06.466 | 488DL6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,881,812:02:0 |      |
| 4177 | 1  | 26  | 08:45:25.133 | 488DL6C     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,881,816:26:0 |      |
| 4178 | 1  | 26  | 12:57:25.133 | 488DL6D     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,065:47:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters  | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|---------|-------------|---|-----|----|----|----------------|------|
| 4179 | 1  | 26  | 13:33:25.133 | 488DL6E     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,101:11:0 |      |
| 4180 | 1  | 26  | 14:12:22.466 | 488DM6A     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,139:59:0 |      |
| 4181 | 1  | 26  | 14:41:28.466 | 488DM6B     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,168:39:0 |      |
| 4182 | 1  | 26  | 16:32:37.133 | 488DM6C     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,278:32:0 |      |
| 4183 | 1  | 26  | 21:35:33.133 | 488DN6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,577:87:0 |      |
| 4184 | 1  | 27  | 00:39:37.800 | 488DN6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,760:01:0 |      |
| 4185 | 1  | 27  | 00:41:09.133 | 488DN6C     | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,761:47:0 |      |
| 4186 | 1  | 27  | 00:49:41.133 | 488DN6D     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,769:87:0 |      |
| 4187 | 1  | 27  | 01:04:41.133 | 488DN6E     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,784:72:0 |      |
| 4188 | 1  | 27  | 01:28:49.800 | 488DO6A     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,808:61:0 |      |
| 4189 | 1  | 27  | 01:55:39.133 | 488DO6B     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,882,835:18:0 |      |
| 4190 | 1  | 27  | 07:54:13.133 | 488DP6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,883,189:75:0 |      |
| 4191 | 1  | 27  | 08:21:17.133 | 488DP6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,883,216:54:0 |      |
| 4192 | 1  | 27  | 08:26:13.133 | 488DP6C     | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,883,221:43:0 |      |
| 4193 | 1  | 27  | 12:57:17.133 | 488DP6D     | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,883,489:51:0 |      |
| 4194 | 1  | 27  | 13:07:49.133 | 488DP6E     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,883,499:89:0 |      |
| 4195 | 1  | 27  | 14:07:33.066 | 488DQ6A     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,883,559:05:0 |      |
| 4196 | 1  | 28  | 00:00:37.066 | 488DR6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,884,145:55:0 |      |
| 4197 | 1  | 28  | 01:00:21.066 | 488DR6B     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,884,204:62:0 |      |
| 4198 | 1  | 28  | 07:49:57.066 | 488DS6A     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,884,609:71:0 |      |
| 4199 | 1  | 28  | 08:31:18.400 | 488DS6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,884,650:62:0 |      |
| 4200 | 1  | 28  | 08:36:53.066 | 488DS6C     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,884,656:18:0 |      |
| 4201 | 1  | 28  | 15:38:19.066 | 411JT6A     | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,885,073:00:0 |      |
| 4202 | 1  | 28  | 15:38:19.066 |             | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 557.28 +/-        | 200 | 4  | 0  | 5,885,073:00:0 |      |
| 4203 | 1  | 28  | 15:38:20.466 |             | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC * 557.40 +/-        | 200 | 4  | 0  | 5,885,073:02:1 |      |
| 4204 | 1  | 28  | 15:38:25.733 |             | DMS:    | : *US_RD    | P7, TRACK 1, FWD, TIC * 558.64 +/-        | 200 | 4  | 0  | 5,885,073:10:0 |      |
| 4205 | 1  | 28  | 15:38:26.933 |             | DMS:    | : *RUNUP    | R7, TRACK *4, *REV, TIC * 558.70 +/-      | 200 | 4  | 0  | 5,885,073:11:8 |      |
| 4206 | 1  | 28  | 15:38:28.333 |             | DMS:    | : *AT SPD   | R7, TRACK 4, REV, TIC 558.58 +/-          | 200 | 4  | 0  | 5,885,073:13:9 |      |
| 4207 | 1  | 28  | 15:38:28.333 |             | DMS:    | : *RECORD   | R7, TRACK 4, REV, TIC * 558.58 +/-        | 200 | 4  | 0  | 5,885,073:13:9 |      |
| 4208 | 1  | 28  | 15:38:29.066 | 411JT6B     | 6TMREC  | BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,885,073:15:0 |      |
| 4209 | 1  | 28  | 15:40:30.400 | 411JT6C     | 6TMREC  | NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,885,075:15:0 |      |
| 4210 | 1  | 28  | 15:40:33.066 | 175TU176A6A | 6TMREC  | LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,885,075:19:0 |      |
| 4211 | 1  | 28  | 15:40:33.733 | 175TU422A6A | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,885,075:20:0 |      |
| 4212 | 1  | 28  | 15:40:40.400 |             | DMS:    | : *RUNDOWN  | R7, TRACK 4, REV, TIC * 527.62 +/-        | 200 | 4  | 0  | 5,885,075:30:0 |      |
| 4213 | 1  | 28  | 15:40:40.400 | 175TU422A6B | 6DMSC   | RDY,0       | DMS Control Tape stop                     | 200 | 4  | 0  | 5,885,075:30:0 |      |
| 4214 | 1  | 28  | 15:40:41.600 |             | DMS:    | : *READY    | RDY, TRACK 4, REV, TIC * 527.56 +/-       | 200 | 4  | 0  | 5,885,075:31:8 |      |
| 4215 | 1  | 28  | 15:54:28.400 | 488DT6A     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,885,088:89:0 |      |
| 4216 | 1  | 28  | 20:29:25.066 | 488DT6B     | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,885,360:82:0 |      |
| 4217 | 1  | 28  | 21:07:49.066 | 488DT6C     | 6TMSED  | NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,885,398:80:0 |      |
| 4218 | 1  | 29  | 04:22:15.666 | 488DU6A     | 6TMSED  | FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,885,828:50:0 |      |
| 4219 | 1  | 29  | 04:25:09.000 | 488DU6B     | 6TMSED  | FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,885,831:37:0 |      |
| 4220 | 1  | 29  | 11:29:24.333 |             | DMS:    | : *US-RUNUP | P7, TRACK *1, *FWD, TIC 527.56 +/-        | 200 | 4  | 0  | 5,886,251:00:0 |      |
| 4221 | 1  | 29  | 11:29:24.333 | 411JU6A     | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,886,251:00:0 |      |
| 4222 | 1  | 29  | 11:29:25.733 |             | DMS:    | : *US AT SP | P7, TRACK 1, FWD, TIC * 527.68 +/-        | 200 | 4  | 0  | 5,886,251:02:1 |      |
| 4223 | 1  | 29  | 11:29:31.000 |             | DMS:    | : *US_RD    | P7, TRACK 1, FWD, TIC * 528.92 +/-        | 200 | 4  | 0  | 5,886,251:10:0 |      |
| 4224 | 1  | 29  | 11:29:32.200 |             | DMS:    | : *RUNUP    | R7, TRACK *4, *REV, TIC * 528.98 +/-      | 200 | 4  | 0  | 5,886,251:11:8 |      |
| 4225 | 1  | 29  | 11:29:33.600 |             | DMS:    | : *RECORD   | R7, TRACK 4, REV, TIC * 528.86 +/-        | 200 | 4  | 0  | 5,886,251:13:9 |      |
| 4226 | 1  | 29  | 11:29:33.600 |             | DMS:    | : *AT SPD   | R7, TRACK 4, REV, TIC 528.86 +/-          | 200 | 4  | 0  | 5,886,251:13:9 |      |
| 4227 | 1  | 29  | 11:29:34.333 | 411JU6B     | 6TMREC  | BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,886,251:15:0 |      |
| 4228 | 1  | 29  | 11:31:35.666 | 411JU6C     | 6TMREC  | NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,886,253:15:0 |      |
| 4229 | 1  | 29  | 11:31:38.333 | 175TV176A6A | 6TMREC  | LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,886,253:19:0 |      |
| 4230 | 1  | 29  | 11:31:39.000 | 175TV422A6A | 6DMSC   | R7,0        | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,886,253:20:0 |      |
| 4231 | 1  | 29  | 11:31:45.666 | 175TV422A6B | 6DMSC   | RDY,0       | DMS Control Tape stop                     | 200 | 4  | 0  | 5,886,253:30:0 |      |
| 4232 | 1  | 29  | 11:31:45.666 |             | DMS:    | : *RUNDOWN  | R7, TRACK 4, REV, TIC * 497.90 +/-        | 200 | 4  | 0  | 5,886,253:30:0 |      |
| 4233 | 1  | 29  | 11:31:46.866 |             | DMS:    | : *READY    | RDY, TRACK 4, REV, TIC * 497.84 +/-       | 200 | 4  | 0  | 5,886,253:31:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|---------|------------------|---|-----|----|----|----------------|------|
| 4234 | 1  | 29  | 17:50:13.666 | 488DV6A     | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,886,627:58:0 |      |
| 4235 | 1  | 29  | 18:27:49.000 | 488DV6B     | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,886,664:74:0 |      |
| 4236 | 1  | 29  | 19:08:33.000 | 488DV6C     | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,886,705:09:0 |      |
| 4237 | 1  | 29  | 19:10:29.000 | 488DV6D     | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,886,707:01:0 |      |
| 4238 | 1  | 29  | 19:36:53.666 | 488DV6E     | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,886,733:12:0 |      |
| 4239 | 1  | 29  | 21:02:00.333 | 20US4B      | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 200 | 4  | 0  | 5,886,817:28:0 |      |
| 4240 | 1  | 29  | 21:03:00.333 | 20US4D      | 7MODE   | SPNL             | AACS ALL-SPIN LOW                         | 200 | 4  | 0  | 5,886,818:27:0 |      |
| 4241 | 1  | 29  | 21:05:00.333 | 20US4E      | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,886,820:25:0 |      |
| 4242 | 1  | 29  | 21:10:30.333 | 20US4G      | 7VENT   | 0.611,1.333,8    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,825:65:0 |      |
| 4243 | 1  | 29  | 21:10:31.000 | 20US4H      | 7VENT   | 0.611,10.989,8   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,825:66:0 |      |
| 4244 | 1  | 29  | 21:10:51.000 | 20US4J      | 7VENT   | 0.611,1.333,6    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:05:0 |      |
| 4245 | 1  | 29  | 21:10:51.666 | 20US4J      | 7VENT   | 0.611,10.989,6   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:06:0 |      |
| 4246 | 1  | 29  | 21:11:11.666 | 20US4K      | 7VENT   | 0.611,1.333,4    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:36:0 |      |
| 4247 | 1  | 29  | 21:11:12.333 | 20US4L      | 7VENT   | 0.611,0.666,5    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:37:0 |      |
| 4248 | 1  | 29  | 21:11:22.333 | 20US4M      | 7VENT   | 0.611,1.333,4    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:52:0 |      |
| 4249 | 1  | 29  | 21:11:23.000 | 20US4N      | 7VENT   | 0.611,0.666,5    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:53:0 |      |
| 4250 | 1  | 29  | 21:11:33.000 | 20US4O      | 7VENT   | 1.211,1.333,10   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:68:0 |      |
| 4251 | 1  | 29  | 21:11:33.666 | 20US4P      | 7VENT   | 1.211,0.666,12   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,826:69:0 |      |
| 4252 | 1  | 29  | 21:13:20.333 | 20US4S      | 7VENT   | 0.611,1.333,7    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,828:47:0 |      |
| 4253 | 1  | 29  | 21:13:21.000 | 20US4T      | 7VENT   | 0.611,10.989,7   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,828:48:0 |      |
| 4254 | 1  | 29  | 21:13:41.000 | 20US4U      | 7VENT   | 0.611,1.333,1    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,828:78:0 |      |
| 4255 | 1  | 29  | 21:13:41.666 | 20US4V      | 7VENT   | 0.611,10.989,1   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,828:79:0 |      |
| 4256 | 1  | 29  | 21:14:01.666 | 20US4AC     | 7VENT   | 0.611,1.333,2    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,829:18:0 |      |
| 4257 | 1  | 29  | 21:14:02.333 | 20US4AD     | 7VENT   | 0.611,0.666,3    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,829:19:0 |      |
| 4258 | 1  | 29  | 21:14:12.333 | 20US4AE     | 7VENT   | 0.611,1.333,2    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,829:34:0 |      |
| 4259 | 1  | 29  | 21:14:13.000 | 20US4AF     | 7VENT   | 0.611,0.666,3    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,829:35:0 |      |
| 4260 | 1  | 29  | 21:14:23.000 | 20US4W      | 7VENT   | 1.211,1.333,9    | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,829:50:0 |      |
| 4261 | 1  | 29  | 21:14:23.666 | 20US4X      | 7VENT   | 1.211,0.666,11   | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,886,829:51:0 |      |
| 4262 | 1  | 29  | 21:15:20.333 | 20US4Z      | 7MODE   | CRU              | AACS CRUISE MODE                          | 200 | 4  | 0  | 5,886,830:45:0 |      |
| 4263 | 1  | 29  | 21:34:59.666 | 432OM431A6A | 6RCDSL  | DDSNCG,PLSNCG,EP | Record Deselect (DDS o                    | 200 | 4  | 0  | 5,886,849:85:0 |      |
| 4264 | 1  | 29  | 21:35:00.333 | 432OM6A     | 6RTSL1  |                  | R/T Select of DDS and                     | 200 | 4  | 0  | 5,886,849:86:0 |      |
| 4265 | 1  | 29  | 21:40:04.333 | 20UD4A      | 7SAFE   | STOP             | S/P NO MOVEMENT                           | 200 | 4  | 0  | 5,886,854:87:0 |      |
| 4266 | 1  | 29  | 21:40:54.333 | 20UD4B      | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 200 | 4  | 0  | 5,886,855:71:0 |      |
| 4267 | 1  | 30  | 00:19:49.000 | 488DW6A     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,012:86:0 |      |
| 4268 | 1  | 30  | 00:53:57.000 | 488DW6B     | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,046:64:0 |      |
| 4269 | 1  | 30  | 01:19:12.333 | 488DW6C     | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,071:62:0 |      |
| 4270 | 1  | 30  | 01:46:02.333 | 488DW6D     | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,096:20:0 |      |
| 4271 | 1  | 30  | 07:39:17.000 | 488DX6A     | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,447:53:0 |      |
| 4272 | 1  | 30  | 08:23:39.000 | 488DX6B     | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,491:42:0 |      |
| 4273 | 1  | 30  | 08:24:05.000 | 488DX6C     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,491:81:0 |      |
| 4274 | 1  | 30  | 08:32:37.000 | 488DX6D     | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,887,500:30:0 |      |
| 4275 | 1  | 30  | 15:30:52.933 | 411JV6A     | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,887,914:00:0 |      |
| 4276 | 1  | 30  | 15:30:52.933 |             | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC 497.84 +/-        | 200 | 4  | 0  | 5,887,914:00:0 |      |
| 4277 | 1  | 30  | 15:30:54.333 |             | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC * 497.96 +/-        | 200 | 4  | 0  | 5,887,914:02:1 |      |
| 4278 | 1  | 30  | 15:30:59.600 |             | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC * 499.20 +/-        | 200 | 4  | 0  | 5,887,914:10:0 |      |
| 4279 | 1  | 30  | 15:31:00.800 |             | DMS:    | :*RUNUP          | R7, TRACK *4, *REV, TIC * 499.26 +/-      | 200 | 4  | 0  | 5,887,914:11:8 |      |
| 4280 | 1  | 30  | 15:31:02.200 |             | DMS:    | :*AT_SPD         | R7, TRACK 4, REV, TIC 499.14 +/-          | 200 | 4  | 0  | 5,887,914:13:9 |      |
| 4281 | 1  | 30  | 15:31:02.200 |             | DMS:    | :*RECORD         | R7, TRACK 4, REV, TIC * 499.14 +/-        | 200 | 4  | 0  | 5,887,914:13:9 |      |
| 4282 | 1  | 30  | 15:31:02.933 | 411JV6B     | 6TMREC  | BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,887,914:15:0 |      |
| 4283 | 1  | 30  | 15:33:04.266 | 411JV6C     | 6TMREC  | NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,887,916:15:0 |      |
| 4284 | 1  | 30  | 15:33:06.933 | 175TW176A6A | 6TMREC  | LPW              | 7.68 KBPS LOW RATE SCI PWRS RECORD Record | 200 | 4  | 0  | 5,887,916:19:0 |      |
| 4285 | 1  | 30  | 15:33:07.600 | 175TW422A6A | 6DMSC   | R7,0             | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,887,916:20:0 |      |
| 4286 | 1  | 30  | 15:33:14.266 | 175TW422A6B | 6DMSC   | RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,887,916:30:0 |      |
| 4287 | 1  | 30  | 15:33:14.266 |             | DMS:    | :*RUNDOWN        | R7, TRACK 4, REV, TIC * 468.18 +/-        | 200 | 4  | 0  | 5,887,916:30:0 |      |
| 4288 | 1  | 30  | 15:33:15.466 |             | DMS:    | :*READY          | RDY, TRACK 4, REV, TIC * 468.13 +/-       | 200 | 4  | 0  | 5,887,916:31:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|--------------------|---|-----|----|----|----------------|------|
| 4289 | 1  | 30  | 19:29:12.266 | 488DY6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,149:04:0 |      |
| 4290 | 1  | 30  | 23:39:16.933 | 488DY6B     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,397:03:0 |      |
| 4291 | 1  | 31  | 00:24:04.933 | 488DY6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,441:31:0 |      |
| 4292 | 1  | 31  | 01:44:20.933 | 488DZ6A     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,520:66:0 |      |
| 4293 | 1  | 31  | 02:11:10.266 | 488DZ6B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,547:23:0 |      |
| 4294 | 1  | 31  | 06:05:24.933 | 488DZ6C     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,778:84:0 |      |
| 4295 | 1  | 31  | 07:54:12.933 | 488EA6A     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,886:48:0 |      |
| 4296 | 1  | 31  | 08:18:08.266 | 488EA6B     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,910:17:0 |      |
| 4297 | 1  | 31  | 08:28:20.933 | 488EA6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,888,920:26:0 |      |
| 4298 | 1  | 31  | 15:25:38.933 | 411JW6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,889,333:00:0 |      |
| 4299 | 1  | 31  | 15:25:38.933 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 468.13 +/-        | 200 | 4  | 0  | 5,889,333:00:0 |      |
| 4300 | 1  | 31  | 15:25:40.333 |             | DMS: : *US AT SP   | P7, TRACK 1, FWD, TIC * 468.24 +/-        | 200 | 4  | 0  | 5,889,333:02:1 |      |
| 4301 | 1  | 31  | 15:25:45.600 |             | DMS: : *US RD      | P7, TRACK 1, FWD, TIC * 469.48 +/-        | 200 | 4  | 0  | 5,889,333:10:0 |      |
| 4302 | 1  | 31  | 15:25:46.800 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 469.54 +/-      | 200 | 4  | 0  | 5,889,333:11:8 |      |
| 4303 | 1  | 31  | 15:25:48.200 |             | DMS: : *AT SPD     | R7, TRACK 4, REV, TIC 469.42 +/-          | 200 | 4  | 0  | 5,889,333:13:9 |      |
| 4304 | 1  | 31  | 15:25:48.200 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 469.42 +/-        | 200 | 4  | 0  | 5,889,333:13:9 |      |
| 4305 | 1  | 31  | 15:25:48.933 | 411JW6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,889,333:15:0 |      |
| 4306 | 1  | 31  | 15:27:50.266 | 411JW6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,889,335:15:0 |      |
| 4307 | 1  | 31  | 15:27:52.933 | 175TX176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,889,335:19:0 |      |
| 4308 | 1  | 31  | 15:27:53.600 | 175TX422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,889,335:20:0 |      |
| 4309 | 1  | 31  | 15:28:00.266 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 438.47 +/-        | 200 | 4  | 0  | 5,889,335:30:0 |      |
| 4310 | 1  | 31  | 15:28:00.266 | 175TX422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,889,335:30:0 |      |
| 4311 | 1  | 31  | 15:28:01.466 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 438.41 +/-       | 200 | 4  | 0  | 5,889,335:31:8 |      |
| 4312 | 1  | 31  | 16:54:04.933 | 488EB6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,889,420:42:0 |      |
| 4313 | 1  | 31  | 23:28:36.866 | 488EC6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,889,810:60:0 |      |
| 4314 | 1  | 32  | 00:39:00.866 | 488EC6B     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,889,880:26:0 |      |
| 4315 | 1  | 32  | 00:48:03.533 | 488EC6C     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,889,889:21:0 |      |
| 4316 | 1  | 32  | 00:58:12.866 | 488EC6D     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,889,899:25:0 |      |
| 4317 | 1  | 32  | 01:59:02.200 | 488EC6E     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,889,959:39:0 |      |
| 4318 | 1  | 32  | 07:28:36.866 | 488ED6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,890,285:35:0 |      |
| 4319 | 1  | 32  | 08:10:46.200 | 488ED6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,890,327:07:0 |      |
| 4320 | 1  | 32  | 08:17:40.866 | 488ED6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,890,333:83:0 |      |
| 4321 | 1  | 32  | 15:18:23.533 | 411JX6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,890,750:00:0 |      |
| 4322 | 1  | 32  | 15:18:23.533 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 438.41 +/-        | 200 | 4  | 0  | 5,890,750:00:0 |      |
| 4323 | 1  | 32  | 15:18:24.933 |             | DMS: : *US AT SP   | P7, TRACK 1, FWD, TIC * 438.53 +/-        | 200 | 4  | 0  | 5,890,750:02:1 |      |
| 4324 | 1  | 32  | 15:18:30.200 |             | DMS: : *US RD      | P7, TRACK 1, FWD, TIC * 439.76 +/-        | 200 | 4  | 0  | 5,890,750:10:0 |      |
| 4325 | 1  | 32  | 15:18:31.400 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 439.82 +/-      | 200 | 4  | 0  | 5,890,750:11:8 |      |
| 4326 | 1  | 32  | 15:18:32.800 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 439.70 +/-        | 200 | 4  | 0  | 5,890,750:13:9 |      |
| 4327 | 1  | 32  | 15:18:32.800 |             | DMS: : *AT SPD     | R7, TRACK 4, REV, TIC 439.70 +/-          | 200 | 4  | 0  | 5,890,750:13:9 |      |
| 4328 | 1  | 32  | 15:18:33.533 | 411JX6B     | 6TMREC BDT         | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,890,750:15:0 |      |
| 4329 | 1  | 32  | 15:20:34.866 | 411JX6C     | 6TMREC NRC         | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,890,752:15:0 |      |
| 4330 | 1  | 32  | 15:20:37.533 | 175TY176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record  | 200 | 4  | 0  | 5,890,752:19:0 |      |
| 4331 | 1  | 32  | 15:20:38.200 | 175TY422A6A | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,890,752:20:0 |      |
| 4332 | 1  | 32  | 15:20:44.866 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 408.75 +/-        | 200 | 4  | 0  | 5,890,752:30:0 |      |
| 4333 | 1  | 32  | 15:20:44.866 | 175TY422A6B | 6DMSC RDY,0        | DMS Control Tape stop                     | 200 | 4  | 0  | 5,890,752:30:0 |      |
| 4334 | 1  | 32  | 15:20:46.066 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 408.69 +/-       | 200 | 4  | 0  | 5,890,752:31:8 |      |
| 4335 | 1  | 32  | 16:53:57.533 | 488EE6A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,890,844:47:0 |      |
| 4336 | 1  | 32  | 23:24:20.866 | 488EF6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,230:56:0 |      |
| 4337 | 1  | 33  | 00:32:36.866 | 488EF6B     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,298:12:0 |      |
| 4338 | 1  | 33  | 00:41:08.866 | 488EF6C     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,306:52:0 |      |
| 4339 | 1  | 33  | 07:24:20.800 | 488EG6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,705:31:0 |      |
| 4340 | 1  | 33  | 08:08:24.800 | 488EG6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,748:84:0 |      |
| 4341 | 1  | 33  | 08:09:08.800 | 488EG6C     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,749:59:0 |      |
| 4342 | 1  | 33  | 08:17:40.800 | 488EG6D     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,891,758:08:0 |      |
| 4343 | 1  | 33  | 15:15:10.800 | 411JY6A     | 6DMSC R7,0         | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,892,171:00:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID        | Command Parameters | Description                              | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|--------------------|--|-----|----|----|----------------|------|
| 4344 | 1  | 33  | 15:15:10.800 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 408.69 +/-       | 200 | 4  | 0  | 5.892,171:00:0 |      |
| 4345 | 1  | 33  | 15:15:12.200 |             | DMS: : *US AT SP   | P7, TRACK 1, FWD, TIC * 408.81 +/-       | 200 | 4  | 0  | 5.892,171:02:1 |      |
| 4346 | 1  | 33  | 15:15:17.466 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 410.04 +/-       | 200 | 4  | 0  | 5.892,171:10:0 |      |
| 4347 | 1  | 33  | 15:15:18.666 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 410.10 +/-     | 200 | 4  | 0  | 5.892,171:11:8 |      |
| 4348 | 1  | 33  | 15:15:20.066 |             | DMS: : *AT SPD     | R7, TRACK 4, REV, TIC 409.98 +/-         | 200 | 4  | 0  | 5.892,171:13:9 |      |
| 4349 | 1  | 33  | 15:15:20.066 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 409.98 +/-       | 200 | 4  | 0  | 5.892,171:13:9 |      |
| 4350 | 1  | 33  | 15:15:20.800 | 411JY6B     | 6TMREC BDT         | 7.68 KBPS BUFFERDUMP TO TAPE Record Mode | 200 | 4  | 0  | 5.892,171:15:0 |      |
| 4351 | 1  | 33  | 15:17:22.133 | 411JY6C     | 6TMREC NRC         | NO RECORD Record Mode Change             | 200 | 4  | 0  | 5.892,173:15:0 |      |
| 4352 | 1  | 33  | 15:17:24.800 | 175TZ176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record | 200 | 4  | 0  | 5.892,173:19:0 |      |
| 4353 | 1  | 33  | 15:17:25.466 | 175TZ422A6A | 6DMSC R7/0         | DMS Control Tape runup 7.68kps           | 200 | 4  | 0  | 5.892,173:20:0 |      |
| 4354 | 1  | 33  | 15:17:32.133 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 379.03 +/-       | 200 | 4  | 0  | 5.892,173:30:0 |      |
| 4355 | 1  | 33  | 15:17:32.133 | 175TZ422A6B | 6DMSC RDY,0        | DMS Control Tape stop                    | 200 | 4  | 0  | 5.892,173:30:0 |      |
| 4356 | 1  | 33  | 15:17:33.333 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 378.97 +/-      | 200 | 4  | 0  | 5.892,173:31:8 |      |
| 4357 | 1  | 33  | 16:59:42.800 | 488EH6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,274:35:0 |      |
| 4358 | 1  | 33  | 18:18:18.800 | 488EH6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,352:11:0 |      |
| 4359 | 1  | 33  | 18:47:24.800 | 488EH6C     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,380:82:0 |      |
| 4360 | 1  | 33  | 23:54:12.800 | 488E16A     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,684:30:0 |      |
| 4361 | 1  | 34  | 00:24:04.800 | 488E16B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,713:79:0 |      |
| 4362 | 1  | 34  | 01:04:43.466 | 488E16C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,754:06:0 |      |
| 4363 | 1  | 34  | 01:31:33.466 | 488E16D     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.892,780:55:0 |      |
| 4364 | 1  | 34  | 07:13:40.800 | 488E16A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,118:88:0 |      |
| 4365 | 1  | 34  | 08:04:52.800 | 488E16B     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,169:55:0 |      |
| 4366 | 1  | 34  | 08:07:45.466 | 488E16C     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,172:41:0 |      |
| 4367 | 1  | 34  | 08:17:40.800 | 488E16D     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,182:24:0 |      |
| 4368 | 1  | 34  | 12:49:35.466 | 488E16E     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,451:17:0 |      |
| 4369 | 1  | 34  | 13:56:52.800 | 488E16A     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,517:67:0 |      |
| 4370 | 1  | 34  | 20:36:49.400 | 488E16A     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.893,913:26:0 |      |
| 4371 | 1  | 34  | 23:23:39.400 | 488E16B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,078:26:0 |      |
| 4372 | 1  | 35  | 00:44:51.400 | 488E16C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,158:54:0 |      |
| 4373 | 1  | 35  | 01:11:41.400 | 488E16D     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,185:12:0 |      |
| 4374 | 1  | 35  | 05:24:52.733 | 488EM6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,435:49:0 |      |
| 4375 | 1  | 35  | 07:33:31.400 | 488EM6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,562:70:0 |      |
| 4376 | 1  | 35  | 07:35:00.733 | 488EM6C     | 6TMSED FILL,AL4    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,564:22:0 |      |
| 4377 | 1  | 35  | 07:43:32.733 | 488EM6D     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.894,572:62:0 |      |
| 4378 | 1  | 35  | 14:42:28.066 |             | DMS: : *US-RUNUP   | P7, TRACK *1, *FWD, TIC 378.97 +/-       | 200 | 4  | 0  | 5.894,987:00:0 |      |
| 4379 | 1  | 35  | 14:42:28.066 | 411JZ6A     | 6DMSC R7/0         | DMS Control Tape runup 7.68kps           | 200 | 4  | 0  | 5.894,987:00:0 |      |
| 4380 | 1  | 35  | 14:42:29.466 |             | DMS: : *US AT SP   | P7, TRACK 1, FWD, TIC * 379.09 +/-       | 200 | 4  | 0  | 5.894,987:02:1 |      |
| 4381 | 1  | 35  | 14:42:34.733 |             | DMS: : *US_RD      | P7, TRACK 1, FWD, TIC * 380.32 +/-       | 200 | 4  | 0  | 5.894,987:10:0 |      |
| 4382 | 1  | 35  | 14:42:35.933 |             | DMS: : *RUNUP      | R7, TRACK *4, *REV, TIC * 380.38 +/-     | 200 | 4  | 0  | 5.894,987:11:8 |      |
| 4383 | 1  | 35  | 14:42:37.333 |             | DMS: : *AT SPD     | R7, TRACK 4, REV, TIC 380.26 +/-         | 200 | 4  | 0  | 5.894,987:13:9 |      |
| 4384 | 1  | 35  | 14:42:37.333 |             | DMS: : *RECORD     | R7, TRACK 4, REV, TIC * 380.26 +/-       | 200 | 4  | 0  | 5.894,987:13:9 |      |
| 4385 | 1  | 35  | 14:42:38.066 | 411JZ6B     | 6TMREC BDT         | 7.68 KBPS BUFFERDUMP TO TAPE Record Mode | 200 | 4  | 0  | 5.894,987:15:0 |      |
| 4386 | 1  | 35  | 14:44:39.400 | 411JZ6C     | 6TMREC NRC         | NO RECORD Record Mode Change             | 200 | 4  | 0  | 5.894,989:15:0 |      |
| 4387 | 1  | 35  | 14:44:42.066 | 175UA176A6A | 6TMREC LPW         | 7.68 KBPS LOW RATE SCI PWS RECORD Record | 200 | 4  | 0  | 5.894,989:19:0 |      |
| 4388 | 1  | 35  | 14:44:42.733 | 175UA422A6A | 6DMSC R7/0         | DMS Control Tape runup 7.68kps           | 200 | 4  | 0  | 5.894,989:20:0 |      |
| 4389 | 1  | 35  | 14:44:49.400 |             | DMS: : *RUNDOWN    | R7, TRACK 4, REV, TIC * 349.31 +/-       | 200 | 4  | 0  | 5.894,989:30:0 |      |
| 4390 | 1  | 35  | 14:44:49.400 | 175UA422A6B | 6DMSC RDY,0        | DMS Control Tape stop                    | 200 | 4  | 0  | 5.894,989:30:0 |      |
| 4391 | 1  | 35  | 14:44:50.600 |             | DMS: : *READY      | RDY, TRACK 4, REV, TIC * 349.25 +/-      | 200 | 4  | 0  | 5.894,989:31:8 |      |
| 4392 | 1  | 35  | 15:49:26.733 | 488EN6A     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,053:22:0 |      |
| 4393 | 1  | 35  | 17:08:33.400 | 488EN6B     | 6TMSED FILL,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,131:44:0 |      |
| 4394 | 1  | 35  | 17:37:39.400 | 488EN6C     | 6TMSED NORM,AL5    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,160:24:0 |      |
| 4395 | 1  | 35  | 23:43:32.733 | 488EO6A     | 6TMSED NORM,AL4    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,522:12:0 |      |
| 4396 | 1  | 36  | 00:34:44.733 | 488EO6B     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,572:70:0 |      |
| 4397 | 1  | 36  | 00:54:59.400 | 488EO6C     | 6TMSED FILL,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,592:72:0 |      |
| 4398 | 1  | 36  | 01:21:49.400 | 488EO6D     | 6TMSED NORM,AL6    | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.895,619:30:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command Parameters      | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|-------------------------|---|-----|----|----|----------------|------|
| 4399 | 1  | 36  | 05:06:31.333 | 488EO6E | 6TMSED FILL,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,895,841:51:0 |      |
| 4400 | 1  | 36  | 05:09:56.666 | 488EP6A | 6TMSED FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,895,844:86:0 |      |
| 4401 | 1  | 36  | 12:12:37.333 | 431YL6A | 6RCDSL DDSNCG,PLSNCG,EP | Record Deselect (DDS o                    | 200 | 4  | 0  | 5,896,262:89:0 |      |
| 4402 | 1  | 36  | 12:13:39.333 |         | DMS: : *US-RUNUP        | P7, TRACK *1, *FWD, TIC 349.25 +/-        | 200 | 4  | 0  | 5,896,264:00:0 |      |
| 4403 | 1  | 36  | 12:13:39.333 | 411KA6A | 6DMSC R7,0              | DMS Control Tape runup 7.68kps            | 200 | 4  | 0  | 5,896,264:00:0 |      |
| 4404 | 1  | 36  | 12:13:40.733 |         | DMS: : *US_AT_SP        | P7, TRACK 1, FWD, TIC * 349.37 +/-        | 200 | 4  | 0  | 5,896,264:02:1 |      |
| 4405 | 1  | 36  | 12:13:46.000 |         | DMS: : *US_RD           | P7, TRACK 1, FWD, TIC * 350.60 +/-        | 200 | 4  | 0  | 5,896,264:10:0 |      |
| 4406 | 1  | 36  | 12:13:47.200 |         | DMS: : *RUNUP           | R7, TRACK *4, *REV, TIC * 350.66 +/-      | 200 | 4  | 0  | 5,896,264:11:8 |      |
| 4407 | 1  | 36  | 12:13:48.600 |         | DMS: : *RECORD          | R7, TRACK 4, REV, TIC * 350.54 +/-        | 200 | 4  | 0  | 5,896,264:13:9 |      |
| 4408 | 1  | 36  | 12:13:48.600 |         | DMS: : *AT_SPD          | R7, TRACK 4, REV, TIC 350.54 +/-          | 200 | 4  | 0  | 5,896,264:13:9 |      |
| 4409 | 1  | 36  | 12:13:49.333 | 411KA6B | 6TMREC BDT              | 7.68 KBPS BUFFER DUMP TO TAPE Record Mode | 200 | 4  | 0  | 5,896,264:15:0 |      |
| 4410 | 1  | 36  | 12:15:49.333 | 20YC6A  | 6HICON                  |   | 200 | 4  | 0  | 5,896,266:13:0 |      |
| 4411 | 1  | 36  | 12:15:50.666 | 411KA6C | 6TMREC NRC              | NO RECORD Record Mode Change              | 200 | 4  | 0  | 5,896,266:15:0 |      |
| 4412 | 1  | 36  | 12:15:51.333 |         | DMS: : *RUNDOWN         | R7, TRACK 4, REV, TIC * 321.78 +/-        | 200 | 4  | 0  | 5,896,266:16:0 |      |
| 4413 | 1  | 36  | 12:15:51.333 | 411KA6D | 6DMSC RDY,0             | DMS Control Tape stop                     | 200 | 4  | 0  | 5,896,266:16:0 |      |
| 4414 | 1  | 36  | 12:15:52.533 |         | DMS: : *READY           | RDY, TRACK 4, REV, TIC * 321.72 +/-       | 200 | 4  | 0  | 5,896,266:17:8 |      |
| 4415 | 1  | 36  | 12:16:41.333 | 431YM6A | 6RCSEL DDSNCG,PLSNCG,EP | Record Select (DDS onl                    | 200 | 4  | 0  | 5,896,267:00:0 |      |
| 4416 | 1  | 36  | 17:34:18.666 | 488EQ6A | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,896,581:12:0 |      |
| 4417 | 1  | 36  | 18:53:42.666 | 488EQ6B | 6TMSED FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,896,659:60:0 |      |
| 4418 | 1  | 36  | 19:22:48.666 | 488EQ6C | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,896,688:40:0 |      |
| 4419 | 1  | 36  | 19:54:42.000 | 432JB6B | 6RTDS2 NIMDSL,AACDSL,RT | NIMS R/T DESELECTAACS DESELECT            | 200 | 4  | 0  | 5,896,719:89:0 |      |
| 4420 | 1  | 36  | 20:00:00.000 | 20A3EW  | 37A Final Condition     | NIMS Power ON                             | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4421 | 1  | 36  | 20:00:00.000 |         | DMS: : READY            | RDY, TRACK 4, REV, TIC 321.72 +/-         | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4422 | 1  | 36  | 20:00:00.000 | 20A3FF  | 40T2R Final Condition   | PCT Heater 2 OFF                          | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4423 | 1  | 36  | 20:00:00.000 | 20A3FE  | 40T1PR Final Condition  | PCT Heater 1 OFF (primary relay)          | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4424 | 1  | 36  | 20:00:00.000 | 20A3FD  | 40HRPR Final Condition  | RCT Heater OFF (primary relay)            | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4425 | 1  | 36  | 20:00:00.000 | 20A3EX  | 37HR Final Condition    | Replacement Heaters OFF                   | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4426 | 1  | 36  | 20:00:00.000 | 20A3EY  | 37C1PR Final Condition  | Optics Heater 1 OFF (primary relay)       | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4427 | 1  | 36  | 20:00:00.000 | 20A3EZ  | 37C2PR Final Condition  | Optics Heater 2 OFF (primary relay)       | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4428 | 1  | 36  | 20:00:00.000 | 20A3FA  | 37F1PR Final Condition  | Radiator Flash Heater OFF (primary relay) | 200 | 4  | 0  | 5,896,725:20:0 |      |
| 4429 | 1  | 36  | 20:00:00.000 | 20A3FB  | 37F2PR Final Condition  | Shield Flash Heater OFF (primary relay)   | 200 | 4  | 0  | 5,896,725:20:0 |      |

| Sequence: |    | G29B-AR |              | Created: 6/6/01 |                          | Begin: 01-036/20:00:00                    |     | Finish: 01-083/12:00:00 |    |                |     |
|-----------|----|---------|--------------|-----------------|--------------------------|---|-----|-------------------------|----|----------------|-----|
| Line      | YR | DOY     | SCET - GMT   | PSID            | Command Parameters       | Description                               | GCM | GO                      | GS | RIM            | MFI |
| 1         | 1  | 36      | 20:00:00.000 |                 | DMS: : READY             | RDY, TRACK 4, REV, TIC 321.72 +/-         | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 2         | 1  | 36      | 20:00:00.000 | 20A3EW          | 37A Initial Condition    | NIMS Power ON                             | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 3         | 1  | 36      | 20:00:00.000 | 20A3EX          | 37HR Initial Condition   | Replacement Heaters OFF                   | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 4         | 1  | 36      | 20:00:00.000 | 20A3EY          | 37C1PR Initial Condition | Optics Heater 1 OFF (primary relay)       | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 5         | 1  | 36      | 20:00:00.000 | 20A3EZ          | 37C2PR Initial Condition | Optics Heater 2 OFF (primary relay)       | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 6         | 1  | 36      | 20:00:00.000 | 20A3FA          | 37F1PR Initial Condition | Radiator Flash Heater OFF (primary relay) | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 7         | 1  | 36      | 20:00:00.000 | 20A3FB          | 37F2PR Initial Condition | Shield Flash Heater OFF (primary relay)   | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 8         | 1  | 36      | 20:00:00.000 | 20A3FD          | 40HRPR Initial Condition | RCT Heater OFF (primary relay)            | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 9         | 1  | 36      | 20:00:00.000 | 20A3FE          | 40T1PR Initial Condition | PCT Heater 1 OFF (primary relay)          | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 10        | 1  | 36      | 20:00:00.000 | 20A3FF          | 40T2R Initial Condition  | PCT Heater 2 OFF                          | 200 | 4                       | 0  | 5,896,725:20:0 |     |
| 11        | 1  | 36      | 20:01:40.666 | 488AA6A         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,896,726:80:0 |     |
| 12        | 1  | 36      | 20:01:47.333 | 432MA431A6A     | 6RCTDSL DSDSL,PLSNCG,EP  | Record Deselect (DDS o                    | 200 | 4                       | 0  | 5,896,726:90:0 |     |
| 13        | 1  | 36      | 20:01:48.000 | 432MA6A         | 6RTSL1                   | RT Select of DDS and                      | 200 | 4                       | 0  | 5,896,727:00:0 |     |
| 14        | 1  | 36      | 20:18:04.000 | 20SG4A          | 7SAFE STOP               | S/P NO MOVEMENT                           | 200 | 4                       | 0  | 5,896,743:08:0 |     |
| 15        | 1  | 36      | 20:18:54.000 | 20SG4B          | 7SLEW DIS,POS,0.0        | Stator movement                           | 200 | 4                       | 0  | 5,896,743:83:0 |     |
| 16        | 1  | 36      | 20:20:00.000 | 176SA6A         | 6TMREC IPB               | INITIATE PLAYBACK (PB CONTROL) Record Mod | 200 | 4                       | 0  | 5,896,745:00:0 |     |
| 17        | 1  | 36      | 21:55:10.666 | 488AA6B         | 6TMSED FILL,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,896,839:12:0 |     |
| 18        | 1  | 36      | 22:01:08.666 | 488AA6C         | 6TMSED FILL,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,896,845:03:0 |     |
| 19        | 1  | 37      | 22:13:22.000 | 488AB6A         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,897,094:44:0 |     |
| 20        | 1  | 37      | 06:58:44.666 | 488AB6B         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,897,376:66:0 |     |
| 21        | 1  | 37      | 07:35:07.333 | 488AB6C         | 6TMSED FILL,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,897,412:64:0 |     |
| 22        | 1  | 37      | 07:41:24.666 | 488AB6D         | 6TMSED FILL,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,897,418:84:0 |     |
| 23        | 1  | 37      | 18:58:15.933 | 488AC6A         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,088:31:0 |     |
| 24        | 1  | 37      | 22:48:04.600 | 488AC6B         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,315:57:0 |     |
| 25        | 1  | 38      | 00:13:24.600 | 488AC6C         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,400:02:0 |     |
| 26        | 1  | 38      | 00:32:36.600 | 488AC6D         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,419:01:0 |     |
| 27        | 1  | 38      | 06:54:28.600 | 488AD6A         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,796:62:0 |     |
| 28        | 1  | 38      | 07:47:48.600 | 488AD6B         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,849:39:0 |     |
| 29        | 1  | 38      | 07:52:13.266 | 488AD6C         | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,853:72:0 |     |
| 30        | 1  | 38      | 08:00:36.600 | 488AD6D         | 6TMSED FILL,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,898,862:08:0 |     |
| 31        | 1  | 38      | 16:23:09.266 | 488AE6A         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,359:10:0 |     |
| 32        | 1  | 38      | 22:43:48.533 | 488AF6A         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,735:53:0 |     |
| 33        | 1  | 39      | 00:09:08.533 | 488AF6B         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,819:89:0 |     |
| 34        | 1  | 39      | 00:22:07.200 | 488AF6C         | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,832:74:0 |     |
| 35        | 1  | 39      | 00:30:28.533 | 488AF6D         | 6TMSED FILL,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,841:07:0 |     |
| 36        | 1  | 39      | 01:38:06.533 | 488AF6E         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,907:88:0 |     |
| 37        | 1  | 39      | 03:00:24.533 | 488AG6A         | 6TMSED FILL,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,899,989:33:0 |     |
| 38        | 1  | 39      | 03:27:14.533 | 488AG6B         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,900,015:82:0 |     |
| 39        | 1  | 39      | 04:29:24.533 | 488AG6C         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,900,077:35:0 |     |
| 40        | 1  | 39      | 07:13:40.533 | 488AG6D         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,900,239:77:0 |     |
| 41        | 1  | 39      | 07:52:04.533 | 488AG6E         | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,900,277:75:0 |     |
| 42        | 1  | 39      | 08:00:36.533 | 488AH6A         | 6TMSED FILL,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,900,286:24:0 |     |
| 43        | 1  | 39      | 17:38:00.533 | 488AI6A         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,900,857:29:0 |     |
| 44        | 1  | 39      | 22:33:08.533 | 488AI6B         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,149:19:0 |     |
| 45        | 1  | 40      | 00:00:36.533 | 488AJ6A         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,235:65:0 |     |
| 46        | 1  | 40      | 00:09:08.533 | 488AJ6B         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,244:14:0 |     |
| 47        | 1  | 40      | 06:43:48.533 | 488AK6A         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,634:44:0 |     |
| 48        | 1  | 40      | 07:24:16.533 | 488AK6B         | 6TMSED FILL,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,674:46:0 |     |
| 49        | 1  | 40      | 07:28:36.533 | 488AK6C         | 6TMSED FILL,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,678:72:0 |     |
| 50        | 1  | 40      | 12:20:34.466 | 488AK6D         | 6TMSED NORM,AL4          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,967:50:0 |     |
| 51        | 1  | 40      | 12:31:32.466 | 488AK6E         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,901,978:36:0 |     |
| 52        | 1  | 40      | 13:50:28.466 | 488AL6A         | 6TMSED NORM,AL6          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,902,056:42:0 |     |
| 53        | 1  | 40      | 22:28:52.466 | 488AM6A         | 6TMSED NORM,AL5          | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,902,569:15:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters | Description            | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------|------------------------|-----|----|----|----------------|-----|
| 54   | 1  | 40  | 22:52:20.466 | 488AM6B | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,902,592:34:0 |     |
| 55   | 1  | 41  | 06:33:08.466 | 488AN6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,903,048:10:0 |     |
| 56   | 1  | 41  | 07:32:52.466 | 488AN6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,903,107:17:0 |     |
| 57   | 1  | 41  | 07:36:48.466 | 488AN6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,903,111:07:0 |     |
| 58   | 1  | 41  | 07:45:40.466 | 488AN6D | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,903,119:77:0 |     |
| 59   | 1  | 42  | 00:12:42.400 | 488AO6A | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,096:03:0 |     |
| 60   | 1  | 42  | 06:28:52.400 | 488AP6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,468:06:0 |     |
| 61   | 1  | 42  | 07:28:36.400 | 488AP6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,527:13:0 |     |
| 62   | 1  | 42  | 07:36:40.400 | 488AP6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,535:11:0 |     |
| 63   | 1  | 42  | 12:35:18.400 | 488AQ6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,830:43:0 |     |
| 64   | 1  | 42  | 13:05:40.400 | 488AQ6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,860:46:0 |     |
| 65   | 1  | 42  | 13:54:29.733 | 488AQ6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,908:72:0 |     |
| 66   | 1  | 42  | 14:23:35.733 | 488AQ6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,904,937:52:0 |     |
| 67   | 1  | 42  | 22:58:44.400 | 488AR6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,447:05:0 |     |
| 68   | 1  | 43  | 00:06:34.400 | 488AR6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,514:13:0 |     |
| 69   | 1  | 43  | 00:15:32.400 | 488AR6C | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,523:01:0 |     |
| 70   | 1  | 43  | 02:27:33.066 | 488AR6D | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,653:52:0 |     |
| 71   | 1  | 43  | 06:22:28.333 | 488AS6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,885:83:0 |     |
| 72   | 1  | 43  | 07:22:12.333 | 488AS6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,944:90:0 |     |
| 73   | 1  | 43  | 07:31:32.333 | 488AS6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,954:20:0 |     |
| 74   | 1  | 43  | 07:41:24.333 | 488AS6D | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,905,963:89:0 |     |
| 75   | 1  | 43  | 21:00:00.333 | 481UD4A | 7VECT   |            | Inert vect update UTC  | 200 | 4  | 0  | 5,906,753:73:0 |     |
| 76   | 1  | 44  | 04:07:24.333 | 488AT6A | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,907,176:46:0 |     |
| 77   | 1  | 44  | 06:18:12.333 | 488AT6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,907,305:79:0 |     |
| 78   | 1  | 44  | 07:09:10.333 | 488AT6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,907,356:25:0 |     |
| 79   | 1  | 44  | 07:15:48.333 | 488AT6D | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,907,362:76:0 |     |
| 80   | 1  | 44  | 17:27:18.933 | 488AU6A | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,907,967:57:0 |     |
| 81   | 1  | 44  | 21:56:52.266 | 488AU6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,234:20:0 |     |
| 82   | 1  | 44  | 22:49:05.600 | 488AU6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,285:79:0 |     |
| 83   | 1  | 45  | 01:08:10.933 | 488AV6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,423:39:0 |     |
| 84   | 1  | 45  | 02:29:50.266 | 488AV6B | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,504:17:0 |     |
| 85   | 1  | 45  | 02:58:56.933 | 488AV6C | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,532:89:0 |     |
| 86   | 1  | 45  | 06:37:24.266 | 488AV6D | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,749:03:0 |     |
| 87   | 1  | 45  | 07:26:16.266 | 488AW6A | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,797:33:0 |     |
| 88   | 1  | 45  | 07:35:00.266 | 488AW6B | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,908,806:00:0 |     |
| 89   | 1  | 45  | 18:52:10.933 | 488AX6A | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,909,475:67:0 |     |
| 90   | 1  | 45  | 21:48:20.266 | 488AX6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,909,649:87:0 |     |
| 91   | 1  | 45  | 23:32:52.266 | 488AX6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,909,753:31:0 |     |
| 92   | 1  | 45  | 23:46:10.200 | 488AX6D | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,909,766:45:0 |     |
| 93   | 1  | 45  | 23:56:20.200 | 488AX6E | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,909,776:50:0 |     |
| 94   | 1  | 46  | 00:22:09.533 | 488AY6A | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,909,802:08:0 |     |
| 95   | 1  | 46  | 06:03:16.200 | 488AY6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,910,139:41:0 |     |
| 96   | 1  | 46  | 07:07:16.200 | 488AZ6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,910,202:68:0 |     |
| 97   | 1  | 46  | 07:16:07.533 | 488AZ6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,910,211:46:0 |     |
| 98   | 1  | 46  | 07:26:28.200 | 488AZ6C | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,910,221:67:0 |     |
| 99   | 1  | 46  | 16:22:03.533 | 488BA6A | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,910,751:40:0 |     |
| 100  | 1  | 46  | 21:41:56.200 | 488BA6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,067:73:0 |     |
| 101  | 1  | 46  | 22:53:48.200 | 488B6A  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,138:80:0 |     |
| 102  | 1  | 46  | 23:00:52.200 | 488B6B  | 6TMSED  | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,145:79:0 |     |
| 103  | 1  | 47  | 00:22:01.533 | 488B6C  | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,226:12:0 |     |
| 104  | 1  | 47  | 05:56:52.200 | 488B6A  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,557:27:0 |     |
| 105  | 1  | 47  | 06:58:26.200 | 488B6B  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,618:17:0 |     |
| 106  | 1  | 47  | 07:03:00.200 | 488B6C  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,622:64:0 |     |
| 107  | 1  | 47  | 11:54:37.466 | 488B6D  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,911:11:0 |     |
| 108  | 1  | 47  | 13:05:40.133 | 488B6A  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,911,981:35:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters     | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|----------------|---|-----|----|----|----------------|-----|
| 109  | 1  | 47  | 13:15:10.800 | 488BD6B | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,911,990:72:0 |     |
| 110  | 1  | 47  | 13:44:16.800 | 488BD6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,019:52:0 |     |
| 111  | 1  | 47  | 17:56:28.800 | 176UW6A | 6TMREC  | PPB            | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5,912,269:00:0 |     |
| 112  | 1  | 47  | 18:02:00.133 | 20UQ4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5,912,274:42:0 |     |
| 113  | 1  | 47  | 18:05:00.133 | 20UQ4D  | 7MODE   | SPNL           | AACS ALL-SPIN LOW                         | 200 | 4  | 0  | 5,912,275:41:0 |     |
| 114  | 1  | 47  | 18:03:00.133 | 20UQ4E  | 7SAFE   | UNSTOW         | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,912,277:39:0 |     |
| 115  | 1  | 47  | 18:10:30.133 | 20UQ4G  | 7VENT   | 0.611,1.333,8  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,282:79:0 |     |
| 116  | 1  | 47  | 18:10:30.800 | 20UQ4H  | 7VENT   | 0.611,10.989,8 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,282:80:0 |     |
| 117  | 1  | 47  | 18:10:50.800 | 20UQ4I  | 7VENT   | 0.611,1.333,6  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:19:0 |     |
| 118  | 1  | 47  | 18:10:51.466 | 20UQ4J  | 7VENT   | 0.611,10.989,6 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:20:0 |     |
| 119  | 1  | 47  | 18:11:11.466 | 20UQ4K  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:50:0 |     |
| 120  | 1  | 47  | 18:11:12.133 | 20UQ4L  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:51:0 |     |
| 121  | 1  | 47  | 18:11:22.133 | 20UQ4M  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:66:0 |     |
| 122  | 1  | 47  | 18:11:22.800 | 20UQ4N  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:67:0 |     |
| 123  | 1  | 47  | 18:11:32.800 | 20UQ4O  | 7VENT   | 1.211,1.333,10 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:82:0 |     |
| 124  | 1  | 47  | 18:11:33.466 | 20UQ4P  | 7VENT   | 1.211,0.666,12 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,283:83:0 |     |
| 125  | 1  | 47  | 18:13:20.133 | 20UQ4S  | 7VENT   | 0.611,1.333,7  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,285:61:0 |     |
| 126  | 1  | 47  | 18:13:20.800 | 20UQ4T  | 7VENT   | 0.611,10.989,7 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,285:62:0 |     |
| 127  | 1  | 47  | 18:13:40.800 | 20UQ4U  | 7VENT   | 0.611,1.333,1  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:01:0 |     |
| 128  | 1  | 47  | 18:13:41.466 | 20UQ4V  | 7VENT   | 0.611,10.989,1 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:02:0 |     |
| 129  | 1  | 47  | 18:14:01.466 | 20UQ4AC | 7VENT   | 0.611,1.333,2  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:32:0 |     |
| 130  | 1  | 47  | 18:14:02.133 | 20UQ4AD | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:33:0 |     |
| 131  | 1  | 47  | 18:14:12.133 | 20UQ4AE | 7VENT   | 0.611,1.333,2  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:48:0 |     |
| 132  | 1  | 47  | 18:14:12.800 | 20UQ4AF | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:49:0 |     |
| 133  | 1  | 47  | 18:14:22.800 | 20UQ4W  | 7VENT   | 1.211,1.333,9  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:64:0 |     |
| 134  | 1  | 47  | 18:14:23.466 | 20UQ4X  | 7VENT   | 1.211,0.666,11 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,912,286:65:0 |     |
| 135  | 1  | 47  | 18:15:20.133 | 20UQ4Z  | 7MODE   | GRU            | AACS CRUISE MODE                          | 200 | 4  | 0  | 5,912,287:59:0 |     |
| 136  | 1  | 47  | 18:40:04.133 | 20UW4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                           | 200 | 4  | 0  | 5,912,312:10:0 |     |
| 137  | 1  | 47  | 18:40:54.133 | 20UW4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5,912,312:85:0 |     |
| 138  | 1  | 47  | 18:42:59.466 | 176UX6A | 6TMREC  | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4  | 0  | 5,912,315:00:0 |     |
| 139  | 1  | 47  | 22:22:28.133 | 488BE6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,532:06:0 |     |
| 140  | 1  | 47  | 23:30:53.466 | 488BE6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,599:67:0 |     |
| 141  | 1  | 47  | 23:44:33.466 | 488BE6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,613:23:0 |     |
| 142  | 1  | 47  | 23:56:20.133 | 488BE6D | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,624:82:0 |     |
| 143  | 1  | 48  | 00:11:37.466 | 488BE6E | 6TMSED  | FILL,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,640:02:0 |     |
| 144  | 1  | 48  | 00:38:27.466 | 488BF6A | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,666:51:0 |     |
| 145  | 1  | 48  | 05:52:36.133 | 488BF6B | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,912,977:23:0 |     |
| 146  | 1  | 48  | 06:56:36.133 | 488BG6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,040:50:0 |     |
| 147  | 1  | 48  | 07:15:51.466 | 488BG6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,059:54:0 |     |
| 148  | 1  | 48  | 11:49:28.133 | 488BG6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,330:18:0 |     |
| 149  | 1  | 48  | 12:05:56.133 | 488BG6D | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,346:44:0 |     |
| 150  | 1  | 48  | 13:54:44.133 | 488BH6A | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,454:08:0 |     |
| 151  | 1  | 48  | 21:04:41.400 | 488BI6A | 6TMSED  | FILL,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,879:29:0 |     |
| 152  | 1  | 48  | 21:07:48.066 | 488BI6B | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,913,882:36:0 |     |
| 153  | 1  | 50  | 00:32:29.400 | 488BJ6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,915,509:01:0 |     |
| 154  | 1  | 50  | 01:55:31.400 | 488BJ6B | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,915,591:12:0 |     |
| 155  | 1  | 50  | 02:24:37.400 | 488BJ6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,915,619:83:0 |     |
| 156  | 1  | 50  | 06:11:48.000 | 488BJ6D | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,915,844:54:0 |     |
| 157  | 1  | 50  | 07:05:34.000 | 488BK6A | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,915,897:70:0 |     |
| 158  | 1  | 50  | 11:39:12.666 | 488BK6B | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,168:37:0 |     |
| 159  | 1  | 50  | 11:59:32.000 | 488BK6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,188:46:0 |     |
| 160  | 1  | 50  | 13:59:00.000 | 488BL6A | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,306:60:0 |     |
| 161  | 1  | 50  | 21:07:48.000 | 488BM6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,730:68:0 |     |
| 162  | 1  | 50  | 22:23:15.333 | 488BM6B | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,805:34:0 |     |
| 163  | 1  | 50  | 22:28:52.000 | 488BM6C | 6TMSED  | FILL,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,810:84:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------------|---|-----|----|----|----------------|-----|
| 164  | 1  | 51  | 00:21:28.000 | 488BM6D | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,916,922:26:0 |     |
| 165  | 1  | 51  | 05:31:16.000 | 488BN6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,917,228:62:0 |     |
| 166  | 1  | 51  | 06:48:04.000 | 488BN6B | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,917,304:58:0 |     |
| 167  | 1  | 51  | 07:00:26.000 | 488BN6C | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,917,316:79:0 |     |
| 168  | 1  | 51  | 11:39:04.666 | 488BO6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,917,592:41:0 |     |
| 169  | 1  | 51  | 11:59:32.000 | 488BO6B | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,917,612:62:0 |     |
| 170  | 1  | 51  | 13:59:00.000 | 488BO6C | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,917,730:76:0 |     |
| 171  | 1  | 51  | 17:56:46.600 | 176TA6A | 6TMREC  | PPB              | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5,917,966:00:0 |     |
| 172  | 1  | 51  | 18:02:50.600 | 465VA6A | 6DMST   |                  | 5000 DMS Slew to TIC                      | 200 | 4  | 0  | 5,917,972:00:0 |     |
| 173  | 1  | 51  | 18:02:50.600 |         | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 321.72 +/-         | 200 | 4  | 0  | 5,917,972:00:0 |     |
| 174  | 1  | 51  | 18:02:50.600 |         | DMS:    | :*SLEW-TIC       | P7, TRACK *1, FWD, TIC 321.72 +/-         | 200 | 4  | 0  | 5,917,972:00:0 |     |
| 175  | 1  | 51  | 18:02:57.266 |         | DMS:    | :*RUNUP          | P7, TRACK 1, FWD, TIC 321.72 +/-          | 200 | 4  | 0  | 5,917,972:10:0 |     |
| 176  | 1  | 51  | 18:02:58.666 |         | DMS:    | :*AT SPD         | P7, TRACK 1, FWD, TIC *321.84 +/-         | 200 | 4  | 0  | 5,917,972:12:1 |     |
| 177  | 1  | 51  | 20:57:07.933 | 488BP6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,918,144:34:0 |     |
| 178  | 1  | 51  | 23:02:59.933 | 488BP6B | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,918,268:78:0 |     |
| 179  | 1  | 51  | 23:22:11.933 | 488BP6C | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,918,287:77:0 |     |
| 180  | 1  | 51  | 23:35:29.400 |         | DMS:    | :*RUNDOWN        | P7, TRACK 1, FWD, TIC *4997.94 +/-        | 200 | 4  | 0  | 5,918,300:90:2 |     |
| 181  | 1  | 51  | 23:35:30.600 |         | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *4998.00 +/-       | 200 | 4  | 0  | 5,918,301:01:0 |     |
| 182  | 1  | 51  | 23:56:31.933 | 465VB6A | 6DMSC   | P100,4           | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 5,918,321:73:0 |     |
| 183  | 1  | 51  | 23:56:31.933 |         | DMS:    | :*US-RUNUP       | P7, TRACK 1, FWD, TIC 4998.00 +/-         | 200 | 4  | 0  | 5,918,321:73:0 |     |
| 184  | 1  | 51  | 23:56:33.333 |         | DMS:    | :*US-AT_SP       | P7, TRACK 1, FWD, TIC *4998.12 +/-        | 200 | 4  | 0  | 5,918,321:75:1 |     |
| 185  | 1  | 51  | 23:56:38.600 |         | DMS:    | :*US RD          | P7, TRACK 1, FWD, TIC *4999.35 +/-        | 200 | 4  | 0  | 5,918,321:83:0 |     |
| 186  | 1  | 51  | 23:56:39.800 |         | DMS:    | :*RUNUP          | P100, TRACK *4, REV, TIC *4999.41 +/-     | 200 | 4  | 0  | 5,918,321:84:8 |     |
| 187  | 1  | 51  | 23:56:43.666 |         | DMS:    | :*P_SLEW         | P100, TRACK 4, REV, TIC *4993.91 +/-      | 200 | 4  | 0  | 5,918,321:90:6 |     |
| 188  | 1  | 51  | 23:56:43.666 |         | DMS:    | :*AT SPD         | P100, TRACK 4, REV, TIC 4993.91 +/-       | 200 | 4  | 0  | 5,918,321:90:6 |     |
| 189  | 1  | 52  | 00:22:23.933 |         | DMS:    | :*RUNDOWN        | P100, TRACK 4, REV, TIC *255.79 +/-       | 200 | 4  | 0  | 5,918,347:35:0 |     |
| 190  | 1  | 52  | 00:22:23.933 | 465VB6B | 6DMSC   | RDY,4            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,918,347:35:0 |     |
| 191  | 1  | 52  | 00:22:25.133 |         | DMS:    | :*READY          | RDY, TRACK 4, REV, TIC *254.99 +/-        | 200 | 4  | 0  | 5,918,347:36:8 |     |
| 192  | 1  | 52  | 02:21:12.600 |         | DMS:    | :*US-RUNUP       | P7, TRACK *1, FWD, TIC 254.99 +/-         | 200 | 4  | 0  | 5,918,464:81:0 |     |
| 193  | 1  | 52  | 02:21:12.600 |         | DMS:    | :*DMS-TURN       | P7, TRACK 4, REV, TIC 254.99 +/-          | 200 | 4  | 0  | 5,918,464:81:0 |     |
| 194  | 1  | 52  | 02:21:12.600 | 465VC6A | 6DTRN   | CMD,6DTRN,465VC6 | DMS TRACK TURNAROUND                      | 200 | 4  | 0  | 5,918,464:81:0 |     |
| 195  | 1  | 52  | 02:21:14.000 |         | DMS:    | :*US AT SP       | P7, TRACK 1, FWD, TIC *255.11 +/-         | 200 | 4  | 0  | 5,918,464:83:1 |     |
| 196  | 1  | 52  | 02:21:19.266 |         | DMS:    | :*US RD          | P7, TRACK 1, FWD, TIC *256.34 +/-         | 200 | 4  | 0  | 5,918,465:00:0 |     |
| 197  | 1  | 52  | 02:21:20.466 |         | DMS:    | :*RUNUP          | P7, TRACK *4, REV, TIC *256.40 +/-        | 200 | 4  | 0  | 5,918,465:01:8 |     |
| 198  | 1  | 52  | 02:21:21.866 |         | DMS:    | :*AT SPD         | P7, TRACK 4, REV, TIC *256.28 +/-         | 200 | 4  | 0  | 5,918,465:03:9 |     |
| 199  | 1  | 52  | 02:25:09.266 | 488BP6D | 6TMSED  | NORM,AH6         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,918,468:72:0 |     |
| 200  | 1  | 52  | 02:25:22.533 |         | DMS:    | :*REVERSE        | P7, TRACK 4, REV, TIC *199.87 +/-         | 200 | 4  | 0  | 5,918,469:00:9 |     |
| 201  | 1  | 52  | 02:25:23.733 |         | DMS:    | :*RUNUP          | P7, TRACK 1, FWD, TIC 199.81 +/-          | 200 | 4  | 0  | 5,918,469:02:7 |     |
| 202  | 1  | 52  | 02:25:23.733 |         | DMS:    | :*TURNARND       | P7, TRACK *1, FWD, TIC *199.81 +/-        | 200 | 4  | 0  | 5,918,469:02:7 |     |
| 203  | 1  | 52  | 02:25:25.133 |         | DMS:    | :*AT SPD         | P7, TRACK 1, FWD, TIC *199.93 +/-         | 200 | 4  | 0  | 5,918,469:04:8 |     |
| 204  | 1  | 52  | 02:25:37.133 |         | DMS:    | :*AUTOSTOP       | P7, TRACK 1, FWD, TIC *202.06 +/-         | 200 | 4  | 0  | 5,918,469:22:8 |     |
| 205  | 1  | 52  | 02:25:38.333 |         | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *202.12 +/-        | 200 | 4  | 0  | 5,918,469:24:6 |     |
| 206  | 1  | 52  | 02:31:15.266 |         | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 200 | 4  | 0  | 5,918,474:75:0 |     |
| 207  | 1  | 52  | 02:31:15.266 | 465VD6A | 6DMSC   | P100,1           | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 5,918,474:75:0 |     |
| 208  | 1  | 52  | 02:31:21.933 |         | DMS:    | :*RUNUP          | P100, TRACK 1, FWD, TIC 202.12 +/-        | 200 | 4  | 0  | 5,918,474:85:0 |     |
| 209  | 1  | 52  | 02:31:25.800 |         | DMS:    | :*P_SLEW         | P100, TRACK 1, FWD, TIC *207.62 +/-       | 200 | 4  | 0  | 5,918,474:90:8 |     |
| 210  | 1  | 52  | 02:31:25.800 |         | DMS:    | :*AT SPD         | P100, TRACK 1, FWD, TIC 207.62 +/-        | 200 | 4  | 0  | 5,918,474:90:8 |     |
| 211  | 1  | 52  | 03:03:09.266 | 465VD6B | 6DMSC   | RDY,1            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,918,506:34:0 |     |
| 212  | 1  | 52  | 03:03:09.266 |         | DMS:    | :*RUNDOWN        | P100, TRACK 1, FWD, TIC *6063.01 +/-      | 200 | 4  | 0  | 5,918,506:34:0 |     |
| 213  | 1  | 52  | 03:03:10.466 |         | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *6063.81 +/-       | 200 | 4  | 0  | 5,918,506:35:8 |     |
| 214  | 1  | 52  | 03:18:45.266 | 465VE6A | 6DMSC   | P100,2           | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 5,918,521:73:0 |     |
| 215  | 1  | 52  | 03:18:45.266 |         | DMS:    | :*US-RUNUP       | P7, TRACK 1, FWD, TIC 6063.81 +/-         | 200 | 4  | 0  | 5,918,521:73:0 |     |
| 216  | 1  | 52  | 03:18:46.666 |         | DMS:    | :*US AT SP       | P7, TRACK 1, FWD, TIC *6063.93 +/-        | 200 | 4  | 0  | 5,918,521:75:1 |     |
| 217  | 1  | 52  | 03:18:51.933 |         | DMS:    | :*US RD          | P7, TRACK 1, FWD, TIC *6065.17 +/-        | 200 | 4  | 0  | 5,918,521:83:0 |     |
| 218  | 1  | 52  | 03:18:53.133 |         | DMS:    | :*RUNUP          | P100, TRACK *2, REV, TIC *6065.23 +/-     | 200 | 4  | 0  | 5,918,521:84:8 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description                              | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------------|--|-----|----|----|----------------|-----|
| 219  | 1  | 52  | 03:18:57.000 |         | DMS:    | : *P_SLEW        | P100, TRACK 2, REV, TIC *6059.73 +/-     | 200 | 4  | 0  | 5,918,521:90:6 |     |
| 220  | 1  | 52  | 03:18:57.000 |         | DMS:    | : *AT SPD        | P100, TRACK 2, REV, TIC 6059.73 +/-      | 200 | 4  | 0  | 5,918,521:90:6 |     |
| 221  | 1  | 52  | 03:50:53.266 | 465VF6A | 6DMSC   | P100.3           | DMS Control Tape P/B 100.8kbps           | 200 | 4  | 0  | 5,918,553:53:0 |     |
| 222  | 1  | 52  | 03:50:53.266 |         | DMS:    | : *RUNDOWN       | P100, TRACK 2, REV, TIC * 164.96 +/-     | 200 | 4  | 0  | 5,918,553:53:0 |     |
| 223  | 1  | 52  | 03:50:54.466 |         | DMS:    | : *RUNUP         | P100, TRACK *3, *FWD, TIC * 164.16 +/-   | 200 | 4  | 0  | 5,918,553:54:8 |     |
| 224  | 1  | 52  | 03:50:58.333 |         | DMS:    | : *P_SLEW        | P100, TRACK 3, FWD, TIC * 169.66 +/-     | 200 | 4  | 0  | 5,918,553:60:6 |     |
| 225  | 1  | 52  | 03:50:58.333 |         | DMS:    | : *AT SPD        | P100, TRACK 3, FWD, TIC 169.66 +/-       | 200 | 4  | 0  | 5,918,553:60:6 |     |
| 226  | 1  | 52  | 04:22:53.933 |         | DMS:    | : *RUNDOWN       | P100, TRACK 3, FWD, TIC *6062.38 +/-     | 200 | 4  | 0  | 5,918,585:22:0 |     |
| 227  | 1  | 52  | 04:22:53.933 | 465VF6B | 6DMSC   | RDY,3            | DMS Control Tape stop                    | 200 | 4  | 0  | 5,918,585:22:0 |     |
| 228  | 1  | 52  | 04:22:55.133 |         | DMS:    | : *READY         | RDY, TRACK 3, FWD, TIC *6063.18 +/-      | 200 | 4  | 0  | 5,918,585:23:8 |     |
| 229  | 1  | 52  | 04:37:37.266 | 465VG6A | 6DMSC   | P100.4           | DMS Control Tape P/B 100.8kbps           | 200 | 4  | 0  | 5,918,599:73:0 |     |
| 230  | 1  | 52  | 04:37:37.266 |         | DMS:    | : *US-RUNUP      | P7, TRACK *1, FWD, TIC 6063.18 +/-       | 200 | 4  | 0  | 5,918,599:73:0 |     |
| 231  | 1  | 52  | 04:37:38.666 |         | DMS:    | : *US AT_SP      | P7, TRACK 1, FWD, TIC *6063.30 +/-       | 200 | 4  | 0  | 5,918,599:75:1 |     |
| 232  | 1  | 52  | 04:37:43.933 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *6064.53 +/-       | 200 | 4  | 0  | 5,918,599:83:0 |     |
| 233  | 1  | 52  | 04:37:45.133 |         | DMS:    | : *RUNUP         | P100, TRACK *4, *REV, TIC *6064.59 +/-   | 200 | 4  | 0  | 5,918,599:84:8 |     |
| 234  | 1  | 52  | 04:37:49.000 |         | DMS:    | : *AT SPD        | P100, TRACK 4, REV, TIC 6059.09 +/-      | 200 | 4  | 0  | 5,918,599:90:6 |     |
| 235  | 1  | 52  | 04:37:49.000 |         | DMS:    | : *P_SLEW        | P100, TRACK 4, REV, TIC *6059.09 +/-     | 200 | 4  | 0  | 5,918,599:90:6 |     |
| 236  | 1  | 52  | 05:09:44.600 | 465VH6A | 6DMSC   | P100.3           | DMS Control Tape P/B 100.8kbps           | 200 | 4  | 0  | 5,918,631:52:0 |     |
| 237  | 1  | 52  | 05:09:44.600 |         | DMS:    | : *RUNDOWN       | P100, TRACK 4, REV, TIC * 166.38 +/-     | 200 | 4  | 0  | 5,918,631:52:0 |     |
| 238  | 1  | 52  | 05:09:45.800 |         | DMS:    | : *RUNUP         | P100, TRACK *3, *FWD, TIC * 165.58 +/-   | 200 | 4  | 0  | 5,918,631:53:8 |     |
| 239  | 1  | 52  | 05:09:49.666 |         | DMS:    | : *AT SPD        | P100, TRACK 3, FWD, TIC 171.08 +/-       | 200 | 4  | 0  | 5,918,631:59:6 |     |
| 240  | 1  | 52  | 05:09:49.666 |         | DMS:    | : *P_SLEW        | P100, TRACK 3, FWD, TIC * 171.08 +/-     | 200 | 4  | 0  | 5,918,631:59:6 |     |
| 241  | 1  | 52  | 05:10:50.600 | 465VH6B | 6DMSC   | RDY,3            | DMS Control Tape stop                    | 200 | 4  | 0  | 5,918,632:60:0 |     |
| 242  | 1  | 52  | 05:10:50.600 |         | DMS:    | : *RUNDOWN       | P100, TRACK 3, FWD, TIC * 358.52 +/-     | 200 | 4  | 0  | 5,918,632:60:0 |     |
| 243  | 1  | 52  | 05:10:51.800 |         | DMS:    | : *READY         | RDY, TRACK 3, FWD, TIC * 359.32 +/-      | 200 | 4  | 0  | 5,918,632:61:8 |     |
| 244  | 1  | 52  | 05:11:59.266 | 488BQ6A | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,918,633:72:0 |     |
| 245  | 1  | 52  | 05:25:20.600 | 465VI6A | 6DMSC   | RDY,4            | DMS Control Tape stop                    | 200 | 4  | 0  | 5,918,647:00:0 |     |
| 246  | 1  | 52  | 05:25:20.600 |         | DMS:    | : *READY         | RDY, TRACK *4, *REV, TIC 359.32 +/-      | 200 | 4  | 0  | 5,918,647:00:0 |     |
| 247  | 1  | 52  | 05:26:14.600 | 465VJ6A | 6DTRN   | CMD,6DTRN,465VJ6 | DMS TRACK TURNAROUND                     | 200 | 4  | 0  | 5,918,647:81:0 |     |
| 248  | 1  | 52  | 05:26:14.600 |         | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 359.32 +/-       | 200 | 4  | 0  | 5,918,647:81:0 |     |
| 249  | 1  | 52  | 05:26:14.600 |         | DMS:    | : *DMS-TURN      | P7, TRACK 4, REV, TIC 359.32 +/-         | 200 | 4  | 0  | 5,918,647:81:0 |     |
| 250  | 1  | 52  | 05:26:16.000 |         | DMS:    | : *US AT_SP      | P7, TRACK 1, FWD, TIC * 359.44 +/-       | 200 | 4  | 0  | 5,918,647:83:1 |     |
| 251  | 1  | 52  | 05:26:21.266 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC * 360.67 +/-       | 200 | 4  | 0  | 5,918,648:00:0 |     |
| 252  | 1  | 52  | 05:26:22.466 |         | DMS:    | : *RUNUP         | P7, TRACK *4, *REV, TIC * 360.73 +/-     | 200 | 4  | 0  | 5,918,648:01:8 |     |
| 253  | 1  | 52  | 05:26:23.866 |         | DMS:    | : *AT SPD        | P7, TRACK 4, REV, TIC * 360.61 +/-       | 200 | 4  | 0  | 5,918,648:03:9 |     |
| 254  | 1  | 52  | 05:26:59.933 | 488BQ6B | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,918,648:58:0 |     |
| 255  | 1  | 52  | 05:37:49.666 |         | DMS:    | : *REVERSE       | P7, TRACK 4, REV, TIC * 199.87 +/-       | 200 | 4  | 0  | 5,918,659:31:6 |     |
| 256  | 1  | 52  | 05:37:50.866 |         | DMS:    | : *TURNARND      | P7, TRACK *1, *FWD, TIC * 199.81 +/-     | 200 | 4  | 0  | 5,918,659:33:4 |     |
| 257  | 1  | 52  | 05:37:50.866 |         | DMS:    | : *RUNUP         | P7, TRACK 1, FWD, TIC 199.81 +/-         | 200 | 4  | 0  | 5,918,659:33:4 |     |
| 258  | 1  | 52  | 05:37:52.266 |         | DMS:    | : *AT SPD        | P7, TRACK 1, FWD, TIC * 199.93 +/-       | 200 | 4  | 0  | 5,918,659:35:5 |     |
| 259  | 1  | 52  | 05:38:04.266 |         | DMS:    | : *AUTOSTOP      | P7, TRACK 1, FWD, TIC * 202.06 +/-       | 200 | 4  | 0  | 5,918,659:53:5 |     |
| 260  | 1  | 52  | 05:38:05.466 |         | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC * 202.12 +/-      | 200 | 4  | 0  | 5,918,659:55:3 |     |
| 261  | 1  | 52  | 05:53:03.933 | 20UJ4A  | 7SAFE   | STOP             | S/P NO MOVEMENT                          | 200 | 4  | 0  | 5,918,674:38:0 |     |
| 262  | 1  | 52  | 05:53:53.933 | 20UJ4B  | 7SLEW   | DIS,POS,0.0      | Stator movement                          | 200 | 4  | 0  | 5,918,675:22:0 |     |
| 263  | 1  | 52  | 05:55:40.600 | 176TB6A | 6TMREC  | RPB              | RESUME PLAYBACK (PB CONTROL) Record Mode | 200 | 4  | 0  | 5,918,677:00:0 |     |
| 264  | 1  | 52  | 06:38:04.600 | 488BQ6C | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,918,718:85:0 |     |
| 265  | 1  | 52  | 15:22:07.933 | 488BR6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,919,237:21:0 |     |
| 266  | 1  | 52  | 16:45:52.600 | 488BR6B | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,919,320:05:0 |     |
| 267  | 1  | 52  | 17:14:58.600 | 488BR6C | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,919,348:76:0 |     |
| 268  | 1  | 52  | 21:46:11.933 | 488BS6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,919,617:07:0 |     |
| 269  | 1  | 52  | 23:30:11.933 | 488BS6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,919,719:85:0 |     |
| 270  | 1  | 52  | 23:39:15.933 | 488BS6C | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,919,728:82:0 |     |
| 271  | 1  | 53  | 12:22:00.533 | 488BT6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,920,483:24:0 |     |
| 272  | 1  | 53  | 14:09:39.866 | 488BT6B | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,920,589:67:0 |     |
| 273  | 1  | 53  | 20:31:31.866 | 488BU6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,920,967:37:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters | Description            | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------|------------------------|-----|----|----|----------------|-----|
| 274  | 1  | 53  | 22:49:01.866 | 488BU6B | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,103:36:0 |     |
| 275  | 1  | 53  | 22:52:19.866 | 488BU6C | 6TMS    | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,106:60:0 |     |
| 276  | 1  | 54  | 03:14:03.200 | 488BV6A | 6TMS    | NORM,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,365:46:0 |     |
| 277  | 1  | 54  | 03:18:59.866 | 488BV6B | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,370:36:0 |     |
| 278  | 1  | 54  | 04:10:11.866 | 488BV6C | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,421:03:0 |     |
| 279  | 1  | 54  | 10:02:11.866 | 488BW6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,769:15:0 |     |
| 280  | 1  | 54  | 10:55:31.866 | 488BW6B | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,821:83:0 |     |
| 281  | 1  | 54  | 11:09:48.533 | 488BW6C | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,836:03:0 |     |
| 282  | 1  | 54  | 11:12:35.866 | 488BW6D | 6TMS    | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,838:72:0 |     |
| 283  | 1  | 54  | 11:27:31.866 | 488BW6E | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,921,853:51:0 |     |
| 284  | 1  | 55  | 02:21:47.800 | 488BX6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,922,738:00:0 |     |
| 285  | 1  | 55  | 03:46:12.466 | 488BX6B | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,922,821:44:0 |     |
| 286  | 1  | 55  | 04:15:18.466 | 488BX6C | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,922,850:24:0 |     |
| 287  | 1  | 55  | 05:41:55.800 | 488BX6D | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,922,935:85:0 |     |
| 288  | 1  | 55  | 06:44:53.133 | 488BX6E | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,922,998:18:0 |     |
| 289  | 1  | 55  | 11:23:31.133 | 488BY6A | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,923,273:70:0 |     |
| 290  | 1  | 55  | 11:48:51.800 | 488BY6B | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,923,298:76:0 |     |
| 291  | 1  | 55  | 14:13:55.800 | 488BY6C | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,923,442:28:0 |     |
| 292  | 1  | 55  | 20:12:19.800 | 488BZ6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,923,796:70:0 |     |
| 293  | 1  | 55  | 22:37:23.733 | 488BZ6B | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,923,940:22:0 |     |
| 294  | 1  | 55  | 22:54:27.733 | 488BZ6C | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,923,957:11:0 |     |
| 295  | 1  | 56  | 05:01:23.733 | 488CA6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,924,320:02:0 |     |
| 296  | 1  | 56  | 06:20:03.066 | 488CA6B | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,924,397:74:0 |     |
| 297  | 1  | 56  | 06:20:19.733 | 488CA6C | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,924,398:08:0 |     |
| 298  | 1  | 56  | 11:18:23.733 | 488CB6A | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,924,692:80:0 |     |
| 299  | 1  | 56  | 11:48:51.733 | 488CB6B | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,924,723:01:0 |     |
| 300  | 1  | 56  | 14:18:11.733 | 488CB6C | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,924,870:64:0 |     |
| 301  | 1  | 56  | 19:55:15.733 | 488CC6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,925,204:06:0 |     |
| 302  | 1  | 56  | 21:01:23.733 | 488CC6B | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,925,269:43:0 |     |
| 303  | 1  | 57  | 04:50:43.733 | 488CD6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,925,733:59:0 |     |
| 304  | 1  | 57  | 06:16:03.733 | 488CD6B | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,925,818:04:0 |     |
| 305  | 1  | 57  | 06:19:37.066 | 488CD6C | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,925,821:51:0 |     |
| 306  | 1  | 57  | 06:28:51.733 | 488CD6D | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,925,830:64:0 |     |
| 307  | 1  | 57  | 15:06:26.333 | 488CE6A | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,342:54:0 |     |
| 308  | 1  | 57  | 16:31:33.666 | 488CE6B | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,426:71:0 |     |
| 309  | 1  | 57  | 17:00:39.666 | 488CE6C | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,455:51:0 |     |
| 310  | 1  | 57  | 21:05:39.666 | 488CE6D | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,697:79:0 |     |
| 311  | 1  | 57  | 22:49:32.333 | 488CF6A | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,800:55:0 |     |
| 312  | 1  | 57  | 22:58:43.666 | 488CF6B | 6TMS    | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,809:63:0 |     |
| 313  | 1  | 58  | 00:20:30.333 | 488CF6C | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,926,890:52:0 |     |
| 314  | 1  | 58  | 04:46:27.666 | 488CF6D | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,927,153:55:0 |     |
| 315  | 1  | 58  | 05:20:35.666 | 488CG6A | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,927,187:33:0 |     |
| 316  | 1  | 58  | 09:36:35.666 | 488CG6B | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,927,440:50:0 |     |
| 317  | 1  | 58  | 10:40:35.666 | 488CG6C | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,927,503:77:0 |     |
| 318  | 1  | 58  | 10:49:27.000 | 488CG6D | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,927,512:55:0 |     |
| 319  | 1  | 58  | 10:59:47.666 | 488CG6E | 6TMS    | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,927,522:76:0 |     |
| 320  | 1  | 59  | 00:20:22.266 | 488CH6A | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,928,314:56:0 |     |
| 321  | 1  | 59  | 04:40:03.600 | 488CH6B | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,928,571:41:0 |     |
| 322  | 1  | 59  | 06:04:48.933 | 488CH6C | 6TMS    | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,928,655:25:0 |     |
| 323  | 1  | 59  | 06:05:23.600 | 488CH6D | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,928,655:77:0 |     |
| 324  | 1  | 59  | 06:13:55.600 | 488CH6E | 6TMS    | FILL,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,928,664:26:0 |     |
| 325  | 1  | 59  | 22:40:14.266 | 488CI6A | 6TMS    | NORM,AL6   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,929,639:69:0 |     |
| 326  | 1  | 60  | 04:31:31.533 | 488CI6B | 6TMS    | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,929,987:17:0 |     |
| 327  | 1  | 60  | 06:01:07.533 | 488CJ6A | 6TMS    | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,930,075:73:0 |     |
| 328  | 1  | 60  | 06:19:13.533 | 488CJ6B | 6TMS    | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,930,093:64:0 |     |



| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------------|---------------------------|-----|----|----|----------------|-----|
| 329  | 1  | 60  | 06:28:51.533 | 488CJ6C | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.930,103:21:0 |     |
| 330  | 1  | 60  | 23:20:59.533 | 488CK6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,104:22:0 |     |
| 331  | 1  | 61  | 00:47:01.533 | 488CK6B | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,189:30:0 |     |
| 332  | 1  | 61  | 01:16:07.533 | 488CK6C | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,218:10:0 |     |
| 333  | 1  | 61  | 05:01:23.533 | 488CK6D | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,440:82:0 |     |
| 334  | 1  | 61  | 06:24:05.533 | 488CL6A | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,522:63:0 |     |
| 335  | 1  | 61  | 10:57:42.200 | 488CL6B | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,793:27:0 |     |
| 336  | 1  | 61  | 11:38:11.533 | 488CL6C | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.931,833:31:0 |     |
| 337  | 1  | 61  | 15:43:31.466 | 488CM6A | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,075:89:0 |     |
| 338  | 1  | 61  | 17:55:47.466 | 488CM6B | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,206:72:0 |     |
| 339  | 1  | 61  | 22:05:23.466 | 488CN6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,453:59:0 |     |
| 340  | 1  | 61  | 22:50:11.466 | 488CN6B | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,497:87:0 |     |
| 341  | 1  | 62  | 04:16:35.466 | 488CO6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,820:70:0 |     |
| 342  | 1  | 62  | 05:54:43.466 | 488CO6B | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,917:75:0 |     |
| 343  | 1  | 62  | 06:23:56.133 | 488CQ6C | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.932,946:65:0 |     |
| 344  | 1  | 62  | 11:07:34.133 | 488CP6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.933,227:21:0 |     |
| 345  | 1  | 62  | 11:33:55.466 | 488CP6B | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.933,253:27:0 |     |
| 346  | 1  | 62  | 22:01:07.466 | 488CQ6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.933,873:55:0 |     |
| 347  | 1  | 62  | 22:48:51.466 | 488CQ6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.933,920:74:0 |     |
| 348  | 1  | 62  | 22:58:43.466 | 488CQ6C | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.933,930:52:0 |     |
| 349  | 1  | 63  | 01:19:49.400 | 488CQ6D | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,070:11:0 |     |
| 350  | 1  | 63  | 04:10:11.400 | 488CR6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,238:56:0 |     |
| 351  | 1  | 63  | 05:46:11.400 | 488CR6B | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,333:51:0 |     |
| 352  | 1  | 63  | 05:48:49.400 | 488CR6C | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,336:15:0 |     |
| 353  | 1  | 63  | 10:52:26.733 | 488CS6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,636:41:0 |     |
| 354  | 1  | 63  | 12:14:35.400 | 488CS6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,717:63:0 |     |
| 355  | 1  | 63  | 12:48:14.733 | 488CS6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,750:89:0 |     |
| 356  | 1  | 63  | 13:26:37.400 | 20MC6A  | 6MCOPI  | HLM1A,E476,B1A1A | HLM1A,E476,B1A1A,50C2,523 | 200 | 4  | 0  | 5.934,788:85:0 |     |
| 357  | 1  | 63  | 13:27:38.066 | 20MC6C  | 6MCOPI  | HLM1A,E476,B1A1A | HLM1A,E476,B1A1A,5234,53F | 200 | 4  | 0  | 5.934,789:85:0 |     |
| 358  | 1  | 63  | 13:28:38.733 | 20MC6E  | 6MCOPI  | HLM1A,E476,B1A1A | HLM1A,E476,B1A1A,53F5,572 | 200 | 4  | 0  | 5.934,790:85:0 |     |
| 359  | 1  | 63  | 13:29:07.400 | 488CS6D | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.934,791:37:0 |     |
| 360  | 1  | 63  | 13:29:39.400 | 20MC6G  | 6MCOPI  | HLM1A,E476,B1A1A | HLM1A,E476,B1A1A,5728,5A9 | 200 | 4  | 0  | 5.934,791:85:0 |     |
| 361  | 1  | 63  | 13:46:37.400 | 20XC6A  | 6MCOPI  | HLM1A,F7CC,B1A1A | HLM1A,F7CC,B1A1A,50C2,523 | 200 | 4  | 0  | 5.934,808:65:0 |     |
| 362  | 1  | 63  | 13:47:38.066 | 20XC6C  | 6MCOPI  | HLM1A,F7CC,B1A1A | HLM1A,F7CC,B1A1A,5234,53F | 200 | 4  | 0  | 5.934,809:65:0 |     |
| 363  | 1  | 63  | 13:48:38.733 | 20XC6E  | 6MCOPI  | HLM1A,F7CC,B1A1A | HLM1A,F7CC,B1A1A,53F5,572 | 200 | 4  | 0  | 5.934,810:65:0 |     |
| 364  | 1  | 63  | 13:49:39.400 | 20XC6G  | 6MCOPI  | HLM1A,F7CC,B1A1A | HLM1A,F7CC,B1A1A,5728,5A9 | 200 | 4  | 0  | 5.934,811:65:0 |     |
| 365  | 1  | 63  | 19:59:31.400 | 488CT6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,177:47:0 |     |
| 366  | 1  | 63  | 22:43:47.400 | 488CT6B | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,339:89:0 |     |
| 367  | 1  | 63  | 22:54:27.400 | 488CT6C | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,350:48:0 |     |
| 368  | 1  | 63  | 23:18:47.400 | 488CT6D | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,374:54:0 |     |
| 369  | 1  | 63  | 23:45:37.400 | 488CT6E | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,401:12:0 |     |
| 370  | 1  | 64  | 03:55:15.400 | 488CU6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,648:02:0 |     |
| 371  | 1  | 64  | 05:39:47.400 | 488CU6B | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,751:37:0 |     |
| 372  | 1  | 64  | 06:13:40.066 | 488CU6C | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,784:83:0 |     |
| 373  | 1  | 64  | 06:22:27.400 | 488CU6D | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.935,793:55:0 |     |
| 374  | 1  | 64  | 15:15:29.333 | 488CV6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.936,320:71:0 |     |
| 375  | 1  | 64  | 21:46:11.333 | 488CW6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.936,707:17:0 |     |
| 376  | 1  | 64  | 22:43:35.333 | 488CW6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.936,763:87:0 |     |
| 377  | 1  | 64  | 22:52:19.333 | 488CW6C | 6TMSED  | FILL,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.936,772:54:0 |     |
| 378  | 1  | 65  | 00:04:33.333 | 488CW6D | 6TMSED  | NORM,AL6         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.936,844:03:0 |     |
| 379  | 1  | 65  | 03:44:35.333 | 488CW6E | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.937,061:59:0 |     |
| 380  | 1  | 65  | 05:35:31.333 | 488CX6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.937,171:33:0 |     |
| 381  | 1  | 65  | 07:04:49.333 | 488CX6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.937,259:62:0 |     |
| 382  | 1  | 65  | 07:38:28.666 | 488CX6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.937,292:88:0 |     |
| 383  | 1  | 65  | 10:19:15.333 | 488CX6D | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 200 | 4  | 0  | 5.937,451:89:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters     | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|----------------|---|-----|----|----|----------------|-----|
| 384  | 1  | 65  | 10:21:26.666 | 488CX6E | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.937,454:13:0 |     |
| 385  | 1  | 65  | 10:32:03.333 | 488CY6A | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.937,464:58:0 |     |
| 386  | 1  | 65  | 14:40:22.666 | 488CY6B | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.937,710:21:0 |     |
| 387  | 1  | 65  | 21:39:47.266 | 488CZ6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,125:03:0 |     |
| 388  | 1  | 65  | 22:43:27.266 | 488CZ6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,188:00:0 |     |
| 389  | 1  | 65  | 22:52:19.266 | 488CZ6C | 6TMSED  | FILL,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,196:70:0 |     |
| 390  | 1  | 65  | 23:04:25.933 | 488CZ6D | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,208:68:0 |     |
| 391  | 1  | 66  | 03:29:39.266 | 488CZ6E | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,471:05:0 |     |
| 392  | 1  | 66  | 05:29:07.266 | 488DA6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,589:19:0 |     |
| 393  | 1  | 66  | 06:03:23.933 | 488DA6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,623:10:0 |     |
| 394  | 1  | 66  | 06:11:47.266 | 488DA6C | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.938,631:37:0 |     |
| 395  | 1  | 66  | 15:20:13.933 | 488DB6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.939,173:75:0 |     |
| 396  | 1  | 66  | 16:52:59.933 | 488DB6B | 6TMSED  | NORM,AH5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.939,265:52:0 |     |
| 397  | 1  | 66  | 16:56:27.933 | 176UE6A | 6TMREC  | PPB            | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5.939,269:00:0 |     |
| 398  | 1  | 66  | 17:23:29.933 | 20SP41  | 7MODE   | INT            | AACS INERTIAL MODE                        | 200 | 4  | 0  | 5.939,295:67:0 |     |
| 399  | 1  | 66  | 17:38:29.933 | 20SP4K  | 7SLEW   | INIT,POS,17.45 | Stator movement                           | 200 | 4  | 0  | 5.939,310:52:0 |     |
| 400  | 1  | 66  | 17:50:29.933 | 20SP4L  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.939,322:40:0 |     |
| 401  | 1  | 66  | 17:57:29.933 | 20SP4M  | 7SLEW   | INIT,NEG,17.45 | Stator movement                           | 200 | 4  | 0  | 5.939,329:33:0 |     |
| 402  | 1  | 66  | 18:09:29.933 | 20SP4N  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.939,341:21:0 |     |
| 403  | 1  | 66  | 18:16:29.933 | 20SP4O  | 7SLEW   | INIT,POS,4.36  | Stator movement                           | 200 | 4  | 0  | 5.939,348:14:0 |     |
| 404  | 1  | 66  | 18:28:29.933 | 20SP4P  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.939,360:02:0 |     |
| 405  | 1  | 66  | 18:35:29.933 | 20SP4Q  | 7SLEW   | INIT,NEG,4.36  | Stator movement                           | 200 | 4  | 0  | 5.939,366:86:0 |     |
| 406  | 1  | 66  | 18:47:29.933 | 20SP4R  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.939,378:74:0 |     |
| 407  | 1  | 66  | 18:59:29.933 | 20SP4AH | 7MODE   | CRU            | AACS CRUISE MODE                          | 200 | 4  | 0  | 5.939,390:62:0 |     |
| 408  | 1  | 66  | 19:14:59.933 | 488DB6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.939,406:01:0 |     |
| 409  | 1  | 66  | 19:15:03.933 | 20UP4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                           | 200 | 4  | 0  | 5.939,406:07:0 |     |
| 410  | 1  | 66  | 19:15:53.933 | 20UP4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.939,406:82:0 |     |
| 411  | 1  | 66  | 19:17:00.600 | 176UF6A | 6TMREC  | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4  | 0  | 5.939,408:00:0 |     |
| 412  | 1  | 66  | 21:29:07.266 | 488DC6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.939,538:60:0 |     |
| 413  | 1  | 66  | 22:35:15.266 | 488DC6B | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.939,604:06:0 |     |
| 414  | 1  | 67  | 03:14:43.266 | 488DC6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.939,880:42:0 |     |
| 415  | 1  | 67  | 05:24:51.266 | 488DD6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,009:15:0 |     |
| 416  | 1  | 67  | 06:03:15.933 | 488DD6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,047:14:0 |     |
| 417  | 1  | 67  | 06:11:47.266 | 488DD6C | 6TMSED  | FILL,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,055:53:0 |     |
| 418  | 1  | 67  | 06:34:15.200 | 488DD6D | 6TMSED  | NORM,AL6       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,077:73:0 |     |
| 419  | 1  | 67  | 08:24:03.200 | 488DD6E | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,186:36:0 |     |
| 420  | 1  | 67  | 09:49:23.200 | 488DE6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,270:72:0 |     |
| 421  | 1  | 67  | 10:16:51.200 | 488DE6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,297:87:0 |     |
| 422  | 1  | 67  | 10:19:15.200 | 488DE6C | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,300:30:0 |     |
| 423  | 1  | 67  | 10:29:55.200 | 488DE6D | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,310:80:0 |     |
| 424  | 1  | 67  | 16:21:52.533 | 488DF6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,658:88:0 |     |
| 425  | 1  | 67  | 17:45:08.533 | 488DF6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.940,741:29:0 |     |
| 426  | 1  | 67  | 17:56:57.200 | 176UM6A | 6TMREC  | PPB            | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5.940,753:00:0 |     |
| 427  | 1  | 67  | 18:01:59.866 | 20UR4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.940,757:90:0 |     |
| 428  | 1  | 67  | 18:02:59.866 | 20UR4D  | 7MODE   | SPNL           | AACS ALL-SPIN LOW                         | 200 | 4  | 0  | 5.940,758:89:0 |     |
| 429  | 1  | 67  | 18:04:59.866 | 20UR4E  | 7SAFE   | UNSTOP         | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5.940,760:87:0 |     |
| 430  | 1  | 67  | 18:10:29.866 | 20UR4G  | 7VENT   | 0.611,1.333,8  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,766:36:0 |     |
| 431  | 1  | 67  | 18:10:30.533 | 20UR4H  | 7VENT   | 0.611,10.989,8 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,766:37:0 |     |
| 432  | 1  | 67  | 18:10:50.533 | 20UR4I  | 7VENT   | 0.611,1.333,6  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,766:67:0 |     |
| 433  | 1  | 67  | 18:10:51.200 | 20UR4J  | 7VENT   | 0.611,10.989,6 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,766:68:0 |     |
| 434  | 1  | 67  | 18:11:11.200 | 20UR4K  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,767:07:0 |     |
| 435  | 1  | 67  | 18:11:11.866 | 20UR4L  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,767:08:0 |     |
| 436  | 1  | 67  | 18:11:21.866 | 20UR4M  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,767:23:0 |     |
| 437  | 1  | 67  | 18:11:22.533 | 20UR4N  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,767:24:0 |     |
| 438  | 1  | 67  | 18:11:32.533 | 20UR4O  | 7VENT   | 1.211,1.333,10 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.940,767:39:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters     | Description                              | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|----------------|--|-----|----|----|----------------|-----|
| 439  | 1  | 67  | 18:11:33.200 | 20UR4P  | 7VENT   | 1.211,0.666,12 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,767:40:0 |     |
| 440  | 1  | 67  | 18:13:19.866 | 20UR4S  | 7VENT   | 0.611,1.133,7  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,769:18:0 |     |
| 441  | 1  | 67  | 18:13:20.533 | 20UR4T  | 7VENT   | 0.611,10.989,7 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,769:19:0 |     |
| 442  | 1  | 67  | 18:13:40.533 | 20UR4U  | 7VENT   | 0.611,1.133,1  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,769:49:0 |     |
| 443  | 1  | 67  | 18:13:41.200 | 20UR4V  | 7VENT   | 0.611,10.989,1 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,769:50:0 |     |
| 444  | 1  | 67  | 18:14:01.200 | 20UR4AC | 7VENT   | 0.611,1.133,2  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,769:80:0 |     |
| 445  | 1  | 67  | 18:14:01.866 | 20UR4AD | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,769:81:0 |     |
| 446  | 1  | 67  | 18:14:11.866 | 20UR4AE | 7VENT   | 0.611,1.133,2  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,770:05:0 |     |
| 447  | 1  | 67  | 18:14:12.533 | 20UR4AF | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,770:06:0 |     |
| 448  | 1  | 67  | 18:14:22.533 | 20UR4AW | 7VENT   | 1.211,1.133,9  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,770:21:0 |     |
| 449  | 1  | 67  | 18:14:23.200 | 20UR4X  | 7VENT   | 1.211,0.666,11 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5,940,770:22:0 |     |
| 450  | 1  | 67  | 18:15:19.866 | 20UR4Z  | 7MODE   | CRU            | AACS CRUISE MODE                         | 200 | 4  | 0  | 5,940,771:16:0 |     |
| 451  | 1  | 67  | 18:18:47.200 | 488DF6C | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,940,774:54:0 |     |
| 452  | 1  | 67  | 18:40:03.866 | 20UY4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                          | 200 | 4  | 0  | 5,940,795:58:0 |     |
| 453  | 1  | 67  | 18:40:53.866 | 20UY4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                          | 200 | 4  | 0  | 5,940,796:42:0 |     |
| 454  | 1  | 67  | 18:42:27.200 | 176UZ6A | 6TMSD   | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode | 200 | 4  | 0  | 5,940,798:00:0 |     |
| 455  | 1  | 67  | 22:24:35.200 | 488DG6A | 6TMSD   | NORM,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,941,017:63:0 |     |
| 456  | 1  | 67  | 22:31:06.533 | 488DG6B | 6TMSD   | FILL,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,941,024:13:0 |     |
| 457  | 1  | 67  | 22:41:39.200 | 488DG6C | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,941,034:52:0 |     |
| 458  | 1  | 68  | 14:59:58.533 | 488DH6A | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,002:13:0 |     |
| 459  | 1  | 68  | 21:14:11.133 | 488DI6A | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,372:22:0 |     |
| 460  | 1  | 68  | 22:23:03.133 | 488DI6B | 6TMSD   | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,440:32:0 |     |
| 461  | 1  | 68  | 22:33:07.133 | 488DI6C | 6TMSD   | FILL,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,450:28:0 |     |
| 462  | 1  | 68  | 23:04:02.466 | 488DI6D | 6TMSD   | NORM,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,480:81:0 |     |
| 463  | 1  | 69  | 02:29:55.133 | 488DI6E | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,684:46:0 |     |
| 464  | 1  | 69  | 04:35:47.800 | 488DJ6A | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,809:00:0 |     |
| 465  | 1  | 69  | 04:42:11.133 | 488DJ6B | 6TMSD   | FILL,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,815:29:0 |     |
| 466  | 1  | 69  | 06:24:00.466 | 488DJ6C | 6TMSD   | NORM,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,942,916:02:0 |     |
| 467  | 1  | 69  | 08:04:51.133 | 488DJ6D | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,015:69:0 |     |
| 468  | 1  | 69  | 09:38:43.133 | 488DJ6E | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,108:54:0 |     |
| 469  | 1  | 69  | 10:09:59.800 | 488DK6A | 6TMSD   | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,139:48:0 |     |
| 470  | 1  | 69  | 10:14:59.133 | 488DK6B | 6TMSD   | FILL,AL2       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,144:42:0 |     |
| 471  | 1  | 69  | 10:29:55.133 | 488DK6C | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,159:21:0 |     |
| 472  | 1  | 69  | 17:04:49.800 | 488DL6A | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,549:73:0 |     |
| 473  | 1  | 69  | 21:03:31.133 | 488DL6B | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,785:79:0 |     |
| 474  | 1  | 69  | 22:31:47.133 | 488DL6C | 6TMSD   | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,873:15:0 |     |
| 475  | 1  | 69  | 22:35:15.133 | 488DL6D | 6TMSD   | FILL,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,876:54:0 |     |
| 476  | 1  | 69  | 22:45:55.133 | 488DL6E | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,887:13:0 |     |
| 477  | 1  | 69  | 23:04:47.800 | 488DM6A | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,905:74:0 |     |
| 478  | 1  | 70  | 00:33:12.466 | 488DM6B | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,943,993:23:0 |     |
| 479  | 1  | 70  | 00:59:59.800 | 481UC4A | 7VECT   |                | Inert vect update UTC                    | 200 | 4  | 0  | 5,944,019:68:0 |     |
| 480  | 1  | 70  | 01:02:18.466 | 488DM6C | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,022:03:0 |     |
| 481  | 1  | 70  | 03:14:43.066 | 488DM6D | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,152:90:0 |     |
| 482  | 1  | 70  | 05:24:51.066 | 488DN6A | 6TMSD   | NORM,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,281:63:0 |     |
| 483  | 1  | 70  | 06:59:38.400 | 488DN6B | 6TMSD   | FILL,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,375:40:0 |     |
| 484  | 1  | 70  | 07:26:28.400 | 488DN6C | 6TMSD   | NORM,AL6       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,401:89:0 |     |
| 485  | 1  | 70  | 07:49:55.066 | 488DN6D | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,425:15:0 |     |
| 486  | 1  | 70  | 09:34:27.066 | 488DN6E | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,528:50:0 |     |
| 487  | 1  | 70  | 10:03:03.066 | 488DO6A | 6TMSD   | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,556:76:0 |     |
| 488  | 1  | 70  | 10:08:35.066 | 488DO6B | 6TMSD   | FILL,AL1       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,562:28:0 |     |
| 489  | 1  | 70  | 10:44:51.066 | 488DO6C | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,944,598:16:0 |     |
| 490  | 1  | 70  | 21:54:40.400 | 488DP6A | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,945,260:58:0 |     |
| 491  | 1  | 70  | 23:23:20.400 | 488DP6B | 6TMSD   | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,945,348:30:0 |     |
| 492  | 1  | 70  | 23:52:26.400 | 488DP6C | 6TMSD   | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,945,377:10:0 |     |
| 493  | 1  | 71  | 02:53:23.066 | 488DP6D | 6TMSD   | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,945,556:06:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID     | Command | Parameters | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|----------|---------|------------|---|-----|----|----|----------------|-----|
| 494  | 1  | 71  | 05:22:45.066 | 488DQ6A  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,945,703:72:0 |     |
| 495  | 1  | 71  | 05:31:15.066 | 488DQ6B  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,945,712:18:0 |     |
| 496  | 1  | 71  | 15:14:34.333 | 488DR6A  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,946,289:10:0 |     |
| 497  | 1  | 71  | 20:44:19.000 | 488DR6B  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,946,615:21:0 |     |
| 498  | 1  | 71  | 21:52:40.333 | 488DS6A  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,946,682:76:0 |     |
| 499  | 1  | 71  | 22:01:07.000 | 488DS6B  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,946,691:17:0 |     |
| 500  | 1  | 72  | 00:19:31.666 | 488DS6C  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,946,828:07:0 |     |
| 501  | 1  | 72  | 04:48:35.000 | 488DT6A  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,094:16:0 |     |
| 502  | 1  | 72  | 05:18:27.000 | 488DT6B  | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,123:65:0 |     |
| 503  | 1  | 72  | 07:20:03.000 | 488DT6C  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,243:89:0 |     |
| 504  | 1  | 72  | 09:19:31.000 | 488DT6D  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,362:12:0 |     |
| 505  | 1  | 72  | 09:56:29.666 | 488DT6E  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,398:64:0 |     |
| 506  | 1  | 72  | 10:00:03.000 | 488DU6A  | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,402:20:0 |     |
| 507  | 1  | 72  | 10:10:43.000 | 488DU6B  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,412:70:0 |     |
| 508  | 1  | 72  | 15:21:13.666 | 488DU6C  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,719:79:0 |     |
| 509  | 1  | 72  | 16:45:47.000 | 488DV6A  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,803:45:0 |     |
| 510  | 1  | 72  | 17:19:26.333 | 488DV6B  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,947,836:71:0 |     |
| 511  | 1  | 72  | 21:48:19.000 | 488DV6C  | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,102:64:0 |     |
| 512  | 1  | 72  | 22:20:27.666 | 488DV6D  | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,134:45:0 |     |
| 513  | 1  | 72  | 22:30:58.933 | 488DV6E  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,144:82:0 |     |
| 514  | 1  | 72  | 23:04:24.933 | 488DW6A  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,177:88:0 |     |
| 515  | 1  | 73  | 04:40:02.933 | 488DW6B  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,509:83:0 |     |
| 516  | 1  | 73  | 05:46:03.600 | 488DX6A  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,575:18:0 |     |
| 517  | 1  | 73  | 05:48:18.933 | 488DX6B  | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,577:39:0 |     |
| 518  | 1  | 73  | 05:58:58.933 | 488DX6C  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,948,587:89:0 |     |
| 519  | 1  | 73  | 15:21:06.266 | 488DY6A  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,143:84:0 |     |
| 520  | 1  | 73  | 16:45:54.933 | 488DY6B  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,227:73:0 |     |
| 521  | 1  | 73  | 17:19:34.266 | 488DY6C  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,261:08:0 |     |
| 522  | 1  | 73  | 21:44:02.933 | 488DZ6A  | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,522:60:0 |     |
| 523  | 1  | 73  | 22:13:54.933 | 488DZ6B  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,552:18:0 |     |
| 524  | 1  | 73  | 22:48:43.600 | 488DZ6C  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,586:57:0 |     |
| 525  | 1  | 73  | 23:17:49.600 | 488DZ6D  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,615:37:0 |     |
| 526  | 1  | 74  | 04:33:38.933 | 488E6A   | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,927:69:0 |     |
| 527  | 1  | 74  | 05:07:46.933 | 488E6B   | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,961:47:0 |     |
| 528  | 1  | 74  | 05:14:10.933 | 488E6C   | 6TMSED  | NORM,AL6   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,949,967:77:0 |     |
| 529  | 1  | 74  | 06:39:30.933 | 488E6D   | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,052:22:0 |     |
| 530  | 1  | 74  | 08:54:24.200 | 488E6E   | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,185:59:0 |     |
| 531  | 1  | 74  | 08:58:10.866 | 488E6B6  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,189:35:0 |     |
| 532  | 1  | 74  | 18:15:57.533 | 488E6C6  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,741:03:0 |     |
| 533  | 1  | 74  | 19:41:04.200 | 488E6C6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,825:19:0 |     |
| 534  | 1  | 74  | 20:14:43.533 | 488E6C6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,858:45:0 |     |
| 535  | 1  | 74  | 21:39:46.866 | 488E6C6D | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,942:56:0 |     |
| 536  | 1  | 74  | 22:00:12.200 | 488E6E6  | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,962:74:0 |     |
| 537  | 1  | 74  | 22:11:46.866 | 488E6D6A | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,950,974:24:0 |     |
| 538  | 1  | 75  | 00:20:55.533 | 488E6D6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,101:90:0 |     |
| 539  | 1  | 75  | 01:46:06.200 | 488E6D6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,186:21:0 |     |
| 540  | 1  | 75  | 02:19:45.533 | 488E6D6D | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,219:47:0 |     |
| 541  | 1  | 75  | 05:18:26.866 | 488E6E6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,396:22:0 |     |
| 542  | 1  | 75  | 05:30:09.533 | 488E6E6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,407:75:0 |     |
| 543  | 1  | 75  | 05:41:54.866 | 488E6E6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,419:41:0 |     |
| 544  | 1  | 75  | 15:25:50.200 | 488EF6A  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,951,996:87:0 |     |
| 545  | 1  | 75  | 15:53:00.200 | 488EF6B  | 6TMSED  | NORM,AH4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,952,023:75:0 |     |
| 546  | 1  | 75  | 15:55:12.200 | 176SG6A  | 6TMREC  | PPB        | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5,952,026:00:0 |     |
| 547  | 1  | 75  | 16:51:10.200 | 488EF6C  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,952,081:32:0 |     |
| 548  | 1  | 75  | 17:24:49.533 | 488EF6D  | 6TMSED  | NORM,AH4   | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,952,114:58:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters | Description                              | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------|--|-----|----|----|----------------|-----|
| 549  | 1  | 75  | 21:01:00.133 | 488EF6E | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,328:40:0 |     |
| 550  | 1  | 75  | 21:04:36.133 | 176SH6A | 6TMREC  | RPB        | RESUME PLAYBACK (PB CONTROL) Record Mode | 200 | 4  | 0  | 5,952,332:00:0 |     |
| 551  | 1  | 75  | 21:29:06.800 | 488EG6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,356:22:0 |     |
| 552  | 1  | 75  | 22:05:04.800 | 488EG6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,391:74:0 |     |
| 553  | 1  | 75  | 22:16:02.800 | 488EG6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,402:60:0 |     |
| 554  | 1  | 75  | 23:05:48.133 | 488EG6D | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,451:79:0 |     |
| 555  | 1  | 76  | 00:31:13.466 | 488EG6E | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,536:32:0 |     |
| 556  | 1  | 76  | 01:04:52.133 | 488EH6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,569:57:0 |     |
| 557  | 1  | 76  | 05:14:10.800 | 488EH6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,816:18:0 |     |
| 558  | 1  | 76  | 05:30:02.800 | 488EH6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,831:81:0 |     |
| 559  | 1  | 76  | 05:41:54.800 | 488EH6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,952,843:57:0 |     |
| 560  | 1  | 76  | 15:28:56.800 | 488EI6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,953,424:19:0 |     |
| 561  | 1  | 76  | 19:44:34.800 | 488EI6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,953,677:03:0 |     |
| 562  | 1  | 76  | 21:58:58.800 | 488EJ6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,953,809:87:0 |     |
| 563  | 1  | 76  | 22:04:56.800 | 488EJ6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,953,815:78:0 |     |
| 564  | 1  | 76  | 22:16:02.800 | 488EJ6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,953,826:76:0 |     |
| 565  | 1  | 76  | 23:03:53.466 | 488EJ6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,953,874:14:0 |     |
| 566  | 1  | 77  | 04:08:02.800 | 488EK6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,954,174:88:0 |     |
| 567  | 1  | 77  | 05:16:32.066 | 488EK6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,954,242:64:0 |     |
| 568  | 1  | 77  | 05:22:42.733 | 488EK6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,954,248:74:0 |     |
| 569  | 1  | 77  | 10:01:57.400 | 488EK6D | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,954,524:90:0 |     |
| 570  | 1  | 77  | 10:10:42.733 | 488EL6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,954,533:59:0 |     |
| 571  | 1  | 77  | 12:16:34.733 | 488EL6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,954,658:12:0 |     |
| 572  | 1  | 77  | 19:33:54.733 | 488EM6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,090:60:0 |     |
| 573  | 1  | 77  | 21:52:34.733 | 488EM6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,227:73:0 |     |
| 574  | 1  | 77  | 21:59:49.400 | 488EM6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,234:88:0 |     |
| 575  | 1  | 77  | 22:11:46.733 | 488EM6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,246:72:0 |     |
| 576  | 1  | 77  | 23:03:46.733 | 488EM6E | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,298:20:0 |     |
| 577  | 1  | 78  | 03:59:30.733 | 488EN6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,590:64:0 |     |
| 578  | 1  | 78  | 05:06:52.066 | 488EN6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,955,657:29:0 |     |
| 579  | 1  | 78  | 15:35:27.333 | 488EO6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,279:00:0 |     |
| 580  | 1  | 78  | 17:01:31.333 | 488EO6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,364:14:0 |     |
| 581  | 1  | 78  | 17:35:12.666 | 488EO6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,397:40:0 |     |
| 582  | 1  | 78  | 21:07:46.666 | 488EO6D | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,607:61:0 |     |
| 583  | 1  | 78  | 21:52:31.333 | 488EP6A | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,651:84:0 |     |
| 584  | 1  | 78  | 21:58:58.666 | 488EP6B | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,658:28:0 |     |
| 585  | 1  | 78  | 22:13:54.666 | 488EP6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,673:07:0 |     |
| 586  | 1  | 79  | 00:18:38.666 | 488EP6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,956,796:40:0 |     |
| 587  | 1  | 79  | 03:48:50.666 | 488EP6E | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,004:30:0 |     |
| 588  | 1  | 79  | 05:18:26.666 | 488EQ6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,092:86:0 |     |
| 589  | 1  | 79  | 08:28:18.666 | 488EQ6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,280:66:0 |     |
| 590  | 1  | 79  | 09:30:31.333 | 488EQ6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,342:23:0 |     |
| 591  | 1  | 79  | 09:32:18.666 | 488EQ6D | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,344:02:0 |     |
| 592  | 1  | 79  | 09:47:14.666 | 488EQ6E | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,358:72:0 |     |
| 593  | 1  | 79  | 15:33:33.333 | 488ER6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,701:27:0 |     |
| 594  | 1  | 79  | 18:57:38.666 | 488ER6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,957,903:13:0 |     |
| 595  | 1  | 79  | 21:37:38.666 | 488ES6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,061:35:0 |     |
| 596  | 1  | 79  | 21:49:34.666 | 488ES6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,073:17:0 |     |
| 597  | 1  | 79  | 22:01:06.666 | 488ES6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,084:54:0 |     |
| 598  | 1  | 80  | 00:18:30.666 | 488ES6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,220:44:0 |     |
| 599  | 1  | 80  | 03:38:10.600 | 488ET6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,417:87:0 |     |
| 600  | 1  | 80  | 05:14:10.600 | 488ET6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,512:82:0 |     |
| 601  | 1  | 80  | 05:19:32.600 | 488ET6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,518:19:0 |     |
| 602  | 1  | 80  | 05:31:14.600 | 488ET6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,958,529:71:0 |     |
| 603  | 1  | 80  | 15:18:26.600 | 488EU6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5,959,110:48:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID     | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|----------|---------|------------------|---|-----|----|----|----------------|-----|
| 604  | 1  | 80  | 18:34:10.600 | 488EU6B  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,304:10:0 |     |
| 605  | 1  | 80  | 21:33:22.600 | 488EV6A  | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,481:31:0 |     |
| 606  | 1  | 80  | 21:49:27.266 | 488EV6B  | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,497:22:0 |     |
| 607  | 1  | 80  | 22:01:06.600 | 488EV6C  | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,508:70:0 |     |
| 608  | 1  | 80  | 23:03:23.933 | 488EV6D  | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,570:34:0 |     |
| 609  | 1  | 81  | 03:27:30.600 | 488EV6E  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,831:53:0 |     |
| 610  | 1  | 81  | 05:07:46.600 | 488EW6A  | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,930:68:0 |     |
| 611  | 1  | 81  | 05:19:24.600 | 488EW6B  | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,942:23:0 |     |
| 612  | 1  | 81  | 05:31:14.600 | 488EW6C  | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,959,953:87:0 |     |
| 613  | 1  | 81  | 15:18:18.533 | 488EX6A  | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,960,534:52:0 |     |
| 614  | 1  | 81  | 18:02:10.533 | 488EX6B  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,960,696:58:0 |     |
| 615  | 1  | 81  | 21:26:58.533 | 488EY6A  | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,960,899:17:0 |     |
| 616  | 1  | 81  | 21:44:19.200 | 488EY6B  | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,960,916:31:0 |     |
| 617  | 1  | 81  | 21:56:50.533 | 488EY6C  | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,960,928:66:0 |     |
| 618  | 1  | 82  | 00:20:03.200 | 488EY6D  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,070:33:0 |     |
| 619  | 1  | 82  | 01:46:58.533 | 488EY6E  | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,156:30:0 |     |
| 620  | 1  | 82  | 02:20:37.200 | 488EZ6A  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,189:55:0 |     |
| 621  | 1  | 82  | 04:33:38.533 | 488EZ6B  | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,321:15:0 |     |
| 622  | 1  | 82  | 05:09:40.533 | 488EZ6C  | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,356:73:0 |     |
| 623  | 1  | 82  | 05:12:02.533 | 488EZ6D  | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,359:13:0 |     |
| 624  | 1  | 82  | 05:26:58.533 | 488EZ6E  | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,373:83:0 |     |
| 625  | 1  | 82  | 05:38:14.533 | 488FA6A  | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,385:05:0 |     |
| 626  | 1  | 82  | 06:39:45.200 | 488FA6B  | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,445:81:0 |     |
| 627  | 1  | 82  | 07:08:51.866 | 488FA6C  | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,474:62:0 |     |
| 628  | 1  | 82  | 08:02:42.533 | 488FA6D  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,527:85:0 |     |
| 629  | 1  | 82  | 09:18:54.533 | 488FA6E  | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,603:27:0 |     |
| 630  | 1  | 82  | 09:23:46.533 | 488FB6A  | 6TMSED  | FILL,AL1         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,608:10:0 |     |
| 631  | 1  | 82  | 10:00:02.533 | 488FB6B  | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,643:89:0 |     |
| 632  | 1  | 82  | 10:56:41.200 | 1761TC6A | 6TMREC  | PPB              | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5,961,700:00:0 |     |
| 633  | 1  | 82  | 11:02:45.200 |          | DMS:    | : *SLEW-TIC      | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 5,961,706:00:0 |     |
| 634  | 1  | 82  | 11:02:45.200 |          | DMS:    | : *TURNARND      | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 5,961,706:00:0 |     |
| 635  | 1  | 82  | 11:02:45.200 | 465WA6A  | 6DMST   |                  | 5000 DMS Slew to TIC                      | 200 | 4  | 0  | 5,961,706:00:0 |     |
| 636  | 1  | 82  | 11:02:45.200 |          | DMS:    | : *E4-DELAY      | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 200 | 4  | 0  | 5,961,706:00:0 |     |
| 637  | 1  | 82  | 11:02:51.866 |          | DMS:    | : *RUNUP         | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 5,961,706:10:0 |     |
| 638  | 1  | 82  | 11:02:53.266 |          | DMS:    | : *AT SPD        | P7, TRACK 1, FWD, TIC *202.24 +/-         | 200 | 4  | 0  | 5,961,706:12:1 |     |
| 639  | 1  | 82  | 15:38:11.866 | 488FC6A  | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,961,978:38:0 |     |
| 640  | 1  | 82  | 16:43:54.000 |          | DMS:    | : *RUNDOWN       | P7, TRACK 1, FWD, TIC *4997.94 +/-        | 200 | 4  | 0  | 5,962,043:36:2 |     |
| 641  | 1  | 82  | 16:43:55.200 |          | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC *4998.00 +/-       | 200 | 4  | 0  | 5,962,043:38:0 |     |
| 642  | 1  | 82  | 16:56:26.533 | 465WB6A  | 6DMSC   | P100.4           | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 5,962,055:73:0 |     |
| 643  | 1  | 82  | 16:56:26.533 |          | DMS:    | : *US-RUNUP      | P7, TRACK 1, FWD, TIC 4998.00 +/-         | 200 | 4  | 0  | 5,962,055:73:0 |     |
| 644  | 1  | 82  | 16:56:27.933 |          | DMS:    | : *US-AT_SP      | P7, TRACK 1, FWD, TIC *4998.12 +/-        | 200 | 4  | 0  | 5,962,055:75:1 |     |
| 645  | 1  | 82  | 16:56:33.200 |          | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *4999.35 +/-        | 200 | 4  | 0  | 5,962,055:83:0 |     |
| 646  | 1  | 82  | 16:56:34.400 |          | DMS:    | : *RUNUP         | P100, TRACK *4, *REV, TIC *4999.41 +/-    | 200 | 4  | 0  | 5,962,055:84:8 |     |
| 647  | 1  | 82  | 16:56:38.266 |          | DMS:    | : *AT SPD        | P100, TRACK 4, REV, TIC 4993.91 +/-       | 200 | 4  | 0  | 5,962,055:90:6 |     |
| 648  | 1  | 82  | 16:56:38.266 |          | DMS:    | : *P_SLEW        | P100, TRACK 4, REV, TIC *4993.91 +/-      | 200 | 4  | 0  | 5,962,055:90:6 |     |
| 649  | 1  | 82  | 17:02:26.533 | 488FC6B  | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,962,061:67:0 |     |
| 650  | 1  | 82  | 17:02:18.533 | 465WB6B  | 6DMSC   | RDY.4            | DMS Control Tape stop                     | 200 | 4  | 0  | 5,962,081:35:0 |     |
| 651  | 1  | 82  | 17:22:18.533 |          | DMS:    | : *RUNDOWN       | P100, TRACK 4, REV, TIC *255.79 +/-       | 200 | 4  | 0  | 5,962,081:35:0 |     |
| 652  | 1  | 82  | 17:22:19.733 |          | DMS:    | : *READY         | RDY, TRACK 4, REV, TIC *254.99 +/-        | 200 | 4  | 0  | 5,962,081:36:8 |     |
| 653  | 1  | 82  | 19:21:07.200 | 465WC6A  | 6DTRN   | CMD,6DTRN,465WC6 | DMS TRACK TURNAROUND                      | 200 | 4  | 0  | 5,962,198:81:0 |     |
| 654  | 1  | 82  | 19:21:07.200 |          | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 254.99 +/-        | 200 | 4  | 0  | 5,962,198:81:0 |     |
| 655  | 1  | 82  | 19:21:07.200 |          | DMS:    | : *DMS-TURN      | P7, TRACK 4, REV, TIC 254.99 +/-          | 200 | 4  | 0  | 5,962,198:81:0 |     |
| 656  | 1  | 82  | 19:21:08.600 |          | DMS:    | : *US-AT_SP      | P7, TRACK 1, FWD, TIC *255.11 +/-         | 200 | 4  | 0  | 5,962,198:83:1 |     |
| 657  | 1  | 82  | 19:21:13.866 |          | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *256.34 +/-         | 200 | 4  | 0  | 5,962,199:00:0 |     |
| 658  | 1  | 82  | 19:21:15.066 |          | DMS:    | : *RUNUP         | P7, TRACK *4, *REV, TIC *256.40 +/-       | 200 | 4  | 0  | 5,962,199:01:8 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------------|--|-----|----|----|----------------|-----|
| 659  | 1  | 82  | 19:21:16.466 |         | DMS:    | : *AT SPD        | P7, TRACK 4, REV, TIC * 256.28 +/-     | 200 | 4  | 0  | 5.962,199:03:9 |     |
| 660  | 1  | 82  | 19:25:09.200 | 488FC6C | 6TMSD   | NORM,AH4         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5.962,202:80:0 |     |
| 661  | 1  | 82  | 19:25:17.133 |         | DMS:    | : *REVERSE       | P7, TRACK 4, REV, TIC * 199.87 +/-     | 200 | 4  | 0  | 5.962,203:00:9 |     |
| 662  | 1  | 82  | 19:25:18.333 |         | DMS:    | : *RUNUP         | P7, TRACK 1, FWD, TIC 199.81 +/-       | 200 | 4  | 0  | 5.962,203:02:7 |     |
| 663  | 1  | 82  | 19:25:18.333 |         | DMS:    | : *TURNARND      | P7, TRACK *1, *FWD, TIC * 199.81 +/-   | 200 | 4  | 0  | 5.962,203:02:7 |     |
| 664  | 1  | 82  | 19:25:19.733 |         | DMS:    | : *AT SPD        | P7, TRACK 1, FWD, TIC * 199.93 +/-     | 200 | 4  | 0  | 5.962,203:04:8 |     |
| 665  | 1  | 82  | 19:25:31.733 |         | DMS:    | : *AUTOSTOP      | P7, TRACK 1, FWD, TIC * 202.06 +/-     | 200 | 4  | 0  | 5.962,203:22:8 |     |
| 666  | 1  | 82  | 19:25:32.933 |         | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC * 202.12 +/-    | 200 | 4  | 0  | 5.962,203:24:6 |     |
| 667  | 1  | 82  | 19:31:09.866 | 465WD6A | 6DMSC   | P100,1           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5.962,208:75:0 |     |
| 668  | 1  | 82  | 19:31:09.866 |         | DMS:    | : *E4-DELAY      | RDY, TRACK 1, FWD, TIC 202.12 +/-      | 200 | 4  | 0  | 5.962,208:75:0 |     |
| 669  | 1  | 82  | 19:31:16.533 |         | DMS:    | : *RUNUP         | P100, TRACK 1, FWD, TIC 202.12 +/-     | 200 | 4  | 0  | 5.962,208:85:0 |     |
| 670  | 1  | 82  | 19:31:20.400 |         | DMS:    | : *P_SLEW        | P100, TRACK 1, FWD, TIC * 207.62 +/-   | 200 | 4  | 0  | 5.962,208:90:8 |     |
| 671  | 1  | 82  | 19:31:20.400 |         | DMS:    | : *AT SPD        | P100, TRACK 1, FWD, TIC 207.62 +/-     | 200 | 4  | 0  | 5.962,208:90:8 |     |
| 672  | 1  | 82  | 20:03:03.866 |         | DMS:    | : *RUNDOWN       | P100, TRACK 1, FWD, TIC *6063.01 +/-   | 200 | 4  | 0  | 5.962,240:34:0 |     |
| 673  | 1  | 82  | 20:03:03.866 | 465WD6B | 6DMSC   | RDY,1            | DMS Control Tape stop                  | 200 | 4  | 0  | 5.962,240:34:0 |     |
| 674  | 1  | 82  | 20:03:05.066 |         | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC *6063.81 +/-    | 200 | 4  | 0  | 5.962,240:35:8 |     |
| 675  | 1  | 82  | 20:18:39.866 |         | DMS:    | : *US-RUNUP      | P7, TRACK 1, FWD, TIC 6063.81 +/-      | 200 | 4  | 0  | 5.962,255:73:0 |     |
| 676  | 1  | 82  | 20:18:39.866 | 465WE6A | 6DMSC   | P100,2           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5.962,255:73:0 |     |
| 677  | 1  | 82  | 20:18:41.266 |         | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *6063.93 +/-     | 200 | 4  | 0  | 5.962,255:75:1 |     |
| 678  | 1  | 82  | 20:18:46.533 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *6065.17 +/-     | 200 | 4  | 0  | 5.962,255:83:0 |     |
| 679  | 1  | 82  | 20:18:47.733 |         | DMS:    | : *RUNUP         | P100, TRACK *2, *REV, TIC *6065.23 +/- | 200 | 4  | 0  | 5.962,255:84:8 |     |
| 680  | 1  | 82  | 20:18:51.600 |         | DMS:    | : *AT SPD        | P100, TRACK 2, REV, TIC 6059.73 +/-    | 200 | 4  | 0  | 5.962,255:90:6 |     |
| 681  | 1  | 82  | 20:18:51.600 |         | DMS:    | : *P_SLEW        | P100, TRACK 2, REV, TIC *6059.73 +/-   | 200 | 4  | 0  | 5.962,255:90:6 |     |
| 682  | 1  | 82  | 20:50:47.800 |         | DMS:    | : *RUNDOWN       | P100, TRACK 2, REV, TIC * 165.17 +/-   | 200 | 4  | 0  | 5.962,287:53:0 |     |
| 683  | 1  | 82  | 20:50:47.800 | 465WF6A | 6DMSC   | P100,3           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5.962,287:53:0 |     |
| 684  | 1  | 82  | 20:50:49.000 |         | DMS:    | : *RUNUP         | P100, TRACK *3, *FWD, TIC * 164.37 +/- | 200 | 4  | 0  | 5.962,287:54:8 |     |
| 685  | 1  | 82  | 20:50:52.866 |         | DMS:    | : *AT SPD        | P100, TRACK 3, FWD, TIC 169.87 +/-     | 200 | 4  | 0  | 5.962,287:60:6 |     |
| 686  | 1  | 82  | 20:50:52.866 |         | DMS:    | : *P_SLEW        | P100, TRACK 3, FWD, TIC * 169.87 +/-   | 200 | 4  | 0  | 5.962,287:60:6 |     |
| 687  | 1  | 82  | 21:22:42.466 | 488FC6D | 6TMSD   | NORM,AH3         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5.962,319:13:0 |     |
| 688  | 1  | 82  | 21:22:48.466 | 465WF6B | 6DMSC   | RDY,3            | DMS Control Tape stop                  | 200 | 4  | 0  | 5.962,319:22:0 |     |
| 689  | 1  | 82  | 21:22:48.466 |         | DMS:    | : *RUNDOWN       | P100, TRACK 3, FWD, TIC *6062.58 +/-   | 200 | 4  | 0  | 5.962,319:22:0 |     |
| 690  | 1  | 82  | 21:22:49.666 |         | DMS:    | : *READY         | RDY, TRACK 3, FWD, TIC *6063.38 +/-    | 200 | 4  | 0  | 5.962,319:23:8 |     |
| 691  | 1  | 82  | 21:37:31.800 |         | DMS:    | : *US-RUNUP      | P7, TRACK *1, FWD, TIC 6063.38 +/-     | 200 | 4  | 0  | 5.962,333:73:0 |     |
| 692  | 1  | 82  | 21:37:31.800 | 465WG6A | 6DMSC   | P100,4           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5.962,333:73:0 |     |
| 693  | 1  | 82  | 21:37:33.200 |         | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC *6063.50 +/-     | 200 | 4  | 0  | 5.962,333:73:1 |     |
| 694  | 1  | 82  | 21:37:38.466 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *6064.74 +/-     | 200 | 4  | 0  | 5.962,333:83:0 |     |
| 695  | 1  | 82  | 21:37:39.666 |         | DMS:    | : *RUNUP         | P100, TRACK *4, *REV, TIC *6064.80 +/- | 200 | 4  | 0  | 5.962,333:84:8 |     |
| 696  | 1  | 82  | 21:37:43.533 |         | DMS:    | : *AT SPD        | P100, TRACK 4, REV, TIC 6059.30 +/-    | 200 | 4  | 0  | 5.962,333:90:6 |     |
| 697  | 1  | 82  | 21:37:43.533 |         | DMS:    | : *P_SLEW        | P100, TRACK 4, REV, TIC *6059.30 +/-   | 200 | 4  | 0  | 5.962,333:90:6 |     |
| 698  | 1  | 82  | 21:44:12.466 | 488FD6A | 6TMSD   | FILL,AH3         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5.962,340:37:0 |     |
| 699  | 1  | 82  | 22:09:39.133 | 465WH6A | 6DMSC   | P100,3           | DMS Control Tape P/B 100.8kbps         | 200 | 4  | 0  | 5.962,365:52:0 |     |
| 700  | 1  | 82  | 22:09:39.133 |         | DMS:    | : *RUNDOWN       | P100, TRACK 4, REV, TIC * 166.58 +/-   | 200 | 4  | 0  | 5.962,365:52:0 |     |
| 701  | 1  | 82  | 22:09:40.333 |         | DMS:    | : *RUNUP         | P100, TRACK *3, *FWD, TIC * 165.78 +/- | 200 | 4  | 0  | 5.962,365:53:8 |     |
| 702  | 1  | 82  | 22:09:44.200 |         | DMS:    | : *AT SPD        | P100, TRACK 3, FWD, TIC 171.28 +/-     | 200 | 4  | 0  | 5.962,365:59:6 |     |
| 703  | 1  | 82  | 22:09:44.200 |         | DMS:    | : *P_SLEW        | P100, TRACK 3, FWD, TIC * 171.28 +/-   | 200 | 4  | 0  | 5.962,365:59:6 |     |
| 704  | 1  | 82  | 22:10:45.133 |         | DMS:    | : *RUNDOWN       | P100, TRACK 3, FWD, TIC * 358.72 +/-   | 200 | 4  | 0  | 5.962,366:60:0 |     |
| 705  | 1  | 82  | 22:10:45.133 | 465WH6B | 6DMSC   | RDY,3            | DMS Control Tape stop                  | 200 | 4  | 0  | 5.962,366:60:0 |     |
| 706  | 1  | 82  | 22:10:46.333 |         | DMS:    | : *READY         | RDY, TRACK 3, FWD, TIC * 359.52 +/-    | 200 | 4  | 0  | 5.962,366:61:8 |     |
| 707  | 1  | 82  | 22:11:59.133 | 488FD6B | 6TMSD   | FILL,AL3         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 5.962,367:80:0 |     |
| 708  | 1  | 82  | 22:25:15.133 |         | DMS:    | : *READY         | RDY, TRACK *4, *REV, TIC 359.52 +/-    | 200 | 4  | 0  | 5.962,381:00:0 |     |
| 709  | 1  | 82  | 22:25:15.133 | 465WI6A | 6DMSC   | RDY,4            | DMS Control Tape stop                  | 200 | 4  | 0  | 5.962,381:00:0 |     |
| 710  | 1  | 82  | 22:26:09.133 | 465WJ6A | 6DTRN   | CMD,6DTRN,465WJ6 | DMS TRACK TURNAROUND                   | 200 | 4  | 0  | 5.962,381:81:0 |     |
| 711  | 1  | 82  | 22:26:09.133 |         | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 359.52 +/-     | 200 | 4  | 0  | 5.962,381:81:0 |     |
| 712  | 1  | 82  | 22:26:09.133 |         | DMS:    | : *DMS-TURN      | P7, TRACK 4, REV, TIC 359.52 +/-       | 200 | 4  | 0  | 5.962,381:81:0 |     |
| 713  | 1  | 82  | 22:26:10.533 |         | DMS:    | : *US_AT_SP      | P7, TRACK 1, FWD, TIC * 359.64 +/-     | 200 | 4  | 0  | 5.962,381:83:1 |     |

| Line       | YR       | DOY       | SCET - GMT          | PSID          | Command Parameters     | Description                                      | GCM        | GO       | GS       | RIM                   | MFI |
|------------|----------|-----------|---------------------|---------------|------------------------|--|------------|----------|----------|-----------------------|-----|
| 714        | 1        | 82        | 22:26:15.800        |               | DMS: : *US RD          | P7, TRACK 1, FWD, TIC * 360.88 +/-               | 200        | 4        | 0        | 5,962,382:00:0        |     |
| 715        | 1        | 82        | 22:26:17.000        |               | DMS: : *RUNUP          | P7, TRACK *4, *REV, TIC * 360.94 +/-             | 200        | 4        | 0        | 5,962,382:01:8        |     |
| 716        | 1        | 82        | 22:26:18.400        |               | DMS: : *AT SPD         | P7, TRACK 4, REV, TIC * 360.82 +/-               | 200        | 4        | 0        | 5,962,382:03:9        |     |
| 717        | 1        | 82        | 22:37:45.066        |               | DMS: : *REVERSE        | P7, TRACK 4, REV, TIC * 199.87 +/-               | 200        | 4        | 0        | 5,962,393:32:9        |     |
| 718        | 1        | 82        | 22:37:46.266        |               | DMS: : *TURNARND       | P7, TRACK *1, *FWD, TIC * 199.81 +/-             | 200        | 4        | 0        | 5,962,393:34:7        |     |
| 719        | 1        | 82        | 22:37:46.266        |               | DMS: : *RUNUP          | P7, TRACK 1, FWD, TIC 199.81 +/-                 | 200        | 4        | 0        | 5,962,393:34:7        |     |
| 720        | 1        | 82        | 22:37:47.666        |               | DMS: : *AT SPD         | P7, TRACK 1, FWD, TIC * 199.93 +/-               | 200        | 4        | 0        | 5,962,393:36:8        |     |
| 721        | 1        | 82        | 22:37:59.666        |               | DMS: : *AUTOSTOP       | P7, TRACK 1, FWD, TIC * 202.06 +/-               | 200        | 4        | 0        | 5,962,393:54:8        |     |
| 722        | 1        | 82        | 22:38:00.866        |               | DMS: : *READY          | RDY, TRACK 1, FWD, TIC * 202.12 +/-              | 200        | 4        | 0        | 5,962,393:56:6        |     |
| 723        | 1        | 82        | 22:53:03.800        | 20UK4A        | <b>STOP</b>            | S/P NO MOVEMENT                                  | 200        | 4        | 0        | 5,962,408:46:0        |     |
| 724        | 1        | 82        | 22:53:53.800        | 20UK4B        | 7SLEW DIS,POS,0.0      | Stator movement                                  | 200        | 4        | 0        | 5,962,409:30:0        |     |
| 725        | 1        | 82        | 22:55:35.133        | 176TD6A       | 6TMREC <b>RPB</b>      | RESUME PLAYBACK (PB CONTROL) Record Mode         | 200        | 4        | 0        | 5,962,411:00:0        |     |
| 726        | 1        | 83        | 02:21:15.800        | 488FD6C       | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,962,614:38:0        |     |
| 727        | 1        | 83        | 02:40:34.466        | 488FD6D       | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,962,633:47:0        |     |
| 728        | 1        | 83        | 03:47:06.466        | 488FE6A       | 6TMSED FILL,AL4        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,962,699:29:0        |     |
| 729        | 1        | 83        | 04:20:45.133        | 488FE6B       | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,962,732:54:0        |     |
| 730        | 1        | 83        | 08:06:58.466        | 488FE6C       | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,962,956:30:0        |     |
| 731        | 1        | 83        | 09:08:50.466        | 488FE6D       | 6TMSED NORM,AL2        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,963,017:47:0        |     |
| 732        | 1        | 83        | 09:25:54.466        | 488FE6E       | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,963,034:36:0        |     |
| 733        | 1        | 83        | 09:55:46.466        | 488FF6A       | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,963,063:85:0        |     |
| 734        | 1        | 83        | 10:42:08.466        | 488FF6B       | 6TMSED FILL,AL4        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,963,109:72:0        |     |
| 735        | 1        | 83        | 11:15:47.133        | 488FF6C       | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                           | 200        | 4        | 0        | 5,963,143:06:0        |     |
| 736        | 1        | 83        | 11:49:05.133        | 176SJ6A       | 6TMREC <b>PPB</b>      | PAUSE PLAYBACK (PB CONTROL) Record Mode C        | 200        | 4        | 0        | 5,963,176:00:0        |     |
| 737        | 1        | 83        | 11:59:59.800        |               | DMS: : READY           | RDY, TRACK 1, FWD, TIC 202.12 +/-                | 200        | 4        | 0        | 5,963,186:72:0        |     |
| <b>738</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3EW</b> | <b>Final Condition</b> | <b>NIMS Power ON</b>                             | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>739</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3EX</b> | <b>Final Condition</b> | <b>Replacement Heaters OFF</b>                   | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>740</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3EY</b> | <b>Final Condition</b> | <b>Optics Heater 1 OFF (primary relay)</b>       | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>741</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3EZ</b> | <b>Final Condition</b> | <b>Optics Heater 2 OFF (primary relay)</b>       | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>742</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3FA</b> | <b>Final Condition</b> | <b>Radiator Flash Heater OFF (primary relay)</b> | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>743</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3FB</b> | <b>Final Condition</b> | <b>Shield Flash Heater OFF (primary relay)</b>   | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>744</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3FD</b> | <b>Final Condition</b> | <b>RCT Heater OFF (primary relay)</b>            | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>745</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3FE</b> | <b>Final Condition</b> | <b>PCT Heater 1 OFF (primary relay)</b>          | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |
| <b>746</b> | <b>1</b> | <b>83</b> | <b>12:00:00.000</b> | <b>20A3FF</b> | <b>Final Condition</b> | <b>PCT Heater 2 OFF</b>                          | <b>200</b> | <b>4</b> | <b>0</b> | <b>5,963,186:72:3</b> |     |



| Sequence: |    | G29C-AR |              | Created: 6/19/01 |                         | Begin: 01-083/12:00:00                    |     | Finish: 01-135/00:00:00 |    |                |      |
|-----------|----|---------|--------------|------------------|-------------------------|---|-----|-------------------------|----|----------------|------|
| Line      | YR | DOY     | SCET - GMT   | PSID             | Command Parameters      | Description                               | GCM | GO                      | GS | RIM            | MF I |
| 1         | 1  | 83      | 11:59:59.800 |                  | DMS: : READY            | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 200 | 4                       | 0  | 5,963,186.72:0 |      |
| 2         | 1  | 83      | 12:00:00.000 | 20A3EW           | 37A CMD,37A,20A3EW,,    | NIMS Power ON                             | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 3         | 1  | 83      | 12:00:00.000 | 20A3EX           | 37HR CMD,37HR,20A3EX,   | Replacement Heaters OFF                   | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 4         | 1  | 83      | 12:00:00.000 | 20A3FF           | 40T2R CMD,40T2R,20A3FF  | PCT Heater 2 OFF                          | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 5         | 1  | 83      | 12:00:00.000 | 20A3FE           | 40T1PR CMD,40T1PR,20A3F | PCT Heater 1 OFF (primary relay)          | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 6         | 1  | 83      | 12:00:00.000 | 20A3FD           | 40HRPR CMD,40HRPR,20A3F | RCT Heater OFF (primary relay)            | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 7         | 1  | 83      | 12:00:00.000 | 20A3FB           | 37F2PR CMD,37F2PR,20A3F | Shield Flash Heater OFF (primary relay)   | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 8         | 1  | 83      | 12:00:00.000 | 20A3FA           | 37F1PR CMD,37F1PR,20A3F | Radiator Flash Heater OFF (primary relay) | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 9         | 1  | 83      | 12:00:00.000 | 20A3EZ           | 37C2PR CMD,37C2PR,20A3E | Optics Heater 2 OFF (primary relay)       | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 10        | 1  | 83      | 12:00:00.000 | 20A3EY           | 37C1PR CMD,37C1PR,20A3E | Optics Heater 1 OFF (primary relay)       | 200 | 4                       | 0  | 5,963,186.72:3 |      |
| 11        | 1  | 83      | 12:01:38.466 | 488AA6A          | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,963,188.38:0 |      |
| 12        | 1  | 83      | 12:04:15.133 | 176UA6A          | 6TMREC RPB              | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4                       | 0  | 5,963,191.00:0 |      |
| 13        | 1  | 83      | 21:18:26.466 | 488AB6A          | 6TMSED NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,963,739.09:0 |      |
| 14        | 1  | 83      | 21:39:05.800 | 488AB6B          | 6TMSED FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,963,759.48:0 |      |
| 15        | 1  | 83      | 21:50:26.466 | 488AB6C          | 6TMSED FILL,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,963,770.68:0 |      |
| 16        | 1  | 83      | 23:28:01.800 | 488AB6D          | 6TMSED NORM,AL5         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,963,867.24:0 |      |
| 17        | 1  | 84      | 02:53:22.466 | 488AB6E          | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,070.32:0 |      |
| 18        | 1  | 84      | 04:52:50.466 | 488AC6A          | 6TMSED NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,188.46:0 |      |
| 19        | 1  | 84      | 05:09:02.466 | 488AC6B          | 6TMSED FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,204.48:0 |      |
| 20        | 1  | 84      | 05:20:34.466 | 488AC6C          | 6TMSED FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,215.85:0 |      |
| 21        | 1  | 84      | 15:39:43.733 | 488AD6A          | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,828.26:0 |      |
| 22        | 1  | 84      | 17:07:17.066 | 488AD6B          | 6TMSED FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,914.80:0 |      |
| 23        | 1  | 84      | 17:40:56.400 | 488AD6C          | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,964,948.15:0 |      |
| 24        | 1  | 84      | 20:08:02.400 | 488AD6D          | 6TMSED NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,093.59:0 |      |
| 25        | 1  | 84      | 21:22:42.400 | 488AD6E          | 6TMSED NORM,AL2         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,167.45:0 |      |
| 26        | 1  | 84      | 21:27:44.400 | 488AE6A          | 6TMSED FILL,AL2         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,172.43:0 |      |
| 27        | 1  | 85      | 09:14:59.066 | 488AF6A          | 6TMSED NORM,AL2         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,871.86:0 |      |
| 28        | 1  | 85      | 09:40:50.400 | 488AF6B          | 6TMSED NORM,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,897.47:0 |      |
| 29        | 1  | 85      | 10:35:17.733 | 488AF6C          | 6TMSED FILL,AL3         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,951.34:0 |      |
| 30        | 1  | 85      | 11:01:54.400 | 488AF6D          | 6TMSED FILL,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,977.63:0 |      |
| 31        | 1  | 85      | 11:10:20.400 | 488AF6E          | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,965,986.03:0 |      |
| 32        | 1  | 85      | 13:52:59.733 | 488AG6A          | 6TMSED NORM,AH4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,966,146.82:0 |      |
| 33        | 1  | 85      | 13:56:07.733 | 176UQ6A          | 6TMREC PPB              | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4                       | 0  | 5,966,150.00:0 |      |
| 34        | 1  | 85      | 14:05:59.733 | 20UB4C           | 7STAT 10.00,246.92,-21  | Stator inertial point                     | 200 | 4                       | 0  | 5,966,159.69:0 |      |
| 35        | 1  | 85      | 14:06:11.733 | 20UB6D           | 6MROH 7.6744,0,A10      | read from AACSA7.6744,0,A10               | 200 | 4                       | 0  | 5,966,159.87:0 |      |
| 36        | 1  | 85      | 14:25:01.733 | 490UB412A4B      | 7MODE INT               | AACS INERTIAL MODE                        | 200 | 4                       | 0  | 5,966,178.53:0 |      |
| 37        | 1  | 85      | 14:29:59.733 | 490UB412A4D      | 7SAFE UNSTOW            | S/P TO 153 deg cone                       | 200 | 4                       | 0  | 5,966,183.45:0 |      |
| 38        | 1  | 85      | 14:30:19.733 | 20UB4D           | 7STAT 17.45,246.92,-21  | Stator inertial point                     | 200 | 4                       | 0  | 5,966,183.75:0 |      |
| 39        | 1  | 85      | 14:34:09.733 | 490UB412A4E      | 7VECT                   | Inert vect update UTC                     | 200 | 4                       | 0  | 5,966,187.56:0 |      |
| 40        | 1  | 85      | 14:34:13.733 | 490UB412A4F      | 7TURN 2,RTH             | ALERT Thruster                            | 200 | 4                       | 0  | 5,966,187.62:0 |      |
| 41        | 1  | 85      | 14:38:01.733 | 490UB412A406A4A  | 7VECT                   | Inert vect update UTC                     | 200 | 4                       | 0  | 5,966,191.40:0 |      |
| 42        | 1  | 85      | 14:38:03.733 | 490UB412A406A4B  | 7STAR 1,497,343.73      | Star catalog update                       | 200 | 4                       | 0  | 5,966,191.43:0 |      |
| 43        | 1  | 85      | 14:38:05.733 | 490UB412A406A4C  | 7STAR 2,128,193.42      | Star catalog update                       | 200 | 4                       | 0  | 5,966,191.46:0 |      |
| 44        | 1  | 85      | 14:38:07.733 | 490UB412A406A4D  | 7STAR 3,122,305.11      | Star catalog update                       | 200 | 4                       | 0  | 5,966,191.49:0 |      |
| 45        | 1  | 85      | 14:38:09.733 | 490UB412A406A4E  | 7STAR 4,0,0,0,0.0       | Star catalog update                       | 200 | 4                       | 0  | 5,966,191.52:0 |      |
| 46        | 1  | 85      | 14:38:11.733 | 490UB412A406A4F  | 7STAR 5,0,0,0,0.0       | Star catalog update                       | 200 | 4                       | 0  | 5,966,191.55:0 |      |
| 47        | 1  | 85      | 14:38:13.733 | 490UB412A406A4G  | 7STAR 6,0,0,0,0.0       | Star catalog update                       | 200 | 4                       | 0  | 5,966,191.58:0 |      |
| 48        | 1  | 85      | 14:48:05.733 | 20UB4F           | 7SLEW DIS,POS,0.0       | Stator movement                           | 200 | 4                       | 0  | 5,966,201.36:0 |      |
| 49        | 1  | 85      | 14:56:09.733 | 490UB412A4G      | 7MODE CRU               | AACS CRUISE MODE                          | 200 | 4                       | 0  | 5,966,209.34:0 |      |
| 50        | 1  | 85      | 16:30:03.733 | 20UH4A           | 7SAFE STOP              | S/P NO MOVEMENT                           | 200 | 4                       | 0  | 5,966,302.22:0 |      |
| 51        | 1  | 85      | 16:30:53.733 | 20UH4B           | 7SLEW DIS,POS,0.0       | Stator movement                           | 200 | 4                       | 0  | 5,966,303.06:0 |      |
| 52        | 1  | 85      | 16:30:59.733 | 488AG6B          | 6TMSED NORM,AL4         | Sci, Eng, and D/L Chan                    | 200 | 4                       | 0  | 5,966,303.15:0 |      |
| 53        | 1  | 85      | 16:32:51.066 | 176UB6A          | 6TMREC RPB              | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4                       | 0  | 5,966,305.00:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters        | Description                 | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|-------------------|-----------------------------|-----|----|----|----------------|------|
| 54   | 1  | 85  | 20:22:58.333 | 488AH6A | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,966,532:54:0 |      |
| 55   | 1  | 85  | 21:26:58.333 | 488AH6B | 6TMSED  | NORM,AL2          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,966,595:81:0 |      |
| 56   | 1  | 85  | 21:27:36.333 | 488AH6C | 6TMSED  | FILL,AL2          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,966,596:47:0 |      |
| 57   | 1  | 85  | 21:46:10.333 | 488AH6D | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,966,614:80:0 |      |
| 58   | 1  | 86  | 00:17:47.666 | 488AH6E | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,966,764:76:0 |      |
| 59   | 1  | 86  | 03:01:54.333 | 488AI6A | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,966,927:13:0 |      |
| 60   | 1  | 86  | 04:52:50.333 | 488AI6B | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,036:78:0 |      |
| 61   | 1  | 86  | 04:58:48.333 | 488AI6C | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,042:69:0 |      |
| 62   | 1  | 86  | 05:09:54.333 | 488AI6D | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,053:67:0 |      |
| 63   | 1  | 86  | 05:17:45.666 | 488AI6E | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,061:46:0 |      |
| 64   | 1  | 86  | 07:52:02.333 | 488AJ6A | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,214:08:0 |      |
| 65   | 1  | 86  | 09:04:26.333 | 488AJ6B | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,285:63:0 |      |
| 66   | 1  | 86  | 09:06:42.333 | 488AJ6C | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,287:85:0 |      |
| 67   | 1  | 86  | 09:17:22.333 | 488AJ6D | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,298:44:0 |      |
| 68   | 1  | 86  | 15:42:42.333 | 488AK6A | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,679:53:0 |      |
| 69   | 1  | 86  | 17:21:38.333 | 488AK6B | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,967,777:39:0 |      |
| 70   | 1  | 86  | 21:12:02.333 | 488AK6C | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,005:27:0 |      |
| 71   | 1  | 86  | 21:28:43.666 | 488AK6D | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,021:73:0 |      |
| 72   | 1  | 86  | 21:39:46.333 | 488AK6E | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,032:66:0 |      |
| 73   | 1  | 86  | 23:07:40.333 | 488AL6A | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,119:60:0 |      |
| 74   | 1  | 86  | 23:59:35.000 | 431MB6A | 6RCSEL  | DDSSSEL,PLSNCG,EP | Record Select (DDS onl      | 200 | 4  | 0  | 5,968,171:00:0 |      |
| 75   | 1  | 87  | 03:01:54.266 | 488AL6B | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,351:29:0 |      |
| 76   | 1  | 87  | 04:46:26.266 | 488AL6C | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,454:64:0 |      |
| 77   | 1  | 87  | 04:53:41.600 | 488AL6D | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,461:80:0 |      |
| 78   | 1  | 87  | 05:05:38.266 | 488AL6E | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,968,473:63:0 |      |
| 79   | 1  | 87  | 16:47:35.600 | 488AM6A | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,167:85:0 |      |
| 80   | 1  | 87  | 17:36:34.266 | 488AM6B | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,216:34:0 |      |
| 81   | 1  | 87  | 21:12:02.266 | 488AM6C | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,429:43:0 |      |
| 82   | 1  | 87  | 21:28:36.266 | 488AM6D | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,445:78:0 |      |
| 83   | 1  | 87  | 21:39:46.266 | 488AM6E | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,456:82:0 |      |
| 84   | 1  | 87  | 23:09:20.266 | 488AN6A | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,545:44:0 |      |
| 85   | 1  | 88  | 00:37:40.933 | 488AN6B | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,632:78:0 |      |
| 86   | 1  | 88  | 01:11:20.266 | 488AN6C | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,666:13:0 |      |
| 87   | 1  | 88  | 04:12:18.266 | 488AN6D | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,845:11:0 |      |
| 88   | 1  | 88  | 04:52:38.933 | 488AN6E | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,885:02:0 |      |
| 89   | 1  | 88  | 04:52:50.266 | 488AO6A | 6TMSED  | FILL,AL2          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,885:19:0 |      |
| 90   | 1  | 88  | 05:09:54.266 | 488AO6B | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,969,902:08:0 |      |
| 91   | 1  | 88  | 13:17:29.533 | 488AP6A | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,970,384:29:0 |      |
| 92   | 1  | 88  | 17:38:22.200 | 488AP6B | 6TMSED  | FILL,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,970,642:30:0 |      |
| 93   | 1  | 89  | 01:17:25.533 | 488AQ6A | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,096:31:0 |      |
| 94   | 1  | 89  | 03:01:54.200 | 488AQ6B | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,199:61:0 |      |
| 95   | 1  | 89  | 04:42:10.200 | 488AQ6C | 6TMSED  | NORM,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,298:76:0 |      |
| 96   | 1  | 89  | 04:52:38.866 | 488AQ6D | 6TMSED  | FILL,AL3          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,309:18:0 |      |
| 97   | 1  | 89  | 05:01:22.200 | 488AQ6E | 6TMSED  | FILL,AL2          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,317:75:0 |      |
| 98   | 1  | 89  | 05:24:32.200 | 488AR6A | 6TMSED  | NORM,AL2          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,340:67:0 |      |
| 99   | 1  | 89  | 05:29:06.200 | 488AR6B | 6TMSED  | NORM,AL5          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,345:23:0 |      |
| 100  | 1  | 89  | 07:47:46.200 | 488AR6C | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,482:36:0 |      |
| 101  | 1  | 89  | 08:57:29.533 | 488AR6D | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,551:32:0 |      |
| 102  | 1  | 89  | 09:02:26.200 | 488AR6E | 6TMSED  | FILL,AL2          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,556:22:0 |      |
| 103  | 1  | 89  | 09:17:22.200 | 488AS6A | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,571:01:0 |      |
| 104  | 1  | 89  | 15:44:08.200 | 488AT6A | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,971,953:48:0 |      |
| 105  | 1  | 89  | 17:12:52.200 | 488AT6B | 6TMSED  | FILL,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,972,041:26:0 |      |
| 106  | 1  | 89  | 17:46:31.533 | 488AT6C | 6TMSED  | NORM,AL4          | Sci, Eng, and D/L Chan      | 200 | 4  | 0  | 5,972,074:52:0 |      |
| 107  | 1  | 89  | 17:56:03.533 | 176UG6A | 6TMREC  | PPB               | PAUSE PLAYBACK (PB CONTROL) | 200 | 4  | 0  | 5,972,084:00:0 |      |
| 108  | 1  | 89  | 18:02:00.200 | 20UU4B  | 7SLEW   | DIS,POS,0.0       | Stator movement             | 200 | 4  | 0  | 5,972,089:80:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters     | Description                              | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|----------------|--|-----|----|----|----------------|------|
| 109  | 1  | 89  | 18:03:00.200 | 20UU4D  | 7MODE   | SPNL           | AACS ALL-SPIN LOW                        | 200 | 4  | 0  | 5.972,090.77:0 |      |
| 110  | 1  | 89  | 18:05:00.200 | 20UU4E  | 7SAFE   | UNSTOW         | S/P TO 153 deg cone                      | 200 | 4  | 0  | 5.972,092.79:0 |      |
| 111  | 1  | 89  | 18:10:30.200 | 20UU4G  | 7VENT   | 0.611,1.333,8  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,098.26:0 |      |
| 112  | 1  | 89  | 18:10:30.866 | 20UU4H  | 7VENT   | 0.611,10.989,8 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,098.27:0 |      |
| 113  | 1  | 89  | 18:10:50.866 | 20UU4I  | 7VENT   | 0.611,1.333,6  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,098.57:0 |      |
| 114  | 1  | 89  | 18:10:51.533 | 20UU4J  | 7VENT   | 0.611,10.989,6 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,098.58:0 |      |
| 115  | 1  | 89  | 18:11:11.533 | 20UU4K  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,098.88:0 |      |
| 116  | 1  | 89  | 18:11:12.200 | 20UU4L  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,098.89:0 |      |
| 117  | 1  | 89  | 18:11:22.200 | 20UU4M  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,099.13:0 |      |
| 118  | 1  | 89  | 18:11:22.866 | 20UU4N  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,099.14:0 |      |
| 119  | 1  | 89  | 18:11:32.866 | 20UU4O  | 7VENT   | 1.211,1.333,10 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,099.29:0 |      |
| 120  | 1  | 89  | 18:11:33.533 | 20UU4P  | 7VENT   | 1.211,0.666,12 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,099.30:0 |      |
| 121  | 1  | 89  | 18:13:20.200 | 20UU4S  | 7VENT   | 0.611,1.333,7  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.08:0 |      |
| 122  | 1  | 89  | 18:13:20.866 | 20UU4T  | 7VENT   | 0.611,10.989,7 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.09:0 |      |
| 123  | 1  | 89  | 18:13:40.866 | 20UU4U  | 7VENT   | 0.611,1.333,1  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.39:0 |      |
| 124  | 1  | 89  | 18:13:41.533 | 20UU4V  | 7VENT   | 0.611,10.989,1 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.40:0 |      |
| 125  | 1  | 89  | 18:14:01.533 | 20UU4AC | 7VENT   | 0.611,1.333,2  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.70:0 |      |
| 126  | 1  | 89  | 18:14:02.200 | 20UU4AD | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.71:0 |      |
| 127  | 1  | 89  | 18:14:12.200 | 20UU4AE | 7VENT   | 0.611,1.333,2  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.86:0 |      |
| 128  | 1  | 89  | 18:14:12.866 | 20UU4AF | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,101.87:0 |      |
| 129  | 1  | 89  | 18:14:22.866 | 20UU4AW | 7VENT   | 1.211,1.333,9  | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,102.11:0 |      |
| 130  | 1  | 89  | 18:14:23.533 | 20UU4AX | 7VENT   | 1.211,0.666,11 | ALERT -- Thruster fire                   | 200 | 4  | 0  | 5.972,102.12:0 |      |
| 131  | 1  | 89  | 18:15:20.200 | 20UU4Z  | 7MODE   | CRU            | AACS CRUISE MODE                         | 200 | 4  | 0  | 5.972,103.06:0 |      |
| 132  | 1  | 89  | 18:40:04.200 | 20UG4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                          | 200 | 4  | 0  | 5.972,127.48:0 |      |
| 133  | 1  | 89  | 18:40:54.200 | 20UG4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                          | 200 | 4  | 0  | 5.972,128.32:0 |      |
| 134  | 1  | 89  | 18:42:34.200 | 176UH6A | 6TMREC  | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode | 200 | 4  | 0  | 5.972,130.00:0 |      |
| 135  | 1  | 89  | 20:16:34.200 | 488AT6D | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,222.88:0 |      |
| 136  | 1  | 89  | 21:10:42.866 | 488AT6E | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,276.47:0 |      |
| 137  | 1  | 89  | 21:16:18.200 | 488AU6A | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,282.04:0 |      |
| 138  | 1  | 89  | 21:31:14.200 | 488AU6B | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,296.74:0 |      |
| 139  | 1  | 89  | 23:37:19.466 | 488AU6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,421.47:0 |      |
| 140  | 1  | 90  | 02:57:38.133 | 488AU6D | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,619.57:0 |      |
| 141  | 1  | 90  | 04:40:02.133 | 488AV6A | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,720.82:0 |      |
| 142  | 1  | 90  | 04:50:42.133 | 488AV6B | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,731.41:0 |      |
| 143  | 1  | 90  | 07:41:22.133 | 488AV6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,900.22:0 |      |
| 144  | 1  | 90  | 08:54:13.466 | 488AV6D | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,972.27:0 |      |
| 145  | 1  | 90  | 08:56:02.133 | 488AV6E | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,974.08:0 |      |
| 146  | 1  | 90  | 09:10:58.133 | 488AW6A | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.972,988.78:0 |      |
| 147  | 1  | 91  | 01:07:12.800 | 488AX6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.973,934.54:0 |      |
| 148  | 1  | 91  | 02:57:38.133 | 488AX6B | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,043.73:0 |      |
| 149  | 1  | 91  | 03:14:42.133 | 488AX6C | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,060.62:0 |      |
| 150  | 1  | 91  | 07:41:22.133 | 488AY6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,324.38:0 |      |
| 151  | 1  | 91  | 08:49:32.800 | 488AY6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,391.77:0 |      |
| 152  | 1  | 91  | 08:51:46.133 | 488AY6C | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,394.04:0 |      |
| 153  | 1  | 91  | 09:06:42.066 | 488AY6D | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,408.74:0 |      |
| 154  | 1  | 91  | 15:42:08.733 | 488AZ6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,799.83:0 |      |
| 155  | 1  | 91  | 18:02:10.066 | 488AZ6B | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.974,938.36:0 |      |
| 156  | 1  | 91  | 21:01:22.066 | 488AZ6C | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,115.57:0 |      |
| 157  | 1  | 91  | 21:13:09.400 | 488AZ6D | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,127.26:0 |      |
| 158  | 1  | 91  | 21:24:50.066 | 488AZ6E | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,138.76:0 |      |
| 159  | 1  | 91  | 23:38:52.733 | 488BA6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,271.37:0 |      |
| 160  | 1  | 92  | 01:08:08.066 | 488BA6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,359.62:0 |      |
| 161  | 1  | 92  | 01:41:47.400 | 488BA6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,392.88:0 |      |
| 162  | 1  | 92  | 04:05:54.066 | 488BA6D | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,535.45:0 |      |
| 163  | 1  | 92  | 04:38:59.400 | 488BA6E | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                   | 200 | 4  | 0  | 5.975,568.20:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID   | Command | Parameters | Description            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|--------|---------|------------|------------------------|-----|----|----|----------------|------|
| 164  | 1  | 92  | 04:42:10.066 | 488B6A | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,975,571:33:0 |      |
| 165  | 1  | 92  | 04:57:06.066 | 488B6B | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,975,586:12:0 |      |
| 166  | 1  | 92  | 15:32:01.400 | 488B6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,214:07:0 |      |
| 167  | 1  | 92  | 18:06:26.066 | 488B6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,366:72:0 |      |
| 168  | 1  | 92  | 20:57:06.000 | 488B6C | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,535:53:0 |      |
| 169  | 1  | 92  | 21:16:18.000 | 488B6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,554:52:0 |      |
| 170  | 1  | 93  | 02:57:38.000 | 488D6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,892:14:0 |      |
| 171  | 1  | 93  | 04:31:30.000 | 488D6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,984:90:0 |      |
| 172  | 1  | 93  | 04:33:00.666 | 488D6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,986:44:0 |      |
| 173  | 1  | 93  | 04:44:18.000 | 488D6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,976,997:59:0 |      |
| 174  | 1  | 93  | 05:01:57.333 | 488D6E | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,015:10:0 |      |
| 175  | 1  | 93  | 07:37:06.000 | 488E6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,168:50:0 |      |
| 176  | 1  | 93  | 08:43:57.333 | 488E6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,234:61:0 |      |
| 177  | 1  | 93  | 08:47:30.000 | 488E6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,238:16:0 |      |
| 178  | 1  | 93  | 08:58:10.000 | 488E6D | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,248:66:0 |      |
| 179  | 1  | 93  | 15:48:41.333 | 488F6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,654:67:0 |      |
| 180  | 1  | 93  | 17:18:19.333 | 488F6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,743:35:0 |      |
| 181  | 1  | 93  | 17:51:58.666 | 488F6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,776:61:0 |      |
| 182  | 1  | 93  | 20:12:18.000 | 488F6D | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,915:41:0 |      |
| 183  | 1  | 93  | 21:05:38.000 | 488F6E | 6TMSED  | NORM,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,968:18:0 |      |
| 184  | 1  | 93  | 21:06:42.666 | 488G6A | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,969:24:0 |      |
| 185  | 1  | 93  | 21:24:50.000 | 488G6B | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,977,987:17:0 |      |
| 186  | 1  | 94  | 15:46:48.600 | 488H6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,077:05:0 |      |
| 187  | 1  | 94  | 18:10:41.933 | 488H6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,219:33:0 |      |
| 188  | 1  | 94  | 20:50:41.933 | 488H6C | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,377:55:0 |      |
| 189  | 1  | 94  | 21:09:53.933 | 488H6D | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,396:54:0 |      |
| 190  | 1  | 94  | 22:33:27.266 | 488I6A | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,479:21:0 |      |
| 191  | 1  | 94  | 23:07:06.600 | 488I6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,512:47:0 |      |
| 192  | 1  | 95  | 04:01:37.933 | 488I6C | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,803:73:0 |      |
| 193  | 1  | 95  | 04:27:47.266 | 488I6D | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,829:61:0 |      |
| 194  | 1  | 95  | 04:40:01.933 | 488J6A | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,979,841:71:0 |      |
| 195  | 1  | 95  | 12:16:42.600 | 488K6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,980,293:40:0 |      |
| 196  | 1  | 95  | 18:17:05.866 | 488L6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,980,649:79:0 |      |
| 197  | 1  | 95  | 20:50:41.866 | 488L6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,980,801:71:0 |      |
| 198  | 1  | 95  | 20:57:43.200 | 488L6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,980,808:66:0 |      |
| 199  | 1  | 95  | 21:09:53.866 | 488L6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,980,820:70:0 |      |
| 200  | 1  | 95  | 23:16:39.866 | 488L6E | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,980,946:13:0 |      |
| 201  | 1  | 96  | 02:55:29.866 | 488M6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,981,162:52:0 |      |
| 202  | 1  | 96  | 04:27:13.866 | 488M6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,981,253:27:0 |      |
| 203  | 1  | 96  | 04:27:41.200 | 488M6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,981,253:68:0 |      |
| 204  | 1  | 96  | 04:40:01.866 | 488M6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,981,265:87:0 |      |
| 205  | 1  | 96  | 15:31:35.866 | 488N6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,981,910:33:0 |      |
| 206  | 1  | 96  | 18:17:05.866 | 488N6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,074:04:0 |      |
| 207  | 1  | 96  | 20:48:33.866 | 488N6C | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,223:77:0 |      |
| 208  | 1  | 96  | 20:59:13.866 | 488N6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,234:36:0 |      |
| 209  | 1  | 97  | 02:55:29.800 | 488O6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,586:68:0 |      |
| 210  | 1  | 97  | 04:21:57.133 | 488O6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,672:23:0 |      |
| 211  | 1  | 97  | 04:27:13.800 | 488O6C | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,677:43:0 |      |
| 212  | 1  | 97  | 08:33:37.800 | 488O6D | 6TMSED  | NORM,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,921:15:0 |      |
| 213  | 1  | 97  | 08:43:13.800 | 488O6E | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,930:60:0 |      |
| 214  | 1  | 97  | 09:34:25.800 | 488P6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,982,981:27:0 |      |
| 215  | 1  | 97  | 09:58:43.133 | 488P6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,983,005:29:0 |      |
| 216  | 1  | 97  | 10:32:22.466 | 488P6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,983,038:55:0 |      |
| 217  | 1  | 97  | 20:10:09.800 | 488Q6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,983,610:04:0 |      |
| 218  | 1  | 97  | 20:46:25.800 | 488Q6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,983,645:83:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters | Description            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|------------|------------------------|-----|----|----|----------------|------|
| 219  | 1  | 97  | 21:36:32.466 | 488BQ6C | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,983,695:43:0 |      |
| 220  | 1  | 97  | 22:05:38.466 | 488BQ6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,983,724:23:0 |      |
| 221  | 1  | 98  | 02:51:13.800 | 488BR6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,984,006:64:0 |      |
| 222  | 1  | 98  | 04:20:49.800 | 488BR6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,984,095:29:0 |      |
| 223  | 1  | 98  | 04:32:28.466 | 488BR6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,984,106:76:0 |      |
| 224  | 1  | 98  | 04:44:17.800 | 488BR6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,984,118:48:0 |      |
| 225  | 1  | 98  | 15:31:22.400 | 488BS6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,984,758:45:0 |      |
| 226  | 1  | 98  | 18:21:21.733 | 488BS6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,984,926:56:0 |      |
| 227  | 1  | 98  | 20:44:17.733 | 488BS6C | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,985,067:89:0 |      |
| 228  | 1  | 98  | 20:54:57.733 | 488BS6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,985,078:48:0 |      |
| 229  | 1  | 99  | 02:51:13.733 | 488BT6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,985,430:80:0 |      |
| 230  | 1  | 99  | 04:20:49.733 | 488BT6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,985,519:45:0 |      |
| 231  | 1  | 99  | 04:22:22.400 | 488BT6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,985,521:02:0 |      |
| 232  | 1  | 99  | 04:33:37.733 | 488BT6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,985,532:14:0 |      |
| 233  | 1  | 99  | 15:31:16.400 | 488BU6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,182:52:0 |      |
| 234  | 1  | 99  | 18:21:21.733 | 488BU6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,350:72:0 |      |
| 235  | 1  | 99  | 20:40:01.733 | 488BU6C | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,487:85:0 |      |
| 236  | 1  | 99  | 20:47:18.400 | 488BU6D | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,495:12:0 |      |
| 237  | 1  | 99  | 20:59:13.733 | 488BU6E | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,506:84:0 |      |
| 238  | 1  | 99  | 21:18:01.666 | 488BV6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,525:47:0 |      |
| 239  | 1  | 99  | 22:48:59.000 | 488BV6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,615:43:0 |      |
| 240  | 1  | 99  | 23:22:38.333 | 488BV6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,648:69:0 |      |
| 241  | 1  | 100 | 03:50:57.666 | 488BW6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,914:12:0 |      |
| 242  | 1  | 100 | 04:14:50.333 | 488BW6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,937:68:0 |      |
| 243  | 1  | 100 | 04:20:49.666 | 488BW6C | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,943:61:0 |      |
| 244  | 1  | 100 | 04:35:45.666 | 488BW6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,986,958:40:0 |      |
| 245  | 1  | 100 | 15:31:10.333 | 488BX6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,987,606:59:0 |      |
| 246  | 1  | 100 | 18:10:41.666 | 488BX6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,987,764:38:0 |      |
| 247  | 1  | 100 | 20:35:45.666 | 488X6C  | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,987,907:81:0 |      |
| 248  | 1  | 100 | 20:42:11.666 | 488X6D  | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,987,914:23:0 |      |
| 249  | 1  | 100 | 20:52:49.666 | 488X6E  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,987,924:70:0 |      |
| 250  | 1  | 100 | 23:06:08.333 | 488Y6A  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,988,056:56:0 |      |
| 251  | 1  | 101 | 02:44:49.666 | 488Y6B  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,988,272:82:0 |      |
| 252  | 1  | 101 | 04:10:09.666 | 488Y6C  | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,988,357:27:0 |      |
| 253  | 1  | 101 | 04:12:09.666 | 488Y6D  | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,988,359:25:0 |      |
| 254  | 1  | 101 | 04:22:57.666 | 488Y6E  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,988,369:87:0 |      |
| 255  | 1  | 101 | 15:46:04.933 | 488Z6A  | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,045:52:0 |      |
| 256  | 1  | 101 | 18:06:25.600 | 488Z6B  | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,184:34:0 |      |
| 257  | 1  | 101 | 19:54:10.933 | 488Z6C  | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,290:86:0 |      |
| 258  | 1  | 101 | 20:03:45.600 | 488Z6D  | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,300:38:0 |      |
| 259  | 1  | 102 | 01:36:01.600 | 488CA6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,629:03:0 |      |
| 260  | 1  | 102 | 05:21:08.933 | 488CA6B | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,851:62:0 |      |
| 261  | 1  | 102 | 05:24:49.600 | 488CA6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,989,855:29:0 |      |
| 262  | 1  | 102 | 13:02:45.600 | 488CB6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,308:20:0 |      |
| 263  | 1  | 102 | 14:34:14.933 | 488CB6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,398:64:0 |      |
| 264  | 1  | 102 | 15:07:54.266 | 488CB6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,431:90:0 |      |
| 265  | 1  | 102 | 19:50:57.533 | 488CC6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,711:85:0 |      |
| 266  | 1  | 102 | 20:34:21.533 | 488CC6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,754:78:0 |      |
| 267  | 1  | 102 | 20:40:01.533 | 488CC6C | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,760:42:0 |      |
| 268  | 1  | 102 | 20:54:57.533 | 488CC6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,775:21:0 |      |
| 269  | 1  | 102 | 23:15:56.866 | 488CC6E | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,990,914:61:0 |      |
| 270  | 1  | 103 | 02:36:17.533 | 488CD6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,991,112:74:0 |      |
| 271  | 1  | 103 | 04:05:53.533 | 488CD6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,991,201:39:0 |      |
| 272  | 1  | 103 | 04:06:57.533 | 488CD6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,991,202:44:0 |      |
| 273  | 1  | 103 | 04:18:41.533 | 488CD6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 200 | 4  | 0  | 5,991,214:08:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters    | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|---------------|---|-----|----|----|----------------|------|
| 274  | 1  | 103 | 15:30:52.866 | 488CE6A | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,991,878:81:0 |      |
| 275  | 1  | 103 | 17:51:29.533 | 488CE6B | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,017:87:0 |      |
| 276  | 1  | 103 | 20:25:05.533 | 488CE6C | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,169:79:0 |      |
| 277  | 1  | 103 | 20:31:53.533 | 488CE6D | 6TMSED  | FILL,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,176:54:0 |      |
| 278  | 1  | 103 | 20:44:17.533 | 488CE6E | 6TMSED  | FILL,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,188:78:0 |      |
| 279  | 1  | 103 | 23:17:37.533 | 488CF6A | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,340:46:0 |      |
| 280  | 1  | 104 | 00:49:24.200 | 488CF6B | 6TMSED  | FILL,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,431:25:0 |      |
| 281  | 1  | 104 | 01:23:03.533 | 488CF6C | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,464:51:0 |      |
| 282  | 1  | 104 | 03:36:01.466 | 488CF6D | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,596:06:0 |      |
| 283  | 1  | 104 | 04:04:20.133 | 488CF6E | 6TMSED  | FILL,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,624:06:0 |      |
| 284  | 1  | 104 | 04:10:09.466 | 488CG6A | 6TMSED  | FILL,AL2      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,629:75:0 |      |
| 285  | 1  | 104 | 04:25:05.466 | 488CG6B | 6TMSED  | FILL,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,644:54:0 |      |
| 286  | 1  | 104 | 10:02:34.133 | 488CG6C | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,992,978:33:0 |      |
| 287  | 1  | 104 | 11:12:33.466 | 488CH6A | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,993,047:53:0 |      |
| 288  | 1  | 104 | 17:45:05.466 | 488CL6A | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,993,435:73:0 |      |
| 289  | 1  | 104 | 19:44:33.466 | 488CL6B | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,993,553:87:0 |      |
| 290  | 1  | 105 | 00:19:45.466 | 488CJ6A | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,993,826:12:0 |      |
| 291  | 1  | 105 | 01:28:01.466 | 488CJ6B | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,993,893:59:0 |      |
| 292  | 1  | 105 | 05:11:36.800 | 488CJ6C | 6TMSED  | FILL,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,994,114:71:0 |      |
| 293  | 1  | 105 | 15:30:40.733 | 488CK6A | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,994,727:04:0 |      |
| 294  | 1  | 105 | 17:34:25.400 | 488CK6B | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,994,849:39:0 |      |
| 295  | 1  | 105 | 20:18:41.400 | 488CK6C | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,995,011:81:0 |      |
| 296  | 1  | 105 | 20:29:21.400 | 488CK6D | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,995,022:40:0 |      |
| 297  | 1  | 106 | 02:21:21.400 | 488CL6A | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,995,370:52:0 |      |
| 298  | 1  | 106 | 03:55:13.400 | 488CL6B | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,995,463:37:0 |      |
| 299  | 1  | 106 | 03:56:40.733 | 488CL6C | 6TMSED  | FILL,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,995,464:77:0 |      |
| 300  | 1  | 106 | 04:08:01.400 | 488CL6D | 6TMSED  | FILL,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,995,476:06:0 |      |
| 301  | 1  | 106 | 15:17:21.400 | 488CM6A | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,138:04:0 |      |
| 302  | 1  | 106 | 16:49:39.400 | 488CM6B | 6TMSED  | FILL,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,229:30:0 |      |
| 303  | 1  | 106 | 17:23:18.733 | 488CM6C | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,262:56:0 |      |
| 304  | 1  | 106 | 19:36:01.400 | 488CM6D | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,393:79:0 |      |
| 305  | 1  | 106 | 20:22:16.066 | 488CM6E | 6TMSED  | FILL,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,439:55:0 |      |
| 306  | 1  | 106 | 20:25:05.400 | 488CN6A | 6TMSED  | FILL,AL2      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,442:36:0 |      |
| 307  | 1  | 106 | 20:40:01.400 | 488CN6B | 6TMSED  | FILL,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,457:15:0 |      |
| 308  | 1  | 106 | 23:15:33.400 | 488CN6C | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,610:90:0 |      |
| 309  | 1  | 107 | 02:14:57.333 | 488CN6D | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,788:38:0 |      |
| 310  | 1  | 107 | 03:50:57.333 | 488CO6A | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,883:33:0 |      |
| 311  | 1  | 107 | 03:51:34.666 | 488CO6B | 6TMSED  | FILL,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,883:89:0 |      |
| 312  | 1  | 107 | 04:03:45.333 | 488CO6C | 6TMSED  | FILL,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,996,896:02:0 |      |
| 313  | 1  | 107 | 15:05:29.333 | 488CP6A | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,997,550:44:0 |      |
| 314  | 1  | 107 | 17:19:29.333 | 488CP6B | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,997,683:01:0 |      |
| 315  | 1  | 107 | 20:10:09.333 | 488CP6C | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,997,851:73:0 |      |
| 316  | 1  | 107 | 20:21:31.333 | 488CP6D | 6TMSED  | FILL,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,997,863:04:0 |      |
| 317  | 1  | 107 | 20:33:37.333 | 488CP6E | 6TMSED  | FILL,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,997,875:01:0 |      |
| 318  | 1  | 108 | 14:15:23.933 | 488CQ6A | 6TMSED  | NORM,AL5      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,998,925:11:0 |      |
| 319  | 1  | 108 | 17:10:57.266 | 488CQ6B | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,999,098:68:0 |      |
| 320  | 1  | 108 | 20:08:01.266 | 488CQ6C | 6TMSED  | NORM,AL3      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,999,273:79:0 |      |
| 321  | 1  | 108 | 20:27:13.266 | 488CR6A | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,999,292:78:0 |      |
| 322  | 1  | 108 | 21:54:51.933 | 488CR6B | 6TMSED  | FILL,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,999,379:49:0 |      |
| 323  | 1  | 108 | 22:28:31.266 | 488CR6C | 6TMSED  | NORM,AL4      | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5,999,412:75:0 |      |
| 324  | 1  | 108 | 22:55:59.933 | 176UP6A | 6TMREC  | PPB           | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 5,999,440:00:0 |      |
| 325  | 1  | 108 | 23:01:59.933 | 20UZ4B  | 7SLEW   | DIS,POS,0.0   | Stator movement                           | 200 | 4  | 0  | 5,999,445:85:0 |      |
| 326  | 1  | 108 | 23:02:59.933 | 20UZ4D  | 7MODE   | SPNL          | AACS ALL-SPIN LOW                         | 200 | 4  | 0  | 5,999,446:84:0 |      |
| 327  | 1  | 108 | 23:04:59.933 | 20UZ4E  | 7SAFE   | UNSTOW        | S/P TO 153 deg cone                       | 200 | 4  | 0  | 5,999,448:82:0 |      |
| 328  | 1  | 108 | 23:10:29.933 | 20UZ4G  | 7VENT   | 0.611,1.333,8 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5,999,454:31:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|----------------|---|-----|----|----|----------------|------|
| 329  | 1  | 108 | 23:10:30.600 | 20UZH4  | 7VENT   | 0.611,10.989,8 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,454:32:0 |      |
| 330  | 1  | 108 | 23:10:50.600 | 20UZ41  | 7VENT   | 0.611,1.333,6  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,454:62:0 |      |
| 331  | 1  | 108 | 23:10:51.266 | 20UZ4J  | 7VENT   | 0.611,10.989,6 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,454:63:0 |      |
| 332  | 1  | 108 | 23:11:11.266 | 20UZ4K  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,455:02:0 |      |
| 333  | 1  | 108 | 23:11:11.933 | 20UZ4L  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,455:03:0 |      |
| 334  | 1  | 108 | 23:11:21.933 | 20UZ4M  | 7VENT   | 0.611,1.333,4  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,455:18:0 |      |
| 335  | 1  | 108 | 23:11:22.600 | 20UZ4N  | 7VENT   | 0.611,0.666,5  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,455:19:0 |      |
| 336  | 1  | 108 | 23:11:32.600 | 20UZ4O  | 7VENT   | 1.211,1.333,10 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,455:34:0 |      |
| 337  | 1  | 108 | 23:11:33.266 | 20UZ4P  | 7VENT   | 1.211,0.666,12 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,455:35:0 |      |
| 338  | 1  | 108 | 23:13:19.933 | 20UZ4S  | 7VENT   | 0.611,1.333,7  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,457:13:0 |      |
| 339  | 1  | 108 | 23:13:20.600 | 20UZ4T  | 7VENT   | 0.611,10.989,7 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,457:14:0 |      |
| 340  | 1  | 108 | 23:13:40.600 | 20UZ4U  | 7VENT   | 0.611,1.333,1  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,457:44:0 |      |
| 341  | 1  | 108 | 23:13:41.266 | 20UZ4V  | 7VENT   | 0.611,10.989,1 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,457:45:0 |      |
| 342  | 1  | 108 | 23:14:01.266 | 20UZ4AC | 7VENT   | 0.611,1.333,2  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,457:75:0 |      |
| 343  | 1  | 108 | 23:14:01.933 | 20UZ4AD | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,457:76:0 |      |
| 344  | 1  | 108 | 23:14:11.933 | 20UZ4AE | 7VENT   | 0.611,1.333,2  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,458:00:0 |      |
| 345  | 1  | 108 | 23:14:12.600 | 20UZ4AF | 7VENT   | 0.611,0.666,3  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,458:01:0 |      |
| 346  | 1  | 108 | 23:14:22.600 | 20UZ4W  | 7VENT   | 1.211,1.333,9  | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,458:16:0 |      |
| 347  | 1  | 108 | 23:14:23.266 | 20UZ4X  | 7VENT   | 1.211,0.666,11 | ALERT -- Thruster fire                    | 200 | 4  | 0  | 5.999,458:17:0 |      |
| 348  | 1  | 108 | 23:15:19.933 | 20UZ4Z  | 7MODE   | CRU            | AAGS CRUISE MODE                          | 200 | 4  | 0  | 5.999,459:11:0 |      |
| 349  | 1  | 108 | 23:40:03.933 | 20UJ4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                           | 200 | 4  | 0  | 5.999,483:53:0 |      |
| 350  | 1  | 108 | 23:40:53.933 | 20UJ4B  | 7SLEW   | DIS.POS,0.0    | Stator movement                           | 200 | 4  | 0  | 5.999,484:37:0 |      |
| 351  | 1  | 108 | 23:42:30.600 | 176US6A | 6TMREC  | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4  | 0  | 5.999,486:00:0 |      |
| 352  | 1  | 109 | 03:14:41.266 | 488CS6A | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.999,695:77:0 |      |
| 353  | 1  | 109 | 03:47:27.266 | 488CS6B | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.999,728:23:0 |      |
| 354  | 1  | 109 | 03:50:57.266 | 488CS6C | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.999,731:65:0 |      |
| 355  | 1  | 109 | 04:05:53.266 | 488CS6D | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 5.999,746:44:0 |      |
| 356  | 1  | 109 | 12:15:18.600 | 488CT6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.000,230:48:0 |      |
| 357  | 1  | 109 | 17:04:33.266 | 488CT6B | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.000,516:54:0 |      |
| 358  | 1  | 109 | 20:05:53.200 | 488CU6A | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.000,695:85:0 |      |
| 359  | 1  | 109 | 20:16:20.533 | 488CU6B | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.000,706:25:0 |      |
| 360  | 1  | 109 | 20:27:13.200 | 488CU6C | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.000,717:03:0 |      |
| 361  | 1  | 109 | 23:15:16.533 | 488CU6D | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.000,883:22:0 |      |
| 362  | 1  | 110 | 02:00:01.200 | 488CU6E | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.001,046:16:0 |      |
| 363  | 1  | 110 | 03:40:17.200 | 488CV6A | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.001,145:31:0 |      |
| 364  | 1  | 110 | 03:46:18.533 | 488CV6B | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.001,151:27:0 |      |
| 365  | 1  | 110 | 03:57:21.200 | 488CV6C | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.001,162:20:0 |      |
| 366  | 1  | 110 | 09:54:03.200 | 176VA6A | 6TMREC  | PPB            | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 6.001,515:00:0 |      |
| 367  | 1  | 110 | 10:02:08.533 |         | DMS:    | :*E4-DELAY     | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 200 | 4  | 0  | 6.001,523:00:0 |      |
| 368  | 1  | 110 | 10:02:08.533 |         | DMS:    | :*SLEW-TIC     | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 6.001,523:00:0 |      |
| 369  | 1  | 110 | 10:02:08.533 |         | DMS:    | :*TURNARND     | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 6.001,523:00:0 |      |
| 370  | 1  | 110 | 10:02:08.533 | 465WA6A | 6DMST   |                | 5000 DMS Slew to TIC                      | 200 | 4  | 0  | 6.001,523:00:0 |      |
| 371  | 1  | 110 | 10:02:15.200 |         | DMS:    | :*RUNUP        | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 6.001,523:10:0 |      |
| 372  | 1  | 110 | 10:02:16.600 |         | DMS:    | :*AT SPD       | P7, TRACK 1, FWD, TIC *202.24 +/-         | 200 | 4  | 0  | 6.001,523:12:1 |      |
| 373  | 1  | 110 | 14:50:12.533 | 488CW6A | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6.001,807:82:0 |      |
| 374  | 1  | 110 | 15:43:17.333 |         | DMS:    | :*RUNDOWN      | P7, TRACK 1, FWD, TIC *4997.94 +/-        | 200 | 4  | 0  | 6.001,860:36:2 |      |
| 375  | 1  | 110 | 15:43:18.533 |         | DMS:    | :*READY        | RDY, TRACK 1, FWD, TIC *4998.00 +/-       | 200 | 4  | 0  | 6.001,860:38:0 |      |
| 376  | 1  | 110 | 15:55:49.866 | 465WB6A | 6DMSC   | P100,4         | DMS Control Tape P/B 100.8kbps            | 200 | 4  | 0  | 6.001,872:73:0 |      |
| 377  | 1  | 110 | 15:55:49.866 |         | DMS:    | :*US-RUNUP     | P7, TRACK 1, FWD, TIC 4998.00 +/-         | 200 | 4  | 0  | 6.001,872:73:0 |      |
| 378  | 1  | 110 | 15:55:51.266 |         | DMS:    | :*US_AT SP     | P7, TRACK 1, FWD, TIC *4998.12 +/-        | 200 | 4  | 0  | 6.001,872:75:1 |      |
| 379  | 1  | 110 | 15:55:56.533 |         | DMS:    | :*US_RD        | P7, TRACK 1, FWD, TIC *4999.35 +/-        | 200 | 4  | 0  | 6.001,872:83:0 |      |
| 380  | 1  | 110 | 15:55:57.733 |         | DMS:    | :*RUNUP        | P100, TRACK *4, *REV, TIC *4999.41 +/-    | 200 | 4  | 0  | 6.001,872:84:8 |      |
| 381  | 1  | 110 | 15:56:01.600 |         | DMS:    | :*AT SPD       | P100, TRACK 4, REV, TIC 4993.91 +/-       | 200 | 4  | 0  | 6.001,872:90:6 |      |
| 382  | 1  | 110 | 15:56:01.600 |         | DMS:    | :*P_SLEW       | P100, TRACK 4, REV, TIC *4993.91 +/-      | 200 | 4  | 0  | 6.001,872:90:6 |      |
| 383  | 1  | 110 | 16:21:41.866 | 465WB6B | 6DMSC   | RDY,4          | DMS Control Tape stop                     | 200 | 4  | 0  | 6.001,898:35:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description                            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|------------------|--|-----|----|----|----------------|------|
| 384  | 1  | 110 | 16:21:41.866 |         | DMS:    | : *RUNDOWN       | P100, TRACK 4, REV, TIC * 255.79 +/-   | 200 | 4  | 0  | 6,001,898:35:8 |      |
| 385  | 1  | 110 | 16:21:43.066 |         | DMS:    | : *READY         | RDY, TRACK 4, REV, TIC * 254.99 +/-    | 200 | 4  | 0  | 6,001,898:36:8 |      |
| 386  | 1  | 110 | 16:34:41.200 | 488CW6B | 6TMSD   | NORM,AL4         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 6,001,911:21:0 |      |
| 387  | 1  | 110 | 18:25:33.866 | 465WC6A | 6DTRN   | CMD,6DTRN,465WC6 | DMS TRACK TURNAROUND                   | 200 | 4  | 0  | 6,002,020:81:0 |      |
| 388  | 1  | 110 | 18:25:33.866 |         | DMS:    | : *US-RUNUP      | P7, TRACK *1, *FWD, TIC 254.99 +/-     | 200 | 4  | 0  | 6,002,020:81:0 |      |
| 389  | 1  | 110 | 18:25:33.866 |         | DMS:    | : *US-AT_SP      | P7, TRACK 4, REV, TIC 254.99 +/-       | 200 | 4  | 0  | 6,002,020:81:0 |      |
| 390  | 1  | 110 | 18:25:35.266 |         | DMS:    | : *US-AT_SP      | P7, TRACK 1, FWD, TIC * 255.11 +/-     | 200 | 4  | 0  | 6,002,020:83:1 |      |
| 391  | 1  | 110 | 18:25:40.533 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC * 256.34 +/-     | 200 | 4  | 0  | 6,002,021:00:0 |      |
| 392  | 1  | 110 | 18:25:41.733 |         | DMS:    | : *RUNUP         | P7, TRACK *4, *REV, TIC * 256.40 +/-   | 200 | 4  | 0  | 6,002,021:01:8 |      |
| 393  | 1  | 110 | 18:25:43.133 |         | DMS:    | : *AT_SPD        | P7, TRACK 4, REV, TIC * 256.28 +/-     | 200 | 4  | 0  | 6,002,021:03:9 |      |
| 394  | 1  | 110 | 18:29:09.200 | 488CW6C | 6TMSD   | NORM,AH4         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 6,002,024:40:0 |      |
| 395  | 1  | 110 | 18:29:43.800 |         | DMS:    | : *REVERSE       | P7, TRACK 4, REV, TIC * 199.87 +/-     | 200 | 4  | 0  | 6,002,025:00:9 |      |
| 396  | 1  | 110 | 18:29:45.000 |         | DMS:    | : *RUNUP         | P7, TRACK 1, FWD, TIC 199.81 +/-       | 200 | 4  | 0  | 6,002,025:02:7 |      |
| 397  | 1  | 110 | 18:29:45.000 |         | DMS:    | : *TURNARND      | P7, TRACK *1, *FWD, TIC * 199.81 +/-   | 200 | 4  | 0  | 6,002,025:02:7 |      |
| 398  | 1  | 110 | 18:29:46.400 |         | DMS:    | : *AT_SPD        | P7, TRACK 1, FWD, TIC * 199.93 +/-     | 200 | 4  | 0  | 6,002,025:04:8 |      |
| 399  | 1  | 110 | 18:29:58.400 |         | DMS:    | : *AUTOSTOP      | P7, TRACK 1, FWD, TIC * 202.06 +/-     | 200 | 4  | 0  | 6,002,025:22:8 |      |
| 400  | 1  | 110 | 18:29:59.600 |         | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC * 202.12 +/-    | 200 | 4  | 0  | 6,002,025:24:6 |      |
| 401  | 1  | 110 | 18:35:36.533 | 465WD6A | 6DMSD   | P100,1           | DMS Control Tape P/B 100.8kpbs         | 200 | 4  | 0  | 6,002,030:75:0 |      |
| 402  | 1  | 110 | 18:35:36.533 |         | DMS:    | : *E4-DELAY      | RDY, TRACK 1, FWD, TIC 202.12 +/-      | 200 | 4  | 0  | 6,002,030:75:0 |      |
| 403  | 1  | 110 | 18:35:43.200 |         | DMS:    | : *RUNUP         | P100, TRACK 1, FWD, TIC 202.12 +/-     | 200 | 4  | 0  | 6,002,030:85:0 |      |
| 404  | 1  | 110 | 18:35:47.066 |         | DMS:    | : *AT_SPD        | P100, TRACK 1, FWD, TIC 207.62 +/-     | 200 | 4  | 0  | 6,002,030:90:8 |      |
| 405  | 1  | 110 | 18:35:47.066 |         | DMS:    | : *P_SLEW        | P100, TRACK 1, FWD, TIC * 207.62 +/-   | 200 | 4  | 0  | 6,002,030:90:8 |      |
| 406  | 1  | 110 | 19:07:30.533 | 465WD6B | 6DMSD   | RDY,1            | DMS Control Tape stop                  | 200 | 4  | 0  | 6,002,062:34:0 |      |
| 407  | 1  | 110 | 19:07:30.533 |         | DMS:    | : *RUNDOWN       | P100, TRACK 1, FWD, TIC *6063.01 +/-   | 200 | 4  | 0  | 6,002,062:34:0 |      |
| 408  | 1  | 110 | 19:07:31.733 |         | DMS:    | : *READY         | RDY, TRACK 1, FWD, TIC *6063.81 +/-    | 200 | 4  | 0  | 6,002,062:35:8 |      |
| 409  | 1  | 110 | 19:23:06.533 |         | DMS:    | : *US-RUNUP      | P7, TRACK 1, FWD, TIC 6063.81 +/-      | 200 | 4  | 0  | 6,002,077:73:0 |      |
| 410  | 1  | 110 | 19:23:06.533 | 465WE6A | 6DMSD   | P100,2           | DMS Control Tape P/B 100.8kpbs         | 200 | 4  | 0  | 6,002,077:73:0 |      |
| 411  | 1  | 110 | 19:23:07.933 |         | DMS:    | : *US-AT_SP      | P7, TRACK 1, FWD, TIC *6063.93 +/-     | 200 | 4  | 0  | 6,002,077:75:1 |      |
| 412  | 1  | 110 | 19:23:13.200 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *6065.17 +/-     | 200 | 4  | 0  | 6,002,077:83:0 |      |
| 413  | 1  | 110 | 19:23:14.400 |         | DMS:    | : *RUNUP         | P100, TRACK *2, *REV, TIC *6065.23 +/- | 200 | 4  | 0  | 6,002,077:84:8 |      |
| 414  | 1  | 110 | 19:23:18.266 |         | DMS:    | : *AT_SPD        | P100, TRACK 2, REV, TIC 6059.73 +/-    | 200 | 4  | 0  | 6,002,077:90:6 |      |
| 415  | 1  | 110 | 19:23:18.266 |         | DMS:    | : *P_SLEW        | P100, TRACK 2, REV, TIC *6059.73 +/-   | 200 | 4  | 0  | 6,002,077:90:6 |      |
| 416  | 1  | 110 | 19:55:14.533 |         | DMS:    | : *RUNDOWN       | P100, TRACK 2, REV, TIC * 164.96 +/-   | 200 | 4  | 0  | 6,002,109:53:0 |      |
| 417  | 1  | 110 | 19:55:14.533 | 465WF6A | 6DMSD   | P100,3           | DMS Control Tape P/B 100.8kpbs         | 200 | 4  | 0  | 6,002,109:53:0 |      |
| 418  | 1  | 110 | 19:55:15.733 |         | DMS:    | : *RUNUP         | P100, TRACK *3, *FWD, TIC * 164.16 +/- | 200 | 4  | 0  | 6,002,109:54:8 |      |
| 419  | 1  | 110 | 19:55:19.600 |         | DMS:    | : *AT_SPD        | P100, TRACK 3, FWD, TIC 169.66 +/-     | 200 | 4  | 0  | 6,002,109:60:6 |      |
| 420  | 1  | 110 | 19:55:19.600 |         | DMS:    | : *P_SLEW        | P100, TRACK 3, FWD, TIC * 169.66 +/-   | 200 | 4  | 0  | 6,002,109:60:6 |      |
| 421  | 1  | 110 | 19:59:29.200 | 488CW6D | 6TMSD   | NORM,AH3         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 6,002,113:71:0 |      |
| 422  | 1  | 110 | 20:16:33.200 | 488CW6E | 6TMSD   | NORM,AH4         | Sci, Eng, and D/L Chan                 | 200 | 4  | 0  | 6,002,130:60:0 |      |
| 423  | 1  | 110 | 20:27:15.200 | 465WF6B | 6DMSD   | RDY,3            | DMS Control Tape stop                  | 200 | 4  | 0  | 6,002,141:22:0 |      |
| 424  | 1  | 110 | 20:27:15.200 |         | DMS:    | : *RUNDOWN       | P100, TRACK 3, FWD, TIC *6062.38 +/-   | 200 | 4  | 0  | 6,002,141:22:0 |      |
| 425  | 1  | 110 | 20:27:16.400 |         | DMS:    | : *READY         | RDY, TRACK 3, FWD, TIC *6063.18 +/-    | 200 | 4  | 0  | 6,002,141:23:8 |      |
| 426  | 1  | 110 | 20:41:58.533 | 465WG6A | 6DMSD   | P100,4           | DMS Control Tape P/B 100.8kpbs         | 200 | 4  | 0  | 6,002,155:73:0 |      |
| 427  | 1  | 110 | 20:41:58.533 |         | DMS:    | : *US-RUNUP      | P7, TRACK *1, FWD, TIC 6063.18 +/-     | 200 | 4  | 0  | 6,002,155:73:0 |      |
| 428  | 1  | 110 | 20:41:59.933 |         | DMS:    | : *US-AT_SP      | P7, TRACK 1, FWD, TIC *6063.30 +/-     | 200 | 4  | 0  | 6,002,155:75:1 |      |
| 429  | 1  | 110 | 20:42:05.200 |         | DMS:    | : *US_RD         | P7, TRACK 1, FWD, TIC *6064.53 +/-     | 200 | 4  | 0  | 6,002,155:83:0 |      |
| 430  | 1  | 110 | 20:42:06.400 |         | DMS:    | : *RUNUP         | P100, TRACK *4, *REV, TIC *6064.59 +/- | 200 | 4  | 0  | 6,002,155:84:8 |      |
| 431  | 1  | 110 | 20:42:10.266 |         | DMS:    | : *P_SLEW        | P100, TRACK 4, REV, TIC *6059.09 +/-   | 200 | 4  | 0  | 6,002,155:90:6 |      |
| 432  | 1  | 110 | 20:42:10.266 |         | DMS:    | : *AT_SPD        | P100, TRACK 4, REV, TIC 6059.09 +/-    | 200 | 4  | 0  | 6,002,155:90:6 |      |
| 433  | 1  | 110 | 21:14:05.866 | 465WH6A | 6DMSD   | P100,3           | DMS Control Tape P/B 100.8kpbs         | 200 | 4  | 0  | 6,002,187:52:0 |      |
| 434  | 1  | 110 | 21:14:05.866 |         | DMS:    | : *RUNDOWN       | P100, TRACK 4, REV, TIC * 166.38 +/-   | 200 | 4  | 0  | 6,002,187:52:0 |      |
| 435  | 1  | 110 | 21:14:07.066 |         | DMS:    | : *RUNUP         | P100, TRACK *3, *FWD, TIC * 165.58 +/- | 200 | 4  | 0  | 6,002,187:53:8 |      |
| 436  | 1  | 110 | 21:14:10.933 |         | DMS:    | : *P_SLEW        | P100, TRACK 3, FWD, TIC * 171.08 +/-   | 200 | 4  | 0  | 6,002,187:59:6 |      |
| 437  | 1  | 110 | 21:14:10.933 |         | DMS:    | : *AT_SPD        | P100, TRACK 3, FWD, TIC 171.08 +/-     | 200 | 4  | 0  | 6,002,187:59:6 |      |
| 438  | 1  | 110 | 21:15:11.866 |         | DMS:    | : *RUNDOWN       | P100, TRACK 3, FWD, TIC * 358.52 +/-   | 200 | 4  | 0  | 6,002,188:60:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|------------------------|---|-----|----|----|----------------|------|
| 439  | 1  | 110 | 21:15:11.866 | 465WH6B         | 6DMSC RDY,3            | DMS Control Tape stop                     | 200 | 4  | 0  | 6,002,188:60:0 |      |
| 440  | 1  | 110 | 21:15:13.066 |                 | DMS: :*READY           | RDY, TRACK 3, FWD, TIC * 359.32 +/-       | 200 | 4  | 0  | 6,002,188:61:8 |      |
| 441  | 1  | 110 | 21:15:59.200 | 488CX6A         | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,189:40:0 |      |
| 442  | 1  | 110 | 21:29:41.866 | 465WI6A         | 6DMSC RDY,4            | DMS Control Tape stop                     | 200 | 4  | 0  | 6,002,203:00:0 |      |
| 443  | 1  | 110 | 21:29:41.866 |                 | DMS: :*READY           | RDY, TRACK *4,*REV, TIC 359.32 +/-        | 200 | 4  | 0  | 6,002,203:00:0 |      |
| 444  | 1  | 110 | 21:30:35.866 | 465WJ6A         | 6DTRN CMD,6DTRN,465WJ6 | DMS TRACK TURNAROUND                      | 200 | 4  | 0  | 6,002,203:81:0 |      |
| 445  | 1  | 110 | 21:30:35.866 |                 | DMS: :*US-RUNUP        | P7, TRACK *1,*FWD, TIC 359.32 +/-         | 200 | 4  | 0  | 6,002,203:81:0 |      |
| 446  | 1  | 110 | 21:30:35.866 |                 | DMS: :*DMS-TURN        | P7, TRACK 4, REV, TIC 359.32 +/-          | 200 | 4  | 0  | 6,002,203:81:0 |      |
| 447  | 1  | 110 | 21:30:37.266 |                 | DMS: :*US AT SP        | P7, TRACK 1, FWD, TIC * 359.44 +/-        | 200 | 4  | 0  | 6,002,203:83:1 |      |
| 448  | 1  | 110 | 21:30:42.533 |                 | DMS: :*AT SPD          | P7, TRACK 1, FWD, TIC * 360.67 +/-        | 200 | 4  | 0  | 6,002,204:00:0 |      |
| 449  | 1  | 110 | 21:30:43.733 |                 | DMS: :*RUNUP           | P7, TRACK *4,*REV, TIC * 360.73 +/-       | 200 | 4  | 0  | 6,002,204:01:8 |      |
| 450  | 1  | 110 | 21:30:45.133 |                 | DMS: :*AT SPD          | P7, TRACK 4, REV, TIC * 360.61 +/-        | 200 | 4  | 0  | 6,002,204:03:9 |      |
| 451  | 1  | 110 | 21:42:10.933 |                 | DMS: :*REVERSE         | P7, TRACK 4, REV, TIC * 199.87 +/-        | 200 | 4  | 0  | 6,002,215:31:6 |      |
| 452  | 1  | 110 | 21:42:12.133 |                 | DMS: :*RUNUP           | P7, TRACK 1, FWD, TIC 199.81 +/-          | 200 | 4  | 0  | 6,002,215:33:4 |      |
| 453  | 1  | 110 | 21:42:12.133 |                 | DMS: :*TURNARND        | P7, TRACK *1,*FWD, TIC * 199.81 +/-       | 200 | 4  | 0  | 6,002,215:33:4 |      |
| 454  | 1  | 110 | 21:42:13.533 |                 | DMS: :*AT SPD          | P7, TRACK 1, FWD, TIC * 199.93 +/-        | 200 | 4  | 0  | 6,002,215:35:5 |      |
| 455  | 1  | 110 | 21:42:25.533 |                 | DMS: :*AUTOSTOP        | P7, TRACK 1, FWD, TIC * 202.06 +/-        | 200 | 4  | 0  | 6,002,215:53:5 |      |
| 456  | 1  | 110 | 21:42:26.733 |                 | DMS: :*READY           | RDY, TRACK 1, FWD, TIC * 202.12 +/-       | 200 | 4  | 0  | 6,002,215:55:3 |      |
| 457  | 1  | 110 | 21:45:02.533 | 488CX6B         | 6TMSED FILL,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,218:16:0 |      |
| 458  | 1  | 110 | 21:59:01.200 | 176VB6A         | 6TMREC RPB             | RESUME PLAYBACK (PB CONTROL) Record Mode  | 200 | 4  | 0  | 6,002,232:00:0 |      |
| 459  | 1  | 110 | 22:18:41.200 | 488CX6C         | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,251:41:0 |      |
| 460  | 1  | 111 | 02:59:45.200 | 488CX6D         | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,529:39:0 |      |
| 461  | 1  | 111 | 03:37:05.200 | 488CY6A         | 6TMSED FILL,AL3        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,566:32:0 |      |
| 462  | 1  | 111 | 03:40:17.200 | 488CY6B         | 6TMSED FILL,AL2        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,569:47:0 |      |
| 463  | 1  | 111 | 07:47:17.133 | 488CY6C         | 6TMSED NORM,AL2        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,813:73:0 |      |
| 464  | 1  | 111 | 07:52:01.133 | 488CY6D         | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,818:44:0 |      |
| 465  | 1  | 111 | 08:17:37.133 | 488CY6E         | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,002,843:73:0 |      |
| 466  | 1  | 111 | 12:22:57.133 | 488Z6A          | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,086:40:0 |      |
| 467  | 1  | 111 | 15:39:13.133 | 488Z6B          | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,280:50:0 |      |
| 468  | 1  | 111 | 19:55:13.133 | 488DA6A         | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,533:67:0 |      |
| 469  | 1  | 111 | 20:12:17.133 | 488DA6B         | 6TMSED NORM,AL5        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,550:56:0 |      |
| 470  | 1  | 112 | 01:34:25.133 | 488DA6C         | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,869:19:0 |      |
| 471  | 1  | 112 | 02:59:08.466 | 176UY6A         | 6TMREC RPB             | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 200 | 4  | 0  | 6,003,953:00:0 |      |
| 472  | 1  | 112 | 03:29:37.133 | 488DB6A         | 6TMSED NORM,AL3        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,983:13:0 |      |
| 473  | 1  | 112 | 03:41:07.800 | 488DB6B         | 6TMSED FILL,AL3        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,003,994:48:0 |      |
| 474  | 1  | 112 | 03:53:05.133 | 488DB6C         | 6TMSED FILL,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,004,006:32:0 |      |
| 475  | 1  | 112 | 10:04:49.133 | 465KA6A         | 6DMST                  | 250 DMS Slew to TIC                       | 200 | 4  | 0  | 6,004,374:00:0 |      |
| 476  | 1  | 112 | 10:04:49.133 |                 | DMS: :*TURNARND        | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 6,004,374:00:0 |      |
| 477  | 1  | 112 | 10:04:49.133 |                 | DMS: :*SLEW-TIC        | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 6,004,374:00:0 |      |
| 478  | 1  | 112 | 10:04:49.133 |                 | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 200 | 4  | 0  | 6,004,374:00:0 |      |
| 479  | 1  | 112 | 10:04:55.800 |                 | DMS: :*RUNUP           | P7, TRACK 1, FWD, TIC 202.12 +/-          | 200 | 4  | 0  | 6,004,374:10:0 |      |
| 480  | 1  | 112 | 10:04:57.200 |                 | DMS: :*AT SPD          | P7, TRACK 1, FWD, TIC * 202.24 +/-        | 200 | 4  | 0  | 6,004,374:12:1 |      |
| 481  | 1  | 112 | 10:08:11.266 |                 | DMS: :*RUNDOWN         | P7, TRACK 1, FWD, TIC * 247.94 +/-        | 200 | 4  | 0  | 6,004,377:30:2 |      |
| 482  | 1  | 112 | 10:08:12.466 |                 | DMS: :*READY           | RDY, TRACK 1, FWD, TIC * 248.00 +/-       | 200 | 4  | 0  | 6,004,377:32:0 |      |
| 483  | 1  | 112 | 15:26:49.133 | 488DC6A         | 6TMSED NORM,AL4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,004,692:42:0 |      |
| 484  | 1  | 112 | 15:34:59.800 | 488DC6B         | 6TMSED NORM,AH4        | Sci, Eng, and D/L Chan                    | 200 | 4  | 0  | 6,004,700:50:0 |      |
| 485  | 1  | 112 | 15:46:33.733 | 165JD4A         | 7SCAN NORM,44.0,13.0,1 | Check S/P Position                        | 200 | 4  | 0  | 6,004,711:90:0 |      |
| 486  | 1  | 112 | 16:17:59.733 | 444SM443A4B     | 7MODE INT              | AACS INERTIAL MODE                        | 200 | 4  | 0  | 6,004,743:07:0 |      |
| 487  | 1  | 112 | 18:19:30.400 | 165ID4A         | 7SCAN NORM,43.411,13.1 | Check S/P Position                        | 200 | 4  | 0  | 6,004,863:23:0 |      |
| 488  | 1  | 112 | 18:21:17.066 | 118ID           | GS                     |   | 200 | 4  | 0  | 6,004,865:01:0 |      |
| 489  | 1  | 112 | 18:21:27.066 | 118ID110A111A4A | 7STRP 0.00102,0.0,26.0 | Slew = -0.51                              | 200 | 4  | 0  | 6,004,865:16:0 |      |
| 490  | 1  | 112 | 18:22:09.733 |                 | DMS: :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 248.00 +/-         | 200 | 4  | 0  | 6,004,865:80:0 |      |
| 491  | 1  | 112 | 18:22:09.733 | 175ID422A6A     | 6DMSC R115,1           | DMS Control                               | 200 | 4  | 0  | 6,004,865:80:0 |      |
| 492  | 1  | 112 | 18:22:16.400 |                 | DMS: :*RUNUP           | R115, TRACK 1, FWD, TIC 248.00 +/-        | 200 | 4  | 0  | 6,004,865:90:0 |      |
| 493  | 1  | 112 | 18:22:19.066 | 118ID11A        | SMOS GE                |   | 200 | 4  | 0  | 6,004,866:03:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters         | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|--------------------|---|-----|----|----|----------------|------|
| 494  | 1  | 112 | 18:22:19.733 | 175ID176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,866:04:0 |      |
| 495  | 1  | 112 | 18:22:20.400 |                 | DMS:    | :*AT SPD           | R115, TRACK 1, FWD, TIC 254.30 +/-        | 200 | 4  | 0  | 6,004,866:05:0 |      |
| 496  | 1  | 112 | 18:22:20.400 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC *254.30 +/-       | 200 | 4  | 0  | 6,004,866:05:0 |      |
| 497  | 1  | 112 | 18:22:25.066 | 165IE4A         | 7SCAN   | NORM,43.409,13.1   | Check S/P Position                        | 200 | 4  | 0  | 6,004,866:12:0 |      |
| 498  | 1  | 112 | 18:22:31.733 | 175ID422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,866:22:0 |      |
| 499  | 1  | 112 | 18:22:31.733 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC *294.14 +/-       | 200 | 4  | 0  | 6,004,866:22:0 |      |
| 500  | 1  | 112 | 18:22:32.933 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC *295.14 +/-        | 200 | 4  | 0  | 6,004,866:23:8 |      |
| 501  | 1  | 112 | 18:24:19.066 | 118IE           | SMOS    | GS                 | Slew = 0.51                               | 200 | 4  | 0  | 6,004,868:01:0 |      |
| 502  | 1  | 112 | 18:24:29.066 | 118IE110A111A4A | 7STRP   | 0.00102,0.0,0.26,0 | RDY, TRACK 1, FWD, TIC 295.14 +/-         | 200 | 4  | 0  | 6,004,868:16:0 |      |
| 503  | 1  | 112 | 18:25:11.733 |                 | DMS:    | :*E4-DELAY         | R115, TRACK 1, FWD, TIC 295.14 +/-        | 200 | 4  | 0  | 6,004,868:80:0 |      |
| 504  | 1  | 112 | 18:25:11.733 | 175IE422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,868:80:0 |      |
| 505  | 1  | 112 | 18:25:18.400 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 295.14 +/-        | 200 | 4  | 0  | 6,004,868:90:0 |      |
| 506  | 1  | 112 | 18:25:21.066 | 118IE11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,869:03:0 |      |
| 507  | 1  | 112 | 18:25:21.733 | 175IE176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,869:04:0 |      |
| 508  | 1  | 112 | 18:25:22.400 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC *301.44 +/-       | 200 | 4  | 0  | 6,004,869:05:0 |      |
| 509  | 1  | 112 | 18:25:22.400 |                 | DMS:    | :*AT SPD           | R115, TRACK 1, FWD, TIC 301.44 +/-        | 200 | 4  | 0  | 6,004,869:05:0 |      |
| 510  | 1  | 112 | 18:25:27.066 | 165IF4A         | 7SCAN   | NORM,43.409,13.1   | Check S/P Position                        | 200 | 4  | 0  | 6,004,869:12:0 |      |
| 511  | 1  | 112 | 18:25:33.733 | 175IE422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,869:22:0 |      |
| 512  | 1  | 112 | 18:25:33.733 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC *341.29 +/-       | 200 | 4  | 0  | 6,004,869:22:0 |      |
| 513  | 1  | 112 | 18:25:34.933 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC *342.29 +/-        | 200 | 4  | 0  | 6,004,869:23:8 |      |
| 514  | 1  | 112 | 18:27:21.066 | 118IF           | SMOS    | GS                 | Slew = 0.51                               | 200 | 4  | 0  | 6,004,871:01:0 |      |
| 515  | 1  | 112 | 18:27:31.066 | 118IF110A111A4A | 7STRP   | 0.00102,0.0,0.26,0 | RDY, TRACK 1, FWD, TIC 342.29 +/-         | 200 | 4  | 0  | 6,004,871:16:0 |      |
| 516  | 1  | 112 | 18:28:13.733 |                 | DMS:    | :*E4-DELAY         | R115, TRACK 1, FWD, TIC 342.29 +/-        | 200 | 4  | 0  | 6,004,871:80:0 |      |
| 517  | 1  | 112 | 18:28:13.733 | 175IF422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,871:80:0 |      |
| 518  | 1  | 112 | 18:28:20.400 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 342.29 +/-        | 200 | 4  | 0  | 6,004,871:90:0 |      |
| 519  | 1  | 112 | 18:28:23.066 | 118IF11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,872:03:0 |      |
| 520  | 1  | 112 | 18:28:23.733 | 175IF176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,872:04:0 |      |
| 521  | 1  | 112 | 18:28:24.400 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC *348.59 +/-       | 200 | 4  | 0  | 6,004,872:05:0 |      |
| 522  | 1  | 112 | 18:28:24.400 |                 | DMS:    | :*AT SPD           | R115, TRACK 1, FWD, TIC 348.59 +/-        | 200 | 4  | 0  | 6,004,872:05:0 |      |
| 523  | 1  | 112 | 18:28:35.733 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC *388.43 +/-       | 200 | 4  | 0  | 6,004,872:22:0 |      |
| 524  | 1  | 112 | 18:28:35.733 | 175IF422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,872:22:0 |      |
| 525  | 1  | 112 | 18:28:36.933 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC *389.43 +/-        | 200 | 4  | 0  | 6,004,872:23:8 |      |
| 526  | 1  | 112 | 18:28:46.400 | 165IG4A         | 7SCAN   | NORM,339.700996,   | Check S/P Position                        | 200 | 4  | 0  | 6,004,872:38:0 |      |
| 527  | 1  | 112 | 18:32:27.733 | 118IG           | SMOS    | GS                 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,876:06:0 |      |
| 528  | 1  | 112 | 18:32:51.733 | 118IG110A111A4A | 7STRP   | -0.0002,0.0,0.26,0 | RDY, TRACK 1, FWD, TIC 389.43 +/-         | 200 | 4  | 0  | 6,004,877:80:0 |      |
| 529  | 1  | 112 | 18:33:35.066 | 118IG110A111A4B | 7STRP   | 0.001,-0.00066,0   | DMS Control                               | 200 | 4  | 0  | 6,004,877:80:0 |      |
| 530  | 1  | 112 | 18:33:43.733 | 118IG110A111A4C | 7STRP   | -0.0002,0.0,0.26,0 | R115, TRACK 1, FWD, TIC 389.43 +/-        | 200 | 4  | 0  | 6,004,877:90:0 |      |
| 531  | 1  | 112 | 18:34:17.733 |                 | DMS:    | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 389.43 +/-         | 200 | 4  | 0  | 6,004,878:03:0 |      |
| 532  | 1  | 112 | 18:34:17.733 | 175IG422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,878:03:0 |      |
| 533  | 1  | 112 | 18:34:24.400 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 389.43 +/-        | 200 | 4  | 0  | 6,004,878:03:0 |      |
| 534  | 1  | 112 | 18:34:27.066 | 118IG11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,878:03:0 |      |
| 535  | 1  | 112 | 18:34:27.733 | 175IG176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,878:04:0 |      |
| 536  | 1  | 112 | 18:34:28.400 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC *395.73 +/-       | 200 | 4  | 0  | 6,004,878:05:0 |      |
| 537  | 1  | 112 | 18:34:28.400 |                 | DMS:    | :*AT SPD           | R115, TRACK 1, FWD, TIC 395.73 +/-        | 200 | 4  | 0  | 6,004,878:05:0 |      |
| 538  | 1  | 112 | 18:34:42.400 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC *444.95 +/-       | 200 | 4  | 0  | 6,004,878:26:0 |      |
| 539  | 1  | 112 | 18:34:42.400 | 175IG422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,878:26:0 |      |
| 540  | 1  | 112 | 18:34:43.600 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC *445.95 +/-        | 200 | 4  | 0  | 6,004,878:27:8 |      |
| 541  | 1  | 112 | 18:34:50.400 | 165IH4A         | 7SCAN   | NORM,339.700996,   | Check S/P Position                        | 200 | 4  | 0  | 6,004,878:38:0 |      |
| 542  | 1  | 112 | 18:36:30.400 | 118IH           | SMOS    | GS                 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,880:06:0 |      |
| 543  | 1  | 112 | 18:36:54.400 | 118IH110A111A4A | 7STRP   | -0.0002,0.0,0.26,0 | RDY, TRACK 1, FWD, TIC 445.95 +/-         | 200 | 4  | 0  | 6,004,880:42:0 |      |
| 544  | 1  | 112 | 18:37:37.733 | 118IH110A111A4B | 7STRP   | 0.001,-0.00066,0   | DMS Control                               | 200 | 4  | 0  | 6,004,881:16:0 |      |
| 545  | 1  | 112 | 18:37:46.400 | 118IH110A111A4C | 7STRP   | -0.0002,0.0,0.26,0 | RDY, TRACK 1, FWD, TIC 445.95 +/-         | 200 | 4  | 0  | 6,004,881:29:0 |      |
| 546  | 1  | 112 | 18:38:20.400 |                 | DMS:    | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 445.95 +/-         | 200 | 4  | 0  | 6,004,881:80:0 |      |
| 547  | 1  | 112 | 18:38:20.400 | 175IH422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,881:80:0 |      |
| 548  | 1  | 112 | 18:38:27.066 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 445.95 +/-        | 200 | 4  | 0  | 6,004,881:90:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|------------------------|---|-----|----|----|----------------|------|
| 549  | 1  | 112 | 18:38:29.733 | 118IH11A        | SMOS GE                |   | 200 | 4  | 0  | 6,004,882:03:0 |      |
| 550  | 1  | 112 | 18:38:30.400 | 175IH176A6A     | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,882:04:0 |      |
| 551  | 1  | 112 | 18:38:31.066 |                 | DMS: *RECORD           | R115, TRACK 1, FWD, TIC * 452.25 +/-      | 200 | 4  | 0  | 6,004,882:05:0 |      |
| 552  | 1  | 112 | 18:38:31.066 |                 | DMS: *AT_SPD           | R115, TRACK 1, FWD, TIC 452.25 +/-        | 200 | 4  | 0  | 6,004,882:05:0 |      |
| 553  | 1  | 112 | 18:38:45.066 | 175IH422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,882:26:0 |      |
| 554  | 1  | 112 | 18:38:45.066 |                 | DMS: *RUNDOWN          | R115, TRACK 1, FWD, TIC * 501.47 +/-      | 200 | 4  | 0  | 6,004,882:26:0 |      |
| 555  | 1  | 112 | 18:38:46.266 |                 | DMS: *READY            | RDY, TRACK 1, FWD, TIC * 502.47 +/-       | 200 | 4  | 0  | 6,004,882:27:8 |      |
| 556  | 1  | 112 | 18:38:53.066 | 165IJ4A         | 7SCAN NORM,339.700996, | Check S/P Position                        | 200 | 4  | 0  | 6,004,882:38:0 |      |
| 557  | 1  | 112 | 18:40:33.066 | 118IJ           | SMOS GS                |   | 200 | 4  | 0  | 6,004,884:06:0 |      |
| 558  | 1  | 112 | 18:40:57.066 | 118IJ10A111A4A  | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,884:42:0 |      |
| 559  | 1  | 112 | 18:41:40.400 | 118IJ10A111A4B  | 7STRP 0.001,-0.00066,0 | Slew = 0.51                               | 200 | 4  | 0  | 6,004,885:16:0 |      |
| 560  | 1  | 112 | 18:41:49.066 | 118IJ10A111A4C  | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,885:29:0 |      |
| 561  | 1  | 112 | 18:42:23.066 |                 | DMS: *E4-DELAY         | RDY, TRACK 1, FWD, TIC 502.47 +/-         | 200 | 4  | 0  | 6,004,885:80:0 |      |
| 562  | 1  | 112 | 18:42:23.066 | 175IJ422A6A     | 6DMSC R115,1           | DMS Control                               | 200 | 4  | 0  | 6,004,885:80:0 |      |
| 563  | 1  | 112 | 18:42:29.733 |                 | DMS: *RUNUP            | R115, TRACK 1, FWD, TIC 502.47 +/-        | 200 | 4  | 0  | 6,004,885:90:0 |      |
| 564  | 1  | 112 | 18:42:32.400 | 118IJ11A        | SMOS GE                |   | 200 | 4  | 0  | 6,004,886:03:0 |      |
| 565  | 1  | 112 | 18:42:33.066 | 175IJ176A6A     | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,886:04:0 |      |
| 566  | 1  | 112 | 18:42:33.733 |                 | DMS: *AT_SPD           | R115, TRACK 1, FWD, TIC 508.77 +/-        | 200 | 4  | 0  | 6,004,886:05:0 |      |
| 567  | 1  | 112 | 18:42:33.733 |                 | DMS: *RECORD           | R115, TRACK 1, FWD, TIC * 508.77 +/-      | 200 | 4  | 0  | 6,004,886:05:0 |      |
| 568  | 1  | 112 | 18:42:47.733 | 175IJ422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,886:26:0 |      |
| 569  | 1  | 112 | 18:42:47.733 |                 | DMS: *RUNDOWN          | R115, TRACK 1, FWD, TIC * 557.99 +/-      | 200 | 4  | 0  | 6,004,886:26:0 |      |
| 570  | 1  | 112 | 18:42:48.933 |                 | DMS: *READY            | RDY, TRACK 1, FWD, TIC * 558.99 +/-       | 200 | 4  | 0  | 6,004,886:27:8 |      |
| 571  | 1  | 112 | 18:42:55.733 | 165IJ4A         | 7SCAN NORM,339.700996, | Check S/P Position                        | 200 | 4  | 0  | 6,004,886:38:0 |      |
| 572  | 1  | 112 | 18:44:35.733 | 118IJ           | SMOS GS                |   | 200 | 4  | 0  | 6,004,888:06:0 |      |
| 573  | 1  | 112 | 18:44:59.733 | 118IJ10A111A4A  | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,888:42:0 |      |
| 574  | 1  | 112 | 18:45:43.066 | 118IJ10A111A4B  | 7STRP 0.001,-0.00066,0 | Slew = 0.51                               | 200 | 4  | 0  | 6,004,889:16:0 |      |
| 575  | 1  | 112 | 18:45:51.733 | 118IJ10A111A4C  | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,889:29:0 |      |
| 576  | 1  | 112 | 18:46:25.733 | 175IJ422A6A     | 6DMSC R115,1           | DMS Control                               | 200 | 4  | 0  | 6,004,889:80:0 |      |
| 577  | 1  | 112 | 18:46:25.733 |                 | DMS: *E4-DELAY         | RDY, TRACK 1, FWD, TIC 558.99 +/-         | 200 | 4  | 0  | 6,004,889:80:0 |      |
| 578  | 1  | 112 | 18:46:32.400 |                 | DMS: *RUNUP            | R115, TRACK 1, FWD, TIC 558.99 +/-        | 200 | 4  | 0  | 6,004,889:90:0 |      |
| 579  | 1  | 112 | 18:46:35.066 | 118IJ11A        | SMOS GE                |   | 200 | 4  | 0  | 6,004,890:03:0 |      |
| 580  | 1  | 112 | 18:46:35.733 | 175IJ176A6A     | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,890:04:0 |      |
| 581  | 1  | 112 | 18:46:36.400 |                 | DMS: *AT_SPD           | R115, TRACK 1, FWD, TIC 565.29 +/-        | 200 | 4  | 0  | 6,004,890:05:0 |      |
| 582  | 1  | 112 | 18:46:36.400 |                 | DMS: *RECORD           | R115, TRACK 1, FWD, TIC * 565.29 +/-      | 200 | 4  | 0  | 6,004,890:05:0 |      |
| 583  | 1  | 112 | 18:46:50.400 |                 | DMS: *RUNDOWN          | R115, TRACK 1, FWD, TIC * 614.51 +/-      | 200 | 4  | 0  | 6,004,890:26:0 |      |
| 584  | 1  | 112 | 18:46:50.400 | 175IJ422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,890:26:0 |      |
| 585  | 1  | 112 | 18:46:51.600 |                 | DMS: *READY            | RDY, TRACK 1, FWD, TIC * 615.51 +/-       | 200 | 4  | 0  | 6,004,890:27:8 |      |
| 586  | 1  | 112 | 18:46:58.400 | 165IK4A         | 7SCAN NORM,27.971,20.7 | Check S/P Position                        | 200 | 4  | 0  | 6,004,890:38:0 |      |
| 587  | 1  | 112 | 18:50:39.733 | 118IK           | SMOS GS                |   | 200 | 4  | 0  | 6,004,894:06:0 |      |
| 588  | 1  | 112 | 18:51:03.733 | 118IK110A111A4A | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,894:42:0 |      |
| 589  | 1  | 112 | 18:51:47.066 | 118IK110A111A4B | 7STRP 0.001,-0.00066,0 | Slew = 0.51                               | 200 | 4  | 0  | 6,004,895:16:0 |      |
| 590  | 1  | 112 | 18:51:55.733 | 118IK110A111A4C | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,895:29:0 |      |
| 591  | 1  | 112 | 18:52:29.733 | 175IK422A6A     | 6DMSC R115,1           | DMS Control                               | 200 | 4  | 0  | 6,004,895:80:0 |      |
| 592  | 1  | 112 | 18:52:29.733 |                 | DMS: *E4-DELAY         | RDY, TRACK 1, FWD, TIC 615.51 +/-         | 200 | 4  | 0  | 6,004,895:80:0 |      |
| 593  | 1  | 112 | 18:52:36.400 |                 | DMS: *RUNUP            | R115, TRACK 1, FWD, TIC 615.51 +/-        | 200 | 4  | 0  | 6,004,895:90:0 |      |
| 594  | 1  | 112 | 18:52:39.066 | 118IK11A        | SMOS GE                |   | 200 | 4  | 0  | 6,004,896:03:0 |      |
| 595  | 1  | 112 | 18:52:39.733 | 175IK176A6A     | 6TMREC HMA             | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,896:04:0 |      |
| 596  | 1  | 112 | 18:52:40.400 |                 | DMS: *AT_SPD           | R115, TRACK 1, FWD, TIC 621.81 +/-        | 200 | 4  | 0  | 6,004,896:05:0 |      |
| 597  | 1  | 112 | 18:52:40.400 |                 | DMS: *RECORD           | R115, TRACK 1, FWD, TIC * 621.81 +/-      | 200 | 4  | 0  | 6,004,896:05:0 |      |
| 598  | 1  | 112 | 18:52:54.400 | 175IK422A6B     | 6DMSC RDY,0            | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,896:26:0 |      |
| 599  | 1  | 112 | 18:52:54.400 |                 | DMS: *RUNDOWN          | R115, TRACK 1, FWD, TIC * 671.02 +/-      | 200 | 4  | 0  | 6,004,896:26:0 |      |
| 600  | 1  | 112 | 18:52:55.600 |                 | DMS: *READY            | RDY, TRACK 1, FWD, TIC * 672.02 +/-       | 200 | 4  | 0  | 6,004,896:27:8 |      |
| 601  | 1  | 112 | 18:53:02.400 | 165IL4A         | 7SCAN NORM,27.971,20.7 | Check S/P Position                        | 200 | 4  | 0  | 6,004,896:38:0 |      |
| 602  | 1  | 112 | 18:54:42.400 | 118IL           | SMOS GS                |   | 200 | 4  | 0  | 6,004,898:06:0 |      |
| 603  | 1  | 112 | 18:55:06.400 | 118IL110A111A4A | 7STRP -0.0002,0.0,26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,898:42:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters         | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|--------------------|---|-----|----|----|----------------|------|
| 604  | 1  | 112 | 18:55:49.733 | 118IL110A111A4B | 7STRP   | 0.001,-0.00066,0   | Slew = 0.51                               | 200 | 4  | 0  | 6,004,899:16:0 |      |
| 605  | 1  | 112 | 18:55:58.400 | 118IL110A111A4C | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,899:29:0 |      |
| 606  | 1  | 112 | 18:56:32.400 |                 | DMS:    | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 672.02 +/-         | 200 | 4  | 0  | 6,004,899:80:0 |      |
| 607  | 1  | 112 | 18:56:32.400 | 175IL422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,899:80:0 |      |
| 608  | 1  | 112 | 18:56:39.066 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 672.02 +/-        | 200 | 4  | 0  | 6,004,899:90:0 |      |
| 609  | 1  | 112 | 18:56:41.733 | 118IL11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,900:03:0 |      |
| 610  | 1  | 112 | 18:56:42.400 | 175IL176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,900:04:0 |      |
| 611  | 1  | 112 | 18:56:43.066 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC * 678.32 +/-      | 200 | 4  | 0  | 6,004,900:05:0 |      |
| 612  | 1  | 112 | 18:56:43.066 |                 | DMS:    | :*AT_SPD           | R115, TRACK 1, FWD, TIC 678.32 +/-        | 200 | 4  | 0  | 6,004,900:05:0 |      |
| 613  | 1  | 112 | 18:56:57.066 | 175IL422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,900:26:0 |      |
| 614  | 1  | 112 | 18:56:57.066 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC * 727.54 +/-      | 200 | 4  | 0  | 6,004,900:26:0 |      |
| 615  | 1  | 112 | 18:56:58.266 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC * 728.54 +/-       | 200 | 4  | 0  | 6,004,900:27:8 |      |
| 616  | 1  | 112 | 18:57:05.066 | 165IM4A         | 7SCAN   | NORM:27.971,20.7   | Check S/P Position                        | 200 | 4  | 0  | 6,004,900:38:0 |      |
| 617  | 1  | 112 | 18:58:45.066 | 118IM           | SMOS    | GS                 |   | 200 | 4  | 0  | 6,004,902:06:0 |      |
| 618  | 1  | 112 | 18:59:09.066 | 118IM110A111A4A | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,902:42:0 |      |
| 619  | 1  | 112 | 18:59:52.400 | 118IM110A111A4B | 7STRP   | 0.001,-0.00066,0   | Slew = 0.51                               | 200 | 4  | 0  | 6,004,903:16:0 |      |
| 620  | 1  | 112 | 19:00:01.066 | 118IM110A111A4C | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,903:29:0 |      |
| 621  | 1  | 112 | 19:00:35.066 | 175IM422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,903:80:0 |      |
| 622  | 1  | 112 | 19:00:35.066 |                 | DMS:    | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 728.54 +/-         | 200 | 4  | 0  | 6,004,903:80:0 |      |
| 623  | 1  | 112 | 19:00:41.733 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 728.54 +/-        | 200 | 4  | 0  | 6,004,903:90:0 |      |
| 624  | 1  | 112 | 19:00:44.400 | 118IM11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,904:03:0 |      |
| 625  | 1  | 112 | 19:00:45.066 | 175IM176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,904:04:0 |      |
| 626  | 1  | 112 | 19:00:45.733 |                 | DMS:    | :*AT_SPD           | R115, TRACK 1, FWD, TIC 734.84 +/-        | 200 | 4  | 0  | 6,004,904:05:0 |      |
| 627  | 1  | 112 | 19:00:45.733 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC * 734.84 +/-      | 200 | 4  | 0  | 6,004,904:05:0 |      |
| 628  | 1  | 112 | 19:00:59.733 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC * 784.06 +/-      | 200 | 4  | 0  | 6,004,904:26:0 |      |
| 629  | 1  | 112 | 19:00:59.733 | 175IM422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,904:26:0 |      |
| 630  | 1  | 112 | 19:01:00.933 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC * 785.06 +/-       | 200 | 4  | 0  | 6,004,904:27:8 |      |
| 631  | 1  | 112 | 19:01:07.733 | 165IN4A         | 7SCAN   | NORM:27.971,20.7   | Check S/P Position                        | 200 | 4  | 0  | 6,004,904:38:0 |      |
| 632  | 1  | 112 | 19:02:47.733 | 118IN           | SMOS    | GS                 |   | 200 | 4  | 0  | 6,004,906:06:0 |      |
| 633  | 1  | 112 | 19:03:11.733 | 118IN110A111A4A | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,906:42:0 |      |
| 634  | 1  | 112 | 19:03:55.066 | 118IN110A111A4B | 7STRP   | 0.001,-0.00066,0   | Slew = 0.51                               | 200 | 4  | 0  | 6,004,907:16:0 |      |
| 635  | 1  | 112 | 19:04:03.733 | 118IN110A111A4C | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,907:29:0 |      |
| 636  | 1  | 112 | 19:04:37.733 |                 | DMS:    | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 785.06 +/-         | 200 | 4  | 0  | 6,004,907:80:0 |      |
| 637  | 1  | 112 | 19:04:37.733 | 175IN422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,907:80:0 |      |
| 638  | 1  | 112 | 19:04:44.400 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 785.06 +/-        | 200 | 4  | 0  | 6,004,907:90:0 |      |
| 639  | 1  | 112 | 19:04:47.066 | 118IN11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,908:03:0 |      |
| 640  | 1  | 112 | 19:04:47.066 | 175IN176A6A     | 6TMREC  | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,908:04:0 |      |
| 641  | 1  | 112 | 19:04:48.400 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC * 791.36 +/-      | 200 | 4  | 0  | 6,004,908:05:0 |      |
| 642  | 1  | 112 | 19:04:48.400 |                 | DMS:    | :*AT_SPD           | R115, TRACK 1, FWD, TIC 791.36 +/-        | 200 | 4  | 0  | 6,004,908:05:0 |      |
| 643  | 1  | 112 | 19:05:02.400 | 175IN422A6B     | 6DMSC   | RDY,0              | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,908:26:0 |      |
| 644  | 1  | 112 | 19:05:02.400 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC * 840.58 +/-      | 200 | 4  | 0  | 6,004,908:26:0 |      |
| 645  | 1  | 112 | 19:05:03.600 |                 | DMS:    | :*READY            | RDY, TRACK 1, FWD, TIC * 841.58 +/-       | 200 | 4  | 0  | 6,004,908:27:8 |      |
| 646  | 1  | 112 | 19:05:10.400 | 165IO4A         | 7SCAN   | NORM:27.971,20.7   | Check S/P Position                        | 200 | 4  | 0  | 6,004,908:38:0 |      |
| 647  | 1  | 112 | 19:06:50.400 | 118IO           | SMOS    | GS                 |   | 200 | 4  | 0  | 6,004,910:06:0 |      |
| 648  | 1  | 112 | 19:07:14.400 | 118IO110A111A4A | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,910:42:0 |      |
| 649  | 1  | 112 | 19:07:57.733 | 118IO110A111A4B | 7STRP   | 0.001,-0.00066,0   | Slew = 0.51                               | 200 | 4  | 0  | 6,004,911:16:0 |      |
| 650  | 1  | 112 | 19:08:06.400 | 118IO110A111A4C | 7STRP   | -0.0002,0.0,0.26,0 | Slew = 0.21                               | 200 | 4  | 0  | 6,004,911:29:0 |      |
| 651  | 1  | 112 | 19:08:38.400 | 175IO422A6A     | 6DMSC   | R115,1             | DMS Control                               | 200 | 4  | 0  | 6,004,911:77:0 |      |
| 652  | 1  | 112 | 19:08:38.400 |                 | DMS:    | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 841.58 +/-         | 200 | 4  | 0  | 6,004,911:77:0 |      |
| 653  | 1  | 112 | 19:08:45.066 |                 | DMS:    | :*RUNUP            | R115, TRACK 1, FWD, TIC 841.58 +/-        | 200 | 4  | 0  | 6,004,911:87:0 |      |
| 654  | 1  | 112 | 19:08:48.400 | 175IO176A6A     | 6TMREC  | HIS                | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 200 | 4  | 0  | 6,004,912:01:0 |      |
| 655  | 1  | 112 | 19:08:49.066 |                 | DMS:    | :*AT_SPD           | R115, TRACK 1, FWD, TIC 847.88 +/-        | 200 | 4  | 0  | 6,004,912:02:0 |      |
| 656  | 1  | 112 | 19:08:49.066 |                 | DMS:    | :*RECORD           | R115, TRACK 1, FWD, TIC * 847.88 +/-      | 200 | 4  | 0  | 6,004,912:02:0 |      |
| 657  | 1  | 112 | 19:08:49.733 | 118IO11A        | SMOS    | GE                 |   | 200 | 4  | 0  | 6,004,912:03:0 |      |
| 658  | 1  | 112 | 19:08:56.400 |                 | DMS:    | :*RUNDOWN          | R115, TRACK 1, FWD, TIC * 873.66 +/-      | 200 | 4  | 0  | 6,004,912:13:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|---------|------------|---|-----|----|----|----------------|------|
| 659  | 1  | 112 | 19:08:56.400 | 175IQ422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,912:13:0 |      |
| 660  | 1  | 112 | 19:08:57.600 |             | DMS:    | :*READY    | RDY, TRACK 1, FWD, TIC * 874.66 +/-       | 200 | 4  | 0  | 6,004,912:14:8 |      |
| 661  | 1  | 112 | 19:11:46.400 | 175IP422A6A | 6DMSC   | R115,1     | DMS Control                               | 200 | 4  | 0  | 6,004,914:86:0 |      |
| 662  | 1  | 112 | 19:11:46.400 |             | DMS:    | :*E4-DELAY | RDY, TRACK 1, FWD, TIC 874.66 +/-         | 200 | 4  | 0  | 6,004,914:86:0 |      |
| 663  | 1  | 112 | 19:11:53.066 |             | DMS:    | :*RUNUP    | R115, TRACK 1, FWD, TIC 874.66 +/-        | 200 | 4  | 0  | 6,004,915:05:0 |      |
| 664  | 1  | 112 | 19:11:56.400 | 175IP176A6A | 6TMREC  | HIM        | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 200 | 4  | 0  | 6,004,915:10:0 |      |
| 665  | 1  | 112 | 19:11:57.066 |             | DMS:    | :*AT SPD   | R115, TRACK 1, FWD, TIC 880.96 +/-        | 200 | 4  | 0  | 6,004,915:11:0 |      |
| 666  | 1  | 112 | 19:11:57.066 |             | DMS:    | :*RECORD   | R115, TRACK 1, FWD, TIC * 880.96 +/-      | 200 | 4  | 0  | 6,004,915:11:0 |      |
| 667  | 1  | 112 | 19:14:52.400 | 175IP422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,918:01:0 |      |
| 668  | 1  | 112 | 19:14:52.400 |             | DMS:    | :*RUNDOWN  | R115, TRACK 1, FWD, TIC *1497.37 +/-      | 200 | 4  | 0  | 6,004,918:01:0 |      |
| 669  | 1  | 112 | 19:14:53.600 |             | DMS:    | :*READY    | RDY, TRACK 1, FWD, TIC *1498.37 +/-       | 200 | 4  | 0  | 6,004,918:02:8 |      |
| 670  | 1  | 112 | 19:17:16.400 |             | DMS:    | :*E4-DELAY | RDY, TRACK 1, FWD, TIC 1498.37 +/-        | 200 | 4  | 0  | 6,004,920:35:0 |      |
| 671  | 1  | 112 | 19:17:16.400 | 175IQ422A6A | 6DMSC   | R115,1     | DMS Control                               | 200 | 4  | 0  | 6,004,920:35:0 |      |
| 672  | 1  | 112 | 19:17:23.066 |             | DMS:    | :*RUNUP    | R115, TRACK 1, FWD, TIC 1498.37 +/-       | 200 | 4  | 0  | 6,004,920:45:0 |      |
| 673  | 1  | 112 | 19:17:26.400 | 175IQ176A6A | 6TMREC  | HMA        | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,920:50:0 |      |
| 674  | 1  | 112 | 19:17:27.066 |             | DMS:    | :*RECORD   | R115, TRACK 1, FWD, TIC *1504.67 +/-      | 200 | 4  | 0  | 6,004,920:51:0 |      |
| 675  | 1  | 112 | 19:17:27.066 |             | DMS:    | :*AT SPD   | R115, TRACK 1, FWD, TIC 1504.67 +/-       | 200 | 4  | 0  | 6,004,920:51:0 |      |
| 676  | 1  | 112 | 19:18:24.400 | 175IQ422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,921:46:0 |      |
| 677  | 1  | 112 | 19:18:24.400 |             | DMS:    | :*RUNDOWN  | R115, TRACK 1, FWD, TIC *1706.23 +/-      | 200 | 4  | 0  | 6,004,921:46:0 |      |
| 678  | 1  | 112 | 19:18:25.600 |             | DMS:    | :*READY    | RDY, TRACK 1, FWD, TIC *1707.23 +/-       | 200 | 4  | 0  | 6,004,921:47:8 |      |
| 679  | 1  | 112 | 19:18:47.066 | 175JQ422A6A | 6DMSC   | R115,1     | DMS Control                               | 200 | 4  | 0  | 6,004,921:80:0 |      |
| 680  | 1  | 112 | 19:18:47.066 |             | DMS:    | :*E4-DELAY | RDY, TRACK 1, FWD, TIC 1707.23 +/-        | 200 | 4  | 0  | 6,004,921:80:0 |      |
| 681  | 1  | 112 | 19:18:53.733 |             | DMS:    | :*RUNUP    | R115, TRACK 1, FWD, TIC 1707.23 +/-       | 200 | 4  | 0  | 6,004,921:90:0 |      |
| 682  | 1  | 112 | 19:18:57.066 | 175JQ176A6A | 6TMREC  | HMA        | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 200 | 4  | 0  | 6,004,922:04:0 |      |
| 683  | 1  | 112 | 19:18:57.733 |             | DMS:    | :*AT SPD   | R115, TRACK 1, FWD, TIC 1713.53 +/-       | 200 | 4  | 0  | 6,004,922:05:0 |      |
| 684  | 1  | 112 | 19:18:57.733 |             | DMS:    | :*RECORD   | R115, TRACK 1, FWD, TIC *1713.53 +/-      | 200 | 4  | 0  | 6,004,922:05:0 |      |
| 685  | 1  | 112 | 19:19:25.066 | 175JQ422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,922:46:0 |      |
| 686  | 1  | 112 | 19:19:25.066 |             | DMS:    | :*RUNDOWN  | R115, TRACK 1, FWD, TIC *1809.62 +/-      | 200 | 4  | 0  | 6,004,922:46:0 |      |
| 687  | 1  | 112 | 19:19:26.266 |             | DMS:    | :*READY    | RDY, TRACK 1, FWD, TIC *1810.62 +/-       | 200 | 4  | 0  | 6,004,922:47:8 |      |
| 688  | 1  | 112 | 19:21:01.733 | 175IR422A6A | 6DMSC   | R115,1     | DMS Control                               | 200 | 4  | 0  | 6,004,924:09:0 |      |
| 689  | 1  | 112 | 19:21:01.733 |             | DMS:    | :*E4-DELAY | RDY, TRACK 1, FWD, TIC 1810.62 +/-        | 200 | 4  | 0  | 6,004,924:09:0 |      |
| 690  | 1  | 112 | 19:21:08.400 |             | DMS:    | :*RUNUP    | R115, TRACK 1, FWD, TIC 1810.62 +/-       | 200 | 4  | 0  | 6,004,924:19:0 |      |
| 691  | 1  | 112 | 19:21:11.733 | 175IR176A6A | 6TMREC  | HIS        | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 200 | 4  | 0  | 6,004,924:24:0 |      |
| 692  | 1  | 112 | 19:21:12.400 |             | DMS:    | :*AT SPD   | R115, TRACK 1, FWD, TIC 1816.92 +/-       | 200 | 4  | 0  | 6,004,924:25:0 |      |
| 693  | 1  | 112 | 19:21:12.400 |             | DMS:    | :*RECORD   | R115, TRACK 1, FWD, TIC *1816.92 +/-      | 200 | 4  | 0  | 6,004,924:25:0 |      |
| 694  | 1  | 112 | 19:22:27.066 | 175IR422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,925:46:0 |      |
| 695  | 1  | 112 | 19:22:27.066 |             | DMS:    | :*RUNDOWN  | R115, TRACK 1, FWD, TIC *2079.42 +/-      | 200 | 4  | 0  | 6,004,925:46:0 |      |
| 696  | 1  | 112 | 19:22:28.266 |             | DMS:    | :*READY    | RDY, TRACK 1, FWD, TIC *2080.42 +/-       | 200 | 4  | 0  | 6,004,925:47:8 |      |
| 697  | 1  | 112 | 19:22:33.066 |             | DMS:    | :*E4-DELAY | RDY, TRACK 1, FWD, TIC 2080.42 +/-        | 200 | 4  | 0  | 6,004,925:55:0 |      |
| 698  | 1  | 112 | 19:22:33.066 | 175JR422A6A | 6DMSC   | R115,1     | DMS Control                               | 200 | 4  | 0  | 6,004,925:55:0 |      |
| 699  | 1  | 112 | 19:22:39.733 |             | DMS:    | :*RUNUP    | R115, TRACK 1, FWD, TIC 2080.42 +/-       | 200 | 4  | 0  | 6,004,925:65:0 |      |
| 700  | 1  | 112 | 19:22:43.066 | 175JR176A6A | 6TMREC  | HIS        | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 200 | 4  | 0  | 6,004,925:70:0 |      |
| 701  | 1  | 112 | 19:22:43.733 |             | DMS:    | :*RECORD   | R115, TRACK 1, FWD, TIC *2086.72 +/-      | 200 | 4  | 0  | 6,004,925:71:0 |      |
| 702  | 1  | 112 | 19:22:43.733 |             | DMS:    | :*AT SPD   | R115, TRACK 1, FWD, TIC 2086.72 +/-       | 200 | 4  | 0  | 6,004,925:71:0 |      |
| 703  | 1  | 112 | 19:22:57.733 |             | DMS:    | :*RUNDOWN  | R115, TRACK 1, FWD, TIC *2135.94 +/-      | 200 | 4  | 0  | 6,004,926:01:0 |      |
| 704  | 1  | 112 | 19:22:57.733 | 175JR422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,926:01:0 |      |
| 705  | 1  | 112 | 19:22:58.933 |             | DMS:    | :*READY    | RDY, TRACK 1, FWD, TIC *2136.94 +/-       | 200 | 4  | 0  | 6,004,926:02:8 |      |
| 706  | 1  | 112 | 19:23:49.066 |             | DMS:    | :*E4-DELAY | RDY, TRACK 1, FWD, TIC 2136.94 +/-        | 200 | 4  | 0  | 6,004,926:78:0 |      |
| 707  | 1  | 112 | 19:23:49.066 | 175IS422A6A | 6DMSC   | R115,1     | DMS Control                               | 200 | 4  | 0  | 6,004,926:78:0 |      |
| 708  | 1  | 112 | 19:23:55.733 |             | DMS:    | :*RUNUP    | R115, TRACK 1, FWD, TIC 2136.94 +/-       | 200 | 4  | 0  | 6,004,926:88:0 |      |
| 709  | 1  | 112 | 19:23:59.066 | 175IS176A6A | 6TMREC  | HCA        | 115.2 KBPS IMAGE(1-200)RECORD Record Mod  | 200 | 4  | 0  | 6,004,927:02:0 |      |
| 710  | 1  | 112 | 19:23:59.733 |             | DMS:    | :*RECORD   | R115, TRACK 1, FWD, TIC *2143.24 +/-      | 200 | 4  | 0  | 6,004,927:03:0 |      |
| 711  | 1  | 112 | 19:23:59.733 |             | DMS:    | :*AT SPD   | R115, TRACK 1, FWD, TIC 2143.24 +/-       | 200 | 4  | 0  | 6,004,927:03:0 |      |
| 712  | 1  | 112 | 19:24:06.400 | 175IS422A6B | 6DMSC   | RDY,0      | DMS Control Tape stop                     | 200 | 4  | 0  | 6,004,927:13:0 |      |
| 713  | 1  | 112 | 19:24:06.400 |             | DMS:    | :*RUNDOWN  | R115, TRACK 1, FWD, TIC *2166.68 +/-      | 200 | 4  | 0  | 6,004,927:13:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command  | Parameters        | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|-----------------|----------|-------------------|--|-----|----|----------------|----------------|------|
| 714  | 1  | 112 | 19:24:07.600 |                 | DMS:     | :*READY           | RDY, TRACK 1, FWD, TIC *2167.68 +/- 1      | 200 | 4  | 0              | 6,004,927:14:8 |      |
| 715  | 1  | 112 | 19:26:23.733 | 175IT422A6A     | 6DMSC    | R806.1            | DMS Control                                | 200 | 4  | 0              | 6,004,929:37:0 |      |
| 716  | 1  | 112 | 19:26:23.733 |                 | DMS:     | :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 2167.68 +/- 1       | 200 | 4  | 0              | 6,004,929:37:0 |      |
| 717  | 1  | 112 | 19:26:30.400 |                 | DMS:     | :*RUNUP           | R806, TRACK 1, FWD, TIC 2167.68 +/- 1      | 200 | 4  | 0              | 6,004,929:47:0 |      |
| 718  | 1  | 112 | 19:26:35.066 | 175IT176A6A     | 6TMREC   | IM8               | 806.4 KBPS IMAGE RECORD Record Mode Chang  | 200 | 4  | 0              | 6,004,929:54:0 |      |
| 719  | 1  | 112 | 19:26:35.666 |                 | DMS:     | :*AT SPD          | R806, TRACK 1, FWD, TIC 2233.68 +/- 1      | 200 | 4  | 0              | 6,004,929:54:9 |      |
| 720  | 1  | 112 | 19:26:35.666 |                 | DMS:     | :*RECORD          | R806, TRACK 1, FWD, TIC *2233.68 +/- 1     | 200 | 4  | 0              | 6,004,929:54:9 |      |
| 721  | 1  | 112 | 19:26:59.733 | 176IT6A         | 6TMREC   | A18               | 806.4 KBPS SSI RECORD Record Mode Change   | 200 | 4  | 0              | 6,004,930:00:0 |      |
| 722  | 1  | 112 | 19:27:04.400 | 175IT422A6B     | 6DMSC    | RDY,0             | DMS Control Tape stop                      | 200 | 4  | 0              | 6,004,930:07:0 |      |
| 723  | 1  | 112 | 19:27:04.400 |                 | DMS:     | :*RUNDOWN         | R806, TRACK 1, FWD, TIC *2940.79 +/- 1     | 200 | 4  | 0              | 6,004,930:07:0 |      |
| 724  | 1  | 112 | 19:27:07.133 |                 | DMS:     | :*READY           | RDY, TRACK 1, FWD, TIC *2952.29 +/- 1      | 200 | 4  | 0              | 6,004,930:11:1 |      |
| 725  | 1  | 112 | 20:01:21.700 | 29HNSTRCAL01-   |          | -----START-----   |  | 200 | 4  | 0              | :              |      |
| 726  | 1  | 112 | 20:01:21.733 | 165DA4A         | 7SCAN    | NORM,100.693999,  | Check S/P Position                         | 200 | 4  | 0              | 6,004,963:90:0 |      |
| 727  | 1  | 112 | 20:02:08.400 | 20DA5A          | 37PL     |                   | Program Load (halts microprocessor & unwri | 4   | 0  | 6,004,964:69:0 |                |      |
| 728  | 1  | 112 | 20:02:15.733 | 20DA5B          | 37MRL    |                   | Memory Realocate (software operates from R | 4   | 0  | 6,004,964:80:0 |                |      |
| 729  | 1  | 112 | 20:02:23.733 | 20DA6A          | 6MCOPY   | NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 6,004,965:01:0 |                |      |
| 730  | 1  | 112 | 20:02:33.733 | 20DA6B          | 6MCOPY   | NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 6,004,965:16:0 |                |      |
| 731  | 1  | 112 | 20:02:43.733 | 20DA5C          | 37IRT    |                   | Instrument Reset (goes into POR state)     | 4   | 0  | 6,004,965:31:0 |                |      |
| 732  | 1  | 112 | 20:02:45.066 | 20DA5D          | 37MN     |                   | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 6,004,965:33:0 |      |
| 733  | 1  | 112 | 20:03:16.400 | 20DA4A          | 37IST    | 1,2,0,OFF,0,0,0   | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 6,004,965:80:0 |      |
| 734  | 1  | 112 | 20:03:20.400 | 125DA4A         | 37IST    | 0,2,0,OFF,0,1,1   | Gain State 4                               | 4R0 | 4  | 0              | 6,004,967:84:0 |      |
| 735  | 1  | 112 | 20:05:20.400 | 125DA11A        | NIMSINIT | GE                | ##### GROUP END INIT                       | 4R0 | 4  | 0              | 6,004,967:84:0 |      |
| 736  | 1  | 112 | 20:05:20.400 | 125DA           | NIMSINIT | GS                | ##### GROUP START INIT                     | 4R0 | 4  | 0              | 6,004,967:84:0 |      |
| 737  | 1  | 112 | 20:06:21.066 | 127DA4A         | 37IOP    | 3,0               | Long Map, Grating Start Position =00       | 4R3 | 4  | 0              | 6,004,968:84:0 |      |
| 738  | 1  | 112 | 20:06:21.066 | 127DA           | NIMSTAB  | GS                | %%%%% GROUP START TAB                      | 4R3 | 4  | 0              | 6,004,968:84:0 |      |
| 739  | 1  | 112 | 20:06:21.733 | 127DA4B         | 37ETB    | 04,C4,35,FF,FF    | Loads wavelength edit table                | 4R3 | 4  | 0              | 6,004,968:85:0 |      |
| 740  | 1  | 112 | 20:06:29.733 | 127DA11A        | NIMSTAB  | GE                | %%%%% GROUP END TAB                        | 4R3 | 4  | 0              | 6,004,969:06:0 |      |
| 741  | 1  | 112 | 20:07:13.066 | 175DA422A6A     | 6DMSC    | R28,1             | DMS Control                                | 4R3 | 4  | 0              | 6,004,969:71:0 |      |
| 742  | 1  | 112 | 20:07:13.066 |                 | DMS:     | :*E4-DELAY        | RDY, TRACK 1, FWD, TIC 2952.29 +/- 1       | 4R3 | 4  | 0              | 6,004,969:71:0 |      |
| 743  | 1  | 112 | 20:07:17.066 | 117DA           | CSMOS    | GS                | **** GROUP START CSMOS                     | 4R3 | 4  | 0              | 6,004,969:77:0 |      |
| 744  | 1  | 112 | 20:07:19.733 |                 | DMS:     | :*RUNUP           | R28, TRACK 1, FWD, TIC 2952.29 +/- 1       | 4R3 | 4  | 0              | 6,004,969:81:0 |      |
| 745  | 1  | 112 | 20:07:23.066 | 175DA176A6A     | 6TMREC   | MPW               | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 4R3 | 4  | 0              | 6,004,969:86:0 |      |
| 746  | 1  | 112 | 20:07:23.733 |                 | DMS:     | :*RECORD          | R28, TRACK 1, FWD, TIC *2953.79 +/- 1      | 4R3 | 4  | 0              | 6,004,969:87:0 |      |
| 747  | 1  | 112 | 20:07:23.733 |                 | DMS:     | :*AT SPD          | R28, TRACK 1, FWD, TIC 2953.79 +/- 1       | 4R3 | 4  | 0              | 6,004,969:87:0 |      |
| 748  | 1  | 112 | 20:07:26.400 | 117DA105A106A4A | 7STRP    | -0.0017,0.0,0.0,0 | Slew =0.03                                 | 4R3 | 4  | 0              | 6,004,970:00:0 |      |
| 749  | 1  | 112 | 20:08:25.733 | 117DA105A106A4B | 7STRP    | 0.00167,0.0,0.0,0 | Slew =12.01                                | 4R3 | 4  | 0              | 6,004,970:89:0 |      |
| 750  | 1  | 112 | 20:08:32.400 | 117DA105A106A4C | 7STRP    | -0.0017,0.0,0.0,0 | Slew =0.03                                 | 4R3 | 4  | 0              | 6,004,971:08:0 |      |
| 751  | 1  | 112 | 20:09:31.733 | 117DA105A106A4D | 7STRP    | 0.00167,0.0,0.0,0 | Slew =12.01                                | 4R3 | 4  | 0              | 6,004,972:06:0 |      |
| 752  | 1  | 112 | 20:09:38.400 | 117DA105A106A4E | 7STRP    | -0.0017,0.0,0.0,0 | Slew =0.03                                 | 4R3 | 4  | 0              | 6,004,972:16:0 |      |
| 753  | 1  | 112 | 20:10:37.733 | 117DA105A106A4F | 7STRP    | 0.00167,0.0,0.0,0 | Slew =12.01                                | 4R3 | 4  | 0              | 6,004,973:14:0 |      |
| 754  | 1  | 112 | 20:10:44.400 | 117DA105A106A4G | 7STRP    | -0.0017,0.0,0.0,0 | Slew =0.03                                 | 4R3 | 4  | 0              | 6,004,973:24:0 |      |
| 755  | 1  | 112 | 20:11:43.733 | 117DA105A106A4H | 7STRP    | 0.00167,0.0,0.0,0 | Slew =12.01                                | 4R3 | 4  | 0              | 6,004,974:22:0 |      |
| 756  | 1  | 112 | 20:11:50.400 | 117DA105A106A4I | 7STRP    | -0.0017,0.0,0.0,0 | Slew =0.03                                 | 4R3 | 4  | 0              | 6,004,974:32:0 |      |
| 757  | 1  | 112 | 20:12:49.733 | 117DA11A        | CSMOS    | GE                | **** GROUP END CSMOS                       | 4R3 | 4  | 0              | 6,004,975:30:0 |      |
| 758  | 1  | 112 | 20:13:23.733 |                 | DMS:     | :*RUNDOWN         | R28, TRACK 1, FWD, TIC *3270.20 +/- 1      | 4R3 | 4  | 0              | 6,004,975:81:0 |      |
| 759  | 1  | 112 | 20:13:23.733 | 175DA422A6B     | 6DMSC    | RDY,0             | DMS Control Tape stop                      | 4R3 | 4  | 0              | 6,004,975:81:0 |      |
| 760  | 1  | 112 | 20:13:24.933 |                 | DMS:     | :*READY           | RDY, TRACK 1, FWD, TIC *3270.50 +/- 1      | 4R3 | 4  | 0              | 6,004,975:82:8 |      |
| 761  | 1  | 112 | 20:13:29.100 | 29HNSTRCAL01-   |          | -----STOP-----    |  | 4R3 | 4  | 0              | :              |      |
| 762  | 1  | 112 | 20:17:37.000 | 29HNDRKCAL01-   |          | -----START-----   |  | 4R3 | 4  | 0              | :              |      |
| 763  | 1  | 112 | 20:18:19.066 | 20DB5A          | 37PL     |                   | Program Load (halts microprocessor & unwri | 4   | 0  | 6,004,980:69:0 |                |      |
| 764  | 1  | 112 | 20:18:26.400 | 20DB5B          | 37MRL    |                   | Memory Realocate (software operates from R | 4   | 0  | 6,004,980:80:0 |                |      |
| 765  | 1  | 112 | 20:18:34.400 | 20DB6A          | 6MCOPY   | NIMS              | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 6,004,981:01:0 |                |      |
| 766  | 1  | 112 | 20:18:44.400 | 20DB6B          | 6MCOPY   | NIMS              | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 6,004,981:16:0 |                |      |
| 767  | 1  | 112 | 20:18:54.400 | 20DB5C          | 37IRT    |                   | Instrument Reset (goes into POR state)     | 4   | 0  | 6,004,981:31:0 |                |      |
| 768  | 1  | 112 | 20:18:55.733 | 20DB5D          | 37MN     |                   | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 6,004,981:33:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID          | Command  | Parameters       | Description                                | GCM | GO | GS             | RIM            | MF I |
|------|----|-----|--------------|---------------|----------|------------------|--|-----|----|----------------|----------------|------|
| 769  | 1  | 112 | 20:19:27.066 | 20DB4A        | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 6,004,981:80:0 |      |
| 770  | 1  | 112 | 20:20:30.400 | 125DB         | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R0 | 4  | 0              | 6,004,982:84:0 |      |
| 771  | 1  | 112 | 20:20:30.400 | 125DB11A      | NIMSINIT | GE               | ##### GROUP END INIT                       | 2R0 | 4  | 0              | 6,004,982:84:0 |      |
| 772  | 1  | 112 | 20:20:30.400 | 125DB4A       | 37IST    | 0,2,0,OFF,0,1,0  | Gain State 2                               | 2R0 | 4  | 0              | 6,004,982:84:0 |      |
| 773  | 1  | 112 | 20:20:34.400 | 165DB4A       | 7SCAN    | NORM,99.947,-16. | Check S/P Position                         | 2R0 | 4  | 0              | 6,004,982:90:0 |      |
| 774  | 1  | 112 | 20:21:31.066 | 127DB         | NIMSTAB  | GS               | ##### GROUP START TAB                      | 2R0 | 4  | 0              | 6,004,983:84:0 |      |
| 775  | 1  | 112 | 20:21:31.066 | 127DB4A       | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 2R3 | 4  | 0              | 6,004,983:84:0 |      |
| 776  | 1  | 112 | 20:21:31.733 | 127DB4B       | 37ETB    | 04,C4,35,FF,FF   | Loads wavelength edit table                | 2R3 | 4  | 0              | 6,004,983:85:0 |      |
| 777  | 1  | 112 | 20:21:39.733 | 127DB11A      | NIMSTAB  | GE               | ##### GROUP END TAB                        | 2R3 | 4  | 0              | 6,004,984:06:0 |      |
| 778  | 1  | 112 | 20:24:24.400 | DMS:          |          | *E4-DELAY        | RDY, TRACK 1, FWD, TIC 3270.50 +/- 1       | 2R3 | 4  | 0              | 6,004,986:71:0 |      |
| 779  | 1  | 112 | 20:24:24.400 | 175DB422A6A   | 6DMSC    | R28,1            | DMS Control                                | 2R3 | 4  | 0              | 6,004,986:71:0 |      |
| 780  | 1  | 112 | 20:24:31.066 | DMS:          |          | *RUNUP           | R28, TRACK 1, FWD, TIC 3270.50 +/- 1       | 2R3 | 4  | 0              | 6,004,986:81:0 |      |
| 781  | 1  | 112 | 20:24:34.400 | 175DB176A6A   | 6TMREC   | MPW              | 28.8 KBPS PWS + NIMS RECORD Record Mode C  | 2R3 | 4  | 0              | 6,004,986:86:0 |      |
| 782  | 1  | 112 | 20:24:35.066 | DMS:          |          | *RECORD          | R28, TRACK 1, FWD, TIC *3272.00 +/- 1      | 2R3 | 4  | 0              | 6,004,986:87:0 |      |
| 783  | 1  | 112 | 20:24:35.066 | DMS:          |          | *AT SPD          | R28, TRACK 1, FWD, TIC 3272.00 +/- 1       | 2R3 | 4  | 0              | 6,004,986:87:0 |      |
| 784  | 1  | 112 | 20:25:33.733 | 125ED         | NIMSINIT | GS               | ##### GROUP START INIT                     | 2R3 | 4  | 0              | 6,004,987:84:0 |      |
| 785  | 1  | 112 | 20:25:33.733 | 125ED4A       | 37IST    | 0,2,0,OFF,0,1,1  | Gain State 4                               | 4R3 | 4  | 0              | 6,004,987:84:0 |      |
| 786  | 1  | 112 | 20:25:33.733 | 125ED11A      | NIMSINIT | GE               | ##### GROUP END INIT                       | 4R3 | 4  | 0              | 6,004,987:84:0 |      |
| 787  | 1  | 112 | 20:26:34.400 | 125EF4A       | 37IST    | 0,2,0,OFF,0,1,2  | Gain State 3                               | 3R3 | 4  | 0              | 6,004,988:84:0 |      |
| 788  | 1  | 112 | 20:26:34.400 | 125EF         | NIMSINIT | GS               | ##### GROUP START INIT                     | 3R3 | 4  | 0              | 6,004,988:84:0 |      |
| 789  | 1  | 112 | 20:26:34.400 | 125EF11A      | NIMSINIT | GE               | ##### GROUP END INIT                       | 3R3 | 4  | 0              | 6,004,988:84:0 |      |
| 790  | 1  | 112 | 20:27:35.066 | 125EG4A       | 37IST    | 0,2,0,OFF,0,1,3  | Gain State 1                               | 1R3 | 4  | 0              | 6,004,989:84:0 |      |
| 791  | 1  | 112 | 20:27:35.066 | 125EG11A      | NIMSINIT | GE               | ##### GROUP END INIT                       | 1R3 | 4  | 0              | 6,004,989:84:0 |      |
| 792  | 1  | 112 | 20:27:35.066 | 125EG         | NIMSINIT | GS               | ##### GROUP START INIT                     | 1R3 | 4  | 0              | 6,004,989:84:0 |      |
| 793  | 1  | 112 | 20:30:35.066 | 175DB422A6B   | 6DMSC    | RDY,0            | DMS Control Tape stop                      | 1R3 | 4  | 0              | 6,004,992:81:0 |      |
| 794  | 1  | 112 | 20:30:35.066 | DMS:          |          | *RUNDOWN         | R28, TRACK 1, FWD, TIC *3588.40 +/- 1      | 1R3 | 4  | 0              | 6,004,992:81:0 |      |
| 795  | 1  | 112 | 20:30:36.266 | DMS:          |          | *READY           | RDY, TRACK 1, FWD, TIC *3588.70 +/- 1      | 1R3 | 4  | 0              | 6,004,992:82:8 |      |
| 796  | 1  | 112 | 20:30:40.500 | 29HNRKCAL01-  |          | -----STOP-----   |  | 1R3 | 4  | 0              | :              |      |
| 797  | 1  | 112 | 20:55:13.066 | 488DC6C       | 6TMSED   | FILL,AH4         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,005,017:23:0 |      |
| 798  | 1  | 112 | 21:14:59.733 | 444SN443A4A   | 7MODE    | CRU              | AACS CRUISE MODE                           | 1R3 | 4  | 0              | 6,005,036:74:0 |      |
| 799  | 1  | 112 | 21:28:52.400 | 488DD6A       | 6TMSED   | NORM,AH4         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,005,050:49:0 |      |
| 800  | 1  | 113 | 02:44:49.066 | 488DD6B       | 6TMSED   | NORM,AH3         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,005,363:01:0 |      |
| 801  | 1  | 113 | 03:29:37.066 | 488DE6A       | 6TMSED   | NORM,AH2         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,005,407:29:0 |      |
| 802  | 1  | 113 | 03:29:51.733 | 488DE6B       | 6TMSED   | FILL,AH2         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,005,407:51:0 |      |
| 803  | 1  | 113 | 03:46:41.066 | 488DE6C       | 6TMSED   | FILL,AH4         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,005,424:18:0 |      |
| 804  | 1  | 113 | 04:05:45.733 | 29NNRCTCAL01- |          | -----START-----  |  | 1R3 | 4  | 0              | :              |      |
| 805  | 1  | 113 | 04:05:45.733 | 20XE4A        | 7SAFE    | NSTOW            | S/P TO 153 deg cone                        | 1R3 | 4  | 0              | 6,005,443:06:0 |      |
| 806  | 1  | 113 | 04:09:52.400 | 20FA4A        | 7SAFE    | STOP             | S/P NO MOVEMENT                            | 1R3 | 4  | 0              | 6,005,447:12:0 |      |
| 807  | 1  | 113 | 04:10:42.400 | 20FA4B        | 7SLEW    | DIS,POS,0,0      | Stator movement                            | 1R3 | 4  | 0              | 6,005,447:87:0 |      |
| 808  | 1  | 113 | 04:13:47.066 | 185XE10A3A    | 40HRP    |                  | 1 RCT Heater ON (primary relay)            | 1R3 | 4  | 0              | 6,005,451:00:0 |      |
| 809  | 1  | 113 | 04:13:52.400 | 185XE10B3A    | 40HRP    |                  | 2 RCT Heater ON (primary relay)            | 1R3 | 4  | 0              | 6,005,451:08:0 |      |
| 810  | 1  | 113 | 15:26:44.400 | 488DF6A       | 6TMSED   | NORM,AH4         | Sci, Eng, and D/L Chan                     | 1R3 | 4  | 0              | 6,006,116:51:0 |      |
| 811  | 1  | 113 | 16:05:21.733 | 20DC5A        | 37PL     |                  | Program Load (halts microprocessor & unwri | 4   | 0  | 6,006,154:69:0 |                |      |
| 812  | 1  | 113 | 16:05:29.066 | 20DC5B        | 37MRL    |                  | Memory Realocate (software operates from R | 4   | 0  | 6,006,154:80:0 |                |      |
| 813  | 1  | 113 | 16:05:37.066 | 20DC6A        | 6MCOPI   | NIMS             | NIMS,1000,LLM1A,7300,77F7                  | 4   | 0  | 6,006,155:01:0 |                |      |
| 814  | 1  | 113 | 16:05:47.066 | 20DC6B        | 6MCOPI   | NIMS             | NIMS,1598,LLM1A,77F8,781D                  | 4   | 0  | 6,006,155:16:0 |                |      |
| 815  | 1  | 113 | 16:05:57.066 | 20DC5C        | 37IRT    |                  | Instrument Reset (goes into POR state)     | 4   | 0  | 6,006,155:31:0 |                |      |
| 816  | 1  | 113 | 16:05:58.400 | 20DC5D        | 37MN     |                  | Memory Normal (software operates from ROM) | 260 | 4  | 0              | 6,006,155:33:0 |      |
| 817  | 1  | 113 | 16:06:29.733 | 20DC4A        | 37IST    | 1,2,0,OFF,0,0,0  | Chopper ON, Sync, Chopper (Ref)            | 2R0 | 4  | 0              | 6,006,155:80:0 |      |
| 818  | 1  | 113 | 16:07:30.400 | 20DC4B        | 37IST    | 0,2,0,OFF,0,1,3  | Gain State 1                               | 1R0 | 4  | 0              | 6,006,156:80:0 |      |
| 819  | 1  | 113 | 16:13:37.066 | 127XE         | NIMSTAB  | GS               | ##### GROUP START TAB                      | 1R0 | 4  | 0              | 6,006,162:84:0 |      |
| 820  | 1  | 113 | 16:13:37.066 | 127XE4A       | 37IOP    | 3,0              | Long Map, Grating Start Position =00       | 1R3 | 4  | 0              | 6,006,162:84:0 |      |
| 821  | 1  | 113 | 16:13:37.733 | 127XE4B       | 37ETB    | 04,C4,35,FF,FF   | Loads wavelength edit table                | 1R3 | 4  | 0              | 6,006,162:85:0 |      |
| 822  | 1  | 113 | 16:13:45.733 | 127XE11A      | NIMSTAB  | GE               | ##### GROUP END TAB                        | 1R3 | 4  | 0              | 6,006,163:06:0 |      |
| 823  | 1  | 113 | 16:19:47.733 | 20UT4A        | 7SCAN    | NORM,76.39,22.39 | Check S/P Position                         | 1R3 | 4  | 0              | 6,006,169:03:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID           | Command  | Parameters         | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|----------|--------------------|---|-----|----|----|----------------|------|
| 824  | 1  | 113 | 16:23:48.400 | 192XE4A        | 7CONE    | 17.0,119.7         | Check S/P Position                        | 1R3 | 4  | 0  | 6,006.173:00:0 |      |
| 825  | 1  | 113 | 16:29:52.400 | 192XE4B        | 7CONE    | 17.0,0.0           | Check S/P Position                        | 1R3 | 4  | 0  | 6,006.179:00:0 |      |
| 826  | 1  | 113 | 16:32:41.066 | 175XF422A6A    | 6DMSC    | R28,1              | DMS Control                               | 1R3 | 4  | 0  | 6,006.181:71:0 |      |
| 827  | 1  | 113 | 16:32:41.066 |                | DMS:     | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 3588.70 +/- 1      | 1R3 | 4  | 0  | 6,006.181:71:0 |      |
| 828  | 1  | 113 | 16:32:47.733 |                | DMS:     | :*RUNUP            | RDY, TRACK 1, FWD, TIC 3588.70 +/- 1      | 1R3 | 4  | 0  | 6,006.181:81:0 |      |
| 829  | 1  | 113 | 16:32:51.066 | 175XF176A6A    | 6TMREC   | MPW                | 28.8 KBPS PWS + NIMS RECORD Record Mode C | 1R3 | 4  | 0  | 6,006.181:86:0 |      |
| 830  | 1  | 113 | 16:32:51.733 |                | DMS:     | :*RECORD           | R28, TRACK 1, FWD, TIC *3590.20 +/- 1     | 1R3 | 4  | 0  | 6,006.181:87:0 |      |
| 831  | 1  | 113 | 16:32:51.733 |                | DMS:     | :*AT SPD           | R28, TRACK 1, FWD, TIC 3590.20 +/- 1      | 1R3 | 4  | 0  | 6,006.181:87:0 |      |
| 832  | 1  | 113 | 16:37:57.733 | 185XE10C3A     | 40HRPR   |                    | 1 RCT Heater OFF (primary relay)          | 1R3 | 4  | 0  | 6,006.187:00:0 |      |
| 833  | 1  | 113 | 16:38:03.066 | 185XE10D3A     | 40HRPR   |                    | 2 RCT Heater OFF (primary relay)          | 1R3 | 4  | 0  | 6,006.187:08:0 |      |
| 834  | 1  | 113 | 16:42:58.400 |                | DMS:     | :*RUNDOWN          | R28, TRACK 1, FWD, TIC *4123.41 +/- 1     | 1R3 | 4  | 0  | 6,006.191:87:0 |      |
| 835  | 1  | 113 | 16:42:58.400 | 175XF422A6B    | 6DMSC    | RDY,0              | DMS Control Tape stop                     | 1R3 | 4  | 0  | 6,006.191:87:0 |      |
| 836  | 1  | 113 | 16:42:59.600 |                | DMS:     | :*READY            | RDY, TRACK 1, FWD, TIC *4123.71 +/- 1     | 1R3 | 4  | 0  | 6,006.191:88:8 |      |
| 837  | 1  | 113 | 16:43:01.066 | 192XE4C        | 7CONE    | 17.0,153.0         | Check S/P Position                        | 1R3 | 4  | 0  | 6,006.192:00:0 |      |
| 838  | 1  | 113 | 16:49:00.400 | 127XF          | NIMSTAB  | GS                 | %%%% GROUP START TAB                      | 1R3 | 4  | 0  | 6,006.197:84:0 |      |
| 839  | 1  | 113 | 16:49:00.400 | 127XF4A        | 37IOP    | 0,0                | Safe, Grating Start Position =00          | 1R0 | 4  | 0  | 6,006.197:84:0 |      |
| 840  | 1  | 113 | 16:49:01.066 | 127XF4B        | 37ETB    | 04,C4,02,00,00     | Loads wavelength edit table               | 1R0 | 4  | 0  | 6,006.197:85:0 |      |
| 841  | 1  | 113 | 16:49:09.066 | 127XF11A       | NIMSTAB  | GE                 | %%%% GROUP END TAB                        | 1R0 | 4  | 0  | 6,006.198:06:0 |      |
| 842  | 1  | 113 | 16:52:02.400 | 125XF          | NIMSINIT | GS                 | ##### GROUP START INIT                    | 1R0 | 4  | 0  | 6,006.200:84:0 |      |
| 843  | 1  | 113 | 16:52:02.400 | 125XF4A        | 37MB     | 0,0,0,0,0,0        | Selects mirror (spatial) edit table       | 1R0 | 4  | 0  | 6,006.200:84:0 |      |
| 844  | 1  | 113 | 16:53:03.066 | 125XF4B        | 37IST    | 1,0,0,OFF,0,0,0    | Chopper ON, Sync, 63Hz (Ref)              | 160 | 4  | 0  | 6,006.201:84:0 |      |
| 845  | 1  | 113 | 16:54:03.733 | 125XF4C        | 37IST    | 1,1,0,OFF,0,0,0    | Chopper OFF, N/A, 63Hz (Ref)              | 100 | 4  | 0  | 6,006.202:84:0 |      |
| 846  | 1  | 113 | 16:54:03.733 | 125XF11A       | NIMSINIT | GE                 | ##### GROUP END INIT                      | 100 | 4  | 0  | 6,006.202:84:0 |      |
| 847  | 1  | 113 | 16:54:12.400 | 29NNRCTCAL01-  |          | -----STOP-----     |   | 100 | 4  | 0  | :              |      |
| 848  | 1  | 113 | 17:00:17.066 | 488DF6B        | 6TMSED   | FILL,AH4           | Sci, Eng, and D/L Chan                    | 100 | 4  | 0  | 6,006.209:07:0 |      |
| 849  | 1  | 113 | 17:01:12.400 | 165JA4A        | 7SCAN    | NORM,43.823,13.1   | Check S/P Position                        | 100 | 4  | 0  | 6,006.209:90:0 |      |
| 850  | 1  | 113 | 17:33:25.066 | 444WA443A4B    | 7MODE    | INT                | AACS INERTIAL MODE                        | 100 | 4  | 0  | 6,006.241:77:0 |      |
| 851  | 1  | 113 | 17:33:56.400 | 488DF6C        | 6TMSED   | NORM,AH4           | Sci, Eng, and D/L Chan                    | 100 | 4  | 0  | 6,006.242:33:0 |      |
| 852  | 1  | 113 | 18:23:06.400 | 165IA4A        | 7SCAN    | NORM,43.556,13.1   | Check S/P Position                        | 100 | 4  | 0  | 6,006.290:90:0 |      |
| 853  | 1  | 113 | 18:25:12.400 | 118IA          | SMOS     | GS                 |   | 100 | 4  | 0  | 6,006.293:06:0 |      |
| 854  | 1  | 113 | 18:25:37.066 | 118IA110A11A4A | 7STRP    | 0.00406,0.0,0.92,0 | Slew = 2.03                               | 100 | 4  | 0  | 6,006.293:43:0 |      |
| 855  | 1  | 113 | 18:26:01.733 | 175IA422A6A    | 6DMSC    | R115,1             | DMS Control                               | 100 | 4  | 0  | 6,006.293:80:0 |      |
| 856  | 1  | 113 | 18:26:01.733 |                | DMS:     | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 4123.71 +/- 1      | 100 | 4  | 0  | 6,006.293:80:0 |      |
| 857  | 1  | 113 | 18:26:07.733 | 118IA11A       | SMOS     | GE                 |   | 100 | 4  | 0  | 6,006.293:89:0 |      |
| 858  | 1  | 113 | 18:26:08.400 |                | DMS:     | :*RUNUP            | R115, TRACK 1, FWD, TIC 4123.71 +/- 1     | 100 | 4  | 0  | 6,006.293:90:0 |      |
| 859  | 1  | 113 | 18:26:11.733 | 175IA176A6A    | 6TMREC   | HMA                | 115.2 KBPS IMAGE(1-400)RECORD Record Mode | 100 | 4  | 0  | 6,006.294:04:0 |      |
| 860  | 1  | 113 | 18:26:12.400 |                | DMS:     | :*AT SPD           | R115, TRACK 1, FWD, TIC 4130.01 +/- 1     | 100 | 4  | 0  | 6,006.294:05:0 |      |
| 861  | 1  | 113 | 18:26:12.400 |                | DMS:     | :*RECORD           | R115, TRACK 1, FWD, TIC *4130.01 +/- 1    | 100 | 4  | 0  | 6,006.294:05:0 |      |
| 862  | 1  | 113 | 18:26:15.733 | 165IB4A        | 7SCAN    | NORM,43.556,13.1   | Check S/P Position                        | 100 | 4  | 0  | 6,006.294:10:0 |      |
| 863  | 1  | 113 | 18:26:29.066 | 175IA422A6B    | 6DMSC    | RDY,0              | DMS Control Tape stop                     | 100 | 4  | 0  | 6,006.294:30:0 |      |
| 864  | 1  | 113 | 18:26:29.066 |                | DMS:     | :*RUNDOWN          | R115, TRACK 1, FWD, TIC *4188.60 +/- 1    | 100 | 4  | 0  | 6,006.294:30:0 |      |
| 865  | 1  | 113 | 18:26:30.266 |                | DMS:     | :*READY            | RDY, TRACK 1, FWD, TIC *4189.60 +/- 1     | 100 | 4  | 0  | 6,006.294:31:8 |      |
| 866  | 1  | 113 | 18:28:14.400 | 118IB          | SMOS     | GS                 |   | 100 | 4  | 0  | 6,006.296:06:0 |      |
| 867  | 1  | 113 | 18:29:08.400 | 118IB110A11A4A | 7STRP    | 0.00406,0.0,0.182, | Slew = 2.03                               | 100 | 4  | 0  | 6,006.296:87:0 |      |
| 868  | 1  | 113 | 18:30:08.400 |                | DMS:     | :*E4-DELAY         | RDY, TRACK 1, FWD, TIC 4189.60 +/- 1      | 100 | 4  | 0  | 6,006.297:86:0 |      |
| 869  | 1  | 113 | 18:30:08.400 | 175IB422A6A    | 6DMSC    | R115,1             | DMS Control                               | 100 | 4  | 0  | 6,006.297:86:0 |      |
| 870  | 1  | 113 | 18:30:09.066 | 118IB11A       | SMOS     | GE                 |   | 100 | 4  | 0  | 6,006.297:87:0 |      |
| 871  | 1  | 113 | 18:30:15.066 |                | DMS:     | :*RUNUP            | R115, TRACK 1, FWD, TIC 4189.60 +/- 1     | 100 | 4  | 0  | 6,006.298:05:0 |      |
| 872  | 1  | 113 | 18:30:18.400 | 175IB176A6A    | 6TMREC   | HIM                | 115.2 KBPS SSI + NIMS RECORD Record Mode  | 100 | 4  | 0  | 6,006.298:10:0 |      |
| 873  | 1  | 113 | 18:30:18.400 | 165IC4A        | 7SCAN    | NORM,43.556,13.1   | Check S/P Position                        | 100 | 4  | 0  | 6,006.298:10:0 |      |
| 874  | 1  | 113 | 18:30:19.066 |                | DMS:     | :*AT SPD           | R115, TRACK 1, FWD, TIC 4195.90 +/- 2     | 100 | 4  | 0  | 6,006.298:11:0 |      |
| 875  | 1  | 113 | 18:30:19.066 |                | DMS:     | :*RECORD           | R115, TRACK 1, FWD, TIC *4195.90 +/- 1    | 100 | 4  | 0  | 6,006.298:11:0 |      |
| 876  | 1  | 113 | 18:30:35.733 | 175IB422A6B    | 6DMSC    | RDY,0              | DMS Control Tape stop                     | 100 | 4  | 0  | 6,006.298:36:0 |      |
| 877  | 1  | 113 | 18:30:35.733 |                | DMS:     | :*RUNDOWN          | R115, TRACK 1, FWD, TIC *4254.49 +/- 2    | 100 | 4  | 0  | 6,006.298:36:0 |      |
| 878  | 1  | 113 | 18:30:36.933 |                | DMS:     | :*READY            | RDY, TRACK 1, FWD, TIC *4255.49 +/- 2     | 100 | 4  | 0  | 6,006.298:37:8 |      |



| Line | YR | DOY | SCET - GMT   | PSID           | Command Parameters                        | Description   | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|----------------|---|---|-----|----|----|----------------|------|
| 879  | 1  | 113 | 18:32:17.066 | 118IC          | SMOS GS                                   |   | 100 | 4  | 0  | 6,006,300:06:0 |      |
| 880  | 1  | 113 | 18:33:11.066 | 118IC10A111A4A | 7STRP 0.00406,0.0,182,<br>DMS: :*E4-DELAY | Slew = 2.03<br>RDY, TRACK 1, FWD, TIC 4255.49 +/- 2 | 100 | 4  | 0  | 6,006,300:87:0 |      |
| 881  | 1  | 113 | 18:34:11.066 | 175IC422A6A    | 6DMSC R115,1                              | DMS Control   | 100 | 4  | 0  | 6,006,301:86:0 |      |
| 882  | 1  | 113 | 18:34:11.066 | 118IC11A       | SMOS GE                                   |   | 100 | 4  | 0  | 6,006,301:87:0 |      |
| 883  | 1  | 113 | 18:34:17.733 | 175IC176A6A    | 6TMREC HIM                                | R115, TRACK 1, FWD, TIC 4255.49 +/- 2               | 100 | 4  | 0  | 6,006,302:05:0 |      |
| 884  | 1  | 113 | 18:34:21.733 | 488DF6D        | 6TMSED NORM,AH3                           | 115.2 KBPS SSI + NIMS RECORD Record Mode            | 100 | 4  | 0  | 6,006,302:10:0 |      |
| 885  | 1  | 113 | 18:34:21.733 | 488DF6E        | 6TMSED NORM,AH2                           | R115, TRACK 1, FWD, TIC *4261.79 +/- 2              | 100 | 4  | 0  | 6,006,302:11:0 |      |
| 886  | 1  | 113 | 18:34:21.733 | 444WB443A4A    | 7MODE CRU                                 | R115, TRACK 1, FWD, TIC 4261.79 +/- 2               | 100 | 4  | 0  | 6,006,302:11:0 |      |
| 887  | 1  | 113 | 18:34:38.400 | 20KA4A         | 7SAFE UNSTOW                              | DMS Control Tape stop                               | 100 | 4  | 0  | 6,006,302:36:0 |      |
| 888  | 1  | 113 | 18:34:38.400 | 29NNCITRN01-   | *****START*****                           |   | 100 | 4  | 0  | 6,006,302:36:0 |      |
| 889  | 1  | 113 | 18:34:39.600 | 20UC4C         | 7STAT 10.00,256.39,-22                    | R115, TRACK 1, FWD, TIC *4320.39 +/- 2              | 100 | 4  | 0  | 6,006,302:37:8 |      |
| 890  | 1  | 113 | 18:40:33.066 | 488DG6A        | 6TMSED FILL,AH2                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,308:22:0 |      |
| 891  | 1  | 113 | 18:40:33.066 | 488DG6B        | 6TMSED FILL,AH1                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,320:82:0 |      |
| 892  | 1  | 113 | 18:40:33.066 | 488DG6C        | 6TMSED FILL,AL1                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,327:43:0 |      |
| 893  | 1  | 113 | 18:40:33.066 | 488DG6D        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 894  | 1  | 113 | 18:40:33.066 | 488DG6E        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 895  | 1  | 113 | 18:40:33.066 | 488DG6F        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 896  | 1  | 113 | 18:40:33.066 | 488DG6G        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 897  | 1  | 113 | 18:40:33.066 | 488DG6H        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 898  | 1  | 113 | 18:40:33.066 | 488DG6I        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 899  | 1  | 113 | 18:40:33.066 | 488DG6J        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 900  | 1  | 113 | 18:40:33.066 | 488DG6K        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 901  | 1  | 113 | 18:40:33.066 | 488DG6L        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 902  | 1  | 113 | 18:40:33.066 | 488DG6M        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 903  | 1  | 113 | 18:40:33.066 | 488DG6N        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 904  | 1  | 113 | 18:40:33.066 | 488DG6O        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 905  | 1  | 113 | 18:40:33.066 | 488DG6P        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 906  | 1  | 113 | 18:40:33.066 | 488DG6Q        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 907  | 1  | 113 | 18:40:33.066 | 488DG6R        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 908  | 1  | 113 | 18:40:33.066 | 488DG6S        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 909  | 1  | 113 | 18:40:33.066 | 488DG6T        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 910  | 1  | 113 | 18:40:33.066 | 488DG6U        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 911  | 1  | 113 | 18:40:33.066 | 488DG6V        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 912  | 1  | 113 | 18:40:33.066 | 488DG6W        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 913  | 1  | 113 | 18:40:33.066 | 488DG6X        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 914  | 1  | 113 | 18:40:33.066 | 488DG6Y        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 915  | 1  | 113 | 18:40:33.066 | 488DG6Z        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 916  | 1  | 113 | 18:40:33.066 | 488DG7A        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 917  | 1  | 113 | 18:40:33.066 | 488DG7B        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 918  | 1  | 113 | 18:40:33.066 | 488DG7C        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 919  | 1  | 113 | 18:40:33.066 | 488DG7D        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 920  | 1  | 113 | 18:40:33.066 | 488DG7E        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 921  | 1  | 113 | 18:40:33.066 | 488DG7F        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 922  | 1  | 113 | 18:40:33.066 | 488DG7G        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 923  | 1  | 113 | 18:40:33.066 | 488DG7H        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 924  | 1  | 113 | 18:40:33.066 | 488DG7I        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 925  | 1  | 113 | 18:40:33.066 | 488DG7J        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 926  | 1  | 113 | 18:40:33.066 | 488DG7K        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 927  | 1  | 113 | 18:40:33.066 | 488DG7L        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 928  | 1  | 113 | 18:40:33.066 | 488DG7M        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 929  | 1  | 113 | 18:40:33.066 | 488DG7N        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 930  | 1  | 113 | 18:40:33.066 | 488DG7O        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 931  | 1  | 113 | 18:40:33.066 | 488DG7P        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 932  | 1  | 113 | 18:40:33.066 | 488DG7Q        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |
| 933  | 1  | 113 | 18:40:33.066 | 488DG7R        | 6TMSED FILL,AL3                           | Sci, Eng, and D/L Chan                              | 100 | 4  | 0  | 6,006,330:22:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters     | Description                              | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|---------|----------------|--|-----|----|----|----------------|------|
| 934  | 1  | 113 | 22:48:05.733 | 127FB11A    | NIMSTAB | GE             | %%%GROUP END TAB                         | 4R3 | 4  | 0  | 6,006,553:06:0 |      |
| 935  | 1  | 113 | 22:48:13.733 | 488DH6A     | 6TMSED  | FILL/AH3       | Sci, Eng, and D/L Chan                   | 4R3 | 4  | 0  | 6,006,553:18:0 |      |
| 936  | 1  | 113 | 22:48:49.066 |             | DMS:    | :*E4-DELAY     | RDY, TRACK 1, FWD, TIC 4321.39 +/- 2     | 4R3 | 4  | 0  | 6,006,553:71:0 |      |
| 937  | 1  | 113 | 22:48:49.066 | 175EA422A6A | 6DMSC   | R28,1          | DMS Control                              | 4R3 | 4  | 0  | 6,006,553:71:0 |      |
| 938  | 1  | 113 | 22:48:55.733 |             | DMS:    | :*RUNUP        | 28,8, TRACK 1, FWD, TIC 4321.39 +/- 2    | 4R3 | 4  | 0  | 6,006,553:81:0 |      |
| 939  | 1  | 113 | 22:48:59.066 | 175EA176A6A | 6TMREC  | MPW            | 28.8, TRACK 1, FWD, TIC 4322.89 +/- 2    | 4R3 | 4  | 0  | 6,006,553:86:0 |      |
| 940  | 1  | 113 | 22:48:59.733 |             | DMS:    | :*AT SPD       | R28, TRACK 1, FWD, TIC 4322.89 +/- 2     | 4R3 | 4  | 0  | 6,006,553:87:0 |      |
| 941  | 1  | 113 | 22:48:59.733 |             | DMS:    | :*RECORD       | R28, TRACK 1, FWD, TIC 4322.89 +/- 2     | 4R3 | 4  | 0  | 6,006,553:87:0 |      |
| 942  | 1  | 113 | 22:51:01.066 | 175EA422A6B | 6DMSC   | RDY,0          | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,555:87:0 |      |
| 943  | 1  | 113 | 22:51:02.266 |             | DMS:    | :*RUNDOWN      | R28, TRACK 1, FWD, TIC *4429.53 +/- 2    | 4R3 | 4  | 0  | 6,006,555:87:0 |      |
| 944  | 1  | 113 | 22:51:02.266 |             | DMS:    | :*READY        | RDY, TRACK 1, FWD, TIC *4429.83 +/- 2    | 4R3 | 4  | 0  | 6,006,555:88:8 |      |
| 945  | 1  | 113 | 22:51:03.733 | 192FC4A     | 7CONE   | 17,0,54,88     | Check S/P Position                       | 4R3 | 4  | 0  | 6,006,556:00:0 |      |
| 946  | 1  | 113 | 22:51:04.400 | 192FC4B     | 7CLK    | 17,0,244,07    | Check S/P Position                       | 4R3 | 4  | 0  | 6,006,556:01:0 |      |
| 947  | 1  | 113 | 22:54:53.066 |             | DMS:    | :*E4-DELAY     | RDY, TRACK 1, FWD, TIC 4429.83 +/- 2     | 4R3 | 4  | 0  | 6,006,559:71:0 |      |
| 948  | 1  | 113 | 22:54:53.066 | 175EB422A6A | 6DMSC   | R28,1          | DMS Control                              | 4R3 | 4  | 0  | 6,006,559:71:0 |      |
| 949  | 1  | 113 | 22:54:59.733 |             | DMS:    | :*RUNUP        | R28, TRACK 1, FWD, TIC 4429.83 +/- 2     | 4R3 | 4  | 0  | 6,006,559:81:0 |      |
| 950  | 1  | 113 | 22:55:03.066 | 175EB176A6A | 6TMREC  | MPW            | 28.8, TRACK 1, FWD, TIC 4429.83 +/- 2    | 4R3 | 4  | 0  | 6,006,559:86:0 |      |
| 951  | 1  | 113 | 22:55:03.733 |             | DMS:    | :*RECORD       | R28, TRACK 1, FWD, TIC 4431.33 +/- 2     | 4R3 | 4  | 0  | 6,006,559:87:0 |      |
| 952  | 1  | 113 | 22:55:03.733 |             | DMS:    | :*AT SPD       | R28, TRACK 1, FWD, TIC 4431.33 +/- 2     | 4R3 | 4  | 0  | 6,006,559:87:0 |      |
| 953  | 1  | 113 | 23:05:10.400 |             | DMS:    | :*RUNDOWN      | R28, TRACK 1, FWD, TIC *4964.53 +/- 2    | 4R3 | 4  | 0  | 6,006,569:87:0 |      |
| 954  | 1  | 113 | 23:05:10.400 | 175EB422A6B | 6DMSC   | RDY,0          | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,569:87:0 |      |
| 955  | 1  | 113 | 23:05:11.600 |             | DMS:    | :*READY        | RDY, TRACK 1, FWD, TIC *4964.83 +/- 2    | 4R3 | 4  | 0  | 6,006,569:88:8 |      |
| 956  | 1  | 113 | 23:14:19.066 | 192IU4A     | 7CONE   | 8,0,60,36      | Check S/P Position                       | 4R3 | 4  | 0  | 6,006,579:00:0 |      |
| 957  | 1  | 113 | 23:14:19.733 | 192IU4B     | 7CLK    | 8,0,243,619999 | Check S/P Position                       | 4R3 | 4  | 0  | 6,006,579:01:0 |      |
| 958  | 1  | 113 | 23:19:19.066 |             | DMS:    | :*E4-DELAY     | RDY, TRACK 1, FWD, TIC 4964.83 +/- 2     | 4R3 | 4  | 0  | 6,006,583:86:0 |      |
| 959  | 1  | 113 | 23:19:19.066 | 175IU422A6A | 6DMSC   | R115,1         | DMS Control                              | 4R3 | 4  | 0  | 6,006,583:86:0 |      |
| 960  | 1  | 113 | 23:19:25.733 |             | DMS:    | :*RUNUP        | R115, TRACK 1, FWD, TIC 4964.83 +/- 2    | 4R3 | 4  | 0  | 6,006,584:05:0 |      |
| 961  | 1  | 113 | 23:19:29.066 | 175IU176A6A | 6TMREC  | HIM            | 115.2, TRACK 1, FWD, TIC 4964.83 +/- 2   | 4R3 | 4  | 0  | 6,006,584:10:0 |      |
| 962  | 1  | 113 | 23:19:29.733 |             | DMS:    | :*AT SPD       | R115, TRACK 1, FWD, TIC 4971.13 +/- 2    | 4R3 | 4  | 0  | 6,006,584:11:0 |      |
| 963  | 1  | 113 | 23:19:29.733 |             | DMS:    | :*RECORD       | R115, TRACK 1, FWD, TIC *4971.13 +/- 2   | 4R3 | 4  | 0  | 6,006,584:11:0 |      |
| 964  | 1  | 113 | 23:22:25.066 |             | DMS:    | :*RUNDOWN      | R115, TRACK 1, FWD, TIC *5587.54 +/- 2   | 4R3 | 4  | 0  | 6,006,587:01:0 |      |
| 965  | 1  | 113 | 23:22:25.066 | 175IU422A6B | 6DMSC   | RDY,0          | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,587:01:0 |      |
| 966  | 1  | 113 | 23:22:26.266 |             | DMS:    | :*READY        | RDY, TRACK 1, FWD, TIC *5588.54 +/- 2    | 4R3 | 4  | 0  | 6,006,587:02:8 |      |
| 967  | 1  | 113 | 23:24:22.400 |             | DMS:    | :*E4-DELAY     | RDY, TRACK 1, FWD, TIC 5588.54 +/- 2     | 4R3 | 4  | 0  | 6,006,588:86:0 |      |
| 968  | 1  | 113 | 23:24:22.400 | 175JU422A6A | 6DMSC   | R115,1         | DMS Control                              | 4R3 | 4  | 0  | 6,006,588:86:0 |      |
| 969  | 1  | 113 | 23:24:29.066 |             | DMS:    | :*RUNUP        | R115, TRACK 1, FWD, TIC 5588.54 +/- 2    | 4R3 | 4  | 0  | 6,006,589:05:0 |      |
| 970  | 1  | 113 | 23:24:32.400 | 175JU176A6A | 6TMREC  | HIM            | 115.2, TRACK 1, FWD, TIC 5588.54 +/- 2   | 4R3 | 4  | 0  | 6,006,589:10:0 |      |
| 971  | 1  | 113 | 23:24:33.066 |             | DMS:    | :*RECORD       | R115, TRACK 1, FWD, TIC *5594.84 +/- 2   | 4R3 | 4  | 0  | 6,006,589:11:0 |      |
| 972  | 1  | 113 | 23:24:33.066 |             | DMS:    | :*AT SPD       | R115, TRACK 1, FWD, TIC 5594.84 +/- 2    | 4R3 | 4  | 0  | 6,006,589:11:0 |      |
| 973  | 1  | 113 | 23:25:17.733 | 488DH6B     | 6TMSED  | NORM/AH3       | Sci, Eng, and D/L Chan                   | 4R3 | 4  | 0  | 6,006,589:78:0 |      |
| 974  | 1  | 113 | 23:25:27.066 |             | DMS:    | :*RUNDOWN      | R115, TRACK 1, FWD, TIC *5784.68 +/- 2   | 4R3 | 4  | 0  | 6,006,590:01:0 |      |
| 975  | 1  | 113 | 23:25:27.066 | 175JU422A6B | 6DMSC   | RDY,0          | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,590:01:0 |      |
| 976  | 1  | 113 | 23:25:28.266 |             | DMS:    | :*READY        | RDY, TRACK 1, FWD, TIC *5785.68 +/- 2    | 4R3 | 4  | 0  | 6,006,590:02:8 |      |
| 977  | 1  | 113 | 23:25:50.400 |             | DMS:    | :*READY        | RDY, TRACK *2, *REV, TIC 5785.68 +/- 2   | 4R3 | 4  | 0  | 6,006,590:36:0 |      |
| 978  | 1  | 113 | 23:25:50.400 | 465KC6A     | 6DMSC   | RDY,2          | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,590:36:0 |      |
| 979  | 1  | 113 | 23:27:23.066 |             | DMS:    | :*US-RUNUP     | P7, TRACK *1, *FWD, TIC 5785.68 +/- 2    | 4R3 | 4  | 0  | 6,006,591:84:0 |      |
| 980  | 1  | 113 | 23:27:23.066 | 175IU422A6A | 6DMSC   | R115,0         | DMS Control Tape runup 115.2kbb          | 4R3 | 4  | 0  | 6,006,591:84:0 |      |
| 981  | 1  | 113 | 23:27:24.466 |             | DMS:    | :*US_AT SP     | P7, TRACK 1, FWD, TIC *5785.80 +/- 2     | 4R3 | 4  | 0  | 6,006,591:86:1 |      |
| 982  | 1  | 113 | 23:27:29.733 |             | DMS:    | :*US_RD        | P7, TRACK 1, FWD, TIC *5787.03 +/- 2     | 4R3 | 4  | 0  | 6,006,592:03:0 |      |
| 983  | 1  | 113 | 23:27:30.933 |             | DMS:    | :*RUNUP        | R115, TRACK *2, *REV, TIC *5787.09 +/- 2 | 4R3 | 4  | 0  | 6,006,592:04:8 |      |
| 984  | 1  | 113 | 23:27:34.400 | 175IU176A6A | 6TMREC  | HIM            | 115.2, TRACK 1, FWD, TIC 5787.09 +/- 2   | 4R3 | 4  | 0  | 6,006,592:10:8 |      |
| 985  | 1  | 113 | 23:27:34.933 |             | DMS:    | :*RECORD       | R115, TRACK 2, REV, TIC *5780.79 +/- 2   | 4R3 | 4  | 0  | 6,006,592:10:8 |      |
| 986  | 1  | 113 | 23:27:34.933 |             | DMS:    | :*AT SPD       | R115, TRACK 2, REV, TIC 5780.79 +/- 2    | 4R3 | 4  | 0  | 6,006,592:10:8 |      |
| 987  | 1  | 113 | 23:28:29.066 | 175IU422A6B | 6DMSC   | RDY,0          | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,593:01:0 |      |
| 988  | 1  | 113 | 23:28:29.066 |             | DMS:    | :*RUNDOWN      | R115, TRACK 2, REV, TIC *5590.48 +/- 2   | 4R3 | 4  | 0  | 6,006,593:01:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters | Description                              | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|---------|------------|--|-----|----|----|----------------|------|
| 989  | 1  | 113 | 23:28:30.266 |             | DMS:    | :*READY    | RDY, TRACK 2, REV, TIC *5589.48 +/- 2    | 4R3 | 4  | 0  | 6,006,593:02:8 |      |
| 990  | 1  | 113 | 23:29:29.066 | 192IU4C     | 7CONE   | 8.0,153.0  | Check S/P Position                       | 4R3 | 4  | 0  | 6,006,594:00:0 |      |
| 991  | 1  | 113 | 23:29:29.733 | 192IU4D     | 7CLK    | 8.0,300.0  | Check S/P Position                       | 4R3 | 4  | 0  | 6,006,594:01:0 |      |
| 992  | 1  | 113 | 23:30:25.066 |             | DMS:    | :*US-RUNUP | P7, TRACK *1,*FWD, TIC *5589.48 +/- 2    | 4R3 | 4  | 0  | 6,006,594:84:0 |      |
| 993  | 1  | 113 | 23:30:25.066 | 175JV422A6A | 6DMSC   | R115.0     | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,594:84:0 |      |
| 994  | 1  | 113 | 23:30:26.466 |             | DMS:    | :*US_AT_SP | P7, TRACK 1, FWD, TIC *5589.60 +/- 2     | 4R3 | 4  | 0  | 6,006,594:86:1 |      |
| 995  | 1  | 113 | 23:30:31.733 |             | DMS:    | :*US_RD    | P7, TRACK 1, FWD, TIC *5590.84 +/- 2     | 4R3 | 4  | 0  | 6,006,595:03:0 |      |
| 996  | 1  | 113 | 23:30:32.933 |             | DMS:    | :*RUNUP    | R115, TRACK *2, REV, TIC *5590.90 +/- 2  | 4R3 | 4  | 0  | 6,006,595:04:8 |      |
| 997  | 1  | 113 | 23:30:36.400 | 175JV176A6A | 6TMREC  | HIM        | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,595:10:0 |      |
| 998  | 1  | 113 | 23:30:36.933 |             | DMS:    | :*AT_SPD   | R115, TRACK 2, REV, TIC *5584.60 +/- 2   | 4R3 | 4  | 0  | 6,006,595:10:8 |      |
| 999  | 1  | 113 | 23:30:36.933 |             | DMS:    | :*RECORD   | R115, TRACK 2, REV, TIC *5584.60 +/- 2   | 4R3 | 4  | 0  | 6,006,595:10:8 |      |
| 1000 | 1  | 113 | 23:31:31.066 | 175JV422A6B | 6DMSC   | RDY.0      | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,596:01:0 |      |
| 1001 | 1  | 113 | 23:31:31.066 |             | DMS:    | :*RUNDOWN  | R115, TRACK 2, REV, TIC *5394.28 +/- 2   | 4R3 | 4  | 0  | 6,006,596:01:0 |      |
| 1002 | 1  | 113 | 23:31:32.266 |             | DMS:    | :*READY    | RDY, TRACK 2, REV, TIC *5393.28 +/- 2    | 4R3 | 4  | 0  | 6,006,596:02:8 |      |
| 1003 | 1  | 113 | 23:33:27.066 |             | DMS:    | :*US-RUNUP | P7, TRACK *1,*FWD, TIC *5393.28 +/- 2    | 4R3 | 4  | 0  | 6,006,597:84:0 |      |
| 1004 | 1  | 113 | 23:33:27.066 | 175IW422A6A | 6DMSC   | R115.0     | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,597:84:0 |      |
| 1005 | 1  | 113 | 23:33:28.466 |             | DMS:    | :*US_AT_SP | P7, TRACK 1, FWD, TIC *5393.40 +/- 2     | 4R3 | 4  | 0  | 6,006,597:86:1 |      |
| 1006 | 1  | 113 | 23:33:33.733 |             | DMS:    | :*US_RD    | P7, TRACK 1, FWD, TIC *5394.64 +/- 2     | 4R3 | 4  | 0  | 6,006,598:03:0 |      |
| 1007 | 1  | 113 | 23:33:34.933 |             | DMS:    | :*RUNUP    | R115, TRACK *2,*REV, TIC *5394.70 +/- 2  | 4R3 | 4  | 0  | 6,006,598:04:8 |      |
| 1008 | 1  | 113 | 23:33:38.400 | 175IW176A6A | 6TMREC  | HIM        | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,598:10:0 |      |
| 1009 | 1  | 113 | 23:33:38.933 |             | DMS:    | :*AT_SPD   | R115, TRACK 2, REV, TIC *5388.40 +/- 2   | 4R3 | 4  | 0  | 6,006,598:10:8 |      |
| 1010 | 1  | 113 | 23:33:38.933 |             | DMS:    | :*RECORD   | R115, TRACK 2, REV, TIC *5388.40 +/- 2   | 4R3 | 4  | 0  | 6,006,598:10:8 |      |
| 1011 | 1  | 113 | 23:34:33.066 | 175IW422A6B | 6DMSC   | RDY.0      | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,599:01:0 |      |
| 1012 | 1  | 113 | 23:34:33.066 |             | DMS:    | :*RUNDOWN  | R115, TRACK 2, REV, TIC *5198.09 +/- 2   | 4R3 | 4  | 0  | 6,006,599:01:0 |      |
| 1013 | 1  | 113 | 23:34:34.266 |             | DMS:    | :*READY    | RDY, TRACK 2, REV, TIC *5197.09 +/- 2    | 4R3 | 4  | 0  | 6,006,599:02:8 |      |
| 1014 | 1  | 113 | 23:36:29.066 | 175JW422A6A | 6DMSC   | R115.0     | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,600:84:0 |      |
| 1015 | 1  | 113 | 23:36:29.066 |             | DMS:    | :*US-RUNUP | P7, TRACK *1,*FWD, TIC *5197.09 +/- 2    | 4R3 | 4  | 0  | 6,006,600:84:0 |      |
| 1016 | 1  | 113 | 23:36:30.466 |             | DMS:    | :*US_AT_SP | P7, TRACK 1, FWD, TIC *5197.21 +/- 2     | 4R3 | 4  | 0  | 6,006,600:86:1 |      |
| 1017 | 1  | 113 | 23:36:35.733 |             | DMS:    | :*US_RD    | P7, TRACK 1, FWD, TIC *5198.44 +/- 2     | 4R3 | 4  | 0  | 6,006,601:03:0 |      |
| 1018 | 1  | 113 | 23:36:36.933 |             | DMS:    | :*RUNUP    | R115, TRACK *2,*REV, TIC *5198.50 +/- 2  | 4R3 | 4  | 0  | 6,006,601:04:8 |      |
| 1019 | 1  | 113 | 23:36:40.400 | 175JW176A6A | 6TMREC  | HIM        | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,601:10:0 |      |
| 1020 | 1  | 113 | 23:36:40.933 |             | DMS:    | :*AT_SPD   | R115, TRACK 2, REV, TIC *5192.20 +/- 2   | 4R3 | 4  | 0  | 6,006,601:10:8 |      |
| 1021 | 1  | 113 | 23:36:40.933 |             | DMS:    | :*RECORD   | R115, TRACK 2, REV, TIC *5192.20 +/- 2   | 4R3 | 4  | 0  | 6,006,601:10:8 |      |
| 1022 | 1  | 113 | 23:37:34.400 | 176IX6A     | 6TMREC  | HIS        | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,602:00:0 |      |
| 1023 | 1  | 113 | 23:38:20.400 | 175JW422A6B | 6DMSC   | RDY.0      | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,602:69:0 |      |
| 1024 | 1  | 113 | 23:38:20.400 |             | DMS:    | :*RUNDOWN  | R115, TRACK 2, REV, TIC *4842.51 +/- 2   | 4R3 | 4  | 0  | 6,006,602:69:0 |      |
| 1025 | 1  | 113 | 23:38:21.600 |             | DMS:    | :*READY    | RDY, TRACK 2, REV, TIC *4841.51 +/- 2    | 4R3 | 4  | 0  | 6,006,602:70:8 |      |
| 1026 | 1  | 113 | 23:39:25.066 |             | DMS:    | :*US-RUNUP | P7, TRACK *1,*FWD, TIC *4841.51 +/- 2    | 4R3 | 4  | 0  | 6,006,603:75:0 |      |
| 1027 | 1  | 113 | 23:39:25.066 | 175IX422A6A | 6DMSC   | R115.0     | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,603:75:0 |      |
| 1028 | 1  | 113 | 23:39:26.466 |             | DMS:    | :*US_AT_SP | P7, TRACK 1, FWD, TIC *4841.63 +/- 2     | 4R3 | 4  | 0  | 6,006,603:77:1 |      |
| 1029 | 1  | 113 | 23:39:31.733 |             | DMS:    | :*US_RD    | P7, TRACK 1, FWD, TIC *4842.87 +/- 2     | 4R3 | 4  | 0  | 6,006,603:85:0 |      |
| 1030 | 1  | 113 | 23:39:32.933 |             | DMS:    | :*RUNUP    | R115, TRACK *2,*REV, TIC *4842.93 +/- 2  | 4R3 | 4  | 0  | 6,006,603:86:8 |      |
| 1031 | 1  | 113 | 23:39:36.400 | 175IX176A6A | 6TMREC  | HIS        | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,604:01:0 |      |
| 1032 | 1  | 113 | 23:39:36.933 |             | DMS:    | :*AT_SPD   | R115, TRACK 2, REV, TIC *4836.63 +/- 2   | 4R3 | 4  | 0  | 6,006,604:01:8 |      |
| 1033 | 1  | 113 | 23:39:36.933 |             | DMS:    | :*RECORD   | R115, TRACK 2, REV, TIC *4836.63 +/- 2   | 4R3 | 4  | 0  | 6,006,604:01:8 |      |
| 1034 | 1  | 113 | 23:39:51.066 |             | DMS:    | :*RUNDOWN  | R115, TRACK 2, REV, TIC *4786.94 +/- 2   | 4R3 | 4  | 0  | 6,006,604:23:0 |      |
| 1035 | 1  | 113 | 23:39:51.066 | 175IX422A6B | 6DMSC   | RDY.0      | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,604:23:0 |      |
| 1036 | 1  | 113 | 23:39:52.266 |             | DMS:    | :*READY    | RDY, TRACK 2, REV, TIC *4785.94 +/- 2    | 4R3 | 4  | 0  | 6,006,604:24:8 |      |
| 1037 | 1  | 113 | 23:40:56.400 | 175JX422A6A | 6DMSC   | R115.0     | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,605:30:0 |      |
| 1038 | 1  | 113 | 23:40:56.400 |             | DMS:    | :*US-RUNUP | P7, TRACK *1,*FWD, TIC *4785.94 +/- 2    | 4R3 | 4  | 0  | 6,006,605:30:0 |      |
| 1039 | 1  | 113 | 23:40:57.800 |             | DMS:    | :*US_AT_SP | P7, TRACK 1, FWD, TIC *4786.06 +/- 2     | 4R3 | 4  | 0  | 6,006,605:32:1 |      |
| 1040 | 1  | 113 | 23:41:03.066 |             | DMS:    | :*US_RD    | P7, TRACK 1, FWD, TIC *4787.29 +/- 2     | 4R3 | 4  | 0  | 6,006,605:40:0 |      |
| 1041 | 1  | 113 | 23:41:04.266 |             | DMS:    | :*RUNUP    | R115, TRACK *2,*REV, TIC *4787.35 +/- 2  | 4R3 | 4  | 0  | 6,006,605:41:8 |      |
| 1042 | 1  | 113 | 23:41:07.733 | 175JX176A6A | 6TMREC  | HIS        | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,605:47:0 |      |
| 1043 | 1  | 113 | 23:41:08.266 |             | DMS:    | :*AT_SPD   | R115, TRACK 2, REV, TIC *4781.05 +/- 2   | 4R3 | 4  | 0  | 6,006,605:47:8 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command  | Parameters      | Description                              | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|----------|-----------------|--|-----|----|----|----------------|------|
| 1044 | 1  | 113 | 23:41:08.266 |             | DMS:     | :*RECORD        | R115, TRACK 2, REV, TIC *4781.05 +/- 2   | 4R3 | 4  | 0  | 6,006,605:47:8 |      |
| 1045 | 1  | 113 | 23:41:22.400 |             | DMS:     | :*RUNDOWN       | R115, TRACK 2, REV, TIC *4731.37 +/- 2   | 4R3 | 4  | 0  | 6,006,605:69:0 |      |
| 1046 | 1  | 113 | 23:41:22.400 | 175JX422A6B | 6DMSC    | RDY,0           | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,605:69:0 |      |
| 1047 | 1  | 113 | 23:41:23.600 |             | DMS:     | :*READY         | RDY, TRACK 2, REV, TIC *4730.37 +/- 2    | 4R3 | 4  | 0  | 6,006,605:70:8 |      |
| 1048 | 1  | 113 | 23:42:27.066 |             | DMS:     | :*US-RUNUP      | P7, TRACK *1,*FWD, TIC 4730.37 +/- 2     | 4R3 | 4  | 0  | 6,006,606:75:0 |      |
| 1049 | 1  | 113 | 23:42:27.066 | 175Y422A6A  | 6DMSC    | R115,0          | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,606:75:0 |      |
| 1050 | 1  | 113 | 23:42:28.466 |             | DMS:     | :*US AT SP      | P7, TRACK 1, FWD, TIC *4730.49 +/- 2     | 4R3 | 4  | 0  | 6,006,606:77:1 |      |
| 1051 | 1  | 113 | 23:42:33.733 |             | DMS:     | :*US RD         | P7, TRACK 1, FWD, TIC *4731.72 +/- 2     | 4R3 | 4  | 0  | 6,006,606:85:0 |      |
| 1052 | 1  | 113 | 23:42:34.933 |             | DMS:     | :*RUNUP         | R115, TRACK *2,*REV, TIC *4731.78 +/- 2  | 4R3 | 4  | 0  | 6,006,606:86:8 |      |
| 1053 | 1  | 113 | 23:42:38.400 | 175Y176A6A  | 6TMREC   | HIS             | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,607:01:8 |      |
| 1054 | 1  | 113 | 23:42:38.933 |             | DMS:     | :*AT SPD        | R115, TRACK 2, REV, TIC 4725.48 +/- 2    | 4R3 | 4  | 0  | 6,006,607:01:8 |      |
| 1055 | 1  | 113 | 23:42:38.933 |             | DMS:     | :*RECORD        | R115, TRACK 2, REV, TIC *4725.48 +/- 2   | 4R3 | 4  | 0  | 6,006,607:01:8 |      |
| 1056 | 1  | 113 | 23:42:53.066 | 175Y422A6B  | 6DMSC    | RDY,0           | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,607:23:0 |      |
| 1057 | 1  | 113 | 23:42:53.066 |             | DMS:     | :*RUNDOWN       | R115, TRACK 2, REV, TIC *4675.79 +/- 2   | 4R3 | 4  | 0  | 6,006,607:23:0 |      |
| 1058 | 1  | 113 | 23:42:54.266 |             | DMS:     | :*READY         | RDY, TRACK 2, REV, TIC *4674.79 +/- 2    | 4R3 | 4  | 0  | 6,006,607:24:8 |      |
| 1059 | 1  | 113 | 23:43:58.400 | 175JY422A6A | 6DMSC    | R115,0          | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,608:30:0 |      |
| 1060 | 1  | 113 | 23:43:58.400 |             | DMS:     | :*US-RUNUP      | P7, TRACK *1,*FWD, TIC 4674.79 +/- 2     | 4R3 | 4  | 0  | 6,006,608:30:0 |      |
| 1061 | 1  | 113 | 23:43:59.800 |             | DMS:     | :*US AT SP      | P7, TRACK 1, FWD, TIC *4674.91 +/- 2     | 4R3 | 4  | 0  | 6,006,608:32:1 |      |
| 1062 | 1  | 113 | 23:44:05.066 |             | DMS:     | :*US RD         | P7, TRACK 1, FWD, TIC *4676.15 +/- 2     | 4R3 | 4  | 0  | 6,006,608:40:0 |      |
| 1063 | 1  | 113 | 23:44:06.266 |             | DMS:     | :*RUNUP         | R115, TRACK *2,*REV, TIC *4676.21 +/- 2  | 4R3 | 4  | 0  | 6,006,608:41:8 |      |
| 1064 | 1  | 113 | 23:44:09.733 | 175JY176A6A | 6TMREC   | HIS             | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,608:47:0 |      |
| 1065 | 1  | 113 | 23:44:10.266 |             | DMS:     | :*RECORD        | R115, TRACK 2, REV, TIC *4669.91 +/- 2   | 4R3 | 4  | 0  | 6,006,608:47:8 |      |
| 1066 | 1  | 113 | 23:44:10.266 |             | DMS:     | :*AT SPD        | R115, TRACK 2, REV, TIC 4669.91 +/- 2    | 4R3 | 4  | 0  | 6,006,608:47:8 |      |
| 1067 | 1  | 113 | 23:44:24.400 |             | DMS:     | :*RUNDOWN       | R115, TRACK 2, REV, TIC *4620.22 +/- 2   | 4R3 | 4  | 0  | 6,006,608:69:0 |      |
| 1068 | 1  | 113 | 23:44:24.400 | 175JY422A6B | 6DMSC    | RDY,0           | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,608:69:0 |      |
| 1069 | 1  | 113 | 23:44:25.600 |             | DMS:     | :*READY         | RDY, TRACK 2, REV, TIC *4619.22 +/- 2    | 4R3 | 4  | 0  | 6,006,608:70:8 |      |
| 1070 | 1  | 113 | 23:45:29.066 | 175I422A6A  | 6DMSC    | R115,0          | DMS Control Tape runup 115.2kb           | 4R3 | 4  | 0  | 6,006,609:75:0 |      |
| 1071 | 1  | 113 | 23:45:29.066 |             | DMS:     | :*US-RUNUP      | P7, TRACK *1,*FWD, TIC 4619.22 +/- 2     | 4R3 | 4  | 0  | 6,006,609:75:0 |      |
| 1072 | 1  | 113 | 23:45:30.466 |             | DMS:     | :*US AT SP      | P7, TRACK 1, FWD, TIC *4619.34 +/- 2     | 4R3 | 4  | 0  | 6,006,609:77:1 |      |
| 1073 | 1  | 113 | 23:45:35.733 |             | DMS:     | :*US RD         | P7, TRACK 1, FWD, TIC *4620.57 +/- 2     | 4R3 | 4  | 0  | 6,006,609:85:0 |      |
| 1074 | 1  | 113 | 23:45:36.933 |             | DMS:     | :*RUNUP         | R115, TRACK *2,*REV, TIC *4620.63 +/- 2  | 4R3 | 4  | 0  | 6,006,609:86:8 |      |
| 1075 | 1  | 113 | 23:45:40.400 | 175I176A6A  | 6TMREC   | HIS             | 115.2 KBPS SSI + NIMS RECORD Record Mode | 4R3 | 4  | 0  | 6,006,610:01:0 |      |
| 1076 | 1  | 113 | 23:45:40.933 |             | DMS:     | :*AT SPD        | R115, TRACK 2, REV, TIC 4614.33 +/- 2    | 4R3 | 4  | 0  | 6,006,610:01:8 |      |
| 1077 | 1  | 113 | 23:45:40.933 |             | DMS:     | :*RECORD        | R115, TRACK 2, REV, TIC *4614.33 +/- 2   | 4R3 | 4  | 0  | 6,006,610:01:8 |      |
| 1078 | 1  | 113 | 23:45:55.733 |             | DMS:     | :*RUNDOWN       | R115, TRACK 2, REV, TIC *4562.30 +/- 2   | 4R3 | 4  | 0  | 6,006,610:24:0 |      |
| 1079 | 1  | 113 | 23:45:55.733 | 175I422A6B  | 6DMSC    | RDY,0           | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,610:24:0 |      |
| 1080 | 1  | 113 | 23:45:56.933 |             | DMS:     | :*READY         | RDY, TRACK 2, REV, TIC *4561.30 +/- 2    | 4R3 | 4  | 0  | 6,006,610:25:8 |      |
| 1081 | 1  | 113 | 23:47:31.733 |             | DMS:     | :*US-RUNUP      | P7, TRACK *1,*FWD, TIC 4561.30 +/- 2     | 4R3 | 4  | 0  | 6,006,611:77:0 |      |
| 1082 | 1  | 113 | 23:47:31.733 | 175KA422A6A | 6DMSC    | R7,0            | DMS Control Tape runup 7.68kps           | 4R3 | 4  | 0  | 6,006,611:77:0 |      |
| 1083 | 1  | 113 | 23:47:33.133 |             | DMS:     | :*US AT SP      | P7, TRACK 1, FWD, TIC *4561.42 +/- 2     | 4R3 | 4  | 0  | 6,006,611:79:1 |      |
| 1084 | 1  | 113 | 23:47:38.400 |             | DMS:     | :*US RD         | P7, TRACK 1, FWD, TIC *4562.66 +/- 2     | 4R3 | 4  | 0  | 6,006,611:87:0 |      |
| 1085 | 1  | 113 | 23:47:39.600 |             | DMS:     | :*RUNUP         | R7, TRACK *2,*REV, TIC *4562.72 +/- 2    | 4R3 | 4  | 0  | 6,006,611:88:8 |      |
| 1086 | 1  | 113 | 23:47:40.400 | 175KA176A6A | 6TMREC   | LPW             | 7.68 KBPS LOW RATE SCI PWS RECORD Record | 4R3 | 4  | 0  | 6,006,611:90:0 |      |
| 1087 | 1  | 113 | 23:47:41.000 |             | DMS:     | :*AT SPD        | R7, TRACK 2, REV, TIC 4562.60 +/- 2      | 4R3 | 4  | 0  | 6,006,611:90:9 |      |
| 1088 | 1  | 113 | 23:47:41.000 |             | DMS:     | :*RECORD        | R7, TRACK 2, REV, TIC *4562.60 +/- 2     | 4R3 | 4  | 0  | 6,006,611:90:9 |      |
| 1089 | 1  | 113 | 23:47:47.733 |             | DMS:     | :*RUNDOWN       | R7, TRACK 2, REV, TIC *4561.02 +/- 2     | 4R3 | 4  | 0  | 6,006,612:10:0 |      |
| 1090 | 1  | 113 | 23:47:47.733 | 175KA422A6B | 6DMSC    | RDY,0           | DMS Control Tape stop                    | 4R3 | 4  | 0  | 6,006,612:10:0 |      |
| 1091 | 1  | 113 | 23:47:48.933 |             | DMS:     | :*READY         | RDY, TRACK 2, REV, TIC *4560.96 +/- 2    | 4R3 | 4  | 0  | 6,006,612:11:8 |      |
| 1092 | 1  | 114 | 01:02:25.733 | 127FE4A     | 37IOP    | 0,0             | Safe, Grating Start Position =00         | 4R0 | 4  | 0  | 6,006,685:84:0 |      |
| 1093 | 1  | 114 | 01:02:25.733 | 127FE       | NIMSTAB  | GS              | %%%% GROUP START TAB                     | 4R0 | 4  | 0  | 6,006,685:84:0 |      |
| 1094 | 1  | 114 | 01:02:26.400 | 127FE4B     | 37ETAB   | 04,C4,02,00,00  | Loads wavelength edit table              | 4R0 | 4  | 0  | 6,006,685:85:0 |      |
| 1095 | 1  | 114 | 01:02:34.400 | 127FE11A    | NIMSTAB  | GE              | %%%% GROUP END TAB                       | 4R0 | 4  | 0  | 6,006,686:06:0 |      |
| 1096 | 1  | 114 | 01:02:34.400 | 20FE4A      | 7SAFE    | UNSTOW          | S/P TO 153 deg cone                      | 4R0 | 4  | 0  | 6,006,686:06:0 |      |
| 1097 | 1  | 114 | 01:04:27.066 | 125FE4A     | 37IST    | 1,0,0,OFF,0,0,0 | Chopper ON, Sync, 63Hz (Ref)             | 460 | 4  | 0  | 6,006,687:84:0 |      |
| 1098 | 1  | 114 | 01:04:27.066 | 125FE       | NIMSINIT | GS              | ##### GROUP START INIT                   | 460 | 4  | 0  | 6,006,687:84:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                              | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|--|-----|----|----|----------------|------|
| 1099 | 1  | 114 | 01:05:27.733 | 125FE4B         | 37IST   | 1,1,0,OFF,0,0,0  | Chopper OFF, N/A, 63Hz (Ref)             | 400 | 4  | 0  | 6,006,688:84:0 |      |
| 1100 | 1  | 114 | 01:06:28.400 | 125FE11A        | NIMSNIT | GE               | ##### GROUP END INIT                     | 400 | 4  | 0  | 6,006,689:84:0 |      |
| 1101 | 1  | 114 | 01:06:28.400 | 125FE4C         | 37MB    | 0,0,0,0,0,0,0    | Selects mirror (spatial) edit table      | 400 | 4  | 0  | 6,006,689:84:0 |      |
| 1102 | 1  | 114 | 01:06:37.066 | 29NNPCTCAL01-   |         | -----STOP-----   |  | 400 | 4  | 0  | :              |      |
| 1103 | 1  | 114 | 01:07:40.400 | 444FF443A4A     | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                      | 400 | 4  | 0  | 6,006,691:10:0 |      |
| 1104 | 1  | 114 | 01:11:40.400 | 444FF443A4B     | 7MODE   | CRU              | AACS CRUISE MODE                         | 400 | 4  | 0  | 6,006,695:06:0 |      |
| 1105 | 1  | 114 | 01:30:59.700 | 29NNSCITRN02-   |         | -----START-----  |  | 400 | 4  | 0  | :              |      |
| 1106 | 1  | 114 | 01:30:59.733 | 20UD4C          | 7STAT   | 10,00,251.12,-21 | Stator inertial point                    | 400 | 4  | 0  | 6,006,714:16:0 |      |
| 1107 | 1  | 114 | 01:31:11.733 | 20UD6D          | 6MROH   | 7,6744,0,A10     | read from AACS A7,6744,0,A10             | 400 | 4  | 0  | 6,006,714:34:0 |      |
| 1108 | 1  | 114 | 01:50:02.333 | 490UD412A4B     | 7MODE   | INT              | AACS INERTIAL MODE                       | 400 | 4  | 0  | 6,006,733:01:0 |      |
| 1109 | 1  | 114 | 01:55:00.333 | 490UD412A4D     | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                      | 400 | 4  | 0  | 6,006,737:84:0 |      |
| 1110 | 1  | 114 | 01:55:20.333 | 20UD4D          | 7STAT   | 17,45,251.12,-21 | Stator inertial point                    | 400 | 4  | 0  | 6,006,738:23:0 |      |
| 1111 | 1  | 114 | 01:59:10.333 | 490UD412A4E     | 7VECT   |                  | Inert vect update UTC                    | 400 | 4  | 0  | 6,006,742:04:0 |      |
| 1112 | 1  | 114 | 01:59:14.333 | 490UD412A4F     | 7TURN   | 2,RTH            | ALERT Thruster                           | 400 | 4  | 0  | 6,006,742:10:0 |      |
| 1113 | 1  | 114 | 02:03:02.333 | 490UD412A406A4A | 7STAR   | 1,497,343.73     | Star catalog update                      | 400 | 4  | 0  | 6,006,745:79:0 |      |
| 1114 | 1  | 114 | 02:03:04.333 | 490UD412A406A4B | 7STAR   | 2,211,140.1409,- | Star catalog update                      | 400 | 4  | 0  | 6,006,745:82:0 |      |
| 1115 | 1  | 114 | 02:03:06.333 | 490UD412A406A4C | 7STAR   | 3,356,206.39     | Star catalog update                      | 400 | 4  | 0  | 6,006,745:85:0 |      |
| 1116 | 1  | 114 | 02:03:08.333 | 490UD412A406A4D | 7STAR   | 4,0,0,0,0,0,0    | Star catalog update                      | 400 | 4  | 0  | 6,006,745:88:0 |      |
| 1117 | 1  | 114 | 02:03:10.333 | 490UD412A406A4E | 7STAR   | 5,0,0,0,0,0,0    | Star catalog update                      | 400 | 4  | 0  | 6,006,746:00:0 |      |
| 1118 | 1  | 114 | 02:03:12.333 | 490UD412A406A4F | 7STAR   | 6,0,0,0,0,0,0    | Star catalog update                      | 400 | 4  | 0  | 6,006,746:03:0 |      |
| 1119 | 1  | 114 | 02:13:06.333 | 20UD4F          | 7SLEW   | DIS,POS,0,0      | Stator movement                          | 400 | 4  | 0  | 6,006,755:75:0 |      |
| 1120 | 1  | 114 | 02:14:57.000 | 488DH6C         | 6TMSED  | NORM,AH2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,757:59:0 |      |
| 1121 | 1  | 114 | 02:21:10.333 | 490UD412A4G     | 7MODE   | CRU              | AACS CRUISE MODE                         | 400 | 4  | 0  | 6,006,763:73:0 |      |
| 1122 | 1  | 114 | 02:21:10.400 | 29NNSCITRN02-   |         | -----STOP-----   |  | 400 | 4  | 0  | :              |      |
| 1123 | 1  | 114 | 03:15:19.666 | 488DH6D         | 6TMSED  | FILL,AH2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,817:33:0 |      |
| 1124 | 1  | 114 | 03:25:21.000 | 488DH6E         | 6TMSED  | FILL,AH1         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,827:25:0 |      |
| 1125 | 1  | 114 | 03:48:19.666 |                 | DMS:    | : READY          | RDY, TRACK *4, REV, TIC 4560.96 +/- 2    | 400 | 4  | 0  | 6,006,850:00:0 |      |
| 1126 | 1  | 114 | 03:55:04.333 | 20UA4A          | 7SAFE   | STOP             | S/P NO MOVEMENT                          | 400 | 4  | 0  | 6,006,856:61:0 |      |
| 1127 | 1  | 114 | 03:55:54.333 | 20UA4B          | 7SLEW   | DIS,POS,0,0      | Stator movement                          | 400 | 4  | 0  | 6,006,857:45:0 |      |
| 1128 | 1  | 114 | 03:56:00.333 | 488DI6A         | 6TMSED  | FILL,AL1         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,857:54:0 |      |
| 1129 | 1  | 114 | 03:57:25.666 | 176UC6A         | 6TMREC  | RPB              | RESUME PLAYBACK (PB CONTROL) Record Mode | 400 | 4  | 0  | 6,006,859:00:0 |      |
| 1130 | 1  | 114 | 04:23:03.000 | 488DI6B         | 6TMSED  | NORM,AL1         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,884:31:0 |      |
| 1131 | 1  | 114 | 04:31:29.000 | 488DI6C         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,892:62:0 |      |
| 1132 | 1  | 114 | 05:03:06.333 | 488DI6D         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,923:87:0 |      |
| 1133 | 1  | 114 | 05:32:12.333 | 488DI6E         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,952:67:0 |      |
| 1134 | 1  | 114 | 05:42:05.000 | 20WN6A          | 6MCOPY  | HLM1A,E415,B1A1A | HLM1A,E415,B1A1A,5000,506                | 400 | 4  | 0  | 6,006,962:46:0 |      |
| 1135 | 1  | 114 | 05:54:41.000 | 488DJ6A         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,006,974:88:0 |      |
| 1136 | 1  | 114 | 07:28:33.000 | 488DJ6B         | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,067:73:0 |      |
| 1137 | 1  | 114 | 07:32:06.333 | 488DJ6C         | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,071:29:0 |      |
| 1138 | 1  | 114 | 07:39:13.000 | 488DJ6D         | 6TMSED  | FILL,AL1         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,078:32:0 |      |
| 1139 | 1  | 114 | 08:15:29.000 | 488DJ6E         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,114:20:0 |      |
| 1140 | 1  | 114 | 16:26:38.333 | 488DK6A         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,599:89:0 |      |
| 1141 | 1  | 114 | 19:40:17.000 | 488DK6B         | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,791:45:0 |      |
| 1142 | 1  | 114 | 20:05:53.666 | 488DK6C         | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,816:75:0 |      |
| 1143 | 1  | 114 | 20:16:33.000 | 488DK6D         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,007,827:33:0 |      |
| 1144 | 1  | 115 | 14:16:34.266 | 488DL6A         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,008,895:47:0 |      |
| 1145 | 1  | 115 | 15:50:26.933 | 488DL6B         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,008,988:33:0 |      |
| 1146 | 1  | 115 | 16:24:06.266 | 488DL6C         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,021:59:0 |      |
| 1147 | 1  | 115 | 18:40:32.933 | 488DL6D         | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,156:54:0 |      |
| 1148 | 1  | 115 | 19:14:40.933 | 488DL6E         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,190:32:0 |      |
| 1149 | 1  | 115 | 20:43:14.266 | 488DM6A         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,277:85:0 |      |
| 1150 | 1  | 115 | 21:12:20.933 | 488DM6B         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,306:66:0 |      |
| 1151 | 1  | 115 | 23:00:39.600 | 488DM6C         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,413:77:0 |      |
| 1152 | 1  | 116 | 01:59:44.933 | 488DM6D         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,590:88:0 |      |
| 1153 | 1  | 116 | 05:58:56.933 | 488DN6A         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,009,827:49:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters | Description            | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|------------|------------------------|-----|----|----|----------------|------|
| 1154 | 1  | 116 | 07:26:23.600 | 488DN6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,009,914:02:0 |      |
| 1155 | 1  | 116 | 07:28:32.933 | 488DN6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,009,916:14:0 |      |
| 1156 | 1  | 116 | 07:39:12.933 | 488DN6D | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,009,926:64:0 |      |
| 1157 | 1  | 116 | 14:16:29.600 | 488DO6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,010,319:56:0 |      |
| 1158 | 1  | 116 | 19:33:52.933 | 488DO6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,010,633:47:0 |      |
| 1159 | 1  | 116 | 19:55:44.266 | 488DO6C | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,010,655:12:0 |      |
| 1160 | 1  | 116 | 20:08:00.933 | 488DO6D | 6TMSED  | FILL,AL5   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,010,667:25:0 |      |
| 1161 | 1  | 116 | 21:14:40.933 | 488DP6A | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,010,733:19:0 |      |
| 1162 | 1  | 117 | 01:19:28.866 | 488DP6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,010,975:29:0 |      |
| 1163 | 1  | 117 | 03:14:40.866 | 488DQ6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,011,089:23:0 |      |
| 1164 | 1  | 117 | 03:25:42.200 | 488DQ6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,011,100:14:0 |      |
| 1165 | 1  | 117 | 03:38:08.866 | 488DQ6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,011,112:42:0 |      |
| 1166 | 1  | 117 | 17:01:23.533 | 488DR6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,011,906:80:0 |      |
| 1167 | 1  | 117 | 17:17:20.866 | 488DR6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,011,922:60:0 |      |
| 1168 | 1  | 118 | 01:19:28.866 | 488DS6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,012,399:45:0 |      |
| 1169 | 1  | 118 | 03:08:16.866 | 488DS6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,012,507:09:0 |      |
| 1170 | 1  | 118 | 05:58:56.866 | 488DS6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,012,675:81:0 |      |
| 1171 | 1  | 118 | 07:12:42.200 | 488DS6D | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,012,748:76:0 |      |
| 1172 | 1  | 118 | 12:11:20.133 | 488DT6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,044:17:0 |      |
| 1173 | 1  | 118 | 12:37:52.800 | 488DT6B | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,070:40:0 |      |
| 1174 | 1  | 118 | 14:50:08.800 | 488DT6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,201:23:0 |      |
| 1175 | 1  | 118 | 17:13:04.800 | 488DT6D | 6TMSED  | NORM,AL5   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,342:56:0 |      |
| 1176 | 1  | 119 | 00:24:00.800 | 488DU6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,768:74:0 |      |
| 1177 | 1  | 119 | 00:51:44.800 | 488DU6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,796:22:0 |      |
| 1178 | 1  | 119 | 02:05:43.466 | 488DU6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,869:37:0 |      |
| 1179 | 1  | 119 | 02:39:22.133 | 488DU6D | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,013,902:62:0 |      |
| 1180 | 1  | 119 | 06:03:12.800 | 488DU6E | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,104:26:0 |      |
| 1181 | 1  | 119 | 07:09:20.800 | 488DV6A | 6TMSED  | NORM,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,169:63:0 |      |
| 1182 | 1  | 119 | 07:10:30.800 | 488DV6B | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,170:77:0 |      |
| 1183 | 1  | 119 | 07:24:16.800 | 488DV6C | 6TMSED  | FILL,AL1   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,184:42:0 |      |
| 1184 | 1  | 119 | 08:12:38.133 | 488DV6D | 6TMSED  | NORM,AL1   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,232:26:0 |      |
| 1185 | 1  | 119 | 08:21:52.800 | 488DV6E | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,241:39:0 |      |
| 1186 | 1  | 119 | 08:45:45.466 | 488DW6A | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,265:04:0 |      |
| 1187 | 1  | 119 | 09:19:24.133 | 488DW6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,298:29:0 |      |
| 1188 | 1  | 119 | 18:52:35.400 | 488DX6A | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,014,865:19:0 |      |
| 1189 | 1  | 120 | 09:11:11.400 | 488DY6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,015,714:34:0 |      |
| 1190 | 1  | 120 | 19:07:30.066 | 488DZ6A | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,304:12:0 |      |
| 1191 | 1  | 120 | 21:16:09.400 | 488DZ6B | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,431:34:0 |      |
| 1192 | 1  | 120 | 22:50:52.066 | 488DZ6C | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,525:04:0 |      |
| 1193 | 1  | 120 | 23:24:31.400 | 488DZ6D | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,558:30:0 |      |
| 1194 | 1  | 121 | 02:23:28.733 | 488EA6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,735:29:0 |      |
| 1195 | 1  | 121 | 03:08:16.733 | 488EA6B | 6TMSED  | NORM,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,779:57:0 |      |
| 1196 | 1  | 121 | 03:19:09.400 | 488EA6C | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,790:35:0 |      |
| 1197 | 1  | 121 | 03:36:00.733 | 488EA6D | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,016,807:05:0 |      |
| 1198 | 1  | 121 | 15:11:05.333 | 488EB6A | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,017,494:45:0 |      |
| 1199 | 1  | 121 | 19:01:22.000 | 488EB6B | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,017,722:22:0 |      |
| 1200 | 1  | 121 | 19:08:16.666 | 488EB6C | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,017,729:07:0 |      |
| 1201 | 1  | 122 | 07:21:22.666 | 488EC6A | 6TMSED  | NORM,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,018,454:11:0 |      |
| 1202 | 1  | 122 | 07:37:04.666 | 488EC6B | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,018,469:59:0 |      |
| 1203 | 1  | 122 | 08:47:28.666 | 488EC6C | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,018,539:25:0 |      |
| 1204 | 1  | 122 | 08:50:58.000 | 488EC6D | 6TMSED  | FILL,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,018,542:66:0 |      |
| 1205 | 1  | 122 | 09:24:37.333 | 488EC6E | 6TMSED  | NORM,AL4   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,018,576:01:0 |      |
| 1206 | 1  | 122 | 18:19:12.600 | 488ED6A | 6TMSED  | NORM,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,019,104:66:0 |      |
| 1207 | 1  | 122 | 19:26:15.266 | 488ED6B | 6TMSED  | FILL,AL3   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,019,171:03:0 |      |
| 1208 | 1  | 122 | 19:29:36.600 | 488ED6C | 6TMSED  | FILL,AL2   | Sci, Eng, and D/L Chan | 400 | 4  | 0  | 6,019,174:32:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|------------------|---------------------------|-----|----|----|----------------|------|
| 1209 | 1  | 122 | 19:44:32.600 | 488ED6D | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,189:11:0 |      |
| 1210 | 1  | 122 | 19:59:13.933 | 488ED6E | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,203:59:0 |      |
| 1211 | 1  | 122 | 20:23:46.600 | 488EE6A | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,227:84:0 |      |
| 1212 | 1  | 122 | 20:52:52.600 | 488EE6B | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,256:64:0 |      |
| 1213 | 1  | 123 | 00:53:52.600 | 488EE6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,495:05:0 |      |
| 1214 | 1  | 123 | 02:50:56.600 | 488EF6A | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,610:76:0 |      |
| 1215 | 1  | 123 | 02:53:20.600 | 488EF6B | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,613:19:0 |      |
| 1216 | 1  | 123 | 03:04:00.600 | 488EF6C | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,019,623:69:0 |      |
| 1217 | 1  | 123 | 03:34:55.266 | 20MC6A  | 6MCOPI  | HLMTA,E476,B1A1A | HLMTA,E476,B1A1A,50C2,523 | 400 | 4  | 0  | 6,019,654:30:0 |      |
| 1218 | 1  | 123 | 03:35:55.933 | 20MC6C  | 6MCOPI  | HLMTA,E476,B1A1A | HLMTA,E476,B1A1A,5234,53F | 400 | 4  | 0  | 6,019,655:30:0 |      |
| 1219 | 1  | 123 | 03:36:56.600 | 20MC6E  | 6MCOPI  | HLMTA,E476,B1A1A | HLMTA,E476,B1A1A,53F5,572 | 400 | 4  | 0  | 6,019,656:30:0 |      |
| 1220 | 1  | 123 | 03:37:57.266 | 20MC6G  | 6MCOPI  | HLMTA,E476,B1A1A | HLMTA,E476,B1A1A,5728,5A9 | 400 | 4  | 0  | 6,019,657:30:0 |      |
| 1221 | 1  | 123 | 14:15:57.266 | 488EG6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,288:29:0 |      |
| 1222 | 1  | 123 | 19:14:40.600 | 488EG6B | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,583:69:0 |      |
| 1223 | 1  | 123 | 19:35:12.600 | 488EG6C | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,604:06:0 |      |
| 1224 | 1  | 123 | 19:46:40.600 | 488EG6D | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,615:37:0 |      |
| 1225 | 1  | 123 | 20:59:09.933 | 488EH6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,687:09:0 |      |
| 1226 | 1  | 124 | 00:34:40.533 | 488EH6B | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,900:22:0 |      |
| 1227 | 1  | 124 | 00:58:08.533 | 488EH6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,020,923:41:0 |      |
| 1228 | 1  | 124 | 02:16:06.533 | 488EH6D | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,000:51:0 |      |
| 1229 | 1  | 124 | 02:49:45.200 | 488EH6E | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,033:76:0 |      |
| 1230 | 1  | 124 | 05:39:44.533 | 488EI6A | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,201:87:0 |      |
| 1231 | 1  | 124 | 06:48:00.533 | 488EI6B | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,269:43:0 |      |
| 1232 | 1  | 124 | 06:53:56.533 | 488EI6C | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,275:31:0 |      |
| 1233 | 1  | 124 | 07:11:28.533 | 488EI6D | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,292:62:0 |      |
| 1234 | 1  | 124 | 15:15:52.533 | 488EJ6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,021,771:69:0 |      |
| 1235 | 1  | 124 | 19:08:16.533 | 488EJ6B | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,001:55:0 |      |
| 1236 | 1  | 124 | 19:35:08.533 | 488EJ6C | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,028:16:0 |      |
| 1237 | 1  | 124 | 19:46:40.533 | 488EJ6D | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,039:53:0 |      |
| 1238 | 1  | 124 | 23:30:51.200 | 488EK6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,261:27:0 |      |
| 1239 | 1  | 125 | 00:56:00.533 | 488EK6B | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,345:47:0 |      |
| 1240 | 1  | 125 | 05:29:04.533 | 488EK6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,615:53:0 |      |
| 1241 | 1  | 125 | 06:56:26.533 | 488EL6A | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,701:90:0 |      |
| 1242 | 1  | 125 | 06:58:40.533 | 488EL6B | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,704:18:0 |      |
| 1243 | 1  | 125 | 07:13:36.533 | 488EL6C | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,718:88:0 |      |
| 1244 | 1  | 125 | 07:22:10.533 | 488EL6D | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,727:40:0 |      |
| 1245 | 1  | 125 | 07:41:20.533 | 488EL6E | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,022,746:36:0 |      |
| 1246 | 1  | 125 | 17:06:40.466 | 488EM6A | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,023,305:47:0 |      |
| 1247 | 1  | 125 | 22:44:12.466 | 488EM6B | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,023,639:31:0 |      |
| 1248 | 1  | 125 | 22:48:00.466 | 488EM6C | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,023,643:09:0 |      |
| 1249 | 1  | 126 | 19:15:44.466 | 488EN6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,024,857:31:0 |      |
| 1250 | 1  | 126 | 20:51:17.066 | 488EN6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,024,951:76:0 |      |
| 1251 | 1  | 126 | 21:24:56.400 | 488EN6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,024,985:11:0 |      |
| 1252 | 1  | 127 | 02:04:16.400 | 488EO6A | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,025,261:35:0 |      |
| 1253 | 1  | 127 | 02:48:59.066 | 488EO6B | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,025,305:55:0 |      |
| 1254 | 1  | 127 | 02:49:04.400 | 488EO6C | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,025,305:63:0 |      |
| 1255 | 1  | 127 | 03:06:08.400 | 488EO6D | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,025,322:52:0 |      |
| 1256 | 1  | 127 | 15:15:40.400 | 488EP6A | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,044:08:0 |      |
| 1257 | 1  | 127 | 16:51:20.400 | 488EP6B | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,138:64:0 |      |
| 1258 | 1  | 127 | 17:24:59.733 | 488EP6C | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,171:90:0 |      |
| 1259 | 1  | 127 | 17:53:36.400 | 488EP6D | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,200:26:0 |      |
| 1260 | 1  | 127 | 19:08:16.400 | 488EP6E | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,274:12:0 |      |
| 1261 | 1  | 127 | 19:18:42.400 | 488EQ6A | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,284:41:0 |      |
| 1262 | 1  | 127 | 19:36:00.400 | 488EQ6B | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,301:51:0 |      |
| 1263 | 1  | 127 | 21:23:52.400 | 488EQ6C | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan    | 400 | 4  | 0  | 6,026,408:22:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID        | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-------------|---------|------------------|---|-----|----|----|----------------|------|
| 1264 | 1  | 128 | 00:24:00.400 | 488EQ6D     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,026,586:36:0 |      |
| 1265 | 1  | 128 | 02:36:24.400 | 488ER6A     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,026,719:29:0 |      |
| 1266 | 1  | 128 | 03:00:47.733 | 488ER6B     | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,026,741:42:0 |      |
| 1267 | 1  | 128 | 03:04:00.400 | 488ER6C     | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,026,744:58:0 |      |
| 1268 | 1  | 128 | 03:18:56.400 | 488ER6D     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,026,759:37:0 |      |
| 1269 | 1  | 128 | 03:30:37.666 | 488ES6A     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,027,364:34:0 |      |
| 1270 | 1  | 128 | 18:53:20.333 | 488ES6B     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,027,683:49:0 |      |
| 1271 | 1  | 128 | 19:19:52.333 | 488ES6C     | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,027,709:71:0 |      |
| 1272 | 1  | 128 | 19:31:44.333 | 488ET6A     | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,027,721:47:0 |      |
| 1273 | 1  | 128 | 23:03:48.333 | 488ET6B     | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,027,931:23:0 |      |
| 1274 | 1  | 129 | 00:02:40.333 | 488ET6C     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,027,989:43:0 |      |
| 1275 | 1  | 129 | 02:34:08.333 | 488EU6A     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,028,139:25:0 |      |
| 1276 | 1  | 129 | 02:52:07.000 | 488EU6B     | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,028,157:05:0 |      |
| 1277 | 1  | 129 | 02:57:36.333 | 488EU6C     | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,028,162:44:0 |      |
| 1278 | 1  | 129 | 03:12:32.333 | 488EU6D     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,028,177:23:0 |      |
| 1279 | 1  | 129 | 15:40:33.666 | 488EV6A     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,028,917:05:0 |      |
| 1280 | 1  | 129 | 18:42:40.266 | 488EV6B     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,097:15:0 |      |
| 1281 | 1  | 129 | 19:18:56.266 | 488EV6C     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,133:03:0 |      |
| 1282 | 1  | 129 | 20:56:28.266 | 488EV6D     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,229:45:0 |      |
| 1283 | 1  | 129 | 21:30:07.600 | 488EV6E     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,262:71:0 |      |
| 1284 | 1  | 130 | 00:24:00.266 | 488EW6A     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,434:68:0 |      |
| 1285 | 1  | 130 | 01:10:56.266 | 488EW6B     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,481:15:0 |      |
| 1286 | 1  | 130 | 02:11:28.933 | 488EW6C     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,541:04:0 |      |
| 1287 | 1  | 130 | 02:55:08.266 | 488EW6D     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,584:20:0 |      |
| 1288 | 1  | 130 | 04:37:52.266 | 488EW6E     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,685:75:0 |      |
| 1289 | 1  | 130 | 06:18:08.266 | 488EX6A     | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,784:90:0 |      |
| 1290 | 1  | 130 | 06:34:26.266 | 488EX6B     | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,801:10:0 |      |
| 1291 | 1  | 130 | 06:48:00.266 | 488EX6C     | 6TMSED  | FILL,AL1         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,814:48:0 |      |
| 1292 | 1  | 130 | 07:24:16.266 | 488EX6D     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,029,850:36:0 |      |
| 1293 | 1  | 130 | 10:15:30.266 | 488EX6E     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,019:68:0 |      |
| 1294 | 1  | 130 | 11:51:30.933 | 488EY6A     | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,114:64:0 |      |
| 1295 | 1  | 130 | 12:25:10.266 | 488EY6B     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,147:90:0 |      |
| 1296 | 1  | 130 | 14:19:26.266 | 176SQ6A     | 6TMREC  | PPB              | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 400 | 4  | 0  | 6,030,261:00:0 |      |
| 1297 | 1  | 130 | 14:23:00.266 | 488EY6C     | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,264:48:0 |      |
| 1298 | 1  | 130 | 14:54:00.266 | 20AA4AA     | 7STAT   | 10.00,317.3071,4 | Stator inertial point                     | 400 | 4  | 0  | 6,030,295:17:0 |      |
| 1299 | 1  | 130 | 14:54:12.266 | 20AA6AA     | 6MROH   | 7,6744,0,A10     | read from AACSA7,6744,0,A10               | 400 | 4  | 0  | 6,030,295:35:0 |      |
| 1300 | 1  | 130 | 15:00:00.266 | 474AA416A4B | 7MODE   | INT              | AACS INERTIAL MODE                        | 400 | 4  | 0  | 6,030,301:11:0 |      |
| 1301 | 1  | 130 | 15:02:00.266 | 474AA416A4D | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 400 | 4  | 0  | 6,030,303:09:0 |      |
| 1302 | 1  | 130 | 15:02:20.266 | 20AA4AD     | 7STAT   | 17.45,317.3071,4 | Stator inertial point                     | 400 | 4  | 0  | 6,030,303:39:0 |      |
| 1303 | 1  | 130 | 15:06:14.266 | 474AA416A4E | 7BURN   | ,317.307098,45.0 | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6,030,307:26:0 |      |
| 1304 | 1  | 130 | 15:13:04.266 | 20AA4AF     | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 400 | 4  | 0  | 6,030,314:04:0 |      |
| 1305 | 1  | 130 | 15:18:56.266 | 20AA4AG     | 7MODE   | CRU              | AACS CRUISE MODE                          | 400 | 4  | 0  | 6,030,319:77:0 |      |
| 1306 | 1  | 130 | 15:40:12.266 | 20AA4AJ     | 7STAT   | 10.00,317.3071,4 | Stator inertial point                     | 400 | 4  | 0  | 6,030,340:80:0 |      |
| 1307 | 1  | 130 | 15:40:24.266 | 20AA6AB     | 6MROH   | 7,6744,0,A10     | read from AACSA7,6744,0,A10               | 400 | 4  | 0  | 6,030,341:07:0 |      |
| 1308 | 1  | 130 | 15:46:12.266 | 20AA4AK     | 7MODE   | INT              | AACS INERTIAL MODE                        | 400 | 4  | 0  | 6,030,346:74:0 |      |
| 1309 | 1  | 130 | 15:48:12.266 | 474AA416A4G | 7BURN   | 317.307098,45.09 | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6,030,348:72:0 |      |
| 1310 | 1  | 130 | 16:04:36.933 | 20AA4AM     | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 400 | 4  | 0  | 6,030,365:02:0 |      |
| 1311 | 1  | 130 | 16:09:28.933 | 20AA4AN     | 7MODE   | CRU              | AACS CRUISE MODE                          | 400 | 4  | 0  | 6,030,369:76:0 |      |
| 1312 | 1  | 130 | 17:13:04.266 | 488EY6D     | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,432:66:0 |      |
| 1313 | 1  | 130 | 17:17:00.933 | 20AB4A      | 7SAFE   | STOP             | S/P NO MOVEMENT                           | 400 | 4  | 0  | 6,030,436:57:0 |      |
| 1314 | 1  | 130 | 17:17:50.933 | 20AB4B      | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 400 | 4  | 0  | 6,030,437:41:0 |      |
| 1315 | 1  | 130 | 17:19:24.933 | 176AA6A     | 6TMREC  | RPB              | RESUME PLAYBACK (PB CONTROL) Record Mode  | 400 | 4  | 0  | 6,030,439:00:0 |      |
| 1316 | 1  | 130 | 18:49:04.266 | 488EZ6A     | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,527:61:0 |      |
| 1317 | 1  | 130 | 19:08:30.266 | 488EZ6B     | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,546:81:0 |      |
| 1318 | 1  | 130 | 19:25:20.266 | 488EZ6C     | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,030,563:49:0 |      |



| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|-----------------|---------|------------------|---|-----|----|----|----------------|------|
| 1319 | 1  | 130 | 19:31:00.266 | 488EZ6D         | 6TMSED  | FILL,AL5         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.030,569:13:0 |      |
| 1320 | 1  | 130 | 19:34:54.266 | 176SH6A         | 6TMREC  | RPB              | RESUME PLAYBACK(PB CONTROL) Record Mode   | 400 | 4  | 0  | 6.030,573:00:0 |      |
| 1321 | 1  | 130 | 21:13:41.600 | 488EZ6E         | 6TMSED  | NORM,AL5         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.030,670:64:0 |      |
| 1322 | 1  | 130 | 23:17:52.266 | 488FA6A         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.030,793:47:0 |      |
| 1323 | 1  | 131 | 00:31:48.933 | 488FA6B         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.030,866:59:0 |      |
| 1324 | 1  | 131 | 01:30:28.266 | 488FA6C         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.030,924:60:0 |      |
| 1325 | 1  | 131 | 03:06:33.533 | 488FA6D         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,019:63:0 |      |
| 1326 | 1  | 131 | 03:40:12.200 | 488FA6E         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,052:88:0 |      |
| 1327 | 1  | 131 | 04:18:40.200 | 488FB6A         | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,091:01:0 |      |
| 1328 | 1  | 131 | 06:13:52.200 | 488FB6B         | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,204:86:0 |      |
| 1329 | 1  | 131 | 06:29:51.533 | 488FB6C         | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,220:69:0 |      |
| 1330 | 1  | 131 | 06:43:44.200 | 488FB6D         | 6TMSED  | FILL,AL1         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,234:44:0 |      |
| 1331 | 1  | 131 | 07:20:00.200 | 488FB6E         | 6TMSED  | FILL,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,270:32:0 |      |
| 1332 | 1  | 131 | 15:41:45.533 | 488FC6A         | 6TMSED  | NORM,AL3         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,766:54:0 |      |
| 1333 | 1  | 131 | 15:52:00.200 | 488FC6B         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,776:66:0 |      |
| 1334 | 1  | 131 | 17:16:35.533 | 488FC6C         | 6TMSED  | FILL,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,860:35:0 |      |
| 1335 | 1  | 131 | 17:50:14.200 | 488FC6D         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.031,893:60:0 |      |
| 1336 | 1  | 131 | 20:53:00.200 | 488FC6E         | 6TMSED  | NORM,AL4         | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,074:38:0 |      |
| 1337 | 1  | 131 | 20:56:37.533 | 176UD6A         | 6TMREC  | PPB              | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 400 | 4  | 0  | 6.032,078:00:0 |      |
| 1338 | 1  | 131 | 21:06:12.200 | 20UE4C          | 7STAT   | 10.00,255.89,-22 | Stator inertial point                     | 400 | 4  | 0  | 6.032,087:25:0 |      |
| 1339 | 1  | 131 | 21:06:12.200 | 20UE6D          | 6MROH   | 7,6744,0,A10     | read from AACSA7,6744,0,A10               | 400 | 4  | 0  | 6.032,087:43:0 |      |
| 1340 | 1  | 131 | 21:25:02.200 | 490UE412A4B     | 7MODE   | INT              | AACS INERTIAL MODE                        | 400 | 4  | 0  | 6.032,106:09:0 |      |
| 1341 | 1  | 131 | 21:30:00.200 | 490UE412A4D     | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 400 | 4  | 0  | 6.032,111:01:0 |      |
| 1342 | 1  | 131 | 21:30:20.200 | 20UE4D          | 7STAT   | 17.45,255.89,-22 | Stator inertial point                     | 400 | 4  | 0  | 6.032,111:31:0 |      |
| 1343 | 1  | 131 | 21:34:10.200 | 490UE412A4E     | 7VECT   |                  | Inert vect update UTC                     | 400 | 4  | 0  | 6.032,115:12:0 |      |
| 1344 | 1  | 131 | 21:34:14.200 | 490UE412A4F     | 7TURN   | 2,RTH            | ALERT Thruster                            | 400 | 4  | 0  | 6.032,115:18:0 |      |
| 1345 | 1  | 131 | 21:38:02.200 | 490UE412A406A4A | 7STAR   | 1,497,343.73     | Star catalog update                       | 400 | 4  | 0  | 6.032,118:87:0 |      |
| 1346 | 1  | 131 | 21:38:04.200 | 490UE412A406A4B | 7STAR   | 2,356,206.39     | Star catalog update                       | 400 | 4  | 0  | 6.032,118:90:0 |      |
| 1347 | 1  | 131 | 21:38:06.200 | 490UE412A406A4C | 7STAR   | 3,477,309.93     | Star catalog update                       | 400 | 4  | 0  | 6.032,119:02:0 |      |
| 1348 | 1  | 131 | 21:38:08.200 | 490UE412A406A4D | 7STAR   | 4,0,0,0,0.0      | Star catalog update                       | 400 | 4  | 0  | 6.032,119:05:0 |      |
| 1349 | 1  | 131 | 21:38:10.200 | 490UE412A406A4E | 7STAR   | 5,0,0,0,0.0      | Star catalog update                       | 400 | 4  | 0  | 6.032,119:08:0 |      |
| 1350 | 1  | 131 | 21:38:12.200 | 490UE412A406A4F | 7STAR   | 6,0,0,0,0.0      | Star catalog update                       | 400 | 4  | 0  | 6.032,119:11:0 |      |
| 1351 | 1  | 131 | 21:48:06.200 | 20UE4F          | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 400 | 4  | 0  | 6.032,128:83:0 |      |
| 1352 | 1  | 131 | 21:56:10.200 | 490UE412A4G     | 7MODE   | CRU              | AACS CRUISE MODE                          | 400 | 4  | 0  | 6.032,136:81:0 |      |
| 1353 | 1  | 132 | 00:02:00.200 | 20UX4B          | 7SLEW   | DIS,POS,0.0      | Stator movement                           | 400 | 4  | 0  | 6.032,261:31:0 |      |
| 1354 | 1  | 132 | 00:03:00.200 | 20UX4D          | 7MODE   | UNSTOW           | AACS ALL-SPIN LOW                         | 400 | 4  | 0  | 6.032,262:30:0 |      |
| 1355 | 1  | 132 | 00:05:00.200 | 20UX4E          | 7SAFE   | UNSTOW           | S/P TO 153 deg cone                       | 400 | 4  | 0  | 6.032,264:28:0 |      |
| 1356 | 1  | 132 | 00:10:30.200 | 20UX4G          | 7VENT   | 0.611,1,333.8    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,269:68:0 |      |
| 1357 | 1  | 132 | 00:10:30.866 | 20UX4H          | 7VENT   | 0.611,10,989.8   | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,269:69:0 |      |
| 1358 | 1  | 132 | 00:10:50.866 | 20UX4I          | 7VENT   | 0.611,1,333.6    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:08:0 |      |
| 1359 | 1  | 132 | 00:10:51.533 | 20UX4J          | 7VENT   | 0.611,10,989.6   | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:09:0 |      |
| 1360 | 1  | 132 | 00:11:11.533 | 20UX4K          | 7VENT   | 0.611,1,333.4    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:39:0 |      |
| 1361 | 1  | 132 | 00:11:12.200 | 20UX4L          | 7VENT   | 0.611,0,666.5    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:40:0 |      |
| 1362 | 1  | 132 | 00:11:22.200 | 20UX4M          | 7VENT   | 0.611,1,333.4    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:55:0 |      |
| 1363 | 1  | 132 | 00:11:22.866 | 20UX4N          | 7VENT   | 0.611,0,666.5    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:56:0 |      |
| 1364 | 1  | 132 | 00:11:32.866 | 20UX4O          | 7VENT   | 1.211,1,333.10   | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:71:0 |      |
| 1365 | 1  | 132 | 00:11:33.533 | 20UX4P          | 7VENT   | 1.211,0,666.12   | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,270:72:0 |      |
| 1366 | 1  | 132 | 00:13:20.200 | 20UX4S          | 7VENT   | 0.611,1,333.7    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,272:50:0 |      |
| 1367 | 1  | 132 | 00:13:20.866 | 20UX4T          | 7VENT   | 0.611,10,989.7   | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,272:51:0 |      |
| 1368 | 1  | 132 | 00:13:40.866 | 20UX4U          | 7VENT   | 0.611,1,333.1    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,272:81:0 |      |
| 1369 | 1  | 132 | 00:13:41.533 | 20UX4V          | 7VENT   | 0.611,10,989.1   | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,272:82:0 |      |
| 1370 | 1  | 132 | 00:14:01.533 | 20UX4AC         | 7VENT   | 0.611,1,333.2    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,273:21:0 |      |
| 1371 | 1  | 132 | 00:14:02.200 | 20UX4AD         | 7VENT   | 0.611,0,666.3    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,273:22:0 |      |
| 1372 | 1  | 132 | 00:14:12.200 | 20UX4AE         | 7VENT   | 0.611,1,333.2    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,273:37:0 |      |
| 1373 | 1  | 132 | 00:14:12.866 | 20UX4AF         | 7VENT   | 0.611,0,666.3    | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,273:38:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters     | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|----------------|---|-----|----|----|----------------|------|
| 1374 | 1  | 132 | 00:14:22.866 | 20UX4W  | 7VENT   | 1.211,1.333,9  | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,273:53:0 |      |
| 1375 | 1  | 132 | 00:14:23.533 | 20UX4X  | 7VENT   | 1.211,0.666,11 | ALERT -- Thruster fire                    | 400 | 4  | 0  | 6.032,273:54:0 |      |
| 1376 | 1  | 132 | 00:15:20.200 | 20UX4Z  | 7MODE   | CRU            | AACS CRUISE MODE                          | 400 | 4  | 0  | 6.032,274:48:0 |      |
| 1377 | 1  | 132 | 00:39:00.200 | 488FD6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,297:85:0 |      |
| 1378 | 1  | 132 | 00:40:04.200 | 20UY4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                           | 400 | 4  | 0  | 6.032,298:90:0 |      |
| 1379 | 1  | 132 | 00:40:54.200 | 20UY4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 400 | 4  | 0  | 6.032,299:74:0 |      |
| 1380 | 1  | 132 | 00:44:07.533 | 176UJ6A | 6TMREC  | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode  | 400 | 4  | 0  | 6.032,303:00:0 |      |
| 1381 | 1  | 132 | 01:17:20.200 | 488FD6B | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,335:77:0 |      |
| 1382 | 1  | 132 | 02:23:28.200 | 488FD6C | 6TMSED  | NORM,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,401:23:0 |      |
| 1383 | 1  | 132 | 02:33:26.200 | 488FD6D | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,411:10:0 |      |
| 1384 | 1  | 132 | 06:40:43.533 | 488FE6A | 6TMSED  | NORM,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,655:62:0 |      |
| 1385 | 1  | 132 | 06:56:32.200 | 488FE6B | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,671:29:0 |      |
| 1386 | 1  | 132 | 07:41:20.200 | 488FE6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.032,715:57:0 |      |
| 1387 | 1  | 132 | 16:27:44.133 | 488FF6A | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,354:84:0 |      |
| 1388 | 1  | 132 | 19:06:57.466 | 488FF6B | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,393:65:0 |      |
| 1389 | 1  | 132 | 19:12:32.133 | 488FF6C | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,399:21:0 |      |
| 1390 | 1  | 132 | 19:27:28.133 | 488FF6D | 6TMSED  | FILL,AL5       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,414:00:0 |      |
| 1391 | 1  | 132 | 21:13:34.800 | 488FF6E | 6TMSED  | NORM,AL5       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,518:86:0 |      |
| 1392 | 1  | 132 | 22:52:16.133 | 488FG6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,616:50:0 |      |
| 1393 | 1  | 133 | 02:12:48.133 | 488FG6B | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,814:80:0 |      |
| 1394 | 1  | 133 | 02:36:58.800 | 488FG6C | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,838:72:0 |      |
| 1395 | 1  | 133 | 02:42:40.133 | 488FG6D | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,844:38:0 |      |
| 1396 | 1  | 133 | 02:57:36.133 | 488FG6E | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.033,859:17:0 |      |
| 1397 | 1  | 133 | 15:10:19.466 | 488FH6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.034,583:78:0 |      |
| 1398 | 1  | 133 | 18:27:44.133 | 488FH6B | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.034,779:09:0 |      |
| 1399 | 1  | 133 | 19:08:16.133 | 488FH6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.034,819:17:0 |      |
| 1400 | 1  | 133 | 20:46:42.133 | 488FH6D | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.034,916:49:0 |      |
| 1401 | 1  | 133 | 21:20:21.466 | 488FI6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.034,949:75:0 |      |
| 1402 | 1  | 134 | 01:17:20.066 | 488FI6B | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,184:18:0 |      |
| 1403 | 1  | 134 | 02:18:46.733 | 488FI6C | 6TMSED  | FILL,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,244:88:0 |      |
| 1404 | 1  | 134 | 02:19:12.066 | 488FI6D | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,245:35:0 |      |
| 1405 | 1  | 134 | 02:36:16.066 | 488FI6E | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,262:24:0 |      |
| 1406 | 1  | 134 | 12:50:16.733 | 488FJ6A | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,869:48:0 |      |
| 1407 | 1  | 134 | 14:26:45.400 | 488FJ6B | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,964:86:0 |      |
| 1408 | 1  | 134 | 15:00:24.733 | 488FJ6C | 6TMSED  | NORM,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.035,998:21:0 |      |
| 1409 | 1  | 134 | 15:53:00.066 | 488FJ6D | 6TMSED  | NORM,AH4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.036,050:22:0 |      |
| 1410 | 1  | 134 | 15:56:48.066 | 176UM6A | 6TMREC  | PPB            | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 400 | 4  | 0  | 6.036,054:00:0 |      |
| 1411 | 1  | 134 | 16:23:30.066 | 20SP4I  | 7MODE   | INT            | AACS INERTIAL MODE                        | 400 | 4  | 0  | 6.036,080:37:0 |      |
| 1412 | 1  | 134 | 16:38:30.066 | 20SP4K  | 7SLEW   | INIT,POS,17.45 | Stator movement                           | 400 | 4  | 0  | 6.036,095:22:0 |      |
| 1413 | 1  | 134 | 16:50:30.066 | 20SP4L  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 400 | 4  | 0  | 6.036,107:10:0 |      |
| 1414 | 1  | 134 | 16:57:30.066 | 20SP4M  | 7SLEW   | INIT,NEG,17.45 | Stator movement                           | 400 | 4  | 0  | 6.036,114:03:0 |      |
| 1415 | 1  | 134 | 17:08:48.066 | 488FJ6E | 6TMSED  | NORM,AH3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.036,125:19:0 |      |
| 1416 | 1  | 134 | 17:09:30.066 | 20SP4N  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 400 | 4  | 0  | 6.036,125:82:0 |      |
| 1417 | 1  | 134 | 17:16:30.066 | 20SP4O  | 7SLEW   | INIT,POS,4.36  | Stator movement                           | 400 | 4  | 0  | 6.036,132:75:0 |      |
| 1418 | 1  | 134 | 17:28:30.066 | 20SP4P  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 400 | 4  | 0  | 6.036,144:63:0 |      |
| 1419 | 1  | 134 | 17:35:30.066 | 20SP4Q  | 7SLEW   | INIT,NEG,4.36  | Stator movement                           | 400 | 4  | 0  | 6.036,151:56:0 |      |
| 1420 | 1  | 134 | 17:47:30.066 | 20SP4R  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 400 | 4  | 0  | 6.036,163:44:0 |      |
| 1421 | 1  | 134 | 17:59:30.066 | 20SP4AH | 7MODE   | CRU            | AACS CRUISE MODE                          | 400 | 4  | 0  | 6.036,175:32:0 |      |
| 1422 | 1  | 134 | 18:15:00.066 | 488FK6A | 6TMSED  | NORM,AL3       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.036,190:62:0 |      |
| 1423 | 1  | 134 | 18:15:04.066 | 20UN4A  | 7SAFE   | STOP           | S/P NO MOVEMENT                           | 400 | 4  | 0  | 6.036,190:68:0 |      |
| 1424 | 1  | 134 | 18:15:54.066 | 20UN4B  | 7SLEW   | DIS,POS,0.0    | Stator movement                           | 400 | 4  | 0  | 6.036,191:52:0 |      |
| 1425 | 1  | 134 | 18:17:20.733 | 176UN6A | 6TMREC  | RPB            | RESUME PLAYBACK (PB CONTROL) Record Mode  | 400 | 4  | 0  | 6.036,193:00:0 |      |
| 1426 | 1  | 134 | 18:38:24.066 | 488FK6B | 6TMSED  | NORM,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.036,213:75:0 |      |
| 1427 | 1  | 134 | 18:58:17.400 | 488FK6C | 6TMSED  | FILL,AL2       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.036,233:45:0 |      |
| 1428 | 1  | 134 | 19:16:48.066 | 488FK6D | 6TMSED  | FILL,AL4       | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6.036,251:73:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters      | Description                               | GCM | GO | GS | RIM            | MF I |
|------|----|-----|--------------|---------|---------|-----------------|---|-----|----|----|----------------|------|
| 1429 | 1  | 134 | 21:15:15.400 | 488FK6E | 6TMSD   | NORM,AL4        | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,036,368:87:0 |      |
| 1430 | 1  | 134 | 22:51:46.066 | 488FL6A | 6TMSD   | FILL,AL4        | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,036,464:37:0 |      |
| 1431 | 1  | 134 | 23:25:25.400 | 488FL6B | 6TMSD   | NORM,AL4        | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,036,497:63:0 |      |
| 1432 | 1  | 135 | 00:00:00.000 | 20A3FE  | 40T1PR  | Final Condition | PCT Heater 1 OFF (primary relay)          | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1433 | 1  | 135 | 00:00:00.000 | 20A3FD  | 40HRPR  | Final Condition | PCT Heater OFF (primary relay)            | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1434 | 1  | 135 | 00:00:00.000 | 20A3FB  | 37F2PR  | Final Condition | Shield Flash Heater OFF (primary relay)   | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1435 | 1  | 135 | 00:00:00.000 | 20A3FA  | 37F1PR  | Final Condition | Radiator Flash Heater OFF (primary relay) | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1436 | 1  | 135 | 00:00:00.000 | 20A3EZ  | 37C2PR  | Final Condition | Optics Heater 2 OFF (primary relay)       | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1437 | 1  | 135 | 00:00:00.000 | 20A3EY  | 37C1PR  | Final Condition | Optics Heater 1 OFF (primary relay)       | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1438 | 1  | 135 | 00:00:00.000 | 20A3EX  | 37HR    | Final Condition | Replacement Heaters OFF                   | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1439 | 1  | 135 | 00:00:00.000 | 20A3FF  | 40T2R   | Final Condition | PCT Heater 2 OFF                          | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1440 | 1  | 135 | 00:00:00.000 | 20A3EW  | 37A     | Final Condition | NIMS Power ON                             | 400 | 4  | 0  | 6,036,531:80:9 |      |
| 1441 | 1  | 135 | 00:00:00.066 |         | DMS:    | : READY         | RDY, TRACK 4, REV, TIC 4560.96 +/- 2      | 400 | 4  | 0  | 6,036,531:81:0 |      |

| Sequence: |    | G29D-AR |              | Created: 6/25/01 |         | Begin: 01-135/00:00:00 |   | Finish: 01-142/17:00:00 |    |    |                |      |
|-----------|----|---------|--------------|------------------|---------|------------------------|---|-------------------------|----|----|----------------|------|
| Line      | YR | DOY     | SCET - GMT   | PSID             | Command | Parameters             | Description                               | GCM                     | GO | GS | RIM            | MF I |
| 1         | 1  | 135     | 00:00:00.000 | 20A3EW           | 37A     |                        | NIMS Power ON                             | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 2         | 1  | 135     | 00:00:00.000 | 20A3EX           | 37HR    |                        | Replacement Heaters OFF                   | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 3         | 1  | 135     | 00:00:00.000 | 20A3EY           | 37C1PR  |                        | Optics Heater 1 OFF (primary relay)       | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 4         | 1  | 135     | 00:00:00.000 | 20A3EZ           | 37C2PR  |                        | Optics Heater 2 OFF (primary relay)       | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 5         | 1  | 135     | 00:00:00.000 | 20A3FA           | 37F1PR  |                        | Radiator Flash Heater OFF (primary relay) | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 6         | 1  | 135     | 00:00:00.000 | 20A3FB           | 37F2PR  |                        | Shield Flash Heater OFF (primary relay)   | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 7         | 1  | 135     | 00:00:00.000 | 20A3FD           | 40HRPR  |                        | RCT Heater OFF (primary relay)            | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 8         | 1  | 135     | 00:00:00.000 | 20A3FE           | 40T1PR  |                        | PCT Heater 1 OFF (primary relay)          | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 9         | 1  | 135     | 00:00:00.000 | 20A3FF           | 40T2R   |                        | PCT Heater 2 OFF                          | 400                     | 4  | 0  | 6,036,531:80:9 |      |
| 10        | 1  | 135     | 00:00:00.066 |                  | DMS:    | : READY                | RDY, TRACK 4, REV, TIC 4560.96 +/- 2      | 400                     | 4  | 0  | 6,036,531:81:0 |      |
| 11        | 1  | 135     | 00:00:32.066 | 488AA6A          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,036,532:38:0 |      |
| 12        | 1  | 135     | 00:02:08.066 | 176TA6A          | 6TMREC  | PPB                    | PAUSE PLAYBACK (PB CONTROL) Record Mode C | 400                     | 4  | 0  | 6,036,534:00:0 |      |
| 13        | 1  | 135     | 00:07:00.066 | 20SS6B           | 6MROH   | 4,5B20,1,A2            | read from HLM1A4:5B20,1,A2                | 400                     | 4  | 0  | 6,036,538:74:0 |      |
| 14        | 1  | 135     | 00:25:00.066 | 20SS6C           | 6MROH   | 5,5B20,1,B2            | read from HLM1B5:5B20,1,B2                | 400                     | 4  | 0  | 6,036,556:56:0 |      |
| 15        | 1  | 135     | 00:46:04.066 | 20UP4A           | 7SAFE   | STOP                   | S/P NO MOVEMENT                           | 400                     | 4  | 0  | 6,036,577:41:0 |      |
| 16        | 1  | 135     | 00:46:54.066 | 20UP4B           | 7SLEW   | DIS,POS,0.0            | Stator movement                           | 400                     | 4  | 0  | 6,036,578:25:0 |      |
| 17        | 1  | 135     | 00:48:38.733 | 176TB6A          | 6TMREC  | RPB                    | RESUME PLAYBACK (PB CONTROL) Record Mode  | 400                     | 4  | 0  | 6,036,580:00:0 |      |
| 18        | 1  | 135     | 01:23:44.066 | 488AA6B          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,036,614:64:0 |      |
| 19        | 1  | 135     | 02:19:12.066 | 488AA6C          | 6TMSED  | NORM,AL2               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,036,669:51:0 |      |
| 20        | 1  | 135     | 02:23:16.733 | 488AA6D          | 6TMSED  | FILL,AL2               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,036,673:54:0 |      |
| 21        | 1  | 135     | 02:40:32.066 | 488AA6E          | 6TMSED  | FILL,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,036,690:60:0 |      |
| 22        | 1  | 135     | 14:25:12.666 | 488AB6A          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,387:54:0 |      |
| 23        | 1  | 135     | 16:01:48.000 | 488AB6B          | 6TMSED  | FILL,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,483:11:0 |      |
| 24        | 1  | 135     | 16:35:27.333 | 488AB6C          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,516:37:0 |      |
| 25        | 1  | 135     | 17:02:24.000 | 488AB6D          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,543:05:0 |      |
| 26        | 1  | 135     | 18:23:28.000 | 488AB6E          | 6TMSED  | NORM,AL2               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,623:21:0 |      |
| 27        | 1  | 135     | 18:43:31.333 | 488AC6A          | 6TMSED  | FILL,AL2               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,643:06:0 |      |
| 28        | 1  | 135     | 18:53:20.000 | 488AC6B          | 6TMSED  | FILL,AL1               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,652:70:0 |      |
| 29        | 1  | 135     | 19:29:36.000 | 488AC6C          | 6TMSED  | FILL,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,688:58:0 |      |
| 30        | 1  | 135     | 22:56:31.333 | 488AC6D          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,893:26:0 |      |
| 31        | 1  | 135     | 23:05:04.000 | 488AC6E          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,037,901:67:0 |      |
| 32        | 1  | 136     | 01:00:16.000 | 488AD6A          | 6TMSED  | NORM,AL5               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,015:61:0 |      |
| 33        | 1  | 136     | 04:18:40.000 | 488AD6B          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,211:81:0 |      |
| 34        | 1  | 136     | 06:18:08.000 | 488AD6C          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,330:04:0 |      |
| 35        | 1  | 136     | 06:21:24.666 | 488AD6D          | 6TMSED  | FILL,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,333:26:0 |      |
| 36        | 1  | 136     | 06:28:48.000 | 488AD6E          | 6TMSED  | FILL,AL1               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,340:54:0 |      |
| 37        | 1  | 136     | 07:05:04.000 | 488AE6A          | 6TMSED  | FILL,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,376:42:0 |      |
| 38        | 1  | 136     | 13:35:10.666 | 488AF6A          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,762:26:0 |      |
| 39        | 1  | 136     | 15:11:51.333 | 488AF6B          | 6TMSED  | FILL,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,857:82:0 |      |
| 40        | 1  | 136     | 15:45:30.666 | 488AF6C          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,891:17:0 |      |
| 41        | 1  | 136     | 17:02:24.000 | 488AF6D          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,038,967:21:0 |      |
| 42        | 1  | 136     | 18:14:25.333 | 488AF6E          | 6TMSED  | FILL,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,038:42:0 |      |
| 43        | 1  | 136     | 18:25:35.933 | 488AG6A          | 6TMSED  | FILL,AL5               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,049:47:0 |      |
| 44        | 1  | 136     | 18:58:22.600 | 488AG6B          | 6TMSED  | NORM,AL5               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,081:85:0 |      |
| 45        | 1  | 136     | 19:44:37.266 | 488AG6C          | 6TMSED  | FILL,AL5               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,127:61:0 |      |
| 46        | 1  | 136     | 20:13:43.933 | 488AG6D          | 6TMSED  | NORM,AL5               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,156:42:0 |      |
| 47        | 1  | 136     | 23:13:35.933 | 488AG6E          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,334:32:0 |      |
| 48        | 1  | 137     | 02:02:07.933 | 488AH6A          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,501:03:0 |      |
| 49        | 1  | 137     | 02:19:24.600 | 488AH6B          | 6TMSED  | FILL,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,518:11:0 |      |
| 50        | 1  | 137     | 02:29:51.933 | 488AH6C          | 6TMSED  | FILL,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,039,528:42:0 |      |
| 51        | 1  | 137     | 14:00:07.266 | 488AI6A          | 6TMSED  | NORM,AL4               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,040,211:12:0 |      |
| 52        | 1  | 137     | 18:17:03.933 | 488AI6B          | 6TMSED  | NORM,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,040,465:23:0 |      |
| 53        | 1  | 137     | 18:50:12.600 | 488AI6C          | 6TMSED  | FILL,AL3               | Sci, Eng, and D/L Chan                    | 400                     | 4  | 0  | 6,040,498:03:0 |      |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters  | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|-------------|---|-----|----|----|----------------|-----|
| 54   | 1  | 137 | 18:53:19.933 | 488AI6D | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,040,501:11:0 |     |
| 55   | 1  | 137 | 19:08:15.933 | 488AI6E | 6TMSED  | FILL,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,040,515:81:0 |     |
| 56   | 1  | 137 | 22:51:26.600 | 488AJ6A | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,040,736:56:0 |     |
| 57   | 1  | 137 | 23:00:47.933 | 488AJ6B | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,040,745:79:0 |     |
| 58   | 1  | 138 | 01:00:15.933 | 488AJ6C | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,040,864:02:0 |     |
| 59   | 1  | 138 | 04:07:59.933 | 488AJ6D | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,049:63:0 |     |
| 60   | 1  | 138 | 06:07:27.866 | 488AK6A | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,167:77:0 |     |
| 61   | 1  | 138 | 06:15:20.533 | 488AK6B | 6TMSED  | FILL,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,175:58:0 |     |
| 62   | 1  | 138 | 06:22:23.866 | 488AK6C | 6TMSED  | FILL,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,182:56:0 |     |
| 63   | 1  | 138 | 06:58:39.866 | 488AK6D | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,218:44:0 |     |
| 64   | 1  | 138 | 14:20:24.533 | 488AL6A | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,655:34:0 |     |
| 65   | 1  | 138 | 14:35:11.866 | 488AL6B | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,670:00:0 |     |
| 66   | 1  | 138 | 15:26:23.866 | 488AL6C | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,720:58:0 |     |
| 67   | 1  | 138 | 15:36:57.200 | 488AL6D | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,731:07:0 |     |
| 68   | 1  | 138 | 16:10:36.533 | 488AL6E | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,041,764:33:0 |     |
| 69   | 1  | 139 | 01:02:23.866 | 488AM6A | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,042,290:28:0 |     |
| 70   | 1  | 139 | 01:53:35.866 | 488AM6B | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,042,340:86:0 |     |
| 71   | 1  | 139 | 02:05:41.866 | 488AM6C | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,042,352:83:0 |     |
| 72   | 1  | 139 | 02:17:03.866 | 488AM6D | 6TMSED  | FILL,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,042,364:14:0 |     |
| 73   | 1  | 139 | 02:53:19.866 | 488AM6E | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,042,400:02:0 |     |
| 74   | 1  | 140 | 00:30:00.466 | 488AN6A | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,043,682:41:0 |     |
| 75   | 1  | 140 | 01:36:31.800 | 488AN6B | 6TMSED  | NORM,AL5    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,043,748:22:0 |     |
| 76   | 1  | 140 | 03:18:55.800 | 488AN6C | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,043,849:47:0 |     |
| 77   | 1  | 140 | 05:58:55.800 | 488AN6D | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,007:69:0 |     |
| 78   | 1  | 140 | 06:09:37.133 | 488AN6E | 6TMSED  | FILL,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,018:30:0 |     |
| 79   | 1  | 140 | 06:18:07.800 | 488AO6A | 6TMSED  | FILL,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,026:68:0 |     |
| 80   | 1  | 140 | 06:54:23.800 | 488AO6B | 6TMSED  | FILL,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,062:56:0 |     |
| 81   | 1  | 140 | 08:06:20.466 | 488AO6C | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,133:70:0 |     |
| 82   | 1  | 140 | 09:06:39.800 | 488AO6D | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,193:39:0 |     |
| 83   | 1  | 140 | 09:42:01.133 | 488AO6E | 6TMSED  | FILL,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,228:36:0 |     |
| 84   | 1  | 140 | 10:15:40.466 | 488AP6A | 6TMSED  | NORM,AL4    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,261:62:0 |     |
| 85   | 1  | 140 | 16:02:39.800 | 488AP6B | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,604:78:0 |     |
| 86   | 1  | 140 | 17:53:35.800 | 488AQ6A | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,714:52:0 |     |
| 87   | 1  | 140 | 18:08:01.133 | 488AQ6B | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,728:76:0 |     |
| 88   | 1  | 140 | 18:50:19.800 | 488AQ6C | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,770:62:0 |     |
| 89   | 1  | 140 | 19:23:43.133 | 488AQ6D | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,803:64:0 |     |
| 90   | 1  | 140 | 20:11:01.800 | 488AQ6E | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,850:45:0 |     |
| 91   | 1  | 140 | 20:13:43.133 | 488AR6A | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,853:14:0 |     |
| 92   | 1  | 140 | 21:01:01.800 | 488AR6B | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,044,899:86:0 |     |
| 93   | 1  | 141 | 01:42:55.733 | 488AR6C | 6TMSED  | NORM,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,178:68:0 |     |
| 94   | 1  | 141 | 01:43:11.066 | 488AR6D | 6TMSED  | FILL,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,179:00:0 |     |
| 95   | 1  | 141 | 06:31:20.400 | 488AS6A | 6TMSED  | NORM,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,463:90:0 |     |
| 96   | 1  | 141 | 07:13:47.733 | 488AS6B | 6TMSED  | FILL,AL1    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,505:89:0 |     |
| 97   | 1  | 141 | 08:30:23.733 | 488AS6C | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,581:67:0 |     |
| 98   | 1  | 141 | 08:42:55.066 | 488AS6D | 6TMSED  | NORM,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,594:11:0 |     |
| 99   | 1  | 141 | 12:44:27.066 | 176Z6A  | 6TMREC  | <b>TPB</b>  | TERMINATE PLAYBACK (PB CONTROL) Record Mo | 400 | 4  | 0  | 6,045,833:00:0 |     |
| 100  | 1  | 141 | 12:52:59.733 | 488AT6A | 6TMSED  | NORM,AH2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,045,841:41:0 |     |
| 101  | 1  | 141 | 17:13:03.733 | 488AT6B | 6TMSED  | NORM,AH3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,046,098:60:0 |     |
| 102  | 1  | 141 | 18:00:59.733 | 488AT6C | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,046,146:06:0 |     |
| 103  | 1  | 141 | 19:29:59.733 | 488AU6A | 6TMSED  | FILL,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,046,234:08:0 |     |
| 104  | 1  | 141 | 20:07:03.733 | 488AU6B | 6TMSED  | NORM,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,046,270:68:0 |     |
| 105  | 1  | 141 | 22:38:43.733 | 488AU6C | 6TMSED  | FILL,AL3    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,046,420:68:0 |     |
| 106  | 1  | 141 | 22:47:59.733 | 488AU6D | 6TMSED  | FILL,AL2    | Sci, Eng, and D/L Chan                    | 400 | 4  | 0  | 6,046,429:83:0 |     |
| 107  | 1  | 141 | 23:02:14.400 | 465WK6A | 6DMST   |             | 5000 DMS Slew to TIC                      | 400 | 4  | 0  | 6,046,444:00:0 |     |
| 108  | 1  | 141 | 23:02:14.400 |         | DMS:    | : *SLEW-TIC | P7, TRACK *,*FWD, TIC 4560.96 +/- 2       | 400 | 4  | 0  | 6,046,444:00:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID    | Command | Parameters       | Description                              | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|---------|---------|------------------|--|-----|----|----|----------------|-----|
| 109  | 1  | 141 | 23:02:14.400 |         | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 4560.96 +/- 2     | 400 | 4  | 0  | 6,046,444:00:0 |     |
| 110  | 1  | 141 | 23:02:21.066 |         | DMS:    | :*RUNUP          | P7, TRACK 1, FWD, TIC 4560.96 +/- 2      | 400 | 4  | 0  | 6,046,444:10:0 |     |
| 111  | 1  | 141 | 23:02:22.466 |         | DMS:    | :*AT_SPD         | P7, TRACK 1, FWD, TIC *4561.08 +/- 2     | 400 | 4  | 0  | 6,046,444:12:1 |     |
| 112  | 1  | 141 | 23:33:25.200 |         | DMS:    | :*RUNDOWN        | P7, TRACK 1, FWD, TIC *4997.94 +/- 2     | 400 | 4  | 0  | 6,046,474:76:2 |     |
| 113  | 1  | 141 | 23:33:26.400 |         | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *4998.00 +/- 2    | 400 | 4  | 0  | 6,046,474:78:0 |     |
| 114  | 1  | 141 | 23:55:17.066 | 488AU6E | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,496:42:0 |     |
| 115  | 1  | 142 | 00:08:45.066 | 488AV6A | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,509:71:0 |     |
| 116  | 1  | 142 | 00:56:03.733 | 488AV6B | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,556:52:0 |     |
| 117  | 1  | 142 | 04:52:47.733 | 488AV6C | 6TMSED  | NORM,AL1         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,790:64:0 |     |
| 118  | 1  | 142 | 04:55:55.733 | 465WL6A | 6DMSC   | P100.4           | DMS Control Tape P/B 100.8kbps           | 400 | 4  | 0  | 6,046,793:73:0 |     |
| 119  | 1  | 142 | 04:55:55.733 |         | DMS:    | :*US-RUNUP       | P7, TRACK 1, FWD, TIC 4998.00 +/- 2      | 400 | 4  | 0  | 6,046,793:73:0 |     |
| 120  | 1  | 142 | 04:55:57.133 |         | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *4998.12 +/- 2     | 400 | 4  | 0  | 6,046,793:75:1 |     |
| 121  | 1  | 142 | 04:56:02.400 |         | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *4999.35 +/- 2     | 400 | 4  | 0  | 6,046,793:83:0 |     |
| 122  | 1  | 142 | 04:56:03.600 |         | DMS:    | :*RUNUP          | P100, TRACK *4, *REV, TIC *4999.41 +/- 2 | 400 | 4  | 0  | 6,046,793:84:8 |     |
| 123  | 1  | 142 | 04:56:07.466 |         | DMS:    | :*AT_SPD         | P100, TRACK 4, REV, TIC 4993.91 +/- 3    | 400 | 4  | 0  | 6,046,793:90:6 |     |
| 124  | 1  | 142 | 04:56:07.466 |         | DMS:    | :*P_SLEW         | P100, TRACK 4, REV, TIC *4993.91 +/- 2   | 400 | 4  | 0  | 6,046,793:90:6 |     |
| 125  | 1  | 142 | 05:21:47.733 | 465WL6B | 6DMSC   | RDY,4            | DMS Control Tape stop                    | 400 | 4  | 0  | 6,046,819:35:0 |     |
| 126  | 1  | 142 | 05:21:47.733 |         | DMS:    | :*RUNDOWN        | P100, TRACK 4, REV, TIC *255.79 +/- 3    | 400 | 4  | 0  | 6,046,819:35:0 |     |
| 127  | 1  | 142 | 05:21:48.933 |         | DMS:    | :*READY          | RDY, TRACK 4, REV, TIC *254.99 +/- 3     | 400 | 4  | 0  | 6,046,819:36:8 |     |
| 128  | 1  | 142 | 05:33:01.733 | 488AV6D | 6TMSED  | FILL,AL1         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,830:45:0 |     |
| 129  | 1  | 142 | 06:15:59.733 | 488AW6A | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,872:90:0 |     |
| 130  | 1  | 142 | 07:25:39.733 |         | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC 254.99 +/- 3     | 400 | 4  | 0  | 6,046,941:81:0 |     |
| 131  | 1  | 142 | 07:25:39.733 | 465WM6A | 6DTRN   | CMD,6DTRN,465WM6 | DMS TRACK TURNAROUND                     | 400 | 4  | 0  | 6,046,941:81:0 |     |
| 132  | 1  | 142 | 07:25:39.733 |         | DMS:    | :*DMS-TURN       | P7, TRACK 4, REV, TIC 254.99 +/- 3       | 400 | 4  | 0  | 6,046,941:81:0 |     |
| 133  | 1  | 142 | 07:25:41.133 |         | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *255.11 +/- 3      | 400 | 4  | 0  | 6,046,941:83:1 |     |
| 134  | 1  | 142 | 07:25:46.400 |         | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *256.34 +/- 3      | 400 | 4  | 0  | 6,046,942:00:0 |     |
| 135  | 1  | 142 | 07:25:47.600 |         | DMS:    | :*RUNUP          | P7, TRACK *4, *REV, TIC *256.40 +/- 3    | 400 | 4  | 0  | 6,046,942:01:8 |     |
| 136  | 1  | 142 | 07:25:49.000 |         | DMS:    | :*AT_SPD         | P7, TRACK 4, REV, TIC *256.28 +/- 3      | 400 | 4  | 0  | 6,046,942:03:9 |     |
| 137  | 1  | 142 | 07:29:09.066 | 488AW6B | 6TMSED  | FILL,AH2         | Sci, Eng, and D/L Chan                   | 400 | 4  | 0  | 6,046,945:31:0 |     |
| 138  | 1  | 142 | 07:29:49.666 |         | DMS:    | :*REVERSE        | P7, TRACK 4, REV, TIC *199.87 +/- 3      | 400 | 4  | 0  | 6,046,946:00:9 |     |
| 139  | 1  | 142 | 07:29:50.866 |         | DMS:    | :*TURNARND       | P7, TRACK *1, *FWD, TIC *199.81 +/- 3    | 400 | 4  | 0  | 6,046,946:02:7 |     |
| 140  | 1  | 142 | 07:29:50.866 |         | DMS:    | :*RUNUP          | P7, TRACK 1, FWD, TIC 199.81 +/- 3       | 400 | 4  | 0  | 6,046,946:02:7 |     |
| 141  | 1  | 142 | 07:29:52.266 |         | DMS:    | :*AT_SPD         | P7, TRACK 1, FWD, TIC *199.93 +/-        | 400 | 4  | 0  | 6,046,946:04:8 |     |
| 142  | 1  | 142 | 07:30:04.266 |         | DMS:    | :*AUTOSTOP       | P7, TRACK 1, FWD, TIC *202.06 +/-        | 400 | 4  | 0  | 6,046,946:22:8 |     |
| 143  | 1  | 142 | 07:30:05.466 |         | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *202.12 +/-       | 400 | 4  | 0  | 6,046,946:24:6 |     |
| 144  | 1  | 142 | 07:35:42.400 | 465WN6A | 6DMSC   | P100.1           | DMS Control Tape P/B 100.8kbps           | 400 | 4  | 0  | 6,046,951:75:0 |     |
| 145  | 1  | 142 | 07:35:42.400 |         | DMS:    | :*E4-DELAY       | RDY, TRACK 1, FWD, TIC 202.12 +/-        | 400 | 4  | 0  | 6,046,951:75:0 |     |
| 146  | 1  | 142 | 07:35:49.066 |         | DMS:    | :*RUNUP          | P100, TRACK 1, FWD, TIC 202.12 +/-       | 400 | 4  | 0  | 6,046,951:85:0 |     |
| 147  | 1  | 142 | 07:35:52.933 |         | DMS:    | :*AT_SPD         | P100, TRACK 1, FWD, TIC 207.62 +/-       | 400 | 4  | 0  | 6,046,951:90:8 |     |
| 148  | 1  | 142 | 07:35:52.933 |         | DMS:    | :*P_SLEW         | P100, TRACK 1, FWD, TIC *207.62 +/-      | 400 | 4  | 0  | 6,046,951:90:8 |     |
| 149  | 1  | 142 | 08:07:36.400 | 465WN6B | 6DMSC   | RDY,1            | DMS Control Tape stop                    | 400 | 4  | 0  | 6,046,983:34:0 |     |
| 150  | 1  | 142 | 08:07:36.400 |         | DMS:    | :*RUNDOWN        | P100, TRACK 1, FWD, TIC *6063.01 +/-     | 400 | 4  | 0  | 6,046,983:34:0 |     |
| 151  | 1  | 142 | 08:07:37.600 |         | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *6063.81 +/-      | 400 | 4  | 0  | 6,046,983:35:8 |     |
| 152  | 1  | 142 | 08:23:12.400 | 465WO6A | 6DMSC   | P100.2           | DMS Control Tape P/B 100.8kbps           | 400 | 4  | 0  | 6,046,998:73:0 |     |
| 153  | 1  | 142 | 08:23:12.400 |         | DMS:    | :*US-RUNUP       | P7, TRACK 1, FWD, TIC 6063.81 +/-        | 400 | 4  | 0  | 6,046,998:73:0 |     |
| 154  | 1  | 142 | 08:23:13.800 |         | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *6063.93 +/-       | 400 | 4  | 0  | 6,046,998:75:1 |     |
| 155  | 1  | 142 | 08:23:19.066 |         | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *6065.17 +/-       | 400 | 4  | 0  | 6,046,998:83:0 |     |
| 156  | 1  | 142 | 08:23:20.266 |         | DMS:    | :*RUNUP          | P100, TRACK *2, *REV, TIC *6065.23 +/-   | 400 | 4  | 0  | 6,046,998:84:8 |     |
| 157  | 1  | 142 | 08:23:24.133 |         | DMS:    | :*P_SLEW         | P100, TRACK 2, REV, TIC *6059.73 +/-     | 400 | 4  | 0  | 6,046,998:90:6 |     |
| 158  | 1  | 142 | 08:23:24.133 |         | DMS:    | :*AT_SPD         | P100, TRACK 2, REV, TIC 6059.73 +/-      | 400 | 4  | 0  | 6,046,998:90:6 |     |
| 159  | 1  | 142 | 08:55:20.400 |         | DMS:    | :*RUNDOWN        | P100, TRACK 2, REV, TIC *164.96 +/-      | 400 | 4  | 0  | 6,047,030:53:0 |     |
| 160  | 1  | 142 | 08:55:20.400 | 465WP6A | 6DMSC   | P100.3           | DMS Control Tape P/B 100.8kbps           | 400 | 4  | 0  | 6,047,030:53:0 |     |
| 161  | 1  | 142 | 08:55:21.600 |         | DMS:    | :*RUNUP          | P100, TRACK *3, *FWD, TIC *164.16 +/-    | 400 | 4  | 0  | 6,047,030:54:8 |     |
| 162  | 1  | 142 | 08:55:25.466 |         | DMS:    | :*AT_SPD         | P100, TRACK 3, FWD, TIC 169.66 +/-       | 400 | 4  | 0  | 6,047,030:60:6 |     |
| 163  | 1  | 142 | 08:55:25.466 |         | DMS:    | :*P_SLEW         | P100, TRACK 3, FWD, TIC *169.66 +/-      | 400 | 4  | 0  | 6,047,030:60:6 |     |

| Line | YR | DOY | SCET - GMT   | PSID            | Command | Parameters       | Description                           | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|-----------------|---------|------------------|---------------------------------------|-----|----|----|----------------|-----|
| 164  | 1  | 142 | 09:27:21.066 | 465WP6B         | 6DMSC   | RDY,3            | DMS Control Tape stop                 | 400 | 4  | 0  | 6,047,062:22:0 |     |
| 165  | 1  | 142 | 09:27:21.066 |                 | DMS:    | :*RUNDOWN        | P100, TRACK 3, FWD, TIC *6062.38 +/-  | 400 | 4  | 0  | 6,047,062:22:0 |     |
| 166  | 1  | 142 | 09:27:22.266 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *6063.18 +/-   | 400 | 4  | 0  | 6,047,062:23:8 |     |
| 167  | 1  | 142 | 09:42:04.400 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1, FWD, TIC *6063.18 +/-   | 400 | 4  | 0  | 6,047,076:73:0 |     |
| 168  | 1  | 142 | 09:42:04.400 | 465WQ6A         | 6DMSC   | P100.4           | DMS Control Tape P/B 100.8kbps        | 400 | 4  | 0  | 6,047,076:73:0 |     |
| 169  | 1  | 142 | 09:42:05.800 |                 | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *6063.30 +/-    | 400 | 4  | 0  | 6,047,076:75:1 |     |
| 170  | 1  | 142 | 09:42:11.066 |                 | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *6064.53 +/-    | 400 | 4  | 0  | 6,047,076:83:0 |     |
| 171  | 1  | 142 | 09:42:12.266 |                 | DMS:    | :*RUNUP          | P100, TRACK *4, REV, TIC *6064.59 +/- | 400 | 4  | 0  | 6,047,076:84:8 |     |
| 172  | 1  | 142 | 09:42:16.133 |                 | DMS:    | :*P_SLEW         | P100, TRACK 4, REV, TIC *6059.09 +/-  | 400 | 4  | 0  | 6,047,076:90:6 |     |
| 173  | 1  | 142 | 09:42:16.133 |                 | DMS:    | :*AT_SPD         | P100, TRACK 4, REV, TIC *6059.09 +/-  | 400 | 4  | 0  | 6,047,076:90:6 |     |
| 174  | 1  | 142 | 10:14:11.733 |                 | DMS:    | :*RUNDOWN        | P100, TRACK 4, REV, TIC *166.38 +/-   | 400 | 4  | 0  | 6,047,108:52:0 |     |
| 175  | 1  | 142 | 10:14:11.733 | 465WR6A         | 6DMSC   | P100.3           | DMS Control Tape P/B 100.8kbps        | 400 | 4  | 0  | 6,047,108:52:0 |     |
| 176  | 1  | 142 | 10:14:12.933 |                 | DMS:    | :*RUNUP          | P100, TRACK *3, FWD, TIC *165.58 +/-  | 400 | 4  | 0  | 6,047,108:53:8 |     |
| 177  | 1  | 142 | 10:14:16.800 |                 | DMS:    | :*AT_SPD         | P100, TRACK 3, FWD, TIC 171.08 +/-    | 400 | 4  | 0  | 6,047,108:59:6 |     |
| 178  | 1  | 142 | 10:14:16.800 |                 | DMS:    | :*P_SLEW         | P100, TRACK 3, FWD, TIC *171.08 +/-   | 400 | 4  | 0  | 6,047,108:59:6 |     |
| 179  | 1  | 142 | 10:15:17.733 |                 | DMS:    | :*RUNDOWN        | P100, TRACK 3, FWD, TIC *358.52 +/-   | 400 | 4  | 0  | 6,047,109:60:0 |     |
| 180  | 1  | 142 | 10:15:17.733 | 465WR6B         | 6DMSC   | RDY,3            | DMS Control Tape stop                 | 400 | 4  | 0  | 6,047,109:60:0 |     |
| 181  | 1  | 142 | 10:15:18.933 |                 | DMS:    | :*READY          | RDY, TRACK 3, FWD, TIC *359.32 +/-    | 400 | 4  | 0  | 6,047,109:61:8 |     |
| 182  | 1  | 142 | 10:15:59.066 | 488AW6C         | 6TMSED  | FILL,AL2         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,110:31:0 |     |
| 183  | 1  | 142 | 10:29:47.666 |                 | DMS:    | :*READY          | RDY, TRACK *4, *REV, TIC 359.32 +/-   | 400 | 4  | 0  | 6,047,124:00:0 |     |
| 184  | 1  | 142 | 10:29:47.666 | 465WS6A         | 6DMSC   | RDY,4            | DMS Control Tape stop                 | 400 | 4  | 0  | 6,047,124:00:0 |     |
| 185  | 1  | 142 | 10:30:41.666 |                 | DMS:    | :*DMS-TURN       | P7, TRACK 4, REV, TIC 359.32 +/-      | 400 | 4  | 0  | 6,047,124:81:0 |     |
| 186  | 1  | 142 | 10:30:41.666 |                 | DMS:    | :*US-RUNUP       | P7, TRACK *1, *FWD, TIC 359.32 +/-    | 400 | 4  | 0  | 6,047,124:81:0 |     |
| 187  | 1  | 142 | 10:30:41.666 | 465WT6A         | 6DTRN   | CMD,6DTRN,465WT6 | DMS TRACK TURNAROUND                  | 400 | 4  | 0  | 6,047,124:81:0 |     |
| 188  | 1  | 142 | 10:30:43.066 |                 | DMS:    | :*US_AT_SP       | P7, TRACK 1, FWD, TIC *359.44 +/-     | 400 | 4  | 0  | 6,047,124:83:1 |     |
| 189  | 1  | 142 | 10:30:48.333 |                 | DMS:    | :*US_RD          | P7, TRACK 1, FWD, TIC *360.67 +/-     | 400 | 4  | 0  | 6,047,125:00:0 |     |
| 190  | 1  | 142 | 10:30:49.533 |                 | DMS:    | :*RUNUP          | P7, TRACK *4, *REV, TIC *360.73 +/-   | 400 | 4  | 0  | 6,047,125:01:8 |     |
| 191  | 1  | 142 | 10:30:50.933 |                 | DMS:    | :*AT_SPD         | P7, TRACK 4, REV, TIC *360.61 +/-     | 400 | 4  | 0  | 6,047,125:03:9 |     |
| 192  | 1  | 142 | 10:42:16.733 |                 | DMS:    | :*REVERSE        | P7, TRACK 4, REV, TIC *199.87 +/-     | 400 | 4  | 0  | 6,047,136:31:6 |     |
| 193  | 1  | 142 | 10:42:17.933 |                 | DMS:    | :*TURNARND       | P7, TRACK *1, *FWD, TIC *199.81 +/-   | 400 | 4  | 0  | 6,047,136:33:4 |     |
| 194  | 1  | 142 | 10:42:17.933 |                 | DMS:    | :*RUNUP          | P7, TRACK 1, FWD, TIC 199.81 +/-      | 400 | 4  | 0  | 6,047,136:33:4 |     |
| 195  | 1  | 142 | 10:42:19.333 |                 | DMS:    | :*AT_SPD         | P7, TRACK 1, FWD, TIC *199.93 +/-     | 400 | 4  | 0  | 6,047,136:35:5 |     |
| 196  | 1  | 142 | 10:42:31.333 |                 | DMS:    | :*AUTOSTOP       | P7, TRACK 1, FWD, TIC *202.06 +/-     | 400 | 4  | 0  | 6,047,136:53:5 |     |
| 197  | 1  | 142 | 10:42:32.533 |                 | DMS:    | :*READY          | RDY, TRACK 1, FWD, TIC *202.12 +/-    | 400 | 4  | 0  | 6,047,136:55:3 |     |
| 198  | 1  | 142 | 12:10:17.000 | 488AW6D         | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,223:35:0 |     |
| 199  | 1  | 142 | 12:53:00.333 | 488AX6A         | 6TMSED  | NORM,AH2         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,265:58:0 |     |
| 200  | 1  | 142 | 13:06:00.333 | 20UF4C          | 7STAT   | 10.00,260.50,-25 | Stator inertial point                 | 400 | 4  | 0  | 6,047,278:45:0 |     |
| 201  | 1  | 142 | 13:06:12.333 | 20UF6D          | 6MROH   | 7,6744.0,A10     | read from AACSA7.6744.0,A10           | 400 | 4  | 0  | 6,047,278:63:0 |     |
| 202  | 1  | 142 | 13:25:02.333 | 490UF412A4B     | 7MODE   | INT              | AACS INERTIAL MODE                    | 400 | 4  | 0  | 6,047,297:29:0 |     |
| 203  | 1  | 142 | 13:30:00.333 | 490UF412A4D     | 7SAFE   | UNSTOW           | SP TO 153 deg cone                    | 400 | 4  | 0  | 6,047,302:21:0 |     |
| 204  | 1  | 142 | 13:30:20.333 | 20UF4D          | 7STAT   | 17.45,260.50,-25 | Stator inertial point                 | 400 | 4  | 0  | 6,047,302:51:0 |     |
| 205  | 1  | 142 | 13:33:46.333 | 488AX6B         | 6TMSED  | FILL,AH2         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,305:87:0 |     |
| 206  | 1  | 142 | 13:34:10.333 | 490UF412A4E     | 7VECT   | RTH              | Inert vect update UTC                 | 400 | 4  | 0  | 6,047,306:32:0 |     |
| 207  | 1  | 142 | 13:34:14.333 | 490UF412A4F     | 7TURN   | 2,RTH            | ALERT Thruster                        | 400 | 4  | 0  | 6,047,306:38:0 |     |
| 208  | 1  | 142 | 13:38:02.333 | 490UF412A406A4A | 7STAR   | 1,1307.23,966,-5 | Star catalog update                   | 400 | 4  | 0  | 6,047,310:16:0 |     |
| 209  | 1  | 142 | 13:38:04.333 | 490UF412A406A4B | 7STAR   | 2,211,140.1409,- | Star catalog update                   | 400 | 4  | 0  | 6,047,310:19:0 |     |
| 210  | 1  | 142 | 13:38:06.333 | 490UF412A406A4C | 7STAR   | 3,477,309.93     | Star catalog update                   | 400 | 4  | 0  | 6,047,310:22:0 |     |
| 211  | 1  | 142 | 13:38:08.333 | 490UF412A406A4D | 7STAR   | 4,0,0,0,0,0      | Star catalog update                   | 400 | 4  | 0  | 6,047,310:25:0 |     |
| 212  | 1  | 142 | 13:38:10.333 | 490UF412A406A4E | 7STAR   | 5,0,0,0,0,0      | Star catalog update                   | 400 | 4  | 0  | 6,047,310:28:0 |     |
| 213  | 1  | 142 | 13:38:12.333 | 490UF412A406A4F | 7STAR   | 6,0,0,0,0,0      | Star catalog update                   | 400 | 4  | 0  | 6,047,310:31:0 |     |
| 214  | 1  | 142 | 13:48:06.333 | 20UF4F          | 7SLEW   | DIS,POS,0.0      | Stator movement                       | 400 | 4  | 0  | 6,047,320:12:0 |     |
| 215  | 1  | 142 | 13:56:10.333 | 490UF412A4G     | 7MODE   | CRU              | AACS CRUISE MODE                      | 400 | 4  | 0  | 6,047,328:10:0 |     |
| 216  | 1  | 142 | 14:21:05.000 | 488AX6C         | 6TMSED  | NORM,AH2         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,352:68:0 |     |
| 217  | 1  | 142 | 15:31:00.333 | 488AX6D         | 6TMSED  | NORM,AL2         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,421:82:0 |     |
| 218  | 1  | 142 | 16:53:51.666 | 488AX6E         | 6TMSED  | NORM,AL1         | Sci, Eng, and D/L Chan                | 400 | 4  | 0  | 6,047,503:77:0 |     |

| Line | YR | DOY | SCET - GMT   | PSID   | Command | Parameters      | Description                               | GCM | GO | GS | RIM            | MFI |
|------|----|-----|--------------|--------|---------|-----------------|---|-----|----|----|----------------|-----|
| 219  | 1  | 142 | 17:00:00.000 | 20A3FB | 37F2PR  | Final Condition | Shield Flash Heater OFF (primary relay)   | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 220  | 1  | 142 | 17:00:00.000 | 20A3FD | 40HRPR  | Final Condition | RCT Heater OFF (primary relay)            | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 221  | 1  | 142 | 17:00:00.000 | 20A3FE | 40T1PR  | Final Condition | PCT Heater 1 OFF (primary relay)          | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 222  | 1  | 142 | 17:00:00.000 | 20A3FF | 40T2R   | Final Condition | PCT Heater 2 OFF                          | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 223  | 1  | 142 | 17:00:00.000 | 20A3EW | 37A     | Final Condition | NIMS Power ON                             | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 224  | 1  | 142 | 17:00:00.000 | 20A3FA | 37F1PR  | Final Condition | Radiator Flash Heater OFF (primary relay) | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 225  | 1  | 142 | 17:00:00.000 | 20A3EZ | 37C2PR  | Final Condition | Optics Heater 2 OFF (primary relay)       | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 226  | 1  | 142 | 17:00:00.000 | 20A3EY | 37C1PR  | Final Condition | Optics Heater 1 OFF (primary relay)       | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 227  | 1  | 142 | 17:00:00.000 | 20A3EX | 37HR    | Final Condition | Replacement Heaters OFF                   | 400 | 4  | 0  | 6,047,509:83:5 |     |
| 228  | 1  | 142 | 17:00:00.333 |        | DMS:    | : READY         | RDY, TRACK 1, FWD, TIC 202.12 +/-         | 400 | 4  | 0  | 6,047,509:84:0 |     |



# 29GNREGION01

```

OAPEL: 29GNREGION01      ALIAS: 29GNREGION01
EXT: A                    PSID: DA
SCLK1: 05840624:89:0     SCLK2: 05840639:71:0
SCET1: 00-363/10:36:27.866 SCET2: 00-363/10:51:25.866
TARGET: GANYMEDE        PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 288           TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326288001      03 26 288 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039FF    | 0,0011,1001,1111,1111 |
| 13           | 039FF    | 0,0011,1001,1111,1111 |
| 14           | 039FF    | 0,0011,1001,1111,1111 |
| 15           | 039FF    | 0,0011,1001,1111,1111 |
| 16           | 039FF    | 0,0011,1001,1111,1111 |
| 17           | 039FF    | 0,0011,1001,1111,1111 |
| 18           | 039FF    | 0,0011,1001,1111,1111 |
| 19           | 039FF    | 0,0011,1001,1111,1111 |
| 20           | 039FF    | 0,0011,1001,1111,1111 |
| 21           | 039FF    | 0,0011,1001,1111,1111 |
| 22           | 039FF    | 0,0011,1001,1111,1111 |
| 23           | 039FF    | 0,0011,1001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29CNGLOBAL01

```

OAPEL: 29CNGLOBAL01          ALIAS: 29CNGLOBAL01
EXT: A                        PSID: DB
SCLK1: 05840812:90:0        SCLK2: 05840815:01:0
SCET1: 00-363/13:46:33.200  SCET2: 00-363/13:48:36.533
TARGET: CALLISTO            PARTITION: 1
  
```

```

MODE: 3                      GAIN: 4
CHOP: 1                      GRAT_OFF: 4
PTAB_A: 1 1 0 0 124         PTAB_B: 1 1 0 0 124
ECAL: 0                      OPCAL: 0
R/T: 0                       RECORD: 1
  
```

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 288             TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326288001        03 26 288 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039FF    | 0,0011,1001,1111,1111 |
| 13           | 039FF    | 0,0011,1001,1111,1111 |
| 14           | 039FF    | 0,0011,1001,1111,1111 |
| 15           | 039FF    | 0,0011,1001,1111,1111 |
| 16           | 039FF    | 0,0011,1001,1111,1111 |
| 17           | 039FF    | 0,0011,1001,1111,1111 |
| 18           | 039FF    | 0,0011,1001,1111,1111 |
| 19           | 039FF    | 0,0011,1001,1111,1111 |
| 20           | 039FF    | 0,0011,1001,1111,1111 |
| 21           | 039FF    | 0,0011,1001,1111,1111 |
| 22           | 039FF    | 0,0011,1001,1111,1111 |
| 23           | 039FF    | 0,0011,1001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29GNGLOBAL01

```

OAPEL: 29GNGLOBAL01      ALIAS: 29GNGLOBAL01
EXT: A                    PSID: DC
SCLK1: 05841022:90:0     SCLK2: 05841032:62:0
SCET1: 00-363/17:18:53.200 SCET2: 00-363/17:28:41.200
TARGET: GANYMEDE        PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 252          TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326252001      03 26 252 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039F8    | 0,0011,1001,1111,1000 |
| 13           | 039F8    | 0,0011,1001,1111,1000 |
| 14           | 039F8    | 0,0011,1001,1111,1000 |
| 15           | 039F8    | 0,0011,1001,1111,1000 |
| 16           | 039F8    | 0,0011,1001,1111,1000 |
| 17           | 039F8    | 0,0011,1001,1111,1000 |
| 18           | 039F8    | 0,0011,1001,1111,1000 |
| 19           | 039F8    | 0,0011,1001,1111,1000 |
| 20           | 039F8    | 0,0011,1001,1111,1000 |
| 21           | 039F8    | 0,0011,1001,1111,1000 |
| 22           | 039F8    | 0,0011,1001,1111,1000 |
| 23           | 039F8    | 0,0011,1001,1111,1000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29GNGLOBAL02

```

OAPEL: 29GNGLOBAL02      ALIAS: 29GNGLOBAL02
EXT: A                    PSID: DD
SCLK1: 05841035:89:0     SCLK2: 05841046:01:0
SCET1: 00-363/17:32:01.866 SCET2: 00-363/17:42:09.866
TARGET: GANYMEDE        PARTITION: 1
  
```

```

MODE: 3                  GAIN: 2
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 0                   RECORD: 1
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 126          TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326126001      03 26 126 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 039F8    | 0,0011,1001,1111,1000 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 039F8    | 0,0011,1001,1111,1000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 039F8    | 0,0011,1001,1111,1000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 039F8    | 0,0011,1001,1111,1000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 039F8    | 0,0011,1001,1111,1000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 039F8    | 0,0011,1001,1111,1000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29GNGLOBAL03

```

OAPEL: 29GNGLOBAL03      ALIAS: 29GNGLOBAL03
EXT: A                    PSID: DE
SCLK1: 05841337:90:0     SCLK2: 05841345:57:0
SCET1: 00-363/22:37:23.133 SCET2: 00-363/22:45:06.466
TARGET: GANYMEDE        PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 252          TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326252001      03 26 252 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039F8    | 0,0011,1001,1111,1000 |
| 13           | 039F8    | 0,0011,1001,1111,1000 |
| 14           | 039F8    | 0,0011,1001,1111,1000 |
| 15           | 039F8    | 0,0011,1001,1111,1000 |
| 16           | 039F8    | 0,0011,1001,1111,1000 |
| 17           | 039F8    | 0,0011,1001,1111,1000 |
| 18           | 039F8    | 0,0011,1001,1111,1000 |
| 19           | 039F8    | 0,0011,1001,1111,1000 |
| 20           | 039F8    | 0,0011,1001,1111,1000 |
| 21           | 039F8    | 0,0011,1001,1111,1000 |
| 22           | 039F8    | 0,0011,1001,1111,1000 |
| 23           | 039F8    | 0,0011,1001,1111,1000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29INIWATCH01

```

OAPEL: 29INIWATCH01      ALIAS: 29INIWATCH01
EXT: A                    PSID: DF
SCLK1: 05841377:90:0     SCLK2: 05841380:87:0
SCET1: 00-363/23:17:49.800 SCET2: 00-363/23:20:49.800
TARGET: IO                PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 288           TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326288001      03 26 288 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039FF    | 0,0011,1001,1111,1111 |
| 13           | 039FF    | 0,0011,1001,1111,1111 |
| 14           | 039FF    | 0,0011,1001,1111,1111 |
| 15           | 039FF    | 0,0011,1001,1111,1111 |
| 16           | 039FF    | 0,0011,1001,1111,1111 |
| 17           | 039FF    | 0,0011,1001,1111,1111 |
| 18           | 039FF    | 0,0011,1001,1111,1111 |
| 19           | 039FF    | 0,0011,1001,1111,1111 |
| 20           | 039FF    | 0,0011,1001,1111,1111 |
| 21           | 039FF    | 0,0011,1001,1111,1111 |
| 22           | 039FF    | 0,0011,1001,1111,1111 |
| 23           | 039FF    | 0,0011,1001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNGRWAKE01

```

OAPEL: 29JNGRWAKE01      ALIAS: 29JNGRWAKE01
EXT: A                    PSID: DG
SCLK1: 05841605:13:0     SCLK2: 05841630:58:0
SCET1: 00-364/03:07:31.133 SCET2: 00-364/03:33:17.133
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 48           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326048001      03 26 048 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038C7    | 0,0011,1000,1100,0111 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 00000    | 0,0000,0000,0000,0000 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 038C7    | 0,0011,1000,1100,0111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 00000    | 0,0000,0000,0000,0000 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 038C7    | 0,0011,1000,1100,0111 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 038C7    | 0,0011,1000,1100,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 038C7    | 0,0011,1000,1100,0111 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 038C7    | 0,0011,1000,1100,0111 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29INIWATCH02

```

OAPEL: 29INIWATCH02          ALIAS: 29INIWATCH02
EXT: A                        PSID: DH
SCLK1: 05841649:89:0        SCLK2: 05841653:07:0
SCET1: 00-364/03:52:51.133  SCET2: 00-364/03:55:59.133
TARGET: IO                   PARTITION: 1
  
```

```

MODE: 3                      GAIN: 2
CHOP: 1                      GRAT_OFF: 4
PTAB_A: 1 1 0 0 124        PTAB_B: 1 1 0 0 124
ECAL: 0                     OPCAL: 0
R/T: 0                      RECORD: 1
  
```

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 288             TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326288001        03 26 288 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039FF    | 0,0011,1001,1111,1111 |
| 13           | 039FF    | 0,0011,1001,1111,1111 |
| 14           | 039FF    | 0,0011,1001,1111,1111 |
| 15           | 039FF    | 0,0011,1001,1111,1111 |
| 16           | 039FF    | 0,0011,1001,1111,1111 |
| 17           | 039FF    | 0,0011,1001,1111,1111 |
| 18           | 039FF    | 0,0011,1001,1111,1111 |
| 19           | 039FF    | 0,0011,1001,1111,1111 |
| 20           | 039FF    | 0,0011,1001,1111,1111 |
| 21           | 039FF    | 0,0011,1001,1111,1111 |
| 22           | 039FF    | 0,0011,1001,1111,1111 |
| 23           | 039FF    | 0,0011,1001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |



# 29JNGRWAKE02

```

OAPEL: 29JNGRWAKE02      ALIAS: 29JNGRWAKE02
EXT: A                    PSID: DI
SCLK1: 05841656:90:0     SCLK2: 05841670:87:0
SCET1: 00-364/03:59:55.800 SCET2: 00-364/04:14:03.800
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0            EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 48            TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326048001      03 26 048 001
WTGRP_SIZ: 26
  
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038C7    | 0,0011,1000,1100,0111 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 00000    | 0,0000,0000,0000,0000 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 038C7    | 0,0011,1000,1100,0111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 00000    | 0,0000,0000,0000,0000 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 038C7    | 0,0011,1000,1100,0111 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 038C7    | 0,0011,1000,1100,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 038C7    | 0,0011,1000,1100,0111 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 038C7    | 0,0011,1000,1100,0111 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNNEBRLT01

```

OAPEL: 29JNNEBRLT01      ALIAS: 29JNNEBRLT01
EXT: R                    PSID: DJ
SCLK1: 05841679:00:0     SCLK2: 05841688:12:0
SCET1: 2000-364/04:22:12.133 SCET2: 2000-364/04:31:25.133
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                  GAIN: 2
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 1                   RECORD: 0
  
```

```

MB_DOWN: 10001           MB_UP: 10001
COMP_FLAG: 0
EST_COMP: 0.0           EST_COMPV: 0.0
RATE_CON1: 00000        RATE_CON2: 00000
NWAVETOT: 130           TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302130000      03 02 130 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 03CD7    | 0,0011,1100,1101,0111 |
| 1            | 03CD7    | 0,0011,1100,1101,0111 |
| 2            | 03CD7    | 0,0011,1100,1101,0111 |
| 3            | 03CD7    | 0,0011,1100,1101,0111 |
| 4            | 03CD7    | 0,0011,1100,1101,0111 |
| 5            | 03CD7    | 0,0011,1100,1101,0111 |
| 6            | 03CD7    | 0,0011,1100,1101,0111 |
| 7            | 03CD7    | 0,0011,1100,1101,0111 |
| 8            | 03CD7    | 0,0011,1100,1101,0111 |
| 9            | 03CD7    | 0,0011,1100,1101,0111 |
| 10           | 03CD7    | 0,0011,1100,1101,0111 |
| 11           | 03CD7    | 0,0011,1100,1101,0111 |
| 12           | 03CD7    | 0,0011,1100,1101,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNNTZRLT01

```

OAPEL: 29JNNTZRLT01      ALIAS: 29JNNTZRLT01
EXT: R                    PSID: DK
SCLK1: 05841704:00:0     SCLK2: 05841713:12:0
SCET1: 2000-364/04:47:27.800 SCET2: 2000-364/04:56:41.800
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 1                    RECORD: 0
  
```

```

MB_DOWN: 10001           MB_UP: 10001
COMP_FLAG: 0
EST_COMP: 0.0           EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 130          TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302130000      03 02 130 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 03CD7    | 0,0011,1100,1101,0111 |
| 1            | 03CD7    | 0,0011,1100,1101,0111 |
| 2            | 03CD7    | 0,0011,1100,1101,0111 |
| 3            | 03CD7    | 0,0011,1100,1101,0111 |
| 4            | 03CD7    | 0,0011,1100,1101,0111 |
| 5            | 03CD7    | 0,0011,1100,1101,0111 |
| 6            | 03CD7    | 0,0011,1100,1101,0111 |
| 7            | 03CD7    | 0,0011,1100,1101,0111 |
| 8            | 03CD7    | 0,0011,1100,1101,0111 |
| 9            | 03CD7    | 0,0011,1100,1101,0111 |
| 10           | 03CD7    | 0,0011,1100,1101,0111 |
| 11           | 03CD7    | 0,0011,1100,1101,0111 |
| 12           | 03CD7    | 0,0011,1100,1101,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNSTZRLT01

```

OAPEL: 29JNSTZRLT01      ALIAS: 29JNSTZRLT01
EXT: R                    PSID: DL
SCLK1: 05841724:00:0     SCLK2: 05841733:12:0
SCET1: 2000-364/05:07:41.133 SCET2: 2000-364/05:16:55.133
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                  GAIN: 2
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 1                   RECORD: 0
  
```

```

MB_DOWN: 10001          MB_UP: 10001
COMP_FLAG: 0
EST_COMP: 0.0          EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 130          TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302130000      03 02 130 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 03CD7    | 0,0011,1100,1101,0111 |
| 1            | 03CD7    | 0,0011,1100,1101,0111 |
| 2            | 03CD7    | 0,0011,1100,1101,0111 |
| 3            | 03CD7    | 0,0011,1100,1101,0111 |
| 4            | 03CD7    | 0,0011,1100,1101,0111 |
| 5            | 03CD7    | 0,0011,1100,1101,0111 |
| 6            | 03CD7    | 0,0011,1100,1101,0111 |
| 7            | 03CD7    | 0,0011,1100,1101,0111 |
| 8            | 03CD7    | 0,0011,1100,1101,0111 |
| 9            | 03CD7    | 0,0011,1100,1101,0111 |
| 10           | 03CD7    | 0,0011,1100,1101,0111 |
| 11           | 03CD7    | 0,0011,1100,1101,0111 |
| 12           | 03CD7    | 0,0011,1100,1101,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNHTSPOT01

```

OAPEL: 29JNHTSPOT01      ALIAS: 29JNHTSPOT01
EXT: A                    PSID: DM
SCLK1: 05841740:90:0     SCLK2: 05841754:87:0
SCET1: 00-364/05:24:51.800 SCET2: 00-364/05:38:59.800
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                  GAIN: 2
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 0                   RECORD: 1
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 48           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326048001      03 26 048 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038C7    | 0,0011,1000,1100,0111 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 00000    | 0,0000,0000,0000,0000 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 038C7    | 0,0011,1000,1100,0111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 00000    | 0,0000,0000,0000,0000 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 038C7    | 0,0011,1000,1100,0111 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 038C7    | 0,0011,1000,1100,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 038C7    | 0,0011,1000,1100,0111 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 038C7    | 0,0011,1000,1100,0111 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNHTSPOT02

```

OAPEL: 29JNHTSPOT02      ALIAS: 29JNHTSPOT02
EXT: A                    PSID: DN
SCLK1: 05841777:89:0     SCLK2: 05841793:74:0
SCET1: 00-364/06:02:16.466 SCET2: 00-364/06:18:16.466
TARGET: JUPITER          PARTITION: 1
    
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
    
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 48           TLMFMT: LPU
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0326048001      03 26 048 001
WTGRP_SIZ: 26
    
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038C7    | 0,0011,1000,1100,0111 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 00000    | 0,0000,0000,0000,0000 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 038C7    | 0,0011,1000,1100,0111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 00000    | 0,0000,0000,0000,0000 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 038C7    | 0,0011,1000,1100,0111 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 038C7    | 0,0011,1000,1100,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 038C7    | 0,0011,1000,1100,0111 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 038C7    | 0,0011,1000,1100,0111 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNNTZRLT02

```

OAPEL: 29JNNTZRLT02      ALIAS: 29JNNTZRLT02
EXT: R                    PSID: DP
SCLK1: 05842001:00:0     SCLK2: 05842010:12:0
SCET1: 2000-364/09:47:45.800 SCET2: 2000-364/09:56:59.800
TARGET: JUPITER          PARTITION: 1
    
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 1                    RECORD: 0
    
```

```

MB_DOWN: 10001           MB_UP: 10001
COMP_FLAG: 0
EST_COMP: 0.0           EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 130          TLMFMT: RT
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0302130000      03 02 130 000
WTGRP_SIZ: 2
    
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 03CD7    | 0,0011,1100,1101,0111 |
| 1            | 03CD7    | 0,0011,1100,1101,0111 |
| 2            | 03CD7    | 0,0011,1100,1101,0111 |
| 3            | 03CD7    | 0,0011,1100,1101,0111 |
| 4            | 03CD7    | 0,0011,1100,1101,0111 |
| 5            | 03CD7    | 0,0011,1100,1101,0111 |
| 6            | 03CD7    | 0,0011,1100,1101,0111 |
| 7            | 03CD7    | 0,0011,1100,1101,0111 |
| 8            | 03CD7    | 0,0011,1100,1101,0111 |
| 9            | 03CD7    | 0,0011,1100,1101,0111 |
| 10           | 03CD7    | 0,0011,1100,1101,0111 |
| 11           | 03CD7    | 0,0011,1100,1101,0111 |
| 12           | 03CD7    | 0,0011,1100,1101,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNSTZRLT02

```

OAPEL: 29JNSTZRLT02      ALIAS: 29JNSTZRLT02
EXT: R                    PSID: DQ
SCLK1: 05842016:00:0     SCLK2: 05842021:12:0
SCET1: 2000-364/10:02:55.800 SCET2: 2000-364/10:08:07.133
TARGET: JUPITER          PARTITION: 1
    
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 1                    RECORD: 0
    
```

```

MB_DOWN: 10001           MB_UP: 10001
COMP_FLAG: 0
EST_COMP: 0.0            EST_COMPV: 0.0
RATE_CON1: 00000        RATE_CON2: 00000
NWAVETOT: 130           TLMFMT: RT
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0302130000      03 02 130 000
WTGRP_SIZ: 2
    
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 03CD7    | 0,0011,1100,1101,0111 |
| 1            | 03CD7    | 0,0011,1100,1101,0111 |
| 2            | 03CD7    | 0,0011,1100,1101,0111 |
| 3            | 03CD7    | 0,0011,1100,1101,0111 |
| 4            | 03CD7    | 0,0011,1100,1101,0111 |
| 5            | 03CD7    | 0,0011,1100,1101,0111 |
| 6            | 03CD7    | 0,0011,1100,1101,0111 |
| 7            | 03CD7    | 0,0011,1100,1101,0111 |
| 8            | 03CD7    | 0,0011,1100,1101,0111 |
| 9            | 03CD7    | 0,0011,1100,1101,0111 |
| 10           | 03CD7    | 0,0011,1100,1101,0111 |
| 11           | 03CD7    | 0,0011,1100,1101,0111 |
| 12           | 03CD7    | 0,0011,1100,1101,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |



# 29JNAURORA01

```

OAPEL: 29JNAURORA01      ALIAS: 29JNAURORA01
EXT: A                    PSID: DR
SCLK1: 05842181:90:0     SCLK2: 05842193:74:0
SCET1: 00-364/12:50:45.800 SCET2: 00-364/13:02:43.133
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNLIMBRT01

```

OAPEL: 29JNLIMBRT01      ALIAS: 29JNLIMBRT01
EXT: R                    PSID: DS
SCLK1: 05842199:00:0     SCLK2: 05842203:12:0
SCET1: 2000-364/13:07:57.800 SCET2: 2000-364/13:12:08.466
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                  GAIN: 4
CHOP: 1                 GRAT_OFF: 4
PTAB_A: 1 1 0 0 124    PTAB_B: 1 1 0 0 124
ECAL: 0                 OPCAL: 0
R/T: 1                  RECORD: 0
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 0
EST_COMP: 0.0           EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 080          TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302080000      03 02 080 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 000FF    | 0,0000,0000,1111,1111 |
| 1            | 000FF    | 0,0000,0000,1111,1111 |
| 2            | 000FF    | 0,0000,0000,1111,1111 |
| 3            | 000FF    | 0,0000,0000,1111,1111 |
| 4            | 000FF    | 0,0000,0000,1111,1111 |
| 5            | 000FF    | 0,0000,0000,1111,1111 |
| 6            | 000FF    | 0,0000,0000,1111,1111 |
| 7            | 000FF    | 0,0000,0000,1111,1111 |
| 8            | 000FF    | 0,0000,0000,1111,1111 |
| 9            | 000FF    | 0,0000,0000,1111,1111 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 00000    | 0,0000,0000,0000,0000 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29ENGLOBAL01

```

OAPEL: 29ENGLOBAL01      ALIAS: 29ENGLOBAL01
EXT: A                    PSID: DT
SCLK1: 05842220:89:0     SCLK2: 05842223:84:0
SCET1: 00-364/13:30:11.133 SCET2: 00-364/13:33:09.800
TARGET: EUROPA           PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 288          TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326288001      03 26 288 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039FF    | 0,0011,1001,1111,1111 |
| 13           | 039FF    | 0,0011,1001,1111,1111 |
| 14           | 039FF    | 0,0011,1001,1111,1111 |
| 15           | 039FF    | 0,0011,1001,1111,1111 |
| 16           | 039FF    | 0,0011,1001,1111,1111 |
| 17           | 039FF    | 0,0011,1001,1111,1111 |
| 18           | 039FF    | 0,0011,1001,1111,1111 |
| 19           | 039FF    | 0,0011,1001,1111,1111 |
| 20           | 039FF    | 0,0011,1001,1111,1111 |
| 21           | 039FF    | 0,0011,1001,1111,1111 |
| 22           | 039FF    | 0,0011,1001,1111,1111 |
| 23           | 039FF    | 0,0011,1001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA02

```

OAPEL: 29JNAURORA02      ALIAS: 29JNAURORA02
EXT: A                    PSID: DU
SCLK1: 05842240:90:0     SCLK2: 05842253:74:0
SCET1: 00-364/13:50:25.133 SCET2: 00-364/14:03:23.133
TARGET: JUPITER          PARTITION: 1
    
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
    
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0            EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 72            TLMFMT: LPU
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
    
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNLIMBRT02

```

OAPEL: 29JNLIMBRT02      ALIAS: 29JNLIMBRT02
EXT: R                    PSID: DV
SCLK1: 05842259:00:0     SCLK2: 05842263:12:0
SCET1: 2000-364/14:08:37.800 SCET2: 2000-364/14:12:48.466
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 1                    RECORD: 0
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 0
EST_COMP: 0.0           EST_COMPV: 0.0
RATE_CON1: 00000        RATE_CON2: 00000
NWAVETOT: 080           TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302080000      03 02 080 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 000FF    | 0,0000,0000,1111,1111 |
| 1            | 000FF    | 0,0000,0000,1111,1111 |
| 2            | 000FF    | 0,0000,0000,1111,1111 |
| 3            | 000FF    | 0,0000,0000,1111,1111 |
| 4            | 000FF    | 0,0000,0000,1111,1111 |
| 5            | 000FF    | 0,0000,0000,1111,1111 |
| 6            | 000FF    | 0,0000,0000,1111,1111 |
| 7            | 000FF    | 0,0000,0000,1111,1111 |
| 8            | 000FF    | 0,0000,0000,1111,1111 |
| 9            | 000FF    | 0,0000,0000,1111,1111 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 00000    | 0,0000,0000,0000,0000 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA03

```

OAPEL: 29JNAURORA03      ALIAS: 29JNAURORA03
EXT: A                    PSID: DX
SCLK1: 05842301:90:0     SCLK2: 05842313:83:0
SCET1: 00-364/14:52:05.800 SCET2: 00-364/15:04:09.800
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNLIMBRT03

```

OAPEL: 29JNLIMBRT03      ALIAS: 29JNLIMBRT03
EXT: R                    PSID: DY
SCLK1: 05842319:00:0     SCLK2: 05842323:12:0
SCET1: 2000-364/15:09:17.800 SCET2: 2000-364/15:13:28.466
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 1                    RECORD: 0
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 0
EST_COMP: 0.0           EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 080          TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302080000      03 02 080 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 000FF    | 0,0000,0000,1111,1111 |
| 1            | 000FF    | 0,0000,0000,1111,1111 |
| 2            | 000FF    | 0,0000,0000,1111,1111 |
| 3            | 000FF    | 0,0000,0000,1111,1111 |
| 4            | 000FF    | 0,0000,0000,1111,1111 |
| 5            | 000FF    | 0,0000,0000,1111,1111 |
| 6            | 000FF    | 0,0000,0000,1111,1111 |
| 7            | 000FF    | 0,0000,0000,1111,1111 |
| 8            | 000FF    | 0,0000,0000,1111,1111 |
| 9            | 000FF    | 0,0000,0000,1111,1111 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 00000    | 0,0000,0000,0000,0000 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA04

```

OAPEL: 29JNAURORA04      ALIAS: 29JNAURORA04
EXT: A                    PSID: DZ
SCLK1: 05842361:89:0     SCLK2: 05842373:85:0
SCET1: 00-364/15:52:45.800 SCET2: 00-364/16:04:51.133
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |



# 29JNAURORA05

```

OAPEL: 29JNAURORA05      ALIAS: 29JNAURORA05
EXT: A                    PSID: EB
SCLK1: 05842420:89:0     SCLK2: 05842433:70:0
SCET1: 00-364/16:52:25.133 SCET2: 00-364/17:05:21.133
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA06

```

OAPEL: 29JNAURORA06      ALIAS: 29JNAURORA06
EXT: A                    PSID: ED
SCLK1: 05842483:89:0     SCLK2: 05842494:01:0
SCET1: 00-364/17:56:07.133 SCET2: 00-364/18:06:15.133
TARGET: JUPITER          PARTITION: 1
    
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
    
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0            EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 72            TLMFMT: LPU
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
    
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNLIMBRT06

```

OAPEL: 29JNLIMBRT06      ALIAS: 29JNLIMBRT06
EXT: R                    PSID: EE
SCLK1: 05842499:00:0     SCLK2: 05842503:12:0
SCET1: 2000-364/18:11:17.800 SCET2: 2000-364/18:15:28.466
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                  GAIN: 4
CHOP: 1                 GRAT_OFF: 4
PTAB_A: 1 1 0 0 124    PTAB_B: 1 1 0 0 124
ECAL: 0                 OPCAL: 0
R/T: 1                  RECORD: 0
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 0
EST_COMP: 0.0          EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 080          TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302080000      03 02 080 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 000FF    | 0,0000,0000,1111,1111 |
| 1            | 000FF    | 0,0000,0000,1111,1111 |
| 2            | 000FF    | 0,0000,0000,1111,1111 |
| 3            | 000FF    | 0,0000,0000,1111,1111 |
| 4            | 000FF    | 0,0000,0000,1111,1111 |
| 5            | 000FF    | 0,0000,0000,1111,1111 |
| 6            | 000FF    | 0,0000,0000,1111,1111 |
| 7            | 000FF    | 0,0000,0000,1111,1111 |
| 8            | 000FF    | 0,0000,0000,1111,1111 |
| 9            | 000FF    | 0,0000,0000,1111,1111 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 00000    | 0,0000,0000,0000,0000 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA07

```

OAPEL: 29JNAURORA07      ALIAS: 29JNAURORA07
EXT: A                    PSID: EF
SCLK1: 05842561:89:0     SCLK2: 05842574:03:0
SCET1: 00-364/19:14:59.133 SCET2: 00-364/19:27:10.466
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNLIMBRT07

```

OAPEL: 29JNLIMBRT07      ALIAS: 29JNLIMBRT07
EXT: R                    PSID: EG
SCLK1: 05842579:00:0     SCLK2: 05842583:12:0
SCET1: 2000-364/19:32:11.133 SCET2: 2000-364/19:36:21.800
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                  GAIN: 4
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 1                   RECORD: 0
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 0
EST_COMP: 0.0          EST_COMPV: 0.0
RATE_CON1: 00000       RATE_CON2: 00000
NWAVETOT: 080          TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302080000     03 02 080 000
WTGRP_SIZ: 2
  
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 000FF    | 0,0000,0000,1111,1111 |
| 1            | 000FF    | 0,0000,0000,1111,1111 |
| 2            | 000FF    | 0,0000,0000,1111,1111 |
| 3            | 000FF    | 0,0000,0000,1111,1111 |
| 4            | 000FF    | 0,0000,0000,1111,1111 |
| 5            | 000FF    | 0,0000,0000,1111,1111 |
| 6            | 000FF    | 0,0000,0000,1111,1111 |
| 7            | 000FF    | 0,0000,0000,1111,1111 |
| 8            | 000FF    | 0,0000,0000,1111,1111 |
| 9            | 000FF    | 0,0000,0000,1111,1111 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 00000    | 0,0000,0000,0000,0000 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA08

```

OAPEL: 29JNAURORA08      ALIAS: 29JNAURORA08
EXT: A                    PSID: EH
SCLK1: 05842621:89:0     SCLK2: 05842634:07:0
SCET1: 00-364/20:15:39.133 SCET2: 00-364/20:27:53.133
TARGET: JUPITER          PARTITION: 1
    
```

```

MODE: 3                  GAIN: 4
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 0                   RECORD: 1
    
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
    
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA09

```

OAPEL: 29JNAURORA09      ALIAS: 29JNAURORA09
EXT: A                    PSID: EK
SCLK1: 05842682:89:0     SCLK2: 05842695:71:0
SCET1: 00-364/21:17:19.800 SCET2: 00-364/21:30:15.800
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNAURORA10

```

OAPEL: 29JNAURORA10      ALIAS: 29JNAURORA10
EXT: A                    PSID: EL
SCLK1: 05842740:89:0     SCLK2: 05842753:70:0
SCET1: 00-364/22:15:58.466 SCET2: 00-364/22:28:54.466
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 72           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326072001      03 26 072 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 00010    | 0,0000,0000,0001,0000 |
| 2            | 00010    | 0,0000,0000,0001,0000 |
| 3            | 00010    | 0,0000,0000,0001,0000 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 00010    | 0,0000,0000,0001,0000 |
| 6            | 00010    | 0,0000,0000,0001,0000 |
| 7            | 00010    | 0,0000,0000,0001,0000 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 00010    | 0,0000,0000,0001,0000 |
| 10           | 00010    | 0,0000,0000,0001,0000 |
| 11           | 00010    | 0,0000,0000,0001,0000 |
| 12           | 038D7    | 0,0011,1000,1101,0111 |
| 13           | 00010    | 0,0000,0000,0001,0000 |
| 14           | 00010    | 0,0000,0000,0001,0000 |
| 15           | 00010    | 0,0000,0000,0001,0000 |
| 16           | 038D7    | 0,0011,1000,1101,0111 |
| 17           | 00010    | 0,0000,0000,0001,0000 |
| 18           | 00010    | 0,0000,0000,0001,0000 |
| 19           | 00010    | 0,0000,0000,0001,0000 |
| 20           | 038D7    | 0,0011,1000,1101,0111 |
| 21           | 00010    | 0,0000,0000,0001,0000 |
| 22           | 00010    | 0,0000,0000,0001,0000 |
| 23           | 00010    | 0,0000,0000,0001,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |



# 29JNSTZRLT03

```

OAPEL: 29JNSTZRLT03          ALIAS: 29JNSTZRLT03
EXT: R                        PSID: EP
SCLK1: 05843112:00:0        SCLK2: 05843121:12:0
SCET1: 2000-365/04:31:06.400 SCET2: 2000-365/04:40:20.400
TARGET: JUPITER              PARTITION: 1
  
```

```

MODE: 3                      GAIN: 2
CHOP: 1                      GRAT_OFF: 4
PTAB_A: 1 1 0 0 124         PTAB_B: 1 1 0 0 124
ECAL: 0                     OPCAL: 0
R/T: 1                      RECORD: 0
  
```

```

MB_DOWN: 10001              MB_UP: 10001
COMP_FLAG: 0
EST_COMP: 0.0              EST_COMPV: 0.0
RATE_CON1: 00000           RATE_CON2: 00000
NWAVETOT: 130              TLMFMT: RT
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0302130000         03 02 130 000
WTGRP_SIZ: 2
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 03CD7    | 0,0011,1100,1101,0111 |
| 1            | 03CD7    | 0,0011,1100,1101,0111 |
| 2            | 03CD7    | 0,0011,1100,1101,0111 |
| 3            | 03CD7    | 0,0011,1100,1101,0111 |
| 4            | 03CD7    | 0,0011,1100,1101,0111 |
| 5            | 03CD7    | 0,0011,1100,1101,0111 |
| 6            | 03CD7    | 0,0011,1100,1101,0111 |
| 7            | 03CD7    | 0,0011,1100,1101,0111 |
| 8            | 03CD7    | 0,0011,1100,1101,0111 |
| 9            | 03CD7    | 0,0011,1100,1101,0111 |
| 10           | 03CD7    | 0,0011,1100,1101,0111 |
| 11           | 03CD7    | 0,0011,1100,1101,0111 |
| 12           | 03CD7    | 0,0011,1100,1101,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 00000    | 0,0000,0000,0000,0000 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00000    | 0,0000,0000,0000,0000 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNWTOVAL01

```

OAPEL: 29JNWTOVAL01      ALIAS: 29JNWTOVAL01
EXT: A                    PSID: EQ
SCLK1: 05843127:89:0     SCLK2: 05843143:84:0
SCET1: 00-365/04:47:16.400 SCET2: 00-365/05:03:23.733
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 48           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326048001      03 26 048 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038C7    | 0,0011,1000,1100,0111 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 00000    | 0,0000,0000,0000,0000 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 038C7    | 0,0011,1000,1100,0111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 00000    | 0,0000,0000,0000,0000 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 038C7    | 0,0011,1000,1100,0111 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 038C7    | 0,0011,1000,1100,0111 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 038C7    | 0,0011,1000,1100,0111 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 038C7    | 0,0011,1000,1100,0111 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNJUPNTZ01

```

OAPEL: 29JNJUPNTZ01      ALIAS: 29JNJUPNTZ01
EXT: A                    PSID: ER
SCLK1: 05843147:90:0     SCLK2: 05843179:62:0
SCET1: 00-365/05:07:29.733 SCET2: 00-365/05:39:33.066
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 3                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 24           TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326024001      03 26 024 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 00042    | 0,0000,0000,0100,0010 |
| 1            | 00000    | 0,0000,0000,0000,0000 |
| 2            | 00000    | 0,0000,0000,0000,0000 |
| 3            | 00000    | 0,0000,0000,0000,0000 |
| 4            | 038C7    | 0,0011,1000,1100,0111 |
| 5            | 00000    | 0,0000,0000,0000,0000 |
| 6            | 00000    | 0,0000,0000,0000,0000 |
| 7            | 00000    | 0,0000,0000,0000,0000 |
| 8            | 00042    | 0,0000,0000,0100,0010 |
| 9            | 00000    | 0,0000,0000,0000,0000 |
| 10           | 00000    | 0,0000,0000,0000,0000 |
| 11           | 00000    | 0,0000,0000,0000,0000 |
| 12           | 00042    | 0,0000,0000,0100,0010 |
| 13           | 00000    | 0,0000,0000,0000,0000 |
| 14           | 00000    | 0,0000,0000,0000,0000 |
| 15           | 00000    | 0,0000,0000,0000,0000 |
| 16           | 038C7    | 0,0011,1000,1100,0111 |
| 17           | 00000    | 0,0000,0000,0000,0000 |
| 18           | 00000    | 0,0000,0000,0000,0000 |
| 19           | 00000    | 0,0000,0000,0000,0000 |
| 20           | 00042    | 0,0000,0000,0100,0010 |
| 21           | 00000    | 0,0000,0000,0000,0000 |
| 22           | 00000    | 0,0000,0000,0000,0000 |
| 23           | 00000    | 0,0000,0000,0000,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29INIWATCH03

```

OAPEL: 29INIWATCH03          ALIAS: 29INIWATCH03
EXT: A                        PSID: ES
SCLK1: 05844510:89:0        SCLK2: 05844513:59:0
SCET1: 00-366/04:05:38.400  SCET2: 00-366/04:08:19.733
TARGET: IO                   PARTITION: 1
  
```

```

MODE: 3                      GAIN: 2
CHOP: 1                      GRAT_OFF: 4
PTAB_A: 1 1 0 0 124         PTAB_B: 1 1 0 0 124
ECAL: 0                      OPCAL: 0
R/T: 0                       RECORD: 1
  
```

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 288             TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326288001        03 26 288 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039FF    | 0,0011,1001,1111,1111 |
| 1            | 039FF    | 0,0011,1001,1111,1111 |
| 2            | 039FF    | 0,0011,1001,1111,1111 |
| 3            | 039FF    | 0,0011,1001,1111,1111 |
| 4            | 039FF    | 0,0011,1001,1111,1111 |
| 5            | 039FF    | 0,0011,1001,1111,1111 |
| 6            | 039FF    | 0,0011,1001,1111,1111 |
| 7            | 039FF    | 0,0011,1001,1111,1111 |
| 8            | 039FF    | 0,0011,1001,1111,1111 |
| 9            | 039FF    | 0,0011,1001,1111,1111 |
| 10           | 039FF    | 0,0011,1001,1111,1111 |
| 11           | 039FF    | 0,0011,1001,1111,1111 |
| 12           | 039FF    | 0,0011,1001,1111,1111 |
| 13           | 039FF    | 0,0011,1001,1111,1111 |
| 14           | 039FF    | 0,0011,1001,1111,1111 |
| 15           | 039FF    | 0,0011,1001,1111,1111 |
| 16           | 039FF    | 0,0011,1001,1111,1111 |
| 17           | 039FF    | 0,0011,1001,1111,1111 |
| 18           | 039FF    | 0,0011,1001,1111,1111 |
| 19           | 039FF    | 0,0011,1001,1111,1111 |
| 20           | 039FF    | 0,0011,1001,1111,1111 |
| 21           | 039FF    | 0,0011,1001,1111,1111 |
| 22           | 039FF    | 0,0011,1001,1111,1111 |
| 23           | 039FF    | 0,0011,1001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29JNGLOBAL01

```

OAPEL: 29JNGLOBAL01      ALIAS: 29JNGLOBAL01
EXT: A                    PSID: ET
SCLK1: 05845011:90:0     SCLK2: 05845022:39:0
SCET1: 00-366/12:32:12.400 SCET2: 00-366/12:42:46.400
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 7                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 012      PTAB_B: 1 1 0 0 012
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0            EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 9             TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0713009001      07 13 009 001
WTGRP_SIZ: 13
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 038D7    | 0,0011,1000,1101,0111 |
| 2            | 038D7    | 0,0011,1000,1101,0111 |
| 3            | 038D7    | 0,0011,1000,1101,0111 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 038D7    | 0,0011,1000,1101,0111 |
| 6            | 038D7    | 0,0011,1000,1101,0111 |
| 7            | 038D7    | 0,0011,1000,1101,0111 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 038D7    | 0,0011,1000,1101,0111 |
| 10           | 038D7    | 0,0011,1000,1101,0111 |
| 11           | 038D7    | 0,0011,1000,1101,0111 |
| 12           | 00000    | 0,0000,0000,0000,0000 |

# 29JNGLOBAL02

```

OAPEL: 29JNGLOBAL02      ALIAS: 29JNGLOBAL02
EXT: A                    PSID: EU
SCLK1: 05845110:90:0     SCLK2: 05845121:40:0
SCET1: 00-366/14:12:18.400 SCET2: 00-366/14:22:52.400
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 7                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 012      PTAB_B: 1 1 0 0 012
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 9             TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0713009001      07 13 009 001
WTGRP_SIZ: 13
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 038D7    | 0,0011,1000,1101,0111 |
| 2            | 038D7    | 0,0011,1000,1101,0111 |
| 3            | 038D7    | 0,0011,1000,1101,0111 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 038D7    | 0,0011,1000,1101,0111 |
| 6            | 038D7    | 0,0011,1000,1101,0111 |
| 7            | 038D7    | 0,0011,1000,1101,0111 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 038D7    | 0,0011,1000,1101,0111 |
| 10           | 038D7    | 0,0011,1000,1101,0111 |
| 11           | 038D7    | 0,0011,1000,1101,0111 |
| 12           | 00000    | 0,0000,0000,0000,0000 |

# 29JNGLOBAL03

```

OAPEL: 29JNGLOBAL03          ALIAS: 29JNGLOBAL03
EXT: A                        PSID: EV
SCLK1: 05845209:90:0        SCLK2: 05845220:39:0
SCET1: 00-366/15:52:24.333  SCET2: 00-366/16:02:58.333
TARGET: JUPITER              PARTITION: 1
  
```

```

MODE: 7                      GAIN: 2
CHOP: 1                      GRAT_OFF: 4
PTAB_A: 1 1 0 0 012        PTAB_B: 1 1 0 0 012
ECAL: 0                     OPCAL: 0
R/T: 0                      RECORD: 1
  
```

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 9                TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0713009001        07 13 009 001
WTGRP_SIZ: 13
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 038D7    | 0,0011,1000,1101,0111 |
| 2            | 038D7    | 0,0011,1000,1101,0111 |
| 3            | 038D7    | 0,0011,1000,1101,0111 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 038D7    | 0,0011,1000,1101,0111 |
| 6            | 038D7    | 0,0011,1000,1101,0111 |
| 7            | 038D7    | 0,0011,1000,1101,0111 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 038D7    | 0,0011,1000,1101,0111 |
| 10           | 038D7    | 0,0011,1000,1101,0111 |
| 11           | 038D7    | 0,0011,1000,1101,0111 |
| 12           | 00000    | 0,0000,0000,0000,0000 |

# 29JNGLOBAL04

```

OAPEL: 29JNGLOBAL04      ALIAS: 29JNGLOBAL04
EXT: A                    PSID: EW
SCLK1: 05845308:90:0     SCLK2: 05845319:39:0
SCET1: 00-366/17:32:30.333 SCET2: 00-366/17:43:04.333
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 7                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 012      PTAB_B: 1 1 0 0 012
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0            EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 9              TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0713009001      07 13 009 001
WTGRP_SIZ: 13
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 038D7    | 0,0011,1000,1101,0111 |
| 2            | 038D7    | 0,0011,1000,1101,0111 |
| 3            | 038D7    | 0,0011,1000,1101,0111 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 038D7    | 0,0011,1000,1101,0111 |
| 6            | 038D7    | 0,0011,1000,1101,0111 |
| 7            | 038D7    | 0,0011,1000,1101,0111 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 038D7    | 0,0011,1000,1101,0111 |
| 10           | 038D7    | 0,0011,1000,1101,0111 |
| 11           | 038D7    | 0,0011,1000,1101,0111 |
| 12           | 00000    | 0,0000,0000,0000,0000 |



# 29JNGLOBAL05

```

OAPEL: 29JNGLOBAL05          ALIAS: 29JNGLOBAL05
EXT: A                        PSID: EX
SCLK1: 05845407:90:0        SCLK2: 05845418:39:0
SCET1: 00-366/19:12:36.333  SCET2: 00-366/19:23:10.333
TARGET: JUPITER              PARTITION: 1
  
```

```

MODE: 7                      GAIN: 2
CHOP: 1                      GRAT_OFF: 4
PTAB_A: 1 1 0 0 012         PTAB_B: 1 1 0 0 012
ECAL: 0                      OPCAL: 0
R/T: 0                       RECORD: 1
  
```

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 9                TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0713009001        07 13 009 001
WTGRP_SIZ: 13
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 038D7    | 0,0011,1000,1101,0111 |
| 2            | 038D7    | 0,0011,1000,1101,0111 |
| 3            | 038D7    | 0,0011,1000,1101,0111 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 038D7    | 0,0011,1000,1101,0111 |
| 6            | 038D7    | 0,0011,1000,1101,0111 |
| 7            | 038D7    | 0,0011,1000,1101,0111 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 038D7    | 0,0011,1000,1101,0111 |
| 10           | 038D7    | 0,0011,1000,1101,0111 |
| 11           | 038D7    | 0,0011,1000,1101,0111 |
| 12           | 00000    | 0,0000,0000,0000,0000 |

# 29JNGLOBAL06

```

OAPEL: 29JNGLOBAL06      ALIAS: 29JNGLOBAL06
EXT: A                    PSID: EY
SCLK1: 05845506:90:0     SCLK2: 05845517:39:0
SCET1: 00-366/20:52:42.333 SCET2: 00-366/21:03:16.333
TARGET: JUPITER          PARTITION: 1
  
```

```

MODE: 7                   GAIN: 2
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 012      PTAB_B: 1 1 0 0 012
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 9             TLMFMT: LPU
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0713009001      07 13 009 001
WTGRP_SIZ: 13
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 038D7    | 0,0011,1000,1101,0111 |
| 1            | 038D7    | 0,0011,1000,1101,0111 |
| 2            | 038D7    | 0,0011,1000,1101,0111 |
| 3            | 038D7    | 0,0011,1000,1101,0111 |
| 4            | 038D7    | 0,0011,1000,1101,0111 |
| 5            | 038D7    | 0,0011,1000,1101,0111 |
| 6            | 038D7    | 0,0011,1000,1101,0111 |
| 7            | 038D7    | 0,0011,1000,1101,0111 |
| 8            | 038D7    | 0,0011,1000,1101,0111 |
| 9            | 038D7    | 0,0011,1000,1101,0111 |
| 10           | 038D7    | 0,0011,1000,1101,0111 |
| 11           | 038D7    | 0,0011,1000,1101,0111 |
| 12           | 00000    | 0,0000,0000,0000,0000 |

# 29HNSTRCAL01

```

OAPEL: 29HNSTRCAL01      ALIAS: 29HNSTRCAL01
EXT: A                    PSID: DA
SCLK1: 06004969:88:0     SCLK2: 06004973:14:0
SCET1: 01-112/20:07:24.400 SCET2: 01-112/20:10:37.733
TARGET: SKY              PARTITION: 1
  
```

```

MODE: 3                  GAIN: 4
CHOP: 1                  GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                  OPCAL: 0
R/T: 0                   RECORD: 1
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0          EST_COMPV: 0.3
RATE_CON1: 00000      RATE_CON2: 65525
NWAVETOT: 144         TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326144001     03 26 144 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 039C0    | 0,0011,1001,1100,0000 |
| 1            | 039C0    | 0,0011,1001,1100,0000 |
| 2            | 039C0    | 0,0011,1001,1100,0000 |
| 3            | 039C0    | 0,0011,1001,1100,0000 |
| 4            | 039C0    | 0,0011,1001,1100,0000 |
| 5            | 039C0    | 0,0011,1001,1100,0000 |
| 6            | 039C0    | 0,0011,1001,1100,0000 |
| 7            | 039C0    | 0,0011,1001,1100,0000 |
| 8            | 039C0    | 0,0011,1001,1100,0000 |
| 9            | 039C0    | 0,0011,1001,1100,0000 |
| 10           | 039C0    | 0,0011,1001,1100,0000 |
| 11           | 039C0    | 0,0011,1001,1100,0000 |
| 12           | 039C0    | 0,0011,1001,1100,0000 |
| 13           | 039C0    | 0,0011,1001,1100,0000 |
| 14           | 039C0    | 0,0011,1001,1100,0000 |
| 15           | 039C0    | 0,0011,1001,1100,0000 |
| 16           | 039C0    | 0,0011,1001,1100,0000 |
| 17           | 039C0    | 0,0011,1001,1100,0000 |
| 18           | 039C0    | 0,0011,1001,1100,0000 |
| 19           | 039C0    | 0,0011,1001,1100,0000 |
| 20           | 039C0    | 0,0011,1001,1100,0000 |
| 21           | 039C0    | 0,0011,1001,1100,0000 |
| 22           | 039C0    | 0,0011,1001,1100,0000 |
| 23           | 039C0    | 0,0011,1001,1100,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29HNRKCAL02

```

OAPEL: 29HNRKCAL02          ALIAS: 29HNRKCAL01
EXT: A                      PSID: B
SCLK1: 06004986:89:0       SCLK2: 06004987:90:0
SCET1: 01-112/20:24:37.066 SCET2: 01-112/20:25:37.733
TARGET: SKY                 PARTITION: 1
    
```

```

MODE: 3                     GAIN: 2
CHOP: 1                     GRAT_OFF: 4
PTAB_A: 1 1 0 0 124        PTAB_B: 1 1 0 0 124
ECAL: 0                     OPCAL: 0
R/T: 0                      RECORD: 1
    
```

```

MB_DOWN: 00000             MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 360             TLMFMT: MPW
    
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
    
```

```

WETGID: 0326360001        03 26 360 001
WTGRP_SIZ: 26
    
```

### EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 1BDFF    | 1,1011,1101,1111,1111 |
| 1            | 1BDFF    | 1,1011,1101,1111,1111 |
| 2            | 1BDFF    | 1,1011,1101,1111,1111 |
| 3            | 1BDFF    | 1,1011,1101,1111,1111 |
| 4            | 1BDFF    | 1,1011,1101,1111,1111 |
| 5            | 1BDFF    | 1,1011,1101,1111,1111 |
| 6            | 1BDFF    | 1,1011,1101,1111,1111 |
| 7            | 1BDFF    | 1,1011,1101,1111,1111 |
| 8            | 1BDFF    | 1,1011,1101,1111,1111 |
| 9            | 1BDFF    | 1,1011,1101,1111,1111 |
| 10           | 1BDFF    | 1,1011,1101,1111,1111 |
| 11           | 1BDFF    | 1,1011,1101,1111,1111 |
| 12           | 1BDFF    | 1,1011,1101,1111,1111 |
| 13           | 1BDFF    | 1,1011,1101,1111,1111 |
| 14           | 1BDFF    | 1,1011,1101,1111,1111 |
| 15           | 1BDFF    | 1,1011,1101,1111,1111 |
| 16           | 1BDFF    | 1,1011,1101,1111,1111 |
| 17           | 1BDFF    | 1,1011,1101,1111,1111 |
| 18           | 1BDFF    | 1,1011,1101,1111,1111 |
| 19           | 1BDFF    | 1,1011,1101,1111,1111 |
| 20           | 1BDFF    | 1,1011,1101,1111,1111 |
| 21           | 1BDFF    | 1,1011,1101,1111,1111 |
| 22           | 1BDFF    | 1,1011,1101,1111,1111 |
| 23           | 1BDFF    | 1,1011,1101,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29HNRKCAL04

```

OAPEL: 29HNRKCAL04          ALIAS: 29HNRKCAL01
EXT: A                      PSID: B
SCLK1: 06004988:00:0       SCLK2: 06004988:90:0
SCET1: 01-112/20:25:38.400 SCET2: 01-112/20:26:38.400
TARGET: SKY                 PARTITION: 1
  
```

```

MODE: 3                     GAIN: 4
CHOP: 1                     GRAT_OFF: 4
PTAB_A: 1 1 0 0 124        PTAB_B: 1 1 0 0 124
ECAL: 0                     OPCAL: 0
R/T: 0                      RECORD: 1
  
```

```

MB_DOWN: 00000             MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 360              TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326360001        03 26 360 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 1BDFF    | 1,1011,1101,1111,1111 |
| 1            | 1BDFF    | 1,1011,1101,1111,1111 |
| 2            | 1BDFF    | 1,1011,1101,1111,1111 |
| 3            | 1BDFF    | 1,1011,1101,1111,1111 |
| 4            | 1BDFF    | 1,1011,1101,1111,1111 |
| 5            | 1BDFF    | 1,1011,1101,1111,1111 |
| 6            | 1BDFF    | 1,1011,1101,1111,1111 |
| 7            | 1BDFF    | 1,1011,1101,1111,1111 |
| 8            | 1BDFF    | 1,1011,1101,1111,1111 |
| 9            | 1BDFF    | 1,1011,1101,1111,1111 |
| 10           | 1BDFF    | 1,1011,1101,1111,1111 |
| 11           | 1BDFF    | 1,1011,1101,1111,1111 |
| 12           | 1BDFF    | 1,1011,1101,1111,1111 |
| 13           | 1BDFF    | 1,1011,1101,1111,1111 |
| 14           | 1BDFF    | 1,1011,1101,1111,1111 |
| 15           | 1BDFF    | 1,1011,1101,1111,1111 |
| 16           | 1BDFF    | 1,1011,1101,1111,1111 |
| 17           | 1BDFF    | 1,1011,1101,1111,1111 |
| 18           | 1BDFF    | 1,1011,1101,1111,1111 |
| 19           | 1BDFF    | 1,1011,1101,1111,1111 |
| 20           | 1BDFF    | 1,1011,1101,1111,1111 |
| 21           | 1BDFF    | 1,1011,1101,1111,1111 |
| 22           | 1BDFF    | 1,1011,1101,1111,1111 |
| 23           | 1BDFF    | 1,1011,1101,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29HNRKCAL03

```

OAPEL: 29HNRKCAL03          ALIAS: 29HNRKCAL01
EXT: A                      PSID: B
SCLK1: 06004989:00:0       SCLK2: 06004989:90:0
SCET1: 01-112/20:26:41.066 SCET2: 01-112/20:27:39.066
TARGET: SKY                 PARTITION: 1
  
```

```

MODE: 3                     GAIN: 3
CHOP: 1                     GRAT_OFF: 4
PTAB_A: 1 1 0 0 124        PTAB_B: 1 1 0 0 124
ECAL: 0                     OPCAL: 0
R/T: 0                      RECORD: 1
  
```

```

MB_DOWN: 00000             MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 360             TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                   000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326360001        03 26 360 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 1BDFF    | 1,1011,1101,1111,1111 |
| 1            | 1BDFF    | 1,1011,1101,1111,1111 |
| 2            | 1BDFF    | 1,1011,1101,1111,1111 |
| 3            | 1BDFF    | 1,1011,1101,1111,1111 |
| 4            | 1BDFF    | 1,1011,1101,1111,1111 |
| 5            | 1BDFF    | 1,1011,1101,1111,1111 |
| 6            | 1BDFF    | 1,1011,1101,1111,1111 |
| 7            | 1BDFF    | 1,1011,1101,1111,1111 |
| 8            | 1BDFF    | 1,1011,1101,1111,1111 |
| 9            | 1BDFF    | 1,1011,1101,1111,1111 |
| 10           | 1BDFF    | 1,1011,1101,1111,1111 |
| 11           | 1BDFF    | 1,1011,1101,1111,1111 |
| 12           | 1BDFF    | 1,1011,1101,1111,1111 |
| 13           | 1BDFF    | 1,1011,1101,1111,1111 |
| 14           | 1BDFF    | 1,1011,1101,1111,1111 |
| 15           | 1BDFF    | 1,1011,1101,1111,1111 |
| 16           | 1BDFF    | 1,1011,1101,1111,1111 |
| 17           | 1BDFF    | 1,1011,1101,1111,1111 |
| 18           | 1BDFF    | 1,1011,1101,1111,1111 |
| 19           | 1BDFF    | 1,1011,1101,1111,1111 |
| 20           | 1BDFF    | 1,1011,1101,1111,1111 |
| 21           | 1BDFF    | 1,1011,1101,1111,1111 |
| 22           | 1BDFF    | 1,1011,1101,1111,1111 |
| 23           | 1BDFF    | 1,1011,1101,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29HNRKCAL01

```

OAPEL: 29HNRKCAL01      ALIAS: 29HNRKCAL01
EXT: A                  PSID: B
SCLK1: 06004990:00:0    SCLK2: 06004991:01:0
SCET1: 01-112/20:27:39.733 SCET2: 01-112/20:28:41.066
TARGET: SKY             PARTITION: 1
  
```

```

MODE: 3                 GAIN: 1
CHOP: 1                 GRAT_OFF: 4
PTAB_A: 1 1 0 0 124    PTAB_B: 1 1 0 0 124
ECAL: 0                 OPCAL: 0
R/T: 0                  RECORD: 1
  
```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 360          TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326360001     03 26 360 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 1BDFF    | 1,1011,1101,1111,1111 |
| 1            | 1BDFF    | 1,1011,1101,1111,1111 |
| 2            | 1BDFF    | 1,1011,1101,1111,1111 |
| 3            | 1BDFF    | 1,1011,1101,1111,1111 |
| 4            | 1BDFF    | 1,1011,1101,1111,1111 |
| 5            | 1BDFF    | 1,1011,1101,1111,1111 |
| 6            | 1BDFF    | 1,1011,1101,1111,1111 |
| 7            | 1BDFF    | 1,1011,1101,1111,1111 |
| 8            | 1BDFF    | 1,1011,1101,1111,1111 |
| 9            | 1BDFF    | 1,1011,1101,1111,1111 |
| 10           | 1BDFF    | 1,1011,1101,1111,1111 |
| 11           | 1BDFF    | 1,1011,1101,1111,1111 |
| 12           | 1BDFF    | 1,1011,1101,1111,1111 |
| 13           | 1BDFF    | 1,1011,1101,1111,1111 |
| 14           | 1BDFF    | 1,1011,1101,1111,1111 |
| 15           | 1BDFF    | 1,1011,1101,1111,1111 |
| 16           | 1BDFF    | 1,1011,1101,1111,1111 |
| 17           | 1BDFF    | 1,1011,1101,1111,1111 |
| 18           | 1BDFF    | 1,1011,1101,1111,1111 |
| 19           | 1BDFF    | 1,1011,1101,1111,1111 |
| 20           | 1BDFF    | 1,1011,1101,1111,1111 |
| 21           | 1BDFF    | 1,1011,1101,1111,1111 |
| 22           | 1BDFF    | 1,1011,1101,1111,1111 |
| 23           | 1BDFF    | 1,1011,1101,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

# 29NNRCTCAL01

```

OAPEL: 29NNRCTCAL01      ALIAS: 29NNRCTCAL01
EXT: A                    PSID: C
SCLK1: 06006181:88:0     SCLK2: 06006191:83:0
SCET1: 01-113/16:32:53.066 SCET2: 01-113/16:42:56.400
TARGET: CAL              PARTITION: 1
  
```

```

MODE: 3                   GAIN: 1
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124     PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 216          TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326216001      03 26 216 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 001FF    | 0,0000,0001,1111,1111 |
| 1            | 001FF    | 0,0000,0001,1111,1111 |
| 2            | 001FF    | 0,0000,0001,1111,1111 |
| 3            | 001FF    | 0,0000,0001,1111,1111 |
| 4            | 001FF    | 0,0000,0001,1111,1111 |
| 5            | 001FF    | 0,0000,0001,1111,1111 |
| 6            | 001FF    | 0,0000,0001,1111,1111 |
| 7            | 001FF    | 0,0000,0001,1111,1111 |
| 8            | 001FF    | 0,0000,0001,1111,1111 |
| 9            | 001FF    | 0,0000,0001,1111,1111 |
| 10           | 001FF    | 0,0000,0001,1111,1111 |
| 11           | 001FF    | 0,0000,0001,1111,1111 |
| 12           | 001FF    | 0,0000,0001,1111,1111 |
| 13           | 001FF    | 0,0000,0001,1111,1111 |
| 14           | 001FF    | 0,0000,0001,1111,1111 |
| 15           | 001FF    | 0,0000,0001,1111,1111 |
| 16           | 001FF    | 0,0000,0001,1111,1111 |
| 17           | 001FF    | 0,0000,0001,1111,1111 |
| 18           | 001FF    | 0,0000,0001,1111,1111 |
| 19           | 001FF    | 0,0000,0001,1111,1111 |
| 20           | 001FF    | 0,0000,0001,1111,1111 |
| 21           | 001FF    | 0,0000,0001,1111,1111 |
| 22           | 001FF    | 0,0000,0001,1111,1111 |
| 23           | 001FF    | 0,0000,0001,1111,1111 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |



# 29NNPCTCAL01

```

OAPEL: 29NNPCTCAL01      ALIAS: 29NNPCTCAL01
EXT: A                    PSID: EA
SCLK1: 06006559:89:0     SCLK2: 06006565:02:0
SCET1: 01-113/22:55:05.733 SCET2: 01-113/23:00:11.733
TARGET: CAL              PARTITION: 1
  
```

```

MODE: 3                   GAIN: 4
CHOP: 1                   GRAT_OFF: 4
PTAB_A: 1 1 0 0 124      PTAB_B: 1 1 0 0 124
ECAL: 0                   OPCAL: 0
R/T: 0                    RECORD: 1
  
```

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 216           TLMFMT: MPW
  
```

```

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 000, 000, 000, 000, 000, 000, 000, 000, 000, 000
                  000, 000, 000, 000, 000, 000, 000, 000, 000
  
```

```

WETGID: 0326216001      03 26 216 001
WTGRP_SIZ: 26
  
```

## EDIT TABLE

| GRATING STEP | HEX MASK | DETECTOR MASK         |
|--------------|----------|-----------------------|
| 0            | 1BDC0    | 1,1011,1101,1100,0000 |
| 1            | 1BDC0    | 1,1011,1101,1100,0000 |
| 2            | 1BDC0    | 1,1011,1101,1100,0000 |
| 3            | 1BDC0    | 1,1011,1101,1100,0000 |
| 4            | 1BDC0    | 1,1011,1101,1100,0000 |
| 5            | 1BDC0    | 1,1011,1101,1100,0000 |
| 6            | 1BDC0    | 1,1011,1101,1100,0000 |
| 7            | 1BDC0    | 1,1011,1101,1100,0000 |
| 8            | 1BDC0    | 1,1011,1101,1100,0000 |
| 9            | 1BDC0    | 1,1011,1101,1100,0000 |
| 10           | 1BDC0    | 1,1011,1101,1100,0000 |
| 11           | 1BDC0    | 1,1011,1101,1100,0000 |
| 12           | 1BDC0    | 1,1011,1101,1100,0000 |
| 13           | 1BDC0    | 1,1011,1101,1100,0000 |
| 14           | 1BDC0    | 1,1011,1101,1100,0000 |
| 15           | 1BDC0    | 1,1011,1101,1100,0000 |
| 16           | 1BDC0    | 1,1011,1101,1100,0000 |
| 17           | 1BDC0    | 1,1011,1101,1100,0000 |
| 18           | 1BDC0    | 1,1011,1101,1100,0000 |
| 19           | 1BDC0    | 1,1011,1101,1100,0000 |
| 20           | 1BDC0    | 1,1011,1101,1100,0000 |
| 21           | 1BDC0    | 1,1011,1101,1100,0000 |
| 22           | 1BDC0    | 1,1011,1101,1100,0000 |
| 23           | 1BDC0    | 1,1011,1101,1100,0000 |
| 24           | 00000    | 0,0000,0000,0000,0000 |
| 25           | 00000    | 0,0000,0000,0000,0000 |

NIMS G29 OBSTAB

This is a time-ordered ASCII TABLE (listing) of GALILEO NIMS observation parameters for use by downlink data processing of the NIMS G29 data. Each Obstab entry is 512 bytes long but is presented here as 4 lines of 128 characters per entry. Included items come from NIMS commands in (1) the Standard Sequence Data File (SSDF) and (2) the Playback Table Update Process (PTUP), plus some items from (3) the NIMS/CDS software load.

Note that SCLK1, SCLK2, SCET1 and SCET2 of non-realtime observations reflect the amount of data actually played back, rather than the amount recorded on tape. Likewise, the wavelength edit table pointers of non-realtime observations point to the playback edit table masks, rather than the ones used during recording.

Some of these items are needed for MIPS realtime processing of NIMS data, others for NIMSMERGE generation of the EDR and still others by NIMS/ISIS and MIPS systematic processing of EDRs into cubes. Missing non-required items will not interfere with a processing step. For completeness, almost all uplinked parameters are included in the table. (Only those items which will almost certainly remain constant have been omitted; e.g. Rice decision tables.)

The source below is one of:

- SEF for the Standard Sequence Data File (SSDF), specifying parameters of one of the NIMS (37) commands
- PBK for the Playback Table Update Process (PTUP), specifying parameters of the NIMPBK SINGLE command
- S/W for the NIMS/CDS software load process
- NIMS for NIMS team systematic processing requests to MIPS

\* indicates item absolutely required for UDR generation (decompression, wavelength edit processing)  
 # indicates item useful for UDR generation (for checking)  
 unmarked items needed for cube generation or useful for general information  
 <tbd> indicates more details will be forthcoming

| name        | nchar | columns | .description   | .source   |
|-------------|-------|---------|--|---|
| OAPEL       | 12    | 1 - 12  | .Oapel Name from SEF (no aliases yet)  | SEF: activity ID, 1st 12 chars should be unique     |
| ALIAS       | 12    | 13 - 24 | .NIMS alias name for OAPEL   | NIMS:   |
| EXT         | 1     | 25 - 25 | .Extension, for split OAPELS, A,B,C...<br>for playback, R,S,T... for realtime.<br>Required for realtime. | NIMS: if breaking activity into several cubes       |
| PSID        | 2     | 26 - 27 | .Parameter Set Identification  | SEF: <tbd>  |
| * SCLK1     | 13    | 28 - 40 | .Start time of played-back OBS in SCLK   | PBK (except realtime data: SEF)                     |
| * SCLK2     | 13    | 41 - 53 | .Stop time of played-back OBS in SCLK  | PBK (except realtime data: SEF)                     |
| * PARTITION | 1     | 54 - 54 | .Partition for SCLK1 and SCLK2.  |   |
| <spare>     | 9     | 55 - 63 |  |   |
| TARGET      | 8     | 64 - 71 | .Primary Target of OBS   | SEF: translate from 3rd char in OAPEL (activity ID) |

```

-----
MODE      2 72 - 73      .NIMS Instrument MODE (0-15)      SEF: 37IOP, data byte 2, bits 5-8
GAIN      1 74 - 74      .Gain State (true value)          SEF: 37IST, data byte 3, bits 7-8 (if bit 6 = 1)
                                         0=gs2, 1=gs4, 2=gs3, 3=gs1
CHOP      1 75 - 75      .Chopper State (1=Ref,2=63Hz,3=FreeRun,4=Off) SEF: 37IST, data byte 2, bits 7-8 (if bit 6 = 1)
                                         0=63hz, 1=off, 2=ref, 3=freeerun
GRAT_OFF  1 76 - 76      .Grating Offset (0-7, default 4)   SEF: 37GOF, data byte 2, bits 5-8
PTAB_A(6) 12 77 - 88      .First PTAB |repeat count,mirror op,autobias...SEF: functions of MODE (from 37IOP) as modified by
PTAB_B(6) 12 89 - 100  .Second PTAB |...grating start, grating delta... 37MPT, unless special sequence (modes 12-15)
.         .         |...number of grating positions) in which case values come from 37SS
                                         parameters <tbd>
ECAL      1 101 - 101     .Electronics Calibration Active (1=yes) SEF: 37IST, data byte 3, bit 4 (1=on)
OPCAL     1 102 - 102     .Optics Calibration active (1=yes)   SEF: 37IST, data byte 3, bit 5 (1=on)
# REAL_TIME 1 103 - 103     .NIMS in Real-Time Telemetry (1=yes) SEF: track RT_INST_SEL .and. 37RT
# RECORD   1 104 - 104     .NIMS in Record Telemetry (1=yes)   SEF: track DMS status event:
                                         RECORD, REVERSE, RESUME, RUNDOWN <tbd>

* THRESHSEL 1 105 - 105     .Threshold value select (>0 = yes)   PBK: THRESHLD_TBL > 0 (i.e. 1-3)
<spare>    1 106 - 106     .
# RTISELDN 5 107 - 111     .RTI select, 5 binary bits (for mirror SEF: 37MB data byte 1, bits 4-8 <tbd>
                                         position blocking, down scan)
# RTISELUP 5 112 - 116     .RTI select, 5 binary bits (for mirror SEF: 37MB data byte 2, bits 4-8 <tbd>
                                         position blocking, up scan)
<spare>    1 117 - 117     .
* RICEFLAG  1 118 - 118     .Rice compression flag              PBK: 0 no compression
                                         1 Rice compression, ref vals each mirror scan
                                         3 Rice compression, ref vals each RIM rollover

<spare>    1 119 - 119     .
ESTCOMP    3 120 - 122     .Rice estimated compression ratio (m.n) PBK: CMPR_DVSR <tbd>
ESTCOMPV   3 123 - 125     .Rice estimated error in compression ratio (m.n)PBK: CMPR_UNC <tbd>
# RATECON1 5 126 - 130     .Rate control lower limit           PBK: | S/W table entry indexed by LOSSY_COMP (1-7)
# RATECON2 5 131 - 135     .Rate control upper limit           PBK: | or 0 if LOSSY_COMP = 0 (no rate control)
                                         |
<spare>    17 136 - 152     .
NWAVERTOT 3 153 - 155     .Total number of wavelengths selected Compute from relevant Wavelength Edit Table group
TLMFMT     3 156 - 158     .Telemetry format (MPW et al, LPU or LNR) SEF: 6TMREC command
SCET1      21 159 - 179     .Start time of played-back OBS in UTC PBK (except realtime data: SEF)
SCET2      21 180 - 200     .Stop time of played-back OBS in UTC  PBK (except realtime data: SEF)
<spares>   67 201 - 267     .Start time of played-back OBS in UTC  PBK (except realtime data: SEF)
* THRESH   51 268 - 318     .Threshold values (17 3-digit values, 0-999) PBK: S/W table indexed by THRESH_TBL > 0, else 0s
-----

```

```

# WETGID      10 319 - 328      .Wavelength selection group ID (unique)      PBK: WET_GID      (realtime <tbd>)
Rule of formation: mmeelll1nnn where
mm = instrument mode (0-15)
ee = # entries in group
lll = number of wavelengths selected
nnn = sequence number
* WETGRPSIZ      2 329 - 330      .# Wavelength Edit entries (1-26)      PBK: ED_GRP_LEN      (realtime SEF: 37ETB <tbd>)
* WETGRP      182 331 - 512      .Wavelength Edit Table group: WETGRPSIZ      PBK: ED_GRP      (realtime SEF: 37ETB data bytes 2..)

```

entries, each one has 7 characters. The first 2 characters are the repeat count (01-26). The other 5 characters contain 5 hex digits, representing the detector mask in the form BHHH where B is 0 or 1 and H has range 0-15. (These entries are from the 37ETB instrument edit group for realtime data and from the logical AND of corresponding entries in the instrument and playback edit groups for playback data.)

.The TARGET names used are:

```

CAL      - N - non-science targets, usually calibration targets
EARTH    - W - Earth
MOON     - L - Moon
SKY      - H - Stellar Space (space and stars)
VENUS    - V - Venus
GASPRA   - P - Gaspra
IDA      - U - Ida
JUPITER  - J - Jupiter
IO       - I - Io
EUROPA   - E - Europa
GANYMEDE - G - Ganymede
CALLISTO - C - Callisto
J_RING   - R - Jupiter rings

```

(the single letter abbreviation appears as the third character in the OAPEL name ).



```

-----
29JNNTZRLT0129JNNTZRLT01RDK05841704:00:005841713:12:01            JUPITER 3214 1 1 0 0 124 1 1 0 0 12400100 1000110001 0 0.00.0000
000000    130RT 2000-364/04:47:27.8002000-364/04:56:41.800
00000000000000000000000000000000000000000000000000000000000000 21303CD71300000

29JNSTZRLT0129JNSTZRLT01RDL05841724:00:005841733:12:01            JUPITER 3214 1 1 0 0 124 1 1 0 0 12400100 1000110001 0 0.00.0000
000000    130RT 2000-364/05:07:41.1332000-364/05:16:55.133
00000000000000000000000000000000000000000000000000000000000000 21303CD71300000

29JNHTSPOT0129JNHTSPOT01ADM05841740:90:005841754:87:01            JUPITER 3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525    1 48LPU 00-364/05:24:51.800 00-364/05:38:59.800
00000000000000000000000000000000000000000000000000000000000000 10000001038C701000000100000001038C70100000001000000010000010000
001038C7010000010000001038C70100000100000010000001038C7010000001038C701000001038C701000000100000010000001000000
29JNHTSPOT0229JNHTSPOT02ADN05841777:89:005841793:74:01            JUPITER 3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525    2 48LPU 00-364/06:02:16.466 00-364/06:18:16.466
00000000000000000000000000000000000000000000000000000000000000 10000001038C701000000100000010000001038C70100000001000000010000
001038C7010000010000001038C70100000100000010000001038C7010000001038C7010000001038C701000000100000010000001000000
29JNNTZRLT0229JNNTZRLT02RDP05842001:00:005842010:12:01            JUPITER 3214 1 1 0 0 124 1 1 0 0 12400100 1000110001 0 0.00.0000
000000    130RT 2000-364/09:47:45.8002000-364/09:56:59.800
00000000000000000000000000000000000000000000000000000000000000 21303CD71300000

29JNSTZRLT0229JNSTZRLT02RDQ05842016:00:005842021:12:01            JUPITER 3214 1 1 0 0 124 1 1 0 0 12400100 1000110001 0 0.00.0000
000000    130RT 2000-364/10:02:55.8002000-364/10:08:07.133
00000000000000000000000000000000000000000000000000000000000000 21303CD71300000

29JNAURORA0129JNAURORA01ADR05842181:90:005842193:74:01            JUPITER 3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525    1 72LPU 00-364/12:50:45.800 00-364/13:02:43.133
00000000000000000000000000000000000000000000000000000000000000 1001038D7010001001001038D70100010010001000100010001000100010001000
1001038D7010001001001038D70100010010001001001001038D7010001001038D7010001001038D7010001001000100100010001000000
29JNLIMBRT0129JNLIMBRT01RDS05842199:00:005842203:12:01            JUPITER 3414 1 1 0 0 124 1 1 0 0 12400100 0000000000 0 0.00.0000
000000    080RT 2000-364/13:07:57.8002000-364/13:12:08.466
00000000000000000000000000000000000000000000000000000000000000 2100000FF1600000

29ENGLOBAL0129ENGLOBAL01ADT05842220:89:005842223:84:01            EUROPA 3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525    1 288MPW 00-364/13:30:11.133 00-364/13:33:09.800
00000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000
FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039
29JNAURORA0229JNAURORA02ADU05842240:90:005842253:74:01            JUPITER 3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525    2 72LPU 00-364/13:50:25.133 00-364/14:03:23.133
00000000000000000000000000000000000000000000000000000000000000 1001038D7010001001038D7010001001000100010001000100010001000
1001038D70100010010001001038D70100010010001001000100100010010001001038D701000100100010010001001000100010001000000
-----

```











# Chapter 5 - Detailed Observation Designs

## Contents

|     | Sub-Section                     | Page |
|-----|---------------------------------|------|
| 5.0 | Contents .....                  | 1    |
| 5.1 | Introduction to Chapter 5 ..... | 2    |
| 5.2 | NIMS G29 Observations .....     | 3-95 |

## Introduction to Chapter 5

### Detailed Observation Designs

Each NIMS Detailed Observation Design consists of an OAPEL form and a Pointer plot. The OAPEL form is a brief description of the design of the observation. The Pointer plot is a plot of the target body with the NIMS footprint incorporated in the mosaic design superimposed on the target body. The size and orientation of the target body is plotted as it appears at the time of the first NIMS footprint plotted. For long observations, the target body may rotate or move relative to the spacecraft during the observation. Some observations, such as calibrations, do not have Pointer plots.

The Pointer plots and OAPEL forms in this chapter have been updated to report the actual data returned.

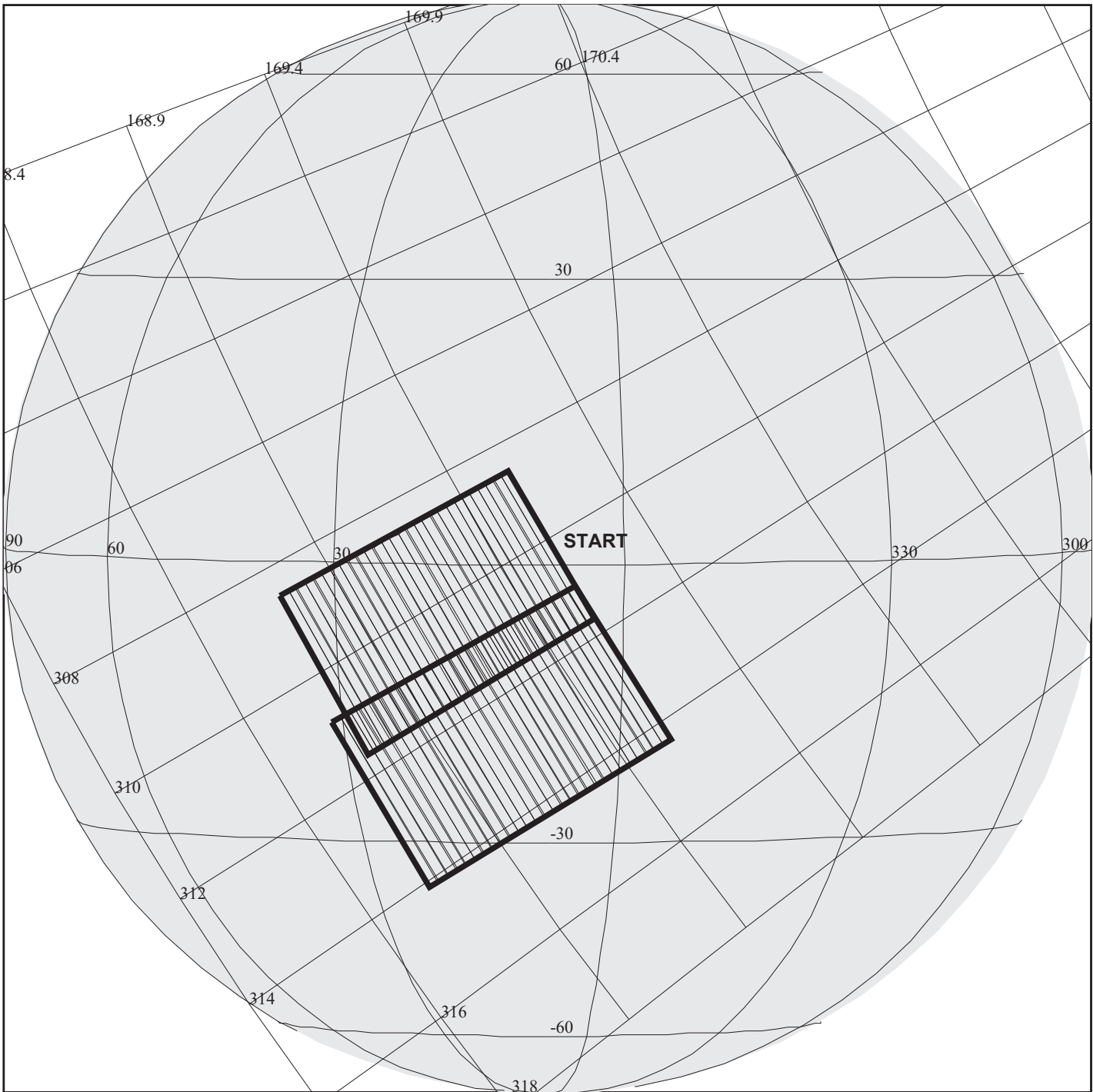
The Pointer plots have the spatial extent of the actual data returned outlined with a thick line. When no data were returned for a particular observation, its Pointer plot has a single slash across the plot with the text "NO DATA RETURNED" printed in the upper left corner of the plot.

The text of the OAPEL forms have been modified to reflect the actual NIMS instrument parameters for playback. An extra line containing one or some of the following statements has been added to the Observation Objective section of the OAPEL form to report the data return status:

```
"Data Returned"      == Data from this observation returned
"No Data Returned"   == NO Data from this observation returned
"Processor Halted"   == The NIMS Processor had halted at this time.
```

More information regarding NIMS data return can be found in Chapter 7 of this guide.

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| NIMS Software Reload  |                       | ACTIVITY ID: 29NNRELOAD01-      |                                |
|   |                       | START TIME: 00-363/09:03:07.000 |                                |
| Activity ID: Orbit 29 Target N Inst N OAPEL RELOAD SeqNo 01 -   |                       |                                 |                                |
| Title   | NIMS Software Reload  | Instrument                      | NIMS                           |
| Requestor   | NIMS-SWG/M. SEGURA    | Team NIMS Working Group         | SWG                            |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/28/00 Week 52 |
| Start   | JEE-CDS 00001091:36:2 | 00-363/09:03:07.000             | JEE-000/18:23:31.466           |
| End   | JEE-CDS 00001089:11:2 | 00-363/09:05:25.000             | JEE-000/18:21:13.466           |
| Duration  | 00000002:25:0         | 000/00:02:18.000                | 000/00:02:18.000               |
| Top Label   | 29NNRELOAD01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 0                     | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>NIMS reload</p> <p>Each NIMS GEM observation will have an instrument reload before the start of each observation. Each reload has its own OAPEL form, but only this first is included in the NIMSGUIDE. There are 35 NIMS reloads in G29.</p> <p>29GNGLOBAL02, 29JNNEBRLT01, 29NNSTZRLT02, 29JNLIMBRT01, 29JNLIMBRT02, 29JNLIMBRT03, 29JNLIMBRT06, 29JNLIMBRT07, 29JNJUPNTZ01 do not have reloads.</p> |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| <p>Use a standard set of commands to halt the instrument, load the software and reinitialize the instrument.</p> <p>37PL - Halt NIMS Processor</p> <p>37MRL - Memory Reallocate</p> <p>6MCPY - Copy flight software from CDS to NIMS 1000</p> <p>6MCPY - Copy flight software from CDS to NIMS 1598</p> <p>37IRT - Instrument Reset</p> <p>37MN - Memory Normal</p> <p>37IST - Chopper Reference.</p>     |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/31/00 10:48:23               | rev 1/99                       |



165DA:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/2565 TC= 3  
 A= 364 pD= 2894 SR=17.450 RA50= 64.38 DEC50= 21.73 cone=169.58 clock=310.13  
 117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/2565  
 1:#s= 2 Cs= -14.10 XCs= 0.00 Cr= 14.20 XCr= 7.50 sD= 1422 rD= 50

## 29GNREGION01

DESIGN G3.2 yande:11/16/2000 13:12:57

FILE:P.29GNREGION01

TARGET BODY : GANYMEDE

MINI:m.29GNREGION01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:GEE 00-363/08:25:05.866 +CDS 130:00:0

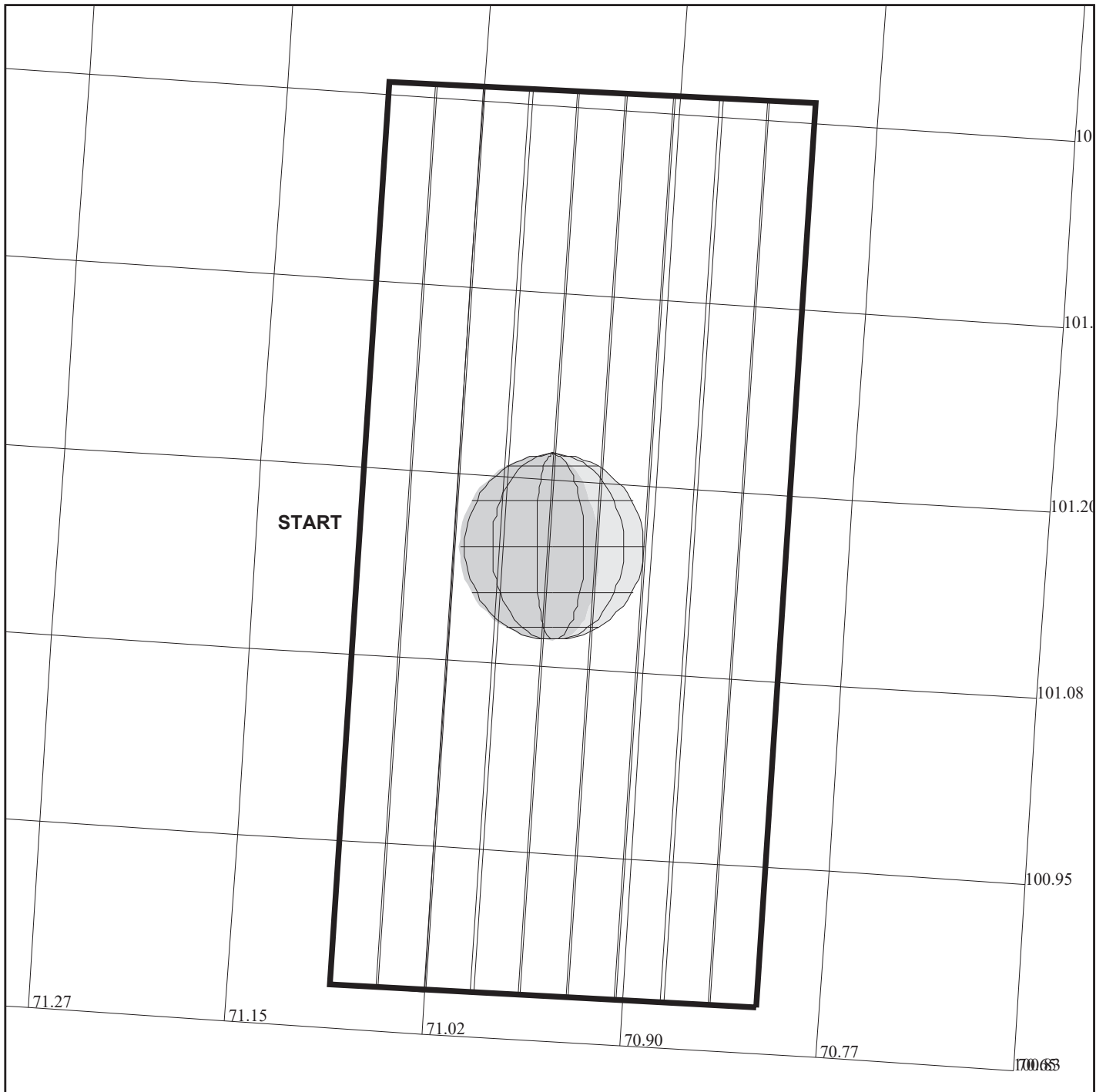
OBSERVATION:29GNREGION01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 2894 S= 1.000

DESCRIP:GANYMEDE\_REGION\_OBSERVATION

|   |                     |                |                     |                      |          |
|---|---------------------|----------------|---------------------|----------------------|----------|
| Ganymede Region Obs   |                     | ACTIVITY ID:   | 29GNREGION01-       |                      |          |
|   |                     | START TIME:    | 00-363/10:31:29.199 |                      |          |
| Activity ID: Orbit 29 Target G Inst N OAPEL REGION SeqNo 01 -   |                     |                |                     |                      |          |
| Title   | Ganymede Region Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-SWG/M. SEGURA  |                | Team                | NIMS Working Group   | SWG      |
| Time System   | CDS                 | Load ID        | Calendar Date       | 12/28/00             | Week 52  |
| Start   | GEE+CDS             | 00000125:00:0  | 00-363/10:31:29.199 | GEE+000/02:06:23.333 |          |
| End   | GEE+CDS             | 00000141:00:0  | 00-363/10:47:39.866 | GEE+000/02:22:34.000 |          |
| Duration  |                     | 00000016:00:0  | 000/00:16:10.667    | 000/00:16:10.667     |          |
| Top Label   | 29GNREGION01-       |                |                     |                      |          |
| Bottom Label  |                     |                |                     |                      |          |
| Plot Key  | NIMS                | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                 | Report Options | BOTH                | Scan Platform        | No       |
| CDS Source  | OAP                 | Spin State     | DUAL                | DMS                  | No       |
| Observation Objective   |                     |                |                     |                      |          |
| <p>Ganymede regional obseration. This represents the final NIMS moderate spatial resolution data set for Ganymede of the Galileo Mission. This data set will be used in conjunction and collaboration with data acquired in previous orbits by NIMS and SSI to do in-depth compositional studies.</p> |                     |                |                     |                      |          |
| Data Returned   |                     |                |                     |                      |          |
| Design Detail   |                     |                |                     |                      |          |
| BTG=2.09 MB, TICS=796, FMT=MPW, LM  |                     |                |                     |                      |          |
| Long Map, gain state 2.   |                     |                |                     |                      |          |
| Mosaic of two swaths, roughly between +10 to -30 deg latitude and<br>0 to +30 degrees West longitude.   |                     |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                     |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, GLM408, GLM288  |                     |                |                     |                      |          |
| Galileo Activity Plan Form  |                     |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29CNGLOBAL01**

165DB:TT= 0 TMC=1 C= 2.00 XC= 0.00 BS= 0/6781 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=311.09 DEC50=-19.18 cone= 71.08 clock=101.16  
 117DB:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/6781  
 1:#s= 1 Cs= -3.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 464 rD= 44

DESIGN G3.2 yande:11/15/2000 18:23:24

FILE:P.29CNGLOBAL01

TARGET BODY : CALLISTO

MINI:m.29CNGLOBAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:CEE 00-363/13:42:35.200 +CDS 04:00:0

OBSERVATION:29CNGLOBAL01

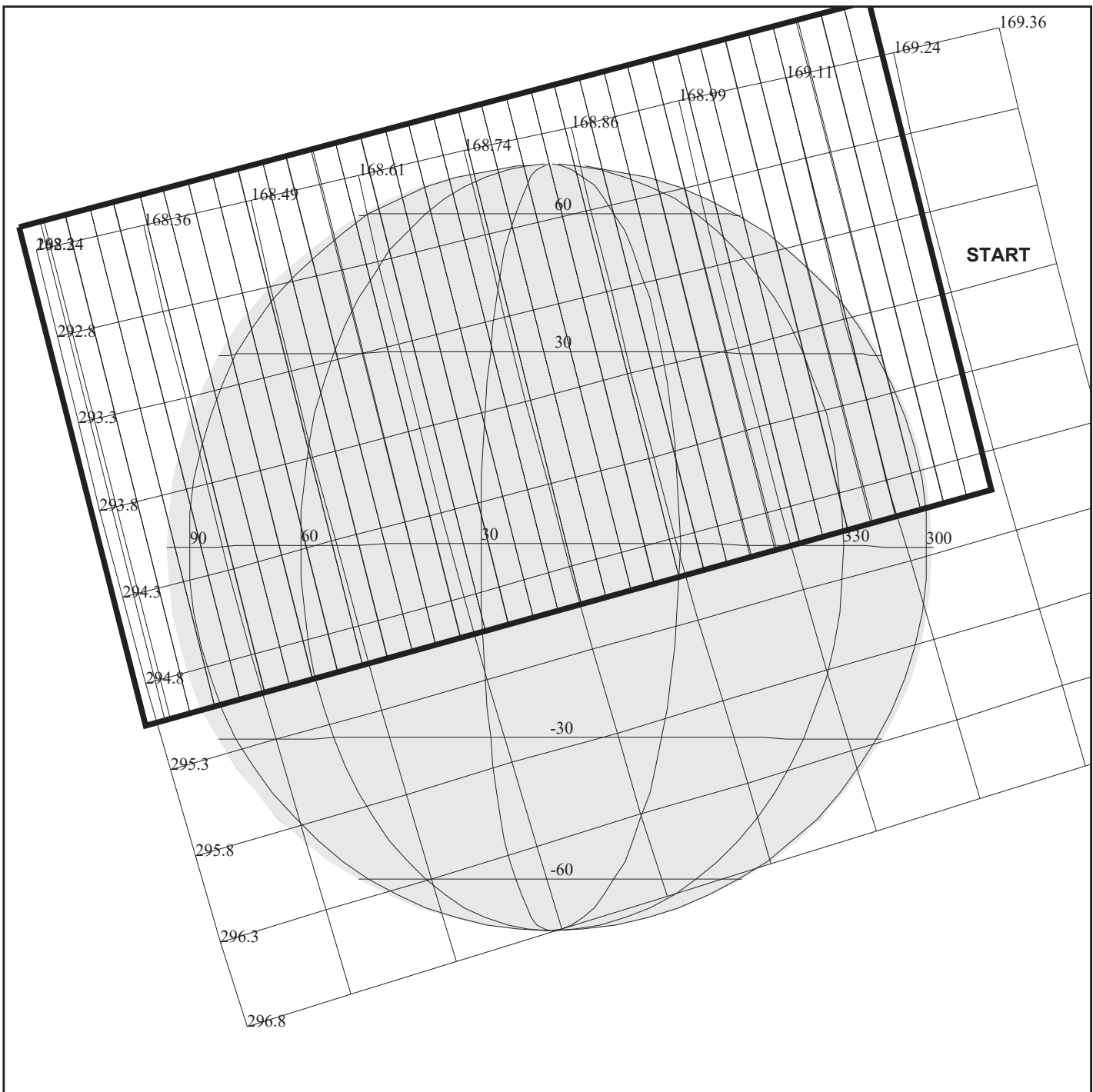
THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.170

DESCRIP:CALLISTO\_GLOBAL\_OBSERVATION

|  |                     |                |                     |                      |          |
|--|---------------------|----------------|---------------------|----------------------|----------|
| Callisto Global Obs  |                     | ACTIVITY ID:   | 29CNGLOBAL01-       |                      |          |
|  |                     | START TIME:    | 00-363/13:42:35.200 |                      |          |
| Activity ID: Orbit 29 Target C Inst N OAPEL GLOBAL SeqNo 01 -  |                     |                |                     |                      |          |
| Title  | Callsito Global Obs |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-SWG/M. SEGURA  |                | Team                | NIMS Working Group   | SWG      |
| Time System  | CDS                 | Load ID        | Calendar Date       | 12/28/00             | Week 52  |
| Start  | CEE+CDS             | 00000000:00:0  | 00-363/13:42:35.200 | CEE+000/00:00:00.000 |          |
| End  | CEE+CDS             | 00000020:00:0  | 00-363/14:02:48.533 | CEE+000/00:20:13.333 |          |
| Duration   |                     | 00000020:00:0  | 000/00:20:13.333    | 000/00:20:13.333     |          |
| Top Label  | 29CNGLOBAL01-       |                |                     |                      |          |
| Bottom Label   |                     |                |                     |                      |          |
| Plot Key   | NIMS                | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                 | Report Options | BOTH                | Scan Platform        | No       |
| CDS Source   | OAP                 | Spin State     | DUAL                | DMS                  | No       |
| Observation Objective  |                     |                |                     |                      |          |
| <p>This observation will allow for compositional mapping.<br/> This Galileo view of Callisto is being done in support of the Cassini VIMS observations of Callisto planned in the same time frame.</p> |                     |                |                     |                      |          |
| Data Returned  |                     |                |                     |                      |          |
| Design Detail  |                     |                |                     |                      |          |
| BTG=0.61 MB, TICS=145, FMT=MPW, LM   |                     |                |                     |                      |          |
| Low-resolution single swath global mosaic across the 1/3-lit disk.<br>Mosaic centered at 0 degrees latitude, 20 degrees West Longitude.  |                     |                |                     |                      |          |
| Booms Present.   |                     |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                     |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, CLM408, CLM288   |                     |                |                     |                      |          |
| Galileo Activity Plan Form   |                     |                | 12/01/00            | 00:00:00             | rev 6/95 |





**29GNGLOBAL01**

165DC:TT= 0 TMC=1 C= 8.70 XC= -4.00 BS= 0/5001 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50= 65.47 DEC50= 24.64 cone=169.22 clock=293.49  
 117DC:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5001  
 1:#s= 1 Cs= -17.70 XCs= 0.00 Cr= 15.50 XCr= 5.00 sD= 1792 rD= 48

DESIGN G3.2 yande:11/15/2000 18:23:45

FILE:P.29GNGLOBAL01

TARGET BODY : GANYMEDE

MINI:m.29GNGLOBAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

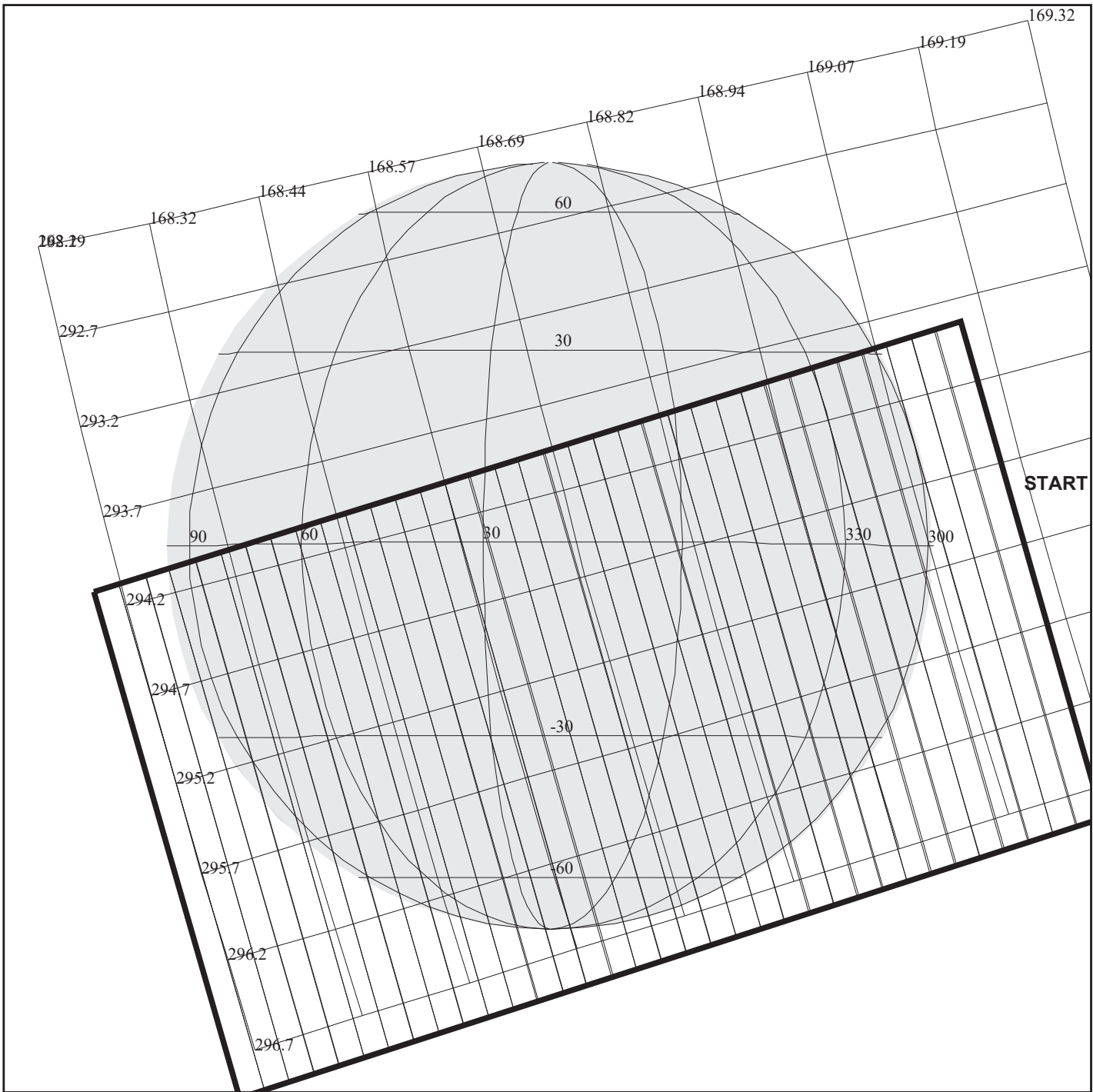
START:GEE 00-363/08:25:05.866 +CDS 528:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

OBSERVATION:29GNGLOBAL01

DESCRIP:GANYMEDE\_GLOBAL\_OBSERVATION

|   |                       |                |                     |                      |          |
|---|-----------------------|----------------|---------------------|----------------------|----------|
| Ganymede Global Obs   |                       | ACTIVITY ID:   | 29GNGLOBAL01-       |                      |          |
|   |                       | START TIME:    | 00-363/17:14:55.199 |                      |          |
| Activity ID: Orbit 29 Target G Inst N OAPEL GLOBAL SeqNo 01 -   |                       |                |                     |                      |          |
| Title   | Ganymede Global Obs   |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-SWG/M. SEGURA    |                | Team                | NIMS Working Group   | SWG      |
| Time System   | CDS                   | Load ID        | Calendar Date       | 12/28/00             | Week 52  |
| Start   | GEE+CDS 00000524:00:0 |                | 00-363/17:14:55.199 | GEE+000/08:49:49.333 |          |
| End   | GEE+CDS 00000538:00:0 |                | 00-363/17:29:04.532 | GEE+000/09:03:58.666 |          |
| Duration  | 00000014:00:0         |                | 000/00:14:09.333    | 000/00:14:09.333     |          |
| Top Label   | 29GNGLOBAL01-         |                |                     |                      |          |
| Bottom Label  |                       |                |                     |                      |          |
| Plot Key  | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                   | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|   |                       |                |                     | DMS                  | No       |
| Observation Objective   |                       |                |                     |                      |          |
| To obtain spectral map of the entire disk. This observation will be used to investigate the surface mineralogy and distribution of compositional units in a global context. |                       |                |                     |                      |          |
| Data Returned   |                       |                |                     |                      |          |
| Design Detail   |                       |                |                     |                      |          |
| BTG=4.13 MB, TICS=147, FMT=LPU, LM  |                       |                |                     |                      |          |
| Low phase angle single swath mosaic across the Ganymede's northern hemisphere. Mosaic covers -30 to +90 degrees latitude and 290 to 110 degrees West longitude.             |                       |                |                     |                      |          |
| Target centered at -2 degrees latitude, 20 degrees West longitude   |                       |                |                     |                      |          |
| To be merged with 29GNGLOBAL02 to form a whole-disk mosaic. Mosaic split into two parts to avoid cone pole problems.  |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, GLM252, GLM252  |                       |                |                     |                      |          |
| Galileo Activity Plan Form  |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29GNGLOBAL02**

165DD:TT= 0 TMC=1 C= 8.70 XC= 3.00 BS= 0/7367 TC= 3  
 A= 546 pD= 0 SR=17.450 RA50= 65.50 DEC50= 24.28 cone=169.16 clock=295.36  
 117DD:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7367  
 1:#s= 1 Cs= -17.80 XCs= 0.00 Cr= 17.00 XCr= 11.00 sD= 1792 rD= 80

DESIGN G3.2 yande:11/15/2000 18:23:54

FILE:P.29GNGLOBAL02

TARGET BODY : GANYMEDE

MINI:m.29GNGLOBAL02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

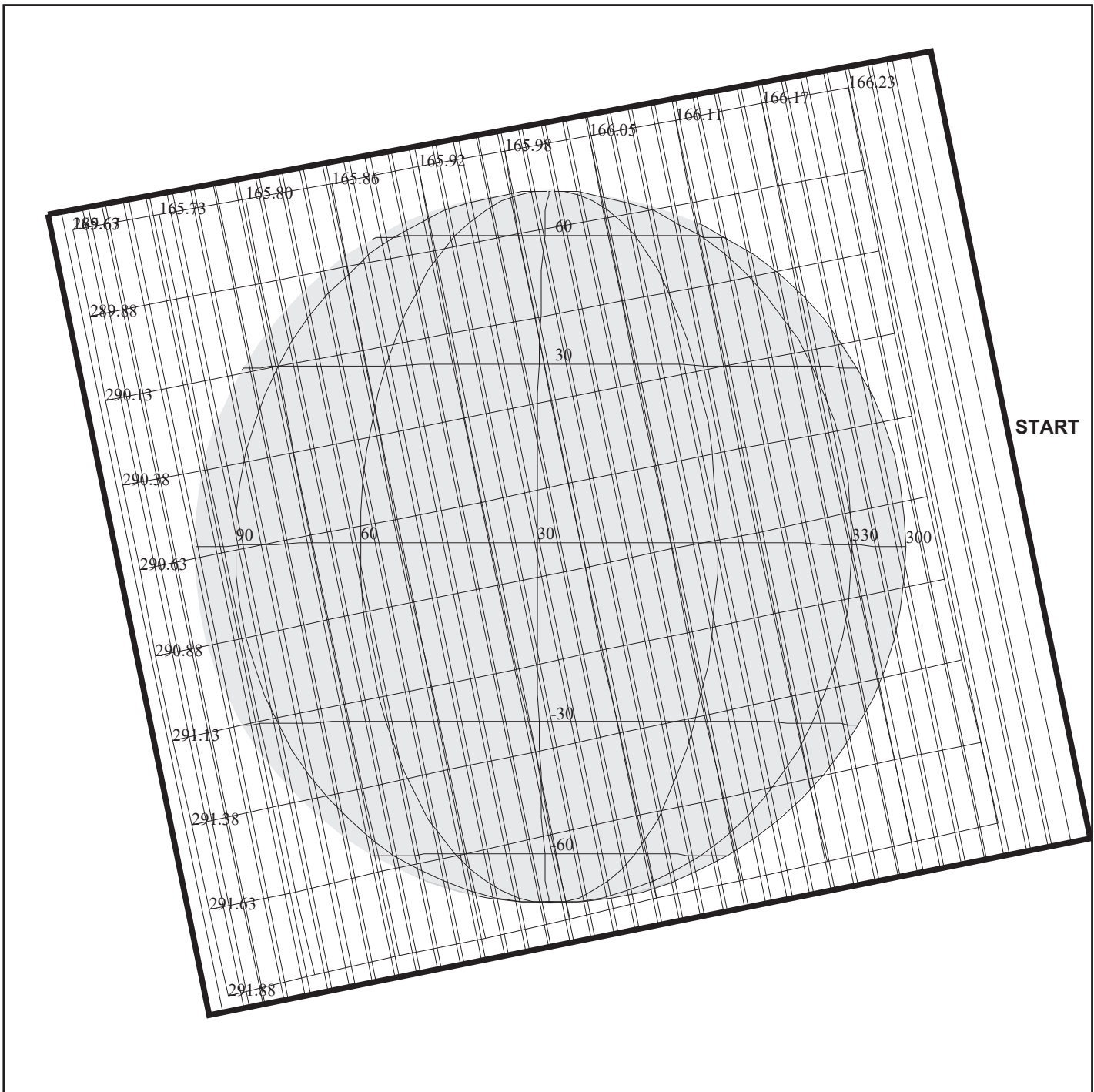
START:GEE 00-363/08:25:05.866 +CDS 541:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

OBSERVATION:29GNGLOBAL02

DESCRIP:GANYMEDE\_GLOBAL\_OBSERVATION

|   |                       |                |                     |                      |          |
|---|-----------------------|----------------|---------------------|----------------------|----------|
| Ganymede Global Obs   |                       | ACTIVITY ID:   | 29GNGLOBAL02-       |                      |          |
|   |                       | START TIME:    | 00-363/17:29:04.532 |                      |          |
| Activity ID: Orbit 29 Target G Inst N OAPEL GLOBAL SeqNo 02 -   |                       |                |                     |                      |          |
| Title   | Ganymede Global Obs   |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-SWG/M. SEGURA    |                | Team                | NIMS Working Group   | SWG      |
| Time System   | CDS                   | Load ID        | Calendar Date       | 12/28/00             | Week 52  |
| Start   | GEE+CDS 00000538:00:0 |                | 00-363/17:29:04.532 | GEE+000/09:03:58.666 |          |
| End   | GEE+CDS 00000568:00:0 |                | 00-363/17:59:24.532 | GEE+000/09:34:18.666 |          |
| Duration  | 00000030:00:0         |                | 000/00:30:20.000    | 000/00:30:20.000     |          |
| Top Label   | 29GNGLOBAL02-         |                |                     |                      |          |
| Bottom Label  |                       |                |                     |                      |          |
| Plot Key  | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                   | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|   |                       |                |                     | DMS                  | No       |
| Observation Objective   |                       |                |                     |                      |          |
| To obtain spectral map of the entire disk. This observation will be used to investigate the surface mineralogy and distribution of compositional units in a global context. |                       |                |                     |                      |          |
| Data Returned   |                       |                |                     |                      |          |
| Design Detail   |                       |                |                     |                      |          |
| BTG=4.13 MB, TICS=147, FMT=LPU, LM  |                       |                |                     |                      |          |
| Low phase angle single swath mosaic across the Ganymede's southern hemisphere. Mosaic covers -90 to +30 degrees latitude and 290 to 110 degrees West longitude.             |                       |                |                     |                      |          |
| Target centered at -2 degrees latitude, 20 degrees West longitude   |                       |                |                     |                      |          |
| To be merged with 29GNGLOBAL01 to form a whole-disk mosaic. Mosaic split into two parts to avoid cone pole problems.  |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, GLM252, GLM126  |                       |                |                     |                      |          |
| Galileo Activity Plan Form  |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29GNGLOBAL03**

165DE:TT= 0 TMC= 1 C= 5.70 XC= -0.10 BS= 0/2331 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50= 68.74 DEC50= 25.02 cone=166.29 clock=290.78  
 117DE:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/2331  
 1:#s= 1 Cs= -13.50 XCs= -0.70 Cr= 0.00 XCr= 0.00 sD= 2042 rD= 80

DESIGN G3.2 yande:11/15/2000 18:24:14

FILE:P.29GNGLOBAL03

TARGET BODY : GANYMEDE

MINI:m.29GNGLOBAL03

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

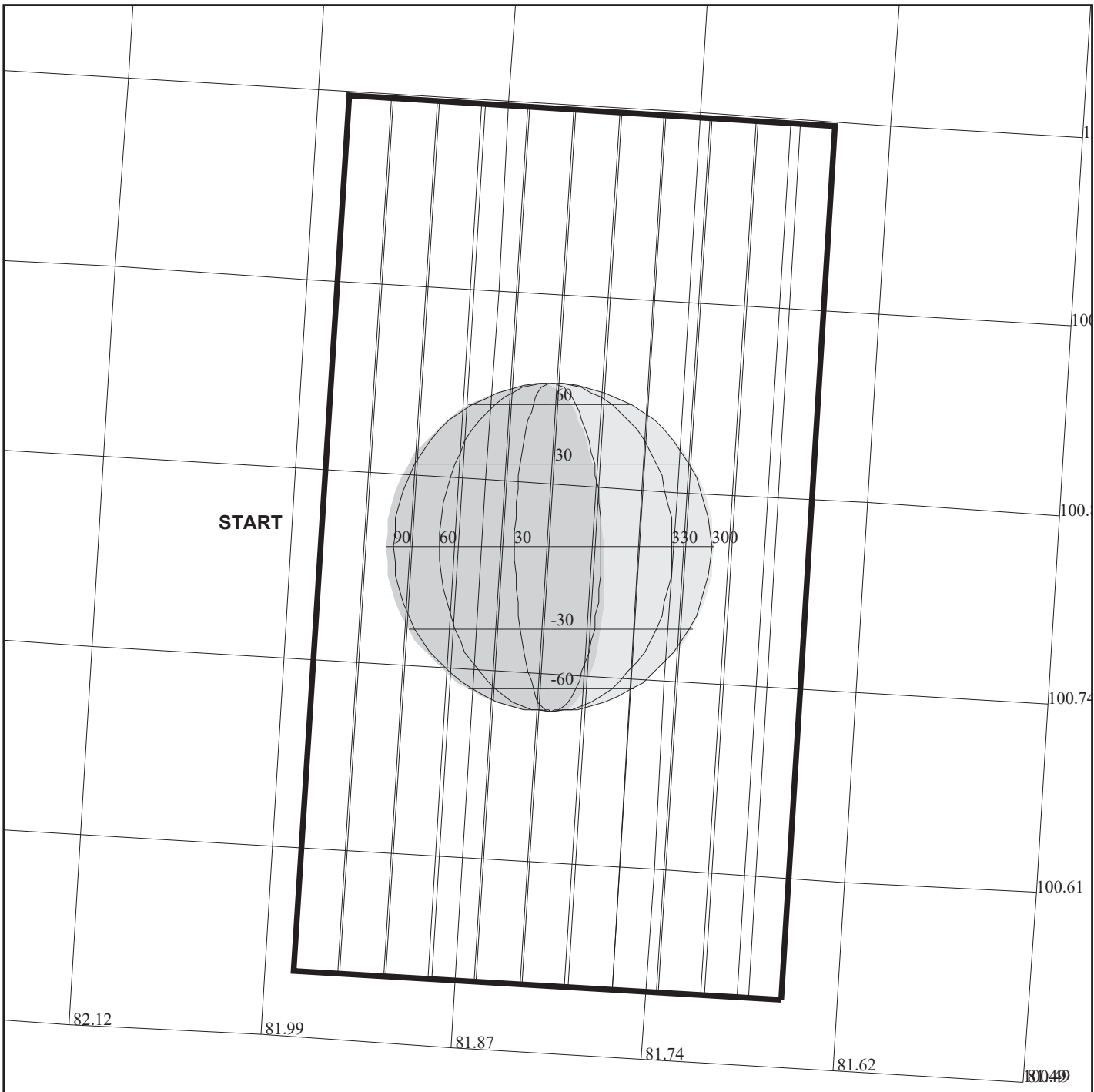
START:GEE 00-363/08:25:05.866 +CDS 843:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.650

OBSERVATION:29GNGLOBAL03

DESCRIP:GANYMEDE\_GLOBAL\_OBSERVATION

|   |                       |                |                     |                      |          |
|---|-----------------------|----------------|---------------------|----------------------|----------|
| Ganymede Global Obs   |                       | ACTIVITY ID:   | 29GNGLOBAL03-       |                      |          |
|   |                       | START TIME:    | 00-363/22:33:25.199 |                      |          |
| Activity ID: Orbit 29 Target G Inst N OAPEL GLOBAL SeqNo 03 -   |                       |                |                     |                      |          |
| Title   | Ganymede Global Obs   |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-SWG/M. SEGURA    |                | Team                | NIMS Working Group   | SWG      |
| Time System   | CDS                   | Load ID        | Calendar Date       | 12/28/00             | Week 52  |
| Start   | GEE+CDS 00000839:00:0 |                | 00-363/22:33:25.199 | GEE+000/14:08:19.333 |          |
| End   | GEE+CDS 00000855:00:0 |                | 00-363/22:49:35.866 | GEE+000/14:24:30.000 |          |
| Duration  | 00000016:00:0         |                | 000/00:16:10.667    | 000/00:16:10.667     |          |
| Top Label   | 29GNGLOBAL03-         |                |                     |                      |          |
| Bottom Label  |                       |                |                     |                      |          |
| Plot Key  | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                   | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|   |                       |                |                     | DMS                  | No       |
| Observation Objective   |                       |                |                     |                      |          |
| To obtain spectral map of the entire disk. This observation will be used to investigate the surface mineralogy and distribution of compositional units in a global context. |                       |                |                     |                      |          |
| Data Returned   |                       |                |                     |                      |          |
| Design Detail   |                       |                |                     |                      |          |
| BTG=1.44 MB, TICS=110, FMT=LPU, LM  |                       |                |                     |                      |          |
| Low phase angle single swath mosaic across Ganymede's entire disk. Mosaic covers -90 to +90 degrees latitude and 295 to 115 degrees West longitude.                         |                       |                |                     |                      |          |
| Target centered at -2 degrees latitude, 25 degrees West longitude   |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, GLM252, GLM252  |                       |                |                     |                      |          |
| Galileo Activity Plan Form  |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



165DF:TT= 0 TMC= 1 C= 2.50 XC= 0.00 BS= 0/9611 TC= 3  
 A= 728 pD= 536 SR=17.450 RA50=321.77 DEC50=-15.35 cone= 81.96 clock=100.82  
 117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9611  
 1:#s= 1 Cs= -5.20 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 536 rD= 80

## 29INIWATCH01

DESIGN G3.2 yande:11/16/2000 11:14:39

FILE:P.29INIWATCH01

TARGET BODY : IO

MINI:m.29INIWATCH01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:IEE 00-364/03:33:43.133 -CDS 253:00:0

OBSERVATION:29INIWATCH01

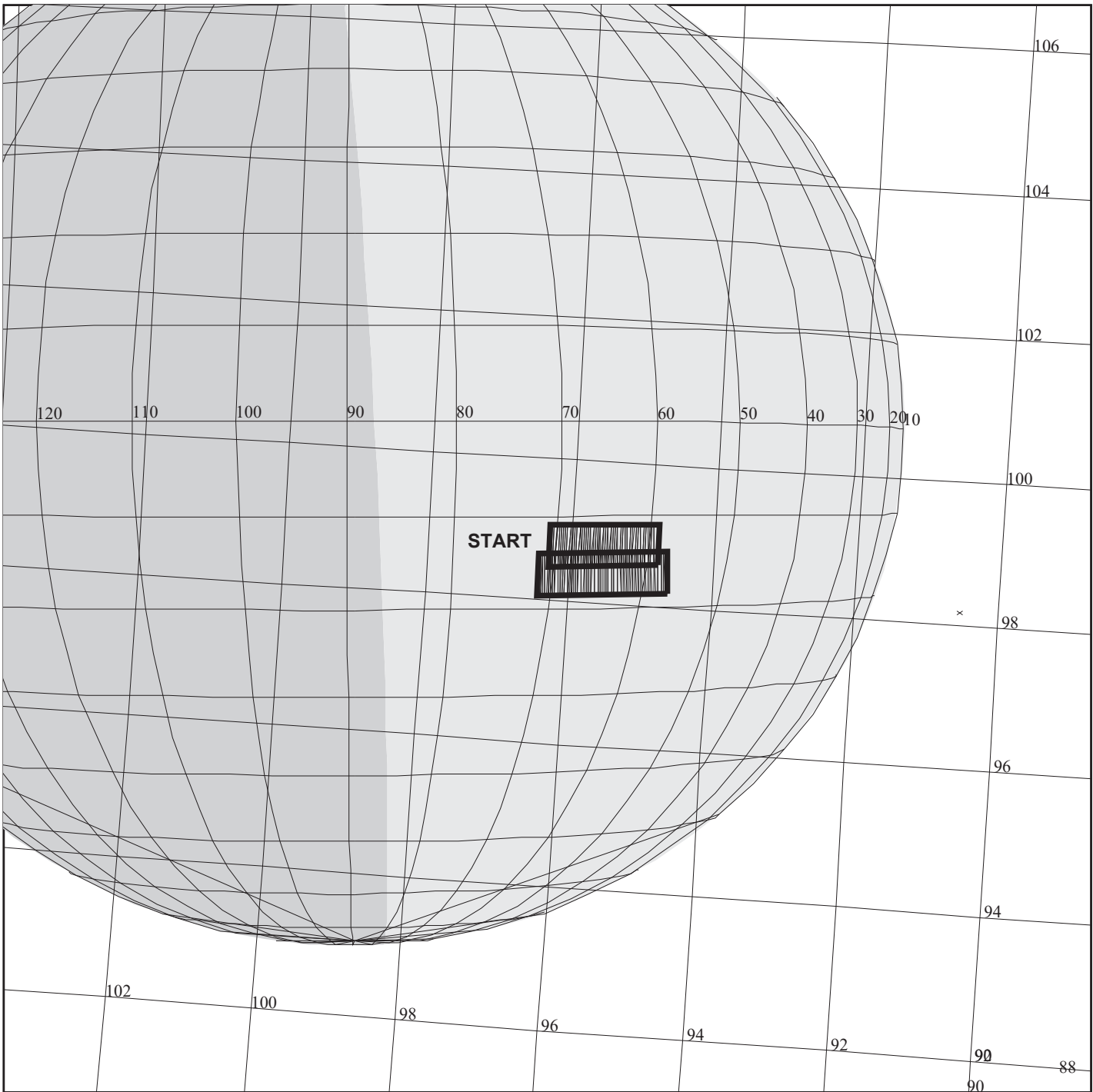
THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 536 S= 0.300

DESCRIP:IO\_MONITORING

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Io Monitoring   |                       | ACTIVITY ID: 29INIWATCH01-      |                                |
|   |                       | START TIME: 00-363/23:13:51.800 |                                |
| Activity ID: Orbit 29 Target I Inst N OAPEL IWATCH SeqNo 01 -       |                       |                                 |                                |
| Title   | Io Monitoring         | Instrument                      |                                |
| Requestor   | NIMS-SWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       | NIMS SWG                        |                                |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/28/00 Week 52 |
| Start   | IEE-CDS 00000257:00:0 | 00-363/23:13:51.800             | IEE-000/04:19:51.333           |
| End   | IEE-CDS 00000250:00:0 | 00-363/23:20:56.467             | IEE-000/04:12:46.666           |
| Duration  | 00000007:00:0         | 000/00:07:04.667                | 000/00:07:04.667               |
| Top Label   | 29INIWATCH01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| To monitor Io's volcanic activity.                                  |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=1.09 MB, TICS=171, FMT=MPW, LM                                  |                       |                                 |                                |
| Single swath mosaic across Io's 1/3-lit disk.                       |                       |                                 |                                |
| Mosaic covers -90 to +90 degrees latitude and                       |                       |                                 |                                |
| 288 to 108 degrees West longitude.                                  |                       |                                 |                                |
| Target centered at 0 degrees latitude, 20 degrees West longitude    |                       |                                 |                                |
| Booms Present.  |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM288  |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |





**29JNGRWAKE01**

165DG:TT= 0 TMC=1 C= 13.00 XC= 1.00 BS= 0/0925 TC= 1(-14 65 )  
 A= 182 pD= 0 SR=17.450 RA50=335.97 DEC50=-11.03 cone= 96.29 clock= 98.76  
 117DG:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/0925  
 1:#s= 2 Cs= -7.75 XCs= 1.20 Cr= 27.00 XCr= -9.00 sD= 2342 rD= 36

DESIGN G3.2 yande:11/16/2000 16:24:15

FILE:P.29JNGRWAKE01

CENTRAL BODY:JUPITER III

MINI:m.29JNGRWAKE01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 -CDS 19:00:0

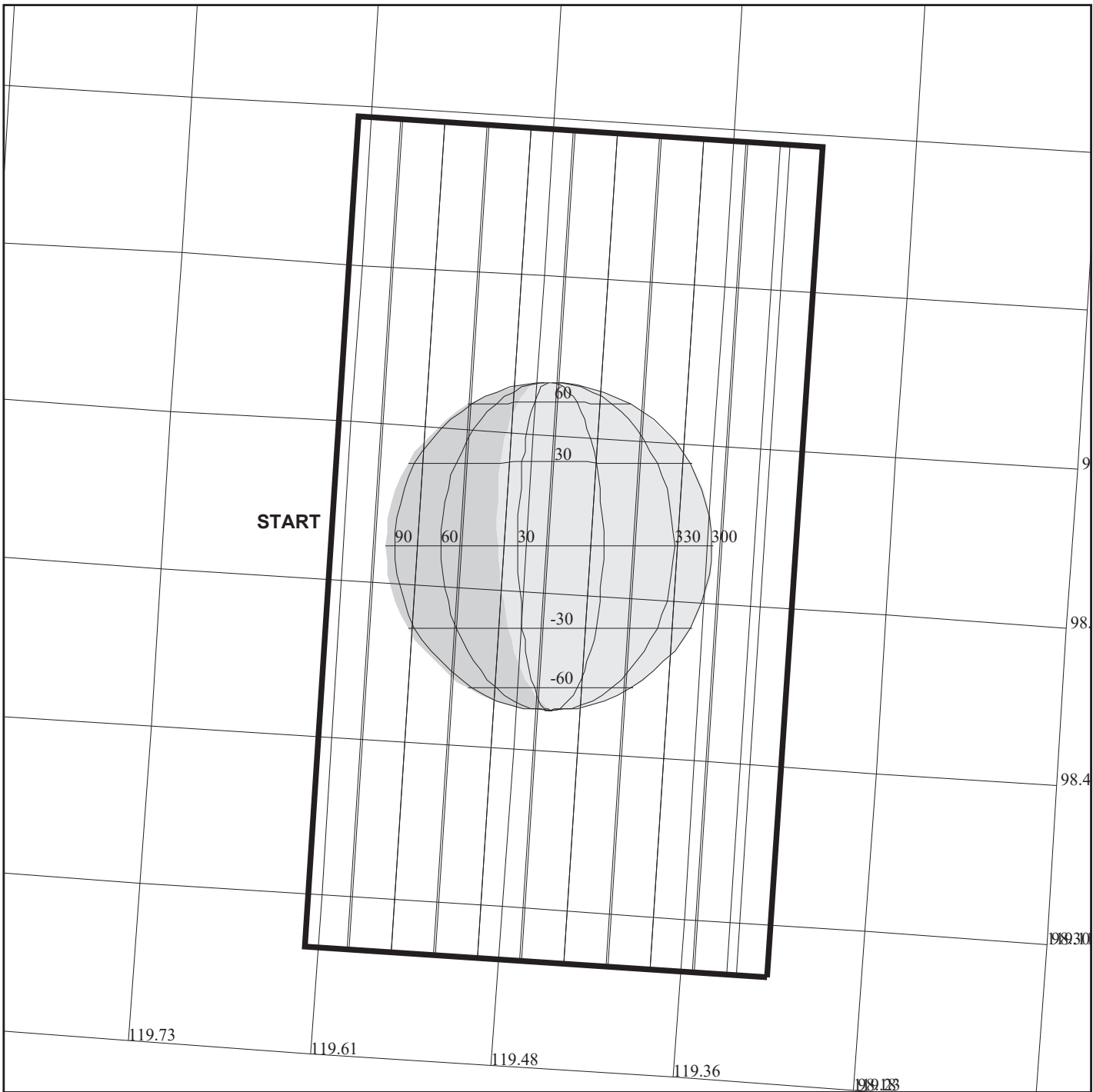
OBSERVATION:29JNGRWAKE01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

DESCRIP:JUPITER\_HOT\_SPOT\_OBSERVATION

|   |                      |                |                     |                      |          |
|---|----------------------|----------------|---------------------|----------------------|----------|
| Jupiter GRS Wake Obs  |                      | ACTIVITY ID:   | 29JNGRWAKE01-       |                      |          |
|   |                      | START TIME:    | 00-364/03:06:25.133 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GRWAKE SeqNo 01 -                                       |                      |                |                     |                      |          |
| Title   | Jupiter GRS Wake Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA   |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                  | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE-CDS              | 00000020:00:0  | 00-364/03:06:25.133 | JEE-000/00:20:13.333 |          |
| End   | JEE-CDS              | 00000000:00:0  | 00-364/03:26:38.466 | JEE-000/00:00:00.000 |          |
| Duration  |                      | 00000020:00:0  | 000/00:20:13.333    | 000/00:20:13.333     |          |
| Top Label   | 29JNGRWAKE01-        |                |                     |                      |          |
| Bottom Label  |                      |                |                     |                      |          |
| Plot Key  | NIMS                 | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                  | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                  | Spin State     | DUAL                | Scan Platform        | No       |
|   |                      |                | DMS                 |                      | No       |
| Observation Objective   |                      |                |                     |                      |          |
| To investigate composition and cloud dynamics of Jupiter's GRS turbulent wake region.               |                      |                |                     |                      |          |
| Data Returned   |                      |                |                     |                      |          |
| Design Detail   |                      |                |                     |                      |          |
| BTG=0.29 MB, TICS=271, FMT=LPU, LM  |                      |                |                     |                      |          |
| Two swath mosaic across the northern half of the GRS and downstream turbulent wake region, dayside. |                      |                |                     |                      |          |
| Mosaic covers: -18 to -11 degrees latitude and +57 to +71 degrees West longitude.                   |                      |                |                     |                      |          |
| Target centered at -15 degrees latitude, 65 degrees West longitude.                                 |                      |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                                 |                      |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM48                                   |                      |                |                     |                      |          |
| Galileo Activity Plan Form  |                      |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29INIWATCH02**

165DH:TT= 0 TMC= 1 C= 2.50 XC= 0.00 BS= 0/9115 TC= 3  
 A= 728 pD= 536 SR=17.450 RA50=356.68 DEC50= -0.08 cone=119.61 clock= 98.59  
 117DH:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9115  
 1:#s= 1 Cs= -5.20 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 536 rD= 80

DESIGN G3.2 yande:11/15/2000 18:24:57

FILE:P.29INIWATCH02

TARGET BODY : IO

MINI:m.29INIWATCH02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

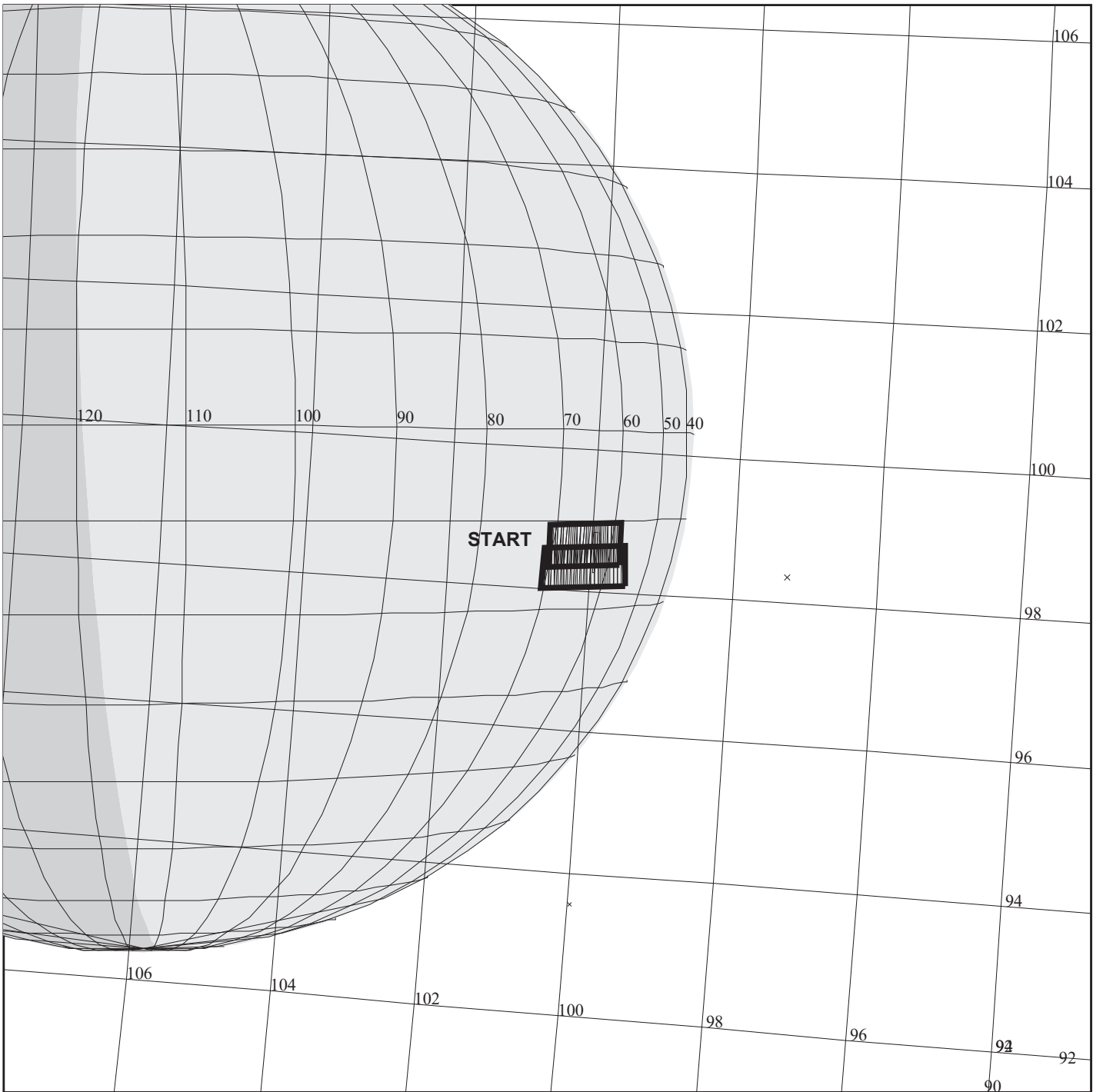
START:IEE 00-364/03:33:43.133 +CDS 19:00:0

BODY PLOT TIME:TARGET-TIME D= 536 S= 0.300

OBSERVATION:29INIWATCH02

DESCRIP:IO\_MONITORING

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Io Monitoring   |                       | ACTIVITY ID: 29INIWATCH02-      |                                |
|   |                       | START TIME: 00-364/03:48:53.133 |                                |
| Activity ID: Orbit 29 Target I Inst N OAPEL IWATCH SeqNo 02 -       |                       |                                 |                                |
| Title   | Io Monitoring         | Instrument                      |                                |
| Requestor   | NIMS-SWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       | NIMS SWG                        |                                |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/28/00 Week 52 |
| Start   | IEE+CDS 00000015:00:0 | 00-364/03:48:53.133             | IEE+000/00:15:10.000           |
| End   | IEE+CDS 00000022:00:0 | 00-364/03:55:57.799             | IEE+000/00:22:14.666           |
| Duration  | 00000007:00:0         | 000/00:07:04.666                | 000/00:07:04.666               |
| Top Label   | 29INIWATCH02-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| To monitor Io's volcanic activity.                                  |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=1.09 MB, TICS=171, FMT=MPW, LM                                  |                       |                                 |                                |
| Single swath mosaic across Io's 2/3-lit disk.                       |                       |                                 |                                |
| Mosaic covers -90 to +90 degrees latitude and                       |                       |                                 |                                |
| 289 to 109 degrees West longitude.                                  |                       |                                 |                                |
| Target centered at 0 degrees latitude, 20 degrees West longitude    |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM288  |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



START

165DI:TT= 0 TMC= 1 C= 8.00 XC= 2.00 BS= 0/0389 TC= 1(-14 65 )  
 A= 182 pD= 0 SR=17.450 RA50=339.91 DEC50= -9.20 cone=100.58 clock= 98.60  
 117DI:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/0389  
 1:#s= 2 Cs= -4.15 XCs= 1.00 Cr= 17.50 XCr= -7.00 sD= 1256 rD= 36

**29JNGRWAKE02**

DESIGN G3.2 yande:11/16/2000 16:28:35

FILE:P.29JNGRWAKE02

CENTRAL BODY:JUPITER III

MINI:m.29JNGRWAKE02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 33:00:0

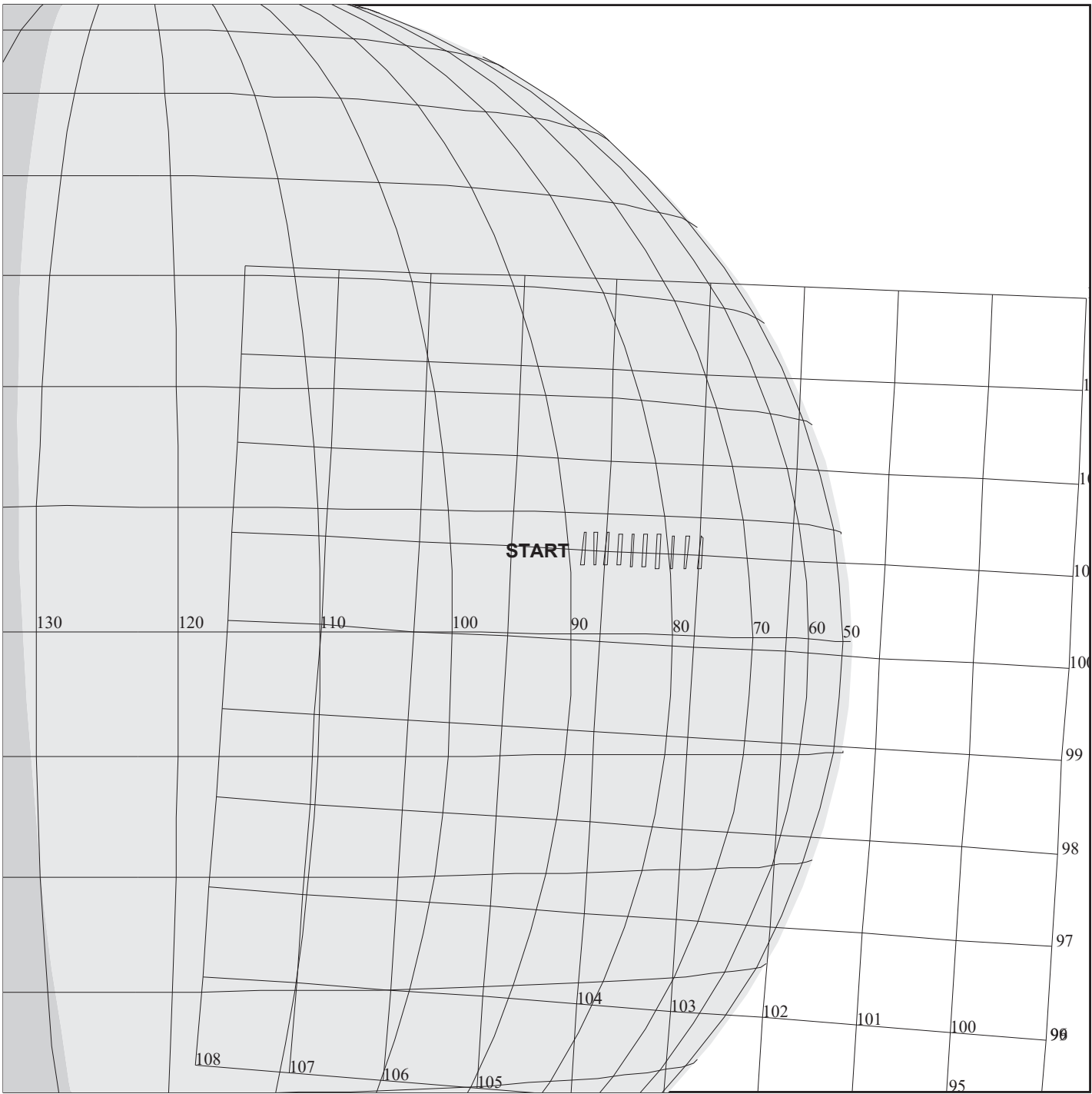
OBSERVATION:29JNGRWAKE02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

DESCRIP:JUPITER\_HOT\_SPOT\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter GRS Wake Obs  |                       | ACTIVITY ID: 29JNGRWAKE02-      |                                |
|   |                       | START TIME: 00-364/04:00:00.466 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL GRWAKE SeqNo 02 -                                       |                       |                                 |                                |
| Title   | Jupiter GRS Wake Obs  | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00000033:00:0 | 00-364/04:00:00.466             | JEE+000/00:33:22.000           |
| End   | JEE+CDS 00000051:00:0 | 00-364/04:18:12.466             | JEE+000/00:51:34.000           |
| Duration  | 00000018:00:0         | 000/00:18:12.000                | 000/00:18:12.000               |
| Top Label   | 29JNGRWAKE02-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| To investigate composition and cloud dynamics of Jupiter's GRS turbulent wake region.               |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.97 MB, TICS=271, FMT=LPU, LM  |                       |                                 |                                |
| Two swath mosaic across the northern half of the GRS and downstream turbulent wake region, dayside. |                       |                                 |                                |
| Mosaic covers: -17 to -11 degrees latitude and +56 to +70 degrees West longitude.                   |                       |                                 |                                |
| Target centered at -15 degrees latitude, 65 degrees West longitude.                                 |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                                 |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM48                                   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



**29JNNEBRLT01**

165DJ:TT= 0 TMC= 1 C= 18.00 XC= 0.00 BS= 0/3847 TC= 1(7 82.5 )  
 A= 182 pD= 0 SR=17.450 RA50=342.39 DEC50= -5.24 cone=104.60 clock=101.02  
 117DJ:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/3847  
 1:#s= 1 Cs= -8.35 XCs= -1.50 Cr= 0.00 XCr= 0.00 sD= 2526 rD= 2

DESIGN G3.2 yande:12/21/2000 13:51:50

FILE:P.29JNNEBRLT01

CENTRAL BODY:JUPITER III

MINI:m.29JNNEBRLT01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 52:00:0

OBSERVATION:29JNNEBRLT01

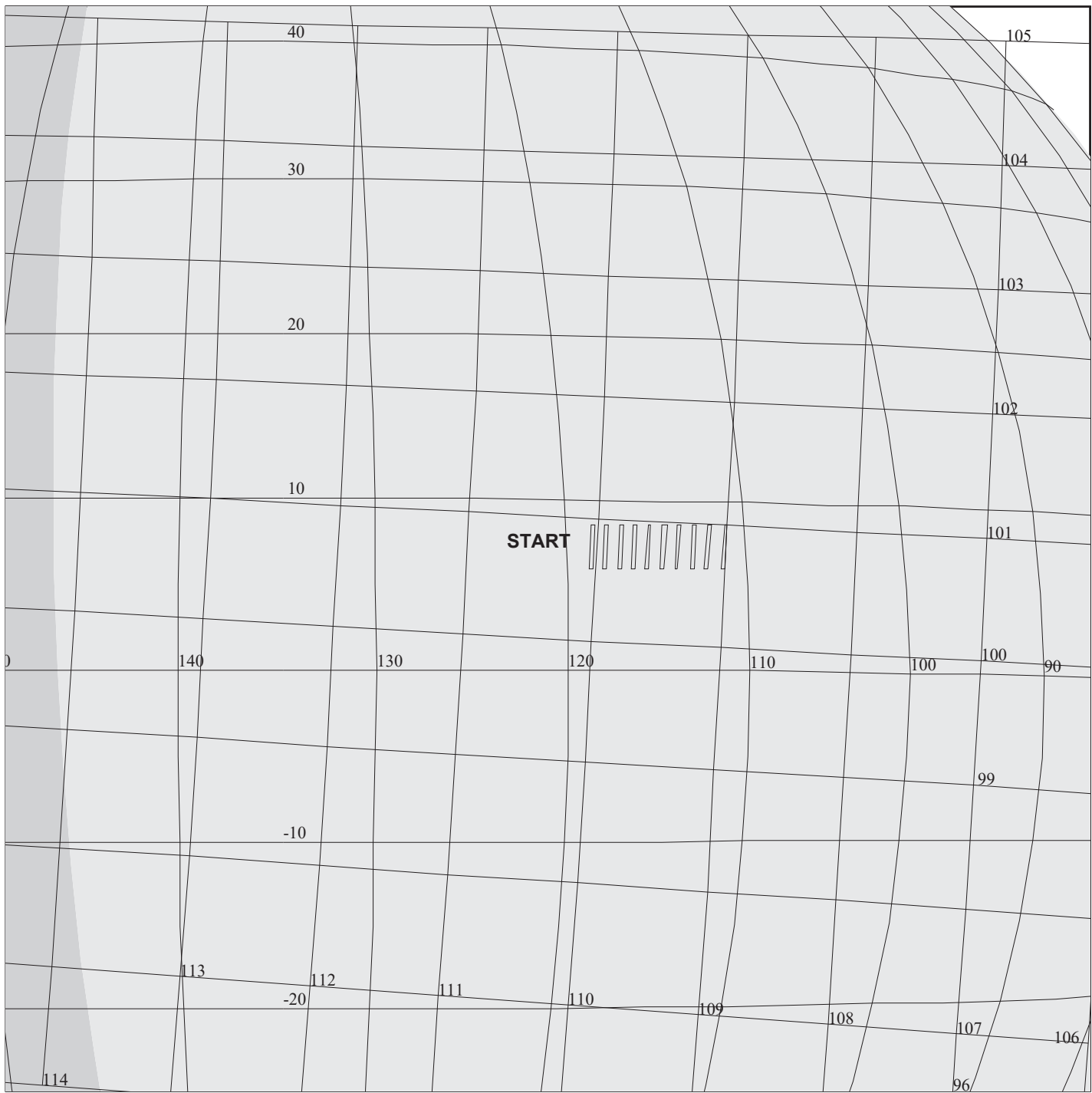
THINNING:NIM 7, MIRROR BLOCKING: 10001

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.300

DESCRIP:JUPITER\_RT\_NEB\_OBSERVATION

|   |                     |                |                     |                      |          |
|---|---------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T NEB Obs   |                     | ACTIVITY ID:   | 29JNNEBRLT01-       |                      |          |
|   |                     | START TIME:    | 00-364/04:18:12.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL NEBRLT SeqNo 01 -   |                     |                |                     |                      |          |
| Title   | Jupiter R/T NEB Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA  |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                 | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS             | 00000051:00:0  | 00-364/04:18:12.466 | JEE+000/00:51:34.000 |          |
| End   | JEE+CDS             | 00000066:00:0  | 00-364/04:33:22.466 | JEE+000/01:06:44.000 |          |
| Duration  |                     | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label   | 29JNNEBRLT01-       |                |                     |                      |          |
| Bottom Label  |                     |                |                     |                      |          |
| Plot Key  | NIMS                | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                 | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                 | Spin State     | DUAL                | Scan Platform        | No       |
|   |                     |                |                     | DMS                  | No       |
| Observation Objective   |                     |                |                     |                      |          |
| <p>Jupiter North Equatorial Belt real-time observation.<br/> These observations are designed to monitor cloud activity, thermal and compositional changes over the duration of the Galileo mission.</p> |                     |                |                     |                      |          |
| Data Returned   |                     |                |                     |                      |          |
| Design Detail   |                     |                |                     |                      |          |
| BTG=0.05 R/T LM   |                     |                |                     |                      |          |
| Single swath across the Northern Equatorial Belt hotspot region, dayside.   |                     |                |                     |                      |          |
| Mosaic covers: +5 to +9 degrees latitude and<br>+74 to +91 degrees West longitude.  |                     |                |                     |                      |          |
| Target centered at +7 degrees latitude, 83 degrees West longitude.  |                     |                |                     |                      |          |
| Mirror Blocking 11,11 (10001,10001)   |                     |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                     |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, R/T, JLM130  |                     |                |                     |                      |          |
| Galileo Activity Plan Form  |                     |                | 12/01/00            | 00:00:00             | rev 6/95 |





165DK:TT= 0 TMC=1 C= 14.50 XC= 0.00 BS= 0/8397 TC= 1(7 115 )  
 A= 182 pD= 0 SR=17.450 RA50=347.62 DEC50= -2.78 cone=110.36 clock=100.75  
 117DK:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/8397  
 1:#s= 1 Cs= -8.40 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 2532 rD= 2

**29JNNTZRLT01**

DESIGN G3.2 yande:12/21/2000 13:51:59

FILE:P.29JNNTZRLT01

CENTRAL BODY:JUPITER III

MINI:m.29JNNTZRLT01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 77:00:0

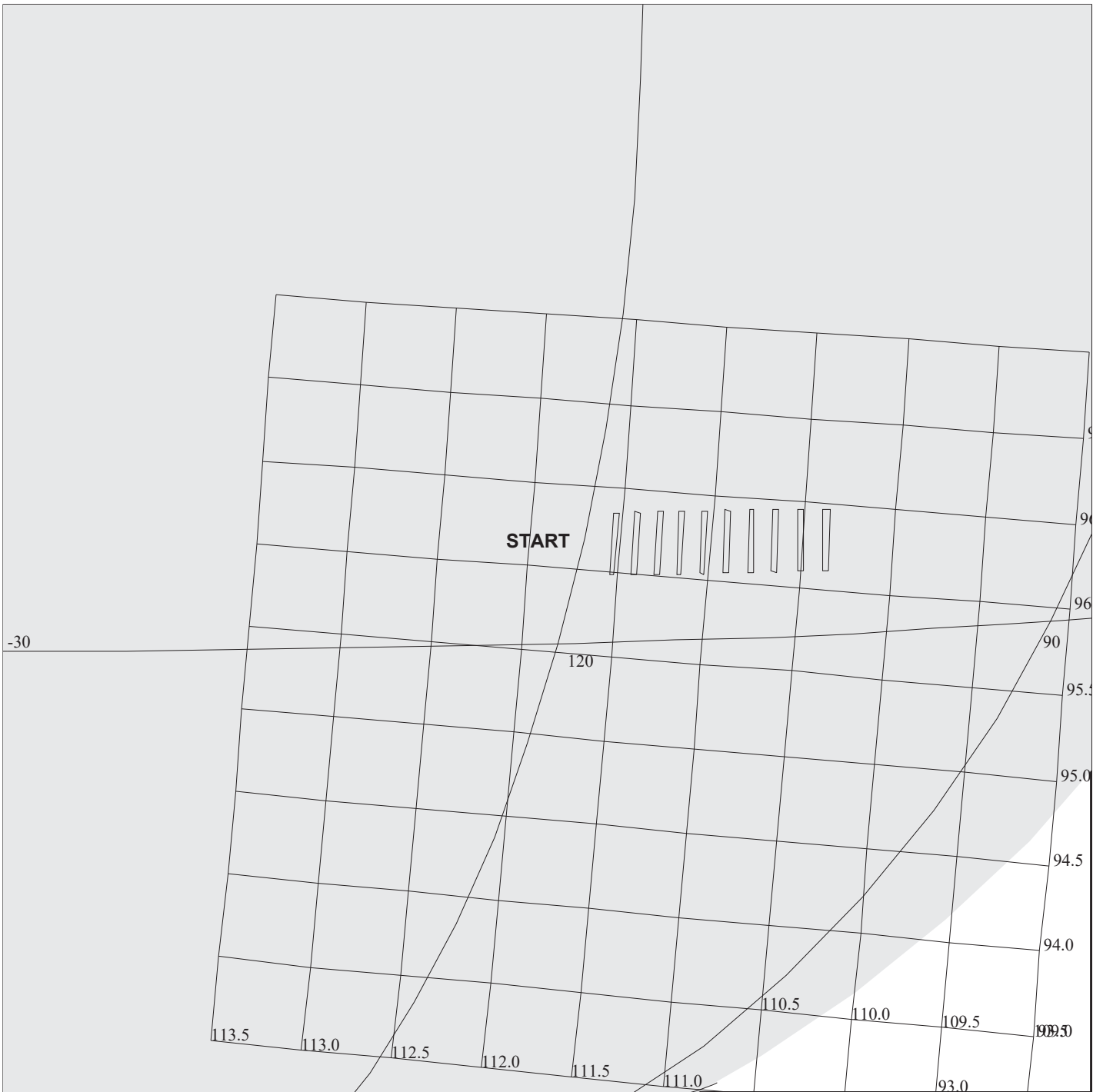
OBSERVATION:29JNNTZRLT01

THINNING:NIM 7, MIRROR BLOCKING: 10001

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.800

DESCRIP:JUPITER\_RT\_NTZ\_OBSERVATION

|   |                     |                |                     |                      |          |
|---|---------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T NTZ Obs   |                     | ACTIVITY ID:   | 29JNNTZRLT01-       |                      |          |
|   |                     | START TIME:    | 00-364/04:43:29.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL NTZRLT SeqNo 01 -   |                     |                |                     |                      |          |
| Title   | Jupiter R/T NTZ Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA  |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                 | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS             | 00000076:00:0  | 00-364/04:43:29.132 | JEE+000/01:16:50.666 |          |
| End   | JEE+CDS             | 00000091:00:0  | 00-364/04:58:39.132 | JEE+000/01:32:00.666 |          |
| Duration  |                     | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label   | 29JNNTZRLT01-       |                |                     |                      |          |
| Bottom Label  |                     |                |                     |                      |          |
| Plot Key  | NIMS                | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                 | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                 | Spin State     | DUAL                | Scan Platform        | No       |
|   |                     |                |                     | DMS                  | No       |
| Observation Objective   |                     |                |                     |                      |          |
| <p>Jupiter North Temperate Zone real-time observation.<br/> This observation is actually looking at the Northern Equatorial Belt (NEB) region. These observations are designed to monitor cloud activity, thermal and compositional changes over the duration of the Galileo mission.</p> |                     |                |                     |                      |          |
| Data Returned   |                     |                |                     |                      |          |
| Design Detail   |                     |                |                     |                      |          |
| BTG=0.04 R/T LM   |                     |                |                     |                      |          |
| Single swath across the Northern Equatorial Belt hotspot region, dayside.   |                     |                |                     |                      |          |
| Mosaic covers: +5 to +9 degrees latitude and<br>+110 to +121 degrees West longitude.  |                     |                |                     |                      |          |
| Target centered at +7 degrees latitude, 115 degrees West longitude.   |                     |                |                     |                      |          |
| Mirror Blocking 11,11 (10001,10001)   |                     |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                     |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, R/T, JLM130  |                     |                |                     |                      |          |
| Galileo Activity Plan Form  |                     |                | 12/01/00            | 00:00:00             | rev 6/95 |



165DL:TT= 0 TMC= 1 C= 13.00 XC= 0.00 BS= 0/2037 TC= 1(-26 115 )  
 A= 182 pD= 0 SR=17.450 RA50=351.03 DEC50= -5.81 cone=111.87 clock= 96.15  
 117DL:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/2037  
 1:#s= 1 Cs= -8.40 XCs= 2.00 Cr= 0.00 XCr= 0.00 sD= 2538 rD= 2

**29JNSTZRLT01**

DESIGN G3.2 yande:12/21/2000 13:52:19

FILE:P.29JNSTZRLT01

CENTRAL BODY:JUPITER III

MINI:m.29JNSTZRLT01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 97:00:0

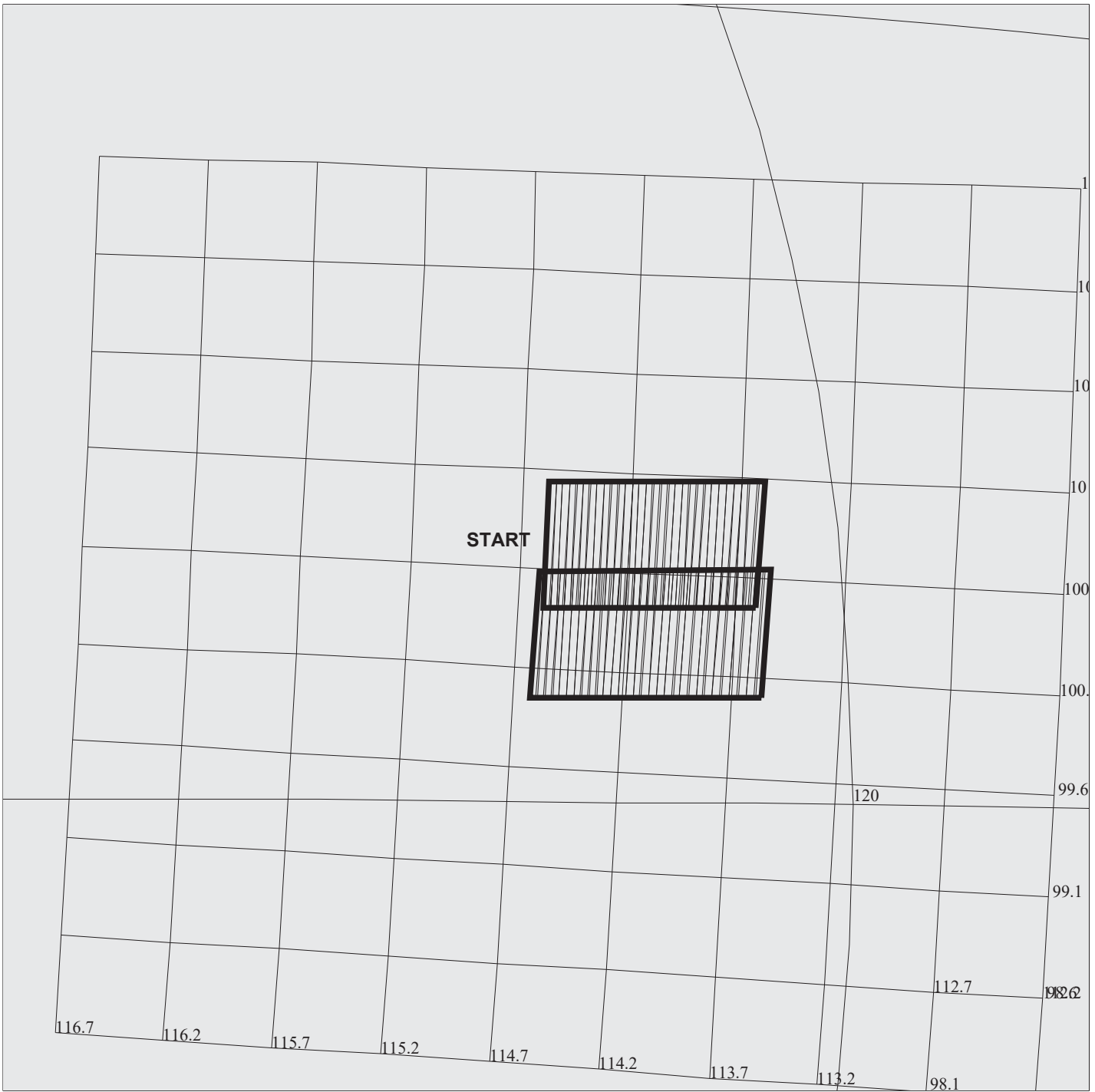
OBSERVATION:29JNSTZRLT01

THINNING:NIM 7, MIRROR BLOCKING: 10001

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.500

DESCRIP:JUPITER\_RT\_STZ\_OBSERVATION

|   |                     |                |                     |                      |          |
|---|---------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T STZ Obs   |                     | ACTIVITY ID:   | 29JNSTZRLT01-       |                      |          |
|   |                     | START TIME:    | 00-364/05:03:42.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL STZRLT SeqNo 01 -   |                     |                |                     |                      |          |
| Title   | Jupiter R/T STZ Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA  |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                 | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS             | 00000096:00:0  | 00-364/05:03:42.466 | JEE+000/01:37:04.000 |          |
| End   | JEE+CDS             | 00000111:00:0  | 00-364/05:18:52.466 | JEE+000/01:52:14.000 |          |
| Duration  |                     | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label   | 29JNSTZRLT01-       |                |                     |                      |          |
| Bottom Label  |                     |                |                     |                      |          |
| Plot Key  | NIMS                | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                 | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                 | Spin State     | DUAL                | Scan Platform        | No       |
|   |                     |                | DMS                 |                      | No       |
| Observation Objective   |                     |                |                     |                      |          |
| <p>Jupiter South Tropical Zone real-time observation.<br/> These observations are designed to monitor cloud activity, thermal and compositional changes over the duration of the Galileo mission.</p> |                     |                |                     |                      |          |
| Data Returned   |                     |                |                     |                      |          |
| Design Detail   |                     |                |                     |                      |          |
| BTG=0.04 R/T LM   |                     |                |                     |                      |          |
| Single swath across the South Tropical Zone, dayside.   |                     |                |                     |                      |          |
| Mosaic covers: -27 to -25 degrees latitude and<br>+106 to +121 degrees West longitude.  |                     |                |                     |                      |          |
| Target centered at -26 degrees latitude, 110 degrees West longitude.  |                     |                |                     |                      |          |
| Mirror Blocking 11,11 (10001,10001)   |                     |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                     |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, R/T, JLM130  |                     |                |                     |                      |          |
| Galileo Activity Plan Form  |                     |                | 12/01/00            | 00:00:00             | rev 6/95 |



START

## 29JNHTSPOT01

165DM:TT= 0 TMC=1 C= 7.00 XC= 4.50 BS= 0/5677 TC= 1(7 128 )  
 A= 182 pD= 0 SR=17.450 RA50=351.33 DEC50= -0.81 cone=114.56 clock=100.75  
 117DM:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/5677  
 1:#s= 2 Cs= -5.05 XCs= 0.00 Cr= 16.50 XCr= -8.00 sD= 1526 rD= 38

DESIGN G3.2 yande:11/15/2000 18:35:16

FILE:P.29JNHTSPOT01

CENTRAL BODY:JUPITER III

MINI:m.29JNHTSPOT01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

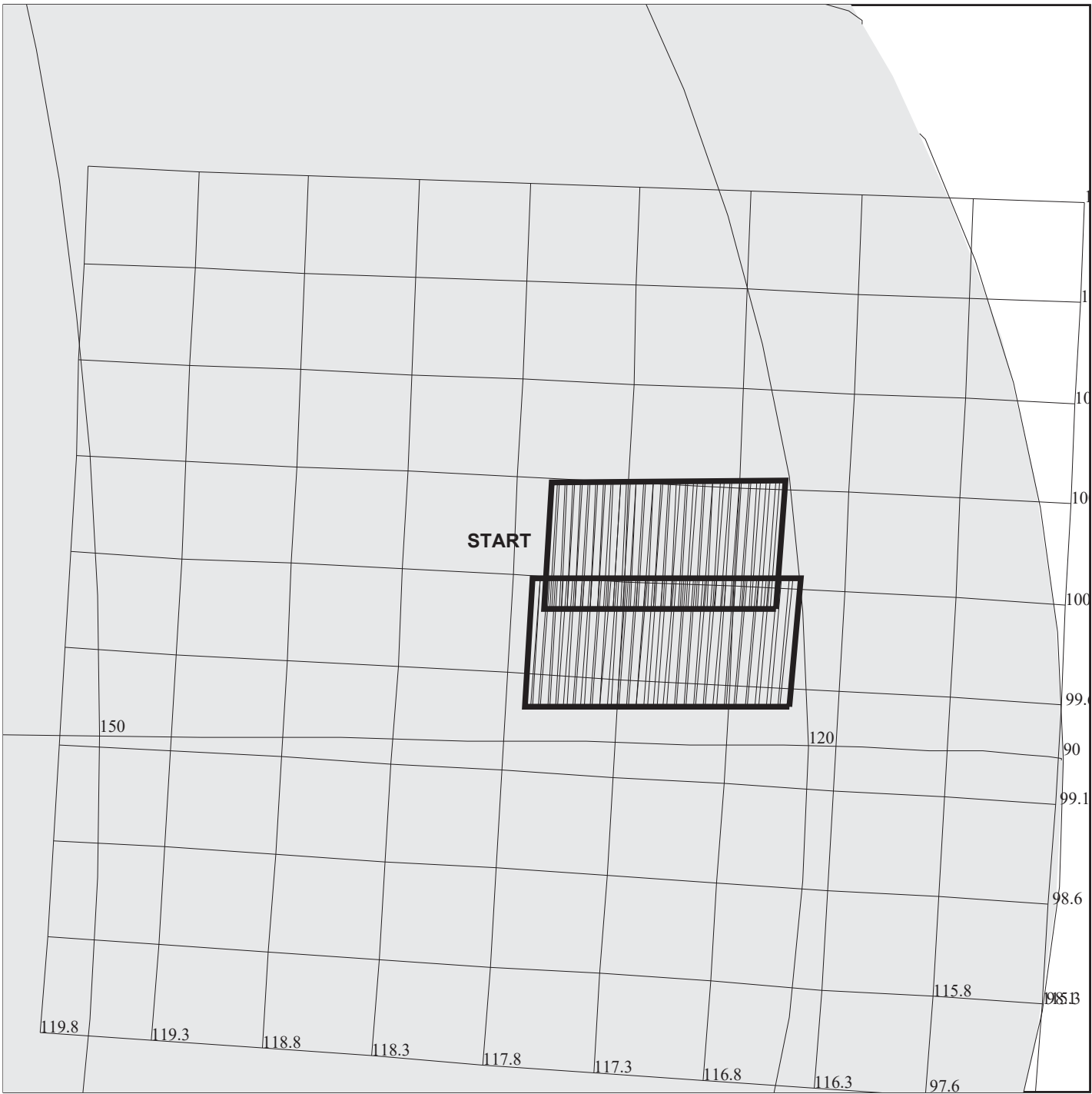
START:JEE 00-364/03:26:38.466 +CDS 117:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 3.000

OBSERVATION:29JNHTSPOT01

DESCRIP:JUPITER\_HOT\_SPOT\_OBSERVATION

|  |                      |                |                     |                      |          |
|--|----------------------|----------------|---------------------|----------------------|----------|
| Jupiter Hot Spot Obs   |                      | ACTIVITY ID:   | 29JNHTSPOT01-       |                      |          |
|  |                      | START TIME:    | 00-364/05:23:55.799 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL HTSPOT SeqNo 01 -  |                      |                |                     |                      |          |
| Title  | Jupiter Hot Spot Obs |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA   |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                  | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start  | JEE+CDS              | 00000116:00:0  | 00-364/05:23:55.799 | JEE+000/01:57:17.333 |          |
| End  | JEE+CDS              | 00000136:00:0  | 00-364/05:44:09.132 | JEE+000/02:17:30.666 |          |
| Duration   |                      | 00000020:00:0  | 000/00:20:13.333    | 000/00:20:13.333     |          |
| Top Label  | 29JNHTSPOT01-        |                |                     |                      |          |
| Bottom Label   |                      |                |                     |                      |          |
| Plot Key   | NIMS                 | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                  | Report Options | BOTH                | Scan Platform        | No       |
| CDS Source   | OAP                  | Spin State     | DUAL                | DMS                  | No       |
| Observation Objective  |                      |                |                     |                      |          |
| Jupiter Hot Spot map to determine cloud dynamics and permit mapping of compositional variations over time. |                      |                |                     |                      |          |
| Data Returned  |                      |                |                     |                      |          |
| Design Detail  |                      |                |                     |                      |          |
| BTG=0.36 MB, TICS=271, FMT=LPU, LM   |                      |                |                     |                      |          |
| Two swath mosaic over a hotspot region, dayside.   |                      |                |                     |                      |          |
| Mosaic covers: +4 to +14 degrees latitude and<br>+123 to +131 degrees West longitude.                      |                      |                |                     |                      |          |
| Target centered at +7 degrees latitude, 127 degrees West longitude.  |                      |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                      |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM48  |                      |                |                     |                      |          |
| Galileo Activity Plan Form   |                      |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29JNHTSPOT02**

165DN:TT= 0 TMC= 1 C= 8.00 XC= 0.00 BS= 0/2411 TC= 1(7 128 )  
 A= 728 pD= 0 SR=17.450 RA50=354.22 DEC50= 0.21 cone=117.59 clock=100.22  
 117DN:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/2411  
 1:#s= 2 Cs= -4.75 XCs= 0.00 Cr= 17.50 XCr= -8.50 sD= 1434 rD= 40

DESIGN G3.2 yande:11/15/2000 18:36:56

FILE:P.29JNHTSPOT02

CENTRAL BODY:JUPITER III

MINI:m.29JNHTSPOT02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 154:00:0

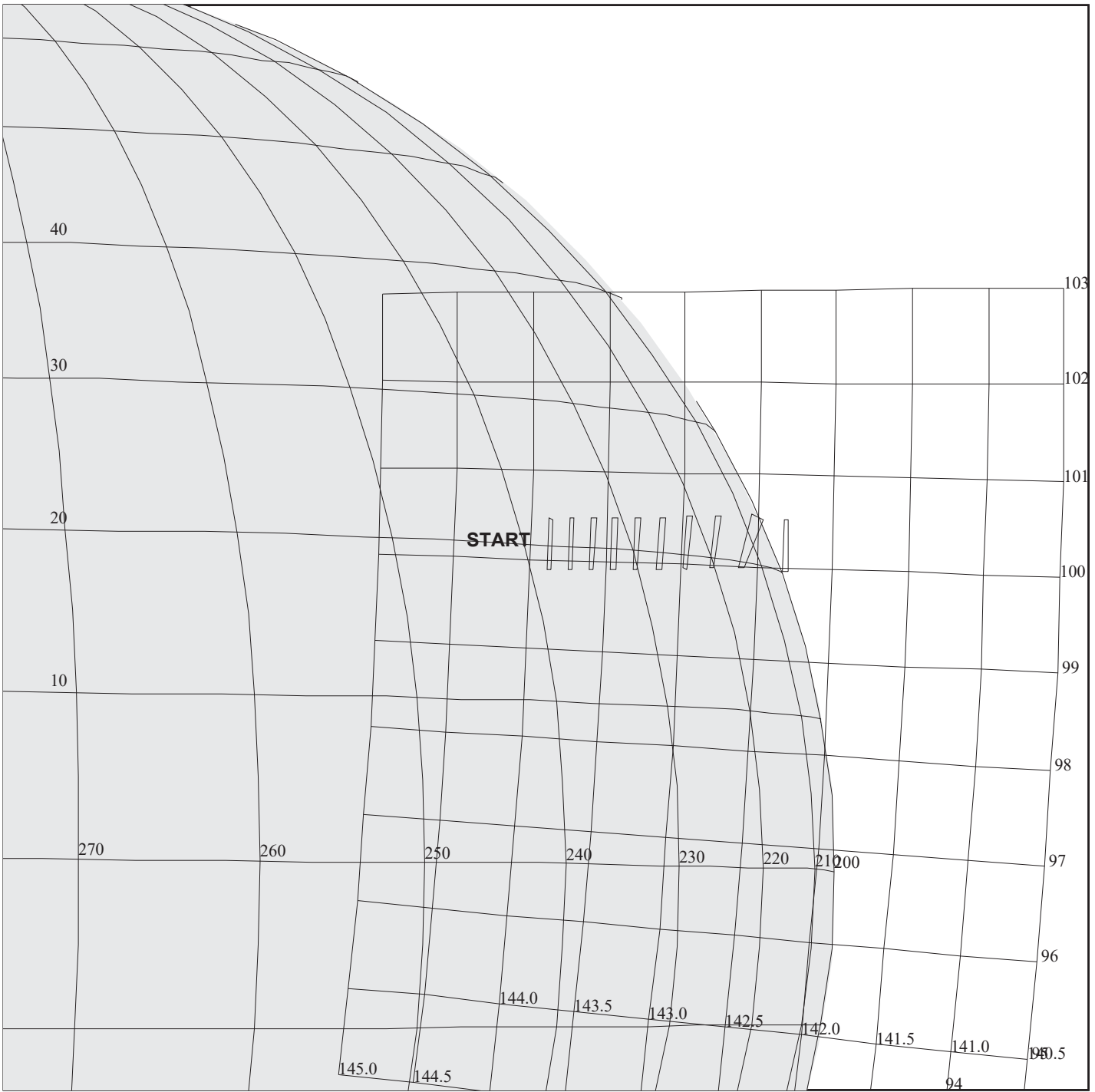
BODY PLOT TIME:TARGET-TIME D= 0 S= 3.000

OBSERVATION:29JNHTSPOT02

DESCRIP:GRS\_WAKE\_OBSERVATION

|  |                      |                |                     |                      |          |
|--|----------------------|----------------|---------------------|----------------------|----------|
| Jupiter Hot Spot Obs   |                      | ACTIVITY ID:   | 29JNHTSPOT02-       |                      |          |
|  |                      | START TIME:    | 00-364/05:58:18.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL HTSPOT SeqNo 02 -  |                      |                |                     |                      |          |
| Title  | Jupiter Hot Spot Obs |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA   |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                  | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start  | JEE+CDS              | 00000150:00:0  | 00-364/05:58:18.466 | JEE+000/02:31:40.000 |          |
| End  | JEE+CDS              | 00000165:00:0  | 00-364/06:13:28.466 | JEE+000/02:46:50.000 |          |
| Duration   |                      | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNHTSPOT02-        |                |                     |                      |          |
| Bottom Label   |                      |                |                     |                      |          |
| Plot Key   | NIMS                 | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                  | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                  | Spin State     | DUAL                | Scan Platform        | No       |
|  |                      |                |                     | DMS                  | No       |
| Observation Objective  |                      |                |                     |                      |          |
| Jupiter Hot Spot map to determine cloud dynamics and permit mapping of compositional variations over time. |                      |                |                     |                      |          |
| Data Returned  |                      |                |                     |                      |          |
| Design Detail  |                      |                |                     |                      |          |
| BTG=0.36 MB, TICS=201, FMT=LPU, LM   |                      |                |                     |                      |          |
| Two swath mosaic over a hotspot region, dayside.   |                      |                |                     |                      |          |
| Mosaic covers: +2 to +12 degrees latitude and<br>+121 to +133 degrees West longitude.                      |                      |                |                     |                      |          |
| Target centered at +7 degrees latitude, 127 degrees West longitude.  |                      |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                      |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM48  |                      |                |                     |                      |          |
| Galileo Activity Plan Form   |                      |                | 12/01/00            | 00:00:00             | rev 6/95 |





165DP:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/2997 TC= 1(20 238 )  
 A= 728 pD= 0 SR=17.450 RA50= 17.76 DEC50= 12.31 cone=143.90 clock=100.17  
 117DP:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/2997  
 1:#s= 1 Cs= -13.20 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 2002 rD= 2

**29JNNTZRLT02**

DESIGN G3.2 yande:12/21/2000 13:52: 8

FILE:P.29JNNTZRLT02

CENTRAL BODY:JUPITER III

MINI:m.29JNNTZRLT02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 377:00:0

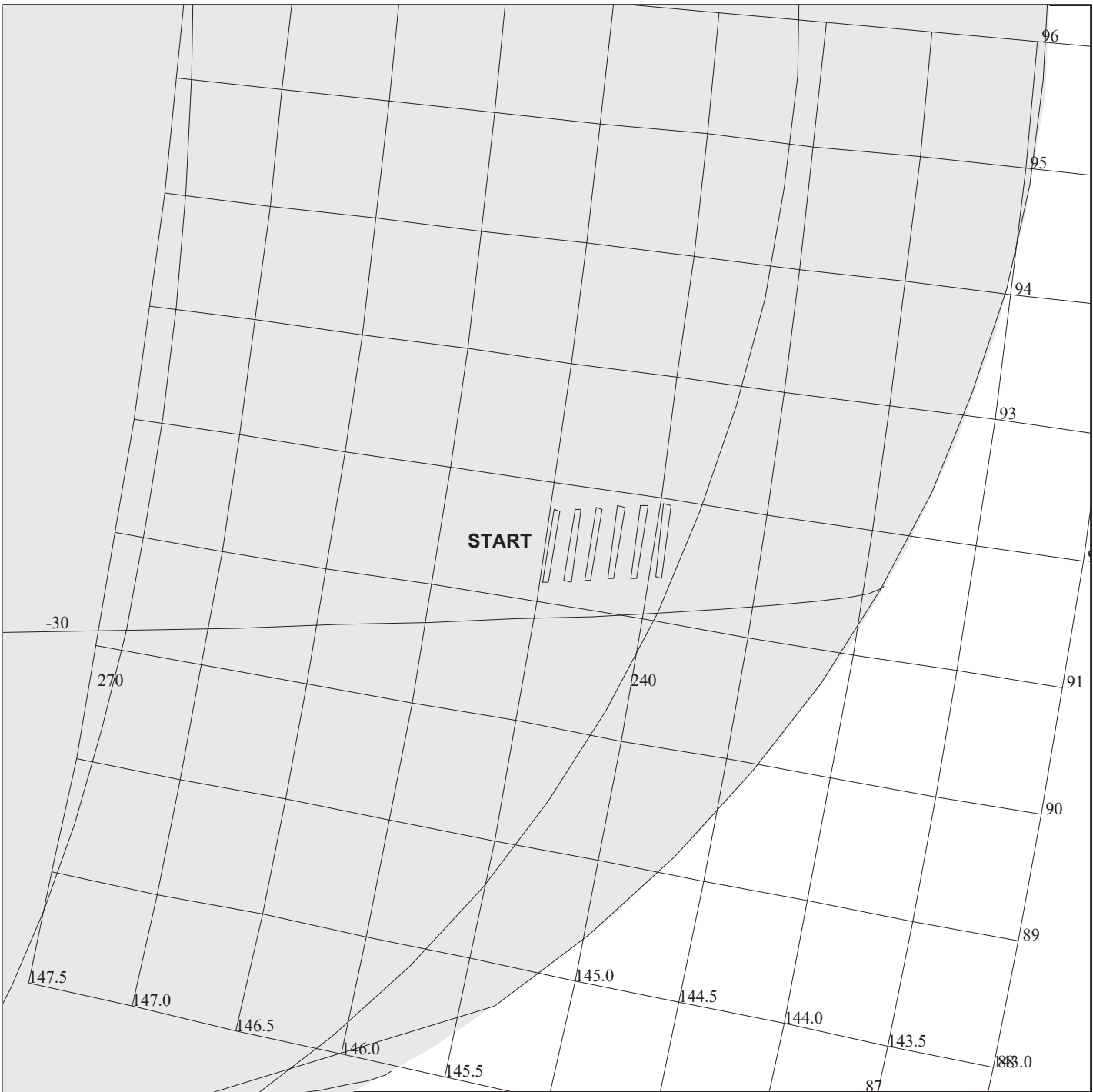
OBSERVATION:29JNNTZRLT02

THINNING:NIM 7, MIRROR BLOCKING: 10001

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.800

DESCRIP:JUPITER\_RT\_NTZ\_OBSERVATION

|  |                     |                |                     |                      |          |
|--|---------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T NTZ Obs  |                     | ACTIVITY ID:   | 29JNNTZRLT02-       |                      |          |
|  |                     | START TIME:    | 00-364/09:43:47.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL NTZRLT SeqNo 02 -  |                     |                |                     |                      |          |
| Title  | Jupiter R/T NTZ Obs |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA  |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                 | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start  | JEE+CDS             | 00000373:00:0  | 00-364/09:43:47.132 | JEE+000/06:17:08.666 |          |
| End  | JEE+CDS             | 00000388:00:0  | 00-364/09:58:57.132 | JEE+000/06:32:18.666 |          |
| Duration   |                     | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNNTZRLT02-       |                |                     |                      |          |
| Bottom Label   |                     |                |                     |                      |          |
| Plot Key   | NIMS                | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                 | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                 | Spin State     | DUAL                | Scan Platform        | No       |
|  |                     |                |                     | DMS                  | No       |
| Observation Objective  |                     |                |                     |                      |          |
| <p>Jupiter North Temperate Zone real-time observation.<br/> These observations are designed to monitor cloud activity, thermal and compositional changes over the duration of the Galileo mission.</p> |                     |                |                     |                      |          |
| Data Returned  |                     |                |                     |                      |          |
| Design Detail  |                     |                |                     |                      |          |
| BTG=0.04 R/T LM  |                     |                |                     |                      |          |
| Single swath across the Northern Temperate Zone region, dayside.   |                     |                |                     |                      |          |
| Mosaic covers: +18 to +22 degrees latitude and<br>+201 to +238 degrees West longitude.   |                     |                |                     |                      |          |
| Target centered at +20 degrees latitude, 225 degrees West longitude.   |                     |                |                     |                      |          |
| Swath runs off of the limb.  |                     |                |                     |                      |          |
| Mirror Blocking 11,11 (10001,10001)  |                     |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                     |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, R/T, JLM130   |                     |                |                     |                      |          |
| Galileo Activity Plan Form   |                     |                | 12/01/00            | 00:00:00             | rev 6/95 |



START

**29JNSTZRLT02**

165DQ:TT= 0 TMC=1 C= 14.00 XC= -3.50 BS= 0/5727 TC= 1(-26 237.5 )  
 A= 546 pD= 0 SR=17.450 RA50= 21.61 DEC50= 8.66 cone=145.45 clock= 91.48  
 117DQ:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/5727  
 1:#s= 1 Cs= -6.60 XCs= 2.60 Cr= 0.00 XCr= 0.00 sD= 2002 rD= 2

DESIGN G3.2 yande:12/21/2000 13:52:30

FILE:P.29JNSTZRLT02

CENTRAL BODY:JUPITER III

MINI:m.29JNSTZRLT02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 392:00:0

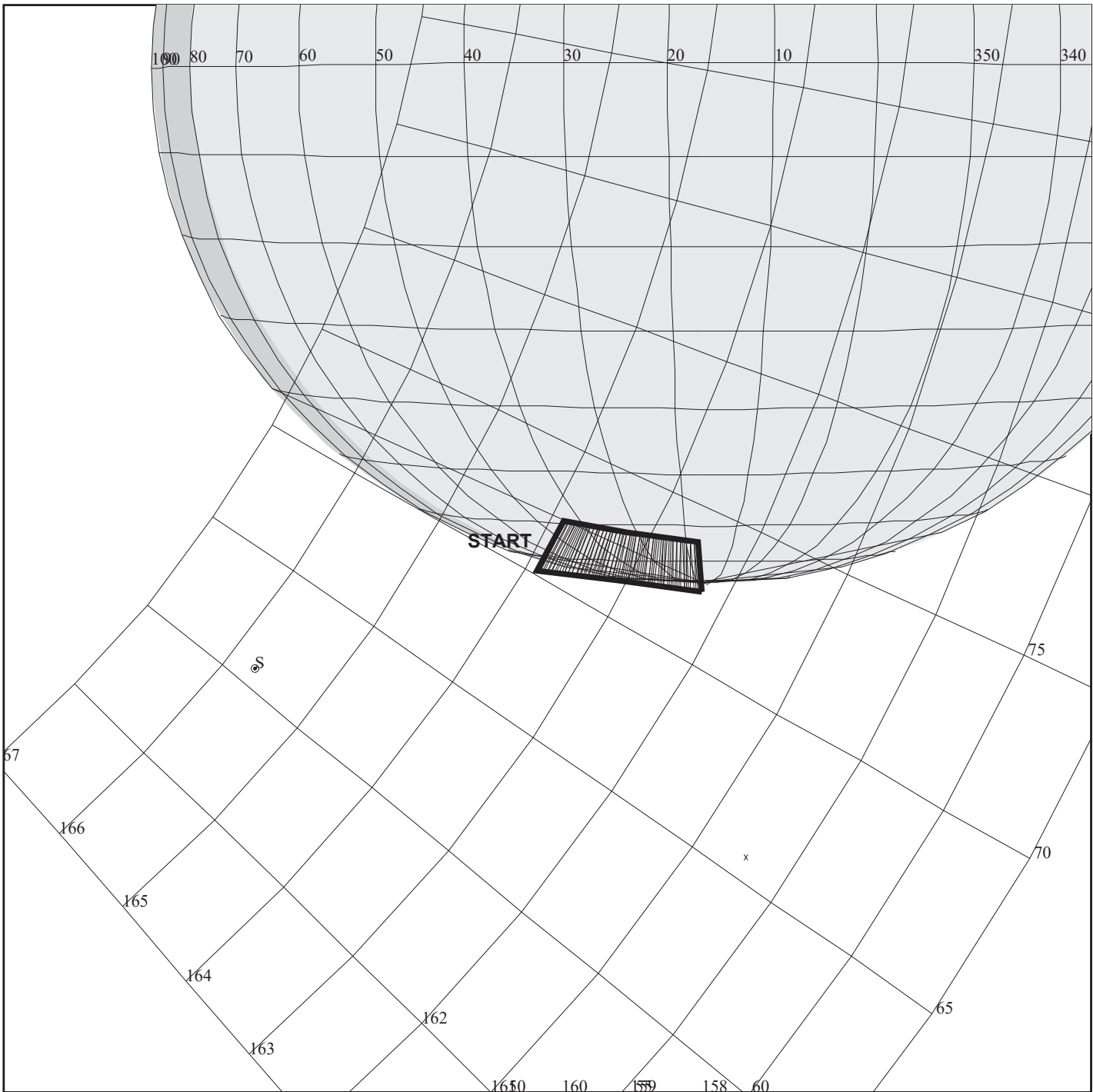
OBSERVATION:29JNSTZRLT02

THINNING:NIM 7, MIRROR BLOCKING: 10001

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.500

DESCRIP:JUPITER\_RT\_STZ\_OBSERVATION

|   |                       |                |                     |                      |          |
|---|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T STZ Obs   |                       | ACTIVITY ID:   | 29JNSTZRLT02-       |                      |          |
|   |                       | START TIME:    | 00-364/09:58:57.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL STZRLT SeqNo 02 -   |                       |                |                     |                      |          |
| Title   | Jupiter R/T STZ Obs   |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                   | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS 00000388:00:0 |                | 00-364/09:58:57.132 | JEE+000/06:32:18.666 |          |
| End   | JEE+CDS 00000403:00:0 |                | 00-364/10:14:07.132 | JEE+000/06:47:28.666 |          |
| Duration  | 00000015:00:0         |                | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label   | 29JNSTZRLT02-         |                |                     |                      |          |
| Bottom Label  |                       |                |                     |                      |          |
| Plot Key  | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                   | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|   |                       |                |                     | DMS                  | No       |
| Observation Objective   |                       |                |                     |                      |          |
| <p>Jupiter South Tropical Zone real-time observation.<br/> These observations are designed to monitor cloud activity, thermal and compositional changes over the duration of the Galileo mission.</p> |                       |                |                     |                      |          |
| Data Returned   |                       |                |                     |                      |          |
| Design Detail   |                       |                |                     |                      |          |
| BTG=0.04 R/T LM   |                       |                |                     |                      |          |
| Single swath across the South Tropical Zone, dayside.   |                       |                |                     |                      |          |
| Mosaic covers: -27 to -25 degrees latitude and<br>+230 to +249 degrees West longitude.  |                       |                |                     |                      |          |
| Target centered at -26 degrees latitude, 240 degrees West longitude.  |                       |                |                     |                      |          |
| Mirror Blocking 11,11 (10001,10001)   |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, R/T, JLM130  |                       |                |                     |                      |          |
| Galileo Activity Plan Form  |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



165DR:TT= 0 TMC=1 C= 18.00 XC= -3.00 BS= 0/5939 TC= 1(-80 50 )  
 A= 364 pD= 0 SR=17.450 RA50= 41.51 DEC50= 13.59 cone=163.88 clock= 71.23  
 117DR:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/5939  
 1:#s= 1 Cs= -13.80 XCs= 4.10 Cr= 0.00 XCr= 0.00 sD= 2174 rD= 2

## 29JNAURORA01

DESIGN G3.2 yande:11/16/2000 15:58:14

FILE:P.29JNAURORA01

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 558:00:0

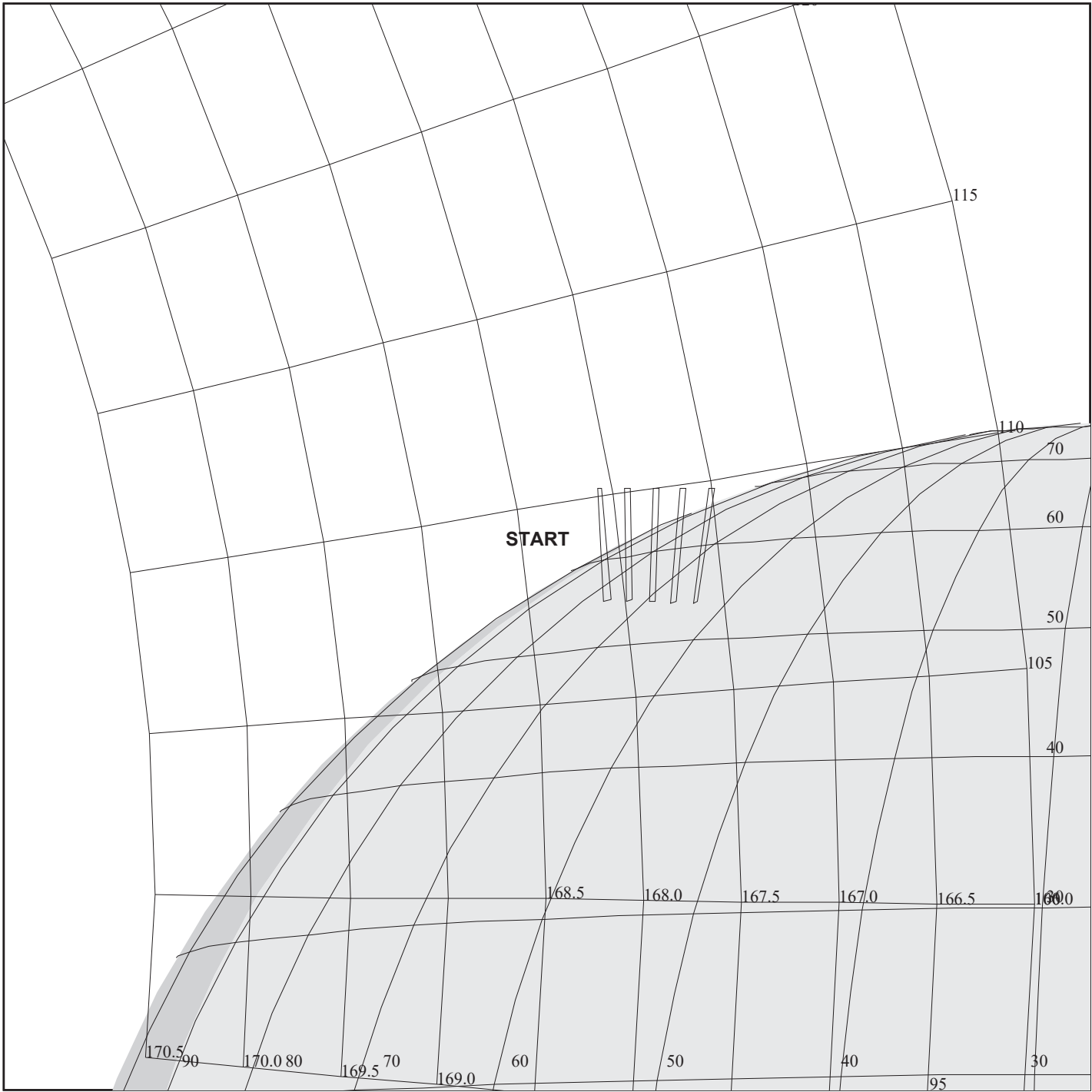
OBSERVATION:29JNAURORA01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                    |                |                     |                      |          |
|---|--------------------|----------------|---------------------|----------------------|----------|
| Jupiter Aurora Obs  |                    | ACTIVITY ID:   | 29JNAURORA01-       |                      |          |
|   |                    | START TIME:    | 00-364/12:48:49.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 01 -   |                    |                |                     |                      |          |
| Title   | Jupiter Aurora Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS            | 00000556:00:0  | 00-364/12:48:49.132 | JEE+000/09:22:10.666 |          |
| End   | JEE+CDS            | 00000570:00:0  | 00-364/13:02:58.466 | JEE+000/09:36:20.000 |          |
| Duration  |                    | 00000014:00:0  | 000/00:14:09.334    | 000/00:14:09.334     |          |
| Top Label   | 29JNAURORA01-      |                |                     |                      |          |
| Bottom Label  |                    |                |                     |                      |          |
| Plot Key  | NIMS               | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                | Report Options | BOTH                | Scan Platform        | No       |
| CDS Source  | OAP                | Spin State     | DUAL                | DMS                  | No       |
| Observation Objective   |                    |                |                     |                      |          |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                    |                |                     |                      |          |
| Data Returned   |                    |                |                     |                      |          |
| Design Detail   |                    |                |                     |                      |          |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                    |                |                     |                      |          |
| Single swath over the southern aurora region, dayside.  |                    |                |                     |                      |          |
| Mosaic covers: -90 to -60 degrees latitude and<br>+19 to +56 degrees West longitude.  |                    |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                    |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                    |                |                     |                      |          |
| Galileo Activity Plan Form  |                    |                | 12/01/00            | 00:00:00             | rev 6/95 |



165DS:TT= 0 TMC= 1 C= 9.00 XC= 2.00 BS= 0/8669 TC= 1(60 80 )  
 A= 364 pD= 0 SR=17.450 RA50= 40.92 DEC50= 23.44 cone=168.33 clock=109.02  
 117DS:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/8669  
 1:#s= 1 Cs= -9.50 XCs= -2.00 Cr= 0.00 XCr= 0.00 sD= 1446 rD= 2

**29JNLIMBRT01**

DESIGN G3.2 yande:12/21/2000 13:50:57

FILE:P.29JNLIMBRT01

CENTRAL BODY:JUPITER III

MINI:m.29JNLIMBRT01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 573:00:0

OBSERVATION:29JNLIMBRT01

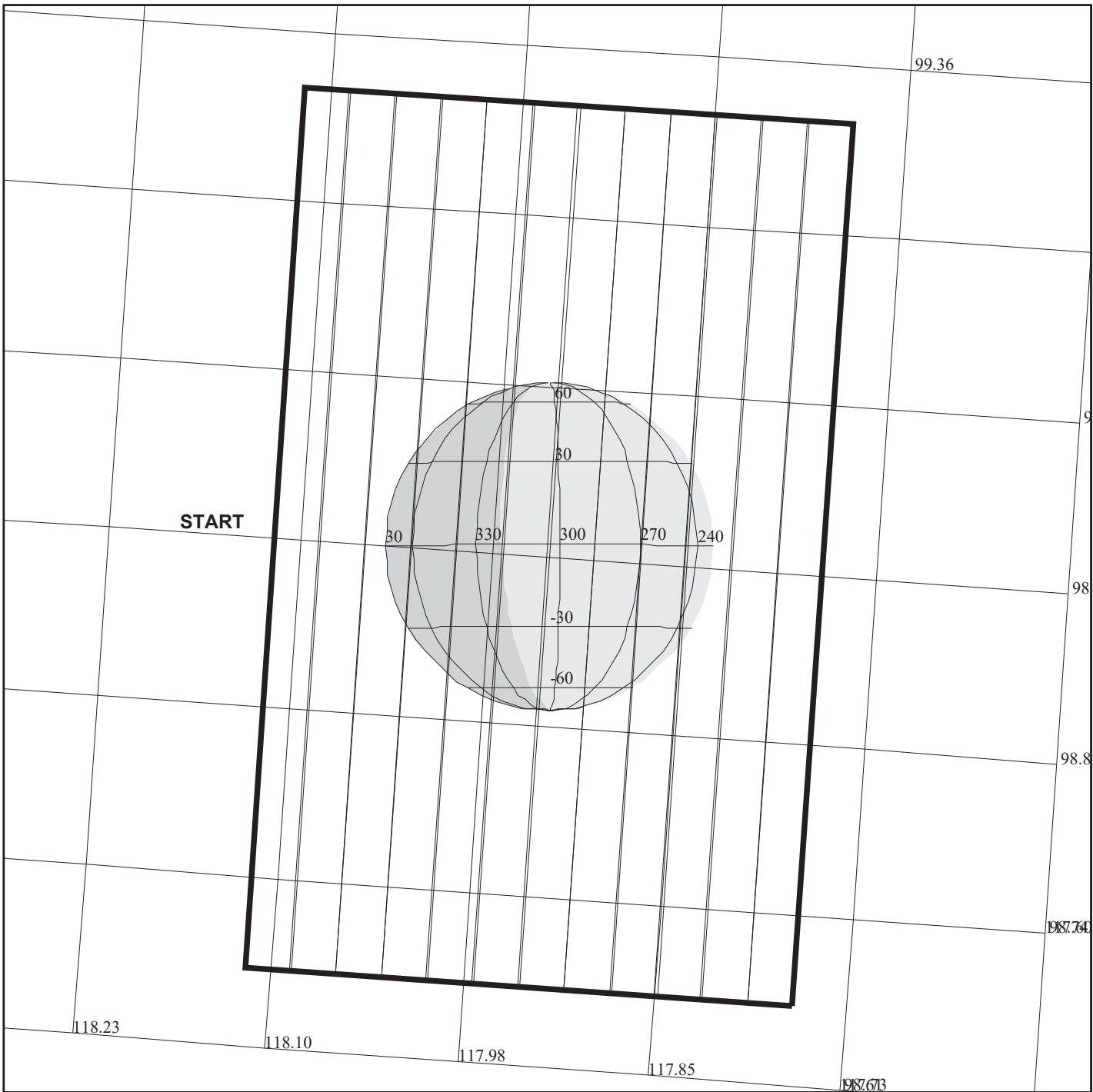
THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.000

DESCRIP:JUPITER\_REALTIME\_LIMB\_OBSERVATIO

|   |                       |                |                     |                      |          |
|---|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T Limb Obs  |                       | ACTIVITY ID:   | 29JNLIMBRT01-       |                      |          |
|   |                       | START TIME:    | 00-364/13:03:59.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL LIMBRT SeqNo 01 -                         |                       |                |                     |                      |          |
| Title   | Jupiter R/T Limb Obs  |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                   | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS 00000571:00:0 |                | 00-364/13:03:59.132 | JEE+000/09:37:20.666 |          |
| End   | JEE+CDS 00000581:00:0 |                | 00-364/13:14:05.799 | JEE+000/09:47:27.333 |          |
| Duration  | 00000010:00:0         |                | 000/00:10:06.667    | 000/00:10:06.667     |          |
| Top Label   | 29JNLIMBRT01-         |                |                     |                      |          |
| Bottom Label  |                       |                |                     |                      |          |
| Plot Key  | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                   | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|   |                       |                |                     | DMS                  | No       |
| Observation Objective   |                       |                |                     |                      |          |
| Real-time observation of Jupiter's northern limb.                                     |                       |                |                     |                      |          |
| Data Returned   |                       |                |                     |                      |          |
| Design Detail   |                       |                |                     |                      |          |
| BTG=0.03 R/T LM   |                       |                |                     |                      |          |
| Single swath across Jupiter's northern limb, dayside.                                 |                       |                |                     |                      |          |
| Mosaic covers: +54 to +68 degrees latitude and<br>+69 to +109 degrees West longitude. |                       |                |                     |                      |          |
| Target centered at +60 degrees latitude, 90 degrees West longitude.                   |                       |                |                     |                      |          |
| No Mirror Blocking.   |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                   |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, JLM80                             |                       |                |                     |                      |          |
| Galileo Activity Plan Form  |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |





**29ENGLOBAL01**

165DT:TT= 0 TMC= 1 C= 3.00 XC= 0.00 BS= 0/3037 TC= 3  
 A= 728 pD= 616 SR=17.450 RA50=355.20 DEC50= -0.49 cone=118.11 clock= 99.00  
 117DT:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/3037  
 1:#s= 1 Cs= -6.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 616 rD= 44

DESIGN G3.2 yande:11/15/2000 18:23:34

FILE:P.29ENGLOBAL01

TARGET BODY : EUROPA

MINI:m.29ENGLOBAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

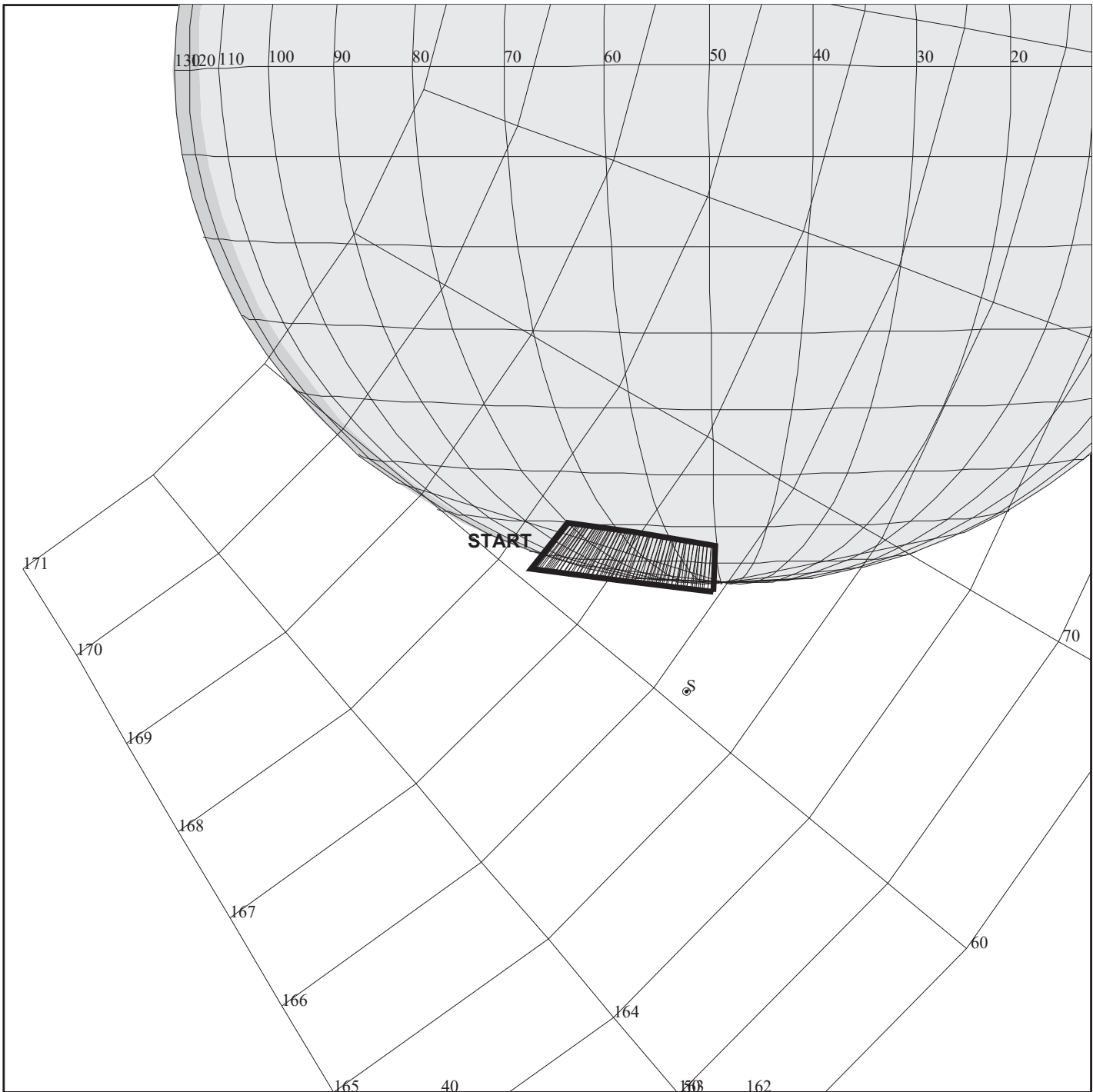
START:EEE 00-364/09:37:43.133 +CDS 230:00:0

BODY PLOT TIME:TARGET-TIME D= 616 S= 0.300

OBSERVATION:29ENGLOBAL01

DESCRIP:EUROPA\_GLOBAL\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Europa Global Obs   |                       | ACTIVITY ID: 29ENGLOBAL01-      |                                |
|   |                       | START TIME: 00-364/13:26:13.799 |                                |
| Activity ID: Orbit 29 Target E Inst N OAPEL GLOBAL SeqNo 01 -   |                       |                                 |                                |
| Title   | Europa Global Obs     | Instrument                      |                                |
| Requestor   | NIMS-SWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       | NIMS SWG                        |                                |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/28/00 Week 52 |
| Start   | EEE+CDS 00000226:00:0 | 00-364/13:26:13.799             | EEE+000/03:48:30.666           |
| End   | EEE+CDS 00000242:00:0 | 00-364/13:42:24.466             | EEE+000/04:04:41.333           |
| Duration  | 00000016:00:0         | 000/00:16:10.667                | 000/00:16:10.667               |
| Top Label   | 29ENGLOBAL01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>This observation will allow for compositional mapping. This Galileo view of Europa is being done in support of the Cassini VIMS observations of Europa planned in the same time frame.</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.64 MB, TICS=187, FMT=MPW, LM  |                       |                                 |                                |
| <p>Low-resolution single swath global mosaic across the 2/3-lit disk. Mosaic centered at 0 degrees latitude, 305 degrees West Longitude.</p>  |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, ELM408, ELM288  |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



**29JNAURORA02**

165DU:TT= 0 TMC=1 C= 20.00 XC= -8.00 BS= 0/6677 TC= 1(-80 80 )  
 A= 728 pD= 0 SR=17.450 RA50= 45.80 DEC50= 15.09 cone=167.68 clock= 61.97  
 117DU:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/6677  
 1:#s= 1 Cs= -14.00 XCs= 7.00 Cr= 0.00 XCr= 0.00 sD= 2356 rD= 2

DESIGN G3.2 yande:11/16/2000 15:51:39

FILE:P.29JNAURORA02

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

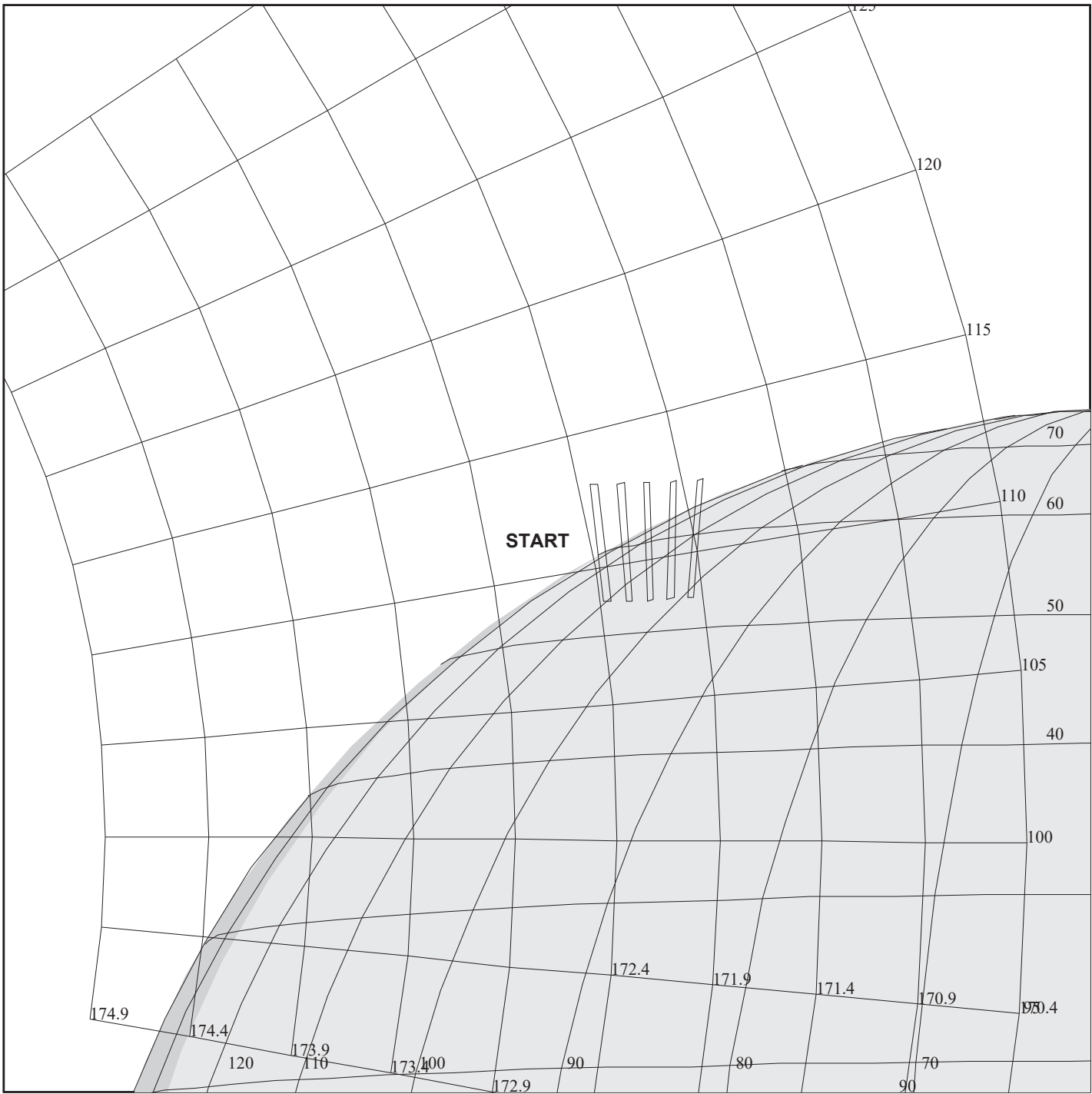
START:JEE 00-364/03:26:38.466 +CDS 617:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA02

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter Aurora Obs  |                       | ACTIVITY ID: 29JNAURORA02-      |                                |
|   |                       | START TIME: 00-364/13:49:29.132 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 02 -   |                       |                                 |                                |
| Title   | Jupiter Aurora Obs    | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00000616:00:0 | 00-364/13:49:29.132             | JEE+000/10:22:50.666           |
| End   | JEE+CDS 00000630:00:0 | 00-364/14:03:38.466             | JEE+000/10:37:00.000           |
| Duration  | 00000014:00:0         | 000/00:14:09.334                | 000/00:14:09.334               |
| Top Label   | 29JNAURORA02-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                       |                                 |                                |
| Single swath over the southern aurora region, dayside.  |                       |                                 |                                |
| Mosaic covers: -90 to -60 degrees latitude and<br>+54 to +95 degrees West longitude.  |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



165DV:TT= 0 TMC= 1 C= 8.00 XC= 1.20 BS= 0/9589 TC= 1(60 120 )  
 A= 364 pD= 0 SR=17.450 RA50= 45.45 DEC50= 24.40 cone=172.58 clock=111.16  
 117DV:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/9589  
 1:#s= 1 Cs= -9.30 XCs= -1.40 Cr= 0.00 XCr= 0.00 sD= 1446 rD= 2

## 29JNLIMBRT02

DESIGN G3.2 yande:12/21/2000 13:51: 8

FILE:P.29JNLIMBRT02

CENTRAL BODY:JUPITER III

MINI:m.29JNLIMBRT02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 633:00:0

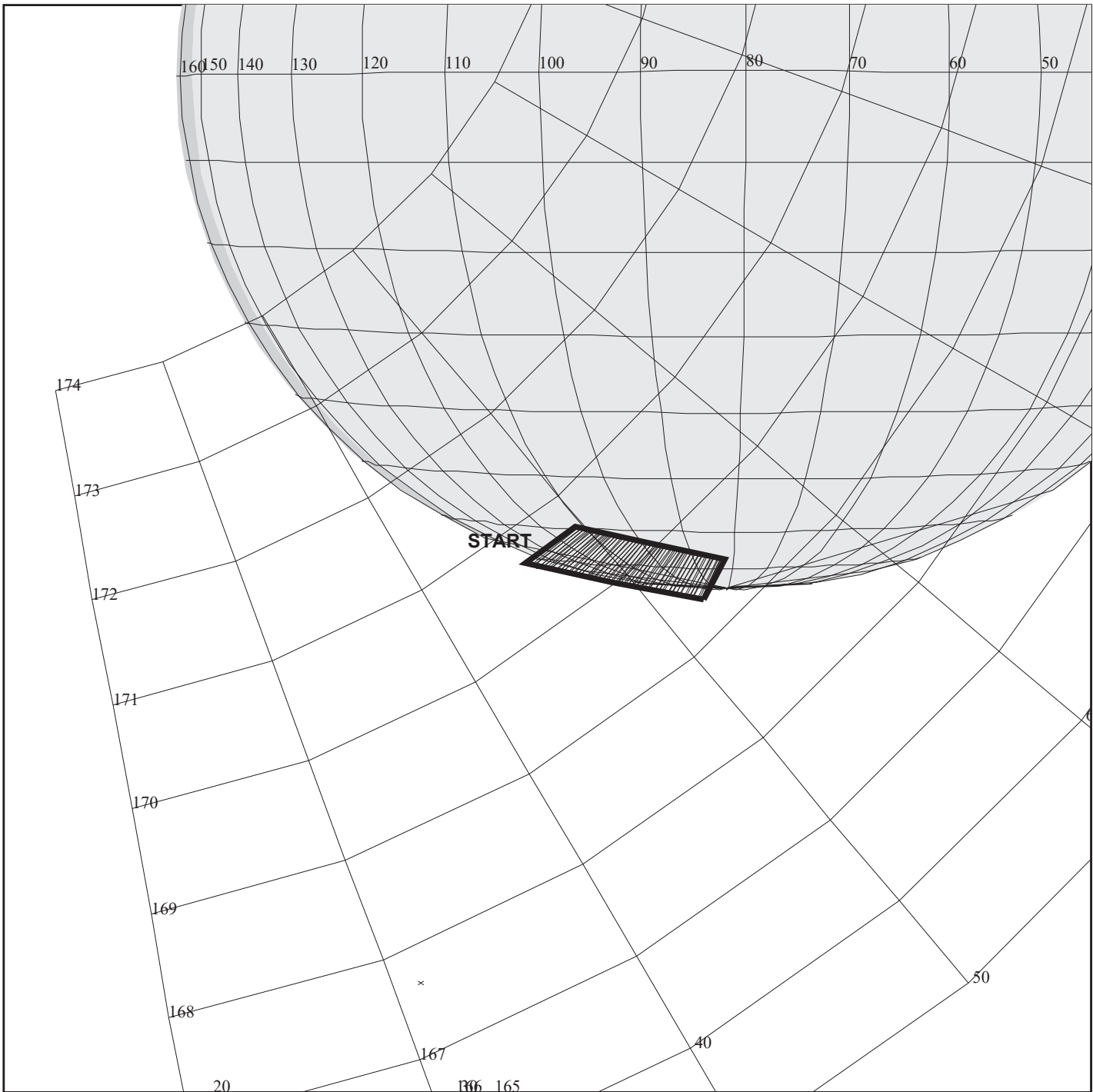
OBSERVATION:29JNLIMBRT02

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.000

DESCRIP:JUPITER\_REALTIME\_LIMB\_OBSERVATIO

|  |                      |                |                     |                      |          |
|--|----------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T Limb Obs   |                      | ACTIVITY ID:   | 29JNLIMBRT02-       |                      |          |
|  |                      | START TIME:    | 00-364/14:04:39.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL LIMBRT SeqNo 02 -                          |                      |                |                     |                      |          |
| Title  | Jupiter R/T Limb Obs |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA   |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                  | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start  | JEE+CDS              | 00000631:00:0  | 00-364/14:04:39.132 | JEE+000/10:38:00.666 |          |
| End  | JEE+CDS              | 00000641:00:0  | 00-364/14:14:45.799 | JEE+000/10:48:07.333 |          |
| Duration   |                      | 00000010:00:0  | 000/00:10:06.667    | 000/00:10:06.667     |          |
| Top Label  | 29JNLIMBRT02-        |                |                     |                      |          |
| Bottom Label   |                      |                |                     |                      |          |
| Plot Key   | NIMS                 | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                  | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                  | Spin State     | DUAL                | Scan Platform        | No       |
|  |                      |                |                     | DMS                  | No       |
| Observation Objective  |                      |                |                     |                      |          |
| Real-time observation of Jupiter's northern limb.                                      |                      |                |                     |                      |          |
| Data Returned  |                      |                |                     |                      |          |
| Design Detail  |                      |                |                     |                      |          |
| BTG=0.03 R/T LM  |                      |                |                     |                      |          |
| Single swath across Jupiter's northern limb, dayside.                                  |                      |                |                     |                      |          |
| Mosaic covers: +54 to +68 degrees latitude and<br>+106 to +142 degrees West longitude. |                      |                |                     |                      |          |
| Target centered at +60 degrees latitude, 115 degrees West longitude.                   |                      |                |                     |                      |          |
| No Mirror Blocking.  |                      |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                    |                      |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, JLM80                              |                      |                |                     |                      |          |
| Galileo Activity Plan Form   |                      |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29JNAURORA03**

165DX:TT= 0 TMC= 1 C= 13.00 XC= -7.00 BS= 0/7779 TC= 1(-80 150 )  
 A= 728 pD= 0 SR=17.450 RA50= 49.71 DEC50= 16.40 cone=170.67 clock= 47.72  
 117DX:#SB= 1 OR= 0.080 RR=12.000 BM=F RC= 1 BS= 0/7779  
 1:#s= 1 Cs= -13.60 XCs= 9.90 Cr= 0.00 XCr= 0.00 sD= 2174 rD= 2

DESIGN G3.2 yande:11/16/2000 15:46:33

FILE:P.29JNAURORA03

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA03

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 678:00:0

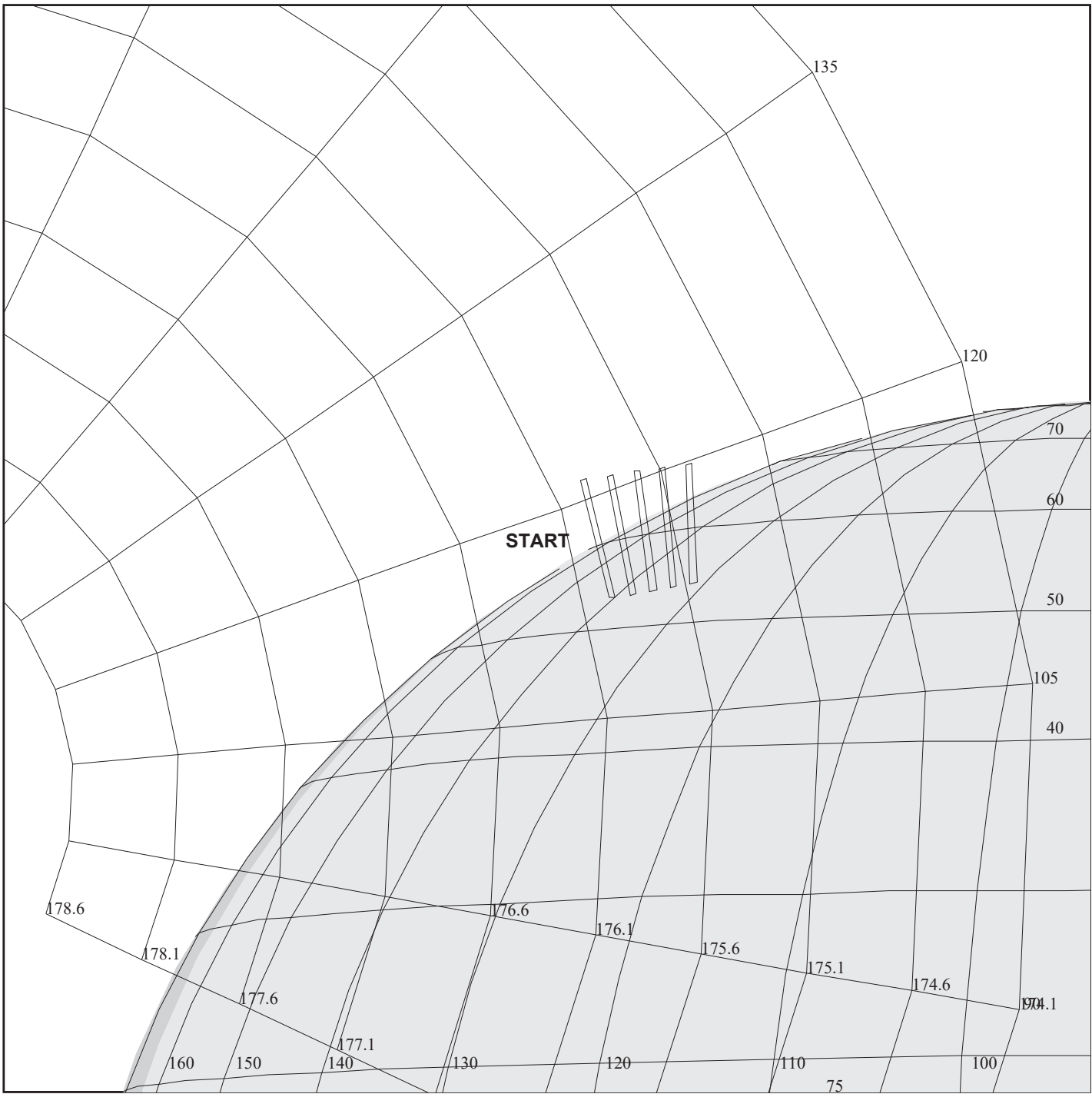
BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA03

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter Aurora Obs  |                       | ACTIVITY ID: 29JNAURORA03-      |                                |
|   |                       | START TIME: 00-364/14:50:09.132 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 03 -   |                       |                                 |                                |
| Title   | Jupiter Aurora Obs    | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00000676:00:0 | 00-364/14:50:09.132             | JEE+000/11:23:30.666           |
| End   | JEE+CDS 00000690:00:0 | 00-364/15:04:18.466             | JEE+000/11:37:40.000           |
| Duration  | 00000014:00:0         | 000/00:14:09.334                | 000/00:14:09.334               |
| Top Label   | 29JNAURORA03-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                       |                                 |                                |
| Single swath over the southern aurora region, dayside.  |                       |                                 |                                |
| Mosaic covers: -90 to -60 degrees latitude and<br>+88 to +126 degrees West longitude.   |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |





165DY:TT= 0 TMC= 1 C= 8.00 XC= 1.50 BS= 0/0509 TC= 1(60 150 )  
 A= 364 pD= 0 SR=17.450 RA50= 49.45 DEC50= 25.18 cone=176.24 clock=117.70  
 117DY:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/0509  
 1:#s= 1 Cs= -9.50 XCs= -0.80 Cr= 0.00 XCr= 0.00 sD= 1446 rD= 2

**29JNLIMBRT03**

DESIGN G3.2 yande:12/21/2000 13:51:17

FILE:P.29JNLIMBRT03

CENTRAL BODY:JUPITER III

MINI:m.29JNLIMBRT03

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 693:00:0

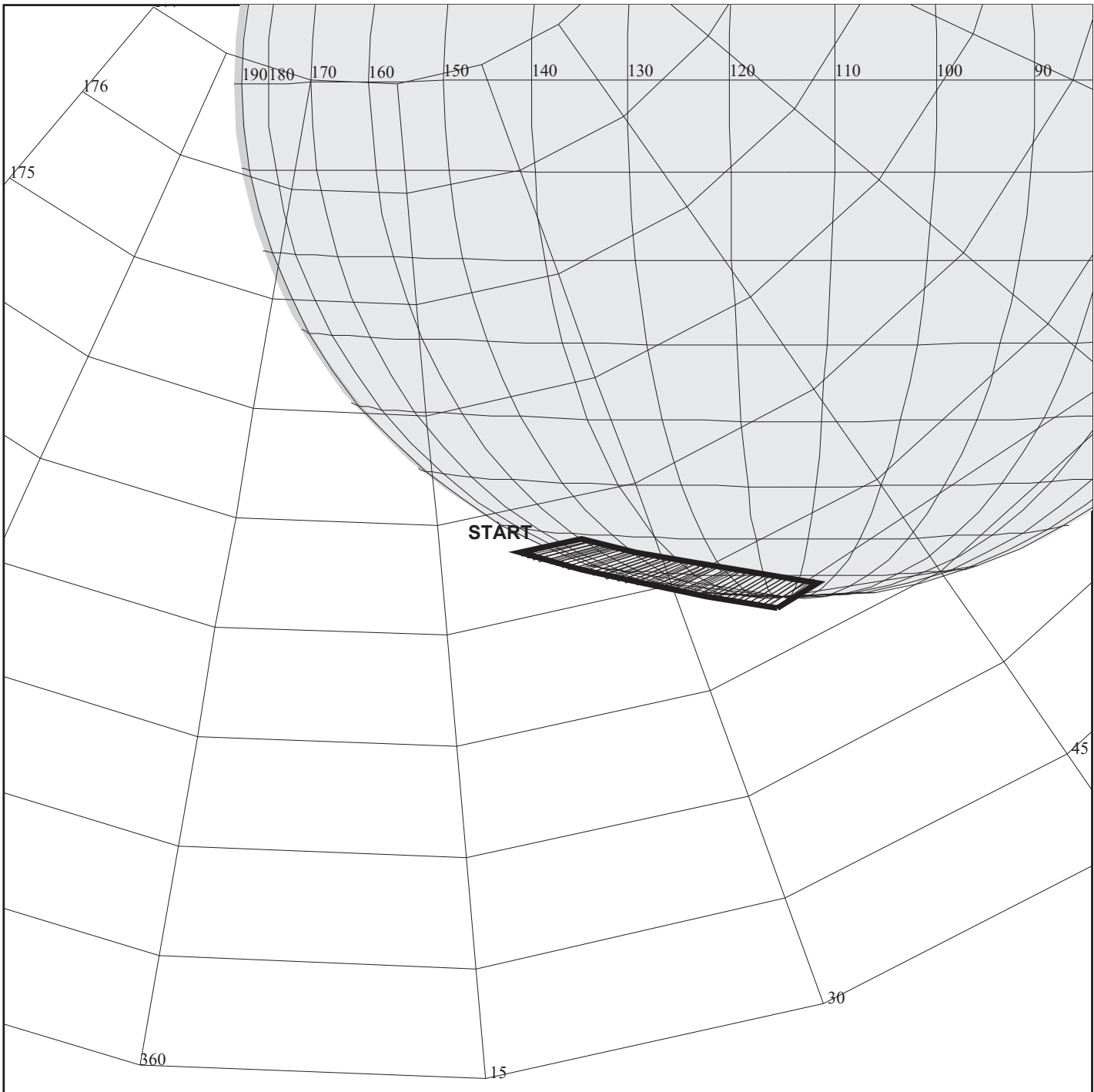
OBSERVATION:29JNLIMBRT03

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.000

DESCRIP:JUPITER\_REALTIME\_LIMB\_OBSERVATIO

|  |                       |                                 |                                |
|--|-----------------------|---------------------------------|--------------------------------|
| Jupiter R/T Limb Obs   |                       | ACTIVITY ID: 29JNLIMBRT03-      |                                |
|  |                       | START TIME: 00-364/15:05:19.132 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL LIMBRT SeqNo 03 -                          |                       |                                 |                                |
| Title  | Jupiter R/T Limb Obs  | Instrument                      | NIMS                           |
| Requestor  | NIMS-AWG/M. SEGURA    | Team NIMS Working Group         | AWG                            |
| Time System  | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start  | JEE+CDS 00000691:00:0 | 00-364/15:05:19.132             | JEE+000/11:38:40.666           |
| End  | JEE+CDS 00000701:00:0 | 00-364/15:15:25.799             | JEE+000/11:48:47.333           |
| Duration   | 00000010:00:0         | 000/00:10:06.667                | 000/00:10:06.667               |
| Top Label  | 29JNLIMBRT03-         |                                 |                                |
| Bottom Label   |                       |                                 |                                |
| Plot Key   | NIMS                  | Type                            | SCI                            |
| CDS Bytes  | 300                   | Report Options                  | BOTH                           |
| CDS Source   | OAP                   | Spin State                      | DUAL                           |
|  |                       | Scan Platform                   | No                             |
|  |                       | DMS                             | No                             |
| Observation Objective  |                       |                                 |                                |
| Real-time observation of Jupiter's northern limb.                                      |                       |                                 |                                |
| Data Returned  |                       |                                 |                                |
| Design Detail  |                       |                                 |                                |
| BTG=0.03 R/T LM  |                       |                                 |                                |
| Single swath across Jupiter's northern limb, dayside.                                  |                       |                                 |                                |
| Mosaic covers: +54 to +68 degrees latitude and<br>+141 to +175 degrees West longitude. |                       |                                 |                                |
| Target centered at +60 degrees latitude, 145 degrees West longitude.                   |                       |                                 |                                |
| No Mirror Blocking.  |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                    |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, JLM80                              |                       |                                 |                                |
| Galileo Activity Plan Form   |                       | 12/01/00 00:00:00               | rev 6/95                       |



**29JNAURORA04**

165DZ:TT= 0 TMC= 1 C= 15.50 XC= -25.00 BS= 0/8699 TC= 1(-80 150 )  
 A= 728 pD= 0 SR=17.450 RA50= 53.76 DEC50= 17.65 cone=172.65 clock= 22.88  
 117DZ:#SB= 1 OR= 0.250 RR=12.000 BM=F RC= 1 BS= 0/8699  
 1:#s= 1 Cs= -13.00 XCs= 25.80 Cr= 0.00 XCr= 0.00 sD= 2174 rD= 2

DESIGN G3.2 yande:11/16/2000 15:38: 8

FILE:P.29JNAURORA04

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA04

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

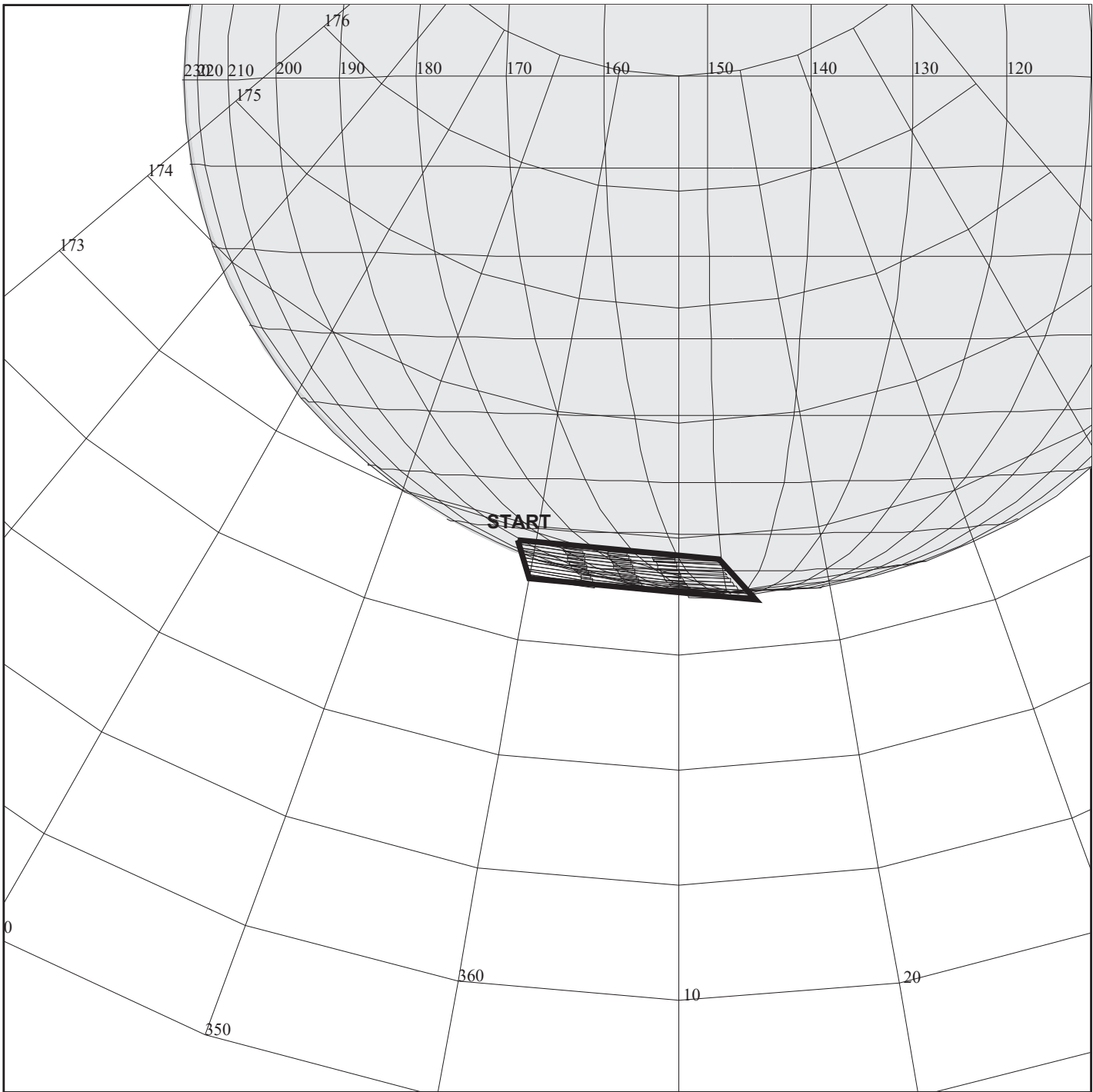
START:JEE 00-364/03:26:38.466 +CDS 738:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA04

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                    |                |                     |                      |          |
|---|--------------------|----------------|---------------------|----------------------|----------|
| Jupiter Aurora Obs  |                    | ACTIVITY ID:   | 29JNAURORA04-       |                      |          |
|   |                    | START TIME:    | 00-364/15:50:49.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 04 -   |                    |                |                     |                      |          |
| Title   | Jupiter Aurora Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS            | 00000736:00:0  | 00-364/15:50:49.132 | JEE+000/12:24:10.666 |          |
| End   | JEE+CDS            | 00000750:00:0  | 00-364/16:04:58.466 | JEE+000/12:38:20.000 |          |
| Duration  |                    | 00000014:00:0  | 000/00:14:09.334    | 000/00:14:09.334     |          |
| Top Label   | 29JNAURORA04-      |                |                     |                      |          |
| Bottom Label  |                    |                |                     |                      |          |
| Plot Key  | NIMS               | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                | Report Options | BOTH                | Scan Platform        | No       |
| CDS Source  | OAP                | Spin State     | DUAL                | DMS                  | No       |
| Observation Objective   |                    |                |                     |                      |          |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                    |                |                     |                      |          |
| Data Returned   |                    |                |                     |                      |          |
| Design Detail   |                    |                |                     |                      |          |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                    |                |                     |                      |          |
| Single swath over the southern aurora region, dayside.  |                    |                |                     |                      |          |
| Mosaic covers: -90 to -60 degrees latitude and<br>+110 to +181 degrees West longitude.  |                    |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                    |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                    |                |                     |                      |          |
| Galileo Activity Plan Form  |                    |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29JNAURORA05**

165EB:TT= 0 TMC= 1 C= 5.00 XC= -20.00 BS= 0/9437 TC= 1(-80 180 )  
 A= 728 pD= 0 SR=17.450 RA50= 56.55 DEC50= 18.39 cone=172.85 clock= 1.02  
 117EB:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9437  
 1:#s= 4 Cs= -5.40 XCs= 0.00 Cr= 5.60 XCr= 5.00 sD= 552 rD= 50

DESIGN G3.2 yande:11/16/2000 15:27:44

FILE:P.29JNAURORA05

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA05

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

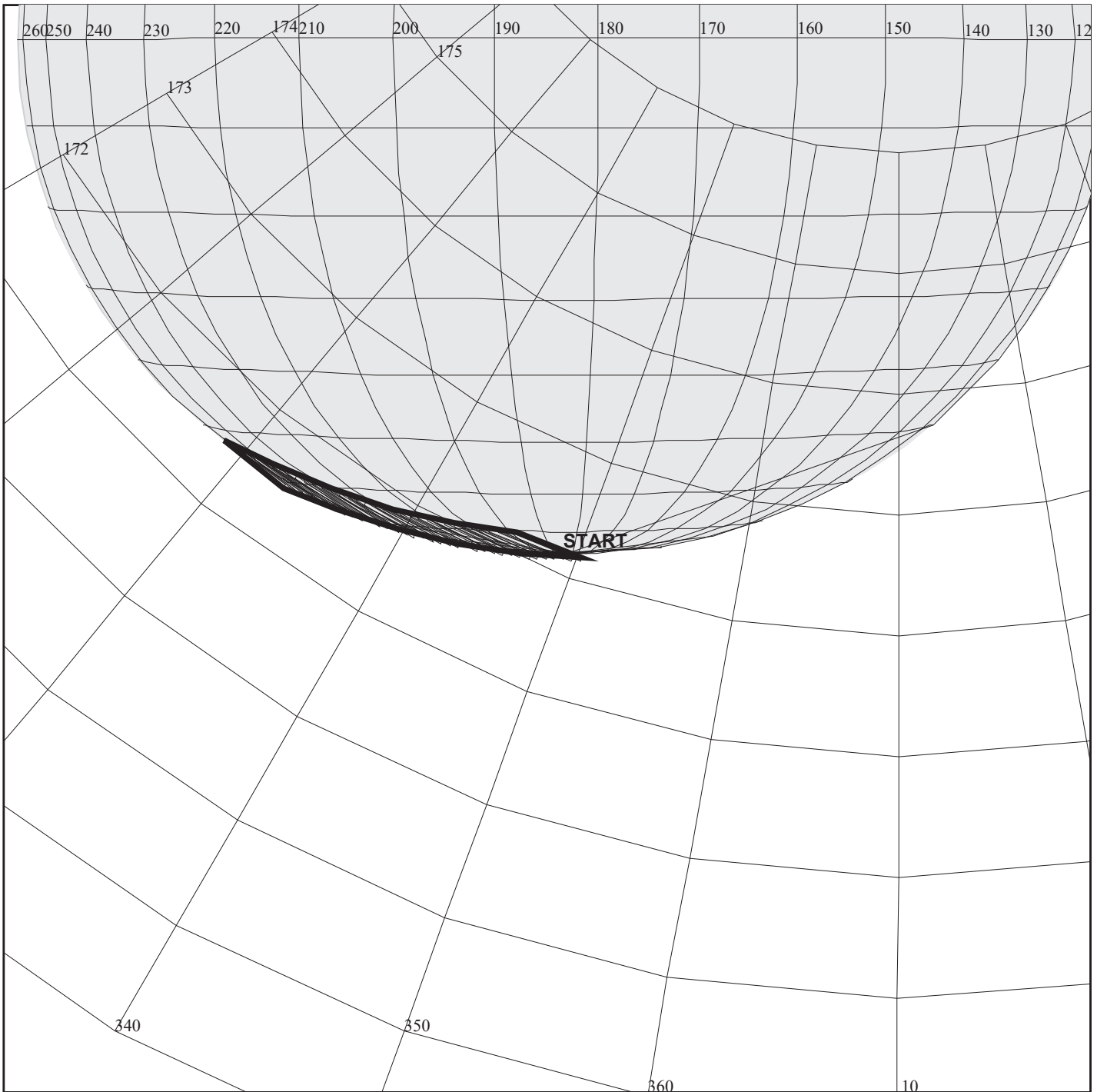
START:JEE 00-364/03:26:38.466 +CDS 797:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA05

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter Aurora Obs  |                       | ACTIVITY ID: 29JNAURORA05-      |                                |
|   |                       | START TIME: 00-364/16:51:29.132 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 05 -   |                       |                                 |                                |
| Title   | Jupiter Aurora Obs    | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00000796:00:0 | 00-364/16:51:29.132             | JEE+000/13:24:50.666           |
| End   | JEE+CDS 00000810:00:0 | 00-364/17:05:38.466             | JEE+000/13:39:00.000           |
| Duration  | 00000014:00:0         | 000/00:14:09.334                | 000/00:14:09.334               |
| Top Label   | 29JNAURORA05-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p>                       |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                       |                                 |                                |
| <p>Four swath mosaic over the southern aurora region, dayside.<br/> Mosaic split into 4 N/S swaths due to cone pole problems.<br/> Mosaic covers: -90 to -60 degrees latitude and<br/> +150 to +210 degrees West longitude.</p> |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



**29JNAURORA06**

165ED:TT= 0 TMC= 1 C= 4.00 XC= 15.00 BS= 0/0903 TC= 1(-70 220 )  
 A= 524 pD= 0 SR=17.450 RA50= 58.42 DEC50= 18.59 cone=172.18 clock=348.22  
 117ED:#SB= 1 OR= 0.580 RR=12.000 BM=F RC= 1 BS= 0/0903  
 1:#s= 1 Cs= -7.20 XCs= -48.80 Cr= 7.00 XCr= 5.50 sD= 1810 rD= 50

DESIGN G3.2 yande:11/16/2000 15:22:36

FILE:P.29JNAURORA06

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA06

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 860:00:0

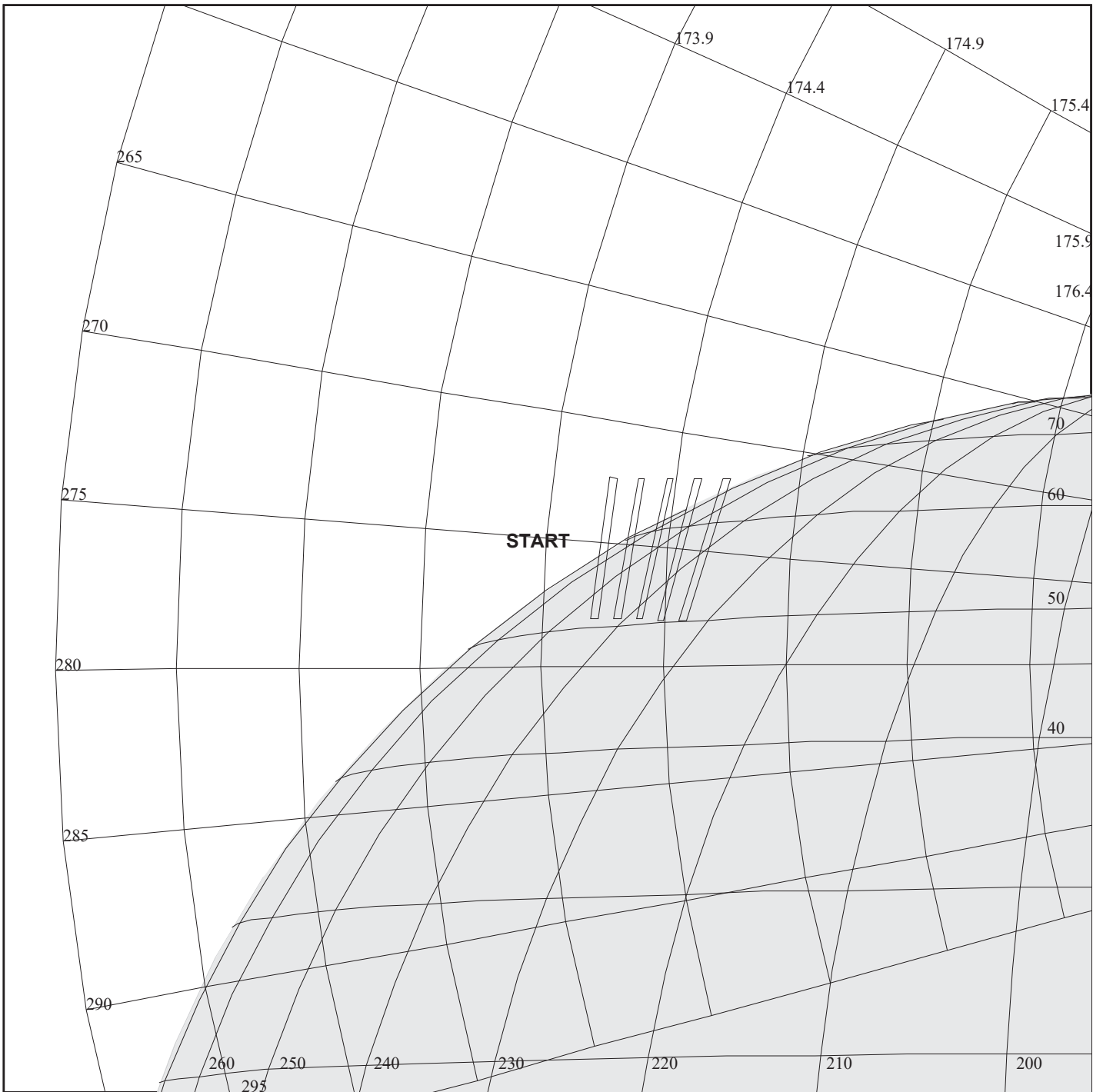
BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA06

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                    |                |                     |                      |          |
|---|--------------------|----------------|---------------------|----------------------|----------|
| Jupiter Aurora Obs  |                    | ACTIVITY ID:   | 29JNAURORA06-       |                      |          |
|   |                    | START TIME:    | 00-364/17:52:09.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 06 -   |                    |                |                     |                      |          |
| Title   | Jupiter Aurora Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS            | 00000856:00:0  | 00-364/17:52:09.132 | JEE+000/14:25:30.666 |          |
| End   | JEE+CDS            | 00000870:00:0  | 00-364/18:06:18.466 | JEE+000/14:39:40.000 |          |
| Duration  |                    | 00000014:00:0  | 000/00:14:09.334    | 000/00:14:09.334     |          |
| Top Label   | 29JNAURORA06-      |                |                     |                      |          |
| Bottom Label  |                    |                |                     |                      |          |
| Plot Key  | NIMS               | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                | Spin State     | DUAL                | Scan Platform        | No       |
|   |                    |                |                     | DMS                  | No       |
| Observation Objective   |                    |                |                     |                      |          |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                    |                |                     |                      |          |
| Data Returned   |                    |                |                     |                      |          |
| Design Detail   |                    |                |                     |                      |          |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                    |                |                     |                      |          |
| Single swath over the southern aurora region, dayside.  |                    |                |                     |                      |          |
| Mosaic covers: -90 to -60 degrees latitude and<br>+191 to +264 degrees West longitude.  |                    |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                    |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                    |                |                     |                      |          |
| Galileo Activity Plan Form  |                    |                | 12/01/00            | 00:00:00             | rev 6/95 |





165EE:TT= 0 TMC= 1 C= -7.00 XC= 1.50 BS= 0/3269 TC= 1(60 260 )  
 A= 364 pD= 0 SR=17.450 RA50= 60.00 DEC50= 26.81 cone=173.96 clock=275.28  
 117EE:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/3269  
 1:#s= 1 Cs= 9.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1446 rD= 2

## 29JNLIMBRT06

DESIGN G3.2 yande:12/21/2000 13:51:31

FILE:P.29JNLIMBRT06

CENTRAL BODY:JUPITER III

MINI:m.29JNLIMBRT06

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 873:00:0

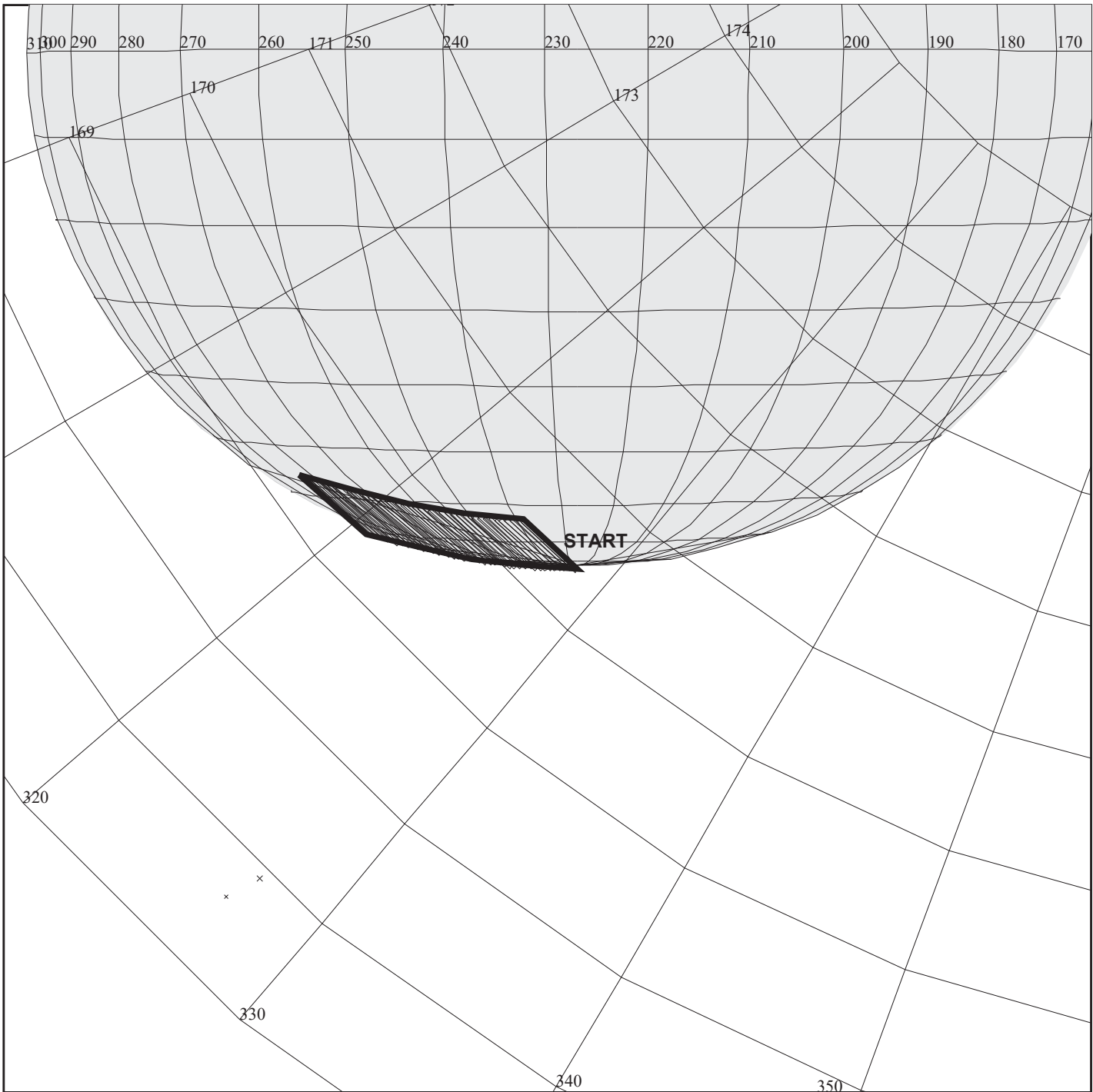
OBSERVATION:29JNLIMBRT06

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.000

DESCRIP:JUPITER\_REALTIME\_LIMB\_OBSERVATIO

|  |                      |                |                     |                      |          |
|--|----------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T Limb Obs   |                      | ACTIVITY ID:   | 29JNLIMBRT06-       |                      |          |
|  |                      | START TIME:    | 00-364/18:07:19.132 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL LIMBRT SeqNo 06 -                          |                      |                |                     |                      |          |
| Title  | Jupiter R/T Limb Obs |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA   |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                  | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start  | JEE+CDS              | 00000871:00:0  | 00-364/18:07:19.132 | JEE+000/14:40:40.666 |          |
| End  | JEE+CDS              | 00000881:00:0  | 00-364/18:17:25.799 | JEE+000/14:50:47.333 |          |
| Duration   |                      | 00000010:00:0  | 000/00:10:06.667    | 000/00:10:06.667     |          |
| Top Label  | 29JNLIMBRT06-        |                |                     |                      |          |
| Bottom Label   |                      |                |                     |                      |          |
| Plot Key   | NIMS                 | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                  | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                  | Spin State     | DUAL                | Scan Platform        | No       |
|  |                      |                |                     | DMS                  | No       |
| Observation Objective  |                      |                |                     |                      |          |
| Real-time observation of Jupiter's northern limb.                                      |                      |                |                     |                      |          |
| Data Returned  |                      |                |                     |                      |          |
| Design Detail  |                      |                |                     |                      |          |
| BTG=0.03 R/T LM  |                      |                |                     |                      |          |
| Single swath across Jupiter's northern limb, dayside.                                  |                      |                |                     |                      |          |
| Mosaic covers: +54 to +68 degrees latitude and<br>+237 to +276 degrees West longitude. |                      |                |                     |                      |          |
| Target centered at +60 degrees latitude, 245 degrees West longitude.                   |                      |                |                     |                      |          |
| No Mirror Blocking.  |                      |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                    |                      |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, JLM80                              |                      |                |                     |                      |          |
| Galileo Activity Plan Form   |                      |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29JNAURORA07**

165EF:TT= 0 TMC= 1 C= 7.50 XC= 9.00 BS= 0/5099 TC= 1(-70 260 )  
 A= 728 pD= 0 SR=17.450 RA50= 62.16 DEC50= 19.57 cone=170.40 clock=326.80  
 117EF:#SB= 1 OR= 0.220 RR=12.000 BM=F RC= 1 BS= 0/5099  
 1:#s= 1 Cs= -21.00 XCs= -31.00 Cr= 0.00 XCr= 0.00 sD= 2174 rD= 2

DESIGN G3.2 yande:11/16/2000 15:15:18

FILE:P.29JNAURORA07

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA07

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

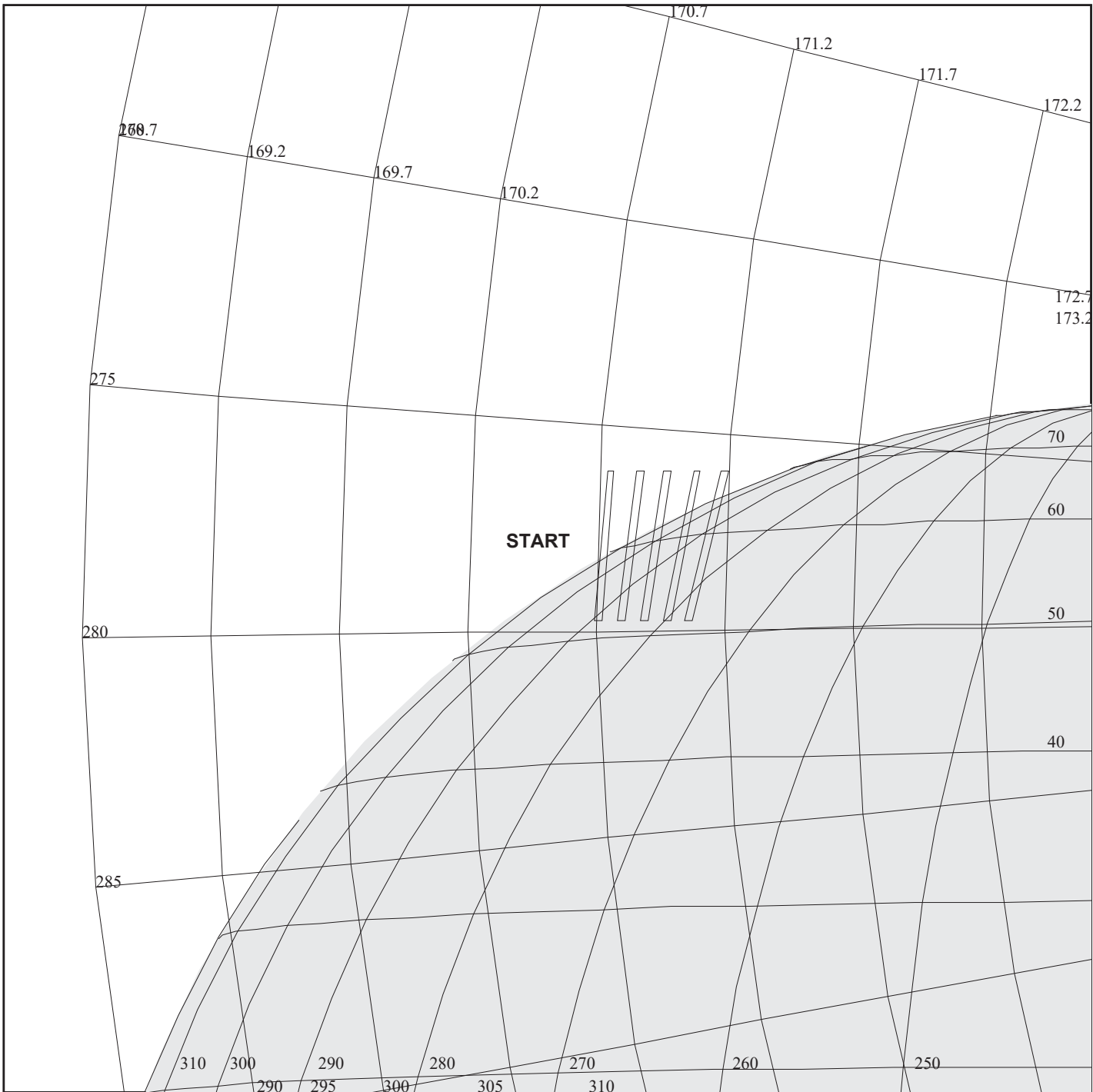
START:JEE 00-364/03:26:38.466 +CDS 938:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA07

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                    |                |                     |                      |          |
|---|--------------------|----------------|---------------------|----------------------|----------|
| Jupiter Aurora Obs  |                    | ACTIVITY ID:   | 29JNAURORA07-       |                      |          |
|   |                    | START TIME:    | 00-364/19:13:02.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 07 -   |                    |                |                     |                      |          |
| Title   | Jupiter Aurora Obs |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS            | 00000936:00:0  | 00-364/19:13:02.466 | JEE+000/15:46:24.000 |          |
| End   | JEE+CDS            | 00000950:00:0  | 00-364/19:27:11.799 | JEE+000/16:00:33.333 |          |
| Duration  |                    | 00000014:00:0  | 000/00:14:09.333    | 000/00:14:09.333     |          |
| Top Label   | 29JNAURORA07-      |                |                     |                      |          |
| Bottom Label  |                    |                |                     |                      |          |
| Plot Key  | NIMS               | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                | Spin State     | DUAL                | Scan Platform        | No       |
|   |                    |                |                     | DMS                  | No       |
| Observation Objective   |                    |                |                     |                      |          |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                    |                |                     |                      |          |
| Data Returned   |                    |                |                     |                      |          |
| Design Detail   |                    |                |                     |                      |          |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                    |                |                     |                      |          |
| Single swath over the southern aurora region, dayside.  |                    |                |                     |                      |          |
| Mosaic covers: -90 to -60 degrees latitude and<br>+235 to +290 degrees West longitude.  |                    |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                    |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                    |                |                     |                      |          |
| Galileo Activity Plan Form  |                    |                | 12/01/00            | 00:00:00             | rev 6/95 |



165EG:TT= 0 TMC=1 C= -7.00 XC= 0.50 BS= 0/7829 TC= 1(60 300 )  
 A= 364 pD= 0 SR=17.450 RA50= 63.82 DEC50= 27.27 cone=170.55 clock=277.96  
 117EG:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/7829  
 1:#s= 1 Cs= 9.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1446 rD= 2

## 29JNLIMBRT07

DESIGN G3.2 yande:12/21/2000 13:51:39

FILE:P.29JNLIMBRT07

CENTRAL BODY:JUPITER III

MINI:m.29JNLIMBRT07

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 953:00:0

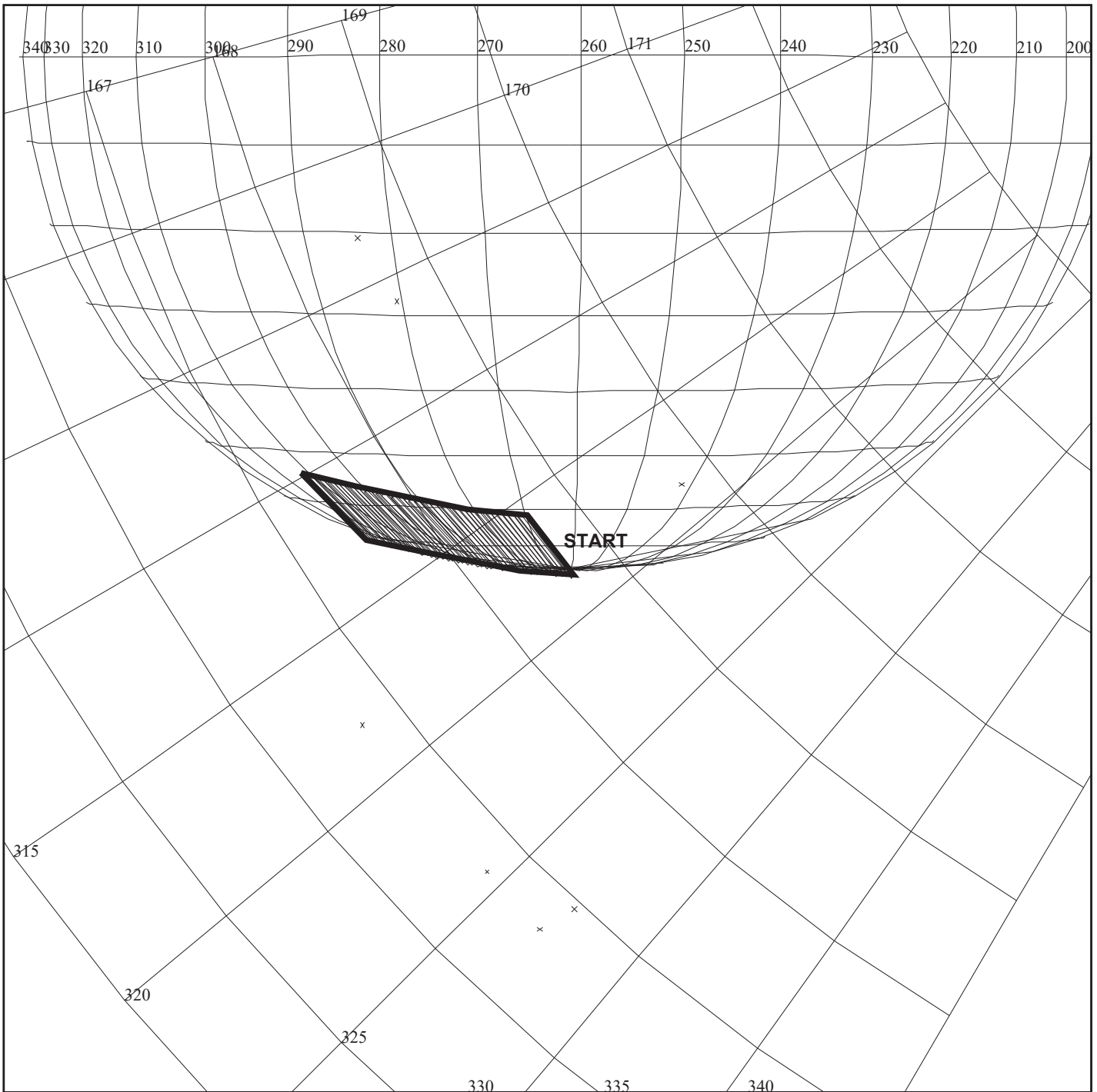
OBSERVATION:29JNLIMBRT07

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.000

DESCRIP:JUPITER\_REALTIME\_LIMB\_OBSERVATIO

|  |                       |                |                     |                      |          |
|--|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T Limb Obs   |                       | ACTIVITY ID:   | 29JNLIMBRT07-       |                      |          |
|  |                       | START TIME:    | 00-364/19:28:12.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL LIMBRT SeqNo 07 -                          |                       |                |                     |                      |          |
| Title  | Jupiter R/T Limb Obs  |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                   | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start  | JEE+CDS 00000951:00:0 |                | 00-364/19:28:12.466 | JEE+000/16:01:34.000 |          |
| End  | JEE+CDS 00000961:00:0 |                | 00-364/19:38:19.132 | JEE+000/16:11:40.666 |          |
| Duration   | 00000010:00:0         |                | 000/00:10:06.666    | 000/00:10:06.666     |          |
| Top Label  | 29JNLIMBRT07-         |                |                     |                      |          |
| Bottom Label   |                       |                |                     |                      |          |
| Plot Key   | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                   | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|  |                       |                |                     | DMS                  | No       |
| Observation Objective  |                       |                |                     |                      |          |
| Real-time observation of Jupiter's northern limb.                                      |                       |                |                     |                      |          |
| Data Returned  |                       |                |                     |                      |          |
| Design Detail  |                       |                |                     |                      |          |
| BTG=0.03 R/T LM  |                       |                |                     |                      |          |
| Single swath across Jupiter's northern limb, dayside.                                  |                       |                |                     |                      |          |
| Mosaic covers: +54 to +68 degrees latitude and<br>+283 to +322 degrees West longitude. |                       |                |                     |                      |          |
| Target centered at +60 degrees latitude, 295 degrees West longitude.                   |                       |                |                     |                      |          |
| No Mirror Blocking.  |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT                    |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, JLM80                              |                       |                |                     |                      |          |
| Galileo Activity Plan Form   |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29JNAURORA08**

165EH:TT= 0 TMC= 1 C= 9.50 XC= 10.00 BS= 0/6019 TC= 1(-65 290 )  
 A= 728 pD= 0 SR=17.450 RA50= 64.72 DEC50= 20.16 cone=168.65 clock=317.09  
 117EH:#SB= 1 OR= 0.160 RR=12.000 BM=F RC= 1 BS= 0/6019  
 1:#s= 1 Cs= -24.70 XCs= -25.70 Cr= 6.00 XCr= 12.50 sD= 2182 rD= 54

DESIGN G3.2 yande:11/16/2000 15:11:50

FILE:P.29JNAURORA08

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA08

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 998:00:0

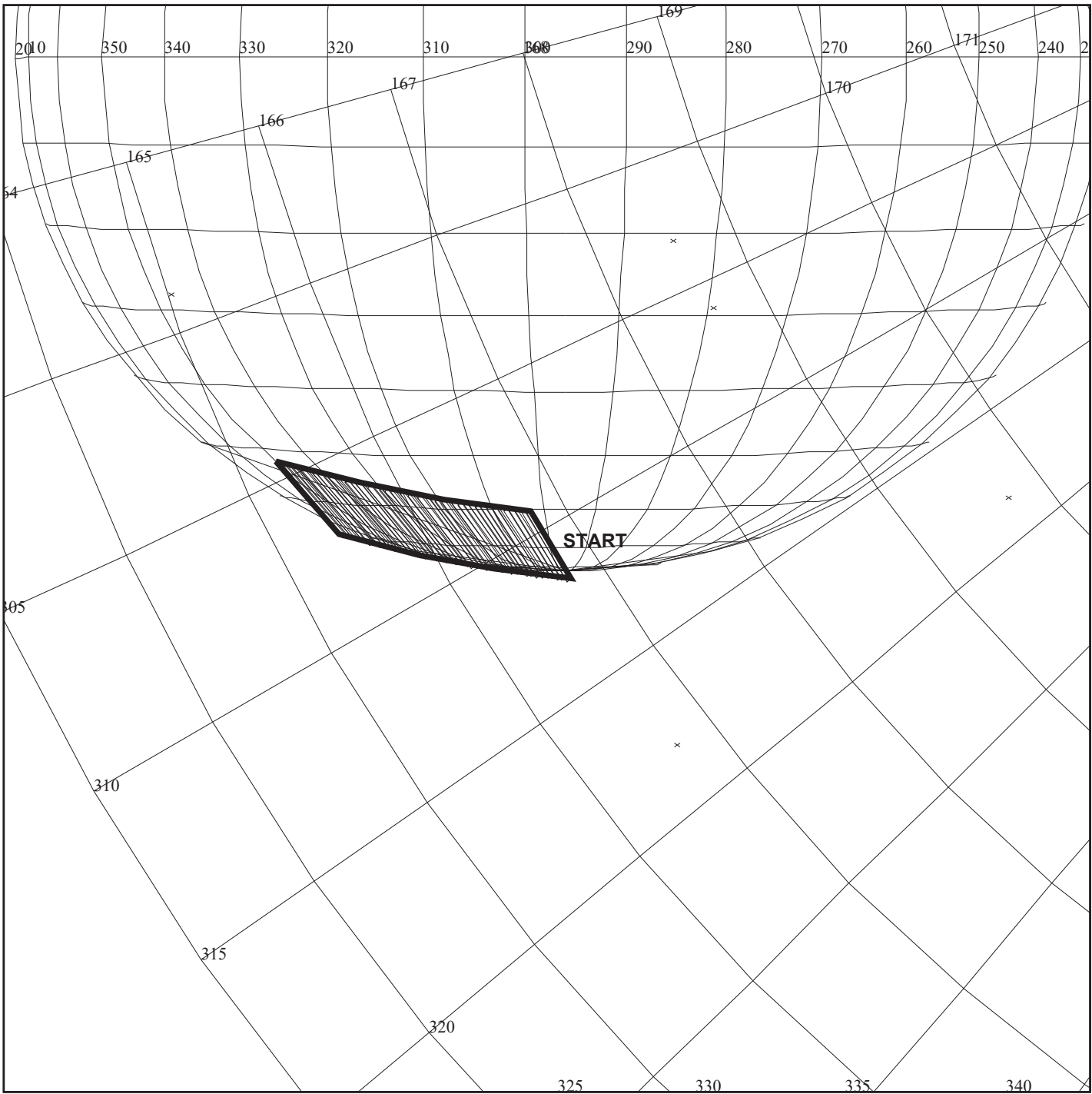
BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA08

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter Aurora Obs  |                       | ACTIVITY ID: 29JNAURORA08-      |                                |
|   |                       | START TIME: 00-364/20:13:42.466 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 08 -   |                       |                                 |                                |
| Title   | Jupiter Aurora Obs    | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00000996:00:0 | 00-364/20:13:42.466             | JEE+000/16:47:04.000           |
| End   | JEE+CDS 00001010:00:0 | 00-364/20:27:51.799             | JEE+000/17:01:13.333           |
| Duration  | 00000014:00:0         | 000/00:14:09.333                | 000/00:14:09.333               |
| Top Label   | 29JNAURORA08-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                       |                                 |                                |
| Single swath over the southern aurora region, dayside.  |                       |                                 |                                |
| Mosaic covers: -90 to -60 degrees latitude and<br>+267 to +318 degrees West longitude.  |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |





**29JNAURORA09**

165EK:TT= 0 TMC= 1 C= 13.50 XC= 12.00 BS= 0/7121 TC= 1(-62.5 330 )  
 A= 728 pD= 0 SR=17.450 RA50= 67.17 DEC50= 20.65 cone=166.76 clock=310.52  
 117EK:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/7121  
 1:#s= 1 Cs= -28.80 XCs= -24.30 Cr= 8.50 XCr= 13.00 sD= 2364 rD= 52

DESIGN G3.2 yande:11/27/2000 11: 4:26

FILE:P.29JNAURORA09

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA09

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

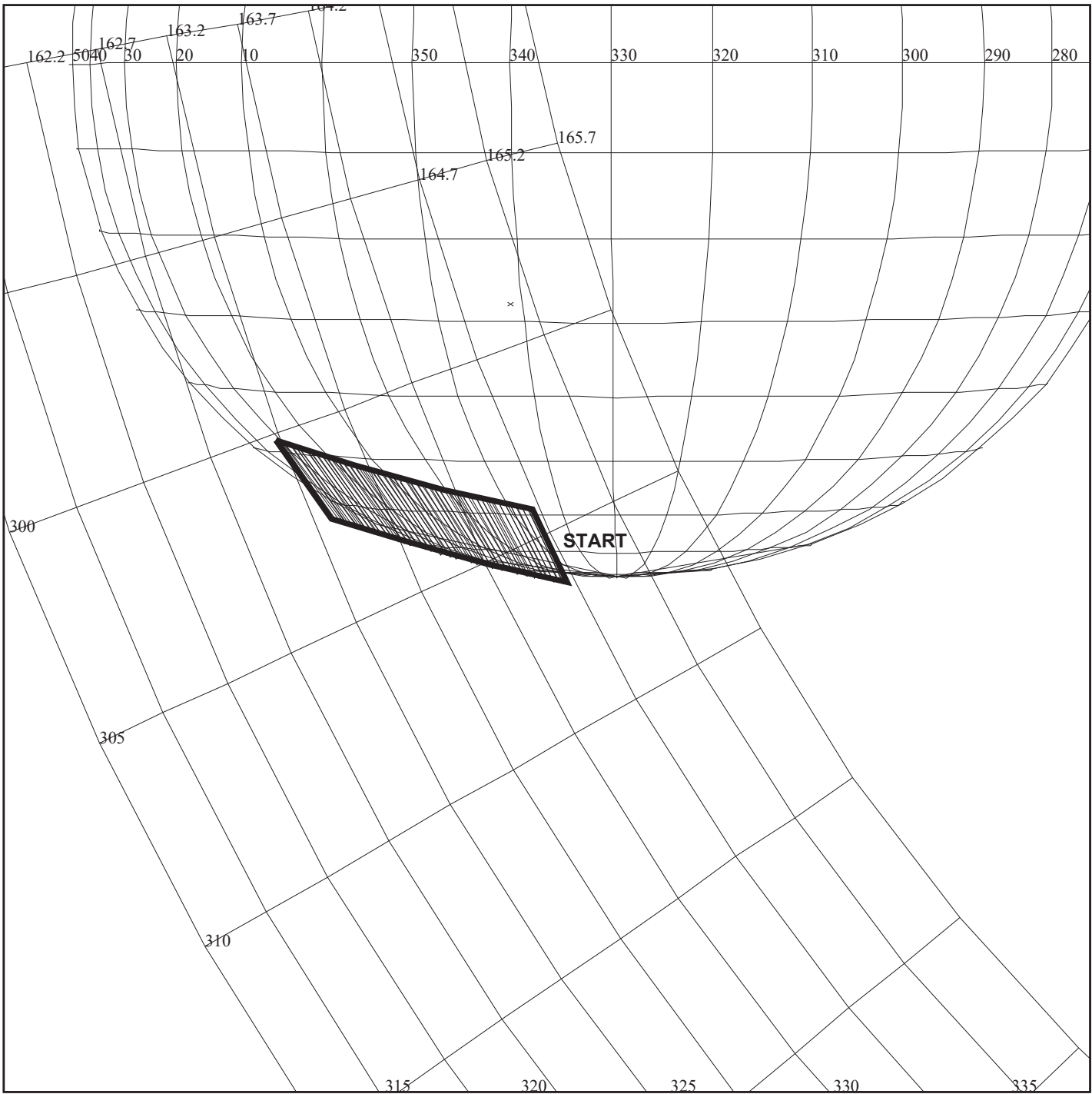
START:JEE 00-364/03:26:38.466 +CDS 1059:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA09

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter Aurora Obs  |                       | ACTIVITY ID: 29JNAURORA09-      |                                |
|   |                       | START TIME: 00-364/21:14:22.466 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 09 -   |                       |                                 |                                |
| Title   | Jupiter Aurora Obs    | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00001056:00:0 | 00-364/21:14:22.466             | JEE+000/17:47:44.000           |
| End   | JEE+CDS 00001070:00:0 | 00-364/20:28:31.799             | JEE+000/18:01:53.333           |
| Duration  | 00000014:00:0         | 000/00:14:09.333                | 000/00:14:09.333               |
| Top Label   | 29JNAURORA09-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                       |                                 |                                |
| Single swath over the southern aurora region, dayside.  |                       |                                 |                                |
| Mosaic covers: -90 to -60 degrees latitude and<br>+300 to +357 degrees West longitude.  |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



**29JNAURORA10**

165EL:TT= 0 TMC= 1 C= 7.50 XC= 8.00 BS= 0/7677 TC= 1(-60 360 )  
 A= 728 pD= 0 SR=17.450 RA50= 69.78 DEC50= 21.14 cone=164.63 clock=305.33  
 117EL:#SB= 1 OR= 0.090 RR=12.000 BM=F RC= 1 BS= 0/7677  
 1:#s= 1 Cs= -29.00 XCs= -23.00 Cr= 0.00 XCr= 0.00 sD= 2356 rD= 2

DESIGN G3.2 yande:11/16/2000 15: 9: 5

FILE:P.29JNAURORA10

CENTRAL BODY:JUPITER III

MINI:m.29JNAURORA10

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

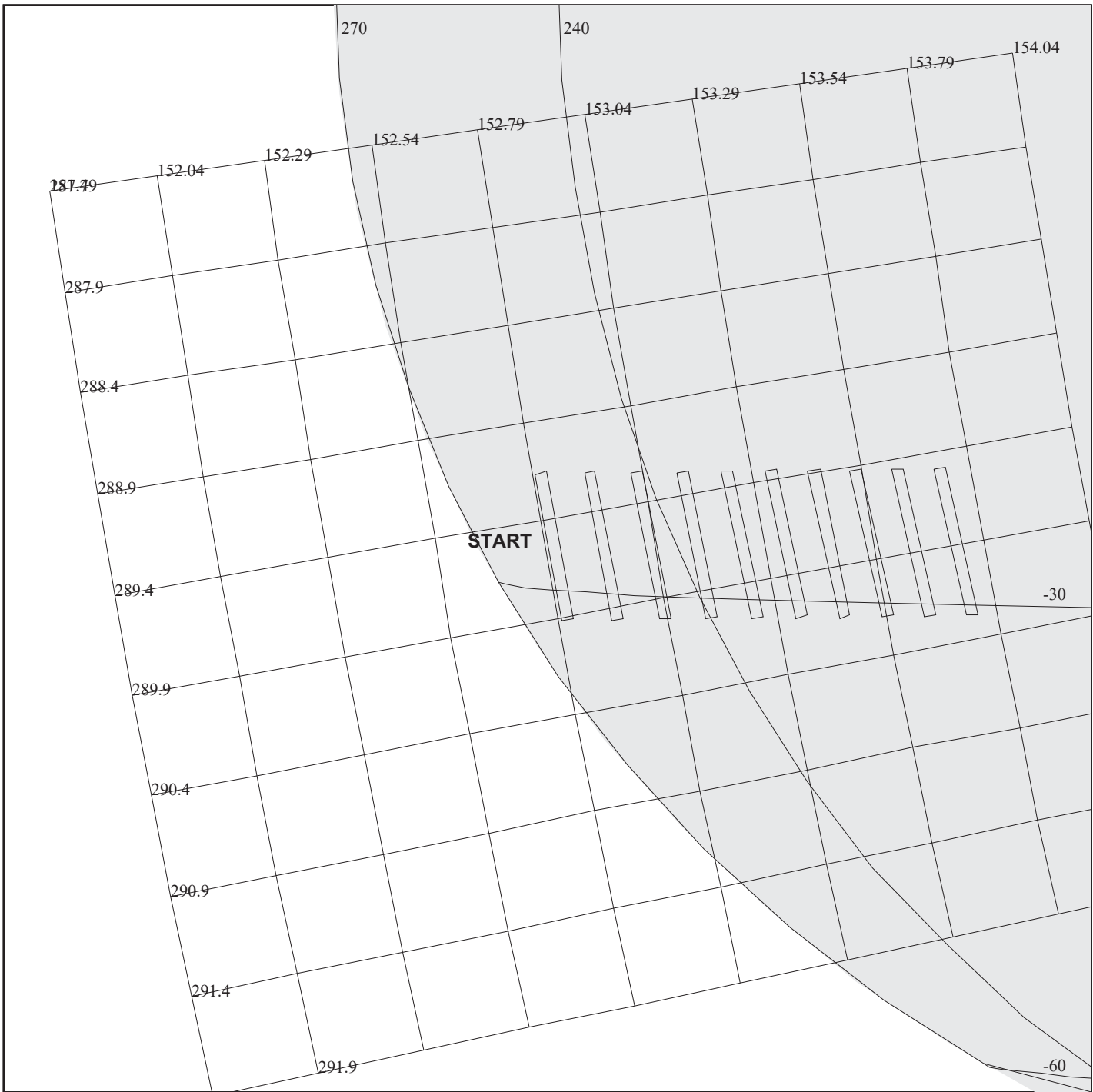
START:JEE 00-364/03:26:38.466 +CDS 1117:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNAURORA10

DESCRIP:JUPITER\_AURORA\_OBSERVATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Jupiter Aurora Obs  |                       | ACTIVITY ID: 29JNAURORA10-      |                                |
|   |                       | START TIME: 00-364/22:15:02.466 |                                |
| Activity ID: Orbit 29 Target J Inst N OAPEL AURORA SeqNo 10 -   |                       |                                 |                                |
| Title   | Jupiter Aurora Obs    | Instrument                      |                                |
| Requestor   | NIMS-AWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       |                                 | NIMS AWG                       |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/29/00 Week 52 |
| Start   | JEE+CDS 00001116:00:0 | 00-364/22:15:02.466             | JEE+000/18:48:24.000           |
| End   | JEE+CDS 00001130:00:0 | 00-364/22:29:11.799             | JEE+000/19:02:33.333           |
| Duration  | 00000014:00:0         | 000/00:14:09.333                | 000/00:14:09.333               |
| Top Label   | 29JNAURORA10-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       |                                 | Scan Platform                  |
|   |                       |                                 | No                             |
|   |                       |                                 | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>1 of 10 Jupiter Aurora maps of the southern aurora region.<br/> The set of 10 will map out all 360 degrees longitude of Jupiter's southern Aurora region over 1 Jupiter rotation (about 10 hours).</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=0.48 MB, TICS=187, FMT=LPU, LM  |                       |                                 |                                |
| Single swath over the southern aurora region, dayside.  |                       |                                 |                                |
| Mosaic covers: -90 to -60 degrees latitude and<br>+347 to +40 degrees West longitude.   |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, JLM240, JLM72   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



**29JNSTZRLT03**

165EP:TT= 0 TMC= 1 C= -6.00 XC= 0.00 BS= 0/5381 TC= 1(-26 237.5 )  
 A= 728 pD= 0 SR=17.450 RA50= 83.55 DEC50= 24.12 cone=152.80 clock=289.52  
 117EP:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5381  
 1:#s= 1 Cs= 18.00 XCs= 3.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 2

DESIGN G3.2 yande:12/21/2000 13:52:53

FILE:P.29JNSTZRLT03

CENTRAL BODY:JUPITER III

MINI:m.29JNSTZRLT03

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 1489:00:0

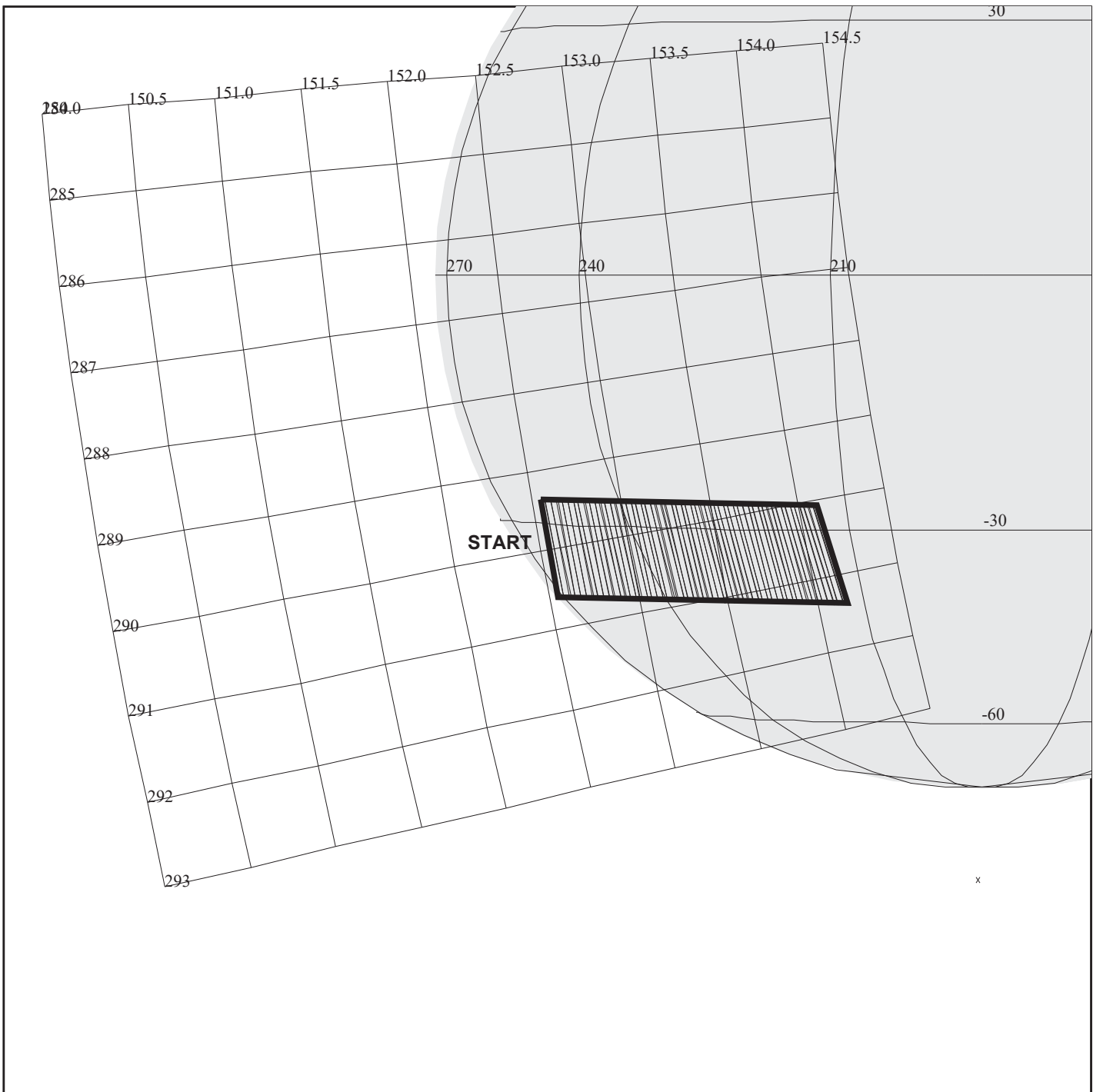
OBSERVATION:29JNSTZRLT03

THINNING:NIM 7, MIRROR BLOCKING: 10001

BODY PLOT TIME:TARGET-TIME D= 0 S= 2.500

DESCRIP:JUPITER\_RT\_STZ\_OBSERVATION

|   |                       |                |                     |                      |          |
|---|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter R/T STZ Obs   |                       | ACTIVITY ID:   | 29JNSTZRLT03-       |                      |          |
|   |                       | START TIME:    | 00-365/04:28:08.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL STZRLT SeqNo 03 -   |                       |                |                     |                      |          |
| Title   | Jupiter R/T STZ Obs   |                | Instrument          |                      | NIMS     |
| Requestor   | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                   | Load ID        | Calendar Date       | 12/29/00             | Week 52  |
| Start   | JEE+CDS 00001485:00:0 |                | 00-365/04:28:08.466 | JEE+001/01:01:30.000 |          |
| End   | JEE+CDS 00001499:00:0 |                | 00-365/04:42:17.799 | JEE+001/01:15:39.333 |          |
| Duration  | 00000014:00:0         |                | 000/00:14:09.333    | 000/00:14:09.333     |          |
| Top Label   | 29JNSTZRLT03-         |                |                     |                      |          |
| Bottom Label  |                       |                |                     |                      |          |
| Plot Key  | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                   | Report Options | BOTH                |                      |          |
| CDS Source  | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|   |                       |                |                     | DMS                  | No       |
| Observation Objective   |                       |                |                     |                      |          |
| <p>Jupiter South Tropical Zone real-time observation.<br/> These observations are designed to monitor cloud activity, thermal and compositional changes over the duration of the Galileo mission.</p> |                       |                |                     |                      |          |
| Data Returned   |                       |                |                     |                      |          |
| Design Detail   |                       |                |                     |                      |          |
| BTG=0.04 R/T LM   |                       |                |                     |                      |          |
| Single swath across the South Tropical Zone, dayside.   |                       |                |                     |                      |          |
| Mosaic covers: -31 to -22 degrees latitude and<br>+221 to +252 degrees West longitude.  |                       |                |                     |                      |          |
| Target centered at -26 degrees latitude, 236 degrees West longitude.  |                       |                |                     |                      |          |
| Mirror Blocking 11,11 (10001,10001)   |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, R/T, JLM130  |                       |                |                     |                      |          |
| Galileo Activity Plan Form  |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



**29JNWTOVAL01**

165EQ:TT= 0 TMC=1 C= -10.00 XC= -2.50 BS= 0/8111 TC= 1(-33.5 238 )  
 A= 728 pD= 0 SR=17.450 RA50= 83.75 DEC50= 23.89 cone=152.59 clock=289.97  
 117EQ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/8111  
 1:#s= 1 Cs= 28.90 XCs= 6.00 Cr= 0.00 XCr= 0.00 sD= 2912 rD= 2

DESIGN G3.2 yande:11/16/2000 16: 1:15

FILE:P.29JNWTOVAL01

CENTRAL BODY:JUPITER III

MINI:m.29JNWTOVAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 1504:00:0

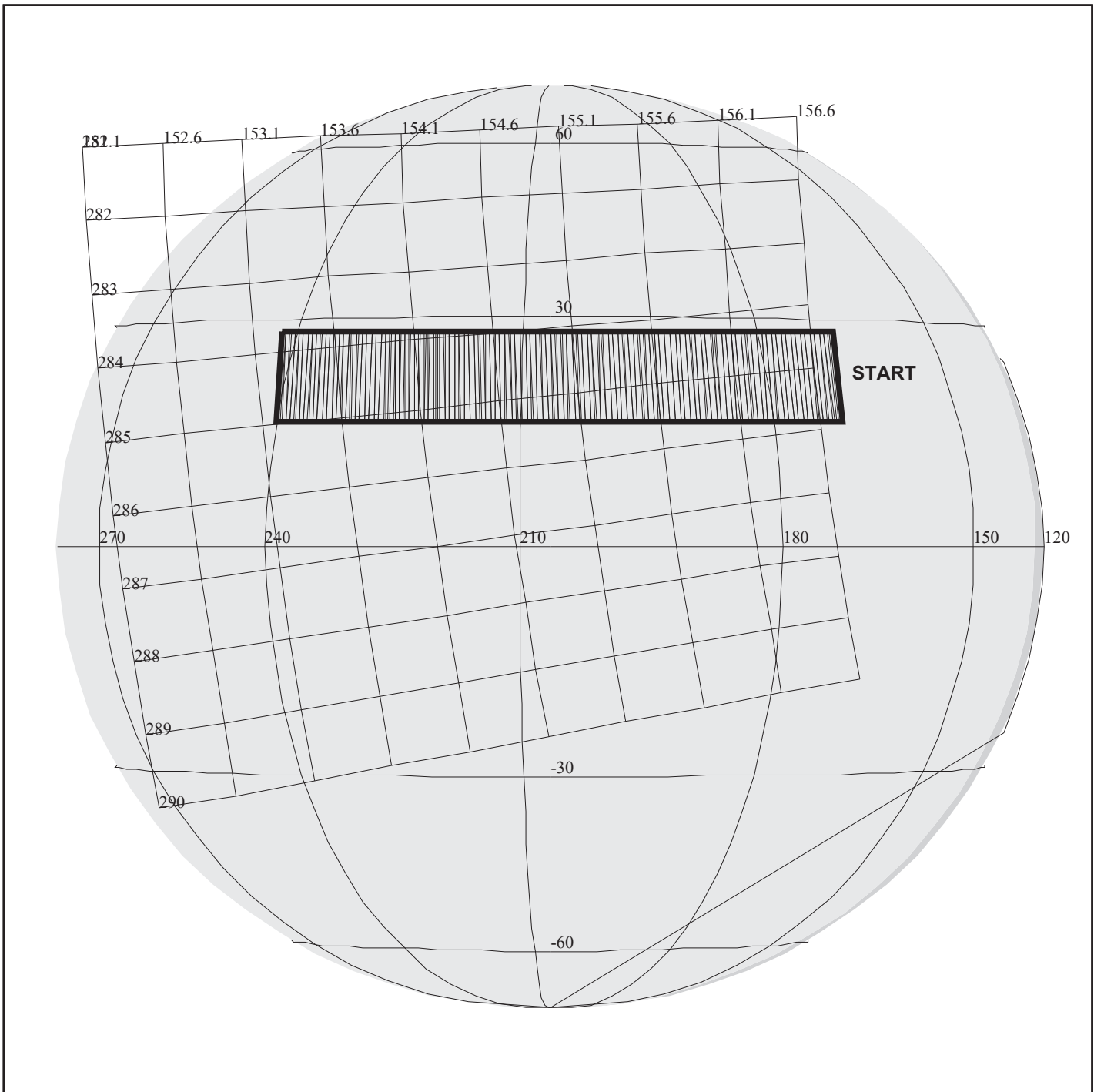
BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

OBSERVATION:29JNWTOVAL01

DESCRIP:WHITE\_OVAL

|   |                        |                |                     |                      |          |
|---|------------------------|----------------|---------------------|----------------------|----------|
| Jupiter White Oval Obs  |                        | ACTIVITY ID:   | 29JNWTOVAL01-       |                      |          |
|   |                        | START TIME:    | 00-365/04:43:18.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL WTOVAL SeqNo 01 -   |                        |                |                     |                      |          |
| Title   | Jupiter White Oval Obs |                | Instrument          | NIMS                 |          |
| Requestor   | NIMS-AWG/M. SEGURA     |                | Team                | NIMS Working Group   | AWG      |
| Time System   | CDS                    | Load ID        | Calendar Date       | 12/30/00             | Week 52  |
| Start   | JEE+CDS                | 00001500:00:0  | 00-365/04:43:18.466 | JEE+001/01:16:40.000 |          |
| End   | JEE+CDS                | 00001515:00:0  | 00-365/04:58:28.466 | JEE+001/01:31:50.000 |          |
| Duration  |                        | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label   | 29JNWTOVAL01-          |                |                     |                      |          |
| Bottom Label  |                        |                |                     |                      |          |
| Plot Key  | NIMS                   | Type           | SCI                 |                      |          |
| CDS Bytes   | 300                    | Report Options | BOTH                | Scan Platform        | No       |
| CDS Source  | OAP                    | Spin State     | DUAL                | DMS                  | No       |
| Observation Objective   |                        |                |                     |                      |          |
| <p>Jupiter white oval observation designed to observe the last of a series of white ovals which have merged over the course of 2 years. Data set will contain compositional and cloud dynamics information.</p> |                        |                |                     |                      |          |
| Data Returned   |                        |                |                     |                      |          |
| Design Detail   |                        |                |                     |                      |          |
| BTG=0.36 MB, TICS=201, FMT=LPU, LM  |                        |                |                     |                      |          |
| Single swath over the white oval region at -33 degrees latitude, dayside.   |                        |                |                     |                      |          |
| Mosaic covers: -39 to -27 degrees latitude and<br>+213 to +260 degrees West longitude.  |                        |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                        |                |                     |                      |          |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM48   |                        |                |                     |                      |          |
| Galileo Activity Plan Form  |                        |                | 12/01/00            | 00:00:00             | rev 6/95 |





**29JNJUPNTZ01**

165ER:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/1751 TC= 1(22 170 )  
 A= 546 pD= 0 SR=17.450 RA50= 79.39 DEC50= 26.33 cone=156.76 clock=285.18  
 117ER:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/1751  
 1:#s= 1 Cs= -57.95 XCs= -6.00 Cr= 0.00 XCr= 0.00 sD= 5824 rD= 2

DESIGN G3.2 yande:11/15/2000 18:37:47

FILE:P.29JNJUPNTZ01

CENTRAL BODY:JUPITER III

MINI:m.29JNJUPNTZ01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

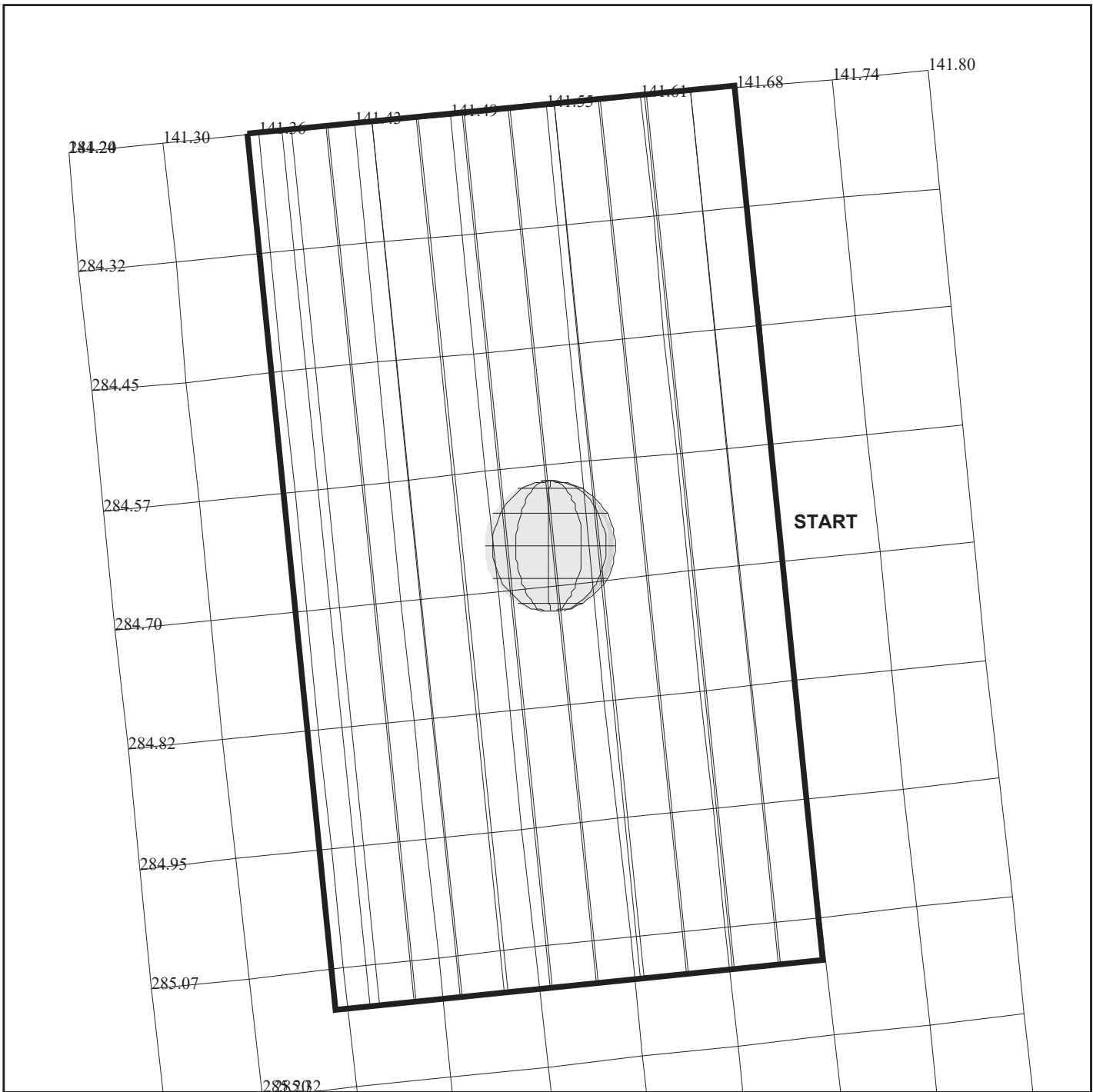
START:JEE 00-364/03:26:38.466 +CDS 1524:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.900

OBSERVATION:29JNJUPNTZ01

DESCRIP:JUPITER\_RT\_NTZ\_OBSERVATION

|  |  |  |
|--|--|--|
| Jupiter NTZ Obs  | ACTIVITY ID: 29JNJUPNTZ01-                 | START TIME: 00-365/04:43:18.466          |
| Activity ID: Orbit 29 Target J Inst N OAPEL JUPNTZ SeqNo 01 -  |  |  |
| Title Requestor  | Jupiter NTZ Oval Obs<br>NIMS-AWG/M. SEGURA | Instrument Working Group<br>NIMS AWG     |
| Time System  | CDS  | Load ID                                  |
| Start  | JEE+CDS 00001520:00:0                      | Calendar Date 12/30/00 Week 52           |
| End  | JEE+CDS 00001535:00:0                      | 00-365/05:03:31.799 JEE+001/01:36:53.333 |
| Duration   | 00000015:00:0                              | 000/00:15:10.000 JEE+001/01:52:03.333    |
| Top Label  | 29JNJUPNTZ01-                              |  |
| Bottom Label   |  |  |
| Plot Key   | NIMS                                       | Type                                     |
| CDS Bytes  | 300  | Report Options                           |
| CDS Source   | OAP  | Spin State                               |
|  |  | SCI                                      |
|  |  | BOTH                                     |
|  |  | DUAL                                     |
|  |  | Scan Platform                            |
|  |  | DMS                                      |
|  |  | No                                       |
|  |  | No                                       |
| Observation Objective  |  |  |
| Recorded Jupiter Northern Temperate Zone (NTZ) observation designed provide composition, thermal and cloud dynamics information. |  |  |
| Data Returned  |  |  |
| Design Detail  |  |  |
| BTG=0.36 MB, TICS=201, FMT=LPU, LM   |  |  |
| Single swath over the NTZ region at +22 degrees latitude, dayside.   |  |  |
| Mosaic covers: +16 to +28 degrees latitude and<br>+170 to +241 degrees West longitude.   |  |  |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |  |  |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM24  |  |  |
| Galileo Activity Plan Form   | 12/01/00 00:00:00                          | rev 6/95                                 |



**29INIWATCH03**

165ES:TT= 0 TMC= 1 C= 2.50 XC= 0.00 BS= 0/9817 TC= 3  
 A= 364 pD= 536 SR= 8.000 RA50= 96.08 DEC50= 25.05 cone=141.67 clock=284.66  
 117ES:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9817  
 1:#s= 1 Cs= -5.20 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 536 rD= 80

DESIGN G3.2 yande:11/15/2000 18:26:48

FILE:P.29INIWATCH03

TARGET BODY : IO

MINI:m.29INIWATCH03

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

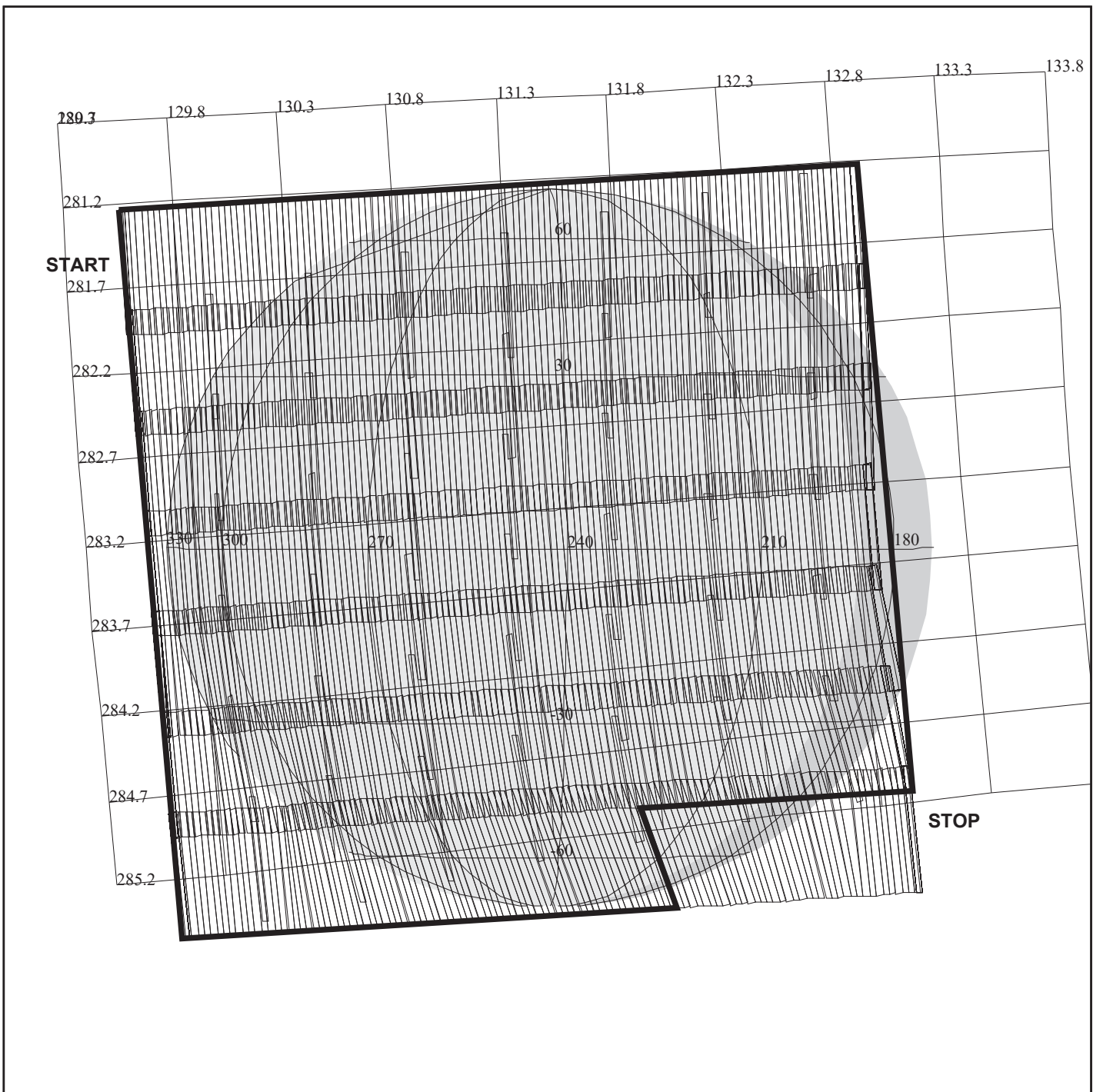
START:IEE 00-364/03:33:43.133 +CDS 2880:00:0

BODY PLOT TIME:TARGET-TIME D= 536 S= 0.120

OBSERVATION:29INIWATCH03

DESCRIP:IO\_MONITORING

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| Io Monitoring   |                       | ACTIVITY ID: 29INIWATCH03-      |                                |
|   |                       | START TIME: 00-364/03:48:53.133 |                                |
| Activity ID: Orbit 29 Target I Inst N OAPEL IWATCH SeqNo 03 -       |                       |                                 |                                |
| Title   | Io Monitoring         | Instrument                      |                                |
| Requestor   | NIMS-SWG/M. SEGURA    | Team                            | NIMS Working Group             |
|   |                       | NIMS SWG                        |                                |
| Time System   | CDS                   | Load ID                         | Calendar Date 12/31/00 Week 52 |
| Start   | IEE+CDS 00002880:00:0 | 00-366/04:05:43.133             | IEE+002/00:32:00.000           |
| End   | IEE+CDS 00002887:00:0 | 00-366/04:12:47.799             | IEE+002/00:39:04.666           |
| Duration  | 00000007:00:0         | 000/00:07:04.666                | 000/00:07:04.666               |
| Top Label   | 29INIWATCH03-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 300                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| To monitor Io's volcanic activity while in eclipse.                 |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| BTG=1.09 MB, TICS=171, FMT=MPW, LM                                  |                       |                                 |                                |
| Distant single swath mosaic across Io's eclipsed disk.              |                       |                                 |                                |
| Mosaic covers -90 to +90 degrees latitude and                       |                       |                                 |                                |
| 239 to 59 degrees West longitude.                                   |                       |                                 |                                |
| Target centered at 0 degrees latitude, 330 degrees West longitude   |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM288  |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/01/00 00:00:00               | rev 6/95                       |



165ET:TT= 0 TMC= 1 C= -32.00 XC= -24.00 BS= 0/0999 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=109.68 DEC50= 24.84 cone=129.53 clock=281.58  
 117ET:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/0999  
 1:#s= 7 Cs= 58.00 XCs= 0.00 Cr= -58.00 XCr= 8.00 sD= 246 rD= 44

## 29JNGLOBAL01

DESIGN G3.2 yande:11/15/2000 18:28:45

FILE:P.29JNGLOBAL01

CENTRAL BODY:JUPITER III

MINI:m.29JNGLOBAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 3388:00:0

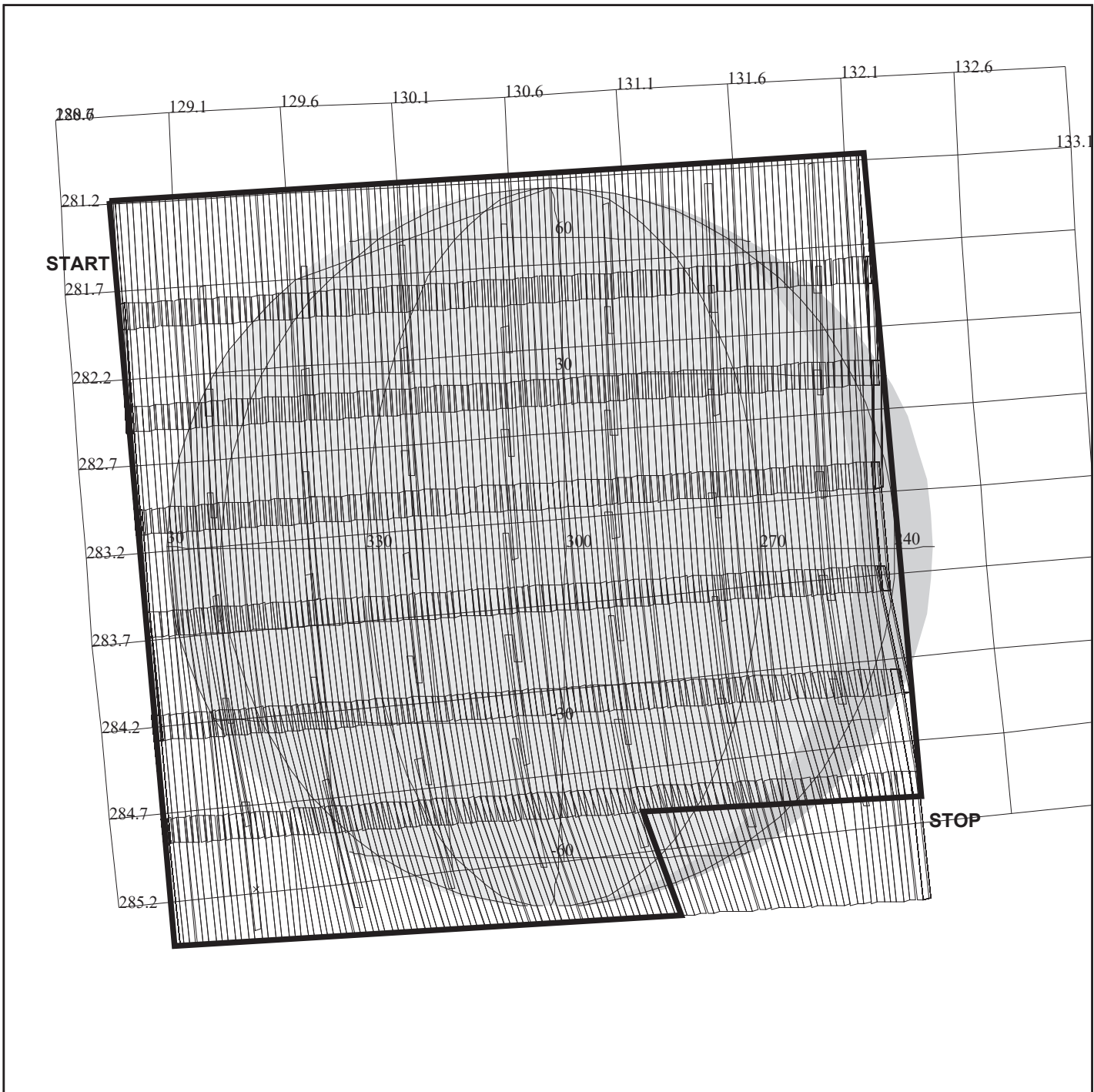
BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

OBSERVATION:29JNGLOBAL01

DESCRIP:JUPITER\_GLOBAL\_MAP

|  |                       |                |                     |                      |          |
|--|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter Global Map   |                       | ACTIVITY ID:   | 29JNGLOBAL01-       |                      |          |
|  |                       | START TIME:    | 00-366/12:28:14.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GLOBAL SeqNo 01 -  |                       |                |                     |                      |          |
| Title  | Jupiter Global Map    |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                   | Load ID        | Calendar Date       | 12/31/00             | Week 52  |
| Start  | JEE+CDS 00003384:00:0 |                | 00-366/12:28:14.466 | JEE+002/09:01:36.000 |          |
| End  | JEE+CDS 00003399:00:0 |                | 00-366/12:43:24.466 | JEE+002/09:16:14.000 |          |
| Duration   | 00000015:00:0         |                | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNGLOBAL01-         |                |                     |                      |          |
| Bottom Label   |                       |                |                     |                      |          |
| Plot Key   | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                   | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|  |                       |                |                     | DMS                  | No       |
| Observation Objective  |                       |                |                     |                      |          |
| <p>1 of 6 Jupiter global maps of Jupiter's entire disk.<br/> The set of 6 will map out all 360 degrees longitude of Jupiter<br/> over almost 1 Jupiter rotation (about 8 hours).</p> |                       |                |                     |                      |          |
| Data Returned  |                       |                |                     |                      |          |
| Design Detail  |                       |                |                     |                      |          |
| BTG=0.66 MB, TICS=201, FMT=LPU, XM   |                       |                |                     |                      |          |
| Global mosaic made of 7 swaths across the daylit portion of the disk.  |                       |                |                     |                      |          |
| Mosaic covers: -90 to +90 degrees latitude and<br>+185 to +310 degrees West longitude (at the equator).  |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                       |                |                     |                      |          |
| Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM9  |                       |                |                     |                      |          |
| Galileo Activity Plan Form   |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |





165EU:TT= 0 TMC= 1 C= -32.00 XC= -24.00 BS= 0/9017 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=110.44 DEC50= 24.71 cone=128.83 clock=281.54  
 117EU:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/9017  
 1:#s= 7 Cs= 58.00 XCs= 0.00 Cr= -58.00 XCr= 8.00 sD= 246 rD= 44

## 29JNGLOBAL02

DESIGN G3.2 yande:11/15/2000 18:28:26

FILE:P.29JNGLOBAL02

CENTRAL BODY:JUPITER III

MINI:m.29JNGLOBAL02

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 00-364/03:26:38.466 +CDS 3487:00:0

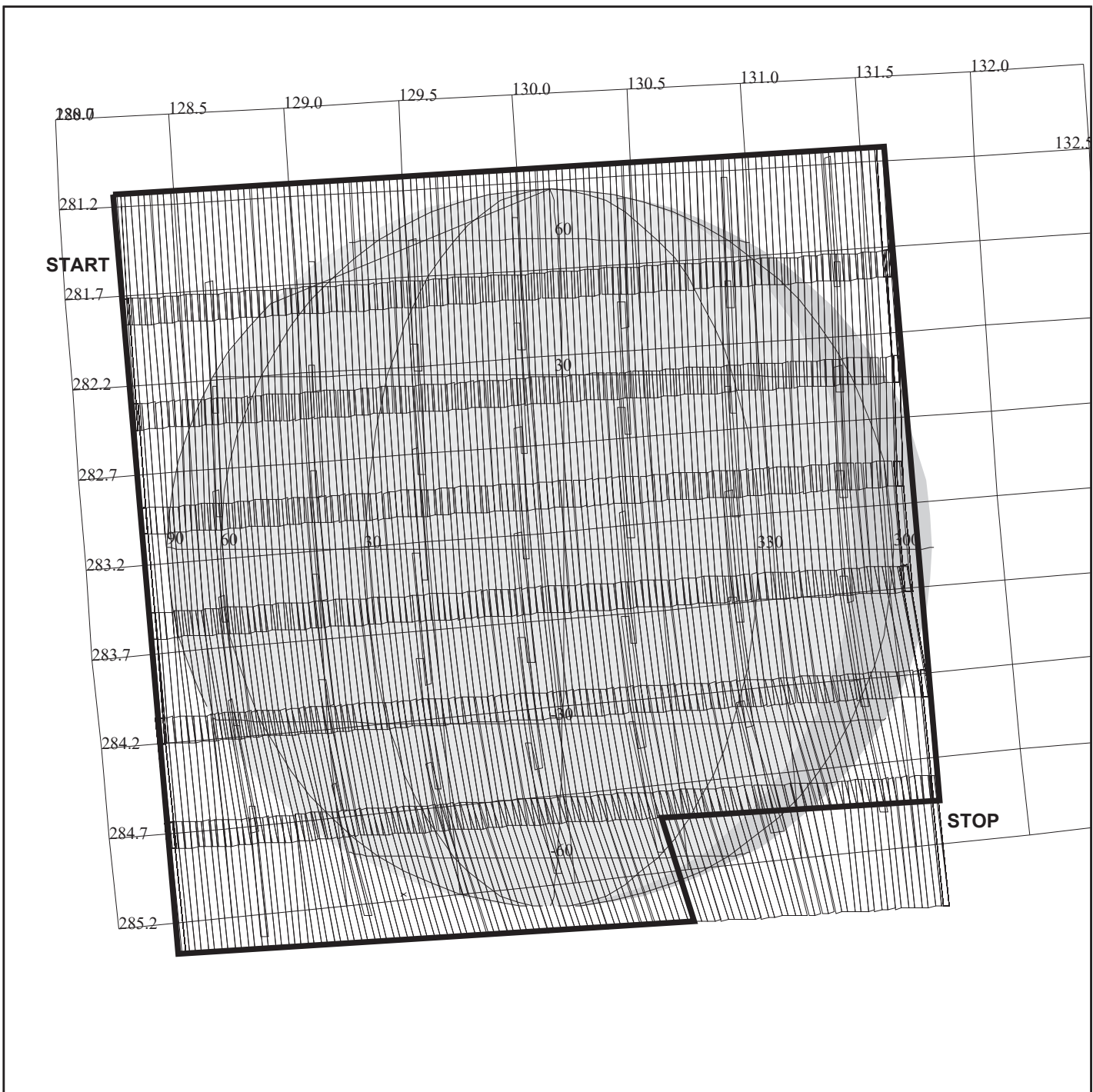
BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

OBSERVATION:29JNGLOBAL02

DESCRIP:JUPITER\_GLOBAL\_MAP

|  |                    |                |                     |                      |          |
|--|--------------------|----------------|---------------------|----------------------|----------|
| Jupiter Global Map   |                    | ACTIVITY ID:   | 29JNGLOBAL02-       |                      |          |
|  |                    | START TIME:    | 00-366/14:08:20.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GLOBAL SeqNo 02 -  |                    |                |                     |                      |          |
| Title  | Jupiter Global Map |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                | Load ID        | Calendar Date       | 12/31/00             | Week 52  |
| Start  | JEE+CDS            | 00003483:00:0  | 00-366/14:08:20:466 | JEE+002/10:41:42.000 |          |
| End  | JEE+CDS            | 00003498:00:0  | 00-366/14:23:30.466 | JEE+002/10:56:52.000 |          |
| Duration   |                    | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNGLOBAL02-      |                |                     |                      |          |
| Bottom Label   |                    |                |                     |                      |          |
| Plot Key   | NIMS               | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                | Spin State     | DUAL                | Scan Platform        | No       |
|  |                    |                |                     | DMS                  | No       |
| Observation Objective  |                    |                |                     |                      |          |
| <p>1 of 6 Jupiter global maps of Jupiter's entire disk.<br/> The set of 6 will map out all 360 degrees longitude of Jupiter<br/> over almost 1 Jupiter rotation (about 8 hours).</p> |                    |                |                     |                      |          |
| Data Returned  |                    |                |                     |                      |          |
| Design Detail  |                    |                |                     |                      |          |
| BTG=0.66 MB, TICS=201, FMT=LPU, XM   |                    |                |                     |                      |          |
| Global mosaic made of 7 swaths across the daylit portion of the disk.  |                    |                |                     |                      |          |
| Mosaic covers: -90 to +90 degrees latitude and<br>+245 to +30 degrees West longitude (at the equator).   |                    |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                    |                |                     |                      |          |
| Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM9  |                    |                |                     |                      |          |
| Galileo Activity Plan Form   |                    |                | 12/01/00            | 00:00:00             | rev 6/95 |





165EV:TT= 0 TMC= 1 C= -31.00 XC= -24.00 BS= 0/7035 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=111.11 DEC50= 24.61 cone=128.22 clock=281.50  
 117EV:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/7035  
 1:#s= 7 Cs= 58.00 XCs= 0.00 Cr= -58.00 XCr= 8.00 sD= 246 rD= 44

## 29JNGLOBAL03

DESIGN G3.2 yande:11/15/2000 18:29: 3

FILE:P.29JNGLOBAL03

CENTRAL BODY:JUPITER III

MINI:m.29JNGLOBAL03

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

THINNING:NIM 2

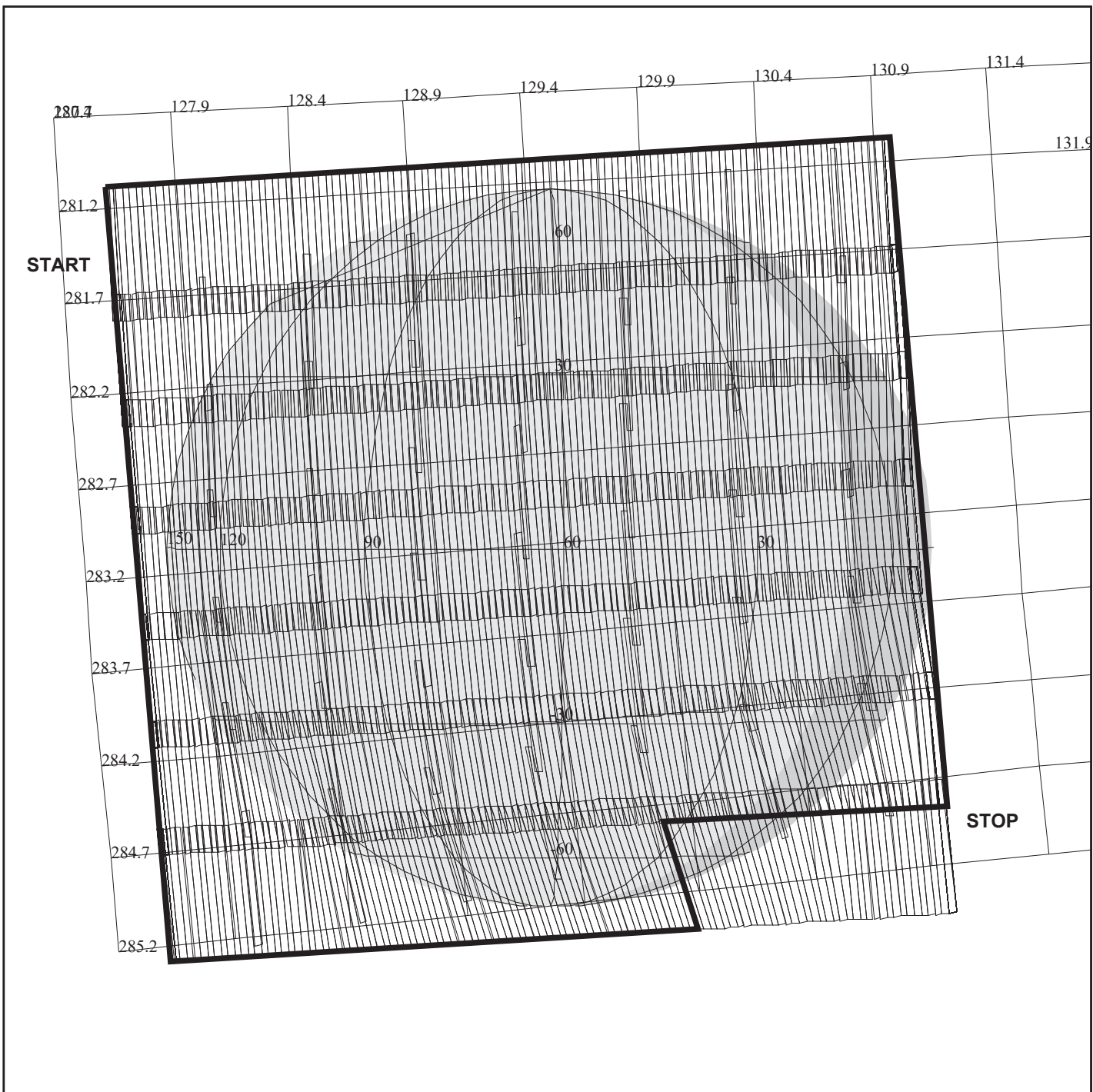
START:JEE 00-364/03:26:38.466 +CDS 3586:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

OBSERVATION:29JNGLOBAL03

DESCRIP:JUPITER\_GLOBAL\_MAP

|  |                       |                |                     |                      |          |
|--|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter Global Map   |                       | ACTIVITY ID:   | 29JNGLOBAL03-       |                      |          |
|  |                       | START TIME:    | 00-366/15:48:26.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GLOBAL SeqNo 03 -  |                       |                |                     |                      |          |
| Title  | Jupiter Global Map    |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                   | Load ID        | Calendar Date       | 12/31/00             | Week 52  |
| Start  | JEE+CDS 00003582:00:0 |                | 00-366/15:48:26.466 | JEE+002/12:21:48.000 |          |
| End  | JEE+CDS 00003597:00:0 |                | 00-366/16:03:36.466 | JEE+002/12:36:58.000 |          |
| Duration   | 00000015:00:0         |                | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNGLOBAL03-         |                |                     |                      |          |
| Bottom Label   |                       |                |                     |                      |          |
| Plot Key   | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                   | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|  |                       |                |                     | DMS                  | No       |
| Observation Objective  |                       |                |                     |                      |          |
| <p>1 of 6 Jupiter global maps of Jupiter's entire disk.<br/> The set of 6 will map out all 360 degrees longitude of Jupiter<br/> over almost 1 Jupiter rotation (about 8 hours).</p> |                       |                |                     |                      |          |
| Data Returned  |                       |                |                     |                      |          |
| Design Detail  |                       |                |                     |                      |          |
| BTG=0.66 MB, TICS=201, FMT=LPU, XM   |                       |                |                     |                      |          |
| Global mosaic made of 7 swaths across the daylit portion of the disk.  |                       |                |                     |                      |          |
| Mosaic covers: -90 to +90 degrees latitude and<br>+295 to +90 degrees West longitude (at the equator).   |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                       |                |                     |                      |          |
| Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM9  |                       |                |                     |                      |          |
| Galileo Activity Plan Form   |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



165EW:TT= 0 TMC= 1 C= -31.00 XC= -24.00 BS= 0/5053 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=111.80 DEC50= 24.49 cone=127.57 clock=281.45  
 117EW:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/5053  
 1:#s= 7 Cs= 58.00 XCs= 0.00 Cr= -58.00 XCr= 8.00 sD= 246 rD= 44

## 29JNGLOBAL04

DESIGN G3.2 yande:11/15/2000 18:29:21

FILE:P.29JNGLOBAL04

CENTRAL BODY:JUPITER III

MINI:m.29JNGLOBAL04

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 3685:00:0

OBSERVATION:29JNGLOBAL04

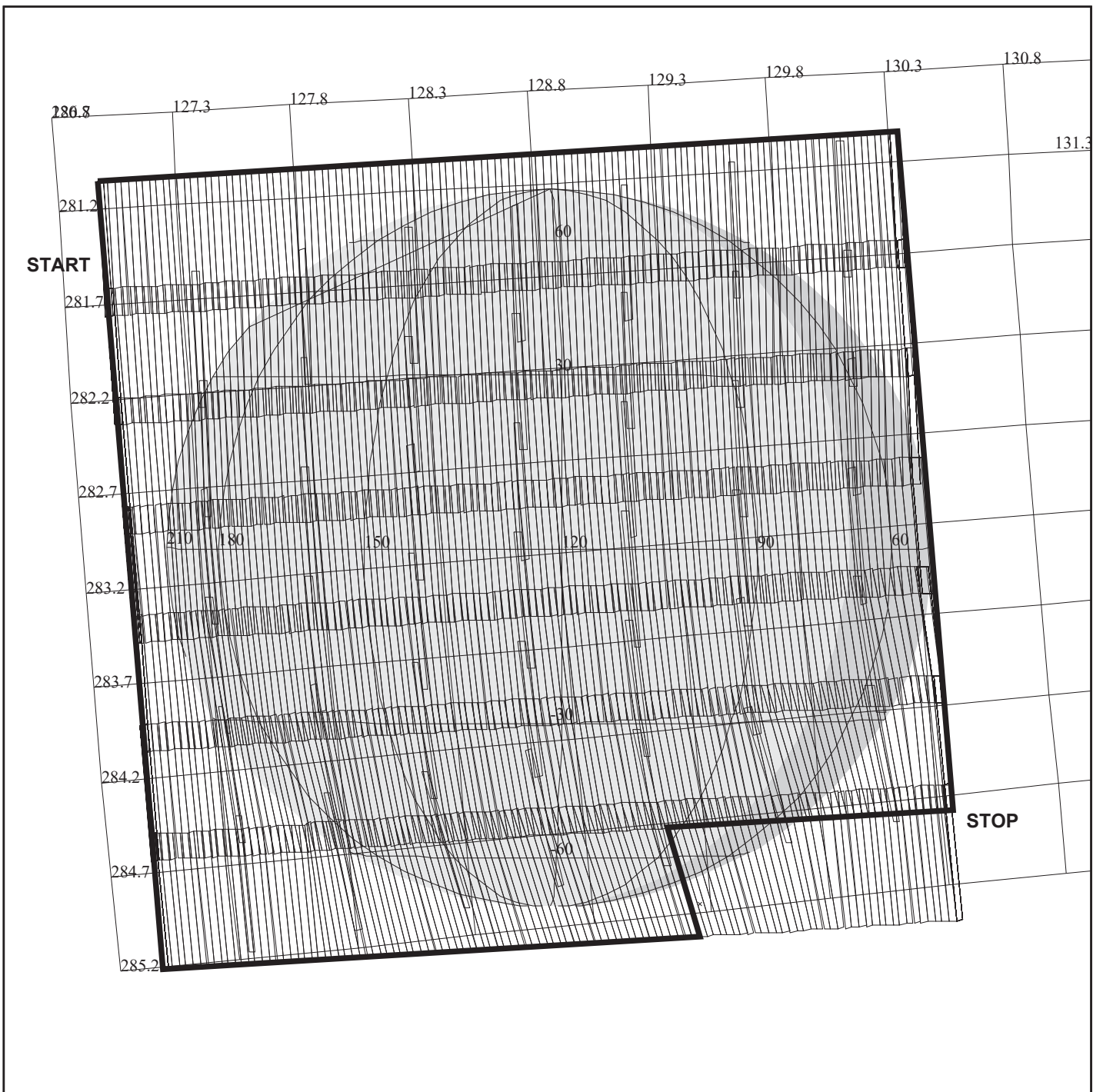
THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

DESCRIP:JUPITER\_GLOBAL\_MAP

|  |                       |                |                     |                      |          |
|--|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter Global Map   |                       | ACTIVITY ID:   | 29JNGLOBAL04-       |                      |          |
|  |                       | START TIME:    | 00-366/17:28:32.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GLOBAL SeqNo 04 -  |                       |                |                     |                      |          |
| Title  | Jupiter Global Map    |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                   | Load ID        | Calendar Date       | 12/31/00             | Week 52  |
| Start  | JEE+CDS 00003681:00:0 |                | 00-366/17:28:32:466 | JEE+002/14:01:54.000 |          |
| End  | JEE+CDS 00003696:00:0 |                | 00-366/17:43:42.466 | JEE+002/14:17:04.000 |          |
| Duration   | 00000015:00:0         |                | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNGLOBAL04-         |                |                     |                      |          |
| Bottom Label   |                       |                |                     |                      |          |
| Plot Key   | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                   | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|  |                       |                |                     | DMS                  | No       |
| Observation Objective  |                       |                |                     |                      |          |
| <p>1 of 6 Jupiter global maps of Jupiter's entire disk.<br/> The set of 6 will map out all 360 degrees longitude of Jupiter<br/> over almost 1 Jupiter rotation (about 8 hours).</p> |                       |                |                     |                      |          |
| Data Returned  |                       |                |                     |                      |          |
| Design Detail  |                       |                |                     |                      |          |
| BTG=0.66 MB, TICS=201, FMT=LPU, XM   |                       |                |                     |                      |          |
| Global mosaic made of 7 swaths across the daylit portion of the disk.  |                       |                |                     |                      |          |
| Mosaic covers: -90 to +90 degrees latitude and<br>+350 to +150 degrees West longitude (at the equator).  |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                       |                |                     |                      |          |
| Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM9  |                       |                |                     |                      |          |
| Galileo Activity Plan Form   |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |





165EU:TT= 0 TMC= 1 C= -31.00 XC= -24.00 BS= 0/3071 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=112.47 DEC50= 24.37 cone=126.95 clock=281.41  
 117EU:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/3071  
 1:#s= 7 Cs= 58.00 XCs= 0.00 Cr= -58.00 XCr= 8.00 sD= 246 rD= 44

## 29JNGLOBAL05

DESIGN G3.2 yande:11/10/2000 14:47: 0

FILE:P.29JNGLOBAL05

CENTRAL BODY:JUPITER III

MINI:m.29JNGLOBAL05

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 3784:00:0

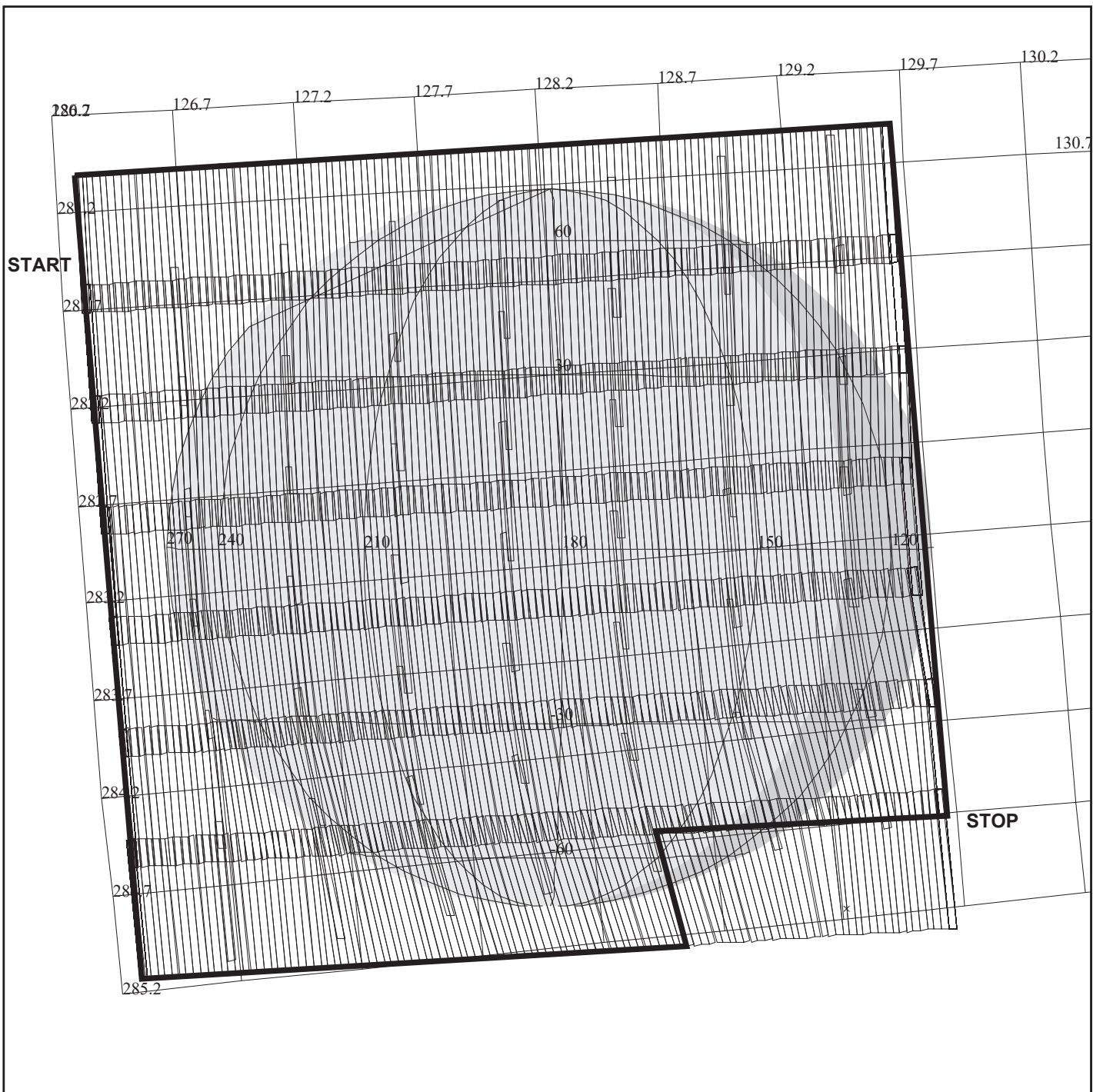
OBSERVATION:29JNGLOBAL05

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

DESCRIP:JUPITER\_GLOBAL\_MAP

|  |                       |                |                     |                      |          |
|--|-----------------------|----------------|---------------------|----------------------|----------|
| Jupiter Global Map   |                       | ACTIVITY ID:   | 29JNGLOBAL05-       |                      |          |
|  |                       | START TIME:    | 00-366/19:08:38.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GLOBAL SeqNo 05 -  |                       |                |                     |                      |          |
| Title  | Jupiter Global Map    |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA    |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                   | Load ID        | Calendar Date       | 12/31/00             | Week 52  |
| Start  | JEE+CDS 00003780:00:0 |                | 00-366/19:08:38:466 | JEE+002/15:42:00.000 |          |
| End  | JEE+CDS 00003795:00:0 |                | 00-366/19:23:48.466 | JEE+002/15:57:10.000 |          |
| Duration   | 00000015:00:0         |                | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNGLOBAL05-         |                |                     |                      |          |
| Bottom Label   |                       |                |                     |                      |          |
| Plot Key   | NIMS                  | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                   | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                   | Spin State     | DUAL                | Scan Platform        | No       |
|  |                       |                |                     | DMS                  | No       |
| Observation Objective  |                       |                |                     |                      |          |
| <p>1 of 6 Jupiter global maps of Jupiter's entire disk.<br/> The set of 6 will map out all 360 degrees longitude of Jupiter<br/> over almost 1 Jupiter rotation (about 8 hours).</p> |                       |                |                     |                      |          |
| Data Returned  |                       |                |                     |                      |          |
| Design Detail  |                       |                |                     |                      |          |
| BTG=0.66 MB, TICS=201, FMT=LPU, XM   |                       |                |                     |                      |          |
| Global mosaic made of 7 swaths across the daylit portion of the disk.  |                       |                |                     |                      |          |
| Mosaic covers: -90 to +90 degrees latitude and<br>+30 to +210 degrees West longitude (at the equator).   |                       |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                       |                |                     |                      |          |
| Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM9  |                       |                |                     |                      |          |
| Galileo Activity Plan Form   |                       |                | 12/01/00            | 00:00:00             | rev 6/95 |



165EV:TT= 0 TMC= 1 C= -32.00 XC= -24.00 BS= 0/1089 TC= 3  
 A= 728 pD= 0 SR=17.450 RA50=113.18 DEC50= 24.24 cone=126.30 clock=281.38  
 117EV:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/1089  
 1:#s= 7 Cs= 58.00 XCs= 0.00 Cr= -58.00 XCr= 8.00 sD= 246 rD= 44

## 29JNGLOBAL06

DESIGN G3.2 yande:11/10/2000 14:47:50

FILE:P.29JNGLOBAL06

CENTRAL BODY:JUPITER III

MINI:m.29JNGLOBAL06

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:JEE 00-364/03:26:38.466 +CDS 3883:00:0

OBSERVATION:29JNGLOBAL06

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700

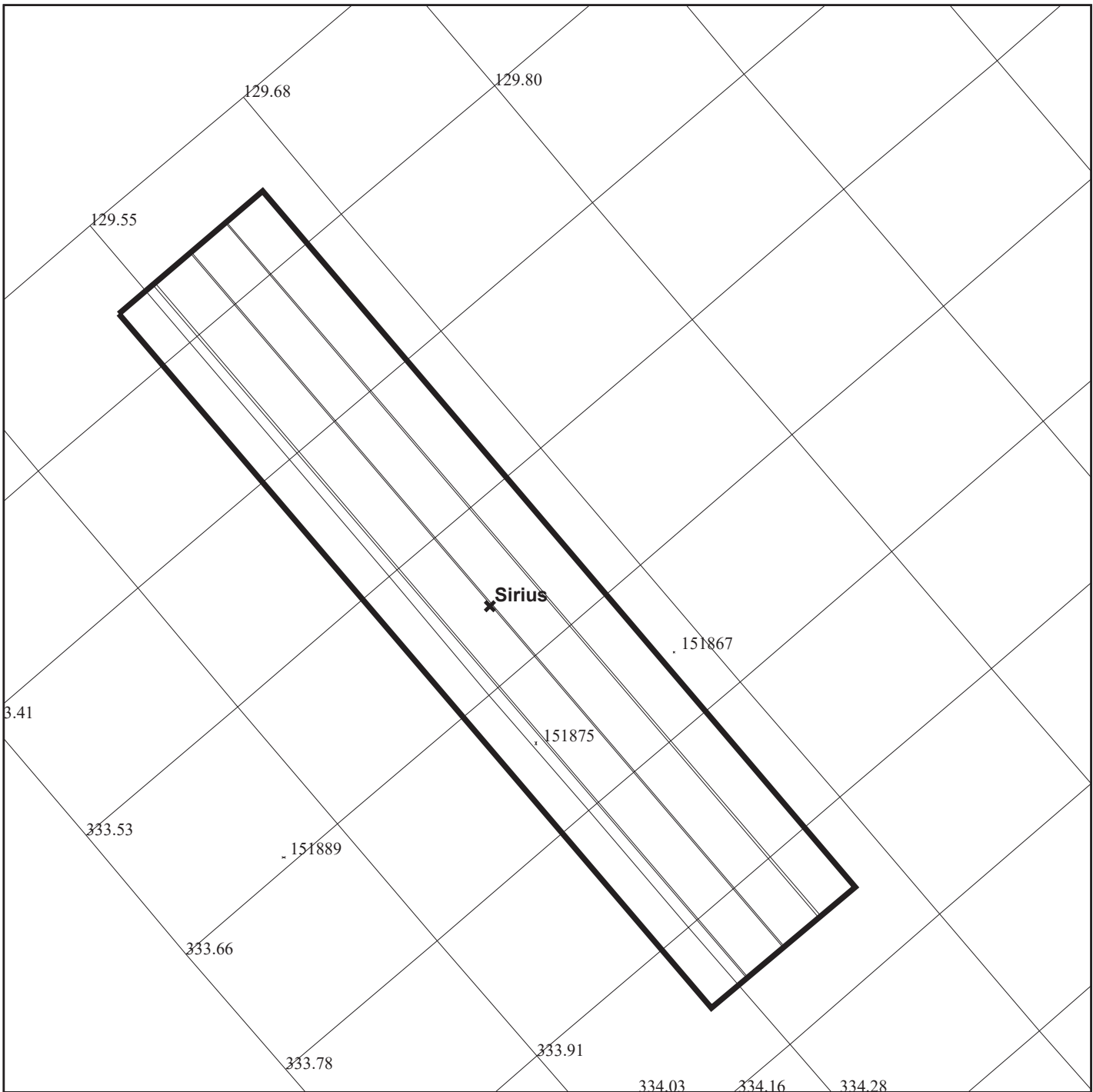
DESCRIP:JUPITER\_GLOBAL\_MAP

|  |                    |                |                     |                      |          |
|--|--------------------|----------------|---------------------|----------------------|----------|
| Jupiter Global Map   |                    | ACTIVITY ID:   | 29JNGLOBAL06-       |                      |          |
|  |                    | START TIME:    | 00-366/20:48:44.466 |                      |          |
| Activity ID: Orbit 29 Target J Inst N OAPEL GLOBAL SeqNo 06 -  |                    |                |                     |                      |          |
| Title  | Jupiter Global Map |                | Instrument          |                      | NIMS     |
| Requestor  | NIMS-AWG/M. SEGURA |                | Team                | NIMS Working Group   | AWG      |
| Time System  | CDS                | Load ID        | Calendar Date       | 12/31/00             | Week 52  |
| Start  | JEE+CDS            | 00003780:00:0  | 00-366/20:48:44:466 | JEE+002/17:22:06.000 |          |
| End  | JEE+CDS            | 00003795:00:0  | 00-366/21:03:54.466 | JEE+002/17:37:16.000 |          |
| Duration   |                    | 00000015:00:0  | 000/00:15:10.000    | 000/00:15:10.000     |          |
| Top Label  | 29JNGLOBAL06-      |                |                     |                      |          |
| Bottom Label   |                    |                |                     |                      |          |
| Plot Key   | NIMS               | Type           | SCI                 |                      |          |
| CDS Bytes  | 300                | Report Options | BOTH                |                      |          |
| CDS Source   | OAP                | Spin State     | DUAL                | Scan Platform        | No       |
|  |                    |                |                     | DMS                  | No       |
| Observation Objective  |                    |                |                     |                      |          |
| <p>1 of 6 Jupiter global maps of Jupiter's entire disk.<br/> The set of 6 will map out all 360 degrees longitude of Jupiter<br/> over almost 1 Jupiter rotation (about 8 hours).</p> |                    |                |                     |                      |          |
| Data Returned  |                    |                |                     |                      |          |
| Design Detail  |                    |                |                     |                      |          |
| BTG=0.66 MB, TICS=201, FMT=LPU, XM   |                    |                |                     |                      |          |
| Global mosaic made of 7 swaths across the daylit portion of the disk.  |                    |                |                     |                      |          |
| Mosaic covers: -90 to +90 degrees latitude and<br>+110 to +270 degrees West longitude (at the equator).  |                    |                |                     |                      |          |
| OBSERVATION ACCIDENTALLY PERFORMED IN CHOPPER 63HZ MODE.   |                    |                |                     |                      |          |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT  |                    |                |                     |                      |          |
| Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM9  |                    |                |                     |                      |          |
| Galileo Activity Plan Form   |                    |                | 12/01/00            | 00:00:00             | rev 6/95 |



|   |                    |                                 |  |
|---|--------------------|---------------------------------|--|
| NIMS Chopper Off  |                    | ACTIVITY ID: 29NNCHOPOF01-      |  |
|   |                    | START TIME: 01-002/02:06:54.000 |  |
| Activity ID: Orbit 29 Target N Inst N OAPEL CHOPOF SeqNo 01 - |                    |                                 |  |
| Title   | NIMS Chopper Off   |                                 | Instrument                               |
| Requestor   | NIMS-SWG/M. SEGURA |                                 | NIMS AWG                                 |
|   | Team               | NIMS                            | Working Group                            |
| Time System   | CDS                | Load ID                         | Calendar Date 06/07/00 Week 23           |
| Start   | JEE+CDS            | 00005617:76:3                   | 01-002/02:06:54.000 JEE+003/22:40:15.533 |
| End   | JEE+CDS            | 00005617:78:8                   | 01-002/02:08:57.000 JEE+003/22:42:18.533 |
| Duration  |                    | 00000002:02:5                   | 000/00:02:03.000 000/00:02:03.000        |
| Top Label   | 29NNCHOPOF01-      |                                 |  |
| Bottom Label  |                    |                                 |  |
| Plot Key  | NIMS               | Type                            | SCI                                      |
| CDS Bytes   | 000                | Report Options                  | TOL                                      |
| CDS Source  | ***                | Spin State                      | N  |
|   |                    | Scan Platform                   | No                                       |
|   |                    | DMS                             | No                                       |
| Observation Objective   |                    |                                 |  |
| Turn off NIMS Chopper   |                    |                                 |  |
| Design Detail   |                    |                                 |  |
| Galileo Activity Plan Form                                    |                    |                                 |  |
| 12/31/00 00:00:00 rev 6/95                                    |                    |                                 |  |

**This page BLANK**



165DA:TT= 0 TMC= 1 C= 0.90 XC= 0.00 BS= 0/3339 TC=14(Sirius )  
 A=1092 pD= 0 SR= 8.000 RA50=100.69 DEC50=-16.62 cone=129.64 clock=333.60  
 117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/3339  
 1:#s= 5 Cs= -1.70 XCs= 0.00 Cr= 1.67 XCr= 0.00 sD= 178 rD= 20

## 29HNSTRCAL01

DESIGN G3.2 yande: 2/21/2001 10:58:37

FILE:P.29HNSTRCAL01

CENTRAL BODY:JUPITER III

MINI:m.29HNSTRCAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:SAT 01-112/16:14:57.066 +CDS 230:00:0

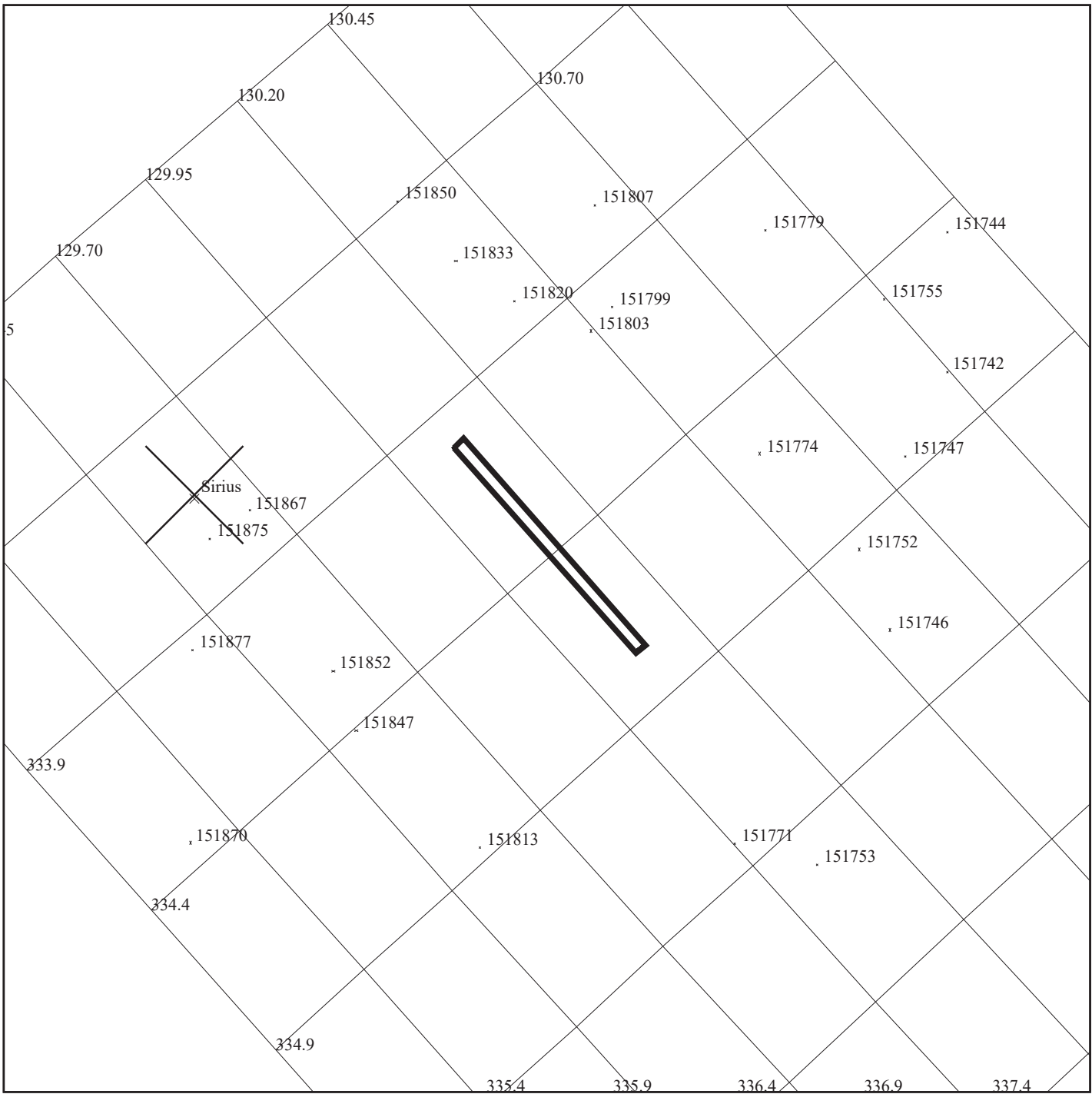
OBSERVATION:29HNSTRCAL01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000

DESCRIP:SIRIUS\_STAR\_CALIBRATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| NIMS Star Calibration   |                       | ACTIVITY ID: 29HNSTRCAL01-      |                                |
|   |                       | START TIME: 01-112/20:01:26.400 |                                |
| Activity ID: Orbit 29 Target H Inst N OAPEL STRCAL SeqNo 01 -   |                       |                                 |                                |
| Title   | NIMS Star Calibration |                                 | Instrument                     |
| Requestor   | NIMS-SWG/M. SEGURA    |                                 | NIMS                           |
|   | Team                  | NIMS Working Group              | SWG                            |
| Time System   | CDS                   | Load ID                         | Calendar Date 04/22/00 Week 16 |
| Start   | SAT+CDS 00000224:00:0 | 01-112/20:01:26.400             | SAT+000/03:46:29.333           |
| End   | SAT+CDS 00000235:24:0 | 01-112/20:12:49.733             | SAT+000/03:57:52.666           |
| Duration  | 00000011:24:0         | 000/00:11:23.333                | 000/00:11:23.333               |
| Top Label   | 29HNSTRCAL01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 275                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | Yes                            |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>This observation is a NIMS STAR calibration using the star Sirius. The data will be used to calibrate the NIMS visible detectors. The calibration data will be recorded.</p>   |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| <ol style="list-style-type: none"> <li>1) Target to the star Sirius.</li> <li>2) Chopper on, Gain State 4,</li> <li>3) Set NIMS to Long Map Mode</li> <li>4) Slew across the star in cone 5 times over 5 Rims.</li> </ol> |                       |                                 |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, LM442, LM144  |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/31/00 10:48:23               | rev 1/99                       |



165DB:TT= 0 TMC=1 C= 8.50 XC= 10.00 BS= 0/6433 TC=14(Sirius )  
 A= 728 pD= 0 SR= 8.000 RA50= 99.95 DEC50=-16.68 cone=130.08 clock=334.34

## 29HNRKCAL01

DESIGN G3.2 yande: 2/21/2001 10:51: 2

FILE:P.29HNRKCAL01

CENTRAL BODY:JUPITER III

MINI:m.29HNRKCAL01

S/C EPH:/DATA/NAVIO/001024-tour.NS

PERIAPSIS:

START:SAT 01-112/16:14:57.066 +CDS 247:00:0

OBSERVATION:29HNRKCAL01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300

DESCRIP:DARK\_SKY\_CALIBRATION

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| NIMS Dark Calibration   |                       | ACTIVITY ID: 29HNDRKCAL01-      |                                |
|   |                       | START TIME: 01-112/20:17:37.066 |                                |
| Activity ID: Orbit 29 Target H Inst N OAPEL DRKCAL SeqNo 01 -   |                       |                                 |                                |
| Title   | NIMS Dark Calibration |                                 | Instrument                     |
| Requestor   | NIMS-SWG/M. SEGURA    |                                 | NIMS                           |
|   | Team                  | NIMS Working Group              | SWG                            |
| Time System   | CDS                   | Load ID                         | Calendar Date 04/22/00 Week 16 |
| Start   | SAT+CDS 00000240:00:0 | 01-112/20:17:37.066             | SAT+000/04:02:40.000           |
| End   | SAT+CDS 00000252:85:0 | 01-112/20:30:41.733             | SAT+000/04:15:44.666           |
| Duration  | 00000012:85:0         | 000/00:13:04.666                | 000/00:13:04.666               |
| Top Label   | 29HNDRKCAL01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 275                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | DMS                            |
|   |                       |                                 | Yes                            |
|   |                       |                                 | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>This observation is a NIMS dark calibration using dark sky.<br/> The calibration data will be recorded.<br/> All 4 gain states will be used.</p> |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| Dark Sky Calibration of all 4 gain states.  |                       |                                 |                                |
| Target to Dark Sky  |                       |                                 |                                |
| Record 1 Rim of each gain state (2, 4, 1 and 3).  |                       |                                 |                                |
| Aliases:  | 29HNDRKCAL01          | Gain State 1                    |                                |
|   | 29HNDRKCAL02          | Gain State 2                    |                                |
|   | 29HNDRKCAL03          | Gain State 3                    |                                |
|   | 29HNDRKCAL04          | Gain State 4                    |                                |
| SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 2,4,3,1 Grating Start 0, MPW, LM442, LM360   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/31/00 10:48:23               | rev 1/99                       |

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| NIMS RCT Calibration  |                       | ACTIVITY ID: 29NNRCTCAL01-      |                                |
|   |                       | START TIME: 01-113/14:04:20.400 |                                |
| Activity ID: Orbit 29 Target N Inst N OAPEL RCTCAL SeqNo 01 -   |                       |                                 |                                |
| Title   | NIMS RCT Calibration  | Instrument                      | NIMS                           |
| Requestor   | NIMS-AWG/K. BAINES    | Team NIMS Working Group         | AWG                            |
| Time System   | CDS                   | Load ID                         | Calendar Date 04/23/00 Week 17 |
| Start   | RTA+CDS 00000725:00:0 | 01-113/14:04:20.400             | RTA+000/12:13:03.333           |
| End   | RTA+CDS 00000773:78:0 | 01-113/14:53:44.400             | RTA+000/13:02:27.333           |
| Duration  | 00000048:78:0         | 000/00:49:24.000                | 000/00:49:24.000               |
| Top Label   | 29NNRCTCAL01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 450                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | No                             |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>This observation is a NIMS radiometric calibration using the RCT target. The data will be used to calibrate the NIMS thermal detectors. The calibration data will be recorded.</p> <p>This calibration will also be used to prepare for later RCT calibrations when the spacecraft power constraints will not allow the RCT heaters to be on while moving the scan platform. To prepare for this eventuality, this calibration will also watch the RCT cool off for 5 Rims to calibrate the RCT cooling rate for use with future RCT calibrations.</p>                             |                       |                                 |                                |
| Data Returned   |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| <ol style="list-style-type: none"> <li>1) Turn on RCT Heaters for 12 hours.</li> <li>2) Set Engineering Variable Map to return NIMS Temps more frequently.</li> <li>3) Set NIMS to Long Map Mode, Gain state 1, Chopper Reference</li> <li>4) Pause playback before using scan platform.</li> <li>5) Slew to Dark (cone = 119.7)</li> <li>6) Slew to RCT (cone = 0.0)</li> <li>7) Record 5 Rims</li> <li>8) Turn off RCT Heaters.</li> <li>9) Record 5 more Rims as RCT cools.</li> <li>10) Slew scan platform to Safe position (cone = 153.0) .</li> <li>11) Chopper off.</li> </ol> |                       |                                 |                                |
| Detectors 9, 10, 11, 12, 13, 14, 15, 16, 17   |                       |                                 |                                |
| Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, LM442, RCT216   |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/31/00 10:48:23               | rev 1/99                       |

|   |                       |                                 |                                |
|---|-----------------------|---------------------------------|--------------------------------|
| NIMS PCT Calibration  |                       | ACTIVITY ID: 29NNPCTCAL01-      |                                |
|   |                       | START TIME: 01-113/22:39:41.000 |                                |
| Activity ID: Orbit 29 Target N Inst N OAPEL PCTCAL SeqNo 01 -   |                       |                                 |                                |
| Title   | NIMS PCT Calibration  | Instrument NIMS                 |                                |
| Requestor   | NIMS-SWG/M. SEGURA    | Team NIMS                       | Working Group SWG              |
| Time System   | CDS                   | Load ID                         | Calendar Date 04/23/00 Week 17 |
| Start   | PCT+CDS 00000000:00:0 | 01-113/22:39:41.400             | PCT+000/00:00:00.000           |
| End   | PCT+CDS 00000000:00:0 | 01-114/01:06:37.733             | PCT+000/00:00:00.000           |
| Duration  | 00000000:00:0         | 000/02:26:56.000                | 000/00:00:00.000               |
| Top Label   | 29NNPCTCAL01-         |                                 |                                |
| Bottom Label  |                       |                                 |                                |
| Plot Key  | NIMS                  | Type                            | SCI                            |
| CDS Bytes   | 275                   | Report Options                  | BOTH                           |
| CDS Source  | OAP                   | Spin State                      | DUAL                           |
|   |                       | Scan Platform                   | Yes                            |
|   |                       | DMS                             | No                             |
| Observation Objective   |                       |                                 |                                |
| <p>This observation is a NIMS photometric calibration usint the PCT target. The data will be used to calibrate the NIMS visible detectors. The calibration data will be recorded. A science-turn will be used to minimize the off-sun angle. At this time the off-sun angle is about 0.0 degrees.</p> <p>This a joint PCT calibration with SSI.</p> <p>This is the last NIMS PCT Calibration.</p> <p>Data Returned</p>  |                       |                                 |                                |
| Design Detail   |                       |                                 |                                |
| <ol style="list-style-type: none"> <li>1) Science Turn to 0.0 degrees sun angle.</li> <li>2) Reload NIMS Flight Software.</li> <li>3) Long Map, Gain State 4.</li> <li>4) Record 2 RIMs of Dark.</li> <li>5) Slew to PCT (cone 54.88, clock = 244.07)</li> <li>6) Record 10 RIMs of PCT.</li> <li>7) SSI PCT Calibration.</li> <li>8) NIMS to Safe Mode.</li> <li>9) Chopper Off.</li> <li>10) Science Turn to Earth Pointing.</li> </ol> <p>Detectors 1, 2, 4, 5, 6, 7, 9, 10, 11</p> <p>Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, LM408, PCT216</p> |                       |                                 |                                |
| Galileo Activity Plan Form  |                       | 12/31/00 10:48:23               | rev 1/99                       |



## Chapter 6 - Edit Tables

### Contents

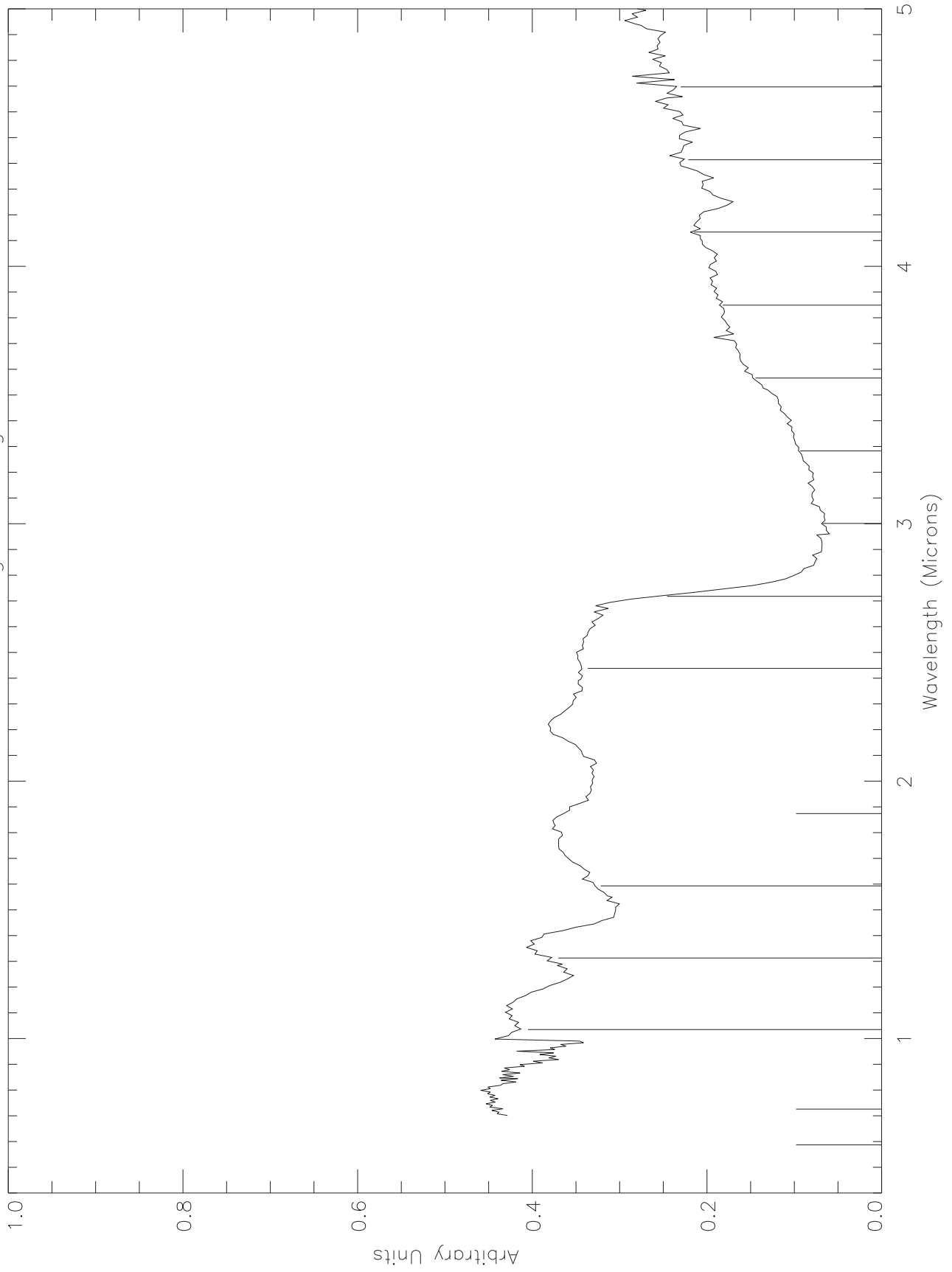
|     | Sub-Section        | Page |
|-----|--------------------|------|
| 6.0 | Contents .....     | 1    |
| 6.1 | Introduction ..... | 2    |
| 6.2 | Callisto .....     | 3    |
| 6.3 | Europa .....       | 4    |
| 6.4 | Jupiter .....      | 5    |
| 6.5 | Ganymede .....     | 6    |
| 6.6 | PCT .....          | 7    |
| 6.7 | RCT .....          | 8    |

## Introduction to Chapter 6

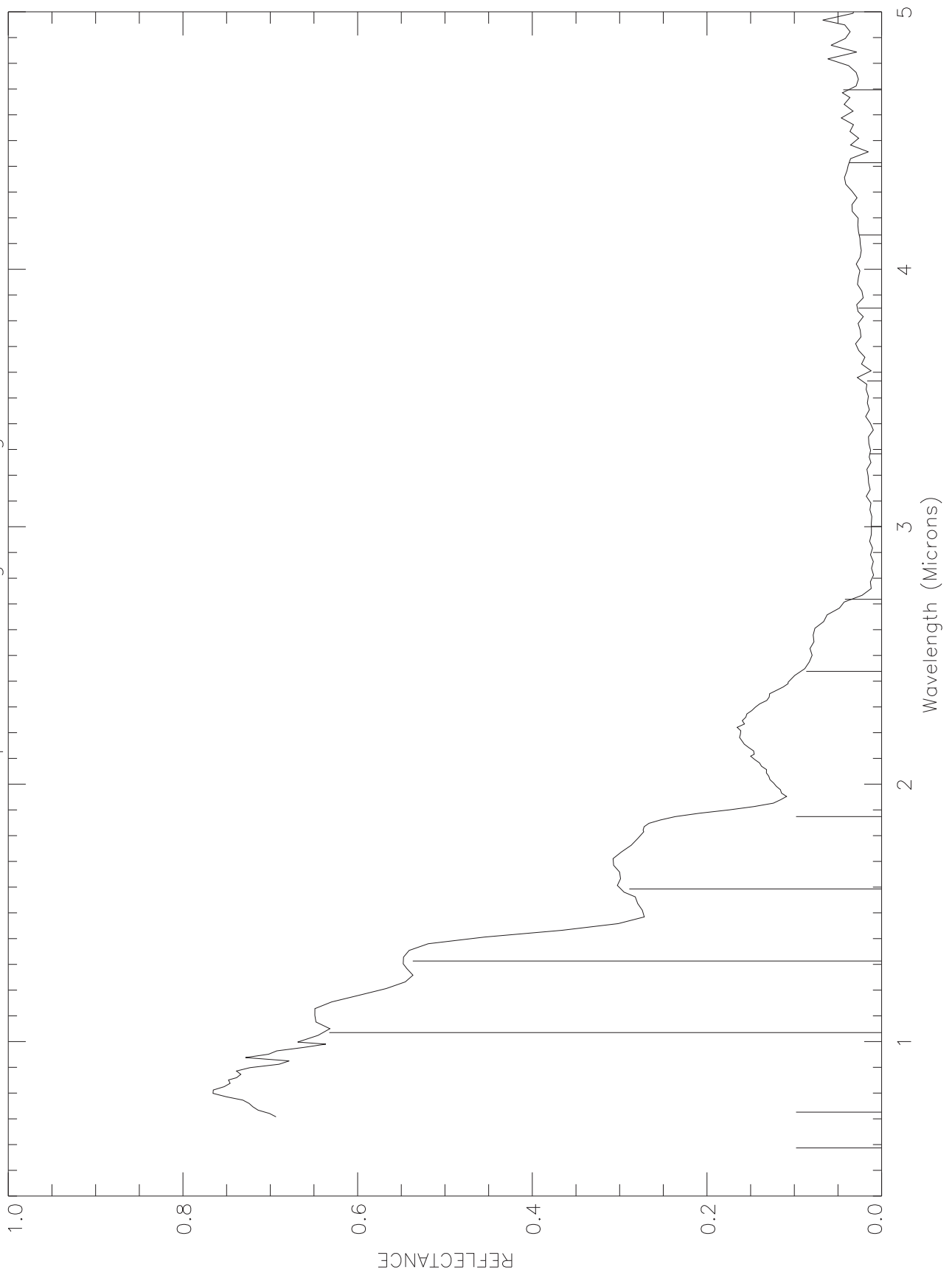
### NIMS Edit Table Plots

This chapter contains plots of the NIMS Edit Tables used in G29. The representative spectra used in these plots are observational reference spectra for the target body as obtained from telescopic observations from the Earth. Each reference spectrum is a composite of multiple published sources. Vertical lines below the reference curves mark the wavelengths selected for return. Where no spectral information is available, the selected wavelengths are shown as lines with amplitude equal to .05 on the vertical axis.

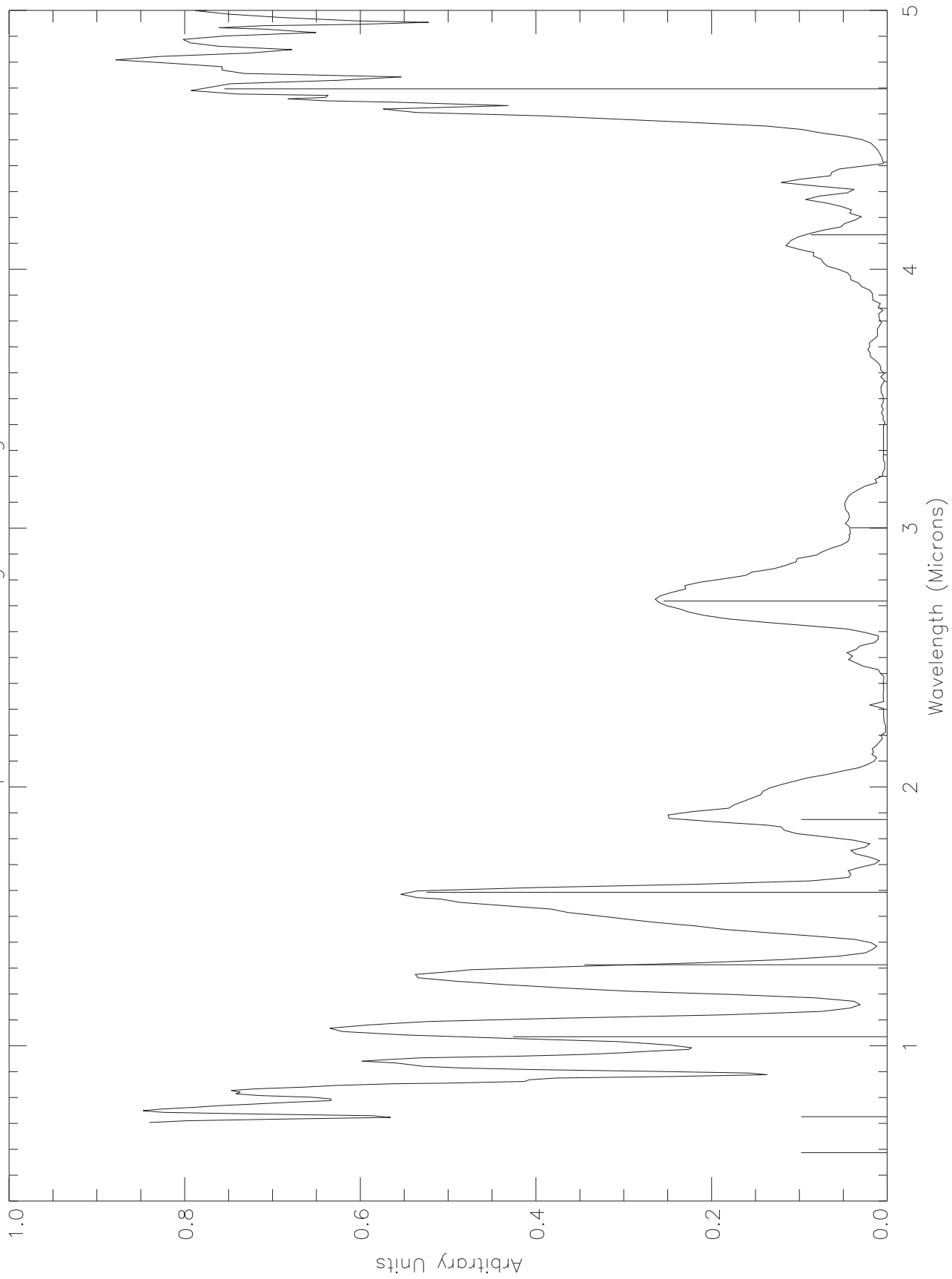
Callisto Fixed—Long Wavelengths



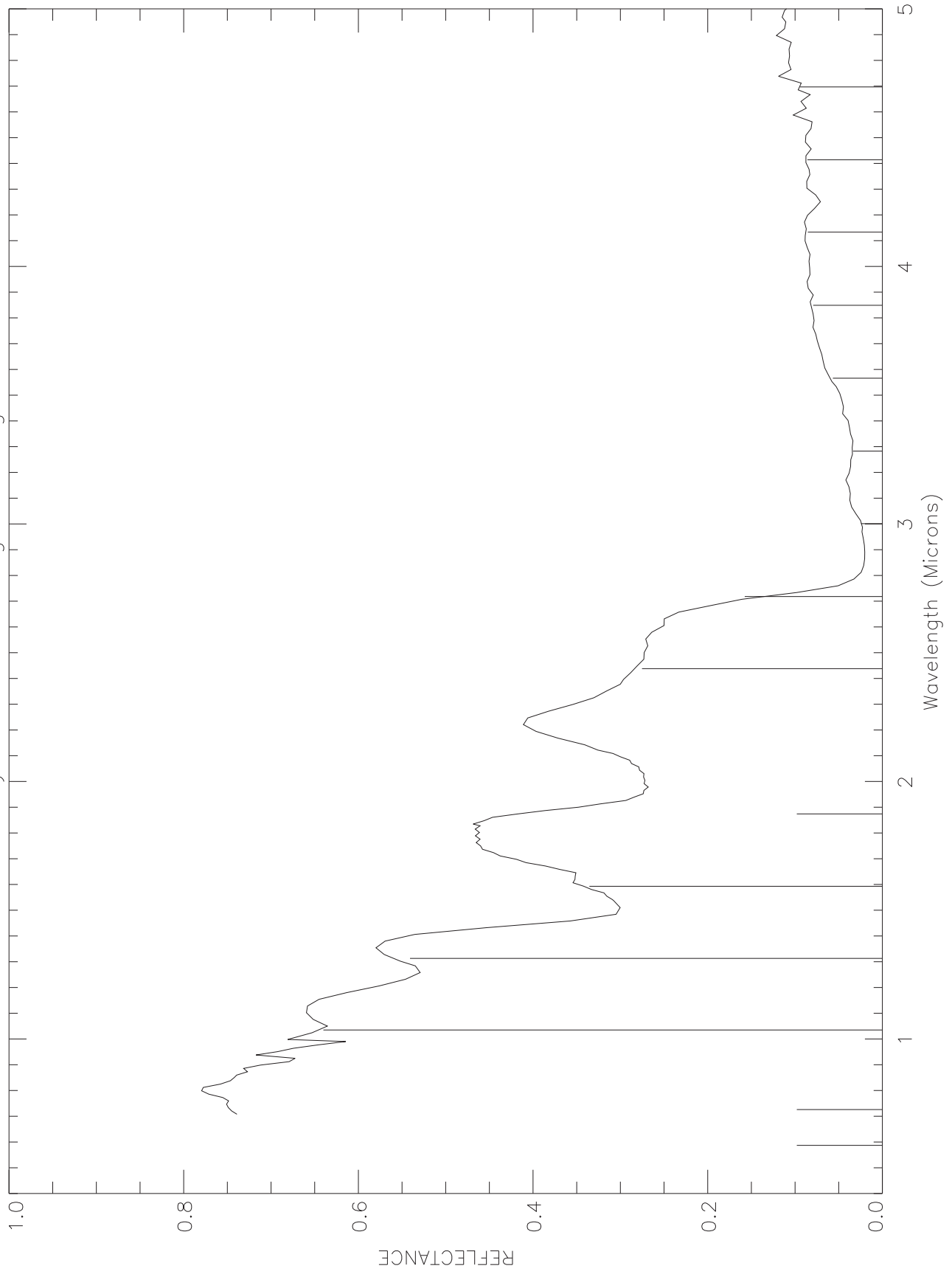
Europa Fixed—Long Wavelengths

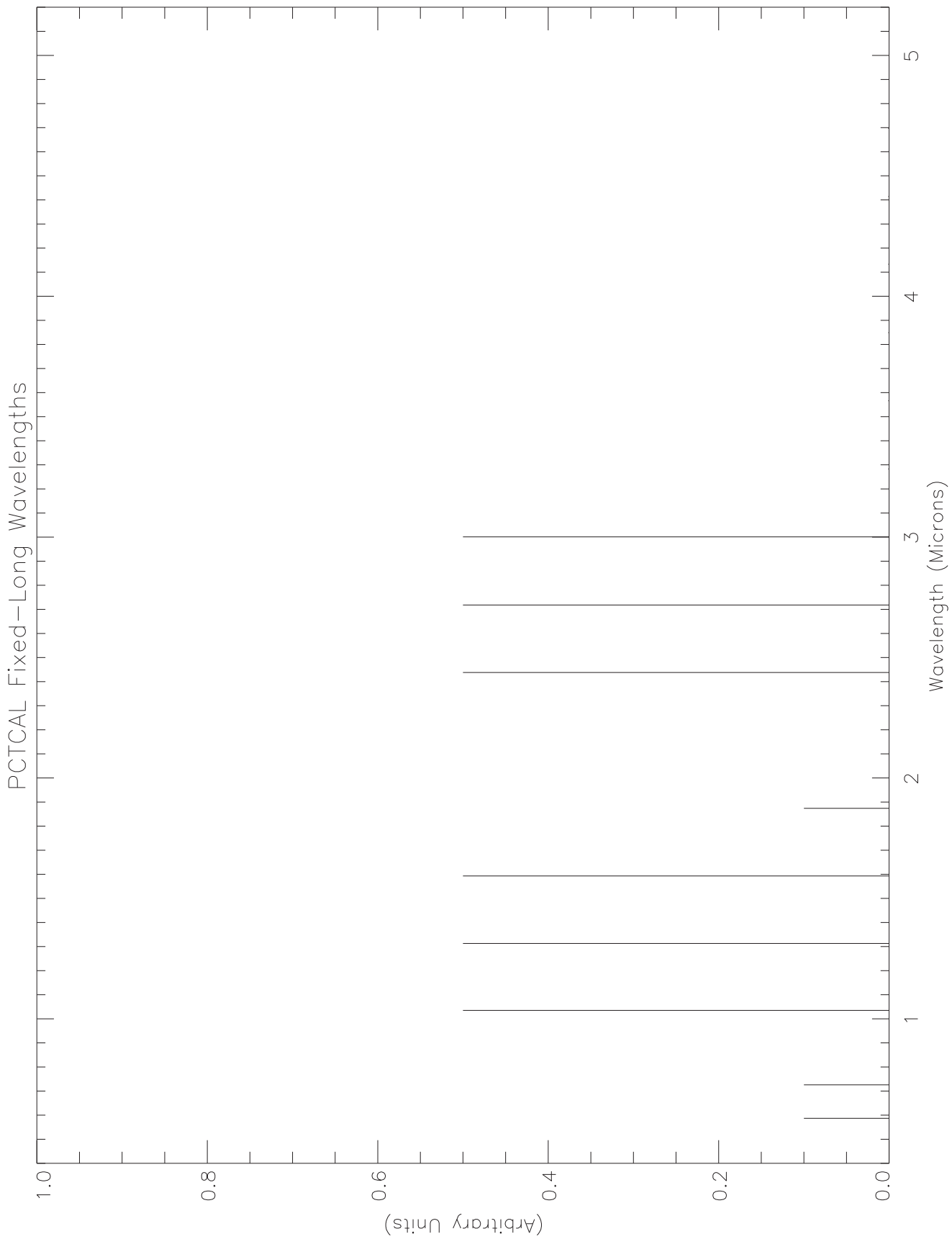


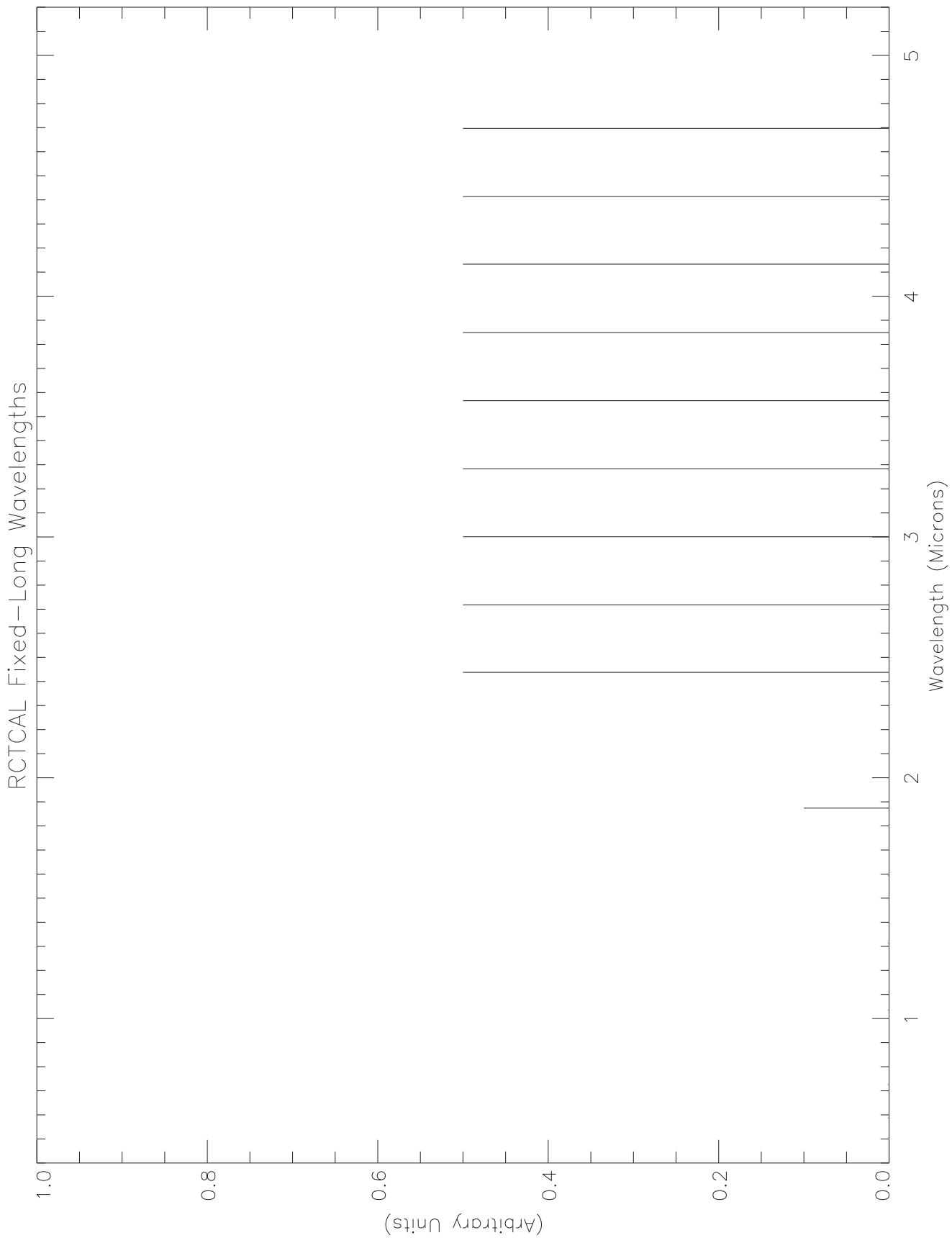
Jupiter Fixed—Long Wavelengths



Ganymede Fixed-Long Wavelengths









## Chapter 7 - Data Return

### Contents

|      | Sub-Section                                    | Page  |
|------|--|-------|
| 7.0  | Contents .....                                 | 1     |
| 7.1  | Introduction to Chapter 7 .....                | 2     |
| 7.2  | NIMS G29 Observation Geometry Plot .....       | 3     |
| 7.3  | NIMS Calibration Geometry Plot .....           | 4     |
| 7.4  | Final G29 Playback Model .....                 | 5-8   |
| 7.5  | Recap of G29 Playback Events .....             | 9     |
| 7.6  | Timeline of G29 Playback Events .....          | 9-22  |
| 7.7  | G29 NIMS Anomaly Discussion .....              | 23-24 |
| 7.8  | NIMS Archived EDRs and CUBEs .....             | 25    |
| 7.9  | NIMS Data Formats, Types, Labels and Access .. | 26-27 |
| 7.10 | Understanding the NIMS Mask .....              | 28    |

## Introduction to Chapter 7

This chapter is a report on the NIMS data return for the G29 orbit. Due to the low downlink data rates available for Galileo Jupiter Operations and other unforeseen and unpredictable events during the G29 Encounter and Cruise, not all NIMS data recorded on the tape recorder or selected in real-time were returned. The previous 6 chapters nominally describe the planning and intention of the NIMS observations for this orbit, except the obstab section in chapter 4 which was updated to give the latest parameters for the data that were actually returned.

There were thirty-six autonomous reloads of the NIMS RAM code from CDS during the G29 encounter, one just before each science observation. One software halt was inferred during G29. The approach that we are taking to avoid data loss due to processor halts has proven to be very successful.

The NIMS grating became stuck some time between C22 and I24. NIMS can now return only 17 (of 408) wavelengths. This has caused a drastic change in NIMS science capabilities. Detectors 1, 2 and 7 now have very low sensitivity. Detectors 3 and 8 are still not functioning. NIMS now returns only 12 useful wavelengths. Interesting science can still be carried out given the current condition of the instrument.

One observation (29JNGLOBAL06) took data in chopper 63Hz mode. The 37IST command which set the chopper mode failed to go from 63Hz to Reference mode. The 37IST command selected the gain state and chopper mode in the same command string.

The plots on the pages 3 and 4 show the geometry of the NIMS G29 observations using a north trajectory pole projection. The 'returned' observations are in Bold characters and the 'non-returned' in gray. The observations with an asterix were taken with the NIMS software halted.

The spreadsheets on pages 5 through 8 summarize the 'final' playback model for the G29 data returned.

The text on page 9 gives a 'recap' of the G29 playback events which affected which observations were returned.

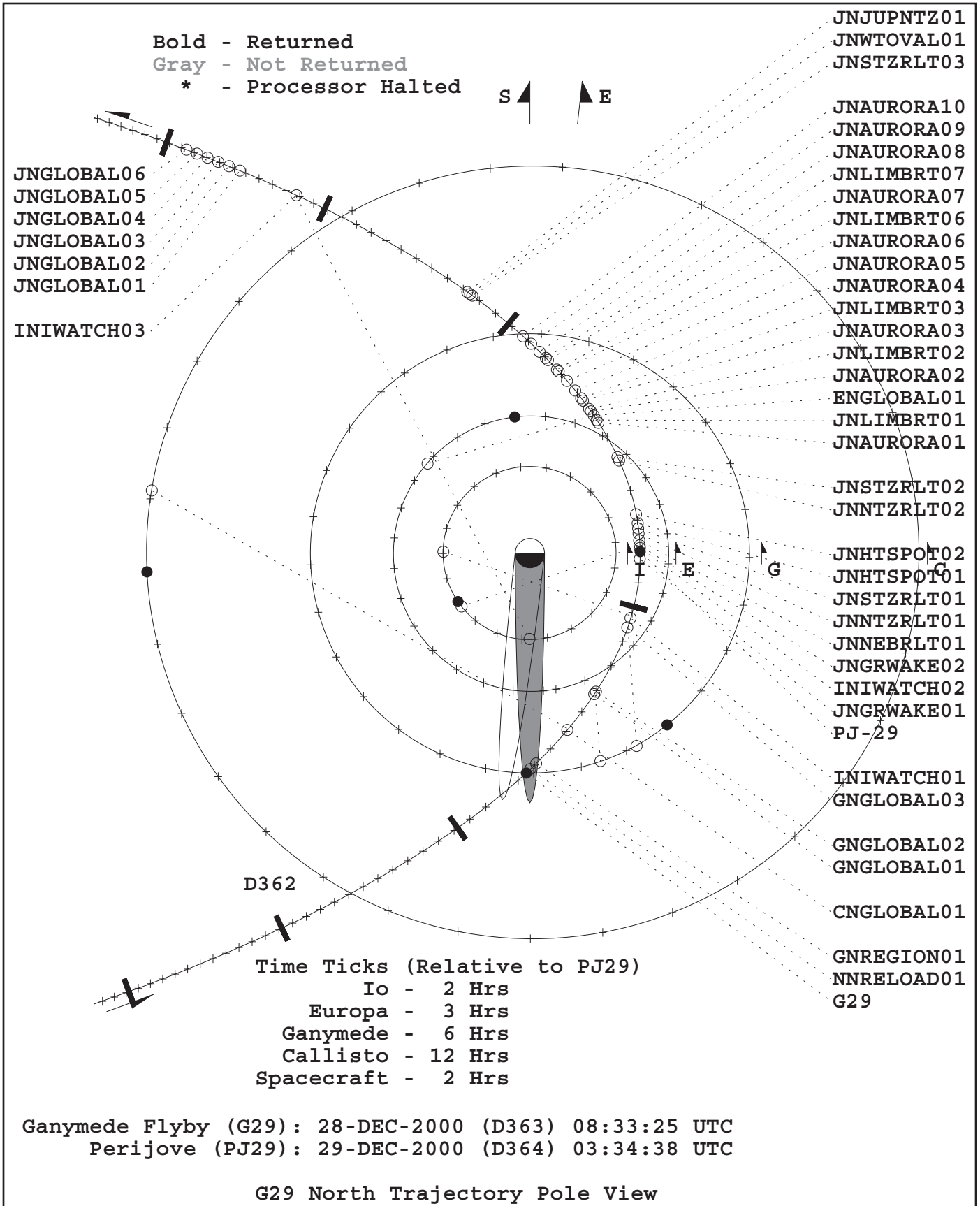
A Timeline of G29 playback events is on pages 9 through 22.

The text on pages 23 and 24 describes the G29 NIMS and Spacecraft Anomalies.

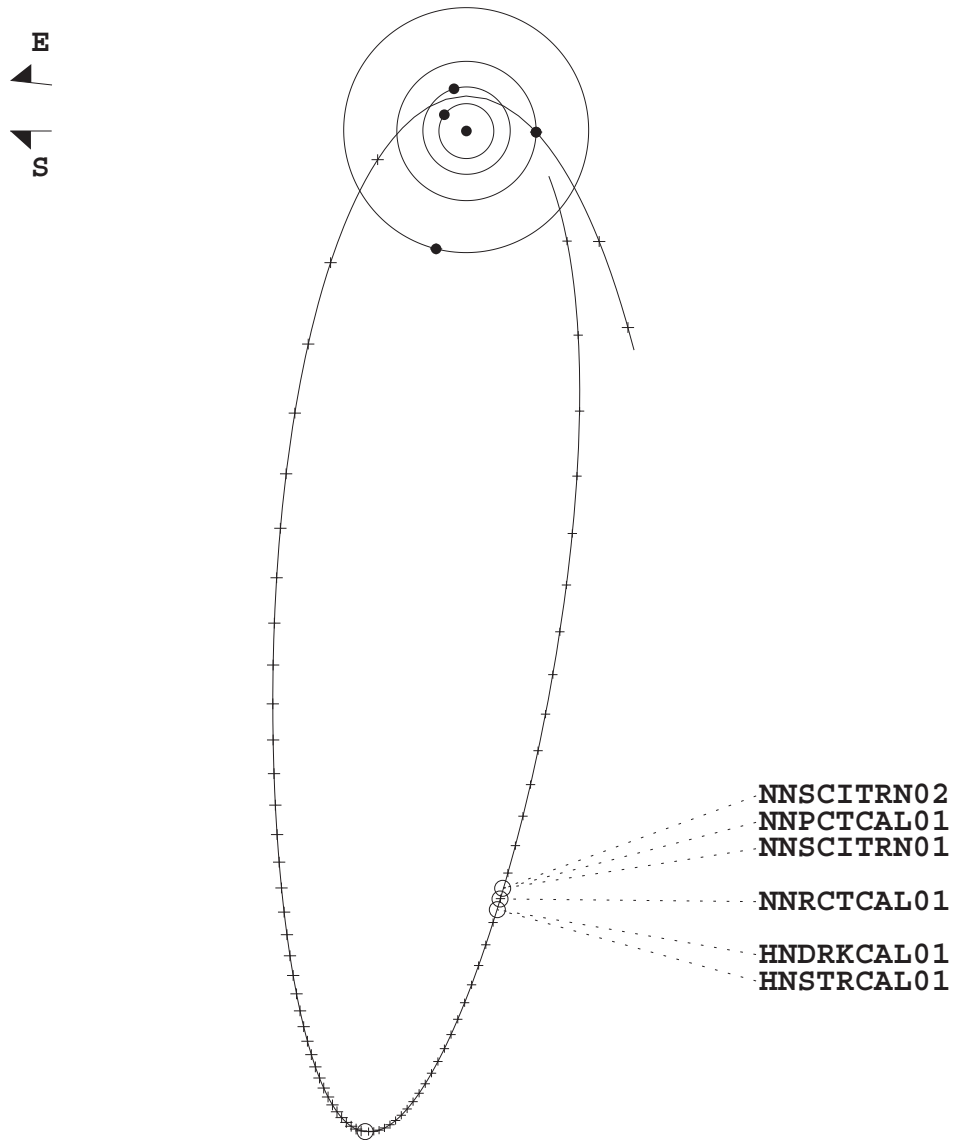
The text on page 25 gives a brief discussion of the NIMS data files. Additional information about NIMS data formats, data types, data labels and data access is given on pages 26 and 27.

The text on page 28 is a guide to understanding the NIMS MASK.

# NIMS G29 OBSERVATIONS



# NIMS G29 CALIBRATIONS



Time Ticks (Relative to G29)  
Spacecraft - 2 Days

Ganymede Flyby (G29): 28-DEC-2000 (D363) 08:33:25 UTC  
Perijove (PJ29): 29-DEC-2000 (D364) 03:34:38 UTC

G29 North Trajectory Pole View

# NIMS G29 DATA RETURN

| Activity ID     | Observation Title       | NIMS Edit Table | NIMS PB Table | Mode | Gain | Grating Start | Grating Offset | Record Format | PSID |
|-----------------|-------------------------|-----------------|---------------|------|------|---------------|----------------|---------------|------|
| 29NREGION01     | Ganymede Region Obs     | G29GLM442       | G29GLMFG288   | LM   | 2    | 0             | 4              | MPW           | DA   |
| 29CNGLOBAL01    | Callisto Global Obs     | G29CLM442       | G29CLMFG288   | LM   | 4    | 0             | 4              | MPW           | DB   |
| 29NGLOBAL01     | Ganymede Global Obs 01  | G29GLMFG252     | G29GLMFG252   | LM   | 2    | 0             | 4              | LPU           | DC   |
| 29NGLOBAL03     | Ganymede Global Obs 03  | G29GLMFG252     | G29GLMFG252   | LM   | 2    | 0             | 4              | LPU           | DE   |
| 29INIWATCH01    | Io Monitoring 01        | G29ILM442       | G29ILMFG288   | LM   | 2    | 0             | 4              | MPW           | DF   |
| 29INIWATCH02    | Io Monitoring 02        | G29ILM442       | G29ILMFG288   | LM   | 2    | 0             | 4              | MPW           | DH   |
| 29JNGRWAKE02    | Jupiter GRS Wake Obs 02 | G29JLMFG240     | G29JLMFG48    | LM   | 2    | 0             | 4              | LPU           | DI   |
| 29JNNERLT01     | Jupiter R/T NEB Obs 01  |                 |               | LM   | 2    | 0             | 4              | LPU           | DJ   |
| 29JNNTRLT01     | Jupiter R/T MTZ Obs 01  |                 |               | LM   | 2    | 0             | 4              | LPU           | DK   |
| 29JNSTZRLT01    | Jupiter R/T STZ Obs 01  |                 |               | LM   | 2    | 0             | 4              | LPU           | DL   |
| 29JNHTSPOT01    | Jupiter Hot Spot Obs 01 | G29JLMFG240     | G29JLMFG48    | LM   | 2    | 0             | 4              | LPU           | DM   |
| 29JNNTZRLT02    | Jupiter R/T NTZ Obs 02  |                 |               | LM   | 2    | 0             | 4              | LPU           | DP   |
| 29JNSTZRLT02    | Jupiter R/T STZ Obs 02  |                 |               | LM   | 2    | 0             | 4              | LPU           | DQ   |
| 29JNAURORA01    | Jupiter Aurora Obs 01   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | DR   |
| 29JNLIMBRT01    | Jupiter R/T Limb Obs 01 |                 |               | LM   | 4    | 0             | 4              | LPU           | DS   |
| 29ENGLOBAL01    | Europa Global Obs       | G29ELM442       | G29ELMFG288   | LM   | 3    | 0             | 4              | MPW           | DT   |
| 29JNLIMBRT02    | Jupiter R/T Limb Obs 02 |                 |               | LM   | 4    | 0             | 4              | LPU           | DV   |
| 29JNAURORA03    | Jupiter Aurora Obs 03   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | DX   |
| 29JNLIMBRT03    | Jupiter R/T Limb Obs 03 |                 |               | LM   | 4    | 0             | 4              | LPU           | DY   |
| 29JNAURORA04    | Jupiter Aurora Obs 04   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | DZ   |
| 29JNAURORA06    | Jupiter Aurora Obs 06   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | ED   |
| 29JNLIMBRT06    | Jupiter R/T Limb Obs 06 |                 |               | LM   | 4    | 0             | 4              | LPU           | EE   |
| 29JNAURORA07    | Jupiter Aurora Obs 07   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | EF   |
| 29JNLIMBRT07    | Jupiter R/T Limb Obs 07 |                 |               | LM   | 4    | 0             | 4              | LPU           | EG   |
| 29JNAURORA08    | Jupiter Aurora Obs 08   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | EH   |
| 29JNAURORA09    | Jupiter Aurora Obs 09   | G29JLMFG240     | G29GLMFG72    | LM   | 4    | 0             | 4              | LPU           | EK   |
| 29JNSTZRLT03    | Jupiter R/T STZ Obs 03  |                 |               | LM   | 2    | 0             | 4              | LPU           | EP   |
| 29JNWTVAL01     | Jupiter white Oval Obs  | G29JLMFG240     | G29JLMFG48    | LM   | 2    | 0             | 4              | LPU           | EQ   |
| 29INIWATCH03    | Io Monitoring 03        | G29ILM442       | G29ILMFG288   | LM   | 2    | 0             | 4              | MPW           | ES   |
| 29JNGLOBAL02    | Jupiter Global Map 02   | G29JXMFG10      | G29JXMFG9     | XM   | 2    | 0             | 4              | LPU           | FU   |
| 29JNGLOBAL03    | Jupiter Global Map 03   | G29JXMFG10      | G29JXMFG9     | XM   | 2    | 0             | 4              | LPU           | EV   |
| 29JNGLOBAL04    | Jupiter Global Map 04   | G29JXMFG10      | G29JXMFG9     | XM   | 2    | 0             | 4              | LPU           | EW   |
| 29JNGLOBAL05    | Jupiter Global Map 05   | G29JXMFG10      | G29JXMFG9     | XM   | 2    | 0             | 4              | LPU           | EX   |
| 29JNGLOBAL06    | Jupiter Global Map 06   | G29JXMFG10      | G29JXMFG9     | XM   | 2    | 0             | 4              | LPU           | EY   |
| 29NREGION01-gf  | Ganymede REGION Obs     | G29GLM442       | G29GLMFG288   | LM   | 2    | 0             | 4              | MPW           | DA   |
| 29NREGION01     | Ganymede REGION Obs     | G29GLM442       | G29GLMFG144   | LM   | 2    | 0             | 4              | MPW           | DA   |
| 29NGLOBAL01-gf  | Ganymede Global Obs 01  | G29GLMFG252     | G29GLMFG252   | LM   | 2    | 0             | 4              | LPU           | DC   |
| 29NGLOBAL02     | Ganymede Global Obs 02  | G29GLMFG252     | G29GLMFG126   | LM   | 2    | 0             | 4              | LPU           | DD   |
| 29NGLOBAL03-gf  | Ganymede Global Obs 03  | G29GLMFG252     | G29GLMFG252   | LM   | 2    | 0             | 4              | LPU           | DE   |
| 29JNGRWAKE01    | Jupiter GRS Wake Obs 01 | G29JLMFG240     | G29JLMFG48    | LM   | 2    | 0             | 4              | LPU           | DG   |
| 29JNGRWAKE02-gf | Jupiter GRS Wake Obs 01 | G29JLMFG240     | G29JLMFG48    | LM   | 2    | 0             | 4              | LPU           | DI   |
| 29JNHTSPOT01-gf | Jupiter Hot Spot Obs 01 | G29JLMFG240     | G29JLMFG48    | LM   | 2    | 0             | 4              | LPU           | DM   |

# NIMS G29 DATA RETURN

| Activity ID  | Observation Title       | NIMS Edit Table | NIMS PB Table | Mode | Gain    | Grating Start | Grating Offset | Record Format | PSID |
|--|-------------------------|-----------------|---------------|------|---------|---------------|----------------|---------------|------|
| 29JNHTSPOT02   | Jupiter Hot Spot Obs 02 | G29JLMFG240     | G29JLMFG48    | LM   | 2       | 0             | 4              | LPU           | DN   |
| 29ENGLOBAL01-gf  | Europa Global           | G29ELM442       | G29ELMFG288   | LM   | 3       | 0             | 4              | MPW           | DT   |
| 29JNAURORA02   | Jupiter Aurora Obs 02   | G29JLMFG240     | G29GLMFG72    | LM   | 4       | 0             | 4              | LPU           | DU   |
| 29JNAURORA05   | Jupiter Aurora Obs 05   | G29JLMFG240     | G29GLMFG72    | LM   | 4       | 0             | 4              | LPU           | EB   |
| 29JNAURORA06-gf  | Jupiter Aurora Obs 06   | G29JLMFG240     | G29GLMFG72    | LM   | 4       | 0             | 4              | LPU           | ED   |
| 29JNAURORA08-gf  | Jupiter Aurora Obs 08   | G29JLMFG240     | G29GLMFG72    | LM   | 4       | 0             | 4              | LPU           | EH   |
| 29JNAURORA10   | Jupiter Aurora Obs 10   | G29JLMFG240     | G29GLMFG72    | LM   | 4       | 0             | 4              | LPU           | EL   |
| 29JNTOVAL01-gf   | Jupiter White Oval Obs  | G29JLMFG240     | G29JLMFG48    | LM   | 2       | 0             | 4              | LPU           | EQ   |
| 29JNJUPNTZ01   | Jupiter NTZ Obs         | G29JLMFG240     | G29JLMFG24    | LM   | 2       | 0             | 4              | LPU           | ER   |
| 29JNINWATCH03-gf   | Io Monitoring 03        | G29ILM442       | G29ILMFG288   | LM   | 2       | 0             | 4              | MPW           | ES   |
| 29JNGLOBAL01   | Jupiter Global Map 01   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | ET   |
| 29JNGLOBAL02-gf  | Jupiter Global Map 02   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | EU   |
| 29JNGLOBAL03-gf  | Jupiter Global Map 03   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | EV   |
| 29JNGLOBAL04-gf  | Jupiter Global Map 04   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | EW   |
| 29JNGLOBAL06-gf  | Jupiter Global Map 06   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | EY   |
| 29GNREGION01-gf  | Ganymede Region Obs     | G29GLM442       | G29GLMFG288   | LM   | 2       | 0             | 4              | MPW           | DA   |
| 29GNGLOBAL01-gf  | Ganymede Global Obs 01  | G29GLMFG252     | G29GLMFG252   | LM   | 2       | 0             | 4              | LPU           | DC   |
| 29GNGLOBAL02-gf  | Ganymede Global Obs 02  | G29GLMFG252     | G29GLMFG126   | LM   | 2       | 0             | 4              | LPU           | DD   |
| 29JNINWATCH01-gf   | Io Monitoring 01        | G29ILM442       | G29ILMFG288   | LM   | 2       | 0             | 4              | MPW           | DF   |
| 29JNHTSPOT02-gf  | Jupiter Hot Spot Obs 02 | G29JLMFG240     | G29JLMFG48    | LM   | 2       | 0             | 4              | LPU           | DN   |
| 29JNAURORA10-gf  | Jupiter Aurora Obs 10   | G29JLMFG240     | G29GLMFG72    | LM   | 4       | 0             | 4              | LPU           | EL   |
| 29JNJUPNTZ01-gf  | Jupiter NTZ Obs         | G29JLMFG240     | G29JLMFG24    | LM   | 2       | 0             | 4              | LPU           | EP   |
| 29HNSTRCAL01   | Star Calibration        | G29HLMFG442     | G29HLMFG144   | LM   | 4       |               |                |               | DA   |
| 29HNDRKCAL01   | Dark Calibration        | G29HLMFG442     | G29HLMFG360   | LM   | 1,2,3,4 |               |                |               | DB   |
| 29NNRCTCAL01   | RCT Calibration         | G29HLMFG442     | G29HLMFG216   | LM   | 1       |               |                |               | DC   |
| 29NNPCTCAL01   | PCT Calibration         | G29HLMFG442     | G29HLMFG192   | LM   | 4       |               |                |               | DD   |
| 29GNREGION01-gf  | Ganymede Region Obs     | G29GLM442       | G29GLMFG288   | LM   | 2       | 0             | 4              | MPW           | DA   |
| 29GNGLOBAL01-gf  | Ganymede Global Obs 01  | G29GLMFG252     | G29GLMFG252   | LM   | 2       | 0             | 4              | LPU           | DB   |
| 29JNINWATCH01-gf   | Io Monitoring 01        | G29ILM442       | G29ILMFG288   | LM   | 2       | 0             | 4              | MPW           | DF   |
| 29JNJUPNTZ01-gf  | Jupiter NTZ Obs         | G29JLMFG240     | G29JLMFG24    | LM   | 2       | 0             | 4              | LPU           | ER   |
| 29JNGLOBAL01-gf  | Jupiter Global Map 01   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | ET   |
| 29JNGLOBAL04-gf  | Jupiter Global Map 04   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | EW   |
| 29JNGLOBAL06-gf  | Jupiter Global Map 06   | G29JXMFG10      | G29JXMFG9     | XM   | 2       | 0             | 4              | LPU           | EY   |
| 29HNDRKCAL01-gf  | Dark Calibration        | G29HLMFG442     | G29HLMFG360   | LM   | 1,2,3,4 |               |                |               | DB   |
| 29NNRCTCAL01-gf  | RCT Calibration         | G29HLMFG442     | G29HLMFG216   | LM   | 1       |               |                |               | DC   |
| 29NNPCTCAL01-gf  | PCT Calibration         | G29HLMFG442     | G29HLMFG192   | LM   | 4       |               |                |               | DD   |
| Tables created for the NIMS fixed-grating case include the letters FG in the table name. |                         |                 |               |      |         |               |                |               |      |

# NIMS G29 DATA RETURN

| Activity ID  | Mode | Record Format | Wave-lengths Returned | Record Time (sec.) | PB time (sec) | Selected Bits to Tape | Bits to Tape | Mode Cycle (sec) | AACS Mbits | Comp | Total BTG (Mbits) | Data Reduct Factor | Pass |
|--------------|------|---------------|-----------------------|--------------------|---------------|-----------------------|--------------|------------------|------------|------|-------------------|--------------------|------|
|              |      |               |                       | (sec.)             | (sec)         | sBOT (Mbits)          | BOT (Mbit)   | (sec)            | c          |      | (w/4% ohead)      | (sBOT/BTG)         |      |
| 29GNREGION01 | LM   | MPW           | 288                   | 900                | 479           | 5.52                  | 10.37        | 8.667            | 0.03       | 1.79 | 1.850             | 2.98               | 1    |
| 29CNGLOBAL01 | LM   | MPW           | 288                   | 125                | 123           | 1.42                  | 1.44         | 8.667            | 0.01       | 1.76 | 0.483             | 2.93               | 1    |
| 29NGLOBAL01  | LM   | LPU           | 252                   | 600                | 588           | 3.63                  | 3.70         | 8.667            | 0.03       | 1.52 | 2.340             | 1.55               | 1    |
| 29NGLOBAL03  | LM   | LPU           | 252                   | 475                | 463           | 2.86                  | 2.93         | 8.667            | 0.03       | 1.34 | 2.090             | 1.37               | 1    |
| 29IN1WATCH01 | LM   | MPW           | 288                   | 185                | 180           | 2.07                  | 2.13         | 8.667            | 0.01       | 1.44 | 0.864             | 2.40               | 1    |
| 29IN1WATCH02 | LM   | MPW           | 288                   | 190                | 188           | 2.17                  | 2.19         | 8.667            | 0.01       | 1.27 | 1.023             | 2.12               | 1    |
| 29JNGRWAKE02 | LM   | LPU           | 48                    | 860                | 848           | 5.23                  | 5.30         | 8.667            | 0.05       | 1.32 | 0.740             | 7.07               | 1    |
| 29JNNEBRLT01 | LM   |               | 130                   |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNNTZRLT01 | LM   |               | 130                   |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNSTZRLT01 | LM   |               | 130                   |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNHTSPOT01 | LM   | LPU           | 48                    | 860                | 848           | 5.23                  | 5.30         | 8.667            | 0.05       | 1.37 | 0.713             | 7.34               | 1    |
| 29JNNTZRLT02 | LM   |               | 130                   |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNSTZRLT02 | LM   |               | 130                   |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNAURORA01 | LM   | LPU           | 72                    | 730                | 718           | 4.43                  | 4.50         | 8.667            | 0.04       | 1.32 | 0.940             | 4.71               | 1    |
| 29JNLIMBRT01 | LM   |               | 80                    |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29ENGLOBAL01 | LM   | MPW           | 288                   | 180                | 178           | 2.05                  | 2.07         | 8.667            | 0.01       | 1.45 | 0.848             | 2.42               | 1    |
| 29JNLIMBRT02 | LM   |               | 80                    |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNAURORA03 | LM   | LPU           | 72                    | 727                | 724           | 4.47                  | 4.48         | 8.667            | 0.04       | 1.35 | 0.927             | 4.82               | 1    |
| 29JNLIMBRT03 | LM   |               | 80                    |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNAURORA04 | LM   | LPU           | 72                    | 780                | 726           | 4.48                  | 4.81         | 8.667            | 0.04       | 1.41 | 0.890             | 5.03               | 1    |
| 29JNAURORA06 | LM   | LPU           | 72                    | 780                | 608           | 3.75                  | 4.81         | 8.667            | 0.04       | 1.68 | 0.625             | 6.00               | 1    |
| 29JNLIMBRT06 | LM   |               | 80                    |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNAURORA07 | LM   | LPU           | 72                    | 780                | 731           | 4.51                  | 4.81         | 8.667            | 0.04       | 1.53 | 0.826             | 5.46               | 1    |
| 29JNLIMBRT07 | LM   |               | 80                    |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNAURORA08 | LM   | LPU           | 72                    | 780                | 734           | 4.53                  | 4.81         | 8.667            | 0.04       | 1.49 | 0.851             | 5.32               | 1    |
| 29JNAURORA09 | LM   | LPU           | 72                    | 780                | 776           | 4.79                  | 4.81         | 8.667            | 0.04       | 1.49 | 0.900             | 5.32               | 1    |
| 29JNSTZRLT03 | LM   |               | 130                   |                    |               | 0.00                  | 0.00         | 8.667            | 0.00       |      |                   |                    |      |
| 29JNWTOVAL01 | LM   | LPU           | 48                    | 972                | 967           | 5.96                  | 6.00         | 8.667            | 0.06       | 1.82 | 0.612             | 9.74               | 1    |
| 29IN1WATCH03 | LM   | MPW           | 288                   | 165                | 161           | 1.85                  | 1.90         | 8.667            | 0.01       | 2.91 | 0.382             | 4.85               | 1    |
| 29JNGLOBAL02 | XM   | LPU           | 9                     | 646                | 634           | 3.91                  | 3.98         | 0.333            | 0.04       | 2.12 | 1.681             | 2.33               | 1    |
| 29JNGLOBAL03 | XM   | LPU           | 9                     | 646                | 634           | 3.91                  | 3.98         | 0.333            | 0.04       | 2.13 | 1.673             | 2.34               | 1    |
| 29JNGLOBAL04 | XM   | LPU           | 9                     | 646                | 634           | 3.91                  | 3.98         | 0.333            | 0.04       | 2.16 | 1.650             | 2.37               | 1    |
| 29JNGLOBAL05 | XM   | LPU           | 9                     | 660                | 635           | 3.92                  | 4.07         | 0.333            | 0.04       | 2.23 | 1.601             | 2.45               | 1    |
| 29JNGLOBAL06 | XM   | LPU           | 9                     | 646                | 634           | 3.91                  | 3.98         | 0.333            | 0.04       | 2.43 | 1.467             | 2.67               | 1    |
| 29GNREGION01 | LM   | MPW           | 288                   | 900                | 10            | 0.12                  | 10.37        | 8.667            | 0.00       | 1.8  | 0.038             | 3.00               | 2    |
| 29GNREGION01 | LM   | MPW           | 288                   | 900                | 414           | 4.77                  | 10.37        | 8.667            | 0.02       | 1.8  | 1.590             | 3.00               | 2    |
| 29NGLOBAL01  | LM   | LPU           | 252                   | 600                | 225           | 1.39                  | 3.70         | 8.667            | 0.01       | 1.49 | 0.913             | 1.52               | 2    |
| 29NGLOBAL02  | LM   | LPU           | 126                   | 610                | 608           | 3.75                  | 3.76         | 8.667            | 0.04       | 1.52 | 1.210             | 3.10               | 2    |
| 29NGLOBAL03  | LM   | LPU           | 252                   | 475                | 49            | 0.30                  | 2.93         | 8.667            | 0.00       | 1.34 | 0.221             | 1.37               | 2    |
| 29JNGRWAKE01 | LM   | LPU           | 48                    | 1557               | 1546          | 9.54                  | 9.60         | 8.667            | 0.09       | 1.32 | 1.349             | 7.07               | 2    |
| 29JNGRWAKE02 | LM   | LPU           | 48                    | 860                | 243           | 1.50                  | 5.30         | 8.667            | 0.01       | 1.32 | 0.212             | 7.07               | 2    |
| 29JNHTSPOT01 | LM   | LPU           | 48                    | 860                | 24            | 0.15                  | 5.30         | 8.667            | 0.00       | 1.37 | 0.020             | 7.34               | 2    |

# NIMS G29 DATA RETURN

| Activity ID              | Mode | Record Format | Wave-lengths Returned | Record Time (sec.) | PB time (sec) | Selected Bits to sBOT (Mbits) | Bits to Tape BOT (Mbit) | Mode Cycle (sec) | AACS Mbits c 2.5 | Comp  | Total BTG (Mbits) (w/4% ohead) | Data Reduct Factor (sBOT/BTG) | Pass |
|--------------------------|------|---------------|-----------------------|--------------------|---------------|-------------------------------|-------------------------|------------------|------------------|-------|--------------------------------|-------------------------------|------|
| 29JNHTSPO02              | LM   | LPU           | 48                    | 972                | 960           | 5.92                          | 6.00                    | 8.667            | 0.06             | 1.38  | 0.801                          | 7.39                          | 2    |
| 29ENGLOBAL01             | LM   | MPW           | 288                   | 180                | 12            | 0.14                          | 2.07                    | 8.667            | 0.00             | 1.45  | 0.057                          | 2.42                          | 2    |
| 29JNAURORA02             | LM   | LPU           | 72                    | 790                | 778           | 4.80                          | 4.87                    | 8.667            | 0.04             | 1.34  | 1.003                          | 4.78                          | 2    |
| 29JNAURORA05             | LM   | LPU           | 72                    | 780                | 776           | 4.79                          | 4.81                    | 8.667            | 0.04             | 1.57  | 0.854                          | 5.60                          | 2    |
| 29JNAURORA06             | LM   | LPU           | 72                    | 780                | 44            | 0.27                          | 4.81                    | 8.667            | 0.00             | 1.68  | 0.045                          | 6.00                          | 2    |
| 29JNAURORA08             | LM   | LPU           | 72                    | 780                | 20            | 0.12                          | 4.81                    | 8.667            | 0.00             | 1.49  | 0.023                          | 5.32                          | 2    |
| 29JNAURORA10             | LM   | LPU           | 72                    | 780                | 774           | 4.77                          | 4.81                    | 8.667            | 0.04             | 1.54  | 0.868                          | 5.50                          | 2    |
| 29JNNTOTAL01             | LM   | LPU           | 48                    | 972                | 66            | 0.41                          | 6.00                    | 8.667            | 0.00             | 1.82  | 0.042                          | 9.74                          | 2    |
| 29JNJUPNTZ01             | LM   | LPU           | 24                    | 1928               | 1924          | 11.87                         | 11.89                   | 8.667            | 0.11             | 1.9   | 0.583                          | 20.35                         | 2    |
| 29INIWATCH03             | LM   | MPW           | 288                   | 165                | 13            | 0.15                          | 1.90                    | 8.667            | 0.00             | 2.91  | 0.031                          | 4.85                          | 2    |
| 29JNGLOBAL01             | XM   | LPU           | 9                     | 646                | 634           | 3.91                          | 3.98                    | 0.333            | 0.04             | 2.1   | 1.697                          | 2.30                          | 2    |
| 29JNGLOBAL02             | XM   | LPU           | 9                     | 646                | 90            | 0.56                          | 3.98                    | 0.333            | 0.01             | 2.12  | 0.239                          | 2.33                          | 2    |
| 29JNGLOBAL03             | XM   | LPU           | 9                     | 646                | 46            | 0.28                          | 3.98                    | 0.333            | 0.00             | 2.13  | 0.121                          | 2.34                          | 2    |
| 29JNGLOBAL04             | XM   | LPU           | 9                     | 646                | 38            | 0.23                          | 3.98                    | 0.333            | 0.00             | 2.16  | 0.099                          | 2.37                          | 2    |
| 29JNGLOBAL06             | XM   | LPU           | 9                     | 646                | 50            | 0.31                          | 3.98                    | 0.333            | 0.00             | 2.4   | 0.117                          | 2.63                          | 2    |
| 29GNREGION01             | LM   | MPW           | 288                   | 900                | 15            | 0.17                          | 10.37                   | 8.667            | 0.00             | 1.8   | 0.058                          | 3.00                          | 3    |
| 29GNGLOBAL01             | LM   | LPU           | 252                   | 600                | 42            | 0.26                          | 3.70                    | 8.667            | 0.00             | 1.5   | 0.169                          | 1.53                          | 3    |
| 29GNGLOBAL02             | LM   | LPU           | 126                   | 610                | 34            | 0.21                          | 3.76                    | 8.667            | 0.00             | 1.52  | 0.068                          | 3.10                          | 3    |
| 29INIWATCH01             | LM   | MPW           | 288                   | 185                | 62            | 0.71                          | 2.13                    | 8.667            | 0.00             | 1.44  | 0.298                          | 2.40                          | 3    |
| 29JNHTSPO02              | LM   | LPU           | 48                    | 972                | 23            | 0.14                          | 6.00                    | 8.667            | 0.00             | 1.4   | 0.019                          | 7.50                          | 3    |
| 29JNAURORA10             | LM   | LPU           | 72                    | 780                | 475           | 2.93                          | 4.81                    | 8.667            | 0.03             | 1.54  | 0.533                          | 5.50                          | 3    |
| 29JNJUPNTZ01             | LM   | LPU           | 24                    | 1928               | 155           | 0.96                          | 11.89                   | 8.667            | 0.01             | 1.9   | 0.047                          | 20.35                         | 3    |
| 29HNSTRCAL01             | LM   | MPW           | 144                   | 360                | 193           | 2.22                          | 2.22                    | 8.667            | 0.00             | 2.49  | 0.268                          | 8.30                          | 1    |
| 29HNDKCAL01              | LM   | MPW           | 360                   | 360                | 240           | 2.76                          | 2.76                    | 8.667            | 0.00             | 4.26  | 0.487                          | 5.68                          | 1    |
| 29NNRCTCAL01             | LM   | MPW           | 216                   | 606                | 604           | 6.96                          | 6.96                    | 8.667            | 0.00             | 4.32  | 0.725                          | 9.60                          | 1    |
| 29NNPCTCAL01             | LM   | MPW           | 216                   | 606                | 306           | 3.53                          | 3.53                    | 8.667            | 0.00             | 2.52  | 0.629                          | 5.60                          | 1    |
| 29GNREGION01             | LM   | MPW           | 288                   | 900                | 18            | 0.21                          | 10.37                   | 8.667            | 0.00             | 1.8   | 0.069                          | 3.00                          | 2    |
| 29GNGLOBAL01             | LM   | LPU           | 252                   | 600                | 8             | 0.05                          | 3.70                    | 8.667            | 0.00             | 1.5   | 0.032                          | 1.53                          | 2    |
| 29INIWATCH01             | LM   | MPW           | 288                   | 185                | 33            | 0.38                          | 2.13                    | 8.667            | 0.00             | 1.44  | 0.158                          | 2.40                          | 2    |
| 29JNJUPNTZ01             | LM   | LPU           | 24                    | 1928               | 155           | 0.96                          | 11.89                   | 8.667            | 0.01             | 1.9   | 0.047                          | 20.35                         | 2    |
| 29JNGLOBAL01             | XM   | LPU           | 9                     | 646                | 40            | 0.25                          | 3.98                    | 0.333            | 0.00             | 2.1   | 0.107                          | 2.30                          | 2    |
| 29JNGLOBAL04             | XM   | LPU           | 9                     | 646                | 59            | 0.36                          | 3.98                    | 0.333            | 0.00             | 2.16  | 0.154                          | 2.37                          | 2    |
| 29JNGLOBAL06             | XM   | LPU           | 9                     | 646                | 50            | 0.31                          | 3.98                    | 0.333            | 0.00             | 2.4   | 0.117                          | 2.63                          | 2    |
| 29HNDKCAL01              | LM   | MPW           | 360                   | 360                | 52            | 0.60                          | 3.98                    | 8.667            | 0.00             | 4.2   | 0.107                          | 5.60                          | 2    |
| 29NNRCTCAL01             | LM   | MPW           | 216                   | 606                | 12            | 0.14                          | 8.667                   | 8.667            | 4.3              | 0.014 | 0.014                          | 9.56                          | 2    |
| 29NNPCTCAL01             | LM   | MPW           | 216                   | 606                | 38            | 0.44                          | 8.667                   | 8.667            | 2.5              | 0.079 | 0.079                          | 5.56                          | 2    |
| <b>42.295 Total</b>      |      |               |                       |                    |               |                               |                         |                  |                  |       |                                |                               |      |
| <b>42.373 Allocation</b> |      |               |                       |                    |               |                               |                         |                  |                  |       |                                |                               |      |
| <b>-0.078 Over/Under</b> |      |               |                       |                    |               |                               |                         |                  |                  |       |                                |                               |      |



## RECAP OF G29 PLAYBACK EVENTS

The G29 orbit was very successful, particularly for NIMS Jupiter observations. Downlink resources were relatively abundant, with NIMS returning more than 42 Mbits of data during the playback period. A new software patch enabled the use of LPU record mode for the first time since C22.

The Cassini spacecraft traversed the Jovian system during G29, giving rise to opportunities for collaborative observations.

Playback strategies were relatively complex. There were three passes over the tape for standard data return, and there were an additional two passes for return of calibration data recorded during G29 cruise. Although there were a large number of gaps due to DSN outages, a high percentage of these were successfully filled.

One despun bus reset occurred during the encounter, and this was handled successfully by the onboard software. No NIMS software halts were detected. SSI experienced hardware problems which resulted in the loss of some of their observations.

The following timeline details the most significant events of the G29 playback period. Most of the text below is excerpted from messages issued at the time.

### G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 12-05-00: The initial version of the NIMS G29 playback table was delivered today. G29 is comparable in complexity to a Prime Mission orbit. Some good news is that MWG released some 40 Mbits of surplus downlink allocation back to SPOT, of which we received 11.5 Mbits. This is a significant addition to our prior total of 26.9. The table delivered today commands playback of about 43 Mbits of data, so we are significantly over our allocation at this point.
- 12-26-00: G29 encounter begins at 22:30 UTC.
- 12-28-00: Ganymede close approach occurs at 08:33 UTC.
- 12-28-00: (J. Erickson) The Galileo spacecraft is operating normally, and all activities appear to be as planned. Close approach to Ganymede was at 4:00 a.m. PST on 12/28 (Earth Received Time), and at an altitude of 2,337.4 kilometers (1,452.4 miles). All planned Ganymede observations to date appear to have been recorded successfully. Jupiter close approach will be at 8:02 p.m. PST tonight (12/28), shortly before the expected peak of the radiation flux.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 12-29-00: Perijove occurs at 03:34 UTC.
- 12-29-00: A despun bus reset event occurs at 04:35, which is handled by onboard software.
- 12-29-00: (J. Erickson) Galileo Ganymede 29 Status Report #2 - 10:00 p.m. PST The Galileo spacecraft is operating normally (except for the SSI camera - see below), and all activities appear to be as planned. The current status is from the DSS 14 pass at 9:30 p.m. PST on 12/28. The spacecraft has now passed Jupiter close approach and the peak of the radiation expected for this encounter. All observation recording is proceeding according to plan. The expected end of the radiation danger is at 3:05 p.m. PST on 12/29. Earlier, at 1:30 p.m. PST Earth Receive Timed, an alarm was received from the Solid State Imaging Camera. It seems to indicate a re-occurrence of a problem with the light flood LED turning on continuously. Commands were sent to disable the LED and this appears to have had no effect. The incident occurred during a quiescent period for the camera, hours after the previous observation. Additional observations will begin Friday, 12/29. Continued analysis is in progress.
- 12-29-00: (M. Segura) I've done analysis on the engineering telemetry for the instrument up to the moment. It appears that we've made it thru perijove without Spacecraft or NIMS problems thus far. We will have good data up thru the first STZ realtime observation. At this point, the sequence is clocking out for NIMS and we're about 40 minutes away from the execution of the Jupiter HotSpot01 observation. The LPU patch is working flawlessly. SSI has had some difficulties. It appears that they are experiencing a "flood-mode" problem as in G28. A command was sent to turn flood-mode off and the telemetry indicated no change. This approach worked as a resolution in G28 but seems to not have done so this time. Analysis is ongoing with a number of options to be attempted to recover before the IO observations due to execute around 9 am tomorrow morning.
- 12-29-00: (R. Mehlman) Packets from the first three realtime observations are down. DNs appear to be reasonable at first glance, but as no doubt expected, detector 7 data is, let's say, subdued. No bad SCLKs received. Good ones are from between GNGLOBAL02 and 03, right after INIWATCH01, and after JNNEBRLT01. Hardware status words since NIMS observations began are as expected, showing proper chopper mode and gain state. (There's a possible chopper mode anomaly before that, which would affect only early SSI ridealong, if we ask for it.)

G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 12-29-00: (M. Segura) Just to let you know that things are going well for NIMS this orbit... Even the bus reset did not have any effect on our data set thus far.
- 12-30-00: (R. Mehlman) Engineering data has been scarce over the last 24 hours, but the few temperatures and hardware status words received appear normal. All the SCLKs we got have been good. Everything appears to be OK, but of course the proof will be in the playback.
- 12-30-00: (J. Erickson) The Galileo spacecraft is operating normally, and all activities appear to be as planned. The SSI camera was power cycled and it's memory reloaded late last night. At approximately 11:30 p.m. PST 12/29, verification was received from the spacecraft that this had eliminated the anomalous engineering readings from the SSI camera. This was in time to pick up the observations on 12/30, including the subsequent Io eclipse recordings.
- 01-02-01: (E. Theilig) The Galileo spacecraft is operating normally at the end of the encounter observations. The current status is from the DSS 63 pass at 12:30 p.m. PST on 1/2. All encounter recording went according to plan with the possible exception of the SSI camera. Three times during the encounter anomalous engineering readings were received from the SSI camera. The first incident cleared when commands were sent to power-cycle the instrument and reload its memory. The second and third incidents cleared autonomously. Some of the Io Eclipse and Jupiter atmospheric feature track observations occurred during the periods of anomalous engineering readings. The impact of these readings on the images is unknown at this time.
- 01-05-01: (J. Erickson) This was another successful encounter, with a single area of concern. Close approach to Ganymede was at 1:00 a.m. PST on 12/28 (Earth Received Time), and at an altitude of 2,337.4 kilometers (1,452.4 miles). Remote sensing observations and fields and particles recordings of Ganymede were completed as planned. The DSN successfully recorded the Radio Science Jupiter Occultation over DSS-14 (Goldstone, California), between 8:23 p.m. (12/27) and 12:10 a.m. (12/28) PST. Jupiter close approach was at 8:02 p.m. PST 12/28. Playback will begin 6/15/00. Playback is delayed to allow an opportunity for another cross sectional mapping of Jupiter's magnetosphere. Radiation levels were significantly below average, with no problems identified. The peak radiation level was around 420 (measured by the star scanner in pulse counts), significantly lower than the maximum of 1400 seen in previous GEM orbits.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

During the encounter a single standard bus reset occurred and was handled normally by the on-board recovery software without any effect on the planned sequence. This occurred at 12:35 a.m. on 12/29/2000 PST, ground receipt time.

- 01-09-01: A new pre-uplink version of the NIMS G29 playback table was delivered today. This incorporates a number of timing corrections and modified wavelength tables for a few observations. Wavelength selections for playback of a number of Jupiter observations still need to be specified. The "preview" playback of SSI observations to assess the effects of the light flood LED staying on did not go well. The tape recorder (DMS) appears to have gone into search mode during playback.
- 01-12-01: (E. Theilig) The Galileo spacecraft is operating normally, following the Ganymede 29 encounter. The primary activity over the past week has been the continuation of a 100-day magnetospheric survey by the fields and particles instruments, in collaboration with the Cassini mission. Although playback of G29A data has not begun, a few early reports based on RTS data have come in. NIMS reports receipt of all but a few packets of their real time observations. PWS real time data from Ganymede is causing the PWS to further consider their high-rate data from G28. Ganymede and its magnetosphere look more and more like a completely unique environment in our solar system. The DDS team has had a quick look at dust data from both Galileo and Cassini during the encounter period and have been able to identify the same "packets" of dust particles as they passed by each spacecraft. This will allow the DDS Team to better understand the details of how the magnetosphere transports these dust particles from the vicinity of Io, through the magnetosphere, and out into the solar wind.
- 01-16-01: (Y. Anderson) For this G29 playback allocation update, the allocations for SSI, NIMS and PPR are essentially unchanged from before. However, there are several significant changes in the process of coming up with these numbers.
- 1) We realized that the total BTG we were using (215 MB) is incorrect. That number has 80 MB of the 116.9 of the MWG BTG residing in Load A, not during playback. Therefore, these MBTG should not be considered when making up the allocations. As a result, the G29 OAP bit to Ground Allocations are updated as:
- |              |          |        |
|--------------|----------|--------|
| SSI          | 61.2 MB  | 45.33% |
| NIMS         | 26.9 MB  | 19.93% |
| PPR          | 5.0 MB   | 3.70%  |
| UVS/EUV      | 5.0 MB   | 3.70%  |
| MWG          | 36.9 MB  | 27.33% |
| Total        | 135.0 MB | 100.0% |
| Inefficiency | 5.2 MB   |        |
| SPOT margin  | 34.0 MB  |        |

G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 2) Current G29 Science BTG is estimated as 207 MB (with 167 MB for Load B and 40 MB for Load C). This gives the BTGs for each team, using the percentages above:

|              |           |
|--------------|-----------|
| SSI          | 75.611 MB |
| NIMS         | 33.234 MB |
| PPR          | 6.177 MB  |
| UVS/EUV      | 6.177 MB  |
| WMG          | 45.589 MB |
| Inefficiency | 6.21 MB   |
| SPOT margin  | 34.0 MB   |
| Total        | 207 MB    |

- 3) SPOT releases 17 MB margin to teams to make up the difference, so BTG for the teams are essentially unchanged at this point. Of 17 MB, 5 MB goes to MWG, and the rest is distributed among SSI, NIMS and PPR based on their relative percentages (65.7% for SSI, 28.9% for NIMS, and 5.4% for PPR).
- 4) UVS/EUV releases its 6.177 MB and the number is redistributed among SSI, NIMS and PPR, based on the relative percentages.

Finally, we have

|         |           |  |
|---------|-----------|--|
| SSI     | 87.553 MB |  |
| NIMS    | 37.057 MB | (1.43 MB AACS charges have been deducted)  |
| PPR     | 7.159 MB  |  |
| UVS/EUV | 0.000     |  |
| MWG     | 25.180 MB | (0.339 MB AACS charges, 5.07 MB DDS charges, and 20 MB of Buffer Dumps have been deducted) |
| DDS     | 5.070 MB  |  |
| AACS    | 1.769 MB  |  |
| BDT     | 20.000 MB |  |

G29 Load B&C Total Allocation: 183.79 MB  
(excluding SPOT margin 17 MB and inefficiency 6.21 MB)

01-17-01: (to the Ganymede investigators) We do not have enough downlink allocation in G29 to play back all of the data we have on tape. The Jupiter data volume is being reduced by about 60%. We need to make sure that what we bring down for Ganymede is useful.

For Ganymede we have 1 REGION observation recorded with all wavelengths and 3 GLOBALs (in LPU mode) recording 252 wavelengths. For these we take data from 12 detectors, excluding 1, 2, 3, and 7, 8. We essentially get 24 DNs for each spatial pixel, for all detectors except 15-17, where we get 12 DNs per scan/instrument cycle. Thus we have lots of redundancy and should get excellent low noise images at each band.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

To save bits at this point I propose we return data for only the 12 "good" detectors for 29GNREGION01. Does anyone have a good reason to look at the nearly-nonexistent signal from detectors 1, 2, or 7? If so let me know. If more drastic cuts turn out to be necessary I think we could cut back to 12x redundancy for the GLOBALs, without doing great harm to the science.

- 01-17-01: (R. Mehlman) We would like to receive Jupiter global observations 04, 05, and 06 sooner rather than later. We think 05 is in chopper reference and 06 in 63 hertz, but we don't know what mode 04 is in. We hope to determine that from the data by comparing all three.
- 01-17-01: Priorities for the Jupiter G29 observations playback: Here is an overview of the situation. There are 3 categories to talk about, the globals, the auroras and the miscellaneous others. We have 24 Mbits or so to use. The division of the pie was made arbitrarily and can be changed easily. In all cases we recorded data for 10 detectors, 4-5-6-7 10-11 13 15 16 17. Globals: Now at 9 Mbits with only 7 detectors selected to come down. Fixed map mode, no redundant data. Kevin gives these high priority in connection with Cassini science and wants all detectors, or all except det 7. Question: will we get anything useful from det 7 (1.8 microns but "blocked")? Aurora: Current plan is 5 samples for each of 10 detectors (50 "wavelengths" of possible 240). Currently 10 observations, 5 Mbits total. Cutting det 7 saves 10%. Want to oversample 4.1 microns (det 15)? Are all detectors equally valuable or could some be deselected for playback? Others: Dayside hotmats (2), GRS wake (2), and a white oval and a north temperate zone. All budgeted for either 5x redundancy or 10 x redundancy (5 or 10 samples from each of the 10 detectors).
- 01-18-01: The newest G29 playback table is resident on LIVELY in [JSHIRLEY]G29NIMS\_010118.PBT. A few changes were made to deselect times of pass 2 observations to conform to DMS rules. 29JNGLOBAL05 was moved from pass 2 to pass 1, to investigate a possible chopper anomaly noted in telemetry data by Bob Mehlman. And, the number of detectors selected for the 3 IOWATCH observations, and for 29GNREGION01, was reduced from 15 to 12. However, the wavelength selections for the Jupiter observations are yet to be finalized. This will occur before the next update.
- 01-25-01: I have moved a new G29 playback table over to LIVELY. This has newly-created wavelength selections implemented for all the Jupiter observations. The globals will come down with 9 detectors/wavelengths. The aurora have 72 "wavelengths" selected, and the others have 48 (HOTMAPS, WHTOVL, etc.).



G29 Playback Events Timeline (12-05-00 to 05-15-01)

01-29-01: (Y. Anderson) Here is the updated playback allocation from the last merge (delivered by 1/18/01):

| MBTG(%) | Total   | ActualUsage | UnusedBTG |        |
|---------|---------|-------------|-----------|--------|
| SSI     | 49.531% | 87.553      | 42.714    | 44.839 |
| NIMS    | 20.859% | 36.872      | 37.076    | -0.204 |
| PPR     | 4.050%  | 7.159       | 6.482     | 0.677  |
| MWG     | 14.245% | 25.180      | 18.553    | 6.627  |
| AACS    | 0.000%  | 0.000       | 1.955*    | -1.955 |
| BDT     | 11.314% | 20.000      | 21.550    | -1.550 |
| Total   | 100.0%  | 176.766     | 128.330   | 48.436 |

AACS usage includes 1.615 MB from NIMS and 0.339MB from MWG.

01-30-01: The final pre-uplink NIMS G29 Playback table was delivered Friday. With predicted compression values we are very close to our downlink bits allocation of about 37 Mbits. Following discussions with Kevin and Bob, a strategy for prioritizing Jupiter data return was identified (and implemented in this delivery). The Jupiter global observations which have about 4x better spatial resolution than their Cassini VIMS counterparts have high priority and are selected in full (all spatial coverage with 9 detectors). (Note: The wavelength record tables for this orbit included detector 7, which currently shows very low signal levels. The data for detector 7 is not planned for playback in any Jupiter observations). The auroral observations will be played back with 100% of the recorded data for detector 13 (where auroral emissions are seen), and with 25% of the total recorded data for the other 8 detectors. Lastly, the remaining observations (HOTSPOTS, WHTOVL, GRWAKE01-02, NTZ) will be returned with 25% of the recorded data, for 8 detectors (this selection does not include detectors 7 and 13).  
The Ganymede global observations (LPU mode) will come down with all recorded wavelengths, while the GNREGION observation and the various distant Io, Europa, and Callisto observations are being returned with 12 detectors selected. We expect to need additional allocation bits to return gap-fill. If we receive a windfall, we will be able to add some additional commands to return data recorded during SSI observations, and we will be able to expand the percent data returned for some of the Jupiter observations.

02-01-01: (Y. Anderson) Playback initiates Monday February 5 at 12:59 PM PDT. (01-036/20:59 SCET-UTC). Playback terminates at the end of the C-load, around DOY 01-142/16:00 (TBD)

02-13-01: (Y. Anderson) G29 Playback Allocation Update  
The changes from last G29 playback allocation are:  
1. SPOT released 3.0 MB overhead inefficiency. It was redistributed to SSI (2.084) and NIMS (0.916) based on the allocation percentage.  
This cut the inefficiency holding to 3.292 MB.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

2. A total of 2.5 MB downlink capability was deducted due to the calibration activities in the C-load. This deduction was charged from SSI (1.737) and NIMS (0.763) based on the allocation percentage.

02-14-01: Only two changes were made for this delivery. Both of these will result in improvements in playback efficiency, resulting in reduced amounts of "fill" coming down in the downlink stream at the beginning of the second pass over the tape. The second scan of 29GNREGION01 was moved to pass 2 (PSID=EZ), along with the entire playback of 29GNGLOBAL02. Playback is currently running about 1.5 days ahead of schedule.

02-20-01: (Y. Anderson) The only change in allocation from last G29 playback allocation is: SPOT released 10.0 MB margin to the teams. It was redistributed to SSI (6.947) and NIMS (3.053) based on their OAP allocation percentages. This cut the SPOT margin to 7.0 MB.

|      | MBTG    | Total  | ActualUsage | Unused BTG |
|------|---------|--------|-------------|------------|
| SSI  | 50.020% | 95.510 | 49.343      | 46.167     |
| NIMS | 21.128% | 40.343 | 37.392      | 2.951      |

02-21-01: (M. Segura) G29 calibration record and playback: The wavelength edit tables are just the default. We are recording all the calibrations in MPW with ALL detector data going to tape - even the non-functional 3 and 8. I suggest that we remove those 2 detectors in the actual playback table we uplink. Leave the rest with all the overlap (yep, even with 1,2, and 7 questionable) unless absolutely necessary. We should have on the order of 10 mbits to use for the return of the cals. I estimated that the total cost of 360 wavelength return at 1.2 compression would cost about 13 mbits with every last tic of tape returned.

02-28-01: G29 playback is on schedule. The NIMS Ganymede and Callisto observations from the first pass over the tape are down. Compression is somewhat lower than predicted (about 1.7 versus 2.0). We have lost a significant amount of data due to DSN station problems (weather and so on). Roughly half of 29GNGLOBAL01 and 29GNGLOBAL03 will have to be replayed in pass 2 at a cost of roughly 2 Mbits. We received about 3 Mbits of new allocation last week through a SPOT margin release, so we are within our allocation now.

03-06-01: (Y. Anderson) Since SSI needs to update the tail end of pass 1 (29RSRINGS\_03, -04, and -05), we will have an update this week! If you've known of ANY changes that you need to make in the current playback table for the remaining pass 1 and pass 2, please include them in this week's playback delivery file.



G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 03-07-01: There are very many changes to the playback table due to new data on actual compression performance of pass 1 observations, and due to the need to fill a dozen significant gaps. We are temporarily above our playback bits allocation of 40.25 Mbits. We have plenty of time to rectify the situation. If we do not receive any additional margin bits, we will have to cut back on the number of wavelengths returned in some of our pass 2 observations. Today Herb showed a new SSI global image of the northern hemisphere of Io, revealing an extremely large apparent plume deposit "bulls-eye", centered near Tvashtar, that has not been in evidence before.
- 03-14-01: (Y. Anderson) G29 Playback Allocation Update - The latest G29CHA orpro indicates that the total capability is down ~4 MB from the previous one (from 200.4 MB to 196.3 MB). The capability from resuming playback after load-C calibrations to the end of the sequence is now 40.8 MB only (down from previous 44.4 MB). To compensate this cut in capabilities, SPOT released 4.0 MB margin to the teams. It adds 2.779 MB to SSI and 1.221 MB to NIMS. The SPOT margin is now 3.0 MB. At present, NIMS is about 4% over their allocation, and this does not count the BTG needed for their calibration data playback.
- 03-14-01: Here's the situation. From now till the end of playback we have about 12.2 Mbits of allocation. The data currently selected for playback amounts to 13.6 Mbits. To playback all of the calibration data with 12 detectors fully selected requires about 6.2 Mbits. So, we are over by about 7.2 Mbits. The times of the calibrations are  
STARCAL 6 minutes  
DARKCAL 6 minutes  
RCT CAL 10 Rims  
PCTCAL1 2 Rims  
PCTCAL2 10 Rims  
All are in MPW.  
Please let me know how much data is required from each of these to accomplish the goals. How many grating steps per detector required as a minimum; which detectors are superfluous; and where the duration could be cut down.
- 03-14-01: NIMS G29 Calibrations Playback Commands  
A mini-pbt was delivered today containing only 5 sets of singles, for returning recorded calibration data at the end of the playback period. Due to a number of factors we are now considerably over our downlink allocation.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

All of the calibrations except the RCTCAL are returning all grating positions for 12 detectors. Playback times have been cut back significantly from the record times. We will get half the recorded data for the STRCAL and the PCTCALs, and 4 (of 6) RIMS of the DRKCAL (1 RIM for each gain state). The RCTCAL was not cut back in duration. The current plan requires about 3.8 Mbits for playback of calibrations only.

- 03-21-01: The table delivered today has 10 new sets of commands for filling gaps in our pass 1 observations. In addition, there were a number of changes in data reduction factors (to reflect actual compression values). We had some very good news in the actual compressions for the Jupiter global observations. These compressed with ratios of 2.1-2.4, significantly better than expected. As a result we were not forced to make as many cuts to our wavelengths coverage for Jupiter observations as I anticipated last week. Due to the bits savings from good compression noted above, I did not change the playback commands for the 3 remaining aurora observations, or for 29JNGRWAKE01 or for 29JNHTSPOT02. I did have to cut back 29JNJUPNTZ01 (the last to be returned) to 24 from 48 wavelengths. This has enhanced redundancy for detectors 11 and 16 as requested by Kevin. All of the calibrations have new wavelength selections, as follows:
- 29HNSTRCAL01: detectors 4,5,6,9,10,11 (6x24=144)
  - 29HNDRKCAL01: 15 detectors (360 wavelengths)
  - 29HNRCTCAL01: detectors 9-17 (9x24=216)
  - 29HNPCTCAL01: detectors 1,2,4,5,6,7,9,10 (8x24=192)
- 03-22-01: (Y. Anderson) Currently running ahead of the schedule (G29PEM) about 2.5 days. We are playing back 29MBBFRDMP18 in Segment 10. Track 4, tic 805 (as of 10 PM 3/21/01). Playback is currently about 53% complete.
- 03-26-01: (Y. Anderson) Just wanted to remind you that we will have an EARLY update this week. The pb files are due to 3pm tomorrow (Tue., 3/27). The update will be for segment 13, 14, 15, and 16. These are all relatively short segments. Next week we will update segment 17 and 18, which will end the pre-calibration data playback. Therefore, for G29A encounter data we only have two updates, this week and next week. PPR released their 1.652 MB: 0.81 MB applied to covering the station loss, and the rest 0.842 MB released to SSI and NIMS. MWG also released their 1.328 MB to SSI and NIMS. SPOT released 1.0 MB margin and 2.0 MB inefficiency to SSI and NIMS. Currently, SPOT holds 2.0 MB for margin and 1.139 MB for inefficiency.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 03-27-01: An early update was completed yesterday. A number of minor changes were made. We received donations of downlink bits allocations from PPR and MWG, and there was a small SPOT release of margin bits, totaling about 1.7 Mbits for us. On the down side, there is a labor dispute going on at the DSN station in Canberra. If this continues indefinitely there will be a significant impact on our remaining playback capability. In this update the time of playback was increased for 29HNDARKCL01, and playback of detector 11 data was added for 29NNPCTCAL01. Some of our new allocation was used to restore full data density playback for the second part of 29GNREGION01.
- 04-02-01: (D. Bindschadler) - Here's the (new) basic order by which PB will proceed:  
PBT #1 Pass 1 - complete  
Pass 2 - in progress  
Pass 3 - for gap-fill, may only get Trk 1 & 2 data?  
PBT #1 will end with a TPB command, probably early on DOY 112.  
PBT #2 Pass 1 - return DOY 112-113 calibration data  
Pass 2 - gap-fill, Track 2 onward.  
Note that there are no guarantees as to how far Pass 3 or PBT #2's Pass 2 will get through the tape.  
- If you are participating in the 2nd (Calibration data) playback, please deliver two separate PBT's, one for Passes 1 through 3 through the G29 data, and a second for return of calibration data and remaining gap-fill from G29. Teams (e.g., PPR?) who are not returning calibration data only need deliver a single PBT.  
- The purpose of this week's updates is (in part) to give us two shots at getting this new strategy done correctly. If you are pressed for time, please concentrate your efforts on Pass 3 data return -- we have more time to work on PBT #2.
- 04-04-01: Due to problems at the DSN, particularly Canberra, we have been forced to adopt a new strategy for the balance of G29 playback. As a result there are now two G29 playback tables. Due to DSN problems there are significant gaps in our data. The project has decided to approve a third pass over the early parts of G29 recording in order to recover some of the data.  
The calibrations, which will be performed April 22-23, were formerly included in the G29 table and given pass numbers of 3. However, now they are in their own table (G29NIMS\_010404\_CAL) with pass numbers = 1.  
We will proceed as far as possible into the 3rd pass of G29 encounter playback, before a terminate playback command goes active prior to the calibrations. We (NIMS) have one set of commands in this third pass, to return a large gap in 29INWATCH01. This gap fill was dropped from last week's table due to an error (duplicate PSID).

G29 Playback Events Timeline (12-05-00 to 05-15-01)

Following a first pass through the calibrations data, there will be another opportunity to request gap fills for the G29 encounter data that is not overwritten by calibration recording. Thus the "cal" pbt will likely include some gap fill commands later on.

The following information is included to help the playback coordinator estimate bits requirements and model the playback process from this time forward. These numbers reflect our best current knowledge regarding data compression, etc.

NIMS data returned in pass 1: 25.975 Mbits

NIMS data commanded for passes 2-3: 12.568 Mbits

NIMS calibration data total bits: 3.202 Mbits

The total (41.75 Mbits) is 0.63 Mbits UNDER our current allocation. It is likely that we will experience more data losses in the period prior to calibrations recording.

Hopefully there will be sufficient flexibility in the playback update process for us to successfully adapt to changes over the next few weeks.

04-01-01: (D. Bindschadler) Please note the DSS 63 outage yesterday caused us to drop approximately 44 telemetry frames. DSS 63 had some significant problems but should be back online today. DSS-14 began tracking early and managed to capture 17 frames (or the loss would have been 61). Please be sure to factor in this outage into your plans for the PBT update this week, at least to the extent possible. These data will not be recovered in post-pass processing. This update is your likely to be the best chance we have of recovering the data that were lost.

04-11-01: The table delivered today includes 8 new sets of commands for returning gap-fill. This has been the "gappiest" orbit in memory. For 29GNGLOBAL01, we are even attempting to fill gaps in our gap fill, i.e., we are making a SECOND attempt to recover data that was not captured by ground stations in pass 1 OR pass 2.

The largest gap involves about 0.5 Mbits of data for 29JNAURORA10. Fortunately we had nearly enough remaining allocation to cover this, together with our other gaps. We are over by about .13 Mbits at present, but since there are large uncertainties regarding SSI playback between now and the termination prior to calibrations, we are being allowed this small overage. Playback is currently a little ahead of schedule. The third pass playback should begin on Sunday.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 04-25-01: Although the nominal delivery date for this table is Friday (04-27), no new information affecting NIMS playback is expected, and so I have delivered our file today. In addition to our playback commands for calibration data return, this table includes 7 sets of gap-fill commands for G29 encounter data on tracks 2, 3, and 4. There is considerable uncertainty regarding whether or not we will receive this data, due to unknowns linked with the SSI calibrations compression and strategy. There will be at least one more update cycle. The NIMS calibrations are scheduled to come down from the middle to the end of next week. If there are significant gaps, we will try to fill them in yet another pass over the tape. The gap-fill data commanded amounts to about 0.7 Mbits, which will put us somewhat over our allocation. However, unless the current one-pass-for-calibrations strategy changes, these bits can be regarded as either "packing out" the bitter end of the playback period, or as data that will to some extent prevent us from returning excessive amounts of fill while we slew over several tracks of encounter data prior to a second pass over the calibrations. It should still be possible to remove these, or cut them back, if the need arises, in the next update cycle.
- 05-04-01: (E. Theilig) The Galileo spacecraft is operating normally. Playback of Ganymede 29 encounter data and calibrations performed last week is 87% complete and is scheduled to terminate on 5/21/2001. On Monday, 4/30/2001, the SSI instrument engineer presented his final analysis and test report on the camera BLS anomaly. The anomalous behavior, characterized by increased baseline stabilization voltage, increased SSI input current, and saturated images, was first seen July 2000 and recurred during the Ganymede 29 encounter in December 2000. In two cases the behavior cleared by commanding; however, in another 7 cases, it cleared autonomously. The failure has been localized to the sample and hold circuitry, either in an opamp or a JFET, and was most likely induced by radiation. The cause of the failure and the exact trigger to go into or out of the anomalous state remains unknown.
- 05-07-01: (R. Mehlman) Looks like the missing half-RIM at the end of the PCTCAL showed up, as did the single missing packet in the RCTCAL. But the larger gaps in the DRKCAL are still there, just as before.

G29 Playback Events Timeline (12-05-00 to 05-15-01)

- 05-07-01: I delivered the final playback table for G29 this afternoon (G29NIMS\_CALIB\_010507.PBT). The only changes were to add 4 gap-fill singles for calibration data. Playback will end on 21 May. We had good compression on our calibrations, with ratios above 4 in some cases. This is contributing to playback running a little ahead of schedule. The calibrations gap fills are not likely to be returned. They fall after any SSI gap fills, and the schedule shows only a tiny bit of capability after our encounter gap fills are returned. We will lose at least .5 Mbit of capability while slewing around to the beginning of calibration recordings.  
Late breaking news: Besting this afternoon (after file delivery) shows that the missing RCT and PCT data have turned up. The somewhat earlier DARK cal gaps are still there. Thus the singles in today's table with PSIDs of FK, FL are redundant and could be deleted.
- 05-15-01: (F. Leader) The latest G29 encounter gap-fill playback is down (and bested) several days ahead of schedule. But calibration gap-fill is not yet down. Most of the requested gap-fill made it, but there are a few gaps in it, including one 27-packet gap, no hope of filling that.
- 05-21-01: Playback of G29 calibrations is terminated.



## NIMS Anomaly Report - G29 Sequence

The NIMS grating became stuck prior to the I24 encounter. The grating continued to be stuck for the G29 encounter. This development caused a drastic change in NIMS operations. Detectors 1, 2 and 7 now have very low sensitivity. Detectors 3 and 8 are still not functioning. NIMS now returns only 12 useful wavelengths.

The NIMS processor may have halted once during the G29 Encounter as a result of a CDS Bus Reset (BURP) event. No NIMS observations were lost due to this halt.

The NIMS instrument may have taken science data in Chopper 63Hz mode instead of Chopper Reference mode. This happened when the 37IST command selected gain state and chopper mode in the same command string. The returned data for 29JNGLOBAL06 appear to be taken in Chopper 63Hz mode.

The spacecraft did not safe during the G29 Encounter but did suffer one Bus Reset which precipitated the NIMS halt.

### Stuck Grating (from the I24 NIMS Guide)

At I24, NIMS experienced a fundamental change in the way that it operates. Sometime between C22 and I24, the NIMS grating became stuck at a position corresponding to a pshift of about 14.5. This unusual grating position produces wavelengths for each detector far shorter than previously used. With the stuck grating, NIMS is permanently in a "fixed grating" mode. At this new grating position, Detectors 1, 2 and 7 return very low DN, as their new wavelengths are outside of the passband of their blocking filters and therefore are of minimal use. As before, detectors 3 and 8 are still not functioning.

There is no ground calibration for the wavelengths corresponding to this pshift. Flight calibration was derived from the I24 RCT and PCT calibrations. Details of this new flight calibration will be discussed in the as yet unpublished NIMS calibration report.

The spectral capability of the NIMS instrument shrank from 408 wavelengths to 17 wavelengths with the stuck grating. Now all commanded modes, Long Map, Full Map, Short Map or Fixed Map, select the same 17 wavelengths. Two effects of the stuck grating have been put to good use: spatial editing and noise reduction.

Even though the grating is stuck, the grating cycle still plays an important role. The playback edit table can now be used for spatial data editing. In Long Map mode, each mirror scan can be selected or deselected using the playback edit table. This allows a range of spatial density versus areal coverage choices.

If an observation is performed in Long Map mode at the Long Map scan rate, the 24 mirror scans over a single grating cycle can be averaged together to increase the signal to noise level. The adverse effects of the high levels of radiation-induced noise encountered close-in to Jupiter are greatly alleviated by this averaging.

## NIMS Anomaly Report - G29 Sequence

### Response to Stuck Grating Anomaly (G29)

At G29 the cause of the stuck grating was not known (and is still not clearly understood). No attempts were made during G29 to unstick the grating.

### Processor Halts

There was one NIMS processor halt during G29. The halts were inferred from the occurrence of a CDS Bus Reset. In the CDS recovery process from the bus interrupts, NIMS loses RTI synch with CDS, causing NIMS to halt. This halt was not detected in the NIMS Engineering telemetry but was assumed to have occurred from past behavior. The Bus Reset occurred outside of NIMS observations. Each NIMS observation was preceded by a NIMS Software reload so that no NIMS observations were lost due to the halts.

### NIMS Chopper Anomaly

NIMS appears to have taken science data in 29JNGLOBAL06 while in chopper 63Hz mode. The NIMS engineering hardware status word twice returned a value of 0, indicating chopper 63Hz mode, after the reload which preceded this observation. In the reload, both the gain state and chopper mode were selected in the same 37IST command string:

```
05845504:80:0 00-366/20:50:34.333 CMD,37IST,... 1,2,0,OFF,0,1,0;
```

The data values returned for this observation were consistent with the instrument being in chopper 63Hz mode. The chopper 63Hz calibration correction derived for the Earth 1 and 2 encounters was applied to the I24 calibration for this observation.

A hardware status word also return a value of 0 after the first reload of the encounter. The gain state and chopper mode were also selected together in this instance.

Gain state and Chopper mode have been selected in the same command string in the past without the instrument staying in chopper 63Hz mode. This is something new for NIMS, perhaps a sign of radiation damage.

### Spacecraft Anomaly

During the G29 encounter a single standard bus resets occurred and was handled normally by the on-board recovery software without any effects on the planned sequence. The BURP event occurred at about D364/08:35.

### Anomaly Timing:

|         |                 |   |
|---------|-----------------|---|
| 5840534 | 00-363/09:04:27 | 37IST 29NNRELOAD01 (Gain State & Chopper Ref) |
| 5840608 | 00-363/10:20:07 | Chopper 63Hz ENGR                             |
| 5840620 | 00-363/10:31:24 | 37IST 29NNREGION01 (Chopper Ref only)         |
| 5840793 | 00-363T13:26:47 | Chopper Ref ENGR                              |
| 5841929 | 00-364/08:35:00 | BURP reported                                 |
| 5842217 | 00-364T13:26:47 | 5842214 SCLK reported (just after RELOAD)     |
| 5845505 | 00-366/20:50:41 | 37IST 29NNGLOBAL06 (Gain State & Chopper Ref) |
| 5845593 | 00-366T22:20:07 | Chopper 63Hz ENGR                             |
| 5846411 | 01-001T12:06:47 | Chopper 63Hz ENGR                             |



## NIMS Archived EDRs and CUBEs

The NIMS data are stored in EDRs (Experimental Data Records) produced by JPL-MIPS (Multi-mission Image Processing System). The NIMS Phase2 EDR is described in the NIMS EDR SIS (Software Interface Specification) Number 232-08. The same information is available in both human and machine-readable form in the PDS (Planetary Data System) structure files EDRHDR.FMT and EDRDATA.FMT in the LABEL directory of the NIMS EDR CD-ROM. Each observation has at least one EDR. The EDR file name is derived from the 12 character observation name plus a single character which allows an observation to be broken up into multiple EDRs. The EDRs have a Vicar label, followed by a PDS/ISIS label, binary header records and the data records. For archiving on CD-ROM, the Vicar labels are detached from the EDR (but kept separately on CD) and the file is renamed so as to conform to the 8.3 DOS file-naming convention. The 8.3 EDR name consists of a 2 character orbit identifier, a single character target identifier, a 3 digit counter and the suffix EDR. For example, the MIPS EDR G1GNGLOBAL01A.1 becomes G1G001.EDR. More information about NIMS EDRs can be found in the VOLINFO.TXT file on the EDR CD-ROM.

NIMS EDR data typically require considerable processing before they are readily amenable to science analysis. Normally, the EDRs are processed into spectral image cubes by one of several sets of software. MIPS systematically processes the EDRs into CUBEs (band sequential image files) and MASKs (spatial/spectral summary images) which are distributed on the NIMS CUBE CD-ROMs. Information about the structure of the NIMS CUBEs can be found in the VOLINFO.TXT file on the CUBE CD-ROM. The name of the CUBE file is derived from the input EDR filename. For archiving on CD-ROM, the CUBE files are renamed so as to conform to the 8.3 DOS file-naming convention. The 8.3 CUBE name consists of a 2 character orbit identifier, a single character target identifier, a 3 digit counter, a single character cube-type identifier, a single character data unit-type (DN, radiance or IOF) and the suffix QUB. For example, the MIPS IOF radiance cube for the observation G1GNGLOBAL01A.1 (G1G001) becomes G1G001CR.EDR. The summary MASKs on the CD-ROM have the same 6 character name as the EDR name with the suffix JPG or GIF to denote its graphics format.

Data Format

All data files have PDS labels. The raw data (EDR) file contains time-sequential, 16 bit integers. Reduced data files (TUBES and CUBES) may be viewed as images or spectra. They contain VAX real numbers, are band sequential (BSQ - the images are stacked in band order) and have geometry information appended as backplanes after the last NIMS band.

Data Types

Mask files contain summary images (3 band BSQ) and spectra of up to six selected regions that provide a quick indication of data location, data quality and spectral content. A Guide to understanding the NIMS mask is available.

Cube files contain data that have been projected and resampled. The core data are BSQ - spatial in the first two dimensions, and spectral in the third. Cubes of the satellites are projected in point-of-view, and, with few exceptions have no photometric correction applied. Cubes of Jupiter are (generally) projected as simple cylindrical. Cubes of Europa, Ganymede, and Callisto have been despiked. The cubes are available both in radiance and I/F (intensity divided by flux) form.

Tube files contain data in (almost) time order and normally have a NIMS-related 20 pixel spatial dimension (20 x n or n x 20). Projection coordinates are contained in backplanes, but the data have not been resampled. The data are in units of radiance and no despiking has been applied. All data in cubes are also available in tube form. Some data (such as spatially undersampled data) appear in tube form only.

A spike file contains a list of pixels that have been identified as spikes, but not replaced, in the tube. Spike files can be used to remove spikes from both tube and EDR files.

EDR files contain the most primitive form of the data available. They should be used only for advanced data analysis. The format is complex and the files do not form images or spectra without prior processing.

Data Labels

A data label (PDS form) is attached to the front of each file (except masks, which have an attached VICAR label and a detached PDS label). The labels are in ASCII keyword=value format and contain pointers to various data objects in the file, descriptions of the data objects and descriptions of the observation associated with the file. A history object in similar format follows and describes the processing steps that produced the file. Much of this information is necessary for understanding and viewing the cube. In particular, the label contains the offset to the cube, the dimensions of the cube, axes labels, and explicit wavelength information.

Data Access

Software for processing this data is called ISIS and is available for DEC VAX VMS, SUN Solaris, DEC Alpha Digital Unix, Silicon Graphics Unix and PC LINUX systems. The Unix versions are available from the USGS Astrogeology team. Images from NIMS cubes and tubes can be viewed with any image display program which allows an offset from the beginning of the file to the selected image. Packages tested include ISIS, VICAR, ENVI, SAO IMAGE, and NASAVIEW. ISIS and ENVI (and soon NASAVIEW) additionally display spectra. The ISIS viewer is named CV (UNIX) or QL3 (VMS).

Labels may be displayed with some editors (eg DOS edit), and with most "type" and "search" functions. Some editors do not recognize the PDS line termination conventions. The label may be listed by the ISIS function LHLIST (VMS) or LABEL (UNIX).

Software for converting EDRs to cubes exist in both ISIS (DEC VAX VMS) and VICAR (DEC Alpha VMS) versions only. A primitive list of values in an EDR may be obtained with the program EDRDMP2.

## Understanding the NIMS Mask

The NIMS mask is designed to provide a quick summary of the contents of a NIMS data cube (or tube). It displays a view of both the spatial and spectral content of the data.

The mask has four regions. Starting from the upper left and proceeding clockwise: a spatial display; six or fewer representative spectra; annotation; and a spectral histogram.

The spatial display of an observation which has been projected and resampled (a cube) has a maximum size of 600x600 pixels. This is overlaid with surface coordinates and is embedded in a 700x700 grid of pixel coordinates. It is accompanied by two 1-dimensional histograms describing the raw image and the image stretched for display. The data image can range from a simple combination of up to 3 NIMS bands displayed in the RGB planes, to complicated arithmetic functions of NIMS bands displayed in the RGB planes. (The formulas appear as annotation below the histograms.) The graphics directly below the image show the input and output data histograms for the three color planes. The "shortest" color for each bin displays in front. The image also contains from one to six numbered rectangles, which show the from which averaged spectra (displayed on the right) were taken.

The spatial display of an observation in time sequence (a tube) is a graphic showing a footprint of the observation over a grid of surface coordinates on the target body. Numerals 1-6 on the graphic mark the locations of the average spectra displayed on the right.

The spectra to the right of the image may display either BDRF or radiance (or both). If both are displayed, then a vertical "radiance fence" line will appear where the breakpoint occurs. This permits display of both atmospheric data, which have significant reflectance and thermal components, and I/F satellite surface data which have strong absorptions at longer wavelengths (such as water spectra.) The spectra are labelled with wavelength in microns and location in both pixel and latitude-longitude space.

The annotation provides information about the observation, including its name, a brief description, its geometry, instrument and projection parameters. TCA is the time from Galileo's closest approach to the target body.

The 2-dimensional spectral histogram in the lower left corner shows the number of pixels at a given radiance for each wavelength. If a surface contains spatial mixtures with significantly different spatial fractions for several components, the spectra of the components will be evident in this display.