NIMS GUIDE TO THE C30 ORBIT

Original: May 2001

Revised: November 2001

VERSION DATE: 011130

C30 Encounter starts 05/22/01, C30 Playback starts 05/27/01

Foreword to the Revised Edition

This document was originally published by the NIMS team as a preview to data acquisition for one orbit. It has 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 C30 Orbit for the NIMS Team. The aim of this guide is to provide detailed information on the various NIMS C30 observations and calibrations. Also included in this document is background information on the C30 orbit. This guide was produced before the start of the C30 orbit. After analysis of the NIMS C30 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 C30 orbit. Chapter 2 gives an overview of the C30 orbit and summarizes the NIMS science objectives for the C30 orbit using tables, spreadsheets and timelines. Chapter 3 contains diagrams of various aspects of spacecraft geometry for the C30 orbit. Chapter 4 summarizes the NIMS C30 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 C30 orbit.

For more information on the C30 orbit, please refer to the Galileo Orbit Planning guide and the Galileo Orbit Activity Plan for the C30 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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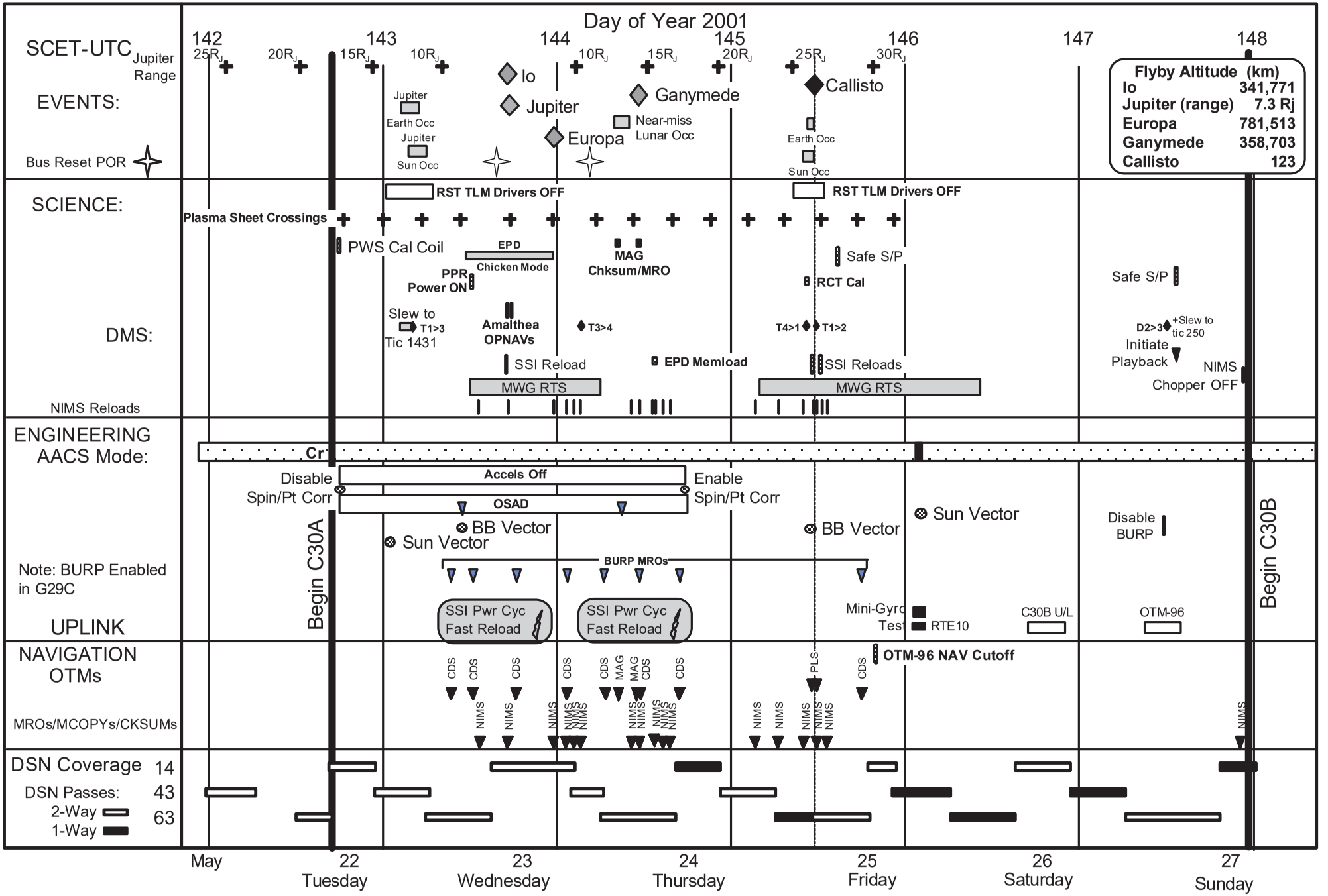
Introduction

This C30 orbit is the thirtieth of thirty orbits in Galileo's Tour of the Jovian system and the fourth orbit in the Galileo Millennium Mission (GMM). C30 is a Callisto Flyby.

There are 21 autonomous reloads of the NIMS RAM code from CDS planned during the C30A encounter period, one just before each science observation. These reloads are in response to the on-going flight-anomalies where the NIMS RAM code takes some bit hits and halts the instrument during when the spacecraft is close to Jupiter. NIMS personnel will monitior the NIMS engineering telemetry data on a regular schedule to track the instrument's status.

The C30 orbit is divided into 2 sequence loads: one Encounter Load (C30A) and one Orbital Cruise Loads (C30B). The C30A load begins on D142 (05/21/01) and ends on D147 (05/26/01). This load contains flyby of Callisto. The Cruise Load runs from D147 to D216. Playback of the recorded data takes place during the Cruise phase, C30B. A high-level overview timeline of the C30 orbit can be found on the following three pages.

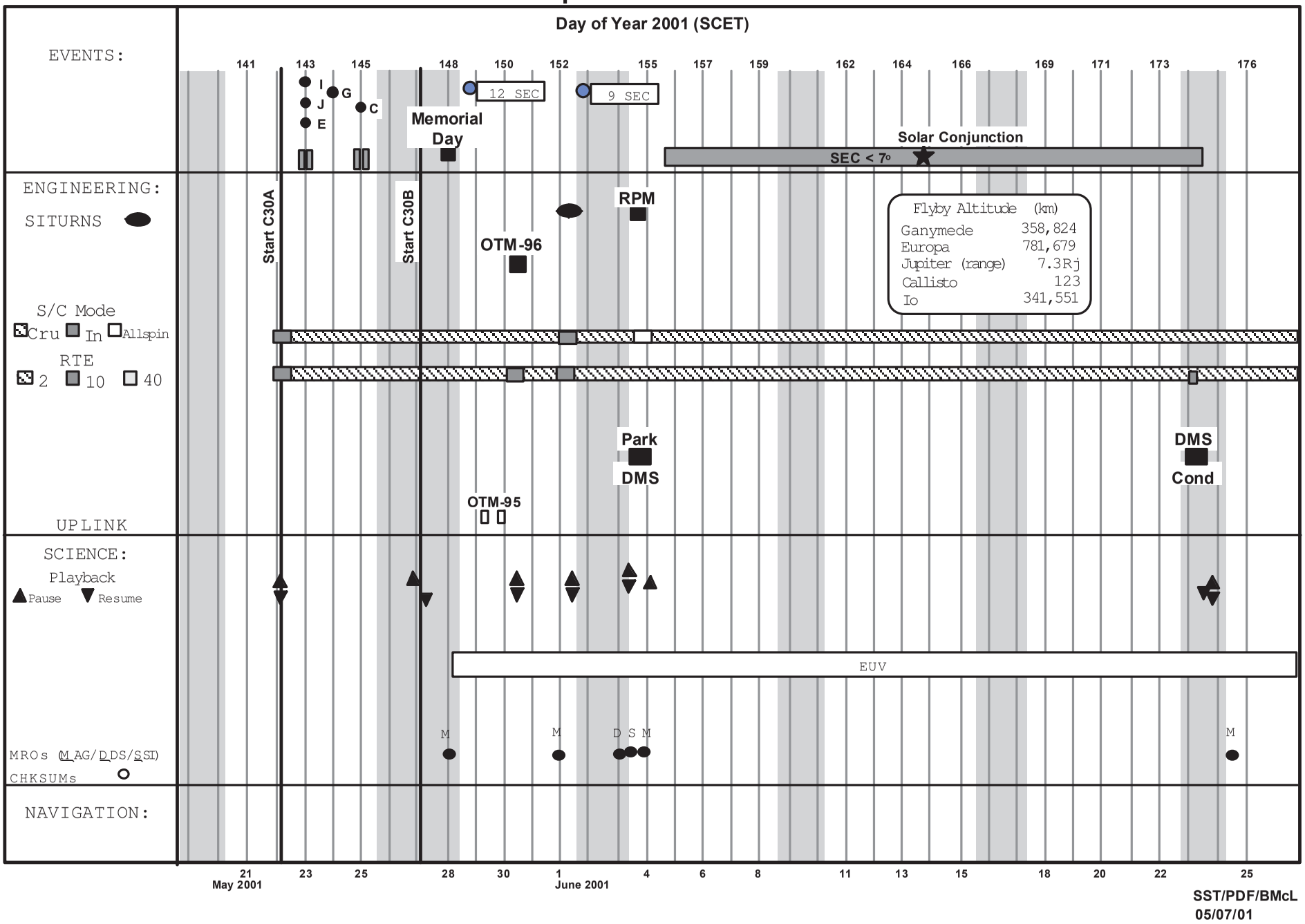
C30A Encounter Overview



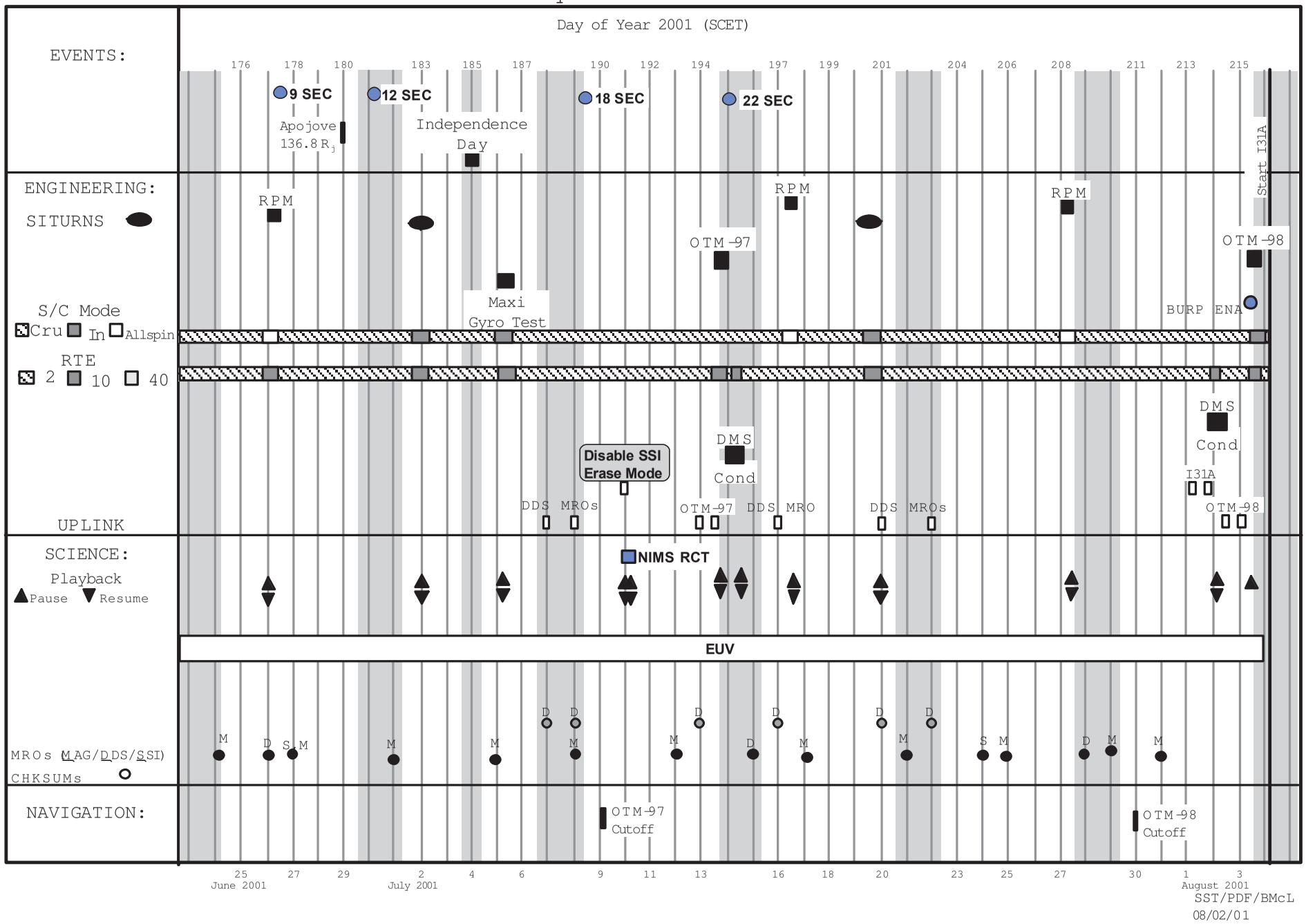
Note: Two Bus Reset PORs occurred during the encounter time period, both of which were properly handled by the on-board recovery routine.
The times were: 01-143/15:49:08 SCET and 01-144/04:34:19 SCET.
SSI Power cycle and fast reloads were sent at 01-143/21:30:00 TRM and 01-144/16:25:00 TRM.

BMcL/SST
06/06/01

C30B Sequence Overview - Part 1



C30B Sequence Overview –Part 2



SST/PDF/BMcL
08/02/01

The following table lists the major events during C30, including NIMS Real Time observations, in UTC.

05/22/01	01-142/17:00:00	C30 Encounter Start
05/23/01	01-143/13:13:39	NIMS RAM Reload 01
05/23/01	01-143/17:17:09	Io Closest Approach
05/23/01	01-143/17:27:19	NIMS RAM Reload 02
05/23/01	01-143/17:34:12	PJ-30 Jupiter Closest Approach
05/23/01	01-143/23:40:26	NIMS RAM Reload 03
05/23/01	01-143/23:50:28	Europa Closest Approach
05/24/01	01-144/01:08:01	NIMS RAM Reload 04
05/24/01	01-144/02:08:41	NIMS RAM Reload 05
05/24/01	01-144/03:09:21	NIMS RAM Reload 06
05/24/01	01-144/10:03:54	NIMS RAM Reload 07
05/24/01	01-144/11:23:47	NIMS RAM Reload 08
05/24/01	01-144/13:04:54	NIMS RAM Reload 09
05/24/01	01-144/13:45:20	NIMS RAM Reload 10
05/24/01	01-144/14:45:00	NIMS RAM Reload 11
05/24/01	01-144/15:46:40	NIMS RAM Reload 12
05/25/01	01-145/03:16:15	NIMS RAM Reload 13
05/25/01	01-145/06:38:28	NIMS RAM Reload 14
05/25/01	01-145/09:59:41	NIMS RAM Reload 15
05/25/01	01-145/11:25:23	C30 Callisto Closest Approach
05/25/01	01-145/11:28:38	NIMS RAM Reload 16
05/25/01	01-145/11:49:54	NIMS RAM Reload 17
05/25/01	01-145/12:26:18	NIMS RAM Reload 18
05/25/01	01-145/13:14:21	NIMS RAM Reload 19
05/27/01	01-147/22:27:28	NIMS RAM Reload 20
05/27/01	01-147/13:24:50	Start C30 Playback
07/10/01	01-191/19:28:49	NIMS RAM Reload 21
07/10/01	01-191/19:55:29	NIMS R/T RCT CAL
08/03/01	01-215/21:48:21	End C30 Playback

Chapter 2 - Orbit Overview

Contents

Introduction to Chapter 2

This chapter gives an overview of the NIMS observations in the C30 Orbit.

The text on page 3 summarizes the NIMS science objectives for C30. The NIMS calibrations are discussed on page 3. Early data return and C30 playback are also discussed on page 3.

The table on page 4 is a time-ordered listing of the NIMS Oapels for C30.

The plot on page 5 shows the geometry of the NIMS C30 observations using a north trajectory pole view projection. The plot on page 6 shows the geometry of the NIMS C30 calibrations.

The spreadsheet on page 7 summarizes the various inputs for the NIMS C30 Observations. The spreadsheet on pages 8 and 9 summarizes the resource usage for the NIMS C30 observations.

The table on page 10 lists various NIMS C30 observing parameters: target latitude/longitude, range, cone angle, incidence angle light), emission angle view) and phase angle.

The timeline on pages 11 through 15 shows the placement of the C30 observations for all intruments during the C30 Encounter Period.

The tapemap on page 16 shows the placement of the C30 observations on the spacecraft's tape recorder.

The timeline on pages 17 through 27 shows the preliminary C30 playback schedule.

The NIMS C30 mosaic designs are summarized on pages 28 through 30 in time-order.

Jupiter Science

There are twelve Jupiter observations in C30, all recorded. Three observations look at brown barges (BBARGE and BARGEB), three others look at the equatorial hot spot region (HTSPOT), two more look at the Great Red Spot wake region (GRWAKE), one looks at the white oval region (WTOVAL) and three are global maps (GLOBAL).

Io Science

Two global maps look at the same face of Io: one in eclipse and the other two-thirds illuminated.

Europa Science

There is one global Europa observation in C30.

Ganymede Science

There are no Ganymede observations in C30.

Callisto Science

There are four Callisto observations in C30. FEATRE01 is a high resolution scan of the Asgard multi-ring struecture. CTBRAN01 looks at the Bran crater region. REGION01 and REGION02 are regional scale maps of a portion of Callisto's surface.

Calibration

There is one NIMS calibration observation planned for C30: an RCT cal.

Early Data Return

There is one realtime observations in C30, the RCT calibration.

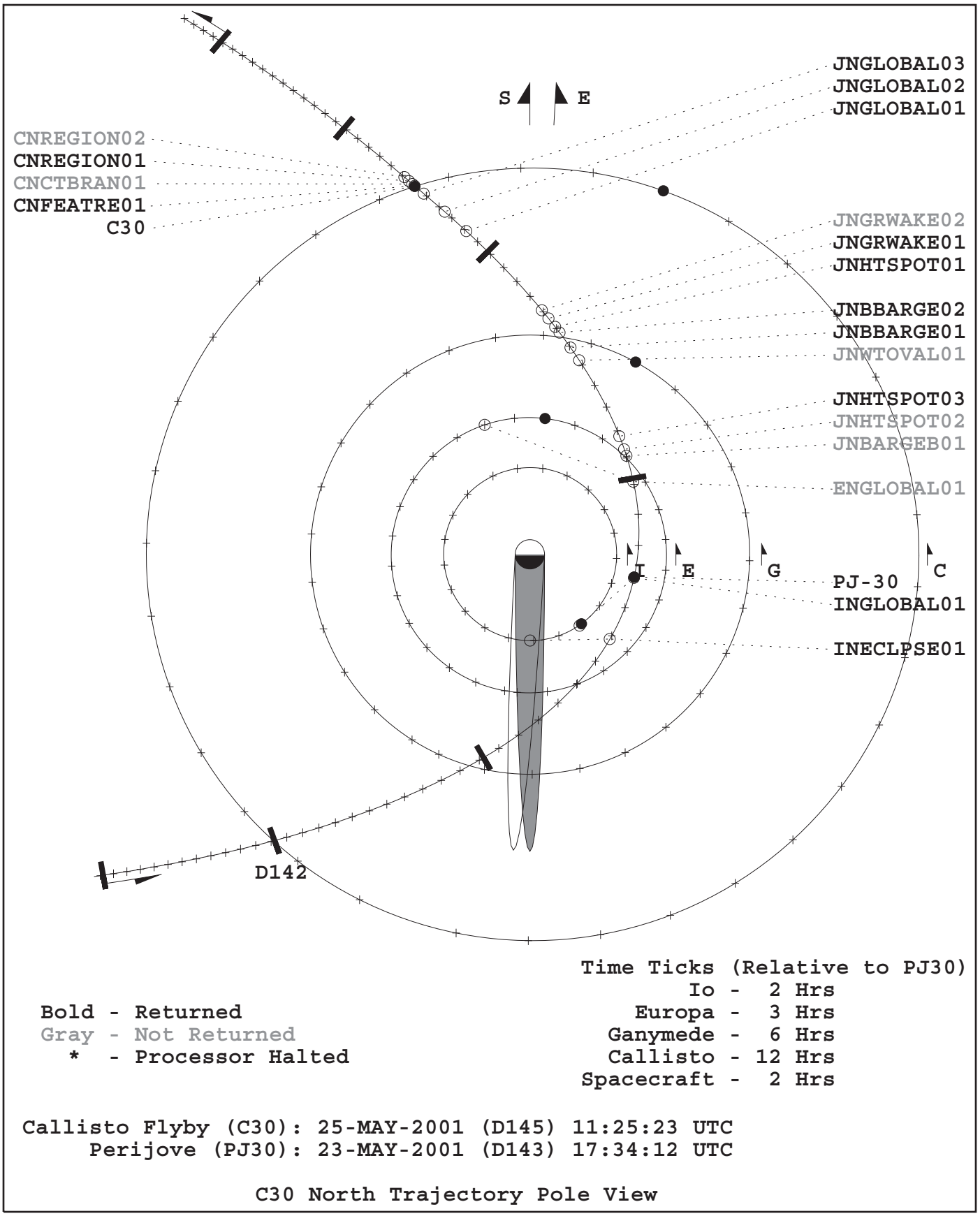
C30 Playback

C30 playback is split into two passes through the tape.

C30 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
30INECLPSE01	01-143/13:19:33	01-143/13:27:38	0/00:08:05
30INGLOBAL01	01-143/17:31:18	01-143/17:49:30	0/00:18:12
30ENGLOBAL01	01-143/23:46:26	01-143/23:54:31	0/00:08:05
30JNBARGEB01	01-144/01:08:20	01-144/01:56:52	0/00:48:32
30JNHTSPOT02	01-144/02:09:00	01-144/03:07:38	0/00:58:38
30JNHTSPOT03	01-144/03:09:40	01-144/04:00:13	0/00:50:33
30JNWTOVAL01	01-144/10:04:13	01-144/10:36:35	0/00:32:21
30JNBBARGE01	01-144/11:25:07	01-144/11:45:20	0/00:20:13
30JNBBARGE02	01-144/13:06:13	01-144/13:36:33	0/00:30:20
30JNHTSPOT01	01-144/13:46:40	01-144/14:17:00	0/00:30:20
30JNGRWAKE01	01-144/14:47:20	01-144/15:17:40	0/00:30:20
30JNGRWAKE02	01-144/15:48:00	01-144/16:18:20	0/00:30:20
30JNGLOBAL01	01-145/03:19:36	01-145/04:00:03	0/00:40:26
30JNGLOBAL02	01-145/06:41:49	01-145/07:10:08	0/00:28:18
30JNGLOBAL03	01-145/10:04:03	01-145/10:34:23	0/00:30:20
30CNFEATRE01	01-145/11:31:10	01-145/11:44:19	0/00:13:08
30CNCTBRAN01	01-145/11:52:14	01-145/12:23:34	0/00:31:20
30CNREGION01	01-145/12:28:38	01-145/13:09:04	0/00:40:26
30CNREGION02	01-145/13:15:08	01-145/13:48:30	0/00:33:22
30NNRCTRLT01	01-191/07:26:07	01-191/20:36:49	0/13:10:42

NIMS C30 OBSERVATIONS



Time Ticks (Relative to PJ30)

Io -	2 Hrs
Europa -	3 Hrs
Ganymede -	6 Hrs
Callisto -	12 Hrs
Spacecraft -	2 Hrs

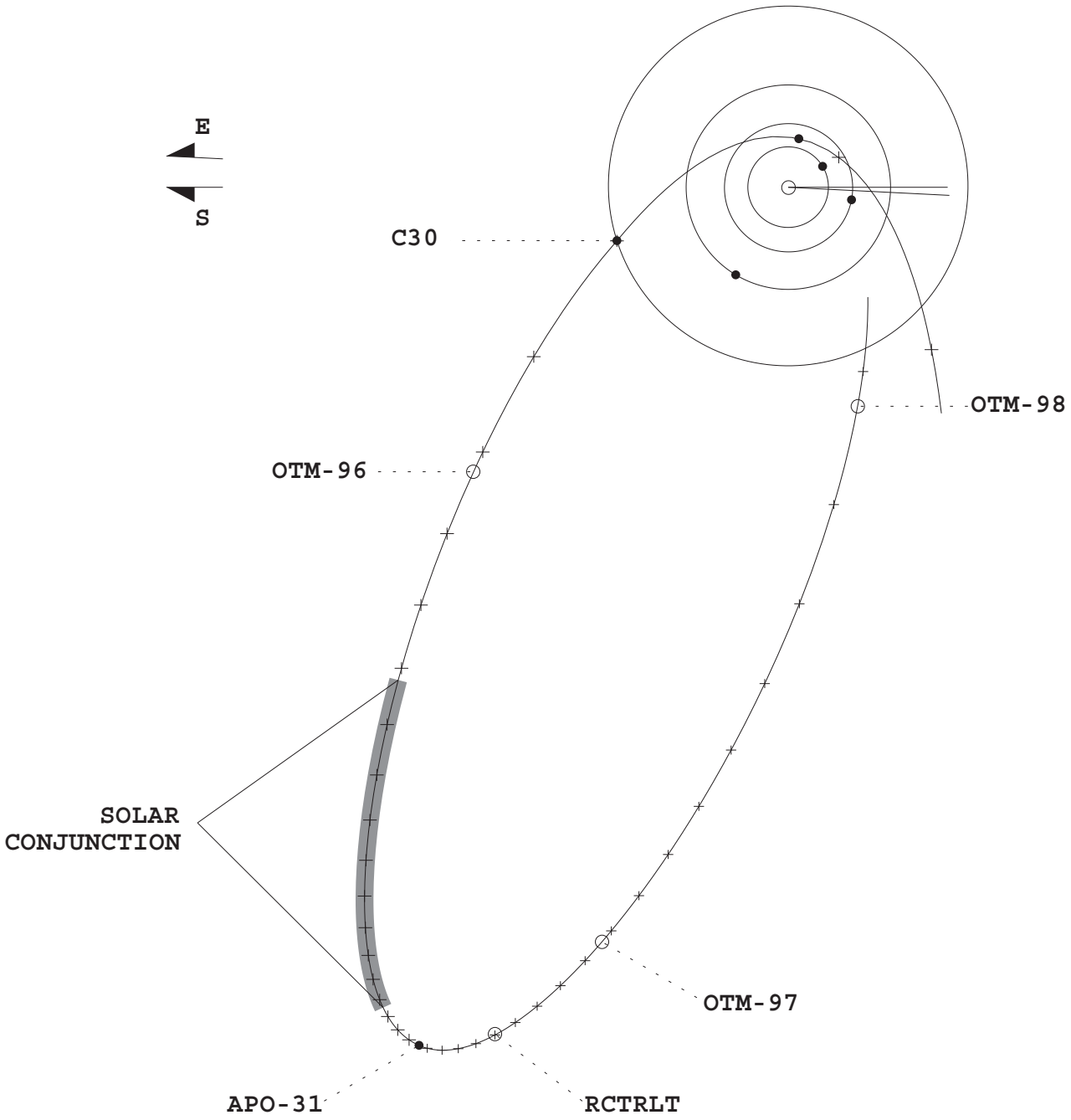
Bold - Returned
Gray - Not Returned
* - Processor Halted

Callisto Flyby (C30): 25-MAY-2001 (D145) 11:25:23 UTC
Perijove (PJ30): 23-MAY-2001 (D143) 17:34:12 UTC

C30 North Trajectory Pole View

NIMS - FEL - 11/30/01

NIMS C30 CALIBRATIONS



Time Ticks (Relative to C30)
Spacecraft - 2 Days

Callisto Flyby (C30): 25-MAY-2001 (D145) 11:25:23 UTC
Perijove (PJ30): 23-MAY-2001 (D143) 17:34:11 UTC
Apojove (A31): 29-JUN-2001 (D180) 23:46:40 UTC

C30 North Trajectory Pole View

NIMS - FEL - 03/26/01

C30 NIMS INPUTS

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
30INECLPSE01-	Io Eclipse	C30ILM442	C30ILMFG36	LM	4	0	4	MPW	DF
30INGLOBAL01-	Io Global	C30ILM442	C30ILMFG36	LM	2	0	4	MPW	DA
30ENGLOBAL01-	Europa Global	C30ELM442		LM	4	0	4	LPU	DB
30JNBARGEB01	Jupiter Brown Barge	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DC
30JNHTSPOT02-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DD
30JNHTSPOT03-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DE
30JNWTOVAL01-	Jupiter White Oval	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DG
30JNBBARGE01-	Jupiter Brown Barge	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DH
30JNBBARGE02-	Jupiter Brown Barge	C30JLMFG240	C30JLMFG8	LM	2	0	4	LPU	DI
30JNHTSPOT01-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DJ
30JNGRWAKE01-	Jupiter GRS Wake	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DK
30JNGRWAKE02-	Jupiter GRS Wake	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DL
30JNGLOBAL01-	Jupiter Global	C30JXMFG10	C30JXMFG2	XM	2	0	4	LPU	DP
30JNGLOBAL01-	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	4	LPU	DP
30JNGLOBAL02-	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	4	LPU	DQ
30JNGLOBAL03-	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	4	LPU	DR
30CNFEATRE01-	Callisto Feature	C30CLM442	C30CLMFG36	LM	4	0	4	MPW	DS
30CNCTBRAN01-	Bran Crater	C30CLMFG253	C30CLMFG36	LM	4	0	4	LPU	DT
30CNREGION01-	Callisto Regional	C30CLMFG253	C30CLMFG12	LM	4	0	4	LPU	DU
30CNREGION02--	Callisto Regional	C30CLMFG253	C30CLMFG12	LM	4	0	4	LPU	DV

C30 RESOURCES

Activity ID	Mode	Record Format	Obs. Cost (tracks)	Obs. Cost (ticks)	Number Wavelengths Returned	Obs Record (sec.)	Obs PB (sec.)	Selected Bits to Tape sBOT (MBITS)	Bits to Tape BOT (Mbit)	Mode Cycle time (sec)
30INECLPSE01-	LM	MPW	0.0550	321	36	362	359	4.14	4.17	8.667
30INGLOBAL01-	LM	MPW	0.1310	764	36	866	427	4.92	9.98	8.667
30ENGLOBAL01-	LM	LPU	0.0094	55	24	226	226	1.39	1.39	8.667
30JNBARGEB01	LM	LPU			16	2786	445	2.74		8.667
30JNHTSPOT02-	LM	LPU	0.1127	656	16	3275	2792	17.22	0.11	8.667
30JNHTSPOT03-	LM	LPU	0.0484	282	16	3314	1195	7.37	0.05	8.667
30JNWTOVAL01-	LM	LPU	0.0638	372	16	1860	1578	9.73	0.06	8.667
30JNBBARGE01-	LM	LPU	0.0196	114	16	981	478	2.95	0.02	8.667
30JNBBARGE02-	LM	LPU	0.0102	59	8	1582	244	1.50	0.01	8.667
30JNHTSPOT01-	LM	LPU	0.0390	227	16	1582	960	5.92	0.04	8.667
30JNGRWAKE01-	LM	LPU	0.0637	371	16	1582	1574	9.71	0.06	8.667
30JNGRWAKE02-	LM	LPU	0.0637	371	16	1582	1574	9.71	0.06	8.667
30JNGLOBAL01-	XM	LPU	0.0642	374	2	1587	302	1.86	9.79	0.333
30JNGLOBAL01-	XM	LPU	0.0642	374	5	1587	791	4.88	9.79	0.333
30JNGLOBAL02-	XM	LPU	0.0588	342	5	1452	718	4.43	8.96	0.333
30JNGLOBAL03-	XM	LPU	0.0590	344	5	1457	824	5.08	8.99	0.333
30CNFEATRE01-	LM	MPW	0.1012	590	36	668	665	7.66	7.70	8.667
30CNCTBRAN01-	LM	LPU	0.0660	385	24	1632	1621	10.00	10.07	8.667
30CNREGION01-	LM	LPU	0.0910	530	12	2253	182	1.12	13.90	8.667
30CNREGION02--	LM	LPU	0.0740	431	12	1830	1819	11.22	11.29	8.667

C30 RESOURCES

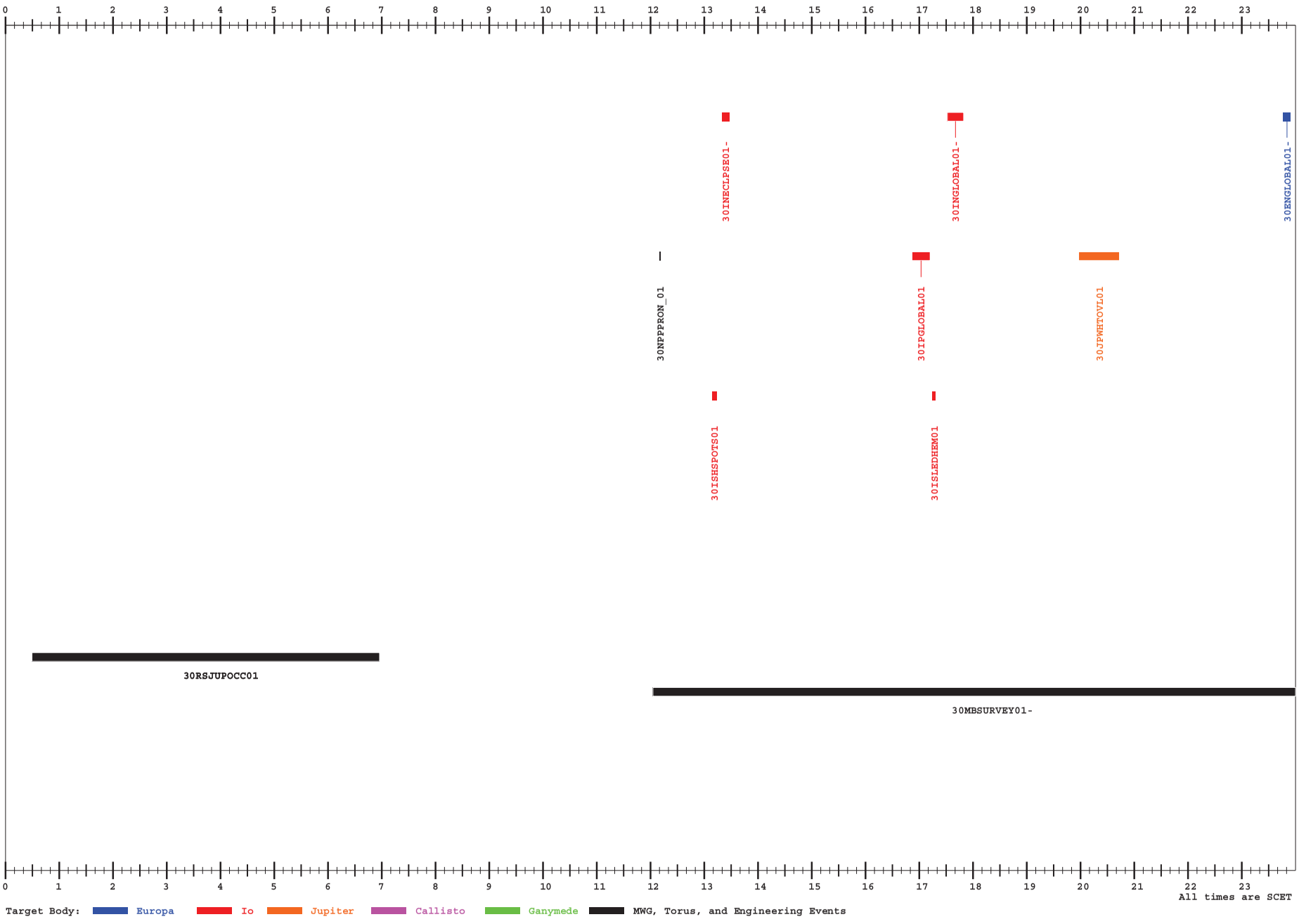
Activity ID	AACS Mbits c 2.5	Comp	Thold	RT BTG	Total BTG (Mbits) with 4% O'head	Data Reduction Factor (sBOT/BTG)	Pass
30INECLPSE01-	0.021	1.21			0.256	16.1	2
30INGLOBAL01-	0.025	1.22			0.302	16.3	2
30ENGLOBAL01-	0.013	1.7					2
30JNBARGEB01		1.5					2
30JNHTSPOT02-	0.161	1.5					2
30JNHTSPOT03-	0.069	1.6			0.287	25.7	2
30JNWTOVAL01-	0.091	1.9					2
30JNBBARGE01-	0.028	1.62			0.113	26.0	2
30JNBBARGE02-	0.014	1.65			0.028	53.0	2
30JNHTSPOT01-	0.055	1.84			0.200	29.6	2
30JNGRWAKE01-	0.091	1.67			0.362	26.8	2
30JNGRWAKE02-	0.091	1.9					2
30JNGLOBAL01-	0.017	2.08			0.181	10.3	2
30JNGLOBAL01-	0.046	1.86			1.328	3.7	2
30JNGLOBAL02-	0.041	2.1					2
30JNGLOBAL03-	0.047	1.84			1.399	3.6	2
30CNFEATRE01-	0.038	1.51			0.380	20.1	2
30CNCTBRAN01-	0.093	2					2
30CNREGION01-	0.010	1.85			0.028	39.6	2
30CNREGION02--	0.105	2					

NIMS C30 OBSERVING GEOMETRY

OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
30INECLPSE01	-90 to +90	0 to 180	384K	92	---	0 to 90	87
30INGLOBAL01	-90 to +90	0 to 180	343K	132	25 to 134	27 to 90	46
30ENGLOBAL01	-90 to +90	220 to 40	782K	70	19 to 175	7 to 90	110
30JNBARGEB01	+10 to +20	307 to 337	600K	132	10 to 133	22 to 52	48
30JNHTSPOT02	+5 to +10	21 to 50	645K	141	19 to 80	7 to 44	38
30JNHTSPOT03	+5 to +10	19 to 48	680K	142	3 to 42	7 to 54	37
30JNWTOVAL01	-40 to -20	214 to 248	950K	163	33 to 64	42 to 77	16
30JNBBARGE01	+8 to +23	308 to 321	968K	168	9 to 19	13 to 24	12
30JNBBARGE02	+7 to +23	29 to 49	1037K	174	16 to 37	14 to 34	7
30JNHTSPOT01	+1 to +11	355 to 45	1066K	173	3 to 39	6 to 48	8
30JNGRWAKE01	-17 to -3	105 to 123	1108K	178	31 to 48	28 to 46	3
30JNGRWAKE02	-17 to -3	108 to 122	1134K	177	10 to 17	8 to 15	3
30JNGLOBAL01	-90 to +90	65 to 245	1584K	169	2 to 99	2 to 91	9
30JNGLOBAL02	-90 to +90	185 to 5	1700K	166	2 to 102	1 to 91	12
30JNGLOBAL03	-90 to +90	305 to 125	1810K	164	3 to 105	3 to 91	14
30CNFEATRE01	+22 to +28	141 to 148	3 to 10K	170	53 to 59	48 to 57	6 to 16
30CNCTBRAN01	-18 to -4	182 to 198	16 to 31K	173	11 to 19	9 to 18	5 to 8
30CNREGION01	-45 to -15	210 to 265	35 to 58K	175	21 to 73	24 to 76	5
30CNREGION02	-22 to +15	174 to 267	63 to 82K	177	0 to 68	1 to 71	4

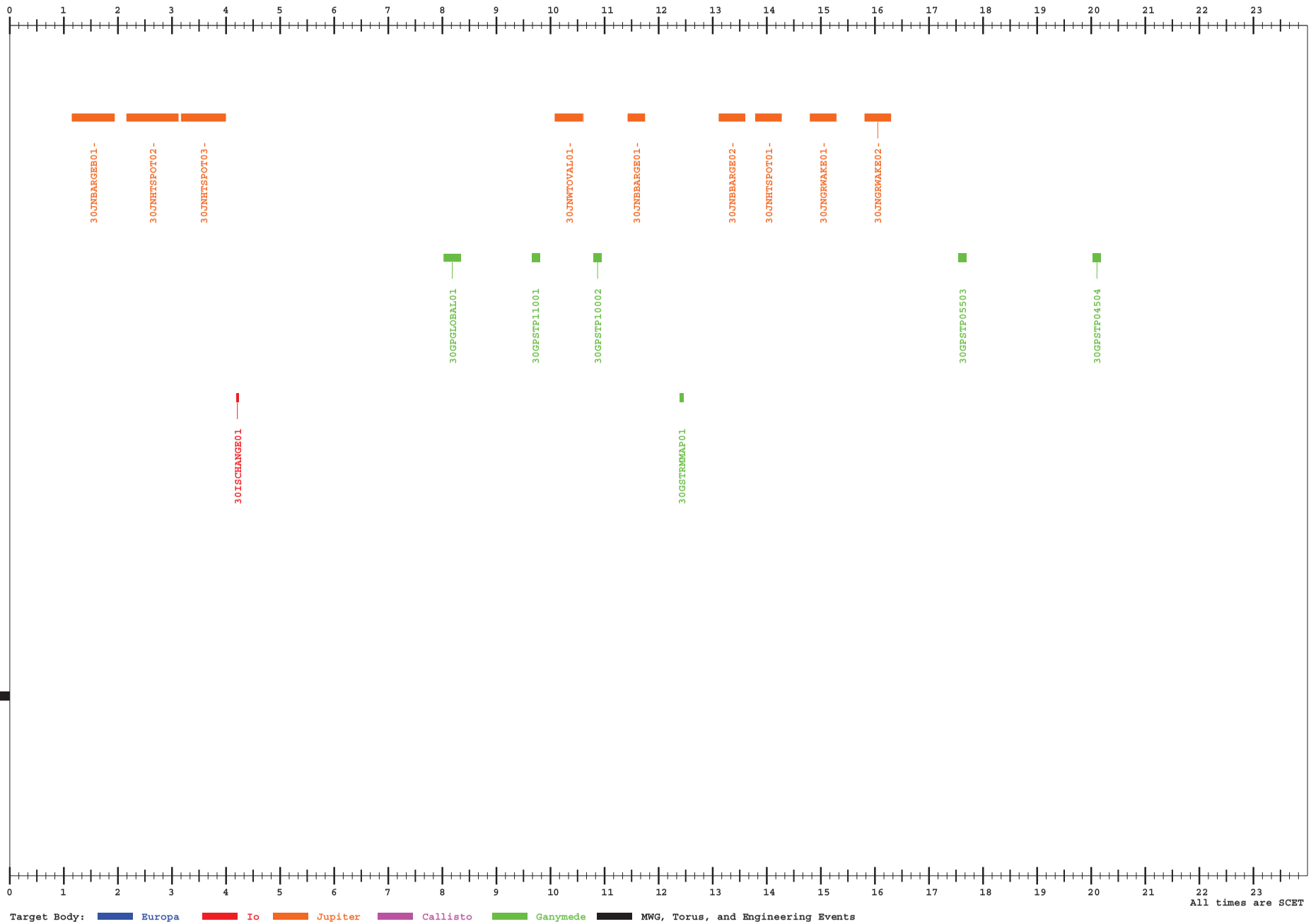
GEM: C30

C30 ENCOUNTER
Plot Time: 01-143/00:00:00.000 to 01-144/00:00:00.000
Date of Plot: 9-May-101 11:26:12



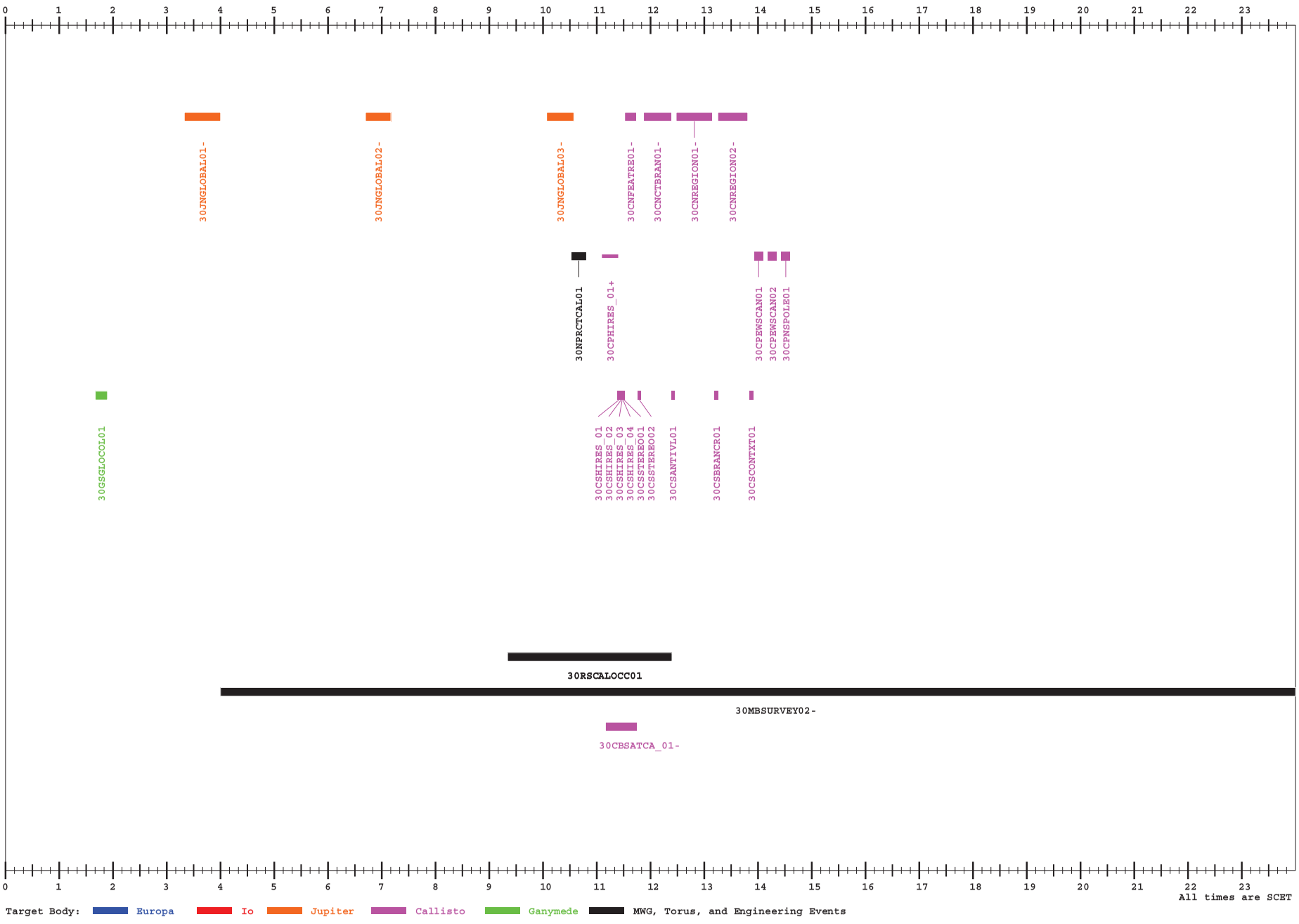
GEM: C30

C30 ENCOUNTER
Plot Time: 01-144/00:00:00.000 to 01-145/00:00:00.000
Date of Plot: 9-May-101 11:26:12



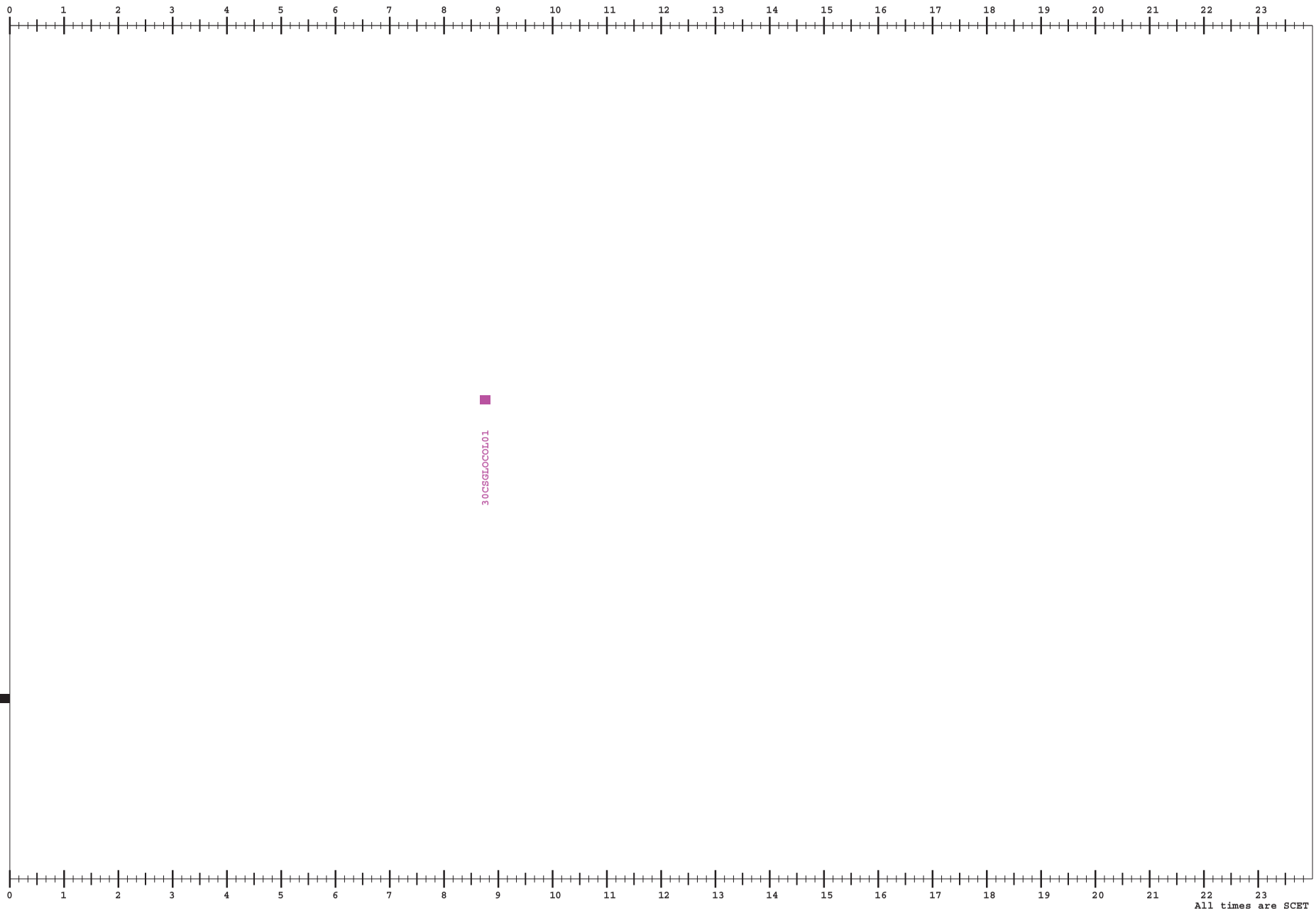
GEM: C30

C30 ENCOUNTER
Plot Time: 01-145/00:00:00.000 to 01-146/00:00:00.000
Date of Plot: 9-May-101 11:26:12



GEM: C30

C30 ENCOUNTER
Plot Time: 01-146/00:00:00.000 to 01-147/00:00:00.000
Date of Plot: 9-May-101 11:26:12



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

GEM: C30

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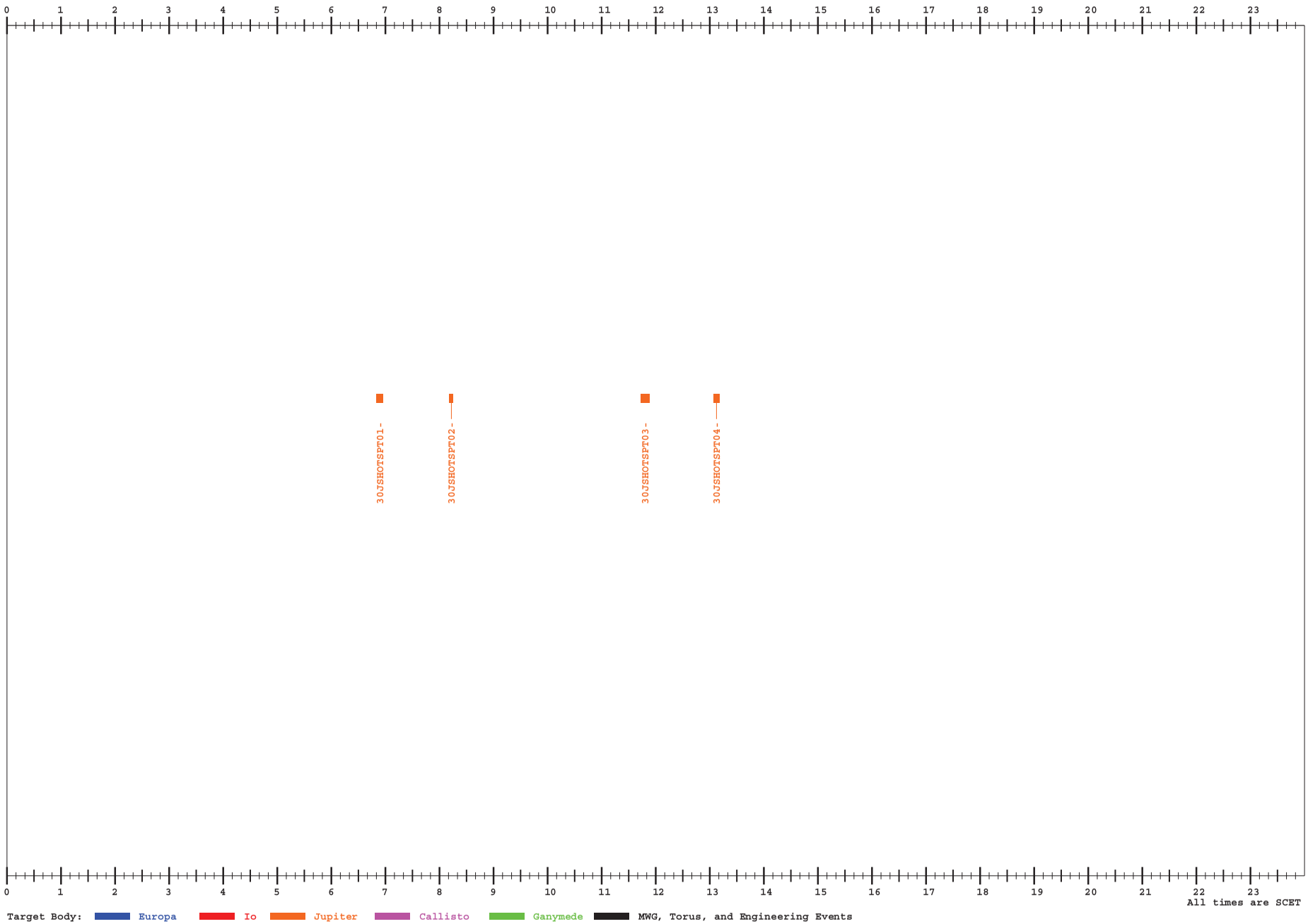
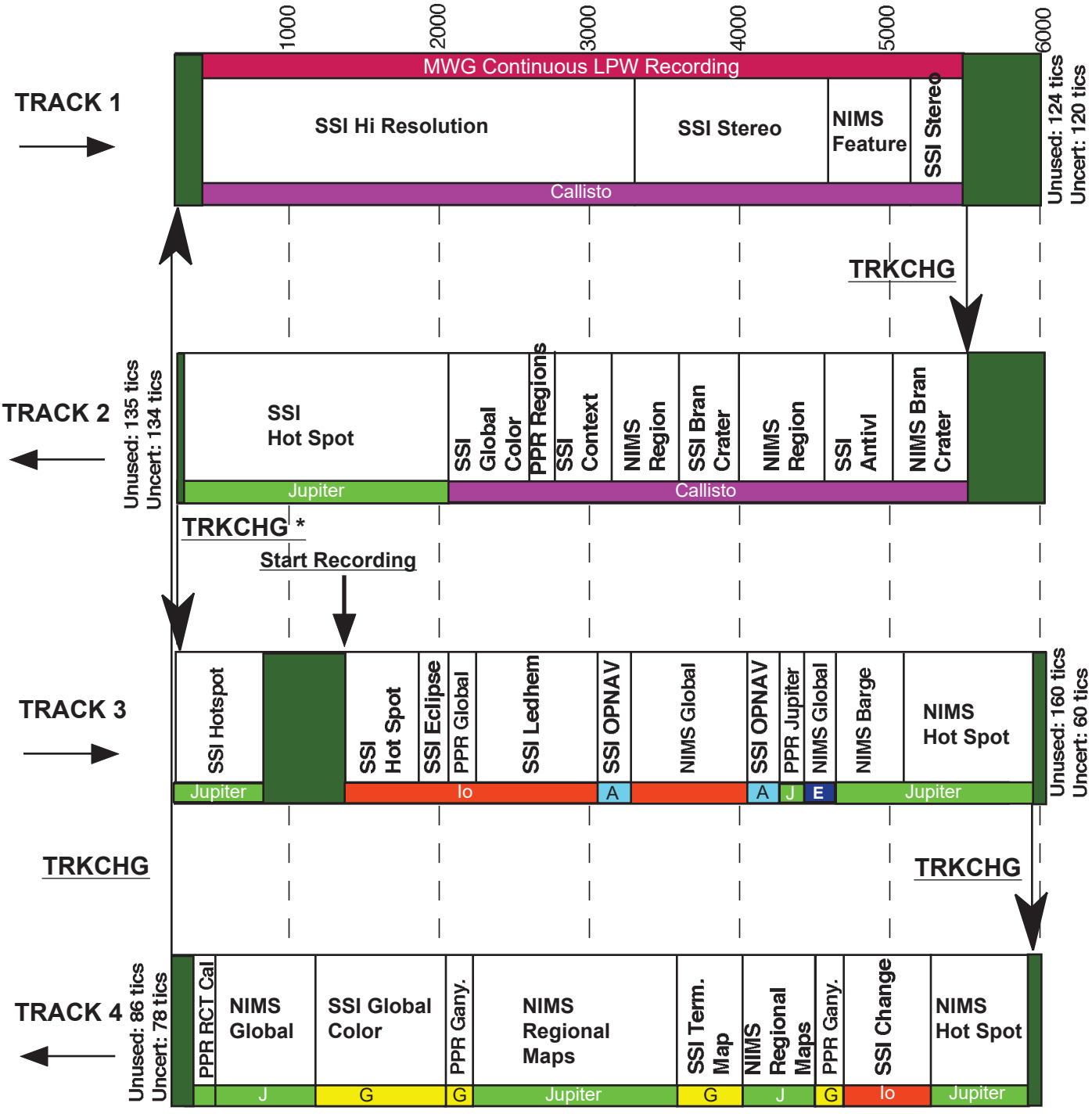


C30 ENCOUNTER HIGH-LEVEL TAPEMAP



* Track Change from 2 to 4, followed by DTRN from 4 to 1 to clear uncertainties, followed by a slew to tic and track change to 3 to resume recording after the DMS conditioning.

L.Barnard, 5/16/01

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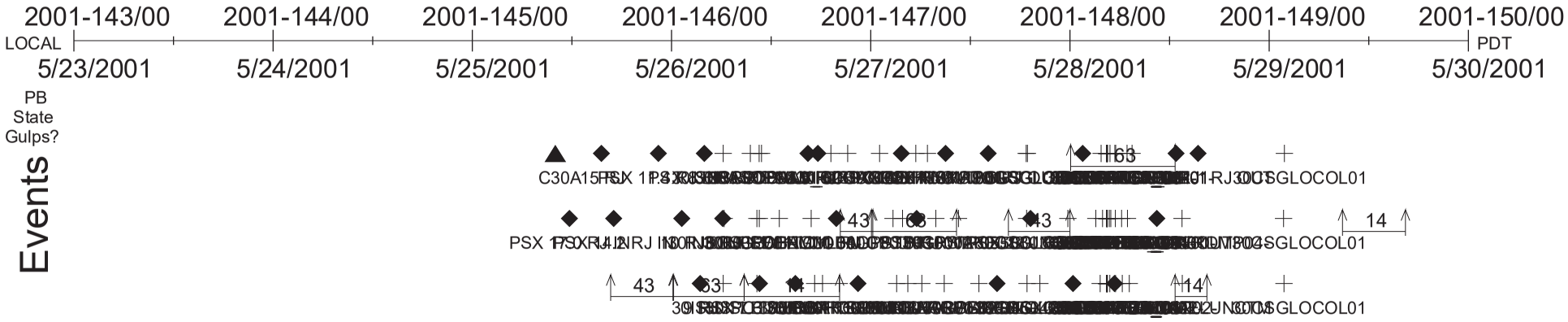

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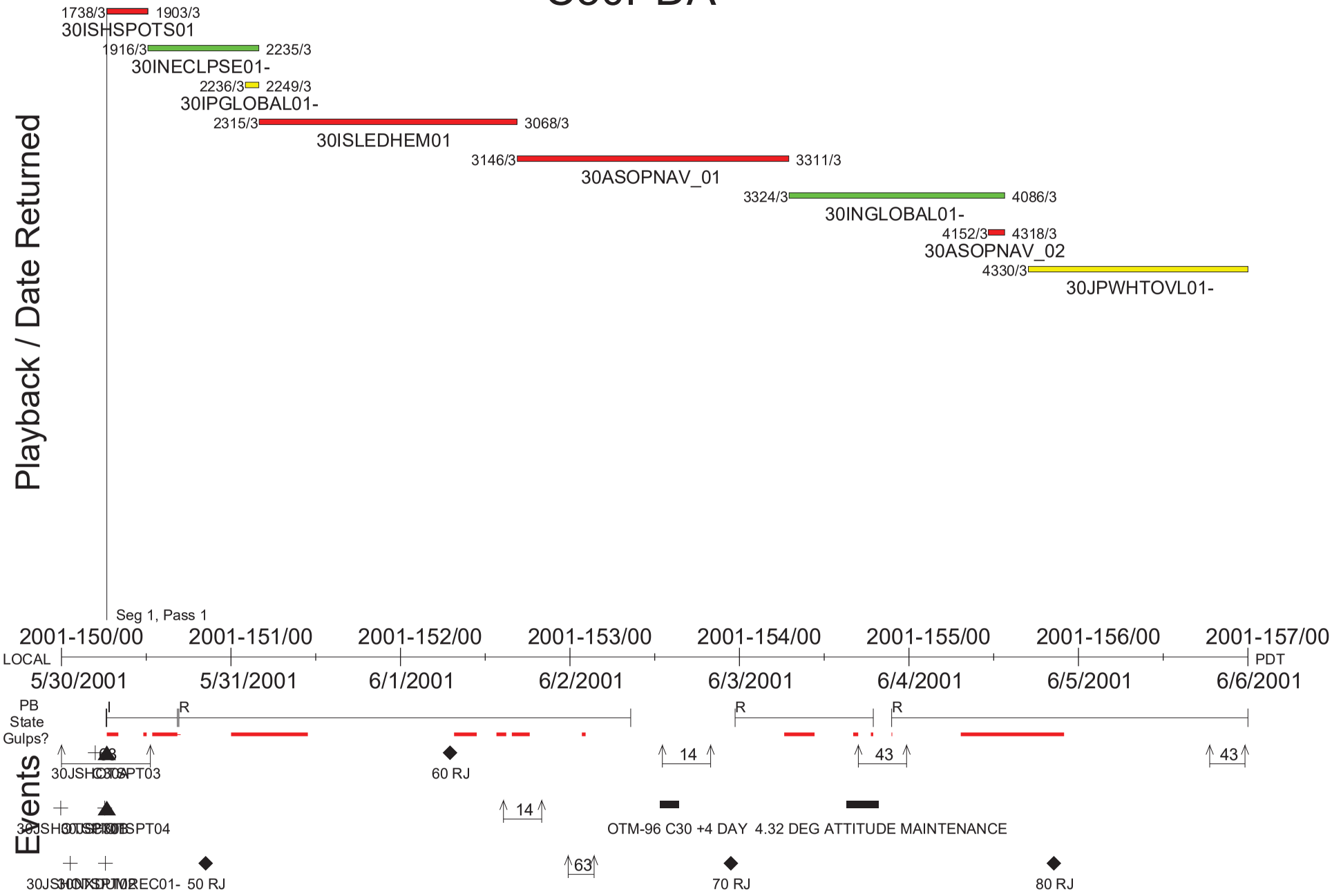

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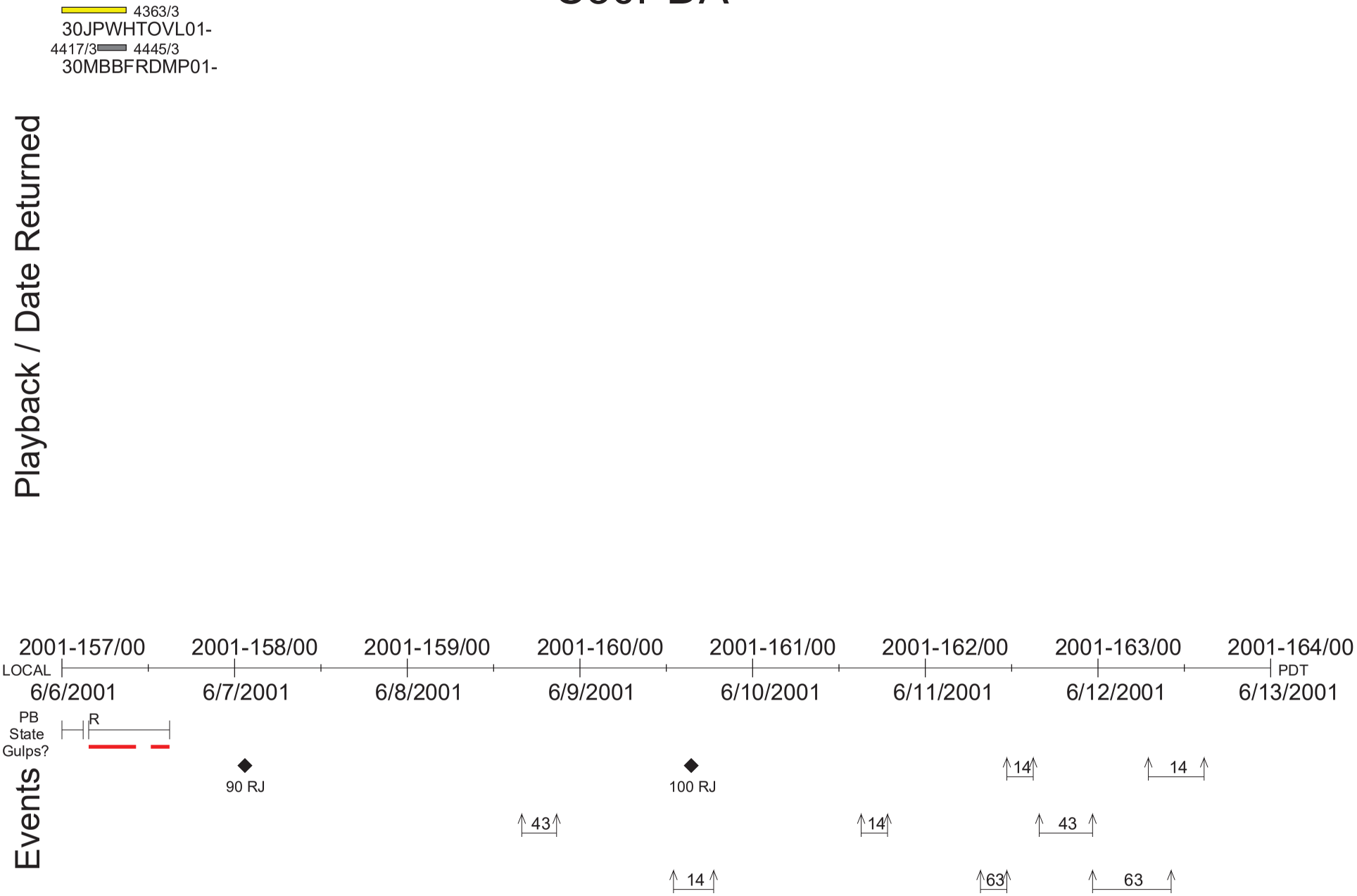
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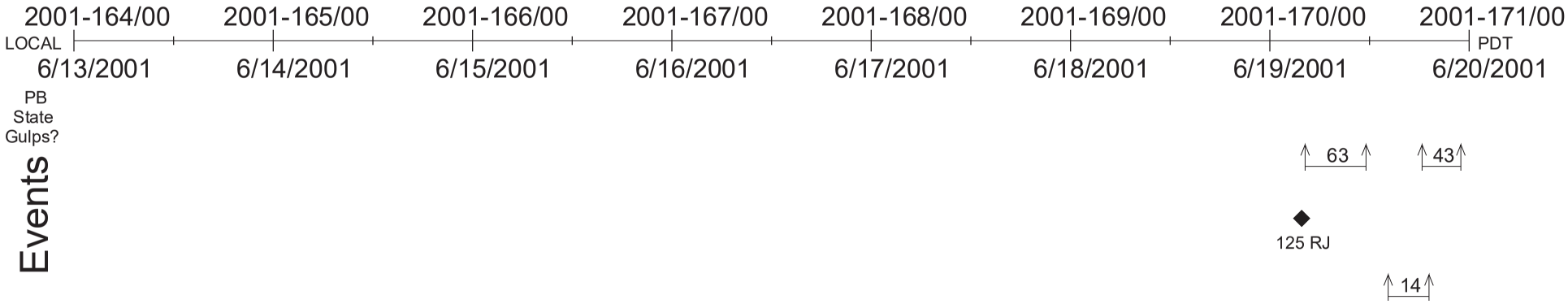

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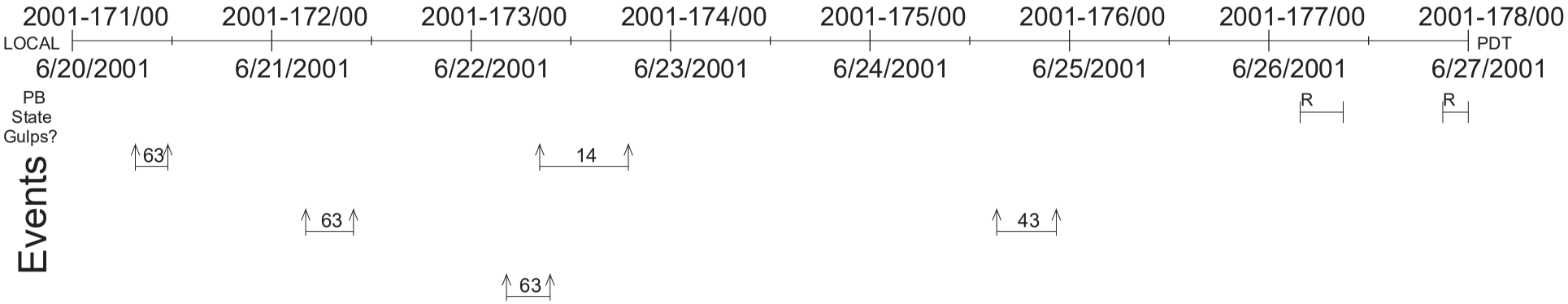

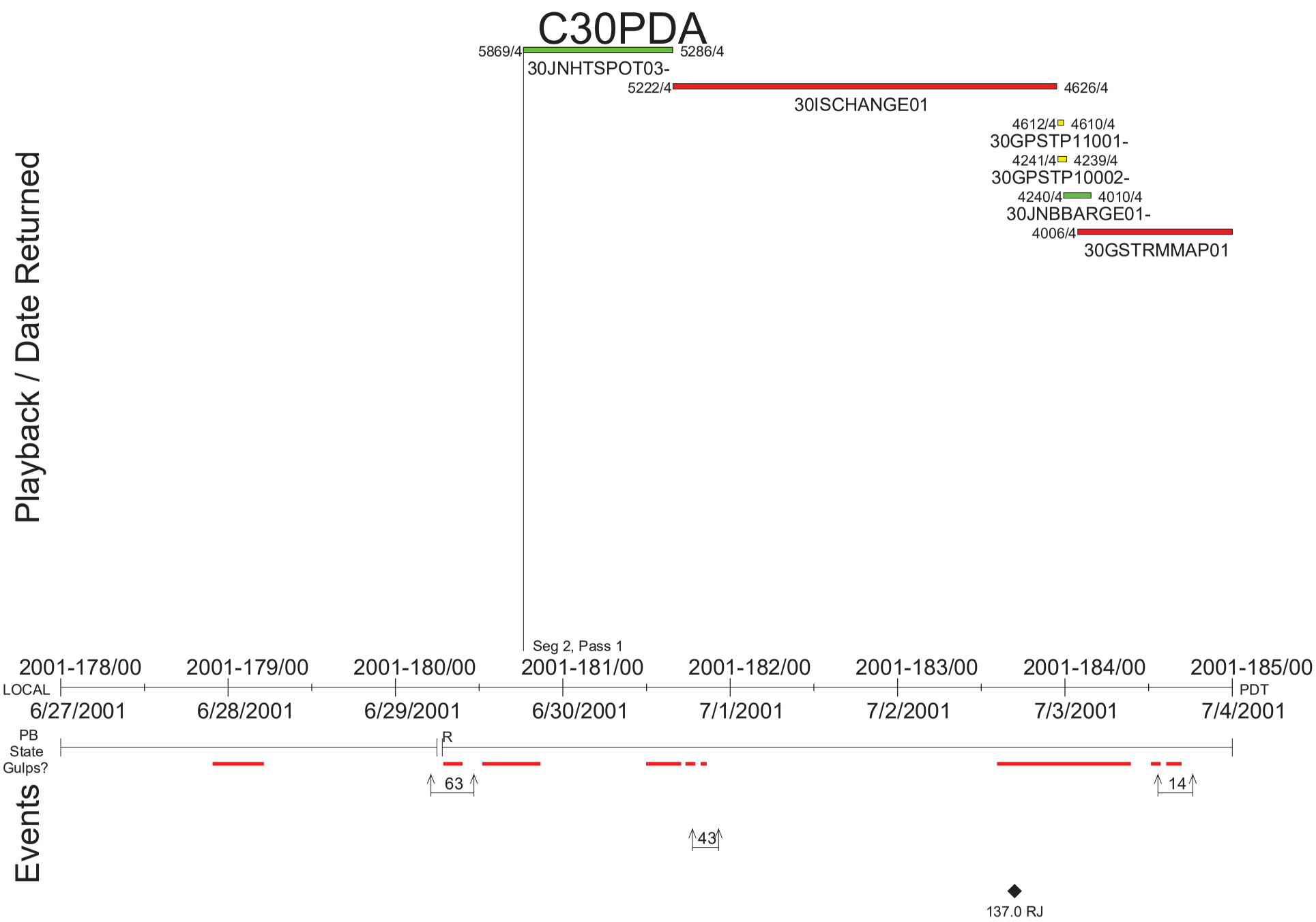
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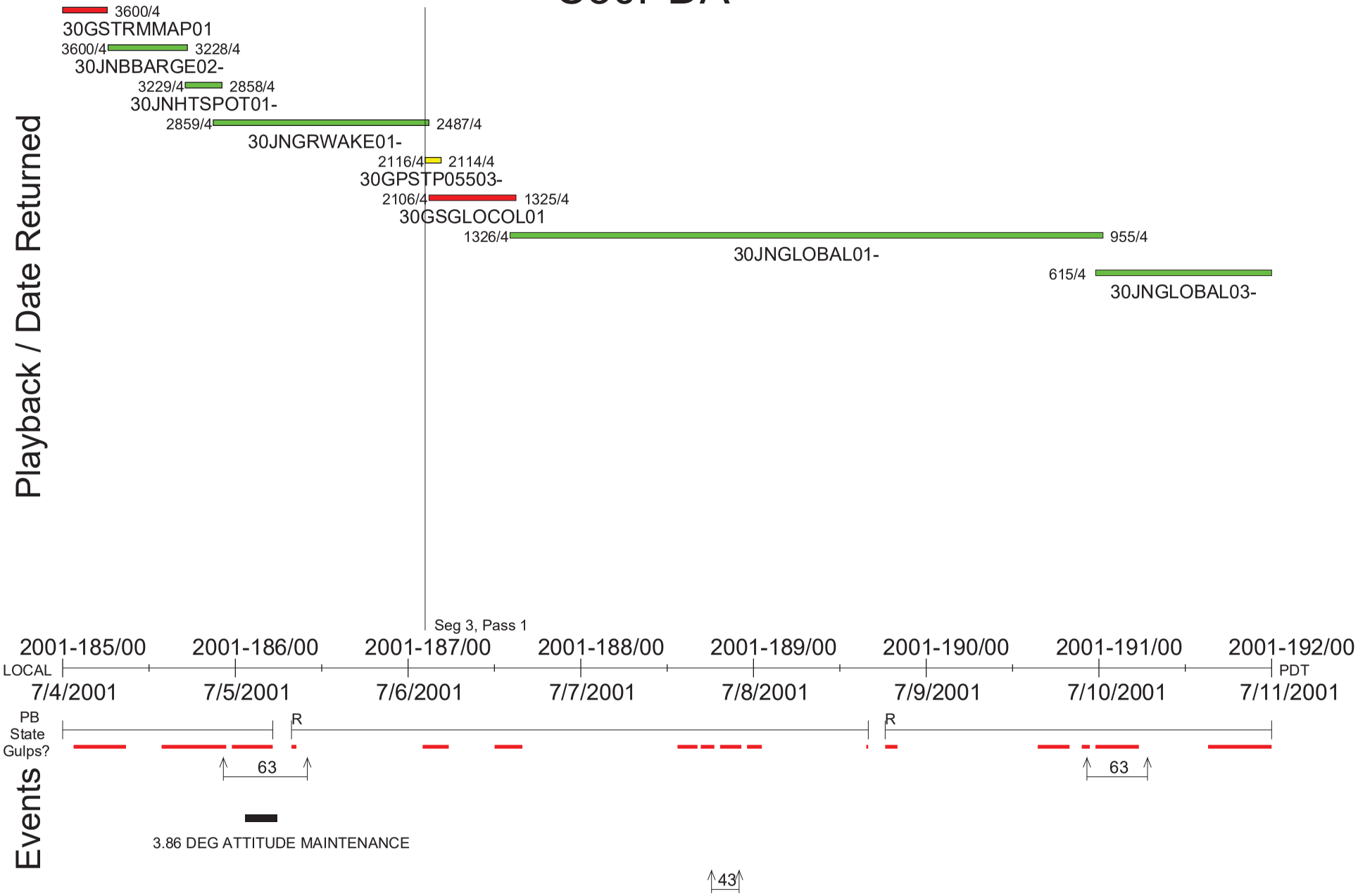
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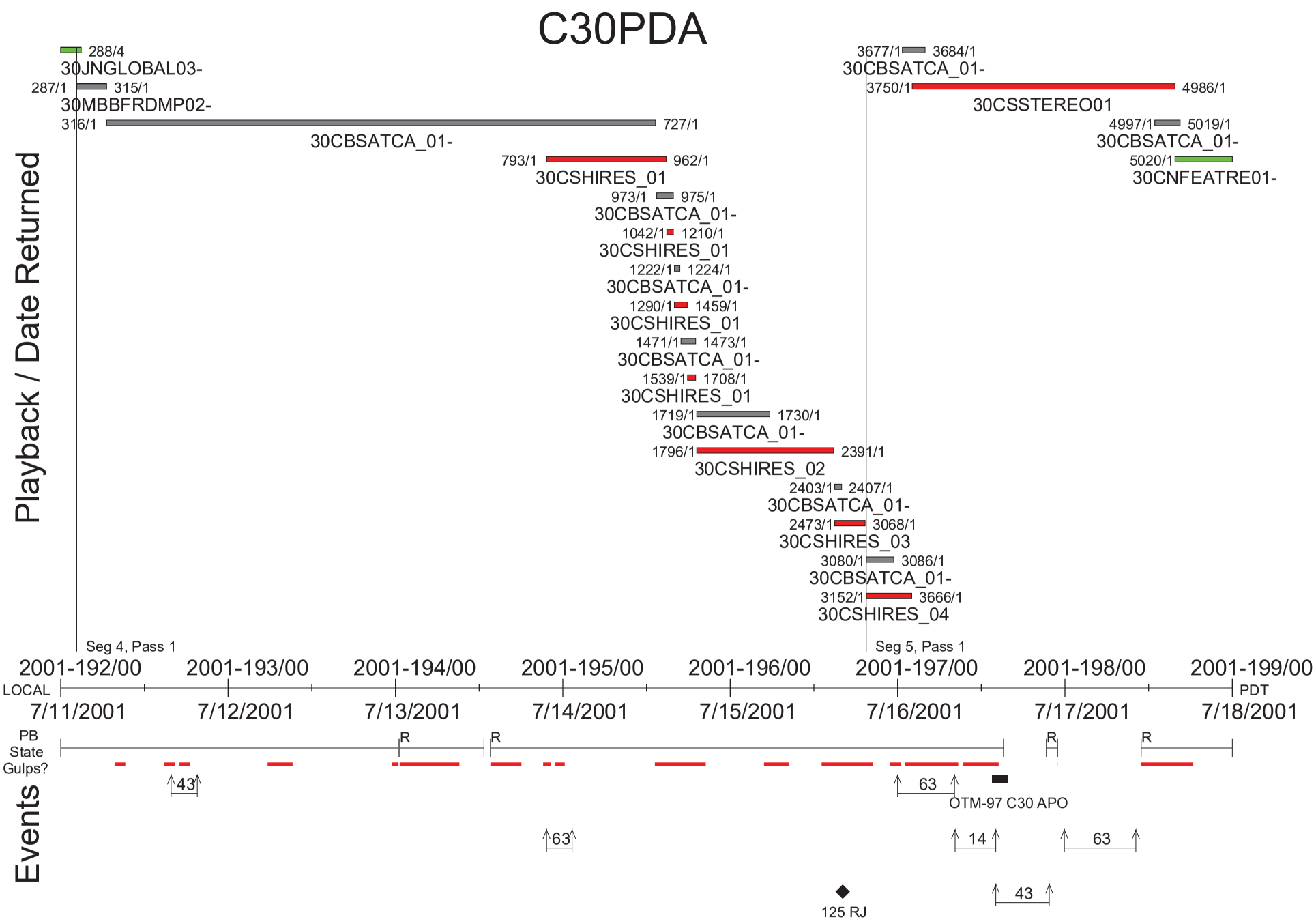
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2407/1
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2473/1
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30CSHIRES_03
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Seg 5, Pass 1
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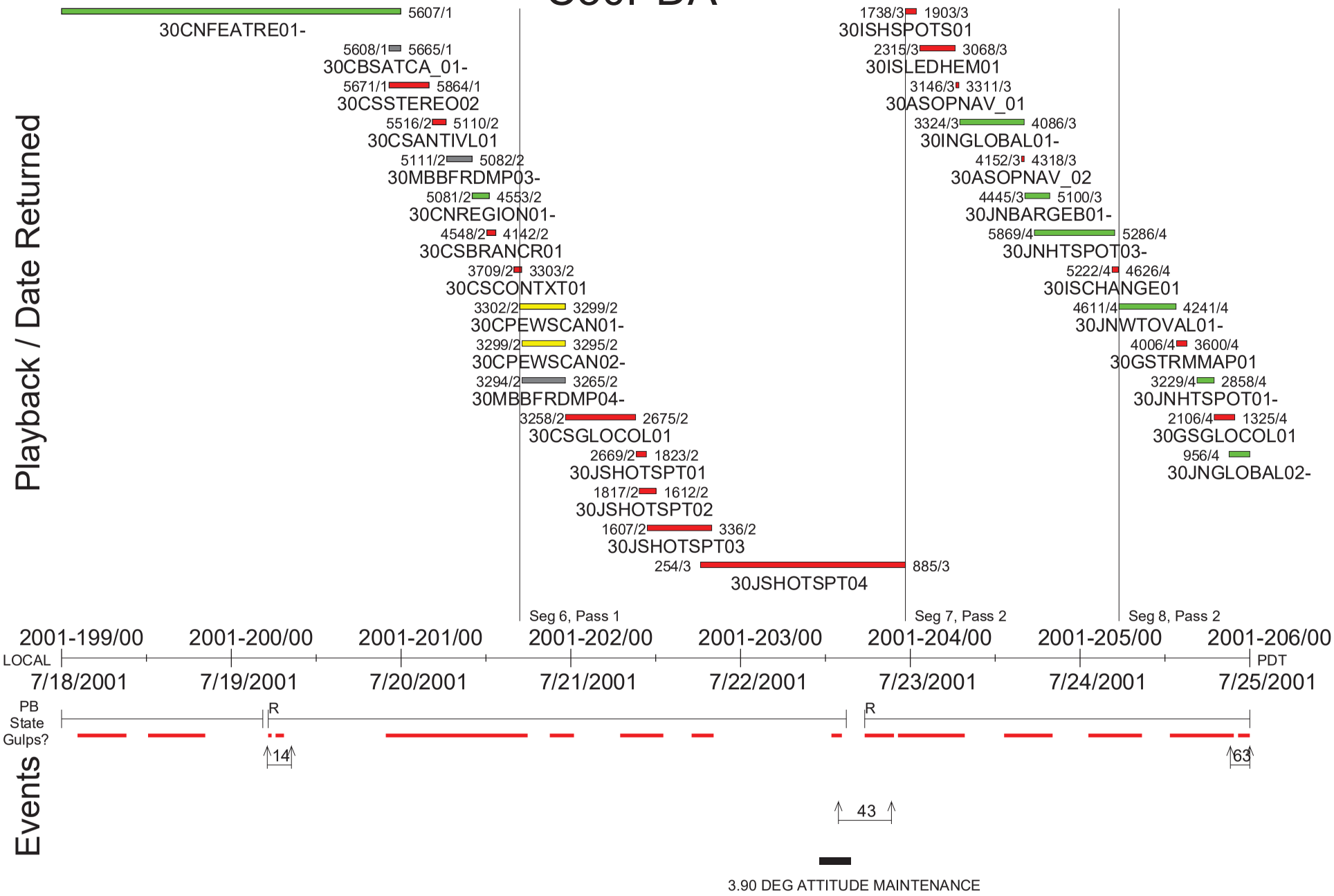
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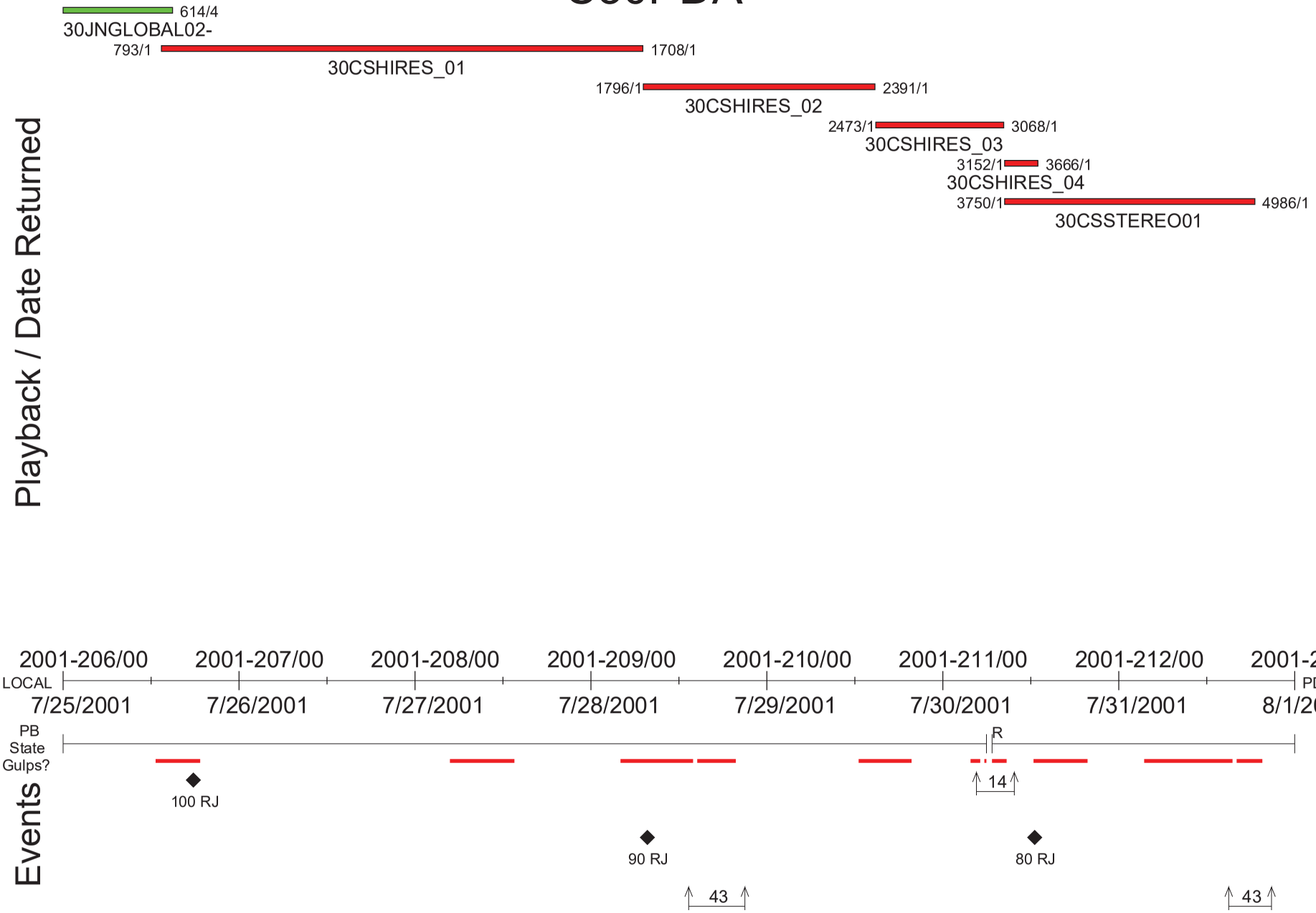
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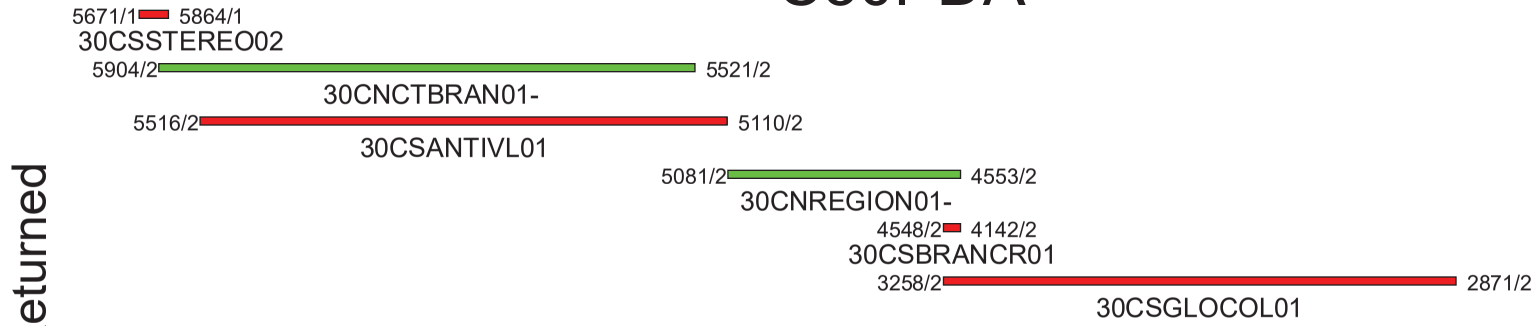

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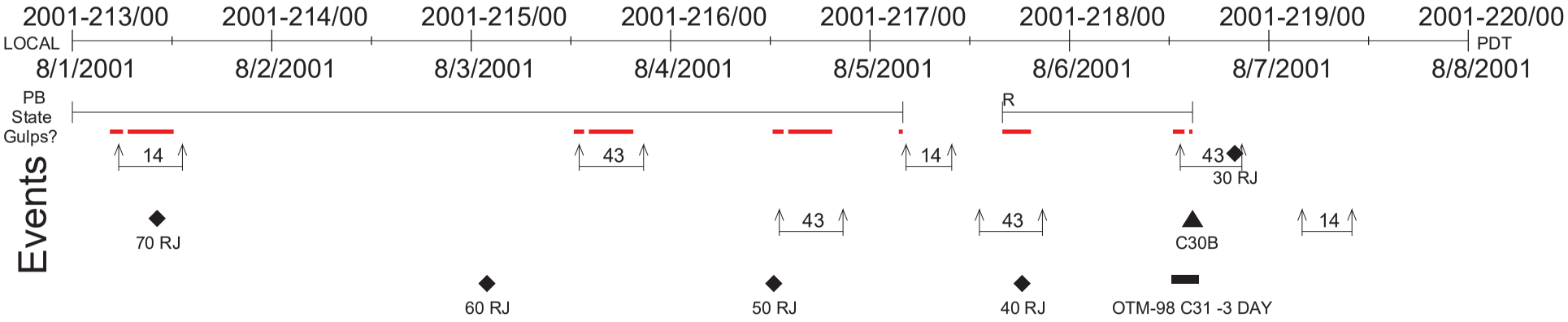

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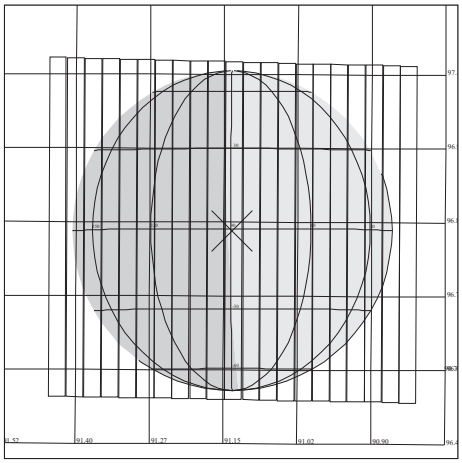

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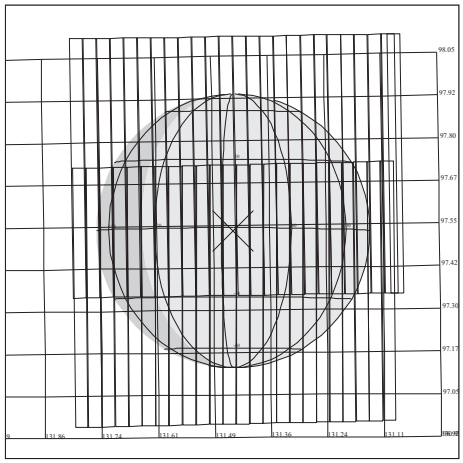

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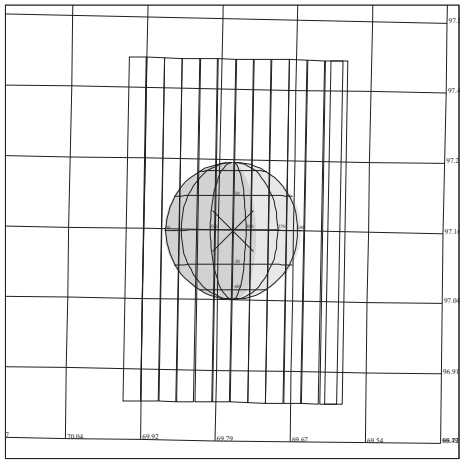

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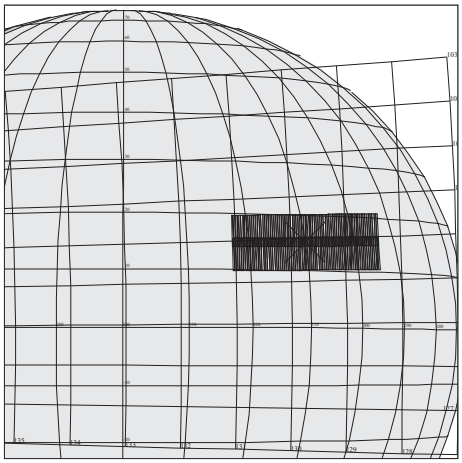

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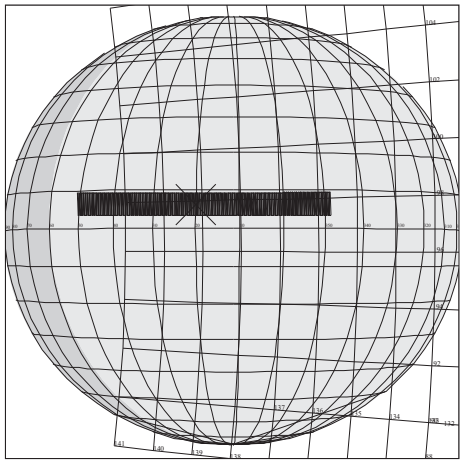

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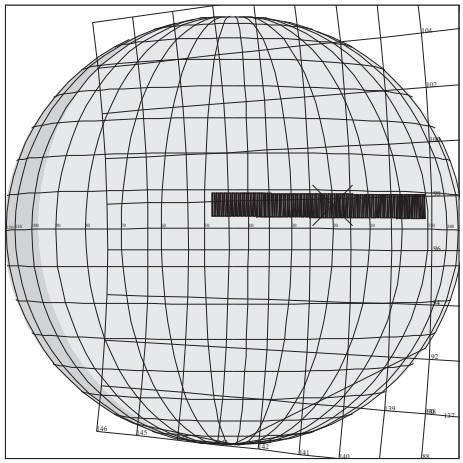

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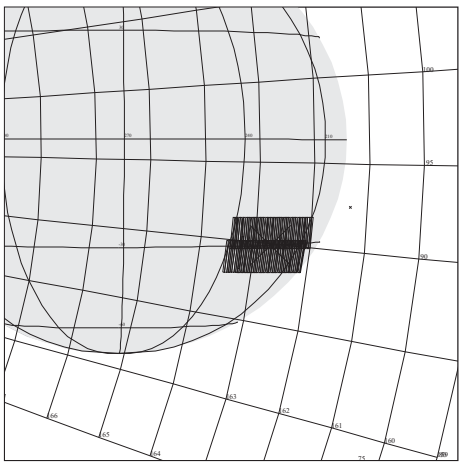

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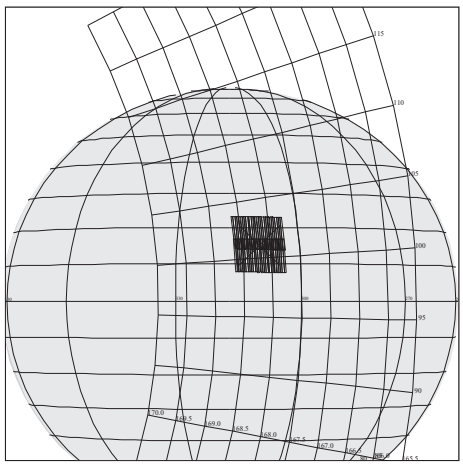

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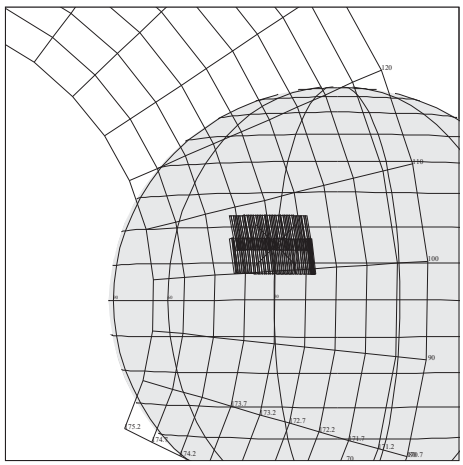

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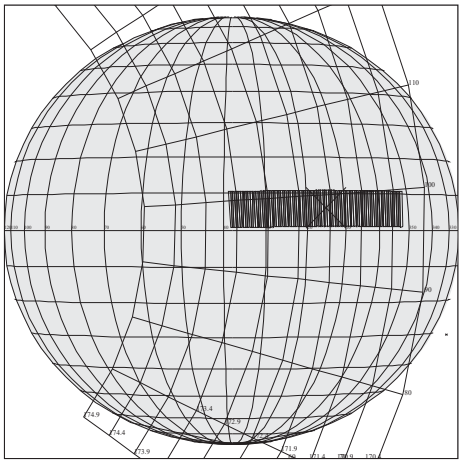

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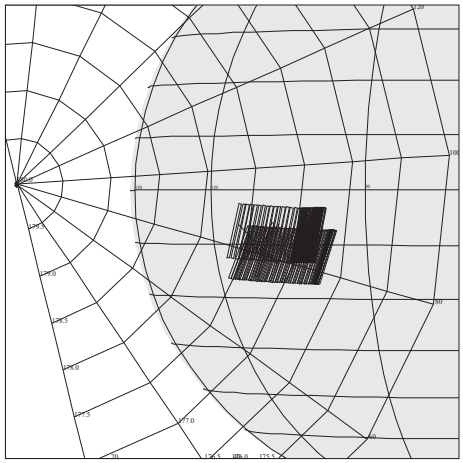

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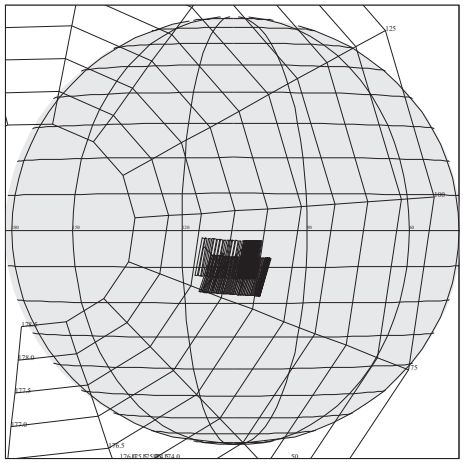

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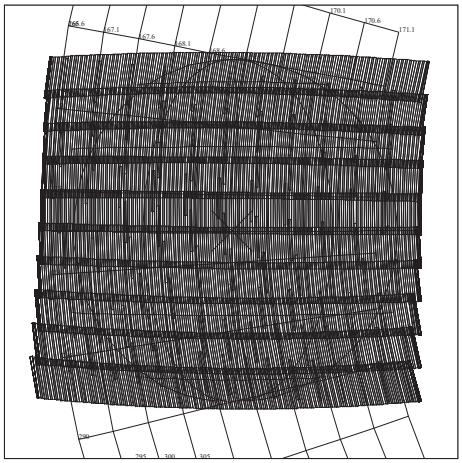

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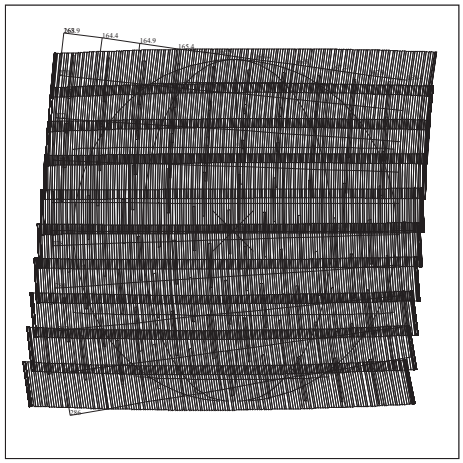

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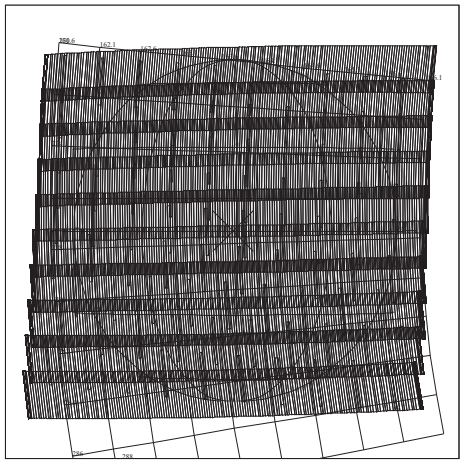

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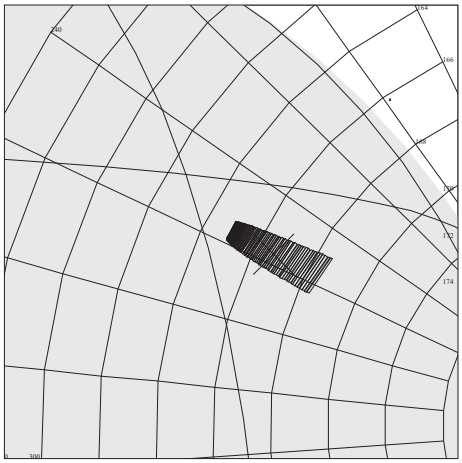

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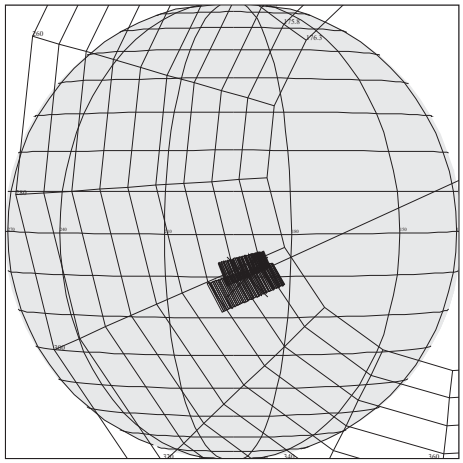

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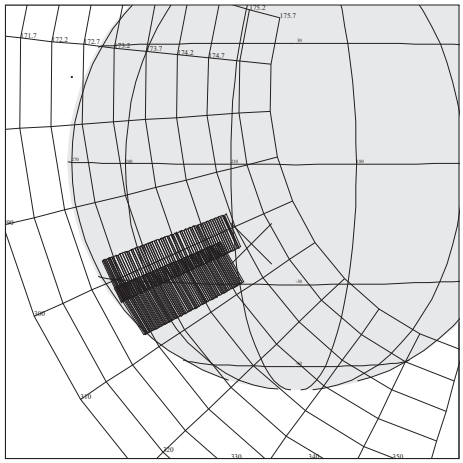

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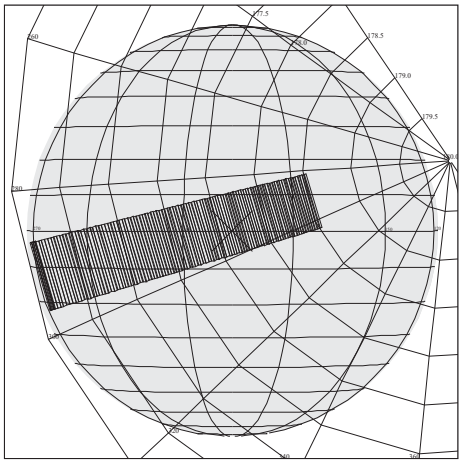
C30 NIMS C



30CNREGION02

01-145/13:15:08

Chapter 3 - Orbit Geometries

Contents

Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the C30 Orbit.

The figure on page 3 is a North Trajectory Pole View of the C30 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the C30 Orbit from +/- 5 days of Callisto closest approach.

The figure on page 5 is a North Trajectory Pole View of the C30 Orbit from +/- 2 days of Callisto closest approach.

The figure on page 6 is a North Trajectory Pole View of the C30 Orbit from +/- 1 day of Callisto closest approach.

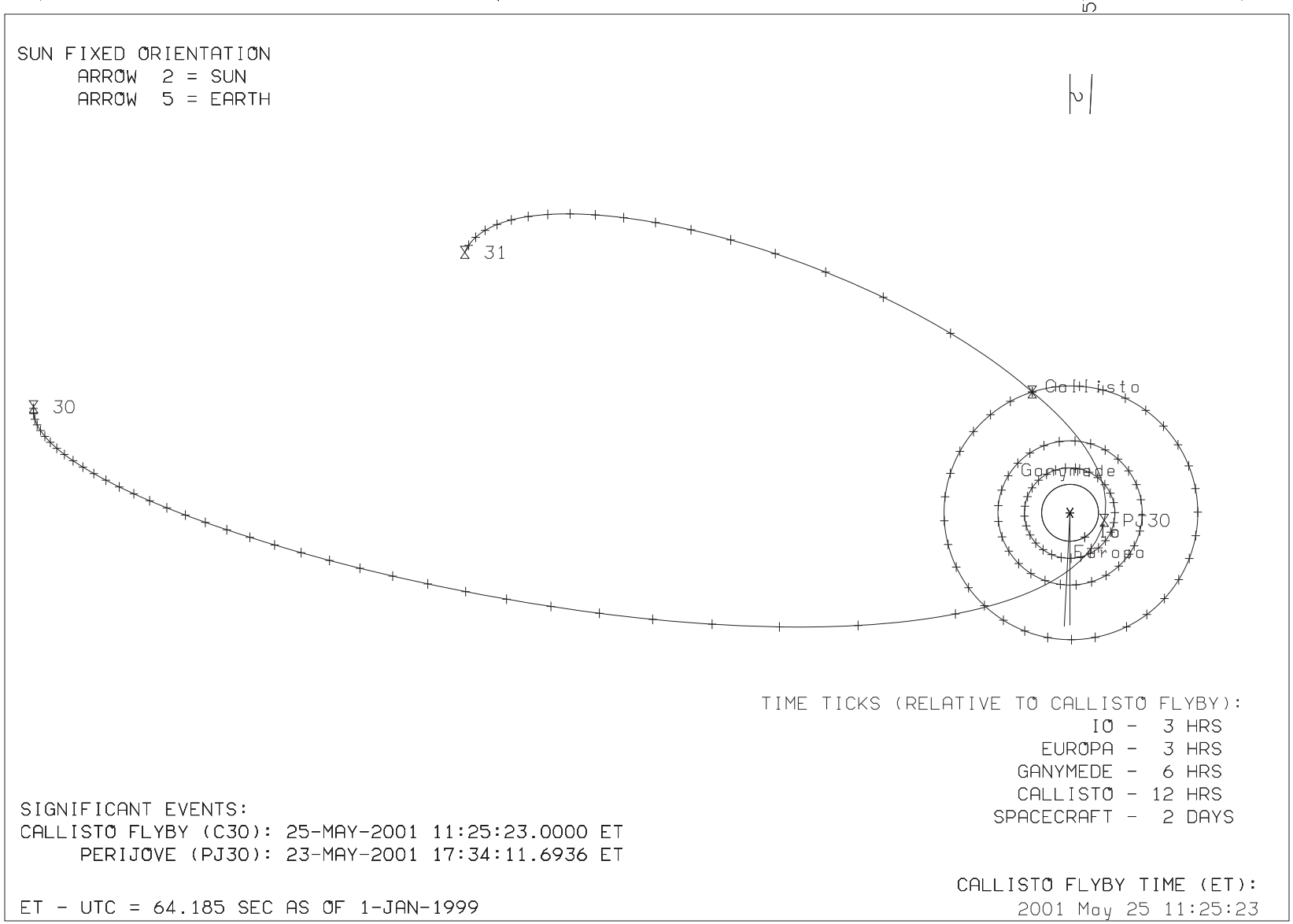
The figure on page 7 is a North Trajectory Pole View of the C30 Orbit from +/- 6 hours of Callisto closest approach.

The figure on page 8 is a North Trajectory Pole View of the C30 Orbit from +/- 1 hour of Callisto closest approach.

The figure on page 9 shows the spacecraft’s groundtrack on Callisto at Callisto closest approach.

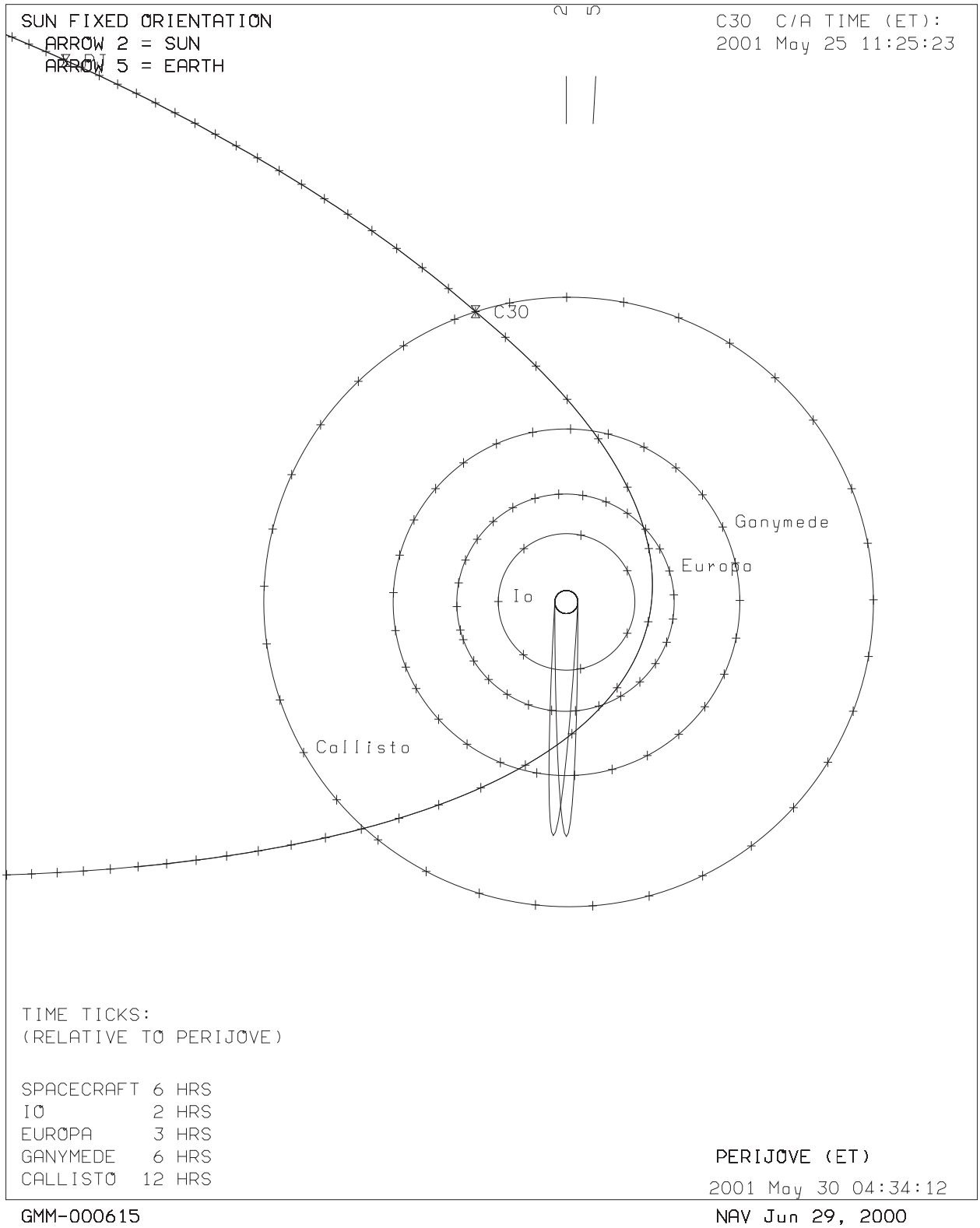
The figure on page 10 shows the spacecraft’s groundtrack on Jupiter at Jupiter closest approach.

Jupiter 30: North Traj Pole View (Callisto 30 Apo to Apo)

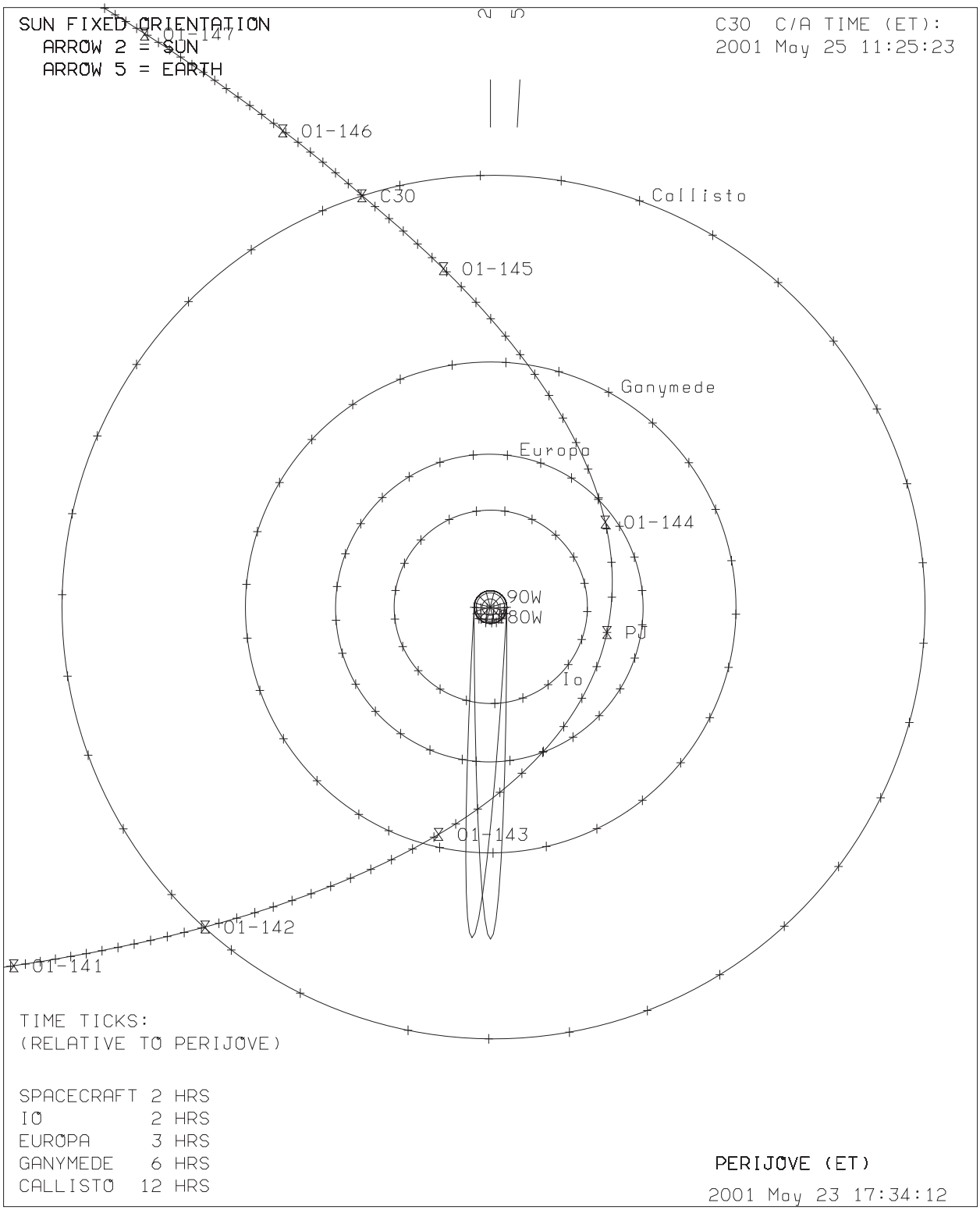


NAV Jun 29, 2000

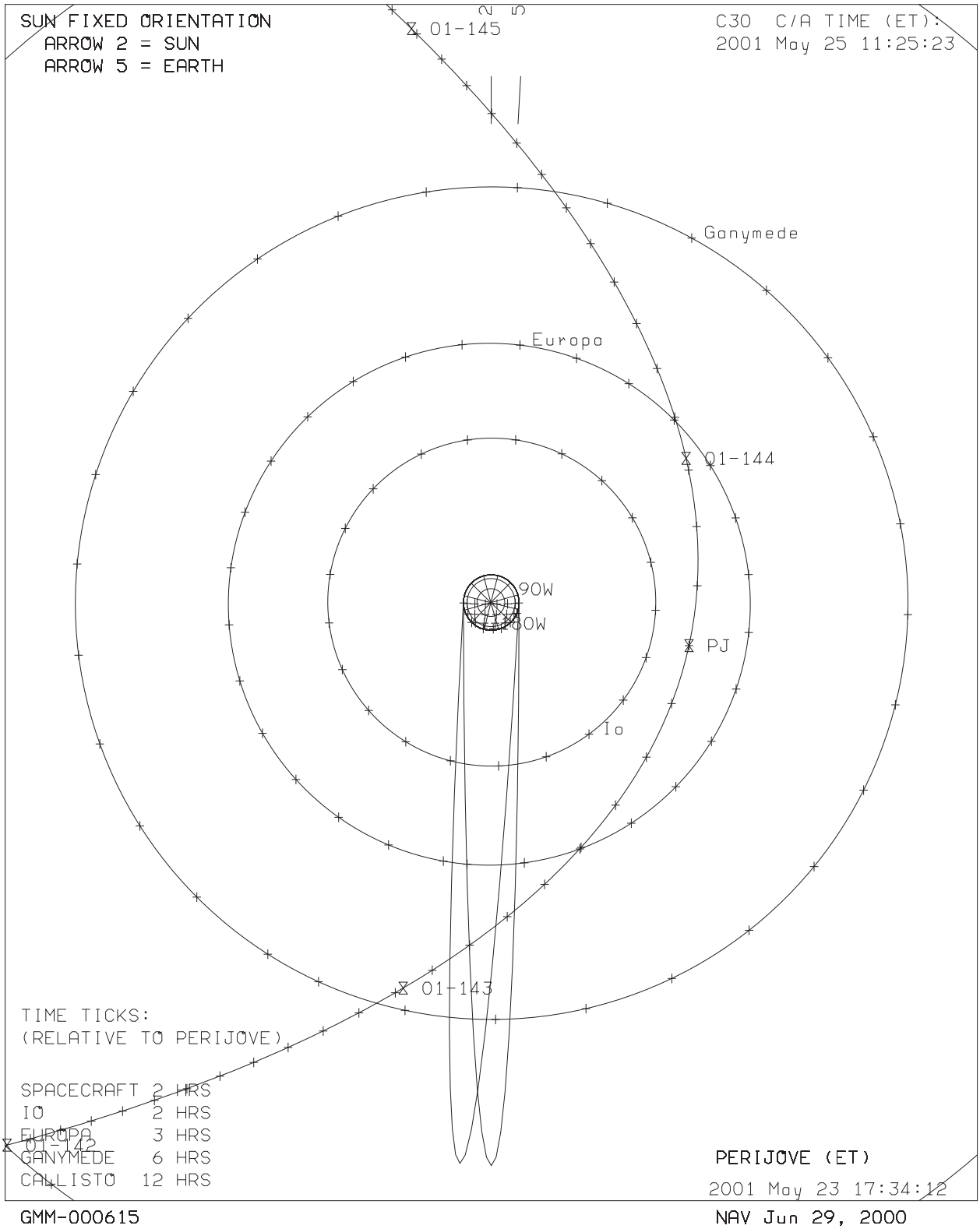
JUPITER 30: N. TRAJ. POLE VIEW (+/- 5 DAYS)



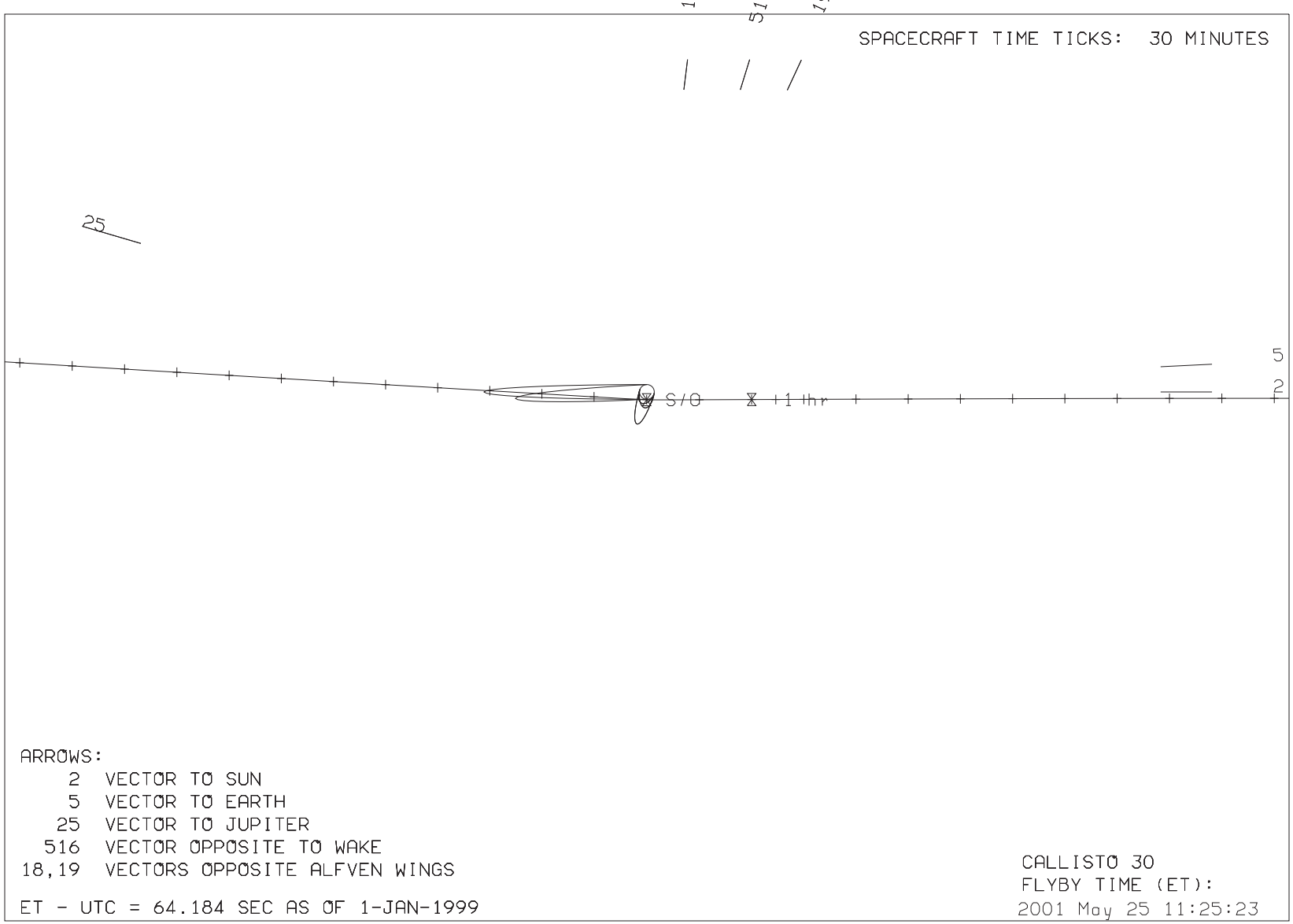
JUPITER 30: N. TRAJ. POLE VIEW (+/- 2 DAYS)



JUPITER 30: N. TRAJ. POLE VIEW (+/- 1 DAY)

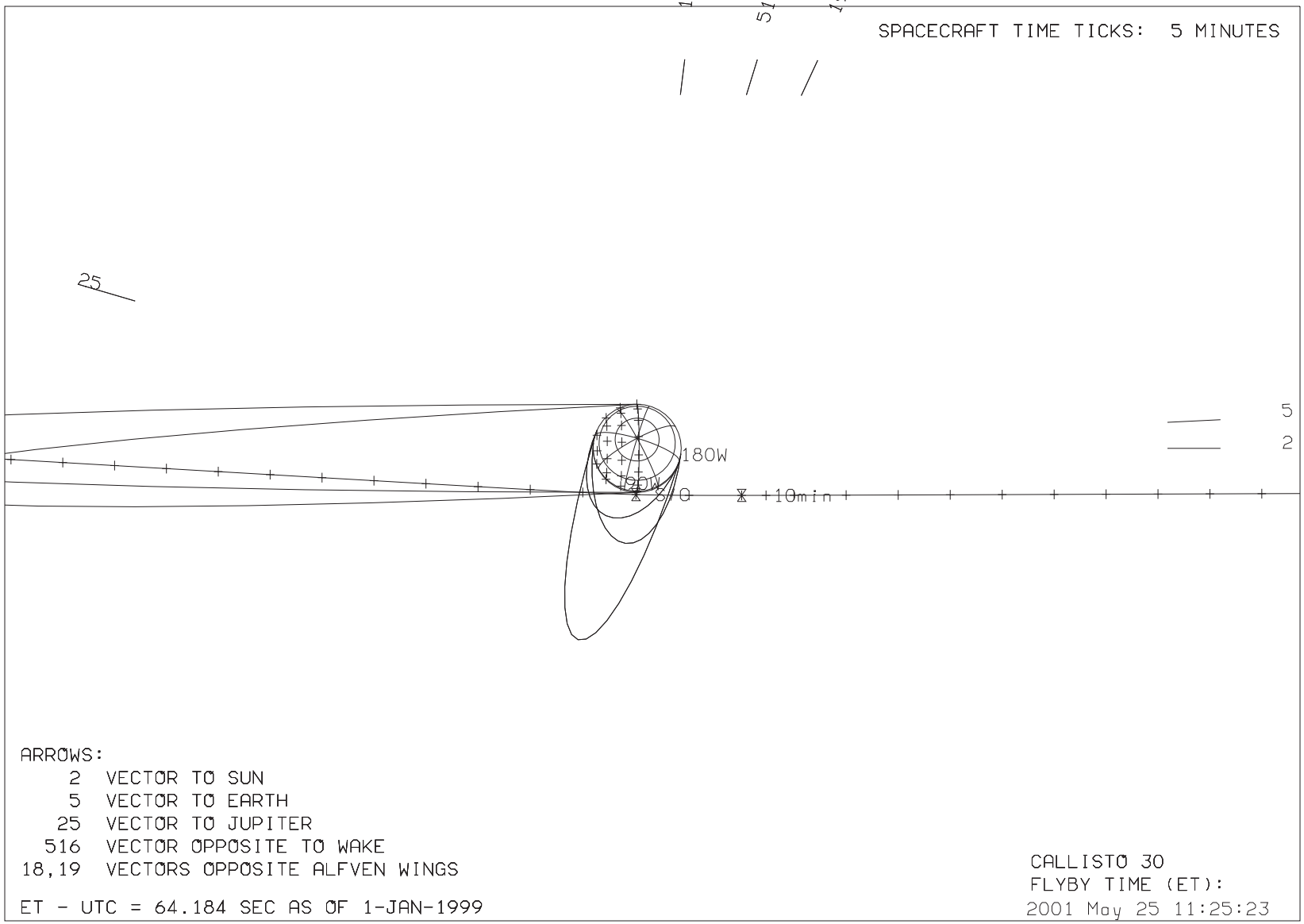


CALLISTO 30: N. TRAJ POLE VIEW (+/- 6 HRS)



NAV 6/29/00

CALLISTO 30: N. TRAJ POLE VIEW (+/- 1 HR)



ARROWS:
- 2 VECTOR TO SUN
- 5 VECTOR TO EARTH
- 25 VECTOR TO JUPITER
- 516 VECTOR OPPOSITE TO WAKE
- 18,19 VECTORS OPPOSITE ALFVEN WINGS

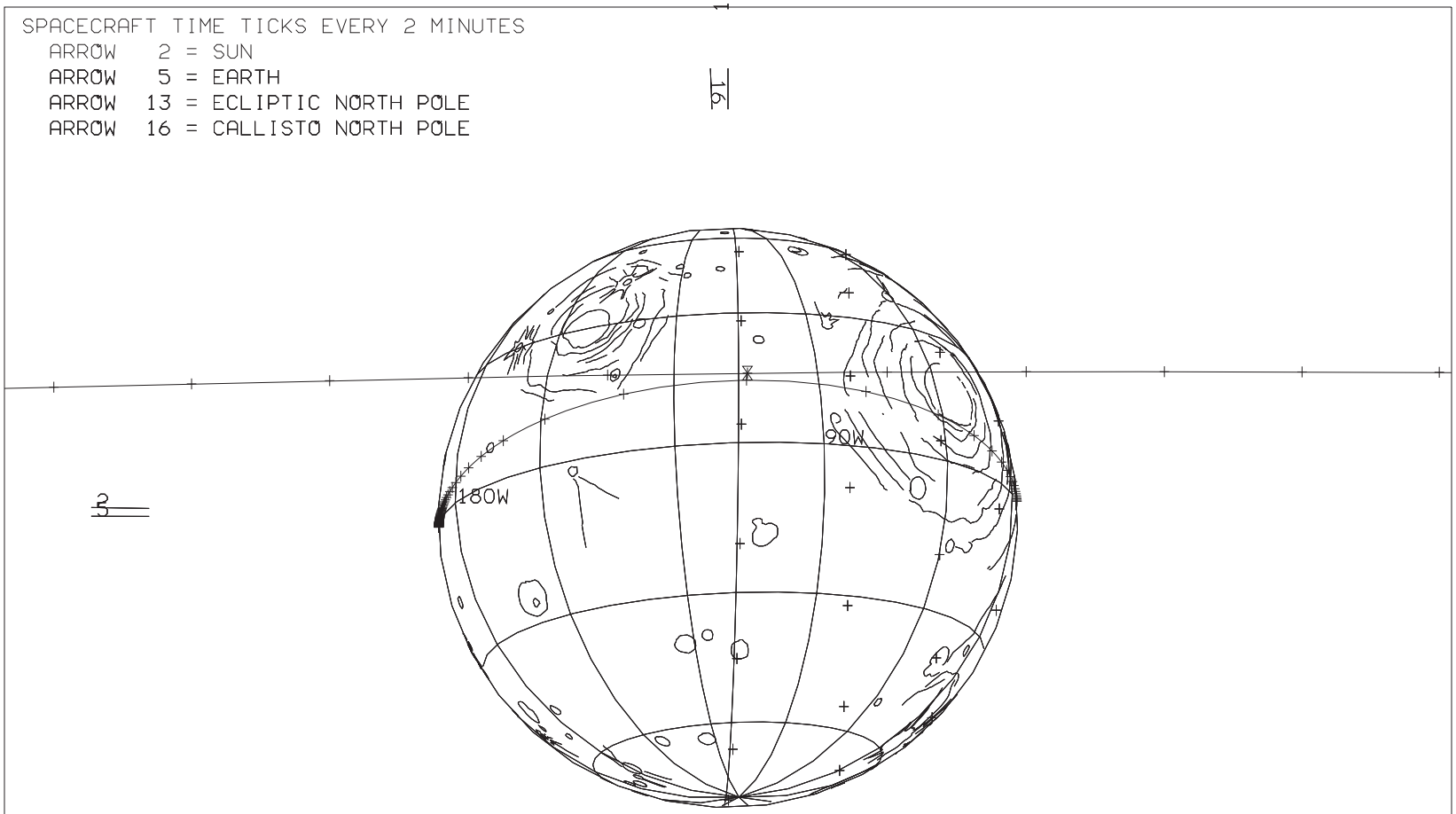
ET - UTC = 64.184 SEC AS OF 1-JAN-1999

CALLISTO 30
FLYBY TIME (ET):
2001 May 25 11:25:23

NAV 6/29/00

CALLISTO 30: GROUNDTRACK AT CLOSEST APPROACH

SPACECRAFT TIME TICKS EVERY 2 MINUTES
ARROW 2 = SUN
ARROW 5 = EARTH
ARROW 13 = ECLIPTIC NORTH POLE
ARROW 16 = CALLISTO NORTH POLE



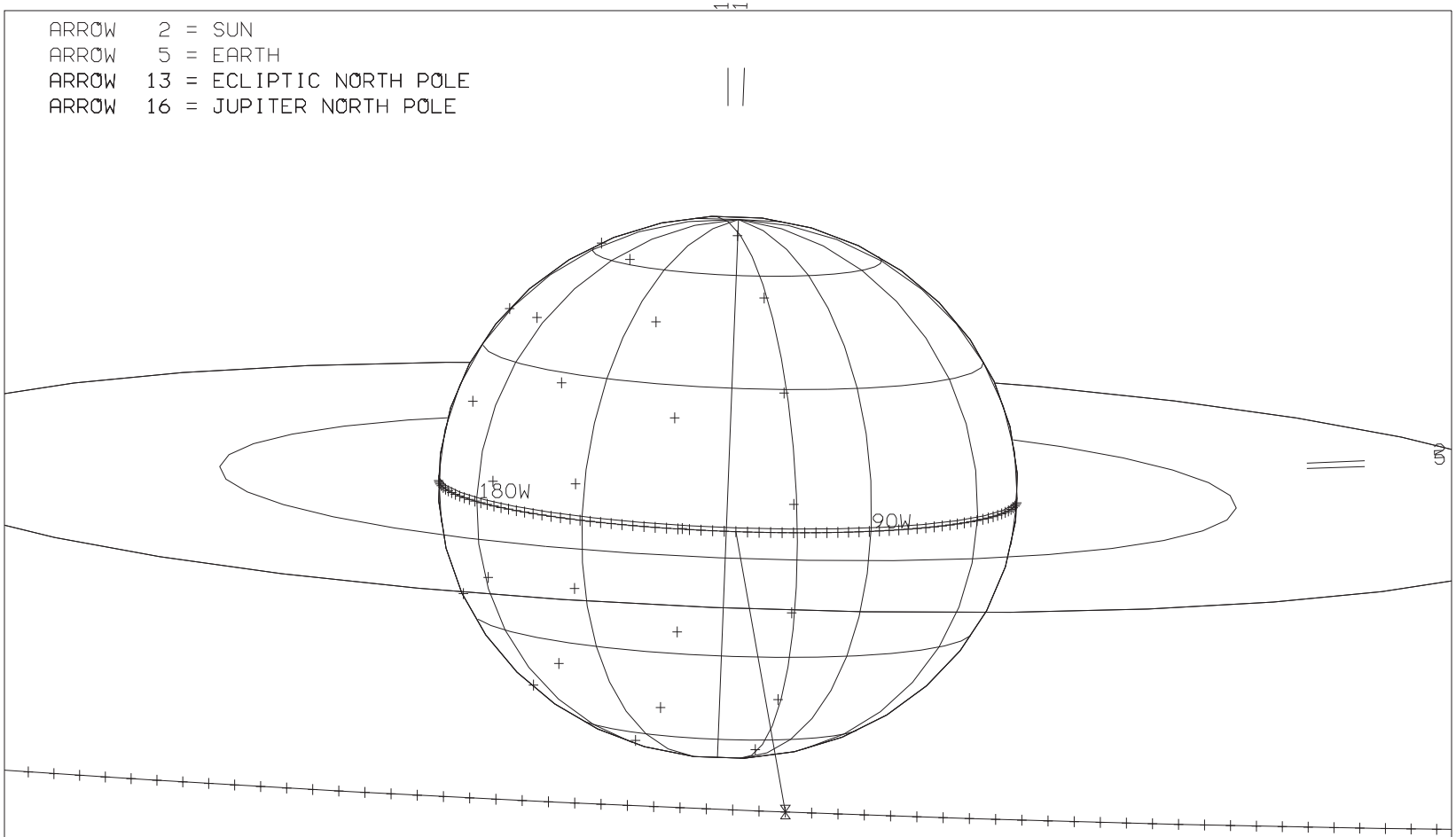
SIGNIFICANT EVENTS:
CALLISTO FLYBY (C30): 25-MAY-2001 11:25:23.0000 ET
PERIJOVE (PJ30): 23-MAY-2001 17:34:11.6936 ET

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

CALLISTO FLYBY TIME (ET):
2001 May 25 11:25:23

NAV Jun 28, 2000

JUPITER 30: GROUNDTRACK AT CLOSEST APPROACH



SIGNIFICANT EVENTS:
CALLISTO FLYBY (C30): 25-MAY-2001 11:25:23.0000 ET
PERIJOVE (PJ30): 23-MAY-2001 17:34:11.6936 ET

RINGS: 1.76 and 3.0 Rj
SPACECRAFT TIME TICKS EVERY 5 MINUTES
ET - UTC = 64.184 SEC AS OF 17-APR-2000

PJ30 TIME (ET):
2001 May 23 17:34:12

NAV Jun 28, 2000

Chapter 4 - NIMS Observation Summaries

Contents

Introduction to Chapter 4

This chapter summarizes the NIMS C30 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 C30 Sequence. The information in this summary is derived from the C30 SEFs (Spacecraft Event File) and PBTs (Playback Tables) with inputs from the NIMS Science Coordinators regarding the start time and duration of the NIMS observations. There are twelve columns of information in this table:

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

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

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

The NIMS Obstab (Observation Table) is a time-ordered listing of the NIMS obsrvation parameters for use by downlink data processing of the NIMS C30 data. It is also derived from the C30 SEFs and PBTs. Each Obstab entry is 512 bytes long but is presented here as 4 lines of 128 characters per entry.

Sequence:	C30A-AR	Created: 7/3/01	Begin: 01-142/17:00:00 Finish: 01-147/23:30:00

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
1	**1**	**142**	**17:00:00.000**	**20A3EW**	**37A**	**Initial Condition**	**NIMS Power ON**	**4O0**	**4**	**0**	**6,047,509:83:5**
2	**1**	**142**	**17:00:00.000**	**20A3EX**	**37HR**	**Initial Condition**	**Replacement Heaters OFF**	**4O0**	**4**	**0**	**6,047,509:83:5**
3	**1**	**142**	**17:00:00.000**	**20A3EY**	**37C1PR**	**Initial Condition**	**Optics Heater 1 OFF (primary relay)**	**4O0**	**4**	**0**	**6,047,509:83:5**
4	**1**	**142**	**17:00:00.000**	**20A3EZ**	**37C2PR**	**Initial Condition**	**Optics Heater 2 OFF (primary relay)**	**4O0**	**4**	**0**	**6,047,509:83:5**
5	**1**	**142**	**17:00:00.000**	**20A3FA**	**37F1PR**	**Initial Condition**	**Radiator Flash Heater OFF (primary relay)**	**4O0**	**4**	**0**	**6,047,509:83:5**
6	**1**	**142**	**17:00:00.000**	**20A3FB**	**37F2PR**	**Initial Condition**	**Shield Flash Heater OFF (primary relay)**	**4O0**	**4**	**0**	**6,047,509:83:5**
7	**1**	**142**	**17:00:00.000**	**20A3FD**	**40HRPR**	**Initial Condition**	**RCT Heater OFF (primary relay)**	**4O0**	**4**	**0**	**6,047,509:83:5**
8	**1**	**142**	**17:00:00.000**	**20A3FE**	**40T1PR**	**Initial Condition**	**PCT Heater 1 OFF (primary relay)**	**4O0**	**4**	**0**	**6,047,509:83:5**
9	**1**	**142**	**17:00:00.000**	**20A3FF**	**40T2R**	**Initial Condition**	**PCT Heater 2 OFF**	**4O0**	**4**	**0**	**6,047,509:83:5**
10	1	142	17:00:00.333		DMS:	: READY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	6,047,509:84:0
11	1	142	17:00:15.666	488AA6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	6,047,510:16:0
12	**1**	**142**	**17:01:04.333**	**432JA6B**	**6RTDS2**	**NIMDSL,AACDSL,RT**	**NIMS R/T DESELECTAACS DESELECT**	**4O0**	**4**	**0**	**6,047,510:89:0**
13	1	142	17:36:31.666	488AA6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	6,047,546:04:0
14	1	142	18:00:00.333	20TO4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4O0	4	0	6,047,569:24:0
15	1	142	18:00:50.333	20TO4B	7SLEW	DIS,POS,0.0	Stator movement	4O0	4	0	6,047,570:08:0
16	1	142	18:00:56.333	20TO4E	7STAR	1,1307,23.9660,-	Star catalog update	4O0	4	0	6,047,570:17:0
17	1	142	18:00:58.333	20TO4F	7STAR	2,9000,2.664,14.	Star catalog update	4O0	4	0	6,047,570:20:0
18	1	142	18:01:00.333	20TO4G	7STAR	3,1307,23.9660,-	Star catalog update	4O0	4	0	6,047,570:23:0
19	1	142	18:01:02.333	20TO4H	7STAR	4,9000,2.664,14.	Star catalog update	4O0	4	0	6,047,570:26:0
20	1	142	18:01:04.333	20TO4I	7STAR	5,1307,23.9660,-	Star catalog update	4O0	4	0	6,047,570:29:0
21	1	142	18:01:06.333	20TO4J	7STAR	6,9000,2.664,14.	Star catalog update	4O0	4	0	6,047,570:32:0
22	1	142	18:18:46.333	488AA6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	6,047,587:75:0
23	1	142	19:16:05.000	488AA6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4O0	4	0	6,047,644:46:0
24	1	142	22:29:38.333	488AA6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4O0	4	0	6,047,835:85:0
25	1	142	22:43:43.666	488AB6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	6,047,849:79:0
26	1	142	23:16:17.000	488AB6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	6,047,882:06:0
27	1	142	23:45:59.000	488AB6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4O0	4	0	6,047,911:40:0
28	1	143	01:00:00.333	481UA4A	7VECT		Inert vect update UTC	4O0	4	0	6,047,984:59:0
29	1	143	02:24:17.000		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	6,048,068:00:0
30	1	143	02:24:17.000	465KA6A	6DMST	1431	DMS Slew to TIC	4O0	4	0	6,048,068:00:0
31	1	143	02:24:17.000		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	6,048,068:00:0
32	1	143	02:24:17.000		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	6,048,068:00:0
33	1	143	02:24:23.666		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	4O0	4	0	6,048,068:10:0
34	1	143	02:24:25.066		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	4O0	4	0	6,048,068:12:1
35	1	143	03:51:37.800		DMS:	**: *RUNDOWN**	P7, TRACK 1, FWD, TIC *1428.94 +/-	4O0	4	0	6,048,154:35:2
36	1	143	03:51:39.000		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *1429.00 +/-	4O0	4	0	6,048,154:37:0
37	1	143	03:52:15.000		DMS:	: READY	RDY, TRACK *3, FWD, TIC 1429.00 +/-	4O0	4	0	6,048,155:00:0
38	1	143	03:52:15.000	465KB6A	6DMSC	RDY,3	DMS Control Tape stop	4O0	4	0	6,048,155:00:0
39	1	143	09:01:14.333	488AC6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4O0	4	0	6,048,460:54:0
40	1	143	09:30:00.333	480SA6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	4O0	4	0	6,048,489:04:0
41	1	143	09:36:40.333	480SA6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	4O0	4	0	6,048,495:58:0
42	1	143	11:00:00.333	481UC4A	7VECT	BB1	Inert vect update UTC	4O0	4	0	6,048,578:05:0
43	1	143	12:00:36.333	432JB431A6A	6RCDSL	DDSDSL,PLSDSL,EP	Record Deselect (DDS o	4O0	4	0	6,048,637:90:0
44	**1**	**143**	**12:00:37.000**	**432JB6B**	**6RTSL2**	**NIMNCG,AACSEL,RT**	**AACS SELECT**	**4O0**	**4**	**0**	**6,048,638:00:0**
45	1	143	12:00:37.000	432JB6A	6RTSL1		R/T Select of DDS and	4O0	4	0	6,048,638:00:0
46	1	143	12:02:42.333	20OB6A	6HICON			4O0	4	0	6,048,640:06:0
47	1	143	12:30:00.333	480SB6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	4O0	4	0	6,048,667:06:0
48	1	143	12:36:40.333	480SB6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	4O0	4	0	6,048,673:60:0
49	1	143	13:08:51.000	165IL4A	7SCAN	NORM,351.230999,	Check S/P Position	4O0	4	0	6,048,705:44:0
50	1	143	13:12:53.000	165IL4B	7VECT		Inert vect update UTC	4O0	4	0	6,048,709:43:0
51	1	143	13:13:15.000		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 1429.00 +/-	4O0	4	0	6,048,709:76:0
52	1	143	13:13:15.000	175IL422A6A	6DMSC	R806,3	DMS Control	4O0	4	0	6,048,709:76:0
53	1	143	13:13:17.000	118IL	**SMOS**	GS		4O0	4	0	6,048,709:79:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
54	1	143	13:13:21.666		DMS:	: *RUNUP	R806, TRACK *3, FWD, TIC 1429.00 +/-	4O0	4	0	6,048,709:86:0	
55	1	143	13:13:26.333	175IL176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	4O0	4	0	6,048,710:02:0	
56	1	143	13:13:26.933		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 1495.00 +/-	4O0	4	0	6,048,710:02:9	
57	1	143	13:13:26.933		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *1495.00 +/-	4O0	4	0	6,048,710:02:9	
58	1	143	13:13:27.000	118IL110A111A4A	7STRP	0.0,-0.00081,26,	Slew =,0.41	4O0	4	0	6,048,710:03:0	
59	**1**	**143**	**13:13:29.000**	**30NNECLPSE01-**		**-----START------**		**4O0**	**4**	**0**	**: :**	
60	1	143	13:13:33.666		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *1660.70 +/-	4O0	4	0	6,048,710:13:0	
61	1	143	13:13:33.666	175IL422A6B	6DMSC	RDY,0	DMS Control Tape stop	4O0	4	0	6,048,710:13:0	
62	1	143	13:13:35.666	118IL11A	**SMOS**	GE		4O0	4	0	6,048,710:16:0	
63	1	143	13:13:36.400		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *1672.20 +/-	4O0	4	0	6,048,710:17:1	
64	**1**	**143**	**13:13:39.666**	**20DF5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,048,710:22:0**	
65	1	143	13:13:41.000		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 1672.20 +/-		4	0	6,048,710:24:0	
66	1	143	13:13:41.000	175JL422A6A	6DMSC	R806,3	DMS Control		4	0	6,048,710:24:0	
67	1	143	13:13:47.666		DMS:	: *RUNUP	R806, TRACK *3, FWD, TIC 1672.20 +/-		4	0	6,048,710:34:0	
68	**1**	**143**	**13:13:47.666**	**20DF5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,048,710:34:0**	
69	1	143	13:13:52.333	175JL176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang		4	0	6,048,710:41:0	
70	1	143	13:13:52.933		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 1738.20 +/-		4	0	6,048,710:41:9	
71	1	143	13:13:52.933		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *1738.20 +/-		4	0	6,048,710:41:9	
72	**1**	**143**	**13:13:56.333**	**20DF6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,048,710:47:0**	
73	1	143	13:13:59.666		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *1903.91 +/-		4	0	6,048,710:52:0	
74	1	143	13:13:59.666	175JL422A6B	6DMSC	RDY,0	DMS Control Tape stop		4	0	6,048,710:52:0	
75	1	143	13:14:02.400		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *1915.41 +/-		4	0	6,048,710:56:1	
76	**1**	**143**	**13:14:19.666**	**20DF6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,048,710:82:0**	
77	**1**	**143**	**13:14:43.666**	**20DF5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,048,711:27:0**	
78	**1**	**143**	**13:14:57.000**	**20DF5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,048,711:47:0**	
79	**1**	**143**	**13:15:41.666**	**20DF4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,048,712:23:0**	
80	**1**	**143**	**13:16:42.333**	**20DF4B**	**37IST**	**0,2,0,OFF,0,1,1**	**Gain State 4**	**4R0**	**4**	**0**	**6,048,713:23:0**	
81	**1**	**143**	**13:17:29.000**	**30NNECLPSE01-**		**-----STOP-------**		**4R0**	**4**	**0**	**: :**	
82	1	143	13:19:24.333	127DF	NIMSTAB	GS	%%%%% GROUP START TAB	4R0	4	0	6,048,715:84:0	
83	**1**	**143**	**13:19:24.333**	**127DF4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**6,048,715:84:0**	
84	**1**	**143**	**13:19:24.333**	**30INECLPSE01-**		**-----START------**		**4R3**	**4**	**0**	**: :**	
85	**1**	**143**	**13:19:25.000**	**127DF4B**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**6,048,715:85:0**	
86	1	143	13:19:28.333	165DF4A	**7SCAN**	**NORM,352.858997,**	**Check S/P Position**	4R3	4	0	6,048,715:90:0	
87	1	143	13:19:33.000	127DF11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	6,048,716:06:0	
88	1	143	13:21:17.000	175DF422A6A	6DMSC	R28,3	DMS Control	4R3	4	0	6,048,717:71:0	
89	1	143	13:21:17.000		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 1915.41 +/-	4R3	4	0	6,048,717:71:0	
90	1	143	13:21:21.000	117DF	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,048,717:77:0	
91	1	143	13:21:23.666		DMS:	: *RUNUP	R28, TRACK *3, FWD, TIC 1915.41 +/-	4R3	4	0	6,048,717:81:0	
92	1	143	13:21:27.000	175DF176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	6,048,717:86:0	
93	1	143	13:21:27.666		DMS:	: *AT_SPD	R28, TRACK 3, FWD, TIC 1916.91 +/-	4R3	4	0	6,048,717:87:0	
94	1	143	13:21:27.666		DMS:	**: *RECORD**	R28, TRACK 3, FWD, TIC *1916.91 +/-	4R3	4	0	6,048,717:87:0	
95	1	143	13:21:29.000	165DF4B	7VECT		Inert vect update UTC	4R3	4	0	6,048,717:89:0	
96	**1**	**143**	**13:21:29.666**	**30INECLPSE01-**	**NIMPBK**	**301DF**	**IO ECLIPSE OBSERVATION**	**4R3**	**4**	**0**	**: :**	
97	1	143	13:21:30.333	117DF105A106A4A	**7STRP**	**-0.0107,-0.0002,**	**Slew =,0.03**	4R3	4	0	6,048,718:00:0	
98	**1**	**143**	**13:24:30.333**	**30INECLPSE01-**	**NIMPBK**	**301EF**	**IO ECLIPSE OBSERVATION**	**4R3**	**4**	**0**	**: :**	
99	**1**	**143**	**13:25:31.666**	**30INECLPSE01-**	**DESELC**	**300EF**	**IO ECLIPSE OBSERVATION**	**4R3**	**4**	**0**	**: :**	
100	**1**	**143**	**13:27:28.333**	**30INECLPSE01-**	**DESELC**	**300DF**	**IO ECLIPSE OBSERVATION**	**4R3**	**4**	**0**	**: :**	
101	1	143	13:27:30.333		DMS:	**: *RUNDOWN**	R28, TRACK 3, FWD, TIC *2235.66 +/-	4R3	4	0	6,048,723:85:0	
102	1	143	13:27:30.333	117DF11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,048,723:85:0	
103	1	143	13:27:30.333	175DF422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,048,723:85:0	
104	1	143	13:27:31.533		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *2235.96 +/-	4R3	4	0	6,048,723:86:8	
105	**1**	**143**	**13:27:35.666**	**30INECLPSE01-**		**-----STOP-------**		**4R3**	**4**	**0**	**: :**	
106	1	143	15:48:49.000	488AD6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,048,863:63:0	
107	1	143	16:28:33.000	165GA4A	7SCAN	NORM,20.52,11.92	Check S/P Position	4R3	4	0	6,048,902:90:0	
108	1	143	16:29:34.333	176GA6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	4R3	4	0	6,048,904:00:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
109	1	143	16:30:25.666	117GA	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,048,904	77:0
110	1	143	16:30:35.000	117GA105A106A4A	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,905	00:0
111	1	143	16:31:51.000	117GA105A106A4B	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,906	23:0
112	1	143	16:32:01.666	117GA105A106A4C	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,906	39:0
113	1	143	16:33:17.666	117GA105A106A4D	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,907	62:0
114	1	143	16:33:28.333	117GA105A106A4E	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,907	78:0
115	1	143	16:34:44.333	117GA105A106A4F	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,909	10:0
116	1	143	16:34:55.000	117GA105A106A4G	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,909	26:0
117	1	143	16:36:11.000	117GA105A106A4H	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,910	49:0
118	1	143	16:36:21.666	117GA105A106A4I	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,910	65:0
119	1	143	16:37:37.666	117GA105A106A4J	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,911	88:0
120	1	143	16:37:48.333	117GA105A106A4K	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,912	13:0
121	1	143	16:39:04.333	117GA105A106A4L	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,913	36:0
122	1	143	16:39:15.000	117GA105A106A4M	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,913	52:0
123	1	143	16:40:31.000	117GA105A106A4N	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,914	75:0
124	1	143	16:40:41.666	117GA105A106A4O	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,915	00:0
125	1	143	16:41:57.666	117GA105A106A4P	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,916	23:0
126	1	143	16:42:08.333	117GA105A106A4Q	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,916	39:0
127	1	143	16:42:09.000	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,048,916	40:0
128	1	143	16:42:09.000		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 2235.96 +/-	4R3	4	0	6,048,916	40:0
129	1	143	16:42:15.666		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 2235.96 +/-	4R3	4	0	6,048,916	50:0
130	1	143	16:42:17.066		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *2236.08 +/-	4R3	4	0	6,048,916	52:1
131	1	143	16:42:34.333		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *2240.12 +/-	4R3	4	0	6,048,916	78:0
132	1	143	16:42:57.000	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,048,917	21:0
133	1	143	16:42:57.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *2245.44 +/-	4R3	4	0	6,048,917	21:0
134	1	143	16:42:58.200		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *2245.50 +/-	4R3	4	0	6,048,917	22:8
135	1	143	16:43:24.333	117GA105A106A4R	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,917	62:0
136	1	143	16:43:35.000	117GA105A106A4S	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,917	78:0
137	1	143	16:44:51.000	117GA105A106A4T	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,919	10:0
138	1	143	16:45:01.666	117GA105A106A4U	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,919	26:0
139	1	143	16:46:17.666	117GA105A106A4V	7STRP	0.0114,-0.00095,	Slew =12.01	4R3	4	0	6,048,920	49:0
140	1	143	16:46:28.333	117GA105A106A4W	7STRP	-0.0075,0.0,0,0,	Slew =,0.11	4R3	4	0	6,048,920	65:0
141	1	143	16:47:44.333	117GA11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,048,921	88:0
142	1	143	16:48:16.333	176GA6B	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,048,922	45:0
143	1	143	16:48:18.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,048,922	48:0
144	1	143	16:48:18.333		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 2245.50 +/-	4R3	4	0	6,048,922	48:0
145	1	143	16:48:25.000		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 2245.50 +/-	4R3	4	0	6,048,922	58:0
146	1	143	16:48:26.400		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *2245.62 +/-	4R3	4	0	6,048,922	60:1
147	1	143	16:48:28.333		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *2246.07 +/-	4R3	4	0	6,048,922	63:0
148	1	143	16:48:43.000	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,048,922	85:0
149	1	143	16:48:43.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *2249.51 +/-	4R3	4	0	6,048,922	85:0
150	1	143	16:48:44.200		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *2249.57 +/-	4R3	4	0	6,048,922	86:8
151	1	143	17:02:05.000	20IB6A	6MCOPY	HLM1A,E415,B1A1A	HLM1A,E415,B1A1A,5000,506	4R3	4	0	6,048,936	14:0
152	1	143	17:15:03.666	165IJ4A	7SCAN	NORM,26.919,14.2	Check S/P Position	4R3	4	0	6,048,948	90:0
153	1	143	17:15:11.666	488AD6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,048,949	11:0
154	1	143	17:16:55.666		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 2249.57 +/-	4R3	4	0	6,048,950	76:0
155	1	143	17:16:55.666	175IJ422A6A	6DMSC	R806,3	DMS Control	4R3	4	0	6,048,950	76:0
156	1	143	17:17:02.333		DMS:	: *RUNUP	R806, TRACK *3, FWD, TIC 2249.57 +/-	4R3	4	0	6,048,950	86:0
157	1	143	17:17:04.333	165IJ4B	7VECT		Inert vect update UTC	4R3	4	0	6,048,950	89:0
158	1	143	17:17:07.000	175IJ176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	4R3	4	0	6,048,951	02:0
159	1	143	17:17:07.600		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *2315.57 +/-	4R3	4	0	6,048,951	02:9
160	1	143	17:17:07.600		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 2315.57 +/- 1	4R3	4	0	6,048,951	02:9
161	1	143	17:17:09.666	118IJ	**SMOS**	GS		4R3	4	0	6,048,951	06:0
162	1	143	17:17:25.000	118IJ110A111A4A	7STRP	0.001,0.00751,26	Slew =2,4.7	4R3	4	0	6,048,951	29:0
163	1	143	17:17:31.666		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *2907.83 +/- 1	4R3	4	0	6,048,951	39:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
164	1	143	17:17:31.666	175IJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,048,951:39:0
165	1	143	17:17:33.666	118IJ11A	**SMOS**	GE		4R3	4	0	6,048,951:42:0
166	1	143	17:17:34.400		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *2919.33 +/- 1	4R3	4	0	6,048,951:43:1
167	1	143	17:17:47.666	175JJ422A6A	6DMSC	R806,3	DMS Control	4R3	4	0	6,048,951:63:0
168	1	143	17:17:47.666		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 2919.33 +/- 1	4R3	4	0	6,048,951:63:0
169	1	143	17:17:54.333		DMS:	: *RUNUP	R806, TRACK *3, FWD, TIC 2919.33 +/- 1	4R3	4	0	6,048,951:73:0
170	1	143	17:17:59.000	175JJ176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	4R3	4	0	6,048,951:80:0
171	1	143	17:17:59.600		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *2985.33 +/- 1	4R3	4	0	6,048,951:80:9
172	1	143	17:17:59.600		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 2985.33 +/- 1	4R3	4	0	6,048,951:80:9
173	1	143	17:18:03.000		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *3069.00 +/- 1	4R3	4	0	6,048,951:86:0
174	1	143	17:18:03.000	175JJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,048,951:86:0
175	1	143	17:18:05.733		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *3080.50 +/- 1	4R3	4	0	6,048,951:90:1
176	**1**	**143**	**17:27:16.333**	**30NNGLOBAL01-**		**-----START------**		**4R3**	**4**	**0**	**: :**
177	**1**	**143**	**17:27:19.666**	**20DA5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,048,961:11:0**
178	**1**	**143**	**17:27:21.666**	**20DA5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,048,961:14:0**
179	**1**	**143**	**17:27:26.333**	**20DA6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,048,961:21:0**
180	**1**	**143**	**17:27:36.333**	**20DA6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,048,961:36:0**
181	1	143	17:27:48.333	488AD6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan		4	0	6,048,961:54:0
182	**1**	**143**	**17:27:49.666**	**20DA5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,048,961:56:0**
183	**1**	**143**	**17:28:03.000**	**20DA5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,048,961:76:0**
184	**1**	**143**	**17:29:06.333**	**20DA4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,048,962:80:0**
185	1	143	17:30:13.666	165IW4A	7SCAN	NORM,355.970997,	Check S/P Position	2R0	4	0	6,048,963:90:0
186	**1**	**143**	**17:30:16.333**	**30NNGLOBAL01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**
187	**1**	**143**	**17:31:10.333**	**30INGLOBAL01-**		**-----START------**		**2R0**	**4**	**0**	**: :**
188	**1**	**143**	**17:31:10.333**	**125DA4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,048,964:84:0**
189	1	143	17:31:10.333	125DA	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,048,964:84:0
190	1	143	17:32:11.000	125DA11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,048,965:84:0
191	**1**	**143**	**17:32:11.000**	**125DA4B**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**2R0**	**4**	**0**	**6,048,965:84:0**
192	1	143	17:33:06.333		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 3080.50 +/- 1	2R0	4	0	6,048,966:76:0
193	1	143	17:33:06.333	175IW422A6A	6DMSC	R806,3	DMS Control	2R0	4	0	6,048,966:76:0
194	**1**	**143**	**17:33:11.666**	**127DA4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,048,966:84:0**
195	1	143	17:33:11.666	127DA	NIMSTAB	GS	%%%%% GROUP START TAB	2R3	4	0	6,048,966:84:0
196	**1**	**143**	**17:33:12.333**	**127DA4B**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,048,966:85:0**
197	1	143	17:33:13.000		DMS:	: *RUNUP	R806, TRACK *3, FWD, TIC 3080.50 +/- 1	2R3	4	0	6,048,966:86:0
198	1	143	17:33:15.000	165IW4B	7VECT		Inert vect update UTC	2R3	4	0	6,048,966:89:0
199	1	143	17:33:17.666	175IW176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	6,048,967:02:0
200	1	143	17:33:18.266		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *3146.50 +/- 1	2R3	4	0	6,048,967:02:9
201	1	143	17:33:18.266		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 3146.50 +/- 2	2R3	4	0	6,048,967:02:9
202	1	143	17:33:20.333	127DA11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,048,967:06:0
203	1	143	17:33:25.000	175IW422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,048,967:13:0
204	1	143	17:33:25.000		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *3312.21 +/- 2	2R3	4	0	6,048,967:13:0
205	1	143	17:33:27.733		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *3323.71 +/- 2	2R3	4	0	6,048,967:17:1
206	1	143	17:34:16.333	165DA4A	**7SCAN**	**NORM,29.82,15.55**	**Check S/P Position**	2R3	4	0	6,048,967:90:0
207	1	143	17:35:04.333		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 3323.71 +/- 2	2R3	4	0	6,048,968:71:0
208	1	143	17:35:04.333	175DA422A6A	6DMSC	R28,3	DMS Control	2R3	4	0	6,048,968:71:0
209	1	143	17:35:08.333	117DA	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,048,968:77:0
210	1	143	17:35:11.000		DMS:	: *RUNUP	R28, TRACK *3, FWD, TIC 3323.71 +/- 2	2R3	4	0	6,048,968:81:0
211	1	143	17:35:14.333	175DA176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	2R3	4	0	6,048,968:86:0
212	1	143	17:35:15.000		DMS:	: *AT_SPD	R28, TRACK 3, FWD, TIC 3325.21 +/- 2	2R3	4	0	6,048,968:87:0
213	1	143	17:35:15.000		DMS:	**: *RECORD**	R28, TRACK 3, FWD, TIC *3325.21 +/- 2	2R3	4	0	6,048,968:87:0
214	1	143	17:35:16.333	165DA4B	7VECT		Inert vect update UTC	2R3	4	0	6,048,968:89:0
215	**1**	**143**	**17:35:17.000**	**30INGLOBAL01-**	**NIMPBK**	**301DA**	**IO GLOBAL OBSERVATION**	**2R3**	**4**	**0**	**: :**
216	1	143	17:35:17.666	117DA105A106A4A	**7STRP**	**-0.012301,0.0,0,**	**Slew =,0.03**	2R3	4	0	6,048,969:00:0
217	1	143	17:42:18.333	117DA105A106A4B	**7STRP**	**0.012401,-0.005,**	**Slew =12.01**	2R3	4	0	6,048,975:85:0
218	**1**	**143**	**17:42:20.333**	**30INGLOBAL01-**	**NIMPBK**	**301DB**	**IO GLOBAL OBSERVATION**	**2R3**	**4**	**0**	**: :**

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
219	**1**	**143**	**17:42:24.333**	**30INGLOBAL01-**	**DESELC**	**300DA**	**IO GLOBAL OBSERVATION**	**2R3**	**4**	**0**	**: :**	
220	1	143	17:42:29.666	117DA105A106A4C	**7STRP**	**-0.012301,0.0,0,**	**Slew =,0.03**	2R3	4	0	6,048,976:11:0	
221	**1**	**143**	**17:49:19.666**	**30INGLOBAL01-**	**DESELC**	**300DB**	**IO GLOBAL OBSERVATION**	**2R3**	**4**	**0**	**: :**	
222	1	143	17:49:30.333	117DA11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,048,983:05:0	
223	1	143	17:49:33.666	165IX4A	7SCAN	NORM,356.771999,	Check S/P Position	2R3	4	0	6,048,983:10:0	
224	1	143	17:49:41.666	175DA422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,048,983:22:0	
225	1	143	17:49:41.666		DMS:	**: *RUNDOWN**	R28, TRACK 3, FWD, TIC *4086.93 +/- 2	2R3	4	0	6,048,983:22:0	
226	1	143	17:49:42.866		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4087.23 +/- 2	2R3	4	0	6,048,983:23:8	
227	**1**	**143**	**17:49:47.000**	**30INGLOBAL01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
228	1	143	17:50:17.666		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4087.23 +/- 2	2R3	4	0	6,048,983:76:0	
229	1	143	17:50:17.666	175IX422A6A	6DMSC	R806,3	DMS Control	2R3	4	0	6,048,983:76:0	
230	1	143	17:50:24.333		DMS:	: *RUNUP	R806, TRACK *3, FWD, TIC 4087.23 +/- 2	2R3	4	0	6,048,983:86:0	
231	1	143	17:50:26.333	165IX4B	7VECT		Inert vect update UTC	2R3	4	0	6,048,983:89:0	
232	1	143	17:50:29.000	175IX176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	6,048,984:02:0	
233	1	143	17:50:29.600		DMS:	: *AT_SPD	R806, TRACK 3, FWD, TIC 4153.23 +/- 2	2R3	4	0	6,048,984:02:9	
234	1	143	17:50:29.600		DMS:	**: *RECORD**	R806, TRACK 3, FWD, TIC *4153.23 +/- 2	2R3	4	0	6,048,984:02:9	
235	1	143	17:50:36.333		DMS:	**: *RUNDOWN**	R806, TRACK 3, FWD, TIC *4318.93 +/- 2	2R3	4	0	6,048,984:13:0	
236	1	143	17:50:36.333	175IX422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,048,984:13:0	
237	1	143	17:50:39.066		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4330.43 +/- 2	2R3	4	0	6,048,984:17:1	
238	1	143	18:30:00.333	480SC6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	6,049,023:10:0	
239	1	143	18:36:40.333	480SC6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	6,049,029:64:0	
240	1	143	19:57:51.000	165GB4A	7SCAN	NORM,5.465,0.832	Check S/P Position	2R3	4	0	6,049,109:90:0	
241	1	143	19:58:52.333	176GB6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	6,049,111:00:0	
242	1	143	19:59:43.666	117GB	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,111:77:0	
243	1	143	19:59:53.000	117GB105A106A4A	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,112:00:0	
244	1	143	20:03:52.333	117GB105A106A4B	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,115:86:0	
245	1	143	20:04:09.000	117GB105A106A4C	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,116:20:0	
246	1	143	20:08:08.333	117GB105A106A4D	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,120:15:0	
247	1	143	20:08:25.000	117GB105A106A4E	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,120:40:0	
248	1	143	20:12:24.333	117GB105A106A4F	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,124:35:0	
249	1	143	20:12:41.000	117GB105A106A4G	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,124:60:0	
250	1	143	20:12:46.333		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4330.43 +/- 2	2R3	4	0	6,049,124:68:0	
251	1	143	20:12:46.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,124:68:0	
252	1	143	20:12:53.000		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4330.43 +/- 2	2R3	4	0	6,049,124:78:0	
253	1	143	20:12:54.400		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *4330.55 +/- 2	2R3	4	0	6,049,124:80:1	
254	1	143	20:13:14.333		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4335.22 +/- 2	2R3	4	0	6,049,125:19:0	
255	1	143	20:13:37.000	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,125:53:0	
256	1	143	20:13:37.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4340.53 +/- 2	2R3	4	0	6,049,125:53:0	
257	1	143	20:13:38.200		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4340.59 +/- 2	2R3	4	0	6,049,125:54:8	
258	1	143	20:16:40.333	117GB105A106A4H	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,128:55:0	
259	1	143	20:16:57.000	117GB105A106A4I	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,128:80:0	
260	1	143	20:20:56.333	117GB105A106A4J	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,132:75:0	
261	1	143	20:21:13.000	117GB105A106A4K	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,133:09:0	
262	1	143	20:25:12.333	117GB105A106A4L	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,137:04:0	
263	1	143	20:25:29.000	117GB105A106A4M	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,137:29:0	
264	1	143	20:27:10.333	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,138:90:0	
265	1	143	20:27:10.333		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4340.59 +/- 2	2R3	4	0	6,049,138:90:0	
266	1	143	20:27:17.000		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4340.59 +/- 2	2R3	4	0	6,049,139:09:0	
267	1	143	20:27:18.400		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *4340.71 +/- 2	2R3	4	0	6,049,139:11:1	
268	1	143	20:27:38.333		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4345.38 +/- 2	2R3	4	0	6,049,139:41:0	
269	1	143	20:28:01.000		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4350.70 +/- 2	2R3	4	0	6,049,139:75:0	
270	1	143	20:28:01.000	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,139:75:0	
271	1	143	20:28:02.200		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4350.76 +/- 2	2R3	4	0	6,049,139:76:8	
272	1	143	20:29:28.333	117GB105A106A4N	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,141:24:0	
273	1	143	20:29:45.000	117GB105A106A4O	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,141:49:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
274	1	143	20:33:44.266	117GB105A106A4P	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,145:44:0	
275	1	143	20:34:00.933	117GB105A106A4Q	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,145:69:0	
276	1	143	20:38:00.266	117GB105A106A4R	7STRP	0.078662,-0.0012	Slew =12.01	2R3	4	0	6,049,149:64:0	
277	1	143	20:38:16.933	117GB105A106A4S	7STRP	-0.072627,0.0,0,	Slew =,0.31	2R3	4	0	6,049,149:89:0	
278	1	143	20:41:34.933		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4350.76 +/- 2	2R3	4	0	6,049,153:22:0	
279	1	143	20:41:34.933	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,153:22:0	
280	1	143	20:41:41.600		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4350.76 +/- 2	2R3	4	0	6,049,153:32:0	
281	1	143	20:41:43.000		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *4350.88 +/- 2	2R3	4	0	6,049,153:34:1	
282	1	143	20:42:02.933		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4355.55 +/- 2	2R3	4	0	6,049,153:64:0	
283	1	143	20:42:16.266	117GB11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,153:84:0	
284	1	143	20:42:25.600	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,154:07:0	
285	1	143	20:42:25.600		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4360.86 +/- 2	2R3	4	0	6,049,154:07:0	
286	1	143	20:42:26.800		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4360.92 +/- 2	2R3	4	0	6,049,154:08:8	
287	1	143	20:43:51.600	176GB6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,155:45:0	
288	1	143	20:43:53.600		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4360.92 +/- 2	2R3	4	0	6,049,155:48:0	
289	1	143	20:43:53.600	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,155:48:0	
290	1	143	20:44:00.266		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4360.92 +/- 2	2R3	4	0	6,049,155:58:0	
291	1	143	20:44:01.666		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC *4361.04 +/- 2	2R3	4	0	6,049,155:60:1	
292	1	143	20:44:03.600		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4361.49 +/- 2	2R3	4	0	6,049,155:63:0	
293	1	143	20:44:14.266		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4363.99 +/- 2	2R3	4	0	6,049,155:79:0	
294	1	143	20:44:14.266	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,155:79:0	
295	1	143	20:44:15.466		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4364.05 +/- 2	2R3	4	0	6,049,155:80:8	
296	1	143	22:47:10.266	488AE6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R3	4	0	6,049,277:41:0	
297	1	143	23:02:55.600	488AE6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,049,293:03:0	
298	1	143	23:15:52.266	20MH6A	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,50C2,523	2R3	4	0	6,049,305:76:0	
299	1	143	23:16:52.933	20MH6C	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,5234,53F	2R3	4	0	6,049,306:76:0	
300	1	143	23:17:53.600	20MH6E	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,53F5,572	2R3	4	0	6,049,307:76:0	
301	1	143	23:18:54.266	20MH6G	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,5728,5A9	2R3	4	0	6,049,308:76:0	
302	1	143	23:30:10.266	432OG431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	6,049,319:89:0	
303	1	143	23:30:10.933	432OG6A	6RTSL1		R/T Select of DDS and	2R3	4	0	6,049,319:90:0	
304	**1**	**143**	**23:40:22.266**	**30NNGLOBAL01-**		**-----START------**		**2R3**	**4**	**0**	: :	
305	**1**	**143**	**23:40:26.266**	**20DB5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,049,330:12:0**	
306	**1**	**143**	**23:40:27.600**	**20DB5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,049,330:14:0**	
307	**1**	**143**	**23:40:30.266**	**20DB6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,049,330:18:0**	
308	**1**	**143**	**23:40:40.266**	**20DB6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,049,330:33:0**	
309	**1**	**143**	**23:40:50.266**	**20DB5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,049,330:48:0**	
310	**1**	**143**	**23:40:53.600**	**20DB5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,049,330:53:0**	
311	**1**	**143**	**23:41:34.266**	**20DB4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,049,331:23:0**	
312	**1**	**143**	**23:42:34.933**	**20DB4B**	**37IST**	**0,2,0,OFF,0,1,1**	**Gain State 4**	**4R0**	**4**	**0**	**6,049,332:23:0**	
313	**1**	**143**	**23:43:22.266**	**30NNGLOBAL01-**		**-----STOP-------**		**4R0**	**4**	**0**	: :	
314	**1**	**143**	**23:46:17.600**	**30ENGLOBAL01-**		**-----START------**		**4R0**	**4**	**0**	: :	
315	1	143	23:46:17.600	127DB	NIMSTAB	GS	%%%%% GROUP START TAB	4R0	4	0	6,049,335:84:0	
316	**1**	**143**	**23:46:17.600**	**127DB4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**6,049,335:84:0**	
317	**1**	**143**	**23:46:18.266**	**127DB4B**	**37ETB**	**0A,CA,18,39,FF,1**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**6,049,335:85:0**	
318	1	143	23:46:21.600	165DB4A	**7SCAN**	**NORM,333.089996,**	**Check S/P Position**	4R3	4	0	6,049,335:90:0	
319	1	143	23:46:26.266	127DB11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	6,049,336:06:0	
320	1	143	23:50:13.600	175DB422A6A	6DMSC	R7,3	DMS Control	4R3	4	0	6,049,339:74:0	
321	1	143	23:50:13.600		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4364.05 +/- 2	4R3	4	0	6,049,339:74:0	
322	1	143	23:50:15.600	117DB	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,049,339:77:0	
323	1	143	23:50:20.266		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4364.05 +/- 2	4R3	4	0	6,049,339:84:0	
324	1	143	23:50:21.600	175DB176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	4R3	4	0	6,049,339:86:0	
325	1	143	23:50:21.666		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4364.17 +/- 2	4R3	4	0	6,049,339:86:1	
326	1	143	23:50:21.666		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 4364.17 +/- 2	4R3	4	0	6,049,339:86:1	
327	1	143	23:50:23.600	165DB4B	7VECT		Inert vect update UTC	4R3	4	0	6,049,339:89:0	
328	1	143	23:50:24.933	117DB105A106A4A	**7STRP**	**-0.006,0.0,0,0,0**	**Slew =,0.03**	4R3	4	0	6,049,340:00:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
329	1	143	23:54:07.600	117DB11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,049,343	61:0
330	1	143	23:54:07.600		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4417.13 +/- 2	4R3	4	0	6,049,343	61:0
331	1	143	23:54:07.600	175DB6A	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,049,343	61:0
332	1	143	23:54:07.600	175DB422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,049,343	61:0
333	1	143	23:54:08.800		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4417.19 +/- 2	4R3	4	0	6,049,343	62:8
334	**1**	**143**	**23:54:12.933**	**30ENGLOBAL01-**		**-----STOP-------**		**4R3**	**4**	**0**	**:**	**:**
335	1	144	00:13:40.266		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4417.19 +/- 2	4R3	4	0	6,049,363	00:0
336	1	144	00:13:40.266	411JA6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,049,363	00:0
337	1	144	00:13:46.933		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4417.19 +/- 2	4R3	4	0	6,049,363	10:0
338	1	144	00:13:48.333		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 4417.31 +/- 2	4R3	4	0	6,049,363	12:1
339	1	144	00:13:48.333		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4417.31 +/- 2	4R3	4	0	6,049,363	12:1
340	1	144	00:13:50.266	411JA6B	6TMREC	**BDT**	7.68 KBPS BUFFER DUMP TO TAPE Record Mode	4R3	4	0	6,049,363	15:0
341	1	144	00:15:51.600	411JA6C	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,049,365	15:0
342	1	144	00:15:52.266		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *4446.35 +/- 2	4R3	4	0	6,049,365	16:0
343	1	144	00:15:52.266	411JA6D	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,049,365	16:0
344	1	144	00:15:53.466		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *4446.41 +/- 2	4R3	4	0	6,049,365	17:8
345	**1**	**144**	**01:08:01.600**	**20DC5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,049,416**	**69:0**
346	**1**	**144**	**01:08:01.600**	**30NNBARGEB01-**		**-----START------**			**4**	**0**	**:**	**:**
347	**1**	**144**	**01:08:08.933**	**20DC5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,049,416**	**80:0**
348	1	144	01:08:15.600	165DC4A	**7SCAN**	**NORM,28.685,16.3**	**Check S/P Position**		4	0	6,049,416	90:0
349	**1**	**144**	**01:08:16.933**	**20DC6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,049,417**	**01:0**
350	**1**	**144**	**01:08:26.933**	**20DC6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,049,417**	**16:0**
351	**1**	**144**	**01:08:36.933**	**20DC5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,049,417**	**31:0**
352	**1**	**144**	**01:08:38.266**	**20DC5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,049,417**	**33:0**
353	**1**	**144**	**01:09:09.600**	**20DC4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,049,417**	**80:0**
354	**1**	**144**	**01:09:10.000**	**30NNBARGEB01-**		**-----STOP-------**		**2R0**	**4**	**0**	**:**	**:**
355	1	144	01:10:12.933	127DC	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,049,418	84:0
356	**1**	**144**	**01:10:12.933**	**30JNBARGEB01-**		**-----START------**		**2R0**	**4**	**0**	**:**	**:**
357	**1**	**144**	**01:10:12.933**	**127DC4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,049,418**	**84:0**
358	**1**	**144**	**01:10:13.600**	**127DC4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,049,418**	**85:0**
359	1	144	01:10:21.600	127DC11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,049,419	06:0
360	1	144	01:12:07.600	175DC422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	6,049,420	74:0
361	1	144	01:12:07.600		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 4446.41 +/- 2	2R3	4	0	6,049,420	74:0
362	1	144	01:12:09.600	117DC	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,420	77:0
363	1	144	01:12:14.266		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 4446.41 +/- 2	2R3	4	0	6,049,420	84:0
364	1	144	01:12:15.600	175DC176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,049,420	86:0
365	1	144	01:12:15.666		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *4446.53 +/- 2	2R3	4	0	6,049,420	86:1
366	1	144	01:12:15.666		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 4446.53 +/- 2	2R3	4	0	6,049,420	86:1
367	1	144	01:12:17.600	165DC4B	7VECT		Inert vect update UTC	2R3	4	0	6,049,420	89:0
368	1	144	01:12:18.933	117DC105A106A4A	**7STRP**	**-0.027607,0.0,0,**	**Slew =,0.02**	2R3	4	0	6,049,421	00:0
369	1	144	01:30:00.266	480SD6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	6,049,438	45:0
370	1	144	01:35:24.933	117DC105A106A4B	**7STRP**	**0.046534,-0.006,**	**Slew =12.01**	2R3	4	0	6,049,443	77:0
371	1	144	01:35:39.600	117DC105A106A4C	**7STRP**	**-0.027607,0.0,0,**	**Slew =,0.02**	2R3	4	0	6,049,444	08:0
372	1	144	01:36:40.266	480SD6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	6,049,445	08:0
373	1	144	01:58:45.600	117DC11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,466	85:0
374	1	144	01:58:45.600		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *5100.43 +/- 2	2R3	4	0	6,049,466	85:0
375	1	144	01:58:45.600	175DC6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,466	85:0
376	1	144	01:58:45.600	175DC422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,466	85:0
377	**1**	**144**	**01:58:45.933**	**30JNBARGEB01-**		**-----STOP-------**		**2R3**	**4**	**0**	**:**	**:**
378	1	144	01:58:46.800		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *5100.49 +/- 2	2R3	4	0	6,049,466	86:8
379	**1**	**144**	**02:07:59.600**	**30NNHTSPOT02-**		**-----START------**		**2R3**	**4**	**0**	**:**	**:**
380	**1**	**144**	**02:08:41.600**	**20DD5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,049,476**	**69:0**
381	**1**	**144**	**02:08:48.933**	**20DD5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,049,476**	**80:0**
382	**1**	**144**	**02:08:54.933**	**30JNHTSPOT02-**		**-----START------**			**4**	**0**	**:**	**:**
383	1	144	02:08:55.600	165DD4A	**7SCAN**	**NORM,40.094,19.1**	**Check S/P Position**		4	0	6,049,476	90:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
384	**1**	**144**	**02:08:56.933**	**20DD6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,049,477:01:0**	
385	**1**	**144**	**02:09:06.933**	**20DD6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,049,477:16:0**	
386	**1**	**144**	**02:09:16.933**	**20DD5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,049,477:31:0**	
387	**1**	**144**	**02:09:18.266**	**20DD5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,049,477:33:0**	
388	**1**	**144**	**02:09:49.600**	**20DD4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,049,477:80:0**	
389	1	144	02:10:52.933	127DD	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,049,478:84:0	
390	**1**	**144**	**02:10:52.933**	**127DD4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,049,478:84:0**	
391	**1**	**144**	**02:10:53.600**	**127DD4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,049,478:85:0**	
392	**1**	**144**	**02:10:59.600**	**30NNHTSPOT02-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
393	1	144	02:11:01.600	127DD11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,049,479:06:0	
394	1	144	02:12:47.600	175DD422A6A	6DMSC	R7,3	DMS Control	2R3	4	0	6,049,480:74:0	
395	1	144	02:12:47.600		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 5100.49 +/- 2	2R3	4	0	6,049,480:74:0	
396	1	144	02:12:49.600	117DD	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,480:77:0	
397	1	144	02:12:54.266		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 5100.49 +/- 2	2R3	4	0	6,049,480:84:0	
398	1	144	02:12:55.600	175DD176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,049,480:86:0	
399	1	144	02:12:55.666		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 5100.61 +/- 2	2R3	4	0	6,049,480:86:1	
400	1	144	02:12:55.666		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC *5100.61 +/- 2	2R3	4	0	6,049,480:86:1	
401	1	144	02:12:58.933	117DD105A106A4A	**7STRP**	**-0.032011,-0.002**	**Slew =,0.01**	2R3	4	0	6,049,481:00:0	
402	1	144	02:36:20.266	488AE6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,049,504:09:0	
403	1	144	03:06:30.266	117DD11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,533:85:0	
404	1	144	03:07:30.933	175DD6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,534:85:0	
405	1	144	03:07:30.933	175DD422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,534:85:0	
406	1	144	03:07:30.933		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC *5868.25 +/- 2	2R3	4	0	6,049,534:85:0	
407	1	144	03:07:32.133		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *5868.31 +/- 2	2R3	4	0	6,049,534:86:8	
408	**1**	**144**	**03:07:36.266**	**30JNHTSPOT02-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
409	1	144	03:08:35.600	465KC6A	6DMSC	RDY,4	DMS Control Tape stop	2R3	4	0	6,049,536:00:0	
410	1	144	03:08:35.600		DMS:	: READY	RDY, TRACK *4, *REV, TIC 5868.31 +/- 2	2R3	4	0	6,049,536:00:0	
411	**1**	**144**	**03:08:39.600**	**30NNHTSPOT03-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
412	1	144	03:08:46.933	488AE6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,049,536:17:0	
413	**1**	**144**	**03:09:21.600**	**20DE5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,049,536:69:0**	
414	**1**	**144**	**03:09:28.933**	**20DE5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,049,536:80:0**	
415	**1**	**144**	**03:09:34.933**	**30JNHTSPOT03-**		**-----START------**			**4**	**0**	**: :**	
416	1	144	03:09:35.600	165DE4A	**7SCAN**	**NORM,41.333,19.3**	**Check S/P Position**		4	0	6,049,536:90:0	
417	**1**	**144**	**03:09:36.933**	**20DE6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,049,537:01:0**	
418	**1**	**144**	**03:09:46.933**	**20DE6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,049,537:16:0**	
419	**1**	**144**	**03:09:56.933**	**20DE5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,049,537:31:0**	
420	**1**	**144**	**03:09:58.266**	**20DE5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,049,537:33:0**	
421	**1**	**144**	**03:10:29.600**	**20DE4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,049,537:80:0**	
422	**1**	**144**	**03:11:32.933**	**127DE4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,049,538:84:0**	
423	1	144	03:11:32.933	127DE	NIMSTAB	GS	%%%%% GROUP START TAB	2R3	4	0	6,049,538:84:0	
424	**1**	**144**	**03:11:33.600**	**127DE4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,049,538:85:0**	
425	**1**	**144**	**03:11:39.600**	**30NNHTSPOT03-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
426	1	144	03:11:41.600	127DE11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,049,539:06:0	
427	1	144	03:13:26.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5868.31 +/- 2	2R3	4	0	6,049,540:73:0	
428	1	144	03:13:26.933	175DE422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,540:73:0	
429	1	144	03:13:28.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5868.43 +/- 2	2R3	4	0	6,049,540:75:1	
430	1	144	03:13:29.600	117DE	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,540:77:0	
431	1	144	03:13:33.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5869.66 +/- 2	2R3	4	0	6,049,540:83:0	
432	1	144	03:13:34.800		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *5869.72 +/- 2	2R3	4	0	6,049,540:84:8	
433	1	144	03:13:35.600	175DE176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,049,540:86:0	
434	1	144	03:13:36.200		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 5869.60 +/- 2	2R3	4	0	6,049,540:86:9	
435	1	144	03:13:36.200		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *5869.60 +/- 2	2R3	4	0	6,049,540:86:9	
436	**1**	**144**	**03:13:38.266**	**30JNHTSPOT03-**	**NIMPBK**	**301DE**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
437	1	144	03:13:38.933	117DE105A106A4A	**7STRP**	**-0.027807,-0.002**	**Slew =,0.01**	2R3	4	0	6,049,541:00:0	
438	**1**	**144**	**03:22:42.933**	**30JNHTSPOT03-**	**NIMPBK**	**301EX**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
439	**1**	**144**	**03:29:20.933**	**30JNHTSPOT03-**	**DESELC**	**300EX**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
440	**1**	**144**	**03:33:23.600**	**30JNHTSPOT03-**	**NIMPBK**	**301DX**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
441	**1**	**144**	**03:33:33.600**	**30JNHTSPOT03-**	**DESELC**	**300DE**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
442	**1**	**144**	**03:54:52.266**	**30JNHTSPOT03-**	**DESELC**	**300DX**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
443	1	144	03:55:02.266	175DE422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,581:85:0	
444	1	144	03:55:02.266	175DE6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,581:85:0	
445	1	144	03:55:02.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *5286.93 +/- 2	2R3	4	0	6,049,581:85:0	
446	1	144	03:55:03.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *5286.87 +/- 2	2R3	4	0	6,049,581:86:8	
447	**1**	**144**	**04:00:05.600**	**30JNHTSPOT03-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
448	1	144	04:00:05.600	117DE11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,586:85:0	
449	1	144	04:11:16.266	165IK4A	7SCAN	NORM,68.898,25.3	Check S/P Position	2R3	4	0	6,049,597:90:0	
450	1	144	04:13:06.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5286.87 +/- 2	2R3	4	0	6,049,599:74:0	
451	1	144	04:13:06.933	175IK422A6A	6DMSC	R806,0	DMS Control Tape runup 806.4kb	2R3	4	0	6,049,599:74:0	
452	1	144	04:13:08.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5286.99 +/- 2	2R3	4	0	6,049,599:76:1	
453	1	144	04:13:13.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5288.22 +/- 2	2R3	4	0	6,049,599:84:0	
454	1	144	04:13:14.800		DMS:	: *RUNUP	R806, TRACK *4, *REV, TIC *5288.28 +/- 2	2R3	4	0	6,049,599:85:8	
455	1	144	04:13:16.933	165IK4B	7VECT		Inert vect update UTC	2R3	4	0	6,049,599:89:0	
456	1	144	04:13:19.600	175IK176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R3	4	0	6,049,600:02:0	
457	1	144	04:13:20.066		DMS:	**: *RECORD**	R806, TRACK 4, REV, TIC *5222.28 +/- 2	2R3	4	0	6,049,600:02:7	
458	1	144	04:13:20.066		DMS:	: *AT_SPD	R806, TRACK 4, REV, TIC 5222.28 +/- 3	2R3	4	0	6,049,600:02:7	
459	1	144	04:13:44.266		DMS:	**: *RUNDOWN**	R806, TRACK 4, REV, TIC *4626.74 +/- 3	2R3	4	0	6,049,600:39:0	
460	1	144	04:13:44.266	175IK422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,600:39:0	
461	1	144	04:13:47.000		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4615.24 +/- 3	2R3	4	0	6,049,600:43:1	
462	1	144	05:06:10.933	488AF6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,049,652:27:0	
463	1	144	05:27:56.266	488AF6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,049,673:74:0	
464	**1**	**144**	**06:00:27.600**	**432JC6B**	**6RTDS2**	**NIMNCG,AACDSL,RT**	**AACS DESELECT**	**2R3**	**4**	**0**	**6,049,705:89:0**	
465	1	144	06:30:00.266	480SE6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	6,049,735:18:0	
466	1	144	06:36:40.266	480SE6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	6,049,741:72:0	
467	1	144	08:00:47.600	165GC4A	7SCAN	NORM,320.382,-15	Check S/P Position	2R3	4	0	6,049,824:90:0	
468	1	144	08:03:50.266	176GC6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	6,049,828:00:0	
469	1	144	08:04:41.600	117GC	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,828:77:0	
470	1	144	08:04:50.933	117GC105A106A4A	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,829:00:0	
471	1	144	08:05:03.600	117GC105A106A4B	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,829:19:0	
472	1	144	08:05:14.266	117GC105A106A4C	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,829:35:0	
473	1	144	08:05:26.933	117GC105A106A4D	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,829:54:0	
474	1	144	08:05:37.600	117GC105A106A4E	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,829:70:0	
475	1	144	08:05:50.266	117GC105A106A4F	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,829:89:0	
476	1	144	08:06:00.933	117GC105A106A4G	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,830:14:0	
477	1	144	08:06:13.600	117GC105A106A4H	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,830:33:0	
478	1	144	08:06:24.266	117GC105A106A4I	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,830:49:0	
479	1	144	08:06:36.933	117GC105A106A4J	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,830:68:0	
480	1	144	08:06:47.600	117GC105A106A4K	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,830:84:0	
481	1	144	08:07:00.266	117GC105A106A4L	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,831:12:0	
482	1	144	08:07:10.933	117GC105A106A4M	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,831:28:0	
483	1	144	08:07:23.600	117GC105A106A4N	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,831:47:0	
484	1	144	08:07:34.266	117GC105A106A4O	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,831:63:0	
485	1	144	08:07:46.933	117GC105A106A4P	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,831:82:0	
486	1	144	08:07:57.600	117GC105A106A4Q	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,832:07:0	
487	1	144	08:08:10.266	117GC105A106A4R	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,832:26:0	
488	1	144	08:08:20.933	117GC105A106A4S	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,832:42:0	
489	1	144	08:08:33.600	117GC105A106A4T	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,832:61:0	
490	1	144	08:08:44.266	117GC105A106A4U	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,832:77:0	
491	1	144	08:08:56.933	117GC105A106A4V	7STRP	0.0114,-0.0012,0	Slew =12.01	2R3	4	0	6,049,833:05:0	
492	1	144	08:09:07.600	117GC105A106A4W	7STRP	-0.0106,0.0001,0	Slew =,1.35	2R3	4	0	6,049,833:21:0	
493	1	144	08:09:20.266	117GC11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,833:40:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
494	1	144	08:10:24.266	176GC6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,834:45:0	
495	1	144	08:10:26.266	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,834:48:0	
496	1	144	08:10:26.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4615.24 +/- 3	2R3	4	0	6,049,834:48:0	
497	1	144	08:10:27.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4615.36 +/- 3	2R3	4	0	6,049,834:50:1	
498	1	144	08:10:32.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4616.59 +/- 3	2R3	4	0	6,049,834:58:0	
499	1	144	08:10:34.133		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *4616.65 +/- 3	2R3	4	0	6,049,834:59:8	
500	1	144	08:10:35.533		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC *4616.53 +/- 3	2R3	4	0	6,049,834:61:9	
501	1	144	08:10:36.266		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *4616.36 +/- 3	2R3	4	0	6,049,834:63:0	
502	1	144	08:10:52.266	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,834:87:0	
503	1	144	08:10:52.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *4612.61 +/- 3	2R3	4	0	6,049,834:87:0	
504	1	144	08:10:53.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4612.55 +/- 3	2R3	4	0	6,049,834:88:8	
505	1	144	08:43:24.266	20MA6A	6CKSUM	MAG,4040,46F0		2R3	4	0	6,049,867:12:0	
506	1	144	08:56:10.933	488AF6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,049,879:70:0	
507	1	144	09:38:52.266	165GD4A	7SCAN	NORM,331.483997,	Check S/P Position	2R3	4	0	6,049,921:90:0	
508	1	144	09:40:54.266	176GD6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	6,049,924:00:0	
509	1	144	09:41:45.600	117GD	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,924:77:0	
510	1	144	09:41:54.933	117GD105A106A4A	7STRP	0.0017,-0.013501	Slew =,0.34	2R3	4	0	6,049,925:00:0	
511	1	144	09:42:43.600	117GD105A106A4B	7STRP	-0.0007,0.013501	Slew =12.01	2R3	4	0	6,049,925:73:0	
512	1	144	09:42:58.266	117GD105A106A4C	7STRP	0.0017,-0.013501	Slew =,0.34	2R3	4	0	6,049,926:04:0	
513	1	144	09:43:46.933	117GD105A106A4D	7STRP	-0.0007,0.013501	Slew =12.01	2R3	4	0	6,049,926:77:0	
514	1	144	09:44:01.600	117GD105A106A4E	7STRP	0.0017,-0.013501	Slew =,0.34	2R3	4	0	6,049,927:08:0	
515	1	144	09:44:50.266	117GD105A106A4F	7STRP	-0.0007,0.013501	Slew =12.01	2R3	4	0	6,049,927:81:0	
516	1	144	09:45:04.933	117GD105A106A4G	7STRP	0.0017,-0.013501	Slew =,0.34	2R3	4	0	6,049,928:12:0	
517	1	144	09:45:53.600	117GD105A106A4H	7STRP	-0.0007,0.013501	Slew =12.01	2R3	4	0	6,049,928:85:0	
518	1	144	09:46:08.266	117GD105A106A4I	7STRP	0.0017,-0.013501	Slew =,0.34	2R3	4	0	6,049,929:16:0	
519	1	144	09:46:56.933	117GD11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,929:89:0	
520	1	144	09:47:28.266	176GD6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,930:45:0	
521	1	144	09:47:30.266	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,930:48:0	
522	1	144	09:47:30.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4612.55 +/- 3	2R3	4	0	6,049,930:48:0	
523	1	144	09:47:31.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4612.67 +/- 3	2R3	4	0	6,049,930:50:1	
524	1	144	09:47:36.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4613.90 +/- 3	2R3	4	0	6,049,930:58:0	
525	1	144	09:47:38.133		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *4613.96 +/- 3	2R3	4	0	6,049,930:59:8	
526	1	144	09:47:39.533		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC *4613.84 +/- 3	2R3	4	0	6,049,930:61:9	
527	1	144	09:47:40.266		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *4613.67 +/- 3	2R3	4	0	6,049,930:63:0	
528	1	144	09:47:54.266	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,930:84:0	
529	1	144	09:47:54.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *4610.39 +/- 3	2R3	4	0	6,049,930:84:0	
530	1	144	09:47:55.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4610.33 +/- 3	2R3	4	0	6,049,930:85:8	
531	**1**	**144**	**10:03:12.933**	**30NNWTOVAL01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
532	**1**	**144**	**10:03:54.933**	**20DG5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,049,946:69:0**	
533	**1**	**144**	**10:04:02.266**	**20DG5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,049,946:80:0**	
534	**1**	**144**	**10:04:08.266**	**30JNWTOVAL01-**		**-----START------**			**4**	**0**	**: :**	
535	1	144	10:04:08.933	165DG4A	**7SCAN**	**NORM,62.835,21.8**	**Check S/P Position**		4	0	6,049,946:90:0	
536	**1**	**144**	**10:04:10.266**	**20DG6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,049,947:01:0**	
537	**1**	**144**	**10:04:20.266**	**20DG6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,049,947:16:0**	
538	**1**	**144**	**10:04:30.266**	**20DG5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,049,947:31:0**	
539	**1**	**144**	**10:04:31.600**	**20DG5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,049,947:33:0**	
540	**1**	**144**	**10:05:02.933**	**20DG4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,049,947:80:0**	
541	1	144	10:06:06.266	125DG11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,049,948:84:0	
542	1	144	10:06:06.266	125DG	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,049,948:84:0	
543	**1**	**144**	**10:06:06.266**	**125DG4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,049,948:84:0**	
544	**1**	**144**	**10:06:12.933**	**30NNWTOVAL01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
545	**1**	**144**	**10:07:06.933**	**127DG4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,049,949:84:0**	
546	1	144	10:07:06.933	127DG	NIMSTAB	GS	%%%%% GROUP START TAB	2R3	4	0	6,049,949:84:0	
547	**1**	**144**	**10:07:07.600**	**127DG4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,049,949:85:0**	
548	1	144	10:07:15.600	127DG11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,049,950:06:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
549	1	144	10:08:00.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4610.33 +/- 3	2R3	4	0	6,049,950:73:0	
550	1	144	10:08:00.266	175DG422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,950:73:0	
551	1	144	10:08:01.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4610.45 +/- 3	2R3	4	0	6,049,950:75:1	
552	1	144	10:08:02.933	117DG	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,950:77:0	
553	1	144	10:08:06.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4611.68 +/- 3	2R3	4	0	6,049,950:83:0	
554	1	144	10:08:08.133		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *4611.74 +/- 3	2R3	4	0	6,049,950:84:8	
555	1	144	10:08:08.933	175DG176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,049,950:86:0	
556	1	144	10:08:09.533		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *4611.62 +/- 3	2R3	4	0	6,049,950:86:9	
557	1	144	10:08:09.533		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 4611.62 +/- 3	2R3	4	0	6,049,950:86:9	
558	1	144	10:08:12.266	117DG105A106A4A	**7STRP**	**-0.015481,0.0015**	**Slew =,0.02**	2R3	4	0	6,049,951:00:0	
559	1	144	10:21:10.266	117DG105A106A4B	**7STRP**	**0.027007,-0.0100**	**Slew =12.01**	2R3	4	0	6,049,963:75:0	
560	1	144	10:21:27.600	117DG105A106A4C	**7STRP**	**-0.015481,0.0015**	**Slew =,0.02**	2R3	4	0	6,049,964:10:0	
561	1	144	10:34:25.600	117DG11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,976:85:0	
562	1	144	10:34:26.266	175DG422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,976:86:0	
563	1	144	10:34:26.266	175DG6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,976:86:0	
564	1	144	10:34:26.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *4242.08 +/- 3	2R3	4	0	6,049,976:86:0	
565	1	144	10:34:27.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4242.02 +/- 3	2R3	4	0	6,049,976:87:8	
566	**1**	**144**	**10:36:32.933**	**30JNWTOVAL01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
567	1	144	10:47:37.600	165GE4A	7SCAN	NORM,340.030998,	Check S/P Position	2R3	4	0	6,049,989:90:0	
568	1	144	10:49:39.600	176GE6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	6,049,992:00:0	
569	1	144	10:50:30.933	117GE	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,049,992:77:0	
570	1	144	10:50:40.266	117GE105A106A4A	7STRP	0.0016,-0.013001	Slew =,0.31	2R3	4	0	6,049,993:00:0	
571	1	144	10:51:28.933	117GE105A106A4B	7STRP	-0.0005,0.013001	Slew =12.01	2R3	4	0	6,049,993:73:0	
572	1	144	10:51:43.600	117GE105A106A4C	7STRP	0.0016,-0.013001	Slew =,0.31	2R3	4	0	6,049,994:04:0	
573	1	144	10:52:32.266	117GE105A106A4D	7STRP	-0.0005,0.013001	Slew =12.01	2R3	4	0	6,049,994:77:0	
574	1	144	10:52:46.933	117GE105A106A4E	7STRP	0.0016,-0.013001	Slew =,0.31	2R3	4	0	6,049,995:08:0	
575	1	144	10:53:35.600	117GE105A106A4F	7STRP	-0.0005,0.013001	Slew =12.01	2R3	4	0	6,049,995:81:0	
576	1	144	10:53:50.266	117GE105A106A4G	7STRP	0.0016,-0.013001	Slew =,0.31	2R3	4	0	6,049,996:12:0	
577	1	144	10:54:38.933	117GE105A106A4H	7STRP	-0.0005,0.013001	Slew =12.01	2R3	4	0	6,049,996:85:0	
578	1	144	10:54:53.600	117GE105A106A4I	7STRP	0.0016,-0.013001	Slew =,0.31	2R3	4	0	6,049,997:16:0	
579	1	144	10:55:42.266	117GE11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,049,997:89:0	
580	1	144	10:56:13.600	176GE6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,049,998:45:0	
581	1	144	10:56:15.600	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,049,998:48:0	
582	1	144	10:56:15.600		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4242.02 +/- 3	2R3	4	0	6,049,998:48:0	
583	1	144	10:56:17.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4242.14 +/- 3	2R3	4	0	6,049,998:50:1	
584	1	144	10:56:22.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4243.37 +/- 3	2R3	4	0	6,049,998:58:0	
585	1	144	10:56:23.466		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *4243.43 +/- 3	2R3	4	0	6,049,998:59:8	
586	1	144	10:56:24.866		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC *4243.31 +/- 3	2R3	4	0	6,049,998:61:9	
587	1	144	10:56:25.600		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *4243.14 +/- 3	2R3	4	0	6,049,998:63:0	
588	1	144	10:56:39.600	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,049,998:84:0	
589	1	144	10:56:39.600		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *4239.86 +/- 3	2R3	4	0	6,049,998:84:0	
590	1	144	10:56:40.800		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4239.80 +/- 3	2R3	4	0	6,049,998:85:8	
591	1	144	11:01:51.600	480MB6	6MROH	12	read from LLM1A12,2282,0,A2	2R3	4	0	6,050,004:06:0	
592	1	144	11:01:51.600	480MB6A	6MROH	12,2282,0,A2	read from LLM1A12,2282,0,A2	2R3	4	0	6,050,004:06:0	
593	**1**	**144**	**11:23:05.600**	**30NNBBARGE01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
594	**1**	**144**	**11:23:47.600**	**20DH5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,050,025:69:0**	
595	**1**	**144**	**11:23:54.933**	**20DH5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,050,025:80:0**	
596	**1**	**144**	**11:24:02.933**	**20DH6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,050,026:01:0**	
597	**1**	**144**	**11:24:12.933**	**20DH6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,050,026:16:0**	
598	**1**	**144**	**11:24:22.933**	**20DH5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,050,026:31:0**	
599	**1**	**144**	**11:24:24.266**	**20DH5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,050,026:33:0**	
600	**1**	**144**	**11:24:55.600**	**20DH4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,050,026:80:0**	
601	**1**	**144**	**11:25:01.600**	**30JNBBARGE01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
602	1	144	11:25:02.266	165DH4A	**7SCAN**	**NORM,67.846999,2**	**Check S/P Position**	2R0	4	0	6,050,026:90:0	
603	1	144	11:25:58.933	125DH	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,050,027:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
604	1	144	11:25:58.933	125DH11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,050,027:84:0	
605	**1**	**144**	**11:25:58.933**	**125DH4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,050,027:84:0**	
606	**1**	**144**	**11:26:05.600**	**30NNBBARGE01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
607	1	144	11:26:59.600	127DH	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,050,028:84:0	
608	**1**	**144**	**11:26:59.600**	**127DH4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,050,028:84:0**	
609	**1**	**144**	**11:27:00.266**	**127DH4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,050,028:85:0**	
610	1	144	11:27:08.266	127DH11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,050,029:06:0	
611	1	144	11:28:53.600	175DH422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,030:73:0	
612	1	144	11:28:53.600		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4239.80 +/- 3	2R3	4	0	6,050,030:73:0	
613	1	144	11:28:55.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4239.92 +/- 3	2R3	4	0	6,050,030:75:1	
614	1	144	11:28:56.266	117DH	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,030:77:0	
615	1	144	11:29:00.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4241.15 +/- 3	2R3	4	0	6,050,030:83:0	
616	1	144	11:29:01.466		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *4241.21 +/- 3	2R3	4	0	6,050,030:84:8	
617	1	144	11:29:02.266	175DH176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,050,030:86:0	
618	1	144	11:29:02.866		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 4241.09 +/- 3	2R3	4	0	6,050,030:86:9	
619	1	144	11:29:02.866		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *4241.09 +/- 3	2R3	4	0	6,050,030:86:9	
620	**1**	**144**	**11:29:04.933**	**30JNBBARGE01-**	**NIMPBK**	**301DH**	**JUPITER BRN BARGE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
621	1	144	11:29:05.600	117DH105A106A4A	**7STRP**	**-0.0094,-0.0014,**	**Slew =,0.02**	2R3	4	0	6,050,031:00:0	
622	1	144	11:30:00.266	480SF6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	6,050,031:82:0	
623	1	144	11:36:40.266	480SF6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	6,050,038:45:0	
624	1	144	11:37:00.933	117DH105A106A4B	**7STRP**	**0.015001,-0.0050**	**Slew =12.01**	2R3	4	0	6,050,038:76:0	
625	**1**	**144**	**11:37:02.933**	**30JNBBARGE01-**	**DESELC**	**300DH**	**JUPITER BRN BARGE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
626	1	144	11:37:16.933	117DH105A106A4C	**7STRP**	**-0.0094,-0.0014,**	**Slew =,0.02**	2R3	4	0	6,050,039:09:0	
627	1	144	11:45:12.266	117DH11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,046:85:0	
628	1	144	11:45:23.600	175DH6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,047:11:0	
629	1	144	11:45:23.600	175DH422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,047:11:0	
630	1	144	11:45:23.600		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *4011.23 +/- 3	2R3	4	0	6,050,047:11:0	
631	1	144	11:45:24.800		DMS:	: *READY	RDY, TRACK 4, REV, TIC *4011.17 +/- 3	2R3	4	0	6,050,047:12:8	
632	**1**	**144**	**11:45:28.933**	**30JNBBARGE01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
633	1	144	12:23:40.933	165IM4A	7SCAN	NORM,351.857998,	Check S/P Position	2R3	4	0	6,050,084:90:0	
634	1	144	12:25:38.266	175IM422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	2R3	4	0	6,050,086:84:0	
635	1	144	12:25:38.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4011.17 +/- 3	2R3	4	0	6,050,086:84:0	
636	1	144	12:25:39.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4011.29 +/- 3	2R3	4	0	6,050,086:86:1	
637	1	144	12:25:40.266	118IM	**SMOS**	GS		2R3	4	0	6,050,086:87:0	
638	1	144	12:25:41.600	165IM4B	7VECT		Inert vect update UTC	2R3	4	0	6,050,086:89:0	
639	1	144	12:25:44.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4012.53 +/- 3	2R3	4	0	6,050,087:03:0	
640	1	144	12:25:46.133		DMS:	: *RUNUP	R115, TRACK *4, *REV, TIC *4012.59 +/- 3	2R3	4	0	6,050,087:04:8	
641	1	144	12:25:49.600	175IM176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	2R3	4	0	6,050,087:10:0	
642	1	144	12:25:50.133		DMS:	**: *RECORD**	R115, TRACK 4, REV, TIC *4006.29 +/- 3	2R3	4	0	6,050,087:10:8	
643	1	144	12:25:50.133		DMS:	: *AT_SPD	R115, TRACK 4, REV, TIC 4006.29 +/- 3	2R3	4	0	6,050,087:10:8	
644	1	144	12:25:50.266	118IM110A111A4A	7STRP	0.0,0.00748,182,	Slew =,3.71	2R3	4	0	6,050,087:11:0	
645	1	144	12:26:50.933	118IM11A	**SMOS**	GE		2R3	4	0	6,050,088:11:0	
646	1	144	12:27:45.600		DMS:	**: *RUNDOWN**	R115, TRACK 4, REV, TIC *3600.35 +/- 3	2R3	4	0	6,050,089:02:0	
647	1	144	12:27:45.600	175IM422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,089:02:0	
648	1	144	12:27:46.800		DMS:	: *READY	RDY, TRACK 4, REV, TIC *3599.35 +/- 3	2R3	4	0	6,050,089:03:8	
649	**1**	**144**	**13:04:12.266**	**30NNBBARGE02-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
650	**1**	**144**	**13:04:54.266**	**20DI5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,050,125:69:0**	
651	**1**	**144**	**13:05:01.600**	**20DI5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,050,125:80:0**	
652	**1**	**144**	**13:05:09.600**	**20DI6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,050,126:01:0**	
653	**1**	**144**	**13:05:19.600**	**20DI6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,050,126:16:0**	
654	**1**	**144**	**13:05:29.600**	**20DI5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,050,126:31:0**	
655	**1**	**144**	**13:05:30.933**	**20DI5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,050,126:33:0**	
656	**1**	**144**	**13:06:02.266**	**20DI4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,050,126:80:0**	
657	**1**	**144**	**13:06:08.266**	**30JNBBARGE02-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
658	1	144	13:06:08.933	165DI4A	**7SCAN**	**NORM,73.651999,2**	**Check S/P Position**	2R0	4	0	6,050,126:90:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
659	1	144	13:07:05.600	125DI	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,050,127:84:0	
660	1	144	13:07:05.600	125DI11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,050,127:84:0	
661	**1**	**144**	**13:07:05.600**	**125DI4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,050,127:84:0**	
662	**1**	**144**	**13:07:12.266**	**30NNBBARGE02-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
663	**1**	**144**	**13:08:06.266**	**127DI4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,050,128:84:0**	
664	1	144	13:08:06.266	127DI	NIMSTAB	GS	%%%%% GROUP START TAB	2R3	4	0	6,050,128:84:0	
665	**1**	**144**	**13:08:06.933**	**127DI4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,050,128:85:0**	
666	1	144	13:08:14.933	127DI11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,050,129:06:0	
667	1	144	13:10:00.266	175DI422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,130:73:0	
668	1	144	13:10:00.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3599.35 +/- 3	2R3	4	0	6,050,130:73:0	
669	1	144	13:10:01.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3599.47 +/- 3	2R3	4	0	6,050,130:75:1	
670	1	144	13:10:02.933	117DI	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,130:77:0	
671	1	144	13:10:06.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3600.70 +/- 3	2R3	4	0	6,050,130:83:0	
672	1	144	13:10:08.133		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *3600.76 +/- 3	2R3	4	0	6,050,130:84:8	
673	1	144	13:10:08.933	175DI176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,050,130:86:0	
674	1	144	13:10:09.533		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *3600.64 +/- 3	2R3	4	0	6,050,130:86:9	
675	1	144	13:10:09.533		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 3600.64 +/- 3	2R3	4	0	6,050,130:86:9	
676	1	144	13:10:12.266	117DI105A106A4A	**7STRP**	**-0.015001,-0.003**	**Slew =,0.03**	2R3	4	0	6,050,131:00:0	
677	**1**	**144**	**13:19:08.266**	**30JNBBARGE02-**	**NIMPBK**	**301DI**	**JUPITER BRN BARGE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
678	1	144	13:23:09.600	117DI105A106A4B	**7STRP**	**0.023004,-0.0025**	**Slew =12.01**	2R3	4	0	6,050,143:74:0	
679	**1**	**144**	**13:23:11.600**	**30JNBBARGE02-**	**DESELC**	**300DI**	**JUPITER BRN BARGE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
680	1	144	13:23:28.266	117DI105A106A4C	**7STRP**	**-0.015001,-0.003**	**Slew =,0.03**	2R3	4	0	6,050,144:11:0	
681	1	144	13:36:25.600	117DI11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,156:85:0	
682	1	144	13:36:36.933	175DI422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,157:11:0	
683	1	144	13:36:36.933		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *3228.60 +/- 3	2R3	4	0	6,050,157:11:0	
684	1	144	13:36:36.933	175DI6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,157:11:0	
685	1	144	13:36:38.133		DMS:	: *READY	RDY, TRACK 4, REV, TIC *3228.54 +/- 3	2R3	4	0	6,050,157:12:8	
686	**1**	**144**	**13:36:42.266**	**30JNBBARGE02-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
687	**1**	**144**	**13:44:38.933**	**30NNHTSPOT01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
688	**1**	**144**	**13:45:20.933**	**20DJ5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,050,165:69:0**	
689	**1**	**144**	**13:45:28.266**	**20DJ5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,050,165:80:0**	
690	**1**	**144**	**13:45:36.266**	**20DJ6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,050,166:01:0**	
691	**1**	**144**	**13:45:46.266**	**20DJ6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,050,166:16:0**	
692	**1**	**144**	**13:45:56.266**	**20DJ5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,050,166:31:0**	
693	**1**	**144**	**13:45:57.600**	**20DJ5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,050,166:33:0**	
694	**1**	**144**	**13:46:28.933**	**20DJ4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,050,166:80:0**	
695	**1**	**144**	**13:46:34.933**	**30JNHTSPOT01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
696	1	144	13:46:35.600	165DJ4A	**7SCAN**	**NORM,70.297999,2**	**Check S/P Position**	2R0	4	0	6,050,166:90:0	
697	**1**	**144**	**13:47:32.266**	**127DJ4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,050,167:84:0**	
698	1	144	13:47:32.266	127DJ	NIMSTAB	GS	%%%%% GROUP START TAB	2R3	4	0	6,050,167:84:0	
699	**1**	**144**	**13:47:32.933**	**127DJ4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,050,167:85:0**	
700	**1**	**144**	**13:47:38.933**	**30NNHTSPOT01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
701	1	144	13:47:40.933	127DJ11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,050,168:06:0	
702	1	144	13:50:26.933	175DJ422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,170:73:0	
703	1	144	13:50:26.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3228.54 +/- 3	2R3	4	0	6,050,170:73:0	
704	1	144	13:50:28.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3228.66 +/- 3	2R3	4	0	6,050,170:75:1	
705	1	144	13:50:29.600	117DJ	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,170:77:0	
706	1	144	13:50:33.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3229.89 +/- 3	2R3	4	0	6,050,170:83:0	
707	1	144	13:50:34.800		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *3229.95 +/- 3	2R3	4	0	6,050,170:84:8	
708	1	144	13:50:35.600	175DJ176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,050,170:86:0	
709	1	144	13:50:36.200		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 3229.83 +/- 3	2R3	4	0	6,050,170:86:9	
710	1	144	13:50:36.200		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *3229.83 +/- 3	2R3	4	0	6,050,170:86:9	
711	**1**	**144**	**13:50:38.266**	**30JNHTSPOT01-**	**NIMPBK**	**301DJ**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
712	1	144	13:50:38.933	117DJ105A106A4A	**7STRP**	**0.062582,0.0016,**	**Slew =,0.04**	2R3	4	0	6,050,171:00:0	
713	**1**	**144**	**14:06:28.266**	**30JNHTSPOT01-**	**NIMPBK**	**301DY**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
714	**1**	**144**	**14:06:38.266**	**30JNHTSPOT01-**	**DESELC**	**300DJ**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
715	**1**	**144**	**14:12:58.266**	**30JNHTSPOT01-**	**DESELC**	**300DY**	**JUPITER HOT SPOT OBSERVATION**	**2R3**	**4**	**0**	**: :**	
716	1	144	14:16:51.600	117DJ11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,196:84:0	
717	1	144	14:17:01.600	175DJ6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,197:08:0	
718	1	144	14:17:01.600		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *2858.25 +/- 3	2R3	4	0	6,050,197:08:0	
719	1	144	14:17:01.600	175DJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,197:08:0	
720	1	144	14:17:02.800		DMS:	: *READY	RDY, TRACK 4, REV, TIC *2858.19 +/- 3	2R3	4	0	6,050,197:09:8	
721	**1**	**144**	**14:17:06.933**	**30JNHTSPOT01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
722	1	144	14:24:55.600	432OU431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2R3	4	0	6,050,204:82:0	
723	1	144	14:24:56.266	432OU6A	6RTSL1		R/T Select of DDS and	2R3	4	0	6,050,204:83:0	
724	**1**	**144**	**14:44:18.266**	**30NNGRWAKE01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
725	**1**	**144**	**14:45:00.266**	**20DK5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,050,224:69:0**	
726	**1**	**144**	**14:45:07.600**	**20DK5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,050,224:80:0**	
727	**1**	**144**	**14:45:15.600**	**20DK6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,050,225:01:0**	
728	**1**	**144**	**14:45:25.600**	**20DK6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,050,225:16:0**	
729	**1**	**144**	**14:45:35.600**	**20DK5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,050,225:31:0**	
730	**1**	**144**	**14:45:36.933**	**20DK5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,050,225:33:0**	
731	**1**	**144**	**14:46:08.266**	**20DK4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,050,225:80:0**	
732	**1**	**144**	**14:47:14.933**	**30JNGRWAKE01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
733	1	144	14:47:15.600	165DK4A	**7SCAN**	**NORM,78.073,24.8**	**Check S/P Position**	2R0	4	0	6,050,226:90:0	
734	**1**	**144**	**14:47:18.266**	**30NNGRWAKE01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
735	1	144	14:48:12.266	125DK11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,050,227:84:0	
736	**1**	**144**	**14:48:12.266**	**125DK4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,050,227:84:0**	
737	1	144	14:48:12.266	125DK	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,050,227:84:0	
738	1	144	14:50:13.600	127DK	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,050,229:84:0	
739	**1**	**144**	**14:50:13.600**	**127DK4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,050,229:84:0**	
740	**1**	**144**	**14:50:14.266**	**127DK4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,050,229:85:0**	
741	1	144	14:50:22.266	127DK11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,050,230:06:0	
742	1	144	14:51:06.933	175DK422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,230:73:0	
743	1	144	14:51:06.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2858.19 +/- 3	2R3	4	0	6,050,230:73:0	
744	1	144	14:51:08.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2858.31 +/- 3	2R3	4	0	6,050,230:75:1	
745	1	144	14:51:09.600	117DK	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,230:77:0	
746	1	144	14:51:13.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2859.55 +/- 3	2R3	4	0	6,050,230:83:0	
747	1	144	14:51:14.800		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *2859.61 +/- 3	2R3	4	0	6,050,230:84:8	
748	1	144	14:51:15.600	175DK176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,050,230:86:0	
749	1	144	14:51:16.200		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 2859.49 +/- 3	2R3	4	0	6,050,230:86:9	
750	1	144	14:51:16.200		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *2859.49 +/- 3	2R3	4	0	6,050,230:86:9	
751	**1**	**144**	**14:51:18.266**	**30JNGRWAKE01-**	**NIMPBK**	**301DK**	**JUPITER GRS WAKE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
752	1	144	14:51:18.933	117DK105A106A4A	**7STRP**	**-0.009,0.00106,0**	**Slew =,0.08**	2R3	4	0	6,050,231:00:0	
753	1	144	15:04:11.600	117DK105A106A4B	**7STRP**	**0.013601,-0.0060**	**Slew =12.01**	2R3	4	0	6,050,243:67:0	
754	1	144	15:04:39.600	117DK105A106A4C	**7STRP**	**-0.009,0.00106,0**	**Slew =,0.08**	2R3	4	0	6,050,244:18:0	
755	**1**	**144**	**15:06:44.266**	**30JNGRWAKE01-**	**NIMPBK**	**301EK**	**JUPITER GRS WAKE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
756	**1**	**144**	**15:11:10.266**	**30JNGRWAKE01-**	**DESELC**	**300EK**	**JUPITER GRS WAKE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
757	1	144	15:17:32.266	117DK11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,256:85:0	
758	**1**	**144**	**15:17:32.266**	**30JNGRWAKE01-**	**DESELC**	**300DK**	**JUPITER GRS WAKE OBSERVATION**	**2R3**	**4**	**0**	**: :**	
759	1	144	15:17:42.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *2487.75 +/- 3	2R3	4	0	6,050,257:09:0	
760	1	144	15:17:42.266	175DK422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,257:09:0	
761	1	144	15:17:42.266	175DK6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,257:09:0	
762	1	144	15:17:43.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *2487.69 +/- 3	2R3	4	0	6,050,257:10:8	
763	**1**	**144**	**15:17:47.600**	**30JNGRWAKE01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
764	1	144	15:33:04.933	488AG6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,050,272:28:0	
765	**1**	**144**	**15:45:58.933**	**30NNGRWAKE02-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
766	**1**	**144**	**15:46:40.933**	**20DL5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,050,285:69:0**	
767	**1**	**144**	**15:46:48.266**	**20DL5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,050,285:80:0**	
768	**1**	**144**	**15:46:56.266**	**20DL6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,050,286:01:0**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
769	**1**	**144**	**15:47:06.266**	**20DL6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,050,286:16:0**	
770	**1**	**144**	**15:47:16.266**	**20DL5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,050,286:31:0**	
771	**1**	**144**	**15:47:17.600**	**20DL5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,050,286:33:0**	
772	**1**	**144**	**15:47:48.933**	**20DL4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,050,286:80:0**	
773	**1**	**144**	**15:47:54.933**	**30JNGRWAKE02-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
774	1	144	15:47:55.600	165DL4A	**7SCAN**	**NORM,77.787,24.8**	**Check S/P Position**	2R0	4	0	6,050,286:90:0	
775	**1**	**144**	**15:48:58.933**	**30NNGRWAKE02-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
776	**1**	**144**	**15:49:52.933**	**125DL4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,050,288:84:0**	
777	1	144	15:49:52.933	125DL	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,050,288:84:0	
778	1	144	15:49:52.933	125DL11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,050,288:84:0	
779	**1**	**144**	**15:50:53.600**	**127DL4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,050,289:84:0**	
780	1	144	15:50:53.600	127DL	NIMSTAB	GS	%%%%% GROUP START TAB	2R3	4	0	6,050,289:84:0	
781	**1**	**144**	**15:50:54.266**	**127DL4B**	**37ETB**	**07,C7,30,3C,D7,0**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,050,289:85:0**	
782	1	144	15:51:02.266	127DL11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,050,290:06:0	
783	1	144	15:51:46.933	175DL422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,290:73:0	
784	1	144	15:51:46.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2487.69 +/- 3	2R3	4	0	6,050,290:73:0	
785	1	144	15:51:48.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2487.81 +/- 3	2R3	4	0	6,050,290:75:1	
786	1	144	15:51:49.600	117DL	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,290:77:0	
787	1	144	15:51:53.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2489.05 +/- 3	2R3	4	0	6,050,290:83:0	
788	1	144	15:51:54.800		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *2489.11 +/- 3	2R3	4	0	6,050,290:84:8	
789	1	144	15:51:55.600	175DL176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R3	4	0	6,050,290:86:0	
790	1	144	15:51:56.200		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 2488.99 +/- 3	2R3	4	0	6,050,290:86:9	
791	1	144	15:51:56.200		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *2488.99 +/- 3	2R3	4	0	6,050,290:86:9	
792	1	144	15:51:58.933	117DL105A106A4A	**7STRP**	**-0.009,0.00076,0**	**Slew =,0.06**	2R3	4	0	6,050,291:00:0	
793	1	144	16:04:51.600	117DL105A106A4B	**7STRP**	**0.012901,-0.0060**	**Slew =12.01**	2R3	4	0	6,050,303:67:0	
794	1	144	16:05:19.600	117DL105A106A4C	**7STRP**	**-0.009,0.00076,0**	**Slew =,0.06**	2R3	4	0	6,050,304:18:0	
795	1	144	16:15:27.600	488AG6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R3	4	0	6,050,314:20:0	
796	1	144	16:18:12.266	117DL11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,316:85:0	
797	1	144	16:18:22.266	175DL6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,317:09:0	
798	1	144	16:18:22.266	175DL422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,317:09:0	
799	1	144	16:18:22.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *2117.25 +/- 3	2R3	4	0	6,050,317:09:0	
800	1	144	16:18:23.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *2117.19 +/- 3	2R3	4	0	6,050,317:10:8	
801	**1**	**144**	**16:18:27.600**	**30JNGRWAKE02-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
802	1	144	16:26:07.600	488AG6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2R3	4	0	6,050,324:70:0	
803	1	144	17:00:00.266	480SG6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	2R3	4	0	6,050,358:25:0	
804	1	144	17:06:40.266	480SG6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	2R3	4	0	6,050,364:79:0	
805	1	144	17:32:04.266	165GF4A	7SCAN	NORM,22.624,11.4	Check S/P Position	2R3	4	0	6,050,389:90:0	
806	1	144	17:34:06.266	176GF6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	6,050,392:00:0	
807	1	144	17:34:57.600	117GF	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,392:77:0	
808	1	144	17:35:06.933	117GF105A106A4A	7STRP	0.001,-0.0098,0,	Slew =,0.37	2R3	4	0	6,050,393:00:0	
809	1	144	17:35:44.933	117GF105A106A4B	7STRP	-0.0011,0.0098,0	Slew =12.01	2R3	4	0	6,050,393:57:0	
810	1	144	17:35:58.933	117GF105A106A4C	7STRP	0.001,-0.0098,0,	Slew =,0.37	2R3	4	0	6,050,393:78:0	
811	1	144	17:36:36.933	117GF105A106A4D	7STRP	-0.0011,0.0098,0	Slew =12.01	2R3	4	0	6,050,394:44:0	
812	1	144	17:36:50.933	117GF105A106A4E	7STRP	0.001,-0.0098,0,	Slew =,0.37	2R3	4	0	6,050,394:65:0	
813	1	144	17:37:28.933	117GF105A106A4F	7STRP	-0.0011,0.0098,0	Slew =12.01	2R3	4	0	6,050,395:31:0	
814	1	144	17:37:42.933	117GF105A106A4G	7STRP	0.001,-0.0098,0,	Slew =,0.37	2R3	4	0	6,050,395:52:0	
815	1	144	17:38:20.933	117GF105A106A4H	7STRP	-0.0011,0.0098,0	Slew =12.01	2R3	4	0	6,050,396:18:0	
816	1	144	17:38:34.933	117GF105A106A4I	7STRP	0.001,-0.0098,0,	Slew =,0.37	2R3	4	0	6,050,396:39:0	
817	1	144	17:39:12.933	117GF105A106A4J	7STRP	-0.0011,0.0098,0	Slew =12.01	2R3	4	0	6,050,397:05:0	
818	1	144	17:39:26.933	117GF105A106A4K	7STRP	0.001,-0.0098,0,	Slew =,0.37	2R3	4	0	6,050,397:26:0	
819	1	144	17:40:04.933	117GF11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,397:83:0	
820	1	144	17:40:40.266	176GF6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,398:45:0	
821	1	144	17:40:42.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2117.19 +/- 3	2R3	4	0	6,050,398:48:0	
822	1	144	17:40:42.266	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,398:48:0	
823	1	144	17:40:43.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2117.31 +/- 3	2R3	4	0	6,050,398:50:1	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
824	1	144	17:40:48.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2118.55 +/- 3	2R3	4	0	6,050,398:58:0	
825	1	144	17:40:50.133		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *2118.61 +/- 3	2R3	4	0	6,050,398:59:8	
826	1	144	17:40:51.533		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC *2118.49 +/- 3	2R3	4	0	6,050,398:61:9	
827	1	144	17:40:52.266		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *2118.32 +/- 3	2R3	4	0	6,050,398:63:0	
828	1	144	17:41:06.266		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *2115.04 +/- 3	2R3	4	0	6,050,398:84:0	
829	1	144	17:41:06.266	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,398:84:0	
830	1	144	17:41:07.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *2114.98 +/- 3	2R3	4	0	6,050,398:85:8	
831	1	144	17:48:43.600	488AG6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R3	4	0	6,050,406:42:0	
832	1	144	17:50:36.266	20MI6A	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,50C2,523	2R3	4	0	6,050,408:29:0	
833	1	144	17:51:36.933	20MI6C	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,5234,53F	2R3	4	0	6,050,409:29:0	
834	1	144	17:52:37.600	20MI6E	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,53F5,572	2R3	4	0	6,050,410:29:0	
835	1	144	17:53:38.266	20MI6G	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,5728,5A9	2R3	4	0	6,050,411:29:0	
836	1	144	18:00:00.266	20TS4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2R3	4	0	6,050,417:56:0	
837	1	144	18:00:50.266	20TS4B	7SLEW	DIS,POS,0.0	Stator movement	2R3	4	0	6,050,418:40:0	
838	1	144	18:00:58.266	20TS4F	7STAR	1,1307,23.9660,-	Star catalog update	2R3	4	0	6,050,418:52:0	
839	1	144	18:01:00.266	20TS4G	7STAR	2,211,140.1409,-	Star catalog update	2R3	4	0	6,050,418:55:0	
840	1	144	18:01:02.266	20TS4H	7STAR	3,477,309.9314,4	Star catalog update	2R3	4	0	6,050,418:58:0	
841	1	144	18:01:04.266	20TS4I	7STAR	4,0,0.0,0.0	Star catalog update	2R3	4	0	6,050,418:61:0	
842	1	144	18:01:06.266	20TS4J	7STAR	5,0,0.0,0.0	Star catalog update	2R3	4	0	6,050,418:64:0	
843	1	144	18:01:08.266	20TS4K	7STAR	6,0,0.0,0.0	Star catalog update	2R3	4	0	6,050,418:67:0	
844	1	144	18:36:01.600	488AG6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2R3	4	0	6,050,453:22:0	
845	1	144	19:58:40.933	165GG4A	7SCAN	NORM,32.56,15.23	Check S/P Position	2R3	4	0	6,050,534:90:0	
846	1	144	20:01:43.600	176GG6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R3	4	0	6,050,538:00:0	
847	1	144	20:02:34.933	117GG	**CSMOS**	GS	***** GROUP START CSMOS	2R3	4	0	6,050,538:77:0	
848	1	144	20:02:44.266	117GG105A106A4A	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,539:00:0	
849	1	144	20:03:30.266	117GG105A106A4B	7STRP	-0.0008,0.010601	Slew =12.01	2R3	4	0	6,050,539:69:0	
850	1	144	20:03:46.933	117GG105A106A4C	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,540:03:0	
851	1	144	20:04:32.933	117GG105A106A4D	7STRP	-0.0008,0.010601	Slew =12.01	2R3	4	0	6,050,540:72:0	
852	1	144	20:04:49.600	117GG105A106A4E	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,541:06:0	
853	1	144	20:05:35.600	117GG105A106A4F	7STRP	-0.0008,0.010601	Slew =12.01	2R3	4	0	6,050,541:75:0	
854	1	144	20:05:52.266	117GG105A106A4G	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,542:09:0	
855	1	144	20:06:38.266	117GG105A106A4H	7STRP	-0.0008,0.010601	Slew =12.01	2R3	4	0	6,050,542:78:0	
856	1	144	20:06:54.933	117GG105A106A4I	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,543:12:0	
857	1	144	20:07:40.933	117GG105A106A4J	7STRP	-0.0008,0.010601	Slew =12.01	2R3	4	0	6,050,543:81:0	
858	1	144	20:07:57.600	117GG105A106A4K	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,544:15:0	
859	1	144	20:08:43.600	117GG105A106A4L	7STRP	-0.0008,0.010601	Slew =12.01	2R3	4	0	6,050,544:84:0	
860	1	144	20:09:00.266	117GG105A106A4M	7STRP	0.0007,-0.010601	Slew =,0.42	2R3	4	0	6,050,545:18:0	
861	1	144	20:09:46.266	117GG11A	**CSMOS**	GE	***** GROUP END CSMOS	2R3	4	0	6,050,545:87:0	
862	1	144	20:11:19.600	176GG6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R3	4	0	6,050,547:45:0	
863	1	144	20:11:21.600		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2114.98 +/- 3	2R3	4	0	6,050,547:48:0	
864	1	144	20:11:21.600	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R3	4	0	6,050,547:48:0	
865	1	144	20:11:23.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2115.10 +/- 3	2R3	4	0	6,050,547:50:1	
866	1	144	20:11:28.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2116.33 +/- 3	2R3	4	0	6,050,547:58:0	
867	1	144	20:11:29.466		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *2116.39 +/- 3	2R3	4	0	6,050,547:59:8	
868	1	144	20:11:30.866		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC *2116.27 +/- 3	2R3	4	0	6,050,547:61:9	
869	1	144	20:11:31.600		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *2116.10 +/- 3	2R3	4	0	6,050,547:63:0	
870	1	144	20:11:47.600	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,547:87:0	
871	1	144	20:11:47.600		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC *2112.35 +/- 3	2R3	4	0	6,050,547:87:0	
872	1	144	20:11:48.800		DMS:	: *READY	RDY, TRACK 4, REV, TIC *2112.29 +/- 3	2R3	4	0	6,050,547:88:8	
873	1	144	22:12:42.266	488AH6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R3	4	0	6,050,667:49:0	
874	1	144	22:28:47.600	488AH6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,050,683:41:0	
875	1	144	23:11:20.933	488AH6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,050,725:49:0	
876	1	144	23:33:45.600	488AH6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,050,747:64:0	
877	1	145	01:21:10.266	488AH6E	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2R3	4	0	6,050,853:85:0	
878	1	145	01:40:12.933	165IN4A	7SCAN	NORM,47.782,19.6	Check S/P Position	2R3	4	0	6,050,872:70:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
879	1	145	01:43:24.266	175IN422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	2R3	4	0	6,050,875	84:0
880	1	145	01:43:24.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2112.29 +/- 3	2R3	4	0	6,050,875	84:0
881	1	145	01:43:25.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2112.41 +/- 3	2R3	4	0	6,050,875	86:1
882	1	145	01:43:27.600	165IN4B	7VECT		Inert vect update UTC	2R3	4	0	6,050,875	89:0
883	1	145	01:43:30.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2113.64 +/- 3	2R3	4	0	6,050,876	03:0
884	1	145	01:43:32.133		DMS:	: *RUNUP	R115, TRACK *4, *REV, TIC *2113.70 +/- 3	2R3	4	0	6,050,876	04:8
885	1	145	01:43:35.600	175IN176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	2R3	4	0	6,050,876	10:0
886	1	145	01:43:36.133		DMS:	**: *RECORD**	R115, TRACK 4, REV, TIC *2107.40 +/- 3	2R3	4	0	6,050,876	10:8
887	1	145	01:43:36.133		DMS:	: *AT_SPD	R115, TRACK 4, REV, TIC 2107.40 +/- 3	2R3	4	0	6,050,876	10:8
888	1	145	01:44:30.266	175IN422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,877	01:0
889	1	145	01:44:30.266		DMS:	**: *RUNDOWN**	R115, TRACK 4, REV, TIC *1917.09 +/- 3	2R3	4	0	6,050,877	01:0
890	1	145	01:44:31.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1916.09 +/- 3	2R3	4	0	6,050,877	02:8
891	1	145	01:46:26.266	175JN422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	2R3	4	0	6,050,878	84:0
892	1	145	01:46:26.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1916.09 +/- 3	2R3	4	0	6,050,878	84:0
893	1	145	01:46:27.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1916.21 +/- 3	2R3	4	0	6,050,878	86:1
894	1	145	01:46:32.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1917.44 +/- 3	2R3	4	0	6,050,879	03:0
895	1	145	01:46:34.133		DMS:	: *RUNUP	R115, TRACK *4, *REV, TIC *1917.50 +/- 3	2R3	4	0	6,050,879	04:8
896	1	145	01:46:37.600	175JN176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	2R3	4	0	6,050,879	10:0
897	1	145	01:46:38.133		DMS:	: *AT_SPD	R115, TRACK 4, REV, TIC 1911.20 +/- 3	2R3	4	0	6,050,879	10:8
898	1	145	01:46:38.133		DMS:	**: *RECORD**	R115, TRACK 4, REV, TIC *1911.20 +/- 3	2R3	4	0	6,050,879	10:8
899	1	145	01:47:32.266	175JN422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,880	01:0
900	1	145	01:47:32.266		DMS:	**: *RUNDOWN**	R115, TRACK 4, REV, TIC *1720.89 +/- 3	2R3	4	0	6,050,880	01:0
901	1	145	01:47:33.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1719.89 +/- 3	2R3	4	0	6,050,880	02:8
902	1	145	01:49:28.266	175IS422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	2R3	4	0	6,050,881	84:0
903	1	145	01:49:28.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1719.89 +/- 3	2R3	4	0	6,050,881	84:0
904	1	145	01:49:29.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1720.01 +/- 3	2R3	4	0	6,050,881	86:1
905	1	145	01:49:34.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1721.25 +/- 3	2R3	4	0	6,050,882	03:0
906	1	145	01:49:36.133		DMS:	: *RUNUP	R115, TRACK *4, *REV, TIC *1721.31 +/- 3	2R3	4	0	6,050,882	04:8
907	1	145	01:49:39.600	175IS176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	2R3	4	0	6,050,882	10:0
908	1	145	01:49:40.133		DMS:	**: *RECORD**	R115, TRACK 4, REV, TIC *1715.01 +/- 3	2R3	4	0	6,050,882	10:8
909	1	145	01:49:40.133		DMS:	: *AT_SPD	R115, TRACK 4, REV, TIC 1715.01 +/- 3	2R3	4	0	6,050,882	10:8
910	1	145	01:50:34.266	175IS422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,883	01:0
911	1	145	01:50:34.266		DMS:	**: *RUNDOWN**	R115, TRACK 4, REV, TIC *1524.69 +/- 3	2R3	4	0	6,050,883	01:0
912	1	145	01:50:35.466		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1523.69 +/- 3	2R3	4	0	6,050,883	02:8
913	1	145	01:52:30.266		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1523.69 +/- 3	2R3	4	0	6,050,884	84:0
914	1	145	01:52:30.266	175IT422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	2R3	4	0	6,050,884	84:0
915	1	145	01:52:31.666		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1523.81 +/- 3	2R3	4	0	6,050,884	86:1
916	1	145	01:52:36.933		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1525.05 +/- 3	2R3	4	0	6,050,885	03:0
917	1	145	01:52:38.133		DMS:	: *RUNUP	R115, TRACK *4, *REV, TIC *1525.11 +/- 3	2R3	4	0	6,050,885	04:8
918	1	145	01:52:41.600	175IT176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	2R3	4	0	6,050,885	10:0
919	1	145	01:52:42.133		DMS:	**: *RECORD**	R115, TRACK 4, REV, TIC *1518.81 +/- 3	2R3	4	0	6,050,885	10:8
920	1	145	01:52:42.133		DMS:	: *AT_SPD	R115, TRACK 4, REV, TIC 1518.81 +/- 3	2R3	4	0	6,050,885	10:8
921	1	145	01:53:36.933		DMS:	**: *RUNDOWN**	R115, TRACK 4, REV, TIC *1326.15 +/- 3	2R3	4	0	6,050,886	02:0
922	1	145	01:53:36.933	175IT422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R3	4	0	6,050,886	02:0
923	1	145	01:53:38.133		DMS:	: *READY	RDY, TRACK 4, REV, TIC *1325.15 +/- 3	2R3	4	0	6,050,886	03:8
924	**1**	**145**	**03:15:33.600**	**30NNGLOBAL01-**		**-----START------**		**2R3**	**4**	**0**	**: :**	
925	**1**	**145**	**03:16:15.600**	**20DP5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,050,967**	**69:0**
926	**1**	**145**	**03:16:22.933**	**20DP5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,050,967**	**80:0**
927	**1**	**145**	**03:16:30.933**	**20DP6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,050,968**	**01:0**
928	**1**	**145**	**03:16:40.933**	**20DP6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,050,968**	**16:0**
929	**1**	**145**	**03:16:50.933**	**20DP5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,050,968**	**31:0**
930	**1**	**145**	**03:16:52.266**	**20DP5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,050,968**	**33:0**
931	**1**	**145**	**03:17:23.600**	**20DP4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,050,968**	**80:0**
932	1	145	03:19:27.600	125DP	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,050,970	84:0
933	1	145	03:19:27.600	125DP11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,050,970	84:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
934	**1**	**145**	**03:19:27.600**	**30JNGLOBAL01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
935	**1**	**145**	**03:19:27.600**	**125DP4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,050,970:84:0**	
936	**1**	**145**	**03:19:27.600**	**30NNGLOBAL01-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
937	1	145	03:19:31.600	165DP4A	**7SCAN**	**NORM,89.639999,2**	**Check S/P Position**	2R0	4	0	6,050,970:90:0	
938	**1**	**145**	**03:20:28.266**	**127DP4A**	**37IOP**	**7,0**	**Fixed Map, Grating Start Position =00**	**2R7**	**4**	**0**	**6,050,971:84:0**	
939	1	145	03:20:28.266	127DP	NIMSTAB	GS	%%%%% GROUP START TAB	2R7	4	0	6,050,971:84:0	
940	**1**	**145**	**03:20:28.933**	**127DP4B**	**37ETB**	**07,C7,18,3C,D7,0**	**Loads wavelength edit table**	**2R7**	**4**	**0**	**6,050,971:85:0**	
941	1	145	03:20:36.933	127DP11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R7	4	0	6,050,972:06:0	
942	1	145	03:23:22.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1325.15 +/- 3	2R7	4	0	6,050,974:73:0	
943	1	145	03:23:22.933	175DP422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R7	4	0	6,050,974:73:0	
944	1	145	03:23:24.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1325.27 +/- 3	2R7	4	0	6,050,974:75:1	
945	1	145	03:23:25.600	117DP	**CSMOS**	GS	***** GROUP START CSMOS	2R7	4	0	6,050,974:77:0	
946	1	145	03:23:29.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1326.51 +/- 3	2R7	4	0	6,050,974:83:0	
947	1	145	03:23:30.800		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC *1326.57 +/- 3	2R7	4	0	6,050,974:84:8	
948	1	145	03:23:31.600	175DP176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R7	4	0	6,050,974:86:0	
949	1	145	03:23:32.200		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 1326.45 +/- 3	2R7	4	0	6,050,974:86:9	
950	1	145	03:23:32.200		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC *1326.45 +/- 3	2R7	4	0	6,050,974:86:9	
951	**1**	**145**	**03:23:34.266**	**30JNGLOBAL01-**	**NIMPBK**	**301DO**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
952	1	145	03:23:34.933	117DP105A106A4A	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,975:00:0	
953	1	145	03:25:50.933	117DP105A106A4B	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,977:22:0	
954	1	145	03:26:14.266	117DP105A106A4C	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,977:57:0	
955	1	145	03:28:30.266	117DP105A106A4D	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,979:79:0	
956	**1**	**145**	**03:28:36.266**	**30JNGLOBAL01-**	**DESELC**	**300DO**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
957	1	145	03:28:53.600	117DP105A106A4E	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,980:23:0	
958	1	145	03:31:09.600	117DP105A106A4F	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,982:45:0	
959	**1**	**145**	**03:31:30.933**	**30JNGLOBAL01-**	**NIMPBK**	**301DP**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
960	1	145	03:31:32.933	117DP105A106A4G	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,982:80:0	
961	1	145	03:33:48.933	117DP105A106A4H	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,985:11:0	
962	1	145	03:34:12.266	117DP105A106A4I	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,985:46:0	
963	1	145	03:36:28.266	117DP105A106A4J	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,987:68:0	
964	1	145	03:36:51.600	117DP105A106A4K	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,988:12:0	
965	1	145	03:39:07.600	117DP105A106A4L	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,990:34:0	
966	1	145	03:39:30.933	117DP105A106A4M	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,990:69:0	
967	1	145	03:41:46.933	117DP105A106A4N	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,993:00:0	
968	1	145	03:42:10.266	117DP105A106A4O	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,993:35:0	
969	1	145	03:44:26.266	117DP105A106A4P	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,995:57:0	
970	**1**	**145**	**03:44:32.266**	**30JNGLOBAL01-**	**DESELC**	**300DP**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
971	1	145	03:44:49.600	117DP105A106A4Q	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,996:01:0	
972	1	145	03:47:05.600	117DP105A106A4R	**7STRP**	**0.090748,-0.0100**	**Slew =12.01**	2R7	4	0	6,050,998:23:0	
973	1	145	03:47:28.933	117DP105A106A4S	**7STRP**	**-0.090042,0.0180**	**Slew =,0.76**	2R7	4	0	6,050,998:58:0	
974	1	145	03:49:44.933	117DP11A	**CSMOS**	GE	***** GROUP END CSMOS	2R7	4	0	6,051,000:80:0	
975	1	145	03:49:54.933	175DP422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R7	4	0	6,051,001:04:0	
976	1	145	03:49:54.933	175DP6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R7	4	0	6,051,001:04:0	
977	1	145	03:49:54.933		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC * 955.49 +/- 3	2R7	4	0	6,051,001:04:0	
978	1	145	03:49:56.133		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 955.43 +/- 3	2R7	4	0	6,051,001:05:8	
979	1	145	03:59:58.266	432JD431A6A	6RCDSL	DDSDSL,PLSDSL,EP	Record Deselect (DDS o	2R7	4	0	6,051,010:90:0	
980	1	145	03:59:58.933	432JD6A	6RTSL1		R/T Select of DDS and	2R7	4	0	6,051,011:00:0	
981	**1**	**145**	**03:59:58.933**	**432JD6B**	**6RTSL2**	**NIMNCG,AACSEL,RT**	**AACS SELECT**	**2R7**	**4**	**0**	**6,051,011:00:0**	
982	**1**	**145**	**04:00:00.933**	**30JNGLOBAL01-**		**-----STOP-------**		**2R7**	**4**	**0**	**: :**	
983	1	145	05:03:04.933	488AI6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R7	4	0	6,051,073:37:0	
984	1	145	06:31:20.933	488AI6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2R7	4	0	6,051,160:64:0	
985	**1**	**145**	**06:37:46.866**	**30NNGLOBAL02-**		**-----START------**		**2R7**	**4**	**0**	**: :**	
986	**1**	**145**	**06:38:28.866**	**20DQ5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,051,167:69:0**	
987	**1**	**145**	**06:38:36.200**	**20DQ5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,051,167:80:0**	
988	**1**	**145**	**06:38:44.200**	**20DQ6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,051,168:01:0**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
989	**1**	**145**	**06:38:54.200**	**20DQ6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,051,168:16:0**	
990	**1**	**145**	**06:39:04.200**	**20DQ5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,051,168:31:0**	
991	**1**	**145**	**06:39:05.533**	**20DQ5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,051,168:33:0**	
992	**1**	**145**	**06:39:36.866**	**20DQ4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,051,168:80:0**	
993	**1**	**145**	**06:40:46.866**	**30NNGLOBAL02-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
994	1	145	06:41:40.866	125DQ	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,051,170:84:0	
995	**1**	**145**	**06:41:40.866**	**125DQ4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,051,170:84:0**	
996	**1**	**145**	**06:41:40.866**	**30JNGLOBAL02-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
997	1	145	06:41:40.866	125DQ11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,051,170:84:0	
998	1	145	06:41:44.866	165DQ4A	**7SCAN**	**NORM,92.919,27.3**	**Check S/P Position**	2R0	4	0	6,051,170:90:0	
999	**1**	**145**	**06:43:42.200**	**127DQ4A**	**37IOP**	**7,0**	**Fixed Map, Grating Start Position =00**	**2R7**	**4**	**0**	**6,051,172:84:0**	
1000	1	145	06:43:42.200	127DQ	NIMSTAB	GS	%%%%% GROUP START TAB	2R7	4	0	6,051,172:84:0	
1001	**1**	**145**	**06:43:42.866**	**127DQ4B**	**37ETB**	**07,C7,18,3C,D7,0**	**Loads wavelength edit table**	**2R7**	**4**	**0**	**6,051,172:85:0**	
1002	1	145	06:43:50.866	127DQ11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R7	4	0	6,051,173:06:0	
1003	1	145	06:45:36.200	175DQ422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R7	4	0	6,051,174:73:0	
1004	1	145	06:45:36.200		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 955.43 +/- 3	2R7	4	0	6,051,174:73:0	
1005	1	145	06:45:37.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 955.55 +/- 3	2R7	4	0	6,051,174:75:1	
1006	1	145	06:45:38.866	117DQ	**CSMOS**	GS	***** GROUP START CSMOS	2R7	4	0	6,051,174:77:0	
1007	1	145	06:45:42.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 956.79 +/- 3	2R7	4	0	6,051,174:83:0	
1008	1	145	06:45:44.066		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 956.85 +/- 3	2R7	4	0	6,051,174:84:8	
1009	1	145	06:45:44.866	175DQ176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R7	4	0	6,051,174:86:0	
1010	1	145	06:45:45.466		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC * 956.73 +/- 3	2R7	4	0	6,051,174:86:9	
1011	1	145	06:45:45.466		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 956.73 +/- 3	2R7	4	0	6,051,174:86:9	
1012	1	145	06:45:48.200	117DQ105A106A4A	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,175:00:0	
1013	1	145	06:47:52.866	117DQ105A106A4B	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,177:05:0	
1014	1	145	06:48:14.866	117DQ105A106A4C	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,177:38:0	
1015	1	145	06:50:19.533	117DQ105A106A4D	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,179:43:0	
1016	1	145	06:50:41.533	117DQ105A106A4E	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,179:76:0	
1017	1	145	06:52:46.200	117DQ105A106A4F	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,181:81:0	
1018	1	145	06:53:08.200	117DQ105A106A4G	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,182:23:0	
1019	1	145	06:55:12.866	117DQ105A106A4H	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,184:28:0	
1020	**1**	**145**	**06:55:28.866**	**30JNGLOBAL02-**	**NIMPBK**	**301DQ**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
1021	1	145	06:55:34.866	117DQ105A106A4I	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,184:61:0	
1022	1	145	06:57:39.533	117DQ105A106A4J	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,186:66:0	
1023	1	145	06:58:01.533	117DQ105A106A4K	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,187:08:0	
1024	1	145	06:58:46.200	488AI6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R7	4	0	6,051,187:75:0	
1025	1	145	07:00:06.200	117DQ105A106A4L	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,189:13:0	
1026	1	145	07:00:28.200	117DQ105A106A4M	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,189:46:0	
1027	1	145	07:02:32.866	117DQ105A106A4N	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,191:51:0	
1028	1	145	07:02:54.866	117DQ105A106A4O	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,191:84:0	
1029	1	145	07:04:59.533	117DQ105A106A4P	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,193:89:0	
1030	**1**	**145**	**07:04:59.533**	**30JNGLOBAL02-**	**DESELC**	**300DQ**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
1031	1	145	07:05:21.533	117DQ105A106A4Q	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,194:31:0	
1032	1	145	07:07:26.200	117DQ105A106A4R	**7STRP**	**0.085205,-0.0052**	**Slew =12.01**	2R7	4	0	6,051,196:36:0	
1033	1	145	07:07:48.200	117DQ105A106A4S	**7STRP**	**-0.085205,0.0130**	**Slew =,0.76**	2R7	4	0	6,051,196:69:0	
1034	1	145	07:09:52.866	117DQ11A	**CSMOS**	GE	***** GROUP END CSMOS	2R7	4	0	6,051,198:74:0	
1035	1	145	07:10:02.866	175DQ6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R7	4	0	6,051,198:89:0	
1036	1	145	07:10:02.866	175DQ422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R7	4	0	6,051,198:89:0	
1037	1	145	07:10:02.866		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC * 615.15 +/- 3	2R7	4	0	6,051,198:89:0	
1038	1	145	07:10:04.066		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 615.09 +/- 3	2R7	4	0	6,051,198:90:8	
1039	**1**	**145**	**07:10:08.200**	**30JNGLOBAL02-**		**-----STOP-------**		**2R7**	**4**	**0**	**: :**	
1040	1	145	08:15:27.533	488AI6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R7	4	0	6,051,263:61:0	
1041	1	145	08:27:56.866	488AI6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2R7	4	0	6,051,276:02:0	
1042	1	145	09:01:45.533	488AJ6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2R7	4	0	6,051,309:42:0	
1043	**1**	**145**	**09:58:59.533**	**30NNGLOBAL03-**		**-----START------**		**2R7**	**4**	**0**	**: :**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1044	**1**	**145**	**09:59:41.533**	**20DR5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,051,366:69:0**	
1045	**1**	**145**	**09:59:48.866**	**20DR5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,051,366:80:0**	
1046	**1**	**145**	**09:59:56.866**	**20DR6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,051,367:01:0**	
1047	**1**	**145**	**10:00:06.866**	**20DR6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,051,367:16:0**	
1048	**1**	**145**	**10:00:16.866**	**20DR5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,051,367:31:0**	
1049	**1**	**145**	**10:00:18.200**	**20DR5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,051,367:33:0**	
1050	**1**	**145**	**10:00:49.533**	**20DR4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,051,367:80:0**	
1051	**1**	**145**	**10:01:52.866**	**30JNGLOBAL03-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
1052	1	145	10:01:52.866	125DR	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,051,368:84:0	
1053	**1**	**145**	**10:01:52.866**	**125DR4A**	**37IST**	**0,2,0,OFF,0,1,0**	**Gain State 2**	**2R0**	**4**	**0**	**6,051,368:84:0**	
1054	1	145	10:01:52.866	125DR11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,051,368:84:0	
1055	**1**	**145**	**10:01:59.533**	**30NNGLOBAL03-**		**-----STOP-------**		**2R0**	**4**	**0**	**: :**	
1056	1	145	10:02:53.533	127DR	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,051,369:84:0	
1057	**1**	**145**	**10:02:53.533**	**127DR4A**	**37IOP**	**7,0**	**Fixed Map, Grating Start Position =00**	**2R7**	**4**	**0**	**6,051,369:84:0**	
1058	**1**	**145**	**10:02:54.200**	**127DR4B**	**37ETB**	**07,C7,18,3C,D7,0**	**Loads wavelength edit table**	**2R7**	**4**	**0**	**6,051,369:85:0**	
1059	1	145	10:03:02.200	127DR11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R7	4	0	6,051,370:06:0	
1060	1	145	10:03:58.200	165DR4A	**7SCAN**	**NORM,95.862,27.0**	**Check S/P Position**	2R7	4	0	6,051,370:90:0	
1061	1	145	10:07:49.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 615.09 +/- 3	2R7	4	0	6,051,374:73:0	
1062	1	145	10:07:49.533	175DR422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R7	4	0	6,051,374:73:0	
1063	1	145	10:07:50.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 615.21 +/- 3	2R7	4	0	6,051,374:75:1	
1064	1	145	10:07:52.200	117DR	**CSMOS**	GS	***** GROUP START CSMOS	2R7	4	0	6,051,374:77:0	
1065	1	145	10:07:56.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 616.44 +/- 3	2R7	4	0	6,051,374:83:0	
1066	1	145	10:07:57.400		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 616.50 +/- 3	2R7	4	0	6,051,374:84:8	
1067	1	145	10:07:58.200	175DR176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	2R7	4	0	6,051,374:86:0	
1068	1	145	10:07:58.800		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC * 616.38 +/- 3	2R7	4	0	6,051,374:86:9	
1069	1	145	10:07:58.800		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC 616.38 +/- 3	2R7	4	0	6,051,374:86:9	
1070	1	145	10:08:01.533	117DR105A106A4A	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,375:00:0	
1071	1	145	10:10:02.200	117DR105A106A4B	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,376:90:0	
1072	1	145	10:10:22.200	117DR105A106A4C	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,377:29:0	
1073	1	145	10:12:22.866	117DR105A106A4D	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,379:28:0	
1074	1	145	10:12:42.866	117DR105A106A4E	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,379:58:0	
1075	1	145	10:14:43.533	117DR105A106A4F	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,381:57:0	
1076	**1**	**145**	**10:14:57.533**	**30JNGLOBAL03-**	**NIMPBK**	**301DR**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
1077	1	145	10:15:03.533	117DR105A106A4G	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,381:87:0	
1078	1	145	10:17:04.200	117DR105A106A4H	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,383:86:0	
1079	1	145	10:17:24.200	117DR105A106A4I	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,384:25:0	
1080	**1**	**145**	**10:19:15.533**	**30JNGLOBAL03-**	**NIMPBK**	**301ER**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
1081	1	145	10:19:24.866	117DR105A106A4J	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,386:24:0	
1082	**1**	**145**	**10:19:43.533**	**30JNGLOBAL03-**	**DESELC**	**300ER**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
1083	1	145	10:19:44.866	117DR105A106A4K	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,386:54:0	
1084	1	145	10:21:45.533	117DR105A106A4L	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,388:53:0	
1085	1	145	10:22:05.533	117DR105A106A4M	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,388:83:0	
1086	1	145	10:24:06.200	117DR105A106A4N	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,390:82:0	
1087	1	145	10:24:26.200	117DR105A106A4O	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,391:21:0	
1088	1	145	10:26:26.866	117DR105A106A4P	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,393:20:0	
1089	1	145	10:26:46.866	117DR105A106A4Q	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,393:50:0	
1090	**1**	**145**	**10:28:41.533**	**30JNGLOBAL03-**	**DESELC**	**300DR**	**JUPITER GLOBAL OBSERVATION**	**2R7**	**4**	**0**	**: :**	
1091	1	145	10:28:47.533	117DR105A106A4R	**7STRP**	**0.082184,-0.0035**	**Slew =12.01**	2R7	4	0	6,051,395:49:0	
1092	1	145	10:29:07.533	117DR105A106A4S	**7STRP**	**-0.082184,0.0110**	**Slew =,0.76**	2R7	4	0	6,051,395:79:0	
1093	1	145	10:31:08.200	117DR11A	**CSMOS**	GE	***** GROUP END CSMOS	2R7	4	0	6,051,397:78:0	
1094	1	145	10:31:15.533	175DR422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R7	4	0	6,051,397:89:0	
1095	1	145	10:31:15.533	175DR6A	6TMREC	**NRC**	NO RECORD Record Mode Change	2R7	4	0	6,051,397:89:0	
1096	1	145	10:31:15.533		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC * 289.02 +/- 3	2R7	4	0	6,051,397:89:0	
1097	1	145	10:31:16.733		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 288.96 +/- 3	2R7	4	0	6,051,397:90:8	
1098	1	145	10:31:16.866	192GH4A	**7CONE**	**9.0,0.0**	Check S/P Position	2R7	4	0	6,051,398:00:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1099	**1**	**145**	**10:32:21.533**	**30JNGLOBAL03-**		**-----STOP-------**		**2R7**	**4**	**0**	**: :**	
1100	1	145	10:38:21.533	176GH6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	2R7	4	0	6,051,405:00:0	
1101	1	145	10:40:36.200	176GH6B	6TMREC	**NRC**	NO RECORD Record Mode Change	2R7	4	0	6,051,407:20:0	
1102	1	145	10:40:38.200		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 288.96 +/- 3	2R7	4	0	6,051,407:23:0	
1103	1	145	10:40:38.200	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R7	4	0	6,051,407:23:0	
1104	1	145	10:40:39.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 289.08 +/- 3	2R7	4	0	6,051,407:25:1	
1105	1	145	10:40:44.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 290.32 +/- 3	2R7	4	0	6,051,407:33:0	
1106	1	145	10:40:46.066		DMS:	: *RUNUP	R7, TRACK *4, *REV, TIC * 290.38 +/- 3	2R7	4	0	6,051,407:34:8	
1107	1	145	10:40:47.466		DMS:	: *AT_SPD	R7, TRACK 4, REV, TIC * 290.26 +/- 3	2R7	4	0	6,051,407:36:9	
1108	1	145	10:40:48.200		DMS:	**: *RECORD**	R7, TRACK 4, REV, TIC * 290.09 +/- 3	2R7	4	0	6,051,407:38:0	
1109	1	145	10:40:59.533	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	2R7	4	0	6,051,407:55:0	
1110	1	145	10:40:59.533		DMS:	**: *RUNDOWN**	R7, TRACK 4, REV, TIC * 287.43 +/- 3	2R7	4	0	6,051,407:55:0	
1111	1	145	10:41:00.733		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 287.37 +/- 3	2R7	4	0	6,051,407:56:8	
1112	1	145	10:42:24.200		DMS:	: READY	RDY, TRACK *1, *FWD, TIC 287.37 +/- 3	2R7	4	0	6,051,409:00:0	
1113	1	145	10:42:24.200	465KD6A	6DMSC	RDY,1	DMS Control Tape stop	2R7	4	0	6,051,409:00:0	
1114	1	145	10:42:39.533	488AJ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2R7	4	0	6,051,409:23:0	
1115	1	145	10:43:24.866	192GH4B	**7CONE**	**9.0,90.0**	Check S/P Position	2R7	4	0	6,051,410:00:0	
1116	1	145	10:44:25.533		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 287.37 +/- 3	2R7	4	0	6,051,411:00:0	
1117	1	145	10:44:25.533	411JB6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R7	4	0	6,051,411:00:0	
1118	1	145	10:44:32.200		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC 287.37 +/- 3	2R7	4	0	6,051,411:10:0	
1119	1	145	10:44:33.600		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 287.49 +/- 3	2R7	4	0	6,051,411:12:1	
1120	1	145	10:44:33.600		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC * 287.49 +/- 3	2R7	4	0	6,051,411:12:1	
1121	1	145	10:44:35.533	411JB6B	6TMREC	**BDT**	7.68 KBPS BUFFER DUMP TO TAPE Record Mode	2R7	4	0	6,051,411:15:0	
1122	1	145	10:46:36.866	411JB6C	6TMREC	**NRC**	NO RECORD Record Mode Change	2R7	4	0	6,051,413:15:0	
1123	1	145	10:46:37.533		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC * 316.54 +/- 3	2R7	4	0	6,051,413:16:0	
1124	1	145	10:46:37.533	411JB6D	6DMSC	RDY,0	DMS Control Tape stop	2R7	4	0	6,051,413:16:0	
1125	1	145	10:46:38.733		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 316.60 +/- 3	2R7	4	0	6,051,413:17:8	
1126	1	145	10:55:42.866		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 316.60 +/- 3	2R7	4	0	6,051,422:15:0	
1127	1	145	10:55:42.866	175TA422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	2R7	4	0	6,051,422:15:0	
1128	1	145	10:55:49.533		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC 316.60 +/- 3	2R7	4	0	6,051,422:25:0	
1129	1	145	10:55:50.866	175TA176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R7	4	0	6,051,422:27:0	
1130	1	145	10:55:50.933		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 316.72 +/- 3	2R7	4	0	6,051,422:27:1	
1131	1	145	10:55:50.933		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC * 316.72 +/- 3	2R7	4	0	6,051,422:27:1	
1132	1	145	11:00:00.200	481UD4A	7VECT		Inert vect update UTC	2R7	4	0	6,051,426:37:0	
1133	1	145	11:06:39.533	165GI4A	7SCAN	NORM,227.933998,	Check S/P Position	2R7	4	0	6,051,432:90:0	
1134	1	145	11:08:50.866	20ID6A	6MCOPY	HLM1A,E415,B1A1A	HLM1A,E415,B1A1A,5000,506	2R7	4	0	6,051,435:14:0	
1135	1	145	11:09:32.866	117GI	**CSMOS**	GS	***** GROUP START CSMOS	2R7	4	0	6,051,435:77:0	
1136	1	145	11:09:39.533	282NA431A6A	6RCSEL	DDSNCG,PLSSEL,EP	Record Select (DDS onl	2R7	4	0	6,051,435:87:0	
1137	1	145	11:09:42.200	117GI105A106A4A	7STRP	0.0,0.0,0,0,0,0,	Slew =,0.28	2R7	4	0	6,051,436:00:0	
1138	1	145	11:09:42.200	431OA6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	2R7	4	0	6,051,436:00:0	
1139	1	145	11:10:26.200	117GI105A106B4A	7STRP	0.0,0.021011,0,0	Slew =12.01	2R7	4	0	6,051,436:66:0	
1140	1	145	11:10:42.866	117GI105A106B4B	7STRP	0.200629,0.0,0,0	Slew =,0.28	2R7	4	0	6,051,437:00:0	
1141	1	145	11:22:50.866	117GI11A	**CSMOS**	GE	***** GROUP END CSMOS	2R7	4	0	6,051,449:00:0	
1142	1	145	11:22:53.533	165IA4A	7SCAN	NORM,101.792,22.	Check S/P Position	2R7	4	0	6,051,449:04:0	
1143	1	145	11:23:54.866	428JA6A	6RCCLR			2R7	4	0	6,051,450:05:0	
1144	1	145	11:23:55.533	428JA6B	6RCSET	14		2R7	4	0	6,051,450:06:0	
1145	1	145	11:24:56.200	118IA	**SMOS**	GS		2R7	4	0	6,051,451:06:0	
1146	1	145	11:25:04.866		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC * 727.80 +/- 3	2R7	4	0	6,051,451:19:0	
1147	1	145	11:25:04.866	175IA422A6A	6DMSC	R806,1	DMS Control	2R7	4	0	6,051,451:19:0	
1148	1	145	11:25:06.066		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC * 727.86 +/- 3	2R7	4	0	6,051,451:20:8	
1149	1	145	11:25:08.200	165IA4B	7VECT		Inert vect update UTC	2R7	4	0	6,051,451:24:0	
1150	1	145	11:25:10.866	175IA176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R7	4	0	6,051,451:28:0	
1151	1	145	11:25:11.333		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC * 793.86 +/- 3	2R7	4	0	6,051,451:28:7	
1152	1	145	11:25:11.333		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 793.86 +/- 4	2R7	4	0	6,051,451:28:7	
1153	1	145	11:25:11.533	118IA110A111A4A	7STRP	-0.044028,0.0250	Slew =,8.01	2R7	4	0	6,051,451:29:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1154	1	145	11:25:15.533	428JB6A	6RCCLR			2R7	4	0	6,051,451	35:0
1155	1	145	11:25:16.200	428JB6B	6RCSET	11		2R7	4	0	6,051,451	36:0
1156	1	145	11:25:18.200		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC * 962.84 +/- 4	2R7	4	0	6,051,451	39:0
1157	1	145	11:25:18.200	175TB422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	2R7	4	0	6,051,451	39:0
1158	1	145	11:25:20.933		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC * 974.34 +/- 4	2R7	4	0	6,051,451	43:1
1159	1	145	11:25:22.200	175TB176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R7	4	0	6,051,451	45:0
1160	1	145	11:25:22.333		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 974.46 +/- 4	2R7	4	0	6,051,451	45:2
1161	1	145	11:25:22.333		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC * 974.46 +/- 4	2R7	4	0	6,051,451	45:2
1162	1	145	11:25:27.533	428JC6A	6RCCLR			2R7	4	0	6,051,451	53:0
1163	1	145	11:25:28.200	428JC6B	6RCSET	14		2R7	4	0	6,051,451	54:0
1164	1	145	11:25:30.866		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC * 976.46 +/- 4	2R7	4	0	6,051,451	58:0
1165	1	145	11:25:30.866	175JA422A6A	6DMSC	R806,1	DMS Control	2R7	4	0	6,051,451	58:0
1166	1	145	11:25:32.066		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC * 976.52 +/- 4	2R7	4	0	6,051,451	59:8
1167	1	145	11:25:36.866	175JA176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R7	4	0	6,051,451	67:0
1168	1	145	11:25:37.333		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC *1042.52 +/- 4	2R7	4	0	6,051,451	67:7
1169	1	145	11:25:37.333		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 1042.52 +/- 4	2R7	4	0	6,051,451	67:7
1170	1	145	11:25:41.533	428JD6A	6RCCLR			2R7	4	0	6,051,451	74:0
1171	1	145	11:25:42.200	428JD6B	6RCSET	11		2R7	4	0	6,051,451	75:0
1172	1	145	11:25:44.200		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *1211.50 +/- 4	2R7	4	0	6,051,451	78:0
1173	1	145	11:25:44.200	175TC422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	2R7	4	0	6,051,451	78:0
1174	1	145	11:25:46.933		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *1223.00 +/- 4	2R7	4	0	6,051,451	82:1
1175	1	145	11:25:48.200	175TC176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R7	4	0	6,051,451	84:0
1176	1	145	11:25:48.333		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *1223.12 +/- 4	2R7	4	0	6,051,451	84:2
1177	1	145	11:25:48.333		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 1223.12 +/- 4	2R7	4	0	6,051,451	84:2
1178	1	145	11:25:54.200	428JE6A	6RCCLR			2R7	4	0	6,051,452	02:0
1179	1	145	11:25:54.866	428JE6B	6RCSET	14		2R7	4	0	6,051,452	03:0
1180	1	145	11:25:56.866		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *1225.12 +/- 4	2R7	4	0	6,051,452	06:0
1181	1	145	11:25:56.866	175IZ422A6A	6DMSC	R806,1	DMS Control	2R7	4	0	6,051,452	06:0
1182	1	145	11:25:58.066		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC *1225.18 +/- 4	2R7	4	0	6,051,452	07:8
1183	1	145	11:26:02.866	175IZ176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R7	4	0	6,051,452	15:0
1184	1	145	11:26:03.333		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 1291.18 +/- 4	2R7	4	0	6,051,452	15:7
1185	1	145	11:26:03.333		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC *1291.18 +/- 4	2R7	4	0	6,051,452	15:7
1186	1	145	11:26:07.533	428JF6A	6RCCLR			2R7	4	0	6,051,452	22:0
1187	1	145	11:26:08.200	428JF6B	6RCSET	11		2R7	4	0	6,051,452	23:0
1188	1	145	11:26:10.200		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *1460.17 +/- 4	2R7	4	0	6,051,452	26:0
1189	1	145	11:26:10.200	175TD422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	2R7	4	0	6,051,452	26:0
1190	1	145	11:26:12.933		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *1471.67 +/- 5	2R7	4	0	6,051,452	30:1
1191	1	145	11:26:14.200	175TD176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R7	4	0	6,051,452	32:0
1192	1	145	11:26:14.333		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 1471.79 +/- 5	2R7	4	0	6,051,452	32:2
1193	1	145	11:26:14.333		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *1471.79 +/- 5	2R7	4	0	6,051,452	32:2
1194	1	145	11:26:19.533	428JG6A	6RCCLR			2R7	4	0	6,051,452	40:0
1195	1	145	11:26:20.200	428JG6B	6RCSET	14		2R7	4	0	6,051,452	41:0
1196	1	145	11:26:22.866		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *1473.79 +/- 5	2R7	4	0	6,051,452	45:0
1197	1	145	11:26:22.866	175JZ422A6A	6DMSC	R806,1	DMS Control	2R7	4	0	6,051,452	45:0
1198	1	145	11:26:24.066		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC *1473.85 +/- 5	2R7	4	0	6,051,452	46:8
1199	1	145	11:26:28.866	175JZ176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R7	4	0	6,051,452	54:0
1200	1	145	11:26:29.333		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC *1539.85 +/- 5	2R7	4	0	6,051,452	54:7
1201	1	145	11:26:29.333		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 1539.85 +/- 5	2R7	4	0	6,051,452	54:7
1202	1	145	11:26:29.533	118IA11A	**SMOS**	GE		2R7	4	0	6,051,452	55:0
1203	1	145	11:26:33.533	428JH6A	6RCCLR			2R7	4	0	6,051,452	61:0
1204	1	145	11:26:34.200	428JH6B	6RCSET	11		2R7	4	0	6,051,452	62:0
1205	1	145	11:26:34.200	165IB4A	7SCAN	NORM,121.396,21.	Check S/P Position	2R7	4	0	6,051,452	62:0
1206	1	145	11:26:36.200		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *1708.83 +/- 5	2R7	4	0	6,051,452	65:0
1207	1	145	11:26:36.200	175TE422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	2R7	4	0	6,051,452	65:0
1208	1	145	11:26:38.933		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *1720.33 +/- 5	2R7	4	0	6,051,452	69:1

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1209	1	145	11:26:40.200	175TE176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R7	4	0	6,051,452:71:0	
1210	1	145	11:26:40.333		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *1720.45 +/- 5	2R7	4	0	6,051,452:71:2	
1211	1	145	11:26:40.333		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 1720.45 +/- 5	2R7	4	0	6,051,452:71:2	
1212	1	145	11:26:57.533	118IB	**SMOS**	GS		2R7	4	0	6,051,453:06:0	
1213	1	145	11:27:02.866	428JI6A	6RCCLR			2R7	4	0	6,051,453:14:0	
1214	1	145	11:27:03.533	428JI6B	6RCSET		14	2R7	4	0	6,051,453:15:0	
1215	1	145	11:27:23.533		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *1730.58 +/- 5	2R7	4	0	6,051,453:45:0	
1216	1	145	11:27:23.533	175IB422A6A	6DMSC	R806,1	DMS Control	2R7	4	0	6,051,453:45:0	
1217	1	145	11:27:24.733		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC *1730.64 +/- 5	2R7	4	0	6,051,453:46:8	
1218	1	145	11:27:26.866	165IB4B	7VECT		Inert vect update UTC	2R7	4	0	6,051,453:50:0	
1219	1	145	11:27:29.533	175IB176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R7	4	0	6,051,453:54:0	
1220	1	145	11:27:30.000		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC *1796.64 +/- 5	2R7	4	0	6,051,453:54:7	
1221	1	145	11:27:30.000		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 1796.64 +/- 5	2R7	4	0	6,051,453:54:7	
1222	1	145	11:27:30.200	118IB110A111A4A	7STRP	-0.007,0.0,26,0,	Slew =,3.51	2R7	4	0	6,051,453:55:0	
1223	1	145	11:27:42.866	428JJ6A	6RCCLR			2R7	4	0	6,051,453:74:0	
1224	1	145	11:27:43.533	428JJ6B	6RCSET		11	2R7	4	0	6,051,453:75:0	
1225	1	145	11:27:47.533	118IB11A	**SMOS**	GE		2R7	4	0	6,051,453:81:0	
1226	1	145	11:27:49.533	165IC4A	7SCAN	NORM,108.103999,	Check S/P Position	2R7	4	0	6,051,453:84:0	
1227	1	145	11:27:54.200		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *2392.18 +/- 5	2R7	4	0	6,051,454:00:0	
1228	1	145	11:27:54.200	175TF422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	2R7	4	0	6,051,454:00:0	
1229	1	145	11:27:56.933		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *2403.68 +/- 5	2R7	4	0	6,051,454:04:1	
1230	1	145	11:27:58.200	175TF176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	2R7	4	0	6,051,454:06:0	
1231	**1**	**145**	**11:27:58.200**	**30NNFEATRE01-**		**-----START------**		**2R7**	**4**	**0**	**: :**	
1232	1	145	11:27:58.200	118IC	**SMOS**	GS		2R7	4	0	6,051,454:06:0	
1233	1	145	11:27:58.333		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 2403.80 +/- 5	2R7	4	0	6,051,454:06:2	
1234	1	145	11:27:58.333		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *2403.80 +/- 5	2R7	4	0	6,051,454:06:2	
1235	1	145	11:28:08.200	428JK6A	6RCCLR			2R7	4	0	6,051,454:21:0	
1236	1	145	11:28:08.866	428JK6B	6RCSET		14	2R7	4	0	6,051,454:22:0	
1237	1	145	11:28:15.533	175IC422A6A	6DMSC	R806,1	DMS Control	2R7	4	0	6,051,454:32:0	
1238	1	145	11:28:15.533		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *2407.84 +/- 5	2R7	4	0	6,051,454:32:0	
1239	1	145	11:28:16.733		DMS:	: *RUNUP	R806, TRACK 1, FWD, TIC *2407.90 +/- 5	2R7	4	0	6,051,454:33:8	
1240	1	145	11:28:18.866	165IC4B	7VECT		Inert vect update UTC	2R7	4	0	6,051,454:37:0	
1241	1	145	11:28:21.533	175IC176A6A	6TMREC	**IM8**	806.4 KBPS IMAGE RECORD Record Mode Chang	2R7	4	0	6,051,454:41:0	
1242	1	145	11:28:22.000		DMS:	: *AT_SPD	R806, TRACK 1, FWD, TIC 2473.90 +/- 6	2R7	4	0	6,051,454:41:7	
1243	1	145	11:28:22.000		DMS:	**: *RECORD**	R806, TRACK 1, FWD, TIC *2473.90 +/- 5	2R7	4	0	6,051,454:41:7	
1244	1	145	11:28:22.200	118IC110A111A4A	7STRP	-0.0068,0.0,26,0	Slew =,3.41	2R7	4	0	6,051,454:42:0	
1245	1	145	11:28:34.866	428JL6A	6RCCLR			2R7	4	0	6,051,454:61:0	
1246	1	145	11:28:35.533	428JL6B	6RCSET		11	2R7	4	0	6,051,454:62:0	
1247	**1**	**145**	**11:28:38.200**	**20DS5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,051,454:66:0**	
1248	1	145	11:28:39.533	118IC11A	**SMOS**	GE			4	0	6,051,454:68:0	
1249	1	145	11:28:46.200		DMS:	**: *RUNDOWN**	R806, TRACK 1, FWD, TIC *3069.44 +/- 6		4	0	6,051,454:78:0	
1250	1	145	11:28:46.200	175TG422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp		4	0	6,051,454:78:0	
1251	1	145	11:28:46.866	165IV4A	7SCAN	NORM,109.855,16.	Check S/P Position		4	0	6,051,454:79:0	
1252	**1**	**145**	**11:28:47.533**	**20DS5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,051,454:80:0**	
1253	1	145	11:28:48.933		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *3080.94 +/- 6		4	0	6,051,454:82:1	
1254	1	145	11:28:50.200	175TG176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record		4	0	6,051,454:84:0	
1255	1	145	11:28:50.333		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 3081.06 +/- 6		4	0	6,051,454:84:2	
1256	1	145	11:28:50.333		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *3081.06 +/- 6		4	0	6,051,454:84:2	
1257	**1**	**145**	**11:28:55.533**	**20DS6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,051,455:01:0**	
1258	1	145	11:28:58.866	118IV	**SMOS**	GS			4	0	6,051,455:06:0	
1259	1	145	11:29:00.866	428JM6A	6RCCLR				4	0	6,051,455:09:0	
1260	1	145	11:29:01.533	428JM6B	6RCSET		14		4	0	6,051,455:10:0	
1261	**1**	**145**	**11:29:05.533**	**20DS6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,051,455:16:0**	
1262	1	145	11:29:16.200	175IV422A6A	6DMSC	R806,1	DMS Control		4	0	6,051,455:32:0	
1263	1	145	11:29:16.200		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *3087.13 +/- 6		4	0	6,051,455:32:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters		Description	GCM	GO	GS	RIM MF I
1264	1	145	11:29:17.400		DMS:	: *RUNUP		R806, TRACK 1, FWD, TIC *3087.19 +/- 6		4	0	6,051,455:33:8
1265	1	145	11:29:19.533	165IV4B	7VECT			Inert vect update UTC		4	0	6,051,455:37:0
1266	1	145	11:29:22.200	175IV176A6A	6TMREC	**IM8**		806.4 KBPS IMAGE RECORD Record Mode Chang		4	0	6,051,455:41:0
1267	1	145	11:29:22.666		DMS:	**: *RECORD**		R806, TRACK 1, FWD, TIC *3153.19 +/- 6		4	0	6,051,455:41:7
1268	1	145	11:29:22.666		DMS:	: *AT_SPD		R806, TRACK 1, FWD, TIC 3153.19 +/- 6		4	0	6,051,455:41:7
1269	1	145	11:29:22.866	118IV110A111A4A	7STRP	-0.0069,0.0,26,0		Slew =,3.41		4	0	6,051,455:42:0
1270	**1**	**145**	**11:29:25.533**	**20DS5C**	**37IRT**			**Instrument Reset (goes into POR state)**		**4**	**0**	**6,051,455:46:0**
1271	1	145	11:29:34.200	428JN6A	6RCCLR					4	0	6,051,455:59:0
1272	1	145	11:29:34.866	428JN6B	6RCSET		11			4	0	6,051,455:60:0
1273	**1**	**145**	**11:29:38.866**	**20DS5D**	**37MN**			**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,051,455:66:0**
1274	1	145	11:29:40.200	118IV11A	**SMOS**	GE			260	4	0	6,051,455:68:0
1275	1	145	11:29:43.533	175TH422A6A	6DMSC	R7,1		DMS Control Tape runup 7.68kbp	260	4	0	6,051,455:73:0
1276	1	145	11:29:43.533		DMS:	**: *RUNDOWN**		R806, TRACK 1, FWD, TIC *3666.70 +/- 6	260	4	0	6,051,455:73:0
1277	1	145	11:29:46.266		DMS:	: *RUNUP		R7, TRACK 1, FWD, TIC *3678.20 +/- 6	260	4	0	6,051,455:77:1
1278	1	145	11:29:47.533	165ID4A	7SCAN	NORM,120.240999,		Check S/P Position	260	4	0	6,051,455:79:0
1279	1	145	11:29:47.533	175TH176A6A	6TMREC	**LPW**		7.68 KBPS LOW RATE SCI PWS RECORD Record	260	4	0	6,051,455:79:0
1280	1	145	11:29:47.666		DMS:	: *AT_SPD		R7, TRACK 1, FWD, TIC 3678.32 +/- 6	260	4	0	6,051,455:79:2
1281	1	145	11:29:47.666		DMS:	**: *RECORD**		R7, TRACK 1, FWD, TIC *3678.32 +/- 6	260	4	0	6,051,455:79:2
1282	**1**	**145**	**11:29:48.200**	**20DS4A**	**37IST**	**1,2,0,OFF,0,0,0**		**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,051,455:80:0**
1283	1	145	11:29:59.533	118ID	**SMOS**	GS			2R0	4	0	6,051,456:06:0
1284	1	145	11:30:01.533	428JO6A	6RCCLR				2R0	4	0	6,051,456:09:0
1285	1	145	11:30:02.200	428JO6B	6RCSET		14		2R0	4	0	6,051,456:10:0
1286	1	145	11:30:16.866		DMS:	**: *RUNDOWN**		R7, TRACK 1, FWD, TIC *3685.16 +/- 6	2R0	4	0	6,051,456:32:0
1287	1	145	11:30:16.866	175ID422A6A	6DMSC	R806,1		DMS Control	2R0	4	0	6,051,456:32:0
1288	1	145	11:30:18.066		DMS:	: *RUNUP		R806, TRACK 1, FWD, TIC *3685.22 +/- 6	2R0	4	0	6,051,456:33:8
1289	1	145	11:30:20.200	165ID4B	7VECT			Inert vect update UTC	2R0	4	0	6,051,456:37:0
1290	1	145	11:30:22.866	175ID176A6A	6TMREC	**IM8**		806.4 KBPS IMAGE RECORD Record Mode Chang	2R0	4	0	6,051,456:41:0
1291	1	145	11:30:23.333		DMS:	: *AT_SPD		R806, TRACK 1, FWD, TIC 3751.22 +/- 7	2R0	4	0	6,051,456:41:7
1292	1	145	11:30:23.333		DMS:	**: *RECORD**		R806, TRACK 1, FWD, TIC *3751.22 +/- 6	2R0	4	0	6,051,456:41:7
1293	1	145	11:30:23.533	118ID110A111A4A	7STRP	-0.0068,0.0,26,0		Slew =,3.41	2R0	4	0	6,051,456:42:0
1294	**1**	**145**	**11:30:51.533**	**125DS4A**	**37IST**	**0,2,0,OFF,0,1,1**		**Gain State 4**	**4R0**	**4**	**0**	**6,051,456:84:0**
1295	**1**	**145**	**11:30:51.533**	**30CNFEATRE01-**		**-----START------**			**4R0**	**4**	**0**	**: :**
1296	1	145	11:30:51.533	125DS	NIMSINIT	GS		##### GROUP START INIT	4R0	4	0	6,051,456:84:0
1297	1	145	11:30:51.533	125DS11A	NIMSINIT	GE		##### GROUP END INIT	4R0	4	0	6,051,456:84:0
1298	1	145	11:30:55.533	428JP6A	6RCCLR				4R0	4	0	6,051,456:90:0
1299	1	145	11:30:56.200	428JP6B	6RCSET		11		4R0	4	0	6,051,457:00:0
1300	**1**	**145**	**11:30:58.200**	**30NNFEATRE01-**		**-----STOP-------**			**4R0**	**4**	**0**	**: :**
1301	1	145	11:31:06.866	118ID11A	**SMOS**	GE			4R0	4	0	6,051,457:16:0
1302	1	145	11:31:13.533	175TI422A6A	6DMSC	R7,1		DMS Control Tape runup 7.68kbp	4R0	4	0	6,051,457:26:0
1303	1	145	11:31:13.533		DMS:	**: *RUNDOWN**		R806, TRACK 1, FWD, TIC *4986.62 +/- 7	4R0	4	0	6,051,457:26:0
1304	1	145	11:31:16.200	165DS4A	**7SCAN**	**NORM,95.7,32.471**		**Check S/P Position**	4R0	4	0	6,051,457:30:0
1305	1	145	11:31:16.266		DMS:	: *RUNUP		R7, TRACK 1, FWD, TIC *4998.12 +/- 7	4R0	4	0	6,051,457:30:1
1306	1	145	11:31:17.533	175TI176A6A	6TMREC	**LPW**		7.68 KBPS LOW RATE SCI PWS RECORD Record	4R0	4	0	6,051,457:32:0
1307	1	145	11:31:17.666		DMS:	**: *RECORD**		R7, TRACK 1, FWD, TIC *4998.24 +/- 7	4R0	4	0	6,051,457:32:2
1308	1	145	11:31:17.666		DMS:	: *AT_SPD		R7, TRACK 1, FWD, TIC 4998.24 +/- 7	4R0	4	0	6,051,457:32:2
1309	1	145	11:31:45.533	428JQ6A	6RCCLR				4R0	4	0	6,051,457:74:0
1310	1	145	11:31:46.200	428JQ6B	6RCSET		12		4R0	4	0	6,051,457:75:0
1311	**1**	**145**	**11:31:52.200**	**127DS4A**	**37IOP**	**3,0**		**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**6,051,457:84:0**
1312	1	145	11:31:52.200	127DS	NIMSTAB	GS		%%%%% GROUP START TAB	4R3	4	0	6,051,457:84:0
1313	**1**	**145**	**11:31:52.866**	**127DS4B**	**37ETB**	**0A,CA,18,39,FF,1**		**Loads wavelength edit table**	**4R3**	**4**	**0**	**6,051,457:85:0**
1314	1	145	11:32:00.866	127DS11A	NIMSTAB	GE		%%%%% GROUP END TAB	4R3	4	0	6,051,458:06:0
1315	1	145	11:32:48.200	117DS	**CSMOS**	GS		***** GROUP START CSMOS	4R3	4	0	6,051,458:77:0
1316	1	145	11:32:48.866		DMS:	**: *RUNDOWN**		R7, TRACK 1, FWD, TIC *5019.61 +/- 7	4R3	4	0	6,051,458:78:0
1317	1	145	11:32:48.866	175DS422A6A	6DMSC	R28,1		DMS Control	4R3	4	0	6,051,458:78:0
1318	1	145	11:32:50.066		DMS:	: *RUNUP		R28, TRACK 1, FWD, TIC *5019.67 +/- 7	4R3	4	0	6,051,458:79:8

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1319	1	145	11:32:54.066		DMS:	: *AT_SPD	R28, TRACK 1, FWD, TIC 5021.17 +/- 7	4R3	4	0	6,051,458:85:8	
1320	1	145	11:32:54.066		DMS:	**: *RECORD**	R28, TRACK 1, FWD, TIC *5021.17 +/- 7	4R3	4	0	6,051,458:85:8	
1321	1	145	11:32:54.200	175DS176A6A	6TMREC	**MPW**	28.8 KBPS PWS + NIMS RECORD Record Mode C	4R3	4	0	6,051,458:86:0	
1322	**1**	**145**	**11:32:56.200**	**30CNFEATRE01-**	**NIMPBK**	**301DS**	**CALLISTO FEATRE OBSERVATION**	**4R3**	**4**	**0**	**: :**	
1323	1	145	11:32:56.200	165DS4B	7VECT		Inert vect update UTC	4R3	4	0	6,051,458:89:0	
1324	1	145	11:32:57.533	117DS105A106A4A	**7STRP**	**0.039621,0.004,0**	**Slew =,0.06**	4R3	4	0	6,051,459:00:0	
1325	1	145	11:39:04.866	428JR6A	6RCCLR			4R3	4	0	6,051,465:05:0	
1326	1	145	11:39:05.533	428JR6B	6RCSET		8	4R3	4	0	6,051,465:06:0	
1327	**1**	**145**	**11:44:00.200**	**30CNFEATRE01-**	**DESELC**	**300DS**	**CALLISTO FEATRE OBSERVATION**	**4R3**	**4**	**0**	**: :**	
1328	1	145	11:44:01.533	117DS11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,469:86:0	
1329	1	145	11:44:02.200	175TJ422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	4R3	4	0	6,051,469:87:0	
1330	1	145	11:44:02.200		DMS:	**: *RUNDOWN**	R28, TRACK 1, FWD, TIC *5608.40 +/- 7	4R3	4	0	6,051,469:87:0	
1331	1	145	11:44:03.400		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *5608.70 +/- 7	4R3	4	0	6,051,469:88:8	
1332	1	145	11:44:04.800		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 5608.82 +/- 7	4R3	4	0	6,051,469:90:9	
1333	1	145	11:44:04.800		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *5608.82 +/- 7	4R3	4	0	6,051,469:90:9	
1334	1	145	11:44:04.866	175TJ176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	4R3	4	0	6,051,470:00:0	
1335	**1**	**145**	**11:44:07.533**	**30CNFEATRE01-**		**-----STOP-------**		**4R3**	**4**	**0**	**: :**	
1336	1	145	11:45:07.533	432OA431A6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	4R3	4	0	6,051,471:03:0	
1337	1	145	11:45:08.200	432OA6A	6RTSL1		R/T Select of DDS and	4R3	4	0	6,051,471:04:0	
1338	1	145	11:45:11.533	282NB431A6A	6RCDSL	DDSNCG,PLSDSL,EP	Record Deselect (DDS o	4R3	4	0	6,051,471:09:0	
1339	1	145	11:46:00.200	282NB432A431A6A	6RCDSL	DDSNCG,PLSDSL,EP	Record Deselect (DDS o	4R3	4	0	6,051,471:82:0	
1340	1	145	11:46:00.866	282NB432A6A	6RTSL1		R/T Select of DDS and	4R3	4	0	6,051,471:83:0	
1341	1	145	11:46:05.533	165IE4A	7SCAN	NORM,87.351999,2	Check S/P Position	4R3	4	0	6,051,471:90:0	
1342	1	145	11:46:10.200	428JT6A	6RCCLR			4R3	4	0	6,051,472:06:0	
1343	1	145	11:48:06.200	165IE4B	7VECT		Inert vect update UTC	4R3	4	0	6,051,473:89:0	
1344	1	145	11:48:08.866	175IE422A6A	6DMSC	R115,1	DMS Control	4R3	4	0	6,051,474:02:0	
1345	1	145	11:48:08.866		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *5666.02 +/- 7	4R3	4	0	6,051,474:02:0	
1346	1	145	11:48:10.066		DMS:	: *RUNUP	R115, TRACK 1, FWD, TIC *5666.08 +/- 7	4R3	4	0	6,051,474:03:8	
1347	1	145	11:48:14.066		DMS:	**: *RECORD**	R115, TRACK 1, FWD, TIC *5672.38 +/- 7	4R3	4	0	6,051,474:09:8	
1348	1	145	11:48:14.066		DMS:	: *AT_SPD	R115, TRACK 1, FWD, TIC 5672.38 +/- 7	4R3	4	0	6,051,474:09:8	
1349	1	145	11:48:14.200	175IE176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,051,474:10:0	
1350	1	145	11:49:08.866	175TK422A6A	6DMSC	R7,1	DMS Control Tape runup 7.68kbp	4R3	4	0	6,051,475:01:0	
1351	1	145	11:49:08.866		DMS:	**: *RUNDOWN**	R115, TRACK 1, FWD, TIC *5865.04 +/- 7	4R3	4	0	6,051,475:01:0	
1352	1	145	11:49:10.066		DMS:	: *RUNUP	R7, TRACK 1, FWD, TIC *5866.04 +/- 7	4R3	4	0	6,051,475:02:8	
1353	1	145	11:49:11.466		DMS:	: *AT_SPD	R7, TRACK 1, FWD, TIC 5866.16 +/- 7	4R3	4	0	6,051,475:04:9	
1354	1	145	11:49:11.466		DMS:	**: *RECORD**	R7, TRACK 1, FWD, TIC *5866.16 +/- 7	4R3	4	0	6,051,475:04:9	
1355	1	145	11:49:11.533	175TK176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	4R3	4	0	6,051,475:05:0	
1356	**1**	**145**	**11:49:12.200**	**30NNCTBRAN01-**		**-----START------**		**4R3**	**4**	**0**	**: :**	
1357	**1**	**145**	**11:49:54.200**	**20DT5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,051,475:69:0**	
1358	**1**	**145**	**11:50:01.533**	**20DT5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,051,475:80:0**	
1359	**1**	**145**	**11:50:09.533**	**20DT6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,051,476:01:0**	
1360	**1**	**145**	**11:50:19.533**	**20DT6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,051,476:16:0**	
1361	**1**	**145**	**11:50:29.533**	**20DT5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,051,476:31:0**	
1362	**1**	**145**	**11:50:30.866**	**20DT5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,051,476:33:0**	
1363	**1**	**145**	**11:51:02.200**	**20DT4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,051,476:80:0**	
1364	1	145	11:51:51.533	175TK422A6B	6DMSC	RDY,0	DMS Control Tape stop	2R0	4	0	6,051,477:63:0	
1365	1	145	11:51:51.533		DMS:	**: *RUNDOWN**	R7, TRACK 1, FWD, TIC *5903.67 +/- 7	2R0	4	0	6,051,477:63:0	
1366	1	145	11:51:52.733		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *5903.73 +/- 7	2R0	4	0	6,051,477:64:8	
1367	**1**	**145**	**11:52:05.533**	**30CNCTBRAN01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
1368	**1**	**145**	**11:52:05.533**	**125DT4A**	**37IST**	**0,2,0,OFF,0,1,1**	**Gain State 4**	**4R0**	**4**	**0**	**6,051,477:84:0**	
1369	1	145	11:52:05.533	125DT11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	6,051,477:84:0	
1370	1	145	11:52:05.533	125DT	NIMSINIT	GS	##### GROUP START INIT	4R0	4	0	6,051,477:84:0	
1371	**1**	**145**	**11:52:12.200**	**30NNCTBRAN01-**		**-----STOP-------**		**4R0**	**4**	**0**	**: :**	
1372	**1**	**145**	**11:53:06.200**	**127DT4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**6,051,478:84:0**	
1373	1	145	11:53:06.200	127DT	NIMSTAB	GS	%%%%% GROUP START TAB	4R3	4	0	6,051,478:84:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
1374	**1**	**145**	**11:53:06.866**	**127DT4B**	**37ETB**	**0A,CA,18,39,FF,1**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**6,051,478:85:0**
1375	1	145	11:53:14.866	127DT11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	6,051,479:06:0
1376	1	145	11:54:10.866	165DT4A	**7SCAN**	**NORM,88.509,22.5**	**Check S/P Position**	4R3	4	0	6,051,479:90:0
1377	1	145	11:54:11.533		DMS:	: READY	RDY, TRACK *2, *REV, TIC 5903.73 +/- 7	4R3	4	0	6,051,480:00:0
1378	1	145	11:54:11.533	465KE6A	6DMSC	RDY,2	DMS Control Tape stop	4R3	4	0	6,051,480:00:0
1379	1	145	11:56:00.866	175DT422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,481:73:0
1380	1	145	11:56:00.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5903.73 +/- 7	4R3	4	0	6,051,481:73:0
1381	1	145	11:56:02.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5903.85 +/- 7	4R3	4	0	6,051,481:75:1
1382	1	145	11:56:03.533	117DT	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,051,481:77:0
1383	1	145	11:56:07.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5905.09 +/- 7	4R3	4	0	6,051,481:83:0
1384	1	145	11:56:08.733		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5905.15 +/- 7	4R3	4	0	6,051,481:84:8
1385	1	145	11:56:09.533	175DT176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	4R3	4	0	6,051,481:86:0
1386	1	145	11:56:10.133		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5905.03 +/- 7	4R3	4	0	6,051,481:86:9
1387	1	145	11:56:10.133		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 5905.03 +/- 7	4R3	4	0	6,051,481:86:9
1388	1	145	11:56:11.533	165DT4B	7VECT		Inert vect update UTC	4R3	4	0	6,051,481:89:0
1389	1	145	11:56:12.866	117DT105A106A4A	**7STRP**	**-0.024005,0.0,0,**	**Slew =,0.03**	4R3	4	0	6,051,482:00:0
1390	1	145	12:09:30.866	20IF6A	6MCOPY	HLM1A,E415,B1A1A	HLM1A,E415,B1A1A,5000,506	4R3	4	0	6,051,495:14:0
1391	1	145	12:09:34.866	117DT105A106A4B	**7STRP**	**0.021003,0.00901**	**Slew =12.01**	4R3	4	0	6,051,495:20:0
1392	1	145	12:09:53.533	117DT105A106A4C	7STRP	-0.024005,0.0,0,	Slew =,0.03	4R3	4	0	6,051,495:48:0
1393	1	145	12:23:15.533	117DT11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,508:68:0
1394	1	145	12:23:22.866	175DT422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,508:79:0
1395	1	145	12:23:22.866	175DT6A	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,508:79:0
1396	1	145	12:23:22.866		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5522.35 +/- 7	4R3	4	0	6,051,508:79:0
1397	1	145	12:23:24.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5522.29 +/- 7	4R3	4	0	6,051,508:80:8
1398	1	145	12:23:26.866	165IH4A	7SCAN	NORM,88.372999,2	Check S/P Position	4R3	4	0	6,051,508:85:0
1399	**1**	**145**	**12:23:28.200**	**30CNCTBRAN01-**		**-----STOP-------**		**4R3**	**4**	**0**	**: :**
1400	1	145	12:24:26.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5522.29 +/- 7	4R3	4	0	6,051,509:84:0
1401	1	145	12:24:26.866	175IH422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,051,509:84:0
1402	1	145	12:24:28.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5522.41 +/- 7	4R3	4	0	6,051,509:86:1
1403	1	145	12:24:28.866	118IH	**SMOS**	GS		4R3	4	0	6,051,509:87:0
1404	1	145	12:24:30.200	165IH4B	7VECT		Inert vect update UTC	4R3	4	0	6,051,509:89:0
1405	1	145	12:24:33.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5523.65 +/- 7	4R3	4	0	6,051,510:03:0
1406	1	145	12:24:34.733		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *5523.71 +/- 7	4R3	4	0	6,051,510:04:8
1407	1	145	12:24:38.200	175IH176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,051,510:10:0
1408	1	145	12:24:38.733		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *5517.41 +/- 7	4R3	4	0	6,051,510:10:8
1409	1	145	12:24:38.733		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 5517.41 +/- 7	4R3	4	0	6,051,510:10:8
1410	1	145	12:24:38.866	118IH110A111A4A	7STRP	0.00731,0.0,182,	Slew =,3.71	4R3	4	0	6,051,510:11:0
1411	**1**	**145**	**12:25:36.200**	**30NNREGION01-**		**-----START------**		**4R3**	**4**	**0**	**: :**
1412	1	145	12:25:39.533	118IH11A	**SMOS**	GE		4R3	4	0	6,051,511:11:0
1413	**1**	**145**	**12:26:18.200**	**20DU5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,051,511:69:0**
1414	**1**	**145**	**12:26:25.533**	**20DU5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,051,511:80:0**
1415	**1**	**145**	**12:26:33.533**	**20DU6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,051,512:01:0**
1416	1	145	12:26:34.200	175IH422A6B	6DMSC	RDY,0	DMS Control Tape stop		4	0	6,051,512:02:0
1417	1	145	12:26:34.200		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *5111.47 +/- 7		4	0	6,051,512:02:0
1418	1	145	12:26:35.400		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5110.47 +/- 7		4	0	6,051,512:03:8
1419	**1**	**145**	**12:26:43.533**	**20DU6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,051,512:16:0**
1420	**1**	**145**	**12:27:17.533**	**20DU5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,051,512:67:0**
1421	**1**	**145**	**12:27:18.866**	**20DU5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,051,512:69:0**
1422	**1**	**145**	**12:27:26.200**	**20DU4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,051,512:80:0**
1423	1	145	12:27:37.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5110.47 +/- 7	2R0	4	0	6,051,513:06:0
1424	1	145	12:27:37.533	411JC6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	2R0	4	0	6,051,513:06:0
1425	1	145	12:27:38.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5110.59 +/- 7	2R0	4	0	6,051,513:08:1
1426	1	145	12:27:44.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5111.83 +/- 7	2R0	4	0	6,051,513:16:0
1427	1	145	12:27:45.400		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5111.89 +/- 7	2R0	4	0	6,051,513:17:8
1428	1	145	12:27:46.800		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 5111.77 +/- 7	2R0	4	0	6,051,513:19:9

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1429	1	145	12:27:46.800		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5111.77 +/- 7	2R0	4	0	6,051,513:19:9	
1430	1	145	12:27:47.533	411JC6B	6TMREC	**BDT**	7.68 KBPS BUFFER DUMP TO TAPE Record Mode	2R0	4	0	6,051,513:21:0	
1431	1	145	12:28:29.533	125DU11A	NIMSINIT	GE	##### GROUP END INIT	2R0	4	0	6,051,513:84:0	
1432	1	145	12:28:29.533	125DU	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,051,513:84:0	
1433	**1**	**145**	**12:28:29.533**	**125DU4A**	**37IST**	**0,2,0,OFF,0,1,1**	**Gain State 4**	**4R0**	**4**	**0**	**6,051,513:84:0**	
1434	**1**	**145**	**12:28:29.533**	**30CNREGION01-**		**-----START------**		**4R0**	**4**	**0**	**: :**	
1435	1	145	12:28:33.533	165DU4A	**7SCAN**	**NORM,85.917,23.4**	**Check S/P Position**	4R0	4	0	6,051,513:90:0	
1436	**1**	**145**	**12:28:36.200**	**30NNREGION01-**		**-----STOP-------**		**4R0**	**4**	**0**	**: :**	
1437	**1**	**145**	**12:29:30.200**	**127DU4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**6,051,514:84:0**	
1438	1	145	12:29:30.200	127DU	NIMSTAB	GS	%%%%% GROUP START TAB	4R3	4	0	6,051,514:84:0	
1439	**1**	**145**	**12:29:30.866**	**127DU4B**	**37ETB**	**0A,CA,18,39,FF,1**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**6,051,514:85:0**	
1440	1	145	12:29:38.866	127DU11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	6,051,515:06:0	
1441	1	145	12:29:48.866	411JC6C	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,515:21:0	
1442	1	145	12:29:51.533	175TL176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	4R3	4	0	6,051,515:25:0	
1443	1	145	12:29:52.200	175TL422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,515:26:0	
1444	1	145	12:29:58.866	175TL422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,515:36:0	
1445	1	145	12:29:58.866		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *5080.81 +/- 7	4R3	4	0	6,051,515:36:0	
1446	1	145	12:30:00.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *5080.75 +/- 7	4R3	4	0	6,051,515:37:8	
1447	1	145	12:30:26.200	117DU	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,051,515:77:0	
1448	1	145	12:30:35.533	117DU105A106A4A	**7STRP**	**-0.0094,-0.00027**	**Slew =,0.01**	4R3	4	0	6,051,516:00:0	
1449	1	145	12:31:24.200	175DU422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,516:73:0	
1450	1	145	12:31:24.200		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 5080.75 +/- 7	4R3	4	0	6,051,516:73:0	
1451	1	145	12:31:25.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5080.87 +/- 7	4R3	4	0	6,051,516:75:1	
1452	1	145	12:31:30.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5082.11 +/- 7	4R3	4	0	6,051,516:83:0	
1453	1	145	12:31:32.066		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *5082.17 +/- 7	4R3	4	0	6,051,516:84:8	
1454	1	145	12:31:32.866	175DU176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	4R3	4	0	6,051,516:86:0	
1455	1	145	12:31:33.466		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 5082.05 +/- 7	4R3	4	0	6,051,516:86:9	
1456	1	145	12:31:33.466		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *5082.05 +/- 7	4R3	4	0	6,051,516:86:9	
1457	**1**	**145**	**12:31:33.533**	**30CNREGION01-**	**NIMPBK**	**301DU**	**CALLISTO REGION OBSERVATION**	**4R3**	**4**	**0**	**: :**	
1458	**1**	**145**	**12:34:35.533**	**30CNREGION01-**	**DESELC**	**300DU**	**CALLISTO REGION OBSERVATION**	**4R3**	**4**	**0**	**: :**	
1459	1	145	12:48:22.866	117DU105A106A4B	**7STRP**	**0.026306,0.00701**	**Slew =12.01**	4R3	4	0	6,051,533:54:0	
1460	1	145	12:48:44.200	117DU105A106A4C	**7STRP**	**-0.0094,-0.00027**	**Slew =,0.01**	4R3	4	0	6,051,533:86:0	
1461	1	145	13:06:31.533	117DU11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,551:49:0	
1462	1	145	13:09:06.200		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *4554.06 +/- 7	4R3	4	0	6,051,554:08:0	
1463	1	145	13:09:06.200	175DU422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,554:08:0	
1464	1	145	13:09:06.200	175DU6A	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,554:08:0	
1465	1	145	13:09:07.400		DMS:	: *READY	RDY, TRACK 2, REV, TIC *4554.00 +/- 7	4R3	4	0	6,051,554:09:8	
1466	**1**	**145**	**13:09:11.533**	**30CNREGION01-**		**-----STOP-------**		**4R3**	**4**	**0**	**: :**	
1467	1	145	13:11:01.533	165IG4A	7SCAN	NORM,83.749,23.8	Check S/P Position	4R3	4	0	6,051,555:90:0	
1468	1	145	13:12:58.866	175IG422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,051,557:84:0	
1469	1	145	13:12:58.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4554.00 +/- 7	4R3	4	0	6,051,557:84:0	
1470	1	145	13:13:00.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4554.12 +/- 7	4R3	4	0	6,051,557:86:1	
1471	1	145	13:13:00.866	118IG	**SMOS**	GS		4R3	4	0	6,051,557:87:0	
1472	1	145	13:13:02.200	165IG4B	7VECT		Inert vect update UTC	4R3	4	0	6,051,557:89:0	
1473	1	145	13:13:05.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4555.36 +/- 7	4R3	4	0	6,051,558:03:0	
1474	1	145	13:13:06.733		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *4555.42 +/- 7	4R3	4	0	6,051,558:04:8	
1475	1	145	13:13:10.200	175IG176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,051,558:10:0	
1476	1	145	13:13:10.733		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *4549.12 +/- 7	4R3	4	0	6,051,558:10:8	
1477	1	145	13:13:10.733		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 4549.12 +/- 7	4R3	4	0	6,051,558:10:8	
1478	1	145	13:13:10.866	118IG110A111A4A	7STRP	0.00731,0.0,182,	Slew =,3.71	4R3	4	0	6,051,558:11:0	
1479	**1**	**145**	**13:14:08.200**	**30NNREGION02-**		**-----START------**		**4R3**	**4**	**0**	**: :**	
1480	1	145	13:14:11.533	118IG11A	**SMOS**	GE		4R3	4	0	6,051,559:11:0	
1481	**1**	**145**	**13:14:21.533**	**20DV5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,051,559:26:0**	
1482	**1**	**145**	**13:14:30.866**	**20DV5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,051,559:40:0**	
1483	**1**	**145**	**13:14:45.533**	**20DV6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,051,559:62:0**	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1484	**1**	**145**	**13:14:56.200**	**20DV6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,051,559:78:0**	
1485	1	145	13:15:04.200	165DV4A	**7SCAN**	**NORM,82.079,25.1**	**Check S/P Position**		4	0	6,051,559:90:0	
1486	1	145	13:15:06.200	175IG422A6B	6DMSC	RDY,0	DMS Control Tape stop		4	0	6,051,560:02:0	
1487	1	145	13:15:06.200		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *4143.18 +/- 7		4	0	6,051,560:02:0	
1488	1	145	13:15:07.400		DMS:	: *READY	RDY, TRACK 2, REV, TIC *4142.18 +/- 7		4	0	6,051,560:03:8	
1489	**1**	**145**	**13:15:12.200**	**20DV5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,051,560:11:0**	
1490	**1**	**145**	**13:15:22.200**	**20DV5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,051,560:26:0**	
1491	**1**	**145**	**13:15:56.200**	**30CNREGION02-**		**-----START------**		**260**	**4**	**0**	**: :**	
1492	**1**	**145**	**13:15:58.200**	**20DV4A**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,051,560:80:0**	
1493	1	145	13:17:01.533	125DV	NIMSINIT	GS	##### GROUP START INIT	2R0	4	0	6,051,561:84:0	
1494	**1**	**145**	**13:17:01.533**	**125DV4A**	**37IST**	**0,2,0,OFF,0,1,1**	**Gain State 4**	**4R0**	**4**	**0**	**6,051,561:84:0**	
1495	1	145	13:17:01.533	125DV11A	NIMSINIT	GE	##### GROUP END INIT	4R0	4	0	6,051,561:84:0	
1496	**1**	**145**	**13:17:08.200**	**30NNREGION02-**		**-----STOP-------**		**4R0**	**4**	**0**	**: :**	
1497	1	145	13:18:02.200	127DV	NIMSTAB	GS	%%%%% GROUP START TAB	4R0	4	0	6,051,562:84:0	
1498	**1**	**145**	**13:18:02.200**	**127DV4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**4R3**	**4**	**0**	**6,051,562:84:0**	
1499	**1**	**145**	**13:18:02.866**	**127DV4B**	**37ETB**	**0A,CA,18,39,FF,1**	**Loads wavelength edit table**	**4R3**	**4**	**0**	**6,051,562:85:0**	
1500	1	145	13:18:10.866	127DV11A	NIMSTAB	GE	%%%%% GROUP END TAB	4R3	4	0	6,051,563:06:0	
1501	1	145	13:18:55.533	175DV422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,563:73:0	
1502	1	145	13:18:55.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 4142.18 +/- 7	4R3	4	0	6,051,563:73:0	
1503	1	145	13:18:56.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4142.30 +/- 7	4R3	4	0	6,051,563:75:1	
1504	1	145	13:18:58.200	117DV	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,051,563:77:0	
1505	1	145	13:19:02.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4143.53 +/- 7	4R3	4	0	6,051,563:83:0	
1506	1	145	13:19:03.400		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *4143.59 +/- 7	4R3	4	0	6,051,563:84:8	
1507	1	145	13:19:04.200	175DV176A6A	6TMREC	**LPU**	7.68 KBPS NIMS-UVS-PPR RECORD Record Mode	4R3	4	0	6,051,563:86:0	
1508	1	145	13:19:04.800		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 4143.47 +/- 7	4R3	4	0	6,051,563:86:9	
1509	1	145	13:19:04.800		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *4143.47 +/- 7	4R3	4	0	6,051,563:86:9	
1510	1	145	13:19:07.533	117DV105A106A4A	**7STRP**	**-0.035014,0.0,0,**	**Slew =,0.02**	4R3	4	0	6,051,564:00:0	
1511	1	145	13:24:58.866	488AJ6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,051,569:72:0	
1512	1	145	13:49:23.533	117DV11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,593:85:0	
1513	1	145	13:49:34.866	175DV422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,594:11:0	
1514	1	145	13:49:34.866		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3714.55 +/- 7	4R3	4	0	6,051,594:11:0	
1515	1	145	13:49:34.866	175DV6A	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,594:11:0	
1516	1	145	13:49:36.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3714.49 +/- 7	4R3	4	0	6,051,594:12:8	
1517	**1**	**145**	**13:49:40.200**	**30CNREGION02-**		**-----STOP-------**		**4R3**	**4**	**0**	**: :**	
1518	1	145	13:50:27.533	165IF4A	7SCAN	NORM,82.794999,2	Check S/P Position	4R3	4	0	6,051,594:90:0	
1519	1	145	13:52:24.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3714.49 +/- 7	4R3	4	0	6,051,596:84:0	
1520	1	145	13:52:24.866	175IF422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,051,596:84:0	
1521	1	145	13:52:26.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3714.61 +/- 7	4R3	4	0	6,051,596:86:1	
1522	1	145	13:52:26.866	118IF	**SMOS**	GS		4R3	4	0	6,051,596:87:0	
1523	1	145	13:52:28.200	165IF4B	7VECT		Inert vect update UTC	4R3	4	0	6,051,596:89:0	
1524	1	145	13:52:31.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3715.85 +/- 7	4R3	4	0	6,051,597:03:0	
1525	1	145	13:52:32.733		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *3715.91 +/- 7	4R3	4	0	6,051,597:04:8	
1526	1	145	13:52:36.200	175IF176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,051,597:10:0	
1527	1	145	13:52:36.733		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *3709.61 +/- 7	4R3	4	0	6,051,597:10:8	
1528	1	145	13:52:36.733		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 3709.61 +/- 7	4R3	4	0	6,051,597:10:8	
1529	1	145	13:52:36.866	118IF110A111A4A	7STRP	0.0072,-0.006053	Slew =12.01	4R3	4	0	6,051,597:11:0	
1530	1	145	13:53:37.533	118IF11A	**SMOS**	GE		4R3	4	0	6,051,598:11:0	
1531	1	145	13:54:30.200	165GJ4A	7SCAN	NORM,80.73,25.44	Check S/P Position	4R3	4	0	6,051,598:90:0	
1532	1	145	13:54:32.200	175IF422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,599:02:0	
1533	1	145	13:54:32.200		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *3303.67 +/- 7	4R3	4	0	6,051,599:02:0	
1534	1	145	13:54:33.400		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3302.67 +/- 7	4R3	4	0	6,051,599:03:8	
1535	1	145	13:55:31.533	176GJ6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	4R3	4	0	6,051,600:00:0	
1536	1	145	13:56:22.866	117GJ	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,051,600:77:0	
1537	1	145	13:56:32.200	117GJ105A106A4A	7STRP	-0.060072,0.0050	Slew =,2.35	4R3	4	0	6,051,601:00:0	
1538	1	145	14:01:32.866	117GJ11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,605:87:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1539	1	145	14:02:05.533	176GJ6B	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,606	45:0
1540	1	145	14:02:07.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3302.67 +/- 7	4R3	4	0	6,051,606	48:0
1541	1	145	14:02:07.533	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,606	48:0
1542	1	145	14:02:08.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3302.79 +/- 7	4R3	4	0	6,051,606	50:1
1543	1	145	14:02:14.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3304.02 +/- 7	4R3	4	0	6,051,606	58:0
1544	1	145	14:02:15.400		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3304.08 +/- 7	4R3	4	0	6,051,606	59:8
1545	1	145	14:02:16.800		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3303.96 +/- 7	4R3	4	0	6,051,606	61:9
1546	1	145	14:02:17.533		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3303.79 +/- 7	4R3	4	0	6,051,606	63:0
1547	1	145	14:02:33.533	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,606	87:0
1548	1	145	14:02:33.533		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3300.04 +/- 7	4R3	4	0	6,051,606	87:0
1549	1	145	14:02:34.733		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3299.98 +/- 7	4R3	4	0	6,051,606	88:8
1550	1	145	14:07:38.866	165GK4A	7SCAN	NORM,80.745999,2	Check S/P Position	4R3	4	0	6,051,611	90:0
1551	1	145	14:08:40.200	176GK6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	4R3	4	0	6,051,613	00:0
1552	1	145	14:09:31.533	117GK	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,051,613	77:0
1553	1	145	14:09:40.866	117GK105A106A4A	7STRP	-0.055056,0.0043	Slew =,0.83	4R3	4	0	6,051,614	00:0
1554	1	145	14:19:47.533	117GK11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,624	00:0
1555	1	145	14:20:17.533	176GK6B	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,624	45:0
1556	1	145	14:20:19.533	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,624	48:0
1557	1	145	14:20:19.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3299.98 +/- 7	4R3	4	0	6,051,624	48:0
1558	1	145	14:20:20.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3300.10 +/- 7	4R3	4	0	6,051,624	50:1
1559	1	145	14:20:26.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3301.34 +/- 7	4R3	4	0	6,051,624	58:0
1560	1	145	14:20:27.400		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3301.40 +/- 7	4R3	4	0	6,051,624	59:8
1561	1	145	14:20:28.800		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3301.28 +/- 7	4R3	4	0	6,051,624	61:9
1562	1	145	14:20:29.533		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3301.10 +/- 7	4R3	4	0	6,051,624	63:0
1563	1	145	14:20:50.200	50ZZ6RE	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,625	03:0
1564	1	145	14:20:50.200		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3296.26 +/- 7	4R3	4	0	6,051,625	03:0
1565	1	145	14:20:51.400		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3296.20 +/- 7	4R3	4	0	6,051,625	04:8
1566	1	145	14:25:50.866	165GL4A	7SCAN	NORM,81.702,26.5	Check S/P Position	4R3	4	0	6,051,629	90:0
1567	1	145	14:28:53.533	176GL6A	6TMREC	**BPT**	7.68 KBPS PPR BURST TO TAPE Record Mode C	4R3	4	0	6,051,633	00:0
1568	1	145	14:29:44.866	117GL	**CSMOS**	GS	***** GROUP START CSMOS	4R3	4	0	6,051,633	77:0
1569	1	145	14:29:54.200	117GL105A106A4A	7STRP	0.038018,0.03154	Slew =12.01	4R3	4	0	6,051,634	00:0
1570	1	145	14:34:53.533	117GL11A	**CSMOS**	GE	***** GROUP END CSMOS	4R3	4	0	6,051,638	85:0
1571	1	145	14:35:27.533	176GL6B	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,639	45:0
1572	1	145	14:35:29.533	50ZZ6XX	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,639	48:0
1573	1	145	14:35:29.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3296.20 +/- 7	4R3	4	0	6,051,639	48:0
1574	1	145	14:35:30.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3296.32 +/- 7	4R3	4	0	6,051,639	50:1
1575	1	145	14:35:36.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3297.55 +/- 7	4R3	4	0	6,051,639	58:0
1576	1	145	14:35:37.400		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3297.61 +/- 7	4R3	4	0	6,051,639	59:8
1577	1	145	14:35:38.800		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC *3297.49 +/- 7	4R3	4	0	6,051,639	61:9
1578	1	145	14:35:39.533		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3297.32 +/- 7	4R3	4	0	6,051,639	63:0
1579	1	145	14:35:55.533	50ZZ6RD	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,639	87:0
1580	1	145	14:35:55.533		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3293.57 +/- 7	4R3	4	0	6,051,639	87:0
1581	1	145	14:35:56.733		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3293.51 +/- 7	4R3	4	0	6,051,639	88:8
1582	1	145	14:45:06.200	20KA4B	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4R3	4	0	6,051,649	03:0
1583	1	145	14:55:04.200	20UC4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4R3	4	0	6,051,658	81:0
1584	1	145	14:55:54.200	20UC4B	7SLEW	DIS,POS,0.0	Stator movement	4R3	4	0	6,051,659	65:0
1585	1	145	17:42:04.200	488AK6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,051,824	05:0
1586	1	145	18:00:00.200	480SH6A	6MROH	44,23E8,0,A2	read from LLM2A44,23E8,0,A2	4R3	4	0	6,051,841	72:0
1587	1	145	18:06:40.200	480SH6B	6MROH	45,23E8,0,B2	read from LLM2B45,23E8,0,B2	4R3	4	0	6,051,848	35:0
1588	1	145	18:25:35.533	488AK6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,051,867	09:0
1589	1	145	18:40:19.533	488AK6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,051,881	61:0
1590	1	145	19:08:43.533	488AK6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,051,909	69:0
1591	1	145	19:56:01.533	488AK6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,051,956	49:0
1592	1	145	20:03:43.533	488AL6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,051,964	14:0
1593	1	145	20:29:51.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3293.51 +/- 7	4R3	4	0	6,051,990	00:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1594	1	145	20:29:51.533	411JD6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,990	00:0
1595	1	145	20:29:52.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3293.63 +/- 7	4R3	4	0	6,051,990	02:1
1596	1	145	20:29:58.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3294.87 +/- 7	4R3	4	0	6,051,990	10:0
1597	1	145	20:29:59.400		DMS:	: *RUNUP	R7, TRACK *2, *REV, TIC *3294.93 +/- 7	4R3	4	0	6,051,990	11:8
1598	1	145	20:30:00.800		DMS:	: *AT_SPD	R7, TRACK 2, REV, TIC 3294.81 +/- 7	4R3	4	0	6,051,990	13:9
1599	1	145	20:30:00.800		DMS:	**: *RECORD**	R7, TRACK 2, REV, TIC *3294.81 +/- 7	4R3	4	0	6,051,990	13:9
1600	1	145	20:30:01.533	411JD6B	6TMREC	**BDT**	7.68 KBPS BUFFER DUMP TO TAPE Record Mode	4R3	4	0	6,051,990	15:0
1601	1	145	20:32:02.866	411JD6C	6TMREC	**NRC**	NO RECORD Record Mode Change	4R3	4	0	6,051,992	15:0
1602	1	145	20:32:05.533	175TM176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	4R3	4	0	6,051,992	19:0
1603	1	145	20:32:06.200	175TM422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	4R3	4	0	6,051,992	20:0
1604	1	145	20:32:12.866		DMS:	**: *RUNDOWN**	R7, TRACK 2, REV, TIC *3263.85 +/- 7	4R3	4	0	6,051,992	30:0
1605	1	145	20:32:12.866	175TM422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,051,992	30:0
1606	1	145	20:32:14.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3263.79 +/- 7	4R3	4	0	6,051,992	31:8
1607	1	145	20:51:01.533	488AL6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,010	85:0
1608	1	145	22:18:01.533	488AL6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,096	89:0
1609	1	145	23:05:19.533	488AL6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,143	69:0
1610	1	145	23:58:43.533	488AL6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,196	52:0
1611	1	146	00:46:01.533	488AM6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,243	32:0
1612	1	146	00:52:58.200	488AM6B	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,250	20:0
1613	1	146	01:27:00.200	20RM4I	**7MODE**	**INT**	AACS INERTIAL MODE	4R3	4	0	6,052,283	80:0
1614	1	146	01:42:00.200	20RM4K	7SLEW	INIT,POS,17.45	Stator movement	4R3	4	0	6,052,298	65:0
1615	1	146	01:54:00.200	20RM4L	7SLEW	DIS,POS,0.0	Stator movement	4R3	4	0	6,052,310	53:0
1616	1	146	02:01:00.200	20RM4M	7SLEW	INIT,NEG,17.45	Stator movement	4R3	4	0	6,052,317	46:0
1617	1	146	02:13:00.200	20RM4N	7SLEW	DIS,POS,0.0	Stator movement	4R3	4	0	6,052,329	34:0
1618	1	146	02:25:00.200	20RM4AH	**7MODE**	**CRU**	AACS CRUISE MODE	4R3	4	0	6,052,341	22:0
1619	1	146	03:10:00.200	488AM6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,385	68:0
1620	1	146	04:00:00.200	481UB4A	7VECT		Inert vect update UTC	4R3	4	0	6,052,435	18:0
1621	1	146	05:26:55.533	488AM6D	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,052,521	15:0
1622	1	146	07:26:23.533	488AN6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,052,639	29:0
1623	1	146	08:39:52.200	165II4A	7SCAN	NORM,81.778,25.3	Check S/P Position	4R3	4	0	6,052,711	90:0
1624	1	146	08:43:50.866	175II422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,052,715	84:0
1625	1	146	08:43:50.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3263.79 +/- 7	4R3	4	0	6,052,715	84:0
1626	1	146	08:43:52.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3263.91 +/- 7	4R3	4	0	6,052,715	86:1
1627	1	146	08:43:54.200	165II4B	7VECT		Inert vect update UTC	4R3	4	0	6,052,715	89:0
1628	1	146	08:43:57.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3265.15 +/- 7	4R3	4	0	6,052,716	03:0
1629	1	146	08:43:58.733		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *3265.21 +/- 7	4R3	4	0	6,052,716	04:8
1630	1	146	08:44:02.200	175II176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,052,716	10:0
1631	1	146	08:44:02.733		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 3258.91 +/- 7	4R3	4	0	6,052,716	10:8
1632	1	146	08:44:02.733		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *3258.91 +/- 7	4R3	4	0	6,052,716	10:8
1633	1	146	08:44:56.866		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *3068.60 +/- 7	4R3	4	0	6,052,717	01:0
1634	1	146	08:44:56.866	175II422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,052,717	01:0
1635	1	146	08:44:58.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *3067.60 +/- 7	4R3	4	0	6,052,717	02:8
1636	1	146	08:46:52.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 3067.60 +/- 7	4R3	4	0	6,052,718	84:0
1637	1	146	08:46:52.866	175JI422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,052,718	84:0
1638	1	146	08:46:54.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *3067.72 +/- 7	4R3	4	0	6,052,718	86:1
1639	1	146	08:46:59.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *3068.95 +/- 7	4R3	4	0	6,052,719	03:0
1640	1	146	08:47:00.733		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *3069.01 +/- 7	4R3	4	0	6,052,719	04:8
1641	1	146	08:47:04.200	175JI176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,052,719	10:0
1642	1	146	08:47:04.733		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 3062.71 +/- 7	4R3	4	0	6,052,719	10:8
1643	1	146	08:47:04.733		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *3062.71 +/- 7	4R3	4	0	6,052,719	10:8
1644	1	146	08:47:58.866	175JI422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,052,720	01:0
1645	1	146	08:47:58.866		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *2872.40 +/- 7	4R3	4	0	6,052,720	01:0
1646	1	146	08:48:00.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2871.40 +/- 7	4R3	4	0	6,052,720	02:8
1647	1	146	08:49:54.866	175IU422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,052,721	84:0
1648	1	146	08:49:54.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2871.40 +/- 7	4R3	4	0	6,052,721	84:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1649	1	146	08:49:56.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2871.52 +/- 7	4R3	4	0	6,052,721:86:1	
1650	1	146	08:50:01.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2872.75 +/- 7	4R3	4	0	6,052,722:03:0	
1651	1	146	08:50:02.733		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *2872.81 +/- 7	4R3	4	0	6,052,722:04:8	
1652	1	146	08:50:06.200	175IU176A6A	6TMREC	**HIM**	115.2 KBPS SSI + NIMS RECORD Record Mode	4R3	4	0	6,052,722:10:0	
1653	1	146	08:50:06.733		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *2866.51 +/- 7	4R3	4	0	6,052,722:10:8	
1654	1	146	08:50:06.733		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 2866.51 +/- 7	4R3	4	0	6,052,722:10:8	
1655	1	146	08:51:00.866		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *2676.20 +/- 7	4R3	4	0	6,052,723:01:0	
1656	1	146	08:51:00.866	175IU422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,052,723:01:0	
1657	1	146	08:51:02.066		DMS:	: *READY	RDY, TRACK 2, REV, TIC *2675.20 +/- 7	4R3	4	0	6,052,723:02:8	
1658	**1**	**146**	**10:14:54.200**	**432JE6B**	**6RTDS2**	**NIMNCG,AACDSL,RT**	**AACS DESELECT**	**4R3**	**4**	**0**	**6,052,805:89:0**	
1659	1	146	10:16:56.866	431MB6A	6RCSEL	DDSSEL,PLSNCG,EP	Record Select (DDS onl	4R3	4	0	6,052,808:00:0	
1660	1	146	14:38:00.200	488AO6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,066:17:0	
1661	1	146	16:00:18.866	488AO6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,147:54:0	
1662	1	146	16:13:43.533	488AO6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,160:78:0	
1663	1	146	17:01:02.133	488AO6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,207:59:0	
1664	1	146	22:13:00.133	488AP6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,516:17:0	
1665	1	146	22:55:18.800	488AP6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,558:03:0	
1666	1	146	23:53:44.133	488AP6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,615:74:0	
1667	1	147	00:41:02.800	488AP6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,662:55:0	
1668	1	147	05:27:25.466	488AQ6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,053,945:76:0	
1669	1	147	05:33:19.466	488AQ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,053,951:61:0	
1670	1	147	06:41:20.133	488AQ6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,054,018:85:0	
1671	1	147	06:50:02.800	165IO4A	7SCAN	NORM,116.839999,	Check S/P Position	4R3	4	0	6,054,027:50:0	
1672	1	147	06:53:23.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 2675.20 +/- 7	4R3	4	0	6,054,030:78:0	
1673	1	147	06:53:23.466	175IO422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,054,030:78:0	
1674	1	147	06:53:24.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *2675.32 +/- 7	4R3	4	0	6,054,030:80:1	
1675	1	147	06:53:26.133	118IO	**SMOS**	GS		4R3	4	0	6,054,030:82:0	
1676	1	147	06:53:30.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *2676.55 +/- 7	4R3	4	0	6,054,030:88:0	
1677	1	147	06:53:30.800	165IO4B	7VECT		Inert vect update UTC	4R3	4	0	6,054,030:89:0	
1678	1	147	06:53:31.333		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *2676.61 +/- 7	4R3	4	0	6,054,030:89:8	
1679	1	147	06:53:34.800	175IO176A6A	6TMREC	**HMA**	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	6,054,031:04:0	
1680	1	147	06:53:35.333		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 2670.31 +/- 7	4R3	4	0	6,054,031:04:8	
1681	1	147	06:53:35.333		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *2670.31 +/- 7	4R3	4	0	6,054,031:04:8	
1682	1	147	06:53:36.133	118IO110A111A4A	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,031:06:0	
1683	1	147	06:54:06.800	118IO110A111A4B	7STRP	-0.007,0.0,0,0,0	Slew =,3.51	4R3	4	0	6,054,031:52:0	
1684	1	147	06:54:37.466	118IO110A111A4C	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,032:07:0	
1685	1	147	06:55:08.133	118IO110A111A4D	7STRP	-0.007,0.0,0,0,0	Slew =,3.51	4R3	4	0	6,054,032:53:0	
1686	1	147	06:55:38.800	118IO110A111A4E	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,033:08:0	
1687	1	147	06:56:09.466	118IO110A111A4F	7STRP	-0.007,0.0,0,0,0	Slew =,3.51	4R3	4	0	6,054,033:54:0	
1688	1	147	06:56:40.133	118IO110A111A4G	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,034:09:0	
1689	1	147	06:57:10.800	118IO11A	**SMOS**	GE		4R3	4	0	6,054,034:55:0	
1690	1	147	06:57:35.466	175IO422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,054,035:01:0	
1691	1	147	06:57:35.466		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *1826.09 +/- 7	4R3	4	0	6,054,035:01:0	
1692	1	147	06:57:36.666		DMS:	: *READY	RDY, TRACK 2, REV, TIC *1825.09 +/- 8	4R3	4	0	6,054,035:02:8	
1693	1	147	06:58:48.133	488AQ6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,054,036:19:0	
1694	1	147	08:10:56.133	165IP4A	7SCAN	NORM,116.037,22.	Check S/P Position	4R3	4	0	6,054,107:50:0	
1695	1	147	08:14:16.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1825.09 +/- 8	4R3	4	0	6,054,110:78:0	
1696	1	147	08:14:16.800	175IP422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,054,110:78:0	
1697	1	147	08:14:18.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1825.21 +/- 8	4R3	4	0	6,054,110:80:1	
1698	1	147	08:14:19.466	118IP	**SMOS**	GS		4R3	4	0	6,054,110:82:0	
1699	1	147	08:14:23.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1826.45 +/- 8	4R3	4	0	6,054,110:88:0	
1700	1	147	08:14:24.133	165IP4B	7VECT		Inert vect update UTC	4R3	4	0	6,054,110:89:0	
1701	1	147	08:14:24.666		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *1826.51 +/- 8	4R3	4	0	6,054,110:89:8	
1702	1	147	08:14:28.133	175IP176A6A	6TMREC	**HMA**	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	6,054,111:04:0	
1703	1	147	08:14:28.666		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 1820.21 +/- 8	4R3	4	0	6,054,111:04:8	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1704	1	147	08:14:28.666		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *1820.21 +/- 8	4R3	4	0	6,054,111:04:8	
1705	1	147	08:14:29.466	118IP110A111A4A	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,111:06:0	
1706	1	147	08:15:00.133	118IP11A	**SMOS**	GE		4R3	4	0	6,054,111:52:0	
1707	1	147	08:15:26.800		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC *1615.83 +/- 8	4R3	4	0	6,054,112:01:0	
1708	1	147	08:15:26.800	175IP422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,054,112:01:0	
1709	1	147	08:15:28.000		DMS:	: *READY	RDY, TRACK 2, REV, TIC *1614.83 +/- 8	4R3	4	0	6,054,112:02:8	
1710	1	147	08:46:12.133	488AQ6E	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	4R3	4	0	6,054,142:39:0	
1711	1	147	09:30:07.466	488AR6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,054,185:79:0	
1712	1	147	11:43:16.133	165IQ4A	7SCAN	NORM,118.108999,	Check S/P Position	4R3	4	0	6,054,317:50:0	
1713	1	147	11:46:36.800	175IQ422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R3	4	0	6,054,320:78:0	
1714	1	147	11:46:36.800		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 1614.83 +/- 8	4R3	4	0	6,054,320:78:0	
1715	1	147	11:46:38.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *1614.95 +/- 8	4R3	4	0	6,054,320:80:1	
1716	1	147	11:46:39.466	118IQ	**SMOS**	GS		4R3	4	0	6,054,320:82:0	
1717	1	147	11:46:43.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *1616.19 +/- 8	4R3	4	0	6,054,320:88:0	
1718	1	147	11:46:44.133	165IQ4B	7VECT		Inert vect update UTC	4R3	4	0	6,054,320:89:0	
1719	1	147	11:46:44.666		DMS:	: *RUNUP	R115, TRACK *2, *REV, TIC *1616.25 +/- 8	4R3	4	0	6,054,320:89:8	
1720	1	147	11:46:48.133	175IQ176A6A	6TMREC	**HMA**	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	6,054,321:04:0	
1721	1	147	11:46:48.666		DMS:	**: *RECORD**	R115, TRACK 2, REV, TIC *1609.95 +/- 8	4R3	4	0	6,054,321:04:8	
1722	1	147	11:46:48.666		DMS:	: *AT_SPD	R115, TRACK 2, REV, TIC 1609.95 +/- 8	4R3	4	0	6,054,321:04:8	
1723	1	147	11:46:49.466	118IQ110A111A4A	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,321:06:0	
1724	1	147	11:47:50.800	118IQ110A111A4B	7STRP	-0.014001,0.0,0,	Slew =,7.01	4R3	4	0	6,054,322:07:0	
1725	1	147	11:48:21.466	118IQ110A111A4C	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,322:53:0	
1726	1	147	11:49:22.800	118IQ110A111A4D	7STRP	-0.014001,0.0,0,	Slew =,7.01	4R3	4	0	6,054,323:54:0	
1727	1	147	11:49:53.466	118IQ110A111A4E	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,324:09:0	
1728	1	147	11:50:54.800	118IQ110A111A4F	7STRP	-0.014001,0.0,0,	Slew =,7.01	4R3	4	0	6,054,325:10:0	
1729	1	147	11:51:25.466	118IQ110A111A4G	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,325:56:0	
1730	1	147	11:52:26.800	118IQ11A	**SMOS**	GE		4R3	4	0	6,054,326:57:0	
1731	1	147	11:52:50.133	175IQ422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,054,327:01:0	
1732	1	147	11:52:50.133		DMS:	**: *RUNDOWN**	R115, TRACK 2, REV, TIC * 339.17 +/- 8	4R3	4	0	6,054,327:01:0	
1733	1	147	11:52:51.333		DMS:	: *READY	RDY, TRACK 2, REV, TIC * 338.17 +/- 8	4R3	4	0	6,054,327:02:8	
1734	1	147	11:57:52.800	465KI6A	6DMSC	RDY,4	DMS Control Tape stop	4R3	4	0	6,054,332:00:0	
1735	1	147	11:57:52.800		DMS:	: READY	RDY, TRACK *4, REV, TIC 338.17 +/- 8	4R3	4	0	6,054,332:00:0	
1736	1	147	12:02:49.466		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 338.17 +/- 8	4R3	4	0	6,054,336:81:0	
1737	1	147	12:02:49.466		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 338.17 +/- 8	4R3	4	0	6,054,336:81:0	
1738	1	147	12:02:49.466	465KF6A	6DTRN	CMD,6DTRN,465KF6	DMS TRACK TURNAROUND	4R3	4	0	6,054,336:81:0	
1739	1	147	12:02:50.866		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 338.29 +/- 8	4R3	4	0	6,054,336:83:1	
1740	1	147	12:02:56.133		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 339.52 +/- 8	4R3	4	0	6,054,337:00:0	
1741	1	147	12:02:57.333		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 339.58 +/- 8	4R3	4	0	6,054,337:01:8	
1742	1	147	12:02:58.733		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 339.46 +/- 8	4R3	4	0	6,054,337:03:9	
1743	1	147	12:12:54.266		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/- 8	4R3	4	0	6,054,346:78:2	
1744	1	147	12:12:55.466		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/- 8	4R3	4	0	6,054,346:80:0	
1745	1	147	12:12:55.466		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/- 8	4R3	4	0	6,054,346:80:0	
1746	1	147	12:12:56.866		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	4R3	4	0	6,054,346:82:1	
1747	1	147	12:13:08.866		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	4R3	4	0	6,054,347:09:1	
1748	1	147	12:13:10.066		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	4R3	4	0	6,054,347:10:9	
1749	1	147	12:38:19.466		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	4R3	4	0	6,054,372:00:0	
1750	1	147	12:38:19.466		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	4R3	4	0	6,054,372:00:0	
1751	1	147	12:38:19.466	465KG6A	6DMST	250	DMS Slew to TIC	4R3	4	0	6,054,372:00:0	
1752	1	147	12:38:19.466		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	4R3	4	0	6,054,372:00:0	
1753	1	147	12:38:26.133		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	4R3	4	0	6,054,372:10:0	
1754	1	147	12:38:27.533		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	4R3	4	0	6,054,372:12:1	
1755	1	147	12:41:41.600		DMS:	**: *RUNDOWN**	P7, TRACK 1, FWD, TIC * 247.94 +/-	4R3	4	0	6,054,375:30:2	
1756	1	147	12:41:42.800		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 248.00 +/-	4R3	4	0	6,054,375:32:0	
1757	1	147	12:53:29.466	465KH6A	6DMSC	RDY,3	DMS Control Tape stop	4R3	4	0	6,054,387:00:0	
1758	1	147	12:53:29.466		DMS:	: READY	RDY, TRACK *3, FWD, TIC 248.00 +/-	4R3	4	0	6,054,387:00:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1759	1	147	13:04:09.466	165IR4A	7SCAN	NORM,117.408,22.	Check S/P Position	4R3	4	0	6,054,397:50:0	
1760	1	147	13:07:31.466	175IR422A6A	6DMSC	R115,3	DMS Control	4R3	4	0	6,054,400:80:0	
1761	1	147	13:07:31.466		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 248.00 +/-	4R3	4	0	6,054,400:80:0	
1762	1	147	13:07:32.800	118IR	**SMOS**	GS		4R3	4	0	6,054,400:82:0	
1763	1	147	13:07:37.466	165IR4B	7VECT		Inert vect update UTC	4R3	4	0	6,054,400:89:0	
1764	1	147	13:07:38.133		DMS:	: *RUNUP	R115, TRACK *3, FWD, TIC 248.00 +/-	4R3	4	0	6,054,400:90:0	
1765	1	147	13:07:41.466	175IR176A6A	6TMREC	**HMA**	115.2 KBPS IMAGE(1-400)RECORD Record Mode	4R3	4	0	6,054,401:04:0	
1766	1	147	13:07:42.133		DMS:	: *AT_SPD	R115, TRACK 3, FWD, TIC 254.30 +/-	4R3	4	0	6,054,401:05:0	
1767	1	147	13:07:42.133		DMS:	**: *RECORD**	R115, TRACK 3, FWD, TIC * 254.30 +/-	4R3	4	0	6,054,401:05:0	
1768	1	147	13:07:42.800	118IR110A111A4A	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,401:06:0	
1769	1	147	13:08:44.133	118IR110A111A4B	7STRP	-0.014001,0.0,0,	Slew =,7.01	4R3	4	0	6,054,402:07:0	
1770	1	147	13:09:14.800	118IR110A111A4C	7STRP	0.007,0.0,92,0,0	Slew =,3.51	4R3	4	0	6,054,402:53:0	
1771	1	147	13:10:16.133	118IR11A	**SMOS**	GE		4R3	4	0	6,054,403:54:0	
1772	1	147	13:10:41.466		DMS:	**: *RUNDOWN**	R115, TRACK 3, FWD, TIC * 884.77 +/-	4R3	4	0	6,054,404:01:0	
1773	1	147	13:10:41.466	175IR422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,054,404:01:0	
1774	1	147	13:10:42.666		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 885.77 +/-	4R3	4	0	6,054,404:02:8	
1775	1	147	13:12:33.466		DMS:	: *E4-DELAY	RDY, TRACK *1, FWD, TIC 885.77 +/-	4R3	4	0	6,054,405:78:0	
1776	1	147	13:12:33.466	175KA422A6A	6DMSC	R7,3	DMS Control	4R3	4	0	6,054,405:78:0	
1777	1	147	13:12:40.133		DMS:	: *RUNUP	R7, TRACK *3, FWD, TIC 885.77 +/-	4R3	4	0	6,054,405:88:0	
1778	1	147	13:12:41.466	175KA176A6A	6TMREC	**LPW**	7.68 KBPS LOW RATE SCI PWS RECORD Record	4R3	4	0	6,054,405:90:0	
1779	1	147	13:12:41.533		DMS:	: *AT_SPD	R7, TRACK 3, FWD, TIC 885.89 +/-	4R3	4	0	6,054,405:90:1	
1780	1	147	13:12:41.533		DMS:	**: *RECORD**	R7, TRACK 3, FWD, TIC * 885.89 +/-	4R3	4	0	6,054,405:90:1	
1781	1	147	13:12:48.800		DMS:	**: *RUNDOWN**	R7, TRACK 3, FWD, TIC * 887.59 +/-	4R3	4	0	6,054,406:10:0	
1782	1	147	13:12:48.800	175KA422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R3	4	0	6,054,406:10:0	
1783	1	147	13:12:50.000		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 887.65 +/-	4R3	4	0	6,054,406:11:8	
1784	1	147	13:15:06.133	20KB4B	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	4R3	4	0	6,054,408:34:0	
1785	1	147	13:20:04.133	20UD4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	4R3	4	0	6,054,413:26:0	
1786	1	147	13:20:54.133	20UD4B	7SLEW	DIS,POS,0.0	Stator movement	4R3	4	0	6,054,414:10:0	
1787	1	147	13:24:50.133	176UA6A	6TMREC	IPB	INITIATE PLAYBACK (PB CONTROL) Record Mod	4R3	4	0	6,054,418:00:0	
1788	1	147	15:02:59.466	488AR6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,054,515:07:0	
1789	1	147	18:35:18.133	488AS6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,054,725:05:0	
1790	1	147	19:03:44.133	488AS6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,054,753:16:0	
1791	1	147	19:15:55.466	20MJ6A	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,50C2,523	4R3	4	0	6,054,765:21:0	
1792	1	147	19:16:56.133	20MJ6C	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,5234,53F	4R3	4	0	6,054,766:21:0	
1793	1	147	19:17:56.800	20MJ6E	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,53F5,572	4R3	4	0	6,054,767:21:0	
1794	1	147	19:18:57.466	20MJ6G	6MCOPY	HLM1A,E476,B1A1A	HLM1A,E476,B1A1A,5728,5A9	4R3	4	0	6,054,768:21:0	
1795	1	147	19:51:02.800	488AS6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	4R3	4	0	6,054,799:88:0	
1796	**1**	**147**	**22:27:22.800**	**30NNRELOAD01-**		**-----START------**		**4R3**	**4**	**0**	**: :**	
1797	**1**	**147**	**22:27:28.133**	**20FN5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,054,954:61:0**	
1798	**1**	**147**	**22:27:31.466**	**20FN5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,054,954:66:0**	
1799	**1**	**147**	**22:27:34.800**	**20FN6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,054,954:71:0**	
1800	**1**	**147**	**22:27:44.800**	**20FN6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,054,954:86:0**	
1801	**1**	**147**	**22:27:58.800**	**20FN5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,054,955:16:0**	
1802	**1**	**147**	**22:28:02.133**	**20FN5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,054,955:21:0**	
1803	**1**	**147**	**22:28:42.133**	**20FN4A**	**37IST**	**1,2,0,OFF,0,1,0**	**Chopper ON, Sync, Chopper (Ref)Gain State**	**2R0**	**4**	**0**	**6,054,955:81:0**	
1804	1	147	22:29:44.800	127FN	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,054,956:84:0	
1805	**1**	**147**	**22:29:44.800**	**127FN4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**2R3**	**4**	**0**	**6,054,956:84:0**	
1806	**1**	**147**	**22:29:45.466**	**127FN4B**	**37ETB**	**04,C4,35,FF,FF**	**Loads wavelength edit table**	**2R3**	**4**	**0**	**6,054,956:85:0**	
1807	1	147	22:29:53.466	127FN11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R3	4	0	6,054,957:06:0	
1808	**1**	**147**	**22:30:22.800**	**30NNRELOAD01-**		**-----STOP-------**		**2R3**	**4**	**0**	**: :**	
1809	**1**	**147**	**22:34:48.133**	**127FO4A**	**37IOP**	**0,0**	**Safe, Grating Start Position =00**	**2R0**	**4**	**0**	**6,054,961:84:0**	
1810	1	147	22:34:48.133	127FO	NIMSTAB	GS	%%%%% GROUP START TAB	2R0	4	0	6,054,961:84:0	
1811	**1**	**147**	**22:34:48.133**	**30NNCHOPOF01-**		**-----START------**		**2R0**	**4**	**0**	**: :**	
1812	**1**	**147**	**22:34:48.800**	**127FO4B**	**37ETB**	**04,C4,02,00,00**	**Loads wavelength edit table**	**2R0**	**4**	**0**	**6,054,961:85:0**	
1813	1	147	22:34:56.800	127FO11A	NIMSTAB	GE	%%%%% GROUP END TAB	2R0	4	0	6,054,962:06:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
1814	**1**	**147**	**22:37:50.133**	**125FN4A**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**260**	**4**	**0**	**6,054,964:84:0**
1815	1	147	22:37:50.133	125FN	NIMSINIT	GS	##### GROUP START INIT	260	4	0	6,054,964:84:0
1816	**1**	**147**	**22:38:50.800**	**125FN4B**	**37IST**	**1,1,0,OFF,0,0,0**	**Chopper OFF, N/A, 63Hz (Ref)**	**2O0**	**4**	**0**	**6,054,965:84:0**
1817	**1**	**147**	**22:39:51.466**	**125FN4C**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**2O0**	**4**	**0**	**6,054,966:84:0**
1818	**1**	**147**	**22:39:51.466**	**30NNCHOPOF01-**		**-----STOP-------**		**2O0**	**4**	**0**	**: :**
1819	1	147	22:39:51.466	125FN11A	NIMSINIT	GE	##### GROUP END INIT	2O0	4	0	6,054,966:84:0
1820	1	147	23:24:25.466	176UB6A	6TMREC	PPB	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,055,011:00:0
1821	**1**	**147**	**23:30:00.000**	**20A3FB**	**37F2PR**	**CMD,37F2PR,20A3F**	**Shield Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
1822	**1**	**147**	**23:30:00.000**	**20A3FD**	**40HRPR**	**CMD,40HRPR,20A3F**	**RCT Heater OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
1823	**1**	**147**	**23:30:00.000**	**20A3FE**	**40T1PR**	**CMD,40T1PR,20A3F**	**PCT Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
1824	**1**	**147**	**23:30:00.000**	**20A3EY**	**37C1PR**	**CMD,37C1PR,20A3E**	**Optics Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
1825	**1**	**147**	**23:30:00.000**	**20A3FF**	**40T2R**	**CMD,40T2R,20A3FF**	**PCT Heater 2 OFF**	**2O0**	**4**	**0**	**6,055,016:46:8**
1826	**1**	**147**	**23:30:00.000**	**20A3EX**	**37HR**	**CMD,37HR,20A3EX,**	**Replacement Heaters OFF**	**2O0**	**4**	**0**	**6,055,016:46:8**
1827	**1**	**147**	**23:30:00.000**	**20A3EZ**	**37C2PR**	**CMD,37C2PR,20A3E**	**Optics Heater 2 OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
1828	**1**	**147**	**23:30:00.000**	**20A3FA**	**37F1PR**	**CMD,37F1PR,20A3F**	**Radiator Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
1829	**1**	**147**	**23:30:00.000**	**20A3EW**	**37A**	**Final Condition**	**NIMS Power ON**	**2O0**	**4**	**0**	**6,055,016:46:8**
1830	1	147	23:30:00.133		DMS:	FILL,AL2	RDY, TRACK 3, FWD, TIC 887.65 +/-	2O0	4	0	6,055,016:47:0

			Sequence:	C30B-AR		Created: 9/28/01	Begin: 01-147/23:30:00 Finish: 01-216/11:00:00				
Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
1	**1**	**147**	**23:30:00.000**	**20A3EZ**	**37C2PR**	**Initial Condition**	**Optics Heater 2 OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
2	**1**	**147**	**23:30:00.000**	**20A3EW**	**37A**	**Initial Condition**	**NIMS Power ON**	**2O0**	**4**	**0**	**6,055,016:46:8**
3	**1**	**147**	**23:30:00.000**	**20A3EX**	**37HR**	**Initial Condition**	**Replacement Heaters OFF**	**2O0**	**4**	**0**	**6,055,016:46:8**
4	**1**	**147**	**23:30:00.000**	**20A3EY**	**37C1PR**	**Initial Condition**	**Optics Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
5	**1**	**147**	**23:30:00.000**	**20A3FF**	**40T2R**	**Initial Condition**	**PCT Heater 2 OFF**	**2O0**	**4**	**0**	**6,055,016:46:8**
6	**1**	**147**	**23:30:00.000**	**20A3FE**	**40T1PR**	**Initial Condition**	**PCT Heater 1 OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
7	**1**	**147**	**23:30:00.000**	**20A3FD**	**40HRPR**	**Initial Condition**	**RCT Heater OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
8	**1**	**147**	**23:30:00.000**	**20A3FB**	**37F2PR**	**Initial Condition**	**Shield Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
9	**1**	**147**	**23:30:00.000**	**20A3FA**	**37F1PR**	**Initial Condition**	**Radiator Flash Heater OFF (primary relay)**	**2O0**	**4**	**0**	**6,055,016:46:8**
10	1	147	23:30:00.133		DMS:	: READY	RDY, TRACK 3, FWD, TIC 887.65 +/-	2O0	4	0	6,055,016:47:0
11	1	147	23:30:39.466	488AA6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,055,017:15:0
12	1	147	23:32:00.133	488AA6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,055,018:45:0
13	1	147	23:34:04.133	20SG4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,055,020:49:0
14	1	147	23:34:54.133	20SG4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,055,021:33:0
15	1	147	23:36:33.466	176SA6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,055,023:00:0
16	1	147	23:36:36.800	488AA6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,055,023:05:0
17	1	147	23:51:59.466	488AA6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,055,038:24:0
18	1	148	06:00:45.400	431ZL6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	2O0	4	0	6,055,402:89:0
19	1	148	06:00:46.733	432ZL6A	6RTSL1		R/T Select of DDS and	2O0	4	0	6,055,403:00:0
20	1	148	06:04:53.400	20ZM6A	6EUVON			2O0	4	0	6,055,407:06:0
21	1	148	06:05:50.066	431ZM6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	2O0	4	0	6,055,408:00:0
22	1	148	06:07:51.400	176SB6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,055,410:00:0
23	1	148	06:16:19.400	488AB6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,055,418:34:0
24	1	148	06:16:20.066	20SA4B	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,055,418:35:0
25	1	148	06:35:20.066	20SA4D	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,055,437:16:0
26	1	148	07:00:47.400	488AB6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,055,462:32:0
27	1	148	07:00:50.066	20SB6A	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,055,462:36:0
28	1	148	09:22:00.066	20SA4F	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,055,602:01:0
29	1	148	09:54:00.066	20AA4AA	7STAT	10.00,340.73,19.	Stator inertial point	2O0	4	0	6,055,633:60:0
30	1	148	09:54:12.066	20AA6AA	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,055,633:78:0
31	1	148	10:00:00.066	474AA416A4B	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,055,639:54:0
32	1	148	10:02:00.066	474AA416A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,055,641:52:0
33	1	148	10:02:20.066	20AA4AD	7STAT	17.45,340.73,19.	Stator inertial point	2O0	4	0	6,055,641:82:0
34	1	148	10:06:14.066	474AA416A4E	7BURN	LAT,340.73,19.57	ALERT -- Thruster fire	2O0	4	0	6,055,645:69:0
35	1	148	11:13:00.066	20AA4AF	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,055,711:72:0
36	1	148	11:18:52.066	20AA4AG	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,055,717:54:0
37	1	148	11:59:30.066	20SB6B	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,055,757:71:0
38	1	148	11:59:50.066	20SB6C	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,055,758:10:0
39	1	148	12:13:08.066	20AA4AM	7STAT	10.00,340.73,19.	Stator inertial point	2O0	4	0	6,055,771:24:0
40	1	148	12:13:20.066	20AA6AB	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,055,771:42:0
41	1	148	12:19:08.066	20AA4AO	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,055,777:18:0
42	1	148	12:21:08.066	474AA416A4K	7BURN	LAT,340.73,19.57	ALERT -- Thruster fire	2O0	4	0	6,055,779:16:0
43	1	148	13:27:54.066	20AA4AQ	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,055,845:19:0
44	1	148	13:32:46.066	20AA4AR	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,055,850:02:0
45	1	148	14:28:02.066	20AA4AX	7STAT	10.00,340.73,19.	Stator inertial point	2O0	4	0	6,055,904:62:0
46	1	148	14:28:14.066	20AA6AC	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,055,904:80:0
47	1	148	14:34:02.066	20AA4AZ	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,055,910:56:0
48	1	148	14:36:02.066	474AA416A4Q	7BURN	LAT,340.73,19.57	ALERT -- Thruster fire	2O0	4	0	6,055,912:54:0
49	1	148	15:42:28.066	20AA4BB	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,055,978:27:0
50	1	148	15:47:20.066	20AA4BC	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,055,983:10:0
51	1	148	17:06:52.066	20AB4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,056,061:70:0
52	1	148	17:07:42.066	20AB4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,056,062:54:0
53	1	148	17:09:07.400	176AA6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,056,064:00:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
54	1	148	17:32:15.400	488AC6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,056,086:80:0	
55	1	148	17:53:02.066	488AC6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,056,107:39:0	
56	1	148	18:36:15.400	488AC6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,056,150:16:0	
57	1	149	14:35:16.000	488AD6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,057,336:01:0	
58	1	149	17:32:15.333	488AD6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,057,511:05:0	
59	1	149	17:48:00.666	488AD6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,057,526:58:0	
60	1	149	18:29:51.333	488AD6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,057,568:02:0	
61	1	149	20:35:16.000	488AE6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,057,692:05:0	
62	1	149	21:58:47.333	488AE6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,057,774:60:0	
63	1	149	22:46:06.000	488AE6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,057,821:41:0	
64	1	150	00:17:35.333	488AE6D	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,057,911:85:0	
65	1	150	01:18:00.666	488AE6E	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,057,971:63:0	
66	1	150	06:21:16.000	488AF6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,058,271:56:0	
67	1	150	06:48:50.666	488AF6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,058,298:81:0	
68	1	150	08:36:15.333	488AF6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,058,405:11:0	
69	1	150	08:41:03.333	488AF6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,058,409:79:0	
70	1	150	09:12:56.666	488AF6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,058,441:37:0	
71	1	150	15:35:44.666	176SP6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,058,820:00:0	
72	1	150	15:41:20.000	20RL4B	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,058,825:48:0	
73	1	150	16:00:20.000	20RL4D	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,058,844:29:0	
74	1	150	18:47:00.000	20RL4F	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,059,009:14:0	
75	1	150	19:03:00.000	488AG6A	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,024:89:0	
76	1	150	19:05:14.666	488AG6B	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,027:18:0	
77	1	150	20:28:48.666	488AG6C	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,109:77:0	
78	1	150	21:16:06.666	488AG6D	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,156:57:0	
79	1	150	23:52:56.600	488AG6E	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,311:67:0	
80	1	151	00:11:11.266	488AH6A	6TMSED	FILL,AH3	Sci, Eng, and D/L Chan	2O0	4	0	6,059,329:71:0	
81	1	151	01:51:13.266	488AH6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	2O0	4	0	6,059,428:65:0	
82	1	151	02:23:27.266	488AH6C	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,460:54:0	
83	1	151	03:08:48.600	488AH6D	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,505:41:0	
84	1	151	03:56:06.600	488AH6E	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,552:21:0	
85	1	151	05:16:59.266	488AI6A	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,632:20:0	
86	1	151	05:22:39.266	488AI6B	6TMSED	FILL,AH1	Sci, Eng, and D/L Chan	2O0	4	0	6,059,637:75:0	
87	1	151	05:58:55.266	488AI6C	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,673:63:0	
88	1	151	06:10:59.933	488AI6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,059,685:58:0	
89	1	151	06:14:59.933	444SA443A4A	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,059,689:54:0	
90	1	151	06:22:29.266	176SQ6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,059,697:00:0	
91	1	151	13:20:13.933	488AJ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,060,110:14:0	
92	1	151	16:58:07.266	488AJ6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,060,325:59:0	
93	1	151	17:37:59.266	488AJ6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,060,365:07:0	
94	1	151	23:06:13.933	488AK6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,060,689:65:0	
95	1	151	23:48:53.266	488AK6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,060,731:82:0	
96	1	152	01:36:17.266	488AK6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,060,838:11:0	
97	1	152	01:52:59.933	488AK6D	6TMSED	NORM,AH1	Sci, Eng, and D/L Chan	2O0	4	0	6,060,854:59:0	
98	1	152	01:56:23.266	176SE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,060,858:00:0	
99	1	152	02:05:59.933	20RA4C	7STAT	10.00,264.39,-23	Stator inertial point	2O0	4	0	6,060,867:46:0	
100	1	152	02:06:11.933	20RA6D	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,060,867:64:0	
101	1	152	02:25:01.933	490UA412A4B	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,060,886:30:0	
102	1	152	02:29:59.933	490UA412A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,060,891:22:0	
103	1	152	02:30:19.933	20RA4D	7STAT	17.45,264.39,-23	Stator inertial point	2O0	4	0	6,060,891:52:0	
104	1	152	02:34:09.933	490UA412A4E	7VECT		Inert vect update UTC	2O0	4	0	6,060,895:33:0	
105	1	152	02:34:13.933	490UA412A4F	7TURN	2,RTH	ALERT Thruster	2O0	4	0	6,060,895:39:0	
106	1	152	02:38:01.933	490UA412A406A4A	7STAR	1,1307,23.966,-5	Star catalog update	2O0	4	0	6,060,899:17:0	
107	1	152	02:38:03.933	490UA412A406A4B	7STAR	2,333,138.16	Star catalog update	2O0	4	0	6,060,899:20:0	
108	1	152	02:38:05.933	490UA412A406A4C	7STAR	3,477,309.93	Star catalog update	2O0	4	0	6,060,899:23:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
109	1	152	02:38:07.933	490UA412A406A4D	7STAR	4,0,0.0,0.0	Star catalog update	2O0	4	0	6,060,899:26:0	
110	1	152	02:38:09.933	490UA412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update	2O0	4	0	6,060,899:29:0	
111	1	152	02:38:11.933	490UA412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update	2O0	4	0	6,060,899:32:0	
112	1	152	02:48:05.933	20RA4F	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,060,909:13:0	
113	1	152	02:56:09.933	490UA412A4G	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,060,917:11:0	
114	1	152	04:30:03.933	20UA4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,061,009:90:0	
115	1	152	04:30:53.933	20UA4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,061,010:74:0	
116	1	152	04:30:59.933	488AK6E	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,061,010:83:0	
117	1	152	04:32:05.933	176SK6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,061,012:00:0	
118	1	152	04:37:57.933	488AL6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,061,017:73:0	
119	1	152	05:20:31.266	488AL6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,061,059:81:0	
120	1	152	14:20:12.533	488AM6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,061,593:59:0	
121	1	152	16:21:51.200	488AM6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,061,713:87:0	
122	1	153	04:57:57.200	488AN6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,062,461:68:0	
123	1	154	00:51:12.466	488AO6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,063,641:81:0	
124	1	154	01:33:55.133	488AO6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,063,684:12:0	
125	1	154	03:21:19.133	488AO6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,063,790:32:0	
126	1	154	04:12:55.800	488AO6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,063,841:36:0	
127	1	154	08:16:19.133	488AP6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,064,082:10:0	
128	1	154	09:56:18.466	176UW6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,064,181:00:0	
129	1	154	10:01:59.800	20US4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,064,186:57:0	
130	1	154	10:02:59.800	20US4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	2O0	4	0	6,064,187:56:0	
131	1	154	10:04:59.800	20US4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,064,189:54:0	
132	1	154	10:10:29.800	20US4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	2O0	4	0	6,064,195:03:0	
133	1	154	10:10:30.466	20US4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	2O0	4	0	6,064,195:04:0	
134	1	154	10:10:50.466	20US4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	2O0	4	0	6,064,195:34:0	
135	1	154	10:10:51.133	20US4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	2O0	4	0	6,064,195:35:0	
136	1	154	10:11:11.133	20US4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	2O0	4	0	6,064,195:65:0	
137	1	154	10:11:11.800	20US4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	2O0	4	0	6,064,195:66:0	
138	1	154	10:11:21.800	20US4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	2O0	4	0	6,064,195:81:0	
139	1	154	10:11:22.466	20US4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	2O0	4	0	6,064,195:82:0	
140	1	154	10:11:32.466	20US4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	2O0	4	0	6,064,196:06:0	
141	1	154	10:11:33.133	20US4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	2O0	4	0	6,064,196:07:0	
142	1	154	10:13:19.800	20US4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	2O0	4	0	6,064,197:76:0	
143	1	154	10:13:20.466	20US4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	2O0	4	0	6,064,197:77:0	
144	1	154	10:13:40.466	20US4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	2O0	4	0	6,064,198:16:0	
145	1	154	10:13:41.133	20US4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	2O0	4	0	6,064,198:17:0	
146	1	154	10:14:01.133	20US4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	2O0	4	0	6,064,198:47:0	
147	1	154	10:14:01.800	20US4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	2O0	4	0	6,064,198:48:0	
148	1	154	10:14:11.800	20US4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	2O0	4	0	6,064,198:63:0	
149	1	154	10:14:12.466	20US4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	2O0	4	0	6,064,198:64:0	
150	1	154	10:14:22.466	20US4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	2O0	4	0	6,064,198:79:0	
151	1	154	10:14:23.133	20US4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	2O0	4	0	6,064,198:80:0	
152	1	154	10:15:19.800	20US4Z	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,064,199:74:0	
153	1	154	10:40:03.800	20UW4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,064,224:25:0	
154	1	154	10:40:53.800	20UW4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,064,225:09:0	
155	1	154	10:42:49.133	176UX6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,064,227:00:0	
156	1	154	17:17:55.800	488AQ6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,064,617:70:0	
157	1	154	19:21:12.466	488AQ6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,064,739:63:0	
158	1	154	21:57:13.800	176TE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,064,894:00:0	
159	1	154	21:59:15.133		DMS:	: *SLEW-TIC	P7, TRACK *1, FWD, TIC 887.65 +/-	2O0	4	0	6,064,896:00:0	
160	1	154	21:59:15.133		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 887.65 +/-	2O0	4	0	6,064,896:00:0	
161	1	154	21:59:15.133	465SZ6A	6DMST	3114	DMS Slew to TIC	2O0	4	0	6,064,896:00:0	
162	1	154	21:59:21.800		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 887.65 +/-	2O0	4	0	6,064,896:10:0	
163	1	154	21:59:23.200		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 887.77 +/-	2O0	4	0	6,064,896:12:1	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
164	1	155	00:37:31.933		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *3111.94 +/-	2O0	4	0	6,065,052:49:2	
165	1	155	00:37:33.133		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *3112.00 +/-	2O0	4	0	6,065,052:51:0	
166	1	155	00:47:55.133	488AR6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,065,062:74:0	
167	1	155	10:45:42.400	488AS6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,065,654:03:0	
168	1	155	10:45:59.733	488AS6B	6TMSED	NORM,AH1	Sci, Eng, and D/L Chan	2O0	4	0	6,065,654:29:0	
169	1	174	10:40:26.200	488AT6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,092,708:16:0	
170	1	174	10:43:04.200	20UR4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,092,710:71:0	
171	1	174	10:43:54.200	20UR4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,092,711:55:0	
172	1	174	10:45:18.866	176SU6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,092,713:00:0	
173	1	174	15:56:44.200	176TA6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,093,021:00:0	
174	1	174	16:02:48.200		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 3112.00 +/-	2O0	4	0	6,093,027:00:0	
175	1	174	16:02:48.200		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 3112.00 +/-	2O0	4	0	6,093,027:00:0	
176	1	174	16:02:48.200	465WK6A	6DMST	5000	DMS Slew to TIC	2O0	4	0	6,093,027:00:0	
177	1	174	16:02:54.866		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 3112.00 +/-	2O0	4	0	6,093,027:10:0	
178	1	174	16:02:56.266		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC *3112.12 +/-	2O0	4	0	6,093,027:12:1	
179	1	174	18:17:01.666		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *4997.94 +/-	2O0	4	0	6,093,159:68:2	
180	1	174	18:17:02.866		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4998.00 +/-	2O0	4	0	6,093,159:70:0	
181	1	174	19:21:08.200	488AU6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,093,223:14:0	
182	1	174	21:56:29.533		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 4998.00 +/-	2O0	4	0	6,093,376:73:0	
183	1	174	21:56:29.533	465WL6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	2O0	4	0	6,093,376:73:0	
184	1	174	21:56:30.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4998.12 +/-	2O0	4	0	6,093,376:75:1	
185	1	174	21:56:36.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4999.35 +/-	2O0	4	0	6,093,376:83:0	
186	1	174	21:56:37.400		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *4999.41 +/-	2O0	4	0	6,093,376:84:8	
187	1	174	21:56:41.266		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 4993.91 +/-	2O0	4	0	6,093,376:90:6	
188	1	174	21:56:41.266		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *4993.91 +/-	2O0	4	0	6,093,376:90:6	
189	1	174	22:22:21.533		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 255.79 +/-	2O0	4	0	6,093,402:35:0	
190	1	174	22:22:21.533	465WL6B	6DMSC	RDY,4	DMS Control Tape stop	2O0	4	0	6,093,402:35:0	
191	1	174	22:22:22.733		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 254.99 +/-	2O0	4	0	6,093,402:36:8	
192	1	175	00:04:46.200	488AU6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,093,503:61:0	
193	1	175	00:21:10.200	465WM6A	6DTRN	CMD,6DTRN,465WM6	DMS TRACK TURNAROUND	2O0	4	0	6,093,519:81:0	
194	1	175	00:21:10.200		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 254.99 +/-	2O0	4	0	6,093,519:81:0	
195	1	175	00:21:10.200		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 254.99 +/-	2O0	4	0	6,093,519:81:0	
196	1	175	00:21:11.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 255.11 +/-	2O0	4	0	6,093,519:83:1	
197	1	175	00:21:16.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 256.34 +/-	2O0	4	0	6,093,520:00:0	
198	1	175	00:21:18.066		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 256.40 +/-	2O0	4	0	6,093,520:01:8	
199	1	175	00:21:19.466		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 256.28 +/-	2O0	4	0	6,093,520:03:9	
200	1	175	00:25:09.533	488AU6C	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,093,523:76:0	
201	1	175	00:25:20.133		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	2O0	4	0	6,093,524:00:9	
202	1	175	00:25:21.333		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	2O0	4	0	6,093,524:02:7	
203	1	175	00:25:21.333		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	2O0	4	0	6,093,524:02:7	
204	1	175	00:25:22.733		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	2O0	4	0	6,093,524:04:8	
205	1	175	00:25:34.733		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	2O0	4	0	6,093,524:22:8	
206	1	175	00:25:35.933		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	2O0	4	0	6,093,524:24:6	
207	1	175	00:31:12.866		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	6,093,529:75:0	
208	1	175	00:31:12.866	465WN6A	6DMSC	P100,1	DMS Control Tape P/B 100.8kbps	2O0	4	0	6,093,529:75:0	
209	1	175	00:31:19.533		DMS:	: *RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	2O0	4	0	6,093,529:85:0	
210	1	175	00:31:23.400		DMS:	: *AT_SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	2O0	4	0	6,093,529:90:8	
211	1	175	00:31:23.400		DMS:	: *P_SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	2O0	4	0	6,093,529:90:8	
212	1	175	01:03:06.866	465WN6B	6DMSC	RDY,1	DMS Control Tape stop	2O0	4	0	6,093,561:34:0	
213	1	175	01:03:06.866		DMS:	: *RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	2O0	4	0	6,093,561:34:0	
214	1	175	01:03:08.066		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	2O0	4	0	6,093,561:35:8	
215	1	175	01:18:42.866	465WO6A	6DMSC	P100,2	DMS Control Tape P/B 100.8kbps	2O0	4	0	6,093,576:73:0	
216	1	175	01:18:42.866		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	2O0	4	0	6,093,576:73:0	
217	1	175	01:18:44.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	2O0	4	0	6,093,576:75:1	
218	1	175	01:18:49.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	2O0	4	0	6,093,576:83:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM MF I
219	1	175	01:18:50.733		DMS:	: *RUNUP	P100, TRACK *2, *REV, TIC *6065.23 +/-	2O0	4	0	6,093,576:84:8
220	1	175	01:18:54.600		DMS:	: *P_SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	2O0	4	0	6,093,576:90:6
221	1	175	01:18:54.600		DMS:	: *AT_SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	2O0	4	0	6,093,576:90:6
222	1	175	01:50:50.800	465WP6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	2O0	4	0	6,093,608:53:0
223	1	175	01:50:50.800		DMS:	: *RUNDOWN	P100, TRACK 2, REV, TIC * 165.17 +/-	2O0	4	0	6,093,608:53:0
224	1	175	01:50:52.000		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 164.37 +/-	2O0	4	0	6,093,608:54:8
225	1	175	01:50:55.866		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 169.87 +/-	2O0	4	0	6,093,608:60:6
226	1	175	01:50:55.866		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 169.87 +/-	2O0	4	0	6,093,608:60:6
227	1	175	02:02:06.133	488AV6A	6TMSED	NORM,AH1	Sci, Eng, and D/L Chan	2O0	4	0	6,093,619:65:0
228	1	175	02:22:51.466	465WP6B	6DMSC	RDY,3	DMS Control Tape stop	2O0	4	0	6,093,640:22:0
229	1	175	02:22:51.466		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC *6062.58 +/-	2O0	4	0	6,093,640:22:0
230	1	175	02:22:52.666		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *6063.38 +/-	2O0	4	0	6,093,640:23:8
231	1	175	02:37:34.800	465WQ6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	2O0	4	0	6,093,654:73:0
232	1	175	02:37:34.800		DMS:	: *US-RUNUP	P7, TRACK *1, FWD, TIC 6063.38 +/-	2O0	4	0	6,093,654:73:0
233	1	175	02:37:36.200		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.50 +/-	2O0	4	0	6,093,654:75:1
234	1	175	02:37:41.466		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6064.74 +/-	2O0	4	0	6,093,654:83:0
235	1	175	02:37:42.666		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *6064.80 +/-	2O0	4	0	6,093,654:84:8
236	1	175	02:37:46.533		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 6059.30 +/-	2O0	4	0	6,093,654:90:6
237	1	175	02:37:46.533		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *6059.30 +/-	2O0	4	0	6,093,654:90:6
238	1	175	03:09:42.133		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 166.58 +/-	2O0	4	0	6,093,686:52:0
239	1	175	03:09:42.133	465WR6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	2O0	4	0	6,093,686:52:0
240	1	175	03:09:43.333		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 165.78 +/-	2O0	4	0	6,093,686:53:8
241	1	175	03:09:47.200		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 171.28 +/-	2O0	4	0	6,093,686:59:6
242	1	175	03:09:47.200		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 171.28 +/-	2O0	4	0	6,093,686:59:6
243	1	175	03:10:48.133	465WR6B	6DMSC	RDY,3	DMS Control Tape stop	2O0	4	0	6,093,687:60:0
244	1	175	03:10:48.133		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC * 358.72 +/-	2O0	4	0	6,093,687:60:0
245	1	175	03:10:49.333		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 359.52 +/-	2O0	4	0	6,093,687:61:8
246	1	175	03:11:59.466	488AV6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,093,688:76:0
247	1	175	03:25:18.133	465WS6A	6DMSC	RDY,4	DMS Control Tape stop	2O0	4	0	6,093,702:00:0
248	1	175	03:25:18.133		DMS:	: READY	RDY, TRACK *4, *REV, TIC 359.52 +/-	2O0	4	0	6,093,702:00:0
249	1	175	03:26:12.133	465WT6A	6DTRN	CMD,6DTRN,465WT6	DMS TRACK TURNAROUND	2O0	4	0	6,093,702:81:0
250	1	175	03:26:12.133		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 359.52 +/-	2O0	4	0	6,093,702:81:0
251	1	175	03:26:12.133		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 359.52 +/-	2O0	4	0	6,093,702:81:0
252	1	175	03:26:13.533		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 359.64 +/-	2O0	4	0	6,093,702:83:1
253	1	175	03:26:18.800		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 360.88 +/-	2O0	4	0	6,093,703:00:0
254	1	175	03:26:20.000		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 360.94 +/-	2O0	4	0	6,093,703:01:8
255	1	175	03:26:21.400		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 360.82 +/-	2O0	4	0	6,093,703:03:9
256	1	175	03:37:48.066		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	2O0	4	0	6,093,714:32:9
257	1	175	03:37:49.266		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	2O0	4	0	6,093,714:34:7
258	1	175	03:37:49.266		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	2O0	4	0	6,093,714:34:7
259	1	175	03:37:50.666		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	2O0	4	0	6,093,714:36:8
260	1	175	03:38:02.666		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	2O0	4	0	6,093,714:54:8
261	1	175	03:38:03.866		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	2O0	4	0	6,093,714:56:6
262	1	175	03:52:52.133	488AV6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,093,729:24:0
263	1	175	03:53:04.133	20UJ4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,093,729:42:0
264	1	175	03:53:54.133	20UJ4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,093,730:26:0
265	1	175	03:55:38.133	176SD6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,093,732:00:0
266	1	175	04:35:42.133	488AV6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,093,771:57:0
267	1	175	19:05:06.800	488AW6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,094,631:44:0
268	1	175	21:56:46.133	488AW6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,094,801:23:0
269	1	175	23:57:52.133	488AW6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,094,921:02:0
270	1	176	04:46:09.466	488AX6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,095,206:13:0
271	1	176	12:07:52.733	488AY6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,095,643:01:0
272	1	177	11:21:10.066	488AZ6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,097,020:90:0
273	1	177	12:03:58.066	488AZ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,097,063:29:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
274	1	177	12:56:13.400	176UP6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,097,115:00:0	
275	1	177	13:02:00.066	20UE4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,097,120:65:0	
276	1	177	13:03:00.066	20UE4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	2O0	4	0	6,097,121:64:0	
277	1	177	13:05:00.066	20UE4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,097,123:62:0	
278	1	177	13:10:30.066	20UE4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	2O0	4	0	6,097,129:11:0	
279	1	177	13:10:30.733	20UE4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	2O0	4	0	6,097,129:12:0	
280	1	177	13:10:50.733	20UE4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	2O0	4	0	6,097,129:42:0	
281	1	177	13:10:51.400	20UE4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	2O0	4	0	6,097,129:43:0	
282	1	177	13:11:11.400	20UE4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	2O0	4	0	6,097,129:73:0	
283	1	177	13:11:12.066	20UE4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	2O0	4	0	6,097,129:74:0	
284	1	177	13:11:22.066	20UE4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	2O0	4	0	6,097,129:89:0	
285	1	177	13:11:22.733	20UE4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	2O0	4	0	6,097,129:90:0	
286	1	177	13:11:32.733	20UE4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	2O0	4	0	6,097,130:14:0	
287	1	177	13:11:33.400	20UE4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	2O0	4	0	6,097,130:15:0	
288	1	177	13:13:20.066	20UE4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	2O0	4	0	6,097,131:84:0	
289	1	177	13:13:20.733	20UE4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	2O0	4	0	6,097,131:85:0	
290	1	177	13:13:40.733	20UE4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	2O0	4	0	6,097,132:24:0	
291	1	177	13:13:41.400	20UE4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	2O0	4	0	6,097,132:25:0	
292	1	177	13:14:01.400	20UE4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	2O0	4	0	6,097,132:55:0	
293	1	177	13:14:02.066	20UE4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	2O0	4	0	6,097,132:56:0	
294	1	177	13:14:12.066	20UE4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	2O0	4	0	6,097,132:71:0	
295	1	177	13:14:12.733	20UE4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	2O0	4	0	6,097,132:72:0	
296	1	177	13:14:22.733	20UE4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	2O0	4	0	6,097,132:87:0	
297	1	177	13:14:23.400	20UE4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	2O0	4	0	6,097,132:88:0	
298	1	177	13:15:20.066	20UE4Z	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,097,133:82:0	
299	1	177	13:40:04.066	20UF4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,097,158:33:0	
300	1	177	13:40:54.066	20UF4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,097,159:17:0	
301	1	177	13:42:44.066	176US6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,097,161:00:0	
302	1	177	13:51:22.066	488AZ6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,097,169:49:0	
303	1	177	16:37:54.066	488AZ6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,097,334:22:0	
304	1	177	17:21:34.066	488BA6A	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,097,377:39:0	
305	1	177	19:26:08.733	488BA6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,097,500:58:0	
306	1	177	22:03:10.000	488BA6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,097,655:85:0	
307	1	178	00:06:54.000	488BB6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,097,778:28:0	
308	1	178	02:42:38.000	488BB6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,097,932:30:0	
309	1	178	03:47:50.666	488BB6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,097,996:75:0	
310	1	178	04:05:50.000	488BB6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,098,014:56:0	
311	1	178	18:56:09.333	488BC6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,098,895:14:0	
312	1	178	22:18:06.000	488BC6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,099,094:80:0	
313	1	178	23:57:51.333	488BC6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,099,193:49:0	
314	1	179	00:35:10.000	488BC6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,099,230:40:0	
315	1	179	01:58:53.333	488BD6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,099,313:22:0	
316	1	179	02:46:12.000	488BD6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,099,360:03:0	
317	1	179	03:01:50.000	488BD6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,099,375:45:0	
318	1	179	03:37:54.666	488BD6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,099,411:16:0	
319	1	179	04:20:46.000	488BD6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,099,453:51:0	
320	1	180	21:15:11.866	488BE6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,101,881:02:0	
321	1	180	21:54:37.866	488BE6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,101,920:02:0	
322	1	181	02:57:33.866	488BE6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,102,219:57:0	
323	1	181	04:03:41.866	488BF6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,102,285:03:0	
324	1	181	04:39:57.866	488BF6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,102,320:82:0	
325	1	181	06:41:33.866	488BF6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,102,441:15:0	
326	1	181	14:33:01.866	488BG6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,102,907:41:0	
327	1	181	16:27:26.533	488BG6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,103,020:55:0	
328	1	181	16:36:45.866	488BG6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,103,029:75:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
329	1	181	17:13:01.866	488BG6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,103,065:63:0	
330	1	181	19:20:12.533	488BG6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,103,191:43:0	
331	1	181	20:43:49.200	488BH6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,103,274:15:0	
332	1	181	21:31:07.866	488BH6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,103,320:87:0	
333	1	181	23:43:25.866	488BH6C	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,103,451:73:0	
334	1	181	23:43:26.533	488BH6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,103,451:74:0	
335	1	182	00:26:05.866	488BH6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,103,494:00:0	
336	1	182	08:31:13.800	488BI6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,103,973:73:0	
337	1	182	14:33:01.800	488BJ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,104,331:57:0	
338	1	182	15:47:55.133	488BJ6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,104,405:63:0	
339	1	182	20:45:13.800	488BK6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,104,699:67:0	
340	1	182	21:50:21.800	488BK6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,104,764:14:0	
341	1	183	02:53:17.800	488BL6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,063:69:0	
342	1	183	04:01:33.800	488BL6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,105,131:25:0	
343	1	183	05:35:25.800	488BL6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,224:10:0	
344	1	183	05:43:48.466	488BL6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,232:36:0	
345	1	183	06:31:07.133	488BL6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,279:17:0	
346	1	183	12:07:59.800	488BM6A	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,612:33:0	
347	1	183	12:11:40.466	176UQ6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,105,616:00:0	
348	1	183	12:20:59.800	20RB4C	7STAT	10.00,268.58,-23	Stator inertial point	2O0	4	0	6,105,625:20:0	
349	1	183	12:21:11.800	20RB6D	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	2O0	4	0	6,105,625:38:0	
350	1	183	12:40:01.800	490UB412A4B	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,105,644:04:0	
351	1	183	12:44:59.800	490UB412A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,105,648:87:0	
352	1	183	12:45:19.800	20RB4D	7STAT	17.45,268.58,-23	Stator inertial point	2O0	4	0	6,105,649:26:0	
353	1	183	12:49:09.800	490UB412A4E	7VECT		Inert vect update UTC	2O0	4	0	6,105,653:07:0	
354	1	183	12:49:13.800	490UB412A4F	7TURN	2,RTH	ALERT Thruster	2O0	4	0	6,105,653:13:0	
355	1	183	12:53:01.800	490UB412A406A4A	7STAR	1,1307,23.966,-5	Star catalog update	2O0	4	0	6,105,656:82:0	
356	1	183	12:53:03.800	490UB412A406A4B	7STAR	2,333,138.16	Star catalog update	2O0	4	0	6,105,656:85:0	
357	1	183	12:53:05.800	490UB412A406A4C	7STAR	3,110,186.82	Star catalog update	2O0	4	0	6,105,656:88:0	
358	1	183	12:53:07.800	490UB412A406A4D	7STAR	4,477,309.93	Star catalog update	2O0	4	0	6,105,657:00:0	
359	1	183	12:53:09.800	490UB412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update	2O0	4	0	6,105,657:03:0	
360	1	183	12:53:11.800	490UB412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update	2O0	4	0	6,105,657:06:0	
361	1	183	13:03:05.800	20RB4F	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,105,666:78:0	
362	1	183	13:11:09.800	490UB412A4G	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,105,674:76:0	
363	1	183	14:45:03.733	20UH4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,105,767:64:0	
364	1	183	14:45:53.733	20UH4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,105,768:48:0	
365	1	183	14:45:59.733	488BM6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,768:57:0	
366	1	183	14:47:23.066	176UB6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,105,770:00:0	
367	1	183	15:29:03.733	488BM6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,105,811:20:0	
368	1	183	15:32:45.733	488BM6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,105,814:80:0	
369	1	183	16:09:01.733	488BM6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,105,850:68:0	
370	1	184	09:01:16.400	488BN6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,106,851:79:0	
371	1	184	12:39:12.400	488BN6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,107,067:37:0	
372	1	184	19:01:16.400	488BO6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,107,445:25:0	
373	1	184	22:37:17.733	488BO6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,107,658:84:0	
374	1	184	22:52:58.400	488BO6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,107,674:39:0	
375	1	184	23:11:25.733	488BO6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,107,692:62:0	
376	1	185	20:26:18.333	488BP6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,108,953:50:0	
377	1	185	22:43:41.666	488BP6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,089:39:0	
378	1	185	23:13:00.333	488BP6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,118:38:0	
379	1	185	23:40:19.000	488BP6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,145:39:0	
380	1	186	01:33:44.333	488BP6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,257:55:0	
381	1	186	02:21:03.000	488BQ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,304:36:0	
382	1	186	03:03:57.666	488BQ6B	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,109,346:76:0	
383	1	186	04:25:01.666	488BQ6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,427:01:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
384	1	186	05:18:43.666	488BQ6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,480:11:0	
385	1	186	06:06:01.666	488BQ6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,109,526:82:0	
386	1	186	06:20:13.666	488BR6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,109,540:86:0	
387	1	186	08:09:15.666	488BR6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,109,648:71:0	
388	1	186	08:19:41.666	488BR6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,109,659:09:0	
389	1	186	22:40:00.266	488BS6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,110,509:87:0	
390	1	186	22:53:00.266	488BS6B	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	2O0	4	0	6,110,522:74:0	
391	1	186	22:56:13.600	176UE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,110,526:00:0	
392	1	186	23:23:30.266	20SP4I	**7MODE**	**INT**	AACS INERTIAL MODE	2O0	4	0	6,110,552:89:0	
393	1	186	23:38:30.266	20SP4K	7SLEW	INIT,POS,17.45	Stator movement	2O0	4	0	6,110,567:74:0	
394	1	186	23:50:30.266	20SP4L	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,110,579:62:0	
395	1	186	23:57:30.266	20SP4M	7SLEW	INIT,NEG,17.45	Stator movement	2O0	4	0	6,110,586:55:0	
396	1	187	00:09:30.266	20SP4N	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,110,598:43:0	
397	1	187	00:16:30.266	20SP4O	7SLEW	INIT,POS,4.36	Stator movement	2O0	4	0	6,110,605:36:0	
398	1	187	00:28:30.266	20SP4P	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,110,617:24:0	
399	1	187	00:35:30.266	20SP4Q	7SLEW	INIT,NEG,4.36	Stator movement	2O0	4	0	6,110,624:17:0	
400	1	187	00:47:30.266	20SP4R	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,110,636:05:0	
401	1	187	00:59:30.266	20SP4AH	**7MODE**	**CRU**	AACS CRUISE MODE	2O0	4	0	6,110,647:84:0	
402	1	187	01:15:00.266	488BS6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,110,663:23:0	
403	1	187	01:15:04.266	20UP4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,110,663:29:0	
404	1	187	01:15:54.266	20UP4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,110,664:13:0	
405	1	187	01:17:46.933	176UF6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,110,666:00:0	
406	1	187	01:42:53.600	488BS6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,110,690:76:0	
407	1	187	03:00:22.933	488BS6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,110,767:43:0	
408	1	187	03:03:57.600	488BT6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,110,771:01:0	
409	1	187	03:18:53.600	488BT6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,110,785:71:0	
410	1	187	22:30:01.533	488BU6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,111,924:24:0	
411	1	188	01:53:33.533	488BU6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,112,125:51:0	
412	1	188	02:55:14.866	488BU6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,112,186:52:0	
413	1	188	03:03:57.533	488BU6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,112,195:17:0	
414	1	188	04:36:24.200	488BV6A	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,112,286:56:0	
415	1	188	04:46:21.533	488BV6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,112,296:42:0	
416	1	188	05:43:40.200	488BV6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,112,353:13:0	
417	1	188	06:30:58.866	488BV6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,112,399:85:0	
418	1	188	12:33:04.200	488BW6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,112,758:04:0	
419	1	188	12:50:37.533	488BW6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,112,775:37:0	
420	1	188	22:10:03.533	488BX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,113,328:63:0	
421	1	189	01:57:49.533	488BX6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,113,553:87:0	
422	1	189	03:03:57.533	488BX6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,113,619:33:0	
423	1	189	03:38:05.533	488BX6D	6TMSED	NORM,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,113,653:11:0	
424	1	189	04:14:21.533	488BY6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,113,688:90:0	
425	1	189	05:46:05.533	488BY6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,113,779:65:0	
426	1	189	14:43:41.466	488BZ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,114,311:37:0	
427	1	189	16:15:50.133	488BZ6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,114,402:49:0	
428	1	189	16:23:57.466	488BZ6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	2O0	4	0	6,114,410:52:0	
429	1	189	17:00:13.466	488BZ6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,114,446:40:0	
430	1	189	21:46:25.466	488CA6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,114,729:45:0	
431	1	189	22:30:53.466	488CA6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,114,773:43:0	
432	1	189	23:21:56.133	488CA6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,114,823:87:0	
433	1	189	23:55:35.466	488CA6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,114,857:22:0	
434	1	190	01:27:57.466	488CA6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,114,948:54:0	
435	1	190	01:29:21.466	488CB6A	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,114,949:89:0	
436	1	190	01:40:45.466	488CB6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,114,961:23:0	
437	1	190	12:40:06.133	488CC6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,115,613:32:0	
438	1	190	15:43:25.466	488CC6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,115,794:60:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
439	1	190	16:14:55.400	488CC6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,115,825:74:0	
440	1	190	16:17:33.400	488CC6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,115,828:38:0	
441	1	190	16:32:29.400	488CC6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,115,843:17:0	
442	1	191	06:30:07.400	488CD6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	2O0	4	0	6,116,671:56:0	
443	**1**	**191**	**07:26:07.400**	**30NNRCTRLT01-**		**-----START------**		**2O0**	**4**	**0**	**: :**	
444	1	191	07:26:07.400	176XU6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	2O0	4	0	6,116,727:00:0	
445	1	191	07:29:13.400	20XE4A	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	2O0	4	0	6,116,730:06:0	
446	1	191	07:33:20.066	20DA4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	2O0	4	0	6,116,734:12:0	
447	1	191	07:34:10.066	20DA4B	7SLEW	DIS,POS,0.0	Stator movement	2O0	4	0	6,116,734:87:0	
448	1	191	07:36:14.066	176XV6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	2O0	4	0	6,116,737:00:0	
449	**1**	**191**	**07:37:14.733**	**185XE10A3A**	**40HRP**	**1**	**RCT Heater ON (primary relay)**	**2O0**	**4**	**0**	**6,116,738:00:0**	
450	**1**	**191**	**07:37:20.066**	**185XE10B3A**	**40HRP**	**2**	**RCT Heater ON (primary relay)**	**2O0**	**4**	**0**	**6,116,738:08:0**	
451	1	191	15:43:25.400	488CE6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,117,218:76:0	
452	1	191	16:10:12.733	488CE6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,117,245:30:0	
453	1	191	16:13:17.400	488CE6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	2O0	4	0	6,117,248:34:0	
454	1	191	16:28:13.400	488CE6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	2O0	4	0	6,117,263:13:0	
455	**1**	**191**	**19:28:49.400**	**20DC5A**	**37PL**		**Program Load (halts microprocessor & unwri**		**4**	**0**	**6,117,441:69:0**	
456	**1**	**191**	**19:28:56.733**	**20DC5B**	**37MRL**		**Memory Realocate (software operates from R**		**4**	**0**	**6,117,441:80:0**	
457	**1**	**191**	**19:29:04.733**	**20DC6A**	**6MCOPY**	**NIMS**	**NIMS,1000,LLM1A,7300,77F7**		**4**	**0**	**6,117,442:01:0**	
458	**1**	**191**	**19:29:14.733**	**20DC6B**	**6MCOPY**	**NIMS**	**NIMS,1598,LLM1A,77F8,781D**		**4**	**0**	**6,117,442:16:0**	
459	**1**	**191**	**19:29:24.733**	**20DC5C**	**37IRT**		**Instrument Reset (goes into POR state)**		**4**	**0**	**6,117,442:31:0**	
460	**1**	**191**	**19:29:26.066**	**20DC5D**	**37MN**		**Memory Normal (software operates from ROM)**	**260**	**4**	**0**	**6,117,442:33:0**	
461	**1**	**191**	**19:32:01.400**	**125XE4A**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**260**	**4**	**0**	**6,117,444:84:0**	
462	1	191	19:32:01.400	125XE	NIMSINIT	GS	##### GROUP START INIT	260	4	0	6,117,444:84:0	
463	**1**	**191**	**19:33:02.066**	**125XE4B**	**37IST**	**1,2,0,OFF,0,0,0**	**Chopper ON, Sync, Chopper (Ref)**	**2R0**	**4**	**0**	**6,117,445:84:0**	
464	**1**	**191**	**19:34:02.733**	**125XE4C**	**37IST**	**0,2,0,OFF,0,1,3**	**Gain State 1**	**1R0**	**4**	**0**	**6,117,446:84:0**	
465	**1**	**191**	**19:35:03.400**	**125XE4D**	**37MB**	**1B,1B,0,0,0,0**	**Selects mirror (spatial) edit table**	**1R0**	**4**	**0**	**6,117,447:84:0**	
466	1	191	19:35:03.400	125XE11A	NIMSINIT	GE	##### GROUP END INIT	1R0	4	0	6,117,447:84:0	
467	**1**	**191**	**19:37:04.733**	**127XE4A**	**37IOP**	**3,0**	**Long Map, Grating Start Position =00**	**1R3**	**4**	**0**	**6,117,449:84:0**	
468	1	191	19:37:04.733	127XE	NIMSTAB	GS	%%%%% GROUP START TAB	1R3	4	0	6,117,449:84:0	
469	**1**	**191**	**19:37:05.400**	**127XE4B**	**37ETB**	**0A,CA,18,03,FF,1**	**Loads wavelength edit table**	**1R3**	**4**	**0**	**6,117,449:85:0**	
470	1	191	19:37:13.400	127XE11A	NIMSTAB	GE	%%%%% GROUP END TAB	1R3	4	0	6,117,450:06:0	
471	1	191	19:41:12.066	176XE6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1R3	4	0	6,117,454:00:0	
472	**1**	**191**	**19:42:50.066**	**185XE10C3A**	**40HRPR**	**1**	**RCT Heater OFF (primary relay)**	**1R3**	**4**	**0**	**6,117,455:56:0**	
473	**1**	**191**	**19:42:55.400**	**185XE10D3A**	**40HRPR**	**2**	**RCT Heater OFF (primary relay)**	**1R3**	**4**	**0**	**6,117,455:64:0**	
474	1	191	19:47:16.066	192XE4A	**7CONE**	**17.0,0.0**	Check S/P Position	1R3	4	0	6,117,460:00:0	
475	**1**	**191**	**19:47:36.066**	**432XE6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**1R3**	**4**	**0**	**6,117,460:30:0**	
476	**1**	**191**	**19:55:40.066**	**432XF6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**1R3**	**4**	**0**	**6,117,468:28:0**	
477	1	191	19:59:24.066	192XE4B	**7CONE**	**17.0,119.7**	Check S/P Position	1R3	4	0	6,117,472:00:0	
478	**1**	**191**	**20:01:45.400**	**432XU6A**	**6RTSL2**	**NIMSEL,AACNCG,RT**	**NIMS R/T SELECT**	**1R3**	**4**	**0**	**6,117,474:30:0**	
479	**1**	**191**	**20:03:45.400**	**432XV6A**	**6RTDS2**	**NIMDSL,AACNCG,RT**	**NIMS R/T DESELECT**	**1R3**	**4**	**0**	**6,117,476:28:0**	
480	1	191	20:05:28.066	192XE4C	**7CONE**	**17.0,153.0**	Check S/P Position	1R3	4	0	6,117,478:00:0	
481	1	191	20:11:29.400	488CE6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1R3	4	0	6,117,483:87:0	
482	1	191	20:12:28.066	127XF	NIMSTAB	GS	%%%%% GROUP START TAB	1R3	4	0	6,117,484:84:0	
483	**1**	**191**	**20:12:28.066**	**127XF4A**	**37IOP**	**0,0**	**Safe, Grating Start Position =00**	**1R0**	**4**	**0**	**6,117,484:84:0**	
484	**1**	**191**	**20:12:28.733**	**127XF4B**	**37ETB**	**04,C4,02,00,00**	**Loads wavelength edit table**	**1R0**	**4**	**0**	**6,117,484:85:0**	
485	1	191	20:12:36.733	127XF11A	NIMSTAB	GE	%%%%% GROUP END TAB	1R0	4	0	6,117,485:06:0	
486	**1**	**191**	**20:15:30.066**	**125XF4A**	**37MB**	**0,0,0,0,0,0**	**Selects mirror (spatial) edit table**	**1R0**	**4**	**0**	**6,117,487:84:0**	
487	1	191	20:15:30.066	125XF	NIMSINIT	GS	##### GROUP START INIT	1R0	4	0	6,117,487:84:0	
488	**1**	**191**	**20:16:30.733**	**125XF4B**	**37IST**	**1,0,0,OFF,0,0,0**	**Chopper ON, Sync, 63Hz (Ref)**	**160**	**4**	**0**	**6,117,488:84:0**	
489	1	191	20:17:31.400	125XF11A	NIMSINIT	GE	##### GROUP END INIT	160	4	0	6,117,489:84:0	
490	**1**	**191**	**20:17:31.400**	**125XF4C**	**37IST**	**1,1,0,OFF,0,0,0**	**Chopper OFF, N/A, 63Hz (Ref)**	**1O0**	**4**	**0**	**6,117,489:84:0**	
491	1	191	20:20:45.400	488CF6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,117,493:11:0	
492	1	191	20:33:54.733	20DB4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	1O0	4	0	6,117,506:12:0	
493	1	191	20:34:44.733	20DB4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,117,506:87:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
494	1	191	20:36:48.733	176XF6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,117,509:00:0	
495	**1**	**191**	**20:36:49.400**	**30NNRCTRLT01-**		**-----STOP-------**		**1O0**	**4**	**0**	: :	
496	1	191	22:20:13.400	488CF6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,117,611:25:0	
497	1	192	01:03:47.400	488CF6C	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,117,773:04:0	
498	1	192	01:08:45.400	488CF6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,117,777:87:0	
499	1	192	04:10:30.000	488CG6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,117,957:64:0	
500	1	192	04:31:25.333	488CG6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,117,978:36:0	
501	1	192	05:14:46.666	488CG6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,118,021:25:0	
502	1	192	05:50:21.333	488CG6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,118,056:42:0	
503	1	192	05:51:36.666	488CG6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,118,057:64:0	
504	1	192	07:16:02.000	488CH6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,118,141:18:0	
505	1	192	07:22:05.333	488CH6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,118,147:17:0	
506	1	192	20:11:31.333	488CI6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,118,908:15:0	
507	1	192	20:20:45.333	488CI6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,118,917:27:0	
508	1	192	22:15:57.333	488CI6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,119,031:21:0	
509	1	193	01:23:41.333	488CI6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,119,216:82:0	
510	1	193	03:23:09.333	488CJ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,119,335:05:0	
511	1	193	03:29:38.000	488CJ6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,119,341:42:0	
512	1	193	03:38:05.333	488CJ6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,119,349:75:0	
513	1	193	04:14:21.333	488CJ6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,119,385:63:0	
514	1	193	11:41:32.666	488CK6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,119,827:88:0	
515	1	193	11:50:53.333	488CK6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,119,837:19:0	
516	1	193	14:30:53.266	488CK6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,119,995:41:0	
517	1	193	15:23:49.933	488CK6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,120,047:74:0	
518	1	193	15:28:29.266	488CK6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,120,052:38:0	
519	1	193	20:06:33.266	488CL6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,120,327:39:0	
520	1	193	20:16:29.266	488CL6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,120,337:23:0	
521	1	193	22:11:41.266	488CL6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,120,451:17:0	
522	1	194	01:23:41.266	488CL6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,120,641:07:0	
523	1	194	03:23:09.266	488CM6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,120,759:21:0	
524	1	194	03:27:21.266	488CM6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,120,763:35:0	
525	1	194	03:33:49.266	488CM6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,120,769:71:0	
526	1	194	03:48:45.266	488CM6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,120,784:50:0	
527	1	194	05:55:14.600	488CM6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,120,909:59:0	
528	1	194	07:31:47.266	488CN6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,005:12:0	
529	1	194	08:05:26.600	488CN6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,038:38:0	
530	1	194	15:41:45.933	488CO6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,489:66:0	
531	1	194	16:20:25.266	488CO6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,527:87:0	
532	1	194	20:03:41.266	488CO6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,121,748:70:0	
533	1	194	20:39:57.266	488CO6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,121,784:58:0	
534	1	194	21:29:41.266	488CO6E	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,121,833:75:0	
535	1	194	22:05:17.200	488CP6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,869:03:0	
536	1	194	22:07:59.866	488CP6B	6TMSED	FILL,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,871:65:0	
537	1	194	22:10:18.533	176SG6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1O0	4	0	6,121,874:00:0	
538	1	194	22:10:31.866	488CP6C	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,121,874:20:0	
539	1	194	22:38:59.866	20BA4AA	7STAT	10.00,152.0453,-	Stator inertial point	1O0	4	0	6,121,902:34:0	
540	1	194	22:39:11.866	20BA6AA	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	1O0	4	0	6,121,902:52:0	
541	1	194	22:44:59.866	474BA416A4B	**7MODE**	**INT**	AACS INERTIAL MODE	1O0	4	0	6,121,908:28:0	
542	1	194	22:46:59.866	474BA416A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	1O0	4	0	6,121,910:26:0	
543	1	194	22:47:19.866	20BA4AD	7STAT	17.45,152.0453,-	Stator inertial point	1O0	4	0	6,121,910:56:0	
544	1	194	22:51:13.866	474BA416A4E	7BURN	152.0453,-46.263	ALERT -- Thruster fire	1O0	4	0	6,121,914:43:0	
545	1	194	23:50:21.200	20BA4AF	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,121,972:86:0	
546	1	194	23:56:13.200	20BA4AG	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,121,978:68:0	
547	1	195	00:41:29.200	20BA4AK	7STAT	10.00,152.0453,-	Stator inertial point	1O0	4	0	6,122,023:47:0	
548	1	195	00:41:41.200	20BA6AB	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	1O0	4	0	6,122,023:65:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
549	1	195	00:47:29.200	20BA4AL	**7MODE**	**INT**	AACS INERTIAL MODE	1O0	4	0	6,122,029:41:0	
550	1	195	00:49:29.200	474BA416A4I	7BURN	152.0453,-46.263	ALERT -- Thruster fire	1O0	4	0	6,122,031:39:0	
551	1	195	01:23:41.200	488CP6D	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,122,065:23:0	
552	1	195	01:48:35.866	20BA4AN	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,122,089:81:0	
553	1	195	01:53:27.866	20BA4AO	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,122,094:64:0	
554	1	195	02:15:43.866	20BA4AS	7STAT	10.00,152.0453,-	Stator inertial point	1O0	4	0	6,122,116:66:0	
555	1	195	02:15:55.866	20BA6AC	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	1O0	4	0	6,122,116:84:0	
556	1	195	02:21:43.866	20BA4AT	**7MODE**	**INT**	AACS INERTIAL MODE	1O0	4	0	6,122,122:60:0	
557	1	195	02:23:43.866	474BA416A4K	7BURN	,152.0453,-46.26	ALERT -- Thruster fire	1O0	4	0	6,122,124:58:0	
558	1	195	02:42:07.200	20BA4AV	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,122,142:75:0	
559	1	195	02:46:59.200	20BA4AW	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,122,147:58:0	
560	1	195	02:49:01.200	488CP6E	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	1O0	4	0	6,122,149:59:0	
561	1	195	03:11:26.533	488CQ6A	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	1O0	4	0	6,122,171:75:0	
562	1	195	03:23:09.200	488CQ6B	6TMSED	FILL,AH1	Sci, Eng, and D/L Chan	1O0	4	0	6,122,183:37:0	
563	1	195	03:59:25.200	488CQ6C	6TMSED	FILL,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,122,219:25:0	
564	1	195	04:15:59.866	488CQ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,122,235:61:0	
565	1	195	04:19:21.866	176SH6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,122,239:00:0	
566	1	195	05:50:16.533	488CQ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,122,328:83:0	
567	1	195	05:56:25.866	176TC6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1O0	4	0	6,122,335:00:0	
568	1	195	06:02:29.866	465VA6A	6DMST	5000	DMS Slew to TIC	1O0	4	0	6,122,341:00:0	
569	1	195	06:02:29.866		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,122,341:00:0	
570	1	195	06:02:29.866		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,122,341:00:0	
571	1	195	06:02:29.866		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,122,341:00:0	
572	1	195	06:02:36.533		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,122,341:10:0	
573	1	195	06:02:37.933		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	1O0	4	0	6,122,341:12:1	
574	1	195	07:26:45.200	488CR6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,122,424:30:0	
575	1	195	08:00:24.533	488CR6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,122,457:56:0	
576	1	195	11:43:38.666		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *4997.94 +/-	1O0	4	0	6,122,678:36:2	
577	1	195	11:43:39.866		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4998.00 +/-	1O0	4	0	6,122,678:38:0	
578	1	195	11:56:11.200		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 4998.00 +/-	1O0	4	0	6,122,690:73:0	
579	1	195	11:56:11.200	465VB6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,122,690:73:0	
580	1	195	11:56:12.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4998.12 +/-	1O0	4	0	6,122,690:75:1	
581	1	195	11:56:17.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4999.35 +/-	1O0	4	0	6,122,690:83:0	
582	1	195	11:56:19.066		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *4999.41 +/-	1O0	4	0	6,122,690:84:8	
583	1	195	11:56:22.933		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 4993.91 +/-	1O0	4	0	6,122,690:90:6	
584	1	195	11:56:22.933		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *4993.91 +/-	1O0	4	0	6,122,690:90:6	
585	1	195	12:22:03.200		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 255.79 +/-	1O0	4	0	6,122,716:35:0	
586	1	195	12:22:03.200	465VB6B	6DMSC	RDY,4	DMS Control Tape stop	1O0	4	0	6,122,716:35:0	
587	1	195	12:22:04.400		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 254.99 +/-	1O0	4	0	6,122,716:36:8	
588	1	195	14:21:52.533	465VC6A	6DTRN	CMD,6DTRN,465VC6	DMS TRACK TURNAROUND	1O0	4	0	6,122,834:81:0	
589	1	195	14:21:52.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 254.99 +/-	1O0	4	0	6,122,834:81:0	
590	1	195	14:21:52.533		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 254.99 +/-	1O0	4	0	6,122,834:81:0	
591	1	195	14:21:53.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 255.11 +/-	1O0	4	0	6,122,834:83:1	
592	1	195	14:21:59.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 256.34 +/-	1O0	4	0	6,122,835:00:0	
593	1	195	14:22:00.400		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 256.40 +/-	1O0	4	0	6,122,835:01:8	
594	1	195	14:22:01.800		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 256.28 +/-	1O0	4	0	6,122,835:03:9	
595	1	195	14:25:09.200	488CS6A	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,122,838:12:0	
596	1	195	14:26:02.466		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	1O0	4	0	6,122,839:00:9	
597	1	195	14:26:03.666		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	1O0	4	0	6,122,839:02:7	
598	1	195	14:26:03.666		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	1O0	4	0	6,122,839:02:7	
599	1	195	14:26:05.066		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	1O0	4	0	6,122,839:04:8	
600	1	195	14:26:17.066		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	1O0	4	0	6,122,839:22:8	
601	1	195	14:26:18.266		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	1O0	4	0	6,122,839:24:6	
602	1	195	14:28:45.200	488CS6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,122,841:63:0	
603	1	195	14:31:55.200	465VD6A	6DMSC	P100,1	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,122,844:75:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
604	1	195	14:31:55.200		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,122,844:75:0	
605	1	195	14:32:01.866		DMS:	: *RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,122,844:85:0	
606	1	195	14:32:05.733		DMS:	: *AT_SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	1O0	4	0	6,122,844:90:8	
607	1	195	14:32:05.733		DMS:	: *P_SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	1O0	4	0	6,122,844:90:8	
608	1	195	15:03:49.200		DMS:	: *RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	1O0	4	0	6,122,876:34:0	
609	1	195	15:03:49.200	465VD6B	6DMSC	RDY,1	DMS Control Tape stop	1O0	4	0	6,122,876:34:0	
610	1	195	15:03:50.400		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	1O0	4	0	6,122,876:35:8	
611	1	195	15:19:25.200	465VE6A	6DMSC	P100,2	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,122,891:73:0	
612	1	195	15:19:25.200		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	1O0	4	0	6,122,891:73:0	
613	1	195	15:19:26.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	1O0	4	0	6,122,891:75:1	
614	1	195	15:19:31.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	1O0	4	0	6,122,891:83:0	
615	1	195	15:19:33.066		DMS:	: *RUNUP	P100, TRACK *2, *REV, TIC *6065.23 +/-	1O0	4	0	6,122,891:84:8	
616	1	195	15:19:36.933		DMS:	: *AT_SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	1O0	4	0	6,122,891:90:6	
617	1	195	15:19:36.933		DMS:	: *P_SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	1O0	4	0	6,122,891:90:6	
618	1	195	15:47:41.200	488CS6C	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	1O0	4	0	6,122,919:69:0	
619	1	195	15:51:33.200	465VF6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,122,923:53:0	
620	1	195	15:51:33.200		DMS:	: *RUNDOWN	P100, TRACK 2, REV, TIC * 164.96 +/-	1O0	4	0	6,122,923:53:0	
621	1	195	15:51:34.400		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 164.16 +/-	1O0	4	0	6,122,923:54:8	
622	1	195	15:51:38.266		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 169.66 +/-	1O0	4	0	6,122,923:60:6	
623	1	195	15:51:38.266		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 169.66 +/-	1O0	4	0	6,122,923:60:6	
624	1	195	16:06:53.200	488CS6D	6TMSED	NORM,AH5	Sci, Eng, and D/L Chan	1O0	4	0	6,122,938:68:0	
625	1	195	16:23:33.866		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC *6062.38 +/-	1O0	4	0	6,122,955:22:0	
626	1	195	16:23:33.866	465VF6B	6DMSC	RDY,3	DMS Control Tape stop	1O0	4	0	6,122,955:22:0	
627	1	195	16:23:35.066		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *6063.18 +/-	1O0	4	0	6,122,955:23:8	
628	1	195	16:38:17.200		DMS:	: *US-RUNUP	P7, TRACK *1, FWD, TIC 6063.18 +/-	1O0	4	0	6,122,969:73:0	
629	1	195	16:38:17.200	465VG6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,122,969:73:0	
630	1	195	16:38:18.600		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.30 +/-	1O0	4	0	6,122,969:75:1	
631	1	195	16:38:23.866		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6064.53 +/-	1O0	4	0	6,122,969:83:0	
632	1	195	16:38:25.066		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *6064.59 +/-	1O0	4	0	6,122,969:84:8	
633	1	195	16:38:28.933		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *6059.09 +/-	1O0	4	0	6,122,969:90:6	
634	1	195	16:38:28.933		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 6059.09 +/-	1O0	4	0	6,122,969:90:6	
635	1	195	16:54:30.533	488CS6E	6TMSED	FILL,AH5	Sci, Eng, and D/L Chan	1O0	4	0	6,122,985:77:0	
636	1	195	17:10:24.533	465VH6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,123,001:52:0	
637	1	195	17:10:24.533		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 166.38 +/-	1O0	4	0	6,123,001:52:0	
638	1	195	17:10:25.733		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 165.58 +/-	1O0	4	0	6,123,001:53:8	
639	1	195	17:10:29.600		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 171.08 +/-	1O0	4	0	6,123,001:59:6	
640	1	195	17:10:29.600		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 171.08 +/-	1O0	4	0	6,123,001:59:6	
641	1	195	17:11:30.533	465VH6B	6DMSC	RDY,3	DMS Control Tape stop	1O0	4	0	6,123,002:60:0	
642	1	195	17:11:30.533		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC * 358.52 +/-	1O0	4	0	6,123,002:60:0	
643	1	195	17:11:31.733		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 359.32 +/-	1O0	4	0	6,123,002:61:8	
644	1	195	17:11:59.200	488CT6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,123,003:12:0	
645	1	195	17:23:36.533	488CT6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,123,014:57:0	
646	1	195	17:26:00.533		DMS:	: READY	RDY, TRACK *4, *REV, TIC 359.32 +/-	1O0	4	0	6,123,017:00:0	
647	1	195	17:26:00.533	465VI6A	6DMSC	RDY,4	DMS Control Tape stop	1O0	4	0	6,123,017:00:0	
648	1	195	17:26:54.533		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 359.32 +/-	1O0	4	0	6,123,017:81:0	
649	1	195	17:26:54.533	465VJ6A	6DTRN	CMD,6DTRN,465VJ6	DMS TRACK TURNAROUND	1O0	4	0	6,123,017:81:0	
650	1	195	17:26:54.533		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 359.32 +/-	1O0	4	0	6,123,017:81:0	
651	1	195	17:26:55.933		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 359.44 +/-	1O0	4	0	6,123,017:83:1	
652	1	195	17:27:01.200		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 360.67 +/-	1O0	4	0	6,123,018:00:0	
653	1	195	17:27:02.400		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 360.73 +/-	1O0	4	0	6,123,018:01:8	
654	1	195	17:27:03.800		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 360.61 +/-	1O0	4	0	6,123,018:03:9	
655	1	195	17:38:29.600		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	1O0	4	0	6,123,029:31:6	
656	1	195	17:38:30.800		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	1O0	4	0	6,123,029:33:4	
657	1	195	17:38:30.800		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	1O0	4	0	6,123,029:33:4	
658	1	195	17:38:32.200		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	1O0	4	0	6,123,029:35:5	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
659	1	195	17:38:44.200		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	1O0	4	0	6,123,029:53:5	
660	1	195	17:38:45.400		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	1O0	4	0	6,123,029:55:3	
661	1	195	17:53:03.866	20UI4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	1O0	4	0	6,123,043:69:0	
662	1	195	17:53:53.866	20UI4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,123,044:53:0	
663	1	195	17:55:19.866	176TB6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,123,046:00:0	
664	1	195	20:03:41.200	488CT6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,123,172:86:0	
665	1	195	21:50:21.200	488CT6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,123,278:40:0	
666	1	196	01:23:51.866	488CU6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,123,489:55:0	
667	1	196	01:27:57.200	488CU6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,123,493:59:0	
668	1	196	09:15:19.133	488CV6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,123,955:80:0	
669	1	196	15:32:45.133	488CW6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,124,329:15:0	
670	1	196	16:10:19.800	488CW6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,124,366:30:0	
671	1	196	16:13:17.133	488CW6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,124,369:23:0	
672	1	196	16:28:13.133	488CW6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,124,384:02:0	
673	1	196	19:13:33.800	488CW6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,124,547:50:0	
674	1	196	20:52:45.133	488CX6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,124,645:59:0	
675	1	196	22:52:13.133	488CX6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,124,763:73:0	
676	1	197	01:32:13.133	488CX6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,124,922:04:0	
677	1	197	03:18:48.466	488CY6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,125,027:42:0	
678	1	197	03:18:53.133	488CY6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,125,027:49:0	
679	1	197	11:05:41.800	488CZ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,125,489:20:0	
680	1	197	11:21:01.133	488CZ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,125,504:34:0	
681	1	197	11:26:42.466	176UG6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1O0	4	0	6,125,510:00:0	
682	1	197	11:31:59.800	20UU4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,125,515:21:0	
683	1	197	11:32:59.800	20UU4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	1O0	4	0	6,125,516:20:0	
684	1	197	11:34:59.800	20UU4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	1O0	4	0	6,125,518:18:0	
685	1	197	11:40:29.800	20UU4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	1O0	4	0	6,125,523:58:0	
686	1	197	11:40:30.466	20UU4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	1O0	4	0	6,125,523:59:0	
687	1	197	11:40:50.466	20UU4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	1O0	4	0	6,125,523:89:0	
688	1	197	11:40:51.133	20UU4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	1O0	4	0	6,125,523:90:0	
689	1	197	11:41:11.133	20UU4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	1O0	4	0	6,125,524:29:0	
690	1	197	11:41:11.800	20UU4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	1O0	4	0	6,125,524:30:0	
691	1	197	11:41:21.800	20UU4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	1O0	4	0	6,125,524:45:0	
692	1	197	11:41:22.466	20UU4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	1O0	4	0	6,125,524:46:0	
693	1	197	11:41:32.466	20UU4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	1O0	4	0	6,125,524:61:0	
694	1	197	11:41:33.133	20UU4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	1O0	4	0	6,125,524:62:0	
695	1	197	11:43:19.800	20UU4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	1O0	4	0	6,125,526:40:0	
696	1	197	11:43:20.466	20UU4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	1O0	4	0	6,125,526:41:0	
697	1	197	11:43:40.466	20UU4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	1O0	4	0	6,125,526:71:0	
698	1	197	11:43:41.133	20UU4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	1O0	4	0	6,125,526:72:0	
699	1	197	11:44:01.133	20UU4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	1O0	4	0	6,125,527:11:0	
700	1	197	11:44:01.800	20UU4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	1O0	4	0	6,125,527:12:0	
701	1	197	11:44:11.800	20UU4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	1O0	4	0	6,125,527:27:0	
702	1	197	11:44:12.466	20UU4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	1O0	4	0	6,125,527:28:0	
703	1	197	11:44:22.466	20UU4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	1O0	4	0	6,125,527:43:0	
704	1	197	11:44:23.133	20UU4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	1O0	4	0	6,125,527:44:0	
705	1	197	11:45:19.800	20UU4Z	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,125,528:38:0	
706	1	197	12:10:03.800	20UG4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	1O0	4	0	6,125,552:80:0	
707	1	197	12:10:05.133	488CZ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,125,552:82:0	
708	1	197	12:10:53.800	20UG4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,125,553:64:0	
709	1	197	12:12:12.466	176UH6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,125,555:00:0	
710	1	197	12:41:39.133	488CZ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,125,584:11:0	
711	1	197	13:15:18.466	488CZ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,125,617:37:0	
712	1	197	14:26:43.133	488DA6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,125,688:03:0	
713	1	198	04:50:23.733	488DB6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,126,542:20:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
714	1	198	15:28:29.066	488DC6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,127,173:27:0	
715	1	198	15:54:05.066	488DC6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,127,198:56:0	
716	1	198	19:53:01.066	488DC6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,127,434:84:0	
717	1	198	21:41:49.066	488DD6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,127,542:48:0	
718	1	199	00:53:45.733	488DD6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,127,732:33:0	
719	1	199	00:58:05.066	488DD6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,127,736:58:0	
720	1	199	04:01:46.400	488DE6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,127,918:28:0	
721	1	199	04:12:13.000	488DE6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,127,928:58:0	
722	1	199	07:26:47.000	488DE6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,128,121:06:0	
723	1	199	07:37:01.000	488DE6D	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,128,131:17:0	
724	1	199	13:58:40.333	488DF6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,128,508:59:0	
725	1	199	19:48:45.000	488DF6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,128,854:80:0	
726	1	199	20:04:49.000	488DG6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,128,870:70:0	
727	1	199	21:41:49.000	488DG6B	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,128,966:64:0	
728	1	200	00:04:39.666	488DG6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,129,107:89:0	
729	1	200	01:19:25.000	488DG6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,129,181:83:0	
730	1	200	03:08:13.000	488DH6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,129,289:47:0	
731	1	200	03:11:33.000	488DH6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,129,292:74:0	
732	1	200	03:18:53.000	488DH6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,129,300:06:0	
733	1	200	03:55:09.000	488DH6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,129,335:85:0	
734	1	200	19:50:50.933	488DI6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,130,281:12:0	
735	1	200	20:16:28.933	488DI6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,306:44:0	
736	1	200	21:19:26.266	488DI6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,368:68:0	
737	1	200	21:53:00.266	488DI6D	6TMSED	FILL,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,401:86:0	
738	1	200	21:56:05.600	176SF6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1O0	4	0	6,130,405:00:0	
739	1	200	21:56:30.266	488DI6E	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,405:37:0	
740	1	200	22:06:00.266	20RC4C	7STAT	10.00,272.82,-23	Stator inertial point	1O0	4	0	6,130,414:73:0	
741	1	200	22:06:12.266	20RC6D	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	1O0	4	0	6,130,415:00:0	
742	1	200	22:25:02.266	490UC412A4B	**7MODE**	**INT**	AACS INERTIAL MODE	1O0	4	0	6,130,433:57:0	
743	1	200	22:26:36.933	488DJ6A	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,130,435:17:0	
744	1	200	22:30:00.266	490UC412A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	1O0	4	0	6,130,438:49:0	
745	1	200	22:30:20.266	20RC4D	7STAT	17.45,272.82,-23	Stator inertial point	1O0	4	0	6,130,438:79:0	
746	1	200	22:34:10.266	490UC412A4E	7VECT		Inert vect update UTC	1O0	4	0	6,130,442:60:0	
747	1	200	22:34:14.266	490UC412A4F	7TURN	2,RTH	ALERT Thruster	1O0	4	0	6,130,442:66:0	
748	1	200	22:38:02.266	490UC412A406A4A	7STAR	1,1307,23.966,-5	Star catalog update	1O0	4	0	6,130,446:44:0	
749	1	200	22:38:04.266	490UC412A406A4B	7STAR	2,333,138.16	Star catalog update	1O0	4	0	6,130,446:47:0	
750	1	200	22:38:06.266	490UC412A406A4C	7STAR	3,104,189.77	Star catalog update	1O0	4	0	6,130,446:50:0	
751	1	200	22:38:08.266	490UC412A406A4D	7STAR	4,167,345.57	Star catalog update	1O0	4	0	6,130,446:53:0	
752	1	200	22:38:10.266	490UC412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update	1O0	4	0	6,130,446:56:0	
753	1	200	22:38:12.266	490UC412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update	1O0	4	0	6,130,446:59:0	
754	1	200	22:48:06.266	20RC4F	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,130,456:40:0	
755	1	200	22:56:10.266	490UC412A4G	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,130,464:38:0	
756	1	201	00:28:12.933	488DJ6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,555:41:0	
757	1	201	00:30:04.266	20UB4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	1O0	4	0	6,130,557:26:0	
758	1	201	00:30:54.266	20UB4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,130,558:10:0	
759	1	201	00:31:00.266	488DJ6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,558:19:0	
760	1	201	00:32:48.933	176SL6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,130,560:00:0	
761	1	201	02:38:20.933	488DJ6D	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,130,684:14:0	
762	1	201	03:25:16.933	488DJ6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,130,730:52:0	
763	1	201	04:12:12.933	488DK6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,130,776:90:0	
764	1	201	04:41:30.266	488DK6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,130,805:87:0	
765	1	201	05:15:09.600	488DK6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,130,839:22:0	
766	1	201	14:41:52.933	488DL6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,131,399:67:0	
767	1	201	20:15:33.600	488DL6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,131,729:68:0	
768	1	201	21:56:44.933	488DM6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,131,829:75:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
769	1	202	00:53:48.866	488DM6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,132,004	86:0
770	1	202	02:57:32.866	488DM6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,132,127	29:0
771	1	202	03:07:03.533	488DM6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,132,136	66:0
772	1	202	03:12:28.866	488DM6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,132,142	08:0
773	1	202	03:27:24.866	488DN6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,132,156	78:0
774	1	202	08:10:34.200	488DN6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,132,436	82:0
775	1	202	15:09:16.866	488DO6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,132,851	01:0
776	1	202	15:45:16.200	488DO6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,132,886	55:0
777	1	202	15:47:40.866	488DO6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,132,888	90:0
778	1	202	16:02:36.866	488DO6D	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,132,903	69:0
779	1	202	19:41:56.866	488DO6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,133,120	62:0
780	1	202	19:50:52.866	488DP6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,133,129	47:0
781	1	202	21:41:48.866	488DP6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,133,239	21:0
782	1	203	01:04:28.866	488DP6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,133,439	61:0
783	1	203	02:57:32.866	488DQ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,133,551	45:0
784	1	203	03:46:36.866	488DQ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,133,600	02:0
785	1	203	04:44:19.533	488DQ6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,133,657	09:0
786	1	203	05:16:12.866	488DQ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,133,688	58:0
787	1	203	05:20:25.533	488DQ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,133,692	73:0
788	1	203	13:55:46.133	488DR6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,134,202	44:0
789	1	203	13:58:52.800	488DR6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,134,205	51:0
790	1	203	19:36:59.466	488DR6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,134,539	87:0
791	1	203	19:46:36.800	488DR6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,134,549	43:0
792	1	203	21:31:08.800	488DS6A	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,134,652	78:0
793	1	204	01:08:44.800	488DS6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,134,868	06:0
794	1	204	01:42:00.133	488DS6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,134,900	87:0
795	1	205	11:45:44.733	488DT6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,136,922	22:0
796	1	205	13:11:56.733	488DT6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,137,007	45:0
797	1	205	20:33:48.733	488DU6A	6TMSED	FILL,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,137,444	46:0
798	1	205	20:37:48.733	488DU6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,137,448	42:0
799	1	206	10:52:07.333	488DV6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,138,293	35:0
800	1	206	11:01:48.666	488DV6B	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,138,302	88:0
801	1	206	13:05:32.666	488DV6C	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,138,425	31:0
802	1	206	19:18:52.666	488DW6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,138,794	52:0
803	1	206	19:42:20.666	488DW6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,138,817	71:0
804	1	206	20:55:56.666	488DW6C	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,138,890	52:0
805	1	206	20:57:00.666	488DW6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,138,891	57:0
806	1	206	21:29:52.666	488DW6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,138,924	12:0
807	1	207	01:23:40.666	488DX6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,139,155	33:0
808	1	207	02:38:20.666	488DX6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,139,229	19:0
809	1	207	02:45:34.666	488DX6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,139,236	33:0
810	1	207	02:59:40.666	488DX6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,139,250	28:0
811	1	207	03:35:56.666	488DX6E	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,139,286	16:0
812	1	207	19:30:51.266	488DY6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,140,230	54:0
813	1	207	21:01:16.600	488DY6B	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,140,320	02:0
814	1	208	01:13:00.600	488DY6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,140,568	90:0
815	1	208	02:44:15.933	488DZ6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,140,659	22:0
816	1	208	02:49:00.600	488DZ6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,140,663	85:0
817	1	208	03:25:16.600	488DZ6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,140,699	73:0
818	1	208	10:36:13.933	488EA6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,141,126	02:0
819	1	208	10:46:52.600	488EA6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,141,136	50:0
820	1	208	11:31:40.600	488EA6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,141,180	78:0
821	1	208	12:06:07.933	488EA6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,141,214	85:0
822	1	208	12:39:47.266	488EA6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,141,248	20:0
823	1	208	12:56:45.266	176UI6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1O0	4	0	6,141,265	00:0

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
824	1	208	13:01:59.933	20UQ4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,141,270:17:0	
825	1	208	13:02:59.933	20UQ4D	**7MODE**	**SPNL**	AACS ALL-SPIN LOW	1O0	4	0	6,141,271:16:0	
826	1	208	13:04:59.933	20UQ4E	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	1O0	4	0	6,141,273:14:0	
827	1	208	13:10:29.933	20UQ4G	7VENT	0.611,1.333,8	ALERT -- Thruster fire	1O0	4	0	6,141,278:54:0	
828	1	208	13:10:30.600	20UQ4H	7VENT	0.611,10.989,8	ALERT -- Thruster fire	1O0	4	0	6,141,278:55:0	
829	1	208	13:10:50.600	20UQ4I	7VENT	0.611,1.333,6	ALERT -- Thruster fire	1O0	4	0	6,141,278:85:0	
830	1	208	13:10:51.266	20UQ4J	7VENT	0.611,10.989,6	ALERT -- Thruster fire	1O0	4	0	6,141,278:86:0	
831	1	208	13:11:11.266	20UQ4K	7VENT	0.611,1.333,4	ALERT -- Thruster fire	1O0	4	0	6,141,279:25:0	
832	1	208	13:11:11.933	20UQ4L	7VENT	0.611,0.666,5	ALERT -- Thruster fire	1O0	4	0	6,141,279:26:0	
833	1	208	13:11:21.933	20UQ4M	7VENT	0.611,1.333,4	ALERT -- Thruster fire	1O0	4	0	6,141,279:41:0	
834	1	208	13:11:22.600	20UQ4N	7VENT	0.611,0.666,5	ALERT -- Thruster fire	1O0	4	0	6,141,279:42:0	
835	1	208	13:11:32.600	20UQ4O	7VENT	1.211,1.333,10	ALERT -- Thruster fire	1O0	4	0	6,141,279:57:0	
836	1	208	13:11:33.266	20UQ4P	7VENT	1.211,0.666,12	ALERT -- Thruster fire	1O0	4	0	6,141,279:58:0	
837	1	208	13:13:19.933	20UQ4S	7VENT	0.611,1.333,7	ALERT -- Thruster fire	1O0	4	0	6,141,281:36:0	
838	1	208	13:13:20.600	20UQ4T	7VENT	0.611,10.989,7	ALERT -- Thruster fire	1O0	4	0	6,141,281:37:0	
839	1	208	13:13:40.600	20UQ4U	7VENT	0.611,1.333,1	ALERT -- Thruster fire	1O0	4	0	6,141,281:67:0	
840	1	208	13:13:41.266	20UQ4V	7VENT	0.611,10.989,1	ALERT -- Thruster fire	1O0	4	0	6,141,281:68:0	
841	1	208	13:14:01.266	20UQ4AC	7VENT	0.611,1.333,2	ALERT -- Thruster fire	1O0	4	0	6,141,282:07:0	
842	1	208	13:14:01.933	20UQ4AD	7VENT	0.611,0.666,3	ALERT -- Thruster fire	1O0	4	0	6,141,282:08:0	
843	1	208	13:14:11.933	20UQ4AE	7VENT	0.611,1.333,2	ALERT -- Thruster fire	1O0	4	0	6,141,282:23:0	
844	1	208	13:14:12.600	20UQ4AF	7VENT	0.611,0.666,3	ALERT -- Thruster fire	1O0	4	0	6,141,282:24:0	
845	1	208	13:14:22.600	20UQ4W	7VENT	1.211,1.333,9	ALERT -- Thruster fire	1O0	4	0	6,141,282:39:0	
846	1	208	13:14:23.266	20UQ4X	7VENT	1.211,0.666,11	ALERT -- Thruster fire	1O0	4	0	6,141,282:40:0	
847	1	208	13:15:19.933	20UQ4Z	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,141,283:34:0	
848	1	208	13:40:03.933	20UN4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	1O0	4	0	6,141,307:76:0	
849	1	208	13:40:53.933	20UN4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,141,308:60:0	
850	1	208	13:42:15.266	176UJ6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,141,310:00:0	
851	1	208	15:42:09.933	488EB6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,141,428:54:0	
852	1	208	15:49:48.600	488EB6B	6TMSED	FILL,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,141,436:14:0	
853	1	208	19:22:14.600	488EB6C	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,141,646:23:0	
854	1	208	19:31:40.600	488EB6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,141,655:53:0	
855	1	208	20:57:00.600	488EB6E	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,141,739:89:0	
856	1	209	01:13:00.600	488EC6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,141,993:15:0	
857	1	209	02:44:31.200	488EC6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,142,083:61:0	
858	1	209	02:44:44.533	488EC6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,142,083:81:0	
859	1	209	10:21:17.200	488ED6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,142,535:38:0	
860	1	209	10:27:40.533	488ED6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,142,541:67:0	
861	1	209	10:51:08.533	488ED6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,142,564:86:0	
862	1	209	12:50:36.533	488ED6D	6TMSED	NORM,AL5	Sci, Eng, and D/L Chan	1O0	4	0	6,142,683:09:0	
863	1	209	17:59:59.866	481UA4A	7VECT	BB1	Inert vect update UTC	1O0	4	0	6,142,989:08:0	
864	1	209	20:39:56.533	488EE6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,143,147:25:0	
865	1	209	22:31:03.200	488EE6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,143,257:15:0	
866	1	209	23:04:42.533	488EE6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,143,290:41:0	
867	1	210	01:19:24.533	488EE6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,143,423:61:0	
868	1	210	02:34:04.533	488EE6E	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,143,497:47:0	
869	1	210	02:35:13.866	488EF6A	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,143,498:60:0	
870	1	210	02:49:00.533	488EF6B	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,143,512:26:0	
871	1	210	03:25:16.533	488EF6C	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,143,548:14:0	
872	1	210	11:31:00.533	488EG6A	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,144,028:50:0	
873	1	210	13:06:01.133	488EG6B	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,144,122:47:0	
874	1	210	13:39:40.466	488EG6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,144,155:73:0	
875	1	210	19:11:37.800	488EH6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,144,484:10:0	
876	1	210	19:18:52.466	488EH6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,144,491:25:0	
877	1	212	19:16:27.733	488EI6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,147,337:22:0	
878	1	212	19:21:00.400	488EI6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,147,341:67:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
879	1	212	20:31:24.400	488EI6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,147,411	33:0
880	1	212	20:35:53.066	488EI6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,147,415	72:0
881	1	212	21:09:32.400	488EI6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,147,449	07:0
882	1	213	01:13:00.400	488EJ6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,147,689	79:0
883	1	213	02:23:24.400	488EJ6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,147,759	45:0
884	1	213	02:30:44.400	488EJ6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,147,766	68:0
885	1	213	02:44:44.400	488EJ6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,147,780	54:0
886	1	213	03:21:00.400	488EJ6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,147,816	42:0
887	1	213	19:11:31.666	488EK6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,148,756	49:0
888	1	213	19:16:44.333	488EK6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,148,761	63:0
889	1	213	20:27:08.333	488EK6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,148,831	29:0
890	1	213	20:35:50.333	488EK6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,148,839	84:0
891	1	213	21:09:29.666	488EK6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,148,873	19:0
892	1	214	01:15:08.333	488EL6A	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,149,116	14:0
893	1	214	02:19:08.333	488EL6B	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,149,179	41:0
894	1	214	02:26:55.000	488EL6C	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,149,187	13:0
895	1	214	02:38:20.333	488EL6D	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,149,198	40:0
896	1	214	03:14:36.333	488EL6E	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,149,234	28:0
897	1	214	10:21:33.666	488EM6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,149,656	52:0
898	1	214	10:27:40.333	488EM6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,149,662	56:0
899	1	214	10:56:22.333	176SM6A	6TMREC	**PPB**	PAUSE PLAYBACK (PB CONTROL) Record Mode C	1O0	4	0	6,149,691	00:0
900	1	214	11:02:26.333	465WA6A	6DMST	5000	DMS Slew to TIC	1O0	4	0	6,149,697	00:0
901	1	214	11:02:26.333		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,149,697	00:0
902	1	214	11:02:26.333		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,149,697	00:0
903	1	214	11:02:26.333		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,149,697	00:0
904	1	214	11:02:33.000		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,149,697	10:0
905	1	214	11:02:34.400		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	1O0	4	0	6,149,697	12:1
906	1	214	11:12:28.333	488EM6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,149,706	84:0
907	1	214	11:50:47.000	488EM6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,149,744	74:0
908	1	214	12:24:26.333	488EM6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,149,778	09:0
909	1	214	15:46:50.333	488EN6A	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,149,978	25:0
910	1	214	15:54:04.333	488EN6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,149,985	39:0
911	1	214	16:43:35.133		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *4997.94 +/-	1O0	4	0	6,150,034	36:2
912	1	214	16:43:36.333		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *4998.00 +/-	1O0	4	0	6,150,034	38:0
913	1	214	16:56:07.666	465WB6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,150,046	73:0
914	1	214	16:56:07.666		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 4998.00 +/-	1O0	4	0	6,150,046	73:0
915	1	214	16:56:09.066		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *4998.12 +/-	1O0	4	0	6,150,046	75:1
916	1	214	16:56:14.333		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *4999.35 +/-	1O0	4	0	6,150,046	83:0
917	1	214	16:56:15.533		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *4999.41 +/-	1O0	4	0	6,150,046	84:8
918	1	214	16:56:19.400		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *4993.91 +/-	1O0	4	0	6,150,046	90:6
919	1	214	16:56:19.400		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 4993.91 +/-	1O0	4	0	6,150,046	90:6
920	1	214	17:21:59.666		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 255.79 +/-	1O0	4	0	6,150,072	35:0
921	1	214	17:21:59.666	465WB6B	6DMSC	RDY,4	DMS Control Tape stop	1O0	4	0	6,150,072	35:0
922	1	214	17:22:00.866		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 254.99 +/-	1O0	4	0	6,150,072	36:8
923	1	214	19:11:35.600	488EN6C	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,150,180	71:0
924	1	214	19:16:44.266	488EN6D	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,150,185	79:0
925	1	214	19:21:48.933	465WC6A	6DTRN	CMD,6DTRN,465WC6	DMS TRACK TURNAROUND	1O0	4	0	6,150,190	81:0
926	1	214	19:21:48.933		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 254.99 +/-	1O0	4	0	6,150,190	81:0
927	1	214	19:21:48.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 254.99 +/-	1O0	4	0	6,150,190	81:0
928	1	214	19:21:50.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 255.11 +/-	1O0	4	0	6,150,190	83:1
929	1	214	19:21:55.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 256.34 +/-	1O0	4	0	6,150,191	00:0
930	1	214	19:21:56.800		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 256.40 +/-	1O0	4	0	6,150,191	01:8
931	1	214	19:21:58.200		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 256.28 +/-	1O0	4	0	6,150,191	03:9
932	1	214	19:25:09.600	488EN6E	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,150,194	18:0
933	1	214	19:25:58.866		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	1O0	4	0	6,150,195	00:9

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
934	1	214	19:26:00.066		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	1O0	4	0	6,150,195:02:7	
935	1	214	19:26:00.066		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	1O0	4	0	6,150,195:02:7	
936	1	214	19:26:01.466		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	1O0	4	0	6,150,195:04:8	
937	1	214	19:26:13.466		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	1O0	4	0	6,150,195:22:8	
938	1	214	19:26:14.666		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	1O0	4	0	6,150,195:24:6	
939	1	214	19:31:51.600		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,150,200:75:0	
940	1	214	19:31:51.600	465WD6A	6DMSC	P100,1	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,150,200:75:0	
941	1	214	19:31:58.266		DMS:	: *RUNUP	P100, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,150,200:85:0	
942	1	214	19:32:02.133		DMS:	: *P_SLEW	P100, TRACK 1, FWD, TIC * 207.62 +/-	1O0	4	0	6,150,200:90:8	
943	1	214	19:32:02.133		DMS:	: *AT_SPD	P100, TRACK 1, FWD, TIC 207.62 +/-	1O0	4	0	6,150,200:90:8	
944	1	214	20:03:45.600	465WD6B	6DMSC	RDY,1	DMS Control Tape stop	1O0	4	0	6,150,232:34:0	
945	1	214	20:03:45.600		DMS:	: *RUNDOWN	P100, TRACK 1, FWD, TIC *6063.01 +/-	1O0	4	0	6,150,232:34:0	
946	1	214	20:03:46.800		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *6063.81 +/-	1O0	4	0	6,150,232:35:8	
947	1	214	20:19:21.600		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 6063.81 +/-	1O0	4	0	6,150,247:73:0	
948	1	214	20:19:21.600	465WE6A	6DMSC	P100,2	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,150,247:73:0	
949	1	214	20:19:23.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.93 +/-	1O0	4	0	6,150,247:75:1	
950	1	214	20:19:28.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6065.17 +/-	1O0	4	0	6,150,247:83:0	
951	1	214	20:19:29.466		DMS:	: *RUNUP	P100, TRACK *2, *REV, TIC *6065.23 +/-	1O0	4	0	6,150,247:84:8	
952	1	214	20:19:33.333		DMS:	: *AT_SPD	P100, TRACK 2, REV, TIC 6059.73 +/-	1O0	4	0	6,150,247:90:6	
953	1	214	20:19:33.333		DMS:	: *P_SLEW	P100, TRACK 2, REV, TIC *6059.73 +/-	1O0	4	0	6,150,247:90:6	
954	1	214	20:27:08.266	488EO6A	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,150,255:45:0	
955	1	214	20:40:46.266	488EO6B	6TMSED	FILL,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,150,268:89:0	
956	1	214	20:51:29.600		DMS:	: *RUNDOWN	P100, TRACK 2, REV, TIC * 164.96 +/-	1O0	4	0	6,150,279:53:0	
957	1	214	20:51:29.600	465WF6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,150,279:53:0	
958	1	214	20:51:30.800		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 164.16 +/-	1O0	4	0	6,150,279:54:8	
959	1	214	20:51:34.666		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 169.66 +/-	1O0	4	0	6,150,279:60:6	
960	1	214	20:51:34.666		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 169.66 +/-	1O0	4	0	6,150,279:60:6	
961	1	214	21:14:25.600	488EO6C	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,150,302:24:0	
962	1	214	21:23:30.266	465WF6B	6DMSC	RDY,3	DMS Control Tape stop	1O0	4	0	6,150,311:22:0	
963	1	214	21:23:30.266		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC *6062.38 +/-	1O0	4	0	6,150,311:22:0	
964	1	214	21:23:31.466		DMS:	: *READY	RDY, TRACK 3, FWD, TIC *6063.18 +/-	1O0	4	0	6,150,311:23:8	
965	1	214	21:38:13.600		DMS:	: *US-RUNUP	P7, TRACK *1, FWD, TIC 6063.18 +/-	1O0	4	0	6,150,325:73:0	
966	1	214	21:38:13.600	465WG6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,150,325:73:0	
967	1	214	21:38:15.000		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *6063.30 +/-	1O0	4	0	6,150,325:75:1	
968	1	214	21:38:20.266		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *6064.53 +/-	1O0	4	0	6,150,325:83:0	
969	1	214	21:38:21.466		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *6064.59 +/-	1O0	4	0	6,150,325:84:8	
970	1	214	21:38:25.333		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 6059.09 +/-	1O0	4	0	6,150,325:90:6	
971	1	214	21:38:25.333		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *6059.09 +/-	1O0	4	0	6,150,325:90:6	
972	1	214	22:10:20.933	465WH6A	6DMSC	P100,3	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,150,357:52:0	
973	1	214	22:10:20.933		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 166.38 +/-	1O0	4	0	6,150,357:52:0	
974	1	214	22:10:22.133		DMS:	: *RUNUP	P100, TRACK *3, *FWD, TIC * 165.58 +/-	1O0	4	0	6,150,357:53:8	
975	1	214	22:10:26.000		DMS:	: *AT_SPD	P100, TRACK 3, FWD, TIC 171.08 +/-	1O0	4	0	6,150,357:59:6	
976	1	214	22:10:26.000		DMS:	: *P_SLEW	P100, TRACK 3, FWD, TIC * 171.08 +/-	1O0	4	0	6,150,357:59:6	
977	1	214	22:11:26.933	465WH6B	6DMSC	RDY,3	DMS Control Tape stop	1O0	4	0	6,150,358:60:0	
978	1	214	22:11:26.933		DMS:	: *RUNDOWN	P100, TRACK 3, FWD, TIC * 358.52 +/-	1O0	4	0	6,150,358:60:0	
979	1	214	22:11:28.133		DMS:	: *READY	RDY, TRACK 3, FWD, TIC * 359.32 +/-	1O0	4	0	6,150,358:61:8	
980	1	214	22:11:59.600	488EO6D	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,150,359:18:0	
981	1	214	22:25:56.933		DMS:	: READY	RDY, TRACK *4, *REV, TIC 359.32 +/-	1O0	4	0	6,150,373:00:0	
982	1	214	22:25:56.933	465WI6A	6DMSC	RDY,4	DMS Control Tape stop	1O0	4	0	6,150,373:00:0	
983	1	214	22:26:50.933	465WJ6A	6DTRN	CMD,6DTRN,465WJ6	DMS TRACK TURNAROUND	1O0	4	0	6,150,373:81:0	
984	1	214	22:26:50.933		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 359.32 +/-	1O0	4	0	6,150,373:81:0	
985	1	214	22:26:50.933		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 359.32 +/-	1O0	4	0	6,150,373:81:0	
986	1	214	22:26:52.333		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 359.44 +/-	1O0	4	0	6,150,373:83:1	
987	1	214	22:26:57.600		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 360.67 +/-	1O0	4	0	6,150,374:00:0	
988	1	214	22:26:58.800		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 360.73 +/-	1O0	4	0	6,150,374:01:8	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
989	1	214	22:27:00.200		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 360.61 +/-	1O0	4	0	6,150,374:03:9	
990	1	214	22:38:26.000		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	1O0	4	0	6,150,385:31:6	
991	1	214	22:38:27.200		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	1O0	4	0	6,150,385:33:4	
992	1	214	22:38:27.200		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	1O0	4	0	6,150,385:33:4	
993	1	214	22:38:28.600		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	1O0	4	0	6,150,385:35:5	
994	1	214	22:38:40.600		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	1O0	4	0	6,150,385:53:5	
995	1	214	22:38:41.800		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	1O0	4	0	6,150,385:55:3	
996	1	214	22:53:04.266	20SM4A	**7SAFE**	**STOP**	S/P NO MOVEMENT	1O0	4	0	6,150,399:75:0	
997	1	214	22:53:54.266	20SM4B	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,150,400:59:0	
998	1	214	22:55:16.266	176SN6A	6TMREC	**RPB**	RESUME PLAYBACK (PB CONTROL) Record Mode	1O0	4	0	6,150,402:00:0	
999	1	215	01:04:28.266	488EO6E	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,150,529:71:0	
1000	1	215	02:19:08.266	488EP6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,150,603:57:0	
1001	1	215	02:22:23.600	488EP6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,150,606:77:0	
1002	1	215	02:34:04.266	488EP6C	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,150,618:36:0	
1003	1	215	03:10:20.266	488EP6D	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,150,654:24:0	
1004	1	215	19:21:38.933	488EQ6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,151,614:82:0	
1005	1	215	19:27:24.266	488EQ6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,151,620:54:0	
1006	1	215	20:42:04.266	488EQ6C	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,151,694:40:0	
1007	1	215	20:50:42.266	488EQ6D	6TMSED	FILL,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,151,702:89:0	
1008	1	215	21:24:21.600	488EQ6E	6TMSED	NORM,AL4	Sci, Eng, and D/L Chan	1O0	4	0	6,151,736:24:0	
1009	1	215	21:48:21.600	176SJ6A	6TMREC	**TPB**	TERMINATE PLAYBACK (PB CONTROL) Record Mo	1O0	4	0	6,151,760:00:0	
1010	1	215	21:53:00.266	488ER6A	6TMSED	NORM,AH4	Sci, Eng, and D/L Chan	1O0	4	0	6,151,764:54:0	
1011	1	215	22:24:00.933	20CA4AA	7STAT	10.00,336.4178,4	Stator inertial point	1O0	4	0	6,151,795:24:0	
1012	1	215	22:24:12.933	20CA6AA	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	1O0	4	0	6,151,795:42:0	
1013	1	215	22:30:00.933	474CA416A4B	**7MODE**	**INT**	AACS INERTIAL MODE	1O0	4	0	6,151,801:18:0	
1014	1	215	22:32:00.933	474CA416A4D	**7SAFE**	**UNSTOW**	S/P TO 153 deg cone	1O0	4	0	6,151,803:16:0	
1015	1	215	22:32:20.933	20CA4AD	7STAT	17.45,336.4178,4	Stator inertial point	1O0	4	0	6,151,803:46:0	
1016	1	215	22:36:14.933	474CA416A4E	7BURN	,336.417797,46.1	ALERT -- Thruster fire	1O0	4	0	6,151,807:33:0	
1017	1	215	22:44:04.266	20CA4AF	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,151,815:09:0	
1018	1	215	22:49:56.266	20CA4AG	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,151,820:82:0	
1019	1	215	23:11:12.266	20CA4AJ	7STAT	10.00,336.4178,4	Stator inertial point	1O0	4	0	6,151,841:85:0	
1020	1	215	23:11:24.266	20CA6AB	6MROH	7,6744,0,A10	read from AACSA7,6744,0,A10	1O0	4	0	6,151,842:12:0	
1021	1	215	23:17:12.266	20CA4AK	**7MODE**	**INT**	AACS INERTIAL MODE	1O0	4	0	6,151,847:79:0	
1022	1	215	23:19:12.266	474CA416A4G	7BURN	,336.417797,46.1	ALERT -- Thruster fire	1O0	4	0	6,151,849:77:0	
1023	1	215	23:27:08.266	20CA4AM	7SLEW	DIS,POS,0.0	Stator movement	1O0	4	0	6,151,857:63:0	
1024	1	215	23:32:00.266	20CA4AN	**7MODE**	**CRU**	AACS CRUISE MODE	1O0	4	0	6,151,862:46:0	
1025	1	216	00:38:52.266	488ER6B	6TMSED	NORM,AH3	Sci, Eng, and D/L Chan	1O0	4	0	6,151,928:58:0	
1026	1	216	00:59:27.600		DMS:	: *TURNARND	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,151,949:00:0	
1027	1	216	00:59:27.600		DMS:	: *SLEW-TIC	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,151,949:00:0	
1028	1	216	00:59:27.600		DMS:	: *E4-DELAY	RDY, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,151,949:00:0	
1029	1	216	00:59:27.600	465KA6A	6DMST	5900	DMS Slew to TIC	1O0	4	0	6,151,949:00:0	
1030	1	216	00:59:34.266		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,151,949:10:0	
1031	1	216	00:59:35.666		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 202.24 +/-	1O0	4	0	6,151,949:12:1	
1032	1	216	02:08:28.266	488ER6C	6TMSED	NORM,AH2	Sci, Eng, and D/L Chan	1O0	4	0	6,152,017:23:0	
1033	1	216	02:20:24.933	488ER6D	6TMSED	FILL,AH2	Sci, Eng, and D/L Chan	1O0	4	0	6,152,029:06:0	
1034	1	216	02:34:04.266	488ER6E	6TMSED	FILL,AH1	Sci, Eng, and D/L Chan	1O0	4	0	6,152,042:52:0	
1035	1	216	03:01:00.266	488ES6A	6TMSED	FILL,AL1	Sci, Eng, and D/L Chan	1O0	4	0	6,152,069:19:0	
1036	1	216	03:10:20.266	488ES6B	6TMSED	FILL,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,152,078:40:0	
1037	1	216	06:05:48.200	431YL6A	6RCDSL	DDSNCG,PLSNCG,EP	Record Deselect (DDS o	1O0	4	0	6,152,251:89:0	
1038	1	216	06:09:01.533	20YC6A	6HICON			1O0	4	0	6,152,255:15:0	
1039	1	216	06:09:52.200	431YM6A	6RCSEL	DDSNCG,PLSNCG,EP	Record Select (DDS onl	1O0	4	0	6,152,256:00:0	
1040	1	216	07:44:36.333		DMS:	: *RUNDOWN	P7, TRACK 1, FWD, TIC *5897.94 +/-	1O0	4	0	6,152,349:63:2	
1041	1	216	07:44:37.533		DMS:	: *READY	RDY, TRACK 1, FWD, TIC *5898.00 +/-	1O0	4	0	6,152,349:65:0	
1042	1	216	07:56:50.866	465KB6A	6DMSC	P100,4	DMS Control Tape P/B 100.8kbps	1O0	4	0	6,152,361:73:0	
1043	1	216	07:56:50.866		DMS:	: *US-RUNUP	P7, TRACK 1, FWD, TIC 5898.00 +/-	1O0	4	0	6,152,361:73:0	

Line	YR	DOY	SCET - GMT	PSID	Command	Parameters	Description	GCM	GO	GS	RIM	MF I
1044	1	216	07:56:52.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC *5898.12 +/-	1O0	4	0	6,152,361:75:1	
1045	1	216	07:56:57.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC *5899.35 +/-	1O0	4	0	6,152,361:83:0	
1046	1	216	07:56:58.733		DMS:	: *RUNUP	P100, TRACK *4, *REV, TIC *5899.41 +/-	1O0	4	0	6,152,361:84:8	
1047	1	216	07:57:02.600		DMS:	: *AT_SPD	P100, TRACK 4, REV, TIC 5893.91 +/-	1O0	4	0	6,152,361:90:6	
1048	1	216	07:57:02.600		DMS:	: *P_SLEW	P100, TRACK 4, REV, TIC *5893.91 +/-	1O0	4	0	6,152,361:90:6	
1049	1	216	08:27:36.200	465KB6B	6DMSC	RDY,4	DMS Control Tape stop	1O0	4	0	6,152,392:20:0	
1050	1	216	08:27:36.200		DMS:	: *RUNDOWN	P100, TRACK 4, REV, TIC * 253.45 +/-	1O0	4	0	6,152,392:20:0	
1051	1	216	08:27:37.400		DMS:	: *READY	RDY, TRACK 4, REV, TIC * 252.65 +/-	1O0	4	0	6,152,392:21:8	
1052	1	216	10:06:41.533	488ET6A	6TMSED	NORM,AL2	Sci, Eng, and D/L Chan	1O0	4	0	6,152,490:20:0	
1053	1	216	10:27:40.200	488ET6B	6TMSED	NORM,AL3	Sci, Eng, and D/L Chan	1O0	4	0	6,152,510:88:0	
1054	1	216	10:29:36.866	465KD6A	6DTRN	CMD,6DTRN,465KD6	DMS TRACK TURNAROUND	1O0	4	0	6,152,512:81:0	
1055	1	216	10:29:36.866		DMS:	: *DMS-TURN	P7, TRACK 4, REV, TIC 252.65 +/-	1O0	4	0	6,152,512:81:0	
1056	1	216	10:29:36.866		DMS:	: *US-RUNUP	P7, TRACK *1, *FWD, TIC 252.65 +/-	1O0	4	0	6,152,512:81:0	
1057	1	216	10:29:38.266		DMS:	: *US_AT_SP	P7, TRACK 1, FWD, TIC * 252.77 +/-	1O0	4	0	6,152,512:83:1	
1058	1	216	10:29:43.533		DMS:	: *US_RD	P7, TRACK 1, FWD, TIC * 254.00 +/-	1O0	4	0	6,152,513:00:0	
1059	1	216	10:29:44.733		DMS:	: *RUNUP	P7, TRACK *4, *REV, TIC * 254.06 +/-	1O0	4	0	6,152,513:01:8	
1060	1	216	10:29:46.133		DMS:	: *AT_SPD	P7, TRACK 4, REV, TIC * 253.94 +/-	1O0	4	0	6,152,513:03:9	
1061	1	216	10:33:36.800		DMS:	: *REVERSE	P7, TRACK 4, REV, TIC * 199.87 +/-	1O0	4	0	6,152,516:76:9	
1062	1	216	10:33:38.000		DMS:	: *TURNARND	P7, TRACK *1, *FWD, TIC * 199.81 +/-	1O0	4	0	6,152,516:78:7	
1063	1	216	10:33:38.000		DMS:	: *RUNUP	P7, TRACK 1, FWD, TIC 199.81 +/-	1O0	4	0	6,152,516:78:7	
1064	1	216	10:33:39.400		DMS:	: *AT_SPD	P7, TRACK 1, FWD, TIC * 199.93 +/-	1O0	4	0	6,152,516:80:8	
1065	1	216	10:33:51.400		DMS:	: *AUTOSTOP	P7, TRACK 1, FWD, TIC * 202.06 +/-	1O0	4	0	6,152,517:07:8	
1066	1	216	10:33:52.600		DMS:	: *READY	RDY, TRACK 1, FWD, TIC * 202.12 +/-	1O0	4	0	6,152,517:09:6	
1067	**1**	**216**	**11:00:00.000**	**20A3EW**	**37A**	**Final Condition**	**NIMS Power ON**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1068	**1**	**216**	**11:00:00.000**	**20A3EX**	**37HR**	**Final Condition**	**Replacement Heaters OFF**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1069	**1**	**216**	**11:00:00.000**	**20A3EY**	**37C1PR**	**Final Condition**	**Optics Heater 1 OFF (primary relay)**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1070	**1**	**216**	**11:00:00.000**	**20A3EZ**	**37C2PR**	**Final Condition**	**Optics Heater 2 OFF (primary relay)**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1071	**1**	**216**	**11:00:00.000**	**20A3FA**	**37F1PR**	**Final Condition**	**Radiator Flash Heater OFF (primary relay)**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1072	**1**	**216**	**11:00:00.000**	**20A3FB**	**37F2PR**	**Final Condition**	**Shield Flash Heater OFF (primary relay)**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1073	**1**	**216**	**11:00:00.000**	**20A3FD**	**40HRPR**	**Final Condition**	**RCT Heater OFF (primary relay)**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1074	**1**	**216**	**11:00:00.000**	**20A3FE**	**40T1PR**	**Final Condition**	**PCT Heater 1 OFF (primary relay)**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1075	**1**	**216**	**11:00:00.000**	**20A3FF**	**40T2R**	**Final Condition**	**PCT Heater 2 OFF**	**1O0**	**4**	**0**	**6,152,542:85:7**	
1076	1	216	11:00:00.200		DMS:	: READY	RDY, TRACK 1, FWD, TIC 202.12 +/-	1O0	4	0	6,152,542:86:0	

30INECLPSE01

```
OAPEL:  30INECLPSE01              ALIAS:  30INECLPSE01
EXT:    A                         PSID:   DF
SCLK1:  06048717:89:0             SCLK2:  06048723:81:0
SCET1:    01-143/13:21:29.666     SCET2:    01-143/13:27:28.333
TARGET: IO                        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:    36                   TLMFMT:     MPW

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

WETGID:     0326036001          03  26  036  001
WTGRP_SIZ:  26
```

EDIT TABLE

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

30INECLPSE01

```
OAPEL:  30INECLPSE01              ALIAS:  30INECLPSE01
EXT:    B                         PSID:   DF
SCLK1:  06048720:88:0             SCLK2:  06048721:88:0
SCET1:    01-143/13:24:30.333     SCET2:    01-143/13:25:31.666
TARGET: IO                        PARTITION: 1

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

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

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

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

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	039FF	0,0011,1001,1111,1111
1	03800	0,0011,1000,0000,0000
2	039FF	0,0011,1001,1111,1111
3	03800	0,0011,1000,0000,0000
4	00000	0,0000,0000,0000,0000
5	03800	0,0011,1000,0000,0000
6	039FF	0,0011,1001,1111,1111
7	03800	0,0011,1000,0000,0000
8	039FF	0,0011,1001,1111,1111
9	03800	0,0011,1000,0000,0000
10	039FF	0,0011,1001,1111,1111
11	03800	0,0011,1000,0000,0000
12	00000	0,0000,0000,0000,0000
13	03800	0,0011,1000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	03800	0,0011,1000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	03800	0,0011,1000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	03800	0,0011,1000,0000,0000
20	00000	0,0000,0000,0000,0000
21	03800	0,0011,1000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	03800	0,0011,1000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

30INECLPSE01

OAPEL: 30INECLPSE01 ALIAS: 30INECLPSE01
EXT: C PSID: DF
SCLK1: 06048717:89:0 SCLK2: 06048723:81:0
SCET1: 01-143/13:21:29.666 SCET2: 01-143/13:27:28.333
TARGET: IO 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: 180 TLMFMT: MPW

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

WETGID: 0326144001 03 26 144 001
WTGRP_SIZ: 26

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	039FF	0,0011,1001,1111,1111
1	03800	0,0011,1000,0000,0000
2	039FF	0,0011,1001,1111,1111
3	03800	0,0011,1000,0000,0000
4	039FF	0,0011,1001,1111,1111
5	03800	0,0011,1000,0000,0000
6	039FF	0,0011,1001,1111,1111
7	03800	0,0011,1000,0000,0000
8	039FF	0,0011,1001,1111,1111
9	03800	0,0011,1000,0000,0000
10	039FF	0,0011,1001,1111,1111
11	03800	0,0011,1000,0000,0000
12	039FF	0,0011,1001,1111,1111
13	03800	0,0011,1000,0000,0000
14	039FF	0,0011,1001,1111,1111
15	03800	0,0011,1000,0000,0000
16	039FF	0,0011,1001,1111,1111
17	03800	0,0011,1000,0000,0000
18	039FF	0,0011,1001,1111,1111
19	03800	0,0011,1000,0000,0000
20	039FF	0,0011,1001,1111,1111
21	03800	0,0011,1000,0000,0000
22	039FF	0,0011,1001,1111,1111
23	03800	0,0011,1000,0000,0000
24	00000	0,0000,0000,0000,0000
25	00000	0,0000,0000,0000,0000

30INGLOBAL01

```
OAPEL:  30INGLOBAL01              ALIAS:  30INGLOBAL01
EXT:    A                         PSID:   DA
SCLK1:  06048968:89:0             SCLK2:  06048982:79:0
SCET1:    01-143/17:35:17.000     SCET2:    01-143/17:49:19.666
TARGET: IO                        PARTITION: 1

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

MB_DOWN:    00000                 MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                   EST_COMPV:  0.3
RATE_CON1:  00000                 RATE_CON2:  65525
NWAVETOT:    36                   TLMFMT:     MPW

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

WETGID:     0326036001          03  26  036  001
WTGRP_SIZ:  26
```

EDIT TABLE

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

30JNHTSPOT03

OAPEL: 30JNHTSPOT03 ALIAS: 30JNHTSPOT03
EXT: A PSID: DE
SCLK1: 06049540:89:0 SCLK2: 06049581:69:0
SCET1: 01-144/03:13:38.266 SCET2: 01-144/03:54:52.266
TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 16 TLMFMT: LPU

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

WETGID: 0326016001 03 26 016 001
WTGRP_SIZ: 26

EDIT TABLE

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

30JNBBARGE01

OAPEL: 30JNBBARGE01 ALIAS: 30JNBBARGE01
EXT: A PSID: DH
SCLK1: 06050030:90:0 SCLK2: 06050038:78:0
SCET1: 01-144/11:29:04.933 SCET2: 01-144/11:37:02.933
TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 16 TLMFMT: LPU

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

WETGID: 0326016001 03 26 016 001
WTGRP_SIZ: 26

EDIT TABLE

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

30JNBBARGE02

OAPEL: 30JNBBARGE02 ALIAS: 30JNBBARGE02
EXT: A PSID: DI
SCLK1: 06050139:75:0 SCLK2: 06050143:77:0
SCET1: 01-144/13:19:08.266 SCET2: 01-144/13:23:11.600
TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 8 TLMFMT: LPU

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

WETGID: 0326008001 03 26 008 001
WTGRP_SIZ: 26

EDIT TABLE

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

30JNHTSPOT01

OAPEL: 30JNHTSPOT01 ALIAS: 30JNHTSPOT01
EXT: A PSID: DJ
SCLK1: 06050170:89:0 SCLK2: 06050193:06:0
SCET1: 01-144/13:50:38.266 SCET2: 01-144/14:12:58.266
TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 16 TLMFMT: LPU

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

WETGID: 0326016001 03 26 016 001
WTGRP_SIZ: 26

EDIT TABLE

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

30JNGRWAKE01

OAPEL: 30JNGRWAKE01 ALIAS: 30JNGRWAKE01
EXT: A PSID: DK
SCLK1: 06050230:89:0 SCLK2: 06050256:85:0
SCET1: 01-144/14:51:18.266 SCET2: 01-144/15:17:32.266
TARGET: JUPITER PARTITION: 1

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

MB_DOWN: 00000 MB_UP: 00000
COMP_FLAG: 1
EST_COMP: 2.0 EST_COMPV: 0.3
RATE_CON1: 00000 RATE_CON2: 65525
NWAVETOT: 16 TLMFMT: LPU

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

WETGID: 0326016001 03 26 016 001
WTGRP_SIZ: 26

EDIT TABLE

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

30JNGLOBAL01

```
OAPEL:  30JNGLOBAL01              ALIAS:  30JNGLOBAL01
EXT:    A                         PSID:   DP
SCLK1:  06050974:89:0             SCLK2:  06050979:87:0
SCET1:    01-145/03:23:34.266     SCET2:    01-145/03:28:36.266
TARGET: JUPITER                   PARTITION: 1

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

MB_DOWN:    00000                 MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                   EST_COMPV:  0.3
RATE_CON1:  00000                 RATE_CON2:  65525
NWAVETOT:     2                   TLMFMT:     LPU

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

WETGID:     0713002001          07  13  002  001
WTGRP_SIZ:  13
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	00090	0,0000,0000,1001,0000
1	00090	0,0000,0000,1001,0000
2	00090	0,0000,0000,1001,0000
3	00090	0,0000,0000,1001,0000
4	00090	0,0000,0000,1001,0000
5	00090	0,0000,0000,1001,0000
6	00090	0,0000,0000,1001,0000
7	00090	0,0000,0000,1001,0000
8	00090	0,0000,0000,1001,0000
9	00090	0,0000,0000,1001,0000
10	00090	0,0000,0000,1001,0000
11	00090	0,0000,0000,1001,0000
12	00000	0,0000,0000,0000,0000

30JNGLOBAL01

```
OAPEL:  30JNGLOBAL01            ALIAS:  30JNGLOBAL01
EXT:    B                       PSID:   DP
SCLK1:  06050982:76:0           SCLK2:  06050995:65:0
SCET1:    01-145/03:31:30.933   SCET2:    01-145/03:44:32.266
TARGET: JUPITER                 PARTITION: 1

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

MB_DOWN:    00000               MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                 EST_COMPV:  0.3
RATE_CON1:  00000               RATE_CON2:  65525
NWAVETOT:     5                 TLMFMT:     LPU

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

WETGID:     0713005001          07  13  005  001
WTGRP_SIZ:  13
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	028C1	0,0010,1000,1100,0001
1	028C1	0,0010,1000,1100,0001
2	028C1	0,0010,1000,1100,0001
3	028C1	0,0010,1000,1100,0001
4	028C1	0,0010,1000,1100,0001
5	028C1	0,0010,1000,1100,0001
6	028C1	0,0010,1000,1100,0001
7	028C1	0,0010,1000,1100,0001
8	028C1	0,0010,1000,1100,0001
9	028C1	0,0010,1000,1100,0001
10	028C1	0,0010,1000,1100,0001
11	028C1	0,0010,1000,1100,0001
12	00000	0,0000,0000,0000,0000

30JNGLOBAL02

```
OAPEL:  30JNGLOBAL02              ALIAS:  30JNGLOBAL02
EXT:    A                         PSID:   DQ
SCLK1:  06051184:51:0             SCLK2:  06051193:89:0
SCET1:    01-145/06:55:28.866     SCET2:    01-145/07:04:59.533
TARGET: JUPITER                   PARTITION: 1

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

MB_DOWN:    00000                 MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                   EST_COMPV:  0.3
RATE_CON1:  00000                 RATE_CON2:  65525
NWAVETOT:     5                   TLMFMT:     LPU

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

WETGID:     0713005001          07  13  005  001
WTGRP_SIZ:  13
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	028C1	0,0010,1000,1100,0001
1	028C1	0,0010,1000,1100,0001
2	028C1	0,0010,1000,1100,0001
3	028C1	0,0010,1000,1100,0001
4	028C1	0,0010,1000,1100,0001
5	028C1	0,0010,1000,1100,0001
6	028C1	0,0010,1000,1100,0001
7	028C1	0,0010,1000,1100,0001
8	028C1	0,0010,1000,1100,0001
9	028C1	0,0010,1000,1100,0001
10	028C1	0,0010,1000,1100,0001
11	028C1	0,0010,1000,1100,0001
12	00000	0,0000,0000,0000,0000

30JNGLOBAL03

```
OAPEL:  30JNGLOBAL03              ALIAS:  30JNGLOBAL03
EXT:    A                         PSID:   DR
SCLK1:  06051381:77:0             SCLK2:  06051395:40:0
SCET1:    01-145/10:14:57.533     SCET2:    01-145/10:28:41.533
TARGET: JUPITER                   PARTITION: 1

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

MB_DOWN:    00000                 MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                   EST_COMPV:  0.3
RATE_CON1:  00000                 RATE_CON2:  65525
NWAVETOT:     5                   TLMFMT:     LPU

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

WETGID:     0713005001          07  13  005  001
WTGRP_SIZ:  13
```

EDIT TABLE

GRATING STEP	HEX MASK	DETECTOR MASK
0	028C1	0,0010,1000,1100,0001
1	028C1	0,0010,1000,1100,0001
2	028C1	0,0010,1000,1100,0001
3	028C1	0,0010,1000,1100,0001
4	028C1	0,0010,1000,1100,0001
5	028C1	0,0010,1000,1100,0001
6	028C1	0,0010,1000,1100,0001
7	028C1	0,0010,1000,1100,0001
8	028C1	0,0010,1000,1100,0001
9	028C1	0,0010,1000,1100,0001
10	028C1	0,0010,1000,1100,0001
11	028C1	0,0010,1000,1100,0001
12	00000	0,0000,0000,0000,0000

30CNFEATRE01

```
OAPEL:  30CNFEATRE01              ALIAS:  30CNFEATRE01
EXT:    A                         PSID:   DS
SCLK1:  06051458:89:0             SCLK2:  06051469:83:0
SCET1:    01-145/11:32:56.200     SCET2:    01-145/11:44:00.200
TARGET: CALLISTO                  PARTITION: 1

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

MB_DOWN:    00000                 MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                   EST_COMPV:  0.3
RATE_CON1:  00000                 RATE_CON2:  65525
NWAVETOT:    30                   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:     0326030001          03  26  030  001
WTGRP_SIZ:  26
```

EDIT TABLE

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

30CNREGION01

```
OAPEL:  30CNREGION01              ALIAS:  30CNREGION01
EXT:    A                         PSID:   DU
SCLK1:  06051516:87:0             SCLK2:  06051519:86:0
SCET1:    01-145/12:31:33.533     SCET2:    01-145/12:34:35.533
TARGET: CALLISTO                  PARTITION: 1

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

MB_DOWN:    00000                 MB_UP:      00000
COMP_FLAG:  1
EST_COMP:   2.0                   EST_COMPV:  0.3
RATE_CON1:  00000                 RATE_CON2:  65525
NWAVETOT:    12                   TLMFMT:     LPU

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

WETGID:     0326012001          03  26  012  001
WTGRP_SIZ:  26
```

EDIT TABLE

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

30NNRCTRLT01

```
OAPEL:  30NNRCTRLT01            ALIAS:  LSNNRCTRTA01
EXT:    R                       PSID:   XU
SCLK1:  06117461:00:0           SCLK2:  06117468:12:0
SCET1:  2001-191/19:48:16.733   SCET2:  2001-191/19:55:29.400
TARGET: CAL                     PARTITION: 1

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

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

30NNRCTRLT01

OAPEL: 30NNRCTRLT01 ALIAS: LSNNRCTRTA01
EXT: S PSID: XU
SCLK1: 06117474:30:0 SCLK2: 06117476:12:0
SCET1: 2001-191/20:02:26.066 SCET2: 2001-191/20:03:34.733
TARGET: CAL PARTITION: 1

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

MB_DOWN: 11011 MB_UP: 11011
COMP_FLAG: 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

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

NIMS C30 OBSTAB

This is a time-ordered ASCII TABLE (listing) of GALILEO NIMS observation parameters for use by downlink data processing of the NIMS C30 data. Each Obstab entry is 512 bytes long but is presented here as 4 lines of 128 characters per entry. Included items come from NIMS commands in (1) the Standard Sequence Data File (SSDF) and (2) the Playback Table Update Process (PTUP), plus some items from (3) the NIMS/CDS software load.

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

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

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

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

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

	MODE	2	72 - 73	.NIMS Instrument MODE (0-15)	SEF: 37IOP, data byte 2, bits 5-8
	GAIN	1	74 - 74	.Gain State (true value)	SEF: 37IST, data byte 3, bits 7-8 (if bit 6 = 1) 0=gs2, 1=gs4, 2=gs3, 3=gs1
	CHOP	1	75 - 75	.Chopper State (1=Ref,2=63Hz,3=FreeRun,4=Off)	SEF: 37IST, data byte 2, bits 7-8 (if bit 6 = 1) 0=63hz, 1=off, 2=ref, 3=freerun
	GRAT_OFF	1	76 - 76	.Grating Offset (0-7, default 4)	SEF: 37GOF, data byte 2, bits 5-8
	PTAB_A(6)	12	77 - 88	.First PTAB |repeat count,mirror op,autobias...	SEF: functions of MODE (from 37IOP) as modified by 37MPT, unless special sequence (modes 12-15) in which case values come from 37SS parameters <tbd>
	PTAB_B(6)	12	89 - 100	.Second PTAB |...grating start, grating delta...	
				. |...number of grating positions)	
	ECAL	1	101 - 101	.Electronics Calibration Active (1=yes)	SEF: 37IST, data byte 3, bit 4 (1=on)
	OPCAL	1	102 - 102	.Optics Calibration active (1=yes)	SEF: 37IST, data byte 3, bit 5 (1=on)
#	REAL_TIME	1	103 - 103	.NIMS in Real-Time Telemetry (1=yes)	SEF: track RT_INST_SEL .and. 37RT
#	RECORD	1	104 - 104	.NIMS in Record Telemetry (1=yes)	SEF: track DMS status event: RECORD, REVERSE, RESUME, RUNDOWN <tbd>
*	THRESHSEL	1	105 - 105	.Threshold value select (>0 = yes)	PBK: THRESHLD_TBL > 0 (i.e. 1-3)
	<spare>	1	106 - 106	.	
#	RTISELDN	5	107 - 111	.RTI select, 5 binary bits (for mirror position blocking, down scan)	SEF: 37MB data byte 1, bits 4-8 <tbd>
#	RTISELUP	5	112 - 116	.RTI select, 5 binary bits (for mirror position blocking, up scan)	SEF: 37MB data byte 2, bits 4-8 <tbd>
	<spare>	1	117 - 117	.	
*	RICEFLAG	1	118 - 118	.Rice compression flag	PBK: 0 no compression 1 Rice compression, ref vals each mirror scan 3 Rice compression, ref vals each RIM rollover
	<spare>	1	119 - 119	.	
	ESTCOMP	3	120 - 122	.Rice estimated compression ratio (m.n)	PBK: CMPR_DVSR <tbd>
	ESTCOMPV	3	123 - 125	.Rice estimated error in compression ratio (m.n)	PBK: CMPR_UNC <tbd>
#	RATECON1	5	126 - 130	.Rate control lower limit	PBK: | S/W table entry indexed by LOSSY_COMP (1-7)
#	RATECON2	5	131 - 135	.Rate control upper limit	PBK: | or 0 if LOSSY_COMP = 0 (no rate control)
	<spare>	17	136 - 152		
	NWAVETOT	3	153 - 155	.Total number of wavelengths selected	Compute from relevant Wavelength Edit Table group
	TLMFMT	3	156 - 158	.Telemetry format (MPW et al, LPU or LNR)	SEF: 6TMREC command
	SCET1	21	159 - 179	.Start time of played-back OBS in UTC	PBK (except realtime data: SEF)
	SCET2	21	180 - 200	.Stop time of played-back OBS in UTC	PBK (except realtime data: SEF)
	<spares>	67	201 - 267	.Start time of played-back OBS in UTC	PBK (except realtime data: SEF)
*	THRESH	51	268 - 318	.Threshold values (17 3-digit values, 0-999)	PBK: S/W table indexed by THRESH_TBL > 0, else 0s

```
-------------------------------------------------------------------------------------------------------------------------------
# WETGID       10 319 - 328     .Wavelength selection group ID (unique)         PBK: WET_GID    (realtime <tbd>)
                                  Rule of formation: mmeellllnnn where
                                   mm  = instrument mode (0-15)
                                   ee  = # entries in group
                                   lll = number of wavelengths selected
                                   nnn = sequence number
* WETGRPSIZ     2 329 - 330     .# Wavelength Edit entries (1-26)               PBK: ED_GRP_LEN (realtime SEF: 37ETB <tbd>)
* WETGRP      182 331 - 512     .Wavelength Edit Table group:  WETGRPSIZ        PBK: ED_GRP     (realtime SEF: 37ETB data bytes 2..)
                                  entries, each one has 7 characters.  The
                                  first 2 characters are the repeat count
                                  (01-26).  The other 5 characters contain
                                  5 hex digits, representing the detector
                                  mask in the form BHHHH where B is 0 or 1
                                  and H has range 0-15.  (These entries are
                                  from the 37ETB instrument edit group for
                                  realtime data and from the logical AND of
                                  corresponding entries in the instrument
                                  and playback edit groups for playback data.)
--------------------------------
.The TARGET names used are:
   CAL      - N - non-science targets, usually calibration targets
   EARTH    - W - Earth
   MOON     - L - Moon
   SKY      - H - Stellar Space (space and stars)
   VENUS    - V - Venus
   GASPRA   - P - Gaspra
   IDA      - U - Ida
   JUPITER  - J - Jupiter
   IO       - I - Io
   EUROPA   - E - Europa
   GANYMEDE - G - Ganymede
   CALLISTO - C - Callisto
   J_RING   - R - Jupiter rings
   (the single letter abbreviation appears as the third character in the OAPEL name ).
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```

```
--------------------------------------------------------------------------------------------------------------------------------
30INECLPSE0130INECLPSE01ADF06048717:89:006048723:81:01         IO       3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          36MPW  01-143/13:21:29.666  01-143/13:27:28.333
          0000000000000000000000000000000000000000000000000032603600126010000001000000100000010000001039FF010000010000001000
0001000000100000010000001000000103 9FF010000001000000100000010000001000000100000010000001039FF010000001000000100000010000001000000
30INECLPSE0130INECLPSE01BDF06048720:88:006048721:88:01         IO       3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        3         144MPW  01-143/13:24:30.333  01-143/13:25:31.666
          0000000000000000000000000000000000000000000000000032614400126010 39FF010380001039FF0103800010000001038000103 9FF01038
0001039FF010380001039FF0103800010000001038000103 9FF010380001039FF010380001039FF0103800010000001038000103 9FF010380001000000100000
30INECLPSE0130INECLPSE01CDF06048717:89:006048723:81:01         IO       3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        3         180MPW  01-143/13:21:29.666  01-143/13:27:28.333
          0000000000000000000000000000000000000000000000000032614400126010 39FF010380001039FF010380001039FF010380001039FF01038
0001039FF010380001039FF010380001039FF010380001039FF010380001039FF010380001039FF010380001039FF010380001000000100000
30INGLOBAL0130INGLOBAL01ADA06048968:89:006048982:79:01         IO       3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          36MPW  01-143/17:35:17.000  01-143/17:49:19.666
          0000000000000000000000000000000000000000000000000032603600126010000001000000100000010000001039FF010000010000001000
0001000000100000010000001000000103 9FF010000001000000100000010000001000000100000010000001039FF010000001000000100000010000001000000
30JNHTSPOT0330JNHTSPOT03ADE06049540:89:006049581:69:01         JUPITER  3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          16LPU  01-144/03:13:38.266  01-144/03:54:52.266
          0000000000000000000000000000000000000000000000000032601600126010000001000000100000010000001000000010000001038C701000
0001000000100000010000001000000100000010000001000000100000010000001000000010000001038C701000000100000010000001000000100000010000001000000100000
30JNBBARGE0130JNBBARGE01ADH06050030:90:006050038:78:01         JUPITER  3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          16LPU  01-144/11:29:04.933  01-144/11:37:02.933
          0000000000000000000000000000000000000000000000000032601600126010000001000000100000010000001000000010000001038C701000
0001000000100000010000001000000100000010000001000000100000010000001000000010000001038C701000000100000010000001000000100000010000001000000100000
30JNBBARGE0230JNBBARGE02ADI06050139:75:006050143:77:01         JUPITER  3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2           8LPU  01-144/13:19:08.266  01-144/13:23:11.600
          0000000000000000000000000000000000000000000000000032600800126010000001000000100000010000001000000010000001000000010000001000
0001000000100000010000001000000103 8C701000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000
30JNHTSPOT0130JNHTSPOT01ADJ06050170:89:006050193:06:01         JUPITER  3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          16LPU  01-144/13:50:38.266  01-144/14:12:58.266
          0000000000000000000000000000000000000000000000000032601600126010000001000000100000010000001000000010000001038C701000
0001000000100000010000001000000100000010000001000000100000010000001000000010000001038C701000000100000010000001000000100000010000001000000100000
30JNGRWAKE0130JNGRWAKE01ADK06050230:89:006050256:85:01         JUPITER  3214 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          16LPU  01-144/14:51:18.266  01-144/15:17:32.266
          0000000000000000000000000000000000000000000000000032601600126010000001000000100000010000001000000010000001038C701000
0001000000100000010000001000000100000010000001000000100000010000001000000010000001038C701000000100000010000001000000100000010000001000000100000
30JNGLOBAL0130JNGLOBAL01ADP06050974:89:006050979:87:01         JUPITER  7214 1 1 0 0 012 1 1 0 0 01200010 0000000000 1 2.00.3000
0065525        2           2LPU  01-145/03:23:34.266  01-145/03:28:36.266
          0000000000000000000000000000000000000000000000000071300200113010009001000900100090010009001000900100090010009001000
900100090010009001000900100090010000 0
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30JNGLOBAL0130JNGLOBAL01BDP06050982:76:006050995:65:01         JUPITER  7214 1 1 0 0 012 1 1 0 0 01200010 0000000000 1 2.00.3000
0065525        2          5LPU  01-145/03:31:30.933  01-145/03:44:32.266
          00000000000000000000000000000000000000000000000000007130050011301028C101028C101028C101028C101028C101028C101028C101028
C101028C101028C101028C101028C10100000
30JNGLOBAL0230JNGLOBAL02ADQ06051184:51:006051193:89:01         JUPITER  7214 1 1 0 0 012 1 1 0 0 01200010 0000000000 1 2.00.3000
0065525        3          5LPU  01-145/06:55:28.866  01-145/07:04:59.533
          00000000000000000000000000000000000000000000000000007130050011301028C101028C101028C101028C101028C101028C101028C101028
C101028C101028C101028C101028C10100000
30JNGLOBAL0330JNGLOBAL03ADR06051381:77:006051395:40:01         JUPITER  7214 1 1 0 0 012 1 1 0 0 01200010 0000000000 1 2.00.3000
0065525        2          5LPU  01-145/10:14:57.533  01-145/10:28:41.533
          00000000000000000000000000000000000000000000000000007130050011301028C101028C101028C101028C101028C101028C101028C101028
C101028C101028C101028C101028C10100000
30CNFEATRE0130CNFEATRE01ADS06051458:89:006051469:83:01         CALLISTO 3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          30MPW  01-145/11:32:56.200  01-145/11:44:00.200
          00000000000000000000000000000000000000000000000000003260300012601000000100000010000001000000103 9FF0100000010000001000
0001000000100000010000001000000103 9F8010000001000000100000010000001000000100000010000001039F8010000001000000100000010000001000000
30CNREGION0130CNREGION01ADU06051516:87:006051519:86:01         CALLISTO 3414 1 1 0 0 124 1 1 0 0 12400010 0000000000 1 2.00.3000
0065525        2          12LPU  01-145/12:31:33.533  01-145/12:34:35.533
          00000000000000000000000000000000000000000000000000003260120012601000000100000010000001000000100000010000001000000100
0001000000100000010000001039FF0100000010000001000000100000010000001000000100000010000001000000100000010000001000000100000010000001000000
30NNRCTRLT01LSNNRCTRTA01RXU06117461:00:006117468:12:01         CAL      3114 1 1 0 0 124 1 1 0 0 12400100 1101111011 0 0.00.0000
0000000                  252RT 2001-191/19:48:16.7332001-191/19:55:29.400
          00000000000000000000000000000000000000000000000303252000 312003FF12007FF0200000

30NNRCTRLT01LSNNRCTRTA01SXU06117474:30:006117476:12:01         CAL      3114 1 1 0 0 124 1 1 0 0 12400100 1101111011 0 0.00.0000
0000000                  252RT 2001-191/20:02:26.0662001-191/20:03:34.733
          00000000000000000000000000000000000000000000000303252000 312003FF12007FF0200000

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Chapter 5 - Detailed Observation Designs

Contents

Introduction to Chapter 5

Detailed Observation Designs

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

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

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

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

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

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

NIMS Software Reload

ACTIVITY ID: 30NNECLPSE01-
START TIME: 01-143/13:13:29.000

Activity ID: Orbit 30 Target N Inst N OAPEL ECLPSE 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	05/23/00	Week 21
Start	IEE-CDS	00000000:00:0	01-143/13:13:29.000	IEE-000/00:00:00.000	
End	IEE-CDS	00000000:00:0	01-143/13:17:29.000	IEE-000/00:00:00.000	
Duration		00000000:00:0	000/00:04:00.000	000/00:00:00.000	

Top Label 30NNECLPSE01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

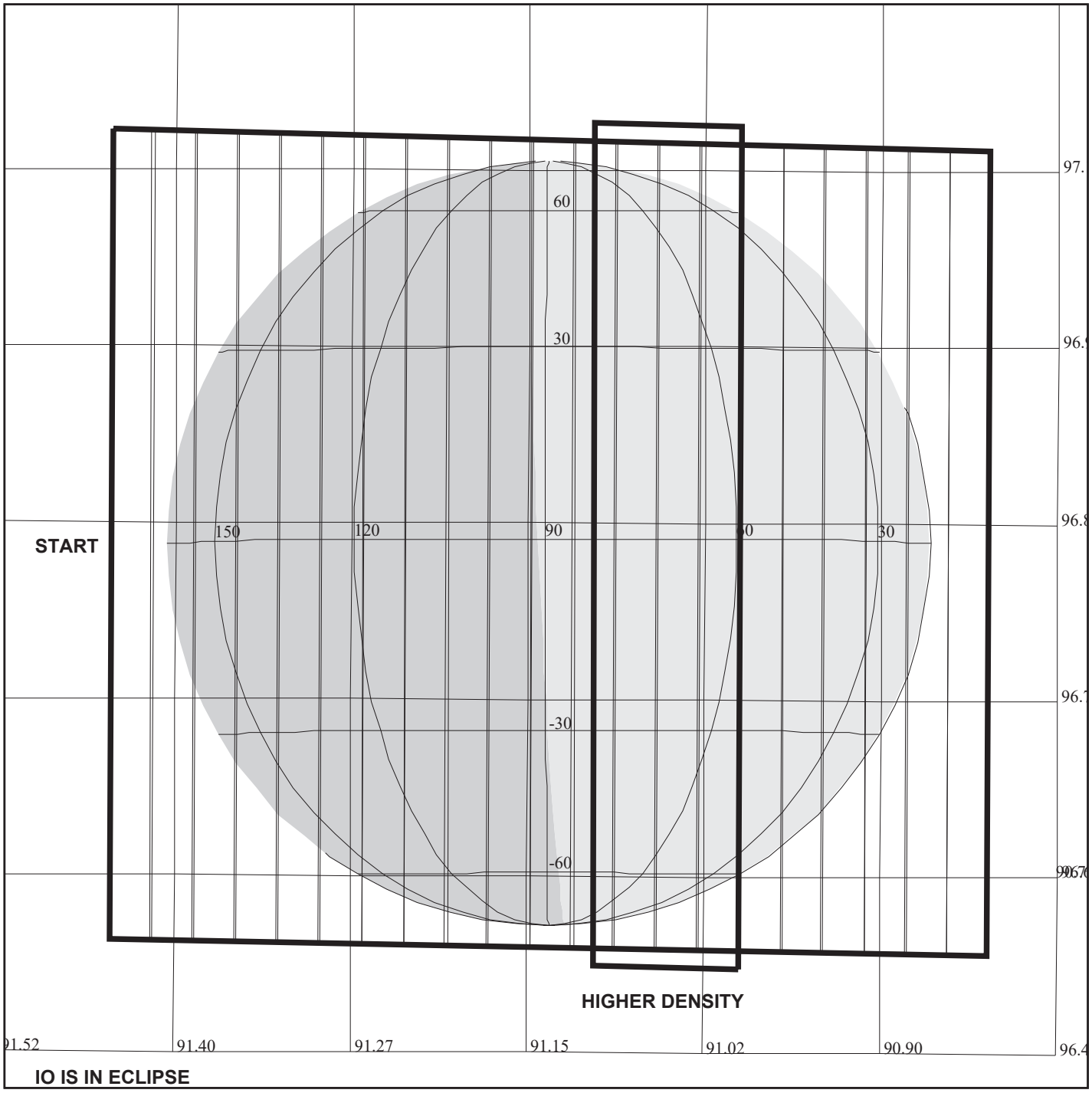
NIMS reload
Each NIMS GEM observation will have an instrument reload before the start of each observation. Each reload has its own OAPEL form, but only this first is included in the NIMSGUIDE. The NIMS C30 reload OAPELs are:

30NNECLPSE01, 30NNGLOBAL01, 30NNGLOBAL01, 30NNBARGEB01, 30NNHTSPOT02, 30NNHTSPOT03, 30NNWTOVAL01, 30NNBBARGE01, 30NNBBARGE02, 30NNHTSPOT01, 30NNGRWAKE01, 30NNGRWAKE02, 30NNGLOBAL01, 30NNGLOBAL02, 30NNGLOBAL03, 30NNFEATRE01, 30NNCTBRAN01, 30NNREGION01, 30NNREGION02, 30NNRELOAD01

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.



165DF:TT= 0 TMC= 1 C= 5.30 XC= 0.10 BS= 0/5471 TC= 3
A= 364 pD= 1080 SR=17.450 RA50=352.86 DEC50= -1.60 cone= 91.44 clock= 96.86
117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5471
1:#s= 1 Cs= -10.70 XCs= -0.20 Cr= 14.00 XCr= -5.00 sD= 1080 rD= 44

30INECLPSE01

DESIGN G3.2 yande: 4/26/2001 12:21:57

FILE:P.30INECLPSE01

TARGET BODY : IO

MINI:m.30INECLPSE01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-143/17:17:09.666 -CDS 233:00:0

BODY PLOT TIME:TARGET-TIME D= 1080 S= 0.700

OBSERVATION:30INECLPSE01

DESCRIP:IO_ECLIPSE

Io Eclipse Obs

ACTIVITY ID: 30INECLPSE01-
START TIME: 01-143/13:19:33.000

Activity ID: Orbit 30 Target I Inst N OAPEL ECLPSE SeqNo 01 -

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

Time System	CDS	Load ID	Calendar Date	05/23/01	Week 21
Start	IEE-CDS 00000235:00:0	01-143/13:19:33.000		IEE-000/03:57:36.666	
End	IEE-CDS 00000227:00:0	01-143/13:27:38.333		IEE-000/03:49:31.333	
Duration	00000008:00:0	000/00:08:05.333		000/00:08:05.333	

Top Label 30INECLPSE01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To search for thermal emissions of active hot spots during eclipse.

Data Returned

Design Detail

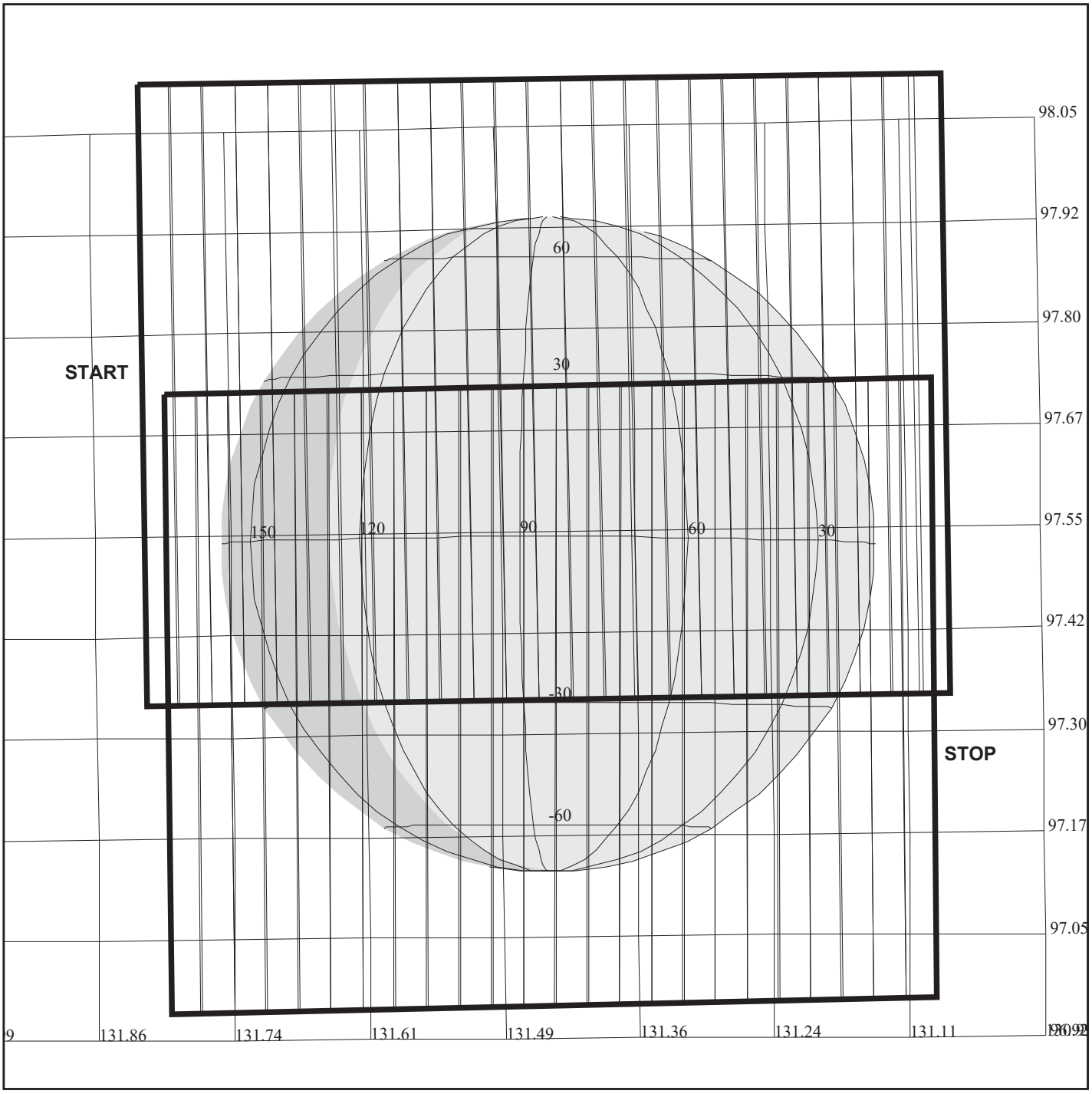
BTG=1.09 MB, TICS=169, FMT=MPW, LM

Single swath global map of Io's disk while in eclipse.
Center of disk near 90 degrees West longitude.

36 wavelengths returnd for all RIMs.
144 extra wavelengths returnd for 4th Rim over region of
new hotspot in southern hemisphere.
180 total wavelengths in 4th RIM.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, ILM408, ILM36
Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, ILM408, ILM144
Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, ILM408, ILM180



165DA:TT= 0 TMC= 1 C= 6.40 XC= 2.50 BS= 0/1153 TC= 3
A= 182 pD= 2558 SR=17.450 RA50= 29.84 DEC50= 15.56 cone=131.81 clock= 97.72
117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/1153
1:#s= 2 Cs= -12.50 XCs= 0.00 Cr= 12.30 XCr= -5.00 sD= 1262 rD= 34

30INGLOBAL01

DESIGN G3.2 yande: 4/26/2001 12:22:13

FILE:P.30INGLOBAL01

TARGET BODY : IO

MINI:m.30INGLOBAL01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-143/17:17:09.666 +CDS 18:00:0

BODY PLOT TIME:TARGET-TIME D= 2558 S= 0.600

OBSERVATION:30INGLOBAL01

DESCRIP:IO_GLOBAL_OBSERVATION

Io Global Obs

ACTIVITY ID: 30INGLOBAL01-
START TIME: 01-143/17:31:18.999

Activity ID: Orbit 30 Target I Inst N OAPEL GLOBAL SeqNo 01 -

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

Time System	CDS	Load ID	Calendar Date	05/23/01	Week 21
Start	IEE+CDS 00000014:00:0	01-143/17:31:18.999		IEE+000/00:14:09.333	
End	IEE+CDS 00000032:00:0	01-143/17:49:30.999		IEE+000/00:32:21.333	
Duration	00000018:00:0	000/00:18:12.000		000/00:18:12.000	

Top Label 30INGLOBAL01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To monitor Io's volcanic activity and surface changes in preparation for the upcoming I31 encounter.

Data Returned

Design Detail

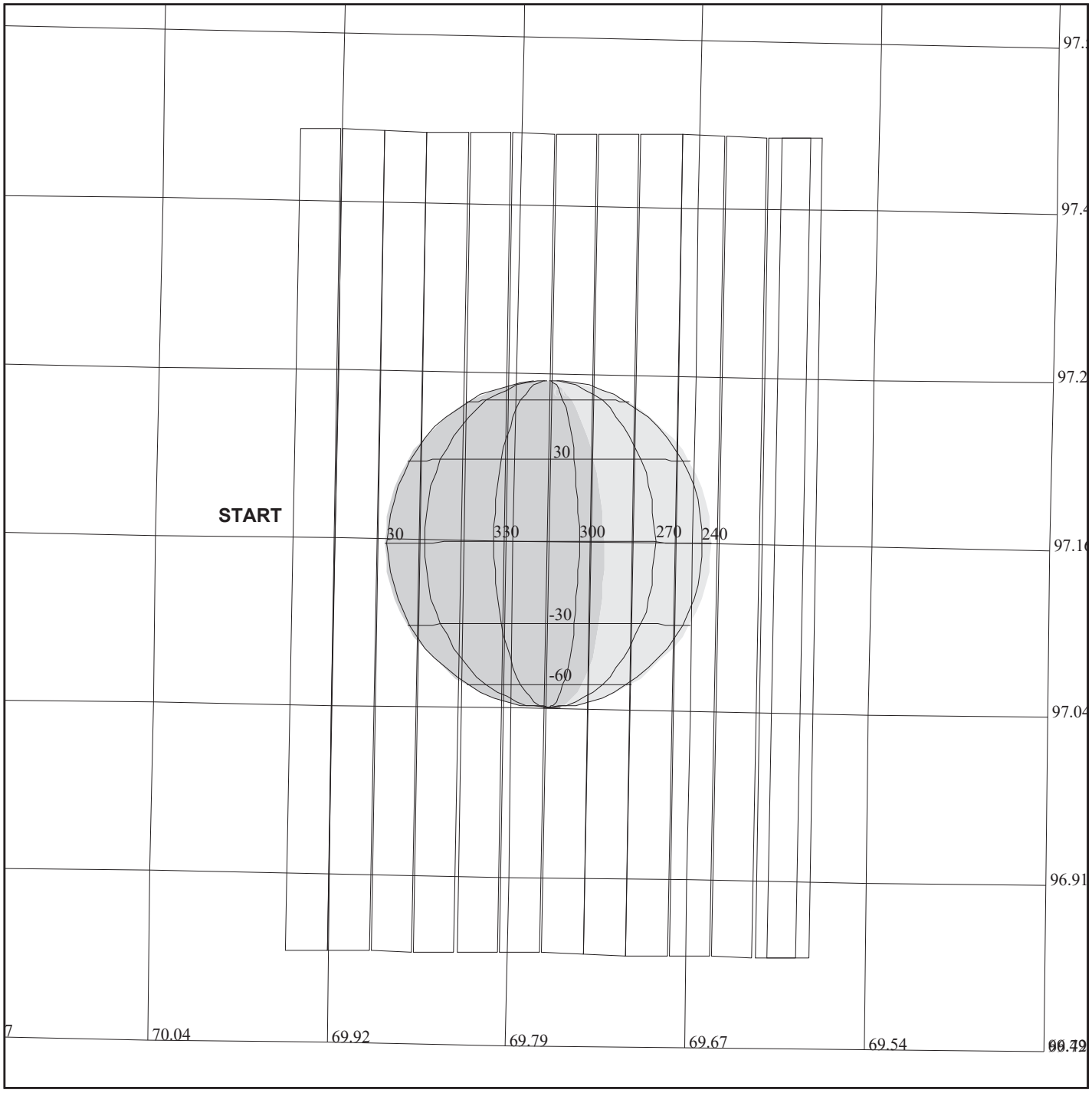
BTG=5.18 MB, TICS=794, FMT=MPW

All lit longitudes and latitudes, LM

Two- swath global map of Io's 3/4 illuminated disk.
Center of disk near 90 degrees West longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM36



165DB:TT= 0 TMC= 1 C= 3.00 XC= 0.00 BS= 0/8675 TC= 3
A= 728 pD= 668 SR=17.450 RA50=333.09 DEC50=-10.35 cone= 69.94 clock= 97.16
117DB:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/8675
1:#s= 1 Cs= -6.00 XCs= 0.00 Cr= 14.00 XCr= -5.00 sD= 668 rD= 44

30ENGLOBAL01

DESIGN G3.2 yande: 4/26/2001 12:21:45

FILE:P.30ENGLOBAL01

TARGET BODY : EUROPA

MINI:m.30ENGLOBAL01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:EEE 01-143/23:50:28.933 +CDS 0:00:0

BODY PLOT TIME:TARGET-TIME D= 668 S= 0.300

OBSERVATION:30ENGLOBAL01

DESCRIP:EUROPA_GLOBAL_OBSERVATION

Europa Global Obs

ACTIVITY ID: 30ENGLOBAL01-
START TIME: 01-143/23:46:36.267

Activity ID: Orbit 30 Target E Inst N OAPEL GLOBAL SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	05/23/01 Week 21
Start	EEE-CDS	00000004:00:0	01-143/23:46:36.267		EEE-000/00:04:02.666
End	EEE+CDS	00000004:00:0	01-143/23:54:41.599		EEE+000/00:04:02.666
Duration		00000008:00:0	000/00:08:05.332		000/00:08:05.332

Top Label 30ENGLOBAL01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate composition of Europa's surface and complete the global mapping which began in the prime mission.

No Data Returned

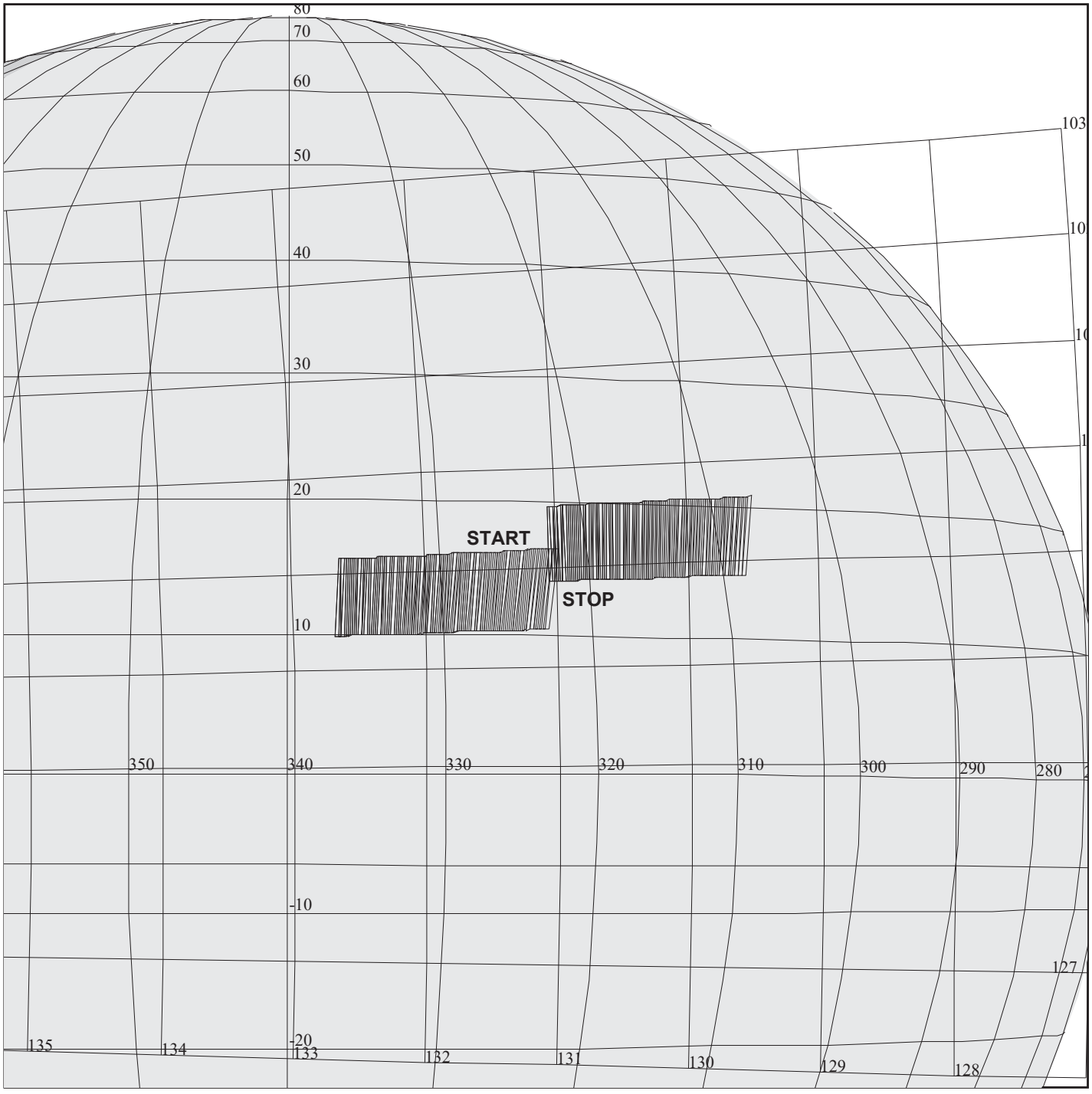
Design Detail

BTG=0.68 MB, TICS=51, FMT=LPU

All lit longitudes and latitudes. LM

Single swath global map of Europa, 1/3 lit.
Low resolution.
Centered at about 310 degrees West longitude.

Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, ELM228



165DC:TT= 0 TMC= 1 C= 23.00 XC= 4.50 BS= 0/3417 TC= 1(15 310)
A= 728 pD= 8360 SR=17.450 RA50= 28.69 DEC50= 16.37 cone=131.05 clock= 99.24
117DC:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/3417
1:#s= 2 Cs= -27.60 XCs= 0.00 Cr= 46.50 XCr= -6.00 sD= 4158 rD= 44

30JNBARGEB01

DESIGN G3.2 yande: 5/21/2001 10:38: 0

FILE:P.30JNBARGEB01

CENTRAL BODY:JUPITER III

MINI:m.30JNBARGEB01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 01-143/17:33:20.333 +CDS 454:00:0

BODY PLOT TIME:TARGET-TIME D= 8360 S= 1.500

OBSERVATION:30JNBARGEB01

DESCRIP:BARGE_B_01

Jupiter Brown Barge Obs

ACTIVITY ID: 30JNBARGEB01-
START TIME: 01-144/01:08:20.333

Activity ID: Orbit 30 Target J Inst N OAPEL BARGEB SeqNo 01 -

Title	Jupiter Brown Barge Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00000450:00:0	01-144/01:08:20.333	JEE+000/07:35:00.000	
End	JEE+CDS	00000498:00:0	01-144/01:56:52.333	JEE+000/08:23:32.000	
Duration		00000048:00:0	000/00:48:32.000	000/00:48:32.000	

Top Label	30JNBARGEB01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and cloud dynamics of Jupiter's Brown Barge region located between 295 and 325 degrees West longitude and 10 to 20 degrees North latitude.

Brown Barge is located at about 19 degrees North latitude.

No Data Returned

Design Detail

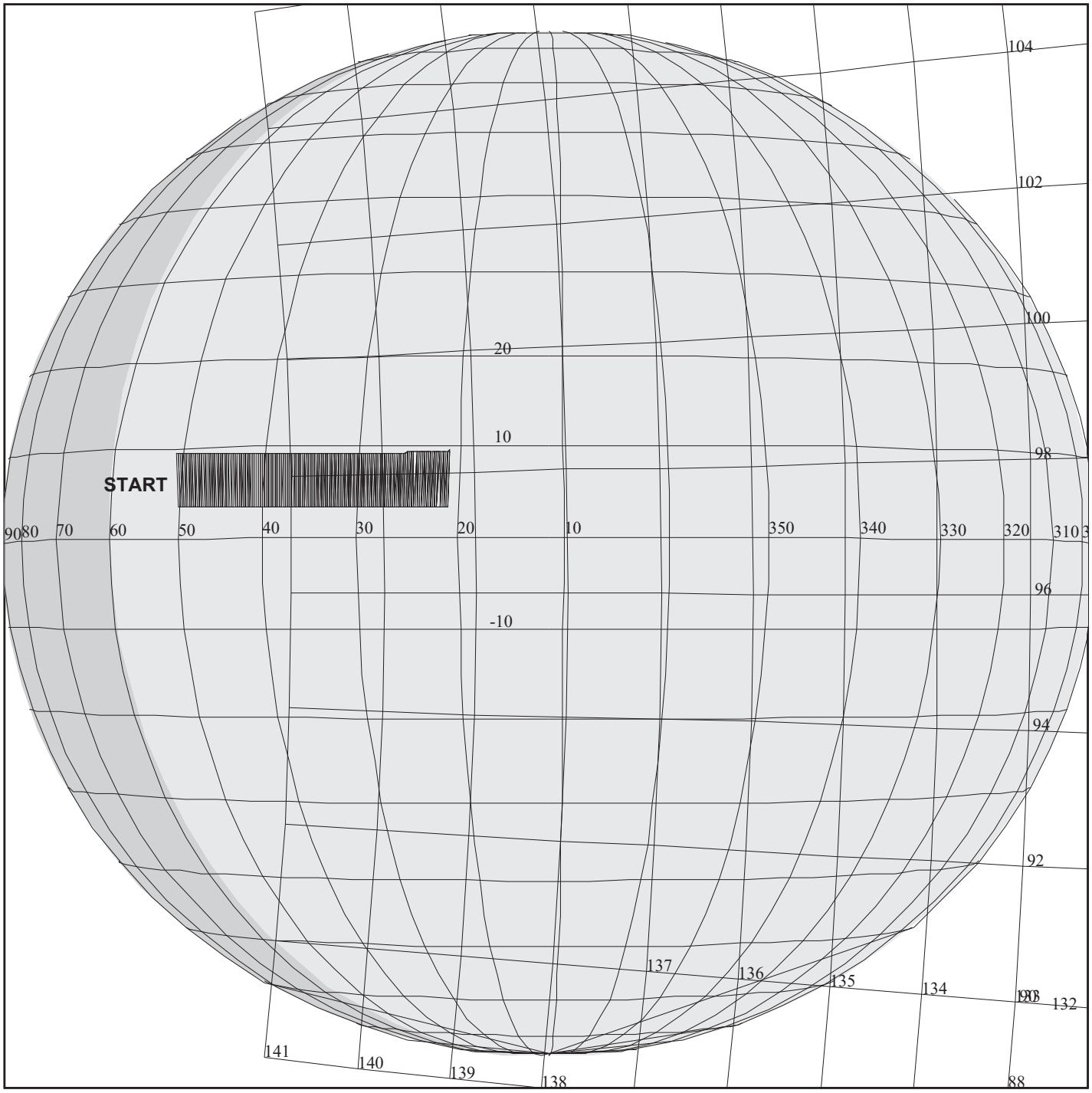
BTG=0.91 MB, TICS=410, FMT=LPU

LM, 2 scans, target body center.

Two-swath regional map.

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240

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



165DD:TT= 0 TMC= 1 C= 53.00 XC= 1.50 BS= 0/4337 TC= 1(6 20)
A= 728 pD= 0 SR=17.450 RA50= 40.09 DEC50= 19.11 cone=142.22 clock= 97.98
117DD:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/4337
1:#s= 1 Cs= -32.00 XCs= -2.00 Cr= 44.70 XCr= -8.00 sD= 9634 rD= 44

30JNHTSPOT02

DESIGN G3.2 yande: 5/21/2001 10:39:55

FILE:P.30JNHTSPOT02

CENTRAL BODY:JUPITER III

MINI:m.30JNHTSPOT02

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 514:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000**

OBSERVATION:30JNHTSPOT02 **DESCRIP:HOT_SPOT_02**

Jupiter Hot Spot Obs

ACTIVITY ID: 30JNHTSPOT02-
START TIME: 01-144/02:09:00.333

Activity ID: Orbit 30 Target J Inst N OAPEL HTSPOT SeqNo 02 -

Title	Jupiter Hot Spot Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00000510:00:0	01-144/02:09:00.333	JEE+000/08:35:40.000	
End	JEE+CDS	00000568:00:0	01-144/03:07:38.999	JEE+000/09:34:18.666	
Duration		00000058:00:0	000/00:58:38.666	000/00:58:38.666	

Top Label	30JNHTSPOT02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and clound dynamic of Jupiter's Hot Spot region located between 50 and 355 degrees West longitude and 5 to 10 degrees North latitude.

Two hotspots are targetted in this observation:
1 at about 6 degrees West longitude,
1 at about 38 degrees West longitude.

No Data Returned

Design Detail

BTG=0.91 MB, TICS=410, FMT=LPU

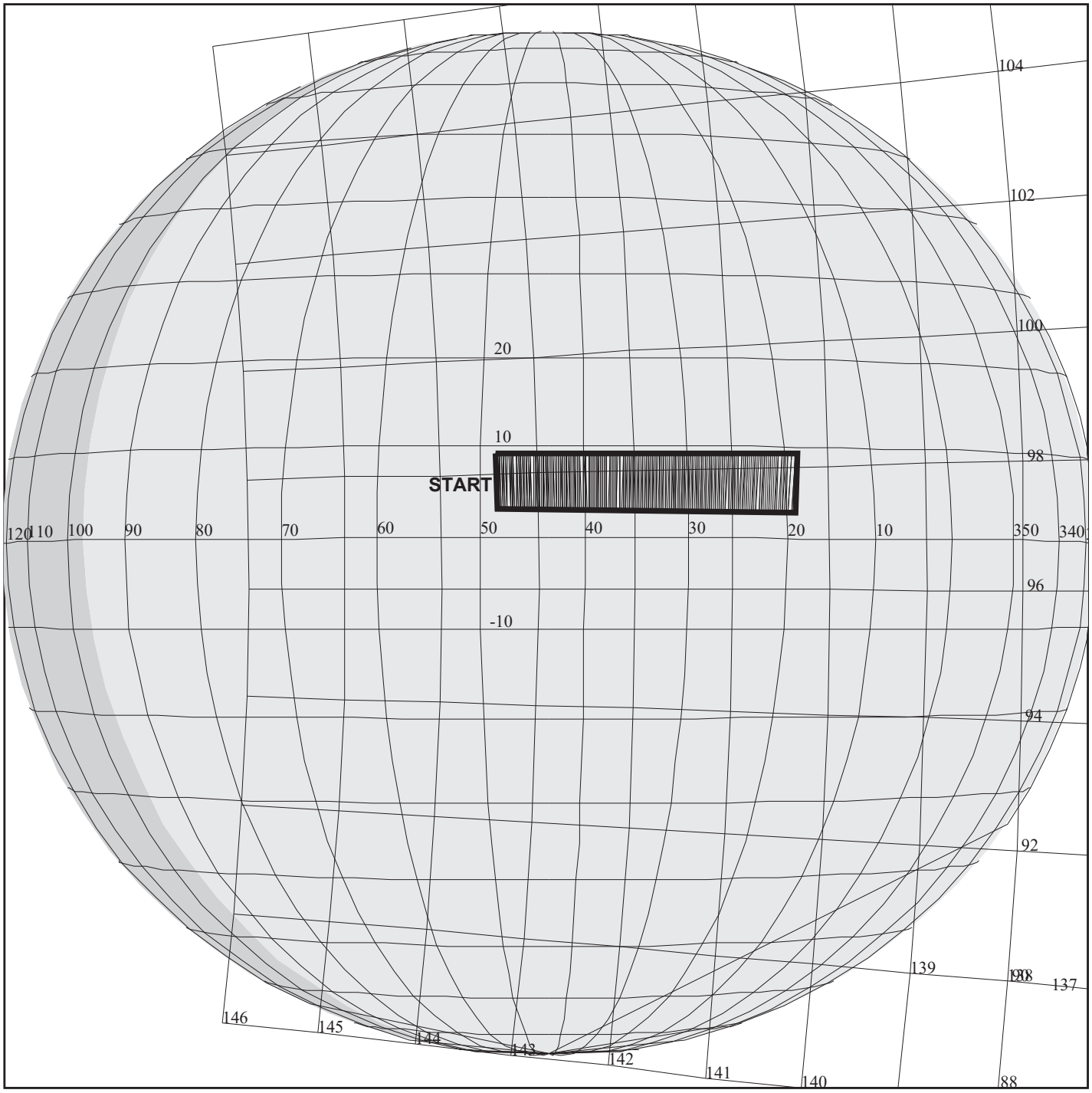
LM, 1 scans, target body center.

Single swath regional map.

2 Hotspots at 6 and 38 degrees West longitude.

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240

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



165DE:TT= 0 TMC= 1 C= 52.00 XC= 1.50 BS= 0/5257 TC= 1(6 20)
A= 728 pD= 0 SR=17.450 RA50= 41.33 DEC50= 19.39 cone=143.42 clock= 97.86
117DE:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/5257
1:#s= 1 Cs= -27.80 XCs= -2.50 Cr= 44.30 XCr= -7.00 sD= 8360 rD= 44

30JNHTSPOT03

DESIGN G3.2 yande: 5/21/2001 10:40:10

FILE:P.30JNHTSPOT03

CENTRAL BODY:JUPITER III

MINI:m.30JNHTSPOT03

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 574:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000**

OBSERVATION:30JNHTSPOT03 **DESCRIP:HOT_SPOT_03**

Jupiter Hot Spot Obs

ACTIVITY ID: 30JNHTSPOT03-
START TIME: 01-144/03:09:40.333

Activity ID: Orbit 30 Target J Inst N OAPEL HTSPOT SeqNo 03 -

Title	Jupiter Hot Spot Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00000570:00:0	01-144/03:09:40.333	JEE+000/09:36:20.000	
End	JEE+CDS	00000620:00:0	01-144/04:00:13.666	JEE+000/10:26:53.333	
Duration		00000050:00:0	000/00:50:33.333	000/00:50:33.333	

Top Label 30JNHTSPOT03-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and cloud dynamics of Jupiter's Hot Spot region located between 50 and 350 degrees West longitude and 5 and 10 degrees North latitude.

Two hotspots are targetted in this observation:
1 at about 6 degrees West longitude,
1 at about 38 degrees West longitude.

Data Returned

Design Detail

BTG=0.91 MB, TICS=269, FMT=LPU

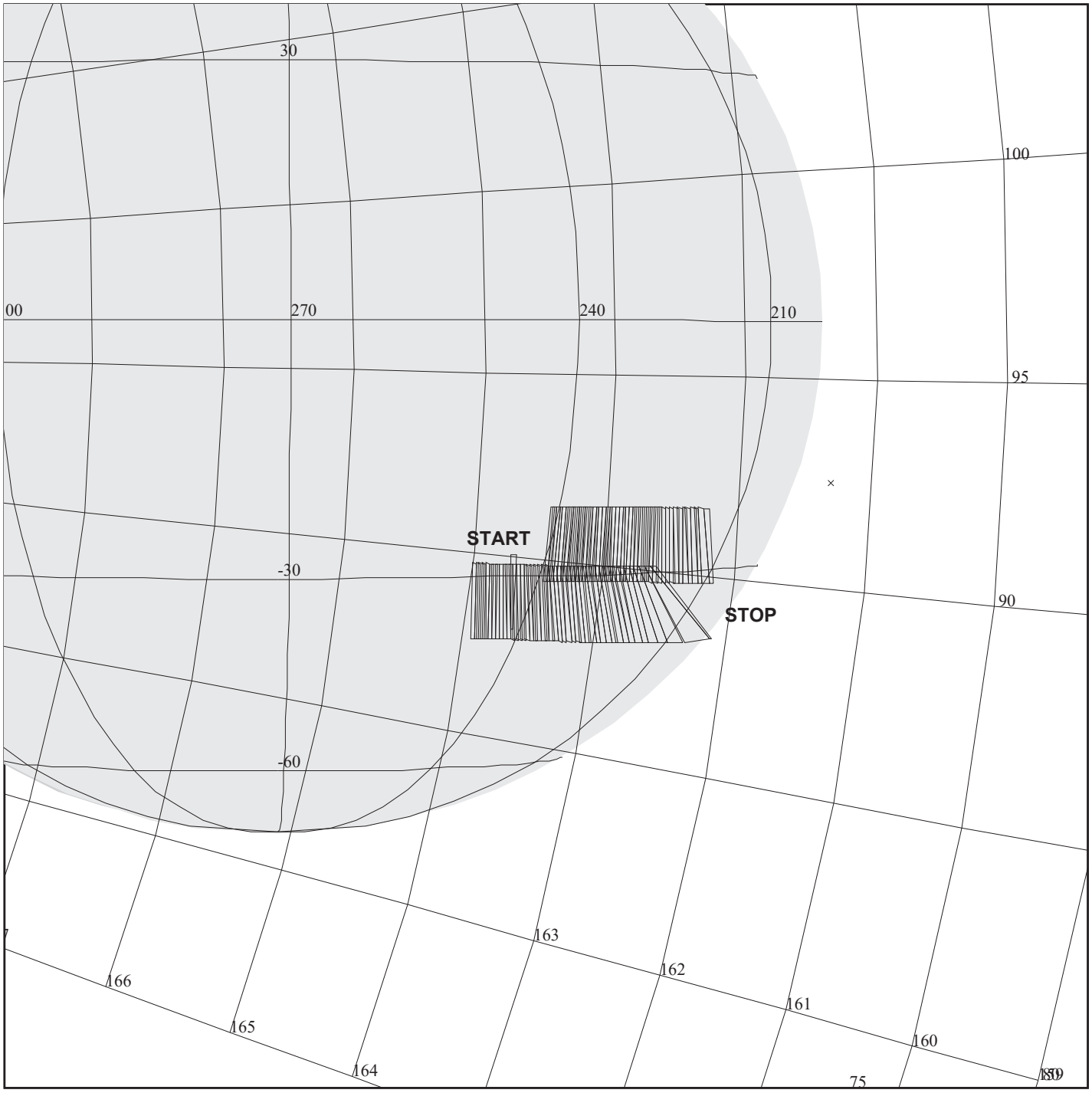
LM, 1 scan, target body center.

Single swath regional map.

2 Hotspots at 6 and 38 degrees West longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM16



165DG:TT= 0 TMC= 1 C= 12.50 XC= 2.80 BS= 0/9877 TC= 1(-30 225)
A= 728 pD= 0 SR=17.450 RA50= 62.84 DEC50= 21.89 cone=163.44 clock= 90.43
117DG:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/9877
1:#s= 2 Cs= -15.48 XCs= 1.50 Cr= 27.00 XCr= -10.00 sD= 2334 rD= 52

30JNWTOVAL01

DESIGN G3.2 yande: 5/21/2001 10:40:26

FILE:P.30JNWTOVAL01

CENTRAL BODY:JUPITER III

MINI:m.30JNWTOVAL01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 01-143/17:33:20.333 +CDS 984:00:0

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

OBSERVATION:30JNWTOVAL01

DESCRIP:WHITE_OVAL_01

Jupiter White Oval Obs

ACTIVITY ID: 30JNWTOVAL01-
START TIME: 01-144/10:04:13.666

Activity ID: Orbit 30 Target J Inst N OAPEL WTOVAL SeqNo 01 -

Title	Jupiter White Oval Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00000980:00:0	01-144/10:04:13.333	JEE+000/16:30:53.333	
End	JEE+CDS	00001012:00:0	01-144/10:36:34.999	JEE+000/17:03:14.666	
Duration		00000032:00:0	000/00:32:21.333	000/00:32:21.333	

Top Label	30JNWTOVAL01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and clound dynamics of Jupiter's last remaing White Oval. This data will enhance the 4 year study of these Jovian features.

No Data Returned

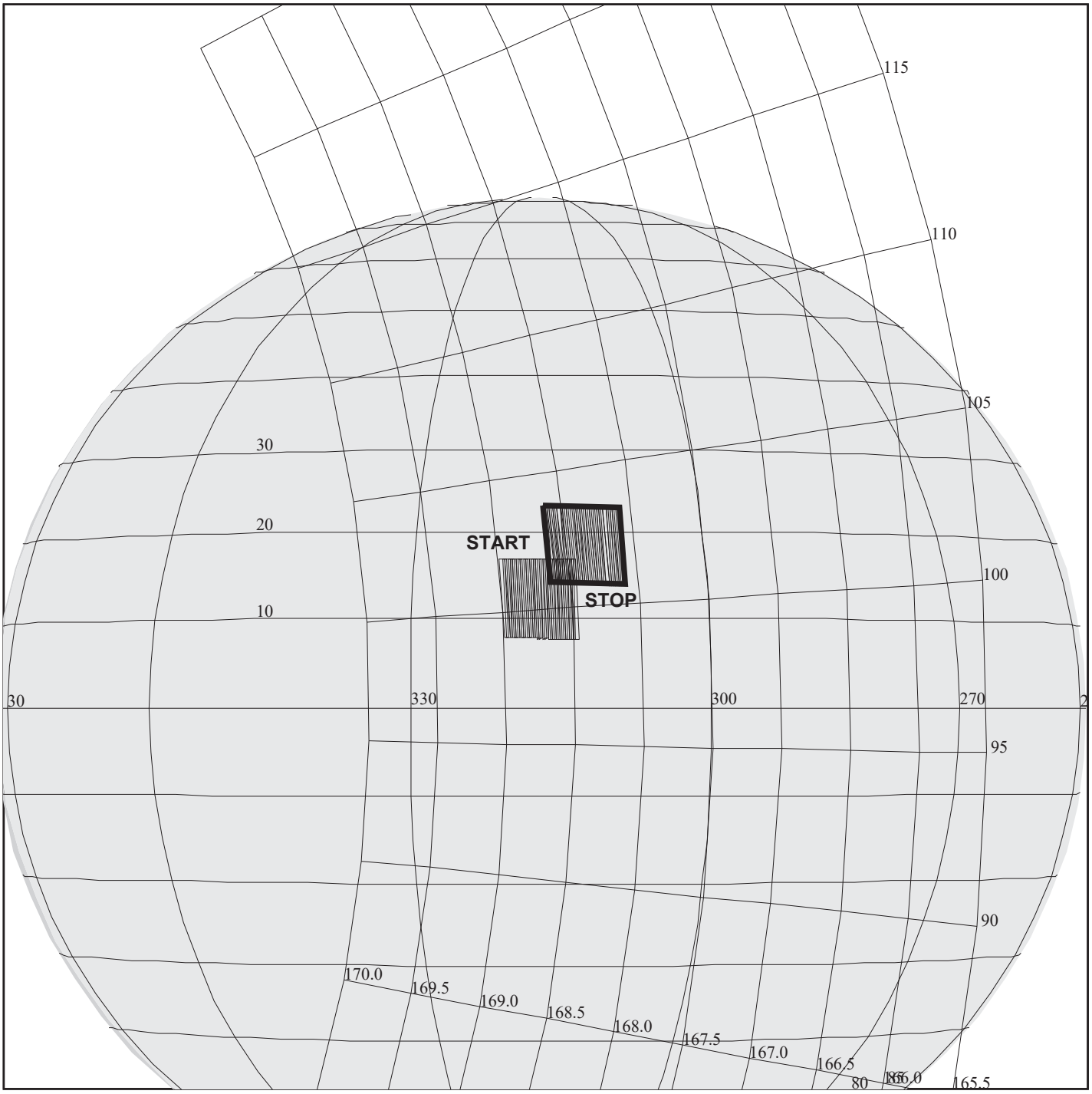
Design Detail

BTG=0.91 MB, TICS=269, FMT=LPU

LM, 2 scans, target body center.

Two-swath regional map.

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240



165DH:TT= 0 TMC= 1 C= 7.50 XC= 4.70 BS= 0/4437 TC= 1(15 310)
A= 728 pD= 0 SR=17.450 RA50= 67.85 DEC50= 25.57 cone=168.59 clock=102.39
117DH:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/4437
1:#s= 2 Cs= -9.40 XCs= -1.40 Cr= 15.00 XCr= -5.00 sD= 1426 rD= 48

30JNBBARGE01

DESIGN G3.2 yande: 5/21/2001 10:38:17

FILE:P.30JNBBARGE01

CENTRAL BODY:JUPITER III

MINI:m.30JNBBARGE01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 1064:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000**

OBSERVATION:30JNBBARGE01 **DESCRIP:WHITE_OVAL_02**

Jupiter Brown Barge Obs

ACTIVITY ID: 30JNBBARGE01-
START TIME: 01-144/11:25:06.999

Activity ID: Orbit 30 Target J Inst N OAPEL BBARGE SeqNo 01 -

Title	Jupiter Brown Barge Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS 00001060:00:0	01-144/11:25:06.999		JEE+000/17:51:46.666	
End	JEE+CDS 00001080:00:0	01-144/11:45:20.333		JEE+000/18:12:00.000	
Duration	00000020:00:0	000/00:20:13.334		000/00:20:13.334	

Top Label 30JNBBARGE01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and clound dynamics of Jupiter's Brown Barge region located between 305 and 320 degrees West longitude and centered at 19 degrees North latitude.

Brown Barge is located at about 19 degrees North latitude.

Data Returned

Design Detail

BTG=0.91 MB, TICS=269, FMT=LPU

LM, 2 scans, target body center.

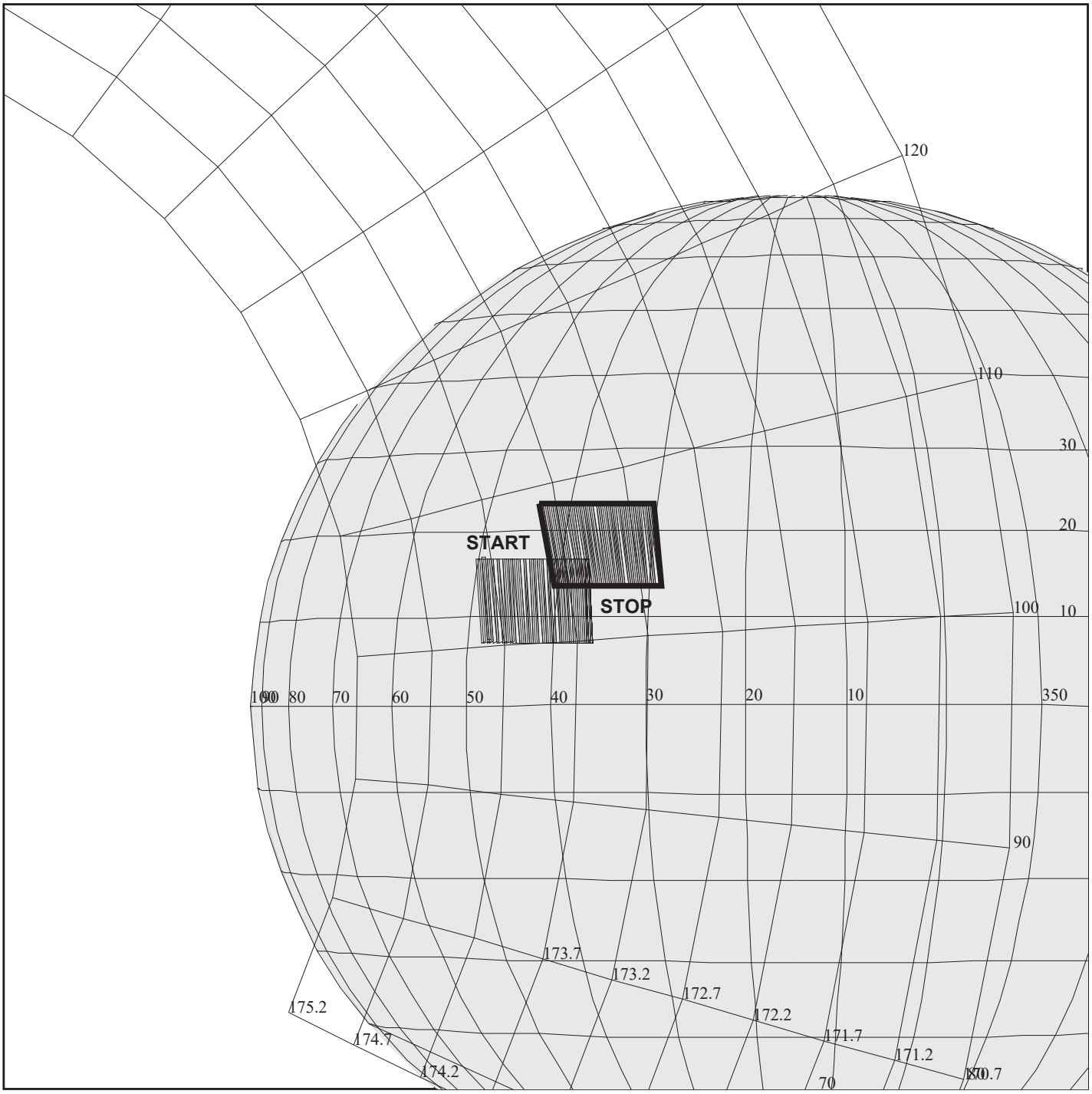
Two-swath regional map.

Only first swath returned.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM16

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



165DI:TT= 0 TMC= 1 C= 11.50 XC= 5.50 BS= 0/2637 TC= 1(15 30)
A= 728 pD= 0 SR=17.450 RA50= 73.65 DEC50= 26.09 cone=173.81 clock=106.31
117DI:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/2637
1:#s= 2 Cs= -15.00 XCs= -3.07 Cr= 23.00 XCr= -2.50 sD= 2332 rD= 56

30JNBBARGE02

DESIGN G3.2 yande: 5/21/2001 10:38:33

FILE:P.30JNBBARGE02

CENTRAL BODY:JUPITER III

MINI:m.30JNBBARGE02

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 1164:00:0 **BODY PLOT TIME:END-TIME D= 0 S= 1.000**

OBSERVATION:30JNBBARGE02 **DESCRIP:WHITE_OVAL_03**

Jupiter Brown Barge Obs

ACTIVITY ID: 30JNBBARGE02-
START TIME: 01-144/13:06:13.666

Activity ID: Orbit 30 Target J Inst N OAPEL BBARGE SeqNo 02 -

Title	Jupiter Brown Barge Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00001160:00:0	01-144/13:06:13.333	JEE+000/19:32:53.333	
End	JEE+CDS	00001190:00:0	01-144/13:36:33.666	JEE+000/20:03:13.333	
Duration		00000030:00:0	000/00:30:20.000	000/00:30:20.000	

Top Label 30JNBBARGE02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and cloud dynamics of Jupiter's Brown Barge region located between 25 and 45 degrees West longitude and centered at 19 degrees North latitude.

Brown Barge is located at about 19 degrees North latitude.

Data Returned

Design Detail

BTG=0.91 MB, TICS=269, FMT=LPU

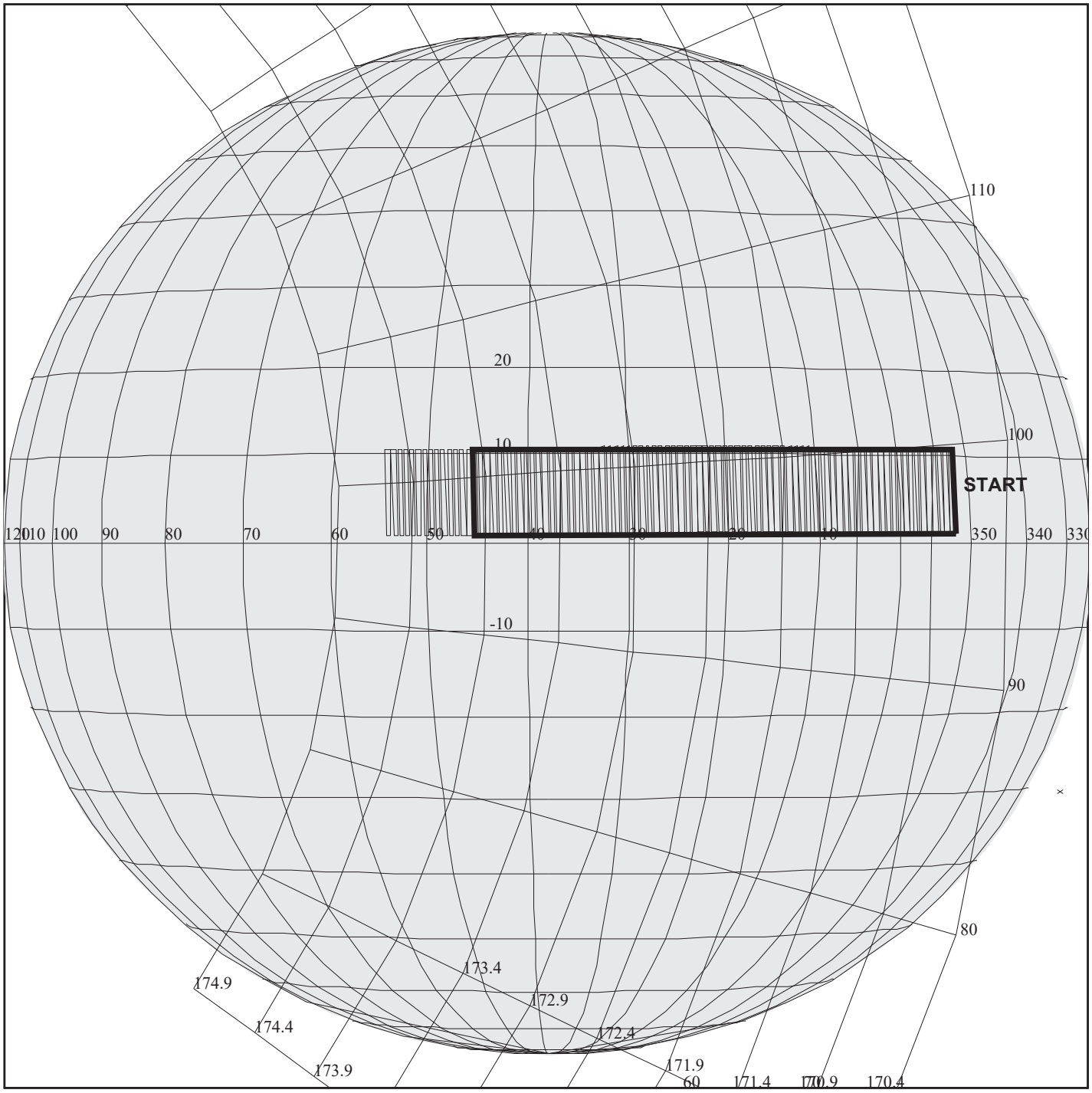
Two-swath regional map.

Only first swath returned.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM8

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



165DJ:TT= 0 TMC= 1 C= -21.00 XC= -1.00 BS= 0/9917 TC= 1(6 15)
A= 728 pD= 0 SR=17.450 RA50= 70.30 DEC50= 24.94 cone=170.76 clock= 98.05
117DJ:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/9917
1:#s= 1 Cs= 62.50 XCs= 1.60 Cr= 23.50 XCr= -7.00 sD= 4718 rD= 58

30JNHTSPOT01

DESIGN G3.2 yande: 5/21/2001 10:39:41

FILE:P.30JNHTSPOT01

CENTRAL BODY:JUPITER III

MINI:m.30JNHTSPOT01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 1204:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000**

OBSERVATION:30JNHTSPOT01 **DESCRIP:HOT_SPOT_01**

Jupiter Hot Spot Obs

ACTIVITY ID: 30JNHTSPOT01-
START TIME: 01-144/13:46:40.333

Activity ID: Orbit 30 Target J Inst N OAPEL HTSPOT SeqNo 01 -

Title	Jupiter Hot Spot Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00001200:00:0	01-144/13:46:40.333	JEE+000/20:13:20.000	
End	JEE+CDS	00001230:00:0	01-144/14:17:00.333	JEE+000/20:43:40.000	
Duration		00000030:00:0	000/00:30:20.000	000/00:30:20.000	

Top Label 30JNHTSPOT01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and clound dynamics of Jupiter's Hot Spot region located between 40 and 355 degrees West longitude and 0 and 10 degrees North latitude.

Two hotspots are targetted in this observation:
1 at about 6 degrees West longitude,
1 at about 38 degrees West longitude.

Last 4 RIMs not returned.

Data Returned

Design Detail

BTG=0.91 MB, TICS=269, FMT=LPU

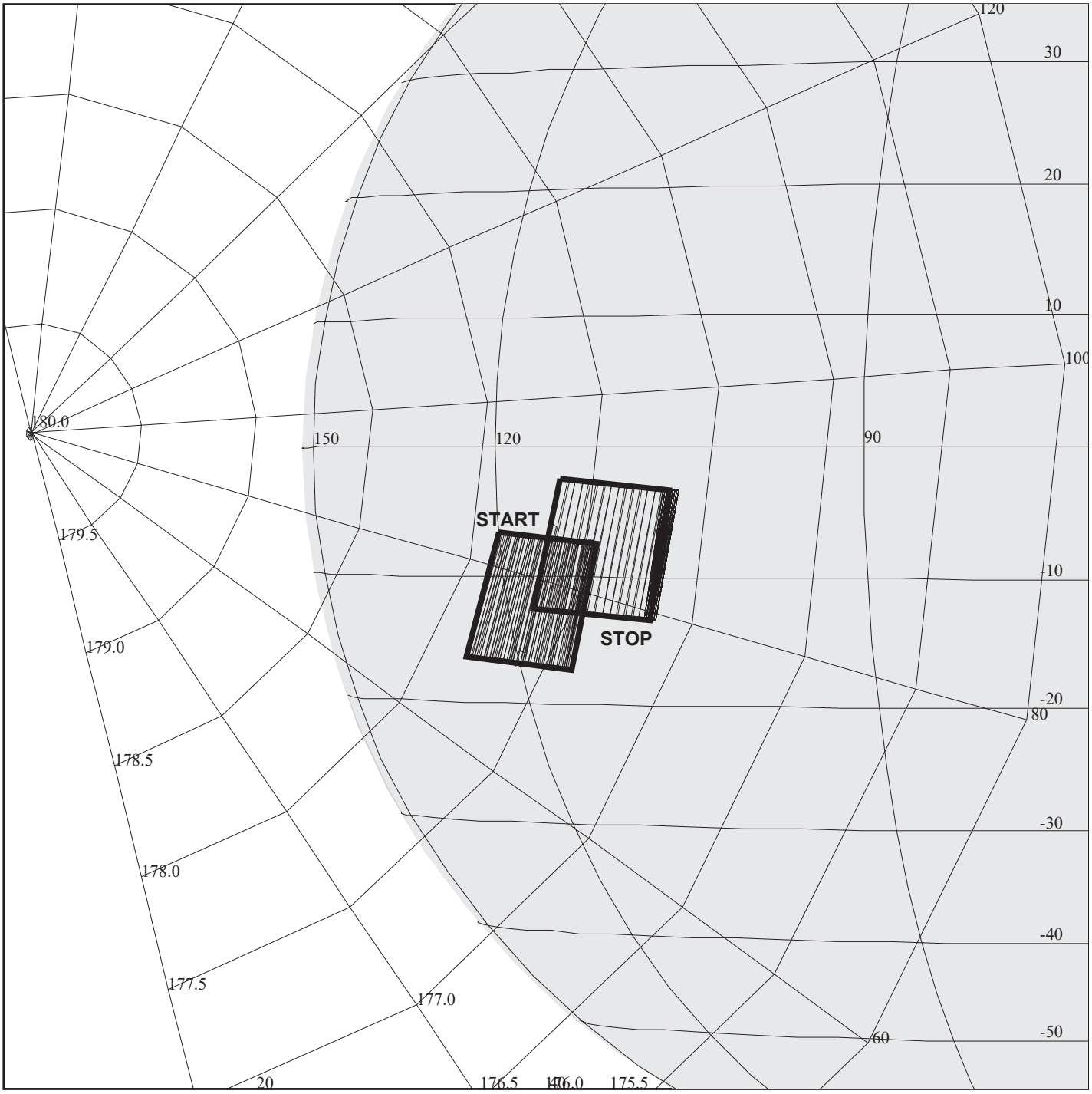
LM, 1 scan, target body centered.

Single swath regional map.

2 Hotspots at 6 and 38 degrees West longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM16



165DK:TT= 0 TMC= 1 C= 5.00 XC= 1.50 BS= 0/0837 TC= 1(-10 110)
A= 728 pD= 0 SR=17.450 RA50= 78.07 DEC50= 24.88 cone=177.72 clock= 83.98
117DK:#SB= 1 OR= 0.070 RR=12.000 BM=F RC= 1 BS= 0/0837
1:#s= 2 Cs= -9.00 XCs= 1.06 Cr= 13.60 XCr= -6.00 sD= 2318 rD= 84

30JNGRWAKE01

DESIGN G3.2 yande: 5/21/2001 10:39:26

FILE:P.30JNGRWAKE01

CENTRAL BODY:JUPITER III

MINI:m.30JNGRWAKE01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 1264:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.500**

OBSERVATION:30JNGRWAKE01 **DESCRIP:GRS_WAKE_01**

Jupiter GRS Wake Obs

ACTIVITY ID: 30JNGRWAKE01-
START TIME: 01-144/14:47:20.333

Activity ID: Orbit 30 Target J Inst N OAPEL GRWAKE SeqNo 01 -

Title	Jupiter GRS Wake Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00001260:00:0	01-144/14:47:20.333	JEE+000/21:14:00.000	
End	JEE+CDS	00001290:00:0	01-144/15:17:40.333	JEE+000/21:44:20.000	
Duration		00000030:00:0	000/00:30:20.000	000/00:30:20.000	

Top Label	30JNGRWAKE01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and cloudn dynamics of Jupiter's turbulent Wake region near the Great Red Spot.

Data Returned

Design Detail

BTG=3.75 MB, TICS=325, FMT=LPU

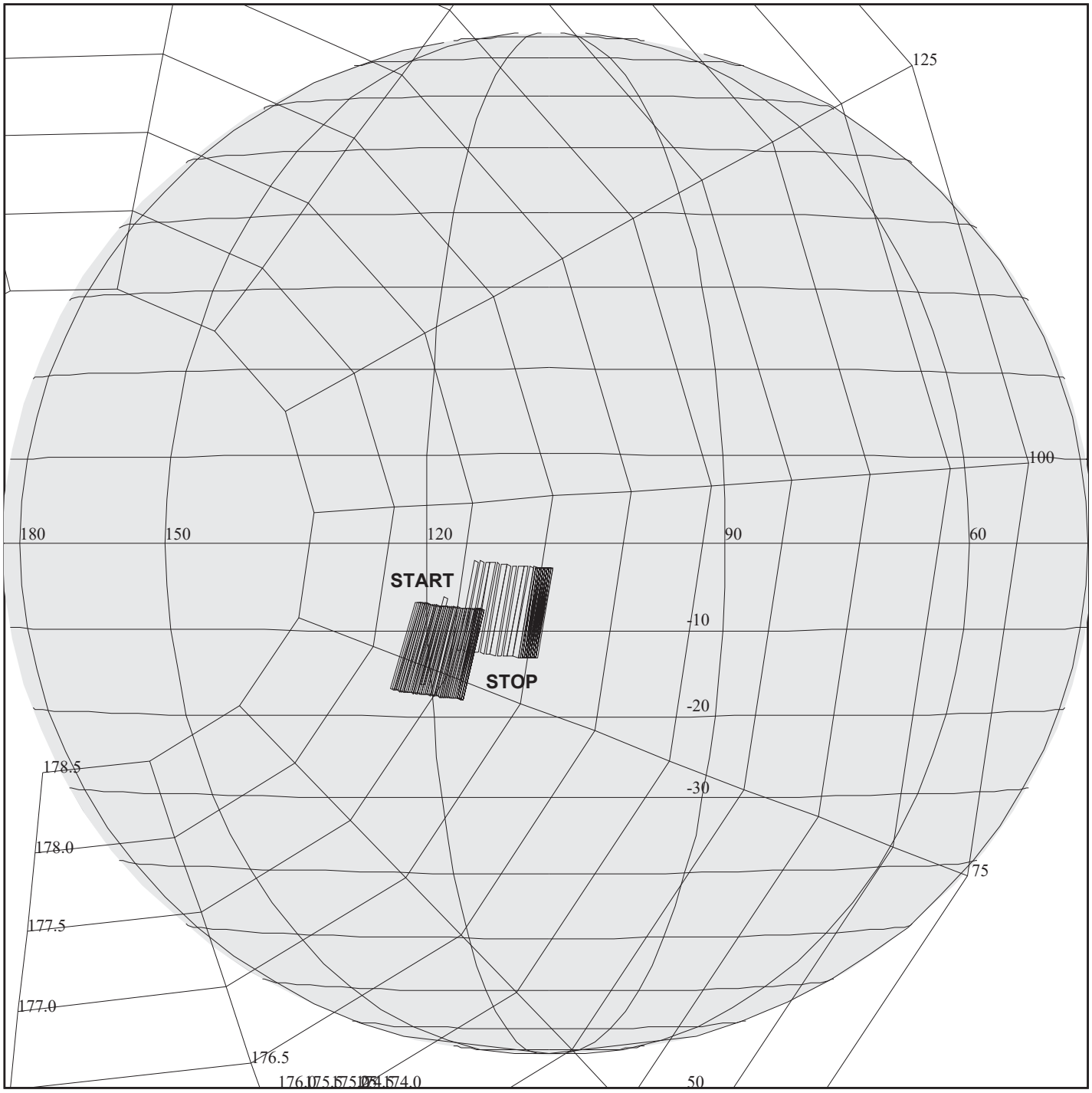
LM, 2 scans, target body center.

Two-swath regional map.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240, JLM16

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



165DL:TT= 0 TMC= 1 C= 7.00 XC= 1.50 BS= 0/1757 TC= 1(-10 110)
A= 728 pD= 0 SR=17.450 RA50= 77.79 DEC50= 24.86 cone=177.46 clock= 85.25
117DL:#SB= 1 OR= 0.050 RR=12.000 BM=F RC= 1 BS= 0/1757
1:#s= 2 Cs= -9.00 XCs= 0.76 Cr= 12.90 XCr= -6.00 sD= 2318 rD= 84

30JNGRWAKE02

DESIGN G3.2 yande: 5/21/2001 10:39: 8

FILE:P.30JNGRWAKE02

CENTRAL BODY:JUPITER III

MINI:m.30JNGRWAKE02

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 1324:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000**

OBSERVATION:30JNGRWAKE02 **DESCRIP:GRS_WAKE_02**

Jupiter GRS Wake Obs

ACTIVITY ID: 30JNGRWAKE02-
START TIME: 01-144/15:48:00.333

Activity ID: Orbit 30 Target J Inst N OAPEL GRWAKE SeqNo 02 -

Title	Jupiter GRS Wake Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/24/01	Week 21
Start	JEE+CDS	00001320:00:0	01-144/15:48:00.333	JEE+000/22:14:40.000	
End	JEE+CDS	00001350:00:0	01-144/16:18:20.333	JEE+000/22:45:00.000	
Duration		00000030:00:0	000/00:30:20.000	000/00:30:20.000	

Top Label	30JNGRWAKE02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and cloud dynamics of Jupiter's turbulent Wake region near the Great Red Spot.

No Data Returned

Design Detail

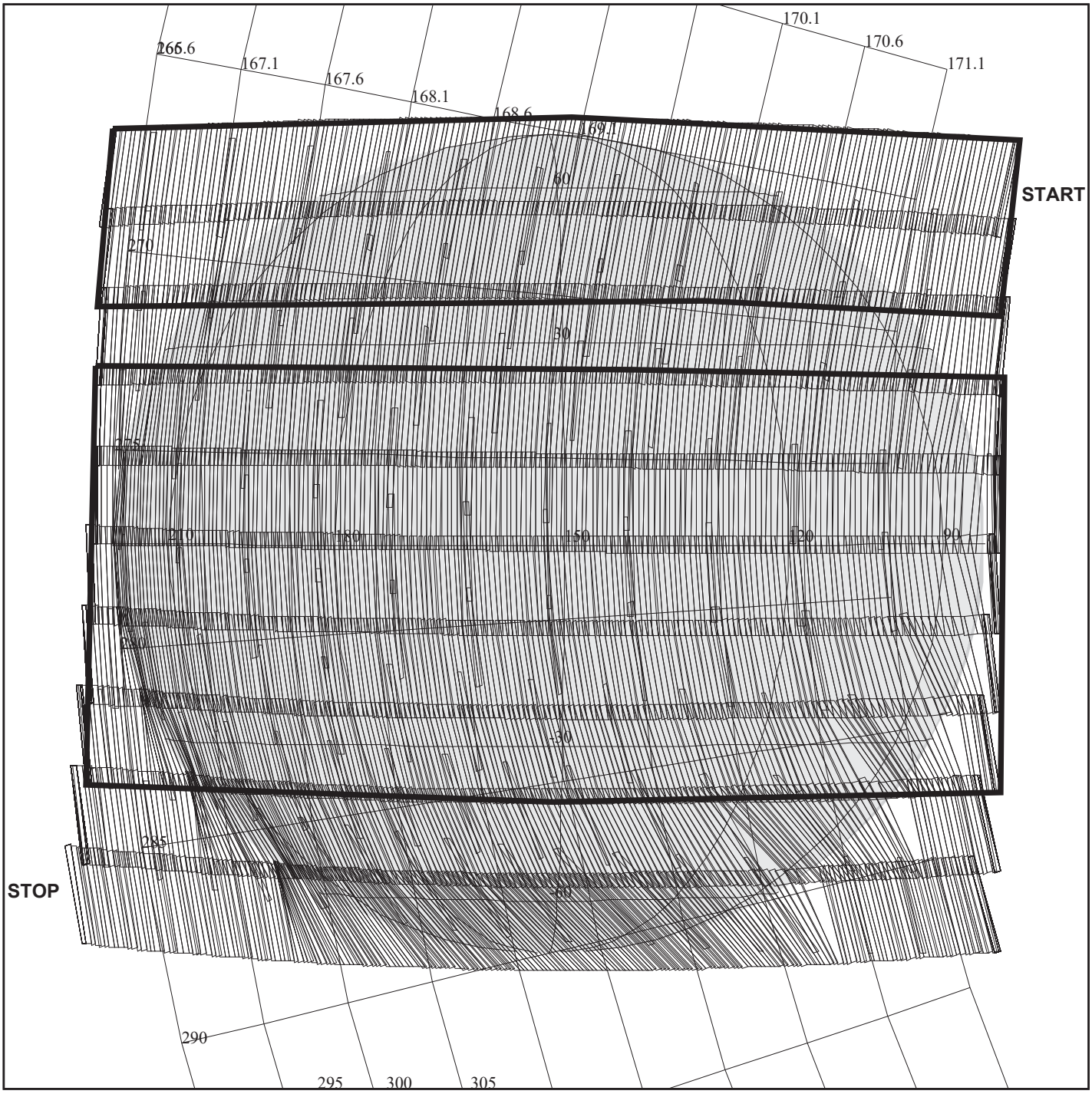
BTG=3.75 MB, TICS=325, FMT=LPU

LM, 2 scans, target body center.

Two-swath regional map.

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, JLM240

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



165DP:TT= 0 TMC= 1 C= 43.50 XC= -45.50 BS= 0/6245 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 89.64 DEC50= 27.45 cone=171.59 clock=263.88
117DP:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/6245
1:#s= 10 Cs= -89.80 XCs= 18.00 Cr= 90.50 XCr= -10.00 sD= 408 rD= 70

30JNGLOBAL01

DESIGN G3.2 yande: 5/21/2001 10:41:12

FILE:P.30JNGLOBAL01

CENTRAL BODY:JUPITER III

MINI:m.30JNGLOBAL01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 2008:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.800**

OBSERVATION:30JNGLOBAL01 **DESCRIP:J_GLOBAL_01**

Jupiter Global Obs

ACTIVITY ID: 30JNGLOBAL01-
START TIME: 01-145/03:19:36.333

Activity ID: Orbit 30 Target J Inst N OAPEL GLOBAL SeqNo 01 -

Title	Jupiter Global Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/25/01	Week 21
Start	JEE+CDS	00002004:00:0	01-145/03:19:36.333	JEE+001/09:46:16.000	
End	JEE+CDS	00002044:00:0	01-145/04:00:02.999	JEE+001/10:26:42.666	
Duration		00000040:00:0	000/00:40:26.666	000/00:40:26.666	

Top Label 30JNGLOBAL01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

The first of three global maps of Jupiter from limb to limb, pole to pole, search for compositional variations over a full Jovian rotation.

Data Returned

Design Detail

BTG=3.75 MB, TICS=325, FMT=LPU

XM, cover all lit longitudes and latitudes

Global map consisting of 10 swaths.

Top 2 swaths returned with 2 wavelengths (det 10,13) (Polar Aurora)
latitude range: +40N to +90N
Central swaths 4-8 returned with 5 wavelengths (det 4,6,10,11,17)
latitude range: -37S to +27N

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM2
Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM5

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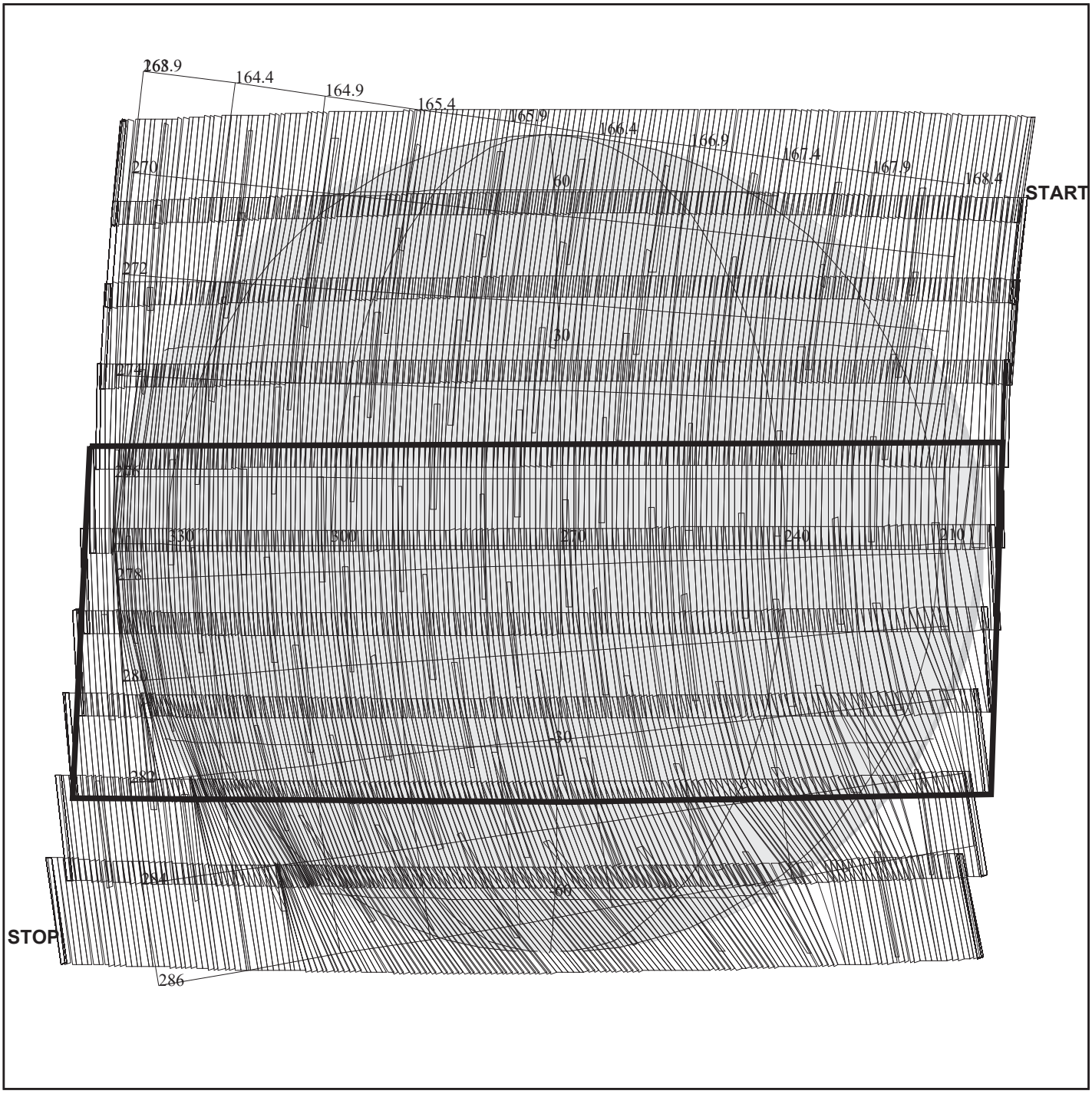

165DQ:TT= 0 TMC= 1 C= 43.00 XC= -42.00 BS= 0/2645 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 92.92 DEC50= 27.30 cone=168.74 clock=267.37
117DQ:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/2645
1:#s= 10 Cs= -85.00 XCs= 13.00 Cr= 85.00 XCr= -5.20 sD= 374 rD= 66

30JNGLOBAL02

DESIGN G3.2 yande: 5/21/2001 10:41:49

FILE:P.30JNGLOBAL02

CENTRAL BODY:JUPITER III

MINI:m.30JNGLOBAL02

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 2208:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.800**

OBSERVATION:30JNGLOBAL02 **DESCRIP:J_GLOBAL_02**

Jupiter Global Obs

ACTIVITY ID: 30JNGLOBAL02-
START TIME: 01-145/06:41:49.666

Activity ID: Orbit 30 Target J Inst N OAPEL GLOBAL SeqNo 02 -

Title	Jupiter Global Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/25/01	Week 21
Start	JEE+CDS 00002204:00:0	01-145/06:41:49.666		JEE+001/13:08:29.333	
End	JEE+CDS 00002232:00:0	01-145/07:10:08.333		JEE+001/13:36:48.000	
Duration	00000028:00:0	000/00:28:18.667		000/00:28:18.667	

Top Label	30JNGLOBAL02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

The second of three global maps of Jupiter, limb to limb, pole to pole, to search for compositional variations a full Jovian rotation.

Data Returned

Design Detail

BTG=3.75 MB, TICS=325, FMT=LPU

XM, cover all lit longitudes and latitudes.

Global map consisting of 10 swaths.

Central swaths 5-8 returned with 5 wavelengths (det 4,6,10,11,17)
latitude range: -40S to +15N

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM5

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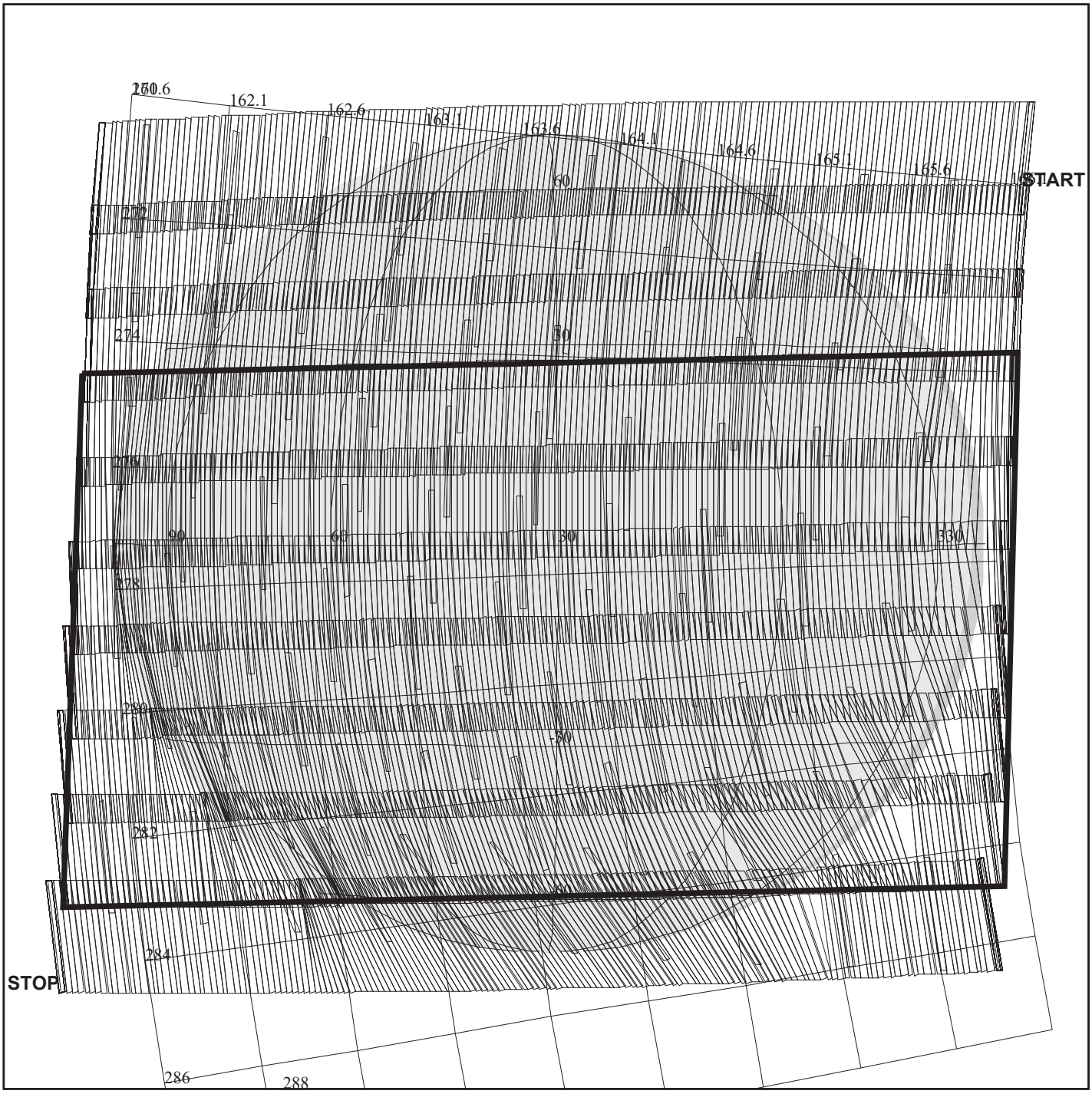

165DR:TT= 0 TMC= 1 C= 41.00 XC= -39.00 BS= 0/9044 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 95.86 DEC50= 27.07 cone=166.15 clock=269.42
117DR:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/9044
1:#s= 10 Cs= -82.00 XCs= 11.00 Cr= 82.00 XCr= -3.50 sD= 362 rD= 60

30JNGLOBAL03

DESIGN G3.2 yande: 5/21/2001 10:42:26

FILE:P.30JNGLOBAL03

CENTRAL BODY:JUPITER III

MINI:m.30JNGLOBAL03

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-143/17:33:20.333 +CDS 2408:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.800**

OBSERVATION:30JNGLOBAL03 **DESCRIP:J_GLOBAL_03**

Jupiter Global Obs

ACTIVITY ID: 30JNGLOBAL03-
START TIME: 01-145/10:04:02.999

Activity ID: Orbit 30 Target J Inst N OAPEL GLOBAL SeqNo 03 -

Title	Jupiter Global Obs			Instrument	NIMS
Requestor	NIMS-AWG/M. SEGURA	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	Calendar Date	05/25/01	Week 21
Start	JEE+CDS	00002404:00:0	01-145/10:04:02.999	JEE+001/16:30:42.666	
End	JEE+CDS	00002434:00:0	01-145/10:34:22.999	JEE+001/17:01:02.666	
Duration		00000030:00:0	000/00:30:20.000	000/00:30:20.000	

Top Label 30JNGLOBAL03-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

The third of three global maps of Jupiter from limb to limb, pole to pole, to investigate compositional variations over a full Jovian rotation.

Data Returned

Design Detail

BTG=3.75 MB, TICS=325, FMT=LPU

XM, cover all lit longitudes and latitudes.

Global map consisting of 10 swaths.

Central swaths 4-9 returned with 5 wavelengths (det 4,6,10,11,17)
latitude range: -50S to +27N

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM5

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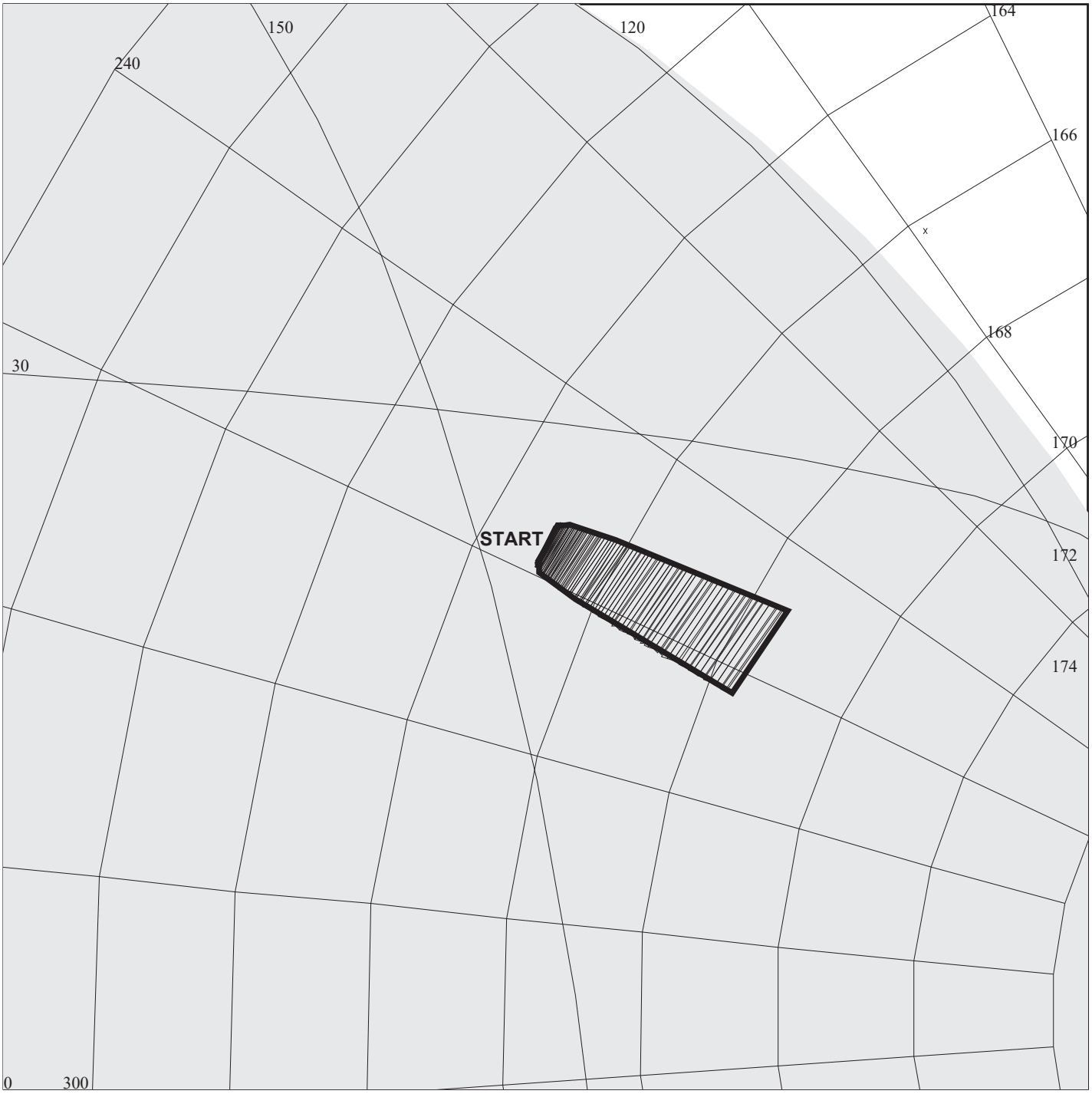


165DS:TT= 0 TMC= 1 C= -29.00 XC= -1.20 BS= 0/4332 TC= 1(25 145)
A= 302 pD= 1992 SR=17.450 RA50= 95.70 DEC50= 32.47 cone=165.01 clock=248.10
117DS:#SB= 1 OR= 0.060 RR=12.000 BM=F RC= 1 BS= 0/4332
1:#s= 1 Cs= 39.60 XCs= 4.00 Cr= -17.00 XCr= 7.00 sD= 1992 rD= 48

30CNFEATRE01

DESIGN G3.2 yande: 4/26/2001 12:21:27

FILE:P.30CNFEATRE01

TARGET BODY : CALLISTO

MINI:m.30CNFEATRE01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:CEE 01-145/11:23:55.533 +CDS 9:77:0

BODY PLOT TIME:TARGET-TIME D= 1992 S= 3.000

OBSERVATION:30CNFEATRE01

DESCRIP:CALLISTO_FEATURE

Callisto Feature Obs

ACTIVITY ID: 30CNFEATRE01-
START TIME: 01-145/11:31:10.866

Activity ID: Orbit 30 Target C Inst N OAPEL FEATRE SeqNo 01 -

Title	Callisto Feature Obs			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	05/25/01	Week 21
Start	CEE+CDS 00000007:16:0	01-145/11:31:10.866		CEE+000/00:07:15.333	
End	CEE+CDS 00000020:16:0	01-145/11:44:19.533		CEE+000/00:20:24.000	
Duration	00000013:00:0	000/00:13:08.667		000/00:13:08.667	

Top Label	30CNFEATRE01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

High spatial resolution scan of the Asgard multi-ring structure to enhance and complete the on-going study of compositional components and surface variations on Callisto.

Data Returned

Design Detail

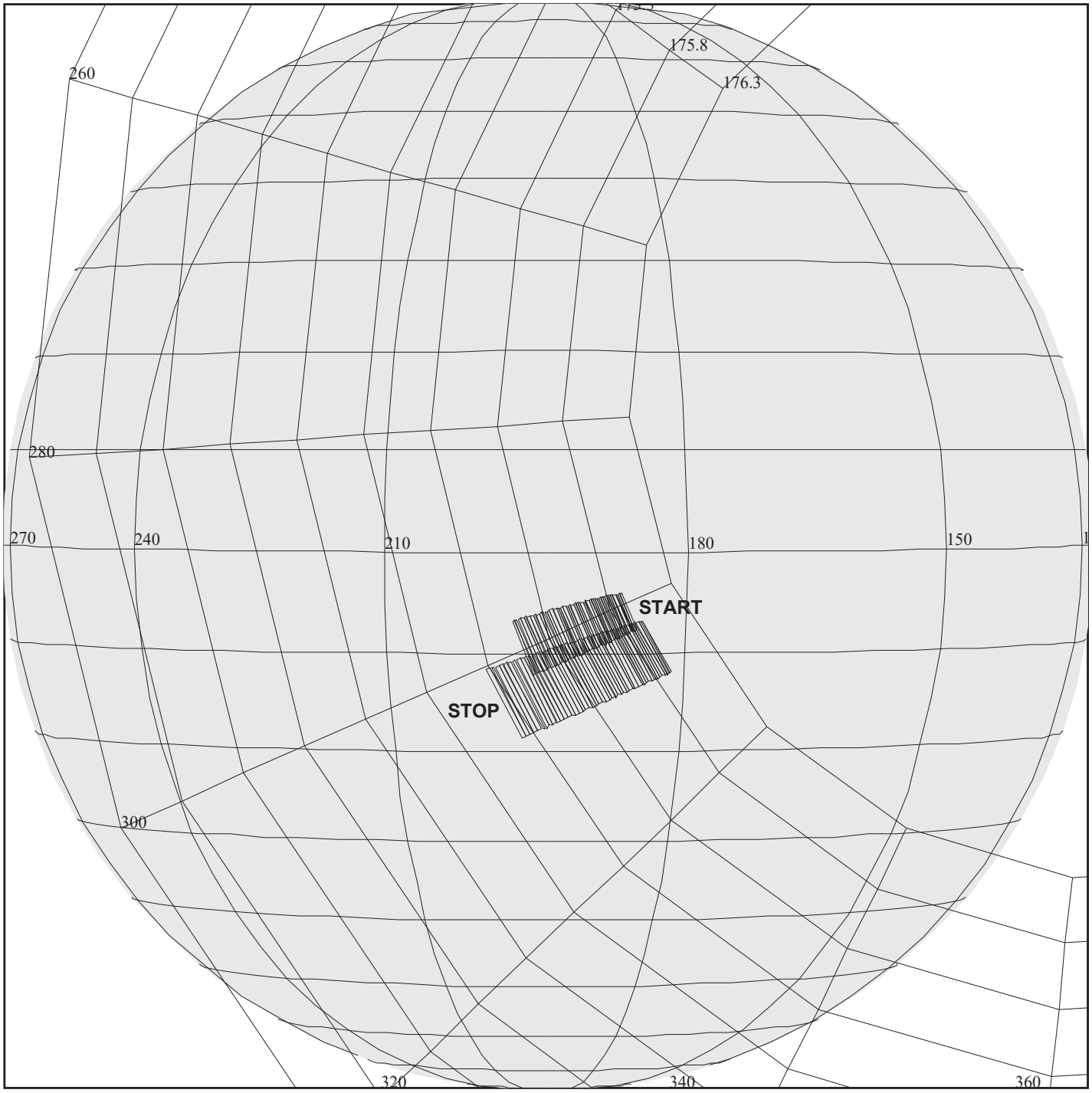
BTG=4.15 MB, TICS=635, FMT=MPW

LM, 1 scan, body center.

Single-swath high resolution map.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 4, Grating Start 0, MPW, CLM408, CLM30



165DT:TT= 0 TMC= 1 C= 15.00 XC= -5.00 BS= 0/8518 TC= 1(-10 190)
A= 364 pD= 4868 SR=17.450 RA50= 88.51 DEC50= 22.53 cone=172.11 clock=299.75
117DT:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/8518
1:#s= 2 Cs= -24.00 XCs= 0.00 Cr= 21.00 XCr= 9.00 sD= 2406 rD= 56

30CNCTBRAN01

DESIGN G3.2 yande: 4/26/2001 12:21:10

FILE:P.30CNCTBRAN01

TARGET BODY : CALLISTO

MINI:m.30CNCTBRAN01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:CEE 01-145/11:23:55.533 +CDS 32:00:0

BODY PLOT TIME:END-TIME D= 4868 S= 1.000

OBSERVATION:30CNCTBRAN01

DESCRIP:CALLISTO_CTBRAN

Callisto Bran Crater Obs

ACTIVITY ID: 30CNCTBRAN01-
START TIME: 01-145/11:52:14.199

Activity ID: Orbit 30 Target C Inst N OAPEL CTBRAN SeqNo 01 -

Title	Callisto Bran Crater Obs			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	05/25/01 Week 21
Start	CEE+CDS	00000028:00:0	01-145/11:52:14.199		CEE+000/00:28:18.666
End	CEE+CDS	00000059:00:0	01-145/12:23:34.866		CEE+000/00:59:39.333
Duration		00000031:00:0	000/00:31:20.667		000/00:31:20.667

Top Label 30CNCTBRAN01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations of the Bran Crater region on Callisto's southern hemisphere.

No Data Returned

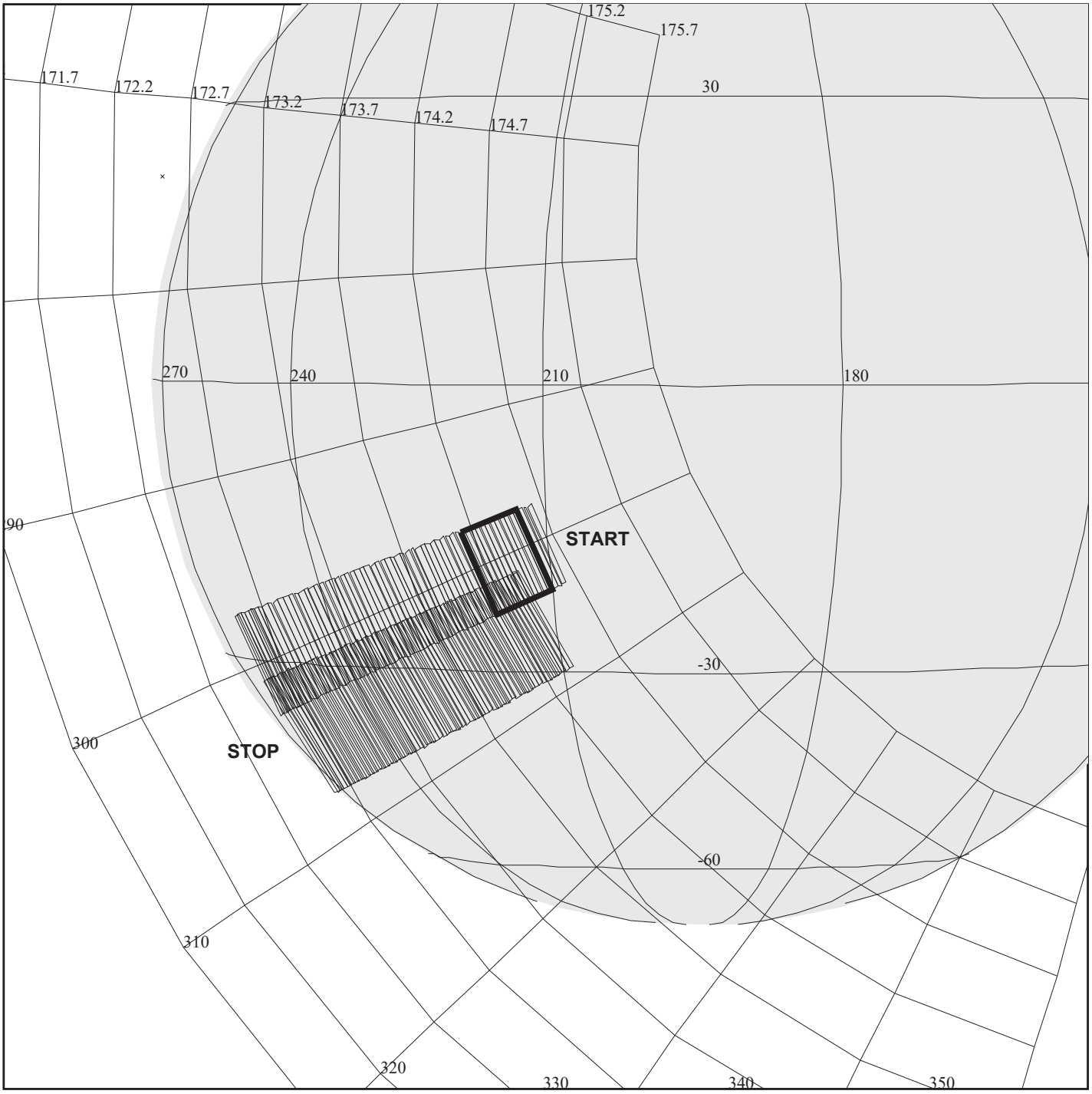
Design Detail

BTG=8.5 MB, TICS=410, FMT=LPU

LM, 2 scans.

Two-swath moderate resolution regional map.

Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, CLM253



165DU:TT= 0 TMC= 1 C= -3.00 XC= -5.50 BS= 0/4706 TC= 1(-19.2 205.5)
A= 364 pD= 0 SR=17.450 RA50= 85.92 DEC50= 23.48 cone=174.67 clock=300.49
117DU:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/4706
1:#s= 2 Cs= -9.40 XCs= -0.27 Cr= 26.30 XCr= 7.00 sD= 3202 rD= 64

30CNREGION01

DESIGN G3.2 yande: 4/26/2001 12:12:38

FILE:P.30CNREGION01

TARGET BODY : CALLISTO

MINI:m.30CNREGION01

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:CEE 01-145/11:23:55.533 +CDS 66:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 1.000**

OBSERVATION:30CNREGION01 **DESCRIP:CALLISTO_REGION**

Callisto Regional Obs

ACTIVITY ID: 30CNREGION01-
START TIME: 01-145/12:28:38.199

Activity ID: Orbit 30 Target C Inst N OAPEL REGION SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	05/25/01 Week 21
Start	CEE+CDS	00000064:00:0	01-145/12:28:38.199		CEE+000/01:04:42.666
End	CEE+CDS	00000104:00:0	01-145/13:09:04.866		CEE+000/01:45:09.333
Duration		00000040:00:0	000/00:40:26.667		000/00:40:26.667

Top Label 30CNREGION01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate composition and variation of constituents over the surface of Callisto on a regional scale.

Data Returned

Design Detail

BTG=7.29 MB, TICS=565, FMT=LPU

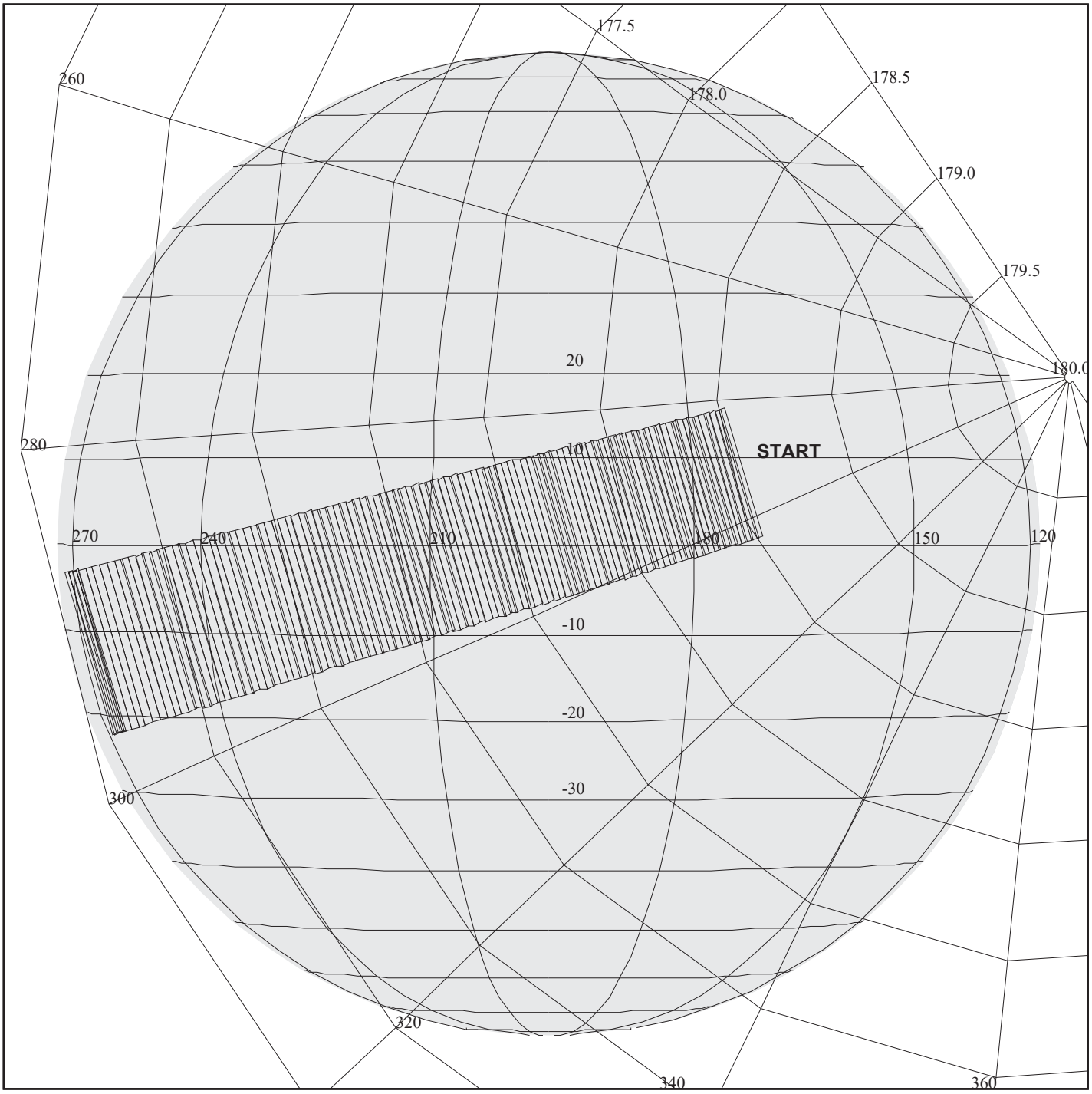
LM, 2 scans.

Two-swath regional map.

Only 3 RIMs of first swath returned.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, CLM253, CLM12



165DV:TT= 0 TMC= 1 C= 15.50 XC= -1.00 BS= 0/3442 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 82.08 DEC50= 25.16 cone=178.53 clock=292.42
117DV:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/3442
1:#s= 1 Cs= -35.00 XCs= 0.00 Cr= 15.00 XCr= 12.00 sD= 5448 rD= 100

30CNREGION02

DESIGN G3.2 yande: 4/26/2001 12:20:17

FILE:P.30CNREGION02

TARGET BODY : CALLISTO

MINI:m.30CNREGION02

S/C EPH:/DATA/NAVIO/010314-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:CEE 01-145/11:23:55.533 +CDS 114:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.900**

OBSERVATION:30CNREGION02 **DESCRIP:CALLISTO_REGION_02**

Callisto Regional Obs

ACTIVITY ID: 30CNREGION02-
START TIME: 01-145/13:15:08.866

Activity ID: Orbit 30 Target C Inst N OAPEL REGION SeqNo 02 -

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

Time System	CDS	Load ID	Calendar Date	05/25/01	Week 21
Start	CEE+CDS	00000110:00:0	01-145/13:15:08.866	CEE+000/01:51:13.333	
End	CEE+CDS	00000143:00:0	01-145/13:48:30.866	CEE+000/02:24:35.333	
Duration		00000033:00:0	000/00:33:22.000	000/00:33:22.000	

Top Label	30CNREGION02-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To investigate compositional variations and enhance the Callisto data set obtained over the course of Galileo's prime and extended missions.

No Data Returned

Design Detail

BTG=21.86 MB, TICS=1268, FMT=LPU

LM, 1 scan.

Single swath regional map.

Fixed Long Map (XLM), Gain 4, Grating Start 0, LPU, CLM253

48.133 01-147 22:39:51.466

NIMS Chopper Off — ACTIVITY ID: 30NNCHOPOF01- / START TIME: 01-147/22:34:48.133

Activity ID: Orbit 30 Target N Inst N OAPEL CHOPOF SeqNo 01 -

Title	NIMS Chopper Off			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	05/27/01 Week 21
Start	JEE+CDS	00000000:00:0	01-147/22:34:48.133		JEE+000/00:00:00.000
End	JEE+CDS	00000000:00:0	01-147/22:39:51.466		JEE+000/00:00:00.000
Duration		00000000:00:0	000/00:05:03.333		000/00:00:00.000

Top Label	30NNCHOPOF01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	300	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Turn off NIMS Chopper.

Design Detail

BTG=2.09 MB, TICS=796, FMT=MPW, LM

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

NIMS RCT Real Time Calibration

ACTIVITY ID: 30NNRCTRLT01-
START TIME: 01-191/07:26:07.400

Activity ID: Orbit 30 Target N Inst N OAPEL RCTRLT SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	07/10/00 Week 28
Start	RTA+CDS	00000000:00:0	00-191/07:26:07.400		RTA+000/00:00:00.000
End	RTA+CDS	00000000:00:0	00-191/20:36:49.400		RTA+000/00:00:00.000
Duration		00000000:00:0	000/13:10:42.000		000/00:00:00.000

Top Label 30NNRCTRLT01-
Bottom Label

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

Observation Objective

This observation is a NIMS radiometric calibration using the RCT target.
The data will be used to calibrate the NIMS thermal detectors.
The calibration data will be returned using Real-time Telemetry

The RCT Heaters cannot be on while that scan platform is in use.
The RCT calibration Library Sequence has been modified to turn off
the RCT heaters before slewing to zero cone to observe.
Hence the RCT is observed as it cools, instead of at a steady temperature.

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

Data Returned

Design Detail

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

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

Galileo Activity Plan Form 05/31/00 10:48:23 rev 1/99

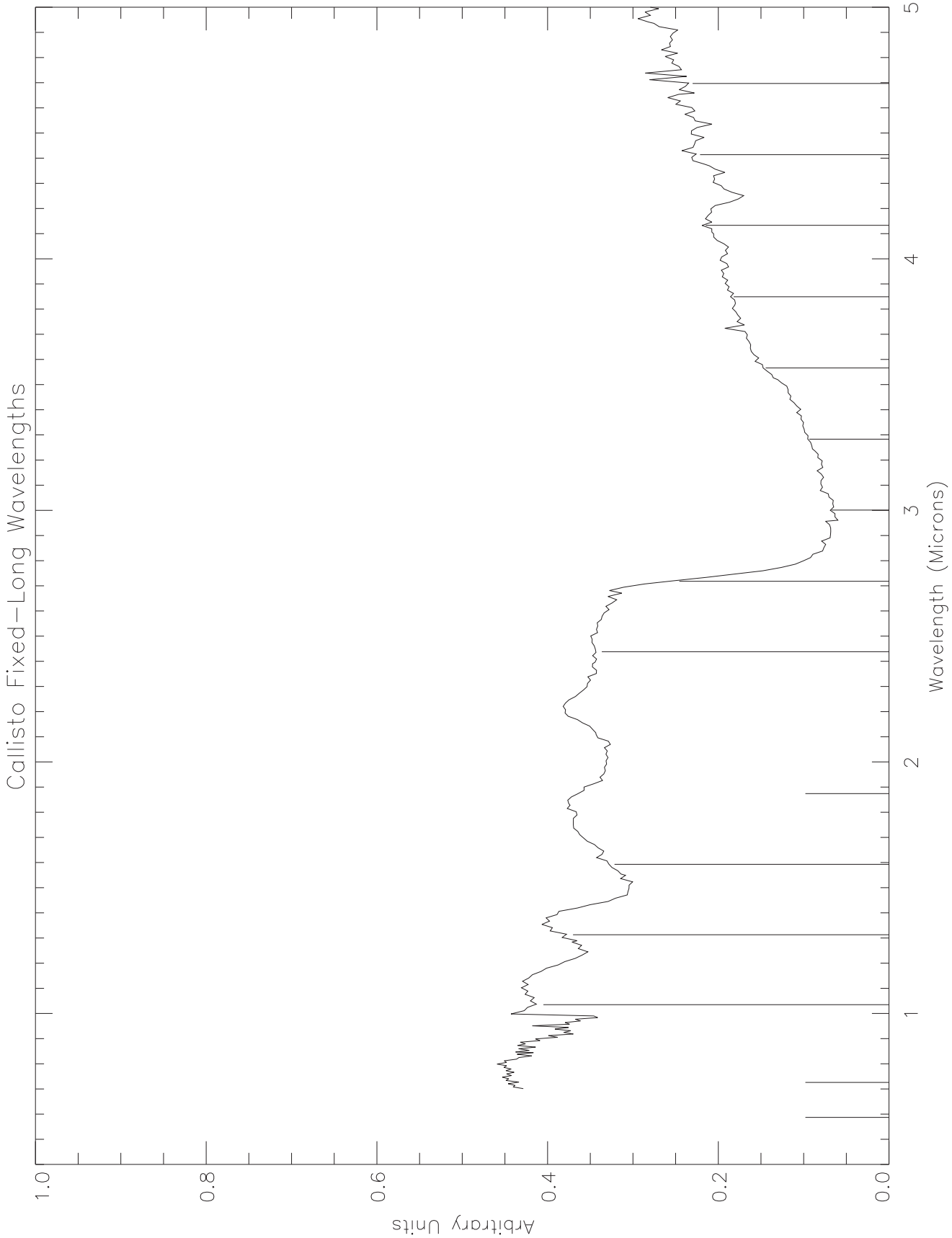
Chapter 6 - Edit Tables

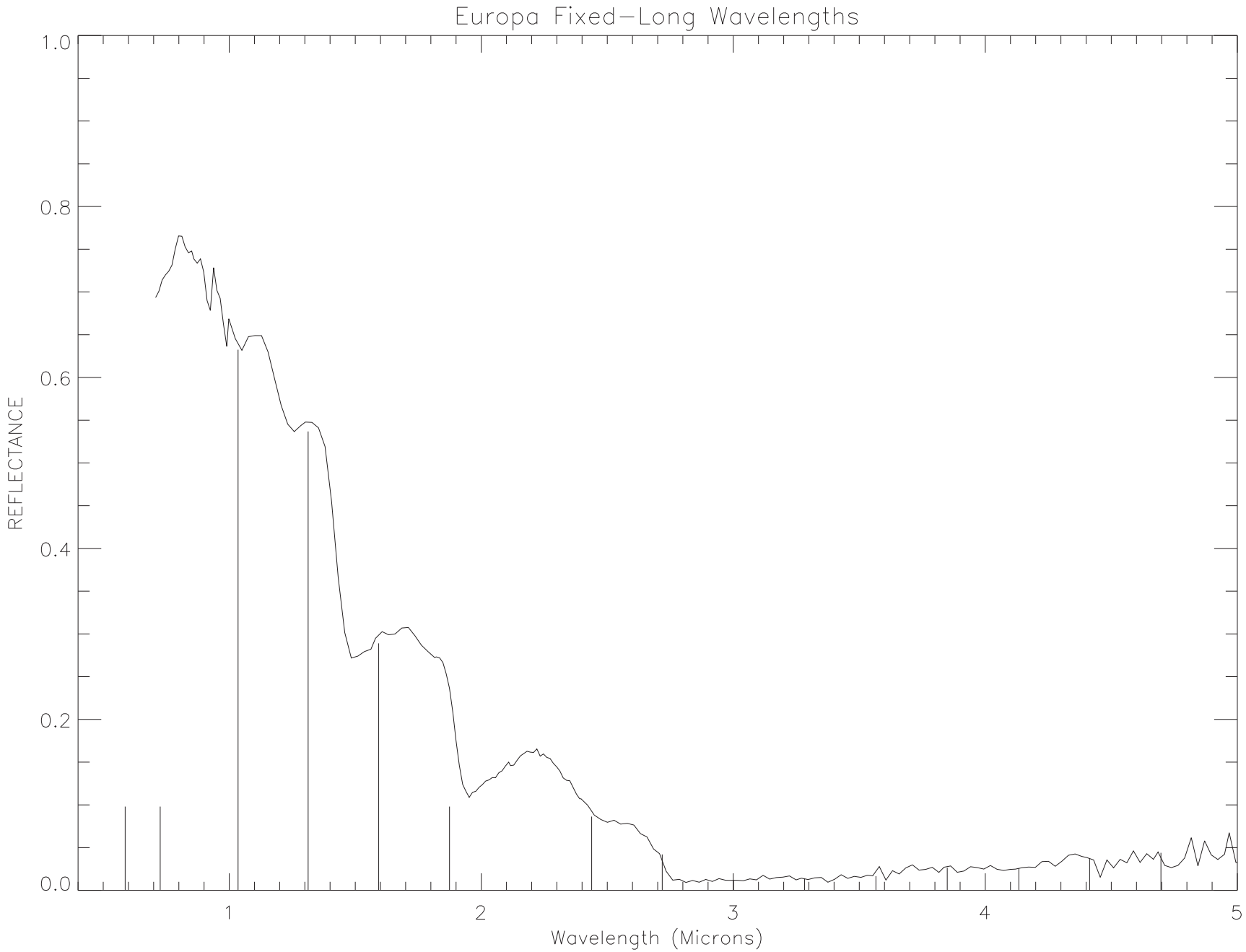
Contents

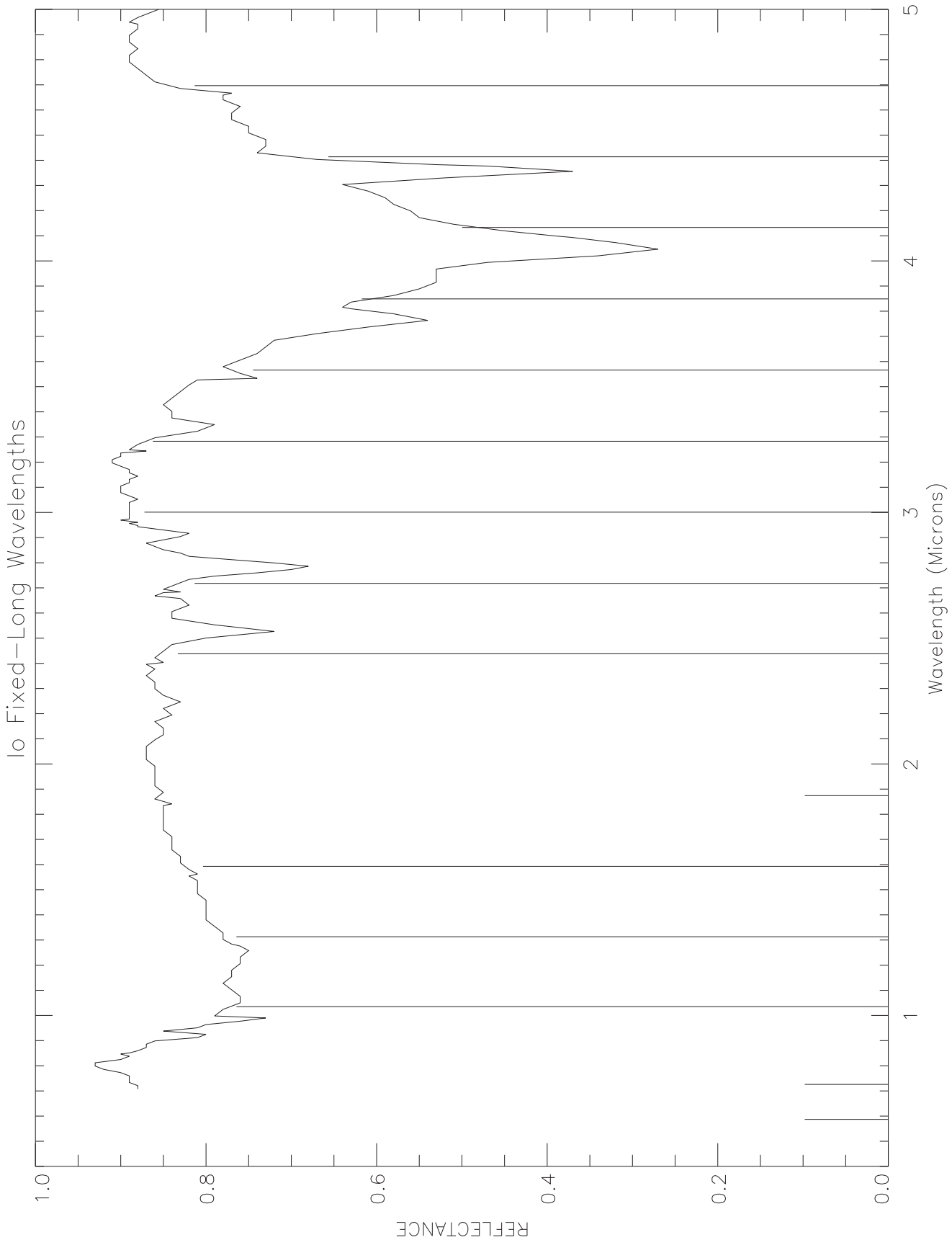
Introduction to Chapter 6

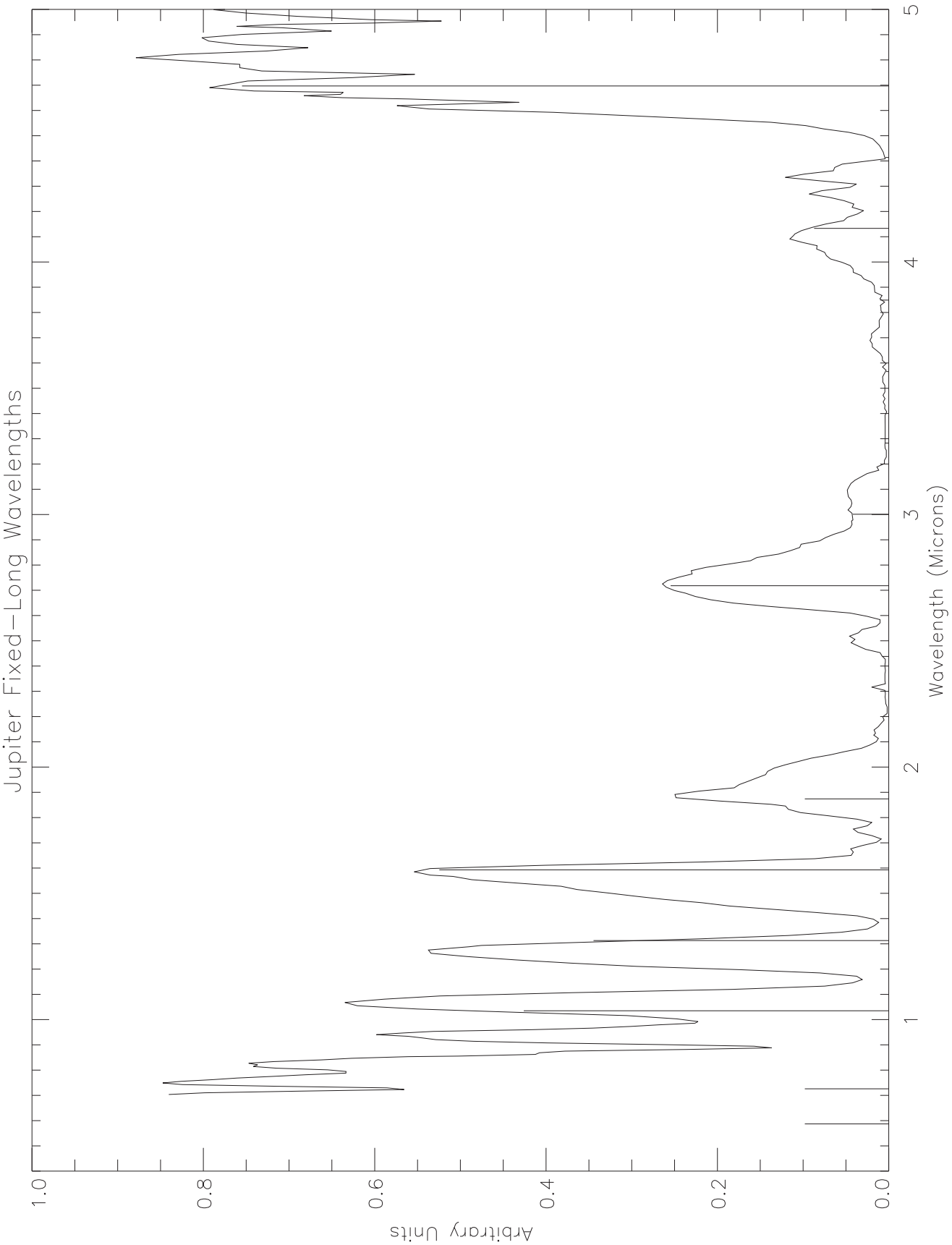
NIMS Edit Table Plots

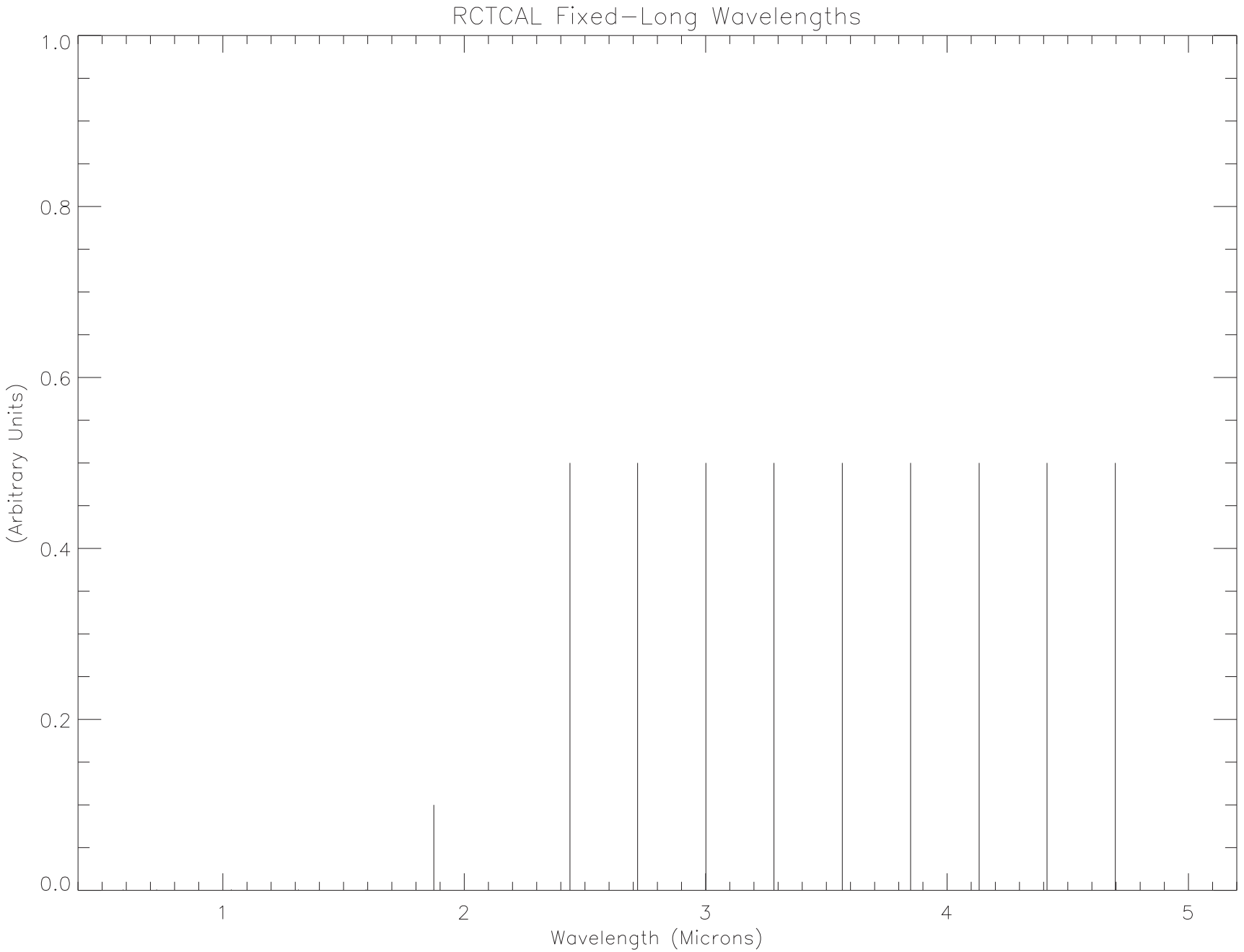
This chapter contains plots of the NIMS Edit Tables used in C30. The representative spectra used in these plots are observational reference spectra for the target body as obtained from telescopic observations from the Earth. Each reference spectrum is a composite of multiple published sources. Vertical lines below the reference curves mark the wavelengths selected for return. Where no spectral information is available, the selected wavelengths are shown as lines with amplitude equal to .05 on the vertical axis.


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


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


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


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


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

Chapter 7 - Data Return

Contents

Introduction to Chapter 7

This chapter is a report on the NIMS data return for the C30 orbit. Due to the low downlink data rates available for Galileo Jupiter Operations and other unforeseen and unpredictable events during the C30 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 twenty-one autonomous reloads of the NIMS RAM code from CDS during the C30 encounter, one just before each science observation. Two software halts were detected during C30. The approach that we are taking to avoid data loss due to processor halts has proven to be very successful.

The NIMS grating became stuck some time between C22 and I24. NIMS can now return only 17 (of 408) wavelengths. This has caused a drastic change in NIMS science capabilities. Detectors 1, 2 and 7 now have very low sensitivity. Detectors 3 and 8 are still not functioning. NIMS now returns only 12 useful wavelengths. Interesting science can still be carried out given the current condition of the instrument.

The plots on the pages 3 and 4 show the geometry of the NIMS C30 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 and 6 summarize the 'final' playback model for the C30 data returned.

The text on page 7 gives a 'recap' of the C30 playback events which affected which observations were returned.

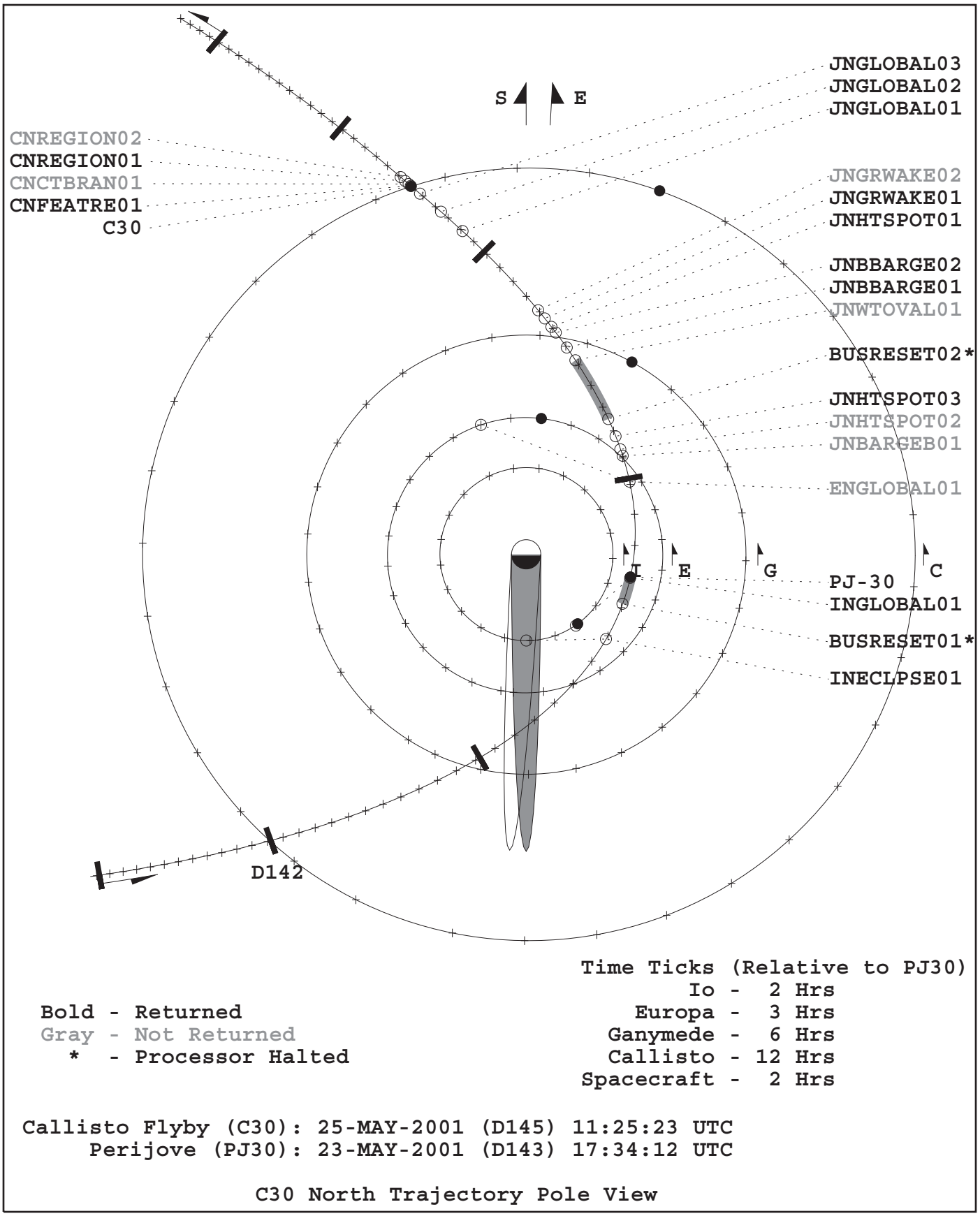
A Timeline of C30 playback events is on pages 7 through 19.

The text on pages 20 and 21 describes the C30 NIMS and Spacecraft Anomalies.

The text on page 22 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 23 and 24.

The text on page 25 is a guide to understanding the NIMS MASK.

NIMS C30 OBSERVATIONS



Bold - Returned
Gray - Not Returned
* - Processor Halted

Time Ticks (Relative to PJ30)

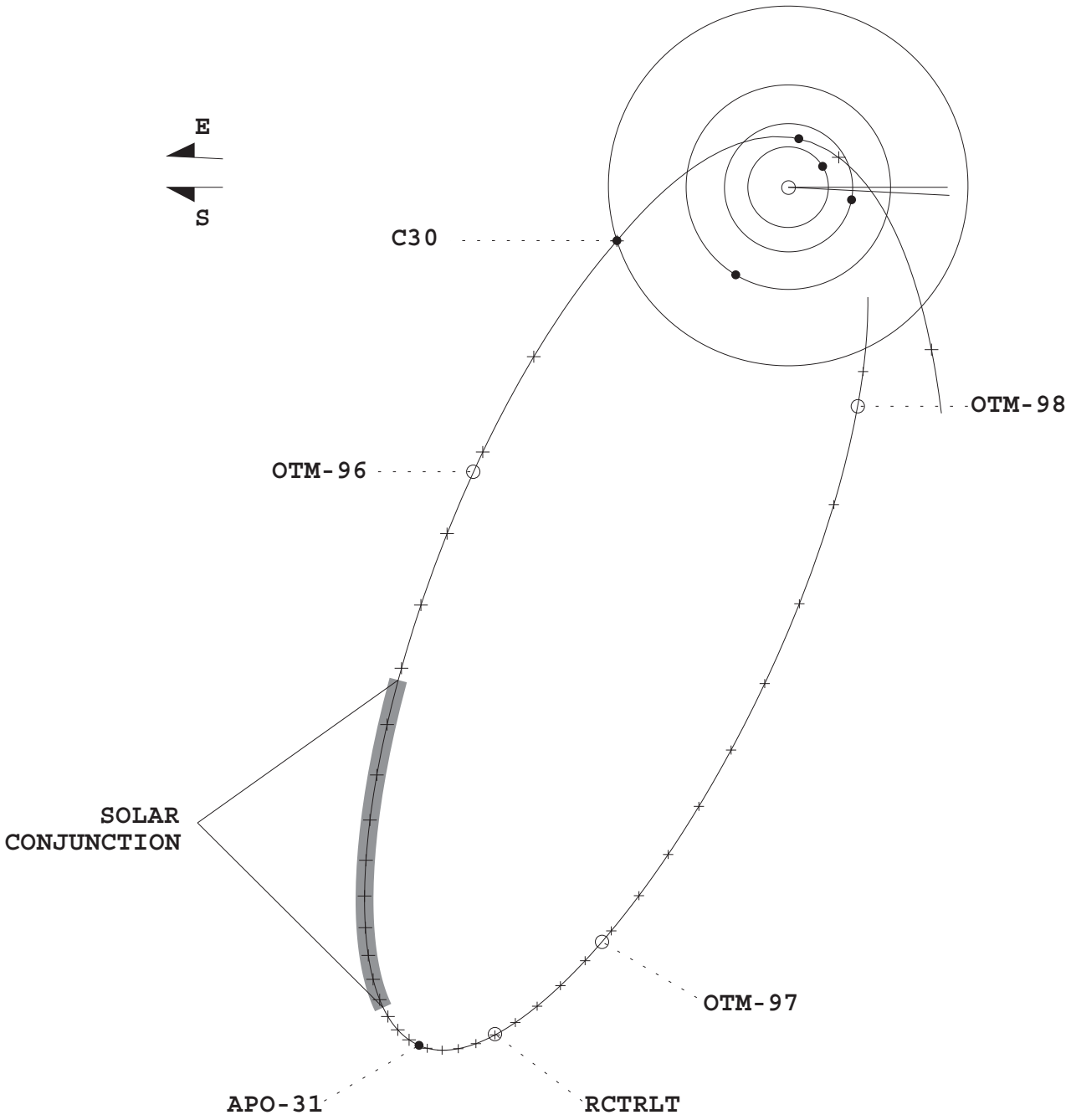
Io -	2 Hrs
Europa -	3 Hrs
Ganymede -	6 Hrs
Callisto -	12 Hrs
Spacecraft -	2 Hrs

Callisto Flyby (C30): 25-MAY-2001 (D145) 11:25:23 UTC
Perijove (PJ30): 23-MAY-2001 (D143) 17:34:12 UTC

C30 North Trajectory Pole View

NIMS - FEL - 11/30/01

NIMS C30 CALIBRATIONS



Time Ticks (Relative to C30)
Spacecraft - 2 Days

Callisto Flyby (C30): 25-MAY-2001 (D145) 11:25:23 UTC
Perijove (PJ30): 23-MAY-2001 (D143) 17:34:11 UTC
Apojove (A31): 29-JUN-2001 (D180) 23:46:40 UTC

C30 North Trajectory Pole View

NIMS - FEL - 03/26/01

NIMS C30 DATA RETURN

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
30INECLPSE01-	Io Eclipse	C30ILM442	C30ILMFG36	LM	4	0	4	MPW	DF
30INGLOBAL01-	Io Global	C30ILM442	C30ILMFG36	LM	2	0	4	MPW	DA
30JNHTSPOT03-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DE
30JNBBARGE01-	Jupiter Brown Barge	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DH
30JNBBARGE02-	Jupiter Brown Barge	C30JLMFG240	C30JLMFG8	LM	2	0	4	LPU	DI
30JNHTSPOT01-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DJ
30JNGRWAKE01-	Jupiter GRS Wake	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DK
30JNGLOBAL01-	Jupiter Global	C30JXMFG10	C30JXMFG2	XM	2	0	6	LPU	DP
30JNGLOBAL01-	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	6	LPU	DP
30JNGLOBAL03-	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	6	LPU	DR
30CNFEATRE01-	Callisto Feature	C30CLM442	C30CLMFG36	LM	4	0	4	MPW	DS
30CNREGION01-	Callisto Regional	C30CLMFG253	C30CLMFG12	LM	4	0	4	LPU	DU
30INECLPSE01-	Io Eclipse	C30ILM442	C30ILMFG144FILL	LM	4	0	4	MPW	DF
30INGLOBAL01-	Io Global	C30ILM442	C30ILMFG36	LM	2	0	4	MPW	DA
30JNHTSPOT03-gf	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DE
30JNHTSPOT03-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DE
30JNHTSPOT01-	Jupiter Hot Spot	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DJ
30JNGRWAKE01-gf	Jupiter GRS Wake	C30JLMFG240	C30JLMFG16	LM	2	0	4	LPU	DK
30JNGLOBAL02-	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	6	LPU	DQ
30JNGLOBAL03-gf	Jupiter Global	C30JXMFG10	C30JXMFG5	XM	2	0	6	LPU	DR
(*) Pass 1 = SSI preview only									

NIMS C30 DATA RETURN

Activity ID	Mode	Record Format	Wave-lengths Returned	Record time (sec)	PB time (sec)	Selected Bits to Tape sBOT (MBITS)	Bits to Tape BOT (Mbit)	Mode Cycle (sec)	AACS Mbits c 2.5	Comp	Total BTG Mbits) wit 4% O'head	Data Reduct. Factor (sBOT/BTG)	Pass (*)
30INECLPSE01-	LM	MPW	36	362	359	4.14	4.17	8.667	0.021	1.21	0.256	16.1	2
30INGLOBAL01-	LM	MPW	36	866	427	4.92	9.98	8.667	0.025	1.22	0.302	16.3	2
30JNHTSPOT03-	LM	LPU	16	3314	1195	7.37	0.05	8.667	0.069	1.6	0.287	25.7	2
30JNBBARGE01-	LM	LPU	16	981	478	2.95	0.02	8.667	0.028	1.62	0.113	26.0	2
30JNBBARGE02-	LM	LPU	8	1582	244	1.50	0.01	8.667	0.014	1.65	0.028	53.0	2
30JNHTSPOT01-	LM	LPU	16	1582	960	5.92	0.04	8.667	0.055	1.84	0.200	29.6	2
30JNGRWAKE01-	LM	LPU	16	1582	1574	9.71	0.06	8.667	0.091	1.67	0.362	26.8	2
30JNGLOBAL01-	XM	LPU	2	1587	302	1.86	9.79	0.333	0.017	2.08	0.181	10.3	2
30JNGLOBAL01-	XM	LPU	5	1587	791	4.88	9.79	0.333	0.046	1.86	1.328	3.7	2
30JNGLOBAL03-	XM	LPU	5	1457	824	5.08	8.99	0.333	0.047	1.84	1.399	3.6	2
30CNFEATRE01-	LM	MPW	36	668	665	7.66	7.70	8.667	0.038	1.51	0.380	20.1	2
30CNREGION01-	LM	LPU	12	2253	182	1.12	13.90	8.667	0.010	1.85	0.028	39.6	2
30INECLPSE01-	LM	MPW	144	362	64	0.74	4.17	8.667	0.004	1.22	0.181	4.1	3
30INGLOBAL01-	LM	MPW	36	866	424	4.88	9.98	8.667	0.024	1.22	0.300	16.3	3
30JNHTSPOT03-gf	LM	LPU	16	3314	398	2.45	0.02	8.667	0.023	1.6	0.096	25.7	3
30JNHTSPOT03-	LM	LPU	16	3314	1289	7.95	0.05	8.667	0.074	1.6	0.309	25.7	3
30JNHTSPOT01-	LM	LPU	16	1582	390	2.41	0.01	8.667	0.022	1.84	0.081	29.6	3
30JNGRWAKE01-gf	LM	LPU	16	1582	276	1.70	0.01	8.667	0.016	1.67	0.063	26.8	3
30JNGLOBAL02-	XM	LPU	5	1452	570	3.52	8.96	0.333	0.033	1.83	0.973	3.6	3
30JNGLOBAL03-gf	XM	LPU	5	1457	28	0.17	8.99	0.333	0.002	1.84	0.048	3.6	3
									1.178		6.918		
											7.250	Allocation	
(*) Pass 1 = SSI preview only											-0.332	Over/Under	

RECAP OF C30 PLAYBACK EVENTS

In contrast with G28 and G29, C30 was severely limited in downlink resources. This was in part due to the occurence of solar conjunction (Galileo behind the Sun) during the cruise (playback) period. The total NIMS science data return was a little over 7 Mbits. By commanding for playback only the minimum number of samples, we were able to retrieve a dozen high-quality observations (two each for Io and Callisto, and 8 for Jupiter). Highlights included the discovery of an extremely hot new volcanic outburst on Io, and an excellent spatially resolved north polar aurora observation for Jupiter.

The Galileo spacecraft experienced two despun bus reset events during C30; both were handled by the onboard software. One NIMS software halt was recorded, but instrument reload commands within the sequence prevented the loss of any observations.

The following timeline details the most signifigant events of the C30 playback period. Most of the text below is excerpted from messages issued at the time.

C30 Playback Events Timeline (04-26-01 to 08-14-01)

04-26-01: This is the second delivery of the C30 playback table. The extremely limited downlink resources in C30 (probably less than 50 Mbits for all instruments) force us to face some difficult decisions regarding cutbacks in data returned. Compounding the problem, there are limits to how much we can reduce data playback for any given observation due to the "fill problem." If we select only a small percentage of the data recorded on tape for return, our downlink packets may not be generated fast enough to keep up with downlink data rates. In this case, fill packets are fed into the downlink stream, and a given NIMS observation requires more downlink bits than our models call for. This pleases no one. We know how to avoid this but in practical terms it means there is a minimum number of wavelengths we can command for return for any particular observation. This being the case, we cannot simply reduce the redundancy level; we must instead cut back on spatial coverage, or cut out some observations entirely. Significant cuts were outlined in today's noon meeting, principally by Kevin / atmospheres. However, employing the minimum number of wavelengths practicable for all observations, we are still about 30% over our current allocation of 10.3 Mbits. This number is expected to go down. By target:
Europa: 30ENGLOBAL01 deleted from playback plan (distant).
Io: 0.7 Mbits for 36/360 wavelengths of ECLIPSE, GLOBAL.
Callisto: 2.1 Mbits; all 4 observations selected, with 24/253 wavelengths or 36/360 wavelengths.

Jupiter: 10.5 Mbits. Partial playback of 30JNHTSPOT03; 50% reduction of BBARGEs; and playback of 4/10 wavelengths (not 5) of GLOBAL01-02. 03 which has the GRS is at 9 bands. BARGEb is not in the current table, however. Note that the 3 GLOBALS currently require 7.4 Mbits by themselves (about 75% of our total downlink allocation).
Thus it appears we will be forced to prioritize further, in order to make the needed cutbacks of more than 30% to the present plan.

04-27-01: (F. Leader) If you guys get creative and start changing playback edit tables in the middle of an observation, please note that it would make ground data processing much easier if these wavelength edit table changes were commanded at RIM roll-over. The ground data processing software will not look for a new Obstab entry unless there is a RIM roll-over.

05-03-01: (Y. Anderson) C30 Playback Allocation Update --
Based on the latest products C30AGA and C30BEA, we have only 46.094 MB playback capability -- 9 MB reduction from what was planned during GMM Scoping Meeting. For now, SPOT plans to hold 1.422 MB for inefficiency and 1.0 MB for margin, which leaves us 43.672 MB for playback.

	Total Allocation	Playback Allocation	Playback Usage	RTS Usage	Unused Bits
Total:	44.98	43.67	54.74	1.310	-11.07
SSI	25.522	25.522	30.571		-5.049
NIMS	6.940	6.840	13.365	0.100	-6.525

AACS allocation was deducted from NIMS (1.881 MB) and MWG (0.092 MB).

05-03-01: (D. Bindschadler) Additional notes regarding allocations: During OAP planning and BTG allocations last fall, MWG and Torrence agreed that 9 MBTG represented a minimum for C30. If MWG usage stays below 9 MBTG (it's currently ~8.1 Mbit), the remainder will be redistributed to SSI, NIMS, and PPR. The cost of moving the SSI 30JSHOTSPT observations out to DOY 147 (~22 hours after the last recorded observation in the C30 OAP) is roughly 1.5 MBTG (due to delay of the IPB). Because the cause of the move is the loss of SSI summation mode capabilities (i.e., outside of SSI's control), the loss in capability will be distributed amongst the teams per OPG percentage.

05-07-01: (K. Baines) I am willing to cut one of the globals back even further, just to get +20 to -20 degrees lat or so. This one should be the one that is on the opposite side of the GRS (the anti-Great-Red-Spot hemisphere) (However, we don't want to miss the white oval or the barge...). Looking at the actual plots.... It seems to me that we can drop the southern part of Global 03. It has the GRS on the limb, but we get a much better view in Global 01. It has a barge, so we want to get the northern hem. So let's return at least scans 4-6 (counting from the north pole downward

on the plot). If possible, let's tack on scans 7-8. This would then get is the GRS on the limb. This means we would only be returning 5 out of the 10 scans on this global. On Global 02, again return at least 4-6. The white oval is on the limb in scan 8/9. So getting back 4-9 would be great. Another cut would be to get back 4-6, then 8-9, leaving out 7 on Global02. (7 could also be left out of Global 03, if need be, so we'd be getting 4-6 and 8 on Global 03)...

05-07-01: (M. Segura) Callisto playback priorities....
30CNFEATRE01 - keep all
30CNCTBRAN01 - keep first scan
30CNREGION01 - keep first scan
30CNREGION02 - first on the chopping block to NOT return.

05-08-01: My rule of thumb up to now has been to request ALL of the AACS (pointing) data for our observations which have cone angles of 165 or higher. For this orbit, however, we end up paying 1.2 Mbits for our AACS, out of a total allocation of 8 Mbits. Lucas, would you be comfortable with half or less of the AACS, for observations with cone angles of 175 or so?? What are the upper and lower limits of a comfort zone..? What subsets of the AACS are most significant (near limb?)

05-15-01: (Y. Anderson) Based on the latest products C30AGD and C30BEE, we have total capability of 43.94 MB. Subtracting the realtime science usage (1.20 MB for UVS/EUV and 0.10 MB for NIMS), we have 42.64 MB for playback.
NIMS 6.494 Mbits
Just wanted you to know the situation of inefficiency of the C30 pbt. We have about 9840 tics inefficiency for the pbt C30PCA, of which 1040 tics are from pass 1 and the rest from pass 2. It costs 1.39 MB at 40 bps, and 2.12 MB at 60 bps. There are two major areas where no data are selected for a long period of recordings. One is among these recordings
30INGLOBAL01-, 30ASOPNAV_02, 30ENGLOBAL01-,
30JNBARGEB01-, 30JNHTSPOT02-, 30JNHTSPOT03-.
I noticed that NIMS will be selecting 30INGLOBAL01 and 30JNBARGEB01 in pass 2 in the next delivery, so some inefficiency here will be eased. It would be even better if NIMS could select part 30JNHTSPOT02 and/or 30JNHTSPOT03 in pass 2.
Another big gap is at the beginning of c/a, where between 30JNWTOVAL01-, 30JNBBARGE01-, 30GSTRMMAP01, 30JNBBARGE02-, 30JNHTSPOT01-, 30JNGRWAKE01-, 30JNGRWAKE02-, 30GSGLOCOL01, 30JNGLOBAL01-, 30JNGLOBAL02-, and 30JNGLOBAL03- no data selected in pass 2.
The cost of this gap alone is 4368 tics. Although NIMS will be selecting 30JNWTOVAL01 and 30JNGLOBAL02 in pass 2 in the next delivery, we still need more selects from these recordings in pass 2 in order to lower the inefficiency.

05-16-01: The playback table delivered yesterday will be uplinked to the spacecraft and will go active on 27 May (a couple of days after the Callisto flyby). The NIMS downlink allocation has shrunk to approximately 8 Mbits, and many significant changes to the playback plan were implemented in this delivery. The painful cuts are detailed by target below. In this delivery we have placed about 40% of our bits in the second playback pass, to reduce the production of fill while slewing over tape. In addition we are experimenting with selecting a relatively tiny amount of spectral data for two short snippets of observations (30JNBBARGE02, 8 wavelengths of 240 recorded, and 30CNREGION01, 12 wavelengths of 253 recorded). In C3 we experienced a significant problem when doing this, during intervals of high data rates (80-160 bps). In this orbit we reach a maximum of 60 bps, with typical data rates of 40 and lower. The C3 problem was a result of the slowness of creation of AACS downlink packets, together with the sparse selection of NIMS data. We are performing this experiment to see if we can safely return fewer wavelengths so we can obtain correspondingly higher spatial coverage. If we see the same result as in C3 ("autonomous fill"), we will adopt a more conservative approach in pass 2. If autonomous fill is observed, the amount should be small enough to represent an insignificant impact on our allocation. If we do not see significant amounts of fill we may be able to significantly increase our spatial coverage for Callisto.

Callisto:

CNFEATRE01, highest resolution, is coming down in full (spatially) at 36/360 wavelengths, in pass 1.

CNCTBRAN01 is in pass 2 with 24/253 wavelengths, with only the first (of 2) spatial scans selected.

CNREGION01 is employed for the fill-test in pass 1 with 3 RIMS of data; the first scan (of 2) is also planned for return in pass 2 at 24/253 density.

CNREGION02 is not selected due to lack of bits.

Europa:

30ENGLOBAL01 will not be returned due to insufficient downlink allocation.

Io:

INECLPSE01 comes down first with 36/360 density.

INGLOBAL01 has the same spectral density but is split between passes 1 and 2 to minimize slewing inefficiency.

Jupiter:

30JNHTSPOT02 and 30JNGRWAKE02 are not being returned due to lack of bits.

JNGLOBAL01, 02 and 03 are reduced from the desired 9 wavelengths/detectors to 5, and a significant amount of spatial coverage is being left behind.

01 has the Red Spot. Of the 10 scans, we will get the top 2 (at 2 wavelengths only) for aurora, and we will get scans 3-8 with 5 detectors (4, 6, 10, 11, 17).

We get the same 5 for scans 4-8 of GLOBAL02, and for scans 4-9 of GLOBAL03.

An obscure switch in the Pointer software was set incorrectly during generation of our designs for several Jupiter observations of specific features. In nearly all cases there are significant errors on the plots. However we have been rather lucky and in most cases we will image all or at least part of the desired feature. Affected are: JNHTSPOT01-03, JNBBARGE01-02, JNGRWAKE01-02, and JNBARGEB01. JNWTOVAL01 was not significantly impacted.

05-22-01: Start of C30 encounter sequence.

05-23-01: (R. Mehlman) At SCLK 6048880 (SCET 143/16:05) CDS received a watchtimer SCLK value of 6048863, 17 minutes earlier, from NIMS. This is evidence of a NIMS software halt between our Io Eclipse and Io Global observations. Since we have a reload before the Io Global, it should be harmless.

05-23-01: Perijove occurs at 17:34 UTC.

05-23-01: (E. Theilig)
Galileo Callisto 30 Status Report #1 - 4:30 p.m. PDT
The Galileo spacecraft is operating normally with the exception of the SSI camera as discussed below, and all activities appear to be as planned. Close approach to Jupiter was at 10:33 a.m. PDT on 5/23 (Earth Receive Time), and at an altitude of 6.3 Jupiter radii. All planned atmospheric and Io observations to date appear to have been recorded successfully. The DSN successfully recorded the Radio Science Jupiter Occultation using the RSR over DSS-43 (Canberra, Australia), between 6:20 p.m. (5/22) and 12:50 a.m. (5/23) PDT. The spacecraft has now passed Jupiter close approach and the peak radiation level was around 350 (measured by the star scanner in pulse counts), significantly lower than the maximum of 1400 seen in previous GEM orbits. The only identified radiation related effects so far have been a standard bus reset, handled normally by the on-board recovery software without any effect on the planned sequence, and possibly the SSI issue discussed below.
As anticipated, the SSI camera baseline voltage anomaly is recurring in association either with instrument commanding or the radiation environment or both. Results of cycling instrument power off and on to clear the problem are unknown because of telemetry outages. More instrument engineering data should be available around 5:00 a.m. Thursday morning.

05-25-01: (E. Theilig)
Galileo Callisto 30 Status Report #3 - 11:50 p.m. 5/24
The Galileo spacecraft is operating normally and all activities appear to be as planned. The current status is from the DSS 43 pass at 10:30 p.m. PDT on 5/24. All observation recording is proceeding according to plan.
The Solid State Imaging camera has returned to its normal state following realtime commands to power cycle the instrument and reload its memory. As has been the case in previous encounters, the Near Infrared Mapping Spectrometer

and the Energetic Particle Detector both experienced memory upsets around perijove. In both cases, sequenced memory loads corrected the problem with minimal loss of data.
A second standard bus reset occurred Wednesday night and was handled normally by the on-board recovery software without any effect on the planned sequence.

05-25-01: Callisto close approach occurs at 11:25 UTC.

05-25-01: (E. Theilig) The Galileo spacecraft is operating normally at the end of the Callisto closest approach observations. The current status is from the DSS 63 pass at 10:30 a.m. PDT on 5/25. Close approach to Callisto was at 4:24 a.m. PDT, at an altitude of 138 km. All planned Callisto observations appear to have been recorded successfully. The Radio Science Callisto occultation experiment over DSS 63 started at 3:11 a.m. (5/25) and ended at 6:14 a.m. (5/25) and was successfully recorded.

05-25-01: (Y. Anderson) As you know, SSI was in anomalous state for some period of time. As a result, the playback strategy has been changed. Currently, we plan to play back the SSI data (only) in pass 1, and add playback of data from other instruments in pass 2 and pass 3. The reason for doing this is we'd like to assess, as quickly as possible, to what extent the SSI data were damaged. I don't know yet as to how this will impact on the team allocations and playback inefficiency. It'll become clearer in a week or so.

06-04-01: Start of solar conjunction.

06-07-01: Since I will be out of town from June 20-July 10, and a new C30 pbt may be required in the interim, I have generated and delivered a new one to /c30/pbt/delivery on donatello, dated 010607. The only change from the prior version is a modification of all pass numbers (which have been incremented by one). Unless we receive a windfall of new downlink bits, our playback strategy will remain unchanged until we have a substantial proportion of our initial data return on the ground.

06-23-01: End of solar conjunction period.

06-24-01: (Y. Anderson) Below is the approval information for the C30 playback table update, C30PED. This is the first C30 playback update, from segment 4 and beyond. Playback is currently 7% complete.
The previous playback table (C30PEB, 3 segments) is a PBT exclusively for SSI data. At the end of Segment 3 we will have been through the entire tape once. Now all singles from NIMS, PPR and F&P were added into the playback table, with pass 2 starting from Segment 4.

07-02-01: (Y. Anderson) C30 playback table update:
As expected, the SSI Jupiter hot spot data of C30 are not good. Currently, C30 playback is 4 days ahead of the schedule. We will send segment 6 on Wed. Thus, for this week's update we will start from segment 7 (which is the beginning of Callisto c/a recordings). To lessen workload, the 2nd delivery of I31 pbt is postponed to Friday 5PM (7/6), one day delay from what's on the schedule.

07-05-01: (R. Lopes) The NIMS eclipse observation in orbit C30, obtained May 23, 2001, shows a very bright hot spot at approximately 50S, 72W. This is probably a new hot spot (I cannot find any previous reference to it). There is a prominent black caldera near that location. A single-component temperature fit by Lucas yields about 1000K, which is very high for a single-component fit (even Pillan was not that high). This is probably a major eruption. We need more samples to be able to determine the hotter components. We only have 3 samples out of 24. I have spoken with Bob and he has agreed that we should get all the samples for that region. It's not very much, about 1 1/2 rims. Bob M. looked at the tube and the rims for this area range from 6048720.78 to 6048722.26. If necessary, we can do away with the gap fill in order to get these data. The whole observation is great: There are 14 hot spots plus 3 that are very faint and I cannot tell for sure. The hot spots include well-known ones (Prometheus, Gish Bar, Zal) as well as some that NIMS had not detected before (Uta, Catha). Let me know if we can adjust the playback tables to get these data.

07-05-01: (R. Mehlman) I rechecked the extent of the hot spot in the DN tube and saw that the feature almost exactly coincides with the 4th RIM of the observation. If bits-to-ground are at a premium, the playback request need only cover one RIM. And if this is also too much, the request could be trimmed back to fewer than the 12 detectors originally selected.

07-06-01: (Y. Anderson) Playback is currently about 2.5 days ahead of schedule. Playback is currently 18% complete.

07-10-01: (K. Schimmels) As most of you know already, playback went into a limited search this weekend for an unknown reason, and recovered as expected without real time commands being sent. We did, however, lose 1.2 MB of capability during the 14 hours of slewing across tracks 4 and 1.
This loss will impact playback BTG for C30. From what I can tell, we have 0.7 MB of SPOT margin and 1.3 MB of ineff. margin retained. If we were to take 1.2 MB of that, then we only have 0.8 MB remaining to cover inefficiencies. So far, I've calculated that we have rec'd 0.210 MB of NET inefficiency, as of the last checkpoint, and I don't have an estimate of the remaining inefficiency we expect to get from here on. I would like to let Yanhua have some time this week to check the following:

1) how much remaining ineff. We expect from the last checkpoint on,
2) tell me if the remaining margins I stated above are correct
3) update SSI's allocation based on what was spent for c30 opnav playback (very very little) and restore the remaining to the margin, if this hasn't been done already.
4) talk to me about the answers to the above, and make recommendations on whether we have the margin bits to pay for this or whether allocations need to change.

As for playback updates for C30, I am recommending that we do NOT do an update this week to Segment 8, unless someone has a very compelling reason to do so. Segment 8 is the middle of Calliso C/A data, and we are still in the first pass thru for most teams (second for SSI). Given that we are behind schedule a bit, we may have the option next week to affect segment 8, but that is uncertain still. The decision on that will be made next Monday (7/16). Also, the SST has a really large workload with I31A, I31B, OTM-97, and a new SIE, and Yanhua is out this week.
IN SUMMARY: There will not be a C30 PBT update this week, unless I am told otherwise at the SPOT meeting tomorrow, and new allocations will be out next week reflecting any cuts due to limited search.

07-10-01: (F. Leader) NIMS packets and DMS limited search mode (not guilty): Regarding the query about the DMS limited search mode and NIMS packets: NIMS received all requested data for 30JNGRWAKE01. The NIMS packet sequence count continued without a gap into the next requested NIMS observation 30JNGLOBAL01.

07-11-01: As you know we have a paltry 7.5 Mbits of downlink allocation in C30. Due to a limited search event on the S/C we are likely to see a drop in allocation (about 1 Mb, divided among the teams). We have already consumed about 4.5 Mbits (60%) not counting any Callisto data return in the first pass over the tape. Some good news is that our experiment with very high data reduction factors has not so far led to the generation of fill packets, as far as I can tell.
Please think about how we can cut and/or reprioritize our observations:
Io issues:
To get the rest of the wavelengths (12*24 - 36 = 252) for the RIM containing the new hot spot in 30INECLPSE01 will cost us .31 Mbits. This is about the same as is required for the entire second pass playback for 30INGLOBAL01. Note that the remaining part of the global is the southern hemisphere, including the hot spot (lat/lon coverage for the two is similar, but the gain states are 4 and 2). I think we could cut the wavelengths from 36 to 24 for the global (based on data reduction factor issue only). I think the key question is, do we really need ALL of the other 21 wavelengths x 12 detectors for the hot spot, or can we make do with fewer? Or can we ignore some detectors for this replay?

Callisto issues:
We have about .55 Mbits in the second pass for CNBRAN and CNREGION01, at 24/253 wavelengths. However we won't see the first pass data for a couple of weeks.
Jupiter issues:
There are 5 observations that can be affected in the second pass. Do we need them all (a third barge observation, 2 hot spot observations, a white oval, and the GLOBAL02)? What do the GLOBALs that are down look like (01 auroral zone with 2 bands, 01 and 03 with 5 bands)? Based on what we have, what can we forego in the second pass?

07-11-01: (R. Lopes) We need the global Io observation to locate the hot spot more accurately, but since it is a daytime observation it is not much good for temperature determination. Cutting the number of wavelengths is a possibility. I'd rather do that than cut anything on the hot spot area in the eclipse observation. We need all we can to get a high-temperature component for the hot spot.

07-11-01: We are facing some wicked decisions regarding our last-pass playback of C30 Jupiter observations.

1. Our overall allocation has been cut and now we are over by .5 Mbits.
2. There are a couple of large gaps in the data that is down (30JNHOTSPOT03, 30JNGRWAKE01).
3. The global01 looks very nice (5 bands middle latitudes), and there are striking aurora in the north polar scan we brought down with 2 wavelengths. Global02 is yet to come down and represents our largest pot of bits.
4. Very high priority is given to a replay of 1 RIM of the Io eclipse, where a hot new eruption is seen, and more data is needed to constrain temperature fits and location. This will require .2 to .3 Mbits. A 33% cut for the remaining Io saves only .1 Mbits.

Bottom line, if we are to retrieve the Io data, we need to cut .6 Mbits from the remaining Jupiter and Callisto observations (more if we want to fill the gaps noted above). Some decisions need to be made by next Wednesday.
Candidates for cuts are:
JNBARGEB01 .1 Mbits
JNHTSPOT03 (10 additional RIMS of the observation) .275 Mbits
JNWTOVAL01 .337 Mbits
JNHTSPOT01 (last third of observation) .133 Mbits
JNGLOBAL02 (longitudes coverage adjoins 01, 03) 1.18 Mbits
There are also 2 Callisto observations with .55 Mbits, at the end.
What to cut?

07-11-01: (Y. Anderson) C30 Playback Allocation Update
Currently, we have 0.7 MB of SPOT margin and 1.3 MB of ineff. margin retaining. As Kathy pointed out earlier, we lost 1.2 MB of downlink capability, due to a limited search this weekend. So far, we have recorded 0.2 MB of NET

inefficiency, as of the last checkpoint, and the estimated remaining inefficiency from the checkpoint on is 1.7 MB. To cover the altogether 3.1 MB loss and inefficiencies, teams need to share a cut of 1.1 MB. It breaks down as: SSI 0.66, NIMS 0.23, PPR 0.01, MWG 0.20.

07-13-01: (R. Lopes) I extracted some parts of Sylvain's last email to me regarding C30:

> I had a quick and dirty look at the new Io global observation from C30. It's so pretty and covers a very nice range of longitudes!. Even if the upper part is still missing. When will we have the rest of the disk? I picked up score of spectra and compared then with typical spectra from global I24INREGION02. The morphology of the C30 individuals is quite different from those present in I24.

This affects our playback strategy. I thought C30 global would not be too useful for SO2 mapping because of the low resolution, but I had not thought about the new longitudes. Looks like we should not cut GLOBAL...

07-18-01: Multiple changes to the table were made this week to respond to new conditions and opportunities. Our allocation has dropped to under 7.2 Mbits, and the detection of a new (very) hot spot in high south latitudes of Io made it desirable to spend additional bits there. We were forced to cut three observations from the plan.

Io:

We are replaying 1 RIM of 30INECLPSE01 with 144 wavelengths which are complementary to the 36 returned the first time through. 21/24 samples are being returned for detectors 4, 5, 6, for best signal enhancement, while an additional 9 samples are coming down for the thermal range detectors 9-17. We will also return the second half (southern hemisphere) of 30INGLOBAL01 (also showing the hot spot). This was trimmed slightly at the end for bits savings.

Callisto:

Playback of 30CNREGION01 was cut. 10 seconds of data playback remain in the table as a placeholder. We may be able to add this observation back next week as a freebie. Since it is near the end of the tape, we should be allowed to reinstate it, with the understanding that it is there to avoid the embarassment of terminating playback before our last DSN pass comes to an end.

Jupiter:

Kevin's desire to get two views of the North equatorial belt hot spots (to look for changes) led to the deletion of 30JNBARGEB01 and 30JNWHTOVAL01. We will get overlapping coverage of longitudes 20-45 W in the observations 30JNHTSPOT01 and 30JNHTSPOT03. We ended up not filling a large gap at the beginning of the latter observation because it did not fall in the contiguous overlap area.

Most of the data reduction factors in this table have been changed to reflect actual compression performance. There will be one more update next week. Playback will terminate on 3 August.

07-23-01: (Y. Anderson) There is also an allocation change for the teams. Remember, about three weeks ago, teams shared 1.1 MB cut due to the limited search. At that time MWG had a cut of 0.2 MB. But since MWG has a lien on 9 MB floor at the OPG planning, MWG needs to have the 0.2 MB back. As a result, an additional 0.2 MB cut will be distributed to SSI, NIMS and PPR.

07-23-01: (K. Schimmels) First, I am going to suggest that the 0.2 MB cut to restore BTG to MWG only come from NIMS and SSI, PPR's percentage of this is totally in the noise. We should have cut the 1.1 from NIMS/SSI only in the first place, but I had also forgotten about the MWG minimum number of BTG needed.
SSI - Herb -It has come to the point where you must adjust the remaining compression numbers in your next playback table to be realistic. We are too close to the end of playback not to be able to see a realistic schedule, and most of that is due to SSI being over allocation by 4.612 MB (artificially, I assume). Please take the time to edit your remaining PBT SINGLEs accordingly. In addition - SSI is last on the tape, you may plan on overselecting bits in the CSGLOCOL observation, but not in anything prior to that in order to assure we get to the last PPR data for gap fill if necessary.
All teams: I am not pleased that we need to do this week's update off schedule, with this being the last week of S&CG for I31, I don't like putting extra pressure on teams, including SST, to do an update on a day that is not scheduled. However, since there is not going to be a chance to see the end of Pass 2 this week prior to even an on schedule update, it looks like we have to have an additional update next week, again, being off schedule. This is NOT something that I want SPOT to get in the habit of requesting. We simply do not have the time or staff to do this repeatedly and from now on, off schedule updates must be requested and cleared in advance not only by me, but by the SST team chief and SIE's as well. We have an encounter in 2 weeks, and squeezing in and additional update is not what we would have liked to be doing next week.
We now face the following issues:

1) We have an unrealistic schedule to gauge playback by, and we have no visibility into the last half of pass 3 yet.
2) We need to decide whether to do an off schedule update either this week OR next.
3) We are definitely in need of an off schedule update early next week if we wish to be able to affect the third pass of playback thru tracks 1 and 2. This means an approval and uplink Tuesday of next week i.e. files due monday, and no chance at seeing data bested next week prior to the final update.
4) Can SST support doing an off schedule update this week and next, given a delta product for I31A and OTM-98 next week? I doubt that the answer will be yes, but we need to ask the question ASAP.

A general plea - I would like for teams to be thinking ahead a bit more on the updates from now on. You should assume when you do an update that there is a chance you will NOT be able to affect the following segments in the next week, and plan accordingly. We updated segment 9 AND BEYOND last week, and allocations have not changed this week that I am aware of. Needing an update to Segment 10 this week surprises me, and I can't say that I will agree to it yet, as there are obviously other issues to consider here. The last pass thru the observations in Segment 10 was around DOY 189 if not earlier, a full week and a half prior to last week's update, and that should be plenty of time to know whether or not a team needs to update the observation in the next pass. Yanhua and I will talk to SST and look at the affects of skipping the update to 10 and updating 11 and beyond next Monday. A decision will be made early Tuesday, but for now do not plan on being able to affect segment 10 unless you can give me a really strong reason ASAP.

07-24-01: (Y. Anderson) The decision was that we cancel the early update this week! We will send segment 10 from C30PEH tomorrow.
This is the last C30 playback allocation update (7/24). The only change from the previous allocations is that 0.2 MB is given back to MWG, which is compensated by a cut of 0.15 MB for SSI and a cut of 0.05 MB for NIMS. The last pbt update for C30 is Thurs., at 3 PM. Last but not least, the allocations.

-- MWG can now give 0.2 MB back to SSI (0.15MB) and NIMS (0.05MB), because they gained 0.382 MB back from the buffer dumps allocation that was taken from them at the beginning of C30 playback. Since they did not plan to add gap fills, this 0.382 MB gain put MWG fairly close to their allocation.
-- There is extra bits (0.1MB) from AACS. We use it to cover PPR's over allocation, if they choose to replay the EWSCAN data, and all other noises.
-- With 0.05 MB back, NIMS is within their allocation
-- With 0.15 MB back, SSI needs to cut 0.2 MB. C30 playback has been a tough one. Thanks to every team's cooperation, we finally made it!

07-26-01: We have a problem. Callisto compression was lower than expected. We may have to cut the BRAN crater observation in today's update, UNLESS we cut back to 12 samples here (from 24) too. Kevin has been happy with single sample observations such as his globals; probably Callisto will be ok with no oversampling too.

07-26-01: This is the final update for C30. Playback will terminate on 3 August. Changes to this table include the addition of 3 sets of gap-fill singles for 30CNFEATRE01, and the reduction of spatial coverage (by one scan) of 30JNGLOBAL02. I also deleted our "placeholder" singles for 30CNREGION01.

Compression values for remaining observations were updated based on pass 2 performance. We are presently a tiny bit under our allocation; total NIMS downlink for the orbit is estimated to be 7.21 Mbits. The cut in spatial coverage for 30JNGLOBAL02 was needed due to undercompression of pass 2 Callisto data. By making this cut we are able to return the complete first scan of 30CNCTBRAN01, as previously planned.

07-29-01: (R. Mehlman) NIMS playback is already done for both Io observations, and for most Jupiter observations including over 1/3 of 30JNGLOBAL02. This means we're once again ahead of schedule, though we don't get any more coverage until Tuesday afternoon, which is about when GLOBAL02 was to begin. Guess there's hope for Callisto.

08-02-01: (R. Lopes) We now have all the data from C30.

08-14-01: (R. Mehlman) 30CNCTBRAN01 never came back. We lost the last few days of playback entirely. It stopped after some 30JNGLOBAL03 gap-fill.

The NIMS grating became stuck prior to the I24 encounter. The grating continued to be stuck for the C30 encounter. This development caused a drastic change in NIMS operations. Detectors 1, 2 and 7 now have very low sensitivity. Detectors 3 and 8 are still not functioning. NIMS now returns only 12 useful wavelengths.

The NIMS processor halted twice during the C30 Encounter as a result of CDS Bus Reset (BURP) events. No NIMS observations were lost due to this halt.

The spacecraft did not safe during the C30 Encounter but did suffer two Bus Resets which precipitated the NIMS halt.

Stuck Grating (from the I24 NIMS Guide)

At I24, NIMS experienced a fundamental change in the way that it operates. Sometime between C22 and I24, the NIMS grating became stuck at a position corresponding to a pshift of about 14.5. This unusual grating position produces wavelengths for each detector far shorter than previously used. With the stuck grating, NIMS is permanently in a "fixed grating" mode. At this new grating position, Detectors 1, 2 and 7 return very low DN, as their new wavelengths are outside of the passband of their blocking filters and therefore are of minimal use. As before, detectors 3 and 8 are still not functioning.

There is no ground calibration for the wavelengths corresponding to this pshift. Flight calibration was derived from the I24 RCT and PCT calibrations. Details of this new flight calibration will be discussed in the as yet unpublished NIMS calibration report.

The spectral capability of the NIMS instrument shrank from 408 wavelengths to 17 wavelengths with the stuck grating. Now all commanded modes, Long Map, Full Map, Short Map or Fixed Map, select the same 17 wavelengths. Two effects of the stuck grating have been put to good use: spatial editing and noise reduction.

Even though the grating is stuck, the grating cycle still plays an important role. The playback edit table can now be used for spatial data editing. In Long Map mode, each mirror scan can be selected or deselected using the playback edit table. This allows a range of spatial density versus areal coverage choices.

If an observation is performed in Long Map mode at the Long Map scan rate, the 24 mirror scans over a single grating cycle can be averaged together to increase the signal to noise level. The adverse effects of the high levels of radiation-induced noise encountered close-in to Jupiter are greatly alleviated by this averaging.

Response to Stuck Grating Anomaly (C30)

At C30 the cause of the stuck grating was not known (and is still not clearly understood). No attempts were made during C30 to unstick the grating.

Processor Halts

There were two NIMS processor halts during C30. The halts were detected by the NIMS SCLK engineering and were coincident in time with the reported CDS Bus Reset events. The two Bus Resets occurred outside of NIMS observations so that the software halts did not affected any NIMS observations. Each NIMS observation was preceded by a software reload so that no NIMS observations were lost due to the halts.

A hardware status word 0 was returned during the encounter, indicating chopper 63Hz mode, at RIM 6049473. This occurred after the 30JNBARGEB01 observation. No data were returned for this observation so the chopper status was not confirmed. The chopper mode was reset by the software reload of the subsequent observation. We dont really understand how the instrument could have gotten into chopper 63Hz mode. There could have been an undetected instrument halt at this time.

Spacecraft Anomaly

During the C30 encounter two standard CDS bus resets occurred and were handled normally by the on-board recovery software without any effects on the planned sequence. The BURP events occurred at about D143/015:49 and D144/04:34.

Anomaly Timing:

6048864	01-143/15:49:00	CDS Bus Reset 01
6048880	01-143/16:05:19	6048863 SCLK reported
6048961	01-143/17:27:19	NIMS Software Reload (30INGLOBAL01)
6049473	01-144/02:05:19	Chopper 63Hz HW Status Word
6049976	01-144/02:08:41	NIMS Software Reload (30JNHTSPOT02)
6049620	01-144/04:34:00	CDS Bus Reset 02
6049697	01-144/05:51:59	6049619 SCLK reported
6049895	01-144/09:11:59	6049619 SCLK reported
6049946	01-144/10:03:54	NIMS Software Reload (30JNWTOVAL01)

NIMS Archived EDRs and CUBEs

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

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

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

Data Format

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

Data Types

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

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

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

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

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

Data Labels

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

Data Access

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

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

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

Understanding the NIMS Mask

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

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

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

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

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

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

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