NIMS GUIDE TO THE I27 ORBIT

Original: February 2000

Revised: December 2000

VERSION DATE: 001231

I27 Encounter starts 02/20/00, I27 Playback starts 02/23/00

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 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 I27 Orbit for the NIMS Team. The aim of this guide is to provide detailed information on the various NIMS I27 observations and calibrations. Also included in this document is background information on the I27 orbit. This guide was produced before the start of the I27 orbit. After analysis of the NIMS I27 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 I27 orbit. Chapter 2 gives an overview of the I27 orbit and summarizes the NIMS science objectives for the I27 orbit using tables, spreadsheets and timelines. Chapter 3 contains diagrams of various aspects of spacecraft geometry for the I27 orbit. Chapter 4 summarizes the NIMS I27 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 I27 orbit.

For more information on the I27 orbit, please refer to the Galileo Orbit Planning guide and the Galileo Orbit Activity Plan for the I27 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 1 - Introduction

Contents

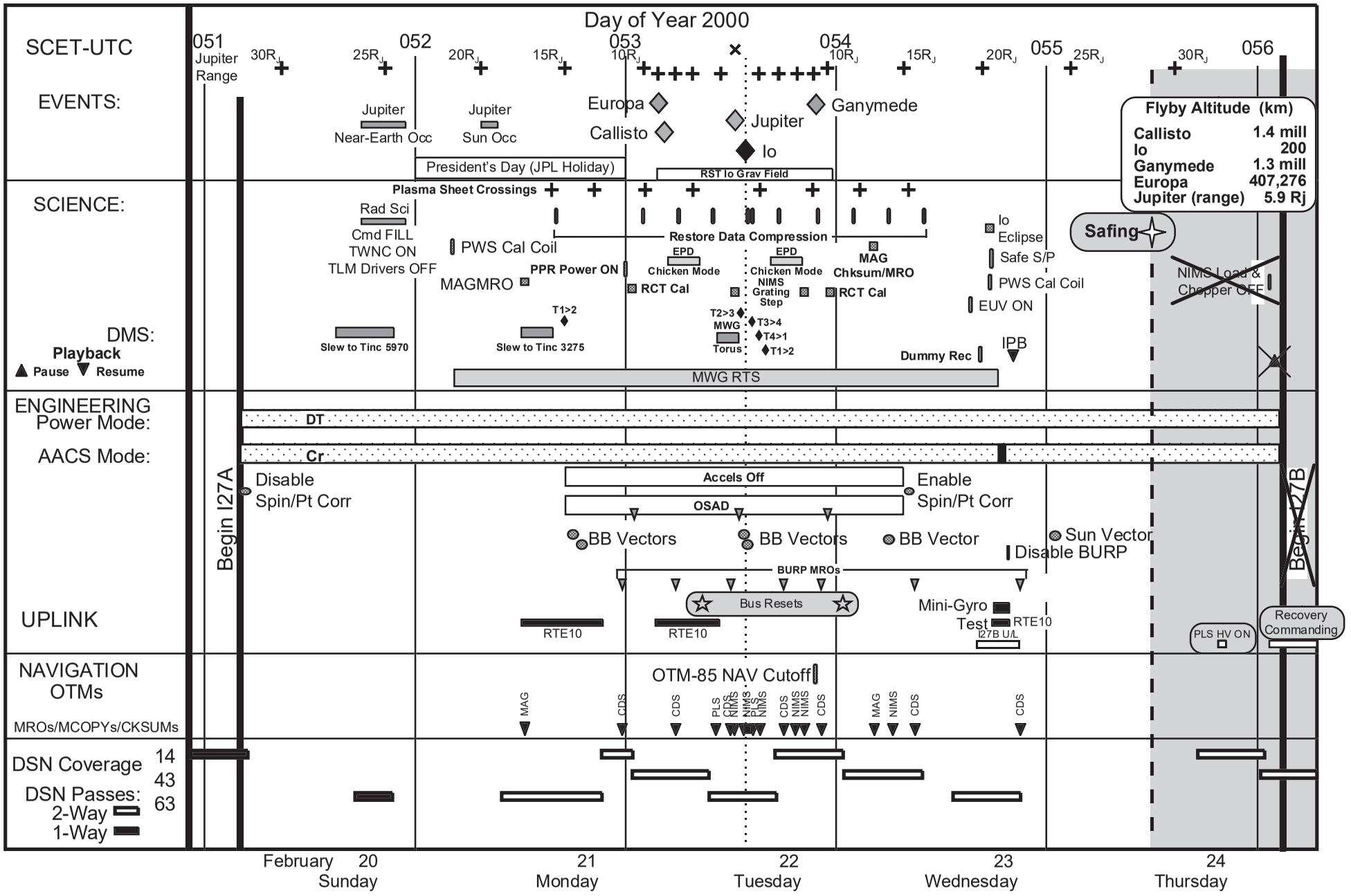
Introduction

This I27 orbit is the twenty-seventh of twenty-nine orbits in Galileo's Tour of the Jovian system and the second orbit in the Galileo Millennium Mission (GMM). I27 is the first Io Flyby of GMM. This orbit has a targetted satellite flyby of Io.

There are 12 autonomous reloads of the NIMS RAM code from CDS planned during the I27A 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 monitior the NIMS engineering telemetry data on a regular schedule to track the instrument's status.

The I27 orbit is divided into 2 sequence loads: one Encounter Load (I27A) and one Orbital Cruise Load (I27B). The I27A load begins on D051 (02/20/00) and ends on D056 (02/25/00). This load contains the flyby of Io. The Cruise Load I27B runs from D056 to D138. Playback of the recorded data takes place during the Cruise phase, I27B. A high-level overview timeline of the I27 orbit can be found on the following three pages.

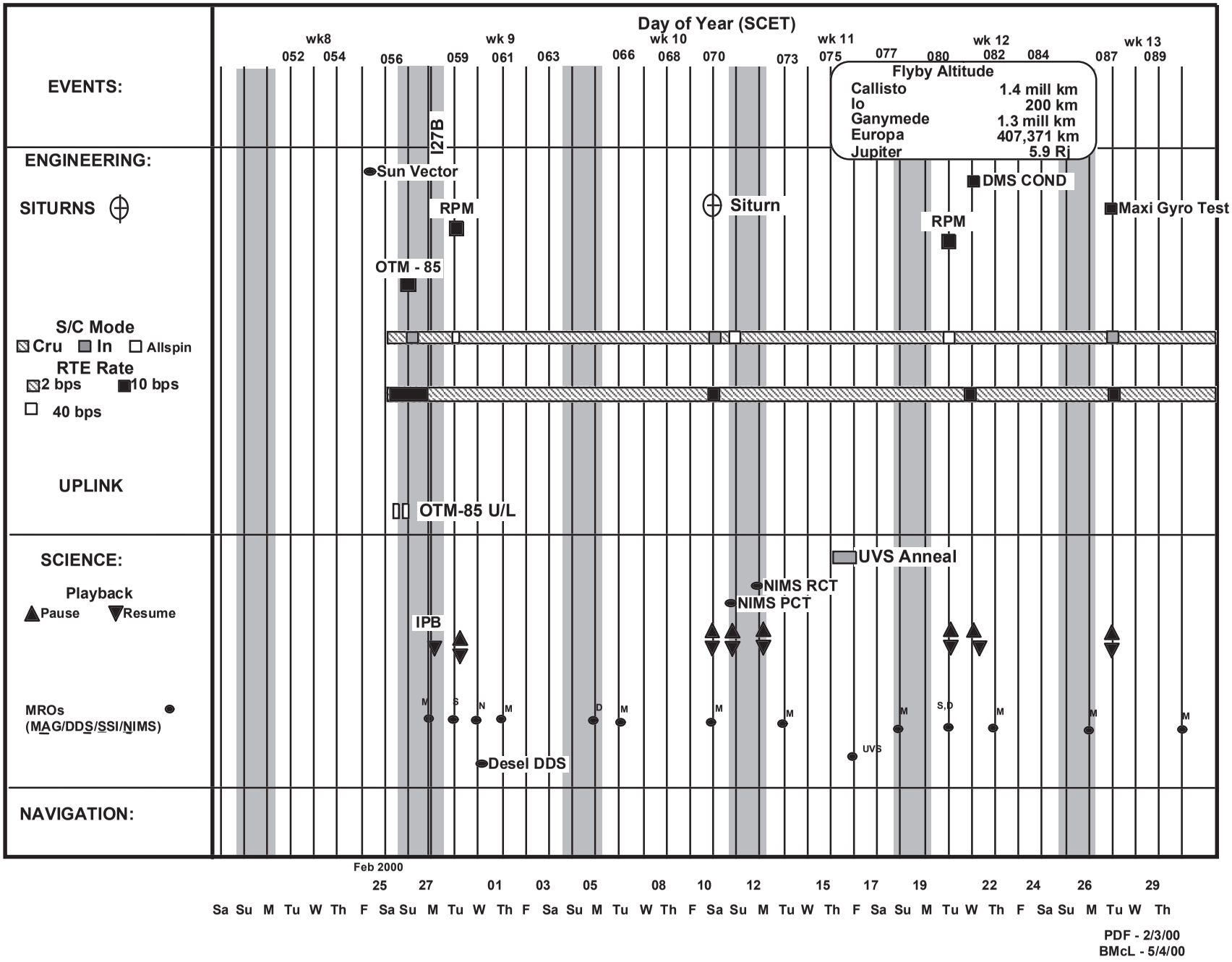
I27A Encounter Overview



Note: Two Bus Reset PORs occurred during the encounter time period, both of which were properly handled by the on-board recovery routine.
The times were: 00-053/08:53:23 SCET and 00-054/00:45-01:45 SCET (indeterminate, MRO not received).
Full safing (due to sumultaneous bus reset) occurred at 00-055/12:00:13 SCET.

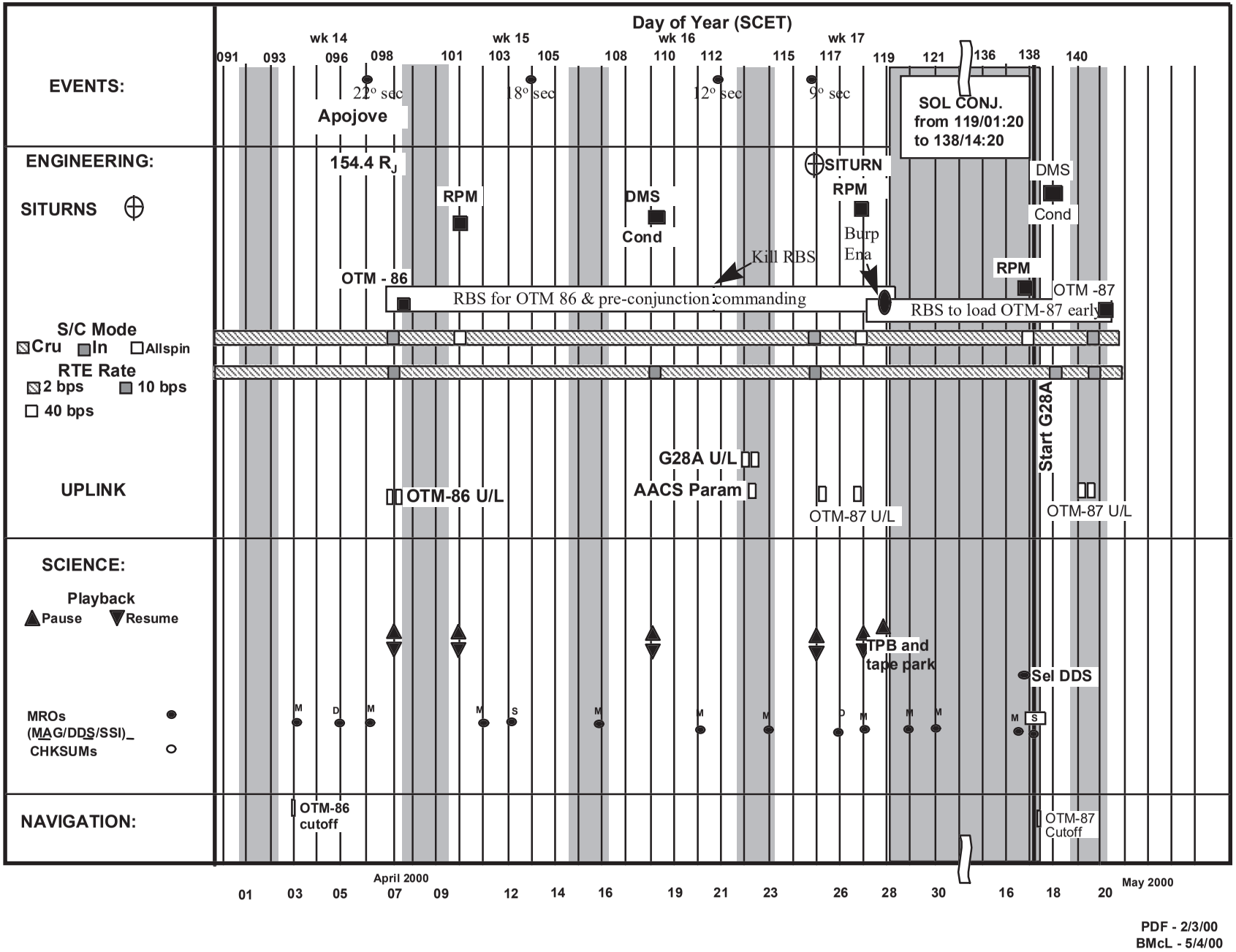
BMcL/SST
2/24/00

I27B Overview - Pt. 1



PDF - 2/3/00
BMcL - 5/4/00

I27B Overview - Pt. 2



PDF - 2/3/00
BMcL - 5/4/00

The following table lists the major events during I27, including NIMS Real Time observations, in UTC.

02/20/00	00-051/04:00:00	I27 Encounter Start
02/22/00	00-053/12:31:28	PJ-27 Jupiter Closest Approach
02/22/00	00-053/12:35:46	NIMS RAM Reload 01
02/22/00	00-053/12:42:40	NIMS Grating Test 01
02/22/00	00-053/13:28:20	NIMS RAM Reload 02
02/22/00	00-053/13:47:26	NIMS RAM Reload 03
02/22/00	00-053/13:47:52	I27 Io Closest Approach
02/22/00	00-053/13:55:44	NIMS RAM Reload 04
02/22/00	00-053/14:13:56	NIMS RAM Reload 05
02/22/00	00-053/14:29:06	NIMS RAM Reload 06
02/22/00	00-053/14:40:00	NIMS RAM Reload 07
02/22/00	00-053/15:12:22	NIMS RAM Reload 08
02/22/00	00-053/15:18:29	NIMS RAM Reload 09
02/22/00	00-053/19:35:32	NIMS RAM Reload 10
02/22/00	00-053/20:30:52	NIMS RAM Reload 11
02/22/00	00-053/20:36:52	NIMS Grating Test 02
02/23/00	00-054/19:36:58	Start I27 Playback
02/24/00	00-055/12:45:00	S/C Safed (Bus Reset + DMS)
02/25/00	00-056/01:58:39	NIMS RAM Reload 12 (not commanded)
02/25/00	00-056/05:30:00	S/C Recovery Initiated
02/26/00	00-057/20:21:37	NIMS Power On (Phase 0)
02/28/00	00-057/20:09:48	Re-Start I27 Playback
02/28/00	00-059/20:24:03	NIMS RAM Reload 13
03/11/00	00-071/08:28:57	NIMS R/T PCT CAL
03/12/00	00-072/13:34:08	NIMS R/T RCT CAL
04/27/00	00-118/21:46:05	End I27 Playback

Chapter 2 - Orbit Overview

Contents

Introduction to Chapter 2

This chapter gives an overview of the NIMS observations in the I27 Orbit.

The text on page 3 summarizes the NIMS science objectives for I27. The NIMS calibrations are discussed on page 3. Early data return and I27 playback are also discussed on page 3.

The I27 Integrated Io Observation Plan is presented on pages 4 and 5.

The table on page 6 is a time-ordered listing of the NIMS Oapels for I27.

The plot on page 7 shows the geometry of the NIMS I27 observations using a north trajectory pole view projection. The plot on page 8 shows the geometry of the NIMS I27 observations during the Io Flyby using a north trajectory pole view projection. The plot on page 9 shows the geometry of the NIMS I27 calibrations.

The spreadsheet on page 10 summarizes the various inputs for the NIMS I27 Observations. The spreadsheet on pages 11 and 12 summarizes the resource usage for the NIMS I27 observations.

The table on page 13 lists various NIMS I27 observing parameters: target latitude/longitude, range, cone angle, incidence angle light), emission angle view) and phase angle.

The timeline on pages 14 through 18 shows the placement of the I27 observations for all intruments during the I27 Encounter Period.

The tapemap on page 19 shows the placement of the I27 observations on the spacecraft's tape recorder.

The timeline on pages 20 through 29 shows the preliminary I27 playback schedule.

The NIMS I27 mosaic designs are summarized on page 30 in time-order.

NIMS I27 SCIENCE OVERVIEW

Io Science

The I27 Io sequence design is different from that used in I24 and I25 in response to the loss of spectral capability due to the stuck grating. The NIMS observations are mostly mapping instead of sit-and-stare spectrum building observations. NIMS and SSI did collaborate on some targets, and some ride-along behind SSI will be returned.

27INHRPELE01 - high resolution nightside obs. of Pele.
27INICHAAC01 - dayside jail-bar obs over 'golf course' in Chaac region.
27INMOSAIC01 - dayside two-swath map of Chaac region.
27INPROMTH01 - dayside map across Prometheus region.
27INCAMAXT01 - dayside map across Camaxtl hot spot.
27INAMRANI01 - dayside three-swath map across Amiarani region.
27INTVASHT01 - dayside map across Tvashtar caldera region.
27INREGION01 - dayside three-swath regional map containing Prometheus.
27INGLOBAL01 - dayside three-swath global map

Calibration

There are three NIMS calibration observations planned for I27: one PCT cal, one RCT cal and one OPCAL.

Early Data Return

There are three realtime observations in I27: One PCT calibration, one RCT calibration and one OPCAL.

I27 Playback

I27 playback is split into two passes through the tape. Some I27 data will not be recorded over in G28 and will be played back during G28 cruise.

Track 2:

day/hr:mn	Min from Io C/A	Target	Target Lat/Lon	S/C Lat/Lon	Range (km)	Notes
053/07:00 to 08:10	-406 to -336	Global	00, 322	+3, 78	161578	PPR nightside dark map
053/11:22 to 12:19	-144 to -87	Loki	00, 285	+3, 114	66504	PPR nightside
053/12:26 to 13:03	-80 to - 43	Daedalus	27, 272	+3, 123	32730	PPR nightside

Track 3:

day/hr:mn	Min from Io C/A	Target	Target Lat/Lon	S/C Lat/Lon	Range (km)	Notes
053/13:07 to 13:24	-39 to - 22	Loki	+13, 318	+3, 128	15153	PPR nightside
053/13:26 to 13:33	-20 to -13	Loki	+11, 328	+3, 131	6898	PPR nightside
053/13:34	-12	Pele	-19, 256	+3, 132	3674	NIMS 1 swath, 7 minutes, nightside
053/13:39	-7	Pele	-18, 255	+3, 133	1445	SSI 1x4 IM8 clear filter, nightside, 17m/pixel
053/13:40	-6	Mulungu	+17, 218	+3, 133	830	PPR dayside
053/13:44	-2	Sapping	+32, 193	+3, 134	374	SSI 1x4 IM4 clear filter, 5.5m/pixel
053/13:48	+2	Chaac	+13, 158	+3, 134	374	SSI 1x7 IM4 + 1 IM4/480, clear fitler, 7-8m/pixel
053/13:50	+4	Prometheus	-1, 156	+3, 134	828	SSI 1x8 IM8 clear filter, 11-13 m/pixel
053/13:51	+5	Chaac	+13, 160	+3, 134	1000	NIMS jail-bar, 4 minutes
053/13:57	+11	Chaac Mosaic	+13, 156	+3, 135	2899	NIMS 2 swaths, 15 minutes

Track 4:

day/hr:mn	Min from Io C/A	Target	Target Lat/Lon	S/C Lat/Lon	Range (km)	Notes
053/14:16	+30	Prometheus	-2, 159	+3, 138	11029	NIMS 1 swath, 10 minutes
053/14:26	+40	Tohil	-26, 163	+3, 139	15180	SSI 2x2 IM8 clear filter, 165 m/pixel
053/14:28	+42	Prometheus	-2, 156	+3, 140	16011	SSI 1x2 IM8 clear filter, 170 m/pixel
053/14:31	+45	Camaxtli	+16, 158	+3, 140	16843	SSI 2x6 IM4 clear filter, 180-185 m/pixel
053/14:36	+50	Camaxtli Region	+14, 137	+3, 141	19338	NIMS 1 swath, 2 minutes
053/14:39	+53	Amirani	+29, 114	+3, 141	20170	SSI 1x3 IM4 green filter, 1 IM4 756, 1 IM4 violet, 210 m/pixel
053/14:43	+56	Amirani	+30, 119	+3, 142	22666	NIMS 3 swath 18 minutes

Track 1:

day/hr:mn	Min from Io C/A	Target	Target Lat/Lon	S/C Lat/Lon	Range (km)	Notes
053/15:01	+74	Tvashtar	+61, 120	+3, 144	30151	SSI 5 IM8 violet, 756, 889, 968, clear filters, 315 m/pixel
053/15:05	+78	Zal, Term	+56, 182	+3, 145	30982	SSI 1x6 IM4 clear filter, 335 m/pixel
053/15:09	+82	Shamshu	+11, 167	+3, 145	32645	SSI 1x4 IM8 clear filter, 340-345 m/pixel
053/15:11	+84	S. Pole	-52, 118	+3, 146	33477	SSI 1x4 IM4 clear filter, 350-355 m/pixel
053/15:13	+86	Tvashtar	+57, 112	+3, 146	34308	NIMS 1 swath, 4 minutes
053/15:17	+90	Region	+19, 163	+3, 147	35971	NIMS 3 swaths, 52 minutes

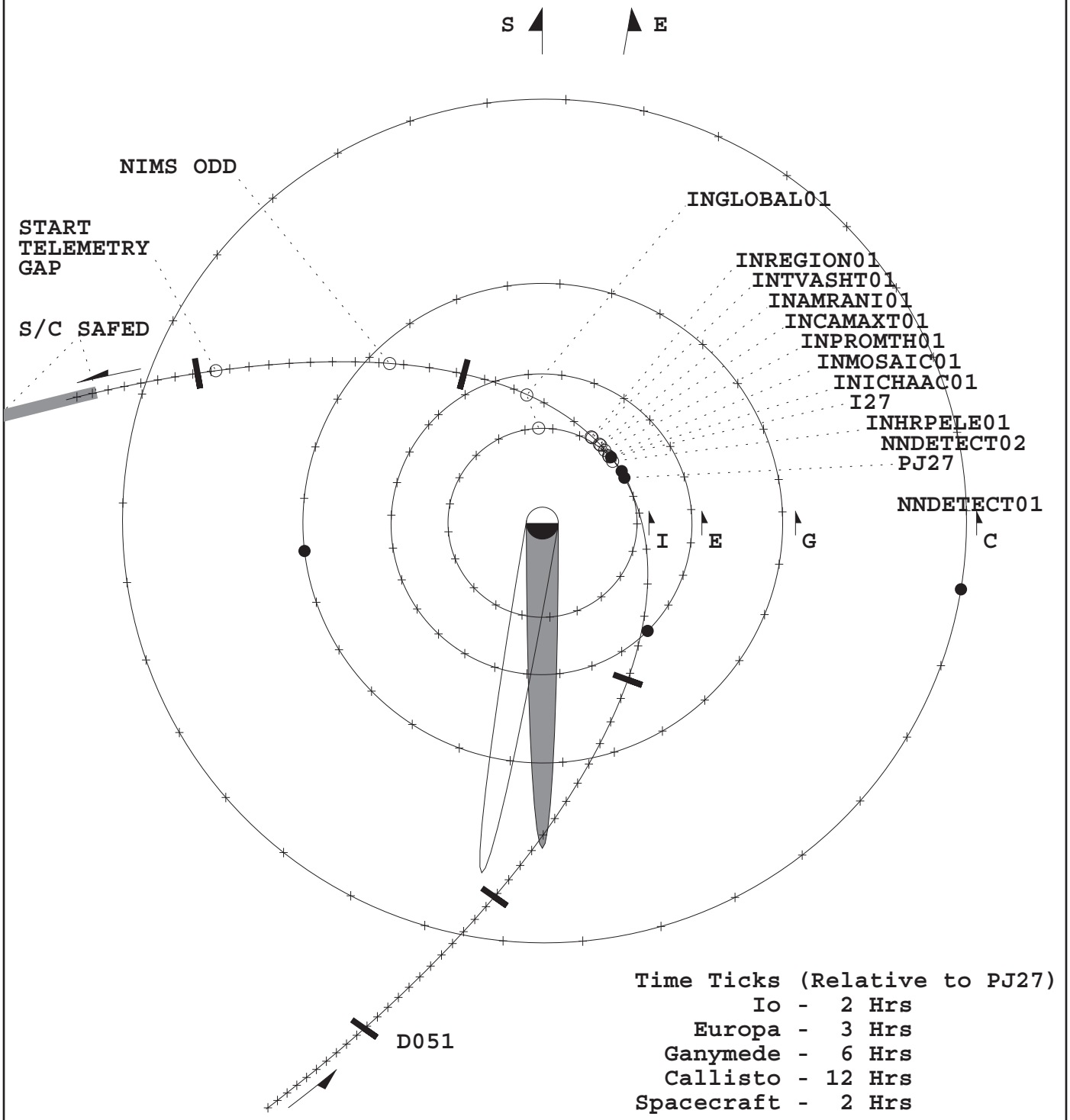
Track 2:

day/hr:mn	Min from Io C/A	Target	Target Lat/Lon	S/C Lat/Lon	Range (km)	Notes
053/16:12	+145	Bosphorus Regio	0, 155	+3, 155	61592	PPR SO2 Frost Sample
053/17:21	+145	Global	0, 165	+3, 165	90826	PPR Dayside Thermal Map
053/19:40	+350	Global	0, 170	+3, 183	155130	NIMS 3 swaths, 40 minutes
053/23:12	+562	Global	0, 200	+3, 214	301743	SSI 2x2 IM4 756, green and violet filters, 3.1 km/pixel
054/16:20	+1590	Eclipse	0, 000	+3, 000	1640K	SSI IM4/400 OCM clear and 1 micron filters, 17 km/pixel

I27 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
27NNDETECT01	00-053/12:35:35	00-053/12:55:48	000/00:20:13
27NNHRPELE01	00-053/13:28:10	00-053/13:31:12	000/00:03:02
27INHRPELE01	00-053/13:34:14	00-053/13:41:18	000/00:07:04
27NNICHAAC01	00-053/13:47:22	00-053/13:50:24	000/00:03:02
27INICHAAC01	00-053/13:51:25	00-053/13:55:28	000/00:04:02
27NNMOSAIC01	00-053/13:55:28	00-053/13:57:29	000/00:02:01
27INMOSAIC01	00-053/13:57:29	00-053/14:12:39	000/00:15:10
27NNPROMTH01	00-053/14:13:40	00-053/14:16:42	000/00:03:02
27INPROMTH01	00-053/14:16:42	00-053/14:26:48	000/00:10:06
27NNCAMAXT01	00-053/14:28:50	00-053/14:31:52	000/00:03:02
27INCAMAXT01	00-053/14:36:55	00-053/14:38:56	000/00:02:01
27NNAMRANI01	00-053/14:39:57	00-053/14:42:59	000/00:03:02
27INAMRANI01	00-053/14:42:59	00-053/15:01:11	000/00:18:12
27NNTVASHT01	00-053/15:12:18	00-053/15:13:19	000/00:01:00
27INTVASHT01	00-053/15:13:19	00-053/15:17:22	000/00:04:02
27INREGION01	00-053/15:17:22	00-053/16:09:56	000/00:52:34
27NNGLOBAL01	00-053/19:35:12	00-053/19:38:14	000/00:03:02
27INGLOBAL01	00-053/19:40:15	00-053/20:20:42	000/00:40:26
27NNDETECT02	00-053/20:30:48	00-053/20:51:02	000/00:20:13
27NNRELOAD01	00-056/01:56:02	00-056/02:10:11	000/00:14:09
27NNPCTRLT01	00-071/02:00:25	00-071/09:50:35	000/07:50:10
27NNRCTRLT01	00-072/10:00:31	00-072/23:16:16	000/13:15:44

NIMS I27 OBSERVATIONS

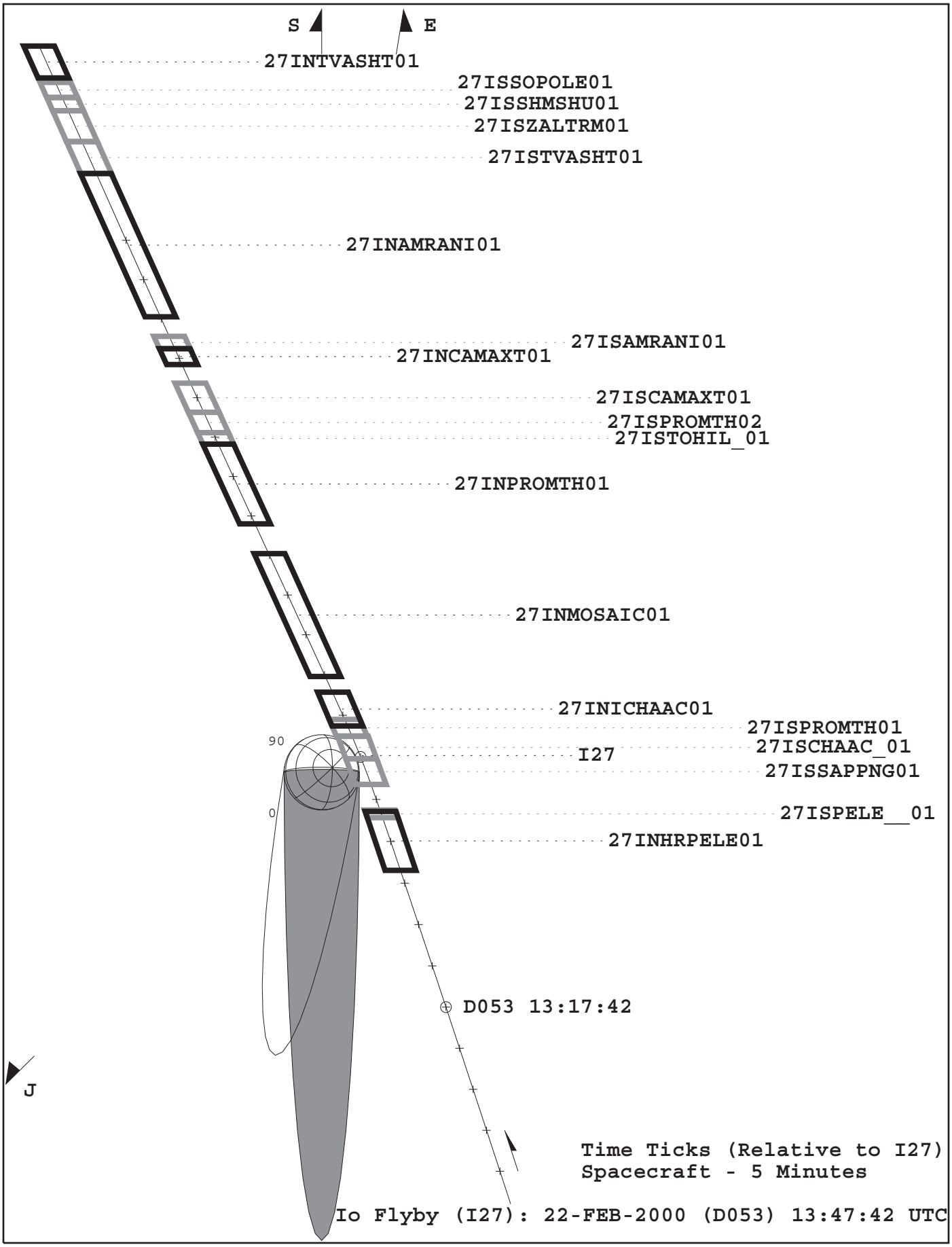


Io Flyby (I27): 22-FEB-2000 (D053) 13:47:42 UTC
Perijove (PJ27): 22-FEB-2000 (D053) 12:31:28 UTC

I27 North Trajectory Pole View

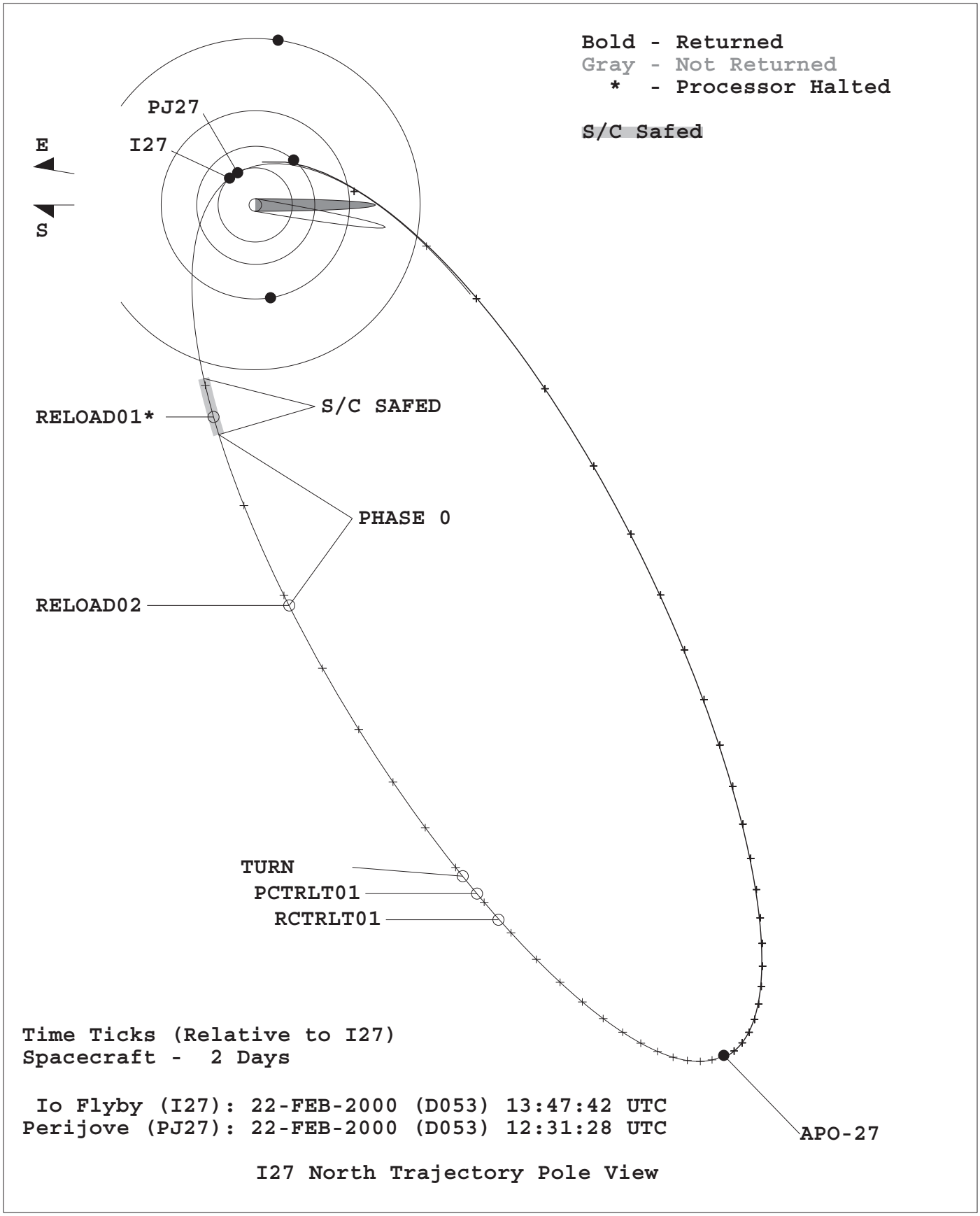
NIMS - FEL - 02/29/00

NIMS & SSI I27 IO FLYBY OBSERVATIONS



I27 North Trajectory Pole View, +2/-01 Hour NIMS - FEL - 01/27/00

NIMS I27 CALIBRATIONS



NIMS - FEL - 01/10/00

I27 NIMS INPUTS

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Fromat	PSID
27NNDETECT01-	Grating Step Test Copy								
27NNHRPELE01-	NIMS Software Reload								
27INHRPELE01-	Io Pele Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	DA
27NNICHAAC01-	NIMS Software Reload								
27INICHAAC01-	Io Chaac Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	DD
27NNMOSAIC01-	NIMS Software Reload								
27INMOSAIC01-	Io Mosaic Obs	I27ILM442	I27ILM144	LM	2	0	4	MPW	DE
27NNPROMTH01-	NIMS Software Reload								
27INPROMTH01-	Io Prometheus Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	DF
27NNCAMAXT01-	NIMS Software Reload								
27INCAMAXT01-	Io Camaxtli Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	DG
27NNAMRANI01-	NIMS Software Reload								
27INAMRANI01-	Io Amirani Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	DH
27NNTVASHT01-	NIMS Software Reload								
27INTVASHT01-	Io Tvashtar Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	EJ
27NNREGION01-	NIMS Software Reload								
27INREGION01-	Io Regional Obs	I27ILM442	I27ILM144	LM	2	0	4	MPW	DI
27NNGLOBAL01-	NIMS Software Reload								
27INGLOBAL01-	Io Global Obs	I27ILM442	I27ILM144	LM	2	0	4	MPW	EI
27NNDETECT02-	Grating Step Test P2	I27ILM442	I27ILM144						
27NNRELOAD01-	NIMS Software Reload	I27ILM442	I27ILM144						
27NNCHOPOF01-	NIMS Chopper Off	I27ILM442	I27ILM144						
27NNPCTRLT01-	PCT Calibration	I27PCT252	R/T	LM	4	0	4	R/T	
27NNRCTRLT01-	RCT Calibration	I27RCT252	R/T	LM	1	0	4	R/T	
27NNROPCAL01	NIMS OPCAL	I27OPCAL48	R/T	LM	4	0	4	R/T	

I27 RESOURCES

Activity ID	Mode	Record Format	Obs. Cost (tracks)	Obs. Cost (ticks)	Number Wavelengths Returned	Obs Record (sec.)	Obs PB (sec.)	Selected Bits to Tape sBOT (MBITS)	Bits to Tape BOT (Mbit)	Mode Cycle time (sec)
27INHRPELE01	LM	MPW	0.0461	269	144	303.00	303.00	3.49	3.49	8.667
27INICHAAC01	LM	MPW	0.0188	110	144	122.00	122.00	1.41	1.41	8.667
27INMOSAIC01	LM	MPW	0.1274	743	144	842.00	842.00	9.70	9.70	8.667
27INPROMTH01	LM	MPW	0.0869	506	144	573.00	573.00	6.60	6.60	8.667
27INCAMAXT01A	LM	MPW	0.0185	108	144	120.00	120.00	1.38	1.38	8.667
27INCAMAXT01B	LM	MPW	0.0185	108	144	120.00	99.33	1.14	1.38	8.667
27INAMRANI01	LM	MPW	0.1694	987	144	1,120.00	1120.00	12.90	12.90	8.667
27INTVASHT01	LM	MPW	0.0336	196	144	220.00	220.00	2.53	2.53	8.667
27INREGION01	LM	MPW	0.4089	2383	144	2,708.00	970.00	11.17	31.20	8.667
27INGLOBAL01	LM	MPW	0.1783	1039	144	1,179.00	0.00	0.00	13.58	8.667
Resource Totals			**1.1064**	**6447**						

I27 RESOURCES

Activity ID	AACS Mbits c 2.5	Comp	Thold	RT	Total BTG Mbits (w/4% ohead)	Data Reduction Factor (sBOT/BTG)	Pass
27INHRPELE01	0.02	1.20			0.8726	4.00	1
27INICHAAC01	0.01	1.20			0.3513	4.00	1
27INMOSAIC01	0.05	1.20			2.4249	4.00	1,2
27INPROMTH01	0.03	1.20			1.6502	4.00	1,2
27INCAMAXT01A	0.01	1.20			0.3456	4.00	1
27INCAMAXT01B	0.01	1.20			0.2861	4.00	1
27INAMRANI01	0.06	1.20			3.2255	4.00	1,2
27INTVASHT01	0.01	1.20			0.6336	4.00	1
27INREGION01	0.06	1.20			2.7935	4.00	1,2
27INGLOBAL01	0.00	1.20			0.0000		1,2
Resource Totals					**12.5832**		

NIMS I27 OBSERVING GEOMETRY

OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
27INHRPELE01	-19 to -17	255 to 256	2.0 to 3.8K	48 to 70	121 to 123	41 to 53	118 to 141
27INPELE__01+	-19 to -17	255 to 256	1.7 to 1.8K	76 to 82	121 to 122	57 to 62	105 to 112
27INPROMTH01+B	-2 to -1	154 to 156	1.1 to 1.4K	141 to 151	19 to 21	33 to 41	30 to 43
27INICHAAC01	+10 to +12	157 to 160	1.8 to 2.7K	158 to 163	23 to 26	27 to 33	6 to 10
27INMOSAIC01	+10 to +15	154 to 160	3.4 to 10.5K	147 to 156	19 to 25	34 to 44	12 to 21
27INPROMTH01	-5 to +0	151 to 159	12 to 15K	147	12 to 21	32 to 42	22
27INTOHIL_01+	-34 to -23	157 to 165	16K	147	33 to 41	48 to 58	22
27INPROMTH02+	-4 to +1	151 to 156	17K	147	12 to 17	33 to 39	22
27INCAMAXT01-	+8 to +18	133 to 158	18 to 20K	147	10 to 21	17 to 42	22
27INAMRANI01	+13 to +34	109 to 121	21 to 30K	149	26 to 42	18 to 33	20
27INTVASHT01+B	+52 to +75	119 to 120	31K	148	61	63	22
27INZALTRM01+	+20 to +50	62 to 81	33K	149	70 to 82	58 to 66	20
27INTVASHT01	+48 to +90	57 to 63	37K	147	60 to 62	59 to 65	22
27INREGION01	-20 to +25	114 to 163	40 to 59K	147	4 to 43	4 to 42	22
27INGLOBAL01	-90 to +90	80 to 260	161 to 175K	153	3 to 106	4 to 90	16

Symbol	Meaning
+	Ride-along
-	NIMS plus ride-along

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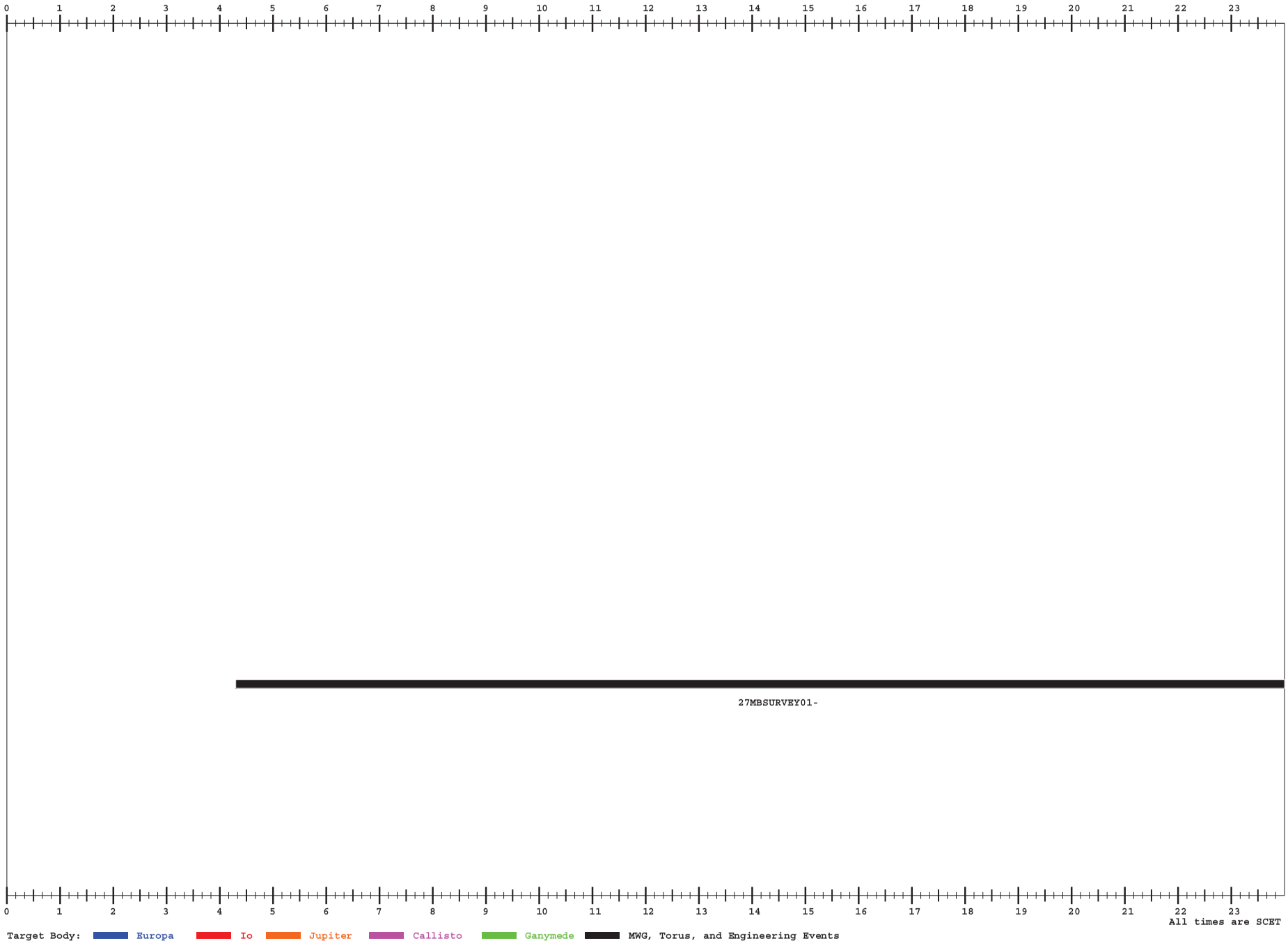

Target Body: Europa Io Jupiter Callisto Ganymede MWG, Torus, and Engineering Events

GEM: I27

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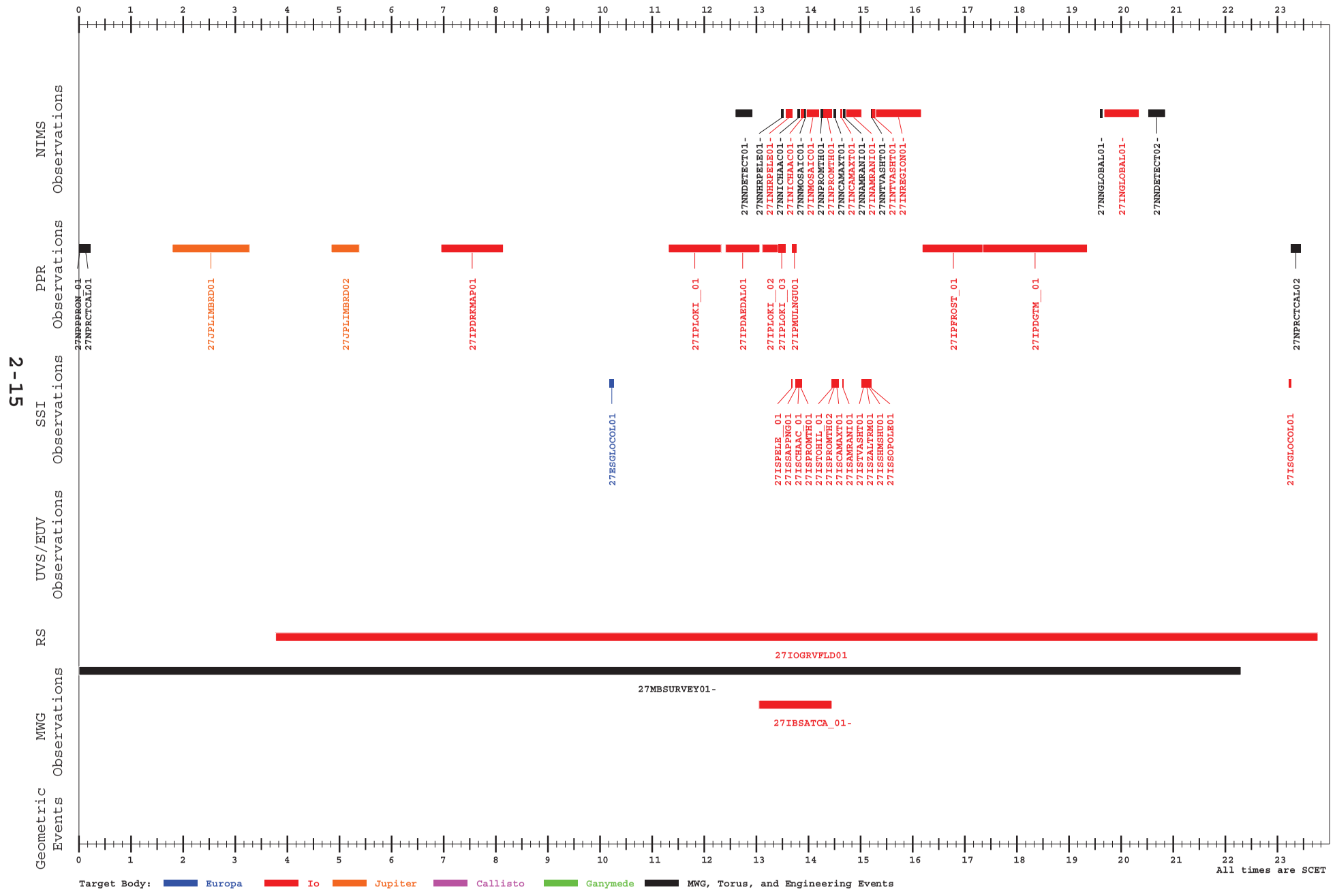

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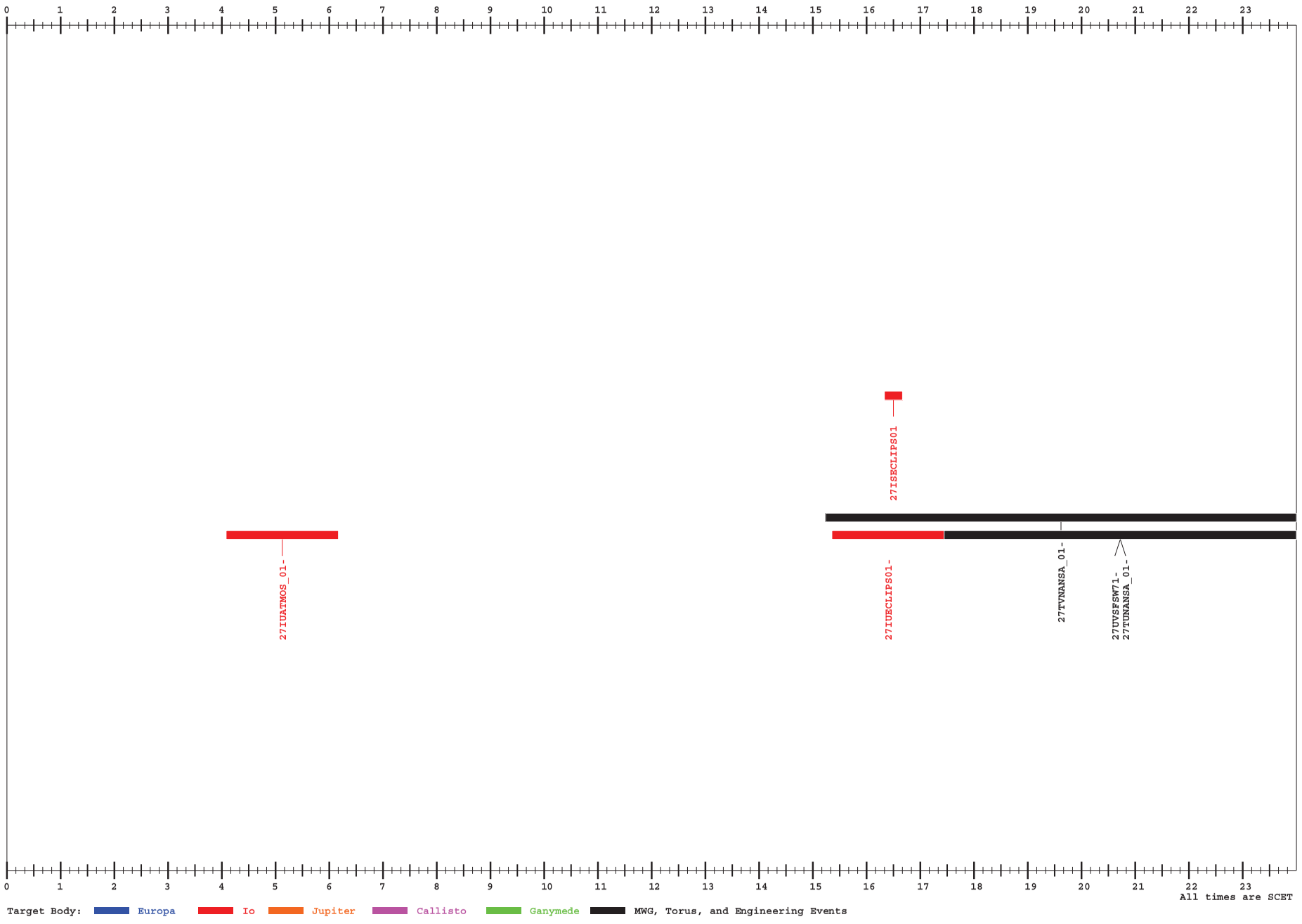

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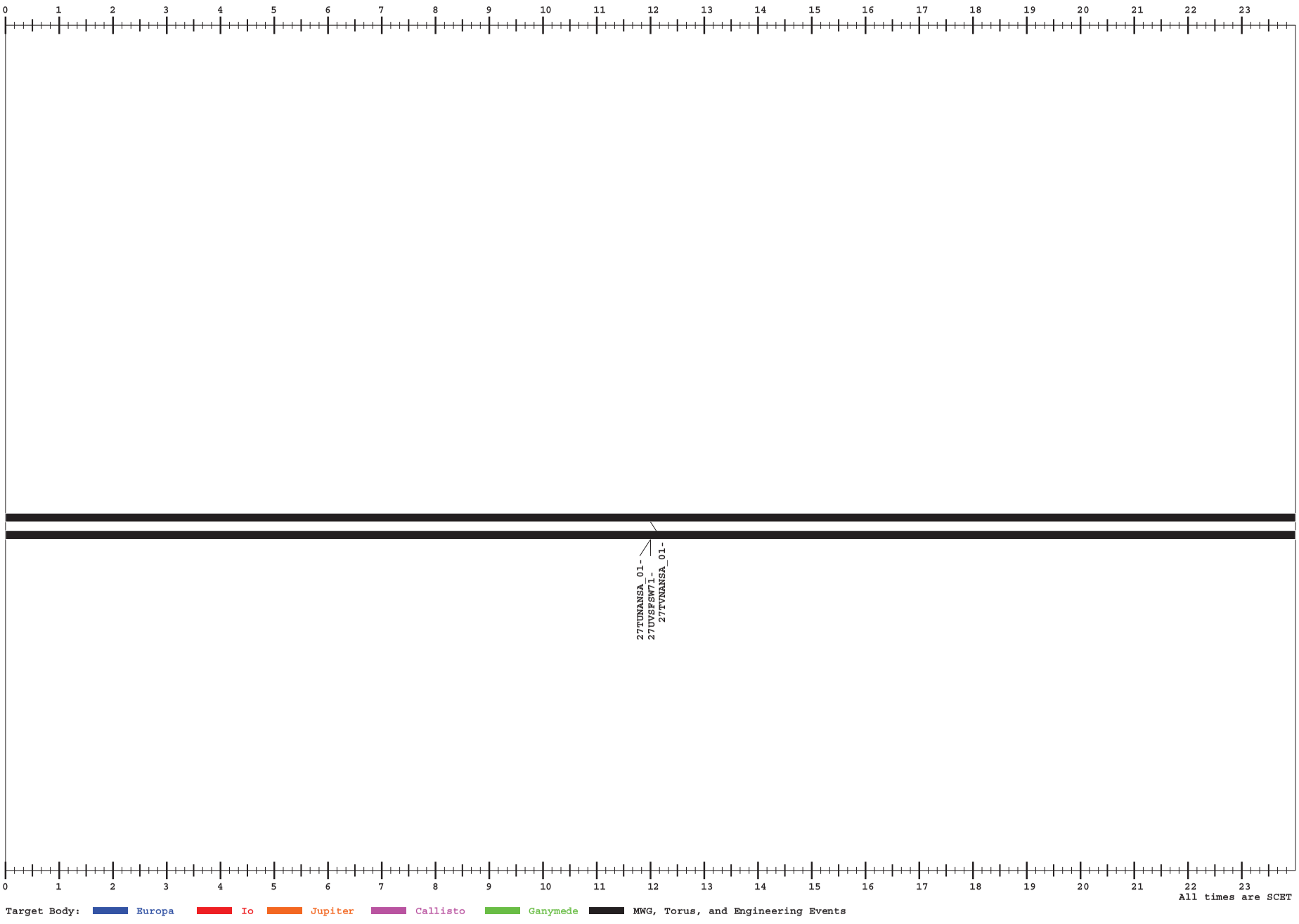

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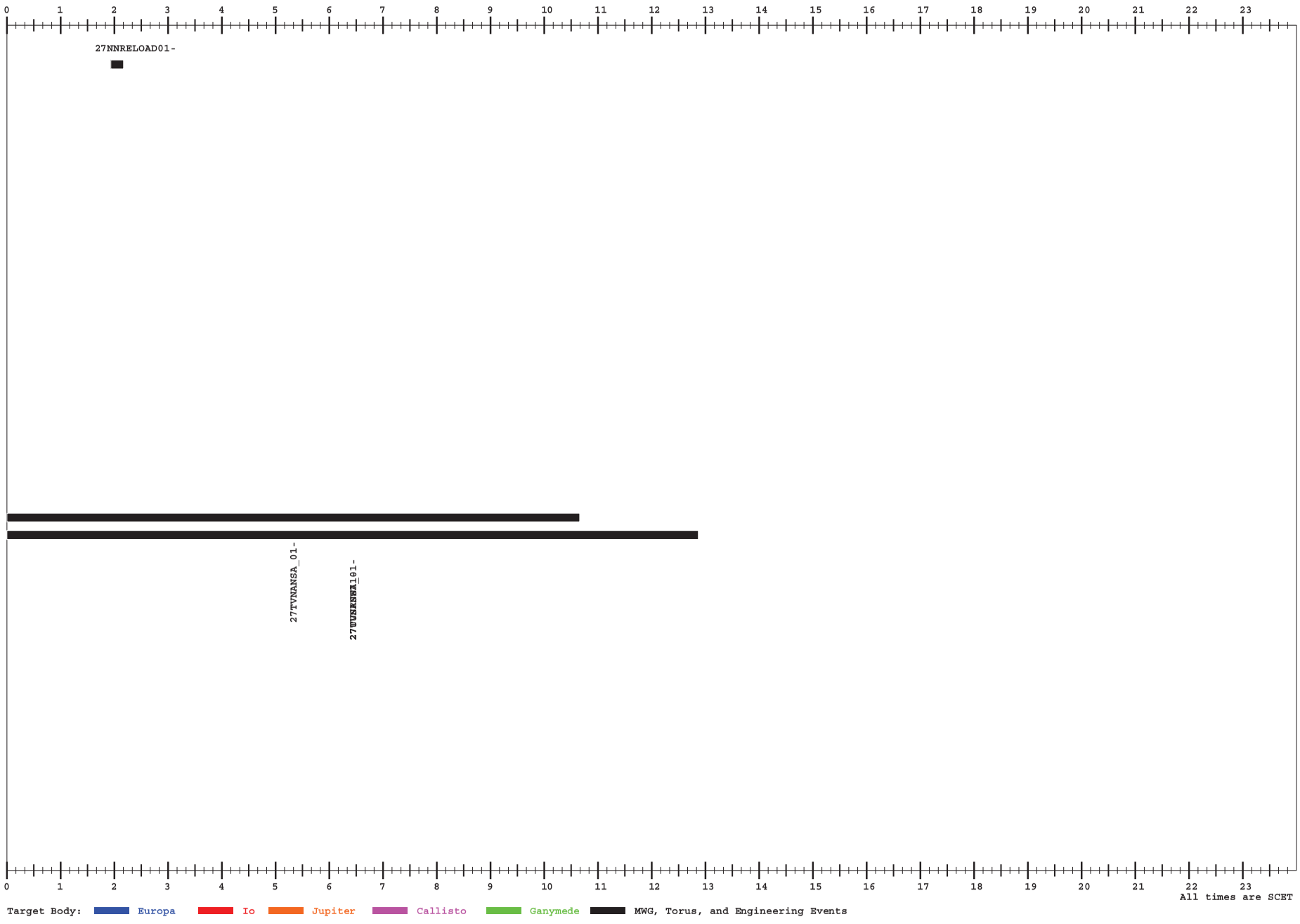

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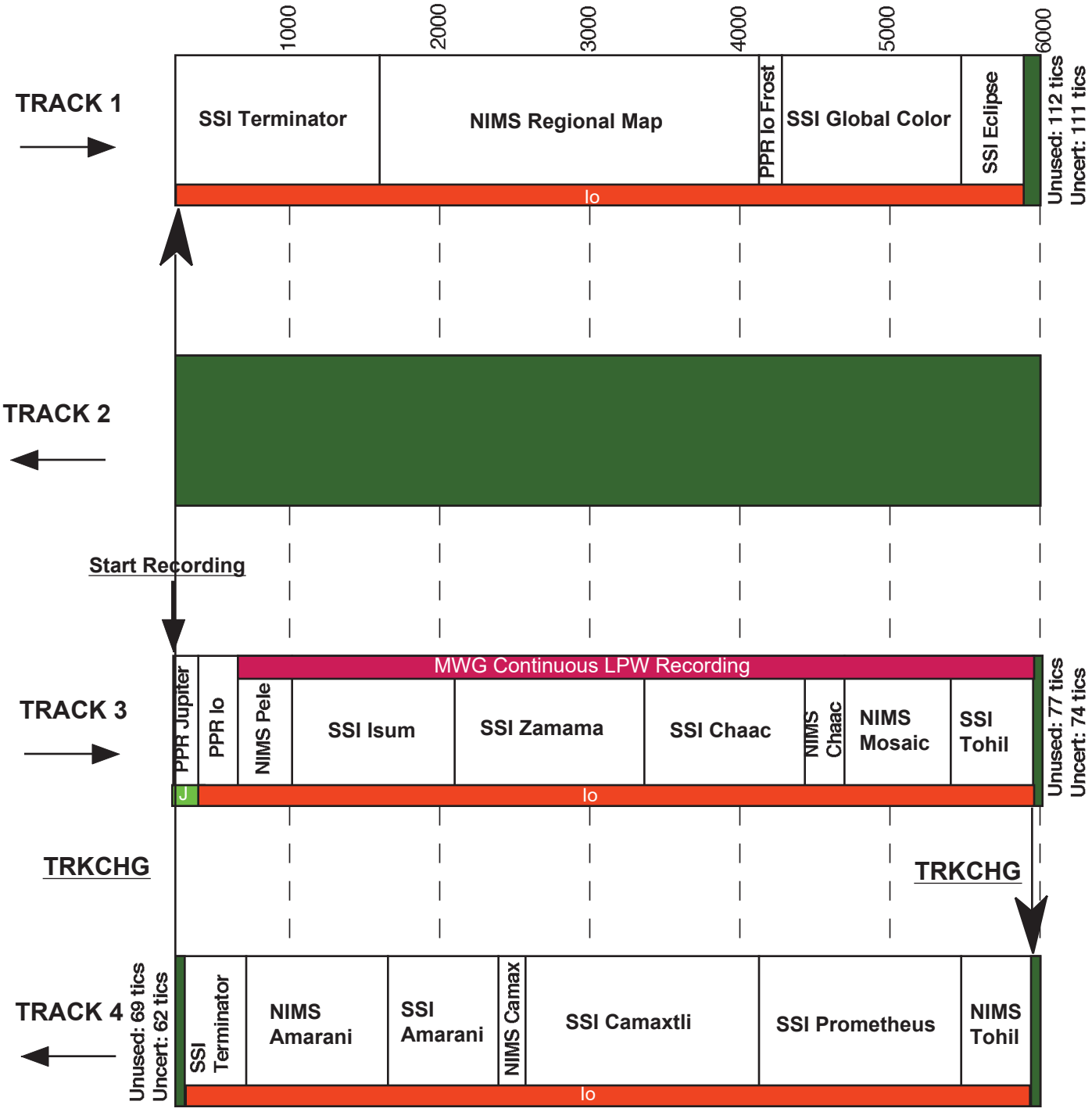
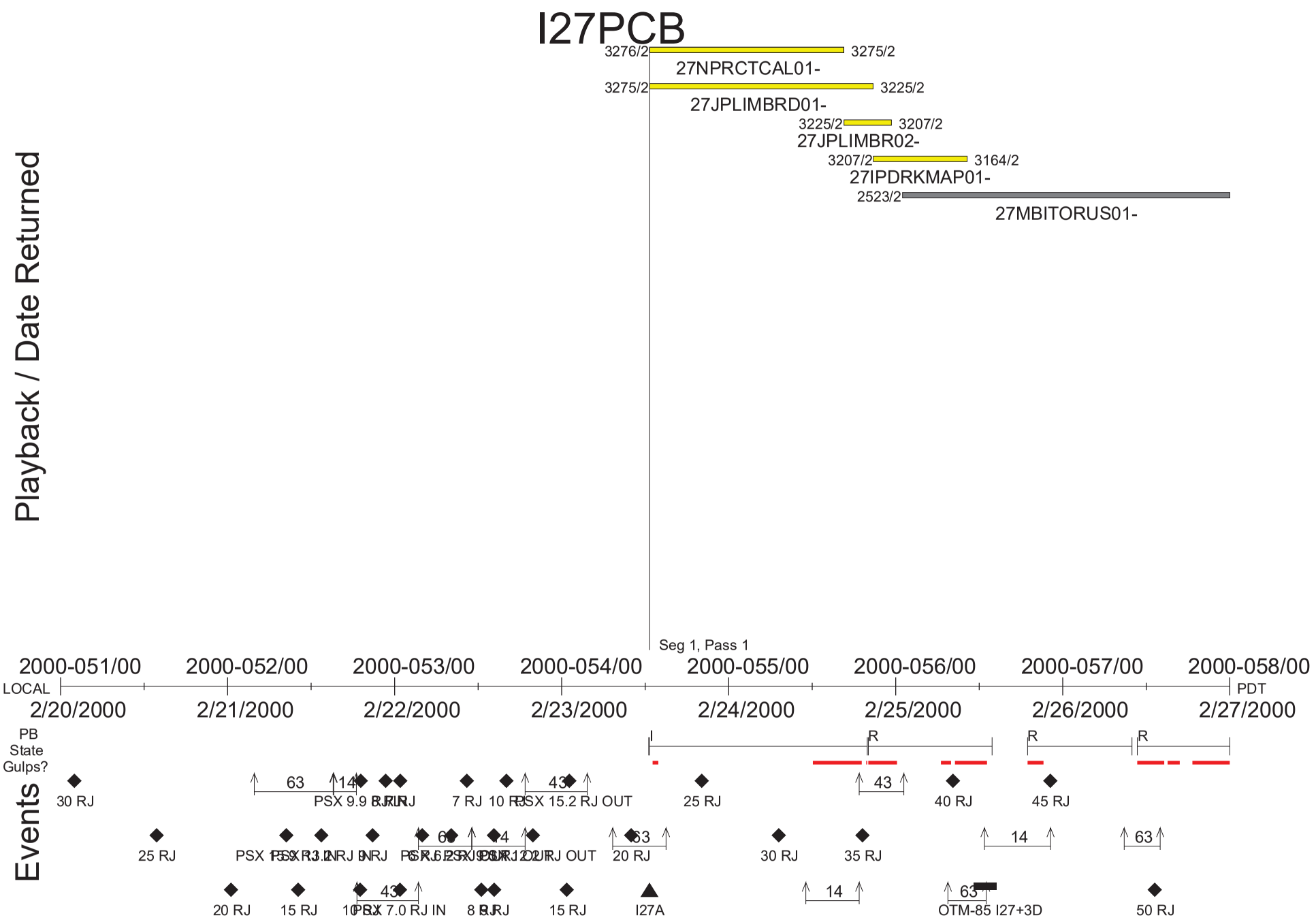


J. Gross, 8/30/99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3275/2
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3225/2
3207/2
27JPLIMBR02-
3207/2
3164/2
27IPDRKMAP01-
2523/2
27MBITORUS01-
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2000-052/00
2000-053/00
2000-054/00
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2/21/2000
2/22/2000
2/23/2000
2/24/2000
2/25/2000
2/26/2000
2/27/2000
PB
State
Gulps?
Events
30 RJ
25 RJ
20 RJ
15 RJ
PSX 9.9 RJ IN
7 RJ
10 RJ
PSX 15.2 RJ OUT
25 RJ
20 RJ
15 RJ
PSX 7.0 RJ IN
I27A
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35 RJ
40 RJ
45 RJ
50 RJ
OTM-85 I27+3D

I27PCB

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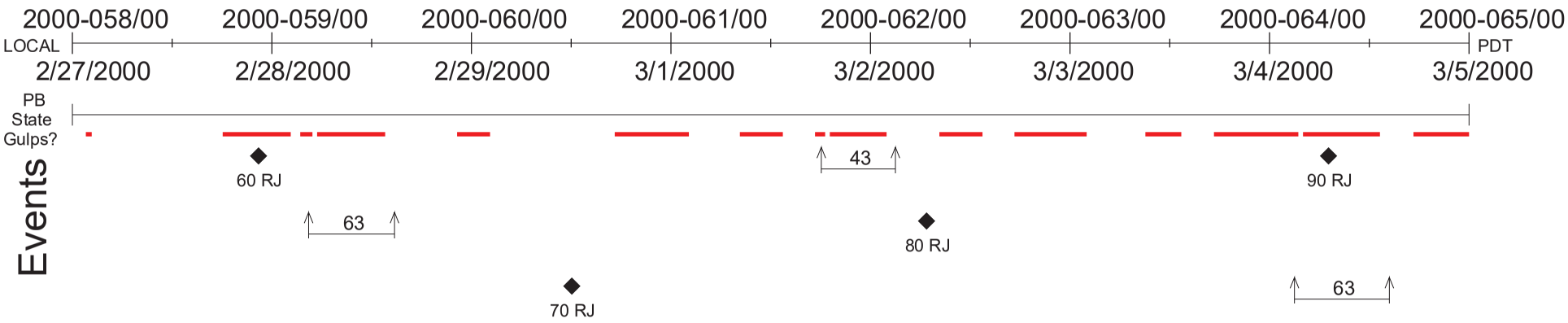

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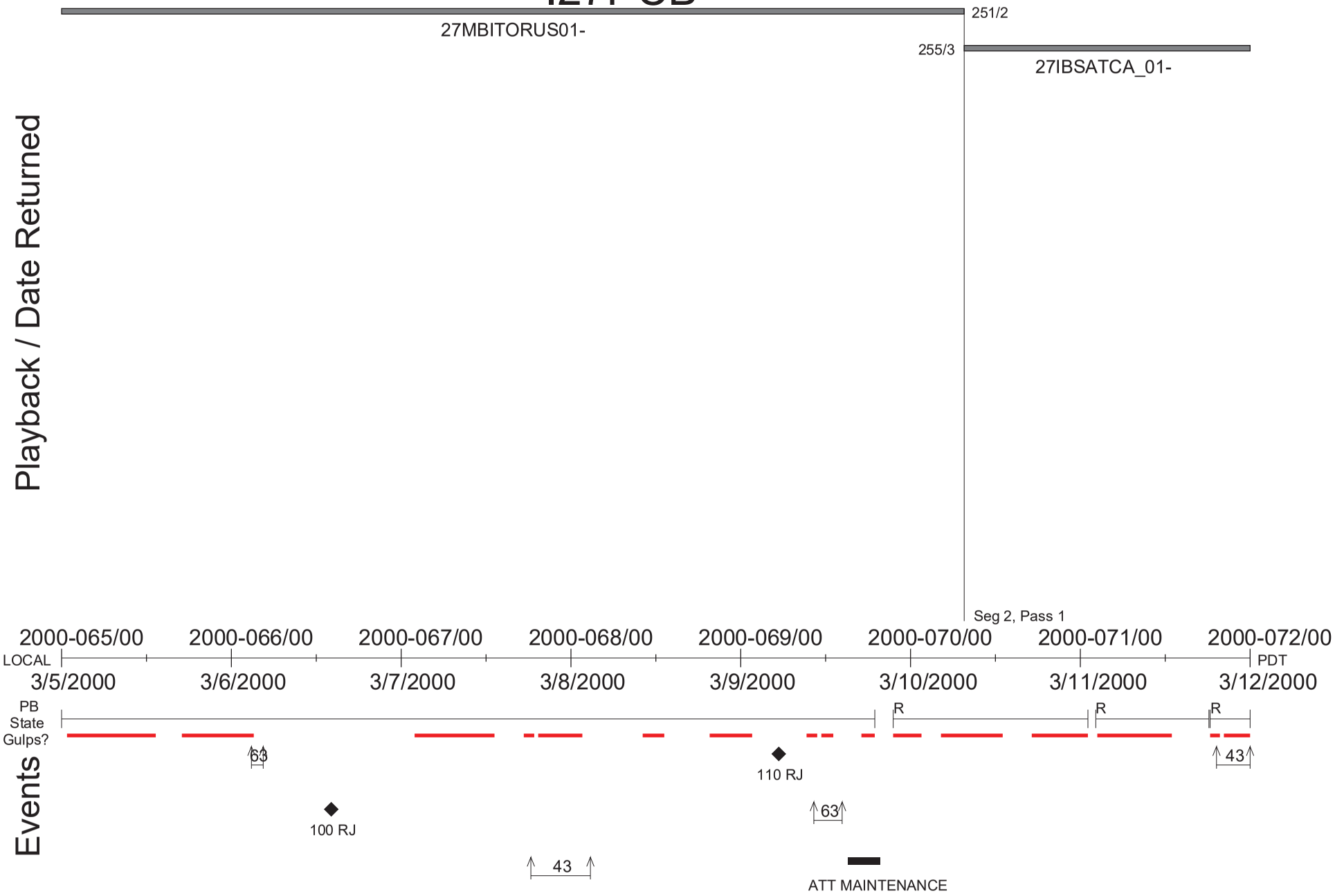
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2000-068/00
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3/10/2000
3/11/2000
3/12/2000
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R
R
63
43
110 RJ
100 RJ
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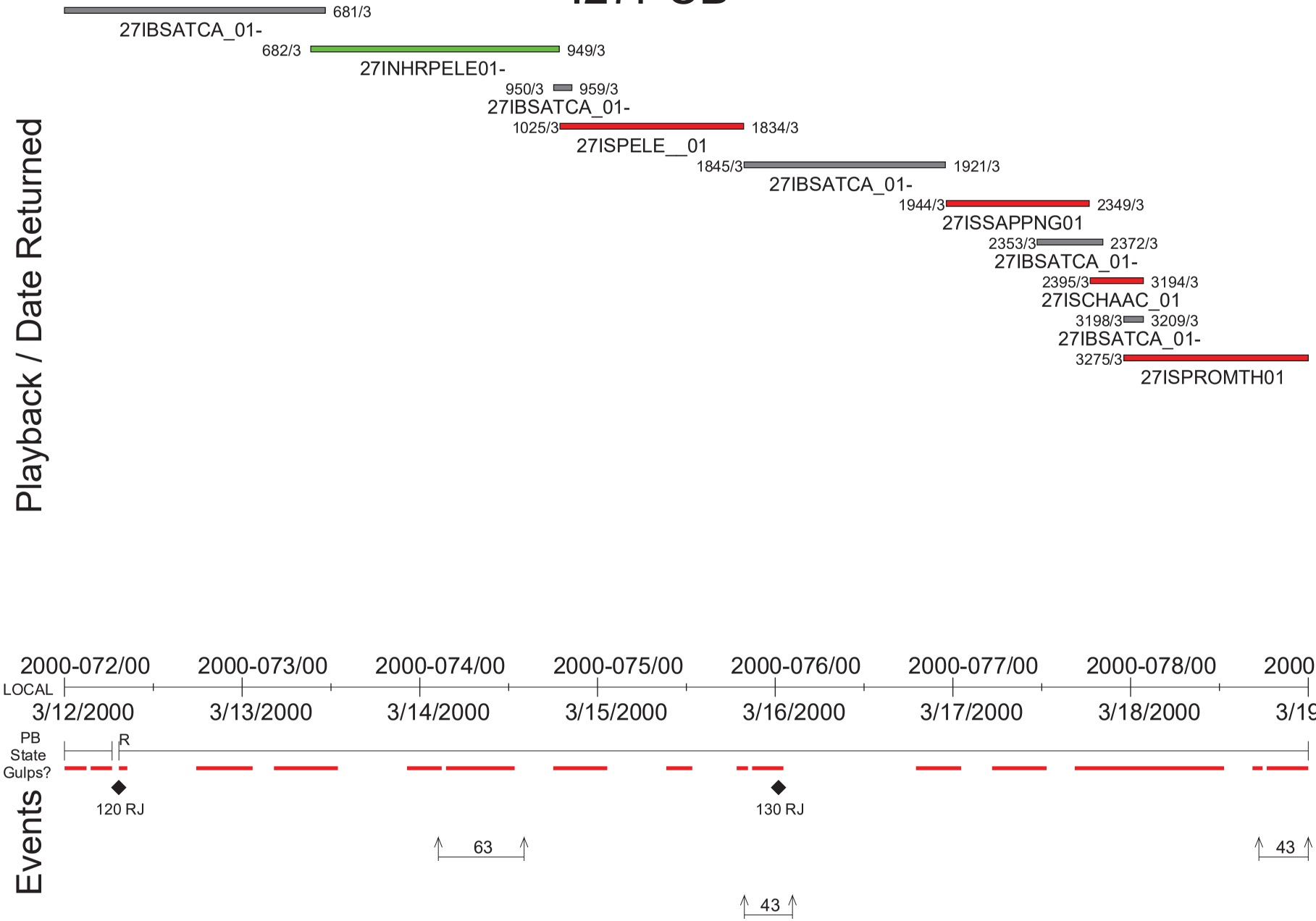
43
ATT MAINTENANCE
Events

I27PCB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959/3
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1025/3
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27ISPELE__01
1845/3
1921/3
27IBSATCA_01-
1944/3
2349/3
27ISSAPPNG01
2353/3
2372/3
27IBSATCA_01-
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Events
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130 RJ
63
43
43

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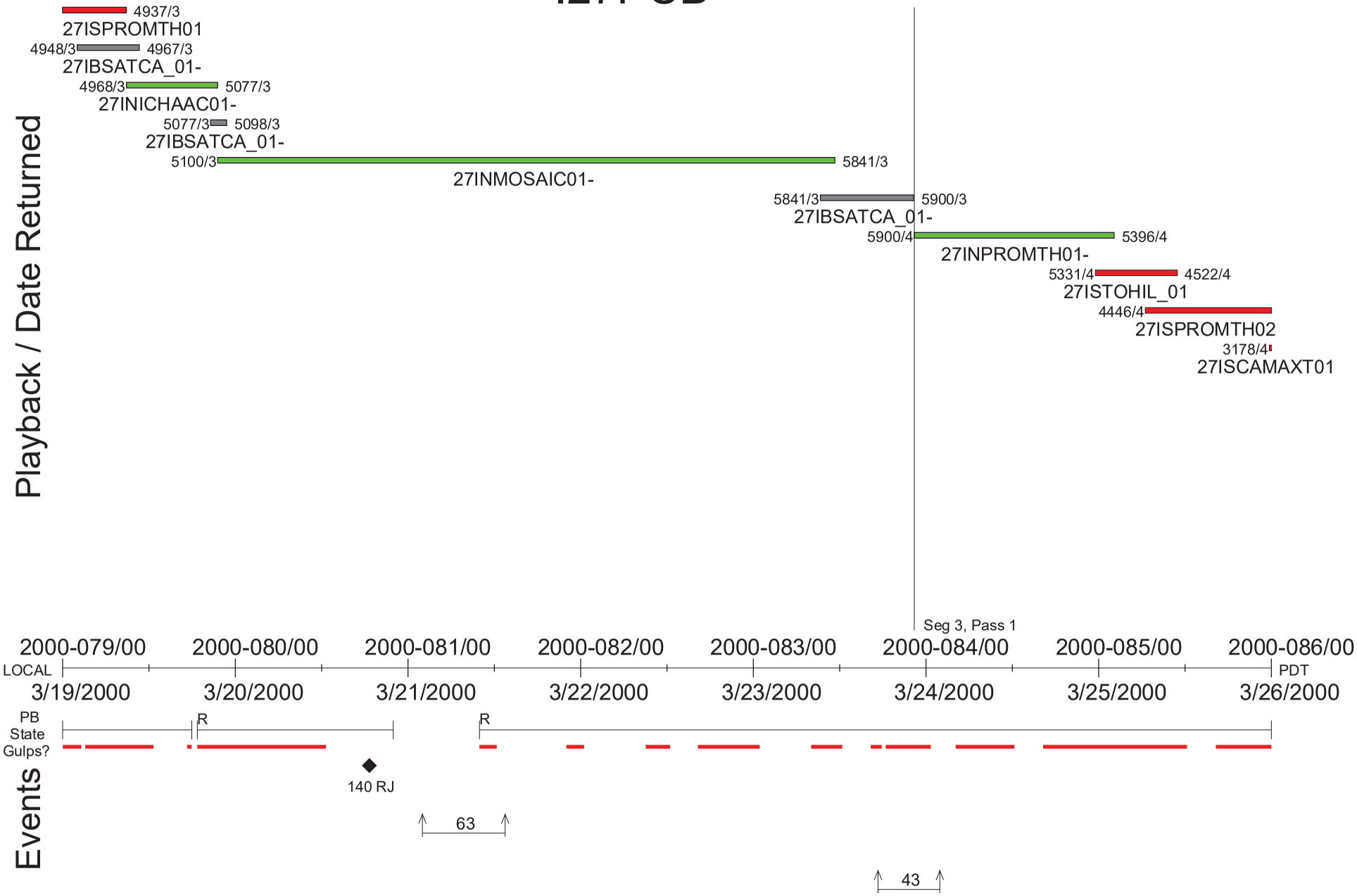
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5098/3
27IBSATCA_01-
5100/3
5841/3
27INMOSAIC01-
5841/3
5900/3
27IBSATCA_01-
5900/4
5396/4
27INPROMTH01-
5331/4
4522/4
27ISTOHIL_01
4446/4
27ISPROMTH02
3178/4
27ISCAMAXT01
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2000-081/00
2000-082/00
2000-083/00
2000-084/00
2000-085/00
2000-086/00
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PDT
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R
Events
140 RJ
63
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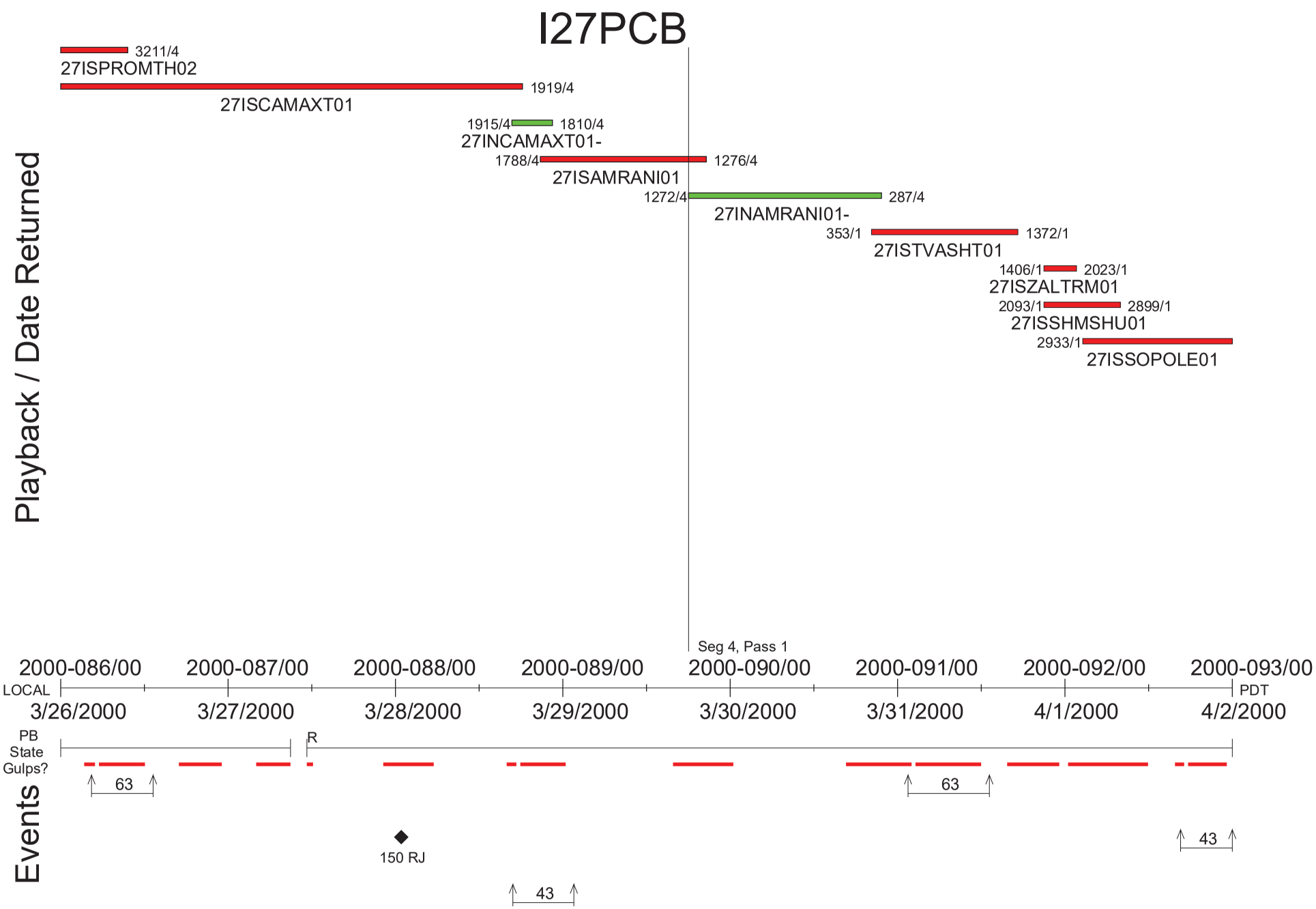
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1372/1
27ISTVASHT01
1406/1
2023/1
27ISZALTRM01
2093/1
2899/1
27ISSHMSHU01
2933/1
27ISSOPOLE01
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Events
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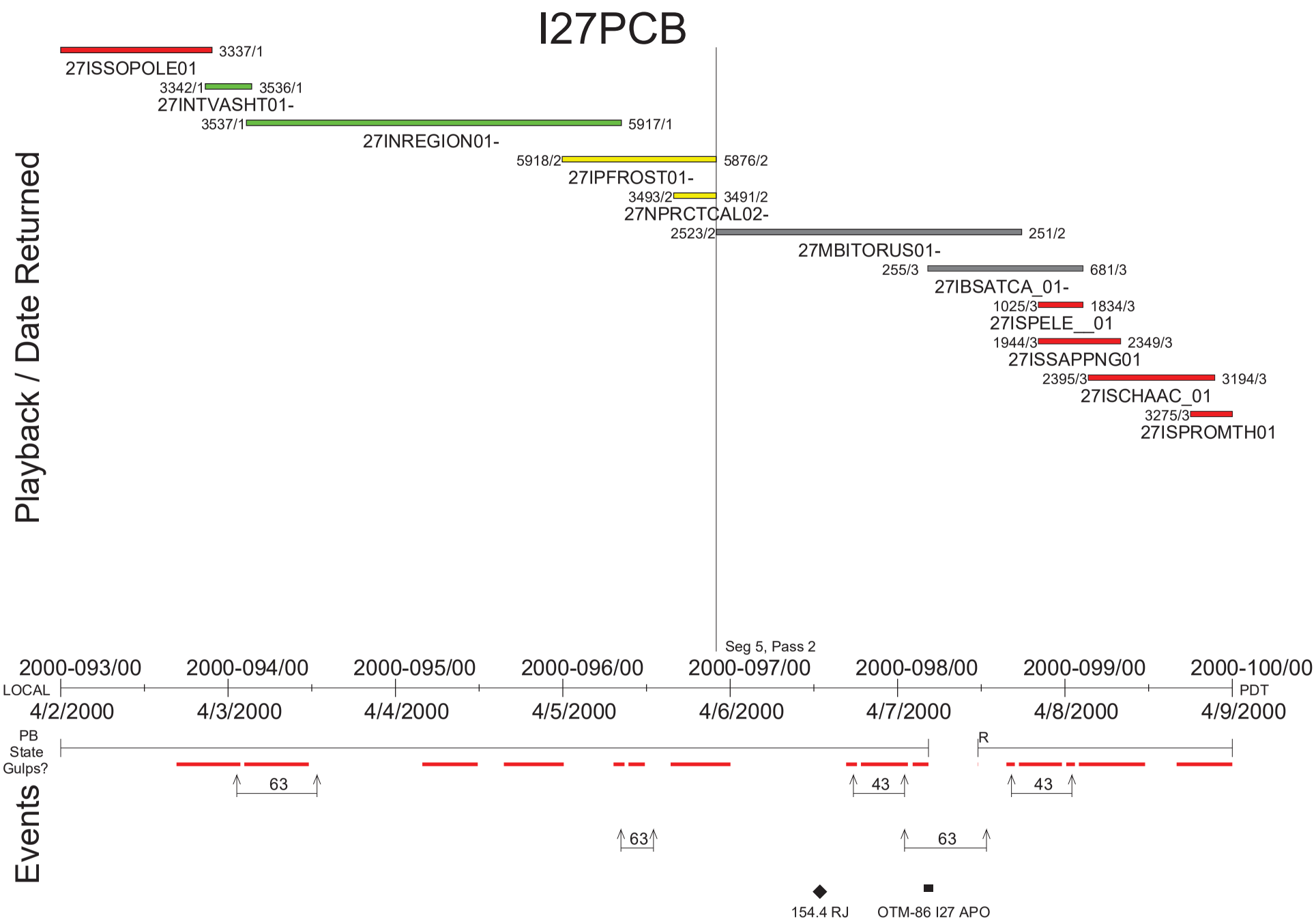
63
150 RJ
43
43

2-25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5876/2
27IPFROST01-
3493/2
3491/2
27NPRCTCAL02-
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27MBITORUS01-
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2395/3
3194/3
27ISCHAAC_01
3275/3
27ISPROMTH01
Seg 5, Pass 2
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2000-098/00
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4/8/2000
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R
Events
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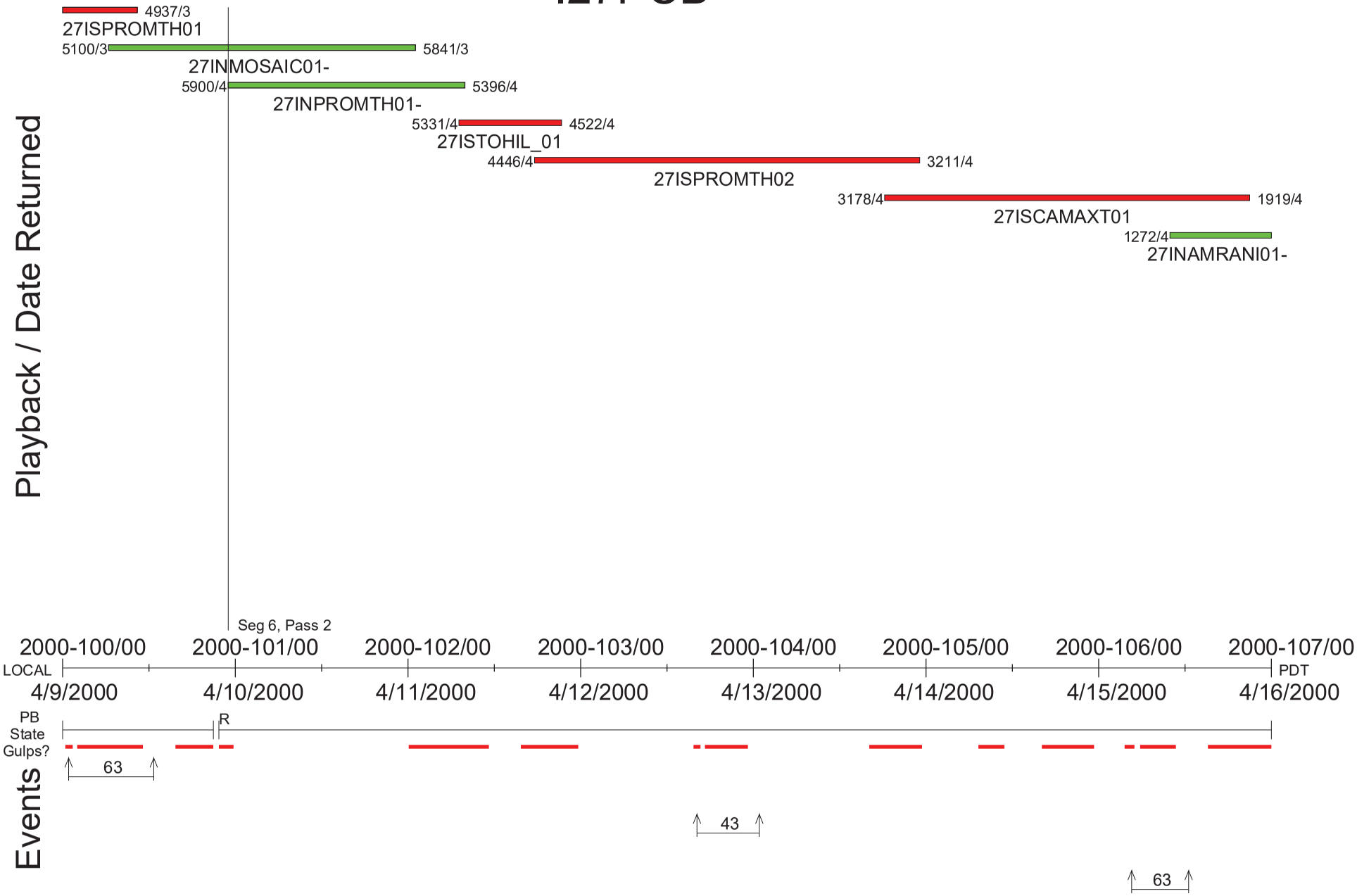
43
43
63
63
154.4 RJ
OTM-86 I27 APO

I27PCB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4522/4
27ISTOHIL_01
4446/4
3211/4
27ISPROMTH02
3178/4
1919/4
27ISCAMAXT01
1272/4
27INAMRANI01-
Playback / Date Returned
Seg 6, Pass 2
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2000-103/00
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Events
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43
63

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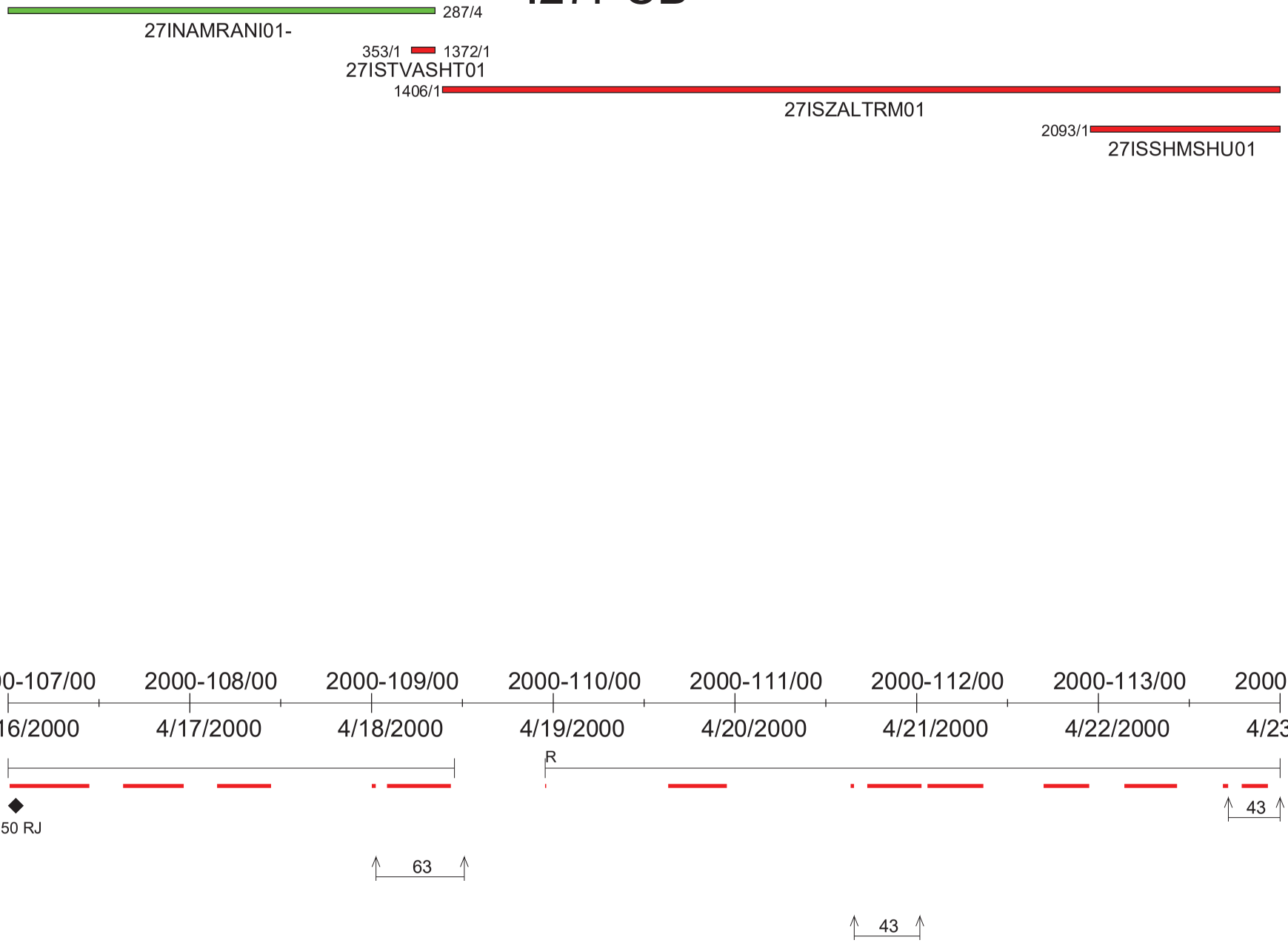
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1406/1
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2000-110/00
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2000-112/00
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PDT
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4/19/2000
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4/21/2000
4/22/2000
4/23/2000
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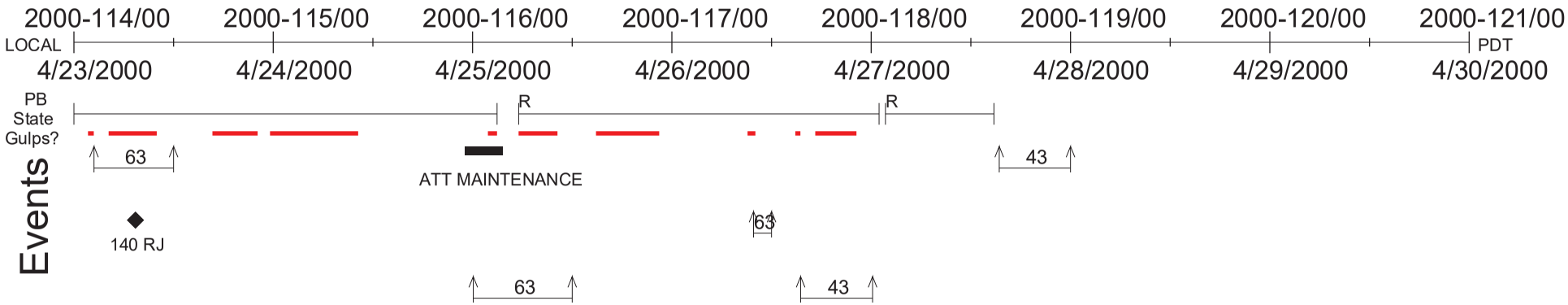
State
Gulps?
R
150 RJ
63
43
43
Events

I27PCB

Playback / Date Returned



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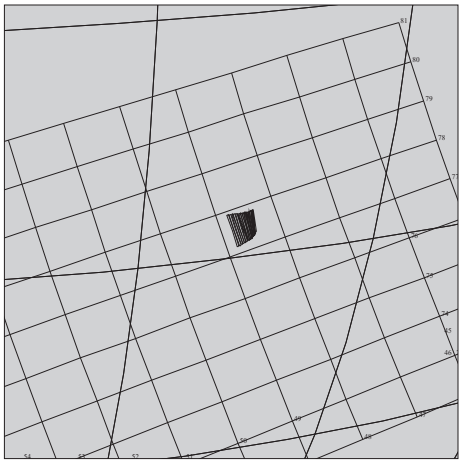

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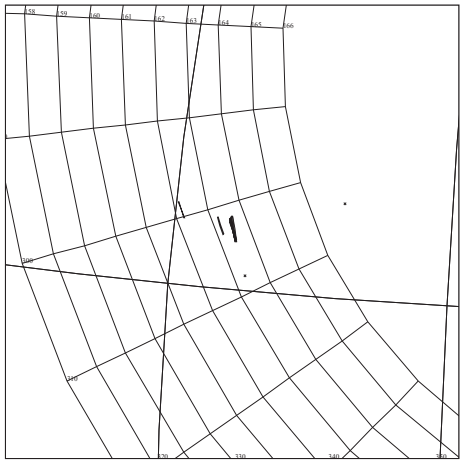

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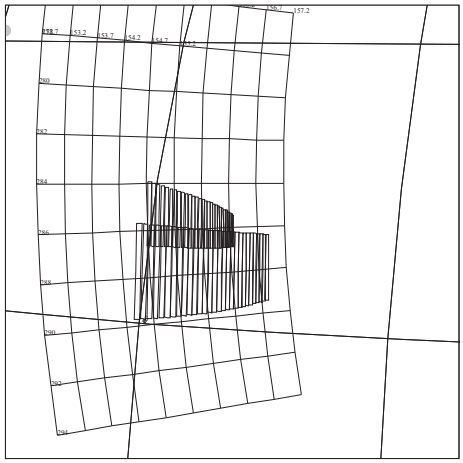

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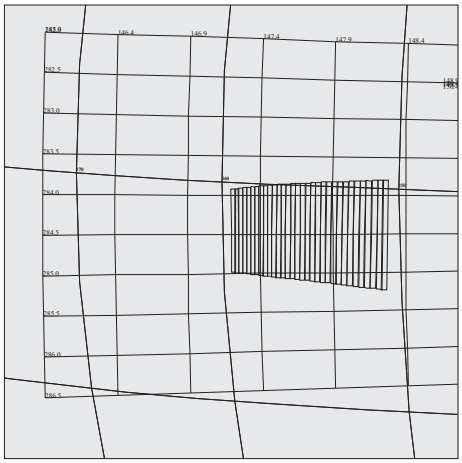

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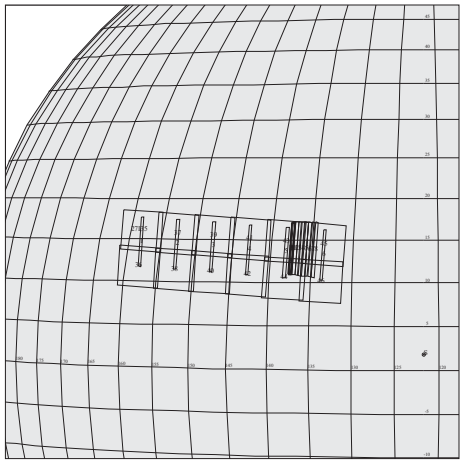

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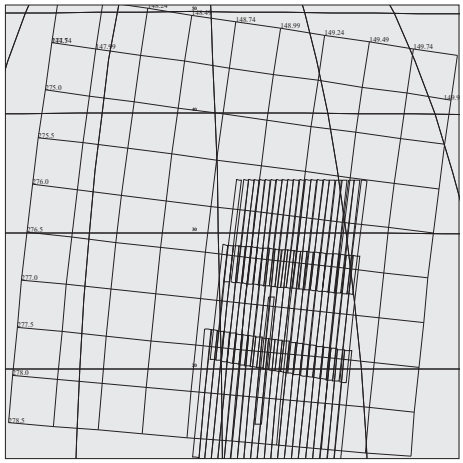

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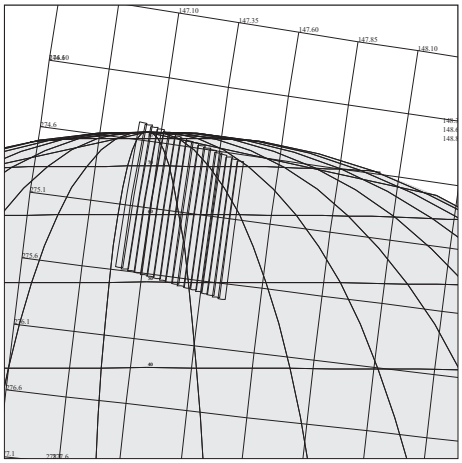

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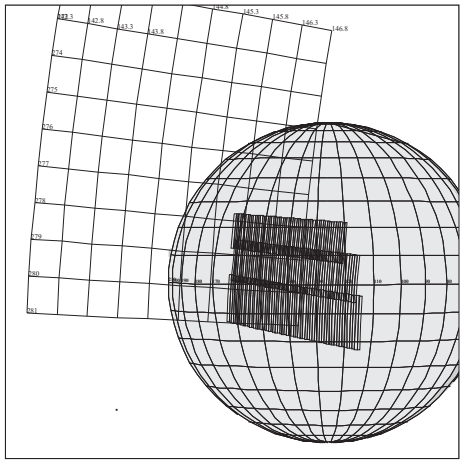

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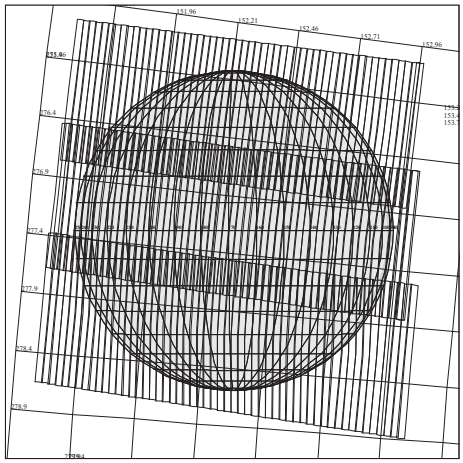


27INGLOBAL01
00-053/19:40:15

Chapter 3 - Orbit Geometries

Contents

Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the I27 Orbit.

The figure on page 3 is a North Trajectory Pole View of the I27 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the I27 Orbit from +/- 5 days of Jupiter closest approach.

The figure on page 5 is a North Trajectory Pole View of the I27 Orbit from +/- 2 days of Jupiter closest approach.

The figure on page 6 is a North Trajectory Pole View of the I27 Orbit from +/- 1 day of Jupiter closest approach.

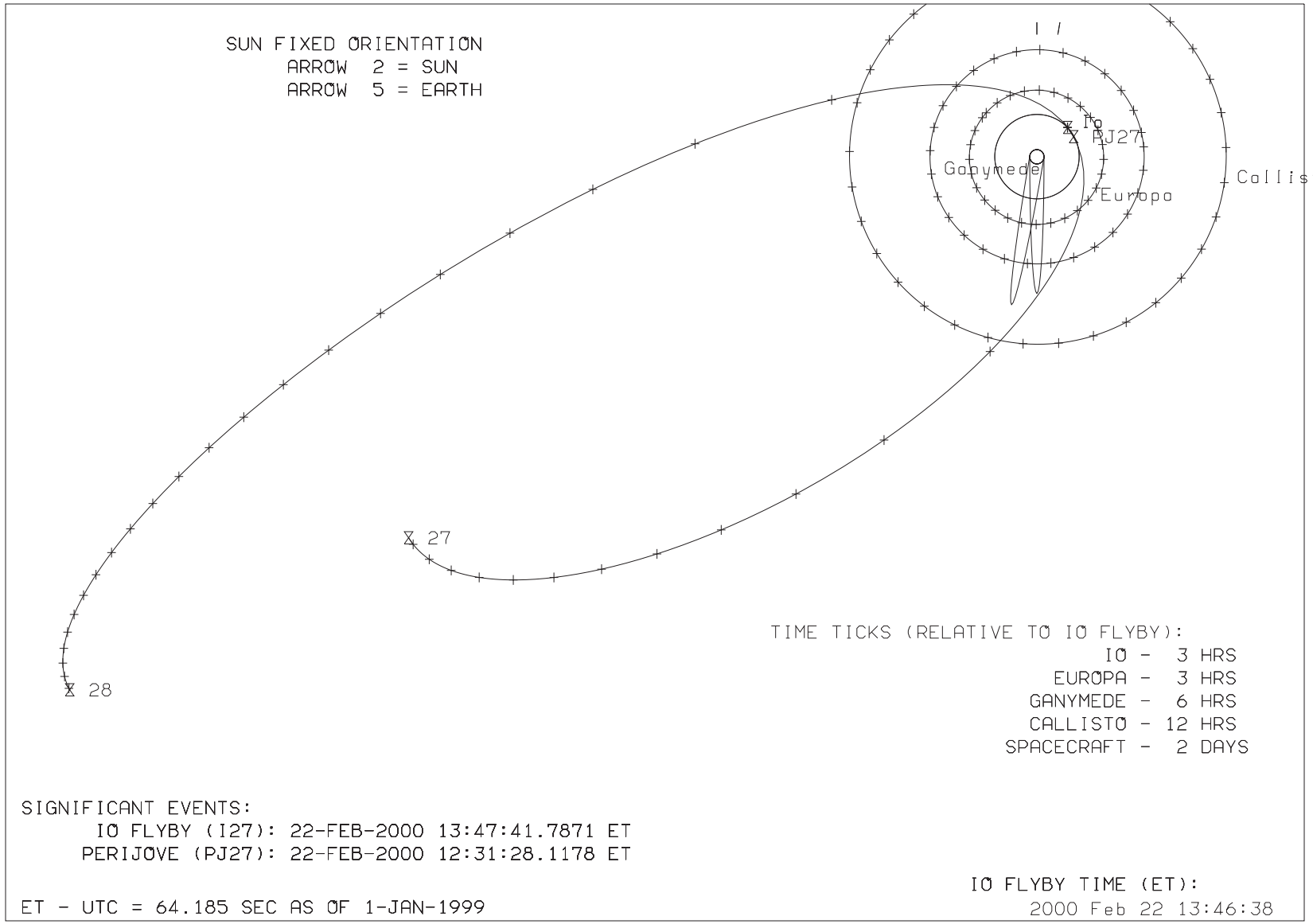
The figure on page 7 shows the spacecraft's groundtrack on Jupiter at Jupiter closest approach.

The figure on page 8 is a North Trajectory Pole View of the I27 Orbit from +/- 6 hours of Io closest approach.

The figure on page 9 is a North Trajectory Pole View of the I27 Orbit from +/- 1 hour of Io closest approach.

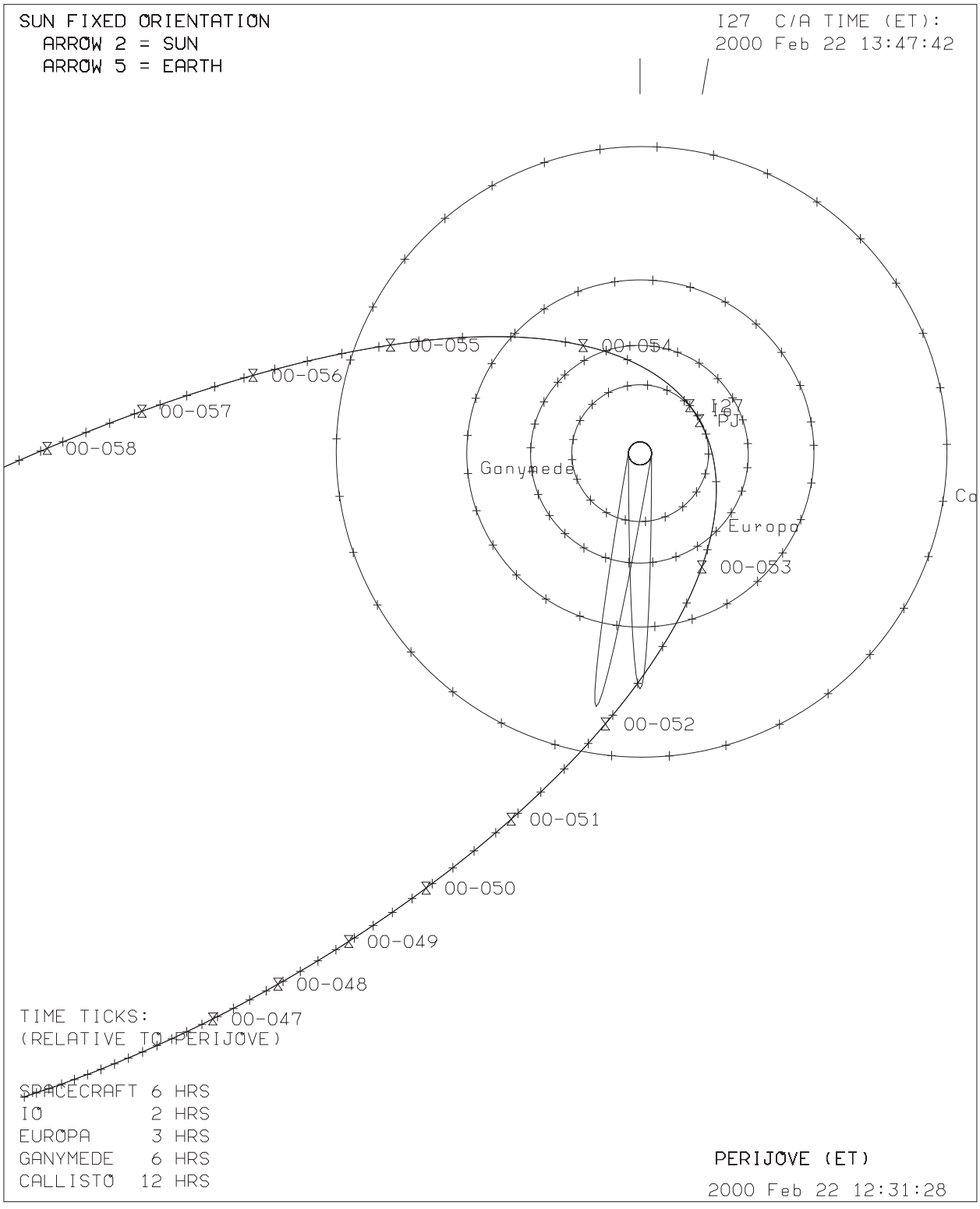
The figure on page 10 shows the spacecraft's groundtrack on Io at Io closest approach.

Jupiter 27: North Traj Pole View (Io27 Apo$^{2}_{5}$ to Apo)



NAV Feb 4, 1999

JUPITER 27: N. TRAJ. POLE VIEW (2 5) (+/- 5 DAYS)



GEM-990114

NAV Feb 4, 1999

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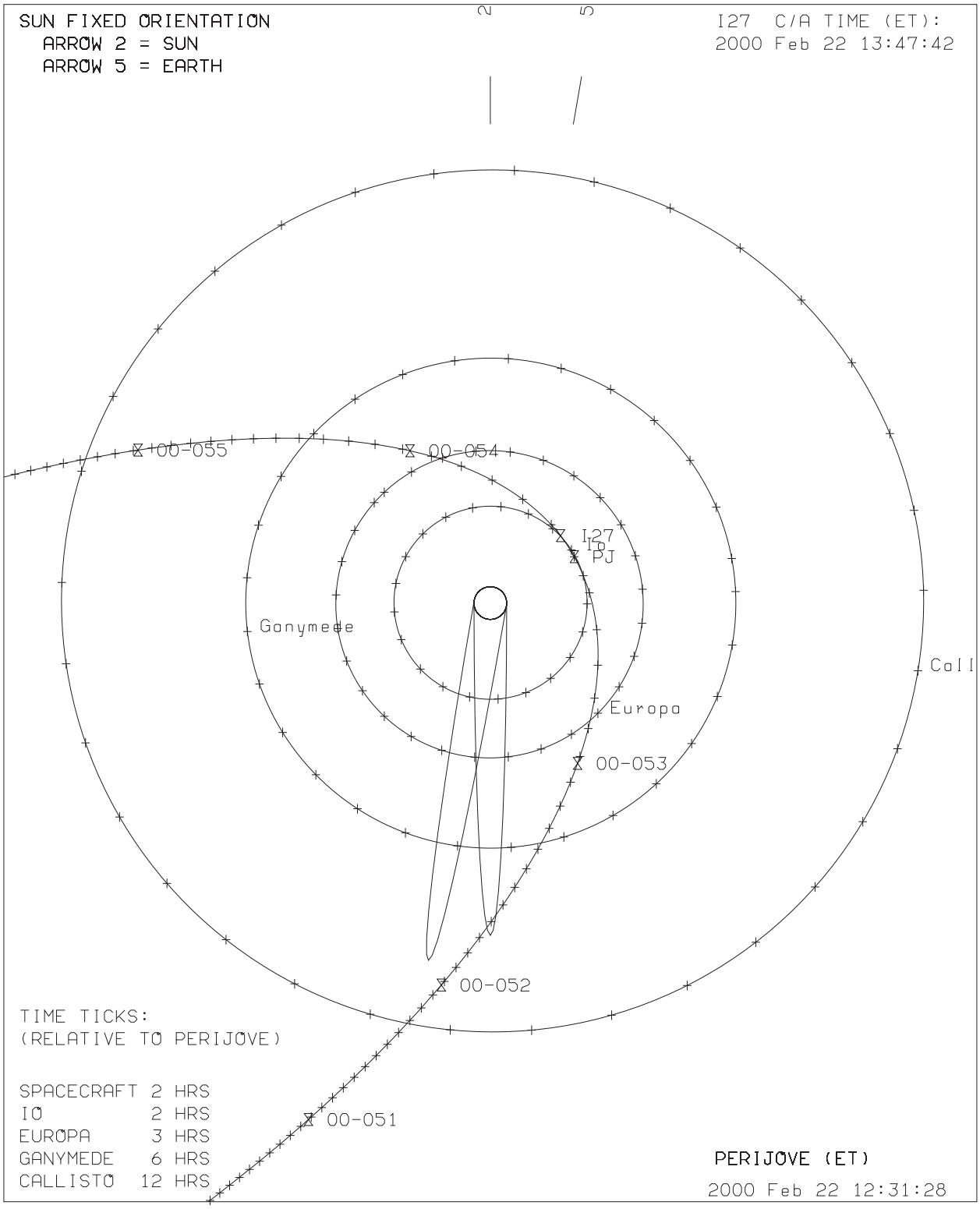
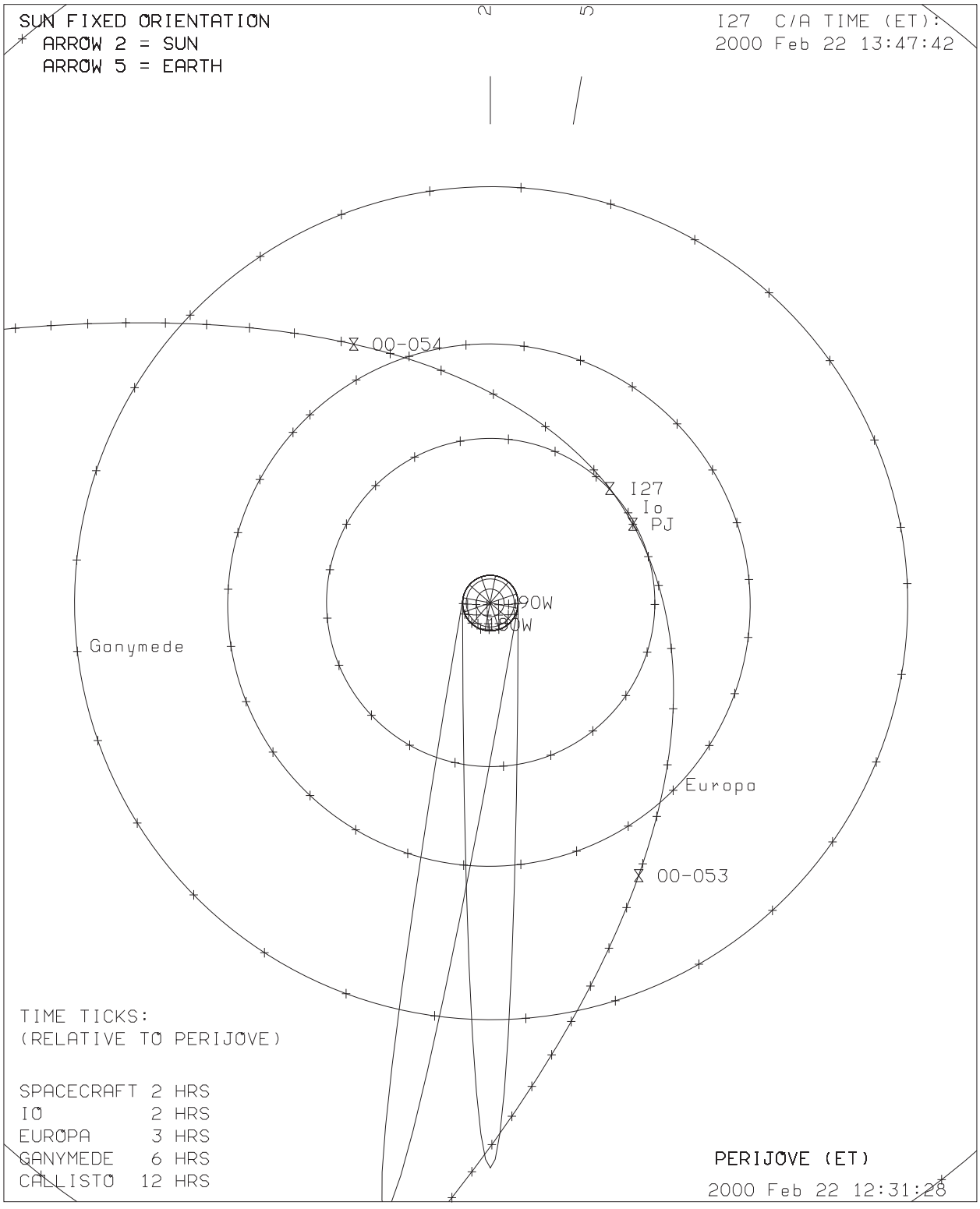


GEM-990114

NAV Feb 4, 1999

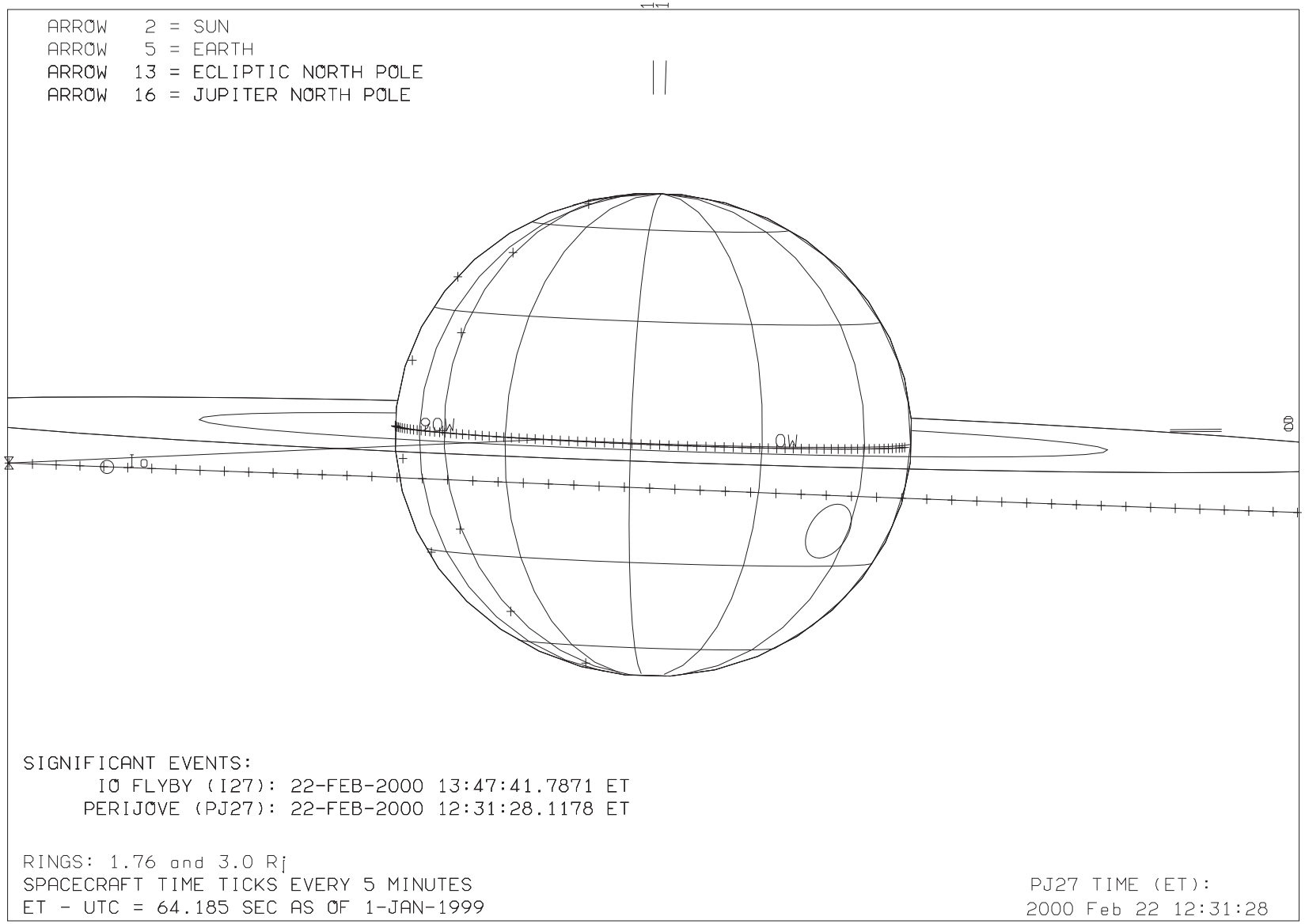
JUPITER 27: N. TRAJ. POLE VIEW (+/- 1 DAY)



GEM-990114

NAV Feb 4, 1999

JUPITER 27: GROUNDTRACK AT CLOSEST APPROACH



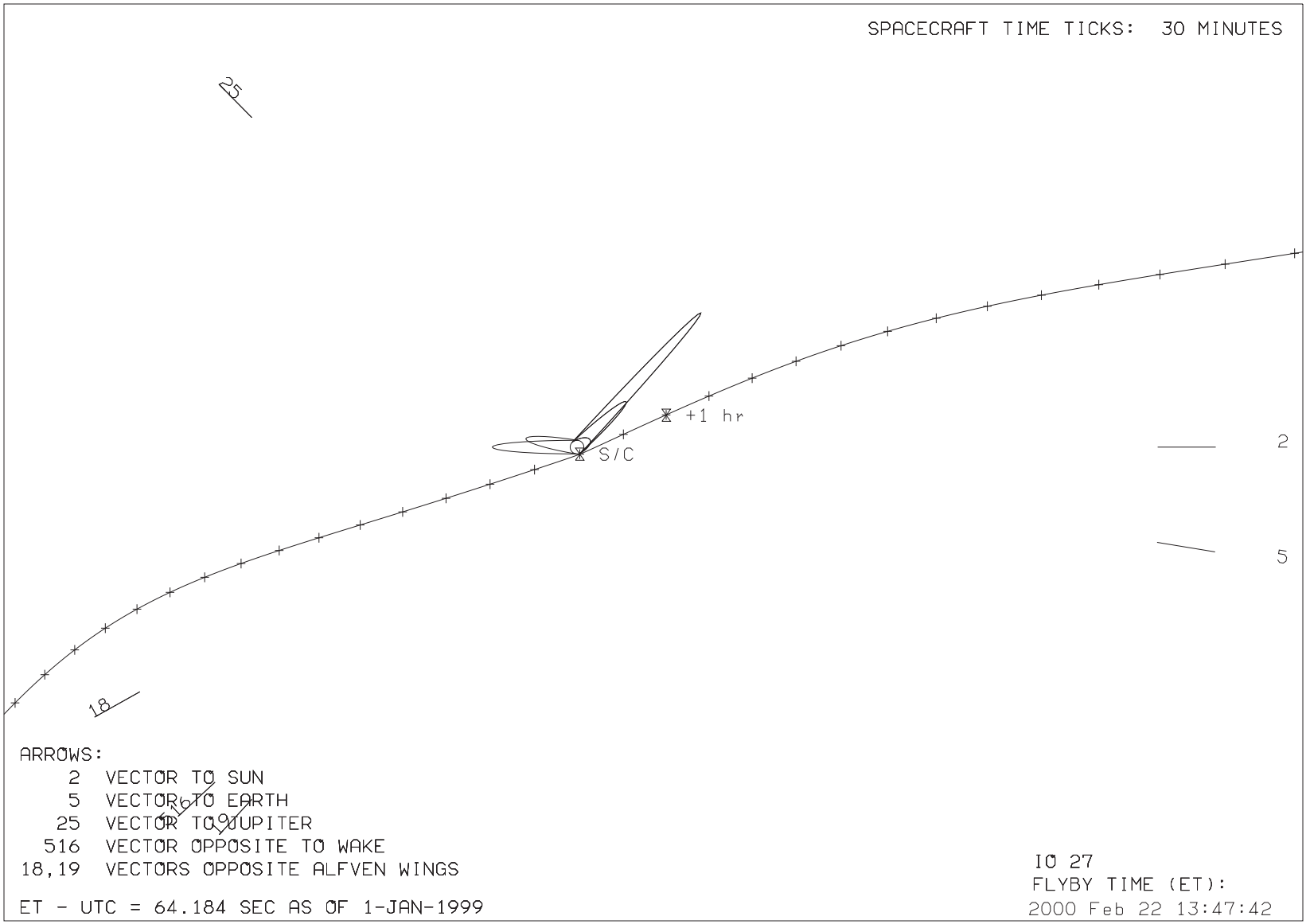
SIGNIFICANT EVENTS:
IO FLYBY (I27): 22-FEB-2000 13:47:41.7871 ET
PERIJOVE (PJ27): 22-FEB-2000 12:31:28.1178 ET

RINGS: 1.76 and 3.0 Rj
SPACECRAFT TIME TICKS EVERY 5 MINUTES
ET - UTC = 64.185 SEC AS OF 1-JAN-1999

PJ27 TIME (ET):
2000 Feb 22 12:31:28

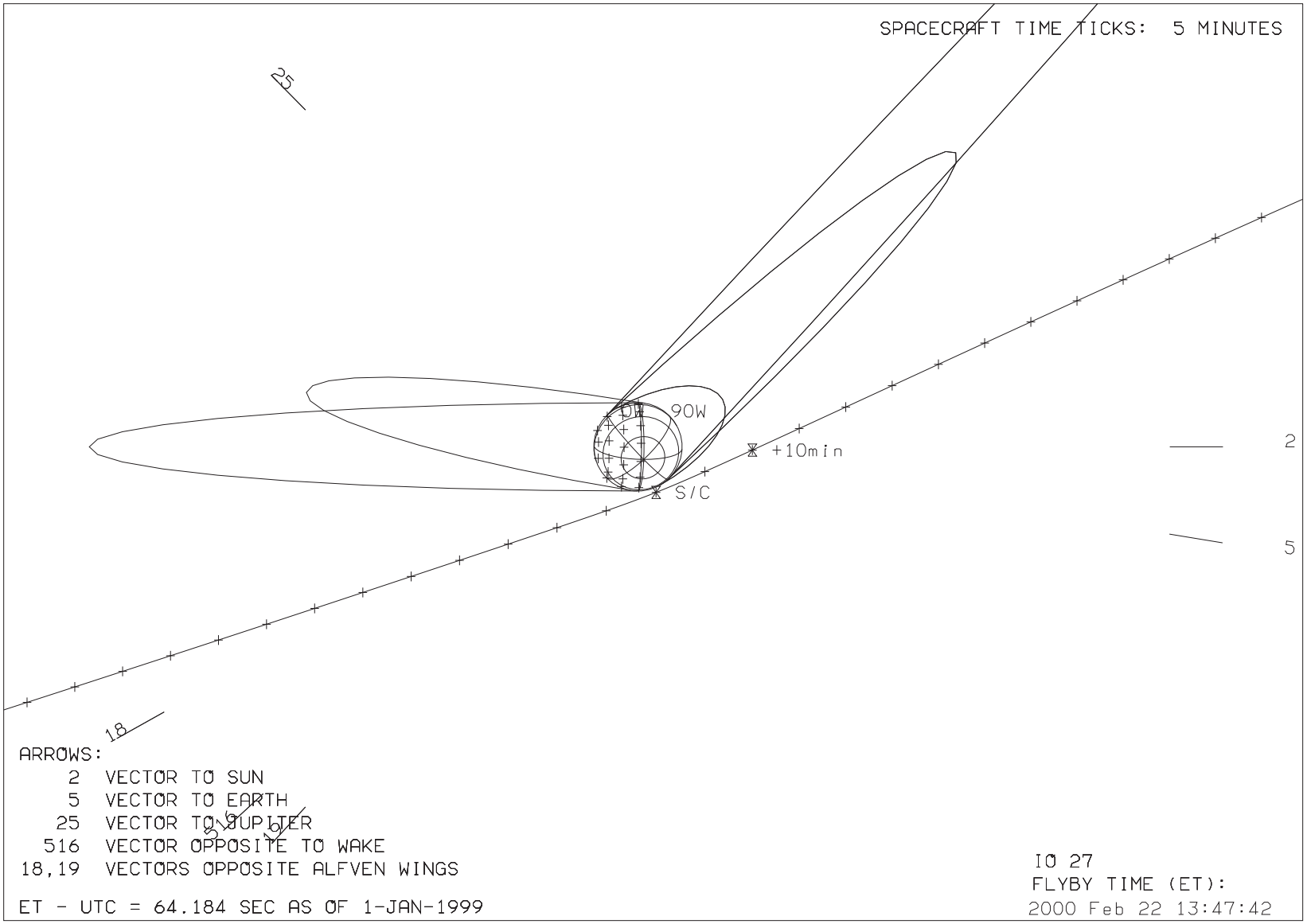
NAV Feb 4, 1999

IO 27: N. TRAJ POLE VIEW (+/- 6 HRS)



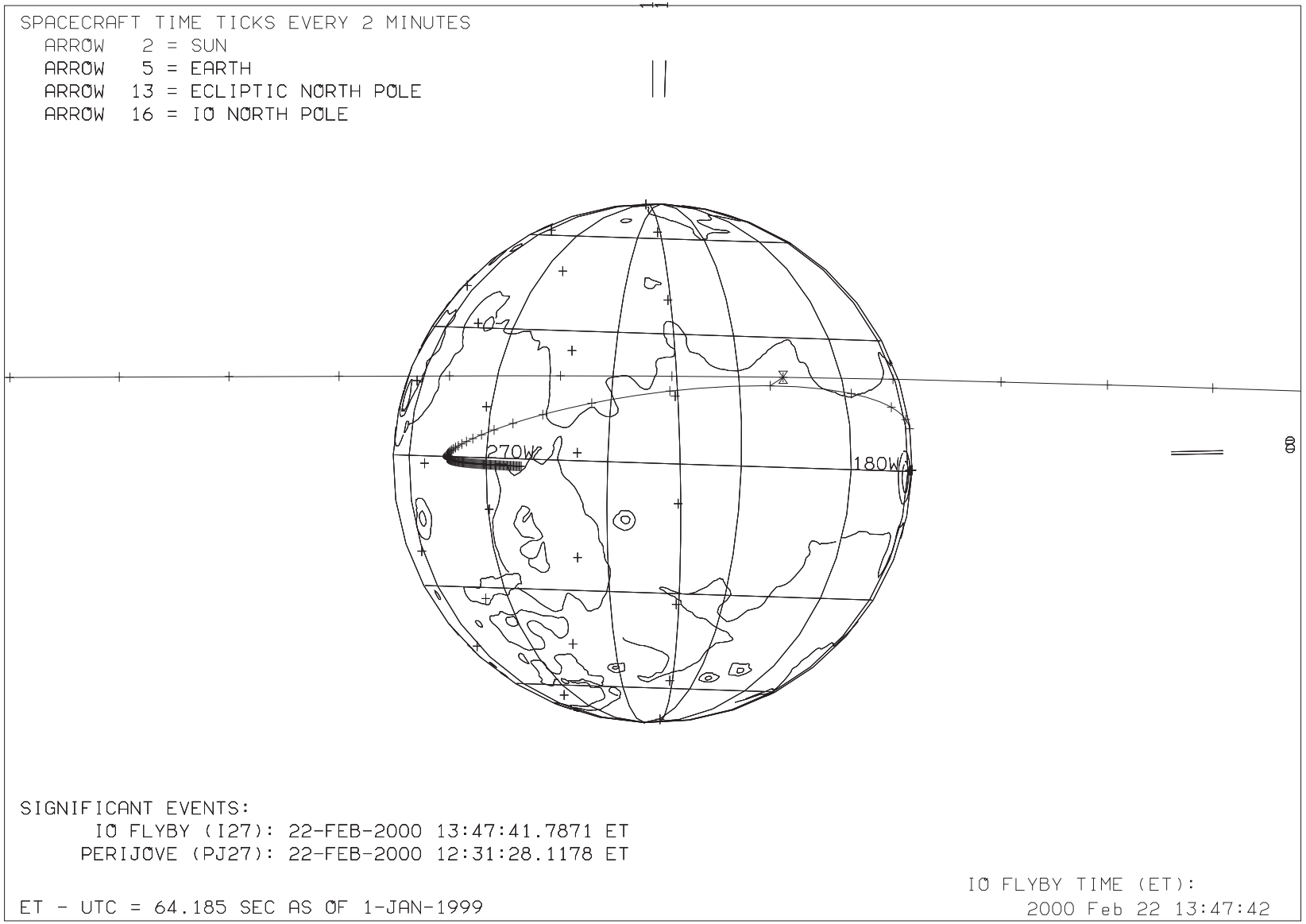
NAV 2/9/99

IO 27: N. TRAJ POLE VIEW (+/- 1 HR)



NAV 2/9/99

IO 27: GROUNDTRACK AT CLOSEST APPROACH



NAV Feb 4, 1999

Chapter 4 - NIMS Observation Summaries

Contents

Introduction to Chapter 4

This chapter summarizes the NIMS I27 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 I27 Sequence. The information in this summary is derived from the I27 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 (Oapel) 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 I27 data. It is also derived from the I27 SEFs and PBTs. Each Obstab entry is 512 bytes long but is presented here as 4 lines of 128 characters per entry.

			Sequence:	I27ADC		Created: 02/09/00	Begin: 00-051/04:00:00 Finish: 00-056/03:00:00				
Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
1	**0**	**51**	**04:00:00.000**	**20A3FB**	**37F2PR**	**Initial Condition**	**Shield Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**5,395,889:71:8**
2	**0**	**51**	**04:00:00.000**	**20A3FD**	**40HRPR**	**Initial Condition**	**RCT Heater OFF (primary relay)**	**2O0**	**4**	**0**	**5,395,889:71:8**
3	**0**	**51**	**04:00:00.000**	**20A3FF**	**40T2R**	**Initial Condition**	**PCT Heater 2 OFF**	**2O0**	**4**	**0**	**5,395,889:71:8**
4	**0**	**51**	**04:00:00.000**	**20A3FE**	**40T1PR**	**Initial Condition**	**PCT Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**5,395,889:71:8**
5	**0**	**51**	**04:00:00.000**	**20A3EX**	**37HR**	**Initial Condition**	**Replacement Heaters OFF**	**2O0**	**4**	**0**	**5,395,889:71:8**
6	**0**	**51**	**04:00:00.000**	**20A3EY**	**37C1PR**	**Initial Condition**	**Optics Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**5,395,889:71:8**
7	**0**	**51**	**04:00:00.000**	**20A3EZ**	**37C2PR**	**Initial Condition**	**Optics Heater 2 OFF (primary relay)**	**2O0**	**4**	**0**	**5,395,889:71:8**
8	**0**	**51**	**04:00:00.000**	**20A3FA**	**37F1PR**	**Initial Condition**	**Radiator Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**5,395,889:71:8**
9	**0**	**51**	**04:00:00.000**	**20A3EW**	**37A**	**Initial Condition**	**NIMS Power ON**	**2O0**	**4**	**0**	**5,395,889:71:8**
10	0	51	04:00:00.133		DMS:	: READY	RDY, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	5,395,889:72:0
11	**0**	**51**	**04:00:11.466**	**432JA6B**	**6RTDS2**	**NIMNCG,AACDSL,RT**	**AACS DESELECT**	**2O0**	**4**	**0**	**5,395,889:89:0**
12	0	51	04:01:57.466	488AA6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,395,891:66:0
13	0	51	04:27:33.466	488AA6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,395,917:04:0
14	0	51	04:39:38.800	488AA6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,395,929:00:0
15	0	51	04:51:01.466	488AA6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,395,940:23:0
16	0	51	14:59:27.400	465KZ6A	6DMST	5970	DMS Slew to TIC	2O0	4	0	5,396,542:00:0
17	0	51	14:59:27.400		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	5,396,542:00:0
18	0	51	14:59:27.400		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	5,396,542:00:0
19	0	51	14:59:27.400		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	5,396,542:00:0
20	0	51	14:59:34.066		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	5,396,542:10:0
21	0	51	14:59:35.466		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	2O0	4	0	5,396,542:12:1
22	0	51	16:50:19.400	488AB6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,396,651:59:0
23	0	51	17:38:41.400	488AB6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,396,699:44:0
24	0	51	20:42:30.066	488AB6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,396,881:25:0
25	0	51	21:12:22.066	488AB6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	5,396,910:74:0
26	0	51	21:49:34.866		DMS:	**: *RUNDOWN**	P7, TRACK 1, FWD, TIC *5967.94 +/-	2O0	4	0	5,396,947:56:2
27	0	51	21:49:36.066		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *5968.00 +/-	2O0	4	0	5,396,947:58:0
28	**0**	**52**	**04:18:12.733**	**432JB6B**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**2O0**	**4**	**0**	**5,397,331:89:0**
29	0	52	04:18:13.400	432JB431A6A	6RCDSL	DDSNCG,PLSDSL,EP	Record Deselect (DDS o	2O0	4	0	5,397,331:90:0
30	0	52	04:18:14.066	432JB6C	6RTSL1		R/T Select of DDS and	2O0	4	0	5,397,332:00:0
31	**0**	**52**	**04:18:14.066**	**432JB6D**	**6RTSL2**	**NIMNCG,AACSEL,RT**	**AACS SELECT**	**2O0**	**4**	**0**	**5,397,332:00:0**
32	0	52	04:18:18.066	488AC6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	5,397,332:06:0
33	0	52	09:55:36.733	488AC6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	5,397,665:61:0
34	0	52	10:00:21.400	488AC6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,397,670:33:0
35	0	52	10:55:49.400	488AD6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,397,725:20:0
36	0	52	11:16:44.066	488AD6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,397,745:82:0
37	0	52	11:50:23.400	488AD6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,397,779:17:0
38	0	52	11:59:18.066		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5968.00 +/-	2O0	4	0	5,397,788:00:0
39	0	52	11:59:18.066		DMS:	: *SLEW-TIC	P7, TRACK *2, *REV, TIC 5968.00 +/-	2O0	4	0	5,397,788:00:0
40	0	52	11:59:18.066	465KA6A	6DMST	3275	DMS Slew to TIC	2O0	4	0	5,397,788:00:0
41	0	52	11:59:19.466		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5968.12 +/-	2O0	4	0	5,397,788:02:1
42	0	52	11:59:24.733		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5969.35 +/-	2O0	4	0	5,397,788:10:0
43	0	52	11:59:25.933		DMS:	: *RUNUP	P7, TRACK *2, *REV, TIC *5969.41 +/-	2O0	4	0	5,397,788:11:8
44	0	52	11:59:27.333		DMS:	: *AT_SPD	P7, TRACK 2, REV, TIC *5969.29 +/-	2O0	4	0	5,397,788:13:9
45	0	52	12:10:00.066	488AD6D	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2O0	4	0	5,397,798:53:0
46	0	52	15:10:53.533		DMS:	**: *RUNDOWN**	P7, TRACK 2, REV, TIC *3277.06 +/-	2O0	4	0	5,397,977:44:2
47	0	52	15:10:54.733		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3277.00 +/-	2O0	4	0	5,397,977:46:0
48	0	52	16:01:04.066	20RI6B	6RTSL1		R/T Select of DDS and	2O0	4	0	5,398,027:10:0
49	0	52	16:59:36.066	465KB6A	6DMSC	RDY,2	DMS Control Tape stop	2O0	4	0	5,398,085:00:0
50	0	52	17:10:00.066	20TO4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	5,398,095:26:0
51	0	52	17:10:50.066	20TO4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	5,398,096:10:0
52	0	52	17:10:56.066	20TO4E	7STAR	1,1610,278.815,3	Star catalog update	2O0	4	0	5,398,096:19:0
53	0	52	17:10:58.066	20TO4F	7STAR	2,9000,2.664,14.	Star catalog update	2O0	4	0	5,398,096:22:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
54	0	52	17:11:00.066	20TO4G	7STAR	3,1610,278.815,3	Star catalog update	2O0	4	0	5,398,096:25:0	
55	0	52	17:11:02.066	20TO4H	7STAR	4,9000,2.664,14.	Star catalog update	2O0	4	0	5,398,096:28:0	
56	0	52	17:11:04.066	20TO4I	7STAR	5,1610,278.815,3	Star catalog update	2O0	4	0	5,398,096:31:0	
57	0	52	17:11:06.066	20TO4J	7STAR	6,9000,2.664,14.	Star catalog update	2O0	4	0	5,398,096:34:0	
58	0	52	17:15:02.733	432OC431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2O0	4	0	5,398,100:25:0	
59	0	52	17:15:03.400	432OC6A	6RTSL1		R/T Select of DDS and	2O0	4	0	5,398,100:26:0	
60	0	52	18:00:00.066	481UA4A	7VECT	BB1	Inert vect update UTC	2O0	4	0	5,398,144:67:0	
61	0	52	19:00:00.066	481UB4A	7VECT		Inert vect update UTC	2O0	4	0	5,398,204:07:0	
62	0	52	19:57:41.400	488AE6A	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	2O0	4	0	5,398,261:12:0	
63	0	52	20:01:04.066	20RJ6B	6RTSL1		R/T Select of DDS and	2O0	4	0	5,398,264:43:0	
64	0	52	20:53:09.400	488AE6B	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	5,398,315:90:0	
65	0	52	21:12:22.000	488AE6C	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,334:90:0	
66	0	52	21:25:00.000	488AE6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,347:44:0	
67	0	52	22:06:45.333	488AE6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,388:71:0	
68	0	52	22:40:24.666	488AF6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,422:06:0	
69	0	52	22:41:45.333	488AF6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,423:36:0	
70	0	52	23:12:30.000	20UM4A	7SCAN	NORM,38.25571,13	Check S/P Position	2O0	4	0	5,398,453:73:0	
71	0	52	23:15:24.666	488AF6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,456:62:0	
72	0	52	23:45:00.000	480SB6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2O0	4	0	5,398,485:86:0	
73	0	52	23:51:40.000	480SB6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2O0	4	0	5,398,492:49:0	
74	0	53	00:02:14.666	192GA4A	**7CONE**	**9.0,0.0**	Check S/P Position	2O0	4	0	5,398,503:00:0	
75	0	53	00:09:19.333	176GA6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2O0	4	0	5,398,510:00:0	
76	0	53	00:11:34.000	176GA6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2O0	4	0	5,398,512:20:0	
77	0	53	00:11:36.000	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,512:23:0	
78	0	53	00:11:36.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3277.00 +/-	2O0	4	0	5,398,512:23:0	
79	0	53	00:11:37.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3277.12 +/-	2O0	4	0	5,398,512:25:1	
80	0	53	00:11:42.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3278.35 +/-	2O0	4	0	5,398,512:33:0	
81	0	53	00:11:43.866		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3278.41 +/-	2O0	4	0	5,398,512:34:8	
82	0	53	00:11:45.266		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3278.29 +/-	2O0	4	0	5,398,512:36:9	
83	0	53	00:11:46.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3278.12 +/-	2O0	4	0	5,398,512:38:0	
84	0	53	00:11:57.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3275.47 +/-	2O0	4	0	5,398,512:55:0	
85	0	53	00:11:57.333	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,512:55:0	
86	0	53	00:11:58.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3275.41 +/-	2O0	4	0	5,398,512:56:8	
87	0	53	00:32:54.000	488AF6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	5,398,533:29:0	
88	0	53	00:52:06.000	488AF6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,398,552:28:0	
89	0	53	01:30:30.000	488AG6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,590:26:0	
90	0	53	01:47:23.333	165GB4A	7SCAN	NORM,256.913998,	Check S/P Position	2O0	4	0	5,398,606:90:0	
91	0	53	01:53:28.000	176GB6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2O0	4	0	5,398,613:00:0	
92	0	53	01:54:19.333	117GB	**CSMOS**	GS	***** GROUP START CSMOS	2O0	4	0	5,398,613:77:0	
93	0	53	01:54:28.666	117GB105A106A4A	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,614:00:0	
94	0	53	01:57:02.666	117GB105A106A4B	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,616:49:0	
95	0	53	01:57:09.333	117GB105A106A4C	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,616:59:0	
96	0	53	01:59:43.333	117GB105A106A4D	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,619:17:0	
97	0	53	01:59:50.000	117GB105A106A4E	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,619:27:0	
98	0	53	02:01:04.000	20RM6B	6RTSL1		R/T Select of DDS and	2O0	4	0	5,398,620:47:0	
99	0	53	02:01:46.000	488AG6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,621:19:0	
100	0	53	02:02:24.000	117GB105A106A4F	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,621:76:0	
101	0	53	02:02:30.666	117GB105A106A4G	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,621:86:0	
102	0	53	02:05:04.666	117GB105A106A4H	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,624:44:0	
103	0	53	02:05:11.333	117GB105A106A4I	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,624:54:0	
104	0	53	02:06:02.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,625:40:0	
105	0	53	02:06:02.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3275.41 +/-	2O0	4	0	5,398,625:40:0	
106	0	53	02:06:04.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3275.53 +/-	2O0	4	0	5,398,625:42:1	
107	0	53	02:06:09.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3276.76 +/-	2O0	4	0	5,398,625:50:0	
108	0	53	02:06:10.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3276.82 +/-	2O0	4	0	5,398,625:51:8	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
109	0	53	02:06:11.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3276.70 +/-	2O0	4	0	5,398,625:53:9	
110	0	53	02:06:28.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3272.93 +/-	2O0	4	0	5,398,625:78:0	
111	0	53	02:06:50.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,626:21:0	
112	0	53	02:06:50.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3267.62 +/-	2O0	4	0	5,398,626:21:0	
113	0	53	02:06:51.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3267.56 +/-	2O0	4	0	5,398,626:22:8	
114	0	53	02:07:45.333	117GB105A106A4J	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,627:12:0	
115	0	53	02:07:52.000	117GB105A106A4K	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,627:22:0	
116	0	53	02:10:26.000	117GB105A106A4L	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,629:71:0	
117	0	53	02:10:32.666	117GB105A106A4M	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,629:81:0	
118	0	53	02:13:06.666	117GB105A106A4N	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,632:39:0	
119	0	53	02:13:13.333	117GB105A106A4O	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,632:49:0	
120	0	53	02:15:47.333	117GB105A106A4P	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,635:07:0	
121	0	53	02:15:54.000	117GB105A106A4Q	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,635:17:0	
122	0	53	02:18:28.000	117GB105A106A4R	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,637:66:0	
123	0	53	02:18:34.666	117GB105A106A4S	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,637:76:0	
124	0	53	02:19:04.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,638:30:0	
125	0	53	02:19:04.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3267.56 +/-	2O0	4	0	5,398,638:30:0	
126	0	53	02:19:06.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3267.68 +/-	2O0	4	0	5,398,638:32:1	
127	0	53	02:19:11.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3268.92 +/-	2O0	4	0	5,398,638:40:0	
128	0	53	02:19:12.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3268.98 +/-	2O0	4	0	5,398,638:41:8	
129	0	53	02:19:13.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3268.86 +/-	2O0	4	0	5,398,638:43:9	
130	0	53	02:19:30.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3265.09 +/-	2O0	4	0	5,398,638:68:0	
131	0	53	02:19:52.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,639:11:0	
132	0	53	02:19:52.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3259.78 +/-	2O0	4	0	5,398,639:11:0	
133	0	53	02:19:53.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3259.72 +/-	2O0	4	0	5,398,639:12:8	
134	0	53	02:21:08.666	117GB105A106A4T	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,640:34:0	
135	0	53	02:21:15.333	117GB105A106A4U	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,640:44:0	
136	0	53	02:23:49.333	117GB105A106A4V	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,643:02:0	
137	0	53	02:23:56.000	117GB105A106A4W	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,643:12:0	
138	0	53	02:26:30.000	117GB105A106A4X	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,645:61:0	
139	0	53	02:26:36.666	117GB105A106A4Y	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,645:71:0	
140	0	53	02:29:10.666	117GB105A106A4Z	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,648:29:0	
141	0	53	02:29:17.333	117GB105A106A4AA	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,648:39:0	
142	0	53	02:31:51.333	117GB105A106A4AB	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,650:88:0	
143	0	53	02:31:58.000	117GB105A106A4AC	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,651:07:0	
144	0	53	02:32:06.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3259.72 +/-	2O0	4	0	5,398,651:20:0	
145	0	53	02:32:06.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,651:20:0	
146	0	53	02:32:08.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3259.84 +/-	2O0	4	0	5,398,651:22:1	
147	0	53	02:32:13.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3261.07 +/-	2O0	4	0	5,398,651:30:0	
148	0	53	02:32:14.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3261.13 +/-	2O0	4	0	5,398,651:31:8	
149	0	53	02:32:15.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3261.01 +/-	2O0	4	0	5,398,651:33:9	
150	0	53	02:32:32.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3257.25 +/-	2O0	4	0	5,398,651:58:0	
151	0	53	02:32:54.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,652:01:0	
152	0	53	02:32:54.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3251.93 +/-	2O0	4	0	5,398,652:01:0	
153	0	53	02:32:55.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3251.88 +/-	2O0	4	0	5,398,652:02:8	
154	0	53	02:34:32.000	117GB105A106A4AD	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,653:56:0	
155	0	53	02:34:38.666	117GB105A106A4AE	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,653:66:0	
156	0	53	02:37:12.666	117GB105A106A4AF	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,656:24:0	
157	0	53	02:37:19.333	117GB105A106A4AG	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,656:34:0	
158	0	53	02:39:53.333	117GB105A106A4AH	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,658:83:0	
159	0	53	02:40:00.000	117GB105A106A4AI	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,659:02:0	
160	0	53	02:42:34.000	117GB105A106A4AJ	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,661:51:0	
161	0	53	02:42:40.666	117GB105A106A4AK	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,661:61:0	
162	0	53	02:45:09.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3251.88 +/-	2O0	4	0	5,398,664:11:0	
163	0	53	02:45:09.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,664:11:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
164	0	53	02:45:10.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3251.99 +/-	2O0	4	0	5,398,664:13:1	
165	0	53	02:45:14.666	117GB105A106A4AL	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,664:19:0	
166	0	53	02:45:16.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3253.23 +/-	2O0	4	0	5,398,664:21:0	
167	0	53	02:45:17.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3253.29 +/-	2O0	4	0	5,398,664:22:8	
168	0	53	02:45:18.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3253.17 +/-	2O0	4	0	5,398,664:24:9	
169	0	53	02:45:21.333	117GB105A106A4AM	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,664:29:0	
170	0	53	02:45:25.333	488AG6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,664:35:0	
171	0	53	02:45:34.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3249.56 +/-	2O0	4	0	5,398,664:48:0	
172	0	53	02:45:56.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3244.25 +/-	2O0	4	0	5,398,664:82:0	
173	0	53	02:45:56.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,664:82:0	
174	0	53	02:45:57.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3244.19 +/-	2O0	4	0	5,398,664:83:8	
175	0	53	02:47:55.333	117GB105A106A4AN	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,666:78:0	
176	0	53	02:48:02.000	117GB105A106A4AO	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,666:88:0	
177	0	53	02:50:36.000	117GB105A106A4AP	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,669:46:0	
178	0	53	02:50:42.666	117GB105A106A4AQ	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,669:56:0	
179	0	53	02:53:16.666	117GB105A106A4AR	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,672:14:0	
180	0	53	02:53:23.333	117GB105A106A4AS	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,672:24:0	
181	0	53	02:55:57.333	117GB105A106A4AT	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,674:73:0	
182	0	53	02:56:04.000	117GB105A106A4AU	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,674:83:0	
183	0	53	02:58:11.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3244.19 +/-	2O0	4	0	5,398,677:01:0	
184	0	53	02:58:11.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,677:01:0	
185	0	53	02:58:12.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3244.31 +/-	2O0	4	0	5,398,677:03:1	
186	0	53	02:58:18.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3245.54 +/-	2O0	4	0	5,398,677:11:0	
187	0	53	02:58:19.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3245.60 +/-	2O0	4	0	5,398,677:12:8	
188	0	53	02:58:20.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3245.48 +/-	2O0	4	0	5,398,677:14:9	
189	0	53	02:58:36.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3241.72 +/-	2O0	4	0	5,398,677:39:0	
190	0	53	02:58:38.000	117GB105A106A4AV	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,677:41:0	
191	0	53	02:58:44.666	117GB105A106A4AW	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,677:51:0	
192	0	53	02:58:59.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3236.40 +/-	2O0	4	0	5,398,677:73:0	
193	0	53	02:58:59.333	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,677:73:0	
194	0	53	02:59:00.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3236.34 +/-	2O0	4	0	5,398,677:74:8	
195	0	53	03:01:18.666	117GB105A106A4AX	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,680:09:0	
196	0	53	03:01:25.333	117GB105A106A4AY	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,680:19:0	
197	0	53	03:03:59.333	117GB105A106A4AZ	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,682:68:0	
198	0	53	03:04:06.000	117GB105A106A4BA	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,682:78:0	
199	0	53	03:06:40.000	117GB105A106A4BB	7STRP	0.024705,-0.0009	Slew =12.01	2O0	4	0	5,398,685:36:0	
200	0	53	03:06:46.666	117GB105A106A4BC	7STRP	-0.021003,0.0,0,	Slew =,0.14	2O0	4	0	5,398,685:46:0	
201	0	53	03:09:20.666	117GB11A	**CSMOS**	GE	***** GROUP END CSMOS	2O0	4	0	5,398,688:04:0	
202	0	53	03:11:13.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3236.34 +/-	2O0	4	0	5,398,689:82:0	
203	0	53	03:11:13.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,689:82:0	
204	0	53	03:11:14.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3236.46 +/-	2O0	4	0	5,398,689:84:1	
205	0	53	03:11:20.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3237.70 +/-	2O0	4	0	5,398,690:01:0	
206	0	53	03:11:21.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3237.76 +/-	2O0	4	0	5,398,690:02:8	
207	0	53	03:11:22.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3237.64 +/-	2O0	4	0	5,398,690:04:9	
208	0	53	03:11:38.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3233.87 +/-	2O0	4	0	5,398,690:29:0	
209	0	53	03:12:01.333	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,690:63:0	
210	0	53	03:12:01.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3228.56 +/-	2O0	4	0	5,398,690:63:0	
211	0	53	03:12:02.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3228.50 +/-	2O0	4	0	5,398,690:64:8	
212	0	53	03:14:51.333	176GB6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2O0	4	0	5,398,693:45:0	
213	0	53	03:14:53.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,693:48:0	
214	0	53	03:14:53.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3228.50 +/-	2O0	4	0	5,398,693:48:0	
215	0	53	03:14:54.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3228.62 +/-	2O0	4	0	5,398,693:50:1	
216	0	53	03:15:00.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3229.85 +/-	2O0	4	0	5,398,693:58:0	
217	0	53	03:15:01.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3229.91 +/-	2O0	4	0	5,398,693:59:8	
218	0	53	03:15:02.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3229.79 +/-	2O0	4	0	5,398,693:61:9	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
219	0	53	03:15:03.333		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3229.62 +/-	2O0	4	0	5,398,693:63:0	
220	0	53	03:15:16.000	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,693:82:0	
221	0	53	03:15:16.000		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3226.65 +/-	2O0	4	0	5,398,693:82:0	
222	0	53	03:15:17.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3226.59 +/-	2O0	4	0	5,398,693:83:8	
223	0	53	03:18:00.000	488AG6D	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2O0	4	0	5,398,696:55:0	
224	0	53	04:50:24.000	165GC4A	7SCAN	NORM,263.059998,	Check S/P Position	2O0	4	0	5,398,787:90:0	
225	0	53	04:53:26.666	176GC6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2O0	4	0	5,398,791:00:0	
226	0	53	04:54:18.000	117GC	**CSMOS**	GS	***** GROUP START CSMOS	2O0	4	0	5,398,791:77:0	
227	0	53	04:54:27.333	117GC105A106A4A	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,792:00:0	
228	0	53	04:55:17.333	117GC105A106A4B	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,792:75:0	
229	0	53	04:55:23.333	117GC105A106A4C	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,792:84:0	
230	0	53	04:56:13.333	117GC105A106A4D	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,793:68:0	
231	0	53	04:56:19.333	117GC105A106A4E	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,793:77:0	
232	0	53	04:57:09.333	117GC105A106A4F	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,794:61:0	
233	0	53	04:57:15.333	117GC105A106A4G	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,794:70:0	
234	0	53	04:58:05.333	117GC105A106A4H	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,795:54:0	
235	0	53	04:58:11.333	117GC105A106A4I	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,795:63:0	
236	0	53	04:59:01.333	117GC105A106A4J	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,796:47:0	
237	0	53	04:59:07.333	117GC105A106A4K	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,796:56:0	
238	0	53	04:59:57.333	117GC105A106A4L	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,797:40:0	
239	0	53	05:00:03.333	117GC105A106A4M	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,797:49:0	
240	0	53	05:00:53.333	117GC105A106A4N	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,798:33:0	
241	0	53	05:00:59.333	117GC105A106A4O	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,798:42:0	
242	0	53	05:01:49.333	117GC105A106A4P	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,799:26:0	
243	0	53	05:01:55.333	117GC105A106A4Q	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,799:35:0	
244	0	53	05:02:45.333	117GC105A106A4R	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,800:19:0	
245	0	53	05:02:51.333	117GC105A106A4S	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,800:28:0	
246	0	53	05:03:41.333	117GC105A106A4T	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,801:12:0	
247	0	53	05:03:47.333	117GC105A106A4U	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,801:21:0	
248	0	53	05:04:37.333	117GC105A106A4V	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,802:05:0	
249	0	53	05:04:43.333	117GC105A106A4W	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,802:14:0	
250	0	53	05:05:33.333	117GC105A106A4X	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,802:89:0	
251	0	53	05:05:39.333	117GC105A106A4Y	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,803:07:0	
252	0	53	05:06:01.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3226.59 +/-	2O0	4	0	5,398,803:40:0	
253	0	53	05:06:01.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,803:40:0	
254	0	53	05:06:02.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3226.71 +/-	2O0	4	0	5,398,803:42:1	
255	0	53	05:06:08.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3227.95 +/-	2O0	4	0	5,398,803:50:0	
256	0	53	05:06:09.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3228.01 +/-	2O0	4	0	5,398,803:51:8	
257	0	53	05:06:10.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3227.89 +/-	2O0	4	0	5,398,803:53:9	
258	0	53	05:06:26.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3224.12 +/-	2O0	4	0	5,398,803:78:0	
259	0	53	05:06:29.333	117GC105A106A4Z	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,803:82:0	
260	0	53	05:06:35.333	117GC105A106A4AA	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,804:00:0	
261	0	53	05:06:49.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3218.81 +/-	2O0	4	0	5,398,804:21:0	
262	0	53	05:06:49.333	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,804:21:0	
263	0	53	05:06:50.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3218.75 +/-	2O0	4	0	5,398,804:22:8	
264	0	53	05:07:25.333	117GC105A106A4AB	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,804:75:0	
265	0	53	05:07:31.333	117GC105A106A4AC	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,804:84:0	
266	0	53	05:08:21.333	117GC105A106A4AD	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,805:68:0	
267	0	53	05:08:27.333	117GC105A106A4AE	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,805:77:0	
268	0	53	05:09:17.333	117GC105A106A4AF	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,806:61:0	
269	0	53	05:09:23.333	117GC105A106A4AG	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,806:70:0	
270	0	53	05:10:13.333	117GC105A106A4AH	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,807:54:0	
271	0	53	05:10:19.333	117GC105A106A4AI	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,807:63:0	
272	0	53	05:11:09.333	117GC105A106A4AJ	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,808:47:0	
273	0	53	05:11:15.333	117GC105A106A4AK	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,808:56:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
274	0	53	05:12:05.333	117GC105A106A4AL	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,809:40:0	
275	0	53	05:12:11.333	117GC105A106A4AM	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,809:49:0	
276	0	53	05:13:01.333	117GC105A106A4AN	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,810:33:0	
277	0	53	05:13:07.333	117GC105A106A4AO	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,810:42:0	
278	0	53	05:13:57.333	117GC105A106A4AP	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,811:26:0	
279	0	53	05:14:03.333	117GC105A106A4AQ	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,811:35:0	
280	0	53	05:14:53.333	117GC105A106A4AR	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,812:19:0	
281	0	53	05:14:59.333	117GC105A106A4AS	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,812:28:0	
282	0	53	05:15:49.333	117GC105A106A4AT	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,813:12:0	
283	0	53	05:15:55.333	117GC105A106A4AU	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,813:21:0	
284	0	53	05:16:45.333	117GC105A106A4AV	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,814:05:0	
285	0	53	05:16:51.333	117GC105A106A4AW	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,814:14:0	
286	0	53	05:17:41.333	117GC105A106A4AX	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,814:89:0	
287	0	53	05:17:47.333	117GC105A106A4AY	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,815:07:0	
288	0	53	05:18:37.333	117GC105A106A4AZ	7STRP	0.0072,-0.00115,	Slew =12.01	2O0	4	0	5,398,815:82:0	
289	0	53	05:18:43.333	117GC105A106A4BA	7STRP	-0.0058,0.0,0,0,	Slew =,0.12	2O0	4	0	5,398,816:00:0	
290	0	53	05:19:03.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,816:30:0	
291	0	53	05:19:03.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3218.75 +/-	2O0	4	0	5,398,816:30:0	
292	0	53	05:19:04.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3218.87 +/-	2O0	4	0	5,398,816:32:1	
293	0	53	05:19:10.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3220.10 +/-	2O0	4	0	5,398,816:40:0	
294	0	53	05:19:11.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3220.16 +/-	2O0	4	0	5,398,816:41:8	
295	0	53	05:19:12.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3220.04 +/-	2O0	4	0	5,398,816:43:9	
296	0	53	05:19:28.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3216.28 +/-	2O0	4	0	5,398,816:68:0	
297	0	53	05:19:33.333	117GC11A	**CSMOS**	GE	***** GROUP END CSMOS	2O0	4	0	5,398,816:75:0	
298	0	53	05:19:51.333	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,817:11:0	
299	0	53	05:19:51.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3210.97 +/-	2O0	4	0	5,398,817:11:0	
300	0	53	05:19:52.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3210.91 +/-	2O0	4	0	5,398,817:12:8	
301	0	53	05:21:01.333	176GC6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2O0	4	0	5,398,818:25:0	
302	0	53	05:21:03.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,818:28:0	
303	0	53	05:21:03.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3210.91 +/-	2O0	4	0	5,398,818:28:0	
304	0	53	05:21:04.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3211.03 +/-	2O0	4	0	5,398,818:30:1	
305	0	53	05:21:10.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3212.26 +/-	2O0	4	0	5,398,818:38:0	
306	0	53	05:21:11.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3212.32 +/-	2O0	4	0	5,398,818:39:8	
307	0	53	05:21:12.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3212.20 +/-	2O0	4	0	5,398,818:41:9	
308	0	53	05:21:13.333		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3212.03 +/-	2O0	4	0	5,398,818:43:0	
309	0	53	05:21:24.000	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,818:59:0	
310	0	53	05:21:24.000		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3209.53 +/-	2O0	4	0	5,398,818:59:0	
311	0	53	05:21:25.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3209.47 +/-	2O0	4	0	5,398,818:60:8	
312	0	53	05:50:00.000	480SC6A	6MROH	44,23E8,0,A10	read from LLM2A44,23E8,0,A1	2O0	4	0	5,398,846:85:0	
313	0	53	05:51:20.000	480SC6B	6MROH	45,23E8,0,B10	read from LLM2B45,23E8,0,B1	2O0	4	0	5,398,848:23:0	
314	0	53	06:01:04.000	20RN6B	6RTSL1		R/T Select of DDS and	2O0	4	0	5,398,857:80:0	
315	0	53	06:56:47.333	165GD4A	7SCAN	NORM,242.445999,	Check S/P Position	2O0	4	0	5,398,912:90:0	
316	0	53	06:59:50.000	176GD6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2O0	4	0	5,398,916:00:0	
317	0	53	07:00:41.333	117GD	**CSMOS**	GS	***** GROUP START CSMOS	2O0	4	0	5,398,916:77:0	
318	0	53	07:00:50.666	117GD105A106A4A	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,917:00:0	
319	0	53	07:03:54.000	117GD105A106A4B	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,920:02:0	
320	0	53	07:04:00.000	117GD105A106A4C	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,920:11:0	
321	0	53	07:07:03.333	117GD105A106A4D	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,923:13:0	
322	0	53	07:07:09.333	117GD105A106A4E	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,923:22:0	
323	0	53	07:10:12.666	117GD105A106A4F	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,926:24:0	
324	0	53	07:10:18.666	117GD105A106A4G	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,926:33:0	
325	0	53	07:12:24.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,928:40:0	
326	0	53	07:12:24.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3209.47 +/-	2O0	4	0	5,398,928:40:0	
327	0	53	07:12:26.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3209.59 +/-	2O0	4	0	5,398,928:42:1	
328	0	53	07:12:31.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3210.82 +/-	2O0	4	0	5,398,928:50:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
329	0	53	07:12:32.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3210.88 +/-	2O0	4	0	5,398,928:51:8	
330	0	53	07:12:33.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3210.76 +/-	2O0	4	0	5,398,928:53:9	
331	0	53	07:12:50.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3207.00 +/-	2O0	4	0	5,398,928:78:0	
332	0	53	07:13:12.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3201.68 +/-	2O0	4	0	5,398,929:21:0	
333	0	53	07:13:12.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,929:21:0	
334	0	53	07:13:13.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3201.63 +/-	2O0	4	0	5,398,929:22:8	
335	0	53	07:13:22.000	117GD105A106A4H	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,929:35:0	
336	0	53	07:13:28.000	117GD105A106A4I	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,929:44:0	
337	0	53	07:16:31.333	117GD105A106A4J	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,932:46:0	
338	0	53	07:16:37.333	117GD105A106A4K	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,932:55:0	
339	0	53	07:19:40.666	117GD105A106A4L	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,935:57:0	
340	0	53	07:19:46.666	117GD105A106A4M	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,935:66:0	
341	0	53	07:22:50.000	117GD105A106A4N	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,938:68:0	
342	0	53	07:22:56.000	117GD105A106A4O	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,938:77:0	
343	0	53	07:25:26.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3201.63 +/-	2O0	4	0	5,398,941:30:0	
344	0	53	07:25:26.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,941:30:0	
345	0	53	07:25:28.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3201.74 +/-	2O0	4	0	5,398,941:32:1	
346	0	53	07:25:33.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3202.98 +/-	2O0	4	0	5,398,941:40:0	
347	0	53	07:25:34.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3203.04 +/-	2O0	4	0	5,398,941:41:8	
348	0	53	07:25:35.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3202.92 +/-	2O0	4	0	5,398,941:43:9	
349	0	53	07:25:52.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3199.15 +/-	2O0	4	0	5,398,941:68:0	
350	0	53	07:25:59.333	117GD105A106A4P	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,941:79:0	
351	0	53	07:26:05.333	117GD105A106A4Q	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,941:88:0	
352	0	53	07:26:14.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3193.84 +/-	2O0	4	0	5,398,942:11:0	
353	0	53	07:26:14.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,942:11:0	
354	0	53	07:26:15.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3193.78 +/-	2O0	4	0	5,398,942:12:8	
355	0	53	07:29:08.666	117GD105A106A4R	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,944:90:0	
356	0	53	07:29:14.666	117GD105A106A4S	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,945:08:0	
357	0	53	07:32:18.000	117GD105A106A4T	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,948:10:0	
358	0	53	07:32:24.000	117GD105A106A4U	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,948:19:0	
359	0	53	07:35:27.333	117GD105A106A4V	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,951:21:0	
360	0	53	07:35:33.333	117GD105A106A4W	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,951:30:0	
361	0	53	07:38:28.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3193.78 +/-	2O0	4	0	5,398,954:20:0	
362	0	53	07:38:28.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,954:20:0	
363	0	53	07:38:30.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3193.90 +/-	2O0	4	0	5,398,954:22:1	
364	0	53	07:38:35.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3195.14 +/-	2O0	4	0	5,398,954:30:0	
365	0	53	07:38:36.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3195.20 +/-	2O0	4	0	5,398,954:31:8	
366	0	53	07:38:36.666	117GD105A106A4X	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,954:32:0	
367	0	53	07:38:37.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3195.08 +/-	2O0	4	0	5,398,954:33:9	
368	0	53	07:38:42.666	117GD105A106A4Y	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,954:41:0	
369	0	53	07:38:54.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3191.31 +/-	2O0	4	0	5,398,954:58:0	
370	0	53	07:39:16.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3186.00 +/-	2O0	4	0	5,398,955:01:0	
371	0	53	07:39:16.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,955:01:0	
372	0	53	07:39:17.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3185.94 +/-	2O0	4	0	5,398,955:02:8	
373	0	53	07:41:46.000	117GD105A106A4Z	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,957:43:0	
374	0	53	07:41:52.000	117GD105A106A4AA	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,957:52:0	
375	0	53	07:44:55.333	117GD105A106A4AB	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,960:54:0	
376	0	53	07:45:01.333	117GD105A106A4AC	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,960:63:0	
377	0	53	07:48:04.666	117GD105A106A4AD	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,963:65:0	
378	0	53	07:48:10.666	117GD105A106A4AE	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,963:74:0	
379	0	53	07:51:14.000	117GD105A106A4AF	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,966:76:0	
380	0	53	07:51:20.000	117GD105A106A4AG	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,966:85:0	
381	0	53	07:51:31.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3185.94 +/-	2O0	4	0	5,398,967:11:0	
382	0	53	07:51:31.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,967:11:0	
383	0	53	07:51:32.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3186.06 +/-	2O0	4	0	5,398,967:13:1	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
384	0	53	07:51:38.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3187.29 +/-	2O0	4	0	5,398,967:21:0	
385	0	53	07:51:39.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3187.35 +/-	2O0	4	0	5,398,967:22:8	
386	0	53	07:51:40.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3187.23 +/-	2O0	4	0	5,398,967:24:9	
387	0	53	07:51:56.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3183.62 +/-	2O0	4	0	5,398,967:48:0	
388	0	53	07:52:18.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,967:82:0	
389	0	53	07:52:18.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3178.31 +/-	2O0	4	0	5,398,967:82:0	
390	0	53	07:52:19.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3178.25 +/-	2O0	4	0	5,398,967:83:8	
391	0	53	07:54:23.333	117GD105A106A4AH	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,969:87:0	
392	0	53	07:54:29.333	117GD105A106A4AI	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,970:05:0	
393	0	53	07:57:32.666	117GD105A106A4AJ	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,973:07:0	
394	0	53	07:57:38.666	117GD105A106A4AK	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,973:16:0	
395	0	53	08:00:42.000	117GD105A106A4AL	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,976:18:0	
396	0	53	08:00:48.000	117GD105A106A4AM	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,976:27:0	
397	0	53	08:03:51.333	117GD105A106A4AN	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,979:29:0	
398	0	53	08:03:57.333	117GD105A106A4AO	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,979:38:0	
399	0	53	08:04:33.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3178.25 +/-	2O0	4	0	5,398,980:01:0	
400	0	53	08:04:33.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,980:01:0	
401	0	53	08:04:34.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3178.37 +/-	2O0	4	0	5,398,980:03:1	
402	0	53	08:04:40.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3179.60 +/-	2O0	4	0	5,398,980:11:0	
403	0	53	08:04:41.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3179.66 +/-	2O0	4	0	5,398,980:12:8	
404	0	53	08:04:42.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3179.54 +/-	2O0	4	0	5,398,980:14:9	
405	0	53	08:04:58.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3175.78 +/-	2O0	4	0	5,398,980:39:0	
406	0	53	08:05:21.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3170.47 +/-	2O0	4	0	5,398,980:73:0	
407	0	53	08:05:21.333	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,980:73:0	
408	0	53	08:05:22.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3170.41 +/-	2O0	4	0	5,398,980:74:8	
409	0	53	08:07:00.666	117GD105A106A4AP	7STRP	0.026806,-0.0013	Slew =12.01	2O0	4	0	5,398,982:40:0	
410	0	53	08:07:06.666	117GD105A106A4AQ	7STRP	-0.028808,0.0,0,	Slew =,0.16	2O0	4	0	5,398,982:49:0	
411	0	53	08:10:10.000	117GD11A	**CSMOS**	GE	***** GROUP END CSMOS	2O0	4	0	5,398,985:51:0	
412	0	53	08:11:06.666	176GD6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2O0	4	0	5,398,986:45:0	
413	0	53	08:11:08.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3170.41 +/-	2O0	4	0	5,398,986:48:0	
414	0	53	08:11:08.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,398,986:48:0	
415	0	53	08:11:10.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3170.53 +/-	2O0	4	0	5,398,986:50:1	
416	0	53	08:11:15.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3171.76 +/-	2O0	4	0	5,398,986:58:0	
417	0	53	08:11:16.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3171.82 +/-	2O0	4	0	5,398,986:59:8	
418	0	53	08:11:17.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3171.70 +/-	2O0	4	0	5,398,986:61:9	
419	0	53	08:11:18.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3171.53 +/-	2O0	4	0	5,398,986:63:0	
420	0	53	08:11:34.000		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3167.93 +/-	2O0	4	0	5,398,986:86:0	
421	0	53	08:11:34.000	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,398,986:86:0	
422	0	53	08:11:35.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3167.88 +/-	2O0	4	0	5,398,986:87:8	
423	0	53	08:31:49.333	432OG431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2O0	4	0	5,399,006:89:0	
424	0	53	08:31:50.000	432OG6A	6RTSL1		R/T Select of DDS and	2O0	4	0	5,399,006:90:0	
425	0	53	08:47:49.333	488AH6A	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	2O0	4	0	5,399,022:73:0	
426	0	53	09:24:05.333	488AH6B	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	5,399,058:61:0	
427	0	53	09:56:05.333	488AH6C	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	2O0	4	0	5,399,090:29:0	
428	0	53	10:01:04.000	20RO6B	6RTSL1		R/T Select of DDS and	2O0	4	0	5,399,095:22:0	
429	0	53	10:11:49.333	165IP4A	7SCAN	NORM,32.13,14.69	Check S/P Position	2O0	4	0	5,399,105:80:0	
430	0	53	10:14:47.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3167.88 +/-	2O0	4	0	5,399,108:74:0	
431	0	53	10:14:47.333	175IP422A6A	6DMSC	R806,0	DMS Control Tape runup 806.4kb	2O0	4	0	5,399,108:74:0	
432	0	53	10:14:48.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3167.99 +/-	2O0	4	0	5,399,108:76:1	
433	0	53	10:14:54.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3169.23 +/-	2O0	4	0	5,399,108:84:0	
434	0	53	10:14:55.200		DMS:	: *RUNUP	R806, TRACK *2, *REV, TIC *3169.29 +/-	2O0	4	0	5,399,108:85:8	
435	0	53	10:14:57.333	165IP4B	7VECT		Inert vect update UTC	2O0	4	0	5,399,108:89:0	
436	0	53	10:14:59.333	118IP	**SMOS**	GS		2O0	4	0	5,399,109:01:0	
437	0	53	10:15:00.000	175IP176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2O0	4	0	5,399,109:02:0	
438	0	53	10:15:00.466		DMS:	**: *RECORD**	R806, TRACK 2, REV, TIC *3103.29 +/-	2O0	4	0	5,399,109:02:7	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
439	0	53	10:15:00.466		DMS:	: *AT_SPD	R806, TRACK 2, REV, TIC 3103.29 +/-	2O0	4	0	5,399,109:02:7	
440	0	53	10:15:09.333	118IP110A111A4A	7STRP	0.0,0.00075,26,0	Slew =,3.41	2O0	4	0	5,399,109:16:0	
441	0	53	10:15:18.000	118IP11A	**SMOS**	GE		2O0	4	0	5,399,109:29:0	
442	0	53	10:15:23.333	175IP422A6B	6DMSC	RDY,0	DMS Control Tape stop	2O0	4	0	5,399,109:37:0	
443	0	53	10:15:23.333		DMS:	**: *RUNDOWN**	R806, TRACK 2, REV, TIC *2540.55 +/-	2O0	4	0	5,399,109:37:0	
444	0	53	10:15:26.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2529.05 +/-	2O0	4	0	5,399,109:41:1	
445	0	53	10:21:52.000	175MA422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2O0	4	0	5,399,115:74:0	
446	0	53	10:21:52.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2529.05 +/-	2O0	4	0	5,399,115:74:0	
447	0	53	10:21:53.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2529.17 +/-	2O0	4	0	5,399,115:76:1	
448	0	53	10:21:58.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2530.41 +/-	2O0	4	0	5,399,115:84:0	
449	0	53	10:21:59.866		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *2530.47 +/-	2O0	4	0	5,399,115:85:8	
450	0	53	10:22:00.666	175MA176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2O0	4	0	5,399,115:87:0	
451	0	53	10:22:01.266		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 2530.35 +/-	2O0	4	0	5,399,115:87:9	
452	0	53	10:22:01.266		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *2530.35 +/-	2O0	4	0	5,399,115:87:9	
453	0	53	10:55:49.333	488AH6D	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2O0	4	0	5,399,149:36:0	
454	0	53	10:56:46.000	488AH6E	6TMSED	FILL,AH4	Sci, Eng, and D/L Chan	2O0	4	0	5,399,150:30:0	
455	0	53	10:58:00.000	488AI6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,399,151:50:0	
456	0	53	11:00:00.000	488AI6B	6TMSED	FILL,DL4	Sci, Eng, and D/L Chan	2O0	4	0	5,399,153:48:0	
457	0	53	11:10:32.666	282NA431A6A	6RCSEL	DDSNCG,PLSSEL,EP	Record Select (DDS onl	2O0	4	0	5,399,163:87:0	
458	0	53	11:10:35.333	431OA6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	2O0	4	0	5,399,164:00:0	
459	0	53	11:18:40.000	165GE4A	7SCAN	NORM,240.181,-20	Check S/P Position	2O0	4	0	5,399,171:90:0	
460	0	53	11:22:34.000	117GE	**CSMOS**	GS	***** GROUP START CSMOS	2O0	4	0	5,399,175:77:0	
461	0	53	11:22:43.333	117GE105A106A4A	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,176:00:0	
462	0	53	11:26:57.333	117GE105A106A4B	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,180:17:0	
463	0	53	11:27:04.666	117GE105A106A4C	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,180:28:0	
464	0	53	11:31:18.666	117GE105A106A4D	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,184:45:0	
465	0	53	11:31:26.000	117GE105A106A4E	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,184:56:0	
466	0	53	11:35:40.000	117GE105A106A4F	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,188:73:0	
467	0	53	11:35:47.333	117GE105A106A4G	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,188:84:0	
468	0	53	11:40:01.333	117GE105A106A4H	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,193:10:0	
469	0	53	11:40:08.666	117GE105A106A4I	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,193:21:0	
470	0	53	11:40:25.333	488AI6C	6TMSED	NORM,DL4	Sci, Eng, and D/L Chan	2O0	4	0	5,399,193:46:0	
471	0	53	11:44:22.666	117GE105A106A4J	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,197:38:0	
472	0	53	11:44:30.000	117GE105A106A4K	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,197:49:0	
473	0	53	11:48:44.000	117GE105A106A4L	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,201:66:0	
474	0	53	11:48:51.333	117GE105A106A4M	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,201:77:0	
475	0	53	11:53:05.333	117GE105A106A4N	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,206:03:0	
476	0	53	11:53:12.666	117GE105A106A4O	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,206:14:0	
477	0	53	11:57:26.666	117GE105A106A4P	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,210:31:0	
478	0	53	11:57:34.000	117GE105A106A4Q	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,210:42:0	
479	0	53	12:00:00.000	480SD6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2O0	4	0	5,399,212:79:0	
480	0	53	12:01:48.000	117GE105A106A4R	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,214:59:0	
481	0	53	12:01:55.333	117GE105A106A4S	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,214:70:0	
482	0	53	12:06:09.333	117GE105A106A4T	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,218:87:0	
483	0	53	12:06:16.666	117GE105A106A4U	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,219:07:0	
484	0	53	12:06:40.000	480SD6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2O0	4	0	5,399,219:42:0	
485	0	53	12:10:30.666	117GE105A106A4V	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,223:24:0	
486	0	53	12:10:38.000	117GE105A106A4W	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,223:35:0	
487	0	53	12:14:52.000	117GE105A106A4X	7STRP	0.038519,-0.0017	Slew =12.01	2O0	4	0	5,399,227:52:0	
488	0	53	12:14:59.333	117GE105A106A4Y	7STRP	-0.035014,0.0,0,	Slew =,0.14	2O0	4	0	5,399,227:63:0	
489	0	53	12:19:13.333	117GE11A	**CSMOS**	GE	***** GROUP END CSMOS	2O0	4	0	5,399,231:80:0	
490	0	53	12:24:23.333	165GF4A	7SCAN	NORM,239.922998,	Check S/P Position	2O0	4	0	5,399,236:90:0	
491	0	53	12:26:16.000	117GF	**CSMOS**	GS	***** GROUP START CSMOS	2O0	4	0	5,399,238:77:0	
492	0	53	12:26:25.333	117GF105A106A4A	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2O0	4	0	5,399,239:00:0	
493	0	53	12:28:31.333	117GF105A106A4B	7STRP	0.01,-0.001,0,0,	Slew =12.01	2O0	4	0	5,399,241:07:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
494	0	53	12:28:37.333	117GF105A106A4C	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2O0	4	0	5,399,241:16:0	
495	0	53	12:30:43.333	117GF105A106A4D	7STRP	0.01,-0.001,0,0,	Slew =12.01	2O0	4	0	5,399,243:23:0	
496	0	53	12:30:49.333	117GF105A106A4E	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2O0	4	0	5,399,243:32:0	
497	0	53	12:32:55.333	117GF105A106A4F	7STRP	0.01,-0.001,0,0,	Slew =12.01	2O0	4	0	5,399,245:39:0	
498	0	53	12:33:01.333	117GF105A106A4G	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2O0	4	0	5,399,245:48:0	
499	0	53	12:35:07.333	117GF105A106A4H	7STRP	0.01,-0.001,0,0,	Slew =12.01	2O0	4	0	5,399,247:55:0	
500	0	53	12:35:13.333	117GF105A106A4I	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2O0	4	0	5,399,247:64:0	
501	**0**	**53**	**12:35:35.334**	**27NNDETECT01-**		**-----START------**		**2O0**	**4**	**0**	**: :**	
502	**0**	**53**	**12:35:46.000**	**20FB5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,248:22:0**	
503	**0**	**53**	**12:35:47.333**	**20FB5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,248:24:0**	
504	**0**	**53**	**12:35:52.666**	**20FB6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,248:32:0**	
505	**0**	**53**	**12:36:02.666**	**20FB6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,248:47:0**	
506	**0**	**53**	**12:36:06.000**	**20FB5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,248:52:0**	
507	**0**	**53**	**12:36:12.666**	**20FB5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,248:62:0**	
508	**0**	**53**	**12:36:20.000**	**20FB4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**5,399,248:73:0**	
509	0	53	12:37:19.333	117GF105A106A4J	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R0	4	0	5,399,249:71:0	
510	**0**	**53**	**12:37:20.666**	**20FB4B**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**5,399,249:73:0**	
511	0	53	12:37:25.333	117GF105A106A4K	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R0	4	0	5,399,249:80:0	
512	**0**	**53**	**12:38:21.333**	**20FB4C**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**2R0**	**4**	**0**	**5,399,250:73:0**	
513	**0**	**53**	**12:39:22.000**	**20FB4D**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,251:73:0**	
514	**0**	**53**	**12:39:22.666**	**20FB4E**	**37ETB**	**4,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,251:74:0**	
515	0	53	12:39:31.333	117GF105A106A4L	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,251:87:0	
516	0	53	12:39:37.333	117GF105A106A4M	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,252:05:0	
517	0	53	12:41:43.333	117GF105A106A4N	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,254:12:0	
518	0	53	12:41:49.333	117GF105A106A4O	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,254:21:0	
519	**0**	**53**	**12:42:40.000**	**20FG6A**	**6MCOPY**	**B1A1A,68EF,NIMS,**	**B1A1A,68EF,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,255:06:0**	
520	**0**	**53**	**12:42:48.666**	**20FG6B**	**6MCOPY**	**B1A1A,68F8,NIMS,**	**B1A1A,68F8,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,255:19:0**	
521	**0**	**53**	**12:43:41.333**	**20FG6C**	**6MCOPY**	**B1A1A,6901,NIMS,**	**B1A1A,6901,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,256:07:0**	
522	**0**	**53**	**12:43:50.000**	**20FG6D**	**6MCOPY**	**B1A1A,690A,NIMS,**	**B1A1A,690A,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,256:20:0**	
523	0	53	12:43:55.333	117GF105A106A4P	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,256:28:0	
524	0	53	12:44:01.333	117GF105A106A4Q	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,256:37:0	
525	**0**	**53**	**12:44:42.666**	**20FG6E**	**6MCOPY**	**B1A1A,6913,NIMS,**	**B1A1A,6913,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,257:08:0**	
526	**0**	**53**	**12:44:51.333**	**20FG6F**	**6MCOPY**	**B1A1A,691C,NIMS,**	**B1A1A,691C,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,257:21:0**	
527	**0**	**53**	**12:45:44.000**	**20FG6G**	**6MCOPY**	**B1A1A,6925,NIMS,**	**B1A1A,6925,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,258:09:0**	
528	**0**	**53**	**12:45:52.666**	**20FG6H**	**6MCOPY**	**B1A1A,692E,NIMS,**	**B1A1A,692E,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,258:22:0**	
529	0	53	12:46:07.333	117GF105A106A4R	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,258:44:0	
530	0	53	12:46:13.333	117GF105A106A4S	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,258:53:0	
531	**0**	**53**	**12:46:45.333**	**20FG6I**	**6MCOPY**	**B1A1A,6937,NIMS,**	**B1A1A,6937,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,259:10:0**	
532	**0**	**53**	**12:46:54.000**	**20FG6J**	**6MCOPY**	**B1A1A,6940,NIMS,**	**B1A1A,6940,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,259:23:0**	
533	**0**	**53**	**12:47:46.666**	**20FG6K**	**6MCOPY**	**B1A1A,6949,NIMS,**	**B1A1A,6949,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,260:11:0**	
534	**0**	**53**	**12:47:55.333**	**20FG6L**	**6MCOPY**	**B1A1A,6952,NIMS,**	**B1A1A,6952,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,260:24:0**	
535	0	53	12:48:19.333	117GF105A106A4T	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,260:60:0	
536	0	53	12:48:25.333	117GF105A106A4U	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,260:69:0	
537	**0**	**53**	**12:48:48.000**	**20FG6M**	**6MCOPY**	**B1A1A,695B,NIMS,**	**B1A1A,695B,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,261:12:0**	
538	**0**	**53**	**12:48:56.666**	**20FG6N**	**6MCOPY**	**B1A1A,6964,NIMS,**	**B1A1A,6964,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,261:25:0**	
539	**0**	**53**	**12:49:49.333**	**20FG6O**	**6MCOPY**	**B1A1A,696D,NIMS,**	**B1A1A,696D,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,262:13:0**	
540	**0**	**53**	**12:49:58.000**	**20FG6P**	**6MCOPY**	**B1A1A,6976,NIMS,**	**B1A1A,6976,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,262:26:0**	
541	0	53	12:50:31.333	117GF105A106A4V	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,262:76:0	
542	0	53	12:50:37.333	117GF105A106A4W	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,262:85:0	
543	**0**	**53**	**12:50:50.666**	**20FG6Q**	**6MCOPY**	**B1A1A,697F,NIMS,**	**B1A1A,697F,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,263:14:0**	
544	**0**	**53**	**12:50:59.333**	**20FG6R**	**6MCOPY**	**B1A1A,6988,NIMS,**	**B1A1A,6988,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,263:27:0**	
545	**0**	**53**	**12:51:52.000**	**20FG6S**	**6MCOPY**	**B1A1A,6991,NIMS,**	**B1A1A,6991,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,264:15:0**	
546	**0**	**53**	**12:52:00.666**	**20FG6T**	**6MCOPY**	**B1A1A,699A,NIMS,**	**B1A1A,699A,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,264:28:0**	
547	0	53	12:52:43.333	117GF105A106A4X	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,265:01:0	
548	0	53	12:52:49.333	117GF105A106A4Y	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,265:10:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
549	**0**	**53**	**12:52:53.333**	**20FG6U**	**6MCOPY**	**B1A1A,69A3,NIMS,**	**B1A1A,69A3,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,265:16:0**	
550	**0**	**53**	**12:53:02.000**	**20FG6V**	**6MCOPY**	**B1A1A,69AC,NIMS,**	**B1A1A,69AC,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,265:29:0**	
551	**0**	**53**	**12:53:54.666**	**20FG6W**	**6MCOPY**	**B1A1A,69B5,NIMS,**	**B1A1A,69B5,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,266:17:0**	
552	**0**	**53**	**12:54:03.333**	**20FG6X**	**6MCOPY**	**B1A1A,69BE,NIMS,**	**B1A1A,69BE,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,266:30:0**	
553	0	53	12:54:55.333	117GF105A106A4Z	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,267:17:0	
554	**0**	**53**	**12:54:56.000**	**20FG6Y**	**6MCOPY**	**B1A1A,69C7,NIMS,**	**B1A1A,69C7,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,267:18:0**	
555	0	53	12:55:01.333	117GF105A106A4AA	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,267:26:0	
556	**0**	**53**	**12:55:04.666**	**20FG6Z**	**6MCOPY**	**B1A1A,69D0,NIMS,**	**B1A1A,69D0,NIMS,150F,151C**	**2R3**	**4**	**0**	**5,399,267:31:0**	
557	**0**	**53**	**12:55:48.667**	**27NNDETECT01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
558	0	53	12:57:07.333	117GF105A106A4AB	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,269:33:0	
559	0	53	12:57:13.333	117GF105A106A4AC	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,269:42:0	
560	0	53	12:59:19.333	117GF105A106A4AD	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,271:49:0	
561	0	53	12:59:25.333	117GF105A106A4AE	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,271:58:0	
562	0	53	13:01:31.333	117GF105A106A4AF	7STRP	0.01,-0.001,0,0,	Slew =12.01	2R3	4	0	5,399,273:65:0	
563	0	53	13:01:37.333	117GF105A106A4AG	7STRP	-0.0074,0.0,0,0,	Slew =,0.06	2R3	4	0	5,399,273:74:0	
564	0	53	13:03:34.000	175MA422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,275:67:0	
565	0	53	13:03:34.000		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC * 258.61 +/-	2R3	4	0	5,399,275:67:0	
566	0	53	13:03:35.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC * 258.55 +/-	2R3	4	0	5,399,275:68:8	
567	0	53	13:03:43.333	117GF11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,275:81:0	
568	0	53	13:04:36.666		DMS:	: READY	RDY, TRACK *3, *FWD, TIC 258.55 +/-	2R3	4	0	5,399,276:70:0	
569	0	53	13:04:36.666	465KC6A	6DMSC	RDY,3	DMS Control Tape stop	2R3	4	0	5,399,276:70:0	
570	0	53	13:04:40.000	175TA422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	5,399,276:75:0	
571	0	53	13:04:40.000		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 258.55 +/-	2R3	4	0	5,399,276:75:0	
572	0	53	13:04:46.666		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 258.55 +/-	2R3	4	0	5,399,276:85:0	
573	0	53	13:04:48.000	175TA176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,399,276:87:0	
574	0	53	13:04:48.066		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC * 258.67 +/-	2R3	4	0	5,399,276:87:1	
575	0	53	13:04:48.066		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 258.67 +/-	2R3	4	0	5,399,276:87:1	
576	0	53	13:04:50.666	431MA6A	6RCSEL	DDSSEL,PLSNCG,EP	Record Select (DDS onl	2R3	4	0	5,399,277:00:0	
577	0	53	13:06:51.333	165GG4A	7SCAN	NORM,248.189999,	Check S/P Position	2R3	4	0	5,399,278:90:0	
578	0	53	13:07:43.333	117GG	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,279:77:0	
579	0	53	13:07:52.666	117GG105A106A4A	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,280:00:0	
580	0	53	13:09:30.666	117GG105A106A4B	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,281:56:0	
581	0	53	13:09:38.000	117GG105A106A4C	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,281:67:0	
582	0	53	13:11:16.000	117GG105A106A4D	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,283:32:0	
583	0	53	13:11:23.333	117GG105A106A4E	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,283:43:0	
584	0	53	13:13:01.333	117GG105A106A4F	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,285:08:0	
585	0	53	13:13:08.666	117GG105A106A4G	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,285:19:0	
586	0	53	13:14:46.666	117GG105A106A4H	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,286:75:0	
587	0	53	13:14:54.000	117GG105A106A4I	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,286:86:0	
588	0	53	13:16:32.000	117GG105A106A4J	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,288:51:0	
589	0	53	13:16:39.333	117GG105A106A4K	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,288:62:0	
590	0	53	13:18:03.333	488AI6D	6TMSED	FILL,DL4	Sci, Eng, and D/L Chan	2R3	4	0	5,399,290:06:0	
591	0	53	13:18:17.333	117GG105A106A4L	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,290:27:0	
592	0	53	13:18:24.666	117GG105A106A4M	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,290:38:0	
593	0	53	13:20:02.666	117GG105A106A4N	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,292:03:0	
594	0	53	13:20:10.000	117GG105A106A4O	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,292:14:0	
595	0	53	13:21:48.000	117GG105A106A4P	7STRP	0.033513,-0.0016	Slew =12.01	2R3	4	0	5,399,293:70:0	
596	0	53	13:21:55.333	117GG105A106A4Q	7STRP	-0.020003,0.0,0,	Slew =,0.21	2R3	4	0	5,399,293:81:0	
597	0	53	13:22:09.333	428JA6A	6RCCLR			2R3	4	0	5,399,294:11:0	
598	0	53	13:22:10.000	428JA6B	6RCSET	12		2R3	4	0	5,399,294:12:0	
599	0	53	13:23:33.333	117GG105A106B4A	7STRP	0.146025,0.0,0,0	Slew =12.01	2R3	4	0	5,399,295:46:0	
600	0	53	13:24:49.333	117GG105A106B4B	7STRP	0.0,0.0,0,0,0,0,	Slew =,0.21	2R3	4	0	5,399,296:69:0	
601	0	53	13:24:54.666	117GG11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,296:77:0	
602	0	53	13:25:03.333	165GJ4A	7SCAN	NORM,260.566998,	Check S/P Position	2R3	4	0	5,399,296:90:0	
603	0	53	13:25:55.333	117GJ	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,297:77:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
604	0	53	13:26:04.666	117GJ105A106A4A	7STRP	-0.012001,0.0,0,	Slew =,0.06	2R3	4	0	5,399,298:00:0	
605	**0**	**53**	**13:28:10.000**	**27NNHRPELE01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
606	**0**	**53**	**13:28:20.666**	**20DA5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,300:22:0**	
607	**0**	**53**	**13:28:22.000**	**20DA5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,300:24:0**	
608	**0**	**53**	**13:28:24.000**	**20DA6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,300:27:0**	
609	**0**	**53**	**13:28:34.000**	**20DA6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,300:42:0**	
610	**0**	**53**	**13:28:47.333**	**20DA5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,300:62:0**	
611	**0**	**53**	**13:28:50.666**	**20DA5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,300:67:0**	
612	**0**	**53**	**13:29:22.000**	**20DA4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,301:23:0**	
613	0	53	13:29:29.333	117GJ105A106A4B	7STRP	0.11551,-0.009,0	Slew =12.01	2R0	4	0	5,399,301:34:0	
614	0	53	13:29:43.333	117GJ105A106A4C	7STRP	-0.012001,0.0,0,	Slew =,0.06	2R0	4	0	5,399,301:55:0	
615	**0**	**53**	**13:30:22.666**	**20DA4B**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**2R0**	**4**	**0**	**5,399,302:23:0**	
616	**0**	**53**	**13:31:12.000**	**27NNHRPELE01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
617	**0**	**53**	**13:31:23.333**	**20DA4C**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,303:23:0**	
618	**0**	**53**	**13:31:24.000**	**20DA4D**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,303:24:0**	
619	0	53	13:33:08.000	117GJ11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,304:89:0	
620	0	53	13:34:00.000	481UC4A	7VECT		Inert vect update UTC	2R3	4	0	5,399,305:76:0	
621	0	53	13:34:09.333	165DA4A	**7SCAN**	**NORM,250.539,-41**	**Check S/P Position**	2R3	4	0	5,399,305:90:0	
622	**0**	**53**	**13:34:14.000**	**27INHRPELE01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
623	0	53	13:35:01.333	117DA	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,306:77:0	
624	0	53	13:35:02.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC * 683.82 +/-	2R3	4	0	5,399,306:78:0	
625	0	53	13:35:02.000	175DA422A6A	6DMSC	R28,3	DMS Control	2R3	4	0	5,399,306:78:0	
626	0	53	13:35:03.200		DMS:	: *RUNUP	R28, TRACK 3, FWD, TIC * 683.88 +/-	2R3	4	0	5,399,306:79:8	
627	0	53	13:35:07.200		DMS:	: *AT_SPD	R28, TRACK 3, FWD, TIC 685.38 +/-	2R3	4	0	5,399,306:85:8	
628	0	53	13:35:07.200		DMS:	**: *RECORD**	R28, TRACK 3, FWD, TIC * 685.38 +/-	2R3	4	0	5,399,306:85:8	
629	0	53	13:35:07.333	175DA176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,306:86:0	
630	**0**	**53**	**13:35:08.000**	**27INHRPELE01-**	**NIMPBK**	**301DA**	**IO PELE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
631	0	53	13:35:09.333	165DA4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,306:89:0	
632	0	53	13:35:10.666	117DA105A106A4A	**7STRP**	**-0.0089,0.0,0,0,**	**Slew =,0.03**	2R3	4	0	5,399,307:00:0	
633	0	53	13:37:19.333	428JB6A	6RCCLR			2R3	4	0	5,399,309:11:0	
634	0	53	13:37:20.000	428JB6B	6RCSET	8		2R3	4	0	5,399,309:12:0	
635	**0**	**53**	**13:40:10.000**	**27INHRPELE01-**	**DESELC**	**300DA**	**IO PELE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
636	0	53	13:40:10.666	117DA11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,311:86:0	
637	0	53	13:40:11.333		DMS:	**: *RUNDOWN**	R28, TRACK 3, FWD, TIC * 952.68 +/-	2R3	4	0	5,399,311:87:0	
638	0	53	13:40:11.333	175TB422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	5,399,311:87:0	
639	0	53	13:40:12.533		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC * 952.98 +/-	2R3	4	0	5,399,311:88:8	
640	0	53	13:40:13.933		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 953.10 +/-	2R3	4	0	5,399,311:90:9	
641	0	53	13:40:13.933		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC * 953.10 +/-	2R3	4	0	5,399,311:90:9	
642	0	53	13:40:14.000	175TB176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,399,312:00:0	
643	0	53	13:40:18.000	118IA	**SMOS**	GS		2R3	4	0	5,399,312:06:0	
644	0	53	13:40:26.666	428JC6A	6RCCLR			2R3	4	0	5,399,312:19:0	
645	0	53	13:40:27.333	428JC6B	6RCSET	14		2R3	4	0	5,399,312:20:0	
646	0	53	13:40:33.333	165IA4A	**7SCAN**	**NORM,286.863998,**	**Check S/P Position**	2R3	4	0	5,399,312:29:0	
647	0	53	13:40:52.666	175IA422A6A	6DMSC	R806,3	DMS Control	2R3	4	0	5,399,312:58:0	
648	0	53	13:40:52.666		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC * 962.18 +/-	2R3	4	0	5,399,312:58:0	
649	0	53	13:40:53.866		DMS:	: *RUNUP	R806, TRACK 3, FWD, TIC * 962.24 +/-	2R3	4	0	5,399,312:59:8	
650	0	53	13:40:56.000	165IA4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,312:63:0	
651	0	53	13:40:58.666	175IA176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,312:67:0	
652	0	53	13:40:59.133		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 1028.24 +/-	2R3	4	0	5,399,312:67:7	
653	0	53	13:40:59.133		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *1028.24 +/-	2R3	4	0	5,399,312:67:7	
654	0	53	13:40:59.333	118IA110A111A4A	7STRP	0.0057,0.0,26,0,	Slew =,2.91	2R3	4	0	5,399,312:68:0	
655	0	53	13:41:18.000	428JD6A	6RCCLR			2R3	4	0	5,399,313:05:0	
656	0	53	13:41:18.666	428JD6B	6RCSET	11		2R3	4	0	5,399,313:06:0	
657	**0**	**53**	**13:41:18.667**	**27INHRPELE01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
658	0	53	13:41:25.333	118IA11A	**SMOS**	GE		2R3	4	0	5,399,313:16:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
659	0	53	13:41:27.333	165GH4A	7SCAN	NORM,248.973,-26	Check S/P Position	2R3	4	0	5,399,313:19:0	
660	0	53	13:41:32.000	175TC422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	5,399,313:26:0	
661	0	53	13:41:32.000		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *1837.07 +/-	2R3	4	0	5,399,313:26:0	
662	0	53	13:41:34.733		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *1848.57 +/- 1	2R3	4	0	5,399,313:30:1	
663	0	53	13:41:36.000	175TC176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,399,313:32:0	
664	0	53	13:41:36.133		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 1848.69 +/- 1	2R3	4	0	5,399,313:32:2	
665	0	53	13:41:36.133		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *1848.69 +/- 1	2R3	4	0	5,399,313:32:2	
666	0	53	13:42:27.333	165GH4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,314:18:0	
667	0	53	13:44:29.333	165IB4A	**7SCAN**	**NORM,306.004997,**	**Check S/P Position**	2R3	4	0	5,399,316:19:0	
668	0	53	13:45:00.000	481UD4A	7VECT	BB2	Inert vect update UTC	2R3	4	0	5,399,316:65:0	
669	0	53	13:46:22.000	118IB	**SMOS**	GS		2R3	4	0	5,399,318:06:0	
670	0	53	13:46:25.333	428JE6A	6RCCLR			2R3	4	0	5,399,318:11:0	
671	0	53	13:46:26.000	428JE6B	6RCSET	12		2R3	4	0	5,399,318:12:0	
672	0	53	13:46:58.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *1924.12 +/- 1	2R3	4	0	5,399,318:60:0	
673	0	53	13:46:58.000	175IB422A6A	6DMSC	R403,3	DMS Control	2R3	4	0	5,399,318:60:0	
674	0	53	13:46:59.200		DMS:	: *RUNUP	R403, TRACK 3, FWD, TIC *1924.18 +/- 1	2R3	4	0	5,399,318:61:8	
675	0	53	13:47:00.000	165IB4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,318:63:0	
676	0	53	13:47:02.666	175IB176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,318:67:0	
677	0	53	13:47:03.066		DMS:	: *AT_SPD	R403, TRACK 3, FWD, TIC 1947.18 +/- 1	2R3	4	0	5,399,318:67:6	
678	0	53	13:47:03.066		DMS:	**: *RECORD**	R403, TRACK 3, FWD, TIC *1947.18 +/- 1	2R3	4	0	5,399,318:67:6	
679	0	53	13:47:03.333	118IB110A111A4A	7STRP	-0.008,-0.0015,2	Slew =,1.91	2R3	4	0	5,399,318:68:0	
680	0	53	13:47:18.000	428JF6A	6RCCLR			2R3	4	0	5,399,318:90:0	
681	0	53	13:47:18.666	428JF6B	6RCSET	11		2R3	4	0	5,399,319:00:0	
682	**0**	**53**	**13:47:22.666**	**27NNICHAAC01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
683	**0**	**53**	**13:47:26.000**	**20DD5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,319:11:0**	
684	0	53	13:47:29.333	118IB11A	**SMOS**	GE			4	0	5,399,319:16:0	
685	**0**	**53**	**13:47:29.333**	**20DD5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,319:16:0**	
686	0	53	13:47:31.333	165IC4A	**7SCAN**	**NORM,323.509998,**	**Check S/P Position**		4	0	5,399,319:19:0	
687	0	53	13:47:36.000	175TD422A6A	6DMSC	R7,3	DMS Control		4	0	5,399,319:26:0	
688	0	53	13:47:36.000		DMS:	**: *RUNDOWN**	R403, TRACK 3, FWD, TIC *2352.42 +/- 1		4	0	5,399,319:26:0	
689	0	53	13:47:38.733		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *2356.42 +/- 1		4	0	5,399,319:30:1	
690	**0**	**53**	**13:47:39.333**	**20DD6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,319:31:0**	
691	0	53	13:47:40.000	175TD176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record		4	0	5,399,319:32:0	
692	0	53	13:47:40.133		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *2356.54 +/- 1		4	0	5,399,319:32:2	
693	0	53	13:47:40.133		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 2356.54 +/- 1		4	0	5,399,319:32:2	
694	**0**	**53**	**13:47:49.333**	**20DD6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,319:46:0**	
695	0	53	13:47:51.333	428JG6A	6RCCLR				4	0	5,399,319:49:0	
696	0	53	13:47:52.000	428JG6B	6RCSET	12			4	0	5,399,319:50:0	
697	**0**	**53**	**13:47:59.333**	**20DD5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,319:61:0**	
698	**0**	**53**	**13:48:09.333**	**20DD5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,319:76:0**	
699	0	53	13:48:23.333	118IC	**SMOS**	GS		260	4	0	5,399,320:06:0	
700	**0**	**53**	**13:48:39.333**	**20DD4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,320:30:0**	
701	0	53	13:48:59.333		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *2375.10 +/- 1	2R0	4	0	5,399,320:60:0	
702	0	53	13:48:59.333	175IC422A6A	6DMSC	R403,3	DMS Control	2R0	4	0	5,399,320:60:0	
703	0	53	13:49:00.533		DMS:	: *RUNUP	R403, TRACK 3, FWD, TIC *2375.16 +/- 1	2R0	4	0	5,399,320:61:8	
704	0	53	13:49:01.333	165IC4B	7VECT		Inert vect update UTC	2R0	4	0	5,399,320:63:0	
705	0	53	13:49:04.000	175IC176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R0	4	0	5,399,320:67:0	
706	0	53	13:49:04.400		DMS:	: *AT_SPD	R403, TRACK 3, FWD, TIC 2398.16 +/- 1	2R0	4	0	5,399,320:67:6	
707	0	53	13:49:04.400		DMS:	**: *RECORD**	R403, TRACK 3, FWD, TIC *2398.16 +/- 1	2R0	4	0	5,399,320:67:6	
708	0	53	13:49:04.666	118IC110A111A4A	7STRP	-0.003,-0.0073,2	Slew =,3.01	2R0	4	0	5,399,320:68:0	
709	0	53	13:49:27.333	428JH6A	6RCCLR			2R0	4	0	5,399,321:11:0	
710	0	53	13:49:28.000	428JH6B	6RCSET	11		2R0	4	0	5,399,321:12:0	
711	0	53	13:50:05.333	118IC11A	**SMOS**	GE		2R0	4	0	5,399,321:68:0	
712	0	53	13:50:07.333	165ID4A	**7SCAN**	**NORM,29.533,-28.**	**Check S/P Position**	2R0	4	0	5,399,321:71:0	
713	0	53	13:50:09.333	175TE422A6A	6DMSC	R7,3	DMS Control	2R0	4	0	5,399,321:74:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
714	0	53	13:50:09.333		DMS:	**: *RUNDOWN**	R403, TRACK 3, FWD, TIC *3197.15 +/- 1	2R0	4	0	5,399,321:74:0	
715	0	53	13:50:12.066		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *3201.15 +/- 1	2R0	4	0	5,399,321:78:1	
716	**0**	**53**	**13:50:13.333**	**20DD4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,321:80:0**	
717	0	53	13:50:13.333	175TE176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,399,321:80:0	
718	0	53	13:50:13.466		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 3201.27 +/- 1	2R3	4	0	5,399,321:80:2	
719	0	53	13:50:13.466		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *3201.27 +/- 1	2R3	4	0	5,399,321:80:2	
720	**0**	**53**	**13:50:14.000**	**20DD4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,321:81:0**	
721	0	53	13:50:24.666	118ID	**SMOS**	GS		2R3	4	0	5,399,322:06:0	
722	**0**	**53**	**13:50:24.666**	**27NNICHAAC01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
723	0	53	13:50:28.000	428JI6A	6RCCLR			2R3	4	0	5,399,322:11:0	
724	0	53	13:50:28.666	428JI6B	6RCSET		14	2R3	4	0	5,399,322:12:0	
725	0	53	13:50:59.333		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *3212.02 +/- 1	2R3	4	0	5,399,322:58:0	
726	0	53	13:50:59.333	175ID422A6A	6DMSC	R806,3	DMS Control	2R3	4	0	5,399,322:58:0	
727	0	53	13:51:00.533		DMS:	: *RUNUP	R806, TRACK 3, FWD, TIC *3212.08 +/- 1	2R3	4	0	5,399,322:59:8	
728	0	53	13:51:02.666	165ID4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,322:63:0	
729	0	53	13:51:05.333	175ID176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,322:67:0	
730	0	53	13:51:05.800		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *3278.08 +/- 1	2R3	4	0	5,399,322:67:7	
731	0	53	13:51:05.800		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 3278.08 +/- 2	2R3	4	0	5,399,322:67:7	
732	0	53	13:51:06.000	118ID110A111A4A	7STRP	-0.0008,0.006,26	Slew =8,2.8	2R3	4	0	5,399,322:68:0	
733	**0**	**53**	**13:51:25.333**	**27INICHAAC01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
734	0	53	13:51:28.666	428JJ6A	6RCCLR			2R3	4	0	5,399,323:11:0	
735	0	53	13:51:29.333	428JJ6B	6RCSET		11	2R3	4	0	5,399,323:12:0	
736	0	53	13:52:06.666	118ID11A	**SMOS**	GE		2R3	4	0	5,399,323:68:0	
737	0	53	13:52:08.666	165DD4A	**7SCAN**	**NORM,44.204,10.1**	**Check S/P Position**	2R3	4	0	5,399,323:71:0	
738	0	53	13:52:13.333		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *4940.03 +/- 2	2R3	4	0	5,399,323:78:0	
739	0	53	13:52:13.333	175TF422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	5,399,323:78:0	
740	0	53	13:52:16.066		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *4951.53 +/- 2	2R3	4	0	5,399,323:82:1	
741	0	53	13:52:17.333	175TF176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,399,323:84:0	
742	0	53	13:52:17.466		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4951.65 +/- 2	2R3	4	0	5,399,323:84:2	
743	0	53	13:52:17.466		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 4951.65 +/- 2	2R3	4	0	5,399,323:84:2	
744	0	53	13:52:34.666	428JK6A	6RCCLR			2R3	4	0	5,399,324:19:0	
745	0	53	13:52:35.333	428JK6B	6RCSET		12	2R3	4	0	5,399,324:20:0	
746	0	53	13:53:26.666	117DD	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,325:06:0	
747	0	53	13:53:36.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4970.05 +/- 2	2R3	4	0	5,399,325:20:0	
748	0	53	13:53:36.000	175DD422A6A	6DMSC	R28,3	DMS Control	2R3	4	0	5,399,325:20:0	
749	0	53	13:53:37.200		DMS:	: *RUNUP	R28, TRACK 3, FWD, TIC *4970.11 +/- 2	2R3	4	0	5,399,325:21:8	
750	0	53	13:53:41.200		DMS:	**: *RECORD**	R28, TRACK 3, FWD, TIC *4971.61 +/- 2	2R3	4	0	5,399,325:27:8	
751	0	53	13:53:41.200		DMS:	: *AT_SPD	R28, TRACK 3, FWD, TIC 4971.61 +/- 2	2R3	4	0	5,399,325:27:8	
752	0	53	13:53:41.333	175DD176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,325:28:0	
753	**0**	**53**	**13:53:47.333**	**27INICHAAC01-**	**NIMPBK**	**301DD**	**IO CHAAC OBSERVATION**	**2R3**	**4**	**0**	**: :**	
754	0	53	13:53:48.666	165DD4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,325:39:0	
755	0	53	13:53:50.000	117DD105A106A4A	**7STRP**	**0.0034,0.0,0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,325:41:0	
756	0	53	13:54:30.666	428JL6A	6RCCLR			2R3	4	0	5,399,326:11:0	
757	0	53	13:54:31.333	428JL6B	6RCSET		8	2R3	4	0	5,399,326:12:0	
758	**0**	**53**	**13:55:28.000**	**27NNMOSAIC01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
759	**0**	**53**	**13:55:28.000**	**27INICHAAC01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
760	**0**	**53**	**13:55:44.000**	**27INICHAACS01**	**DESELC**	**300DD**	**IO CHAAC OBSERVATION**	**2R3**	**4**	**0**	**: :**	
761	0	53	13:55:44.666	175TG422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	5,399,327:31:0	
762	0	53	13:55:44.666		DMS:	**: *RUNDOWN**	R28, TRACK 3, FWD, TIC *5080.13 +/- 2	2R3	4	0	5,399,327:31:0	
763	**0**	**53**	**13:55:44.666**	**20DE5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,327:31:0**	
764	0	53	13:55:45.866		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *5080.43 +/- 2		4	0	5,399,327:32:8	
765	0	53	13:55:47.266		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 5080.55 +/- 2		4	0	5,399,327:34:9	
766	0	53	13:55:47.266		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *5080.55 +/- 2		4	0	5,399,327:34:9	
767	0	53	13:55:47.333	175TG176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record		4	0	5,399,327:35:0	
768	**0**	**53**	**13:55:48.000**	**20DE5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,327:36:0**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
769	0	53	13:55:48.000	117DD11A	**CSMOS**	GE	***** GROUP END CSMOS		4	0	5,399,327:36:0	
770	**0**	**53**	**13:55:51.333**	**20DE6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,327:41:0**	
771	**0**	**53**	**13:56:01.333**	**20DE6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,327:56:0**	
772	**0**	**53**	**13:56:11.333**	**20DE5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,327:71:0**	
773	**0**	**53**	**13:56:14.666**	**20DE5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,327:76:0**	
774	**0**	**53**	**13:56:18.000**	**20DE4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,327:81:0**	
775	0	53	13:56:24.000	165DE4A	**7SCAN**	**NORM,51.02,16.62**	**Check S/P Position**	2R0	4	0	5,399,327:90:0	
776	0	53	13:56:32.000	428JM6A	6RCCLR			2R0	4	0	5,399,328:11:0	
777	0	53	13:56:32.666	428JM6B	6RCSET	12		2R0	4	0	5,399,328:12:0	
778	0	53	13:57:16.000	117DE	**CSMOS**	GS	***** GROUP START CSMOS	2R0	4	0	5,399,328:77:0	
779	0	53	13:57:16.666		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *5101.50 +/- 2	2R0	4	0	5,399,328:78:0	
780	0	53	13:57:16.666	175DE422A6A	6DMSC	R28,3	DMS Control	2R0	4	0	5,399,328:78:0	
781	0	53	13:57:17.866		DMS:	: *RUNUP	R28, TRACK 3, FWD, TIC *5101.56 +/- 2	2R0	4	0	5,399,328:79:8	
782	**0**	**53**	**13:57:18.000**	**20DE4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,328:80:0**	
783	**0**	**53**	**13:57:18.666**	**20DE4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,328:81:0**	
784	0	53	13:57:21.866		DMS:	: *AT_SPD	R28, TRACK 3, FWD, TIC 5103.06 +/- 2	2R3	4	0	5,399,328:85:8	
785	0	53	13:57:21.866		DMS:	**: *RECORD**	R28, TRACK 3, FWD, TIC *5103.06 +/- 2	2R3	4	0	5,399,328:85:8	
786	0	53	13:57:22.000	175DE176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,328:86:0	
787	**0**	**53**	**13:57:22.666**	**27INMOSAIC01-**	**NIMPBK**	**301DE**	**IO MOSAIC OBSERVATION**	**2R3**	**4**	**0**	**: :**	
788	0	53	13:57:24.000	165DE4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,328:89:0	
789	0	53	13:57:25.333	117DE105A106A4A	**7STRP**	**-0.015101,0.0,0,**	**Slew =,0.03**	2R3	4	0	5,399,329:00:0	
790	**0**	**53**	**13:57:29.333**	**27NNMOSAIC01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
791	**0**	**53**	**13:57:29.333**	**27INMOSAIC01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
792	0	53	14:01:04.000	20RP6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,332:55:0	
793	**0**	**53**	**14:05:41.000**	**27INMOSAIC01-**	**DESELC**	**300DE**	**IO MOSAIC OBSERVATION**	**2R3**	**4**	**0**	**: :**	
794	**0**	**53**	**14:05:47.333**	**27INMOSAIC01-**	**NIMPBK**	**301EE**	**IO MOSAIC OBSERVATION**	**2R3**	**4**	**0**	**: :**	
795	0	53	14:05:52.000	117DE105A106A4B	**7STRP**	**0.017502,0.00700**	**Slew =,10.0**	2R3	4	0	5,399,337:32:0	
796	0	53	14:06:04.000	117DE105A106A4C	**7STRP**	**-0.015101,0.0,0,**	**Slew =,0.03**	2R3	4	0	5,399,337:50:0	
797	0	53	14:06:38.666	428JN6A	6RCCLR			2R3	4	0	5,399,338:11:0	
798	0	53	14:06:39.333	428JN6B	6RCSET	8		2R3	4	0	5,399,338:12:0	
799	**0**	**53**	**14:11:23.333**	**27INMOSAIC01-**	**DESELC**	**300EE**	**IO MOSAIC OBSERVATION**	**2R3**	**4**	**0**	**: :**	
800	0	53	14:11:24.666		DMS:	**: *RUNDOWN**	R28, TRACK 3, FWD, TIC *5843.81 +/- 2	2R3	4	0	5,399,342:76:0	
801	0	53	14:11:24.666	175TH422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	5,399,342:76:0	
802	0	53	14:11:25.866		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *5844.11 +/- 2	2R3	4	0	5,399,342:77:8	
803	0	53	14:11:27.266		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *5844.23 +/- 2	2R3	4	0	5,399,342:79:9	
804	0	53	14:11:27.266		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 5844.23 +/- 2	2R3	4	0	5,399,342:79:9	
805	0	53	14:11:27.333	175TH176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,399,342:80:0	
806	0	53	14:11:42.666	488AI6E	6TMSED	NORM,DL4	Sci, Eng, and D/L Chan	2R3	4	0	5,399,343:12:0	
807	**0**	**53**	**14:12:39.333**	**27INMOSAIC01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
808	**0**	**53**	**14:13:40.000**	**27NNPROMTH01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
809	**0**	**53**	**14:13:56.666**	**20DF5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,345:31:0**	
810	**0**	**53**	**14:14:00.000**	**20DF5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,345:36:0**	
811	**0**	**53**	**14:14:03.333**	**20DF6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,345:41:0**	
812	**0**	**53**	**14:14:13.333**	**20DF6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,345:56:0**	
813	**0**	**53**	**14:14:23.333**	**20DF5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,345:71:0**	
814	**0**	**53**	**14:14:26.666**	**20DF5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,345:76:0**	
815	**0**	**53**	**14:14:30.000**	**20DF4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,345:81:0**	
816	0	53	14:14:30.666	117DE11A	**CSMOS**	GE	***** GROUP END CSMOS	2R0	4	0	5,399,345:82:0	
817	0	53	14:14:44.666	428JO6A	6RCCLR			2R0	4	0	5,399,346:12:0	
818	**0**	**53**	**14:15:30.000**	**20DF4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,346:80:0**	
819	**0**	**53**	**14:15:30.666**	**20DF4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,346:81:0**	
820	0	53	14:15:35.333	432MA431A6A	6RCDSL	DDSDSL,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	5,399,346:88:0	
821	0	53	14:15:36.000	432MA6A	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,346:89:0	
822	0	53	14:15:39.333	175TH422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,347:03:0	
823	0	53	14:15:39.333		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *5903.30 +/- 2	2R3	4	0	5,399,347:03:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
824	0	53	14:15:40.533		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *5903.36 +/- 2	2R3	4	0	5,399,347:04:8	
825	0	53	14:15:44.000		DMS:	: READY	RDY, TRACK *4, *REV, TIC 5903.36 +/- 2	2R3	4	0	5,399,347:10:0	
826	0	53	14:15:44.000	465KD6A	6DMSC	RDY,4	DMS Control Tape stop	2R3	4	0	5,399,347:10:0	
827	0	53	14:16:37.333	165DF4A	**7SCAN**	**NORM,60.113,19.2**	**Check S/P Position**	2R3	4	0	5,399,347:90:0	
828	**0**	**53**	**14:16:42.000**	**27NNPROMTH01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
829	**0**	**53**	**14:16:42.000**	**27INPROMTH01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
830	0	53	14:16:45.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5903.36 +/- 2	2R3	4	0	5,399,348:11:0	
831	0	53	14:16:45.333	175DF422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	2R3	4	0	5,399,348:11:0	
832	0	53	14:16:46.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5903.48 +/- 2	2R3	4	0	5,399,348:13:1	
833	0	53	14:16:52.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5904.72 +/- 2	2R3	4	0	5,399,348:21:0	
834	0	53	14:16:53.200		DMS:	: *RUNUP	R28, TRACK *4, *REV, TIC *5904.78 +/- 2	2R3	4	0	5,399,348:22:8	
835	0	53	14:16:56.666	175DF176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,348:28:0	
836	0	53	14:16:57.200		DMS:	: *AT_SPD	R28, TRACK 4, REV, TIC 5903.28 +/- 2	2R3	4	0	5,399,348:28:8	
837	0	53	14:16:57.200		DMS:	**: *RECORD**	R28, TRACK 4, REV, TIC *5903.28 +/- 2	2R3	4	0	5,399,348:28:8	
838	0	53	14:17:29.333	117DF	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,348:77:0	
839	**0**	**53**	**14:17:29.666**	**27INPROMTH01-**	**NIMPBK**	**301DF**	**IO PROMETHEUS OBSERVATION**	**2R3**	**4**	**0**	**: :**	
840	0	53	14:17:37.333	165DF4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,348:89:0	
841	0	53	14:17:38.666	117DF105A106A4A	**7STRP**	**0.016101,0.0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,349:00:0	
842	0	53	14:17:38.666	431MB6A	6RCSEL	DDSSEL,PLSNCG,EP	Record Select (DDS onl	2R3	4	0	5,399,349:00:0	
843	**0**	**53**	**14:21:48.666**	**27INPROMTH01-**	**NIMPBK**	**301EF**	**IO PROMETHEUS OBSERVATION**	**2R3**	**4**	**0**	**: :**	
844	**0**	**53**	**14:21:57.333**	**27INPROMTH01-**	**DESELC**	**300DF**	**IO PROMETHEUS OBSERVATION**	**2R3**	**4**	**0**	**: :**	
845	0	53	14:25:42.000	432MB431A6A	6RCDSL	DDSDSL,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	5,399,356:88:0	
846	0	53	14:25:42.666	432MB6A	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,356:89:0	
847	0	53	14:25:46.000	432OA431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	5,399,357:03:0	
848	0	53	14:25:46.666	432OA6A	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,357:04:0	
849	**0**	**53**	**14:26:28.000**	**27INPROMTH01-**	**DESELC**	**300EF**	**IO PROMETHEUS OBSERVATION**	**2R3**	**4**	**0**	**: :**	
850	0	53	14:26:30.666		DMS:	**: *RUNDOWN**	R28, TRACK 4, REV, TIC *5399.25 +/- 2	2R3	4	0	5,399,357:70:0	
851	0	53	14:26:30.666	175DF422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,357:70:0	
852	0	53	14:26:31.866		DMS:	: *READY	RDY, TRACK 4, REV, TIC *5398.95 +/- 2	2R3	4	0	5,399,357:71:8	
853	0	53	14:26:41.333	117DF11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,357:86:0	
854	0	53	14:26:45.333	282NB431A6A	6RCDSL	DDSNCG,PLSDSL,EP	Record Deselect (DDS o	2R3	4	0	5,399,358:01:0	
855	**0**	**53**	**14:26:48.666**	**27INPROMTH01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
856	0	53	14:26:51.333	165IE4A	**7SCAN**	**NORM,61.035,17.8**	**Check S/P Position**	2R3	4	0	5,399,358:10:0	
857	0	53	14:27:34.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5398.95 +/- 2	2R3	4	0	5,399,358:74:0	
858	0	53	14:27:34.000	282NB432A431A6A	6RCDSL	DDSNCG,PLSDSL,EP	Record Deselect (DDS o	2R3	4	0	5,399,358:74:0	
859	0	53	14:27:34.000	175IE422A6A	6DMSC	R806,0	DMS Control Tape runup 806.4kb	2R3	4	0	5,399,358:74:0	
860	0	53	14:27:34.666	282NB432A6A	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,358:75:0	
861	0	53	14:27:35.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5399.07 +/- 2	2R3	4	0	5,399,358:76:1	
862	0	53	14:27:37.333	118IE	**SMOS**	GS		2R3	4	0	5,399,358:79:0	
863	0	53	14:27:40.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5400.31 +/- 2	2R3	4	0	5,399,358:84:0	
864	0	53	14:27:41.866		DMS:	: *RUNUP	R806, TRACK *4, *REV, TIC *5400.37 +/- 2	2R3	4	0	5,399,358:85:8	
865	0	53	14:27:44.000	165IE4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,358:89:0	
866	0	53	14:27:46.666	175IE176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,359:02:0	
867	0	53	14:27:47.133		DMS:	: *AT_SPD	R806, TRACK 4, REV, TIC 5334.37 +/- 2	2R3	4	0	5,399,359:02:7	
868	0	53	14:27:47.133		DMS:	**: *RECORD**	R806, TRACK 4, REV, TIC *5334.37 +/- 2	2R3	4	0	5,399,359:02:7	
869	0	53	14:27:47.333	118IE110A111A4A	7STRP	0.0073,0.0,26,0,	Slew =,3.71	2R3	4	0	5,399,359:03:0	
870	0	53	14:27:56.000	118IE110A111A4B	7STRP	-0.0073,0.0073,0	Slew =,4.91	2R3	4	0	5,399,359:16:0	
871	0	53	14:28:04.666	118IE110A111A4C	7STRP	0.0073,0.0,26,0,	Slew =,3.71	2R3	4	0	5,399,359:29:0	
872	0	53	14:28:13.333	118IE11A	**SMOS**	GE		2R3	4	0	5,399,359:42:0	
873	0	53	14:28:18.666	165IF4A	**7SCAN**	**NORM,60.465,20.5**	**Check S/P Position**	2R3	4	0	5,399,359:50:0	
874	0	53	14:28:20.000	175IE422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,359:52:0	
875	0	53	14:28:20.000		DMS:	**: *RUNDOWN**	R806, TRACK 4, REV, TIC *4525.54 +/- 2	2R3	4	0	5,399,359:52:0	
876	0	53	14:28:22.733		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4514.04 +/- 2	2R3	4	0	5,399,359:56:1	
877	**0**	**53**	**14:28:50.000**	**27NNCAMAXT01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
878	**0**	**53**	**14:29:06.666**	**20DG5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,360:31:0**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
879	**0**	**53**	**14:29:10.000**	**20DG5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,360:36:0**	
880	**0**	**53**	**14:29:13.333**	**20DG6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,360:41:0**	
881	**0**	**53**	**14:29:23.333**	**20DG6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,360:56:0**	
882	**0**	**53**	**14:29:33.333**	**20DG5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,360:71:0**	
883	0	53	14:29:35.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4514.04 +/- 2	260	4	0	5,399,360:74:0	
884	0	53	14:29:35.333	175IF422A6A	6DMSC	R806,0	DMS Control Tape runup 806.4kb	260	4	0	5,399,360:74:0	
885	**0**	**53**	**14:29:36.666**	**20DG5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,360:76:0**	
886	0	53	14:29:36.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4514.16 +/- 2	260	4	0	5,399,360:76:1	
887	0	53	14:29:38.666	118IF	**SMOS**	GS		260	4	0	5,399,360:79:0	
888	**0**	**53**	**14:29:40.000**	**20DG4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,360:81:0**	
889	0	53	14:29:42.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4515.39 +/- 2	2R0	4	0	5,399,360:84:0	
890	0	53	14:29:43.200		DMS:	: *RUNUP	R806, TRACK *4, *REV, TIC *4515.45 +/- 2	2R0	4	0	5,399,360:85:8	
891	0	53	14:29:45.333	165IF4B	7VECT		Inert vect update UTC	2R0	4	0	5,399,360:89:0	
892	0	53	14:29:48.000	175IF176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R0	4	0	5,399,361:02:0	
893	0	53	14:29:48.466		DMS:	: *AT_SPD	R806, TRACK 4, REV, TIC 4449.45 +/- 3	2R0	4	0	5,399,361:02:7	
894	0	53	14:29:48.466		DMS:	**: *RECORD**	R806, TRACK 4, REV, TIC *4449.45 +/- 2	2R0	4	0	5,399,361:02:7	
895	0	53	14:29:48.666	118IF110A111A4A	7STRP	0.0073,0.0,26,0,	Slew =,3.71	2R0	4	0	5,399,361:03:0	
896	0	53	14:29:57.333	118IF110A111A4B	7STRP	-0.0073,0.0,0,0,	Slew =,3.71	2R0	4	0	5,399,361:16:0	
897	0	53	14:30:06.000	118IF110A111A4C	7STRP	0.0073,0.0,26,0,	Slew =,3.71	2R0	4	0	5,399,361:29:0	
898	0	53	14:30:14.666	118IF110A111A4D	7STRP	-0.0073,0.0,0,0,	Slew =,3.71	2R0	4	0	5,399,361:42:0	
899	0	53	14:30:23.333	118IF110A111A4E	7STRP	0.0073,0.0,26,0,	Slew =,3.71	2R0	4	0	5,399,361:55:0	
900	0	53	14:30:32.000	118IF11A	**SMOS**	GE		2R0	4	0	5,399,361:68:0	
901	0	53	14:30:38.666	175IF422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R0	4	0	5,399,361:78:0	
902	0	53	14:30:38.666		DMS:	**: *RUNDOWN**	R806, TRACK 4, REV, TIC *3214.06 +/- 3	2R0	4	0	5,399,361:78:0	
903	**0**	**53**	**14:30:40.000**	**20DG4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,361:80:0**	
904	**0**	**53**	**14:30:40.666**	**20DG4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,361:81:0**	
905	0	53	14:30:41.400		DMS:	: *READY	RDY, TRACK 4, REV, TIC *3202.56 +/- 3	2R3	4	0	5,399,361:82:1	
906	0	53	14:31:04.000	20RZ6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,362:25:0	
907	0	53	14:31:06.000	165IG4A	**7SCAN**	**NORM,60.219,22.4**	**Check S/P Position**	2R3	4	0	5,399,362:28:0	
908	**0**	**53**	**14:31:52.000**	**27NNCAMAXT01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
909	0	53	14:32:38.666	175IG422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	2R3	4	0	5,399,363:76:0	
910	0	53	14:32:38.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3202.56 +/- 3	2R3	4	0	5,399,363:76:0	
911	0	53	14:32:40.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3202.68 +/- 3	2R3	4	0	5,399,363:78:1	
912	0	53	14:32:40.666	118IG	**SMOS**	GS		2R3	4	0	5,399,363:79:0	
913	0	53	14:32:45.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3203.92 +/- 3	2R3	4	0	5,399,363:86:0	
914	0	53	14:32:46.533		DMS:	: *RUNUP	R403, TRACK *4, *REV, TIC *3203.98 +/- 3	2R3	4	0	5,399,363:87:8	
915	0	53	14:32:47.333	165IG4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,363:89:0	
916	0	53	14:32:50.000	175IG176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,364:02:0	
917	0	53	14:32:50.400		DMS:	: *AT_SPD	R403, TRACK 4, REV, TIC 3180.98 +/- 3	2R3	4	0	5,399,364:02:6	
918	0	53	14:32:50.400		DMS:	**: *RECORD**	R403, TRACK 4, REV, TIC *3180.98 +/- 3	2R3	4	0	5,399,364:02:6	
919	0	53	14:32:50.666	118IG110A111A4A	7STRP	0.0,0.0073,26,0,	Slew =,3.01	2R3	4	0	5,399,364:03:0	
920	**0**	**53**	**14:32:50.666**	**27INCAMAXT01-**	**NIMPBK**	**301EG**	**IO CAMAXTLI OBSERVATION**	**2R3**	**4**	**0**	**: :**	
921	0	53	14:32:59.333	118IG110A111A4B	7STRP	0.0073,-0.0073,0	Slew =,3.01	2R3	4	0	5,399,364:16:0	
922	0	53	14:33:08.000	118IG110A111A4C	7STRP	0.0,0.0073,26,0,	Slew =,3.01	2R3	4	0	5,399,364:29:0	
923	0	53	14:33:16.666	118IG110A111A4D	7STRP	0.0073,-0.0073,0	Slew =,3.01	2R3	4	0	5,399,364:42:0	
924	0	53	14:33:25.333	118IG110A111A4E	7STRP	0.0,0.0073,26,0,	Slew =,3.01	2R3	4	0	5,399,364:55:0	
925	0	53	14:33:34.000	118IG110A111A4F	7STRP	0.0073,-0.0073,0	Slew =,3.01	2R3	4	0	5,399,364:68:0	
926	0	53	14:33:42.666	118IG110A111A4G	7STRP	0.0,0.0073,26,0,	Slew =,3.01	2R3	4	0	5,399,364:81:0	
927	0	53	14:33:51.333	118IG110A111A4H	7STRP	0.0073,-0.0073,0	Slew =,3.01	2R3	4	0	5,399,365:03:0	
928	0	53	14:34:00.000	118IG110A111A4I	7STRP	0.0,0.0073,26,0,	Slew =,3.01	2R3	4	0	5,399,365:16:0	
929	0	53	14:34:08.666	118IG110A111A4J	7STRP	0.0073,-0.0073,0	Slew =,3.01	2R3	4	0	5,399,365:29:0	
930	0	53	14:34:17.333	118IG110A111A4K	7STRP	0.0,0.0073,26,0,	Slew =,3.01	2R3	4	0	5,399,365:42:0	
931	0	53	14:34:26.000	118IG11A	**SMOS**	GE		2R3	4	0	5,399,365:55:0	
932	**0**	**53**	**14:34:30.000**	**27INCAMAXT01-**	**DESELC**	**300EG**	**IO CAMAXTLI OBSERVATION**	**2R3**	**4**	**0**	**: :**	
933	0	53	14:34:32.666		DMS:	**: *RUNDOWN**	R403, TRACK 4, REV, TIC *1922.62 +/- 3	2R3	4	0	5,399,365:65:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
934	0	53	14:34:32.666	175IG422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,365:65:0
935	0	53	14:34:32.666	116IG4A	7STRP	-0.0065,-0.006,0	Slew =,4.01	2R3	4	0	5,399,365:65:0
936	0	53	14:34:35.400		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1918.62 +/- 3	2R3	4	0	5,399,365:69:1
937	0	53	14:35:36.000	175DG422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	2R3	4	0	5,399,366:69:0
938	0	53	14:35:36.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1918.62 +/- 3	2R3	4	0	5,399,366:69:0
939	0	53	14:35:37.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1918.74 +/- 3	2R3	4	0	5,399,366:71:1
940	0	53	14:35:42.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1919.97 +/- 3	2R3	4	0	5,399,366:79:0
941	0	53	14:35:43.866		DMS:	: *RUNUP	R28, TRACK *4, *REV, TIC *1920.03 +/- 3	2R3	4	0	5,399,366:80:8
942	0	53	14:35:46.666	116JG4A	7STRP	0.0036,0.0,0,0,0	Slew =,0.03	2R3	4	0	5,399,366:85:0
943	0	53	14:35:47.333	175DG176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,366:86:0
944	0	53	14:35:47.866		DMS:	: *AT_SPD	R28, TRACK 4, REV, TIC 1918.53 +/- 3	2R3	4	0	5,399,366:86:8
945	0	53	14:35:47.866		DMS:	**: *RECORD**	R28, TRACK 4, REV, TIC *1918.53 +/- 3	2R3	4	0	5,399,366:86:8
946	**0**	**53**	**14:35:49.333**	**27INCAMAXT01-**	**NIMPBK**	**301DG**	**IO CAMAXTLI OBSERVATION**	**2R3**	**4**	**0**	**: :**
947	**0**	**53**	**14:36:55.333**	**27INCAMAXT01-**		**-----START------**		**2R3**	**4**	**0**	**: :**
948	**0**	**53**	**14:37:45.333**	**27INCAMAXT01-**	**DESELC**	**300DG**	**IO CAMAXTLI OBSERVATION**	**2R3**	**4**	**0**	**: :**
949	0	53	14:37:48.000	175DG422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,368:85:0
950	0	53	14:37:48.000		DMS:	**: *RUNDOWN**	R28, TRACK 4, REV, TIC *1812.95 +/- 3	2R3	4	0	5,399,368:85:0
951	0	53	14:37:49.200		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1812.65 +/- 3	2R3	4	0	5,399,368:86:8
952	**0**	**53**	**14:38:56.666**	**27INCAMAXT01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**
953	0	53	14:38:59.333	165IH4A	**7SCAN**	**NORM,56.611,22.8**	**Check S/P Position**	2R3	4	0	5,399,370:10:0
954	0	53	14:39:43.333	175IH422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	2R3	4	0	5,399,370:76:0
955	0	53	14:39:43.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1812.65 +/- 3	2R3	4	0	5,399,370:76:0
956	0	53	14:39:44.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1812.77 +/- 3	2R3	4	0	5,399,370:78:1
957	0	53	14:39:45.333	118IH	**SMOS**	GS		2R3	4	0	5,399,370:79:0
958	0	53	14:39:50.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1814.00 +/- 3	2R3	4	0	5,399,370:86:0
959	0	53	14:39:51.200		DMS:	: *RUNUP	R403, TRACK *4, *REV, TIC *1814.06 +/- 3	2R3	4	0	5,399,370:87:8
960	0	53	14:39:52.000	165IH4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,370:89:0
961	0	53	14:39:54.666	175IH176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,371:02:0
962	0	53	14:39:55.066		DMS:	: *AT_SPD	R403, TRACK 4, REV, TIC 1791.06 +/- 4	2R3	4	0	5,399,371:02:6
963	0	53	14:39:55.066		DMS:	**: *RECORD**	R403, TRACK 4, REV, TIC *1791.06 +/- 3	2R3	4	0	5,399,371:02:6
964	0	53	14:39:55.333	118IH110A111A4A	7STRP	0.0,0.007301,26,	Slew =3,5.0	2R3	4	0	5,399,371:03:0
965	**0**	**53**	**14:39:57.333**	**27NNAMRANI01-**		**-----START------**		**2R3**	**4**	**0**	**: :**
966	**0**	**53**	**14:40:00.666**	**20DH5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,371:11:0**
967	**0**	**53**	**14:40:10.666**	**20DH5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,371:26:0**
968	0	53	14:40:12.666	118IH11A	**SMOS**	GE			4	0	5,399,371:29:0
969	0	53	14:40:13.333	116IH4A	7STRP	0.0,-0.007301,0,	Slew =0,5.0		4	0	5,399,371:30:0
970	**0**	**53**	**14:40:20.666**	**20DH6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,371:41:0**
971	**0**	**53**	**14:40:30.666**	**20DH6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,371:56:0**
972	0	53	14:40:36.666		DMS:	**: *RUNDOWN**	R403, TRACK 4, REV, TIC *1279.19 +/- 4		4	0	5,399,371:65:0
973	0	53	14:40:36.666	175IH422A6B	6DMSC	RDY,0	DMS Control Tape stop		4	0	5,399,371:65:0
974	0	53	14:40:39.400		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1275.19 +/- 4		4	0	5,399,371:69:1
975	**0**	**53**	**14:40:40.666**	**20DH5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,371:71:0**
976	**0**	**53**	**14:40:44.000**	**20DH5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,371:76:0**
977	**0**	**53**	**14:40:47.333**	**20DH4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,371:81:0**
978	0	53	14:41:13.333	165DH4A	**7SCAN**	**NORM,57.182,23.0**	**Check S/P Position**	2R0	4	0	5,399,372:29:0
979	0	53	14:41:40.000	175DH422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	2R0	4	0	5,399,372:69:0
980	0	53	14:41:40.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1275.19 +/- 4	2R0	4	0	5,399,372:69:0
981	0	53	14:41:41.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1275.31 +/- 4	2R0	4	0	5,399,372:71:1
982	0	53	14:41:45.333	117DH	**CSMOS**	GS	***** GROUP START CSMOS	2R0	4	0	5,399,372:77:0
983	0	53	14:41:46.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1276.54 +/- 4	2R0	4	0	5,399,372:79:0
984	0	53	14:41:47.866		DMS:	: *RUNUP	R28, TRACK *4, *REV, TIC *1276.60 +/- 4	2R0	4	0	5,399,372:80:8
985	**0**	**53**	**14:41:48.000**	**20DH4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,372:81:0**
986	**0**	**53**	**14:41:48.666**	**20DH4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,372:82:0**
987	0	53	14:41:51.333	175DH176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,372:86:0
988	0	53	14:41:51.866		DMS:	**: *RECORD**	R28, TRACK 4, REV, TIC *1275.10 +/- 4	2R3	4	0	5,399,372:86:8

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
989	0	53	14:41:51.866		DMS:	: *AT_SPD	R28, TRACK 4, REV, TIC 1275.10 +/- 4	2R3	4	0	5,399,372:86:8
990	**0**	**53**	**14:41:53.333**	**27INAMRANI01-**	**NIMPBK**	**301DH**	**IO AMIRANI OBSERVATION**	**2R3**	**4**	**0**	**: :**
991	0	53	14:41:54.666	117DH105A106A4A	**7STRP**	**0.0112,0.0,0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,373:00:0
992	0	53	14:42:00.000	165DH4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,373:08:0
993	**0**	**53**	**14:42:59.333**	**27INAMRANI01-**		**-----START------**		**2R3**	**4**	**0**	**: :**
994	**0**	**53**	**14:42:59.333**	**27NNAMRANI01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**
995	**0**	**53**	**14:48:08.333**	**27INAMRANI01-**	**DESELC**	**300DH**	**IO AMIRANI OBSERVATION**	**2R3**	**4**	**0**	**: :**
996	0	53	14:48:10.000	117DH105A106A4B	**7STRP**	**-0.0114,0.007,0,**	**Slew =12.01**	2R3	4	0	5,399,379:17:0
997	**0**	**53**	**14:48:15.666**	**27INAMRANI01-**	**NIMPBK**	**301EH**	**IO AMIRANI OBSERVATION**	**2R3**	**4**	**0**	**: :**
998	0	53	14:48:21.333	117DH105A106A4C	**7STRP**	**0.0112,0.0,0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,379:34:0
999	0	53	14:54:36.666	117DH105A106A4D	**7STRP**	**-0.0114,0.007,0,**	**Slew =12.01**	2R3	4	0	5,399,385:51:0
1000	0	53	14:54:48.000	117DH105A106A4E	**7STRP**	**0.0112,0.0,0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,385:68:0
1001	**0**	**53**	**15:00:29.333**	**27INAMRANI01-**	**DESELC**	**300EH**	**IO AMIRANI OBSERVATION**	**2R3**	**4**	**0**	**: :**
1002	0	53	15:00:32.000	175DH422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,391:38:0
1003	0	53	15:00:32.000		DMS:	**: *RUNDOWN**	R28, TRACK 4, REV, TIC * 290.61 +/- 4	2R3	4	0	5,399,391:38:0
1004	0	53	15:00:33.200		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 290.31 +/- 4	2R3	4	0	5,399,391:39:8
1005	0	53	15:01:03.333	117DH11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,391:85:0
1006	**0**	**53**	**15:01:11.333**	**27INAMRANI01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**
1007	0	53	15:01:14.000	165II4A	**7SCAN**	**NORM,58.268,24.3**	**Check S/P Position**	2R3	4	0	5,399,392:10:0
1008	0	53	15:01:44.666	465KE6A	6DMSC	RDY,1	DMS Control Tape stop	2R3	4	0	5,399,392:56:0
1009	0	53	15:01:44.666		DMS:	: READY	RDY, TRACK *1, *FWD, TIC 290.31 +/- 4	2R3	4	0	5,399,392:56:0
1010	0	53	15:02:41.333	175II422A6A	6DMSC	R806,1	DMS Control	2R3	4	0	5,399,393:50:0
1011	0	53	15:02:41.333		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 290.31 +/- 4	2R3	4	0	5,399,393:50:0
1012	0	53	15:02:48.000		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC 290.31 +/- 4	2R3	4	0	5,399,393:60:0
1013	0	53	15:02:50.000	165II4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,393:63:0
1014	0	53	15:02:52.666	175II176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,393:67:0
1015	0	53	15:02:53.266		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC * 356.31 +/- 4	2R3	4	0	5,399,393:67:9
1016	0	53	15:02:53.266		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 356.31 +/- 4	2R3	4	0	5,399,393:67:9
1017	0	53	15:03:34.666	175II422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,394:39:0
1018	0	53	15:03:34.666		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *1375.14 +/- 4	2R3	4	0	5,399,394:39:0
1019	0	53	15:03:37.400		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *1386.64 +/- 4	2R3	4	0	5,399,394:43:1
1020	0	53	15:07:18.000	165IJ4A	**7SCAN**	**NORM,57.372,23.8**	**Check S/P Position**	2R3	4	0	5,399,398:10:0
1021	0	53	15:08:03.333		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 1386.64 +/- 4	2R3	4	0	5,399,398:78:0
1022	0	53	15:08:03.333	175IJ422A6A	6DMSC	R403,1	DMS Control	2R3	4	0	5,399,398:78:0
1023	0	53	15:08:04.000	118IJ	**SMOS**	GS		2R3	4	0	5,399,398:79:0
1024	0	53	15:08:10.000		DMS:	: *RUNUP	R403, TRACK 1, FWD, TIC 1386.64 +/- 4	2R3	4	0	5,399,398:88:0
1025	0	53	15:08:10.666	165IJ4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,398:89:0
1026	0	53	15:08:13.333	175IJ176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,399:02:0
1027	0	53	15:08:13.866		DMS:	: *AT_SPD	R403, TRACK 1, FWD, TIC 1409.64 +/- 5	2R3	4	0	5,399,399:02:8
1028	0	53	15:08:13.866		DMS:	**: *RECORD**	R403, TRACK 1, FWD, TIC *1409.64 +/- 4	2R3	4	0	5,399,399:02:8
1029	0	53	15:08:14.000	118IJ110A111A4A	**7STRP**	**0.0055,0.0045,26**	**Slew =6,4.4**	2R3	4	0	5,399,399:03:0
1030	0	53	15:08:57.333	118IJ11A	**SMOS**	GE		2R3	4	0	5,399,399:68:0
1031	0	53	15:09:04.000		DMS:	**: *RUNDOWN**	R403, TRACK 1, FWD, TIC *2026.51 +/- 5	2R3	4	0	5,399,399:78:0
1032	0	53	15:09:04.000	175IJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,399:78:0
1033	0	53	15:09:06.733		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *2030.51 +/- 5	2R3	4	0	5,399,399:82:1
1034	0	53	15:09:12.000	165IK4A	**7SCAN**	**NORM,56.485,21.6**	**Check S/P Position**	2R3	4	0	5,399,399:90:0
1035	0	53	15:10:03.333		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 2030.51 +/- 5	2R3	4	0	5,399,400:76:0
1036	0	53	15:10:03.333	175IK422A6A	6DMSC	R806,1	DMS Control	2R3	4	0	5,399,400:76:0
1037	0	53	15:10:05.333	118IK	**SMOS**	GS		2R3	4	0	5,399,400:79:0
1038	0	53	15:10:10.000		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC 2030.51 +/- 5	2R3	4	0	5,399,400:86:0
1039	0	53	15:10:12.000	165IK4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,400:89:0
1040	0	53	15:10:14.666	175IK176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,401:02:0
1041	0	53	15:10:15.266		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 2096.51 +/- 5	2R3	4	0	5,399,401:02:9
1042	0	53	15:10:15.266		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC *2096.51 +/- 5	2R3	4	0	5,399,401:02:9
1043	0	53	15:10:15.333	118IK110A111A4A	**7STRP**	**0.0,0.007301,26,**	**Slew =,3.21**	2R3	4	0	5,399,401:03:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1044	0	53	15:10:41.333	118IK11A	**SMOS**	GE		2R3	4	0	5,399,401:42:0	
1045	0	53	15:10:48.000		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *2902.06 +/- 5	2R3	4	0	5,399,401:52:0	
1046	0	53	15:10:48.000	175IK422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,401:52:0	
1047	0	53	15:10:50.733		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *2913.56 +/- 5	2R3	4	0	5,399,401:56:1	
1048	0	53	15:10:53.333	165IL4A	**7SCAN**	**NORM,59.607,19.3**	**Check S/P Position**	2R3	4	0	5,399,401:60:0	
1049	0	53	15:12:06.000		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 2913.56 +/- 5	2R3	4	0	5,399,402:78:0	
1050	0	53	15:12:06.000	175IL422A6A	6DMSC	R403,1	DMS Control	2R3	4	0	5,399,402:78:0	
1051	0	53	15:12:06.666	118IL	**SMOS**	GS		2R3	4	0	5,399,402:79:0	
1052	0	53	15:12:12.666		DMS:	: *RUNUP	R403, TRACK 1, FWD, TIC 2913.56 +/- 5	2R3	4	0	5,399,402:88:0	
1053	0	53	15:12:13.333	165IL4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,402:89:0	
1054	0	53	15:12:16.000	175IL176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,403:02:0	
1055	0	53	15:12:16.533		DMS:	: *AT_SPD	R403, TRACK 1, FWD, TIC 2936.56 +/- 5	2R3	4	0	5,399,403:02:8	
1056	0	53	15:12:16.533		DMS:	**: *RECORD**	R403, TRACK 1, FWD, TIC *2936.56 +/- 5	2R3	4	0	5,399,403:02:8	
1057	0	53	15:12:16.666	118IL110A111A4A	**7STRP**	**-0.0073,-0.0003,**	**Slew =,3.71**	2R3	4	0	5,399,403:03:0	
1058	**0**	**53**	**15:12:18.666**	**27NNTVASHT01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
1059	**0**	**53**	**15:12:22.000**	**20EJ5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,403:11:0**	
1060	**0**	**53**	**15:12:32.000**	**20EJ5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,403:26:0**	
1061	**0**	**53**	**15:12:42.000**	**20EJ6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,403:41:0**	
1062	0	53	15:12:42.666	118IL11A	**SMOS**	GE			4	0	5,399,403:42:0	
1063	0	53	15:12:49.333		DMS:	**: *RUNDOWN**	R403, TRACK 1, FWD, TIC *3340.15 +/- 5		4	0	5,399,403:52:0	
1064	0	53	15:12:49.333	175IL422A6B	6DMSC	RDY,0	DMS Control Tape stop		4	0	5,399,403:52:0	
1065	**0**	**53**	**15:12:52.000**	**20EJ6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,403:56:0**	
1066	0	53	15:12:52.066		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3344.15 +/- 5		4	0	5,399,403:56:1	
1067	**0**	**53**	**15:13:02.000**	**20EJ5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,403:71:0**	
1068	**0**	**53**	**15:13:05.333**	**20EJ5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,403:76:0**	
1069	**0**	**53**	**15:13:08.666**	**20EJ4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,403:81:0**	
1070	0	53	15:13:14.666	165EJ4A	**7SCAN**	**NORM,58.441,24.0**	**Check S/P Position**	2R0	4	0	5,399,403:90:0	
1071	**0**	**53**	**15:13:19.333**	**27NNTVASHT01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
1072	**0**	**53**	**15:13:19.333**	**27INTVASHT01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
1073	0	53	15:14:02.666		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3344.15 +/- 5	2R0	4	0	5,399,404:71:0	
1074	0	53	15:14:02.666	175EJ422A6A	6DMSC	R28,1	DMS Control	2R0	4	0	5,399,404:71:0	
1075	0	53	15:14:06.666	117EJ	**CSMOS**	GS	***** GROUP START CSMOS	2R0	4	0	5,399,404:77:0	
1076	**0**	**53**	**15:14:09.333**	**20EJ4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,404:81:0**	
1077	0	53	15:14:09.333		DMS:	: *RUNUP	R28, TRACK 1, FWD, TIC 3344.15 +/- 5	2R3	4	0	5,399,404:81:0	
1078	**0**	**53**	**15:14:10.000**	**20EJ4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,404:82:0**	
1079	0	53	15:14:12.666	175EJ176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,404:86:0	
1080	0	53	15:14:13.333		DMS:	: *AT_SPD	R28, TRACK 1, FWD, TIC 3345.65 +/- 5	2R3	4	0	5,399,404:87:0	
1081	0	53	15:14:13.333		DMS:	**: *RECORD**	R28, TRACK 1, FWD, TIC *3345.65 +/- 5	2R3	4	0	5,399,404:87:0	
1082	**0**	**53**	**15:14:14.000**	**27INTVASHT01-**	**NIMPBK**	**301EJ**	**IO TVASHTI OBSERVATION**	**2R3**	**4**	**0**	**: :**	
1083	0	53	15:14:16.000	117EJ105A106A4A	**7STRP**	**-0.0089,0.0,0,0,**	**Slew =,0.03**	2R3	4	0	5,399,405:00:0	
1084	**0**	**53**	**15:17:22.000**	**27INREGION01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
1085	**0**	**53**	**15:17:22.000**	**27INTVASHT01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
1086	**0**	**53**	**15:17:52.666**	**27INTVASHT01-**	**DESELC**	**300EJ**	**IO TVASHTI OBSERVATION**	**2R3**	**4**	**0**	**: :**	
1087	0	53	15:17:53.333	175EJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,408:53:0	
1088	0	53	15:17:53.333		DMS:	**: *RUNDOWN**	R28, TRACK 1, FWD, TIC *3539.01 +/- 5	2R3	4	0	5,399,408:53:0	
1089	0	53	15:17:54.533		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3539.31 +/- 5	2R3	4	0	5,399,408:54:8	
1090	**0**	**53**	**15:18:29.333**	**20DI5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,409:16:0**	
1091	**0**	**53**	**15:18:32.666**	**20DI5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,409:21:0**	
1092	**0**	**53**	**15:18:36.000**	**20DI6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,409:26:0**	
1093	**0**	**53**	**15:18:46.000**	**20DI6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,409:41:0**	
1094	**0**	**53**	**15:18:56.000**	**20DI5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,409:56:0**	
1095	**0**	**53**	**15:18:59.333**	**20DI5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,409:61:0**	
1096	**0**	**53**	**15:19:12.666**	**20DI4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,409:81:0**	
1097	0	53	15:19:16.000	117EJ11A	**CSMOS**	GE	***** GROUP END CSMOS	2R0	4	0	5,399,409:86:0	
1098	0	53	15:19:18.666	165DI4A	**7SCAN**	**NORM,60.953,23.0**	**Check S/P Position**	2R0	4	0	5,399,409:90:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1099	0	53	15:20:10.666	117DI	**CSMOS**	GS	***** GROUP START CSMOS	2R0	4	0	5,399,410:77:0	
1100	**0**	**53**	**15:20:12.666**	**20DI4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,410:80:0**	
1101	**0**	**53**	**15:20:13.333**	**20DI4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,410:81:0**	
1102	0	53	15:20:19.333	175DI422A6A	6DMSC	R28,1	DMS Control	2R3	4	0	5,399,410:90:0	
1103	0	53	15:20:19.333		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3539.31 +/- 5	2R3	4	0	5,399,410:90:0	
1104	0	53	15:20:20.000	117DI105A106A4A	**7STRP**	**0.030109,0.0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,411:00:0	
1105	0	53	15:20:26.000		DMS:	: *RUNUP	R28, TRACK 1, FWD, TIC 3539.31 +/- 5	2R3	4	0	5,399,411:09:0	
1106	0	53	15:20:29.333	175DI176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,411:14:0	
1107	0	53	15:20:30.000		DMS:	: *AT_SPD	R28, TRACK 1, FWD, TIC 3540.81 +/- 6	2R3	4	0	5,399,411:15:0	
1108	0	53	15:20:30.000		DMS:	**: *RECORD**	R28, TRACK 1, FWD, TIC *3540.81 +/- 5	2R3	4	0	5,399,411:15:0	
1109	**0**	**53**	**15:20:36.666**	**27INREGION01-**	**NIMPBK**	**301DI**	**IO REGIONAL OBSERVATION**	**2R3**	**4**	**0**	**: :**	
1110	**0**	**53**	**15:36:56.666**	**27INREGION01-**	**DESELC**	**300DI**	**IO GLOBAL OBSERVATION**	**2R3**	**4**	**0**	**: :**	
1111	0	53	15:37:05.333	117DI105A106A4B	**7STRP**	**-0.027007,0.0065**	**Slew =12.01**	2R3	4	0	5,399,427:52:0	
1112	0	53	15:37:12.000	117DI105A106A4C	**7STRP**	**0.030109,0.0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,427:62:0	
1113	**0**	**53**	**15:37:12.000**	**27INREGION01-**	**NIMPBK**	**301EK**	**IO REGIONAL OBSERVATION**	**2R3**	**4**	**0**	**: :**	
1114	**0**	**53**	**15:38:12.666**	**27INREGION01-**	**DESELC**	**300EK**	**IO GLOBAL OBSERVATION**	**2R3**	**4**	**0**	**: :**	
1115	0	53	15:53:57.333	117DI105A106A4D	**7STRP**	**-0.027007,0.0065**	**Slew =12.01**	2R3	4	0	5,399,444:23:0	
1116	0	53	15:54:04.000	117DI105A106A4E	**7STRP**	**0.030109,0.0,0,0**	**Slew =,0.03**	2R3	4	0	5,399,444:33:0	
1117	0	53	16:05:38.000		DMS:	**: *RUNDOWN**	R28, TRACK 1, FWD, TIC *5920.89 +/- 6	2R3	4	0	5,399,455:73:0	
1118	0	53	16:05:38.000	175DI422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,455:73:0	
1119	0	53	16:05:39.200		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *5921.19 +/- 6	2R3	4	0	5,399,455:74:8	
1120	0	53	16:06:56.000		DMS:	: READY	RDY, TRACK *2, *REV, TIC 5921.19 +/- 6	2R3	4	0	5,399,457:08:0	
1121	0	53	16:06:56.000	465KF6A	6DMSC	RDY,2	DMS Control Tape stop	2R3	4	0	5,399,457:08:0	
1122	**0**	**53**	**16:09:56.666**	**27INREGION01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
1123	0	53	16:10:49.333	117DI11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,460:85:0	
1124	0	53	16:11:53.333	165GI4A	7SCAN	NORM,61.839,22.2	Check S/P Position	2R3	4	0	5,399,461:90:0	
1125	0	53	16:14:56.000	176GI6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	5,399,465:00:0	
1126	0	53	16:16:00.666	117GI	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,466:06:0	
1127	0	53	16:16:10.000	117GI105A106A4A	7STRP	-0.0005,0.0,0,0,	Slew =,0.04	2R3	4	0	5,399,466:20:0	
1128	0	53	16:16:47.333	117GI105A106A4B	7STRP	0.04503,-0.01000	Slew =12.01	2R3	4	0	5,399,466:76:0	
1129	0	53	16:16:56.666	117GI105A106A4C	7STRP	-0.0005,0.0,0,0,	Slew =,0.04	2R3	4	0	5,399,466:90:0	
1130	0	53	16:17:34.000	117GI105A106B4A	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,467:55:0	
1131	0	53	16:17:40.666	117GI105A106B4B	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,467:65:0	
1132	0	53	16:26:04.666	117GI105A106B4C	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,476:02:0	
1133	0	53	16:26:11.333	117GI105A106B4D	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,476:12:0	
1134	0	53	16:27:30.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,477:40:0	
1135	0	53	16:27:30.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5921.19 +/- 6	2R3	4	0	5,399,477:40:0	
1136	0	53	16:27:32.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5921.31 +/- 6	2R3	4	0	5,399,477:42:1	
1137	0	53	16:27:37.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5922.54 +/- 6	2R3	4	0	5,399,477:50:0	
1138	0	53	16:27:38.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5922.60 +/- 6	2R3	4	0	5,399,477:51:8	
1139	0	53	16:27:39.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5922.48 +/- 6	2R3	4	0	5,399,477:53:9	
1140	0	53	16:27:56.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5918.72 +/- 6	2R3	4	0	5,399,477:78:0	
1141	0	53	16:28:18.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5913.41 +/- 6	2R3	4	0	5,399,478:21:0	
1142	0	53	16:28:18.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,478:21:0	
1143	0	53	16:28:19.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5913.35 +/- 6	2R3	4	0	5,399,478:22:8	
1144	0	53	16:34:35.333	117GI105A106B4E	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,484:40:0	
1145	0	53	16:34:42.000	117GI105A106B4F	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,484:50:0	
1146	0	53	16:40:32.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,490:30:0	
1147	0	53	16:40:32.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5913.35 +/- 6	2R3	4	0	5,399,490:30:0	
1148	0	53	16:40:34.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5913.47 +/- 6	2R3	4	0	5,399,490:32:1	
1149	0	53	16:40:39.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5914.70 +/- 6	2R3	4	0	5,399,490:40:0	
1150	0	53	16:40:40.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5914.76 +/- 6	2R3	4	0	5,399,490:41:8	
1151	0	53	16:40:41.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5914.64 +/- 6	2R3	4	0	5,399,490:43:9	
1152	0	53	16:40:58.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5910.88 +/- 6	2R3	4	0	5,399,490:68:0	
1153	0	53	16:41:20.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5905.56 +/- 6	2R3	4	0	5,399,491:11:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1154	0	53	16:41:20.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,491:11:0	
1155	0	53	16:41:21.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5905.50 +/- 6	2R3	4	0	5,399,491:12:8	
1156	0	53	16:43:06.000	117GI105A106B4G	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,492:78:0	
1157	0	53	16:43:12.666	117GI105A106B4H	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,492:88:0	
1158	0	53	16:51:36.666	117GI105A106B4I	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,501:25:0	
1159	0	53	16:51:43.333	117GI105A106B4J	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,501:35:0	
1160	0	53	16:53:34.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5905.50 +/- 6	2R3	4	0	5,399,503:20:0	
1161	0	53	16:53:34.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,503:20:0	
1162	0	53	16:53:36.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5905.62 +/- 6	2R3	4	0	5,399,503:22:1	
1163	0	53	16:53:41.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5906.86 +/- 6	2R3	4	0	5,399,503:30:0	
1164	0	53	16:53:42.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5906.92 +/- 6	2R3	4	0	5,399,503:31:8	
1165	0	53	16:53:43.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5906.80 +/- 6	2R3	4	0	5,399,503:33:9	
1166	0	53	16:54:00.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5903.03 +/- 6	2R3	4	0	5,399,503:58:0	
1167	0	53	16:54:22.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5897.72 +/- 6	2R3	4	0	5,399,504:01:0	
1168	0	53	16:54:22.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,504:01:0	
1169	0	53	16:54:23.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5897.66 +/- 6	2R3	4	0	5,399,504:02:8	
1170	0	53	16:58:29.333	488AJ6A	6TMSED	NORM,DL2	Sci, Eng, and D/L Chan	2R3	4	0	5,399,508:07:0	
1171	0	53	17:00:07.333	117GI105A106B4K	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,509:63:0	
1172	0	53	17:00:14.000	117GI105A106B4L	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,509:73:0	
1173	0	53	17:06:37.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5897.66 +/- 6	2R3	4	0	5,399,516:11:0	
1174	0	53	17:06:37.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,516:11:0	
1175	0	53	17:06:38.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5897.78 +/- 6	2R3	4	0	5,399,516:13:1	
1176	0	53	17:06:44.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5899.01 +/- 6	2R3	4	0	5,399,516:21:0	
1177	0	53	17:06:45.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5899.07 +/- 6	2R3	4	0	5,399,516:22:8	
1178	0	53	17:06:46.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5898.95 +/- 6	2R3	4	0	5,399,516:24:9	
1179	0	53	17:07:02.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5895.34 +/- 6	2R3	4	0	5,399,516:48:0	
1180	0	53	17:07:24.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5890.03 +/- 6	2R3	4	0	5,399,516:82:0	
1181	0	53	17:07:24.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,516:82:0	
1182	0	53	17:07:25.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5889.97 +/- 6	2R3	4	0	5,399,516:83:8	
1183	0	53	17:08:38.000	117GI105A106B4M	7STRP	-0.017502,0.0003	Slew =12.01	2R3	4	0	5,399,518:10:0	
1184	0	53	17:08:44.666	117GI105A106B4N	7STRP	0.020003,0.0,0,0	Slew =,0.04	2R3	4	0	5,399,518:20:0	
1185	0	53	17:17:08.666	117GI105A106C4A	7STRP	-0.030009,-0.003	Slew =12.01	2R3	4	0	5,399,526:48:0	
1186	0	53	17:19:16.666	117GI105A106C4B	7STRP	0.0,0.0,0,0,0,0,	Slew =,0.04	2R3	4	0	5,399,528:58:0	
1187	0	53	17:19:22.000	117GI11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,528:66:0	
1188	0	53	17:19:39.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5889.97 +/- 6	2R3	4	0	5,399,529:01:0	
1189	0	53	17:19:39.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,529:01:0	
1190	0	53	17:19:40.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5890.09 +/- 6	2R3	4	0	5,399,529:03:1	
1191	0	53	17:19:46.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5891.33 +/- 6	2R3	4	0	5,399,529:11:0	
1192	0	53	17:19:47.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5891.39 +/- 6	2R3	4	0	5,399,529:12:8	
1193	0	53	17:19:48.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5891.27 +/- 6	2R3	4	0	5,399,529:14:9	
1194	0	53	17:20:04.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5887.50 +/- 6	2R3	4	0	5,399,529:39:0	
1195	0	53	17:20:27.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5882.19 +/- 6	2R3	4	0	5,399,529:73:0	
1196	0	53	17:20:27.333	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,529:73:0	
1197	0	53	17:20:28.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5882.13 +/- 6	2R3	4	0	5,399,529:74:8	
1198	0	53	17:21:39.333	165GL4A	7SCAN	NORM,58.83,23.63	Check S/P Position	2R3	4	0	5,399,530:90:0	
1199	0	53	17:21:56.666	176GI6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	5,399,531:25:0	
1200	0	53	17:21:58.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,531:28:0	
1201	0	53	17:21:58.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5882.13 +/- 6	2R3	4	0	5,399,531:28:0	
1202	0	53	17:22:00.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5882.25 +/- 6	2R3	4	0	5,399,531:30:1	
1203	0	53	17:22:05.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5883.48 +/- 6	2R3	4	0	5,399,531:38:0	
1204	0	53	17:22:06.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5883.54 +/- 6	2R3	4	0	5,399,531:39:8	
1205	0	53	17:22:07.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5883.42 +/- 6	2R3	4	0	5,399,531:41:9	
1206	0	53	17:22:08.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5883.25 +/- 6	2R3	4	0	5,399,531:43:0	
1207	0	53	17:22:20.000		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5880.59 +/- 6	2R3	4	0	5,399,531:60:0	
1208	0	53	17:22:20.000	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,531:60:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1209	0	53	17:22:21.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5880.53 +/- 6	2R3	4	0	5,399,531:61:8	
1210	0	53	17:24:42.000	176GJ6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	5,399,534:00:0	
1211	0	53	17:25:33.333	117GL	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,534:77:0	
1212	0	53	17:25:42.666	117GL105A106A4A	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,535:00:0	
1213	0	53	17:26:13.333	488AJ6B	6TMSED	NORM,DL3	Sci, Eng, and D/L Chan	2R3	4	0	5,399,535:46:0	
1214	0	53	17:29:12.000	117GL105A106A4B	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,538:41:0	
1215	0	53	17:29:20.000	117GL105A106A4C	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,538:53:0	
1216	0	53	17:31:04.000	20RQ6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,540:27:0	
1217	0	53	17:32:49.333	117GL105A106A4D	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,542:03:0	
1218	0	53	17:32:57.333	117GL105A106A4E	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,542:15:0	
1219	0	53	17:36:26.666	117GL105A106A4F	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,545:56:0	
1220	0	53	17:36:34.666	117GL105A106A4G	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,545:68:0	
1221	0	53	17:37:16.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5880.53 +/- 6	2R3	4	0	5,399,546:40:0	
1222	0	53	17:37:16.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,546:40:0	
1223	0	53	17:37:18.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5880.65 +/- 6	2R3	4	0	5,399,546:42:1	
1224	0	53	17:37:23.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5881.89 +/- 6	2R3	4	0	5,399,546:50:0	
1225	0	53	17:37:24.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5881.95 +/- 6	2R3	4	0	5,399,546:51:8	
1226	0	53	17:37:25.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5881.83 +/- 6	2R3	4	0	5,399,546:53:9	
1227	0	53	17:37:42.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5878.06 +/- 6	2R3	4	0	5,399,546:78:0	
1228	0	53	17:38:04.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,547:21:0	
1229	0	53	17:38:04.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5872.75 +/- 6	2R3	4	0	5,399,547:21:0	
1230	0	53	17:38:05.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5872.69 +/- 6	2R3	4	0	5,399,547:22:8	
1231	0	53	17:40:04.000	117GL105A106A4H	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,549:18:0	
1232	0	53	17:40:12.000	117GL105A106A4I	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,549:30:0	
1233	0	53	17:43:41.333	117GL105A106A4J	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,552:71:0	
1234	0	53	17:43:49.333	117GL105A106A4K	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,552:83:0	
1235	0	53	17:47:18.666	117GL105A106A4L	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,556:33:0	
1236	0	53	17:47:26.666	117GL105A106A4M	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,556:45:0	
1237	0	53	17:50:18.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,559:30:0	
1238	0	53	17:50:18.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5872.69 +/- 6	2R3	4	0	5,399,559:30:0	
1239	0	53	17:50:20.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5872.81 +/- 6	2R3	4	0	5,399,559:32:1	
1240	0	53	17:50:25.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5874.04 +/- 6	2R3	4	0	5,399,559:40:0	
1241	0	53	17:50:26.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5874.10 +/- 6	2R3	4	0	5,399,559:41:8	
1242	0	53	17:50:27.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5873.98 +/- 6	2R3	4	0	5,399,559:43:9	
1243	0	53	17:50:44.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5870.22 +/- 6	2R3	4	0	5,399,559:68:0	
1244	0	53	17:50:56.000	117GL105A106A4N	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,559:86:0	
1245	0	53	17:51:04.000	117GL105A106A4O	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,560:07:0	
1246	0	53	17:51:06.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,560:11:0	
1247	0	53	17:51:06.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5864.91 +/- 6	2R3	4	0	5,399,560:11:0	
1248	0	53	17:51:07.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5864.85 +/- 6	2R3	4	0	5,399,560:12:8	
1249	0	53	17:54:33.333	117GL105A106A4P	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,563:48:0	
1250	0	53	17:54:41.333	117GL105A106A4Q	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,563:60:0	
1251	0	53	17:58:10.666	117GL105A106A4R	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,567:10:0	
1252	0	53	17:58:18.666	117GL105A106A4S	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,567:22:0	
1253	0	53	18:00:00.000	480SE6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	5,399,568:83:0	
1254	0	53	18:00:21.333	488AJ6C	6TMSED	NORM,DL4	Sci, Eng, and D/L Chan	2R3	4	0	5,399,569:24:0	
1255	0	53	18:01:48.000	117GL105A106A4T	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,570:63:0	
1256	0	53	18:01:56.000	117GL105A106A4U	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,570:75:0	
1257	0	53	18:03:20.666	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,572:20:0	
1258	0	53	18:03:20.666		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5864.85 +/- 6	2R3	4	0	5,399,572:20:0	
1259	0	53	18:03:22.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5864.97 +/- 6	2R3	4	0	5,399,572:22:1	
1260	0	53	18:03:27.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5866.20 +/- 6	2R3	4	0	5,399,572:30:0	
1261	0	53	18:03:28.533		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5866.26 +/- 6	2R3	4	0	5,399,572:31:8	
1262	0	53	18:03:29.933		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5866.14 +/- 6	2R3	4	0	5,399,572:33:9	
1263	0	53	18:03:46.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5862.38 +/- 6	2R3	4	0	5,399,572:58:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1264	0	53	18:04:08.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,573	01:0
1265	0	53	18:04:08.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5857.06 +/- 6	2R3	4	0	5,399,573	01:0
1266	0	53	18:04:09.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5857.00 +/- 6	2R3	4	0	5,399,573	02:8
1267	0	53	18:05:25.333	117GL105A106A4V	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,574	25:0
1268	0	53	18:05:33.333	117GL105A106A4W	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,574	37:0
1269	0	53	18:06:40.000	480SE6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	5,399,575	46:0
1270	0	53	18:09:02.666	117GL105A106A4X	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,577	78:0
1271	0	53	18:09:10.666	117GL105A106A4Y	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,577	90:0
1272	0	53	18:12:40.000	117GL105A106A4Z	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,581	40:0
1273	0	53	18:12:48.000	117GL105A106A4AA	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,581	52:0
1274	0	53	18:16:17.333	117GL105A106A4AB	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,585	02:0
1275	0	53	18:16:23.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5857.00 +/- 6	2R3	4	0	5,399,585	11:0
1276	0	53	18:16:23.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,585	11:0
1277	0	53	18:16:24.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5857.12 +/- 6	2R3	4	0	5,399,585	13:1
1278	0	53	18:16:25.333	117GL105A106A4AC	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,585	14:0
1279	0	53	18:16:30.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5858.36 +/- 6	2R3	4	0	5,399,585	21:0
1280	0	53	18:16:31.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5858.42 +/- 6	2R3	4	0	5,399,585	22:8
1281	0	53	18:16:32.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5858.30 +/- 6	2R3	4	0	5,399,585	24:9
1282	0	53	18:16:48.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5854.69 +/- 6	2R3	4	0	5,399,585	48:0
1283	0	53	18:17:10.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,585	82:0
1284	0	53	18:17:10.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5849.38 +/- 6	2R3	4	0	5,399,585	82:0
1285	0	53	18:17:11.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5849.32 +/- 6	2R3	4	0	5,399,585	83:8
1286	0	53	18:19:54.666	117GL105A106A4AD	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,588	55:0
1287	0	53	18:20:02.666	117GL105A106A4AE	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,588	67:0
1288	0	53	18:23:32.000	117GL105A106A4AF	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,592	17:0
1289	0	53	18:23:40.000	117GL105A106A4AG	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,592	29:0
1290	0	53	18:27:09.333	117GL105A106A4AH	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,595	70:0
1291	0	53	18:27:17.333	117GL105A106A4AI	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,595	82:0
1292	0	53	18:29:25.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5849.32 +/- 6	2R3	4	0	5,399,598	01:0
1293	0	53	18:29:25.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,598	01:0
1294	0	53	18:29:26.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5849.44 +/- 6	2R3	4	0	5,399,598	03:1
1295	0	53	18:29:32.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5850.67 +/- 6	2R3	4	0	5,399,598	11:0
1296	0	53	18:29:33.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5850.73 +/- 6	2R3	4	0	5,399,598	12:8
1297	0	53	18:29:34.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5850.61 +/- 6	2R3	4	0	5,399,598	14:9
1298	0	53	18:29:50.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5846.84 +/- 6	2R3	4	0	5,399,598	39:0
1299	0	53	18:30:13.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5841.53 +/- 6	2R3	4	0	5,399,598	73:0
1300	0	53	18:30:13.333	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,598	73:0
1301	0	53	18:30:14.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5841.47 +/- 6	2R3	4	0	5,399,598	74:8
1302	0	53	18:30:46.666	117GL105A106A4AJ	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,599	32:0
1303	0	53	18:30:54.666	117GL105A106A4AK	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,599	44:0
1304	0	53	18:34:24.000	117GL105A106A4AL	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,602	85:0
1305	0	53	18:34:32.000	117GL105A106A4AM	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,603	06:0
1306	0	53	18:36:47.333	488AJ6D	6TMSED	FILL,DL4	Sci, Eng, and D/L Chan	2R3	4	0	5,399,605	27:0
1307	0	53	18:38:01.333	117GL105A106A4AN	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,606	47:0
1308	0	53	18:38:09.333	117GL105A106A4AO	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,606	59:0
1309	0	53	18:41:38.666	117GL105A106A4AP	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,610	09:0
1310	0	53	18:41:46.666	117GL105A106A4AQ	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,610	21:0
1311	0	53	18:42:27.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5841.47 +/- 6	2R3	4	0	5,399,610	82:0
1312	0	53	18:42:27.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,610	82:0
1313	0	53	18:42:28.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5841.59 +/- 6	2R3	4	0	5,399,610	84:1
1314	0	53	18:42:34.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5842.83 +/- 6	2R3	4	0	5,399,611	01:0
1315	0	53	18:42:35.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5842.89 +/- 6	2R3	4	0	5,399,611	02:8
1316	0	53	18:42:36.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5842.77 +/- 6	2R3	4	0	5,399,611	04:9
1317	0	53	18:42:52.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5839.00 +/- 6	2R3	4	0	5,399,611	29:0
1318	0	53	18:43:15.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5833.69 +/- 6	2R3	4	0	5,399,611	63:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1319	0	53	18:43:15.333	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,611	63:0
1320	0	53	18:43:16.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5833.63 +/- 6	2R3	4	0	5,399,611	64:8
1321	0	53	18:45:16.000	117GL105A106A4AR	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,613	62:0
1322	0	53	18:45:24.000	117GL105A106A4AS	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,613	74:0
1323	0	53	18:48:53.333	117GL105A106A4AT	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,617	24:0
1324	0	53	18:49:01.333	117GL105A106A4AU	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,617	36:0
1325	0	53	18:52:30.666	117GL105A106A4AV	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,620	77:0
1326	0	53	18:52:38.666	117GL105A106A4AW	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,620	89:0
1327	0	53	18:55:30.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5833.63 +/- 6	2R3	4	0	5,399,623	73:0
1328	0	53	18:55:30.000	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,623	73:0
1329	0	53	18:55:31.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5833.75 +/- 6	2R3	4	0	5,399,623	75:1
1330	0	53	18:55:36.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5834.98 +/- 6	2R3	4	0	5,399,623	83:0
1331	0	53	18:55:37.866		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5835.04 +/- 6	2R3	4	0	5,399,623	84:8
1332	0	53	18:55:39.266		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5834.92 +/- 6	2R3	4	0	5,399,623	86:9
1333	0	53	18:55:54.666		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5831.31 +/- 6	2R3	4	0	5,399,624	19:0
1334	0	53	18:56:08.000	117GL105A106A4AX	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,624	39:0
1335	0	53	18:56:16.000	117GL105A106A4AY	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,624	51:0
1336	0	53	18:56:17.333		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5826.00 +/- 6	2R3	4	0	5,399,624	53:0
1337	0	53	18:56:17.333	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,624	53:0
1338	0	53	18:56:18.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5825.94 +/- 6	2R3	4	0	5,399,624	54:8
1339	0	53	18:59:45.333	117GL105A106A4AZ	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,628	01:0
1340	0	53	18:59:53.333	117GL105A106A4BA	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,628	13:0
1341	0	53	19:03:22.666	117GL105A106A4BB	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,631	54:0
1342	0	53	19:03:30.666	117GL105A106A4BC	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,631	66:0
1343	0	53	19:07:00.000	117GL105A106A4BD	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,635	16:0
1344	0	53	19:07:08.000	117GL105A106A4BE	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,635	28:0
1345	0	53	19:08:32.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5825.94 +/- 6	2R3	4	0	5,399,636	63:0
1346	0	53	19:08:32.000	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,636	63:0
1347	0	53	19:08:33.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5826.06 +/- 6	2R3	4	0	5,399,636	65:1
1348	0	53	19:08:38.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5827.29 +/- 6	2R3	4	0	5,399,636	73:0
1349	0	53	19:08:39.866		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5827.35 +/- 6	2R3	4	0	5,399,636	74:8
1350	0	53	19:08:41.266		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5827.23 +/- 6	2R3	4	0	5,399,636	76:9
1351	0	53	19:08:57.333		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5823.47 +/- 6	2R3	4	0	5,399,637	10:0
1352	0	53	19:09:20.000	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,637	44:0
1353	0	53	19:09:20.000		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5818.16 +/- 6	2R3	4	0	5,399,637	44:0
1354	0	53	19:09:21.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5818.10 +/- 6	2R3	4	0	5,399,637	45:8
1355	0	53	19:10:37.333	117GL105A106A4BF	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,638	69:0
1356	0	53	19:10:45.333	117GL105A106A4BG	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,638	81:0
1357	0	53	19:14:14.666	117GL105A106A4BH	7STRP	-0.03101,0.0008,	Slew =12.01	2R3	4	0	5,399,642	31:0
1358	0	53	19:14:22.666	117GL105A106A4BI	7STRP	0.033012,0.0,0,0	Slew =,0.16	2R3	4	0	5,399,642	43:0
1359	0	53	19:17:52.000	117GL11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,645	84:0
1360	0	53	19:20:26.666	488AJ6E	6TMSED	NORM,DL4	Sci, Eng, and D/L Chan	2R3	4	0	5,399,648	43:0
1361	0	53	19:20:28.000	176GJ6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	5,399,648	45:0
1362	0	53	19:20:30.000	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,648	48:0
1363	0	53	19:20:30.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5818.10 +/- 6	2R3	4	0	5,399,648	48:0
1364	0	53	19:20:31.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5818.22 +/- 6	2R3	4	0	5,399,648	50:1
1365	0	53	19:20:36.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5819.45 +/- 6	2R3	4	0	5,399,648	58:0
1366	0	53	19:20:37.866		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5819.51 +/- 6	2R3	4	0	5,399,648	59:8
1367	0	53	19:20:39.266		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *5819.39 +/- 6	2R3	4	0	5,399,648	61:9
1368	0	53	19:20:40.000		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5819.22 +/- 6	2R3	4	0	5,399,648	63:0
1369	0	53	19:21:00.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5814.38 +/- 6	2R3	4	0	5,399,649	03:0
1370	0	53	19:21:00.666	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,649	03:0
1371	0	53	19:21:01.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5814.32 +/- 6	2R3	4	0	5,399,649	04:8
1372	**0**	**53**	**19:35:12.000**	**27NNGLOBAL01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
1373	**0**	**53**	**19:35:32.000**	**20EI5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,663**	**36:0**

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1374	**0**	**53**	**19:35:35.333**	**20EI5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,663:41:0**	
1375	**0**	**53**	**19:35:38.666**	**20EI6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,663:46:0**	
1376	**0**	**53**	**19:35:48.666**	**20EI6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,663:61:0**	
1377	**0**	**53**	**19:35:58.666**	**20EI5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,663:76:0**	
1378	**0**	**53**	**19:36:02.000**	**20EI5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,663:81:0**	
1379	**0**	**53**	**19:37:02.666**	**20EI4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,399,664:81:0**	
1380	**0**	**53**	**19:38:02.666**	**20EI4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,665:80:0**	
1381	**0**	**53**	**19:38:03.333**	**20EI4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,665:81:0**	
1382	**0**	**53**	**19:38:14.000**	**27NNGLOBAL01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
1383	0	53	19:40:10.666	165EI4A	**7SCAN**	**NORM,54.414,22.1**	**Check S/P Position**	2R3	4	0	5,399,667:90:0	
1384	**0**	**53**	**19:40:15.333**	**27INGLOBAL01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
1385	0	53	19:44:04.666	117EI	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	5,399,671:77:0	
1386	0	53	19:44:14.000	117EI105A106A4A	**7STRP**	**0.027507,0.0,0,0**	**Slew =,0.06**	2R3	4	0	5,399,672:00:0	
1387	0	53	19:45:00.000	175EI422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	2R3	4	0	5,399,672:69:0	
1388	0	53	19:45:00.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5814.32 +/- 6	2R3	4	0	5,399,672:69:0	
1389	0	53	19:45:01.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5814.44 +/- 6	2R3	4	0	5,399,672:71:1	
1390	0	53	19:45:06.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5815.67 +/- 6	2R3	4	0	5,399,672:79:0	
1391	0	53	19:45:07.866		DMS:	: *RUNUP	R28, TRACK *2, *REV, TIC *5815.73 +/- 6	2R3	4	0	5,399,672:80:8	
1392	0	53	19:45:11.333	175EI176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	5,399,672:86:0	
1393	0	53	19:45:11.866		DMS:	: *AT_SPD	R28, TRACK 2, REV, TIC 5814.23 +/- 6	2R3	4	0	5,399,672:86:8	
1394	0	53	19:45:11.866		DMS:	**: *RECORD**	R28, TRACK 2, REV, TIC *5814.23 +/- 6	2R3	4	0	5,399,672:86:8	
1395	0	53	19:51:59.333	117EI105A106A4B	**7STRP**	**-0.023504,0.0070**	**Slew =12.01**	2R3	4	0	5,399,679:61:0	
1396	0	53	19:52:07.333	117EI105A106A4C	**7STRP**	**0.027507,0.0,0,0**	**Slew =,0.06**	2R3	4	0	5,399,679:73:0	
1397	0	53	19:59:52.666	117EI105A106A4D	**7STRP**	**-0.023504,0.0070**	**Slew =12.01**	2R3	4	0	5,399,687:43:0	
1398	0	53	20:00:00.666	117EI105A106A4E	**7STRP**	**0.027507,0.0,0,0**	**Slew =,0.06**	2R3	4	0	5,399,687:55:0	
1399	0	53	20:05:03.333	175EI422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,692:54:0	
1400	0	53	20:05:03.333		DMS:	**: *RUNDOWN**	R28, TRACK 2, REV, TIC *4767.04 +/- 6	2R3	4	0	5,399,692:54:0	
1401	0	53	20:05:04.533		DMS:	: *READY	RDY, TRACK 2, REV, TIC *4766.74 +/- 6	2R3	4	0	5,399,692:55:8	
1402	0	53	20:07:46.000	117EI11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	5,399,695:25:0	
1403	**0**	**53**	**20:20:42.000**	**27INGLOBAL01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
1404	0	53	20:21:49.333	432OI431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	5,399,709:16:0	
1405	0	53	20:21:50.000	432OI6A	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,709:17:0	
1406	**0**	**53**	**20:30:48.666**	**27NNDETECT02-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
1407	**0**	**53**	**20:30:52.000**	**20FC5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,399,718:11:0**	
1408	**0**	**53**	**20:30:54.000**	**20FC5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,399,718:14:0**	
1409	**0**	**53**	**20:30:58.666**	**20FC6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,399,718:21:0**	
1410	**0**	**53**	**20:31:08.666**	**20FC6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,399,718:36:0**	
1411	**0**	**53**	**20:31:18.666**	**20FC5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,399,718:51:0**	
1412	**0**	**53**	**20:31:25.333**	**20FC5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,399,718:61:0**	
1413	**0**	**53**	**20:31:38.000**	**20FC4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**5,399,718:80:0**	
1414	**0**	**53**	**20:32:38.666**	**20FC4B**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**5,399,719:80:0**	
1415	**0**	**53**	**20:33:39.333**	**20FC4C**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**2R0**	**4**	**0**	**5,399,720:80:0**	
1416	**0**	**53**	**20:34:40.000**	**20FC4D**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,399,721:80:0**	
1417	**0**	**53**	**20:34:40.666**	**20FC4E**	**37ETB**	**4,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,399,721:81:0**	
1418	**0**	**53**	**20:36:52.666**	**20FH6A**	**6MCOPY**	**B1A1A,69DE,NIMS,**	**B1A1A,69DE,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,724:06:0**	
1419	**0**	**53**	**20:37:01.333**	**20FH6B**	**6MCOPY**	**B1A1A,69E7,NIMS,**	**B1A1A,69E7,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,724:19:0**	
1420	**0**	**53**	**20:37:54.000**	**20FH6C**	**6MCOPY**	**B1A1A,69F0,NIMS,**	**B1A1A,69F0,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,725:07:0**	
1421	**0**	**53**	**20:38:02.666**	**20FH6D**	**6MCOPY**	**B1A1A,69F9,NIMS,**	**B1A1A,69F9,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,725:20:0**	
1422	**0**	**53**	**20:38:55.333**	**20FH6E**	**6MCOPY**	**B1A1A,6A02,NIMS,**	**B1A1A,6A02,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,726:08:0**	
1423	**0**	**53**	**20:39:04.000**	**20FH6F**	**6MCOPY**	**B1A1A,6A0B,NIMS,**	**B1A1A,6A0B,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,726:21:0**	
1424	**0**	**53**	**20:39:56.666**	**20FH6G**	**6MCOPY**	**B1A1A,6A14,NIMS,**	**B1A1A,6A14,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,727:09:0**	
1425	**0**	**53**	**20:40:05.333**	**20FH6H**	**6MCOPY**	**B1A1A,6A1D,NIMS,**	**B1A1A,6A1D,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,727:22:0**	
1426	**0**	**53**	**20:40:58.000**	**20FH6I**	**6MCOPY**	**B1A1A,6A26,NIMS,**	**B1A1A,6A26,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,728:10:0**	
1427	**0**	**53**	**20:41:06.666**	**20FH6J**	**6MCOPY**	**B1A1A,6A2F,NIMS,**	**B1A1A,6A2F,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,728:23:0**	
1428	**0**	**53**	**20:41:59.333**	**20FH6K**	**6MCOPY**	**B1A1A,6A38,NIMS,**	**B1A1A,6A38,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,729:11:0**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1429	**0**	**53**	**20:42:08.000**	**20FH6L**	**6MCOPY**	**B1A1A,6A41,NIMS,**	**B1A1A,6A41,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,729:24:0**	
1430	**0**	**53**	**20:43:00.666**	**20FH6M**	**6MCOPY**	**B1A1A,6A4A,NIMS,**	**B1A1A,6A4A,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,730:12:0**	
1431	**0**	**53**	**20:43:09.333**	**20FH6N**	**6MCOPY**	**B1A1A,6A53,NIMS,**	**B1A1A,6A53,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,730:25:0**	
1432	**0**	**53**	**20:44:02.000**	**20FH6O**	**6MCOPY**	**B1A1A,6A5C,NIMS,**	**B1A1A,6A5C,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,731:13:0**	
1433	**0**	**53**	**20:44:10.666**	**20FH6P**	**6MCOPY**	**B1A1A,6A65,NIMS,**	**B1A1A,6A65,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,731:26:0**	
1434	**0**	**53**	**20:45:03.333**	**20FH6Q**	**6MCOPY**	**B1A1A,6A6E,NIMS,**	**B1A1A,6A6E,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,732:14:0**	
1435	**0**	**53**	**20:45:12.000**	**20FH6R**	**6MCOPY**	**B1A1A,6A77,NIMS,**	**B1A1A,6A77,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,732:27:0**	
1436	**0**	**53**	**20:46:04.666**	**20FH6S**	**6MCOPY**	**B1A1A,6A80,NIMS,**	**B1A1A,6A80,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,733:15:0**	
1437	**0**	**53**	**20:46:13.333**	**20FH6T**	**6MCOPY**	**B1A1A,6A89,NIMS,**	**B1A1A,6A89,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,733:28:0**	
1438	**0**	**53**	**20:47:06.000**	**20FH6U**	**6MCOPY**	**B1A1A,6A92,NIMS,**	**B1A1A,6A92,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,734:16:0**	
1439	**0**	**53**	**20:47:14.666**	**20FH6V**	**6MCOPY**	**B1A1A,6A9B,NIMS,**	**B1A1A,6A9B,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,734:29:0**	
1440	**0**	**53**	**20:48:07.333**	**20FH6W**	**6MCOPY**	**B1A1A,6AA4,NIMS,**	**B1A1A,6AA4,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,735:17:0**	
1441	**0**	**53**	**20:48:16.000**	**20FH6X**	**6MCOPY**	**B1A1A,6AAD,NIMS,**	**B1A1A,6AAD,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,735:30:0**	
1442	**0**	**53**	**20:49:08.666**	**20FH6Y**	**6MCOPY**	**B1A1A,6AB6,NIMS,**	**B1A1A,6AB6,NIMS,150F,1517**	**2R3**	**4**	**0**	**5,399,736:18:0**	
1443	**0**	**53**	**20:49:17.333**	**20FH6Z**	**6MCOPY**	**B1A1A,6ABF,NIMS,**	**B1A1A,6ABF,NIMS,150F,151C**	**2R3**	**4**	**0**	**5,399,736:31:0**	
1444	**0**	**53**	**20:51:02.000**	**27NNDETECT02-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
1445	0	53	21:00:00.000	488AK6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,399,746:85:0	
1446	0	53	22:01:04.000	20RR6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,399,807:30:0	
1447	0	53	22:15:00.000	480SA6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	5,399,821:10:0	
1448	0	53	22:21:40.000	480SA6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	5,399,827:64:0	
1449	0	53	23:12:38.000	165IM4A	**7SCAN**	**NORM,50.653,21.0**	**Check S/P Position**	2R3	4	0	5,399,878:10:0	
1450	0	53	23:13:22.000	175IM422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	2R3	4	0	5,399,878:76:0	
1451	0	53	23:13:22.000		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4766.74 +/- 6	2R3	4	0	5,399,878:76:0	
1452	0	53	23:13:23.400		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4766.86 +/- 6	2R3	4	0	5,399,878:78:1	
1453	0	53	23:13:24.000	118IM	**SMOS**	GS		2R3	4	0	5,399,878:79:0	
1454	0	53	23:13:28.666		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4768.10 +/- 6	2R3	4	0	5,399,878:86:0	
1455	0	53	23:13:29.866		DMS:	: *RUNUP	R403, TRACK *2, *REV, TIC *4768.16 +/- 6	2R3	4	0	5,399,878:87:8	
1456	0	53	23:13:30.666	165IM4B	7VECT		Inert vect update UTC	2R3	4	0	5,399,878:89:0	
1457	0	53	23:13:33.333	175IM176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,399,879:02:0	
1458	0	53	23:13:33.733		DMS:	: *AT_SPD	R403, TRACK 2, REV, TIC 4745.16 +/- 6	2R3	4	0	5,399,879:02:6	
1459	0	53	23:13:33.733		DMS:	**: *RECORD**	R403, TRACK 2, REV, TIC *4745.16 +/- 6	2R3	4	0	5,399,879:02:6	
1460	0	53	23:13:34.000	118IM110A111A4A	7STRP	0.0073,0.0,26,0,	Slew =,3.51	2R3	4	0	5,399,879:03:0	
1461	0	53	23:13:42.666	118IM110A111B4A	7STRP	-0.0073,0.007301	Slew =,5.21	2R3	4	0	5,399,879:16:0	
1462	0	53	23:13:51.333	118IM110A111B4B	7STRP	0.0073,0.0,26,0,	Slew =,3.51	2R3	4	0	5,399,879:29:0	
1463	0	53	23:14:00.000	118IM110A111A4B	7STRP	-0.0073,-0.00690	Slew =,5.21	2R3	4	0	5,399,879:42:0	
1464	0	53	23:14:08.666	118IM110A111A4C	7STRP	0.0073,0.0,26,0,	Slew =,3.51	2R3	4	0	5,399,879:55:0	
1465	0	53	23:14:17.333	118IM110A111B4C	7STRP	-0.0073,0.007301	Slew =,5.21	2R3	4	0	5,399,879:68:0	
1466	0	53	23:14:26.000	118IM110A111B4D	7STRP	0.0073,0.0,26,0,	Slew =,3.51	2R3	4	0	5,399,879:81:0	
1467	0	53	23:14:34.666	118IM110A111A4D	7STRP	-0.0073,-0.00690	Slew =,5.21	2R3	4	0	5,399,880:03:0	
1468	0	53	23:14:43.333	118IM110A111A4E	7STRP	0.0073,0.0,26,0,	Slew =,3.51	2R3	4	0	5,399,880:16:0	
1469	0	53	23:14:52.000	118IM110A111B4E	7STRP	-0.0073,0.007301	Slew =,5.21	2R3	4	0	5,399,880:29:0	
1470	0	53	23:15:00.666	118IM110A111B4F	7STRP	0.0073,0.0,26,0,	Slew =,3.51	2R3	4	0	5,399,880:42:0	
1471	0	53	23:15:09.333	118IM11A	**SMOS**	GE		2R3	4	0	5,399,880:55:0	
1472	0	53	23:15:14.666	175IM422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,880:63:0	
1473	0	53	23:15:14.666		DMS:	**: *RUNDOWN**	R403, TRACK 2, REV, TIC *3503.20 +/- 6	2R3	4	0	5,399,880:63:0	
1474	0	53	23:15:17.400		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3499.20 +/- 6	2R3	4	0	5,399,880:67:1	
1475	0	53	23:16:34.000	192GK4A	**7CONE**	**9.0,0.0**	Check S/P Position	2R3	4	0	5,399,882:00:0	
1476	0	53	23:23:38.666	176GK6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	5,399,889:00:0	
1477	0	53	23:25:53.333	176GK6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	5,399,891:20:0	
1478	0	53	23:25:55.333		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3499.20 +/- 6	2R3	4	0	5,399,891:23:0	
1479	0	53	23:25:55.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,399,891:23:0	
1480	0	53	23:25:56.733		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3499.32 +/- 6	2R3	4	0	5,399,891:25:1	
1481	0	53	23:26:02.000		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3500.56 +/- 6	2R3	4	0	5,399,891:33:0	
1482	0	53	23:26:03.200		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3500.62 +/- 6	2R3	4	0	5,399,891:34:8	
1483	0	53	23:26:04.600		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3500.50 +/- 6	2R3	4	0	5,399,891:36:9	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1484	0	53	23:26:05.333		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3500.33 +/- 6	2R3	4	0	5,399,891:38:0	
1485	0	53	23:26:16.666	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,399,891:55:0	
1486	0	53	23:26:16.666		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3497.67 +/- 6	2R3	4	0	5,399,891:55:0	
1487	0	53	23:26:17.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3497.61 +/- 6	2R3	4	0	5,399,891:56:8	
1488	0	53	23:28:42.000	192GK4B	**7CONE**	**9.0,90.0**	Check S/P Position	2R3	4	0	5,399,894:00:0	
1489	0	54	00:37:09.333	488AK6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,399,961:64:0	
1490	0	54	01:30:29.333	488AK6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,014:41:0	
1491	0	54	02:01:04.000	20RS6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,400,044:63:0	
1492	0	54	02:16:49.333	488AK6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,060:25:0	
1493	0	54	03:00:28.666	488AL6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,103:41:0	
1494	0	54	04:10:56.000	20MC6A	6CKSUM	MAG,4040,46F0		2R3	4	0	5,400,173:12:0	
1495	0	54	04:11:52.666	480MB6A	6MROH	12,2282,0,A2	read from LLM1A12,2282,0,A2	2R3	4	0	5,400,174:06:0	
1496	0	54	04:11:52.666	480MB6	6MROH	12	read from LLM1A12,2282,0,A2	2R3	4	0	5,400,174:06:0	
1497	0	54	05:59:59.933	481UE4A	7VECT	BB1	Inert vect update UTC	2R3	4	0	5,400,281:00:0	
1498	0	54	06:01:03.933	20RT6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,400,282:05:0	
1499	0	54	07:59:59.933	20TS4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2R3	4	0	5,400,399:62:0	
1500	0	54	08:00:49.933	20TS4B	7SLEW	DIS,POS,0.0	Stator movement	2R3	4	0	5,400,400:46:0	
1501	0	54	08:00:57.933	20TS4F	7STAR	1,1610,278.815,3	Star catalog update	2R3	4	0	5,400,400:58:0	
1502	0	54	08:00:59.933	20TS4G	7STAR	2,111,285.778,13	Star catalog update	2R3	4	0	5,400,400:61:0	
1503	0	54	08:01:01.933	20TS4H	7STAR	3,317,120.456,-3	Star catalog update	2R3	4	0	5,400,400:64:0	
1504	0	54	08:01:03.933	20TS4I	7STAR	4,0,0.0,0.0	Star catalog update	2R3	4	0	5,400,400:67:0	
1505	0	54	08:01:05.933	20TS4J	7STAR	5,0,0.0,0.0	Star catalog update	2R3	4	0	5,400,400:70:0	
1506	0	54	08:01:07.933	20TS4K	7STAR	6,0,0.0,0.0	Star catalog update	2R3	4	0	5,400,400:73:0	
1507	0	54	08:05:02.600	432OE431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	5,400,404:61:0	
1508	0	54	08:05:03.266	432OE6A	6RTSL1		R/T Select of DDS and	2R3	4	0	5,400,404:62:0	
1509	0	54	08:52:05.933	488AL6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,400,451:19:0	
1510	0	54	08:59:59.933	480SF6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	5,400,459:02:0	
1511	0	54	09:06:39.933	480SF6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	5,400,465:56:0	
1512	0	54	09:31:34.600	488AM6A	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,400,490:23:0	
1513	0	54	09:39:01.933	488AM6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	5,400,497:57:0	
1514	0	54	10:01:03.933	20RU6B	6RTSL1		R/T Select of DDS and	2R3	4	0	5,400,519:38:0	
1515	0	54	10:15:17.933	488AM6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,533:45:0	
1516	0	54	13:20:08.600	488AM6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,716:28:0	
1517	0	54	14:46:53.266	488AM6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,802:09:0	
1518	0	54	15:15:04.600	431ZL6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	5,400,829:89:0	
1519	0	54	15:19:12.600	20ZM6A	6EUVON			2R3	4	0	5,400,834:06:0	
1520	0	54	15:20:09.266	431ZM6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	2R3	4	0	5,400,835:00:0	
1521	0	54	15:20:32.600	488AN6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,835:35:0	
1522	0	54	16:20:48.600	165IN4A	**7SCAN**	**NORM,87.717999,2**	**Check S/P Position**	2R3	4	0	5,400,894:90:0	
1523	0	54	16:30:54.600	165IN4B	7VECT		Inert vect update UTC	2R3	4	0	5,400,904:89:0	
1524	0	54	16:31:47.933	118IN	**SMOS**	GS		2R3	4	0	5,400,905:78:0	
1525	0	54	16:31:57.933	118IN110A111A4A	7STRP	0.0035,0.0,24,0,	Slew =2,1.8	2R3	4	0	5,400,906:02:0	
1526	0	54	16:32:03.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3497.61 +/- 6	2R3	4	0	5,400,906:11:0	
1527	0	54	16:32:03.933	175IO422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	2R3	4	0	5,400,906:11:0	
1528	0	54	16:32:05.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3497.73 +/- 6	2R3	4	0	5,400,906:13:1	
1529	0	54	16:32:05.933	118IN11A	**SMOS**	GE		2R3	4	0	5,400,906:14:0	
1530	0	54	16:32:10.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3498.96 +/- 6	2R3	4	0	5,400,906:21:0	
1531	0	54	16:32:11.800		DMS:	: *RUNUP	R403, TRACK *2, *REV, TIC *3499.02 +/- 6	2R3	4	0	5,400,906:22:8	
1532	0	54	16:32:15.266	175IO176A6A	6TMREC	**IM4**	403.2 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	5,400,906:28:0	
1533	0	54	16:32:15.666		DMS:	**: *RECORD**	R403, TRACK 2, REV, TIC *3476.02 +/- 6	2R3	4	0	5,400,906:28:6	
1534	0	54	16:32:15.666		DMS:	: *AT_SPD	R403, TRACK 2, REV, TIC 3476.02 +/- 6	2R3	4	0	5,400,906:28:6	
1535	0	54	16:32:19.266		DMS:	**: *RUNDOWN**	R403, TRACK 2, REV, TIC *3431.73 +/- 6	2R3	4	0	5,400,906:34:0	
1536	0	54	16:32:19.266	175IO422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,400,906:34:0	
1537	0	54	16:32:22.000		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3427.73 +/- 6	2R3	4	0	5,400,906:38:1	
1538	0	54	16:33:48.600	175KA422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	5,400,907:77:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1539	0	54	16:33:48.600		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3427.73 +/- 6	2R3	4	0	5,400,907:77:0	
1540	0	54	16:33:50.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3427.85 +/- 6	2R3	4	0	5,400,907:79:1	
1541	0	54	16:33:55.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3429.08 +/- 6	2R3	4	0	5,400,907:87:0	
1542	0	54	16:33:56.466		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3429.14 +/- 6	2R3	4	0	5,400,907:88:8	
1543	0	54	16:33:57.266	175KA176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R3	4	0	5,400,907:90:0	
1544	0	54	16:33:57.866		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 3429.02 +/- 6	2R3	4	0	5,400,907:90:9	
1545	0	54	16:33:57.866		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3429.02 +/- 6	2R3	4	0	5,400,907:90:9	
1546	0	54	16:34:04.600	175KA422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	5,400,908:10:0	
1547	0	54	16:34:04.600		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3427.44 +/- 6	2R3	4	0	5,400,908:10:0	
1548	0	54	16:34:05.800		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3427.38 +/- 6	2R3	4	0	5,400,908:11:8	
1549	0	54	16:34:57.933	165IZ4A	**7SCAN**	**NORM,87.86,25.52**	**Check S/P Position**	2R3	4	0	5,400,908:90:0	
1550	0	54	17:30:05.933	20KA4B	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2R3	4	0	5,400,963:47:0	
1551	0	54	17:42:59.933	488AN6B	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,976:25:0	
1552	**0**	**54**	**17:59:53.266**	**432JC6B**	**6RTDS2**	**NIMNCG,AACDSL,RT**	**AACS DESELECT**	**2R3**	**4**	**0**	**5,400,992:89:0**	
1553	0	54	18:00:02.600	488AN6C	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2R3	4	0	5,400,993:12:0	
1554	0	54	18:18:59.933	20SV4I	**7MODE**	**INT**	AACS INERTIAL MODE	2R3	4	0	5,401,011:80:0	
1555	0	54	18:33:59.933	20SV4K	7SLEW	INIT,POS,17.45	Stator movement	2R3	4	0	5,401,026:65:0	
1556	0	54	18:45:59.933	20SV4L	7SLEW	DIS,POS,0.0	Stator movement	2R3	4	0	5,401,038:53:0	
1557	0	54	18:52:59.933	20SV4M	7SLEW	INIT,NEG,17.45	Stator movement	2R3	4	0	5,401,045:46:0	
1558	0	54	19:04:59.933	20SV4N	7SLEW	DIS,POS,0.0	Stator movement	2R3	4	0	5,401,057:34:0	
1559	0	54	19:16:59.933	20SV4AH	**7MODE**	**CRU**	AACS CRUISE MODE	2R3	4	0	5,401,069:22:0	
1560	0	54	19:33:03.933	20SW4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2R3	4	0	5,401,085:12:0	
1561	0	54	19:33:53.933	20SW4B	7SLEW	DIS,POS,0.0	Stator movement	2R3	4	0	5,401,085:87:0	
1562	0	54	19:36:58.600	176TA6A	6TMREC	IPB	INITIATE PLAYBACK (PB CONTROL) Record Mod	2R3	4	0	5,401,089:00:0	
1563	0	54	19:52:59.933	488AN6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,401,104:77:0	
1564	0	54	20:04:05.266	488AN6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,401,115:74:0	
1565	0	54	20:53:09.266	488AO6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2R3	4	0	5,401,164:31:0	
1566	0	54	20:53:15.933	488AO6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R3	4	0	5,401,164:41:0	
1567	0	54	20:59:59.933	480SG6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	5,401,171:10:0	
1568	0	54	21:06:39.933	480SG6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	5,401,177:64:0	
1569	0	54	21:10:13.266	488AO6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,401,181:20:0	
1570	0	55	00:59:59.933	481UF4A	7VECT		Inert vect update UTC	2R3	4	0	5,401,408:43:0	
1571	0	55	17:06:19.866	488AP6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,402,364:17:0	
1572	0	55	17:30:29.866	488AP6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,402,388:08:0	
1573	0	55	18:32:02.533	488AP6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,402,448:87:0	
1574	0	55	19:05:41.200	488AP6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,402,482:21:0	
1575	0	56	00:37:09.200	488AQ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2R3	4	0	5,402,810:05:0	
1576	0	56	01:00:37.200	488AQ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2R3	4	0	5,402,833:24:0	
1577	**0**	**56**	**01:56:02.000**	**27NNRELOAD01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
1578	**0**	**56**	**01:58:39.866**	**20FN5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,402,890:61:0**	
1579	**0**	**56**	**01:58:43.200**	**20FN5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,402,890:66:0**	
1580	**0**	**56**	**01:58:46.533**	**20FN6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,402,890:71:0**	
1581	**0**	**56**	**01:58:56.533**	**20FN6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,402,890:86:0**	
1582	**0**	**56**	**01:59:10.533**	**20FN5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,402,891:16:0**	
1583	**0**	**56**	**01:59:13.866**	**20FN5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,402,891:21:0**	
1584	**0**	**56**	**01:59:53.866**	**20FN4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**5,402,891:81:0**	
1585	**0**	**56**	**02:00:53.866**	**20FN4B**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**5,402,892:80:0**	
1586	**0**	**56**	**02:00:54.533**	**20FN4C**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**5,402,892:81:0**	
1587	**0**	**56**	**02:02:55.200**	**20FN4D**	**37IOP**	**0,0**	**Safe, Grating Start Position =00**	**2R0**	**4**	**0**	**5,402,894:80:0**	
1588	**0**	**56**	**02:02:55.866**	**20FN4E**	**37ETB**	**04,C4,02,00,00**	**Loads wavelength edit table**	**2R0**	**4**	**0**	**5,402,894:81:0**	
1589	**0**	**56**	**02:06:58.533**	**20FN4F**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**260**	**4**	**0**	**5,402,898:81:0**	
1590	0	56	02:07:04.533	488AQ6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	260	4	0	5,402,898:90:0	
1591	**0**	**56**	**02:07:59.200**	**20FN4G**	**37IST**	**1,1,0,OFF,0,0,0**	**Chopper OFF, N/A, 63Hz (Ref)**	**2O0**	**4**	**0**	**5,402,899:81:0**	
1592	**0**	**56**	**02:08:59.866**	**20FN4H**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**2O0**	**4**	**0**	**5,402,900:81:0**	
1593	**0**	**56**	**02:10:11.333**	**27NNRELOAD01-**		**-----STOP-------**		**2O0**	**4**	**0**	**: :**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1594	0	56	02:45:43.200	488AQ6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,402,937:19:0	
1595	0	56	02:54:36.533	176TB6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	5,402,946:00:0	
1596	0	56	02:59:59.866		DMS:	: READY	RDY, TRACK 2, REV, TIC 3427.38 +/- 6	2O0	4	0	5,402,951:30:0	
1597	**0**	**56**	**03:00:00.000**	**20A3EW**	**37A**	**Final Condition**	**NIMS Power ON**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1598	**0**	**56**	**03:00:00.000**	**20A3EZ**	**37C2PR**	**Final Condition**	**Optics Heater 2 OFF (primary relay)**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1599	**0**	**56**	**03:00:00.000**	**20A3FA**	**37F1PR**	**Final Condition**	**Radiator Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1600	**0**	**56**	**03:00:00.000**	**20A3FE**	**40T1PR**	**Final Condition**	**PCT Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1601	**0**	**56**	**03:00:00.000**	**20A3FF**	**40T2R**	**Final Condition**	**PCT Heater 2 OFF**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1602	**0**	**56**	**03:00:00.000**	**20A3EX**	**37HR**	**Final Condition**	**Replacement Heaters OFF**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1603	**0**	**56**	**03:00:00.000**	**20A3EY**	**37C1PR**	**Final Condition**	**Optics Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1604	**0**	**56**	**03:00:00.000**	**20A3FB**	**37F2PR**	**Final Condition**	**Shield Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1605	**0**	**56**	**03:00:00.000**	**20A3FD**	**40HRPR**	**Final Condition**	**RCT Heater OFF (primary relay)**	**2O0**	**4**	**0**	**5,402,951:30:2**	
1606	**0**	**71**	**02:00:25.800**	**27NNPCTRLT01-**		**-----START------**					: :	
1607	**0**	**71**	**09:50:35.800**	**27NNPCTRLT01-**		**-----STOP-------**					: :	
1608	**0**	**72**	**10:00:31.733**	**27NNRCTRLT01-**		**-----START------**					: :	
1609	**0**	**72**	**23:16:16.399**	**27NNRCTRLT01-**		**-----STOP-------**					: :	

			Sequence:	I27BDD		Created: 02/24/00	Begin: 00-057/20:00:00 Finish: 00-138/10:00:00				
Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
1	0	57	19:59:59.800		DMS:	: READY	RDY, TRACK 2, REV, TIC 3427.38 +/- 6				5,405,384:27:0
2	**0**	**57**	**20:00:00.000**	**20A3FD**	**40HRPR**	**Initial Condition**	**RCT Heater OFF (primary relay)**				**5,405,384:27:3**
3	**0**	**57**	**20:00:00.000**	**20A3FB**	**37F2PR**	**Initial Condition**	**Shield Flash Heater OFF (primary relay)**				**5,405,384:27:3**
4	**0**	**57**	**20:00:00.000**	**20A3FA**	**37F1PR**	**Initial Condition**	**Radiator Flash Heater OFF (primary relay)**				**5,405,384:27:3**
5	**0**	**57**	**20:00:00.000**	**20A3EZ**	**37C2PR**	**Initial Condition**	**Optics Heater 2 OFF (primary relay)**				**5,405,384:27:3**
6	**0**	**57**	**20:00:00.000**	**20A3EY**	**37C1PR**	**Initial Condition**	**Optics Heater 1 OFF (primary relay)**				**5,405,384:27:3**
7	**0**	**57**	**20:00:00.000**	**20A3EX**	**37HR**	**Initial Condition**	**Replacement Heaters OFF**				**5,405,384:27:3**
8	**0**	**57**	**20:00:00.000**	**20A3FF**	**40T2R**	**Initial Condition**	**PCT Heater 2 OFF**				**5,405,384:27:3**
9	**0**	**57**	**20:00:00.000**	**20A3FE**	**40T1PR**	**Initial Condition**	**PCT Heater 1 OFF (primary relay)**				**5,405,384:27:3**
10	**0**	**57**	**20:00:00.000**	**20A3EW**	**37AR**	**Initial Condition**	**NIMS Power OFF**				**5,405,384:27:3**
11	**0**	**57**	**20:00:41.133**	**432JA6B**	**6RTDS2**	**NIMDSL,AACDSL,RT**	**NIMS R/T DESELECTAACS DESELECT**				**5,405,384:89:0**
12	0	57	20:00:41.800	432JA431A6A	6RCDSL	DDSDSL,PLSNCG,EP	Record Deselect (DDS o				5,405,384:90:0
13	0	57	20:00:42.466	432JA6C	6RTSL1		R/T Select of DDS and				5,405,385:00:0
14	0	57	20:02:30.466	20OA6A	6HICON						5,405,386:71:0
15	0	57	20:02:59.800	488AE6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan				5,405,387:24:0
16	0	57	20:07:47.133	465KZ6A	6DMSC	RDY,2	DMS Control Tape stop				5,405,392:00:0
17	0	57	20:09:48.466	176TE6A	6TMREC	IPB	INITIATE PLAYBACK (PB CONTROL) Record Mod				5,405,394:00:0
18	**0**	**57**	**20:21:09.800**	**20ZU3Q**	**37HR**		**1 Replacement Heaters OFF**				**5,405,405:21:0**
19	**0**	**57**	**20:21:11.800**	**20ZU3S**	**37HR**		**2 Replacement Heaters OFF**				**5,405,405:24:0**
20	**0**	**57**	**20:21:37.800**	**20ZU3R**	**37A**		**1 NIMS Power ON PHASE 0**	**260**	**4**	**0**	**5,405,405:63:0**
21	**0**	**57**	**20:21:39.800**	**20ZU3T**	**37A**		**2 NIMS Power ON**	**260**	**4**	**0**	**5,405,405:66:0**
22	**0**	**57**	**20:23:39.133**	**20ZU4A**	**37IST**	**1,1,0,OFF,0,0,0**	**Chopper OFF, N/A, 63Hz (Ref)**	**2O0**	**4**	**0**	**5,405,407:63:0**
23	0	57	21:35:04.466	488AF6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,405,478:30:0
24	0	57	22:04:10.466	488AF6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,405,507:10:0
25	0	57	23:48:48.466	488AF6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,405,610:54:0
26	0	58	01:37:54.466	488AF6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,405,718:45:0
27	0	58	03:04:21.133	488AF6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	2O0	4	0	5,405,803:90:0
28	0	58	06:41:57.733	488AG6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,406,019:19:0
29	0	58	08:37:09.733	488AG6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,406,133:13:0
30	0	58	09:19:35.066	488AG6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,406,175:09:0
31	0	58	09:21:57.733	488AG6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,406,177:41:0
32	0	58	09:32:37.733	488AG6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,406,188:00:0
33	0	59	00:44:34.400	488AH6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,407,089:84:0
34	0	59	00:56:47.066	176UW6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	5,407,102:00:0
35	0	59	01:01:59.733	20UQ4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	5,407,107:14:0
36	0	59	01:02:59.733	20UQ4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	2O0	4	0	5,407,108:13:0
37	0	59	01:04:53.066	488AH6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,407,110:01:0
38	0	59	01:04:59.733	20UQ4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	5,407,110:11:0
39	0	59	01:10:29.733	20UQ4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	2O0	4	0	5,407,115:51:0
40	0	59	01:10:30.400	20UQ4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	2O0	4	0	5,407,115:52:0
41	0	59	01:10:50.400	20UQ4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	2O0	4	0	5,407,115:82:0
42	0	59	01:10:51.066	20UQ4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	2O0	4	0	5,407,115:83:0
43	0	59	01:11:11.066	20UQ4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	2O0	4	0	5,407,116:22:0
44	0	59	01:11:11.733	20UQ4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	2O0	4	0	5,407,116:23:0
45	0	59	01:11:21.733	20UQ4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	2O0	4	0	5,407,116:38:0
46	0	59	01:11:22.400	20UQ4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	2O0	4	0	5,407,116:39:0
47	0	59	01:11:32.400	20UQ4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	2O0	4	0	5,407,116:54:0
48	0	59	01:11:33.066	20UQ4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	2O0	4	0	5,407,116:55:0
49	0	59	01:13:19.733	20UQ4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	2O0	4	0	5,407,118:33:0
50	0	59	01:13:20.400	20UQ4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	2O0	4	0	5,407,118:34:0
51	0	59	01:13:40.400	20UQ4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	2O0	4	0	5,407,118:64:0
52	0	59	01:13:41.066	20UQ4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	2O0	4	0	5,407,118:65:0
53	0	59	01:14:01.066	20UQ4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	2O0	4	0	5,407,119:04:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
54	0	59	01:14:01.733	20UQ4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	2O0	4	0	5,407,119:05:0	
55	0	59	01:14:11.733	20UQ4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	2O0	4	0	5,407,119:20:0	
56	0	59	01:14:12.400	20UQ4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	2O0	4	0	5,407,119:21:0	
57	0	59	01:14:22.400	20UQ4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	2O0	4	0	5,407,119:36:0	
58	0	59	01:14:23.066	20UQ4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	2O0	4	0	5,407,119:37:0	
59	0	59	01:15:19.733	20UQ4Z	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	5,407,120:31:0	
60	0	59	01:40:03.733	20UW4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	5,407,144:73:0	
61	0	59	01:40:53.733	20UW4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	5,407,145:57:0	
62	0	59	01:42:17.066	176UX6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	5,407,147:00:0	
63	0	59	03:10:45.066	488AH6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	2O0	4	0	5,407,234:45:0	
64	0	59	06:27:01.066	488AH6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	2O0	4	0	5,407,428:55:0	
65	0	59	08:32:53.066	488AI6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,407,553:08:0	
66	0	59	09:15:52.400	488AI6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,407,595:55:0	
67	0	59	10:24:31.733	488AI6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,407,663:46:0	
68	0	59	11:52:30.400	488AI6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,407,750:47:0	
69	0	59	12:26:09.733	488AI6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	5,407,783:73:0	
70	0	59	19:47:01.666	488AJ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	5,408,219:75:0	
71	**0**	**59**	**20:24:03.666**	**20ZF5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**5,408,256:41:0**	
72	**0**	**59**	**20:24:10.333**	**20ZF5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**5,408,256:51:0**	
73	**0**	**59**	**20:24:17.000**	**20ZF6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**5,408,256:61:0**	
74	**0**	**59**	**20:24:27.000**	**20ZF6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**5,408,256:76:0**	
75	**0**	**59**	**20:24:37.000**	**20ZF5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**5,408,257:00:0**	
76	**0**	**59**	**20:24:38.333**	**20ZF5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**5,408,257:02:0**	
77	**0**	**59**	**20:24:49.666**	**20ZF4A**	**37IST**	**1,1,0,OFF,0,1,1**	**Chopper OFF, N/A, 63Hz (Ref)Gain State 4**	**4O0**	**4**	**0**	**5,408,257:19:0**	
78	0	59	20:31:49.666	488AJ6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,408,264:12:0	
79	0	59	20:37:29.666	488AJ6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,408,269:67:0	
80	0	59	20:55:17.666	488AJ6D	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	4O0	4	0	5,408,287:31:0	
81	0	59	23:59:59.000	431MA6A	6RCSEL	DDSSEL,PLSNCG,EP	Record Select (DDS onl	4O0	4	0	5,408,470:00:0	
82	0	60	05:16:45.000	488AK6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	4O0	4	0	5,408,783:26:0	
83	**0**	**60**	**06:00:00.333**	**480EO6A**	**6MROH**	**17,68EF,14,B2**	**read from B1A2B17,68EF,14,B**	**4O0**	**4**	**0**	**5,408,826:06:0**	
84	0	60	06:07:49.000	488AK6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,408,833:72:0	
85	0	60	08:22:13.000	488AK6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,408,966:65:0	
86	0	60	09:14:31.666	488AK6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,409,018:41:0	
87	0	60	09:17:41.000	488AK6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,409,021:52:0	
88	0	60	09:28:21.000	488AL6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,409,032:11:0	
89	0	61	00:14:19.600	488AM6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,409,908:33:0	
90	0	61	01:04:53.600	488AM6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,409,958:34:0	
91	0	61	03:40:37.600	488AM6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	4O0	4	0	5,410,112:36:0	
92	0	61	05:42:12.933	488AM6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,410,232:59:0	
93	0	61	08:17:56.933	488AN6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,410,386:61:0	
94	0	61	09:09:27.600	488AN6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,410,437:56:0	
95	0	61	09:11:16.933	488AN6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,410,439:38:0	
96	0	61	09:26:12.933	488AN6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,410,454:17:0	
97	0	61	15:17:27.600	488AO6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,410,801:52:0	
98	0	61	17:21:56.933	488AO6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,410,924:63:0	
99	0	61	20:12:36.933	488AO6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,411,093:44:0	
100	0	61	20:27:34.266	488AO6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,411,108:25:0	
101	0	61	20:36:04.933	488AO6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,411,116:63:0	
102	0	62	00:19:32.933	488AP6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,411,337:64:0	
103	0	62	00:24:20.933	488AP6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,411,342:41:0	
104	0	62	00:54:12.933	488AP6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,411,371:90:0	
105	0	62	01:32:48.933	488AP6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,411,410:15:0	
106	0	62	02:06:28.266	488AP6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,411,443:41:0	
107	0	62	08:22:13.533	488AQ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,411,815:07:0	
108	0	62	08:56:16.866	488AQ6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,411,848:69:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
109	0	62	09:02:45.533	488AQ6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,411,855:15:0	
110	0	62	09:17:41.533	488AQ6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,411,869:85:0	
111	0	62	15:17:20.866	488AR6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,412,225:58:0	
112	0	62	16:56:20.866	488AR6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,412,323:50:0	
113	0	62	20:06:12.866	488AR6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,412,511:30:0	
114	0	62	20:28:22.200	488AR6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,412,533:22:0	
115	0	62	20:40:20.866	488AR6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,412,545:08:0	
116	0	63	00:19:05.533	488AS6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,412,761:39:0	
117	0	63	01:09:08.866	488AS6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,412,810:85:0	
118	0	63	08:03:00.866	488AT6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,413,220:23:0	
119	0	63	09:00:23.533	488AT6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,413,277:00:0	
120	0	63	09:09:08.866	488AT6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,413,285:60:0	
121	0	63	15:56:37.466	488AU6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,413,688:60:0	
122	0	63	16:04:00.133	488AU6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,413,695:87:0	
123	0	63	20:01:57.466	488AU6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,413,931:27:0	
124	0	63	20:23:15.466	488AU6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,413,952:33:0	
125	0	63	20:33:57.466	488AU6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,413,962:86:0	
126	0	64	00:18:58.133	488AV6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,414,185:44:0	
127	0	64	01:09:08.800	488AV6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,414,235:10:0	
128	0	64	07:52:20.800	488AW6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,414,633:80:0	
129	0	64	09:02:44.800	488AW6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,414,703:46:0	
130	0	64	09:32:36.800	488AW6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,414,733:04:0	
131	0	64	10:19:32.800	488AW6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,414,779:42:0	
132	0	64	10:28:05.466	488AW6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,414,787:83:0	
133	0	64	11:01:44.133	488AX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,414,821:17:0	
134	0	64	19:02:12.800	488AY6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,415,296:35:0	
135	0	64	20:06:12.800	488AY6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,415,359:62:0	
136	0	64	20:16:54.066	488AY6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,415,370:23:0	
137	0	64	20:33:57.400	488AY6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,415,387:11:0	
138	0	65	00:18:51.400	488AY6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,415,609:50:0	
139	0	65	01:09:09.400	488AZ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,415,659:27:0	
140	0	65	07:45:56.733	488BA6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,416,051:66:0	
141	0	65	08:56:20.733	488BA6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,416,121:32:0	
142	0	65	09:30:28.733	488BA6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,416,155:10:0	
143	0	65	19:51:16.733	488BB6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,416,769:08:0	
144	0	65	20:18:32.733	488BB6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,416,796:05:0	
145	0	65	20:21:08.733	488BB6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,416,798:57:0	
146	0	65	20:36:04.733	488BB6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,416,813:36:0	
147	0	66	00:00:04.733	488BB6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,417,015:14:0	
148	0	66	00:09:24.733	488BC6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,417,024:35:0	
149	0	66	01:13:24.733	488BC6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,417,087:62:0	
150	0	66	07:37:25.333	488BD6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,417,467:43:0	
151	0	66	08:52:05.333	488BD6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,417,541:29:0	
152	0	66	09:21:57.333	488BD6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,417,570:78:0	
153	0	66	10:08:53.333	488BD6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,417,617:25:0	
154	0	66	10:10:00.666	488BD6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,417,618:35:0	
155	0	67	08:53:56.000	488BE6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,418,967:29:0	
156	0	67	08:58:28.666	488BE6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,418,971:74:0	
157	0	67	09:28:20.666	488BE6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,419,001:32:0	
158	0	67	19:36:21.266	488BF6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,419,602:62:0	
159	0	67	20:10:29.266	488BF6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,419,636:40:0	
160	0	67	20:11:34.600	488BF6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,419,637:47:0	
161	0	67	20:29:41.266	488BF6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,419,655:39:0	
162	0	68	00:19:51.266	488BF6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,419,883:06:0	
163	0	68	01:13:24.600	488BG6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,419,936:03:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
164	0	68	01:48:29.933	488BG6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,419,970:67:0	
165	0	68	02:22:09.266	488BG6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,420,004:02:0	
166	0	68	07:22:28.600	488BH6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,420,301:04:0	
167	0	68	08:26:28.600	488BH6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,420,364:31:0	
168	0	68	08:36:30.600	488BH6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,420,374:24:0	
169	0	68	08:54:12.600	488BH6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,420,391:70:0	
170	0	68	17:08:26.600	488BI6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,420,880:52:0	
171	0	68	19:32:04.600	488BI6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,421,022:57:0	
172	0	68	20:06:13.200	488BI6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,421,056:36:0	
173	0	68	20:11:27.200	488BI6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,421,061:52:0	
174	0	68	20:29:41.200	488BI6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,421,079:55:0	
175	0	69	02:36:37.866	488BJ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,421,442:47:0	
176	0	69	07:11:48.533	488BJ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,421,714:61:0	
177	0	69	08:36:56.533	488BK6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,421,798:79:0	
178	0	69	08:37:08.533	488BK6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,421,799:06:0	
179	0	69	09:07:00.533	488BK6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,421,828:55:0	
180	0	69	16:18:20.533	488BL6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,422,255:18:0	
181	0	69	17:48:33.200	488BL6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,422,344:38:0	
182	0	69	17:56:04.533	488BL6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,422,351:78:0	
183	0	69	18:23:39.866	488BL6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,422,379:13:0	
184	0	69	19:32:04.533	488BL6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,422,446:73:0	
185	0	69	20:04:53.866	488BM6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,422,479:24:0	
186	0	69	20:16:52.533	488BM6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,422,491:10:0	
187	0	69	20:53:08.533	488BM6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,422,526:89:0	
188	0	70	00:03:18.533	488BM6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,422,715:05:0	
189	0	70	01:24:04.533	488BM6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,422,794:85:0	
190	0	70	01:52:59.866	488BN6A	6TMSED	NORM,AH5	Sci, Eng, and D/L Chan	4O0	4	0	5,422,823:49:0	
191	0	70	01:56:29.866	176UA6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,422,827:00:0	
192	0	70	02:05:59.866	20RP4C	7STAT	10.00,215.39,-13	Stator inertial point	4O0	4	0	5,422,836:36:0	
193	**0**	**70**	**02:06:11.866**	**20RP6D**	**6MROH**	**7,6744,0,A10**	**read from AACSA7,6744,0,A10**	**4O0**	**4**	**0**	**5,422,836:54:0**	
194	0	70	02:25:01.866	490UA412A4B	**7MODE**	**INT**	AACS INERTIAL MODE	4O0	4	0	5,422,855:20:0	
195	0	70	02:29:59.866	490UA412A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,422,860:12:0	
196	0	70	02:30:19.866	20RP4D	7STAT	17.45,215.39,-13	Stator inertial point	4O0	4	0	5,422,860:42:0	
197	0	70	02:34:09.866	490UA412A4E	7VECT		Inert vect update UTC	4O0	4	0	5,422,864:23:0	
198	0	70	02:34:13.866	490UA412A4F	7TURN	2,RTH	ALERT Thruster	4O0	4	0	5,422,864:29:0	
199	0	70	02:38:01.866	490UA412A406A4A	7VECT		Inert vect update UTC	4O0	4	0	5,422,868:07:0	
200	0	70	02:38:03.866	490UA412A406A4B	7STAR	11,610,278.81	Star catalog update	4O0	4	0	5,422,868:10:0	
201	0	70	02:38:05.866	490UA412A406A4C	7STAR	2,714,297.09	Star catalog update	4O0	4	0	5,422,868:13:0	
202	0	70	02:38:07.866	490UA412A406A4D	7STAR	3,395,305.43	Star catalog update	4O0	4	0	5,422,868:16:0	
203	0	70	02:38:09.866	490UA412A406A4E	7STAR	4,0,0.0,0.0	Star catalog update	4O0	4	0	5,422,868:19:0	
204	0	70	02:38:11.866	490UA412A406A4F	7STAR	5,0,0.0,0.0	Star catalog update	4O0	4	0	5,422,868:22:0	
205	0	70	02:38:13.866	490UA412A406A4G	7STAR	6,0,0.0,0.0	Star catalog update	4O0	4	0	5,422,868:25:0	
206	0	70	02:48:05.866	20RP4F	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,422,878:03:0	
207	0	70	02:56:09.866	490UA412A4G	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,422,886:01:0	
208	0	70	04:30:03.800	20US4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,422,978:80:0	
209	0	70	04:30:53.800	20US4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,422,979:64:0	
210	0	70	04:30:59.800	488BN6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,422,979:73:0	
211	0	70	04:32:12.466	176UB6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,422,981:00:0	
212	0	70	07:01:09.133	488BN6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,423,128:28:0	
213	0	70	08:30:45.133	488BO6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,423,216:84:0	
214	0	70	08:32:53.800	488BO6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,423,219:04:0	
215	0	70	08:41:25.133	488BO6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,423,227:43:0	
216	0	70	09:17:41.133	488BO6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,423,263:31:0	
217	0	70	11:18:15.133	488BO6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,423,382:53:0	
218	0	70	19:21:24.466	488BP6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,423,860:39:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
219	0	70	20:01:38.466	488BP6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,423,900:20:0
220	0	70	20:01:56.466	488BP6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,423,900:47:0
221	0	70	20:19:00.466	488BP6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,423,917:36:0
222	0	71	00:08:12.466	488BP6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,424,144:07:0
223	0	71	01:19:48.466	488BQ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,424,214:81:0
224	**0**	**71**	**02:00:25.800**	**27NNPCTRLT01-**		**-----START------**		**4O0**	**4**	**0**	**: :**
225	0	71	07:01:08.466	488BQ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,424,552:43:0
226	0	71	08:04:21.800	176FB6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,424,615:00:0
227	0	71	08:07:30.466	444FB443A4A	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,424,618:10:0
228	0	71	08:11:30.466	444FB443A4B	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	4O0	4	0	5,424,622:06:0
229	0	71	08:20:30.466	444FB443A4C	**7CLK**	**17.45,0.0**	Check S/P Position	4O0	4	0	5,424,630:88:0
230	0	71	08:23:29.800	125FB	NIMSINIT	GS	##### GROUP START INIT	4O0	4	0	5,424,633:84:0
231	**0**	**71**	**08:23:29.800**	**125FB4A**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**460**	**4**	**0**	**5,424,633:84:0**
232	**0**	**71**	**08:24:30.466**	**125FB4B**	**37IST**	**1,2,0,OFF,0,1,1**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**4R0**	**4**	**0**	**5,424,634:84:0**
233	0	71	08:25:31.133	125FB11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	5,424,635:84:0
234	**0**	**71**	**08:25:31.133**	**125FB4C**	**37MB**	**1B,1B,0,0,0,0**	**Selects mirror (spatial) edit table**	**4R0**	**4**	**0**	**5,424,635:84:0**
235	0	71	08:26:28.466	488BR6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4R0	4	0	5,424,636:79:0
236	0	71	08:28:33.133	127FB	NIMSTAB	GS	%%%%% GROUP START TAB	4R0	4	0	5,424,638:84:0
237	**0**	**71**	**08:28:33.133**	**127FB4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**5,424,638:84:0**
238	**0**	**71**	**08:28:33.800**	**127FB4B**	**37ETB**	**0A,CA,19,FF,C0,1**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**5,424,638:85:0**
239	0	71	08:28:41.800	127FB11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	5,424,639:06:0
240	**0**	**71**	**08:28:57.800**	**432FB6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**4R3**	**4**	**0**	**5,424,639:30:0**
241	**0**	**71**	**08:30:57.800**	**432FC6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**4R3**	**4**	**0**	**5,424,641:28:0**
242	0	71	08:31:39.800	192FC4A	**7CONE**	**17.0,54.88**	Check S/P Position	4R3	4	0	5,424,642:00:0
243	0	71	08:31:40.466	192FC4B	**7CLK**	**17.0,244.07**	Check S/P Position	4R3	4	0	5,424,642:01:0
244	**0**	**71**	**08:35:01.800**	**432FD6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**4R3**	**4**	**0**	**5,424,645:30:0**
245	0	71	08:37:08.466	488BR6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	5,424,647:38:0
246	**0**	**71**	**08:45:07.133**	**432FE6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**4R3**	**4**	**0**	**5,424,655:28:0**
247	**0**	**71**	**08:45:44.466**	**127FE4A**	**37IOP**	**0,0**	**Safe, Grating Start Position =00**	**4R0**	**4**	**0**	**5,424,655:84:0**
248	0	71	08:45:44.466	127FE	NIMSTAB	GS	%%%%% GROUP START TAB	4R0	4	0	5,424,655:84:0
249	**0**	**71**	**08:45:45.133**	**127FE4B**	**37ETB**	**04,C4,02,00,00**	**Loads wavelength edit table**	**4R0**	**4**	**0**	**5,424,655:85:0**
250	0	71	08:45:53.133	127FE11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R0	4	0	5,424,656:06:0
251	0	71	08:45:53.133	20FE4A	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4R0	4	0	5,424,656:06:0
252	**0**	**71**	**08:47:45.800**	**125FE4A**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**460**	**4**	**0**	**5,424,657:84:0**
253	0	71	08:47:45.800	125FE	NIMSINIT	GS	##### GROUP START INIT	460	4	0	5,424,657:84:0
254	**0**	**71**	**08:48:46.466**	**125FE4B**	**37IST**	**1,1,0,OFF,0,0,0**	**Chopper OFF, N/A, 63Hz (Ref)**	**4O0**	**4**	**0**	**5,424,658:84:0**
255	0	71	08:49:47.133	125FE11A	NIMSINIT	GE	##### GROUP END INIT	4O0	4	0	5,424,659:84:0
256	**0**	**71**	**08:49:47.133**	**125FE4C**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**4O0**	**4**	**0**	**5,424,659:84:0**
257	0	71	08:50:59.133	444FF443A4A	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,424,661:10:0
258	0	71	08:54:12.466	488BR6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,424,664:27:0
259	0	71	08:54:59.133	444FF443A4B	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,424,665:06:0
260	0	71	09:09:12.466	20FH4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,424,679:12:0
261	0	71	09:10:02.466	20FH4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,424,679:87:0
262	0	71	09:11:05.800	176FH6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,424,681:00:0
263	0	71	09:24:04.466	488BR6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,424,693:76:0
264	**0**	**71**	**09:50:35.800**	**27NNPCTRLT01-**		**-----STOP-------**		**4O0**	**4**	**0**	**: :**
265	0	71	19:21:25.066	488BS6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,425,284:56:0
266	0	71	19:55:33.066	488BS6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,425,318:34:0
267	0	71	19:56:09.066	488BS6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,425,318:88:0
268	0	71	20:14:45.066	488BS6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,425,337:33:0
269	0	72	01:10:38.400	176XU6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,425,630:00:0
270	0	72	01:13:44.400	20XE4A	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,425,633:06:0
271	0	72	01:14:25.733	488BS6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,425,633:68:0
272	0	72	01:17:51.066	20DA4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,425,637:12:0
273	0	72	01:18:41.066	20DA4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,425,637:87:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
274	0	72	01:20:45.066	176XV6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,425,640:00:0	
275	**0**	**72**	**01:21:45.733**	**185XE10A3A**	**40HRP**	**1**	**RCT Heater ON (primary relay)**	**4O0**	**4**	**0**	**5,425,641:00:0**	
276	**0**	**72**	**01:21:51.066**	**185XE10B3A**	**40HRP**	**2**	**RCT Heater ON (primary relay)**	**4O0**	**4**	**0**	**5,425,641:08:0**	
277	0	72	01:24:04.400	488BT6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,425,643:26:0	
278	0	72	02:43:55.066	488BT6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,425,722:23:0	
279	0	72	03:17:34.400	488BT6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,425,755:49:0	
280	0	72	07:01:08.400	488BT6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,425,976:59:0	
281	0	72	08:11:32.400	488BU6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,426,046:25:0	
282	0	72	08:47:48.400	488BU6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,426,082:13:0	
283	0	72	09:19:48.400	488BU6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,426,113:72:0	
284	0	72	09:58:57.066	488BU6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,426,152:46:0	
285	**0**	**72**	**10:00:31.733**	**27NNRCTRLT01-**		**-----START------**		**4O0**	**4**	**0**	**: :**	
286	0	72	10:32:36.400	488BU6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,426,185:72:0	
287	**0**	**72**	**13:16:32.400**	**125XE4A**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**460**	**4**	**0**	**5,426,347:84:0**	
288	0	72	13:16:32.400	125XE	NIMSINIT	GS	##### GROUP START INIT	460	4	0	5,426,347:84:0	
289	**0**	**72**	**13:17:33.066**	**125XE4B**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**4R0**	**4**	**0**	**5,426,348:84:0**	
290	**0**	**72**	**13:18:33.733**	**125XE4C**	**37IST**	**0,2,0,OFF,0,1,3**	**Gain State 1**	**1R0**	**4**	**0**	**5,426,349:84:0**	
291	0	72	13:19:34.400	125XE11A	NIMSINIT	GE	##### GROUP END INIT	1R0	4	0	5,426,350:84:0	
292	**0**	**72**	**13:19:34.400**	**125XE4D**	**37MB**	**1B,1B,0,0,0,0**	**Selects mirror (spatial) edit table**	**1R0**	**4**	**0**	**5,426,350:84:0**	
293	0	72	13:21:35.733	127XE	NIMSTAB	GS	%%%%% GROUP START TAB	1R0	4	0	5,426,352:84:0	
294	**0**	**72**	**13:21:35.733**	**127XE4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**1R3**	**4**	**0**	**5,426,352:84:0**	
295	**0**	**72**	**13:21:36.400**	**127XE4B**	**37ETB**	**0A,CA,18,03,FF,1**	**Loads wavelength edit table**	**1R3**	**4**	**0**	**5,426,352:85:0**	
296	0	72	13:21:44.400	127XE11A	NIMSTAB	GE	%%%%% GROUP END TAB	1R3	4	0	5,426,353:06:0	
297	0	72	13:25:43.066	176XE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1R3	4	0	5,426,357:00:0	
298	0	72	13:31:47.066	192XE4A	**7CONE**	**17.0,119.7**	Check S/P Position	1R3	4	0	5,426,363:00:0	
299	**0**	**72**	**13:34:08.400**	**432XE6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**1R3**	**4**	**0**	**5,426,365:30:0**	
300	**0**	**72**	**13:35:07.733**	**432XF6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**1R3**	**4**	**0**	**5,426,366:28:0**	
301	0	72	13:37:51.066	192XE4B	**7CONE**	**17.0,0.0**	Check S/P Position	1R3	4	0	5,426,369:00:0	
302	**0**	**72**	**13:40:12.400**	**432XU6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**1R3**	**4**	**0**	**5,426,371:30:0**	
303	**0**	**72**	**13:42:12.400**	**432XV6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**1R3**	**4**	**0**	**5,426,373:28:0**	
304	0	72	13:43:55.066	192XE4C	**7CONE**	**17.0,119.7**	Check S/P Position	1R3	4	0	5,426,375:00:0	
305	**0**	**72**	**13:45:56.400**	**185XE10C3A**	**40HRPR**	**1**	**RCT Heater OFF (primary relay)**	**1R3**	**4**	**0**	**5,426,377:00:0**	
306	**0**	**72**	**13:46:01.733**	**185XE10D3A**	**40HRPR**	**2**	**RCT Heater OFF (primary relay)**	**1R3**	**4**	**0**	**5,426,377:08:0**	
307	**0**	**72**	**13:46:16.400**	**432XW6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**1R3**	**4**	**0**	**5,426,377:30:0**	
308	**0**	**72**	**13:47:15.733**	**432XY6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**1R3**	**4**	**0**	**5,426,378:28:0**	
309	0	72	13:48:53.733	125DC	NIMSINIT	GS	##### GROUP START INIT	1R3	4	0	5,426,379:84:0	
310	0	72	13:48:53.733	125DC11A	NIMSINIT	GE	##### GROUP END INIT	1R3	4	0	5,426,379:84:0	
311	**0**	**72**	**13:48:53.733**	**125DC4A**	**37IST**	**0,2,0,OFF,0,1,1**	**Gain State 4**	**4R3**	**4**	**0**	**5,426,379:84:0**	
312	**0**	**72**	**13:49:54.400**	**127DC4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**5,426,380:84:0**	
313	0	72	13:49:54.400	127DC	NIMSTAB	GS	%%%%% GROUP START TAB	4R3	4	0	5,426,380:84:0	
314	**0**	**72**	**13:49:55.066**	**127DC4B**	**37ETB**	**07,C7,31,80,00,0**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**5,426,380:85:0**	
315	0	72	13:49:59.066	192XE4D	**7CONE**	**17.0,153.0**	Check S/P Position	4R3	4	0	5,426,381:00:0	
316	0	72	13:50:03.066	127DC11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	5,426,381:06:0	
317	**0**	**72**	**13:50:19.066**	**432DC6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**4R3**	**4**	**0**	**5,426,381:30:0**	
318	0	72	13:50:55.066	125DD11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	5,426,381:84:0	
319	0	72	13:50:55.066	125DD	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	5,426,381:84:0	
320	**0**	**72**	**13:50:55.066**	**125DD4A**	**37IST**	**0,2,1,OFF,1,0,1**	**OPCAL**	**4R3**	**4**	**0**	**5,426,381:84:0**	
321	0	72	13:52:56.400	125DE11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	5,426,383:84:0	
322	0	72	13:52:56.400	125DE	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	5,426,383:84:0	
323	**0**	**72**	**13:52:56.400**	**125DE4A**	**37IST**	**0,2,1,OFF,1,0,1**	**OPCAL**	**4R3**	**4**	**0**	**5,426,383:84:0**	
324	**0**	**72**	**13:53:19.733**	**432DE6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**4R3**	**4**	**0**	**5,426,384:28:0**	
325	**0**	**72**	**13:56:59.066**	**127XF4A**	**37IOP**	**0,0**	**Safe, Grating Start Position =00**	**4R0**	**4**	**0**	**5,426,387:84:0**	
326	0	72	13:56:59.066	127XF	NIMSTAB	GS	%%%%% GROUP START TAB	4R0	4	0	5,426,387:84:0	
327	**0**	**72**	**13:56:59.733**	**127XF4B**	**37ETB**	**04,C4,02,00,00**	**Loads wavelength edit table**	**4R0**	**4**	**0**	**5,426,387:85:0**	
328	0	72	13:57:07.733	127XF11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R0	4	0	5,426,388:06:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
329	0	72	14:00:01.066	125XF	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	5,426,390:84:0	
330	**0**	**72**	**14:00:01.066**	**125XF4A**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**4R0**	**4**	**0**	**5,426,390:84:0**	
331	**0**	**72**	**14:01:01.733**	**125XF4B**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**460**	**4**	**0**	**5,426,391:84:0**	
332	**0**	**72**	**14:02:02.400**	**125XF4C**	**37IST**	**1,1,0,OFF,0,0,0**	**Chopper OFF, N/A, 63Hz (Ref)**	**4O0**	**4**	**0**	**5,426,392:84:0**	
333	0	72	14:02:02.400	125XF11A	NIMSINIT	GE	##### GROUP END INIT	4O0	4	0	5,426,392:84:0	
334	0	72	14:18:25.733	20DB4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,426,409:12:0	
335	0	72	14:19:15.733	20DB4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,426,409:87:0	
336	0	72	14:21:19.733	176XF6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,426,412:00:0	
337	0	72	15:29:23.066	488BV6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,426,479:28:0	
338	**0**	**72**	**23:16:16.399**	**27NNRCTRLT01-**		**-----STOP-------**		**4O0**	**4**	**0**	**: :**	
339	0	73	00:47:59.666	488BW6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,427,031:71:0	
340	0	73	01:09:09.000	488BW6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,427,052:64:0	
341	0	73	07:01:08.333	488BX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,427,400:75:0	
342	0	73	08:20:04.333	488BX6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,427,478:81:0	
343	0	73	08:24:46.333	488BX6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,427,483:49:0	
344	0	73	08:30:44.333	488BX6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,427,489:40:0	
345	0	73	08:45:40.333	488BX6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,427,504:19:0	
346	0	73	11:17:57.666	488BY6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,427,654:75:0	
347	0	73	19:15:00.333	488BZ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,428,126:57:0	
348	0	73	19:51:16.333	488BZ6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,428,162:45:0	
349	0	73	19:55:57.666	488BZ6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,428,167:12:0	
350	0	73	20:12:36.333	488BZ6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,428,183:54:0	
351	0	74	05:16:05.600	488CA6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,428,721:10:0	
352	0	74	06:54:44.933	488CA6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,428,818:62:0	
353	0	74	08:20:04.933	488CA6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,428,903:07:0	
354	0	74	08:58:28.933	488CA6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,428,941:05:0	
355	0	74	09:57:04.266	488CA6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,428,999:00:0	
356	0	74	10:23:48.933	488CB6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,429,025:41:0	
357	0	74	10:32:08.266	488CB6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,429,033:62:0	
358	0	74	18:06:44.266	488CC6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,429,483:26:0	
359	0	74	19:25:40.266	488CC6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,429,561:32:0	
360	0	74	19:48:26.933	488CC6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,429,583:80:0	
361	0	74	19:59:48.266	488CC6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,429,595:10:0	
362	0	74	20:36:04.266	488CC6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,429,630:89:0	
363	0	75	01:01:01.600	488CD6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,429,893:02:0	
364	0	75	06:54:44.266	488CD6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,430,242:77:0	
365	0	75	08:15:48.266	488CE6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,430,323:02:0	
366	0	75	08:19:04.266	488CE6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,430,326:23:0	
367	0	75	08:26:28.266	488CE6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,430,333:52:0	
368	0	75	09:02:44.266	488CE6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,430,369:40:0	
369	0	75	16:17:44.200	488CF6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,430,799:60:0	
370	**0**	**75**	**18:34:48.866**	**20ZC6A**	**6MCOPY**	**B1A1A,5018,UVS,0**	**B1A1A,5018,UVS,0118,01FF**	**4O0**	**4**	**0**	**5,430,935:21:0**	
371	**0**	**75**	**19:05:08.866**	**20ZC6B**	**6MCOPY**	**B1A1A,5118,UVS,0**	**B1A1A,5118,UVS,0118,01FF**	**4O0**	**4**	**0**	**5,430,965:21:0**	
372	0	75	19:15:00.866	488CF6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,430,974:90:0	
373	0	75	19:47:56.866	488CF6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,431,007:51:0	
374	0	75	19:51:16.866	488CF6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,431,010:78:0	
375	0	75	20:06:12.866	488CF6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,431,025:57:0	
376	0	76	01:47:42.200	488CG6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,431,363:33:0	
377	0	76	03:19:19.533	488CG6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,431,453:89:0	
378	0	76	03:52:58.200	488CG6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,431,487:23:0	
379	0	76	07:01:08.200	488CG6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,431,673:32:0	
380	0	76	08:00:52.200	488CH6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,431,732:39:0	
381	0	76	08:06:32.866	488CH6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,431,738:04:0	
382	0	76	08:20:04.200	488CH6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,431,751:38:0	
383	0	76	08:56:20.200	488CH6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,431,787:26:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
384	**0**	**76**	**12:59:57.533**	**20ZD6A**	**6MCOPY**	**B1A1A,5218,UVS,0**	**B1A1A,5218,UVS,0118,01FF**	**4O0**	**4**	**0**	**5,432,028:21:0**	
385	**0**	**76**	**13:30:17.533**	**20ZD6B**	**6MCOPY**	**B1A1A,5318,UVS,0**	**B1A1A,5318,UVS,0118,01FF**	**4O0**	**4**	**0**	**5,432,058:21:0**	
386	0	77	02:00:49.466	488CI6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,432,800:47:0	
387	**0**	**77**	**03:07:06.133**	**20ZD6C**	**6MROH**	**17,5000,31,B2**	**read from B1A2B17,5000,31,B**	**4O0**	**4**	**0**	**5,432,866:06:0**	
388	0	77	06:54:44.133	488CI6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,433,091:18:0	
389	0	77	08:06:38.133	488CJ6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,433,162:28:0	
390	0	77	08:11:32.133	488CJ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,433,167:14:0	
391	0	77	08:47:48.133	488CJ6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,433,203:02:0	
392	0	77	12:17:34.133	488CJ6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,433,410:44:0	
393	0	77	19:10:44.133	488CK6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,433,819:10:0	
394	0	77	19:39:10.800	488CK6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,433,847:22:0	
395	0	77	19:44:52.133	488CK6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,433,852:79:0	
396	0	77	19:59:48.133	488CK6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,433,867:58:0	
397	0	77	23:27:31.466	488CK6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,434,073:07:0	
398	0	78	00:39:16.133	488CL6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,434,144:03:0	
399	0	78	06:54:44.733	488CM6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,434,515:35:0	
400	0	78	08:09:24.733	488CM6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,434,589:21:0	
401	0	78	08:47:48.733	488CM6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,434,627:19:0	
402	0	78	19:10:44.066	488CN6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,435,243:26:0	
403	0	78	19:37:31.400	488CN6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,435,269:71:0	
404	0	78	19:40:36.066	488CN6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,435,272:75:0	
405	0	78	23:27:46.733	488CN6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,435,497:46:0	
406	0	78	23:33:08.066	488CN6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,435,502:73:0	
407	0	79	00:28:36.066	488CO6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,435,557:60:0	
408	0	79	00:49:35.400	488CO6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,435,578:38:0	
409	0	79	01:23:14.733	488CO6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,435,611:64:0	
410	0	79	07:01:08.066	488CP6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,435,945:80:0	
411	0	79	07:54:28.066	488CP6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,435,998:57:0	
412	0	79	08:17:56.066	488CP6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,436,021:76:0	
413	0	79	08:43:32.066	488CP6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,436,047:14:0	
414	0	79	09:34:37.400	488CP6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,436,097:62:0	
415	0	79	10:08:16.733	488CQ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,436,130:88:0	
416	0	79	19:04:20.666	488CR6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,436,661:13:0	
417	0	79	19:37:28.000	488CR6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,436,693:82:0	
418	0	79	19:40:36.666	488CR6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,436,697:01:0	
419	0	79	19:55:32.666	488CR6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,436,711:71:0	
420	0	80	00:17:20.666	488CR6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,436,970:64:0	
421	0	80	00:28:36.000	488CS6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,436,981:76:0	
422	0	80	00:56:04.000	176UY6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,437,009:00:0	
423	0	80	01:02:00.000	20UR4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,437,014:79:0	
424	0	80	01:03:00.000	20UR4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	4O0	4	0	5,437,015:78:0	
425	0	80	01:05:00.000	20UR4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,437,017:76:0	
426	0	80	01:10:30.000	20UR4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	4O0	4	0	5,437,023:25:0	
427	0	80	01:10:30.666	20UR4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	4O0	4	0	5,437,023:26:0	
428	0	80	01:10:50.666	20UR4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	4O0	4	0	5,437,023:56:0	
429	0	80	01:10:51.333	20UR4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	4O0	4	0	5,437,023:57:0	
430	0	80	01:11:11.333	20UR4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,437,023:87:0	
431	0	80	01:11:12.000	20UR4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,437,023:88:0	
432	0	80	01:11:22.000	20UR4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,437,024:12:0	
433	0	80	01:11:22.666	20UR4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,437,024:13:0	
434	0	80	01:11:32.666	20UR4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	4O0	4	0	5,437,024:28:0	
435	0	80	01:11:33.333	20UR4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	4O0	4	0	5,437,024:29:0	
436	0	80	01:13:20.000	20UR4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	4O0	4	0	5,437,026:07:0	
437	0	80	01:13:20.666	20UR4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	4O0	4	0	5,437,026:08:0	
438	0	80	01:13:40.666	20UR4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	4O0	4	0	5,437,026:38:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
439	0	80	01:13:41.333	20UR4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	4O0	4	0	5,437,026	39:0
440	0	80	01:14:01.333	20UR4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,437,026	69:0
441	0	80	01:14:02.000	20UR4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,437,026	70:0
442	0	80	01:14:12.000	20UR4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,437,026	85:0
443	0	80	01:14:12.666	20UR4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,437,026	86:0
444	0	80	01:14:22.666	20UR4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	4O0	4	0	5,437,027	10:0
445	0	80	01:14:23.333	20UR4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	4O0	4	0	5,437,027	11:0
446	0	80	01:15:20.000	20UR4Z	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,437,028	05:0
447	0	80	01:40:04.000	20UY4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,437,052	47:0
448	0	80	01:40:54.000	20UY4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,437,053	31:0
449	0	80	01:42:34.666	176UZ6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,437,055	00:0
450	0	80	06:50:28.000	488CT6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,437,359	46:0
451	0	80	07:50:12.000	488CT6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,437,418	53:0
452	0	80	08:17:56.000	488CT6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,437,446	01:0
453	0	80	08:37:08.000	488CT6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,437,465	00:0
454	0	80	19:04:20.000	488CU6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,438,085	28:0
455	0	80	19:34:12.600	488CU6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,438,114	78:0
456	0	80	19:35:18.600	488CU6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,438,115	86:0
457	0	81	04:56:31.933	176VA6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,438,671	00:0
458	0	81	05:02:35.933		DMS:	: *SLEW-TIC	P7, TRACK *1, *FWD, TIC 3427.38 +/- 6	4O0	4	0	5,438,677	00:0
459	0	81	05:02:35.933	465WK6A	6DMST	5000	DMS Slew to TIC	4O0	4	0	5,438,677	00:0
460	0	81	05:02:35.933		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3427.38 +/- 6	4O0	4	0	5,438,677	00:0
461	0	81	05:02:42.600		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 3427.38 +/- 6	4O0	4	0	5,438,677	10:0
462	0	81	05:02:44.000		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC *3427.50 +/- 6	4O0	4	0	5,438,677	12:1
463	0	81	06:54:23.400		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *4997.94 +/- 6	4O0	4	0	5,438,787	51:2
464	0	81	06:54:24.600		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4998.00 +/- 6	4O0	4	0	5,438,787	53:0
465	0	81	08:02:33.933	488CV6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,438,854	90:0
466	0	81	08:22:11.933	488CV6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,438,874	37:0
467	0	81	09:21:55.933	488CV6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,438,933	44:0
468	0	81	09:29:47.266	488CV6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,438,941	23:0
469	0	81	10:03:26.600	488CV6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,438,974	49:0
470	0	81	10:56:17.266		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 4998.00 +/- 6	4O0	4	0	5,439,026	73:0
471	0	81	10:56:17.266	465WL6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,439,026	73:0
472	0	81	10:56:18.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4998.12 +/- 6	4O0	4	0	5,439,026	75:1
473	0	81	10:56:23.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4999.35 +/- 6	4O0	4	0	5,439,026	83:0
474	0	81	10:56:25.133		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *4999.41 +/- 6	4O0	4	0	5,439,026	84:8
475	0	81	10:56:29.000		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 4993.91 +/- 7	4O0	4	0	5,439,026	90:6
476	0	81	10:56:29.000		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *4993.91 +/- 6	4O0	4	0	5,439,026	90:6
477	0	81	11:22:09.266	465WL6B	6DMSC	RDY,4	DMS Control Tape stop	4O0	4	0	5,439,052	35:0
478	0	81	11:22:09.266		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 255.79 +/- 7	4O0	4	0	5,439,052	35:0
479	0	81	11:22:10.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 254.99 +/- 7	4O0	4	0	5,439,052	36:8
480	0	81	13:20:57.933		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 254.99 +/- 7	4O0	4	0	5,439,169	81:0
481	0	81	13:20:57.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 254.99 +/- 7	4O0	4	0	5,439,169	81:0
482	0	81	13:20:57.933	465WM6A	6DTRN	CMD,6DTRN,465WM6	DMS TRACK TURNAROUND	4O0	4	0	5,439,169	81:0
483	0	81	13:20:59.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 255.11 +/- 7	4O0	4	0	5,439,169	83:1
484	0	81	13:21:04.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 256.34 +/- 7	4O0	4	0	5,439,170	00:0
485	0	81	13:21:05.800		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 256.40 +/- 7	4O0	4	0	5,439,170	01:8
486	0	81	13:21:07.200		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 256.28 +/- 7	4O0	4	0	5,439,170	03:9
487	0	81	13:25:07.866		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/- 7	4O0	4	0	5,439,174	00:9
488	0	81	13:25:09.066		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/- 7	4O0	4	0	5,439,174	02:7
489	0	81	13:25:09.066		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/- 7	4O0	4	0	5,439,174	02:7
490	0	81	13:25:09.266	488CW6A	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	4O0	4	0	5,439,174	03:0
491	0	81	13:25:10.466		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	4O0	4	0	5,439,174	04:8
492	0	81	13:25:22.466		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	4O0	4	0	5,439,174	22:8
493	0	81	13:25:23.666		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	4O0	4	0	5,439,174	24:6

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
494	0	81	13:32:01.266	465WN6A	6DMSC	P100,1	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,439,180	75:0
495	0	81	13:32:01.266		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,439,180	75:0
496	0	81	13:32:07.933		DMS:	: *RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,439,180	85:0
497	0	81	13:32:11.800		DMS:	: *P_SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	4O0	4	0	5,439,180	90:8
498	0	81	13:32:11.800		DMS:	: *AT_SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	4O0	4	0	5,439,180	90:8
499	0	81	14:03:55.266	465WN6B	6DMSC	RDY,1	DMS Control Tape stop	4O0	4	0	5,439,212	34:0
500	0	81	14:03:55.266		DMS:	: *RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	4O0	4	0	5,439,212	34:0
501	0	81	14:03:56.466		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	4O0	4	0	5,439,212	35:8
502	0	81	14:19:31.266	465WO6A	6DMSC	P100,2	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,439,227	73:0
503	0	81	14:19:31.266		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	4O0	4	0	5,439,227	73:0
504	0	81	14:19:32.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	4O0	4	0	5,439,227	75:1
505	0	81	14:19:37.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	4O0	4	0	5,439,227	83:0
506	0	81	14:19:39.133		DMS:	: *RUNUP	P100, TRACK *2, *REV, TIC *6065.23 +/-	4O0	4	0	5,439,227	84:8
507	0	81	14:19:43.000		DMS:	: *AT_SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	4O0	4	0	5,439,227	90:6
508	0	81	14:19:43.000		DMS:	: *P_SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	4O0	4	0	5,439,227	90:6
509	0	81	14:51:39.266	465WP6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,439,259	53:0
510	0	81	14:51:39.266		DMS:	: *RUNDOWN	P100, TRACK 2, REV, TIC * 164.96 +/-	4O0	4	0	5,439,259	53:0
511	0	81	14:51:40.466		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 164.16 +/-	4O0	4	0	5,439,259	54:8
512	0	81	14:51:44.333		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 169.66 +/-	4O0	4	0	5,439,259	60:6
513	0	81	14:51:44.333		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 169.66 +/-	4O0	4	0	5,439,259	60:6
514	0	81	15:23:39.933		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC *6062.38 +/-	4O0	4	0	5,439,291	22:0
515	0	81	15:23:39.933	465WP6B	6DMSC	RDY,3	DMS Control Tape stop	4O0	4	0	5,439,291	22:0
516	0	81	15:23:41.133		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *6063.18 +/-	4O0	4	0	5,439,291	23:8
517	0	81	15:38:23.266		DMS:	: *US-RUNUP	P7, TRACK *1, FWD, TIC 6063.18 +/-	4O0	4	0	5,439,305	73:0
518	0	81	15:38:23.266	465WQ6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,439,305	73:0
519	0	81	15:38:24.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.30 +/-	4O0	4	0	5,439,305	75:1
520	0	81	15:38:29.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6064.53 +/-	4O0	4	0	5,439,305	83:0
521	0	81	15:38:31.133		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *6064.59 +/-	4O0	4	0	5,439,305	84:8
522	0	81	15:38:35.000		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 6059.09 +/-	4O0	4	0	5,439,305	90:6
523	0	81	15:38:35.000		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *6059.09 +/-	4O0	4	0	5,439,305	90:6
524	0	81	16:10:30.600	465WR6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,439,337	52:0
525	0	81	16:10:30.600		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 166.38 +/-	4O0	4	0	5,439,337	52:0
526	0	81	16:10:31.800		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 165.58 +/-	4O0	4	0	5,439,337	53:8
527	0	81	16:10:35.666		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 171.08 +/-	4O0	4	0	5,439,337	59:6
528	0	81	16:10:35.666		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 171.08 +/-	4O0	4	0	5,439,337	59:6
529	0	81	16:11:36.600	465WR6B	6DMSC	RDY,3	DMS Control Tape stop	4O0	4	0	5,439,338	60:0
530	0	81	16:11:36.600		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC * 358.52 +/-	4O0	4	0	5,439,338	60:0
531	0	81	16:11:37.800		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 359.32 +/-	4O0	4	0	5,439,338	61:8
532	0	81	16:11:59.266	488CW6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,439,339	03:0
533	0	81	16:26:06.600		DMS:	: READY	RDY, TRACK *4, *REV, TIC 359.32 +/-	4O0	4	0	5,439,353	00:0
534	0	81	16:26:06.600	465WS6A	6DMSC	RDY,4	DMS Control Tape stop	4O0	4	0	5,439,353	00:0
535	0	81	16:27:00.600		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 359.32 +/-	4O0	4	0	5,439,353	81:0
536	0	81	16:27:00.600		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 359.32 +/-	4O0	4	0	5,439,353	81:0
537	0	81	16:27:00.600	465WT6A	6DTRN	CMD,6DTRN,465WT6	DMS TRACK TURNAROUND	4O0	4	0	5,439,353	81:0
538	0	81	16:27:02.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 359.44 +/-	4O0	4	0	5,439,353	83:1
539	0	81	16:27:07.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 360.67 +/-	4O0	4	0	5,439,354	00:0
540	0	81	16:27:08.466		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 360.73 +/-	4O0	4	0	5,439,354	01:8
541	0	81	16:27:09.866		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 360.61 +/-	4O0	4	0	5,439,354	03:9
542	0	81	16:38:35.666		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	4O0	4	0	5,439,365	31:6
543	0	81	16:38:36.866		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	4O0	4	0	5,439,365	33:4
544	0	81	16:38:36.866		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	4O0	4	0	5,439,365	33:4
545	0	81	16:38:38.266		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	4O0	4	0	5,439,365	35:5
546	0	81	16:38:50.266		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	4O0	4	0	5,439,365	53:5
547	0	81	16:38:51.466		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	4O0	4	0	5,439,365	55:3
548	0	81	16:53:03.933	20VP4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,439,379	60:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
549	0	81	16:53:53.933	20VP4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,439,380	44:0
550	0	81	16:55:25.933	176VB6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,439,382	00:0
551	0	81	18:15:15.933	488CW6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,439,460	87:0
552	0	81	19:14:59.933	488CW6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,439,520	03:0
553	0	81	19:20:13.266	488CW6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,439,525	18:0
554	0	81	19:38:27.933	488CX6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,439,543	22:0
555	0	82	05:00:22.533	488CY6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,440,098	89:0
556	0	82	06:50:28.533	488CY6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,440,207	79:0
557	0	82	07:28:29.200	488CY6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,440,245	42:0
558	0	82	16:02:07.200	488CZ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,440,753	41:0
559	0	82	19:04:19.866	488CZ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,440,933	60:0
560	0	82	19:26:22.533	488CZ6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,440,955	42:0
561	0	82	19:38:27.866	488CZ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,440,967	38:0
562	0	82	23:17:05.200	488DA6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,441,183	58:0
563	0	83	00:13:39.866	488DA6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,441,239	54:0
564	0	83	06:50:27.866	488DB6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,441,632	03:0
565	0	83	07:52:26.533	488DB6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,441,693	30:0
566	0	83	07:54:27.866	488DB6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,441,695	30:0
567	0	83	08:09:23.866	488DB6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,441,710	09:0
568	0	83	14:54:44.466	488DC6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,442,110	90:0
569	0	83	15:02:02.466	488DC6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,442,118	19:0
570	0	83	19:00:04.466	488DC6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,442,353	57:0
571	0	83	19:21:17.800	488DC6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,442,374	56:0
572	0	83	23:18:20.466	488DD6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,442,609	05:0
573	0	83	23:58:43.800	488DD6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,442,649	00:0
574	0	84	00:50:00.466	488DD6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,442,699	65:0
575	0	84	01:23:39.133	488DD6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,442,732	90:0
576	0	84	06:54:43.800	488DE6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,443,060	39:0
577	0	84	07:39:43.133	488DE6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,443,104	84:0
578	0	84	07:45:55.800	488DE6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,443,111	06:0
579	0	84	08:22:11.800	488DE6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,443,146	85:0
580	0	84	11:06:58.466	488DE6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,443,309	82:0
581	0	84	11:46:59.800	488DF6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,443,349	44:0
582	0	84	15:35:15.800	488DF6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,443,575	22:0
583	0	84	19:00:04.400	488DG6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,443,777	73:0
584	0	84	19:16:12.400	488DG6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,443,793	69:0
585	0	84	19:27:48.400	488DG6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,443,805	21:0
586	0	84	23:16:55.733	488DG6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,444,031	76:0
587	0	85	00:03:00.400	488DG6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,444,077	37:0
588	0	85	06:44:03.733	488DH6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,444,474	05:0
589	0	85	07:43:47.733	488DH6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,444,533	12:0
590	0	85	08:13:39.733	488DH6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,444,562	61:0
591	0	85	11:38:27.733	488DH6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,444,765	20:0
592	0	85	15:28:51.733	488DI6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,444,993	08:0
593	0	85	18:55:47.733	488DI6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,445,197	68:0
594	0	85	19:16:07.733	488DI6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,445,217	78:0
595	0	85	19:27:47.733	488DI6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,445,229	36:0
596	0	85	23:16:51.733	488DJ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,445,455	86:0
597	0	86	00:02:59.733	488DJ6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,445,501	52:0
598	0	86	06:39:48.333	488DK6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,445,894	02:0
599	0	86	07:41:41.666	488DK6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,445,955	21:0
600	0	86	07:43:48.333	488DK6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,445,957	29:0
601	0	86	07:54:28.333	488DK6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,445,967	79:0
602	0	86	10:21:48.333	488DK6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,446,113	53:0
603	0	86	11:55:12.333	488DL6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,446,205	87:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
604	0	86	12:28:51.666	488DL6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,446,239	22:0
605	0	86	18:04:35.666	488DM6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,446,571	26:0
606	0	86	19:04:19.666	488DM6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,446,630	33:0
607	0	86	19:04:49.666	488DM6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,446,630	78:0
608	0	86	19:23:31.666	488DM6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,446,649	32:0
609	0	86	23:56:46.333	488DM6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,446,919	54:0
610	0	87	00:07:15.666	488DN6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,446,929	88:0
611	0	87	06:05:29.666	488DN6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,447,284	24:0
612	0	87	06:09:55.666	488DO6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,447,288	59:0
613	0	87	11:01:44.266	488DO6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,447,577	23:0
614	0	87	11:53:24.266	488DO6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,447,628	32:0
615	0	87	15:05:24.266	488DP6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,447,818	22:0
616	0	87	15:53:00.266	488DP6B	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	4O0	4	0	5,447,865	29:0
617	0	87	15:56:43.600	176UC6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,447,869	00:0
618	0	87	16:23:30.266	20SN4I	**7MODE**	**INT**	AACS INERTIAL MODE	4O0	4	0	5,447,895	44:0
619	0	87	16:38:30.266	20SN4K	7SLEW	INIT,POS,17.45	Stator movement	4O0	4	0	5,447,910	29:0
620	0	87	16:50:30.266	20SN4L	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,447,922	17:0
621	0	87	16:57:30.266	20SN4M	7SLEW	INIT,NEG,17.45	Stator movement	4O0	4	0	5,447,929	10:0
622	0	87	17:09:30.266	20SN4N	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,447,940	89:0
623	0	87	17:16:30.266	20SN4O	7SLEW	INIT,POS,4.36	Stator movement	4O0	4	0	5,447,947	82:0
624	0	87	17:28:30.266	20SN4P	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,447,959	70:0
625	0	87	17:35:30.266	20SN4Q	7SLEW	INIT,NEG,4.36	Stator movement	4O0	4	0	5,447,966	63:0
626	0	87	17:47:30.266	20SN4R	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,447,978	51:0
627	0	87	17:59:30.266	20SN4AH	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,447,990	39:0
628	0	87	18:15:00.266	488DP6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,448,005	69:0
629	0	87	18:15:04.266	20UC4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,448,005	75:0
630	0	87	18:15:54.266	20UC4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,448,006	59:0
631	0	87	18:17:16.266	176UD6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,448,008	00:0
632	0	87	18:49:24.266	488DP6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,448,039	71:0
633	0	87	19:10:58.266	488DP6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,448,061	10:0
634	0	87	19:21:24.266	488DQ6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,448,071	39:0
635	0	88	05:14:53.600	488DR6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,448,658	36:0
636	0	88	06:29:07.600	488DR6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,448,731	74:0
637	0	88	07:35:15.600	488DR6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,448,797	20:0
638	0	88	08:07:15.600	488DR6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,448,828	79:0
639	0	88	12:01:55.600	488DS6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,449,060	87:0
640	0	88	12:29:24.266	488DS6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,449,088	12:0
641	0	88	12:33:55.600	488DS6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,449,092	55:0
642	0	88	22:56:58.200	488DT6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,449,708	73:0
643	0	88	23:03:16.200	488DT6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,449,715	03:0
644	0	88	23:48:04.200	488DT6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,449,759	31:0
645	0	89	00:20:23.533	488DT6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,449,791	28:0
646	0	89	00:54:02.200	488DT6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,449,824	53:0
647	0	89	06:35:31.533	488DU6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,450,162	29:0
648	0	89	07:24:35.533	488DU6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,450,210	77:0
649	0	89	07:24:44.866	488DU6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,450,211	00:0
650	0	89	07:41:39.533	488DU6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,450,227	66:0
651	0	89	22:47:53.533	488DV6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,451,124	00:0
652	0	89	22:56:51.533	488DV6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,451,132	79:0
653	0	89	23:52:19.533	488DV6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,451,187	66:0
654	0	90	06:24:52.133	488DW6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,451,575	87:0
655	0	90	07:26:52.800	488DW6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,451,637	26:0
656	0	90	07:28:52.133	488DW6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,451,639	23:0
657	0	90	07:43:48.133	488DW6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,451,654	02:0
658	0	90	23:36:29.466	488DX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,452,596	22:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
659	0	90	23:52:19.466	488DX6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,452,611:82:0	
660	0	91	06:18:27.466	488DY6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,452,993:72:0	
661	0	91	07:20:19.466	488DY6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,453,054:89:0	
662	0	91	07:48:03.466	488DY6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,453,082:37:0	
663	0	91	08:47:47.466	488DY6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,453,141:44:0	
664	0	91	09:00:33.466	488DY6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,453,154:10:0	
665	0	91	09:34:12.133	488DZ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,453,187:35:0	
666	0	91	17:45:24.066	488EA6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,453,673:17:0	
667	0	91	18:45:08.066	488EA6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,453,732:24:0	
668	0	91	18:59:00.066	488EA6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,453,745:89:0	
669	0	91	19:15:00.066	488EA6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,453,761:73:0	
670	0	91	19:51:16.066	488EA6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,453,797:61:0	
671	0	91	22:42:45.400	488EB6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,453,967:25:0	
672	0	91	22:52:35.400	488EB6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,453,977:00:0	
673	0	91	23:48:03.400	488EB6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,454,031:78:0	
674	0	92	06:11:09.400	488EC6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,454,410:68:0	
675	0	92	06:14:11.400	488EC6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,454,413:68:0	
676	0	92	07:26:44.066	488EC6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,454,485:45:0	
677	0	92	07:33:07.400	488EC6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,454,491:74:0	
678	0	92	07:52:19.400	488EC6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,454,510:73:0	
679	0	92	18:34:28.000	488ED6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,455,145:81:0	
680	0	92	18:55:06.666	488ED6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,455,166:28:0	
681	0	92	19:04:20.000	488ED6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,455,175:39:0	
682	0	92	22:46:42.000	488ED6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,455,395:32:0	
683	0	92	22:52:36.000	488ED6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,455,401:17:0	
684	0	92	23:37:24.000	488EE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,455,445:45:0	
685	0	93	00:05:40.000	488EE6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,455,473:41:0	
686	0	93	00:39:19.333	488EE6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,455,506:67:0	
687	0	93	06:12:40.000	488EF6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,455,836:38:0	
688	0	93	23:36:17.333	488EG6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,456,868:52:0	
689	0	93	23:48:03.333	488EG6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,456,880:19:0	
690	0	94	06:03:31.933	488EH6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,457,251:51:0	
691	0	94	07:03:15.933	488EH6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,457,310:58:0	
692	0	94	07:37:23.933	488EH6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,457,344:36:0	
693	0	94	08:41:23.933	488EH6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,457,407:63:0	
694	0	94	08:45:45.266	488EH6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,457,412:00:0	
695	0	94	09:19:24.600	488EI6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,457,445:26:0	
696	0	94	17:28:19.266	488EJ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,457,928:75:0	
697	0	94	18:34:27.266	488EJ6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,457,994:21:0	
698	0	94	18:34:27.933	488EJ6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,457,994:22:0	
699	0	94	18:51:31.266	488EJ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,458,011:10:0	
700	0	95	10:51:11.200	488EK6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,458,960:21:0	
701	0	95	18:19:31.866	488EL6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,459,403:59:0	
702	0	95	18:47:52.533	488EL6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,459,431:62:0	
703	0	95	18:53:39.866	488EL6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,459,437:37:0	
704	0	95	19:08:35.866	488EL6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,459,452:16:0	
705	0	95	22:32:30.533	488EL6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,459,653:77:0	
706	0	95	22:41:55.200	488EM6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,459,663:14:0	
707	0	95	23:45:55.200	488EM6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,459,726:41:0	
708	0	96	05:48:35.200	488EN6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,460,085:12:0	
709	0	96	07:03:15.200	488EN6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,460,158:89:0	
710	0	96	07:07:57.200	488EN6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,460,163:57:0	
711	0	96	07:13:55.200	488EN6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,460,169:48:0	
712	0	96	07:28:51.200	488EN6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,460,184:27:0	
713	0	96	14:16:07.200	488EO6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,460,587:08:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
714	0	96	15:50:53.200	488EO6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,460,680:74:0	
715	0	96	16:24:32.533	488EO6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,460,714:09:0	
716	0	96	17:09:07.200	488EO6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,460,758:17:0	
717	0	96	18:23:47.800	488EO6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,460,832:04:0	
718	0	96	18:45:55.133	488EP6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,460,853:84:0	
719	0	96	19:00:03.800	488EP6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,460,867:83:0	
720	0	96	19:36:19.800	488EP6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,460,903:71:0	
721	0	96	22:27:26.466	488EP6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,461,073:01:0	
722	0	96	22:37:39.800	488EP6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,461,083:11:0	
723	0	96	23:52:19.800	488EQ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,461,156:88:0	
724	0	97	05:40:03.133	488EQ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,461,500:79:0	
725	0	97	06:58:59.133	488ER6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,461,578:85:0	
726	0	97	07:02:17.133	488ER6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,461,582:18:0	
727	0	97	07:09:39.133	488ER6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,461,589:44:0	
728	0	97	07:45:55.133	488ER6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,461,625:32:0	
729	0	97	23:37:22.466	488ES6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,462,566:32:0	
730	0	97	23:52:19.133	488ES6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,462,581:12:0	
731	0	98	01:10:58.466	488ES6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,462,658:84:0	
732	0	98	01:44:37.133	488ES6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,462,692:18:0	
733	0	98	05:33:39.733	488ES6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,462,918:66:0	
734	0	98	06:44:03.733	488ET6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,462,988:32:0	
735	0	98	07:37:23.733	488ET6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,463,041:09:0	
736	0	98	08:28:54.400	488ET6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,463,092:04:0	
737	0	98	09:04:51.733	488ET6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,463,127:55:0	
738	0	98	09:09:49.066	488ET6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,463,132:46:0	
739	0	98	11:22:59.733	488EU6A	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	4O0	4	0	5,463,264:20:0	
740	0	98	11:25:48.400	176QB6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,463,267:00:0	
741	0	98	16:43:31.066	488EU6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	4O0	4	0	5,463,581:20:0	
742	0	98	18:13:07.066	488EU6C	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	4O0	4	0	5,463,669:76:0	
743	0	98	18:30:59.733	488EU6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,463,687:47:0	
744	0	98	18:31:29.066	176QD6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,463,688:00:0	
745	0	98	18:34:02.400	488EU6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,463,690:48:0	
746	0	98	22:36:19.733	488EV6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,463,930:14:0	
747	0	98	22:56:51.066	488EV6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,463,950:41:0	
748	0	98	23:48:56.400	488EV6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,464,001:88:0	
749	0	99	00:15:47.066	488EV6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,464,028:47:0	
750	0	99	00:24:01.733	488EV6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,464,036:61:0	
751	0	99	05:08:03.066	488EW6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,464,317:52:0	
752	0	99	06:18:27.066	488EW6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,464,387:18:0	
753	0	99	06:34:00.400	488EW6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,464,402:53:0	
754	0	99	07:11:19.066	488EW6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,464,439:44:0	
755	0	99	07:16:03.066	488EW6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,464,444:15:0	
756	0	99	07:52:19.066	488EX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,464,480:03:0	
757	0	99	08:26:02.400	488EX6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,464,513:35:0	
758	0	99	08:59:41.733	488EX6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,464,546:61:0	
759	0	99	17:49:39.666	488EY6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,465,070:74:0	
760	0	99	18:23:47.666	488EY6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,465,104:52:0	
761	0	99	18:29:37.000	488EY6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,465,110:30:0	
762	0	99	18:42:59.666	488EY6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,465,123:51:0	
763	0	99	19:19:15.666	488EY6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,465,159:39:0	
764	0	99	23:00:56.333	488EZ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,465,378:61:0	
765	0	100	00:11:31.000	488EZ6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,465,448:43:0	
766	0	100	04:59:31.000	488EZ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,465,733:28:0	
767	0	100	06:44:03.000	488FA6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,465,836:63:0	
768	0	100	07:22:27.000	488FA6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,465,874:61:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
769	0	100	07:56:35.000	488FA6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,465,908:39:0	
770	0	100	08:24:01.666	488FA6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,465,935:52:0	
771	0	100	09:01:05.666	488FA6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,465,972:21:0	
772	0	100	09:36:51.000	488FB6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,466,007:54:0	
773	0	100	15:58:43.000	488FC6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,466,385:24:0	
774	0	100	17:38:59.000	488FC6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,466,484:39:0	
775	0	100	18:09:39.600	488FC6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,466,514:70:0	
776	0	100	18:13:07.600	488FC6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,466,518:18:0	
777	0	100	18:49:23.600	488FC6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,466,554:06:0	
778	0	100	22:40:53.600	488FD6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,466,783:02:0	
779	0	101	00:22:11.600	488FD6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,466,883:19:0	
780	0	101	03:56:20.266	176UG6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,467,095:00:0	
781	0	101	04:02:00.266	20UU4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,467,100:55:0	
782	0	101	04:03:00.266	20UU4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	4O0	4	0	5,467,101:54:0	
783	0	101	04:05:00.266	20UU4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,467,103:52:0	
784	0	101	04:10:30.266	20UU4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	4O0	4	0	5,467,109:01:0	
785	0	101	04:10:30.933	20UU4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	4O0	4	0	5,467,109:02:0	
786	0	101	04:10:50.933	20UU4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	4O0	4	0	5,467,109:32:0	
787	0	101	04:10:51.600	20UU4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	4O0	4	0	5,467,109:33:0	
788	0	101	04:11:11.600	20UU4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,467,109:63:0	
789	0	101	04:11:12.266	20UU4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,467,109:64:0	
790	0	101	04:11:22.266	20UU4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,467,109:79:0	
791	0	101	04:11:22.933	20UU4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,467,109:80:0	
792	0	101	04:11:32.933	20UU4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	4O0	4	0	5,467,110:04:0	
793	0	101	04:11:33.600	20UU4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	4O0	4	0	5,467,110:05:0	
794	0	101	04:13:20.266	20UU4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	4O0	4	0	5,467,111:74:0	
795	0	101	04:13:20.933	20UU4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	4O0	4	0	5,467,111:75:0	
796	0	101	04:13:40.933	20UU4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	4O0	4	0	5,467,112:14:0	
797	0	101	04:13:41.600	20UU4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	4O0	4	0	5,467,112:15:0	
798	0	101	04:14:01.600	20UU4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,467,112:45:0	
799	0	101	04:14:02.266	20UU4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,467,112:46:0	
800	0	101	04:14:12.266	20UU4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,467,112:61:0	
801	0	101	04:14:12.933	20UU4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,467,112:62:0	
802	0	101	04:14:22.933	20UU4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	4O0	4	0	5,467,112:77:0	
803	0	101	04:14:23.600	20UU4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	4O0	4	0	5,467,112:78:0	
804	0	101	04:15:20.266	20UU4Z	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,467,113:72:0	
805	0	101	04:40:04.266	20UG4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,467,138:23:0	
806	0	101	04:40:54.266	20UG4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,467,139:07:0	
807	0	101	04:42:50.933	176UH6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,467,141:00:0	
808	0	101	04:48:50.933	488FE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,467,146:85:0	
809	0	101	06:39:46.933	488FE6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,467,256:59:0	
810	0	101	06:44:57.600	488FE6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,467,261:70:0	
811	0	101	06:54:42.933	488FE6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,467,271:38:0	
812	0	102	07:06:09.533	488FF6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,468,706:83:0	
813	0	102	07:16:03.533	488FF6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,468,716:64:0	
814	0	102	07:56:35.533	488FF6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,468,756:72:0	
815	0	102	17:24:02.866	488FG6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,469,318:01:0	
816	0	102	18:08:50.866	488FG6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,469,362:29:0	
817	0	102	18:14:35.533	488FG6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,469,368:00:0	
818	0	102	18:28:02.866	488FG6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,469,381:28:0	
819	0	102	19:04:18.866	488FG6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,469,417:16:0	
820	0	102	22:40:47.533	488FH6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,469,631:25:0	
821	0	103	00:37:06.866	488FH6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4O0	4	0	5,469,746:29:0	
822	0	103	04:18:58.866	488FH6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,469,965:68:0	
823	0	103	06:29:06.866	488FI6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,470,094:41:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
824	0	103	06:39:57.533	488FI6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,470,105:16:0	
825	0	103	06:48:18.866	488FI6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,470,113:40:0	
826	0	103	07:24:34.866	488FI6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,470,149:28:0	
827	0	103	22:41:04.800	488FJ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,471,055:67:0	
828	0	103	23:11:46.800	488FJ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,471,086:09:0	
829	0	103	23:39:11.466	488FJ6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,471,113:19:0	
830	0	104	00:16:15.466	488FJ6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,471,149:79:0	
831	0	104	01:51:46.800	488FJ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,471,244:31:0	
832	0	104	02:53:38.800	488FK6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,471,305:48:0	
833	0	104	05:33:38.800	488FK6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,471,463:70:0	
834	0	104	06:14:48.133	488FK6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,471,504:43:0	
835	0	104	06:18:26.800	488FK6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,471,508:07:0	
836	0	104	06:54:42.800	488FK6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,471,543:86:0	
837	0	104	23:07:02.733	488FL6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,472,505:54:0	
838	0	105	00:22:11.400	488FL6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,472,579:83:0	
839	0	105	04:18:59.400	488FL6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,472,814:10:0	
840	0	105	05:37:54.733	488FM6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,472,892:15:0	
841	0	105	06:26:18.066	488FM6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,472,940:02:0	
842	0	105	06:37:38.733	488FM6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,472,951:22:0	
843	0	105	07:13:54.733	488FM6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,472,987:10:0	
844	0	105	14:17:00.733	488FN6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,473,405:51:0	
845	0	105	14:48:18.733	488FN6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,473,436:47:0	
846	0	105	17:53:54.733	488FN6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,473,620:07:0	
847	0	105	17:54:02.733	488FN6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,473,620:19:0	
848	0	105	18:36:34.733	488FN6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,473,662:25:0	
849	0	105	23:06:00.066	488FO6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,473,928:67:0	
850	0	105	23:11:46.733	488FO6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,473,934:41:0	
851	0	106	00:37:06.733	488FO6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,474,018:77:0	
852	0	106	03:57:39.333	488FO6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,474,217:17:0	
853	0	106	05:29:23.333	488FP6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,474,307:83:0	
854	0	106	06:21:43.333	488FP6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,474,359:61:0	
855	0	106	06:33:23.333	488FP6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,474,371:19:0	
856	0	106	07:09:39.333	488FP6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,474,407:07:0	
857	0	106	10:35:58.666	488FP6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,474,611:12:0	
858	0	106	11:58:04.666	488FQ6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,474,692:30:0	
859	0	106	12:45:22.666	488FQ6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,474,739:10:0	
860	0	106	16:43:30.666	488FQ6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,474,974:57:0	
861	0	106	17:43:42.666	488FQ6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,475,034:15:0	
862	0	106	18:25:54.666	488FR6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,475,075:82:0	
863	0	106	22:10:58.000	488FR6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,475,298:44:0	
864	0	106	23:05:22.666	488FR6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,475,352:27:0	
865	0	107	00:52:02.666	488FS6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,475,457:72:0	
866	0	107	03:38:26.666	488FS6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,475,622:33:0	
867	0	107	05:22:58.666	488FS6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,475,725:68:0	
868	0	107	06:22:42.666	488FS6D	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,475,784:75:0	
869	0	107	07:11:46.666	488FT6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,475,833:32:0	
870	0	107	17:38:59.266	488FU6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,476,453:61:0	
871	0	107	17:43:41.266	488FU6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,476,458:29:0	
872	0	107	18:25:55.266	488FU6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,476,500:08:0	
873	0	107	22:10:54.600	488FU6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,476,722:55:0	
874	0	107	23:11:46.600	488FU6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,476,782:73:0	
875	0	108	01:11:14.600	488FV6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4O0	4	0	5,476,900:87:0	
876	0	108	03:08:34.600	488FV6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,477,017:00:0	
877	0	108	05:14:26.600	488FV6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,477,141:44:0	
878	0	108	06:11:17.933	488FV6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,477,197:65:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
879	0	108	06:22:42.600	488FV6E	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,477,209:00:0	
880	0	108	06:58:58.600	488FW6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,477,244:79:0	
881	0	108	10:35:53.933	488FW6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,477,459:37:0	
882	0	108	17:32:35.200	488FX6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,477,871:47:0	
883	0	108	17:43:37.866	488FX6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,477,882:40:0	
884	0	109	07:01:53.200	488FY6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,478,671:84:0	
885	0	109	07:33:13.866	488FY6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,478,702:84:0	
886	0	109	08:49:54.533	488FY6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,478,778:69:0	
887	0	109	09:02:24.533	488FY6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,478,791:11:0	
888	0	109	15:54:26.533	488FZ6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,479,198:57:0	
889	0	109	17:28:35.866	488FZ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,479,291:68:0	
890	0	109	17:56:09.200	176VE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,479,319:00:0	
891	0	109	18:02:13.200		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,479,325:00:0	
892	0	109	18:02:13.200		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,479,325:00:0	
893	0	109	18:02:13.200		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,479,325:00:0	
894	0	109	18:02:13.200	465WA6A	6DMST	5000	DMS Slew to TIC	4O0	4	0	5,479,325:00:0	
895	0	109	18:02:19.866		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,479,325:10:0	
896	0	109	18:02:21.266		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	4O0	4	0	5,479,325:12:1	
897	0	109	18:10:58.533	488FZ6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,479,333:60:0	
898	0	109	23:43:22.000		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *4997.94 +/-	4O0	4	0	5,479,662:36:2	
899	0	109	23:43:23.200		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4998.00 +/-	4O0	4	0	5,479,662:38:0	
900	0	109	23:55:54.533	465WB6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,479,674:73:0	
901	0	109	23:55:54.533		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 4998.00 +/-	4O0	4	0	5,479,674:73:0	
902	0	109	23:55:55.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4998.12 +/-	4O0	4	0	5,479,674:75:1	
903	0	109	23:56:01.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4999.35 +/-	4O0	4	0	5,479,674:83:0	
904	0	109	23:56:02.400		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *4999.41 +/-	4O0	4	0	5,479,674:84:8	
905	0	109	23:56:06.266		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 4993.91 +/-	4O0	4	0	5,479,674:90:6	
906	0	109	23:56:06.266		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *4993.91 +/-	4O0	4	0	5,479,674:90:6	
907	0	110	00:21:46.533		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 255.79 +/-	4O0	4	0	5,479,700:35:0	
908	0	110	00:21:46.533	465WB6B	6DMSC	RDY,4	DMS Control Tape stop	4O0	4	0	5,479,700:35:0	
909	0	110	00:21:47.733		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 254.99 +/-	4O0	4	0	5,479,700:36:8	
910	0	110	00:51:50.533	488GA6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,479,730:11:0	
911	0	110	02:21:35.800	465WC6A	6DTRN	CMD,6DTRN,465WC6	DMS TRACK TURNAROUND	4O0	4	0	5,479,818:81:0	
912	0	110	02:21:35.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 254.99 +/-	4O0	4	0	5,479,818:81:0	
913	0	110	02:21:35.800		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 254.99 +/-	4O0	4	0	5,479,818:81:0	
914	0	110	02:21:37.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 255.11 +/-	4O0	4	0	5,479,818:83:1	
915	0	110	02:21:42.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 256.34 +/-	4O0	4	0	5,479,819:00:0	
916	0	110	02:21:43.666		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 256.40 +/-	4O0	4	0	5,479,819:01:8	
917	0	110	02:21:45.066		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 256.28 +/-	4O0	4	0	5,479,819:03:9	
918	0	110	02:25:09.133	488GA6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	4O0	4	0	5,479,822:37:0	
919	0	110	02:25:45.733		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	4O0	4	0	5,479,823:00:9	
920	0	110	02:25:46.933		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	4O0	4	0	5,479,823:02:7	
921	0	110	02:25:46.933		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	4O0	4	0	5,479,823:02:7	
922	0	110	02:25:48.333		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	4O0	4	0	5,479,823:04:8	
923	0	110	02:26:00.333		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	4O0	4	0	5,479,823:22:8	
924	0	110	02:26:01.533		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	4O0	4	0	5,479,823:24:6	
925	0	110	02:31:38.466		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,479,828:75:0	
926	0	110	02:31:38.466	465WD6A	6DMSC	P100,1	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,479,828:75:0	
927	0	110	02:31:45.133		DMS:	: *RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,479,828:85:0	
928	0	110	02:31:49.000		DMS:	: *P_SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	4O0	4	0	5,479,828:90:8	
929	0	110	02:31:49.000		DMS:	: *AT_SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	4O0	4	0	5,479,828:90:8	
930	0	110	03:03:32.466		DMS:	: *RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	4O0	4	0	5,479,860:34:0	
931	0	110	03:03:32.466	465WD6B	6DMSC	RDY,1	DMS Control Tape stop	4O0	4	0	5,479,860:34:0	
932	0	110	03:03:33.666		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	4O0	4	0	5,479,860:35:8	
933	0	110	03:19:08.466	465WE6A	6DMSC	P100,2	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,479,875:73:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
934	0	110	03:19:08.466		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	4O0	4	0	5,479,875:73:0	
935	0	110	03:19:09.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	4O0	4	0	5,479,875:75:1	
936	0	110	03:19:15.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	4O0	4	0	5,479,875:83:0	
937	0	110	03:19:16.333		DMS:	: *RUNUP	P100, TRACK *2, *REV, TIC *6065.23 +/-	4O0	4	0	5,479,875:84:8	
938	0	110	03:19:20.200		DMS:	: *P_SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	4O0	4	0	5,479,875:90:6	
939	0	110	03:19:20.200		DMS:	: *AT_SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	4O0	4	0	5,479,875:90:6	
940	0	110	03:51:16.466	465WF6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,479,907:53:0	
941	0	110	03:51:16.466		DMS:	: *RUNDOWN	P100, TRACK 2, REV, TIC * 164.96 +/-	4O0	4	0	5,479,907:53:0	
942	0	110	03:51:17.666		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 164.16 +/-	4O0	4	0	5,479,907:54:8	
943	0	110	03:51:21.533		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 169.66 +/-	4O0	4	0	5,479,907:60:6	
944	0	110	03:51:21.533		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 169.66 +/-	4O0	4	0	5,479,907:60:6	
945	0	110	04:23:17.133		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC *6062.38 +/-	4O0	4	0	5,479,939:22:0	
946	0	110	04:23:17.133	465WF6B	6DMSC	RDY,3	DMS Control Tape stop	4O0	4	0	5,479,939:22:0	
947	0	110	04:23:18.333		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *6063.18 +/-	4O0	4	0	5,479,939:23:8	
948	0	110	04:38:00.466		DMS:	: *US-RUNUP	P7, TRACK *1, FWD, TIC 6063.18 +/-	4O0	4	0	5,479,953:73:0	
949	0	110	04:38:00.466	465WG6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,479,953:73:0	
950	0	110	04:38:01.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.30 +/-	4O0	4	0	5,479,953:75:1	
951	0	110	04:38:07.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6064.53 +/-	4O0	4	0	5,479,953:83:0	
952	0	110	04:38:08.333		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *6064.59 +/-	4O0	4	0	5,479,953:84:8	
953	0	110	04:38:12.200		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 6059.09 +/-	4O0	4	0	5,479,953:90:6	
954	0	110	04:38:12.200		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *6059.09 +/-	4O0	4	0	5,479,953:90:6	
955	0	110	04:48:51.133	488GA6C	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	4O0	4	0	5,479,964:48:0	
956	0	110	05:10:07.800		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 166.38 +/-	4O0	4	0	5,479,985:52:0	
957	0	110	05:10:07.800	465WH6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	4O0	4	0	5,479,985:52:0	
958	0	110	05:10:09.000		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 165.58 +/-	4O0	4	0	5,479,985:53:8	
959	0	110	05:10:12.866		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 171.08 +/-	4O0	4	0	5,479,985:59:6	
960	0	110	05:10:12.866		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 171.08 +/-	4O0	4	0	5,479,985:59:6	
961	0	110	05:11:13.800	465WH6B	6DMSC	RDY,3	DMS Control Tape stop	4O0	4	0	5,479,986:60:0	
962	0	110	05:11:13.800		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC * 358.52 +/-	4O0	4	0	5,479,986:60:0	
963	0	110	05:11:15.000		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 359.32 +/-	4O0	4	0	5,479,986:61:8	
964	0	110	05:11:59.133	488GA6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,479,987:37:0	
965	0	110	05:25:43.800		DMS:	: READY	RDY, TRACK *4, *REV, TIC 359.32 +/-	4O0	4	0	5,480,001:00:0	
966	0	110	05:25:43.800	465WI6A	6DMSC	RDY,4	DMS Control Tape stop	4O0	4	0	5,480,001:00:0	
967	0	110	05:26:37.800	465WJ6A	6DTRN	CMD,6DTRN,465WJ6	DMS TRACK TURNAROUND	4O0	4	0	5,480,001:81:0	
968	0	110	05:26:37.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 359.32 +/-	4O0	4	0	5,480,001:81:0	
969	0	110	05:26:37.800		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 359.32 +/-	4O0	4	0	5,480,001:81:0	
970	0	110	05:26:39.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 359.44 +/-	4O0	4	0	5,480,001:83:1	
971	0	110	05:26:44.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 360.67 +/-	4O0	4	0	5,480,002:00:0	
972	0	110	05:26:45.666		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 360.73 +/-	4O0	4	0	5,480,002:01:8	
973	0	110	05:26:47.066		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 360.61 +/-	4O0	4	0	5,480,002:03:9	
974	0	110	05:38:12.866		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	4O0	4	0	5,480,013:31:6	
975	0	110	05:38:14.066		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	4O0	4	0	5,480,013:33:4	
976	0	110	05:38:14.066		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	4O0	4	0	5,480,013:33:4	
977	0	110	05:38:15.466		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	4O0	4	0	5,480,013:35:5	
978	0	110	05:38:27.466		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	4O0	4	0	5,480,013:53:5	
979	0	110	05:38:28.666		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	4O0	4	0	5,480,013:55:3	
980	0	110	05:53:03.800	20VQ4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,480,028:03:0	
981	0	110	05:53:53.800	20VQ4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,480,028:78:0	
982	0	110	05:55:03.133	176VQ6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,480,030:00:0	
983	0	110	06:04:08.466	488GA6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,480,038:90:0	
984	0	110	06:14:11.133	488GB6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,480,048:84:0	
985	0	110	06:50:27.133	488GB6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,480,084:72:0	
986	0	110	22:10:49.133	488GC6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,480,995:04:0	
987	0	110	23:26:42.466	488GC6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,481,070:09:0	
988	0	111	04:38:10.466	488GD6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,481,378:13:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
989	0	111	05:55:43.800	488GD6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,481,454:77:0	
990	0	111	06:03:30.466	488GD6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,481,462:49:0	
991	0	111	22:16:48.400	488GE6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,482,425:13:0	
992	0	111	22:43:19.066	488GE6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,482,451:33:0	
993	0	112	00:26:26.400	488GE6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,482,553:32:0	
994	0	112	00:28:21.066	488GE6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,482,555:22:0	
995	0	112	03:27:46.400	488GE6E	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,482,732:63:0	
996	0	112	07:26:42.400	488GF6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,482,969:00:0	
997	0	112	07:38:16.400	488GF6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,482,980:40:0	
998	0	112	08:25:35.066	488GF6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,483,027:21:0	
999	0	112	15:48:27.733	488GG6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,483,465:22:0	
1000	0	112	23:45:45.000	488GH6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,483,937:26:0	
1001	0	113	00:26:27.000	488GH6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	4O0	4	0	5,483,977:49:0	
1002	0	113	03:27:47.000	488GH6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,484,156:80:0	
1003	0	113	05:47:18.333	488GI6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,484,294:79:0	
1004	0	113	05:52:50.333	488GI6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,484,300:31:0	
1005	0	113	06:29:06.333	488GI6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,484,336:19:0	
1006	0	113	10:25:45.000	488GI6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,484,570:23:0	
1007	0	113	16:39:14.333	488GJ6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,484,939:58:0	
1008	0	113	17:23:29.000	488GJ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,484,983:36:0	
1009	0	113	23:26:45.000	488GK6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,485,342:61:0	
1010	0	114	00:08:23.000	488GK6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,485,383:77:0	
1011	0	114	01:55:46.933	488GK6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,485,490:06:0	
1012	0	114	05:23:28.266	488GK6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,485,695:43:0	
1013	0	114	08:41:44.266	488GL6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,485,891:51:0	
1014	0	114	09:23:22.933	488GL6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,485,932:68:0	
1015	0	114	11:10:46.933	488GL6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,486,038:88:0	
1016	0	114	16:58:26.933	488GM6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,486,382:74:0	
1017	0	114	17:41:06.266	488GM6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,486,425:00:0	
1018	0	114	23:40:41.600	488GN6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,486,780:58:0	
1019	0	115	05:07:21.600	488GN6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,487,103:65:0	
1020	0	115	05:22:58.266	488GN6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,487,119:14:0	
1021	0	115	06:36:42.933	488GO6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,487,192:08:0	
1022	0	115	07:56:34.266	488GO6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,487,271:06:0	
1023	0	115	15:58:42.866	488GP6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,487,747:83:0	
1024	0	115	17:13:26.200	488GP6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,487,821:74:0	
1025	0	116	08:50:50.200	488GQ6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,488,748:83:0	
1026	0	116	09:53:00.200	488GQ6B	6TMSED	NORM,AH1	Sci, Eng, and D/L Chan	4O0	4	0	5,488,810:36:0	
1027	0	116	09:56:38.866	176UE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,488,814:00:0	
1028	0	116	10:06:00.200	20RQ4C	7STAT	10.00,223.59,-15	Stator inertial point	4O0	4	0	5,488,823:23:0	
1029	**0**	**116**	**10:06:12.200**	**20RQ6D**	**6MROH**	**7,6744,0,A10**	**read from AACSA7,6744,0,A10**	**4O0**	**4**	**0**	**5,488,823:41:0**	
1030	0	116	10:25:02.200	490UB412A4B	**7MODE**	**INT**	AACS INERTIAL MODE	4O0	4	0	5,488,842:07:0	
1031	0	116	10:30:00.200	490UB412A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,488,846:90:0	
1032	0	116	10:30:20.200	20RQ4D	7STAT	17.45,223.59,-15	Stator inertial point	4O0	4	0	5,488,847:29:0	
1033	0	116	10:34:10.200	490UB412A4E	7VECT		Inert vect update UTC	4O0	4	0	5,488,851:10:0	
1034	0	116	10:34:14.200	490UB412A4F	7TURN	2,RTH	ALERT Thruster	4O0	4	0	5,488,851:16:0	
1035	0	116	10:38:02.200	490UB412A406A4A	7STAR	1,714,297.09	Star catalog update	4O0	4	0	5,488,854:85:0	
1036	0	116	10:38:04.200	490UB412A406A4B	7STAR	2,586,151.424,12	Star catalog update	4O0	4	0	5,488,854:88:0	
1037	0	116	10:38:06.200	490UB412A406A4C	7STAR	3,348,192.96	Star catalog update	4O0	4	0	5,488,855:00:0	
1038	0	116	10:38:08.200	490UB412A406A4D	7STAR	4,0,0.0,0.0	Star catalog update	4O0	4	0	5,488,855:03:0	
1039	0	116	10:38:10.200	490UB412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update	4O0	4	0	5,488,855:06:0	
1040	0	116	10:38:12.200	490UB412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update	4O0	4	0	5,488,855:09:0	
1041	0	116	10:48:06.200	20RQ4F	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,488,864:81:0	
1042	0	116	10:56:10.200	490UB412A4G	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,488,872:79:0	
1043	0	116	12:30:04.200	20UT4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,488,965:67:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1044	0	116	12:30:54.200	20UT4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,488,966:51:0	
1045	0	116	12:31:00.200	488GQ6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,488,966:60:0	
1046	0	116	12:32:21.533	176UF6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,488,968:00:0	
1047	0	116	17:13:24.800	488GR6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,489,245:88:0	
1048	0	116	21:51:40.133	488GR6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,489,521:15:0	
1049	0	116	23:01:06.800	488GR6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	5,489,589:77:0	
1050	0	117	04:27:30.800	488GS6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,489,912:60:0	
1051	0	117	05:28:24.133	488GS6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,489,972:80:0	
1052	0	117	16:06:40.133	488GT6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,490,604:12:0	
1053	0	117	17:03:22.800	488GT6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,490,660:20:0	
1054	0	117	21:51:38.800	488GT6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,490,945:29:0	
1055	0	117	22:28:28.133	488GU6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,490,981:67:0	
1056	0	118	00:15:52.133	488GU6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,491,087:87:0	
1057	0	118	05:13:22.733	488GV6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,491,382:18:0	
1058	0	118	07:55:58.066	176UI6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	4O0	4	0	5,491,543:00:0	
1059	0	118	08:02:00.066	20UV4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,491,548:88:0	
1060	0	118	08:03:00.066	20UV4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	4O0	4	0	5,491,549:87:0	
1061	0	118	08:05:00.066	20UV4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,491,551:85:0	
1062	0	118	08:10:30.066	20UV4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	4O0	4	0	5,491,557:34:0	
1063	0	118	08:10:30.733	20UV4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	4O0	4	0	5,491,557:35:0	
1064	0	118	08:10:50.733	20UV4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	4O0	4	0	5,491,557:65:0	
1065	0	118	08:10:51.400	20UV4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	4O0	4	0	5,491,557:66:0	
1066	0	118	08:11:11.400	20UV4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,491,558:05:0	
1067	0	118	08:11:12.066	20UV4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,491,558:06:0	
1068	0	118	08:11:22.066	20UV4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,491,558:21:0	
1069	0	118	08:11:22.733	20UV4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,491,558:22:0	
1070	0	118	08:11:32.733	20UV4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	4O0	4	0	5,491,558:37:0	
1071	0	118	08:11:33.400	20UV4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	4O0	4	0	5,491,558:38:0	
1072	0	118	08:13:20.066	20UV4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	4O0	4	0	5,491,560:16:0	
1073	0	118	08:13:20.733	20UV4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	4O0	4	0	5,491,560:17:0	
1074	0	118	08:13:40.733	20UV4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	4O0	4	0	5,491,560:47:0	
1075	0	118	08:13:41.400	20UV4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	4O0	4	0	5,491,560:48:0	
1076	0	118	08:14:01.400	20UV4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,491,560:78:0	
1077	0	118	08:14:02.066	20UV4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,491,560:79:0	
1078	0	118	08:14:12.066	20UV4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,491,561:03:0	
1079	0	118	08:14:12.733	20UV4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,491,561:04:0	
1080	0	118	08:14:22.733	20UV4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	4O0	4	0	5,491,561:19:0	
1081	0	118	08:14:23.400	20UV4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	4O0	4	0	5,491,561:20:0	
1082	0	118	08:15:20.066	20UV4Z	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,491,562:14:0	
1083	0	118	08:40:04.066	20UI4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	5,491,586:56:0	
1084	0	118	08:40:54.066	20UI4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,491,587:40:0	
1085	0	118	08:42:28.733	176UJ6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	4O0	4	0	5,491,589:00:0	
1086	0	118	21:46:05.400	176SL6A	6TMREC	**TPB**	TERMINATE PLAYBACK (PB CONTROL) Record Mo	4O0	4	0	5,492,364:00:0	
1087	0	118	21:48:06.733	465SZ6A	6DMST	3114	DMS Slew to TIC	4O0	4	0	5,492,366:00:0	
1088	0	118	21:48:06.733		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,492,366:00:0	
1089	0	118	21:48:06.733		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,492,366:00:0	
1090	0	118	21:48:06.733		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,492,366:00:0	
1091	0	118	21:48:13.400		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	5,492,366:10:0	
1092	0	118	21:48:14.800		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	4O0	4	0	5,492,366:12:1	
1093	0	118	22:01:38.066	488GW6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,492,379:34:0	
1094	0	118	22:23:28.733	488GW6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,492,400:89:0	
1095	0	119	00:10:52.733	488GW6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	5,492,507:18:0	
1096	0	119	01:15:08.866		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *3111.94 +/-	4O0	4	0	5,492,570:69:2	
1097	0	119	01:15:10.066		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3112.00 +/-	4O0	4	0	5,492,570:71:0	
1098	0	119	01:20:00.066	488GW6D	6TMSED	NORM,AH1	Sci, Eng, and D/L Chan	4O0	4	0	5,492,575:51:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1099	0	138	03:01:59.733	20UX4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	5,519,735:72:0	
1100	0	138	03:02:59.733	20UX4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	4O0	4	0	5,519,736:71:0	
1101	0	138	03:04:59.733	20UX4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4O0	4	0	5,519,738:69:0	
1102	0	138	03:10:29.733	20UX4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	4O0	4	0	5,519,744:18:0	
1103	0	138	03:10:30.400	20UX4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	4O0	4	0	5,519,744:19:0	
1104	0	138	03:10:50.400	20UX4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	4O0	4	0	5,519,744:49:0	
1105	0	138	03:10:51.066	20UX4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	4O0	4	0	5,519,744:50:0	
1106	0	138	03:11:11.066	20UX4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,519,744:80:0	
1107	0	138	03:11:11.733	20UX4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,519,744:81:0	
1108	0	138	03:11:21.733	20UX4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	4O0	4	0	5,519,745:05:0	
1109	0	138	03:11:22.400	20UX4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	4O0	4	0	5,519,745:06:0	
1110	0	138	03:11:32.400	20UX4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	4O0	4	0	5,519,745:21:0	
1111	0	138	03:11:33.066	20UX4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	4O0	4	0	5,519,745:22:0	
1112	0	138	03:13:19.733	20UX4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	4O0	4	0	5,519,747:00:0	
1113	0	138	03:13:20.400	20UX4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	4O0	4	0	5,519,747:01:0	
1114	0	138	03:13:40.400	20UX4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	4O0	4	0	5,519,747:31:0	
1115	0	138	03:13:41.066	20UX4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	4O0	4	0	5,519,747:32:0	
1116	0	138	03:14:01.066	20UX4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,519,747:62:0	
1117	0	138	03:14:01.733	20UX4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,519,747:63:0	
1118	0	138	03:14:11.733	20UX4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	4O0	4	0	5,519,747:78:0	
1119	0	138	03:14:12.400	20UX4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	4O0	4	0	5,519,747:79:0	
1120	0	138	03:14:22.400	20UX4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	4O0	4	0	5,519,748:03:0	
1121	0	138	03:14:23.066	20UX4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	4O0	4	0	5,519,748:04:0	
1122	0	138	03:15:19.733	20UX4Z	**7MODE**	**CRU**	AACS CRUISE MODE	4O0	4	0	5,519,748:89:0	
1123	0	138	09:29:27.066	432MC431A6A	6RCDSL	DDSDSL,PLSNCG,EP	Record Deselect (DDS o	4O0	4	0	5,520,118:90:0	
1124	0	138	09:29:27.733	432MC6A	6RTSL1		R/T Select of DDS and	4O0	4	0	5,520,119:00:0	
1125	0	138	09:59:59.733		DMS:	: READY	RDY, TRACK 1, FWD, TIC 3112.00 +/-	4O0	4	0	5,520,149:18:0	
1126	**0**	**138**	**10:00:00.000**	**20A3EW**	**37A**	**Final Condition**	**NIMS Power ON**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1127	**0**	**138**	**10:00:00.000**	**20A3EX**	**37HR**	**Final Condition**	**Replacement Heaters OFF**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1128	**0**	**138**	**10:00:00.000**	**20A3EY**	**37C1PR**	**Final Condition**	**Optics Heater 1 OFF (primary relay)**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1129	**0**	**138**	**10:00:00.000**	**20A3EZ**	**37C2PR**	**Final Condition**	**Optics Heater 2 OFF (primary relay)**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1130	**0**	**138**	**10:00:00.000**	**20A3FA**	**37F1PR**	**Final Condition**	**Radiator Flash Heater OFF (primary relay)**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1131	**0**	**138**	**10:00:00.000**	**20A3FB**	**37F2PR**	**Final Condition**	**Shield Flash Heater OFF (primary relay)**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1132	**0**	**138**	**10:00:00.000**	**20A3FD**	**40HRPR**	**Final Condition**	**RCT Heater OFF (primary relay)**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1133	**0**	**138**	**10:00:00.000**	**20A3FE**	**40T1PR**	**Final Condition**	**PCT Heater 1 OFF (primary relay)**	**4O0**	**4**	**0**	**5,520,149:18:4**	
1134	**0**	**138**	**10:00:00.000**	**20A3FF**	**40T2R**	**Final Condition**	**PCT Heater 2 OFF**	**4O0**	**4**	**0**	**5,520,149:18:4**	

27INHRPELE01

OAPEL: 27INHRPELE01 ALIAS: 27INHRPELE01
EXT: A PSID: DA
SCLK1: 05399306:87:0 SCLK2: 05399311:85:0
SCET1: 2000-053/13:35:08.000 SCET2: 2000-053/13:40:10.000
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: 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

WETGID: 0326144001 03 26 144 001
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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INHRPELE01

OAPEL: 27INHRPELE01 ALIAS: 27INHRPELE01
EXT: B PSID: DA
SCLK1: 05399306:87:0 SCLK2: 05399308:86:0
SCET1: 2000-053/13:35:08.000 SCET2: 2000-053/13:37:09.333
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: 36 TLMFMT: MPW

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

WETGID: 0326036001 03 26 036 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	18400	1,1000,0100,0000,0000
1	00000	0,0000,0000,0000,0000
2	18400	1,1000,0100,0000,0000
3	00000	0,0000,0000,0000,0000
4	18400	1,1000,0100,0000,0000
5	00000	0,0000,0000,0000,0000
6	18400	1,1000,0100,0000,0000
7	00000	0,0000,0000,0000,0000
8	18400	1,1000,0100,0000,0000
9	00000	0,0000,0000,0000,0000
10	18400	1,1000,0100,0000,0000
11	00000	0,0000,0000,0000,0000
12	18400	1,1000,0100,0000,0000
13	00000	0,0000,0000,0000,0000
14	18400	1,1000,0100,0000,0000
15	00000	0,0000,0000,0000,0000
16	18400	1,1000,0100,0000,0000
17	00000	0,0000,0000,0000,0000
18	18400	1,1000,0100,0000,0000
19	00000	0,0000,0000,0000,0000
20	18400	1,1000,0100,0000,0000
21	00000	0,0000,0000,0000,0000
22	18400	1,1000,0100,0000,0000
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INHRPELE01

OAPEL: 27INHRPELE01 ALIAS: 27INHRPELE01
EXT: C PSID: DA
SCLK1: 05399309:00:0 SCLK2: 05399309:15:0
SCET1: 2000-053/13:37:12.666 SCET2: 2000-053/13:37:22.000
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: 180 TLMFMT: MPW

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

WETGID: 0326180001 03 26 180 001
WTGRP_SIZ: 26

EDIT TABLE

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

27INHRPELE01

OAPEL: 27INHRPELE01 ALIAS: 27INHRPELE01
EXT: D PSID: DA
SCLK1: 05399309:24:0 SCLK2: 05399311:85:0
SCET1: 2000-053/13:37:28.666 SCET2: 2000-053/13:40:10.000
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: 36 TLMFMT: MPW

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

WETGID: 0326036001 03 26 036 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	18400	1,1000,0100,0000,0000
1	00000	0,0000,0000,0000,0000
2	18400	1,1000,0100,0000,0000
3	00000	0,0000,0000,0000,0000
4	18400	1,1000,0100,0000,0000
5	00000	0,0000,0000,0000,0000
6	18400	1,1000,0100,0000,0000
7	00000	0,0000,0000,0000,0000
8	18400	1,1000,0100,0000,0000
9	00000	0,0000,0000,0000,0000
10	18400	1,1000,0100,0000,0000
11	00000	0,0000,0000,0000,0000
12	18400	1,1000,0100,0000,0000
13	00000	0,0000,0000,0000,0000
14	18400	1,1000,0100,0000,0000
15	00000	0,0000,0000,0000,0000
16	18400	1,1000,0100,0000,0000
17	00000	0,0000,0000,0000,0000
18	18400	1,1000,0100,0000,0000
19	00000	0,0000,0000,0000,0000
20	18400	1,1000,0100,0000,0000
21	00000	0,0000,0000,0000,0000
22	18400	1,1000,0100,0000,0000
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INHRPELE01

OAPEL: 27INHRPELE01 ALIAS: 27INHRPELE01
EXT: I PSID: DA
SCLK1: 05399306:87:0 SCLK2: 05399311:85:0
SCET1: 2000-053/13:35:08.000 SCET2: 2000-053/13:40:10.000
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: 180 TLMFMT: MPW

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

WETGID: 0326180001 03 26 180 001
WTGRP_SIZ: 26

EDIT TABLE

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

27INPELE__01

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OAPEL:  27INPELE__01            ALIAS:  27ISPELE__01
EXT:    A                       PSID:   IA
SCLK1:  05399312:71:0           SCLK2:  05399313:24:0
SCET1:  2000-053/13:41:01.333   SCET2:  2000-053/13:41:31.333
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:   144                 TLMFMT:     IM8

THRESHOLD_SEL: 0
THRESHOLD_VALUES:  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	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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INPROMTH01

```
OAPEL:  27INPROMTH01            ALIAS:  27ISPROMTH01
EXT:    B                       PSID:   ID
SCLK1:  05399322:70:0           SCLK2:  05399323:64:0
SCET1:  2000-053/13:51:08.000   SCET2:  2000-053/13:52:04.666
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:   144                 TLMFMT:     IM8

THRESHOLD_SEL: 0
THRESHOLD_VALUES:  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	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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INPROMTH01

```
OAPEL:  27INPROMTH01              ALIAS:  27ISPROMTH01
EXT:    D                         PSID:   ID
SCLK1:  05399322:70:0             SCLK2:  05399323:64:0
SCET1:    00-053/13:51:08.000     SCET2:    00-053/13:52:04.666
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:   144                   TLMFMT:    IM8

THRESHOLD_SEL: 0
THRESHOLD_VALUES:  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	00000	0,0000,0000,0000,0000
1	039FF	0,0011,1001,1111,1111
2	00000	0,0000,0000,0000,0000
3	039FF	0,0011,1001,1111,1111
4	00000	0,0000,0000,0000,0000
5	039FF	0,0011,1001,1111,1111
6	00000	0,0000,0000,0000,0000
7	039FF	0,0011,1001,1111,1111
8	00000	0,0000,0000,0000,0000
9	039FF	0,0011,1001,1111,1111
10	00000	0,0000,0000,0000,0000
11	039FF	0,0011,1001,1111,1111
12	00000	0,0000,0000,0000,0000
13	039FF	0,0011,1001,1111,1111
14	00000	0,0000,0000,0000,0000
15	039FF	0,0011,1001,1111,1111
16	00000	0,0000,0000,0000,0000
17	039FF	0,0011,1001,1111,1111
18	00000	0,0000,0000,0000,0000
19	039FF	0,0011,1001,1111,1111
20	00000	0,0000,0000,0000,0000
21	039FF	0,0011,1001,1111,1111
22	00000	0,0000,0000,0000,0000
23	039FF	0,0011,1001,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INPROMTH01

```
OAPEL:  27INPROMTH01            ALIAS:  27ISPROMTH01
EXT:    I                       PSID:   ID
SCLK1:  05399322:70:0           SCLK2:  05399323:64:0
SCET1:    00-053/13:51:08.000   SCET2:    00-053/13:52:04.666
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:     IM8

THRESHOLD_SEL: 0
THRESHOLD_VALUES:  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

27INICHAAC01

OAPEL: 27INICHAAC01 ALIAS: 27INICHAAC01
EXT: A PSID: DD
SCLK1: 05399325:37:0 SCLK2: 05399327:30:0
SCET1: 2000-053/13:53:47.333 SCET2: 2000-053/13:55:44.000
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: 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

WETGID: 0326144001 03 26 144 001
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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INICHAAC01

OAPEL: 27INICHAAC01 ALIAS: 27INICHAAC01
EXT: B PSID: DD
SCLK1: 05399325:37:0 SCLK2: 05399327:30:0
SCET1: 00-053/13:53:47.333 SCET2: 00-053/13:55:44.000
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: 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

WETGID: 0326144001 03 26 144 001
WTGRP_SIZ: 26

EDIT TABLE

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

27INICHAAC01

```
OAPEL:  27INICHAAC01            ALIAS:  27INICHAAC01
EXT:    I                       PSID:   DD
SCLK1:  05399325:37:0           SCLK2:  05399327:30:0
SCET1:    00-053/13:53:47.333   SCET2:    00-053/13:55:44.000
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

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

27INMOSAIC01

```
OAPEL:  27INMOSAIC01            ALIAS:  27INMOSAIC01
EXT:    A                       PSID:   DE
SCLK1:  05399328:86:0           SCLK2:  05399337:16:0
SCET1:  2000-053/13:57:22.666   SCET2:  2000-053/14:05:41.333
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:   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

WETGID:     0326144001          03  26  144  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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INMOSAIC01

```
OAPEL:  27INMOSAIC01            ALIAS:  27INMOSAIC01
EXT:    B                       PSID:   DE
SCLK1:  05399338:49:0           SCLK2:  05399342:74:0
SCET1:  2000-053/14:07:04.000   SCET2:  2000-053/14:11:23.333
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:   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

WETGID:     0326144001          03  26  144  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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INMOSAIC01

```
OAPEL:  27INMOSAIC01            ALIAS:  27INMOSAIC01
EXT:    C                       PSID:   DE
SCLK1:  05399328:86:0           SCLK2:  05399342:74:0
SCET1:    00-053/13:57:22.666   SCET2:    00-053/14:11:23.333
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:   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

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

EDIT TABLE

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

27INMOSAIC01

```
OAPEL:  27INMOSAIC01            ALIAS:  27INMOSAIC01
EXT:    I                       PSID:   DE
SCLK1:  05399328:86:0           SCLK2:  05399342:74:0
SCET1:    00-053/13:57:22.666   SCET2:    00-053/14:11:23.333
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

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

27INPROMTH01

OAPEL: 27INPROMTH01 ALIAS: 27INPROMTH01
EXT: A PSID: DF
SCLK1: 05399352:61:0 SCLK2: 05399354:78:0
SCET1: 2000-053/14:21:22.000 SCET2: 2000-053/14:23:34.000
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: 36 TLMFMT: MPW

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

WETGID: 0326036001 03 26 036 001
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	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	00000	0,0000,0000,0000,0000
9	00000	0,0000,0000,0000,0000
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

27INPROMTH01

OAPEL: 27INPROMTH01 ALIAS: 27INPROMTH01
EXT: C PSID: DF
SCLK1: 05399348:37:0 SCLK2: 05399357:66:0
SCET1: 00-053/14:17:03.333 SCET2: 00-053/14:26:28.000
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: 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

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

27INTOHIL_01

```
OAPEL:  27INTOHIL_01              ALIAS:  27ISTOHIL_01
EXT:    A                         PSID:   IE
SCLK1:  05399359:08:0             SCLK2:  05399359:49:0
SCET1:    00-053/14:27:51.133     SCET2:    00-053/14:28:18.666
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:   360                   TLMFMT:    IM8

THRESHOLD_SEL: 0
THRESHOLD_VALUES:  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

27INPROMTH02

```
OAPEL:  27INPROMTH02              ALIAS:  27ISPROMTH02
EXT:    A                         PSID:   IF
SCLK1:  05399361:08:0             SCLK2:  05399361:76:0
SCET1:    00-053/14:29:52.466     SCET2:    00-053/14:30:37.333
TARGET: IO                        PARTITION: 1

MODE:       0                     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:    15                   TLMFMT:     IM8

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

WETGID:     0713015001          07  13  015  001
WTGRP_SIZ:  13
```

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

27INCAMAXT01

OAPEL: 27INCAMAXT01 ALIAS: 27ISCAMAXT01
EXT: B PSID: IG
SCLK1: 05399364:02:0 SCLK2: 05399365:61:0
SCET1: 2000-053/14:32:50.666 SCET2: 2000-053/14:34:30.000
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: 36 TLMFMT: IM4

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

WETGID: 0326036001 03 26 036 001
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	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	00000	0,0000,0000,0000,0000
9	00000	0,0000,0000,0000,0000
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

27INCAMAXT01

OAPEL: 27INCAMAXT01 ALIAS: 27ISCAMAXT01
EXT: D PSID: IG
SCLK1: 05399364:02:0 SCLK2: 05399365:61:0
SCET1: 00-053/14:32:50.666 SCET2: 00-053/14:34:30.000
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: 360 TLMFMT: IM4

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 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

27INCAMAXT01

OAPEL: 27INCAMAXT01 ALIAS: 27INCAMAXT01
EXT: A PSID: DG
SCLK1: 05399366:89:0 SCLK2: 05399368:80:0
SCET1: 2000-053/14:35:49.333 SCET2: 2000-053/14:37:45.333
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: 36 TLMFMT: MPW

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

WETGID: 0326036001 03 26 036 001
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	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	00000	0,0000,0000,0000,0000
9	00000	0,0000,0000,0000,0000
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

27INCAMAXT01

```
OAPEL:  27INCAMAXT01              ALIAS:  27INCAMAXT01
EXT:    C                         PSID:   DG
SCLK1:  05399366:89:0             SCLK2:  05399368:80:0
SCET1:    00-053/14:35:49.333     SCET2:    00-053/14:37:45.333
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:   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

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

27INAMRANI01

OAPEL: 27INAMRANI01 ALIAS: 27INAMRANI01
EXT: A PSID: DH
SCLK1: 05399381:75:0 SCLK2: 05399384:00:0
SCET1: 2000-053/14:50:50.000 SCET2: 2000-053/14:53:02.000
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: 36 TLMFMT: MPW

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

WETGID: 0326036001 03 26 036 001
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	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	00000	0,0000,0000,0000,0000
9	00000	0,0000,0000,0000,0000
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

27INAMRANI01

OAPEL: 27INAMRANI01 ALIAS: 27INAMRANI01
EXT: B PSID: DH
SCLK1: 05399372:89:0 SCLK2: 05399391:33:0
SCET1: 00-053/14:41:53.333 SCET2: 00-053/15:00:29.333
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: 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

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

27INTVASHT01

OAPEL: 27INTVASHT01 ALIAS: 27ISTVASHT01
EXT: B PSID: II
SCLK1: 05399393:74:0 SCLK2: 05399394:38:0
SCET1: 2000-053/15:02:57.333 SCET2: 2000-053/15:03:34.000
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: 144 TLMFMT: IM8

THRESHOLD_SEL: 0
THRESHOLD_VALUES: 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	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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INZALTRM01

```
OAPEL:  27INZALTRM01            ALIAS:  27ISZALTRM01
EXT:    A                       PSID:   IJ
SCLK1:  05399399:12:0           SCLK2:  05399399:76:0
SCET1:  2000-053/15:08:20.000   SCET2:  2000-053/15:09:03.333
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:   144                 TLMFMT:     IM4

THRESHOLD_SEL: 0
THRESHOLD_VALUES:  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	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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INTVASHT01

OAPEL: 27INTVASHT01 ALIAS: 27INTVASHT01
EXT: A PSID: EJ
SCLK1: 05399404:88:0 SCLK2: 05399408:51:0
SCET1: 2000-053/15:14:14.000 SCET2: 2000-053/15:17:52.666
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: 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

WETGID: 0326144001 03 26 144 001
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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INREGION01

OAPEL: 27INREGION01 ALIAS: 27INREGION01
EXT: A PSID: DI
SCLK1: 05399411:24:0 SCLK2: 05399455:70:0
SCET1: 2000-053/15:20:36.666 SCET2: 2000-053/16:05:36.000
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: 120 TLMFMT: MPW

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

WETGID: 0326120001 03 26 120 001
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	00000	0,0000,0000,0000,0000
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	039FF	0,0011,1001,1111,1111
13	00000	0,0000,0000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	00000	0,0000,0000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	00000	0,0000,0000,0000,0000
18	00000	0,0000,0000,0000,0000
19	00000	0,0000,0000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	00000	0,0000,0000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27INGLOBAL01

```
OAPEL:  27INGLOBAL01              ALIAS:  27INGLOBAL01
EXT:    A                         PSID:   EI
SCLK1:  05399675:46:0             SCLK2:  05399678:25:0
SCET1:  2000-053/19:47:47.000     SCET2:  2000-053/19:50:35.000
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:    36                   TLMFMT:     MPW

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

WETGID:     0326036001          03  26  036  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	00000	0,0000,0000,0000,0000
3	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	039FF	0,0011,1001,1111,1111
9	00000	0,0000,0000,0000,0000
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	039FF	0,0011,1001,1111,1111
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

27INGLOBAL01

```
OAPEL:  27INGLOBAL01              ALIAS:  27INGLOBAL01
EXT:    B                         PSID:   EI
SCLK1:  05399679:73:0             SCLK2:  05399684:76:0
SCET1:  2000-053/19:52:07.333     SCET2:  2000-053/19:57:13.000
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:    36                   TLMFMT:     MPW

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

WETGID:     0326036001          03  26  036  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	00000	0,0000,0000,0000,0000
3	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	039FF	0,0011,1001,1111,1111
9	00000	0,0000,0000,0000,0000
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	039FF	0,0011,1001,1111,1111
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

27INGLOBAL01

```
OAPEL:  27INGLOBAL01              ALIAS:  27INGLOBAL01
EXT:    C                         PSID:   EI
SCLK1:  05399687:58:0             SCLK2:  05399692:48:0
SCET1:  2000-053/20:00:03.000     SCET2:  2000-053/20:04:59.333
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:    36                   TLMFMT:     MPW

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

WETGID:     0326036001          03  26  036  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	00000	0,0000,0000,0000,0000
3	00000	0,0000,0000,0000,0000
4	00000	0,0000,0000,0000,0000
5	00000	0,0000,0000,0000,0000
6	00000	0,0000,0000,0000,0000
7	00000	0,0000,0000,0000,0000
8	039FF	0,0011,1001,1111,1111
9	00000	0,0000,0000,0000,0000
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	039FF	0,0011,1001,1111,1111
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

27NNPCTRLT01

```
OAPEL:  27NNPCTRLT01            ALIAS:  LSNNPCTRLT01
EXT:    R                       PSID:   FB
SCLK1:  05424640:00:0           SCLK2:  05424641:12:0
SCET1:  2000-071/08:29:38.466   SCET2:  2000-071/08:30:47.133
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:        1                   RECORD:     0

MB_DOWN:    11011               MB_UP:      11011
COMP_FLAG:  1
EST_COMP:   2.0                 EST_COMPV:  0.3
RATE_CON1:  00000               RATE_CON2:  00000
NWAVETOT:   252                 TLMFMT:     RT

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

WETGID:     0303252000          03  03  252  000
WTGRP_SIZ:  3
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1FFC0	1,1111,1111,1100,0000
1	1FFC0	1,1111,1111,1100,0000
2	1FFC0	1,1111,1111,1100,0000
3	1FFC0	1,1111,1111,1100,0000
4	1FFC0	1,1111,1111,1100,0000
5	1FFC0	1,1111,1111,1100,0000
6	1FFC0	1,1111,1111,1100,0000
7	1FFC0	1,1111,1111,1100,0000
8	1FFC0	1,1111,1111,1100,0000
9	1FFC0	1,1111,1111,1100,0000
10	1FFC0	1,1111,1111,1100,0000
11	1FFC0	1,1111,1111,1100,0000
12	1FF80	1,1111,1111,1000,0000
13	1FF80	1,1111,1111,1000,0000
14	1FF80	1,1111,1111,1000,0000
15	1FF80	1,1111,1111,1000,0000
16	1FF80	1,1111,1111,1000,0000
17	1FF80	1,1111,1111,1000,0000
18	1FF80	1,1111,1111,1000,0000
19	1FF80	1,1111,1111,1000,0000
20	1FF80	1,1111,1111,1000,0000
21	1FF80	1,1111,1111,1000,0000
22	1FF80	1,1111,1111,1000,0000
23	1FF80	1,1111,1111,1000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27NNPCTRLT01

OAPEL: 27NNPCTRLT01 ALIAS: LSNNPCTRLT01
EXT: S PSID: FB
SCLK1: 05424646:00:0 SCLK2: 05424655:12:0
SCET1: 2000-071/08:35:42.466 SCET2: 2000-071/08:44:56.466
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: 1 RECORD: 0

MB_DOWN: 11011 MB_UP: 11011
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 00000
NWAVETOT: 252 TLMFMT: RT

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

WETGID: 0303252000 03 03 252 000
WTGRP_SIZ: 3

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1FFC0	1,1111,1111,1100,0000
1	1FFC0	1,1111,1111,1100,0000
2	1FFC0	1,1111,1111,1100,0000
3	1FFC0	1,1111,1111,1100,0000
4	1FFC0	1,1111,1111,1100,0000
5	1FFC0	1,1111,1111,1100,0000
6	1FFC0	1,1111,1111,1100,0000
7	1FFC0	1,1111,1111,1100,0000
8	1FFC0	1,1111,1111,1100,0000
9	1FFC0	1,1111,1111,1100,0000
10	1FFC0	1,1111,1111,1100,0000
11	1FFC0	1,1111,1111,1100,0000
12	1FF80	1,1111,1111,1000,0000
13	1FF80	1,1111,1111,1000,0000
14	1FF80	1,1111,1111,1000,0000
15	1FF80	1,1111,1111,1000,0000
16	1FF80	1,1111,1111,1000,0000
17	1FF80	1,1111,1111,1000,0000
18	1FF80	1,1111,1111,1000,0000
19	1FF80	1,1111,1111,1000,0000
20	1FF80	1,1111,1111,1000,0000
21	1FF80	1,1111,1111,1000,0000
22	1FF80	1,1111,1111,1000,0000
23	1FF80	1,1111,1111,1000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27NNRCTRLT01

OAPEL: 27NNRCTRLT01 ALIAS: LSNNRCTRTA01
EXT: R PSID: XU
SCLK1: 05426366:00:0 SCLK2: 05426366:12:0
SCET1: 2000-072/13:34:49.066 SCET2: 2000-072/13:34:57.066
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: 1 RECORD: 0

MB_DOWN: 11011 MB_UP: 11011
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 00000
NWAVETOT: 252 TLMFMT: RT

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

WETGID: 0303252000 03 03 252 000
WTGRP_SIZ: 3

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	003FF	0,0000,0011,1111,1111
1	003FF	0,0000,0011,1111,1111
2	003FF	0,0000,0011,1111,1111
3	003FF	0,0000,0011,1111,1111
4	003FF	0,0000,0011,1111,1111
5	003FF	0,0000,0011,1111,1111
6	003FF	0,0000,0011,1111,1111
7	003FF	0,0000,0011,1111,1111
8	003FF	0,0000,0011,1111,1111
9	003FF	0,0000,0011,1111,1111
10	003FF	0,0000,0011,1111,1111
11	003FF	0,0000,0011,1111,1111
12	007FF	0,0000,0111,1111,1111
13	007FF	0,0000,0111,1111,1111
14	007FF	0,0000,0111,1111,1111
15	007FF	0,0000,0111,1111,1111
16	007FF	0,0000,0111,1111,1111
17	007FF	0,0000,0111,1111,1111
18	007FF	0,0000,0111,1111,1111
19	007FF	0,0000,0111,1111,1111
20	007FF	0,0000,0111,1111,1111
21	007FF	0,0000,0111,1111,1111
22	007FF	0,0000,0111,1111,1111
23	007FF	0,0000,0111,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27NNRCTRLT01

OAPEL: 27NNRCTRLT01 ALIAS: LSNNRCTRTA01
EXT: S PSID: XU
SCLK1: 05426372:00:0 SCLK2: 05426373:12:0
SCET1: 2000-072/13:40:53.066 SCET2: 2000-072/13:42:01.733
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: 1 RECORD: 0

MB_DOWN: 11011 MB_UP: 11011
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 00000
NWAVETOT: 252 TLMFMT: RT

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

WETGID: 0303252000 03 03 252 000
WTGRP_SIZ: 3

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	003FF	0,0000,0011,1111,1111
1	003FF	0,0000,0011,1111,1111
2	003FF	0,0000,0011,1111,1111
3	003FF	0,0000,0011,1111,1111
4	003FF	0,0000,0011,1111,1111
5	003FF	0,0000,0011,1111,1111
6	003FF	0,0000,0011,1111,1111
7	003FF	0,0000,0011,1111,1111
8	003FF	0,0000,0011,1111,1111
9	003FF	0,0000,0011,1111,1111
10	003FF	0,0000,0011,1111,1111
11	003FF	0,0000,0011,1111,1111
12	007FF	0,0000,0111,1111,1111
13	007FF	0,0000,0111,1111,1111
14	007FF	0,0000,0111,1111,1111
15	007FF	0,0000,0111,1111,1111
16	007FF	0,0000,0111,1111,1111
17	007FF	0,0000,0111,1111,1111
18	007FF	0,0000,0111,1111,1111
19	007FF	0,0000,0111,1111,1111
20	007FF	0,0000,0111,1111,1111
21	007FF	0,0000,0111,1111,1111
22	007FF	0,0000,0111,1111,1111
23	007FF	0,0000,0111,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27NNRCTRLT01

```
OAPEL:  27NNRCTRLT01            ALIAS:  LSNNRCTRTA01
EXT:    T                       PSID:   XU
SCLK1:  05426378:00:0           SCLK2:  05426378:12:0
SCET1:  2000-072/13:46:57.066   SCET2:  2000-072/13:47:05.066
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:        1                   RECORD:     0

MB_DOWN:    11011               MB_UP:      11011
COMP_FLAG:  1
EST_COMP:   2.0                 EST_COMPV:  0.3
RATE_CON1:  00000               RATE_CON2:  00000
NWAVETOT:   252                 TLMFMT:     RT

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

WETGID:     0303252000          03  03  252  000
WTGRP_SIZ:  3
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	003FF	0,0000,0011,1111,1111
1	003FF	0,0000,0011,1111,1111
2	003FF	0,0000,0011,1111,1111
3	003FF	0,0000,0011,1111,1111
4	003FF	0,0000,0011,1111,1111
5	003FF	0,0000,0011,1111,1111
6	003FF	0,0000,0011,1111,1111
7	003FF	0,0000,0011,1111,1111
8	003FF	0,0000,0011,1111,1111
9	003FF	0,0000,0011,1111,1111
10	003FF	0,0000,0011,1111,1111
11	003FF	0,0000,0011,1111,1111
12	007FF	0,0000,0111,1111,1111
13	007FF	0,0000,0111,1111,1111
14	007FF	0,0000,0111,1111,1111
15	007FF	0,0000,0111,1111,1111
16	007FF	0,0000,0111,1111,1111
17	007FF	0,0000,0111,1111,1111
18	007FF	0,0000,0111,1111,1111
19	007FF	0,0000,0111,1111,1111
20	007FF	0,0000,0111,1111,1111
21	007FF	0,0000,0111,1111,1111
22	007FF	0,0000,0111,1111,1111
23	007FF	0,0000,0111,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

27NNOPCAL_01

```
OAPEL:  27NNOPCAL_01            ALIAS:  LSNNOPCAL_01
EXT:    R                       PSID:   DC
SCLK1:  05426382:00:0           SCLK2:  05426384:12:0
SCET1:  2000-072/13:50:59.733   SCET2:  2000-072/13:53:09.066
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:        1                   RECORD:     0

MB_DOWN:    11011               MB_UP:      11011
COMP_FLAG:  1
EST_COMP:   2.0                 EST_COMPV:  0.3
RATE_CON1:  00000               RATE_CON2:  00000
NWAVETOT:   048                 TLMFMT:     RT

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

WETGID:     0302048000          03  02  048  000
WTGRP_SIZ:  2
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	18000	1,1000,0000,0000,0000
1	18000	1,1000,0000,0000,0000
2	18000	1,1000,0000,0000,0000
3	18000	1,1000,0000,0000,0000
4	18000	1,1000,0000,0000,0000
5	18000	1,1000,0000,0000,0000
6	18000	1,1000,0000,0000,0000
7	18000	1,1000,0000,0000,0000
8	18000	1,1000,0000,0000,0000
9	18000	1,1000,0000,0000,0000
10	18000	1,1000,0000,0000,0000
11	18000	1,1000,0000,0000,0000
12	18000	1,1000,0000,0000,0000
13	18000	1,1000,0000,0000,0000
14	18000	1,1000,0000,0000,0000
15	18000	1,1000,0000,0000,0000
16	18000	1,1000,0000,0000,0000
17	18000	1,1000,0000,0000,0000
18	18000	1,1000,0000,0000,0000
19	18000	1,1000,0000,0000,0000
20	18000	1,1000,0000,0000,0000
21	18000	1,1000,0000,0000,0000
22	18000	1,1000,0000,0000,0000
23	18000	1,1000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

NIMS I27 OBSTAB

This is a time-ordered ASCII TABLE (listing) of GALILEO NIMS observation parameters for use by downlink data processing of the NIMS I27 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... for playback, R,S,T... for realtime. 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=freerun
	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 37MPT, unless special sequence (modes 12-15) in which case values come from 37SS parameters <tbd>
	PTAB_B(6)	12	89 - 100	.Second PTAB |...grating start, grating delta... . |...number of grating positions)	
	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 position blocking, down scan)	SEF: 37MB data byte 1, bits 4-8 <tbd>
#	RTISELUP	5	112 - 116	.RTI select, 5 binary bits (for mirror position blocking, up scan)	SEF: 37MB data byte 2, bits 4-8 <tbd>
	<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		
	NWAVETOT	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

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# WETGID       10 319 - 328     .Wavelength selection group ID (unique)         PBK: WET_GID    (realtime <tbd>)
                                  Rule of formation: mmeellllnnn 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 BHHHH 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 ).
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27INHRPELE0127INHRPELE01ADA05399306:87:005399311:85:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        144MPW2000-053/13:35:08.0002000-053/13:40:10.000
          00000000000000000000000000000000000000000000000000032614400126010 39FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INHRPELE0127INHRPELE01BDA05399306:87:005399308:86:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2         36MPW2000-053/13:35:08.0002000-053/13:37:09.333
          00000000000000000000000000000000000000000000000000032603600126011840001000000118400010000001184000100000011840001000
0001184000100000011840001000000118400010000001184000100000011840001000000118400010000001184000100000011840001000000100000
27INHRPELE0127INHRPELE01CDA05399309:00:005399309:15:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2        180MPW2000-053/13:37:12.6662000-053/13:37:22.000
          00000000000000000000000000000000000000000000000000032618000126011BDFF0100000011BDFF0100000011BDFF0100000011BDFF01000
00011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000001000000100000
27INHRPELE0127INHRPELE01DDA05399309:24:005399311:85:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2         36MPW2000-053/13:37:28.6662000-053/13:40:10.000
          00000000000000000000000000000000000000000000000000032603600126011840001000000118400010000001184000100000011840001000
0001184000100000011840001000000118400010000001184000100000011840001000000118400010000001184000100000011840001000000100000
27INHRPELE0127INHRPELE01IDA05399306:87:005399311:85:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        M        180MPW2000-053/13:35:08.0002000-053/13:40:10.000
          00000000000000000000000000000000000000000000000000032618000126011BDFF0100000011BDFF0100000011BDFF0100000011BDFF01000
00011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000011BDFF0100000001000000100000
27INPELE__0127ISPELE__01AIA05399312:71:005399313:24:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2        144IM82000-053/13:41:01.3332000-053/13:41:31.333
          00000000000000000000000000000000000000000000000000032614400126010 39FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INPROMTH0127ISPROMTH01BID05399322:70:005399323:64:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2        144IM82000-053/13:51:08.0002000-053/13:52:04.666
          00000000000000000000000000000000000000000000000000032614400126010 39FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INPROMTH0127ISPROMTH01DID05399322:70:005399323:64:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2        144IM8  00-053/13:51:08.000  00-053/13:52:04.666
          00000000000000000000000000000000000000000000000000032614400126010000001039FF010000001039FF010000001039FF010000001039
FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INPROMTH0127ISPROMTH01IID05399322:70:005399323:64:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        M        288IM8  00-053/13:51:08.000  00-053/13:52:04.666
          00000000000000000000000000000000000000000000000000032628800126010 39FF01039FF01039FF01039FF01039FF01039FF01039FF01039
FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01000000100000
27INICHAAC0127INICHAAC01ADD05399325:37:005399327:30:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        144MPW2000-053/13:53:47.3332000-053/13:55:44.000
          00000000000000000000000000000000000000000000000000032614400126010 39FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
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27INICHAAC0127INICHAAC01BDD05399325:37:005399327:30:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        144MPW  00-053/13:53:47.333  00-053/13:55:44.000
          0000000000000000000000000000000000000000000000000000000032614400126010000001039FF010000001039FF010000001039FF010000001039
FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF01000000100000
27INICHAAC0127INICHAAC01IDD05399325:37:005399327:30:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        M        288MPW  00-053/13:53:47.333  00-053/13:55:44.000
          0000000000000000000000000000000000000000000000000000000032628800126010039FF01039FF01039FF01039FF01039FF01039FF01039FF01039
FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01000000100000
27INMOSAIC0127INMOSAIC01ADE05399328:86:005399337:16:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        144MPW2000-053/13:57:22.6662000-053/14:05:41.333
          0000000000000000000000000000000000000000000000000000000032614400126010039FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INMOSAIC0127INMOSAIC01BDE05399338:49:005399342:74:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2        144MPW2000-053/14:07:04.0002000-053/14:11:23.333
          0000000000000000000000000000000000000000000000000000000032614400126010039FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INMOSAIC0127INMOSAIC01CDE05399328:86:005399342:74:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        144MPW  00-053/13:57:22.666  00-053/14:11:23.333
          0000000000000000000000000000000000000000000000000000000032614400126010000001039FF010000001039FF010000001039FF010000001039
FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF01000000100000
27INMOSAIC0127INMOSAIC01IDE05399328:86:005399342:74:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        M        288MPW  00-053/13:57:22.666  00-053/14:11:23.333
          0000000000000000000000000000000000000000000000000000000032628800126010039FF01039FF01039FF01039FF01039FF01039FF01039FF01039
FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01039FF01000000100000
27INPROMTH0127INPROMTH01ADF05399352:61:005399354:78:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         36MPW2000-053/14:21:22.0002000-053/14:23:34.000
          0000000000000000000000000000000000000000000000000000000032603600126010039FF01039FF01039FF01000000100000010000001000000100000
0001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000
27INPROMTH0127INPROMTH01CDF05399348:37:005399357:66:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        360MPW  00-053/14:17:03.333  00-053/14:26:28.000
          0000000000000000000000000000000000000000000000000000000032636000126011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BD
FF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF01000000100000
27INTOHIL_0127ISTOHIL_01AIE05399359:08:005399359:49:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        360IM8  00-053/14:27:51.133  00-053/14:28:18.666
          0000000000000000000000000000000000000000000000000000000032636000126011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BD
FF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF01000000100000
27INPROMTH0227ISPROMTH02AIF05399361:08:005399361:76:01         IO       0214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         15IM8  00-053/14:29:52.466  00-053/14:30:37.333
          0000000000000000000000000000000000000000000000000000000071301500113011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BD
FF011BDFF011BDFF011BDFF011BDFF011BDFF
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27INCAMAXT0127ISCAMAXT01BIG05399364:02:005399365:61:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         36IM42000-053/14:32:50.6662000-053/14:34:30.000
          00000000000000000000000000000000000000000000000000032603600126011039FF01039FF01039FF01000000100000010000001000000100
00010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000
27INCAMAXT0127ISCAMAXT01DIG05399364:02:005399365:61:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        360IM4  00-053/14:32:50.666  00-053/14:34:30.000
          00000000000000000000000000000000000000000000000000032636000126011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BD
FF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF01000000100000
27INCAMAXT0127INCAMAXT01ADG05399366:89:005399368:80:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         36MPW2000-053/14:35:49.3332000-053/14:37:45.333
          00000000000000000000000000000000000000000000000000032603600126011039FF01039FF01039FF01000000100000010000001000000100
00010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000
27INCAMAXT0127INCAMAXT01CDG05399366:89:005399368:80:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        360MPW  00-053/14:35:49.333  00-053/14:37:45.333
          00000000000000000000000000000000000000000000000000032636000126011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BD
FF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF01000000100000
27INAMRANI0127INAMRANI01ADH05399381:75:005399384:00:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         36MPW2000-053/14:50:50.0002000-053/14:53:02.000
          00000000000000000000000000000000000000000000000000032603600126011039FF01039FF01039FF01000000100000010000001000000100
00010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000
27INAMRANI0127INAMRANI01BDH05399372:89:005399391:33:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1        360MPW  00-053/14:41:53.333  00-053/15:00:29.333
          00000000000000000000000000000000000000000000000000032636000126011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BD
FF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF011BDFF01000000100000
27INTVASHT0127ISTVASHT01BII05399393:74:005399394:38:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         144IM82000-053/15:02:57.3332000-053/15:03:34.000
          00000000000000000000000000000000000000000000000000032614400126011039FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INZALTRM0127ISZALTRM01AIJ05399399:12:005399399:76:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         144IM42000-053/15:08:20.0002000-053/15:09:03.333
          00000000000000000000000000000000000000000000000000032614400126011039FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INTVASHT0127INTVASHT01AEJ05399404:88:005399408:51:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         144MPW2000-053/15:14:14.0002000-053/15:17:52.666
          00000000000000000000000000000000000000000000000000032614400126011039FF010000001039FF010000001039FF010000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
27INREGION0127INREGION01ADI05399411:24:005399455:70:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        1         120MPW2000-053/15:20:36.6662000-053/16:05:36.000
          00000000000000000000000000000000000000000000000000032612000126011039FF010000001039FF010000001000000100000001039FF01000
0001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001039FF010000001000000100000
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27INGLOBAL0127INGLOBAL01AEI05399675:46:005399678:25:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          36MPW2000-053/19:47:47.0002000-053/19:50:35.000
          000000000000000000000000000000000000000000000000000032603600126010039FF0100000010000001000000100000010000001000000100
0001039FF0100000010000001000000100000010000001000000100000010000001039FF0100000010000001000000100000010000001000000100000010000001000000100000
27INGLOBAL0127INGLOBAL01BEI05399679:73:005399684:76:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          36MPW2000-053/19:52:07.3332000-053/19:57:13.000
          000000000000000000000000000000000000000000000000000032603600126010039FF0100000010000001000000100000010000001000000100
0001039FF0100000010000001000000100000010000001000000100000010000001039FF0100000010000001000000100000010000001000000100000010000001000000100000
27INGLOBAL0127INGLOBAL01CEI05399687:58:005399692:48:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          36MPW2000-053/20:00:03.0002000-053/20:04:59.333
          000000000000000000000000000000000000000000000000000032603600126010039FF0100000010000001000000100000010000001000000100
0001039FF0100000010000001000000100000010000001000000100000010000001039FF0100000010000001000000100000010000001000000100000010000001000000100000
27NNPCTRLT01LSNNPCTRLT01RFB05424640:00:005424641:12:01         CAL      3414 1 1 0 0 124 1 1 0 0 12400100 1101111011 1 2.00.3000
0000000                252RT 2000-071/08:29:38.4662000-071/08:30:47.133
          000000000000000000000000000000000000000000000000000303252000 3121FFC0121FF800200000

27NNPCTRLT01LSNNPCTRLT01SFB05424646:00:005424655:12:01         CAL      3414 1 1 0 0 124 1 1 0 0 12400100 1101111011 1 2.00.3000
0000000                252RT 2000-071/08:35:42.4662000-071/08:44:56.466
          000000000000000000000000000000000000000000000000000303252000 3121FFC0121FF800200000

27NNRCTRLT01LSNNRCTRTA01RXU05426366:00:005426366:12:01         CAL      3114 1 1 0 0 124 1 1 0 0 12400100 1101111011 1 2.00.3000
0000000                252RT 2000-072/13:34:49.0662000-072/13:34:57.066
          000000000000000000000000000000000000000000000000000303252000 312003FF12007FF0200000

27NNRCTRLT01LSNNRCTRTA01SXU05426372:00:005426373:12:01         CAL      3114 1 1 0 0 124 1 1 0 0 12400100 1101111011 1 2.00.3000
0000000                252RT 2000-072/13:40:53.0662000-072/13:42:01.733
          000000000000000000000000000000000000000000000000000303252000 312003FF12007FF0200000

27NNRCTRLT01LSNNRCTRTA01TXU05426378:00:005426378:12:01         CAL      3114 1 1 0 0 124 1 1 0 0 12400100 1101111011 1 2.00.3000
0000000                252RT 2000-072/13:46:57.0662000-072/13:47:05.066
          000000000000000000000000000000000000000000000000000303252000 312003FF12007FF0200000

27NNOPCAL_01LSNNOPCAL_01RDC05426382:00:005426384:12:01         CAL      3414 1 1 0 0 124 1 1 0 0 12400100 1101111011 1 2.00.3000
0000000                048RT 2000-072/13:50:59.7332000-072/13:53:09.066
          000000000000000000000000000000000000000000000000000302048000 224180000200000

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Chapter 5 - Detailed Observation Designs

Contents

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 retun 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.

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Grating Step Test

ACTIVITY ID: 27NNDETECT01-
START TIME: 00-053/12:35:35.333

Activity ID: Orbit 27 Target N Inst N OAPEL DETECT SeqNo 01 -

Title	Grating Step Test			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE-CDS 00000070:00:0	00-053/12:35:35.333		IEE-000/01:10:46.666	
End	IEE-CDS 00000050:00:0	00-053/12:55:48.666		IEE-000/00:50:33.333	
Duration	00000020:00:0	000/00:20:13.333		000/00:20:13.333	

Top Label	27NNDETECT01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Procedure to return NIMS Grating position Housekeeping via CDS and MROH

Design Detail

NIMS Housekeeping values, including Grating Position, are copied using 6MCOPY commands from NIMS memory locations to CDS memory locations at selected MF times to collect every other grating position over the NIMS grating cycle. These CDS locations are sent down via a 6MROH command during I27 Cruise after the I27 Encounter period.

NIMS Real-Time Software Reload ACTIVITY ID: 27NNHRPELE01-
START TIME: 00-053/13:28:10.000

Activity ID: Orbit 27 Target N Inst N OAPEL HRPELE SeqNo 01 -

Title	NIMS Real-Time Software Reload			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08

Start	IEE-CDS 00000018:00:0	00-053/13:28:10.000	IEE-000/00:18:12.000
End	IEE-CDS 00000015:00:0	00-053/13:31:12.000	IEE-000/00:15:10.000
Duration	00000003:00:0	000/00:03:02.000	000/00:03:02.000

Top Label 27NNHRPELE01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

NIMS real-time software reload
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 form is included in the NIMSGUIDE.

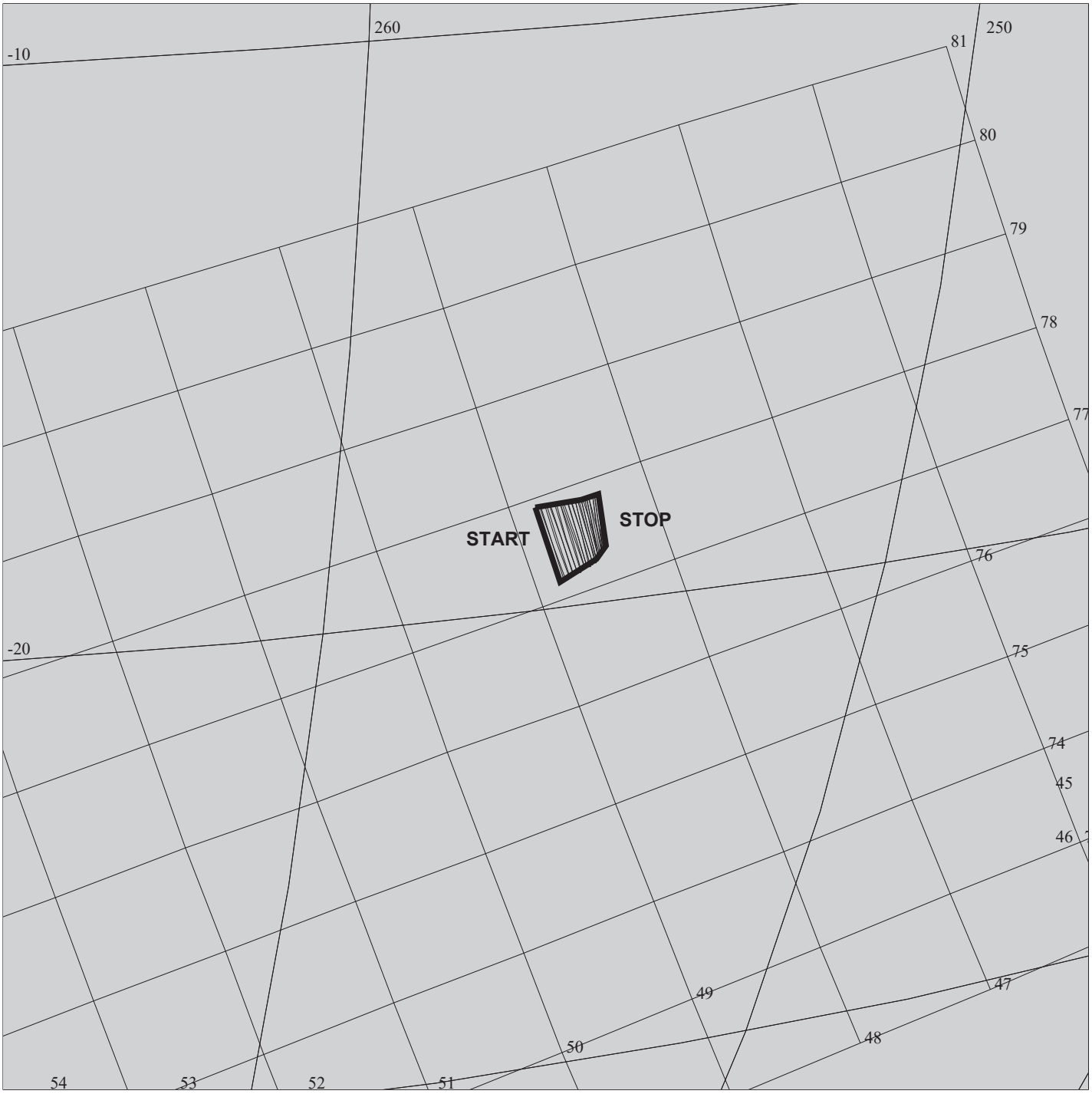
The NIMS I27 reload OAPELS are:
27NNHRPELE01, 27NNICHAAC01, 27NNMOSAIC01, 27NNPROMTH01, 27NNCAMAXT01, 27NNAMRANI01, 27NNTVASHT01, 27NNGLOBAL02, 27NNRELOAD01

27INREGION01 did not have a reload.

Design Detail

Use a standard set of commands to halt the instrument, load the software and reinitialize the instrument.

37PL - Halt NIMS Processor
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference.



165DA:TT= 0 TMC= 1 C= 5.00 XC= 0.00 BS= 0/2732 TC= 1(-18.6 255.7)
A= 182 pD= 900 SR=17.450 RA50=250.54 DEC50=-41.07 cone= 48.82 clock= 77.54
117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/2732
1:#s= 1 Cs= -8.90 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 900 rD= 2

27INHRPELE01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INHRPELE01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 -CDS 11:00:0 **BODY PLOT TIME:TARGET-TIME D= 900 S= 5.000**

OBSERVATION:27INHRPELE01 **DESCRIP:IO_PELE_OBSERVATION**

Io Pele Observation

ACTIVITY ID: 27INHRPELE01-
START TIME: 00-053/13:34:14.000

Activity ID: Orbit 27 Target N Inst N OAPEL HRPELE SeqNo 01 -

Title	Io Pele Observation			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE-CDS 00000012:00:0	00-053/13:34:14.000		IEE-000/00:12:08.000	
End	IEE-CDS 00000005:00:0	00-053/13:41:18.666		IEE-000/00:05:03.333	
Duration	00000007:00:0	000/00:07:04.666		000/00:07:04.666	

Top Label	27INHRPELE01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Nightside observation of Pele to map thermal emission from the hot spot.

Data Returned

Design Detail

BTG=0.8726, TICS=269, FMT=MPW

1 Rim Target Time
5 Rim Obsservation centered at -18 deg Lat, 256 deg W. Lon
1 scan, Nyquist, LM

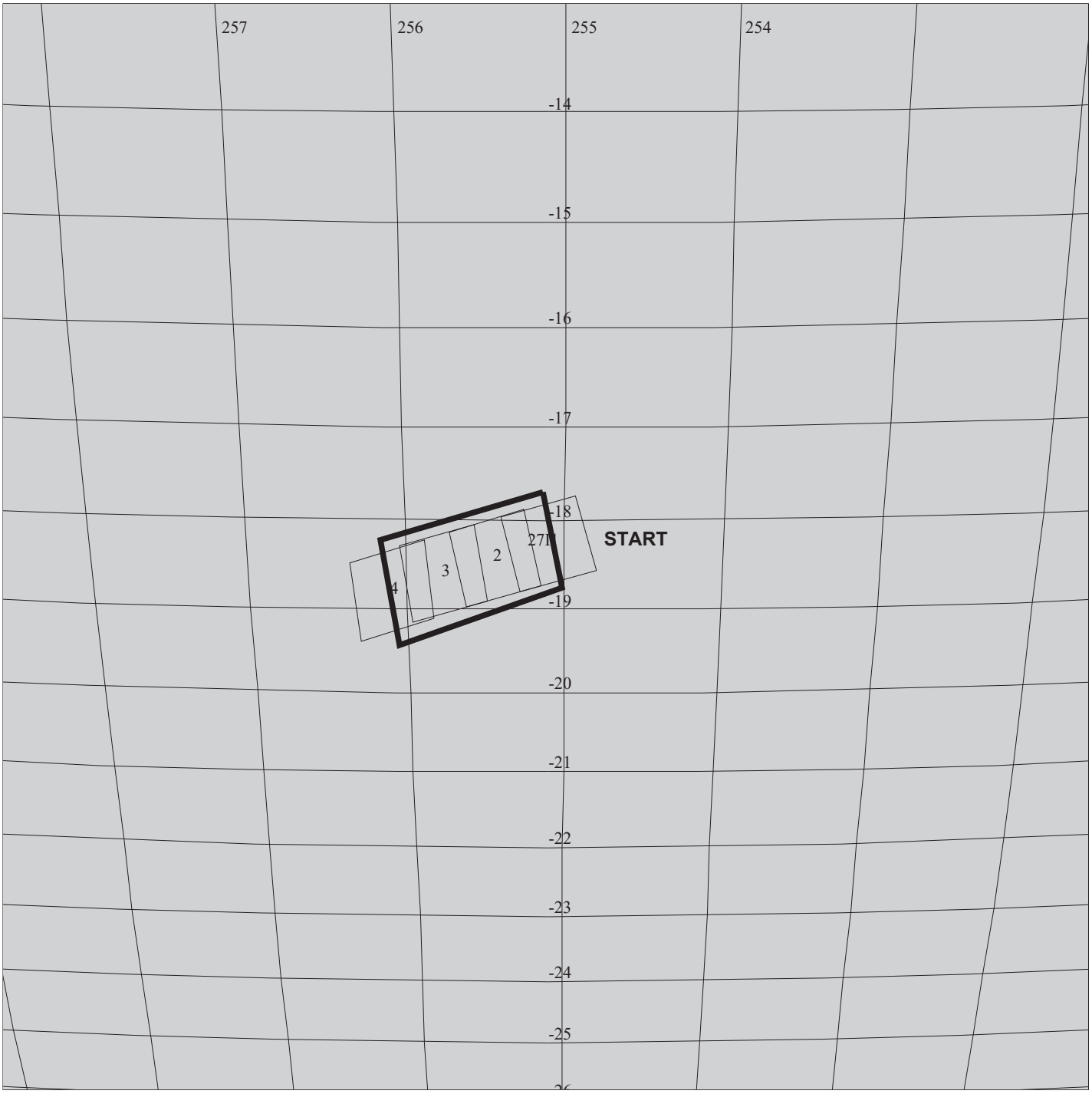
Gain State 2 (to prevent saturation)
Collaborative observation with SSI.

Saturated Pixels.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM180

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IA:TT= 0 TMC= 1 C= -8.53 XC= 0.00 BS=65/3644 TC= 1(-18.5 255.6)
A= 70 pD= 84 SR=17.450 RA50=286.74 DEC50=-63.90 cone= 76.14 clock= 60.84
118IA:#SB= 1 Cs= 5.70 XCs= 0.00 TPP= 26 SR= 2.900 RR=12.000 BM=F RC= 1 BS=68/3644
1:#s= 4 #p= 1 Cr= 0.00 XCr= 0.00

27INPELE__01

DESIGN G3.2 herb : 2/ 4/2000 9:11:42

FILE:P.27ISPELE__01

TARGET BODY : IO

MINI:m.27ISPELE__01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 -CDS 06:00:0

BODY PLOT TIME:TARGET-TIME D= 84 S= 10.000

OBSERVATION:27ISPELE__01

DESCRIP:PELE IN DARKNESS

SSI Io Pele Observation

ACTIVITY ID: 27ISPELE__01-
START TIME: 00-053/13:40:32.000

Activity ID: Orbit 27 Target N Inst S OAPEL PELE__ SeqNo 01 -

Title	SSI Io Pele Observation			Instrument	SSI
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08
Start	IEE-CDS 00000005:70:0	00-053/13:40:32.000		IEE-000/00:05:50.000	
End	IEE-CDS 00000004:80:0	00-053/13:41:26.000		IEE-000/00:04:56.000	
Duration	00000000:81:0	000/00:00:54.000		000/00:00:54.000	

Top Label	27ISPELE__01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Nightside Ride-along behind SSI to look at Pele hotspot.

Data Returned

Design Detail

Ride-along behind SSI.
single swath.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144

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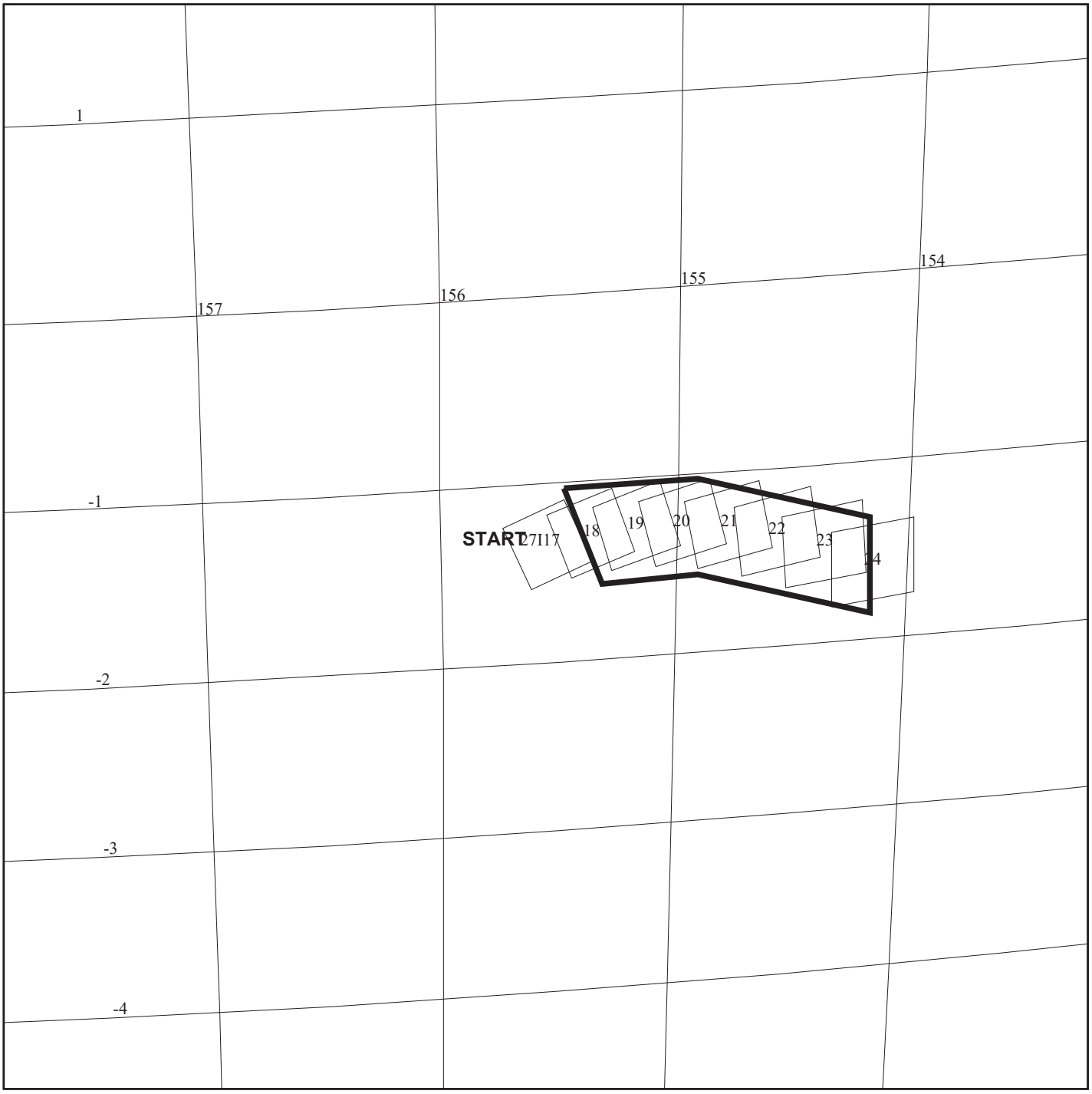


165ID:TT= 0 TMC= 1 C= 6.50 XC= -19.00 BS=65/5464 TC= 1(-1.284 154.848)
A= 168 pD= 188 SR=17.450 RA50= 29.46 DEC50=-28.84 cone=140.92 clock= 31.66
118ID:#SB= 1 Cs= -0.80 XCs= 6.00 TPP= 26 SR= 2.800 RR=12.000 BM=F RC= 1 BS=68/5464
1:#s= 8 #p= 1 Cr= 0.00 XCr= 0.00

27ISPROMTH01

DESIGN G3.2 herb : 2/ 4/2000 9:12:14

FILE:P.27ISPROMTH01

TARGET BODY : IO

MINI:m.27ISPROMTH01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 04:00:0

BODY PLOT TIME:TARGET-TIME D= 188 S= 10.000

OBSERVATION:27ISPROMTH01

DESCRIP:PROMETHEUS

SSI Io Prometheus Observation ACTIVITY ID: 27ISPROMTH01-
START TIME: 00-053/13:50:10.666

Activity ID: Orbit 27 Target N Inst S OAPEL PROMTH SeqNo 01 -

Title	SSI Io Prometheus Observation			Instrument	SSI
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08
Start	IEE+CDS	00000003:70:0	00-053/13:50:10.666	IEE+000/00:03:48.666	
End	IEE+CDS	00000005:70:0	00-053/13:52:12.000	IEE+000/00:05:50.000	
Duration		00000002:00:0	000/00:02:01.333	000/00:02:01.333	

Top Label	27ISPROMTH01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

High resolution dayside ride-along behind SSI across Prometheus hotspot region.

Data Returned

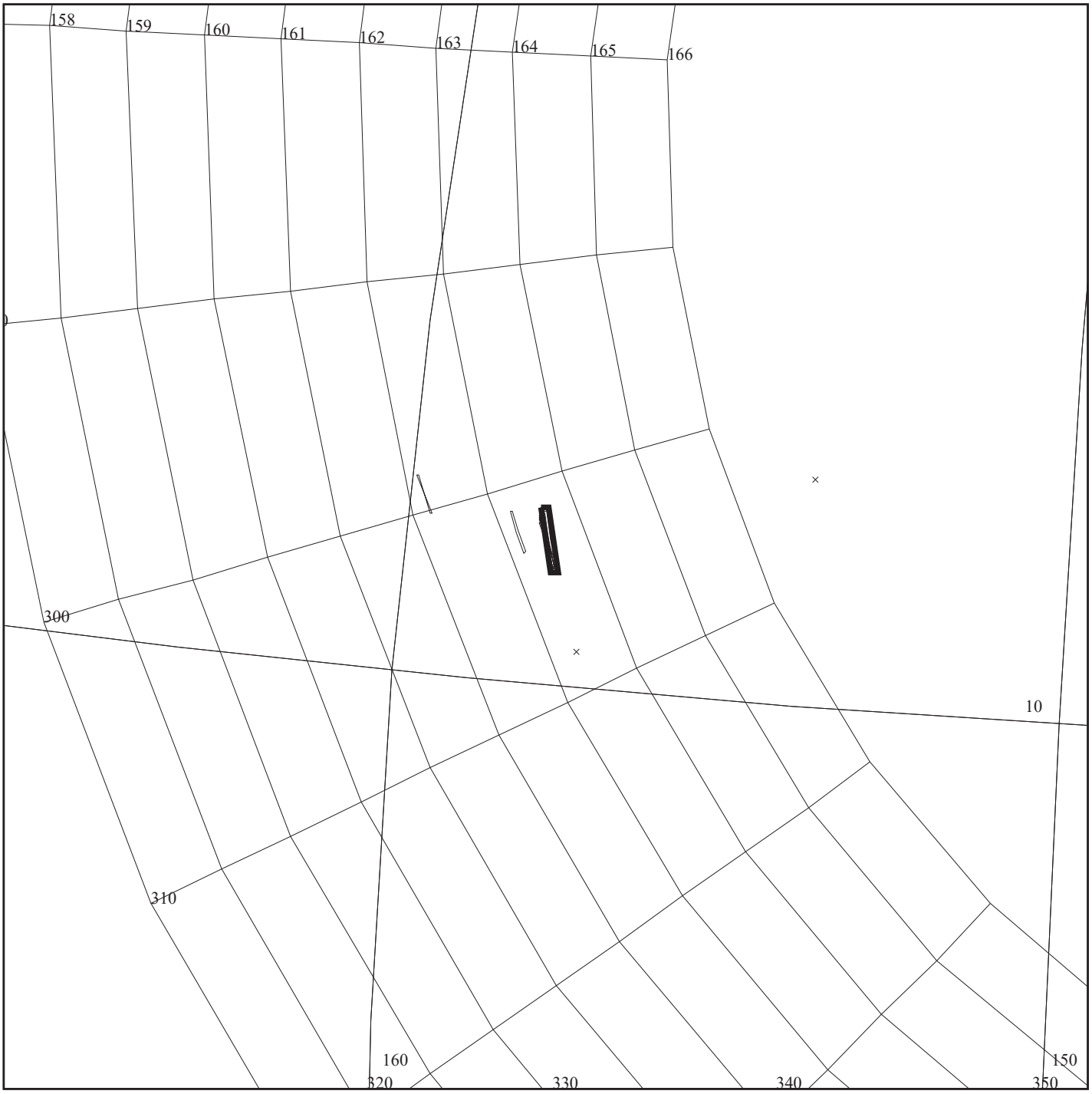
Design Detail

ride-along behind SSI.
single swath.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM288

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DD:TT= 0 TMC= 1 C= -9.00 XC= -3.00 BS=41/6008 TC= 1(12 157)
A= 302 pD= 354 SR=17.450 RA50= 44.20 DEC50= 10.16 cone=163.55 clock=303.03
117DD:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS=41/6008
1:#s= 1 Cs= 3.40 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 354 rD= 36

27INICHAAC01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INICHAAC01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 7:00:0 **BODY PLOT TIME:TARGET-TIME D= 354 S= 4.000**

OBSERVATION:27INICHAAC01 **DESCRIP:IO_CHAAC**

Io Chaac Observation

ACTIVITY ID: 27INICHAAC01-
START TIME: 00-053/13:51:25.333

Activity ID: Orbit 27 Target N Inst N OAPEL ICHAAC SeqNo 01 -

Title	Io Chaac Observation			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000005:00:0	00-053/13:51:25.333		IEE+000/00:05:03.333	
End	IEE+CDS 00000009:00:0	00-053/13:55:28.000		IEE+000/00:09:00.000	
Duration	00000004:00:0	000/00:04:02.666		000/00:04:02.666	

Top Label	27INICHAAC01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside observation of the Chaac region to investigate surface composition. The observed area includes the "Golf Course" (Chaac) at 12N, 157W.

Data Returned

Design Detail

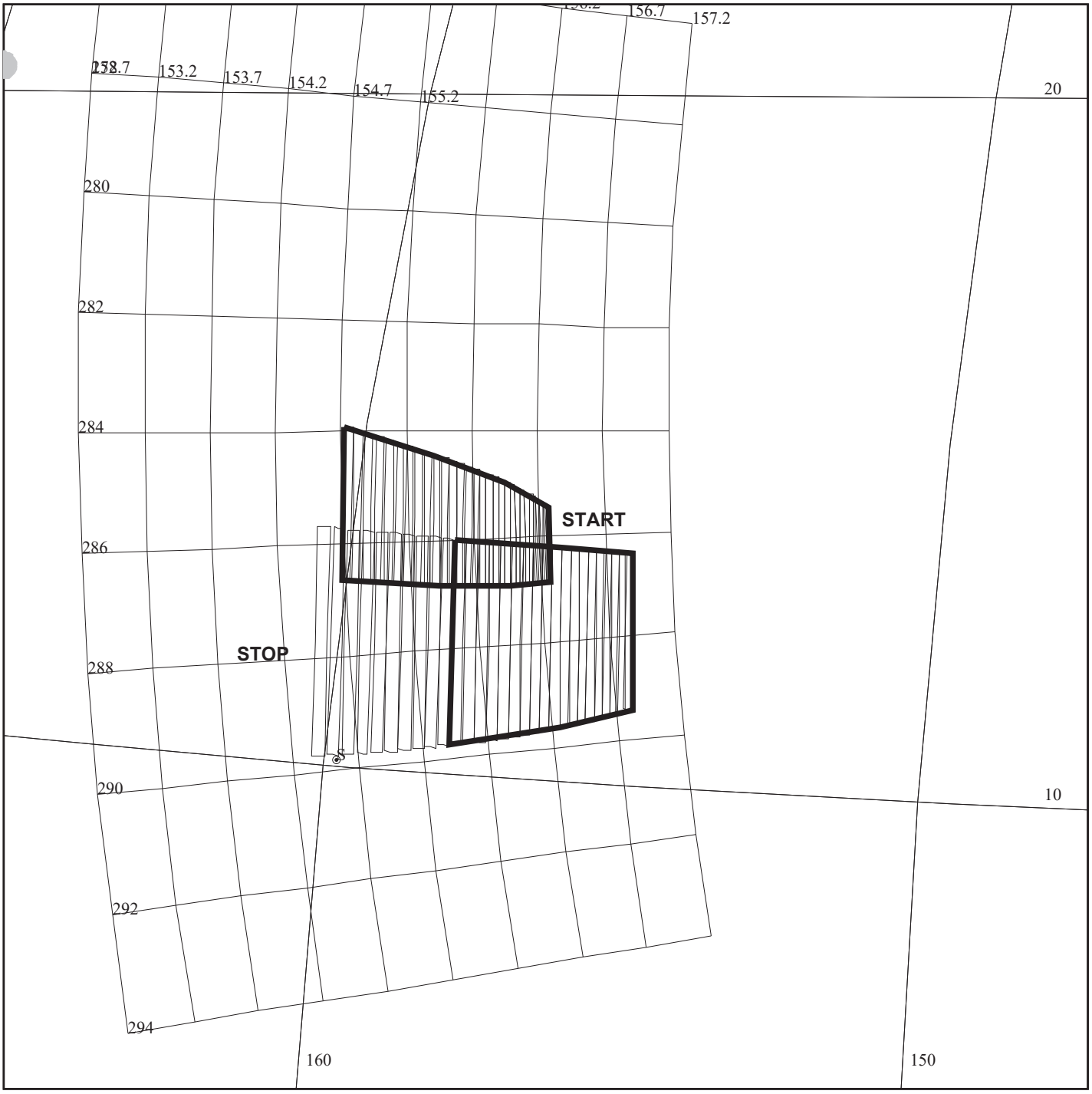
BTG=0.4493, TICS=140, FMT=MPW

Target to 12 deg Latitude, 157 deg W. Longitude.
2 Rim scan, LM, Nyquist.
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM288

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DE:TT= 0 TMC= 1 C= 5.00 XC= -3.00 BS= 0/6736 TC= 1(13 157)
A= 182 pD= 3076 SR=17.450 RA50= 51.02 DEC50= 16.63 cone=156.25 clock=286.15
117DE:#SB= 1 OR= 0.030 RR=10.000 BM=F RC= 1 BS= 0/6736
1:#s= 2 Cs= -15.10 XCs= 0.00 Cr= 17.50 XCr= 7.00 sD= 1520 rD= 36

27INMOSAIC01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INMOSAIC01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 11:00:0 **BODY PLOT TIME:TARGET-TIME D= 3076 S= 5.000**

OBSERVATION:27INMOSAIC01 **DESCRIP:IO_GOLF_COURSE_MOSAIC**

Io Mosaic Obs

ACTIVITY ID: 27INMOSAIC01-
START TIME: 00-053/13:57:29.333

Activity ID: Orbit 27 Target N Inst N OAPEL MOSAIC SeqNo 01 -

Title	Io Mosaic Obs			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000011:00:0	00-053/13:57:29.333		IEE+000/00:11:07.333	
End	IEE+CDS 00000026:00:0	00-053/14:12:39.333		IEE+000/00:26:17.333	
Duration	00000015:00:0	000/00:15:10.000		000/00:15:10.000	

Top Label	27INMOSAIC01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside observation to investigate surface composition of the Chaac hot spot region. Chaac was first detected in I25 as a hot spot.

Data Returned

Design Detail

BTG=2.3183, TICS=710, FMT=MPW

1 Rim Target, 2 scans, LM, Nyquist
Center Target at 12 deg Latitude, 157 deg W. Longitude
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM288

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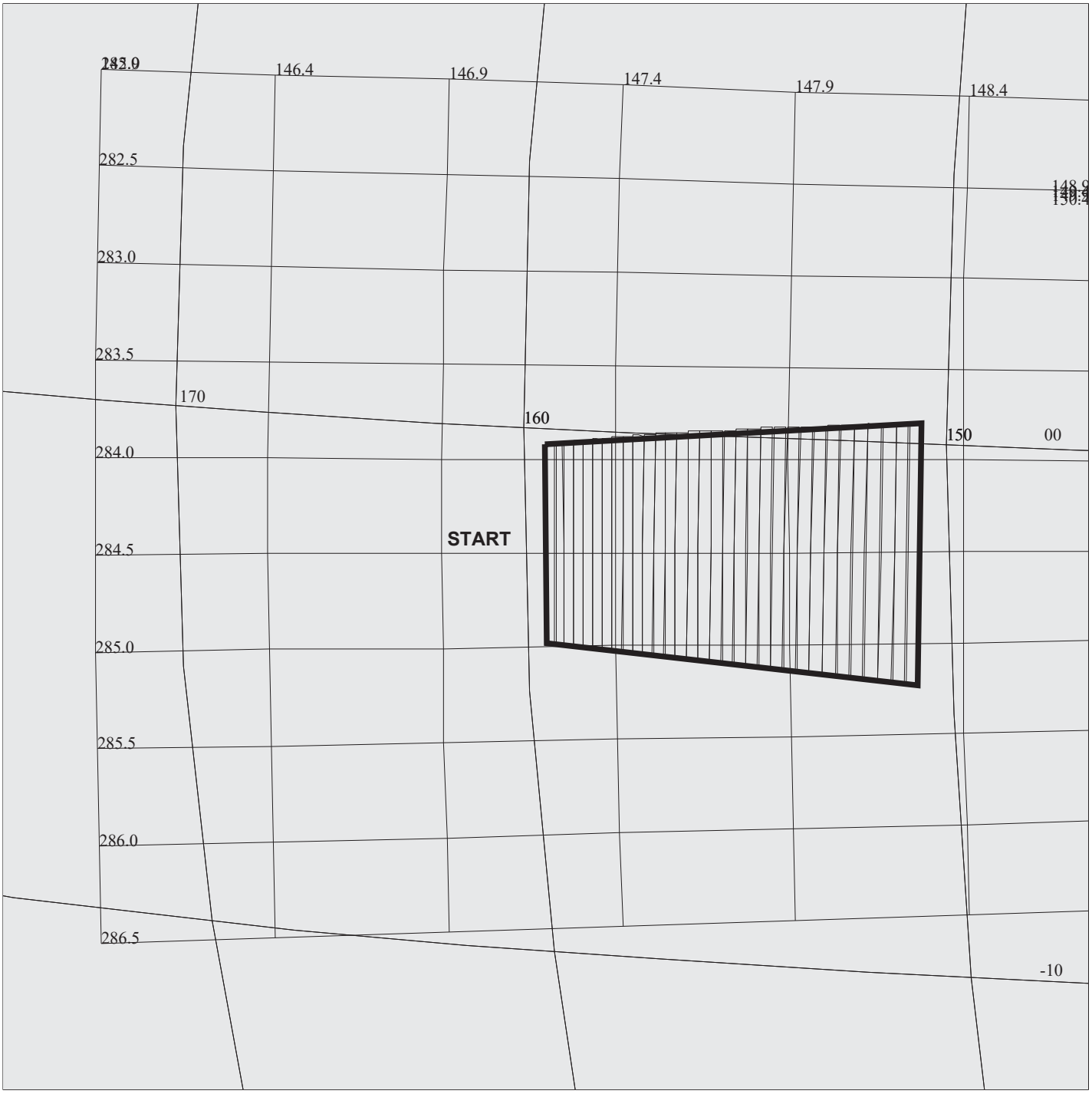


165DF:TT= 0 TMC= 1 C= -9.00 XC= 0.00 BS= 0/0376 TC= 1(-2 155)
A= 182 pD= 1628 SR=17.450 RA50= 60.11 DEC50= 19.30 cone=147.23 clock=284.46
117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0376
1:#s= 1 Cs= 16.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1628 rD= 2

27INPROMTH01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INPROMTH01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 31:00:0 **BODY PLOT TIME:TARGET-TIME D= 1628 S= 5.000**

OBSERVATION:27INPROMTH01 **DESCRIP:PROMETHEUS_OBSERVATION**

Io Prometheus Observation — ACTIVITY ID: 27INPROMTH01-
START TIME: 00-053/14:16:42.000

Activity ID: Orbit 27 Target N Inst N OAPEL PROMTH SeqNo 01 -

Title	Io Prometheus Observation			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000030:00:0	00-053/14:13:40.000		IEE+000/00:30:20.000	
End	IEE+CDS 00000040:00:0	00-053/14:16:42.000		IEE+000/00:40:26.666	
Duration	00000010:00:0	000/00:10:06.666		000/00:10:06.666	

Top Label	27INPROMTH01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside observation of Prometheus region in collaboration with SSI, to investigate surface composition, SO2 distribution and temperature distribution.

Data Returned

Design Detail

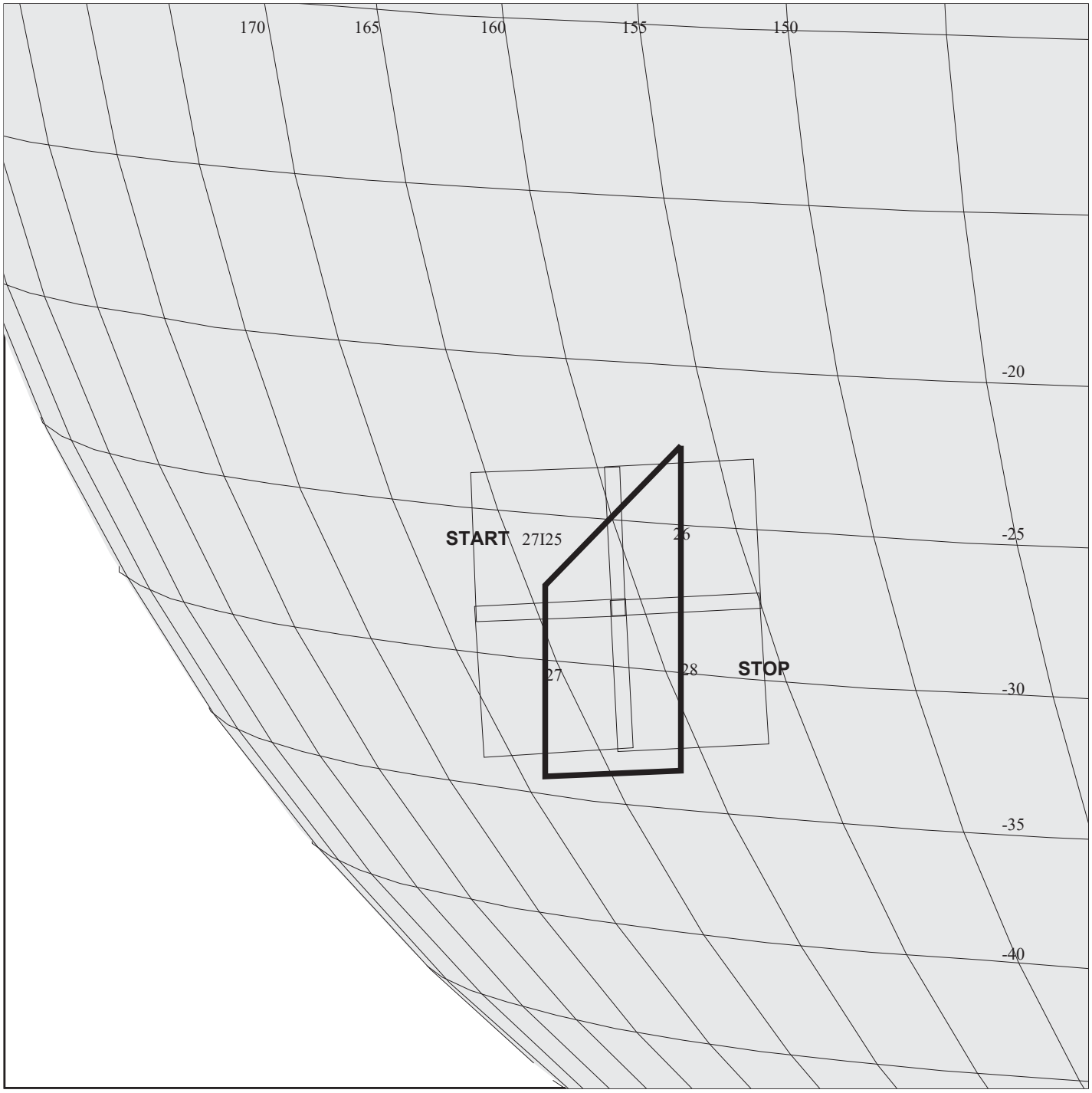
BTG=1.7929, TICS=510, FMT=MPW

1 Rim Target
Center at -2 deg Latitude, 155 deg W. Longitude
One scan, 9 Rims long, LM, Nyquist
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IE:TT= 0 TMC= 1 C= -3.65 XC= -3.65 BS= 0/2198 TC= 1(-27.9 161.0)
A= 160 pD= 84 SR=17.450 RA50= 61.04 DEC50= 17.87 cone=146.62 clock=287.33
118IE:#SB= 1 Cs= 7.30 XCs= 0.00 TPP= 26 SR= 3.700 RR= 4.900 BM=F RC= 1 BS= 3/2198
1:#s= 2 #p= 2 Cr= -7.30 XCr= 7.30

27INTOHIL_01

DESIGN G3.2 herb : 2/ 4/2000 9:14:29

FILE:P.27ISTOHIL_01

TARGET BODY : IO

MINI:m.27ISTOHIL_01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 41:00:0

BODY PLOT TIME:TARGET-TIME D= 84 S= 3.500

OBSERVATION:27ISTOHIL_01

DESCRIP:TOHIL MONS STEREO

SSI Io Tohil Observation

ACTIVITY ID: 27ISTOHIL_01-
START TIME: 00-053/14:26:48.666

Activity ID: Orbit 27 Target N Inst S OAPEL TOHIL_ SeqNo 01 -

Title	SSI Io Tohil Observation			Instrument	SSI
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08
Start	IEE+CDS 00000040:00:0	00-053/14:26:48.666		IEE+000/00:40:26.666	
End	IEE+CDS 00000041:40:0	00-053/14:28:16.000		IEE+000/00:41:54.000	
Duration	00000001:40:0	000/00:01:27.334		000/00:01:27.334	

Top Label 27ISTOHIL_01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside ride-along behind SSI 2X2 mosaic of Tohil region.

Data Returned

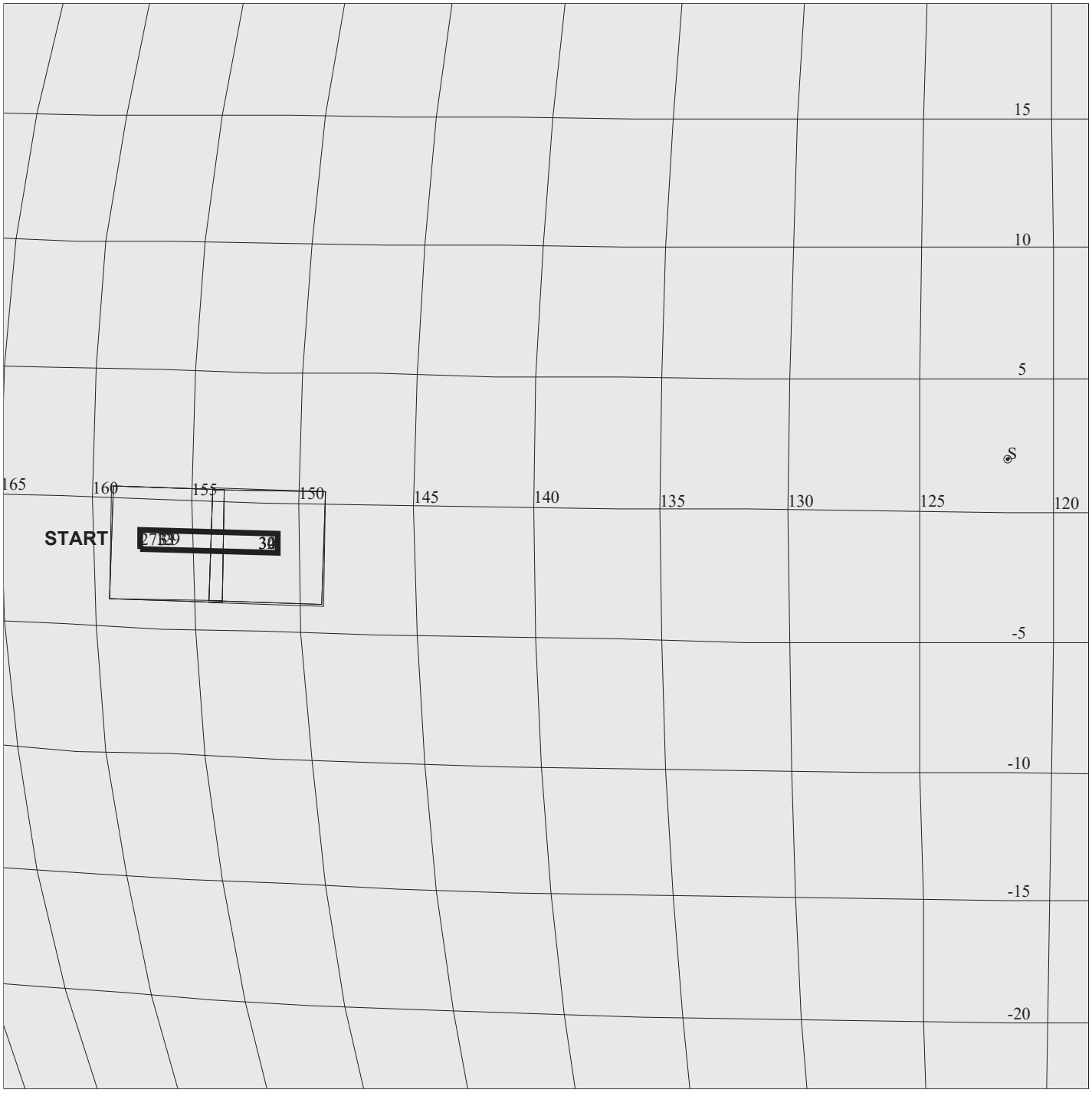
Design Detail

ride-along behind SSI.
2X2 mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IF:TT= 0 TMC= 1 C= -3.65 XC= 0.00 BS= 0/2562 TC= 1(-1.7 153.8)
A= 262 pD= 136 SR=17.450 RA50= 60.46 DEC50= 20.50 cone=146.65 clock=282.43
118IF:#SB= 1 Cs= 7.30 XCs= 0.00 TPP= 26 SR= 3.700 RR= 3.700 BM=F RC= 1 BS= 3/2562
1:#s= 2 #p= 3 Cr= -7.30 XCr= 0.00

27INPROMTH02

DESIGN G3.2 herb : 2/ 4/2000 9:12:47

FILE:P.27ISPROMTH02

TARGET BODY : IO

MINI:m.27ISPROMTH02

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 43:00:0

BODY PLOT TIME:TARGET-TIME D= 136 S= 2.500

OBSERVATION:27ISPROMTH02

DESCRIP:PROMETHEUS COLOR

SSI Io Prometheus Observation ACTIVITY ID: 27ISPROMTH02-
START TIME: 00-053/14:28:16.666

Activity ID: Orbit 27 Target N Inst S OAPEL PROMTH SeqNo 02 -

Title	SSI Io Prometheus Observation			Instrument	SSI
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08
Start	IEE+CDS 00000041:40:0	00-053/14:28:16.666		IEE+000/00:41:54.000	
End	IEE+CDS 00000044:00:0	00-053/14:30:51.333		IEE+000/00:44:29.333	
Duration	00000002:51:0	000/00:02:35.333		000/00:02:35.333	

Top Label	27ISPROMTH02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside ride-along behind SSI 2x1 across Prometheus hotspot region.
.

Data Returned

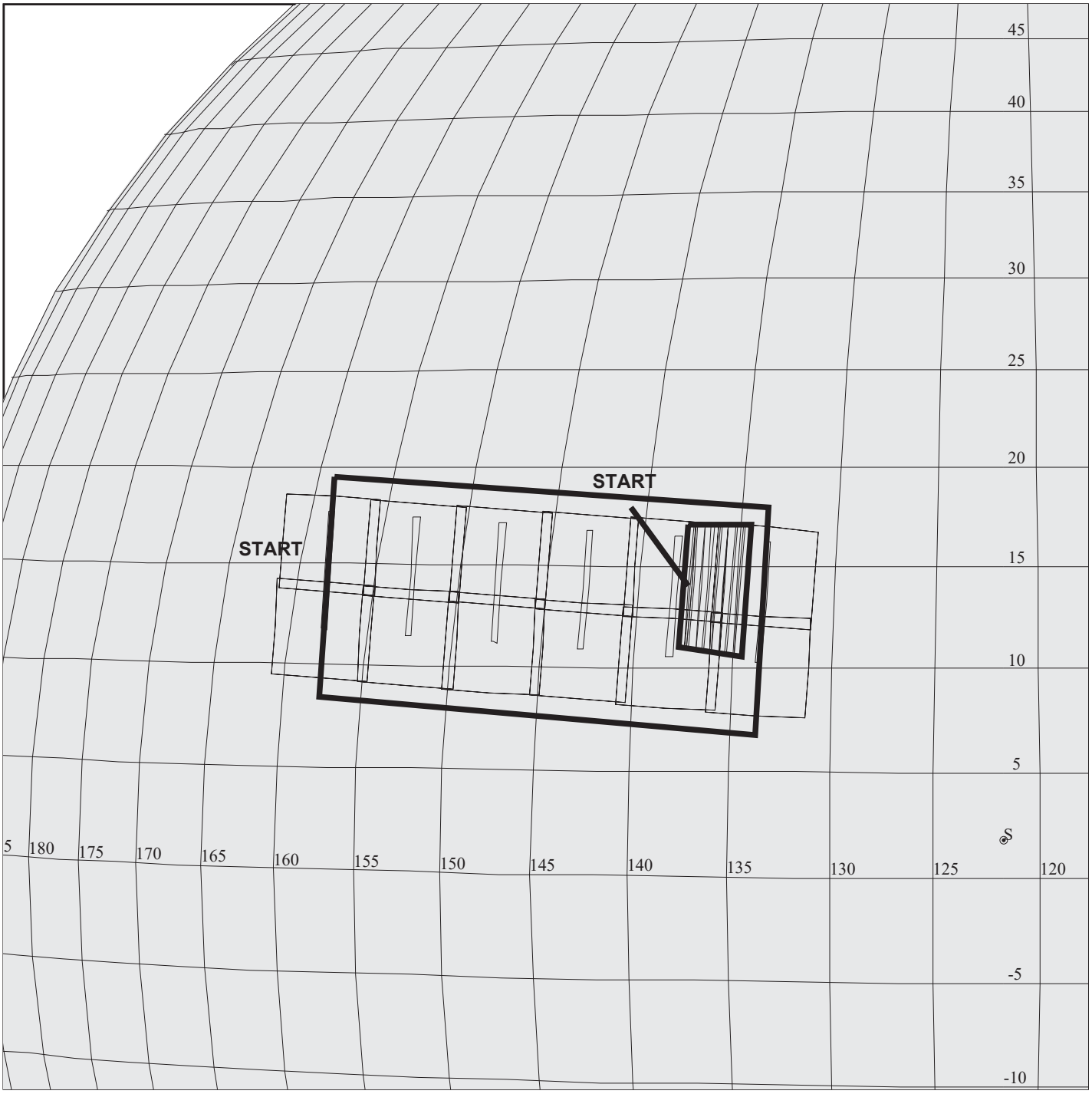
Design Detail

ride-along behind SSI.
2x1, multiple filters.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Safe Mode (XS), Gain 2, Grating Start 0, MPW, IXS017, IXS015

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IG:TT= 0 TMC= 1 C= -18.25 XC= -3.65 BS= 0/3106 TC= 1(13.1 145.2)
A= 306 pD= 898 SR=17.450 RA50= 60.22 DEC50= 22.43 cone=146.39 clock=278.94
118IG:#SB= 1 Cs= 0.00 XCs= 7.30 TPP= 26 SR= 3.000 RR= 3.000 BM=F RC= 1 BS= 3/3106
1:#s= 2 #p= 6 Cr= 7.30 XCr= -7.30
116IG:OR= 4.000 Cs= -6.50 XCs= -6.00 sD= 200 BS=65/3288 TF=N
116JG:OR= 0.030 Cs= 3.60 XCs= 0.00 sD= 364 BS=85/3470 TF=N

27INCAMAXT01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27ISCAMAXT01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

START:IEE 00-053/13:46:22.000 +CDS 46:00:0

OBSERVATION:27ISCAMAXT01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 898 S= 2.000

DESCRIP:CAMAXTLI PATERA/HOTSPOT

Io Camxtli Observation

ACTIVITY ID: 27INCAMAXT01-
START TIME: 00-053/14:36:55.333

Activity ID: Orbit 27 Target N Inst N OAPEL CAMAXT SeqNo 01 -

Title	Io Camaxtli Observation			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000050:00:0	00-053/14:36:55.333		IEE+000/00:50:33.333	
End	IEE+CDS 00000052:00:0	00-053/14:38:56.666		IEE+000/00:52:34.666	
Duration	00000002:00:0	000/00:02:01.333		000/00:02:01.333	

Top Label 27INCAMAXT01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside observation of Camaxtli (9805A) hot spot, first detected by NIMS and SSI in E15. Objective is to investigate surface composition. Collaborative observation with SSI.

Data Returned

Design Detail

BTG=0.3456, TICS=108, FMT=MPW

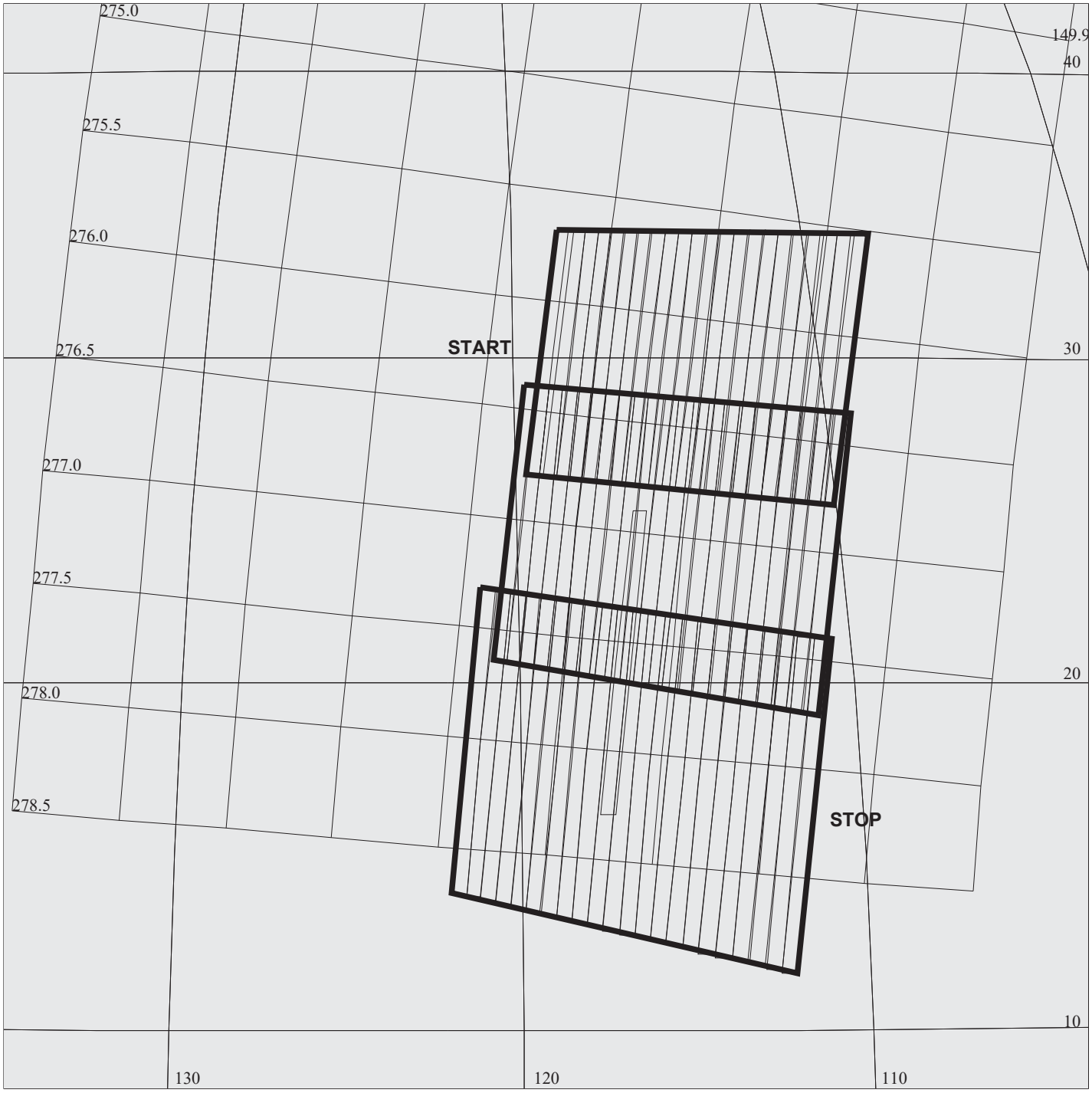
Short NIMS observation included in SSI observation.
Gain State 2.
Centered at 13 deg Latitude, 137 deg W. Longitude

Ride-along with SSI also recorded.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DH:TT= 0 TMC= 1 C= -6.00 XC= -6.00 BS=10/4744 TC= 1(25 115)
A= 142 pD= 3446 SR= 5.000 RA50= 57.18 DEC50= 23.04 cone=148.88 clock=276.27
117DH:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/4744
1:#s= 3 Cs= 11.20 XCs= 0.00 Cr= -11.40 XCr= 7.00 sD= 1126 rD= 34

27INAMRANI01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INAMRANI01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 00-053/13:46:22.000 +CDS 55:00:0

BODY PLOT TIME:TARGET-TIME D= 3446 S= 3.500

OBSERVATION:27INAMRANI01

DESCRIP:IO_GOLF_COURSE_MOSAIC

Io Amirani Observation

ACTIVITY ID: 27INAMRANI01-
START TIME: 00-053/14:42:59.333

Activity ID: Orbit 27 Target N Inst N OAPEL AMRANI SeqNo 01 -

Title	Io Amirani Observation			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000056:00:0	00-053/14:42:59.333		IEE+000/00:56:37.333	
End	IEE+CDS 00000074:00:0	00-053/15:01:11.333		IEE+000/01:14:49.333	
Duration	00000018:00:0	000/00:18:12.000		000/00:18:12.000	

Top Label	27INAMRANI01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Collaborative observation with SSI to investigate surface composition of the Amirani hot spot.

Data Returned

Design Detail

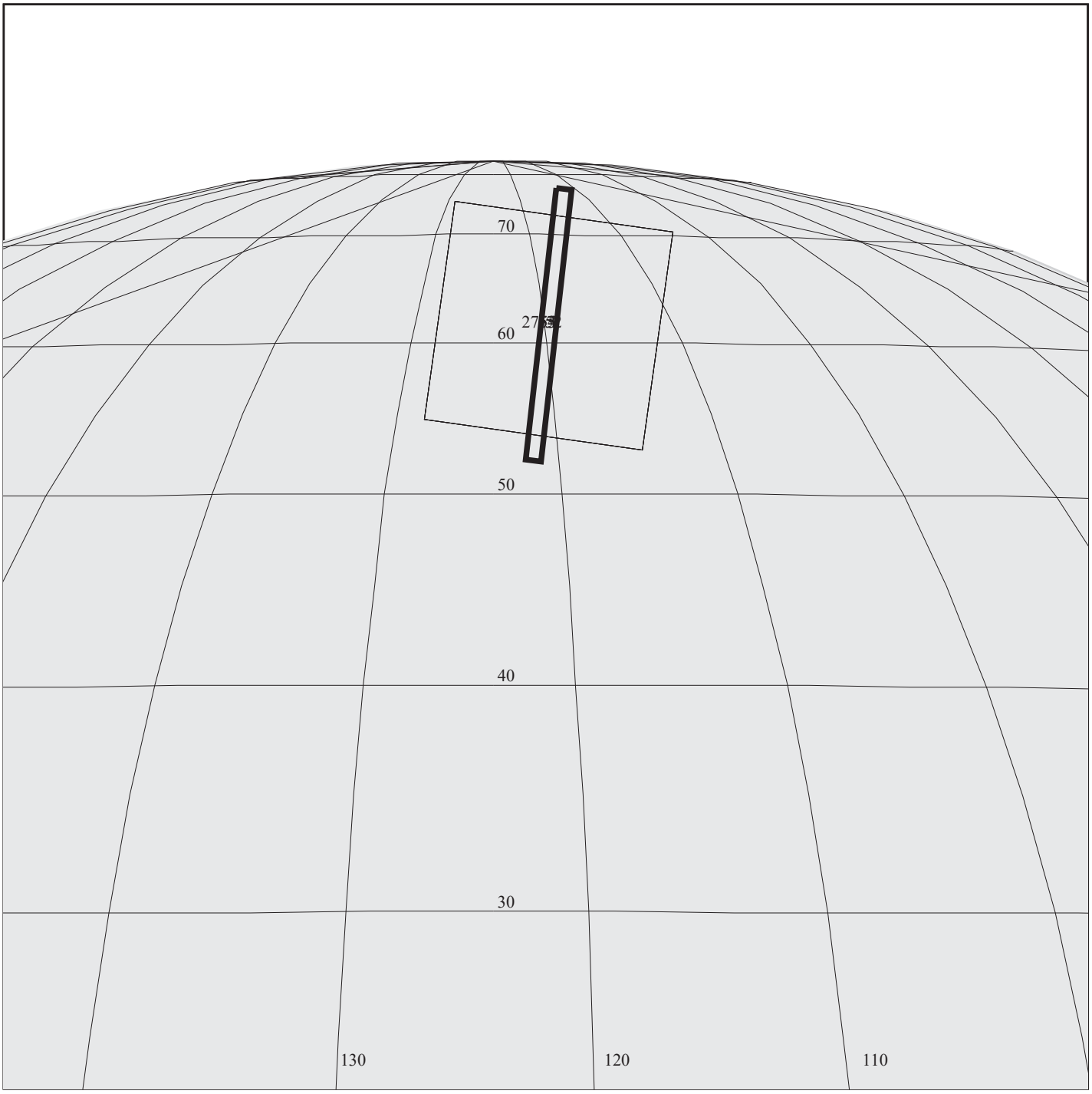
BTG=3.2255, TICS=987, FMT=MPW

Target Time: 1 Rim
Center at 25 deg Latitude, 115 deg W. Longitude
3 scan mosaic, Nyquist, LM
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165II:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS=65/8386 TC= 1(61.3 119.7)
A= 290 pD= 110 SR=17.450 RA50= 58.27 DEC50= 24.35 cone=147.49 clock=274.58

27INTVASHT01

DESIGN G3.2 herb : 2/ 4/2000 9:15:10

FILE:P.27ISTVASHT01

TARGET BODY : IO

MINI:m.27ISTVASHT01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 75:00:0

BODY PLOT TIME:TARGET-TIME D= 110 S= 2.800

OBSERVATION:27ISTVASHT01

DESCRIP:TVASHTAR CATENA COLOR

SSI Io Tvashtar Observation

ACTIVITY ID: 27ISTVASHT01-
START TIME: 00-053/15:01:11.333

Activity ID: Orbit 27 Target N Inst S OAPEL TVASHT SeqNo 01 -

Title	SSI Io Tvashtar Observation			Instrument	SSI
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08
Start	IEE+CDS 00000074:00:0	00-053/15:01:11.333		IEE+000/01:14:49.333	
End	IEE+CDS 00000078:00:0	00-053/15:05:14.000		IEE+000/01:18:52.000	
Duration	00000004:00:0	000/00:04:02.667		000/00:04:02.667	

Top Label	27ISTVASHT01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside ride-along behind SSI 1x1 across Tvashtar caldera region.
.

Data Returned

Design Detail

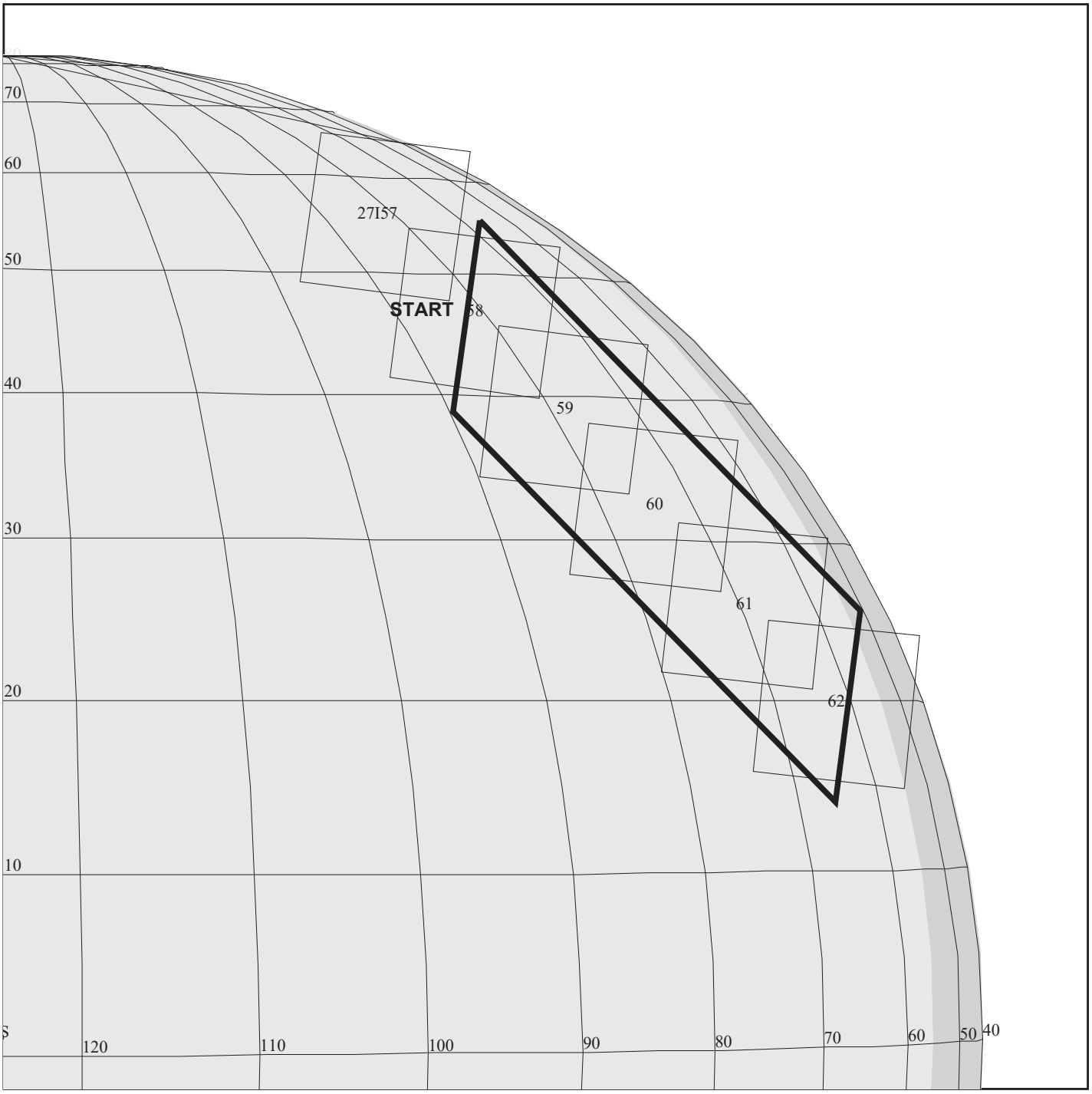
ride-along behind SSI.
1x1, multiple filters.

Single N/S jailbar.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IJ:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/9478 TC= 1(55.5 82.0)
A= 160 pD= 136 SR=17.450 RA50= 57.37 DEC50= 23.88 cone=148.43 clock=274.87
118IJ:#SB= 1 Cs= 5.50 XCs= 4.50 TPP= 26 SR= 4.400 RR=12.000 BM=F RC= 1 BS= 3/9478
1:#s= 6 #p= 1 Cr= 0.00 XCr= 0.00

27INZALTRM01

DESIGN G3.2 herb : 2/ 4/2000 9:15:43

FILE:P.27ISZALTRM01

TARGET BODY : IO

MINI:m.27ISZALTRM01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 81:00:0

BODY PLOT TIME:TARGET-TIME D= 136 S= 1.800

OBSERVATION:27ISZALTRM01

DESCRIP:ZAL/TERMINATOR

SSI Io Zal Terminator Observation ACTIVITY ID: 27ISZALTRM01-
START TIME: 00-053/15:05:14.000

Activity ID: Orbit 27 Target N Inst S OAPEL ZALTRM SeqNo 01 -

Title	SSI Io Zal Terminator Observation			Instrument	SSI
Requestor	NIMS-SWG/M. SEGURA		Team NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/22/00	Week 08
Start	IEE+CDS	00000078:00:0	00-053/15:05:14.000	IEE+000/01:18:52.000	
End	IEE+CDS	00000081:80:0	00-053/15:09:09.333	IEE+000/01:22:47.333	
Duration		00000003:80:0	000/00:03:55.333	000/00:03:55.333	

Top Label 27ISZALTRM01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside ride-along behind SSI 1x6 near-terminator mosaic in the Zal region.
.

Data Returned

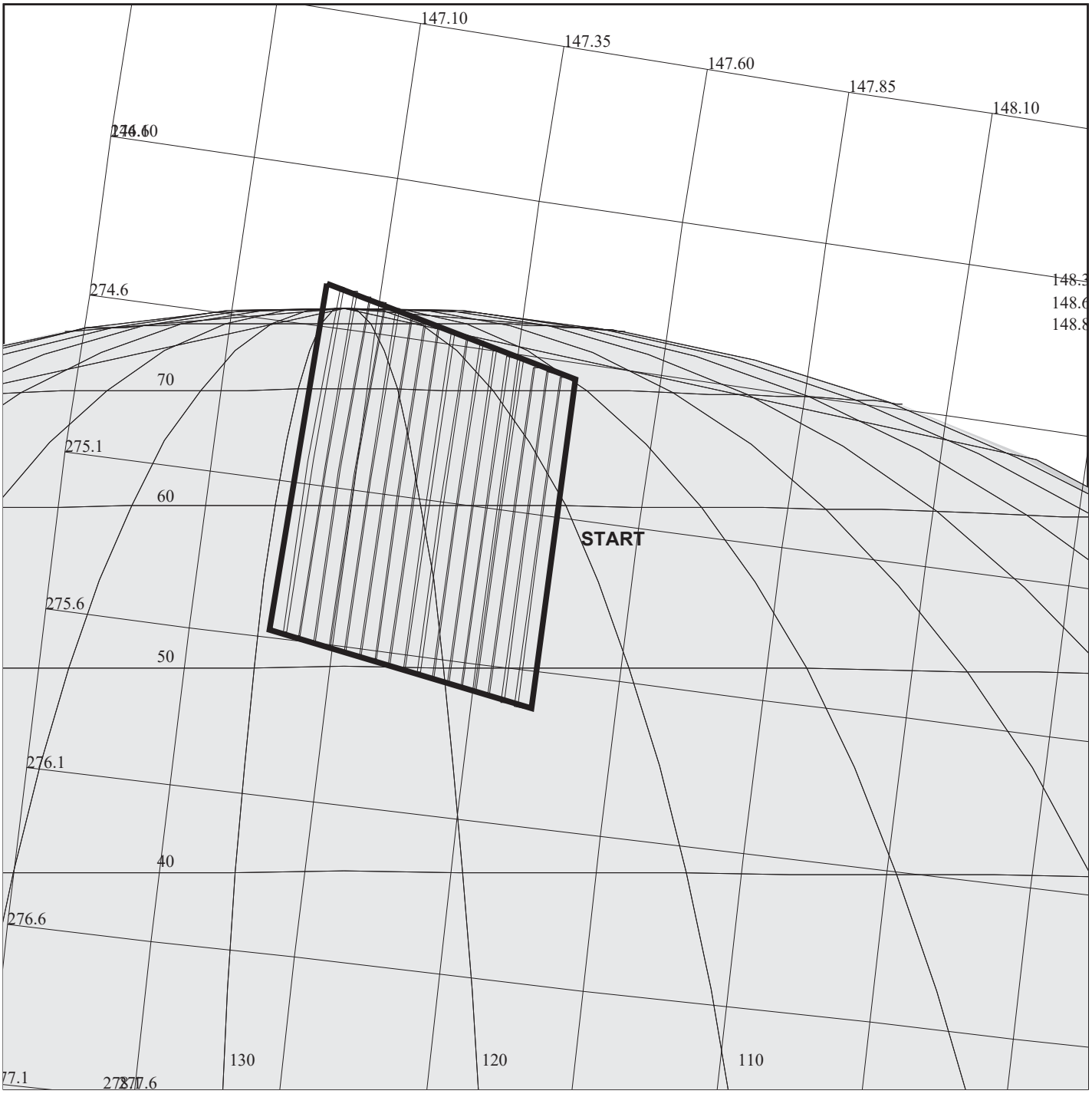
Design Detail

ride-along behind SSI.
1x6 mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165EJ:TT= 0 TMC= 1 C= 4.00 XC= 1.20 BS= 0/0568 TC= 1(61.3 119.7)
A= 182 pD= 0 SR=17.450 RA50= 58.44 DEC50= 24.05 cone=147.45 clock=275.19
117EJ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0568
1:#s= 1 Cs= -8.90 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 900 rD= 2

27INTVASHT01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INTVASHT01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 87:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 3.000**

OBSERVATION:27INTVASHT01 **DESCRIP:IO_TVASH_OBSERVATION**

Io Tvashtar Observation

ACTIVITY ID: 27INTVASHT01-
START TIME: 00-053/15:13:19.333

Activity ID: Orbit 27 Target N Inst N OAPEL TVASHT SeqNo 01 -

Title	Io Tvashtar Observation			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000086:00:0	00-053/15:13:19.333		IEE+000/01:26:57.333	
End	IEE+CDS 00000090:00:0	00-053/15:17:22.000		IEE+000/01:31:00.000	
Duration	00000004:00:0	000/00:04:02.666		000/00:04:02.666	

Top Label	27INTVASHT01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To image Tvashtar caldera, which was seen in I25 to be erupting vigorously. NIMS will study temperature distribution of the eruption materials.

Data Returned

Design Detail

BTG=0.6336, TICS=192, FMT=MPW

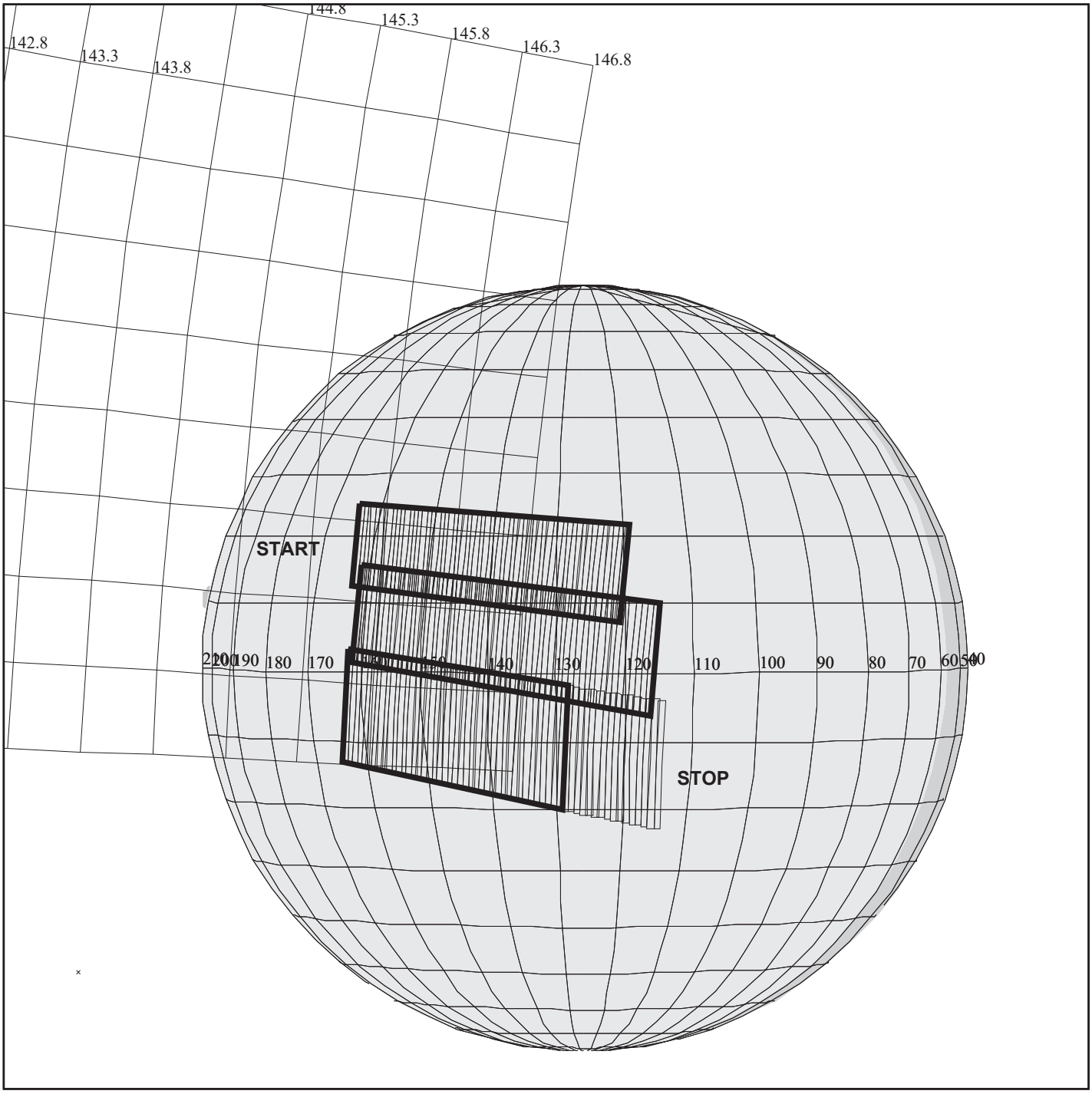
NIMS mosaic over Tvashtar
Long Map
Gain State 2
Collaborative observation with SSI.

Centered at 60 deg Latitude, 120 deg W. Longitude

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DI:TT= 0 TMC= 1 C= -28.50 XC= -12.50 BS= 0/1660 TC= 3
A= 182 pD= 0 SR=17.450 RA50= 60.95 DEC50= 23.00 cone=145.58 clock=278.30
117DI:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/1660
1:#s= 3 Cs= 30.10 XCs= 0.00 Cr= -27.00 XCr= 6.50 sD= 3016 rD= 20

27INREGION01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INREGION01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 00-053/13:46:22.000 +CDS 93:00:0

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

OBSERVATION:27INREGION01

DESCRIP:IO_REGIONAL_MAP

Io Regional Obs

ACTIVITY ID: 27INREGION01-
START TIME: 00-053/15:17:22.000

Activity ID: Orbit 27 Target N Inst N OAPEL REGION SeqNo 01 -

Title	Io Regional Obs			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000090:00:0	00-053/15:17:22.000		IEE+000/01:31:00.000	
End	IEE+CDS 00000142:00:0	00-053/16:09:56.666		IEE+000/02:23:34.666	
Duration	00000052:00:0	000/00:52:34.666		000/00:52:34.666	

Top Label	27INREGION01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside mosaic of Prometheus and Bosphorus Regio region to investigate surface composition, SO2 distribution and thermal emission.

Data Returned

Design Detail

BTG=2.3903, TICS=2435, FMT=MPW

4 Rims Target
3 scans, Long Map, Nyquist
Centered at Io center/equator
Gain State 2

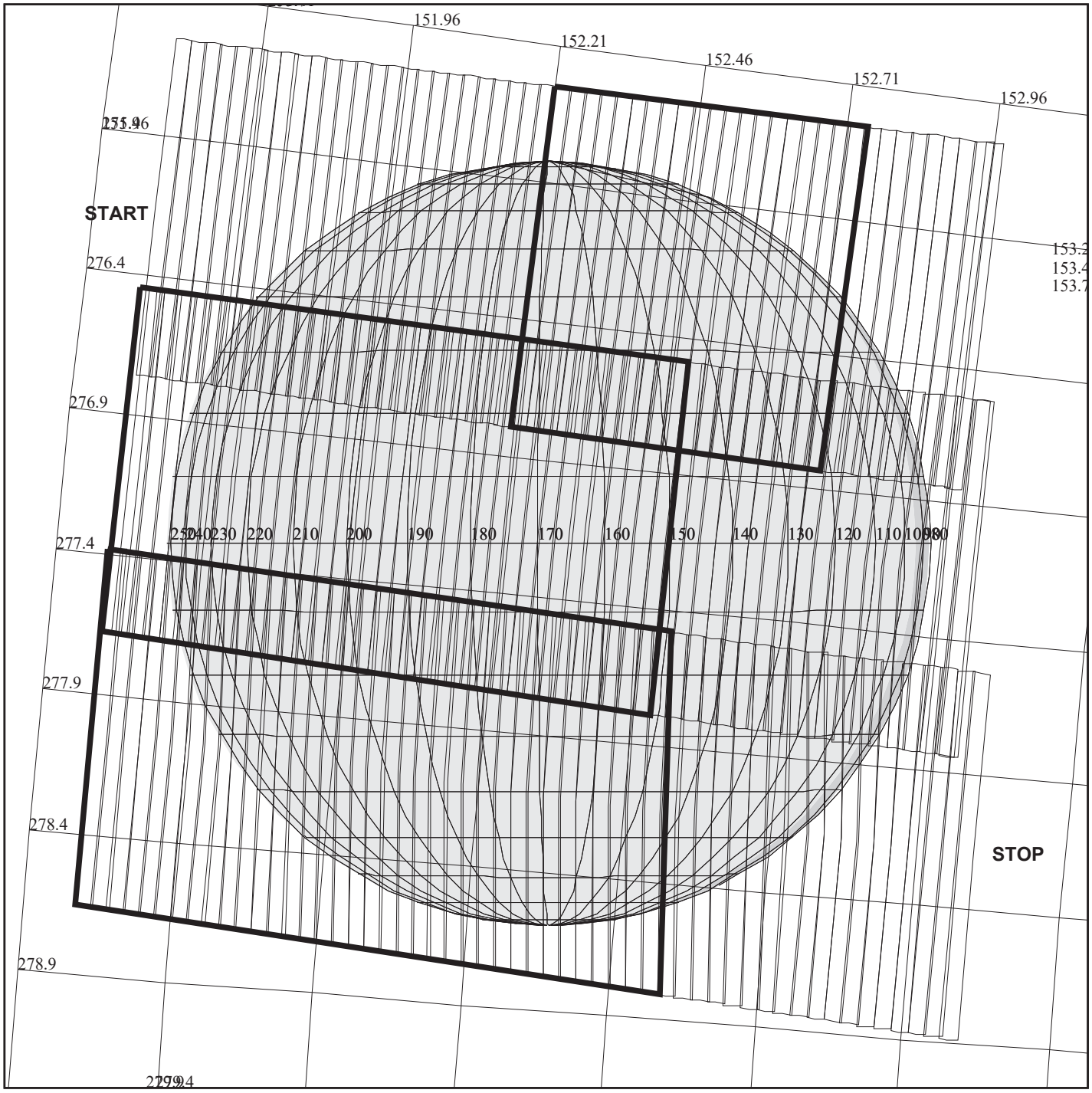
Latitude coverage: -20 to +20 deg
Longitude coverage: 115 to 165 deg W.

Last third of last swath not recorded.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM120

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165El:TT= 0 TMC= 1 C= -12.50 XC= -8.50 BS= 0/9162 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 54.41 DEC50= 22.16 cone=151.58 clock=276.16
117El:#SB= 1 OR= 0.060 RR=12.000 BM=F RC= 1 BS= 0/9162
1:#s= 3 Cs= 27.50 XCs= 0.00 Cr= -23.50 XCr= 7.00 sD= 1396 rD= 24

27INGLOBAL01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INGLOBAL01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 00-053/13:46:22.000 +CDS 354:00:0

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

OBSERVATION:27INGLOBAL01

DESCRIP:IO_GLOBAL_MAP

Io Global Obs

ACTIVITY ID: 27INGLOBAL01-
START TIME: 00-053/19:40:15.333

Activity ID: Orbit 27 Target N Inst N OAPEL GLOBAL SeqNo 01 -

Title	Io Global Obs			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000350:00:0	00-053/19:40:15.333		IEE+000/05:53:53.333	
End	IEE+CDS 00000390:00:0	00-053/20:20:42.000		IEE+000/06:34:20.000	
Duration	00000040:00:0	000/00:40:26.666		000/00:40:26.666	

Top Label	27INGLOBAL01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Io global observation to investigate SO2 distribution, temperature distribution and composition.

Data Returned

Design Detail

BTG=1.0368, TICS=1057, FMT=MPW

Global observation using 3 swaths
Gain State 2

Central meridian: 170 deg W. Longitude

Not enough bits to ground to return the entire mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM036

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95

Grating Step Test	ACTIVITY ID: 27NNDETECT02- START TIME: 00-053/20:30:48.666

Activity ID: Orbit 27 Target N Inst N OAPEL DETECT SeqNo 02 -

Title	Grating Step Test			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000400:00:0	00-053/20:30:48.666		IEE+000/06:44:26.666	
End	IEE+CDS 00000420:00:0	00-053/20:51:02.000		IEE+000/07:04:40.000	
Duration	00000020:00:0	000/00:20:13.333		000/00:20:13.333	

Top Label	27NNDETECT02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Procedure to return NIMS Grating position Housekeeping via CDS and MROH

Design Detail

NIMS Housekeeping values, including Grating Position, are copied using 6MCOPY commands from NIMS memory locations to CDS memory locations at selected MF times to collect every other grating position over the NIMS grating cycle. These CDS locations are sent down via a 6MROH command during I27 Cruise after the I27 Encounter period.

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95

NIMS Real-Time PCT Calibration ACTIVITY ID: 27NNPCTRLT01-
START TIME: 00-071/02:00:25.800

Activity ID: Orbit 27 Target N Inst N OAPEL PCTRLT SeqNo 01 -

Title	NIMS Real-Time PCT Calibration			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	03/11/00 Week 11
Start	PCT+CDS 0:00:0	00-071/02:00:25.800		PCT+000/00:00:00.000	
End	PCT+CDS 00000465:00:0	00-071/09:50:35.800		PCT+000/07:50:10.000	
Duration	00000465:00:0	000/07:50:10.000		000/07:50:10.000	

Top Label 27NNPCTRLT01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	275	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

This observation is an NIMS photometric calibration usint the PCT target.
The data will be used to calibrate the NIMS visible detectors.
The calibration data will be returned using Real-Time telemetry.
At this time the off sun angle is about x.x degrees.

Data Returned

Design Detail

1) Turn off PCT heaters 6 hours before calibration.
2) Scan Platform is at Safe/Unstow (cone = 153.00, clock = 0.00)
3) Chopper on, Gain State 4,
4) Set NIMS to Long Map Mode, ETB = PCT252,
   Mirror Blocking (1B, 1B) (11011, 11011)
5) Select 2 RIMs of Dark in Real-Time (Return 2 LM grating cycle)
6) Slew to PCT (cone 54.88, clock = 244.07)
7) Select 10 RIMS of PCT in Real-Time (Return 10 LM grating cycles)
8) Slew to Safe (cone = 153.00, clock = 0.00)
9) NIMS to Safe Mode, Reset Mirror Blocking (00,00) (00000, 00000)
10) Chopper Off.

Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, PCT252

Galileo Activity Plan Form 01/31/00 12:47:03 rev 6/95

NIMS RCT Real Time Calibration — ACTIVITY ID: 27NNRCTRLT01-
START TIME: 00-072/10:00:31.733

Activity ID: Orbit 27 Target N Inst N OAPEL RCTRLT SeqNo 01 -

Title	NIMS RCT Real Time Calibration	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS	Working Group AWG

Time System CDS Load ID Calendar Date 03/12/00 Week 11

Start	RTA+CDS 00000000:00:0	00-072/10:00:31.733	RTA+000/00:00:00.000
End	RTA+CDS 00000787:00:0	00-072/23:16:16.400	RTA+000/13:15:44.666
Duration	00000787:00:0	000/13:15:44.666	000/13:15:44.666

Top Label 27NNRCTRLT01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	450	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

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 returned using Real-time Telemetry

The NIMS OPCAL has been included in the RCT calibration for GEM.
Perform NIMS Optical Calibration to calibrate the NIMS grating.

This is a GEM Library Sequence
The Dark cone angle must be selected using Pointer.

Data Returned

Design Detail

1) Turn on RCT Heaters for 12 hours.
2) Set Engineering Variable Map to return NIMS Temps more frequently.
3) Set NIMS to Long Map Mode, Gain state 1, Chopper Reference, Mirror Blocking (11011,11011), ETB=RCT252.
4) Pause playback before using scan platform.
5) Slew to Dark (cone = 119.7), return 1 grating cycle (12 mf) in R/T
6) Slew to RCT (cone = 0.0), return 2 grating cycles (12 mf) in R/T
7) Slew to Dark (cone = 119.7), return 1 grating cycle (12 mf) in R/T
8) Slew to Safe (cone = 153.0)
9) Long Map, gain state 4, ETB=OPCAL48.
10) Use 37IST to turn on OPCAL Lamp (two times).
11) Select NIMS Real Time 1 Rim OPCAL, 1 Rim Dark, 1 Rim OPCAL
12) Set NIMS to Safe Mode and turn off Chopper.
13) Resume Playback after using scan platform.

Fixed Long Map (XLM), Gain 1, Grating Start 0, R/T, RCT252
Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, OPCAL48

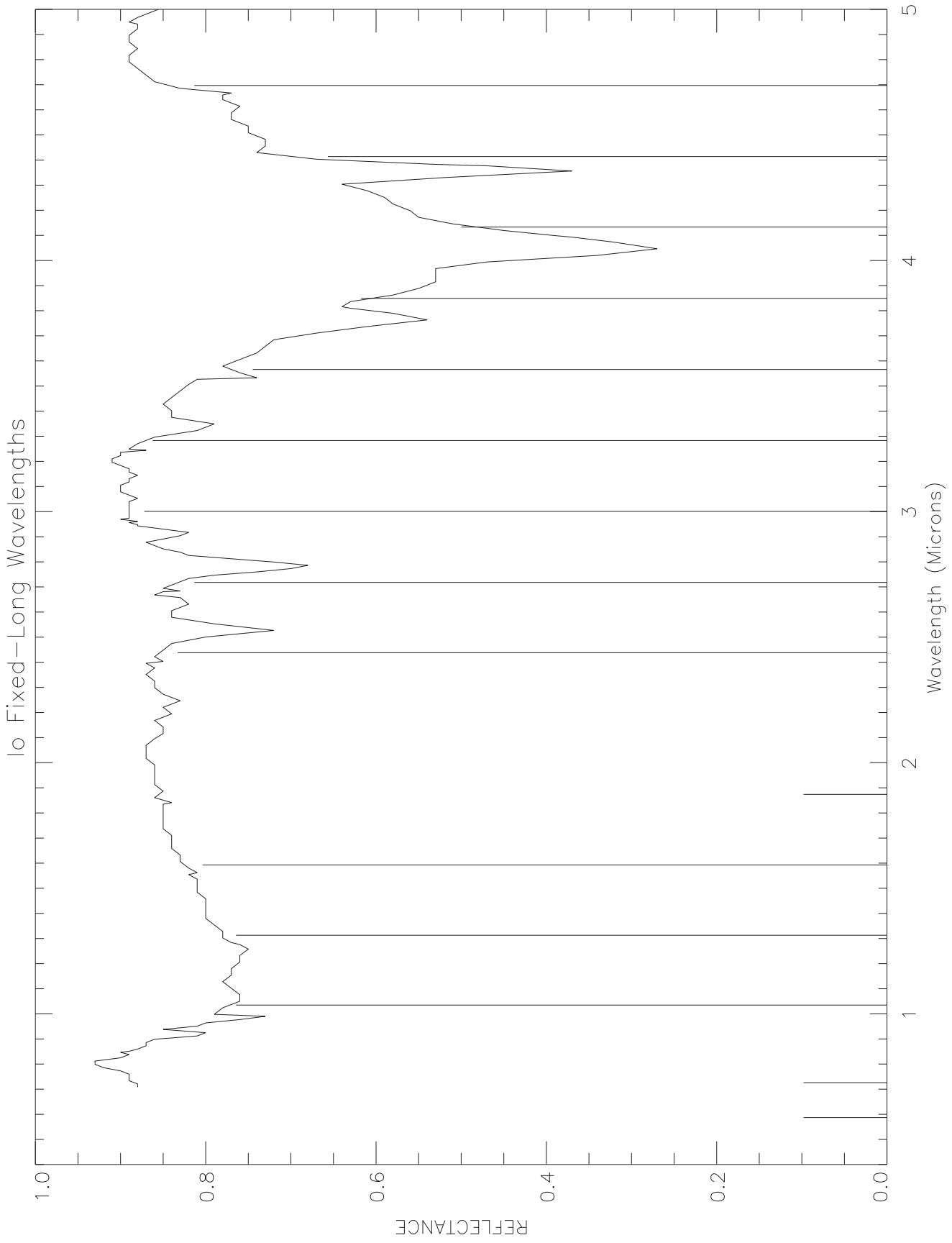
Chapter 6 - Edit Tables

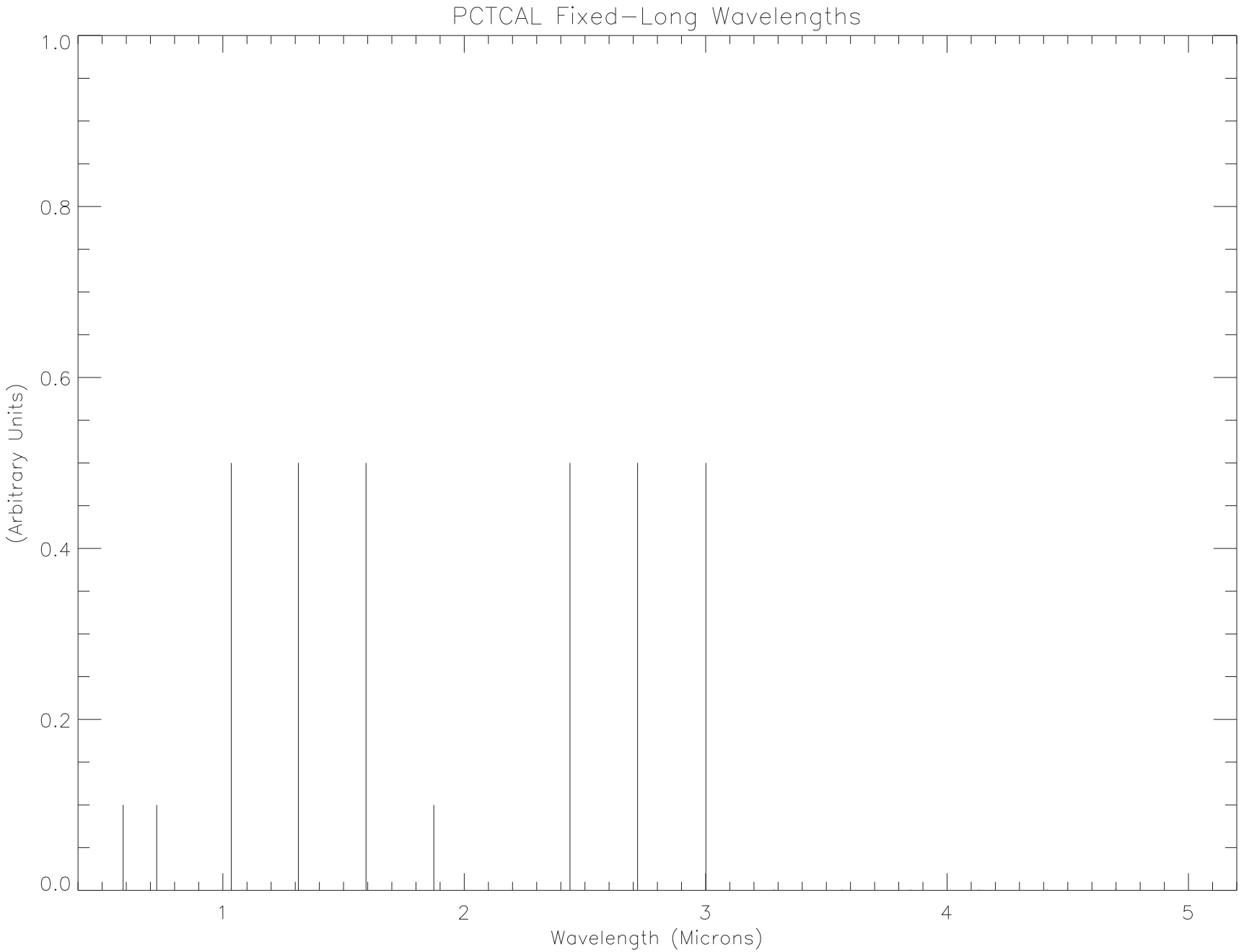
Contents

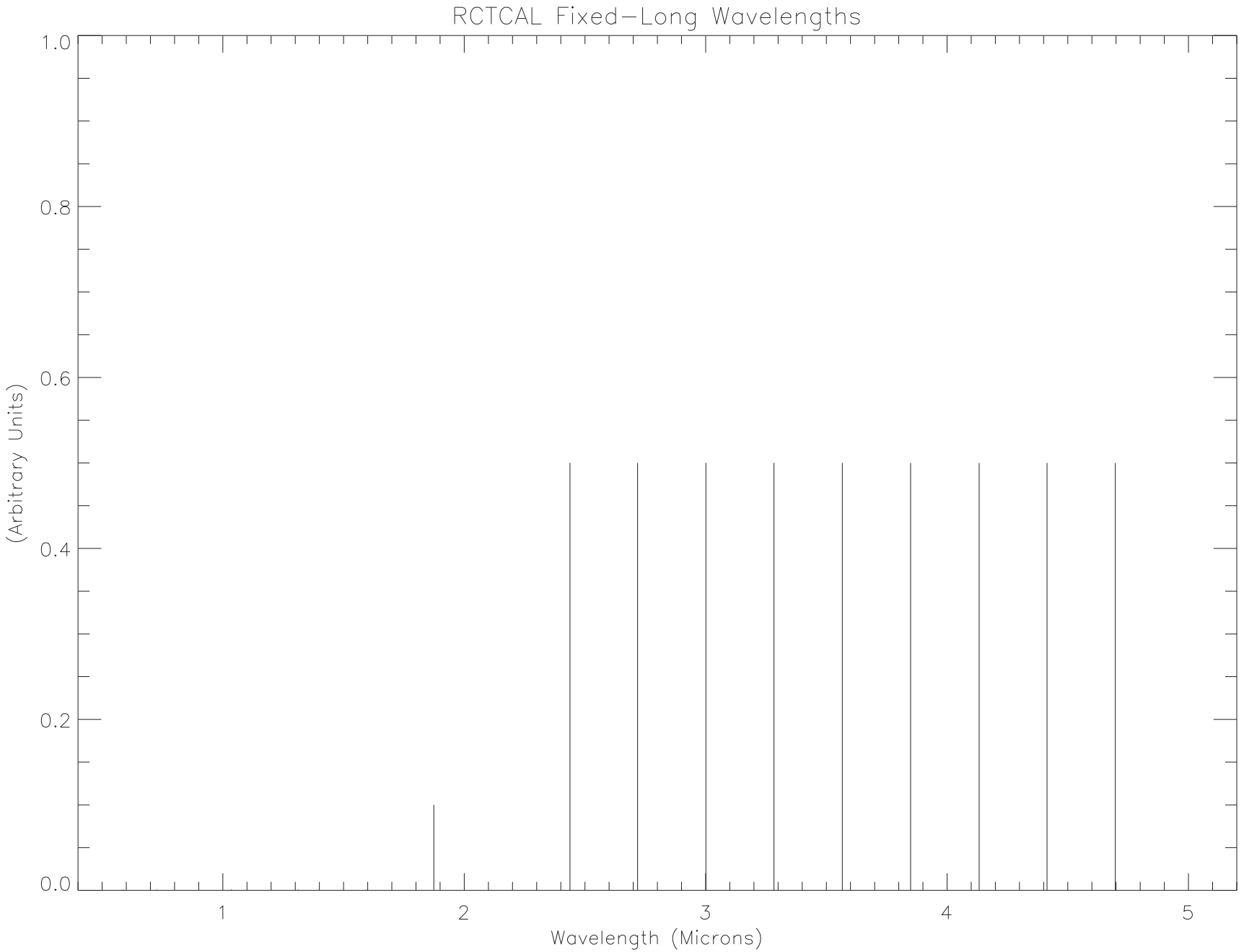
Introduction to Chapter 6

NIMS Edit Table Plots

This chapter contains plots of the NIMS Edit Tables used in I27. 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.


Io Fixed-Long Wavelengths
REFLECTANCE
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
Wavelength (Microns)


PCTCAL Fixed–Long Wavelengths
1.0
0.8
0.6
0.4
0.2
0.0
(Arbitrary Units)
1
2
3
4
5
Wavelength (Microns)


RCTCAL Fixed–Long Wavelengths
1.0
0.8
0.6
0.4
0.2
0.0
(Arbitrary Units)
1
2
3
4
5
Wavelength (Microns)

Chapter 7 - Data Return

Contents

Introduction to Chapter 7

This chapter is a report on the NIMS data return for the I27 orbit. Due to the low downlink data rates available for Galileo Jupiter Operations and other unforeseen and unpredictable events during the I27 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.

The cruise portion of I27 was too short in duration to return all of the data recorded during the I27 encounter. Some of the I27 data were not recorded over during the G28 encounter and were later returned during G28 cruise.

There were twelve autonomous reloads of the NIMS RAM code from CDS during the I27 encounter, one just before each science observation. No software halts were detected during I27. The approach that we are taking to avoid data loss due to processor halts has proven to be very successful.

NIMS engineering started reporting anomalous values after a CDS bus reset event after NIMS had stopped taking science data. This was most likely due to a loss of RTI synch between NIMS and CDS due to the bus reset. The spacecraft went into safing after another bus reset event occurred during data playback. The sequence was recovered without loss of science data.

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 insturment.

The plots on the pages 3, 4 and 5 show the geometry of the NIMS I27 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 6 through 13 summarize the 'final' playback model for the 'returned' I27 data returned during I27 and G28 cruise.

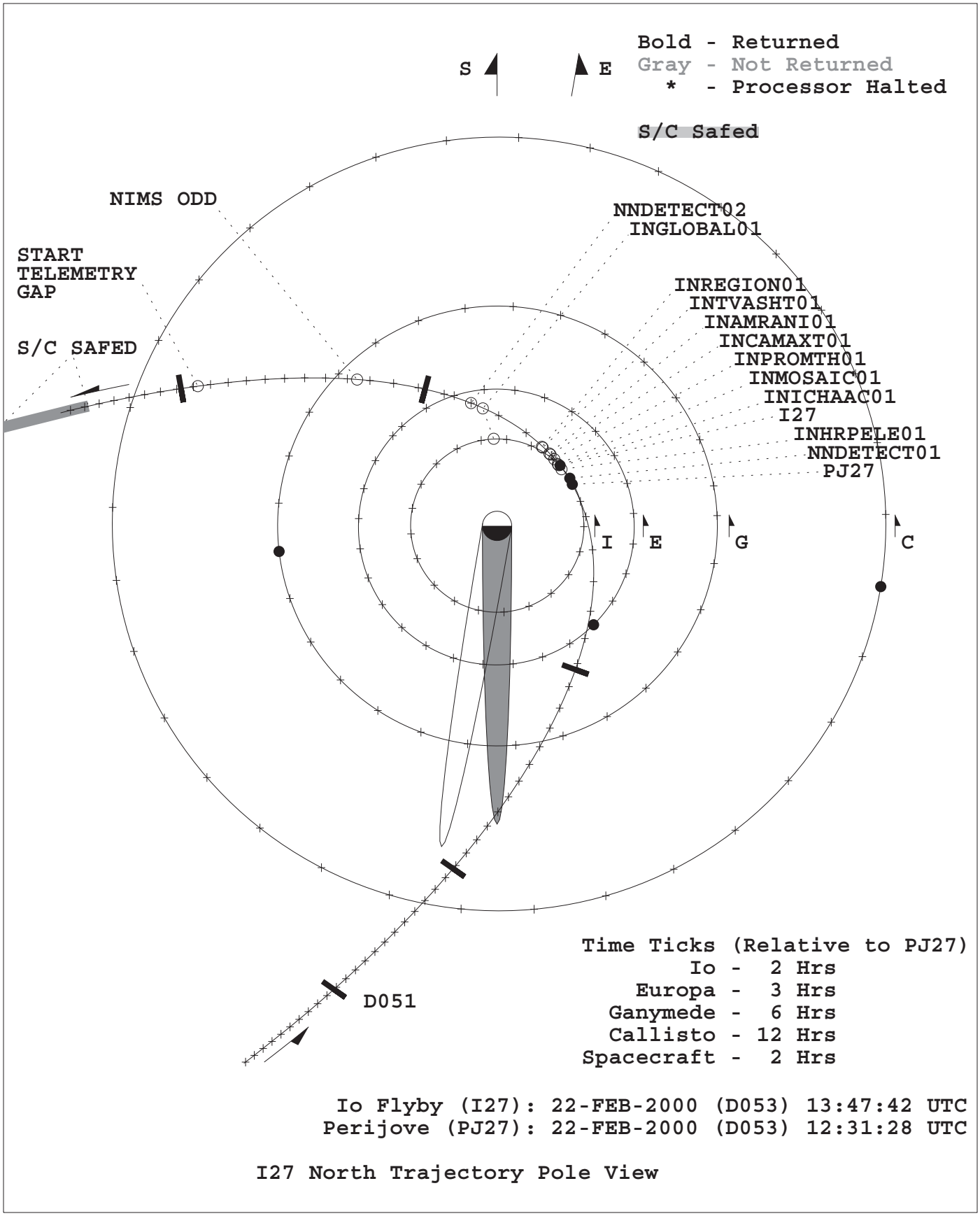
The text on page 14 gives a 'recap' of the I27 playback events which affected which observations were returned.

A Timeline of I27 playback events is on pages 14 through 24.

The text on pages 25 and 26 describes the I27 NIMS and Spacecraft Anomalies.

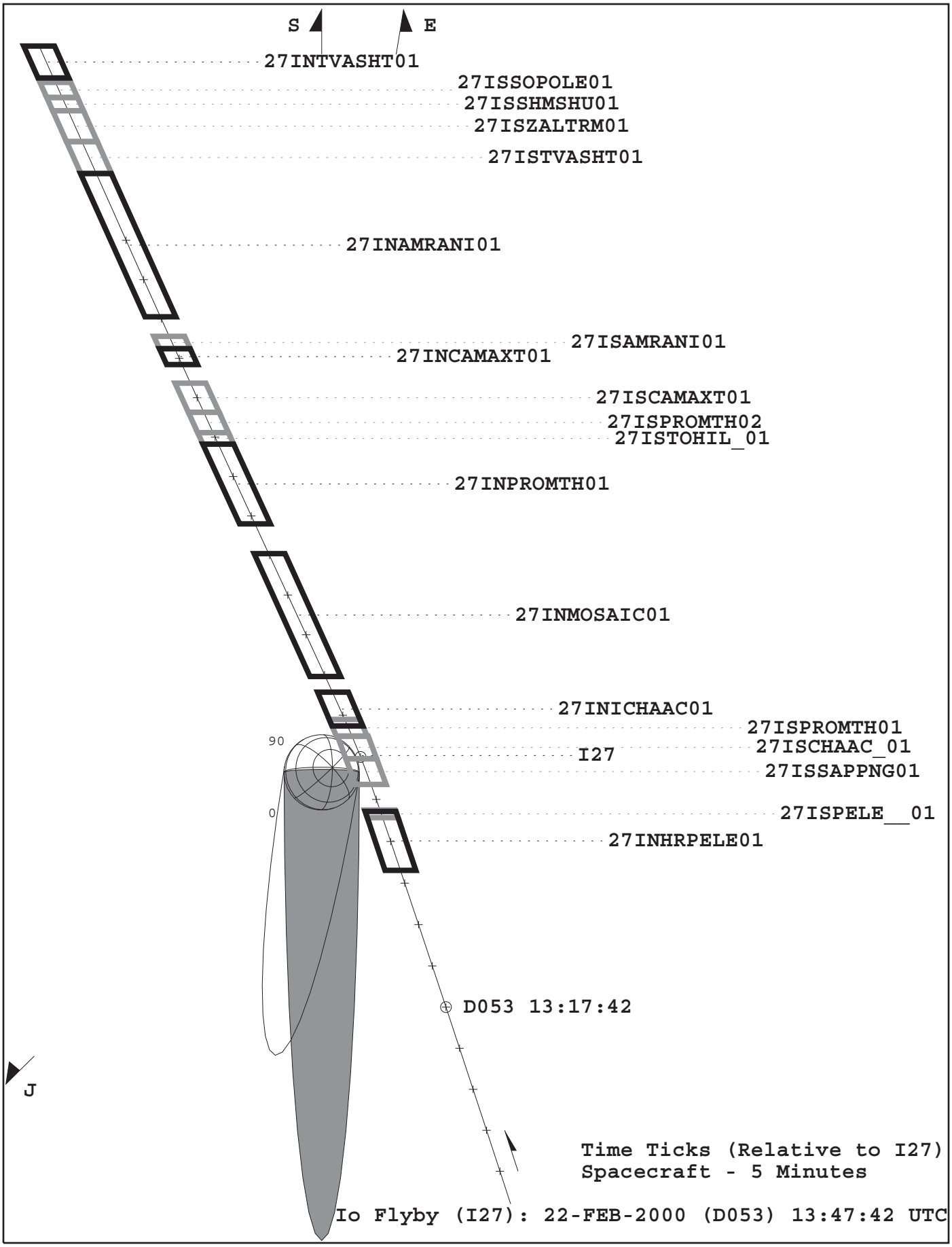
The text on page 27 gives a brief discussion of the NIMS data files. Additional information about NIMS data formats, data types, data labels and data access is given on pages 28 and 29.

NIMS I27 OBSERVATIONS



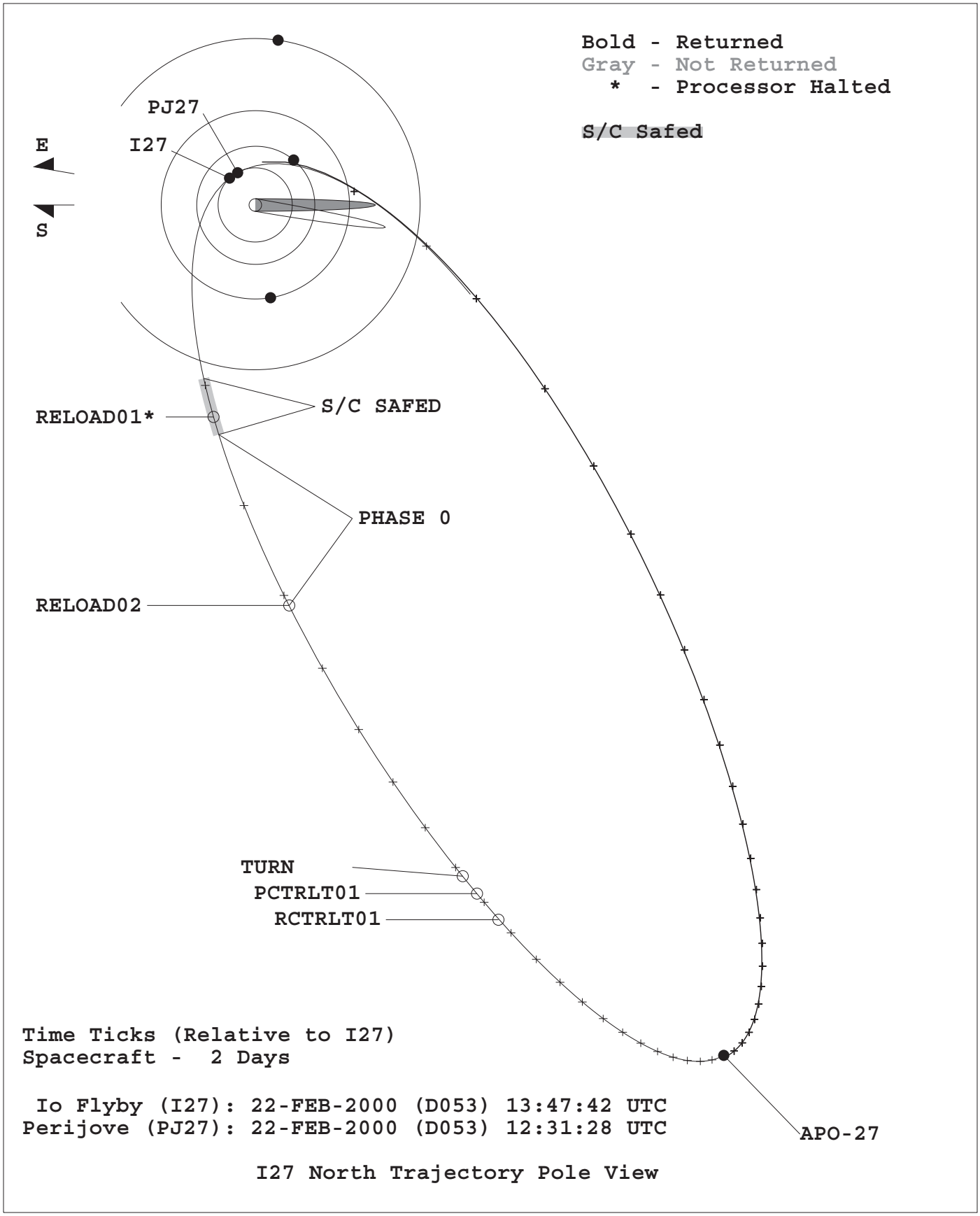
NIMS - FEL - 01/22/01

NIMS & SSI I27 IO FLYBY OBSERVATIONS



I27 North Trajectory Pole View, +/-041 Hour NIMS - FEL - 01/27/00

NIMS I27 CALIBRATIONS



NIMS - FEL - 01/10/00

NIMS I27 DATA RETURN

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Strat	Grating Offset	Record Format	PSID
27INHRPELE01-	Io Pele Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INICHAAC01-	Io Chaac Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INMOSAIC01-	Io Mosaic Obs	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INPROMTH01-	Io Prometheus Observation	I27ILM442	I27ILM36	LM	2	0	4	MPW	
27ISCAMAXT01-	Io Camaxtli Observation	I27ILM442	I27ILM36	LM	2	0	4	MPW	
27INCAMAXT01-		I27ILM442	I27ILM36		2				
27INAMRANI01-	Io Amirani Observation	I27ILM442	I27ILM36	LM	2	0	4	MPW	
27ISTVASHT01-	Io Tvashti Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27ISZALTRM01-	Io Tvashti Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INTVASHT01-	Io Tvashti Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INREGION01-	Io Regional Obs	I27ILM442	I27ILM120A	LM	2	0	4	MPW	
27NNDETECT02-	Grating Step Test P2	I27ILM442	I27ILM144						
27NNRELOAD01-	NIMS Software Reload	I27ILM442	I27ILM144						
27NNCHOPOF01-	NIMS Chopper Off	I27ILM442	I27ILM144						
27NNPCTRLT01-	PCT Calibration	I27PCT252	R/T	LM	4	0	4	R/T	
27NNRCTRLT01-	RCT Calibration	I27RCT252	R/T	LM	1	0	4	R/T	
27NNROPCAL01	NIMS OPCAL	I27OPCAL48	R/T	LM	4	0	4	R/T	
27INHRPELE01-	Io Pele Observation	I27ILM442	I27ILM36S	LM	2	0	4	MPW	
27INHRPELE01-gf	Io Pele Observation	I27ILM442	I27ILM180	LM	2	0	4	MPW	
27ISPELE 01-	Io Tvashti Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27ISPROMTH01-	Io Tvashti Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INICHAAC01-gf	Io Chaac Observation	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INMOSAIC01-gf	Io Mosaic Obs	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INMOSAIC01-	Io Mosaic Obs	I27ILM442	I27ILM144	LM	2	0	4	MPW	
27INREGION01-gf	Io Regional Obs	I27ILM442	I27ILM120A	LM	2	0	4	MPW	
27INREGION01-	Io Regional Obs	I27ILM442	I27ILM120A	LM	2	0	4	MPW	
27INGLOBAL01-	Io Global Obs	I27ILM442	I27ILM36T	LM	2	0	4	MPW	

NIMS I27 DATA RETURN

Activity ID	Mode	Record Format	Wave-lengths Returned	Record Time (sec)	PB Time (sec)	Selected Bits to Tape sBOT (MBITS)	Total 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
27INHRPELE01-	LM	MPW	144	303	303	3.49	3.49	8.667	0.02	1.13	0.927	3.77	1
27INICHAAC01-	LM	MPW	144	122	117	1.35	1.41	8.667	0.01	1.29	0.313	4.30	1
27INMOSAIC01-	LM	MPW	144	842	499	5.75	9.70	8.667	0.03	1.24	1.391	4.13	1
27INPROMTH01-	LM	MPW	36	573	132	1.52	6.60	8.667	0.01	1.08	0.106	14.40	1
27ISCAMAXT01-	LM	MPW	36	102	100	1.15	1.18	8.667	0.01	1.19	0.073	15.87	1
27INCAMAXT01-	LM	MPW	36	120	116	1.34	1.38	8.667	0.01	1.13	0.089	15.07	1
27INAMRANI01-	LM	MPW	36	1,120	132	1.52	12.90	8.667	0.01	1.06	0.108	14.13	1
27ISTVASHT01-	LM	MPW	144	41	37	0.43	0.47	8.667	0.00	1.13	0.113	3.77	1
27ISZALTRM01-	LM	MPW	144	50	43	0.50	0.58	8.667	0.00	1.17	0.127	3.90	1
27INTVASHT01-	LM	MPW	144	220	218	2.51	2.53	8.667	0.01	1.14	0.661	3.80	1
27INREGION01-	LM	MPW	120	2,708	2001	23.05	31.20	8.667	0.12	1.14	5.055	4.56	1
27NNDETECT02-													
27NNRELOAD01-													
27NNCHOPOF01-													
27NNPCTRLT01-													
27NNRCTRLT01-													
27NNROPCAL01													
27INHRPELE01-	LM	MPW	36	303	283	3.26	3.49	8.667	0.02	1.50	0.163	20.00	2
27INHRPELE01-gf	LM	MPW	180	303	12	0.14	3.49	8.667	0.00	1.13	0.046	3.01	2
27ISPELE 01-	LM	MPW	144	33	30	0.35	0.38	8.667	0.00	1.20	0.086	4.00	2
27ISPROMTH01-	LM	MPW	144	67	57	0.66	0.77	8.667	0.00	1.20	0.164	4.00	2
27INICHAAC01-gf	LM	MPW	144	122	18	0.21	1.41	8.667	0.00	1.29	0.048	4.30	2
27INMOSAIC01-gf	LM	MPW	144	842	172	1.98	9.70	8.667	0.01	1.25	0.476	4.17	2
27INMOSAIC01-	LM	MPW	144	842	260	3.00	9.70	8.667	0.01	1.25	0.719	4.17	2
27INREGION01-gf	LM	MPW	120	2,708	123	1.42	31.20	8.667	0.01	1.14	0.311	4.56	2
27INREGION01-	LM	MPW	120	2,708	715	8.24	31.20	8.667	0.04	1.14	1.806	4.56	2
27INGLOBAL01-	LM	MPW	36	1,179	770	8.87	13.58	8.667	0.04	1.15	0.578	15.33	2
											13.359	**Total**	
											12.999	**Allocation**	
											0.36	**Over/Under**	

NIMS G28 DATA RETURN

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
27INICHAAC01-		I27ILM442	G28ILM144Comp	LM	2	0	0	MPW	
27INMOSAIC01-		I27ILM442	G28ILM144Comp	LM	2	0	0	MPW	
27INPROMTH01-		I27ILM442	G28ILM360	LM	2	0	0	MPW	
27INTOHIL_01+		I27ILM442	G28ILM360	LM	2	0	0	MPW	
27INPROMTH02+		I27ILM442	G28ILM360	LM	2	0	0	MPW	
27INCAMAXT01+		I27ILM442	G28ILM360	LM	2	0	0	MPW	
27INCAMAXT01-		I27ILM442	G28ILM360	LM	2	0	0	MPW	
27INAMRANI01-		I27ILM442	G28ILM360	LM	2	0	0	MPW	
28GNCALDRA01+		G28GLM442	G28GLM360		2				
28GNFEATRE01	Ganymede Hi-Res Feature	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28GNSMOOTH02+		G28GLM442	G28GLM360		2				
28GNBRTDRK02+		G28GLM442	G28GLM360		2				
28GNNICHOL02+		G28GLM442	G28GLM360		2				
28GNARBELA02+		G28GLM442	G28GLM360		2				
28GNLMSCAN01	Ganymede Limb Scan	G28GLM442	G28GLM360	LM	4	0	4	MPW	
28GNGLOBAL01	Ganymede Global Composition Map	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28ENECLPSE01	Europa Eclipse Obs	G28ELM442	G28ELM360	LM	4	0	4	MPW	
28JNNEBRLT01	Jupiter NEB R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	
28JNNTZRLT01	Jupiter NTZ R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	
28JNNEBRLT02	Jupiter NEB R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	
28JNNTZRLT02	Jupiter NTZ R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	
28JNNEBRLT03	Jupiter NEB R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	
28JNNTZRLT03	Jupiter NTZ R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE01	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE02	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE03	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE04	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE05	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNAURORA02	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA04	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA05	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNFEATRK01+		G28JLM442	G28JLM360		2				
28JNGLOBAL02	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	
28JNFEATRK02+		G28JLM442	G28JLM360		2				

NIMS G28 DATA RETURN

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
28JNAURORA08	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNFEATRK03+		G28JLM442	G28JXM15_NGM		2				
28JNFEATRK03+		G28JLM442	G28JXM15_NGM		2				
28JNAURORA09	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNEQBLGE06	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE07	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE08	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE09	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28JNEQBLGE10	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	
28NNRCTRLT01-	RCT Calibration	G28RCT252	R/T	LM	1	0	4	R/T	
28NNROPCAL01	NIMS OPCAL	G28OPCAL48	R/T	LM	4	0	4	R/T	
28NNPCTRLT01-	PCT Calibration	G28PCT252	R/T	LM	4	0	4	R/T	
27INPROMTH01+		I27ILM442	G28ILM144Comp		2				
27INMOSAIC01-gf		I27ILM442	G28ILM144Comp		2				
27INMOSAIC01-		I27ILM442	G28ILM288		2				
27INMOSAIC01-gf		I27ILM442	G28ILM144Comp		2				
27INPROMTH01-gf		I27ILM442	G28ILM360		2				
27INCAMAXT01+gf		I27ILM442	G28ILM360		2				
27INAMRANI01-gf		I27ILM442	G28ILM360		2				
28GNFEATRE01-gf	Ganymede Hi-Res Feature	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28GNLMSCAN01	Ganymede Limb Scan	G28GLM442	G28GLM360	LM	4	0	4	MPW	
28GNPERRIN01	Ganymede Perrine Region	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28GNGLOBAL01-gf	Ganymede Global Composition Map	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28GNGLOBAL01	Ganymede Global Composition Map	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28ENECLPSE01-gf	Europa Eclipse Obs	G28ELM442	G28ELM360	LM	4	0	4	MPW	
28JNAURORA01	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA02-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA03	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA04-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNGLOBAL01	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	
28JNAURORA05-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA06	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNFEATRK01+gf		G28JLM442	G28JLM360		2				

NIMS G28 DATA RETURN

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
28JNAURORA07	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNFEATRK02+gf		G28JLM442	G28JLM360		2				
28JNAURORA08-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNFEATRK03+gf		G28JLM442	G28JXM15_NGM		2				
28JNGLOBAL03	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	
28JNAURORA10	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
27INMOSAIC01-gf		I27ILM442	G28ILM144Comp		2				
28GNLMSCAN01-gf	Ganymede Limb Scan	G28GLM442	G28GLM360	LM	4	0	4	MPW	
28GNGLOBAL01-gf	Ganymede Global Composition Map	G28GLM442	G28GLM360	LM	2	0	4	MPW	
28JNAURORA04-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNGLOBAL01-gf	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	
28JNAURORA07-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
28JNAURORA10-gf	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	
gf = gap fill									
(+) = ridealong with SSI									

NIMS G28 DATA RETURN

Activity ID	Mode	Record Format	Wave-lengths Returned	Record Time (sec)	Playback Time (sec)	Selected Bits to Tape 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
27INCHAAC01-	LM	MPW	144	122	117	1.35	1.41	8.667	0.01	1.29	0.313	4.30	1
27INMOSAIC01-	LM	MPW	144	842	842	9.70	9.70	8.667	0.05	1.23	2.366	4.10	1
27INPROMTH01-	LM	MPW	360	573	573	6.60	6.60	8.667	0.03	1.22	4.058	1.63	1
27ISTOHIL_01+	LM	MPW	360	102	27	0.31	1.18	8.667	0.00	1.28	0.182	1.71	1
27ISPROMTH02+	SAFE	MPW	15	102	45	0.52	1.18	0.333	0.00	1.30	0.324	1.60	1
27ISCAMAXT01+	LM	MPW	360	102	100	1.15	1.18	8.667	0.01	1.24	0.697	1.65	1
27INCAMAXT01-	LM	MPW	360	120	116	1.34	1.38	8.667	0.01	1.20	0.835	1.60	1
27INAMRANI01-	LM	MPW	360	1120	1120	12.90	12.90	8.667	0.06	1.18	8.200	1.57	1
28GSCALDRA01+	SAFE	MPW	15	102	28	0.32	1.18	0.333	0.00	3.03	0.087	3.73	1
28GNFEATRE01	LM	MPW	360	484	483	5.56	5.58	8.667	0.03	2.36	1.768	3.15	1
28GSSMOOTH02+	LM	MPW	360	102	10	0.12	1.18	8.667	0.00	2.54	0.034	3.39	1
28GSBRTDRK02+	LM	MPW	360	102	10	0.12	1.18	8.667	0.00	2.64	0.033	3.52	1
28GSNICHOL02+	LM	MPW	360	102	10	0.12	1.18	8.667	0.00	2.57	0.034	3.43	1
28GSARBELA02+	LM	MPW	360	102	44	0.51	1.18	8.667	0.00	2.41	0.158	3.21	1
28GNLMBSCN01	LM	MPW	360	720	360	4.15	8.29	8.667	0.02	2.27	1.370	3.03	1,2
28GNGLOBAL01	LM	MPW	360	720	360	4.15	8.29	8.667	0.02	1.82	1.709	2.43	1,2
28ENECLPSE01	LM	MPW	360	63	60	0.69	0.73	8.667	0.00	1.34	0.387	1.79	1
28JNNEBRLT01	LM	RT	360	480	480	0.00	0.00	8.667	0.03				
28JNNTZRLT01	LM	RT	360	420	420	0.00	0.00	8.667	0.02				
28JNNEBRLT02	LM	RT	360	480	480	0.00	0.00	8.667	0.03				
28JNNTZRLT02	LM	RT	360	420	420	0.00	0.00	8.667	0.02				
28JNNEBRLT03	LM	RT	360	480	480	0.00	0.00	8.667	0.03				
28JNNTZRLT03	LM	RT	360	420	420	0.00	0.00	8.667	0.02				
28JNEQBLGE01	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE02	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE03	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE04	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE05	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNAURORA02	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	1.10	1.233	1.47	1
28JNAURORA04	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.19	0.619	2.92	1
28JNAURORA05	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.25	0.603	3.00	1
28JSFEATRK01+	LM	MPW	360	102	219	2.52	1.18	8.667	0.01	2.27	0.834	3.03	1
28JNGLOBAL02	XM	MPW	15	343	340	3.92	3.95	0.333	0.02	2.52	1.264	3.10	1
28JSFEATRK02+	LM	MPW	360	357	355	4.09	4.11	8.667	0.02	2.41	1.273	3.21	1

NIMS G28 DATA RETURN

Activity ID	Mode	Record Format	Wave-lengths Returned	Record Time (sec)	Playback Time (sec)	Selected Bits to Tape 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
28JNAURORA08	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.21	0.614	2.95	1
28JSFEATRK03+	XS	MPW	15	357	173	1.99	4.11	0.1667	0.01	3.37	0.961	2.07	1
28JSFEATRK03+	XM	MPW	15	357	182	2.10	4.11	0.333	0.01	2.63	0.648	3.23	1
28JNAURORA09	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.21	0.614	2.95	1
28JNEQBLGE06	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE07	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE08	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE09	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28JNEQBLGE10	LM	RT	360	300	300	0.00	0.00	8.667	0.02				
28NNRCTRLT01	LM	RT	252					8.667					
	LM	RT	48					8.667					
28NNPCTRLT01	LM	RT	252					8.667					
27ISPROMTH02+	LM	MPW	144	67	33	0.38	0.77	8.667	0.00	1.30	0.088	4.33	2
27INMOSAIC01-	LM	MPW	144	842	45	0.52	9.70	8.667	0.00	1.20	0.130	4.00	2
27INMOSAIC01-	LM	MPW	288	842	93	1.07	9.70	8.667	0.01	1.20	0.536	2.00	2
27INMOSAIC01-	LM	MPW	144	842	19	0.22	9.70	8.667	0.00	1.20	0.055	4.00	2
27INPROMTH01-	LM	MPW	360	573	26	0.30	6.60	8.667	0.00	1.20	0.187	1.60	2
27ISCAMAXT01+	LM	MPW	360	102	8	0.09	1.18	8.667	0.00	1.20	0.058	1.60	2
27INAMRANI01-	LM	MPW	360	1120	179	2.06	12.90	8.667	0.01	1.18	1.311	1.57	2
28GNFEATRE01	LM	MPW	360	484	16	0.18	5.58	8.667	0.00	2.36	0.059	3.15	2
28GNLMBSCN01	LM	MPW	360	720	369	4.25	8.29	8.667	0.02	2.32	1.374	3.09	1,2
28GNPERRIN01	LM	MPW	360	483	480	5.53	5.56	8.667	0.03	2.16	1.920	2.88	2
28GNGLOBAL01	LM	MPW	360	720	10	0.12	8.29	8.667	0.00	1.83	0.047	2.44	1,2
28GNGLOBAL01	LM	MPW	360	720	368	4.24	8.29	8.667	0.02	1.83	1.737	2.44	1,2
28ENECLPSE01	LM	MPW	360	63	7	0.08	0.73	8.667	0.00	1.34	0.045	1.79	2
28JNAURORA01	LM	MPW	360	160	154	1.77	1.84	8.667	0.01	2.22	0.599	2.96	2
28JNAURORA02	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.14	0.634	2.85	2
28JNAURORA03	LM	MPW	360	160	160	1.84	1.84	8.667	0.01	2.16	0.640	2.88	2
28JNAURORA04	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.31	0.587	3.08	2
28JNGLOBAL01	XM	MPW	15	303	300	3.46	3.49	0.333	0.02	2.44	1.152	3.00	2
28JNAURORA05	LM	MPW	360	160	10	0.12	1.84	8.667	0.00	2.25	0.038	3.00	2
28JNAURORA06	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.25	0.603	3.00	2
28JSFEATRK01+	LM	MPW	360	102	18	0.21	1.18	8.667	0.00	2.27	0.069	3.03	2

NIMS G28 DATA RETURN

Activity ID	Mode	Record Format	Wave-lengths Returned	Record Time (sec)	Playback Time (sec)	Selected Bits to Tape 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
28JNAURORA07	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.37	0.572	3.16	2
28JSFEATRK02+	LM	MPW	360	357	16	0.18	4.11	8.667	0.00	2.41	0.057	3.21	2
28JNAURORA08	LM	MPW	360	160	16	0.18	1.84	8.667	0.00	2.21	0.063	2.95	2
28JSFEATRK03+	XS	MPW	15	357	96	1.11	4.11	0.1667	0.01	3.37	0.533	2.07	2
28JNGLOBAL03	XM	MPW	15	320	317	3.65	3.69	0.333	0.02	2.68	1.108	3.30	2
28JNAURORA10	LM	MPW	360	160	157	1.81	1.84	8.667	0.01	2.21	0.614	2.95	2
27INMOSAIC01-	LM	MPW	144	842	198	2.28	9.70	8.667	0.01	1.20	0.570	4.00	3
28GNLMBSCN01	LM	MPW	360	720	36	0.41	8.29	8.667	0.00	2.32	0.134	3.09	3
28GNGLOBAL01	LM	MPW	360	720	12	0.14	8.29	8.667	0.00	1.83	0.057	2.44	3
28JNAURORA04	LM	MPW	360	160	11	0.13	1.84	8.667	0.00	2.31	0.041	3.08	3
28JNGLOBAL01	XM	MPW	15	303	17	0.20	3.49	0.333	0.00	2.44	0.065	3.00	3
28JNAURORA07	LM	MPW	360	160	10	0.12	1.84	8.667	0.00	2.37	0.036	3.16	3
28JNAURORA10	LM	MPW	360	160	10	0.12	1.84	8.667	0.00	2.21	0.039	2.95	3
											46.975	Total	
											51.760	Allocatation	
											-4.785	Over/Under	

RECAP OF I27 PLAYBACK EVENTS

I27 contained excellent Io observing opportunities and was subject to significant downlink bits constraints. After the encounter executed successfully, a strategy to improve the total I27 data return was implemented. This involved carrying over 1 track of I27 data for playback in G28. This strategy led to a significant increase in the I27 data that could be returned.

NIMS did not experience any software stoppages in I27 during the encounter. However, following initiation of playback, the spacecraft went into safe mode, causing NIMS to shut down at the same time. This event was diagnosed and a recovery plan was implemented very rapidly, resulting in the loss of only about 1.75 Megabits of downlink capability.

Although the total data returned for NIMS in I27 was only a little over 13 Mbits, the high quality of the observations made this one of the premier Io orbits of the mission.

The following timeline details the most signifigant events of the I24 playback period. Most of the text below is excerpted from messages issued at the time.

I27 Playback Events Timeline (02-01-00 to 05-05-00)

02-01-00: A summary of NIMS I27 observation objectives:
Io is the sole target for NIMS observations during I27. NIMS made two observation of Io during closest approach. First was a nightside observation of Pele to map thermal emission from the hot spot at high spatial resolution (down to about 1 km/pixel). The following observation was a dayside jail-bar across the Chaac region (at about the same resolution) covering the strangely-colored "golf course" discovered in earlier orbits by SSI.
The five subsequent observations look at key areas of Io as the spacecraft recedes from the target. 27INMOSAIC01 is a two-swath mosaic across the Chaac region. 27INPROMTH01 is a single-swath across the Prometheus hotspot region. With SSI we look at the Camaxtli hot spot in 25INCAMAXT01. The Amirani hot spot was observed in a three swath mosaic in 27INAMRANI01. 27INTVASHT01 is a single swath mosaic across the Tvahstar caldera complex.
At still greater distances are two larger observations, 27INREGION01 (which covers the Prometheus and Bosphorus Regio regions), and 27INGLOBAL01, which features pole-to-pole coverage at relatively good resolution, at a very low phase angle.

I27 Playback Events Timeline (02-01-00 to 05-05-00)

02-01-00: (K. Schimmels) I27 allocations, etc. are shown below.
A few notes: We took a large (12 MB, 11%) hit to science capability late in the game due to station losses. This will most likely NOT come back to us. This is primarily the reason why everyone is over allocation now. Try to resolve these overages in the next playback table delivery if possible (EOD tomorrow).

I27 Totals:	Alloc.	Total
NIMS	13.283	17.810

02-08-00: (K. Schimmels) AACS charges (with reduced NIMS AACS) are:
NIMS: 0.217 Mb.

02-08-00: Tomorrow at 9:30 SSI will present a "plan" for preserving 1 track of I27 data for playback in G28 (with accompanying loss of some G28 recording).
Here is a brief review of our current status and options regarding I27 data.
Our current allocation lets us get about 20% of what we will record to tape, BUT since we are oversampling due to the fixed grating, we can cut our wavelengths back by half (to FM) without serious consequences for the science. Not returning detectors 1, 2, 7 helps a bit more, getting us to our present state. We now plan to get data for 12 detectors for all observations currently selected. We do not have enough allocation to select any of 27INGLOBAL01, and we can bring down only one scan (of 3) for 27INREGION01.
It is possible that we will lose another 16% of our I27 allocation due to DSN negotiations. This would effectively reduce our REGION01 playback to zero.
As we discussed last week, we could reduce our detectors coverage further, to 9-17 plus one for albedo (detector 6?). This would save 17% across the board and let us get a second scan of 27INREGION01 (assuming we do not suffer the 16% penalty mentioned previously).
Bottom line, it is unlikely that we will get our full spatial coverage of 27INREGION01, or see any part of 27INGLOBAL01, as things now stand. Any increases in spatial coverage will come at the loss of spectral channels.

02-09-00: (D. Bindschadler)
Subj: Proposed changes to G28 encounter sequence
The SPOT team met with Proj. Scientist (TVJ) today (2/9/00) to discuss issues of a possible carryover of I27 data into G28. Herb Breneman made a presentation of a strawman plan put together by the SSI Team in order to allow for such carryover.
After the discussion, Torrence agreed that the plan was essentially consistent with overall GMM science priorities. Also, the operational complexities required by this plan appear to be broadly consistent with SPOT capabilities over the next few months.

I27 Playback Events Timeline (02-01-00 to 05-05-00)

Below is an outline of the modified G28 plan, as presented by Herb and then modified in the course of our discussions. Science coordinators should communicate the relevant portions of this with their teams and make sure that there are no significant science concerns that have been neglected. Coordinators and integrators need to assess the impact of the proposed plan on their workload so that we are sure it is supportable.
The SSI proposal is to record only 3 tracks of data during the G28 encounter period (approximately DOY 140 through 165), allowing Track 4 of the I27 record sequence (the post C/A track) to be carried over into G28. The primary rationale for this change is the science value of the I27 SSI and NIMS data, coupled with the relatively small amount of bits to ground (~88 MBTG) available for all I27 playback.

02-11-00: Today's is the final update before uplink. E26 playback ends on 19 February, and I27 playback begins on the 23rd. The preliminary schedule shows the first NIMS data coming down on 14 March.
A plan to restructure G28 data recording in order to preserve valuable I27 Io data on track 4 for playback during G28 has been proposed. Since both SSI and NIMS favor this strategy, it will probably be implemented, unless some presently unforseen consequence prevents this. The playback table delivered today has not been modified to conform to the proposed plan. We expect that there will be another opportunity to modify the playback table before our first playback commands go active.
The principal consequence for NIMS of the proposed plan will be to shift playback of roughly 90% of the data for the following observations from I27 to G28. The affected observations are: 27INPROMTH01, 27INCAMAXT01, and 27INAMIRANI01. This will permit us to bring back a greater portion of the spatial coverage of 27INREGION01 during I27. To accomplish this the next playback table delivered will differ significantly from this one.
A considerable number of timing changes were made this time, to fine-tune and optimize the data return. In some cases, for instance, the durations of the scan platform motion and the recording of data do not coincide exactly. Savings were accomplished by commanding for return only the recorded data obtained during scan platform slewing. These and other changes permitted us to increase our data return for 27INREGION01 by a little over a RIM. We are now bringing down the full first scan over the target during the first playback pass, with a portion of the second scan commanded for pass 2.

02-17-00: (K. Schimmels) We had another slight decrease in this last round of station allocations - about 0.89 MB.
Your new allocations are reflected below.

I27 Totals:	Alloc.	Total
NIMS	14.831%	12.630

I27 Playback Events Timeline (02-01-00 to 05-05-00)

02-20-00: I27 encounter begins at 04:00 UTC.

02-22-00: Perijove occurs at 12:31 UTC, followed by Io close approach at 13:47 UTC.

02-22-00: (J. Erickson) The Galileo spacecraft is operating normally. Background radiation (as measured by our star scanner) still appears to be within normal limits and peaked at around 910 pulse counts. As of this time more than 95% of the planned observations have been completed, and the encounter appears to be a success. Playback begins on 2/23.

02-22-00: (R. Mehlman) Only 3 SCLKs have been received from the encounter. All have been good. The first preceded our first observation. The second was just before recording of INREGION01 began, but right after the reload preceding it, so tells us nothing. The third was almost 3 hours after INGLOBAL01, telling us that no halts occurred during that observation. I'm afraid there is no way to tell if any halts occurred during the other observations before we start playback -- unless, of course, some lost SCLKs show up.

02-24-00: (J. Erickson) The Galileo spacecraft is presently in safing, with both CDS strings operating, and other subsystems normal. The safing is believed to be a CDS despun bus reset, the third of this encounter. During encounters, the spacecraft is now equipped with a software routine that detects a despun bus reset and enables the CDS to "ignore" it and continue the encounter without interruption. However, this software routine must be disabled during tape recorder playback, which began last night. We haven't previously seen a bus reset happen at this distance from Jupiter, as it occurred at about 29 Rj (Jupiter radii). We are about to begin recovery, and expect to complete the process this evening.

02-25-00: (J. Erickson) This was another picture perfect encounter, with normal execution of all planned activities. Close approach to Io was at 6:32 a.m. PST ground receipt time, at an altitude of 198 km. Remote sensing observations and fields and particles recordings of Io were completed without incident. A radio science near-occultation of Jupiter was recorded at the DSN normally. Playback began 2/23/00 at approximately 12:22 p.m. PST ground receipt time. Radiation levels were about average, with no problems identified. The peak radiation level was around 900 (measured by the star scanner in pulse counts), significantly lower than the maximum of 1400 seen in previous GEM orbits. During the encounter a pair of standard bus resets occurred and was handled normally by the on-board recovery software without any effect on the planned sequence. The first occurred at approximately 1:38 a.m. on 2/22/00, and the second occurred during a window from 5:30 p.m. to 6:30 p.m. on 2/22/00 PST ground receipt time.

Subsequent to the encounter, a third bus reset hit the spacecraft at 4:45 a.m. on 2/24 PST ground receipt time, forcing it into safing. The flight team diagnosed the problem and the spacecraft was brought back into normal operations at 9:30 p.m. PST ground receipt time. Playback will resume on 2/26.

02-25-00: (J. Erickson) It looks like we have lost about 3+ megabits of playback capability due to the problem. This is a first time in orbital operations we've seen one of these resets out of the usual radiation environment. Something else to watch. And we're approaching another milestone. G-28 will put us over the three times radiation design limit. Wow! What's that old Timex commercial - "Takes a lickin, but keeps on . . ."
Because of the s/c anomaly that resulted in safing earlier today, commands have been approved to turn PLS HV back on. MAG is currently off, but the MAGON real time command package is available and will be requested as appropriate in the near future. NIMS will also need to be turned on and its Phase 2 flight software reloaded. The next scheduled activity for NIMS is a PCT calibration on DOY 71.
I27 playback was initiated yesterday and appeared nominal at that time. Planned science activities that have been interrupted by today's anomaly and safing include:
(1) playback, (2) EUV realtime acquisition of Io Torus data, (3) DDS RTS data collection, and (4) MAG optimal averager data collection (returned via MRO).
A new playback table will need to be developed and uplinked in order for I27 playback to proceed.

02-25-00: (K. Schimmels) Playback terminated during safing on Thursday. Playback will reinitiate Saturday at 12:09 PM. Playback is being done in a first-in/first-out fashion this orbit (at least at this point). We are starting pass 1 with track 2 and playing back I27 data in order. Playback had begun prior to safing, and the PPR RCT Calibration as well as some of the first PPR Jupiter Limb 01 observation were already on the ground. The new playback table picks up a new segment 1 with the very next observation - PPR Jupiter Limb 02.

02-25-00: (M. Segura) The latest news about the spacecraft safing is as follows: The time has been refined to DOY 55 ~ 12:00 SCET. The cause is believed to be simultaneous bus resets on both the CDS A and B strings.
Recovery commands were sent late yesterday afternoon and early evening which resulted in the OTM being planned right on schedule. The I27 cruise load will uplink late today/early tomorrow and go active around noon Saturday.
Now on to NIMS status:

There was a significant drop in the power supply, grating, and mirror currents at ~ DOY 54/05:39 scet while all temperatures remained in nominal ranges. This state continued until the safing event which turns the instrument off. The curious thing about this behavior is that the phase 2 clock values kept updating but not with the 2 rim offset from CDS time - only 1 rim difference was observed. There appeared to be no change in s/c power states at the time NIMS telemetry showed a drop in current and no conflicting or competing activities in the sequence.
The next NIMS activity was to be the final reload and chopper off activity on DOY 56 (which got wiped out because of the safing). Typically, when the phase 2 software gets corrupted and crashes, the current values drop to zero and the clock values stop updating. However in the past few orbits, the clock value in channel S1931 had continued to update even after a crash. With this in mind, we were waiting anxiously for the phase 2 reload to occur and the current telemetry channels to "reset".
Due to the safing, we've lost the ability to determine if the reload would have successfully fixed the telemetry or if we truly have another instrument anomaly. The best approach to attempt to make that assessment in the current situation is to turn the instrument back on - and not immediately reload the phase 2 software and monitor the currents for a period of time.
Our recovery plan has the instrument power coming on ~ 12:30 or so Saturday with a reload occurring 48 hours later. I will be in to monitor the currents on Saturday afternoon and will send an e-mail with an update once I've confirmed that the instrument power is back on.

03-01-00: The table delivered today includes changes that reflect the new strategy of carrying over some I27 data for playback in G28. We have 4 observations on track 4 that will not be overwritten during G28 recording. In today's table we have cut back the wavelengths coverage for these observations from 144 to 36, and we have trimmed the playback time for 27INPROMTH01 and 27INAMIRANI01 to about 2 RIMS only. As a result our downlink bits spent on these observations in I27 will only be about 0.4 Mbits. The "preview" data we will obtain for Prometheus and Amirani covers the areas of the hot spots but not the surroundings.
Thanks to the above cuts we can now bring down the full spatial area coverage of 27INREGION01 at 144 wavelengths. The first two (higher-resolution) scans will come down in pass 1 and the last scan will come down in pass 2. We presently have no indications of any software crashes during I27 recording, but it remains a possibility that one of these occurred during the recording of one or more of our observations. Beyond the loss of our data, the only consequence of a stoppage would be an acceleration through the playback schedule.

Although we lost a couple of Mbits of downlink due to the spacecraft safing, our allocations have not been reduced significantly. It still appears that the first NIMS data will come down around the 15th of March.

03-02-00: (K. Schimmels) Playback is currently about 10% complete, and is on schedule. We are playing back the MWG Torus observation. As of 2 PM, tape position is Track 2, Tic 1273. Losses to playback due to safing were 1.75 MB, and were taken from margin. Engineering data was taken from extra playback at the end of the OTM. Margin remains at 0.25 MB, plus 3.7 MB inefficiency margin.

03-10-00: (J. Erickson)

1. The mini-gyro test after I27 yielded the following results:
   -1x axis went from 54.25 to 72.03% error
   (current scale factor mismatch of 9.72 points)
   -2x axis went from 14.23 to 19.48% error
   (current scale factor mismatch of 1.38 points)
   -1y axis went from 19.16 to 27.79% error
   (current scale factor mismatch of 4.74 points).

Scale factors were updated for the post-E26 maneuver and don't reflect the annealing in E26 cruise. The mismatch was considered acceptable for the post-I27 maneuver but will likely be updated after the maxi-gyro test scheduled for March 27.

03-22-00: (F. Leader) re: 27INHRPELE01
Even the thermal detectors (15,16 and 17) are saturated near the centers of hot spots of Pele (What is the lowest temperature that could saturate these detectors ?). Only detector 4 is not saturated at all points and detector 5 has a few saturated points. This obs was in gain state 2.
I highly recommend returning detectors 1,2 and 7 for this observation in pass 2 to try to get temperature range limits on the hottest regions and also fine structure. This is recorded on track 3 and will be over-written in G28.

03-22-00: The table delivered today includes 8 new sets of playback commands. Half of these are for filling gaps, and half will bring down small amounts of SSI ridealong data from the observations 27ISPELE__01, 27ISTVASHT01, 27ISZALTRM01, and 27ISPROMTH01. We cut back on the sampling coverage of 27INREGION01 in order to bring down the ridealongs and gap fills. The number of samples ("grating steps") per detector was reduced from 12 to 10. So far the data is compressing well and further reductions did not turn out to be necessary. The gap fill for 27INICHAAC01 is straightforward but that for 27INHRPELE01 is not. High temperatures on the target produced significant saturation in nearly all detectors so in pass 2 we will go after the data for detectors 1, 2, and 7.

There is a gap in the pass 1 portion which will be filled using a table that selects all 15 detectors with 12 samples each. Some technical details on the timing of the singles are footnoted below.
The SSI observation names are in many cases the same as in the NIMS data requests. In pass 1 we had two sets of singles with the title, 27INCAMAXT01-, one for our own recording and one for SSI ridealong data, at slightly different times. For subsequent ridealongs, I changed the following - to + to indicate the "ridealong" status.
Notes on the 27INHRPELE01 gap fill singles times:
Detector 1, 2, 7 playback before the gap ends at 5399308:87 (day 53 13:37:09.333)
"All detectors" playback over the gap starts at 5399308:88 (13:37:10.000)
"All detectors" playback over the gap ends at 5399309:15 (13:37:22.000)
Detector 1, 2, 7 playback after the gap starts at 5399309:25 (13:37:28.666)

02-29-00: (K. Schimmels) New additions to the bit family are below. Treat them with loving care, as they are small :) 0.8 MB is being released this week. This accounts for addt'l playback expected during pauses to come, and due to lower inefficiencies expected.

Team	Addt'l BTG	New Alloc
NIMS	0.119	12.749

03-30-00: I have delivered a new table for tomorrow's update. There are 3 new sets of singles, PSIDs EP, EQ, ER. These fill gaps in the pass 1 playback of 27INMOSAIC01. We received a small amount of new allocation from the remaining office/inefficiency margin.
If all goes well we should see data from 27INREGION01 on Saturday. If compression is lower than predicted here it could force us to make cuts in next week's update.
Rosaly indicates that we obtained excellent Io observations in I27. For several of these, the other 95% of the data will come down in G28, as one track of tape will be carried over.

03-31-00: (K. Schimmels) Playback is currently about 68% complete, and is on schedule. We are playing back the 27ISSOPOLE01 observation. As of 10 AM 3/31, tape position is Track 1, Tic 2943.

04-06-00: The new table contains 7 new sets of commands, with PSIDs DJ to DP. These fill gaps in our pass 1 playback of 27INREGION01. Although compression has been running pretty much as predicted, filling this large number of gaps has brought us up to and slightly beyond our total downlink allocation. To compensate we have trimmed a little over 1 RIM from the first part of the second scan of 27INMOSAIC01. This area has not revealed any prior hot spot activity.

I27 Playback Events Timeline (02-01-00 to 05-05-00)

04-07-00: (K. Schimmels) Playback is currently about 81% complete, and is running about 1 day ahead of schedule. We are playing back the 27ISSAPPNG01 observation. As of noon 4/7, tape position is Track 3, Tic 1997. 2 new segments were added in pass 2, at the very end due to NIMS wavelength restrictions. Resuming playback early gained us 0.33 MB in capability. Most of this has been released prior to this week (in anticipation) to allow teams to do something useful with the BTG. No additional margin was released this week.

Team	% alloc	Alloc(MBTG)	Usage(MBTG)	Unused MBTG
NIMS	14.831%	12.749	12.464	0.285

04-12-00: Last week we trimmed a little bit off 27INMOSAIC01. We can't change that now. However we just received some additional office margin and have about .5 Mbits to play with. We have a nice Io global on tape. There was some discussion of going for dark sky off the target to derive new dark values. However I think we can get this objective and more by the following approach. We used a 36 wavelength (3 samples, 12 detectors) for previewing Prometheus, Amirani, etc. I got the impression that the resulting products were interesting and useful. If we go after the global using this table, we can get about 2/3 of it down with our current allocation. Any objections? Other suggestions? Question 2. Which 2 scans - north, equatorial, south? The central longitude is 170 and the body is 98% illuminated.

04-12-00: We received .25 Mbit of additional allocation from a release of office margin this week, and the accounting of bits received shows us with .285 Mbits unused. Thus in this update we are able to fill a small gap at the end of pass 1 playback of 27INREGION01 (by moving our pass 2 NIMPBK single 300EK earlier in time). In addition we are adding new singles (DQ) to return the equatorial and southern scans of 27INGLOBAL01, at 36 wavelengths. We may be over our current allocation by a tiny amount this week, but we have one more opportunity to adjust the table next week, so if a trim is required we can accomplish it then. We are requesting every 4th RIM of AACS to help with the pointing of 27INGLOBAL01 as well.

04-12-00: (R. Lopes) I have now prepared a "playback design" that you (and Elias) will love...we cut the beginning of the eastern parts of the middle and south scans, then return a bit of the northern scan around Tvashtar (If you look in the design at the top numbers, which I think are cone angle, the Tvashtar region will be between 152.7 and 152.46). Now, isn't that a good compromise?

I27 Playback Events Timeline (02-01-00 to 05-05-00)

04-13-00: Playback is currently about 90% complete, and is running about 1 day ahead of schedule. We are currently slewing on track 4 towards the 27INAMRANI01- observation. As of 10 AM 4/13, tape position is Track 4, Tic 2879. 1 new segment was added in pass 2, at the very end due to NIMS addition of INGLOBAL. 0.25 MB of margin was released to NIMS for use in INGLOBAL, and SSI, as last on the tape, has packed out the last two observations with lots of pad.

04-17-00: (E. Barbinis) I generated the wavelength table that you requested and I left a copy of it on your chair. The name of the new wavelength table is ILM36T.PBK. It gets the 12 working detectors every 8 grating steps (steps 0, 8 and 16).

04-18-00: Due to looming jury duty, this table has been delivered a day early. It is the final update for I27. The only changes involved the timing of our playback of 27INGLOBAL01. Two new sets of singles, PSIDs DR and DS, were added, while DQ was modified. Following Rosaly's instructions we are returning 2:48 of the upper scan, centered on the longitude of Tvashtar. Longitude values for the center points of each mirror scan range from 100-170 W. To obtain this we cut a similar quantity of data from the eastern portion of the central scan. As you may know the recording of the 3rd scan was incomplete due to sequencing tradeoffs. It turns out that we will get about the same amount of longitudinal coverage for both the center and southern scans, from longitude 150 W to the limb (near 250 W). The wavelength table for this observation was modified to return the first, eighth, and 16th grating steps for each detector (samples spaced evenly in time).

04-19-00: (K. Schimmels) Playback is currently about 96% complete, and is slightly behind schedule (~6 hrs). We are currently playing back the NIMS INREGION observation, and just entered Segment 15. As of 6:30 PM 4/19, tape position is Track 1, Tic 5303. Playback terminates on Thursday, April 27 at approximately 2:47 PM PDT. (00-118/21:47 SCET-UTC). SSI has packed out the end of playback with extra BTG, and we should just barely get into the 27ISGLOCOL01 observation. If there is extra playback at the end, they'll use it all up.

04-27-00: Playback terminated.

I27 Playback Events Timeline (02-01-00 to 05-05-00)

05-05-00: (J. Erickson) In the last two weeks, the spacecraft turned to a new attitude for maintaining communication, conditioned the RPM, terminated playback for conjunction, and slewed the tape to the center (tic 3114). The +X RTG current dropped 1 DN, as predicted, on DOY 121. Both stars 2 and 3 of the 3 star set are occasionally dropping out at this attitude, presumably due to star scanner browning making the stars appearing dimmer than predicted. Star 1, which is now Altair, has not dropped out at all. Telemetry data was received through Monday 5/01; due to conjunction, no data has been received on subsequent passes. Mimimum SEC angle occurs on Sunday 5/07, after which the spacecraft starts heading out of conjunction, although we do not expect to see any more telemetry until approximately 5/13 at the earliest. The command loss timer has been set to time out on DOY 143 (May 22), so that any receiver problems during conjunction will not cause safing and cancel the onboard sequences. Playback terminated on Thursday the 27th, prior to entry into solar conjunction. When playback terminated, approximately 0.3 Mbit of SSI data is thought to have been in the MUB. This was unable to drain prior to entry into conjunction (i.e., RTE 10 bps with downlink at either 8 bps or FILL) because of the DSN station losses on the 27th. The data should remain in the MUB until DOY 138 when the s/c exits conjunction, and the G28A sequence begins. This situation does raise an issue for G28A RTS. Because of the non-zero MUB at the beginning of G28A and the very limited downlink available, there will be a MUB overflow of RTS data for ~4 hours. Because the MUB uses a "first-in, first-out" process, there is no concern over the playback data. SPOT is currently looking at our options for dealing with this situation (which include allowing the overflow to occur).

The NIMS grating became stuck prior to the I24 encounter. The grating continued to be stuck for the I27 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.

There were no NIMS processor halts detected during the I27 Encounter.

The spacecraft safed during the I27 encounter about 2 days after I27 perijove.

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.

Response to Stuck Grating Anomaly (I27)

At I27 the cause of the stuck grating was not known (and is still not clearly understood). No attempts were made during I27 to unstick the grating.

Processor Halts

No NIMS processor halts were detected during I27.

NIMS Engineering Anomaly

Anomalous NIMS Engineering telemetry were received during the outbound portion of the I27 encounter well after NIMS had stopped taking science data and before the scheduled NIMS chopper off and the spacecraft safing event. A standard CDS bus reset event occurred at about D054/00:00. NIMS may have lost RTI synch with CDS at that time, which could account for the anomalous engineering.

There was a significant drop in the power supply, grating and mirror currents detected at D054/15:45 which probably continued until the safing event. Power supply current dropped from 201 to 24 DN, grating current from 81 to 1 DN, and mirror current from 136 to 24.

At D054/17:53 the NIMS hardware status block engineering read 11, which translates to gain state 4, Ecal on. Ecal was not commanded.

The NIMS SCLK at D054/12:39 was offset by only 1 Rim from the reporting SCLK time, instead of the nominal 2 Rim difference.

All of the above occurred after the CDS bus reset. We were waiting for the NIMS planned chopper off and software reload scheduled for D056/01:56 to see if the reload would reset these engineering channels to their nominal values, but the spacecraft safing event at D055/12:00 prevented the reload from executing as scheduled.

Spacecraft Anomaly

During the I27 encounter a pair of standard bus resets occurred and were handled normally by the on-board recovery software without any effects on the planned sequence. The first occurred at about D053/09:38 and the second at about D054/00:00. A third reset hit the spacecraft at about D055/12:00 after playback had been initiated. The combination of DMS activity and bus reset forced the spacecraft into safing. The flight team brought the spacecraft back to normal operations at about D056/05:30. NIMS was powered on at D057/20:21. The NIMS phase 2 software was reloaded at D059/20:24.

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.

NIMS Data Format - Data types - Data Labels - Data Access

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.