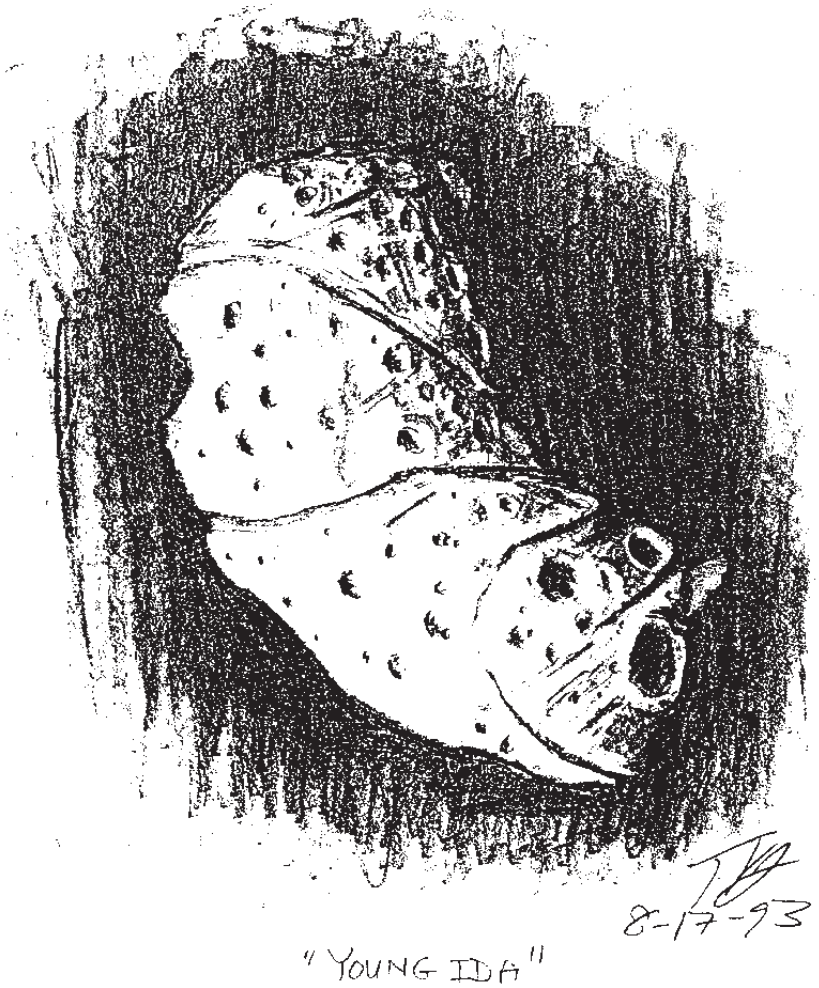
NIMS GUIDE TO THE IDA ENCOUNTER

Original: August 1993
Revised: May 1995

Galileo

The NIMS Ida Encounter Handbook



Ida Closest Approach at 8/28/93 16:52:04 (UT)

Cover art is from Galileo's project scientist, Dr. Torrence V. Johnson

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Introduction to the Revised Edition

This document was originally published by the NIMS team in August 1993 as a guide to the Galileo Encounter with the asteroid Ida. It has been revised and corrected for inclusion on the 4th CD-ROM of NIMS Experimental Data Records (EDRs). Some material in the original document has been omitted, and a chapter added describing the Ida data actually returned to the ground.

The aim of the revised guide is to provide detailed information on the various NIMS observations and calibrations. Also included is background information on the encounter. An overview of the guide is given below. Please refer to the beginning of each chapter for a detailed list of contents.

Chapter 1 gives an introduction to the Ida encounter as well as a discussion of various issues that went into the design of the Ida encounter sequence. Chapter 2 gives an overview of the entire Ida encounter using various timelines. Chapter 3 contains diagrams of various aspects of geometry for the Ida encounter. Chapter 4 summarizes the planned NIMS Ida observations by means of a comprehensize sequence summary, PA summary and Observation Table (OBSTAB). Chapter 5 is a collection of the Detailed Observation Designs made up of OAPEL forms and POINTER plots. Chapter 6 is a summary of the NIMS data return for the Ida Encounter.

For information on the NIMS instrument, please see the preprint of the NIMS instrument paper provided elsewhere on the CD-ROM, or refer to the published version: 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 60: 457-502, 1992.

ACKNOWLEDGEMENTS

The NIMS Ida observations in this guide were designed by Marcia Segura and Paul Weissman with the help of Bill Smythe and Bob Carlson. The calibrations were designed by Marcia Segura with help from Bill Smythe. John Hui prepared the original printed guide. Frank Leader subsequently retrieved most of the original material for the CD-ROM, edited the original Postscript files for consistency and clarity, recovered missing material by scanning parts of the original printed document and prepared the last chapter describing the data return. Some figures from the Galileo Ida Encounter Notebook prepared by the Galileo Mission Design Team were incorporated into this guide. Al Stevenson generated the sequence summary. Bob Mehlman oversaw production of this guide.

Introduction

On August 28, 1993, Galileo will attempt to record the best spatial and spectral information available on an asteroid. 243 Ida will be the target and will provide the second opportunity for an asteroid flyby by the Galileo spacecraft. This packet is provided to the NIMS team as a guide to the Galileo Ida Encounter. Within these pages, you will find information about the asteroid itself, the plans for obtaining the data, and the plans for the data return.

243 Ida - The Asteroid

Ida was discovered by Johann Palisa in Vienna on September 29, 1884. The asteroid was named for the nymph of Crete who nursed young Zeus. It is a faint object as viewed from Earth-based telescopes and little observing was done prior to Galileo's desire to 'fly by' a second asteroid.

Ida is an S-type asteroid and a member of the Koronis family which is in the outer belt between 2.8 and 2.9 AU. Ida itself is located at a semi-major axis of 2.86 AU. It is expected to be composed of olivine and pyroxene silicates and have a reddish color. Large light curve variations imply a very elongated shape with an approximate mean diameter of 28 km.

Ida's pre-encounter characteristics are summarized below. Gaspra's characteristics are also listed for comparison.

- Ida is almost twice as large in diameter and eight times as large in volume as Gaspra (Ida's triaxial ellispoid model is 53 x 23 x 18 km whereas Gaspra's is 19 x 12 x 11 km.)
- Ida is in the middle of the asteroid belt. (Gaspra is located in the inner edge.)
- Ida has a more rapid spin rate. (Ida's spin period = 4.63 hours; Gaspra's period = 7.04 hours.)
- Ida is thought to have a more irregular shape.
- Ida is a member of the Koronis family of asteroids. (Gaspra is in the Flora family.)
- Ida may be much younger that Gaspra. (10s of millions of years vs. 200 million years for Gaspra.)
- Ida is possibly an ordinary chondrite (most common meteorite) parent body. (Gaspra is posibly a stony-iron meteorite parent body.)

On the following three pages are: 1) a list of Ida's physical constants that was provided by the Galileo Mission Design Team, 2) a plot of a ground-based near-infrared spectrum of Ida that was presented by David Tholen at the Munich DPS of 1992 and 3) a plot in semi-major axis vs inclination of the known asteroids showing Ida and Gaspra and the asteroid families that they belong to.

Asteroid 243 Ida - Physical Constants
Class S, Family 3 - Koronis Family

Diameter: 28 +/- 3 km

Shape: assume tri-axial ellipsoidal with axis ratios
a:b:c = 2.3 : 1.0 : 0.8
+/- 0.4 0.2
coupled with the assumed mean diameter yields:
a:b:c = 53 km : 23 km : 18 km
(28 km = cube root of (a*b*c))

Synodic Period:
0.1930680 +/- 0.0000005 day

Sense of Rotation:
unknown, assume retrograde (sigma result)

North Pole Position: (IAU convention - equally likely, adopy #1)
Solution 1: 260 deg ecliptic longitude, +50 deg ecliptic latitude (263 RA, +27 Dec)
Solution 2: 82 deg ecliptic longitude, +50 deg ecliptic latitude (72 RA, +73 Dec)
(uncertainites are +/- 15 deg in each direction)

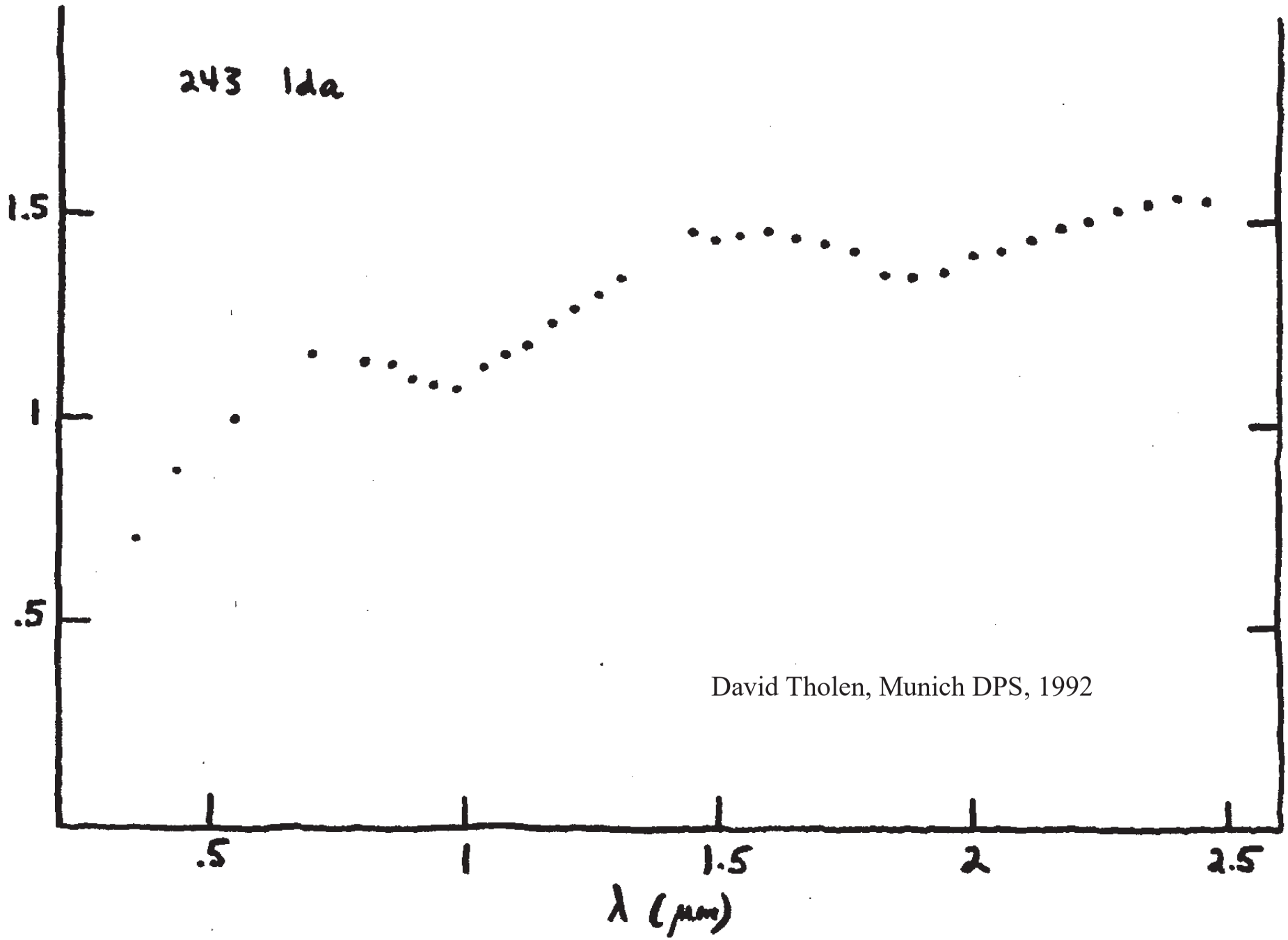
Epoch: (Direction of longest axis)
1993 Aug 29.000 (JD 2449228.500)
Solution 1: 120 deg ecl. long., +33 deg ecl. lat.
Solution 2: 120 deg ecl. long., -34 deg ecl. lat.
1993 Aug 30.000 (JD 2449229.500)
Solution 1: 41 deg ecl. long., +33 deg ecl. lat.
Solution 2: 41 deg ecl. long., -32 deg ecl. lat.

Albedo: 0.24 +/- 0.03 (IRAS)

Magnitudes:
H = 10.02 G = 0.203
U-B = 0.44 B-V = 0.81

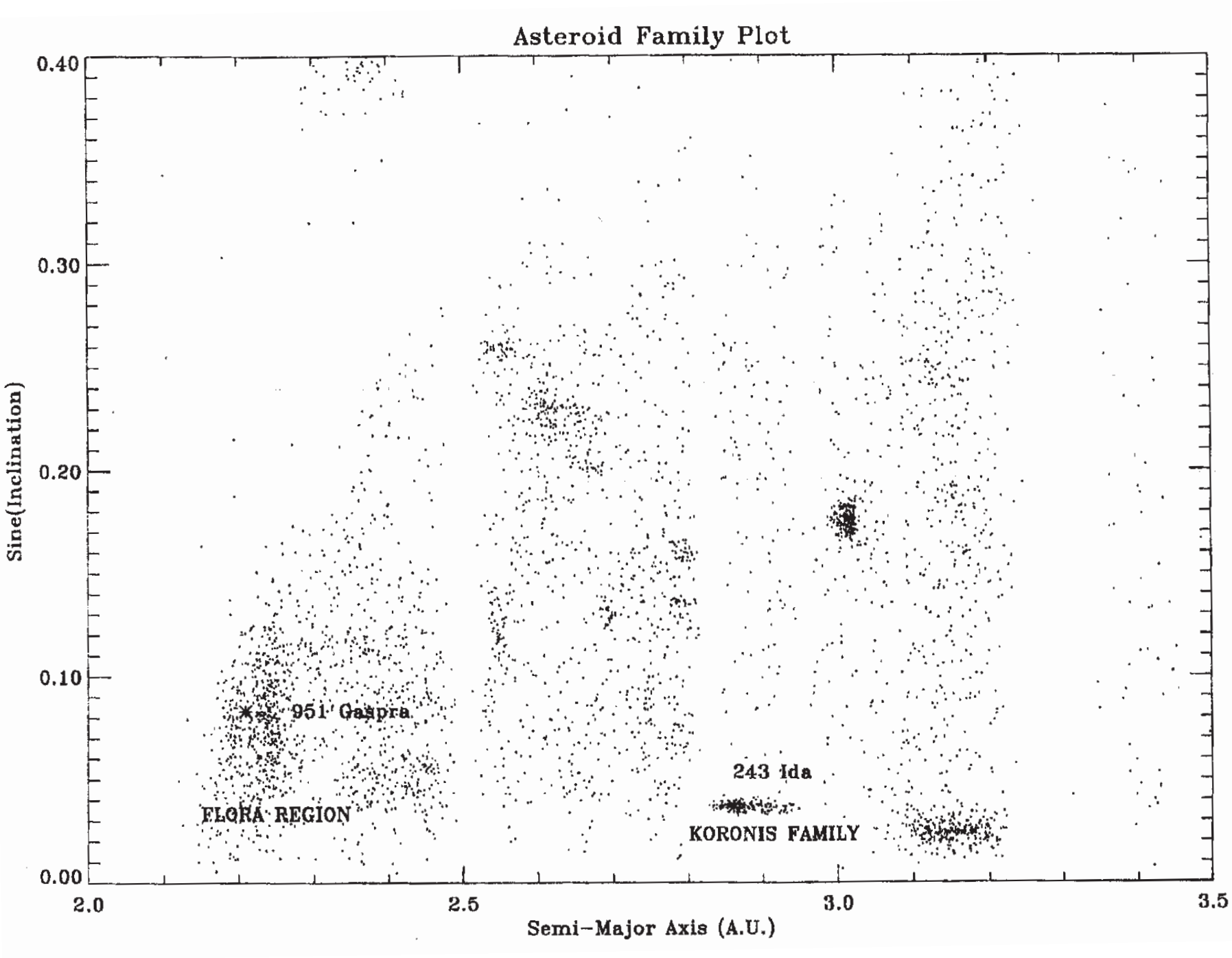
Lightcurve Amplitude:
0.45 - 0.95

Orbital Elements: (Epoch 1993 nov 9.0 = 2449300.5)
a = 2.862 AU (semi-major axis)
Q = 2.7388094 AU (perihelion distance)
e = 0.0434032 (eccentricity)
sin i = 0.0197 (inclination, i=1.13126 deg)
W = 113.21057 deg (argument of perihelion)
node = 323.66333 deg (longitude of asc. node, from B1950.0)
Wbar rate = 64.6 (sec/yr)
node rate = -65.6 (sec/yr)



David Tholen, Munich DPS, 1992

1-05


Asteroid Family Plot
0.40
0.30
0.20
0.10
0.00
Sine(Inclination)
2.0
2.5
3.0
3.5
Semi-Major Axis (A.U.)
951 Gaspra
243 Ida
FLORA REGION
KORONIS FAMILY

History of the Ida Sequence

The planning for Ida Encounter began in the early fall of 1992 with a series of aim point selection meetings. A dark side, 75 deg south ecliptic latitude, 2400 km range flyby was chosen. This aim point provided for the most illuminated surface area to be visible at closest approach and was a compromise of both NIMS and SSI observation requirements. The aim point itself impacted the sequence. It required that the spacecraft attitude be changed (18 degrees off-sun and 29 degrees off-earth) to insure the observations would not be in the cone pole region and to delay the time of boom obscuration. Downlink capability, due to both the spacecraft attitude and the HGA deployment failure, mandated that all science observations be stored on the tape recorder rather than be returned immediately. This requirement grew to include all engineering data taken during the telemetry gap caused by the turn to the off-Earth attitude, which amounted to approximately one half track of the DMS. The data return strategy overshadowed every other aspect of the sequence development. During the observation design phase, much thought was given to the return of Ida data. Observations that may have been collaborative efforts in previous encounters became standalone activities to reduce tape usage. Series of observations were repeated to accommodate easier tape positioning for return. NIMS fixed map observations were added after every absolute slew in the rotation study portion of the sequence to provide more exact Ida location for the return of subsequent NIMS/SSI data. This effort will reduce the amount of dark sky data return for pointing uncertainties and conserve both downlink capability and DMS start/stop cycles for actual asteroid data.

Spacecraft Orientation and Trajectory

Galileo off-sun angle:	~ 18 degrees
Radial distance:	darkside, 2400 km @ closest approach
Closest approach point:	75 degrees, south ecliptic latitude
Encounter time:	August 28, 1993; DOY 93-240/16:52:04 UTC

NIMS Science Priorities

Using the Asteroid Working Group's science objectives, Ida's physical characteristics, spacecraft range, and experience gained during Galileo's flyby of Gaspra, the NIMS Ida observations were sequenced accordingly ("Start" and "End" times are in rims prior to Ida closest approach.).

Priority	Start	End	Observation
1	-5	-1	Fixed Map, 0.8 mrad/sec, collaborative NIMS/SSI mosaic, 95% coverage of error ellipse.
2	-11	-5	Short Map, 0.11 mrad/sec, 2 swaths, full coverage of error ellipse
3	-22	-18	Long Map, 0.03 mrad/sec, 1 swath, full coverage of error ellipse
4	-322	-28	Fixed Map, 0.75 mrad/sec every 90 deg of rotation Full Map, 0.06 mrad/sec every 90 deg of rotation Short Map, 0.11 mrad/sec every 30 degrees between 90 degree samples Short Map, 0.11 mrad/sec every 15 degrees between 30 degree samples throughout 1 full Ida rotation.
5	After closest approach		PCT and RCT calibrations with durations of 6 rims each.

The NIMS Sequence

The NIMS Ida sequence uses four NIMS instrument modes for science observations: Long Map (LM), Full Map (FM), Short Map (SM) and Fixed Map (XM). The gain states chosen were 4 and 3; 4 being used during the distant observations when Ida is still sub-nimsel in size and 3 being used during the closest observations. The grating offset is the default: 4. The following grating offsets were used to allow sampling of the 1.05 micron absorption band. The 1.05 micron samples maximize the scene contrast and should provide the best information on the olivine/pyroxene band. These are the same grating offsets used in the Gaspra Encounter.

Mode	Grating Start Position
LM	0
FM	0
SM	2
XM	6

Observations:

The NIMS science observations are logically divided into two portions; the rotation observations and the "close-in" observations. The rotation portion covers approximate 390 degrees of Ida rotation starting at -322 rims from closest approach. NIMS acquires samples every 90 degrees (XM and FM), 30 degrees (SM), and 15 degrees (SM) of rotation. Note: The XM samples were included to aid in the reduction of pointing uncertainty and thus facilitate asteroid data return. The "close-in" portion covers from -28 rims prior to closest approach (the end of the rotation observations) to 1 rim after closest approach. At -28 rims and -22 rims, NIMS acquires two Long Map (LM) samples. These observations are at the best spectral resolution possible. At -11 rims before closest approach, NIMS observes Ida in Short Map (SM) mode to determine asteroid composition. This observation is done in the best spectral/spatial combination possible. From -5 rims to 1 rim, collaborative NIMS/SSI observations are taken; NIMS acquires data in Fixed Map (XM) mode at the highest spatial resolution possible for the Ida Encounter. NIMS rides along in Fixed Map on an additional SSI observation from -1 to +1 Rim to obtain the highest possible spatial resolution data on the asteroid.

Calibrations:

Bore-sight - NIMS, UVS, and PPR collaborative StarCal, at +30 rims
PCT Cal - NIMS Photometric Calibration at +661 rims
RCT Cal - NIMS Radiometric Calibration at +2984 rims

Activities Prior to Ida Encounter

Certain activities necessary to set the stage for Ida Encounter could not be placed in the EJ3-Ida sequence load due to time/load constraints. These tasks were placed in the EJ2 sequence prior to EJ3. Items of importance to NIMS are the OPNAV frames, instrument turn-on and heater configuration. Although all of the OPNAV images are important to the success of the Ida encounter, #4 and #5 provided NIMS with the opportunity to do two calibrations: Opcal and Ecal. Listed below are the activities of interest to NIMS:

Time	Activity
DOY 93-227/19:38:04	NIMS Shield Heater OFF
DOY 93-229/00:56:44	NIMS Replacement Heaters OFF
DOY 93-229/00:57:12	NIMS Power ON
DOY 93-229/20:25:05	PCT Heater 1 OFF
DOY 93-229/20:41:27	OPNAV 4/NIMS OPCAL recorded
DOY 93-230/04:25:10	OPNAV 4/NIMS OPCAL playback begins
DOY 93-232/06:06:23	OPNAV 4/NIMS OPCAL playback ends
DOY 93-233/14:52:55	OPNAV 5/NIMS ECAL recorded
DOY 93-233/15:05:10	OPNAV 5/NIMS ECAL playback begins
DOY 93-235/05:58:23	OPNAV 5/NIMS ECAL playback ends
DOY 93-237/23:05:10	PCT Heater 1 ON

Timeline Summary

The list below provides an overview of the Encounter events.

Time (UTC)		Event
08/17/93 (Tue., Day 229)	00:57:11	NIMS Turn On in EJ2 Sequence
08/17/93 (Tue., Day 229)	20:39:21	NIMS OPCAL in EJ2 Sequence
08/21/93 (Sat., Day 233)	14:50:50	NIMS ECAL in EJ2 Sequence
08/27/93 (Fri., Day 239)	11:00:00	Ida Sequence EJ3 Begins
08/28/93 (Sat., Day 240)	11:24:28	NIMS First Observation, Ida Rotation 1
08/28/93 (Sat., Day 240)	16:52:04	Ida Closest Approach
08/30/93 (Mon., Day 242)	19:19:03	NIMS Last Observation, PCT Calibration
08/30/93 (Mon., Day 242)	20:35:00	NIMS TURN Off
09/27/93 (Mon., Day 270)	16:00:00	Ida Sequence EJ3 Ends

Month of September, 1993	First Ida Data Return Playback
Months of March through June, 1994	Remainder of Ida Data Return Playback

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Meetings:

Tuesdays	Regular SROP meeting @ 9:00 a.m. in 264-784 NIMS Science Coordinators meeting @11:00 a.m. in 264-784
Wednesdays	Regular S&MD meeting @9:30 a.m. in 264-784
Thursdays	NIMS Team Meeting @ 12:00 p.m. in 183-343

Chapter 2 - Encounter Overview

Contents

Introduction to Chapter 2

This chapter gives an overview of the entire Ida Encounter.

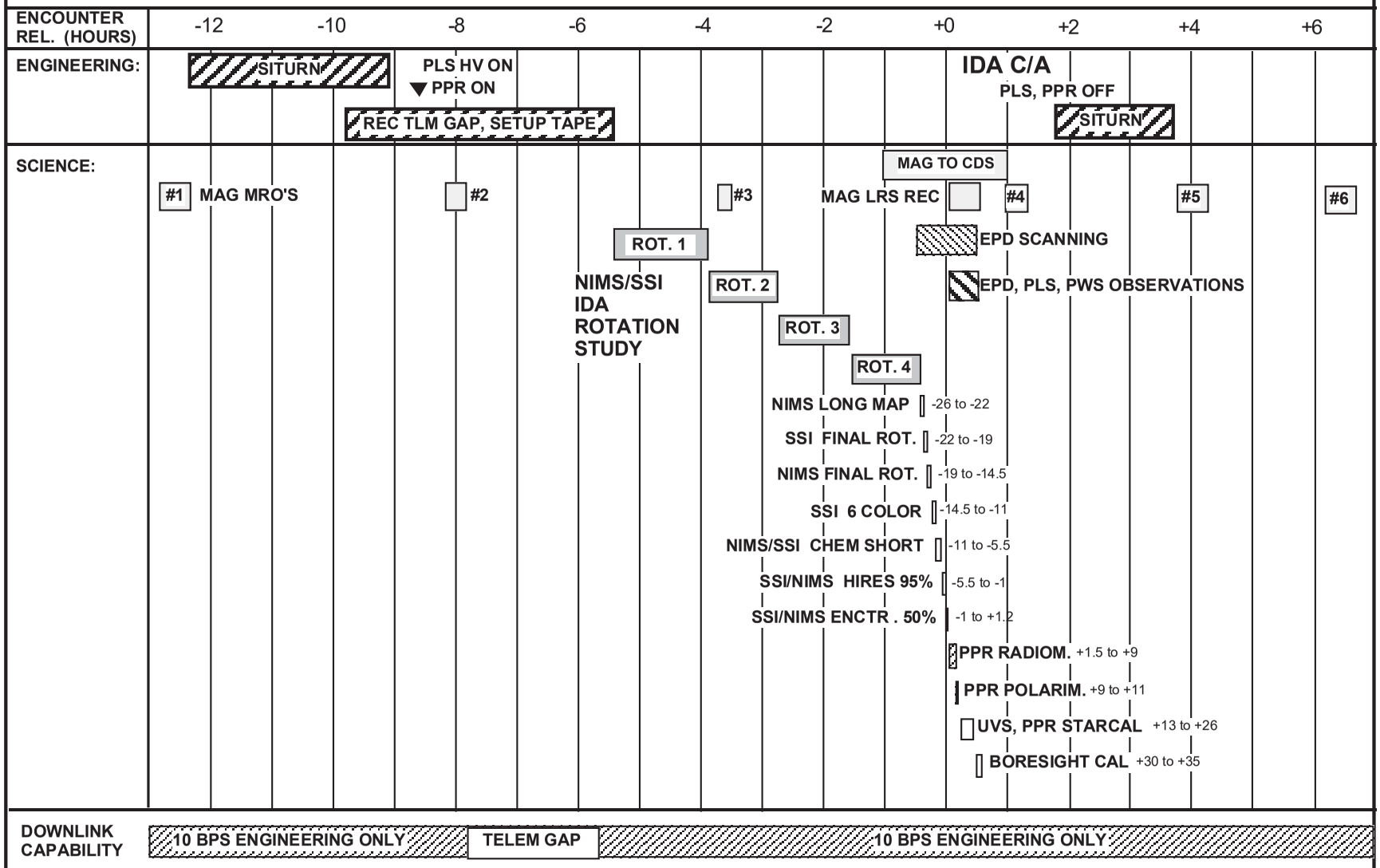
The two figures on pages 3 and 4 show the Ida Encounter Timeline from -12 to +6 hours relative to Ida Closest Approach. The timelines block out the major Remote Sensing Observations for the Ida Encounter.

The timeline on page 5, the Galileo Ida Key Events Timeline, shows the science activities occuring during the Ida Encounter, with graphical representations of the major Ida mosaics.

The table on page 6 is an overview of the NIMS observations in the Ida Encounter. It lists various geometric quantities and a brief statement of objective for each group of observations.

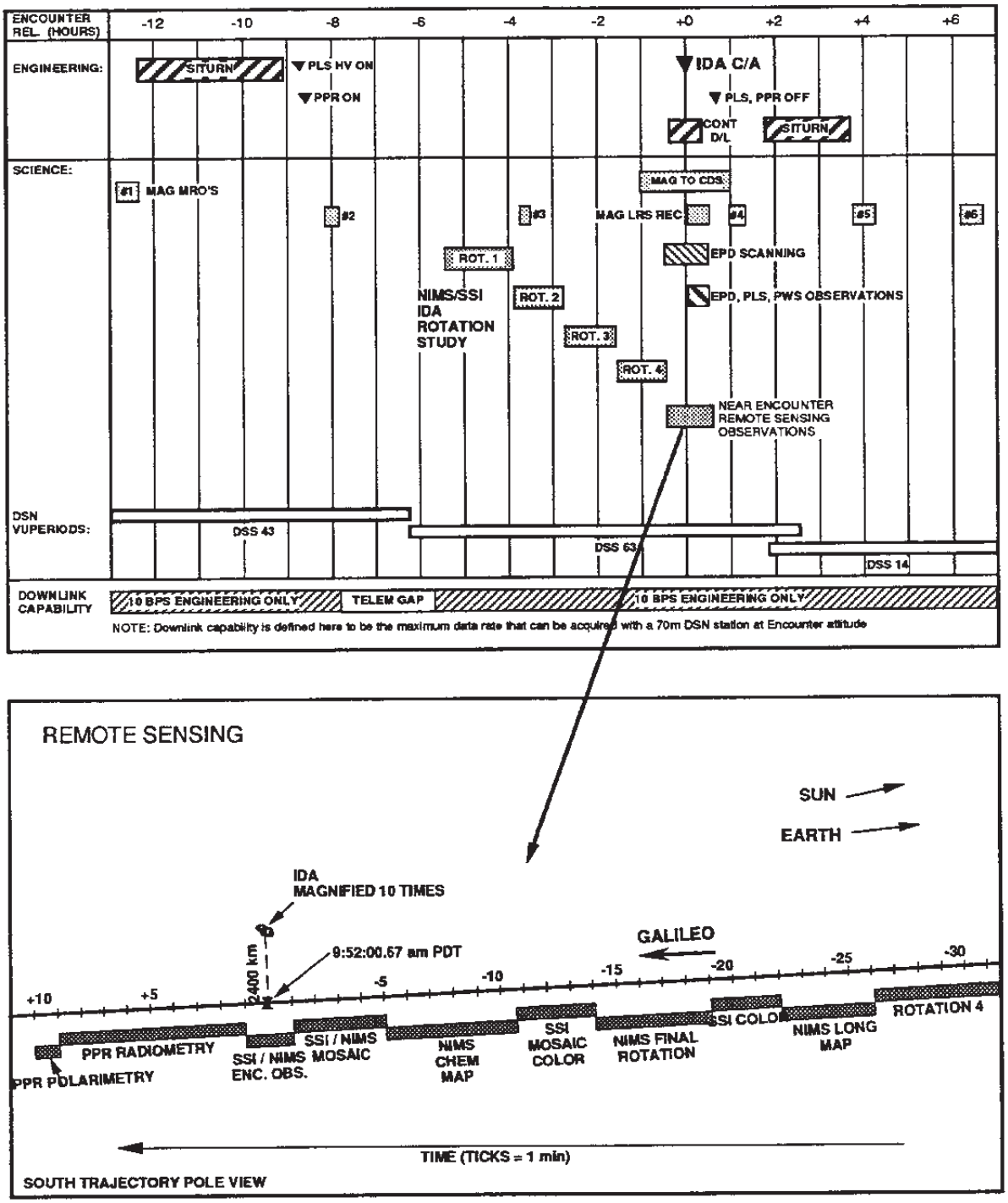
The table on page 7 is a summary of the NIMS instrument states for the NIMS observations in the Ida Encounter.

IDA ENCOUNTER, -12 HOURS TO +6 HOURS

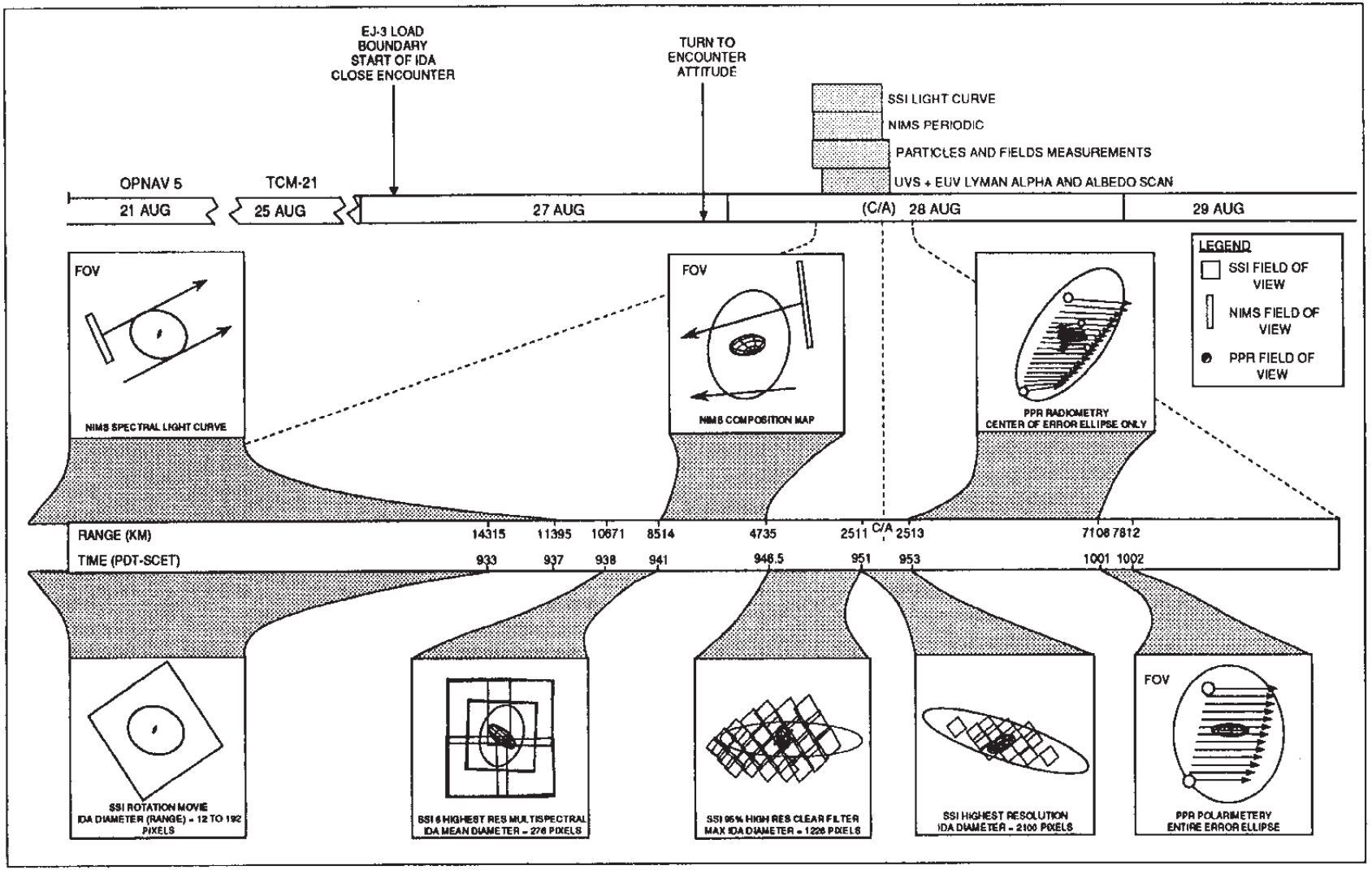


NOTE: Downlink capability is defined here to be the maximum data rate that can be acquired with a 70m DSN station at Encounter attitude

PJS 6/4/93



Ida Encounter Summary, -12 hours to +6 hours


EJ-3 LOAD BOUNDARY START OF IDA CLOSE ENCOUNTER
TURN TO ENCOUNTER ATTITUDE
SSI LIGHT CURVE
NIMS PERIODIC
PARTICLES AND FIELDS MEASUREMENTS
UVS + EUV LYMAN ALPHA AND ALBEDO SCAN
OPNAV 5
21 AUG
TCM-21
25 AUG
27 AUG
(C/A)
28 AUG
29 AUG
LEGEND
SSI FIELD OF VIEW
NIMS FIELD OF VIEW
PPR FIELD OF VIEW
FOV
NIMS SPECTRAL LIGHT CURVE
NIMS COMPOSITION MAP
PPR RADIOMETRY CENTER OF ERROR ELLIPSE ONLY
RANGE (KM)
14315
11395
10671
8514
4735
2511
C/A
2513
7108
7812
TIME (PDT-SCET)
933
937
938
941
948.5
951
953
1001
1002
SSI ROTATION MOVIE IDA DIAMETER (RANGE) = 12 TO 192 PIXELS
SSI 6 HIGHEST RES MULTISPECTRAL IDA MEAN DIAMETER = 276 PIXELS
SSI 95% HIGH RES CLEAR FILTER MAX IDA DIAMETER = 1226 PIXELS
SSI HIGHEST RESOLUTION IDA DIAMETER = 2100 PIXELS
PPR POLARIMETERY ENTIRE ERROR ELLIPSE

IDA ENCOUNTER OVERVIEW

TIME (RIMs)	OBSERVATION NAME	RANGE (km)	SPATIAL RESOLUTION (km/nimsel)	ANGULAR SEMI-DIAMETER	PHASE ANGLE (deg)	CONE ANGLE (deg)	OBSERVATION OBJECTIVE
-322	ROTATI01						This observation will
-322	RTURXM01*	241485.9	120.74	0.0033	19.48	173.98	provide a spectral light
-293	RT90FM01*	222908.3	111.45	0.0036	19.50	173.94	curve of Ida periodically
-282	RT15SM01*	208049.6	102.02	0.0039	19.52	173.91	throughout 90 degrees of
-270	RT30SM01*	200620.2	100.31	0.0030	19.53	173.89	rotation sampling every
-259	RT15SM02*	193190.9	96.60	0.0042	19.54	173.87	fifteen degrees.
-247	RT30SM02*	185761.7	92.88	0.0043	19.55	173.85	
-236	RT15SM03*	178332.5	89.17	0.0045	19.57	173.83	
-230	ROTATI02						This observation will
-230	RTURXM02*	170903.3	85.45	0.0047	19.58	173.81	provide a spectral light
-224	RT90FM02*	163474.3	81.74	0.0049	19.60	173.79	curve of Ida periodically
-213	RT15SM04*	156045.2	78.02	0.0051	19.61	173.76	throughout 90 degrees of
-201	RT30SM03*	148616.3	74.31	0.0054	19.63	173.73	rotation sampling every
-190	RT15SM05*	141187.5	70.59	0.0057	19.65	173.70	fifteen degrees.
-178	RT30SM04*	133758.8	66.88	0.0060	19.67	173.66	
-167	RT15SM06*	126330.2	63.17	0.0064	19.70	173.62	
-162	ROTATI03						This observation will
-162	RTURXM03*	118901.8	59.45	0.0067	19.73	173.57	provide a spectral light
-155	RT90FM03*	111473.5	55.74	0.0072	19.76	173.52	curve of Ida periodically
-144	RT15SM07*	104045.5	52.02	0.0077	19.80	173.46	throughout 90 degrees
-132	RT30SM05*	96617.8	48.81	0.0083	19.84	173.39	rotation sampling every
-121	RT15SM08*	89190.5	44.59	0.0090	19.89	173.31	fifteen degrees.
-109	RT30SM06*	81763.5	40.88	0.0098	19.95	173.21	
-98	RT15SM09*	72852.0	36.43	0.0110	20.04	173.07	
-92	ROTATI04						This observation will
-92	RTURXM04*	69881.8	34.94	0.0115	20.07	173.01	provide a spectral light
-86	RT90FM04*	63941.7	31.97	0.0125	20.15	172.88	curve of Ida periodically
-75	RT15SM10*	56517.8	28.26	0.0142	20.28	172.67	throughout 90 degrees
-63	RT30SM07*	47611.5	23.81	0.0168	20.49	172.33	rotation sampling every
-52	RT15SM11*	38709.7	19.35	0.0207	20.80	171.81	fifteen degrees.
-40	RT30SM08*	29816.1	14.91	0.0269	21.34	170.93	
-29	RT15SM12*	20941.5	10.47	0.0383	22.43	169.24	
-26	IDAGLM01	19466.1	9.73	0.0412	22.73	168.79	This group of observations
-22	FINROT01	16520.9	8.26	0.0486	23.50	167.64	will provide Ida's highest
-19	IDAFIN01	14319.9	7.16	0.0562	24.37	166.34	spectral resolution with
-14.5	6COLOR01	11401.1	5.70	0.0706	26.09	164.04	increasing spatial resolution.
-11	IDACHM01	8520.6	4.26	0.0948	29.27	159.91	This observation will provide insight into the chemical heterogeneity of Ida.
-5.5	HISPAT01	4762.2	2.38	0.1841	43.79	143.11	This group of observations
-1	IDACA_01	2611.0	1.31	0.3093	81.53	102.84	will provide the highest spatial resolution at the lowest spectral resolution.
+30	BORCAL01						Boresight calibration done jointly with UVS and PPR.
+661	PCTCAL01						PCT Calibration
+2972	RCTCAL01						RCT Calibration

Actid	Inst Mode	Gain State	Chopper Mode	Grating Start	Grating Offset	Special Mode	Slew Rate	Slew Mode	Slew Method	Pointer Display	Edit Table	Comp Type	Comp Depth
IDUSROTATI01*													
IDUNRTURXM01+	XM	4	Ref	6	4		750	C	NY		0		0
IDUNRT90FM01+	FM	4	Ref	0	4		60	C	NY		0		0
IDUNRT15SM01+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT30SM01+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM02+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT30SM02+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM03+	SM	4	Ref	2	4		110	C	NY		0		0
IDUSROTATI02*													
IDUNRTURXM02+	XM	4	Ref	6	4		750	C	NY		0		0
IDUNRT90FM02+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM04+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT30SM03+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM05+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT30SM04+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM06+	SM	4	Ref	2	4		110	C	NY		0		0
IDUSROTATI03*													
IDUNRTURXM03+	XM	4	Ref	6	4		750	C	NY		0		0
IDUNRT90FM03+	FM	4	Ref	0	4		60	C	NY		0		0
IDUNRT15SM07+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT30SM05+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM08+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT30SM06+	SM	4	Ref	2	4		110	C	NY		0		0
IDUNRT15SM09+	SM	4	Ref	2	4		110	C	NY		0		0
IDUSROTATI04*													
IDUNRTURXM04+	XM	3	Ref	6	4		750	C	NY		0		0
IDUNRT90FM04+	FM	3	Ref	0	4		60	C	NY		0		0
IDUNRT15SM10+	SM	3	Ref	2	4		110	C	NY		0		0
IDUNRT30SM07+	SM	3	Ref	2	4		110	C	NY		0		0
IDUNRT15SM11+	SM	3	Ref	2	4		110	C	NY		0		0
IDUNRT30SM08+	SM	3	Ref	2	4		110	C	NY		0		0
IDUNRT15SM12+	SM	3	Ref	2	4		110	C	NY		0		0
IDUNIDAGLM01+	LM	3	Ref	0	4		30	C	NY		0		0
IDUSFINROT01*	LM	3	Ref	0	4		30	C	NY		0		0
IDUNLONMAP01+	LM	3	Ref	0	4		0	C	NY		0		0
IDUNIDAFIN01*	LM	3	Ref	0	4		30	C	NY		0		0
IDUS6COLOR01*	LM	3	Ref	0	4		30	C	NY		0		0
IDUNLONMAP02+	LM	3	Ref	0	4		0	C	NY		0		0
IDUNIDACHM01*	SM	3	Ref	2	4		110	C	NY		0		0
IDUNHISPAT01+	XM	3	Ref	6	4		800	C	NY		0		0
IDUSHIRES_01*	XM	3	Ref	6	4		800	C	NY		0		0
IDUNIDACA_01+	XM	3	Ref	6	4		890	C	NY		0		0
IDUSENCNTR01*	XM	3	Ref	6	4		890	C	NY		0		0
IDUNBORCAL01+	XM	4	Ref	6	4		80	C	NY		0		0
IDUNPCTCAL01+	LM	1	Ref	0	4		30	C	NY		0		0
IDUNRCTCAL01+	FM	3	Ref	2	4		110	C	NY		0		0

Chapter 3 - Encounter Geometries

Contents

Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the Ida Encounter. The geometry is computed relative to a tri-axial ellipsoid model of Ida.

The figure on page 3 shows the entire Galileo VEEGA Trajectory from launch through Jupiter arrival with various 'milestones' labeled along the trajectory.

The figure on page 4 shows the geometry of the 4 OPNAV images taken on approach to Ida.

The figure on page 5 is a Pole View of the Trajectory of Galileo past Ida during the Ida Flyby, -10 to +10 minutes of closest approach.

The figure on page 6 is a plot of the tri-axial ellipsoid model of Ida at closest approach with the NIMS and SSI footprints.

The figure on page 7 is a plot of spacecraft range from Ida as a function of time.

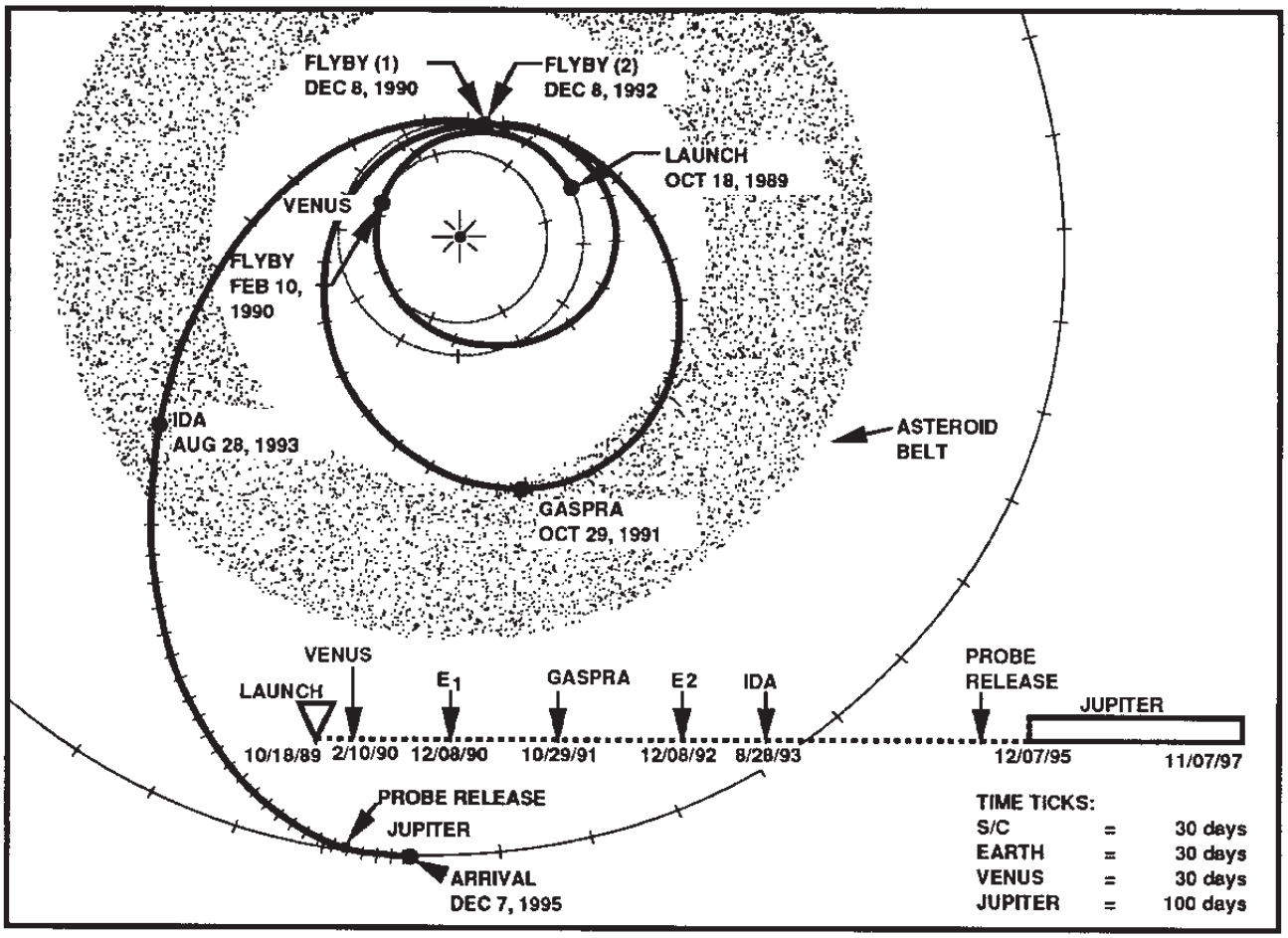
The figure on page 8 is a plot of Ida's tri-axial ellipsoid semi-major axis as a function of time.

The figure on page 9 is a plot of Ida's phase angle as a function of time.

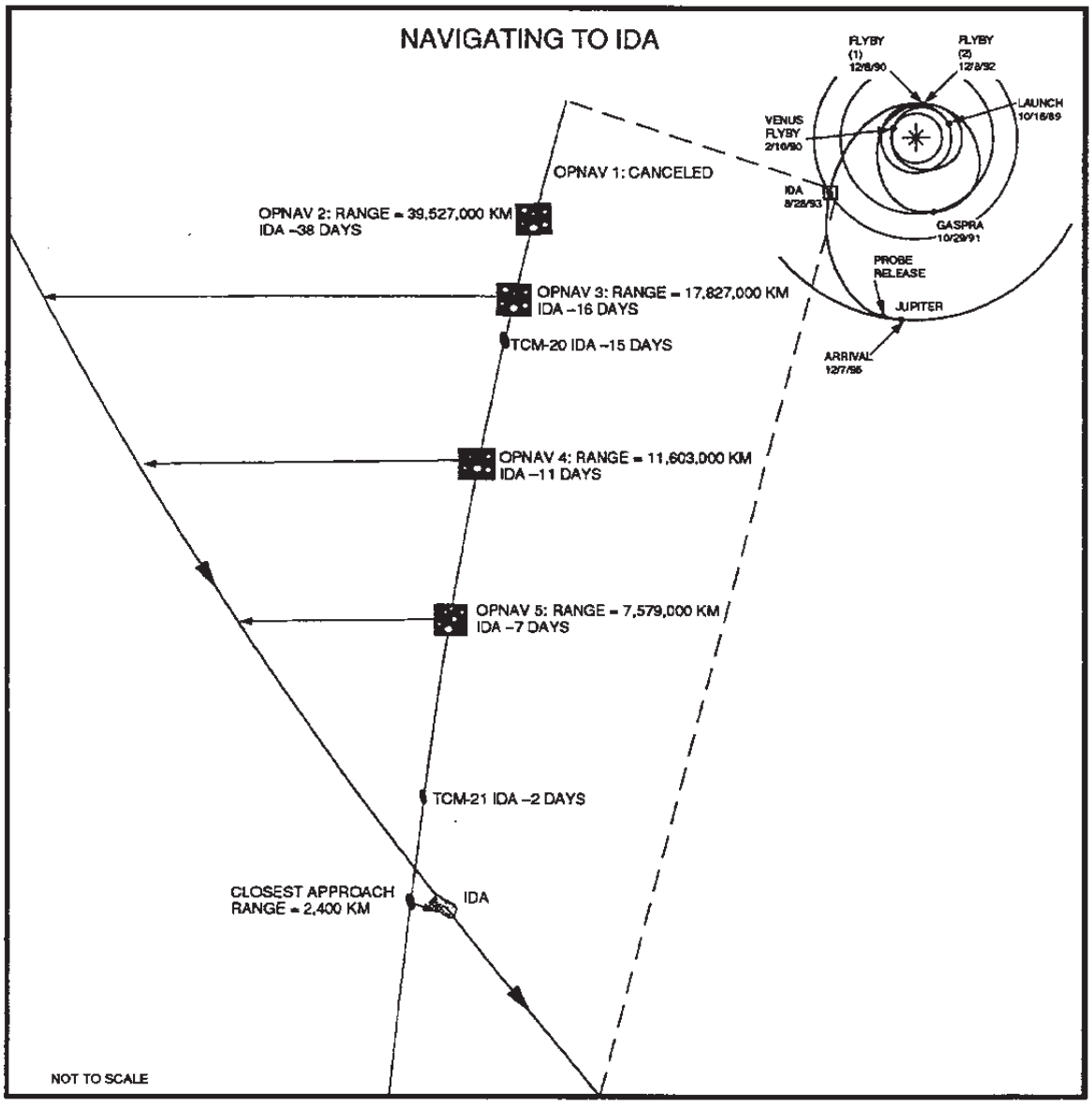
The figure on page 10 is a plot of Ida's cone angle as a function of time.

The figure on page 11 is a plot of the latitude of the spacecraft with respect to Ida (sub-spacecraft point) as a function of time.

The figure on page 12 is a plot of the west longitude of the spacecraft with respect to Ida (sub-spacecraft point) as a function of time.

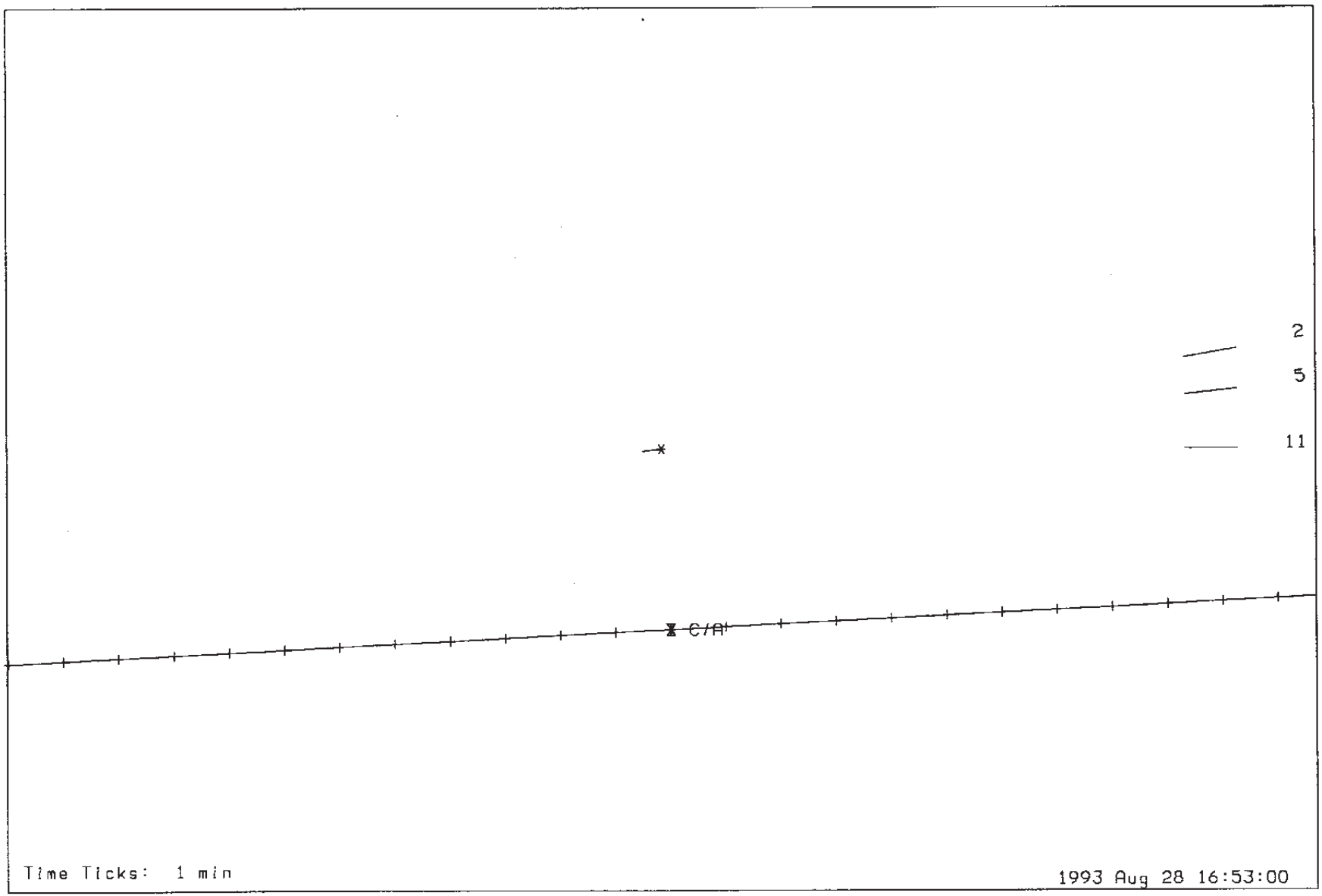


VEEGA TRAJECTORY

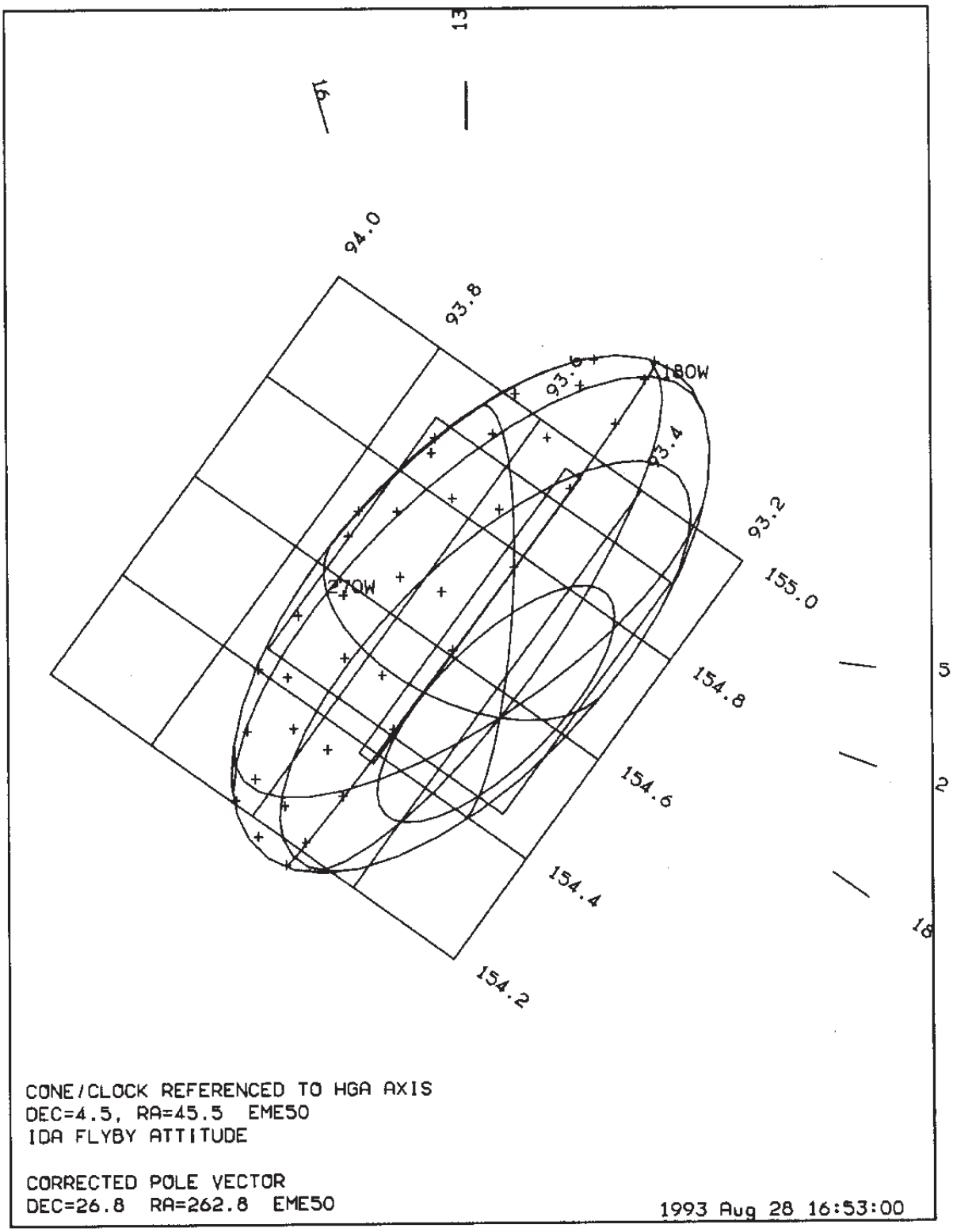


Path of Galileo Past Ida Showing OPNAV Locations and Ranges.

IDA CENT.: S. TRAJ. POLE VIEW, -10 TO +10 MINUTES



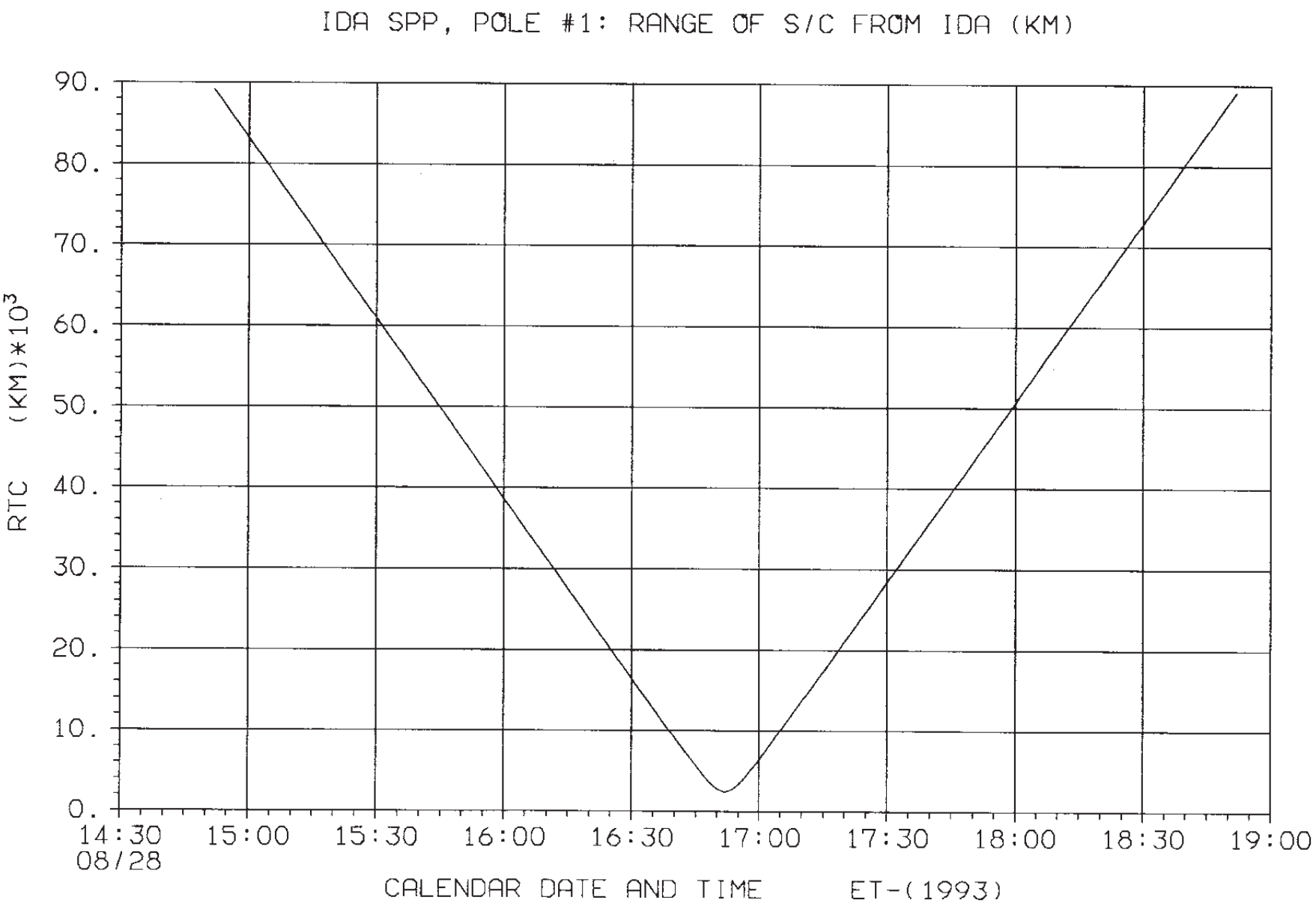
IDA, POLE #1: C/A

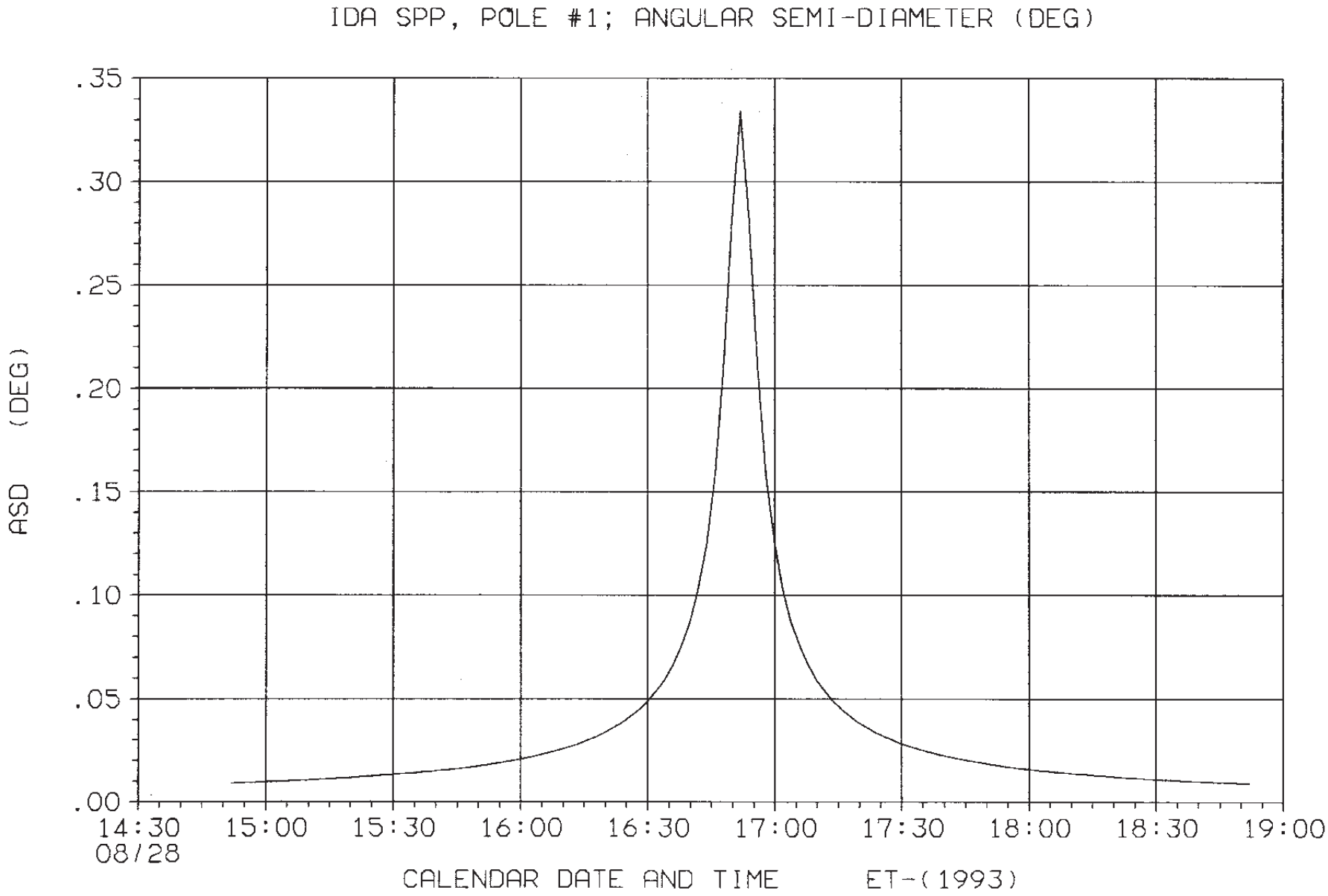


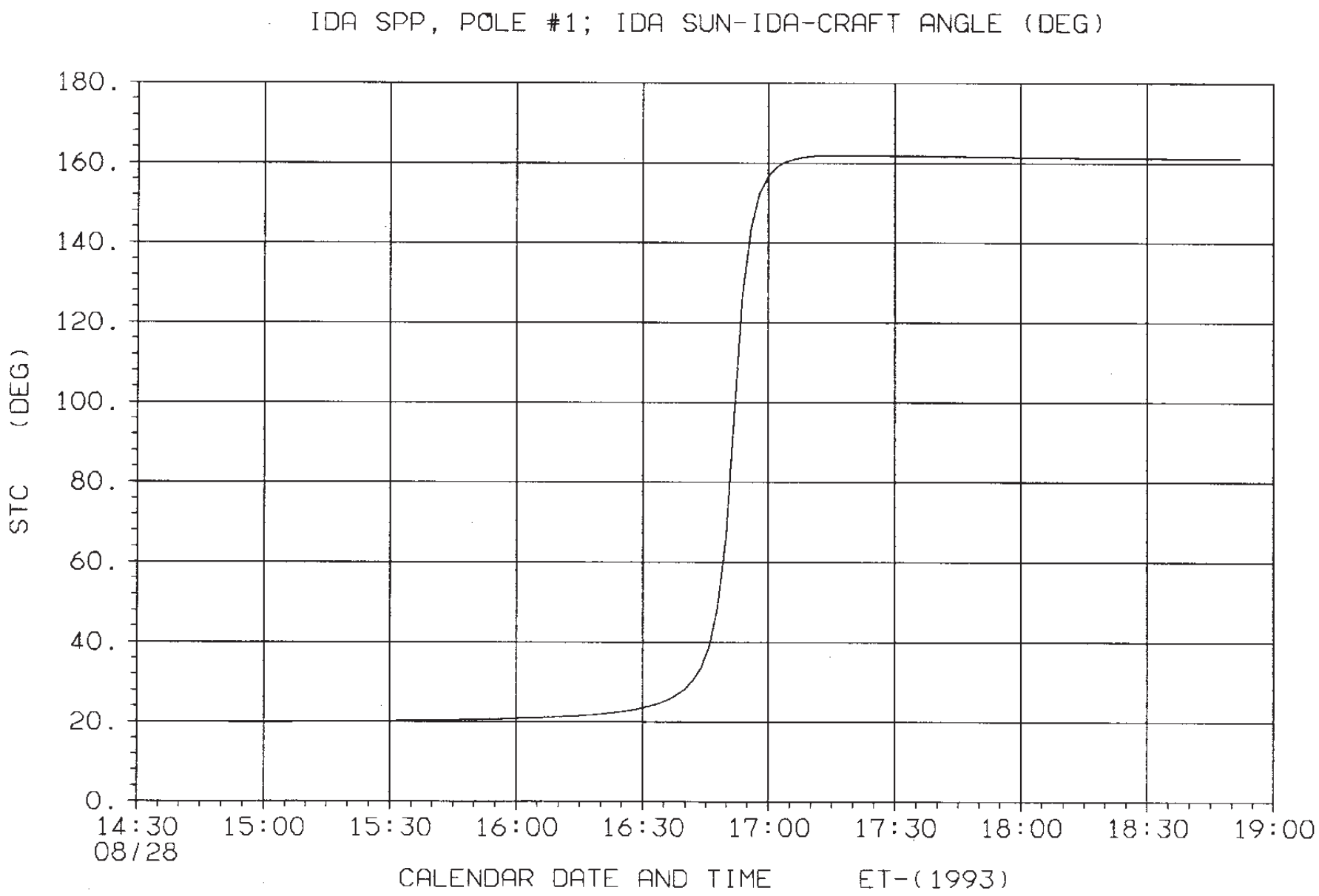
CONE/CLOCK REFERENCED TO HGA AXIS
DEC=4.5, RA=45.5 EME50
IDA FLYBY ATTITUDE

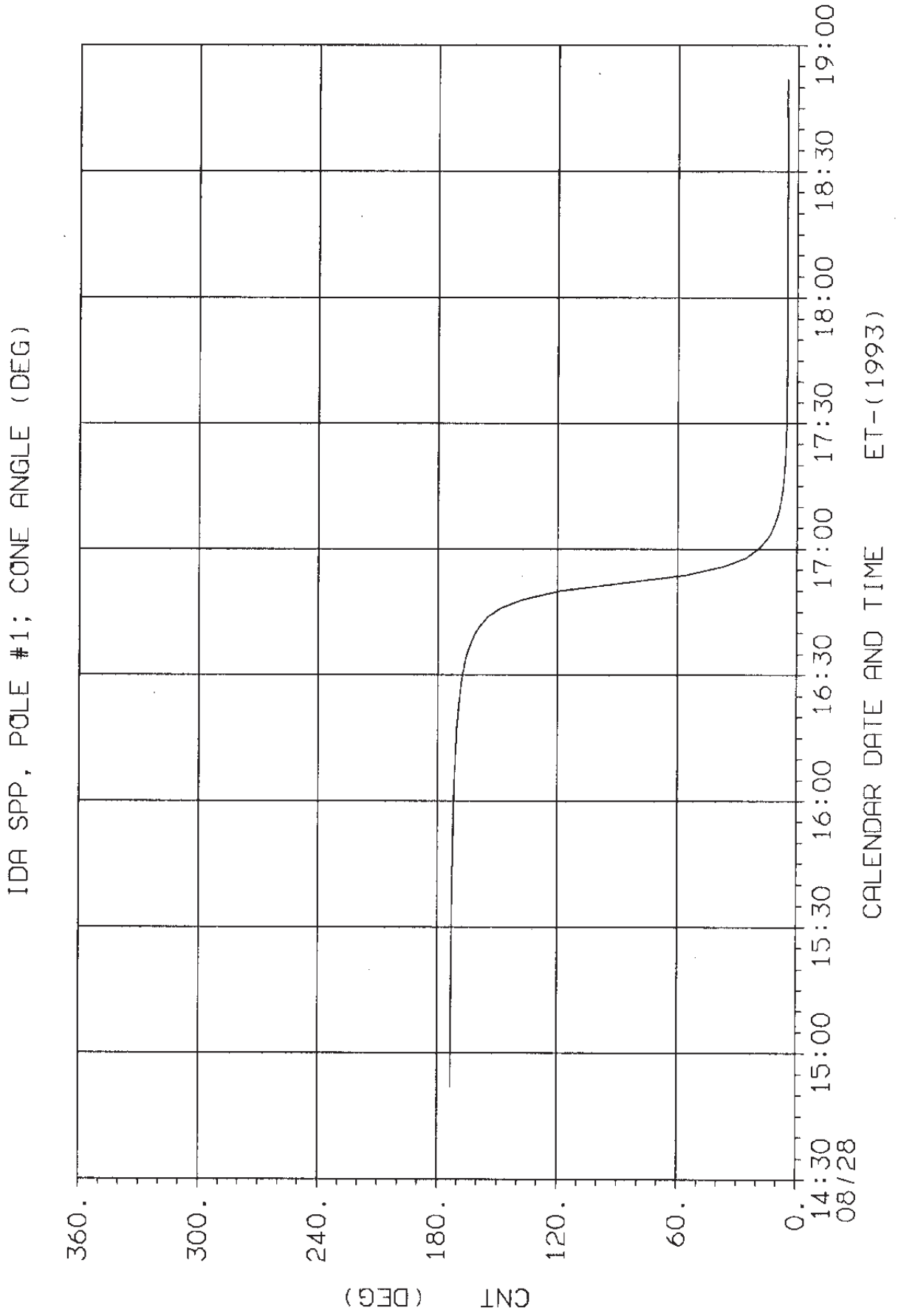
CORRECTED POLE VECTOR
DEC=26.8 RA=262.8 EME50

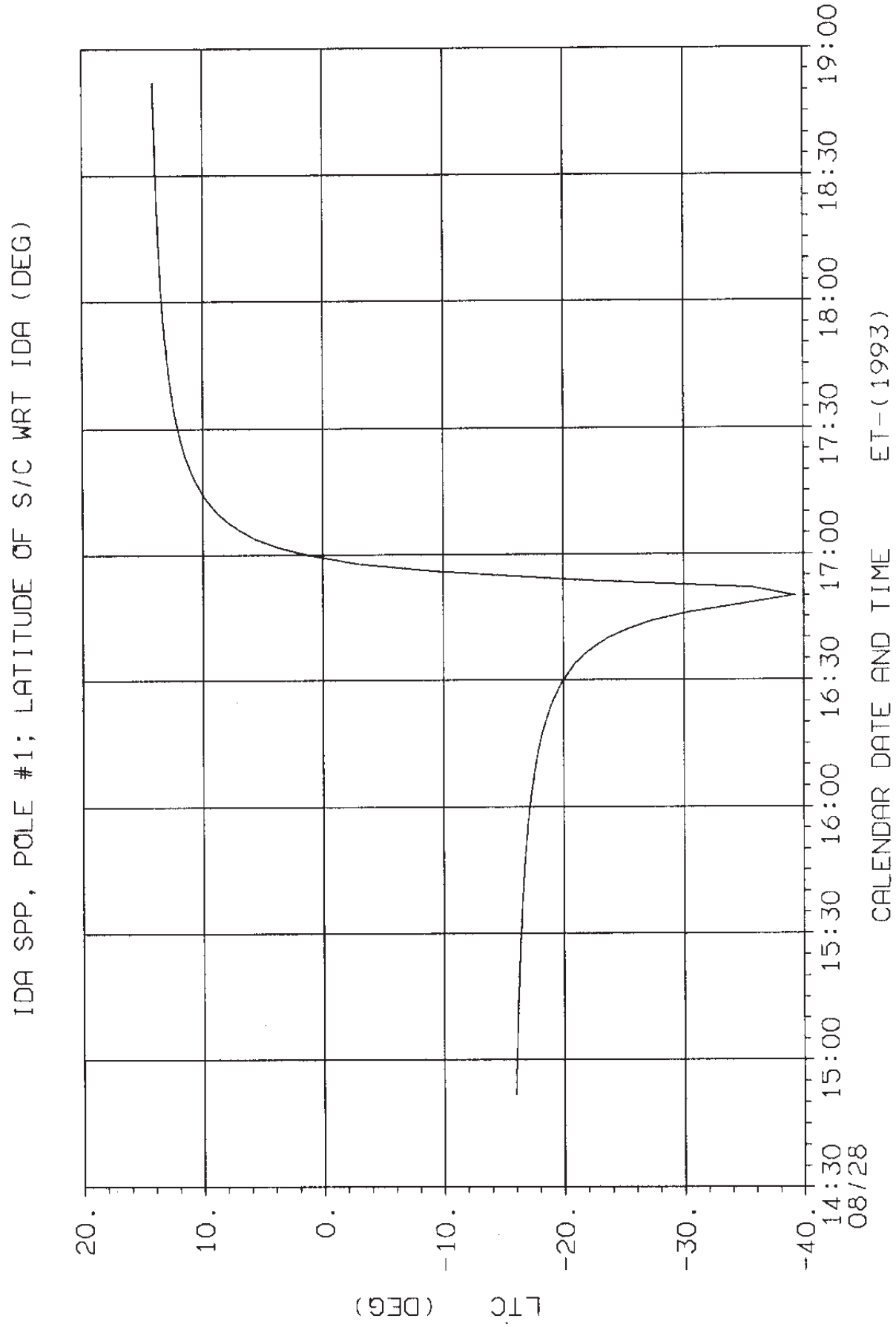
1993 Aug 28 16:53:00

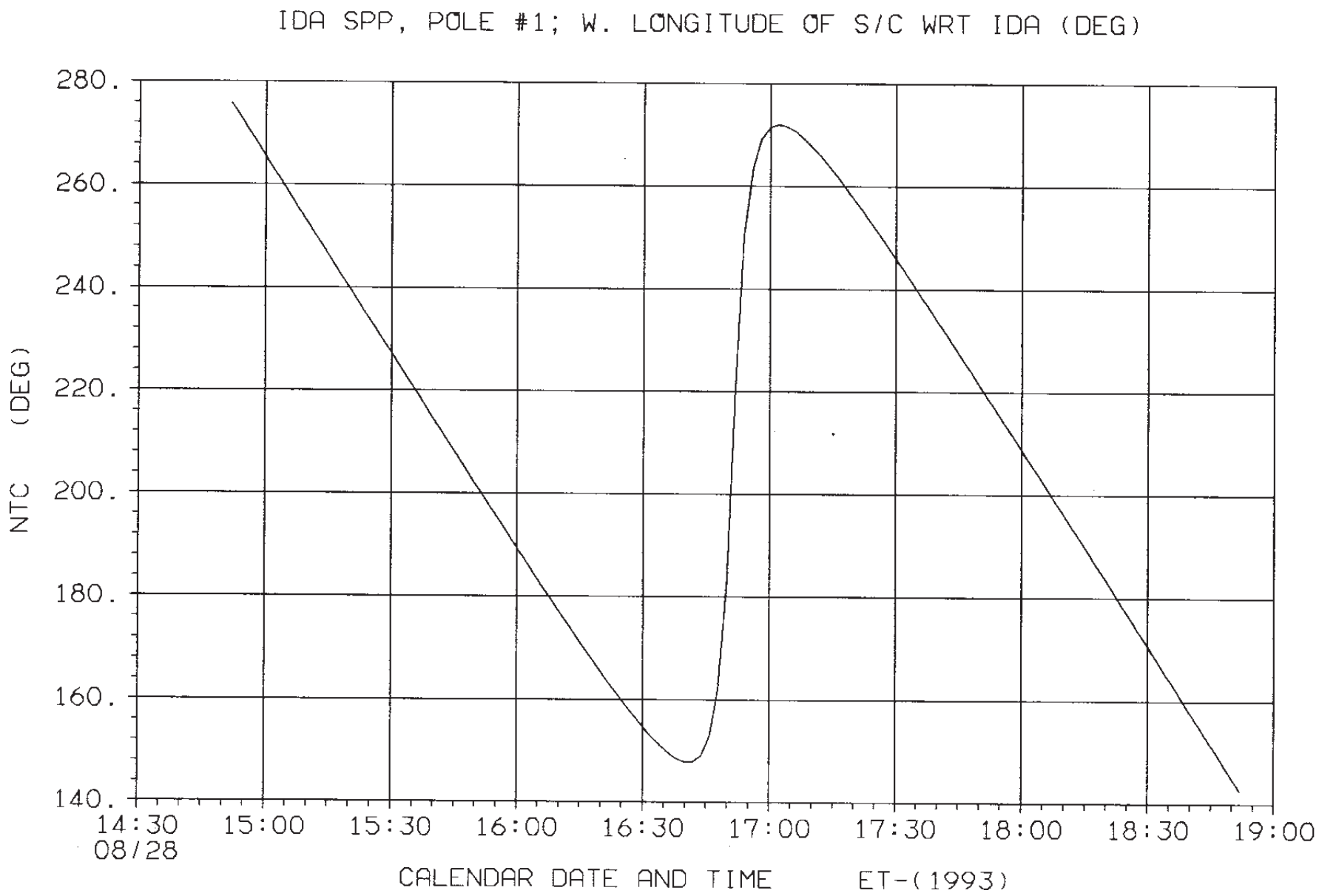

IDA SPP, POLE #1: RANGE OF S/C FROM IDA (KM)
RTC (KM)*10^3
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
14:30
08/28
15:00
15:30
16:00
16:30
17:00
17:30
18:00
18:30
19:00
CALENDAR DATE AND TIME ET-(1993)


IDA SPP, POLE #1; ANGULAR SEMI-DIAMETER (DEG)
ASD (DEG)
.35
.30
.25
.20
.15
.10
.05
.00
14:30
08/28
15:00
15:30
16:00
16:30
17:00
17:30
18:00
18:30
19:00
CALENDAR DATE AND TIME ET-(1993)


IDA SPP, POLE #1; IDA SUN-IDA-CRAFT ANGLE (DEG)
STC (DEG)
180.
160.
140.
120.
100.
80.
60.
40.
20.
0.
14:30
08/28
15:00
15:30
16:00
16:30
17:00
17:30
18:00
18:30
19:00
CALENDAR DATE AND TIME ET-(1993)


IDA SPP, POLE #1; CONE ANGLE (DEG)
CNT (DEG)
360.
300.
240.
180.
120.
60.
0.
14:30
08/28
15:00
15:30
16:00
16:30
17:00
17:30
18:00
18:30
19:00
CALENDAR DATE AND TIME ET-(1993)


IDA SPP, POLE #1; LATITUDE OF S/C WRT IDA (DEG)
LTC (DEG)
20.
10.
0.
-10.
-20.
-30.
-40.
14:30
08/28
15:00
15:30
16:00
16:30
17:00
17:30
18:00
18:30
19:00
CALENDAR DATE AND TIME ET-(1993)


IDA SPP, POLE #1; W. LONGITUDE OF S/C WRT IDA (DEG)
280.
260.
240.
220.
200.
180.
160.
140.
NTC (DEG)
14:30
08/28
15:00
15:30
16:00
16:30
17:00
17:30
18:00
18:30
19:00
CALENDAR DATE AND TIME ET-(1993)

Chapter 4 - NIMS Observation Summaries

Contents

Introduction to Chapter 4

This chapter summarizes the NIMS IDA observations in terms of a comprehensive sequence summary, PA summary and Observation Table (OBSTAB).

The NIMS Sequence Summary is a time-ordered listing of all spacecraft activity pertinent to NIMS operations for the EJ2 and EJ3 Sequences. The information in this summary is derived from the EJ2 and EJ3 SEFs (Spacecraft Event File) with inputs from the NIMS Science Coordinators regarding the start time and duration of the NIMS observations. There are ten columns of information in this table:

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

Also, 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 PA Summary is a time-ordered listing of all PAs (Profile Activities) listed in the EJ2 and EJ3 SEFs which affect NIMS observations.

The NIMS Observation Table (OBSTAB) is a time-ordered listing of the NIMS obsrvation parameters for use by downlink data processing. It is also derived from the EJ2 and EJ3 SEFs.

Sequence: EJ02CC Created: 06/14/93 Begin: 93-187/16:15:00.000 Finish: 93-239/11:00:00.000

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	187	21:25:05.466	20K3A	40T1P	1	PCT Heater 1 ON (primary relay)			1,950,415	64	0
93	187	21:25:10.800	20K3B	40T1P	2	PCT Heater 1 ON (primary relay)			1,950,415	72	0
93	188	14:44:04.133	20A4B	7SAFE	UNSTOW	Check S/P Position			1,951,443	24	0
93	188	15:05:04.133	20A4F	7SLEW	DIS,POS,0.0	Stator movement			1,951,464	03	0
93	188	15:07:04.133	20A4H	7MODE	SPNL	All-Spin Mod			1,951,466	01	0
93	188	15:09:04.133	20A4I	7SAFE	UNSTOW	Check S/P Position			1,951,467	90	0
93	188	15:15:04.066	20A4K	7VENT	0.6,1.333,8	ALERT -- Thruster fire			1,951,473	84	0
93	188	15:15:04.733	20A4L	7VENT	0.6,11.022,8	ALERT -- Thruster fire			1,951,473	85	0
93	188	15:16:04.733	20A4M	7VENT	0.6,1.333,6	ALERT -- Thruster fire			1,951,474	84	0
93	188	15:16:05.400	20A4N	7VENT	0.6,11.022,6	ALERT -- Thruster fire			1,951,474	85	0
93	188	15:20:18.066	20A4Q	7VENT	0.6,1.333,7	ALERT -- Thruster fire			1,951,479	09	0
93	188	15:20:18.733	20A4R	7VENT	0.6,11.022,7	ALERT -- Thruster fire			1,951,479	10	0
93	188	15:21:18.733	20A4S	7VENT	0.6,1.333,1	ALERT -- Thruster fire			1,951,480	09	0
93	188	15:21:19.400	20A4T	7VENT	0.6,11.022,1	ALERT -- Thruster fire			1,951,480	10	0
93	188	15:23:32.066	20A4V	7MODE	CRU	Dual-Spin Mo			1,951,482	27	0
93	188	15:35:00.066	498A4B	7SAFE	UNSTOW	Check S/P Position			1,951,493	58	0
93	188	16:07:00.066	498A4D	7MODE	INT	Dual-Spin Mo			1,951,525	26	0
93	188	16:09:01.400	498A4F	7BURN	LAT,0.0,90.0,1,0	ALERT -- Thruster fire			1,951,527	26	0
93	188	16:22:26.066	498A4G	7BURN	LAT,179.745998,-	ALERT -- Thruster fire			1,951,540	50	0
93	188	16:35:51.400	498A4I	7BURN	LAT,179.745998,-	ALERT -- Thruster fire			1,951,553	75	0
93	188	16:49:16.066	498A4J	7BURN	LAT,0.0,90.0,1,0	ALERT -- Thruster fire			1,951,567	08	0
93	188	17:02:41.400	498A4L	7BURN	PULZ,0.0,90.0,1,	ALERT -- Thruster fire			1,951,580	33	0
93	188	17:16:01.400	498A4N	7BURN	PULZ,0.0,90.0,1,	ALERT -- Thruster fire			1,951,593	50	0
93	188	18:15:02.066	490A412A4B	7MODE	INT	Dual-Spin Mo			1,951,651	83	0
93	188	18:17:52.066	490A476A6A	6TMCHG	ELSLRS	NO DNL			1,951,654	65	0
93	188	18:20:00.066	490A412A4D	7SAFE	UNSTOW	Check S/P Position			1,951,656	75	0
93	188	16:30:00.000	490A412A4E	7VECT	RTH	Inertial vect update U			1,951,660	86	0
93	188	18:24:14.066	490A412A4F	7TURN	1,RTH	ALERT -- Thruster fire			1,951,661	01	0
93	188	18:28:02.066	490A412A406A4A	7STAR	1,1701,278.81399	Star catalog update			1,951,664	70	0
93	188	18:28:04.066	490A412A406A4B	7STAR	2,159,27.236,89.	Star catalog update			1,951,664	73	0
93	188	18:28:06.066	490A412A406A4C	7STAR	3,172,89.077999,	Star catalog update			1,951,664	76	0
93	188	18:28:08.066	490A412A406A4D	7STAR	4,395,305.426998	Star catalog update			1,951,664	79	0
93	188	18:28:10.066	490A412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update			1,951,664	82	0
93	188	18:28:12.066	490A412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update			1,951,664	85	0
93	188	19:43:10.733	490A412A4K	7MODE	CRU	Dual-Spin Mo			1,951,739	08	0
93	188	19:45:12.733	490A412A4M	7SAFE	UNSTOW	Check S/P Position			1,951,741	09	0
93	189	17:05:05.400	20L3A	40T1PR	1	PCT Heater 1 OFF (primary relay)			1,953,006	83	0
93	189	17:05:10.733	20L3B	40T1PR	2	PCT Heater 1 OFF (primary relay)			1,953,007	00	0
93	193	16:03:19.800	444A443A4B	7MODE	INT	Dual-Spin Mo			1,958,642	49	0
93	193	16:38:59.800	20DA6A	6DMSC	RDY,2	Tape stopped			1,958,677	74	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O	S	RIM	MF	I
93	193	16:45:15.133	192GA4A	7CONE	10.0,175.0	Check S/P Position				1,958,684	00	0
93	193	16:48:15.800	165GA4A	7TMOT	DIS,TMC	Target motion compensa				1,958,686	89	0
93	193	16:48:16.466	165GA4B	7SCAN	NORM,192.308998,	Check S/P Position				1,958,686	90	0
93	193	16:53:20.466	176GA6A	6TMCHG	NCGHCM	Dnlnk				1,958,692	00	0
93	193	16:56:56.466	118GA110A111A4A	7STRP	0.0,-0.0005,14,0	Slew =,2.43				1,958,695	51	0
93	93/	16:57:05.800	118GA110A111A4B	7STRP	-0.0006,-0.0005,	Slew =,2.41				1,958,695	65	0
93	193	16:57:10.466	118GA110A111A4C	7STRP	0.0,-0.0005,14,0	Slew =,2.43				1,958,695	72	0
93	193	16:57:22.466	175GA422A6A	6DMSC	R115,0	Record 115.2kbps				1,958,695	90	0
93	193	16:57:53.800	175GA422A6B	6DMSC	RDY,0	Tape stopped				1,958,696	46	0
93	193	16:58:29.133	20GA4A	7SAFE	UNSTOW	Check S/P Position				1,958,697	08	0
93	193	17:05:31.800	20EA6A	6DMSC	S115,3	Slew 115.2kbps				1,958,704	05	0
93	193	17:06:03.133	20EA6B	6DMSC	RDY,2	Tape stopped				1,958,704	52	0
93	193	17:14:59.800	444B443A4A	7MODE	CRU	Dual-Spin Mo				1,958,713	38	0
93	193	18:15:03.133	423A6A	6TMCHG	LPB	NO DNL				1,958,772	74	0
93	193	18:15:09.133	423A6B	6DMSC	P7,2	Playback 7.68kbps				1,958,772	83	0
93	193	18:16:22.466	423A6I	6DMSC	RDY,0	Tape stopped				1,958,774	11	0
93	193	18:16:31.133	423A6J	6TMCHG	ELS	NO DNL				1,958,774	24	0
93	193	18:18:02.466	423A6K	6DMSC	S7,1	Slew 7.68kbps				1,958,775	70	0
93	193	18:18:09.800	423A6L	6DMSC	RDY,2	Tape stopped				1,958,775	81	0
93	193	23:15:03.133	423B6A	6TMCHG	LPB	NO DNL				1,959,069	47	0
93	193	23:15:09.133	423B6B	6DMSC	P7,2	Playback 7.68kbps				1,959,069	56	0
93	193	23:16:22.466	423B6I	6DMSC	RDY,0	Tape stopped				1,959,070	75	0
93	193	23:16:31.133	423B6J	6TMCHG	ELS	NO DNL				1,959,070	88	0
93	193	23:18:02.466	423B6K	6DMSC	S7,1	Slew 7.68kbps				1,959,072	43	0
93	193	23:18:09.800	423B6L	6DMSC	RDY,2	Tape stopped				1,959,072	54	0
93	194	20:10:03.066	423C6A	6TMCHG	LPB	NO DNL				1,960,310	66	0
93	194	20:10:09.066	423C6B	6DMSC	P7,2	Playback 7.68kbps				1,960,310	75	0
93	194	20:11:22.400	423C6I	6DMSC	RDY,0	Tape stopped				1,960,312	03	0
93	194	20:11:31.066	423C6J	6TMCHG	ELS	NO DNL				1,960,312	16	0
93	194	20:13:02.400	423C6K	6DMSC	S7,1	Slew 7.68kbps				1,960,313	62	0
93	194	20:13:09.733	423C6L	6DMSC	RDY,2	Tape stopped				1,960,313	73	0
93	197	17:13:44.266	20D4B	7STAT	+17.45,0.0,90.0	Stator inertial point				1,964,408	80	0
93	197	17:16:44.266	20D4C	7SAFE	UNSTOW	Check S/P Position				1,964,411	77	0
93	198	06:15:04.266	423D6A	6TMCHG	LPB	NO DNL				1,965,181	57	0
93	198	06:15:10.266	423D6B	6DMSC	P7,2	Playback 7.68kbps				1,965,181	66	0
93	198	06:16:23.600	423D6I	6DMSC	RDY,0	Tape stopped				1,965,182	85	0
93	198	06:16:32.266	423D6J	6TMCHG	ELS	NO DNL				1,965,183	07	0
93	198	06:18:03.600	423D6K	6DMSC	S7,1	Slew 7.68kbps				1,965,184	53	0
93	198	06:18:10.933	423D6L	6DMSC	RDY,2	Tape stopped				1,965,184	64	0
93	198	11:00:04.266	423E6A	6TMCHG	LPB	NO DNL				1,965,463	45	0
93	198	11:00:10.266	423E6B	6DMSC	P7,2	Playback 7.68kbps				1,965,463	54	0
93	198	11:01:23.600	423E6I	6DMSC	RDY,0	Tape stopped				1,965,464	73	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	198	11:01:32.266	423E6J	6TMCHG	ELS	NO DNL			1,965,464	86	0
93	198	11:03:03.600	423E6K	6DMSC	S7,1	Slew 7.68kbps			1,965,466	41	0
93	198	11:03:10.933	423E6L	6DMSC	RDY,2	Tape stopped			1,965,466	52	0
93	198	16:00:04.200	423F6A	6TMCHG	LPB	NO DNL			1,965,760	18	0
93	198	16:00:10.200	423F6B	6DMSC	P7,2	Playback 7.68kbps			1,965,760	27	0
93	198	16:01:23.533	423F6I	6DMSC	RDY,0	Tape stopped			1,965,761	46	0
93	198	16:01:32.200	423F6J	6TMCHG	ELS	NO DNL			1,965,761	59	0
93	198	16:03:03.533	423F6K	6DMSC	S7,1	Slew 7.68kbps			1,965,763	14	0
93	198	16:03:10.866	423F6L	6DMSC	RDY,2	Tape stopped			1,965,763	25	0
93	198	21:00:04.200	423G6A	6TMCHG	LPB	NO DNL			1,966,056	82	0
93	198	21:00:10.200	423G6B	6DMSC	P7,2	Playback 7.68kbps			1,966,057	00	0
93	198	21:01:23.533	423G6I	6DMSC	RDY,0	Tape stopped			1,966,058	19	0
93	198	21:01:32.200	423G6J	6TMCHG	ELS	NO DNL			1,966,058	32	0
93	203	21:47:19.933	444C443A4B	7MODE	INT	Dual-Spin Mo			1,973,224	48	0
93	203	22:23:11.933	192GB4A	7CONE	10.0,175.0	Check S/P Position			1,973,260	00	0
93	203	22:26:12.600	165GB4A	7TMOT	DIS,TMC	Target motion compensa			1,973,262	89	0
93	203	22:26:13.266	165GB4B	7SCAN	NORM,192.299999,	Check S/P Position			1,973,262	90	0
93	203	22:31:17.266	176GB6A	6TMCHG	NCGHCM	Dnlnk			1,973,268	00	0
93	203	22:34:53.266	118GB110A111A4A	7STRP	0.0,-0.0005,14,0	Slew =,2.42			1,973,271	51	0
93	03/	22:35:02.600	118GB110A111A4B	7STRP	-0.0006,-0.0005,	Slew =,2.41			1,973,271	65	0
93	203	22:35:07.266	118GB110A111A4C	7STRP	0.0,-0.0005,14,0	Slew =,2.42			1,973,271	72	0
93	203	22:35:19.266	175GB422A6A	6DMSC	R115,0	Record 115.2kbps			1,973,271	90	0
93	203	22:35:50.600	175GB422A6B	6DMSC	RDY,0	Tape stopped			1,973,272	46	0
93	203	22:36:25.266	20GB4A	7SAFE	UNSTOW	Check S/P Position			1,973,273	07	0
93	203	22:43:27.933	20EB6A	6DMSC	S115,3	Slew 115.2kbps			1,973,280	04	0
93	203	22:43:59.266	20EB6B	6DMSC	RDY,2	Tape stopped			1,973,280	51	0
93	203	22:54:59.933	444D443A4A	7MODE	CRU	Dual-Spin Mo			1,973,291	41	0
93	204	00:55:03.266	423I6A	6TMCHG	LPB	NO DNL			1,973,410	17	0
93	204	00:55:09.266	423I6B	6DMSC	P7,2	Playback 7.68kbps			1,973,410	26	0
93	204	00:56:22.600	423I6I	6DMSC	RDY,0	Tape stopped			1,973,411	45	0
93	204	00:56:31.266	423I6J	6TMCHG	ELS	NO DNL			1,973,411	58	0
93	204	00:58:02.600	423I6K	6DMSC	S7,1	Slew 7.68kbps			1,973,413	13	0
93	204	00:58:09.933	423I6L	6DMSC	RDY,2	Tape stopped			1,973,413	24	0
93	204	14:56:03.933	423J6A	6TMCHG	LPB	NO DNL			1,974,241	87	0
93	204	14:56:09.933	423J6B	6DMSC	P7,2	Playback 7.68kbps			1,974,242	05	0
93	204	14:57:23.266	423J6I	6DMSC	RDY,0	Tape stopped			1,974,243	24	0
93	204	14:57:31.933	423J6J	6TMCHG	ELS	NO DNL			1,974,243	37	0
93	204	14:59:03.266	423J6K	6DMSC	S7,1	Slew 7.68kbps			1,974,244	83	0
93	204	14:59:10.600	423J6L	6DMSC	RDY,2	Tape stopped			1,974,245	03	0
93	204	22:22:03.866	423K6A	6TMCHG	LPB	NO DNL			1,974,683	05	0
93	204	22:22:09.866	423K6B	6DMSC	P7,2	Playback 7.68kbps			1,974,683	14	0
93	204	22:23:23.200	423K6I	6DMSC	RDY,0	Tape stopped			1,974,684	33	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O	S	RIM	MF	I
93	204	22:23:31.866	423K6J	6TMCHG	ELS	NO DNL				1,974,684	46	0
93	204	22:25:03.200	423K6K	6DMSC	S7,1	Slew 7.68kbps				1,974,686	01	0
93	204	22:25:10.533	423K6L	6DMSC	RDY,2	Tape stopped				1,974,686	12	0
93	205	14:58:03.866	423L6A	6TMCHG	LPB	NO DNL				1,975,668	10	0
93	205	14:58:09.866	423L6B	6DMSC	P7,2	Playback 7.68kbps				1,975,668	19	0
93	205	14:59:23.200	423L6I	6DMSC	RDY,0	Tape stopped				1,975,669	38	0
93	205	14:59:31.866	423L6J	6TMCHG	ELS	NO DNL				1,975,669	51	0
93	205	15:01:03.200	423L6K	6DMSC	S7,1	Slew 7.68kbps				1,975,671	06	0
93	205	15:01:10.533	423L6L	6DMSC	RDY,2	Tape stopped				1,975,671	17	0
93	205	21:38:03.800	423M6A	6TMCHG	LPB	NO DNL				1,976,063	65	0
93	205	21:38:09.800	423M6B	6DMSC	P7,2	Playback 7.68kbps				1,976,063	74	0
93	205	21:39:23.133	423M6I	6DMSC	RDY,0	Tape stopped				1,976,065	02	0
93	205	21:39:31.800	423M6J	6TMCHG	ELS	NO DNL				1,976,065	15	0
93	205	21:41:03.133	423M6K	6DMSC	S7,1	Slew 7.68kbps				1,976,066	61	0
93	205	21:41:10.466	423M6L	6DMSC	RDY,2	Tape stopped				1,976,066	72	0
93	206	20:20:03.800	423N6A	6TMCHG	LPB	NO DNL				1,977,410	68	0
93	206	20:20:09.800	423N6B	6DMSC	P7,2	Playback 7.68kbps				1,977,410	77	0
93	206	20:21:23.133	423N6I	6DMSC	RDY,0	Tape stopped				1,977,412	05	0
93	206	20:21:31.800	423N6J	6TMCHG	ELS	NO DNL				1,977,412	18	0
93	206	20:23:03.133	423N6K	6DMSC	S7,1	Slew 7.68kbps				1,977,413	64	0
93	206	20:23:10.466	423N6L	6DMSC	RDY,2	Tape stopped				1,977,413	75	0
93	207	01:06:03.800	423O6A	6TMCHG	LPB	NO DNL				1,977,693	55	0
93	207	01:06:09.800	423O6B	6DMSC	P7,2	Playback 7.68kbps				1,977,693	64	0
93	207	01:07:23.133	423O6I	6DMSC	RDY,0	Tape stopped				1,977,694	83	0
93	207	01:07:31.800	423O6J	6TMCHG	ELS	NO DNL				1,977,695	05	0
93	208	21:55:05.666	20M3A	40T1P	1	PCT Heater 1 ON (primary relay)				1,980,353	08	0
93	208	21:55:11.000	20M3B	40T1P	2	PCT Heater 1 ON (primary relay)				1,980,353	16	0
93	209	14:44:04.266	20E4B	7SAFE	UNSTOW	Check S/P Position				1,981,350	89	0
93	209	15:05:04.266	20E4F	7SLEW	DIS,POS,0.0	Stator movement				1,981,371	68	0
93	209	15:07:04.266	20E4H	7MODE	SPNL	All-Spin Mod				1,981,373	66	0
93	209	15:09:04.266	20E4I	7SAFE	UNSTOW	Check S/P Position				1,981,375	64	0
93	209	15:15:04.266	20E4K	7VENT	0.6,1.333,8	ALERT -- Thruster fire				1,981,381	58	0
93	209	15:15:04.933	20E4L	7VENT	0.6,11.022,8	ALERT -- Thruster fire				1,981,381	59	0
93	209	15:16:04.933	20E4M	7VENT	0.6,1.333,6	ALERT -- Thruster fire				1,981,382	58	0
93	209	15:16:05.600	20E4N	7VENT	0.6,11.022,6	ALERT -- Thruster fire				1,981,382	59	0
93	209	15:20:18.266	20E4Q	7VENT	0.6,1.333,7	ALERT -- Thruster fire				1,981,386	74	0
93	209	15:20:18.933	20E4R	7VENT	0.6,11.022,7	ALERT -- Thruster fire				1,981,386	75	0
93	209	15:21:18.933	20E4S	7VENT	0.6,1.333,1	ALERT -- Thruster fire				1,981,387	74	0
93	209	15:21:19.600	20E4T	7VENT	0.6,11.022,1	ALERT -- Thruster fire				1,981,387	75	0
93	209	15:23:32.266	20E4V	7MODE	CRU	Dual-Spin Mo				1,981,390	01	0
93	209	15:34:59.600	498B4B	7SAFE	UNSTOW	Check S/P Position				1,981,401	31	0
93	209	16:06:59.600	498B4D	7MODE	INT	Dual-Spin Mo				1,981,432	90	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	209	16:09:00.933	498B4F	7BURN	LAT,0.0,90.0,1,0	ALERT -- Thruster fire			1,981,434	90	0
93	209	16:22:25.600	498B4G	7BURN	LAT,179.745998,-	ALERT -- Thruster fire			1,981,448	23	0
93	209	16:35:50.933	498B4I	7BURN	LAT,179.745998,-	ALERT -- Thruster fire			1,981,461	48	0
93	209	16:49:15.600	498B4J	7BURN	LAT,0.0,90.0,1,0	ALERT -- Thruster fire			1,981,474	72	0
93	209	17:02:40.933	498B4L	7BURN	PULZ,0.0,90.0,1,	ALERT -- Thruster fire			1,981,488	06	0
93	209	17:16:00.933	498B4N	7BURN	PULZ,0.0,90.0,1,	ALERT -- Thruster fire			1,981,501	23	0
93	209	17:29:22.933	498B4O	7MODE	CRU	Dual-Spin Mo			1,981,514	43	0
93	210	21:35:05.533	20N3A	40T1PR	1	PCT Heater 1 OFF (primary relay)			1,983,181	60	0
93	210	21:35:10.866	20N3B	40T1PR	2	PCT Heater 1 OFF (primary relay)			1,983,181	68	0
93	217	23:08:44.533	20F4B	7STAT	+17.45,0.0,90.0	Stator inertial point			1,993,243	47	0
93	217	23:11:44.533	20F4C	7SAFE	UNSTOW	Check S/P Position			1,993,246	44	0
93	221	15:40:05.666	20O3A	40T1P	1	PCT Heater 1 ON (primary relay)			1,998,496	46	0
93	221	15:40:11.000	20O3B	40T1P	2	PCT Heater 1 ON (primary relay)			1,998,496	54	0
93	223	22:53:02.200	490B412A4B	7MODE	INT	Dual-Spin Mo			2,001,773	04	0
93	223	22:55:52.866	490B476A6A	6TMCHG	ELSLRS	NO DNL			2,001,775	78	0
93	223	22:58:00.200	490B412A4D	7SAFE	UNSTOW	Check S/P Position			2,001,777	87	0
93	223	16:30:00.000	490B412A4E	7VECT	RTH	Inertial vect update U			2,001,782	07	0
93	223	23:02:14.200	490B412A4F	7TURN	1,RTH	ALERT -- Thruster fire			2,001,782	13	0
93			490B412A406A4A	7VECT		Inertial vect update U			2,001,785	82	0
93	223	23:06:04.200	490B412A406A4B	7STAR	1,714,297.091999	Star catalog update			2,001,785	85	0
93	223	23:06:06.200	490B412A406A4C	7STAR	2,159,27.236,89.	Star catalog update			2,001,785	88	0
93	223	23:06:08.200	490B412A406A4D	7STAR	3,377,95.124,-17	Star catalog update			2,001,786	00	0
93	223	23:06:10.200	490B412A406A4E	7STAR	4,0,0.0,0.0	Star catalog update			2,001,786	03	0
93	223	23:06:12.200	490B412A406A4F	7STAR	5,0,0.0,0.0	Star catalog update			2,001,786	06	0
93	223	23:06:14.200	490B412A406A4G	7STAR	6,0,0.0,0.0	Star catalog update			2,001,786	09	0
93	224	00:17:12.866	490B412A4K	7SAFE	UNSTOW	Check S/P Position			2,001,856	27	0
93	224	01:09:29.533	192GC4A	7CONE	10.0,175.0	Check S/P Position			2,001,908	00	0
93	224	01:12:30.200	165GC4A	7TMOT	DIS,TMC	Target motion compensa			2,001,910	89	0
93	224	01:12:30.866	165GC4B	7SCAN	NORM,192.330999,	Check S/P Position			2,001,910	90	0
93	224	01:17:34.866	176GC6A	6TMCHG	NCGHCM	Dnlnk			2,001,916	00	0
93	224	01:21:10.866	118GC110A111A4A	7STRP	0.0,-0.0005,14,0	Slew =,2.63			2,001,919	51	0
93	24/	01:21:20.200	118GC110A111A4B	7STRP	-0.0006,-0.0005,	Slew =,2.62			2,001,919	65	0
93	224	01:21:24.866	118GC110A111A4C	7STRP	0.0,-0.0005,14,0	Slew =,2.63			2,001,919	72	0
93	224	01:21:36.866	175GC422A6A	6DMSC	R115,0	Record 115.2kbps			2,001,919	90	0
93	224	01:22:08.200	175GC422A6B	6DMSC	RDY,0	Tape stopped			2,001,920	46	0
93	224	01:22:42.866	20GC4A	7SAFE	UNSTOW	Check S/P Position			2,001,921	07	0
93	224	01:29:44.866	20EC6A	6DMSC	S115,3	Slew 115.2kbps			2,001,928	03	0
93	224	01:30:16.200	20EC6B	6DMSC	RDY,2	Tape stopped			2,001,928	50	0
93	224	15:01:00.133	444E443A4A	7MODE	CRU	Dual-Spin Mo			2,002,730	34	0
93	225	11:46:04.133	423Q6A	6TMCHG	LPB	NO DNL			2,003,961	69	0
93	225	11:46:10.133	423Q6B	6DMSC	P7,2	Playback 7.68kbps			2,003,961	78	0
93	225	11:47:23.466	423Q6I	6DMSC	RDY,0	Tape stopped			2,003,963	06	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	225	11:47:32.133	423Q6J	6TMCHG	ELS	NO DNL			2,003,963	19	0
93	225	11:49:03.466	423Q6K	6DMSC	S7,1	Slew 7.68kbps			2,003,964	65	0
93	225	11:49:10.800	423Q6L	6DMSC	RDY,2	Tape stopped			2,003,964	76	0
93	225	16:32:04.066	423R6A	6TMCHG	LPB	NO DNL			2,004,244	56	0
93	225	16:32:10.066	423R6B	6DMSC	P7,2	Playback 7.68kbps			2,004,244	65	0
93	225	16:33:23.400	423R6I	6DMSC	RDY,0	Tape stopped			2,004,245	84	0
93	225	16:33:32.066	423R6J	6TMCHG	ELS	NO DNL			2,004,246	06	0
93	225	16:35:03.400	423R6K	6DMSC	S7,1	Slew 7.68kbps			2,004,247	52	0
93	225	16:35:10.733	423R6L	6DMSC	RDY,2	Tape stopped			2,004,247	63	0
93	226	07:00:05.400	20P3A	37F2PR	1	Shield Flash Heater OFF (primary relay)			2,005,103	09	0
93	226	07:00:10.733	20P3B	37F2PR	2	Shield Flash Heater OFF (primary relay)			2,005,103	17	0
93	226	14:39:04.066	423S6A	6TMCHG	LPB	NO DNL			2,005,557	03	0
93	226	14:39:10.066	423S6B	6DMSC	P7,2	Playback 7.68kbps			2,005,557	12	0
93	226	14:40:23.400	423S6I	6DMSC	RDY,0	Tape stopped			2,005,558	31	0
93	226	14:40:32.066	423S6J	6TMCHG	ELS	NO DNL			2,005,558	44	0
93	226	14:42:03.400	423S6K	6DMSC	S7,1	Slew 7.68kbps			2,005,559	90	0
93	226	14:42:10.733	423S6L	6DMSC	RDY,2	Tape stopped			2,005,560	10	0
93	226	22:16:04.000	423T6A	6TMCHG	LPB	NO DNL			2,006,009	01	0
93	226	22:16:10.000	423T6B	6DMSC	P7,2	Playback 7.68kbps			2,006,009	10	0
93	226	22:17:23.333	423T6I	6DMSC	RDY,0	Tape stopped			2,006,010	29	0
93	226	22:17:32.000	423T6J	6TMCHG	ELS	NO DNL			2,006,010	42	0
93	226	22:19:03.333	423T6K	6DMSC	S7,1	Slew 7.68kbps			2,006,011	88	0
93	226	22:19:10.666	423T6L	6DMSC	RDY,2	Tape stopped			2,006,012	08	0
93	227	03:02:04.000	423U6A	6TMCHG	LPB	NO DNL			2,006,291	79	0
93	227	03:02:10.000	423U6B	6DMSC	P7,2	Playback 7.68kbps			2,006,291	88	0
93	227	03:03:23.333	423U6I	6DMSC	RDY,0	Tape stopped			2,006,293	16	0
93	227	03:03:32.000	423U6J	6TMCHG	ELS	NO DNL			2,006,293	29	0
93	227	03:05:03.333	423U6K	6DMSC	S7,1	Slew 7.68kbps			2,006,294	75	0
93	227	03:05:10.666	423U6L	6DMSC	RDY,2	Tape stopped			2,006,294	86	0
93	227	07:48:04.000	423V6A	6TMCHG	LPB	NO DNL			2,006,574	66	0
93	227	07:48:10.000	423V6B	6DMSC	P7,2	Playback 7.68kbps			2,006,574	75	0
93	227	07:49:23.333	423V6I	6DMSC	RDY,0	Tape stopped			2,006,576	03	0
93	227	07:49:32.000	423V6J	6TMCHG	ELS	NO DNL			2,006,576	16	0
93	227	07:51:03.333	423V6K	6DMSC	S7,1	Slew 7.68kbps			2,006,577	62	0
93	227	07:51:10.666	423V6L	6DMSC	RDY,2	Tape stopped			2,006,577	73	0
93	227	14:55:04.000	423W6A	6TMCHG	LPB	NO DNL			2,006,997	03	0
93	227	14:55:10.000	423W6B	6DMSC	P7,2	Playback 7.68kbps			2,006,997	12	0
93	227	14:56:23.333	423W6I	6DMSC	RDY,0	Tape stopped			2,006,998	31	0
93	227	14:56:32.000	423W6J	6TMCHG	ELS	NO DNL			2,006,998	44	0
93	228	20:44:03.933	20G4B	7SAFE	UNSTOW	Check S/P Position			2,008,766	34	0
93	228	21:05:03.933	20G4F	7SLEW	DIS,POS,0.0	Stator movement			2,008,787	13	0
93	228	21:07:03.933	20G4H	7MODE	SPNL	All-Spin Mod			2,008,789	11	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	228	21:09:03.933	20G4I	7SAFE	UNSTOW	Check S/P Position			2,008,791:09:0		
93	228	21:15:03.933	20G4K	7VENT	0.6,1.333,8	ALERT -- Thruster fire			2,008,797:03:0		
93	228	21:15:04.600	20G4L	7VENT	0.6,11.022,8	ALERT -- Thruster fire			2,008,797:04:0		
93	228	21:16:04.600	20G4M	7VENT	0.6,1.333,6	ALERT -- Thruster fire			2,008,798:03:0		
93	228	21:16:05.266	20G4N	7VENT	0.6,11.022,6	ALERT -- Thruster fire			2,008,798:04:0		
93	228	21:20:17.933	20G4Q	7VENT	0.6,1.333,7	ALERT -- Thruster fire			2,008,802:19:0		
93	228	21:20:18.600	20G4R	7VENT	0.6,11.022,7	ALERT -- Thruster fire			2,008,802:20:0		
93	228	21:21:18.600	20G4S	7VENT	0.6,1.333,1	ALERT -- Thruster fire			2,008,803:19:0		
93	228	21:21:19.266	20G4T	7VENT	0.6,11.022,1	ALERT -- Thruster fire			2,008,803:20:0		
93	228	21:23:31.933	20G4V	7MODE	CRU	Dual-Spin Mo			2,008,805:37:0		
93	228	21:34:59.933	498C4B	7SAFE	UNSTOW	Check S/P Position			2,008,816:68:0		
93	228	22:06:59.933	498C4D	7MODE	INT	Dual-Spin Mo			2,008,848:36:0		
93	228	22:09:01.266	498C4F	7BURN	LAT,0.0,90.0,1,0	ALERT -- Thruster fire			2,008,850:36:0		
93	228	22:22:25.933	498C4G	7BURN	LAT,179.745998,-	ALERT -- Thruster fire			2,008,863:60:0		
93	228	22:35:51.266	498C4I	7BURN	LAT,179.745998,-	ALERT -- Thruster fire			2,008,876:85:0		
93	228	22:49:15.933	498C4J	7BURN	LAT,0.0,90.0,1,0	ALERT -- Thruster fire			2,008,890:18:0		
93	228	23:02:41.266	498C4L	7BURN	PULZ,0.0,90.0,1,	ALERT -- Thruster fire			2,008,903:43:0		
93	228	23:16:01.266	498C4N	7BURN	PULZ,0.0,90.0,1,	ALERT -- Thruster fire			2,008,916:60:0		
93	229	00:56:43.933	20ZU3Q	37HR	CMD,37HR,20ZU3Q,	Replacement Heaters OFF			2,009,016:24:0		
93	229	00:57:11.933	20ZU3R	37A	CMD,37A,20ZU3R,,	NIMS Power ON	260	00	2,009,016:66:0		
93	229	00:59:13.266	20ZU4A	37IST	1,2,0,OFF,0,0,0	Chopper ON, Sync, Chopper (Ref)	2R0	00	2,009,018:66:0		
93	229	15:25:00.533	192GD4A	7CONE	10.0,175.0	Check S/P Position	2R0	00	2,009,875:00:0		
93	229	20:25:05.200	20Q3A	40T1PR	1	PCT Heater 1 OFF (primary relay)	2R0	00	2,010,171:71:0		
93	229	20:25:10.533	20Q3B	40T1PR	2	PCT Heater 1 OFF (primary relay)	2R0	00	2,010,171:79:0		
93	229	20:32:21.866	165GD4A	7TMOT	DIS,TMC	Target motion compensa	2R0	00	2,010,178:89:0		
93	229	20:32:22.533	165GD4B	7SCAN	NORM,192.330999,	Check S/P Position	2R0	00	2,010,178:90:0		
93	229	20:37:26.533	176GD6A	6TMCHG	NCGHCM	Dnlnk	2R0	00	2,010,184:00:0		
93	229	20:39:23.200	157JA156A121A4A	37IOP	3,0	Long Map, Grating Start Position =0	2R3	00	2,010,185:84:0		
93	229	20:41:02.533	118GD110A111A4A	7STRP	0.0,-0.0005,14,0	Slew =,2.63	2R3	00	2,010,187:51:0		
93	29/	20:41:11.866	118GD110A111A4B	7STRP	-0.0006,-0.0005,	Slew =,2.62	2R3	00	2,010,187:65:0		
93	229	20:41:16.533	118GD110A111A4C	7STRP	0.0,-0.0005,14,0	Slew =,2.63	2R3	00	2,010,187:72:0		
93	229	20:41:24.533	157JA156A121B4A	37IST	1,2,1,OFF,1,1,1	Chopper ON, Sync, Chopper (Ref)OPCALGain S	4R3	00	2,010,187:84:0		
93	229	20:41:28.533	175GD422A6A	6DMSC	R115,0	Record 115.2kbps	4R3	00	2,010,187:90:0		
93	229	20:41:59.866	175GD422A6B	6DMSC	RDY,0	Tape stopped	4R3	00	2,010,188:46:0		
93	229	20:42:35.200	20GD4A	7SAFE	UNSTOW	Check S/P Position	4R3	00	2,010,189:08:0		
93	229	20:48:29.200	157JA156A121C4A	37IOP	0,0	Safe, Grating Start Position =0	4R0	00	2,010,194:84:0		
93	229	20:49:37.866	20ED6A	6DMSC	S115,3	Slew 115.2kbps	4R0	00	2,010,196:05:0		
93	229	20:50:09.200	20ED6B	6DMSC	RDY,2	Tape stopped	4R0	00	2,010,196:52:0		
93	229	21:05:59.866	20H4A	7MODE	CRU	Dual-Spin Mo	4R0	00	2,010,212:22:0		
93	229	22:56:59.866	20H4B	7STAT	+17.45,0.0,90.0	Stator inertial point	4R0	00	2,010,322:02:0		
93	229	22:59:59.866	20H4C	7SAFE	UNSTOW	Check S/P Position	4R0	00	2,010,324:90:0		
93	230	04:25:03.866	423Z6A	6TMCHG	LPB	NO DNL	4R0	00	2,010,646:44:0		

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	230	04:25:09.866	423Z6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,010,646:53:0		
93	230	04:26:23.200	423Z6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,010,647:72:0		
93	230	04:26:31.866	423Z6J	6TMCHG	ELS	NO DNL	4R0	00	2,010,647:85:0		
93	230	04:28:03.200	423Z6K	6DMSC	S7,1	Slew 7.68kbps	4R0	00	2,010,649:40:0		
93	230	04:28:10.533	423Z6L	6DMSC	RDY,2	Tape stopped	4R0	00	2,010,649:51:0		
93	230	12:00:03.866	423AA6A	6TMCHG	LPB	NO DNL	4R0	00	2,011,096:44:0		
93	230	12:00:09.866	423AA6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,011,096:53:0		
93	230	12:01:23.200	423AA6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,011,097:72:0		
93	230	12:01:31.866	423AA6J	6TMCHG	ELS	NO DNL	4R0	00	2,011,097:85:0		
93	230	12:03:03.200	423AA6K	6DMSC	S7,1	Slew 7.68kbps	4R0	00	2,011,099:40:0		
93	230	12:03:10.533	423AA6L	6DMSC	RDY,2	Tape stopped	4R0	00	2,011,099:51:0		
93	230	21:26:03.800	423AB6A	6TMCHG	LPB	NO DNL	4R0	00	2,011,656:24:0		
93	230	21:26:09.800	423AB6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,011,656:33:0		
93	230	21:27:23.133	423AB6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,011,657:52:0		
93	230	21:27:31.800	423AB6J	6TMCHG	ELS	NO DNL	4R0	00	2,011,657:65:0		
93	230	21:29:03.133	423AB6K	6DMSC	S7,1	Slew 7.68kbps	4R0	00	2,011,659:20:0		
93	230	21:29:10.466	423AB6L	6DMSC	RDY,2	Tape stopped	4R0	00	2,011,659:31:0		
93	231	02:12:03.800	423AC6A	6TMCHG	LPB	NO DNL	4R0	00	2,011,939:11:0		
93	231	02:12:09.800	423AC6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,011,939:20:0		
93	231	02:13:23.133	423AC6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,011,940:39:0		
93	231	02:13:31.800	423AC6J	6TMCHG	ELS	NO DNL	4R0	00	2,011,940:52:0		
93	231	02:15:03.133	423AC6K	6DMSC	S7,1	Slew 7.68kbps	4R0	00	2,011,942:07:0		
93	231	02:15:10.466	423AC6L	6DMSC	RDY,2	Tape stopped	4R0	00	2,011,942:18:0		
93	231	06:58:03.800	423AD6A	6TMCHG	LPB	NO DNL	4R0	00	2,012,221:89:0		
93	231	06:58:09.800	423AD6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,012,222:07:0		
93	231	06:59:23.133	423AD6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,012,223:26:0		
93	231	06:59:31.800	423AD6J	6TMCHG	ELS	NO DNL	4R0	00	2,012,223:39:0		
93	231	07:01:03.133	423AD6K	6DMSC	S7,1	Slew 7.68kbps	4R0	00	2,012,224:85:0		
93	231	07:01:10.466	423AD6L	6DMSC	RDY,2	Tape stopped	4R0	00	2,012,225:05:0		
93	231	14:44:03.800	423AE6A	6TMCHG	LPB	NO DNL	4R0	00	2,012,682:78:0		
93	231	14:44:09.800	423AE6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,012,682:87:0		
93	231	14:45:23.133	423AE6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,012,684:15:0		
93	231	14:45:31.800	423AE6J	6TMCHG	ELS	NO DNL	4R0	00	2,012,684:28:0		
93	231	14:47:03.133	423AE6K	6DMSC	S7,1	Slew 7.68kbps	4R0	00	2,012,685:74:0		
93	231	14:47:10.466	423AE6L	6DMSC	RDY,2	Tape stopped	4R0	00	2,012,685:85:0		
93	232	06:05:03.733	423AF6A	6TMCHG	LPB	NO DNL	4R0	00	2,013,593:67:0		
93	232	06:05:09.733	423AF6B	6DMSC	P7,2	Playback 7.68kbps	4R0	00	2,013,593:76:0		
93	232	06:06:23.066	423AF6I	6DMSC	RDY,0	Tape stopped	4R0	00	2,013,595:04:0		
93	232	06:06:31.733	423AF6J	6TMCHG	ELS	NO DNL	4R0	00	2,013,595:17:0		
93	233	14:01:20.333	444F443A4B	7MODE	INT	Dual-Spin Mo	4R0	00	2,015,488:87:0		
93	233	14:40:49.000	192GE4A	7CONE	10.0,175.0	Check S/P Position	4R0	00	2,015,528:00:0		
93	233	14:43:49.666	165GE4A	7TMOT	DIS,TMC	Target motion compensa	4R0	00	2,015,530:89:0		

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	233	14:43:50.333	165GE4B	7SCAN	NORM,192.334999,	Check S/P Position	4R0	00	2,015,530:90:0	
93	233	14:48:54.333	176GE6A	6TMCHG	NCGHCM	Dnlnk	4R0	00	2,015,536:00:0	
93	233	14:50:51.000	157JB156A121A4A	37IOP	1,0	Full Map, Grating Start Position =0	4R1	00	2,015,537:84:0	
93	233	14:52:30.333	118GE110A111A4A	7STRP	0.0,-0.0005,14,0	Slew =,2.63	4R1	00	2,015,539:51:0	
93	33/	14:52:39.666	118GE110A111A4B	7STRP	-0.0006,-0.0005,	Slew =,2.62	4R1	00	2,015,539:65:0	
93	233	14:52:44.333	118GE110A111A4C	7STRP	0.0,-0.0005,14,0	Slew =,2.63	4R1	00	2,015,539:72:0	
93	233	14:52:52.333	157JB156A121B4A	37IST	0,0,1,ON,0,1,0	ECALGain State 2	2R1	00	2,015,539:84:0	
93	233	14:52:56.333	175GE422A6A	6DMSC	R115,0	Record 115.2kbps	2R1	00	2,015,539:90:0	
93	233	14:53:27.666	175GE422A6B	6DMSC	RDY,0	Tape stopped	2R1	00	2,015,540:46:0	
93	233	14:54:02.333	20GE4A	7SAFE	UNSTOW	Check S/P Position	2R1	00	2,015,541:07:0	
93	233	14:59:57.000	157JB156A121C4A	37IOP	0,0	Safe, Grating Start Position =0	2R0	00	2,015,546:84:0	
93	233	15:01:05.000	20EE6A	6DMSC	S115,3	Slew 115.2kbps	2R0	00	2,015,548:04:0	
93	233	15:01:36.333	20EE6B	6DMSC	RDY,2	Tape stopped	2R0	00	2,015,548:51:0	
93	233	15:05:04.333	423AH6A	6TMCHG	LPB	NO DNL	2R0	00	2,015,551:90:0	
93	233	15:05:10.333	423AH6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,015,552:08:0	
93	233	15:06:23.666	423AH6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,015,553:27:0	
93	233	15:06:32.333	423AH6J	6TMCHG	ELS	NO DNL	2R0	00	2,015,553:40:0	
93	233	15:08:03.666	423AH6K	6DMSC	S7,1	Slew 7.68kbps	2R0	00	2,015,554:86:0	
93	233	15:08:11.000	423AH6L	6DMSC	RDY,2	Tape stopped	2R0	00	2,015,555:06:0	
93	233	18:00:00.333	444G443A4A	7MODE	CRU	Dual-Spin Mo	2R0	00	2,015,725:00:0	
93	233	21:45:04.333	423AI6A	6TMCHG	LPB	NO DNL	2R0	00	2,015,947:54:0	
93	233	21:45:10.333	423AI6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,015,947:63:0	
93	233	21:46:23.666	423AI6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,015,948:82:0	
93	233	21:46:32.333	423AI6J	6TMCHG	ELS	NO DNL	2R0	00	2,015,949:04:0	
93	233	21:48:03.666	423AI6K	6DMSC	S7,1	Slew 7.68kbps	2R0	00	2,015,950:50:0	
93	233	21:48:11.000	423AI6L	6DMSC	RDY,2	Tape stopped	2R0	00	2,015,950:61:0	
93	234	04:16:04.333	423AJ6A	6TMCHG	LPB	NO DNL	2R0	00	2,016,334:27:0	
93	234	04:16:10.333	423AJ6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,016,334:36:0	
93	234	04:17:23.666	423AJ6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,016,335:55:0	
93	234	04:17:32.333	423AJ6J	6TMCHG	ELS	NO DNL	2R0	00	2,016,335:68:0	
93	234	04:19:03.666	423AJ6K	6DMSC	S7,1	Slew 7.68kbps	2R0	00	2,016,337:23:0	
93	234	04:19:11.000	423AJ6L	6DMSC	RDY,2	Tape stopped	2R0	00	2,016,337:34:0	
93	234	11:46:04.266	423AK6A	6TMCHG	LPB	NO DNL	2R0	00	2,016,779:32:0	
93	234	11:46:10.266	423AK6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,016,779:41:0	
93	234	11:47:23.600	423AK6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,016,780:60:0	
93	234	11:47:32.266	423AK6J	6TMCHG	ELS	NO DNL	2R0	00	2,016,780:73:0	
93	234	11:49:03.600	423AK6K	6DMSC	S7,1	Slew 7.68kbps	2R0	00	2,016,782:28:0	
93	234	11:49:10.933	423AK6L	6DMSC	RDY,2	Tape stopped	2R0	00	2,016,782:39:0	
93	234	16:29:04.266	423AL6A	6TMCHG	LPB	NO DNL	2R0	00	2,017,059:22:0	
93	234	16:29:10.266	423AL6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,017,059:31:0	
93	234	16:30:23.600	423AL6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,017,060:50:0	
93	234	16:30:32.266	423AL6J	6TMCHG	ELS	NO DNL	2R0	00	2,017,060:63:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	234	16:32:03.600	423AL6K	6DMSC	S7,1	Slew 7.68kbps	2R0	00	2,017,062	18:0	
93	234	16:32:10.933	423AL6L	6DMSC	RDY,2	Tape stopped	2R0	00	2,017,062	29:0	
93	234	23:43:04.266	423AM6A	6TMCHG	LPB	NO DNL	2R0	00	2,017,488	43:0	
93	234	23:43:10.266	423AM6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,017,488	52:0	
93	234	23:44:23.600	423AM6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,017,489	71:0	
93	234	23:44:32.266	423AM6J	6TMCHG	ELS	NO DNL	2R0	00	2,017,489	84:0	
93	234	23:46:03.600	423AM6K	6DMSC	S7,1	Slew 7.68kbps	2R0	00	2,017,491	39:0	
93	234	23:46:10.933	423AM6L	6DMSC	RDY,2	Tape stopped	2R0	00	2,017,491	50:0	
93	235	05:57:04.266	423AN6A	6TMCHG	LPB	NO DNL	2R0	00	2,017,858	33:0	
93	235	05:57:10.266	423AN6B	6DMSC	P7,2	Playback 7.68kbps	2R0	00	2,017,858	42:0	
93	235	05:58:23.600	423AN6I	6DMSC	RDY,0	Tape stopped	2R0	00	2,017,859	61:0	
93	235	05:58:32.266	423AN6J	6TMCHG	ELS	NO DNL	2R0	00	2,017,859	74:0	
93	237	23:05:05.400	20R3A	40T1P	1	PCT Heater 1 ON (primary relay)	2R0	00	2,021,723	40:0	
93	237	23:05:10.733	20R3B	40T1P	2	PCT Heater 1 ON (primary relay)	2R0	00	2,021,723	48:0	
93	239	10:51:02.000	20AH4B	7SLEW	DIS,POS,0.0	Stator movement	2R0	00	2,023,845	73:0	

Sequence: EJ03DI Created: 07/27/93 Begin: 93-239/11:00:00.000 Finish: 93-270/16:00:00.000

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	239	11:00:00.333		DMS:	READY	RDY, TRACK 2, REV, TIC 4372 +/- 23;			2,023,854	63	0
93	239	20:00:04.333		DMS:	*RUNUP	S806, TRACK *1, *FWD, TIC 4372 +/- 23;			2,024,388	75	0
93	239	20:00:04.333	20AG6A	6DMSC	S806,1	DMS Control Tape slew 806.4kb			2,024,388	75	0
93	239	20:00:09.533		DMS:	*SLEW	S806, TRACK 1, FWD, TIC *4437 +/- 26;			2,024,388	82	8
93	239	20:02:00.800		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC 7177 +/- 26;			2,024,390	67	7
93	239	20:02:00.800		DMS:	*AUTOSTOP	S806, TRACK 1, FWD, TIC *7177 +/- 26;			2,024,390	67	7
93	239	20:02:03.466		DMS:	*READY	RDY, TRACK 1, FWD, TIC *7188 +/- 27;			2,024,390	71	7
93	239	20:07:04.333	20AG6B	6DMSR	CMD,6DMSR,20AG6B	Tape recorder rewind			2,024,395	68	0
93	239	20:07:04.333		DMS:	*REWIND	S806, TRACK *4, *REV, TIC 7188 +/- 27;			2,024,395	68	0
93	239	20:12:09.466		DMS:	*READY	RDY, TRACK *1, *FWD, TIC * 201 +/- 0;			2,024,400	70	7
93	240	05:55:02.333	490A412A4B	7MODE	INT	AACS INERTIAL MODE			2,024,977	23	0
93	240	05:57:57.666	490A476A6A	6TMCHG	ELSLRS	10 BPS TDM / LRS Rec 7.68kb/s			2,024,980	13	0
93	240	06:00:00.333	490A412A4D	7SAFE	UNSTOW	S/P TO 153 deg cone			2,024,982	15	0
93	240	06:04:10.333	490A412A4E	7VECT	RTH	Inert vect update UTC			2,024,986	26	0
93	240	06:04:14.333	490A412A4F	7TURN	1,RTH	ALERT Thruster			2,024,986	32	0
93	240	06:08:02.333	490A412A406A4A	7STAR	1,484,121.997999	Star catalog update			2,024,990	10	0
93	240	06:08:04.333	490A412A406A4B	7STAR	2,425,331.274998	Star catalog update			2,024,990	13	0
93	240	06:08:06.333	490A412A406A4C	7STAR	3,150,319.349998	Star catalog update			2,024,990	16	0
93	240	06:08:08.333	490A412A406A4D	7STAR	4,159,27.236,89.	Star catalog update			2,024,990	19	0
93	240	06:08:10.333	490A412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update			2,024,990	22	0
93	240	06:08:12.333	490A412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update			2,024,990	25	0
93	240	07:04:31.666		DMS:	*RUNUP	R7, TRACK 1, FWD, TIC 201 +/- 0;			2,025,045	89	0
93	240	07:04:31.666	175ES422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps			2,025,045	89	0
93	240	07:04:33.000	176ES6A	6TMCHG	ELSLRS	10 BPS TDM / LRS Rec 7.68kb/s			2,025,046	00	0
93	240	07:04:33.133		DMS:	*RECORD	R7, TRACK 1, FWD, TIC * 202 +/- 0;			2,025,046	00	2
93	240	07:27:13.000	490A412A4K	7SAFE	UNSTOW	S/P TO 153 deg cone			2,025,068	38	0
93	240	11:22:21.666	165IA4A	7TMOT	DIS,TMC	Disable IVP - Target Motion			2,025,300	89	0
93	240	11:22:22.333	165IA4B	7SCAN	NORM,192.081999,	Check S/P Position			2,025,300	90	0
93	240	11:24:43.000		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *3860 +/- 0;			2,025,303	28	0
93	240	11:24:43.000	175ES422A6B	6DMSC	RDY,0	DMS Control Tape stop			2,025,303	28	0
93	240	11:24:44.266		DMS:	*READY	RDY, TRACK 1, FWD, TIC *3861 +/- 0;			2,025,303	29	9
93	240	11:25:20.333	128IA149A131A4A	37IOP	7,6	Fixed Map, Grating Start Position =6	7	06	2,025,303	84	0
93	240	11:26:16.333	117JA	CSMOS	GS	***** GROUP START CSMOS	7	06	2,025,304	77	0
93	240	11:26:21.000	128IA149A131B4A	37IST	1,2,0,OFF,0,1,1	Chopper ON, Sync, Chopper (Ref)Gain State	4R7	06	2,025,304	84	0
93	240	11:26:21.666	175JA422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R7	06	2,025,304	85	0
93	240	11:26:21.666		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 3861 +/- 0;	4R7	06	2,025,304	85	0
93	240	11:26:24.333	165IA4C	7VECT		Inert vect update UTC	4R7	06	2,025,304	89	0
93	240	11:26:25.000	165IA4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	4R7	06	2,025,304	90	0
93	240	11:26:25.666	117JA105A106A4A	7STRP	0.004,0.0,0,0,0,	Slew =,0.76	4R7	06	2,025,305	00	0
93	240	11:26:25.666		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *3863 +/- 0;	4R7	06	2,025,305	00	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	11:26:25.666	176JA6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R7	06	2,025,305:00:0	
93	240	11:26:30.000	IDUNRTURXM01+		-----START------		4R7	06	: :	
93	240	11:26:30.000	IDUSROTATI01*		-----START------		4R7	06	: :	
93	240	11:26:35.000	117JA11A	CSMOS	GE	***** GROUP END CSMOS	4R7	06	2,025,305:14:0	
93	240	11:26:45.666		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *3881 +/- 0;	4R7	06	2,025,305:30:0	
93	240	11:26:45.666	175JA422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R7	06	2,025,305:30:0	
93	240	11:26:46.866		DMS:	*READY	RDY, TRACK 1, FWD, TIC *3882 +/- 0;	4R7	06	2,025,305:31:8	
93	240	11:27:26.333	116IA4A	7STRP	-0.002,0.00001,0	Slew =0,1.0	4R7	06	2,025,306:00:0	
93	240	11:27:30.000	IDUNRTURXM01+		-----STOP-------		4R7	06	: :	
93	240	11:28:26.333	175IA422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R7	06	2,025,306:90:0	
93	240	11:28:26.333		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 3882 +/- 0;	4R7	06	2,025,306:90:0	
93	240	11:28:27.000	176IA6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R7	06	2,025,307:00:0	
93	240	11:28:30.333		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *3888 +/- 1;	4R7	06	2,025,307:05:0	
93	240	11:28:57.666	175IA422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R7	06	2,025,307:46:0	
93	240	11:28:57.666		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *3984 +/- 1;	4R7	06	2,025,307:46:0	
93	240	11:28:58.866		DMS:	*READY	RDY, TRACK 1, FWD, TIC *3985 +/- 1;	4R7	06	2,025,307:47:8	
93	240	11:51:41.666		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 3985 +/- 1;	4R7	06	2,025,329:90:0	
93	240	11:51:41.666	175IB422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R7	06	2,025,329:90:0	
93	240	11:51:42.333	176IB6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R7	06	2,025,330:00:0	
93	240	11:51:45.666		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *3992 +/- 1;	4R7	06	2,025,330:05:0	
93	240	11:54:39.666	128JD149A131A4A	37IOP	1,0	Full Map, Grating Start Position =0	4R1	00	2,025,332:84:0	
93	240	11:54:44.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *4620 +/- 1;	4R1	00	2,025,333:00:0	
93	240	11:54:44.333	175IB422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R1	00	2,025,333:00:0	
93	240	11:54:45.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *4621 +/- 2;	4R1	00	2,025,333:01:8	
93	240	11:55:35.666	117JB	CSMOS	GS	***** GROUP START CSMOS	4R1	00	2,025,333:77:0	
93	240	11:55:40.333	128JD149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R1	00	2,025,333:84:0	
93	240	11:55:45.000	117JB105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.06	4R1	00	2,025,334:00:0	
93	240	11:55:45.000	176JB6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R1	00	2,025,334:00:0	
93	240	11:55:49.000	IDUNRT90FM01+		-----START------		4R1	00	: :	
93	240	11:55:50.333	117JB105A106B4A	7STRP	-0.0025,0.0,0,0,	Slew =,1.25	4R1	00	2,025,334:08:0	
93	240	11:55:51.000	175JB422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R1	00	2,025,334:09:0	
93	240	11:55:51.000		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 4621 +/- 2;	4R1	00	2,025,334:09:0	
93	240	11:55:55.000		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *4622 +/- 2;	4R1	00	2,025,334:15:0	
93	240	11:55:57.000	117JB105A106B4B	7STRP	0.00475,0.0,0,0,	Slew =,0.06	4R1	00	2,025,334:18:0	
93	240	11:57:24.333	117JB11A	CSMOS	GE	***** GROUP END CSMOS	4R1	00	2,025,335:58:0	
93	240	11:57:32.333	175JB422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R1	00	2,025,335:70:0	
93	240	11:57:32.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *4708 +/- 2;	4R1	00	2,025,335:70:0	
93	240	11:57:33.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *4709 +/- 2;	4R1	00	2,025,335:71:8	
93	240	11:58:51.000	IDUNRT90FM01+		-----STOP-------		4R1	00	: :	
93	240	12:05:47.000	128JE149A131A4A	37IOP	5,2	Short Map, Grating Start Position =2	4R5	02	2,025,343:84:0	
93	240	12:06:47.666	128JE149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R5	02	2,025,344:84:0	
93	240	12:06:56.000	IDUNRT15SM01+		-----START------		4R5	02	: :	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	12:06:56.333	117JC	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,345	06	0
93	240	12:07:22.333	117JC105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,345	45	0
93	240	12:07:27.666	117JC105A106B4A	7STRP	-0.005,0.0,0,0,0	Slew =0,2.5	4R5	02	2,025,345	53	0
93	240	12:07:31.666		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 4709 +/- 2;	4R5	02	2,025,345	59	0
93	240	12:07:31.666	175JC422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,345	59	0
93	240	12:07:35.666		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *4710 +/- 3;	4R5	02	2,025,345	65	0
93	240	12:07:37.666	117JC105A106B4B	7STRP	0.005,0.0,0,0,0,	Slew =,0.11	4R5	02	2,025,345	68	0
93	240	12:08:43.000	175JC422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,346	75	0
93	240	12:08:43.000		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *4769 +/- 3;	4R5	02	2,025,346	75	0
93	240	12:08:43.666	117JC11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,346	76	0
93	240	12:08:44.200		DMS:	*READY	RDY, TRACK 1, FWD, TIC *4770 +/- 3;	4R5	02	2,025,346	76	8
93	240	12:10:26.000	IDUNRT15SM01+		-----STOP-------		4R5	02		:	:
93	240	12:13:57.000	116IB4A	7STRP	-0.00227,0.00001	Slew =0,1.0	4R5	02	2,025,352	00	0
93	240	12:14:57.000		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 4770 +/- 3;	4R5	02	2,025,352	90	0
93	240	12:14:57.000	175IC422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R5	02	2,025,352	90	0
93	240	12:14:57.666	176IC6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R5	02	2,025,353	00	0
93	240	12:15:01.000		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *4777 +/- 3;	4R5	02	2,025,353	05	0
93	240	12:15:28.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *4873 +/- 3;	4R5	02	2,025,353	46	0
93	240	12:15:28.333	175IC422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,353	46	0
93	240	12:15:29.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *4874 +/- 3;	4R5	02	2,025,353	47	8
93	240	12:18:51.000	117JD	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,356	77	0
93	240	12:19:00.333	176JD6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,357	00	0
93	240	12:19:00.333	117JD105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,357	00	0
93	240	12:19:04.000	IDUNRT30SM01+		-----START------		4R5	02		:	:
93	240	12:19:05.666	117JD105A106B4A	7STRP	-0.0023,0.0,0,0,	Slew =,1.25	4R5	02	2,025,357	08	0
93	240	12:19:09.666		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 4874 +/- 3;	4R5	02	2,025,357	14	0
93	240	12:19:09.666	175JD422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,357	14	0
93	240	12:19:13.666		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *4875 +/- 4;	4R5	02	2,025,357	20	0
93	240	12:19:15.666	117JD105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,357	23	0
93	240	12:20:16.333	117JD11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,358	23	0
93	240	12:20:21.000		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *4935 +/- 4;	4R5	02	2,025,358	30	0
93	240	12:20:21.000	175JD422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,358	30	0
93	240	12:20:22.200		DMS:	*READY	RDY, TRACK 1, FWD, TIC *4936 +/- 4;	4R5	02	2,025,358	31	8
93	240	12:22:06.000	IDUNRT30SM01+		-----STOP-------		4R5	02		:	:
93	240	12:30:11.666	117JE	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,368	06	0
93	240	12:30:12.000	IDUNRT15SM02+		-----START------		4R5	02		:	:
93	240	12:30:37.666	117JE105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,368	45	0
93	240	12:30:43.000	117JE105A106B4A	7STRP	-0.00475,0.0,0,0	Slew =0,2.5	4R5	02	2,025,368	53	0
93	240	12:30:47.000		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 4936 +/- 4;	4R5	02	2,025,368	59	0
93	240	12:30:47.000	175JE422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,368	59	0
93	240	12:30:51.000		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *4937 +/- 4;	4R5	02	2,025,368	65	0
93	240	12:30:53.000	117JE105A106B4B	7STRP	0.005,0.00004,0,	Slew =,0.11	4R5	02	2,025,368	68	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	12:31:53.666	117JE11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,369	68	0
93	240	12:31:58.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *4996 +/- 4;	4R5	02	2,025,369	75	0
93	240	12:31:58.333	175JE422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,369	75	0
93	240	12:31:59.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *4997 +/- 5;	4R5	02	2,025,369	76	8
93	240	12:33:41.000	IDUNRT15SM02+		-----STOP-------		4R5	02		:	:
93	240	12:37:12.333	116IC4A	7STRP	-0.00247,-0.0000	Slew =0,1.0	4R5	02	2,025,375	00	0
93	240	12:38:12.333		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 4997 +/- 5;	4R5	02	2,025,375	90	0
93	240	12:38:12.333	175ID422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R5	02	2,025,375	90	0
93	240	12:38:13.000	176ID6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R5	02	2,025,376	00	0
93	240	12:38:16.333		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *5004 +/- 5;	4R5	02	2,025,376	05	0
93	240	12:38:43.666	175ID422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,376	46	0
93	240	12:38:43.666		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *5100 +/- 5;	4R5	02	2,025,376	46	0
93	240	12:38:44.866		DMS:	*READY	RDY, TRACK 1, FWD, TIC *5101 +/- 5;	4R5	02	2,025,376	47	8
93	240	12:42:06.333	117JF	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,379	77	0
93	240	12:42:15.666	117JF105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,380	00	0
93	240	12:42:15.666	176JF6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,380	00	0
93	240	12:42:20.000	IDUNRT30SM02+		-----START------		4R5	02		:	:
93	240	12:42:21.000	117JF105A106B4A	7STRP	-0.00225,0.0,0,0	Slew =,1.25	4R5	02	2,025,380	08	0
93	240	12:42:25.000	175JF422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,380	14	0
93	240	12:42:25.000		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 5101 +/- 5;	4R5	02	2,025,380	14	0
93	240	12:42:29.000		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *5102 +/- 6;	4R5	02	2,025,380	20	0
93	240	12:42:31.000	117JF105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,380	23	0
93	240	12:43:31.666	117JF11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,381	23	0
93	240	12:43:36.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *5162 +/- 6;	4R5	02	2,025,381	30	0
93	240	12:43:36.333	175JF422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,381	30	0
93	240	12:43:37.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *5163 +/- 6;	4R5	02	2,025,381	31	8
93	240	12:45:22.000	IDUNRT30SM02+		-----STOP-------		4R5	02		:	:
93	240	12:53:27.000	117JG	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,391	06	0
93	240	12:53:27.000	IDUNRT15SM03+		-----START------		4R5	02		:	:
93	240	12:53:53.000	117JG105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,391	45	0
93	240	12:53:58.333	117JG105A106B4A	7STRP	-0.005,0.0,0,0,0	Slew =0,2.5	4R5	02	2,025,391	53	0
93	240	12:54:02.333	175JG422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,391	59	0
93	240	12:54:02.333		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 5163 +/- 6;	4R5	02	2,025,391	59	0
93	240	12:54:06.333		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *5164 +/- 6;	4R5	02	2,025,391	65	0
93	240	12:54:08.333	117JG105A106B4B	7STRP	0.005,0.0,0,0,0,	Slew =,0.11	4R5	02	2,025,391	68	0
93	240	12:55:09.000	117JG11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,392	68	0
93	240	12:55:13.666	175JG422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,392	75	0
93	240	12:55:13.666		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *5223 +/- 6;	4R5	02	2,025,392	75	0
93	240	12:55:14.866		DMS:	*READY	RDY, TRACK 1, FWD, TIC *5224 +/- 6;	4R5	02	2,025,392	76	8
93	240	12:56:56.000	IDUNRT15SM03+		-----STOP-------		4R5	02		:	:
93	240	12:57:30.000	IDUNRTURXM02+		-----START------		4R5	02		:	:
93	240	12:57:30.000	IDUSROTATI01*		-----STOP-------		4R5	02		:	:

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	12:58:21.666	128JF149A131A4A	37IOP	7,6	Fixed Map, Grating Start Position =6	4R7	06	2,025,395:84:0		
93	240	12:58:30.000	IDUSROTATI02*		-----START------		4R7	06	: :		
93	240	12:58:55.666	165IB4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	4R7	06	2,025,396:44:0		
93	240	12:58:56.333	165IB4B	7SCAN	NORM,192.112999,	Check S/P Position	4R7	06	2,025,396:45:0		
93	240	12:59:17.666	117JH	CSMOS	GS	***** GROUP START CSMOS	4R7	06	2,025,396:77:0		
93	240	12:59:22.333	128JF149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R7	06	2,025,396:84:0		
93	240	12:59:23.000	175JH422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R7	06	2,025,396:85:0		
93	240	12:59:23.000		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 5224 +/- 6;	4R7	06	2,025,396:85:0		
93	240	12:59:25.666	165IB4C	7VECT		Inert vect update UTC	4R7	06	2,025,396:89:0		
93	240	12:59:26.333	165IB4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	4R7	06	2,025,396:90:0		
93	240	12:59:27.000	117JH105A106A4A	7STRP	0.004,0.0,0,0,0,	Slew =,0.76	4R7	06	2,025,397:00:0		
93	240	12:59:27.000	176JH6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R7	06	2,025,397:00:0		
93	240	12:59:27.000		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *5226 +/- 7;	4R7	06	2,025,397:00:0		
93	240	12:59:31.000	IDUNRTURXM02+		-----STOP-------		4R7	06	: :		
93	240	12:59:36.333	117JH11A	CSMOS	GE	***** GROUP END CSMOS	4R7	06	2,025,397:14:0		
93	240	12:59:47.000	175JH422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R7	06	2,025,397:30:0		
93	240	12:59:47.000		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *5243 +/- 7;	4R7	06	2,025,397:30:0		
93	240	12:59:48.200		DMS:	*READY	RDY, TRACK 1, FWD, TIC *5244 +/- 7;	4R7	06	2,025,397:31:8		
93	240	13:00:27.666	116ID4A	7STRP	-0.002,0.00001,0	Slew =0,1.3	4R7	06	2,025,398:00:0		
93	240	13:01:27.666	175IE422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R7	06	2,025,398:90:0		
93	240	13:01:27.666		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 5244 +/- 7;	4R7	06	2,025,398:90:0		
93	240	13:01:28.333	176IE6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R7	06	2,025,399:00:0		
93	240	13:01:31.666		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *5251 +/- 7;	4R7	06	2,025,399:05:0		
93	240	13:04:25.666	128JG149A131A4A	37IOP	5,2	Short Map, Grating Start Position =2	4R5	02	2,025,401:84:0		
93	240	13:04:30.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *5879 +/- 7;	4R5	02	2,025,402:00:0		
93	240	13:04:30.333	175IE422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,402:00:0		
93	240	13:04:31.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *5880 +/- 8;	4R5	02	2,025,402:01:8		
93	240	13:05:21.666	117JI	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,402:77:0		
93	240	13:05:26.333	128JG149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R5	02	2,025,402:84:0		
93	240	13:05:31.000	117JI105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.06	4R5	02	2,025,403:00:0		
93	240	13:05:31.000	176JI6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,403:00:0		
93	240	13:05:35.000	IDUNRT90FM02+		-----START------		4R5	02	: :		
93	240	13:05:36.333	117JI105A106B4A	7STRP	-0.0025,0.0,0,0,	Slew =,1.25	4R5	02	2,025,403:08:0		
93	240	13:05:37.000		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 5880 +/- 8;	4R5	02	2,025,403:09:0		
93	240	13:05:37.000	175JI422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,403:09:0		
93	240	13:05:41.000		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *5881 +/- 8;	4R5	02	2,025,403:15:0		
93	240	13:05:43.000	117JI105A106B4B	7STRP	0.00475,0.0,0,0,	Slew =,0.06	4R5	02	2,025,403:18:0		
93	240	13:07:10.333	117JI11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,404:58:0		
93	240	13:07:18.333	175JI422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,404:70:0		
93	240	13:07:18.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *5967 +/- 8;	4R5	02	2,025,404:70:0		
93	240	13:07:19.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *5968 +/- 8;	4R5	02	2,025,404:71:8		
93	240	13:08:37.000	IDUNRT90FM02+		-----STOP-------		4R5	02	: :		

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	13:15:33.000	128JH149A131A4A	37IOP	5,2	Short Map, Grating Start Position =2	4R5	02	2,025,412:84:0	
93	240	13:16:33.666	128JH149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R5	02	2,025,413:84:0	
93	240	13:16:42.000	IDUNRT15SM04+		-----START------		4R5	02	: :	
93	240	13:16:42.333	117JJ	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,414:06:0	
93	240	13:17:08.333	117JJ105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,414:45:0	
93	240	13:17:13.666	117JJ105A106B4A	7STRP	-0.005,0.0,0,0,0	Slew =0,2.5	4R5	02	2,025,414:53:0	
93	240	13:17:17.666		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 5968 +/- 8;	4R5	02	2,025,414:59:0	
93	240	13:17:17.666	175JJ422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,414:59:0	
93	240	13:17:21.666		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *5969 +/- 9;	4R5	02	2,025,414:65:0	
93	240	13:17:23.666	117JJ105A106B4B	7STRP	0.005,0.00004,0,	Slew =,0.11	4R5	02	2,025,414:68:0	
93	240	13:18:24.333	117JJ11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,415:68:0	
93	240	13:18:29.000	175JJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,415:75:0	
93	240	13:18:29.000		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6029 +/- 9;	4R5	02	2,025,415:75:0	
93	240	13:18:30.200		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6030 +/- 9;	4R5	02	2,025,415:76:8	
93	240	13:20:12.000	IDUNRT15SM04+		-----STOP-------		4R5	02	: :	
93	240	13:23:43.000	116IE4A	7STRP	-0.00227,-0.0000	Slew =0,1.0	4R5	02	2,025,421:00:0	
93	240	13:24:43.000		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 6030 +/- 9;	4R5	02	2,025,421:90:0	
93	240	13:24:43.000	175IF422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R5	02	2,025,421:90:0	
93	240	13:24:43.666	176IF6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R5	02	2,025,422:00:0	
93	240	13:24:47.000		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *6036 +/- 9;	4R5	02	2,025,422:05:0	
93	240	13:25:14.333	175IF422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,422:46:0	
93	240	13:25:14.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6132 +/- 9;	4R5	02	2,025,422:46:0	
93	240	13:25:15.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6133 +/- 9;	4R5	02	2,025,422:47:8	
93	240	13:28:37.000	117JK	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,425:77:0	
93	240	13:28:46.333	117JK105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,426:00:0	
93	240	13:28:46.333	176JK6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,426:00:0	
93	240	13:28:50.000	IDUNRT30SM03+		-----START------		4R5	02	: :	
93	240	13:28:51.666	117JK105A106B4A	7STRP	-0.0023,0.0,0,0,	Slew =,1.25	4R5	02	2,025,426:08:0	
93	240	13:28:55.666		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 6133 +/- 9;	4R5	02	2,025,426:14:0	
93	240	13:28:55.666	175JK422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,426:14:0	
93	240	13:28:59.666		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *6135 +/- 10;	4R5	02	2,025,426:20:0	
93	240	13:29:01.666	117JK105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,426:23:0	
93	240	13:30:02.333	117JK11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,427:23:0	
93	240	13:30:07.000		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6194 +/- 10;	4R5	02	2,025,427:30:0	
93	240	13:30:07.000	175JK422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,427:30:0	
93	240	13:30:08.200		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6195 +/- 10;	4R5	02	2,025,427:31:8	
93	240	13:31:52.000	IDUNRT30SM03+		-----STOP-------		4R5	02	: :	
93	240	13:39:57.666	117JL	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,437:06:0	
93	240	13:39:58.000	IDUNRT15SM05+		-----START------		4R5	02	: :	
93	240	13:40:23.666	117JL105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,437:45:0	
93	240	13:40:29.000	117JL105A106B4A	7STRP	-0.00475,0.0,0,0	Slew =0,2.5	4R5	02	2,025,437:53:0	
93	240	13:40:33.000		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 6195 +/- 10;	4R5	02	2,025,437:59:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	13:40:33.000	175JL422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,437:59:0	
93	240	13:40:37.000		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *6196 +/- 10;	4R5	02	2,025,437:65:0	
93	240	13:40:39.000	117JL105A106B4B	7STRP	0.005,0.0,0,0,0,	Slew =,0.11	4R5	02	2,025,437:68:0	
93	240	13:41:39.666	117JL11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,438:68:0	
93	240	13:41:44.333		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6255 +/- 10;	4R5	02	2,025,438:75:0	
93	240	13:41:44.333	175JL422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,438:75:0	
93	240	13:41:45.533		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6256 +/- 11;	4R5	02	2,025,438:76:8	
93	240	13:43:27.000	IDUNRT15SM05+		-----STOP-------		4R5	02	: :	
93	240	13:46:58.266	116IF4A	7STRP	-0.00247,0.00001	Slew =0,1.0	4R5	02	2,025,444:00:0	
93	240	13:47:58.266		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 6256 +/- 11;	4R5	02	2,025,444:90:0	
93	240	13:47:58.266	175IG422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R5	02	2,025,444:90:0	
93	240	13:47:58.933	176IG6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R5	02	2,025,445:00:0	
93	240	13:48:02.266		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *6263 +/- 11;	4R5	02	2,025,445:05:0	
93	240	13:48:29.600		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6359 +/- 11;	4R5	02	2,025,445:46:0	
93	240	13:48:29.600	175IG422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,445:46:0	
93	240	13:48:30.800		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6360 +/- 11;	4R5	02	2,025,445:47:8	
93	240	13:51:52.266	117JM	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,448:77:0	
93	240	13:52:01.600	117JM105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,449:00:0	
93	240	13:52:01.600	176JM6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,449:00:0	
93	240	13:52:06.000	IDUNRT30SM04+		-----START------		4R5	02	: :	
93	240	13:52:06.933	117JM105A106B4A	7STRP	-0.0024,0.0,0,0,	Slew =,1.25	4R5	02	2,025,449:08:0	
93	240	13:52:10.933	175JM422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,449:14:0	
93	240	13:52:10.933		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 6360 +/- 11;	4R5	02	2,025,449:14:0	
93	240	13:52:14.933		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *6362 +/- 12;	4R5	02	2,025,449:20:0	
93	240	13:52:16.933	117JM105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,449:23:0	
93	240	13:53:17.600	117JM11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,450:23:0	
93	240	13:53:22.266	175JM422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,450:30:0	
93	240	13:53:22.266		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6421 +/- 12;	4R5	02	2,025,450:30:0	
93	240	13:53:23.466		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6422 +/- 12;	4R5	02	2,025,450:31:8	
93	240	13:55:08.000	IDUNRT30SM04+		-----STOP-------		4R5	02	: :	
93	240	14:03:12.933	117JN	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,460:06:0	
93	240	14:03:13.000	IDUNRT15SM06+		-----START------		4R5	02	: :	
93	240	14:03:38.933	117JN105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,460:45:0	
93	240	14:03:44.266	117JN105A106B4A	7STRP	-0.005,0.0,0,0,0	Slew =0,2.5	4R5	02	2,025,460:53:0	
93	240	14:03:48.266	175JN422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,460:59:0	
93	240	14:03:48.266		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 6422 +/- 12;	4R5	02	2,025,460:59:0	
93	240	14:03:52.266		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *6423 +/- 12;	4R5	02	2,025,460:65:0	
93	240	14:03:54.266	117JN105A106B4B	7STRP	0.005,0.0,0,0,0,	Slew =,0.11	4R5	02	2,025,460:68:0	
93	240	14:04:54.933	117JN11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,461:68:0	
93	240	14:04:59.600	175JN422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,461:75:0	
93	240	14:04:59.600		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6482 +/- 12;	4R5	02	2,025,461:75:0	
93	240	14:05:00.800		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6483 +/- 12;	4R5	02	2,025,461:76:8	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	14:06:42.000	IDUNRT15SM06+		-----STOP-------		4R5	02	:	:
93	240	14:07:06.933	128JI149A131A4A	37IOP	7,6	Fixed Map, Grating Start Position =6	4R7	06	2,025,463:84:0	
93	240	14:07:16.000	IDUSROTATI02*		-----STOP-------		4R7	06	:	:
93	240	14:07:40.933	165JA4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	4R7	06	2,025,464:44:0	
93	240	14:07:41.600	165JA4B	7SCAN	NORM,192.158998,	Check S/P Position	4R7	06	2,025,464:45:0	
93	240	14:08:02.933	117JO	CSMOS	GS	***** GROUP START CSMOS	4R7	06	2,025,464:77:0	
93	240	14:08:07.600	128JI149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R7	06	2,025,464:84:0	
93	240	14:08:08.266	175JO422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R7	06	2,025,464:85:0	
93	240	14:08:08.266		DMS:	*RUNUP	R28, TRACK 1, FWD, TIC 6483 +/- 12;	4R7	06	2,025,464:85:0	
93	240	14:08:10.933	165JA4C	7VECT		Inert vect update UTC	4R7	06	2,025,464:89:0	
93	240	14:08:11.600	165JA4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	4R7	06	2,025,464:90:0	
93	240	14:08:12.266		DMS:	*RECORD	R28, TRACK 1, FWD, TIC *6485 +/- 13;	4R7	06	2,025,465:00:0	
93	240	14:08:12.266	117JO105A106A4A	7STRP	0.004,0.0,0,0,0,	Slew =,0.76	4R7	06	2,025,465:00:0	
93	240	14:08:12.266	176JO6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R7	06	2,025,465:00:0	
93	240	14:08:16.000	IDUSROTATI03*		-----START------		4R7	06	:	:
93	240	14:08:16.000	IDUNRTURXM03+		-----START------		4R7	06	:	:
93	240	14:08:21.600	117JO11A	CSMOS	GE	***** GROUP END CSMOS	4R7	06	2,025,465:14:0	
93	240	14:08:32.266	175JO422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R7	06	2,025,465:30:0	
93	240	14:08:32.266		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *6502 +/- 13;	4R7	06	2,025,465:30:0	
93	240	14:08:33.466		DMS:	*READY	RDY, TRACK 1, FWD, TIC *6503 +/- 13;	4R7	06	2,025,465:31:8	
93	240	14:10:13.600	116IG4A	7STRP	-0.002,0.00001,0	Slew =0,1.0	4R7	06	2,025,467:00:0	
93	240	14:10:18.000	IDUNRTURXM03+		-----STOP-------		4R7	06	:	:
93	240	14:11:13.600	175IH422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R7	06	2,025,467:90:0	
93	240	14:11:13.600		DMS:	*RUNUP	R115, TRACK 1, FWD, TIC 6503 +/- 13;	4R7	06	2,025,467:90:0	
93	240	14:11:14.266	176IH6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R7	06	2,025,468:00:0	
93	240	14:11:17.600		DMS:	*RECORD	R115, TRACK 1, FWD, TIC *6510 +/- 13;	4R7	06	2,025,468:05:0	
93	240	14:14:11.600	128JJ149A131A4A	37IOP	1,0	Full Map, Grating Start Position =0	4R1	00	2,025,470:84:0	
93	240	14:14:16.266		DMS:	*RUNDOWN	RDY, TRACK 1, FWD, TIC *7138 +/- 13;	4R1	00	2,025,471:00:0	
93	240	14:14:16.266	175IH422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R1	00	2,025,471:00:0	
93	240	14:14:17.466		DMS:	*READY	RDY, TRACK 1, FWD, TIC *7139 +/- 14;	4R1	00	2,025,471:01:8	
93	240	14:14:20.266	20ET6A	6DMSC	RDY,2	DMS Control Tape stop	4R1	00	2,025,471:06:0	
93	240	14:14:20.266		DMS:	READY	RDY, TRACK *2, *REV, TIC 7139 +/- 14;	4R1	00	2,025,471:06:0	
93	240	14:15:07.600	117JP	CSMOS	GS	***** GROUP START CSMOS	4R1	00	2,025,471:77:0	
93	240	14:15:12.266	128JJ149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R1	00	2,025,471:84:0	
93	240	14:15:16.933	117JP105A106A4A	7STRP	0.0001,0.0,0,0,0	Slew =,0.06	4R1	00	2,025,472:00:0	
93	240	14:15:16.933	176JP6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R1	00	2,025,472:00:0	
93	240	14:15:21.000	IDUNRT90FM03+		-----START------		4R1	00	:	:
93	240	14:15:22.266	117JP105A106B4A	7STRP	-0.002,0.0,0,0,0	Slew =,1.01	4R1	00	2,025,472:08:0	
93	240	14:15:22.933	175JP422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R1	00	2,025,472:09:0	
93	240	14:15:22.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 7139 +/- 14;	4R1	00	2,025,472:09:0	
93	240	14:15:26.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *7137 +/- 14;	4R1	00	2,025,472:15:0	
93	240	14:15:28.933	117JP105A106B4B	7STRP	0.004,0.0,0,0,0,	Slew =,0.06	4R1	00	2,025,472:18:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	14:17:09.600	117JP11A	CSMOS	GE	***** GROUP END CSMOS	4R1	00	2,025,473	78	0
93	240	14:17:20.933	175JP422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R1	00	2,025,474	04	0
93	240	14:17:20.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *7037 +/- 14;	4R1	00	2,025,474	04	0
93	240	14:17:22.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *7036 +/- 14;	4R1	00	2,025,474	05	8
93	240	14:18:23.000	IDUNRT90FM03+		-----STOP-------		4R1	00		:	:
93	240	14:25:18.933	128JK149A131A4A	37IOP	5,2	Short Map, Grating Start Position =2	4R5	02	2,025,481	84	0
93	240	14:26:19.600	128JK149A131B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R5	02	2,025,482	84	0
93	240	14:26:28.000	IDUNRT15SM07+		-----START------		4R5	02		:	:
93	240	14:26:28.266	117JQ	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,483	06	0
93	240	14:26:54.266	117JQ105A106A4A	7STRP	0.0001,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,483	45	0
93	240	14:26:59.600	117JQ105A106B4A	7STRP	-0.004,0.0,0,0,0	Slew =,1.25	4R5	02	2,025,483	53	0
93	240	14:27:03.600		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 7036 +/- 14;	4R5	02	2,025,483	59	0
93	240	14:27:03.600	175JQ422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,483	59	0
93	240	14:27:07.600		DMS:	*RECORD	R28, TRACK 2, REV, TIC *7035 +/- 15;	4R5	02	2,025,483	65	0
93	240	14:27:09.600	117JQ105A106B4B	7STRP	0.004,0.0,0,0,0,	Slew =,0.11	4R5	02	2,025,483	68	0
93	240	14:28:23.600	117JQ11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,484	88	0
93	240	14:28:28.266	175JQ422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,485	04	0
93	240	14:28:28.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *6964 +/- 15;	4R5	02	2,025,485	04	0
93	240	14:28:29.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *6963 +/- 15;	4R5	02	2,025,485	05	8
93	240	14:29:58.000	IDUNRT15SM07+		-----STOP-------		4R5	02		:	:
93	240	14:33:28.933	116IH4A	7STRP	-0.002201,0.0,0,	Slew =,1.01	4R5	02	2,025,490	00	0
93	240	14:34:28.933		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 6963 +/- 15;	4R5	02	2,025,490	90	0
93	240	14:34:28.933	175II422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R5	02	2,025,490	90	0
93	240	14:34:29.600	176II6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R5	02	2,025,491	00	0
93	240	14:34:32.933		DMS:	*RECORD	R115, TRACK 2, REV, TIC *6956 +/- 15;	4R5	02	2,025,491	05	0
93	240	14:37:01.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *6434 +/- 15;	4R5	02	2,025,493	46	0
93	240	14:37:01.600	175II422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,493	46	0
93	240	14:37:02.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *6433 +/- 15;	4R5	02	2,025,493	47	8
93	240	14:38:22.933	117JR	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,494	77	0
93	240	14:38:32.266	117JR105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,495	00	0
93	240	14:38:32.266	176JR6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,495	00	0
93	240	14:38:36.000	IDUNRT30SM05+		-----START------		4R5	02		:	:
93	240	14:38:37.600	117JR105A106B4A	7STRP	-0.00225,0.0,0,0	Slew =,1.25	4R5	02	2,025,495	08	0
93	240	14:38:41.600	175JR422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,495	14	0
93	240	14:38:41.600		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 6433 +/- 15;	4R5	02	2,025,495	14	0
93	240	14:38:45.600		DMS:	*RECORD	R28, TRACK 2, REV, TIC *6431 +/- 16;	4R5	02	2,025,495	20	0
93	240	14:38:47.600	117JR105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,495	23	0
93	240	14:39:48.266	117JR11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,496	23	0
93	240	14:39:52.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *6372 +/- 16;	4R5	02	2,025,496	30	0
93	240	14:39:52.933	175JR422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,496	30	0
93	240	14:39:54.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *6371 +/- 16;	4R5	02	2,025,496	31	8
93	240	14:41:38.000	IDUNRT30SM05+		-----STOP-------		4R5	02		:	:

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	14:49:43.600	117JS	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,506	06:0	
93	240	14:49:44.000	IDUNRT15SM08+		-----START------		4R5	02	:	:	
93	240	14:50:09.600	117JS105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,506	45:0	
93	240	14:50:14.933	117JS105A106B4A	7STRP	-0.0045,0.0,0,0,	Slew =0,2.5	4R5	02	2,025,506	53:0	
93	240	14:50:18.933	175JS422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,506	59:0	
93	240	14:50:18.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 6371 +/- 16;	4R5	02	2,025,506	59:0	
93	240	14:50:22.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *6370 +/- 16;	4R5	02	2,025,506	65:0	
93	240	14:50:24.933	117JS105A106B4B	7STRP	0.00425,0.00004,	Slew =,0.11	4R5	02	2,025,506	68:0	
93	240	14:51:25.600	117JS11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,507	68:0	
93	240	14:51:30.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *6310 +/- 16;	4R5	02	2,025,507	75:0	
93	240	14:51:30.266	175JS422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,507	75:0	
93	240	14:51:31.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *6309 +/- 17;	4R5	02	2,025,507	76:8	
93	240	14:53:13.000	IDUNRT15SM08+		-----STOP-------		4R5	02	:	:	
93	240	14:56:44.266	116II4A	7STRP	-0.002021,-0.000	Slew =0,1.0	4R5	02	2,025,513	00:0	
93	240	14:57:44.266	175IJ422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	4R5	02	2,025,513	90:0	
93	240	14:57:44.266		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 6309 +/- 17;	4R5	02	2,025,513	90:0	
93	240	14:57:44.933	176IJ6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	4R5	02	2,025,514	00:0	
93	240	14:57:48.266		DMS:	*RECORD	R115, TRACK 2, REV, TIC *6303 +/- 17;	4R5	02	2,025,514	05:0	
93	240	15:00:16.933	175IJ422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,516	46:0	
93	240	15:00:16.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *5780 +/- 17;	4R5	02	2,025,516	46:0	
93	240	15:00:18.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *5779 +/- 17;	4R5	02	2,025,516	47:8	
93	240	15:01:38.266	117JT	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,517	77:0	
93	240	15:01:47.600	117JT105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,518	00:0	
93	240	15:01:47.600	176JT6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R5	02	2,025,518	00:0	
93	240	15:01:52.000	IDUNRT30SM06+		-----START------		4R5	02	:	:	
93	240	15:01:52.933	117JT105A106B4A	7STRP	-0.00225,0.0,0,0	Slew =,1.25	4R5	02	2,025,518	08:0	
93	240	15:01:56.933	175JT422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,518	14:0	
93	240	15:01:56.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 5779 +/- 17;	4R5	02	2,025,518	14:0	
93	240	15:02:00.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *5778 +/- 18;	4R5	02	2,025,518	20:0	
93	240	15:02:02.933	117JT105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,518	23:0	
93	240	15:03:03.600	117JT11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,519	23:0	
93	240	15:03:08.266	175JT422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,519	30:0	
93	240	15:03:08.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *5719 +/- 18;	4R5	02	2,025,519	30:0	
93	240	15:03:09.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *5718 +/- 18;	4R5	02	2,025,519	31:8	
93	240	15:04:54.000	IDUNRT30SM06+		-----STOP-------		4R5	02	:	:	
93	240	15:12:58.933	117JU	CSMOS	GS	***** GROUP START CSMOS	4R5	02	2,025,529	06:0	
93	240	15:12:59.000	IDUNRT15SM09+		-----START------		4R5	02	:	:	
93	240	15:13:24.933	117JU105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	4R5	02	2,025,529	45:0	
93	240	15:13:30.266	117JU105A106B4A	7STRP	-0.0045,0.0,0,0,	Slew =0,2.5	4R5	02	2,025,529	53:0	
93	240	15:13:34.266	175JU422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R5	02	2,025,529	59:0	
93	240	15:13:34.266		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 5718 +/- 18;	4R5	02	2,025,529	59:0	
93	240	15:13:38.266		DMS:	*RECORD	R28, TRACK 2, REV, TIC *5716 +/- 18;	4R5	02	2,025,529	65:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	15:13:40.266	117JU105A106B4B	7STRP	0.0045,0.0,0,0,0	Slew =,0.11	4R5	02	2,025,529	68	0
93	240	15:14:40.933	117JU11A	CSMOS	GE	***** GROUP END CSMOS	4R5	02	2,025,530	68	0
93	240	15:14:45.600	175JU422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R5	02	2,025,530	75	0
93	240	15:14:45.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *5657 +/- 18;	4R5	02	2,025,530	75	0
93	240	15:14:46.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *5656 +/- 18;	4R5	02	2,025,530	76	8
93	240	15:16:28.000	IDUNRT15SM09+		-----STOP-------		4R5	02		:	:
93	240	15:17:02.000	IDUSROTATI03*		-----STOP-------		4R5	02		:	:
93	240	15:17:53.600	128JL149A131A4A	37IOP	7,6	Fixed Map, Grating Start Position =6	4R7	06	2,025,533	84	0
93	240	15:18:27.600	165JB4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	4R7	06	2,025,534	44	0
93	240	15:18:28.266	165JB4B	7SCAN	NORM,192.276999,	Check S/P Position	4R7	06	2,025,534	45	0
93	240	15:18:49.600	117JV	CSMOS	GS	***** GROUP START CSMOS	4R7	06	2,025,534	77	0
93	240	15:18:54.266	128JL149A131B4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R7	06	2,025,534	84	0
93	240	15:18:54.933	175JV422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R7	06	2,025,534	85	0
93	240	15:18:54.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 5656 +/- 18;	3R7	06	2,025,534	85	0
93	240	15:18:57.600	165JB4C	7VECT		Inert vect update UTC	3R7	06	2,025,534	89	0
93	240	15:18:58.266	165JB4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R7	06	2,025,534	90	0
93	240	15:18:58.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *5655 +/- 19;	3R7	06	2,025,535	00	0
93	240	15:18:58.933	176JV6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R7	06	2,025,535	00	0
93	240	15:18:58.933	117JV105A106A4A	7STRP	0.0045,0.0,0,0,0	Slew =,0.76	3R7	06	2,025,535	00	0
93	240	15:19:03.000	IDUSROTATI04*		-----START------		3R7	06		:	:
93	240	15:19:03.000	IDUNRTURXM04+		-----START------		3R7	06		:	:
93	240	15:19:10.933	117JV11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06	2,025,535	18	0
93	240	15:19:18.933	175JV422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R7	06	2,025,535	30	0
93	240	15:19:18.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *5637 +/- 19;	3R7	06	2,025,535	30	0
93	240	15:19:20.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *5636 +/- 19;	3R7	06	2,025,535	31	8
93	240	15:19:59.600	116IJ4A	7STRP	-0.0025,0.0,0,0,	Slew =,1.31	3R7	06	2,025,536	00	0
93	240	15:20:04.000	IDUNRTURXM04+		-----STOP-------		3R7	06		:	:
93	240	15:20:59.600		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 5636 +/- 19;	3R7	06	2,025,536	90	0
93	240	15:20:59.600	175IK422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R7	06	2,025,536	90	0
93	240	15:21:00.266	176IK6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R7	06	2,025,537	00	0
93	240	15:21:03.600		DMS:	*RECORD	R115, TRACK 2, REV, TIC *5629 +/- 19;	3R7	06	2,025,537	05	0
93	240	15:23:57.600	128JM149A131A4A	37IOP	1,0	Full Map, Grating Start Position =0	3R1	00	2,025,539	84	0
93	240	15:24:02.266	175IK422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R1	00	2,025,540	00	0
93	240	15:24:02.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *5001 +/- 19;	3R1	00	2,025,540	00	0
93	240	15:24:03.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *5000 +/- 20;	3R1	00	2,025,540	01	8
93	240	15:24:53.600	117JW	CSMOS	GS	***** GROUP START CSMOS	3R1	00	2,025,540	77	0
93	240	15:24:58.266	128JM149A131B4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R1	00	2,025,540	84	0
93	240	15:25:02.933	117JW105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.06	3R1	00	2,025,541	00	0
93	240	15:25:02.933	176JX6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R1	00	2,025,541	00	0
93	240	15:25:07.000	IDUNRT90FM04+		-----START------		3R1	00		:	:
93	240	15:25:08.266	117JW105A106B4A	7STRP	-0.0025,0.0,0,0,	Slew =,1.25	3R1	00	2,025,541	08	0
93	240	15:25:08.933	175JX422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R1	00	2,025,541	09	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	15:25:08.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 5000 +/- 20;	3R1	00	2,025,541:09:0		
93	240	15:25:12.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *4999 +/- 20;	3R1	00	2,025,541:15:0		
93	240	15:25:14.933	117JW105A106B4B	7STRP	0.00524,0.0,0,0,	Slew =,0.06	3R1	00	2,025,541:18:0		
93	240	15:27:16.266	117JW11A	CSMOS	GE	***** GROUP END CSMOS	3R1	00	2,025,543:18:0		
93	240	15:27:24.266	175JX422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R1	00	2,025,543:30:0		
93	240	15:27:24.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *4884 +/- 20;	3R1	00	2,025,543:30:0		
93	240	15:27:25.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *4883 +/- 20;	3R1	00	2,025,543:31:8		
93	240	15:28:09.000	IDUNRT90FM04+		-----STOP-------		3R1	00	: :		
93	240	15:31:06.933	116IN4A	7STRP	-0.00275,0.00000	Slew =0,1.3	3R1	00	2,025,547:00:0		
93	240	15:32:06.933	175IL422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R1	00	2,025,547:90:0		
93	240	15:32:06.933		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 4883 +/- 20;	3R1	00	2,025,547:90:0		
93	240	15:32:07.600	176IL6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R1	00	2,025,548:00:0		
93	240	15:32:10.933		DMS:	*RECORD	R115, TRACK 2, REV, TIC *4876 +/- 21;	3R1	00	2,025,548:05:0		
93	240	15:35:04.933	128JN149A131A4A	37IOP	5,2	Short Map, Grating Start Position =2	3R5	02	2,025,550:84:0		
93	240	15:35:09.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *4248 +/- 21;	3R5	02	2,025,551:00:0		
93	240	15:35:09.600	175IL422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,551:00:0		
93	240	15:35:10.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *4247 +/- 21;	3R5	02	2,025,551:01:8		
93	240	15:36:05.600	128JN149A131B4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R5	02	2,025,551:84:0		
93	240	15:36:10.266	176JY6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R5	02	2,025,552:00:0		
93	240	15:36:14.000	IDUNRT15SM10+		-----START------		3R5	02	: :		
93	240	15:36:14.266	117JX	CSMOS	GS	***** GROUP START CSMOS	3R5	02	2,025,552:06:0		
93	240	15:36:40.266	117JX105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R5	02	2,025,552:45:0		
93	240	15:36:45.600	117JX105A106B4A	7STRP	-0.00263,0.0,0,0	Slew =,1.31	3R5	02	2,025,552:53:0		
93	240	15:36:49.600		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 4247 +/- 21;	3R5	02	2,025,552:59:0		
93	240	15:36:49.600	175JY422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R5	02	2,025,552:59:0		
93	240	15:36:53.600		DMS:	*RECORD	R28, TRACK 2, REV, TIC *4246 +/- 21;	3R5	02	2,025,552:65:0		
93	240	15:36:55.600	117JX105A106B4B	7STRP	0.00525,0.0,0,0,	Slew =,0.11	3R5	02	2,025,552:68:0		
93	240	15:38:16.266	117JX11A	CSMOS	GE	***** GROUP END CSMOS	3R5	02	2,025,554:07:0		
93	240	15:38:20.933	175JY422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,554:14:0		
93	240	15:38:20.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *4169 +/- 21;	3R5	02	2,025,554:14:0		
93	240	15:38:22.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *4168 +/- 21;	3R5	02	2,025,554:15:8		
93	240	15:39:44.000	IDUNRT15SM10+		-----STOP-------		3R5	02	: :		
93	240	15:43:14.933	116IK4A	7STRP	-0.002631,0.0000	Slew =0,1.0	3R5	02	2,025,559:00:0		
93	240	15:44:14.933	175IM422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R5	02	2,025,559:90:0		
93	240	15:44:14.933		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 4168 +/- 21;	3R5	02	2,025,559:90:0		
93	240	15:44:15.600	176IM6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R5	02	2,025,560:00:0		
93	240	15:44:18.933		DMS:	*RECORD	R115, TRACK 2, REV, TIC *4161 +/- 22;	3R5	02	2,025,560:05:0		
93	240	15:47:17.600	175IM422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,563:00:0		
93	240	15:47:17.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *3533 +/- 22;	3R5	02	2,025,563:00:0		
93	240	15:47:18.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *3532 +/- 22;	3R5	02	2,025,563:01:8		
93	240	15:48:08.933	117JY	CSMOS	GS	***** GROUP START CSMOS	3R5	02	2,025,563:77:0		
93	240	15:48:18.266	117JY105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R5	02	2,025,564:00:0		

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	15:48:18.266	176JZ6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R5	02	2,025,564:00:0	
93	240	15:48:22.000	IDUNRT30SM07+		-----START------		3R5	02	: :	
93	240	15:48:23.600	117JY105A106B4A	7STRP	-0.0027,0.0,0,0,	Slew =,1.25	3R5	02	2,025,564:08:0	
93	240	15:48:27.600	175JZ422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R5	02	2,025,564:14:0	
93	240	15:48:27.600		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 3532 +/- 22;	3R5	02	2,025,564:14:0	
93	240	15:48:31.600		DMS:	*RECORD	R28, TRACK 2, REV, TIC *3531 +/- 22;	3R5	02	2,025,564:20:0	
93	240	15:48:33.600	117JY105A106B4B	7STRP	0.0055,0.0,0,0,0	Slew =,0.11	3R5	02	2,025,564:23:0	
93	240	15:49:40.933	117JY11A	CSMOS	GE	***** GROUP END CSMOS	3R5	02	2,025,565:33:0	
93	240	15:49:45.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *3466 +/- 22;	3R5	02	2,025,565:40:0	
93	240	15:49:45.600	175JZ422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,565:40:0	
93	240	15:49:46.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *3465 +/- 23;	3R5	02	2,025,565:41:8	
93	240	15:51:24.000	IDUNRT30SM07+		-----STOP-------		3R5	02	: :	
93	240	15:54:22.266	116IO4A	7STRP	-0.00281,0.00000	Slew =0,1.3	3R5	02	2,025,570:00:0	
93	240	15:55:22.266	175IN422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R5	02	2,025,570:90:0	
93	240	15:55:22.266		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 3465 +/- 23;	3R5	02	2,025,570:90:0	
93	240	15:55:22.933	176IN6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R5	02	2,025,571:00:0	
93	240	15:55:26.266		DMS:	*RECORD	R115, TRACK 2, REV, TIC *3458 +/- 23;	3R5	02	2,025,571:05:0	
93	240	15:58:24.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *2830 +/- 23;	3R5	02	2,025,574:00:0	
93	240	15:58:24.933	175IN422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,574:00:0	
93	240	15:58:26.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *2829 +/- 23;	3R5	02	2,025,574:01:8	
93	240	15:59:25.600	176EA6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R5	02	2,025,575:00:0	
93	240	15:59:29.600	117JZ	CSMOS	GS	***** GROUP START CSMOS	3R5	02	2,025,575:06:0	
93	240	15:59:30.000	IDUNRT15SM11+		-----START------		3R5	02	: :	
93	240	15:59:55.600	117JZ105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R5	02	2,025,575:45:0	
93	240	16:00:00.933	117JZ105A106B4A	7STRP	-0.003,0.0,0,0,0	Slew =,1.31	3R5	02	2,025,575:53:0	
93	240	16:00:04.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 2829 +/- 23;	3R5	02	2,025,575:59:0	
93	240	16:00:04.933	175EA422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R5	02	2,025,575:59:0	
93	240	16:00:08.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *2828 +/- 24;	3R5	02	2,025,575:65:0	
93	240	16:00:10.933	117JZ105A106B4B	7STRP	0.006,0.0,0,0,0,	Slew =,0.11	3R5	02	2,025,575:68:0	
93	240	16:01:18.266	117JZ11A	CSMOS	GE	***** GROUP END CSMOS	3R5	02	2,025,576:78:0	
93	240	16:01:22.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *2763 +/- 24;	3R5	02	2,025,576:85:0	
93	240	16:01:22.933	175EA422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,576:85:0	
93	240	16:01:24.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *2762 +/- 24;	3R5	02	2,025,576:86:8	
93	240	16:02:59.000	IDUNRT15SM11+		-----STOP-------		3R5	02	: :	
93	240	16:06:30.266	116IL4A	7STRP	-0.00301,0.00000	Slew =0,1.0	3R5	02	2,025,582:00:0	
93	240	16:07:30.266		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 2762 +/- 24;	3R5	02	2,025,582:90:0	
93	240	16:07:30.266	175IO422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R5	02	2,025,582:90:0	
93	240	16:07:30.933	176IO6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R5	02	2,025,583:00:0	
93	240	16:07:34.266		DMS:	*RECORD	R115, TRACK 2, REV, TIC *2755 +/- 24;	3R5	02	2,025,583:05:0	
93	240	16:10:32.933	175IO422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,586:00:0	
93	240	16:10:32.933		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *2127 +/- 24;	3R5	02	2,025,586:00:0	
93	240	16:10:34.133		DMS:	*READY	RDY, TRACK 2, REV, TIC *2126 +/- 24;	3R5	02	2,025,586:01:8	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	16:11:24.266	117EA	CSMOS	GS	***** GROUP START CSMOS	3R5	02	2,025,586:77:0	
93	240	16:11:33.600	176EB6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R5	02	2,025,587:00:0	
93	240	16:11:33.600	117EA105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R5	02	2,025,587:00:0	
93	240	16:11:38.000	IDUNRT30SM08+		-----START------		3R5	02	: :	
93	240	16:11:38.933	117EA105A106B4A	7STRP	-0.00275,0.0,0,0	Slew =,1.25	3R5	02	2,025,587:08:0	
93	240	16:11:42.933	175EB422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R5	02	2,025,587:14:0	
93	240	16:11:42.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 2126 +/- 24;	3R5	02	2,025,587:14:0	
93	240	16:11:46.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC *2125 +/- 25;	3R5	02	2,025,587:20:0	
93	240	16:11:48.933	117EA105A106B4B	7STRP	0.00575,0.0,0,0,	Slew =,0.11	3R5	02	2,025,587:23:0	
93	240	16:13:02.933	117EA11A	CSMOS	GE	***** GROUP END CSMOS	3R5	02	2,025,588:43:0	
93	240	16:13:07.600	175EB422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,588:50:0	
93	240	16:13:07.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *2054 +/- 25;	3R5	02	2,025,588:50:0	
93	240	16:13:08.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *2053 +/- 25;	3R5	02	2,025,588:51:8	
93	240	16:14:40.000	IDUNRT30SM08+		-----STOP-------		3R5	02	: :	
93	240	16:17:37.600	116IP4A	7STRP	-0.00301,0.00000	Slew =0,1.3	3R5	02	2,025,593:00:0	
93	240	16:18:37.600		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 2053 +/- 25;	3R5	02	2,025,593:90:0	
93	240	16:18:37.600	175IP422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R5	02	2,025,593:90:0	
93	240	16:18:38.266	176IP6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R5	02	2,025,594:00:0	
93	240	16:18:41.600		DMS:	*RECORD	R115, TRACK 2, REV, TIC *2046 +/- 25;	3R5	02	2,025,594:05:0	
93	240	16:21:40.266	175IP422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,597:00:0	
93	240	16:21:40.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *1418 +/- 25;	3R5	02	2,025,597:00:0	
93	240	16:21:41.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *1417 +/- 26;	3R5	02	2,025,597:01:8	
93	240	16:22:40.933	176EC6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R5	02	2,025,598:00:0	
93	240	16:22:44.933	117EB	CSMOS	GS	***** GROUP START CSMOS	3R5	02	2,025,598:06:0	
93	240	16:22:45.000	IDUNRT15SM12+		-----START------		3R5	02	: :	
93	240	16:23:10.933	117EB105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R5	02	2,025,598:45:0	
93	240	16:23:16.266	117EB105A106B4A	7STRP	-0.0034,0.0,0,0,	Slew =,1.31	3R5	02	2,025,598:53:0	
93	240	16:23:20.266	175EC422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R5	02	2,025,598:59:0	
93	240	16:23:20.266		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 1417 +/- 26;	3R5	02	2,025,598:59:0	
93	240	16:23:24.266		DMS:	*RECORD	R28, TRACK 2, REV, TIC *1416 +/- 26;	3R5	02	2,025,598:65:0	
93	240	16:23:26.266	117EB105A106B4B	7STRP	0.007,0.0,0,0,0,	Slew =,0.11	3R5	02	2,025,598:68:0	
93	240	16:23:36.933	128JA149A131A4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R5	02	2,025,598:84:0	
93	240	16:24:34.266	117EB11A	CSMOS	GE	***** GROUP END CSMOS	3R5	02	2,025,599:79:0	
93	240	16:24:37.600	128JA149A131B4A	37IOP	3,0	Long Map, Grating Start Position =0	3R3	00	2,025,599:84:0	
93	240	16:24:41.600	175EC422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	00	2,025,599:90:0	
93	240	16:24:41.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *1348 +/- 26;	3R3	00	2,025,599:90:0	
93	240	16:24:42.800		DMS:	*READY	RDY, TRACK 2, REV, TIC *1347 +/- 26;	3R3	00	2,025,600:00:8	
93	240	16:25:16.266	165JC4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R3	00	2,025,600:51:0	
93	240	16:25:16.933	165JC4B	7SCAN	NORM,192.912998,	Check S/P Position	3R3	00	2,025,600:52:0	
93	240	16:25:36.933	117EC	CSMOS	GS	***** GROUP START CSMOS	3R3	00	2,025,600:82:0	
93	240	16:25:42.266	175ED422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R3	00	2,025,600:90:0	
93	240	16:25:42.266		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 1347 +/- 26;	3R3	00	2,025,600:90:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	16:25:42.933	176ED6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R3	00	2,025,601	00	0
93	240	16:25:44.933	165JC4C	7VECT		Inert vect update UTC	3R3	00	2,025,601	03	0
93	240	16:25:45.600	165JC4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R3	00	2,025,601	04	0
93	240	16:25:46.266	117EC105A106A4A	7STRP	0.0063,0.0,0,0,0	Slew =,0.03	3R3	00	2,025,601	05	0
93	240	16:25:46.266		DMS:	*RECORD	R28, TRACK 2, REV, TIC *1345 +/- 27;	3R3	00	2,025,601	05	0
93	240	16:25:47.000	IDUNIDAGLM01+		-----START------		3R3	00		:	:
93	240	16:26:14.000	IDUNRT15SM12+		-----STOP-------		3R3	00		:	:
93	240	16:26:48.000	IDUSROTATI04*		-----STOP-------		3R3	00		:	:
93	240	16:29:32.266	117EC11A	CSMOS	GE	***** GROUP END CSMOS	3R3	00	2,025,604	71	0
93	240	16:29:34.933	116IM4A	7STRP	-0.003303,0.0000	Slew =0,1.0	3R3	00	2,025,604	75	0
93	240	16:29:38.266		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC *1141 +/- 27;	3R3	00	2,025,604	80	0
93	240	16:29:38.266	175ED422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	00	2,025,604	80	0
93	240	16:29:39.466		DMS:	*READY	RDY, TRACK 2, REV, TIC *1140 +/- 27;	3R3	00	2,025,604	81	8
93	240	16:29:44.933	175IQ422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R3	00	2,025,604	90	0
93	240	16:29:44.933		DMS:	*RUNUP	R115, TRACK 2, REV, TIC 1140 +/- 27;	3R3	00	2,025,604	90	0
93	240	16:29:45.600	176IQ6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R3	00	2,025,605	00	0
93	240	16:29:48.933		DMS:	*RECORD	R115, TRACK 2, REV, TIC *1134 +/- 27;	3R3	00	2,025,605	05	0
93	240	16:29:50.000	IDUSFINROT01-		-----START------		3R3	00		:	:
93	240	16:30:50.000	IDUNIDAGLM01+		-----STOP-------		3R3	00		:	:
93	240	16:31:50.933	117ED	CSMOS	GS	***** GROUP START CSMOS	3R3	00	2,025,607	06	0
93	240	16:32:39.600	117ED105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.03	3R3	00	2,025,607	79	0
93	240	16:32:45.600	117ED105A106B4A	7STRP	-0.00365,0.0,0,0	Slew =,2.01	3R3	00	2,025,607	88	0
93	240	16:32:47.600	175IQ422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	00	2,025,608	00	0
93	240	16:32:47.600	176EF6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R3	00	2,025,608	00	0
93	240	16:32:47.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC * 506 +/- 27;	3R3	00	2,025,608	00	0
93	240	16:32:48.800		DMS:	*READY	RDY, TRACK 2, REV, TIC * 505 +/- 27;	3R3	00	2,025,608	01	8
93	240	16:32:48.933		DMS:	*RUNUP	R28, TRACK 2, REV, TIC 505 +/- 27;	3R3	00	2,025,608	02	0
93	240	16:32:48.933	175EF422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R3	00	2,025,608	02	0
93	240	16:32:52.000	IDUNIDAFIN01*		-----START------		3R3	00		:	:
93	240	16:32:52.933		DMS:	*RECORD	R28, TRACK 2, REV, TIC * 503 +/- 28;	3R3	00	2,025,608	08	0
93	240	16:32:52.933	117ED105A106B4B	7STRP	0.00795,0.0,0,0,	Slew =,0.03	3R3	00	2,025,608	08	0
93	240	16:33:52.000	IDUSFINROT01-		-----STOP-------		3R3	00		:	:
93	240	16:36:54.266	117IA	CSMOS	GS	***** GROUP START CSMOS	3R3	00	2,025,612	06	0
93	240	16:37:33.600	117ED11A	CSMOS	GE	***** GROUP END CSMOS	3R3	00	2,025,612	65	0
93	240	16:37:34.266	165IC4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R3	00	2,025,612	66	0
93	240	16:37:34.933	165IC4B	7SCAN	NORM,193.872,8.2	Check S/P Position	3R3	00	2,025,612	67	0
93	240	16:37:35.600	175EF422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R3	00	2,025,612	68	0
93	240	16:37:35.600		DMS:	*RUNDOWN	RDY, TRACK 2, REV, TIC * 255 +/- 28;	3R3	00	2,025,612	68	0
93	240	16:37:36.800		DMS:	*READY	RDY, TRACK 2, REV, TIC * 254 +/- 28;	3R3	00	2,025,612	69	8
93	240	16:37:39.600		DMS:	READY	RDY, TRACK *3, *FWD, TIC 254 +/- 28;	3R3	00	2,025,612	74	0
93	240	16:37:39.600	20EU6A	6DMSC	RDY,3	DMS Control Tape stop	3R3	00	2,025,612	74	0
93	240	16:37:40.266	175IR422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	3R3	00	2,025,612	75	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	16:37:40.266		DMS:	*RUNUP	R403, TRACK 3, FWD, TIC 254 +/- 28;	3R3	00	2,025,612:75:0	
93	240	16:37:40.933	165IC4C	7VECT		Inert vect update UTC	3R3	00	2,025,612:76:0	
93	240	16:37:41.600	165IC4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R3	00	2,025,612:77:0	
93	240	16:37:42.266	176IR6A	6TMCHG	NCGIM4	NO CHANGE / 403.2 KBPS IMAGE + 1/8 NIMS RE	3R3	00	2,025,612:78:0	
93	240	16:37:42.933	117IA105A106A4A	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R3	00	2,025,612:79:0	
93	240	16:37:44.066		DMS:	*RECORD	R403, TRACK 3, FWD, TIC * 276 +/- 31;	3R3	00	2,025,612:80:7	
93	240	16:38:26.000	IDUNIDAFIN01*		-----STOP-------		3R3	00	: :	
93	240	16:38:27.600	117IA105A106B4A	7STRP	-0.0023,0.0029,0	Slew =,4.11	3R3	00	2,025,613:55:0	
93	240	16:38:34.266	117IA105A106B4B	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R3	00	2,025,613:65:0	
93	240	16:39:02.266	117IA105A106C4A	7STRP	0.0052,0.00025,0	Slew =,4.11	3R3	00	2,025,614:16:0	
93	240	16:39:08.933	117IA105A106C4B	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R3	00	2,025,614:26:0	
93	240	16:39:36.933	117IA105A106D4A	7STRP	0.0005,-0.00725,	Slew =,4.11	3R3	00	2,025,614:68:0	
93	240	16:39:43.600	117IA105A106D4B	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R3	00	2,025,614:78:0	
93	240	16:39:56.000	IDUS6COLOR01-		-----START------		3R3	00	: :	
93	240	16:40:11.600	117IA105A106E4A	7STRP	-0.0067,-0.0004,	Slew =,4.11	3R3	00	2,025,615:29:0	
93	240	16:40:18.266	117IA105A106E4B	7STRP	0.00001,0.0,0,0,	Slew =,0.11	3R3	00	2,025,615:39:0	
93	240	16:40:46.266	117IA11A	CSMOS	GE	***** GROUP END CSMOS	3R3	00	2,025,615:81:0	
93	240	16:40:46.266	165JE4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R3	00	2,025,615:81:0	
93	240	16:40:46.933	165JE4B	7SCAN	NORM,194.094,12.	Check S/P Position	3R3	00	2,025,615:82:0	
93	240	16:40:48.266	128JC149A131A4A	37IOP	5,2	Short Map, Grating Start Position =2	3R5	02	2,025,615:84:0	
93	240	16:40:49.600	117EE	CSMOS	GS	***** GROUP START CSMOS	3R5	02	2,025,615:86:0	
93	240	16:40:52.933	175IR422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R5	02	2,025,616:00:0	
93	240	16:40:52.933		DMS:	*RUNDOWN	RDY, TRACK 3, FWD, TIC *2600 +/- 31;	3R5	02	2,025,616:00:0	
93	240	16:40:52.933	176EG6A	6TMCHG	NCGHCM	NO CHANGE / 115.2 comp image + NIMS + PW	3R5	02	2,025,616:00:0	
93	240	16:40:55.733		DMS:	*READY	RDY, TRACK 3, FWD, TIC *2604 +/- 32;	3R5	02	2,025,616:04:2	
93	240	16:40:56.266		DMS:	*RUNUP	R115, TRACK 3, FWD, TIC 2604 +/- 32;	3R5	02	2,025,616:05:0	
93	240	16:40:56.266	175EG422A6A	6DMSC	R115,0	DMS Control Tape runup 115.2kb	3R5	02	2,025,616:05:0	
93	240	16:40:57.000	IDUNIDACHM01*		-----START------		3R5	02	: :	
93	240	16:40:57.600	165JE4C	7VECT		Inert vect update UTC	3R5	02	2,025,616:07:0	
93	240	16:40:58.266	165JE4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R5	02	2,025,616:08:0	
93	240	16:40:58.933	117EE105A106A4A	7STRP	0.014151,0.0,0,0	Slew =,0.11	3R5	02	2,025,616:09:0	
93	240	16:41:00.266		DMS:	*RECORD	R115, TRACK 3, FWD, TIC *2610 +/- 32;	3R5	02	2,025,616:11:0	
93	240	16:43:14.933	117EE105A106B4A	7STRP	-0.013351,-0.010	Slew =,3.96	3R5	02	2,025,618:31:0	
93	240	16:43:28.933	117EE105A106B4B	7STRP	0.017152,0.002,0	Slew =,0.11	3R5	02	2,025,618:52:0	
93	240	16:44:50.933	128IC149A131A4A	37IST	1,2,0,OFF,0,1,2	Chopper ON, Sync, Chopper (Ref)Gain State	3R5	02	2,025,619:84:0	
93	240	16:45:00.000	IDUS6COLOR01-		-----STOP-------		3R5	02	: :	
93	240	16:45:51.600	128IC149A131B4A	37IOP	7,6	Fixed Map, Grating Start Position =6	3R7	06	2,025,620:84:0	
93	240	16:46:00.266	117IB	CSMOS	GS	***** GROUP START CSMOS	3R7	06	2,025,621:06:0	
93	240	16:46:13.600	117EE11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06	2,025,621:26:0	
93	240	16:46:15.600	165ID4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R7	06	2,025,621:29:0	
93	240	16:46:16.266	165ID4B	7SCAN	NORM,196.606998,	Check S/P Position	3R7	06	2,025,621:30:0	
93	240	16:46:23.600		DMS:	*RUNDOWN	RDY, TRACK 3, FWD, TIC *3747 +/- 32;	3R7	06	2,025,621:41:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	16:46:23.600	175EG422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R7	06	2,025,621:41:0		
93	240	16:46:24.800		DMS:	*READY	RDY, TRACK 3, FWD, TIC *3748 +/- 33;	3R7	06	2,025,621:42:8		
93	240	16:46:28.933		DMS:	*RUNUP	R403, TRACK 3, FWD, TIC 3748 +/- 33;	3R7	06	2,025,621:49:0		
93	240	16:46:28.933	175IS422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	3R7	06	2,025,621:49:0		
93	240	16:46:29.600	165ID4C	7VECT		Inert vect update UTC	3R7	06	2,025,621:50:0		
93	240	16:46:30.266	165ID4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R7	06	2,025,621:51:0		
93	240	16:46:30.933	117IB105A106A4A	7STRP	0.014501,-0.001,	Slew =0,0.8	3R7	06	2,025,621:52:0		
93	240	16:46:30.933	176IS6A	6TMCHG	NCGIM4	NO CHANGE / 403.2 KBPS IMAGE + 1/8 NIMS RE	3R7	06	2,025,621:52:0		
93	240	16:46:31.000	IDUNHISPAT01+		-----START------		3R7	06	:	:	
93	240	16:46:31.000	IDUSHIRES 01*		-----START------		3R7	06	:	:	
93	240	16:46:32.733		DMS:	*RECORD	R403, TRACK 3, FWD, TIC *3770 +/- 36;	3R7	06	2,025,621:54:7		
93	240	16:46:52.266	117IB105A106B4A	7STRP	0.005,-0.007,0,0	Slew =0,4.7	3R7	06	2,025,621:84:0		
93	240	16:46:56.933	117IB105A106B4B	7STRP	-0.021103,0.0006	Slew =0,0.8	3R7	06	2,025,622:00:0		
93	240	16:47:01.000	IDUNIDACHM01*		-----STOP-------		3R7	06	:	:	
93	240	16:47:26.933	117IB105A106C4A	7STRP	0.0,-0.0077,0,0,	Slew =0,4.7	3R7	06	2,025,622:45:0		
93	240	16:47:31.600	117IB105A106C4B	7STRP	0.027507,0.001,0	Slew =0,0.8	3R7	06	2,025,622:52:0		
93	240	16:48:10.266	117IB105A106D4A	7STRP	0.003,-0.007,0,0	Slew =0,4.7	3R7	06	2,025,623:19:0		
93	240	16:48:14.933	117IB105A106D4B	7STRP	-0.027007,-0.001	Slew =0,0.8	3R7	06	2,025,623:26:0		
93	240	16:48:53.600	117IB105A106E4A	7STRP	0.0058,-0.007,0,	Slew =0,4.7	3R7	06	2,025,623:84:0		
93	240	16:48:58.266	117IB105A106E4B	7STRP	0.027507,0.0028,	Slew =0,0.8	3R7	06	2,025,624:00:0		
93	240	16:49:36.933	117IB105A106F4A	7STRP	0.003,-0.007,0,0	Slew =0,4.7	3R7	06	2,025,624:58:0		
93	240	16:49:41.600	117IB105A106F4B	7STRP	-0.020003,-0.002	Slew =0,0.8	3R7	06	2,025,624:65:0		
93	240	16:50:11.600	117IB105A106G4A	7STRP	0.0065,-0.0062,0	Slew =0,4.7	3R7	06	2,025,625:19:0		
93	240	16:50:16.266	117IB105A106G4B	7STRP	0.019502,0.003,0	Slew =0,0.8	3R7	06	2,025,625:26:0		
93	240	16:50:44.266	117IB11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06	2,025,625:68:0		
93	240	16:50:44.266	165IE4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R7	06	2,025,625:68:0		
93	240	16:50:44.933	165IE4B	7SCAN	NORM,213.132,68.	Check S/P Position	3R7	06	2,025,625:69:0		
93	240	16:50:50.266	117IC	CSMOS	GS	***** GROUP START CSMOS	3R7	06	2,025,625:77:0		
93	240	16:50:50.933		DMS:	*RUNDOWN	RDY, TRACK 3, FWD, TIC *6947 +/- 36;	3R7	06	2,025,625:78:0		
93	240	16:50:50.933	175IS422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R7	06	2,025,625:78:0		
93	240	16:50:53.733		DMS:	*READY	RDY, TRACK 3, FWD, TIC *6951 +/- 37;	3R7	06	2,025,625:82:2		
93	240	16:50:56.266	20EV6A	6DMSC	RDY,4	DMS Control Tape stop	3R7	06	2,025,625:86:0		
93	240	16:50:56.266		DMS:	READY	RDY, TRACK *4, *REV, TIC 6951 +/- 37;	3R7	06	2,025,625:86:0		
93	240	16:50:57.600		DMS:	*RUNUP	R403, TRACK 4, REV, TIC 6951 +/- 37;	3R7	06	2,025,625:88:0		
93	240	16:50:57.600	175IT422A6A	6DMSC	R403,0	DMS Control Tape runup 403.2kb	3R7	06	2,025,625:88:0		
93	240	16:50:58.266	165IE4C	7VECT		Inert vect update UTC	3R7	06	2,025,625:89:0		
93	240	16:50:58.933	165IE4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R7	06	2,025,625:90:0		
93	240	16:50:59.600	117IC105A106A4A	7STRP	0.002,0.0,0,0,0,	Slew =,0.89	3R7	06	2,025,626:00:0		
93	240	16:51:01.400		DMS:	*RECORD	R403, TRACK 4, REV, TIC *6929 +/- 40;	3R7	06	2,025,626:02:7		
93	240	16:51:04.000	IDUSENCNTR01*		-----START------		3R7	06	:	:	
93	240	16:51:04.000	IDUSHIRES 01*		-----STOP-------		3R7	06	:	:	
93	240	16:51:04.000	IDUNIDACA 01+		-----START------		3R7	06	:	:	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	16:51:04.000	IDUNHISPAT01+		-----STOP-------		3R7	06		:	:
93	240	16:51:04.933	117IC105A106B4A	7STRP	0.012501,-0.002,	Slew =,5.92	3R7	06	2,025,626	08:0	
93	240	16:51:10.266	117IC105A106B4B	7STRP	0.0055,0.0,0,0,0	Slew =,0.89	3R7	06	2,025,626	16:0	
93	240	16:51:18.933	117IC105A106C4A	7STRP	-0.011,-0.008,0,	Slew =,5.92	3R7	06	2,025,626	29:0	
93	240	16:51:27.600	117IC105A106C4B	7STRP	0.020003,-0.0005	Slew =,0.89	3R7	06	2,025,626	42:0	
93	240	16:51:53.600	117IC105A106D4A	7STRP	-0.012001,-0.007	Slew =,5.92	3R7	06	2,025,626	81:0	
93	240	16:52:02.266	117IC105A106D4B	7STRP	0.020003,0.0,0,0	Slew =,0.89	3R7	06	2,025,627	03:0	
93	240	16:52:28.266	117IC105A106E4A	7STRP	-0.012001,-0.007	Slew =,5.92	3R7	06	2,025,627	42:0	
93	240	16:52:36.933	117IC105A106E4B	7STRP	0.013001,-0.0003	Slew =,0.89	3R7	06	2,025,627	55:0	
93	240	16:52:54.266	117IC105A106F4A	7STRP	0.01,-0.007,0,0,	Slew =,5.92	3R7	06	2,025,627	81:0	
93	240	16:53:02.933	117IC105A106F4B	7STRP	0.002,0.0,0,0,0,	Slew =,0.89	3R7	06	2,025,628	03:0	
93	240	16:53:04.000	IDUNIDACA 01+		-----STOP-------		3R7	06		:	:
93	240	16:53:08.266	117IC11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06	2,025,628	11:0	
93	240	16:53:09.600	175IT422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R7	06	2,025,628	13:0	
93	240	16:53:09.600	165LA4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R7	06	2,025,628	13:0	
93	240	16:53:09.600	176MA6A	6TMCHG	ELSLRS	10 BPS TDM / LRS Rec 7.68kb/s	3R7	06	2,025,628	13:0	
93	240	16:53:09.600		DMS:	*RUNDOWN	RDY, TRACK 4, REV, TIC *5352 +/- 40;	3R7	06	2,025,628	13:0	
93	240	16:53:10.266	165LA4B	7SCAN	NORM,355.856998,	Check S/P Position	3R7	06	2,025,628	14:0	
93	240	16:53:12.400		DMS:	*READY	RDY, TRACK 4, REV, TIC *5348 +/- 41;	3R7	06	2,025,628	17:2	
93	240	16:53:12.933	175MA422A6A	6DMSC	R7,0	DMS Control Tape runup 7.68kps	3R7	06	2,025,628	18:0	
93	240	16:53:12.933		DMS:	*RUNUP	R7, TRACK 4, REV, TIC 5348 +/- 41;	3R7	06	2,025,628	18:0	
93	240	16:53:14.400		DMS:	*RECORD	R7, TRACK 4, REV, TIC *5347 +/- 41;	3R7	06	2,025,628	20:2	
93	240	16:53:27.600	117LA	CSMOS	GS	***** GROUP START CSMOS	3R7	06	2,025,628	40:0	
93	240	16:53:35.600	165LA4C	7VECT		Inert vect update UTC	3R7	06	2,025,628	52:0	
93	240	16:53:36.266	165LA4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R7	06	2,025,628	53:0	
93	240	16:53:36.933	117LA105A106A4A	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,628	54:0	
93	240	16:53:47.600	117LA105A106A4B	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,628	70:0	
93	240	16:53:52.266	117LA105A106A4C	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,628	77:0	
93	240	16:54:02.933	117LA105A106A4D	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,629	02:0	
93	240	16:54:07.600	117LA105A106A4E	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,629	09:0	
93	240	16:54:18.266	117LA105A106A4F	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,629	25:0	
93	240	16:54:22.933	117LA105A106A4G	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,629	32:0	
93	240	16:54:33.600	117LA105A106A4H	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,629	48:0	
93	240	16:54:38.266	117LA105A106A4I	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,629	55:0	
93	240	16:54:48.933	117LA105A106A4J	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,629	71:0	
93	240	16:54:53.600	117LA105A106A4K	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,629	78:0	
93	240	16:55:04.266	117LA105A106A4L	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,630	03:0	
93	240	16:55:08.933	117LA105A106A4M	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,630	10:0	
93	240	16:55:19.600	117LA105A106A4N	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,630	26:0	
93	240	16:55:24.266	117LA105A106A4O	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,630	33:0	
93	240	16:55:34.933	117LA105A106A4P	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06	2,025,630	49:0	
93	240	16:55:39.600	117LA105A106A4Q	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06	2,025,630	56:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O	S	RIM	MF	I
93	240	16:55:50.266	117LA105A106A4R	7STRP	-0.015401,0.0017	Slew =,7.95	3R7	06		2,025,630	72	0
93	240	16:55:54.933	117LA105A106A4S	7STRP	0.015301,0.0,0,0	Slew =,2.01	3R7	06		2,025,630	79	0
93	240	16:56:05.600	117LA105A106B4A	7STRP	-0.026006,0.011,	Slew =,7.95	3R7	06		2,025,631	04	0
93	240	16:56:06.000	IDUSENCNTR01*		-----STOP-------		3R7	06			:	:
93	240	16:56:11.600	117LA105A106B4B	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,631	13	0
93	240	16:56:20.933	117LA105A106C4A	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,631	27	0
93	240	16:56:25.600	117LA105A106C4B	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,631	34	0
93	240	16:56:34.933	117LA105A106C4C	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,631	48	0
93	240	16:56:39.600	117LA105A106C4D	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,631	55	0
93	240	16:56:48.933	117LA105A106C4E	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,631	69	0
93	240	16:56:53.600	117LA105A106C4F	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,631	76	0
93	240	16:57:02.933	117LA105A106C4G	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,631	90	0
93	240	16:57:07.600	117LA105A106C4H	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,632	06	0
93	240	16:57:16.933	117LA105A106C4I	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,632	20	0
93	240	16:57:21.600	117LA105A106C4J	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,632	27	0
93	240	16:57:30.933	117LA105A106C4K	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,632	41	0
93	240	16:57:35.600	117LA105A106C4L	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,632	48	0
93	240	16:57:44.933	117LA105A106C4M	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,632	62	0
93	240	16:57:49.600	117LA105A106C4N	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,632	69	0
93	240	16:57:58.933	117LA105A106C4O	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,632	83	0
93	240	16:58:03.600	117LA105A106C4P	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,632	90	0
93	240	16:58:12.933	117LA105A106C4Q	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,633	13	0
93	240	16:58:17.600	117LA105A106C4R	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,633	20	0
93	240	16:58:26.933	117LA105A106C4S	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,633	34	0
93	240	16:58:31.600	117LA105A106C4T	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,633	41	0
93	240	16:58:40.933	117LA105A106C4U	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,633	55	0
93	240	16:58:45.600	117LA105A106C4V	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,633	62	0
93	240	16:58:54.933	117LA105A106C4W	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,633	76	0
93	240	16:58:59.600	117LA105A106C4X	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,633	83	0
93	240	16:59:08.933	117LA105A106C4Y	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,634	06	0
93	240	16:59:13.600	117LA105A106C4Z	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,634	13	0
93	240	16:59:22.933	117LA105A106C4AA	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,634	27	0
93	240	16:59:27.600	117LA105A106C4AB	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,634	34	0
93	240	16:59:36.933	117LA105A106C4AC	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,634	48	0
93	240	16:59:41.600	117LA105A106C4AD	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,634	55	0
93	240	16:59:50.933	117LA105A106C4AE	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,634	69	0
93	240	16:59:55.600	117LA105A106C4AF	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,634	76	0
93	240	17:00:04.933	117LA105A106C4AG	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,634	90	0
93	240	17:00:09.600	117LA105A106C4AH	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,635	06	0
93	240	17:00:18.933	117LA105A106C4AI	7STRP	-0.013001,-0.001	Slew =,7.95	3R7	06		2,025,635	20	0
93	240	17:00:23.600	117LA105A106C4AJ	7STRP	0.014001,0.0,0,0	Slew =,2.01	3R7	06		2,025,635	27	0
93	240	17:00:32.933	117LA11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06		2,025,635	41	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	240	17:00:45.600	165LB4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R7	06	2,025,635:60:0		
93	240	17:00:46.266	165LB4B	7SCAN	NORM,9.555,23.00	Check S/P Position	3R7	06	2,025,635:61:0		
93	240	17:01:03.600	117LB	CSMOS	GS	***** GROUP START CSMOS	3R7	06	2,025,635:87:0		
93	240	17:01:11.600	165LB4C	7VECT		Inert vect update UTC	3R7	06	2,025,636:08:0		
93	240	17:01:12.266	165LB4D	7TMOT	ENA,TMC	Enable IVP - Target Motion	3R7	06	2,025,636:09:0		
93	240	17:01:12.933	117LB105A106A4A	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,636:10:0		
93	240	17:01:18.266	117LB105A106A4B	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,636:18:0		
93	240	17:01:22.933	117LB105A106A4C	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,636:25:0		
93	240	17:01:28.266	117LB105A106A4D	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,636:33:0		
93	240	17:01:32.933	117LB105A106A4E	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,636:40:0		
93	240	17:01:38.266	117LB105A106A4F	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,636:48:0		
93	240	17:01:42.933	117LB105A106A4G	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,636:55:0		
93	240	17:01:48.266	117LB105A106A4H	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,636:63:0		
93	240	17:01:52.933	117LB105A106A4I	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,636:70:0		
93	240	17:01:58.266	117LB105A106A4J	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,636:78:0		
93	240	17:02:02.933	117LB105A106A4K	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,636:85:0		
93	240	17:02:08.266	117LB105A106A4L	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,637:02:0		
93	240	17:02:12.933	117LB105A106A4M	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,637:09:0		
93	240	17:02:18.266	117LB105A106A4N	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,637:17:0		
93	240	17:02:22.933	117LB105A106A4O	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,637:24:0		
93	240	17:02:28.266	117LB105A106A4P	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,637:32:0		
93	240	17:02:32.933	117LB105A106A4Q	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,637:39:0		
93	240	17:02:38.266	117LB105A106A4R	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,637:47:0		
93	240	17:02:42.933	117LB105A106A4S	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,637:54:0		
93	240	17:02:48.266	117LB105A106A4T	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,637:62:0		
93	240	17:02:52.933	117LB105A106A4U	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,637:69:0		
93	240	17:02:58.266	117LB105A106A4V	7STRP	-0.0085,-0.001,0	Slew =,4.43	3R7	06	2,025,637:77:0		
93	240	17:03:02.933	117LB105A106A4W	7STRP	0.009,0.0,0,0,0,	Slew =,3.51	3R7	06	2,025,637:84:0		
93	240	17:03:08.266	117LB11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06	2,025,638:01:0		
93	240	17:03:26.933	165KA4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R7	06	2,025,638:29:0		
93	240	17:03:27.600	165KA4B	7SCAN	NORM,206.303999,	Check S/P Position	3R7	06	2,025,638:30:0		
93	240	17:05:12.933	117KA	CSMOS	GS	***** GROUP START CSMOS	3R7	06	2,025,640:06:0		
93	240	17:05:40.933	117KA105A106A4A	7STRP	0.005,0.0,0,0,0,	Slew =,0.04	3R7	06	2,025,640:48:0		
93	240	17:07:53.600	117KA105A106A4B	7STRP	-0.005,0.0,0,0,0	Slew =12.01	3R7	06	2,025,642:65:0		
93	240	17:07:58.266	117KA105A106A4C	7STRP	0.005,0.0,0,0,0,	Slew =,0.04	3R7	06	2,025,642:72:0		
93	240	17:10:10.933	117KA105A106A4D	7STRP	-0.005,0.0,0,0,0	Slew =12.01	3R7	06	2,025,644:89:0		
93	240	17:10:15.600	117KA105A106A4E	7STRP	0.005,0.0,0,0,0,	Slew =,0.04	3R7	06	2,025,645:05:0		
93	240	17:12:28.266	117KA105A106A4F	7STRP	-0.005,0.0,0,0,0	Slew =12.01	3R7	06	2,025,647:22:0		
93	240	17:12:32.933	117KA105A106A4G	7STRP	0.005,0.0,0,0,0,	Slew =,0.04	3R7	06	2,025,647:29:0		
93	240	17:14:45.600	117KA105A106A4H	7STRP	-0.005,0.0,0,0,0	Slew =12.01	3R7	06	2,025,649:46:0		
93	240	17:14:50.266	117KA105A106A4I	7STRP	0.005,0.0,0,0,0,	Slew =,0.04	3R7	06	2,025,649:53:0		
93	240	17:17:02.933	117KA11A	CSMOS	GE	***** GROUP END CSMOS	3R7	06	2,025,651:70:0		

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF I
93	240	17:18:33.600	165KB4A	7TMOT	DIS,TMC	Disable IVP - Target Motion	3R7	06	2,025,653:24:0	
93	240	17:18:34.266	165KB4B	7SCAN	NORM,278.968998,	Check S/P Position	3R7	06	2,025,653:25:0	
93	240	17:22:15.600	157KB156A121A4A	37IOP	7,6	Fixed Map, Grating Start Position =6	3R7	06	2,025,656:84:0	
93	240	17:22:24.000	IDUNBORCAL01+		-----START------		3R7	06	: :	
93	240	17:22:24.266	175MA422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R7	06	2,025,657:06:0	
93	240	17:22:24.266	117KB	CSMOS	GS	***** GROUP START CSMOS	3R7	06	2,025,657:06:0	
93	240	17:22:24.266		DMS:	*RUNDOWN	RDY, TRACK 4, REV, TIC *4936 +/- 41;	3R7	06	2,025,657:06:0	
93	240	17:22:25.533		DMS:	*READY	RDY, TRACK 4, REV, TIC *4935 +/- 41;	3R7	06	2,025,657:07:9	
93	240	17:22:33.600	175KA422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	3R7	06	2,025,657:20:0	
93	240	17:22:33.600		DMS:	*RUNUP	R28, TRACK 4, REV, TIC 4935 +/- 41;	3R7	06	2,025,657:20:0	
93	240	17:22:37.600	117KB105A106A4A	7STRP	0.006,0.0,0,0,0,	Slew =,0.08	3R7	06	2,025,657:26:0	
93	240	17:22:37.600		DMS:	*RECORD	R28, TRACK 4, REV, TIC *4934 +/- 41;	3R7	06	2,025,657:26:0	
93	240	17:22:37.600	176KA6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	3R7	06	2,025,657:26:0	
93	240	17:23:16.266	157KB156A121B4A	37IST	0,2,0,OFF,0,1,1	Gain State 4	4R7	06	2,025,657:84:0	
93	240	17:23:56.933	117KB105A106A4B	7STRP	-0.006,0.0011,0,	Slew =11.77	4R7	06	2,025,658:54:0	
93	240	17:24:03.600	117KB105A106A4C	7STRP	0.006,0.0,0,0,0,	Slew =,0.08	4R7	06	2,025,658:64:0	
93	240	17:25:22.933	117KB105A106A4D	7STRP	-0.006,0.0011,0,	Slew =11.77	4R7	06	2,025,660:01:0	
93	240	17:25:29.600	117KB105A106A4E	7STRP	0.006,0.0,0,0,0,	Slew =,0.08	4R7	06	2,025,660:11:0	
93	240	17:26:48.933	117KB11A	CSMOS	GE	***** GROUP END CSMOS	4R7	06	2,025,661:39:0	
93	240	17:27:18.933	157KB156A121C4A	37IOP	0,0	Safe, Grating Start Position =0	4R0	00	2,025,661:84:0	
93	240	17:27:24.933		DMS:	*RUNDOWN	RDY, TRACK 4, REV, TIC *4681 +/- 41;	4R0	00	2,025,662:02:0	
93	240	17:27:24.933	175KA422A6B	6DMSC	RDY,0	DMS Control Tape stop	4R0	00	2,025,662:02:0	
93	240	17:27:26.133		DMS:	*READY	RDY, TRACK 4, REV, TIC *4680 +/- 41;	4R0	00	2,025,662:03:8	
93	240	17:31:30.000	IDUNBORCAL01+		-----STOP-------		4R0	00	: :	
93	240	18:45:02.266	490B412A4B	7MODE	INT	AACS INERTIAL MODE	4R0	00	2,025,738:72:0	
93	240	18:47:59.600	490B476A6A	6TMCHG	ELSLRS	10 BPS TDM / LRS Rec 7.68kb/s	4R0	00	2,025,741:65:0	
93	240	18:50:00.266	490B412A4D	7SAFE	UNSTOW	S/P TO 153 deg cone	4R0	00	2,025,743:64:0	
93	240	18:54:10.266	490B412A4E	7VECT	RTH	Inert vect update UTC	4R0	00	2,025,747:75:0	
93	240	18:54:14.266	490B412A4F	7TURN	1,RTH	ALERT Thruster	4R0	00	2,025,747:81:0	
93	240	18:58:02.266	490B412A406A4A	7STAR	1,6217,100.72899	Star catalog update	4R0	00	2,025,751:59:0	
93	240	18:58:04.266	490B412A406A4B	7STAR	2,714,297.091999	Star catalog update	4R0	00	2,025,751:62:0	
93	240	18:58:06.266	490B412A406A4C	7STAR	3,159,27.236,89.	Star catalog update	4R0	00	2,025,751:65:0	
93	240	18:58:08.266	490B412A406A4D	7STAR	4,296,98.705999,	Star catalog update	4R0	00	2,025,751:68:0	
93	240	18:58:10.266	490B412A406A4E	7STAR	5,0,0.0,0.0	Star catalog update	4R0	00	2,025,751:71:0	
93	240	18:58:12.266	490B412A406A4F	7STAR	6,0,0.0,0.0	Star catalog update	4R0	00	2,025,751:74:0	
93	240	20:16:10.933	490B412A4K	7MODE	CRU	AACS CRUISE MODE	4R0	00	2,025,828:85:0	
93	240	20:18:12.933	490B412A4M	7SAFE	UNSTOW	S/P TO 153 deg cone	4R0	00	2,025,830:86:0	
93	240	21:50:05.600	20X3A	40T1PR	CMD,40T1PR,20X3A	PCT Heater 1 OFF (primary relay)	4R0	00	2,025,921:74:0	
93	240	21:50:10.933	20X3B	40T1PR	CMD,40T1PR,20X3B	PCT Heater 1 OFF (primary relay)	4R0	00	2,025,921:82:0	
93	240	21:51:06.266	20X3C	40T2R	CMD,40T2R,20X3C,	PCT Heater 2 OFF	4R0	00	2,025,922:74:0	
93	240	21:51:11.600	20X3D	40T2R	CMD,40T2R,20X3D,	PCT Heater 2 OFF	4R0	00	2,025,922:82:0	
93	241	00:48:18.266	444B443A4A	7SAFE	UNSTOW	S/P TO 153 deg cone	4R0	00	2,026,098:06:0	

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	241	00:52:18.266	444B443A4B	7MODE	SPNL	AACS ALL-SPIN LOW	4R0	00	2,026,102	02	0
93	241	01:01:18.266	444B443A4C	7CLK	17.45,0.0	Check S/P Position	4R0	00	2,026,110	84	0
93	241	03:52:15.600	192EH4A	7CONE	17.0,54.88	Check S/P Position	4R0	00	2,026,280	00	0
93	241	03:52:16.266	192EH4B	7CLK	17.0,244.07	Check S/P Position	4R0	00	2,026,280	01	0
93	241	04:00:16.933	175EH422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	4R0	00	2,026,287	85	0
93	241	04:00:16.933		DMS:	*RUNUP	R28, TRACK 4, REV, TIC 4680 +/- 41;	4R0	00	2,026,287	85	0
93	241	04:00:20.933		DMS:	*RECORD	R28, TRACK 4, REV, TIC *4679 +/- 42;	4R0	00	2,026,288	00	0
93	241	04:00:20.933	176EH6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	4R0	00	2,026,288	00	0
93	241	04:00:24.000	IDUNPCTCAL01+		-----START------		4R0	00		:	:
93	241	04:01:16.933	157EG156A121A4A	37IOP	3,0	Long Map, Grating Start Position =0	4R3	00	2,026,288	84	0
93	241	04:02:17.600	157EG156A121B4A	37IST	0,2,0,OFF,0,1,3	Gain State 1	1R3	00	2,026,289	84	0
93	241	04:03:18.266	157EG156A121C4A	37IOP	7,6	Fixed Map, Grating Start Position =6	1R7	06	2,026,290	84	0
93	241	04:04:18.933	157EG156A121D4A	37IOP	0,0	Safe, Grating Start Position =0	1R0	00	2,026,291	84	0
93	241	04:06:24.933		DMS:	*RUNDOWN	RDY, TRACK 4, REV, TIC *4359 +/- 42;	1R0	00	2,026,294	00	0
93	241	04:06:24.933	175EH422A6B	6DMSC	RDY,0	DMS Control Tape stop	1R0	00	2,026,294	00	0
93	241	04:06:26.133		DMS:	*READY	RDY, TRACK 4, REV, TIC *4358 +/- 42;	1R0	00	2,026,294	01	8
93	241	04:09:26.933	192EH4C	7CONE	17.0,153.0	Check S/P Position	1R0	00	2,026,297	00	0
93	241	04:15:05.600	20Y3A	40HRP	CMD,40HRP,20Y3A,	RCT Heater ON (primary relay)	1R0	00	2,026,302	53	0
93	241	04:15:10.933	20Y3B	40HRP	CMD,40HRP,20Y3B,	RCT Heater ON (primary relay)	1R0	00	2,026,302	61	0
93	241	04:16:00.266	444A443A4A	7SAFE	UNSTOW	S/P TO 153 deg cone	1R0	00	2,026,303	44	0
93	241	04:20:00.266	444A443A4B	7MODE	CRU	AACS CRUISE MODE	1R0	00	2,026,307	40	0
93	241	04:45:04.266	20V4A	7SAFE	UNSTOW	S/P TO 153 deg cone	1R0	00	2,026,332	21	0
93	241	04:49:57.000	IDUNPCTCAL01+		-----STOP-------		1R0	00		:	:
93	242	18:30:04.866	20W4A	7STAT	17.45,113.074,22	Stator inertial point	1R0	00	2,028,572	32	0
93	242	19:05:06.866	192JB4A	7CONE	17.0,130.0	Check S/P Position	1R0	00	2,028,607	00	0
93	242	19:12:07.533	175EI422A6A	6DMSC	R28,0	DMS Control Tape runup 28.8kbp	1R0	00	2,028,613	85	0
93	242	19:12:07.533		DMS:	*RUNUP	R28, TRACK 4, REV, TIC 4358 +/- 42;	1R0	00	2,028,613	85	0
93	242	19:12:11.533		DMS:	*RECORD	R28, TRACK 4, REV, TIC *4356 +/- 42;	1R0	00	2,028,614	00	0
93	242	19:12:11.533	176EI6A	6TMCHG	ELSMPW	10 BPS TDM-NO NIMS R/T / 28.8 KBPS PWS + N	1R0	00	2,028,614	00	0
93	242	19:12:15.000	IDUNRCTCAL01+		-----START------		1R0	00		:	:
93	242	19:13:07.533	157EH156A121A4A	37IOP	1,0	Full Map, Grating Start Position =0	1R1	00	2,028,614	84	0
93	242	19:14:08.200	157EH156A121B4A	37IST	0,2,0,OFF,0,1,2	Gain State 3	3R1	00	2,028,615	84	0
93	242	19:15:13.533	192JB4B	7CONE	17.0,0.0	Check S/P Position	3R1	00	2,028,617	00	0
93	242	19:19:11.533	157EH156A121C4A	37IOP	5,2	Short Map, Grating Start Position =2	3R5	02	2,028,620	84	0
93	242	19:21:12.866	157EH156A121D4A	37IOP	7,6	Fixed Map, Grating Start Position =6	3R7	06	2,028,622	84	0
93	242	19:22:13.533	157EH156A121E4A	37IOP	0,0	Safe, Grating Start Position =0	3R0	00	2,028,623	84	0
93	242	19:22:18.200	175EI422A6B	6DMSC	RDY,0	DMS Control Tape stop	3R0	00	2,028,624	00	0
93	242	19:22:18.200		DMS:	*RUNDOWN	RDY, TRACK 4, REV, TIC *3823 +/- 42;	3R0	00	2,028,624	00	0
93	242	19:22:19.400		DMS:	*READY	RDY, TRACK 4, REV, TIC *3822 +/- 43;	3R0	00	2,028,624	01	8
93	242	19:22:22.000	IDUNRCTCAL01+		-----STOP-------		3R0	00		:	:
93	242	19:24:19.533	192JB4C	7CONE	17.0,153.0	Check S/P Position	3R0	00	2,028,626	00	0
93	242	19:28:05.533	20Z3A	40HRPR	CMD,40HRPR,20Z3A	RCT Heater OFF (primary relay)	3R0	00	2,028,629	66	0

YR	DOY	Time	PSID	Command	Parameters	Description	GCM	O S	RIM	MF	I
93	242	19:28:10.866	20Z3B	40HRPR	CMD,40HRPR,20Z3B	RCT Heater OFF (primary relay)	3R0	00	2,028,629:74:0		
93	242	19:36:00.200		DMS:	*RUNUP	S7, TRACK 4, REV, TIC 3822 +/- 43;	3R0	00	2,028,637:50:0		
93	242	19:36:00.200	20QC6A	6DMSC	S7,4	DMS Control Tape slew 7.68kbp	3R0	00	2,028,637:50:0		
93	242	19:36:01.666		DMS:	*SLEW	S7, TRACK 4, REV, TIC *3821 +/- 43;	3R0	00	2,028,637:52:2		
93	242	19:48:00.200	20QC6B	6DMSC	RDY,3	DMS Control Tape stop	3R0	00	2,028,649:38:0		
93	242	19:48:00.200		DMS:	*RUNDOWN	RDY, TRACK 4, REV, TIC *3653 +/- 43;	3R0	00	2,028,649:38:0		
93	242	19:48:01.466		DMS:	*READY	RDY, TRACK *3, *FWD, TIC *3652 +/- 43;	3R0	00	2,028,649:39:9		
93	242	20:00:00.200	20YU4A	37IOP	CMD,37IOP,20YU4A	, Grating Start Position =37	3R0	00	2,028,661:26:0		
93	242	20:01:00.866	20YU3A	37AR	CMD,37AR,20YU3A,	NIMS Power OFF			2,028,662:26:0		
93	242	20:01:20.866	20YU3B	37H	CMD,37H,20YU3B,,	Replacement Heaters ON			2,028,662:56:0		
93	242	20:06:05.533	20AH3A	40T2	CMD,40T2,20AH3A,	PCT Heater 2 ON			2,028,667:28:0		
93	242	20:06:10.866	20AH3B	40T2	CMD,40T2,20AH3B,	PCT Heater 2 ON			2,028,667:36:0		
93	242	20:12:05.533	20AA3A	37F2P	CMD,37F2P,20AA3A	Shield Flash Heater ON (primary relay)			2,028,673:22:0		
93	242	20:12:10.866	20AA3B	37F2P	CMD,37F2P,20AA3B	Shield Flash Heater ON (primary relay)			2,028,673:30:0		

PA Summary Table

This summary is a listing of the PAs (Profile Activities) used by NIMS just prior to the IDA Encounter in EJ2.

INPUT FILE: EJ2_930812.SEF

OAPEL	PA	PSID	SCLK1	SCLK2	SCET1	TARGET
	ALSPINSP	192GD	02009875:00	02009878:00	93-229/15:24:59	
IDNSOPNAV_04	TARGET	165GD	02010178:89	02010187:00	93-229/20:32:20	CAL
IDNSOPNAV_04	SCITLM	176GD	02010184:00	02010184:13	93-229/20:37:25	CAL
IDNSOPNAV_04	INITRS	128GD	02010184:89	02010186:06	93-229/20:38:24	CAL
IDNNOPCAL_01	CMDRS	157JA	02010185:00	02010195:00	93-229/20:38:26	CAL
IDNSOPNAV_04	SSI	147GD	02010186:76	02010188:44	93-229/20:40:17	CAL
IDNSOPNAV_04	SMOS	118GD	02010187:06	02010187:86	93-229/20:40:31	CAL
IDNSOPNAV_04	SCIREC	175GD	02010187:90	02010188:48	93-229/20:41:27	CAL
	ALSPINSP	192GE	02015527:00	02015530:00	93-233/14:39:47	
IDNSOPNAV_05	TARGET	165GE	02015530:89	02015539:00	93-233/14:43:48	CAL
IDNSOPNAV_05	SCITLM	176GE	02015536:00	02015536:13	93-233/14:48:53	CAL
IDNSOPNAV_05	INITRS	128GE	02015536:89	02015538:05	93-233/14:49:52	CAL
IDNNECAL__01	CMDRS	157JB	02015537:00	02015547:00	93-233/14:49:53	CAL
IDNSOPNAV_05	SSI	147GE	02015538:76	02015540:44	93-233/14:51:45	CAL
IDNSOPNAV_05	SMOS	118GE	02015539:05	02015539:86	93-233/14:51:58	CAL
IDNSOPNAV_05	SCIREC	175GE	02015539:90	02015540:48	93-233/14:52:55	CAL

PA Summary Table

This summary is a listing of the PAs (Profile Activities) used by NIMS during the IDA Encounter in EJ3.

INPUT FILE: EJ3_930727.SEF

OAPEL	PA	PSID	SCLK1	SCLK2	SCET1	TARGET
IDUSROTATI01	TARGET	165IA	02025300:89	02025395:45	93-240/11:22:21	IDA
IDUSROTATI01	INITRS	128IA	02025303:84	02025305:06	93-240/11:25:20	IDA
IDUSROTATI01	CSMOS	117JA	02025304:77	02025305:14	93-240/11:26:16	IDA
IDUSROTATI01	SCIREC	175JA	02025304:85	02025305:32	93-240/11:26:21	IDA
IDUSROTATI01	SCITLM	176JA	02025305:00	02025305:13	93-240/11:26:25	IDA
IDUSROTATI01	SSI	147IA	02025306:76	02025307:44	93-240/11:28:17	IDA
IDUSROTATI01	SCIREC	175IA	02025306:90	02025307:48	93-240/11:28:26	IDA
IDUSROTATI01	SCITLM	176IA	02025307:00	02025307:13	93-240/11:28:27	IDA
IDUSROTATI01	CMDRS	157KC	02025329:00	02025334:05	93-240/11:50:41	IDA
IDUSROTATI01	SSI	147IB	02025329:76	02025332:89	93-240/11:51:32	IDA
IDUSROTATI01	SCIREC	175IB	02025329:90	02025333:02	93-240/11:51:41	IDA
IDUSROTATI01	SCITLM	176IB	02025330:00	02025330:13	93-240/11:51:42	IDA
IDUSROTATI01	INITRS	128JD	02025332:84	02025334:06	93-240/11:54:39	IDA
IDUSROTATI01	CSMOS	117JB	02025333:77	02025335:58	93-240/11:55:35	IDA
IDUSROTATI01	SCITLM	176JB	02025334:00	02025334:13	93-240/11:55:45	IDA
IDUSROTATI01	SCIREC	175JB	02025334:09	02025335:72	93-240/11:55:51	IDA
IDUSROTATI01	INITRS	128JE	02025343:84	02025345:06	93-240/12:05:47	IDA
IDUSROTATI01	CSMOS	117JC	02025345:06	02025346:76	93-240/12:06:56	IDA
IDUSROTATI01	SCIREC	175JC	02025345:59	02025346:77	93-240/12:07:31	IDA
IDUSROTATI01	SSI	147IC	02025352:76	02025353:44	93-240/12:14:47	IDA
IDUSROTATI01	SCIREC	175IC	02025352:90	02025353:48	93-240/12:14:57	IDA
IDUSROTATI01	SCITLM	176IC	02025353:00	02025353:13	93-240/12:14:57	IDA
IDUSROTATI01	CSMOS	117JD	02025356:77	02025358:23	93-240/12:18:51	IDA
IDUSROTATI01	SCITLM	176JD	02025357:00	02025357:13	93-240/12:19:00	IDA
IDUSROTATI01	SCIREC	175JD	02025357:14	02025358:32	93-240/12:19:09	IDA
IDUSROTATI01	CSMOS	117JE	02025368:06	02025369:68	93-240/12:30:11	IDA
IDUSROTATI01	SCIREC	175JE	02025368:59	02025369:77	93-240/12:30:47	IDA
IDUSROTATI01	SSI	147ID	02025375:76	02025376:44	93-240/12:38:03	IDA
IDUSROTATI01	SCIREC	175ID	02025375:90	02025376:48	93-240/12:38:12	IDA
IDUSROTATI01	SCITLM	176ID	02025376:00	02025376:13	93-240/12:38:13	IDA
IDUSROTATI01	CSMOS	117JF	02025379:77	02025381:23	93-240/12:42:06	IDA
IDUSROTATI01	SCITLM	176JF	02025380:00	02025380:13	93-240/12:42:15	IDA
IDUSROTATI01	SCIREC	175JF	02025380:14	02025381:32	93-240/12:42:25	IDA
IDUSROTATI01	CSMOS	117JG	02025391:06	02025392:68	93-240/12:53:27	IDA
IDUSROTATI01	SCIREC	175JG	02025391:59	02025392:77	93-240/12:54:02	IDA
IDUSROTATI02	INITRS	128JF	02025395:84	02025397:06	93-240/12:58:21	IDA
IDUSROTATI02	TARGET	165IB	02025396:44	02025464:00	93-240/12:58:55	IDA
IDUSROTATI02	CSMOS	117JH	02025396:77	02025397:14	93-240/12:59:17	IDA
IDUSROTATI02	SCIREC	175JH	02025396:85	02025397:32	93-240/12:59:23	IDA
IDUSROTATI02	SCITLM	176JH	02025397:00	02025397:13	93-240/12:59:27	IDA
IDUSROTATI02	CMDRS	157KD	02025398:00	02025404:00	93-240/13:00:27	IDA
IDUSROTATI02	SSI	147IE	02025398:76	02025401:89	93-240/13:01:18	IDA
IDUSROTATI02	SCIREC	175IE	02025398:90	02025402:02	93-240/13:01:27	IDA
IDUSROTATI02	SCITLM	176IE	02025399:00	02025399:13	93-240/13:01:28	IDA
IDUSROTATI02	INITRS	128JG	02025401:84	02025403:06	93-240/13:04:25	IDA
IDUSROTATI02	CSMOS	117JI	02025402:77	02025404:58	93-240/13:05:21	IDA
IDUSROTATI02	SCITLM	176JI	02025403:00	02025403:13	93-240/13:05:31	IDA

OAPEL	PA	PSID	SCLK1	SCLK2	SCET1	TARGET
IDUSROTATI02	SCIREC	175JI	02025403:09	02025404:72	93-240/13:05:37	IDA
IDUSROTATI02	INITRS	128JH	02025412:84	02025414:06	93-240/13:15:33	IDA
IDUSROTATI02	CSMOS	117JJ	02025414:06	02025415:68	93-240/13:16:42	IDA
IDUSROTATI02	SCIREC	175JJ	02025414:59	02025415:77	93-240/13:17:17	IDA
IDUSROTATI02	SSI	147IF	02025421:76	02025422:44	93-240/13:24:33	IDA
IDUSROTATI02	SCIREC	175IF	02025421:90	02025422:48	93-240/13:24:43	IDA
IDUSROTATI02	SCITLM	176IF	02025422:00	02025422:13	93-240/13:24:43	IDA
IDUSROTATI02	CSMOS	117JK	02025425:77	02025427:23	93-240/13:28:37	IDA
IDUSROTATI02	SCITLM	176JK	02025426:00	02025426:13	93-240/13:28:46	IDA
IDUSROTATI02	SCIREC	175JK	02025426:14	02025427:32	93-240/13:28:55	IDA
IDUSROTATI02	CSMOS	117JL	02025437:06	02025438:68	93-240/13:39:57	IDA
IDUSROTATI02	SCIREC	175JL	02025437:59	02025438:77	93-240/13:40:33	IDA
IDUSROTATI02	SSI	147IG	02025444:76	02025445:44	93-240/13:47:48	IDA
IDUSROTATI02	SCIREC	175IG	02025444:90	02025445:48	93-240/13:47:58	IDA
IDUSROTATI02	SCITLM	176IG	02025445:00	02025445:13	93-240/13:47:58	IDA
IDUSROTATI02	CSMOS	117JM	02025448:77	02025450:23	93-240/13:51:52	IDA
IDUSROTATI02	SCITLM	176JM	02025449:00	02025449:13	93-240/13:52:01	IDA
IDUSROTATI02	SCIREC	175JM	02025449:14	02025450:32	93-240/13:52:10	IDA
IDUSROTATI02	CSMOS	117JN	02025460:06	02025461:68	93-240/14:03:12	IDA
IDUSROTATI02	SCIREC	175JN	02025460:59	02025461:77	93-240/14:03:48	IDA
IDUNROTATI03	INITRS	128JI	02025463:84	02025465:06	93-240/14:07:06	IDA
IDUNROTATI03	TARGET	165JA	02025464:44	02025534:00	93-240/14:07:40	IDA
IDUNROTATI03	CSMOS	117JO	02025464:77	02025465:14	93-240/14:08:02	IDA
IDUNROTATI03	SCIREC	175JO	02025464:85	02025465:32	93-240/14:08:08	IDA
IDUNROTATI03	SCITLM	176JO	02025465:00	02025465:13	93-240/14:08:12	IDA
IDUNROTATI03	CMDRS	157KE	02025467:00	02025472:00	93-240/14:10:13	IDA
IDUNROTATI03	SSI	147IH	02025467:76	02025470:89	93-240/14:11:04	IDA
IDUSROTATI03	SCIREC	175IH	02025467:90	02025471:02	93-240/14:11:13	IDA
IDUSROTATI03	SCITLM	176IH	02025468:00	02025468:13	93-240/14:11:14	IDA
IDUNROTATI03	INITRS	128JJ	02025470:84	02025472:06	93-240/14:14:11	IDA
IDUNROTATI03	CSMOS	117JP	02025471:77	02025473:78	93-240/14:15:07	IDA
IDUNROTATI03	SCITLM	176JP	02025472:00	02025472:13	93-240/14:15:16	IDA
IDUNROTATI03	SCIREC	175JP	02025472:09	02025474:06	93-240/14:15:22	IDA
IDUNROTATI03	INITRS	128JK	02025481:84	02025483:06	93-240/14:25:18	IDA
IDUNROTATI03	CSMOS	117JQ	02025483:06	02025484:88	93-240/14:26:28	IDA
IDUNROTATI03	SCIREC	175JQ	02025483:59	02025485:06	93-240/14:27:03	IDA
IDUNROTATI03	SSI	147II	02025490:76	02025493:44	93-240/14:34:19	IDA
IDUSROTATI03	SCIREC	175II	02025490:90	02025493:48	93-240/14:34:28	IDA
IDUSROTATI03	SCITLM	176II	02025491:00	02025491:13	93-240/14:34:29	IDA
IDUNROTATI03	CSMOS	117JR	02025494:77	02025496:23	93-240/14:38:22	IDA
IDUNROTATI03	SCITLM	176JR	02025495:00	02025495:13	93-240/14:38:32	IDA
IDUNROTATI03	SCIREC	175JR	02025495:14	02025496:32	93-240/14:38:41	IDA
IDUNROTATI03	CSMOS	117JS	02025506:06	02025507:68	93-240/14:49:43	IDA
IDUNROTATI03	SCIREC	175JS	02025506:59	02025507:77	93-240/14:50:18	IDA
IDUNROTATI03	SSI	147IJ	02025513:76	02025516:44	93-240/14:57:34	IDA
IDUSROTATI03	SCIREC	175IJ	02025513:90	02025516:48	93-240/14:57:44	IDA
IDUSROTATI03	SCITLM	176IJ	02025514:00	02025514:13	93-240/14:57:44	IDA
IDUNROTATI03	CSMOS	117JT	02025517:77	02025519:23	93-240/15:01:38	IDA
IDUNROTATI03	SCITLM	176JT	02025518:00	02025518:13	93-240/15:01:47	IDA
IDUNROTATI03	SCIREC	175JT	02025518:14	02025519:32	93-240/15:01:56	IDA
IDUNROTATI03	CSMOS	117JU	02025529:06	02025530:68	93-240/15:12:58	IDA
IDUNROTATI03	SCIREC	175JU	02025529:59	02025530:77	93-240/15:13:34	IDA
IDUNROTATI04	INITRS	128JL	02025533:84	02025535:06	93-240/15:17:53	IDA

OAPEL	PA	PSID	SCLK1	SCLK2	SCET1	TARGET
IDUNROTATI04	TARGET	165JB	02025534:44	02025600:51	93-240/15:18:27	IDA
IDUNROTATI04	CSMOS	117JV	02025534:77	02025535:18	93-240/15:18:49	IDA
IDUNROTATI04	SCIREC	175JV	02025534:85	02025535:32	93-240/15:18:54	IDA
IDUNROTATI04	SCITLM	176JV	02025535:00	02025535:13	93-240/15:18:58	IDA
IDUNROTATI04	SSI	147IK	02025536:76	02025539:89	93-240/15:20:50	IDA
IDUSROTATI04	SCIREC	175IK	02025536:90	02025540:02	93-240/15:20:59	IDA
IDUSROTATI04	SCITLM	176IK	02025537:00	02025537:13	93-240/15:21:00	IDA
IDUNROTATI04	INITRS	128JM	02025539:84	02025541:06	93-240/15:23:57	IDA
IDUNROTATI04	CSMOS	117JW	02025540:77	02025543:18	93-240/15:24:53	IDA
IDUNROTATI04	SCITLM	176JX	02025541:00	02025541:13	93-240/15:25:02	IDA
IDUNROTATI04	SCIREC	175JX	02025541:09	02025543:32	93-240/15:25:08	IDA
IDUNROTATI04	SSI	147IL	02025547:76	02025550:89	93-240/15:31:57	IDA
IDUSROTATI04	SCIREC	175IL	02025547:90	02025551:02	93-240/15:32:06	IDA
IDUSROTATI04	SCITLM	176IL	02025548:00	02025548:13	93-240/15:32:07	IDA
IDUNROTATI04	INITRS	128JN	02025550:84	02025552:06	93-240/15:35:04	IDA
IDUNROTATI04	CMDRS	157JK	02025551:00	02025567:00	93-240/15:35:09	IDA
IDUNROTATI04	SCITLM	176JY	02025552:00	02025552:13	93-240/15:36:10	IDA
IDUNROTATI04	CSMOS	117JX	02025552:06	02025554:07	93-240/15:36:14	IDA
IDUNROTATI04	SCIREC	175JY	02025552:59	02025554:16	93-240/15:36:49	IDA
IDUNROTATI04	SSI	147IM	02025559:76	02025562:89	93-240/15:44:05	IDA
IDUSROTATI04	SCIREC	175IM	02025559:90	02025563:02	93-240/15:44:14	IDA
IDUSROTATI04	SCITLM	176IM	02025560:00	02025560:13	93-240/15:44:15	IDA
IDUNROTATI04	CSMOS	117JY	02025563:77	02025565:33	93-240/15:48:08	IDA
IDUNROTATI04	SCITLM	176JZ	02025564:00	02025564:13	93-240/15:48:18	IDA
IDUNROTATI04	SCIREC	175JZ	02025564:14	02025565:42	93-240/15:48:27	IDA
IDUNROTATI04	SSI	147IN	02025570:76	02025573:89	93-240/15:55:12	IDA
IDUSROTATI04	SCIREC	175IN	02025570:90	02025574:02	93-240/15:55:22	IDA
IDUSROTATI04	SCITLM	176IN	02025571:00	02025571:13	93-240/15:55:22	IDA
IDUNROTATI04	CMDRS	157LC	02025574:00	02025592:00	93-240/15:58:24	IDA
IDUNROTATI04	SCITLM	176EA	02025575:00	02025575:13	93-240/15:59:25	IDA
IDUNROTATI04	CSMOS	117JZ	02025575:06	02025576:78	93-240/15:59:29	IDA
IDUNROTATI04	SCIREC	175EA	02025575:59	02025576:87	93-240/16:00:04	IDA
IDUNROTATI04	SSI	147IO	02025582:76	02025585:89	93-240/16:07:20	IDA
IDUSROTATI04	SCIREC	175IO	02025582:90	02025586:02	93-240/16:07:30	IDA
IDUSROTATI04	SCITLM	176IO	02025583:00	02025583:13	93-240/16:07:30	IDA
IDUNROTATI04	CSMOS	117EA	02025586:77	02025588:43	93-240/16:11:24	IDA
IDUNROTATI04	SCITLM	176EB	02025587:00	02025587:13	93-240/16:11:33	IDA
IDUNROTATI04	SCIREC	175EB	02025587:14	02025588:52	93-240/16:11:42	IDA
IDUNROTATI04	SSI	147IP	02025593:76	02025596:89	93-240/16:18:28	IDA
IDUSROTATI04	SCIREC	175IP	02025593:90	02025597:02	93-240/16:18:37	IDA
IDUSROTATI04	SCITLM	176IP	02025594:00	02025594:13	93-240/16:18:38	IDA
IDUNROTATI04	SCITLM	176EC	02025598:00	02025598:13	93-240/16:22:40	IDA
IDUNROTATI04	CSMOS	117EB	02025598:06	02025599:79	93-240/16:22:44	IDA
IDUNROTATI04	SCIREC	175EC	02025598:59	02025600:01	93-240/16:23:20	IDA
IDUNIDAGLM01	INITRS	128JA	02025598:84	02025600:06	93-240/16:23:36	IDA
IDUNIDAGLM01	CMDRS	157KF	02025600:00	02025606:00	93-240/16:24:42	IDA
IDUNIDAGLM01	TARGET	165JC	02025600:51	02025612:65	93-240/16:25:16	IDA
IDUNIDAGLM01	CSMOS	117EC	02025600:82	02025604:71	93-240/16:25:36	IDA
IDUNIDAGLM01	SCIREC	175ED	02025600:90	02025604:82	93-240/16:25:42	IDA
IDUNIDAGLM01	SCITLM	176ED	02025601:00	02025601:13	93-240/16:25:42	IDA
IDUSFINROT01	SSI	147IQ	02025604:76	02025607:89	93-240/16:29:35	IDA
IDUSFINROT01	SCIREC	175IQ	02025604:90	02025608:02	93-240/16:29:44	IDA
IDUSFINROT01	SCITLM	176IQ	02025605:00	02025605:13	93-240/16:29:45	IDA

OAPEL	PA	PSID	SCLK1	SCLK2	SCET1	TARGET
IDUNIDAFIN01	CMDRS	157KG	02025607:00	02025614:00	93-240/16:31:46	IDA
IDUNIDAFIN01	CSMOS	117ED	02025607:06	02025612:65	93-240/16:31:50	IDA
IDUNIDAFIN01	SCITLM	176EF	02025608:00	02025608:13	93-240/16:32:47	IDA
IDUNIDAFIN01	SCIREC	175EF	02025608:02	02025612:70	93-240/16:32:48	IDA
IDUS6COLOR01	INITRS	128IB	02025610:90	02025612:06	93-240/16:35:48	IDA
IDUS6COLOR01	TARGET	165IC	02025612:06	02025615:81	93-240/16:36:54	IDA
IDUS6COLOR01	CSMOS	117IA	02025612:06	02025615:81	93-240/16:36:54	IDA
IDUS6COLOR01	SSI	147IR	02025612:06	02025615:89	93-240/16:36:54	IDA
IDUS6COLOR01	SCIREC	175IR	02025612:75	02025616:04	93-240/16:37:40	IDA
IDUS6COLOR01	SCITLM	176IR	02025612:78	02025613:00	93-240/16:37:42	IDA
IDUNIDACHM01	CMDRS	157KH	02025615:00	02025622:00	93-240/16:39:52	IDA
IDUNIDACHM01	TARGET	165JE	02025615:81	02025621:27	93-240/16:40:46	IDA
IDUNIDACHM01	INITRS	128JC	02025615:84	02025616:06	93-240/16:40:48	IDA
IDUNIDACHM01	CSMOS	117EE	02025615:86	02025621:26	93-240/16:40:49	IDA
IDUNIDACHM01	SCITLM	176EG	02025616:00	02025616:13	93-240/16:40:52	IDA
IDUNIDACHM01	SCIREC	175EG	02025616:05	02025621:43	93-240/16:40:56	IDA
IDUNIDACHM01	SSI	147IS	02025616:76	02025620:89	93-240/16:41:43	IDA
IDUSHIRES_01	INITRS	128IC	02025619:84	02025621:06	93-240/16:44:50	IDA
IDUSHIRES_01	TARGET	165ID	02025621:06	02025625:68	93-240/16:46:00	IDA
IDUSHIRES_01	CSMOS	117IB	02025621:06	02025625:68	93-240/16:46:00	IDA
IDUSHIRES_01	SSI	147IT	02025621:06	02025628:11	93-240/16:46:00	IDA
IDUSHIRES_01	SCIREC	175IS	02025621:49	02025625:82	93-240/16:46:28	IDA
IDUSHIRES_01	SCITLM	176IS	02025621:52	02025621:65	93-240/16:46:30	IDA
IDUSENCNTR01	TARGET	165IE	02025625:68	02025628:13	93-240/16:50:44	IDA
IDUSENCNTR01	CSMOS	117IC	02025625:77	02025628:11	93-240/16:50:50	IDA
IDUSENCNTR01	SCIREC	175IT	02025625:88	02025628:17	93-240/16:50:57	IDA
IDUPRADOBS01	CMDRS	157LA	02025628:00	02025630:00	93-240/16:53:00	IDA
IDUMSWWING02	SCITLM	176MA	02025628:13	02025628:26	93-240/16:53:09	IDA
IDUPRADOBS01	TARGET	165LA	02025628:13	02025635:60	93-240/16:53:09	IDA
IDUMSWWING02	SCIREC	175MA	02025628:18	02025657:08	93-240/16:53:12	IDA
IDUPRADOBS01	CSMOS	117LA	02025628:40	02025635:41	93-240/16:53:27	IDA
IDUPPOLOBS01	CMDRS	157LB	02025635:00	02025638:18	93-240/17:00:05	IDA
IDUPPOLOBS01	TARGET	165LB	02025635:60	02025638:28	93-240/17:00:45	IDA
IDUPPOLOBS01	CSMOS	117LB	02025635:87	02025638:01	93-240/17:01:03	IDA
IDHUSTRCAL01	TARGET	165KA	02025638:29	02025640:48	93-240/17:03:26	SKY
IDHUSTRCAL01	CMDRS	157KA	02025639:00	02025671:00	93-240/17:04:08	SKY
IDHUSTRCAL01	CSMOS	117KA	02025640:06	02025651:70	93-240/17:05:12	SKY
IDHUBORSIT01	TARGET	165KB	02025653:24	02025657:26	93-240/17:18:33	SKY
IDHUBORSIT01	CMDRS	157KB	02025656:00	02025665:00	93-240/17:21:19	SKY
IDHUBORSIT01	CSMOS	117KB	02025657:06	02025661:39	93-240/17:22:24	SKY
IDHUBORSIT01	SCIREC	175KA	02025657:20	02025662:03	93-240/17:22:33	SKY
IDHUBORSIT01	SCITLM	176KA	02025657:26	02025657:39	93-240/17:22:37	SKY
	ALSPINSP	192EH	02026275:00	02026305:00	93-241/03:47:12	
IDUNPCTCAL01	SCIREC	175EH	02026287:85	02026294:02	93-241/04:00:16	IDA
IDUNPCTCAL01	CMDRS	157EG	02026288:00	02026309:00	93-241/04:00:20	IDA
IDUNPCTCAL01	SCITLM	176EH	02026288:00	02026288:13	93-241/04:00:20	IDA
	ALSPINSP	192JB	02028599:00	02028629:00	93-242/18:57:01	
IDUNRCTCAL01	SCIREC	175EI	02028613:85	02028624:02	93-242/19:12:07	IDA
IDUNRCTCAL01	CMDRS	157EH	02028614:00	02028625:00	93-242/19:12:11	IDA
IDUNRCTCAL01	SCITLM	176EI	02028614:00	02028614:13	93-242/19:12:11	IDA

NIMS Obstab (Planned)

Heading	Columns	Comments
OAPEL	1 - 12	.Oapel Name from SEF (no aliases yet)
EXT	14 - 14	.Extension (allow for split OAPELs)
PSID	16 - 17	.2 Letter ID for the OAPEL
SCLK1	19 - 29	.Start time of OBS in SCLK
SCLK2	31 - 41	.STOP time of OBS in SCLK
MODE	43 - 44	.NIMS Instrument MODE
GAIN	46 - 47	.Gain State (true value)
CHOP	49 - 50	.Chopper State (1=Ref,2=63Hz,3=FreeRun,4=Off)
GRAT_OFF	52 - 53	.Grating Offset
PTAB_A(6)	55 - 71	.First PTAB (repeat count,mirror op,autobias...
PTAB_B(6)	73 - 89	.Second PTAB (...grating start, grating delta...
		. (...number of grating postions)
ECAL	92 - 92	.Electronics Calibration Active (1=yes)
OPCAL	94 - 94	.Optics Calibration active (1=yes)
UTC1	96 - 112	.Start time of OBS in UTC (from SEF - ISO STANDARD)
REAL_TIME	115 - 115	.NIMS in Real-Time Telemetry (1=yes)
RECORD	117 - 117	.NIMS in Record Telemetry(1=yes)
TARGET	120 - 127	.Primary Target of OBS
		IDA - U - Ida
		CALIBRATION - N - Non-Science

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

INPUT SEF FILE: EJ3_930727.SEF

OAPEL, EXT, PSID, SCLK1, SCLK2, MODE, GAIN, CHOP, GRAT_OFF, PTAB_A(6), PTAB_B(6), ECAL, OPCAL, UTC1, REAL_TIME, RECORD, TARGET

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDNNOPCAL_01	A	JA	02010188:05	02010188:46	3	4	1	4	1	1	0	0	1	24	1	1	0	0	1	24	1	0	1993-229T20:41:31	0	1	CAL
IDNNECAL__01	A	JB	02015540:05	02015540:46	1	2	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	1	1993-233T14:52:59	0	1	CAL
IDUSROTATI01	A	IA	02025305:00	02025305:30	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/11:26:25	0	1	IDA
IDUSROTATI01	B	IA	02025307:05	02025307:46	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/11:28:30	0	1	IDA
IDUSROTATI01	C	IA	02025330:05	02025332:90	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/11:51:45	0	1	IDA
IDUSROTATI01	D	IA	02025334:15	02025335:70	1	4	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/11:55:55	0	1	IDA
IDUSROTATI01	E	IA	02025345:65	02025346:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:07:35	0	1	IDA
IDUSROTATI01	F	IA	02025353:05	02025353:46	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:15:01	0	1	IDA
IDUSROTATI01	G	IA	02025357:20	02025358:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:19:13	0	1	IDA
IDUSROTATI01	H	IA	02025368:65	02025369:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:30:51	0	1	IDA
IDUSROTATI01	I	IA	02025376:05	02025376:46	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:38:16	0	1	IDA
IDUSROTATI01	J	IA	02025380:20	02025381:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:42:29	0	1	IDA
IDUSROTATI01	K	IA	02025391:65	02025392:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:54:06	0	1	IDA

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDUSROTATI02	A	JF	02025397:00	02025397:30	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/12:59:27	0	1	IDA
IDUSROTATI02	B	JF	02025399:05	02025401:90	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:01:31	0	1	IDA
IDUSROTATI02	C	JF	02025403:15	02025404:70	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:05:41	0	1	IDA
IDUSROTATI02	D	JF	02025414:65	02025415:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:17:21	0	1	IDA
IDUSROTATI02	E	JF	02025422:05	02025422:46	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:24:47	0	1	IDA
IDUSROTATI02	F	JF	02025426:20	02025427:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:28:59	0	1	IDA
IDUSROTATI02	G	JF	02025437:65	02025438:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:40:37	0	1	IDA
IDUSROTATI02	H	JF	02025445:05	02025445:46	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:48:02	0	1	IDA
IDUSROTATI02	I	JF	02025449:20	02025450:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:52:14	0	1	IDA
IDUSROTATI02	J	JF	02025460:65	02025461:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:03:52	0	1	IDA
IDUNROTATI03	A	JI	02025465:00	02025465:30	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:08:12	0	1	IDA
IDUNROTATI03	B	JI	02025468:05	02025470:90	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:11:17	0	1	IDA
IDUNROTATI03	C	JI	02025472:15	02025474:04	1	4	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/14:15:26	0	1	IDA
IDUNROTATI03	D	JI	02025483:65	02025485:04	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:27:07	0	1	IDA
IDUNROTATI03	E	JI	02025491:05	02025493:46	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:34:32	0	1	IDA
IDUNROTATI03	F	JI	02025495:20	02025496:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:38:45	0	1	IDA
IDUNROTATI03	G	JI	02025506:65	02025507:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:50:22	0	1	IDA
IDUNROTATI03	H	JI	02025514:05	02025516:46	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:57:48	0	1	IDA
IDUNROTATI03	I	JI	02025518:20	02025519:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:02:00	0	1	IDA
IDUNROTATI03	J	JI	02025529:65	02025530:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:13:38	0	1	IDA
IDUNROTATI04	A	JL	02025535:00	02025535:30	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:18:58	0	1	IDA
IDUNROTATI04	B	JL	02025537:05	02025539:90	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:21:03	0	1	IDA
IDUNROTATI04	C	JL	02025541:15	02025543:30	1	3	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/15:25:12	0	1	IDA
IDUNROTATI04	D	JL	02025548:05	02025550:90	1	3	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/15:32:10	0	1	IDA
IDUNROTATI04	E	JL	02025552:65	02025554:14	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:36:53	0	1	IDA
IDUNROTATI04	F	JL	02025560:05	02025563:00	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:44:18	0	1	IDA
IDUNROTATI04	G	JL	02025564:20	02025565:40	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:48:31	0	1	IDA
IDUNROTATI04	H	JL	02025571:05	02025574:00	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:55:26	0	1	IDA
IDUNROTATI04	I	JL	02025575:65	02025576:85	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:00:08	0	1	IDA
IDUNROTATI04	J	JL	02025583:05	02025586:00	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:07:34	0	1	IDA
IDUNROTATI04	K	JL	02025587:20	02025588:50	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:11:46	0	1	IDA
IDUNROTATI04	L	JL	02025594:05	02025597:00	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:18:41	0	1	IDA
IDUNROTATI04	M	JL	02025598:65	02025599:90	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:23:24	0	1	IDA

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDUNIDAGLM01	A	JA	02025601:05	02025604:80	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:25:46	0	1	IDA
IDUSFINROT01	A	IQ	02025605:05	02025608:00	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:29:48	0	1	IDA
IDUNIDAFIN01	A	KG	02025608:08	02025612:68	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:32:52	0	1	IDA
IDUS6COLOR01	A	IB	02025612:80	02025615:90	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:37:44	0	1	IDA
IDUNIDACHM01	A	KH	02025616:11	02025620:90	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:41:00	0	1	IDA
IDUSHIRES_01	A	IC	02025621:00	02025621:41	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:45:51	0	1	IDA
IDUSHIRES_01	B	IC	02025621:54	02025625:78	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:46:32	0	1	IDA
IDUSENCNTR01	A	IE	02025626:02	02025628:13	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:51:01	0	1	IDA
IDHUBORSIT01	A	KB	02025657:26	02025657:90	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/17:22:37	0	1	SKY
IDHUBORSIT01	B	KB	02025658:00	02025661:90	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/17:23:16	0	1	SKY
IDHUBORSIT01	C	KB	02025662:00	02025662:02	0	4	1	4	1	0	0	0	0	12	1	0	0	0	0	12	0	0	1993-240/17:27:18	0	1	SKY
IDUNPCTCAL01	A	EH	02026288:00	02026288:90	0	4	1	4	1	0	0	0	0	12	1	0	0	0	0	12	0	0	1993-241/04:00:20	0	1	CAL
IDUNPCTCAL01	B	EH	02026289:00	02026289:90	3	4	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-241/04:01:16	0	1	CAL
IDUNPCTCAL01	C	EH	02026290:00	02026290:90	3	1	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-241/04:02:17	0	1	CAL
IDUNPCTCAL01	D	EH	02026291:00	02026291:90	7	1	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-241/04:03:18	0	1	CAL
IDUNPCTCAL01	E	EH	02026292:00	02026294:00	0	1	1	4	1	0	0	0	0	12	1	0	0	0	0	12	0	0	1993-241/04:04:18	0	1	CAL
IDUNRCTCAL01	A	EI	02028614:00	02028614:90	0	1	1	4	1	0	0	0	0	12	1	0	0	0	0	12	0	0	1993-242/19:12:11	0	1	CAL
IDUNRCTCAL01	B	EI	02028615:00	02028615:90	1	1	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-242/19:13:07	0	1	CAL
IDUNRCTCAL01	C	EI	02028616:00	02028620:90	1	3	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-242/19:14:08	0	1	CAL
IDUNRCTCAL01	D	EI	02028621:00	02028622:90	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-242/19:19:11	0	1	CAL
IDUNRCTCAL01	E	EI	02028623:00	02028623:90	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-242/19:21:12	0	1	CAL

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 first four OAPEls, IDUSROTATI01, IDUSROTATI02, IDUNROTATI03 and IDUNROTATI04 each cover a complete rotation of Ida. These OAPELs are further sub-divided into multiple OAPELs which cover specific rotational phases of IDA. There is only one Pointer plot for each of these four rotation OAPELs.

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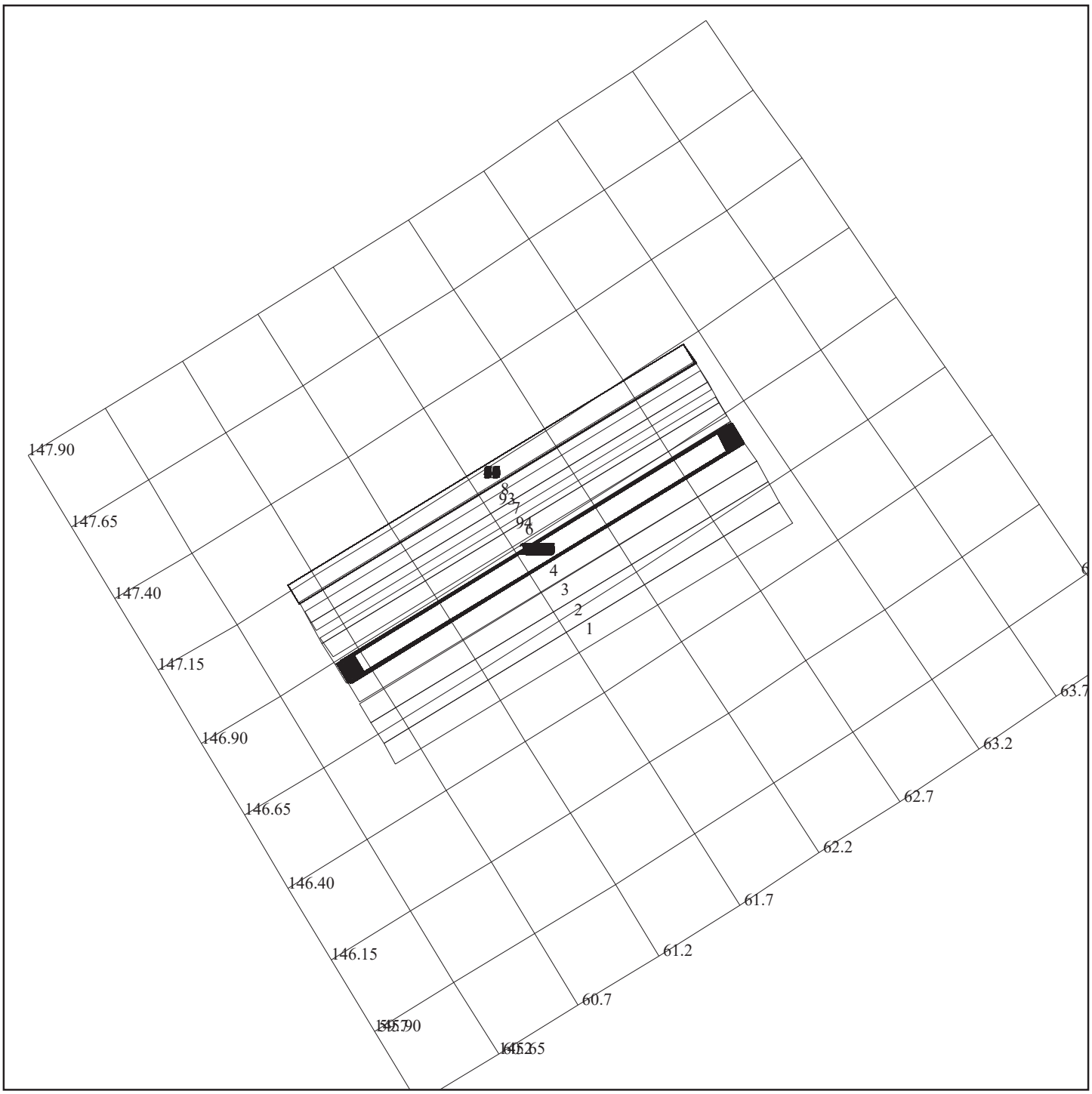


IDUSROTATI01

POINTER E1.0 lisac: 7/20/1993 16:39: 0
FILE:P.IDUSROTATI01
CENTRAL BODY:PLUTO
MINI:/home/lisac/ej3seq/NIMS/m.ej03ab
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 322:00:0
OBSERVATION:IDUSROTATI01

Modes: XM,FM,SM, Gain 4, Chop Ref, Gr_Off 4
Multiple Observations, Multiple NIMS Modes.

Mosaic Start: Cone: 146.9, Clock: 61.8
Combination of CSMOS and SMOS
Plot Ref Time: Start of First Mosaic (TARGET)
Lat, Lon, Range, Res, Phase: (-56.9, 190.4, 241486, 121, 19)
DESCRIP:ROTATION MOVIE 1

Ida Rotation Uncertainty Reduction Obs ACTIVITY ID: IDUNRTURXM01+
START TIME: 93-240/11:26:30

Activity ID: Orbit ID Target U Inst N OAPEL RTURXM SeqNo 01 Multi +

Title Ida Rotation Uncertainty Reduction Obs Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000322:00:0	93-240/11:26:30	IEE-000/05:25:34
End	IEE-CDS 00000321:00:0	93-240/11:27:30	IEE-000/05:24:34
Duration	00000001:00:0	000/00:01:00	000/00:01:00

Top Label IDUNRTURXM01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS data in Fixed Map mode - 17 wavelengths for the purpose of reducing the target/pointing uncertainty of the rotation observations.

Design Detail

Alias IDUSROTATI01

One NIMS scan at .75 mrad/sec across the error ellipse to be used for locating IDA in SSI frames. This will reduce tape recorder/playback overhead planned in the current strategy.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 90 deg Full Map Observati ACTIVITY ID: IDUNRT90FM01+
START TIME: 93-240/11:55:49

Activity ID: Orbit ID Target U Inst N OAPEL RT90FM SeqNo 01 Multi +

Title Ida Rotation 90 deg Full Map Observati Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000293:00:0	93-240/11:55:49	IEE-000/04:56:15
End	IEE-CDS 00000290:00:0	93-240/11:58:51	IEE-000/04:53:13
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT90FM01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

NIMS will perform a full map spectral (204 wavelengths), disk image of Ida at every 90 degrees of rotation for a period of 360 degrees. This is the first of 4 observations.

Design Detail

Alias IDUSROTATI01

One NIMS scan across the error ellipse at a sampling rate of 0.05 mrad/sec in full map mode.

Full Map (FM), Gain 4, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation — ACTIVITY ID: IDUNRT15SM01+ — START TIME: 93-240/12:06:56

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 01 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000282:00:0	93-240/12:06:56	IEE-000/04:45:08
End	IEE-CDS 00000278:50:0	93-240/12:10:26	IEE-000/04:41:38
Duration	00000003:41:0	000/00:03:30	000/00:03:30

Top Label IDUNRT15SM01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the first of twelve observations of this nature

Design Detail

Alias IDUSROTATI01

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida Rotation 30 deg Observation

ACTIVITY ID: IDUNRT30SM01+
START TIME: 93-240/12:19:04

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 01 Multi +

Title Ida Rotation 30 deg Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000270:00:0	93-240/12:19:04	IEE-000/04:33:00
End	IEE-CDS 00000267:00:0	93-240/12:22:06	IEE-000/04:29:58
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the first observation in a series of eight.

Design Detail

Alias IDUSROTATI01

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation

ACTIVITY ID: IDUNRT15SM02+
START TIME: 93-240/12:30:12

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 02 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000259:00:0	93-240/12:30:12	IEE-000/04:21:52
End	IEE-CDS 00000255:50:0	93-240/12:33:41	IEE-000/04:18:23
Duration	00000003:41:0	000/00:03:29	000/00:03:29

Top Label IDUNRT15SM02+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the second of twelve observations of this nature

Design Detail

Alias IDUSROTATI01

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 30 deg Observation — ACTIVITY ID: IDUNRT30SM02+ — START TIME: 93-240/12:42:20

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 02 Multi +

Title Ida Rotation 30 deg Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000247:00:0	93-240/12:42:20	IEE-000/04:09:44
End	IEE-CDS 00000244:00:0	93-240/12:45:22	IEE-000/04:06:42
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM02+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the second observation in a series of eight.

Design Detail

Alias IDUSROTATI01

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida 15 deg Rotation Observation — ACTIVITY ID: IDUNRT15SM03+ — START TIME: 93-240/12:53:27

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 03 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000236:00:0	93-240/12:53:27	IEE-000/03:58:37
End	IEE-CDS 00000232:50:0	93-240/12:56:56	IEE-000/03:55:08
Duration	00000003:41:0	000/00:03:29	000/00:03:29

Top Label IDUNRT15SM03+
Bottom Label

Plot Key NIMS — Riding Plot Key — Conflict Yes
CDS Bytes 0 — Report Options — Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the third of twelve observations of this nature

Design Detail

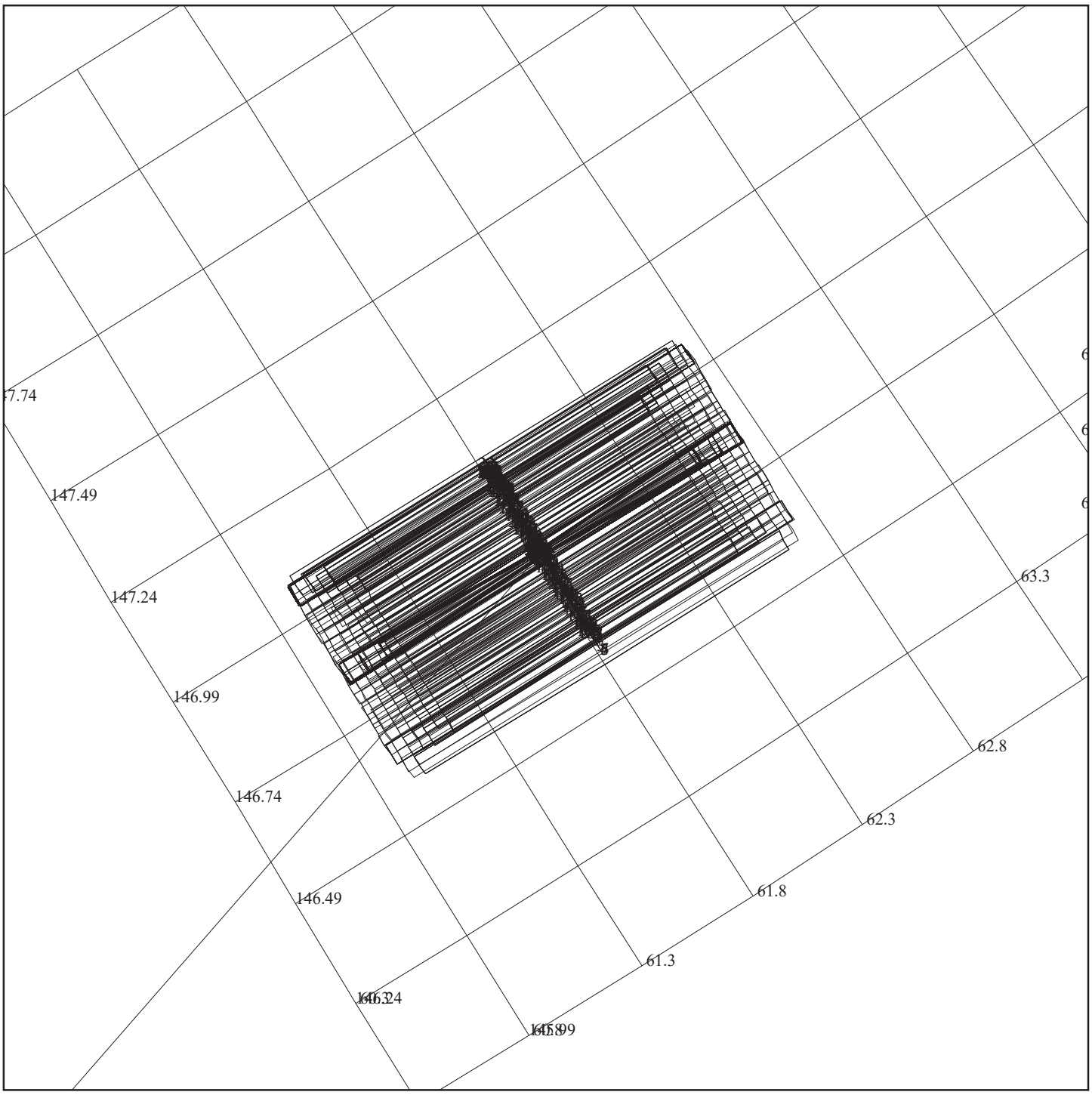
Alias IDUSROTATI01

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95



IDUSROTATI02

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUSROTATI02
CENTRAL BODY:PLUTO
MINI:m.IDUSROTATI02
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 230:00:0
OBSERVATION:IDUSROTATI02

Modes: XM,SM, Gain 4, Chop Ref, Gr_Off 4
Multiple Observations, Multiple NIMS Modes.

Mosaic Start: Cone: 146.7, Clock: 61.8
Combination of CSMOS and SMOS
Plot Ref Time: Start of First Mosaic (TARGET)
Lat, Lon, Range, Res, Phase: (-55.9, 194.8, 170903, 85, 20)
DESCRIP:ROTATION MOVIE 2

Ida Rotation Uncertainty Reduction Obs ACTIVITY ID: IDUNRTURXM02+
START TIME: 93-240/12:57:30

Activity ID: Orbit ID Target U Inst N OAPEL RTURXM SeqNo 02 Multi +

Title Ida Rotation Uncertainty Reduction Obs Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000232:00:0	93-240/12:57:30	IEE-000/03:54:34
End	IEE-CDS 00000230:00:0	93-240/12:59:31	IEE-000/03:52:33
Duration	00000002:00:0	000/00:02:01	000/00:02:01

Top Label IDUNRTURXM02+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS data in Fixed Map mode - 17 wavelengths for the purpose of reducing the target/pointing uncertainty of the rotation observations.

Design Detail

Alias IDUSROTATI02

One NIMS scan at .75 mrad/sec across the error ellipse to be used for locating IDA in SSI frames. This will reduce tape recorder/playback overhead planned in the current strategy.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 90 deg Full Map Observati ACTIVITY ID: IDUNRT90SM02+
START TIME: 93-240/13:05:35

Activity ID: Orbit ID Target U Inst N OAPEL RT90SM SeqNo 02 Multi +

Title Ida Rotation 90 deg Full Map Observati Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000224:00:0	93-240/13:05:35	IEE-000/03:46:29
End	IEE-CDS 00000221:00:0	93-240/13:08:37	IEE-000/03:43:27
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT90SM02+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

NIMS will perform a full map spectral (204 wavelengths), disk image of Ida at every 90 degrees of rotation for a period of 360 degrees.
This is the second of 4 observations.
This observation will use short map mode instead of full map mode to achieve double nyquist sampling.

Design Detail

Alias IDUSROTATI02

One NIMS scan across the error ellipse at a sampling rate of 0.05 mrad/sec in short map mode. This is the nyquist rate for full map mode and double nyquist rate for short map mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation

ACTIVITY ID: IDUNRT15SM04+
START TIME: 93-240/13:16:42

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 04 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000213:00:0	93-240/13:16:42	IEE-000/03:35:22
End	IEE-CDS 00000209:50:0	93-240/13:20:12	IEE-000/03:31:52
Duration	00000003:41:0	000/00:03:30	000/00:03:30

Top Label IDUNRT15SM04+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the fourth of twelve observations of this nature

Design Detail

Alias IDUSROTATI02

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 30 deg Observation — ACTIVITY ID: IDUNRT30SM03+ — START TIME: 93-240/13:28:50

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 03 Multi +

Title Ida Rotation 30 deg Observation — Instrument NIMS

Requestor M. Segura — Team NIMS — Working Group SWG

Time System CDS — Load ID EJ3 — Calendar Date 08/28/93 — Week 34

Start	IEE-CDS 00000201:00:0	93-240/13:28:50	IEE-000/03:23:14
End	IEE-CDS 00000198:00:0	93-240/13:31:52	IEE-000/03:20:12
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM03+
Bottom Label

Plot Key	NIMS	Riding Plot Key	
CDS Bytes	0	Report Options	
Conflict			Yes
Real Time Activity			No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the third observation in a series of eight.

Design Detail

Alias IDUSROTATI02

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida 15 deg Rotation Observation	ACTIVITY ID: IDUNRT15SM05+ START TIME: 93-240/13:39:58

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 05 Multi +

Title	Ida 15 deg Rotation Observation	Instrument	NIMS
Requestor	M. Segura	Team NIMS	Working Group SWG

Time System	CDS	Load ID EJ3	Calendar Date	08/28/93	Week 34
Start	IEE-CDS 00000190:00:0		93-240/13:39:58		IEE-000/03:12:06
End	IEE-CDS 00000186:50:0		93-240/13:43:27		IEE-000/03:08:37
Duration	00000003:41:0		000/00:03:29		000/00:03:29

Top Label	IDUNRT15SM05+		
Bottom Label			
Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the fifth of twelve observations of this nature

Design Detail

Alias IDUSROTATI02

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 30 deg Observation — ACTIVITY ID: IDUNRT30SM04+ — START TIME: 93-240/13:52:06

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 04 Multi +

Title Ida Rotation 30 deg Observation — Instrument NIMS

Requestor M. Segura — Team NIMS — Working Group SWG

Time System CDS — Load ID EJ3 — Calendar Date 08/28/93 — Week 34

Start	IEE-CDS 00000178:00:0	93-240/13:52:06	IEE-000/02:59:58
End	IEE-CDS 00000175:00:0	93-240/13:55:08	IEE-000/02:56:56
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM04+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict: Yes
CDS Bytes	0	Report Options	Real Time Activity: No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the fourth observation in a series of eight.

Design Detail

Alias IDUSROTATI02

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida 15 deg Rotation Observation

ACTIVITY ID: IDUNRT15SM06+
START TIME: 93-240/14:03:13

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 06 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000167:00:0	93-240/14:03:13	IEE-000/02:48:51
End	IEE-CDS 00000163:50:0	93-240/14:06:42	IEE-000/02:45:22
Duration	00000003:41:0	000/00:03:29	000/00:03:29

Top Label IDUNRT15SM06+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the sixth of twelve observations of this nature

Design Detail

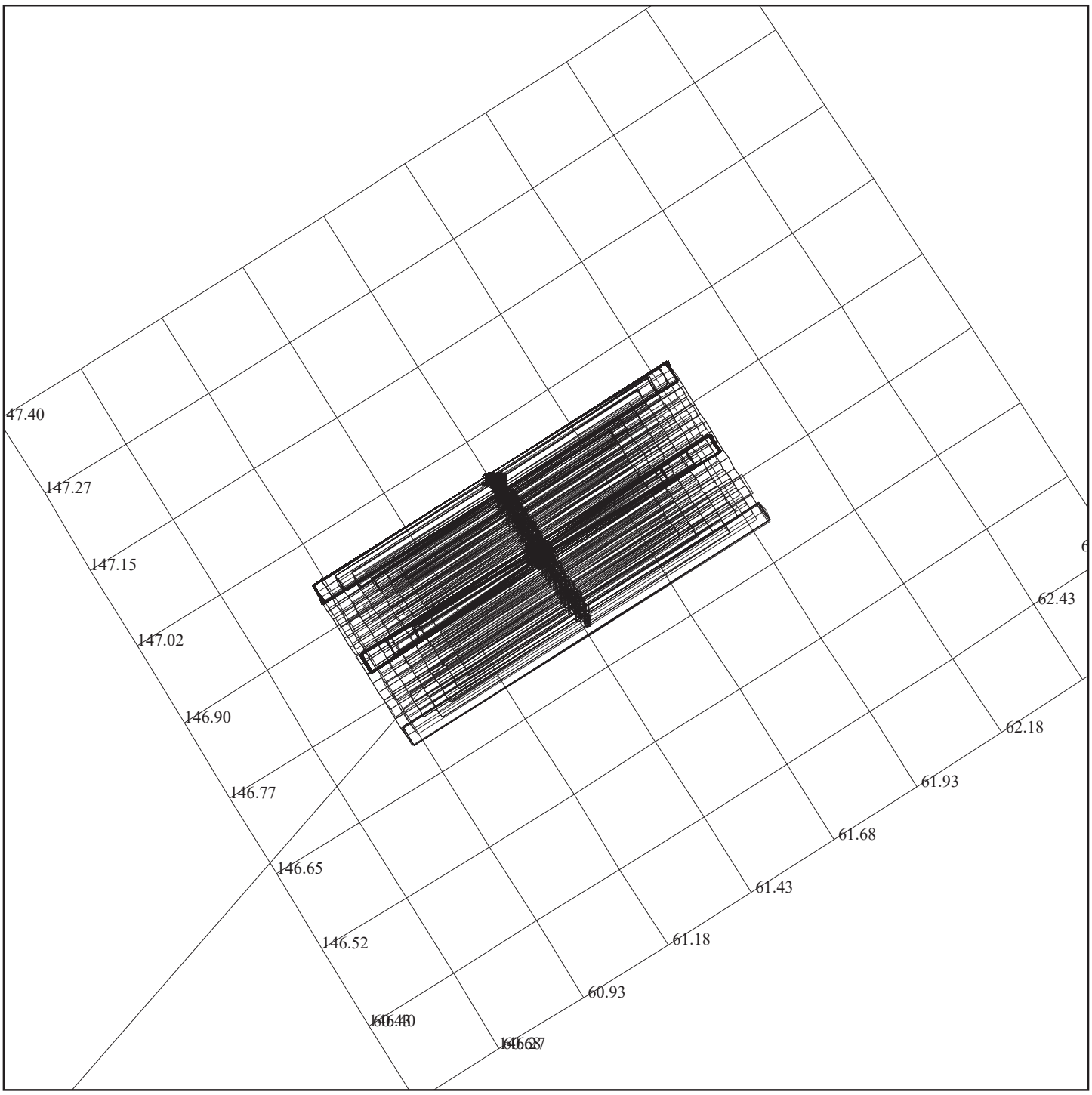
Alias IDUSROTATI02

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNROTATI03

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUNROTATI03
CENTRAL BODY:PLUTO
MINI:m.IDUNROTATI03
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 162:00:0
OBSERVATION:IDUNROTATI03

Modes: XM,FM,SM, Gain 4, Chop Ref, Gr_Off 4
Multiple Observations, Multiple NIMS Modes.

Mosaic Start: Cone: 146.8, Clock: 61.5
Combination of CSMOS and SMOS
Plot Ref Time: Start of First Mosaic (TARGET)
Lat, Lon, Range, Res, Phase: (-54.6, 198.7, 118901, 59, 20)
DESCRIP:ROTATION MOVIE 3

Ida Rotation Uncertainty Reduction Obs ACTIVITY ID: IDUNRTURXM03+
START TIME: 93-240/14:08:16

Activity ID: Orbit ID Target U Inst N OAPEL RTURXM SeqNo 03 Multi +

Title Ida Rotation Uncertainty Reduction Obs Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000162:00:0	93-240/14:08:16	IEE-000/02:43:48
End	IEE-CDS 00000160:00:0	93-240/14:10:18	IEE-000/02:41:46
Duration	00000002:00:0	000/00:02:02	000/00:02:02

Top Label IDUNRTURXM03+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 0 Report Options Real Time Activity No

Observation Objective

To acquire NIMS data in Fixed Map mode - 17 wavelengths for the purpose of reducing the target/pointing uncertainty of the rotation observations.

Design Detail

Alias IDUNROTATI03

One NIMS scan at .75 mrad/sec across the error ellipse to be used for locating IDA in SSI frames. This will reduce tape recorder/playback overhead planned in the current strategy.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 90 deg Full Map Observati ACTIVITY ID: IDUNRT90FM03+
START TIME: 93-240/14:15:21

Activity ID: Orbit ID Target U Inst N OAPEL RT90FM SeqNo 03 Multi +

Title Ida Rotation 90 deg Full Map Observati Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000155:00:0	93-240/14:15:21	IEE-000/02:36:43
End	IEE-CDS 00000152:00:0	93-240/14:18:23	IEE-000/02:33:41
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT90FM03+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

NIMS will perform a full map spectral (204 wavelengths), disk image of Ida at every 90 degrees of rotation for a period of 360 degrees. This is the third of 4 observations.

Design Detail

Alias IDUNROTATI03

One NIMS scan across the error ellipse at a sampling rate of 0.05 mrad/sec in full map mode.

Full Map (FM), Gain 4, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation — ACTIVITY ID: IDUNRT15SM07+ — START TIME: 93-240/14:26:28

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 07 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000144:00:0	93-240/14:26:28	IEE-000/02:25:36
End	IEE-CDS 00000140:50:0	93-240/14:29:58	IEE-000/02:22:06
Duration	00000003:41:0	000/00:03:30	000/00:03:30

Top Label IDUNRT15SM07+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the seventh of twelve observations of this nature

Design Detail

Alias IDUNROTATI03

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida Rotation 30 deg Observation — ACTIVITY ID: IDUNRT30SM05+ — START TIME: 93-240/14:38:36

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 05 Multi +

Title Ida Rotation 30 deg Observation — Instrument NIMS

Requestor M. Segura — Team NIMS — Working Group SWG

Time System CDS — Load ID EJ3 — Calendar Date 08/28/93 — Week 34

Start	IEE-CDS 00000132:00:0	93-240/14:38:36	IEE-000/02:13:28
End	IEE-CDS 00000129:00:0	93-240/14:41:38	IEE-000/02:10:26
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM05+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict: Yes
CDS Bytes	0	Report Options	Real Time Activity: No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the fifth observation in a series of eight.

Design Detail

Alias IDUNROTATI03

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida 15 deg Rotation Observation	ACTIVITY ID: IDUNRT15SM08+ START TIME: 93-240/14:49:44

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 08 Multi +

Title	Ida 15 deg Rotation Observation	Instrument	NIMS
Requestor	M. Segura	Team NIMS	Working Group SWG

Time System	CDS	Load ID EJ3	Calendar Date	08/28/93	Week 34
Start	IEE-CDS 00000121:00:0	93-240/14:49:44		IEE-000/02:02:20	
End	IEE-CDS 00000117:50:0	93-240/14:53:13		IEE-000/01:58:51	
Duration	00000003:41:0	000/00:03:29		000/00:03:29	

Top Label	IDUNRT15SM08+		
Bottom Label			
Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the eighth of twelve observations of this nature

Design Detail

Alias IDUNROTATI03

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 30 deg Observation

ACTIVITY ID: IDUNRT30SM06+
START TIME: 93-240/15:01:52

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 06 Multi +

Title Ida Rotation 30 deg Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000109:00:0	93-240/15:01:52	IEE-000/01:50:12
End	IEE-CDS 00000106:00:0	93-240/15:04:54	IEE-000/01:47:10
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM06+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the sixth observation in a series of eight.

Design Detail

Alias IDUNROTATI03

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation — ACTIVITY ID: IDUNRT15SM09+ — START TIME: 93-240/15:12:59

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 09 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000098:00:0	93-240/15:12:59	IEE-000/01:39:05
End	IEE-CDS 00000094:50:0	93-240/15:16:28	IEE-000/01:35:36
Duration	00000003:41:0	000/00:03:29	000/00:03:29

Top Label IDUNRT15SM09+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the ninth of twelve observations of this nature

Design Detail

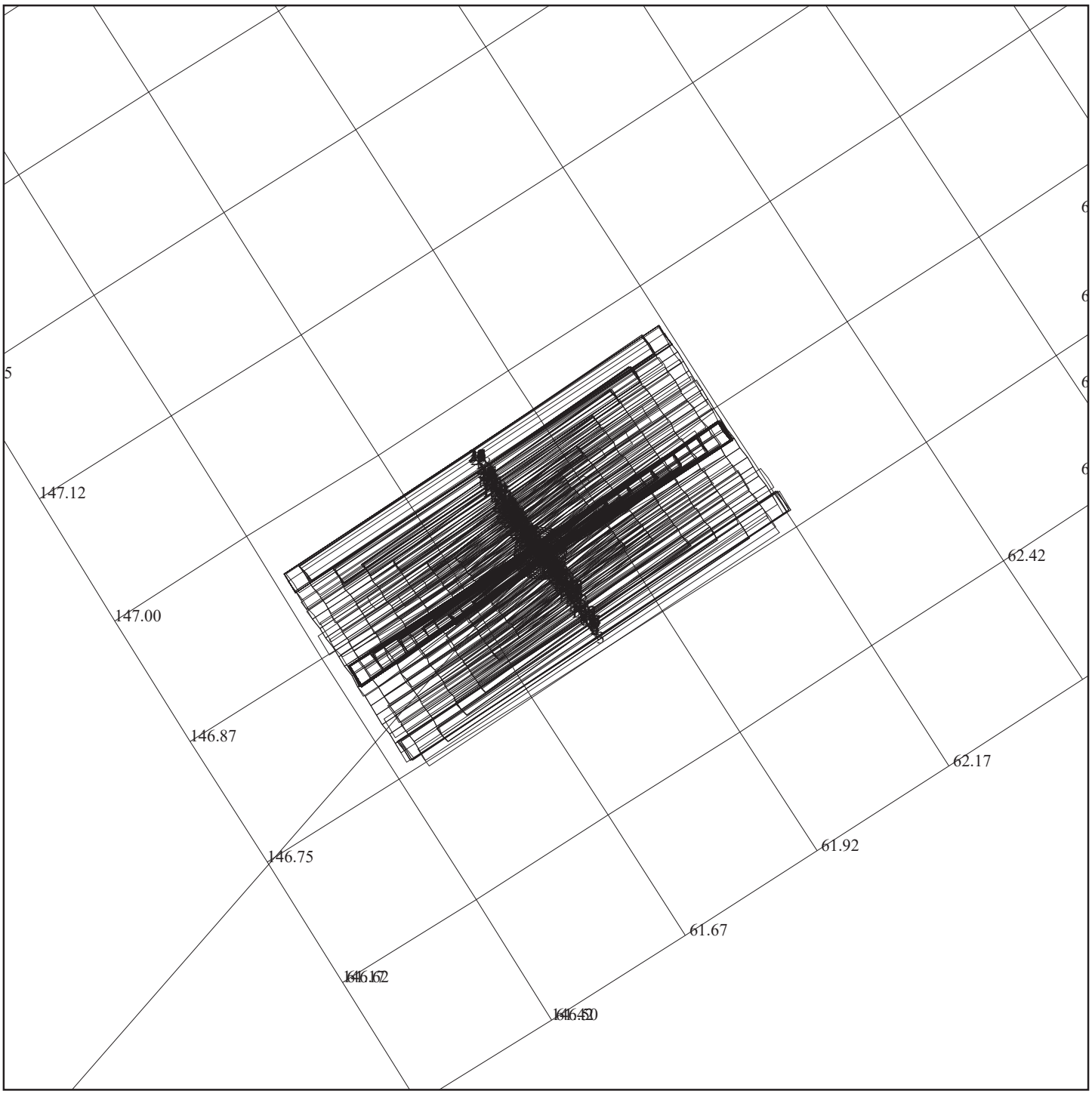
Alias IDUNROTATI03

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 4, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95



IDUNROTATI04

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUNROTATI04
CENTRAL BODY:PLUTO
MINI:m.IDUNROTATI04
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 92:00:0
OBSERVATION:IDUNROTATI04

Modes: XM,FM,SM, Gain 4, Chop Ref, Gr_Off 4
Multiple Observations, Multiple NIMS Modes.

Mosaic Start: Cone: 146.8, Clock: 61.9
Combination of CSMOS and SMOS
Plot Ref Time: Start of First Mosaic (TARGET)
Lat, Lon, Range, Res, Phase: (+50.1, 24.9, 69882, 35, 20)
DESCRIP:ROTATION MOVIE 4

Ida Rotation Uncertainty Reduction Obs ACTIVITY ID: IDUNRTURXM04+
START TIME: 93-240/15:19:03

Activity ID: Orbit ID Target U Inst N OAPEL RTURXM SeqNo 04 Multi +

Title Ida Rotation Uncertainty Reduction Obs Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000092:00:0	93-240/15:19:03	IEE-000/01:33:01
End	IEE-CDS 00000091:00:0	93-240/15:20:04	IEE-000/01:32:00
Duration	00000001:00:0	000/00:01:01	000/00:01:01

Top Label IDUNRTURXM04+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS data in Fixed Map mode - 17 wavelengths for the purpose of reducing the target/pointing uncertainty of the rotation observations.

Design Detail

Alias IDUNROTATI04

One NIMS scan at .75 mrad/sec across the error ellipse to be used for locating IDA in SSI frames. This will reduce tape recorder/playback overhead planned in the current strategy.

Fixed Map (XM), Gain 3, Grating Start 6, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 90 deg Full Map Observati ACTIVITY ID: IDUNRT90FM04+
START TIME: 93-240/15:25:07

Activity ID: Orbit ID Target U Inst N OAPEL RT90FM SeqNo 04 Multi +

Title Ida Rotation 90 deg Full Map Observati Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000086:00:0	93-240/15:25:07	IEE-000/01:26:57
End	IEE-CDS 00000083:00:0	93-240/15:28:09	IEE-000/01:23:55
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT90FM04+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

NIMS will perform a full map spectral (204 wavelengths), disk image of Ida at every 90 degrees of rotation for a period of 360 degrees. This is the last of 4 observations.

Design Detail

Alias IDUNROTATI04

One NIMS scan across the error ellipse at a sampling rate of 0.05 mrad/sec in full map mode.

Full Map (FM), Gain 3, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation — ACTIVITY ID: IDUNRT15SM10+ — START TIME: 93-240/15:36:14

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 10 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000075:00:0	93-240/15:36:14	IEE-000/01:15:50
End	IEE-CDS 00000071:50:0	93-240/15:39:44	IEE-000/01:12:20
Duration	00000003:41:0	000/00:03:30	000/00:03:30

Top Label IDUNRT15SM10+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the tenth of twelve observations of this nature

Design Detail

Alias IDUNROTATI04

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 3, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 30 deg Observation

ACTIVITY ID: IDUNRT30SM07+
START TIME: 93-240/15:48:22

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 07 Multi +

Title Ida Rotation 30 deg Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000063:00:0	93-240/15:48:22	IEE-000/01:03:42
End	IEE-CDS 00000060:00:0	93-240/15:51:24	IEE-000/01:00:40
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM07+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the seventh observation in a series of eight.

Design Detail

Alias IDUNROTATI04

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 3, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida 15 deg Rotation Observation

ACTIVITY ID: IDUNRT15SM11+
START TIME: 93-240/15:59:30

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 11 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000052:00:0	93-240/15:59:30	IEE-000/00:52:34
End	IEE-CDS 00000048:50:0	93-240/16:02:59	IEE-000/00:49:05
Duration	00000003:41:0	000/00:03:29	000/00:03:29

Top Label IDUNRT15SM11+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 0 Report Options Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the eleventh of twelve observations of this nature

Design Detail

Alias IDUNROTATI04

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 3, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Ida Rotation 30 deg Observation — ACTIVITY ID: IDUNRT30SM08+ — START TIME: 93-240/16:11:38

Activity ID: Orbit ID Target U Inst N OAPEL RT30SM SeqNo 08 Multi +

Title Ida Rotation 30 deg Observation — Instrument NIMS

Requestor M. Segura — Team NIMS — Working Group SWG

Time System CDS — Load ID EJ3 — Calendar Date 08/28/93 — Week 34

Start	IEE-CDS 00000040:00:0	93-240/16:11:38	IEE-000/00:40:26
End	IEE-CDS 00000037:00:0	93-240/16:14:40	IEE-000/00:37:24
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label IDUNRT30SM08+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict: Yes
CDS Bytes	0	Report Options	Real Time Activity: No

Observation Objective

To acquire NIMS spectral data in 102 wavelengths at every 30 degrees of rotation in a 360 degree period. This is the eighth and final observation in a series of eight.

Design Detail

Alias IDUNROTATI04

One NIMS scan across the error ellipse at a sampling rate of 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 3, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL — 08/12/93 11:53:02

Galileo Activity Plan Form — rev 5/95

Ida 15 deg Rotation Observation

ACTIVITY ID: IDUNRT15SM12+
START TIME: 93-240/16:22:45

Activity ID: Orbit ID Target U Inst N OAPEL RT15SM SeqNo 12 Multi +

Title Ida 15 deg Rotation Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000029:00:0	93-240/16:22:45	IEE-000/00:29:19
End	IEE-CDS 00000025:50:0	93-240/16:26:14	IEE-000/00:25:50
Duration	00000003:41:0	000/00:03:29	000/00:03:29

Top Label IDUNRT15SM12+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 102 wavelengths at each 15 degrees of rotation in a 360 degree period. This is the last of twelve observations of this nature

Design Detail

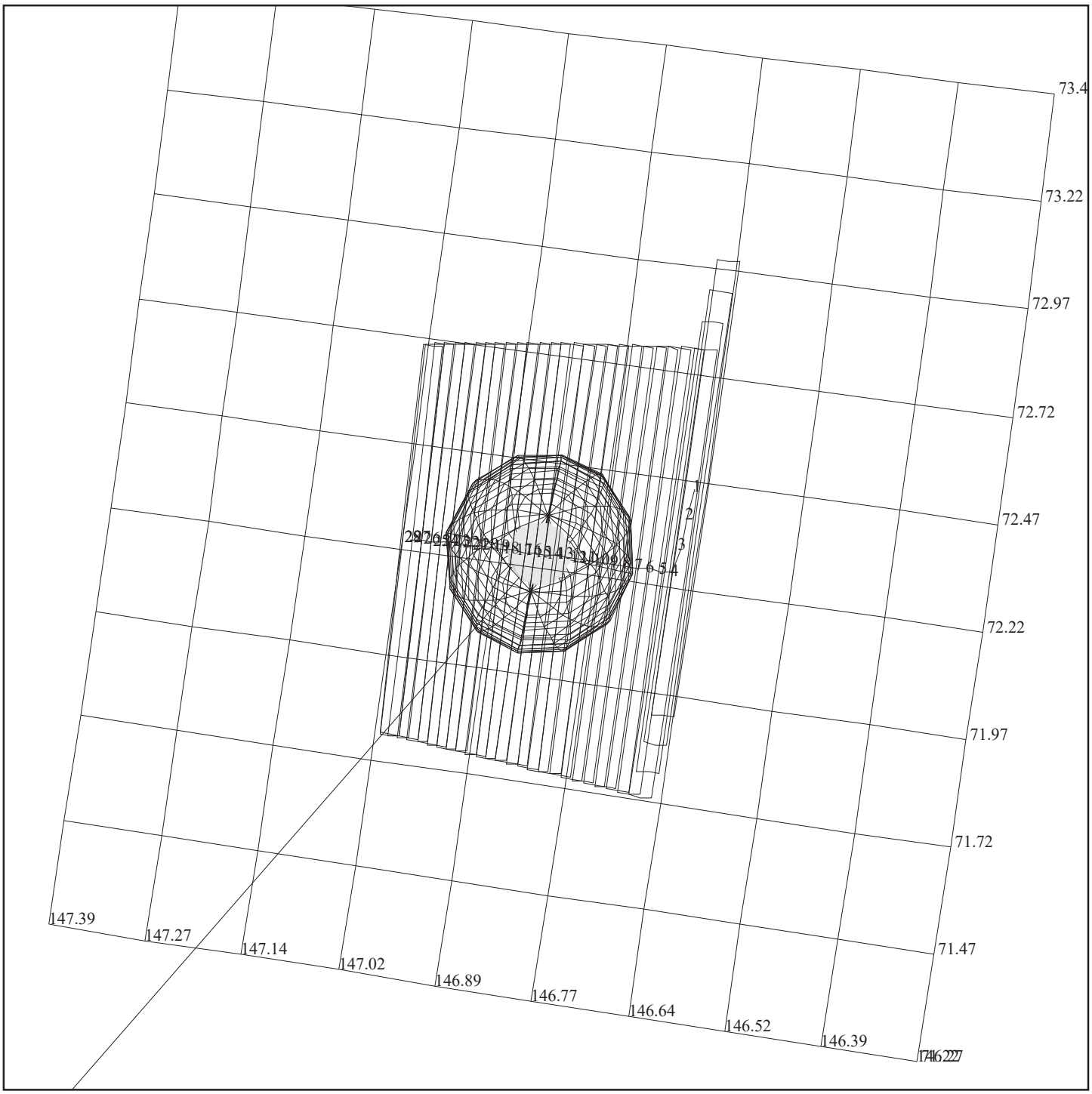
Alias IDUNROTATI04

One NIMS scan across the error ellipse plus pointing uncertainty at a sampling rate of 0.09 mrad/sec in short map 102 wavelength mode.

Short Map (SM), Gain 3, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNIDAGLM01

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUNIDAGLM01
CENTRAL BODY:IDA
MINI:m.IDUNIDAGLM01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 26:00:0
OBSERVATION:IDUNIDAGLM01

Mode: LM, Gr_Strt 0, Gain 3, Chop Ref, Gr_Off 4
408 Wavelengths
Every 2nd NIMS Footprint, 29 Total plotted
Mosaic Start: Cone: 146.65, Clock: 72.4
Slew Rate: .03 mrad/sec, 1 Cone Slew
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (23.65, 263.60, 19466, 9.7, 23)
DESCRIP:IDA GLOBAL LM OBSERVATION

Ida Global Long Map Observation

ACTIVITY ID: IDUNIDAGLM01+
START TIME: 93-240/16:25:47

Activity ID: Orbit ID Target U Inst N OAPEL IDAGLM SeqNo 01 Multi +

Title Ida Global Long Map Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000026:00:0	93-240/16:25:47	IEE-000/00:26:17
End	IEE-CDS 00000021:00:0	93-240/16:30:50	IEE-000/00:21:14
Duration	00000005:00:0	000/00:05:03	000/00:05:03

Top Label IDUNIDAGLM01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	229	Report Options	Real Time Activity No

Observation Objective

To obtain NIMS spectral data in 408 wavelengths, long map mode. This provides the highest spectral resolution data on Ida, at a necessarily lower spectral resolution.

Design Detail

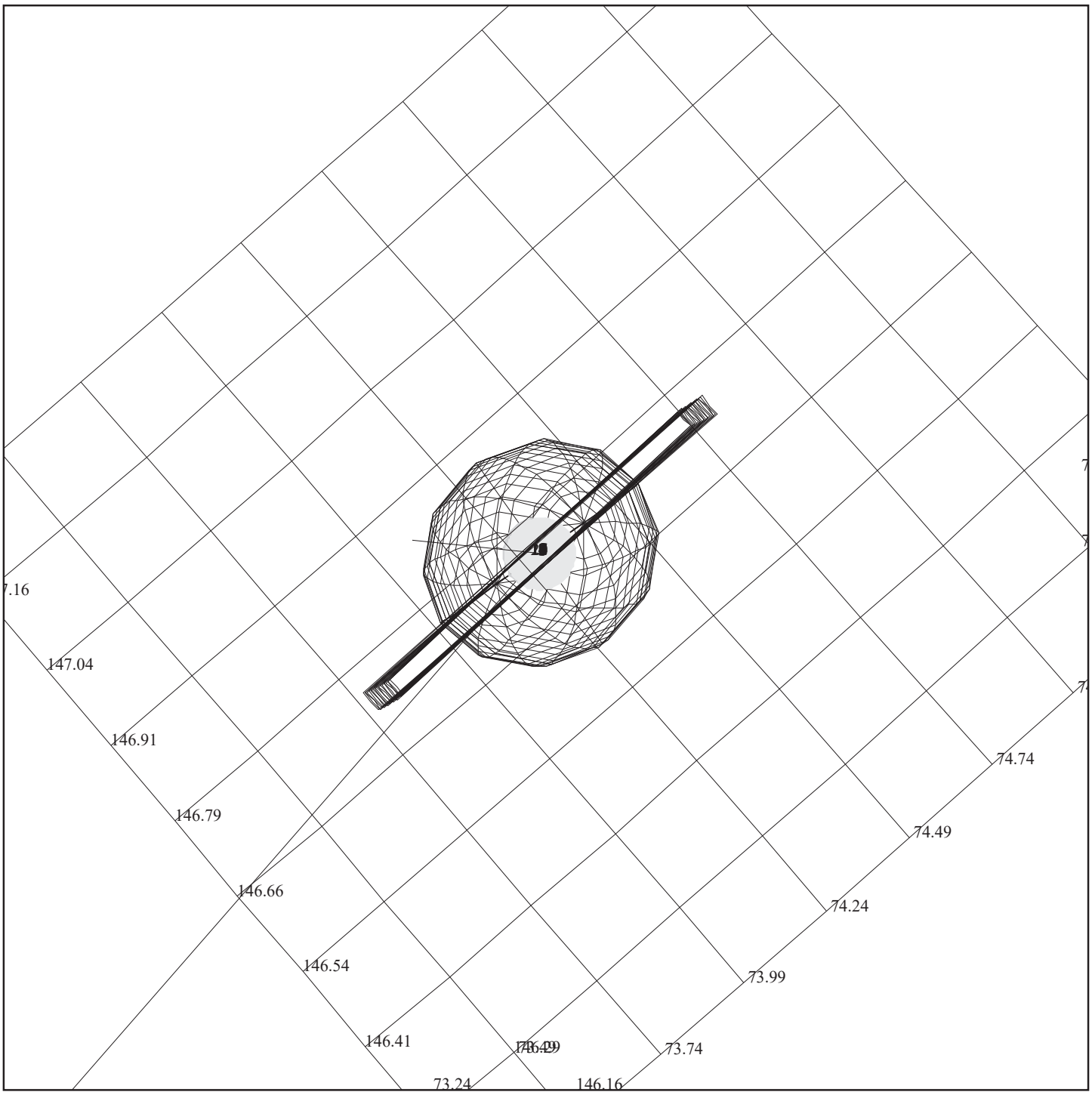
Alias

This observation is done in long map mode, in 408 wavelengths with a sampling rate of 0.03 mrad/sec.

Long Map (LM), Gain 3, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNLONMAP01

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUSFINROT01
CENTRAL BODY:IDA
MINI:m.IDUNIDACMB01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 26:00:0
OBSERVATION:IDUSFINROT01

Mode: LM, Gr_Strt 0, Gain 3, Chop Ref, Gr_Off 4
408 Wavelengths
Every 2nd NIMS Footprint, 21 Total plotted
Mosaic Start: Cone: 146.75, Clock: 74.3
Slew Rate: xxx mrad/sec, SMOS
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (-20.95, 321.94, 16521, 8.3, 23)
DESCRIP:IDA SSI FINAL ROTATION

NIMS Long Map / IDUSFINROT

ACTIVITY ID: IDUNLONMAP01+
START TIME: 93-240/16:29:50

Activity ID: Orbit ID Target U Inst N OAPEL LONMAP SeqNo 01 Multi +

Title NIMS Long Map / IDUSFINROT Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000022:00:0	93-240/16:29:50	IEE-000/00:22:14
End	IEE-CDS 00000018:00:0	93-240/16:33:52	IEE-000/00:18:12
Duration	00000004:00:0	000/00:04:02	000/00:04:02

Top Label IDUNLONMAP01+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 0 Report Options Real Time Activity No

Observation Objective

NIMS ride-along with SSI's final rotation observation.

Design Detail

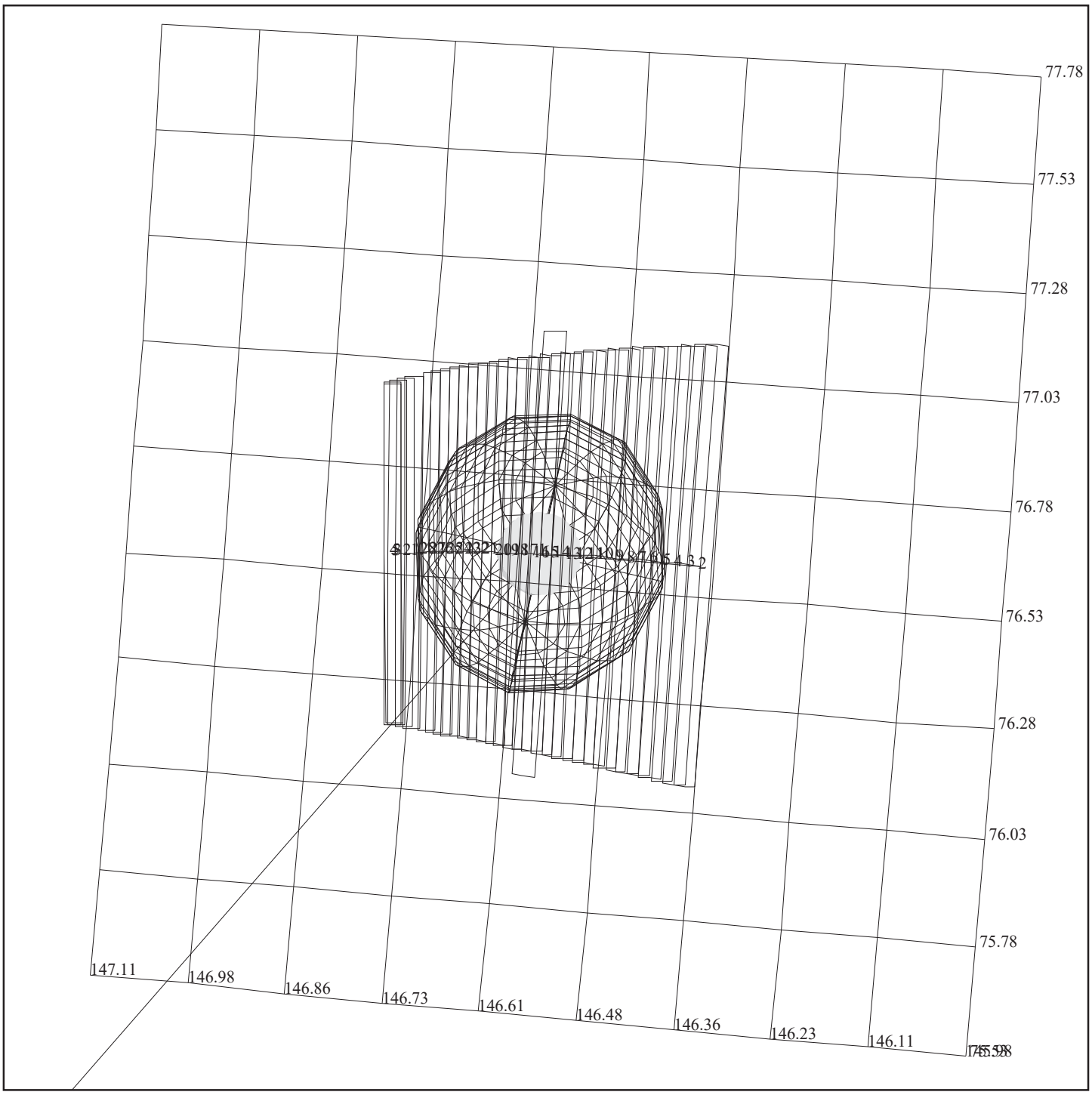
Alias IDUSFINROT01

NIMS ride-along behind SSI stop and shoot.
NIMS is in Long Map mode.

Long Map (LM), Gain 3, Grating Start 0, Chopper Ref, HCM

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNIDAFIN01

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUNIDAFIN01
CENTRAL BODY:IDA
MINI:m.IDUNIDACMB01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 26:00:0
OBSERVATION:IDUNIDAFIN01

Mode: LM, Gr_Strt 0, Gain 3, Chop Ref, Gr_Off 4
408 Wavelengths
Every 2nd NIMS Footprint, 27 Total plotted
Mosaic Start: Cone: 146.6, Clock: 76.6
Slew Rate: .03 mrad/sec, 1 Cone Slew
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (+7.61, 359.10, 14320, 7.2, 24)
DESCRIP:IDA FINAL 90 DEG ROTATION MAP

NIMS Final 90 deg Rotation Map

ACTIVITY ID: IDUNIDAFIN01+
START TIME: 93-240/16:32:52

Activity ID: Orbit ID Target U Inst N OAPEL IDAFIN SeqNo 01 Multi +

Title NIMS Final 90 deg Rotation Map Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000019:00:0	93-240/16:32:52	IEE-000/00:19:12
End	IEE-CDS 00000013:45:0	93-240/16:38:26	IEE-000/00:13:38
Duration	00000005:46:0	000/00:05:34	000/00:05:34

Top Label IDUNIDAFIN01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	229	Report Options	Real Time Activity No

Observation Objective

NIMS will perform a Long Map spectral, disk image of IDA. This is the last of the rotation observations and the fifth 90 degree observation taken by NIMS. The data is taken in 408 wavelengths. This observation provides the highest spectral resolution data on the asteroid at a necessarily lower spectral resolution.

Design Detail

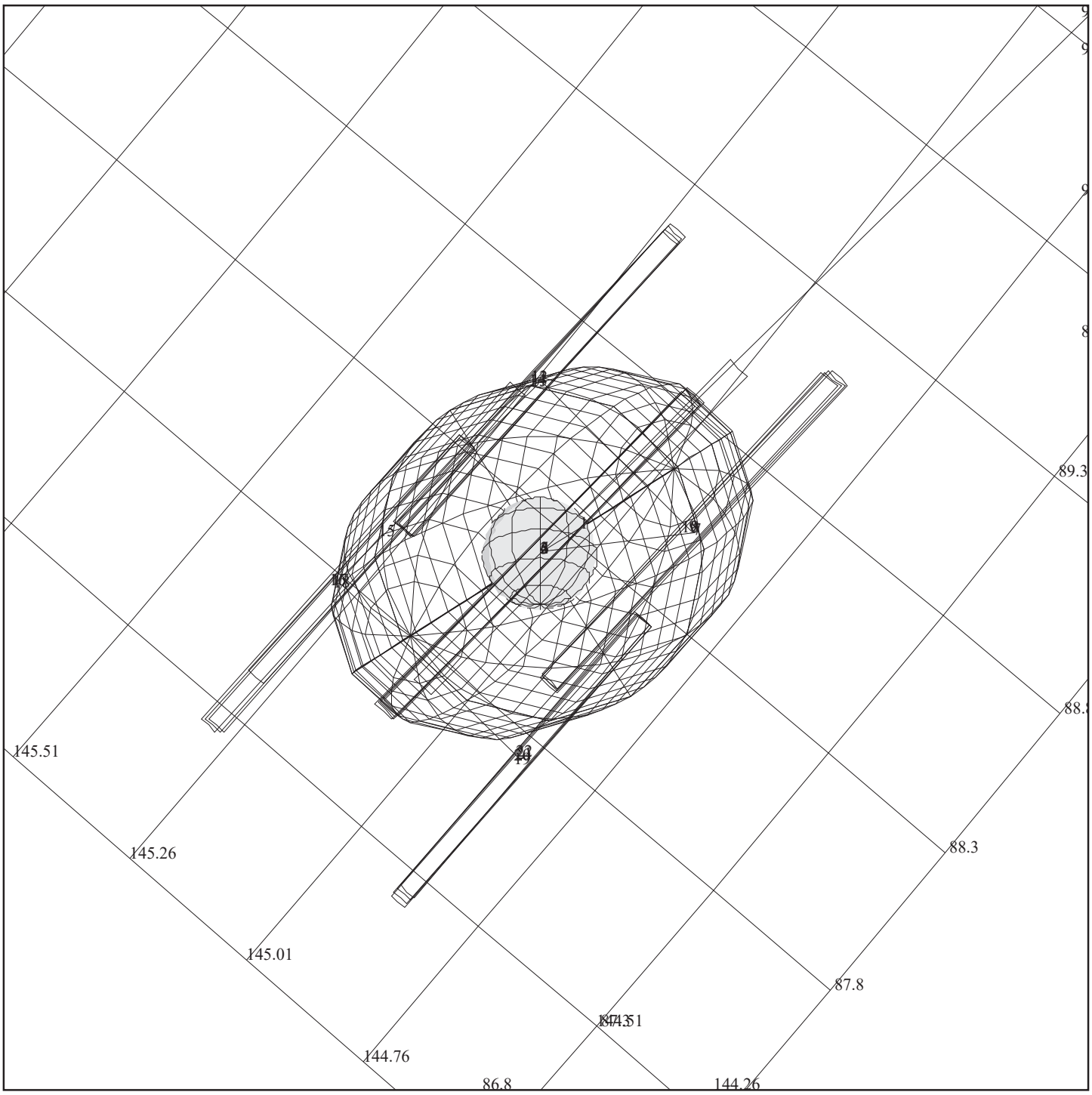
Alias

Instrument is in Long Map mode at 408 wavelenghts, this mode being used on the fifth and last 90 degrees of rotation.
Sampling rate is 0.03 mrad/sec.

Long Map (LM), Gain 3, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNLONMAP02

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUS6COLOR01
CENTRAL BODY:IDA
MINI:m.IDUS6COLOR01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 15:00:0
OBSERVATION:IDUS6COLOR01

Mode: LM, Gr_Strt 0, Gain 3, Chop Ref, Gr_Off 4
408 Wavelengths
Every 2nd NIMS Footprint, 22 Total plotted
Mosaic Start: Cone: 145.05, Clock: 88.2
Slew Rate: xxx mrad/sec, SMOS
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (+12.42, 282.10, 11402, 5.7, 26)
DESCRIP:TARGET FOR 6-COLOR 1X1 4-COLOR 2

NIMS Long Map / IDUS6COLOR

ACTIVITY ID: IDUNLONMAP02+
START TIME: 93-240/16:39:56

Activity ID: Orbit ID Target U Inst N OAPEL LONMAP SeqNo 02 Multi +

Title NIMS Long Map / IDUS6COLOR Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000012:00:0	93-240/16:39:56	IEE-000/00:12:08
End	IEE-CDS 00000007:00:0	93-240/16:45:00	IEE-000/00:07:04
Duration	00000005:00:0	000/00:05:04	000/00:05:04

Top Label IDUNLONMAP02+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 0 Report Options Real Time Activity No

Observation Objective

NIMS ride-along with SSI's 6 color observation.

Design Detail

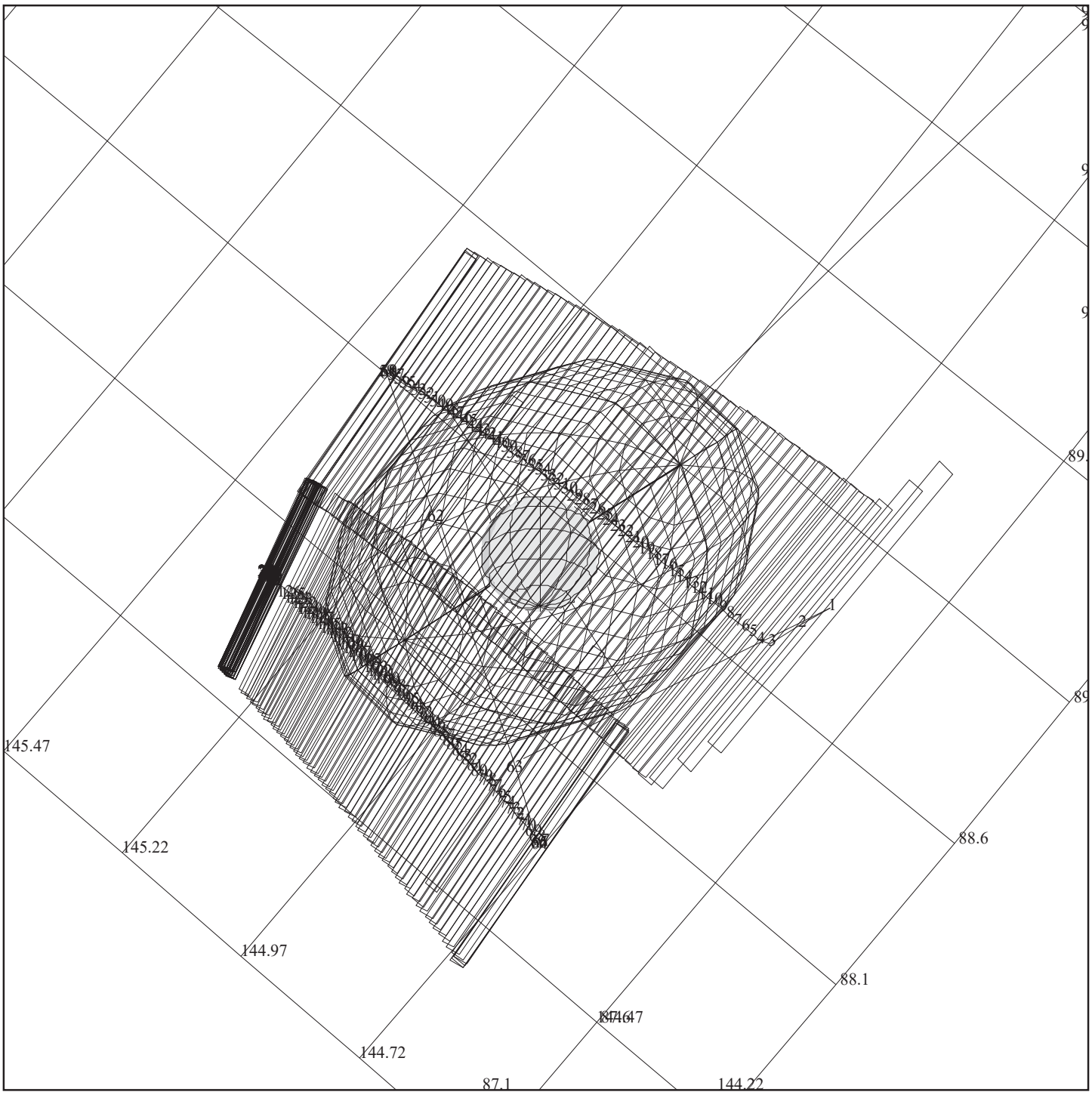
Alias IDUS6COLOR01

NIMS ride-along behind SSI stop and shoot.
NIMS is in Long Map mode.

Long Map (LM), Gain 3, Grating Start 0, Chopper Ref, IM4

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNIDACHM01

POINTER E1.0 lisac: 7/20/1993 11:19:37
FILE:P.IDUNIDACHM01
CENTRAL BODY:IDA
MINI:/home/lisac/ej3seq/NIMS/m.ej03ab
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 11:00:0
OBSERVATION:IDUNIDACHM01

Mode: SM, Gr_Strt 2, Gain 3, Chop Ref, Gr_Off 4
102 Wavelengths
Every 2nd NIMS Footprint, 53 Total plotted
Mosaic Start: Cone: 144.62, Clock: 88.9
Slew Rate: .09 mrad/sec, Z Scan
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (-10.16, 235.47, 8521, 4.3, 30)
DESCRIP:IDA COMPOSITION @ 102 WAVELENGTH

IDA Composition at 102 wavelengths

ACTIVITY ID: IDUNIDACHM01+
START TIME: 93-240/16:40:57

Activity ID: Orbit ID Target U Inst N OAPEL IDACHM SeqNo 01 Multi +

Title IDA Composition at 102 wavelengths Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000011:00:0	93-240/16:40:57	IEE-000/00:11:07
End	IEE-CDS 00000005:00:0	93-240/16:47:01	IEE-000/00:05:03
Duration	00000006:00:0	000/00:06:04	000/00:06:04

Top Label IDUNIDACHM01+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 229 Report Options Real Time Activity No

Observation Objective

Map the compositional heterogeneity of IDA using 102 wavelengths (1/4 of the full NIMS spectral resolution). The 102 wavelength mode provides the highest spatial resolution at a spectral resolution of about 0.04 microns. This is the lowest available spectral resolution which permits analysis of shape for solid bands. This is the NIMS-driven highest priority observation with 95% probability of capture.

Design Detail

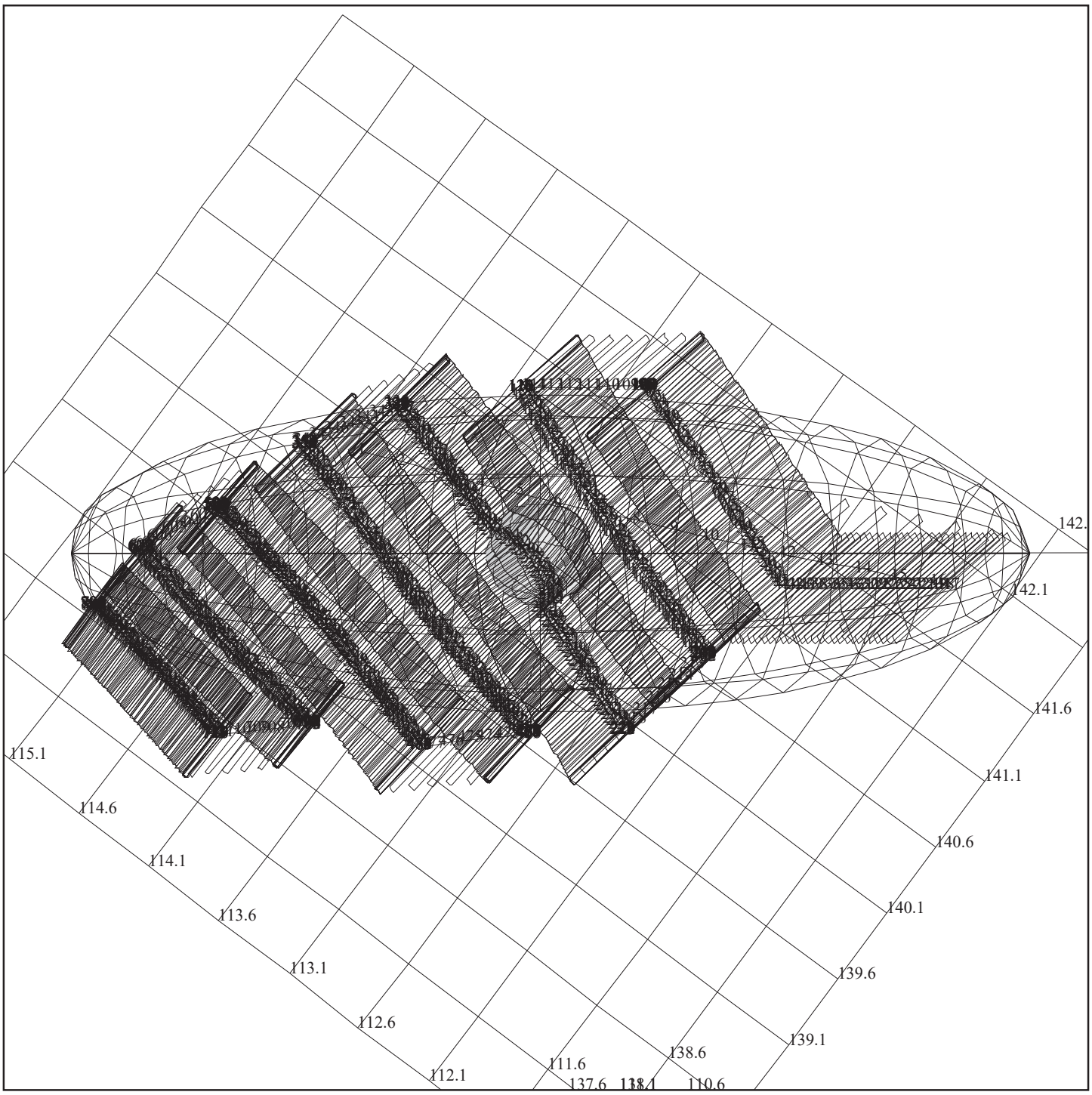
Alias

This observations is the last of NIMS planned Short Map scans of Ida. The instrument is sampling at 0.09 mrad/sec in 102 wavelengths.

Short Map (SM), Gain 3, Grating Start 2, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNHISPAT01

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUSHIRES_01
CENTRAL BODY:IDA
MINI:m.IDUSHIRES_01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 6:00:0
OBSERVATION:IDUSHIRES_01

Mode: XM, Gr_Strt 6, Gain 3, Chop Ref, Gr_Off 4
17 Wavelengths
Every 2nd NIMS Footprint, 804 Total plotted
Mosaic Start: Cone: 114.6, Clock: 140.5
Slew Rate: .80 mrad/sec, Box Scan
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (-1.60, 73.63, 4762, 2.4, 39)
DESCRIP:HIRES 95% CONFIDENCE OBSERVATION

Ida Highest Spatial Resolution Observa ACTIVITY ID: IDUNHISPAT01+
START TIME: 93-240/16:46:31

Activity ID: Orbit ID Target U Inst N OAPEL HISPAT SeqNo 01 Multi +

Title Ida Highest Spatial Resolution Observa Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000005:45:0	93-240/16:46:31	IEE-000/00:05:33
End	IEE-CDS 00000001:00:0	93-240/16:51:04	IEE-000/00:01:00
Duration	00000004:45:0	000/00:04:33	000/00:04:33

Top Label IDUNHISPAT01+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 0 Report Options Real Time Activity No

Observation Objective

To obtain NIMS data in Fixed Map mode (17 wavelengths), in conjuction with the SSI High Resolution observation. This observation provides the highest spatial resolution spectral image with 95% probability of capture. Ida is sampled in 17 wavelengths spanning from 0.7 to 5.2 microns.

Design Detail

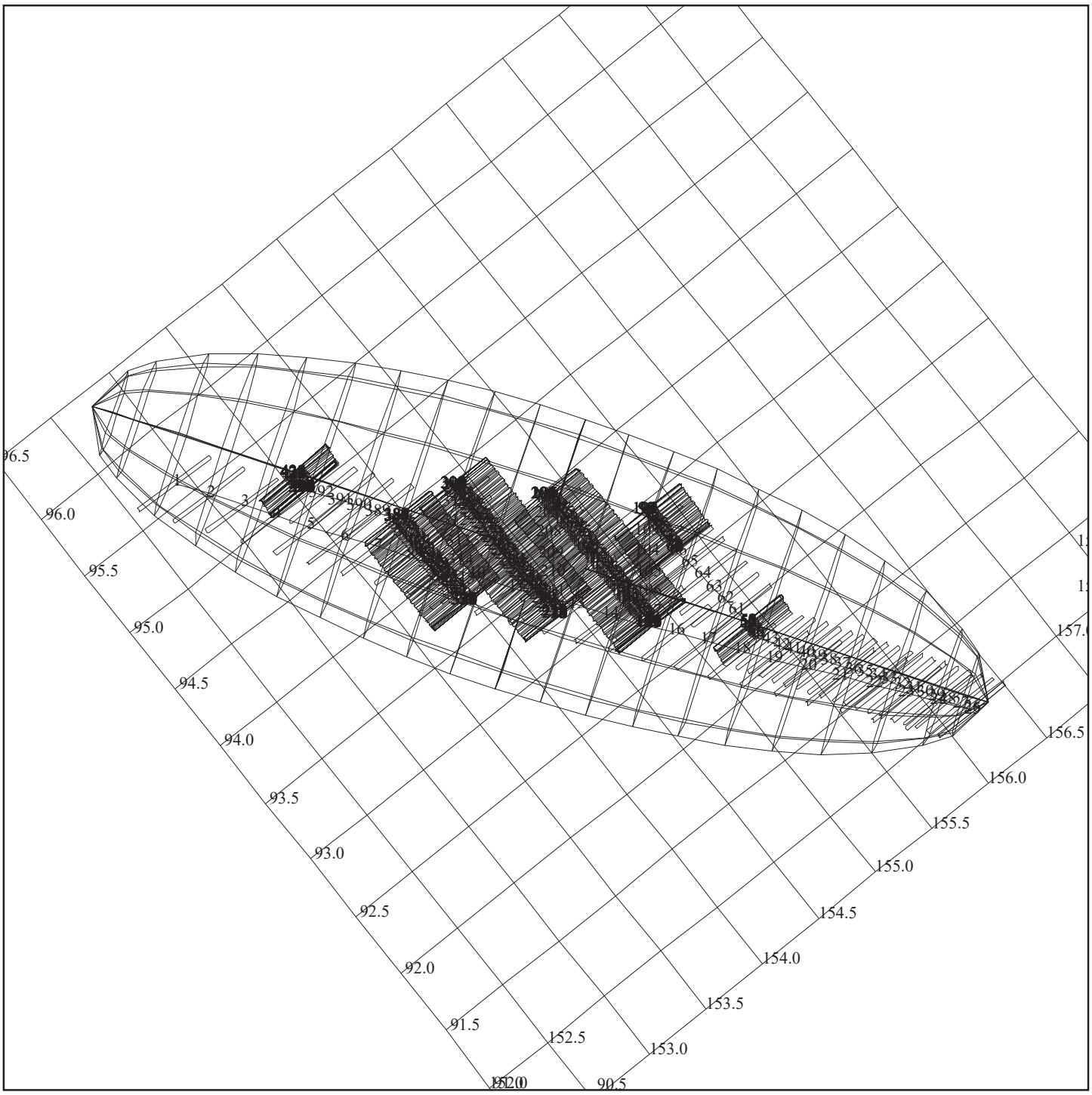
Alias IDUSHIRES01

This observation is designed such that both NIMS and SSI are in compatible modes and scan rates. NIMS is in Fixed Map mode and scannng at a rate of 0.800 mrad/sec.

Fixed Map (XM), Gain 3, Grating Start 6, Chopper Ref, IM4

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDUNIDACA_01

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDUSENCNTR01
CENTRAL BODY:IDA
MINI:m.IDUSENCNTR01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 -CDS 1:00:0
OBSERVATION:IDUSENCNTR01

Mode: XM, Gr_Strt 6, Gain 3, Chop Ref, Gr_Off 4
17 Wavelengths
Every 2nd NIMS Footprint, 430 Total plotted
Mosaic Start: Cone: 95.6, Clock: 152.9
Slew Rate: .80 mrad/sec, Z Scan
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (-3.84, 123.46, 2611, 1.3, 74)
DESCRIP:SUPER HI-RES REDUCED CONFIDENCE

Ida Closest Approach Observation — ACTIVITY ID: IDUNIDACA_01+ — START TIME: 93-240/16:51:04

Activity ID: Orbit ID Target U Inst N OAPEL IDACA_ SeqNo 01 Multi +

Title Ida Closest Approach Observation Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE-CDS 00000001:00:0	93-240/16:51:04	IEE-000/00:01:00
End	IEE+CDS 00000001:00:0	93-240/16:53:04	IEE+000/00:01:00
Duration	00000002:00:0	000/00:02:00	000/00:02:00

Top Label IDUNIDACA_01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	0	Report Options	Real Time Activity No

Observation Objective

To obtain a NIMS spectral image of a portion of Ida with the highest possible spatial resolution in 17 wavelengths. This is a compatible NIMS/SSI observation.

Design Detail

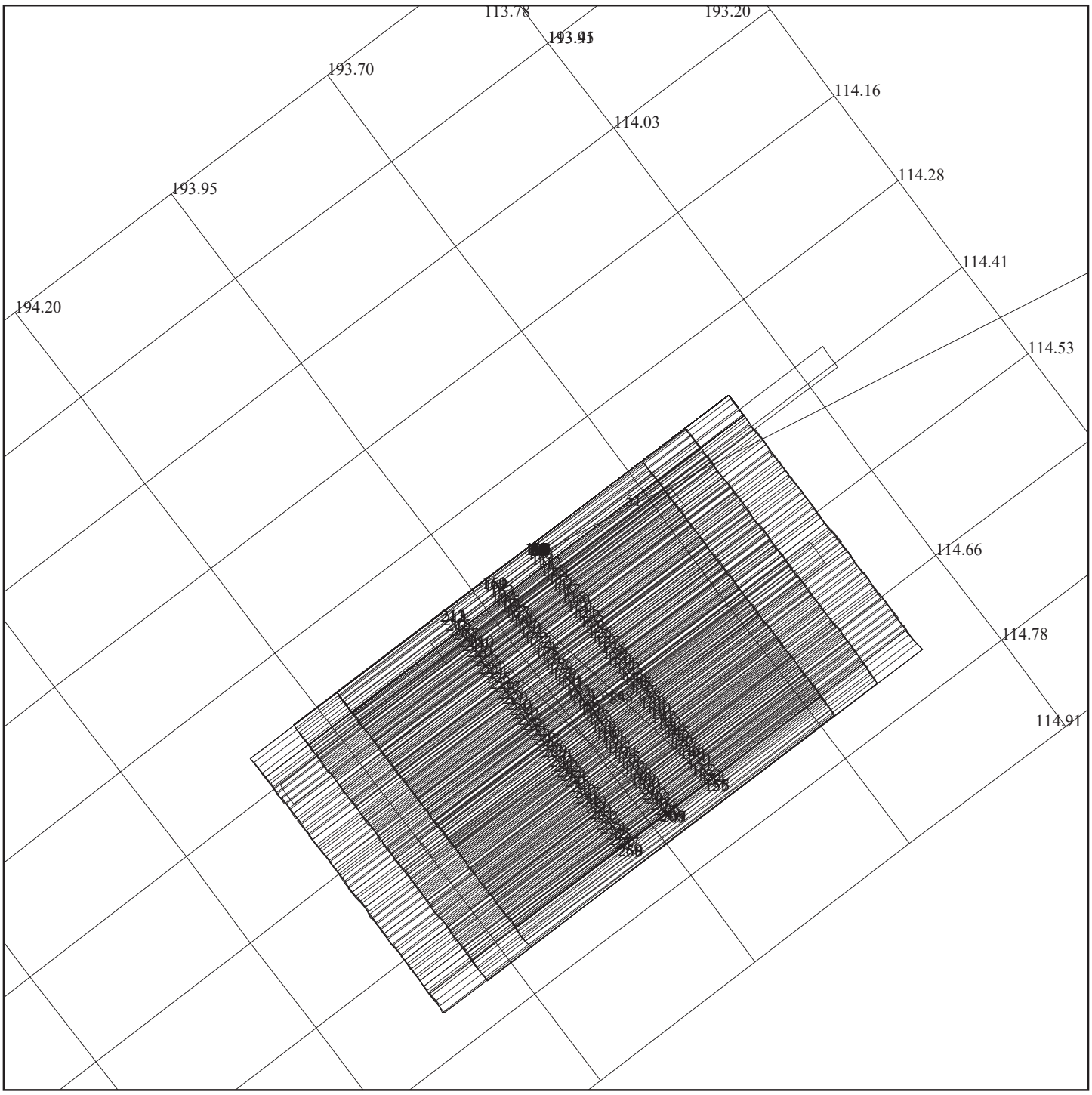
Alias IDUSENCNTR01

This design is a compatible NIMS/SSI observation taken at -1 to +1 minutes, with the highest spatial resolution possible. NIMS will be in Fixed Map mode, taking data in 17 wavelengths with a sampling rate of 0.800 mrad/sec.

Fixed Map (XM), Gain 3, Grating Start 6, Chopper Ref, IM4

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95



IDHNBORCAL01

POINTER E1.0 Iisac: 7/20/1993 9: 8:32
FILE:P.IDHUBORSIT01
CENTRAL BODY:IDA
MINI:m.IDHUBORSIT01
S/C EPH:/DATA/EPH/IDA22-050593.t
PERIAPSIS:93-240/16:53:00.000
START:IEE 93-240/16:52:04.066 +CDS 30:00:0
OBSERVATION:IDHUBORSIT01

Mode: XM, Gr_Strt 6, Gain 3, Chop Ref, Gr_Off 4
17 Wavelengths
Every 2nd NIMS Footprint, 260 Total plotted
Mosaic Start: Cone: 114.38, Clock: 193.85
Slew Rate: .08 mrad/sec, Z Scan
Plot Ref Time: Start of Mosaic
Lat, Lon, Range, Res, Phase: (x, x, x, x, x)
DESCRIP:BORESIGHT CAL - VEGA

Boresight Calibration

ACTIVITY ID: IDHNBORCAL01+
START TIME: 93-240/17:22:24

Activity ID: Orbit ID Target H Inst N OAPEL BORCAL SeqNo 01 Multi +

Title Boresight Calibration Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE+CDS 00000030:00:0	93-240/17:22:24	IEE+000/00:30:20
End	IEE+CDS 00000039:00:0	93-240/17:31:30	IEE+000/00:39:26
Duration	00000009:00:0	000/00:09:06	000/00:09:06

Top Label IDHNBORCAL01+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 0 Report Options Real Time Activity No

Observation Objective

Boresight Calibration with PPR, NIMS and UVS instruments to determine field of view offsets of scan platform instruments, minus SSI.

Design Detail

Alias IDHUBORSIT01

Target Star: Vega (alpha Lyra)

Fixed Map (XM), Gain 3, Grating Start 6, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

NIMS PCT Calibration

ACTIVITY ID: IDNNPCTCAL01+
START TIME: 93-241/04:00:24

Activity ID: Orbit ID Target N Inst N OAPEL PCTCAL SeqNo 01 Multi +

Title NIMS PCT Calibration Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE+CDS 00000661:00:0	93-241/04:00:24	IEE+000/11:08:20
End	IEE+CDS 00000710:00:0	93-241/04:49:57	IEE+000/11:57:53
Duration	00000049:00:0	000/00:49:33	000/00:49:33

Top Label IDNNPCTCAL01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	229	Report Options	Real Time Activity No

Observation Objective

Perform a Photometric Calibration of the NIMS instrument after the IDA encounter.

Design Detail

Alias

This calibration will be done in Long Map mode.
The off-sun angle is approximately 18 degrees.
The PCT will be partially in shade due to the high off-sun angle of the spin-axis of the spacecraft.

Long Map (LM), Gain 1, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL

08/12/93
11:53:02

Galileo Activity Plan Form rev 5/95

NIMS RCT Calibration

ACTIVITY ID: IDNNRCTCAL01+
START TIME: 93-242/19:12:15

Activity ID: Orbit ID Target N Inst N OAPEL RCTCAL SeqNo 01 Multi +

Title NIMS RCT Calibration Instrument NIMS

Requestor M. Segura Team NIMS Working Group SWG

Time System CDS Load ID EJ3 Calendar Date 08/28/93 Week 34

Start	IEE+CDS 00002987:00:0	93-242/19:12:15	IEE+002/02:20:11
End	IEE+CDS 00002997:00:0	93-242/19:22:22	IEE+002/02:30:18
Duration	00000010:00:0	000/00:10:07	000/00:10:07

Top Label IDNNRCTCAL01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict Yes
CDS Bytes	229	Report Options	Real Time Activity No

Observation Objective

Perform a Radiometric Calibration of the NIMS instrument after the IDA encounter.

Design Detail

Alias

This calibration will be done in Full Map mode.

Full Map (FM), Gain 1, Grating Start 0, Chopper Ref, MPW

Last Changed 05/22/95 Changed By FEL 08/12/93 11:53:02

Galileo Activity Plan Form rev 5/95

Chapter 6 - Data Return

Contents

Introduction to Chapter 6

Data Return

The Ida data were recorded on tape during the Ida Encounter and partially played back over a number of months. Due to the low data rates, not all of the NIMS Ida observations were returned. Efforts were made to locate IDA in the NIMS data using jailbar searches and then, using assumptions based on the design of the mosaics, small segments of selected mosaics were returned so as to maximize Ida data return. Unfortunately a problem with the scan platform gyros caused the spacecraft to change from inertial mode to cruise mode, causing the mosaics and scan platform slews to execute in an unpredictable manner such that dark sky data was returned instead of Ida data in many cases. A discussion of the scan platform problems follows later in this chapter.

The NIMS data are stored in EDRs (Experiment Data Records) produced by JPL-MIPS (Multi-mission Image Processing System). The NIMS EDR is described in the NIMS Experiment Data Record SIS (Software Interface Specification) Number 232-08. This document is part of the Galileo Project document GLL-625-610. The NIMS EDR file name is determined by the start time (SCLK) of the data. It begins with the letter "N", which is followed by the partition number, RIM and MOD91 counts; the file extension is a number which represents the version number of duplicate files. For example, if the clock is in its second cycle and the first record's SCLK is equal to 12345678.90.7, and this is the first such EDR, then the file will be named: "N21234567890.1".

The MIPS-generated 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 (but kept separately on the CD) and the file is renamed so as to conform to the 8.3 DOS file-naming convention as follows: The initial "N" becomes an "E", the partition number is preserved, the RIM count is split between the name and the extension, and a final character (A,B,...) is added to the extension to distinguish any EDRs that start in the same RIM. For example, the MIPS EDR N21234567890.1 becomes E2123456.78A.

Along with this NIMS Guide, other files are distributed on the NIMS EDR CD to help describe the NIMS data. Among these files are the OBSCAT, OBSPLN and RIMCAT. The OBSCAT is very similar to the OBSTAB described below in this chapter and as well as in its PDS label on the CD. The OBSPLN, the planned OBSTAB, is a table similar to the planned Obstab found in Chapter 4 of this NIMS Guide. It is also described in its PDS label on the CD. The RIMCAT is a table which describes the NIMS EDR data on a RIM by RIM basis. It contains one entry (row) for each RIM of each NIMS EDR. The RIMCAT may be used to track instrument mode and state changes, etc. It too is described in its PDS label on the CD.

The table on the following four pages, the NIMS Obstab (Observation Table), is a time-ordered listing of the NIMS observation parameters for the data returned from the Ida Encounter. It will be used for

systematic processing of the EDR data into cubes and tubes. The NIMS Obstab found in Chapter 4 of this NIMS Guide is the Planned Obstab - the Observation Table for the NIMS data that was sent to the spacecraft's tape recorder.

The table on the following five pages gives a brief summary of the NIMS data returned for the Ida Encounter. Since Ida's position and velocity were not well known during the planning stages of the Ida observations, a large amount of empty space was scanned in each mosaic to ensure that Ida would be observed. As stated above, due to limited down-link capabilities and low data rates, not all Ida observations were returned. Only portions of some mosaics were returned. For each NIMS EDR the SCLK range is given along with the OAPEL names of the NIMS observations that take place during that time period. For each observation the time ranges for which data were returned along with the time ranges in which NIMS actually observed Ida are listed, along with additional comments. Dactyl, Ida's moon, was detected in three NIMS observations: IDUNIDAFIN01, IDUNIDACHM01 and IDUSHIRES_01. The time ranges for when NIMS saw Dactyl are also listed in this table. The last three NIMS EDRs in this table contain NIMS boresight, PCT and RCT calibration data.

Next in this chapter is a NIMS memo which discusses the scan platform's anomalous behavior during the Ida Fly-by. Towards the beginning of the Ida Encounter the scan platform gyros were turned off due to a perceived overheating of the gyros. The response of the AACS was to switch from inertial mode to cruise mode for the rest of the encounter. The cone actuator has a different response in cruise mode than in inertial mode. All mosaics executed in cruise mode were affected by this response difference. Sometimes the mosaics were executed with slight deviations from the predicted mosaic, sometimes with large offsets in execution and sometimes not at all! Examples of the scan platform behavior are given in this section. This change in the execution of the scan platform behavior had a large effect on the amount of NIMS Ida data returned. Once Ida's position was determined more precisely, the plan was to return only the data in which NIMS would see Ida. This plan was based on the assumption of how the scan platform behaved in inertial mode. Since the scan platform behaved in a manner different from that predicted, NIMS did not see Ida in many of the small segments of mosaics that were returned. This problem was greatest in the first half of the encounter sequence where Ida's size was of the order of a few NIMS pixels and the mosaics were of short duration. The mosaics in the second half of the Ida encounter were longer in duration so that they still completed even though they were executed in cruise mode. The scan platform's behavior, though, was still very erratic in these large mosaics, as illustrated in the attached memo.

Even with the constraints of limited data return and the problems with the anomalous scan platform behavior, the NIMS Ida observations which had the highest priority were returned, along with the bonus of finding and observing Dactyl, Ida's moon.

NIMS Obstab (Data Returned)

Heading	Columns	Comments
OAPEL	1 - 12	.Oapel Name (NIMS aliases Used)
EXT	14 - 14	.Extension (allow for split OAPELs)
PSID	16 - 17	.2 Letter ID for the OAPEL
SCLK1	19 - 29	.Start time of OBS in SCLK
SCLK2	31 - 41	.STOP time of OBS in SCLK
MODE	43 - 44	.NIMS Instrument MODE
GAIN	46 - 47	.Gain State (true value)
CHOP	49 - 50	.Chopper State (1=Ref,2=63Hz,3=FreeRun,4=Off)
GRAT_OFF	52 - 53	.Grating Offset
PTAB_A(6)	55 - 71	.First PTAB (repeat count,mirror op,autobias...
PTAB_B(6)	73 - 89	.Second PTAB (...grating start, grating delta...
		. (...number of grating postions)
ECAL	92 - 92	.Electronics Calibration Active (1=yes)
OPCAL	94 - 94	.Optics Calibration active (1=yes)
UTC1	96 - 112	.Start time of OBS in UTC (from SEF - ISO STANDARD)
REAL_TIME	115 - 115	.NIMS in Real-Time Telemetry (1=yes)
RECORD	117 - 117	.NIMS in Record Telemetry(1=yes)
TARGET	120 - 127	.Primary Target of OBS
		IDA - U - Ida
		CALIBRATION - N - Non-Science

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

INPUT SEF FILE: EJ3_930727.SEF

OAPEL, EXT, PSID, SCLK1, SCLK2, MODE, GAIN, CHOP, GRAT_OFF, PTAB_A(6), PTAB_B(6), ECAL, OPCAL, UTC1, REAL_TIME, RECORD, TARGET

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDNNOPCAL_01	A	JA	02010188:04	02010188:45	3	4	1	4	1	1	0	0	1	24	1	1	0	0	1	24	1	0	1993-229T20:41:31	0	1	CAL
IDNNECAL__01	A	JB	02015540:04	02015540:39	1	2	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	1	1993-233T14:52:59	0	1	CAL
IDUNRTURXM01	A	IA	02025305:00	02025305:14	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/11:26:25	0	1	IDA
IDUSROTATI01	A	IA	02025307:19	02025307:25	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/11:28:39	0	1	IDA
IDUNRT15SM03	A	IA	02025392:11	02025392:28	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/12:54:31	0	1	IDA

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDUNRTURXM02	A	JF	02025396:90	02025397:00	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/12:59:26	0	1	IDA
IDUNRTURXM02	B	JF	02025397:22	02025397:25	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/12:59:41	0	1	IDA
IDUSROTATI02	A	JF	02025399:16	02025399:29	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:01:39	0	1	IDA
IDUSROTATI02	B	JF	02025399:70	02025399:73	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:02:15	0	1	IDA
IDUSROTATI02	C	JF	02025400:18	02025400:25	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:02:41	0	1	IDA
IDUSROTATI02	D	JF	02025400:70	02025400:73	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:03:15	0	1	IDA
IDUSROTATI02	E	JF	02025401:16	02025401:29	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:03:39	0	1	IDA
IDUSROTATI02	F	JF	02025401:66	02025401:72	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/13:04:13	0	1	IDA
IDUNRT90SM02	A	JF	02025403.19	02025403.25	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:05:43	0	1	IDA
IDUNRT90SM02	B	JF	02025403.69	02025404.07	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:05:17	0	1	IDA
IDUNRT90SM02	C	JF	02025404.20	02025404.54	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:05:56	0	1	IDA
IDUNRT15SM04	A	JF	02025414:66	02025414:74	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:17:21	0	1	IDA
IDUNRT15SM04	A	JF	02025415:19	02025415:26	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:17:51	0	1	IDA
IDUSROTATI02	G	JF	02025422:13	02025422:35	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:24:52	0	1	IDA
IDUNRT30SM03	A	JF	02025426:19	02025426:47	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:28:59	0	1	IDA
IDUNRT30SM03	B	JF	02025426:49	02025426:53	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:29:19	0	1	IDA
IDUNRT30SM03	C	JF	02025426:69	02025426:74	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:29:32	0	1	IDA
IDUNRT30SM03	D	JF	02025427:19	02025427:30	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:29:59	0	1	IDA
IDUNRT15SM05	A	JF	02025437:69	02025437:74	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:40:39	0	1	IDA
IDUNRT15SM05	B	JF	02025438:19	02025438:26	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:41:03	0	1	IDA
IDUNRT15SM05	C	JF	02025438:69	02025438:74	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:41:40	0	1	IDA
IDUSROTATI02	H	JF	02025445:20	02025445:27	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:48:12	0	1	IDA
IDUNRT30SM04	A	JF	02025449:19	02025449:54	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:52:14	0	1	IDA
IDUNRT30SM04	B	JF	02025449:69	02025449:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:53:48	0	1	IDA
IDUNRT30SM04	C	JF	02025450:19	02025450:27	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/13:53:14	0	1	IDA
IDUNRT15SM06	A	JF	02025460:69	02025460:75	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:03:54	0	1	IDA
IDUNRT15SM06	B	JF	02025461:19	02025461:27	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:04:22	0	1	IDA
IDUNRTURXM03	A	JI	02025465:22	02025465:27	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:08:26	0	1	IDA
IDUNROTATI03	A	JI	02025468:19	02025468:26	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:11:26	0	1	IDA
IDUNROTATI03	B	JI	02025468:70	02025468:72	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:12:00	0	1	IDA
IDUNROTATI03	C	JI	02025469:20	02025469:26	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:12:27	0	1	IDA
IDUNROTATI03	D	JI	02025469:70	02025469:72	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:13:01	0	1	IDA
IDUNROTATI03	E	JI	02025470:19	02025470:25	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:13:28	0	1	IDA
IDUNROTATI03	F	JI	02025470:65	02025470:73	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/14:13:58	0	1	IDA

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDUNRT90FM03	A	JI	02025472:18	02025472:28	1	4	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/14:15:28	0	1	IDA
IDUNRT90FM03	B	JI	02025472:67	02025473:07	1	4	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/14:16:01	0	1	IDA
IDUNRT90FM03	C	JI	02025473:18	02025473:24	1	4	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/14:16:29	0	1	IDA
IDUNRT90FM03	D	JI	02025473:61	02025473:89	1	4	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/14:16:57	0	1	IDA
IDUNRT15SM07	A	JI	02025484:21	02025484:48	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:27:39	0	1	IDA
IDUNROTATI03	G	JI	02025491:14	02025491:36	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:34:39	0	1	IDA
IDUNROTATI03	H	JI	02025491:40	02025491:56	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:34:56	0	1	IDA
IDUNRT30SM05	A	JI	02025495:25	02025495:79	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:39:49	0	1	IDA
IDUNROTATI03	I	JI	02025514:19	02025514:26	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:57:57	0	1	IDA
IDUNROTATI03	J	JI	02025514:66	02025514:72	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:58:29	0	1	IDA
IDUNROTATI03	K	JI	02025515:66	02025515:72	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/14:59:30	0	1	IDA
IDUNROTATI03	L	JI	02025516:21	02025516:27	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:00:00	0	1	IDA
IDUNRT15SM09	A	JI	02025530:72	02025530:74	5	4	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:14:43	0	1	IDA
IDUNRTURXM04	A	JL	02025534:90	02025535:22	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:18:58	0	1	IDA
IDUNROTATI04	A	JL	02025537:18	02025537:22	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:21:12	0	1	IDA
IDUNROTATI04	B	JL	02025538:18	02025538:25	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:22:14	0	1	IDA
IDUNROTATI04	C	JL	02025539:18	02025539:25	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:22:14	0	1	IDA
IDUNROTATI04	D	JL	02025539:64	02025539:70	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/15:23:43	0	1	IDA
IDUNRT90FM04	A	JL	02025541:32	02025542:32	1	3	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/15:25:24	0	1	IDA
IDUNROTATI04	E	JL	02025548:18	02025548:25	1	3	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-240/15:32:19	0	1	IDA
IDUNRT15SM10	A	JL	02025552:84	02025553:21	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:37:05	0	1	IDA
IDUNROTATI04	F	JL	02025560:19	02025560:27	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:44:28	0	1	IDA
IDUNROTATI04	G	JL	02025560:64	02025560:71	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:44:58	0	1	IDA
IDUNROTATI04	H	JL	02025561:19	02025561:26	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:45:28	0	1	IDA
IDUNROTATI04	I	JL	02025562:19	02025562:26	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:46:28	0	1	IDA
IDUNROTATI04	J	JL	02025562:64	02025562:71	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:46:59	0	1	IDA
IDUNRT30SM07	A	JL	02025564:29	02025564:57	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:48:37	0	1	IDA
IDUNROTATI04	K	JL	02025571:18	02025571:25	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:55:34	0	1	IDA
IDUNROTATI04	L	JL	02025572:19	02025572:26	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:57:08	0	1	IDA
IDUNROTATI04	M	JL	02025573:20	02025573:27	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:57:36	0	1	IDA
IDUNROTATI04	N	JL	02025573:64	02025573:71	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/15:58:06	0	1	IDA
IDUNROTATI04	O	JL	02025583:19	02025583:26	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:07:43	0	1	IDA
IDUNROTATI04	P	JL	02025584:19	02025584:25	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:08:44	0	1	IDA
IDUNROTATI04	Q	JL	02025585:19	02025585:25	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:09:44	0	1	IDA
IDUNROTATI04	R	JL	02025585:64	02025585:71	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:10:14	0	1	IDA
IDUNRT30SM08	A	JL	02025587:33	02025587:60	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:11:55	0	1	IDA
IDUNROTATI04	S	JL	02025594:19	02025594:25	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:18:50	0	1	IDA

OAPEL	EXT	PSID	SCLK1	SCLK2	M	G	C	O	PTAB A						PTAB B						E	O	UTC1	R	T	TARGET
IDUNLONMAP01	A	IQ	02025605:11	02025605:25	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:29:53	0	1	IDA
IDUNLONMAP01	B	IQ	02025606:10	02025606:26	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:30:53	0	1	IDA
IDUNLONMAP01	C	IQ	02025607:14	02025607:23	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:31:56	0	1	IDA
IDUNLONMAP01	D	IQ	02025607:56	02025607:69	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:32:24	0	1	IDA
IDUNIDAFIN01	A	KG	02025609:06	02025611:82	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:33:52	0	1	IDA
IDUNLONMAP02	A	IB	02025612:80	02025612:85	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:37:44	0	1	IDA
IDUNLONMAP02	B	IB	02025613:16	02025613:20	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:38:02	0	1	IDA
IDUNLONMAP02	C	IB	02025613:28	02025613:33	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:38:09	0	1	IDA
IDUNLONMAP02	D	IB	02025613:41	02025613:46	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:38:17	0	1	IDA
IDUNLONMAP02	E	IB	02025613:54	02025613:59	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:38:27	0	1	IDA
IDUNLONMAP02	F	IB	02025615:85	02025615:89	3	3	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-240/16:40:48	0	1	IDA
IDUNIDACHM01	A	KH	02025616:11	02025616:77	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:41:00	0	1	IDA
IDUNIDACHM01	B	KH	02025617:11	02025618:16	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:42:00	0	1	IDA
IDUNIDACHM01	C	KH	02025618:11	02025618:88	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:43:01	0	1	IDA
IDUNIDACHM01	D	KH	02025619:11	02025620:52	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-240/16:44:01	0	1	IDA
IDUNHISPAT01	A	IC	02025622:74	02025622:77	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:47:46	0	1	IDA
IDUNHISPAT01	B	IC	02025622:82	02025622:84	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:47:51	0	1	IDA
IDUNHISPAT01	C	IC	02025623:02	02025623:25	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:47:59	0	1	IDA
IDUNHISPAT01	D	IC	02025623:29	02025623:51	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:48:16	0	1	IDA
IDUNHISPAT01	E	IC	02025624:28	02025624:52	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:49:17	0	1	IDA
IDUNIDACA_01	A	IE	02025627:80	02025627:90	7	3	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/16:52:53	0	1	IDA
IDUNBORCAL01	A	KB	02025658:54	02025660:16	7	4	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-240/17:23:56	0	1	SKY
IDUNPCTCAL01	A	EH	02026289:81	02026289:90	3	4	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-241/04:02:15	0	1	CAL
IDUNPCTCAL01	B	EH	02026290:00	02026290:90	3	1	1	4	1	1	0	0	1	24	1	1	0	0	1	24	0	0	1993-241/04:02:21	0	1	CAL
IDUNPCTCAL01	C	EH	02026291:00	02026291:04	7	1	1	4	1	1	0	6	0	12	1	1	0	6	0	12	0	0	1993-241/04:03:23	0	1	CAL
IDUNRCTCAL01	A	EI	02028619:74	02028620:90	1	3	1	4	1	1	0	0	2	12	1	1	0	0	2	12	0	0	1993-242/19:18:04	0	1	CAL
IDUNRCTCAL01	B	EI	02028621:00	02028621:07	5	3	1	4	1	1	0	2	4	6	1	1	0	2	4	6	0	0	1993-242/19:19:16	0	1	CAL

NIMS IDA DATA

NIMS_EDR NIMS EDR filename.
SCLK1 NIMS EDR Start SCLK (RIM.MF).
SCLK2 NIMS EDR End SCLK (RIM.MF).
NR Number of Data Records (MFs).
NF Number of 0-Fill Records (MFs).
OAPEL Observation Name.
IDA IDA Seen in Data: X = Yes, 0 = No, M = Moon (Dactyl, aka Elvis)
MODE NIMS Mode.
DATA_RANGE SCLK Range (RIM:MF - RIM:MF) of Data Segment.
IDA_RANGE SCLK Range (RIM:MF - RIM:MF) Where IDA Is Seen By NIMS Within the Data Segment.
COMMENTS The Comment 'High DN' means DN greater than about 100.

NOTES:
1) Any NIMS EDR may contain data from multiple Observations (OAPELs).
2) Sub-MF fragments were not cataloged; valid NIMS IDA data may occur in fragments within the latter EDRs due to jailbar searches.
3) If an Observation (OAPEL) is missing from this table, then there wasn't any significant data returned for that Observation.

FEL 01mar95

NIMS_EDR	SCLK 1	SCLK2	(NR, NF)	OAPEL	IDA	MODE	DATA_RANGE	IDA_RANGE	COMMENTS
N10201018804.2	2010188.04	2010188.45	(42, 0)	OPNAV 4	0	LM	(88.04 - 88.45)		OPCAL
N10201554004.2	2015540.04	2015540.39	(36, 20)	OPNAV 5	0	FM	(40.04 - 40.39)		ECAL
N10202530500.2	2025305.00	2025305.14	(15, 0)	IDUNRTURXM01	X	XM	(05.00 - 05.14)	(05.08 - 05.08)	
N10202530719.2	2025307.19	2025307.25	(7, 0)	IDUSROTATI01	0	XM	(07.19 - 07.25)		
N10202539211.2	2025392.11	2025392.28	(18, 0)	IDUNRT15SM03	0	SM	(92.11 - 92.28)		
N10202539690.2	2025396.90	2025399.73	(257, 233)	IDUNRTURXM02	0	XM	(96.90 - 97.00)		
				IDUNRTURXM02	0	XM	(97.22 - 97.25)		
				IDUSROTATI02	0	XM	(99.16 - 99.29)		
				IDUSROTATI02	0	XM	(99.70 - 99.73)		

NIMS IDA DATA

NIMS_EDR	SCLK 1	SCLK2	(NR, NF)	OAPEL	IDA	MODE	DATA_RANGE	IDA_RANGE	COMMENTS
N10202540018.2	2025400.18	2025404.54	(401, 294)	IDUSROTATI02	0	XM	(00.18 - 00.25)		
				IDUSROTATI02	0	XM	(00.70 - 00.73)		
				IDUSROTATI02	X	XM	(01.16 - 01.29)	(01.27 - 01.29)	
				IDUSROTATI02	0	XM	(01.66 - 01.72)		
				IDUNRT90SM02	X	SM	(03.19 - 03.25)	(03.21 - 03.21)	
				IDUNRT90SM02	0	SM	(03.69 - 04.07)		
				IDUNRT90SM02	0	SM	(04.20 - 04.54)		
N10202541469.2	2025414.69	2025415.26	(49, 35)	IDUNRT15SM04	0	SM	(14.69 - 14.74)		
				IDUNRT15SM04	X	SM	(15.19 - 15.26)	(15.19 - 15.21)	HIGH DN
N10202542213.2	2025422.13	2025422.35	(23, 0)	IDUSROTATI02	X	SM	(22.13 - 22.35)	(22.29 - 22.29)	
N10202542619.2	2025426.19	2025427.26	(99, 51)	IDUNRT30SM03	X	SM	(26.19 - 26.47)	(26.31 - 26.37)	
				IDUNRT30SM03	X	SM	(26.49 - 26.53)	(26.53 - 26.53)	
				IDUNRT30SM03	0	SM	(26.69 - 26.74)		
				IDUNRT30SM03	0	SM	(27.19 - 27.26)		
N10202543769.2	2025437.69	2025438.74	(97, 75)	IDUNRT15SM05	0	SM	(37.69 - 37.74)		
				IDUNRT15SM05	0	SM	(38.19 - 38.26)		
				IDUNRT15SM05	0	SM	(38.69 - 38.74)		
N10202544520.2	2025445.20	2025445.27	(8, 0)	IDUSROTATI02	X	SM	(45.20 - 45.27)	(45.21 - 45.22)	
N10202544919.2	2025449.19	2025450.27	(100, 49)	IDUNRT30SM04	X	SM	(49.19 - 49.54)	(49.49 - 49.54)	HIGH DN
				IDUNRT30SM04	0	SM	(49.69 - 49.75)		
				IDUNRT30SM04	0	SM	(50.19 - 50.27)		
N10202546069.2	2025460.69	2025461.27	(50, 34)	IDUNRT15SM06	0	SM	(60.69 - 60.75)		
				IDUNRT15SM06	0	SM	(61.19 - 61.27)		
N10202546522.2	2025465.22	2025465.27	(6, 0)	IDUNRTURXM03	X	XM	(65.22 - 65.27)	(65.22 - 65.26)	HIGH DN

NIMS IDA DATA

NIMS_EDR	SCLK 1	SCLK2	(NR, NF)	OAPEL	IDA	MODE	DATA_RANGE	IDA_RANGE	COMMENTS
N10202546819.2	2025468.19	2025473.89	(526, 407)	IDUSROTATI03	0	XM	(68.91 - 68.26)		
				IDUSROTATI03	0	XM	(68.70 - 68.72)		
				IDUSROTATI03	X	XM	(69.20 - 69.26)	(69.22 - 69.26)	
				IDUSROTATI03	0	XM	(69.70 - 69.72)		
				IDUSROTATI03	X	XM	(70.19 - 70.25)	(70.19 - 70.25)	
				IDUSROTATI03	0	XM	(70.65 - 70.73)		
				IDUNRT90FM03	0	FM	(72.18 - 72.28)		
				IDUNRT90FM03	0	FM	(72.67 - 73.07)		
				IDUNRT90FM03	0	FM	(73.18 - 73.24)		
				IDUNRT90FM03	0	FM	(73.61 - 73.89)		
N10202548421.2	2025484.21	2025484.48	(28, 0)	IDUNRT15SM07	0	SM	(84.21 - 84.48)		
N10202549114.2	2025491.14	2025491.56	(43, 2)	IDUSROTATI03	X	SM	(91.14 - 91.36)	(91.19 - 91.25)	
				IDUSROTATI03	X	SM	(91.40 - 91.56)	(91.56 - 91.56)	
N10202549525.2	2025495.25	2025495.79	(55, 0)	IDUNRT30SM05	X	SM	(95.25 - 95.79)	(95.25 - 95.30)	
								(95.49 - 95.59)	HIGH DN
N10202551419.2	2025514.19	2025516.27	(191, 159)	IDUSROTATI03	X	SM	(14.19 - 14.26)	(14.19 - 14.19)	
				IDUSROTATI03	X	SM	(14.66 - 14.72)	(14.66 - 14.72)	HIGH DN
				IDUSROTATI03	X	SM	(15.66 - 15.72)	(15.66 - 15.72)	HIGH DN
				IDUSROTATI03	X	SM	(16.21 - 16.27)	(16.21 - 16.27)	HIGH DN
N10202553072.2	2025530.72	2025530.74	(3, 0)	IDUNRT15SM09	0	SM	(30.72 - 30.74)		
N10202553490.2	2025534.90	2025542.33	(672, 523)	IDUNRTURXM04	X	XM	(34.90 - 35.22)	(34.90 - 34.90)	
				IDUSROTATI04	X	XM	(37.18 - 37.25)	(37.19 - 37.25)	HIGH DN
				IDUSROTATI04	X	XM	(38.18 - 38.25)	(38.18 - 38.25)	HIGH DN
				IDUSROTATI04	X	XM	(39.18 - 39.25)	(39.18 - 39.25)	
				IDUSROTATI04	X	XM	(39.64 - 39.70)	(39.64 - 39.70)	
				IDUNRT90FM04	X	FM	(41.32 - 42.32)	(41.32 - 41.64)	HIGH DN, 2 MP

NIMS IDA DATA

NIMS_EDR	SCLK 1	SCLK2	(NR, NF)	OAPEL	IDA	MODE	DATA_RANGE	IDA_RANGE	COMMENTS
N10202554818.2	2025548.18	2025548.25	(8, 0)	IDUSROTATI04	X	FM	(48.18 - 48.25)	(48.18 - 48.25)	HIGH DN, 2 MP
N10202555284.2	2025552.84	2025553.21	(29, 0)	IDUNRT15SM10	X	SM	(52.84 - 53.21)	(52.84 - 53.16)	HIGH DN, 2 MP
N10202556019.2	2025560.19	2025564.57	(403, 336)	IDUSROTATI04	X	SM	(60.19 - 60.27)	(60.19 - 60.22)	
				IDUSROTATI04	X	SM	(60.64 - 60.71)	(60.67 - 60.71)	HIGH DN
				IDUSROTATI04	0	SM	(61.19 - 61.26)		
				IDUSROTATI04	0	SM	(62.19 - 62.26)		
				IDUSROTATI04	X	SM	(62.64 - 62.71)	(62.65 - 62.67)	
				IDUNRT30SM07	X	SM	(64.29 - 64.57)	(64.29 - 64.57)	HIGH DN, 2 MP
N10202557118.2	2025571.18	2025573.71	(236, 204)	IDUSROTATI04	X	SM	(71.18 - 71.25)	(71.18 - 71.25)	
				IDUSROTATI04	0	SM	(72.19 - 72.26)		
				IDUSROTATI04	X	SM	(73.20 - 73.27)	(73.22 - 73.27)	
				IDUSROTATI04	X	SM	(73.64 - 73.71)	(73.64 - 73.64)	
N10202558319.2	2025583.19	2025587.60	(406, 348)	IDUSROTATI04	X	SM	(83.19 - 83.26)	(83.20 - 83.25)	
				IDUSROTATI04	X	SM	(84.19 - 84.25)	(84.19 - 84.25)	
				IDUSROTATI04	X	SM	(85.19 - 85.25)	(85.19 - 85.25)	
				IDUSROTATI04	X	SM	(85.64 - 85.71)	(85.64 - 85.71)	
				IDUNRT30SM08	X	SM	(87.33 - 87.60)	(87.33 - 87.60)	HIGH DN, 3 MP
N10202559419.2	2025594.19	2025594.25	(7, 0)	IDUSROTATI04	X	SM	(94.19 - 94.25)	(94.19 - 94.25)	HIGH DN, 2 MP
N10202560511.2	2025605.11	2025613.59	(777, 392)	IDUNLONMAP01	X	LM	(05.11 - 05.25)	(05.11 - 05.24)	HIGH DN, 5 MP
				IDUNLONMAP01	X	LM	(06.10 - 06.26)	(06.11 - 06.26)	HIGH DN, 5 MP
				IDUNLONMAP01	X	LM	(07.14 - 07.23)	(07.14 - 07.23)	HIGH DN, 5 MP
				IDUNLONMAP01	X	LM	(07.56 - 07.69)	(07.56 - 07.69)	HIGH DN, 5 MP
				IDUNIDAFIN01	M	LM	(09.06 - 09.85)	(09.52 - 09.85)	LOW DN, MP 6,7
				IDUNIDAFIN01	X	LM	(09.86 - 11.82)	(09.86 - 11.81)	HIGH DN, 6 MP

NIMS IDA DATA

NIMS_EDR	SCLK 1	SCLK2	(NR, NF)	OAPEL	IDA	MODE	DATA_RANGE	IDA_RANGE	COMMENTS
				IDUNLONMAP02	X	LM	(12.80 - 12.85)	(12.80 - 12.85)	HIGH DN, 5 MP
				IDUNLONMAP02	X	LM	(13.16 - 13.20)	(13.16 - 13.20)	HIGH DN, 5 MP
				IDUNLONMAP02	X	LM	(13.28 - 13.33)	(13.28 - 13.33)	HIGH DN, 5 MP
				IDUNLONMAP02	X	LM	(13.41 - 13.46)	(13.41 - 13.46)	HIGH DN, 5 MP
				IDUNLONMAP02	X	LM	(13.54 - 13.59)	(13.54 - 13.59)	HIGH DN, 5 MP
N10202561585.2	2025615.85	2025627.27	(1035, 486)	IDUNLONMAP02	0	LM	(15.85 - 15.89)		
				IDUNIDACHM01	M	SM	(16.57 - 16.77)	(16.72 - 16.77)	LOW DN, MP 0,1
				IDUNIDACHM01	X	SM	(17.04 - 18.16)	(17.11 - 18.13)	HIGH DN
				IDUNIDACHM01	M	SM	(18.82 - 18.88)	(18.84 - 18.88)	LOW DN, MP 19
				IDUNIDACHM01	X	SM	(19.25 - 20.52)	(19.29 - 20.52)	HIGH DN
				IDUNHISPAT01	M	XM	(22.74 - 22.77)	(22.75 - 22.75)	LOW DN, MP 6,7
				IDUNHISPAT01	0	XM	(22.82 - 22.84)		
				IDUNHISPAT01	X	XM	(23.02 - 23.25)	(23.02 - 23.23)	HIGH DN
				IDUNHISPAT01	X	XM	(23.29 - 23.51)	(23.30 - 23.43)	HIGH DN
				IDUNHISPAT01	X	XM	(24.28 - 24.52)	(24.34 - 24.44)	HIGH DN
				IDUNIDACA_01	X	XM	(27.80 - 27.90)	(27.84 - 27.86)	HIGH DN
N10202565854.2	2025658.54	2025660.16	(145, 1)	IDUNBORCAL01	STAR	XM	(58.54 - 60.16)		
N10202628981.2	2025689.81	2025691.04	(106, 0)	IDUNPCTCAL01	PCT	LM	(89.81 - 91.04)		
N10202861974.2	2025619.74	2025621.07	(116, 0)	IDUNRCTCAL01	RCT	FM	(19.74 - 21.07)		

JET PROPULSION LABORATORY IOM NIMS 94-xxx-FL

21-JUL-1994

To: Bill Smythe

From: Frank Leader (UCLA)

Subject: A Brief Discussion of Scan Platform Anomalous Behavior During the IDA Fly-by.

CC: Galileo SDT.

Due to the overheating of the scan platform gyroes, AACS switched from Inertial Mode to Cruise Mode near -230 rims before closest approach to IDA near the start of the Rotation_2 segment. In Cruise Mode, the scan platform was not able to perform mosaics as expected in Inertial mode. Sometimes the mosaics were executed with slight deviations from the predicted mosaic, sometimes with large offsets in execution (time lags up to 30 mfs) and sometimes not at all. This erratic behavior made it very difficult for the NIMS team to predict where IDA would be in a particular mosaic, causing the NIMS Team to miss a large number of opportunities to return NIMS observations of IDA due to the limited number of bits-to-ground available for the IDA data return. The following is a sample of some of the scan platform anomalies observed during the IDA Fly-by. The observed scan platform pointing values come from AACS in the NIMS EDR and the predicts come from TISIM files produced by Pointer. These data are also available in the form of C-Kernels available from the Galileo SDT.

Figures 1 and 2 illustrate one of the occasions when a mosaic was not executed at all. Both planned (thick line) and measured Scan Platform RA (PRA) are plotted as a function of time for two nearly identical NIMS CSMOS mosaics. Figure 1 illustrates a mosaic executed when the spacecraft was still in Inertial Mode at the start of Rotation_1 and Figure 2 is from a mosaic executed at the start of Rotation_4 when the spacecraft was in Cruise Mode. In each case the scan platform was to slew about 4 mrad at a rate of .75 mrad/sec, completing the slew in 8 mf (5 1/3 seconds). In Figure 1 the slew completed in the alotted time and NIMS 'saw' IDA at mf 8; within the error ellipse of the model. In Figure 2 the scan platform did not complete the slew in the allotted time and NIMS failed to 'see' IDA.

Figure 3 illustrates an example of when a mosaic executed in Cruise Mode but was offset in time up to about 30 mfs (20 seconds). The thick line is the planned slew and the thin line is the observed slew. In this mosaic, the scan platform did not slew to the commanded position of -167.7 degrees in PRA prior to the start of the mosaic but remained stationary at the pre-commanded PRA of -167.6 degrees. The scan platform did not move until about 10 mf into the mosaic and then slewed at the commanded slew rate, causing an effective time-offset in the mosaic of about 30 mfs. Fortunately the slew crossed IDA and NIMS was able to return some useful data for this specific observation. Unfortunately, due to 30 mf time-offset in execution, the NIMS Team wasted many DMS-MROs in locating the mfs when NIMS 'saw' IDA.

Figure 4 illustrates the scan platform behavior in a larger mosaic towards the end of the Fly-By (IDUNIDACHM01) where the scan platform deviated from the planned motion but not too greatly. Here the smooth continuous line is the planned mosaic and the wavy dis-continuous line is the observed mosaic. Scan platform RA (PRA) is plotted versus scan platform DEC (PDEC). In the observed mosaic the scan platform seems to have built up an error and then corrected to where it should be in the planned mosaic. The number 1 in the figure shows where the scan platform jumped abruptly in time executing one of these corrections. This jump in scan platform PRA was evident in the NIMS data as NIMS was observing IDA at the time, and made it impossible for the NIMS Team to register the NIMS spectra on IDA.

With the spacecraft in Cruise Mode, the scan platform cone controller (SAS) seems to have been slow to respond to cone slew commands typically used in CSMOS mosaics. The deviation of the cone slew from planned is not uniform for all CSMOS mosaics. Sometimes the slew would cross IDA before the end of the slew and NIMS would 'see' IDA, but at a time much later than that predicted.

Unfortunately there was little support from the AACS Team in helping to understand the erratic behavior of the scan platform in Cruise Mode in time to come up with a plan to return as much NIMS observations of IDA as possible. The only consolation received was the statement that "Cruise Mode was not meant for taking Science Data."

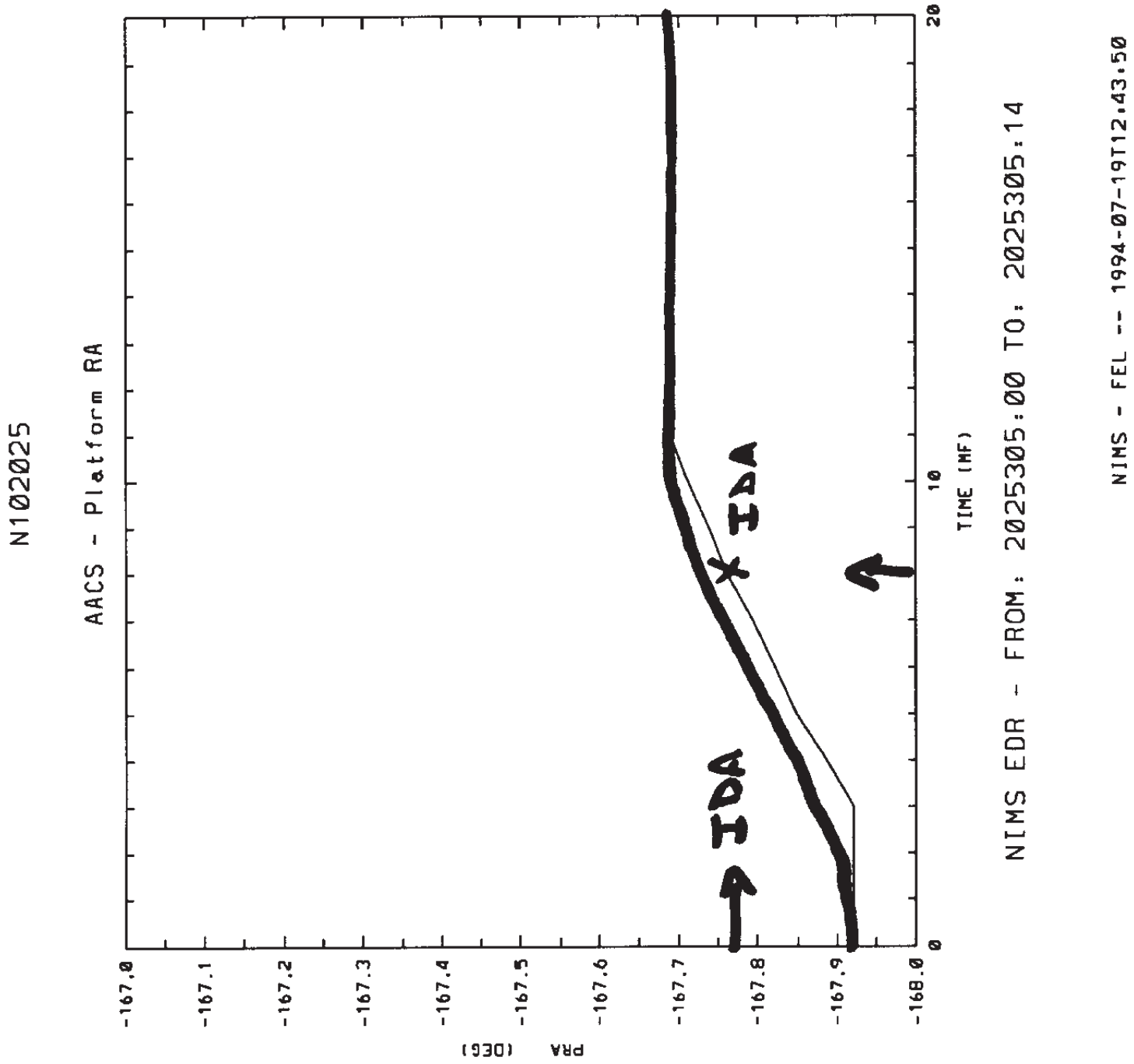

N102025
AACS - Platform RA
-167.0
-167.1
-167.2
-167.3
-167.4
-167.5
-167.6
-167.7
-167.8
-167.9
-168.0
PRA (DEG)
0
10
20
TIME (MF)
IDA
IDA
NIMS EDR - FROM: 2025305:00 TO: 2025305:14
NIMS - FEL -- 1994-07-19T12:43:50

Figure 1

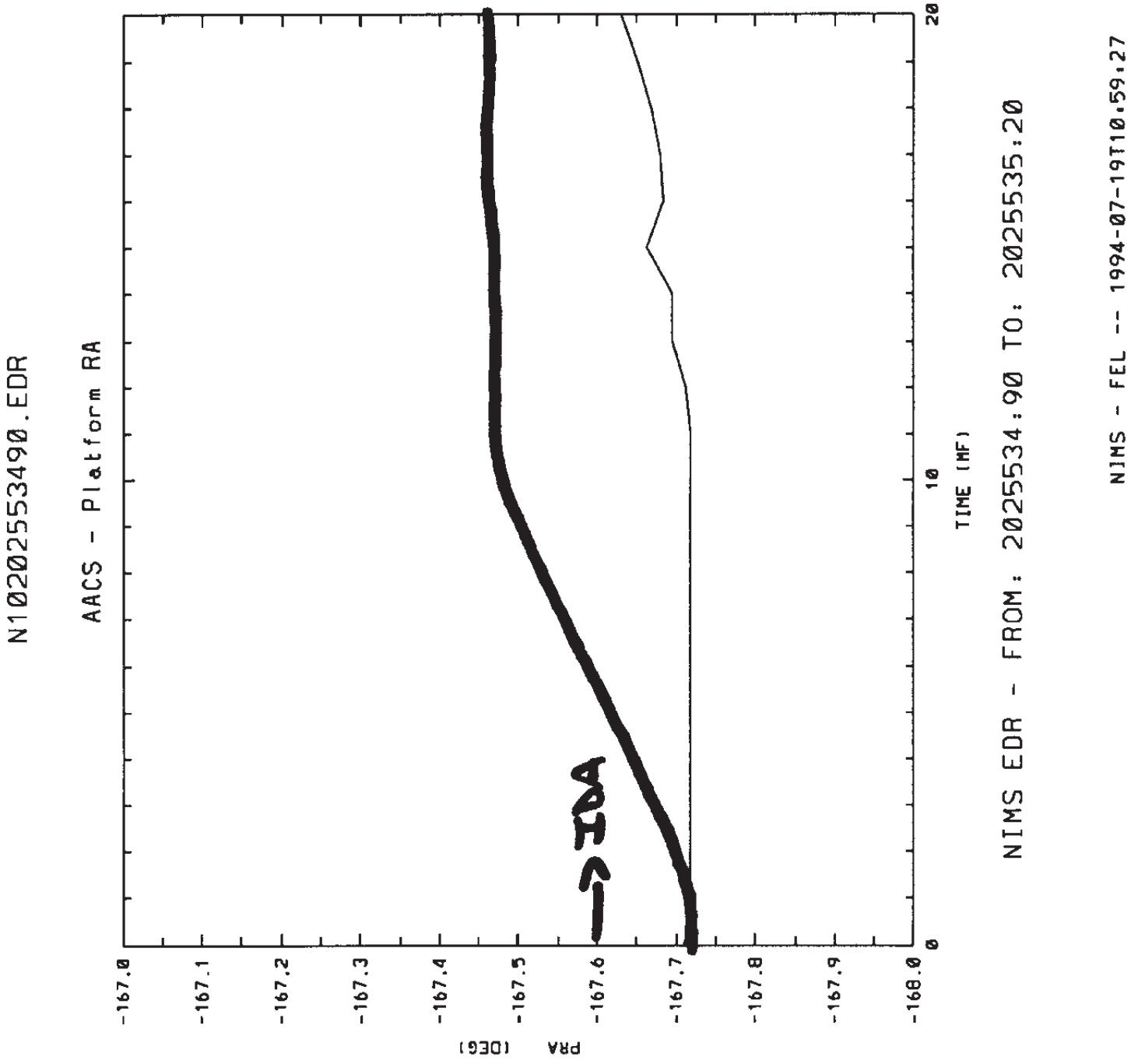

N1020255349Ø.EDR
AACS - Platform RA
-167.0
-167.1
-167.2
-167.3
-167.4
-167.5
-167.6
-167.7
-167.8
-167.9
-168.0
PRA (DEG)
0
10
20
TIME (MF)
NIMS EDR - FROM: 2025534:90 TO: 2025535:20
NIMS - FEL -- 1994-07-19T10:59:27

Figure 2

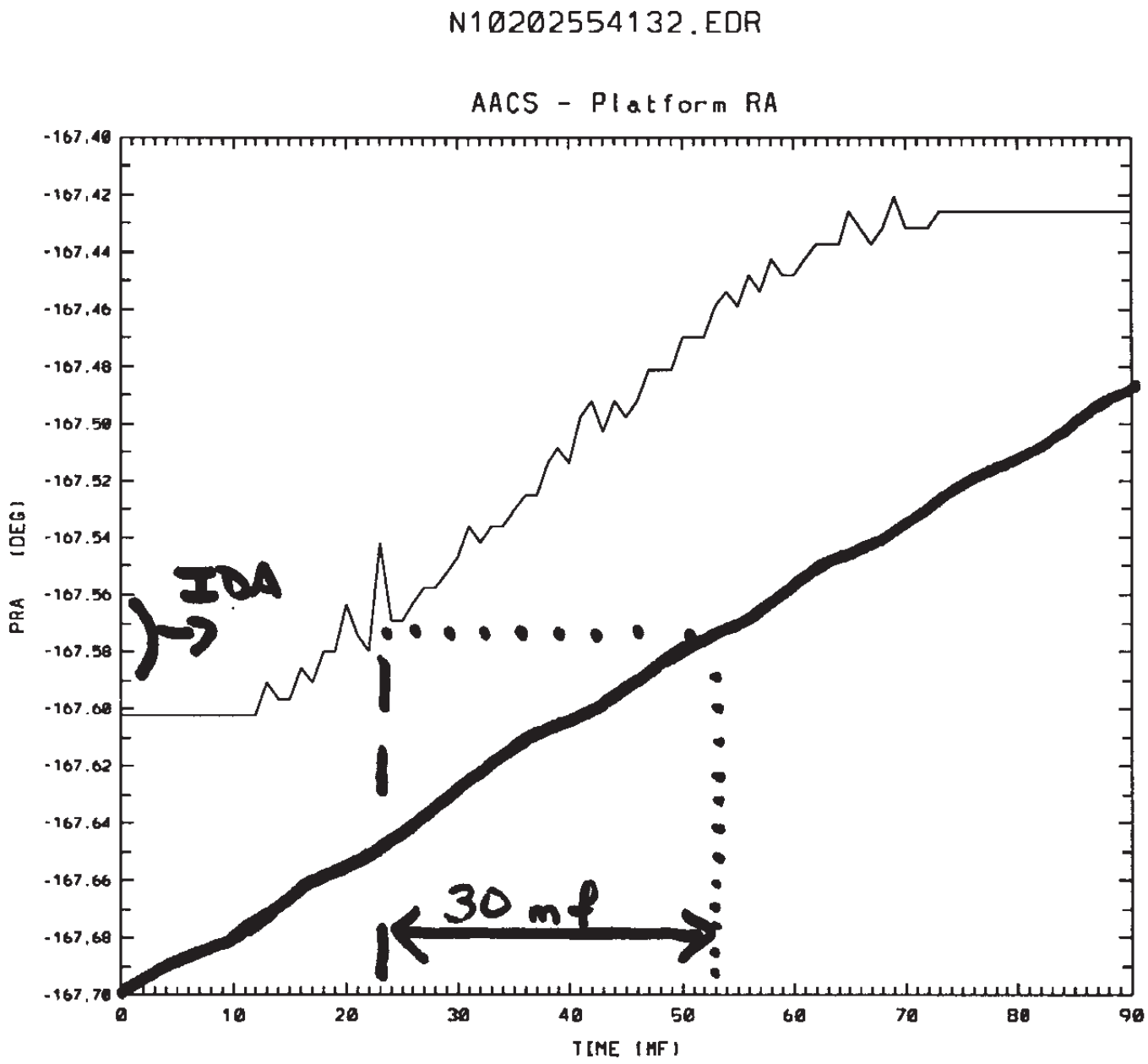

N10202554132.EDR
AACS - Platform RA
PRA (DEG)
-167.40
-167.42
-167.44
-167.46
-167.48
-167.50
-167.52
-167.54
-167.56
-167.58
-167.60
-167.62
-167.64
-167.66
-167.68
-167.70
0
10
20
30
40
50
60
70
80
90
TIME (MF)
IOA
30 mf
NIMS EDR - FROM: 2025541:32 TO: 2025542:33
NIMS - FEL -- 1994-07-19T17:08:28

Figure 3

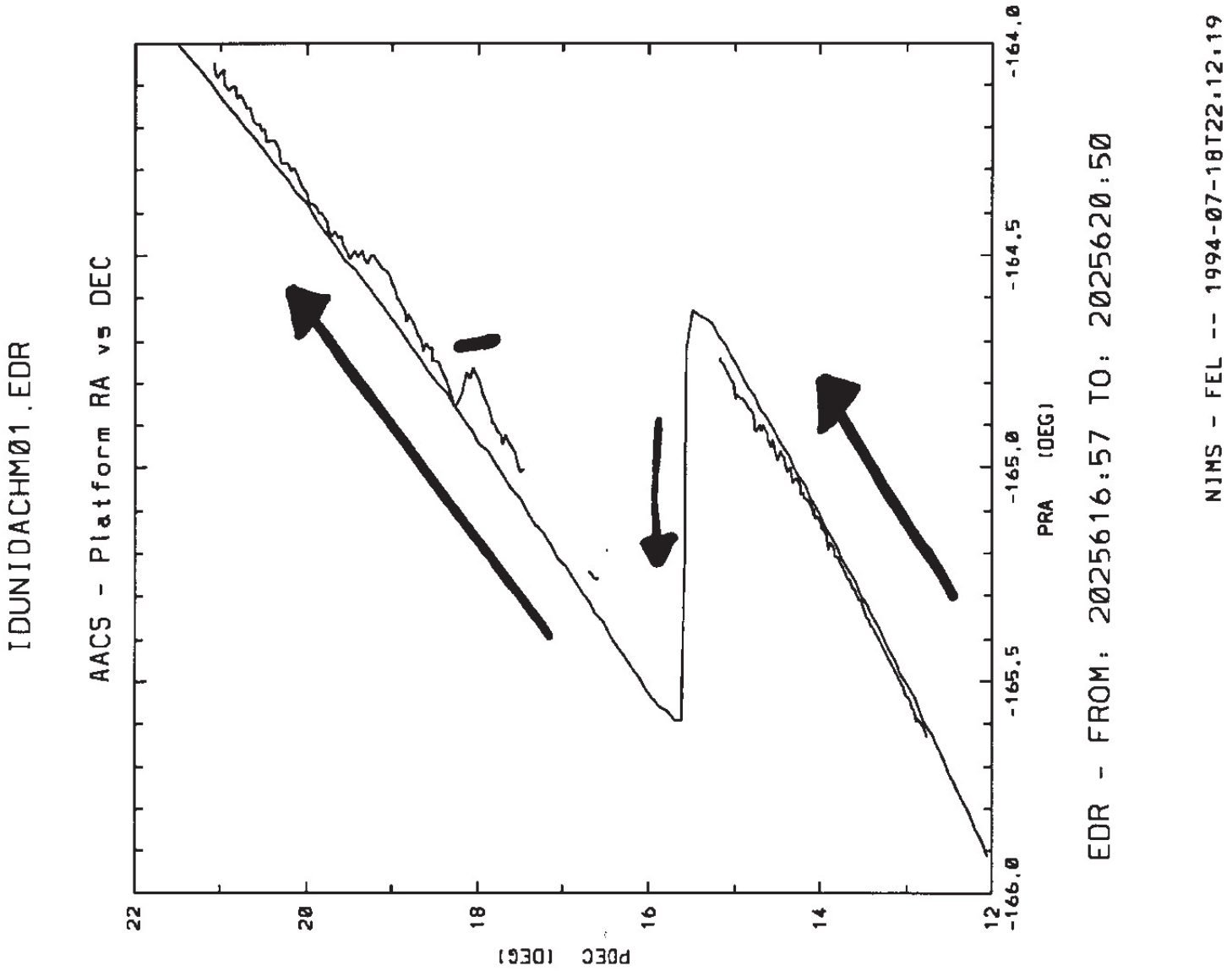

IDUNIDACHM01.EDR
AACS - Platform RA vs DEC
PDEC (DEG)
22
20
18
16
14
12
-166.0
-165.5
-165.0
-164.5
-164.0
PRA (DEG)
EDR - FROM: 2025616:57 TO: 2025620:50
NIMS - FEL -- 1994-07-18T22:12:19

Figure 4