

NIMS GUIDE TO THE E15 ORBIT

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Foreword to the Revised Edition

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

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

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

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

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

Acknowledgements

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

Foreword

This document serves as a guide to the E15 Orbit for the NIMS Team. The aim of this guide is to provide detailed information on the various NIMS E15 observations and calibrations. Also included in this document is background information on the E15 orbit. This guide was produced before the start of the E15 orbit. After analysis of the NIMS E15 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 E15 orbit. Chapter 2 gives an overview of the E15 orbit and summarizes the NIMS science objectives for the E15 orbit using tables, spreadsheets and timelines. Chapter 3 contains diagrams of various aspects of spacecraft geometry for the E15 orbit. Chapter 4 summarizes the NIMS E15 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 E15 orbit.

For more information on the E15 orbit, please refer to the Galileo Orbit Planning guide and the Galileo Orbit Activity Plan for the E15 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.

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Chapter 1 - Introduction

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Introduction

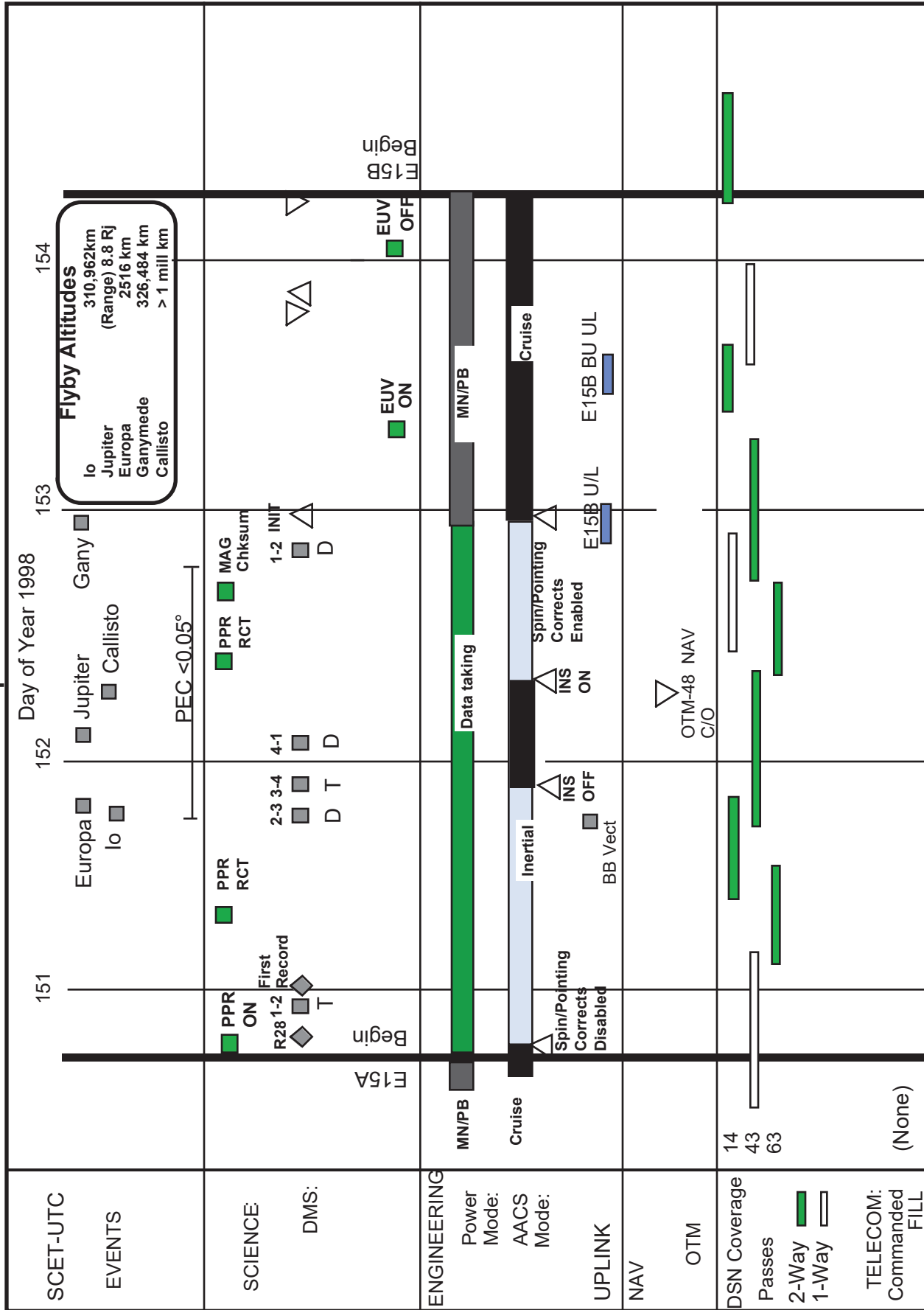
This E15 orbit is the fifteenth of twenty-five orbits in Galileo's Tour of the Jovian system and the fourth orbit in the Galileo Europa Mission (GEM). This orbit has a targetted satellite flyby of Europa. NIMS will make observations of Jupiter, Io, Europa and Callisto in this orbit.

There are 15 autonomous reloads of the NIMS RAM code from CDS planned during the E15A encounter period, one just before each science observation. These reloads are in response to the on-going flight-anomalies where the NIMS RAM code takes some bit hits and halts the instrument during when the spacecraft is close to Jupiter. NIMS personnel will monitor the NIMS engineering telemetry data on a regular schedule to track the instrument's status.

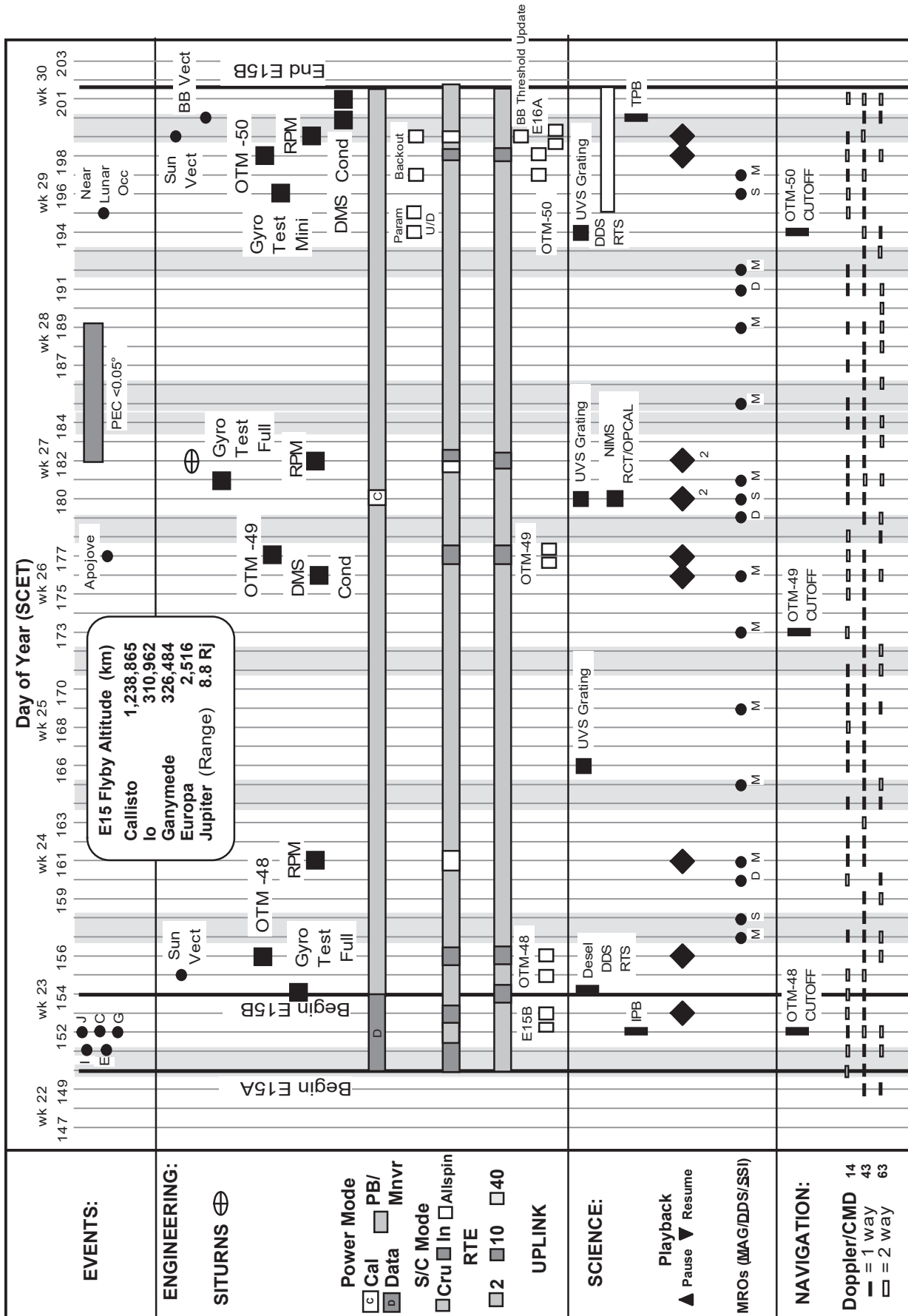
The E15 orbit is divided into 2 sequence loads: one Encounter Load (E15A) and one Orbital Cruise Load (E15B). The E15A load begins on D150 (05/30/98) and ends on D154 (06/03/98). This load contains the flybys of Jupiter, Europa, Io and Callisto. The Cruise Load E15B runs from D154 to D201. Playback of the recorded data takes place during the Cruise phase, E15B. A high-level overview timeline of the E15 orbit can be found on the following two pages.

Due to spacecraft safing during E16, many E15 observations were not recorded over in E16 as planned. Therefore, these E15 observations were available for playback during E16 cruise. The playback portion of this guide corresponds to playback of E15 data during E15 and E16 cruise.

E15A Sequence Overview



E-15 Overview



May 1998 June 1998 July 1998

27 29 01 03 05 08 10 12 15 17 19 22 24 26 29 01 03 06 08 10 13 15 17 20 22

W Th F Sa Su M Tu W Th F Sa Su M Tu W Th F Sa Su M Tu W Th F Sa Su M Tu W Th F Sa Su M Tu W

SST/BMcL 5/27/98

Introduction

The following table lists the major events during E15, including NIMS Real Time observations, in UTC.

05/30/98	98-150/21:00:00	E15 Encounter Start
05/30/98	98-151/02:49:48	NIMS RAM Reload 01
05/30/98	98-151/02:58:10	NIMS R/T Jupiter 01
05/30/98	98-151/13:10:37	NIMS RAM Reload 02
05/30/98	98-151/17:29:28	NIMS RAM Reload 03
05/30/98	98-151/20:35:31	NIMS RAM Reload 04
05/30/98	98-151/20:58:47	Io Closest Approach
05/30/98	98-151/21:12:56	Europa Closest Approach
05/30/98	98-151/21:15:39	NIMS RAM Reload 05
05/30/98	98-151/21:43:57	NIMS RAM Reload 06
05/30/98	98-151/22:14:17	NIMS RAM Reload 07
05/31/98	98-152/02:14:56	NIMS RAM Reload 08
05/31/98	98-152/02:34:28	Jupiter Closest Approach
05/31/98	98-152/13:06:05	NIMS RAM Reload 09
05/31/98	98-152/14:24:57	NIMS RAM Reload 10
05/31/98	98-152/14:29:35	NIMS R/T Jupiter 02
05/31/98	98-152/16:39:26	NIMS RAM Reload 11
05/31/98	98-152/16:59:13	NIMS R/T Jupiter 03
05/31/98	98-152/17:10:19	NIMS RAM Reload 12
05/31/98	98-152/17:37:04	NIMS RAM Reload 13
05/31/98	98-152/18:04:22	NIMS RAM Reload 14
05/31/98	98-152/18:51:53	NIMS RAM Reload 15
05/31/98	98-152/22:06:16	Start E15 Playback
06/29/98	98-180/20:34:39	NIMS R/T RCT CAL
07/19/98	98-200/15:56:43	End E15 Playback

Chapter 2 - Orbit Overview

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Introduction to Chapter 2

This chapter gives an overview of the NIMS observations in the E15 Orbit.

The text on page 3 summarizes the NIMS science objectives for E15. The NIMS calibrations are discussed on page 3. Early data return and E15 playback are also discussed on page 3.

The table on page 4 is a time-ordered listing of the NIMS Oapels for E15.

The plot on page 5 shows the geometry of the NIMS E15 observations using a north trajectory pole view projection. The plot on page 6 shows the NIMS Europa regional observations along the trajectory of the E15 Europa flyby. The plot on page 7 shows the geometry of the NIMS E15 calibrations.

The table on page 8 lists various NIMS E15 observing parameters: target latitude/longitude, range, cone angle, incidence angle (light), emission angle (view) and phase angle.

The spreadsheet on page 9 summarizes the various inputs for the NIMS E15 Observations. The spreadsheet on pages 10 and 11 summarizes the resource usage for the NIMS E15 observations.

The timeline on page 12 shows the placement of the E15 observations for all instruments during the E15 Encounter Period.

The tapemap on page 13 shows the placement of the E15 observations on the spacecraft's tape recorder.

The timeline on pages 14 through 20 shows the preliminary E15 playback schedule.

The NIMS E15 mosaic designs are summarized on page 21 and 22 in time-order.

NIMS E15 SCIENCE OVERVIEW

Jupiter Science

There are six Jupiter observations in E15. All observations look at the nightside North Equatorial Belt region at about 7 degrees North latitude in gain state 4. Three are realtime and three are recorded. The three realtime observations look at different longitudes. JUPRTS01 returns 10 Rims of 408 wavelengths, JUPRTS02 returns 20 Rims of 408 wavelengths and JUPRTS03 returns 10 Rims of 408 wavelengths. JNJPDARK01, 02 and 03 all look at the same nightside region, +7 latitude, 155 to 170 W. longitude with different viewing geometries.

Io Science

There are two INHRSPEC high spatial and spectral resolution Io observations in E15. INHRSPEC01, centered at 155 W. longitude, consists of four identical scans across the daylit disk, three in Long Map mode and the last in Long Spectrometer mode. INHRSPEC02, centered at 195 W. longitude, consists of three scans across the daylit disk, the first across the northern hemisphere, the second across the southern hemisphere and the third across the equatorial region.

Europa Science

There are eight Europa observations planned for E15: Four regional observations, one half-disk global observation and three distant global observations. ENREGION01 is a two swath observation centered at +7 latitude, 185 W. longitude. ENSUCOMP01 is a Long Spectrometer west-east scan (107 - 120 W. longitude) at about +7 latitude over the Cilix dark linea terrain. ENSUCOMP02 is a two swath observation centered at +30 latitude, 105 W. longitude on rough terrain. ENSUCOMP03 is an equatorial scan from 90 to 120 W. longitude. ENGLOBAL01 is a 4 scan map of the 1/3 lit disk in gain states 3 and 4. ENEUR16H01, ENEUR20H01 and ENEUR22H01 are distant single scan maps of the 1/3 daylit disk. Each has two identical swaths: the first in gain state 4, MPW 408 wavelengths, the second in gain state 3, LPU 228 wavelengths.

Ganymede and Callisto Science

Ganymede and Callisto were not observed in E15.

Calibration

There are two NIMS calibration observations planned for E15: one RCT cal and one OPCAL.

Early Data Return

There are five realtime observations in E15: Three 408 wavelength Jupiter observations (JUPRTS), one RCT calibration and one OPCAL.

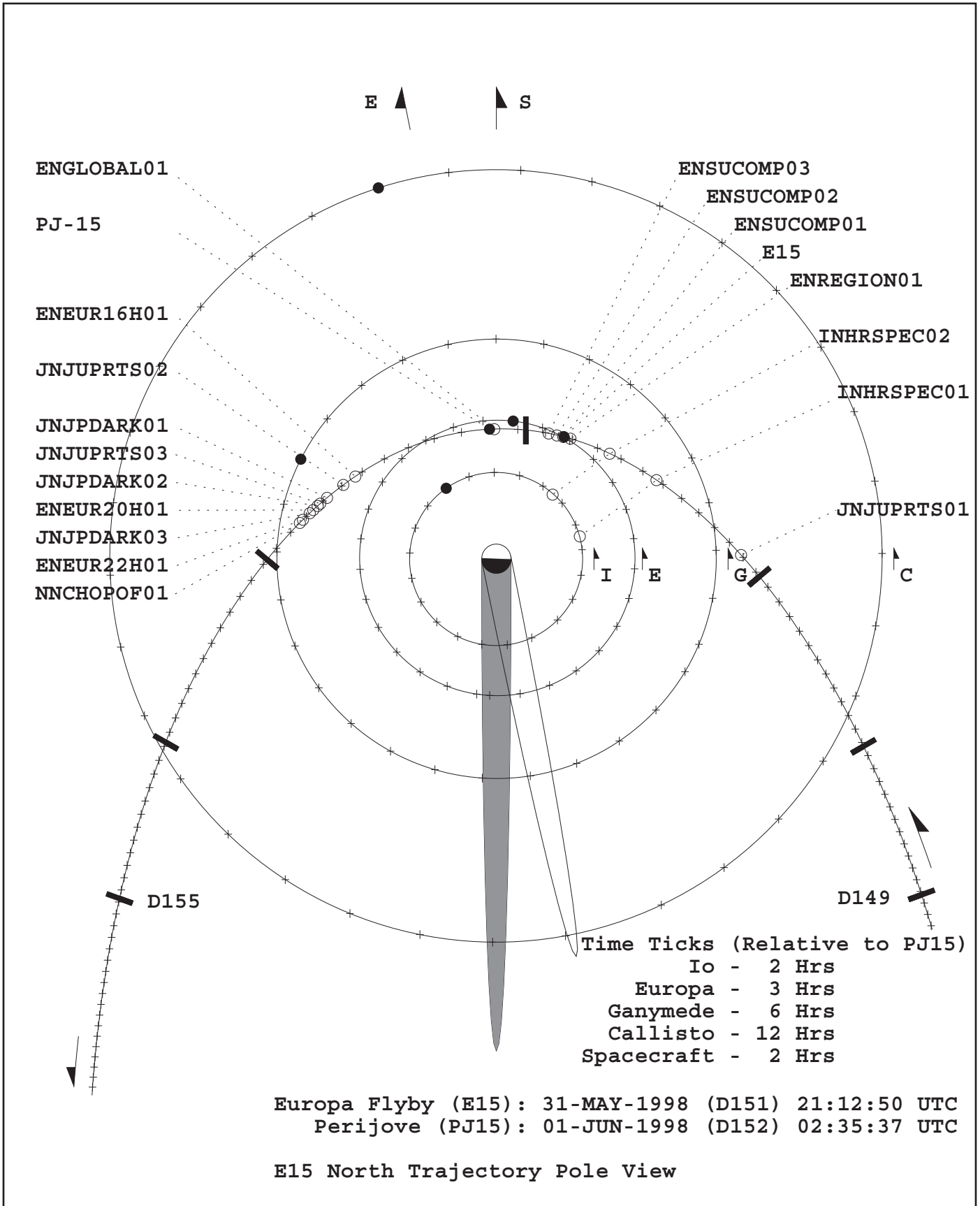
E15 Playback

E15 playback is split into two passes through the tape.

E15 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
15NNJUPRTS01-	98-151/02:43:51	98-151/02:53:58	000/00:10:06
15JNJUPRTS01*	98-151/02:53:58	98-151/03:09:08	000/00:15:10
15NNHRSPEC01-	98-151/13:04:40	98-151/13:14:47	000/00:10:06
15INHRSPEC01-	98-151/13:14:47	98-151/13:41:04	000/00:26:17
15NNHRSPEC02-	98-151/17:23:31	98-151/17:33:37	000/00:10:06
15INHRSPEC02-	98-151/17:33:37	98-151/17:59:55	000/00:26:17
15NNREGION01-	98-151/20:33:22	98-151/20:43:29	000/00:10:06
15ENREGION01-	98-151/20:43:29	98-151/21:04:43	000/00:21:14
15NNSUCOMP01-	98-151/21:13:49	98-151/21:16:51	000/00:03:02
15ENSUCOMP01-	98-151/21:17:51	98-151/21:42:07	000/00:24:16
15NNSUCOMP02-	98-151/21:42:07	98-151/21:46:10	000/00:04:02
15ENSUCOMP02-	98-151/21:46:10	98-151/22:11:27	000/00:25:16
15NNSUCOMP03-	98-151/22:11:27	98-151/22:16:30	000/00:05:03
15ENSUCOMP03-	98-151/22:16:30	98-151/22:33:41	000/00:17:11
15NNGLOBAL01-	98-152/02:07:02	98-152/02:17:09	000/00:10:06
15ENGLOBAL01-	98-152/02:17:09	98-152/02:51:31	000/00:34:22
15NNEUR16H01-	98-152/13:04:15	98-152/13:14:22	000/00:10:06
15ENEUR16H01-	98-152/13:15:23	98-152/13:35:36	000/00:20:13
15NNJUPRTS02-	98-152/14:22:21	98-152/14:26:24	000/00:04:02
15JNJUPRTS02*	98-152/14:26:24	98-152/14:50:40	000/00:24:16
15NNJPDARK01-	98-152/16:37:51	98-152/16:40:53	000/00:03:02
15JNJPDARK01-	98-152/16:40:53	98-152/16:56:03	000/00:15:10
15JNJUPRTS03*	98-152/16:56:03	98-152/17:10:12	000/00:14:09
15NNJPDARK02-	98-152/17:10:12	98-152/17:14:15	000/00:04:02
15JNJPDARK02-	98-152/17:14:15	98-152/17:33:27	000/00:19:12
15NNEUR20H01-	98-152/17:34:13	98-152/17:39:17	000/00:05:03
15ENEUR20H01-	98-152/17:39:17	98-152/18:01:31	000/00:22:14
15NNJPDARK03-	98-152/18:03:47	98-152/18:06:49	000/00:03:02
15JNJPDARK03-	98-152/18:06:49	98-152/18:23:00	000/00:16:10
15NNEUR22H01-	98-152/18:49:03	98-152/18:54:06	000/00:05:03
15ENEUR22H01-	98-152/18:54:06	98-152/19:20:23	000/00:26:17
15NNCHOPOF01-	98-152/19:24:26	98-152/19:34:33	000/00:10:06
15NNRCTRLT01-	98-180/08:00:05	98-180/21:15:50	000/13:15:44

NIMS E15 OBSERVATIONS

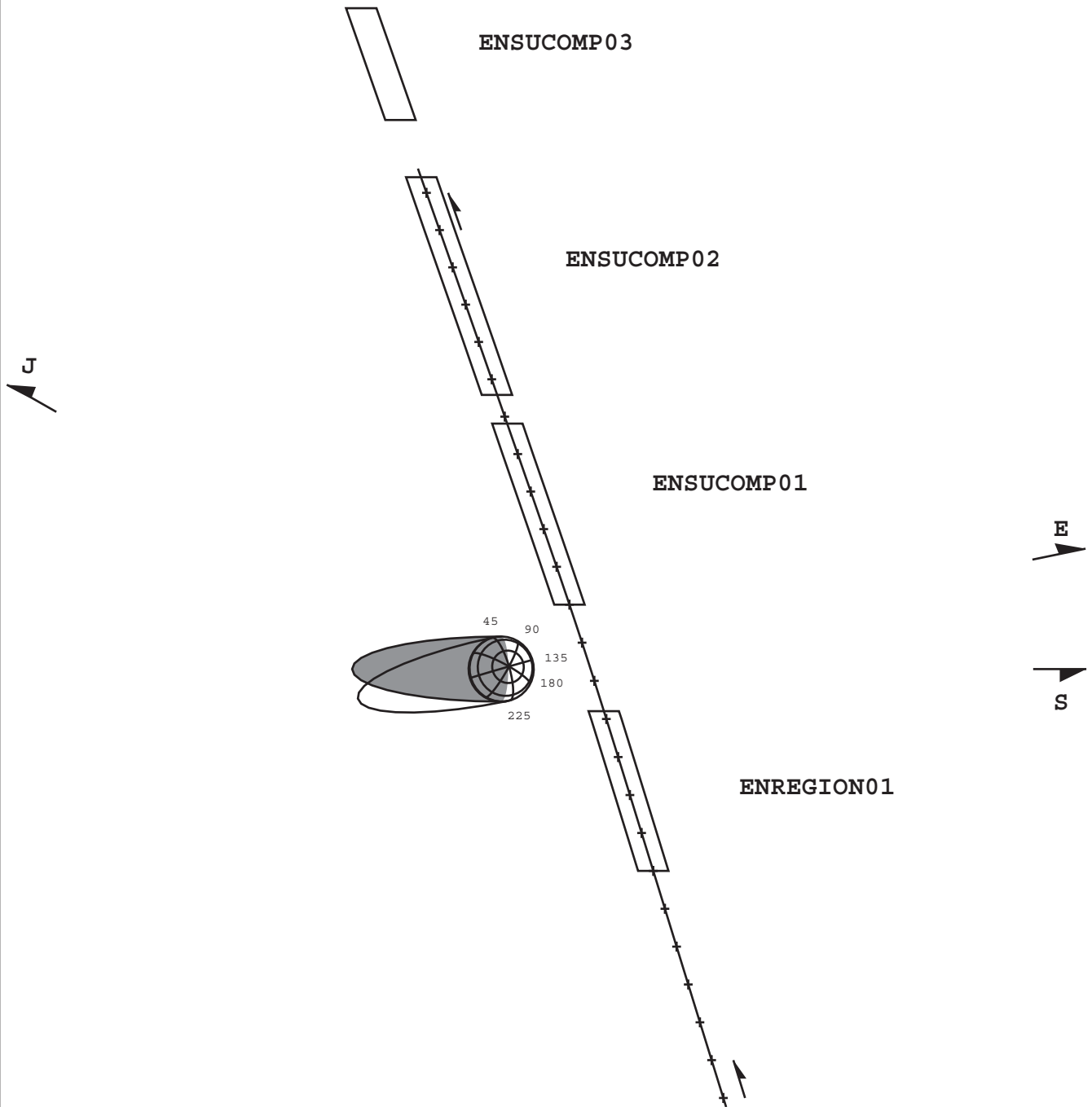


NIMS E15 EUROPA FLYBY OBSERVATIONS

Europa Flyby (E15): 31-MAY-1998 (D151) 21:12:50 UTC

Time Ticks (Relative to E15)

Spacecraft - 5 Minutes

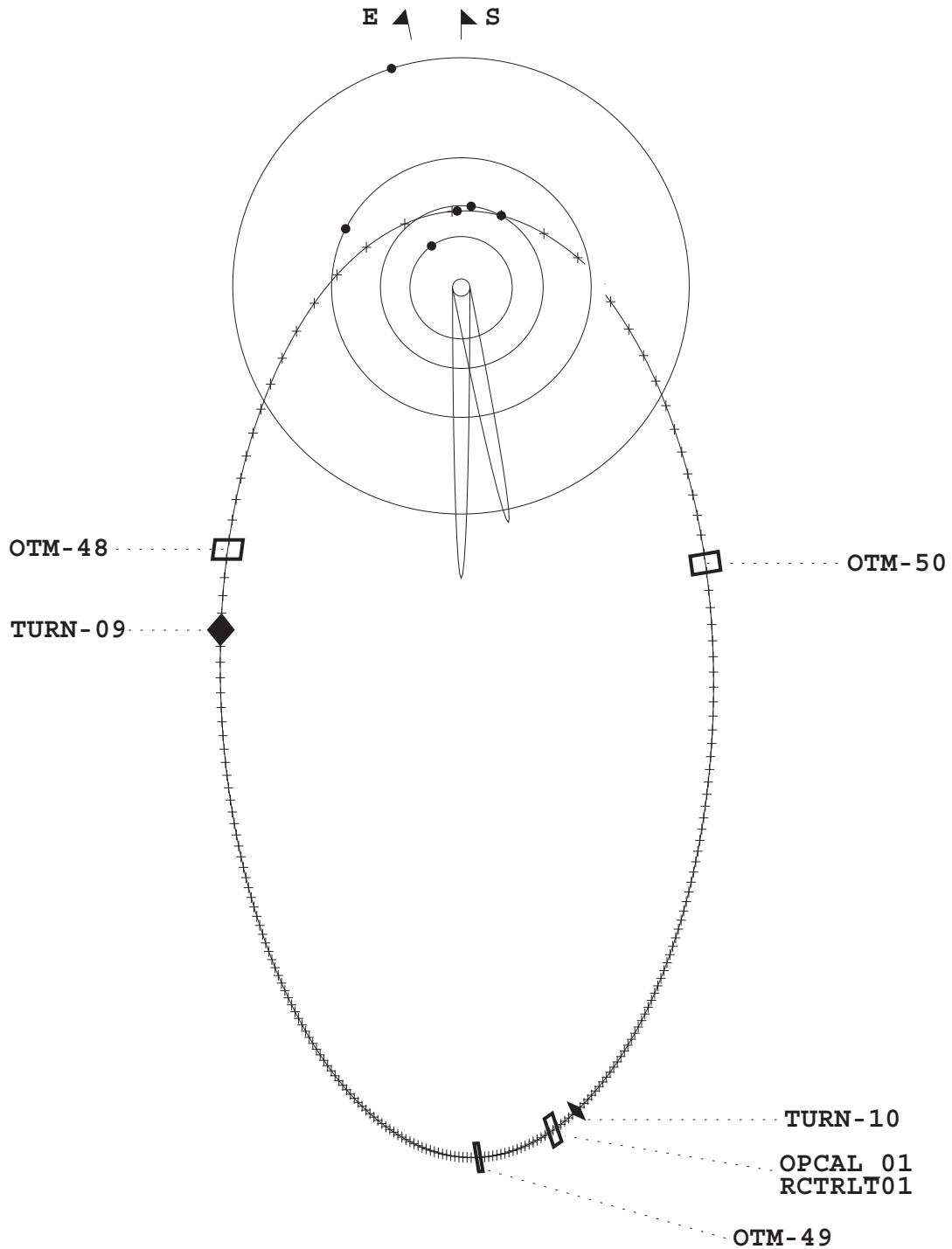


E15 North Trajectory Pole View, +/- 1 Hour

NIMS E15 CRUISE CALIBRATIONS

Europa Flyby (E15): 31-MAY-1998 (D151) 21:12:50 UTC
Perijove (PJ15): 01-JUN-1998 (D152) 02:35:37 UTC
Apojove (AJ15): 25-JUN-1998 (D176) 16:00:00 UTC

Time Ticks (Relative to E15)
Spacecraft - 6 Hours



E15 North Trajectory Pole View, Perijove to Perijove

NIMS E15 OBSERVING GEOMETRY

OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
15JNJUPRTS01	+6 to +8	81 to 100	1130K	82	113 to 137	27 to 51	87
15INHRSPEC01	-90 to +90	65 to 245	460K	118	3 to 141	2 to 90	51
15INHRSPEC02	-90 to +90	105 to 295	334K	114	3 to 141	1 to 90	54
15ENREGION01	+4 to +10	182 to 187	6K	113 to 154	31 to 38	5 to 23	17 to 56
15ENSUCOMP01	+7 to +7	107 to 121	6K	96 to 126	33 to 46	19 to 61	65 to 95
15ENSUCOMP02	+20 to +37	92 to 115	17K	91 to 94	46 to 67	44 to 63	97 to 100
15ENSUCOMP03	-5 to +7	90 to 121	27K	87 to 89	37 to 67	35 to 67	102 to 104
15ENGLOBAL01	-90 to +90	65 to 155	120K	82	23 to 107	15 to 90	109
15ENEUR16H01	-90 to +90	105 to 195	308K	76	25 to 115	0 to 90	115
15JNJUPRTS02	+6 to +8	42 to 80	800K	130	90 to 140	30 to 80	61
15JNJPDARK01	+3 to +11	155 to 168	832K	121	90 to 97	21 to 28	70
15JNJUPRTS03	+6 to +8	145 to 161	850K	121	106 to 116	37 to 47	70
15JNJPDARK02	+3 to +11	154 to 171	860K	120	107 to 118	37 to 49	70
15ENEUR20H01	-90 to +90	128 to 219	359K	80	21 to 111	0 to 90	111
15JNJPDARK03	+3 to +11	142 to 183	918K	118	126 to 160	54 to 90	72
15ENEUR22H01	-90 to +90	135 to 226	375K	82	19 to 110	0 to 90	109

E15 NIMS INPUTS

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
15NNJUPRTS01-	NIMS Software Reload								
15JNJUPRTS01*	Jupiter Realtime Observation	E15JLM442/MB R/T		LM	4	0	4	R/T	DA
15NNHRSPEC01-	NIMS Software Reload								
15INHRSPEC01-	Io Monitoring at High Spectral Resolutio	E15IILM442	E15B_ILM228C_1	LM,LS	2	0	4	MPW	DB
15NNHRSPEC02-	NIMS Software Reload								
15INHRSPEC02-	Io Monitoring at High Spectral Resolutio	E15IILM442	E15IILM360	LM	2	0	4	MPW	DD
15NNREGION01-	NIMS Software Reload								
15ENREGION01-	Europa Regional Observation	E15EILM442	E15EILM360	LM	3	0	4	MPW	DE
15NNSUCOMP01-	NIMS Software Reload								
15ENSUCOMP01-	Europa Surface Composition	E15EILM442	E15EILM360	LS	3	0	4	MPW	DF
15NNSUCOMP02-	NIMS Software Reload								
15ENSUCOMP02-	Europa Surface Composition	E15EILM442	E15EILM360	LM	3	0	4	MPW	DG
15NNSUCOMP03-	NIMS Software Reload								
15ENSUCOMP03-	Europa Surface Composition	E15EILM442	E15B_ELM228C_1	LM	4,3	0	4	MPW	DH
15NNGLOBAL01-	NIMS Software Reload								
15ENGLOBAL01-	Europa Global	E15EILM442	E15B_ELM228C_1	LM	4,3	0	4	MPW	DI
15NNEUR16H01-	NIMS Software Reload								
15ENEUR16H01-	Europa 16 Hour Map	E15EILM442	E15B_ELM240T	LM	4	0	4	MPW	DK
15ENEUR16H01-	Europa 16 Hour Map	E15B_ELM240V	E15B_ELM168V	LM	3	0	4	LPU	EK
15NNJUPRTS02-	NIMS Software Reload								
15JNJUPRTS02*	Jupiter Realtime Observation	E15JLM442/MB R/T		LM	4	0	4	R/T	DC
15NNJPDARK01-	NIMS Software Reload								
15JNJPDARK01-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DN
15JNJUPRTS03*	Jupiter Realtime Observation	E15JLM442/MB R/T		LM	4	0	4	R/T	DJ
15NNJPDARK02-	NIMS Software Reload								
15JNJPDARK02-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DO
15NNEUR20H01-	NIMS Software Reload								
15ENEUR20H01-	Europa 20 Hour Map	E15EILM442	E15B_ELM240T	LM	4	0	4	MPW	DL
15ENEUR20H01-	Europa 20 Hour Map	E15B_ELM240V	E15B_ELM168V	LM	3	0	4	LPU	EL
15NNJPDARK03-	NIMS Software Reload								
15JNJPDARK03-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DP
15NNEUR22H01-	NIMS Software Reload								
15ENEUR22H01-	Europa 22 Hour Map	E15EILM442	E15B_ELM240T	LM	4	0	4	MPW	DM
15ENEUR22H01-	Europa 22 Hour Map	E15B_ELM240V	E15B_ELM168V	LM	3	0	4	LPU	EM
15NNCHOP0F01-	Chopper off								
15NNRCTRLT01-	NIMS RCT Real-Time Calibration	E14RCT252	R/T	LM	1	0	4	R/T	XE

E15 NIMS RESOURCES

Activity ID	Mode	Record	Obs. Cost	Obs. Cost (tracks)	Obs. Cost (sec.)	Number Returned	Obs	Obs (sec.)	Selected Bits to Tape (MBITS)	Bits to Tape (Mbit)	Mode
15JNJUPRTS01	LM	R/T				360					
15INHRSPEC01	LM	MPW	0.1905	1110	1260	228	335	3.86	14.52	14.52	8.667
15JNJUPRTS02	LM	R/T				360					
15INHRSPEC02	LM	MPW	0.1905	1110	1260	797.333	9.19	13.13	14.52	14.52	8.667
15ENREGION01	LM	MPW	0.1724	1004	1140	1140	1150	13.25	13.82	13.82	8.667
15ENSUCOMP01	LM	MPW	0.1814	1057	1200	360	949	10.93	13.82	13.82	8.667
15ENSUCOMP02	LM	MPW	0.1814	1057	1200	360	530	6.11	6.91	6.91	8.667
15ENSUCOMP03	LM	MPW	0.0909	530	1800	228	979	11.28	20.74	20.74	8.667
15ENGLOBAL01	LM	MPW	0.2719	1585	290	240	286	3.29	3.34	3.34	8.667
15ENEUR16H01	LM	MPW	0.0442	257	290	168	286	1.76	1.79	1.79	8.667
15ENEUR16H01	LM	LPU	0.0120	70	600	80	300	1.85	3.70	3.70	8.667
15JNJPDARK01	LM	LPU	0.0245	143		360					
15JNJUPRTS03	LM	R/T									
15JNJPDARK02	LM	LPU	0.0245	143	600	80	300	1.85	3.70	3.70	8.667
15ENEUR20H01	LM	MPW	0.0406	236	266	251.333	2.90	3.06	3.06	3.06	8.667
15ENEUR20H01	LM	LPU	0.0110	64	266	251.33	1.55	1.64	1.64	1.64	8.667
15JNJPDARK03	LM	LPU	0.0245	143	600	80	300	1.85	3.70	3.70	8.667
15ENEUR22H01	LM	MPW	0.0374	218	245	234	234	2.70	2.82	2.82	8.667
15ENEUR22H01	LM	LPU	0.0102	59	245	234	234	1.44	1.51	1.51	8.667
15NNRCTRLT01	LM	R/T									
Total			1.5078	8786							
Allloc											

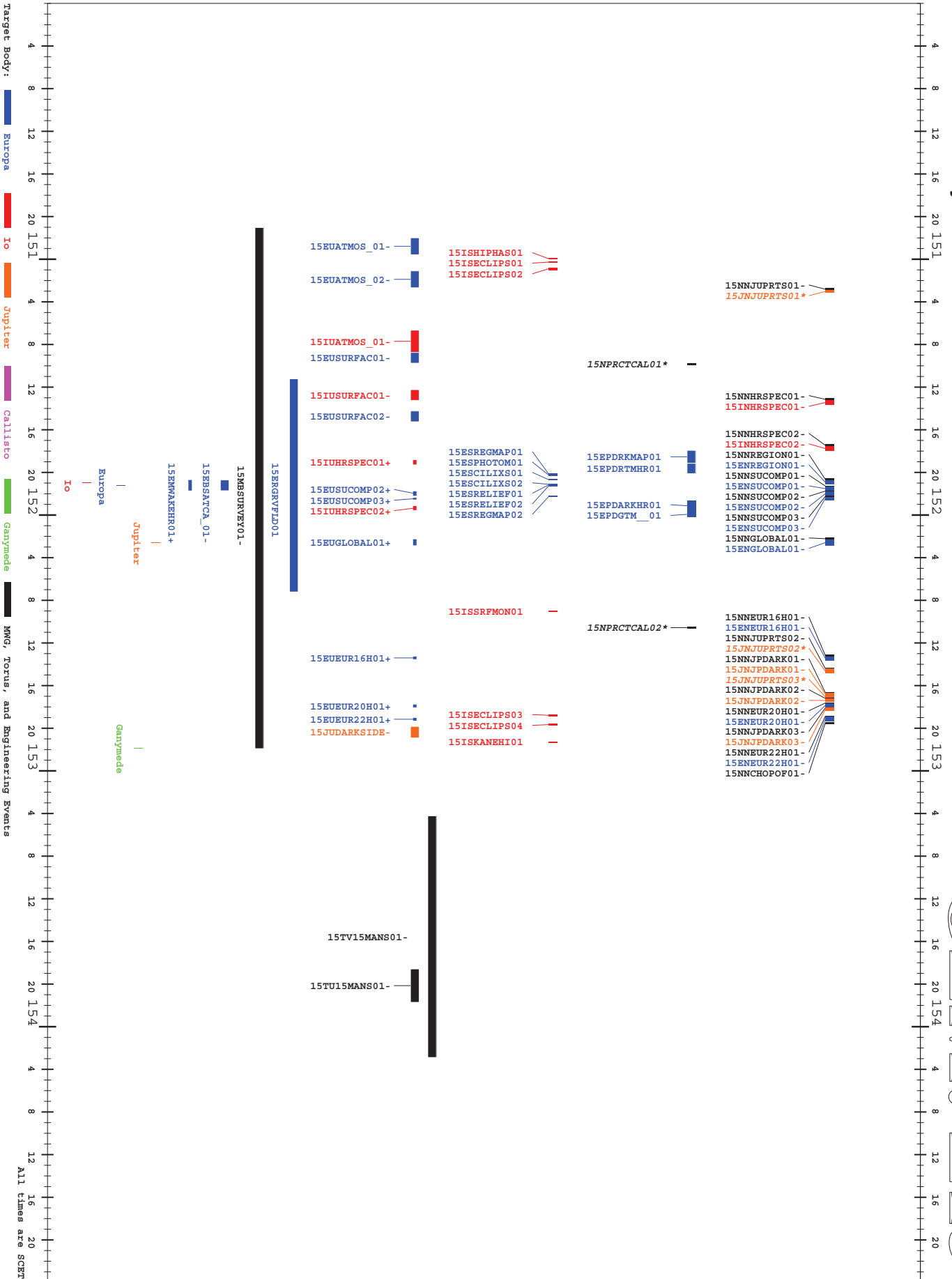
E15 NIMS RESOURCES

Activity ID	AACS Mbits	Thold	Comp	RT Mbits	Total MBTG (w/4% overhead)	Data Reduction Factor (sBOT/MTG)	Pass
c 2.5							
15JNJUPRTS01				0.16			
15INHRSPEC01	0.02	2	1.50		1.2220	3.16	1,2
15JNJUPRTS02				0.16			
15INHRSPEC02	0.05	2	1.30		5.2990	1.73	1,2
15ENREGION01	0.07	0	1.30		7.5763	1.73	1,2
15ENSUCOMP01	0.07	0	1.30		7.6428	1.73	1,2
15ENSUCOMP02	0.05	0	1.30		6.3070	1.73	1,2
15ENSUCOMP03	0.03	0	1.30		2.2308	2.74	1,2
15ENGLOBAL01	0.06	0	1.40		3.8263	2.95	1,2
15ENEUR16H01	0.02	0	1.50		1.0982	3.00	1
15ENEUR16H01	0.02	0	1.50		0.7687	2.29	2
15JNJPDARK01	0.02	0	1.30		0.4431	4.18	1
15JNJUPRTS03				0.16			
15JNJPDARK02	0.02	0	1.40		0.4114	4.50	2
15ENEUR20H01	0.01	0	1.50		0.9651	3.00	2
15ENEUR20H01	0.01	0	1.50		0.6755	2.29	1
15JNJPDARK03	0.02	0	1.40		0.4114	4.50	2
15ENEUR22H01	0.01	0	1.50		0.8985	3.00	1
15ENEUR22H01	0.01	0	1.50		0.6290	2.29	2
15NNRCTRLT01					0.1400		
Total				Total	40.4052		
Alloc				Alloc	40.1830		
				Over/Un	0.2222		

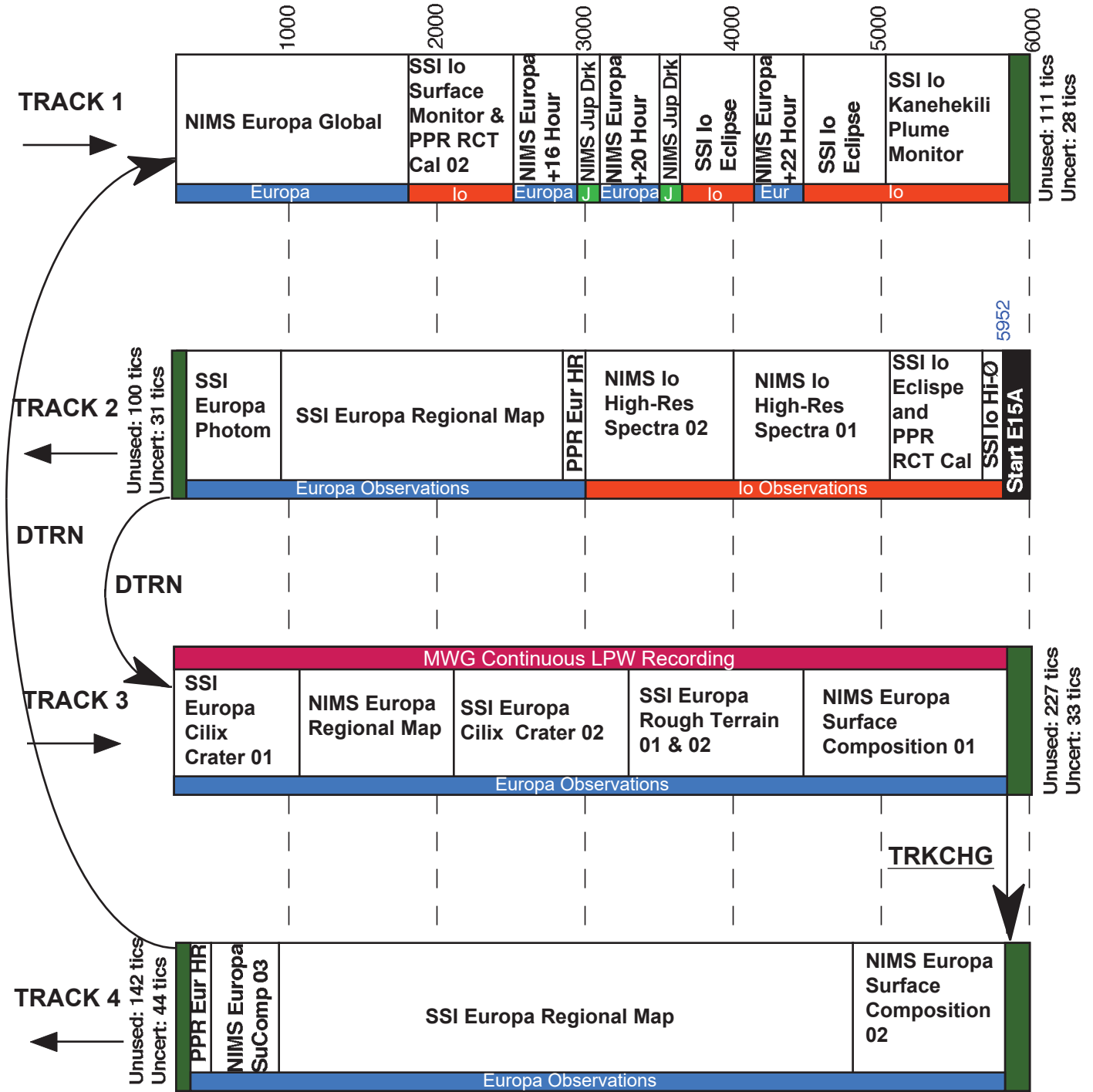
E15 ENCOUNTER
Plot Time: 98-150/00:00:00.000 to 98-155/00:00:00.000
Date of Plot: 11-May-98 14:58:18

GEM: E15

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

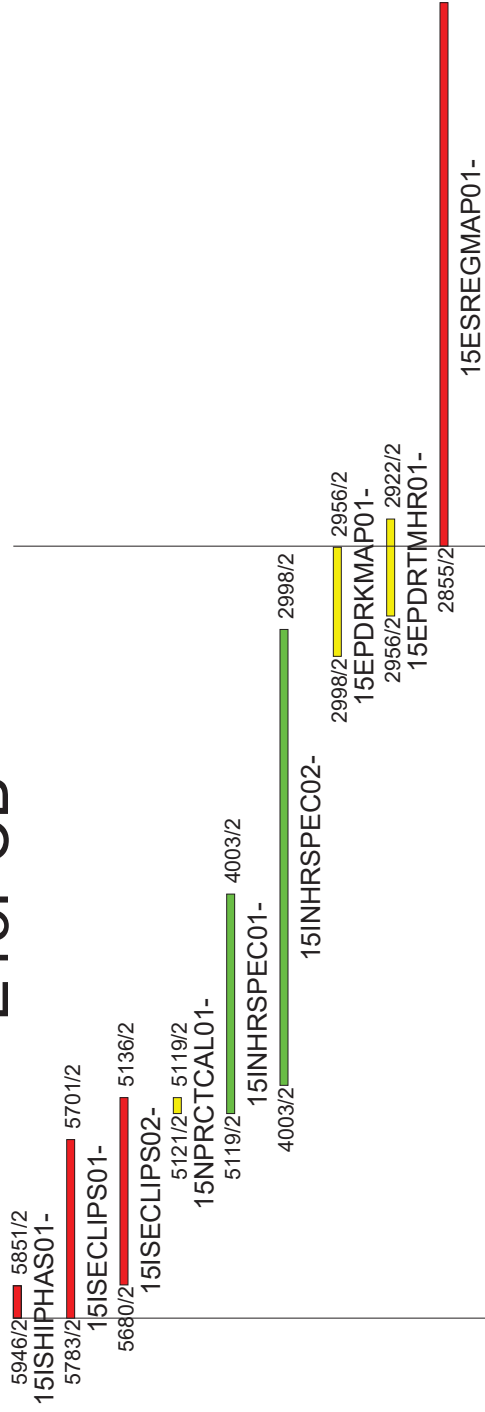


E15 HIGH-LEVEL TAPEMAP

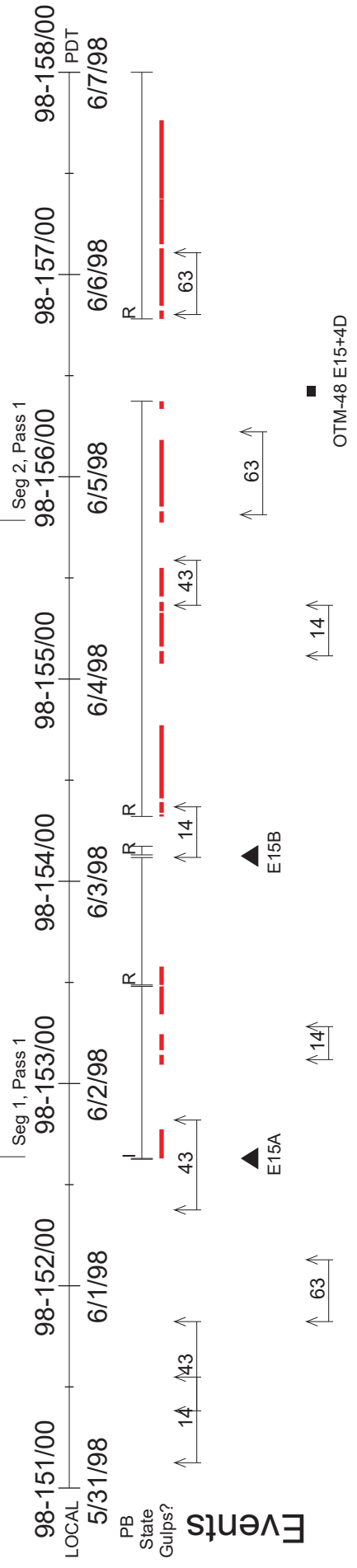


J. Gross, 5/4/98

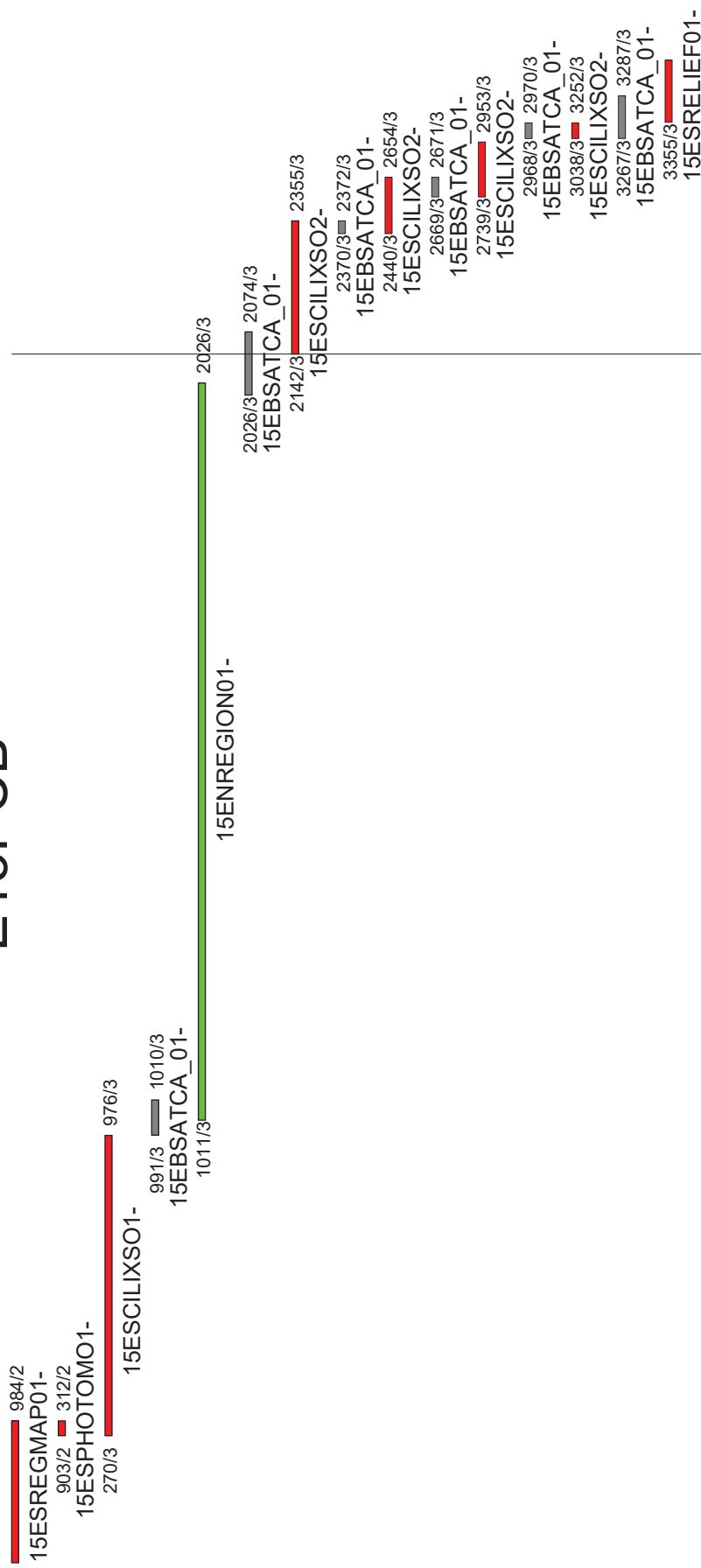
E15PCB



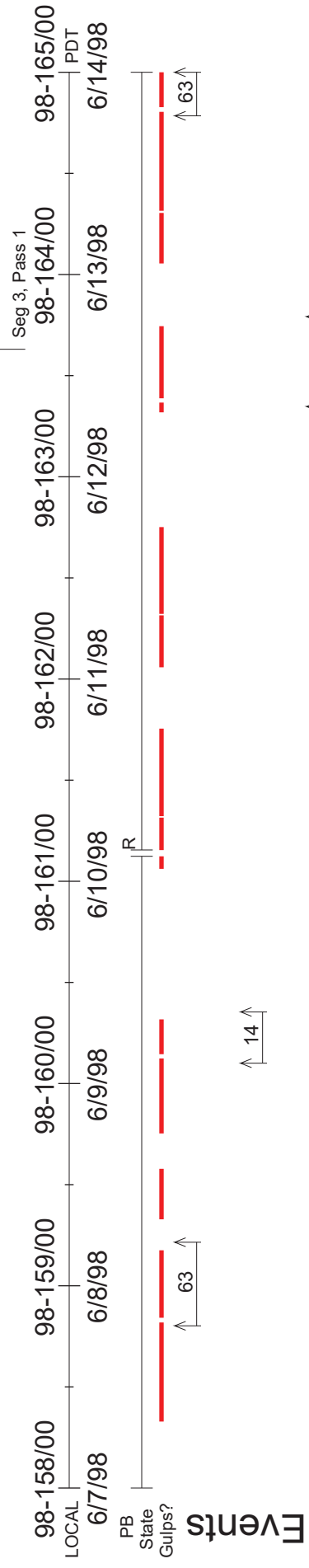
Playback / Date Returned



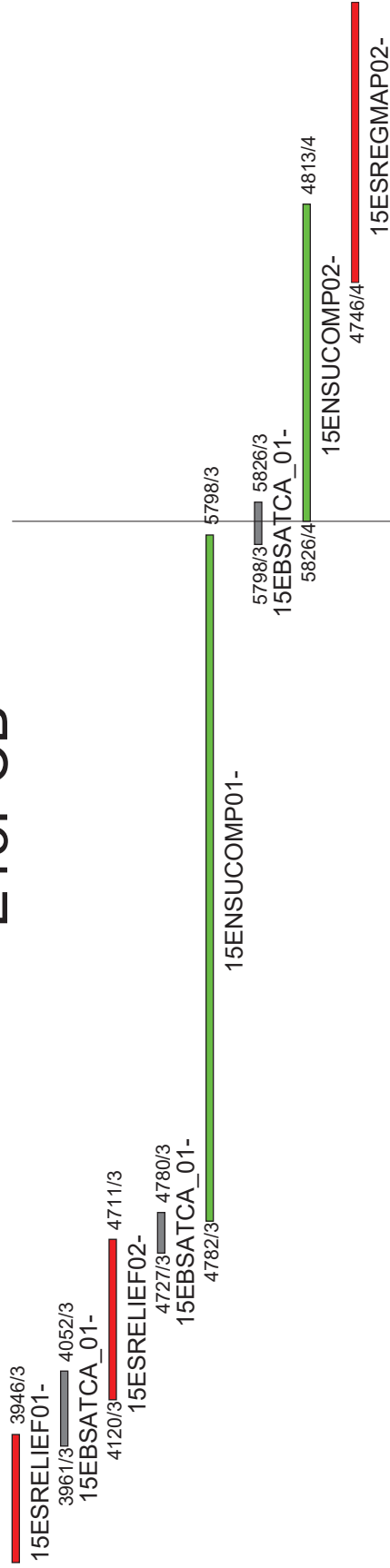
E15PCB



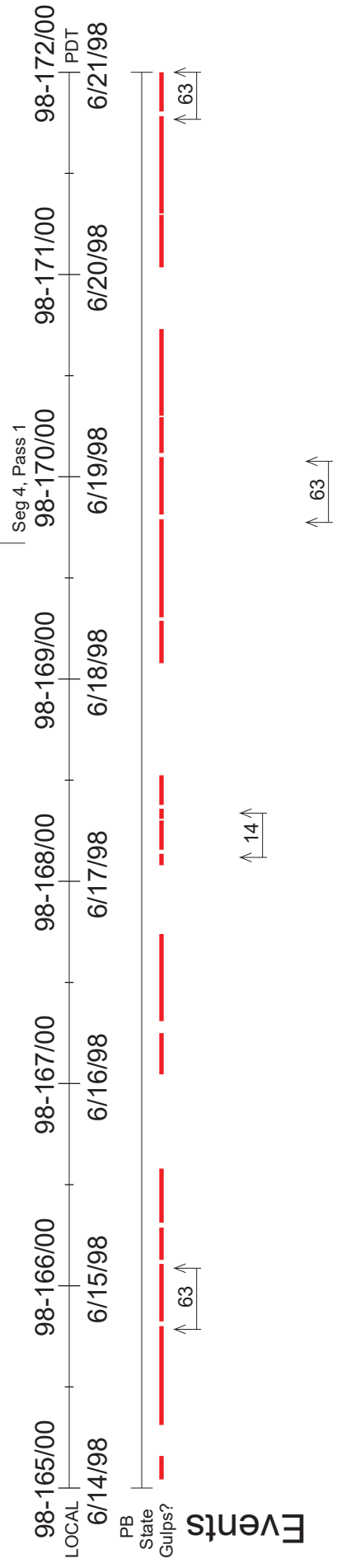
Playback / Date Returned



E15PCB



Playback / Date Returned



Events

E15PCB

972/4

15ESREGMAP02-

421/4

15ENSUCOMP03-

421/4 387/4

15EPDARKHR01-

387/4 368/4

15EPDGTM__01-

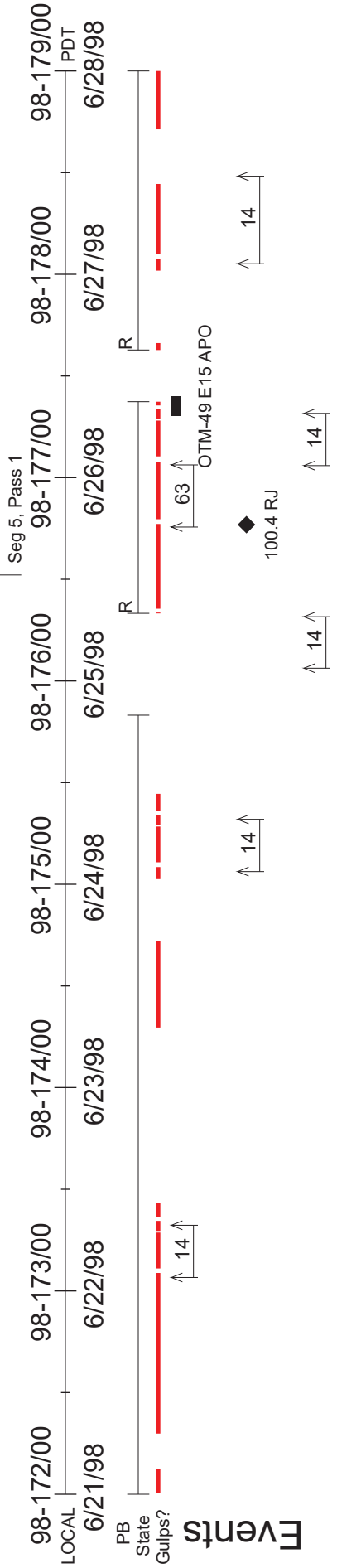
216/1

15ENGLOBAL01-

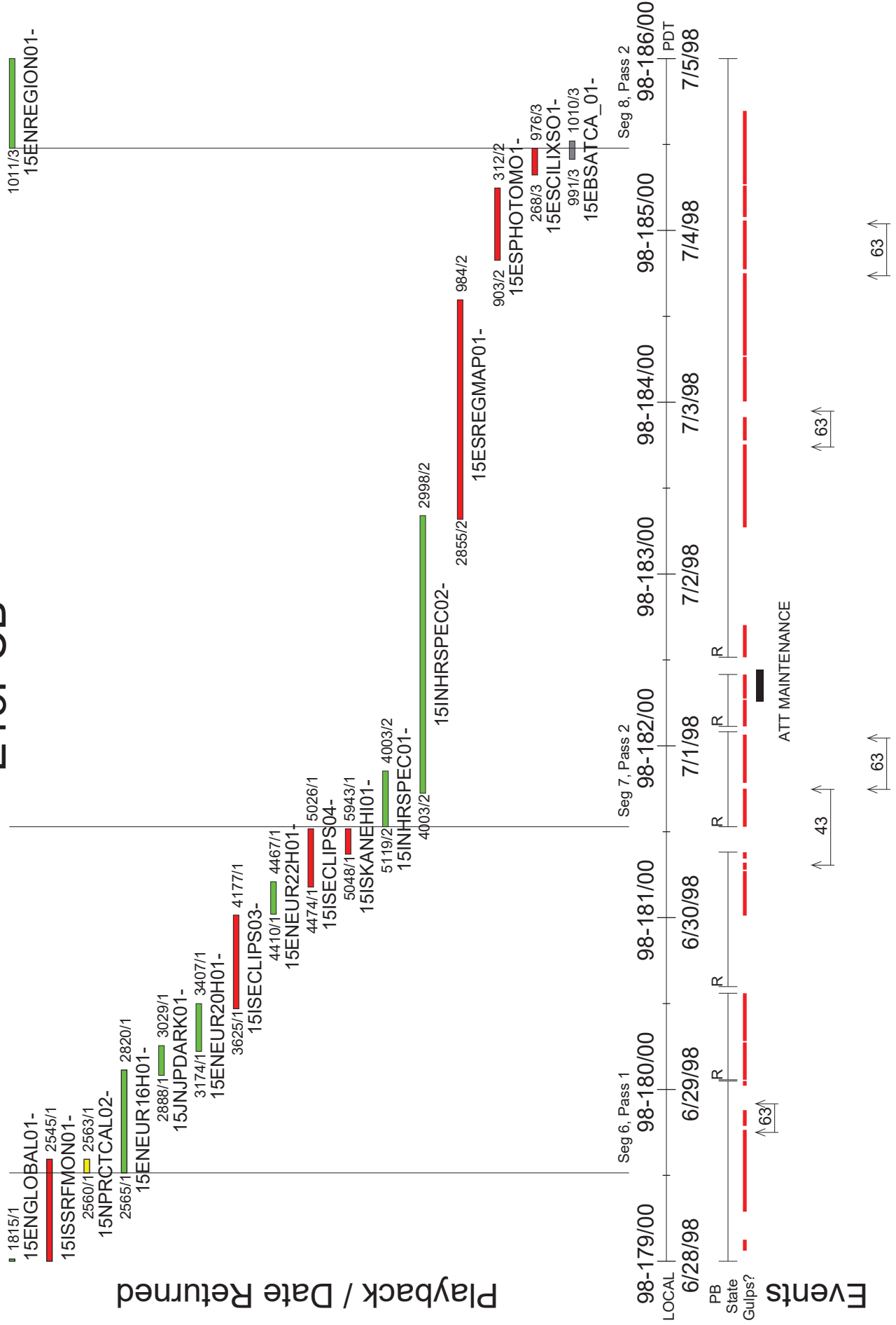
1883/1

15ISSRFMON01-

Playback / Date Returned



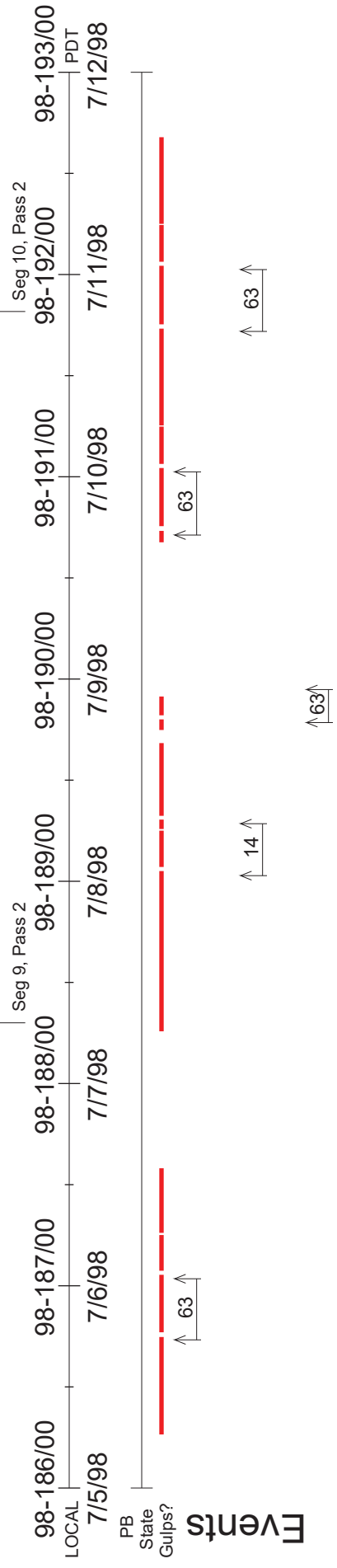
E15PCB



E15PCB

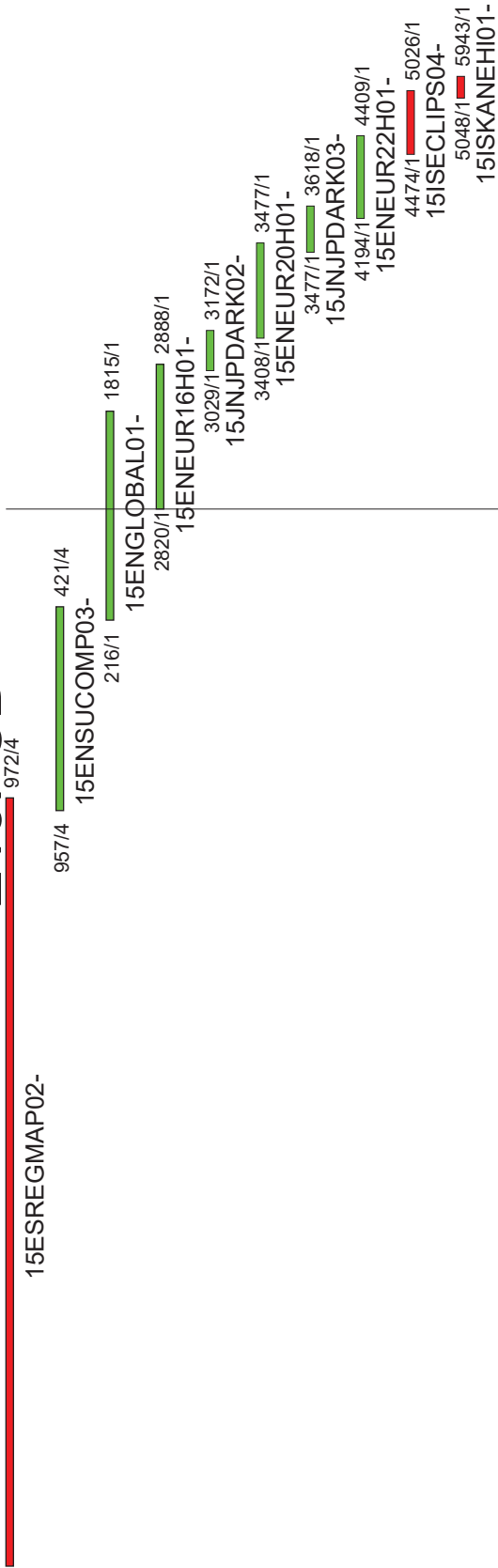


Playback / Date Returned

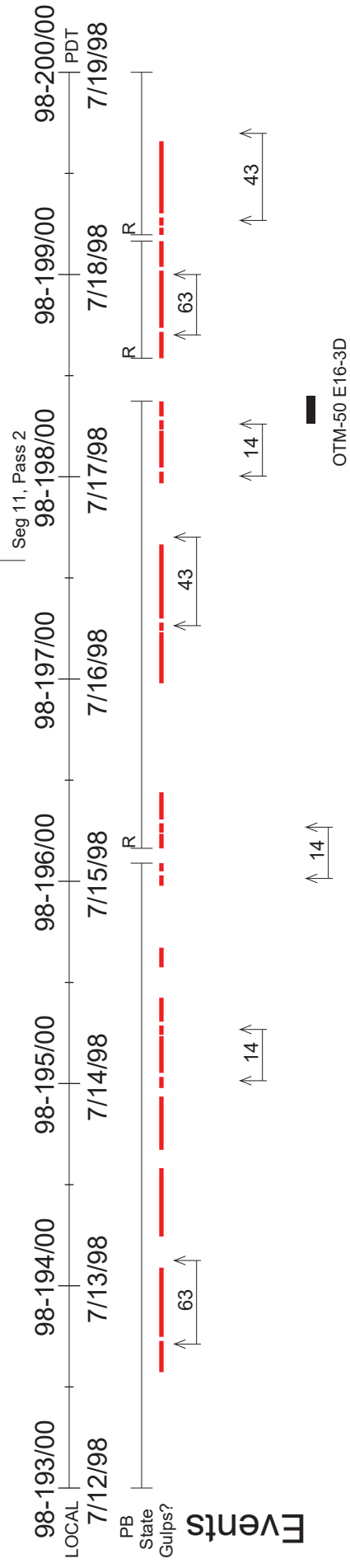


Events

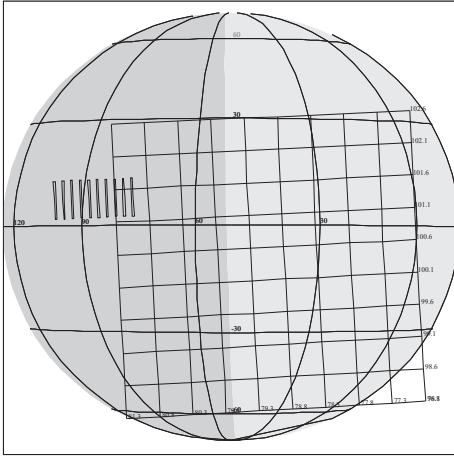
E15PCB



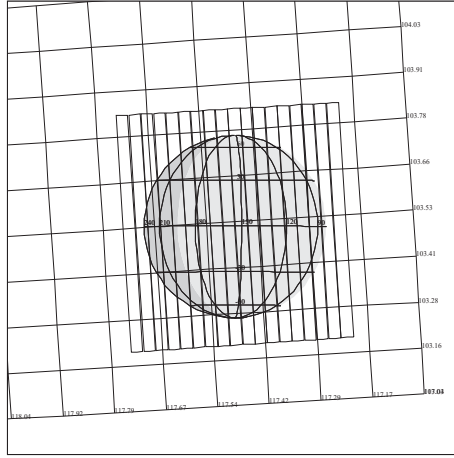
Playback / Date Returned



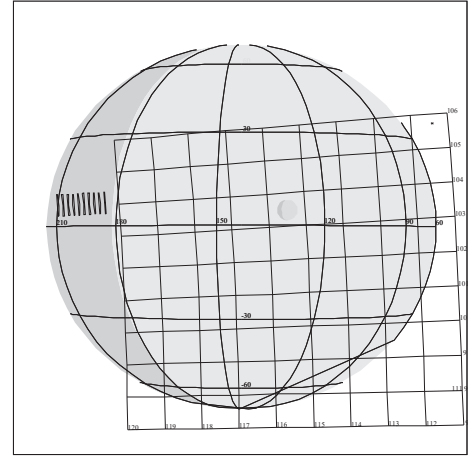
E15 NIMS A



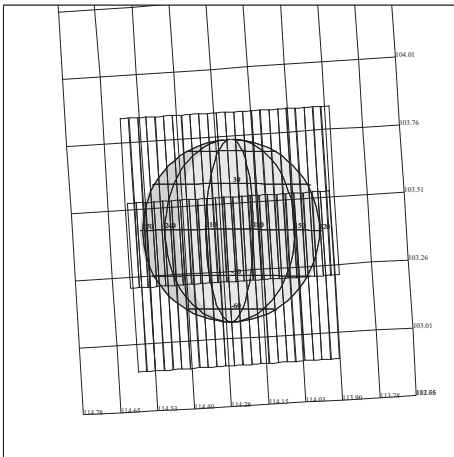
15JNJUPRTS01
98-151/02:53:58



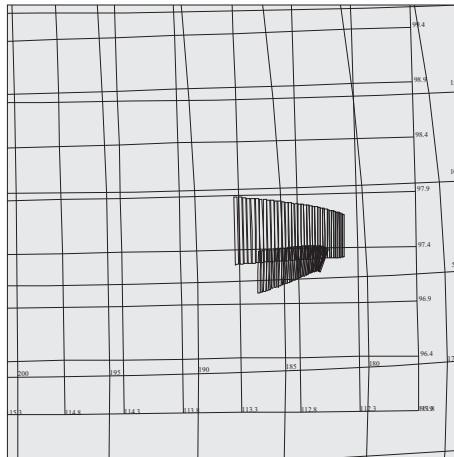
15INHRSPEC01
98-151/13:14:47



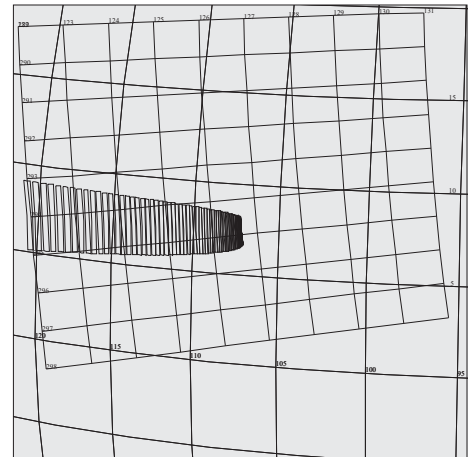
15JNJUPRTS02
98-151/16:19:49



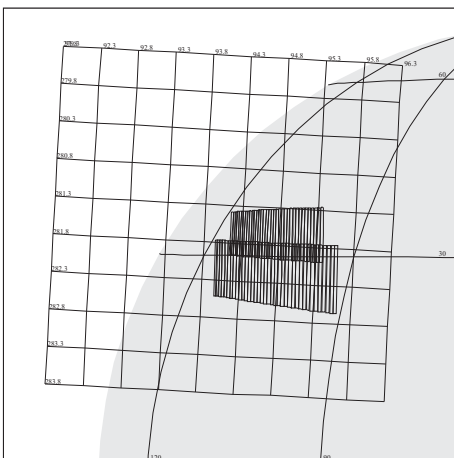
15INHRSPEC02
98-151/17:33:37



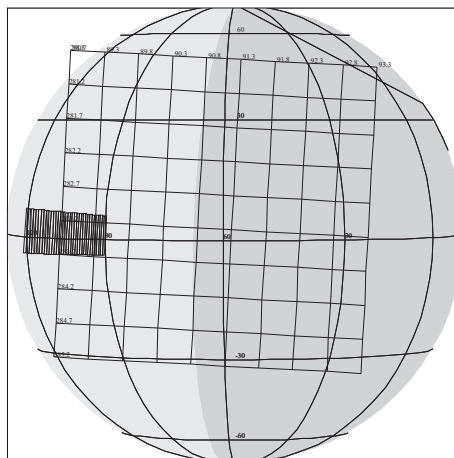
15ENREGION01
98-151/20:43:29



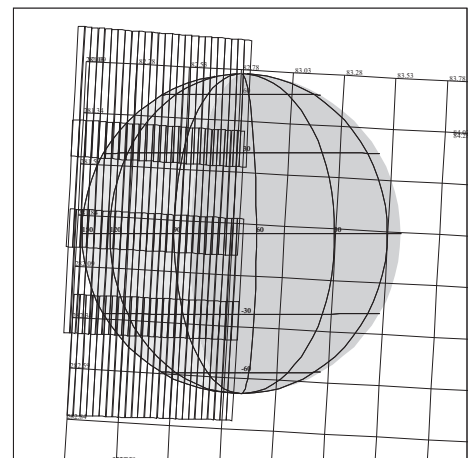
15ENSUCOMP01
98-151/21:17:51



15ENSUCOMP02
98-151/21:46:10

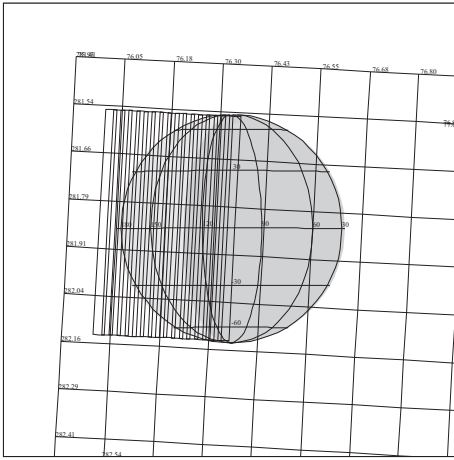


15ENSUCOMP03
98-151/22:16:30

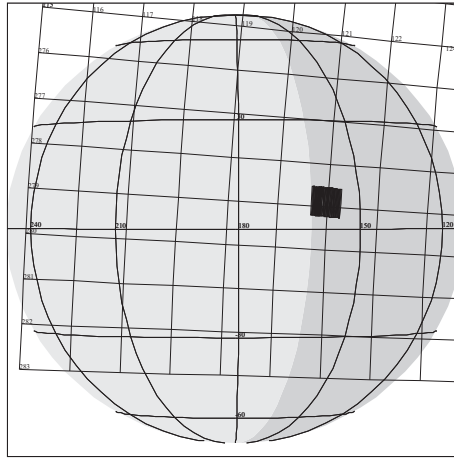


15ENGLOBAL01
98-152/02:17:09

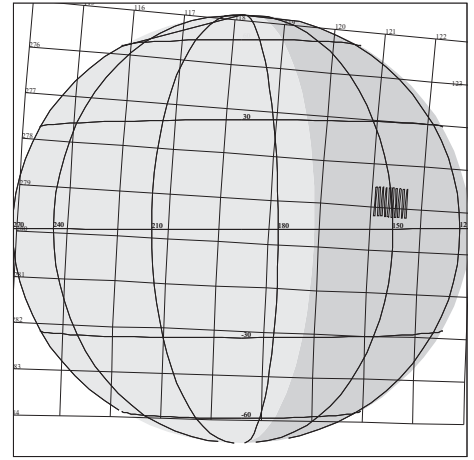
E15 NIMS B



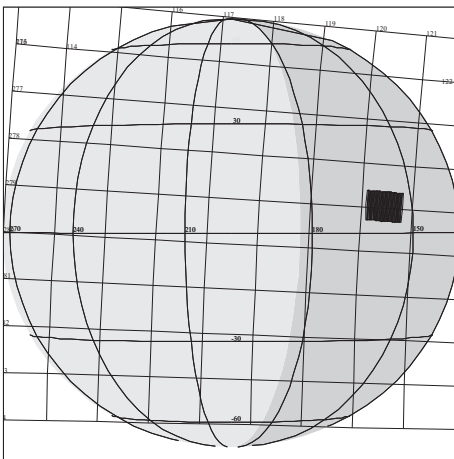
15ENEUR16H01
98-152/13:15:23



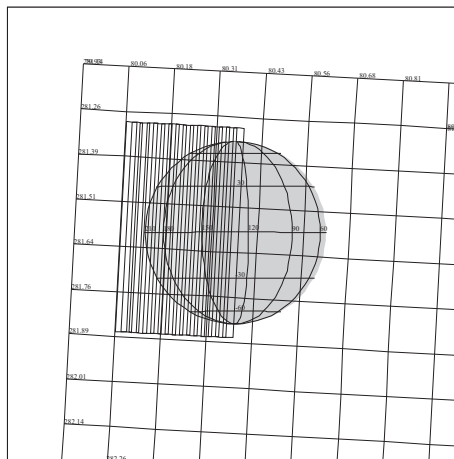
15JNJPDARK01
98-152/16:03:28



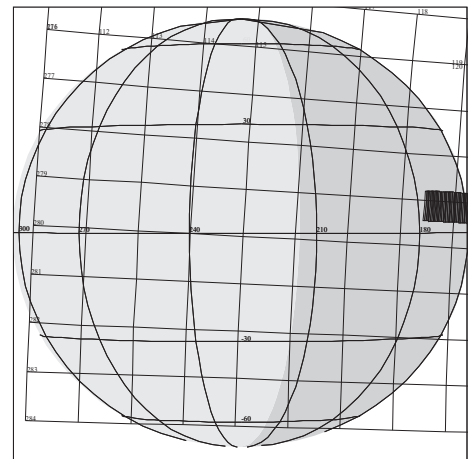
15JNJUPRTS03
98-152/16:56:03



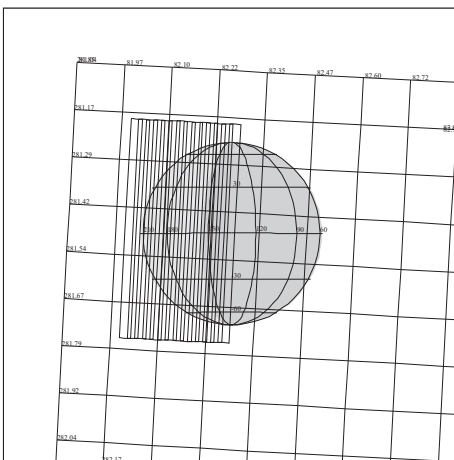
15JNJPDARK02
98-152/17:14:15



15ENEUR20H01
98-152/17:39:17



15JNJPDARK03
98-152/18:04:48



15ENEUR22H01
98-152/18:54:06

Chapter 3 - Orbit Geometries

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3.5	E15 North Trajectory Pole View (+/- 1 day) ...	6
3.7	Europa North Trajectory Pole View (+/- 6 hours)	7
3.8	Europa North Trajectory Pole View (+/- 1 hour)	8
3.9	Europa Groundtrack at Closest Approach	9
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Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the E15 Orbit.

The figure on page 3 is a North Trajectory Pole View of the E15 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the E15 Orbit from +/- 5 days of Europa closest approach.

The figure on page 5 is a North Trajectory Pole View of the E15 Orbit from +/- 2 days of Europa closest approach.

The figure on page 6 is a North Trajectory Pole View of the E15 Orbit from +/- 1 day of Europa closest approach.

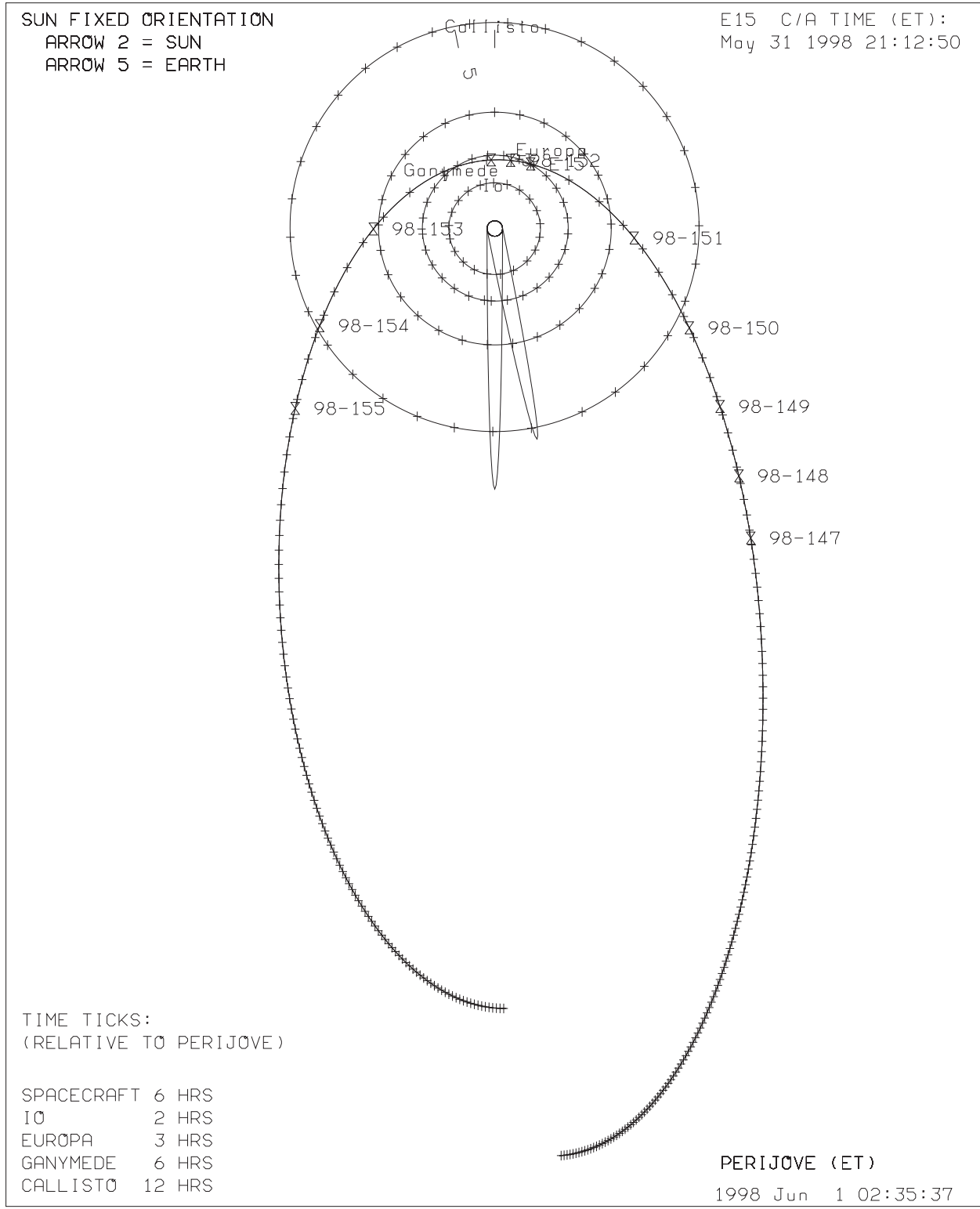
The figure on page 7 is a North Trajectory Pole View of the E15 Orbit from +/- 6 hours of Europa closest approach.

The figure on page 8 is a North Trajectory Pole View of the E15 Orbit from +/- 1 hour of Europa closest approach.

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

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

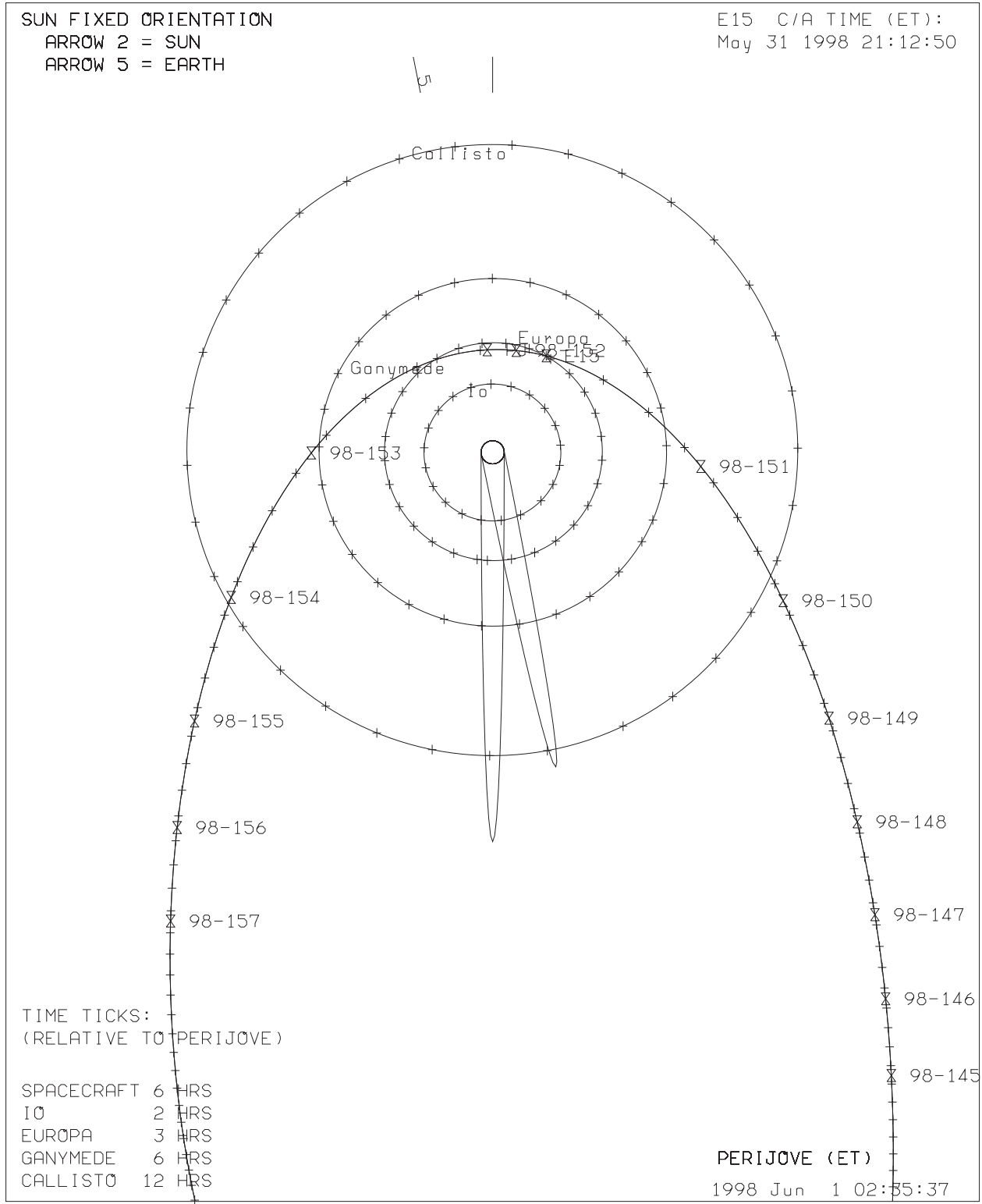
JUPITER 15: N. TRAJ. POLE VIEW (APO TO APO)



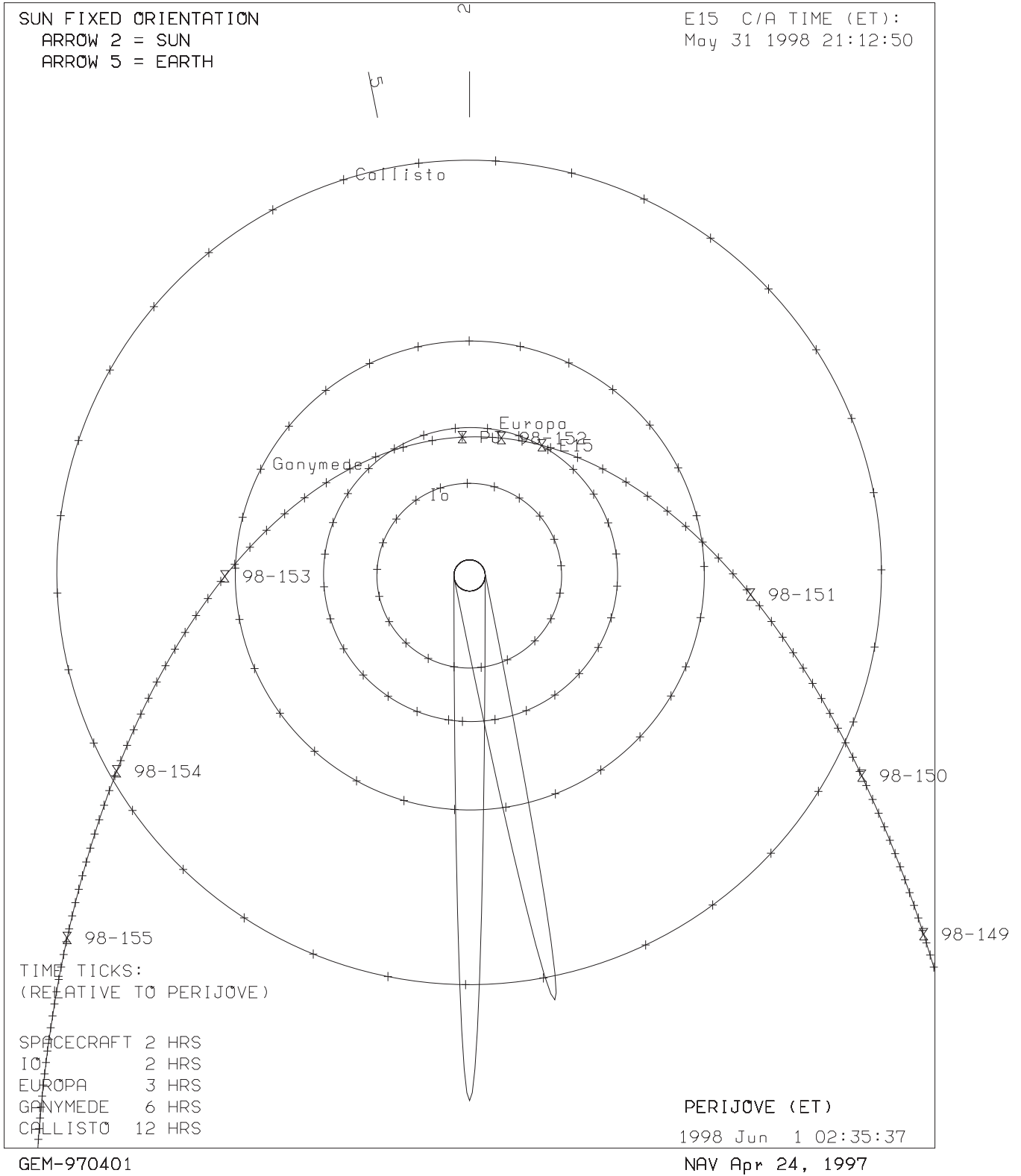
GEM-970401

NAV Apr 24, 1997

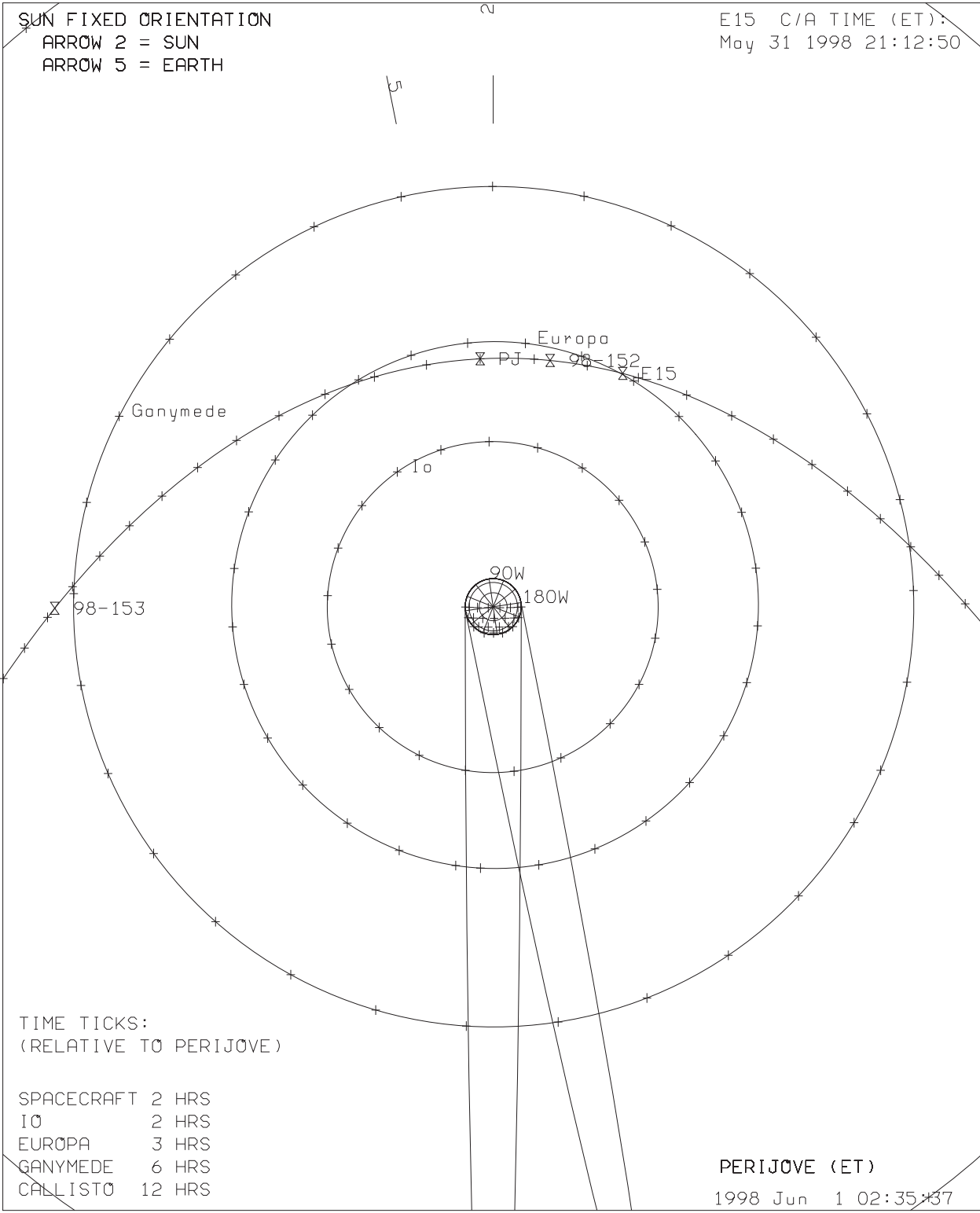
JUPITER 15: N. TRAJ. POLE VIEW (+/- 5 DAYS)



JUPITER 15: N. TRAJ. POLE VIEW (+/- 2 DAYS)



JUPITER 15: N. TRAJ. POLE VIEW (+/- 1 DAY)



SUN FIXED ORIENTATION
 ARROW 2 = SUN
 ARROW 5 = EARTH

E15 C/A TIME (ET):
 May 31 1998 21:12:50

TIME TICKS:
 (RELATIVE TO PERIJOVE)

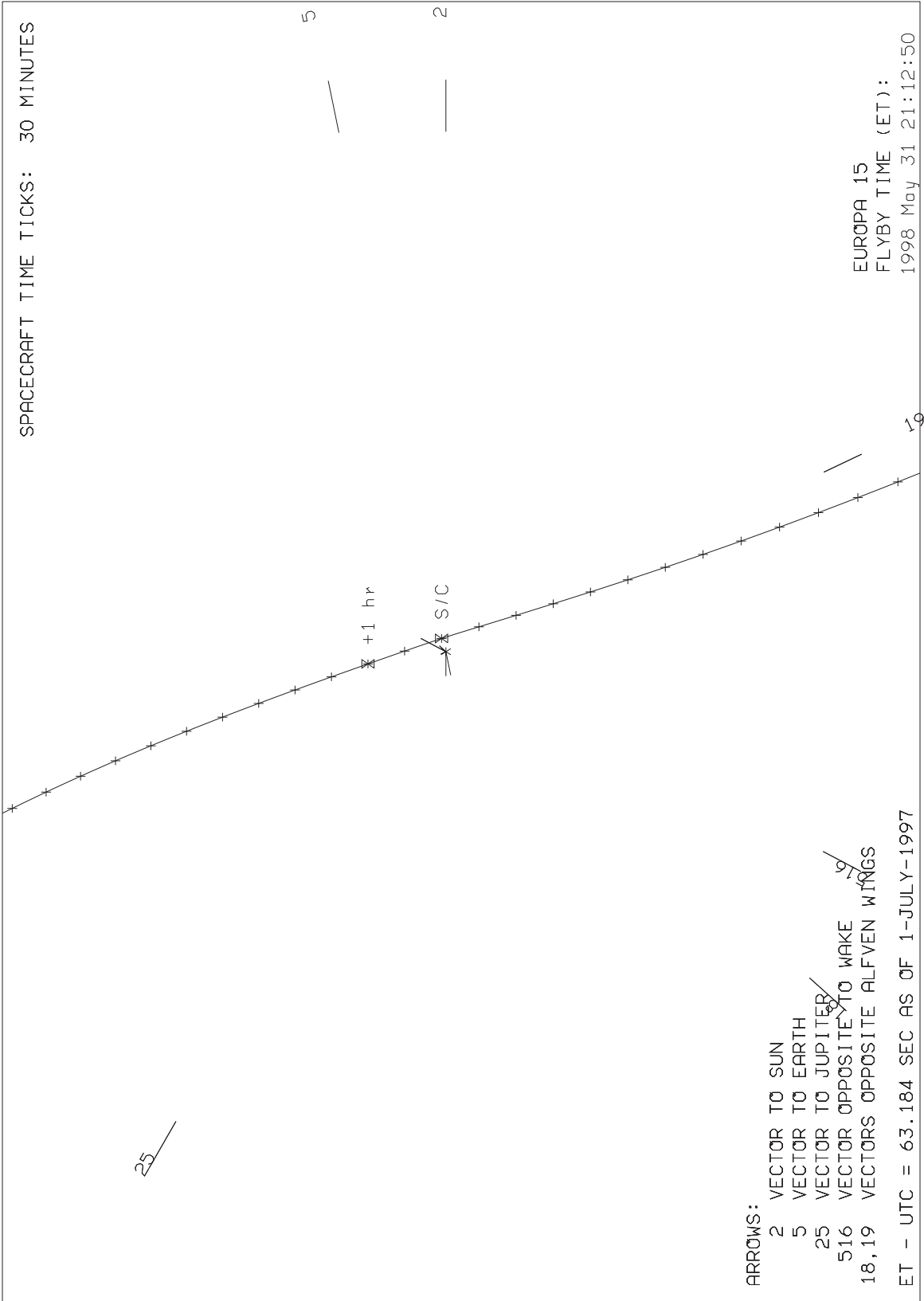
- SPACECRAFT 2 HRS
- IO 2 HRS
- EUROPA 3 HRS
- GANYMEDE 6 HRS
- CALLISTO 12 HRS

PERIJOVE (ET)
 1998 Jun 1 02:35:37

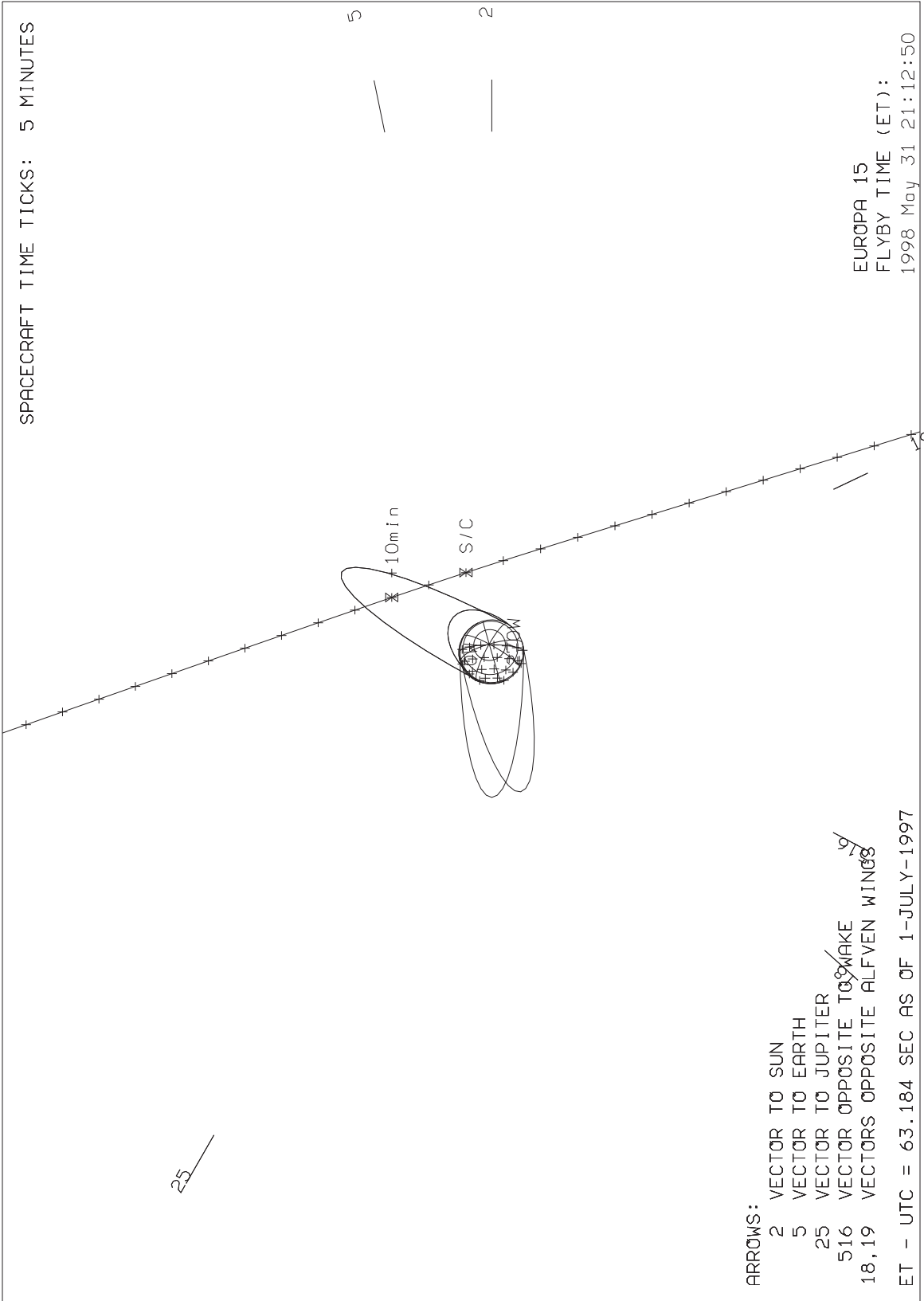
GEM-970401

NAV Apr 24, 1997

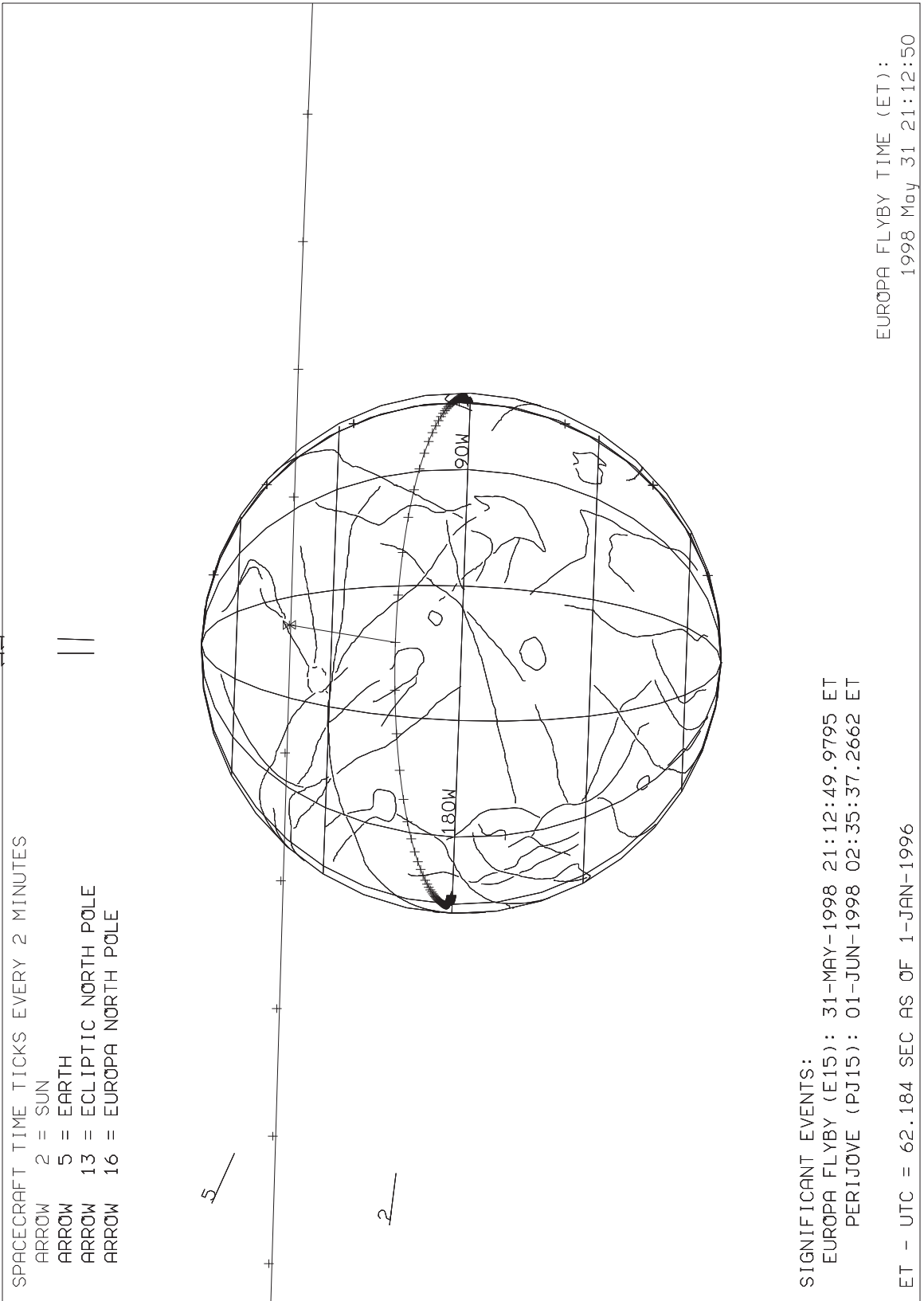
EUROPA 15: N. TRAJ POLE VIEW (+/- 6 HRS)



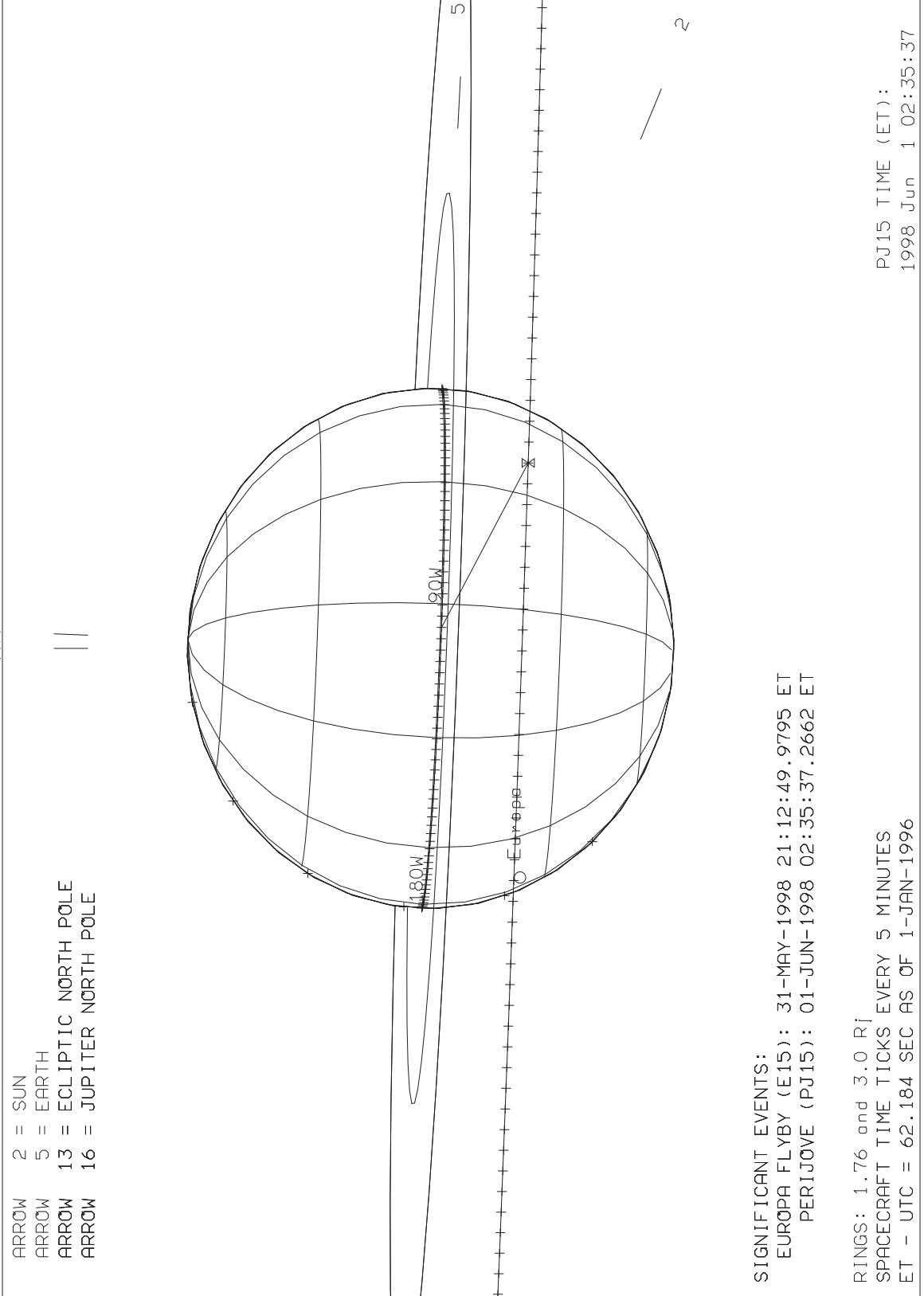
EUROPA 15: N. TRAJ POLE VIEW (+/- 1 HR)



EUROPA 15: GROUNDTRACK AT CLOSEST APPROACH



JUPITER 15: GROUNDTRACK AT CLOSEST APPROACH



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

SIGNIFICANT EVENTS:
 EUROPA FLYBY (E15): 31-MAY-1998 21:12:49.9795 ET
 PERIJOVE (PJ15): 01-JUN-1998 02:35:37.2662 ET

RINGS: 1.76 and 3.0 Rj
 SPACECRAFT TIME TICKS EVERY 5 MINUTES
 ET - UTC = 62.184 SEC AS OF 1-JAN-1996

PJ15 TIME (ET):
 1998 Jun 1 02:35:37
 NAV Apr 7, 1997

Chapter 4 - NIMS Observation Summaries

Contents

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4.2	NIMS Sequence Summary	3-60
4.3	NIMS Individual Obstab Summaries	61-120
4.4	NIMS OBSTAB (Returned)	121-129

Introduction to Chapter 4

This chapter summarizes the NIMS E15 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 E15 Sequence. The information in this summary is derived from the E15 SEFs (Spacecraft Event File) and PBTs (Playback Tables) with inputs from the NIMS Science Coordinators regarding the start time and duration of the NIMS observations. There are twelve columns of information in this table:

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

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

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

The NIMS Obstab (Observation Table) is a time-ordered listing of the NIMS obsrvation parameters for use by downlink data processing of the NIMS E15 data. It is also derived from the E15 SEFs and PBTs. Each Obstab entry is 512 bytes long but is presented here as 4 lines of 128 characters per entry.

Sequence:		E15A-AR		Created: 09/04/98		Begin: 98-150/21:00:00		Finish: 98-154/10:00:00			
Line	YR	DOY	SCET - GMT	PSID	Command Parameters	Description	GCM	GO	GS	RIM	MF I
1	98	150	20:59:59.866		DMS: : READY	RDY, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,498,243:09:0	
2	98	150	21:00:00.000	20A3EW	37A Initial Condition	NIMS Power ON	400	4	0	4,498,243:09:2	
3	98	150	21:00:00.000	20A3EX	37HR Initial Condition	Replacement Heaters OFF	400	4	0	4,498,243:09:2	
4	98	150	21:00:00.000	20A3EY	37C1PR Initial Condition	Optics Heater 1 OFF (primary relay)	400	4	0	4,498,243:09:2	
5	98	150	21:00:00.000	20A3EZ	37C2PR Initial Condition	Optics Heater 2 OFF (primary relay)	400	4	0	4,498,243:09:2	
6	98	150	21:00:00.000	20A3FA	37F1PR Initial Condition	Radiator Flash Heater OFF (primary relay)	400	4	0	4,498,243:09:2	
7	98	150	21:00:00.000	20A3FF	40T2 Initial Condition	PCT Heater 2 ON	400	4	0	4,498,243:09:2	
8	98	150	21:00:00.000	20A3FE	40T1P Initial Condition	PCT Heater 1 ON (primary relay)	400	4	0	4,498,243:09:2	
9	98	150	21:00:00.000	20A3FD	40HRPR Initial Condition	PCT Heater OFF (primary relay)	400	4	0	4,498,243:09:2	
10	98	150	21:00:00.000	20A3FB	37F2PR Initial Condition	Shield Flash Heater OFF (primary relay)	400	4	0	4,498,243:09:2	
11	98	150	21:00:53.200	432JA6B	6RTDS2 NIMDSL,AACNCG,RT	NIMS R/T DESELECT	400	4	0	4,498,243:89:0	
12	98	150	21:00:53.866	432JA431A6A	6RCDLSD	Record Deselect (DDS o	400	4	0	4,498,243:90:0	
13	98	150	21:00:54.533	432JA6C	6RTSL1	R/T Select of DDS and	400	4	0	4,498,244:00:0	
14	98	150	21:00:54.533	432JA6D	6RTSL2 NIMNCG,AACSEL,RT	AACS SELECT	400	4	0	4,498,244:00:0	
15	98	150	21:00:59.866	200A6A	6HICON		400	4	0	4,498,244:08:0	
16	98	150	21:02:13.200	488AA6A	6TMSED NORM,DL6	Sci, Eng, and D/L Chan	400	4	0	4,498,245:27:0	
17	98	150	21:06:59.866	41AA99A	POWER PWR MODE change	Change to Data Taking Mode	400	4	0	4,498,250:02:0	
18	98	150	21:07:03.866	41AA3A	40T1PR	1 PCT Heater 1 OFF (primary relay)	400	4	0	4,498,250:08:0	
19	98	150	21:07:13.866	41AA3B	40T1PR	2 PCT Heater 1 OFF (primary relay)	400	4	0	4,498,250:23:0	
20	98	150	21:07:23.866	41AA3C	40T2R	1 PCT Heater 2 OFF	400	4	0	4,498,250:38:0	
21	98	150	21:07:33.866	41AA3D	40T2R	2 PCT Heater 2 OFF	400	4	0	4,498,250:53:0	
22	98	150	21:13:52.533	175KA422A6A	6DMSC R28,1	DMS Control	400	4	0	4,498,256:75:0	
23	98	150	21:13:52.533		DMS: : *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,498,256:75:0	
24	98	150	21:13:59.200		DMS: : *RUNUP	RDY, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,498,256:85:0	
25	98	150	21:14:02.533	175KA176A6A	6TMREC MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	400	4	0	4,498,256:90:0	
26	98	150	21:14:03.200		DMS: : *AT SPD	R28, TRACK 1, FWD, TIC 203.62 +/-	400	4	0	4,498,257:00:0	
27	98	150	21:14:03.200		DMS: : *RECORD	R28, TRACK 1, FWD, TIC * 203.62 +/-	400	4	0	4,498,257:00:0	
28	98	150	21:35:59.866	444UA443A4B	7MODE INT	AACS INERTIAL MODE	400	4	0	4,498,278:64:0	
29	98	150	21:59:32.533	165CA4A	7SCAN NORM,268.813,-25	Check S/P Position	400	4	0	4,498,301:90:0	
30	98	150	22:03:34.533	165CA4B	7VECT	Inert vect update UTC	400	4	0	4,498,305:89:0	
31	98	150	22:49:02.533	165CA4C	7VECT	Inert vect update UTC	400	4	0	4,498,350:86:0	
32	98	150	23:03:06.533		DMS: : *RUNDOWN	R28, TRACK 1, FWD, TIC *5954.60 +/-	400	4	0	4,498,364:78:0	
33	98	150	23:03:06.533	175KA422A6B	6DMSC RDY,0	DMS Control Tape stop	400	4	0	4,498,364:78:0	
34	98	150	23:03:07.733		DMS: : *READY	RDY, TRACK 1, FWD, TIC *5954.90 +/-	400	4	0	4,498,364:79:8	
35	98	150	23:14:22.533	465KB6A	6DMSC RDY,2	DMS Control Tape stop	400	4	0	4,498,376:00:0	
36	98	150	23:14:22.533		DMS: : *READY	RDY, TRACK *2, *REV, TIC 5954.90 +/-	400	4	0	4,498,376:00:0	
37	98	150	23:40:05.200	488AA6B	6TMSED NORM,DL5	Sci, Eng, and D/L Chan	400	4	0	4,498,401:39:0	
38	98	150	23:54:48.533	165IA4A	7SCAN NORM,265.776997,	Check S/P Position	400	4	0	4,498,415:90:0	
39	98	150	23:57:45.200	118IA	SMOS GS		400	4	0	4,498,418:82:0	
40	98	150	23:57:49.866	165IA4B	7VECT	Inert vect update UTC	400	4	0	4,498,418:89:0	
41	98	150	23:57:55.200	118IA110A11A4A	7STRP -0.00275,0.092,	Slew = 3.01	400	4	0	4,498,419:06:0	
42	98	150	23:58:43.200		DMS: : *US-RUNUP	P7, TRACK *1, *FWD, TIC 5954.90 +/-	400	4	0	4,498,419:78:0	
43	98	150	23:58:43.200	175JE422A6A	6DMSC R115:0	DMS Control Tape runup 115.2kb	400	4	0	4,498,419:78:0	
44	98	150	23:58:44.600		DMS: : *US_AT_SP	P7, TRACK 1, FWD, TIC *5955.02 +/-	400	4	0	4,498,419:80:1	
45	98	150	23:58:49.866		DMS: : *US_RD	P7, TRACK 1, FWD, TIC *5956.25 +/-	400	4	0	4,498,419:88:0	
46	98	150	23:58:51.066		DMS: : *RUNUP	R115, TRACK *2, *REV, TIC *5956.31 +/-	400	4	0	4,498,419:89:8	
47	98	150	23:58:54.533	175JE176A6A	6TMREC HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	400	4	0	4,498,420:04:0	
48	98	150	23:58:55.066		DMS: : *AT SPD	R115, TRACK 2, REV, TIC 5950.01 +/-	400	4	0	4,498,420:04:8	
49	98	150	23:58:55.066		DMS: : *RECORD	R115, TRACK 2, REV, TIC *5950.01 +/-	400	4	0	4,498,420:04:8	
50	98	150	23:58:55.533	118IA11A	SMOS GE		400	4	0	4,498,420:07:0	
51	98	150	23:59:22.533	175JE422A6B	6DMSC RDY,0	DMS Control Tape stop	400	4	0	4,498,420:46:0	
52	98	150	23:59:22.533		DMS: : *RUNDOWN	R115, TRACK 2, REV, TIC *5853.45 +/-	400	4	0	4,498,420:46:0	
53	98	150	23:59:23.733		DMS: : *READY	RDY, TRACK 2, REV, TIC *5852.45 +/-	400	4	0	4,498,420:47:8	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
54	98	151	00:14:01.200	165IB4A	7SCAN	NORM,266.612999,	Check S/P Position	400	4	0	4,498,434:90:0	
55	98	151	00:17:01.200	175IA422A6A	6DMSC	R806.0	DMS Control Tape runup 806.4kb	400	4	0	4,498,437:87:0	
56	98	151	00:17:01.200	165IB4B	DMS:	:US-RUNUP	P7, TRACK *1, FWD, TIC 5852.45 +/-	400	4	0	4,498,437:87:0	
57	98	151	00:17:02.533	165IB4B	7VECT		Inert vect update UTC	400	4	0	4,498,437:89:0	
58	98	151	00:17:02.600		DMS:	:US_AT_SP	P7, TRACK 1, FWD, TIC *5852.57 +/-	400	4	0	4,498,437:89:1	
59	98	151	00:17:07.866		DMS:	:US_RD	P7, TRACK 1, FWD, TIC *5853.80 +/-	400	4	0	4,498,438:06:0	
60	98	151	00:17:09.066		DMS:	:RUNUP	R806, TRACK *2, *REV, TIC *5853.86 +/-	400	4	0	4,498,438:07:8	
61	98	151	00:17:13.866	175IA176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	400	4	0	4,498,438:15:0	
62	98	151	00:17:14.333		DMS:	:RECORD	R806, TRACK 2, REV, TIC *5787.86 +/-	400	4	0	4,498,438:15:7	
63	98	151	00:17:14.333		DMS:	:AT SPD	R806, TRACK 2, REV, TIC 5787.86 +/-	400	4	0	4,498,438:15:7	
64	98	151	00:17:17.866		DMS:	:RUNDOWN	R806, TRACK 2, REV, TIC *5700.91 +/-	400	4	0	4,498,438:21:0	
65	98	151	00:17:17.866	175IA422A6B	6DMSC	RDY,0	DMS Control Tape stop	400	4	0	4,498,438:21:0	
66	98	151	00:17:20.600		DMS:	:READY	RDY, TRACK 2, REV, TIC *5689.41 +/-	400	4	0	4,498,438:25:1	
67	98	151	00:47:23.200	165IM4A	7SCAN	NORM,268.302998,	Check S/P Position	400	4	0	4,498,467:90:0	
68	98	151	00:50:24.533	165IM4B	7VECT		Inert vect update UTC	400	4	0	4,498,470:89:0	
69	98	151	00:50:47.866	175IB422A6A	6DMSC	R115.0	DMS Control Tape runup 115.2kb	400	4	0	4,498,471:33:0	
70	98	151	00:50:47.866		DMS:	:US-RUNUP	P7, TRACK *1, FWD, TIC 5689.41 +/-	400	4	0	4,498,471:33:0	
71	98	151	00:50:49.266		DMS:	:US_AT_SP	P7, TRACK 1, FWD, TIC *5689.53 +/-	400	4	0	4,498,471:35:1	
72	98	151	00:50:54.533		DMS:	:US_RD	P7, TRACK 1, FWD, TIC *5690.77 +/-	400	4	0	4,498,471:43:0	
73	98	151	00:50:55.733		DMS:	:RUNUP	R115, TRACK *2, *REV, TIC *5690.83 +/-	400	4	0	4,498,471:44:8	
74	98	151	00:50:59.200	175IB176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	400	4	0	4,498,471:50:0	
75	98	151	00:50:59.733		DMS:	:AT SPD	R115, TRACK 2, REV, TIC 5684.53 +/-	400	4	0	4,498,471:50:8	
76	98	151	00:50:59.733		DMS:	:RECORD	R115, TRACK 2, REV, TIC *5684.53 +/-	400	4	0	4,498,471:50:8	
77	98	151	00:51:26.533	175IB422A6B	6DMSC	RDY,0	DMS Control Tape stop	400	4	0	4,498,472:00:0	
78	98	151	00:51:26.533		DMS:	:RUNDOWN	R115, TRACK 2, REV, TIC *5590.31 +/-	400	4	0	4,498,472:00:0	
79	98	151	00:51:27.733		DMS:	:READY	RDY, TRACK 2, REV, TIC *5589.31 +/-	400	4	0	4,498,472:01:8	
80	98	151	00:52:49.200	175IC422A6A	6DMSC	R115.0	DMS Control Tape runup 115.2kb	400	4	0	4,498,473:33:0	
81	98	151	00:52:49.200		DMS:	:US-RUNUP	P7, TRACK *1, FWD, TIC 5589.31 +/-	400	4	0	4,498,473:33:0	
82	98	151	00:52:50.600		DMS:	:US_AT_SP	P7, TRACK 1, FWD, TIC *5589.43 +/-	400	4	0	4,498,473:35:1	
83	98	151	00:52:55.866		DMS:	:US_RD	P7, TRACK 1, FWD, TIC *5590.66 +/-	400	4	0	4,498,473:43:0	
84	98	151	00:52:57.066		DMS:	:RUNUP	R115, TRACK *2, *REV, TIC *5590.72 +/-	400	4	0	4,498,473:44:8	
85	98	151	00:53:00.533	175IC176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	400	4	0	4,498,473:50:0	
86	98	151	00:53:01.066		DMS:	:AT SPD	R115, TRACK 2, REV, TIC 5584.42 +/-	400	4	0	4,498,473:50:8	
87	98	151	00:53:01.066		DMS:	:RECORD	R115, TRACK 2, REV, TIC *5584.42 +/-	400	4	0	4,498,473:50:8	
88	98	151	00:53:27.866		DMS:	:RUNDOWN	R115, TRACK 2, REV, TIC *5490.20 +/-	400	4	0	4,498,474:00:0	
89	98	151	00:53:27.866	175IC422A6B	6DMSC	RDY,0	DMS Control Tape stop	400	4	0	4,498,474:00:0	
90	98	151	00:53:29.066		DMS:	:READY	RDY, TRACK 2, REV, TIC *5489.20 +/-	400	4	0	4,498,474:01:8	
91	98	151	00:54:50.533		DMS:	:US-RUNUP	P7, TRACK *1, FWD, TIC 5489.20 +/-	400	4	0	4,498,475:33:0	
92	98	151	00:54:50.533	175ID422A6A	6DMSC	R115.0	DMS Control Tape runup 115.2kb	400	4	0	4,498,475:33:0	
93	98	151	00:54:51.933		DMS:	:US_AT_SP	P7, TRACK 1, FWD, TIC *5489.32 +/-	400	4	0	4,498,475:35:1	
94	98	151	00:54:57.200		DMS:	:US_RD	P7, TRACK 1, FWD, TIC *5490.56 +/-	400	4	0	4,498,475:43:0	
95	98	151	00:54:58.400		DMS:	:RUNUP	R115, TRACK *2, *REV, TIC *5490.62 +/-	400	4	0	4,498,475:44:8	
96	98	151	00:55:01.866	175ID176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	400	4	0	4,498,475:50:0	
97	98	151	00:55:02.400		DMS:	:AT SPD	R115, TRACK 2, REV, TIC 5484.32 +/-	400	4	0	4,498,475:50:8	
98	98	151	00:55:02.400		DMS:	:RECORD	R115, TRACK 2, REV, TIC *5484.32 +/-	400	4	0	4,498,475:50:8	
99	98	151	00:55:29.200		DMS:	:RUNDOWN	R115, TRACK 2, REV, TIC *5390.10 +/-	400	4	0	4,498,476:00:0	
100	98	151	00:55:29.200	175ID422A6B	6DMSC	RDY,0	DMS Control Tape stop	400	4	0	4,498,476:00:0	
101	98	151	00:55:30.400		DMS:	:READY	RDY, TRACK 2, REV, TIC *5389.10 +/-	400	4	0	4,498,476:01:8	
102	98	151	00:56:51.866	175IE422A6A	6DMSC	R115.0	DMS Control Tape runup 115.2kb	400	4	0	4,498,477:33:0	
103	98	151	00:56:51.866		DMS:	:US-RUNUP	P7, TRACK *1, FWD, TIC 5389.10 +/-	400	4	0	4,498,477:33:0	
104	98	151	00:56:53.266		DMS:	:US_AT_SP	P7, TRACK 1, FWD, TIC *5389.22 +/-	400	4	0	4,498,477:35:1	
105	98	151	00:56:58.533		DMS:	:US_RD	P7, TRACK 1, FWD, TIC *5390.45 +/-	400	4	0	4,498,477:43:0	
106	98	151	00:56:59.733		DMS:	:RUNUP	R115, TRACK *2, *REV, TIC *5390.51 +/-	400	4	0	4,498,477:44:8	
107	98	151	00:57:03.200	175IE176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	400	4	0	4,498,477:50:0	
108	98	151	00:57:03.733		DMS:	:RECORD	R115, TRACK 2, REV, TIC *5384.21 +/-	400	4	0	4,498,477:50:8	

Line	YR	DOY	SCET - GMT	PSID	Command Parameters	Description	GCM	GO	GS	RIM	MF I
109	98	151	00:57:03.733		DMS: : *AT_SPD	R115, TRACK 2, REV, TIC 5384.21 +/-	400	4	0	4,498,477:50:8	
110	98	151	00:57:30.533		DMS: : *RUNDOWN	R115, TRACK 2, REV, TIC *5289.99 +/-	400	4	0	4,498,478:00:0	
111	98	151	00:57:30.533	175IE422A6B	6DMSC RDY,0	DMS Control Tape stop	400	4	0	4,498,478:00:0	
112	98	151	00:57:31.733		DMS: : *READY	RDY, TRACK 2, REV, TIC *5288.99 +/-	400	4	0	4,498,478:01:8	
113	98	151	00:58:37.200		DMS: : *US-RUNUP	P7, TRACK *1, *FWD, TIC 5288.99 +/-	400	4	0	4,498,479:09:0	
114	98	151	00:58:37.200	175IF422A6A	6DMSC R806,0	DMS Control Tape runup 806.4kb	400	4	0	4,498,479:09:0	
115	98	151	00:58:38.600		DMS: : *US_AT_SP	P7, TRACK 1, FWD, TIC *5289.11 +/-	400	4	0	4,498,479:11:1	
116	98	151	00:58:43.866		DMS: : *US_RD	P7, TRACK 1, FWD, TIC *5290.35 +/-	400	4	0	4,498,479:19:0	
117	98	151	00:58:45.066		DMS: : *RUNUP	R806, TRACK *2, *REV, TIC *5290.41 +/-	400	4	0	4,498,479:20:8	
118	98	151	00:58:49.866	175IF176A6A	6TMREC IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	400	4	0	4,498,479:28:0	
119	98	151	00:58:50.333		DMS: : *AT_SPD	R806, TRACK 2, REV, TIC 5224.41 +/- 1	400	4	0	4,498,479:28:7	
120	98	151	00:58:50.333		DMS: : *RECORD	R806, TRACK 2, REV, TIC *5224.41 +/-	400	4	0	4,498,479:28:7	
121	98	151	00:58:53.866		DMS: : *RUNDOWN	R806, TRACK 2, REV, TIC *5137.45 +/- 1	400	4	0	4,498,479:34:0	
122	98	151	00:58:53.866	175IF422A6B	6DMSC RDY,0	DMS Control Tape stop	400	4	0	4,498,479:34:0	
123	98	151	00:58:56.600		DMS: : *READY	RDY, TRACK 2, REV, TIC *5125.95 +/- 1	400	4	0	4,498,479:38:1	
124	98	151	01:05:35.200	165CB4A	7SCAN NORM,271.177998,	Check S/P Position	400	4	0	4,498,485:90:0	
125	98	151	01:09:37.200	165CB4B	7VECT	Inert vect update UTC	400	4	0	4,498,489:89:0	
126	98	151	01:09:41.200	488AA6C	6TMSED NORM,DL4	Sci, Eng, and D/L Chan	400	4	0	4,498,490:04:0	
127	98	151	01:38:57.200	165CG4A	7SCAN NORM,271.889999,	Check S/P Position	400	4	0	4,498,518:90:0	
128	98	151	01:39:33.200	488AA6D	6TMSED NORM,DL3	Sci, Eng, and D/L Chan	400	4	0	4,498,519:53:0	
129	98	151	01:39:57.200	165CG4B	7VECT	Inert vect update UTC	400	4	0	4,498,519:89:0	
130	98	151	02:09:17.200	165CH4A	7SCAN NORM,272.579998,	Check S/P Position	400	4	0	4,498,548:90:0	
131	98	151	02:10:17.200	165CH4B	7VECT	Inert vect update UTC	400	4	0	4,498,549:89:0	
132	98	151	02:13:41.200	488AA6E	6TMSED NORM,DL4	Sci, Eng, and D/L Chan	400	4	0	4,498,553:31:0	
133	98	151	02:43:51.749	15NNJUPRTS01-	-----START-----		400	4	0	0	
134	98	151	02:48:41.200	176DA6A	6TMREC NRC	NO RECORD Record Mode Change	400	4	0	4,498,587:87:0	
135	98	151	02:49:48.533	20DA5A	37PL	Program Load (halts microprocessor & unwri	260	4	0	4,498,589:06:0	
136	98	151	02:49:49.866	20DA5B	37MRL	Memory Realocate (software operates from R	260	4	0	4,498,589:08:0	
137	98	151	02:49:51.200	20DA6A	6MCOPI NIMS	NIMS,1000,LLM1A,7300,77F7	260	4	0	4,498,589:10:0	
138	98	151	02:50:01.200	20DA6B	6MCOPI NIMS	NIMS,1598,LLM1A,77F8,781D	260	4	0	4,498,589:25:0	
139	98	151	02:50:11.200	20DA5C	37IRT	Instrument Reset (goes into POR state)	260	4	0	4,498,589:40:0	
140	98	151	02:50:37.866	20DA5D	37MNI	Memory Normal (software operates from ROM)	260	4	0	4,498,589:80:0	
141	98	151	02:51:00.533	20DA4A	37IST	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,498,590:23:0	
142	98	151	02:53:58.416	15NNJUPRTS01-	-----STOP-----		2R0	4	0	0	
143	98	151	02:53:58.416	15JNJUPRTS01*	-----START-----		2R0	4	0	0	
144	98	151	02:54:47.200	165DA4A	7SCAN NORM,254.891998,	Check S/P Position	2R0	4	0	4,498,593:90:0	
145	98	151	02:56:44.533	127DA	NIMSTAB GS	%%%%%%%%GROUP START TAB	2R0	4	0	4,498,595:84:0	
146	98	151	02:56:44.533	127DA4A	37IOP 3,0	Long Map, Grating Start Position =00	2R3	4	0	4,498,595:84:0	
147	98	151	02:56:45.200	127DA4B	37ETB 04,C4,35,FF,FF	Loads wavelength edit table	2R3	4	0	4,498,595:85:0	
148	98	151	02:56:53.200	127DA11A	NIMSTAB GE	%%%%%%%%GROUP END TAB	2R3	4	0	4,498,596:06:0	
149	98	151	02:57:45.200	125DA4A	37IST 0,2,0,OFF,0,1,1	Gain State 4	4R3	4	0	4,498,596:84:0	
150	98	151	02:57:45.200	125DA	NIMSINIT GS	##### GROUP START INIT	4R3	4	0	4,498,596:84:0	
151	98	151	02:58:09.866	432DA6A	6RTSL2 NIMSEL,AACNCG,RT	NIMS R/T SELECT	4R3	4	0	4,498,597:30:0	
152	98	151	02:58:41.200	117DA	CSMOS GS	***** GROUP START CSMOS	4R3	4	0	4,498,597:77:0	
153	98	151	02:58:45.866	125DA11A	NIMSINIT GE	##### GROUP END INIT	4R3	4	0	4,498,597:84:0	
154	98	151	02:58:45.866	125DA4B	37MB 1B,1B,0,0,0,0	Selects mirror (spatial) edit table	4R3	4	0	4,498,597:84:0	
155	98	151	02:58:49.200	165DA4B	7VECT	Inert vect update UTC	4R3	4	0	4,498,597:89:0	
156	98	151	02:58:50.533	117DA105A106A4A	7STRP -0.018102,0,0,0,	Slew =,0.03	4R3	4	0	4,498,598:00:0	
157	98	151	03:08:15.200	432DZ6A	6RTDS2 NIMDSL,AACNCG,RT	NIMS R/T DESELECT	4R3	4	0	4,498,607:28:0	
158	98	151	03:08:57.200	117DA11A	CSMOS GE	***** GROUP END CSMOS	4R3	4	0	4,498,608:00:0	
159	98	151	03:09:08.416	15JNJUPRTS01*	-----STOP-----		4R3	4	0	0	
160	98	151	03:09:33.200	488AB6A	FILL,DL4	Sci, Eng, and D/L Chan	4R3	4	0	4,498,608:54:0	
161	98	151	03:43:12.533	488AB6B	6TMSED NORM,DL4	Sci, Eng, and D/L Chan	4R3	4	0	4,498,641:80:0	
162	98	151	06:39:15.133	165CC4A	7SCAN NORM,284.539997,	Check S/P Position	4R3	4	0	4,498,815:90:0	
163	98	151	06:43:17.133	165CC4B	7VECT	Inert vect update UTC	4R3	4	0	4,498,819:89:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
164	98	151	07:12:37.133	165CI4A	7SCAN	NORM,285.457996,	Check S/P Position	4R3	4	0	4,498,848:90:0	
165	98	151	07:13:37.133	165CI4B	7VECT		Inert vect update UTC	4R3	4	0	4,498,849:89:0	
166	98	151	07:42:57.133	165CJ4A	7SCAN	NORM,286.875999,	Check S/P Position	4R3	4	0	4,498,878:90:0	
167	98	151	07:43:57.133	165CJ4B	7VECT		Inert vect update UTC	4R3	4	0	4,498,879:89:0	
168	98	151	08:13:17.133	165CK4A	7SCAN	NORM,288.290997,	Check S/P Position	4R3	4	0	4,498,908:90:0	
169	98	151	08:14:17.133	165CK4B	7VECT		Inert vect update UTC	4R3	4	0	4,498,909:89:0	
170	98	151	08:44:37.800	165CD4A	7SCAN	NORM,274.404999,	Check S/P Position	4R3	4	0	4,498,939:90:0	
171	98	151	08:48:39.800	165CD4B	7VECT		Inert vect update UTC	4R3	4	0	4,498,943:89:0	
172	98	151	09:18:13.133	488AC6A	6TMSED	NORM,DL3	Sci, Eng, and D/L Chan	4R3	4	0	4,498,973:19:0	
173	98	151	09:28:53.133	488AC6B	6TMSED	NORM,DL4	Sci, Eng, and D/L Chan	4R3	4	0	4,498,983:69:0	
174	98	151	09:45:18.466	192GA4A	7CONE	17.4,0.0	Check S/P Position	4R3	4	0	4,499,000:00:0	
175	98	151	09:49:21.133	176GA6A	6TMREC	BPT	7.68 KBPS PPR BURST TO TAPE Record Mode C	4R3	4	0	4,499,004:00:0	
176	98	151	09:51:35.800	176GA6B	6TMREC	NRC	NO RECORD Record Mode Change	4R3	4	0	4,499,006:20:0	
177	98	151	09:51:37.800		DMS:	:*US-RUNUP	P7, TRACK *1,*FWD, TIC *5125.95 +/- 1	4R3	4	0	4,499,006:23:0	
178	98	151	09:51:37.800	50ZZ6XX	6DMS	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	4,499,006:23:0	
179	98	151	09:51:39.200		DMS:	:*US_AT_SP	P7, TRACK 1, FWD, TIC *5126.07 +/- 1	4R3	4	0	4,499,006:25:1	
180	98	151	09:51:44.466		DMS:	:*US_RD	P7, TRACK 1, FWD, TIC *5127.31 +/- 1	4R3	4	0	4,499,006:33:0	
181	98	151	09:51:45.666		DMS:	:*RUNUP	R7, TRACK *2,*REV, TIC *5127.37 +/- 1	4R3	4	0	4,499,006:34:8	
182	98	151	09:51:47.066		DMS:	:*AT_SPD	R7, TRACK 2, REV, TIC *5127.25 +/- 1	4R3	4	0	4,499,006:36:9	
183	98	151	09:51:47.800		DMS:	:*RECORD	R7, TRACK 2, REV, TIC *5127.08 +/- 1	4R3	4	0	4,499,006:38:0	
184	98	151	09:51:59.133	50ZZ6RD	6DMS	RDY,0	DMS Control Tape stop	4R3	4	0	4,499,006:55:0	
185	98	151	09:51:59.133		DMS:	:*RUNDOWN	R7, TRACK 2, REV, TIC *5124.42 +/- 1	4R3	4	0	4,499,006:55:0	
186	98	151	09:52:00.333		DMS:	:*READY	RDY, TRACK 2, REV, TIC *5124.36 +/- 1	4R3	4	0	4,499,006:56:8	
187	98	151	10:29:29.133	488AC6C	6TMSED	FILL,DL4	Sci, Eng, and D/L Chan	4R3	4	0	4,499,043:63:0	
188	98	151	11:08:08.466	488AC6D	6TMSED	NORM,DL4	Sci, Eng, and D/L Chan	4R3	4	0	4,499,081:84:0	
189	98	151	12:13:55.800	165CE4A	7SCAN	NORM,293.114998,	Check S/P Position	4R3	4	0	4,499,146:90:0	
190	98	151	12:17:57.800	165CE4B	7VECT		Inert vect update UTC	4R3	4	0	4,499,150:89:0	
191	98	151	12:46:14.466	165CE4C	7VECT		Inert vect update UTC	4R3	4	0	4,499,178:86:0	
192	98	151	13:04:40.594	15NNHRSPEC01-		-----START-----		4R3	4	0	:	
193	98	151	13:10:37.800	20DB5A	37PL		Program Load (halts microprocessor & unwri	4R3	4	0	4,499,203:06:0	
194	98	151	13:10:39.133	20DB5B	37MRL		Memory Realocate (software operates from R	4R3	4	0	4,499,203:08:0	
195	98	151	13:10:40.466	20DB6A	6MCOPI	NIMS	NIMS,1000,LLM1A,7300,77F7	4R3	4	0	4,499,203:10:0	
196	98	151	13:10:50.466	20DB6B	6MCOPI	NIMS	NIMS,1598,LLM1A,77F8,781D	4R3	4	0	4,499,203:25:0	
197	98	151	13:11:00.466	20DB5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,499,203:40:0	
198	98	151	13:11:27.133	20DB5D	37MIN		Memory Normal (software operates from ROM)	260	4	0	4,499,203:80:0	
199	98	151	13:11:49.800	20DB4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,499,204:23:0	
200	98	151	13:14:31.800	125DB	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	4,499,206:84:0	
201	98	151	13:14:31.800	125DB4A	37IST	0,2,0,OFF,0,1,0	Gain State 2	2R0	4	0	4,499,206:84:0	
202	98	151	13:14:35.800	165DB4A	7SCAN	NORM,293.670998,	Check S/P Position	2R0	4	0	4,499,206:90:0	
203	98	151	13:14:47.261	15NNHRSPEC01-		-----STOP-----		2R0	4	0	:	
204	98	151	13:14:47.261	15NNHRSPEC01-		-----START-----		2R0	4	0	:	
205	98	151	13:15:32.466	125DB4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	2R0	4	0	4,499,207:84:0	
206	98	151	13:15:32.466	125DB11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	4,499,207:84:0	
207	98	151	13:18:24.466		DMS:	:*US-RUNUP	P7, TRACK *1,*FWD, TIC 5124.36 +/- 1	2R0	4	0	4,499,210:69:0	
208	98	151	13:18:24.466	175DB42A6A	6DMS	R28,0	DMS Control Tape runup 28.8kbp	2R0	4	0	4,499,210:69:0	
209	98	151	13:18:25.866		DMS:	:*US_AT_SP	P7, TRACK 1, FWD, TIC *5124.48 +/- 1	2R0	4	0	4,499,210:71:1	
210	98	151	13:18:29.800	117DB	CSMOS	GS	##### GROUP START CSMOS	2R0	4	0	4,499,210:77:0	
211	98	151	13:18:31.133		DMS:	:*US_RD	P7, TRACK 1, FWD, TIC *5125.72 +/- 1	2R0	4	0	4,499,210:79:0	
212	98	151	13:18:32.333		DMS:	:*RUNUP	R28, TRACK *2,*REV, TIC *5125.78 +/- 1	2R0	4	0	4,499,210:80:8	
213	98	151	13:18:34.466	127DB4A	37IOP	3,0	Long Map, Grating Start Position =00	2R3	4	0	4,499,210:84:0	
214	98	151	13:18:34.466	127DB	NIMSTAB	GS	%%%%%% GROUP START TAB	2R3	4	0	4,499,210:84:0	
215	98	151	13:18:35.133	127DB4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	2R3	4	0	4,499,210:85:0	
216	98	151	13:18:35.800	175DB176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	4,499,210:86:0	
217	98	151	13:18:36.333		DMS:	:*AT_SPD	R28, TRACK 2, REV, TIC 5124.28 +/- 1	2R3	4	0	4,499,210:86:8	
218	98	151	13:18:36.333		DMS:	:*RECORD	R28, TRACK 2, REV, TIC *5124.28 +/- 1	2R3	4	0	4,499,210:86:8	

Line	YR	DOY	SCET - GMT	PSID	Command Parameters	Description	GCM	GO	GS	RIM	MF I
219	98	151	13:18:37.800	165DB4B	7VECT	Inert vect update UTC	2R3	4	0	4,499,210:89:0	
220	98	151	13:18:39.133	117DB105A106A4A	7STRP -0.0092,0,0,0,0,	Slew =0.03	2R3	4	0	4,499,211:00:0	
221	98	151	13:18:39.133	151NHRSPPEC01-	NIMPBK 301EB	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
222	98	151	13:18:43.133	127DB11A	NIMSTAB GE	%%%%GROUP END TAB	2R3	4	0	4,499,211:06:0	
223	98	151	13:23:49.133	117DB105A106A4B	7STRP -0.00906,0,0,0,0,	Slew =12.01	2R3	4	0	4,499,216:22:0	
224	98	151	13:23:47.133	117DB105A106A4C	7STRP -0.0092,0,0,0,0,	Slew =-0.03	2R3	4	0	0	
225	98	151	13:25:16.466	151NHRSPPEC01-	NIMPBK 301EB	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
226	98	151	13:26:06.466	151NHRSPPEC01-	DESEL 300EB	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
227	98	151	13:29:07.133	117DB105A106A4D	7STRP 0.00906,0,0,0,0,	Slew =12.01	2R3	4	0	4,499,221:32:0	
228	98	151	13:29:15.133	151NHRSPPEC01-	NIMPBK 301EQ	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
229	98	151	13:29:15.133	151NHRSPPEC01-	DESEL 300EB	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
230	98	151	13:29:15.133	117DB105A106A4E	7STRP -0.0092,0,0,0,0,	Slew =0.03	2R3	4	0	4,499,221:44:0	
231	98	151	13:34:25.133	151NHRSPPEC01-	DESEL 300EQ	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
232	98	151	13:34:25.133	117DB105A106A4F	7STRP 0.00906,0,0,0,0,	Slew =12.01	2R3	4	0	4,499,226:54:0	
233	98	151	13:34:33.133	151NHRSPPEC01-	NIMPBK 301ED	IO HIGH RES SURFACE MONITORING	2R3	4	0	0	
234	98	151	13:34:33.133	117DB105A106A4G	7STRP -0.0092,0,0,0,0,	Slew =-0.03	2R3	4	0	4,499,226:66:0	
235	98	151	13:34:44.466	33A4A	37IOP 4.0	Long Spectrometer, Grating Start Position	2R4	4	0	4,499,226:83:0	
236	98	151	13:34:49.133	151NHRSPPEC01-	DESEL 300ED	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
237	98	151	13:34:49.800	151NHRSPPEC01-	NIMPBK 301XD	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
238	98	151	13:35:48.466	151NHRSPPEC01-	NIMPBK 301ED	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
239	98	151	13:35:50.466	151NHRSPPEC01-	NIMPBK 301EB	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
240	98	151	13:35:59.133	151NHRSPPEC01-	DESEL 300XD	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
241	98	151	13:36:06.466	151NHRSPPEC01-	DESEL 300ED	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
242	98	151	13:38:43.133	151NHRSPPEC01-	NIMPBK 301EK	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
243	98	151	13:38:52.466	151NHRSPPEC01-	DESEL 300EB	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
244	98	151	13:39:25.800	151NHRSPPEC01-	NIMPBK 301EK	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
245	98	151	13:39:43.133	151NHRSPPEC01-	DESEL 300EK	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
246	98	151	13:39:43.133	151NHRSPPEC01-	DESEL 300EK	IO HIGH RES SURFACE MONITORING	2R4	4	0	0	
247	98	151	13:39:43.133	117DB11A	CSMOS GE	**** GROUP END CSMOS	2R4	4	0	4,499,231:76:0	
248	98	151	13:39:46.466		DMS: : *RUNDOWN	R28, TRACK 2, REV, TIC *4007.95 +/- 1	2R4	4	0	4,499,231:81:0	
249	98	151	13:39:46.466	175DB422A6B	6DMSC RYD,0	DMS Control Tape stop	2R4	4	0	4,499,231:81:0	
250	98	151	13:39:47.666		DMS: : *READY	RDY, TRACK 2, REV, TIC *4007.65 +/- 1	2R4	4	0	4,499,231:82:8	
251	98	151	13:41:04.594	151NHRSPPEC01-	-----STOP-----		2R4	4	0	0	
252	98	151	14:14:15.133	165CF4A	NORM,273.129997,	Check S/P Position	2R4	4	0	4,499,265:90:0	
253	98	151	14:18:17.133	165CF4B	7VECT	Inert vect update UTC	2R4	4	0	4,499,269:89:0	
254	98	151	14:46:33.800	165CF4C	7VECT	Inert vect update UTC	2R4	4	0	4,499,297:86:0	
255	98	151	16:29:27.133	488AD6A	6TMSED FILL,DL4	Sci, Eng, and D/L Chan	2R4	4	0	4,499,399:64:0	
256	98	151	17:08:06.466	488AD6B	6TMSED NORM,DL4	Sci, Eng, and D/L Chan	2R4	4	0	4,499,437:85:0	
257	98	151	17:23:31.261	151NHRSPPEC02-	-----START-----		2R4	4	0	0	
258	98	151	17:29:28.466	20DD5A	37PL	Program Load (halts microprocessor & unwri	2R4	4	0	4,499,459:06:0	
259	98	151	17:29:29.800	20DD5B	37MRL	Memory Realocate (software operates from R	2R4	4	0	4,499,459:08:0	
260	98	151	17:29:31.133	20DD6A	6MCOPI NIMS	NIMS,1000,LLM1A,7300,77F7	2R4	4	0	4,499,459:10:0	
261	98	151	17:29:41.133	20DD6B	6MCOPI NIMS	NIMS,1598,LLM1A,77F8,781D	2R4	4	0	4,499,459:25:0	
262	98	151	17:29:51.133	20DD5C	37IRT	Instrument Reset (goes into POR state)	260	4	0	4,499,459:40:0	
263	98	151	17:30:17.800	20DD5D	37MIN	Memory Normal (software operates from ROM)	260	4	0	4,499,459:80:0	
264	98	151	17:30:40.466	20DD4A	37IST 1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,499,460:23:0	
265	98	151	17:33:22.466	125DD4A	37IST 0,2,0,OFF,0,1,0	Gain State 2	2R0	4	0	4,499,462:84:0	
266	98	151	17:33:22.466	125DD	NIMSINIT GS	##### GROUP START INIT	2R0	4	0	4,499,462:84:0	
267	98	151	17:33:26.466	165DD4A	7SCAN NORM,290.275997,	Check S/P Position	2R0	4	0	4,499,462:90:0	
268	98	151	17:33:37.927	151NHRSPPEC02-	-----START-----		2R0	4	0	0	
269	98	151	17:33:37.927	151NHRSPPEC02-	-----STOP-----		2R0	4	0	0	
270	98	151	17:34:23.133	125DD4B	37MB 0,0,0,0,0,0	Selects mirror (spatial) edit table	2R0	4	0	4,499,463:84:0	
271	98	151	17:34:23.133	125DD11A	NIMSINIT GE	##### GROUP END INIT	2R0	4	0	4,499,463:84:0	
272	98	151	17:37:15.133		DMS: : *US-RUNUP	P7, TRACK *1, *FWD, TIC 4007.65 +/- 1	2R0	4	0	4,499,466:69:0	
273	98	151	17:37:15.133	175DD422A6A	6DMSC R28:0	DMS Control Tape runup 28.8kbp	2R0	4	0	4,499,466:69:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
274	98	151	17:37:16.533		DMS:	:*US_AT_SP	P7, TRACK 1, FWD, TIC *4007.77 +/- 1	2R0	4	0	4,499,466:71:1	
275	98	151	17:37:20.466	117DD	CSMOS	GS	**** GROUP START CSMOS	2R0	4	0	4,499,466:77:0	
276	98	151	17:37:21.800		DMS:	:*US_RD	P7, TRACK 1, FWD, TIC *4009.00 +/- 1	2R0	4	0	4,499,466:79:0	
277	98	151	17:37:23.000		DMS:	:*RUNUP	R28, TRACK 2, *REV, TIC *4009.06 +/- 1	2R0	4	0	4,499,466:80:8	
278	98	151	17:37:25.133	127DD4A	37IOP	3,0	Long Map, Grating Start Position =00	2R3	4	0	4,499,466:84:0	
279	98	151	17:37:25.133	127DD	NIMSTAB	GS	Load wavelenght edit table	2R3	4	0	4,499,466:85:0	
280	98	151	17:37:25.800	127DD4B	37ETB	04,C4,35,FF,FF	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	4,499,466:86:0	
281	98	151	17:37:26.466	175DD176A6A	6TMREC	MPW	R28, TRACK 2, REV, TIC 4007.56 +/- 1	2R3	4	0	4,499,466:86:8	
282	98	151	17:37:27.000		DMS:	:*AT_SPD	R28, TRACK 2, REV, TIC *4007.56 +/- 1	2R3	4	0	4,499,466:86:8	
283	98	151	17:37:27.000		DMS:	:*RECORD	Inert vect update UTC	2R3	4	0	4,499,466:89:0	
284	98	151	17:37:28.466	165DD4B	7VECT		Slew =0.03	2R3	4	0	4,499,467:00:0	
285	98	151	17:37:29.800	117DD105A106A4A	7STRP	-0.012001,0.0,0,0,	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,467:06:0	
286	98	151	17:37:29.800	15INHRSPPEC02-	NIMPBK	301DD	%%%GROUP END TAB	2R3	4	0	4,499,467:06:0	
287	98	151	17:37:33.800	127DD11A	NIMSTAB	GE	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,467:06:0	
288	98	151	17:44:05.133	15INHRSPPEC02-	NIMPBK	301EX	Slew =12.01	2R3	4	0	4,499,473:60:0	
289	98	151	17:44:13.800	117DD105A106A4B	7STRP	0.012001,-0.005,	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:60:0	
290	98	151	17:44:17.133	15INHRSPPEC02-	DESEL	300DD	Slew =-0.03	2R3	4	0	4,499,473:71:0	
291	98	151	17:44:21.133	117DD105A106A4C	7STRP	-0.012001,0.0,0,0,	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
292	98	151	17:44:34.466	15INHRSPPEC02-	NIMPBK	301ED	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
293	98	151	17:44:45.133	15INHRSPPEC02-	DESEL	300EX	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
294	98	151	17:47:35.133	15INHRSPPEC02-	NIMPBK	301EX	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
295	98	151	17:49:35.133	15INHRSPPEC02-	DESEL	300EX	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
296	98	151	17:50:27.800	15INHRSPPEC02-	NIMPBK	301EY	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
297	98	151	17:50:39.800	15INHRSPPEC02-	DESEL	300EY	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
298	98	151	17:51:04.466	15INHRSPPEC02-	DESEL	300ED	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,473:71:0	
299	98	151	17:51:05.133	117DD105A106B4A	7STRP	0.0104,0.0031,0,	Slew =12.01	2R3	4	0	4,499,480:40:0	
300	98	151	17:51:12.466	117DD105A106B4B	7STRP	-0.009,0.0,0,0,0,	Slew =0.03	2R3	4	0	4,499,480:51:0	
301	98	151	17:51:12.466	15INHRSPPEC02-	NIMPBK	301EY	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,485:51:0	
302	98	151	17:52:11.800	15INHRSPPEC02-	NIMPBK	301EX	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,485:51:0	
303	98	151	17:52:41.000	15INHRSPPEC02-	DESEL	300EX	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,485:72:0	
304	98	151	17:54:04.466	15INHRSPPEC02-	NIMPBK	301EY	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,485:72:0	
305	98	151	17:54:48.000	15INHRSPPEC02-	DESEL	300EY	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,485:73:8	
306	98	151	17:56:15.800	117DD11A	CSMOS	GE	**** GROUP END CSMOS	2R3	4	0	4,499,485:73:8	
307	98	151	17:56:15.800	15INHRSPPEC02-	DESEL	300EY	IO HIGH RES SURFACE MONITORING	2R3	4	0	4,499,485:72:0	
308	98	151	17:56:29.800	175DD422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,485:72:0	
309	98	151	17:56:29.800		DMS:	:*RUNDOWN	R28, TRACK 2, REV, TIC *3003.15 +/- 1	2R3	4	0	4,499,485:72:0	
310	98	151	17:56:31.000		DMS:	:*READY	RDY, TRACK 2, REV, TIC *3002.85 +/- 1	2R3	4	0	4,499,485:73:8	
311	98	151	17:56:41.800	165GB4A	7SCAN	NORM,273,230999,	Check S/P Position	2R3	4	0	4,499,485:90:0	
312	98	151	17:56:42.466	176GB6A	6TMREC	BPT	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	4,499,486:00:0	
313	98	151	17:57:33.800	117GB	CSMOS	GS	**** GROUP START CSMOS	2R3	4	0	4,499,486:77:0	
314	98	151	17:57:41.800	165GB4B	7VECT		Inert vect update UTC	2R3	4	0	4,499,486:89:0	
315	98	151	17:57:43.133	117GB105A106A4A	7STRP	0.025005,0.0,0,0,	Slew =0.44	2R3	4	0	4,499,487:00:0	
316	98	151	17:58:43.133	117GB105A106A4B	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,487:90:0	
317	98	151	17:58:52.466	117GB105A106A4C	7STRP	0.025005,0.0,0,0,	Slew =0.44	2R3	4	0	4,499,488:13:0	
318	98	151	17:59:52.466	117GB105A106A4D	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,489:12:0	
319	98	151	17:59:55.261	15INHRSPPEC02-	-----STOP-----			2R3	4	0	4,499,489:12:0	
320	98	151	18:00:01.800	117GB105A106A4E	7STRP	0.025005,0.0,0,0,	Slew =0.44	2R3	4	0	4,499,489:26:0	
321	98	151	18:01:01.800	117GB105A106A4F	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,490:25:0	
322	98	151	18:01:11.133	117GB105A106A4G	7STRP	0.025005,0.0,0,0,	Slew =0.44	2R3	4	0	4,499,490:39:0	
323	98	151	18:02:11.133	117GB105A106A4H	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,491:38:0	
324	98	151	18:02:20.466	117GB105A106A4I	7STRP	0.025005,0.0,0,0,	Slew =-0.44	2R3	4	0	4,499,491:52:0	
325	98	151	18:03:20.466	117GB105A106A4J	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,492:51:0	
326	98	151	18:03:29.800	117GB105A106A4K	7STRP	0.025005,0.0,0,0,	Slew =-0.44	2R3	4	0	4,499,492:65:0	
327	98	151	18:04:29.800	117GB105A106A4L	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,493:64:0	
328	98	151	18:04:39.133	117GB105A106A4M	7STRP	0.025005,0.0,0,0,	Slew =-0.44	2R3	4	0	4,499,493:78:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
329	98	151	18:05:39.133	117GB105A106A4N	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,494:77:0	
330	98	151	18:05:48.466	117GB105A106A4O	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,495:00:0	
331	98	151	18:06:48.466	117GB105A106A4P	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,495:90:0	
332	98	151	18:06:57.800	117GB105A106A4Q	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,496:13:0	
333	98	151	18:07:57.800	117GB105A106A4R	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,497:12:0	
334	98	151	18:08:07.133	117GB105A106A4S	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,497:26:0	
335	98	151	18:09:07.133	117GB105A106A4T	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,498:25:0	
336	98	151	18:09:16.466	117GB105A106A4U	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,498:39:0	
337	98	151	18:09:17.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3002.85 +/- 1	2R3	4	0	4,499,498:40:0	
338	98	151	18:09:17.133	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,498:40:0	
339	98	151	18:09:18.533		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3002.97 +/- 1	2R3	4	0	4,499,498:42:1	
340	98	151	18:09:23.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3004.20 +/- 1	2R3	4	0	4,499,498:50:0	
341	98	151	18:09:25.000		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3004.26 +/- 1	2R3	4	0	4,499,498:51:8	
342	98	151	18:09:26.400		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3004.14 +/- 1	2R3	4	0	4,499,498:53:9	
343	98	151	18:09:42.466		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *3000.38 +/- 1	2R3	4	0	4,499,498:78:0	
344	98	151	18:10:05.133	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,499:21:0	
345	98	151	18:10:05.133		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2995.06 +/- 1	2R3	4	0	4,499,499:21:0	
346	98	151	18:10:06.333		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2995.00 +/- 1	2R3	4	0	4,499,499:22:8	
347	98	151	18:10:16.466	117GB105A106A4V	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,499:38:0	
348	98	151	18:10:25.800	117GB105A106A4W	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,499:52:0	
349	98	151	18:11:25.800	117GB105A106A4X	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,500:51:0	
350	98	151	18:11:35.133	117GB105A106A4Y	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,500:65:0	
351	98	151	18:11:59.800	488AD6C	6TMSED	NORM,EL4	Sci, Eng, and D/L Chan	2R3	4	0	4,499,501:11:0	
352	98	151	18:12:35.133	117GB105A106A4Z	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,501:64:0	
353	98	151	18:12:44.466	117GB105A106A4AA	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,501:78:0	
354	98	151	18:13:44.466	117GB105A106A4AB	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,502:77:0	
355	98	151	18:13:53.800	117GB105A106A4AC	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,503:00:0	
356	98	151	18:14:53.800	117GB105A106A4AD	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,503:90:0	
357	98	151	18:15:03.133	117GB105A106A4AE	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,504:13:0	
358	98	151	18:16:03.133	117GB105A106A4AF	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,505:12:0	
359	98	151	18:16:12.466	117GB105A106A4AG	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,505:26:0	
360	98	151	18:17:12.466	117GB105A106A4AH	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,506:25:0	
361	98	151	18:17:21.800	117GB105A106A4AI	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,506:39:0	
362	98	151	18:18:21.800	117GB105A106A4AJ	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,507:38:0	
363	98	151	18:18:31.133	117GB105A106A4AK	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,507:52:0	
364	98	151	18:19:31.133	117GB105A106A4AL	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,508:51:0	
365	98	151	18:19:40.466	117GB105A106A4AM	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,508:65:0	
366	98	151	18:20:40.466	117GB105A106A4AN	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,509:64:0	
367	98	151	18:20:49.800	117GB105A106A4AO	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,509:78:0	
368	98	151	18:21:49.800	117GB105A106A4AP	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,510:77:0	
369	98	151	18:21:59.133	117GB105A106A4AQ	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,511:00:0	
370	98	151	18:22:19.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2995.00 +/- 1	2R3	4	0	4,499,511:30:0	
371	98	151	18:22:19.133	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,511:30:0	
372	98	151	18:22:20.533		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2995.12 +/- 1	2R3	4	0	4,499,511:32:1	
373	98	151	18:22:25.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2996.36 +/- 1	2R3	4	0	4,499,511:40:0	
374	98	151	18:22:27.000		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *2996.42 +/- 1	2R3	4	0	4,499,511:41:8	
375	98	151	18:22:28.400		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *2996.30 +/- 1	2R3	4	0	4,499,511:43:9	
376	98	151	18:22:44.466		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *2992.53 +/- 1	2R3	4	0	4,499,511:68:0	
377	98	151	18:22:59.133	117GB105A106A4AR	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,511:90:0	
378	98	151	18:23:07.133		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2987.22 +/- 1	2R3	4	0	4,499,512:11:0	
379	98	151	18:23:07.133	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,512:11:0	
380	98	151	18:23:08.333		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2987.16 +/- 1	2R3	4	0	4,499,512:12:8	
381	98	151	18:23:08.466	117GB105A106A4AS	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,512:13:0	
382	98	151	18:24:08.466	117GB105A106A4AT	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,513:12:0	
383	98	151	18:24:17.800	117GB105A106A4AU	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,513:26:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
384	98	151	18:25:17.800	117GB105A106A4AV	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,514:25:0	
385	98	151	18:25:27.133	117GB105A106A4AW	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,514:39:0	
386	98	151	18:26:27.133	117GB105A106A4AX	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,515:38:0	
387	98	151	18:26:36.466	117GB105A106A4AY	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,515:52:0	
388	98	151	18:27:36.466	117GB105A106A4AZ	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,516:51:0	
389	98	151	18:27:45.800	117GB105A106A4BA	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,516:65:0	
390	98	151	18:28:45.800	117GB105A106A4BB	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,517:64:0	
391	98	151	18:28:55.133	117GB105A106A4BC	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,517:78:0	
392	98	151	18:29:55.133	117GB105A106A4BD	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,518:77:0	
393	98	151	18:30:04.466	117GB105A106A4BE	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,519:90:0	
394	98	151	18:31:04.466	117GB105A106A4BF	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,519:90:0	
395	98	151	18:31:13.800	117GB105A106A4BG	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,520:13:0	
396	98	151	18:32:13.800	117GB105A106A4BH	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,521:12:0	
397	98	151	18:32:23.133	117GB105A106A4BI	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,521:26:0	
398	98	151	18:33:23.133	117GB105A106A4BJ	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,522:25:0	
399	98	151	18:33:32.466	117GB105A106A4BK	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,522:39:0	
400	98	151	18:34:32.466	117GB105A106A4BL	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,523:38:0	
401	98	151	18:34:41.800	117GB105A106A4BM	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,523:52:0	
402	98	151	18:35:21.133	50ZZ6XX	6DMSC	R7,0	DMS Control	2R3	4	0	4,499,524:20:0	
403	98	151	18:35:21.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2987.16 +/- 1	2R3	4	0	4,499,524:20:0	
404	98	151	18:35:22.533		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2987.28 +/- 1	2R3	4	0	4,499,524:22:1	
405	98	151	18:35:27.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2988.52 +/- 1	2R3	4	0	4,499,524:30:0	
406	98	151	18:35:29.000		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *2988.58 +/- 1	2R3	4	0	4,499,524:31:8	
407	98	151	18:35:30.400		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *2988.46 +/- 1	2R3	4	0	4,499,524:33:9	
408	98	151	18:35:41.800	117GB105A106A4BN	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,524:58:0	
409	98	151	18:35:46.466		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *2984.69 +/- 1	2R3	4	0	4,499,524:65:0	
410	98	151	18:35:51.133	117GB105A106A4BO	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,524:65:0	
411	98	151	18:36:09.133		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2979.38 +/- 1	2R3	4	0	4,499,525:01:0	
412	98	151	18:36:09.133	50ZZ6RE	6DMSC	RDY,0	DMS Control	2R3	4	0	4,499,525:01:0	
413	98	151	18:36:10.333		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2979.32 +/- 1	2R3	4	0	4,499,525:02:8	
414	98	151	18:36:51.133	117GB105A106A4BP	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,525:64:0	
415	98	151	18:37:00.466	117GB105A106A4BQ	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,525:78:0	
416	98	151	18:38:00.466	117GB105A106A4BR	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,526:77:0	
417	98	151	18:38:09.800	117GB105A106A4BS	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,527:00:0	
418	98	151	18:39:09.800	117GB105A106A4BT	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,527:90:0	
419	98	151	18:39:19.133	117GB105A106A4BU	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,528:13:0	
420	98	151	18:40:19.133	117GB105A106A4BV	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,529:12:0	
421	98	151	18:40:28.466	117GB105A106A4BW	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,529:26:0	
422	98	151	18:41:28.466	117GB105A106A4BX	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,530:25:0	
423	98	151	18:41:37.800	117GB105A106A4BY	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,530:39:0	
424	98	151	18:42:37.800	117GB105A106A4BZ	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,531:38:0	
425	98	151	18:42:47.133	117GB105A106A4CA	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,531:52:0	
426	98	151	18:43:47.133	117GB105A106A4CB	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,532:51:0	
427	98	151	18:43:56.466	117GB105A106A4CC	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,532:65:0	
428	98	151	18:44:56.466	117GB105A106A4CD	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,533:64:0	
429	98	151	18:45:05.800	117GB105A106A4CE	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,533:78:0	
430	98	151	18:46:05.800	117GB105A106A4CF	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,534:77:0	
431	98	151	18:46:15.133	117GB105A106A4CG	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,535:00:0	
432	98	151	18:47:15.133	117GB105A106A4CH	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,535:90:0	
433	98	151	18:47:24.466	117GB105A106A4CI	7STRP	0.025005,0.0,0.0	Slew = 0.44	2R3	4	0	4,499,536:13:0	
434	98	151	18:48:23.800	50ZZ6XX	6DMSC	R7,0	DMS Control	2R3	4	0	4,499,537:11:0	
435	98	151	18:48:23.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2979.32 +/- 1	2R3	4	0	4,499,537:11:0	
436	98	151	18:48:24.466	117GB105A106A4CJ	7STRP	0.00005,-0.00094	Slew =12.01	2R3	4	0	4,499,537:12:0	
437	98	151	18:48:25.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2979.44 +/- 1	2R3	4	0	4,499,537:13:1	
438	98	151	18:48:30.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2980.67 +/- 1	2R3	4	0	4,499,537:21:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
439	98	151	18:48:31.666		DMS:	:*RUNUP	R7, TRACK 2, *REV, TIC *2980.73 +/- 1	2R3	4	0	4,499,537:22:8	
440	98	151	18:48:33.066		DMS:	:*AT SPD	R7, TRACK 2, REV, TIC *2980.61 +/- 1	2R3	4	0	4,499,537:24:9	
441	98	151	18:48:33.800	117GB105A106A4CK	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,537:26:0	
442	98	151	18:48:48.466		DMS:	:*RECORD	R7, TRACK 2, REV, TIC *2977.00 +/- 1	2R3	4	0	4,499,537:48:0	
443	98	151	18:49:11.133		DMS:	:*RUNDOWN	R7, TRACK 2, REV, TIC *2971.69 +/- 1	2R3	4	0	4,499,537:82:0	
444	98	151	18:49:11.133	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,537:82:0	
445	98	151	18:49:12.333		DMS:	:*READY	RDY, TRACK 2, REV, TIC *2971.63 +/- 1	2R3	4	0	4,499,537:83:8	
446	98	151	18:49:33.800	117GB105A106A4CL	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,538:25:0	
447	98	151	18:49:43.133	117GB105A106A4CM	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,538:39:0	
448	98	151	18:50:43.133	117GB105A106A4CN	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,539:38:0	
449	98	151	18:50:52.466	117GB105A106A4CO	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,539:52:0	
450	98	151	18:51:52.466	117GB105A106A4CP	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,540:51:0	
451	98	151	18:52:01.800	117GB105A106A4CQ	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,540:65:0	
452	98	151	18:53:01.800	117GB105A106A4CR	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,541:64:0	
453	98	151	18:53:11.133	117GB105A106A4CS	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,541:78:0	
454	98	151	18:54:11.133	117GB105A106A4CT	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,542:77:0	
455	98	151	18:54:20.466	117GB105A106A4CU	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,543:00:0	
456	98	151	18:55:20.466	117GB105A106A4CV	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,543:90:0	
457	98	151	18:55:29.800	117GB105A106A4CW	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,544:13:0	
458	98	151	18:56:29.800	117GB105A106A4CX	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,545:12:0	
459	98	151	18:56:39.133	117GB105A106A4CY	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,545:26:0	
460	98	151	18:57:39.133	117GB105A106A4CZ	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,546:25:0	
461	98	151	18:57:48.466	117GB105A106A4DA	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,546:39:0	
462	98	151	18:58:48.466	117GB105A106A4DB	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,547:38:0	
463	98	151	18:58:57.800	117GB105A106A4DC	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,547:52:0	
464	98	151	18:59:57.800	117GB105A106A4DD	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,548:51:0	
465	98	151	19:00:07.133	117GB105A106A4DE	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,548:65:0	
466	98	151	19:01:07.133	117GB105A106A4DF	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,549:64:0	
467	98	151	19:01:16.466	117GB105A106A4DG	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,549:78:0	
468	98	151	19:01:25.800		DMS:	:*US-RUNUP	P7, TRACK *1, *FWD, TIC 2971.63 +/- 1	2R3	4	0	4,499,550:01:0	
469	98	151	19:01:25.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,550:01:0	
470	98	151	19:01:27.200		DMS:	:*US AT SP	P7, TRACK 1, FWD, TIC *2971.75 +/- 1	2R3	4	0	4,499,550:03:1	
471	98	151	19:01:32.466		DMS:	:*US RD	P7, TRACK 1, FWD, TIC *2972.98 +/- 1	2R3	4	0	4,499,550:11:0	
472	98	151	19:01:33.666		DMS:	:*RUNUP	R7, TRACK *2, *REV, TIC *2973.04 +/- 1	2R3	4	0	4,499,550:12:8	
473	98	151	19:01:35.066		DMS:	:*AT SPD	R7, TRACK 2, REV, TIC *2972.92 +/- 1	2R3	4	0	4,499,550:14:9	
474	98	151	19:01:51.133		DMS:	:*RECORD	R7, TRACK 2, REV, TIC *2969.16 +/- 1	2R3	4	0	4,499,550:39:0	
475	98	151	19:02:13.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,550:73:0	
476	98	151	19:02:13.800		DMS:	:*RUNDOWN	R7, TRACK 2, REV, TIC *2963.85 +/- 1	2R3	4	0	4,499,550:73:0	
477	98	151	19:02:15.000		DMS:	:*READY	RDY, TRACK 2, REV, TIC *2963.79 +/- 1	2R3	4	0	4,499,550:74:8	
478	98	151	19:02:16.466	117GB105A106A4DH	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,550:77:0	
479	98	151	19:02:25.800	117GB105A106A4DI	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,551:00:0	
480	98	151	19:03:25.800	117GB105A106A4DJ	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,551:90:0	
481	98	151	19:03:35.133	117GB105A106A4DK	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,552:13:0	
482	98	151	19:04:35.133	117GB105A106A4DL	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,553:12:0	
483	98	151	19:04:44.466	117GB105A106A4DM	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,553:26:0	
484	98	151	19:05:44.466	117GB105A106A4DN	7STRP	0.00005:-0.00094	Slew = 12.01	2R3	4	0	4,499,554:25:0	
485	98	151	19:05:53.800	117GB105A106A4DO	7STRP	0.025005:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,554:39:0	
486	98	151	19:06:53.800	117GB105A106B4A	7STRP	-0.04503:-0.01:0	Slew = 12.01	2R3	4	0	4,499,555:38:0	
487	98	151	19:07:03.133	117GB105A106B4B	7STRP	0.0:0.0:0.0:0.0	Slew = 0.44	2R3	4	0	4,499,555:52:0	
488	98	151	19:08:03.800	117GB111A	CSMOS	GE	***** GROUP END CSMOS	2R3	4	0	4,499,556:52:0	
489	98	151	19:08:29.800	176GB6B	6TMREC	NRC	NO RECORD Record Mode Change	2R3	4	0	4,499,557:00:0	
490	98	151	19:08:31.800		DMS:	:*US-RUNUP	P7, TRACK *1, *FWD, TIC 2963.79 +/- 1	2R3	4	0	4,499,557:03:0	
491	98	151	19:08:31.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,557:03:0	
492	98	151	19:08:33.200		DMS:	:*US AT SP	P7, TRACK 1, FWD, TIC *2963.91 +/- 1	2R3	4	0	4,499,557:05:1	
493	98	151	19:08:38.466		DMS:	:*US RD	P7, TRACK 1, FWD, TIC *2965.14 +/- 1	2R3	4	0	4,499,557:13:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
494	98	151	19:08:39.666		DMS:	: *RUNUP	R7, TRACK 2, *REV, TIC *2965.20 +/- 1	2R3	4	0	4,499,557:14:8	
495	98	151	19:08:41.066		DMS:	: *AT SPD	R7, TRACK 2, REV, TIC *2965.08 +/- 1	2R3	4	0	4,499,557:16:9	
496	98	151	19:08:41.800		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *2964.91 +/- 1	2R3	4	0	4,499,557:18:0	
497	98	151	19:08:57.800		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2961.16 +/- 1	2R3	4	0	4,499,557:42:0	
498	98	151	19:08:57.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,557:42:0	
499	98	151	19:08:59.000		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2961.10 +/- 1	2R3	4	0	4,499,557:43:8	
500	98	151	19:09:29.800	165GC4A	7SCAN	NORM,272.577,-26	Check S/P Position	2R3	4	0	4,499,557:90:0	
501	98	151	19:09:31.133	176GC6A	6TMREC	BPT	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	4,499,558:01:0	
502	98	151	19:10:21.800	117GC	CSMOS	GS	***** GROUP START CSMOS	2R3	4	0	4,499,558:77:0	
503	98	151	19:10:29.800	165GC4B	7VECT		Inert vect update UTC	2R3	4	0	4,499,559:00:0	
504	98	151	19:10:31.133	117GC105A106A4A	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,559:00:0	
505	98	151	19:11:25.133	117GC105A106A4B	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,559:81:0	
506	98	151	19:11:34.466	117GC105A106A4C	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,560:04:0	
507	98	151	19:12:28.466	117GC105A106A4D	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,560:85:0	
508	98	151	19:12:37.800	117GC105A106A4E	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,561:08:0	
509	98	151	19:13:31.800	117GC105A106A4F	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,561:89:0	
510	98	151	19:13:41.133	117GC105A106A4G	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,562:12:0	
511	98	151	19:14:35.133	117GC105A106A4H	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,563:02:0	
512	98	151	19:14:44.466	117GC105A106A4I	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,563:16:0	
513	98	151	19:15:38.466	117GC105A106A4J	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,564:06:0	
514	98	151	19:15:47.800	117GC105A106A4K	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,564:20:0	
515	98	151	19:16:41.800	117GC105A106A4L	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,565:10:0	
516	98	151	19:16:51.133	117GC105A106A4M	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,565:24:0	
517	98	151	19:17:45.133	117GC105A106A4N	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,566:14:0	
518	98	151	19:17:54.466	117GC105A106A4O	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,566:28:0	
519	98	151	19:18:48.466	117GC105A106A4P	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,567:18:0	
520	98	151	19:18:57.800	117GC105A106A4Q	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,567:32:0	
521	98	151	19:19:51.800	117GC105A106A4R	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,568:22:0	
522	98	151	19:20:01.133	117GC105A106A4S	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,568:36:0	
523	98	151	19:20:55.133	117GC105A106A4T	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,569:26:0	
524	98	151	19:21:04.466	117GC105A106A4U	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,569:40:0	
525	98	151	19:21:58.466	117GC105A106A4V	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,570:30:0	
526	98	151	19:22:05.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,570:41:0	
527	98	151	19:22:05.800		DMS:	: *US-RUNUP	P7, TRACK *1,*FWD, TIC 2961.10 +/- 1	2R3	4	0	4,499,570:41:0	
528	98	151	19:22:07.200		DMS:	: *US AT_SP	P7, TRACK 1, FWD, TIC *2961.22 +/- 1	2R3	4	0	4,499,570:43:1	
529	98	151	19:22:07.800	117GC105A106A4W	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,570:44:0	
530	98	151	19:22:12.466		DMS:	: *US RD	P7, TRACK 1, FWD, TIC *2962.45 +/- 1	2R3	4	0	4,499,570:51:0	
531	98	151	19:22:13.666		DMS:	: *RUNUP	R7, TRACK *2,*REV, TIC *2962.51 +/- 1	2R3	4	0	4,499,570:52:8	
532	98	151	19:22:15.066		DMS:	: *AT SPD	R7, TRACK 2, REV, TIC *2962.39 +/- 1	2R3	4	0	4,499,570:54:9	
533	98	151	19:22:31.133		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *2958.63 +/- 1	2R3	4	0	4,499,570:79:0	
534	98	151	19:22:53.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,571:22:0	
535	98	151	19:22:53.800		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2953.31 +/- 1	2R3	4	0	4,499,571:22:0	
536	98	151	19:22:55.000		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2953.25 +/- 1	2R3	4	0	4,499,571:23:8	
537	98	151	19:23:01.800	117GC105A106A4X	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,571:34:0	
538	98	151	19:23:11.133	117GC105A106A4Y	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,571:48:0	
539	98	151	19:24:05.133	117GC105A106A4Z	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,572:38:0	
540	98	151	19:24:14.466	117GC105A106A4AA	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,572:52:0	
541	98	151	19:25:08.466	117GC105A106A4AB	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,573:42:0	
542	98	151	19:25:17.800	117GC105A106A4AC	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,573:56:0	
543	98	151	19:26:11.800	117GC105A106A4AD	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,574:46:0	
544	98	151	19:26:21.133	117GC105A106A4AE	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,574:60:0	
545	98	151	19:27:15.133	117GC105A106A4AF	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,575:50:0	
546	98	151	19:27:24.466	117GC105A106A4AG	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,575:64:0	
547	98	151	19:28:18.466	117GC105A106A4AH	7STRP	0.0,0.00119,0.0,	Slew =12.01	2R3	4	0	4,499,576:54:0	
548	98	151	19:28:27.800	117GC105A106A4AI	7STRP	0.051044,0.0,0.0	Slew =,1.01	2R3	4	0	4,499,576:68:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
549	98	151	19:29:21.800	117GC105A106A4AJ	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,577:58:0	
550	98	151	19:29:31.133	117GC105A106A4AK	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,577:72:0	
551	98	151	19:30:25.133	117GC105A106A4AL	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,578:62:0	
552	98	151	19:30:34.466	117GC105A106A4AM	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,578:76:0	
553	98	151	19:31:28.466	117GC105A106A4AN	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,579:66:0	
554	98	151	19:31:37.800	117GC105A106A4AO	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,579:80:0	
555	98	151	19:32:31.800	117GC105A106A4AP	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,580:70:0	
556	98	151	19:32:41.133	117GC105A106A4AQ	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,580:84:0	
557	98	151	19:33:35.133	117GC105A106A4AR	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,581:74:0	
558	98	151	19:33:44.466	117GC105A106A4AS	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,581:88:0	
559	98	151	19:34:38.466	117GC105A106A4AT	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,582:78:0	
560	98	151	19:34:47.800	117GC105A106A4AU	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,583:01:0	
561	98	151	19:35:07.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,583:31:0	
562	98	151	19:35:07.800		DMS:	: *US-RUNUP	P7, TRACK 1, *FWD, TIC 2953.25 +/- 1	2R3	4	0	4,499,583:31:0	
563	98	151	19:35:09.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2953.37 +/- 1	2R3	4	0	4,499,583:33:1	
564	98	151	19:35:14.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2954.61 +/- 1	2R3	4	0	4,499,583:41:0	
565	98	151	19:35:15.666		DMS:	: *RUNUP	R7, TRACK 2, *REV, TIC *2954.67 +/- 1	2R3	4	0	4,499,583:42:8	
566	98	151	19:35:17.066		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *2954.55 +/- 1	2R3	4	0	4,499,583:44:9	
567	98	151	19:35:33.133		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *2950.78 +/- 1	2R3	4	0	4,499,583:69:0	
568	98	151	19:35:41.800	117GC105A106A4AV	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,583:82:0	
569	98	151	19:35:51.133	117GC105A106A4AW	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,584:05:0	
570	98	151	19:35:55.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,584:12:0	
571	98	151	19:35:55.800		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2945.47 +/- 1	2R3	4	0	4,499,584:12:0	
572	98	151	19:35:57.000		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2945.41 +/- 1	2R3	4	0	4,499,584:13:8	
573	98	151	19:36:45.133	117GC105A106A4AX	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,584:86:0	
574	98	151	19:36:54.466	117GC105A106A4AY	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,585:09:0	
575	98	151	19:37:48.466	117GC105A106A4AZ	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,585:90:0	
576	98	151	19:37:57.800	117GC105A106A4BA	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,586:13:0	
577	98	151	19:38:51.800	117GC105A106A4BB	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,587:03:0	
578	98	151	19:39:01.133	117GC105A106A4BC	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,587:17:0	
579	98	151	19:39:55.133	117GC105A106A4BD	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,588:07:0	
580	98	151	19:40:04.466	117GC105A106A4BE	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,588:21:0	
581	98	151	19:40:58.466	117GC105A106A4BF	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,589:11:0	
582	98	151	19:41:07.800	117GC105A106A4BG	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,589:25:0	
583	98	151	19:42:01.800	117GC105A106A4BH	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,590:15:0	
584	98	151	19:42:11.133	117GC105A106A4BI	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,590:29:0	
585	98	151	19:43:05.133	117GC105A106A4BJ	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,591:19:0	
586	98	151	19:43:14.466	117GC105A106A4BK	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,591:33:0	
587	98	151	19:44:08.466	117GC105A106A4BL	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,592:23:0	
588	98	151	19:44:17.800	117GC105A106A4BM	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,592:37:0	
589	98	151	19:45:11.800	117GC105A106A4BN	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,593:27:0	
590	98	151	19:45:21.133	117GC105A106A4BO	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,593:41:0	
591	98	151	19:46:15.133	117GC105A106A4BP	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,594:31:0	
592	98	151	19:46:24.466	117GC105A106A4BQ	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,594:45:0	
593	98	151	19:47:18.466	117GC105A106A4BR	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,595:35:0	
594	98	151	19:47:27.800	117GC105A106A4BS	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,595:49:0	
595	98	151	19:48:09.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,596:21:0	
596	98	151	19:48:09.800		DMS:	: *US-RUNUP	P7, TRACK 1, *FWD, TIC 2945.41 +/- 1	2R3	4	0	4,499,596:21:0	
597	98	151	19:48:11.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2945.53 +/- 1	2R3	4	0	4,499,596:23:1	
598	98	151	19:48:16.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2946.77 +/- 1	2R3	4	0	4,499,596:32:8	
599	98	151	19:48:17.666		DMS:	: *RUNUP	R7, TRACK 2, *REV, TIC *2946.83 +/- 1	2R3	4	0	4,499,596:32:8	
600	98	151	19:48:19.066		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *2946.71 +/- 1	2R3	4	0	4,499,596:34:9	
601	98	151	19:48:21.800	117GC105A106A4BT	7STRP	0.0,0.00119,0.0,0	Slew =12.01	2R3	4	0	4,499,596:39:0	
602	98	151	19:48:31.133	117GC105A106A4BU	7STRP	0.051044,0.0,0,0	Slew = 1.01	2R3	4	0	4,499,596:53:0	
603	98	151	19:48:35.133		DMS:	: *RECORD	R7, TRACK 2, REV, TIC *2942.94 +/- 1	2R3	4	0	4,499,596:59:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
604	98	151	19:48:57.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,597:02:0	
605	98	151	19:48:57.800		DMS:	: *RUNDOWN	R7, TRACK 2, REV, TIC *2937.63 +/- 1	2R3	4	0	4,499,597:02:0	
606	98	151	19:48:59.000		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2937.57 +/- 1	2R3	4	0	4,499,597:03:8	
607	98	151	19:49:25.133	117GC105A106A4BV	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,597:43:0	
608	98	151	19:49:34.466	117GC105A106A4BW	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,597:57:0	
609	98	151	19:50:28.466	117GC105A106A4BX	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,598:47:0	
610	98	151	19:50:37.800	117GC105A106A4BY	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,598:61:0	
611	98	151	19:51:31.800	117GC105A106A4BZ	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,599:51:0	
612	98	151	19:51:41.133	117GC105A106A4CA	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,599:65:0	
613	98	151	19:52:35.133	117GC105A106A4CB	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,600:55:0	
614	98	151	19:52:44.466	117GC105A106A4CC	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,600:69:0	
615	98	151	19:53:38.466	117GC105A106A4CD	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,601:59:0	
616	98	151	19:53:47.800	117GC105A106A4CE	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,601:73:0	
617	98	151	19:54:41.800	117GC105A106A4CF	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,602:63:0	
618	98	151	19:54:51.133	117GC105A106A4CG	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,602:77:0	
619	98	151	19:55:45.133	117GC105A106A4CH	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,603:67:0	
620	98	151	19:55:54.466	117GC105A106A4CI	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,603:81:0	
621	98	151	19:56:48.466	117GC105A106A4CJ	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,604:71:0	
622	98	151	19:56:57.800	117GC105A106A4CK	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,604:85:0	
623	98	151	19:57:51.800	117GC105A106A4CL	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,605:75:0	
624	98	151	19:58:01.133	117GC105A106A4CM	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,605:89:0	
625	98	151	19:58:55.133	117GC105A106A4CN	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,606:79:0	
626	98	151	19:59:04.466	117GC105A106A4CO	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,607:02:0	
627	98	151	19:59:58.466	117GC105A106A4CP	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,607:83:0	
628	98	151	20:00:07.800	117GC105A106A4CQ	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,608:06:0	
629	98	151	20:01:01.800	117GC105A106A4CR	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,608:87:0	
630	98	151	20:01:11.133	117GC105A106A4CS	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,609:10:0	
631	98	151	20:01:12.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2937.57 +/- 1	2R3	4	0	4,499,609:12:0	
632	98	151	20:01:12.466	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,609:12:0	
633	98	151	20:01:13.866		DMS:	: *US_AT_SP	P7, TRACK 1, *FWD, TIC *2937.69 +/- 1	2R3	4	0	4,499,609:14:1	
634	98	151	20:01:19.133		DMS:	: *US_RD	P7, TRACK 1, *FWD, TIC *2938.92 +/- 1	2R3	4	0	4,499,609:22:0	
635	98	151	20:01:20.333		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *2938.98 +/- 1	2R3	4	0	4,499,609:23:8	
636	98	151	20:01:21.733		DMS:	: *AT_SPD	R7, TRACK 2, *REV, TIC *2938.86 +/- 1	2R3	4	0	4,499,609:25:9	
637	98	151	20:01:37.133		DMS:	: *RECORD	R7, TRACK 2, *REV, TIC *2935.25 +/- 1	2R3	4	0	4,499,609:49:0	
638	98	151	20:01:59.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,609:83:0	
639	98	151	20:01:59.800		DMS:	: *RUNDOWN	R7, TRACK 2, *REV, TIC *2929.94 +/- 1	2R3	4	0	4,499,609:83:0	
640	98	151	20:02:01.000		DMS:	: *READY	RDY, TRACK 2, *REV, TIC *2929.88 +/- 1	2R3	4	0	4,499,609:84:8	
641	98	151	20:02:05.133	117GC105A106A4CT	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,610:00:0	
642	98	151	20:02:14.466	117GC105A106A4CU	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,610:14:0	
643	98	151	20:03:08.466	117GC105A106A4CV	7STRP	0.0.0.00119.0.0,	Slew =12.01	2R3	4	0	4,499,611:04:0	
644	98	151	20:03:17.800	117GC105A106A4CW	7STRP	0.051044.0.0.0.0	Slew =12.01	2R3	4	0	4,499,611:18:0	
645	98	151	20:04:11.800	117GC105A106B4A	7STRP	0.040021.0.0.1.0,	Slew =12.01	2R3	4	0	4,499,612:08:0	
646	98	151	20:04:21.133	117GC105A106B4B	7STRP	0.0.0.0.0.0.0.0.0,	Slew =12.01	2R3	4	0	4,499,612:22:0	
647	98	151	20:05:21.800	117GC11A	CSMOS	GE	***** GROUP END CSMOS	2R3	4	0	4,499,613:22:0	
648	98	151	20:05:29.133	176GC6B	6TMREC	NRC	NO RECORD Record Mode Change	2R3	4	0	4,499,613:33:0	
649	98	151	20:05:31.133	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	4,499,613:36:0	
650	98	151	20:05:31.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2929.88 +/- 1	2R3	4	0	4,499,613:36:0	
651	98	151	20:05:32.533		DMS:	: *US_AT_SP	P7, TRACK 1, *FWD, TIC *2930.00 +/- 1	2R3	4	0	4,499,613:38:1	
652	98	151	20:05:37.800		DMS:	: *US_RD	P7, TRACK 1, *FWD, TIC *2931.23 +/- 1	2R3	4	0	4,499,613:46:0	
653	98	151	20:05:39.000		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *2931.29 +/- 1	2R3	4	0	4,499,613:47:8	
654	98	151	20:05:40.400		DMS:	: *AT_SPD	R7, TRACK 2, *REV, TIC *2931.17 +/- 1	2R3	4	0	4,499,613:49:9	
655	98	151	20:05:41.133		DMS:	: *RECORD	R7, TRACK 2, *REV, TIC *2931.00 +/- 1	2R3	4	0	4,499,613:51:0	
656	98	151	20:05:54.466	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,613:71:0	
657	98	151	20:05:54.466		DMS:	: *RUNDOWN	R7, TRACK 2, *REV, TIC *2927.88 +/- 1	2R3	4	0	4,499,613:71:0	
658	98	151	20:05:55.666		DMS:	: *READY	RDY, TRACK 2, *REV, TIC *2927.82 +/- 1	2R3	4	0	4,499,613:72:8	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
659	98	151	20:07:07.800	165IC4A	7SCAN	NORM,280.939999,	Check S/P Position	2R3	4	0	4,499,614:90:0	
660	98	151	20:09:59.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2927.82 +/- 1	2R3	4	0	4,499,617:74:0	
661	98	151	20:09:59.133	175IG422A6A	6DMSC	R806.0	DMS Control Tape runup 806.4kb	2R3	4	0	4,499,617:74:0	
662	98	151	20:10:00.533		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2927.94 +/- 1	2R3	4	0	4,499,617:76:1	
663	98	151	20:10:02.466	118IC	SMOS	GS		2R3	4	0	4,499,617:79:0	
664	98	151	20:10:05.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2929.17 +/- 1	2R3	4	0	4,499,617:84:0	
665	98	151	20:10:07.000		DMS:	: *RUNUP	R806, TRACK *2, *REV, TIC *2929.23 +/- 1	2R3	4	0	4,499,617:85:8	
666	98	151	20:10:09.133	165IC4B	7VECT		Inert vect update UTC	2R3	4	0	4,499,617:89:0	
667	98	151	20:10:11.800	175IG176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	4,499,618:02:0	
668	98	151	20:10:12.266		DMS:	: *AT_SPD	R806, TRACK 2, REV, TIC 2863.23 +/- 1	2R3	4	0	4,499,618:02:7	
669	98	151	20:10:12.266		DMS:	: *RECORD	R806, TRACK 2, REV, TIC *2863.23 +/- 1	2R3	4	0	4,499,618:02:7	
670	98	151	20:10:12.466	118IC110A111A4A	7STRP	-0.0027.0.0073.2	Slew = 3.01	2R3	4	0	4,499,618:03:0	
671	98	151	20:10:47.133	118IC110A111A4B	7STRP	0.0035.-0.029209	Slew = -6.01	2R3	4	0	4,499,618:55:0	
672	98	151	20:10:55.800	118IC110A111A4C	7STRP	-0.0027.0.0073.2	Slew = 3.01	2R3	4	0	4,499,618:68:0	
673	98	151	20:11:28.466	175IG422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,619:26:0	
674	98	151	20:11:28.466		DMS:	: *RUNDOWN	R806, TRACK 2, REV, TIC * 988.00 +/- 1	2R3	4	0	4,499,619:26:0	
675	98	151	20:11:30.466	118IC11A	SMOS	GE		2R3	4	0	4,499,619:29:0	
676	98	151	20:11:31.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC * 976.50 +/- 1	2R3	4	0	4,499,619:30:1	
677	98	151	20:13:11.800	165IS4A	7SCAN	NORM,277.803997,	Check S/P Position	2R3	4	0	4,499,620:90:0	
678	98	151	20:16:03.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 976.50 +/- 1	2R3	4	0	4,499,623:74:0	
679	98	151	20:16:03.133	175IH422A6A	6DMSC	R806.0	DMS Control Tape runup 806.4kb	2R3	4	0	4,499,623:74:0	
680	98	151	20:16:04.533		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 976.62 +/- 1	2R3	4	0	4,499,623:76:1	
681	98	151	20:16:09.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 977.85 +/- 1	2R3	4	0	4,499,623:84:0	
682	98	151	20:16:11.000		DMS:	: *RUNUP	R806, TRACK *2, *REV, TIC * 977.91 +/- 1	2R3	4	0	4,499,623:85:8	
683	98	151	20:16:13.133	165IS4B	7VECT		Inert vect update UTC	2R3	4	0	4,499,623:89:0	
684	98	151	20:16:15.800	175IH176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	4,499,624:02:0	
685	98	151	20:16:16.266		DMS:	: *AT_SPD	R806, TRACK 2, REV, TIC 911.91 +/- 2	2R3	4	0	4,499,624:02:7	
686	98	151	20:16:16.266		DMS:	: *RECORD	R806, TRACK 2, REV, TIC * 911.91 +/- 1	2R3	4	0	4,499,624:02:7	
687	98	151	20:16:40.466		DMS:	: *RUNDOWN	R806, TRACK 2, REV, TIC * 316.36 +/- 2	2R3	4	0	4,499,624:39:0	
688	98	151	20:16:40.466	175IH422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	4,499,624:39:0	
689	98	151	20:16:43.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC * 304.86 +/- 2	2R3	4	0	4,499,624:43:1	
690	98	151	20:20:10.466	465KC6A	6DTRN	CMD,6DTRN,465KC6	DMS TRACK TURNAROUND	2R3	4	0	4,499,627:81:0	
691	98	151	20:20:10.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 304.86 +/- 2	2R3	4	0	4,499,627:81:0	
692	98	151	20:20:10.466		DMS:	: *DMS-TURN	P7, TRACK 2, REV, TIC 304.86 +/- 2	2R3	4	0	4,499,627:81:0	
693	98	151	20:20:11.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 304.98 +/- 2	2R3	4	0	4,499,627:83:1	
694	98	151	20:20:17.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 306.22 +/- 2	2R3	4	0	4,499,628:00:0	
695	98	151	20:20:18.333		DMS:	: *RUNUP	P7, TRACK *2, *REV, TIC * 306.28 +/- 2	2R3	4	0	4,499,628:01:8	
696	98	151	20:20:19.733		DMS:	: *AT_SPD	P7, TRACK 2, REV, TIC * 306.16 +/- 2	2R3	4	0	4,499,628:03:9	
697	98	151	20:27:53.200		DMS:	: *REVERSE	P7, TRACK 2, REV, TIC * 199.87 +/- 2	2R3	4	0	4,499,635:47:1	
698	98	151	20:27:54.400		DMS:	: *RUNUP	P7, TRACK 3, FWD, TIC 199.81 +/- 2	2R3	4	0	4,499,635:48:9	
699	98	151	20:27:54.400		DMS:	: *TURNARND	P7, TRACK *3, *FWD, TIC * 199.81 +/- 2	2R3	4	0	4,499,635:48:9	
700	98	151	20:27:55.800		DMS:	: *AT_SPD	P7, TRACK 3, FWD, TIC * 199.93 +/-	2R3	4	0	4,499,635:51:0	
701	98	151	20:28:07.800		DMS:	: *AUTOSTOP	P7, TRACK 3, FWD, TIC * 202.06 +/-	2R3	4	0	4,499,635:69:0	
702	98	151	20:28:09.000		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 202.12 +/-	2R3	4	0	4,499,635:70:8	
703	98	151	20:33:22.463	15NNREGION01-		-----START-----		2R3	4	0	:	
704	98	151	20:35:31.133	20DE5A	37PL		Program Load (halts microprocessor & unwri	2R3	4	0	4,499,643:06:0	
705	98	151	20:35:32.466	20DE5B	37MRL		Memory Realocate (software operates from R	2R3	4	0	4,499,643:08:0	
706	98	151	20:35:33.800	20DE6A	6MCPY	NIMS	NIMS,1000,LLM1A,7300,77F7	2R3	4	0	4,499,643:10:0	
707	98	151	20:35:43.800	20DE6B	6MCPY	NIMS	NIMS,1598,LLM1A,77F8,781D	2R3	4	0	4,499,643:25:0	
708	98	151	20:35:53.800	20DE5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,499,643:40:0	
709	98	151	20:36:20.466	20DE5D	37MNM		Memory Normal (software operates from ROM)	260	4	0	4,499,643:80:0	
710	98	151	20:36:43.133	20DE4A	37IST	1.2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,499,644:23:0	
711	98	151	20:38:24.466	125DE4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R0	4	0	4,499,645:84:0	
712	98	151	20:38:24.466	125DE	NIMSINIT	GS	##### GROUP START INIT	3R0	4	0	4,499,645:84:0	
713	98	151	20:38:28.466	165ID4A	7SCAN	NORM,287.400997,	Check S/P Position	3R0	4	0	4,499,645:90:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
714	98	151	20:39:25.133	125DE11A	NIMSINIT	GE	##### GROUP END INIT	3R0	4	0	4,499,646:84:0	
715	98	151	20:39:25.133	125DE4B	37MB	0,0,0,0,0	Selects mirror (spatial) edit table	3R0	4	0	4,499,646:84:0	
716	98	151	20:41:26.466	127DE	NIMSTAB	GS	%%/% GROUP START TAB	3R0	4	0	4,499,648:84:0	
717	98	151	20:41:26.466	127DE4A	37IOP	3,0	Long Map, Grating Start Position =00	3R3	4	0	4,499,648:84:0	
718	98	151	20:41:27.133	127DE4B	37ETM	04,C4.35,FF,FF	Loads wavelength edit table	3R3	4	0	4,499,648:85:0	
719	98	151	20:41:35.133	127DE11A	NIMSTAB	GE	%%/% GROUP END TAB	3R3	4	0	4,499,649:06:0	
720	98	151	20:42:17.800		DMS:	:*E4-DELAY	RDY, TRACK *1, FWD, TIC 202.12 +/-	3R3	4	0	4,499,649:70:0	
721	98	151	20:42:17.800	175II422A6A	6DMSC	R806.3	DMS Control	3R3	4	0	4,499,649:70:0	
722	98	151	20:42:24.466		DMS:	:*RUNUP	R806, TRACK *3, FWD, TIC 202.12 +/-	3R3	4	0	4,499,649:80:0	
723	98	151	20:42:25.800	282NA431A6A	6RCSEL	DDSSCG,PLSSEL,EP	Record Select (DDS onl)	3R3	4	0	4,499,649:82:0	
724	98	151	20:42:29.133	175II176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	3R3	4	0	4,499,649:87:0	
725	98	151	20:42:29.733		DMS:	:*AT SPD	R806, TRACK 3, FWD, TIC 268.12 +/-	3R3	4	0	4,499,649:87:9	
726	98	151	20:42:29.733		DMS:	:*RECORD	R806, TRACK 3, FWD, TIC *268.12 +/-	3R3	4	0	4,499,649:87:9	
727	98	151	20:42:30.466	165ID4B	7VECT		Inert vect update UTC	3R3	4	0	4,499,649:89:0	
728	98	151	20:42:31.800	43TOA6A	6RCSEL	DDSSSEL,PLSNCG,EP	Record Select (DDS onl)	3R3	4	0	4,499,650:00:0	
729	98	151	20:42:45.133	428JA6A	6RCCLR			3R3	4	0	4,499,650:20:0	
730	98	151	20:42:45.800	428JA6B	6RCSET			3R3	4	0	4,499,650:20:0	
731	98	151	20:42:57.800	175TA422A6A	6DMSC	R7.3	DMS Control	3R3	4	0	4,499,650:39:0	
732	98	151	20:42:57.800		DMS:	:*RUNDOWN	R806, TRACK 3, FWD, TIC * 958.83 +/-	3R3	4	0	4,499,650:39:0	
733	98	151	20:43:00.533		DMS:	:*RUNUP	R7, TRACK 3, FWD, TIC * 970.33 +/-	3R3	4	0	4,499,650:43:1	
734	98	151	20:43:01.800	175TA176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCIPWS RECORD Record	3R3	4	0	4,499,650:45:2	
735	98	151	20:43:01.933		DMS:	:*AT SPD	R7, TRACK 3, FWD, TIC 970.45 +/-	3R3	4	0	4,499,650:45:2	
736	98	151	20:43:01.933		DMS:	:*RECORD	R7, TRACK 3, FWD, TIC * 970.45 +/-	3R3	4	0	4,499,650:45:2	
737	98	151	20:43:29.130	15NNREGION01-		-----STOP-----		3R3	4	0	:	
738	98	151	20:43:29.130	15ENREGION01-		-----START-----		3R3	4	0	:	
739	98	151	20:43:31.800	165DE4A	7SCAN	NORM,289.601997,	Check S/P Position	3R3	4	0	4,499,650:90:0	
740	98	151	20:43:45.133	428JB6A	6RCCLR			3R3	4	0	4,499,651:19:0	
741	98	151	20:43:45.800	428JB6B	6RCSET			3R3	4	0	4,499,651:20:0	
742	98	151	20:44:23.800	117DE	CSMOS	GS	***** GROUP START CSMOS	3R3	4	0	4,499,651:77:0	
743	98	151	20:44:24.466		DMS:	:*RUNDOWN	R7, TRACK 3, FWD, TIC * 989.79 +/-	3R3	4	0	4,499,651:78:0	
744	98	151	20:44:24.466	175DE422A6A	6DMSC	R28.3	DMS Control	3R3	4	0	4,499,651:78:0	
745	98	151	20:44:25.666		DMS:	:*RUNUP	R28, TRACK 3, FWD, TIC * 989.85 +/-	3R3	4	0	4,499,651:79:8	
746	98	151	20:44:29.666		DMS:	:*AT SPD	R28, TRACK 3, FWD, TIC 991.35 +/-	3R3	4	0	4,499,651:85:8	
747	98	151	20:44:29.666		DMS:	:*RECORD	R28, TRACK 3, FWD, TIC * 991.35 +/-	3R3	4	0	4,499,651:85:8	
748	98	151	20:44:29.800	175DE176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	3R3	4	0	4,499,651:86:0	
749	98	151	20:44:31.800	165DE4B	7VECT		Inert vect update UTC	3R3	4	0	4,499,651:89:0	
750	98	151	20:44:33.133	117DE105A106A4A	7STRP	-0.018852,0.0,0,0,	Slew =,0.03	3R3	4	0	4,499,652:00:0	
751	98	151	20:44:33.133	15ENREGION01-	NIMPBK	301DE	EUROPA REGIONAL OBSERVATION	3R3	4	0	:	
752	98	151	20:53:38.466	428JC6A	6RCCLR			3R3	4	0	4,499,660:90:0	
753	98	151	20:53:39.133	428JC6B	6RCSET			3R3	4	0	4,499,661:00:0	
754	98	151	20:54:53.133	15ENREGION01-	NIMPBK	301EE	EUROPA REGIONAL OBSERVATION	3R3	4	0	:	
755	98	151	20:55:03.800	117DE105A106A4B	7STRP	0.021003,-0.009,	Slew =12.01	3R3	4	0	4,499,662:36:0	
756	98	151	20:55:05.800	15ENREGION01-	DESEL	300DE	EUROPA REGIONAL OBSERVATION	3R3	4	0	:	
757	98	151	20:55:13.133	15ENREGION01-	DESEL	300EE	EUROPA REGIONAL OBSERVATION	3R3	4	0	:	
758	98	151	20:55:14.466	15ENREGION01-	NIMPBK	301EE	EUROPA REGIONAL OBSERVATION	3R3	4	0	:	
759	98	151	20:55:15.133	117DE105A106A4C	7STRP	-0.018852,0.0,0,0,	Slew =,0.03	3R3	4	0	4,499,662:53:0	
760	98	151	21:03:41.800	15ENREGION01-	DESEL	300EE	EUROPA REGIONAL OBSERVATION	3R3	4	0	:	
761	98	151	21:03:43.800		DMS:	:*RUNDOWN	R28, TRACK 3, FWD, TIC *2005.72 +/-	3R3	4	0	4,499,670:88:0	
762	98	151	21:03:43.800	175TB422A6A	6DMSC	R7.3	DMS Control	3R3	4	0	4,499,670:88:0	
763	98	151	21:03:45.000		DMS:	:*RUNUP	R7, TRACK 3, FWD, TIC *2006.02 +/-	3R3	4	0	4,499,670:89:8	
764	98	151	21:03:46.400		DMS:	:*AT SPD	R7, TRACK 3, FWD, TIC 2006.14 +/-	3R3	4	0	4,499,671:00:9	
765	98	151	21:03:46.400		DMS:	:*RECORD	R7, TRACK 3, FWD, TIC *2006.14 +/-	3R3	4	0	4,499,671:00:9	
766	98	151	21:03:46.466	175TB176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCIPWS RECORD Record	3R3	4	0	4,499,671:01:0	
767	98	151	21:03:52.466	428JD6A	6RCCLR			3R3	4	0	4,499,671:10:0	
768	98	151	21:03:53.133	428JD6B	6RCSET			3R3	4	0	4,499,671:11:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
769	98	151	21:04:43.130	15ENREGION01-				3R3	4	0	:	
770	98	151	21:05:45.800	117DE11A	CSMOS	GE	***** GROUP END CSMOS	3R3	4	0	:	4,499.672:89:0
771	98	151	21:05:46.466	165IE4A	7SCAN	NORM,347.582996,	Check S/P Position	3R3	4	0	:	4,499.672:90:0
772	98	151	21:06:46.466	165IE4B	7VECT		Inert vect update UTC	3R3	4	0	:	4,499.673:89:0
773	98	151	21:06:51.800	117IE	CSMOS	GS	***** GROUP START CSMOS	3R3	4	0	:	4,499.674:06:0
774	98	151	21:07:09.800	175J422A6A	6DMSC	R806.3	DMS Control	3R3	4	0	:	4,499.674:33:0
775	98	151	21:07:09.800		DMS:	: *RUNDOWN	R7, TRACK 3, FWD, TIC *2053.82 +/-	3R3	4	0	:	4,499.674:33:0
776	98	151	21:07:11.000		DMS:	: *RUNUP	R806, TRACK 3, FWD, TIC *2053.88 +/-	3R3	4	0	:	4,499.674:34:8
777	98	151	21:07:13.800	117IE105A106A4A	7STRP	-0.029008,-0.005	Slew = 3.15	3R3	4	0	:	4,499.674:39:0
778	98	151	21:07:15.800	175J176A6A	6TMREC	AIB	806.4 KBPS SSI RECORD Record Mode Change	3R3	4	0	:	4,499.674:42:0
779	98	151	21:07:16.266		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 2119.88 +/-	3R3	4	0	:	4,499.674:42:7
780	98	151	21:07:16.266		DMS:	: *RECORD	R806, TRACK 3, FWD, TIC *2119.88 +/-	3R3	4	0	:	4,499.674:42:7
781	98	151	21:07:19.800	428JE6A	6RCCLR			3R3	4	0	:	4,499.674:48:0
782	98	151	21:07:20.466	428JE6B	6RCSET			3R3	4	0	:	4,499.674:49:0
783	98	151	21:07:25.133	175TC422A6A	6DMSC	R7.3	DMS Control	3R3	4	0	:	4,499.674:56:0
784	98	151	21:07:25.133		DMS:	: *RUNDOWN	R806, TRACK 3, FWD, TIC *2338.08 +/-	3R3	4	0	:	4,499.674:56:0
785	98	151	21:07:27.866		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *2349.58 +/-	3R3	4	0	:	4,499.674:60:1
786	98	151	21:07:29.133	175TC176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SSI RECORD Record	3R3	4	0	:	4,499.674:62:0
787	98	151	21:07:29.266		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *2349.70 +/-	3R3	4	0	:	4,499.674:62:2
788	98	151	21:07:29.266		DMS:	: *RECORD	R7, TRACK 3, FWD, TIC *2349.70 +/-	3R3	4	0	:	4,499.674:62:2
789	98	151	21:07:29.800	117IE105A106B4A	7STRP	0.029509,0.01200	Slew = -4.01	3R3	4	0	:	4,499.674:63:0
790	98	151	21:07:33.133	428JF6A	6RCCLR			3R3	4	0	:	4,499.674:68:0
791	98	151	21:07:33.800	428JF6B	6RCSET			3R3	4	0	:	4,499.674:69:0
792	98	151	21:07:37.800		DMS:	: *RUNDOWN	R7, TRACK 3, FWD, TIC *2351.70 +/-	3R3	4	0	:	4,499.674:75:0
793	98	151	21:07:37.800	175IK422A6A	6DMSC	R806.3	DMS Control	3R3	4	0	:	4,499.674:75:0
794	98	151	21:07:39.000		DMS:	: *RUNUP	R806, TRACK 3, FWD, TIC *2351.76 +/-	3R3	4	0	:	4,499.674:76:8
795	98	151	21:07:41.800	117IE105A106B4B	7STRP	-0.028007,0.0,0,	Slew = 3.15	3R3	4	0	:	4,499.674:81:0
796	98	151	21:07:43.800	175IK176A6A	6TMREC	AIB	806.4 KBPS SSI RECORD Record Mode Change	3R3	4	0	:	4,499.674:84:0
797	98	151	21:07:44.266		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 2417.76 +/-	3R3	4	0	:	4,499.674:84:7
798	98	151	21:07:44.266		DMS:	: *RECORD	R806, TRACK 3, FWD, TIC *2417.76 +/-	3R3	4	0	:	4,499.674:84:7
799	98	151	21:07:47.800	428JG6A	6RCCLR			3R3	4	0	:	4,499.674:90:0
800	98	151	21:07:48.466	428JG6B	6RCSET			3R3	4	0	:	4,499.675:00:0
801	98	151	21:07:53.133		DMS:	: *RUNDOWN	R806, TRACK 3, FWD, TIC *2635.96 +/-	3R3	4	0	:	4,499.675:07:0
802	98	151	21:07:53.133	175TD422A6A	6DMSC	R7.3	DMS Control	3R3	4	0	:	4,499.675:07:0
803	98	151	21:07:55.866		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *2647.46 +/-	3R3	4	0	:	4,499.675:11:1
804	98	151	21:07:57.133	175TD176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SSI RECORD Record	3R3	4	0	:	4,499.675:13:0
805	98	151	21:07:57.266		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 2647.58 +/-	3R3	4	0	:	4,499.675:13:2
806	98	151	21:07:57.266		DMS:	: *RECORD	R7, TRACK 3, FWD, TIC *2647.58 +/-	3R3	4	0	:	4,499.675:13:2
807	98	151	21:07:57.800	117IE105A106C4A	7STRP	0.030009,0.00775	Slew = 4.01	3R3	4	0	:	4,499.675:14:0
808	98	151	21:08:01.133	428JH6A	6RCCLR			3R3	4	0	:	4,499.675:19:0
809	98	151	21:08:01.800	428JH6B	6RCSET			3R3	4	0	:	4,499.675:20:0
810	98	151	21:08:05.800		DMS:	: *RUNDOWN	R7, TRACK 3, FWD, TIC *2649.58 +/-	3R3	4	0	:	4,499.675:26:0
811	98	151	21:08:05.800	175IL422A6A	6DMSC	R806.3	DMS Control	3R3	4	0	:	4,499.675:26:0
812	98	151	21:08:07.000		DMS:	: *RUNUP	R806, TRACK 3, FWD, TIC *2649.64 +/-	3R3	4	0	:	4,499.675:27:8
813	98	151	21:08:09.800	117IE105A106C4B	7STRP	-0.027007,0.0045	Slew = 3.15	3R3	4	0	:	4,499.675:32:0
814	98	151	21:08:11.800	175IL176A6A	6TMREC	AIB	806.4 KBPS SSI RECORD Record Mode Change	3R3	4	0	:	4,499.675:35:0
815	98	151	21:08:12.266		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 2715.64 +/-	3R3	4	0	:	4,499.675:35:7
816	98	151	21:08:12.266		DMS:	: *RECORD	R806, TRACK 3, FWD, TIC *2715.64 +/-	3R3	4	0	:	4,499.675:35:7
817	98	151	21:08:15.800	428JI6A	6RCCLR			3R3	4	0	:	4,499.675:41:0
818	98	151	21:08:16.466	428JI6B	6RCSET			3R3	4	0	:	4,499.675:42:0
819	98	151	21:08:21.133	175TE422A6A	6DMSC	R7.3	DMS Control	3R3	4	0	:	4,499.675:49:0
820	98	151	21:08:21.133		DMS:	: *RUNDOWN	R806, TRACK 3, FWD, TIC *2933.85 +/-	3R3	4	0	:	4,499.675:49:0
821	98	151	21:08:23.866		DMS:	: *RUNUP	R7, TRACK 3, FWD, TIC *2945.35 +/-	3R3	4	0	:	4,499.675:53:1
822	98	151	21:08:25.133	175TE176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SSI RECORD Record	3R3	4	0	:	4,499.675:55:0
823	98	151	21:08:25.266		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 2945.47 +/-	3R3	4	0	:	4,499.675:55:2

Line	YR	DOY	SCET - GMT	PSID	Command Parameters	Description	GCM	GO	GS	RIM	MF I
824	98	151	21:08:25.266		DMS: : *RECORD	R7, TRACK 3, FWD, TIC *2945.47 +/- 1	3R3	4	0	4,499,675:55:2	
825	98	151	21:08:25.800	117IE105A106D4A	7STRP 0.030509,0.002,0	Slew = ,4.01	3R3	4	0	4,499,675:56:0	
826	98	151	21:08:29.133	428J6A	6RCCLR		3R3	4	0	4,499,675:61:0	
827	98	151	21:08:29.800	428J6B	6RCSET		3R3	4	0	4,499,675:62:0	
829	98	151	21:08:33.800	175IM422A6A	6DMSC R806.3	DMS Control	3R3	4	0	4,499,675:68:0	
830	98	151	21:08:35.000		DMS: : *RUNDOWN	R7, TRACK 3, FWD, TIC *2947.47 +/- 1	3R3	4	0	4,499,675:68:0	
831	98	151	21:08:37.800	117IE105A106D4B	7STRP -0.027007,0.0107	Slew = ,3.15	3R3	4	0	4,499,675:74:0	
832	98	151	21:08:39.800	175IM176A6A	6TMREC A18	806.4 KBPS SSI RECORD Record Mode Change	3R3	4	0	4,499,675:77:0	
833	98	151	21:08:40.266		DMS: : *RECORD	R806, TRACK 3, FWD, TIC *3013.53 +/- 1	3R3	4	0	4,499,675:77:7	
834	98	151	21:08:40.266		DMS: : *AT_SPD	R806, TRACK 3, FWD, TIC 3013.53 +/- 2	3R3	4	0	4,499,675:77:7	
835	98	151	21:08:43.800	428JK6A	6RCCLR		3R3	4	0	4,499,675:83:0	
836	98	151	21:08:44.466	428JK6B	6RCSET		3R3	4	0	4,499,675:84:0	
837	98	151	21:08:49.133		DMS: : *RUNDOWN	R806, TRACK 3, FWD, TIC *3231.73 +/- 2	3R3	4	0	4,499,676:00:0	
838	98	151	21:08:49.133	175TF422A6A	6DMSC R7.3	DMS Control	3R3	4	0	4,499,676:00:0	
839	98	151	21:08:51.866		DMS: : *RUNUP	R7, TRACK 3, FWD, TIC *3243.23 +/- 2	3R3	4	0	4,499,676:04:1	
840	98	151	21:08:53.133	175TF176A6A	6TMREC LPW	7.68 KBPS LOW RATE SSI PWS RECORD Record	3R3	4	0	4,499,676:06:0	
841	98	151	21:08:53.266		DMS: : *RECORD	R7, TRACK 3, FWD, TIC *3243.35 +/- 2	3R3	4	0	4,499,676:06:2	
842	98	151	21:08:53.266		DMS: : *AT_SPD	R7, TRACK 3, FWD, TIC 3243.35 +/- 2	3R3	4	0	4,499,676:06:2	
843	98	151	21:08:53.800	117IE11A	CSMOS GE	**** GROUP END CSMOS	3R3	4	0	4,499,676:07:0	
844	98	151	21:08:55.133	165IF4A	7SCAN NORM,346.956997,	Check S/P Position	3R3	4	0	4,499,676:09:0	
845	98	151	21:09:35.800	428JL6A	6RCCLR		3R3	4	0	4,499,676:70:0	
846	98	151	21:09:36.466	428JL6B	6RCSET		3R3	4	0	4,499,676:71:0	
847	98	151	21:09:53.800	118IF	SMOS GS		3R3	4	0	4,499,677:06:0	
848	98	151	21:10:19.800		DMS: : *RUNDOWN	R7, TRACK 3, FWD, TIC *3263.63 +/- 2	3R3	4	0	4,499,677:45:0	
849	98	151	21:10:19.800	175IN422A6A	6DMSC R806.3	DMS Control	3R3	4	0	4,499,677:45:0	
850	98	151	21:10:21.000		DMS: : *RUNUP	R806, TRACK 3, FWD, TIC *3263.69 +/- 2	3R3	4	0	4,499,677:46:8	
851	98	151	21:10:23.133	165IF4B	7VECT	Inert vect update UTC	3R3	4	0	4,499,677:50:0	
852	98	151	21:10:25.800	175IN176A6A	6TMREC IM8	806.4 KBPS IMAGE RECORD Record Mode Change	3R3	4	0	4,499,677:54:0	
853	98	151	21:10:26.266		DMS: : *RECORD	R806, TRACK 3, FWD, TIC *3329.69 +/- 2	3R3	4	0	4,499,677:54:7	
854	98	151	21:10:26.266		DMS: : *AT_SPD	R806, TRACK 3, FWD, TIC 3329.69 +/- 2	3R3	4	0	4,499,677:54:7	
855	98	151	21:10:26.466	118IF110A111A4A	7STRP -0.0072,0.0003,2	Slew = ,2.61	3R3	4	0	4,499,677:55:0	
856	98	151	21:10:37.800	428JM6A	6RCCLR		3R3	4	0	4,499,677:72:0	
857	98	151	21:10:38.466	428JM6B	6RCSET		3R3	4	0	4,499,677:73:0	
858	98	151	21:10:43.800	118IF11A	SMOS GE		3R3	4	0	4,499,677:81:0	
859	98	151	21:10:50.466		DMS: : *RUNDOWN	R806, TRACK 3, FWD, TIC *3925.24 +/- 2	3R3	4	0	4,499,678:00:0	
860	98	151	21:10:50.466	175TG422A6A	6DMSC R7.3	DMS Control	3R3	4	0	4,499,678:00:0	
861	98	151	21:10:53.200		DMS: : *RUNUP	R7, TRACK 3, FWD, TIC *3936.74 +/- 2	3R3	4	0	4,499,678:04:1	
862	98	151	21:10:54.466	175TG176A6A	6TMREC LPW	7.68 KBPS LOW RATE SSI PWS RECORD Record	3R3	4	0	4,499,678:06:0	
863	98	151	21:10:54.600		DMS: : *AT_SPD	R7, TRACK 3, FWD, TIC 3936.86 +/- 2	3R3	4	0	4,499,678:06:2	
864	98	151	21:10:54.600		DMS: : *RECORD	R7, TRACK 3, FWD, TIC *3936.86 +/- 2	3R3	4	0	4,499,678:06:2	
865	98	151	21:12:51.133	165IG4A	7SCAN NORM,34.653,11.1	Check S/P Position	3R3	4	0	4,499,679:90:0	
866	98	151	21:13:49.129	15NSUSCOMP01-	-----START-----		3R3	4	0	4,499,681:25:0	
867	98	151	21:14:09.133	428JN6A	6RCCLR		3R3	4	0	4,499,681:26:0	
868	98	151	21:14:09.800	428JN6B	6RCSET		3R3	4	0	4,499,681:26:0	
869	98	151	21:15:39.133	20DF5A	37PL	Program Load (halts microprocessor & unwri	3R3	4	0	4,499,682:89:0	
870	98	151	21:15:46.466	20DF5B	37MRL	Memory Realocate (software operates from R	3R3	4	0	4,499,682:89:0	
871	98	151	21:15:47.800	20DF6A	6MCOPY NIMS	NIMS,1000,LLM1A,7300,77F7	3R3	4	0	4,499,682:82:0	
872	98	151	21:15:57.800	20DF6B	6MCOPY NIMS	NIMS,1598,LLM1A,77F8,781D	3R3	4	0	4,499,683:06:0	
873	98	151	21:16:07.800	20DF5C	37IRT	Instrument Reset (goes into POR state)	260	4	0	4,499,683:21:0	
874	98	151	21:16:09.133	20DF5D	37MNM	Memory Normal (software operates from ROM)	260	4	0	4,499,683:23:0	
875	98	151	21:16:47.133	20DF4A	37IST 1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,499,683:80:0	
876	98	151	21:16:51.129	15NSUSCOMP01-	-----STOP-----		2R0	4	0	4,499,683:80:0	
877	98	151	21:16:58.466	118IG	SMOS GS		2R0	4	0	4,499,684:06:0	
878	98	151	21:17:24.466	175IO422A6A	6DMSC R806.3	DMS Control	2R0	4	0	4,499,684:45:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
879	98	151	21:17:24.466		DMS:	:*RUNDOWN	R7, TRACK 3, FWD, TIC *4028.23 +/- 2	2R0	4	0	4,499,684:45:0	
880	98	151	21:17:25.666		DMS:	:*RUNUP	R806, TRACK 3, FWD, TIC *4028.29 +/- 2	2R0	4	0	4,499,684:46:8	
881	98	151	21:17:27.800	165IG4B	7VECT		Inert vect update UTC	2R0	4	0	4,499,684:50:0	
882	98	151	21:17:30.466	175IO176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	2R0	4	0	4,499,684:54:0	
883	98	151	21:17:30.933		DMS:	:*AT SPD	R806, TRACK 3, FWD, TIC 4094.29 +/- 3	2R0	4	0	4,499,684:54:7	
884	98	151	21:17:30.933		DMS:	:*RECORD	R806, TRACK 3, FWD, TIC *4094.29 +/- 2	2R0	4	0	4,499,684:54:7	
885	98	151	21:17:31.133	118IG110A111A4A	7STRP	-0.0072,0.0,26.0	Slew = ,2.61	2R0	4	0	4,499,684:55:0	
886	98	151	21:17:42.466	428JO6A	6RCCLR			2R0	4	0	4,499,684:72:0	
887	98	151	21:17:43.133	428JO6B	6RCSET			2R0	4	0	4,499,684:73:0	
888	98	151	21:17:48.466	118IG11A	SMOS	GE		2R0	4	0	4,499,684:81:0	
889	98	151	21:17:51.796	15ENSUCOMP01-		-----START-----		2R0	4	0	:	
890	98	151	21:17:55.133		DMS:	:*RUNDOWN	R806, TRACK 3, FWD, TIC *4689.84 +/- 3	2R0	4	0	4,499,685:00:0	
891	98	151	21:17:55.133	175TH422A6A	6DMSC	R7,3	DMS Control	2R0	4	0	4,499,685:00:0	
892	98	151	21:17:57.800	165DF4A	7SCAN	NORM,47.707,6.73	Check S/P Position	2R0	4	0	4,499,685:04:0	
893	98	151	21:17:57.866		DMS:	:*RUNUP	R7, TRACK 3, FWD, TIC *4701.34 +/- 3	2R0	4	0	4,499,685:04:1	
894	98	151	21:17:59.133	175TH176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCIPWS RECORD Record	2R0	4	0	4,499,685:06:0	
895	98	151	21:17:59.266		DMS:	:*RECORD	R7, TRACK 3, FWD, TIC *4701.46 +/- 3	2R0	4	0	4,499,685:06:2	
896	98	151	21:17:59.266		DMS:	:*AT SPD	R7, TRACK 3, FWD, TIC 4701.46 +/- 3	2R0	4	0	4,499,685:06:2	
897	98	151	21:18:51.133	125DF	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	4,499,685:84:0	
898	98	151	21:18:51.133	125DF4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R0	4	0	4,499,685:84:0	
899	98	151	21:19:51.800	125DF11A	NIMSINIT	GE	##### GROUP END INIT	3R0	4	0	4,499,686:84:0	
900	98	151	21:19:51.800	125DF4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	3R0	4	0	4,499,686:84:0	
901	98	151	21:19:53.800	428JP6A	6RCCLR			3R0	4	0	4,499,686:87:0	
902	98	151	21:19:54.466	428JP6B	6RCSET			3R0	4	0	4,499,686:88:0	
903	98	151	21:21:48.466	117DF	CSMOS	GS	##### GROUP START CSMOS	3R0	4	0	4,499,688:77:0	
904	98	151	21:21:49.133	175DF422A6A	6DMSC	R28,3	DMS Control	3R0	4	0	4,499,688:78:0	
905	98	151	21:21:49.133		DMS:	:*RUNDOWN	R7, TRACK 3, FWD, TIC *4755.33 +/- 3	3R0	4	0	4,499,688:78:0	
906	98	151	21:21:50.333		DMS:	:*RUNUP	R28, TRACK 3, FWD, TIC *4755.39 +/- 3	3R0	4	0	4,499,688:79:8	
907	98	151	21:21:53.133	127DF	NIMSTAB	GS	##### GROUP START TAB	3R0	4	0	4,499,688:84:0	
908	98	151	21:21:53.133	127DF4A	37IOP	3,0	Long Map, Grating Start Position =00	3R3	4	0	4,499,688:84:0	
909	98	151	21:21:53.800	33B4A	37IOP	4,0	Long Spectrometer, Grating Start Position	3R4	4	0	4,499,688:85:0	
910	98	151	21:21:53.800	127DF4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	3R4	4	0	4,499,688:85:0	
911	98	151	21:21:54.333		DMS:	:*RECORD	R28, TRACK 3, FWD, TIC 4756.89 +/- 3	3R4	4	0	4,499,688:85:8	
912	98	151	21:21:54.333		DMS:	:*AT SPD	R28, TRACK 3, FWD, TIC 4756.89 +/- 3	3R4	4	0	4,499,688:85:8	
913	98	151	21:21:54.466	175DF176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	3R4	4	0	4,499,688:86:0	
914	98	151	21:21:56.466	165DF4B	7VECT		Inert vect update UTC	3R4	4	0	4,499,688:89:0	
915	98	151	21:21:57.800	15ENSUCOMP01-	NIMPBK	301DF	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
916	98	151	21:21:57.800	117DF105A106A4A	7STRP	-0.034514,0.0,0.0,	Slew =,0.03	3R4	4	0	4,499,689:00:0	
917	98	151	21:22:01.800	127DF11A	NIMSTAB	GE	##### GROUP END TAB	3R4	4	0	4,499,689:06:0	
918	98	151	21:22:12.466	15ENSUCOMP01-	NIMPBK	301DA	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
919	98	151	21:22:21.800	15ENSUCOMP01-	DESELC	300DA	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
920	98	151	21:24:22.466	15ENSUCOMP01-	NIMPBK	301DB	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
921	98	151	21:24:45.133	15ENSUCOMP01-	DESELC	300DB	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
922	98	151	21:30:02.466	428JQ6A	6RCCLR			3R4	4	0	4,499,696:90:0	
923	98	151	21:30:03.133	428JQ6B	6RCSET			3R4	4	0	4,499,697:00:0	
924	98	151	21:31:29.800	15ENSUCOMP01-	NIMPBK	301EF	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
925	98	151	21:31:32.466	15ENSUCOMP01-	DESELC	300DF	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
926	98	151	21:41:04.466	15ENSUCOMP01-	DESELC	300EF	EUROPA CLIX REGION OBSERVATION	3R4	4	0	:	
927	98	151	21:41:10.466	117DF11A	CSMOS	GE	##### GROUP END CSMOS	3R4	4	0	4,499,708:00:0	
928	98	151	21:41:10.466		DMS:	:*RUNDOWN	R28, TRACK 3, FWD, TIC *5773.03 +/- 3	3R4	4	0	4,499,708:00:0	
929	98	151	21:41:10.466	175TI422A6A	6DMSC	R7,3	DMS Control	3R4	4	0	4,499,708:00:0	
930	98	151	21:41:11.666		DMS:	:*RUNUP	R7, TRACK 3, FWD, TIC *5773.33 +/- 3	3R4	4	0	4,499,708:01:8	
931	98	151	21:41:13.066		DMS:	:*RECORD	R7, TRACK 3, FWD, TIC *5773.45 +/- 3	3R4	4	0	4,499,708:03:9	
932	98	151	21:41:13.066		DMS:	:*AT SPD	R7, TRACK 3, FWD, TIC *5773.45 +/- 3	3R4	4	0	4,499,708:03:9	
933	98	151	21:41:13.133	175TI176A6A	6TMREC	LPW	7.68 KBPS LOW RATE SCIPWS RECORD Record	3R4	4	0	4,499,708:04:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
934	98	151	21:42:07.796	15NNSUCOMP02-	6RCCLR	-----START-----	Record Deselect (DDS o	3R4	4	0	:	:
935	98	151	21:42:07.796	15ENSUCOMP01-	6RCDL	-----STOP-----	R/T Select of DDS and	3R4	4	0	:	:
936	98	151	21:42:11.133	428JR6A	6RCDL		R/T Select of DDS and	3R4	4	0	:	:
937	98	151	21:43:09.800	432MA431A6A	6RCDL		R/T Select of DDS and	3R4	4	0	:	:
938	98	151	21:43:10.466	432MA6A	6RCDL		R/T Select of DDS and	3R4	4	0	:	:
939	98	151	21:43:13.800	175T1422A6B	6DMSC		R/T Select of DDS and	3R4	4	0	:	:
940	98	151	21:43:13.800	432OA431A6A	6RCDL		R/T Select of DDS and	3R4	4	0	:	:
941	98	151	21:43:13.800		DMS: *	RUNDOWN	R7, TRACK 3, FWD, TIC *5801.74 +/- 3	3R4	4	0	:	:
942	98	151	21:43:14.466	432OA6A	6RTSL1		R/T Select of DDS and	3R4	4	0	:	:
943	98	151	21:43:15.000		DMS: *	READY	R7, TRACK 3, FWD, TIC *5801.80 +/- 3	3R4	4	0	:	:
944	98	151	21:43:17.800	282NB431A6A	6RCDL		R/T Select of DDS and	3R4	4	0	:	:
945	98	151	21:43:17.800	20DG5A	37PL		Program Load (halts microprocessor & unwr	3R4	4	0	:	:
946	98	151	21:44:05.133	20DG5B	37MRL		Memory Realocate (software operates from R	3R4	4	0	:	:
947	98	151	21:44:06.466	20DG6A	6MCPY	NIMS	NIMS,1000,LLM1A,7300,77F7	3R4	4	0	:	:
948	98	151	21:44:06.466	282NB432A431A6A	6RCDL		R/T Select of DDS and	3R4	4	0	:	:
949	98	151	21:44:07.133	282NB432A6A	6RTSL1		R/T Select of DDS and	3R4	4	0	:	:
950	98	151	21:44:16.466	20DG6B	6MCPY	NIMS	NIMS,1598,LLM1A,77F8,781D	3R4	4	0	:	:
951	98	151	21:44:26.466	20DG5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	:	:
952	98	151	21:44:27.800	20DG5D	37MN		Memory Normal (software operates from ROM)	260	4	0	:	:
953	98	151	21:45:05.800	20DG4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	:	:
954	98	151	21:46:10.462	15ENSUCOMP02-		-----START-----		2R0	4	0	:	:
955	98	151	21:46:10.462	15NNSUCOMP02-		-----STOP-----		2R0	4	0	:	:
956	98	151	21:46:13.133	165DG4A	7SCAN	NORM,78.801,24.5	Check S/P Position	2R0	4	0	:	:
957	98	151	21:46:13.800	465KD6A	6DMSC	RDY,4	DMS Control Tape stop	2R0	4	0	:	:
958	98	151	21:46:13.800		DMS: *	READY	RDY, TRACK *4, *REV, TIC 5801.80 +/- 3	2R0	4	0	:	:
959	98	151	21:47:09.800	125DG4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R0	4	0	:	:
960	98	151	21:47:09.800	125DG	NIMSINIT	GS	##### GROUP START INIT	3R0	4	0	:	:
961	98	151	21:48:10.466	125DG11A	NIMSINIT	GE	##### GROUP END INIT	3R0	4	0	:	:
962	98	151	21:48:10.466	125DG4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	3R0	4	0	:	:
963	98	151	21:50:01.800		DMS: *	US-RUNUP	P7, TRACK *1, *FWD, TIC 5801.80 +/- 3	3R0	4	0	:	:
964	98	151	21:50:01.800	175DG422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R0	4	0	:	:
965	98	151	21:50:03.200		DMS: *	US_AT_SP	P7, TRACK 1, FWD, TIC *5801.92 +/- 3	3R0	4	0	:	:
966	98	151	21:50:07.133	117DG	CSMOS	GS	***** GROUP START CSMOS	3R0	4	0	:	:
967	98	151	21:50:08.466		DMS: *	US_RD	P7, TRACK 1, FWD, TIC *5803.16 +/- 3	3R0	4	0	:	:
968	98	151	21:50:09.666		DMS: *	RUNUP	R28, TRACK *4, *REV, TIC *5803.22 +/- 3	3R0	4	0	:	:
969	98	151	21:50:11.800	127DG4A	37IOP	3,0	Long Map, Grating Start Position =00	3R3	4	0	:	:
970	98	151	21:50:11.800	127DG	NIMSTAB	GS	%%%% GROUP START TAB	3R3	4	0	:	:
971	98	151	21:50:12.466	127DG4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	3R3	4	0	:	:
972	98	151	21:50:13.133	175DG176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	3R3	4	0	:	:
973	98	151	21:50:13.666		DMS: *	AT_SPD	R28, TRACK 4, REV, TIC 5801.72 +/- 3	3R3	4	0	:	:
974	98	151	21:50:13.666		DMS: *	RECORD	R28, TRACK 4, REV, TIC *5801.72 +/- 3	3R3	4	0	:	:
975	98	151	21:50:15.133	165DG4B	7VECT		Inert vect update UTC	3R3	4	0	:	:
976	98	151	21:50:16.466	117DG105A106A4A	7STRP	0,018502,0,0,0,0	Slew =,0.03	3R3	4	0	:	:
977	98	151	21:50:16.466	15ENSUCOMP02-	NIMPBK	301DG	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
978	98	151	21:50:20.466	127DG11A	NIMSTAB	GE	%%%% GROUP END TAB	3R3	4	0	:	:
979	98	151	21:53:15.800	15ENSUCOMP02-	NIMPBK	301DC	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
980	98	151	21:53:46.466	15ENSUCOMP02-	DESELC	300DC	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
981	98	151	21:58:27.800	15ENSUCOMP02-	NIMPBK	301DI	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
982	98	151	21:58:35.133	15ENSUCOMP02-	DESELC	300DI	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
983	98	151	21:58:45.133	15ENSUCOMP02-	NIMPBK	301DQ	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
984	98	151	21:59:00.466	15ENSUCOMP02-	DESELC	300DQ	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
985	98	151	21:59:59.800	481UA4A	7VECT	BB2	Inert vect update UTC	3R3	4	0	:	:
986	98	151	22:00:23.133	15ENSUCOMP02-	NIMPBK	301DG	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
987	98	151	22:00:30.133	15ENSUCOMP02-	NIMPBK	301FB	EUROPA ROUGH TERRAIN	3R3	4	0	:	:
988	98	151	22:00:31.800	15ENSUCOMP02-	DESELC	300DG	EUROPA ROUGH TERRAIN	3R3	4	0	:	:

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
989	98	151	22:00:37.800	117DG105A106A4B	7STRP	-0.018502,0.007,	Slew =12.01	3R3	4	0	4,499,727:22:0	
990	98	151	22:00:48.466	117DG105A106A4C	7STRP	0.018502,0.0,0.0	Slew =0.03	3R3	4	0	4,499,727:38:0	
991	98	151	22:00:57.800	15ENSUCOMP02-	NIMPBK	301EG	EUROPA ROUGH TERRAIN	3R3	4	0	:	
992	98	151	22:01:07.000	15ENSUCOMP02-	DESELC	300FB	EUROPA ROUGH TERRAIN	3R3	4	0	:	
993	98	151	22:01:09.800	15ENSUCOMP02-	DESELC	300DG	EUROPA ROUGH TERRAIN	3R3	4	0	:	
994	98	151	22:02:33.133	15ENSUCOMP02-	NIMPBK	301ES	EUROPA ROUGH TERRAIN	3R3	4	0	:	
995	98	151	22:05:17.800	15ENSUCOMP02-	DESELC	300ES	EUROPA ROUGH TERRAIN	3R3	4	0	:	
996	98	151	22:07:48.000	15ENSUCOMP02-	NIMPBK	301FC	EUROPA ROUGH TERRAIN	3R3	4	0	:	
997	98	151	22:07:59.133	15ENSUCOMP02-	DESELC	300EG	EUROPA ROUGH TERRAIN	3R3	4	0	:	
998	98	151	22:07:59.133	15ENSUCOMP02-	NIMPBK	301EQ	EUROPA ROUGH TERRAIN	3R3	4	0	:	
999	98	151	22:08:18.000	15ENSUCOMP02-	DESELC	300FC	EUROPA ROUGH TERRAIN	3R3	4	0	:	
1000	98	151	22:09:26.466	15ENSUCOMP02-	DESELC	300EQ	EUROPA ROUGH TERRAIN	3R3	4	0	:	
1001	98	151	22:09:27.133		DMS:	:::RUNDOWN	R28, TRACK 4, REV, TIC *4787.93 +/- 3	3R3	4	0	4,499,735:88:0	
1002	98	151	22:09:27.133	175DG422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,735:88:0	
1003	98	151	22:09:28.333		DMS:	:::READY	RDY, TRACK 4, REV, TIC *4787.63 +/- 3	3R3	4	0	4,499,735:89:8	
1004	98	151	22:11:09.800	117DG11A	CSMOS	GE	**** GROUP END CSMOS	3R3	4	0	4,499,737:60:0	
1005	98	151	22:11:27.129	15NNSUCOMP03-			*****START*****	3R3	4	0	:	
1006	98	151	22:11:27.129	15ENSUCOMP02-			*****STOP*****	3R3	4	0	:	
1007	98	151	22:13:31.133	165IH4A	7SCAN	NORM,82.304999,2	Check S/P Position	3R3	4	0	4,499,739:90:0	
1008	98	151	22:14:17.800	20DH5A	37PL		Program Load (halts microprocessor & unwri	3R3	4	0	4,499,740:69:0	
1009	98	151	22:14:25.133	20DH5B	37MRL		Memory Realocate (software operates from R	3R3	4	0	4,499,740:80:0	
1010	98	151	22:14:26.466	20DH6A	6MCOPY	NIMS	NIMS,1000,LLM1A,7300,77F7	3R3	4	0	4,499,740:82:0	
1011	98	151	22:14:36.466	20DH6B	6MCOPY	NIMS	NIMS,1598,LLM1A,77F8,781D	3R3	4	0	4,499,741:06:0	
1012	98	151	22:14:46.466	20DH5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,499,741:21:0	
1013	98	151	22:14:47.800	20DH5D	37MIN		Memory Normal (software operates from ROM)	260	4	0	4,499,741:23:0	
1014	98	151	22:15:21.800		DMS:	:::US-RUNUP	P7, TRACK *, FWD, TIC 4787.63 +/- 3	260	4	0	4,499,741:74:0	
1015	98	151	22:15:21.800	175IP422A6A	6DMSC	R806,0	DMS Control Tape runup 806.4kb	260	4	0	4,499,741:74:0	
1016	98	151	22:15:23.200		DMS:	:::US_AT_SP	P7, TRACK 1, FWD, TIC *4787.75 +/- 3	260	4	0	4,499,741:76:1	
1017	98	151	22:15:25.133	118IH	SMOS	GS		260	4	0	4,499,741:79:0	
1018	98	151	22:15:29.800	20DH4A	37IST	1.2,OFF,0.0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,499,741:80:0	
1019	98	151	22:15:28.466		DMS:	:::US_RD	P7, TRACK 1, FWD, TIC *4788.98 +/- 3	2R0	4	0	4,499,741:84:0	
1020	98	151	22:15:29.666		DMS:	:::RUNUP	R806, TRACK *, *REV, TIC *4789.04 +/- 3	2R0	4	0	4,499,741:85:8	
1021	98	151	22:15:31.800	165IH4B	7VECT		Inert vect update UTC	2R0	4	0	4,499,741:89:0	
1022	98	151	22:15:34.466	175IP176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	2R0	4	0	4,499,742:02:0	
1023	98	151	22:15:34.933		DMS:	:::AT_SPD	R806, TRACK 4, REV, TIC 4723.04 +/- 3	2R0	4	0	4,499,742:02:7	
1024	98	151	22:15:34.933		DMS:	:::RECORD	R806, TRACK 4, REV, TIC *4723.04 +/- 3	2R0	4	0	4,499,742:02:7	
1025	98	151	22:15:35.133	118IH10A11A4A	7STRP	-0.0073,0.0,26.0	Slew = 3.01	2R0	4	0	4,499,742:03:0	
1026	98	151	22:15:43.800	118IH10A11A4B	7STRP	0.0071,-0.0073,0	Slew = 3.01	2R0	4	0	4,499,742:16:0	
1027	98	151	22:15:52.466	118IH10A11A4C	7STRP	-0.0073,0.0,26.0	Slew = 3.01	2R0	4	0	4,499,742:29:0	
1028	98	151	22:16:01.133	118IH10A11B4A	7STRP	0.0073,-0.0073,0	Slew = 3.01	2R0	4	0	4,499,742:42:0	
1029	98	151	22:16:09.800	118IH10A11B4B	7STRP	-0.0073,0.0,26.0	Slew = 3.01	2R0	4	0	4,499,742:55:0	
1030	98	151	22:16:18.466	118IH10A11B4C	7STRP	0.0073,-0.0073,0	Slew = 3.01	2R0	4	0	4,499,742:68:0	
1031	98	151	22:16:27.133	118IH10A11B4D	7STRP	-0.0073,0.0,26.0	Slew = 3.01	2R0	4	0	4,499,742:81:0	
1032	98	151	22:16:29.133	125DH	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	4,499,742:84:0	
1033	98	151	22:16:29.133	125DH4A	37IST	0.2,OFF,0.1,1	Gain State 4	4R0	4	0	4,499,742:84:0	
1034	98	151	22:16:30.462	15ENSUCOMP03-			*****START*****	4R0	4	0	:	
1035	98	151	22:16:30.462	15NNSUCOMP03-			*****STOP*****	4R0	4	0	:	
1036	98	151	22:16:35.800	118IH10A11C4A	7STRP	0.0076,-0.0073,0	Slew = 3.01	4R0	4	0	4,499,743:03:0	
1037	98	151	22:16:44.466	118IH10A11C4B	7STRP	-0.0073,0.0,26.0	Slew = 3.01	4R0	4	0	4,499,743:16:0	
1038	98	151	22:16:53.133	118IH10A11D4A	7STRP	0.0078,-0.0073,0	Slew = 3.01	4R0	4	0	4,499,743:29:0	
1039	98	151	22:17:01.800	118IH10A11D4B	7STRP	-0.0073,0.0,26.0	Slew = 3.01	4R0	4	0	4,499,743:42:0	
1040	98	151	22:17:10.466	118IH10A11E4A	7STRP	0.0092,-0.0071,0	Slew = 3.01	4R0	4	0	4,499,743:55:0	
1041	98	151	22:17:19.133	118IH10A11E4B	7STRP	-0.0073,0.0,26.0	Slew = 3.01	4R0	4	0	4,499,743:68:0	
1042	98	151	22:17:27.800	118IH10A11F4A	7STRP	0.0084,-0.0073,0	Slew = 3.01	4R0	4	0	4,499,743:81:0	
1043	98	151	22:17:29.800	125DH4B	37MB	0.0,0.0,0.0	Selects mirror (spatial) edit table	4R0	4	0	4,499,743:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I	
1044	98	151	22:17:29.800	125DH11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,499,743:84:0		
1045	98	151	22:17:36.466	118IH10A111F4B	7STRP	-0.0073,0.0,26.0	Slew = 3.01	4R0	4	0	4,499,744:03:0		
1046	98	151	22:17:45.133	118IH11A	SMOS	GE		4R0	4	0	4,499,744:16:0		
1047	98	151	22:17:45.133	116IH4A	7STRP	0.0091,-0.0071,0	Slew = 0.5,0	4R0	4	0	4,499,744:16:0		
1048	98	151	22:17:53.800	116IT4A	7STRP	-0.017502,0.0200	Slew = 6.01	4R0	4	0	4,499,744:29:0		
1049	98	151	22:18:08.466	175IP422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R0	4	0	4,499,744:51:0		
1050	98	151	22:18:08.466		DMS:	: *RUNDOWN	R806, TRACK 4, REV, TIC * 933.18 +/- 3	4R0	4	0	4,499,744:51:0		
1051	98	151	22:18:11.200		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 933.18 +/- 3	4R0	4	0	4,499,744:55:1		
1052	98	151	22:18:34.466	165DH4A	7SCAN	NORM,84.143,23.3	Check S/P Position	4R0	4	0	4,499,744:90:0		
1053	98	151	22:19:31.133	127DH4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	4,499,745:84:0		
1054	98	151	22:19:31.133	127DH	NIMSTAB	GS	%%%% GROUP START TAB	4R3	4	0	4,499,745:84:0		
1055	98	151	22:19:31.800	127DH4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	4,499,745:85:0		
1056	98	151	22:19:39.800	127DH11A	NIMSTAB	GE	%%%% GROUP END TAB	4R3	4	0	4,499,746:06:0		
1057	98	151	22:22:23.133	175DH422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R3	4	0	4,499,748:69:0		
1058	98	151	22:22:23.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 933.18 +/- 3	4R3	4	0	4,499,748:69:0		
1059	98	151	22:22:24.533	117DH	DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 933.30 +/- 3	4R3	4	0	4,499,748:71:1		
1060	98	151	22:22:28.466		CSMOS	GS	**** GROUP START CSMOS	4R3	4	0	4,499,748:77:0		
1061	98	151	22:22:29.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 934.54 +/- 3	4R3	4	0	4,499,748:79:0		
1062	98	151	22:22:31.000		DMS:	: *RUNUP	R28, TRACK *, *REV, TIC * 934.60 +/- 3	4R3	4	0	4,499,748:80:8		
1063	98	151	22:22:34.466	175DH176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	4,499,748:86:0		
1064	98	151	22:22:35.000		DMS:	: *AT_SPD	R28, TRACK 4, REV, TIC 933.10 +/- 3	4R3	4	0	4,499,748:86:8		
1065	98	151	22:22:35.000		DMS:	: *RECORD	R28, TRACK 4, REV, TIC * 933.10 +/- 3	4R3	4	0	4,499,748:86:8		
1066	98	151	22:22:36.466	165DH4B	7VECT		Inert vect update UTC	4R3	4	0	4,499,748:89:0		
1067	98	151	22:22:37.800	15ENSUCOMP03-	NIMPBK	301EH	EUROPA SURFACE TRANSECT	4R3	4	0	0	0	0
1068	98	151	22:22:37.800	117DH105A106A4A	7STRP	-0.018102,0.0,0.0,	Slew = 0.03	4R3	4	0	4,499,749:00:0		
1069	98	151	22:22:37.800	15ENSUCOMP03-	NIMPBK	301DH	EUROPA SURFACE TRANSECT	4R3	4	0	0	0	0
1070	98	151	22:26:53.133	15ENSUCOMP03-	NIMPBK	301EH	EUROPA SURFACE TRANSECT	4R3	4	0	0	0	0
1071	98	151	22:27:01.800	15ENSUCOMP03-	DESEL	300DH	EUROPA SURFACE TRANSECT	4R3	4	0	0	0	0
1072	98	151	22:27:36.466	125FH	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,499,753:84:0		
1073	98	151	22:27:36.466	125FH11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,499,753:84:0		
1074	98	151	22:27:36.466	125FH4A	37SIT	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,499,753:84:0		
1075	98	151	22:32:35.800	15ENSUCOMP03-	DESEL	300EH	EUROPA SURFACE TRANSECT	3R3	4	0	0	0	0
1076	98	151	22:32:35.800	15ENSUCOMP03-	DESEL	300EH	EUROPA SURFACE TRANSECT	3R3	4	0	0	0	0
1077	98	151	22:32:44.466	117DH11A	CSMOS	GE	**** GROUP END CSMOS	3R3	4	0	4,499,759:00:0		
1078	98	151	22:32:45.133	175DH422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,759:01:0		
1079	98	151	22:32:45.133		DMS:	: *RUNDOWN	R28, TRACK 4, REV, TIC * 396.85 +/- 3	3R3	4	0	4,499,759:01:0		
1080	98	151	22:32:46.333		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 396.55 +/- 3	3R3	4	0	4,499,759:02:8		
1081	98	151	22:32:48.466	444UB443A4A	7MODE	CRU	AACS CRUISE MODE	3R3	4	0	4,499,759:06:0		
1082	98	151	22:33:41.796	15ENSUCOMP03-		----	STOP	3R3	4	0	0	0	0
1083	98	151	22:39:48.466	165GD4A	7SCAN	NORM,84.412999,2	Check S/P Position	3R3	4	0	4,499,765:90:0		
1084	98	151	22:39:49.133	176GD6A	6TMREC	BPT	7.68 KBPS PPR BURST TO TAPE Record Mode C	3R3	4	0	4,499,766:00:0		
1085	98	151	22:40:40.466	117GD	CSMOS	GS	**** GROUP START CSMOS	3R3	4	0	4,499,766:77:0		
1086	98	151	22:40:48.466	165GD4B	7VECT		Inert vect update UTC	3R3	4	0	4,499,766:89:0		
1087	98	151	22:40:49.800	117GD105A106A4A	7STRP	0.043027,0.0,0.0	Slew = 0.61	3R3	4	0	4,499,767:00:0		
1088	98	151	22:42:03.133	117GD105A106A4B	7STRP	0.00006,0.0011,0	Slew = 12.01	3R3	4	0	4,499,768:19:0		
1089	98	151	22:42:12.466	117GD105A106A4C	7STRP	0.043027,0.0,0.0	Slew = 0.61	3R3	4	0	4,499,768:33:0		
1090	98	151	22:43:25.800	117GD105A106A4D	7STRP	0.00006,0.0011,0	Slew = 12.01	3R3	4	0	4,499,769:52:0		
1091	98	151	22:43:35.133	117GD105A106A4E	7STRP	0.043027,0.0,0.0	Slew = 0.61	3R3	4	0	4,499,769:66:0		
1092	98	151	22:44:48.466	117GD105A106A4F	7STRP	0.00006,0.0011,0	Slew = 12.01	3R3	4	0	4,499,770:85:0		
1093	98	151	22:44:57.800	117GD105A106A4G	7STRP	0.043027,0.0,0.0	Slew = 0.61	3R3	4	0	4,499,771:08:0		
1094	98	151	22:46:11.133	117GD105A106A4H	7STRP	0.00006,0.0011,0	Slew = 12.01	3R3	4	0	4,499,772:27:0		
1095	98	151	22:46:20.466	117GD105A106A4I	7STRP	0.043027,0.0,0.0	Slew = 0.61	3R3	4	0	4,499,772:41:0		
1096	98	151	22:47:33.800	117GD105A106A4J	7STRP	0.00006,0.0011,0	Slew = 12.01	3R3	4	0	4,499,773:60:0		
1097	98	151	22:47:43.133	117GD105A106A4K	7STRP	0.043027,0.0,0.0	Slew = 0.61	3R3	4	0	4,499,773:74:0		
1098	98	151	22:48:56.466	117GD105A106A4L	7STRP	0.00006,0.0011,0	Slew = 12.01	3R3	4	0	4,499,775:02:0		

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1099	98	151	22:49:05.800	117GD105A106A4M	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,775.16:0	
1100	98	151	22:50:19.133	117GD105A106A4N	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,776.35:0	
1101	98	151	22:50:28.466	117GD105A106A4O	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,776.49:0	
1102	98	151	22:51:41.800	117GD105A106A4P	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,777.68:0	
1103	98	151	22:51:51.133	117GD105A106A4Q	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,777.82:0	
1104	98	151	22:52:23.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 396.55 +/- 3	3R3	4	0	4,499,778.40:0	
1105	98	151	22:52:23.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,778.40:0	
1106	98	151	22:52:25.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 396.67 +/- 3	3R3	4	0	4,499,778.42:1	
1107	98	151	22:52:30.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 397.90 +/- 3	3R3	4	0	4,499,778.50:0	
1108	98	151	22:52:31.666		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 397.96 +/- 3	3R3	4	0	4,499,778.51:8	
1109	98	151	22:52:33.066		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 397.84 +/- 3	3R3	4	0	4,499,778.53:9	
1110	98	151	22:52:49.133		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 394.08 +/- 3	3R3	4	0	4,499,778.78:0	
1111	98	151	22:53:04.466	117GD105A106A4R	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,779.10:0	
1112	98	151	22:53:11.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 388.76 +/- 3	3R3	4	0	4,499,779.21:0	
1113	98	151	22:53:11.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,779.21:0	
1114	98	151	22:53:13.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 388.70 +/- 3	3R3	4	0	4,499,779.22:8	
1115	98	151	22:53:13.800	117GD105A106A4S	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,779.24:0	
1116	98	151	22:54:27.133	117GD105A106A4T	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,780.43:0	
1117	98	151	22:54:36.466	117GD105A106A4U	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,780.57:0	
1118	98	151	22:55:49.800	117GD105A106A4V	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,781.76:0	
1119	98	151	22:55:59.133	117GD105A106A4W	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,781.90:0	
1120	98	151	22:57:12.466	117GD105A106A4X	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,783.18:0	
1121	98	151	22:57:21.800	117GD105A106A4Y	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,783.32:0	
1122	98	151	22:58:35.133	117GD105A106A4Z	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,784.51:0	
1123	98	151	22:58:44.466	117GD105A106A4AA	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,784.65:0	
1124	98	151	22:59:57.800	117GD105A106A4AB	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,785.84:0	
1125	98	151	23:00:07.133	117GD105A106A4AC	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,786.07:0	
1126	98	151	23:01:20.466	117GD105A106A4AD	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,787.26:0	
1127	98	151	23:01:29.800	117GD105A106A4AE	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,787.40:0	
1128	98	151	23:02:43.133	117GD105A106A4AF	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,788.59:0	
1129	98	151	23:02:52.466	117GD105A106A4AG	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,788.73:0	
1130	98	151	23:04:05.800	117GD105A106A4AH	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,790.01:0	
1131	98	151	23:04:15.133	117GD105A106A4AI	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,790.15:0	
1132	98	151	23:05:25.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,791.30:0	
1133	98	151	23:05:27.200		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 388.70 +/- 3	3R3	4	0	4,499,791.30:0	
1134	98	151	23:05:27.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 388.82 +/- 3	3R3	4	0	4,499,791.32:1	
1135	98	151	23:05:28.466	117GD105A106A4AJ	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,791.34:0	
1136	98	151	23:05:32.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 390.06 +/- 3	3R3	4	0	4,499,791.40:0	
1137	98	151	23:05:33.666		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 390.12 +/- 3	3R3	4	0	4,499,791.41:8	
1138	98	151	23:05:35.066		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 390.00 +/- 3	3R3	4	0	4,499,791.43:9	
1139	98	151	23:05:37.800	117GD105A106A4AK	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,791.48:0	
1140	98	151	23:05:51.133		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 386.23 +/- 3	3R3	4	0	4,499,791.68:0	
1141	98	151	23:06:13.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 380.92 +/- 3	3R3	4	0	4,499,792.11:0	
1142	98	151	23:06:13.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,792.11:0	
1143	98	151	23:06:15.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 380.86 +/- 3	3R3	4	0	4,499,792.12:8	
1144	98	151	23:06:51.133	117GD105A106A4AL	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,792.67:0	
1145	98	151	23:07:00.466	117GD105A106A4AM	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,792.81:0	
1146	98	151	23:08:13.800	117GD105A106A4AN	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,794.09:0	
1147	98	151	23:08:23.133	117GD105A106A4AO	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,794.23:0	
1148	98	151	23:09:36.466	117GD105A106A4AP	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,795.42:0	
1149	98	151	23:09:45.800	117GD105A106A4AQ	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,795.56:0	
1150	98	151	23:10:59.133	117GD105A106A4AR	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,796.75:0	
1151	98	151	23:11:08.466	117GD105A106A4AS	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,796.89:0	
1152	98	151	23:12:21.800	117GD105A106A4AT	7STRP	0.00006.0.0011.0	Slew = 12.01	3R3	4	0	4,499,798.17:0	
1153	98	151	23:12:31.133	117GD105A106A4AU	7STRP	0.043027.0.0.0	Slew = 0.61	3R3	4	0	4,499,798.31:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1154	98	151	23:13:44.466	117GD105A106A4AV	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,799:50:0	
1155	98	151	23:13:53.800	117GD105A106A4AW	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,799:64:0	
1156	98	151	23:15:07.133	117GD105A106A4AX	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,800:83:0	
1157	98	151	23:15:16.466	117GD105A106A4AY	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,801:06:0	
1158	98	151	23:16:29.800	117GD105A106A4AZ	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,802:25:0	
1159	98	151	23:16:39.133	117GD105A106A4BA	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,802:39:0	
1160	98	151	23:17:52.466	117GD105A106A4BB	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,803:58:0	
1161	98	151	23:18:01.800	117GD105A106A4BC	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,803:72:0	
1162	98	151	23:18:27.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 380.86 +/- 3	3R3	4	0	4,499,804:20:0	
1163	98	151	23:18:27.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,804:20:0	
1164	98	151	23:18:29.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 380.98 +/- 3	3R3	4	0	4,499,804:22:1	
1165	98	151	23:18:34.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 382.22 +/- 3	3R3	4	0	4,499,804:30:0	
1166	98	151	23:18:35.666		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 382.28 +/- 3	3R3	4	0	4,499,804:31:8	
1167	98	151	23:18:37.066		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 382.16 +/- 3	3R3	4	0	4,499,804:33:9	
1168	98	151	23:18:53.133		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 378.39 +/- 3	3R3	4	0	4,499,804:58:0	
1169	98	151	23:19:15.133	117GD105A106A4BD	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,805:00:0	
1170	98	151	23:19:15.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 373.08 +/- 3	3R3	4	0	4,499,805:01:0	
1171	98	151	23:19:15.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,805:01:0	
1172	98	151	23:19:17.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 373.02 +/- 3	3R3	4	0	4,499,805:02:8	
1173	98	151	23:19:24.466	117GD105A106A4BE	7STRP	0.043027,0.0,0.0	Slew =12.01	3R3	4	0	4,499,805:14:0	
1174	98	151	23:20:37.800	117GD105A106A4BF	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,806:33:0	
1175	98	151	23:20:47.133	117GD105A106A4BG	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,806:47:0	
1176	98	151	23:22:00.466	117GD105A106A4BH	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,807:66:0	
1177	98	151	23:22:09.800	117GD105A106A4BI	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,807:80:0	
1178	98	151	23:23:23.133	117GD105A106A4BJ	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,809:08:0	
1179	98	151	23:23:32.466	117GD105A106A4BK	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,809:22:0	
1180	98	151	23:24:45.800	117GD105A106A4BL	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,810:41:0	
1181	98	151	23:24:55.133	117GD105A106A4BM	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,810:55:0	
1182	98	151	23:26:08.466	117GD105A106A4BN	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,811:74:0	
1183	98	151	23:26:17.800	117GD105A106A4BO	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,811:88:0	
1184	98	151	23:27:31.133	117GD105A106A4BP	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,813:16:0	
1185	98	151	23:27:40.466	117GD105A106A4BQ	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,813:30:0	
1186	98	151	23:28:53.800	117GD105A106A4BR	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,814:49:0	
1187	98	151	23:29:03.133	117GD105A106A4BS	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,814:63:0	
1188	98	151	23:30:16.466	117GD105A106A4BT	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,815:82:0	
1189	98	151	23:30:25.800	117GD105A106A4BU	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,816:05:0	
1190	98	151	23:31:30.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 373.02 +/- 3	3R3	4	0	4,499,817:11:0	
1191	98	151	23:31:30.466	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,817:11:0	
1192	98	151	23:31:31.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 373.14 +/- 3	3R3	4	0	4,499,817:13:1	
1193	98	151	23:31:37.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 374.37 +/- 3	3R3	4	0	4,499,817:21:0	
1194	98	151	23:31:38.333		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 374.43 +/- 3	3R3	4	0	4,499,817:22:8	
1195	98	151	23:31:39.133	117GD105A106A4BV	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,817:24:0	
1196	98	151	23:31:39.733		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 374.31 +/- 3	3R3	4	0	4,499,817:24:9	
1197	98	151	23:31:48.466	117GD105A106A4BW	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,817:38:0	
1198	98	151	23:31:55.133		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 370.70 +/- 3	3R3	4	0	4,499,817:48:0	
1199	98	151	23:32:17.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,817:82:0	
1200	98	151	23:32:17.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 365.39 +/- 3	3R3	4	0	4,499,817:82:0	
1201	98	151	23:32:19.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 365.33 +/- 3	3R3	4	0	4,499,817:83:8	
1202	98	151	23:33:01.800	117GD105A106A4BX	7STRP	0.00006,0.0011,0	Slew =12.01	3R3	4	0	4,499,818:57:0	
1203	98	151	23:33:11.133	117GD105A106A4BY	7STRP	0.043027,0.0,0.0	Slew =0.61	3R3	4	0	4,499,818:71:0	
1204	98	151	23:34:24.466	117GD105A106B4A	7STRP	0.01,0.01,0.0,0	Slew =12.01	3R3	4	0	4,499,819:90:0	
1205	98	151	23:34:37.800	117GD105A106B4B	7STRP	0.0,0.0,0.0,0.0,0	Slew =0.61	3R3	4	0	4,499,820:19:0	
1206	98	151	23:35:38.466	117GD11A	CSMOS	GE	***** GROUP END CSMOS	3R3	4	0	4,499,821:19:0	
1207	98	151	23:36:26.466	176GD6B	6TMREC	NRC	NO RECORD Record Mode Change	3R3	4	0	4,499,822:00:0	
1208	98	151	23:36:28.466	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,822:03:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1209	98	151	23:36:28.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC	365.33 +/-	3	3R3	4	0 4,499,822:05:0
1210	98	151	23:36:29.866		DMS:	: *US AT SP	P7, TRACK 1, FWD, TIC * 365.45 +/-	3	3R3	4	0 4,499,822:05:1	
1211	98	151	23:36:35.133		DMS:	: *US RD	P7, TRACK 1, FWD, TIC * 366.68 +/-	3	3R3	4	0 4,499,822:13:0	
1212	98	151	23:36:36.333		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 366.74 +/-	3	3R3	4	0 4,499,822:14:8	
1213	98	151	23:36:37.733		DMS:	: *AT SPD	R7, TRACK 4, REV, TIC * 366.62 +/-	3	3R3	4	0 4,499,822:16:9	
1214	98	151	23:36:38.466		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 366.45 +/-	3	3R3	4	0 4,499,822:18:0	
1215	98	151	23:36:52.466		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 363.17 +/-	3	3R3	4	0 4,499,822:39:0	
1216	98	151	23:36:52.466	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop		3R3	4	0 4,499,822:39:0	
1217	98	151	23:36:53.666		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 363.11 +/-	3	3R3	4	0 4,499,822:40:8	
1218	98	151	23:40:28.466	165GE4A	7SCAN	NORM,87,421,22,9	Check S/P Position		3R3	4	0 4,499,825:90:0	
1219	98	151	23:40:29.133	176GE6A	6TMREC	BPT	7.68 KBPS PPR BURST TO TAPE Record Mode C		3R3	4	0 4,499,826:00:0	
1220	98	151	23:41:20.466	117GE	CSMOS	GS	***** GROUP START CSMOS		3R3	4	0 4,499,826:77:0	
1221	98	151	23:41:28.466	165GE4B	7VECT		Inert vect update UTC		3R3	4	0 4,499,826:89:0	
1222	98	151	23:41:29.800	117GE105A106A4A	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,827:00:0	
1223	98	151	23:41:53.800	117GE105A106A4B	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,827:36:0	
1224	98	151	23:42:03.133	117GE105A106A4C	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,827:50:0	
1225	98	151	23:42:27.133	117GE105A106A4D	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,827:86:0	
1226	98	151	23:42:36.466	117GE105A106A4E	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,828:09:0	
1227	98	151	23:43:00.466	117GE105A106A4F	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,828:45:0	
1228	98	151	23:43:09.800	117GE105A106A4G	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,828:59:0	
1229	98	151	23:43:33.800	117GE105A106A4H	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,829:04:0	
1230	98	151	23:43:43.133	117GE105A106A4I	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,829:18:0	
1231	98	151	23:44:07.133	117GE105A106A4J	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,829:54:0	
1232	98	151	23:44:16.466	117GE105A106A4K	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,829:68:0	
1233	98	151	23:44:40.466	117GE105A106A4L	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,830:13:0	
1234	98	151	23:44:49.800	117GE105A106A4M	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,830:27:0	
1235	98	151	23:45:13.800	117GE105A106A4N	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,830:63:0	
1236	98	151	23:45:23.133	117GE105A106A4O	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,830:77:0	
1237	98	151	23:45:47.133	117GE105A106A4P	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,831:22:0	
1238	98	151	23:45:56.466	117GE105A106A4Q	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,831:36:0	
1239	98	151	23:46:20.466	117GE105A106A4R	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,831:72:0	
1240	98	151	23:46:29.800	117GE105A106A4S	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,831:86:0	
1241	98	151	23:46:53.800	117GE105A106A4T	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,832:31:0	
1242	98	151	23:47:03.133	117GE105A106A4U	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,832:45:0	
1243	98	151	23:47:27.133	117GE105A106A4V	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,832:81:0	
1244	98	151	23:47:36.466	117GE105A106A4W	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,833:04:0	
1245	98	151	23:48:00.466	117GE105A106A4X	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,833:40:0	
1246	98	151	23:48:09.800	117GE105A106A4Y	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,833:54:0	
1247	98	151	23:48:33.800	117GE105A106A4Z	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,833:90:0	
1248	98	151	23:48:43.133	117GE105A106A4AA	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,834:13:0	
1249	98	151	23:49:07.133	117GE105A106A4AB	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,834:49:0	
1250	98	151	23:49:16.466	117GE105A106A4AC	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,834:63:0	
1251	98	151	23:49:40.466	117GE105A106A4AD	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,835:08:0	
1252	98	151	23:49:49.800	117GE105A106A4AE	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,835:22:0	
1253	98	151	23:50:13.800	117GE105A106A4AF	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,835:58:0	
1254	98	151	23:50:27.133	117GE105A106A4AG	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,835:72:0	
1255	98	151	23:50:47.133	117GE105A106A4AH	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,836:17:0	
1256	98	151	23:50:56.466	117GE105A106A4AI	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,836:31:0	
1257	98	151	23:51:20.466	117GE105A106A4AJ	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,836:67:0	
1258	98	151	23:51:29.800	117GE105A106A4AK	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,836:81:0	
1259	98	151	23:51:53.800	117GE105A106A4AL	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,837:26:0	
1260	98	151	23:52:03.133	117GE105A106A4AM	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,837:40:0	
1261	98	151	23:52:27.133	117GE105A106A4AN	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,837:76:0	
1262	98	151	23:52:36.466	117GE105A106A4AO	7STRP	-0.026506,0.0,0,	Slew =,1.25		3R3	4	0 4,499,837:90:0	
1263	98	151	23:53:00.466	117GE105A106A4AP	7STRP	-0.00006,-0.001,	Slew =12.01		3R3	4	0 4,499,838:35:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1264	98	151	23:53:03.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 363.11 +/- 3	3R3	4	0	4,499,838:40:0	
1265	98	151	23:53:03.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,838:40:0	
1266	98	151	23:53:05.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 363.23 +/- 3	3R3	4	0	4,499,838:42:1	
1267	98	151	23:53:09.800	117GE105A106A4AQ	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,838:49:0	
1268	98	151	23:53:10.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 364.47 +/- 3	3R3	4	0	4,499,838:50:0	
1269	98	151	23:53:11.666		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 364.53 +/- 3	3R3	4	0	4,499,838:51:8	
1270	98	151	23:53:13.066		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 364.41 +/- 3	3R3	4	0	4,499,838:53:9	
1271	98	151	23:53:29.133		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 360.64 +/- 3	3R3	4	0	4,499,838:78:0	
1272	98	151	23:53:33.800	117GE105A106A4AR	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,838:85:0	
1273	98	151	23:53:43.133	117GE105A106A4AS	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,839:08:0	
1274	98	151	23:53:51.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,839:21:0	
1275	98	151	23:53:51.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 355.33 +/- 3	3R3	4	0	4,499,839:21:0	
1276	98	151	23:53:53.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 355.27 +/- 3	3R3	4	0	4,499,839:22:8	
1277	98	151	23:54:07.133	117GE105A106A4AT	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,839:44:0	
1278	98	151	23:54:16.466	117GE105A106A4AU	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,839:58:0	
1279	98	151	23:54:40.466	117GE105A106A4AV	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,840:03:0	
1280	98	151	23:54:49.800	117GE105A106A4AW	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,840:17:0	
1281	98	151	23:55:13.800	117GE105A106A4AX	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,840:53:0	
1282	98	151	23:55:23.133	117GE105A106A4AY	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,840:67:0	
1283	98	151	23:55:47.133	117GE105A106A4AZ	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,841:12:0	
1284	98	151	23:55:56.466	117GE105A106A4BA	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,841:26:0	
1285	98	151	23:56:20.466	117GE105A106A4BB	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,841:62:0	
1286	98	151	23:56:29.800	117GE105A106A4BC	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,841:76:0	
1287	98	151	23:56:53.800	117GE105A106A4BD	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,842:21:0	
1288	98	151	23:57:03.133	117GE105A106A4BE	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,842:35:0	
1289	98	151	23:57:27.133	117GE105A106A4BF	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,842:71:0	
1290	98	151	23:57:36.466	117GE105A106A4BG	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,842:85:0	
1291	98	151	23:58:00.466	117GE105A106A4BH	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,843:30:0	
1292	98	151	23:58:09.800	117GE105A106A4BI	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,843:44:0	
1293	98	151	23:58:33.800	117GE105A106A4BJ	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,843:80:0	
1294	98	151	23:58:43.133	117GE105A106A4BK	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,844:03:0	
1295	98	151	23:59:07.133	117GE105A106A4BL	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,844:39:0	
1296	98	151	23:59:16.466	117GE105A106A4BM	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,844:53:0	
1297	98	151	23:59:40.466	117GE105A106A4BN	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,844:89:0	
1298	98	151	23:59:49.800	117GE105A106A4BO	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,845:12:0	
1299	98	152	00:00:13.800	117GE105A106A4BP	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,845:48:0	
1300	98	152	00:00:23.133	117GE105A106A4BQ	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,845:62:0	
1301	98	152	00:00:47.133	117GE105A106A4BR	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,846:07:0	
1302	98	152	00:00:56.466	117GE105A106A4BS	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,846:21:0	
1303	98	152	00:01:20.466	117GE105A106A4BT	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,846:57:0	
1304	98	152	00:01:29.800	117GE105A106A4BU	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,846:71:0	
1305	98	152	00:01:53.800	117GE105A106A4BV	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,847:16:0	
1306	98	152	00:02:03.133	117GE105A106A4BW	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,847:30:0	
1307	98	152	00:02:27.133	117GE105A106A4BX	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,847:66:0	
1308	98	152	00:02:36.466	117GE105A106A4BY	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,847:80:0	
1309	98	152	00:03:00.466	117GE105A106A4BZ	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,848:25:0	
1310	98	152	00:03:09.800	117GE105A106A4CA	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,848:39:0	
1311	98	152	00:03:33.800	117GE105A106A4CB	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,848:75:0	
1312	98	152	00:03:43.133	117GE105A106A4CC	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,848:89:0	
1313	98	152	00:04:07.133	117GE105A106A4CD	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,849:34:0	
1314	98	152	00:04:16.466	117GE105A106A4CE	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,849:48:0	
1315	98	152	00:04:40.466	117GE105A106A4CF	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,849:84:0	
1316	98	152	00:04:49.800	117GE105A106A4CG	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,850:07:0	
1317	98	152	00:05:13.800	117GE105A106A4CH	7STRP	-0.00006,-0.001,	Slew = 12.01	3R3	4	0	4,499,850:43:0	
1318	98	152	00:05:23.133	117GE105A106A4CI	7STRP	-0.026506,0.0,0,	Slew = 1.25	3R3	4	0	4,499,850:57:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1319	98	152	00:05:47.133	117GE105A106A4CJ	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,851:02:0	
1320	98	152	00:05:56.466	117GE105A106A4CK	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,851:16:0	
1321	98	152	00:06:05.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 355.27 +/- 3	3R3	4	0	4,499,851:30:0	
1322	98	152	00:06:05.800	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,851:30:0	
1323	98	152	00:06:07.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 355.39 +/- 3	3R3	4	0	4,499,851:32:1	
1324	98	152	00:06:12.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 356.62 +/- 3	3R3	4	0	4,499,851:40:0	
1325	98	152	00:06:13.666		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 356.68 +/- 3	3R3	4	0	4,499,851:41:8	
1326	98	152	00:06:15.066		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 356.56 +/- 3	3R3	4	0	4,499,851:43:9	
1327	98	152	00:06:20.466	117GE105A106A4CL	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,851:52:0	
1328	98	152	00:06:29.800	117GE105A106A4CM	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,851:66:0	
1329	98	152	00:06:31.133		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 352.80 +/- 3	3R3	4	0	4,499,851:68:0	
1330	98	152	00:06:53.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,852:11:0	
1331	98	152	00:06:53.800	117GE105A106A4CN	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,852:11:0	
1332	98	152	00:06:53.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 347.48 +/- 3	3R3	4	0	4,499,852:11:0	
1333	98	152	00:06:55.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 347.42 +/- 3	3R3	4	0	4,499,852:12:8	
1334	98	152	00:07:03.133	117GE105A106A4CO	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,852:25:0	
1335	98	152	00:07:27.133	117GE105A106A4CP	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,852:61:0	
1336	98	152	00:07:36.466	117GE105A106A4CQ	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,852:75:0	
1337	98	152	00:08:00.466	117GE105A106A4CR	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,853:20:0	
1338	98	152	00:08:09.800	117GE105A106A4CS	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,853:34:0	
1339	98	152	00:08:33.800	117GE105A106A4CT	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,853:70:0	
1340	98	152	00:08:43.133	117GE105A106A4CU	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,853:84:0	
1341	98	152	00:09:07.133	117GE105A106A4CV	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,854:29:0	
1342	98	152	00:09:16.466	117GE105A106A4CW	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,854:43:0	
1343	98	152	00:09:40.466	117GE105A106A4CX	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,854:79:0	
1344	98	152	00:09:49.800	117GE105A106A4CY	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,855:02:0	
1345	98	152	00:10:13.800	117GE105A106A4CZ	7STRP	-0.00006,-0.001,	Slew =12.01	3R3	4	0	4,499,855:38:0	
1346	98	152	00:10:23.133	117GE105A106A4DA	7STRP	-0.026506,0.0,0,	Slew =,1.25	3R3	4	0	4,499,855:52:0	
1347	98	152	00:10:47.133	117GE105A106B4A	7STRP	0.030009,-0.007,	Slew =12.01	3R3	4	0	4,499,855:88:0	
1348	98	152	00:10:56.466	117GE105A106B4B	7STRP	0.0,0.0,0.0,0.0,0,	Slew =,1.25	3R3	4	0	4,499,856:11:0	
1349	98	152	00:11:57.133	117GE11A	CSMOS	GE	***** GROUP END CSMOS	3R3	4	0	4,499,857:11:0	
1350	98	152	00:12:50.466	176GE6B	6TMREC	NRC	NO RECORD Record Mode Change	3R3	4	0	4,499,858:00:0	
1351	98	152	00:12:52.466	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,499,858:03:0	
1352	98	152	00:12:52.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 347.42 +/- 3	3R3	4	0	4,499,858:03:0	
1353	98	152	00:12:53.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 347.54 +/- 3	3R3	4	0	4,499,858:05:1	
1354	98	152	00:12:59.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 348.78 +/- 3	3R3	4	0	4,499,858:13:0	
1355	98	152	00:13:00.333		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 348.84 +/- 3	3R3	4	0	4,499,858:14:8	
1356	98	152	00:13:01.733		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 348.72 +/- 3	3R3	4	0	4,499,858:16:9	
1357	98	152	00:13:02.466		DMS:	: *RECORD	R7, TRACK 4, REV, TIC * 348.55 +/- 3	3R3	4	0	4,499,858:18:0	
1358	98	152	00:13:17.800		DMS:	: *RUNDOWN	R7, TRACK 4, REV, TIC * 344.95 +/- 3	3R3	4	0	4,499,858:41:0	
1359	98	152	00:13:17.800	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,499,858:41:0	
1360	98	152	00:13:19.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 344.89 +/- 3	3R3	4	0	4,499,858:42:8	
1361	98	152	00:34:58.466	465KE6A	6DTRN	CMD,6DTRN,465KE6	DMS TRACK TURNAROUND	3R3	4	0	4,499,879:81:0	
1362	98	152	00:34:58.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 344.89 +/- 3	3R3	4	0	4,499,879:81:0	
1363	98	152	00:34:58.466		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 344.89 +/- 3	3R3	4	0	4,499,879:81:0	
1364	98	152	00:34:59.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 345.01 +/- 3	3R3	4	0	4,499,879:83:1	
1365	98	152	00:35:05.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 346.25 +/- 3	3R3	4	0	4,499,880:00:0	
1366	98	152	00:35:06.333		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 346.31 +/- 3	3R3	4	0	4,499,880:01:8	
1367	98	152	00:35:07.733		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 346.19 +/- 3	3R3	4	0	4,499,880:03:9	
1368	98	152	00:45:31.933		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/- 3	3R3	4	0	4,499,890:30:2	
1369	98	152	00:45:33.133		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/- 3	3R3	4	0	4,499,890:32:0	
1370	98	152	00:45:33.133		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/- 3	3R3	4	0	4,499,890:32:0	
1371	98	152	00:45:34.533		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	3R3	4	0	4,499,890:34:1	
1372	98	152	00:45:46.533		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	3R3	4	0	4,499,890:52:1	
1373	98	152	00:45:47.733		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	3R3	4	0	4,499,890:53:9	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1374	98	152	00:48:13.800	488AE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	3R3	4	0	4,499,893:00:0	
1375	98	152	01:00:13.800		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	3R3	4	0	4,499,904:79:0	
1376	98	152	01:00:13.800	465KF6A	6DMSC	P7,1	DMS Control Tape P/B 7.68kbps	3R3	4	0	4,499,904:79:0	
1377	98	152	01:00:20.466		DMS:	:*RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	3R3	4	0	4,499,904:89:0	
1378	98	152	01:00:21.866		DMS:	:*AT SPD	P7, TRACK 1, FWD, TIC 202.24 +/-	3R3	4	0	4,499,905:00:1	
1379	98	152	01:00:21.866		DMS:	:*P_SLEW	P7, TRACK 1, FWD, TIC * 202.24 +/-	3R3	4	0	4,499,905:00:1	
1380	98	152	01:01:22.466		DMS:	:*RUNDOWN	P7, TRACK 1, FWD, TIC * 216.45 +/-	3R3	4	0	4,499,906:00:0	
1381	98	152	01:01:22.466	465KF6B	6DMSC	RDY,1	DMS Control Tape stop	3R3	4	0	4,499,906:00:0	
1382	98	152	01:01:23.666		DMS:	:*READY	RDY, TRACK 1, FWD, TIC * 216.51 +/-	3R3	4	0	4,499,906:01:8	
1383	98	152	01:20:21.133	488AE6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	3R3	4	0	4,499,924:70:0	
1384	98	152	01:39:33.133	488AE6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	3R3	4	0	4,499,943:69:0	
1385	98	152	01:54:29.133	488AE6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	3R3	4	0	4,499,958:48:0	
1386	98	152	02:07:02.462	15NNGLOBAL01-	-----START-----			3R3	4	0	:::	
1387	98	152	02:14:56.466	20DI5A	37PL		Program Load (halts microprocessor & unwri	3R3	4	0	4,499,978:69:0	
1388	98	152	02:15:03.800	20DI5B	37MRL		Memory Realocate (software operates from R	3R3	4	0	4,499,978:80:0	
1389	98	152	02:15:05.133	20DI6A	6MCOPI	NIMS	NIMS,1000,LLM1A,7300,77F7	3R3	4	0	4,499,978:82:0	
1390	98	152	02:15:15.133	20DI6B	6MCOPI	NIMS	NIMS,1598,LLM1A,77F8,781D	3R3	4	0	4,499,979:06:0	
1391	98	152	02:15:25.133	20DI5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,499,979:21:0	
1392	98	152	02:15:26.466	20DI5D	37MNI		Memory Normal (software operates from ROM)	260	4	0	4,499,979:23:0	
1393	98	152	02:16:04.466	20DI4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,499,979:80:0	
1394	98	152	02:16:11.133	165DI4A	7SCAN	NORM,91.308,24.5	Check S/P Position	2R0	4	0	4,499,979:90:0	
1395	98	152	02:17:09.129	15ENGLOBAL01-	-----START-----			2R0	4	0	:::	
1396	98	152	02:17:09.129	15NNGLOBAL01-	-----STOP-----			2R0	4	0	:::	
1397	98	152	02:18:08.466	125DI4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	4,499,981:84:0	
1398	98	152	02:18:08.466	125DI	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	4,499,981:84:0	
1399	98	152	02:19:09.133	125DI11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,499,982:84:0	
1400	98	152	02:19:09.133	125DI4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	4,499,982:84:0	
1401	98	152	02:20:01.133		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 216.51 +/-	4R0	4	0	4,499,983:71:0	
1402	98	152	02:20:01.133	175DJ422A6A	6DMSC	R28,1	DMS Control	4R0	4	0	4,499,983:71:0	
1403	98	152	02:20:05.133	117DI	CSMOS	GS	**** GROUP START CSMOS	4R0	4	0	4,499,983:77:0	
1404	98	152	02:20:07.800		DMS:	:*RUNUP	R28, TRACK 1, FWD, TIC 216.51 +/-	4R0	4	0	4,499,983:81:0	
1405	98	152	02:20:09.800	127DI4A	37IOP	3.0	Long Map, Grating Start Position =00	4R3	4	0	4,499,983:84:0	
1406	98	152	02:20:09.800	127DI	NIMSTAB	GS	%%% GROUP START TAB	4R3	4	0	4,499,983:84:0	
1407	98	152	02:20:10.466	127DI4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	4,499,983:85:0	
1408	98	152	02:20:11.133	175DJ176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	4,499,983:86:0	
1409	98	152	02:20:11.800		DMS:	:*AT SPD	R28, TRACK 1, FWD, TIC 218.01 +/-	4R3	4	0	4,499,983:87:0	
1410	98	152	02:20:11.800		DMS:	:*RECORD	R28, TRACK 1, FWD, TIC * 218.01 +/-	4R3	4	0	4,499,983:87:0	
1411	98	152	02:20:13.133	165DI4B	7VECT		Inert vect update UTC	4R3	4	0	4,499,983:89:0	
1412	98	152	02:20:14.466	117DH05A106A4A	7STRP	-0.013401,0.0,0,0,	Slew = 0.03	4R3	4	0	4,499,984:00:0	
1413	98	152	02:20:18.466	127DI11A	NIMSTAB	GE	%%% GROUP END TAB	4R3	4	0	4,499,984:06:0	
1414	98	152	02:21:15.133	15ENGLOBAL01-	NIMPBK	301DJ	EUROPA GLOBAL MAP	4R3	4	0	:::	
1415	98	152	02:24:12.466	125FI4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,499,987:84:0	
1416	98	152	02:24:12.466	125FI	NIMSINIT	GS	##### GROUP START INIT	3R3	4	0	4,499,987:84:0	
1417	98	152	02:24:12.466	125FI11A	NIMSINIT	GE	##### GROUP END INIT	3R3	4	0	4,499,987:84:0	
1418	98	152	02:24:17.133	15ENGLOBAL01-	DESELC	300DJ	EUROPA GLOBAL MAP	3R3	4	0	:::	
1419	98	152	02:24:21.133	488AE6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	3R3	4	0	4,499,988:06:0	
1420	98	152	02:27:14.466	125FA4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R3	4	0	4,499,990:84:0	
1421	98	152	02:27:14.466	125FA11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,499,990:84:0	
1422	98	152	02:27:14.466	125FA	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,499,990:84:0	
1423	98	152	02:27:43.800	117DH05A106A4B	7STRP	0.013401,-0.007,	Slew =12.01	4R3	4	0	4,499,991:37:0	
1424	98	152	02:27:46.466	15ENGLOBAL01-	NIMPBK	301EZ	EUROPA GLOBAL MAP	4R3	4	0	:::	
1425	98	152	02:27:50.466	117DH05A106A4C	7STRP	-0.013401,0.0,0,0,	Slew =0.03	4R3	4	0	4,499,991:47:0	
1426	98	152	02:29:43.800	15ENGLOBAL01-	NIMPBK	301DR	EUROPA GLOBAL MAP	4R3	4	0	:::	
1427	98	152	02:32:17.800	125FB11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,499,995:84:0	
1428	98	152	02:32:17.800	125FB	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,499,995:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1429	98	152	02:32:17.800	125FB4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,499,995:84:0	
1430	98	152	02:32:19.800	15ENGLOBAL01-	NIMPBK	301ET	EUROPA GLOBAL MAP	3R3	4	0		
1431	98	152	02:32:33.800	15ENGLOBAL01-	DESEL	300DR	EUROPA GLOBAL MAP	3R3	4	0		
1432	98	152	02:33:20.466	15ENGLOBAL01-	NIMPBK	301DS	EUROPA GLOBAL MAP	3R3	4	0		
1433	98	152	02:33:33.800	15ENGLOBAL01-	NIMPBK	301DJ	EUROPA GLOBAL MAP	3R3	4	0		
1434	98	152	02:34:23.800	15ENGLOBAL01-	DESEL	300DJ	EUROPA GLOBAL MAP	3R3	4	0		
1435	98	152	02:35:11.800	15ENGLOBAL01-	DESEL	300DS	EUROPA GLOBAL MAP	3R3	4	0		
1436	98	152	02:35:19.800	125FC11A	NIMSINIT	GE	##### GROUP END INIT	3R3	4	0	4,499,998:84:0	
1437	98	152	02:35:19.800	117DI105A106A4D	7STRP	0.013401,-0.007,	Slew =12.01	3R3	4	0	4,499,998:84:0	
1438	98	152	02:35:19.800	125FC	NIMSINIT	GS	##### GROUP START INIT	3R3	4	0	4,499,998:84:0	
1439	98	152	02:35:19.800	125FC4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R3	4	0	4,499,998:84:0	
1440	98	152	02:35:22.466	15ENGLOBAL01-	NIMPBK	301EJ	EUROPA GLOBAL MAP	4R3	4	0		
1441	98	152	02:35:24.466	15ENGLOBAL01-	DESEL	300EZ	EUROPA GLOBAL MAP	4R3	4	0		
1442	98	152	02:35:26.466	117DI105A106A4E	7STRP	-0.013401,0.0,0,	Slew =0.03	4R3	4	0	4,499,999:03:0	
1443	98	152	02:39:25.800	15ENGLOBAL01-	NIMPBK	301DH	EUROPA GLOBAL MAP	4R3	4	0		
1444	98	152	02:39:41.133	15ENGLOBAL01-	DESEL	300DH	EUROPA GLOBAL MAP	4R3	4	0		
1445	98	152	02:40:23.133	125FD11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,500,003:84:0	
1446	98	152	02:40:23.133	125FD	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,500,003:84:0	
1447	98	152	02:40:23.133	125FD4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,500,003:84:0	
1448	98	152	02:42:24.466	125FE4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R3	4	0	4,500,005:84:0	
1449	98	152	02:42:24.466	125FE	NIMSINIT	GS	##### GROUP END INIT	4R3	4	0	4,500,005:84:0	
1450	98	152	02:42:24.466	125FE11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,500,005:84:0	
1451	98	152	02:42:48.466	15ENGLOBAL01-	NIMPBK	301EU	EUROPA GLOBAL MAP	4R3	4	0		
1452	98	152	02:42:55.800	117DI105A106A4F	7STRP	0.013401,-0.007,	Slew =12.01	4R3	4	0	4,500,006:40:0	
1453	98	152	02:43:00.466	15ENGLOBAL01-	DESEL	300EJ	EUROPA GLOBAL MAP	4R3	4	0		
1454	98	152	02:43:02.466	117DI105A106A4G	7STRP	-0.013401,0.0,0,	Slew =0.03	4R3	4	0	4,500,006:50:0	
1455	98	152	02:44:03.133	15ENGLOBAL01-	NIMPBK	301ET	EUROPA GLOBAL MAP	4R3	4	0		
1456	98	152	02:44:57.800	15ENGLOBAL01-	DESEL	300EU	EUROPA GLOBAL MAP	4R3	4	0		
1457	98	152	02:47:07.133	15ENGLOBAL01-	NIMPBK	301EZ	EUROPA GLOBAL MAP	4R3	4	0		
1458	98	152	02:47:07.133	15ENGLOBAL01-	DESEL	300ET	EUROPA GLOBAL MAP	4R3	4	0		
1459	98	152	02:47:27.800	125FG	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,500,010:84:0	
1460	98	152	02:47:27.800	125FG4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,500,010:84:0	
1461	98	152	02:47:27.800	125FG11A	NIMSINIT	GE	##### GROUP END INIT	3R3	4	0	4,500,010:84:0	
1462	98	152	02:50:31.133	15ENGLOBAL01-	DESEL	300ET	EUROPA GLOBAL MAP	3R3	4	0		
1463	98	152	02:50:31.133	15ENGLOBAL01-	DESEL	300EZ	EUROPA GLOBAL MAP	3R3	4	0		
1464	98	152	02:50:31.800	175DJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,013:87:0	
1465	98	152	02:50:31.800		DMS:	: *RUNDOWN	R28, TRACK 1, FWD, TIC *1817.62 +/-	3R3	4	0	4,500,013:87:0	
1466	98	152	02:50:31.800	117DI11A	CSMOS	GE	##### GROUP END CSMOS	3R3	4	0	4,500,013:87:0	
1467	98	152	02:50:33.000		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *1817.92 +/-	3R3	4	0	4,500,013:88:8	
1468	98	152	02:51:31.796	15ENGLOBAL01-		-----STOP-----		3R3	4	0		
1469	98	152	02:54:23.133	488AF6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	3R3	4	0	4,500,017:70:0	
1470	98	152	03:43:02.466	488AF6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	3R3	4	0	4,500,065:81:0	
1471	98	152	08:39:27.800	444UC443A4B	7MODE	INT	AACS INERTIAL MODE	3R3	4	0	4,500,359:05:0	
1472	98	152	08:53:33.133	165II4A	7SCAN	NORM,347.056,-5,	Check S/P Position	3R3	4	0	4,500,372:90:0	
1473	98	152	09:01:37.800	165II4B	7VECT		Inert vect update UTC	3R3	4	0	4,500,380:89:0	
1474	98	152	09:02:03.800		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 1817.92 +/-	3R3	4	0	4,500,381:37:0	
1475	98	152	09:02:03.800	175IR422A6A	6DMSC	R806.1	DMS Control	3R3	4	0	4,500,381:37:0	
1476	98	152	09:02:10.466		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC 1817.92 +/-	3R3	4	0	4,500,381:47:0	
1477	98	152	09:02:15.133	175IR176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	3R3	4	0	4,500,381:54:0	
1478	98	152	09:02:15.733		DMS:	: *AT SPD	R806, TRACK 1, FWD, TIC 1883.92 +/-	3R3	4	0	4,500,381:54:9	
1479	98	152	09:02:15.733		DMS:	: *RECORD	R806, TRACK 1, FWD, TIC *1883.92 +/-	3R3	4	0	4,500,381:54:9	
1480	98	152	09:02:22.466		DMS:	: *RUNDOWN	R806, TRACK 1, FWD, TIC *2049.62 +/-	3R3	4	0	4,500,381:65:0	
1481	98	152	09:02:22.466	175IR422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,381:65:0	
1482	98	152	09:02:25.200		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *2061.12 +/-	3R3	4	0	4,500,381:69:1	
1483	98	152	09:02:28.466		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 2061.12 +/-	3R3	4	0	4,500,381:74:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I	
1484	98	152	09:02:28.466	175IS422A6A	6DMSC	R806,1	DMS Control	3R3	4	0	4,500,381.74:0		
1485	98	152	09:02:35.133		DMS:	*RUNUP	R806, TRACK 1, FWD, TIC 2061.12 +/-	3R3	4	0	4,500,381.84:0		
1486	98	152	09:02:39.800	175IS176A6A	6TMREC	AIB	806.4 KBPS SSI RECORD Record Mode Change	3R3	4	0	4,500,382.00:0		
1487	98	152	09:02:40.400		DMS:	*RECORD	R806, TRACK 1, FWD, TIC *2127.12 +/-	3R3	4	0	4,500,382.00:9		
1488	98	152	09:02:40.400		DMS:	*AT SPD	R806, TRACK 1, FWD, TIC 2127.12 +/-	3R3	4	0	4,500,382.00:9		
1489	98	152	09:02:56.466		DMS:	*RUNDOWN	R806, TRACK 1, FWD, TIC *2522.51 +/-	3R3	4	0	4,500,382.25:0		
1490	98	152	09:02:56.466	175IS422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,382.25:0		
1491	98	152	09:02:59.200		DMS:	*READY	RDY, TRACK 1, FWD, TIC *2534.01 +/-	3R3	4	0	4,500,382.29:1		
1492	98	152	10:29:37.133	192GF4A	7CONE	17.4,0.0	Check S/P Position	3R3	4	0	4,500,468.00:0		
1493	98	152	10:33:39.800	176GF6A	6TMREC	BPT	7.68 KBPS PPR BURST TO TAPE Record Mode C	3R3	4	0	4,500,472.00:0		
1494	98	152	10:35:51.133	488AG6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	3R3	4	0	4,500,474:15:0		
1495	98	152	10:35:54.466	176GF6B	6TMREC	NRC	NO RECORD Record Mode Change	3R3	4	0	4,500,474:20:0		
1496	98	152	10:35:56.466		DMS:	*E4-DELAY	RDY, TRACK 1, FWD, TIC 2534.01 +/-	3R3	4	0	4,500,474:23:0		
1497	98	152	10:35:56.466	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R3	4	0	4,500,474:23:0		
1498	98	152	10:36:03.133		DMS:	*RUNUP	R7, TRACK 1, FWD, TIC 2534.01 +/-	3R3	4	0	4,500,474:33:0		
1499	98	152	10:36:04.533		DMS:	*AT SPD	R7, TRACK 1, FWD, TIC *2534.13 +/-	3R3	4	0	4,500,474:35:1		
1500	98	152	10:36:06.466		DMS:	*RECORD	R7, TRACK 1, FWD, TIC *2534.58 +/-	3R3	4	0	4,500,474:38:0		
1501	98	152	10:36:17.800		DMS:	*RUNDOWN	R7, TRACK 1, FWD, TIC *2537.24 +/-	3R3	4	0	4,500,474:55:0		
1502	98	152	10:36:17.800	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,474:55:0		
1503	98	152	10:36:19.000		DMS:	*READY	RDY, TRACK 1, FWD, TIC *2537.30 +/-	3R3	4	0	4,500,477:56:8		
1504	98	152	10:39:17.133	488AG6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	3R3	4	0	4,500,477:51:0		
1505	98	152	11:06:12.466	488AG6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	3R3	4	0	4,500,504:17:0		
1506	98	152	13:04:15.796	15NNEUR16H01-		-----START-----		3R3	4	0	0		
1507	98	152	13:06:05.733	20DK5A	37PL		Program Load (halts microprocessor & unwri	3R3	4	0	4,500,622:69:0		
1508	98	152	13:06:13.066	20DK5B	37MRL		Memory Realocate (software operates from R	3R3	4	0	4,500,622:80:0		
1509	98	152	13:06:14.400	20DK6A	6MCPY	NIMS	NIMS,1000,LLM1A,7300,77F7	3R3	4	0	4,500,622:82:0		
1510	98	152	13:06:24.400	20DK6B	6MCPY	NIMS	NIMS,1598,LLM1A,77F8,781D	3R3	4	0	4,500,623:06:0		
1511	98	152	13:06:34.400	20DK5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,500,623:21:0		
1512	98	152	13:06:35.733	20DK5D	37MN		Memory Normal (software operates from ROM)	260	4	0	4,500,623:23:0		
1513	98	152	13:07:13.733	20DK4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,500,623:80:0		
1514	98	152	13:09:17.733	125DK4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	4,500,625:84:0		
1515	98	152	13:09:17.733	125DK	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	4,500,625:84:0		
1516	98	152	13:10:18.400	125DK4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	4,500,626:84:0		
1517	98	152	13:10:18.400	125DK11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,500,626:84:0		
1518	98	152	13:11:19.066	127DK	NIMSTAB	GS	%%%%%% GROUP START TAB	4R0	4	0	4,500,627:84:0		
1519	98	152	13:11:19.066	127DK4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	4,500,627:85:0		
1520	98	152	13:14:22.462	127DK4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	4,500,628:06:0		
1521	98	152	13:14:27.733	127DK11A	NIMSTAB	GE	%%%%%% GROUP END TAB	4R3	4	0	4,500,628:06:0		
1522	98	152	13:12:23.733	165DK4A	7SCAN	NORM,98.441999,2	Check S/P Position	4R3	4	0	4,500,628:90:0		
1523	98	152	13:14:22.462	15NNEUR16H01-		-----STOP-----		4R3	4	0	0		
1524	98	152	13:15:23.129	15ENEUR16H01-		-----START-----		4R3	4	0	0		
1525	98	152	13:20:16.400		DMS:	*E4-DELAY	RDY, TRACK 1, FWD, TIC 2537.30 +/-	4R3	4	0	4,500,636:71:0		
1526	98	152	13:20:16.400	175DK422A6A	6DMSC	R28,1	DMS Control	4R3	4	0	4,500,636:71:0		
1527	98	152	13:20:20.400	117DK	CSMOS	GS	***** GROUP START CSMOS	4R3	4	0	4,500,636:77:0		
1528	98	152	13:20:23.066		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 2537.30 +/-	4R3	4	0	4,500,636:81:0		
1529	98	152	13:20:26.400	175DK176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	4,500,636:86:0		
1530	98	152	13:20:27.066	15ENEUR16H01-	NIMPBK	301DT	EUROPA 16 HOUR MAP	4R3	4	0	0		
1531	98	152	13:20:27.066		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *2538.80 +/-	4R3	4	0	4,500,636:87:0		
1532	98	152	13:20:27.066		DMS:	*AT SPD	R28, TRACK 1, FWD, TIC 2538.80 +/- 1	4R3	4	0	4,500,636:87:0		
1533	98	152	13:20:27.066	15ENEUR16H01-	NIMPBK	301DT	EUROPA 16 HOUR MAP	4R3	4	0	0		
1534	98	152	13:20:28.400	165DK4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,636:89:0		
1535	98	152	13:20:29.733	15ENEUR16H01-	NIMPBK	301DK	EUROPA 16 HOUR MAP	4R3	4	0	0		
1536	98	152	13:20:29.733	117DK105A106A4A	7STRP	-0.0057,0,0,0,0,	Slew =,0.02	4R3	4	0	4,500,637:00:0		
1537	98	152	13:20:29.733	15ENEUR16H01-	NIMPBK	301DK	EUROPA 16 HOUR MAP	4R3	4	0	0		
1538	98	152	13:21:12.400	15ENEUR16H01-	DESEL	300DT	EUROPA 16 HOUR MAP	4R3	4	0	0		

Strip of Sequence E15A-AR

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Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1539	98	152	13:21:15.733	15ENEUR16H01-	DESEL	300DT	EUROPA 16 HOUR MAP	4R3	4	0	:	:
1540	98	152	13:25:15.733	15ENEUR16H01-	DESEL	300DK	EUROPA 16 HOUR MAP	4R3	4	0	:	:
1541	98	152	13:25:15.733	15ENEUR16H01-	DESEL	300DK	EUROPA 16 HOUR MAP	4R3	4	0	:	:
1542	98	152	13:25:17.066	175DK422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,641:67:0	
1543	98	152	13:25:17.066	117DK105A106A4B	7STRP	0.00569,0,0,0,0,	Slew =12.01	4R3	4	0	4,500,641:67:0	
1544	98	152	13:25:17.066		DMS:	:*RUNDOWN	R28, TRACK 1, FWD, TIC *2793.68 +/- 1	4R3	4	0	4,500,641:67:0	
1545	98	152	13:25:18.266		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *2793.98 +/- 1	4R3	4	0	4,500,641:68:8	
1546	98	152	13:25:28.400	125EK4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,500,641:84:0	
1547	98	152	13:25:28.400	125EK	NIMSNIT	GS	##### GROUP START INIT	3R3	4	0	4,500,641:84:0	
1548	98	152	13:25:28.400	125EK11A	NIMSNIT	GE	##### GROUP END INIT	3R3	4	0	4,500,641:84:0	
1549	98	152	13:26:29.066	127EK	NIMSTAB	GS	%%%/%% GROUP START TAB	3R3	4	0	4,500,642:84:0	
1550	98	152	13:26:29.733	127EK4A	37ETB	07,C7,31,BD,C8,0	Loads wavelength edit table	3R3	4	0	4,500,642:85:0	
1551	98	152	13:26:37.733	127EK11A	NIMSTAB	GE	%%%/%% GROUP END TAB	3R3	4	0	4,500,643:06:0	
1552	98	152	13:27:23.066	175EK422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	3R3	4	0	4,500,643:74:0	
1553	98	152	13:27:23.066		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 2793.98 +/- 1	3R3	4	0	4,500,643:74:0	
1554	98	152	13:27:26.400	117DK105A106A4C	7STRP	-0.0057,0,0,0,0,	Slew =,0.02	3R3	4	0	4,500,643:79:0	
1555	98	152	13:27:29.733		DMS:	:*RUNUP	R7, TRACK 1, FWD, TIC 2793.98 +/- 1	3R3	4	0	4,500,643:84:0	
1556	98	152	13:27:31.066	175EK176A6A	6TMREC	LPU	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	3R3	4	0	4,500,643:86:0	
1557	98	152	13:27:31.133		DMS:	:*RECORD	R7, TRACK 1, FWD, TIC *2794.10 +/- 1	3R3	4	0	4,500,643:86:1	
1558	98	152	13:27:31.133		DMS:	:*AT SPD	R7, TRACK 1, FWD, TIC 2794.10 +/- 1	3R3	4	0	4,500,643:86:1	
1559	98	152	13:27:31.733	15ENEUR16H01-	NIMPBK	301EP	EUROPA 16 HOUR MAP	3R3	4	0	:	
1560	98	152	13:27:31.733	15ENEUR16H01-	NIMPBK	301EK	EUROPA 16 HOUR MAP	3R3	4	0	:	
1561	98	152	13:32:13.733	117DK11A	CSMOS	GE	**** GROUP END CSMOS	3R3	4	0	4,500,648:55:0	
1562	98	152	13:32:13.733	15ENEUR16H01-	DESEL	300EP	EUROPA 16 HOUR MAP	3R3	4	0	:	
1563	98	152	13:32:13.733	15ENEUR16H01-	DESEL	300EK	EUROPA 16 HOUR MAP	3R3	4	0	:	
1564	98	152	13:32:21.733	175EK422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,648:67:0	
1565	98	152	13:32:21.733	175EK6A	6TMREC	NRC	NO RECORD Record Mode Change	3R3	4	0	4,500,648:67:0	
1566	98	152	13:32:21.733		DMS:	:*RUNDOWN	R7, TRACK 1, FWD, TIC *2862.21 +/- 1	3R3	4	0	4,500,648:67:0	
1567	98	152	13:32:22.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *2862.27 +/- 1	3R3	4	0	4,500,648:68:8	
1568	98	152	13:35:36.462	15ENEUR16H01-	-----STOP	-----STOP		3R3	4	0	:	
1569	98	152	14:22:21.748	15NNJUPRTS02-	-----START	-----START		3R3	4	0	:	
1570	98	152	14:24:57.733	20DC5A	37PL		Program Load (halts microprocessor & unwri	3R3	4	0	4,500,700:69:0	
1571	98	152	14:25:05.066	20DC5B	37MRL		Memory Realocate (software operates from R	3R3	4	0	4,500,700:80:0	
1572	98	152	14:25:06.400	20DC6A	6MCOPY	NIMS	NIMS,1000,LLM1A,7300,77F7	3R3	4	0	4,500,700:82:0	
1573	98	152	14:25:16.400	20DC6B	6MCOPY	NIMS	NIMS,1598,LLM1A,77F8,781D	3R3	4	0	4,500,701:06:0	
1574	98	152	14:25:26.400	20DC5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,500,701:21:0	
1575	98	152	14:25:27.733	20DC5D	37MN		Memory Normal (software operates from ROM)	260	4	0	4,500,701:23:0	
1576	98	152	14:26:05.733	20DC4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,500,701:80:0	
1577	98	152	14:26:12.400	165DC4A	7SCAN	NORM,41,498,18,8	Check S/P Position	2R0	4	0	4,500,701:90:0	
1578	98	152	14:26:24.415	15NNJUPRTS02*	-----START	-----START		2R0	4	0	:	
1579	98	152	14:26:24.415	15NNJUPRTS02-	-----STOP	-----STOP		2R0	4	0	:	
1580	98	152	14:27:09.066	125DC	NIMSNIT	GS	##### GROUP START INIT	2R0	4	0	4,500,702:84:0	
1581	98	152	14:27:09.066	125DC4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	4,500,702:84:0	
1582	98	152	14:28:09.733	125DC11A	NIMSNIT	GE	##### GROUP END INIT	4R0	4	0	4,500,703:84:0	
1583	98	152	14:28:09.733	125DC4B	37MB	1B,1B,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	4,500,703:84:0	
1584	98	152	14:29:10.400	127DC	NIMSTAB	GS	%%%/%% GROUP START TAB	4R0	4	0	4,500,704:84:0	
1585	98	152	14:29:10.400	127DC4A	37IOP	3.0	Long Map, Grating Start Position =00	4R3	4	0	4,500,704:84:0	
1586	98	152	14:29:11.066	127DC4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	4,500,704:85:0	
1587	98	152	14:29:19.066	127DC11A	NIMSTAB	GE	%%%/%% GROUP END TAB	4R3	4	0	4,500,705:06:0	
1588	98	152	14:29:35.066	432DC6A	6RTSL2	NIMSEL,AACNCG,RT	NIMS R/T SELECT	4R3	4	0	4,500,705:30:0	
1589	98	152	14:30:06.400	117DC	CSMOS	GS	**** GROUP START CSMOS	4R3	4	0	4,500,705:77:0	
1590	98	152	14:30:14.400	165DC4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,705:89:0	
1591	98	152	14:30:15.733	117DC105A106A4A	7STRP	0.036216,0,0,0,0	Slew =,0.03	4R3	4	0	4,500,706:00:0	
1592	98	152	14:49:47.066	432DY6A	6RTDS2	NIMDSL,AACNCG,RT	NIMS R/T DESELECT	4R3	4	0	4,500,725:28:0	
1593	98	152	14:50:24.400	117DC11A	CSMOS	GE	**** GROUP END CSMOS	4R3	4	0	4,500,725:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1594	98	152	14:50:40.415	15JNJUPRTS02*		-----STOP-----		4R3	4	0	:	:
1595	98	152	16:27:05.733	488AG6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	4R3	4	0	:	4,500,821:50:0
1596	98	152	16:37:51.082	15NNJPDARK01-		-----START-----		4R3	4	0	:	:
1597	98	152	16:39:26.400	20DN5A	37PL		Program Load (halts microprocessor & unwri	4R3	4	0	:	4,500,833:69:0
1598	98	152	16:39:33.733	20DN5B	37MRL		Memory Realocate (software operates from R	4R3	4	0	:	4,500,833:80:0
1599	98	152	16:39:35.066	20DN6A	6MCPY	NIMS	NIMS,1000,LLM1A,7300,77F7	4R3	4	0	:	4,500,833:82:0
1600	98	152	16:39:45.066	20DN6B	6MCPY	NIMS	NIMS,1598,LLM1A,77F8,781D	4R3	4	0	:	4,500,834:06:0
1601	98	152	16:39:55.066	20DN5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	:	4,500,834:21:0
1602	98	152	16:39:56.400	20DN5D	37MN		Memory Normal (software operates from ROM)	260	4	0	:	4,500,834:23:0
1603	98	152	16:40:34.400	20DN4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	:	4,500,834:80:0
1604	98	152	16:40:53.082	15NNJPDARK01-		-----STOP-----		2R0	4	0	:	:
1605	98	152	16:40:53.082	15NNJPDARK01-		-----START-----		2R0	4	0	:	:
1606	98	152	16:41:41.733	165DN4A	7SCAN	NORM,49.508,20.9	Check S/P Position	2R0	4	0	:	4,500,835:90:0
1607	98	152	16:42:38.400	125DN4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	:	4,500,836:84:0
1608	98	152	16:42:38.400	125DN	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	:	4,500,836:84:0
1609	98	152	16:43:39.066	125DN11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	:	4,500,837:84:0
1610	98	152	16:43:39.066	125DN4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	:	4,500,837:84:0
1611	98	152	16:44:39.733	127DN	NIMSTAB	GS	%%/%/% GROUP START TAB	4R0	4	0	:	4,500,838:84:0
1612	98	152	16:44:39.733	127DN4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	:	4,500,838:84:0
1613	98	152	16:44:40.400	127DN4B	37ETB	GE,02.03,FF,1A,	Loads wavelength edit table	4R3	4	0	:	4,500,838:85:0
1614	98	152	16:44:48.400	127DN11A	NIMSTAB	GE	%%/%/% GROUP END TAB	4R3	4	0	:	4,500,839:06:0
1615	98	152	16:45:33.733		DMS:	:*EA-DELAY	RDY, TRACK 1, FWD, TIC 2862.27 +/- 1	4R3	4	0	:	4,500,839:74:0
1616	98	152	16:45:33.733	175DN422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	4R3	4	0	:	4,500,839:74:0
1617	98	152	16:45:35.733	117DN	CSMOS	GS	**** GROUP START CSMOS	4R3	4	0	:	4,500,839:77:0
1618	98	152	16:45:40.400		DMS:	:*RUNUP	R7, TRACK 1, FWD, TIC 2862.27 +/- 1	4R3	4	0	:	4,500,839:84:0
1619	98	152	16:45:41.733	175DN176A6A	6TMREC	LPU	7.68 KBPS NIMS-JVS-PPR RECORD Record Mode	4R3	4	0	:	4,500,839:86:0
1620	98	152	16:45:41.800		DMS:	:*RECORD	R7, TRACK 1, FWD, TIC *2862.39 +/- 1	4R3	4	0	:	4,500,839:86:1
1621	98	152	16:45:41.800		DMS:	:*AT_SPD	R7, TRACK 1, FWD, TIC 2862.39 +/- 1	4R3	4	0	:	4,500,839:86:1
1622	98	152	16:45:43.733	165DN4B	7VECT		Inert vect update UTC	4R3	4	0	:	4,500,839:89:0
1623	98	152	16:45:45.066	15JNJPDARK01-	NIMPBK	301DN	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1624	98	152	16:45:45.066	15JNJPDARK01-	NIMPBK	301DU	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1625	98	152	16:45:45.066	117DN105A106A4A	7STRP	-0.018102,0,0,0,	Slew = 0.03	4R3	4	0	:	4,500,840:00:0
1626	98	152	16:49:36.400	15JNJPDARK01-	NIMPBK	301DU	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1627	98	152	16:49:57.066	15JNJPDARK01-	DESEL	300DU	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1628	98	152	16:50:35.733	15JNJPDARK01-	NIMPBK	301DN	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1629	98	152	16:50:45.066	15JNJPDARK01-	DESEL	300DU	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1630	98	152	16:55:39.733	15JNJPDARK01-	DESEL	300DN	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1631	98	152	16:55:40.400	15JNJPDARK01-	DESEL	300DN	DARK SIDE JUPITER ZONE	4R3	4	0	:	:
1632	98	152	16:55:42.400	175DN6A	6TMREC	NRC	NO RECORD Record Mode Change	4R3	4	0	:	4,500,849:77:0
1633	98	152	16:55:42.400	175DN422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	:	4,500,849:77:0
1634	98	152	16:55:42.400		DMS:	:*RUNDOWN	R7, TRACK 1, FWD, TIC *3003.16 +/- 1	4R3	4	0	:	4,500,849:77:0
1635	98	152	16:55:43.600		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *3003.22 +/- 1	4R3	4	0	:	4,500,849:78:8
1636	98	152	16:55:50.400	117DN11A	CSMOS	GE	**** GROUP END CSMOS	4R3	4	0	:	4,500,849:89:0
1637	98	152	16:55:51.066	165DJ4A	7SCAN	NORM,49.053,20.7	Check S/P Position	4R3	4	0	:	4,500,849:90:0
1638	98	152	16:56:03.082	15JNJPDARK01-		-----STOP-----		4R3	4	0	:	:
1639	98	152	16:56:03.082	15JNJUPRTS03*		-----START-----		4R3	4	0	:	:
1640	98	152	16:56:11.733	488AH6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	4R3	4	0	:	4,500,850:30:0
1641	98	152	16:56:47.733	125DJ4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R3	4	0	:	4,500,850:84:0
1642	98	152	16:56:47.733	125DJ	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	:	4,500,850:84:0
1643	98	152	16:57:48.400	125DJ11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	:	4,500,851:84:0
1644	98	152	16:57:48.400	125DJ4B	37MB	1B,1B,0,0,0,0	Selects mirror (spatial) edit table	4R3	4	0	:	4,500,851:84:0
1645	98	152	16:58:49.066	127DJ	NIMSTAB	GS	%%/%/% GROUP START TAB	4R3	4	0	:	4,500,852:84:0
1646	98	152	16:58:49.066	127DJ4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	:	4,500,852:84:0
1647	98	152	16:58:49.733	127DJ4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	:	4,500,852:85:0
1648	98	152	16:58:57.733	127DJ11A	NIMSTAB	GE	%%/%/% GROUP END TAB	4R3	4	0	:	4,500,853:06:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1649	98	152	16:59:13.733	432DJ6A	6RTSL2	NIMSEL,AACNCG,RT	NIMS R/T SELECT	4R3	4	0	4,500,853:70:0	
1650	98	152	16:59:45.066	117DJ	CSMOS	GS	**** GROUP START CSMOS	4R3	4	0	4,500,853:70:0	
1651	98	152	16:59:53.066	165DJ4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,853:89:0	
1652	98	152	16:59:54.400	117DJ105A106A4A	7STRP	-0.018002,0.0,0.0,	Slew = 0.03	4R3	4	0	4,500,854:00:0	
1653	98	152	17:10:01.066	117DJ11A	CSMOS	GE	**** GROUP END CSMOS	4R3	4	0	4,500,864:00:0	
1654	98	152	17:10:12.415	15JNJUPRTS03*			*****STOP*****	4R3	4	0	:	
1655	98	152	17:10:12.415	15NNJPDARK02-			*****START*****	4R3	4	0	:	
1656	98	152	17:10:19.733	432DI6A	6RTDS2	NIMDSL,AACNCG,RT	NIMS R/T DESELECT	4R3	4	0	4,500,864:28:0	
1657	98	152	17:11:47.733	20DO5A	37PL		Program Load (halts microprocessor & unwri	4R3	4	0	4,500,865:69:0	
1658	98	152	17:11:55.066	20DO5B	37MRL		Memory Realocate (software operates from R	4R3	4	0	4,500,865:80:0	
1659	98	152	17:11:56.400	20DO6A	6MCPY	NIMS	NIMS,1000,LLM1A,7300,77F7	4R3	4	0	4,500,865:82:0	
1660	98	152	17:12:06.400	20DO6B	6MCPY	NIMS	NIMS,1598,LLM1A,77F8,781D	4R3	4	0	4,500,866:06:0	
1661	98	152	17:12:16.400	20DO5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,500,866:21:0	
1662	98	152	17:12:17.733	20DO5D	37MN		Memory Normal (software operates from ROM)	260	4	0	4,500,866:23:0	
1663	98	152	17:12:55.733	20DO4A	37IST	1.2,0,OFF,0.0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,500,866:80:0	
1664	98	152	17:14:15.082	15JNJPDARK02-			*****START*****	2R0	4	0	:	
1665	98	152	17:14:15.082	15NNJPDARK02-			*****STOP*****	2R0	4	0	:	
1666	98	152	17:14:59.733	125DO	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	4,500,868:84:0	
1667	98	152	17:14:59.733	125DO4A	37IST	0.2,0,OFF,0.1,1	Gain State 4	4R0	4	0	4,500,868:84:0	
1668	98	152	17:15:03.733	165DO4A	7SCAN	NORM,49.992,21.0	Check S/P Position	4R0	4	0	4,500,868:90:0	
1669	98	152	17:16:00.400	125DO11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,500,869:84:0	
1670	98	152	17:16:00.400	125DO4B	37MB	0.0,0.0,0.0,0	Selects mirror (spatial) edit table	4R0	4	0	4,500,869:84:0	
1671	98	152	17:18:01.733	127DO	NIMSTAB	GS	%%/%/% GROUP START TAB	4R0	4	0	4,500,871:84:0	
1672	98	152	17:18:01.733	127DO4A	37IOP	3.0	Long Map, Grating Start Position =00	4R3	4	0	4,500,871:84:0	
1673	98	152	17:18:02.400	127DO4B	37ETB	GE,02.03,FF,1A,	Loads wavelength edit table	4R3	4	0	4,500,871:85:0	
1674	98	152	17:18:10.400	127DO11A	NIMSTAB	GE	%%/%/% GROUP END TAB	4R3	4	0	4,500,872:06:0	
1675	98	152	17:18:55.733		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 3003.22 +/- 1	4R3	4	0	4,500,872:74:0	
1676	98	152	17:18:55.733	175DO422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	4R3	4	0	4,500,872:74:0	
1677	98	152	17:18:57.733	117DO	CSMOS	GS	**** GROUP START CSMOS	4R3	4	0	4,500,872:77:0	
1678	98	152	17:19:02.400		DMS:	:*RUNUP	R7, TRACK 1, FWD, TIC 3003.22 +/- 1	4R3	4	0	4,500,872:84:0	
1679	98	152	17:19:03.733	175DO176A6A	6TMREC	LPU	7.68 KBPS NIMS-JVS-PPR RECORD Record Mode	4R3	4	0	4,500,872:86:0	
1680	98	152	17:19:03.800		DMS:	:*AT SPD	R7, TRACK 1, FWD, TIC 3003.34 +/- 1	4R3	4	0	4,500,872:86:1	
1681	98	152	17:19:03.800		DMS:	:*RECORD	R7, TRACK 1, FWD, TIC *3003.34 +/- 1	4R3	4	0	4,500,872:86:1	
1682	98	152	17:19:05.733	165DO4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,872:89:0	
1683	98	152	17:19:07.066	15JNJPDARK02-	NIMPBK	301DO	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1684	98	152	17:19:07.066	117DO105A106A4A	7STRP	-0.018102,0.0,0.0,	Slew = 0.03	4R3	4	0	:	
1685	98	152	17:19:07.066	15JNJPDARK02-	NIMPBK	301DO	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1686	98	152	17:19:15.066	20MC6A	6CKSUM	MAG,4040,46FO		4R3	4	0	4,500,873:12:0	
1687	98	152	17:20:05.733	15JNJPDARK02-	NIMPBK	301DF	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1688	98	152	17:20:11.733	480MB6A	6MROH	12,2282,0,A2	read from LLM1A12,2282,0,A2	4R3	4	0	4,500,874:06:0	
1689	98	152	17:20:11.733	480MB6	6MROH		12 read from LLM1A12,2282,0,A2	4R3	4	0	4,500,874:06:0	
1690	98	152	17:20:25.733	15JNJPDARK02-	DESEL	300DF	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1691	98	152	17:23:57.733	15JNJPDARK02-	NIMPBK	301EO	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1692	98	152	17:24:07.066	15JNJPDARK02-	DESEL	300DO	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1693	98	152	17:29:11.733	15JNJPDARK02-	DESEL	300EO	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1694	98	152	17:29:11.733	15JNJPDARK02-	DESEL	300DO	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1695	98	152	17:29:13.733	117DO11A	CSMOS	GE	**** GROUP END CSMOS	4R3	4	0	4,500,883:00:0	
1696	98	152	17:29:13.733		DMS:	:*RUNDOWN	R7, TRACK 1, FWD, TIC *3146.29 +/- 1	4R3	4	0	4,500,883:00:0	
1697	98	152	17:29:13.733	175DO422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,883:00:0	
1698	98	152	17:29:13.733	175DO6A	6TMREC	NRC	NO RECORD Record Mode Change	4R3	4	0	4,500,883:00:0	
1699	98	152	17:29:14.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *3146.35 +/- 1	4R3	4	0	4,500,883:01:8	
1700	98	152	17:33:27.748	15JNJPDARK02-			*****STOP*****	4R3	4	0	:	
1701	98	152	17:34:13.796	15NNEUR20H01-			*****START*****	4R3	4	0	:	
1702	98	152	17:37:04.400	20DL5A	37PL		Program Load (halts microprocessor & unwri	4R3	4	0	4,500,890:69:0	
1703	98	152	17:37:11.733	20DL5B	37MRL		Memory Realocate (software operates from R	4R3	4	0	4,500,890:80:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1704	98	152	17:37:13.066	20DL6A	6MCPY	NIMS	NIMS,1000,LLM1A,7300,77F7	4R3	4	0	4,500,890	82:0
1705	98	152	17:37:23.066	20DL6B	6MCPY	NIMS	NIMS,1598,LLM1A,77F8,781D	4R3	4	0	4,500,891	06:0
1706	98	152	17:37:33.066	20DL5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,500,891	21:0
1707	98	152	17:37:34.400	20DL5D	37MN		Memory Normal (software operates from ROM)	260	4	0	4,500,891	23:0
1708	98	152	17:38:12.400	20DL4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,500,891	80:0
1709	98	152	17:39:17.129	15NNEUR20H01-		-----STOP-----		2R0	4	0	:	:
1710	98	152	17:39:17.129	15NNEUR20H01-		-----START-----		2R0	4	0	:	:
1711	98	152	17:40:16.400	125DL4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	4,500,893	84:0
1712	98	152	17:40:16.400	125DL	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	4,500,893	84:0
1713	98	152	17:41:17.066	125DL11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,500,894	84:0
1714	98	152	17:41:17.066	125DL4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	4,500,894	84:0
1715	98	152	17:43:18.400	127DL4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	4,500,896	84:0
1716	98	152	17:43:18.400	127DL	NIMSTAB	GS	%%-%-% GROUP START TAB	4R3	4	0	4,500,896	84:0
1717	98	152	17:43:19.066	127DL4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	4,500,896	85:0
1718	98	152	17:43:27.066	127DL11A	NIMSTAB	GE	%%-%-% GROUP END TAB	4R3	4	0	4,500,897	06:0
1719	98	152	17:46:24.400	165DL4A	7SCAN	NORM,93.990999,2	Check S/P Position	4R3	4	0	4,500,899	90:0
1720	98	152	17:50:13.066	488AH6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	4R3	4	0	4,500,903	69:0
1721	98	152	17:50:14.400		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 3146.35 +/- 1	4R3	4	0	4,500,903	71:0
1722	98	152	17:50:14.400	175DL422A6A	6DMSC	R28,1	DMS Control	4R3	4	0	4,500,903	71:0
1723	98	152	17:50:18.400	117DL	CSMOS	GS	***** GROUP START CSMOS	4R3	4	0	4,500,903	77:0
1724	98	152	17:50:21.066		DMS:	:*RUNUP	R28, TRACK 1, FWD, TIC 3146.35 +/- 1	4R3	4	0	4,500,903	81:0
1725	98	152	17:50:24.400	175DL176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	4,500,903	86:0
1726	98	152	17:50:25.066		DMS:	:*RECORD	R28, TRACK 1, FWD, TIC *3147.85 +/- 1	4R3	4	0	4,500,903	87:0
1727	98	152	17:50:25.066		DMS:	:*AT_SPD	R28, TRACK 1, FWD, TIC 3147.85 +/- 1	4R3	4	0	4,500,903	87:0
1728	98	152	17:50:26.400	165DL4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,903	89:0
1729	98	152	17:50:27.733	117DL105A106A4A	7STRP	-0.0052,0,0,0,0,	Slew =-0.02	4R3	4	0	4,500,904	00:0
1730	98	152	17:50:27.733	15ENEUR20H01-	NIMPBK	301DL	EUROPA 20 HOUR MAP	4R3	4	0	:	:
1731	98	152	17:50:27.733	15ENEUR20H01-	NIMPBK	301DV	EUROPA 20 HOUR MAP	4R3	4	0	:	:
1732	98	152	17:53:44.400	15ENEUR20H01-	NIMPBK	301DV	EUROPA 20 HOUR MAP	4R3	4	0	:	:
1733	98	152	17:53:59.733	15ENEUR20H01-	DESELC	300DV	EUROPA 20 HOUR MAP	4R3	4	0	:	:
1734	98	152	17:54:39.066	15ENEUR20H01-	DESELC	300DL	EUROPA 20 HOUR MAP	4R3	4	0	:	:
1735	98	152	17:54:49.066	15ENEUR20H01-	DESELC	300DV	EUROPA 20 HOUR MAP	4R3	4	0	:	:
1736	98	152	17:54:51.066		DMS:	:*RUNDOWN	R28, TRACK 1, FWD, TIC *3381.64 +/- 1	4R3	4	0	4,500,908	31:0
1737	98	152	17:54:51.066	175DL422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,908	31:0
1738	98	152	17:54:51.733	117DL105A106A4B	7STRP	0,052,0,0,0,0,0	Slew =12.01	4R3	4	0	4,500,908	32:0
1739	98	152	17:54:52.266		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *3381.94 +/- 1	4R3	4	0	4,500,908	32:8
1740	98	152	17:55:26.400	127EL	NIMSTAB	GS	%%-%-% GROUP START TAB	4R3	4	0	4,500,908	84:0
1741	98	152	17:55:27.066	127EL4A	37ETB	07,C7,31,BD,C8,0	Loads wavelength edit table	4R3	4	0	4,500,908	85:0
1742	98	152	17:55:35.066	127EL11A	NIMSTAB	GE	%%-%-% GROUP END TAB	4R3	4	0	4,500,909	06:0
1743	98	152	17:56:20.400		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 3381.94 +/- 1	4R3	4	0	4,500,909	74:0
1744	98	152	17:56:20.400	175EL422A6A	6DMSC		DMS Control Tape runup 7.68kbp	4R3	4	0	4,500,909	74:0
1745	98	152	17:56:27.066	125EL4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,500,909	84:0
1746	98	152	17:56:27.066	125EL11A	NIMSINIT	GE	##### GROUP END INIT	3R3	4	0	4,500,909	84:0
1747	98	152	17:56:27.066		DMS:	:*RUNUP	R7, TRACK 1, FWD, TIC 3381.94 +/- 1	3R3	4	0	4,500,909	84:0
1748	98	152	17:56:27.066	125EL	NIMSINIT	GS	##### GROUP START INIT	3R3	4	0	4,500,909	84:0
1749	98	152	17:56:28.400	175EL176A6A	6TMREC	LPU	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	3R3	4	0	4,500,909	86:0
1750	98	152	17:56:28.466		DMS:	:*AT_SPD	R7, TRACK 1, FWD, TIC 3382.06 +/- 1	3R3	4	0	4,500,909	86:1
1751	98	152	17:56:28.466		DMS:	:*RECORD	R7, TRACK 1, FWD, TIC *3382.06 +/- 1	3R3	4	0	4,500,909	86:1
1752	98	152	17:57:01.066	15ENEUR20H01-	NIMPBK	301EF	EUROPA 20 HOUR MAP	3R3	4	0	:	:
1753	98	152	17:57:01.066	117DL105A106A4C	7STRP	-0.0052,0,0,0,0,	Slew =-0.02	3R3	4	0	4,500,910	44:0
1754	98	152	17:57:06.400	15ENEUR20H01-	NIMPBK	301DL	EUROPA 20 HOUR MAP	3R3	4	0	:	:
1755	98	152	17:57:11.066	15ENEUR20H01-	NIMPBK	301EL	EUROPA 20 HOUR MAP	3R3	4	0	:	:
1756	98	152	17:57:31.066	15ENEUR20H01-	DESELC	300DL	EUROPA 20 HOUR MAP	3R3	4	0	:	:
1757	98	152	18:01:17.733	15ENEUR20H01-	DESELC	300EL	EUROPA 20 HOUR MAP	3R3	4	0	:	:
1758	98	152	18:01:23.066	15ENEUR20H01-	DESELC	300EF	EUROPA 20 HOUR MAP	3R3	4	0	:	:

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1759	98	152	18:01:25.066		DMS:	: *RUNDOWN	R7, TRACK 1, FWD, TIC *3451.57 +/- 1	3R3	4	0	4,500,914:76:0	
1760	98	152	18:01:25.066	175EL6A	6TMREC	NRC	NO RECORD Record Mode Change	3R3	4	0	4,500,914:76:0	
1761	98	152	18:01:25.066	117DL11A	CSMOS	GE	***** GROUP END CSMOS	3R3	4	0	4,500,914:76:0	
1762	98	152	18:01:25.066	175EL422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,914:76:0	
1763	98	152	18:01:26.266		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3451.63 +/- 1	3R3	4	0	4,500,914:77:8	
1764	98	152	18:01:31.796	15ENEUR20H01-			*****STOP*****	3R3	4	0	:	
1765	98	152	18:03:47.748	15NNJPDARK03-			*****START*****	3R3	4	0	:	
1766	98	152	18:04:22.400	20DP5A	37PL		Program Load (halts microprocessor & unwri	3R3	4	0	4,500,917:69:0	
1767	98	152	18:04:29.733	20DP5B	37MRL		Memory Realocate (software operates from R	3R3	4	0	4,500,917:80:0	
1768	98	152	18:04:31.066	20DP6A	6MCOPI	NIMS	NIMS,1000,LLM1A,7300,77F7	3R3	4	0	4,500,917:82:0	
1769	98	152	18:04:41.066	20DP6B	6MCOPI	NIMS	NIMS,1598,LLM1A,77F8,781D	3R3	4	0	4,500,918:06:0	
1770	98	152	18:04:51.066	20DP5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,500,918:21:0	
1771	98	152	18:04:52.400	20DP5D	37MN		Memory Normal (software operates from ROM)	260	4	0	4,500,918:23:0	
1772	98	152	18:05:30.400	20DP4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,500,918:80:0	
1773	98	152	18:06:33.733	125DP	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	4,500,919:84:0	
1774	98	152	18:06:33.733	125DP4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	4,500,919:84:0	
1775	98	152	18:06:37.733	165DP4A	7SCAN	NORM,51.507,21.3	Check S/P Position	4R0	4	0	4,500,919:90:0	
1776	98	152	18:06:49.748	15NNJPDARK03-			*****STOP*****	4R0	4	0	:	
1777	98	152	18:06:49.748	15JNJPDARK03-			*****START*****	4R0	4	0	:	
1778	98	152	18:07:34.400	125DP11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,500,920:84:0	
1779	98	152	18:07:34.400	125DP4B	37MB	0,0,0,0,0,0	##### GROUP (spatial) edit table	4R0	4	0	4,500,920:84:0	
1780	98	152	18:08:35.066	127DP	NIMSTAB	GS	%%%GROUP START TAB	4R0	4	0	4,500,921:84:0	
1781	98	152	18:08:35.066	127DP4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	4,500,921:84:0	
1782	98	152	18:08:35.733	127DP4B	37ETB	CD,02,03,FF,1A,	Loads wavelength edit table	4R3	4	0	4,500,921:85:0	
1783	98	152	18:08:43.733	127DP11A	NIMSTAB	GE	%%%GROUP END TAB	4R3	4	0	4,500,922:06:0	
1784	98	152	18:10:29.733	175DP422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	4R3	4	0	4,500,923:74:0	
1785	98	152	18:10:29.733		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3451.63 +/- 1	4R3	4	0	4,500,923:74:0	
1786	98	152	18:10:31.733	117DP	CSMOS	GS	***** GROUP START CSMOS	4R3	4	0	4,500,923:77:0	
1787	98	152	18:10:36.400		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC 3451.63 +/- 1	4R3	4	0	4,500,923:84:0	
1788	98	152	18:10:37.733	175DP176A6A	6TMREC	LPU	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	4R3	4	0	4,500,923:86:0	
1789	98	152	18:10:37.800		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 3451.75 +/- 1	4R3	4	0	4,500,923:86:1	
1790	98	152	18:10:37.800		DMS:	: *RECORD	R7, TRACK 1, FWD, TIC *3451.75 +/- 1	4R3	4	0	4,500,923:86:1	
1791	98	152	18:10:39.733	165DP4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,923:89:0	
1792	98	152	18:10:41.066	15JNJPDARK03-	NIMPBK	301DD	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1793	98	152	18:10:41.066	117DP105A106A4A	7STRP	-0.018102,0.0,0.0,	Slew =-0.03	4R3	4	0	4,500,924:00:0	
1794	98	152	18:10:41.066	15JNJPDARK03-	NIMPBK	301DP	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1795	98	152	18:12:07.733	15JNJPDARK03-	NIMPBK	301DP	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1796	98	152	18:12:07.733	15JNJPDARK03-	DESEL	300DD	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1797	98	152	18:18:21.733	15JNJPDARK03-	NIMPBK	301DM	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1798	98	152	18:18:51.733	15JNJPDARK03-	DESEL	300DM	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1799	98	152	18:20:15.733	15JNJPDARK03-	DESEL	300DP	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1800	98	152	18:20:36.400	15JNJPDARK03-	DESEL	300DP	DARK SIDE JUPITER ZONE	4R3	4	0	:	
1801	98	152	18:20:38.400	175DP6A	6TMREC	NRC	NO RECORD Record Mode Change	4R3	4	0	4,500,933:77:0	
1802	98	152	18:20:38.400	175DP422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,933:77:0	
1803	98	152	18:20:38.400		DMS:	: *RUNDOWN	R7, TRACK 1, FWD, TIC *3592.52 +/- 1	4R3	4	0	4,500,933:77:0	
1804	98	152	18:20:39.600		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3592.58 +/- 1	4R3	4	0	4,500,933:78:8	
1805	98	152	18:20:47.733	117DP11A	CSMOS	GE	***** GROUP END CSMOS	4R3	4	0	4,500,934:00:0	
1806	98	152	18:23:00.415	15JNJPDARK03-			*****STOP*****	4R3	4	0	:	
1807	98	152	18:37:58.400	165IO4A	7SCAN	NORM,34.471,15.6	Check S/P Position	4R3	4	0	4,500,950:90:0	
1808	98	152	18:46:03.066	165IO4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,958:89:0	
1809	98	152	18:46:27.733	175IT422A6A	6DMSC	R115.1	DMS Control	4R3	4	0	4,500,959:35:0	
1810	98	152	18:46:27.733		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3592.58 +/- 1	4R3	4	0	4,500,959:35:0	
1811	98	152	18:46:34.400		DMS:	: *RUNUP	R115, TRACK 1, FWD, TIC 3592.58 +/- 1	4R3	4	0	4,500,959:45:0	
1812	98	152	18:46:37.733	175IT176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	4,500,959:50:0	
1813	98	152	18:46:38.400		DMS:	: *RECORD	R115, TRACK 1, FWD, TIC *3598.88 +/- 1	4R3	4	0	4,500,959:51:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1814	98	152	18:46:38.400		DMS:	: *AT_SPD	R115, TRACK 1, FWD, TIC 3598.88 +/- 1	4R3	4	0	4,500,959:51:0	
1815	98	152	18:47:05.066		DMS:	: *RUNDOWN	R115, TRACK 1, FWD, TIC *3692.63 +/- 1	4R3	4	0	4,500,960:00:0	
1816	98	152	18:47:05.066	175I17422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,960:00:0	
1817	98	152	18:47:06.266		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3693.63 +/- 1	4R3	4	0	4,500,960:01:8	
1818	98	152	18:47:28.400		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3693.63 +/- 1	4R3	4	0	4,500,960:35:0	
1819	98	152	18:47:28.400	175IU422A6A	6DMSC	R115,1	DMS Control	4R3	4	0	4,500,960:35:0	
1820	98	152	18:47:35.066		DMS:	: *RUNUP	R115, TRACK 1, FWD, TIC 3693.63 +/- 1	4R3	4	0	4,500,960:45:0	
1821	98	152	18:47:38.400	175IU176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	4,500,960:50:0	
1822	98	152	18:47:39.066		DMS:	: *AT_SPD	R115, TRACK 1, FWD, TIC 3699.93 +/- 1	4R3	4	0	4,500,960:51:0	
1823	98	152	18:47:39.066		DMS:	: *RECORD	R115, TRACK 1, FWD, TIC *3699.93 +/- 1	4R3	4	0	4,500,960:51:0	
1824	98	152	18:48:05.733		DMS:	: *RUNDOWN	R115, TRACK 1, FWD, TIC *3793.68 +/- 1	4R3	4	0	4,500,961:00:0	
1825	98	152	18:48:05.733	175IU422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,961:00:0	
1826	98	152	18:48:06.933		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3794.68 +/- 1	4R3	4	0	4,500,961:01:8	
1827	98	152	18:48:29.066		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3794.68 +/- 1	4R3	4	0	4,500,961:35:0	
1828	98	152	18:48:29.066	175IV422A6A	6DMSC	R115,1	DMS Control	4R3	4	0	4,500,961:35:0	
1829	98	152	18:48:35.733		DMS:	: *RUNUP	R115, TRACK 1, FWD, TIC 3794.68 +/- 1	4R3	4	0	4,500,961:45:0	
1830	98	152	18:48:39.066	175IV176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	4,500,961:50:0	
1831	98	152	18:48:39.733		DMS:	: *RECORD	R115, TRACK 1, FWD, TIC *3800.98 +/- 1	4R3	4	0	4,500,961:51:0	
1832	98	152	18:48:39.733		DMS:	: *AT_SPD	R115, TRACK 1, FWD, TIC 3800.98 +/- 1	4R3	4	0	4,500,961:51:0	
1833	98	152	18:49:03.129	15NNEUR22H01-	-----START-----			4R3	4	0	:	:
1834	98	152	18:49:06.400	175IV422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,962:00:0	
1835	98	152	18:49:06.400		DMS:	: *RUNDOWN	R115, TRACK 1, FWD, TIC *3894.73 +/- 1	4R3	4	0	4,500,962:00:0	
1836	98	152	18:49:07.600		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3895.73 +/- 1	4R3	4	0	4,500,962:01:8	
1837	98	152	18:49:29.733	175IW422A6A	6DMSC	R115,1	DMS Control	4R3	4	0	4,500,962:35:0	
1838	98	152	18:49:29.733		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3895.73 +/- 1	4R3	4	0	4,500,962:35:0	
1839	98	152	18:49:36.400		DMS:	: *RUNUP	R115, TRACK 1, FWD, TIC 3895.73 +/- 1	4R3	4	0	4,500,962:45:0	
1840	98	152	18:49:39.733	175IW176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	4,500,962:50:0	
1841	98	152	18:49:40.400		DMS:	: *AT_SPD	R115, TRACK 1, FWD, TIC 3902.03 +/- 1	4R3	4	0	4,500,962:51:0	
1842	98	152	18:49:40.400		DMS:	: *RECORD	R115, TRACK 1, FWD, TIC *3902.03 +/- 1	4R3	4	0	4,500,962:51:0	
1843	98	152	18:50:07.066	175IW422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,963:00:0	
1844	98	152	18:50:07.066		DMS:	: *RUNDOWN	R115, TRACK 1, FWD, TIC *3995.78 +/- 1	4R3	4	0	4,500,963:00:0	
1845	98	152	18:50:08.266		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3996.78 +/- 1	4R3	4	0	4,500,963:01:8	
1846	98	152	18:50:14.400	175IX422A6A	6DMSC	R806,1	DMS Control	4R3	4	0	4,500,963:11:0	
1847	98	152	18:50:14.400		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3996.78 +/- 1	4R3	4	0	4,500,963:11:0	
1848	98	152	18:50:21.066		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC 3996.78 +/- 1	4R3	4	0	4,500,963:21:0	
1849	98	152	18:50:25.733	175IX176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	4R3	4	0	4,500,963:28:0	
1850	98	152	18:50:26.333		DMS:	: *RECORD	R806, TRACK 1, FWD, TIC *4062.78 +/- 1	4R3	4	0	4,500,963:28:9	
1851	98	152	18:50:26.333		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 4062.78 +/- 1	4R3	4	0	4,500,963:28:9	
1852	98	152	18:50:29.733	175IX422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	4,500,963:34:0	
1853	98	152	18:50:29.733		DMS:	: *RUNDOWN	R806, TRACK 1, FWD, TIC *4146.45 +/- 1	4R3	4	0	4,500,963:34:0	
1854	98	152	18:50:32.466		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4157.95 +/- 1	4R3	4	0	4,500,963:38:1	
1855	98	152	18:51:53.733	20DM5A	37PL		Program Load (halts microprocessor & unwri	4R3	4	0	4,500,964:69:0	
1856	98	152	18:52:01.066	20DM5B	37MRL		Memory Realocate (software operates from R	4R3	4	0	4,500,964:80:0	
1857	98	152	18:52:02.400	20DM6A	6MCOPY	NIMS	NIMS,1000,LLM1A,7300,77F7	4R3	4	0	4,500,964:82:0	
1858	98	152	18:52:12.400	20DM6B	6MCOPY	NIMS	NIMS,1598,LLM1A,77F8,781D	4R3	4	0	4,500,965:06:0	
1859	98	152	18:52:22.400	20DM5C	37IRT		Instrument Reset (goes into POR state)	260	4	0	4,500,965:21:0	
1860	98	152	18:52:23.733	20DM5D	37MN		Memory Normal (software operates from ROM)	260	4	0	4,500,965:23:0	
1861	98	152	18:53:01.733	20DM4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	4	0	4,500,965:80:0	
1862	98	152	18:54:06.462	15NNEUR22H01-	-----STOP-----			2R0	4	0	:	:
1863	98	152	18:54:06.462	15NEUR22H01-	-----START-----			2R0	4	0	:	:
1864	98	152	18:55:05.733	125DM	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	4,500,967:84:0	
1865	98	152	18:55:05.733	125DM4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R0	4	0	4,500,967:84:0	
1866	98	152	18:56:06.400	125DM11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	4,500,968:84:0	
1867	98	152	18:56:06.400	125DM4B	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	4,500,968:84:0	
1868	98	152	18:57:07.066	127DM4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	4,500,969:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1869	98	152	18:57:07.066	127DM	NIMSTAB	GS	%%%% GROUP START TAB	4R3	4	0	4,500,969:84:0	
1870	98	152	18:57:07.733	127DM4B	37ETB	04,C4,35,FF,FF	Loads wavelength edit table	4R3	4	0	4,500,969:85:0	
1871	98	152	18:57:15.733	127DM11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	4,500,970:06:0	
1872	98	152	19:01:13.733	165DM4A	7SCAN	NORM,91,882999,2	Check S/P Position	4R3	4	0	4,500,973:90:0	
1873	98	152	19:05:03.733		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4157.95 +/- 1	4R3	4	0	4,500,977:71:0	
1874	98	152	19:05:03.733	175DM422A6A	6DMSC	R28,1	DMS Control	4R3	4	0	4,500,977:71:0	
1875	98	152	19:05:07.733	117DM	CSMOS	GS	**** GROUP START CSMOS	4R3	4	0	4,500,977:77:0	
1876	98	152	19:05:10.400		DMS:	:*RUNUP	R28, TRACK 1, FWD, TIC 4157.95 +/- 1	4R3	4	0	4,500,977:81:0	
1877	98	152	19:05:13.733	175DM176A6A	6TMREC	MPW	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	4,500,977:86:0	
1878	98	152	19:05:14.400		DMS:	:*AT SPD	R28, TRACK 1, FWD, TIC 4159.45 +/- 1	4R3	4	0	4,500,977:87:0	
1879	98	152	19:05:14.400		DMS:	:*RECORD	R28, TRACK 1, FWD, TIC *4159.45 +/- 1	4R3	4	0	4,500,977:87:0	
1880	98	152	19:05:15.733	165DM4B	7VECT		Inert vect update UTC	4R3	4	0	4,500,977:89:0	
1881	98	152	19:05:17.066	15ENEUR22H01-	NIMPBK	301DM	EUROPA 22 HOUR MAP	4R3	4	0	4,500,981:84:0	
1882	98	152	19:05:17.066	117DM105A106A4A	7STRP	-0.00475,0,0,0,0	Slew = 0.02	4R3	4	0	4,500,978:00:0	
1883	98	152	19:05:17.066	15ENEUR22H01-	NIMPBK	301EL	EUROPA 22 HOUR MAP	4R3	4	0	4,500,981:84:0	
1884	98	152	19:09:11.066	15ENEUR22H01-	DESELC	300DM	EUROPA 22 HOUR MAP	4R3	4	0	4,500,981:85:0	
1885	98	152	19:09:11.066	15ENEUR22H01-	DESELC	300EL	EUROPA 22 HOUR MAP	4R3	4	0	4,500,981:85:0	
1886	98	152	19:09:15.066	125EM	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,500,981:84:0	
1887	98	152	19:09:15.066	125EM4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R3	4	0	4,500,981:84:0	
1888	98	152	19:09:15.066	125EM11A	NIMSINIT	GE	##### GROUP END INIT	3R3	4	0	4,500,981:84:0	
1889	98	152	19:09:15.733	117DM105A106A4B	7STRP	0.0048,0,0,0,0,0	Slew =12.01	3R3	4	0	4,500,981:85:0	
1890	98	152	19:09:19.733	175DM422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,982:00:0	
1891	98	152	19:09:19.733		DMS:	:*RUNDOWN	R28, TRACK 1, FWD, TIC *4375.08 +/- 1	3R3	4	0	4,500,982:00:0	
1892	98	152	19:09:20.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4375.38 +/- 1	3R3	4	0	4,500,982:01:8	
1893	98	152	19:10:15.733	127EM	NIMSTAB	GS	%%%%% GROUP START TAB	3R3	4	0	4,500,982:84:0	
1894	98	152	19:10:16.400	127EM4A	37ETB	07,C7,31,BD,C8,0	Loads wavelength edit table	3R3	4	0	4,500,982:85:0	
1895	98	152	19:10:24.400	127EM11A	NIMSTAB	GE	%%%%% GROUP END TAB	3R3	4	0	4,500,983:06:0	
1896	98	152	19:11:09.733	175EM422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	3R3	4	0	4,500,983:74:0	
1897	98	152	19:11:09.733		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4375.38 +/- 1	3R3	4	0	4,500,983:74:0	
1898	98	152	19:11:16.400		DMS:	:*RUNUP	R7, TRACK 1, FWD, TIC 4375.38 +/- 1	3R3	4	0	4,500,983:84:0	
1899	98	152	19:11:17.733	175EM176A6A	6TMREC	LPU	7.68 KBPS NIMS-JVS-PPR RECORD Record Mode	3R3	4	0	4,500,983:86:0	
1900	98	152	19:11:17.800		DMS:	:*RECORD	R7, TRACK 1, FWD, TIC *4375.50 +/- 1	3R3	4	0	4,500,983:86:1	
1901	98	152	19:11:17.800		DMS:	:*AT SPD	R7, TRACK 1, FWD, TIC 4375.50 +/- 1	3R3	4	0	4,500,983:86:1	
1902	98	152	19:11:21.066	15ENEUR22H01-	NIMPBK	301EM	EUROPA 22 HOUR MAP	3R3	4	0	4,500,983:86:1	
1903	98	152	19:11:21.066	15ENEUR22H01-	NIMPBK	301EM	EUROPA 22 HOUR MAP	3R3	4	0	4,500,983:86:1	
1904	98	152	19:11:25.066	117DM105A106A4C	7STRP	-0.00475,0,0,0,0,0	Slew =0.02	3R3	4	0	4,500,984:06:0	
1905	98	152	19:15:15.066	15ENEUR22H01-	DESELC	300EM	EUROPA 22 HOUR MAP	3R3	4	0	4,500,984:06:0	
1906	98	152	19:15:15.066	15ENEUR22H01-	DESELC	300EM	EUROPA 22 HOUR MAP	3R3	4	0	4,500,988:00:0	
1907	98	152	19:15:23.733	175EM6A	6TMREC	NRC	NO RECORD Record Mode Change	3R3	4	0	4,500,988:00:0	
1908	98	152	19:15:23.733		DMS:	:*RUNDOWN	RDY, TRACK 1, FWD, TIC *4433.14 +/- 1	3R3	4	0	4,500,988:00:0	
1909	98	152	19:15:23.733	117DM11A	CSMOS	GE	**** GROUP END CSMOS	3R3	4	0	4,500,988:00:0	
1910	98	152	19:15:23.733	175EM422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	4	0	4,500,988:00:0	
1911	98	152	19:15:24.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4433.20 +/- 1	3R3	4	0	4,500,988:01:8	
1912	98	152	19:20:23.796	15ENEUR22H01-			-----STOP-----	3R3	4	0	4,500,988:01:8	
1913	98	152	19:24:26.462	15NNCHOPOF01-			-----START-----	3R3	4	0	4,500,988:01:8	
1914	98	152	19:27:27.066	127DQ4A	37IOP	0,0	Safe, Grating Start Position =00	3R0	4	0	4,500,999:84:0	
1915	98	152	19:27:27.066	127DQ	NIMSTAB	GS	%%%%% GROUP START TAB	3R0	4	0	4,500,999:84:0	
1916	98	152	19:27:27.733	127DQ4B	37ETB	04,C4,02,00,00	Loads wavelength edit table	3R0	4	0	4,500,999:85:0	
1917	98	152	19:27:35.733	127DQ11A	NIMSTAB	GE	%%%%% GROUP END TAB	3R0	4	0	4,501,000:06:0	
1918	98	152	19:30:29.066	125DQ4A	37IST	1,0,0,OFF,0,0,0	Chopper ON, Sync, 63Hz (Ref)	360	4	0	4,501,002:84:0	
1919	98	152	19:30:29.066	125DQ	NIMSINIT	GS	##### GROUP START INIT	360	4	0	4,501,002:84:0	
1920	98	152	19:30:33.066	165IQ4A	7SCAN	NORM,38,215,16,8	Check S/P Position	360	4	0	4,501,002:90:0	
1921	98	152	19:31:29.733	125DQ4B	37IST	1,1,0,OFF,0,0,0	Chopper OFF, N/A, 63Hz (Ref)	300	4	0	4,501,003:84:0	
1922	98	152	19:32:30.400	125DQ4C	37MB	0,0,0,0,0,0,0	Selects mirror (spatial) edit table	300	4	0	4,501,004:84:0	
1923	98	152	19:32:30.400	125DQ11A	NIMSINIT	GE	##### GROUP END INIT	300	4	0	4,501,004:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1924	98	152	19:34:33.129	15NNCHOP0F01-				300	4	0	:	:
1925	98	152	19:38:37.733	165IQ4B	7VECT	-----STOP-----	Inert vect update UTC	300	4	0	4	4,501,010:89:0
1926	98	152	19:39:02.400	175Y422A6A	6DMSC	R115.1	DMS Control	300	4	0	4	4,501,011:35:0
1927	98	152	19:39:02.400		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4433.20 +/- 1	300	4	0	4	4,501,011:35:0
1928	98	152	19:39:09.066		DMS:	:*RUNUP	R115, TRACK 1, FWD, TIC 4433.20 +/- 1	300	4	0	4	4,501,011:45:0
1929	98	152	19:39:12.400	175Y176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	300	4	0	4	4,501,011:50:0
1930	98	152	19:39:13.066		DMS:	:*AT SPD	R115, TRACK 1, FWD, TIC 4439.50 +/- 1	300	4	0	4	4,501,011:51:0
1931	98	152	19:39:13.066		DMS:	:*RECORD	R115, TRACK 1, FWD, TIC *4439.50 +/- 1	300	4	0	4	4,501,011:51:0
1932	98	152	19:39:39.733	175Y422A6B	6DMSC	RDY,0	DMS Control Tape stop	300	4	0	4	4,501,012:00:0
1933	98	152	19:39:39.733		DMS:	:*RUNDOWN	R115, TRACK 1, FWD, TIC *4533.25 +/- 1	300	4	0	4	4,501,012:00:0
1934	98	152	19:39:40.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4534.25 +/- 1	300	4	0	4	4,501,012:01:8
1935	98	152	19:40:03.066	175IZ422A6A	6DMSC	R115.1	DMS Control	300	4	0	4	4,501,012:35:0
1936	98	152	19:40:03.066		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4534.25 +/- 1	300	4	0	4	4,501,012:35:0
1937	98	152	19:40:09.733		DMS:	:*RUNUP	R115, TRACK 1, FWD, TIC 4534.25 +/- 1	300	4	0	4	4,501,012:45:0
1938	98	152	19:40:13.066	175IZ176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	300	4	0	4	4,501,012:50:0
1939	98	152	19:40:13.733		DMS:	:*AT SPD	R115, TRACK 1, FWD, TIC 4540.55 +/- 1	300	4	0	4	4,501,012:51:0
1940	98	152	19:40:13.733		DMS:	:*RECORD	R115, TRACK 1, FWD, TIC *4540.55 +/- 1	300	4	0	4	4,501,012:51:0
1941	98	152	19:40:40.400	175IZ422A6B	6DMSC	RDY,0	DMS Control Tape stop	300	4	0	4	4,501,013:00:0
1942	98	152	19:40:40.400		DMS:	:*RUNDOWN	R115, TRACK 1, FWD, TIC *4634.30 +/- 1	300	4	0	4	4,501,013:00:0
1943	98	152	19:40:41.600		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4635.30 +/- 1	300	4	0	4	4,501,013:01:8
1944	98	152	19:41:03.733		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4635.30 +/- 1	300	4	0	4	4,501,013:35:0
1945	98	152	19:41:03.733	175JA422A6A	6DMSC	R115.1	DMS Control	300	4	0	4	4,501,013:35:0
1946	98	152	19:41:10.400		DMS:	:*RUNUP	R115, TRACK 1, FWD, TIC 4635.30 +/- 1	300	4	0	4	4,501,013:45:0
1947	98	152	19:41:13.733	175JA176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	300	4	0	4	4,501,013:50:0
1948	98	152	19:41:14.400		DMS:	:*AT SPD	R115, TRACK 1, FWD, TIC 4641.60 +/- 2	300	4	0	4	4,501,013:51:0
1949	98	152	19:41:14.400		DMS:	:*RECORD	R115, TRACK 1, FWD, TIC *4641.60 +/- 1	300	4	0	4	4,501,013:51:0
1950	98	152	19:41:41.066		DMS:	:*RUNDOWN	R115, TRACK 1, FWD, TIC *4735.35 +/- 2	300	4	0	4	4,501,014:00:0
1951	98	152	19:41:41.066	175JA422A6B	6DMSC	RDY,0	DMS Control Tape stop	300	4	0	4	4,501,014:00:0
1952	98	152	19:41:42.266		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4736.35 +/- 2	300	4	0	4	4,501,014:01:8
1953	98	152	19:42:04.400		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4736.35 +/- 2	300	4	0	4	4,501,014:35:0
1954	98	152	19:42:04.400	175JB422A6A	6DMSC	R115.1	DMS Control	300	4	0	4	4,501,014:35:0
1955	98	152	19:42:11.066		DMS:	:*RUNUP	R115, TRACK 1, FWD, TIC 4736.35 +/- 2	300	4	0	4	4,501,014:45:0
1956	98	152	19:42:14.400	175JB176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	300	4	0	4	4,501,014:50:0
1957	98	152	19:42:15.066		DMS:	:*AT SPD	R115, TRACK 1, FWD, TIC 4742.65 +/- 2	300	4	0	4	4,501,014:51:0
1958	98	152	19:42:15.066		DMS:	:*RECORD	R115, TRACK 1, FWD, TIC *4742.65 +/- 2	300	4	0	4	4,501,014:51:0
1959	98	152	19:42:41.733		DMS:	:*RUNDOWN	R115, TRACK 1, FWD, TIC *4836.40 +/- 2	300	4	0	4	4,501,015:00:0
1960	98	152	19:42:41.733	175JB422A6B	6DMSC	RDY,0	DMS Control Tape stop	300	4	0	4	4,501,015:00:0
1961	98	152	19:42:42.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4837.40 +/- 2	300	4	0	4	4,501,015:01:8
1962	98	152	19:42:49.066		DMS:	:*E4-DELAY	RDY, TRACK 1, FWD, TIC 4837.40 +/- 2	300	4	0	4	4,501,015:11:0
1963	98	152	19:42:49.066	175JC422A6A	6DMSC	R806.1	DMS Control	300	4	0	4	4,501,015:11:0
1964	98	152	19:42:55.733		DMS:	:*RUNUP	R806, TRACK 1, FWD, TIC 4837.40 +/- 2	300	4	0	4	4,501,015:21:0
1965	98	152	19:43:00.400	175JC176A6A	6TMREC	IM8	806.4 KBPS IMAGE RECORD Record Mode Chang	300	4	0	4	4,501,015:28:0
1966	98	152	19:43:01.000		DMS:	:*RECORD	R806, TRACK 1, FWD, TIC *4903.40 +/- 2	300	4	0	4	4,501,015:28:9
1967	98	152	19:43:01.000		DMS:	:*AT SPD	R806, TRACK 1, FWD, TIC 4903.40 +/- 2	300	4	0	4	4,501,015:28:9
1968	98	152	19:43:04.400	175JC422A6B	6DMSC	RDY,0	DMS Control Tape stop	300	4	0	4	4,501,015:34:0
1969	98	152	19:43:04.400		DMS:	:*RUNDOWN	R806, TRACK 1, FWD, TIC *4987.07 +/- 2	300	4	0	4	4,501,015:34:0
1970	98	152	19:43:07.133		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *4998.57 +/- 2	300	4	0	4	4,501,015:38:1
1971	98	152	19:49:45.733	165AB4A	7SCAN	NORM,58.305,22.3	Check S/P Position	300	4	0	4	4,501,021:90:0
1972	98	152	19:53:47.733	165AB4B	7VECT		Inert vect update UTC	300	4	0	4	4,501,025:89:0
1973	98	152	20:24:08.400	165AC4A	7SCAN	NORM,59.828,22.6	Check S/P Position	300	4	0	4	4,501,055:90:0
1974	98	152	20:25:08.400	165AC4B	7VECT		Inert vect update UTC	300	4	0	4	4,501,056:89:0
1975	98	152	21:14:41.733	165IL4A	7SCAN	NORM,45.027,18.9	Check S/P Position	300	4	0	4	4,501,105:90:0
1976	98	152	21:17:38.400	118IL	SMOS	GS		300	4	0	4	4,501,108:82:0
1977	98	152	21:17:43.066	165IL4B	7VECT		Inert vect update UTC	300	4	0	4	4,501,108:89:0
1978	98	152	21:17:48.400	118IL110A111A4A	7STRP	-0.00275,0.0,92,	Inert vect update UTC Slew = 3.01	300	4	0	4	4,501,109:06:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1979	98	152	21:18:37.733		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 4998.57 +/- 2	300	4	0	4,501,109:80:0	
1980	98	152	21:18:37.733	175JD422A6A	6DMSC	R115.1	DMS Control	300	4	0	4,501,109:80:0	
1981	98	152	21:18:44.400		DMS:	: *RUNUP	R115, TRACK 1, FWD, TIC 4998.57 +/- 2	300	4	0	4,501,109:90:0	
1982	98	152	21:18:47.733	175JD176A6A	6TMREC	HMA	115.2 KBPS IMAGE(1-400)RECORD Record Mode	300	4	0	4,501,110:04:0	
1983	98	152	21:18:48.400		DMS:	: *RECORD	R115, TRACK 1, FWD, TIC *5004.87 +/- 2	300	4	0	4,501,110:05:0	
1984	98	152	21:18:48.400		DMS:	: *AT_SPD	R115, TRACK 1, FWD, TIC 5004.87 +/- 2	300	4	0	4,501,110:05:0	
1985	98	152	21:18:49.733	118IL11A	SMOS	GE		300	4	0	4,501,110:07:0	
1986	98	152	21:23:03.066		DMS:	: *RUNDOWN	R115, TRACK 1, FWD, TIC *5900.18 +/- 2	300	4	0	4,501,114:23:0	
1987	98	152	21:23:03.066	175JD422A6B	6DMSC	RDY,0	DMS Control Tape stop	300	4	0	4,501,114:23:0	
1988	98	152	21:23:04.266		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *5901.18 +/- 2	300	4	0	4,501,114:24:8	
1989	98	152	21:24:42.400		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 5901.18 +/- 2	300	4	0	4,501,115:81:0	
1990	98	152	21:24:42.400		DMS:	: *DMS-TURN	P7, TRACK 1, FWD, TIC 5901.18 +/- 2	300	4	0	4,501,115:81:0	
1991	98	152	21:24:42.400	465KG6A	6DTRN	CMD,6DTRN,465KG6	DMS TRACK TURNAROUND	300	4	0	4,501,115:81:0	
1992	98	152	21:24:49.066		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 5901.18 +/- 2	300	4	0	4,501,116:00:0	
1993	98	152	21:24:50.466		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC *5901.30 +/- 2	300	4	0	4,501,116:02:1	
1994	98	152	21:33:49.400		DMS:	: *REVERSE	P7, TRACK 1, FWD, TIC *6027.63 +/- 2	300	4	0	4,501,124:82:5	
1995	98	152	21:33:50.600		DMS:	: *RUNUP	P7, TRACK 2, REV, TIC 6027.69 +/- 2	300	4	0	4,501,124:84:3	
1996	98	152	21:33:50.600		DMS:	: *TURNARND	P7, TRACK *2, *REV, TIC *6027.69 +/- 2	300	4	0	4,501,124:84:3	
1997	98	152	21:33:52.000		DMS:	: *AT_SPD	P7, TRACK 2, REV, TIC *6027.57 +/-	300	4	0	4,501,124:86:4	
1998	98	152	21:34:04.000		DMS:	: *AUTOSTOP	P7, TRACK 2, REV, TIC *6025.44 +/-	300	4	0	4,501,125:13:4	
1999	98	152	21:34:05.200		DMS:	: *READY	RDY, TRACK 2, REV, TIC *6025.38 +/-	300	4	0	4,501,125:15:2	
2000	98	152	21:50:00.400	444UD443A4A	7MODE	CRU	AACS CRUISE MODE	300	4	0	4,501,140:83:0	
2001	98	152	21:54:07.066	432JB6B	6RTDS2	NIMNCG,AACDSL,RT	AACS DESELECT	300	4	0	4,501,144:89:0	
2002	98	152	22:00:00.400	41SA99A	POWER	PWR MODE change	Change to Maneuver/Playback Mode	300	4	0	4,501,150:73:0	
2003	98	152	22:01:54.400	41SA3G	40T1P		1 PCT Heater 1 ON (primary relay)	300	4	0	4,501,152:62:0	
2004	98	152	22:02:04.400	41SA3H	40T1P		2 PCT Heater 1 ON (primary relay)	300	4	0	4,501,152:77:0	
2005	98	152	22:02:14.400	41SA3I	40T2		1 PCT Heater 2 ON	300	4	0	4,501,153:01:0	
2006	98	152	22:02:24.400	41SA3J	40T2		2 PCT Heater 2 ON	300	4	0	4,501,153:16:0	
2007	98	152	22:05:05.066	20UB4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,501,155:75:0	
2008	98	152	22:05:55.066	20UB4B	7SLEW	DIS,POS:0.0	Stator movement	300	4	0	4,501,156:59:0	
2009	98	152	22:06:16.400	176UA6A	6TMREC	IPB	INITIATE PLAYBACK (PB CONTROL) Record Mod	300	4	0	4,501,157:00:0	
2010	98	153	01:24:37.066	488AI6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,501,353:15:0	
2011	98	153	01:34:13.066	488AI6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,501,362:60:0	
2012	98	153	01:41:41.066	488AI6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	300	4	0	4,501,370:04:0	
2013	98	153	02:17:57.066	488AI6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,501,405:83:0	
2014	98	153	04:14:17.733	431ZL6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	300	4	0	4,501,520:89:0	
2015	98	153	04:18:25.733	20ZM6A	6EUVON			300	4	0	4,501,525:06:0	
2016	98	153	04:19:22.400	431ZM6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	300	4	0	4,501,526:00:0	
2017	98	153	08:58:05.733	488AJ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	300	4	0	4,501,801:60:0	
2018	98	153	09:03:17.066	488AJ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,501,806:72:0	
2019	98	153	09:13:57.066	488AJ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,501,817:31:0	
2020	98	153	10:24:15.066	488AJ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,501,886:79:0	
2021	98	153	10:57:54.400	488AJ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,501,920:14:0	
2022	98	153	11:53:57.066	488AK6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,501,975:53:0	
2023	98	153	12:51:27.733	488AK6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,502,032:42:0	
2024	98	153	12:55:49.066	488AK6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,502,036:70:0	
2025	98	153	15:12:47.733	488AK6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,502,172:22:0	
2026	98	153	15:29:25.066	488AK6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,502,188:62:0	
2027	98	153	16:37:41.066	488AL6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,502,256:18:0	
2028	98	153	18:31:44.400	176AA6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,502,369:00:0	
2029	98	153	18:34:45.733	165BA4A	7SCAN	NORM,83.332,25.2	Check S/P Position	300	4	0	4,502,371:90:0	
2030	98	153	18:39:53.733	20UP4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,502,377:06:0	
2031	98	153	18:40:43.733	20UP4B	7SLEW	DIS,POS:0.0	Stator movement	300	4	0	4,502,377:81:0	
2032	98	153	18:41:51.066	176AB6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,502,379:00:0	
2033	98	153	20:52:31.000	488AL6B	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,502,508:21:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
2034	98	153	20:55:49.000	488AL6C	6TMSED	FILL-AL3	Sci, Eng, and D/L Chan	300	4	0	4,502,511:45:0	
2035	98	154	02:47:09.666	431YL6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	300	4	0	4,502,858:89:0	
2036	98	154	02:50:19.666	20YC6A	6HICON			300	4	0	4,502,862:10:0	
2037	98	154	02:51:13.666	431YM6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	300	4	0	4,502,863:00:0	
2038	98	154	08:54:10.333	488AM6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,503,221:87:0	
2039	98	154	09:03:17.000	488AM6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,503,230:88:0	
2040	98	154	09:48:49.000	176UB6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,503,276:00:0	
2041	98	154	09:51:05.666	20KA4A	7SAFE	UNSTOW	S/P TO 153 deg cone	300	4	0	4,503,278:23:0	
2042	98	154	10:00:00.000	20A3EW	37A	Final Condition	NIMS Power ON	300	4	0	4,503,287:05:5	
2043	98	154	10:00:00.000	20A3EX	37HR	Final Condition	Replacement Heaters OFF	300	4	0	4,503,287:05:5	
2044	98	154	10:00:00.000	20A3EY	37C1PR	Final Condition	Optics Heater 1 OFF (primary relay)	300	4	0	4,503,287:05:5	
2045	98	154	10:00:00.000	20A3EZ	37C2PR	Final Condition	Optics Heater 2 OFF (primary relay)	300	4	0	4,503,287:05:5	
2046	98	154	10:00:00.000	20A3FA	37F1PR	Final Condition	Radiator Flash Heater OFF (primary relay)	300	4	0	4,503,287:05:5	
2047	98	154	10:00:00.000	20A3FB	37F2PR	Final Condition	Shield Flash Heater OFF (primary relay)	300	4	0	4,503,287:05:5	
2048	98	154	10:00:00.000	20A3FD	40HRPR	Final Condition	RCT Heater OFF (primary relay)	300	4	0	4,503,287:05:5	
2049	98	154	10:00:00.000	20A3FE	40T1P	Final Condition	PCT Heater 1 ON (primary relay)	300	4	0	4,503,287:05:5	
2050	98	154	10:00:00.000	20A3FF	40T2	Final Condition	PCT Heater 2 ON	300	4	0	4,503,287:05:5	
2051	98	154	10:00:00.333		DMS:	: READY	RDY, TRACK 2, REV, TIC 6025.38 +/-	300	4	0	4,503,287:06:0	

Sequence:		E15B-AR		Created: 09/09/98		Begin: 98-154/10:00:00		Finish: 98-201/05:00:00				
Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1	98	154	10:00:00.000	20A3EX	37HR	CMD,37HR,20A3EX,	Replacement Heaters OFF	300	4	0	4,503,287:05:5	
2	98	154	10:00:00.000	20A3EW	37A	CMD,37A,20A3EW,,	NIMS Power ON	300	4	0	4,503,287:05:5	
3	98	154	10:00:00.000	20A3FF	40T2	CMD,40T2,20A3FF,	PCT Heater 2 ON	300	4	0	4,503,287:05:5	
4	98	154	10:00:00.000	20A3FE	40T1P	CMD,40T1P,20A3FE	PCT Heater 1 ON (primary relay)	300	4	0	4,503,287:05:5	
5	98	154	10:00:00.000	20A3FD	40HRPR	CMD,40HRPR,20A3F	RCT Heater OFF (primary relay)	300	4	0	4,503,287:05:5	
6	98	154	10:00:00.000	20A3FB	37F2PR	CMD,37F2PR,20A3F	Shield Flash Heater OFF (primary relay)	300	4	0	4,503,287:05:5	
7	98	154	10:00:00.000	20A3FA	37F1PR	CMD,37F1PR,20A3F	Radiator Flash Heater OFF (primary relay)	300	4	0	4,503,287:05:5	
8	98	154	10:00:00.000	20A3EZ	37C2PR	CMD,37C2PR,20A3E	Optics Heater 2 OFF (primary relay)	300	4	0	4,503,287:05:5	
9	98	154	10:00:00.000	20A3EY	37C1PR	CMD,37C1PR,20A3E	Optics Heater 1 OFF (primary relay)	300	4	0	4,503,287:05:5	
10	98	154	10:00:00.333		DMS:	: READY	RDY, TRACK 2, REV, TIC 6025.38 +/-	300	4	0	4,503,287:06:0	
11	98	154	10:00:53.000	488AA6A	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,503,287:85:0	
12	98	154	10:01:56.333	432NA6B	6RTDS2	NIMDSL,,AACDSL,RT	NIMS R/T DESELECTAACS DESELECT	300	4	0	4,503,288:89:0	
13	98	154	10:05:04.333	20WA4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,503,292:07:0	
14	98	154	10:05:54.333	20WA4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,503,292:82:0	
15	98	154	10:07:01.000	176SA6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,503,294:00:0	
16	98	154	10:19:10.333	488AA6C	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,503,306:02:0	
17	98	154	10:52:49.666	488AA6D	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,503,339:28:0	
18	98	154	11:02:45.000	488AA6E	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,503,349:11:0	
19	98	154	11:05:00.333	488AB6A	6TMSD	NORM,AH5	Sci, Eng, and D/L Chan	300	4	0	4,503,351:32:0	
20	98	154	11:08:41.666	176NC6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,503,355:00:0	
21	98	154	11:12:12.333	20NW6BA	6MROH	7,6CF8,0,A10	read from AACS7,6CF8,0,A10	300	4	0	4,503,358:43:0	
22	98	154	11:18:56.333	20NW6F	6MROH	12,2095,2,A10	read from LLM1A12,2095,2,A1	300	4	0	4,503,365:12:0	
23	98	154	11:32:30.333	20NW6K	6MROH	7,6F96,2,A10	read from AACS7,6F96,2,A10	300	4	0	4,503,378:50:0	
24	98	154	11:46:38.333	20NW4I	7MODE	INIT	AACS INERTIAL MODE	300	4	0	4,503,392:48:0	
25	98	154	12:01:38.333	20NW4K	7SLEW	INIT_POS,17.45	Stator movement	300	4	0	4,503,407:33:0	
26	98	154	12:13:38.333	20NW4L	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,503,419:21:0	
27	98	154	12:20:38.333	20NW4M	7SLEW	INIT_NEG,17.45	Stator movement	300	4	0	4,503,426:14:0	
28	98	154	12:32:38.333	20NW4N	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,503,438:02:0	
29	98	154	12:39:38.333	20NW4O	7SLEW	INIT_POS,4.36	Stator movement	300	4	0	4,503,444:86:0	
30	98	154	12:51:38.333	20NW4P	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,503,456:74:0	
31	98	154	12:58:38.333	20NW4Q	7SLEW	INIT_NEG,4.36	Stator movement	300	4	0	4,503,463:67:0	
32	98	154	13:10:38.333	20NW4R	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,503,475:55:0	
33	98	154	13:17:38.333	20NW4S	7CONE	17.45,180.0	Check S/P Position	300	4	0	4,503,482:48:0	
34	98	154	13:23:38.333	20NW4T	7CONE	4.36,0.0	Check S/P Position	300	4	0	4,503,488:42:0	
35	98	154	13:29:38.333	20NW4U	7CONE	4.36,0.0	Check S/P Position	300	4	0	4,503,494:36:0	
36	98	154	13:44:38.333	20NW4V	7CONE	4.36,153.0	Check S/P Position	300	4	0	4,503,509:21:0	
37	98	154	14:21:42.333	20NW4AG	7SAFE	UNSTOW	S/P TO 153 deg cone	300	4	0	4,503,545:81:0	
38	98	154	14:25:42.333	20NW4AH	7MODE	CRU	AACS CRUISE MODE	300	4	0	4,503,549:77:0	
39	98	154	14:33:57.000	431MA6A	6RCSEL	DDSSSEL,PLSNCG,EP	Record Select (DDS onl)	300	4	0	4,503,558:00:0	
40	98	154	14:34:22.333	20NW6U	6MROH	7,6F96,2,A10	read from AACS7,6F96,2,A10	300	4	0	4,503,558:38:0	
41	98	154	14:39:22.333	20NW4AM	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,503,563:33:0	
42	98	154	14:41:01.666	176ND6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,503,565:00:0	
43	98	154	14:48:30.333	20NW6BB	6MROH	7,6CF8,0,A10	read from AACS7,6CF8,0,A10	300	4	0	4,503,572:36:0	
44	98	154	14:50:00.333	20NW6Y	6MROH	12,2095,2,A10	read from LLM1A12,2095,2,A1	300	4	0	4,503,573:80:0	
45	98	154	14:56:48.333	488AB6B	6TMSD	FILL,AH5	Sci, Eng, and D/L Chan	300	4	0	4,503,580:55:0	
46	98	154	15:00:00.333	488AB6C	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,503,583:70:0	
47	98	154	15:01:41.000	488AB6D	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,503,585:39:0	
48	98	154	15:07:52.333	488AB6E	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,503,591:50:0	
49	98	154	15:18:45.000	488AC6A	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,503,602:28:0	
50	98	154	16:18:29.000	488AC6B	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,503,661:35:0	
51	98	154	16:23:18.333	488AC6C	6TMSD	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,503,666:14:0	
52	98	154	16:50:08.333	488AC6D	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,503,692:63:0	
53	98	155	00:00:00.333	481UB4A	7VECT		Inert vect update UTC	300	4	0	4,504,117:76:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
54	98	155	00:16:21.000	488AD6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,504,134:00:0	
55	98	155	01:16:05.000	488AD6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,504,193:07:0	
56	98	155	01:30:46.333	488AD6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,504,207:55:0	
57	98	155	01:35:17.000	488AD6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,504,212:06:0	
58	98	155	01:50:13.000	488AD6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,504,226:76:0	
59	98	155	08:49:16.266	488AE6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,504,641:26:0	
60	98	155	08:59:00.933	488AE6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,504,650:84:0	
61	98	155	10:19:04.933	488AE6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,504,730:10:0	
62	98	155	10:47:48.933	488AE6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,504,758:48:0	
63	98	155	10:51:12.933	488AE6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,504,761:81:0	
64	98	155	14:51:23.600	488AF6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,504,999:39:0	
65	98	155	14:55:16.933	488AF6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,003:25:0	
66	98	155	15:02:57.600	488AF6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,010:79:0	
67	98	155	16:09:02.933	488AF6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,076:21:0	
68	98	155	16:47:42.266	488AF6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,114:42:0	
69	98	155	16:54:44.933	488AG6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,505,121:39:0	
70	98	155	20:11:08.933	488AG6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,505,315:61:0	
71	98	155	20:15:16.933	488AG6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,505,319:69:0	
72	98	156	01:34:20.266	488AH6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,505,635:28:0	
73	98	156	01:43:48.933	488AH6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,644:62:0	
74	98	156	02:54:00.933	488AH6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,714:10:0	
75	98	156	03:27:40.266	488AH6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,505,747:36:0	
76	98	156	04:57:56.933	488AH6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,505,836:62:0	
77	98	156	07:50:44.933	488AI6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,506,007:53:0	
78	98	156	11:07:00.866	488AI6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,506,201:63:0	
79	98	156	11:22:18.200	488AI6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,506,216:74:0	
80	98	156	11:34:44.866	488AI6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,506,229:11:0	
81	98	156	15:03:03.533	488AJ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,506,435:13:0	
82	98	156	15:14:28.866	488AJ6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,506,446:40:0	
83	98	156	15:53:00.200	488AJ6C	6TMSED	NORM,AH5	Sci, Eng, and D/L Chan	300	4	0	4,506,484:49:0	
84	98	156	15:57:30.866	176SB6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,506,489:00:0	
85	98	156	16:03:32.866	488AJ6D	6TMSED	NORM,AH6	Sci, Eng, and D/L Chan	300	4	0	4,506,494:88:0	
86	98	156	16:09:00.200	20AB4C	7STAT	17,45,269,2255,4	Stator inertial point	300	4	0	4,506,500:33:0	
87	98	156	16:30:00.200	474AA416A4B	7MODE INT		AACS INERTIAL MODE	300	4	0	4,506,521:12:0	
88	98	156	16:32:00.200	474AA416A4D	7SAFE UNSTOW		S/P TO 153 deg cone	300	4	0	4,506,523:10:0	
89	98	156	16:32:20.200	20AB4D	7STAT	17,45,269,2255,4	Stator inertial point	300	4	0	4,506,523:40:0	
90	98	156	16:36:14.200	474AA416A4E	7BURN	POSZ,269,225498,	ALERT -- Thruster fire	300	4	0	4,506,527:27:0	
91	98	156	16:57:14.200	20AB4M	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,506,548:06:0	
92	98	156	17:02:06.200	20AB4N	7MODE CRU		AACS CRUISE MODE	300	4	0	4,506,552:80:0	
93	98	156	18:09:38.200	20AE4A	7SAFE STOP		S/P NO MOVEMENT	300	4	0	4,506,619:61:0	
94	98	156	18:10:28.200	20AE4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,506,620:45:0	
95	98	156	18:11:59.533	176AB6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,506,622:00:0	
96	98	157	00:16:20.866	488AK6A	6TMSED	NORM,AH5	Sci, Eng, and D/L Chan	300	4	0	4,506,982:32:0	
97	98	157	01:11:48.866	488AK6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	300	4	0	4,507,037:19:0	
98	98	157	01:30:00.200	488AK6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,507,055:18:0	
99	98	157	01:35:16.866	488AK6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,507,060:38:0	
100	98	157	01:43:57.533	176SC6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,507,069:00:0	
101	98	157	02:43:55.533	488AK6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,507,128:28:0	
102	98	157	03:17:34.200	488AL6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,507,161:53:0	
103	98	157	04:38:44.866	488AL6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,507,241:79:0	
104	98	157	08:05:40.866	488AL6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,507,446:48:0	
105	98	157	09:24:36.866	488AM6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,507,524:54:0	
106	98	157	10:06:39.533	488AM6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,507,566:16:0	
107	98	157	10:35:45.533	488AM6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,507,594:87:0	
108	98	157	11:13:24.866	488AM6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,507,632:18:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
109	98	157	14:53:08.866	488AM6E	6TMSED	NORM,AL7	Sci, Eng, and D/L Chan	300	4	0	4,507,849:47:0	
110	98	157	15:56:50.200	488AN6A	6TMSED	FILL,AL7	Sci, Eng, and D/L Chan	300	4	0	4,507,912:46:0	
111	98	157	15:59:16.866	488AN6B	6TMSED	FILL,AL8	Sci, Eng, and D/L Chan	300	4	0	4,507,914:84:0	
112	98	157	16:00:56.866	488AN6C	6TMSED	NORM,AL8	Sci, Eng, and D/L Chan	300	4	0	4,507,916:52:0	
113	98	157	18:26:28.800	488AN6D	6TMSED	NORM,AL7	Sci, Eng, and D/L Chan	300	4	0	4,508,060:46:0	
114	98	157	19:00:36.800	488AN6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,508,094:24:0	
115	98	158	00:16:20.800	488AO6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,508,406:48:0	
116	98	158	01:05:24.800	488AO6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,508,455:05:0	
117	98	158	01:18:26.800	488AO6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,508,467:86:0	
118	98	158	01:20:20.800	488AO6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,508,469:75:0	
119	98	158	01:35:16.800	488AO6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,508,484:54:0	
120	98	158	14:53:15.466	488AP6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,509,273:73:0	
121	98	158	15:03:48.800	488AP6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,509,284:22:0	
122	98	158	15:48:36.800	488AP6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,509,328:50:0	
123	98	159	00:16:20.733	488AQ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,509,830:64:0	
124	98	159	01:05:24.733	488AQ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,509,879:21:0	
125	98	159	01:28:52.733	488AQ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,509,902:40:0	
126	98	159	02:38:43.400	488AQ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,509,971:47:0	
127	98	159	03:12:22.733	488AQ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,510,004:73:0	
128	98	159	04:13:08.733	488AR6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,510,064:82:0	
129	98	159	08:12:04.733	488AR6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,510,301:19:0	
130	98	159	11:00:36.733	488AS6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,510,467:81:0	
131	98	159	11:12:36.733	488AS6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,510,479:69:0	
132	98	159	11:24:04.733	488AS6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,510,491:09:0	
133	98	159	14:53:21.400	488AS6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,510,698:07:0	
134	98	159	15:03:48.733	488AS6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,510,708:38:0	
135	98	159	15:48:36.733	488AT6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,510,752:66:0	
136	98	159	20:52:44.733	488AT6B	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,511,053:47:0	
137	98	159	20:55:48.733	488AT6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,511,056:50:0	
138	98	160	01:04:44.733	488AU6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,511,302:68:0	
139	98	160	01:13:56.733	488AU6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,511,311:77:0	
140	98	160	02:13:40.733	488AU6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,511,370:84:0	
141	98	160	08:20:36.666	488AV6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,511,733:75:0	
142	98	160	08:44:04.666	488AV6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,511,757:03:0	
143	98	160	09:58:35.333	488AV6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,511,830:66:0	
144	98	160	10:22:12.666	488AV6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,511,854:08:0	
145	98	160	10:29:00.666	488AV6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,511,860:74:0	
146	98	160	14:36:46.000	488AW6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,512,105:77:0	
147	98	160	14:40:20.666	488AW6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,512,109:35:0	
148	98	161	08:28:32.666	488AX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,513,165:77:0	
149	98	161	09:09:40.666	488AX6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,513,206:48:0	
150	98	161	09:57:40.666	176ST6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,513,254:00:0	
151	98	161	10:02:00.000	20UQ4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,513,258:25:0	
152	98	161	10:03:00.000	20UQ4D	7MODE	SPNL	AACS ALL-SPIN LOW	300	4	0	4,513,259:24:0	
153	98	161	10:05:00.000	20UQ4E	7SAFE	UNSTOW	S/P TO 153 deg cone	300	4	0	4,513,261:22:0	
154	98	161	10:10:30.000	20UQ4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	300	4	0	4,513,266:62:0	
155	98	161	10:10:30.666	20UQ4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	300	4	0	4,513,266:63:0	
156	98	161	10:10:50.666	20UQ4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	300	4	0	4,513,267:02:0	
157	98	161	10:10:51.333	20UQ4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	300	4	0	4,513,267:03:0	
158	98	161	10:11:11.333	20UQ4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	300	4	0	4,513,267:33:0	
159	98	161	10:11:12.000	20UQ4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	300	4	0	4,513,267:34:0	
160	98	161	10:11:22.000	20UQ4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	300	4	0	4,513,267:49:0	
161	98	161	10:11:22.666	20UQ4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	300	4	0	4,513,267:50:0	
162	98	161	10:11:32.666	20UQ4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	300	4	0	4,513,267:65:0	
163	98	161	10:11:33.333	20UQ4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	300	4	0	4,513,267:66:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
164	98	161	10:13:20.000	20UQ4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	300	4	0	4,513,269:44:0	
165	98	161	10:13:20.666	20UQ4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	300	4	0	4,513,269:45:0	
166	98	161	10:13:40.666	20UQ4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	300	4	0	4,513,269:75:0	
167	98	161	10:13:41.333	20UQ4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	300	4	0	4,513,269:76:0	
168	98	161	10:14:01.333	20UQ4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	300	4	0	4,513,270:15:0	
169	98	161	10:14:02.000	20UQ4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	300	4	0	4,513,270:16:0	
170	98	161	10:14:12.000	20UQ4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	300	4	0	4,513,270:31:0	
171	98	161	10:14:12.666	20UQ4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	300	4	0	4,513,270:32:0	
172	98	161	10:14:22.666	20UQ4AW	7VENT	1.211,1.333,9	ALERT -- Thruster fire	300	4	0	4,513,270:47:0	
173	98	161	10:14:23.333	20UQ4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	300	4	0	4,513,270:48:0	
174	98	161	10:15:20.000	20UQ4Z	7MODE	CRU	AACS CRUISE MODE	300	4	0	4,513,271:42:0	
175	98	161	10:40:04.000	20UJ4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,513,295:84:0	
176	98	161	10:40:54.000	20UJ4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,513,296:68:0	
177	98	161	10:42:10.000	176SU6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,513,298:00:0	
178	98	161	10:49:56.666	488AX6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,513,305:63:0	
179	98	161	14:33:09.266	488AY6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,513,526:41:0	
180	98	161	14:36:04.600	488AY6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,513,529:31:0	
181	98	161	14:43:34.600	488AY6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,513,536:69:0	
182	98	161	14:55:16.600	488AY6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,513,548:30:0	
183	98	161	15:40:04.600	488AY6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,513,592:58:0	
184	98	162	08:23:39.266	488AZ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,514,092:62:0	
185	98	162	00:56:52.600	488AZ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,514,143:29:0	
186	98	162	01:06:53.933	488AZ6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,514,153:21:0	
187	98	162	01:11:48.600	488AZ6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,514,158:08:0	
188	98	162	01:26:44.600	488AZ6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,514,172:78:0	
189	98	162	08:23:39.266	488BA6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,514,585:17:0	
190	98	162	09:05:24.600	488BA6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,514,626:44:0	
191	98	162	10:43:32.600	488BA6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,514,723:49:0	
192	98	162	14:33:12.600	488BB6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,514,950:62:0	
193	98	162	14:36:04.600	488BB6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,514,953:47:0	
194	98	162	14:43:40.600	488BB6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,514,961:03:0	
195	98	162	14:55:16.600	488BB6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,514,972:46:0	
196	98	162	15:33:40.600	488BB6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,515,010:44:0	
197	98	163	00:01:24.533	488BC6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,515,512:58:0	
198	98	163	00:52:36.533	488BC6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,515,563:25:0	
199	98	163	01:01:39.866	488BC6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,515,572:21:0	
200	98	163	01:07:32.533	488BC6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	300	4	0	4,515,578:04:0	
201	98	163	01:43:48.533	488BC6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,515,613:83:0	
202	98	163	14:38:47.200	488BD6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,516,380:34:0	
203	98	163	15:48:14.533	488BD6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,516,449:06:0	
204	98	163	16:12:04.533	488BD6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,516,472:58:0	
205	98	163	16:18:43.866	488BD6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,516,479:20:0	
206	98	163	23:20:52.533	488BE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,516,896:66:0	
207	98	164	00:52:09.200	488BE6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,516,987:00:0	
208	98	164	00:56:52.533	488BE6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	300	4	0	4,516,991:61:0	
209	98	164	01:33:08.533	488BE6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,517,027:49:0	
210	98	164	08:18:52.466	488BF6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,517,428:74:0	
211	98	164	08:54:44.466	488BF6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,517,464:26:0	
212	98	164	10:39:16.466	488BF6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,517,567:61:0	
213	98	164	14:18:21.800	488BF6D	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,517,784:32:0	
214	98	164	14:21:08.466	488BG6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,517,787:09:0	
215	98	164	14:33:54.466	488BG6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,517,799:66:0	
216	98	164	14:44:36.466	488BG6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,517,810:28:0	
217	98	164	15:29:24.466	488BG6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,517,854:56:0	
218	98	164	23:57:08.466	488BH6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,518,356:70:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
219	98	165	00:41:56.466	488BH6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,518,401:07:0	
220	98	165	01:05:24.466	488BH6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,518,424:26:0	
221	98	165	02:18:04.466	488BH6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,518,496:14:0	
222	98	165	02:51:43.133	488BH6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,518,529:39:0	
223	98	165	03:45:24.466	488BI6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,518,582:48:0	
224	98	165	08:01:24.466	488BI6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,518,835:65:0	
225	98	165	10:41:24.466	488BJ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,518,993:87:0	
226	98	165	10:48:16.400	488BJ6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,519,000:68:0	
227	98	165	11:00:36.400	488BJ6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,519,012:86:0	
228	98	165	14:29:01.733	488BJ6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,519,219:07:0	
229	98	165	14:40:20.400	488BJ6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,519,230:24:0	
230	98	165	15:25:08.400	488BK6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,519,274:52:0	
231	98	165	23:52:52.400	488BL6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,519,776:66:0	
232	98	166	00:41:56.400	488BL6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,519,825:23:0	
233	98	166	01:05:24.400	488BL6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,519,848:42:0	
234	98	166	02:12:57.066	488BL6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,519,915:24:0	
235	98	166	02:46:36.400	488BL6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,519,948:50:0	
236	98	166	03:39:00.400	488BM6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,520,000:34:0	
237	98	166	07:57:08.400	488BM6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,520,255:61:0	
238	98	166	08:50:28.400	488BM6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,520,308:38:0	
239	98	166	09:35:41.733	488BM6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,520,353:13:0	
240	98	166	10:04:47.733	488BN6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,520,381:84:0	
241	98	166	10:35:00.400	488BN6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,520,411:73:0	
242	98	166	13:54:15.066	488BN6C	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,520,608:78:0	
243	98	166	13:57:40.400	488BN6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,520,612:22:0	
244	98	166	14:29:08.400	488BN6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,520,643:33:0	
245	98	166	14:40:20.400	488BO6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,520,654:40:0	
246	98	166	15:25:08.400	488BO6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,520,698:68:0	
247	98	166	20:54:20.333	488BP6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,521,024:30:0	
248	98	166	20:57:56.333	488BP6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,521,027:81:0	
249	98	167	08:05:33.666	488BQ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,521,688:16:0	
250	98	167	08:14:12.333	488BQ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,521,696:66:0	
251	98	167	08:44:04.333	488BQ6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,521,726:24:0	
252	98	167	10:30:44.333	488BQ6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,521,831:69:0	
253	98	167	12:59:03.666	488BQ6E	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,521,978:41:0	
254	98	167	13:02:12.333	488BR6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,521,981:51:0	
255	98	167	14:24:15.666	488BR6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,522,062:65:0	
256	98	167	14:33:56.333	488BR6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,522,072:26:0	
257	98	167	15:20:52.333	488BR6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,522,118:64:0	
258	98	167	23:42:12.333	488BS6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,522,614:48:0	
259	98	168	00:31:16.333	488BS6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,522,663:05:0	
260	98	168	00:44:26.333	488BS6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,522,676:07:0	
261	98	168	00:46:12.333	488BS6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,522,677:75:0	
262	98	168	01:01:08.266	488BS6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,522,692:54:0	
263	98	168	08:54:20.266	488BT6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,523,160:54:0	
264	98	168	09:45:56.266	488BT6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,523,211:57:0	
265	98	168	10:15:26.266	488BT6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,523,240:73:0	
266	98	168	10:44:32.933	488BT6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,523,269:54:0	
267	98	168	14:12:52.266	488BT6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,523,475:57:0	
268	98	168	14:16:52.266	488BU6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,523,479:53:0	
269	98	168	14:24:22.266	488BU6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,523,487:00:0	
270	98	168	14:36:04.266	488BU6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,523,498:52:0	
271	98	168	15:20:52.266	488BU6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,523,542:80:0	
272	98	168	15:36:48.933	488BU6E	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,523,558:59:0	
273	98	168	16:03:38.266	488BV6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,523,585:16:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
274	98	168	19:34:25.600	488BV6B	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,523,793:59:0	
275	98	168	19:36:52.266	488BV6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,523,796:06:0	
276	98	169	08:52:40.866	488BW6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,524,583:12:0	
277	98	169	10:30:44.200	488BW6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,524,680:10:0	
278	98	169	13:54:24.866	488BW6C	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,524,881:50:0	
279	98	169	13:57:40.200	488BW6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,524,884:70:0	
280	98	169	14:19:29.533	488BW6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,524,906:32:0	
281	98	169	14:29:40.200	488BX6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,524,916:38:0	
282	98	169	15:14:28.200	488BX6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,524,960:66:0	
283	98	169	23:31:32.200	488BY6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,525,452:30:0	
284	98	170	00:22:44.200	488BY6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,525,502:88:0	
285	98	170	00:33:24.200	488BY6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,525,513:47:0	
286	98	170	00:50:28.200	488BY6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,525,530:36:0	
287	98	170	01:57:29.533	488BY6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,525,596:62:0	
288	98	170	02:31:08.200	488BZ6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,525,629:87:0	
289	98	170	03:41:08.200	488BZ6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,525,699:17:0	
290	98	170	07:31:32.200	488BZ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,525,927:05:0	
291	98	170	08:35:32.200	488CA6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,525,990:32:0	
292	98	170	09:20:12.200	488CA6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,526,034:48:0	
293	98	170	09:49:18.866	488CA6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,526,063:29:0	
294	98	170	10:30:44.200	488CA6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,526,104:26:0	
295	98	170	14:04:48.200	488CA6E	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,526,316:00:0	
296	98	170	14:08:20.200	488CB6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,526,319:45:0	
297	98	170	14:14:36.200	488CB6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,526,325:63:0	
298	98	170	14:25:24.200	488CB6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,526,336:34:0	
299	98	170	15:14:28.133	488CB6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,526,384:82:0	
300	98	170	23:27:16.133	488CC6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,526,872:26:0	
301	98	171	00:22:44.133	488CC6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,526,927:13:0	
302	98	171	00:31:56.800	488CC6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,526,936:23:0	
303	98	171	00:37:40.133	488CC6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	300	4	0	4,526,941:83:0	
304	98	171	01:13:56.133	488CC6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,526,977:71:0	
305	98	171	07:51:01.466	488CD6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,527,370:46:0	
306	98	171	08:01:24.133	488CD6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,527,380:70:0	
307	98	171	08:35:32.133	488CD6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,527,414:48:0	
308	98	171	10:30:44.133	488CD6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,527,528:42:0	
309	98	171	14:04:51.466	488CE6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,527,740:21:0	
310	98	171	14:08:20.133	488CE6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,527,743:61:0	
311	98	171	14:14:43.466	488CE6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,527,749:90:0	
312	98	171	14:25:24.133	488CE6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,527,760:50:0	
313	98	171	15:10:12.133	488CE6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,527,804:78:0	
314	98	171	23:23:00.066	488CF6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,528,292:22:0	
315	98	172	00:18:28.066	488CF6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,528,347:09:0	
316	98	172	00:39:48.066	488CF6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,528,368:18:0	
317	98	172	01:47:14.066	488CF6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,528,434:81:0	
318	98	172	02:20:53.400	488CF6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,528,468:16:0	
319	98	172	03:49:40.066	488CG6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,528,555:89:0	
320	98	172	07:08:04.066	488CG6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,528,752:18:0	
321	98	172	10:01:11.400	488CH6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,528,923:38:0	
322	98	172	14:09:51.400	488CH6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,529,169:32:0	
323	98	172	14:21:08.066	488CH6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,529,180:46:0	
324	98	172	15:10:12.066	488CH6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,529,229:03:0	
325	98	172	23:18:44.066	488CI6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,529,712:18:0	
326	98	173	00:12:04.066	488CI6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,529,764:86:0	
327	98	173	01:35:16.066	488CI6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,529,847:21:0	
328	98	173	07:33:40.000	488CJ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,530,201:63:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
329	98	173	07:57:08.000	488CJ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,530,224:82:0	
330	98	173	09:07:04.000	488CJ6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,530,294:06:0	
331	98	173	09:35:16.000	488CJ6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,530,321:87:0	
332	98	173	09:39:00.666	488CJ6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,530,325:60:0	
333	98	173	13:53:32.000	488CK6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,530,577:35:0	
334	98	173	13:57:40.000	488CK6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,530,581:43:0	
335	98	173	14:04:58.666	488CK6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,530,588:64:0	
336	98	173	14:14:44.000	488CK6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,530,598:32:0	
337	98	173	15:10:12.000	488CK6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,530,653:19:0	
338	98	173	15:16:11.333	488CL6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,530,659:12:0	
339	98	173	15:43:01.333	488CL6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,530,685:61:0	
340	98	173	17:25:16.000	488CL6C	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,530,786:72:0	
341	98	173	17:28:52.000	488CL6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,530,790:32:0	
342	98	174	14:05:06.600	488CM6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,532,013:01:0	
343	98	174	14:16:51.933	488CM6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,532,024:58:0	
344	98	174	15:10:11.933	488CM6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,532,077:35:0	
345	98	174	23:03:47.933	488CN6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,532,545:71:0	
346	98	175	00:03:31.933	488CN6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,532,604:78:0	
347	98	175	00:20:37.933	488CN6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,532,621:70:0	
348	98	175	00:22:43.933	488CN6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,532,623:77:0	
349	98	175	00:37:39.933	488CN6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,532,638:56:0	
350	98	175	07:36:31.266	488CO6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,533,052:79:0	
351	98	175	07:46:27.933	488CO6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,533,062:64:0	
352	98	175	09:01:49.266	488CO6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,533,137:21:0	
353	98	175	09:35:28.600	488CO6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,533,170:47:0	
354	98	175	09:41:39.933	488CO6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,533,176:58:0	
355	98	175	13:48:56.600	488CP6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,533,421:18:0	
356	98	175	13:53:23.933	488CP6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,533,425:55:0	
357	98	175	14:00:13.266	488CP6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,533,432:32:0	
358	98	175	14:10:27.933	488CP6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,533,442:44:0	
359	98	175	15:10:11.933	488CP6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,533,501:51:0	
360	98	175	15:10:57.933	488CQ6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,533,502:29:0	
361	98	175	15:37:47.266	488CQ6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,533,528:77:0	
362	98	175	17:40:16.600	488CQ6C	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,533,649:90:0	
363	98	175	17:43:47.933	488CQ6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,533,653:43:0	
364	98	176	02:57:24.533	176SN6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,534,201:00:0	
365	98	176	03:03:28.533		DMS:	: *SLEW-TIC	P7, TRACK 2, REV, TIC 6025.38 +/-	300	4	0	4,534,207:00:0	
366	98	176	03:03:28.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 6025.38 +/-	300	4	0	4,534,207:00:0	
367	98	176	03:03:28.533		DMS:	: *TURNARND	P7, TRACK 2, REV, TIC 6025.38 +/-	300	4	0	4,534,207:00:0	
368	98	176	03:03:28.533	465SA6A	6DMST		5000 DMS Slew to TIC	300	4	0	4,534,207:00:0	
369	98	176	03:03:29.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6025.50 +/-	300	4	0	4,534,207:02:1	
370	98	176	03:03:35.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6026.73 +/-	300	4	0	4,534,207:10:0	
371	98	176	03:03:36.400		DMS:	: *RUNUP	P7, TRACK *2, *REV, TIC *6026.79 +/-	300	4	0	4,534,207:11:8	
372	98	176	03:03:37.800		DMS:	: *AT_SPD	P7, TRACK 2, REV, TIC *6026.67 +/-	300	4	0	4,534,207:13:9	
373	98	176	04:16:28.666		DMS:	: *RUNDOWN	P7, TRACK 2, REV, TIC *5002.06 +/-	300	4	0	4,534,279:18:2	
374	98	176	04:16:29.866		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5002.00 +/-	300	4	0	4,534,279:20:0	
375	98	176	07:36:39.866	488CR6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,534,477:17:0	
376	98	176	07:46:27.866	488CR6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,534,486:80:0	
377	98	176	08:56:42.533	488CR6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,534,556:32:0	
378	98	176	08:57:09.866	465SB6A	6DMSC	P100.4	DMS Control Tape P/B 100.8kbps	300	4	0	4,534,556:73:0	
379	98	176	08:57:09.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5002.00 +/-	300	4	0	4,534,556:73:0	
380	98	176	08:57:11.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5002.12 +/-	300	4	0	4,534,556:75:1	
381	98	176	08:57:16.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5003.35 +/-	300	4	0	4,534,556:83:0	
382	98	176	08:57:17.733		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *5003.41 +/-	300	4	0	4,534,556:84:8	
383	98	176	08:57:21.600		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *4997.91 +/-	300	4	0	4,534,556:90:6	

Line	YR	DOY	SCET - GMT	PSID	Command Parameters	Description	GCM	GO	GS	RIM	MF I
384	98	176	08:57:21.600		DMS: :*AT_SPD	P100, TRACK 4, REV, TIC 4997.91 +/-	300	4	0	4,534,556:90:6	
385	98	176	09:23:01.866		DMS: :*RUNDOWN	P100, TRACK 4, REV, TIC * 259.79 +/-	300	4	0	4,534,582:35:0	
386	98	176	09:23:01.866	465SB6B	6DMSC RDY,4	DMS Control Tape stop	300	4	0	4,534,582:35:0	
387	98	176	09:23:03.066		DMS: :*READY	RDY, TRACK 4, REV, TIC * 258.99 +/-	300	4	0	4,534,582:36:8	
388	98	176	09:30:21.200	488CR6D	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,534,589:57:0	
389	98	176	09:45:55.866	488CR6E	6TMSED NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,534,605:03:0	
390	98	176	11:20:49.866		DMS: :*DMS-TURN	P7, TRACK 4, REV, TIC 258.99 +/-	300	4	0	4,534,698:81:0	
391	98	176	11:20:49.866	465SC6A	6DTRN CMD,6DTRN,465SC6	DMS TRACK TURNAROUND	300	4	0	4,534,698:81:0	
392	98	176	11:20:49.866		DMS: :*US-RUNUP	P7, TRACK *1,*FWD, TIC 258.99 +/-	300	4	0	4,534,698:81:0	
393	98	176	11:20:51.266		DMS: :*US_AT_SP	P7, TRACK 1, FWD, TIC * 259.11 +/-	300	4	0	4,534,698:83:1	
394	98	176	11:20:56.533		DMS: :*US_RD	P7, TRACK 1, FWD, TIC * 260.34 +/-	300	4	0	4,534,699:00:0	
395	98	176	11:20:57.733		DMS: :*RUNUP	P7, TRACK *4,*REV, TIC * 260.40 +/-	300	4	0	4,534,699:01:8	
396	98	176	11:20:59.133		DMS: :*AT_SPD	P7, TRACK 4, REV, TIC * 260.28 +/-	300	4	0	4,534,699:03:9	
397	98	176	11:25:16.866		DMS: :*REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	300	4	0	4,534,703:26:5	
398	98	176	11:25:18.066		DMS: :*TURNARND	P7, TRACK *1,*FWD, TIC * 199.81 +/-	300	4	0	4,534,703:28:3	
399	98	176	11:25:18.066		DMS: :*RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	300	4	0	4,534,703:28:3	
400	98	176	11:25:19.466		DMS: :*AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	300	4	0	4,534,703:30:4	
401	98	176	11:25:31.466		DMS: :*AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	300	4	0	4,534,703:48:4	
402	98	176	11:25:32.666		DMS: :*READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	300	4	0	4,534,703:50:2	
403	98	176	11:31:53.200	465SD6A	6DMSC P100,1	DMS Control Tape P/B 100.8kbps	300	4	0	4,534,709:75:0	
404	98	176	11:31:53.200		DMS: :*E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	300	4	0	4,534,709:75:0	
405	98	176	11:31:59.866		DMS: :*RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	300	4	0	4,534,709:85:0	
406	98	176	11:32:03.733		DMS: :*AT_SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	300	4	0	4,534,709:90:8	
407	98	176	11:32:03.733		DMS: :*P_SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	300	4	0	4,534,709:90:8	
408	98	176	12:03:47.200	465SD6B	6DMSC RDY,1	DMS Control Tape stop	300	4	0	4,534,741:34:0	
409	98	176	12:03:47.200		DMS: :*RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	300	4	0	4,534,741:34:0	
410	98	176	12:03:48.400		DMS: :*READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	300	4	0	4,534,741:35:8	
411	98	176	12:19:23.200		DMS: :*US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	300	4	0	4,534,756:73:0	
412	98	176	12:19:23.200	465SE6A	6DMSC P100,2	DMS Control Tape P/B 100.8kbps	300	4	0	4,534,756:73:0	
413	98	176	12:19:24.600		DMS: :*US_AT_SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	300	4	0	4,534,756:75:1	
414	98	176	12:19:29.866		DMS: :*US_RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	300	4	0	4,534,756:83:0	
415	98	176	12:19:31.066		DMS: :*RUNUP	P100, TRACK *2,*REV, TIC *6065.23 +/-	300	4	0	4,534,756:84:8	
416	98	176	12:19:34.933		DMS: :*AT_SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	300	4	0	4,534,756:90:6	
417	98	176	12:19:34.933		DMS: :*P_SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	300	4	0	4,534,756:90:6	
418	98	176	12:51:31.200		DMS: :*RUNDOWN	P100, TRACK 2, REV, TIC * 164.96 +/-	300	4	0	4,534,788:53:0	
419	98	176	12:51:31.200	465SF6A	6DMSC P100,3	DMS Control Tape P/B 100.8kbps	300	4	0	4,534,788:53:0	
420	98	176	12:51:32.400		DMS: :*RUNUP	P100, TRACK *3,*FWD, TIC * 164.16 +/-	300	4	0	4,534,788:54:8	
421	98	176	12:51:36.266		DMS: :*P_SLEW	P100, TRACK 3, FWD, TIC * 169.66 +/-	300	4	0	4,534,788:60:6	
422	98	176	12:51:36.266		DMS: :*AT_SPD	P100, TRACK 3, FWD, TIC 169.66 +/-	300	4	0	4,534,788:60:6	
423	98	176	13:23:31.866		DMS: :*RUNDOWN	P100, TRACK 3, FWD, TIC *6062.38 +/-	300	4	0	4,534,820:22:0	
424	98	176	13:23:31.866	465SF6B	6DMSC RDY,3	DMS Control Tape stop	300	4	0	4,534,820:22:0	
425	98	176	13:23:33.066		DMS: :*READY	RDY, TRACK 3, FWD, TIC *6063.18 +/-	300	4	0	4,534,820:23:8	
426	98	176	13:38:15.200	465SG6A	6DMSC P100,4	DMS Control Tape P/B 100.8kbps	300	4	0	4,534,834:73:0	
427	98	176	13:38:15.200		DMS: :*US-RUNUP	P7, TRACK *1, FWD, TIC 6063.18 +/-	300	4	0	4,534,834:73:0	
428	98	176	13:38:16.600		DMS: :*US_AT_SP	P7, TRACK 1, FWD, TIC *6063.30 +/-	300	4	0	4,534,834:75:1	
429	98	176	13:38:21.866		DMS: :*US_RD	P7, TRACK 1, FWD, TIC *6064.53 +/-	300	4	0	4,534,834:83:0	
430	98	176	13:38:23.066		DMS: :*RUNUP	P100, TRACK *4,*REV, TIC *6064.59 +/-	300	4	0	4,534,834:84:8	
431	98	176	13:38:26.933		DMS: :*AT_SPD	P100, TRACK 4, REV, TIC 6059.09 +/-	300	4	0	4,534,834:90:6	
432	98	176	13:38:26.933		DMS: :*P_SLEW	P100, TRACK 4, REV, TIC *6059.09 +/-	300	4	0	4,534,834:90:6	
433	98	176	13:44:16.533	488CS6A	6TMSED FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,534,840:69:0	
434	98	176	13:49:07.866	488CS6B	6TMSED FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,534,845:51:0	
435	98	176	13:55:21.200	488CS6C	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,534,851:65:0	
436	98	176	14:06:11.866	488CS6D	6TMSED NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,534,862:40:0	
437	98	176	14:10:22.533		DMS: :*RUNDOWN	P100, TRACK 4, REV, TIC * 166.38 +/-	300	4	0	4,534,866:52:0	
438	98	176	14:10:22.533	465SH6A	6DMSC P100,3	DMS Control Tape P/B 100.8kbps	300	4	0	4,534,866:52:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
439	98	176	14:10:23.733		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 165.58 +/-	300	4	0	4,534,866:53:8	
440	98	176	14:10:27.600		DMS:	: *P SLEW	P100, TRACK 3, FWD, TIC * 171.08 +/-	300	4	0	4,534,866:59:6	
441	98	176	14:10:27.600		DMS:	: *AT SPD	P100, TRACK 3, FWD, TIC 171.08 +/-	300	4	0	4,534,866:59:6	
442	98	176	14:11:28.533		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC * 358.52 +/-	300	4	0	4,534,867:60:0	
443	98	176	14:11:28.533	465SH6B	6DMSC	RDY,3	DMS Control Tape stop	300	4	0	4,534,867:60:0	
444	98	176	14:11:29.733		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 359.32 +/-	300	4	0	4,534,867:61:8	
445	98	176	14:25:58.533		DMS:	: *READY	RDY, TRACK *4, *REV, TIC 359.32 +/-	300	4	0	4,534,882:00:0	
446	98	176	14:25:58.533	465SI6A	6DMSC	RDY,4	DMS Control Tape stop	300	4	0	4,534,882:00:0	
447	98	176	14:26:52.533		DMS:	: *DMS-TURNUP	P7, TRACK 4, REV, TIC 359.32 +/-	300	4	0	4,534,882:81:0	
448	98	176	14:26:52.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 359.32 +/-	300	4	0	4,534,882:81:0	
449	98	176	14:26:52.533	465SJ6A	6DTRN	CMD:6DTRN,465SJ6	DMS TRACK TURNAROUND	300	4	0	4,534,882:81:0	
450	98	176	14:26:53.933		DMS:	: *US AT SP	P7, TRACK 1, FWD, TIC * 359.44 +/-	300	4	0	4,534,882:83:1	
451	98	176	14:26:59.200		DMS:	: *US RD	P7, TRACK 1, FWD, TIC * 360.67 +/-	300	4	0	4,534,883:00:0	
452	98	176	14:27:00.400		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 360.73 +/-	300	4	0	4,534,883:01:8	
453	98	176	14:27:01.800		DMS:	: *AT SPD	P7, TRACK 4, REV, TIC * 360.61 +/-	300	4	0	4,534,883:03:9	
454	98	176	14:38:27.600		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	300	4	0	4,534,894:31:6	
455	98	176	14:38:28.800		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	300	4	0	4,534,894:33:4	
456	98	176	14:38:28.800		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	300	4	0	4,534,894:33:4	
457	98	176	14:38:30.200		DMS:	: *AT SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	300	4	0	4,534,894:35:5	
458	98	176	14:38:42.200		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	300	4	0	4,534,894:53:5	
459	98	176	14:38:43.400		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	300	4	0	4,534,894:55:3	
460	98	176	14:55:57.866	20UG4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,534,911:60:0	
461	98	176	14:56:47.866	20UG4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,534,912:44:0	
462	98	176	14:58:19.866	176SO6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,534,914:00:0	
463	98	176	15:04:26.533	488C56E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,534,920:04:0	
464	98	176	15:25:07.866	488CT6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,534,940:46:0	
465	98	176	15:31:31.200	488CT6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,534,946:75:0	
466	98	176	22:42:27.866	488CU6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,535,373:03:0	
467	98	176	23:52:51.866	488CU6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,535,442:60:0	
468	98	177	00:07:47.866	488CU6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,535,457:39:0	
469	98	177	00:26:59.866	488CU6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,535,476:38:0	
470	98	177	01:31:37.200	488CU6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,535,540:30:0	
471	98	177	02:05:16.466	488CV6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,535,573:56:0	
472	98	177	08:51:34.466	488CW6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,535,975:41:0	
473	98	177	09:30:13.133	488CW6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,536,013:61:0	
474	98	177	09:50:11.800	488CW6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,536,033:39:0	
475	98	177	13:44:21.133	488CW6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,536,265:01:0	
476	98	177	13:49:07.800	488CW6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,536,269:67:0	
477	98	177	13:55:28.466	488CX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,536,276:01:0	
478	98	177	14:06:11.800	488CX6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,536,286:56:0	
479	98	177	15:04:18.466	488CX6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,536,344:08:0	
480	98	177	15:25:07.800	488CX6D	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	300	4	0	4,536,364:62:0	
481	98	177	15:31:25.133	488CX6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,536,370:82:0	
482	98	177	15:53:00.466	488CY6A	6TMSED	NORM,AH6	Sci, Eng, and D/L Chan	300	4	0	4,536,392:23:0	
483	98	177	15:57:48.466	176SD6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,536,397:00:0	
484	98	177	16:08:59.800	20BB4C	7STAT	17,45,265,7538,4	Stator inertial point	300	4	0	4,536,408:06:0	
485	98	177	16:29:59.800	474BA416A4B	7MODE	INT	AACS INERTIAL MODE	300	4	0	4,536,428:76:0	
486	98	177	16:31:59.800	474BA416A4D	7SAFE	UNSTOW	S/P TO 153 deg cone	300	4	0	4,536,430:74:0	
487	98	177	16:32:19.800	20BB4D	7STAT	17,45,265,7538,4	Stator inertial point	300	4	0	4,536,431:13:0	
488	98	177	16:36:13.800	474BA416A4E	7BURN	SZ,265,753799,4.	ALERT -- Thruster fire	300	4	0	4,536,435:00:0	
489	98	177	16:42:43.133	20BB4F	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,536,441:38:0	
490	98	177	16:48:35.133	20BB4G	7MODE	CRU	AACS CRUISE MODE	300	4	0	4,536,447:20:0	
491	98	177	17:12:51.133	20BB4J	7STAT	17,45,265,7538,4	Stator inertial point	300	4	0	4,536,471:20:0	
492	98	177	17:15:51.133	20BB4K	7MODE	INT	AACS INERTIAL MODE	300	4	0	4,536,474:17:0	
493	98	177	17:17:51.133	474BA416A4G	7BURN	AT,265,753799,4.	ALERT -- Thruster fire	300	4	0	4,536,476:15:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
494	98	177	17:25:25.133	20BB4M	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,536,483:59:0	
495	98	177	17:30:17.133	20BB4N	7MODE	CRU	AACS CRUISE MODE	300	4	0	4,536,488:42:0	
496	98	177	18:37:49.133	20BE4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,536,555:23:0	
497	98	177	18:38:39.133	20BE4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,536,556:07:0	
498	98	177	18:39:35.133	176B6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,536,557:00:0	
499	98	177	18:50:19.133	20BD6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,536,567:56:0	
500	98	177	22:00:00.466	488CZ6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,536,755:20:0	
501	98	177	22:03:49.800	176SE6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,536,759:00:0	
502	98	177	22:33:55.800	488CZ6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,536,788:70:0	
503	98	177	22:53:00.466	488CZ6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,536,807:58:0	
504	98	177	22:57:23.800	488CZ6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	300	4	0	4,536,811:89:0	
505	98	178	07:25:55.133	488DA6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	300	4	0	4,537,314:83:0	
506	98	178	07:31:31.800	488DA6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,537,320:42:0	
507	98	178	07:42:11.800	488DA6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,537,331:01:0	
508	98	178	08:51:27.133	488DA6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,537,399:46:0	
509	98	178	09:25:06.400	488DA6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,537,432:72:0	
510	98	178	10:00:51.733	488DB6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,537,468:14:0	
511	98	178	15:08:03.733	488DB6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,537,771:89:0	
512	98	178	17:33:07.733	488DC6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,537,915:41:0	
513	98	178	17:39:53.733	488DC6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,537,922:13:0	
514	98	179	00:06:59.733	488DD6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,538,304:90:0	
515	98	179	00:16:19.733	488DD6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,538,314:20:0	
516	98	179	01:41:39.733	488DD6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,538,398:56:0	
517	98	179	08:29:07.733	488DE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,538,801:55:0	
518	98	179	10:00:38.400	488DE6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,538,892:10:0	
519	98	179	10:02:59.733	488DE6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,538,894:40:0	
520	98	179	10:13:39.733	488DE6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,538,904:90:0	
521	98	179	13:55:43.733	488DE6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,539,124:56:0	
522	98	179	14:06:11.733	488DF6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,539,134:88:0	
523	98	179	15:27:15.733	488DF6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,539,215:13:0	
524	98	179	22:08:19.666	488DG6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,539,611:73:0	
525	98	179	23:33:39.666	488DG6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,539,696:18:0	
526	98	179	23:59:15.666	488DG6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,539,721:47:0	
527	98	180	00:20:35.666	488DG6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,539,742:56:0	
528	98	180	01:21:14.333	488DG6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,539,802:54:0	
529	98	180	01:54:53.666	488DH6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,539,835:80:0	
530	98	180	04:06:45.000	488DH6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,539,966:26:0	
531	98	180	04:13:07.666	488DH6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	300	4	0	4,539,972:54:0	
532	98	180	07:22:09.666	488DH6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	300	4	0	4,540,159:50:0	
533	98	180	07:31:31.666	488DH6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,540,168:74:0	
534	98	180	08:00:05.666	15NNRCTRLT01-	-----START-----			300	4	0	:	
535	98	180	08:00:05.666	41XE99A	POWER	PWR MODE change	Change to Calib/Decon Mode	300	4	0	4,540,197:06:0	
536	98	180	08:00:09.666	41XE31	40T1PR		1 PCT Heater 1 OFF (primary relay)	300	4	0	4,540,197:12:0	
537	98	180	08:00:19.666	41XE3J	40T1PR		2 PCT Heater 1 OFF (primary relay)	300	4	0	4,540,197:27:0	
538	98	180	08:00:29.666	41XE3K	40T2R		1 PCT Heater 2 OFF	300	4	0	4,540,197:42:0	
539	98	180	08:00:39.666	41XE3L	40T2R		2 PCT Heater 2 OFF	300	4	0	4,540,197:57:0	
540	98	180	08:11:09.000	176XU6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	300	4	0	4,540,208:00:0	
541	98	180	08:14:15.000	20XE4A	7SAFE	UNSTOW	S/P TO 153 deg cone	300	4	0	4,540,211:06:0	
542	98	180	08:18:21.666	20DA4A	7SAFE	STOP	S/P NO MOVEMENT	300	4	0	4,540,215:12:0	
543	98	180	08:19:11.666	20DA4B	7SLEW	DIS,POS,0.0	Stator movement	300	4	0	4,540,215:87:0	
544	98	180	08:21:15.666	176XV6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	300	4	0	4,540,218:00:0	
545	98	180	08:22:16.333	185XE10A3A	40HRP		1 RCT Heater ON (primary relay)	300	4	0	4,540,219:00:0	
546	98	180	08:22:21.666	185XE10B3A	40HRP		2 RCT Heater ON (primary relay)	300	4	0	4,540,219:08:0	
547	98	180	08:26:59.666	488DI6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,540,223:61:0	
548	98	180	13:34:23.666	488DI6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	300	4	0	4,540,527:63:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
549	98	180	13:38:27.666	488D16C	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	300	4	0	4,540,531:65:0	
550	98	180	13:45:51.666	488D16D	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	300	4	0	4,540,539:03:0	
551	98	180	14:01:55.666	488D16E	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	300	4	0	4,540,554:84:0	
552	98	180	15:35:47.666	488D16A	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	300	4	0	4,540,647:69:0	
553	98	180	20:17:03.000	125XE4A	37IST	1,0,0,OFF,0,0,0	Chopper ON, Sync, 63Hz (Ref)	360	4	0	4,540,925:84:0	
554	98	180	20:17:03.000	125XE	NIMSINIT	GS	##### GROUP START INIT	360	4	0	4,540,925:84:0	
555	98	180	20:18:03.666	125XE4B	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	3R0	4	0	4,540,926:84:0	
556	98	180	20:19:04.333	125XE4C	37IST	0,2,0,OFF,0,1,3	Gain State 1	1R0	4	0	4,540,927:84:0	
557	98	180	20:20:05.000	125XE4D	37MB	1B,1B,0,0,0,0	Selects mirror (spatial) edit table	1R0	4	0	4,540,928:84:0	
558	98	180	20:20:05.000	125XE11A	NIMSINIT	GE	##### GROUP END INIT	1R0	4	0	4,540,928:84:0	
559	98	180	20:22:06.333	127XE	NIMSTAB	GS	%%-%-%-% GROUP START TAB	1R0	4	0	4,540,930:84:0	
560	98	180	20:22:06.333	127XE4A	37IOP	3,0	Long Map, Grating Start Position =00	1R3	4	0	4,540,930:84:0	
561	98	180	20:22:07.000	127XE4B	37ETB	0A,CA,18,03,FF,1	Loads wavelength edit table	1R3	4	0	4,540,930:85:0	
562	98	180	20:22:15.000	127XE11A	NIMSTAB	GE	%%-%-%-% GROUP END TAB	1R3	4	0	4,540,931:06:0	
563	98	180	20:22:13.666	176XE6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1R3	4	0	4,540,935:00:0	
564	98	180	20:28:18.333	20UT4A	7SCAN	NORM,346.935,-6.	Check S/P Position	1R3	4	0	4,540,937:05:0	
565	98	180	20:32:17.666	192XE4A	7CONE	17,0,119,7	Check S/P Position	1R3	4	0	4,540,941:00:0	
566	98	180	20:34:39.000	432XE6A	6RTSL2	NIMSEL,AACNCG,RT	NIMS R/T SELECT	1R3	4	0	4,540,943:30:0	
567	98	180	20:35:38.333	432XF6A	6RTDS2	NIMDSL,AACNCG,RT	NIMS R/T DESELECT	1R3	4	0	4,540,944:28:0	
568	98	180	20:38:21.666	192XE4B	7CONE	17,0,0,0	Check S/P Position	1R3	4	0	4,540,947:00:0	
569	98	180	20:40:43.000	432XU6A	6RTSL2	NIMSEL,AACNCG,RT	NIMS R/T SELECT	1R3	4	0	4,540,949:30:0	
570	98	180	20:42:43.000	432XV6A	6RTDS2	NIMDSL,AACNCG,RT	NIMS R/T DESELECT	1R3	4	0	4,540,951:28:0	
571	98	180	20:44:25.666	192XE4C	7CONE	17,0,119,7	Check S/P Position	1R3	4	0	4,540,953:00:0	
572	98	180	20:46:27.000	185XE10C3A	40HRPR		1 RCT Heater OFF (primary relay)	1R3	4	0	4,540,955:00:0	
573	98	180	20:46:32.333	185XE10D3A	40HRPR		2 RCT Heater OFF (primary relay)	1R3	4	0	4,540,955:08:0	
574	98	180	20:46:47.000	432XW6A	6RTSL2	NIMSEL,AACNCG,RT	NIMS R/T SELECT	1R3	4	0	4,540,955:30:0	
575	98	180	20:47:46.333	432XY6A	6RTDS2	NIMDSL,AACNCG,RT	NIMS R/T DESELECT	1R3	4	0	4,540,956:28:0	
576	98	180	20:49:24.333	125DC4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R3	4	0	4,540,957:84:0	
577	98	180	20:49:24.333	125DC	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,540,957:84:0	
578	98	180	20:49:24.333	125DC11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,540,957:84:0	
579	98	180	20:50:25.000	127DC	NIMSTAB	GS	%%-%-%-% GROUP START TAB	4R3	4	0	4,540,958:84:0	
580	98	180	20:50:25.000	127DC4A	37IOP	3,0	Long Map, Grating Start Position =00	4R3	4	0	4,540,958:84:0	
581	98	180	20:50:25.666	127DC4B	37ETB	07,C7,31,80,00,0	Loads wavelength edit table	4R3	4	0	4,540,958:85:0	
582	98	180	20:50:29.666	192XE4D	7CONE	17,0,153,0	Check S/P Position	4R3	4	0	4,540,959:00:0	
583	98	180	20:50:33.666	127DC11A	NIMSTAB	GE	%%-%-%-% GROUP END TAB	4R3	4	0	4,540,959:06:0	
584	98	180	20:50:49.666	432DC6A	6RTSL2	NIMSEL,AACNCG,RT	NIMS R/T SELECT	4R3	4	0	4,540,959:30:0	
585	98	180	20:51:25.666	125DD4A	37IST	0,2,1,OFF,1,0,1	OPCAL	4R3	4	0	4,540,959:84:0	
586	98	180	20:51:25.666	125DD11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,540,959:84:0	
587	98	180	20:51:25.666	125DD	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,540,959:84:0	
588	98	180	20:53:27.000	125DE4A	37IST	0,2,1,OFF,1,0,1	OPCAL	4R3	4	0	4,540,961:84:0	
589	98	180	20:53:27.000	125DE	NIMSINIT	GS	##### GROUP START INIT	4R3	4	0	4,540,961:84:0	
590	98	180	20:53:27.000	125DE11A	NIMSINIT	GE	##### GROUP END INIT	4R3	4	0	4,540,961:84:0	
591	98	180	20:53:50.333	432DE6A	6RTDS2	NIMDSL,AACNCG,RT	NIMS R/T DESELECT	4R3	4	0	4,540,962:28:0	
592	98	180	20:55:01.666	488D16B	6TMSD	FILL,AL6	Sci, Eng, and D/L Chan	4R3	4	0	4,540,963:44:0	
593	98	180	20:57:29.666	127XF4A	37IOP	0,0	Safe, Grating Start Position =00	4R0	4	0	4,540,965:84:0	
594	98	180	20:57:29.666	127XF	NIMSTAB	GS	%%-%-%-% GROUP START TAB	4R0	4	0	4,540,965:84:0	
595	98	180	20:57:30.333	127XF4B	37ETB	04,C4,02,00,00	Loads wavelength edit table	4R0	4	0	4,540,965:85:0	
596	98	180	20:57:38.333	127XF11A	NIMSTAB	GE	%%-%-%-% GROUP END TAB	4R0	4	0	4,540,966:06:0	
597	98	180	20:57:55.666	488D16C	6TMSD	FILL,AL3	Sci, Eng, and D/L Chan	4R0	4	0	4,540,966:32:0	
598	98	180	21:00:31.666	125XF4A	37MB	0,0,0,0,0,0	Selects mirror (spatial) edit table	4R0	4	0	4,540,968:84:0	
599	98	180	21:00:31.666	125XF	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	4,540,968:84:0	
600	98	180	21:01:32.333	125XF4B	37IST	1,0,0,OFF,0,0,0	Chopper ON, Sync, 63Hz (Ref)	460	4	0	4,540,969:84:0	
601	98	180	21:02:33.000	125XF11A	NIMSINIT	GE	##### GROUP END INIT	460	4	0	4,540,970:84:0	
602	98	180	21:02:33.000	125XF4C	37IST	1,1,0,OFF,0,0,0	Chopper OFF, N/A, 63Hz (Ref)	400	4	0	4,540,970:84:0	
603	98	180	21:08:45.666	41XU99A	POWER	PWR MODE change	Change to Maneuver/Playback Mode	400	4	0	4,540,977:06:0	

Line	YR	DOY	SCET - GMT	PSID	Command Parameters	Description	GCM	GO	GS	RIM	MF I
604	98	180	21:10:39.666	41XU3G	40T1P	1 PCT Heater 1 ON (primary relay)	400	4	0	4,540,978:86:0	
605	98	180	21:10:49.666	41XU3H	40T1P	2 PCT Heater 1 ON (primary relay)	400	4	0	4,540,979:10:0	
606	98	180	21:10:59.666	41XU3I	40T2	1 PCT Heater 2 ON	400	4	0	4,540,979:25:0	
607	98	180	21:11:09.666	41XU3J	40T2	2 PCT Heater 2 ON	400	4	0	4,540,979:40:0	
608	98	180	21:15:50.332	15NNRCTRLT01-	-----STOP-----		400	4	0	:	
609	98	180	21:18:56.333	20DB4A	7SAFE STOP	S/P NO MOVEMENT	400	4	0	4,540,987:12:0	
610	98	180	21:19:46.333	20DB4B	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,540,987:87:0	
611	98	180	21:21:50.333	176XF6A	6TMREC RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,540,990:00:0	
612	98	181	07:17:17.600	488DK6A	6TMSED NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,541,578:83:0	
613	98	181	07:27:15.600	488DK6B	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,541,588:70:0	
614	98	181	08:26:59.600	488DK6C	6TMSED NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,541,647:77:0	
615	98	181	13:29:34.266	488DL6A	6TMSED FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,541,947:09:0	
616	98	181	13:34:11.600	488DL6B	6TMSED FILL,AL3	Sci, Eng, and D/L Chan	400	4	0	4,541,951:61:0	
617	98	181	13:42:19.600	488DL6C	6TMSED NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,541,959:65:0	
618	98	181	13:51:15.600	488DL6D	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,541,968:50:0	
619	98	181	14:41:02.266	488DL6E	6TMSED FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,542,017:71:0	
620	98	181	15:14:41.600	488DM6A	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,542,051:06:0	
621	98	181	16:05:00.266	488DM6B	6TMSED NORM,AH4	Sci, Eng, and D/L Chan	400	4	0	4,542,100:75:0	
622	98	181	16:08:12.933	176S16A	6TMREC PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	400	4	0	4,542,104:00:0	
623	98	181	16:12:12.266	20SM6BA	6MROH 7.6CF8,0,A10	read from AACSA7,6CF8,0,A10	400	4	0	4,542,107:86:0	
624	98	181	16:18:56.266	20SM6F	6MROH 12,2095,2,A10	read from LLM1A12,2095,2,A1	400	4	0	4,542,114:55:0	
625	98	181	16:32:30.266	20SM6K	6MROH 7.6F96,2,A10	read from AACSA7,6F96,2,A10	400	4	0	4,542,128:02:0	
626	98	181	16:46:38.266	20SM4I	7MODE INT	AACS INERTIAL MODE	400	4	0	4,542,142:00:0	
627	98	181	17:01:38.266	20SM4K	7SLEW INIT,POS,17.45	Stator movement	400	4	0	4,542,156:76:0	
628	98	181	17:13:38.266	20SM4L	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,542,168:64:0	
629	98	181	17:20:38.266	20SM4M	7SLEW INIT,NEG,17.45	Stator movement	400	4	0	4,542,175:57:0	
630	98	181	17:32:38.266	20SM4N	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,542,187:45:0	
631	98	181	17:39:38.266	20SM4O	7SLEW INIT,POS,4.36	Stator movement	400	4	0	4,542,194:38:0	
632	98	181	17:51:38.266	20SM4P	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,542,206:26:0	
633	98	181	17:58:38.266	20SM4Q	7SLEW INIT,NEG,4.36	Stator movement	400	4	0	4,542,213:19:0	
634	98	181	18:10:38.266	20SM4R	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,542,225:07:0	
635	98	181	18:17:38.266	20SM4S	7CONE 17.45,0.0	Check S/P Position	400	4	0	4,542,232:00:0	
636	98	181	18:23:38.266	20SM4T	7CONE 17.45,180.0	Check S/P Position	400	4	0	4,542,237:85:0	
637	98	181	18:29:38.266	20SM4U	7CONE 4.36,0.0	Check S/P Position	400	4	0	4,542,243:79:0	
638	98	181	18:44:38.266	20SM4V	7CONE 4.36,153.0	Check S/P Position	400	4	0	4,542,258:64:0	
639	98	181	19:21:42.266	20SM4AG	7SAFE UNSTOW	S/P TO 153 deg cone	400	4	0	4,542,295:33:0	
640	98	181	19:25:42.266	20SM4AH	7MODE CRU	AACS CRUISE MODE	400	4	0	4,542,299:29:0	
641	98	181	19:34:22.266	20SM6U	6MROH 7.6F96,2,A10	read from AACSA7,6F96,2,A10	400	4	0	4,542,307:81:0	
642	98	181	19:39:22.266	20SM4AM	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,542,312:76:0	
643	98	181	19:40:32.933	176SK6A	6TMREC RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,542,314:00:0	
644	98	181	19:48:30.266	20SM6BB	6MROH 7.6CF8,0,A10	read from AACSA7,6CF8,0,A10	400	4	0	4,542,321:79:0	
645	98	181	19:50:00.266	20SM6Y	6MROH 12,2095,2,A10	read from LLM1A12,2095,2,A1	400	4	0	4,542,323:32:0	
646	98	181	20:00:00.266	488DM6C	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,542,333:22:0	
647	98	181	23:44:19.600	488DN6A	6TMSED NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,542,555:09:0	
648	98	182	00:16:19.600	488DN6B	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,542,586:68:0	
649	98	182	01:00:58.266	488DN6C	6TMSED FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,542,630:82:0	
650	98	182	01:49:37.600	488DN6D	6TMSED NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,542,679:02:0	
651	98	182	08:26:59.533	488DO6A	6TMSED NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,543,072:02:0	
652	98	182	08:33:42.200	488DO6B	6TMSED FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,543,078:60:0	
653	98	182	08:57:18.200	176SV6A	6TMREC PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	400	4	0	4,543,102:00:0	
654	98	182	09:02:00.200	20UR4B	7SLEW DIS,POS,0.0	Stator movement	400	4	0	4,543,106:59:0	
655	98	182	09:02:48.866	488DO6C	6TMSED NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,543,107:41:0	
656	98	182	09:03:00.200	20UR4D	7MODE SPNL	AACS ALL-SPIN LOW	400	4	0	4,543,107:58:0	
657	98	182	09:05:00.200	20UR4E	7SAFE UNSTOW	S/P TO 153 deg cone	400	4	0	4,543,109:56:0	
658	98	182	09:10:30.200	20UR4G	7VENT 0.611,1.333,8	ALERT -- Thruster fire	400	4	0	4,543,115:05:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
659	98	182	09:10:30.866	20UR4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	400	4	0	4,543,115:06:0	
660	98	182	09:10:50.866	20UR4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	400	4	0	4,543,115:36:0	
661	98	182	09:10:51.533	20UR4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	400	4	0	4,543,115:37:0	
662	98	182	09:11:11.533	20UR4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	400	4	0	4,543,115:67:0	
663	98	182	09:11:12.200	20UR4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	400	4	0	4,543,115:68:0	
664	98	182	09:11:22.200	20UR4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	400	4	0	4,543,115:83:0	
665	98	182	09:11:22.866	20UR4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	400	4	0	4,543,115:84:0	
666	98	182	09:11:32.866	20UR4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	400	4	0	4,543,116:08:0	
667	98	182	09:11:33.533	20UR4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	400	4	0	4,543,116:09:0	
668	98	182	09:13:20.200	20UR4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	400	4	0	4,543,117:78:0	
669	98	182	09:13:20.866	20UR4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	400	4	0	4,543,117:79:0	
670	98	182	09:13:40.866	20UR4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	400	4	0	4,543,118:18:0	
671	98	182	09:13:41.533	20UR4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	400	4	0	4,543,118:19:0	
672	98	182	09:14:01.533	20UR4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	400	4	0	4,543,118:49:0	
673	98	182	09:14:02.200	20UR4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	400	4	0	4,543,118:50:0	
674	98	182	09:14:12.200	20UR4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	400	4	0	4,543,118:65:0	
675	98	182	09:14:12.866	20UR4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	400	4	0	4,543,118:66:0	
676	98	182	09:14:22.866	20UR4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	400	4	0	4,543,118:81:0	
677	98	182	09:14:23.533	20UR4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	400	4	0	4,543,118:82:0	
678	98	182	09:15:20.200	20UR4Z	7MODE	CRU	AACS CRUISE MODE	400	4	0	4,543,119:76:0	
679	98	182	09:40:04.200	20UK4A	7SAFE	STOP	S/P NO MOVEMENT	400	4	0	4,543,144:27:0	
680	98	182	09:40:54.200	20UK4B	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,543,145:11:0	
681	98	182	09:42:48.200	176SW6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,543,147:00:0	
682	98	182	13:25:03.533	488DO6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,543,366:74:0	
683	98	182	13:29:55.533	488DO6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,543,371:57:0	
684	98	182	13:36:07.533	488DP6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,543,377:69:0	
685	98	182	14:01:55.533	488DP6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,543,403:25:0	
686	98	182	15:52:51.533	488DP6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,543,512:90:0	
687	98	182	16:53:00.200	488DP6D	6TMSED	NORM,AH6	Sci, Eng, and D/L Chan	400	4	0	4,543,572:43:0	
688	98	182	16:57:34.866	176WA6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	400	4	0	4,543,577:00:0	
689	98	182	17:06:00.200	20WC4C	7STAT	17.45,178.14,2.2	Stator inertial point	400	4	0	4,543,585:30:0	
690	98	182	17:25:02.200	490UA412A4B	7MODE	INT	AACS INERTIAL MODE	400	4	0	4,543,604:14:0	
691	98	182	17:30:00.200	490UA412A4D	7SAFE	UNSTOW	S/P TO 153 deg cone	400	4	0	4,543,609:06:0	
692	98	182	17:30:20.200	20WC4D	7STAT	17.45,178.14,2.2	Stator inertial point	400	4	0	4,543,609:36:0	
693	98	182	17:34:10.200	490UA412A4E	7VECT		Inert vect update UTC	400	4	0	4,543,613:17:0	
694	98	182	17:34:14.200	490UA412A4F	7TURN	2,RTH	ALERT Thruster	400	4	0	4,543,613:23:0	
695	98	182	17:38:02.200	490UA412A406A4A	7STAR	16,217,100.73	Star catalog update	400	4	0	4,543,617:01:0	
696	98	182	17:38:04.200	490UA412A406A4B	7STAR	2,125,259.73	Star catalog update	400	4	0	4,543,617:04:0	
697	98	182	17:38:06.200	490UA412A406A4C	7STAR	3,130,228.55	Star catalog update	400	4	0	4,543,617:07:0	
698	98	182	17:38:08.200	490UA412A406A4D	7STAR	4,371,138.16,-69	Star catalog update	400	4	0	4,543,617:10:0	
699	98	182	17:38:10.200	490UA412A406A4E	7STAR	5,0,0,0,0,0	Star catalog update	400	4	0	4,543,617:13:0	
700	98	182	17:38:12.200	490UA412A406A4F	7STAR	6,0,0,0,0,0	Star catalog update	400	4	0	4,543,617:16:0	
701	98	182	17:48:06.200	20WC4F	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,543,626:88:0	
702	98	182	17:56:10.200	490UA412A44G	7MODE	CRU	AACS CRUISE MODE	400	4	0	4,543,634:86:0	
703	98	182	19:20:04.200	20WE4A	7SAFE	STOP	S/P NO MOVEMENT	400	4	0	4,543,717:84:0	
704	98	182	19:20:54.200	20WE4B	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,543,718:68:0	
705	98	182	19:22:10.200	176WE6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,543,720:00:0	
706	98	182	19:25:00.200	488DP6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,543,722:73:0	
707	98	182	22:29:39.533	488DQ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,543,905:39:0	
708	98	182	23:33:39.533	488DQ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,543,968:66:0	
709	98	182	23:52:16.200	488DQ6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,543,987:12:0	
710	98	182	23:54:59.533	488DQ6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	400	4	0	4,543,989:75:0	
711	98	183	00:09:55.533	488DQ6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,544,004:54:0	
712	98	183	13:31:14.133	488DR6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,544,797:09:0	
713	98	183	13:42:43.466	488DR6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,544,808:42:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
714	98	183	14:50:59.466	488DR6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,544,875:89:0	
715	98	183	22:18:59.466	488DS6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,545,319:05:0	
716	98	183	23:33:39.466	488DS6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,545,392:82:0	
717	98	183	23:44:19.466	488DS6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,545,403:41:0	
718	98	184	00:01:23.466	488DS6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,545,420:30:0	
719	98	184	01:05:43.466	488DS6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,545,483:87:0	
720	98	184	01:39:22.133	488DT6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,545,517:21:0	
721	98	184	03:06:59.466	488DT6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,545,603:81:0	
722	98	184	04:55:15.466	488DT6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,545,710:88:0	
723	98	184	05:00:03.466	488DT6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,545,715:65:0	
724	98	184	07:06:20.133	488DT6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,545,840:55:0	
725	98	184	07:52:51.466	488DU6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,545,886:56:0	
726	98	184	11:17:39.466	488DU6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,546,089:15:0	
727	98	184	13:14:59.466	488DU6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,546,205:19:0	
728	98	184	13:19:45.466	488DU6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,546,209:84:0	
729	98	184	13:23:31.466	488DU6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,546,213:59:0	
730	98	184	13:31:22.133	488DV6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,546,221:37:0	
731	98	184	13:42:43.466	488DV6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,546,232:58:0	
732	98	184	14:46:43.466	488DV6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,546,295:85:0	
733	98	184	22:14:43.400	488DW6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,546,739:01:0	
734	98	184	23:29:23.400	488DW6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,546,812:78:0	
735	98	185	01:00:35.400	488DW6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,546,903:05:0	
736	98	185	01:34:14.733	488DW6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,546,936:31:0	
737	98	185	03:02:43.400	488DW6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,023:77:0	
738	98	185	06:25:23.400	488DX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,547,224:26:0	
739	98	185	07:46:27.400	488DX6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,304:42:0	
740	98	185	08:23:18.733	488DX6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,340:83:0	
741	98	185	08:52:24.733	488DX6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,369:63:0	
742	98	185	11:17:39.400	488DX6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,547,513:31:0	
743	98	185	13:08:35.400	488DY6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,623:05:0	
744	98	185	13:15:05.400	488DY6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,629:44:0	
745	98	185	13:19:15.400	488DY6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,547,633:55:0	
746	98	185	13:26:30.733	488DY6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,547,640:71:0	
747	98	185	13:36:19.400	488DY6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,547,650:44:0	
748	98	185	14:46:43.400	488DZ6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,547,720:10:0	
749	98	185	22:14:43.400	488EA6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,548,163:17:0	
750	98	185	23:25:07.400	488EA6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,548,232:74:0	
751	98	185	23:41:36.066	488EA6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,548,249:10:0	
752	98	185	23:44:19.400	488EA6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	400	4	0	4,548,251:73:0	
753	98	185	23:54:59.400	488EA6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,548,262:32:0	
754	98	186	13:21:38.666	488EB6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,549,060:13:0	
755	98	186	13:32:03.333	488EB6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,549,070:40:0	
756	98	186	14:38:11.333	488EB6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,549,135:77:0	
757	98	186	22:10:27.333	488EC6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,549,583:13:0	
758	98	186	23:25:07.333	488EC6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,549,656:90:0	
759	98	186	23:33:39.333	488EC6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,549,665:39:0	
760	98	186	23:52:51.333	488EC6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,549,684:38:0	
761	98	187	00:55:19.333	488EC6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,549,746:18:0	
762	98	187	01:28:58.666	488ED6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,549,779:44:0	
763	98	187	02:32:51.333	488ED6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,549,842:60:0	
764	98	187	06:40:19.333	488ED6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,550,087:37:0	
765	98	187	07:37:55.333	488EE6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,550,144:34:0	
766	98	187	08:18:02.666	488EE6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,550,184:05:0	
767	98	187	08:47:08.666	488EE6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,550,212:76:0	
768	98	187	10:32:51.266	488EE6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,550,317:35:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
769	98	187	13:01:23.266	488EE6E	6TMSD	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,550,464:26:0	
770	98	187	13:04:19.266	488EF6A	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,550,467:17:0	
771	98	187	13:16:46.600	488EF6B	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,550,479:46:0	
772	98	187	13:27:47.266	488EF6C	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,550,490:36:0	
773	98	187	14:31:47.266	488EF6D	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,550,553:63:0	
774	98	187	20:56:46.600	488EG6A	6TMSD	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,550,934:41:0	
775	98	187	21:00:03.266	488EG6B	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,550,937:63:0	
776	98	188	13:11:54.600	488EH6A	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,551,898:79:0	
777	98	188	13:23:31.266	488EH6B	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,551,910:32:0	
778	98	188	14:23:15.266	488EH6C	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,551,969:39:0	
779	98	188	22:14:43.200	488EI6A	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,552,435:65:0	
780	98	188	23:18:43.200	488EI6B	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,552,499:01:0	
781	98	189	00:22:43.200	488EI6C	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,552,562:28:0	
782	98	189	06:44:35.200	488EJ6A	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,552,939:89:0	
783	98	189	08:12:03.200	488EJ6B	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,553,026:44:0	
784	98	189	08:12:46.533	488EJ6C	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,553,027:18:0	
785	98	189	08:41:52.533	488EJ6D	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,553,055:89:0	
786	98	189	13:00:27.866	488EK6A	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,553,311:66:0	
787	98	189	13:04:19.200	488EK6B	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,553,315:49:0	
788	98	189	13:12:02.533	488EK6C	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,553,323:16:0	
789	98	189	13:23:31.200	488EK6D	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,553,334:48:0	
790	98	189	14:12:35.200	488EK6E	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,553,383:05:0	
791	98	189	14:19:07.866	488EL6A	6TMSD	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,553,389:48:0	
792	98	189	14:45:57.200	488EL6B	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,553,416:05:0	
793	98	189	22:18:59.200	488EM6A	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,553,864:10:0	
794	98	189	23:14:27.200	488EM6B	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,553,918:88:0	
795	98	189	23:23:49.200	488EM6C	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,553,928:21:0	
796	98	189	23:29:23.200	488EM6D	6TMSD	FILL,AL1	Sci, Eng, and D/L Chan	400	4	0	4,553,933:67:0	
797	98	190	00:05:39.200	488EM6E	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,553,969:55:0	
798	98	190	00:57:06.466	488EN6A	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,554,020:45:0	
799	98	190	01:33:07.133	488EN6B	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,554,056:10:0	
800	98	190	02:12:40.466	488EN6C	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,554,095:21:0	
801	98	190	02:41:46.466	488EN6D	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,554,124:01:0	
802	98	190	04:55:35.133	488EN6E	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,554,256:32:0	
803	98	190	05:00:03.133	488EO6A	6TMSD	FILL,AL3	Sci, Eng, and D/L Chan	400	4	0	4,554,260:70:0	
804	98	190	23:13:34.466	488EP6A	6TMSD	NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,555,342:25:0	
805	98	190	23:22:59.133	488EP6B	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,555,351:53:0	
806	98	191	00:34:47.133	488EP6C	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,555,422:54:0	
807	98	191	01:08:26.466	488EP6D	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,555,455:80:0	
808	98	191	01:13:55.133	488EP6E	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,555,461:27:0	
809	98	191	06:36:03.133	488EQ6A	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,555,779:81:0	
810	98	191	07:08:03.133	488EQ6B	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,555,811:49:0	
811	98	191	08:02:30.400	488EQ6C	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,555,865:36:0	
812	98	191	08:31:36.400	488EQ6D	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,555,894:16:0	
813	98	191	08:48:19.066	488EQ6E	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,555,910:64:0	
814	98	191	12:57:24.400	488ER6A	6TMSD	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,556,157:05:0	
815	98	191	13:00:03.066	488ER6B	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,556,159:61:0	
816	98	191	13:05:31.733	488ER6C	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,556,165:08:0	
817	98	191	13:53:23.066	488ER6D	6TMSD	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,556,212:38:0	
818	98	191	22:25:23.066	488ES6A	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,556,718:72:0	
819	98	191	23:14:27.066	488ES6B	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,556,767:29:0	
820	98	192	00:34:39.066	488ES6C	6TMSD	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,556,846:58:0	
821	98	192	00:58:59.066	488ES6D	6TMSD	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,556,870:64:0	
822	98	192	01:05:18.400	488ES6E	6TMSD	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,556,876:87:0	
823	98	192	06:36:03.066	488ET6A	6TMSD	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,557,204:06:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
824	98	192	07:03:47.066	488ET6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,557,231:45:0	
825	98	192	08:02:22.400	488ET6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,557,289:40:0	
826	98	192	08:29:07.066	488ET6D	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,557,315:81:0	
827	98	192	08:30:58.400	488ET6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,557,317:66:0	
828	98	192	12:52:41.733	488EU6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,557,576:52:0	
829	98	192	12:55:47.066	488EU6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,557,579:57:0	
830	98	192	13:00:40.400	488EU6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,557,584:42:0	
831	98	192	13:38:27.066	488EU6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,557,621:75:0	
832	98	192	22:29:39.000	488EV6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,558,147:17:0	
833	98	192	23:10:11.000	488EV6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,558,187:25:0	
834	98	192	23:17:39.666	488EV6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,558,194:61:0	
835	98	192	23:20:51.000	488EV6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	400	4	0	4,558,197:75:0	
836	98	192	23:31:31.000	488EV6E	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,558,208:34:0	
837	98	193	20:44:58.333	488EW6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,559,467:76:0	
838	98	193	22:29:38.933	488EW6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,559,571:33:0	
839	98	193	23:05:54.933	488EW6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,559,607:21:0	
840	98	194	00:22:42.933	488EW6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,559,683:17:0	
841	98	194	00:27:08.266	488EW6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,559,687:51:0	
842	98	194	00:56:14.933	488EX6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,559,716:32:0	
843	98	194	08:01:22.933	488EY6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,560,136:74:0	
844	98	194	09:09:02.933	488EY6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,560,203:67:0	
845	98	194	09:18:10.933	488EY6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,560,212:70:0	
846	98	194	12:50:56.933	488EY6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,560,423:18:0	
847	98	194	13:23:30.933	488EY6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,560,455:37:0	
848	98	194	20:57:14.933	488EZ6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,560,904:14:0	
849	98	194	21:00:02.933	488EZ6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,560,906:84:0	
850	98	194	23:07:47.600	488EZ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,561,033:24:0	
851	98	194	23:33:38.933	488EZ6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,561,058:76:0	
852	98	194	23:59:04.933	432MC431A6A	6RCDSL	DDSDSL,PLSNCG,EP	Record Deselect (DDS o	400	4	0	4,561,083:90:0	
853	98	194	23:59:05.600	432MC6A	6RTSL1		R/T Select of DDS and	400	4	0	4,561,084:00:0	
854	98	195	01:18:10.933	488EZ6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,561,162:20:0	
855	98	195	05:27:12.866	488FA6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,561,408:47:0	
856	98	195	05:29:54.866	488FA6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,561,411:17:0	
857	98	195	06:27:49.533	488FA6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,561,468:42:0	
858	98	195	07:08:02.866	488FA6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,561,508:22:0	
859	98	195	07:46:57.533	488FA6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,561,546:66:0	
860	98	195	08:16:03.533	488FB6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,561,575:46:0	
861	98	195	12:36:58.200	488FB6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,561,833:50:0	
862	98	195	12:46:05.533	488FB6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,561,842:52:0	
863	98	195	13:12:50.866	488FB6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,561,869:03:0	
864	98	195	13:53:18.866	488FB6E	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,561,909:05:0	
865	98	195	14:20:08.200	488FC6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,561,935:53:0	
866	98	195	17:10:50.866	488FC6B	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,562,104:38:0	
867	98	195	20:47:40.200	488FD6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,562,318:78:0	
868	98	195	22:31:46.866	488FD6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,562,421:75:0	
869	98	195	23:05:54.866	488FD6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	400	4	0	4,562,455:53:0	
870	98	195	23:07:11.533	488FD6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	400	4	0	4,562,456:77:0	
871	98	195	23:27:14.866	488FD6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,562,476:62:0	
872	98	196	06:27:58.200	488FE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,562,892:71:0	
873	98	196	06:59:30.866	488FE6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,562,923:89:0	
874	98	196	07:41:48.200	488FE6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,562,965:73:0	
875	98	196	08:10:54.866	488FE6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,562,994:54:0	
876	98	196	09:05:00.200	488FE6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,563,048:08:0	
877	98	196	09:08:57.533	176SH6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	400	4	0	4,563,052:00:0	
878	98	196	09:39:00.200	20SQ41	7MODE	INT	AACS INERTIAL MODE	400	4	0	4,563,081:65:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
879	98	196	09:54:00.200	20SQ4K	7SLEW	INIT,POS,17.45	Stator movement	400	4	0	4,563,096:50:0	
880	98	196	09:54:26.866	488FF6A	6TMSED	NORM,AH6	Sci, Eng, and D/L Chan	400	4	0	4,563,096:90:0	
881	98	196	10:06:00.200	20SQ4L	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,563,108:38:0	
882	98	196	10:13:00.200	20SQ4M	7SLEW	INIT,NEG,17.45	Stator movement	400	4	0	4,563,115:31:0	
883	98	196	10:25:00.200	20SQ4N	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,563,127:19:0	
884	98	196	10:37:00.200	20SQ4AH	7MODE	CRU	AACS CRUISE MODE	400	4	0	4,563,139:07:0	
885	98	196	10:53:04.200	20ST4A	7SAFE	STOP	S/P NO MOVEMENT	400	4	0	4,563,154:88:0	
886	98	196	10:53:54.200	20ST4B	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,563,155:72:0	
887	98	196	10:54:06.866	176SJ6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,563,156:00:0	
888	98	196	10:57:00.200	488FF6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,563,158:78:0	
889	98	196	12:38:07.466	488FF6C	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,563,258:79:0	
890	98	196	12:40:50.800	488FF6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,563,261:51:0	
891	98	196	12:46:13.466	488FF6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,563,266:80:0	
892	98	196	13:04:18.800	488FF6G	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,563,284:70:0	
893	98	196	13:53:09.466	488FG6B	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,563,333:07:0	
894	98	196	14:19:59.466	488FG6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,563,359:56:0	
895	98	196	16:07:46.800	488FG6D	6TMSED	NORM,AL7	Sci, Eng, and D/L Chan	400	4	0	4,563,466:20:0	
896	98	196	17:33:30.800	488FG6E	6TMSED	FILL,AL7	Sci, Eng, and D/L Chan	400	4	0	4,563,551:01:0	
897	98	196	17:35:14.800	488FH6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,563,552:66:0	
898	98	197	06:13:07.466	488FI6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,564,302:25:0	
899	98	197	06:29:38.800	488FI6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,564,318:56:0	
900	98	197	07:22:58.800	488FI6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,564,371:33:0	
901	98	197	12:33:12.133	488FJ6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,564,678:16:0	
902	98	197	12:36:34.800	488FJ6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,564,681:47:0	
903	98	197	12:43:09.466	488FJ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,564,688:02:0	
904	98	197	13:04:18.800	488FJ6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,564,708:86:0	
905	98	197	13:41:37.466	488FJ6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,564,745:77:0	
906	98	197	14:10:43.466	488FK6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,564,774:57:0	
907	98	197	15:44:18.800	488FK6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,564,867:17:0	
908	98	197	19:51:46.733	488FK6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,565,111:85:0	
909	98	197	22:25:22.733	488FL6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,565,263:77:0	
910	98	197	22:58:23.400	488FL6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,565,296:45:0	
911	98	197	23:01:38.733	488FL6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	400	4	0	4,565,299:65:0	
912	98	197	23:12:18.733	488FL6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,565,310:24:0	
913	98	198	06:13:16.733	488FM6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,565,726:55:0	
914	98	198	06:48:50.733	488FM6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,565,761:71:0	
915	98	198	07:36:31.400	488FM6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,565,808:85:0	
916	98	198	08:05:37.400	488FM6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,565,837:65:0	
917	98	198	08:58:58.733	488FM6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,565,890:44:0	
918	98	198	12:28:10.733	488FN6A	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,566,097:35:0	
919	98	198	12:30:10.733	488FN6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,566,099:33:0	
920	98	198	12:36:31.400	488FN6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,566,105:58:0	
921	98	198	12:53:38.733	488FN6D	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,566,122:52:0	
922	98	198	13:42:51.400	488FN6E	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,566,171:22:0	
923	98	198	14:09:41.400	488FO6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,566,197:71:0	
924	98	198	15:18:42.733	488FO6B	6TMSED	NORM,AL7	Sci, Eng, and D/L Chan	400	4	0	4,566,266:04:0	
925	98	198	15:53:00.066	488FO6C	6TMSED	NORM,AH7	Sci, Eng, and D/L Chan	400	4	0	4,566,299:87:0	
926	98	198	15:57:05.400	176SF6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	400	4	0	4,566,304:00:0	
927	98	198	20:06:42.733	488FO6D	6TMSED	NORM,AH6	Sci, Eng, and D/L Chan	400	4	0	4,566,550:80:0	
928	98	198	21:00:00.066	488FP6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,566,603:53:0	
929	98	198	21:03:27.400	176SG6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,566,607:00:0	
930	98	198	22:25:22.733	488FP6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,566,688:02:0	
931	98	198	22:50:58.733	488FP6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,566,713:31:0	
932	98	198	23:40:02.733	488FP6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,566,761:79:0	
933	98	199	00:00:00.066	481UC4A	7VECT		Inert vect update UTC	400	4	0	4,566,781:55:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
934	98	199	00:11:24.733	488FP6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,566,792:81:0	
935	98	199	00:40:30.733	488FQ6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,566,821:61:0	
936	98	199	06:01:54.666	488FQ6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,567,139:49:0	
937	98	199	06:23:14.666	488FQ6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,567,160:58:0	
938	98	199	07:10:10.666	488FR6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,567,207:05:0	
939	98	199	07:27:45.333	488FR6B	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,567,224:40:0	
940	98	199	07:54:35.333	488FR6C	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,567,250:89:0	
941	98	199	10:57:37.333	176SX6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	400	4	0	4,567,432:00:0	
942	98	199	11:02:00.000	20US4B	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,567,436:30:0	
943	98	199	11:03:00.000	20US4D	7MODE	SPNL	AACS ALL-SPIN LOW	400	4	0	4,567,437:29:0	
944	98	199	11:05:00.000	20US4E	7SAFE	UNSTOW	S/P TO 153 deg cone	400	4	0	4,567,439:27:0	
945	98	199	11:10:30.000	20US4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	400	4	0	4,567,444:67:0	
946	98	199	11:10:30.666	20US4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	400	4	0	4,567,444:68:0	
947	98	199	11:10:50.666	20US4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	400	4	0	4,567,445:07:0	
948	98	199	11:10:51.333	20US4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	400	4	0	4,567,445:08:0	
949	98	199	11:11:11.333	20US4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	400	4	0	4,567,445:38:0	
950	98	199	11:11:12.000	20US4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	400	4	0	4,567,445:39:0	
951	98	199	11:11:22.000	20US4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	400	4	0	4,567,445:54:0	
952	98	199	11:11:22.666	20US4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	400	4	0	4,567,445:55:0	
953	98	199	11:11:32.666	20US4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	400	4	0	4,567,445:70:0	
954	98	199	11:11:33.333	20US4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	400	4	0	4,567,445:71:0	
955	98	199	11:13:20.000	20US4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	400	4	0	4,567,447:49:0	
956	98	199	11:13:20.666	20US4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	400	4	0	4,567,447:50:0	
957	98	199	11:13:40.666	20US4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	400	4	0	4,567,447:80:0	
958	98	199	11:13:41.333	20US4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	400	4	0	4,567,447:81:0	
959	98	199	11:14:01.333	20US4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	400	4	0	4,567,448:20:0	
960	98	199	11:14:02.000	20US4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	400	4	0	4,567,448:21:0	
961	98	199	11:14:12.000	20US4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	400	4	0	4,567,448:36:0	
962	98	199	11:14:12.666	20US4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	400	4	0	4,567,448:37:0	
963	98	199	11:14:22.666	20US4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	400	4	0	4,567,448:52:0	
964	98	199	11:14:23.333	20US4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	400	4	0	4,567,448:53:0	
965	98	199	11:15:20.000	20US4Z	7MODE	CRU	AACS CRUISE MODE	400	4	0	4,567,449:47:0	
966	98	199	11:40:04.000	20UL4A	7SAFE	STOP	S/P NO MOVEMENT	400	4	0	4,567,473:89:0	
967	98	199	11:40:54.000	20UL4B	7SLEW	DIS,POS,0.0	Stator movement	400	4	0	4,567,474:73:0	
968	98	199	11:42:06.666	176SY6A	6TMREC	RPB	RESUME PLAYBACK (PB CONTROL) Record Mode	400	4	0	4,567,476:00:0	
969	98	199	12:33:21.333	488FR6D	6TMSED	FILL,AL6	Sci, Eng, and D/L Chan	400	4	0	4,567,526:62:0	
970	98	199	12:36:34.666	488FR6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,567,529:79:0	
971	98	199	12:48:27.333	488FS6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,567,541:56:0	
972	98	199	13:00:02.666	488FS6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,567,553:07:0	
973	98	199	13:46:19.333	488FS6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,567,598:77:0	
974	98	199	14:15:25.333	488FS6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,567,627:57:0	
975	98	199	15:14:26.666	488FS6E	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,567,686:00:0	
976	98	199	20:02:26.666	488FT6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,567,970:76:0	
977	98	199	22:21:06.666	488FT6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,568,107:89:0	
978	98	199	22:48:56.000	488FT6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	400	4	0	4,568,135:45:0	
979	98	199	22:50:58.666	488FT6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	400	4	0	4,568,137:47:0	
980	98	199	23:05:54.666	488FT6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,568,152:26:0	
981	98	200	00:00:00.000	481UA4A	7VECT	BB2	Inert vect update UTC	400	4	0	4,568,205:71:0	
982	98	200	12:26:50.600	488FU6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,568,944:38:0	
983	98	200	12:49:22.600	488FU6B	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,568,966:64:0	
984	98	200	15:48:34.600	488FU6C	6TMSED	NORM,AL7	Sci, Eng, and D/L Chan	400	4	0	4,569,143:85:0	
985	98	200	15:56:43.933	176SP6A	6TMREC	TPB	TERMINATE PLAYBACK (PB CONTROL) Record Mo	400	4	0	4,569,152:00:0	
986	98	200	16:02:47.933	465TA6A	6DMST		5000 DMS Slew to TIC	400	4	0	4,569,158:00:0	
987	98	200	16:02:47.933		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,158:00:0	
988	98	200	16:02:47.933		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,158:00:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
989	98	200	16:02:47.933		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,158:00:0	
990	98	200	16:02:54.600		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,158:10:0	
991	98	200	16:02:56.000		DMS:	: *AT SPD	P7, TRACK 1, FWD, TIC *202.24 +/-	400	4	0	4,569,158:12:1	
992	98	200	18:56:18.600	488FV6A	6TMSED	NORM,AL6	Sci, Eng, and D/L Chan	400	4	0	4,569,329:55:0	
993	98	200	21:43:56.733		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *4997.94 +/-	400	4	0	4,569,495:36:2	
994	98	200	21:43:57.933		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4998.00 +/-	400	4	0	4,569,495:38:0	
995	98	200	21:56:29.266	465TB6A	6DMSC	P100.4	DMS Control Tape P/B 100.8kbps	400	4	0	4,569,507:73:0	
996	98	200	21:56:29.266		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 4998.00 +/-	400	4	0	4,569,507:73:0	
997	98	200	21:56:30.666		DMS:	: *US AT SP	P7, TRACK 1, FWD, TIC *4998.12 +/-	400	4	0	4,569,507:75:1	
998	98	200	21:56:35.933		DMS:	: *US RD	P7, TRACK 1, FWD, TIC *4999.35 +/-	400	4	0	4,569,507:83:0	
999	98	200	21:56:37.133		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *4999.41 +/-	400	4	0	4,569,507:84:8	
1000	98	200	21:56:41.000		DMS:	: *AT SPD	P100, TRACK 4, REV, TIC 4993.91 +/-	400	4	0	4,569,507:90:6	
1001	98	200	21:56:41.000		DMS:	: *P SLEW	P100, TRACK 4, REV, TIC *4993.91 +/-	400	4	0	4,569,507:90:6	
1002	98	200	22:16:50.600	488FV6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,569,527:85:0	
1003	98	200	22:22:21.266	465TB6B	6DMSC	RDY.4	DMS Control Tape stop	400	4	0	4,569,533:35:0	
1004	98	200	22:22:21.266		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 255.79 +/-	400	4	0	4,569,533:35:0	
1005	98	200	22:22:22.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 254.99 +/-	400	4	0	4,569,533:36:8	
1006	98	200	22:42:26.600	488FV6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	400	4	0	4,569,553:23:0	
1007	98	200	23:40:02.600	488FV6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,569,610:20:0	
1008	98	201	00:01:05.266	488FV6E	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	400	4	0	4,569,631:03:0	
1009	98	201	00:20:09.266	465TC6A	6DTRN	CMD:6DTRN;465TC6	DMS TRACK TURNAROUND	400	4	0	4,569,649:81:0	
1010	98	201	00:20:09.266		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 254.99 +/-	400	4	0	4,569,649:81:0	
1011	98	201	00:20:09.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 254.99 +/-	400	4	0	4,569,649:81:0	
1012	98	201	00:20:10.666		DMS:	: *US AT SP	P7, TRACK 1, FWD, TIC * 255.11 +/-	400	4	0	4,569,649:83:1	
1013	98	201	00:20:15.933		DMS:	: *US RD	P7, TRACK 1, FWD, TIC * 256.34 +/-	400	4	0	4,569,650:00:0	
1014	98	201	00:20:17.133		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 256.40 +/-	400	4	0	4,569,650:01:8	
1015	98	201	00:20:18.533		DMS:	: *AT SPD	P7, TRACK 4, REV, TIC * 256.28 +/-	400	4	0	4,569,650:03:9	
1016	98	201	00:24:19.200		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	400	4	0	4,569,654:00:9	
1017	98	201	00:24:20.400		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	400	4	0	4,569,654:02:7	
1018	98	201	00:24:20.400		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	400	4	0	4,569,654:02:7	
1019	98	201	00:24:21.800		DMS:	: *AT SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	400	4	0	4,569,654:04:8	
1020	98	201	00:24:33.800		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	400	4	0	4,569,654:22:8	
1021	98	201	00:24:35.000		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	400	4	0	4,569,654:24:6	
1022	98	201	00:30:11.933	465TD6A	6DMSC	P100.1	DMS Control Tape P/B 100.8kbps	400	4	0	4,569,659:75:0	
1023	98	201	00:30:11.933	488FW6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	400	4	0	4,569,659:75:0	
1024	98	201	00:30:11.933		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,659:75:0	
1025	98	201	00:30:18.600		DMS:	: *RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,659:85:0	
1026	98	201	00:30:22.466		DMS:	: *AT SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	400	4	0	4,569,659:90:8	
1027	98	201	00:30:22.466		DMS:	: *P SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	400	4	0	4,569,659:90:8	
1028	98	201	01:02:05.933	465TD6B	6DMSC	RDY.1	DMS Control Tape stop	400	4	0	4,569,659:90:8	
1029	98	201	01:02:05.933		DMS:	: *RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	400	4	0	4,569,691:34:0	
1030	98	201	01:02:07.133		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	400	4	0	4,569,691:35:8	
1031	98	201	01:17:41.933	465TE6A	6DMSC	P100.2	DMS Control Tape P/B 100.8kbps	400	4	0	4,569,706:73:0	
1032	98	201	01:17:41.933		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	400	4	0	4,569,706:73:0	
1033	98	201	01:17:43.333		DMS:	: *US AT SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	400	4	0	4,569,706:75:1	
1034	98	201	01:17:48.600		DMS:	: *US RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	400	4	0	4,569,706:83:0	
1035	98	201	01:17:49.800		DMS:	: *RUNUP	P100, TRACK *2, *REV, TIC *6065.23 +/-	400	4	0	4,569,706:84:8	
1036	98	201	01:17:53.666		DMS:	: *AT SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	400	4	0	4,569,706:90:6	
1037	98	201	01:17:53.666		DMS:	: *P SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	400	4	0	4,569,706:90:6	
1038	98	201	01:49:49.933	465TF6A	6DMSC	P100.3	DMS Control Tape P/B 100.8kbps	400	4	0	4,569,738:53:0	
1039	98	201	01:49:49.933		DMS:	: *RUNDOWN	P100, TRACK 2, REV, TIC * 164.96 +/-	400	4	0	4,569,738:53:0	
1040	98	201	01:49:51.133		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 164.16 +/-	400	4	0	4,569,738:54:8	
1041	98	201	01:49:55.000		DMS:	: *P SLEW	P100, TRACK 3, FWD, TIC * 169.66 +/-	400	4	0	4,569,738:60:6	
1042	98	201	01:49:55.000		DMS:	: *AT SPD	P100, TRACK 3, FWD, TIC 169.66 +/-	400	4	0	4,569,738:60:6	
1043	98	201	02:21:50.600		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC *6062.38 +/-	400	4	0	4,569,770:22:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1044	98	201	02:21:50.600	465TF6B	6DMSC	RDY,3	DMS Control Tape stop	400	4	0	4,569,770:22:0	
1045	98	201	02:21:51.800		DMS:	:*READY	RDY, TRACK 3, FWD, TIC *6063.18 +/-	400	4	0	4,569,770:23:8	
1046	98	201	02:36:33.933		DMS:	:*US-RUNUP	P7, TRACK *1, FWD, TIC 6063.18 +/-	400	4	0	4,569,784:73:0	
1047	98	201	02:36:33.933	465TG6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	400	4	0	4,569,784:73:0	
1048	98	201	02:36:35.333		DMS:	:*US, AT, SP	P7, TRACK 1, FWD, TIC *6063.30 +/-	400	4	0	4,569,784:75:1	
1049	98	201	02:36:40.600		DMS:	:*RUNUP	P7, TRACK 1, FWD, TIC *6064.53 +/-	400	4	0	4,569,784:83:0	
1050	98	201	02:36:41.800		DMS:	:*AT SPD	P100, TRACK *4, *REV, TIC *6084.59 +/-	400	4	0	4,569,784:84:8	
1051	98	201	02:36:45.666		DMS:	:*AT SPD	P100, TRACK 4, REV, TIC 6059.09 +/-	400	4	0	4,569,784:90:6	
1052	98	201	02:36:45.666		DMS:	:*P_SLEW	P100, TRACK 4, REV, TIC 6059.09 +/-	400	4	0	4,569,784:90:6	
1053	98	201	03:08:41.266	465TH6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	400	4	0	4,569,816:52:0	
1054	98	201	03:08:41.266		DMS:	:*RUNDOWN	P100, TRACK 4, REV, TIC *166.38 +/-	400	4	0	4,569,816:52:0	
1055	98	201	03:08:42.466		DMS:	:*RUNUP	P100, TRACK *3, *FWD, TIC *165.58 +/-	400	4	0	4,569,816:53:8	
1056	98	201	03:08:46.333		DMS:	:*AT SPD	P100, TRACK 3, FWD, TIC 171.08 +/-	400	4	0	4,569,816:59:6	
1057	98	201	03:08:46.333		DMS:	:*P_SLEW	P100, TRACK 3, FWD, TIC *171.08 +/-	400	4	0	4,569,816:59:6	
1058	98	201	03:09:47.266		DMS:	:*RUNDOWN	P100, TRACK 3, FWD, TIC *358.52 +/-	400	4	0	4,569,817:60:0	
1059	98	201	03:09:47.266	465TH6B	6DMSC	RDY,3	DMS Control Tape stop	400	4	0	4,569,817:60:0	
1060	98	201	03:09:48.466		DMS:	:*READY	RDY, TRACK 3, FWD, TIC *359.32 +/-	400	4	0	4,569,817:61:8	
1061	98	201	03:24:17.266		DMS:	:*READY	RDY, TRACK *4, *REV, TIC 359.32 +/-	400	4	0	4,569,832:00:0	
1062	98	201	03:24:17.266	465TI6A	6DMSC	RDY,4	DMS Control Tape stop	400	4	0	4,569,832:00:0	
1063	98	201	03:25:11.266		DMS:	:*US-RUNUP	P7, TRACK *1, *FWD, TIC 359.32 +/-	400	4	0	4,569,832:81:0	
1064	98	201	03:25:11.266		DMS:	:*DMS-TURN	P7, TRACK 4, REV, TIC 359.32 +/-	400	4	0	4,569,832:81:0	
1065	98	201	03:25:11.266	465TJ6A	6DTRN	CMD:6DTRN,465TJ6	DMS TRACK TURNAROUND	400	4	0	4,569,832:81:0	
1066	98	201	03:25:12.666		DMS:	:*US AT, SP	P7, TRACK 1, FWD, TIC *359.44 +/-	400	4	0	4,569,832:83:1	
1067	98	201	03:25:17.933		DMS:	:*US RD	P7, TRACK 1, FWD, TIC *360.67 +/-	400	4	0	4,569,833:00:0	
1068	98	201	03:25:19.133		DMS:	:*RUNUP	P7, TRACK *4, *REV, TIC *360.73 +/-	400	4	0	4,569,833:01:8	
1069	98	201	03:25:20.533		DMS:	:*AT SPD	P7, TRACK 4, REV, TIC *360.61 +/-	400	4	0	4,569,833:03:9	
1070	98	201	03:36:46.333		DMS:	:*REVERSE	P7, TRACK 4, REV, TIC *199.87 +/-	400	4	0	4,569,844:31:6	
1071	98	201	03:36:47.533		DMS:	:*TURNARND	P7, TRACK *1, *FWD, TIC *199.81 +/-	400	4	0	4,569,844:33:4	
1072	98	201	03:36:47.533		DMS:	:*RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	400	4	0	4,569,844:33:4	
1073	98	201	03:36:48.933		DMS:	:*AT SPD	P7, TRACK 1, FWD, TIC *199.93 +/-	400	4	0	4,569,844:35:5	
1074	98	201	03:37:00.933		DMS:	:*AUTOSTOP	P7, TRACK 1, FWD, TIC *202.06 +/-	400	4	0	4,569,844:53:5	
1075	98	201	03:37:02.133		DMS:	:*READY	RDY, TRACK 1, FWD, TIC *202.12 +/-	400	4	0	4,569,844:55:3	
1076	98	201	04:59:59.933		DMS:	:*READY	RDY, TRACK 1, FWD, TIC 202.12 +/-	400	4	0	4,569,926:60:1	
1077	98	201	05:00:00.000	20A3EW	37A	Final Condition	NIMS Power ON	400	4	0	4,569,926:60:1	
1078	98	201	05:00:00.000	20A3EX	37HR	Final Condition	Replacement Heaters OFF	400	4	0	4,569,926:60:1	
1079	98	201	05:00:00.000	20A3EY	37C1PR	Final Condition	Optics Heater 1 OFF (primary relay)	400	4	0	4,569,926:60:1	
1080	98	201	05:00:00.000	20A3EZ	37C2PR	Final Condition	Optics Heater 2 OFF (primary relay)	400	4	0	4,569,926:60:1	
1081	98	201	05:00:00.000	20A3FA	37F1PR	Final Condition	Radiator Flash Heater OFF (primary relay)	400	4	0	4,569,926:60:1	
1082	98	201	05:00:00.000	20A3FB	37F2PR	Final Condition	Shield Flash Heater OFF (primary relay)	400	4	0	4,569,926:60:1	
1083	98	201	05:00:00.000	20A3FD	40HRPR	Final Condition	RCT Heater OFF (primary relay)	400	4	0	4,569,926:60:1	
1084	98	201	05:00:00.000	20A3FE	40T1P	Final Condition	PCT Heater 1 ON (primary relay)	400	4	0	4,569,926:60:1	
1085	98	201	05:00:00.000	20A3FF	40T2	Final Condition	PCT Heater 2 ON	400	4	0	4,569,926:60:1	

15JNJUPRTS01

OAPEL: 15JNJUPRTS01 ALIAS: 15JNJUPRTS01
EXT: R PSID: DA
SCLK1: 04498598:00:0 SCLK2: 04498607:12:0
SCET1: 1998-151/02:58:50.500 SCET2: 1998-151/03:08:04.566
TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 11011 MB_UP: 11011
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 00000
NWAVETOT: 408 TLMFMT: RT

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

WETGID: 0302408000 03 02 408 000
WTGRP_SIZ: 2

EDIT TABLE

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

15INHRSPEC01

```

OAPEL: 15INHRSPEC01      ALIAS: 15INHRSPEC01
EXT: C                    PSID: B
SCLK1: 04499211:00:0     SCLK2: 04499221:44:0
SCET1: 98-151/13:18:39.133 SCET2: 98-151/13:29:15.133
TARGET: IO                PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15INHRSPEC01

```

OAPEL: 15INHRSPEC01      ALIAS: 15INHRSPEC01
EXT: A                    PSID: B
SCLK1: 04499221:44:0     SCLK2: 04499226:53:0
SCET1: 98-151/13:29:15.133 SCET2: 98-151/13:34:25.133
TARGET: IO                PARTITION: 1
  
```

```

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

```

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

```

THRESHOLD_SEL: 2
THRESHOLD_VALUES: 030, 030, 030, 000, 030, 029, 028, 028, 029
                  028, 032, 034, 031, 031, 032, 030, 029
  
```

```

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

15INHRSPEC01

```

OAPEL: 15INHRSPEC01      ALIAS: 15INHRSPEC01
EXT: D                    PSID: B
SCLK1: 04499226:65:0     SCLK2: 04499226:90:0
SCET1: 98-151/13:34:33.133 SCET2: 98-151/13:34:49.133
TARGET: IO                PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15INHRSPEC01

```

OAPEL: 15INHRSPEC01      ALIAS: 15INHRSPEC01
EXT: B                    PSID: B
SCLK1: 04499227:00:0     SCLK2: 04499231:76:0
SCET1: 98-151/13:34:49.800 SCET2: 98-151/13:39:43.133
TARGET: IO                PARTITION: 1
  
```

```

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

```

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

```

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

```

WETGID: 0426360001      04 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

15INHRSPEC02

```

OAPEL: 15INHRSPEC02      ALIAS: 15INHRSPEC02
EXT: A                    PSID: D
SCLK1: 04499467:00:0     SCLK2: 04499480:38:0
SCET1: 98-151/17:37:29.800 SCET2: 98-151/17:51:04.466
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: 2
THRESHOLD_VALUES: 030, 030, 030, 000, 030, 029, 028, 028, 029
                  028, 032, 034, 031, 031, 032, 030, 029
  
```

```

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

15INHRSPEC02

```

OAPEL: 15INHRSPEC02      ALIAS: 15INHRSPEC02
EXT: B                    PSID: D
SCLK1: 04499480:50:0     SCLK2: 04499485:51:0
SCET1: 98-151/17:51:12.466 SCET2: 98-151/17:56:15.800
TARGET: IO                PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENREGION01

```

OAPEL: 15ENREGION01      ALIAS: 15ENREGION01
EXT: A                    PSID: E
SCLK1: 04499652:00:0     SCLK2: 04499670:84:0
SCET1: 98-151/20:44:33.133 SCET2: 98-151/21:03:41.800
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENSUCOMP01

```

OAPEL: 15ENSUCOMP01      ALIAS: 15ENSUCOMP01
EXT: A                    PSID: F
SCLK1: 04499689:00:0     SCLK2: 04499707:82:0
SCET1: 98-151/21:21:57.800 SCET2: 98-151/21:41:04.466
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

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

```

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

```

WETGID: 0426360001      04 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

15ENSUCOMP02

```

OAPEL: 15ENSUCOMP02      ALIAS: 15ENSUCOMP02
EXT: A                    PSID: G
SCLK1: 04499717:00:0     SCLK2: 04499735:86:0
SCET1: 98-151/21:50:16.466 SCET2: 98-151/22:09:26.466
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENSUCOMP03

OAPEL: 15ENSUCOMP03 ALIAS: 15ENSUCOMP03
 EXT: A PSID: DH
 SCLK1: 04499749:00:0 SCLK2: 04499753:90:0
 SCET1: 98-151/22:22:37.800 SCET2: 98-151/22:27:40.466
 TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 228 TLMFMT: MPW

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

WETGID: 0326228001 03 26 228 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENSUCOMP03

```

OAPEL: 15ENSUCOMP03          ALIAS: 15ENSUCOMP03
EXT: C                        PSID: DH
SCLK1: 04499749:00:0        SCLK2: 04499753:90:0
SCET1: 98-151/22:22:37.800  SCET2: 98-151/22:27:40.466
TARGET: EUROPA              PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 132             TLMFMT: MPW
  
```

```

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

```

WETGID: 0326132001        03 26 132 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENSUCOMP03

```

OAPEL: 15ENSUCOMP03      ALIAS: 15ENSUCOMP03
EXT: I                    PSID: DH
SCLK1: 04499749:00:0     SCLK2: 04499753:90:0
SCET1: 98-151/22:22:37.800 SCET2: 98-151/22:27:40.466
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENSUCOMP03

```

OAPEL: 15ENSUCOMP03      ALIAS: 15ENSUCOMP03
EXT: B                    PSID: DH
SCLK1: 04499754:00:0     SCLK2: 04499758:78:0
SCET1: 98-151/22:27:41.133 SCET2: 98-151/22:32:35.800
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 228          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: 0326228001      03 26 228 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENSUCOMP03

```

OAPEL: 15ENSUCOMP03          ALIAS: 15ENSUCOMP03
EXT: J                        PSID: DH
SCLK1: 04499754:00:0        SCLK2: 04499758:78:0
SCET1: 98-151/22:27:41.133  SCET2: 98-151/22:32:35.800
TARGET: EUROPA              PARTITION: 1
    
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENGLOBAL01

```

OAPEL: 15ENGLOBAL01      ALIAS: 15ENGLOBAL01
EXT: A                    PSID: I
SCLK1: 04499985:00:0     SCLK2: 04499987:90:0
SCET1: 98-152/02:21:15.133 SCET2: 98-152/02:24:16.466
TARGET: EUROPA           PARTITION: 1
    
```

```

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

```

MB_DOWN: 00000           MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0            EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 228           TLMFMT: MPW
    
```

```

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

```

WETGID: 0326228001      03 26 228 001
WTGRP_SIZ: 26
    
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL03

```

OAPEL: 15ENGLOBAL03          ALIAS: 15ENGLOBAL01
EXT: A                       PSID: I
SCLK1: 04499991:40:0        SCLK2: 04499995:90:0
SCET1: 98-152/02:27:46.466  SCET2: 98-152/02:32:21.800
TARGET: EUROPA              PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 228             TLMFMT: MPW
  
```

```

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

```

WETGID: 0326228001        03 26 228 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL03

```

OAPEL: 15ENGLOBAL03          ALIAS: 15ENGLOBAL01
EXT: B                        PSID: I
SCLK1: 04499995:87:0        SCLK2: 04499995:90:0
SCET1: 98-152/02:32:19.800  SCET2: 98-152/02:32:21.800
TARGET: EUROPA              PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 132             TLMFMT: MPW
  
```

```

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

```

WETGID: 0326132001        03 26 132 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL04

```

OAPEL: 15ENGLOBAL04          ALIAS: 15ENGLOBAL01
EXT: A                        PSID: I
SCLK1: 04499996:00:0         SCLK2: 04499998:90:0
SCET1: 98-152/02:32:22.466  SCET2: 98-152/02:35:23.800
TARGET: EUROPA                PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 228             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: 0326228001        03 26 228 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL04

OAPEL: 15ENGLOBAL04 ALIAS: 15ENGLOBAL01
EXT: B PSID: I
SCLK1: 04499996:00:0 SCLK2: 04499998:90:0
SCET1: 98-152/02:32:22.466 SCET2: 98-152/02:35:23.800
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 132 TLMFMT: MPW

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

WETGID: 0326132001 03 26 132 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL05

```

OAPEL: 15ENGLOBAL05          ALIAS: 15ENGLOBAL01
EXT: A                        PSID: I
SCLK1: 04499999:00:0        SCLK2: 04500003:90:0
SCET1: 98-152/02:35:24.466  SCET2: 98-152/02:40:27.133
TARGET: EUROPA              PARTITION: 1
    
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 228              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: 0326228001        03 26 228 001
WTGRP_SIZ: 26
    
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL05

OAPEL: 15ENGLOBAL05 ALIAS: 15ENGLOBAL01
 EXT: B PSID: I
 SCLK1: 04499999:00:0 SCLK2: 04500003:90:0
 SCET1: 98-152/02:35:24.466 SCET2: 98-152/02:40:27.133
 TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 132 TLMFMT: MPW

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

WETGID: 0326132001 03 26 132 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL06

```

OAPEL: 15ENGLOBAL06          ALIAS: 15ENGLOBAL01
EXT: A                        PSID: I
SCLK1: 04500004:00:0         SCLK2: 04500005:90:0
SCET1: 98-152/02:40:28.800  SCET2: 98-152/02:42:28.466
TARGET: EUROPA              PARTITION: 1
    
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 228             TLMFMT: MPW
    
```

```

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

```

WETGID: 0326228001        03 26 228 001
WTGRP_SIZ: 26
    
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL06

```

OAPEL: 15ENGLOBAL06          ALIAS: 15ENGLOBAL01
EXT: B                        PSID: I
SCLK1: 04500004:00:0        SCLK2: 04500005:90:0
SCET1: 98-152/02:40:28.800  SCET2: 98-152/02:42:28.466
TARGET: EUROPA              PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000              MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000          RATE_CON2: 65525
NWAVETOT: 132             TLMFMT: MPW
  
```

```

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

```

WETGID: 0326132001        03 26 132 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL07

OAPEL: 15ENGLOBAL07 ALIAS: 15ENGLOBAL01
EXT: A PSID: I
SCLK1: 04500006:00:0 SCLK2: 04500010:90:0
SCET1: 98-152/02:42:29.133 SCET2: 98-152/02:47:31.800
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 228 TLMFMT: MPW

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

WETGID: 0326228001 03 26 228 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL07

```

OAPEL: 15ENGLOBAL07          ALIAS: 15ENGLOBAL01
EXT: B                        PSID: I
SCLK1: 04500006:00:0         SCLK2: 04500010:90:0
SCET1: 98-152/02:42:29.133  SCET2: 98-152/02:47:31.800
TARGET: EUROPA                PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000                MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0                 EST_COMPV: 0.3
RATE_CON1: 00000              RATE_CON2: 65525
NWAVETOT: 132                 TLMFMT: MPW
  
```

```

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

```

WETGID: 0326132001           03 26 132 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL08

```

OAPEL: 15ENGLOBAL08      ALIAS: 15ENGLOBAL01
EXT:   A                  PSID:   I
SCLK1: 04500011:00:0     SCLK2: 04500013:85:0
SCET1: 98-152/02:47:32.466 SCET2: 98-152/02:50:31.133
TARGET: EUROPA           PARTITION: 1
    
```

```

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

```

MB_DOWN:   00000          MB_UP:    00000
COMP_FLAG: 1
EST_COMP:  2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 65525
NWAVETOT: 228           TLMFMT:   MPW
    
```

```

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

```

WETGID:    0326228001    03 26 228 001
WTGRP_SIZ: 26
    
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	03C00	0,0011,1100,0000,0000
1	1BDFF	1,1011,1101,1111,1111
2	03C00	0,0011,1100,0000,0000
3	1BDFF	1,1011,1101,1111,1111
4	03C00	0,0011,1100,0000,0000
5	1BDFF	1,1011,1101,1111,1111
6	03C00	0,0011,1100,0000,0000
7	1BDFF	1,1011,1101,1111,1111
8	03C00	0,0011,1100,0000,0000
9	1BDFF	1,1011,1101,1111,1111
10	03C00	0,0011,1100,0000,0000
11	1BDFF	1,1011,1101,1111,1111
12	03C00	0,0011,1100,0000,0000
13	1BDFF	1,1011,1101,1111,1111
14	03C00	0,0011,1100,0000,0000
15	1BDFF	1,1011,1101,1111,1111
16	03C00	0,0011,1100,0000,0000
17	1BDFF	1,1011,1101,1111,1111
18	03C00	0,0011,1100,0000,0000
19	1BDFF	1,1011,1101,1111,1111
20	03C00	0,0011,1100,0000,0000
21	1BDFF	1,1011,1101,1111,1111
22	03C00	0,0011,1100,0000,0000
23	1BDFF	1,1011,1101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENGLOBAL08

OAPEL: 15ENGLOBAL08 ALIAS: 15ENGLOBAL01
 EXT: B PSID: I
 SCLK1: 04500011:00:0 SCLK2: 04500013:85:0
 SCET1: 98-152/02:47:32.466 SCET2: 98-152/02:50:31.133
 TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 132 TLMFMT: MPW

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

WETGID: 0326132001 03 26 132 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	181FF	1,1000,0001,1111,1111
1	00000	0,0000,0000,0000,0000
2	181FF	1,1000,0001,1111,1111
3	00000	0,0000,0000,0000,0000
4	181FF	1,1000,0001,1111,1111
5	00000	0,0000,0000,0000,0000
6	181FF	1,1000,0001,1111,1111
7	00000	0,0000,0000,0000,0000
8	181FF	1,1000,0001,1111,1111
9	00000	0,0000,0000,0000,0000
10	181FF	1,1000,0001,1111,1111
11	00000	0,0000,0000,0000,0000
12	181FF	1,1000,0001,1111,1111
13	00000	0,0000,0000,0000,0000
14	181FF	1,1000,0001,1111,1111
15	00000	0,0000,0000,0000,0000
16	181FF	1,1000,0001,1111,1111
17	00000	0,0000,0000,0000,0000
18	181FF	1,1000,0001,1111,1111
19	00000	0,0000,0000,0000,0000
20	181FF	1,1000,0001,1111,1111
21	00000	0,0000,0000,0000,0000
22	181FF	1,1000,0001,1111,1111
23	00000	0,0000,0000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR16H01

OAPEL: 15ENEUR16H01 ALIAS: 15ENEUR16H01
EXT: A PSID: K
SCLK1: 04500637:00:0 SCLK2: 04500641:65:0
SCET1: 98-152/13:20:29.733 SCET2: 98-152/13:25:15.733
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 240 TLMFMT: MPW

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

WETGID: 0326240001 03 26 240 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	005FF	0,0000,0101,1111,1111
1	005FF	0,0000,0101,1111,1111
2	005FF	0,0000,0101,1111,1111
3	005FF	0,0000,0101,1111,1111
4	005FF	0,0000,0101,1111,1111
5	005FF	0,0000,0101,1111,1111
6	005FF	0,0000,0101,1111,1111
7	005FF	0,0000,0101,1111,1111
8	005FF	0,0000,0101,1111,1111
9	005FF	0,0000,0101,1111,1111
10	005FF	0,0000,0101,1111,1111
11	005FF	0,0000,0101,1111,1111
12	005FF	0,0000,0101,1111,1111
13	005FF	0,0000,0101,1111,1111
14	005FF	0,0000,0101,1111,1111
15	005FF	0,0000,0101,1111,1111
16	005FF	0,0000,0101,1111,1111
17	005FF	0,0000,0101,1111,1111
18	005FF	0,0000,0101,1111,1111
19	005FF	0,0000,0101,1111,1111
20	005FF	0,0000,0101,1111,1111
21	005FF	0,0000,0101,1111,1111
22	005FF	0,0000,0101,1111,1111
23	005FF	0,0000,0101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR16H01

OAPEL: 15ENEUR16H01 ALIAS: 15ENEUR16H01
EXT: C PSID: K
SCLK1: 04500637:00:0 SCLK2: 04500641:65:0
SCET1: 98-152/13:20:29.733 SCET2: 98-152/13:25:15.733
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 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, 000, 000

WETGID: 0326120001 03 26 120 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1B800	1,1011,1000,0000,0000
1	1B800	1,1011,1000,0000,0000
2	1B800	1,1011,1000,0000,0000
3	1B800	1,1011,1000,0000,0000
4	1B800	1,1011,1000,0000,0000
5	1B800	1,1011,1000,0000,0000
6	1B800	1,1011,1000,0000,0000
7	1B800	1,1011,1000,0000,0000
8	1B800	1,1011,1000,0000,0000
9	1B800	1,1011,1000,0000,0000
10	1B800	1,1011,1000,0000,0000
11	1B800	1,1011,1000,0000,0000
12	1B800	1,1011,1000,0000,0000
13	1B800	1,1011,1000,0000,0000
14	1B800	1,1011,1000,0000,0000
15	1B800	1,1011,1000,0000,0000
16	1B800	1,1011,1000,0000,0000
17	1B800	1,1011,1000,0000,0000
18	1B800	1,1011,1000,0000,0000
19	1B800	1,1011,1000,0000,0000
20	1B800	1,1011,1000,0000,0000
21	1B800	1,1011,1000,0000,0000
22	1B800	1,1011,1000,0000,0000
23	1B800	1,1011,1000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR16H01

```

OAPEL: 15ENEUR16H01      ALIAS: 15ENEUR16H01
EXT: I                    PSID: K
SCLK1: 04500637:00:0     SCLK2: 04500641:65:0
SCET1: 98-152/13:20:29.733 SCET2: 98-152/13:25:15.733
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENEUR16H01

```

OAPEL: 15ENEUR16H01      ALIAS: 15ENEUR16H01
EXT: B                    PSID: K
SCLK1: 04500643:87:0     SCLK2: 04500648:54:0
SCET1: 98-152/13:27:31.733 SCET2: 98-152/13:32:13.733
TARGET: EUROPA           PARTITION: 1

```

```

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

```

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 168          TLMFMT: LPU

```

```

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

```

```

WETGID: 0326168001      03 26 168 001
WTGRP_SIZ: 26

```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1BD00	1,1011,1101,0000,0000
1	1BD00	1,1011,1101,0000,0000
2	1BD00	1,1011,1101,0000,0000
3	1BD00	1,1011,1101,0000,0000
4	1BD00	1,1011,1101,0000,0000
5	1BD00	1,1011,1101,0000,0000
6	1BD00	1,1011,1101,0000,0000
7	1BD00	1,1011,1101,0000,0000
8	1BD00	1,1011,1101,0000,0000
9	1BD00	1,1011,1101,0000,0000
10	1BD00	1,1011,1101,0000,0000
11	1BD00	1,1011,1101,0000,0000
12	1BD00	1,1011,1101,0000,0000
13	1BD00	1,1011,1101,0000,0000
14	1BD00	1,1011,1101,0000,0000
15	1BD00	1,1011,1101,0000,0000
16	1BD00	1,1011,1101,0000,0000
17	1BD00	1,1011,1101,0000,0000
18	1BD00	1,1011,1101,0000,0000
19	1BD00	1,1011,1101,0000,0000
20	1BD00	1,1011,1101,0000,0000
21	1BD00	1,1011,1101,0000,0000
22	1BD00	1,1011,1101,0000,0000
23	1BD00	1,1011,1101,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR16H01

OAPEL: 15ENEUR16H01 ALIAS: 15ENEUR16H01
 EXT: D PSID: K
 SCLK1: 04500643:87:0 SCLK2: 04500648:54:0
 SCET1: 98-152/13:27:31.733 SCET2: 98-152/13:32:13.733
 TARGET: EUROPA PARTITION: 1

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

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

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

WETGID: 0326072001 03 26 072 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	000C8	0,0000,0000,1100,1000
1	000C8	0,0000,0000,1100,1000
2	000C8	0,0000,0000,1100,1000
3	000C8	0,0000,0000,1100,1000
4	000C8	0,0000,0000,1100,1000
5	000C8	0,0000,0000,1100,1000
6	000C8	0,0000,0000,1100,1000
7	000C8	0,0000,0000,1100,1000
8	000C8	0,0000,0000,1100,1000
9	000C8	0,0000,0000,1100,1000
10	000C8	0,0000,0000,1100,1000
11	000C8	0,0000,0000,1100,1000
12	000C8	0,0000,0000,1100,1000
13	000C8	0,0000,0000,1100,1000
14	000C8	0,0000,0000,1100,1000
15	000C8	0,0000,0000,1100,1000
16	000C8	0,0000,0000,1100,1000
17	000C8	0,0000,0000,1100,1000
18	000C8	0,0000,0000,1100,1000
19	000C8	0,0000,0000,1100,1000
20	000C8	0,0000,0000,1100,1000
21	000C8	0,0000,0000,1100,1000
22	000C8	0,0000,0000,1100,1000
23	000C8	0,0000,0000,1100,1000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR16H01

```

OAPEL: 15ENEUR16H01      ALIAS: 15ENEUR16H01
EXT: J                    PSID: K
SCLK1: 04500643:87:0     SCLK2: 04500648:54:0
SCET1: 98-152/13:27:31.733 SCET2: 98-152/13:32:13.733
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 240          TLMFMT: LPU
  
```

```

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

```

WETGID: 0326240001      03 26 240 001
WTGRP_SIZ: 26
  
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1BDC8	1,1011,1101,1100,1000
1	1BDC8	1,1011,1101,1100,1000
2	1BDC8	1,1011,1101,1100,1000
3	1BDC8	1,1011,1101,1100,1000
4	1BDC8	1,1011,1101,1100,1000
5	1BDC8	1,1011,1101,1100,1000
6	1BDC8	1,1011,1101,1100,1000
7	1BDC8	1,1011,1101,1100,1000
8	1BDC8	1,1011,1101,1100,1000
9	1BDC8	1,1011,1101,1100,1000
10	1BDC8	1,1011,1101,1100,1000
11	1BDC8	1,1011,1101,1100,1000
12	1BDC8	1,1011,1101,1100,1000
13	1BDC8	1,1011,1101,1100,1000
14	1BDC8	1,1011,1101,1100,1000
15	1BDC8	1,1011,1101,1100,1000
16	1BDC8	1,1011,1101,1100,1000
17	1BDC8	1,1011,1101,1100,1000
18	1BDC8	1,1011,1101,1100,1000
19	1BDC8	1,1011,1101,1100,1000
20	1BDC8	1,1011,1101,1100,1000
21	1BDC8	1,1011,1101,1100,1000
22	1BDC8	1,1011,1101,1100,1000
23	1BDC8	1,1011,1101,1100,1000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15JNJUPRTS02

```

OAPEL: 15JNJUPRTS02      ALIAS: 15JNJUPRTS02
EXT: R                    PSID: C
SCLK1: 04500706:00:0     SCLK2: 04500725:12:0
SCET1: 1998-152/14:30:15.700 SCET2: 1998-152/14:49:36.400
TARGET: JUPITER          PARTITION: 1
  
```

```

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

```

MB_DOWN: 11011           MB_UP: 11011
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000        RATE_CON2: 00000
NWAVETOT: 408           TLMFMT: RT
  
```

```

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

```

WETGID: 0302408000      03 02 408 000
WTGRP_SIZ: 2
  
```

EDIT TABLE

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

15JNJPDARK01

OAPEL: 15JNJPDARK01 ALIAS: 15JNJPDARK01
 EXT: A PSID: N
 SCLK1: 04500840:00:0 SCLK2: 04500849:73:0
 SCET1: 98-152/16:45:45.066 SCET2: 98-152/16:55:40.400
 TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 80 TLMFMT: LPU

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

WETGID: 0326080001 03 26 080 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	00007	0,0000,0000,0000,0111
1	00007	0,0000,0000,0000,0111
2	00007	0,0000,0000,0000,0111
3	00007	0,0000,0000,0000,0111
4	00007	0,0000,0000,0000,0111
5	00007	0,0000,0000,0000,0111
6	00007	0,0000,0000,0000,0111
7	00007	0,0000,0000,0000,0111
8	00007	0,0000,0000,0000,0111
9	00007	0,0000,0000,0000,0111
10	00007	0,0000,0000,0000,0111
11	00007	0,0000,0000,0000,0111
12	00007	0,0000,0000,0000,0111
13	00007	0,0000,0000,0000,0111
14	00007	0,0000,0000,0000,0111
15	00007	0,0000,0000,0000,0111
16	0000F	0,0000,0000,0000,1111
17	0000F	0,0000,0000,0000,1111
18	0000F	0,0000,0000,0000,1111
19	0000F	0,0000,0000,0000,1111
20	0000F	0,0000,0000,0000,1111
21	0000F	0,0000,0000,0000,1111
22	0000F	0,0000,0000,0000,1111
23	0000F	0,0000,0000,0000,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15JNJPDARK01

```

OAPEL: 15JNJPDARK01      ALIAS: 15JNJPDARK01
EXT: B                   PSID: N
SCLK1: 04500840:00:0     SCLK2: 04500849:72:0
SCET1: 98-152/16:45:45.066 SCET2: 98-152/16:55:39.733
TARGET: JUPITER          PARTITION: 1
    
```

```

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

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 149          TLMFMT: LPU
    
```

```

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

```

WETGID: 0326149001      03 26 149 001
WTGRP_SIZ: 26
    
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	001F8	0,0000,0001,1111,1000
1	005F8	0,0000,0101,1111,1000
2	005F8	0,0000,0101,1111,1000
3	005F8	0,0000,0101,1111,1000
4	005F8	0,0000,0101,1111,1000
5	005F8	0,0000,0101,1111,1000
6	005F8	0,0000,0101,1111,1000
7	005F8	0,0000,0101,1111,1000
8	005F8	0,0000,0101,1111,1000
9	005F8	0,0000,0101,1111,1000
10	005F8	0,0000,0101,1111,1000
11	005F8	0,0000,0101,1111,1000
12	005F8	0,0000,0101,1111,1000
13	005F8	0,0000,0101,1111,1000
14	001F8	0,0000,0001,1111,1000
15	001F8	0,0000,0001,1111,1000
16	001F0	0,0000,0001,1111,0000
17	001F0	0,0000,0001,1111,0000
18	001F0	0,0000,0001,1111,0000
19	001F0	0,0000,0001,1111,0000
20	001F0	0,0000,0001,1111,0000
21	001F0	0,0000,0001,1111,0000
22	001F0	0,0000,0001,1111,0000
23	001F0	0,0000,0001,1111,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15JNJUPRTS03

```

OAPEL: 15JNJUPRTS03          ALIAS: 15JNJUPRTS03
EXT: R                        PSID: DJ
SCLK1: 04500854:00:0         SCLK2: 04500864:12:0
SCET1: 1998-152/16:59:54.400 SCET2: 1998-152/17:10:09.066
TARGET: JUPITER              PARTITION: 1
  
```

```

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

```

MB_DOWN: 11011              MB_UP: 11011
COMP_FLAG: 1
EST_COMP: 2.0              EST_COMPV: 0.3
RATE_CON1: 00000           RATE_CON2: 00000
NWAVETOT: 408              TLMFMT: RT
  
```

```

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

```

WETGID: 0302408000         03 02 408 000
WTGRP_SIZ: 2
  
```

EDIT TABLE

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

15JNJPDARK02

OAPEL: 15JNJPDARK02 ALIAS: 15JNJPDARK02
 EXT: A PSID: O
 SCLK1: 04500873:00:0 SCLK2: 04500882:87:0
 SCET1: 98-152/17:19:07.066 SCET2: 98-152/17:29:11.733
 TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 80 TLMFMT: LPU

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

WETGID: 0326080001 03 26 080 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	00007	0,0000,0000,0000,0111
1	00007	0,0000,0000,0000,0111
2	00007	0,0000,0000,0000,0111
3	00007	0,0000,0000,0000,0111
4	00007	0,0000,0000,0000,0111
5	00007	0,0000,0000,0000,0111
6	00007	0,0000,0000,0000,0111
7	00007	0,0000,0000,0000,0111
8	00007	0,0000,0000,0000,0111
9	00007	0,0000,0000,0000,0111
10	00007	0,0000,0000,0000,0111
11	00007	0,0000,0000,0000,0111
12	00007	0,0000,0000,0000,0111
13	00007	0,0000,0000,0000,0111
14	00007	0,0000,0000,0000,0111
15	00007	0,0000,0000,0000,0111
16	0000F	0,0000,0000,0000,1111
17	0000F	0,0000,0000,0000,1111
18	0000F	0,0000,0000,0000,1111
19	0000F	0,0000,0000,0000,1111
20	0000F	0,0000,0000,0000,1111
21	0000F	0,0000,0000,0000,1111
22	0000F	0,0000,0000,0000,1111
23	0000F	0,0000,0000,0000,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15JNJPDARK02

OAPEL: 15JNJPDARK02 ALIAS: 15JNJPDARK02
 EXT: B PSID: O
 SCLK1: 04500873:00:0 SCLK2: 04500882:87:0
 SCET1: 98-152/17:19:07.066 SCET2: 98-152/17:29:11.733
 TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVEROT: 149 TLMFMT: LPU

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

WETGID: 0326149001 03 26 149 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	001F8	0,0000,0001,1111,1000
1	005F8	0,0000,0101,1111,1000
2	005F8	0,0000,0101,1111,1000
3	005F8	0,0000,0101,1111,1000
4	005F8	0,0000,0101,1111,1000
5	005F8	0,0000,0101,1111,1000
6	005F8	0,0000,0101,1111,1000
7	005F8	0,0000,0101,1111,1000
8	005F8	0,0000,0101,1111,1000
9	005F8	0,0000,0101,1111,1000
10	005F8	0,0000,0101,1111,1000
11	005F8	0,0000,0101,1111,1000
12	005F8	0,0000,0101,1111,1000
13	005F8	0,0000,0101,1111,1000
14	001F8	0,0000,0001,1111,1000
15	001F8	0,0000,0001,1111,1000
16	001F0	0,0000,0001,1111,0000
17	001F0	0,0000,0001,1111,0000
18	001F0	0,0000,0001,1111,0000
19	001F0	0,0000,0001,1111,0000
20	001F0	0,0000,0001,1111,0000
21	001F0	0,0000,0001,1111,0000
22	001F0	0,0000,0001,1111,0000
23	001F0	0,0000,0001,1111,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR20H01

OAPEL: 15ENEUR20H01 ALIAS: 15ENEUR20H01
EXT: C PSID: CM
SCLK1: 04500904:00:0 SCLK2: 04500908:27:0
SCET1: 98-152/17:50:27.733 SCET2: 98-152/17:54:49.066
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 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, 000, 000

WETGID: 0326120001 03 26 120 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1B800	1,1011,1000,0000,0000
1	1B800	1,1011,1000,0000,0000
2	1B800	1,1011,1000,0000,0000
3	1B800	1,1011,1000,0000,0000
4	1B800	1,1011,1000,0000,0000
5	1B800	1,1011,1000,0000,0000
6	1B800	1,1011,1000,0000,0000
7	1B800	1,1011,1000,0000,0000
8	1B800	1,1011,1000,0000,0000
9	1B800	1,1011,1000,0000,0000
10	1B800	1,1011,1000,0000,0000
11	1B800	1,1011,1000,0000,0000
12	1B800	1,1011,1000,0000,0000
13	1B800	1,1011,1000,0000,0000
14	1B800	1,1011,1000,0000,0000
15	1B800	1,1011,1000,0000,0000
16	1B800	1,1011,1000,0000,0000
17	1B800	1,1011,1000,0000,0000
18	1B800	1,1011,1000,0000,0000
19	1B800	1,1011,1000,0000,0000
20	1B800	1,1011,1000,0000,0000
21	1B800	1,1011,1000,0000,0000
22	1B800	1,1011,1000,0000,0000
23	1B800	1,1011,1000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR20H01

```

OAPEL: 15ENEUR20H01      ALIAS: 15ENEUR20H01
EXT: I                    PSID: CM
SCLK1: 04500904:00:0     SCLK2: 04500908:27:0
SCET1: 98-152/17:50:27.733 SCET2: 98-152/17:54:49.066
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

MB_DOWN: 00000          MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0           EST_COMPV: 0.3
RATE_CON1: 00000       RATE_CON2: 65525
NWAVETOT: 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

15ENEUR20H01

OAPEL: 15ENEUR20H01 ALIAS: 15ENEUR20H01
 EXT: B PSID: CM
 SCLK1: 04500910:52:0 SCLK2: 04500914:65:0
 SCET1: 98-152/17:57:06.400 SCET2: 98-152/18:01:17.733
 TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 168 TLMFMT: LPU

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

WETGID: 0326168001 03 26 168 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1BD00	1,1011,1101,0000,0000
1	1BD00	1,1011,1101,0000,0000
2	1BD00	1,1011,1101,0000,0000
3	1BD00	1,1011,1101,0000,0000
4	1BD00	1,1011,1101,0000,0000
5	1BD00	1,1011,1101,0000,0000
6	1BD00	1,1011,1101,0000,0000
7	1BD00	1,1011,1101,0000,0000
8	1BD00	1,1011,1101,0000,0000
9	1BD00	1,1011,1101,0000,0000
10	1BD00	1,1011,1101,0000,0000
11	1BD00	1,1011,1101,0000,0000
12	1BD00	1,1011,1101,0000,0000
13	1BD00	1,1011,1101,0000,0000
14	1BD00	1,1011,1101,0000,0000
15	1BD00	1,1011,1101,0000,0000
16	1BD00	1,1011,1101,0000,0000
17	1BD00	1,1011,1101,0000,0000
18	1BD00	1,1011,1101,0000,0000
19	1BD00	1,1011,1101,0000,0000
20	1BD00	1,1011,1101,0000,0000
21	1BD00	1,1011,1101,0000,0000
22	1BD00	1,1011,1101,0000,0000
23	1BD00	1,1011,1101,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR20H01

```

OAPEL: 15ENEUR20H01      ALIAS: 15ENEUR20H01
EXT: D                    PSID: CM
SCLK1: 04500910:44:0     SCLK2: 04500914:73:0
SCET1: 98-152/17:57:01.066 SCET2: 98-152/18:01:23.066
TARGET: EUROPA           PARTITION: 1
    
```

```

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

```

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

```

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

```

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

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	000C8	0,0000,0000,1100,1000
1	000C8	0,0000,0000,1100,1000
2	000C8	0,0000,0000,1100,1000
3	000C8	0,0000,0000,1100,1000
4	000C8	0,0000,0000,1100,1000
5	000C8	0,0000,0000,1100,1000
6	000C8	0,0000,0000,1100,1000
7	000C8	0,0000,0000,1100,1000
8	000C8	0,0000,0000,1100,1000
9	000C8	0,0000,0000,1100,1000
10	000C8	0,0000,0000,1100,1000
11	000C8	0,0000,0000,1100,1000
12	000C8	0,0000,0000,1100,1000
13	000C8	0,0000,0000,1100,1000
14	000C8	0,0000,0000,1100,1000
15	000C8	0,0000,0000,1100,1000
16	000C8	0,0000,0000,1100,1000
17	000C8	0,0000,0000,1100,1000
18	000C8	0,0000,0000,1100,1000
19	000C8	0,0000,0000,1100,1000
20	000C8	0,0000,0000,1100,1000
21	000C8	0,0000,0000,1100,1000
22	000C8	0,0000,0000,1100,1000
23	000C8	0,0000,0000,1100,1000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR20H01

OAPEL: 15ENEUR20H01 ALIAS: 15ENEUR20H01
EXT: J PSID: CM
SCLK1: 04500910:52:0 SCLK2: 04500914:73:0
SCET1: 98-152/17:57:06.400 SCET2: 98-152/18:01:23.066
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 240 TLMFMT: LPU

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

WETGID: 0326240001 03 26 240 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1BDC8	1,1011,1101,1100,1000
1	1BDC8	1,1011,1101,1100,1000
2	1BDC8	1,1011,1101,1100,1000
3	1BDC8	1,1011,1101,1100,1000
4	1BDC8	1,1011,1101,1100,1000
5	1BDC8	1,1011,1101,1100,1000
6	1BDC8	1,1011,1101,1100,1000
7	1BDC8	1,1011,1101,1100,1000
8	1BDC8	1,1011,1101,1100,1000
9	1BDC8	1,1011,1101,1100,1000
10	1BDC8	1,1011,1101,1100,1000
11	1BDC8	1,1011,1101,1100,1000
12	1BDC8	1,1011,1101,1100,1000
13	1BDC8	1,1011,1101,1100,1000
14	1BDC8	1,1011,1101,1100,1000
15	1BDC8	1,1011,1101,1100,1000
16	1BDC8	1,1011,1101,1100,1000
17	1BDC8	1,1011,1101,1100,1000
18	1BDC8	1,1011,1101,1100,1000
19	1BDC8	1,1011,1101,1100,1000
20	1BDC8	1,1011,1101,1100,1000
21	1BDC8	1,1011,1101,1100,1000
22	1BDC8	1,1011,1101,1100,1000
23	1BDC8	1,1011,1101,1100,1000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15JNJPDARK03

OAPEL: 15JNJPDARK03 ALIAS: 15JNJPDARK03
 EXT: A PSID: P
 SCLK1: 04500924:00:0 SCLK2: 04500933:42:0
 SCET1: 98-152/18:10:41.066 SCET2: 98-152/18:20:15.733
 TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 80 TLMFMT: LPU

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

WETGID: 0326080001 03 26 080 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	00007	0,0000,0000,0000,0111
1	00007	0,0000,0000,0000,0111
2	00007	0,0000,0000,0000,0111
3	00007	0,0000,0000,0000,0111
4	00007	0,0000,0000,0000,0111
5	00007	0,0000,0000,0000,0111
6	00007	0,0000,0000,0000,0111
7	00007	0,0000,0000,0000,0111
8	00007	0,0000,0000,0000,0111
9	00007	0,0000,0000,0000,0111
10	00007	0,0000,0000,0000,0111
11	00007	0,0000,0000,0000,0111
12	00007	0,0000,0000,0000,0111
13	00007	0,0000,0000,0000,0111
14	00007	0,0000,0000,0000,0111
15	00007	0,0000,0000,0000,0111
16	0000F	0,0000,0000,0000,1111
17	0000F	0,0000,0000,0000,1111
18	0000F	0,0000,0000,0000,1111
19	0000F	0,0000,0000,0000,1111
20	0000F	0,0000,0000,0000,1111
21	0000F	0,0000,0000,0000,1111
22	0000F	0,0000,0000,0000,1111
23	0000F	0,0000,0000,0000,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15JNJPDARK03

OAPEL: 15JNJPDARK03 ALIAS: 15JNJPDARK03
 EXT: B PSID: P
 SCLK1: 04500924:00:0 SCLK2: 04500933:73:0
 SCET1: 98-152/18:10:41.066 SCET2: 98-152/18:20:36.400
 TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 149 TLMFMT: LPU

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

WETGID: 0326149001 03 26 149 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	001F8	0,0000,0001,1111,1000
1	005F8	0,0000,0101,1111,1000
2	005F8	0,0000,0101,1111,1000
3	005F8	0,0000,0101,1111,1000
4	005F8	0,0000,0101,1111,1000
5	005F8	0,0000,0101,1111,1000
6	005F8	0,0000,0101,1111,1000
7	005F8	0,0000,0101,1111,1000
8	005F8	0,0000,0101,1111,1000
9	005F8	0,0000,0101,1111,1000
10	005F8	0,0000,0101,1111,1000
11	005F8	0,0000,0101,1111,1000
12	005F8	0,0000,0101,1111,1000
13	005F8	0,0000,0101,1111,1000
14	001F8	0,0000,0001,1111,1000
15	001F8	0,0000,0001,1111,1000
16	001F0	0,0000,0001,1111,0000
17	001F0	0,0000,0001,1111,0000
18	001F0	0,0000,0001,1111,0000
19	001F0	0,0000,0001,1111,0000
20	001F0	0,0000,0001,1111,0000
21	001F0	0,0000,0001,1111,0000
22	001F0	0,0000,0001,1111,0000
23	001F0	0,0000,0001,1111,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR22H01

OAPEL: 15ENEUR22H01 ALIAS: 15ENEUR22H01
 EXT: A PSID: M
 SCLK1: 04500978:00:0 SCLK2: 04500981:77:0
 SCET1: 98-152/19:05:17.066 SCET2: 98-152/19:09:11.066
 TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
 COMP_FLAG: 1
 EST_COMP: 2.0 EST_COMPV: 0.3
 RATE_CON1: 00000 RATE_CON2: 65525
 NWAVETOT: 240 TLMFMT: MPW

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

WETGID: 0326240001 03 26 240 001
 WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	005FF	0,0000,0101,1111,1111
1	005FF	0,0000,0101,1111,1111
2	005FF	0,0000,0101,1111,1111
3	005FF	0,0000,0101,1111,1111
4	005FF	0,0000,0101,1111,1111
5	005FF	0,0000,0101,1111,1111
6	005FF	0,0000,0101,1111,1111
7	005FF	0,0000,0101,1111,1111
8	005FF	0,0000,0101,1111,1111
9	005FF	0,0000,0101,1111,1111
10	005FF	0,0000,0101,1111,1111
11	005FF	0,0000,0101,1111,1111
12	005FF	0,0000,0101,1111,1111
13	005FF	0,0000,0101,1111,1111
14	005FF	0,0000,0101,1111,1111
15	005FF	0,0000,0101,1111,1111
16	005FF	0,0000,0101,1111,1111
17	005FF	0,0000,0101,1111,1111
18	005FF	0,0000,0101,1111,1111
19	005FF	0,0000,0101,1111,1111
20	005FF	0,0000,0101,1111,1111
21	005FF	0,0000,0101,1111,1111
22	005FF	0,0000,0101,1111,1111
23	005FF	0,0000,0101,1111,1111
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR22H01

OAPEL: 15ENEUR22H01 ALIAS: 15ENEUR22H01
EXT: C PSID: M
SCLK1: 04500978:00:0 SCLK2: 04500981:77:0
SCET1: 98-152/19:05:17.066 SCET2: 98-152/19:09:11.066
TARGET: EUROPA PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 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, 000

WETGID: 0326120001 03 26 120 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1B800	1,1011,1000,0000,0000
1	1B800	1,1011,1000,0000,0000
2	1B800	1,1011,1000,0000,0000
3	1B800	1,1011,1000,0000,0000
4	1B800	1,1011,1000,0000,0000
5	1B800	1,1011,1000,0000,0000
6	1B800	1,1011,1000,0000,0000
7	1B800	1,1011,1000,0000,0000
8	1B800	1,1011,1000,0000,0000
9	1B800	1,1011,1000,0000,0000
10	1B800	1,1011,1000,0000,0000
11	1B800	1,1011,1000,0000,0000
12	1B800	1,1011,1000,0000,0000
13	1B800	1,1011,1000,0000,0000
14	1B800	1,1011,1000,0000,0000
15	1B800	1,1011,1000,0000,0000
16	1B800	1,1011,1000,0000,0000
17	1B800	1,1011,1000,0000,0000
18	1B800	1,1011,1000,0000,0000
19	1B800	1,1011,1000,0000,0000
20	1B800	1,1011,1000,0000,0000
21	1B800	1,1011,1000,0000,0000
22	1B800	1,1011,1000,0000,0000
23	1B800	1,1011,1000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR22H01

```

OAPEL: 15ENEUR22H01      ALIAS: 15ENEUR22H01
EXT: I                    PSID: M
SCLK1: 04500978:00:0     SCLK2: 04500981:77:0
SCET1: 98-152/19:05:17.066 SCET2: 98-152/19:09:11.066
TARGET: EUROPA           PARTITION: 1
  
```

```

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

```

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

```

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

```

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

EDIT TABLE

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

15ENEUR22H01

```

OAPEL: 15ENEUR22H01          ALIAS: 15ENEUR22H01
EXT: B                        PSID: M
SCLK1: 04500984:00:0         SCLK2: 04500987:77:0
SCET1: 98-152/19:11:21.066  SCET2: 98-152/19:15:15.066
TARGET: EUROPA                PARTITION: 1
    
```

```

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

```

MB_DOWN: 00000                MB_UP: 00000
COMP_FLAG: 1                  EST_COMPV: 0.3
EST_COMP: 2.0                 RATE_CON2: 65525
RATE_CON1: 00000              TLMFMT: LPU
NWAVETOT: 168
    
```

```

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

```

WETGID: 0326168001           03 26 168 001
WTGRP_SIZ: 26
    
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	1BD00	1,1011,1101,0000,0000
1	1BD00	1,1011,1101,0000,0000
2	1BD00	1,1011,1101,0000,0000
3	1BD00	1,1011,1101,0000,0000
4	1BD00	1,1011,1101,0000,0000
5	1BD00	1,1011,1101,0000,0000
6	1BD00	1,1011,1101,0000,0000
7	1BD00	1,1011,1101,0000,0000
8	1BD00	1,1011,1101,0000,0000
9	1BD00	1,1011,1101,0000,0000
10	1BD00	1,1011,1101,0000,0000
11	1BD00	1,1011,1101,0000,0000
12	1BD00	1,1011,1101,0000,0000
13	1BD00	1,1011,1101,0000,0000
14	1BD00	1,1011,1101,0000,0000
15	1BD00	1,1011,1101,0000,0000
16	1BD00	1,1011,1101,0000,0000
17	1BD00	1,1011,1101,0000,0000
18	1BD00	1,1011,1101,0000,0000
19	1BD00	1,1011,1101,0000,0000
20	1BD00	1,1011,1101,0000,0000
21	1BD00	1,1011,1101,0000,0000
22	1BD00	1,1011,1101,0000,0000
23	1BD00	1,1011,1101,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15ENEUR22H01

OAPEL: 15ENEUR22H01 ALIAS: 15ENEUR22H01
EXT: D PSID: M
SCLK1: 04500984:00:0 SCLK2: 04500987:77:0
SCET1: 98-152/19:11:21.066 SCET2: 98-152/19:15:15.066
TARGET: EUROPA PARTITION: 1

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

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

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

WETGID: 0326072001 03 26 072 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	000C8	0,0000,0000,1100,1000
1	000C8	0,0000,0000,1100,1000
2	000C8	0,0000,0000,1100,1000
3	000C8	0,0000,0000,1100,1000
4	000C8	0,0000,0000,1100,1000
5	000C8	0,0000,0000,1100,1000
6	000C8	0,0000,0000,1100,1000
7	000C8	0,0000,0000,1100,1000
8	000C8	0,0000,0000,1100,1000
9	000C8	0,0000,0000,1100,1000
10	000C8	0,0000,0000,1100,1000
11	000C8	0,0000,0000,1100,1000
12	000C8	0,0000,0000,1100,1000
13	000C8	0,0000,0000,1100,1000
14	000C8	0,0000,0000,1100,1000
15	000C8	0,0000,0000,1100,1000
16	000C8	0,0000,0000,1100,1000
17	000C8	0,0000,0000,1100,1000
18	000C8	0,0000,0000,1100,1000
19	000C8	0,0000,0000,1100,1000
20	000C8	0,0000,0000,1100,1000
21	000C8	0,0000,0000,1100,1000
22	000C8	0,0000,0000,1100,1000
23	000C8	0,0000,0000,1100,1000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

15NNRCTRLT01

OAPEL: 15NNRCTRLT01 ALIAS: LSNNRCTRTA01
 EXT: R PSID: XU
 SCLK1: 04540944:00:0 SCLK2: 04540944:12:0
 SCET1: 1998-180/20:35:19.666 SCET2: 1998-180/20:35:27.666
 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: 0
 EST_COMP: 0.0 EST_COMPV: 0.0
 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, 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

15NNRCTRLT01

```

OAPEL: 15NNRCTRLT01      ALIAS: LSNNRCTRTA01
EXT: S                    PSID: XU
SCLK1: 04540950:00:0     SCLK2: 04540951:12:0
SCET1: 1998-180/20:41:23.666 SCET2: 1998-180/20:42:32.333
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: 0
EST_COMP: 0.0           EST_COMPV: 0.0
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, 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

15NNRCTRLT01

```

OAPEL: 15NNRCTRLT01      ALIAS: LSNNRCTRTA01
EXT: T                    PSID: XU
SCLK1: 04540956:00:0     SCLK2: 04540956:12:0
SCET1: 1998-180/20:47:27.666 SCET2: 1998-180/20:47:35.666
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: 0
EST_COMP: 0.0           EST_COMPV: 0.0
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, 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

15NNOPCAL_01

```

OAPEL: 15NNOPCAL_01          ALIAS: LSNNOPCAL_01
EXT: R                        PSID: DC
SCLK1: 04540960:00:0        SCLK2: 04540962:12:0
SCET1: 1998-180/20:51:30.333 SCET2: 1998-180/20:53:39.666
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: 1
R/T: 1                      RECORD: 0
  
```

```

MB_DOWN: 11011              MB_UP: 11011
COMP_FLAG: 0
EST_COMP: 0.0              EST_COMPV: 0.0
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 E15 OBSTAB

This is a time-ordered ASCII TABLE (listing) of GALILEO NIMS observation parameters for use by downlink data processing of the NIMS E15 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=freeerun
GRAT_OFF  1 76 - 76      .Grating Offset (0-7, default 4)   SEF: 37GOF, data byte 2, bits 5-8
PTAB_A(6) 12 77 - 88      .First PTAB |repeat count,mirror op,autobias...SEF: functions of MODE (from 37IOP) as modified by
PTAB_B(6) 12 89 - 100  .Second PTAB |...grating start, grating delta... 37MPT, unless special sequence (modes 12-15)
.         .         |...number of grating positions) in which case values come from 37SS
                                         parameters <tbd>
ECAL      1 101 - 101     .Electronics Calibration Active (1=yes) SEF: 37IST, data byte 3, bit 4 (1=on)
OPCAL     1 102 - 102     .Optics Calibration active (1=yes)   SEF: 37IST, data byte 3, bit 5 (1=on)
# REAL_TIME 1 103 - 103     .NIMS in Real-Time Telemetry (1=yes) SEF: track RT_INST_SEL .and. 37RT
# RECORD   1 104 - 104     .NIMS in Record Telemetry (1=yes)   SEF: track DMS status event:
                                         RECORD, REVERSE, RESUME, RUNDOWN <tbd>

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

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

```

```

# WETGID      10 319 - 328      .Wavelength selection group ID (unique)      PBK: WET_GID      (realtime <tbd>)
Rule of formation: mmeelll1nnn where
mm = instrument mode (0-15)
ee = # entries in group
lll = number of wavelengths selected
nnn = sequence number
* WETGRPSIZ      2 329 - 330      .# Wavelength Edit entries (1-26)      PBK: ED_GRP_LEN      (realtime SEF: 37ETB <tbd>)
* WETGRP      182 331 - 512      .Wavelength Edit Table group: WETGRPSIZ      PBK: ED_GRP      (realtime SEF: 37ETB data bytes 2..)
entries, each one has 7 characters. The
first 2 characters are the repeat count
(01-26). The other 5 characters contain
5 hex digits, representing the detector
mask in the form BHHH where B is 0 or 1
and H has range 0-15. (These entries are
from the 37ETB instrument edit group for
realtime data and from the logical AND of
corresponding entries in the instrument
and playback edit groups for playback data.)

```

.The TARGET names used are:

```

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

```


Chapter 5 - Detailed Observation Designs

Contents

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5.1	Introduction to Chapter 5	2
5.2	NIMS E15 Observations	3-37

Introduction to Chapter 5

Detailed Observation Designs

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

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

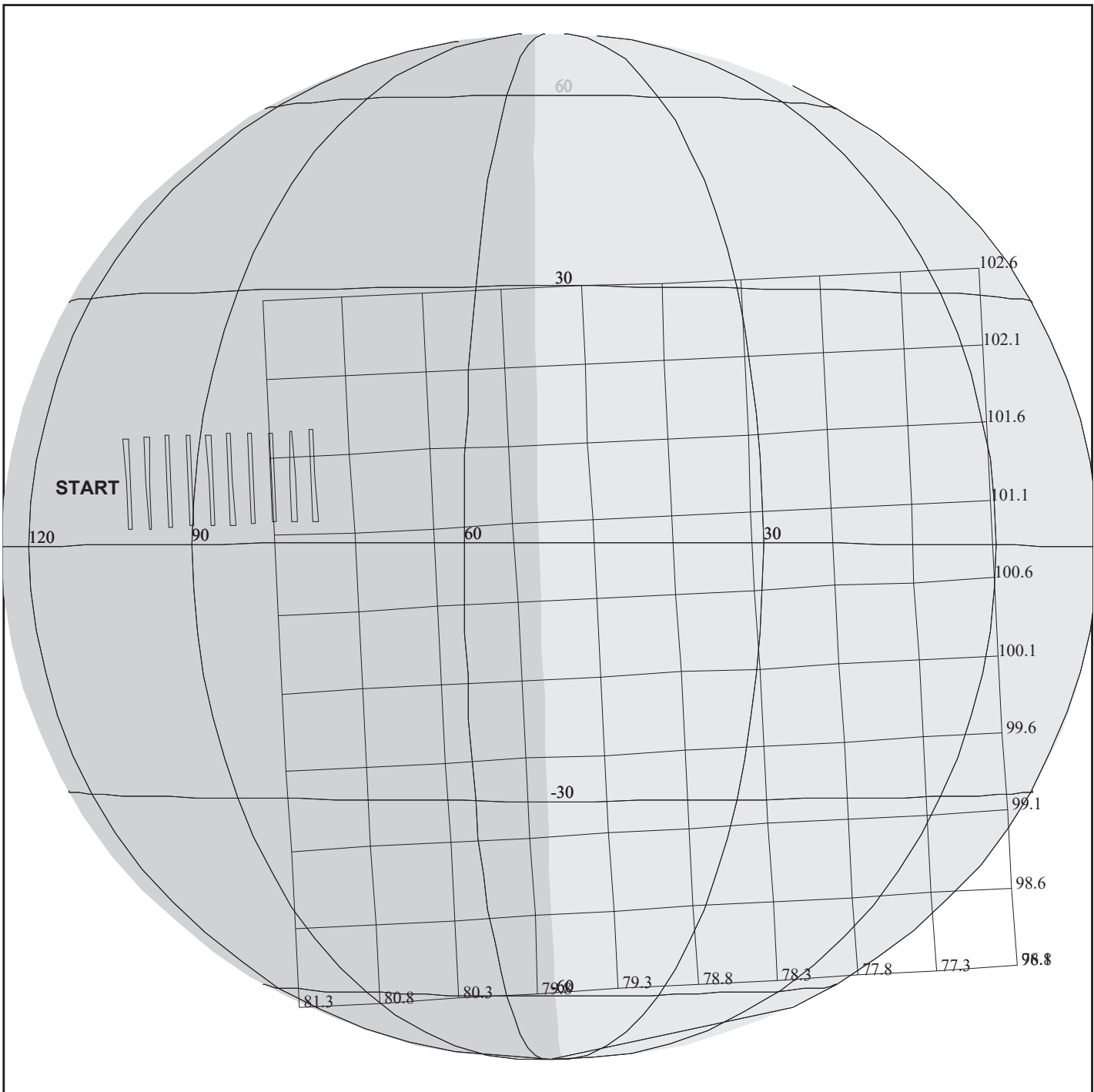
The Pointer plots have the spatial extent of the actual data returned outlined with a thick line. When no data were returned for a particular observation, its Pointer plot has a single slash across the plot with the text "NO DATA RETURNED" printed in the upper left corner of the plot.

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

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

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

NIMS Software Reload		ACTIVITY ID: 15NNJUPRTS01-	
		START TIME: 98-151/02:43:51.749	
Activity ID: Orbit 15 Target N Inst N OAPEL JUPRTS SeqNo 01 -			
Title	NIMS Software Reload	Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team NIMS Working Group	SWG
Time System	CDS	Load ID	Calendar Date 05/31/98 Week 22
Start	JEE-CDS 00001415:00:0	98-151/02:43:51.749	JEE-000/23:50:43.333
End	JEE-CDS 00001405:00:0	98-151/02:53:58.416	JEE-000/23:40:36.666
Duration	00000010:00:0	000/00:10:06.667	000/00:10:06.667
Top Label	15NNJUPRTS01		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	Yes
		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 E15 reload OAPELS are: 15NNJUPRTS01,15NNHRSPEC01,15NNHRSPEC02,15NNREGION01, 15NNSUCOMP01,15NNSUCOMP02,15NNSUCOMP03,15NNGLOBAL01, 15NNEUR16H01,15NNJUPRTS02,15NNJPDARK01,15NNJPDARK02, 15NNEUR20H01,15NNJPDARK03,15NNEUR22H01			
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.			
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15JNJUPRTS01

165DA:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/3791 TC= 1(7 100)
 A= 728 pD= 1810 SR=17.450 RA50=254.89 DEC50=-24.17 cone= 82.26 clock=101.53
 117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/3791
 1:#s= 1 Cs= -18.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 40

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15JNJUPRTS01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:JEE 98-152/02:34:27.800 -CDS 1400:00:0

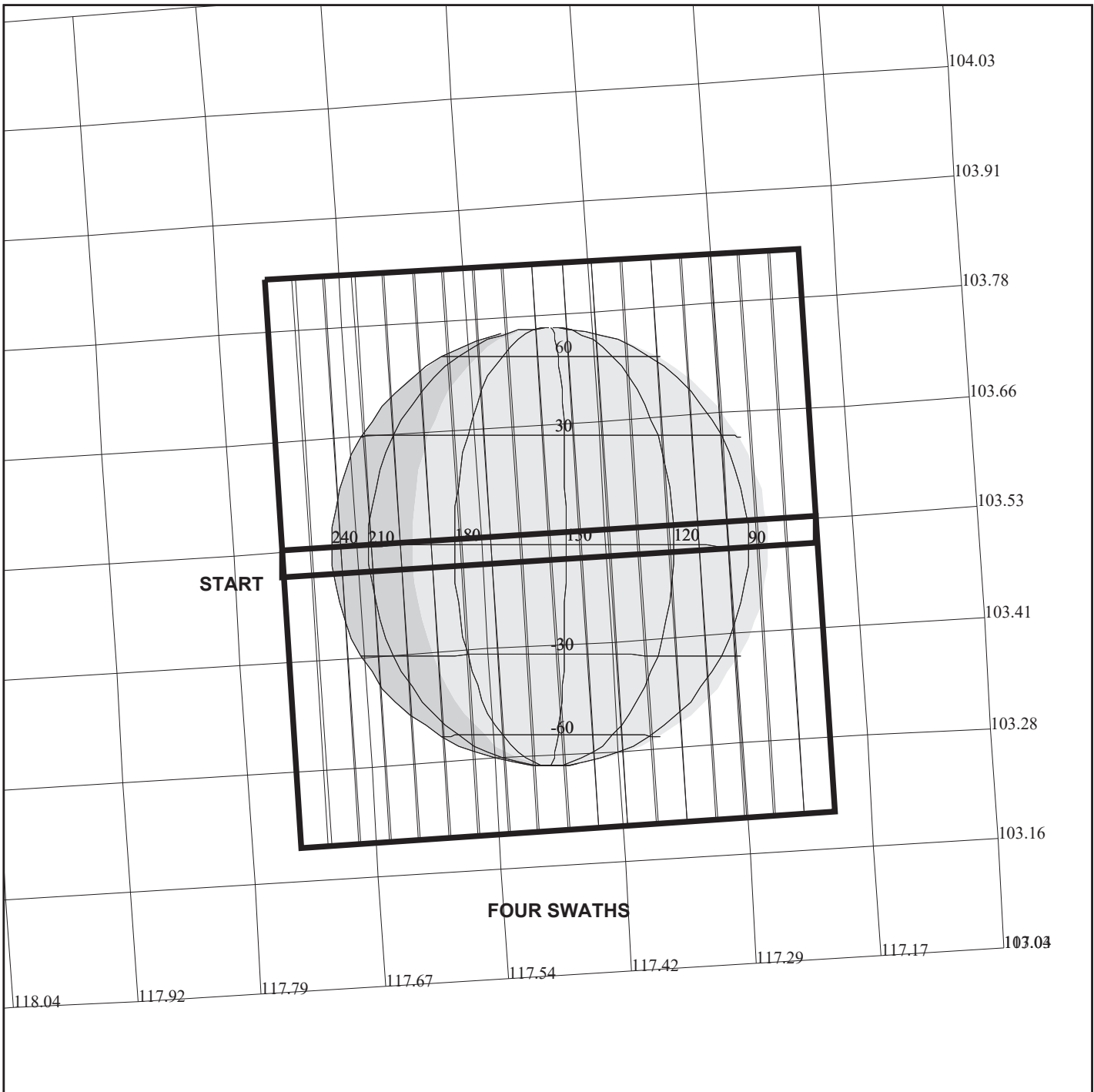
OBSERVATION:15JNJUPRTS01

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 1810 S= 1.000

DESCRIP:Jupiter_Realtime_Observation

Jupiter Realtime Observation		ACTIVITY ID:	15JNJUPRTS01*		
		START TIME:	98-151/02:53:58.416		
Activity ID: Orbit 15 Target J Inst N OAPEL JUPRTS SeqNo 01 *					
Title	Jupiter Realtime Observation		Instrument		NIMS
Requestor	NIMS-AWG/A. OCAMPO		Team	NIMS Working Group	AWG
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	JEE-CDS	00001405:00:0	98-151/02:53:58.416	JEE-000/23:40:36.666	
End	JEE-CDS	00001390:00:0	98-151/03:09:08.416	JEE-000/23:25:26.666	
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000	
Top Label	15JNJUPRTS01*				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No
Observation Objective					
Search for Jupiter atmospheric composition and thermal variations over time.					
FREE_RTS=0.16 mbits					
Data Returned					
Design Detail					
Long map. One scan at +7 degrees latitude.					
No overlap in FOV.					
Nightside					
NIMS R/T only returns every seventh FOV.					
Long Map (LM), Gain 4, Grating Start 0, R/T, E15JLM408					
Galileo Activity Plan Form			04/24/98	15:59:22	rev 6/95



15INHRSPEC01

165DB:TT= 0 TMC= 1 C= 4.60 XC= 0.00 BS= 0/5357 TC= 3
 A= 728 pD= 3812 SR=17.450 RA50=293.67 DEC50=-22.54 cone=117.74 clock=103.52
 117DB:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5357
 1:#s= 4 Cs= -9.20 XCs= 0.00 Cr= 9.06 XCr= 0.00 sD= 930 rD= 24

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15INHRSPEC01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

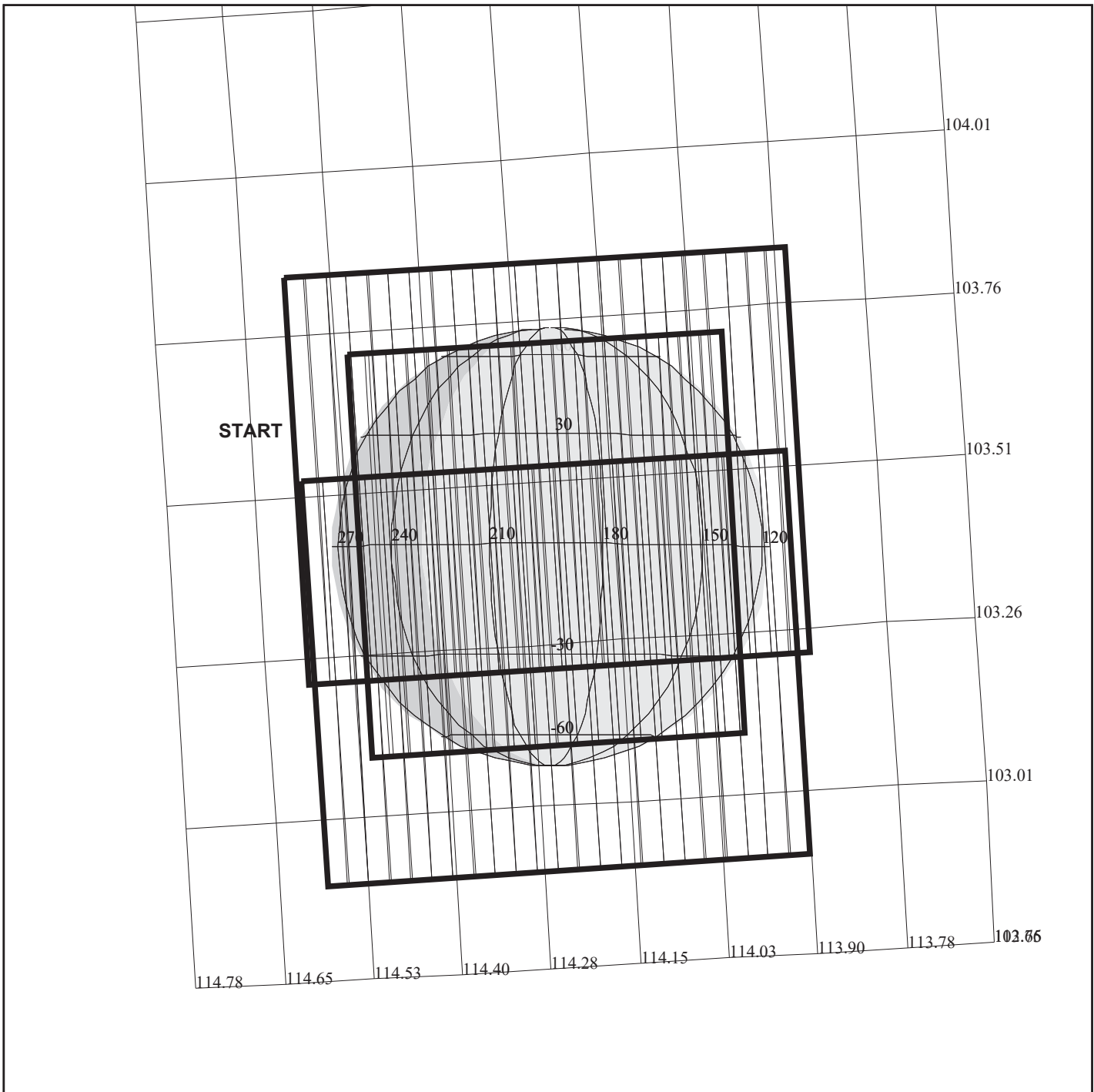
START:IEE 98-151/20:58:46.466 -CDS 455:00:0

BODY PLOT TIME:TARGET-TIME D= 3812 S= 0.400

OBSERVATION:15INHRSPEC01

DESCRIP:Io_Monitoring_at_High_Spec_Res

Io Monitoring High Spectral Resolution		ACTIVITY ID:	15INHRSPEC01-		
		START TIME:	98-151/13:14:47.261		
Activity ID: Orbit 15 Target I Inst N OAPEL HRSPEC SeqNo 01 -					
Title Requestor	Io Monitoring High Spectral Resolution NIMS-SWG/R.		Instrument Team	NIMS Working Group NIMS SWG	
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	IEE-CDS 00000460:00:0		98-151/13:14:47.261	IEE-000/07:45:06.666	
End	IEE-CDS 00000434:00:0		98-151/13:41:04.594	IEE-000/07:18:49.333	
Duration	00000026:00:0		000/00:26:17.333	000/00:26:17.333	
Top Label	15INHRSPEC01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH		
CDS Source	OAP	Spin State	DUAL	Scan Platform	Yes
			DMS		Yes
Observation Objective					
<p>Second highest resolution observation during the GEM E-orbits. This observation targets the Pele-Marduk-Reiden region that will be imaged in I24. Observation coordinated with SSI.</p>					
Data Returned					
Design Detail					
<p>Global Mosaic in Long Map, 408 wavelengths. Record Mode is MPW. NIMS resolution is approximately 150 km/pixel. Central longitude about 155 West.</p> <p>TICS= 1110, FMT= MPW, MBTG= 3.022, PPR_RA=0.21</p> <p>4 identical swaths across the disk. Swaths 1-3 in Long Map Swath 4 in Long Spectrometer (nearly equatorial) Swath 3 returned with thresholding.</p> <p>Long Map (LM), Gain 2, Grating Start 0, MPW, E15ILM442, E15ILM360</p>					
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15INHRSPEC02

165DD:TT= 0 TMC= 1 C= 6.00 XC= 2.00 BS= 0/1949 TC= 3
 A= 728 pD= 2548 SR=17.450 RA50=290.28 DEC50=-22.88 cone=114.58 clock=103.53
 117DD:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/1949
 1:#s= 2 Cs= -12.00 XCs= 0.00 Cr= 12.00 XCr= -5.00 sD= 1212 rD= 22

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15INHRSPEC02

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

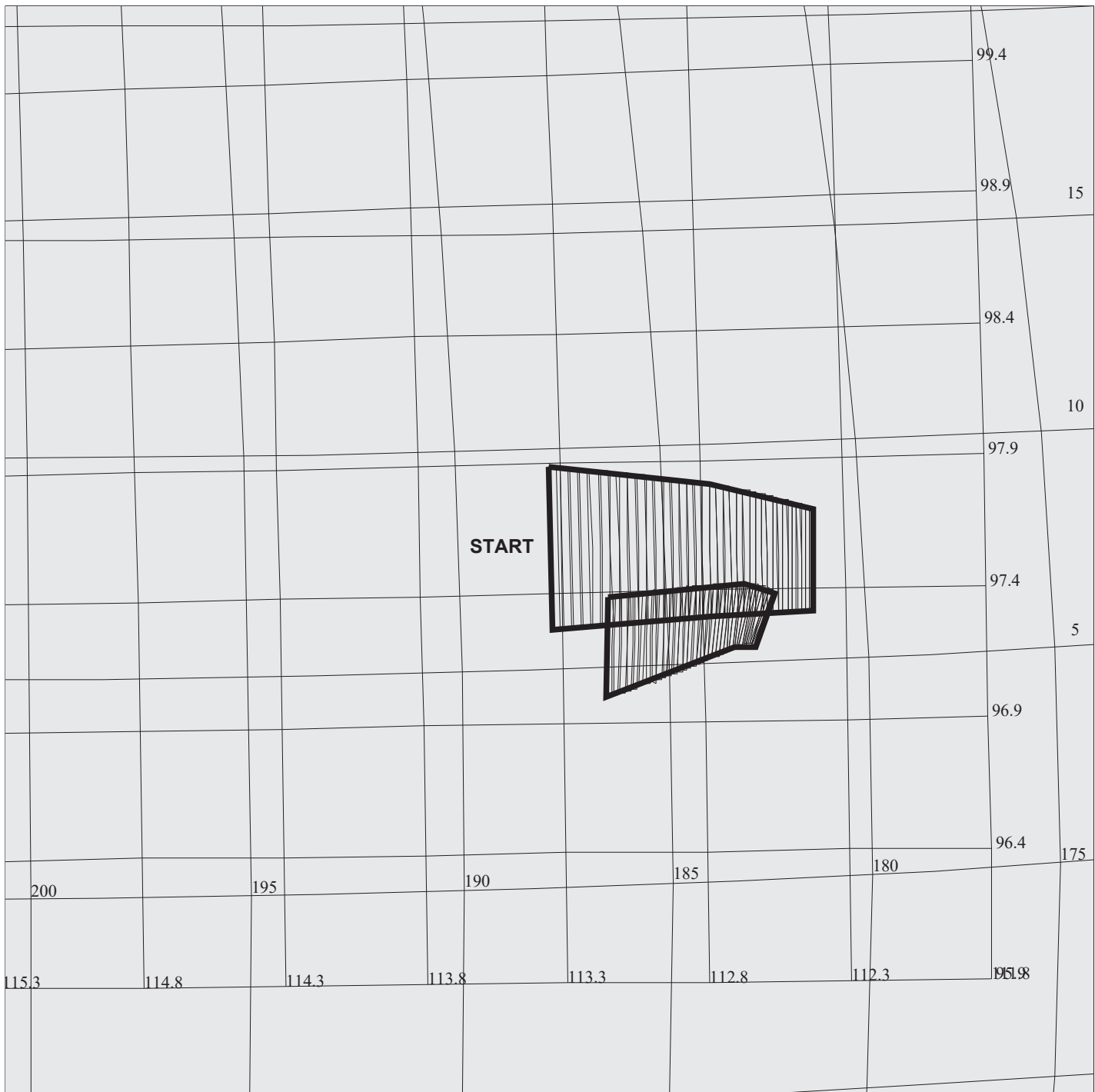
START:IEE 98-151/20:58:46.466 -CDS 199:00:0

BODY PLOT TIME:TARGET-TIME D= 2548 S= 0.400

OBSERVATION:15INHRSPEC02

DESCRIP:Io_Monitoring_at_High_Spec_Res

Io Monitoring High Spectral Resolution		ACTIVITY ID:	15INHRSPEC02-		
		START TIME:	98-151/17:33:37.927		
Activity ID: Orbit 15 Target I Inst N OAPEL HRSPEC SeqNo 02 -					
Title Requestor	Io Monitoring High Spectral Resolution NIMS-SWG/R.		Instrument Team	NIMS Working Group NIMS SWG	
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	IEE-CDS 00000204:00:0		98-151/17:33:37.927	IEE-000/03:26:16.000	
End	IEE-CDS 00000178:00:0		98-151/17:59:55.261	IEE-000/02:59:58.666	
Duration	00000026:00:0		000/00:26:17.334	000/00:26:17.334	
Top Label	15INHRSPEC02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH		
CDS Source	OAP	Spin State	DUAL	Scan Platform	Yes
				DMS	Yes
Observation Objective					
<p>Second highest resolution observation during the GEM E-orbits. This observation targets the Pele-Marduk-Reiden region that will be imaged in I24. Observation coordinated with SSI.</p>					
Data Returned					
Design Detail					
<p>Global Mosaic in Long Map, 408 wavelengths. Record Mode is MPW. NIMS resolution is approximately 230 km/pixel. Central longitude about 195 West.</p> <p>TICS= 1110, FMT= MPW, MBTG= 5.280, PPR_RA=0.21</p> <p>Three swaths: first swath across the northern hemisphere, second swath across the southern hemisphere, third swath across the equator.</p> <p>The first two swaths were returned thresholded.</p>					
Long Map (LM), Gain 2, Grating Start 0, MPW, E15ILM442, E15ILM360					
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15ENREGION01

165DE:TT= 0 TMC= 1 C= 7.00 XC= 2.00 BS= 0/5619 TC= 1(7 185)
 A= 182 pD= 3812 SR=17.450 RA50=289.60 DEC50=-28.46 cone=113.32 clock=97.55
 117DE:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5619
 1:#s= 2 Cs= -18.85 XCs= 0.00 Cr= 21.00 XCr= -9.00 sD= 1892 rD= 34

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENREGION01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:EEE 98-151/21:12:55.800 -CDS 28:00:0

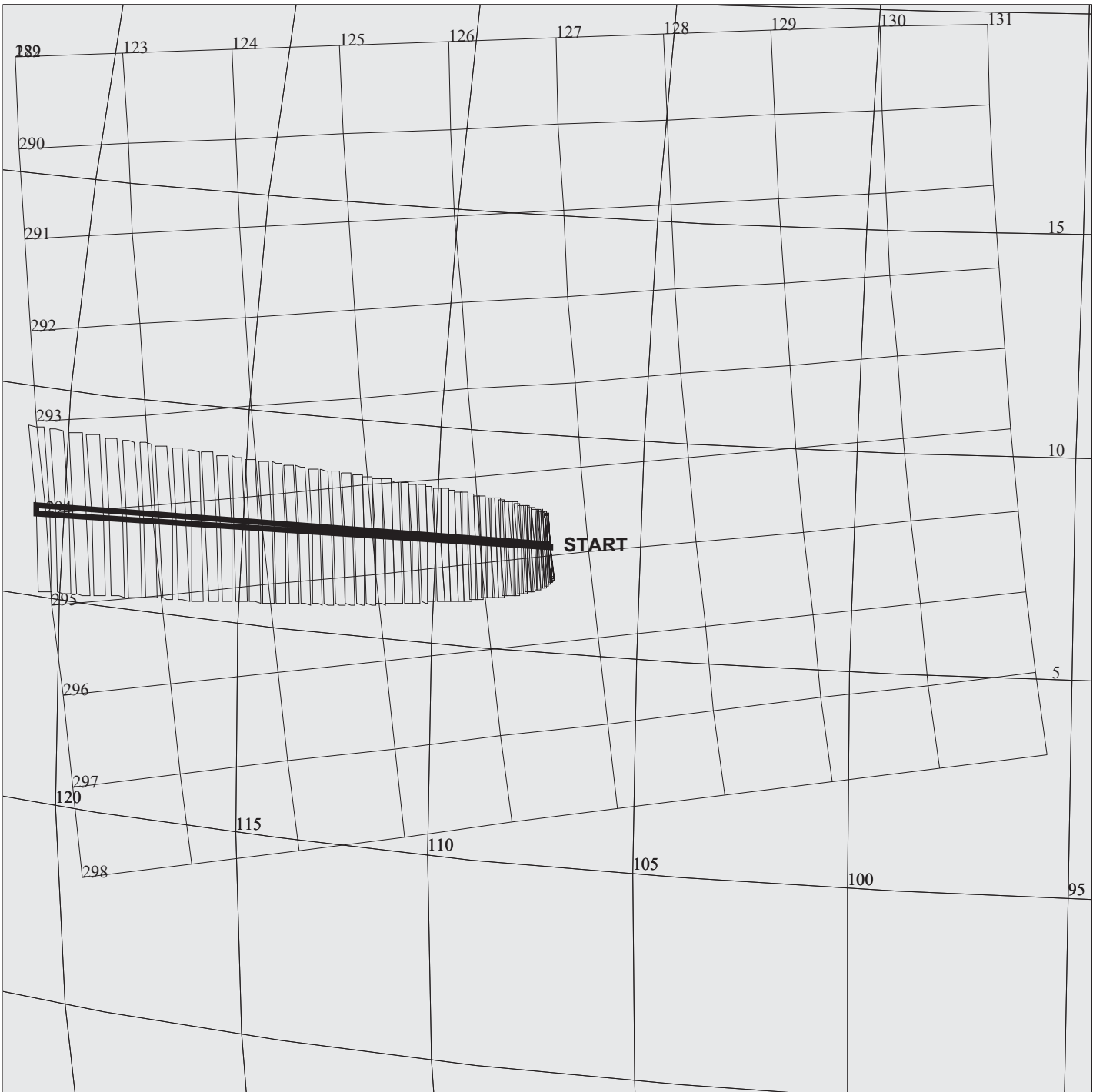
OBSERVATION:15ENREGION01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 3812 S= 4.000

DESCRIP:Europa_Global

Europa Regional Observation		ACTIVITY ID:	15ENREGION01-		
		START TIME:	98-151/20:43:29.130		
Activity ID: Orbit 15 Target E Inst N OAPEL REGION SeqNo 01 -					
Title	Europa Regional Observation		Instrument	NIMS	
Requestor	NIMS-SWG/A. OCAMPO		Team	NIMS Working Group	SWG
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	EEE-CDS	00000028:00:0	98-151/20:43:29.130	EEE-000/00:28:18.666	
End	EEE-CDS	00000007:00:0	98-151/21:04:43.130	EEE-000/00:07:04.666	
Duration		00000021:00:0	000/00:21:14.000	000/00:21:14.000	
Top Label	15ENREGION01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes
Observation Objective					
Europa Regional observation.					
Data Returned					
Design Detail					
Europa Regional observation					
Two swaths, centered at +7 latitude, 185 W. longitude					
Long Map (LM), Gain 3, Grating Start 0, MPW, E15ELM442, E15ELM360					
Galileo Activity Plan Form			04/24/98	15:59:22	rev 6/95



165DF:TT= 0 TMC= 1 C= 19.00 XC= 0.00 BS= 0/2353 TC= 1(7 110)
 A= 728 pD= 3448 SR=17.450 RA50= 47.71 DEC50= 6.73 cone=126.64 clock=294.88
 117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/2353
 1:#s= 1 Cs= -34.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 3458 rD= 2

15ENSUCOMP01

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENSUCOMP01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:EEE 98-151/21:12:55.800 +CDS 09:00:0

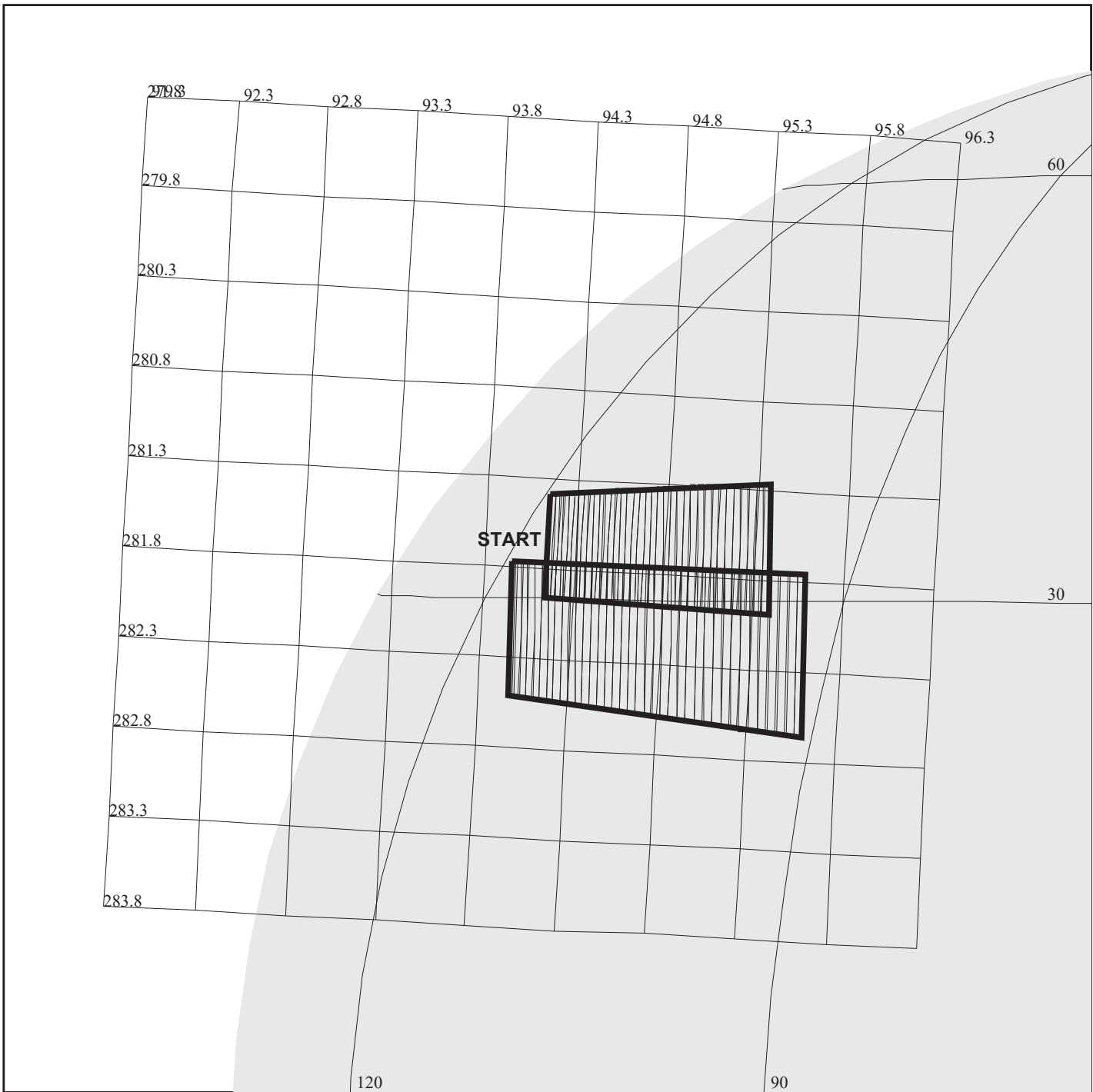
OBSERVATION:15ENSUCOMP01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 3448 S= 3.300

DESCRIP:Europa_Surface_Composition

Europa Surface Composition		ACTIVITY ID:	15ENSUCOMP01-		
		START TIME:	98-151/21:17:51.796		
Activity ID: Orbit 15 Target E Inst N OAPEL SUCOMP SeqNo 01 -					
Title	Europa Surface Composition		Instrument		NIMS
Requestor	NIMS-SWG/A. OCAMPO		Team	NIMS Working Group	SWG
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	EEE+CDS	00000006:00:0	98-151/21:17:51.796	EEE+000/00:06:04.000	
End	EEE+CDS	00000030:00:0	98-151/21:42:07.796	EEE+000/00:30:20.000	
Duration		00000024:00:0	000/00:24:16.000	000/00:24:16.000	
Top Label	15ENSUCOMP01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes
Observation Objective					
Europa surface composition observation covering latitude = +7 degrees and West longitude = 107 to 121.					
Data Returned					
Design Detail					
NIMS mode = LS TICS= 1057, FMT= MPW, MBTG= 6.566, PPR_RA=0.199					
Gain State = 3 Grating Position = 0					
East-west single-pixel swath (long spectrometer mode).					
Long Spectrometer (LS), Gain 3, Grating Start 0, MPW, E15ELM442, E15ELM360					
Galileo Activity Plan Form			04/24/98	15:59:23	rev 6/95



15ENSUCOMP02

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENSUCOMP02

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:EEE 98-151/21:12:55.800 +CDS 37:00:0

OBSERVATION:15ENSUCOMP02

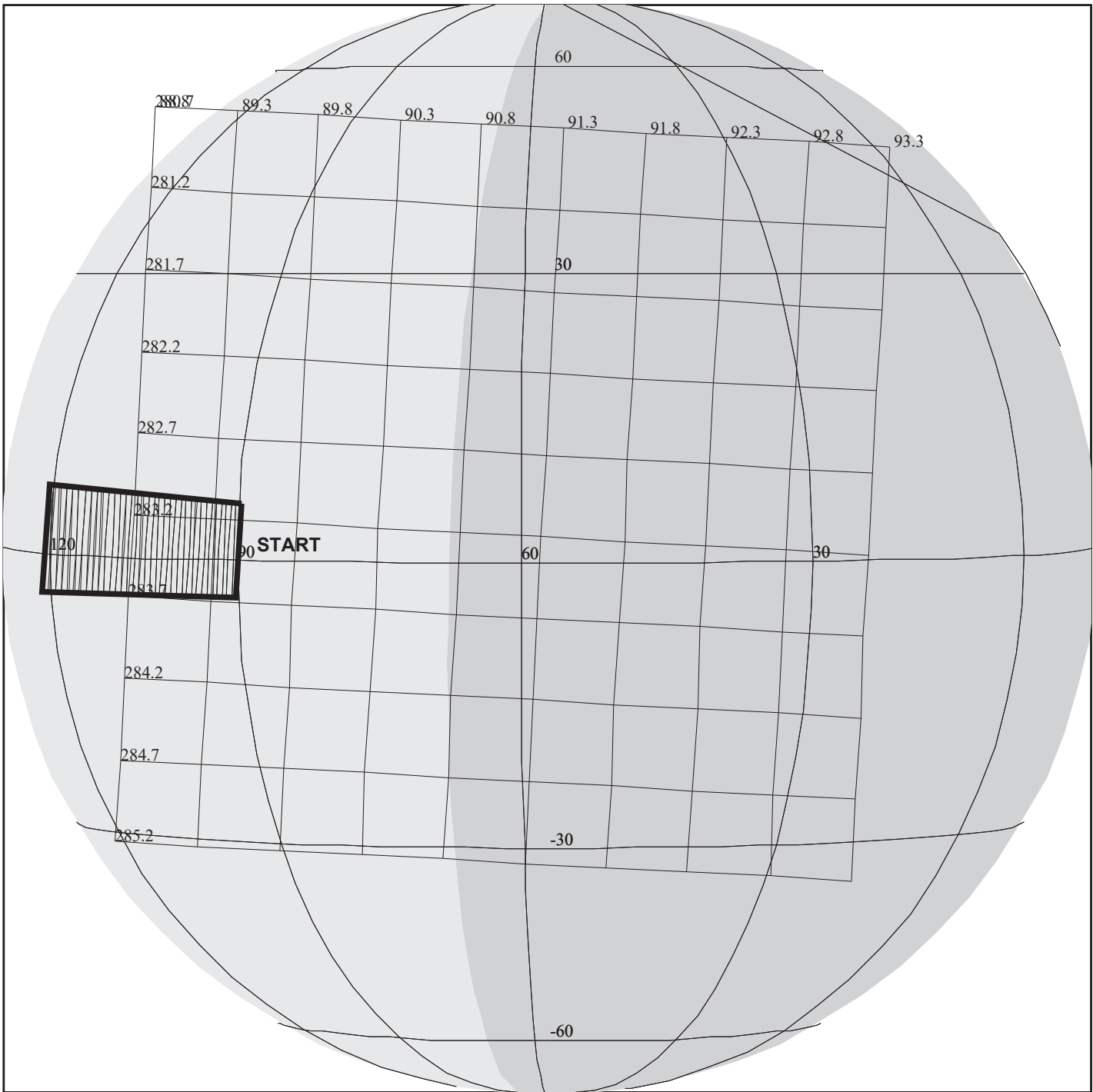
165DG:TT= 0 TMC=1 C= -9.25 XC= -3.00 BS= 0/7449 TC= 1(31 105)
 A= 728 pD= 3812 SR=17.450 RA50= 78.80 DEC50= 24.51 cone= 94.16 clock=281.67
 117DG:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7449
 1:#s= 2 Cs= 18.50 XCs= 0.00 Cr= -18.50 XCr= 7.00 sD= 1864 rD= 32

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 3812 S= 2.000

DESCRIP:Europa_Surface_Composition

Europa Surface Composition		ACTIVITY ID:	15ENSUCOMP02-		
		START TIME:	98-151/21:46:10.462		
Activity ID: Orbit 15 Target E Inst N OAPEL SUCOMP SeqNo 02 -					
Title	Europa Surface Composition		Instrument		NIMS
Requestor	NIMS-SWG/A. OCAMPO		Team	NIMS Working Group	SWG
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	EEE+CDS	00000034:00:0	98-151/21:46:10.462	EEE+000/00:34:22.666	
End	EEE+CDS	00000059:00:0	98-151/22:11:27.129	EEE+000/00:59:39.333	
Duration		00000025:00:0	000/00:25:16.667	000/00:25:16.667	
Top Label	15ENSUCOMP02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes
Observation Objective					
Europa surface composition observation centered at +30 degrees latitude and 105 degrees West longitude on a rough terrain region.					
Data Returned					
Design Detail					
NIMS mode = LM TICS= 1057, FMT= MPW, MBTG= 5.472, PPR_RA=0.199					
Gain state = 3 Grating position = 0					
Two swaths, centered at +30 latitude, 105 W. longitude.					
Long Map (LM), Gain 3, Grating Start 0, MPW, E15ELM442, E15ELM360					
Galileo Activity Plan Form			04/24/98	15:59:23	rev 6/95



15ENSUCOMP03

165DH:TT= 0 TMC=1 C= 0.00 XC= 0.00 BS=0/3273 TC=1(1 90)
 A= 728 pD= 1810 SR=17.450 RA50= 84.14 DEC50= 23.30 cone= 89.42 clock=283.35
 117DH:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/3273
 1:#s= 1 Cs= -18.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 2

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENSUCOMP03

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:EEE 98-151/21:12:55.800 +CDS 69:00:0

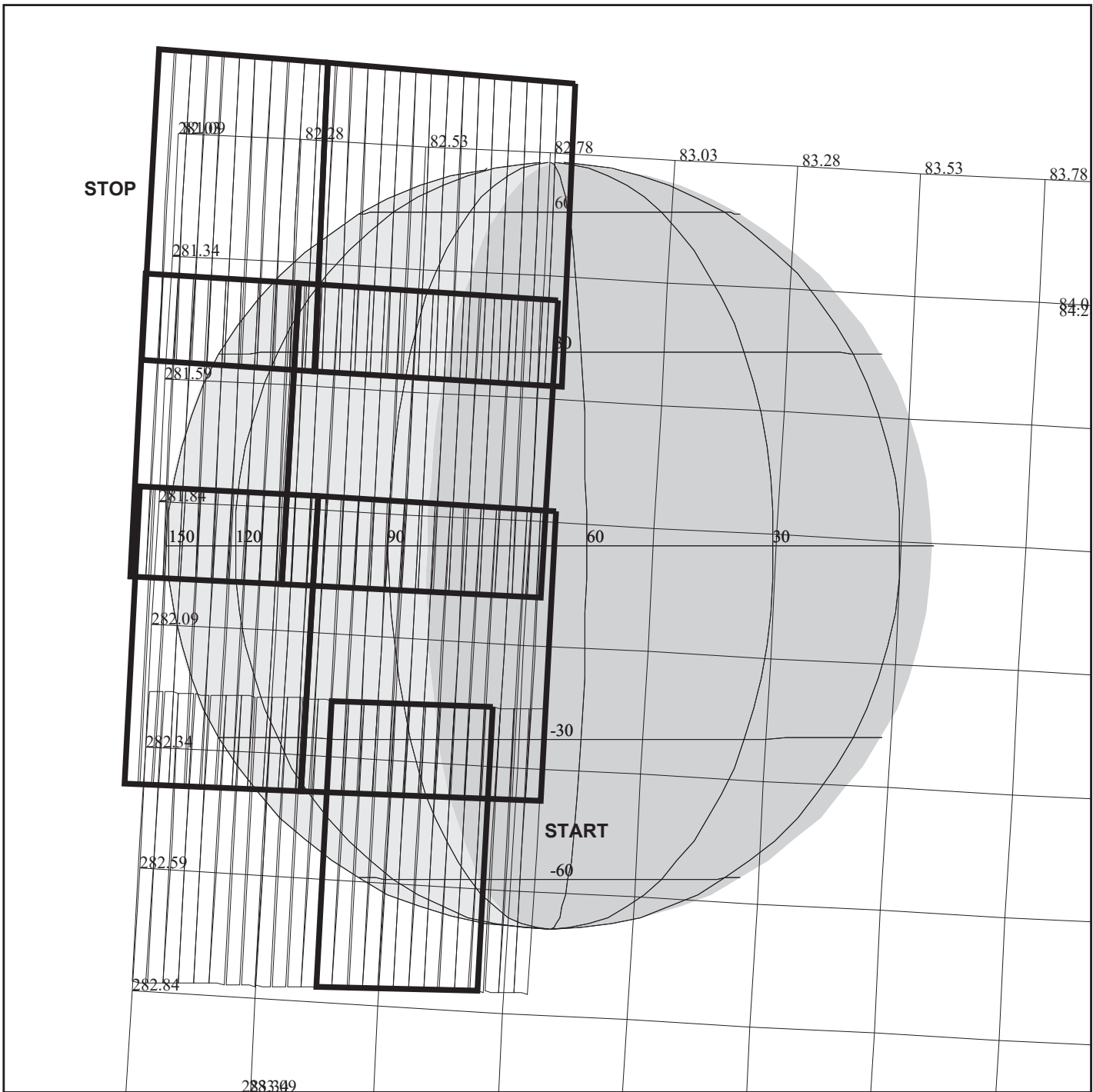
OBSERVATION:15ENSUCOMP03

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 1810 S= 1.000

DESCRIP:Europa_Surface_Composition

Europa Surface Composition		ACTIVITY ID:	15ENSUCOMP03-		
		START TIME:	98-151/22:16:30.462		
Activity ID: Orbit 15 Target E Inst N OAPEL SUCOMP SeqNo 03 -					
Title	Europa Surface Composition		Instrument		NIMS
Requestor	NIMS-SWG/A. OCAMPO		Team	NIMS Working Group	SWG
Time System	CDS	Load ID	Calendar Date	05/31/98	Week 22
Start	EEE+CDS	00000064:00:0	98-151/22:16:30.462	EEE+000/01:04:42.666	
End	EEE+CDS	00000081:00:0	98-151/22:33:41.796	EEE+000/01:21:54.000	
Duration		00000017:00:0	000/00:17:11.334	000/00:17:11.334	
Top Label	15ENSUCOMP03-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes
Observation Objective					
Europa surface composition observation covering the near-equatorial region between 90 and 120 degrees West longitude.					
Data Returned					
Design Detail					
NIMS mode = LM TICS= 530, FMT= MPW, MBTG= 1.933, PPR_RA=0.100					
Gain State = 4 Grating Position = 0					
Single swath along the equator from 90 to 120 degrees W. longitude.					
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM228C					
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM132C					
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM360					
Galileo Activity Plan Form			04/24/98	15:59:23	rev 6/95



15ENGLOBAL01

165DI:TT= 0 TMC= 1 C= 0.00 XC= 10.75 BS= 0/6043 TC= 3
 A= 728 pD= 5450 SR=17.450 RA50= 91.31 DEC50= 24.51 cone= 82.82 clock=282.51
 117DI:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/6043
 1:#s= 4 Cs= -13.40 XCs= 0.00 Cr= 13.40 XCr= -7.00 sD= 1348 rD= 20

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENGLOBAL01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

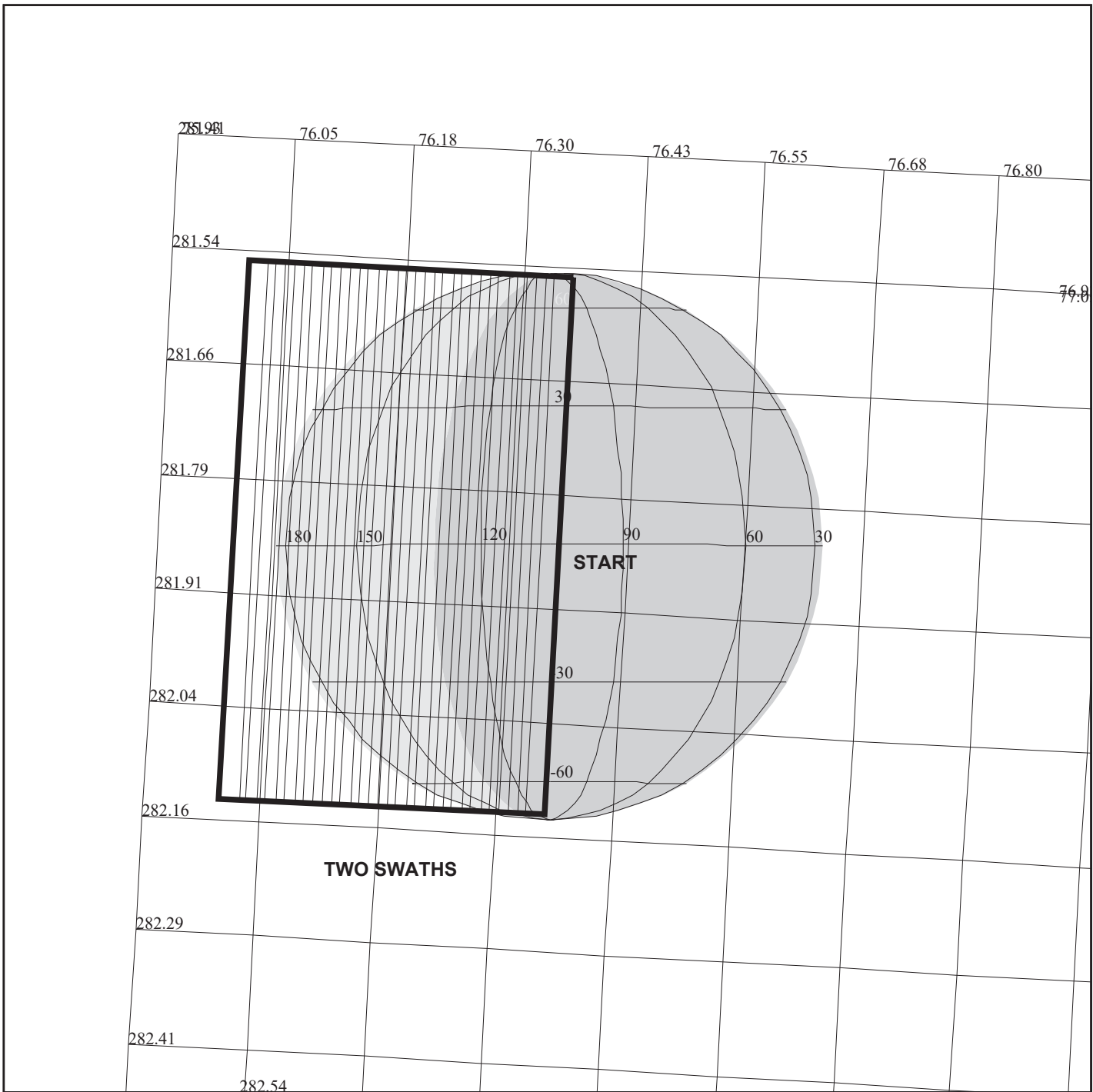
START:EEE 98-151/21:12:55.800 +CDS 304:00:0

BODY PLOT TIME:TARGET-TIME D= 5450 S= 0.700

OBSERVATION:15ENGLOBAL01

DESCRIP:Europa_Global

Europa Global		ACTIVITY ID: 15ENGLOBAL01-	
		START TIME: 98-152/02:17:09.129	
Activity ID: Orbit 15 Target E Inst N OAPEL GLOBAL SeqNo 01 -			
Title	Europa Global	Instrument	
Requestor	NIMS-SWG/A. OCAMPO	Team	NIMS Working Group
		NIMS SWG	
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	EEE+CDS 00000302:00:0	98-152/02:17:09.129	EEE+000/05:05:21.333
End	EEE+CDS 00000336:00:0	98-152/02:51:31.796	EEE+000/05:39:44.000
Duration	00000034:00:0	000/00:34:22.667	000/00:34:22.667
Top Label	15ENGLOBAL01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	150	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	Yes
		DMS	Yes
Observation Objective			
Europa Global mosaic covering 1/3 daylit disk from 70 to 150 degrees W. longitude at 58 KM resolution.			
Data Returned			
Design Detail			
NIMS mode = LM TICS= 1585, FMT=MPW, MBTG= 5.472, PPR_RA=0.299			
Number of swaths is four. GS 4 near the terminator, GS 3 near the limb.			
Swath	Gain	# waves	EDR
1	4	228	15ENGLOBAL01 A
1	3	0	
2	4	228, 132	15ENGLOBAL03 A, B
2	3	228, 132	15ENGLOBAL04 A, B
3	4	228, 132	15ENGLOBAL05 A, B
3	3	228, 132	15ENGLOBAL06 A, B
4	4	228, 132	15ENGLOBAL07 A, B
4	3	228, 132	15ENGLOBAL08 A, B
SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT			
TORQUE-SPIKES ALSO PRESENT. BOOMS ALSO PRESENT			
Long Map (LM), Gain 3,4 Grating Start 0, MPW, E14ELM442, E14ELM228C			
Long Map (LM), Gain 3,4 Grating Start 0, MPW, E14ELM442, E14ELM132C			
Long Map (LM), Gain 3,4 Grating Start 0, MPW, E14ELM442, E14ELM360			
Galileo Activity Plan Form		04/24/98 15:59:23	rev 6/95



15ENEUR16H01

165DK:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/4889 TC= 3
 A= 728 pD= 2178 SR=17.450 RA50= 98.44 DEC50= 25.17 cone= 76.34 clock=281.85
 117DK:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/4889
 1:#s= 2 Cs= -5.70 XCs= 0.00 Cr= 5.69 XCr= 0.00 sD= 862 rD= 388

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENEUR16H01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

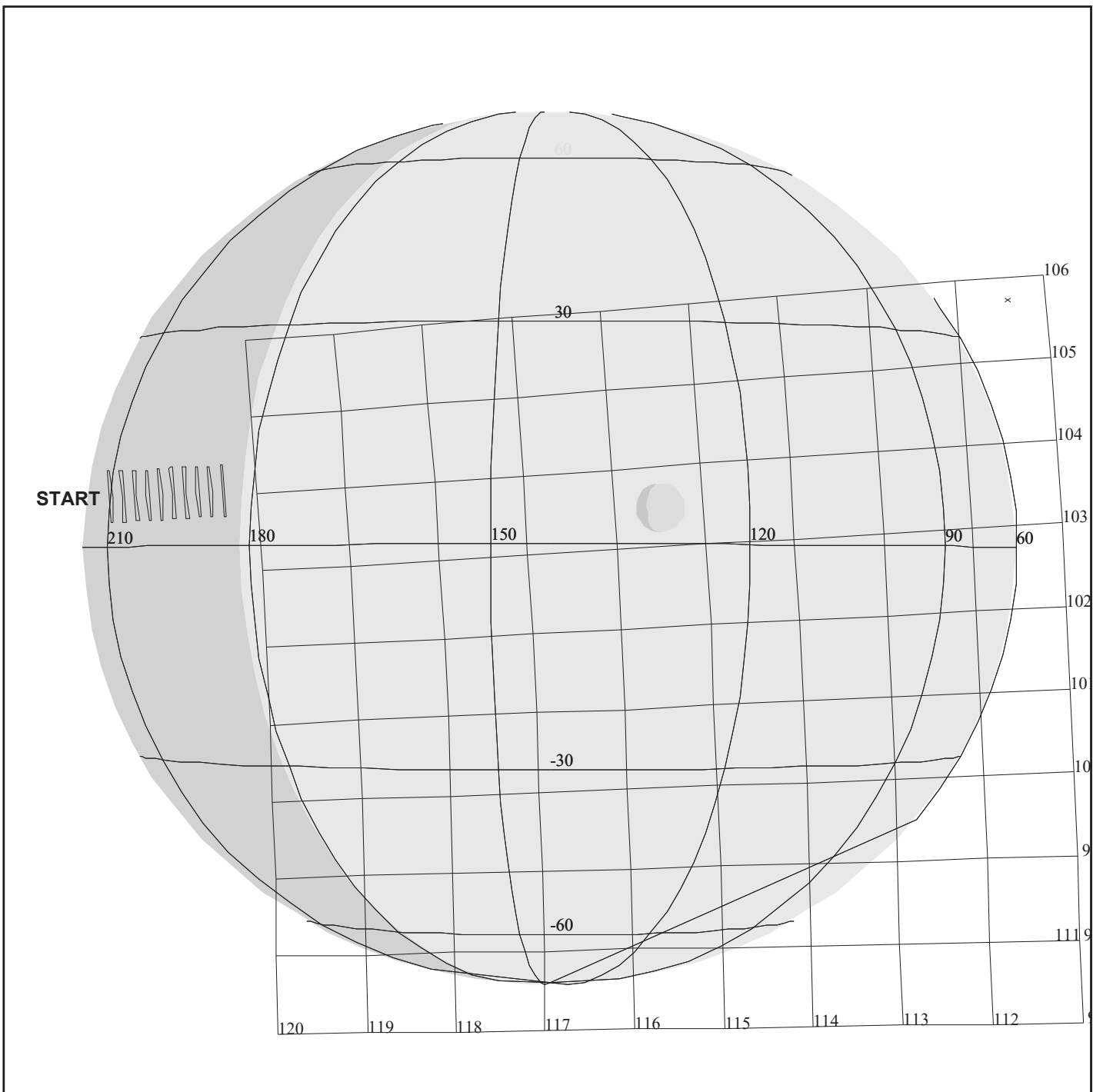
START:EEE 98-151/21:12:55.800 +CDS 957:00:0

BODY PLOT TIME:TARGET-TIME D= 2178 S= 0.500

OBSERVATION:15ENEUR16H01

DESCRIP:EUROPA_+16_HOURS

Europa 16 Hour Map		ACTIVITY ID: 15ENEUR16H01-	
		START TIME: 98-152/13:15:23.129	
Activity ID: Orbit 15 Target E Inst N OAPEL EUR16H SeqNo 01 -			
Title	Europa 16 Hour Map	Instrument	
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS Working Group
			NIMS SWG
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	EEE+CDS 00000953:00:0	98-152/13:15:23.129	EEE+000/16:03:35.333
End	EEE+CDS 00000973:00:0	98-152/13:35:36.462	EEE+000/16:23:48.666
Duration	00000020:00:0	000/00:20:13.333	000/00:20:13.333
Top Label	15ENEUR16H01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	Yes
		DMS	Yes
Observation Objective			
Distant Europa global mapping at 16 hours after closest approach. Special emphasis given to the non-ice components on Europa's surface.			
Two identical scans: the first in gain state 4 MPW, the second in gain state 3 LPU.			
Return shorter wavelengths in gain state 3 as they will saturate in gain state 4.			
Gain state 4 allows better resolution of low signals at longer wavelengths.			
Data Returned			
Design Detail			
Long Map, Nyquist sampling, 2 scans across the body.			
Scan 1: MPW, gain state 4			
Scan 2: LPU, gain state 3			
SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT			
BOOMS PRESENT			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM168V			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM72V			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM240V			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM240T			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM120T			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM360			
Galileo Activity Plan Form		04/24/98	15:59:24 rev 6/95



15JNJUPRTS02

TARGET G3.1 Iisac: 4/10/1998 14: 9:13

FILE:P.15JNJUPRTS02

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:JEE 98-152/02:34:27.800 -CDS 600:00:0

OBSERVATION:15JNJUPRTS02

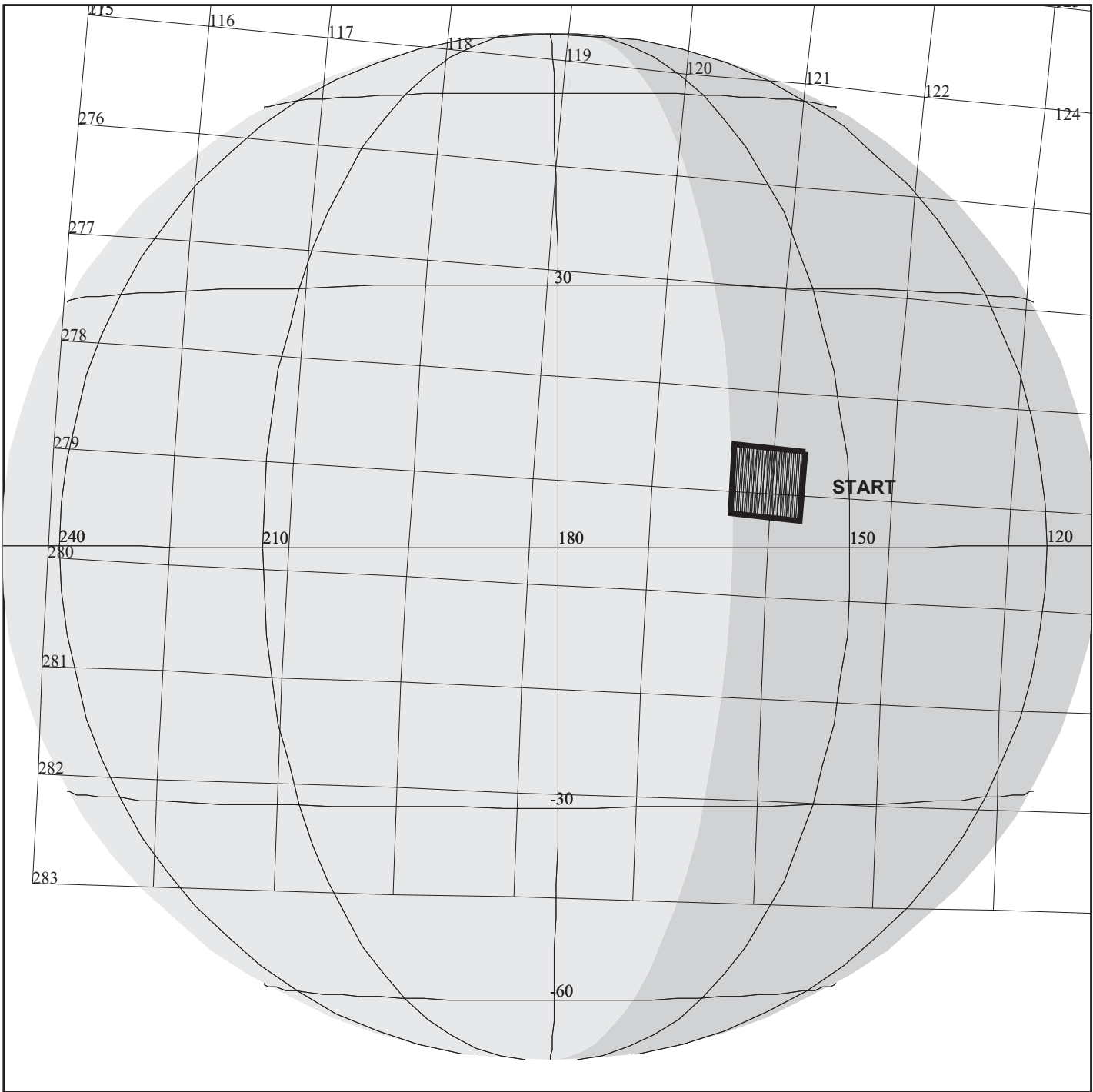
165DC:TT= 0 TMC= 1 C= 11.00 XC= 0.00 BS= 0/9391 TC= 1(7 195)
 A= 728 pD= 1810 SR=17.450 RA50=297.79 DEC50=-21.52 cone=121.65 clock=104.09
 117DC:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9391
 1:#s= 1 Cs= -18.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 40

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 1810 S= 0.850

DESCRIP:Jupiter_Realtime_Observation

Jupiter Realtime Observation		ACTIVITY ID:	15JNJUPRTS02*		
		START TIME:	98-152/14:26:24.415		
Activity ID: Orbit 15 Target J Inst N OAPEL JUPRTS SeqNo 02 *					
Title	Jupiter Realtime Observation		Instrument	NIMS	
Requestor	NIMS-AWG/M. SEGURA		Team	NIMS Working Group	AWG
Time System	CDS	Load ID	Calendar Date	06/01/98	Week 22
Start	JEE+CDS	00000704:00:0	98-152/14:26:24.415	JEE+000/11:51:49.333	
End	JEE+CDS	00000728:00:0	98-152/14:50:40.415	JEE+000/12:16:05.333	
Duration		00000024:00:0	000/00:24:16.000	000/00:24:16.000	
Top Label	15JNJUPRTS02*				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No
Observation Objective					
Search for Jupiter atmospheric composition and thermal variations over time.					
FREE_RTS= 0.16 mbits					
Data Returned					
Design Detail					
Long map. One scan, 20 RIMS long at +7 degrees latitude.					
No overlap in FOV.					
Nightside					
NIMS R/T returns every seventh FOV.					
SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT					
Long Map (LM), Gain 4, Grating Start 0, R/T, E15JLM408					
Galileo Activity Plan Form			04/24/98	15:59:24	rev 6/95



15JNJPDARK01

165DN:TT= 0 TMC= 1 C= 5.00 XC= 0.00 BS= 0/1835 TC= 1(7 159)
 A= 728 pD= 1810 SR=17.450 RA50= 49.51 DEC50= 20.91 cone=121.25 clock=278.90
 117DN:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/1835
 1:#s= 1 Cs= -18.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 40

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15JNJPDARK01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

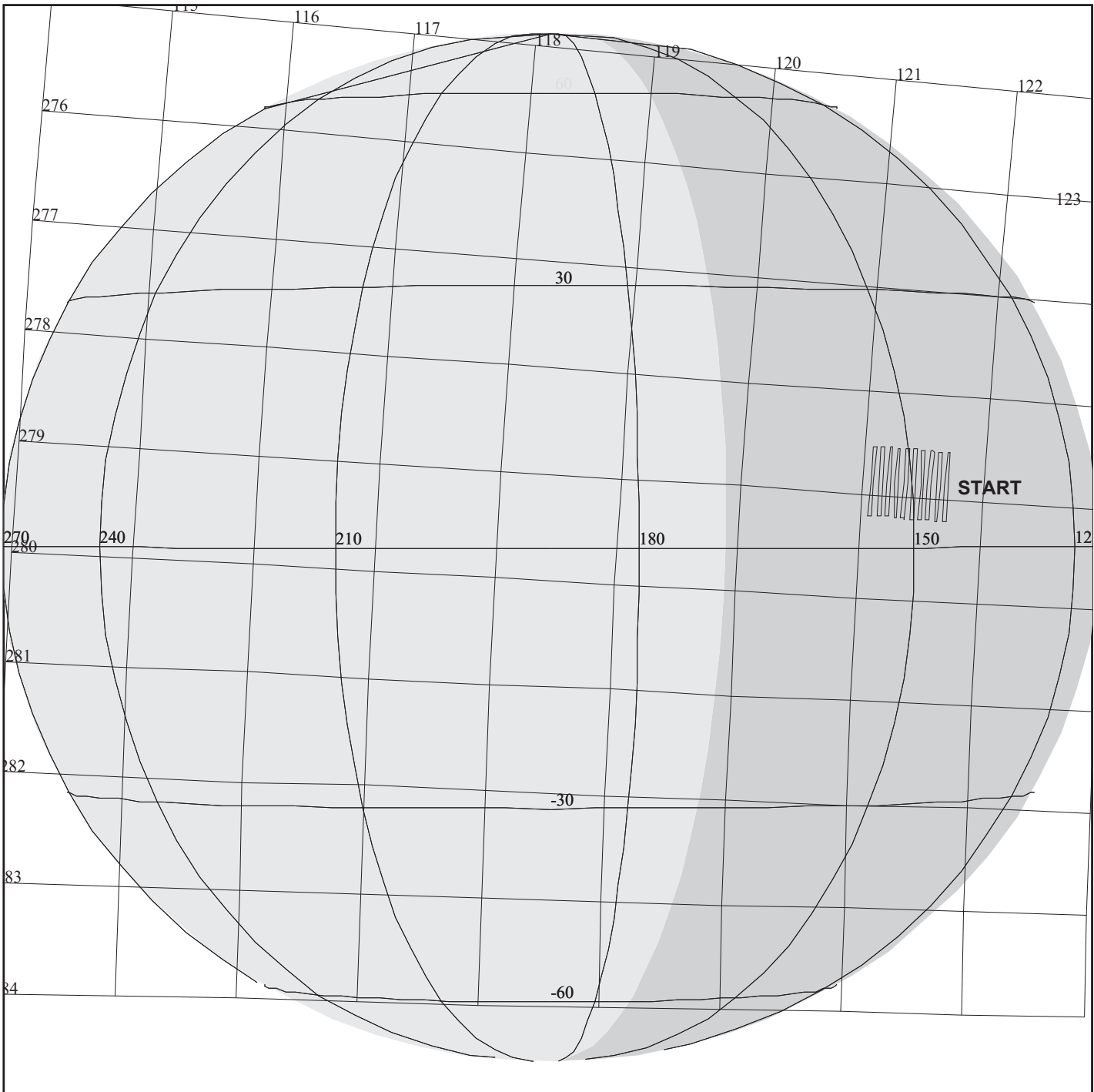
START:JEE 98-152/02:34:27.800 +CDS 842:00:0

BODY PLOT TIME:TARGET-TIME D= 1810 S= 1.000

OBSERVATION:15JNJPDARK01

DESCRIP:JUPITER_DARKSIDE_02

Jupiter Dark Observation		ACTIVITY ID: 15JNJPDARK01-	
		START TIME: 98-152/16:40:53.082	
Activity ID: Orbit 15 Target J Inst N OAPEL JPDARK SeqNo 01 -			
Title	Jupiter Dark Observation	Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS Working Group
Requestor		Instrument	AWG
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	JEE+CDS 00000837:00:0	98-152/16:40:53.082	JEE+000/14:06:18.000
End	JEE+CDS 00000852:00:0	98-152/16:56:03.082	JEE+000/14:21:28.000
Duration	00000015:00:0	000/00:15:10.000	000/00:15:10.000
Top Label	15JNJPDARK01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	ALL
		Scan Platform	No
		DMS	No
Observation Objective			
<p>Search for composition and thermal variations in Jupiter's NEB North Equatorial Belt at +7 latitude. First in a set of three observations covering the same nightside territory at the same phase angle but different incidence and emission angles.</p>			
Data Returned			
Design Detail			
<p>Single swath at +7 latitude, 155 to 170 W. longitude Nightside, gain state 4</p> <p>SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT</p>			
<p>Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M149B Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M80B Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M229B</p>			
Galileo Activity Plan Form		04/24/98 15:59:24	rev 6/95



15JNJUPRTS03

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15JNJUPRTS03

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:JEE 98-152/02:34:27.800 +CDS 856:00:0

OBSERVATION:15JNJUPRTS03

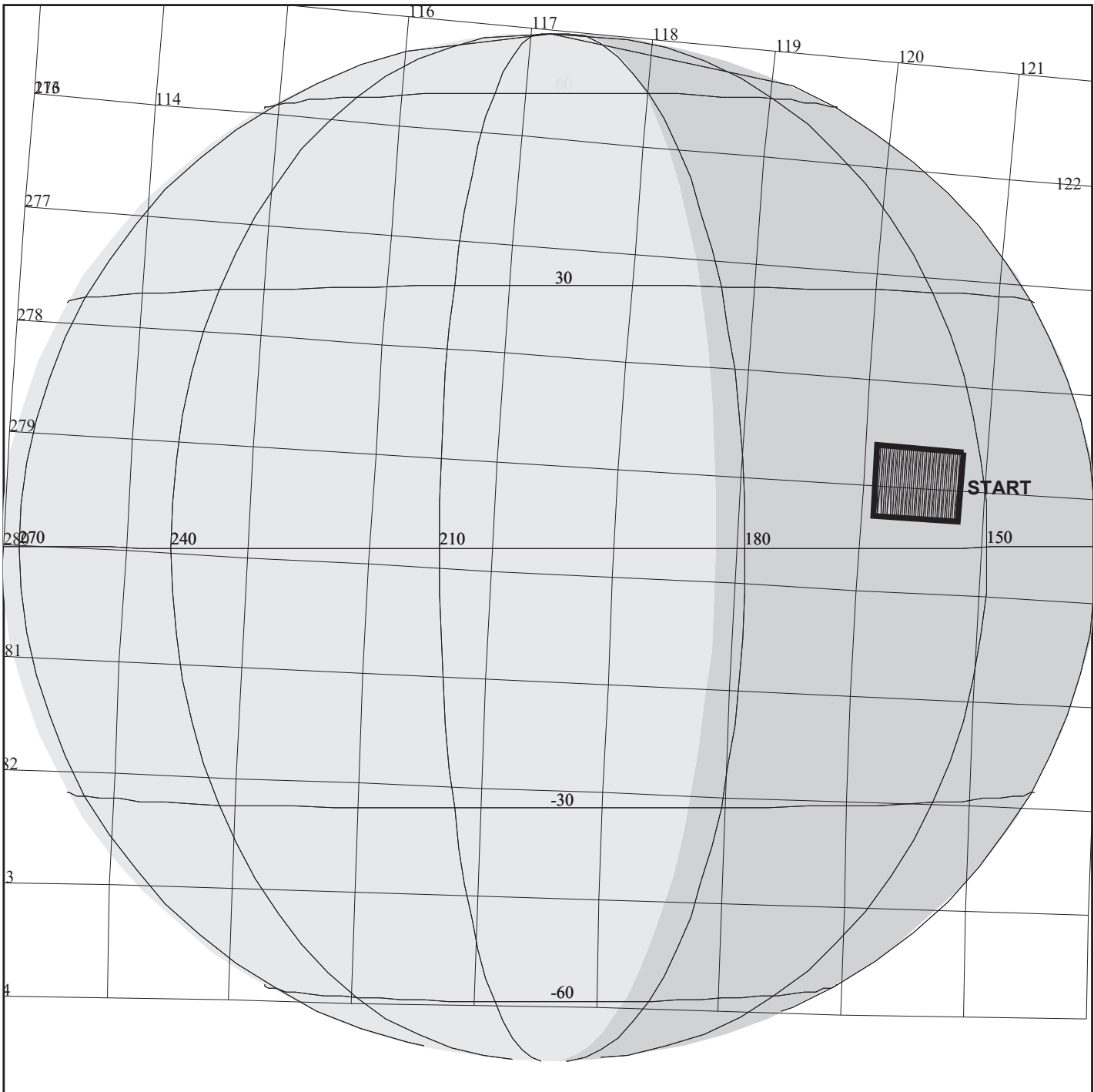
165DJ:TT= 0 TMC= 1 C= 5.00 XC= 0.00 BS= 0/4383 TC= 1(7 150)
 A= 728 pD= 1810 SR=17.450 RA50= 49.05 DEC50= 20.78 cone=121.69 clock=278.88
 117DJ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/4383
 1:#s= 1 Cs= -18.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 40

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 1810 S= 1.000

DESCRIP:Jupiter_Realtime_Observation

Jupiter Realtime Observation		ACTIVITY ID:	15JNJUPRTS03*		
		START TIME:	98-152/16:56:03.082		
Activity ID: Orbit 15 Target J Inst N OAPEL JUPRTS SeqNo 03 *					
Title	Jupiter Realtime Observation		Instrument		NIMS
Requestor	NIMS-AWG/A. OCAMPO		Team	NIMS Working Group	AWG
Time System	CDS	Load ID	Calendar Date	06/01/98	Week 22
Start	JEE+CDS	00000852:00:0	98-152/16:56:03.082	JEE+000/14:21:28.000	
End	JEE+CDS	00000866:00:0	98-152/17:10:12.415	JEE+000/14:35:37.333	
Duration		00000014:00:0	000/00:14:09.333	000/00:14:09.333	
Top Label	15JNJUPRTS03*				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No
Observation Objective					
Search for Jupiter atmospheric composition and thermal variations over time. FREE_RTS=0.16 mbits					
Data Returned					
Design Detail					
Long map. one scan, 10 Rims long at +7 degrees latitude. Nightside. No overlap in FOV. NIMS R/T only returns every seventh FOV.					
SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT					
Long Map (LM), Gain 4, Grating Start 0, R/T, E15JLM408					
Galileo Activity Plan Form			04/24/98	15:59:24	rev 6/95



15JNJP DARK02

165DO:TT= 0 TMC=1 C= 5.00 XC= 0.00 BS= 0/7841 TC= 1(7 159)
 A= 728 pD= 1810 SR=17.450 RA50= 49.99 DEC50= 21.01 cone=120.79 clock=278.97
 117DO:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7841
 1:#s= 1 Cs= -18.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 40

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15JNJP DARK02

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

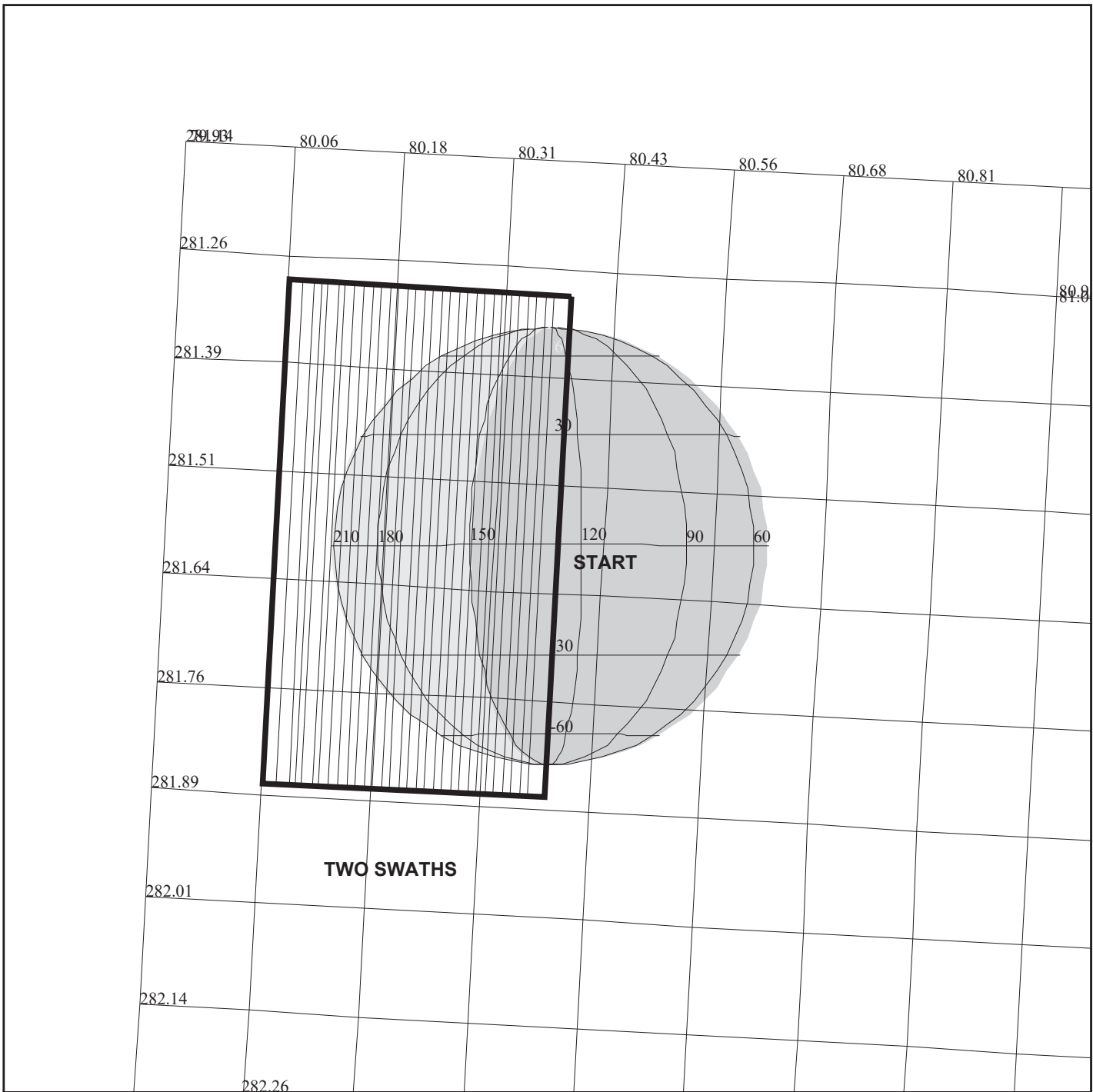
START:JEE 98-152/02:34:27.800 +CDS 875:00:0

BODY PLOT TIME:TARGET-TIME D= 1810 S= 1.000

OBSERVATION:15JNJP DARK02

DESCRIP:JUPITER_DARKSIDE_02

Jupiter Dark Observation		ACTIVITY ID:	15JNJPDARK02-		
		START TIME:	98-152/17:14:15.082		
Activity ID: Orbit 15 Target J Inst N OAPEL JPDARK SeqNo 02 -					
Title	Jupiter Dark Observation		Instrument		NIMS
Requestor	NIMS-SWG/M. SEGURA		Team	NIMS Working Group	AWG
Time System	CDS	Load ID	Calendar Date	06/01/98	Week 22
Start	JEE+CDS	00000870:00:0	98-152/17:14:15.082	JEE+000/14:39:40.000	
End	JEE+CDS	00000889:00:0	98-152/17:33:27.748	JEE+000/14:58:52.666	
Duration		00000019:00:0	000/00:19:12.666	000/00:19:12.666	
Top Label	15JNJPDARK02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes
Observation Objective					
<p>Search for composition and thermal variations in Jupiter's NEB North Equatorial Belt at +7 latitude. Second in a set of three observations covering the same nightside territory at the same phase angle but different incidence and emission angles.</p>					
Data Returned					
Design Detail					
<p>Single swath at +7 latitude, 155 to 170 W. longitude Nightside, gain state 4</p> <p>SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT</p>					
<p>Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M149B Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M80B Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M229B</p>					
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165DL:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/3483 TC= 3
 A= 728 pD= 2174 SR=17.450 RA50= 93.99 DEC50= 25.47 cone= 80.37 clock=281.58
 117DL:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/3483
 1:#s= 2 Cs= -5.20 XCs= 0.00 Cr= 5.20 XCr= 0.00 sD= 792 rD= 388

15ENEUR20H01

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENEUR20H01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

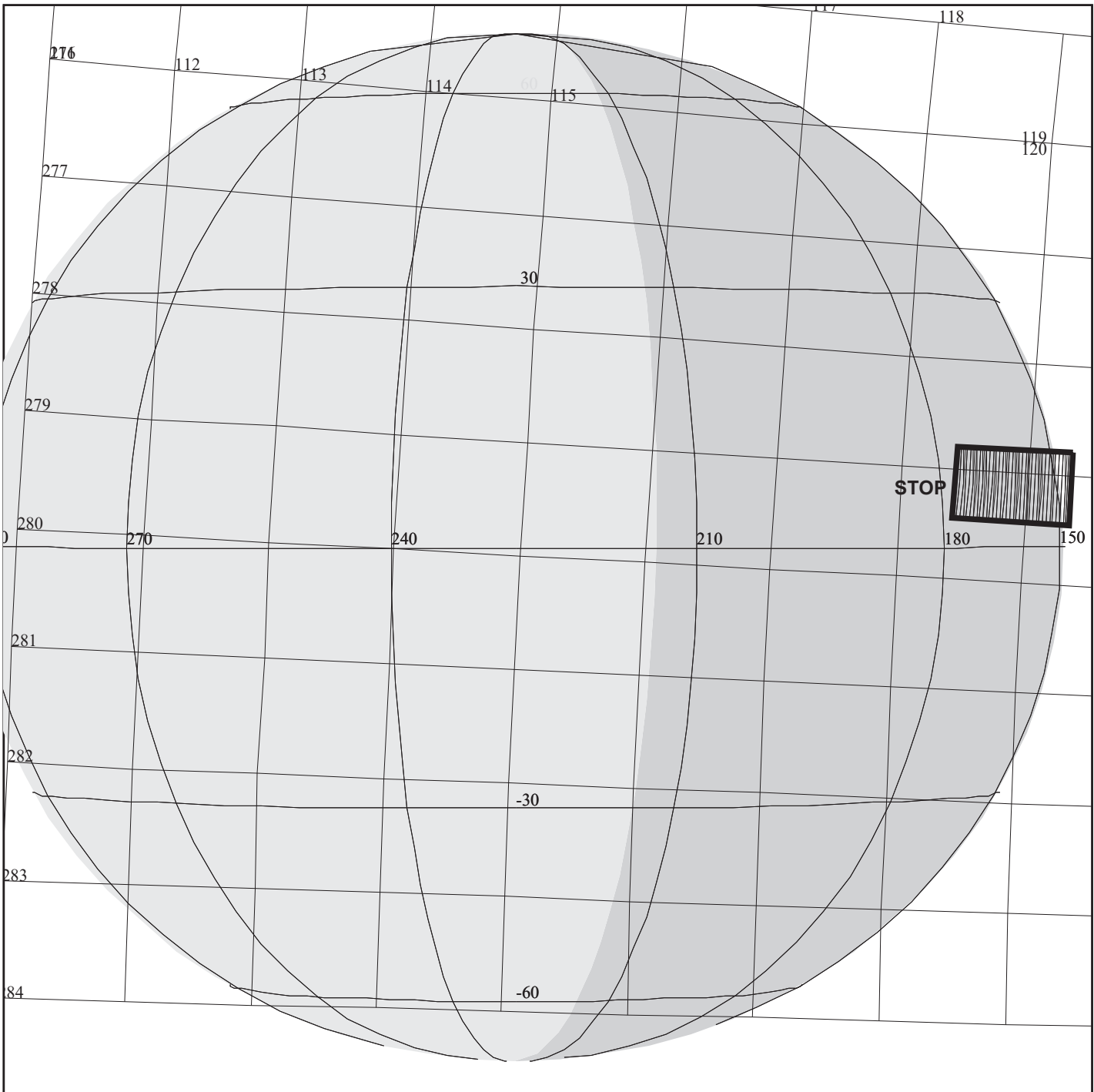
START:EEE 98-151/21:12:55.800 +CDS 1224:00:0

BODY PLOT TIME:TARGET-TIME D= 2174 S= 0.400

OBSERVATION:15ENEUR20H01

DESCRIP:EUROPA_+20_HOURS

Europa 20 Hour Map		ACTIVITY ID: 15ENEUR20H01-	
		START TIME: 98-152/17:39:17.129	
Activity ID: Orbit 15 Target E Inst N OAPEL EUR20H SeqNo 01 -			
Title	Europa 20 Hour Map	Instrument	
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS Working Group
			NIMS SWG
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	EEE+CDS 00001214:00:0	98-152/17:39:17.129	EEE+000/20:27:29.333
End	EEE+CDS 00001236:00:0	98-152/18:01:31.796	EEE+000/20:49:44.000
Duration	00000022:00:0	000/00:22:14.667	000/00:22:14.667
Top Label	15ENEUR20H01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	Yes
		DMS	Yes
Observation Objective			
Distant Europa global mapping at 20 hours after closest approach. Special emphasis given to the non-ice components on Europa's surface.			
Two identical scans: the first in gain state 4 MPW, the second in gain state 3 LPU.			
Return shorter wavelengths in gain state 3 as they will saturate in gain state 4.			
Gain state 4 allows better resolution of low signals at longer wavelengths.			
Data Returned			
Design Detail			
Long Map, Nyquist sampling, 2 scans across the body.			
Scan 1: MPW, gain state 4			
Scan 2: LPU, gain state 3			
SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT			
BOOMS PRESENT			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM168V			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM72V			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM240V			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM240T			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM120T			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM360			
Galileo Activity Plan Form		04/24/98	15:59:25 rev 6/95



15JNJPDARK03

165DP:TT= 0 TMC= 1 C= 4.50 XC= 0.00 BS= 0/7123 TC= 1(7 159)
 A= 728 pD= 1810 SR=17.450 RA50= 51.51 DEC50= 21.35 cone=119.34 clock=279.12
 117DP:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7123
 1:#s= 1 Cs= -18.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1820 rD= 40

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15JNJPDARK03

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

START:JEE 98-152/02:34:27.800 +CDS 926:00:0

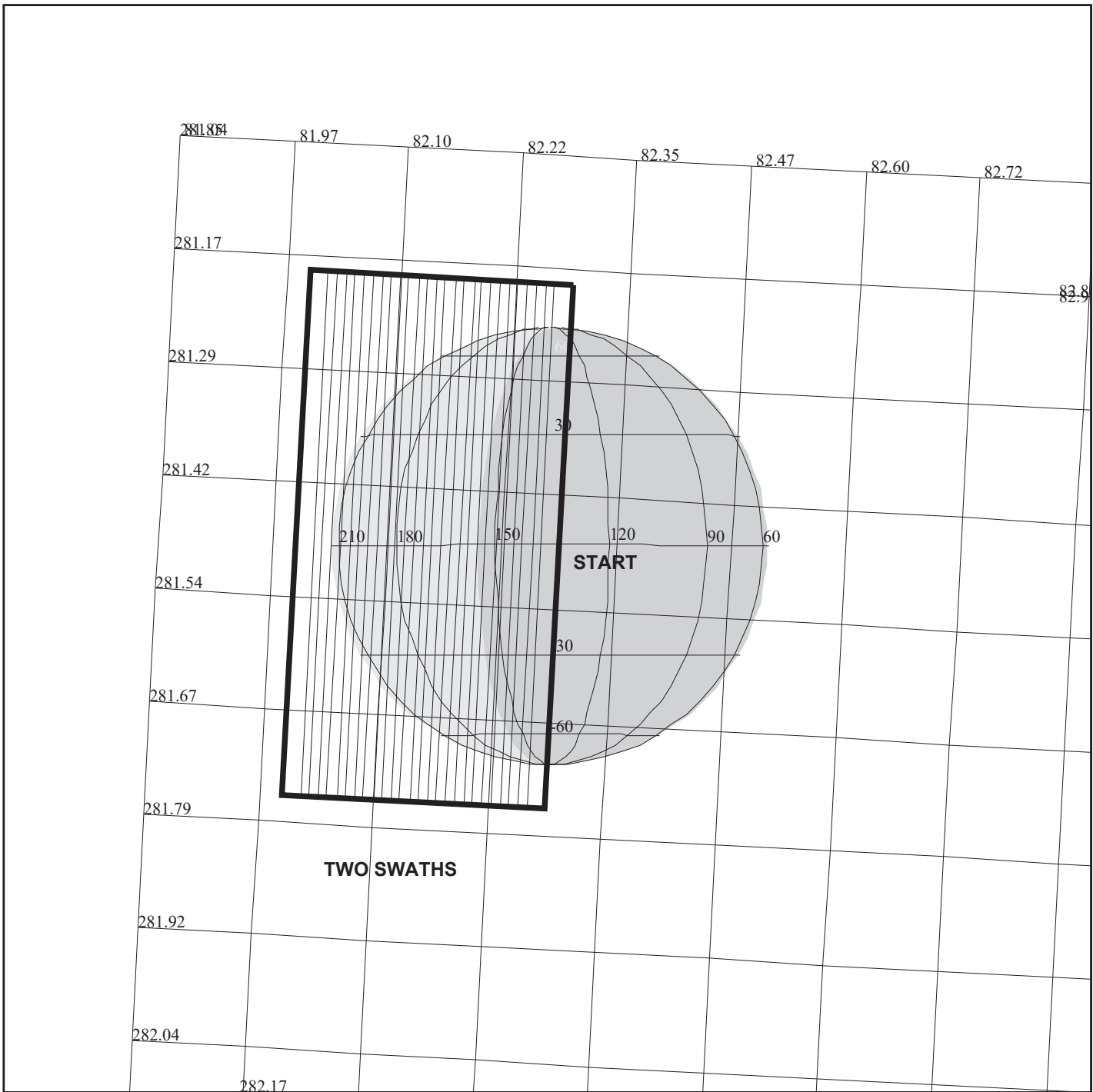
OBSERVATION:15JNJPDARK03

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 1810 S= 1.000

DESCRIP:JUPITER_DARKSIDE_03

Jupiter Dark Observation		ACTIVITY ID: 15JNJPDARK03-	
		START TIME: 98-152/18:06:49.748	
Activity ID: Orbit 15 Target J Inst N OAPEL JPDARK SeqNo 03 -			
Title	Jupiter Dark Observation	Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team NIMS Working Group	AWG
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	JEE+CDS 00000922:00:0	98-152/18:06:49.748	JEE+000/15:32:14.666
End	JEE+CDS 00000938:00:0	98-152/18:23:00.415	JEE+000/15:48:25.333
Duration	00000016:00:0	000/00:16:10.667	000/00:16:10.667
Top Label	15JNJPDARK03-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	ALL
		Scan Platform	No
		DMS	No
Observation Objective			
<p>Search for composition and thermal variations in Jupiter's NEB North Equatorial Belt at +7 latitude. Third in a set of three observations covering the same nightside territory at the same phase angle but different incidence and emission angles.</p>			
Data Returned			
Design Detail			
<p>Single swath at +7 latitude, 155 to 170 W. longitude Nightside, gain state 4</p> <p>SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT</p>			
<p>Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M149B Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M80B Long Map (LM), Gain 4, Grating Start 0, LPU, E15J5M253B, E15J5M229B</p>			
Galileo Activity Plan Form		04/24/98 15:59:25	rev 6/95



15ENEUR22H01

165DM:TT= 0 TMC=1 C= 0.00 XC= 0.00 BS= 0/6951 TC= 3
 A= 728 pD= 1810 SR=17.450 RA50= 91.88 DEC50= 25.55 cone= 82.27 clock=281.47
 117DM:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/6951
 1:#s= 2 Cs= -4.75 XCs= 0.00 Cr= 4.80 XCr= 0.00 sD= 716 rD= 388

TARGET G3.1 lisac: 4/10/1998 14: 9:13

FILE:P.15ENEUR22H01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980330-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:EEE 98-151/21:12:55.800 +CDS 1298:00:0

BODY PLOT TIME:TARGET-TIME D= 1810 S= 0.400

OBSERVATION:15ENEUR22H01

DESCRIP:EUROPA_+22_HOURS

Europa 22 Hour Map		ACTIVITY ID: 15ENEUR22H01-	
		START TIME: 98-152/18:54:06.462	
Activity ID: Orbit 15 Target E Inst N OAPEL EUR22H SeqNo 01 -			
Title	Europa 22 Hour Map	Instrument	
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS Working Group
			NIMS SWG
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	EEE+CDS 00001288:00:0	98-152/18:54:06.462	EEE+000/21:42:18.666
End	EEE+CDS 00001314:00:0	98-152/19:20:23.796	EEE+000/22:08:36.000
Duration	00000026:00:0	000/00:26:17.334	000/00:26:17.334
Top Label	15ENEUR22H01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	Yes
		DMS	Yes
Observation Objective			
Distant Europa global mapping at 22 hours after closest approach. Special emphasis given to the non-ice components on Europa's surface.			
Two identical scans: the first in gain state 4 MPW, the second in gain state 3 LPU.			
Return shorter wavelengths in gain state 3 as they will saturate in gain state 4.			
Gain state 4 allows better resolution of low signals at longer wavelengths.			
Data Returned			
Design Detail			
Long Map, Nyquist sampling, 2 scans across the body.			
Scan 1: MPW, gain state 4			
Scan 2: LPU, gain state 3			
SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT			
BOOMS PRESENT			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM168V			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM72V			
Long Map (LM), Gain 3, Grating Start 0, LPU, E15ELM240V, E15ELM240V			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM240T			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM120T			
Long Map (LM), Gain 4, Grating Start 0, MPW, E15ELM442, E15ELM360			
Galileo Activity Plan Form		04/24/98	15:59:25 rev 6/95

Chopper off		ACTIVITY ID: 15NNCHOPOF01-	
		START TIME: 98-152/19:24:26.462	
Activity ID: Orbit 15 Target N Inst N OAPEL CHOPOF SeqNo 01 -			
Title	Chopper off		Instrument
Requestor	NIMS-SWG/M. SEGURA		NIMS
	Team	NIMS	Working Group
Time System	CDS	Load ID	Calendar Date 06/01/98 Week 22
Start	EEE+CDS 00001318:00:0	98-152/19:24:26.462	EEE+000/22:12:38.666
End	EEE+CDS 00001328:00:0	98-152/19:34:33.129	EEE+000/22:22:45.333
Duration	00000010:00:0	000/00:10:06.667	000/00:10:06.667
Top Label	15NNCHOPOF01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	0	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	No
		DMS	No
Observation Objective			
Preserve the lifetime of the NIMS Chopper by turning it off during Cruise.			
Design Detail			
37IST 1,0,0,OFF,0,0,0 Chopper 63Hz			
37IST 1,1,0,OFF,0,0,0 Chopper Off			
Galileo Activity Plan Form		04/24/98 15:59:25	rev 6/95

NIMS RCT Real-Time Calibration		ACTIVITY ID: 15NNRCTRLT01-	
		START TIME: 98-180/08:00:05.666	
Activity ID: Orbit 15 Target N Inst N OAPEL RCTRLT SeqNo 01 -			
Title	NIMS RCT Real-Time Calibration		Instrument
Requestor	NIMS-AWG/K. BAINES	Team	NIMS Working Group
			NIMS AWG
Time System	CDS	Load ID	Calendar Date 06/29/98 Week 26
Start	RTA+CDS 0:00:0	98-180/08:00:05.666	RTA+000/00:00:00.000
End	RTA+CDS 00000787:00:0	98-180/21:15:50.332	RTA+000/13:15:44.666
Duration	00000787:00:0	000/13:15:44.666	000/13:15:44.666
Top Label	15NNRCTRLT01-		
Bottom Label			
Plot Key	NIMS	Type	SCI
CDS Bytes	450	Report Options	BOTH
CDS Source	OAP	Spin State	DUAL
		Scan Platform	No
		DMS	No
Observation Objective			
<p>This observation is a NIMS radiometric calibration using the RCT target. The data will be used to calibrate the NIMS thermal detectors. The calibration data will be returned using Real-Time Telemetry. An OPCAL is also performed.</p>			
Design Detail			
<ol style="list-style-type: none"> 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. <p>Long Map (LM), Gain 1, Grating Start 0, R/T, RCT252 Long Map (LM), Gain 4, Grating Start 0, R/T, OPCAL48</p>			
Galileo Activity Plan Form		04/24/98 15:59:25 rev 6/95	

Chapter 6 - Edit Tables

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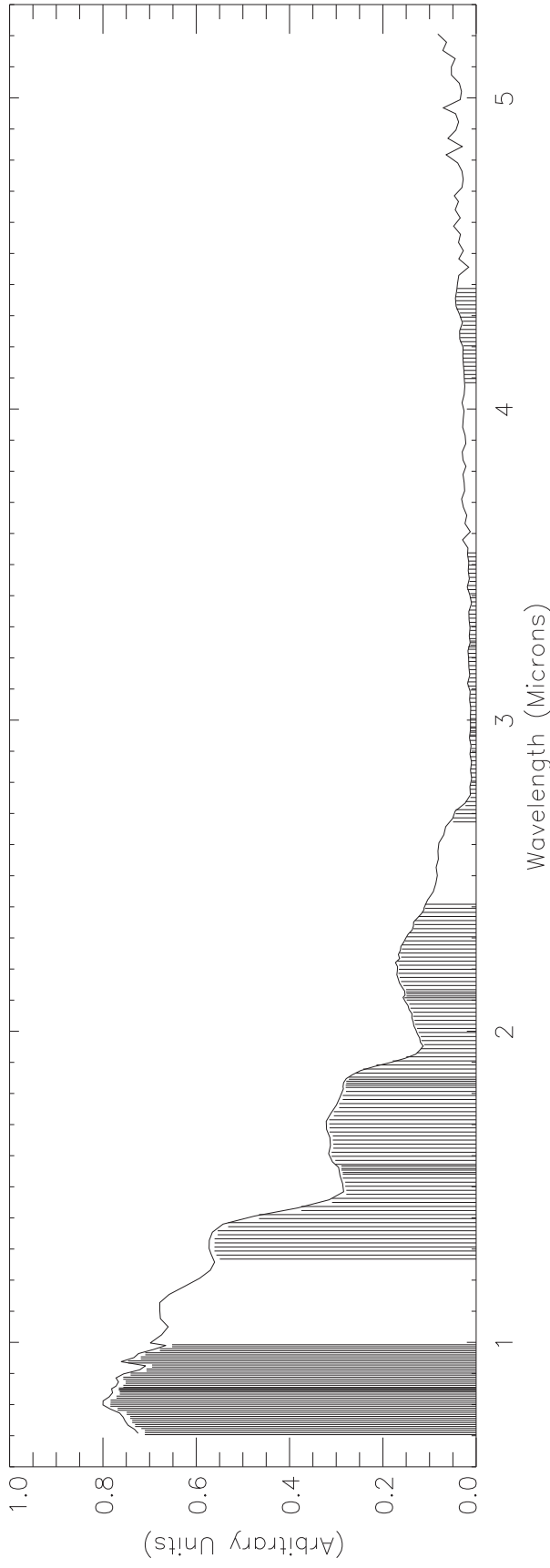
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Introduction to Chapter 6

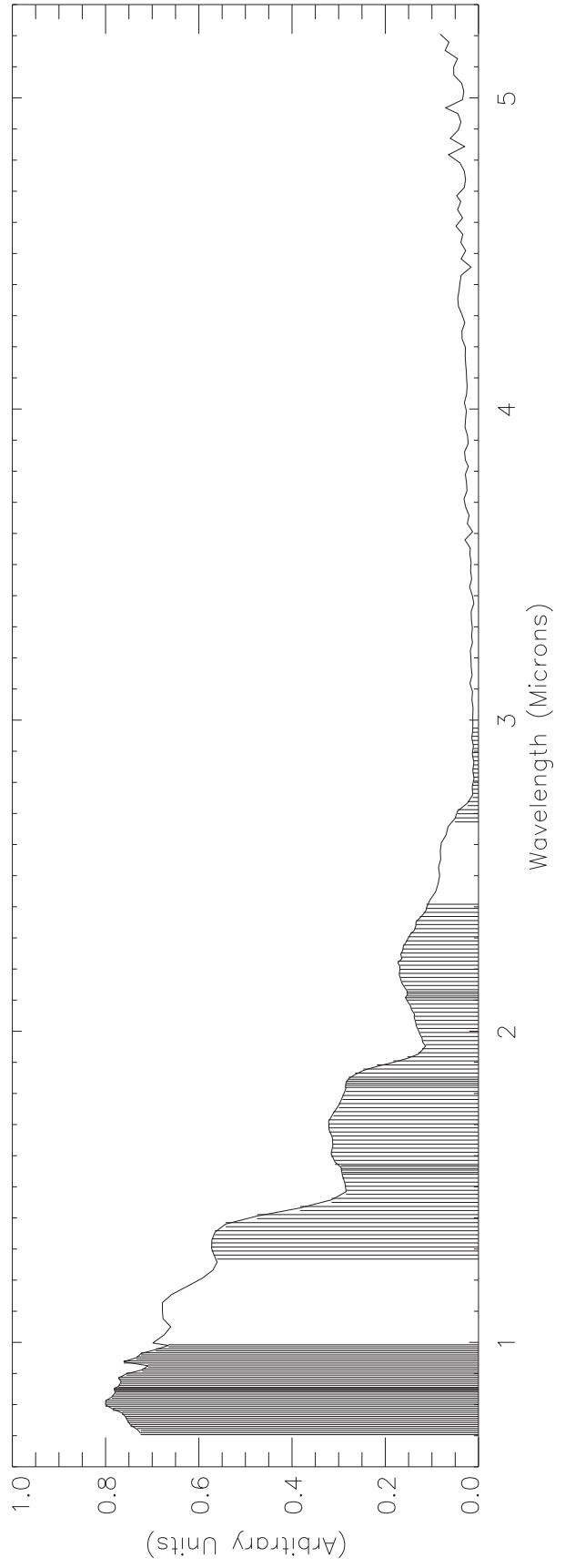
NIMS Edit Table Plots

This chapter contains plots of the NIMS Edit Tables used in E15. 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.

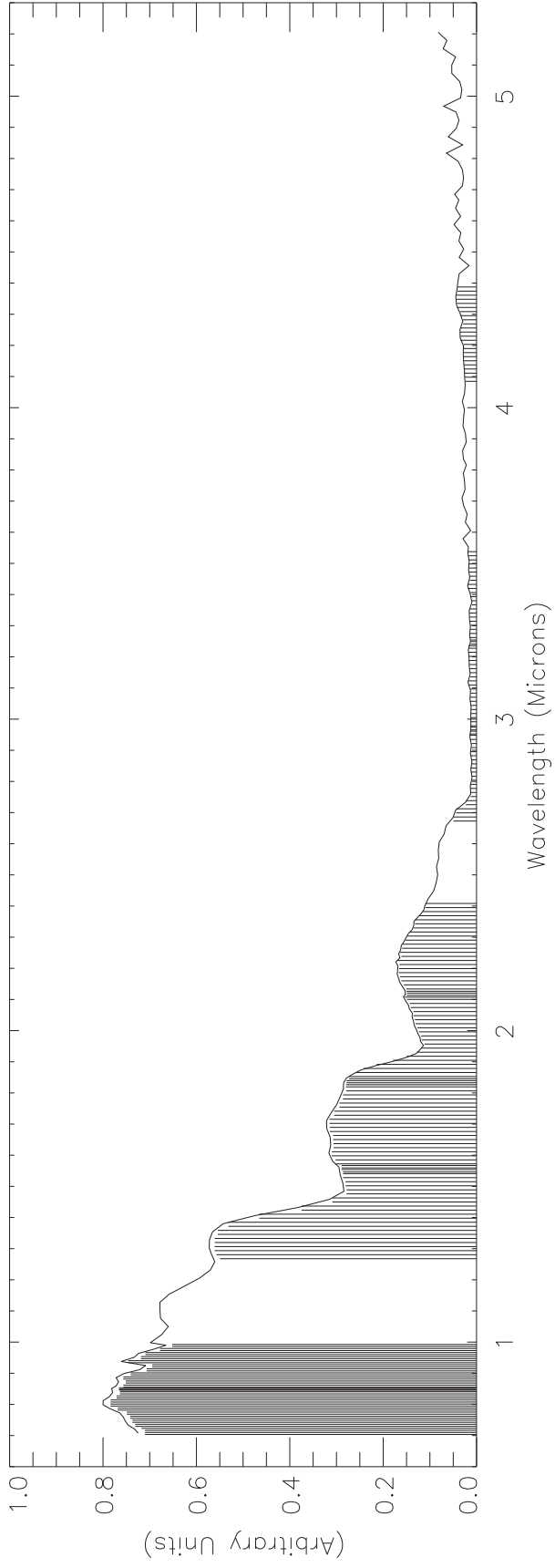
B_ELM240V.ETB



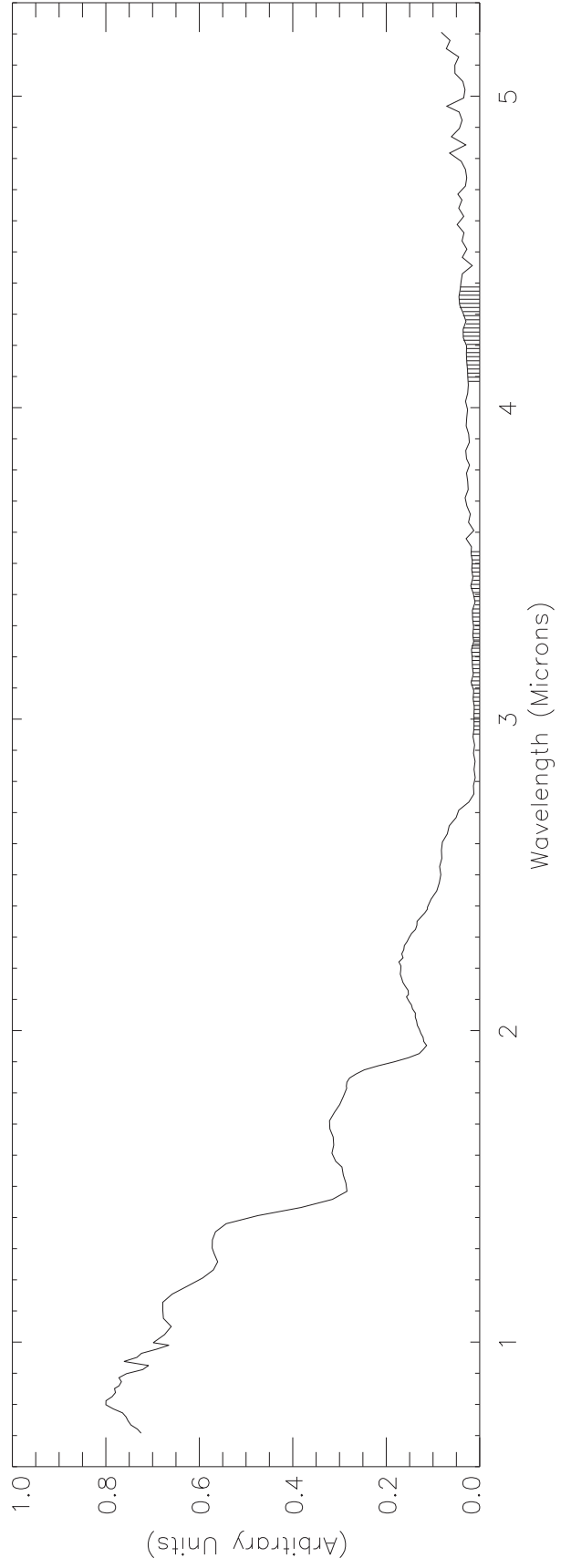
B_ELM168V.PBK



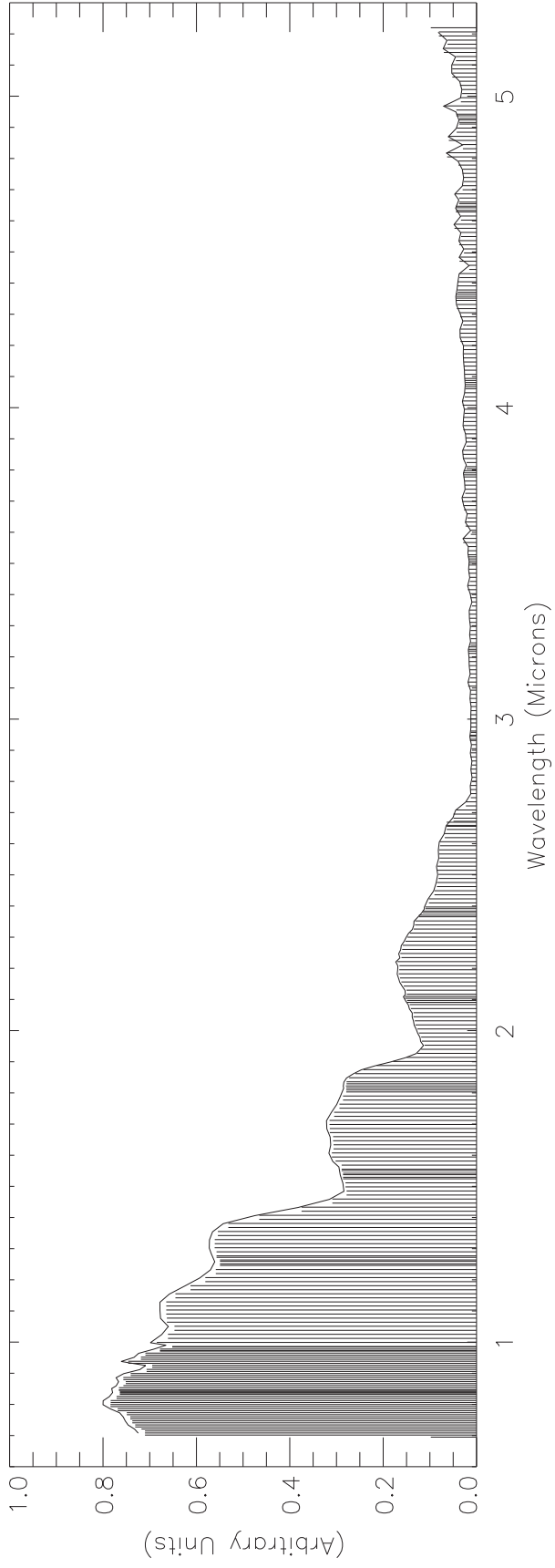
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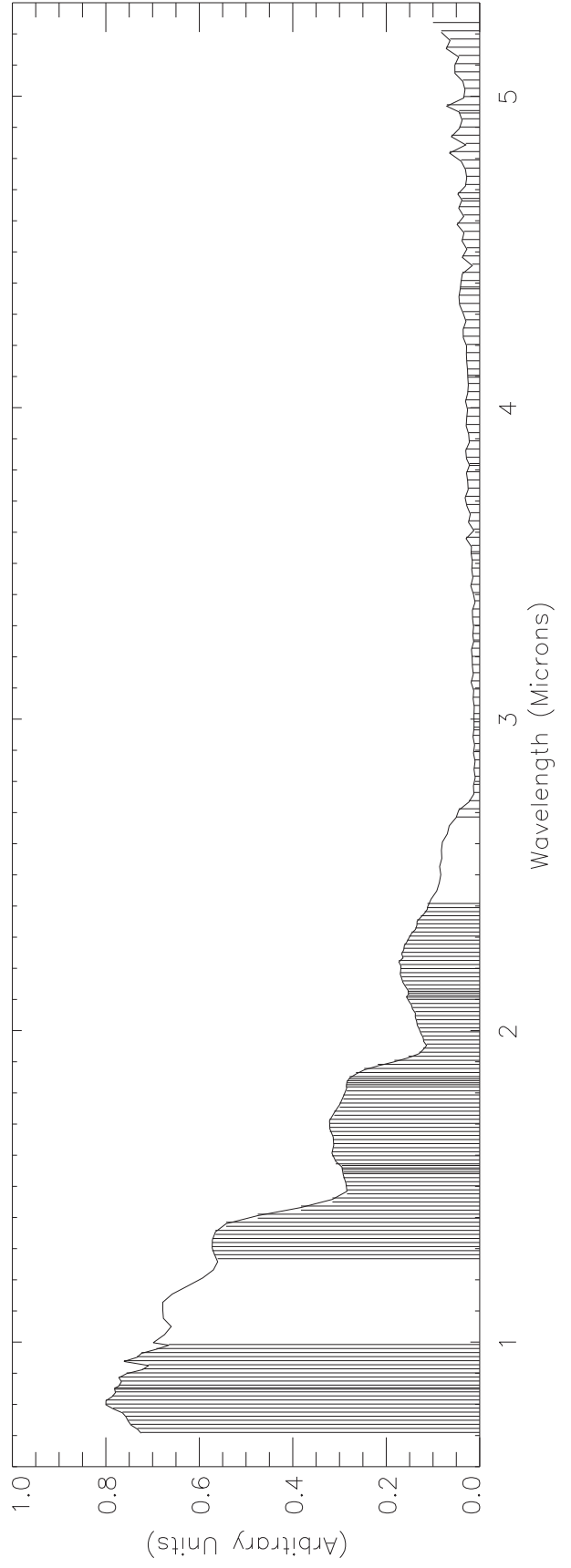
ELM72V.PBK



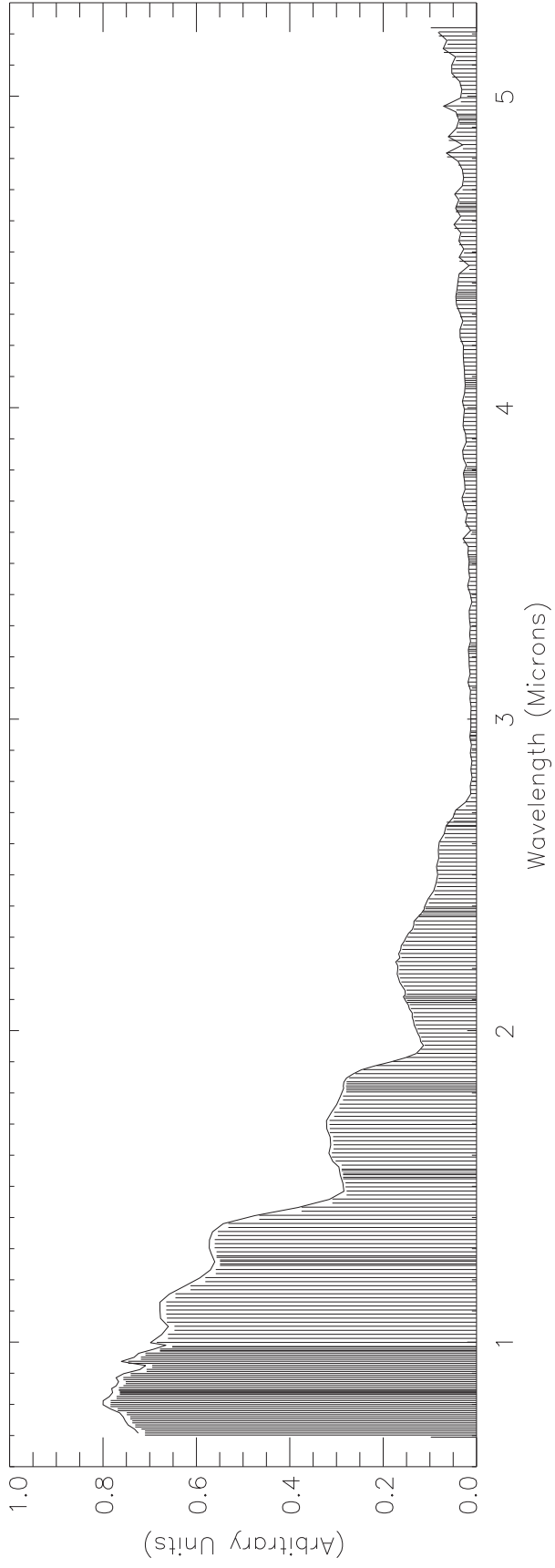
ELM442.ETB



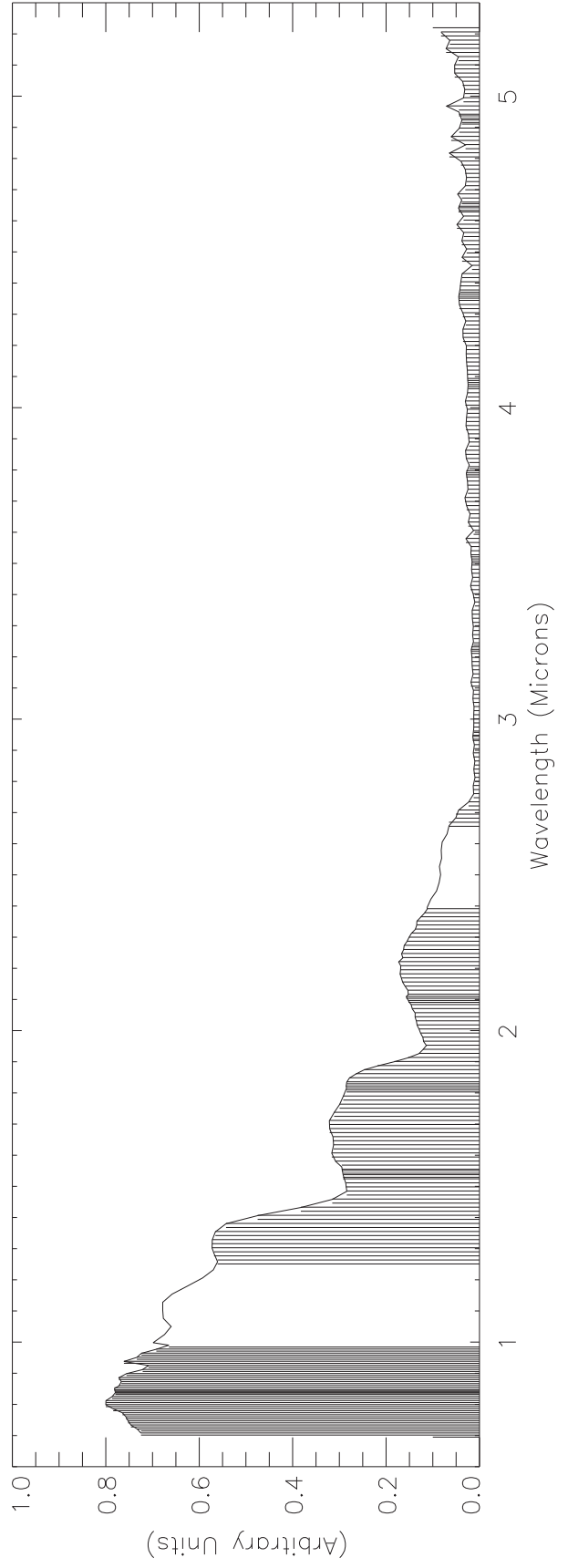
ELM228C.PBK



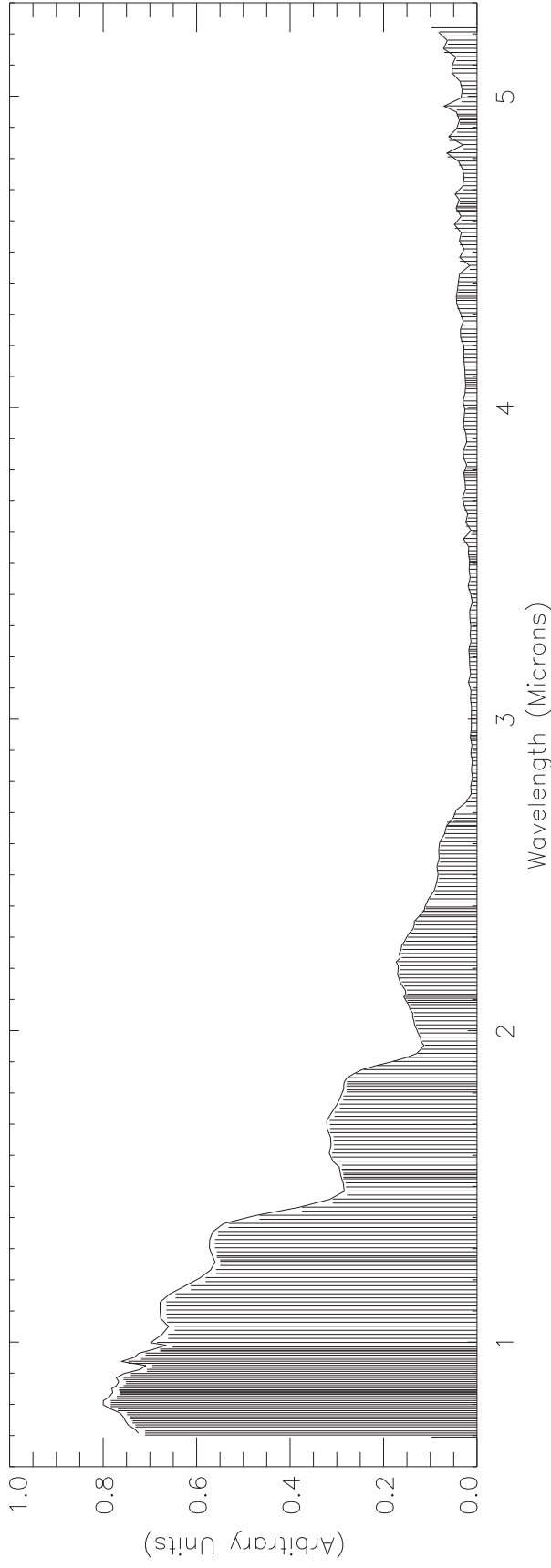
ELM442.ETB



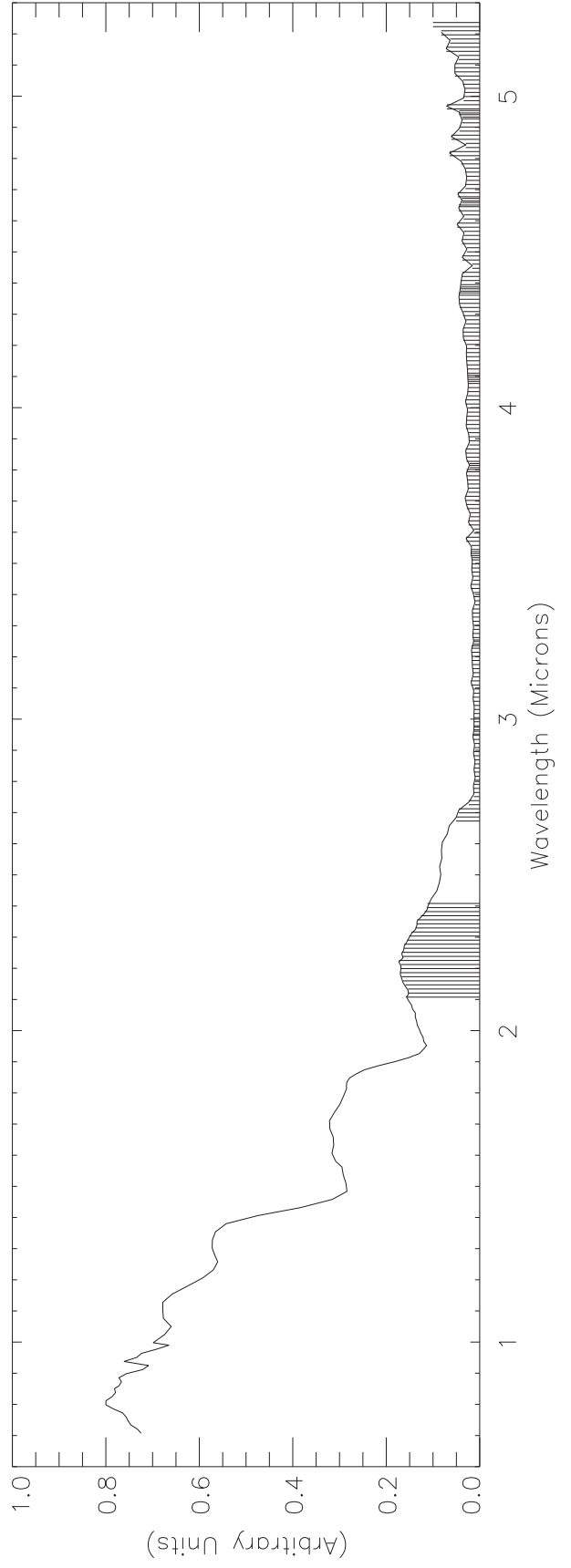
ELM360.PBK



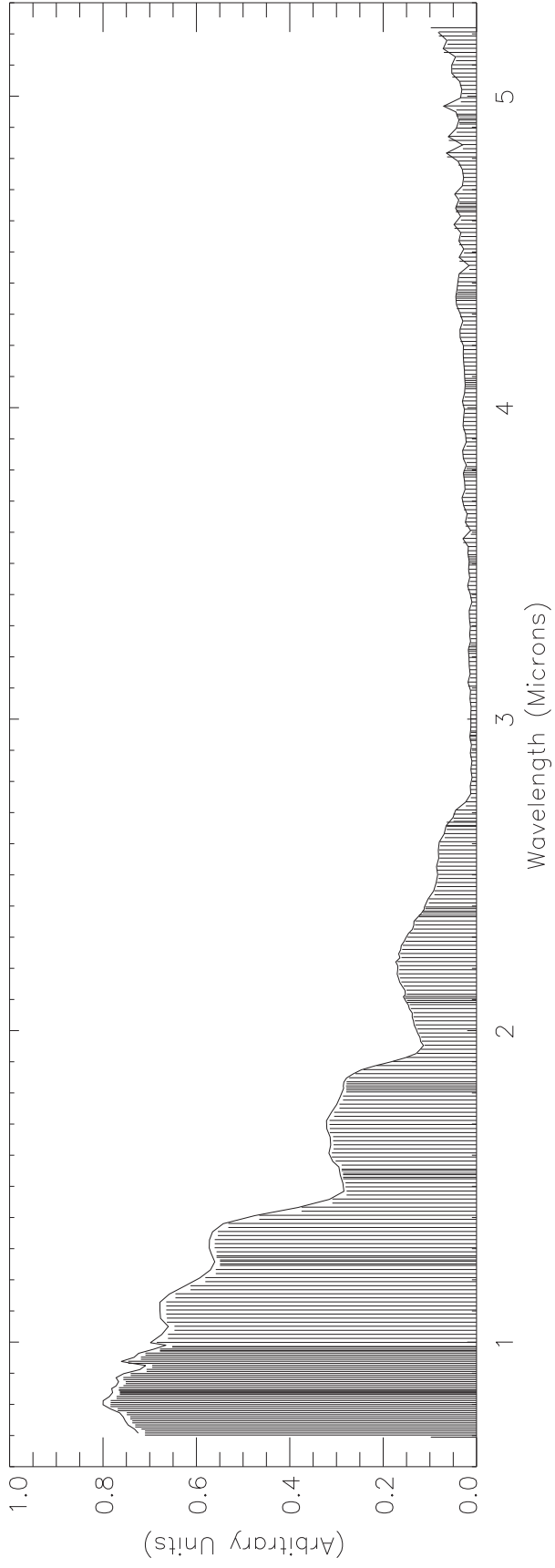
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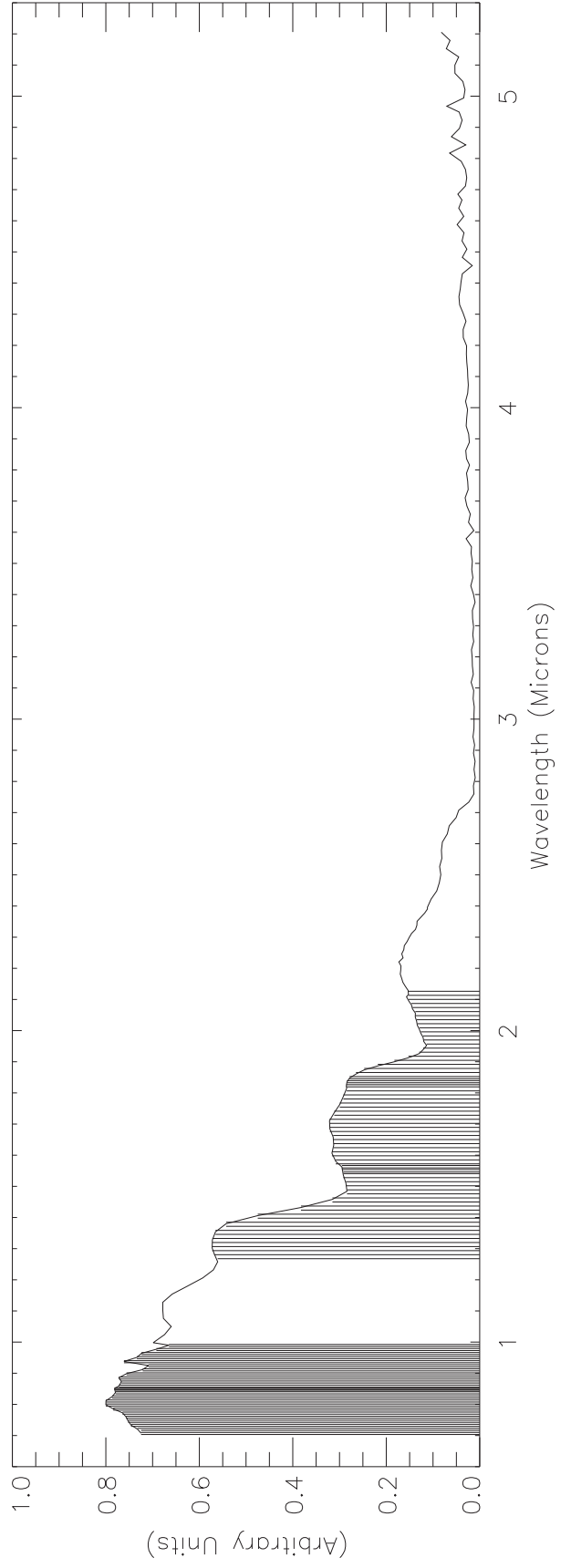
B_ELM240T.PBK



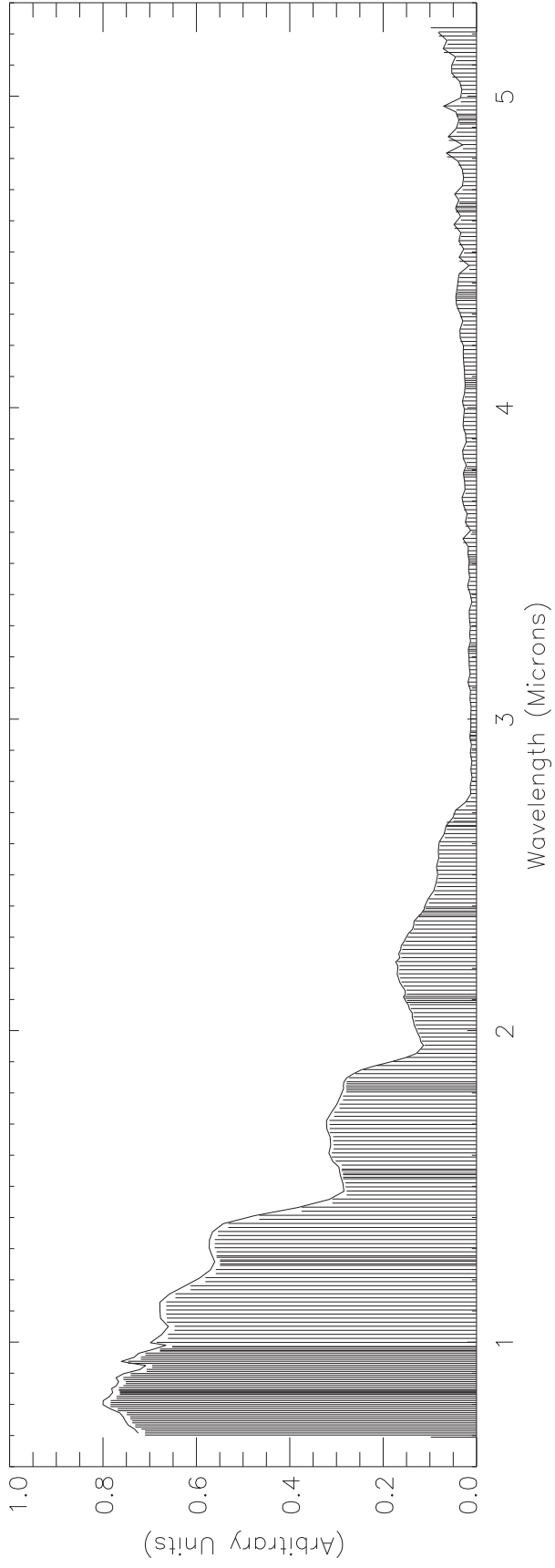
ELM442.ETB



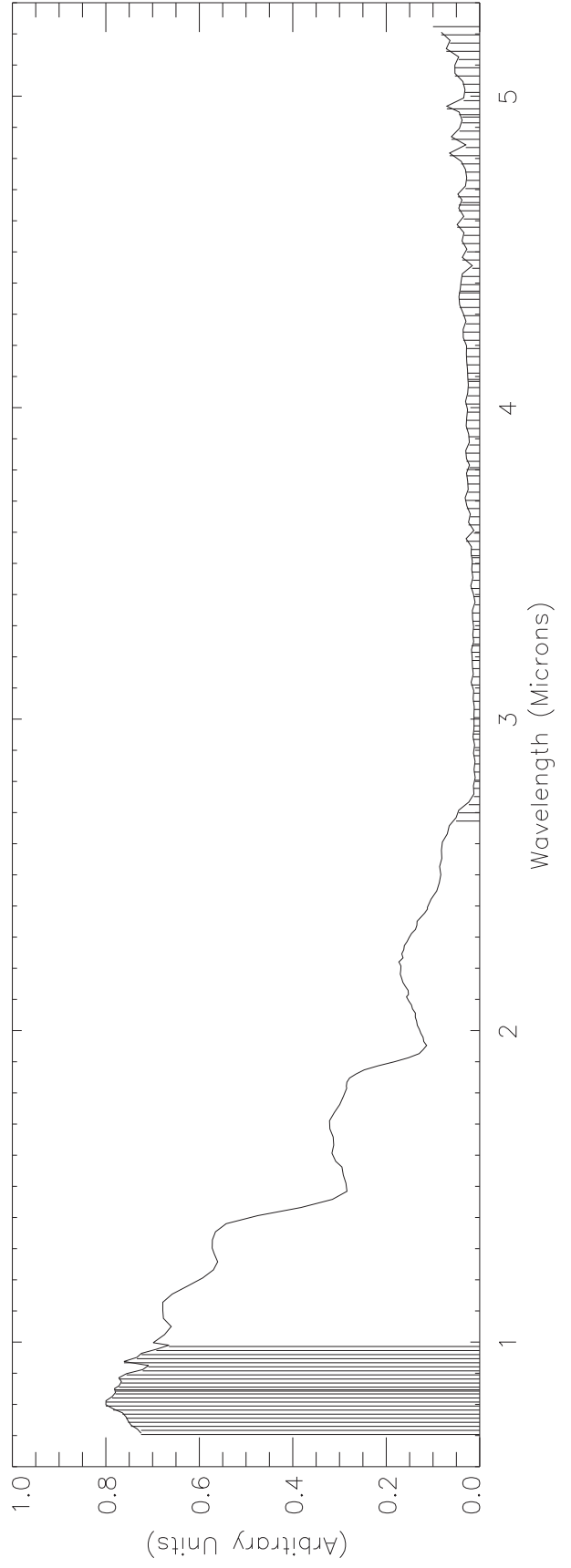
ELM120T.PBK



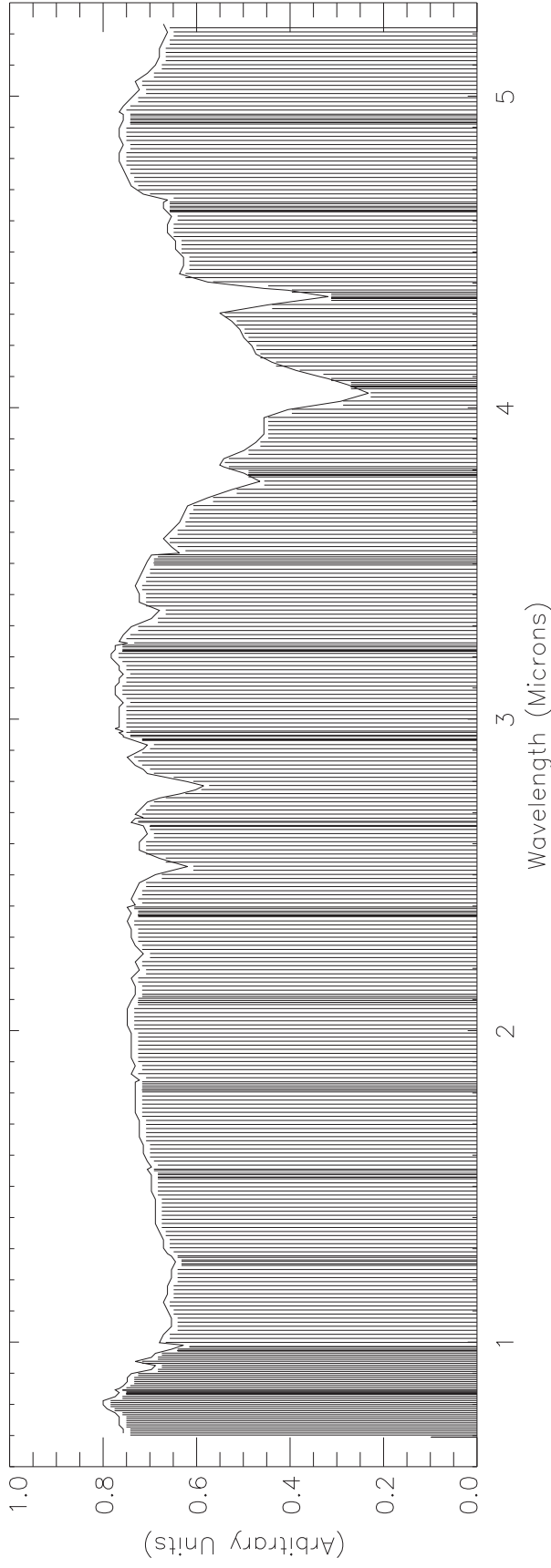
ELM442.ETB



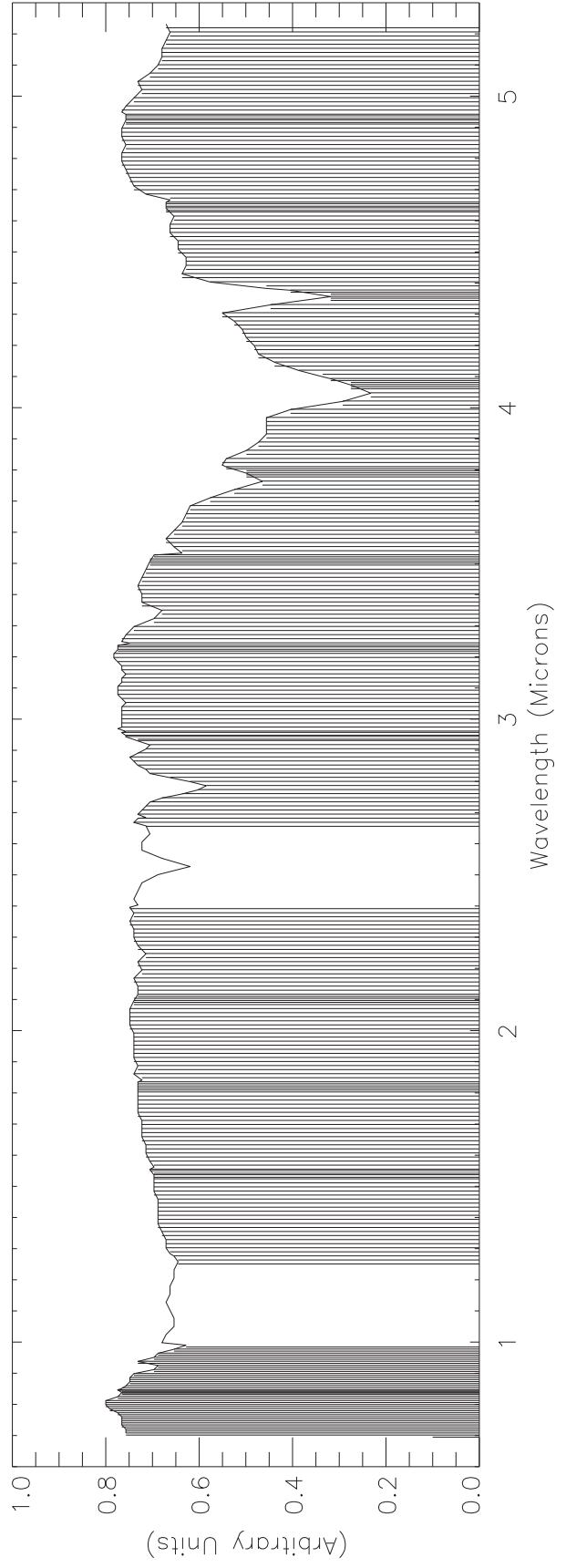
ELM132C.PBK



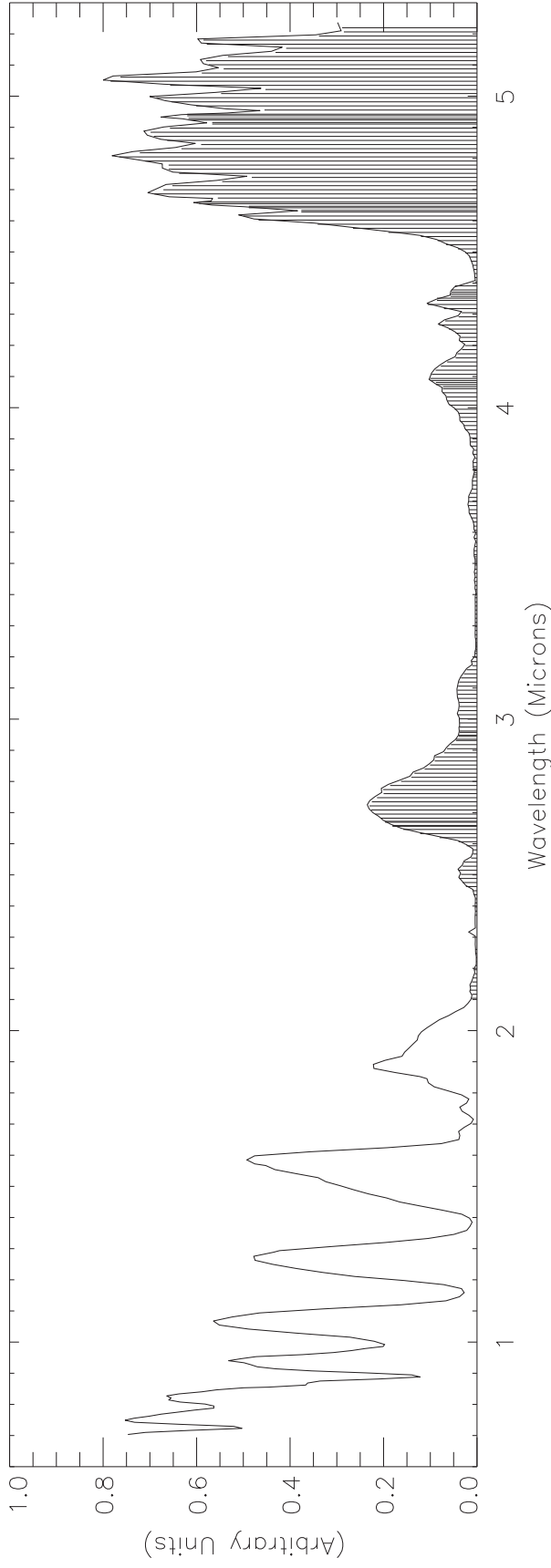
ILM442.ETB



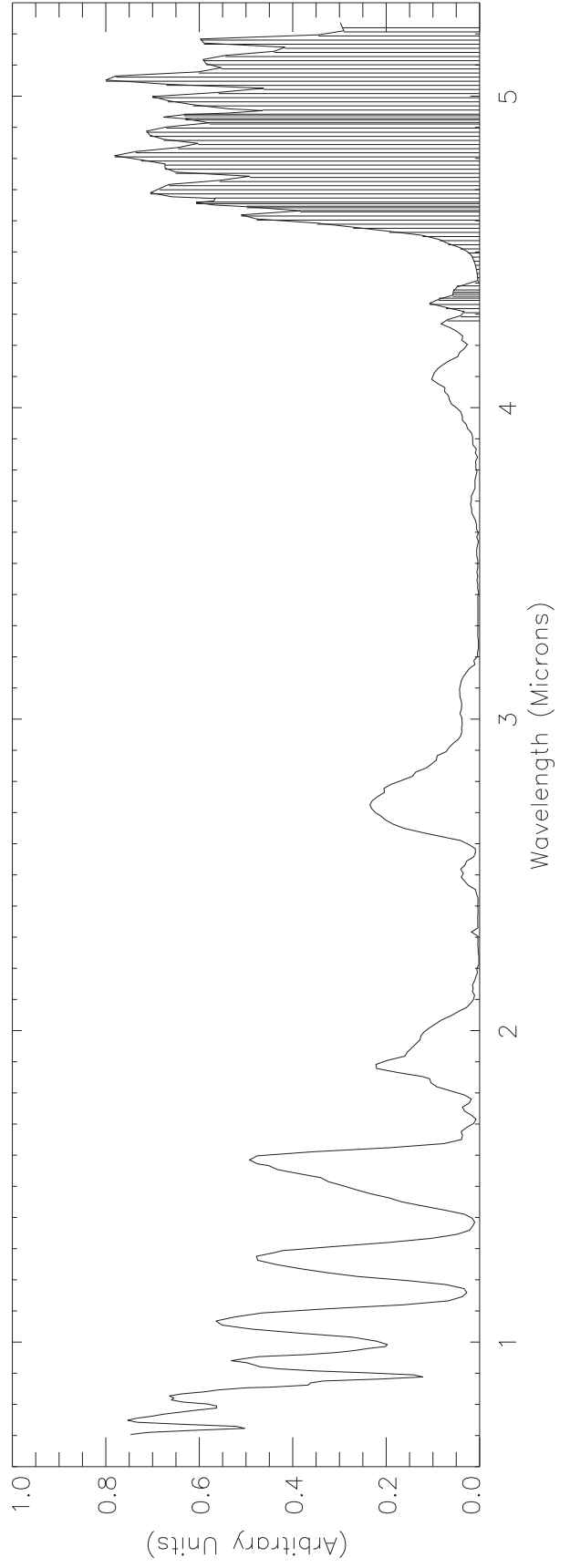
ILM360.PBK



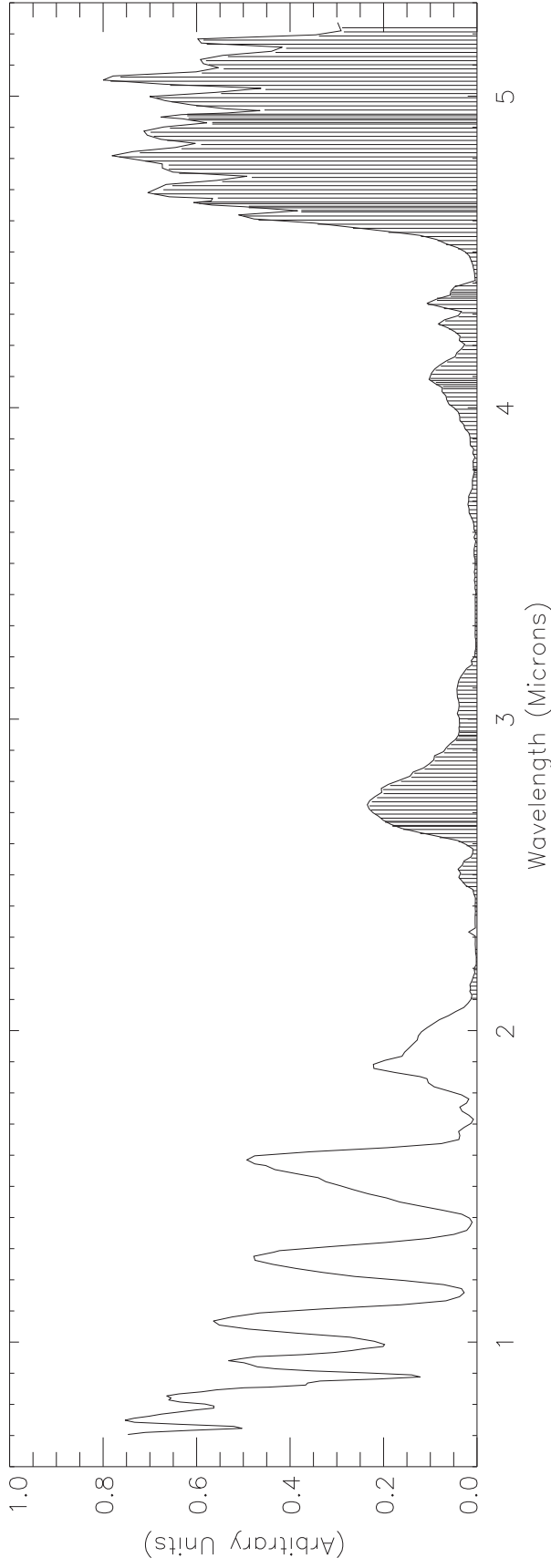
J5M253B.ETB



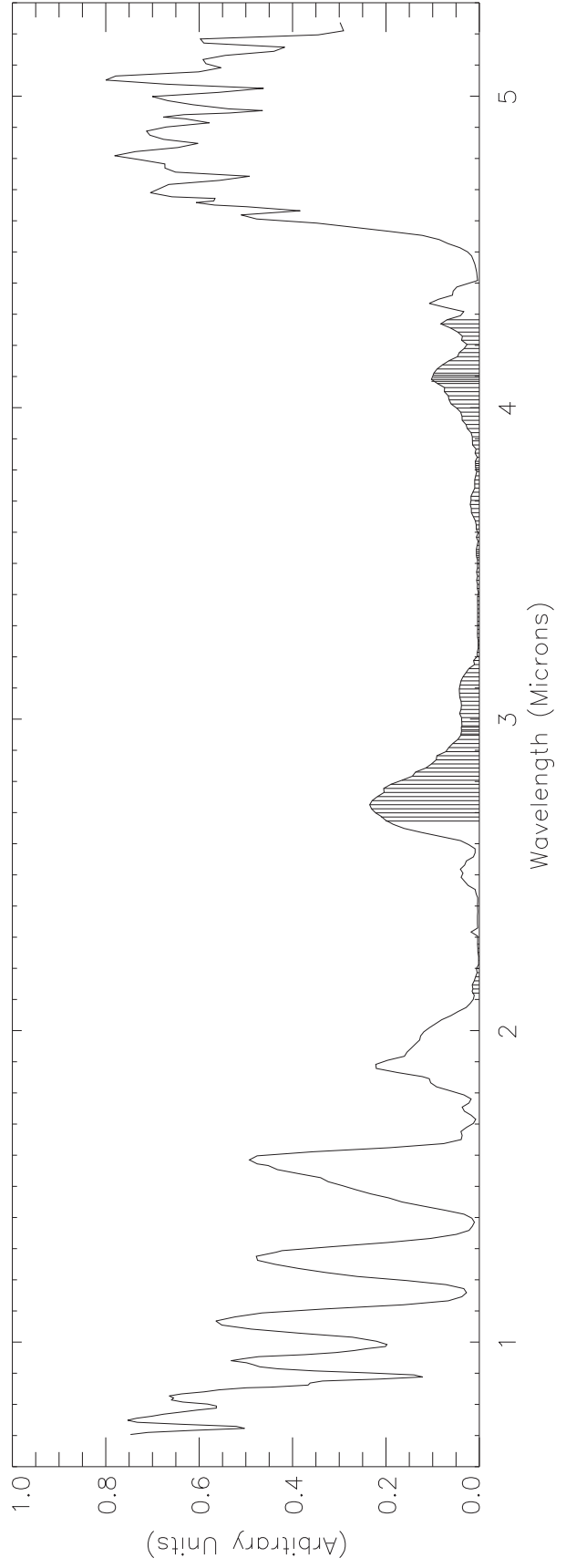
J5M80B.PBK



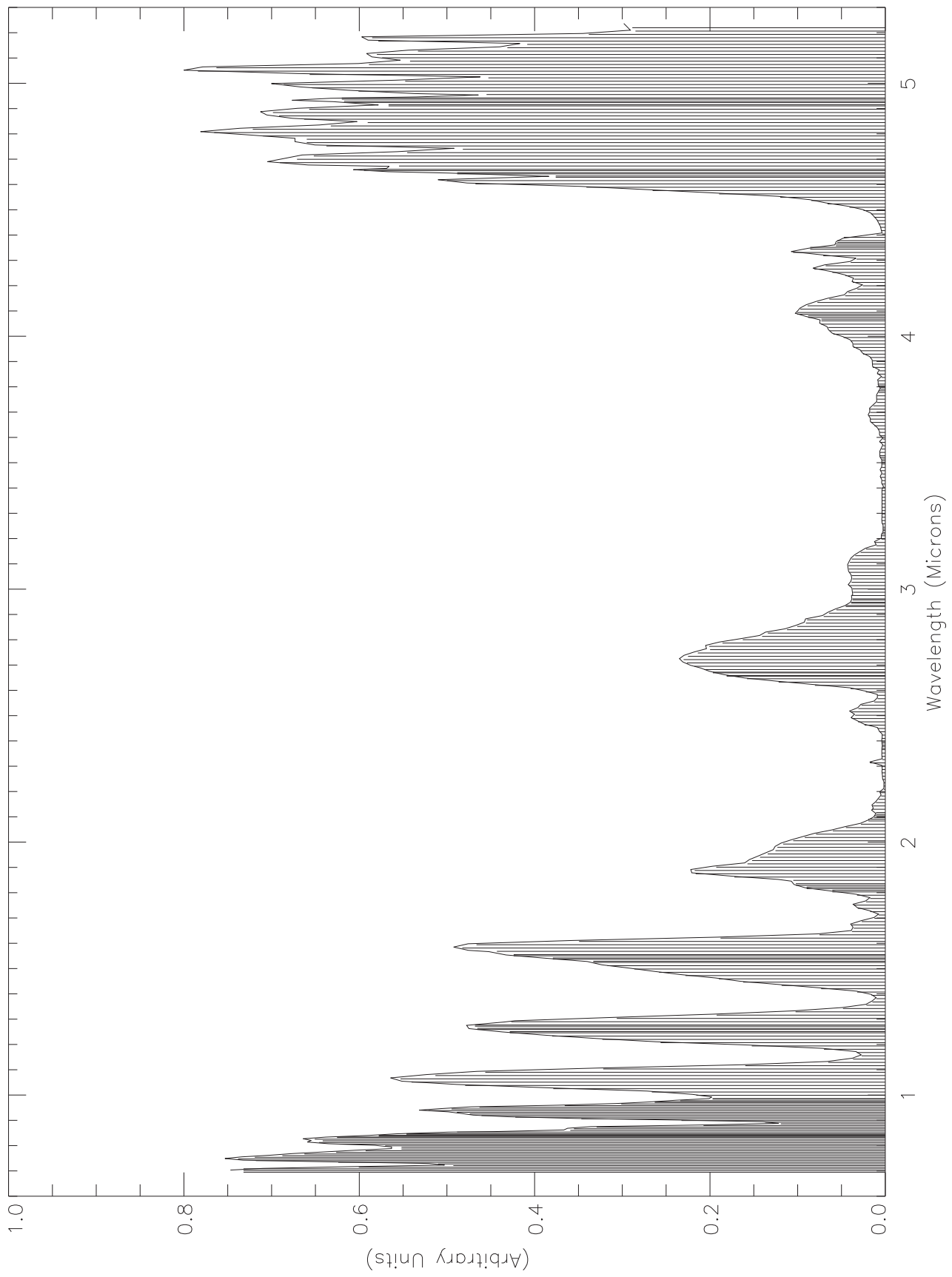
J5M253B.ETB



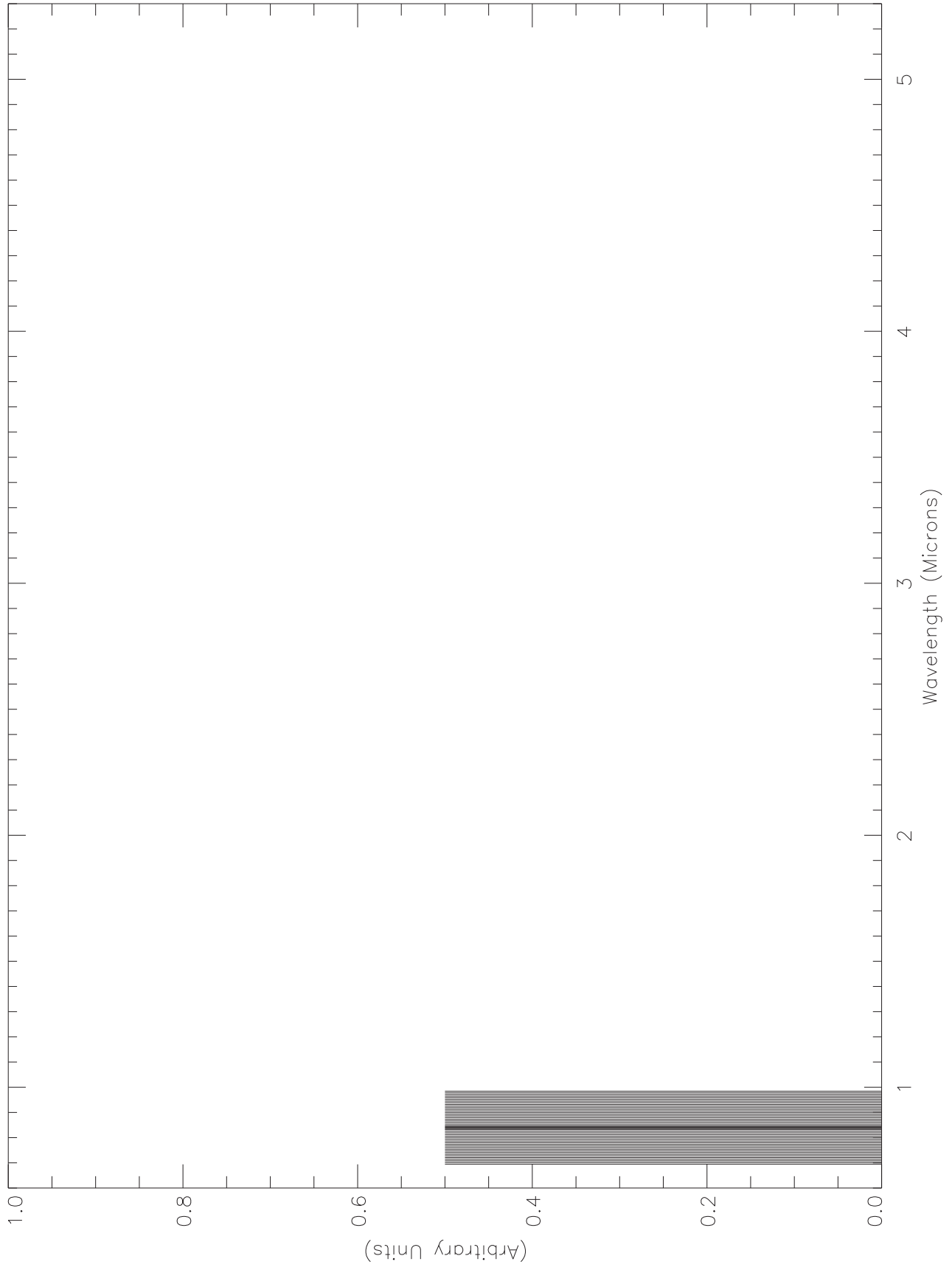
J5M149B.PBK



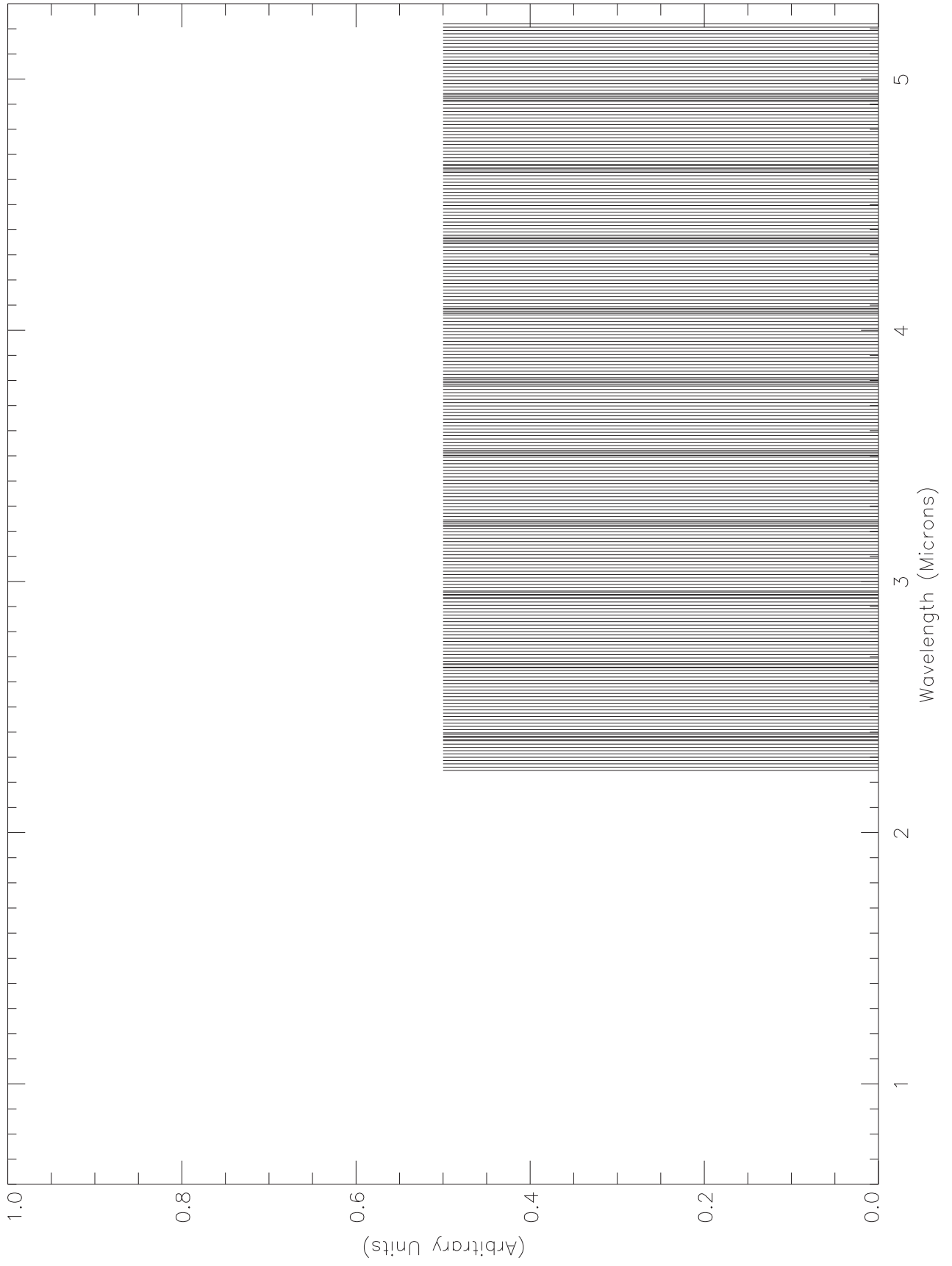
JLM408



OPCAL48.ETB



RCT252.PBK



Chapter 7 - Data Return

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Introduction to Chapter 7

This chapter is a report on the NIMS data return for the E15 orbit. Due to the low downlink data rates available for Galileo Jupiter Operations and other unforeseen and unpredictable events during the E15 Encounter and Cruise, not all NIMS data recorded on the tape recorder or selected in real-time were returned. The previous 6 chapters nominally describe the planning and intention of the NIMS observations for this orbit, except the obstab section in chapter 4 which was updated to give the latest parameters for the data that were actually returned.

There were fifteen autonomous reloads of the NIMS RAM code from CDS during the E15 encounter, one just before each science observation. No observations were lost due to NIMS processor halts. The approach that we are taking to avoid data loss due to processor halts has proven to be very successful.

Detectors 3 and 8 are still not functioning and are expected to be lost for the rest of the mission.

AACS had a fault trip causing the outbound portion of the E15 encounter to be executed in Cruise mode. Also, star scanner noise near perijove caused anomalous scan platform motion.

Spacecraft safing during the E16 encounter caused a good portion of E15 data not to be recorded over in E16. Thus, additional E15 data were returned during E16 playback.

The plots on the pages 3 and 4 show the geometry of the NIMS E15 observations using a north trajectory pole projection. The 'returned' observations are in Bold characters and the 'non-returned' in gray. The observations with an asterix were taken with the NIMS software halted.

The spreadsheets on pages 5 through 8 summarize the 'final' playback model for the 'returned' data.

The text on page 9 gives a 'recap' of the E15 playback events which affected which observations were returned.

A Timeline of E15 playback events is on pages 9 through 14.

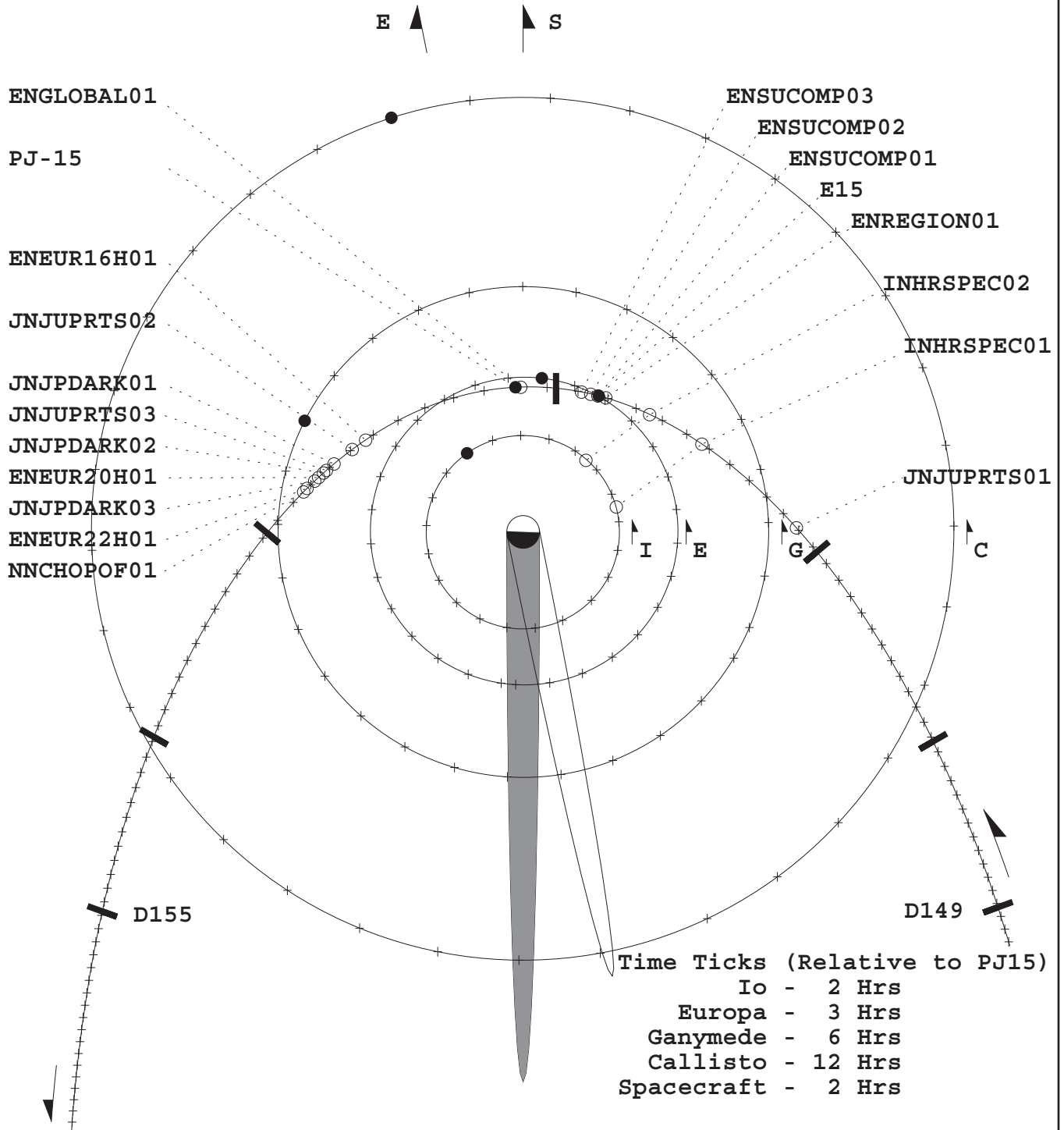
The text on page 15 describes the E15 NIMS and AACS Anomalies.

The text on page 16 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 17 and 18.

The text on page 19 is a guide to understanding the NIMS MASK.

NIMS E15 OBSERVATIONS

Bold - Returned
 Gray - Not Returned



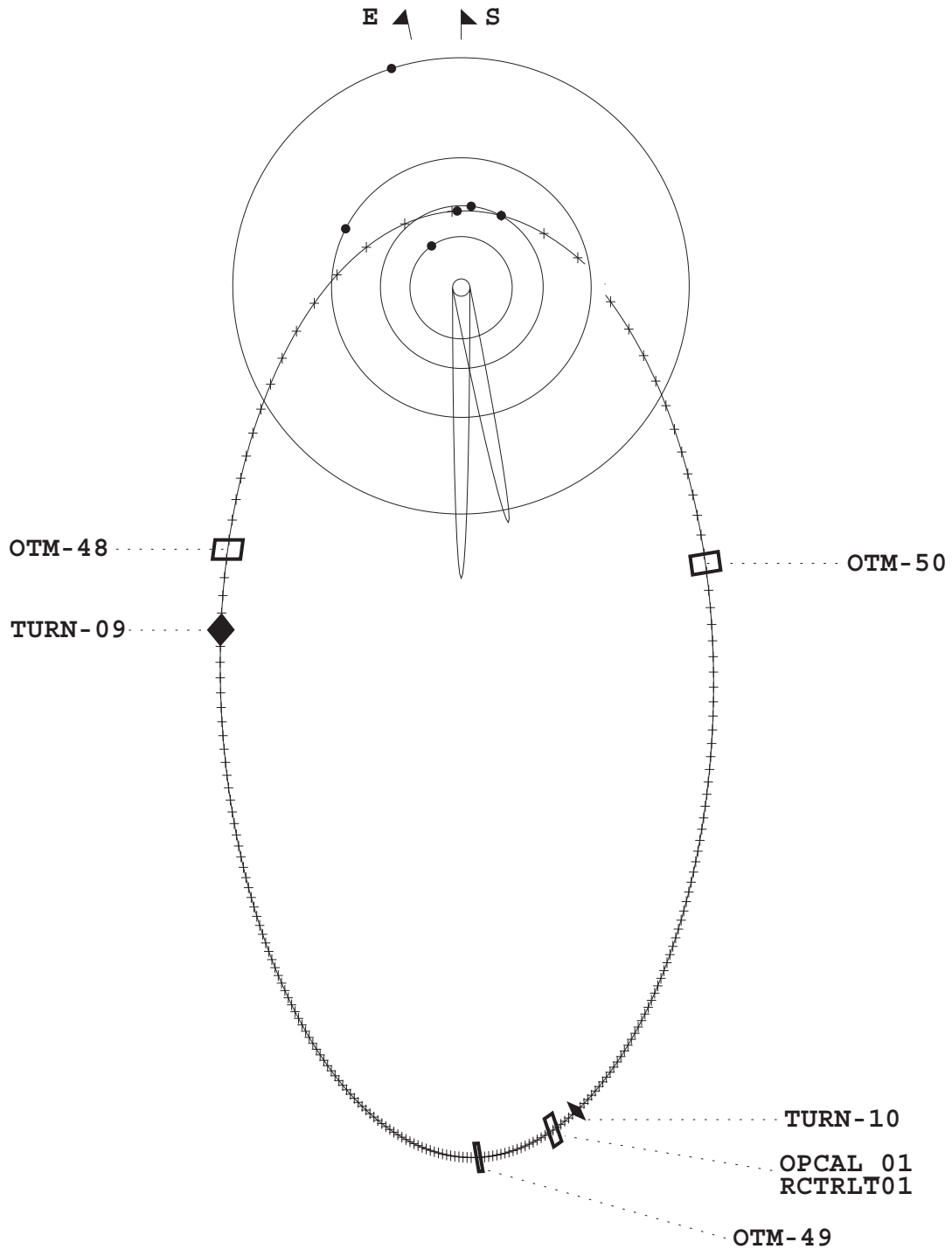
Europa Flyby (E15): 31-MAY-1998 (D151) 21:12:50 UTC
 Perijove (PJ15): 01-JUN-1998 (D152) 02:35:37 UTC

E15 North Trajectory Pole View

NIMS E15 CRUISE CALIBRATIONS

Europa Flyby (E15): 31-MAY-1998 (D151) 21:12:50 UTC
Perijove (PJ15): 01-JUN-1998 (D152) 02:35:37 UTC
Apojove (AJ15): 25-JUN-1998 (D176) 16:00:00 UTC

Time Ticks (Relative to E15)
Spacecraft - 6 Hours



E15 North Trajectory Pole View, Perijove to Perijove

NIMS E15 DATA RETURN

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating	Grating	Record	PSID
						Start	Offset	Format	
15JNJUPRTS01*	Jupiter Realtime Observation	E15JLM442	R/T	LM	4	0	4	R/T	DA
15INHRSPEC02-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DD
15ENREGION01-	Europa Regional Observation	E15ELM442	E15ELM360	LM	3	0	4	MPW	DE
15ENSUCOMP01-	Europa Surface Composition	E15ELM442	E15ELM360	LS	3	0	4	MPW	DF
15ENSUCOMP02-	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENSUCOMP03-	Europa Surface Composition	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DH
15ENGLOBAL01-	Europa Global	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DI
15ENGLOBAL01-	Europa Global	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DI
15ENBUR16H01-	Europa 16 Hour Map	E15JLM442	E15B_ELM240T	LM	4	0	4	MPW	DK
15JNJUPRTS02*	Jupiter Realtime Observation	E15JLM442	R/T	LM	4	0	4	R/T	DC
15JNJPDARK01-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DN
15JNJUPRTS03*	Jupiter Realtime Observation	E15JLM442	R/T	LM	4	0	4	R/T	DJ
15ENBUR20H01-	Europa 20 Hour Map	E15ELM442	E15B_ELM240T	LM	4	0	4	MPW	DL
15ENBUR22H01-	Europa 22 Hour Map	E15ELM240V	E15B_ELM168V	LM	3	0	4	LPU	EM
15NNRCTRLT01-	NIMS RCT Real-Time Calibration	E14RCT252	R/T	LM	1	0	4	R/T	XE
15INHRSPEC01-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DB
15INHRSPEC02-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DD
15ENREGION01-	Europa Regional Observation	E15ELM442	E15ELM360	LM	3	0	4	MPW	DE
15ENSUCOMP01-gf	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DF
15ENSUCOMP01-	Europa Surface Composition	E15ELM442	E15ELM360	LS	3	0	4	MPW	DF
15ENSUCOMP02-gf	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENSUCOMP02-	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENSUCOMP03-	Europa Surface Composition	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DH
15ENGLOBAL01-gf	Europa Global	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DI
15ENGLOBAL01-	Europa Global	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DI
15ENGLOBAL01-	Europa Global	E15ELM442	E15B_ELM228C	LM	4,3	0	4	MPW	DI
15ENBUR16H01-gf	Europa 16 Hour Map	E15ELM442	E15B_ELM240T	LM	4	0	4	MPW	DK
15ENBUR16H01-	Europa 16 Hour Map	E15ELM240V	E15B_ELM168V	LM	3	0	4	LPU	EK
15JNJPDARK01-gf	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DN
15JNJPDARK02-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DO
15ENBUR20H01-gf	Europa 20 Hour Map	E15ELM442	E15B_ELM240T	LM	4	0	4	MPW	DL
15ENBUR20H01-	Europa 20 Hour Map	E15ELM240V	E15B_ELM168V	LM	3	0	4	LPU	EL
15JNJPDARK03-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DP
15ENBUR22H01-	Europa 22 Hour Map	E15ELM442	E15B_ELM240T	LM	4	0	4	MPW	DM
15ENBUR22H01-	Europa 22 Hour Map	E15ELM442	E15B_ELM240T	LM	4	0	4	MPW	DM
15INHRSPEC01-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DB
15INHRSPEC02-gf	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DD

NIMS E15 DATA RETURN

Activity ID	Mode	Record	Wave- Format lengths	Record Time	PB Time	Selected Bits of Tape	Total Bits of Tape	Bits BOT (Mbits)	Mode Cycle	Thold	Comp	Total BTG Mbits	Data Reduce Factor	Pass	
															(sec.)
15JNJUPRTS01*	LM	360													
15INHRSPEC02-	LM	MPW	360	1260	408	4.70	14.52	8.667	2	1.46		2.41	1.95	1	
15ENREGION01-	LM	MPW	360	1140	632	7.28	13.13	8.667	0	1.25		4.37	1.67	1	
15ENSUCOMP01-	LM	MPW	360	1200	575	6.62	13.82	8.667	0	1.48		3.36	1.97	1	
15ENSUCOMP02-	LM	MPW	360	1200	615	7.08	13.82	8.667	0	1.33		4.00	1.77	1	
15ENSUCOMP03-	LM	MPW	228	600	265	3.05	6.91	8.667	0	1.22		1.19	2.57	1	
15ENGLOBAL01-	LM	MPW	228	1800	182	2.10	20.74	8.667	0	1.20		0.83	2.53	1	
15ENGLOBAL01-	LM	MPW	228	1800	458	5.28	20.74	8.667	0	1.26		1.99	2.65	1	
15ENEUR16H01-	LM	MPW	240	290	286	3.29	3.34	8.667	0	1.25		1.32	2.50	1	
15JNJUPRTS02*	LM		360												
15JNJPDARK01-	LM	LPU	80	600	300	1.85	3.70	8.667	0	1.30		0.44	4.18	1	
15JNJUPRTS03*	LM		360												
15ENEUR20H01-	LM	MPW	240	266	251	2.89	3.06	8.667	0	1.51		0.96	3.02	1	
15ENEUR22H01-	LM	LPU	168	245	234	1.44	1.51	8.667	0	1.53		0.62	2.34	1	
15NNRCTRLT01-	LM	R/T	252									0.14			
15INHRSPEC01-	LM	MPW	360	1260	182	2.10	14.52	8.667	0	1.67		0.94	2.23	2	
15INHRSPEC02-	LM	MPW	360	1260	390	4.49	14.52	8.667	2	1.49		2.26	1.99	2	
15ENREGION01-	LM	MPW	360	1140	507	5.84	13.13	8.667	0	1.25		3.50	1.67	2	
15ENSUCOMP01-gf	LM	MPW	360	1200	34	0.39	13.82	8.667	0	1.48		0.20	1.97	2	
15ENSUCOMP01-	LM	MPW	360	1200	575	6.62	13.82	8.667	0	1.41		3.52	1.88	2	
15ENSUCOMP02-gf	LM	MPW	360	1200	54	0.62	13.82	8.667	0	1.33		0.35	1.77	2	
15ENSUCOMP02-	LM	MPW	360	1200	420	4.84	13.82	8.667	0	1.33		2.73	1.77	2	
15ENSUCOMP03-	LM	MPW	228	600	343	3.95	6.91	8.667	0	1.30		1.44	2.74	2	
15ENGLOBAL01-gf	LM	MPW	228	1800	282	3.25	20.74	8.667	0	1.25		1.23	2.63	2	
15ENGLOBAL01-	LM	MPW	228	1800	458	5.28	20.74	8.667	0	1.25		2.00	2.63	2	
15ENGLOBAL01-	LM	MPW	228	1800	182	2.10	20.74	8.667	0	1.25		0.80	2.63	2	
15ENEUR16H01-gf	LM	MPW	240	290	49	0.56	3.34	8.667	0	1.25		0.23	2.50	2	
15ENEUR16H01-	LM	LPU	168	290	286	1.76	1.79	8.667	0	1.42		0.81	2.17	2	
15JNJPDARK01-gf	LM	LPU	80	600	21	0.13	3.70	8.667	0	1.30		0.03	4.18	2	
15JNJPDARK02-	LM	LPU	80	600	300	1.85	3.70	8.667	0	1.26		0.46	4.05	2	
15ENEUR20H01-gf	LM	MPW	240	266	15	0.17	3.06	8.667	0	1.58		0.05	3.16	2	
15ENEUR20H01-	LM	LPU	168	266	252	1.55	1.64	8.667	0	1.58		0.64	2.42	2	
15JNJPDARK03-	LM	LPU	80	600	486	3.00	3.70	8.667	0	1.27		0.73	4.08	2	
15ENGLOBAL01-gf	LM	MPW	240	245	234	2.70	2.82	8.667	0	1.47		0.92	2.94	2	
15INHRSPEC01-	LM	MPW	360	1260	243	2.80	14.52	8.667	2	1.47		1.43	1.96	3	
15INHRSPEC02-gf	LM	MPW	360	1260	130	1.50	14.52	8.667	2	1.46		0.77	1.95	3	
													46.68	Total	
													45.11	Alloc	
													1.57	Over/Under	

NIMS E16 DATA RETURN

Activity ID	Observation Title	NIMS EDIT Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
16INHRSPEC01	Io Monitoring at High Spectral Resolution	E16ILM243C	E16ILM228C	LM	2	0	4	LPU	
16JNJUPRTS01	Jupiter Realtime Observation	E16JLM442		LM	2	0	4	R/T	
16JNHOTMAP01	NIMS Jupiter Hotmap	E16JHT238A	E16JHT238A	LM	2	0	4	LPU	
16HNDARKCL01		E16HN442	E16HN408	LM	1,2,3,4			MPW	
NIMS Software Reload									
15ENSUCOMP02-gf	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENSUCOMP02-	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENGL0BAL01-gf	Europa Global	E15ELM442	E15B ELM228C	LM	4,3	0	4	MPW	DI
15ENGL0BAL01-	Europa Global	E15ELM442	E15B ELM228C	LM	4,3	0	4	MPW	DI
15ENEUR16H01C-	Europa 16 Hour Map	E15ELM442	E15ELM120T	LM	4	0	4	MPW	DK
15ENEUR16H01D-	Europa 16 Hour Map	E15ELM240V	E15ELM72V	LM	3	0	4	LPU	EK
15JNJDPARK01A-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DN
15JNJDPARK02A-gf	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DO
15JNJDPARK02A-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DO
15ENEUR20H01B-gf	Europa 20 Hour Map	E15ELM240V	E15ELM168V	LM	3	0	4	LPU	EL
15JNJDPARK03A-	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DP
15JNJDPARK03A-gf	Jupiter Dark Observation	E15J5M253B	E15J5M80B	LM	4	0	4	LPU	DP
15ENEUR22H01C-	Europa 22 Hour Map	E15ELM442	E15ELM120T	LM	4	0	4	MPW	DM
15ENEUR22H01D-	Europa 22 Hour Map	E15ELM240V	E15ELM72V	LM	3	0	4	LPU	EM
15INHRSPEC01-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DB
15INHRSPEC01-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LS	2	0	4	MPW	DB
15INHRSPEC02-gf	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DD
15INHRSPEC02-	Io Monitoring at High Spectral Resolution	E15ILM442	E15ILM360	LM	2	0	4	MPW	DD
16INHRSPEC01	Io Monitoring at High Spectral Resolution	E16ILM243C	E16ILM228C	LM	2	0	4	LPU	
16HNDARKCL01		E15HN442	E15HN408	LM	1,2,3,4			MPW	
15ENREGION01-gf	Europa Regional Observation	E15ELM442	E15ELM360	LM	3	0	4	MPW	DE
15ENSUCOMP02-gf	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENSUCOMP02-gf	Europa Surface Composition	E15ELM442	E15ELM360	LM	3	0	4	MPW	DG
15ENSUCOMP03CD-	Europa Surface Composition	E15ELM442	E15ELM132C	LM	4,3	0	4	MPW	DH
15ENGL0BAL01J-Q-	Europa Global	E15ELM442	E15ELM132C	LM	4,3	0	4	MPW	DI

NIMS E16 DATA RETURN

15ENEUR16H01A-gf	Europa 16 Hour Map	E15ELM442	E15ELM360	LM	4	0	4	LPU	EK
15JNJPDARK01B-	Jupiter Dark Observation	E15J5M253B	E15J5M149B	LM	4	0	4	LPU	DN
15JNJPDARK02B-	Jupiter Dark Observation	E15J5M253B	E15J5M149B	LM	4	0	4	LPU	DO
15ENEUR20H01C-	Europa 20 Hour Map	E15ELM442	E15ELM120T	LM	4	0	4	MPW	DL
15ENEUR20H01D-	Europa 20 Hour Map	E15ELM240V	E15ELM72V	LM	3	0	4	LPU	EL
15JNJPDARK03B-	Jupiter Dark Observation	E15J5M253B	E15J5M149B	LM	4	0	4	LPU	DP
Extended Playback Required Pass Number Reset to 1									
15INHRSPEC01-gf	Io Monitoring at High Spectral Resolutio	E15IIM442	E15IIM360	LM	2	0	4	MPW	DB
15INHRSPEC01-gf	Io Monitoring at High Spectral Resolutio	E15IIM442	E15IIM360	LM	2	0	4	MPW	DB
15INHRSPEC01-gf	Io Monitoring at High Spectral Resolutio	E15IIM442	E15IIM360	LM	2	0	4	MPW	DB
15INHRSPEC02-gf	Io Monitoring at High Spectral Resolutio	E15IIM442	E15IIM360	LM	2	0	4	MPW	DD
15INHRSPEC02-gf	Io Monitoring at High Spectral Resolutio	E15IIM442	E15IIM360	LM	2	0	4	MPW	DD
NOTES: The complexity of E16 playback resulted in the use of several schemes for numbering the separate portions of the observations. Final data product nomenclature will differ from that employed here. This spreadsheet is a record of the separate parts commanded to be played back, in time order of playback.									
gf= Gap fill									

NIMS E16 DATA RETURN

Activity ID	Mode	Record Format	Wave-lengths Returned	Record Time (sec.)	PB Time (sec.)	Selected Bits of Tape sBOT (Mbits)	Total Bits of Tape BOT (Mbits)	Mode Cycle (sec)	Thold	Comp	Total BTG Mbits (4% OHEAD)	Data Reduct Factor (sBOT/BTG)	Pass
16INHRSP01	LM	LPU	228	184.00	181.00	1.110	1.13	8.667	0	2.32	0.43	2.60	1
16JNJUPRTS01	LM		360										
16JNHOTWAP01	LM	LPU	238	1468.0	70.00	5.180	9.06	8.667	0	99.00	0.00	1.35	1
16HNDARKCL01	LM	MPW	408	667	485	5.59		8.667	0	2.71	1.75	3.19	1
15ENSUCOMP02-gf	LM	MPW	360	1200	212.2	2.44	13.82	8.667	0	1.33	1.38	1.77	2
15ENSUCOMP02-	LM	MPW	360	1200	88	1.01	13.82	8.667	0	1.33	0.57	1.77	2
15ENGLOBAL01-gf	LM	MPW	228	1800	195	2.25	20.74	8.667	0	1.20	0.89	2.53	2
15ENGLOBAL01-	LM	MPW	228	1800	204.6	2.36	20.74	8.667	0	1.26	0.89	2.65	2
15ENEUR16H01C-	LM	MPW	120	290	286	3.29	3.34	8.667	0	1.40	0.59	5.60	2
15ENEUR16H01D-	LM	LPU	72	290	282	1.74	1.79	8.667	0	1.25	0.39	4.46	2
15JNJPDARK001A-	LM	LPU	80	600	306	1.89	3.70	8.667	0	1.30	0.45	4.18	2
15JNJPDARK002A-gf	LM	LPU	80	600	20	0.12	3.70	8.667	0	1.26	0.03	4.05	2
15JNJPDARK002A-	LM	LPU	80	600	316	1.95	3.70	8.667	0	1.26	0.48	4.05	2
15ENEUR20H01B-gf	LM	LPU	168	266	20	0.12	1.64	8.667	0	1.50	0.05	2.29	2
15JNJPDARK003A-	LM	LPU	80	600	86	0.53	3.70	8.667	0	1.27	0.13	4.08	2
15JNJPDARK003A-gf	LM	LPU	80	600	30	0.19	3.70	8.667	0	1.27	0.05	4.08	2
15ENEUR22H01C-	LM	MPW	120	245	234	2.70	2.82	8.667	0	1.50	0.45	6.00	2
15ENEUR22H01D-	LM	LPU	72	245	234	1.44	1.51	8.667	0	1.53	0.26	5.46	2
15INHRSP01-	LM	MPW	360	1260	636	7.33	14.52	8.667	0	1.30	4.23	1.73	3
15INHRSP01-	LM	MPW	360	1260	146	1.68	14.52	8.667	0	1.40	0.90	1.87	3
15INHRSP02-gf	LM	MPW	360	1260	40	0.46	14.52	8.667	2	1.30	0.27	1.73	3
15INHRSP02-	LM	MPW	360	1260	303.3	3.49	14.52	8.667	0	1.30	2.02	1.73	3
16INHRSP01	LPU	MPW	228	184.00	180.00	1.110	1.13	8.667	0	1.60	0.62	1.80	3
16HNDARKCL01	LM	MPW	408	667	242	2.79		8.667	0	2.70	0.88	2.35	3
15ENREGION01-gf	LM	MPW	360	1140	20	0.23	13.13	8.667	0	1.25	0.14	1.67	4
15ENSUCOMP02-gf	LM	MPW	360	1200	30	0.35	13.82	8.667	0	1.33	0.19	1.77	4
15ENSUCOMP02-gf	LM	MPW	360	1200	30	0.35	13.82	8.667	0	1.33	0.19	1.77	4
15ENSUCOMP03CD-	LM	MPW	132	600	598	6.89	6.91	8.667	0	1.25	1.52	4.55	4
15ENGLOBAL01J-Q	LM	MPW	132	1800	1092	12.58	20.74	8.667	0	1.25	2.77	4.55	4

RECAP OF E15 PLAYBACK EVENTS

Although the Galileo spacecraft dropped into safe mode a couple of days before the start of the E15 encounter, the sequence was recovered and nearly all of it executed as planned. Excellent NIMS observations of Io and Europa were recorded in E15, which was the last encounter to be flown primarily in inertial mode. Following perijove, problems with the gyros dropped the spacecraft into cruise mode and safed the scan platform. Impact on the subsequent distant Europa and Jupiter observations was minimal. There was no evidence of any NIMS software stoppages during E15.

NIMS' E15 downlink allocation of about 40 Mbits was significantly larger than that for E12 or E14. Nonetheless not all of the recorded data could be returned with the resources available. The safing of the spacecraft in E16 permitted us to bring down the rest (see the E16 NIMS guide).

The following timeline details the most significant events of the E15 playback period. Most of the text below is excerpted from messages issued at the time.

E15 Playback Events Timeline (04-10-98 to 07-19-98)

- 04-10-98: NIMS downlink bits allocation is 40.604 Megabits.
- 04-20-98: NIMS downlink bits allocation is 40.043 Mbits.
- 05-06-98: NIMS downlink bits allocation is 39.564 Mbits due to refinements in telemetry modeling.
- 05-07-98: The playback table delivered today has correct wavelength edit tables commanded and all known time corrections (to correspond to the SEF) applied. E15 data recording includes a new strategy of changing instrument gain states during single observations. This was suggested by Gary Hansen for particular Europa observations. It is implemented in 15ENGLOBAL01 and in 15ENSUCOMP03. In addition to 5 close-in Europa observations and 6 distant ones, E15 includes 2 Io observations (15INHRSPEC01, 02), 3 Jupiter dark observations, 3 realtime Jupiter observations, and an RCT calibration. A software patch to overcome the problems with one of the spacecraft gyros is under development. If this is accomplished successfully, all NIMS E15 observations except 15ENGLOBAL01 will be taken in inertial mode, avoiding the problem of uncompensated spacecraft wobble during data recording. Cruise mode is commanded near perijove to minimize further degradation of the gyro electronics.
- 05-20-98: E15 begins on 30 May. The playback table delivered today is ready to fly. Changes this week included a few timing adjustments and pass number changes, particularly for the 20 and 22 hour distant Europa observations.

E15 Playback Events Timeline (04-10-98 to 07-19-98)

- 05-29-98: (J. Erickson) The Galileo spacecraft is presently in safing, due to an error in the construction of the Europa-15 approach maneuver sequence. On May 28 the spacecraft executed the majority of the maneuver, before the sequence error caused the spacecraft to abort the on-board sequence and safe itself. The flight team is presently reconfiguring the spacecraft to allow the uplink of the encounter sequence on the evening of May 29. It is expected that the encounter activities beginning on May 30 will be unaffected by the safing event.
- 05-30-98: E15 encounter begins.
- 05-31-98: Europa close approach occurs at 21:12 UTC. At 21:32:48 the spacecraft is commanded from inertial mode to cruise mode, to minimize radiation damage during the Jupiter close approach period.
- 06-01-98: Perijove occurs at 02:35 UTC, while NIMS is recording 15ENGLOBAL01. At 08:37 the spacecraft is commanded from cruise mode back to inertial mode, prior to the distant Europa observations. Forty minutes later, a problem with the gyros (described in more detail below) dropped the spacecraft back into cruise mode once more.
- 06-04-98: (K. Schimmels) E15 Playback is running slightly ahead of schedule. The first update for E15 playback will be next week - you may affect segments 4 and beyond. Allocations have been updated to reflect the following:
OTM-48 - we will resume playback about 7 hours earlier than planned - this gives us about 1.4 MB additional playback.
Release of 3.0 MB of inefficiency margin.
Release of extra 1.2 MB of SPOT margin which was being held for gyro activities.
Total released by OPG percentages: 5.6 MB
NIMS allocation is 41.385 Mbits.
- 06-05-98: (J. Erickson) The Galileo spacecraft is operating normally. The primary activity over the past week has been the Europa -15 Encounter on May 30/31 and June 1, and the beginning of the playback of that data. Additionally, the post Europa-15 maneuver scheduled for June 5 is executing nominally. The Europa-15 encounter sequence executed properly, and the updated attitude control system flight software is operating as planned. This corrects the problems previously seen with the spacecraft gyros. On June 1, a minor attitude control system problem arose during the end of the encounter sequence. In an event similar to one that occurred August 28, 1993, the attitude control system stopped controlling observation pointing with gyro control, but instead began relying on star input. This is a very rare event, happening only twice since launch.

E15 Playback Events Timeline (04-10-98 to 07-19-98)

A standard gyro performance and calibration test was executed on June 3, and the results indicate that the performance of the troublesome gyro is unchanged. This calibration, as well as later ones, will be used for updating gyro scale factors.

- 06-07-98: (J. Erickson) The encounter on May 30-June 1 executed as planned with one minor exception. The encounter was executed in inertial mode through the Europa closest approach, the gyros and INSSs were turned off for the perijove pass, then the gyros/INSSs were turned back on for post perijove observations. After the spacecraft was in inertial mode with the gyros off for 40 minutes, fault monitor 28 (no gyro data in inertial) tripped and aborted the spacecraft out of inertial mode and safed the scan platform. An additional change in spacecraft state indicated the INSSs and accelerometers were also off post fault. The accelerometers and INSSs have since both been commanded back on without incident. AACS investigation into the cause of the FM28 trip is ongoing. The subsequent gyro performance test showed the gyros are at post E-14 performance, and OTM-48 has executed nominally. At this time, this appears to be a repeat of the unresolved event that occurred at the Ida encounter.
- 06-10-98: We received an additional 2 Mb of downlink allocation this week. Reserves that were held to help with gyro anomaly analysis were released, with some additional bits from the playback inefficiency portion of the office reserves. As a result we make additions and fine-tuning changes to nearly half of the observations remaining. For Jupiter, the timing of 15JNJP DARK03 was altered so that all three of these observations would return about the same longitudes (154-160). We will bring down 5 Rims of each one. For Io, we plan to bring down 3 Rims (central 60% of one scan) of 15INHRSPEC01, which was recorded in long spectrometer mode. The balance of 15INHRSPEC02 will also come down in pass 2. For Europa, we increased (to 100%) the spatial data return of 15ENSUCOMP03 (228 wavelengths). For 15ENGLOBAL01 we will bring down all of both equatorial scans, but only 2 Rims of each of the polar scans. There was no evidence of instrument software halts in E15.
- 06-17-98: E15 playback is coming along well. Compression for 15ENSUCOMP01 was good at 1.51, saving some bits that we can use elsewhere. There are a few missing packets in this observation that we may wish to replay later. We made changes to the pass 2 compression estimates (data reduction factors) to reflect actual pass 1 performance.

E15 Playback Events Timeline (04-10-98 to 07-19-98)

In addition we made some significant changes to the playback plan for 15ENGLOBAL01. For the two scans covering the polar regions, following Gary Hansen's advice, we are not playing back the first (largely dark) Rim. We are able to increase playback to include Rims 2-4 for each of the polar scans thanks to compression savings. In addition we are not commanding thresholding for these, since the available table is not appropriate for the gain state employed.

- 06-24-98: Since there have been no releases of margin bits, and since playback is progressing on schedule, there were no updates to the E15 table this week. Next week we will generate additional commands for gap filling for 15ENSUCOMP01 and 02. 15ENREGION01 was retargeted to 7 N 185 W where Gary Hansen's plots show lots of non-ice material. It was recorded in gain state 3. The signal at the short wavelength end is strong and did not saturate, and there is lots of spatial variation, including intersecting linea. This appears to be a very nice observation at 3.4 km/pixel resolution. The second half will come down in pass 2.
The MWG is proposing a trade of bits. They have about 1.5 Mb "extra" in the present orbit and would like to trade this for 1.5 Mb of our bits in E18.
- 06-25-98: (M. Segura) The SOHO spacecraft declared a spacecraft emergency this morning due to problems during their latest maneuver. There is a rumor floating around that the thrusters malfunctioned and are still firing. Contact has been lost with SOHO and our playback has been impacted. We lost our 14 pass yesterday/early today - but PB was paused so we experienced no data loss. SOHO's view periods are unfortunately very similiar to ours so the loss of downlink over the next few days could be great.
In a meeting this morning, the group (coordinators for all teams and Brian decided to let segment 5 continue and not pause playback. This decision was based on the facts that we have no idea which passes SOHO will take and pausing playback could cause more downlink to be lost that just marching along.
- 06-26-98: (K. Schimmels) There will NOT be an update to Segment 7 today. We will send it from pbt.e15pch as is. The gaps we expect to receive in playback data have all been received, and have been queried on the realtime server. We lost a total of 263 playback VCDUs, which is 0.93 MB. NIMS, UVS, PPR, and AACS experienced lost data from Segments 5 and into Segment 6, and all of this data is recoverable in Pass 2.

E15 Playback Events Timeline (04-10-98 to 07-19-98)

Therefore, SPOT will cover the cost of these losses using margin bits. Teams' allocations will be increased by whatever the cost was of the data gaps they have due to SOHO. The updated allocations will be available on Tuesday at noon. If we have any more unexpected losses due to SOHO, changes will have to be made in Segment 8 and beyond.

- 06-30-98: (K. Schimmels) 1.709 MB is being released from the SPOT margin, currently at 2.82 MB, to cover the total cost of the SOHO losses. The remaining SPOT margin is 1.11 MB.
- 07-01-98: A considerable number of changes were required this time to adapt to changing conditions. Due to emergency recovery activities connected with the problems with the SOHO spacecraft, we lost about 1.7 Mb of downlink late last week. About 1.2 Mb of this was NIMS data being played back while the DSN was listening elsewhere. The losses could have been considerably larger. Fortunately there was sufficient office margin available to cover the loss, and accordingly we received 1.2 Mb to enable us to replay the lost data. In another development we traded 1.5 Mb of our downlink allocation in E18 for 1.5 Mb held by the MWG in the present orbit. We intended to use all of this to bring down the remaining 5 Rims of 15ENSUCOMP02. However, other developments changed the plan. New information on actual E15 compression values arrived this morning. Compression was poorer than expected on 15ENSUCOMP03, 15ENGLOBAL01, 15ENEUR16H01, and 15JNJPDARK01. This modified the compression estimates for pass 2 playback of those observations, and for the gap fill singles. As a result, instead of having 1.5 Mb for 15ENSUCOMP02, there was only 0.6 Mb available to expand this observation. Ten new sets of playback commands were added to the playback table to recapture data lost due to the SOHO problem, and to pick up a few other small gaps. Thanks to Bob Mehlman for providing up to date compression figures, and to Bob and Frank for precise data gap times. It is likely that in next week's update we will only be able to affect the last few observations (those in segment 11). If more margin becomes available then we will be able to expand the Jupiter dark side observations that are presently only 50% selected.
- 07-08-98: Today's is the final update for the E15 table. Playback will terminate on 19 July. We were able to convince the project that a third pass over the first part of the tape, to pick up some large gaps in 15INHRSPEC02, would be a good idea (although this triggered some soul-searching on their part).

E15 Playback Events Timeline (04-10-98 to 07-19-98)

2.2 Mb of downlink capability was released this week, 1.0 to us and 1.2 to SSI. Some of this was office margin, some was inefficiency margin, and about 0.5 was contributed by PPR. The factors that enabled us to go after our 15INHRSPEC02 gaps included SSI's uncertainty about their compression. They dedicated their 1.2 Mb to giving themselves "insurance" that their last observation would in fact make it down. If all goes as predicted, that 1.2 Mb will cover the time required for us to slew across 3000 tics of tape and get to our observation. On the other hand, if they undercompress significantly, we may never get to 15INHRSPEC02.

In addition to filling our gaps, I was able to increase playback of 15JNJPDARK03 by 3 Rims, to a total of 8, out of the 10 recorded. In addition NIMS contributed about 0.03 Mb to UVS to enable them to bring down some Io data collected at the same time as 15INHRSPEC02.

- 07-08-98: Inspection of 15ENGLOBAL01 reveals major misalignments of adjacent scans on the limb and elsewhere. Attempts to correlate these with scan platform mis-slews begin with requests to AACs. The mis-slews are attributed to radiation effects.
- 07-09-98: Thanks to Playback Coordinator Kathy Schimmels for pointing out that we could add some additional playback commands for our third pass through the tape. Following some discussion we decided to play back 4 Rims (about 80%) of one of the long map mode scans of 15INHRSPEC01. Although this observation has lower resolution than 15INHRSPEC02, it covers a range of longitudes where new hot spots may be present. This observation may confirm the presence of new activity on Io.
- 07-19-98: Playback terminated.
NIMS downlink total was 46.68 Mbits, 1.5 Mbits over our allocation and 6 Mbits more than our total allocation in May.

NIMS Anomaly Report - E15 Sequence

There were no NIMS processor halts detected during the E15 Encounter. Detectors 3 and 8 are still not functioning and are expected to be lost for the rest of the mission.

Also, due to problems with the gyros, the spacecraft was in AACS Cruise mode for the outbound portion of the encounter time period.

E15 AACS Anomaly

Two AACS anomalies occurred during E15. The first AACS anomaly was during the Cruise mode period near perijove and affected the NIMS observation 15ENGLOBAL01. The second AACS anomaly occurred not long after perijove. This second anomaly caused AACS to drop out of Inertial mode into Cruise mode for the outbound portion of the encounter. Thus, all NIMS E15 outbound observations were taken in Cruise mode.

The first anomaly occurred during perijove when AACS was in Cruise mode. AACS was commanded to Cruise mode for about 10 hours during the E15 perijove period while the spacecraft was inside of Europa's orbit. This was done so as not to use the faulty gyros in the high radiation environment. So, pointing was maintained using the star scanner alone. Unfortunately, the high radiation environment also affected the star scanner. The high background noise in the star scanner caused errors in the attitude estimate. AACS tried to correct the scan platform pointing using the erroneous attitude estimates, which made the scan platform move in sudden spurts, producing torque-spike-like behavior. This anomaly greatly affected the pointing for the NIMS observation 15ENGLOBAL01. It is impossible to accurately reproject the data for this observation.

The second anomaly occurred at about 1998-152/09:22 about 40 minutes after AACS had been commanded to Inertial mode after the E15 perijove Cruise mode period. An AACS fault was tripped, causing the scan platform to be safed and AACS to drop back into Cruise mode. AACS remained in Cruise mode during the outbound portion of the E15 encounter period. The result of this was that all E15 outbound NIMS observations were taken in Cruise mode. 8 NIMS observations were affected.

NIMS Archived EDRs and CUBEs

The NIMS data are stored in EDRs (Experimental Data Records) produced by JPL-MIPS (Multi-mission Image Processing System). The NIMS Phase2 EDR is described in the NIMS EDR SIS (Software Interface Specification) Number 232-08. The same information is available in both human and machine-readable form in the PDS (Planetary Data System) structure files EDRHDR.FMT and EDRDATA.FMT in the LABEL directory of the NIMS EDR CD-ROM. Each observation has at least one EDR. The EDR file name is derived from the 12 character observation name plus a single character which allows an observation to be broken up into multiple EDRs. The EDRs have a Vicar label, followed by a PDS/ISIS label, binary header records and the data records. For archiving on CD-ROM, the Vicar labels are detached from the EDR (but kept separately on CD) and the file is renamed so as to conform to the 8.3 DOS file-naming convention. The 8.3 EDR name consists of a 2 character orbit identifier, a single character target identifier, a 3 digit counter and the suffix EDR. For example, the MIPS EDR G1GNGLOBAL01A.1 becomes G1G001.EDR. More information about NIMS EDRs can be found in the VOLINFO.TXT file on the EDR CD-ROM.

NIMS EDR data typically require considerable processing before they are readily amenable to science analysis. Normally, the EDRs are processed into spectral image cubes by one of several sets of software. MIPS systematically processes the EDRs into CUBEs (band sequential image files) and MASKs (spatial/spectral summary images) which are distributed on the NIMS CUBE CD-ROMs. Information about the structure of the NIMS CUBEs can be found in the VOLINFO.TXT file on the CUBE CD-ROM. The name of the CUBE file is derived from the input EDR filename. For archiving on CD-ROM, the CUBE files are renamed so as to conform to the 8.3 DOS file-naming convention. The 8.3 CUBE name consists of a 2 character orbit identifier, a single character target identifier, a 3 digit counter, a single character cube-type identifier, a single character data unit-type (DN, radiance or IOF) and the suffix QUB. For example, the MIPS IOF radiance cube for the observation G1GNGLOBAL01A.1 (G1G001) becomes G1G001CR.EDR. The summary MASKs on the CD-ROM have the same 6 character name as the EDR name with the suffix JPG or GIF to denote its graphics format.

Data Format

All data files have PDS labels. The raw data (EDR) file contains time-sequential, 16 bit integers. Reduced data files (TUBES and CUBES) may be viewed as images or spectra. They contain VAX real numbers, are band sequential (BSQ - the images are stacked in band order) and have geometry information appended as backplanes after the last NIMS band.

Data Types

Mask files contain summary images (3 band BSQ) and spectra of up to six selected regions that provide a quick indication of data location, data quality and spectral content. A Guide to understanding the NIMS mask is available.

Cube files contain data that have been projected and resampled. The core data are BSQ - spatial in the first two dimensions, and spectral in the third. Cubes of the satellites are projected in point-of-view, and, with few exceptions have no photometric correction applied. Cubes of Jupiter are (generally) projected as simple cylindrical. Cubes of Europa, Ganymede, and Callisto have been despiked. The cubes are available both in radiance and I/F (intensity divided by flux) form.

Tube files contain data in (almost) time order and normally have a NIMS-related 20 pixel spatial dimension (20 x n or n x 20). Projection coordinates are contained in backplanes, but the data have not been resampled. The data are in units of radiance and no despiking has been applied. All data in cubes are also available in tube form. Some data (such as spatially undersampled data) appear in tube form only.

A spike file contains a list of pixels that have been identified as spikes, but not replaced, in the tube. Spike files can be used to remove spikes from both tube and EDR files.

EDR files contain the most primitive form of the data available. They should be used only for advanced data analysis. The format is complex and the files do not form images or spectra without prior processing.

Data Labels

A data label (PDS form) is attached to the front of each file (except masks, which have an attached VICAR label and a detached PDS label). The labels are in ASCII keyword=value format and contain pointers to various data objects in the file, descriptions of the data objects and descriptions of the observation associated with the file. A history object in similar format follows and describes the processing steps that produced the file. Much of this information is necessary for understanding and viewing the cube. In particular, the label contains the offset to the cube, the dimensions of the cube, axes labels, and explicit wavelength information.

Data Access

Software for processing this data is called ISIS and is available for DEC VAX VMS, SUN Solaris, DEC Alpha Digital Unix, Silicon Graphics Unix and PC LINUX systems. The Unix versions are available from the USGS Astrogeology team. Images from NIMS cubes and tubes can be viewed with any image display program which allows an offset from the beginning of the file to the selected image. Packages tested include ISIS, VICAR, ENVI, SAO IMAGE, and NASAVIEW. ISIS and ENVI (and soon NASAVIEW) additionally display spectra. The ISIS viewer is named CV (UNIX) or QL3 (VMS).

Labels may be displayed with some editors (eg DOS edit), and with most "type" and "search" functions. Some editors do not recognize the PDS line termination conventions. The label may be listed by the ISIS function LHLIST (VMS) or LABEL (UNIX).

Software for converting EDRs to cubes exist in both ISIS (DEC VAX VMS) and VICAR (DEC Alpha VMS) versions only. A primitive list of values in an EDR may be obtained with the program EDRDMP2.

Understanding the NIMS Mask

The NIMS mask is designed to provide a quick summary of the contents of a NIMS data cube (or tube). It displays a view of both the spatial and spectral content of the data.

The mask has four regions. Starting from the upper left and proceeding clockwise: a spatial display; six or fewer representative spectra; annotation; and a spectral histogram.

The spatial display of an observation which has been projected and resampled (a cube) has a maximum size of 600x600 pixels. This is overlaid with surface coordinates and is embedded in a 700x700 grid of pixel coordinates. It is accompanied by two 1-dimensional histograms describing the raw image and the image stretched for display. The data image can range from a simple combination of up to 3 NIMS bands displayed in the RGB planes, to complicated arithmetic functions of NIMS bands displayed in the RGB planes. (The formulas appear as annotation below the histograms.) The graphics directly below the image show the input and output data histograms for the three color planes. The "shortest" color for each bin displays in front. The image also contains from one to six numbered rectangles, which show the from which averaged spectra (displayed on the right) were taken.

The spatial display of an observation in time sequence (a tube) is a graphic showing a footprint of the observation over a grid of surface coordinates on the target body. Numerals 1-6 on the graphic mark the locations of the average spectra displayed on the right.

The spectra to the right of the image may display either BDRF or radiance (or both). If both are displayed, then a vertical "radiance fence" line will appear where the breakpoint occurs. This permits display of both atmospheric data, which have significant reflectance and thermal components, and I/F satellite surface data which have strong absorptions at longer wavelengths (such as water spectra.) The spectra are labelled with wavelength in microns and location in both pixel and latitude-longitude space.

The annotation provides information about the observation, including its name, a brief description, its geometry, instrument and projection parameters. TCA is the time from Galileo's closest approach to the target body.

The 2-dimensional spectral histogram in the lower left corner shows the number of pixels at a given radiance for each wavelength. If a surface contains spatial mixtures with significantly different spatial fractions for several components, the spectra of the components will be evident in this display.