Chapter 5 - Detailed Observation Designs

Contents

Introduction to Chapter 5

Detailed Observation Designs

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

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

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

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

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

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

Optical Calibration	ACTIVITY ID:	E4NNOPCAL 01-
	START TIME:	96-350/00:21:56.000

Activity ID: Orbit E4 Target N Inst N OAPEL OPCAL SeqNo 01 -

Title	Optical Calibration			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4C	Calendar Date	12/15/96	Week	51

Start	96-350/00:21:56.000
End	96-350/00:30:08.000
Duration	000/00:08:12.000

Top Label	E4NNOPCAL 01-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	217	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To perform an Optical Calibration of the NIMS instrument.

Also perform an Electronics Calibration of the NIMS instrument.

This ECAL was added to test Detector 8's electronics
in light of Detector 8's failure during C3.

The nominal OPCAL wavelength selection of detectors 1 and 2
was expanded to include detectors 7, 8 and 9.

Data Returned

Design Detail

Long Map
Gain State 4
Mirror Block 1B,1B (11011,11011) (select mirror positions 8-11)
ETB selects Detectors 1,2,7,8 and 9.
Select NIMS in Real Time for 5 RIMs.
Five Long Map grating cycles returned.
Rim 1 OPCAL
RIM 2 DARK
Rim 3 OPCAL
Rim 4 DARK
Rim 4 ECAL

Long Map (LM), Gain 4, Grating Start 0, RT, E4OPCAL120

Galileo Activity Plan Form 11/15/96 10:45:26 rev 6/95

Shield Heater Off/PCT Heaters On — **ACTIVITY ID:** E4NNSHDOFF01- — **START TIME:** 96-350/02:33:38.000

Activity ID: Orbit E4 Target N Inst N OAPEL SHDOFF SeqNo 01 -

Title	Shield Heater Off/PCT Heaters On			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/15/96	Week	50

Start	EEE-CDS	00005955:00:0	96-350/02:33:38.000	EEE-004/04:21:10.000
End	EEE-CDS	00005951:00:0	96-350/02:37:40.667	EEE-004/04:17:07.333
Duration		00000004:00:0	000/00:04:02.667	000/00:04:02.667

Top Label E4NNSHDOFF01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To turn off NIMS shield flash heater at least 48 hours before the first NIMS observation in E4.

Design Detail

Galileo Activity Plan Form 11/15/96 10:45:14 rev 6/95

NIMS chopper turn on	ACTIVITY ID: E4NNCHOPON01- START TIME: 96-352/03:01:35.333

Activity ID: Orbit E4 Target N Inst N OAPEL CHOPON SeqNo 01 -

Title	NIMS chopper turn on			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	JEE-CDS	00002870:00:0	96-352/03:01:35.333	JEE-002/00:21:53.333
End	JEE-CDS	00002860:00:0	96-352/03:11:42.000	JEE-002/00:11:46.666
Duration		00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label E4NNNIMSON01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	52	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

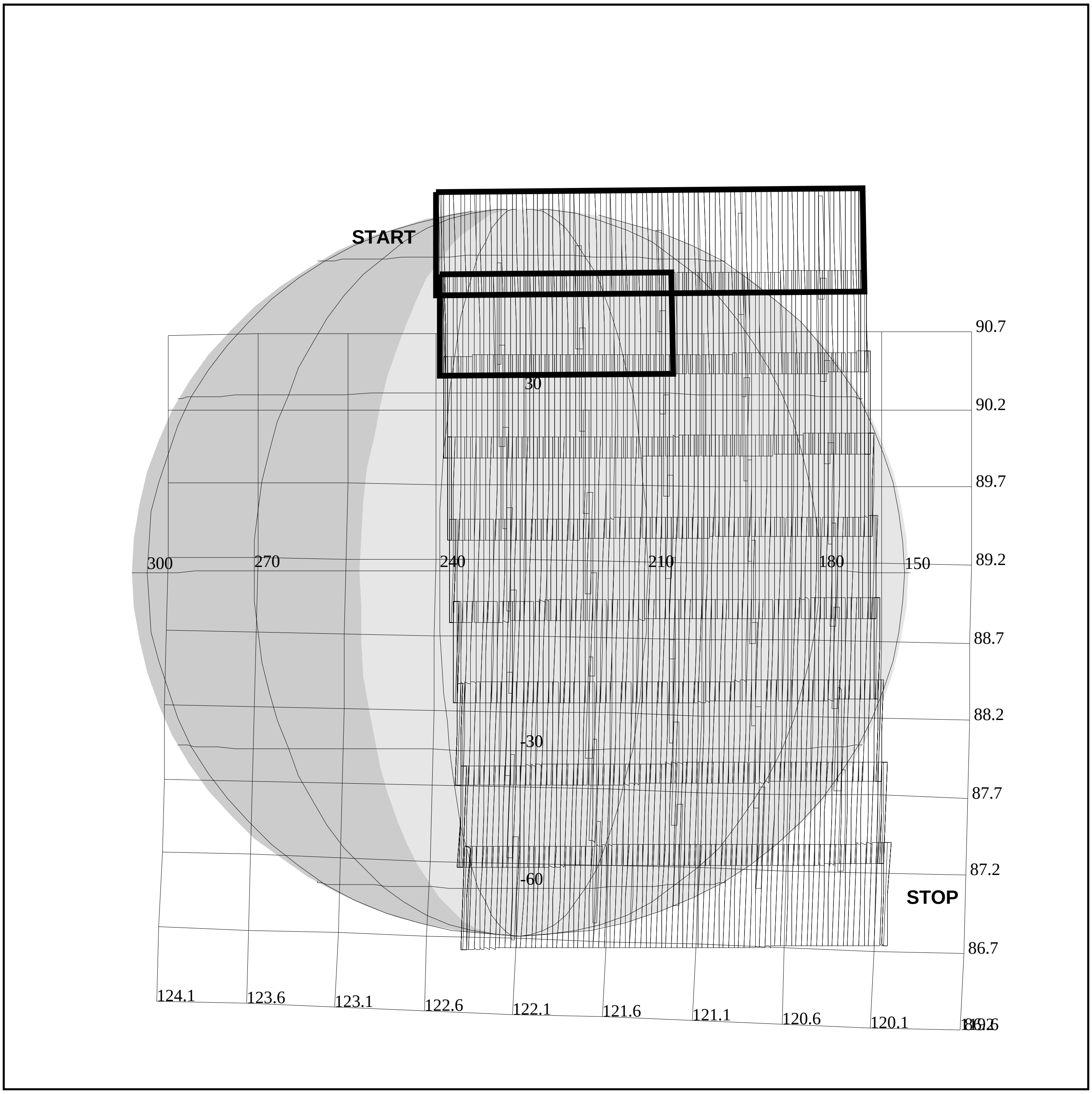
Observation Objective

To turn the NIMS instrument chopper on and change its mode to REFERENCE.

Design Detail

Use two NIMS 37IST commands, the first to turn chopper on and the second to reference:
37IST,1,0,0,OFF,0,0,0 Choper 63 Hz
37IST,1,2,0,OFF,0,0,0 Chopper Reference
Also, issue a 37MB command to enable all mirror positions
37MB,0,0,0,0,0,0 (00000,00000)

Galileo Activity Plan Form 11/15/96 10:45:14 rev 6/95



165DA:TT= 0 TMC= 1 C= 3.00 XC= -3.00 BS= 0/2824 TC= 1(81 280)
A= 728 pD= 0 SR=17.450 RA50=227.54 DEC50=-17.86 cone=122.62 clock= 91.34
117DA:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/2824
1:#s= 9 Cs= -41.00 XCs= 0.00 Cr= 41.00 XCr= -8.00 sD= 172 rD= 30

E4JNGLOMOS01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNGLOMOS01

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 96-354/03:23:28.666 -CDS 2845:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

OBSERVATION:E4JNGLOMOS01

DESCRIP:E4_JUPITER_GLOBAL_MOSAIC_01

Jupiter Global Mosaic Prt 1	ACTIVITY ID: E4JNGLOMOS01- START TIME: 96-352/03:21:48.666

Activity ID: Orbit E4 Target J Inst N OAPEL GLOMOS SeqNo 01 -

Title	Jupiter Global Mosaic Prt 1	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	JEE-CDS 00002850:00:0	96-352/03:21:48.666	JEE-002/00:01:40.000
End	JEE-CDS 00002835:14:0	96-352/03:36:49.333	JEE-001/23:46:39.333
Duration	00000014:77:0	000/00:15:00.667	000/00:15:00.667

Top Label E4JNGLOMOS01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part 1 of 6 Jupiter global mosaics. Jupiter imaged in 5 colors (1.594, 2.156, 2.722, 3.0011, and 4.982 microns) using NIMS playback table JGM05A to obtain global maps depicting features at ~945 km/nimsel resolution. This map acquired near 227 degrees CML (system III) at a phase angle of ~ 65 degrees.

Data Returned

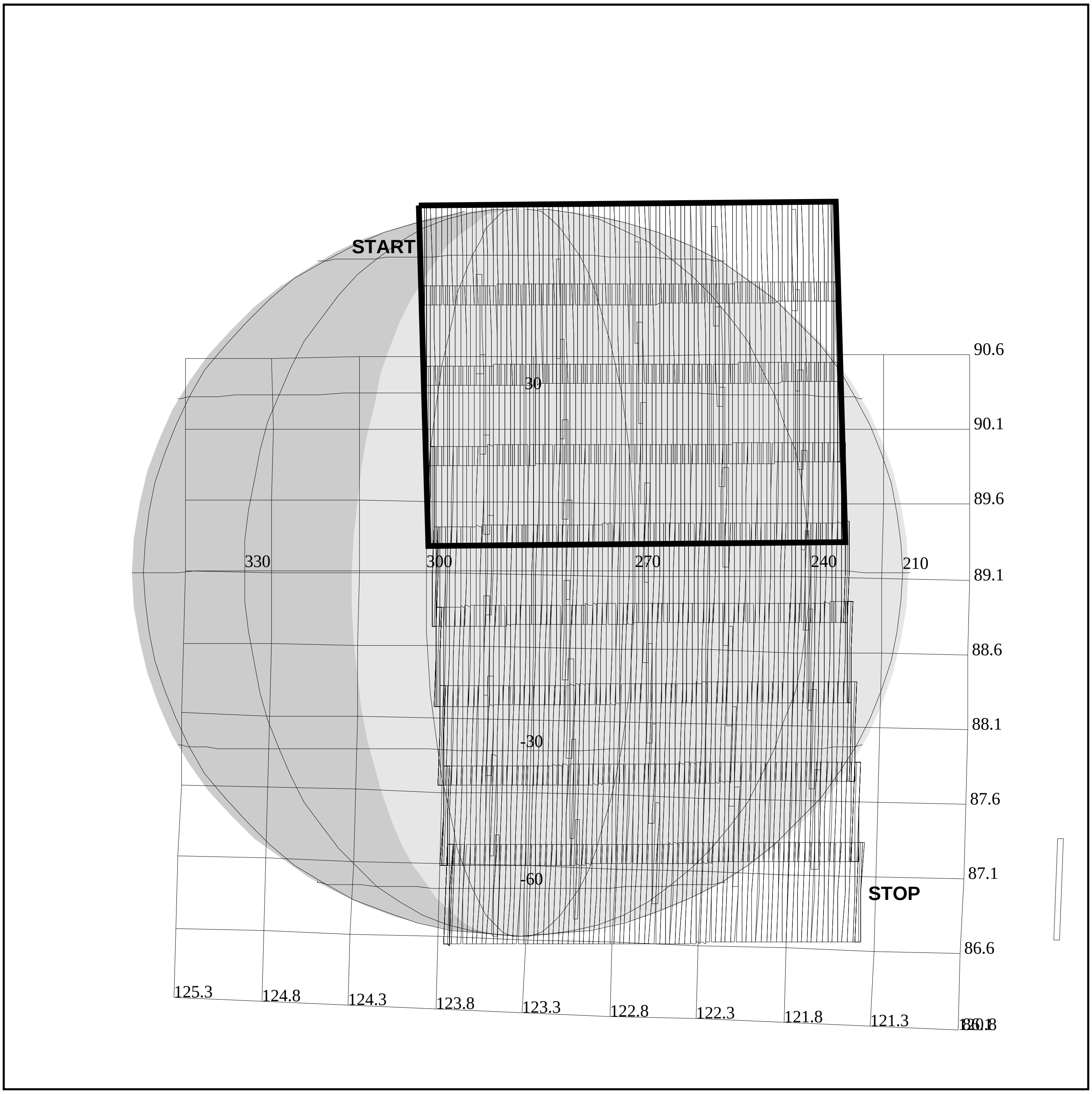
Design Detail

See OPG (page A-17). Fixed grating mode, in 1/2 NIMS mode, Nyquist sampling. 9 tiers, acquired near 1.883 million km, each covering pole-to-pole in N/S direction and about 1 fractional radius in the East-West direction (i.e., ~60 degrees of longitude at the Equator). About 10 minutes of scanning, accumulating 5.70 MBTG and 0.0202 tracks. 4 minutes reserved for targetting.
Wavelength table: JGM05A. TLM: LPU
Note: Only the first 272 secs of the scanning is returned, due to tape cuts, i.e., only the northern hemisphere is recorded.
Note 10/18/96: New solar conjunction playback constraints allow just a small portion of the 6 global mosaics to be played back. (Most likely, we will return about one-fourth of one GLOMOS.)

Only 1.5 swaths out of 9 returned (Northern Hemisphere)

Fixed Map (XM), Gain 2, Grating Start 5, LPU, E4JGM10A, E4JGM05A

Galileo Activity Plan Form 11/15/96 10:45:14 rev 6/95



165DB:TT= 0 TMC= 1 C= 3.00 XC= -4.00 BS= 0/0478 TC= 1(78 340)
A= 728 pD= 0 SR=17.450 RA50=228.86 DEC50=-18.24 cone=123.93 clock= 91.34
117DB:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/0478
1:#s= 9 Cs= -41.00 XCs= 0.00 Cr= 41.00 XCr= -8.00 sD= 172 rD= 30

E4JNGLOMOS02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNGLOMOS02

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JEE 96-354/03:23:28.666 -CDS 2748:00:0

OBSERVATION:E4JNGLOMOS02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_JUPITER_GLOBAL_MOSAIC_02

Jupiter Global Mosaic Prt 2	ACTIVITY ID:	E4JNGLOMOS02-
	START TIME:	96-352/04:59:53.333

Activity ID: Orbit E4 Target J Inst N OAPEL GLOMOS SeqNo 02 -

Title	Jupiter Global Mosaic Prt 2		Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	JEE-CDS	00002753:00:0	96-352/04:59:53.333	JEE-001/22:23:35.333
End	JEE-CDS	00002738:14:0	96-352/05:14:54.000	JEE-001/22:08:34.666
Duration		00000014:77:0	000/00:15:00.667	000/00:15:00.667

Top Label E4JNGLOMOS02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part 2 of 6 Jupiter global mosaics. Jupiter imaged in 5 colors (1.594, 2.156, 2.722, 3.0011, and 4.982 microns) using NIMS playback table JGM05A to obtain global maps depicting features at ~945 km/nimsel resolution. This map acquired near 227 degrees CML (system III) at a phase angle of ~ 65 degrees.

Data Returned

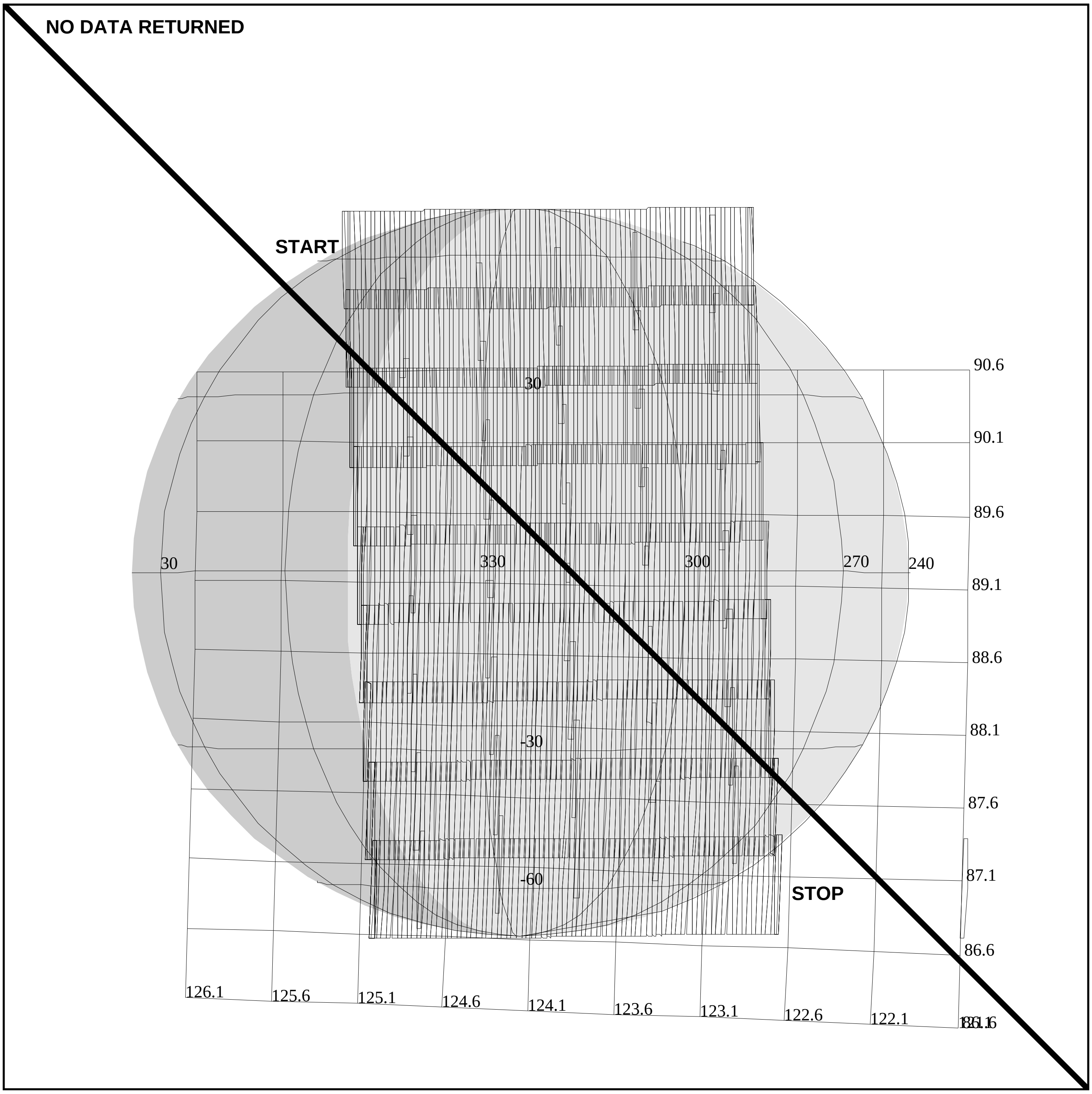
Design Detail

About 10 minutes of scanning, accumulating 5.70 MBTG and 0.0202 tracks.
4 minutes reserved for targetting. Wavelength table: JGM05A. TLM: LPU
Note: Only the first 272 secs of the scanning is returned, due to tape cuts, i.e., only the northern hemisphere is recorded.
Note 10/18/96: New solar conjunction playback constraints allow just a small portion of the 6 global mosaics to be played back. (Most likely, we will return about one-fourth of one GLOMOS.)

Only 4 out of 9 swaths returned (Norther Hemisphere)

Fixed Map (XM), Gain 2, Grating Start 5, LPU, E4JGM10A, E4JGM05A

Galileo Activity Plan Form 11/15/96 10:45:14 rev 6/95



165DC:TT= 0 TMC= 1 C= 10.00 XC= -4.00 BS= 0/1944 TC= 1(75 10)
A= 728 pD= 0 SR=17.450 RA50=230.14 DEC50=-18.57 cone=125.20 clock= 91.37
117DC:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/1944
1:#s= 9 Cs= -41.00 XCs= 0.00 Cr= 41.00 XCr= -8.00 sD= 172 rD= 30

E4JNGLOMOS03

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNGLOMOS03

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 96-354/03:23:28.666 -CDS 2685:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNGLOMOS03 **DESCRIP:E4_JUPITER_GLOBAL_MOSAIC_03**

Jupiter Global Mosaic Prt 3	ACTIVITY ID: E4JNGLOMOS03- START TIME: 96-352/06:03:35.333

Activity ID: Orbit E4 Target J Inst N OAPEL GLOMOS SeqNo 03 -

Title	Jupiter Global Mosaic Prt 3			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	JEE-CDS	00002690:00:0	96-352/06:03:35.333	JEE-001/21:19:53.333
End	JEE-CDS	00002675:14:0	96-352/06:18:36.000	JEE-001/21:04:52.666
Duration		00000014:77:0	000/00:15:00.667	000/00:15:00.667

Top Label	E4JNGLOMOS03-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part 3 of 6 Jupiter global mosaics. Jupiter imaged in 5 colors (1.594, 2.156, 2.722, 3.0011, and 4.982 microns) using NIMS playback table JGM05A to obtain global maps depicting features at ~945 km/nimsel resolution. This map acquired near 227 degrees CML (system III) at a phase angle of ~ 65 degrees.

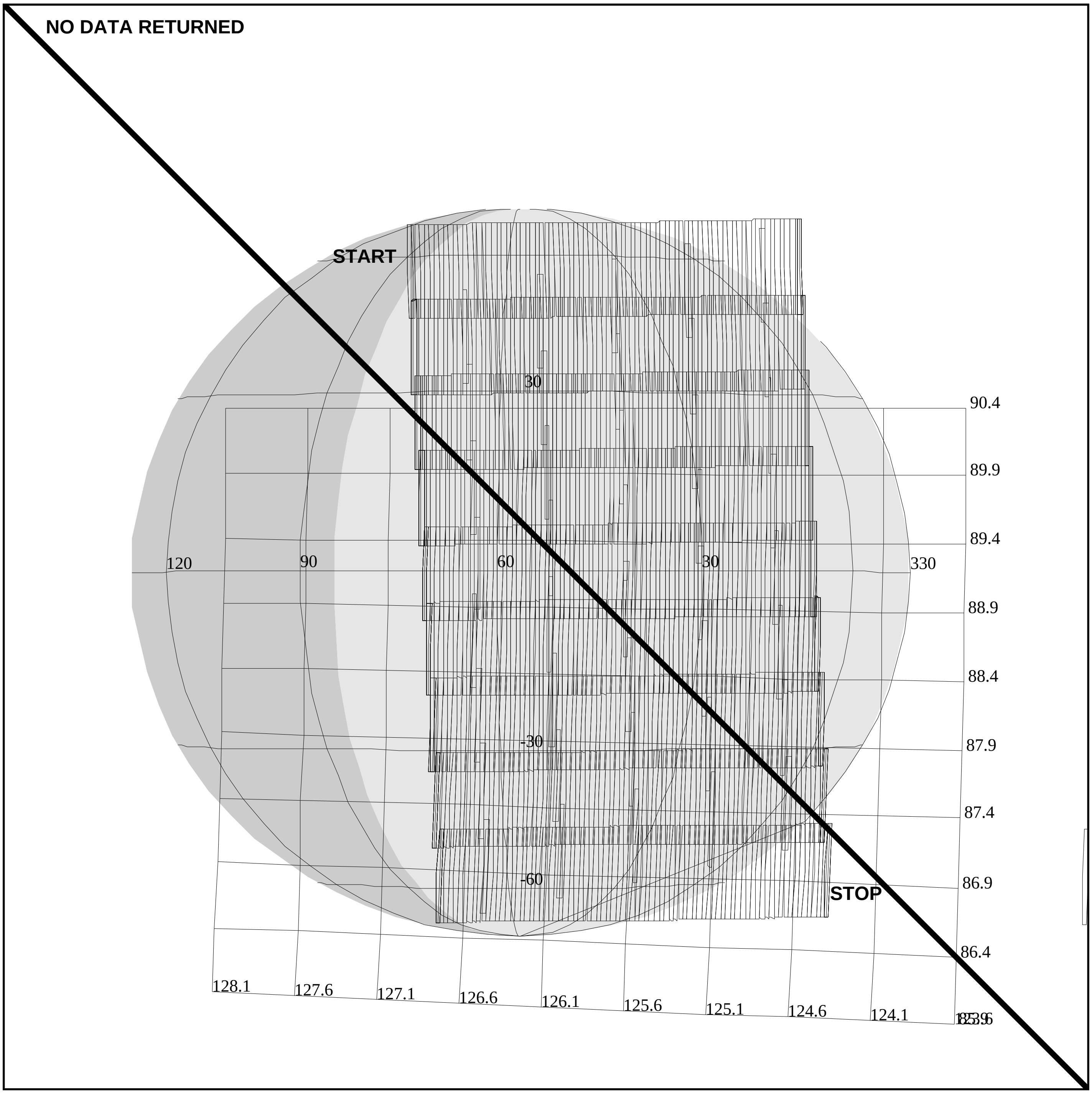
No Data Returned

Design Detail

About 10 minutes of scanning, accumulating 5.70 MBTG and 0.0202 tracks.
4 minutes reserved for targetting. Wavelength table: JGM05A. TLM: LPU
Note: Only the first 272 secs of the scanning is returned, due to tape cuts, i.e., only the northern hemisphere is recorded.
Note 10/18/96: New solar conjunction playback constraints allow just a small portion of the 6 global mosaics to be played back. (Most likely, we will return about one-fourth of one GLOMOS.)

Fixed Map (XM), Gain 2, Grating Start 5, LPU, E4JGM10A, E4JGM05A

Galileo Activity Plan Form   11/15/96 10:45:14   rev 6/95



165DD:TT= 0 TMC= 1 C= 8.00 XC= -5.50 BS= 0/0154 TC= 1(75 76)
A= 728 pD= 0 SR=17.450 RA50=231.94 DEC50=-19.00 cone=126.95 clock= 91.43
117DD:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/0154
1:#s= 9 Cs= -41.00 XCs= 0.00 Cr= 41.00 XCr= -8.00 sD= 172 rD= 30

E4JNGLOMOS04

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNGLOMOS04

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JEE 96-354/03:23:28.666 -CDS 2530:00:0

OBSERVATION:E4JNGLOMOS04

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_JUPITER_GLOBAL_MOSAIC_04

Jupiter Global Mosaic Prt 4	ACTIVITY ID: E4JNGLOMOS04- START TIME: 96-352/08:40:18.666

Activity ID: Orbit E4 Target J Inst N OAPEL GLOMOS SeqNo 04 -

Title	Jupiter Global Mosaic Prt 4			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	JEE-CDS	00002535:00:0	96-352/08:40:18.666	JEE-001/18:43:10.000
End	JEE-CDS	00002520:14:0	96-352/08:55:19.333	JEE-001/18:28:09.333
Duration		00000014:77:0	000/00:15:00.667	000/00:15:00.667

Top Label E4JNGLOMOS04-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part 4 of 6 Jupiter global mosaics. Jupiter imaged in 5 colors (1.594, 2.156, 2.722, 3.0011, and 4.982 microns) using NIMS playback table JGM05A. to obtain global maps depicting features at ~945 km/nimsel resolution. This map acquired near 227 degrees CML (system III) at a phase angle of ~ 65 degrees.

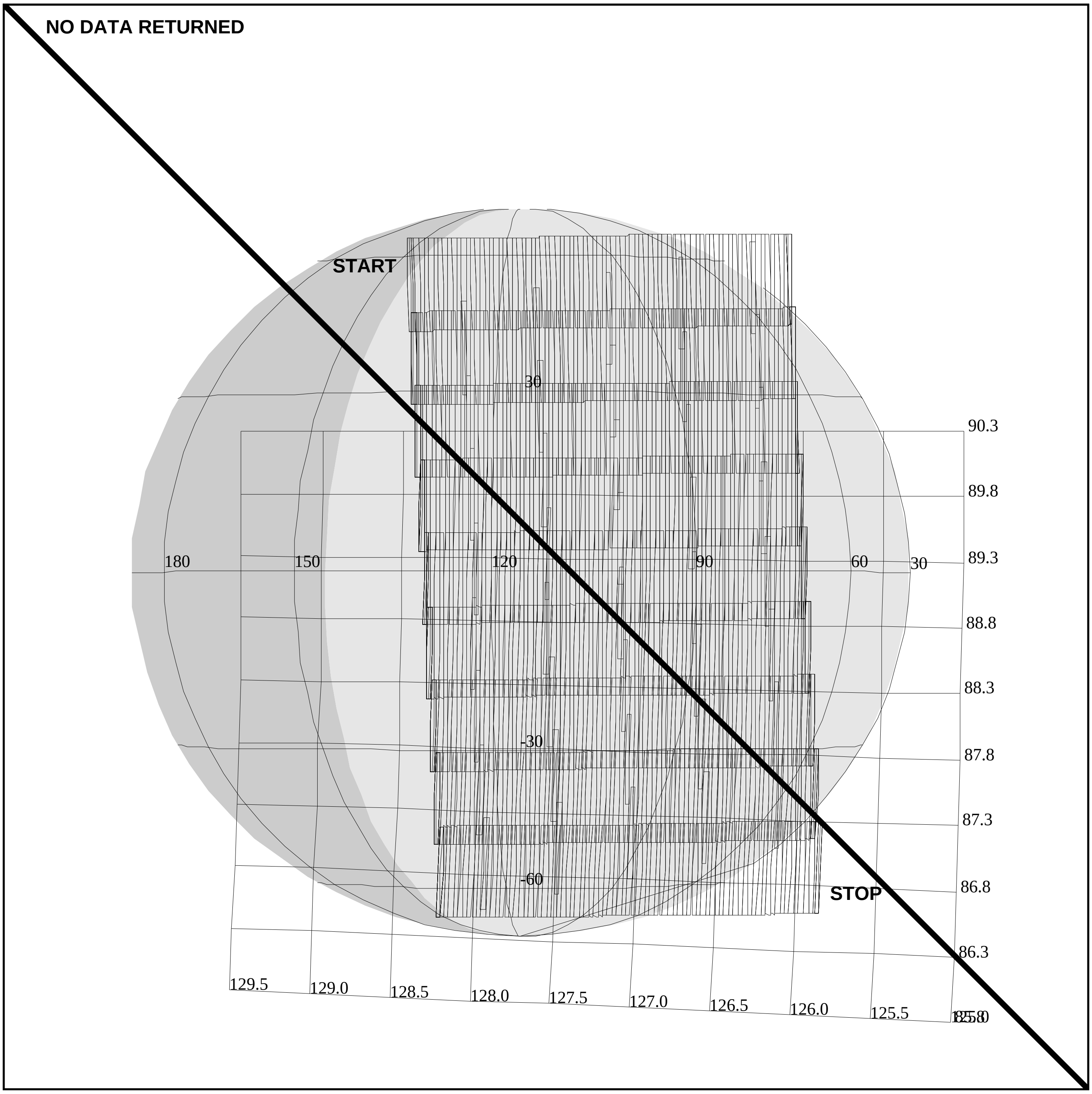
No Data Returned

Design Detail

About 10 minutes of scanning, accumulating 5.70 MBTG and 0.0202 tracks.
4 minutes reserved for targetting. Wavelength table: JGM05A. TLM: LPU
Note: Only the first 272 secs of the scanning is returned, due to tape cuts, i.e., only the northern hemisphere is recorded.
Note 10/18/96: New solar conjunction playback constraints allow just a small portion of the 6 global mosaics to be played back. (Most likely, we will return about one-fourth of one GLOMOS.)

Fixed Map (XM), Gain 2, Grating Start 5, LPU, E4JGM10A, E4JGM05A

Galileo Activity Plan Form 11/15/96 10:45:14 rev 6/95



165DE:TT= 0 TMC= 1 C= 3.00 XC= -7.00 BS= 0/8172 TC= 1(75 167)
A= 728 pD= 0 SR=17.450 RA50=233.43 DEC50=-19.38 cone=128.41 clock= 91.43
117DE:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/8172
1:#s= 9 Cs= -41.00 XCs= 0.00 Cr= 41.00 XCr= -8.00 sD= 172 rD= 30

E4JNGLOMOS05

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNGLOMOS05

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 96-354/03:23:28.666 -CDS 2431:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNGLOMOS05 **DESCRIP:E4_JUPITER_GLOBAL_MOSAIC_05**

Jupiter Global Mosaic Prt 5		ACTIVITY ID:	E4JNGLOMOS05-
		START TIME:	96-352/10:20:24.666

Activity ID: Orbit E4 Target J Inst N OAPEL GLOMOS SeqNo 05 -

Title	Jupiter Global Mosaic Prt 5			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	JEE-CDS 00002436:00:0	96-352/10:20:24.666	JEE-001/17:03:04.000
End	JEE-CDS 00002421:21:0	96-352/10:35:20.666	JEE-001/16:48:08.000
Duration	00000014:70:0	000/00:14:56.000	000/00:14:56.000

Top Label E4JNGLOMOS05-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part 5 of 6 Jupiter global mosaics. Jupiter imaged in 5 colors (1.594, 2.156, 2.722, 3.0011, and 4.982 microns) using NIMS playback table JGM05A. to obtain global maps depicting features at ~945 km/nimsel resolution. This map acquired near 227 degrees CML (system III) at a phase angle of ~ 65 degrees.

No Data Returned

Design Detail

About 10 minutes of scanning, accumulating 5.70 MBTG and 0.0202 tracks.
4 minutes reserved for targetting. Wavelength table: JGM05A. TLM: LPU
Note: Only the first 272 secs of the scanning is returned, due to tape cuts, i.e., only the northern hemisphere is recorded.
Note 10/18/96: New solar conjunction playback constraints allow just a small portion of the 6 global mosaics to be played back. (Most likely, we will return about one-fourth of one GLOMOS.)

Fixed Map (XM), Gain 2, Grating Start 5, LPU, E4JGM10A, E4JGM05A

Galileo Activity Plan Form 11/15/96 10:45:14 rev 6/95

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E4 Health 1	ACTIVITY ID: E4NNHEALTH01-
	START TIME: 96-352/10:35:24.667

Activity ID: Orbit E4 Target N Inst N OAPEL HEALTH SeqNo 01 -

Title	E4 Health 1			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	EEE-CDS	00002630:15:0	96-352/10:35:24.667	EEE-001/20:19:23.333
End	EEE-CDS	00002627:00:0	96-352/10:38:36.667	EEE-001/20:16:11.333
Duration		00000003:15:0	000/00:03:12.000	000/00:03:12.000

Top Label E4NNHEALTH01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	100	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

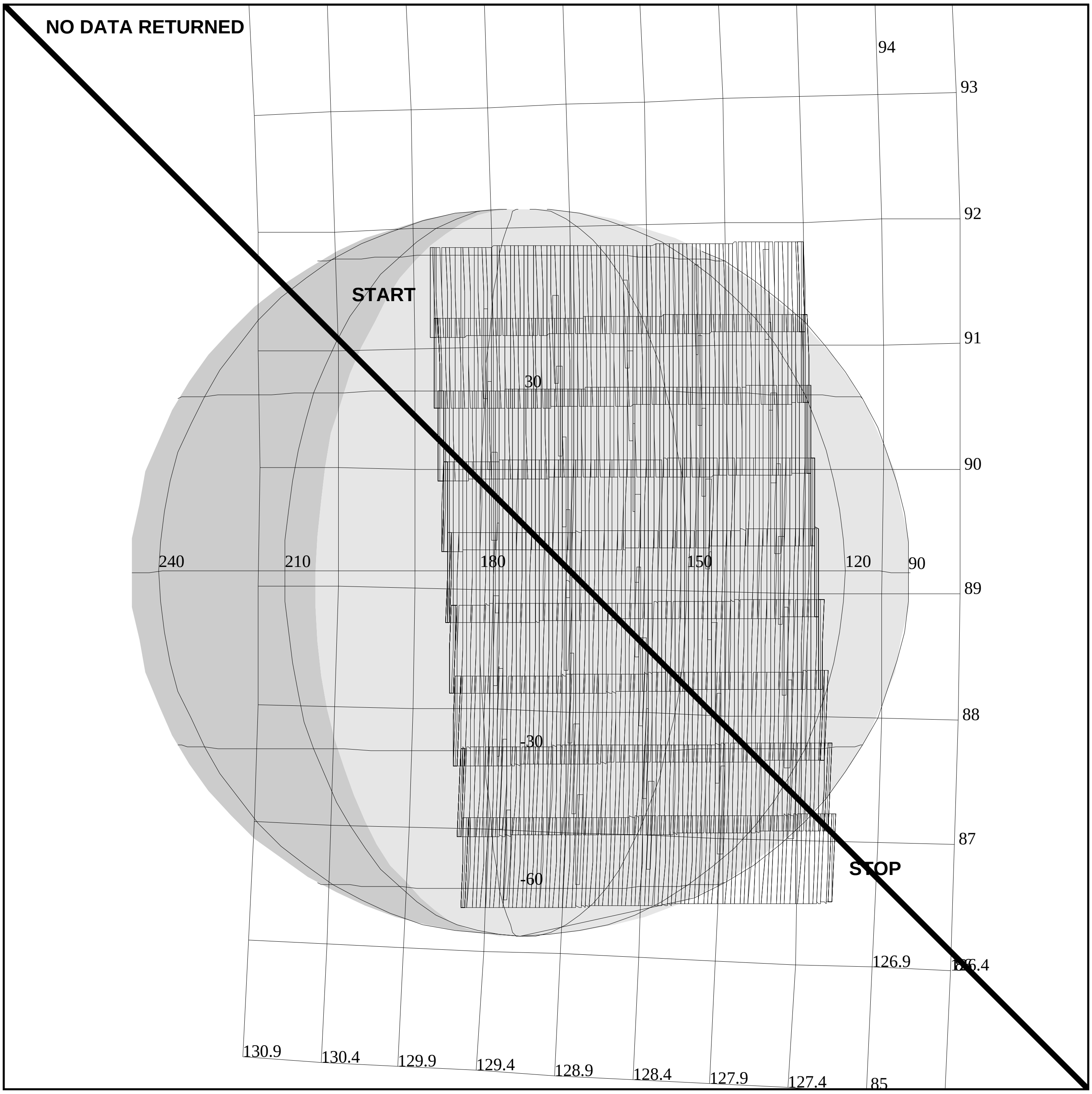
Observation Objective

Required to verify instrument operation.
These observations provide a 3 detector view of the instrument.
The detectors are selected such that a bright and a dark channel
will exist for either a satellite or Jupiter for a target.
The observations are spaced approximately 24 hours apart.

Design Detail

Long Map (LM), Gain 2, Grating Start 0, RT, E4RECVY3

Galileo Activity Plan Form 11/15/96 10:45:15 rev 6/95



165DF:TT= 0 TMC= 1 C= -1.00 XC= -8.00 BS= 0/6008 TC= 1(75 240)
A= 728 pD= 0 SR=17.450 RA50=234.86 DEC50=-19.70 cone=129.79 clock= 91.47
117DF:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/6008
1:#s= 9 Cs= -41.00 XCs= 0.00 Cr= 41.00 XCr= -8.00 sD= 172 rD= 30

E4JNGLOMOS06

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNGLOMOS06

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 96-354/03:23:28.666 -CDS 2333:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNGLOMOS06 **DESCRIP:E4_JUPITER_GLOBAL_MOSAIC_06**

Jupiter Global Mosaic Prt 5		ACTIVITY ID:	E4JNGLOMOS06-
		START TIME:	96-352/11:59:30.000

Activity ID: Orbit E4 Target J Inst N OAPEL GLOMOS SeqNo 06 -

Title	Jupiter Global Mosaic Prt 5		Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	JEE-CDS 00002338:00:0	96-352/11:59:30.000	JEE-001/15:23:58.666
End	JEE-CDS 00002323:17:0	96-352/12:14:28.666	JEE-001/15:09:00.000
Duration	00000014:74:0	000/00:14:58.666	000/00:14:58.666

Top Label E4JNGLOMOS06-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part 6 of 6 Jupiter global mosaics. Jupiter imaged in 5 colors (1.594, 2.156, 2.722, 3.0011, and 4.982 microns) using NIMS playback table JGM05A. to obtain global maps depicting features at ~945 km/nimsel resolution. This map acquired near 227 degrees CML (system III) at a phase angle of ~ 65 degrees.

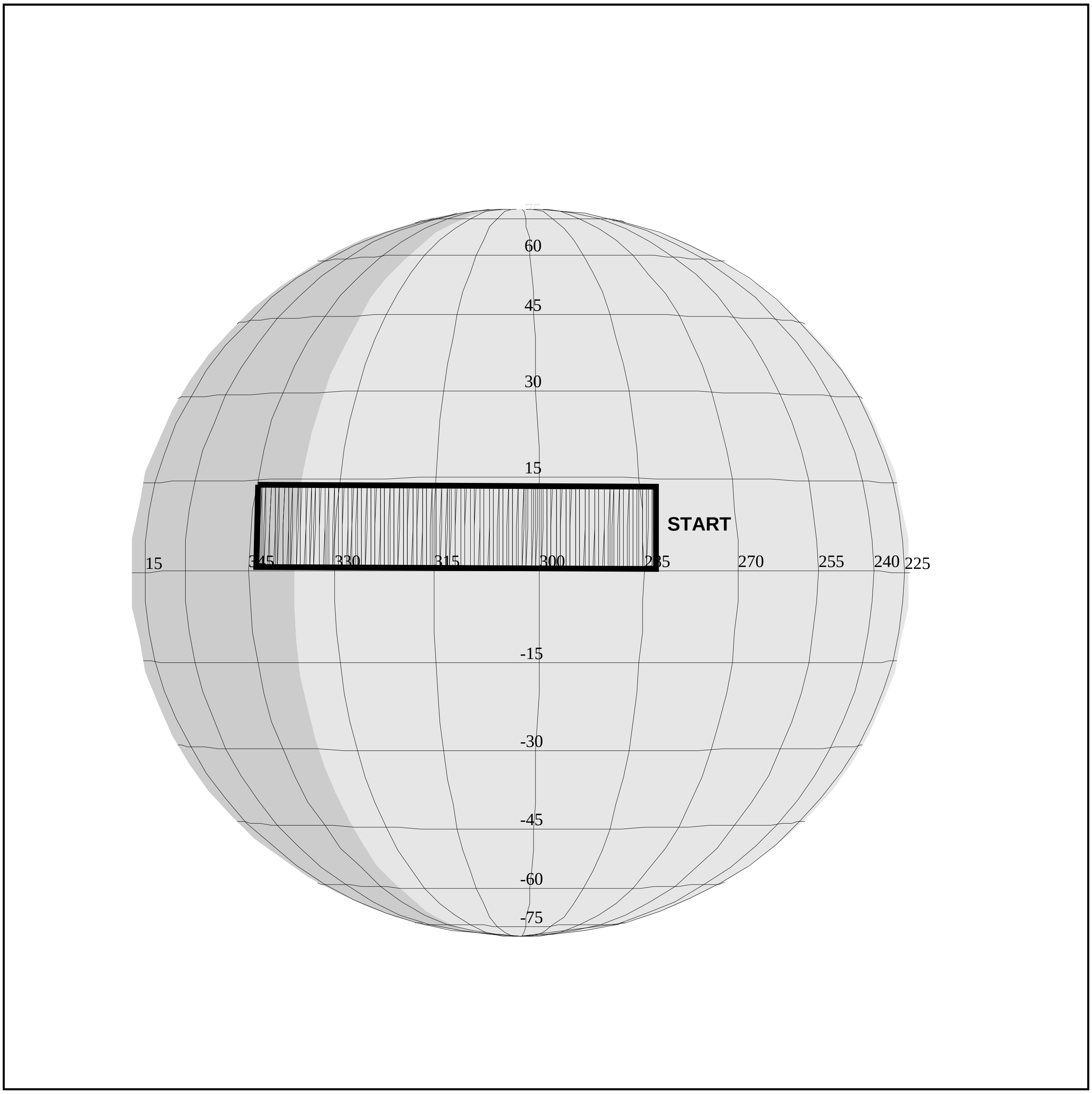
No Data Returned

Design Detail

About 10 minutes of scanning, accumulating 5.70 MBTG and 0.0202 tracks.
4 minutes reserved for targetting. Wavelength table: JGM05A. TLM: LPU
Note: Only the first 272 secs of the scanning is returned, due to tape cuts, i.e., only the northern hemisphere is recorded.
Note 10/18/96: New solar conjunction playback constraints allow just a small portion of the 6 global mosaics to be played back. (Most likely, we will return about one-fourth of one GLOMOS.)

Fixed Map (XM), Gain 2, Grating Start 5, LPU, E4JGM10A, E4JGM05A

Galileo Activity Plan Form 11/15/96 10:45:15 rev 6/95



165DG:TT= 0 TMC= 1 C= -38.00 XC= -3.50 BS= 0/5320 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50=236.75 DEC50=-21.62 cone=131.96 clock= 89.55
117DG:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/5320
1:#s= 1 Cs= 47.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1192 rD= 2

E4JNFEA05501

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA05501

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JFC 96-353/02:52:18.733 -CDS 0662:00:0

OBSERVATION:E4JNFEA05501

THINNING:NIM 2

BODY PLOT TIME:END-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_55_PHASE_01

Jupiter Camp. feat. 55 deg. phase Prt 1	ACTIVITY ID: E4JNFEA05501- START TIME: 96-352/15:37:54.067

Activity ID: Orbit E4 Target J Inst N OAPEL FEA055 SeqNo 01 -

Title	Jupiter Camp. feat. 55 deg. phase Prt 1	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	JFC-CDS 00000667:00:0	96-352/15:37:54.067	JFC-000/11:14:24.666
End	JFC-CDS 00000655:00:0	96-352/15:50:02.067	JFC-000/11:02:16.666
Duration	00000012:00:0	000/00:12:08.000	000/00:12:08.000

Top Label E4JNFEA05501-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the first observation obtained on a rotation with phase angle approximately 55 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near the terminator, assuming feature coordinates 7.0 degrees North latitude and 331 degrees West longitude (System III).

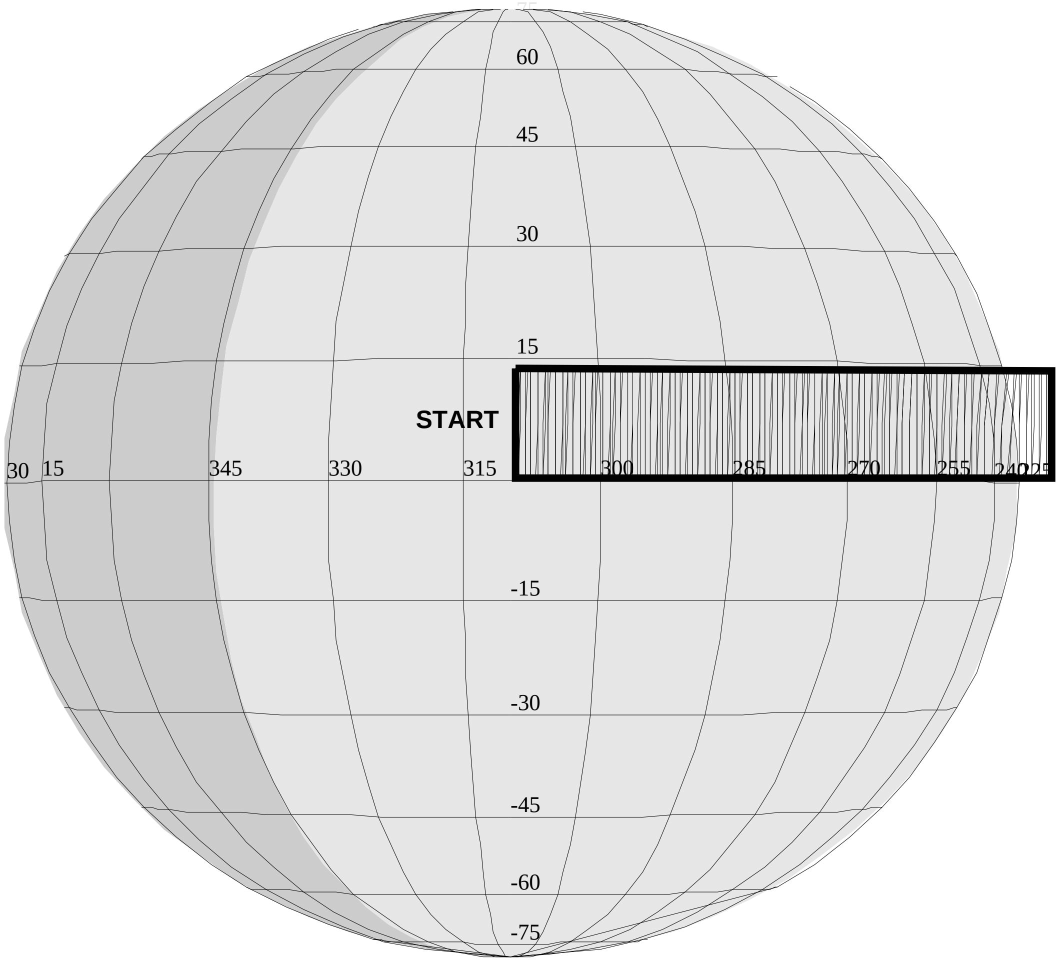
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 331 degrees West longitude, 7.0 degrees North latitude. S/C distance about 1.47 million KM, NIMS IFOV (NIMSEL) = 735 KM; 4*1 mosaic covers 58800*14700 KM. About 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks. 4 minutes reserved for targetting. Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal windfield.

A detector 8 wavelength was added to the playback edit table E4JFT04A, making E4JFT05A, to monitor the failed detector 8.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT05A



165DH:TT= 0 TMC= 1 C= -17.00 XC= -3.50 BS= 0/7504 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50=237.93 DEC50=-21.86 cone=133.08 clock= 89.56
117DH:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/7504
1:#s= 1 Cs= -47.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1192 rD= 2

E4JNFEA05502

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA05502

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JFC 96-353/02:52:18.733 -CDS 650:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA05502 **DESCRIP:E4_FEAT_CAMP_55_PHASE_02**

Jupiter Camp. feat. 55 deg. phase Prt 2	ACTIVITY ID: E4JNFEA05502-
	START TIME: 96-352/15:50:29.400

Activity ID: Orbit E4 Target J Inst N OAPEL FEA055 SeqNo 02 -

Title	Jupiter Camp. feat. 55 deg. phase Prt 2			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	JFC-CDS	00000654:50:0	96-352/15:50:29.400	JFC-000/11:01:49.333
End	JFC-CDS	00000643:00:0	96-352/16:02:10.067	JFC-000/10:50:08.666
Duration		00000011:50:0	000/00:11:40.667	000/00:11:40.667

Top Label	E4JNFEA05502-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the second observation obtained on a rotation with phase angle approximately 55 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near the central meridian, assuming feature coordinates 7.0 degrees North latitude and 331 degrees West longitude (System III).

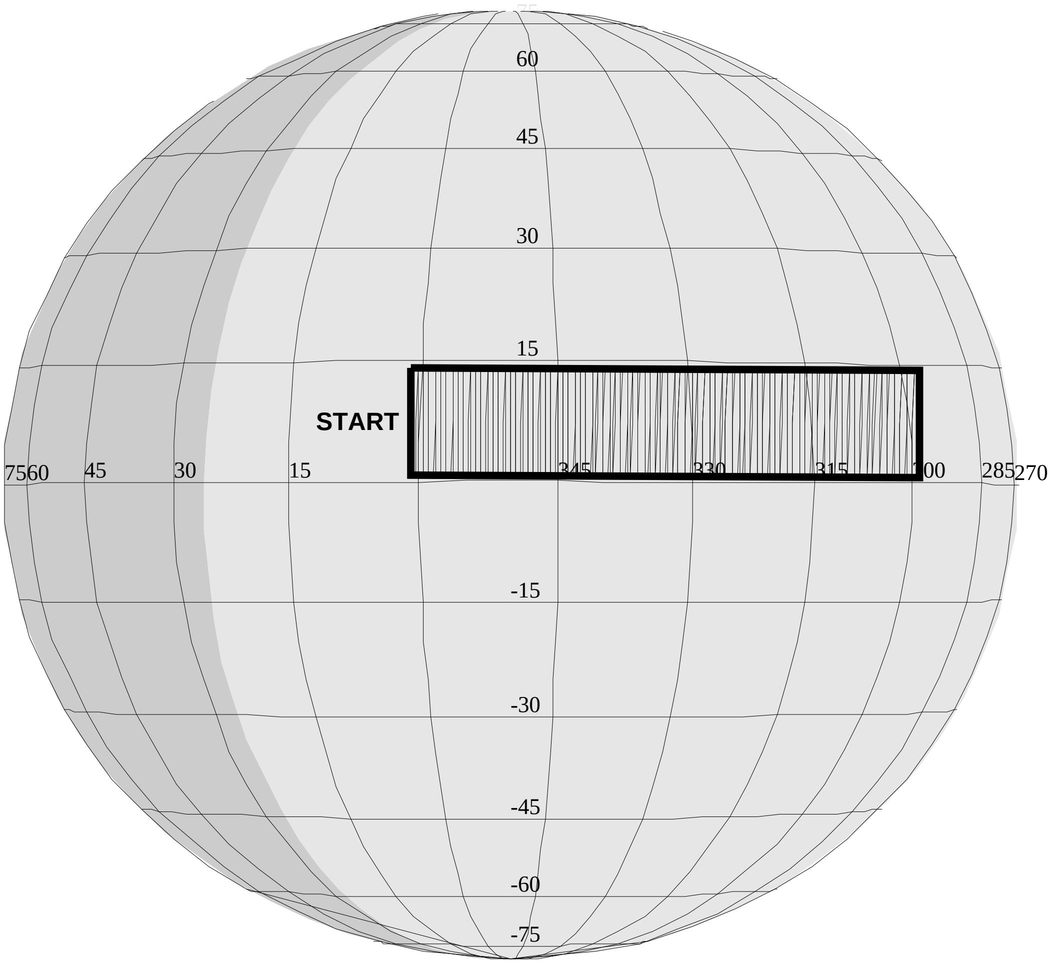
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 331 degrees West longitude, 7.0 degrees North latitude.
S/C distance about 1.46 million KM, NIMS IFOV (NIMSEL) = 730 KM;
4*1 mosaic covers 58400*14600 KM. About 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks.
4 minutes reserved for targetting. Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal windfield.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form   11/15/96 10:45:15   rev 6/95



165DI:TT= 0 TMC= 1 C= 26.00 XC= -3.50 BS= 0/9880 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50=239.85 DEC50=-22.20 cone=134.90 clock= 89.60
117DI:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/9880
1:#s= 1 Cs= -47.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1192 rD= 2

E4JNFEA05503

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA05503

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JFC 96-353/02:52:18.733 -CDS 582:00:0

OBSERVATION:E4JNFEA05503

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_55_PHASE_03

Jupiter Camp. feat. 55 deg. phase Prt 3	ACTIVITY ID: E4JNFEA05503- START TIME: 96-352/16:58:47.400

Activity ID: Orbit E4 Target J Inst N OAPEL FEA055 SeqNo 03 -

Title	Jupiter Camp. feat. 55 deg. phase Prt 3			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	JFC-CDS	00000587:00:0	96-352/16:58:47.400	JFC-000/09:53:31.333
End	JFC-CDS	00000575:00:0	96-352/17:10:55.400	JFC-000/09:41:23.333
Duration		00000012:00:0	000/00:12:08.000	000/00:12:08.000

Top Label E4JNFEA05503-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the third observation obtained on a rotation with phase angle approximately 55 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near minimum airmass, assuming feature coordinates 7.0 degrees North latitude and 331 degrees West longitude (System III).

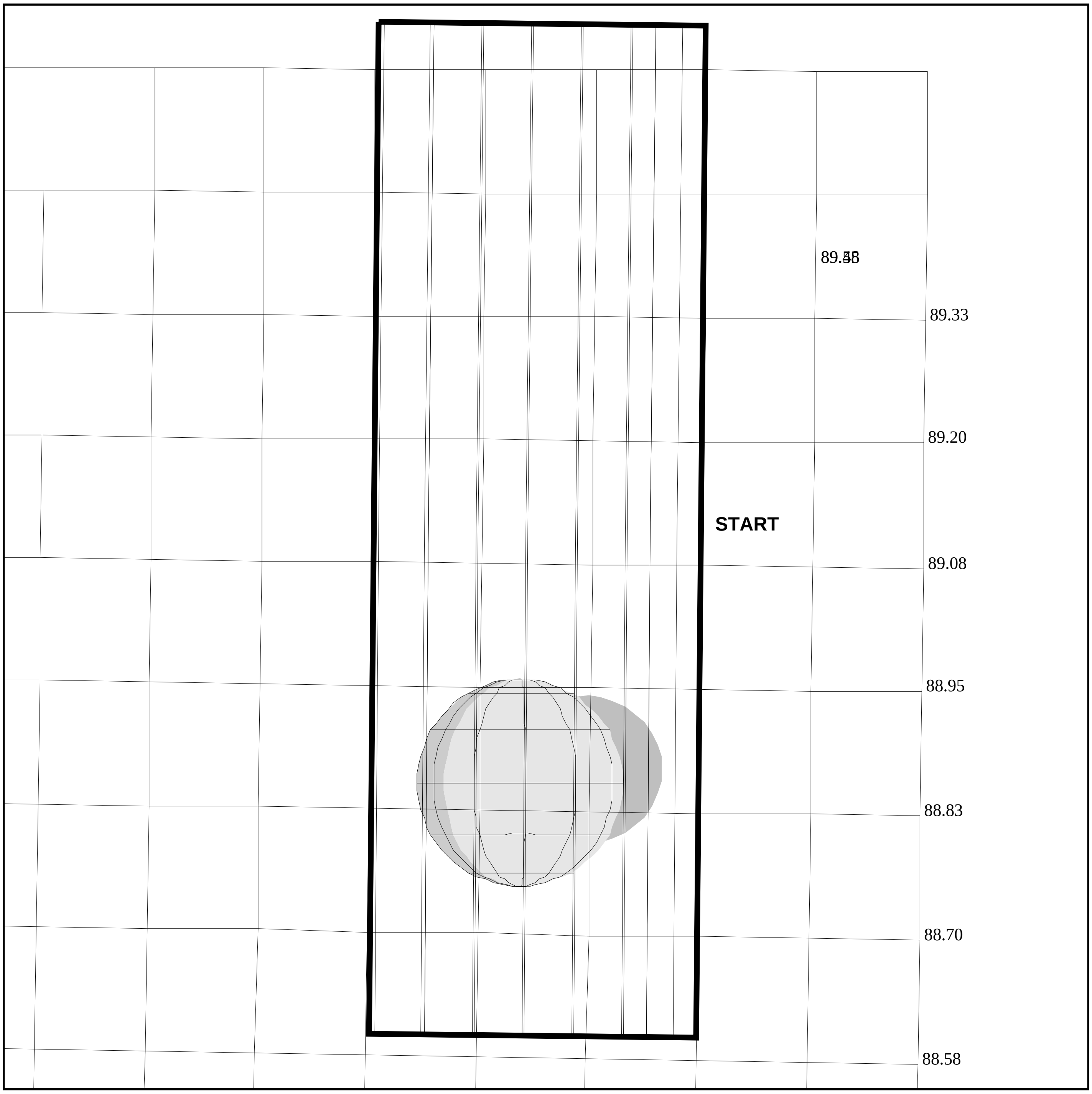
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 331 degrees West longitude, 7.0 degrees North latitude.
S/C distance about 1.43 million KM, NIMS IFOV (NIMSEL) = 715 KM;
4*1 mosaic covers 57200*14300 KM. About 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks.
4 minutes reserved for targetting. Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal windfield.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form   11/15/96 10:45:15   rev 6/95



165DK:TT= 0 TMC= 1 C= -1.50 XC= 2.50 BS= 0/2630 TC= 3
A= 728 pD= 1632 SR=17.450 RA50=251.63 DEC50=-24.23 cone=145.90 clock= 89.11
117DK:#SB= 1 OR= 0.750 RR= 1.400 BM=F RC= 1 BS= 0/2630
1:#s= 28 Cs= 2.80 XCs= 0.00 Cr= -2.61 XCr= 0.00 sD= 26 rD= 16

E4INCOOLCV01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCOOLCV01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 -CDS 1569:00:0

OBSERVATION:E4INCOOLCV01

THINNING:NIM 2

BODY PLOT TIME:START-TIME D= 1632 S= 0.200

DESCRIP:ECLIPSE INGRESS

NIMS Io Eclipse Observation (ingress)   **ACTIVITY ID:** E4INCOOLCV01-
START TIME: 96-352/19:05:10.733

Activity ID: Orbit E4 Target I Inst N OAPEL COOLCV SeqNo 01 -

Title	NIMS Io Eclipse Observation (ingress)			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	IEE-CDS	00001574:00:0	96-352/19:05:10.733	IEE-001/02:31:29.333
End	IEE-CDS	00001560:00:0	96-352/19:19:20.066	IEE-001/02:17:20.000
Duration		00000014:00:0	000/00:14:09.333	000/00:14:09.333

Top Label   E4INCOOLCV01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To investigate cooling of hot spots on Io’s surface as Io is eclipsed by Jupiter.

Data Returned

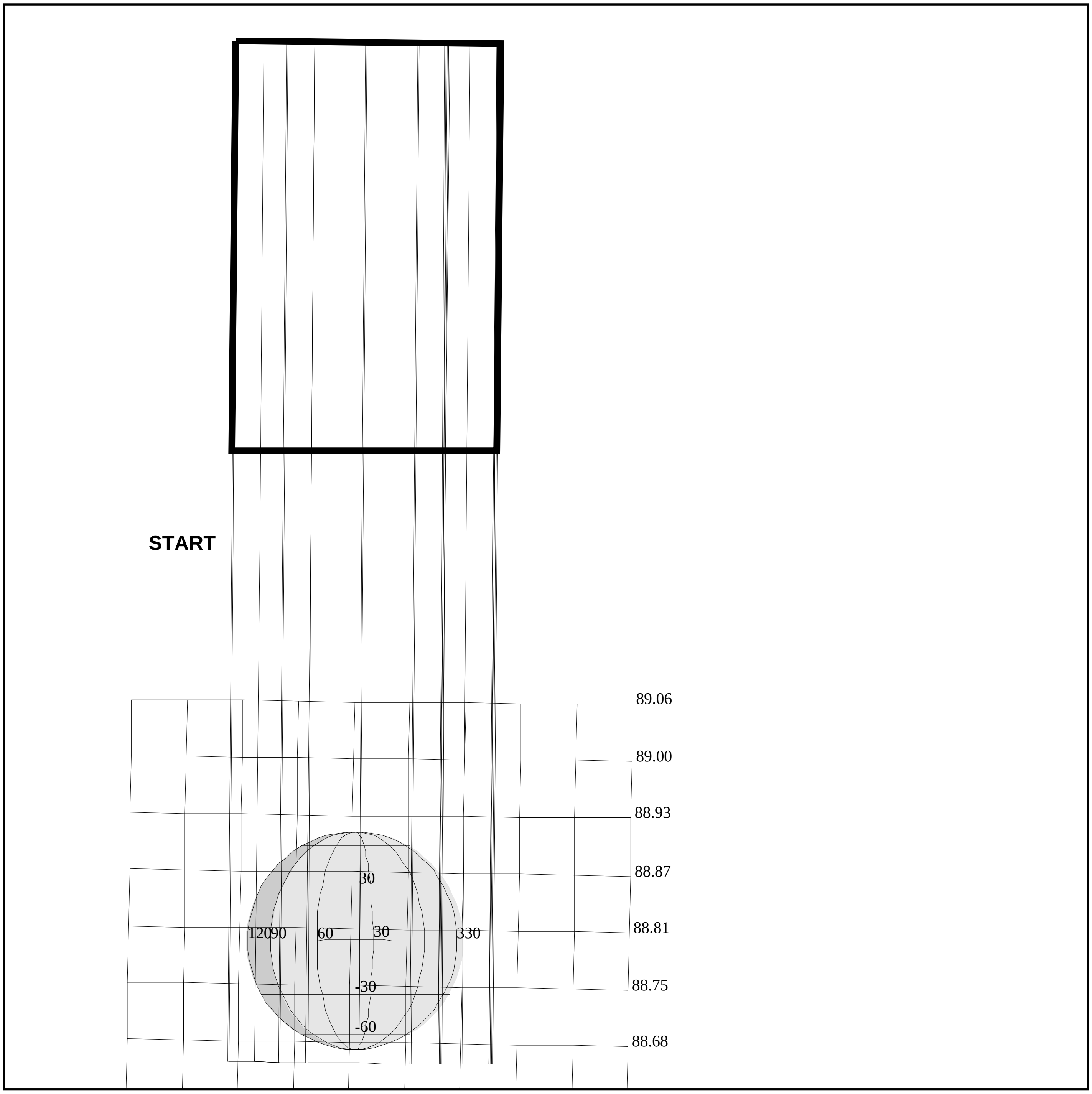
Design Detail

Instrument mode: Fixed Map
Number of wavelengths: 10
Wavelengths P/B: 10
Wavelength table: IXM10
Scan back and forth across disc, 28 times.
TLM: LPU

Swath numbers 2 (A), 5 (B), 10 (C), 19 (D) and 27 (E) selected, but only swaths A, D and E were received on Earth; other 2 lost due to playback gaps.

Fixed Map (XM), Gain 4, Grating Start 21, LPU, E4IXM10B, E4IXM10B

Galileo Activity Plan Form   11/15/96 10:45:15   rev 6/95



165FR:TT= 0 TMC= 1 C= 1.00 XC= 3.80 BS= 0/5188 TC= 3
A= 728 pD= 0 SR=17.450 RA50=255.40 DEC50=-24.51 cone=149.35 clock= 89.22
117FR:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/5188
1:#s= 1 Cs= -2.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 20 rD= 2

E4INRTIMON01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INRTIMON01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 96-353/21:36:40.066 -CDS 1500:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300

OBSERVATION:E4INRTIMON01

DESCRIP:REAL TIME IO MONORING

Real Time Io monoring	ACTIVITY ID: E4INRTIMON01- START TIME: 96-352/20:14:56.733

Activity ID: Orbit E4 Target I Inst N OAPEL RTIMON SeqNo 01 -

Title	Real Time Io monoring			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/17/96 Week 51

Start	IEE-CDS	00001505:00:0	96-352/20:14:56.733	IEE-001/01:21:43.333
End	IEE-CDS	00001497:00:0	96-352/20:23:02.066	IEE-001/01:13:38.000
Duration		00000008:00:0	000/00:08:05.333	000/00:08:05.333

Top Label E4INRTIMON01
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	184	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Observation of Io’s nightside to map hot spots and look for thermal changes on the surface.

Data Returned

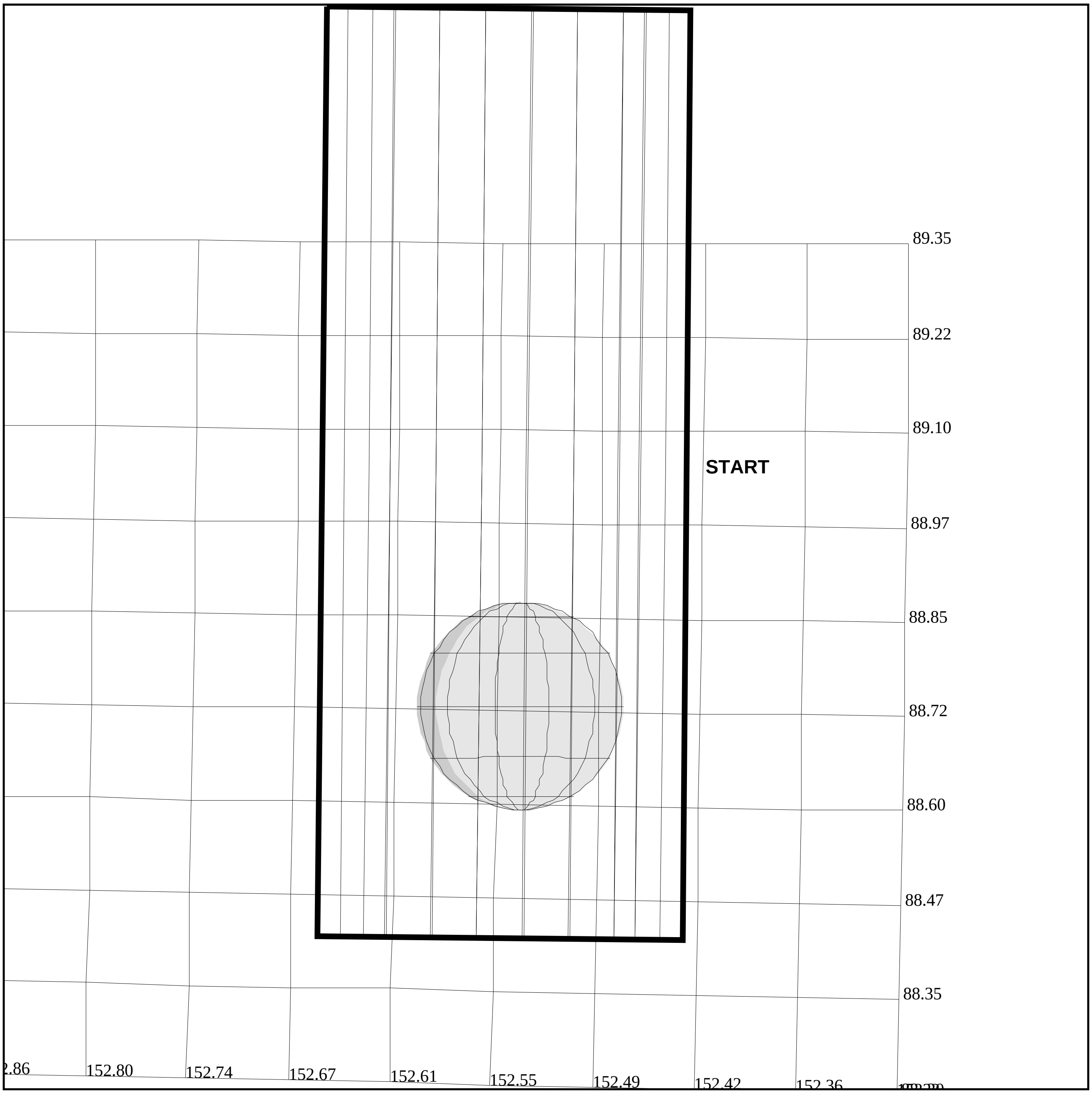
Design Detail

Observation duration per rim: 12 minor frames.
These 12 minor frames must be the first 12 of a rim.
NIMS mirror scan cut from 20 to 8.
Fixed map, 8 wavelengths.
MBTG = 0.017 R/T = 3.5 % MUB.
Offset target center by 2 mrad in cone, either direction.
8 mirror positions will get 23 fields of view, use double Nyquist.
Design the observation to bias toward the bottom of the scan, i.e., cover the satellite with the bottom mirrors accounting for pointing uncertainty. Plot all 20 mirror positions.

Mirror Blocked (1C,07) (11100,00111)
The 8 mirror positions selected are OFF TARGET!
Only Dark Sky returned.

Fixed Map (XM), Gain 2, Grating Start 21, RT, E4IXM8RT

Galileo Activity Plan Form 11/15/96 10:45:15 rev 6/95



165DL:TT= 0 TMC= 1 C= -1.50 XC= 2.50 BS= 0/7382 TC= 3
A= 728 pD= 0 SR=17.450 RA50=258.79 DEC50=-24.83 cone=152.45 clock= 89.04
117DL:#SB= 1 OR= 0.750 RR= 1.400 BM=F RC= 1 BS= 0/7382
1:#s= 24 Cs= 3.50 XCs= 0.00 Cr= -3.30 XCr= 0.00 sD= 30 rD= 20

E4INWARMCV01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INWARMCV01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 -CDS 1433:00:0

OBSERVATION:E4INWARMCV01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:ECLIPSE EGRESS

NIMS Io Eclipse Observation (egress)   ACTIVITY ID: E4INWARMCV01-
START TIME: 96-352/21:22:41.400

Activity ID: Orbit E4 Target I Inst N OAPEL WARMCV SeqNo 01 -

Title	NIMS Io Eclipse Observation (egress)			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	IEE-CDS	00001438:00:0	96-352/21:22:41.400	IEE-001/00:13:58.666
End	IEE-CDS	00001424:00:0	96-352/21:36:50.733	IEE-000/23:59:49.333
Duration		00000014:00:0	000/00:14:09.333	000/00:14:09.333

Top Label   E4INWARMCV01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To investigate warming of hot spots on Io’s surface
as Io is eclipsed by Jupiter.

Data Returned

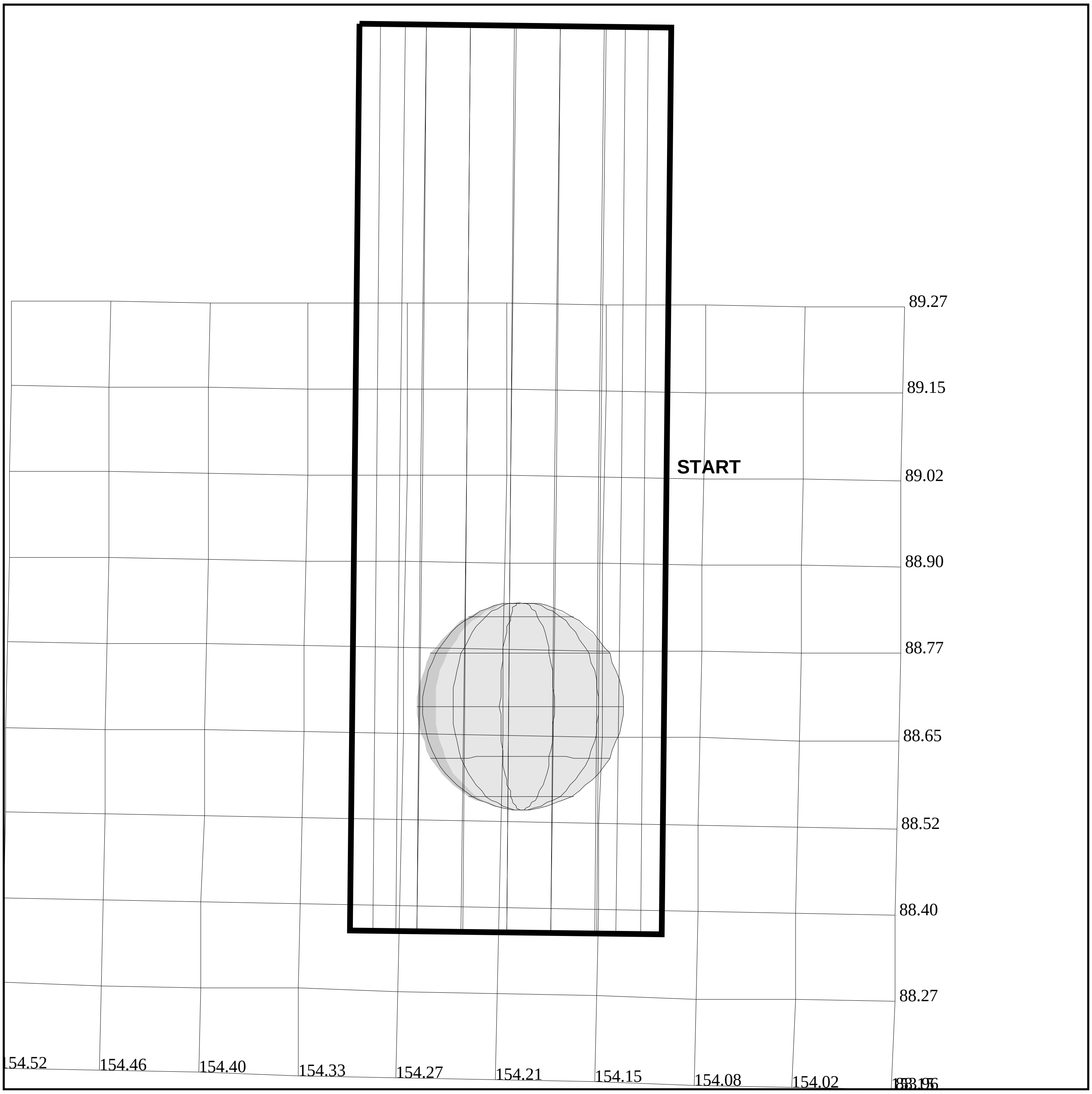
Design Detail

Instrument Mode: Fixed Map
Number of wavelengths: 10
Wavelengths P/B: 10
Wavelength table: IXM10
Scan back and forth across disc, 24 times
TLM: LPU

Swath numbers 2 (A), 5 (B), 8 (C), 11 (D), 15 (E) and 23 (F) selected.

Fixed Map (XM), Gain 2, Grating Start 21, LPU, E4IXM10B, E4IXM10B

Galileo Activity Plan Form   11/15/96 10:45:15   rev 6/95



165DM:TT= 0 TMC= 1 C= -1.50 XC= 2.50 BS=30/3570 TC= 3
A= 60 pD= 0 SR=17.450 RA50=260.62 DEC50=-24.92 cone=154.11 clock= 89.02
117DM:#SB= 1 OR= 0.750 RR= 1.400 BM=F RC= 1 BS=30/3570
1:#s= 5 Cs= 3.00 XCs= 0.00 Cr= -2.75 XCr= 0.00 sD= 28 rD= 16

E4INWARMCV02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INWARMCV02

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 -CDS 1399:00:0

OBSERVATION:E4INWARMCV02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:ECLIPSE EGRESS

NIMS Io Eclipse Obs. (post-egress)   ACTIVITY ID: E4INWARMCV02-
START TIME: 96-352/22:01:06.733

Activity ID: Orbit E4 Target I Inst N OAPEL WARMCV SeqNo 02 -

Title	NIMS Io Eclipse Obs. (post-egress)			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/17/96	Week	51

Start	IEE-CDS	00001400:00:0	96-352/22:01:06.733	IEE-000/23:35:33.333
End	IEE-CDS	00001397:00:0	96-352/22:04:08.733	IEE-000/23:32:31.333
Duration		00000003:00:0	000/00:03:02.000	000/00:03:02.000

Top Label E4INWARMCV02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To investigate warming of hot spots on Io’s surface as Io is eclipsed by Jupiter.

Data Returned

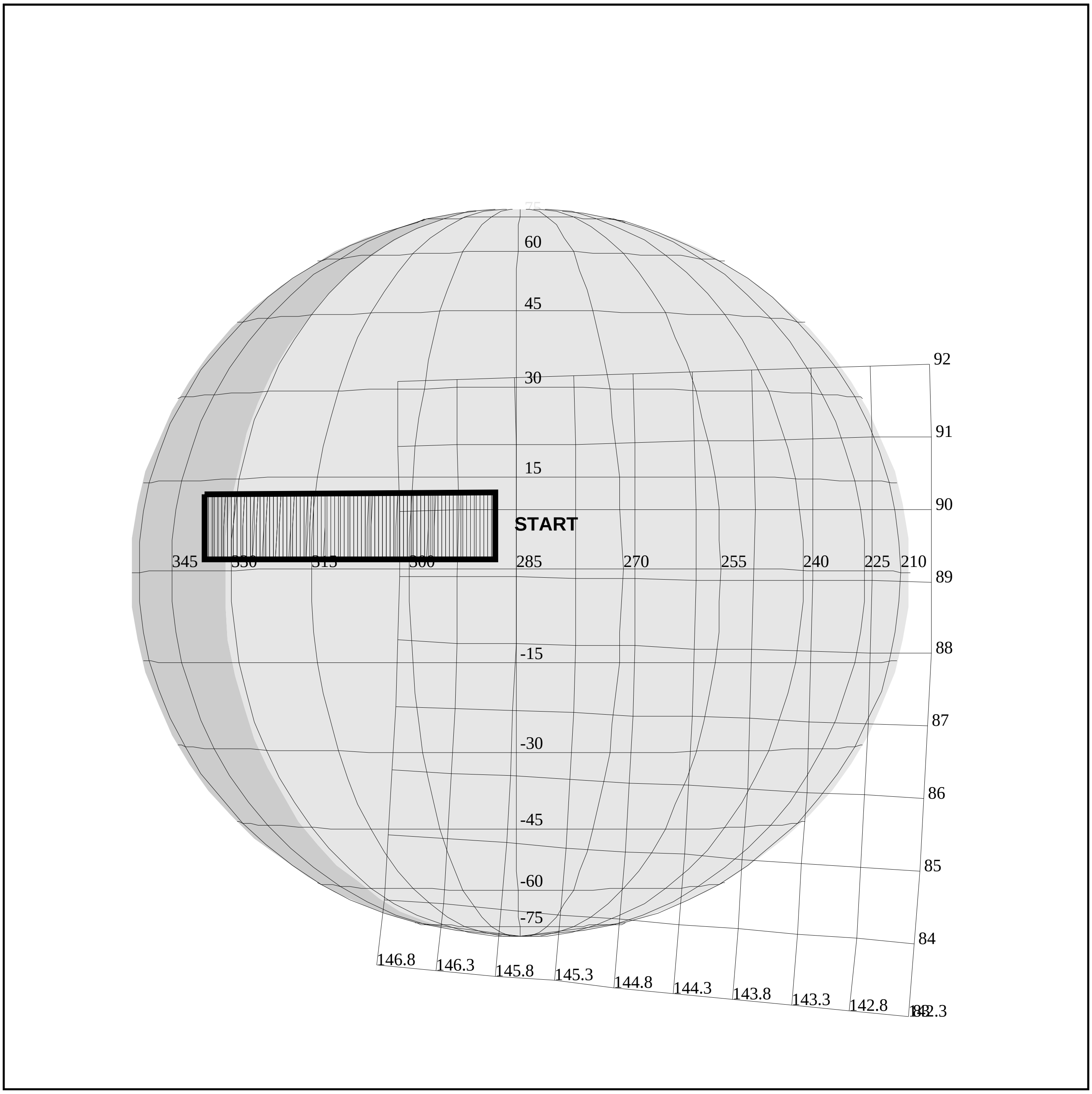
Design Detail

Instrument Mode: Fixed Map
Number of Wavelengths: 10
Wavelengths P/B: 10
Wavelength Table: IXM10,
Scan back and forth across disc, 5 times
TLM: LPU.

Swath numbers 2 (A) and 4 (B) selected.

Fixed Map (XM), Gain 2, Grating Start 21, LPU, E4IXM10B, E4IXM10B

Galileo Activity Plan Form   11/15/96 10:45:16   rev 6/95



165DO:TT= 0 TMC= 1 C= -38.00 XC= -4.30 BS= 0/0880 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50=251.79 DEC50=-23.88 cone=146.01 clock= 89.77
117DO:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/0880
1:#s= 1 Cs= 43.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1192 rD= 2

E4JNFEA04101

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA04101

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JFC 96-353/02:52:18.733 -CDS 082:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA04101 **DESCRIP:E4_FEAT_CAMP_41_PHASE_01**

Jupiter Camp. feat. 41 deg. phase Prt 1	ACTIVITY ID: E4JNFEA04101- START TIME: 96-353/01:24:20.733

Activity ID: Orbit E4 Target J Inst N OAPEL FEA041 SeqNo 01 -

Title	Jupiter Camp. feat. 41 deg. phase Prt 1			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	JFC-CDS	00000087:00:0	96-353/01:24:20.733	JFC-000/01:27:58.000
End	JFC-CDS	00000075:00:0	96-353/01:36:28.733	JFC-000/01:15:50.000
Duration		00000012:00:0	000/00:12:08.000	000/00:12:08.000

Top Label	E4JNFEA04101-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the first observation obtained on a rotation with phase angle approximately 41 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near the terminator, assuming feature coordinates 7.0 degrees North latitude and 328 degrees West longitude (System III).

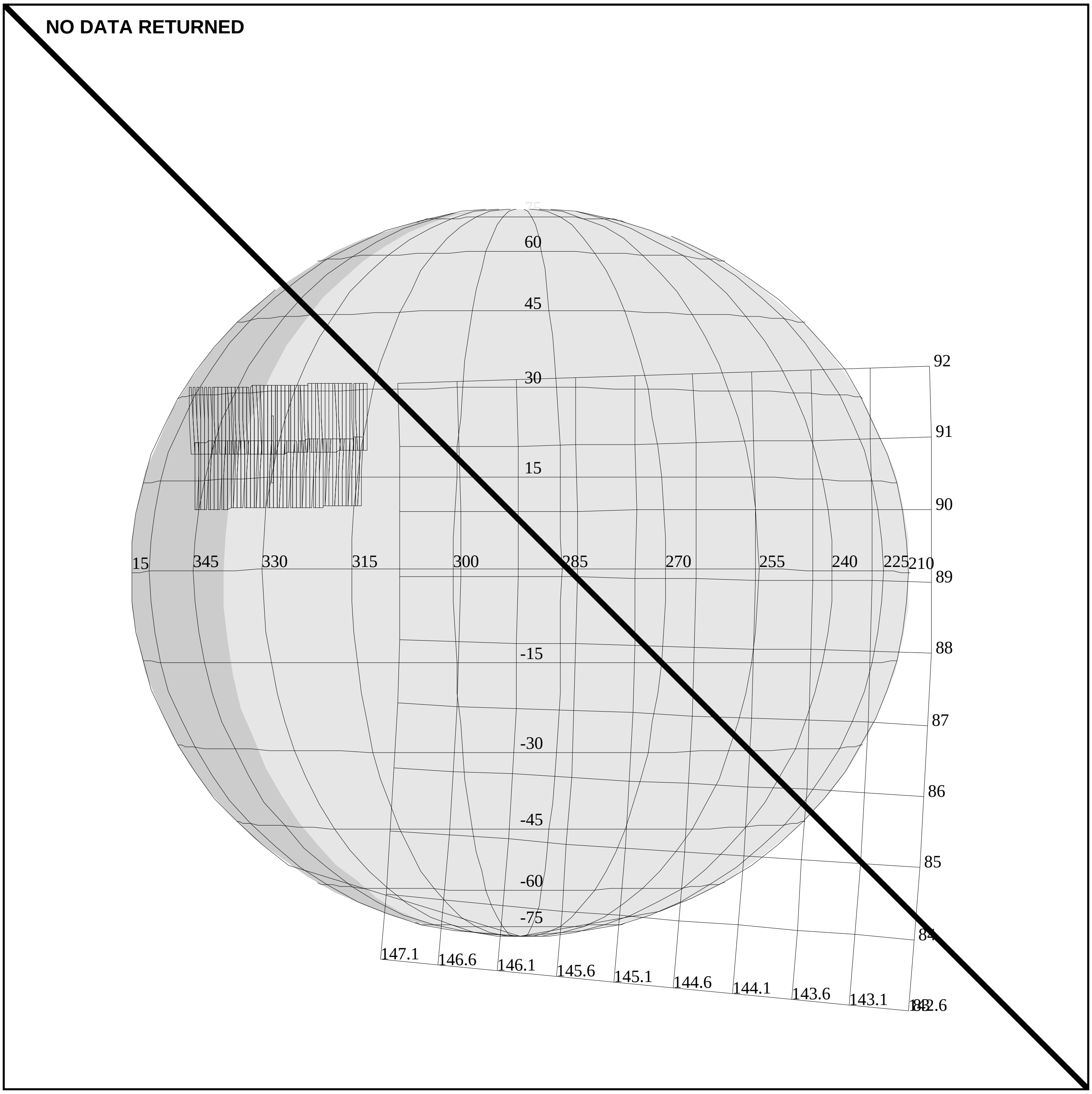
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 328 degrees West longitude, 7.0 degrees North latitude.
S/C distance about 1.19 million KM, NIMS IFOV (NIMSEL) = 595 KM;
4*1 mosaic covers 47600*11900 KM. About 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks.
4 minutes reserved for targetting. Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal windfield.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form   11/15/96 10:45:16   rev 6/95



165DP:TT= 0 TMC= 1 C= 12.60 XC= 4.50 BS= 0/2882 TC= 1(19.8 330)
A= 364 pD= 0 SR=17.450 RA50=255.02 DEC50=-23.30 cone=148.87 clock= 91.50
117DP:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/2882
1:#s= 2 Cs= -25.80 XCs= 0.00 Cr= 26.00 XCr= -8.00 sD= 708 rD= 40

E4JNPFTA4101

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNPFTA4101

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JFC 96-353/02:52:18.733 -CDS 071:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNPFTA4101 **DESCRIP:E4_PARTIAL_FEA_41_PHASE_01**

Jup. Prt. Feat. Tr. A 41 deg Phse Prt 1	ACTIVITY ID: E4JNPFTA4101- START TIME: 96-353/01:37:29.400

Activity ID: Orbit E4 Target J Inst N OAPEL PFTA41 SeqNo 01 -

Title	Jup. Prt. Feat. Tr. A 41 deg Phse Prt 1	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JFC-CDS 00000074:00:0	96-353/01:37:29.400	JFC-000/01:14:49.333
End	JFC-CDS 00000063:02:0	96-353/01:48:35.400	JFC-000/01:03:43.333
Duration	00000010:89:0	000/00:11:06.000	000/00:11:06.000

Top Label E4JNPFTA4101-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 5 OAPELs constituting the partial feature track for feature A. This is the first observation of this feature and the first observation obtained on a rotation with phase angle approximately 41 degrees. Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with feature (NTRZ region to the north of the hot spot feature campaign region) near the terminator, assuming partial feature campaign coordinates 14.0 degrees north latitude and 328 degrees west longitude (system III).

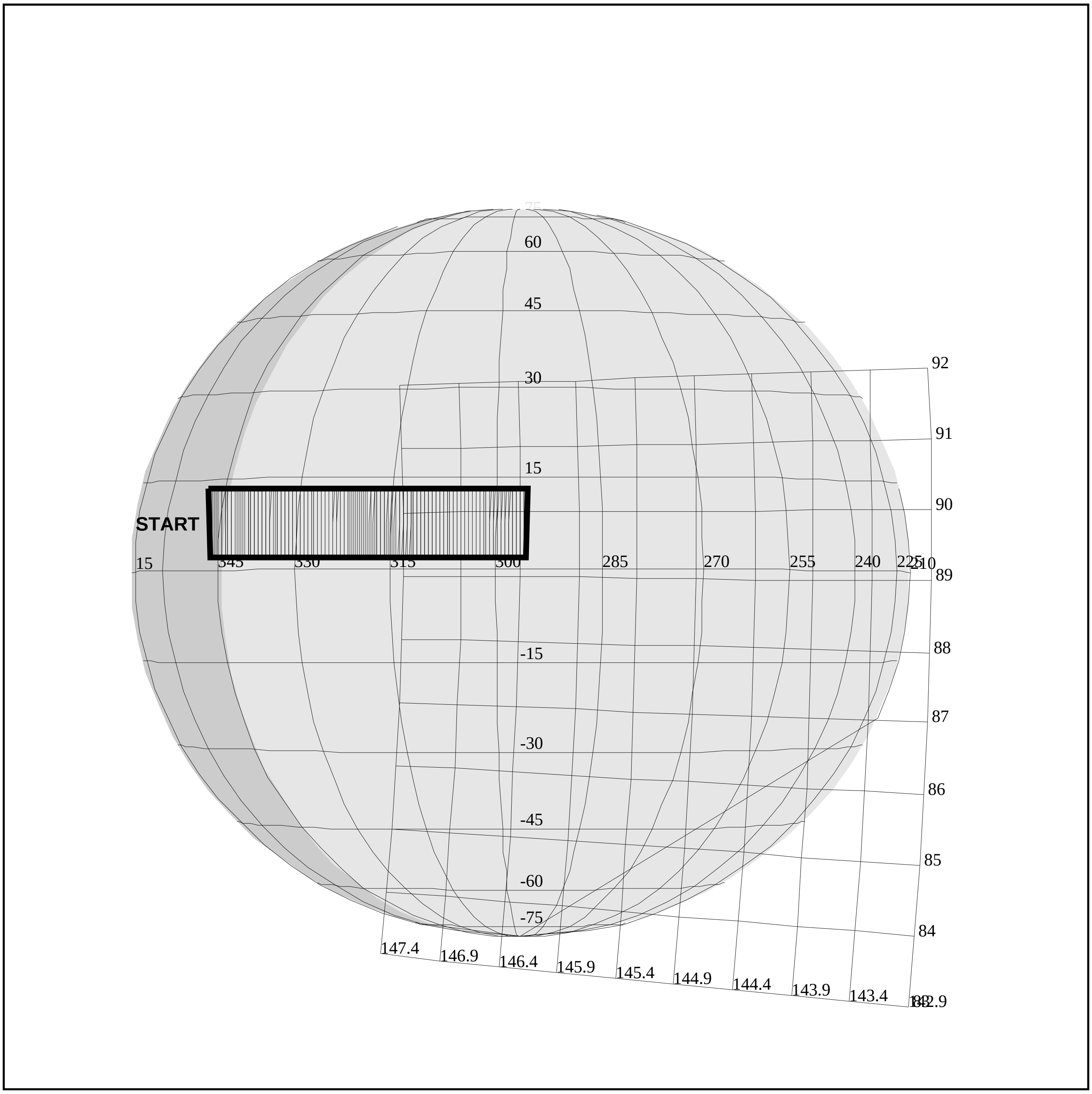
No Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*2 (20*20 mrad) area centered on NTRZ near 328 degrees West longitude, 14 degrees north latitude.
S/C distance about 1.18 million KM, NIMS IFOV (NIMSEL) = 590 KM.
2*2 mosaic covers 23600 * 23600 KM. About 420 seconds of scanning (including 20 secs for reposition slews) accumulating 0.3773 MBTG in 19 colors, and using 0.01411 tracks. 2 minutes reserved for targetting,
TLM: LPU Wavelength table: JFT19A
Note 10/18/96: New solar conjunction playback constraints resulted in almost total deletion of playback (just 2 seconds remain).

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form 11/15/96 10:45:16 rev 6/95



165DQ:TT= 0 TMC= 1 C= 15.00 XC= -4.00 BS= 0/4702 TC= 1(12 328)
A= 182 pD= 0 SR=17.450 RA50=255.06 DEC50=-24.17 cone=149.01 clock= 89.84
117DQ:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/4702
1:#s= 1 Cs= -47.70 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1198 rD= 2

E4JNFEA04102

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA04102

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JFC 96-353/02:52:18.733 -CDS 061:00:0

OBSERVATION:E4JNFEA04102

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_41_PHASE_02

Jupiter Camp. feat. 41 deg. phase Prt 2	ACTIVITY ID:	E4JNFEA04102-
	START TIME:	96-353/01:48:36.733

Activity ID: Orbit E4 Target J Inst N OAPEL FEA041 SeqNo 02 -

Title	Jupiter Camp. feat. 41 deg. phase Prt 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JFC-CDS 00000063:00:0	96-353/01:48:36.733	JFC-000/01:03:42.000
End	JFC-CDS 00000054:00:0	96-353/01:57:42.733	JFC-000/00:54:36.000
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label E4JNFEA04102-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is is the second observation obtained on a rotation with phase angle approximately 41 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near 30 degrees relative longitude, 17 degrees from the terminator, assumming campaign feature coordinates 7 degrees North latitude and 328 degrees West longitude.

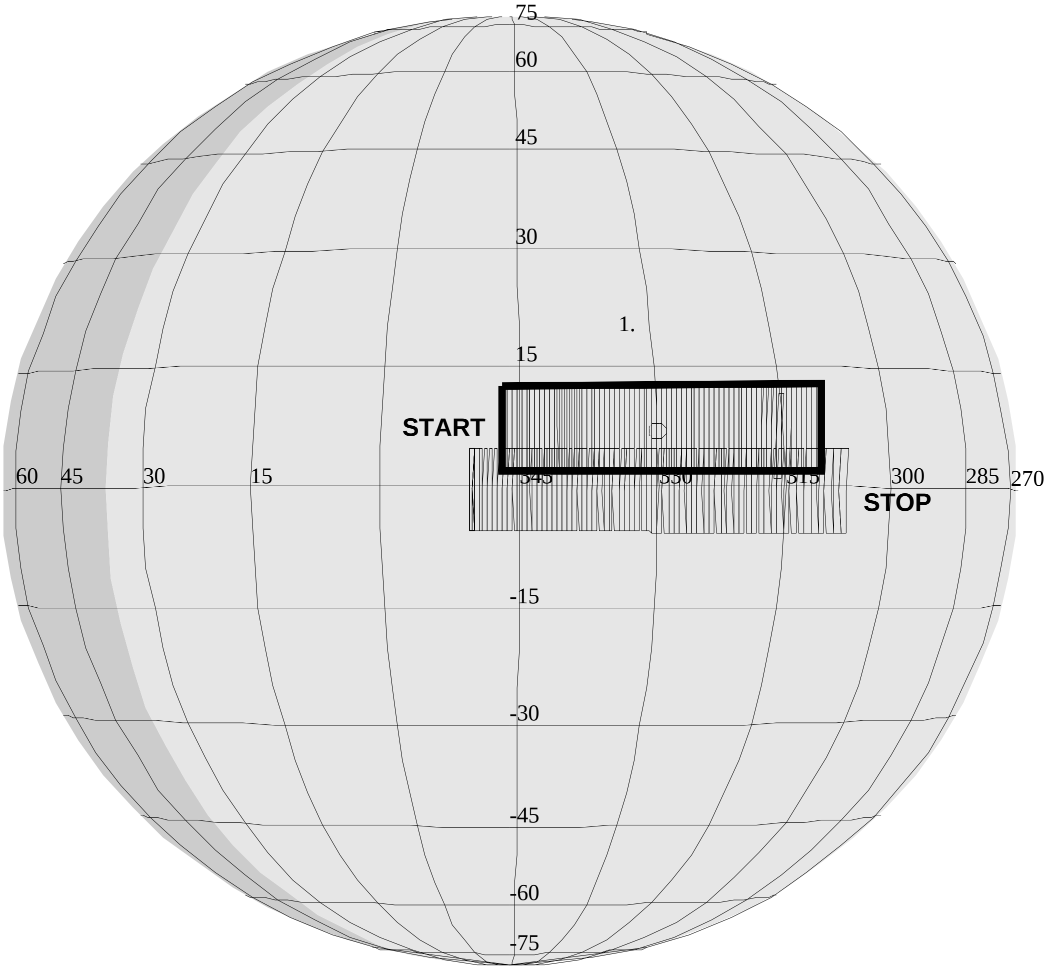
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad).
Observation centered on hot spot near 328 degrees west longitude,
7 degrees north latitude. S/C distance about 1.17 million KM,
NIMS IFOV (NIMSEL) = 585 KM; 4*1 scan covers 46800*11700 KM;
about 400 seconds of scanning. Scan accumulates 0.1022 MBTG in
4 colors, and uses 0.01344 tracks. 1 minute reserved for targetting.
Wavelength table: JFT04A, TLM: LPU
Note 9/1996: Observation record time and consequent playback time
reduced to 27 seconds to fit new tape budget.
Note 10/18/96: This and other feature track OAPELs account for the
100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form 11/15/96 10:45:16 rev 6/95



165DU:TT= 0 TMC= 1 C= 20.00 XC= -4.50 BS= 0/0172 TC= 1(12 328)
A= 182 pD= 1860 SR=17.450 RA50=254.91 DEC50=-24.13 cone=148.87 clock= 89.87
117DU:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/0172
1:#s= 1 Cs= -37.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 930 rD= 2
165DR:TT= 0 TMC= 1 C= 20.00 XC= -12.00 BS= 0/5268 TC= 1(12 330)
A= 182 pD= 0 SR=17.450 RA50=254.91 DEC50=-24.55 cone=148.91 clock= 89.08
117DR:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/5268
1:#s= 1 Cs= -37.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 930 rD= 2

E4JNFEA04103

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA04103

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JFC 96-353/02:52:18.733 +CDS 24:00:0

OBSERVATION:E4JNFEA04103

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_41_PHASE_03

Jupiter Camp. feat. 41 deg. phase Prt 3	ACTIVITY ID: E4JNFEA04103- START TIME: 96-353/03:12:32.066

Activity ID: Orbit E4 Target J Inst N OAPEL FEA041 SeqNo 03 -

Title	Jupiter Camp. feat. 41 deg. phase Prt 3	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JFC+CDS 00000020:00:0	96-353/03:12:32.066	JFC+000/00:20:13.333
End	JFC+CDS 00000058:00:0	96-353/03:50:57.399	JFC+000/00:58:38.666
Duration	00000038:00:0	000/00:38:25.333	000/00:38:25.333

Top Label E4JNFEA04103-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. Also, the second of 5 OAPELs constituting the partial feature track for feature B. For the primary feature campaign, this is the third observation obtained on a rotation with phase angle approximately 41 degrees. For the campaign feature, Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. For the partial feature track, imaged on the subsequent scan, Jupiter is mapped in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with features (the primary feature is a region of hot spots, the partial feature is the northern equatorial region, including a plume head) near minimum airmass, assumming campaign feature coordinates 7 degrees North latitude and 328 degrees West longitude and partial feature coordinates 2 degrees North latitude, 328 degrees West longitude (System III).

Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) and 3*1 (30*10 mrad) contiguous areas. Hot spot near 328 degrees west longitude, 7 degrees north latitude, is centered on first, more northern tier. Equatorial region plumehead near 2 degrees latitude centered on subsequent 3*1 scan. S/C distance about 1.13 million KM, NIMS IFOV (NIMSEL) = 565 KM; 4*1 scan covers 45200*11300 KM; 3*1 scan covers 33900*11300 KM about 400 seconds of scanning on the northern, hotspot tier, 360 seconds on more southern tier, with 2 minutes reserved in between for wavelength table and SCIREC switching.
First scan accumulates 0.1022 MBTG in 4 colors, and uses 0.01344 tracks.
Second scan accumulates 0.2695 MBTG in 19 colors, and uses 0.01008 tracks.
Total OAPEL resource use: 0.3717 MBTG and 0.02352 tracks. 1 minute reserved for targetting. Wavelength tables: JFT04A and JFT19A, TLM: LPU.
Note 10/18/96: New solar conjunction playback constraints resulted in reduction of first scan to 310 secs of playback, and near total deletion (2 secs remain) of second scan.
Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

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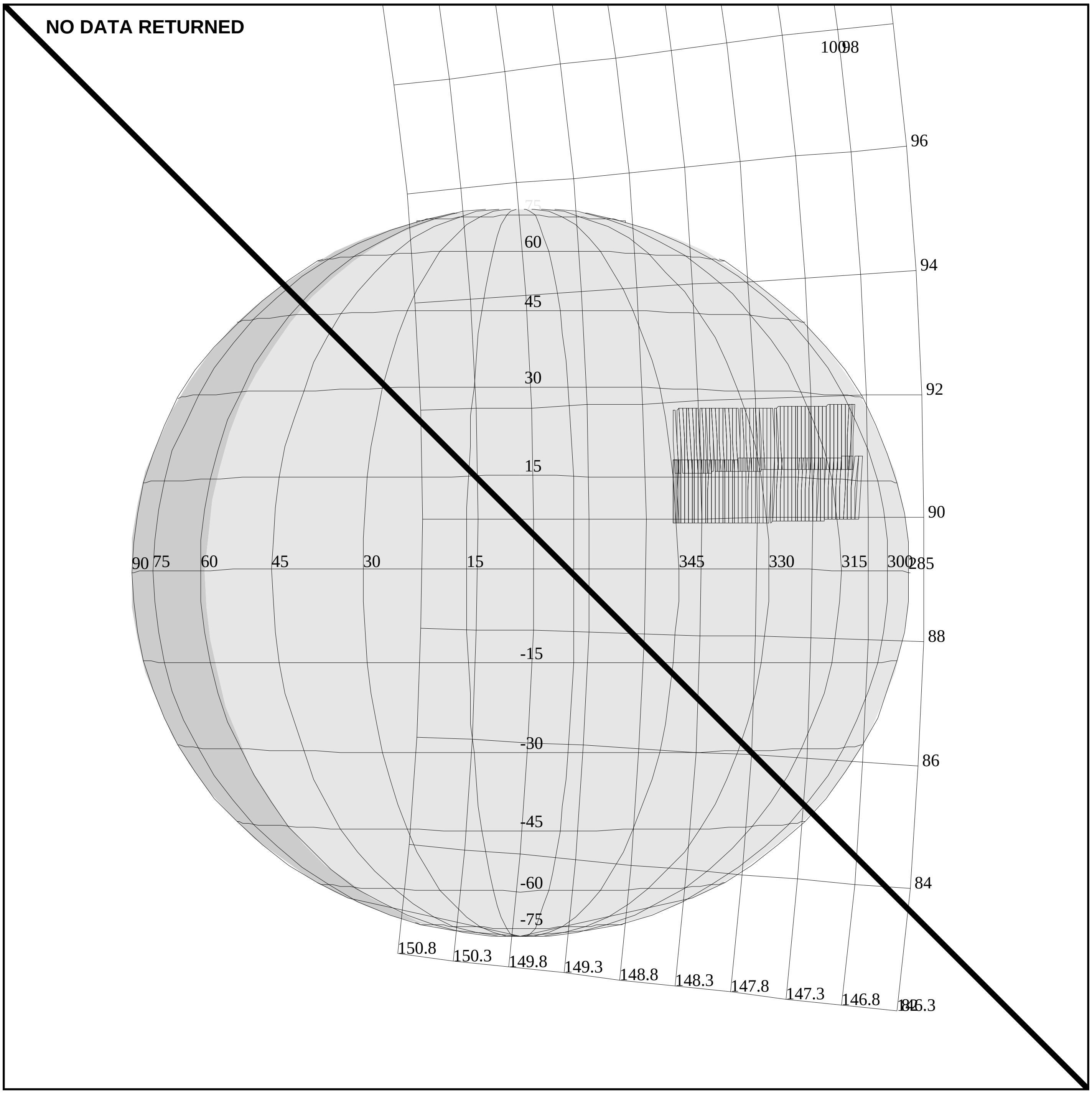


165DS:TT= 0 TMC= 1 C= 12.60 XC= 1.50 BS= 0/6906 TC= 1(19.8 330)
A= 364 pD= 0 SR=17.450 RA50=254.67 DEC50=-23.35 cone=148.56 clock= 91.33
117DS:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/6906
1:#s= 2 Cs= -26.50 XCs= 0.00 Cr= 26.50 XCr= -8.00 sD= 728 rD= 40

E4JNPFTA4102

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNPFTA4102

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JFC 96-353/02:52:18.733 +CDS 61:00:0

OBSERVATION:E4JNPFTA4102

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_PARTIAL_FEA_41_PHASE_02

Jup. Prt. Feat. Tr. A 41 deg Phse Prt 2	ACTIVITY ID:	E4JNPFTA4102-
	START TIME:	96-353/03:51:30.733

Activity ID: Orbit E4 Target J Inst N OAPEL PFTA41 SeqNo 02 -

Title	Jup. Prt. Feat. Tr. A 41 deg Phse Prt 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JFC+CDS 00000058:50:0	96-353/03:51:30.733	JFC+000/00:59:12.000
End	JFC+CDS 00000069:35:0	96-353/04:02:28.066	JFC+000/01:10:09.333
Duration	00000010:76:0	000/00:10:57.333	000/00:10:57.333

Top Label E4JNPFTA4102-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 5 OAPELs constituting the partial feature track for feature A. This is the second observation of this feature and the second obtained on a rotation with phase angle approximately 41 degrees. Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with feature (N TRZ region to the north of the hot spot feature campaign region) near the terminator, assuming partial feature campaign coordinates 12 degrees north latitude and 328 degrees west longitude (system III).

No Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*2 (20*20 mrad) area centered on NTRZ near 328 degrees West longitude, 12 degrees north latitude. S/C distance about 1.12 million KM, NIMS IFOV (NIMSEL) = 560 KM. 2*2 mosaic covers 22400 * 22400 KM. About 420 seconds of scanning (including 20 secs for reposition slew) accumulating 0.3773 MBTG in 19 colors, and using 0.01411 tracks. 2 minutes reserved for targetting. Wavelength table: JFT19A, TLM: LPU
Note 10/18/96: New solar conjunction playback constraints resulted in near total deletion of playback. Only 2secs of playback remain.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form 11/15/96 10:45:16 rev 6/95

E4 Health 2	ACTIVITY ID: E4NNHEALTH02- START TIME: 96-353/04:02:45.334

Activity ID: Orbit E4 Target N Inst N OAPEL HEALTH SeqNo 02 -

Title	E4 Health 2			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	EEE-CDS	00001594:30:0	96-353/04:02:45.334	EEE-001/02:52:02.666
End	EEE-CDS	00001591:00:0	96-353/04:06:07.334	EEE-001/02:48:40.666
Duration		00000003:30:0	000/00:03:22.000	000/00:03:22.000

Top Label E4NNHEALTH02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	100	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Required to verify instrument operation.
These observations provide a 3 detector view of the instrument.
The detectors are selected such that a bright and a dark channel will exist for either a satellite or Jupiter for a target.
The observations are spaced approximately 24 hours apart.

Data Returned

Design Detail

Long Map (LM), Gain 2, Grating Start 0, RT, E4RECVY3

Reload NIMS Memory	ACTIVITY ID: E4NNRELOAD01- START TIME: 96-353/04:30:23.334

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 01 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	EEE-CDS	00001567:00:0	96-353/04:30:23.334	EEE-001/02:24:24.666
End	EEE-CDS	00001552:00:0	96-353/04:45:33.334	EEE-001/02:09:14.666
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label	E4NNRELOAD01-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

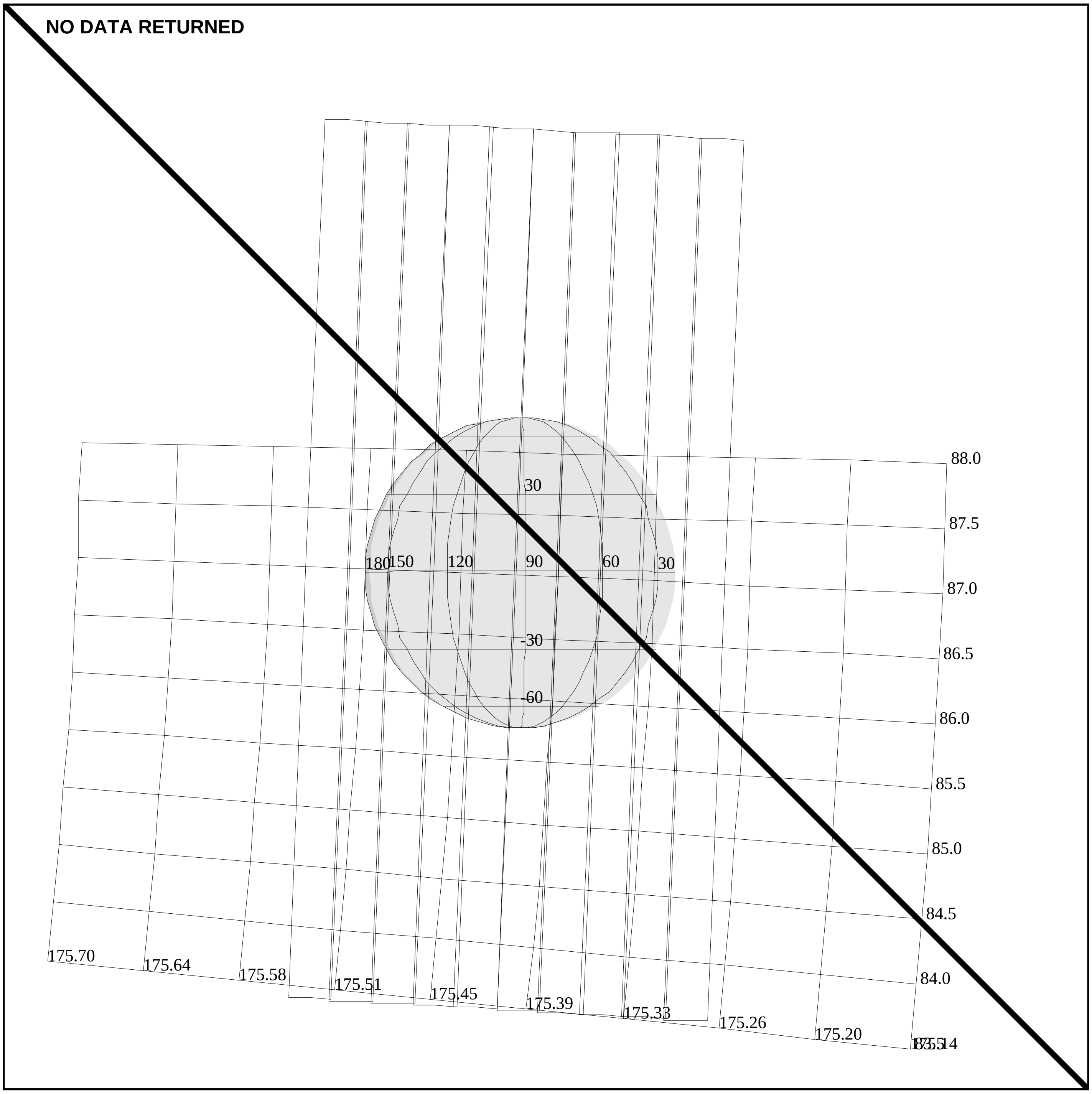
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS,
instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL   - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN   - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form   11/15/96 10:45:17   rev 6/95



165DT:TT= 0 TMC= 1 C= -2.20 XC= 0.00 BS= 0/5470 TC= 3
A= 728 pD= 0 SR=17.450 RA50=283.93 DEC50=-24.23 cone=175.29 clock= 87.04
117DT:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/5470
1:#s= 1 Cs= 6.40 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 484 rD= 2

E4INCHEMIS01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCHEMIS01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 -CDS 949:00:0

OBSERVATION:E4INCHEMIS01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300

DESCRIP:IO DAYSIDE

Monitoring of Io’s Dayside	ACTIVITY ID: E4INCHEMIS01-
	START TIME: 96-353/05:32:04.066

Activity ID: Orbit E4 Target I Inst N OAPEL CHEMIS SeqNo 01 -

Title	Monitoring of Io’s Dayside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	IEE-CDS 00000954:00:0	96-353/05:32:04.066	IEE-000/16:04:36.000
End	IEE-CDS 00000946:31:0	96-353/05:39:48.733	IEE-000/15:56:51.333
Duration	00000007:60:0	000/00:07:44.667	000/00:07:44.667

Top Label E4INCHEMIS01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Dayside monitoring covering wide range of longitudes to look for chemical changes (e.g. SO2 distribution) at resolutions better than ~800 km/nimsel (most observations will have resolutions between 120 and 400 km/nimsel).

No Data Returned

Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G2, C3, E4, E6 and E10 where resolution for lit disk is best.

Long map, 102 wavelengths.
Tracks used per orbit: 0.05 to 0.42.
Bits To Ground per orbit: 0.3 to 2.2 Mbits.
Wavelength table: ILM102, TLM: LPU
UVS ridealong.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM102

Galileo Activity Plan Form 11/15/96 10:45:17 rev 6/95

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Jup. AWG window - 16 d. ph. opportunity	ACTIVITY ID:	E4JNAWGWIN01-
	START TIME:	96-353/08:46:12.066

Activity ID: Orbit E4 Target J Inst N OAPEL AWGWIN SeqNo 01 -

Title	Jup. AWG window - 16 d. ph. opportunity			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	JLP+CDS	00000350:00:0	96-353/08:46:12.066	JLP+000/05:53:53.333
End	JLP+CDS	00000820:00:0	96-353/16:41:25.399	JLP+000/13:49:06.666
Duration		00000470:00:0	000/07:55:13.333	000/07:55:13.333

Top Label	E4JNAWGWIN01-
Bottom Label	

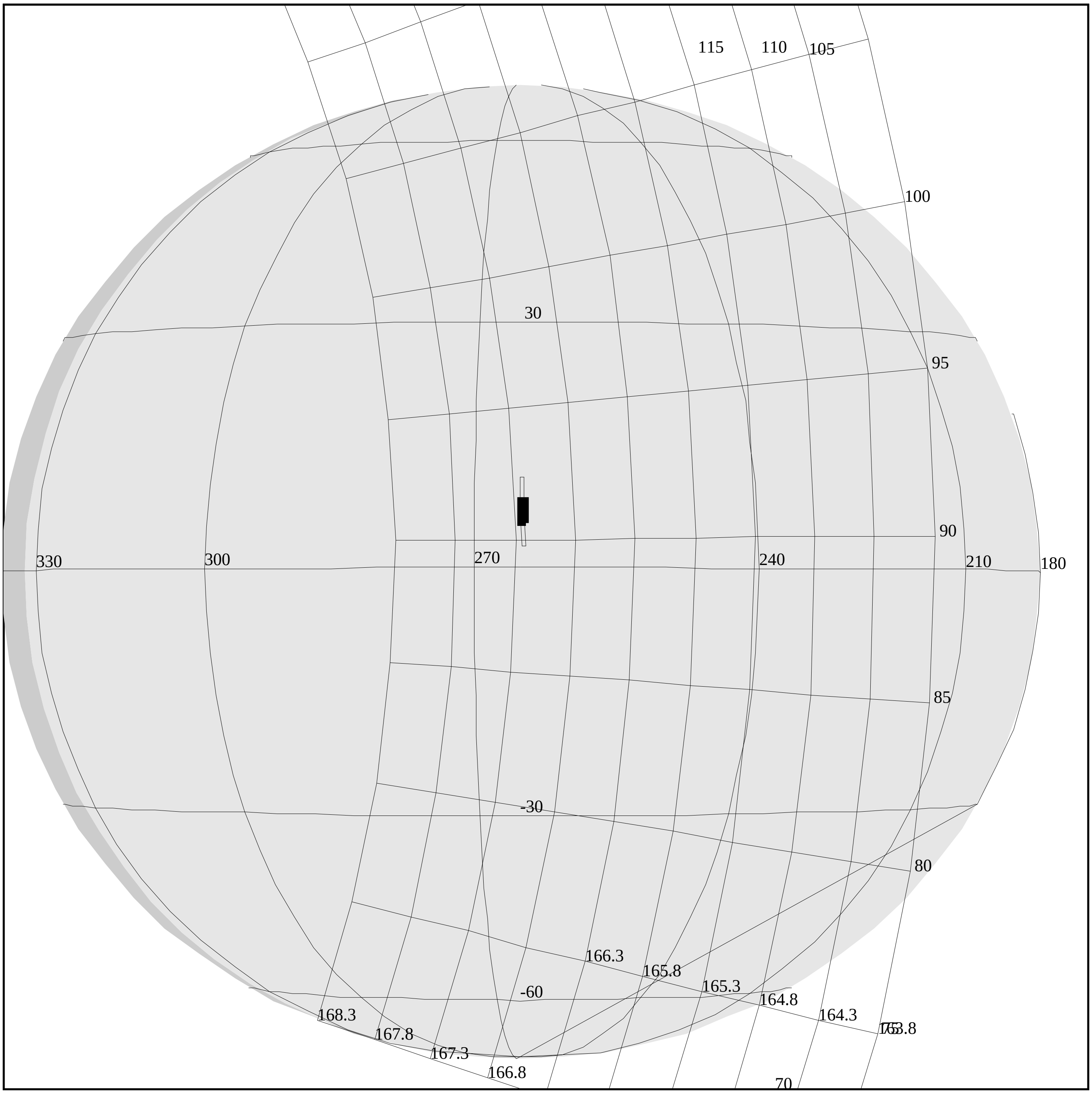
Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

This 8 hour window defines the period within which all observations are tied to the low phase angle epoch (JLP) during the 16-degree phase opportunity. All observations within this window should refer to the JLP (Jupiter Low Phase).

Design Detail

Galileo Activity Plan Form 11/15/96 10:45:17 rev 6/95



165DY:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/8806 TC= 1(6.5 265)
A= 518 pD= 0 SR=17.450 RA50=275.06 DEC50=-24.38 cone=167.22 clock= 91.03
117DY:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/8806
1:#s= 1 Cs= 1.70 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 182 rD= 2

E4JNRTHOTS01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNRTHOTS01

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 7

START:JLP 96-353/02:52:18.733 +CDS 511:00:0

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

OBSERVATION:E4JNRTHOTS01

DESCRIP:JUPITER_REAL_TIME_HOTSPOT

Jupiter Real Time Hotspot		ACTIVITY ID:	E4JNRTHOTS01-
		START TIME:	96-353/11:25:57.399

Activity ID: Orbit E4 Target J Inst N OAPEL RTHOTS SeqNo 01 -

Title	Jupiter Real Time Hotspot			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS	00000508:00:0	96-353/11:25:57.399	JLP+000/08:33:38.666
End	JLP+CDS	00000513:00:0	96-353/11:31:00.733	JLP+000/08:38:42.000
Duration		00000005:00:0	000/00:05:03.334	000/00:05:03.334

Top Label E4JNRTHOTS01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	184	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Longmap spectra of the brightest hotspot observed on Jupiter, (as of October 2, 1996), at nearly the highest spatial resolution achievable by NIMS (430 km/pixel). This feature is located at the position of the probe entry site, when winddrift (100.5 m/sec) is accounted for. Determination of water and phosphine content within the hotspot are primary objectives.

Data Returned

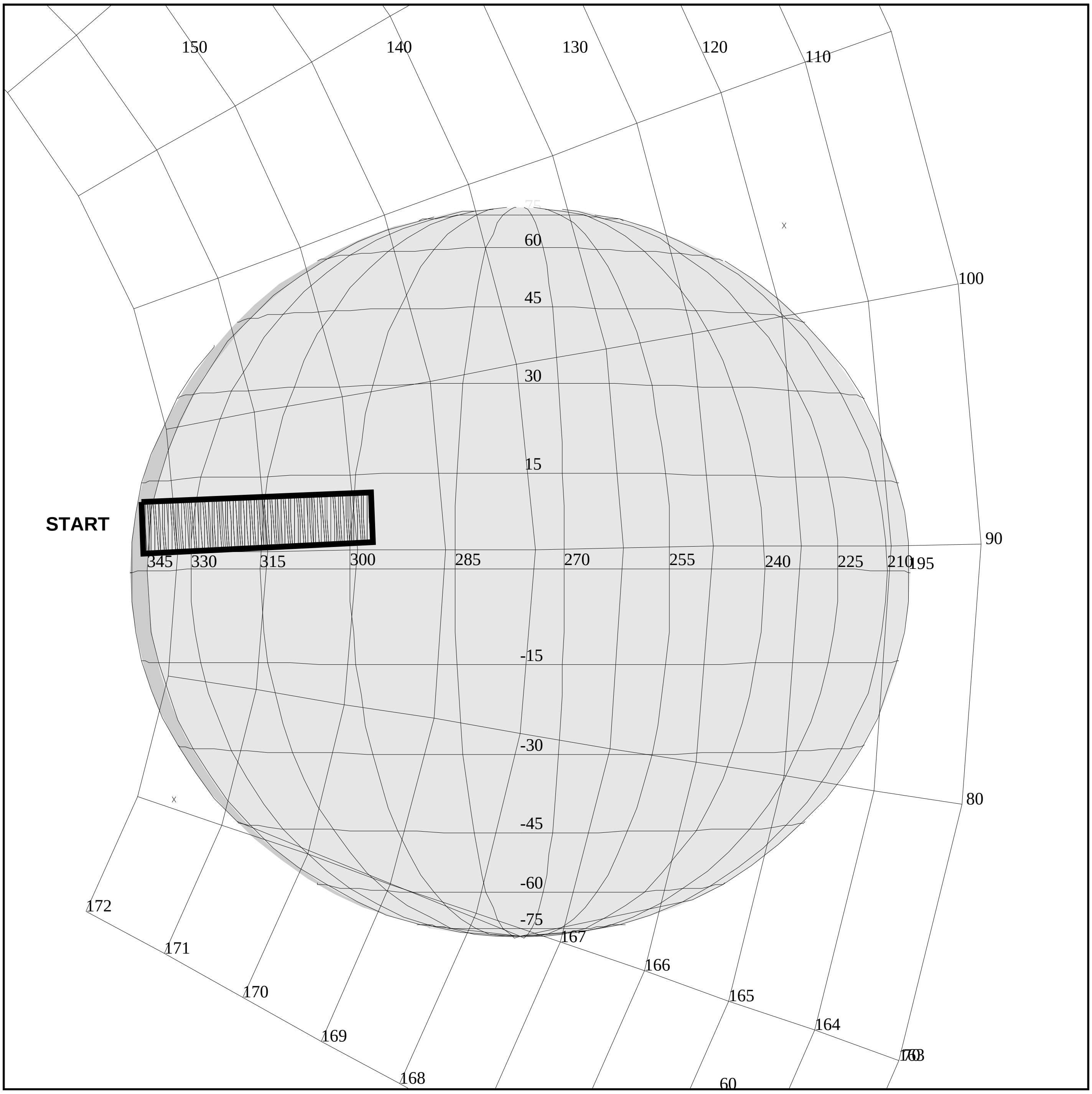
Design Detail

Longmap real time 1-rim spectra at 4 mirror positions centered on the nominal bright hotspot located at 265 degrees West longitude, 6.5 degrees North latitude. Acquired when hotspot is near the central meridian on the 16-degree phase angle apparition. Spatial resolution: 430 km/pixel.
CDS 02:70:0 used for targeting.
Note 11/5/96: This obsevation will be "buffer dumped" and will be played back during playback.

Mirror Blocked (1B,1B) (11011,11011)
1 Rim

Long Map (LM), Gain 2, Grating Start 0, RT, E4JLM408

Galileo Activity Plan Form 11/15/96 10:45:17 rev 6/95



165DV:TT= 0 TMC= 1 C= 11.00 XC= -5.50 BS= 0/2264 TC= 1(12 330)
A= 364 pD= 0 SR=17.450 RA50=280.70 DEC50=-23.99 cone=172.38 clock= 92.16
117DV:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/2264
1:#s= 1 Cs= -43.80 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1200 rD= 2

E4JNFEA01601

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA01601

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JLP 96-353/02:52:18.733 +CDS 0530:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA01601 **DESCRIP:E4_FEAT_CAMP_16_PHASE_01**

Jupiter Camp. feat. 16 deg. phase Prt 1 ACTIVITY ID: E4JNFEA01601-
START TIME: 96-353/11:45:10.066

Activity ID: Orbit E4 Target J Inst N OAPEL FEA016 SeqNo 01 -

Title	Jupiter Camp. feat. 16 deg. phase Prt 1			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS 00000527:00:0	96-353/11:45:10.066	JLP+000/08:52:51.333
End	JLP+CDS 00000536:50:0	96-353/11:54:49.399	JLP+000/09:02:30.666
Duration	00000009:50:0	000/00:09:39.333	000/00:09:39.333

Top Label E4JNFEA01601-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the first observation obtained on a rotation with phase angle approximately 16 degrees. Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with feature (a region of hot spots) near the morning terminator, assuming feature coordinates 7 degrees North latitude and 325 degrees West longitude (System III).

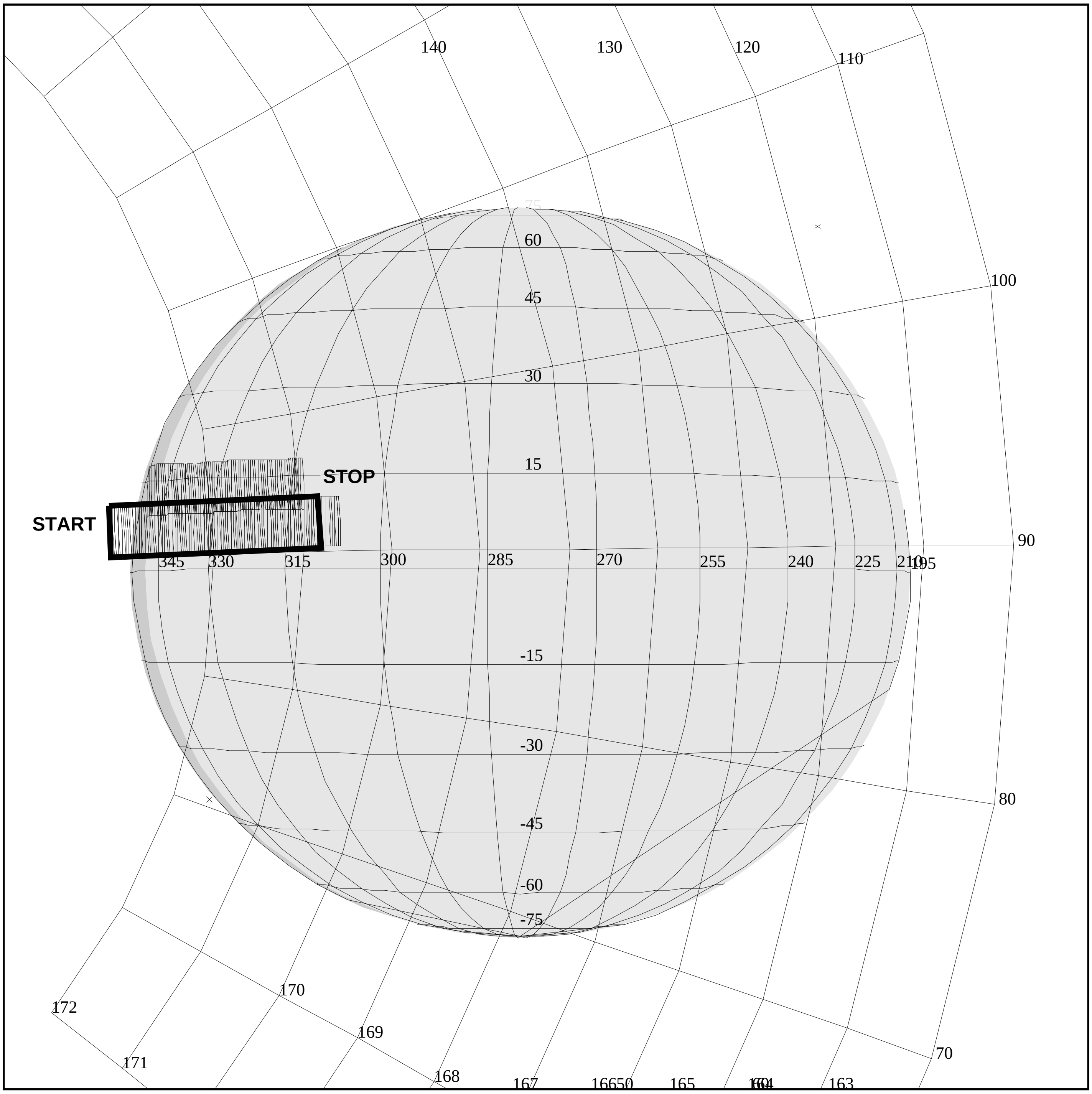
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot region near 325 degrees West longitude, 7 degrees North latitude. S/C distance about 0.89 million KM, NIMS IFOV (NIMSEL) = 445 KM; 4*1 mosaic covers 35600*8900 KM, about 400 seconds of scanning, accumulating 0.3593 MBTG in 19 colors, and using 0.01344 tracks.
2 minutes reserved for targetting. Wavelength table: JFT19A, TLM: LPU
Note 9/96: Observation record time and consequent playback reduced to 81 secs to satisfy reduced tape budget.
Note 10/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT19A

Galileo Activity Plan Form 11/15/96 10:45:17 rev 6/95



165DW:TT= 0 TMC= 1 C= 21.00 XC= -6.00 BS= 0/3720 TC= 1(12 330)
A= 222 pD= 0 SR=17.450 RA50=281.55 DEC50=-23.95 cone=173.16 clock= 92.11
117DW:#SB= 2 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/3720
1:#s= 1 Cs= -43.70 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1200 rD= 2
2:#s= 1 Cs= -32.70 XCs= 0.00 Cr= 41.00 XCr= 8.00 sD= 900 rD= 40

E4JNFEA01602

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA01602

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JLP 96-353/02:52:18.733 +CDS 538:00:0

OBSERVATION:E4JNFEA01602

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_16_PHASE_02

Jupiter Camp. feat. 16 deg. phase Prt 2 ACTIVITY ID: E4JNFEA01602-
START TIME: 96-353/11:54:59.399

Activity ID: Orbit E4 Target J Inst N OAPEL FEA016 SeqNo 02 -

Title	Jupiter Camp. feat. 16 deg. phase Prt 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS 00000536:65:0	96-353/11:54:59.399	JLP+000/09:02:40.666
End	JLP+CDS 00000549:84:0	96-353/12:08:20.733	JLP+000/09:16:02.000
Duration	00000013:19:0	000/00:13:21.334	000/00:13:21.334

Top Label E4JNFEA01602-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. Also, the second of 5 OAPELs constituting the partial feature track for feature B. For the primary feature campaign, this is the second observation obtained on a rotation with phase angle approximately 16 degrees. For the partial feature track B, this is the first observation obtained on this rotation. For both features Jupiter imaged in 25 colors, using NIMS downlink wavelength table JFT25A. This observation acquired with features (the primary feature is a region of hot spots; the partial feature is the northern equatorial region, including a plume head) near 40 degrees relative longitude, assumming campaign feature coordinates 7 degrees North latitude and 325 degrees West longitude and partial feature coordinates 2 degrees North latitude, 325 degrees West longitude (System III).

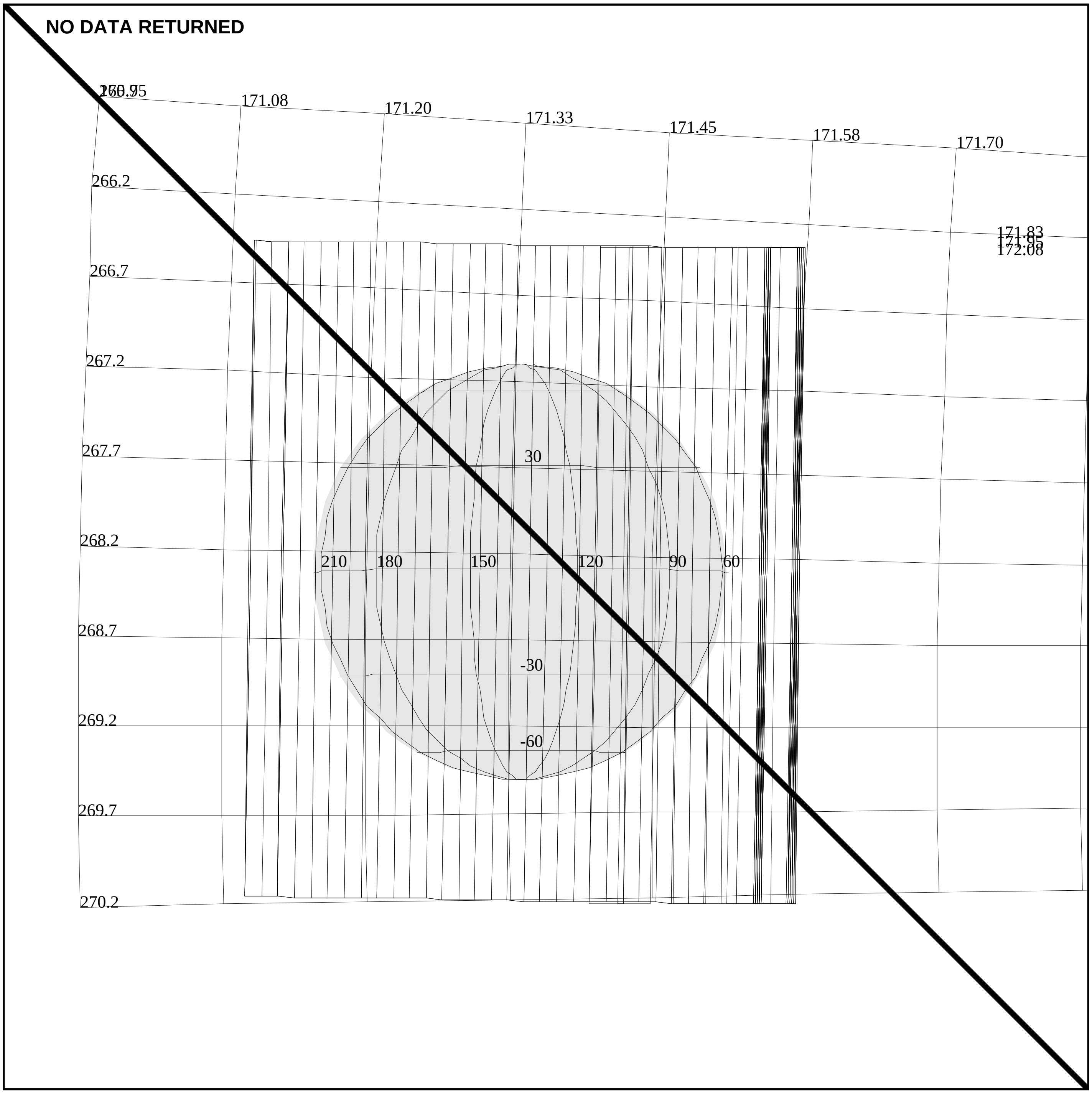
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) and 3*1 (30*10 mrad) contiguous areas. Hot spot near 325 degrees west longitude, 7 degrees north latitude, is centered on first, more northern tier. Equatorial region plumehead near 2 degrees latitude centered on subsequent 3*1 scan. S/C distance about 0.88 million KM, NIMS IFOV (NIMSEL) = 440 KM; 4*1 scan covers 35200*8800 KM; 3*1 scan covers 26400*8800 KM. About 400 seconds of scanning on the northern, hotspot tier, 300 seconds on southern tier,and 20 seconds for reposition slew accumulating 0.6468 MBTG in 25 colors, and using 0.02419 tracks. 1 minute reserved for targetting. Wavelength table: JFT25A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT25A

Galileo Activity Plan Form 11/15/96 10:45:17 rev 6/95



165FD:TT= 0 TMC= 1 C= 4.00 XC= 0.00 BS=40/8270 TC= 3
A= 80 pD= 0 SR=17.450 RA50=297.95 DEC50=-21.70 cone=188.43 clock=268.32
117FD:#SB= 1 OR= 0.380 RR=12.000 BM=F RC= 1 BS=40/8270
1:#s= 1 Cs= 8.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 74 rD= 2

E4INVOLCAN05

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INVOLCAN05

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JLP 96-353/02:52:18.733 +CDS 563:00:0

OBSERVATION:E4INVOLCAN05

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.400

DESCRIP:IO VOLCANOES

Monitoring of Selected Volcanic Regions	ACTIVITY ID: E4INVOLCAN05- START TIME: 96-353/12:18:32.066

Activity ID: Orbit E4 Target I Inst N OAPEL VOLCAN SeqNo 05 -

Title	Monitoring of Selected Volcanic Regions			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	JLP+CDS	00000560:00:0	96-353/12:18:32.066	JLP+000/09:26:13.333
End	JLP+CDS	00000574:00:0	96-353/12:32:41.399	JLP+000/09:40:22.666
Duration		00000014:00:0	000/00:14:09.333	000/00:14:09.333

Top Label   E4INVOLCAN05-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	153	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To monitor time variations in activity of selected regions
(Loki, Pelee, Kanehekili) using selected wavelengths.

No Data Returned

Design Detail

Fixed Map, 10 wavelengths, 30 secs duration (or less).
Orbit 7 is high priority for Loki region,
will be seen at the best nightside resolution (278 km).
~ 5 observations per orbit.
Tracks: 0.005 per observation.

Locations of features:	Kanehekili	(-10 d. lat. +40 d. long.)
	Pelee	(-20 d. lat. -255 d. long.)
	Loki	(+12 d. lat. 310 d. long.)

Wavelength table: IXM10
TLM: LPU

Fixed Map (XM), Gain 2, Grating Start 21, LPU, E4IXM10B, E4IXM10B

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Reload NIMS Memory	ACTIVITY ID: E4NNRELOAD02-
	START TIME: 96-353/12:59:59.334

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 02 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	EEE-CDS	00001063:00:0	96-353/12:59:59.334	EEE-000/17:54:48.666
End	EEE-CDS	00001048:00:0	96-353/13:15:09.334	EEE-000/17:39:38.666
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label   E4NNRELOAD02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

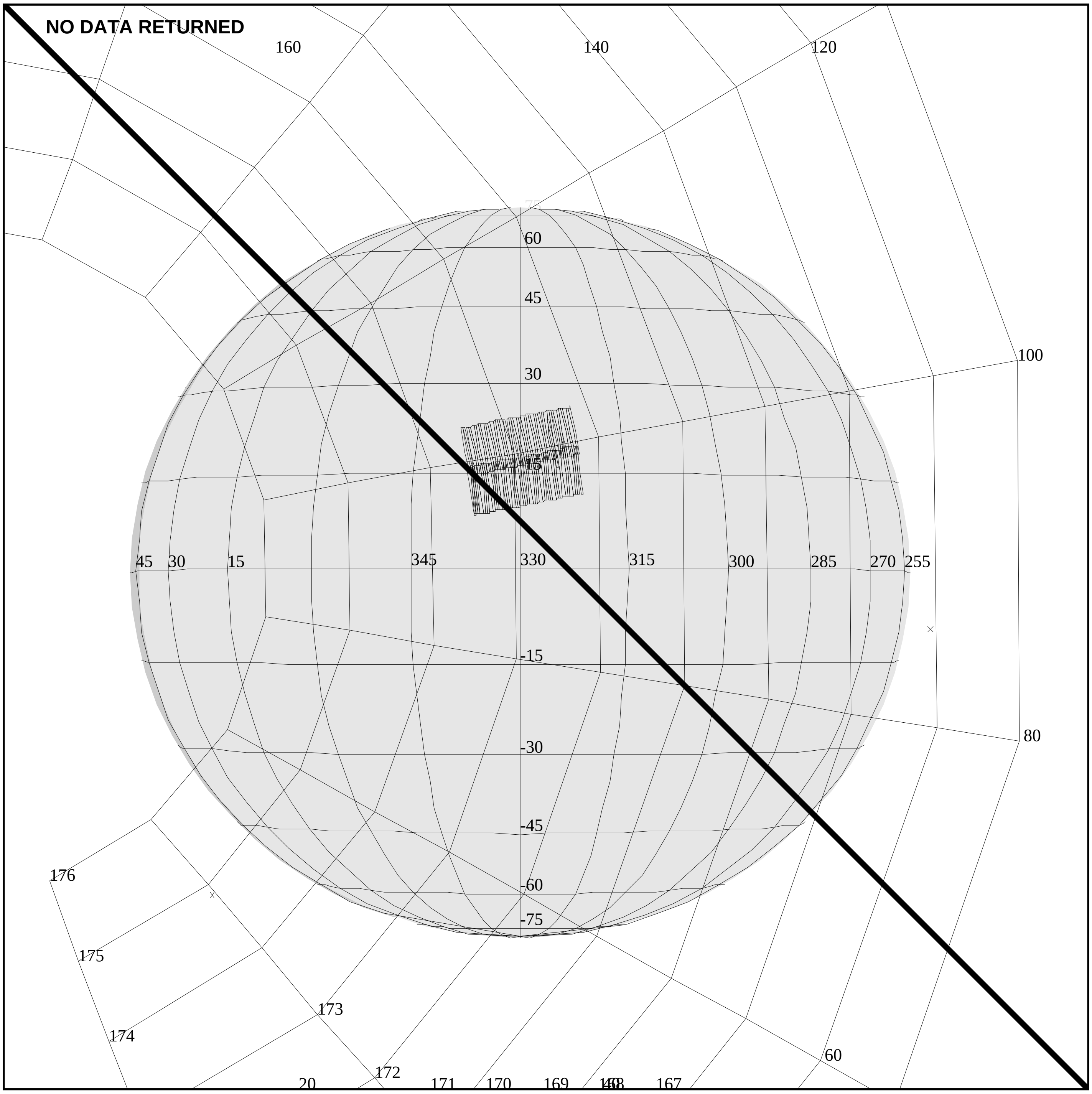
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form   11/15/96 10:45:17   rev 6/95



165DZ:TT= 0 TMC= 1 C= 11.00 XC= 0.50 BS= 0/9736 TC= 1(19.8 330)
A= 182 pD= 0 SR=17.450 RA50=282.02 DEC50=-22.93 cone=173.56 clock=101.05
117DZ:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/9736
1:#s= 2 Cs= -22.10 XCs= 0.00 Cr= 23.00 XCr= -8.00 sD= 608 rD= 40

E4JNPFTA1602

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNPFTA1602

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JLP 96-353/02:52:18.733 +CDS 626:00:0

OBSERVATION:E4JNPFTA1602

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_PARTIAL_FEA_16_PHASE_02

Jup. Prt. Feat. Tr. A 16 deg Phse Prt 2 ACTIVITY ID: E4JNPFTA1602-
START TIME: 96-353/13:22:14.066

Activity ID: Orbit E4 Target J Inst N OAPEL PFTA16 SeqNo 02 -

Title	Jup. Prt. Feat. Tr. A 16 deg Phse Prt 2			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS 00000623:00:0	96-353/13:22:14.066	JLP+000/10:29:55.333
End	JLP+CDS 00000634:00:0	96-353/13:33:21.399	JLP+000/10:41:02.666
Duration	00000011:00:0	000/00:11:07.333	000/00:11:07.333

Top Label E4JNPFTA1602-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 5 OAPELs constituting the partial feature track for feature A. This is the fourth observation of this feature and the second observation obtained on a rotation with phase angle approximately 16 degrees. Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with feature (NTRZ region to the north of the hot spot feature campaign region) near the terminator, assuming partial feature campaign coordinates 12 degrees North latitude and 325 degrees West longitude (system III).

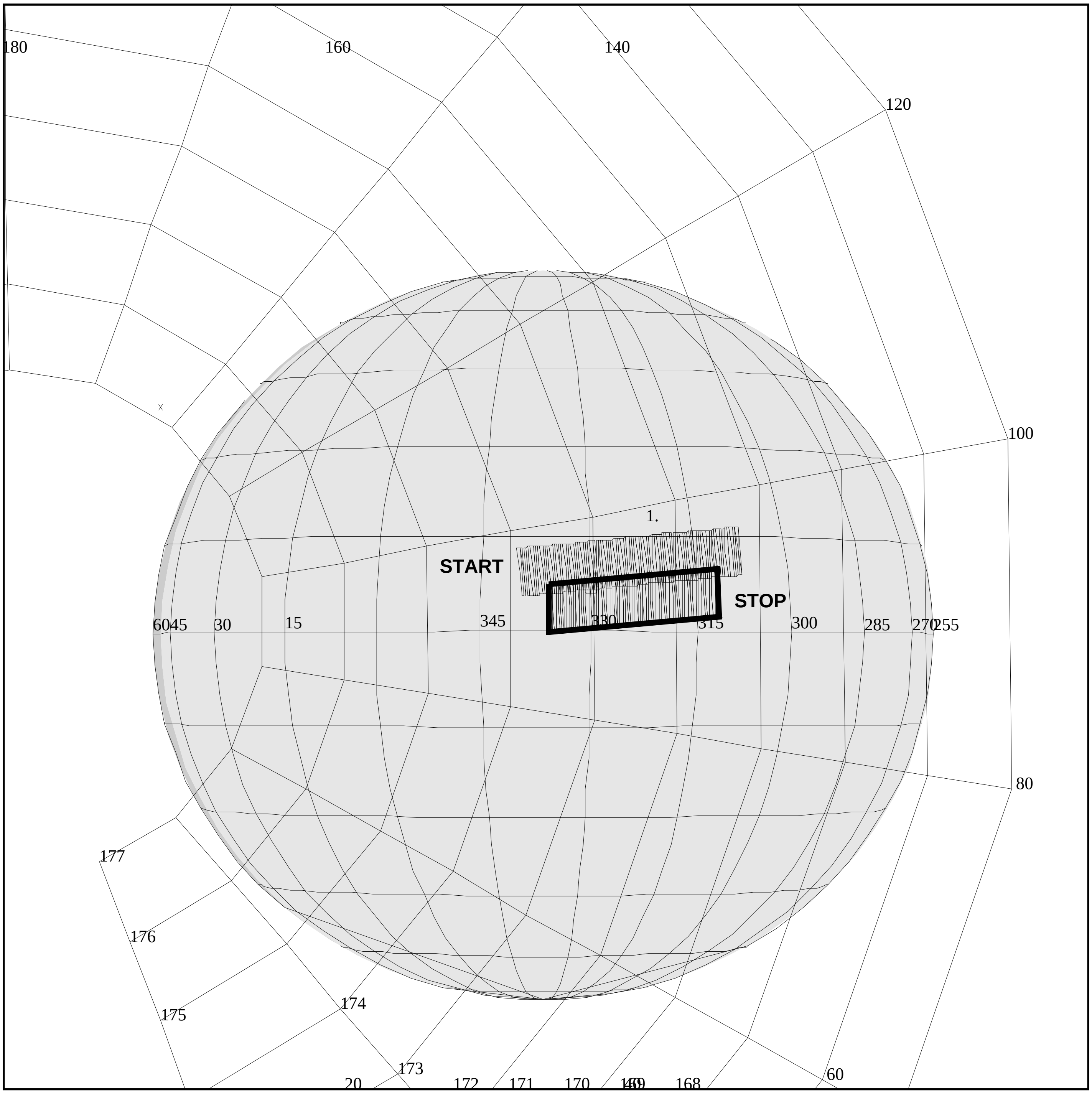
No Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*2 (20*20 mrad) area centered on NTRZ near 325 degrees West longitude, 12 degrees North latitude. S/C distance about 0.84 million KM. NIMS IFOV (NIMSEL) = 410 KM. 2*2 mosaic covers 16800*16800 KM. About 420 seconds of scanning (including 20 secs for reposition slew) accumulating 0.3773 MBTG in 19 colors, and using 0.01411 tracks. 1 minute reserved for targetting.
Wavelength table: JFT19A, TLM: LPU
Note 10/18/96: New solar conjunction playback constraints resulted in near total deletion of playback, only 2 secs of playback remain.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT19A

Galileo Activity Plan Form 11/15/96 10:45:17 rev 6/95



165EA:TT= 0 TMC= 1 C= 22.00 XC= -1.50 BS= 0/1920 TC= 1(12 325)
A= 364 pD= 0 SR=17.450 RA50=282.39 DEC50=-23.58 cone=173.94 clock= 95.25
117EA:#SB= 2 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/1920
1:#s= 1 Cs= -43.80 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1200 rD= 2
2:#s= 1 Cs= -32.90 XCs= 0.00 Cr= 39.00 XCr= -8.00 sD= 900 rD= 40

E4JNFEA01604

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA01604

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JLP 96-353/02:52:18.733 +CDS 638:00:0

OBSERVATION:E4JNFEA01604

THINNING:NIM 2

BODY PLOT TIME:CENTER-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_16_PHASE_04

Jupiter Camp. feat. 16 deg. phase Prt 4	ACTIVITY ID: E4JNFEA01604- START TIME: 96-353/13:34:22.066

Activity ID: Orbit E4 Target J Inst N OAPEL FEA016 SeqNo 04 -

Title	Jupiter Camp. feat. 16 deg. phase Prt 4			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	JLP+CDS	00000635:00:0	96-353/13:34:22.066	JLP+000/10:42:03.333
End	JLP+CDS	00000650:00:0	96-353/13:49:32.066	JLP+000/10:57:13.333
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label	E4JNFEA01604-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. Also obtains territory just to the north of the hot spot latitudinal scan; for the primary feature campaign, this is the fourth observation obtained on a rotation with phase angle approximately 16 degrees. For both features Jupiter imaged in 25 colors, using NIMS downlink wavelength table JFT25A. This observation acquired with features (the primary feature is a region of hot spots, the partial feature is the northern equatorial region, including a plume head) near minimum airmass, asumming campaign feature coordinates 7 degrees North latitude and 325 degrees West longitude and partial feature coordinates 2 degrees North latitude, 325 degrees West longitude (System III).

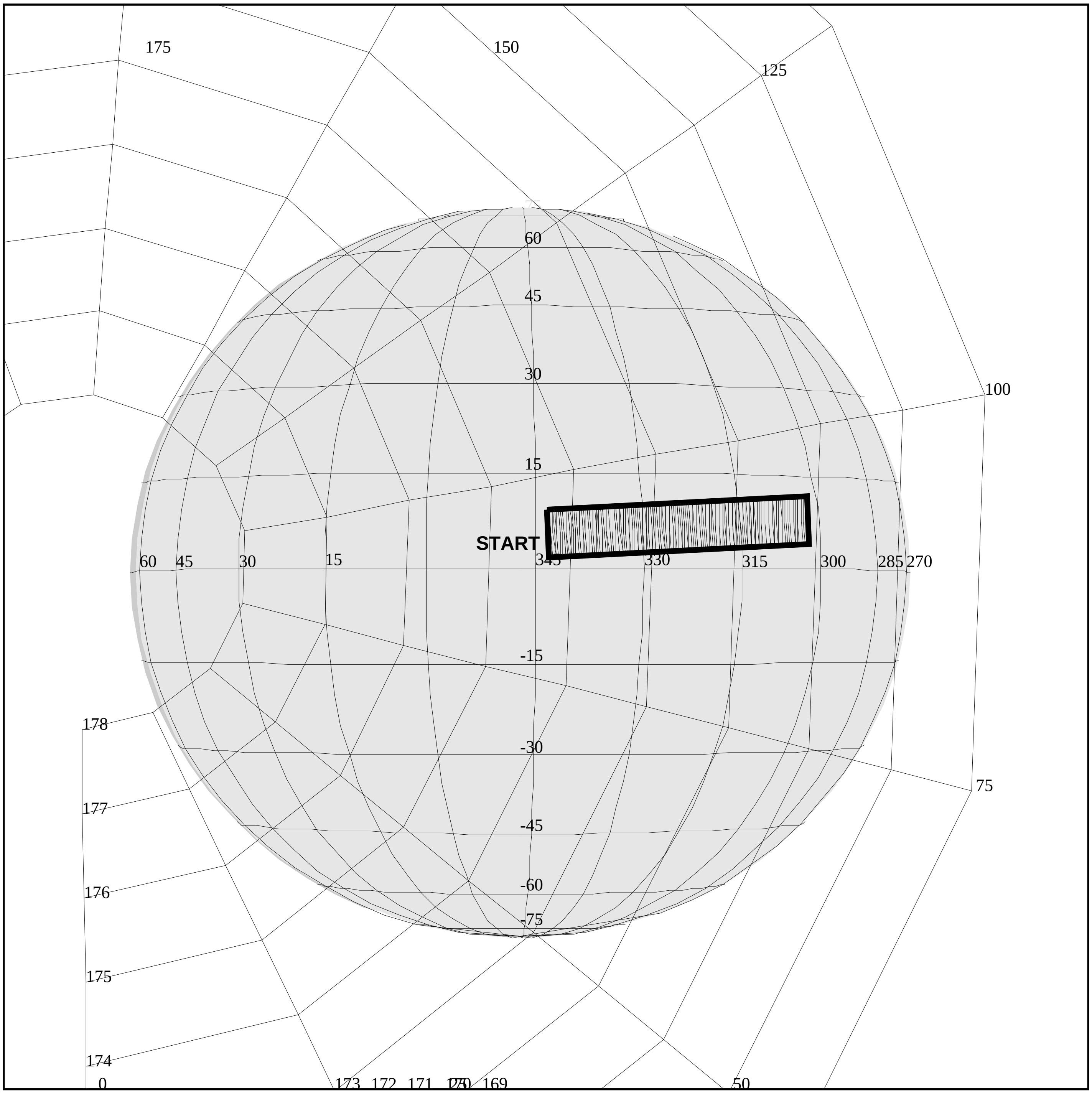
No Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) and 3*1 (30*10 mrad) contiguous areas. Hot spot near 325 degrees west longitude, 7 degrees north latitude, is centered on first, more northern tier. North Equatorial Belt region near 2 degrees latitude centered on subsequent 3*1 scan for the partial feature. S/C distance about 0.82 million KM, NIMS IFOV (NIMSEL) = 410 KM; 4*1 scan covers 32800*8200 KM; 3*1 scan covers 24600*8200 KM. About 8 minutes of scanning on the northern, hotspot tier, 300 seconds on southern tier, and 20 secs for reposition slew, accumulating 0.6468 MBTG in 25 colors, and using 0.02419 tracks. 2 minutes reserved for targetting.
Wavelength table: JFT25A, TLM: LPU
Note 10/18/96: New solar conjunction playback constraints resulted in significant of cutback of playback. Only 297secs of data returned, covering the scan to the north of the hotspot region. This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT25A

Galileo Activity Plan Form 11/15/96 10:45:18 rev 6/95



165EB:TT= 0 TMC= 1 C= 20.00 XC= -7.50 BS= 0/5378 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50=282.88 DEC50=-23.80 cone=174.38 clock= 92.90
117EB:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5378
1:#s= 1 Cs= -43.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 4312 rD= 2

E4JNFEASUB01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEASUB01

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JLP 96-353/02:52:18.733 +CDS 0657:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEASUB01 **DESCRIP:E4_FEAT_CAMP_SUB_SPECTRA**

Jupiter Camp. feat. sub-spectra

ACTIVITY ID: E4JNFEASUB01-
START TIME: 96-353/13:51:33.399

Activity ID: Orbit E4 Target J Inst N OAPEL FEASUB SeqNo 01 -

Title	Jupiter Campaign feature sub- specra			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS 00000652:00:0	96-353/13:51:33.399	JLP+000/10:59:14.666
End	JLP+CDS 00000681:00:0	96-353/14:20:52.733	JLP+000/11:28:34.000
Duration	00000029:00:0	000/00:29:19.334	000/00:29:19.334

Top Label E4JNFEASUB01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

High spectral resolution map of campaign feature (hot spot near 7 degrees north latitude, 325 degrees west longitude), acquired in several CH4 and H2 absorption features. This single partial-spectra map obtained under good lighting conditions (14 degrees solar incidence angle, 25 degrees emission angle). During this phase angle ~ 16 degrees rotation, Jupiter imaged in 80 colors distributed among five spectral regions, using NIMS downlink wavelength table JSB80A.

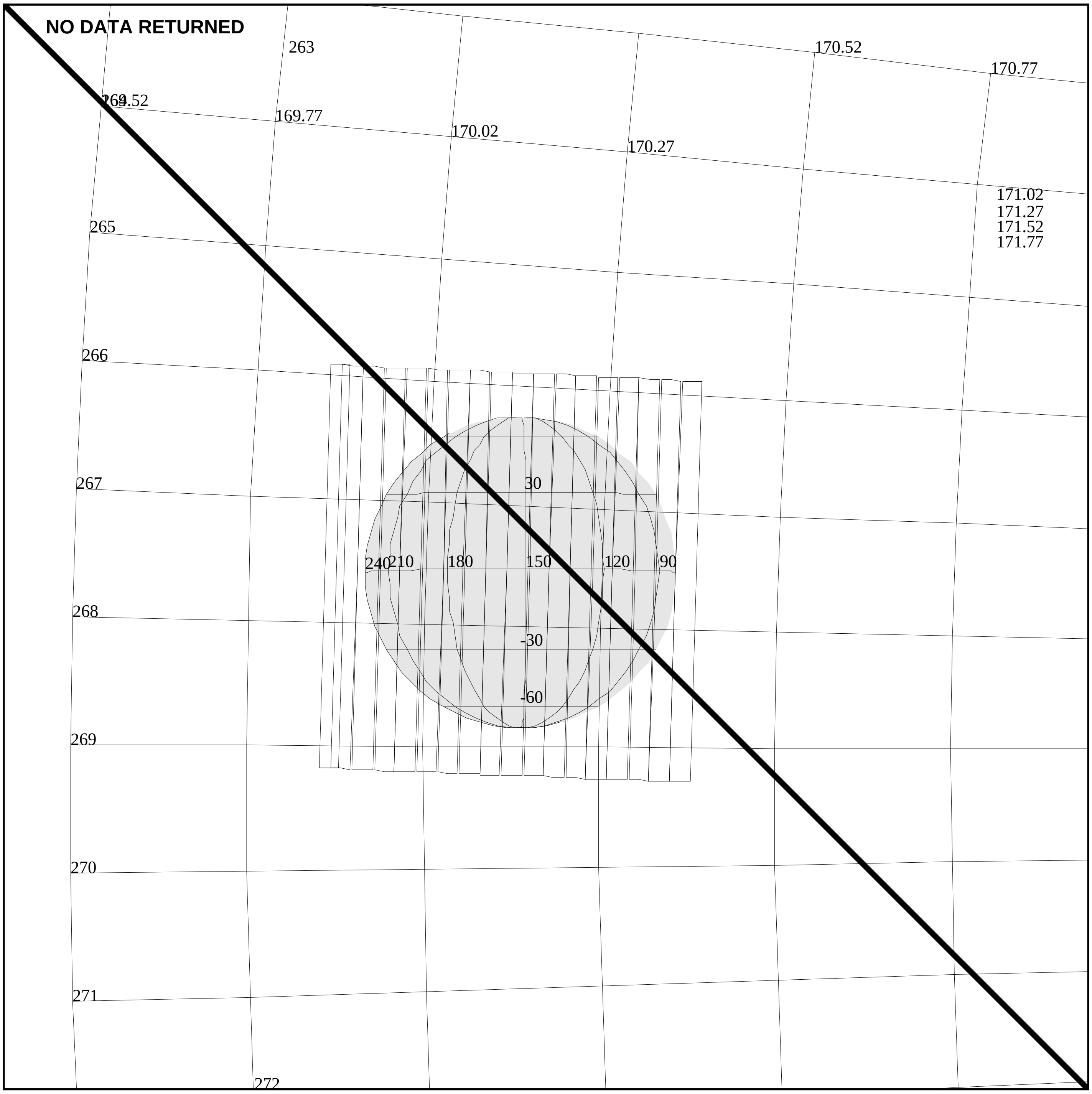
Data Returned

Design Detail

Longmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on the north hemisphere hot spot region. S/C distance about 0.81 million KM. NIMS IFOV = 405 KM. Map covers 32400*8100 KM. About 24 minutes of scanning, accumulating 1.450 MBTG and using 0.0484 tracks. 4 minutes reserved for targetting. Wavelength table: JSB80A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degree per day) zonal wind.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4JSB253A, E4JSB80A

Galileo Activity Plan Form 11/15/96 10:45:18 rev 6/95



165EC:TT= 0 TMC= 1 C= -4.60 XC= 0.00 BS=18/0656 TC= 3
A= 582 pD= 0 SR=17.450 RA50=299.66 DEC50=-21.17 cone=169.89 clock=267.55
117EC:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS=18/0656
1:#s= 1 Cs= 9.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 904 rD= 2

E4INCHEMIS02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCHEMIS02

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JLP 96-353/02:52:18.733 +CDS 686:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300**

OBSERVATION:E4INCHEMIS02 **DESCRIP:IO DAYSIDE**

Monitoring of Io's Dayside		ACTIVITY ID:	E4INCHEMIS02-
		START TIME:	96-353/14:21:53.399

Activity ID: Orbit E4 Target I Inst N OAPEL CHEMIS SeqNo 02 -

Title	Monitoring of Io's Dayside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	JLP+CDS	00000682:00:0	96-353/14:21:53.399	JLP+000/11:29:34.666
End	JLP+CDS	00000692:00:0	96-353/14:32:00.066	JLP+000/11:39:41.333
Duration		00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label	E4INCHEMIS02-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Dayside monitoring covering wide range of longitudes to look for chemical changes (e.g. SO2 distribution) at resolutions better than ~800 km/nimsel (most observations will have resolutions between 120 and 400 km/nimsel).

No Data Returned

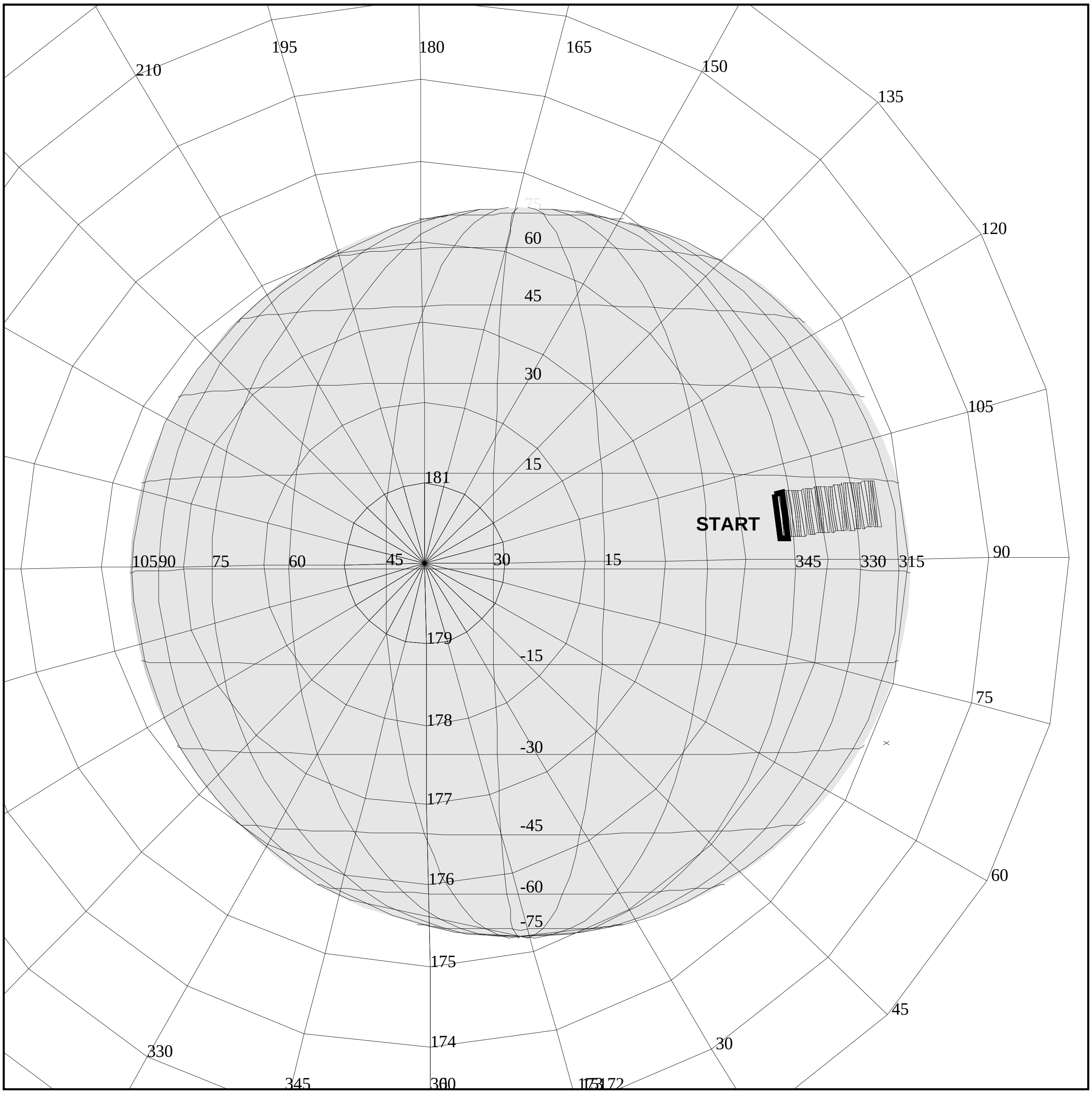
Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G2, C3, E4, E6 and E10 where resolution for lit disk is best.

Long map, 102 wavelengths.
Tracks used per orbit: 0.05 to 0.42.
Bits To Ground per orbit: 0.3 to 2.2 Mbits.
Wavelength table: ILM102, TLM: LPU.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM102

Galileo Activity Plan Form   11/15/96 10:45:18   rev 6/95



165ED:TT= 0 TMC= 1 C= 17.00 XC= 5.00 BS= 0/8300 TC= 1(6.8 330)
A= 770 pD= 0 SR=17.450 RA50=284.18 DEC50=-23.41 cone=175.57 clock= 97.11
117ED:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/8300
1:#s= 1 Cs= -19.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 536 rD= 2

E4JNPFTB1603

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNPFTB1603

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JLP 96-353/02:52:18.733 +CDS 728:00:0

OBSERVATION:E4JNPFTB1603

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_PARTIAL_FEA_16_PHASE_03

Jup. partial feat. tr. for feat. B Prt 4 ACTIVITY ID: E4JNPFTB1603
START TIME: 96-353/15:03:20.733

Activity ID: Orbit E4 Target J Inst N OAPEL PFTB16 SeqNo 03

Title	Jup. partial feat. tr. for feat. B Prt 4			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS 00000723:00:0	96-353/15:03:20.733	JLP+000/12:11:02.000
End	JLP+CDS 00000731:00:0	96-353/15:11:26.066	JLP+000/12:19:07.333
Duration	00000008:00:0	000/00:08:05.333	000/00:08:05.333

Top Label E4JNPFTB1603-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

The fourth of 5 OAPELs constituting the partial feature track for feature B; the third observation obtained on this rotation (4 other observations of this feature can be found imbedded within OAPELs FEA04103, FEA01602, FEA01604 and FEA01605). Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with feature (the northern equatorial region, including a plume head) near 40 degrees relative longitude, assuming partial feature coordinates 2 degrees North latitude, 325 degrees West longitude (System III).

Data Returned

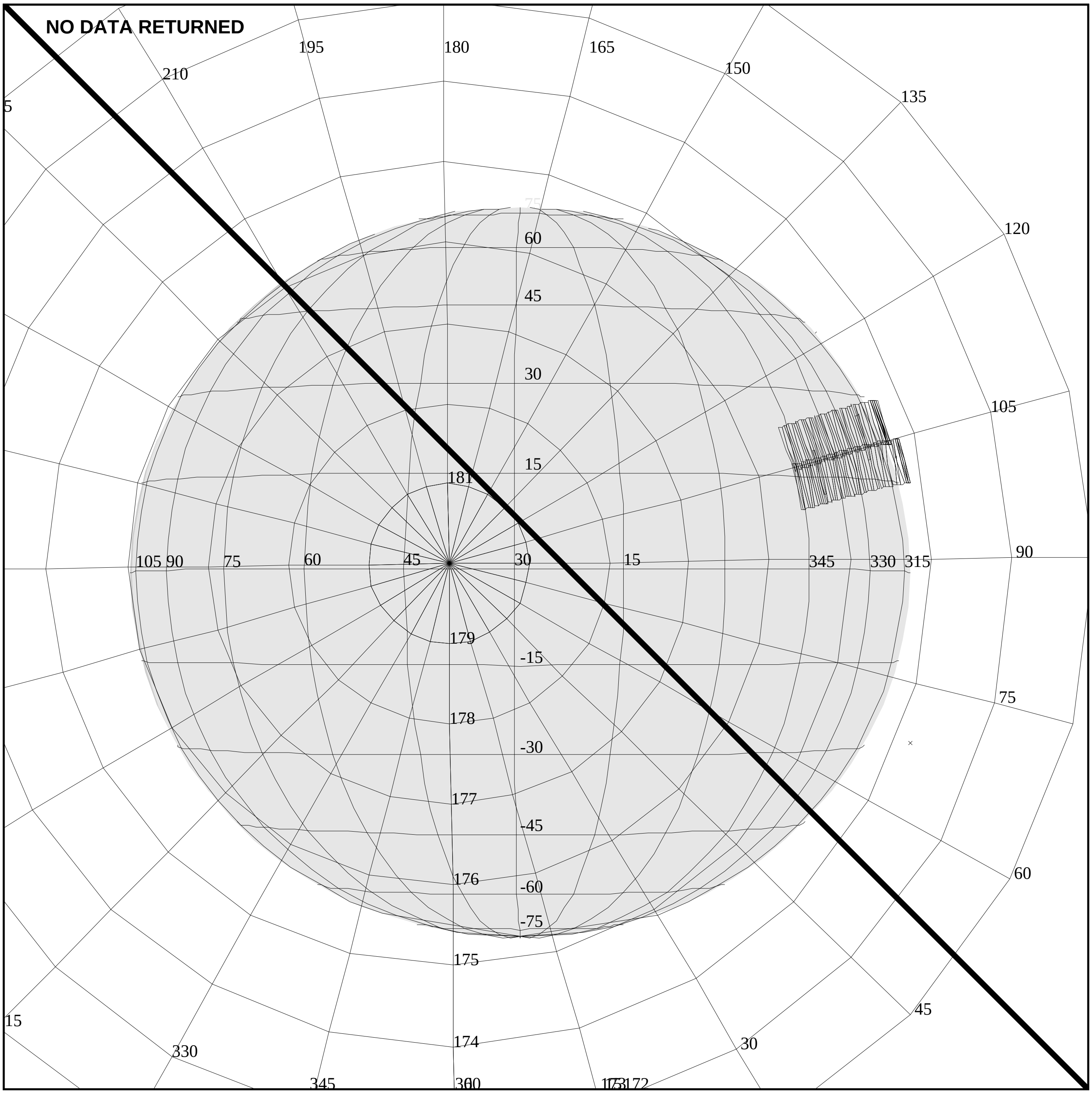
Design Detail

Shortmap, Nyquist-sampled observation of 3*1 (30*10 mrad) contiguous area of feature track B. Equatorial region plumehead near 2 degrees latitude centered on 3*1 scan. S/C distance about 0.88 million KM, NIMS IFOV (NIMSEL) = 440 KM; 3*1 scan covers 26400*8800 KM. About 300 seconds of scanning on southern tier, accumulating 0.2695 MBTG in 19 colors, and using 0.01008 tracks. 4 minutes reserved for targetting.
Wavelength table: JFT19A, TLM: LPU
Note 9/96: Observation record time and consequent playback reduced to 27 seconds to satisfy reduced tape budget.

Only 6 grating cycles returned.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT19A

Galileo Activity Plan Form 11/15/96 10:45:18 rev 6/95



165EE:TT= 0 TMC= 1 C= 13.00 XC= 4.50 BS= 0/9210 TC= 1(19.8 330)
A= 302 pD= 0 SR=17.450 RA50=284.25 DEC50=-22.57 cone=175.55 clock=108.09
117EE:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/9210
1:#s= 2 Cs= -18.00 XCs= 0.00 Cr= 20.00 XCr= -8.00 sD= 662 rD= 48

E4JNPFTA1603

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNPFTA1603

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JLP 96-353/02:52:18.733 +CDS 733:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNPFTA1603 **DESCRIP:E4_PARTIAL_FEA_16_PHASE_03**

Jup. Prt. Feat. Tr. A 16 deg Phse Prt 3	ACTIVITY ID: E4JNPFTA1603- START TIME: 96-353/15:11:32.733

Activity ID: Orbit E4 Target J Inst N OAPEL PFTA16 SeqNo 03 -

Title	Jup. Prt. Feat. Tr. A 16 deg Phse Prt 3	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	JLP+CDS 00000731:10:0	96-353/15:11:32.733	JLP+000/12:19:14.000
End	JLP+CDS 00000743:00:0	96-353/15:23:34.066	JLP+000/12:31:15.333
Duration	00000011:81:0	000/00:12:01.333	000/00:12:01.333

Top Label E4JNPFTA1603-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 5 OAPELs constituting the partial feature track for feature A. This is the fifth observation of this feature and the third observation obtained on a rotation with phase angle approximately 16 degrees. Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with feature (NTRZ region to the north of the hot spot feature campaign region) near the evening limb, assuming partial feature campaign coordinates 12 degrees North latitude and 325 degrees West longitude (system III).

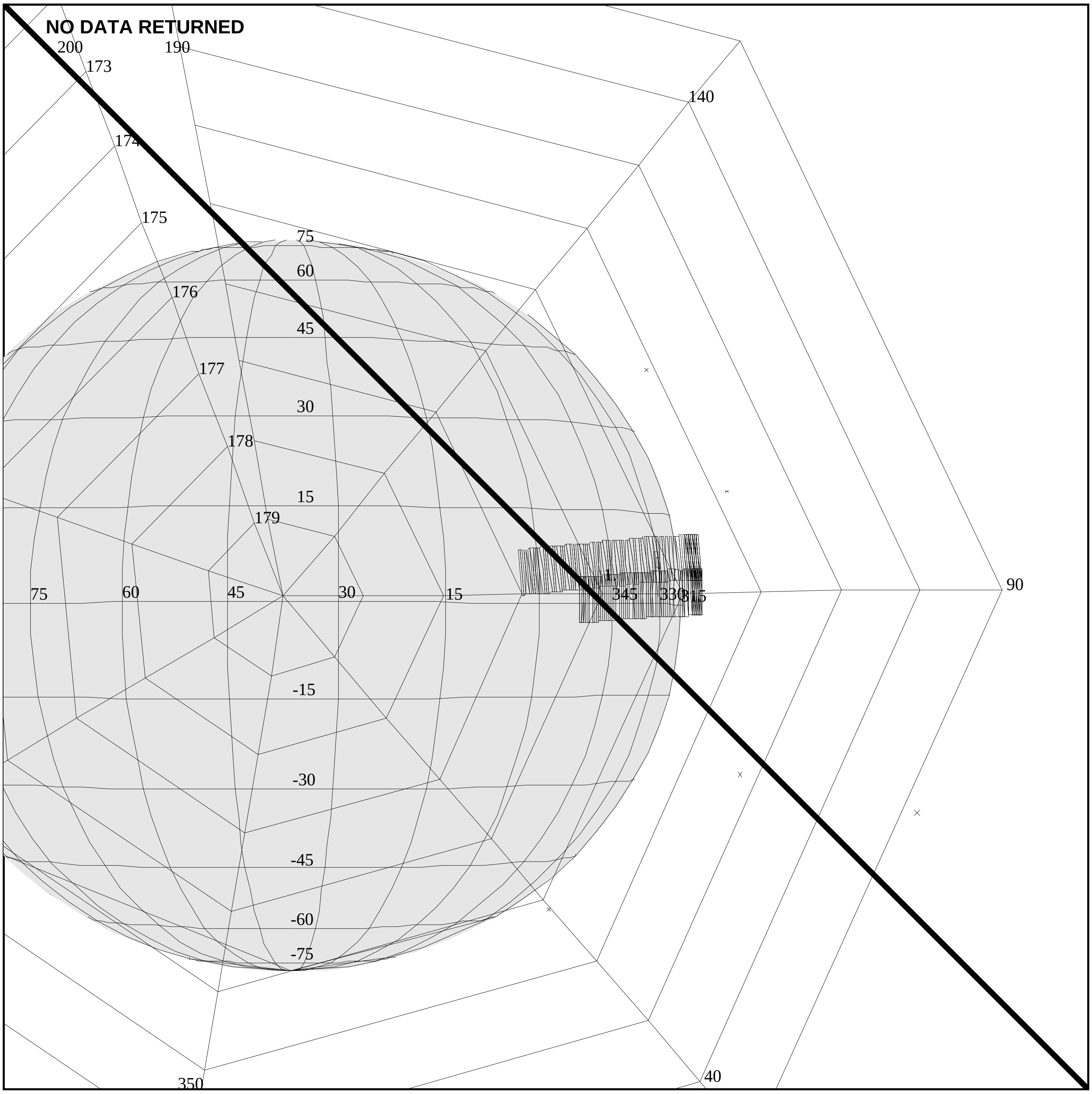
No Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*2 (20*20 mrad) area centered on NTRZ near 325 degrees West longitude, 12 degrees North latitude.
S/C distance about 0.82 million KM. NIMS IFOV (NIMSEL) = 4100 KM.
2*2 mosaic covers 16400*16400 KM. About 420 seconds of scanning (including 20 secs for reposition slew) accumulating 0.3773 MBTG in 19 colors, and using 0.01411 tracks. 4 minutes reserved for targetting.
Wavelength table: JFT19A, TLM: LPU
Note 10/18/96: Playback severely reduced (to 2 seconds) due to new solar conjunction playback constraints.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT19A

Galileo Activity Plan Form 11/15/96 10:45:18 rev 6/95



165EF:TT= 0 TMC= 1 C= 30.00 XC= -6.00 BS= 0/1576 TC= 1(12 330)
A= 364 pD= 0 SR=17.450 RA50=285.74 DEC50=-23.52 cone=177.01 clock= 95.35
117EF:#SB= 2 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/1576
1:#s= 1 Cs= -32.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1288 rD= 2
2:#s= 1 Cs= -17.00 XCs= 0.00 Cr= 23.00 XCr= -7.00 sD= 978 rD= 54

E4JNFEA01605

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA01605

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JLP 96-353/02:52:18.733 +CDS 0746:00:0 **BODY PLOT TIME:CENTER-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA01605 **DESCRIP:E4_FEAT_CAMP_16_PHASE_05**

Jupiter Camp. feat. 16 deg. phase Prt 5	ACTIVITY ID: E4JNFEA01605- START TIME: 96-353/15:24:34.733

Activity ID: Orbit E4 Target J Inst N OAPEL FEA016 SeqNo 05 -

Title	Jupiter Camp. feat. 16 deg. phase Prt 5			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	JLP+CDS	00000744:00:0	96-353/15:24:34.733	JLP+000/12:32:16.000
End	JLP+CDS	00000759:00:0	96-353/15:39:44.733	JLP+000/12:47:26.000
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label	E4JNFEA01605-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. Also, the fifth of five OAPELs constituting the partial feature track for feature B. For the primary feature campaign, this is the fifth observation obtained on a rotation with phase angle approximately 16 degrees. For the partial feature track B, this is the fourth observation obtained on this rotation. For both features Jupiter imaged in 19 colors, using NIMS downlink wavelength table JFT19A. This observation acquired with features (the primary feature is a region of hot spots, the partial feature is the northern equatorial region, including a plume head) near the evening limb, assumming campaign feature coordinates 7 degrees North latitude and 325 degrees West longitude and partial feature coordinates 2 degrees North latitude, 325 degrees West longitude (System III).

No Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) and 3*1 (30*10 mrad) contiguous areas. Hot spot near 330 degrees west longitude, 12 degrees north latitude, is centered on primary, more northern tier. Equatorial region plumehead near 6.8 degrees latitude centered on subsequent 3*1 scan for the partial feature. S/C distance about 0.82 million KM, NIMS IFOV (NIMSEL) = 410 KM; 4*1 scan covers 32800*8200 KM; 3*1 scan covers 24600*8200 KM. About 400 secs of scanning on the northern, hotspot tier and 300 seconds on southern tier, and 20 secs for reposition slew, accumulating 0.6468 MBTG in 19 colors, and using 0.02419 tracks. 2 minutes reserved for targetting. Wavelength table: JFT19A, TLM: LPU
Note 10/18/96: Playback severely reduced (to 2.0 seconds) due to new solar conjunction playback constraints.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68C, E4JFT19A

Galileo Activity Plan Form 11/15/96 10:45:18 rev 6/95

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```
Reload NIMS Memory                        ACTIVITY ID:   E4NNRELOAD03-
                                           START TIME:   96-353/16:59:37.334
```

```
Activity ID: Orbit E4  Target N  Inst N  OAPEL RELOAD  SeqNo 03 -

Title        Reload NIMS Memory                          Instrument       NIMS
Requestor    NIMS-SWG/J. HUI           Team   NIMS  Working Group    SWG
```

```
Time System  CDS       Load ID  E4A     Calendar Date  12/18/96  Week  51

Start        EEE-CDS 00000826:00:0 96-353/16:59:37.334   EEE-000/13:55:10.666
End          EEE-CDS 00000811:00:0 96-353/17:14:47.334   EEE-000/13:40:00.666
Duration             00000015:00:0    000/00:15:10.000       000/00:15:10.000
```

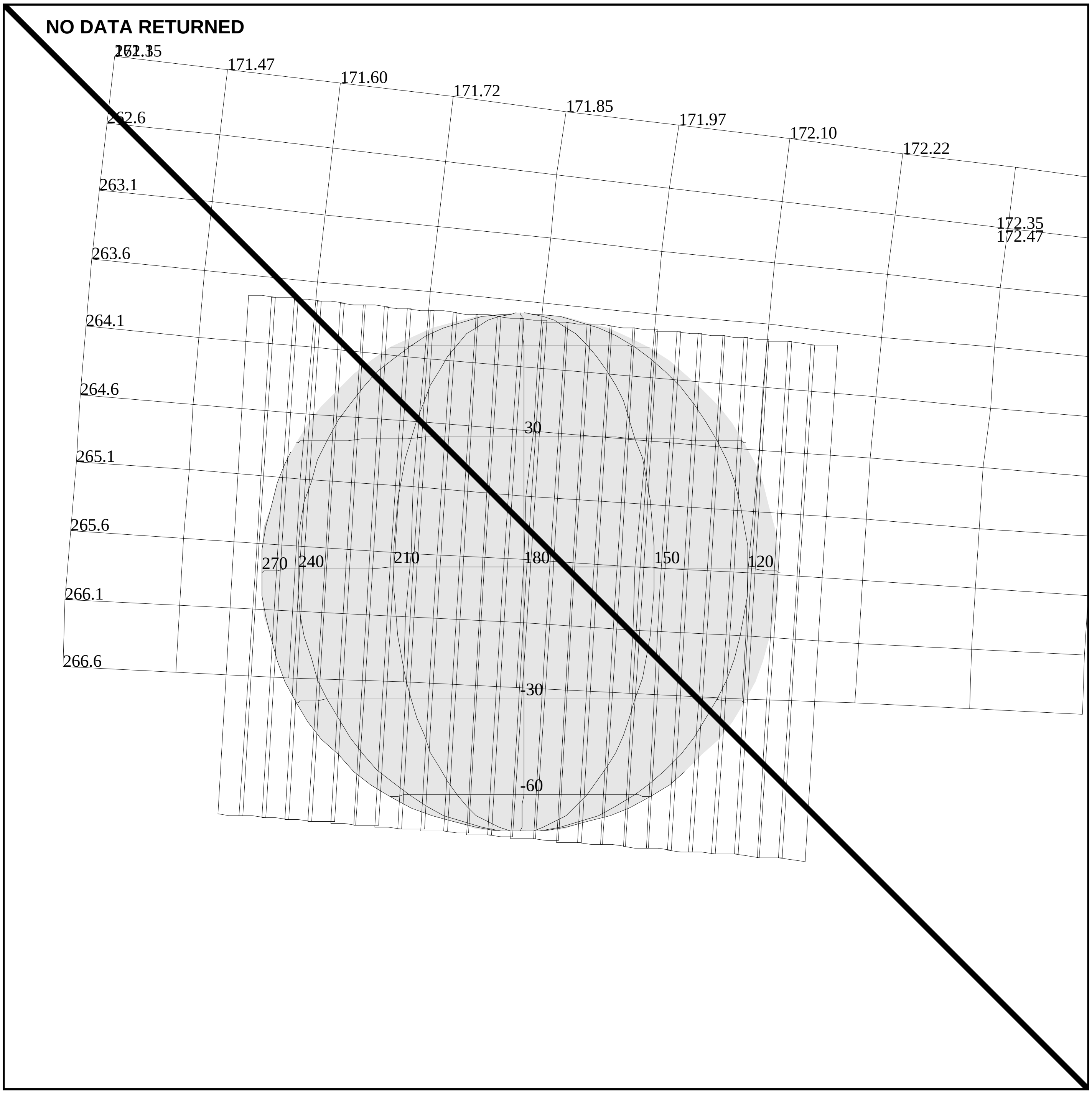
```
Top Label    E4NNRELOAD03-
Bottom Label

Plot Key     NIMS      Type            SCI
CDS Bytes         50   Report Options  BOTH         Scan Platform      No
CDS Source   OAP       Spin State      DUAL         DMS                No
```

Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS,
instrument restart, and operational mode set.

Design Detail

```
6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL   - Halt NIMS Processor (37PL)
37MRL  - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT  - Instrument Reset
37MN   - Memory Normal
37IST  - Chopper Reference
```



165EG:TT= 0 TMC= 1 C= -5.40 XC= 0.00 BS= 0/5054 TC= 3
A= 910 pD= 0 SR=17.450 RA50=297.87 DEC50=-21.31 cone=171.54 clock=265.68
117EG:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5054
1:#s= 1 Cs= 13.20 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1324 rD= 2

E4INCHEMIS03

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCHEMIS03

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 96-353/21:36:40.066 -CDS 237:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.500

OBSERVATION:E4INCHEMIS03

DESCRIP:IO DAYSIDE

Monitoring of Io's Dayside	ACTIVITY ID: E4INCHEMIS03- START TIME: 96-353/17:31:58.733

Activity ID: Orbit E4 Target I Inst N OAPEL CHEMIS SeqNo 03 -

Title	Monitoring of Io's Dayside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	IEE-CDS	00000242:00:0	96-353/17:31:58.733	IEE-000/04:04:41.333
End	IEE-CDS	00000229:00:0	96-353/17:45:07.400	IEE-000/03:51:32.666
Duration		00000013:00:0	000/00:13:08.667	000/00:13:08.667

Top Label E4INCHEMIS03-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Dayside monitoring covering wide range of longitudes to look for chemical changes (e.g. SO2 distribution) at resolutions better than ~800 km/nimsel (most observations will have resolutions between 120 and 400 km/nimsel).

No Data Returned

Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G2, C3, E4, E6 and E10 where resolution for lit disk is best.

Long map, 228 wavelengths.
Tracks used per orbit: 0.05 to 0.42.
Bits To Ground per orbit: 0.3 to 2.2 Mbits.
Wavelength table: ILM228, TLM: LPU.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM228

Galileo Activity Plan Form 11/15/96 10:45:19 rev 6/95

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Full NIMS Memory Read Out Part 1		ACTIVITY ID:	E4NNFULMRO01-
		START TIME:	96-353/17:50:10.667

Activity ID: Orbit E4 Target N Inst N OAPEL FULMRO SeqNo 01 -

Title	Full NIMS Memory Read Out Part 1			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	EEE-CDS	00000776:00:0	96-353/17:50:10.667	EEE-000/13:04:37.333
End	EEE-CDS	00000578:00:0	96-353/21:10:22.667	EEE-000/09:44:25.333
Duration		00000198:00:0	000/03:20:12.000	000/03:20:12.000

Top Label	E4NNFULMRO01-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

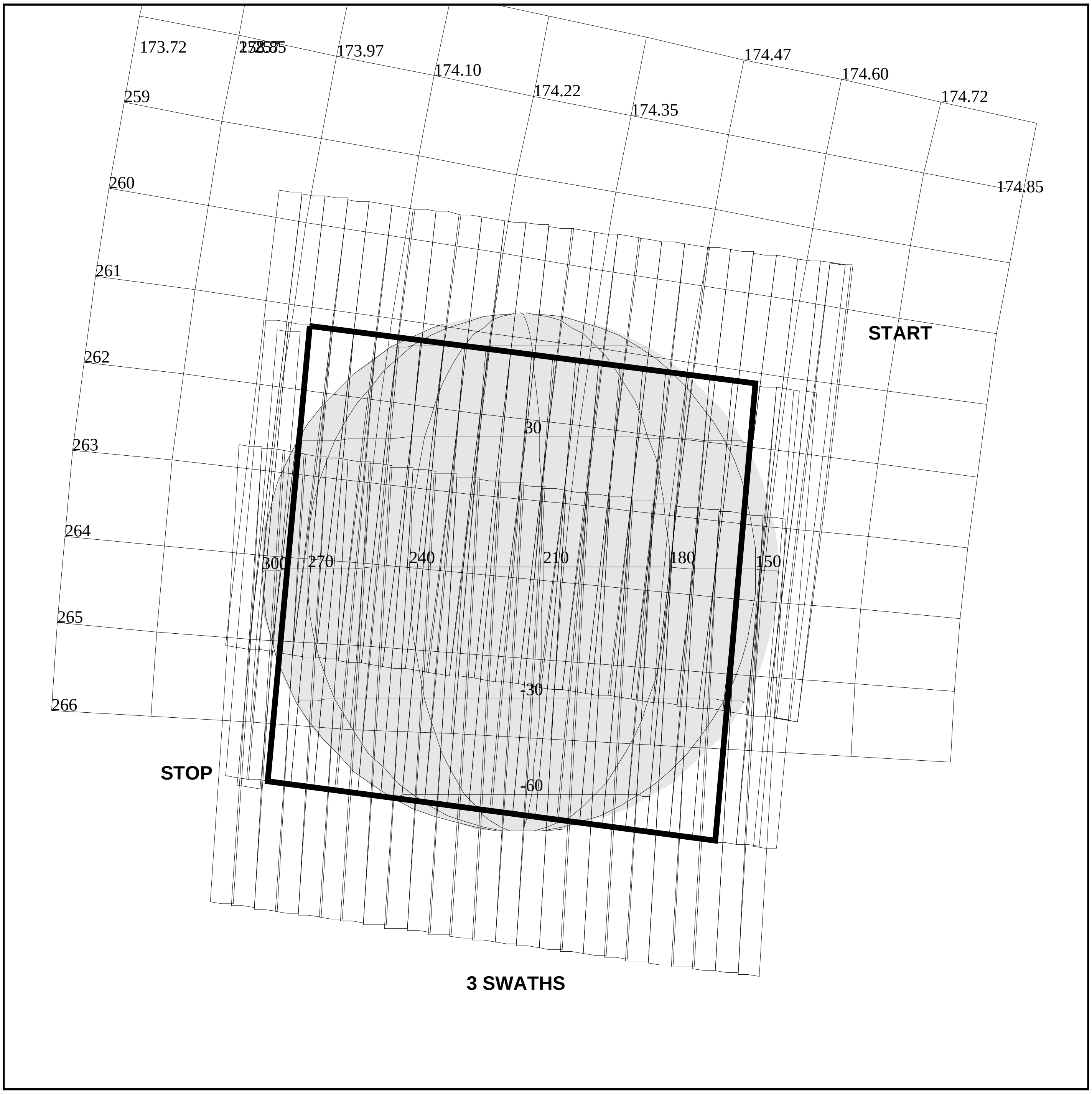
Observation Objective

Full memory readout to help understand software failure problem.

Design Detail

Read out 30 blocks of 32 bytes each of NIMS memory.
Start at 1000 HEX
End at 13BF HEX

Galileo Activity Plan Form   11/15/96 10:45:19   rev 6/95



165EH:TT= 0 TMC= 1 C= 6.20 XC= -2.50 BS=48/4912 TC= 3
A= 728 pD= 0 SR=17.450 RA50=294.55 DEC50=-21.85 cone=174.65 clock=262.48
117EH:#SB= 1 OR= 0.030 RR= 3.000 BM=F RC= 1 BS=48/4912
1:#s= 3 Cs= -12.80 XCs= 0.00 Cr= 11.90 XCr= 3.00 sD= 1284 rD= 48

E4INHRSPEC01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INHRSPEC01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 -CDS 18:00:0

OBSERVATION:E4INHRSPEC01

THINNING:NIM 2

BODY PLOT TIME:START-TIME D= 0 S= 0.500

DESCRIP:IO HI RES OBSERVATIONS

High Spatial & Spectral Obs. of Io   ACTIVITY ID: E4INHRSPEC01-
START TIME: 96-353/21:14:25.400

Activity ID: Orbit E4 Target I Inst N OAPEL HRSPEC SeqNo 01 -

Title	High Spatial & Spectral Obs. of Io			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/18/96	Week	51

Start	IEE-CDS	00000022:00:0	96-353/21:14:25.400	IEE-000/00:22:14.666
End	IEE+CDS	00000014:00:0	96-353/21:50:49.399	IEE+000/00:14:09.333
Duration		00000036:00:0	000/00:36:23.999	000/00:36:23.999

Top Label   E4INHRSPEC01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Mapping observation of Io's dayside at high spatial and spectral resolutions. Objective is to search for both known and yet unknown spectral features.

Data Returned

Design Detail

Global mosaic in Long Map, 228 wavelengths
Wavelength table: ILM228, TLM: LPU

3 overlapping Swaths.
Only the second (middle) Swath returned.

A small part of Swath 1 was returned with only 1 wavelength from detector 8 to monitor detector 8's failure status.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM001
Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM96

Galileo Activity Plan Form   11/15/96 10:45:19   rev 6/95

NIMS Checksum — ACTIVITY ID: E4NNCHKSUM01- / START TIME: 96-353/22:59:34.667

Activity ID: Orbit E4 Target N Inst N OAPEL CHKSUM SeqNo 01 -

Title	NIMS Checksum			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/18/96 Week 51

Start	EEE-CDS	00000470:00:0	96-353/22:59:34.667	EEE-000/07:55:13.333
End	EEE-CDS	00000455:00:0	96-353/23:14:44.667	EEE-000/07:40:03.333
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label E4NNCHKSUM01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Required to diagnose NIMS software corruption problem. It will do five checksums and it will store the results in NIMS memory and then read out by MRO.

Design Detail

```
37PL   - Halt NIMS Processor
6CKSUM - Check Sum NIMS from 1000 to 10FF  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FA from LLM1A 2282,2283
6CKSUM - Check Sum NIMS, from 1100 to 11FF  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FB from LLM1A 2282,2283
6CKSUM - Check Sum NIMS  from 1200 to 12FF  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FC from LLM1A 2282,2283
6CKSUM - Check Sum NIMS from 1300 to 13FF   to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FD from LLM1A 2282,2283
6CKSUM - Check Sum NIMS  from 1400 to 14B3  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FE from LLM1A 2282,2283
6CKSUM - Check Sum NIMS  from 1598 to 15BD  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FF from LLM1A 2282,2283
6MROH  - MRO of NIMS 14FA to 14FF (37,14FA,1,A2)
```

Galileo Activity Plan Form 11/15/96 10:45:19 rev 6/95

Reload NIMS Memory		ACTIVITY ID:	E4NNRELOAD04-
		START TIME:	96-354/00:10:21.334

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 04 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	EEE-CDS	00000400:00:0	96-354/00:10:21.334	EEE-000/06:44:26.666
End	EEE-CDS	00000385:00:0	96-354/00:25:31.334	EEE-000/06:29:16.666
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label	E4NNRELOAD04-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

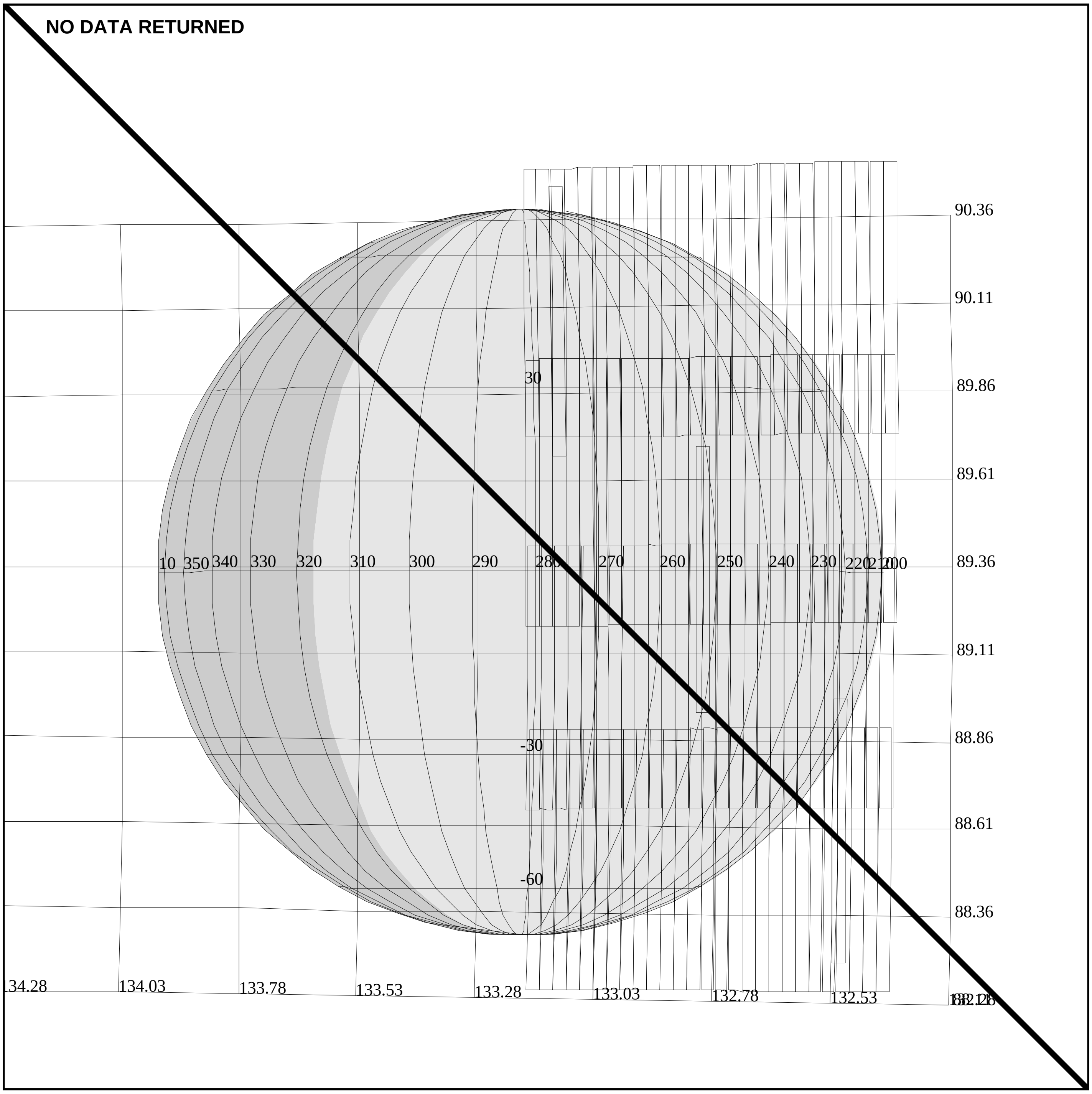
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form   11/15/96 10:45:19   rev 6/95



165EI:TT= 0 TMC= 1 C= -13.80 XC= 10.00 BS= 0/2950 TC= 3
A= 728 pD= 0 SR=17.450 RA50=237.31 DEC50=-21.30 cone=132.40 clock= 90.13
117EI:#SB= 1 OR= 0.060 RR= 4.000 BM=F RC= 1 BS= 0/2950
1:#s= 4 Cs= 14.00 XCs= 0.00 Cr= -13.80 XCr= -7.00 sD= 704 rD= 20

E4ENXDARLI01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4ENXDARLI01

TARGET BODY : EUROPA

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:EEE 96-354/06:54:48.000 -CDS 361:00:0

OBSERVATION:E4ENXDARLI01

THINNING:NIM 2

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

DESCRIP:DARK AND LIT

```
Europa Linea Region Observation          ACTIVITY ID:   E4ENXDARLI01-
                                          START TIME:   96-354/00:44:44.000

Activity ID: Orbit E4  Target E  Inst N  OAPEL XDARLI  SeqNo 01 -

Title         Europa Linea Region Observation         Instrument      NIMS
Requestor     NIMS-SWG/A. OCAMPO        Team   NIMS  Working Group    SWG

Time System  CDS       Load ID  E4A     Calendar Date  12/19/96  Week  51

Start         EEE-CDS 00000366:00:0 96-354/00:44:44.000   EEE-000/06:10:04.000
End           EEE-CDS 00000345:00:0 96-354/01:05:58.000   EEE-000/05:48:50.000
Duration              00000021:00:0    000/00:21:14.000       000/00:21:14.000

Top Label     E4ENXDARLI01-
Bottom Label

Plot Key      NIMS      Type            SCI
CDS Bytes         150   Report Options  BOTH         Scan Platform      Yes
CDS Source    OAP       Spin State      DUAL         DMS                Yes
```

Observation Objective

This observation is part of Europa's global map campaign of the Trailing hemisphere (W. Long. 280 to 210 deg.), where there is a concentration of Linea crossing between hemispheres.

W. Long. span: 280 - 210 degrees
Lat. span: +/- 90 degrees
Disk Coverage: 50%
Sub s/c longitude: 281.6 degrees
Sub s/c latitude: -0.39 degrees

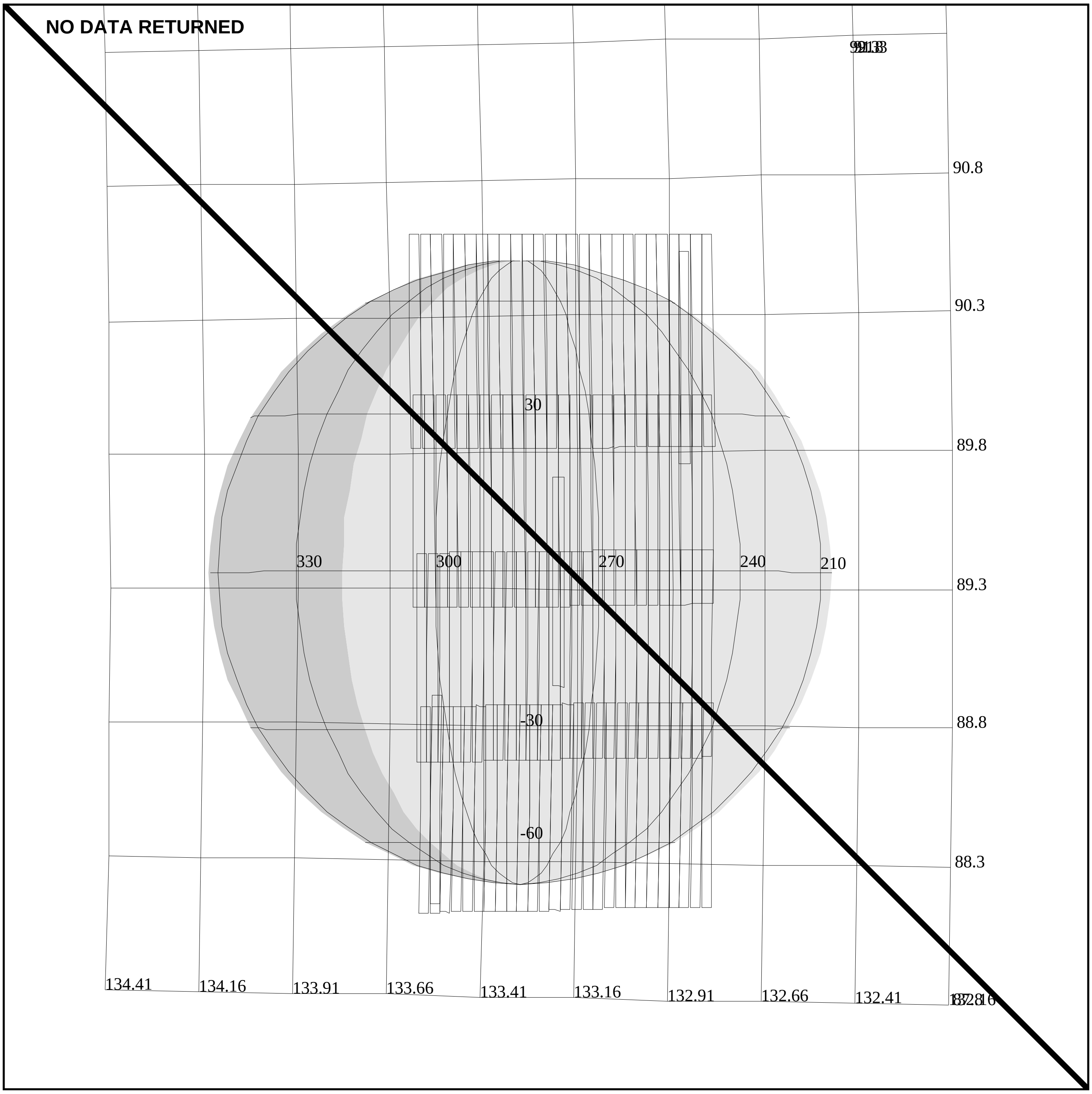
No Data Returned

Design Detail

```
Distance: 114,798 KM           Mode: Full Map
Phase: 55.75 degrees           Slew Rate: 60 MR/S
Cone: 128.84 degrees           % overlap: 30
Wavelengths: 204               Num. of strips: 4
Wavelengths P/B: 102           NIMS F.O.V./ strip: 41
Resolution: 57.4 KM/PIX        Booms: not in F.O.V.
DMS Mode: 28.8                 TLM: MPW
ASD: 0.773 degrees             Area cov. in pixels: 2329
Wavelength table: EFM221 (0.69 - 4.92 microns)
Compression: 2.0               Gain State: 3/2/2/3   Threshold: 2
```

Full Map (FM), Gain 3,2,3, Grating Start 0, MPW, E4EFM221, E4EFM102

Galileo Activity Plan Form   11/15/96 10:45:19   rev 6/95



165EJ:TT= 0 TMC= 1 C= 5.00 XC= 10.80 BS= 0/8410 TC= 3
A= 364 pD= 0 SR=17.450 RA50=238.57 DEC50=-21.52 cone=133.60 clock= 90.19
117EJ:#SB= 1 OR= 0.060 RR= 4.500 BM=F RC= 1 BS= 0/8410
1:#s= 4 Cs= -14.00 XCs= 0.00 Cr= 14.30 XCr= -7.40 sD= 704 rD= 20

E4ENASTERI01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4ENASTERI01

TARGET BODY : EUROPA

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:EEE 96-354/06:54:48.000 -CDS 331:00:0

OBSERVATION:E4ENASTERI01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.600

DESCRIP:PART GLOBAL MOSAIC

Europa Global Mosaic	ACTIVITY ID:	E4ENASTERI01-
	START TIME:	96-354/01:17:05.334

Activity ID: Orbit E4 Target E Inst N OAPEL ASTERI SeqNo 01 -

Title	Europa Global Mosaic			Instrument	NIMS
Requestor	NIMS-SWG/A. OCAMPO	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	EEE-CDS	00000334:00:0	96-354/01:17:05.334	EEE-000/05:37:42.666
End	EEE-CDS	00000315:00:0	96-354/01:36:18.000	EEE-000/05:18:30.000
Duration		00000019:00:0	000/00:19:12.666	000/00:19:12.666

Top Label E4ENASTERI01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Part of GLOBAL MOSAIC campaign of Europa which contains the longitude range 244-300 degrees and centers around Asteri Linea.
Cuts: This observation was reduced to P/B 102 wavelengths instead of the original 204 to accomodate cuts.

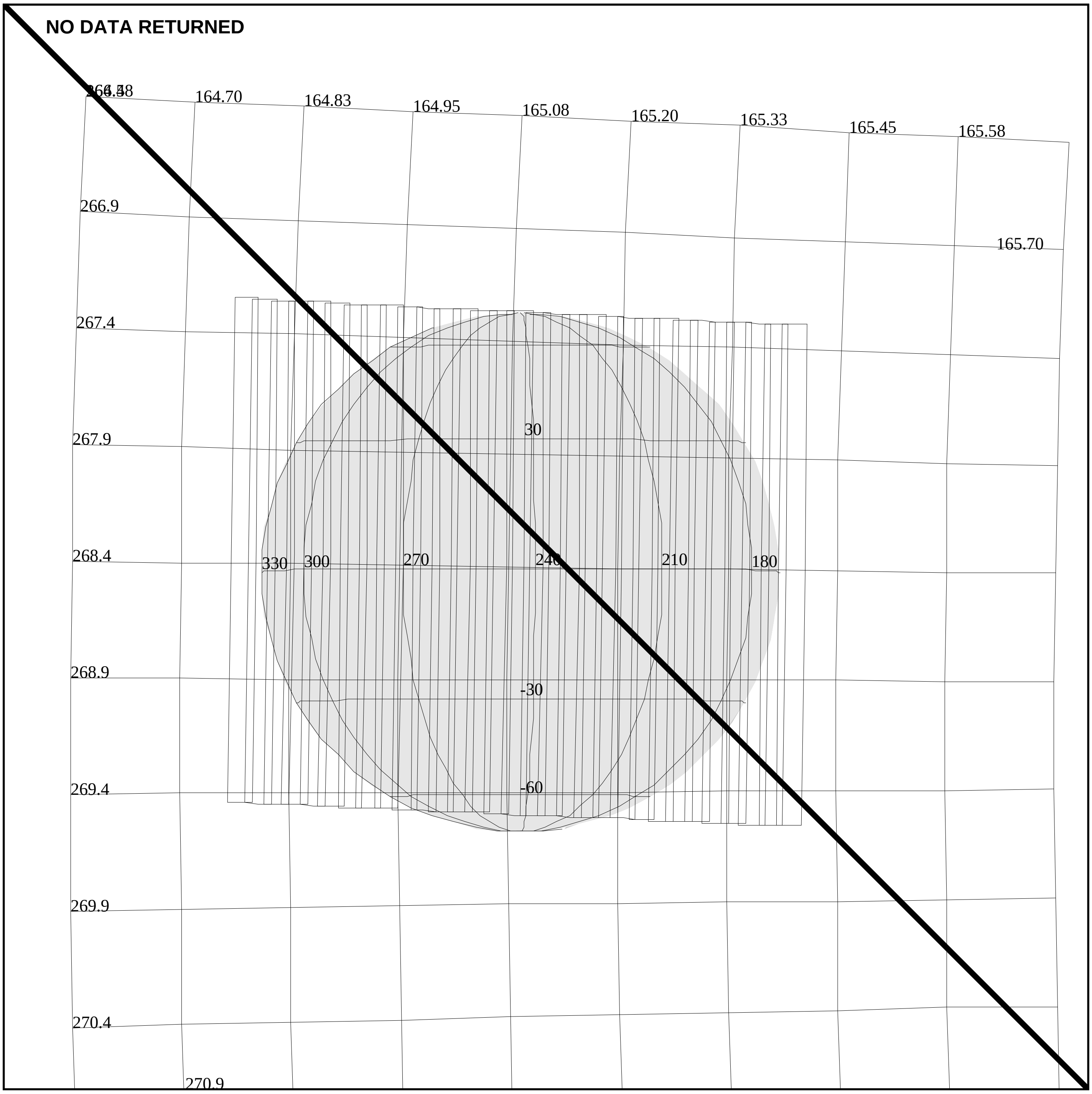
No Data Returned

Design Detail

DISTANCE: 100,000 KM	MODE: FULL MAP	AREA IN PIX: 1995
PHASE: 55 DEG	SLEW RATE: 60 MR/S	TRACKS: 0.0314
CONE: 124 DEG	% OVERLAP: 26	ASD: 0.86 DEG
W.L.: 102	NUM OF STRIPS: 4	LONG SPAN: 240-315 DEG
BOOMS: NOT IN F.O.V.	NIMS FOV/STRIP: 16-40	LAT SPAN: N/S 90 DEG
RESOLUTION: 19 KM/PIX	DMS MODE: 7.68	COVERAGE: 60 %
SUB S/C LONG: 284 DEG	SUB S/C LAT: -0.41 DG	TLM:LPU
GAIN: 3/2/2/3	INCID ANG: 7-100 DEG	EMM ANG: 110 DEG
WAVELENGTHS P/B: 102	WAVELENGTH TABLE: EFM126	
Compression=2	THRESHOLD: 2	

Full Map (FM), Gain 3,2,3, Grating Start 0, LPU, E4EFM126, E4EFM102

Galileo Activity Plan Form 11/15/96 10:45:20 rev 6/95



165EK:TT= 0 TMC= 1 C= 5.50 XC= 0.00 BS= 0/2960 TC= 3
A= 728 pD= 0 SR=17.450 RA50=304.34 DEC50=-20.19 cone=165.41 clock=268.47
117EK:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/2960
1:#s= 1 Cs= -21.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1580 rD= 2

E4INCHEMIS04

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCHEMIS04

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 96-353/21:36:40.066 +CDS 246:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.500**

OBSERVATION:E4INCHEMIS04 **DESCRIP:IO DAYSIDE**

Monitoring of Io's Dayside | **ACTIVITY ID:** E4INCHEMIS04-
START TIME: 96-354/01:40:20.732

Activity ID: Orbit E4 Target I Inst N OAPEL CHEMIS SeqNo 04 -

Title	Monitoring of Io's Dayside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00000241:00:0	96-354/01:40:20.732	IEE+000/04:03:40.666
End	IEE+CDS	00000255:00:0	96-354/01:54:30.066	IEE+000/04:17:50.000
Duration		00000014:00:0	000/00:14:09.334	000/00:14:09.334

Top Label E4INCHEMIS04-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Dayside monitoring covering wide range of longitudes to look for chemical changes (e.g. SO2 distribution) at resolutions better than ~800 km/nimsel (most observations will have resolutions between 120 and 400 km/nimsel).

No Data Returned

Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G2, C3, E4, E6 and E10 where resolution for lit disk is best.

Long map, 102 wavelengths.
Tracks used per orbit: 0.05 to 0.42.
Bits To Ground per orbit: 0.3 to 2.2 Mbits.
Wavelength table: ILM102, TLM: LPU.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM102

Galileo Activity Plan Form 11/15/96 10:45:20 rev 6/95

Full NIMS Memory Read Out Part 2		ACTIVITY ID:	E4NNFULMRO02-
		START TIME:	96-354/01:57:32.000

Activity ID: Orbit E4 Target N Inst N OAPEL FULMRO SeqNo 02 -

Title	Full NIMS Memory Read Out Part 2			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	EEE-CDS	00000294:00:0	96-354/01:57:32.000	EEE-000/04:57:16.000
End	EEE-CDS	00000173:00:0	96-354/03:59:52.667	EEE-000/02:54:55.333
Duration		00000121:00:0	000/02:02:20.667	000/02:02:20.667

Top Label E4NNFULMRO02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Full memory readout to help understand software failure problem.

Design Detail

Read out 18 blocks of 32 bytes each of NIMS memory.
Start at 13C0 HEX
End at 15FF HEX

Galileo Activity Plan Form   11/15/96 10:45:20   rev 6/95

Reload NIMS Memory	ACTIVITY ID:	E4NNRELOAD05-
	START TIME:	96-354/04:30:12.667

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 05 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	EEE-CDS	00000143:00:0	96-354/04:30:12.667	EEE-000/02:24:35.333
End	EEE-CDS	00000128:00:0	96-354/04:45:22.667	EEE-000/02:09:25.333
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label E4NNRELOAD05-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

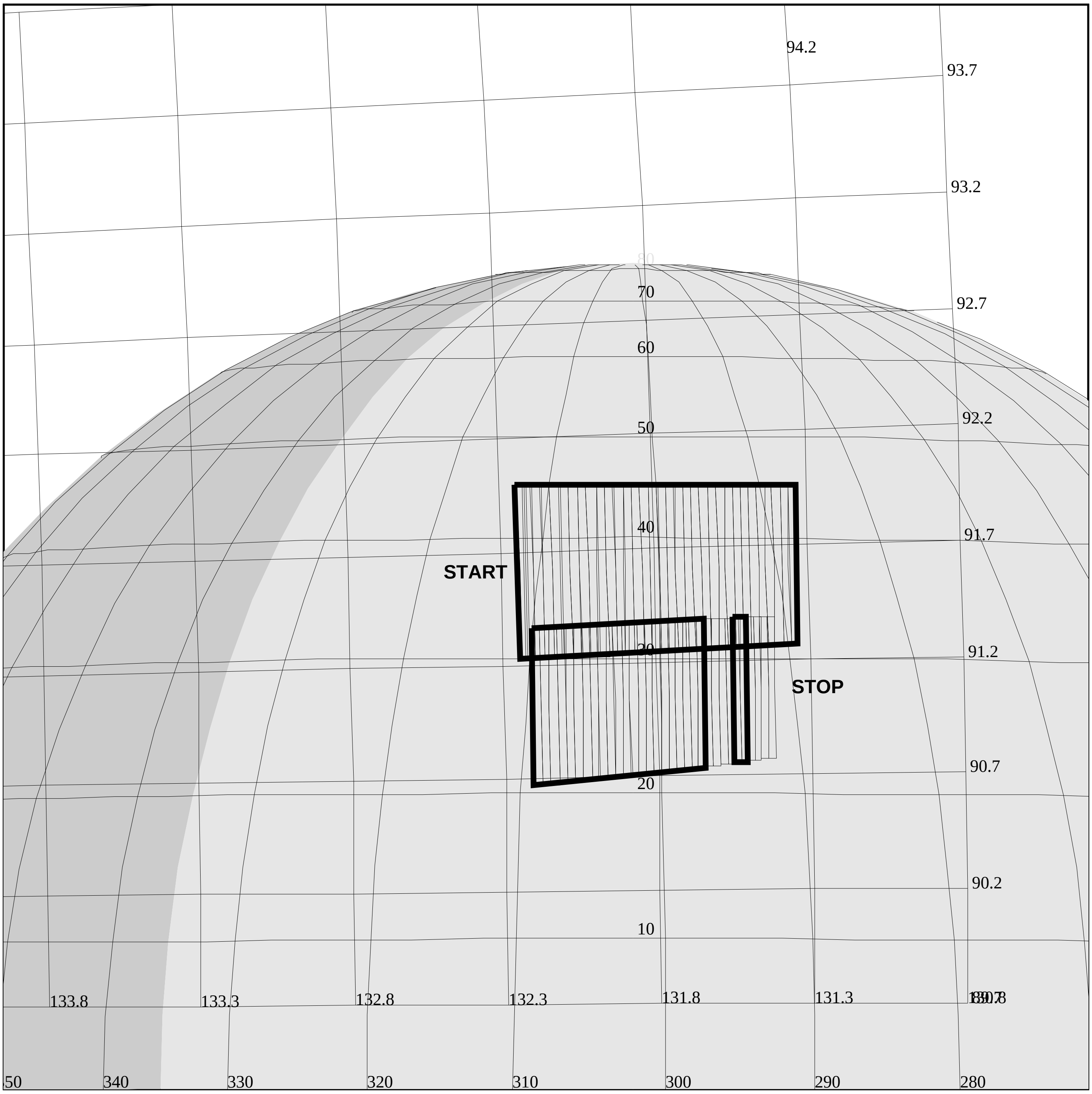
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form 11/15/96 10:45:20 rev 6/95



165EM:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS=36/0270 TC= 1(37.0 311.5)
A= 728 pD= 3372 SR=17.450 RA50=237.46 DEC50=-20.17 cone=132.28 clock= 91.66
117EM:#SB= 1 OR= 0.030 RR= 5.000 BM=F RC= 1 BS=36/0270
1:#s= 2 Cs= -16.60 XCs= 0.00 Cr= 16.50 XCr= -8.50 sD= 1676 rD= 20

E4ENSUCOMP02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4ENSUCOMP02

TARGET BODY : EUROPA

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:ETE 96-354/06:54:48.000 -CDS 101:00:0

OBSERVATION:E4ENSUCOMP02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 3372 S= 1.600

DESCRIP:DARK ICE

Surface Composition / Dark Ice		ACTIVITY ID:	E4ENSUCOMP02-
		START TIME:	96-354/05:08:38.000

Activity ID: Orbit E4 Target E Inst N OAPEL SUCOMP SeqNo 02 -

Title	Surface Composition / Dark Ice			Instrument	NIMS
Requestor	NIMS-SWG/A. OCAMPO	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	ETE-CDS	00000105:00:0	96-354/05:08:38.000	ETE-000/01:46:10.000
End	ETE-CDS	00000081:14:0	96-354/05:32:44.667	ETE-000/01:22:03.333
Duration		00000023:77:0	000/00:24:06.667	000/00:24:06.667

Top Label	E4ENSUCOMP02-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To determine the surface composition of a dark portion of the surface of Europa at very high resolution, centered at 305 Deg. W.Long. and 35 deg. N. Lat.
25% tape cut: To accomodate tape cut, this observation's telemetry rate was changed from MPW to LPU.
PPR and UVS desire to ride along in this observation.
Cuts: Compression ratio was increased from 2 to 3 to reduce BTG.

Data Returned

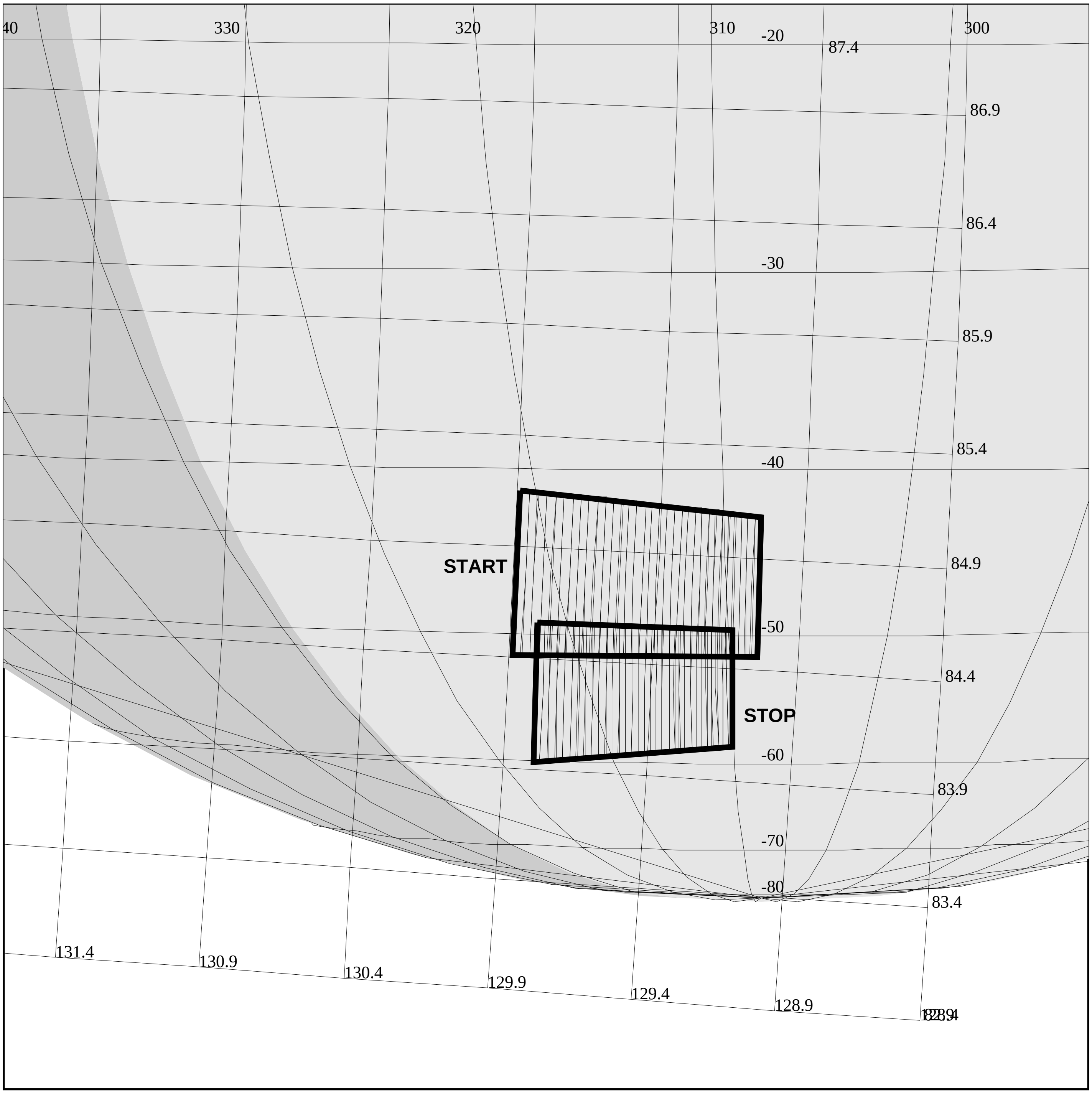
Design Detail

DISTANCE: 23,713 KM	MODE: LONG MAP	TRACKS:0.0345
PHASE: 58 DEG	SLEW RATE: 30 MR/S	LONG SPAN: 300-310 DEG
CONE: 126 DEG	% OVERLAP: 15	LAT SPAN: 28-42 DEG
WAVELENGTHS: 228	NUM OF STRIPS: 2	COVERAGE: 200 X 200 KM
WAVELENGTHS P/B: 228	RESOLUTION: 11 KM/PIX	NIMS F.O.V.: 46
SUB S/C LONG: 303 DEG	BOOMS: NOT IN F.O.V.	DMS MODE : 7.68
SUB S/C LAT:-0.4 DEG	ASD : 3.558 DEG	AREA COV IN PIX: 2760
TLM: LPU	GAIN: 3	INCID ANG: 60-70 DEG
EMM ANG: 34-42 DEG	WAVELENGTH TABLE: ELM245	COMPRESSION: 3
THRESHOLD: 2		

Small Gaps Throughout.
Large Gap in Second Swath, one packet misplaced in center of gap with incorrect SCLK.

Long Map (LM), Gain 3, Grating Start 0, LPU, E4ELM245, E4ELM192

Galileo Activity Plan Form 11/15/96 10:45:20 rev 6/95



165EN:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS=32/7914 TC= 1(-46.0 322.0)
A= 70 pD= 3314 SR=17.450 RA50=233.70 DEC50=-24.74 cone=129.84 clock= 84.76
117EN:#SB= 1 OR= 0.030 RR= 3.000 BM=F RC= 1 BS=32/7914
1:#s= 2 Cs= -16.40 XCs= 0.00 Cr= 15.70 XCr= -8.50 sD= 1644 rD= 26

E4ENSUCOMP01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4ENSUCOMP01

TARGET BODY : EUROPA

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:ETE 96-354/06:54:48.000 -CDS 59:00:0

OBSERVATION:E4ENSUCOMP01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 3314 S= 2.600

DESCRIP:LIGHT ICE

Surface Composition / Light Ice	ACTIVITY ID: E4ENSUCOMP01- START TIME: 96-354/05:54:08.000

Activity ID: Orbit E4 Target E Inst N OAPEL SUCOMP SeqNo 01 -

Title	Surface Composition / Light Ice			Instrument	NIMS
Requestor	NIMS-SWG/A. OCAMPO	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	ETE-CDS	00000060:00:0	96-354/05:54:08.000	ETE-000/01:00:40.000
End	ETE-CDS	00000040:00:0	96-354/06:14:21.334	ETE-000/00:40:26.666
Duration		00000020:00:0	000/00:20:13.334	000/00:20:13.334

Top Label	E4ENSUCOMP01-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To determine the surface composition of a light colored Southern region of Europa's surface at very high resolution, centered at 317 Deg. W. long. and -50 Deg. S. Lat. PPR & UVS will like to ride along in this observation. Cuts: Compression was increased from 2 to 3 to reduce BTG.

Data Returned

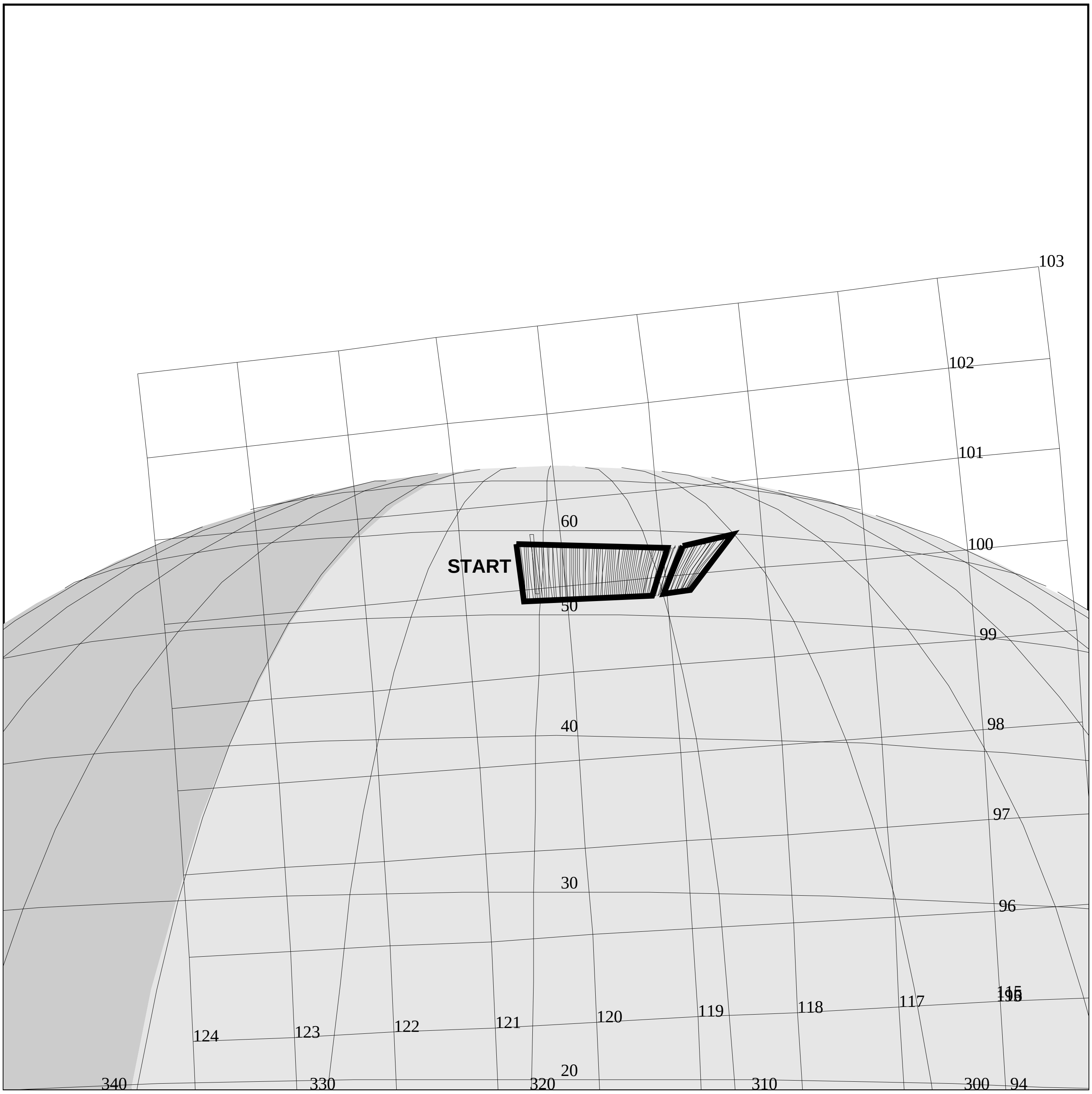
Design Detail

DISTANCE: 18465 KM	MODE: LONG MAP	TRACKS:0.0485
PHASE: 59 DEG	SLEW RATE: 30 MR/S	LONG SPAN: 314-320 DEG
CONE: 125 DEG	% OVERLAP: 15	LAT SPAN: -60 to -58 DEG
WAVELENGTHS: 408	NUM OF STRIPS: 2	COVERAGE: 100 X 100 KM
WAVELENGTHS P/B: 408	RESOLUTION: 9.23 KM/PIX	NUM OF F.O.V.: 70
SUB S/C LONG: 306 DEG	BOOMS: NOT IN NIMS FOV	DMS MODE:28.8
SUB S/C LAT:-0.4 DEG	ASD: 4.49	AREA COV IN PIX: 5015
TLM: MPW	GAIN STATE: 3	INCID ANG: 69-79 DEG
EMM ANG: 59-61 DEG	COMPRESSION: 3	THRESHOLD: 2

WAVELENGTH TABLE: ELM442 (0.69 - 4.92 MICRONS)

Long Map (LM), Gain 3, Grating Start 0, MPW, E4ELM442, E4ELM192

Galileo Activity Plan Form 11/15/96 10:45:20 rev 6/95



165EO:TT= 0 TMC= 1 C= 25.00 XC= 10.00 BS=27/3738 TC= 1(50.0 310.0)
A= 142 pD= 2306 SR=17.450 RA50=227.95 DEC50=-10.00 cone=120.43 clock=100.21
117EO:#SB= 1 OR= 0.030 RR= 3.000 BM=F RC= 1 BS=27/3738
1:#s= 1 Cs= -23.00 XCs= 0.00 Cr= 9.50 XCr= -9.00 sD= 2306 rD= 22

E4ENSUCOMP03

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4ENSUCOMP03

TARGET BODY : EUROPA

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:ETE 96-354/06:54:48.000 -CDS 27:00:0

OBSERVATION:E4ENSUCOMP03

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 2306 S= 2.000

DESCRIP:DOUBLE LINEA

Surface Composition of Double Linea Area ACTIVITY ID: E4ENSUCOMP03-
START TIME: 96-354/06:26:29.334

Activity ID: Orbit E4 Target E Inst N OAPEL SUCOMP SeqNo 03 -

Title	Surface Composition of Double Linea Area	Instrument	NIMS
Requestor	NIMS-SWG/A. OCAMPO	Team NIMS Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	ETE-CDS	00000028:00:0	96-354/06:26:29.334	ETE-000/00:28:18.666
End	ETE-CDS	00000014:00:0	96-354/06:40:38.667	ETE-000/00:14:09.333
Duration		00000014:00:0	000/00:14:09.333	000/00:14:09.333

Top Label E4ENSUCOMP03-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To determine surface composition of double lineas and surrounding area of Europa's Northern Latitudes. Center at +54 degrees latitude and 315 degrees west longitude.

Long. span: 320 - 310 degrees
Lat. span: +52 to +58 degrees
% coverage: 10
Sub s/c longitude: 306.14 degrees Sub s/c latitude: -0.40 degrees
PPR and UVS may ride along in this observation.
Cuts: Compression was increased from 2 to 3 to reduce BTG.

Data Returned

Design Detail

Distance: 5000 KM	Mode: Long Map
Phase: 70 degrees	Slew Rate: 30 MR/S
Cone: 110 degrees	% overlap: 5
Wavelengths: 408	Num. of strips: 1
Wavelengths P/B: 408	Gain State: 3
Resolution: 2.5 NIMSEL	NIMS F.O.V.: 84
Booms: not in F.O.V.	DMS Mode: 28.8
ASD: 4.442 degrees	Area cov. in pixels: 9008,
TLM: MPW	Wavelength table: ELM408 (0.69 - 4.92 microns)
Compression: 3	Threshold: 2

1 Rim missing near the end of the Swath.

Long Map (LM), Gain 3, Grating Start 0, MPW, E4ELM442, E4ELM384

Galileo Activity Plan Form 11/15/96 10:45:20 rev 6/95

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NIMS Checksum	ACTIVITY ID: E4NNCHKSUM02- START TIME: 96-354/06:59:51.333

Activity ID: Orbit E4 Target N Inst N OAPEL CHKSUM SeqNo 02 -

Title	NIMS Checksum			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	EEE+CDS	00000005:00:0	96-354/06:59:51.333	EEE+000/00:05:03.333
End	EEE+CDS	00000020:00:0	96-354/07:15:01.333	EEE+000/00:20:13.333
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label	E4NNCHKSUM02-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

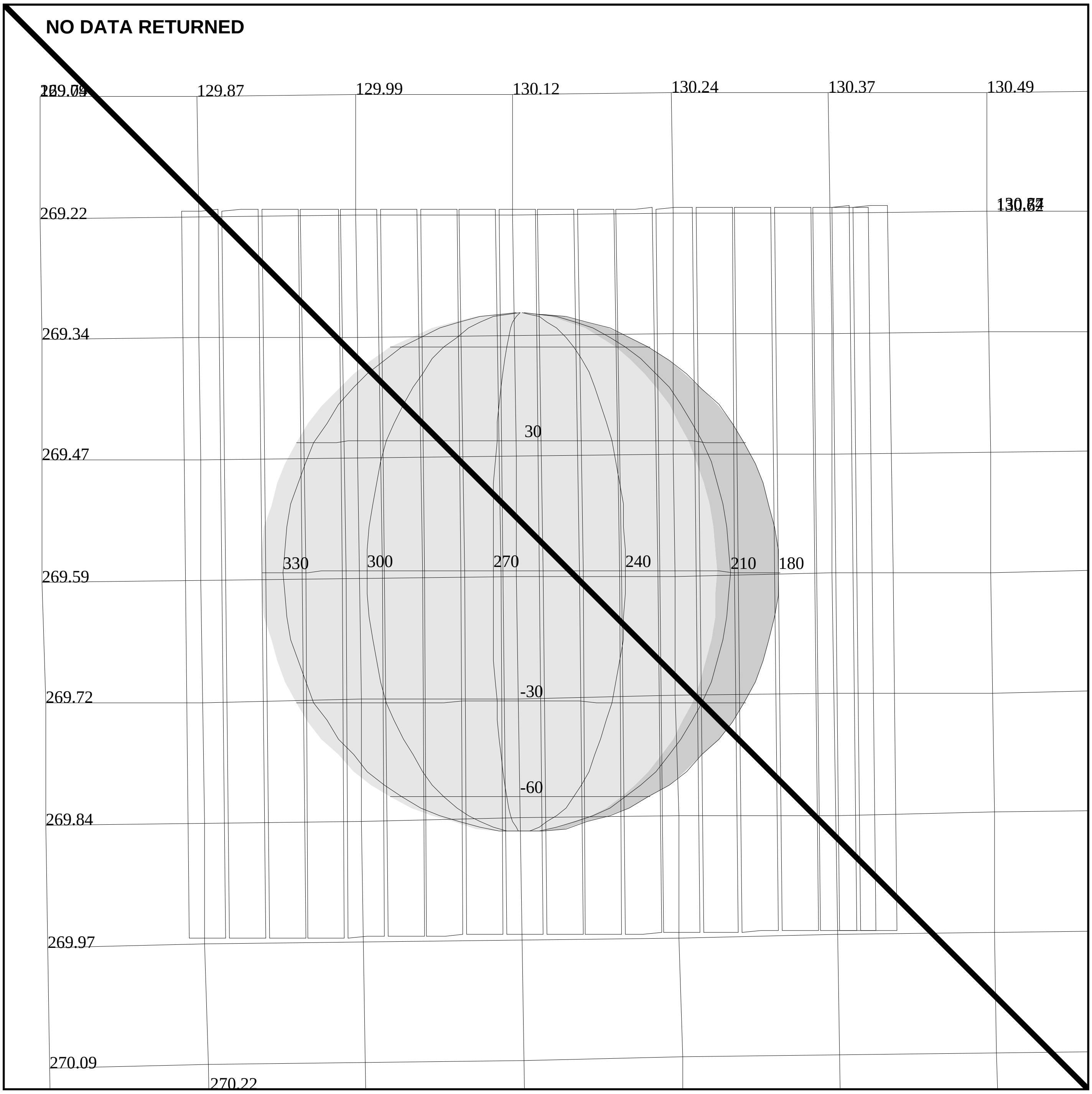
Observation Objective

Required to diagnose NIMS software corruption problem. It will do five checksums and it will store the results in NIMS memory and then read out by MRO.

Design Detail

```
6CKSUM - Check Sum NIMS from 1000 to 10FF  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FA from LLM1A 2282,2283
6CKSUM - Check Sum NIMS, from 1100 to 11FF  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FB from LLM1A 2282,2283
6CKSUM - Check Sum NIMS  from 1200 to 12FF  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FC from LLM1A 2282,2283
6CKSUM - Check Sum NIMS from 1300 to 13FF   to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FD from LLM1A 2282,2283
6CKSUM - Check Sum NIMS  from 1400 to 14B3  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FE from LLM1A 2282,2283
6CKSUM - Check Sum NIMS  from 1598 to 15BD  to  LLM1A 2282,2283
6MCOPY - CDS copy to NIMS 14FF from LLM1A 2282,2283
6MROH  - MRO of NIMS 14FA to 14FF (37,14FA,1,A2)
```

Galileo Activity Plan Form   11/15/96 10:45:20   rev 6/95



165EL:TT= 0 TMC= 1 C= 5.00 XC= 0.00 BS=27/3758 TC= 3
A= 728 pD= 0 SR=17.450 RA50=338.61 DEC50= -8.77 cone=130.41 clock=269.59
117EL:#SB= 1 OR= 0.050 RR=12.000 BM=F RC= 1 BS=27/3758
1:#s= 1 Cs= -18.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 930 rD= 2

E4INCHEMIS05

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCHEMIS05

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 96-353/21:36:40.066 +CDS 635:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.500

OBSERVATION:E4INCHEMIS05

DESCRIP:IO DAYSIDE

Monitoring of Io’s Dayside	ACTIVITY ID: E4INCHEMIS05- START TIME: 96-354/08:14:40.732

Activity ID: Orbit E4 Target I Inst N OAPEL CHEMIS SeqNo 05 -

Title	Monitoring of Io’s Dayside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00000631:00:0	96-354/08:14:40.732	IEE+000/10:38:00.666
End	IEE+CDS	00000641:00:0	96-354/08:24:47.399	IEE+000/10:48:07.333
Duration		00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label E4INCHEMIS05-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Dayside monitoring covering wide range of longitudes to look for chemical changes (e.g. SO2 distribution) at resolutions better than ~800 km/nimsel (most observations will have resolutions between 120 and 400 km/nimsel).

No Data Returned

Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G2, C3, E4, E6 and E10 where resolution for lit disk is best.

Long map, 408 wavelengths.
Tracks used per orbit: 0.05 to 0.42.
Bits To Ground per orbit: 0.3 to 2.2 Mbits.
Wavelength table: ILM228, TLM: LPU.

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM228

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95

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Reload NIMS Memory	ACTIVITY ID: E4NNRELOAD06- START TIME: 96-354/09:29:30.000

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 06 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	EEE+CDS	00000153:00:0	96-354/09:29:30.000	EEE+000/02:34:42.000
End	EEE+CDS	00000168:00:0	96-354/09:44:40.000	EEE+000/02:49:52.000
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label E4NNRELOAD06-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

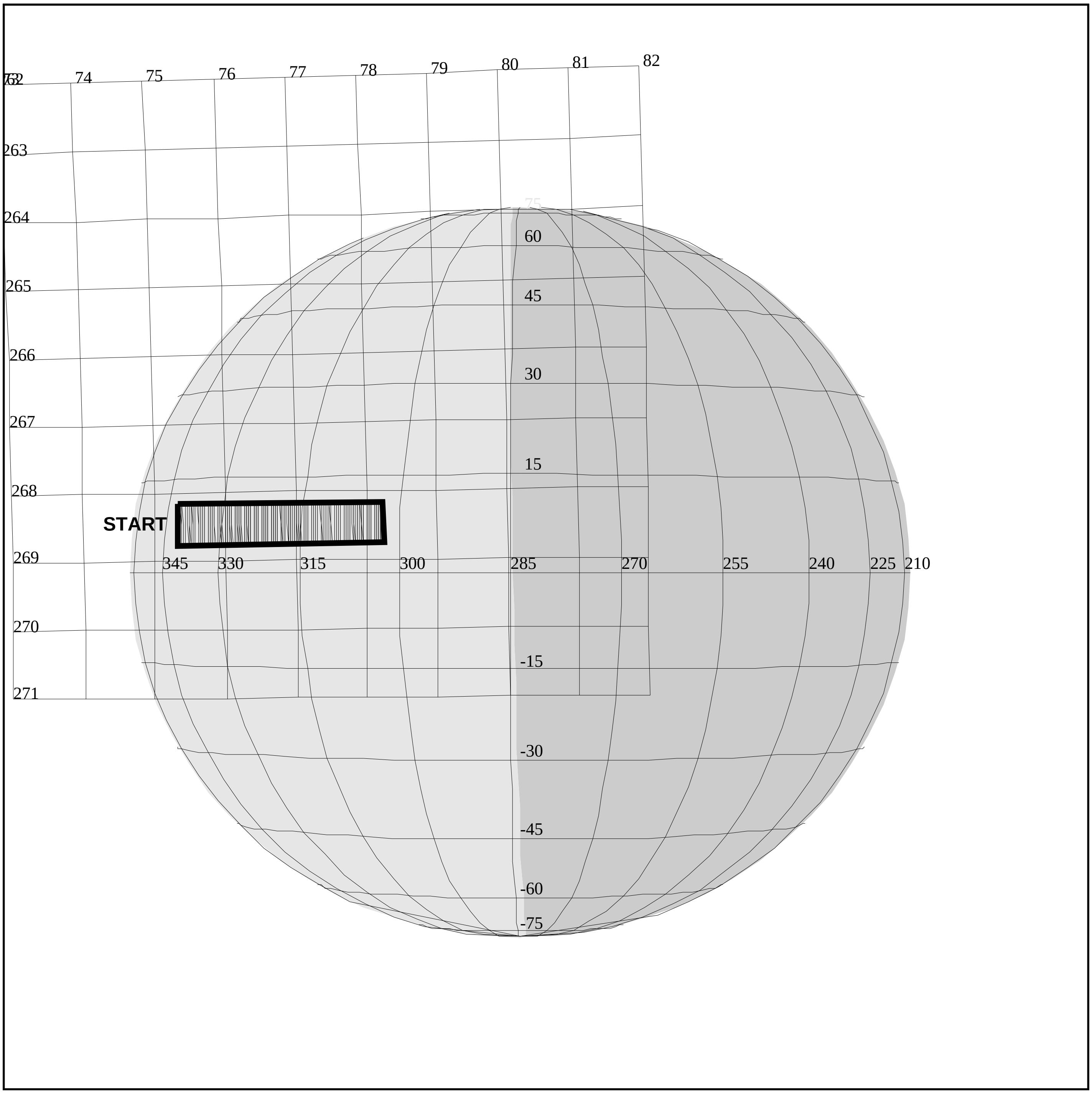
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95



165EP:TT= 0 TMC= 1 C= -24.00 XC= 7.00 BS= 0/2150 TC= 1(12 320)
A= 182 pD= 0 SR=17.450 RA50= 28.94 DEC50= 14.54 cone= 75.34 clock=268.46
117EP:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/2150
1:#s= 1 Cs= 47.70 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1198 rD= 2

E4JNFEA09501

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA09501

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: | **THINNING:NIM 2**

START:EEE 96-354/06:54:48.000 +CDS 0239:00:0 | **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA09501 | **DESCRIP:E4_FEAT_CAMP_95_PHASE_01**

Jupiter Camp. feat. 95 deg. phase Prt 1	ACTIVITY ID:	E4JNFEA09501-
	START TIME:	96-354/10:54:26.000

Activity ID: Orbit E4 Target J Inst N OAPEL FEA095 SeqNo 01 -

Title	Jupiter Camp. feat. 95 deg. phase Prt 1			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	EEE+CDS	00000237:00:0	96-354/10:54:26.000	EEE+000/03:59:38.000
End	EEE+CDS	00000245:53:0	96-354/11:03:06.666	EEE+000/04:08:18.666
Duration		00000008:53:0	000/00:08:40.666	000/00:08:40.666

Top Label	E4JNFEA09501-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the first observation obtained on a rotation with phase angle approximately 95 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near minimum airmass, assuming feature coordinates 7 degrees North latitude and 319 degrees West longitude (System III).

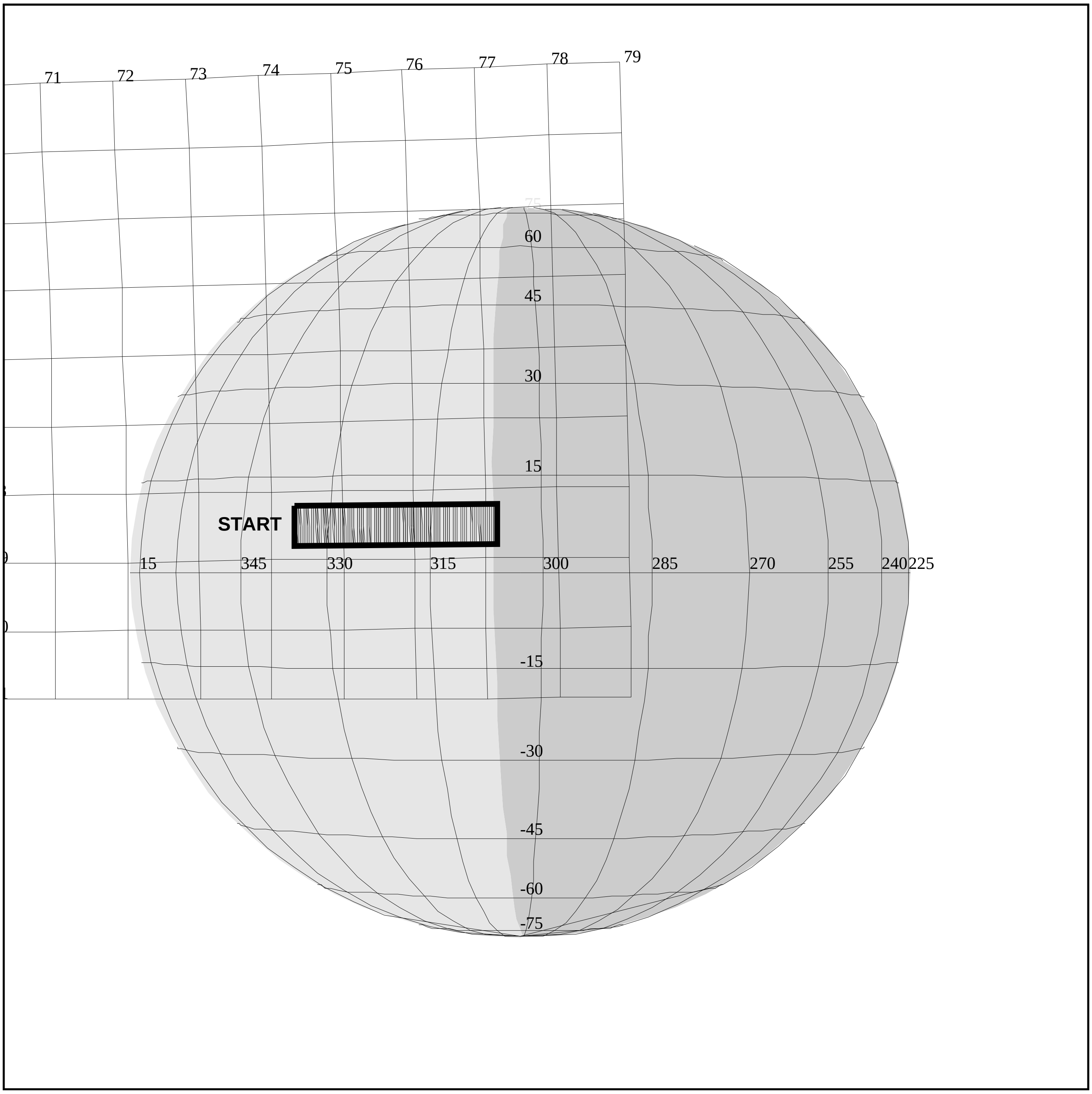
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 319 degrees west longitude, 7 degrees North latitude.
S/C distance about 0.69 million KM, NIMS IFOV (NIMSEL) = 345 KM;
4*1 mosaic covers 27600*6900 KM, about 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks.
1 minute reserved for targetting, following the PPR DARKMAP02 of Europa (28 sec target time calculated by POINTER). Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form   11/15/96 10:45:21   rev 6/95



165EQ:TT= 0 TMC= 1 C= -25.00 XC= 7.50 BS= 0/8702 TC= 1(12 320)
A= 728 pD= 0 SR=17.450 RA50= 29.93 DEC50= 14.86 cone= 74.33 clock=268.51
117EQ:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/8702
1:#s= 1 Cs= 47.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1192 rD= 2

E4JNFEA09502

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA09502

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:EEE 96-354/06:54:48.000 +CDS 0275:00:0

OBSERVATION:E4JNFEA09502

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_FEAT_CAMP_95_PHASE_02

Jupiter Camp. feat. 95 deg. phase Prt 2	ACTIVITY ID:	E4JNFEA09502-
	START TIME:	96-354/11:27:48.000

Activity ID: Orbit E4 Target J Inst N OAPEL FEA095 SeqNo 02 -

Title	Jupiter Camp. feat. 95 deg. phase Prt 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	EEE+CDS	00000270:00:0	96-354/11:27:48.000	EEE+000/04:33:00.000
End	EEE+CDS	00000281:50:0	96-354/11:39:28.666	EEE+000/04:44:40.666
Duration		00000011:50:0	000/00:11:40.666	000/00:11:40.666

Top Label E4JNFEA09502-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the second observation obtained on a rotation with phase angle approximately 95 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) 20 degrees from evening terminator, assuming feature coordinates 7 degrees North latitude and 319 degrees West longitude (System III).

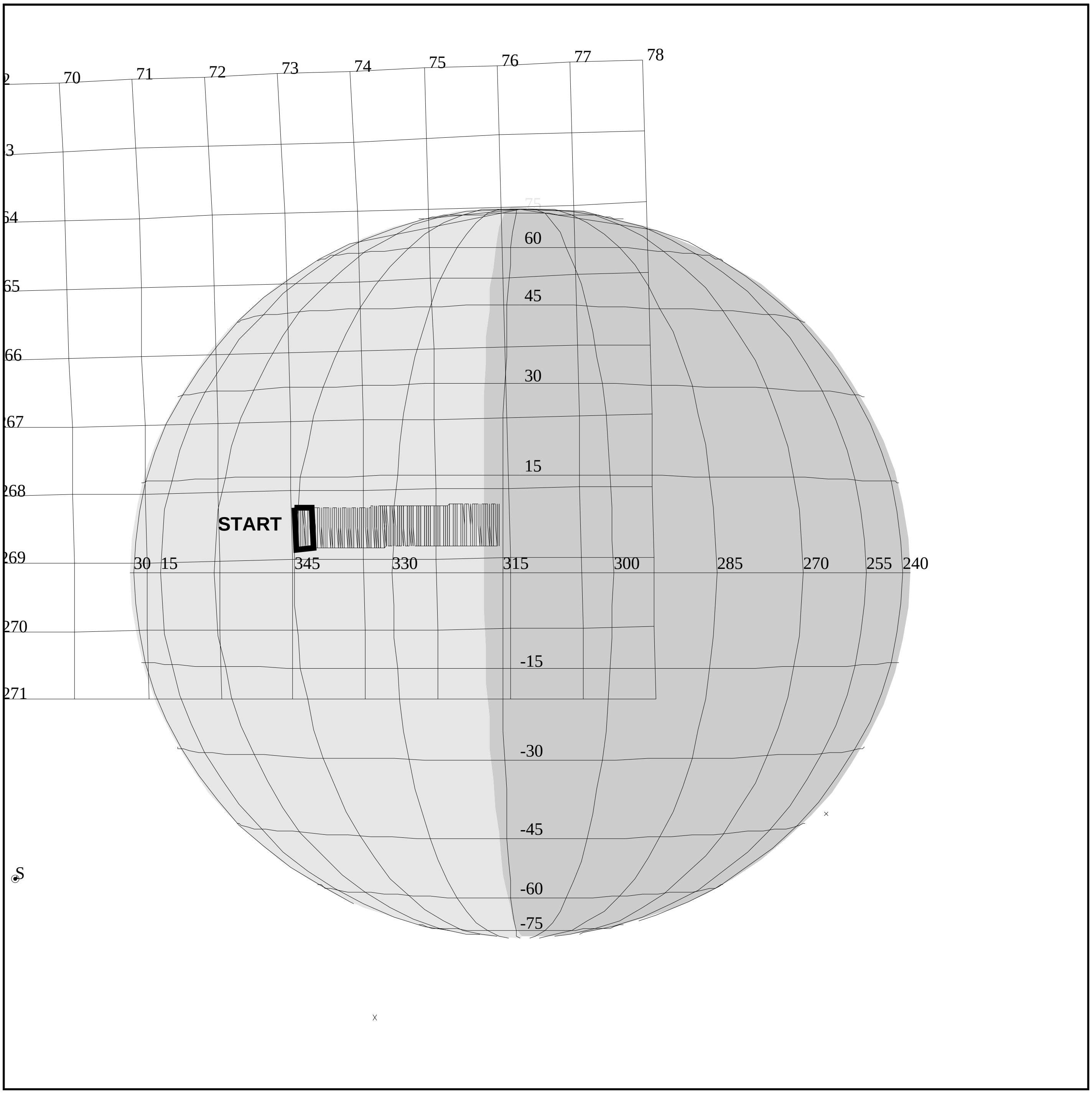
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 319 degrees west longitude, 7 degrees North latitude. S/C distance about 0.69 million KM, NIMS IFOV (NIMSEL) = 345 KM; 4*1 mosaic covers 27600*6900 KM, about 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks. 4 minutes reserved for targetting. Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95



165ER:TT= 0 TMC= 1 C= -24.00 XC= 7.75 BS= 0/1978 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50= 31.17 DEC50= 15.28 cone= 73.06 clock=268.53
117ER:#SB= 1 OR= 0.120 RR=12.000 BM=F RC= 1 BS= 0/1978
1:#s= 1 Cs= 47.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1192 rD= 2

E4JNFEA09503

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA09503

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:EEE 96-354/06:54:48.000 +CDS 0293:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA09503 **DESCRIP:E4_FEAT_CAMP_95_PHASE_03**

Jupiter Camp. feat. 95 deg. phase Prt 3	ACTIVITY ID:	E4JNFEA09503-
	START TIME:	96-354/11:46:00.000

Activity ID: Orbit E4 Target J Inst N OAPEL FEA095 SeqNo 03 -

Title	Jupiter Camp. feat. 95 deg. phase Prt 3	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	EEE+CDS	00000288:00:0	96-354/11:46:00.000	EEE+000/04:51:12.000
End	EEE+CDS	00000299:50:0	96-354/11:57:40.666	EEE+000/05:02:52.666
Duration		00000011:50:0	000/00:11:40.666	000/00:11:40.666

Top Label E4JNFEA09503-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the third observation obtained on a rotation with phase angle approximately 95 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with feature (a region of hot spots) near evening terminator, assuming feature coordinates 7 degrees North latitude and 319 degrees West longitude (System III).

Data Returned

Design Detail

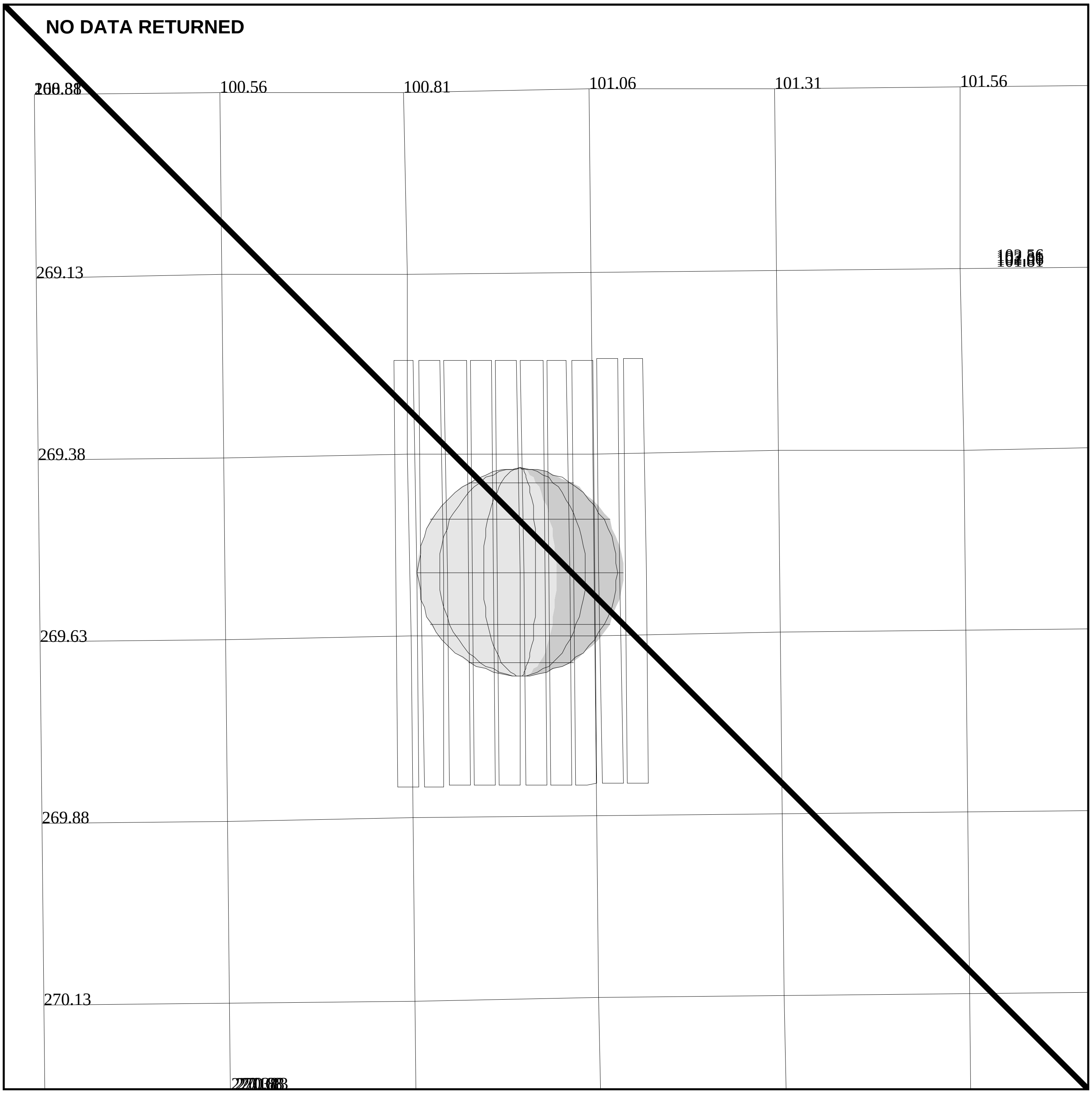
Shortmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on hot spot near 319 degrees west longitude, 7 degrees North latitude. S/C distance about 0.69 million KM, NIMS IFOV (NIMSEL) = 345 KM; 4*1 mosaic covers 27600*6900 KM, about 400 seconds of scanning, accumulating 0.1022 MBTG in 4 colors, and using 0.01344 tracks. 4 minutes reserved for targetting. Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Only 13 grating cycles at start of Swath returned.

A detector 8 wavelength was added to the playback edit table E4JFT04A, making E4JFT05A, to monitor the failed detector 8.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68A, E4JFT05A

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95



165ES:TT=   0 TMC= 1 C=   2.85 XC=   0.00 BS= 0/9814 TC= 3
A= 728 pD=   0 SR=17.450 RA50= 5.33 DEC50= 3.40 cone=101.12 clock=269.54
117ES:#SB= 1 OR= 0.050 RR=12.000 BM=F RC= 1 BS= 0/9814
1:#s= 1 Cs= -10.00 XCs=   0.00 Cr=   0.00 XCr=   0.00 sD=   504 rD=   2

E4INCHEMIS06

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCHEMIS06

TARGET BODY :   IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066   +CDS 943:00:0

OBSERVATION:E4INCHEMIS06

THINNING:NIM   2

BODY PLOT TIME:TARGET-TIME D=   0 S= 0.200

DESCRIP:IO DAYSIDE

Monitoring of Io’s Dayside	ACTIVITY ID: E4INCHEMIS06-
	START TIME: 96-354/13:25:05.399

Activity ID: Orbit E4 Target I Inst N OAPEL CHEMIS SeqNo 06 -

Title	Monitoring of Io’s Dayside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	IEE+CDS	00000938:00:0	96-354/13:25:05.399	IEE+000/15:48:25.333
End	IEE+CDS	00000945:80:0	96-354/13:33:03.399	IEE+000/15:56:23.333
Duration		00000007:80:0	000/00:07:58.000	000/00:07:58.000

Top Label	E4INCHEMIS06-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Dayside monitoring covering wide range of longitudes to look for chemical changes (e.g. SO2 distribution) at resolutions better than ~800 km/nimsel (most observations will have resolutions between 120 and 400 km/nimsel).

No Data Returned

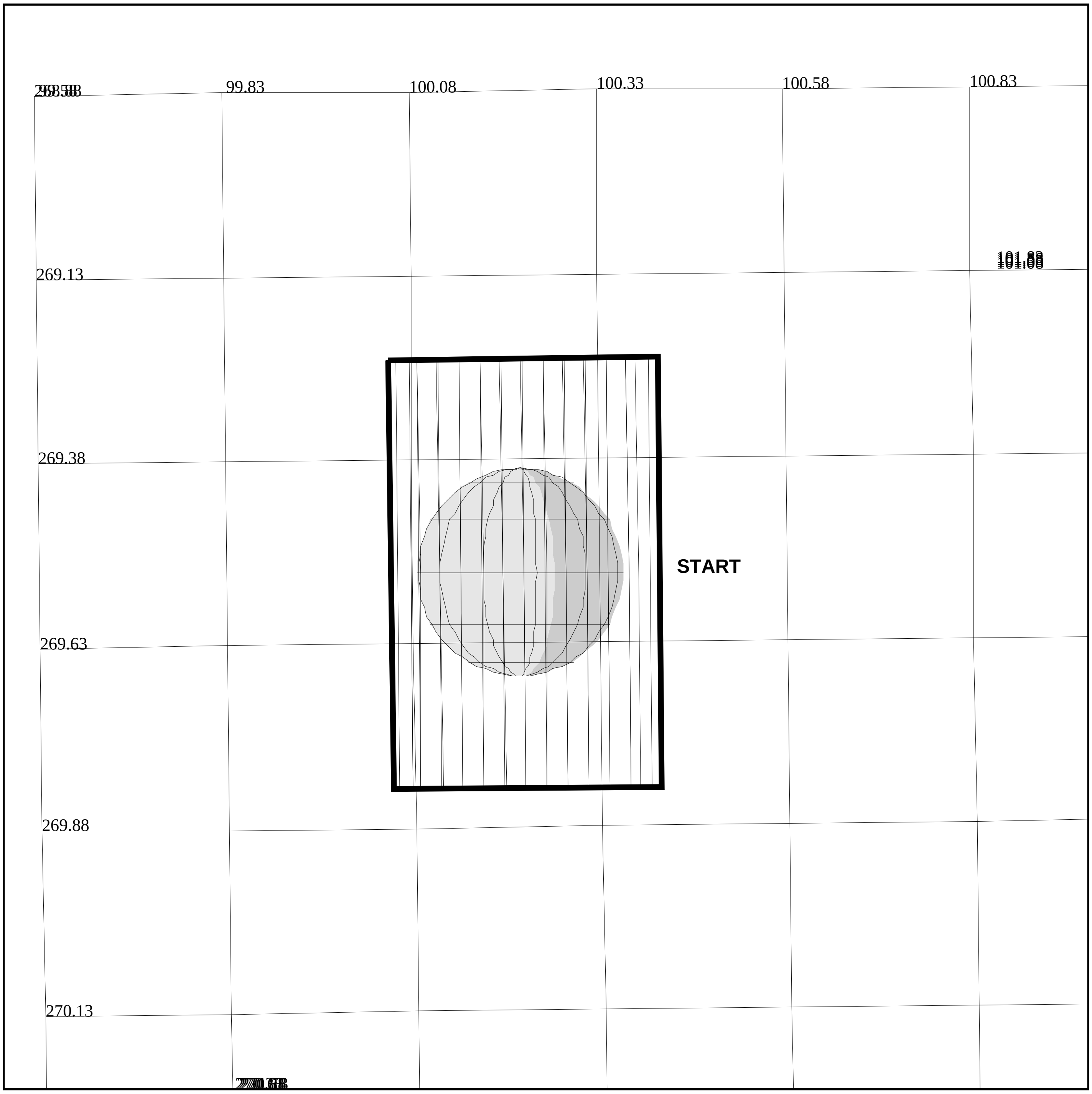
Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G2, C3, E4, E6 and E10 where resolution for lit disk is best.

Long map, 408 wavelengths.
Tracks used per orbit: 0.05 to 0.42.
Bits To Ground per orbit: 0.3 to 2.2 Mbits.
Wavelength table: ILM408, TLM: LPU.

Long Map (LM), Gain 2, Grating Start 0, MPW, E4ILM442, E4ILM408

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95



165EU:TT= 0 TMC= 1 C= 2.95 XC= 0.00 BS=30/1270 TC= 3
A= 60 pD= 0 SR= 1.000 RA50= 6.00 DEC50= 3.71 cone=100.39 clock=269.54
117EU:#SB= 1 OR= 0.750 RR= 2.580 BM=F RC= 1 BS=30/1270
1:#s= 13 Cs= -6.00 XCs= 0.00 Cr= 5.53 XCr= 0.00 sD= 36 rD= 20

E4INCOOLCV02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INCOOLCV02

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 +CDS 951:00:0

OBSERVATION:E4INCOOLCV02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:ECLIPSE INGRESS

NIMS Io Eclipse Observation (ingress) ACTIVITY ID: E4INCOOLCV02-
START TIME: 96-354/13:36:12.732

Activity ID: Orbit E4 Target I Inst N OAPEL COOLCV SeqNo 02 -

Title	NIMS Io Eclipse Observation (ingress)			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	IEE+CDS	00000949:00:0	96-354/13:36:12.732	IEE+000/15:59:32.666
End	IEE+CDS	00000964:00:0	96-354/13:51:22.732	IEE+000/16:14:42.666
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label E4INCOOLCV02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To investigate cooling of hot spots on Io’s surface as Io is eclipsed by Jupiter.

Data Returned

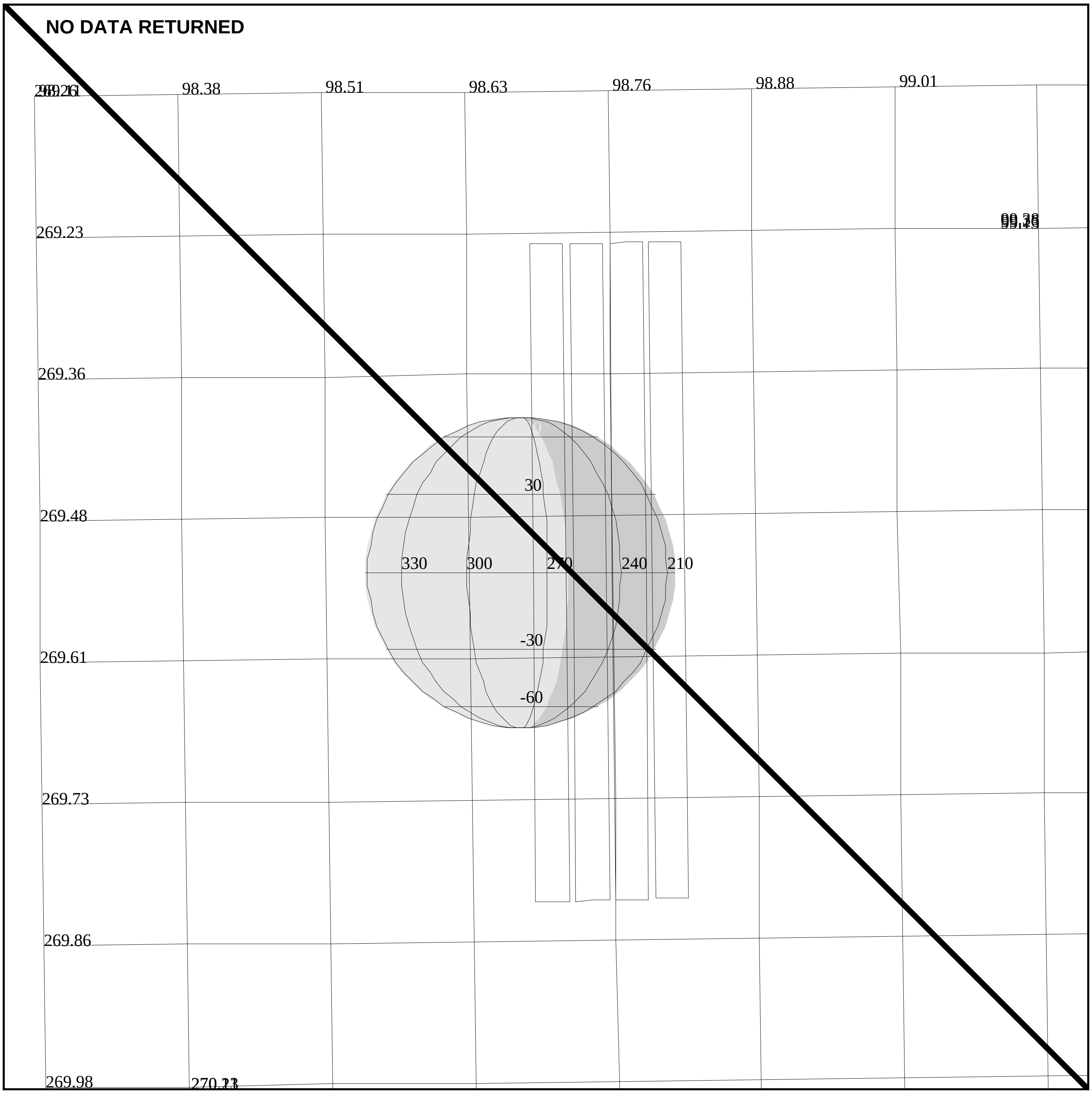
Design Detail

Instrument Mode: Fixed Map
Number of Wavelengths: 10
Wavelengths P/B: 10
Wavelength table: IXM10,
Scan back and forth across disc, 13 times
TLM: LPU

Swath numbers 2 (A), 4 (B), 7 (C) and 9 (D) selected.

Fixed Map (XM), Gain 4, Grating Start 21, LPU, E4IXM10B, E4IXM10B

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95



165EV:TT= 0 TMC= 1 C= 2.40 XC= 0.00 BS= 0/4546 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 7.43 DEC50= 4.37 cone= 98.81 clock=269.53
117EV:#SB= 1 OR= 0.050 RR=12.000 BM=F RC= 1 BS= 0/4546
1:#s= 1 Cs= -3.40 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 174 rD= 2

E4INTHRMAL01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INTHRMAL01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 +CDS 969:00:0

OBSERVATION:E4INTHRMAL01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300

DESCRIP:IO NIGHTSIDE

Monitoring of Io’s Nightside	ACTIVITY ID: E4INTHRMAL01- START TIME: 96-354/13:51:56.066

Activity ID: Orbit E4 Target I Inst N OAPEL THRMAL SeqNo 01 -

Title	Monitoring of Io’s Nightside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00000964:50:0	96-354/13:51:56.066	IEE+000/16:15:16.000
End	IEE+CDS	00000970:00:0	96-354/13:57:26.732	IEE+000/16:20:46.666
Duration		00000005:41:0	000/00:05:30.666	000/00:05:30.666

Top Label E4INTHRMAL01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Thermal monitoring of Io’s nightside covering as wide a range of longitudes as possible with resolutions better than ~800 km/nimsel. Objective is to search for and map hot spots, thermal anomalies and outbursts on the surface. Observations will also include the limb to search for auroral effects.

No Data Returned

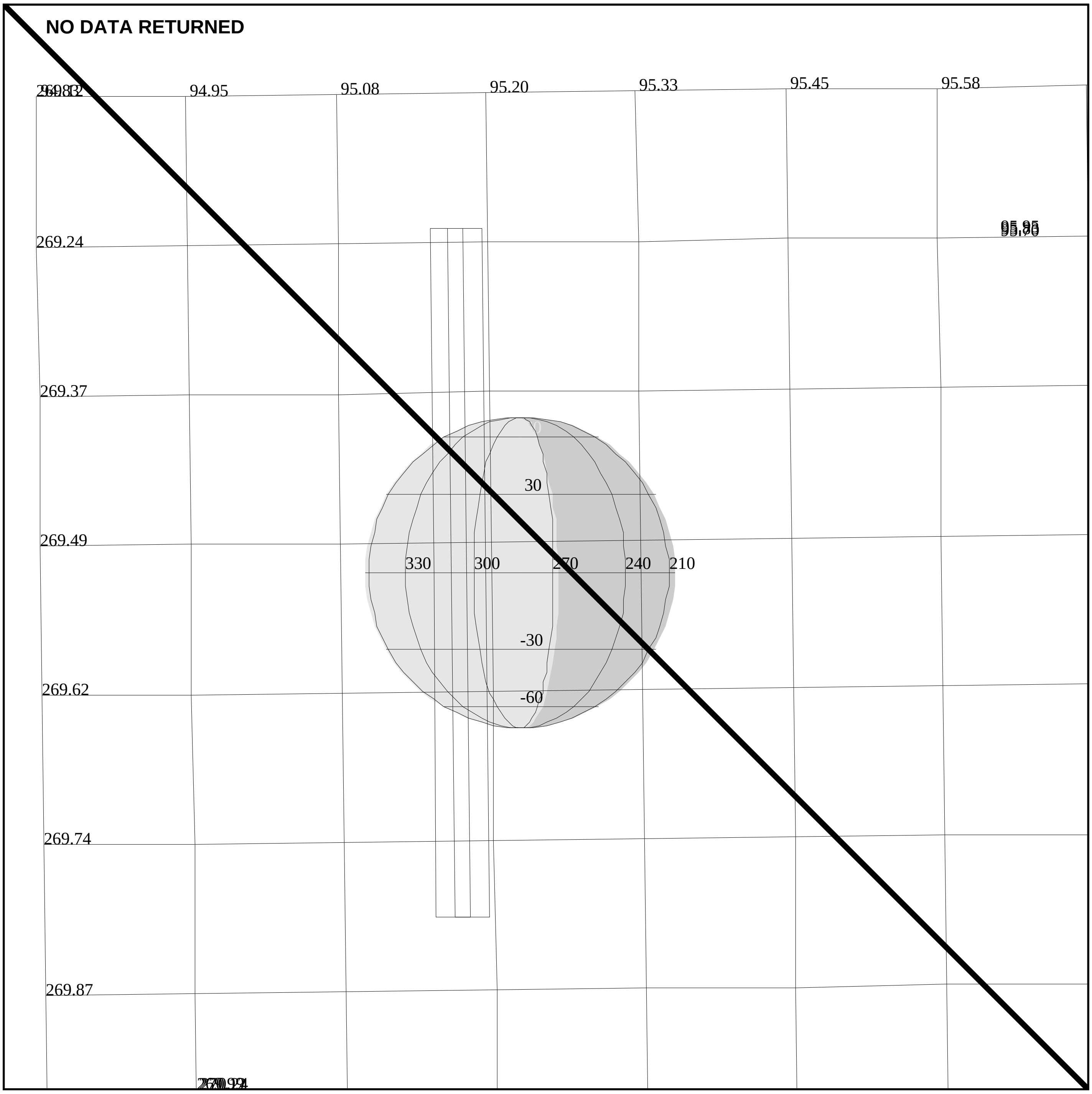
Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G1, C3, and C10 because these have the highest longitudinal coverage and orbits G7 and G8 because these have the best nighttime resolution for LOKI.

Instrument mode: Long Map.
Number of Wavelengths: 102.
Tracks used per orbit: 0.01 to 0.1.
Bits To Ground used per orbit: 0.01 to 0.5 Mbits.
Wavelength table: ILM102.
TLM: LPU.

Long Map (LM), Gain 4, Grating Start 0, LPU, E4ILMDK245, E4ILMDK102

Galileo Activity Plan Form 11/15/96 10:45:21 rev 6/95



165EW:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/1826 TC= 1(0.0 300.0)
A= 728 pD= 0 SR=17.450 RA50= 10.74 DEC50= 5.89 cone= 95.19 clock=269.52
117EW:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/1826
1:#s= 1 Cs= -1.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 80 rD= 2

E4INVOLCAN01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INVOLCAN01

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 96-353/21:36:40.066 +CDS 1009:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300

OBSERVATION:E4INVOLCAN01

DESCRIP:IO VOLCANOES

Monitoring of Selected Volcanic Regions ACTIVITY ID: E4INVOLCAN01-
START TIME: 96-354/14:31:49.399

Activity ID: Orbit E4 Target I Inst N OAPEL VOLCAN SeqNo 01 -

Title	Monitoring of Selected Volcanic Regions		Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00001004:00:0	96-354/14:31:49.399	IEE+000/16:55:09.333
End	IEE+CDS	00001010:00:0	96-354/14:37:53.399	IEE+000/17:01:13.333
Duration		00000006:00:0	000/00:06:04.000	000/00:06:04.000

Top Label E4INVOLCAN01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	153	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To monitor time variations in activity of selected regions
(Loki, Pelee, Kanehekili) using selected wavelengths.

No Data Returned

Design Detail

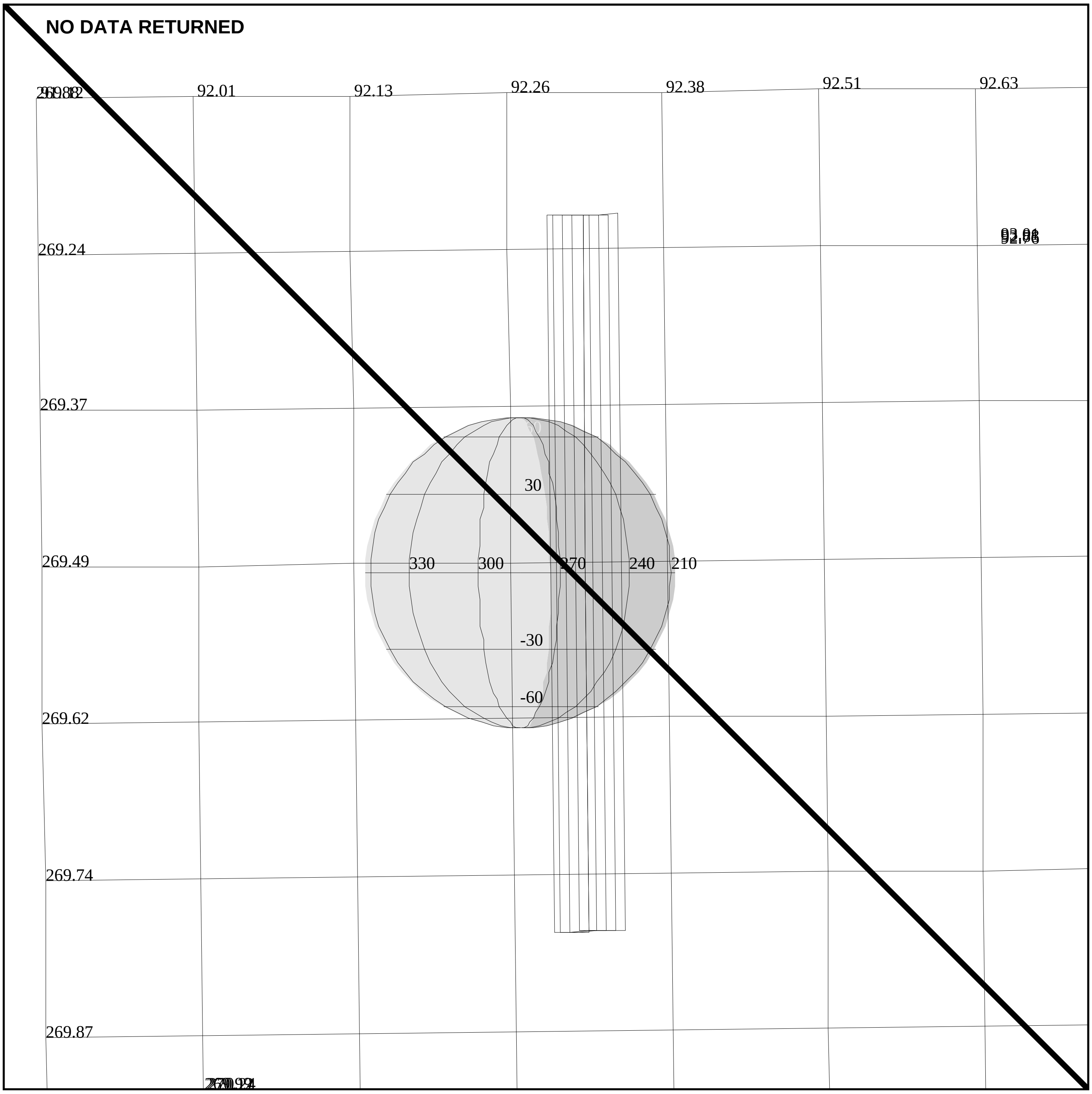
Long Map, 102 wavelengths, 30 secs duration (or less).
Orbit 7 is high priority for Loki region,
will be seen at the best nightside resolution (278 km).
~ 5 observations per orbit.
Tracks: 0.005 per observation.

Locations of features:
- Kanehekili (-10 d. lat. +40 d. long.)
- Pelee (-20 d. lat. -255 d. long.)
- Loki (+12 d. lat. 310 d. long.)

Wavelength table: ILM102
TLM: LPU

Long Map (LM), Gain 2, Grating Start 0, LPU, E4ILM245, E4ILM102

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95



165EX:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/8196 TC= 1(0.0 250.0)
A= 728 pD= 0 SR=17.450 RA50= 13.36 DEC50= 7.06 cone= 92.33 clock=269.50
117EX:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/8196
1:#s= 1 Cs= -1.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 118 rD= 2

E4INVOLCAN02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INVOLCAN02

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 +CDS 1044:00:0

OBSERVATION:E4INVOLCAN02

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300

DESCRIP:IO VOLCANOES

Monitoring of Selected Volcanic Regions	ACTIVITY ID:	E4INVOLCAN02-
	START TIME:	96-354/15:07:12.732

Activity ID: Orbit E4 Target I Inst N OAPEL VOLCAN SeqNo 02 -

Title	Monitoring of Selected Volcanic Regions	Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES Team NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00001039:00:0	96-354/15:07:12.732	IEE+000/17:30:32.666
End	IEE+CDS	00001045:00:0	96-354/15:13:16.732	IEE+000/17:36:36.666
Duration		00000006:00:0	000/00:06:04.000	000/00:06:04.000

Top Label E4INVOLCAN02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	153	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To monitor time variations in activity of selected regions
(Loki, Pelee, Kanehekili) using selected wavelengths.

No Data Returned

Design Detail

Long Map, 228 wavelengths, 30 secs duration (or less).
Orbit 7 is high priority for Loki region,
will be seen at the best nightside resolution (278 km).
~ 5 observations per orbit.
Tracks: 0.005 per observation.

Locations of features:	Kanehekili	(-10 d. lat. +40 d. long.)
	Pelee	(-20 d. lat. -255 d. long.)
	Loki	(+12 d. lat. 310 d. long.)

Wavelength table: ILMDK228
TLM: LPU

Long Map (LM), Gain 4, Grating Start 0, LPU, E4ILMDK245, E4ILMDK228

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95

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Reload NIMS Memory	ACTIVITY ID: E4NNRELOAD07- START TIME: 96-354/15:30:28.000

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 07 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	EEE+CDS	00000510:00:0	96-354/15:30:28.000	EEE+000/08:35:40.000
End	EEE+CDS	00000525:00:0	96-354/15:45:38.000	EEE+000/08:50:50.000
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label E4NNRELOAD07-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

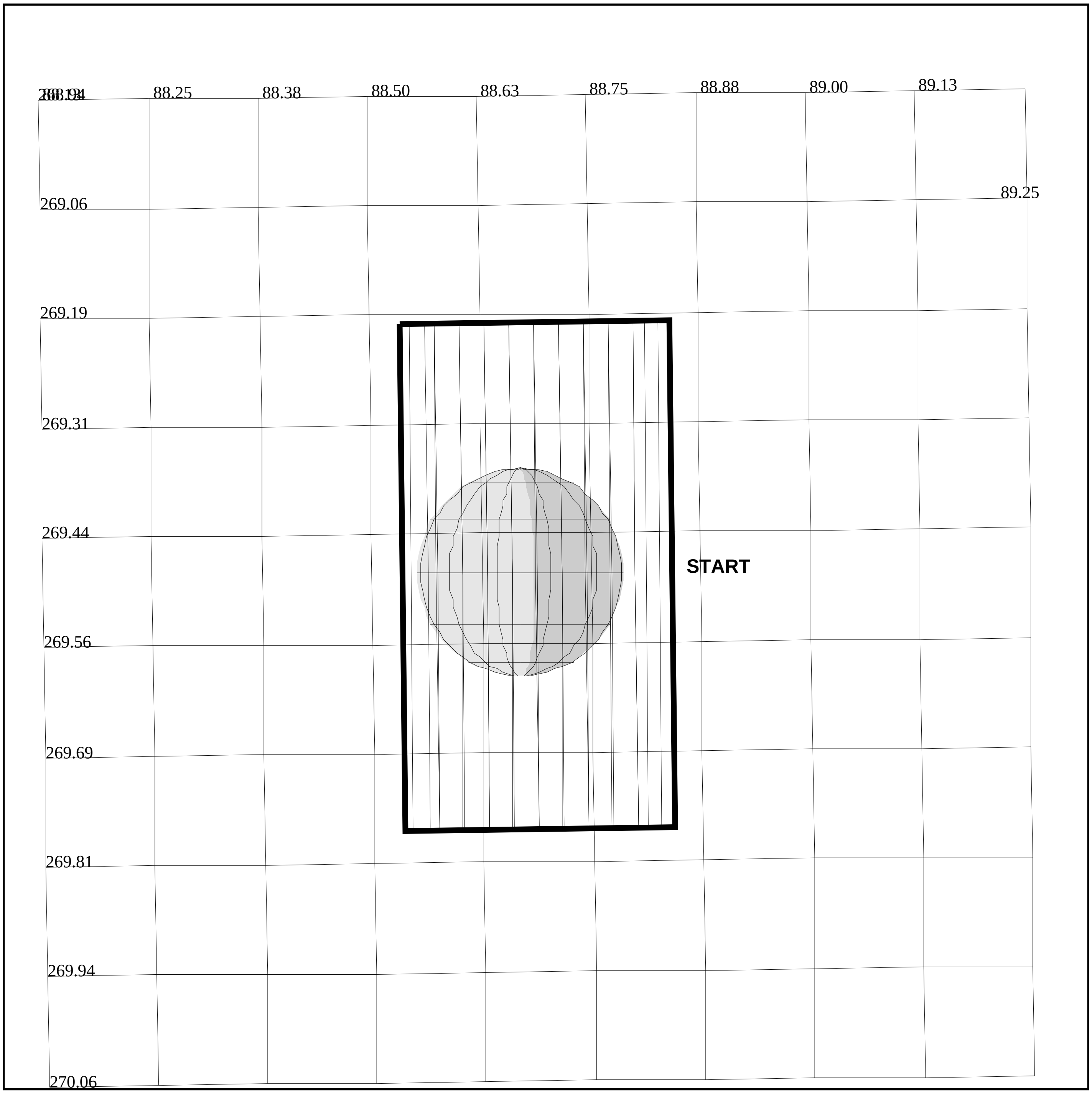
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95



165EY:TT= 0 TMC= 1 C= 2.50 XC= 0.00 BS=30/6022 TC= 3
A= 60 pD= 0 SR=17.450 RA50= 16.60 DEC50= 8.49 cone= 88.82 clock=269.48
117EY:#SB= 1 OR= 0.750 RR= 2.580 BM=F RC= 1 BS=30/6022
1:#s= 30 Cs= -5.00 XCs= 0.00 Cr= 4.60 XCr= 0.00 sD= 34 rD= 18

E4INWARMCV03

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INWARMCV03

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 +CDS 1087:00:0

OBSERVATION:E4INWARMCV03

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:ECLIPSE INGRESS

NIMS Io Eclipse Observation (egress) ACTIVITY ID: E4INWARMCV03-
START TIME: 96-354/15:53:43.399

Activity ID: Orbit E4 Target I Inst N OAPEL WARMCV SeqNo 03 -

Title	NIMS Io Eclipse Observation (egress)			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00001085:00:0	96-354/15:53:43.399	IEE+000/18:17:03.333
End	IEE+CDS	00001100:00:0	96-354/16:08:53.399	IEE+000/18:32:13.333
Duration		00000015:00:0	000/00:15:10.000	000/00:15:10.000

Top Label E4INWARMCV03-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To investigate warming of hot spots on Io’s surface as Io is eclipsed by Jupiter.

Data Returned

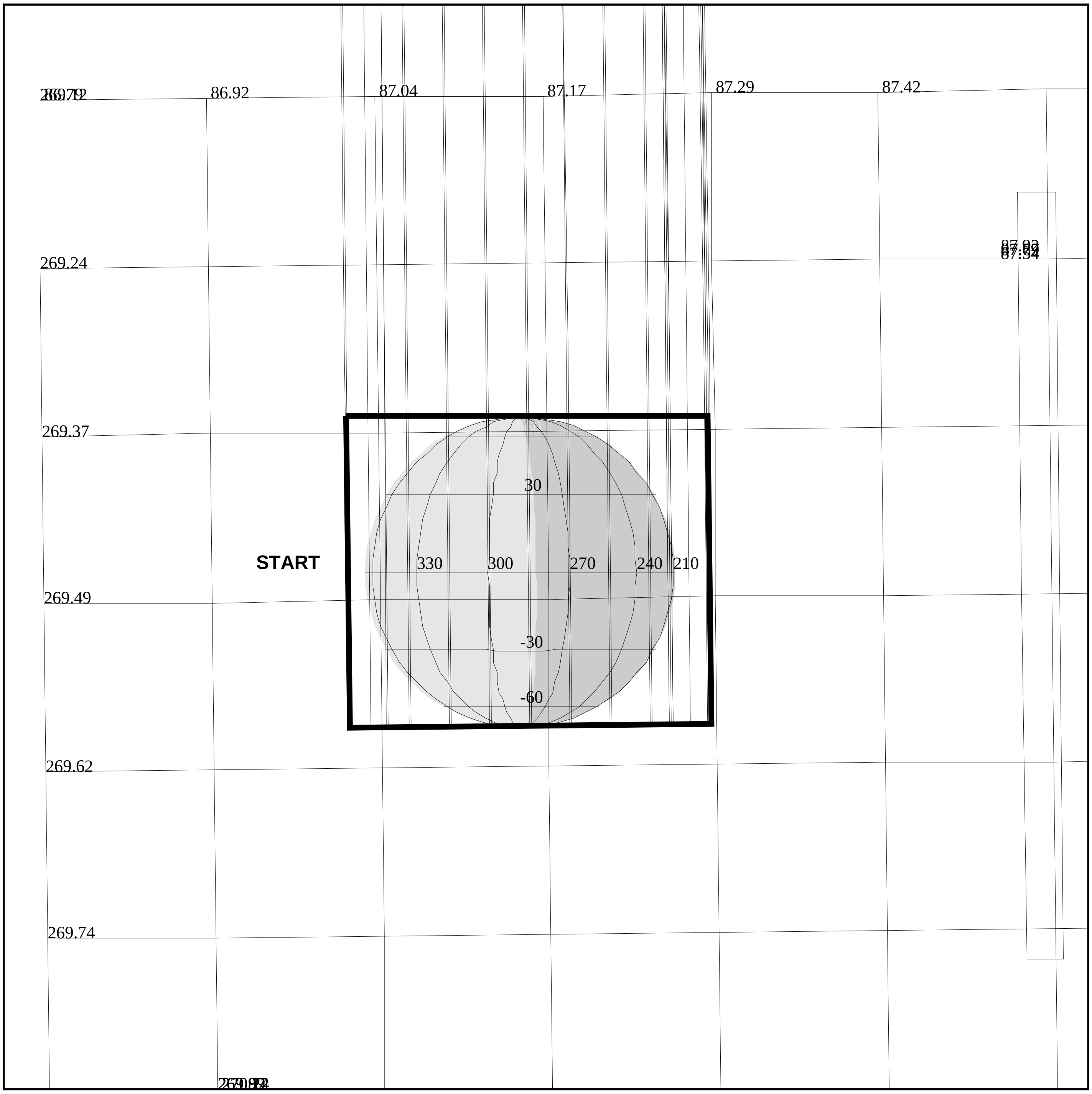
Design Detail

Instrument Mode: Fixed Map,
Number of wavelengths: 10
Wavelengths,P/B: 10,
Wavelength table: IXM10,
Scan back and forth across disc, 30 times
TLM: LPU

Swath numbers 2 (A), 6 (B), 10 (C), 14 (D),
Swath numbers 18 (E), 22 (F), 26 (G) and 29 (H) selected.

Fixed Map (XM), Gain 2, Grating Start 21, LPU, E4IXM10B, E4IXM10B

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95



165FS:TT= 0 TMC= 1 C= -2.00 XC= -3.00 BS= 0/9480 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 18.18 DEC50= 9.37 cone= 87.03 clock=269.30
117FS:#SB= 1 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/9480
1:#s= 1 Cs= 4.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 28 rD= 2

E4INRTIMON02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INRTIMON02

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 96-353/21:36:40.066 +CDS 1106:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300**

OBSERVATION:E4INRTIMON02 **DESCRIP:REAL TIME IO MONORING**

Real Time Io monoring ACTIVITY ID: E4INRTIMON02-
START TIME: 96-354/16:09:54.066

Activity ID: Orbit E4 Target I Inst N OAPEL RTIMON SeqNo 02 -

Title	Real Time Io monoring			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/19/96 Week 51

Start	IEE+CDS	00001101:00:0	96-354/16:09:54.066	IEE+000/18:33:14.000
End	IEE+CDS	00001109:00:0	96-354/16:17:59.399	IEE+000/18:41:19.333
Duration		00000008:00:0	000/00:08:05.333	000/00:08:05.333

Top Label E4INRTIMON02
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Observation of Io’s nightside to map hot spots and look for thermal changes on the surface.

Data Returned

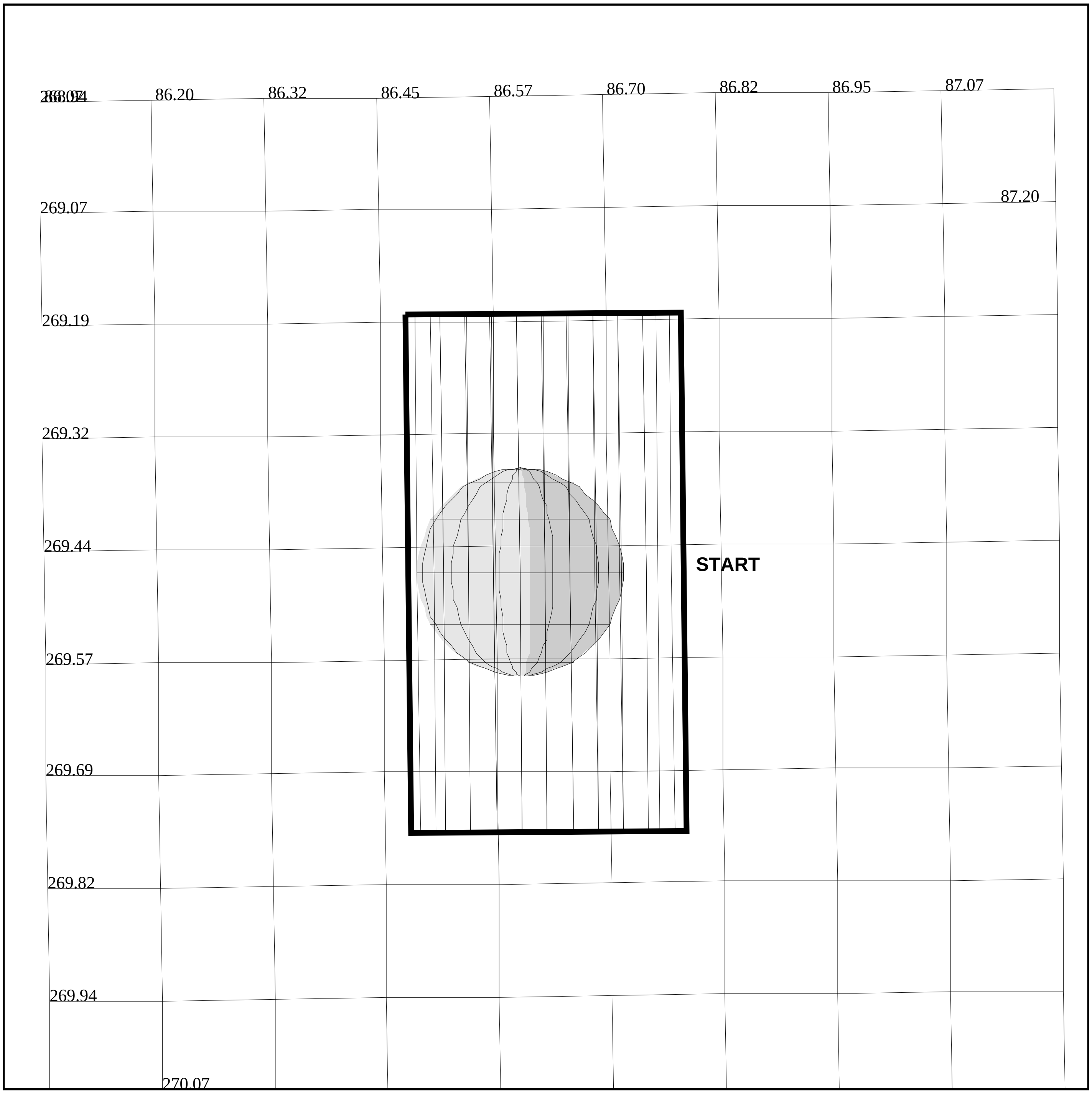
Design Detail

Observation duration per rim: 12 minor frames.
These 12 minor frames must be the first 12 of a rim.
NIMS mirror scan cut from 20 to 8.
Fixed map, 8 wavelengths.
MBTG = 0.017 R/T = 3.5 % MUB.
Offset target center by 2 mrad in cone, either direction.
8 mirror positions will get 23 fields of view, use double Nyquist.
Design the observation to bias toward the bottom of the scan, i.e., cover the satellite with the bottom mirrors accounting for pointing uncertainty. Plot all 20 mirror positions.

Mirror Blocked (1C,07) (11100,00111)

Fixed Map (XM), Gain 2, Grating Start 21, RT, E4IXM8RT

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95



165EZ:TT= 0 TMC= 1 C= 2.40 XC= 0.00 BS=70/0572 TC= 3
A= 464 pD= 0 SR=17.450 RA50= 18.53 DEC50= 9.33 cone= 86.74 clock=269.47
117EZ:#SB= 1 OR= 0.750 RR= 1.400 BM=F RC= 1 BS=70/0572
1:#s= 7 Cs= -5.00 XCs= 0.00 Cr= 4.60 XCr= 0.00 sD= 36 rD= 26

E4INWARMCV04

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INWARMCV04

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 +CDS 1112:00:0

OBSERVATION:E4INWARMCV04

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:ECLIPSE EGRESS

NNIMS Io Eclipse Obs. (post-egress)	**ACTIVITY ID: E4INWARMCV04-** **START TIME: 96-354/16:19:00.066**

Activity ID: Orbit E4 Target I Inst N OAPEL WARMCV SeqNo 04 -

Title	NNIMS Io Eclipse Obs. (post-egress)		Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	IEE+CDS	00001110:00:0	96-354/16:19:00.066	IEE+000/18:42:20.000
End	IEE+CDS	00001115:20:0	96-354/16:24:16.732	IEE+000/18:47:36.666
Duration		00000005:20:0	000/00:05:16.666	000/00:05:16.666

Top Label E4INWARMCV04-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To investigate warming of hot spots on Io's surface as Io is eclipsed by Jupiter.

Data Returned

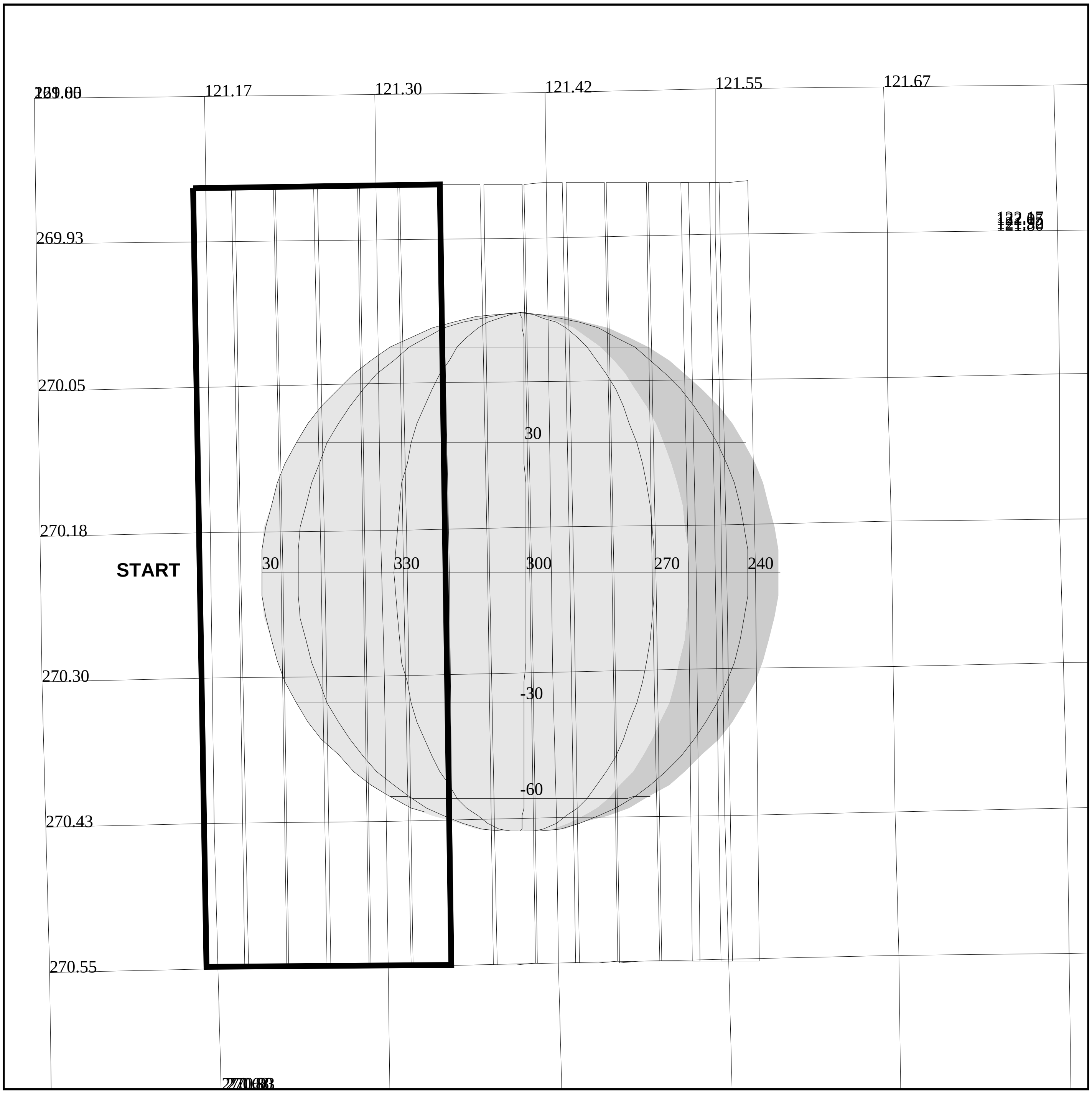
Design Detail

Instrument Mode: Fixed Map
Number of wavelengths: 10
Wavelengths P/B: 10
Wavelength table: IXM10,
Scan back and forth across disc, 7 times
TLM: LPU

Swath numbers 1 (A), 3 (B), 5 (C), and 7 (D) selected.

Fixed Map (XM), Gain 2, Grating Start 21, LPU, E4IXM10B, E4IXM10B

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95



165FZ:TT= 0 TMC= 1 C= -4.00 XC= 0.00 BS= 0/2068 TC= 3
A= 728 pD= 0 SR=17.450 RA50=347.35 DEC50= -5.51 cone=121.17 clock=270.21
117FZ:#SB= 1 OR= 0.010 RR=17.000 BM=F RC= 1 BS= 0/2068
1:#s= 1 Cs= 2.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 696 rD= 2

E4GNGLOBAL01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4GNGLOBAL01

TARGET BODY : GANYMEDE

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:GEE 96-354/20:13:34.666 -CDS 02:00:0

OBSERVATION:E4GNGLOBAL01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.500

DESCRIP:GANYMEDE GLOBAL MAP

Ganymede Global Map	ACTIVITY ID: E4GNGLOBAL01- START TIME: 96-354/20:06:30.000

Activity ID: Orbit E4 Target G Inst N OAPEL GLOBAL SeqNo 01 -

Title	Ganymede Global Map			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/19/96	Week	51

Start	GEE-CDS	00000007:00:0	96-354/20:06:30.000	GEE-000/00:07:04.666
End	GEE+CDS	00000002:00:0	96-354/20:15:35.999	GEE+000/00:02:01.333
Duration		00000009:00:0	000/00:09:05.999	000/00:09:05.999

Top Label E4GNGLOBAL01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	200	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Objective is to understand the global distribution of chemical composition over the surface of Ganymede.

Data Returned

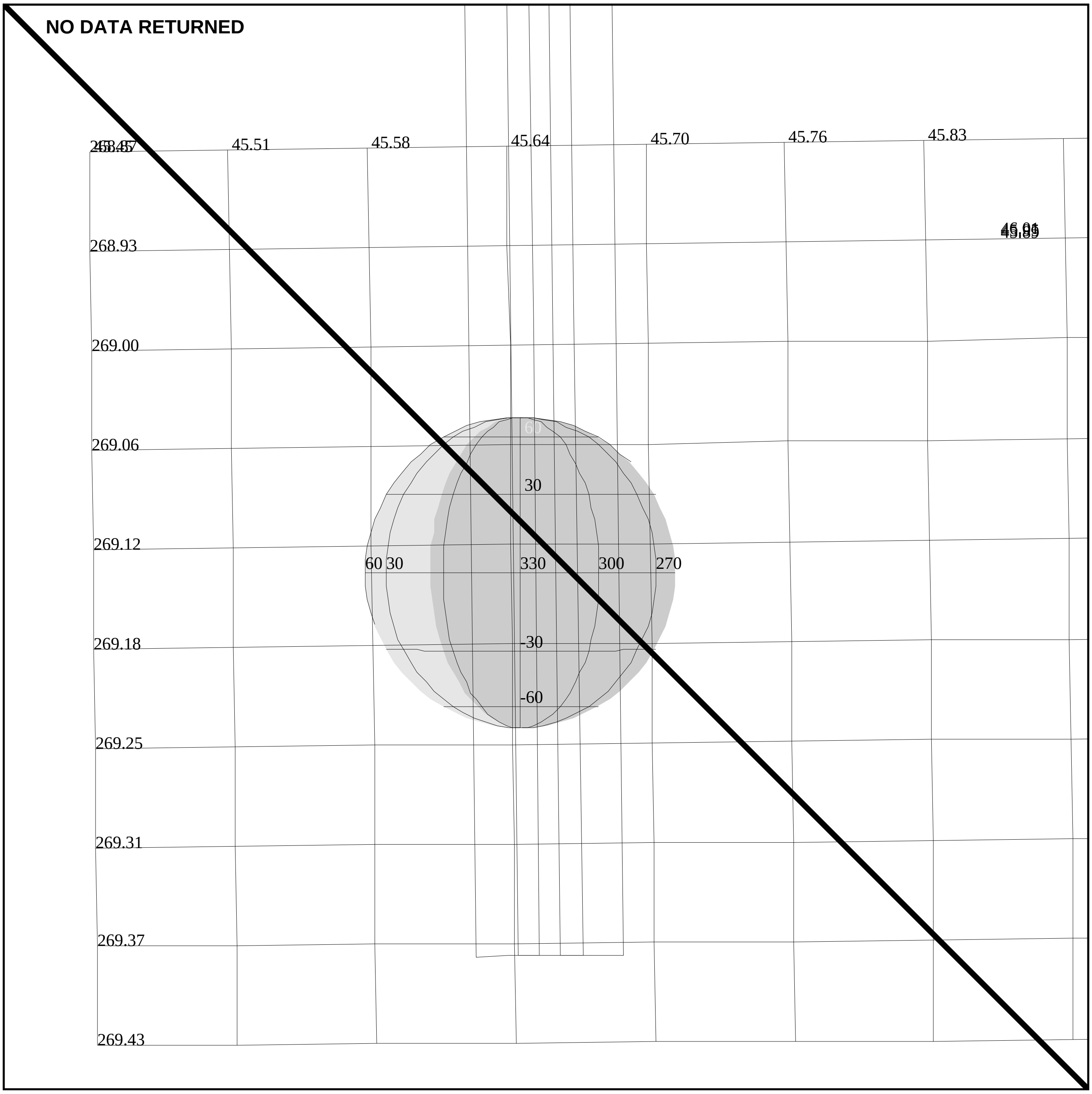
Design Detail

This one of a series of global observations to cover the entire surface of Ganymede. This observation covers longitude 245 to 30 at resolution of ~400 km per NIMS pixel. NIMS in LM mode, gain state 3, chopper reference.
Scan platform slew at 0.03 mrad/sec.
Recording in MPW 442 wavelengths and plan to return 204 wavelengths.

Only first third of Swath returned to pick up Longitudinal Coverage.

Long Map (LM), Gain 3, Grating Start 0, MPW, E4GLM442, E4GLM204

Galileo Activity Plan Form 11/15/96 10:45:22 rev 6/95



165FB:TT=   0 TMC= 1 C=   -0.30 XC=   -2.00 BS= 0/5950 TC= 3
A= 728 pD=   0 SR=17.450 RA50= 59.20 DEC50= 22.53 cone= 45.63 clock=268.98
117FB:#SB= 1 OR= 0.020 RR=12.000 BM=F RC= 1 BS= 0/5950
1:#s= 1 Cs=   0.51 XCs=   0.00 Cr=   0.00 XCr=   0.00 sD=   82 rD=   2

E4INVOLCAN03

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INVOLCAN03

TARGET BODY :   IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066   +CDS 1691:00:0

OBSERVATION:E4INVOLCAN03

THINNING:NIM   1

BODY PLOT TIME:TARGET-TIME D=   0 S= 0.300

DESCRIP:IO VOLCANOES

Monitoring of Selected Volcanic Regions	ACTIVITY ID:	E4INVOLCAN03-
	START TIME:	96-355/02:01:24.066

Activity ID: Orbit E4 Target I Inst N OAPEL VOLCAN SeqNo 03 -

Title	Monitoring of Selected Volcanic Regions		Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team NIMS	Working Group	SWG

Time System CDS   Load ID E4A   Calendar Date 12/20/96 Week 51

Start	IEE+CDS	00001686:00:0	96-355/02:01:24.066	IEE+001/04:24:44.000
End	IEE+CDS	00001692:00:0	96-355/02:07:28.066	IEE+001/04:30:48.000
Duration		00000006:00:0	000/00:06:04.000	000/00:06:04.000

Top Label   E4INVOLCAN03-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	153	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To monitor time variations in activity of selected regions
(Loki, Pelee, Kanehekili) using selected wavelengths.

No Data Returned

Design Detail

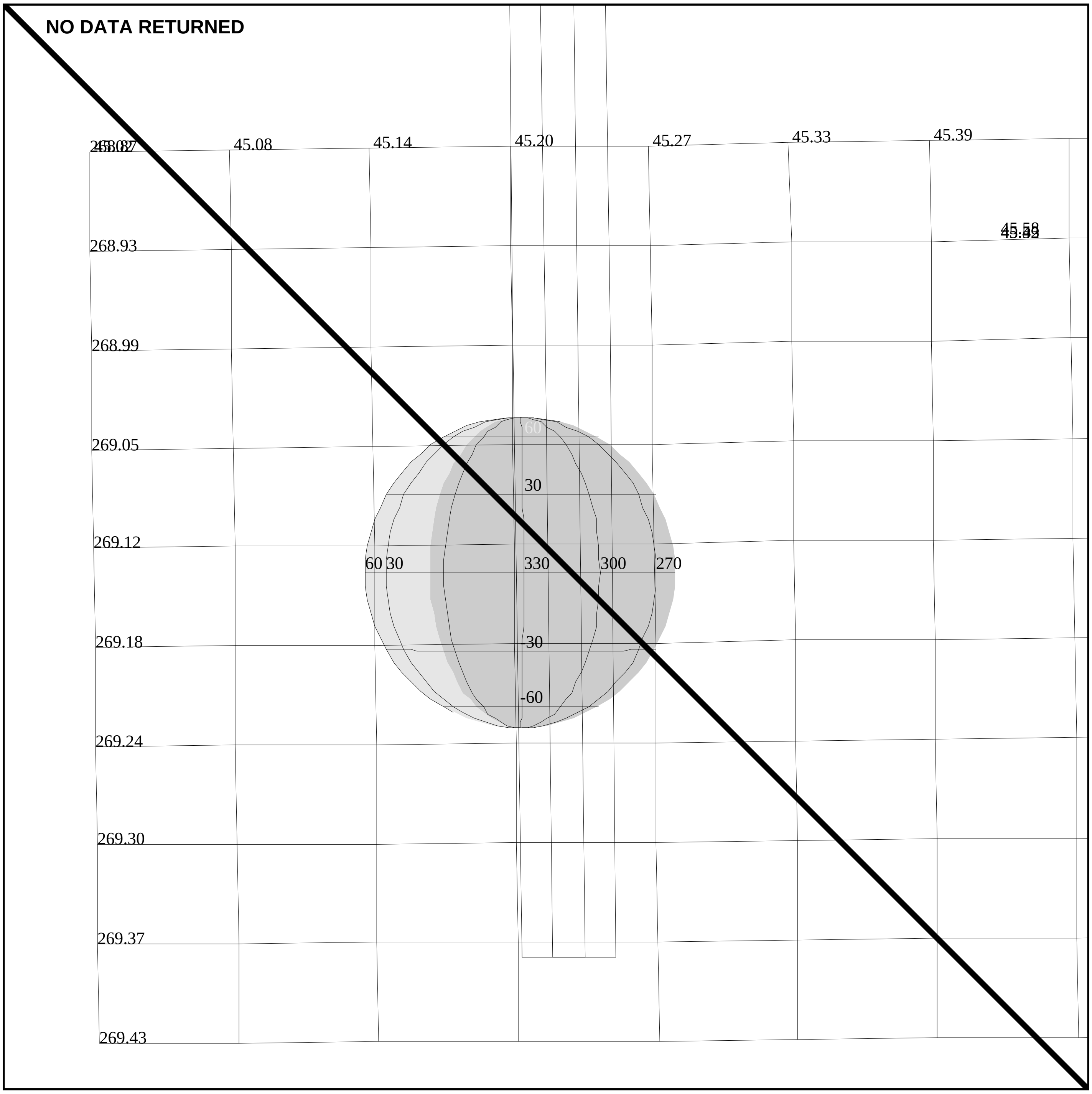
Long Map, 102 wavelengths, 30 secs duration (or less).
Orbit 7 is high priority for Loki region,
will be seen at the best nightside resolution (278 km).
~ 5 observations per orbit.
Tracks: 0.005 per observation.

Locations of features: Kanehekili (-10 d. lat. +40 d. long.)
Pelee   (-20 d. lat. -255 d. long.)
Loki   (+12 d. lat. 310 d. long.)

Wavelength table: ILMDK102,
TLM: LPU

Long Map (LM), Gain 4, Grating Start 0, LPU, E4ILMDK245, E4ILMDK102

Galileo Activity Plan Form   11/15/96 10:45:22   rev 6/95



165FC:TT= 0 TMC= 1 C= 0.10 XC= -2.00 BS= 0/7224 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 59.64 DEC50= 22.62 cone= 45.21 clock=268.97
117FC:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/7224
1:#s= 1 Cs= 0.20 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 64 rD= 2

E4INVOLCAN04

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INVOLCAN04

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 1**

START:IEE 96-353/21:36:40.066 +CDS 1698:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.300**

OBSERVATION:E4INVOLCAN04 **DESCRIP:IO VOLCANOES**

Monitoring of Selected Volcanic Regions ACTIVITY ID: E4INVOLCAN04-
START TIME: 96-355/02:08:28.732

Activity ID: Orbit E4 Target I Inst N OAPEL VOLCAN SeqNo 04 -

Title	Monitoring of Selected Volcanic Regions			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	IEE+CDS 00001693:00:0	96-355/02:08:28.732	IEE+001/04:31:48.666
End	IEE+CDS 00001698:53:0	96-355/02:14:07.399	IEE+001/04:37:27.333
Duration	00000005:53:0	000/00:05:38.667	000/00:05:38.667

Top Label E4INVOLCAN04-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	153	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To monitor time variations in activity of selected regions
(Loki, Pelee, Kanehekili) using selected wavelengths.

No Data Returned

Design Detail

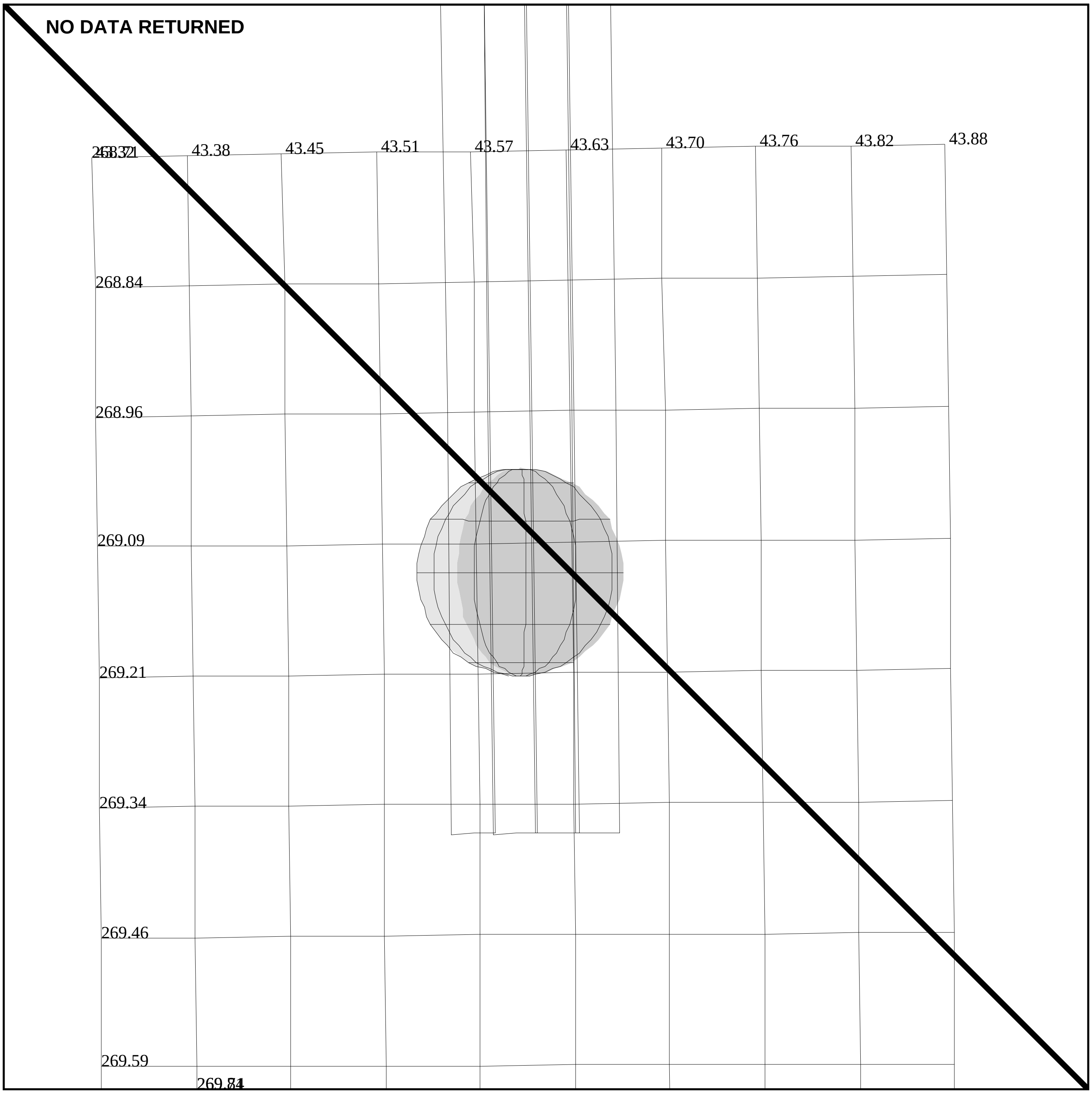
Long Map, 102 wavelengths, 30 secs duration (or less).
Orbit 7 is high priority for Loki region,
will be seen at the best nightside resolution (278 km).
~ 5 observations per orbit.
Tracks: 0.005 per observation.

Locations of features: Kanehekili (-10 d. lat. +40 d. long.)
Pelee (-20 d. lat. -255 d. long.)
Loki (+12 d. lat. 310 d. long.)

Wavelength table: ILMDK102,
TLM: LPU

Long Map (LM), Gain 4, Grating Start 0, LPU, E4ILMDK245, E4ILMDK102

Galileo Activity Plan Form 11/15/96 10:45:23 rev 6/95



165FE:TT= 0 TMC= 1 C= -0.70 XC= -2.00 BS= 0/1956 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 61.39 DEC50= 22.94 cone= 43.56 clock=268.95
117FE:#SB= 1 OR= 0.010 RR=12.000 BM=F RC= 1 BS= 0/1956
1:#s= 1 Cs= 0.70 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 214 rD= 2

E4INTHRMAL02

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4INTHRMAL02

TARGET BODY : IO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:IEE 96-353/21:36:40.066 +CDS 1724:00:0

OBSERVATION:E4INTHRMAL02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:IO NIGHTSIDE

Monitoring of Io’s Nightside — ACTIVITY ID: E4INTHRMAL02- — START TIME: 96-355/02:34:46.066

Activity ID: Orbit E4 Target I Inst N OAPEL THRMAL SeqNo 02 -

Title	Monitoring of Io’s Nightside			Instrument	NIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System CDS   Load ID E4A   Calendar Date 12/20/96   Week 51

Start	IEE+CDS	00001719:00:0	96-355/02:34:46.066	IEE+001/04:58:06.000
End	IEE+CDS	00001725:40:0	96-355/02:41:16.732	IEE+001/05:04:36.666
Duration		00000006:40:0	000/00:06:30.666	000/00:06:30.666

Top Label E4INTHRMAL02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	128	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Thermal monitoring of Io’s nightside covering as wide a range of longitudes as possible with resolutions better than ~800 km/nimsel. Objective is to search for and map hot spots, thermal anomalies and outbursts on the surfac Observations will also include the limb to search for auroral effects.

No Data Returned

Design Detail

Partial or full disk mosaics within C/A + or - 32 hours in all orbits. High priority orbits are G1, C3, and C10 because these have the highest longitudinal coverage and orbits G7 and G8 because these have the best nighttime resolution for LOKI.

Instrument mode: Long Map,
Number of Wavelengths: 102,
Tracks used per orbit: 0.01 to 0.1,
Bits To Ground used per orbit: 0.01 to 0.5 Mbits.
Wavelength table: ILMDK102,
TLM: LPU

Long Map (LM), Gain 4, Grating Start 0, LPU, E4ILMDK245, E4ILMDK102

Galileo Activity Plan Form   11/15/96 10:45:23   rev 6/95

Jupiter High Phase Angle Science Turn **ACTIVITY ID: E4JNSCITRN01-**
START TIME: 96-355/03:59:42.000

Activity ID: Orbit E4 Target J Inst N OAPEL SCITRN SeqNo 01 -

Title	Jupiter High Phase Angle Science Turn	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	EEE+CDS	00001251:00:0	96-355/03:59:42.000	EEE+000/21:04:54.000
End	EEE+CDS	00002078:00:0	96-355/17:55:53.333	EEE+001/11:01:05.333
Duration		00000827:00:0	000/13:56:11.333	000/13:56:11.333

Top Label E4JNSCITRN01-
Bottom Label

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

Observation Objective

18:10:00 Science turn window for AWG observations of Jupiter at 148 -160 degrees phase angle. Observations within this window should refer to epoch JHP (Jupiter High Phase) for 148 degrees observation and epoch JSP for 160 degrees observation.

Design Detail

3 hours assumed to enter the turn, 3 hours to leave it, 0.5 additional hours assumed at both beginning and end for the sliding observation window required to ensure observations of the feature campaign target. Nominal observing period for nominal target at 330 degrees west longitude:
JPE+001/03:30:00 to JPE+001/14:40:00

Galileo Activity Plan Form 11/15/96 10:45:23 rev 6/95

Reload NIMS Memory	ACTIVITY ID: E4NNRELOAD08- START TIME: 96-355/06:29:20.666

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 08 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	12/20/96	Week 51

Start	EEE+CDS	00001399:00:0	96-355/06:29:20.666	EEE+000/23:34:32.666
End	EEE+CDS	00001415:00:0	96-355/06:45:31.333	EEE+000/23:50:43.333
Duration		00000016:00:0	000/00:16:10.667	000/00:16:10.667

Top Label	E4NNRELOAD08-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

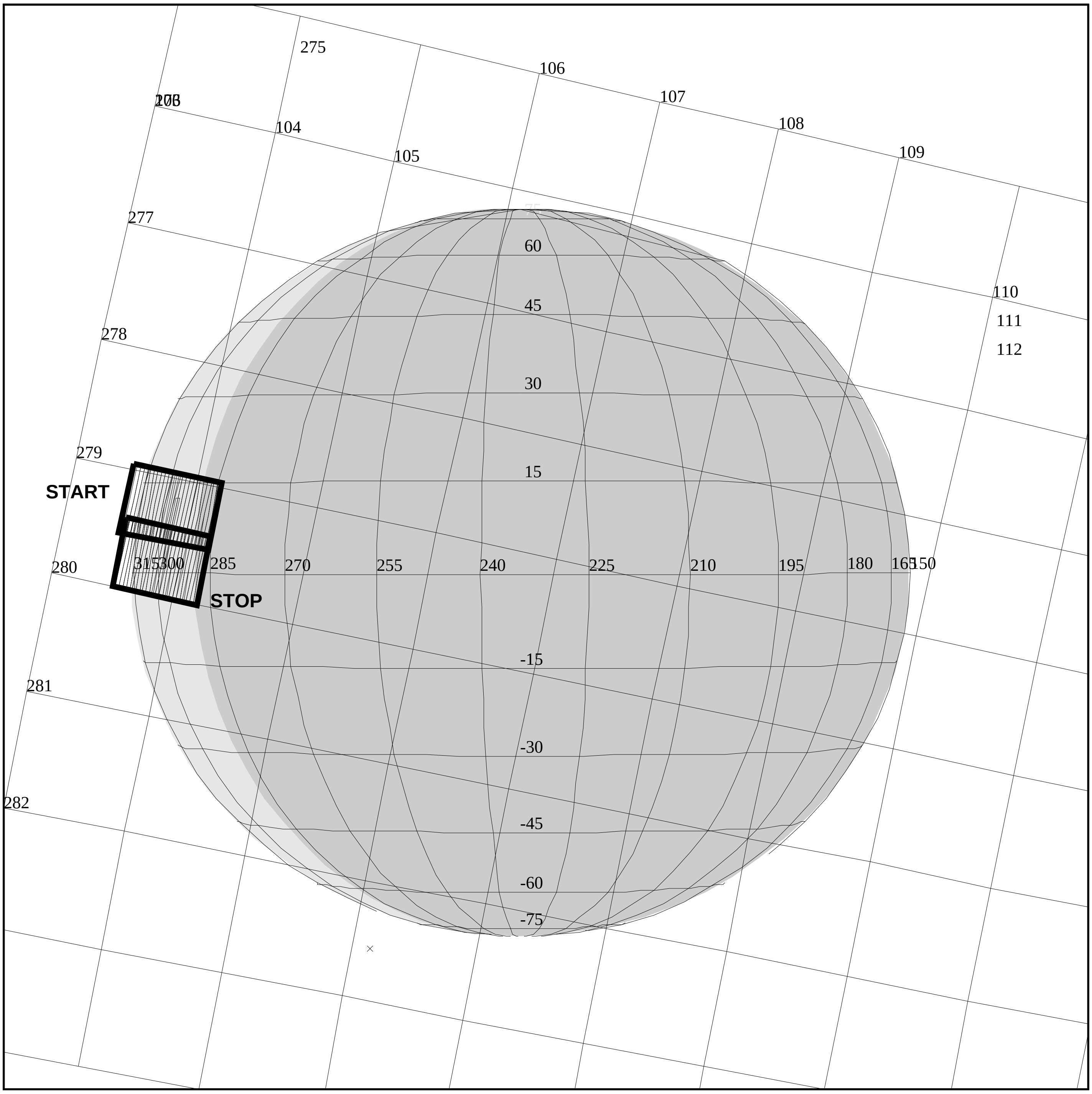
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form 11/15/96 10:45:23 rev 6/95



165FG:TT=   0 TMC= 1 C=   -2.30 XC=   0.00 BS= 0/7820 TC= 1(12   313   )
A= 728 pD=   0 SR=17.450 RA50= 83.16 DEC50= 25.64 cone=103.47 clock=279.25
117FG:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/7820
1:#s= 2 Cs=   12.50 XCs=   0.00 Cr= -12.50 XCr=   8.00 sD=   344 rD=   40

E4JNFEA14801

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA14801

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM   2**

START:JHP 96-353/02:21:58.733   +CDS 03118:00:0 **BODY PLOT TIME:TARGET-TIME D=   0 S= 0.750**

OBSERVATION:E4JNFEA14801 **DESCRIP:E4_FEA_148_PHASE_01**

Jupiter Camp. feat. 148 deg. phase Prt 1	ACTIVITY ID: E4JNFEA14801-
	START TIME: 96-355/06:49:34.066

Activity ID: Orbit E4 Target J Inst N OAPEL FEA148 SeqNo 01 -

Title	Jupiter Camp. feat. 148 deg. phase Prt 1	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS Working Group	AWG

Time System	CDS	Load ID	E4A	Calendar Date	12/20/96	Week	51

Start	JHP+CDS	00003113:00:0	96-355/06:49:34.066	JHP+002/04:27:35.333
End	JHP+CDS	00003122:20:0	96-355/06:58:53.399	JHP+002/04:36:54.666
Duration		00000009:20:0	000/00:09:19.333	000/00:09:19.333

Top Label E4JNFEA14801-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the first observation obtained on a rotation with phase angle approximately 148 degrees. Jupiter imaged in 15 colors, using NIMS downlink wavelength table JFT15A. This observation acquired with feature (a region of hot spots) near the bright limb, assuming feature coordinates 7 degrees North latitude and 313 degrees West longitude (System III).

Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*1 (20*10 mrad) area centered on hot spot near 313 degrees west longitude, 7 degrees North latitude.
S/C distance about 1.29 million KM, NIMS IFOV (NIMSEL) = 645 KM;
2*1 mosaic covers 25800*12900 KM, about 4 minutes of scanning, accumulating 0.1745 MBTG in 15 colors, and using 0.0081 tracks.
4 minutes reserved for targetting. Observation is first of those accomplished while the spacecraft is turned off-Earthline.
(A 2.5 hour pad is needed for flexibility in feature selection).
Wavelength table: JFT15A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68B, E4JFT15A

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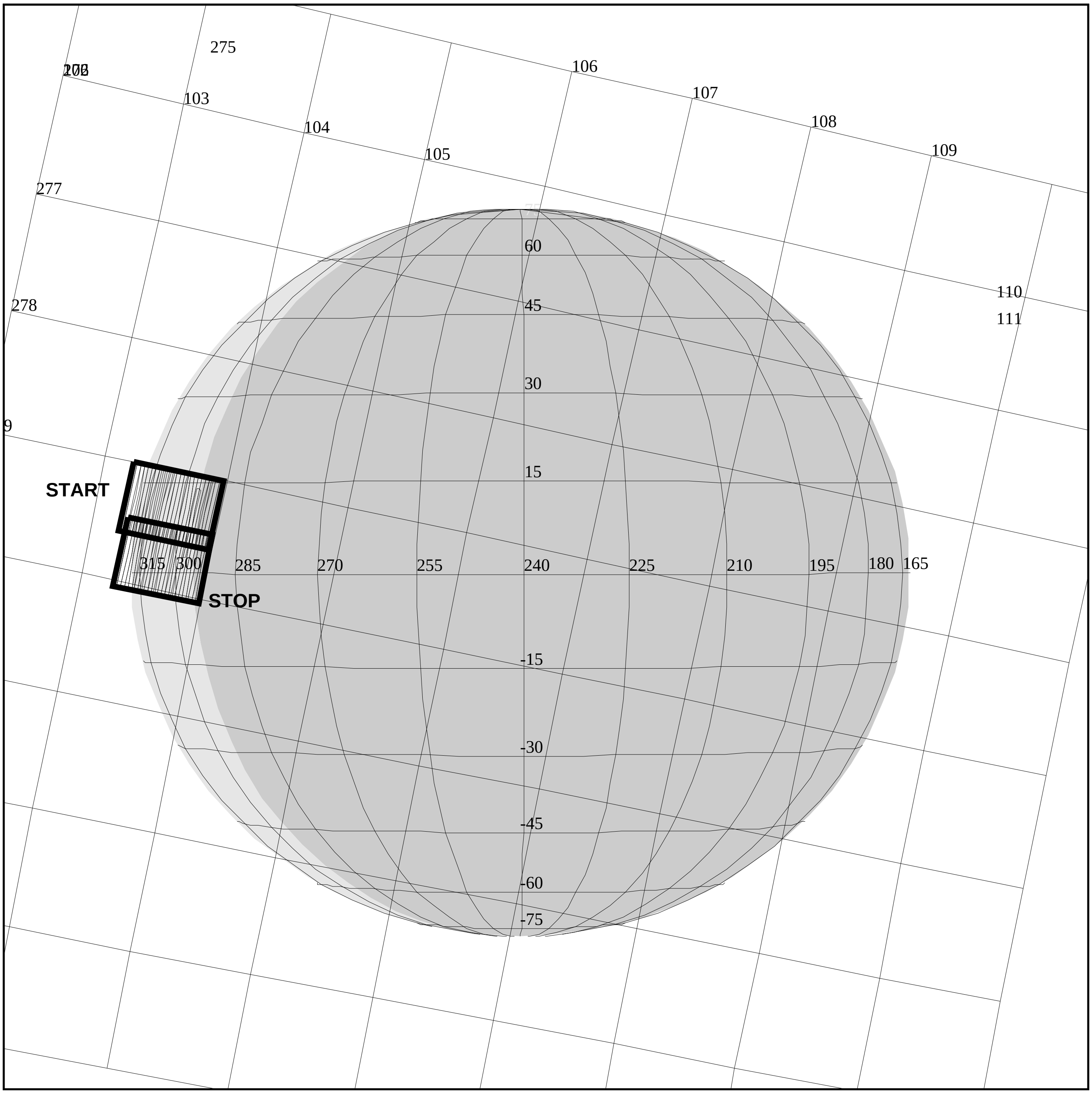

165FH:TT= 0 TMC= 1 C= -3.30 XC= 0.00 BS= 0/9640 TC= 1(12 313)
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117FH:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/9640
1:#s= 2 Cs= 12.50 XCs= 0.00 Cr= -12.50 XCr= 8.00 sD= 346 rD= 36

E4JNFEA14802

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA14802

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JHP 96-353/02:21:58.733 +CDS 03128:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA14802 **DESCRIP:E4_FEA_148_PHASE_02**

Jupiter Camp. feat. 148 deg. phase Prt 2 ACTIVITY ID: E4JNFEA14802-
START TIME: 96-355/07:01:42.066

Activity ID: Orbit E4 Target J Inst N OAPEL FEA148 SeqNo 02 -

Title	Jupiter Camp. feat. 148 deg. phase Prt 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JHP+CDS	00003125:00:0	96-355/07:01:42.066	JHP+002/04:39:43.333
End	JHP+CDS	00003132:20:0	96-355/07:09:00.066	JHP+002/04:47:01.333
Duration		00000007:20:0	000/00:07:18.000	000/00:07:18.000

Top Label E4JNFEA14802-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the second observation obtained on a rotation with phase angle approximately 148 degrees. Jupiter imaged in 15 colors, using NIMS downlink wavelength table JFT15A. This observation acquired with feature (a region of hot spots) near minimum airmass, assuming feature coordinates 7 degrees North latitude and 313 degrees West longitude (System III).

Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*1 (20*10 mrad) area centered on hot spot near 313 degrees west longitude, 7 degrees North latitude.
S/C distance about 1.29 million KM, NIMS IFOV (NIMSEL) = 645 KM;
2*1 mosaic covers 25800*12900 KM, about 4 minutes of scanning, accumulating 0.1745 MBTG in 15 colors, and using 0.0081 tracks.
2 minutes reserved for targetting.
Spacecraft is turned off-Earthline during this observation.
Wavelength table: JFT15A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68B, E4JFT15A

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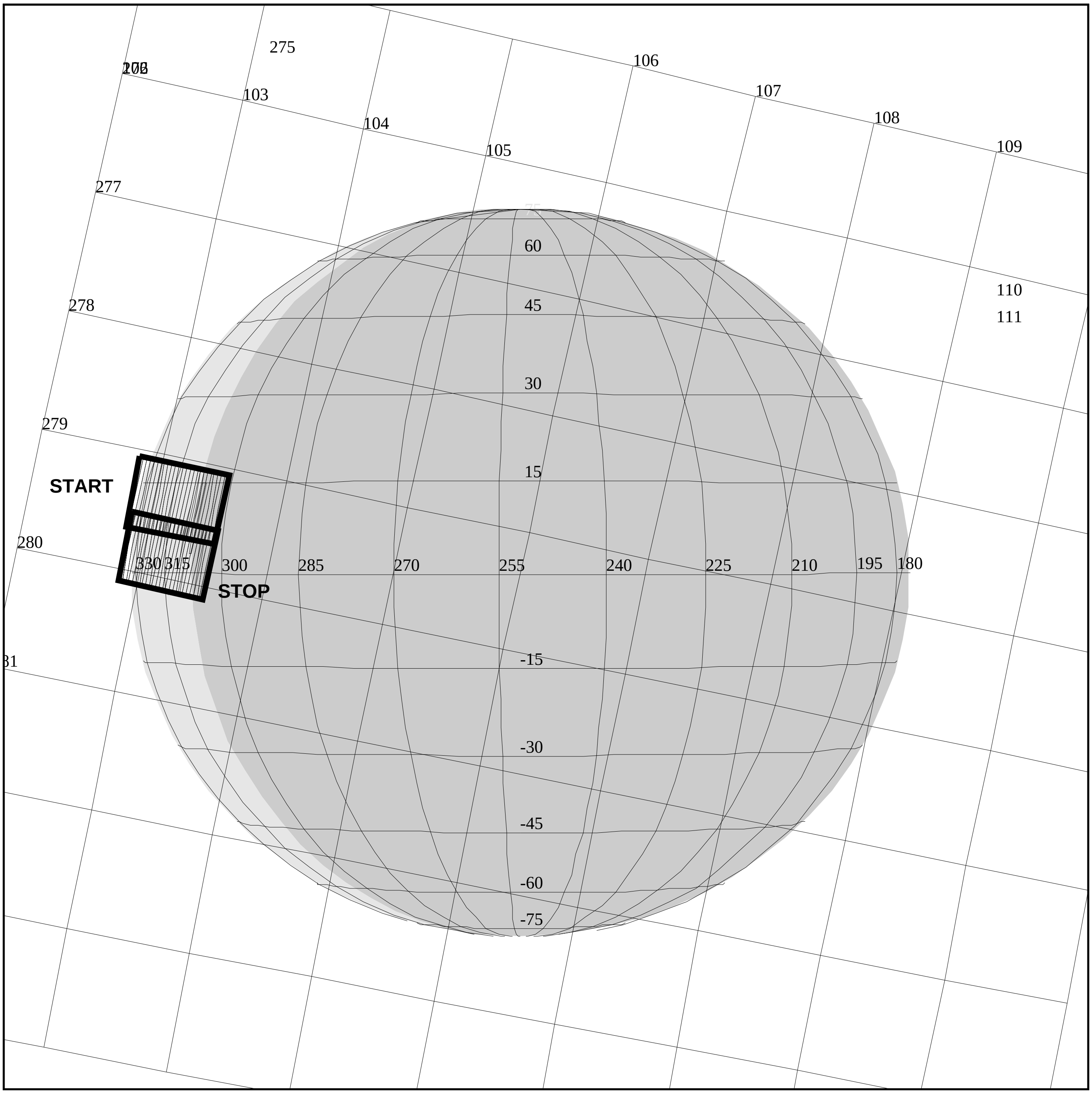

165FI:TT= 0 TMC= 1 C= -6.50 XC= 0.00 BS= 0/3280 TC= 1(12 313)
A= 364 pD= 0 SR=17.450 RA50= 83.89 DEC50= 25.70 cone=102.81 clock=279.35
117FI:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/3280
1:#s= 2 Cs= 12.50 XCs= 0.00 Cr= -12.50 XCr= 8.00 sD= 346 rD= 36

E4JNFEA14803

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA14803

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

THINNING:NIM 2

START:JHP 96-353/02:21:58.733 +CDS 03148:00:0

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

OBSERVATION:E4JNFEA14803

DESCRIP:E4_FEA_148_PHASE_03

Jupiter Camp. feat. 148 deg. phase Prt 3 ACTIVITY ID: E4JNFEA14803-
START TIME: 96-355/07:21:55.399

Activity ID: Orbit E4 Target J Inst N OAPEL FEA148 SeqNo 03 -

Title	Jupiter Camp. feat. 148 deg. phase Prt 3	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JHP+CDS 00003145:00:0	96-355/07:21:55.399	JHP+002/04:59:56.666
End	JHP+CDS 00003152:20:0	96-355/07:29:13.399	JHP+002/05:07:14.666
Duration	00000007:20:0	000/00:07:18.000	000/00:07:18.000

Top Label E4JNFEA14803-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the third observation obtained on a rotation with phase angle approximately 148 degrees. Jupiter imaged in 15 colors, using NIMS downlink wavelength table JFT15A. This observation acquired with feature (a region of hot spots) near the evening terminator, assuming feature coordinates 7 degrees North latitude and 313 degrees West longitude (System III).

Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 2*1 (20*10 mrad) area centered on hot spot near 313 degrees West longitude, 7 degrees North latitude.
S/C distance about 1.29 million KM, NIMS IFOV (NIMSEL) = 645 KM;
2*1 mosaic covers 25800*12900 KM, about 4 minutes of scanning, accumulating 0.1745 MBTG in 15 colors, and using 0.0081 tracks.
2 minutes reserved for targetting.
Spacecraft is turned off-Earthline during this observation.
Wavelength table: JFT15A, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account for the 100.3 m/sec (-7 degrees per day) zonal wind.

Short Map (SM), Gain 2, Grating Start 1, LPU, E4JFT68B, E4JFT15A

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E4 Health 4	ACTIVITY ID: E4NNHEALTH04- START TIME: 96-355/07:59:20.000

Activity ID: Orbit E4 Target N Inst N OAPEL HEALTH SeqNo 04 -

Title	E4 Health 4			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4A	Calendar Date	12/20/96	Week	51

Start	EEE+CDS	00001488:00:0	96-355/07:59:20.000	EEE+001/01:04:32.000
End	EEE+CDS	00001492:00:0	96-355/08:03:22.666	EEE+001/01:08:34.666
Duration		00000004:00:0	000/00:04:02.666	000/00:04:02.666

Top Label   E4NNHEALTH04-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	100	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Required to verify instrument operation. These observations provide a 3 detector view of the instrument.
The detectors are selected such that a bright and a dark channel will exist for either a satellite or Jupiter for a target. The observations are spaced approximately 24 hours apart.

Design Detail

Long Map (LM), Gain 2, Grating Start 0, RT, E4RECVY3

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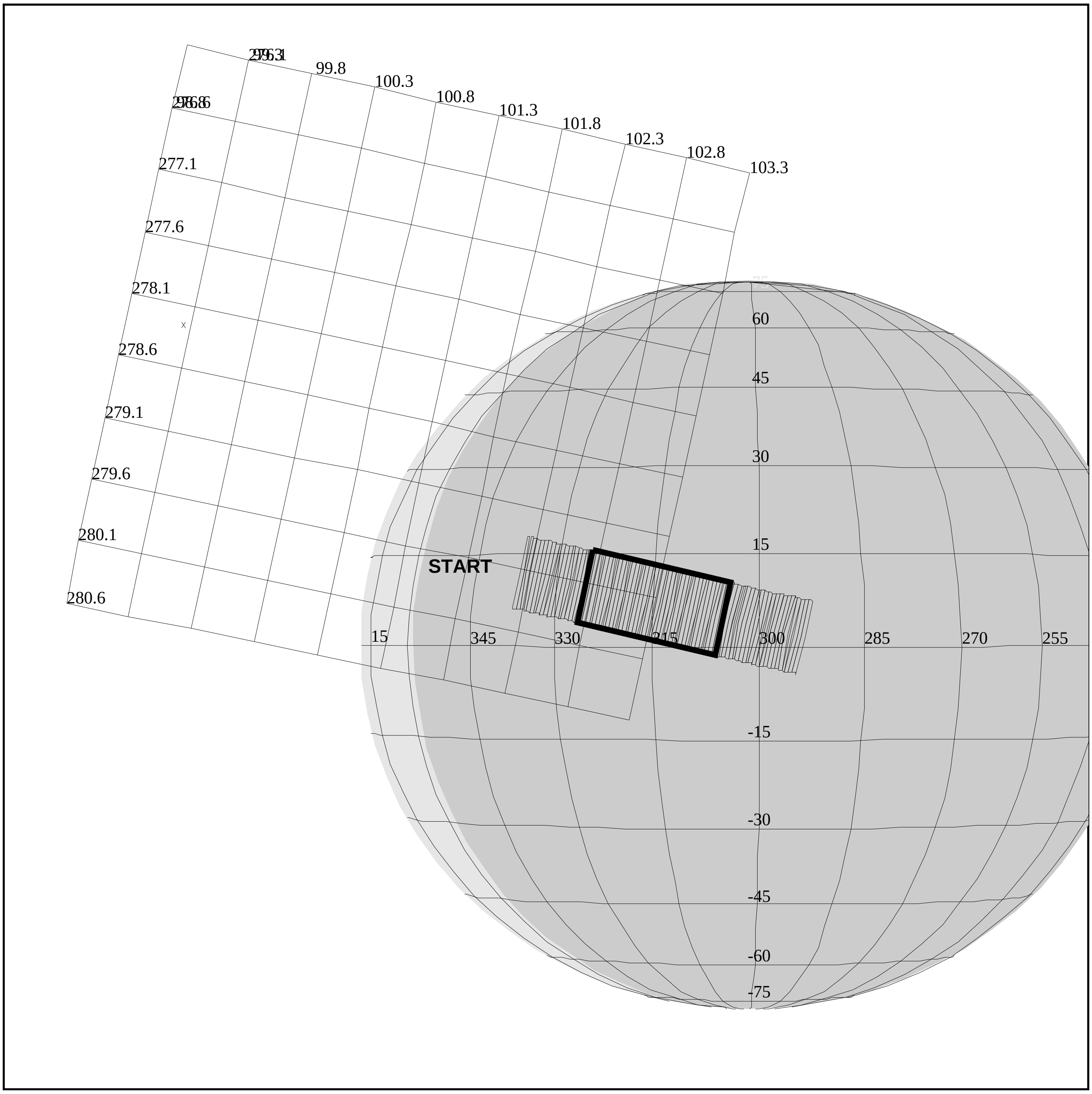

165FJ:TT= 0 TMC= 1 C= -5.00 XC= 1.00 BS= 0/8568 TC= 1(12 330)
A= 728 pD= 0 SR=17.450 RA50= 84.64 DEC50= 25.62 cone=102.18 clock=279.59
117FJ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/8568
1:#s= 2 Cs= 43.10 XCs= 0.00 Cr= -37.70 XCr= -1.00 sD= 4320 rD= 364

E4JNFEA53M01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA53M01

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JHP 96-353/02:21:58.733 +CDS 3232:00:0

OBSERVATION:E4JNFEA53M01

THINNING:NIM 2

BODY PLOT TIME:CENTER-TIME D= 0 S= 0.750

DESCRIP:E4_5&3_MICRON_MAP_01

Jupiter Campaign feature 5 & 3 um maps ACTIVITY ID: E4JNFEA53M01-
START TIME: 96-355/08:44:50.066

Activity ID: Orbit E4 Target J Inst N OAPEL FEA53M SeqNo 01 -

Title	Jupiter Campaign feature 5 & 3 um maps	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JHP+CDS	00003227:00:0	96-355/08:44:50.066	JHP+002/06:22:51.333
End	JHP+CDS	00003282:00:0	96-355/09:40:26.733	JHP+002/07:18:28.000
Duration		00000055:00:0	000/00:55:36.667	000/00:55:36.667

Top Label E4JNFEA53M01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

High spectral resolution 5-micron and 3 micron nightime maps of trace species within the hot spot campaign feature. The hot spot feature, centered at 315 degrees west longitude (system III), 7 degrees north latitude, is observed near the central meridian during the phase angle ~ 148 degrees rotation. The hot spot is scanned in the 160 wavelengths specified by NIMS wavelength table J35160. A second scan is partially recorded and played back as well (27 seconds worth of data).

Data Returned

Design Detail

Longmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on campaign feature. S/C distance about 1.30 million KM, map covers 52000*13000 KM. Scan encompasses about 24 minutes of scanning, accumulating 1.450 MBTG and using 0.0484 tracks. 4 minutes reserved for targetting.
2 minutes reserved for reposition slew to perform a second observation observation which is partially recorded.
Total OAPEL resources used: 2.81 MBTG and 0.0499 tracks.
Spacecraft is turned off-Earthline for this observation.
Wavelength table: J35160, TLM: LPU
Note 10/18/96: This and other feature track OAPELs account fot the 100.3 m/sec (-7 degrees per day) zonal wind.

Center half of first swath returned.
Second overlapping swath not returned, removed from pointer plot for clarity

Long Map (LM), Gain 4, Grating Start 0, LPU, E4J35160, E4J35160

Galileo Activity Plan Form 11/15/96 10:45:24 rev 6/95

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Reload NIMS Memory		ACTIVITY ID:	E4NNRELOAD09-
		START TIME:	96-355/10:08:45.333

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 09 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	12/20/96	Week 51

Start	EEE+CDS	00001616:00:0	96-355/10:08:45.333	EEE+001/03:13:57.333
End	EEE+CDS	00001632:00:0	96-355/10:24:56.000	EEE+001/03:30:08.000
Duration		00000016:00:0	000/00:16:10.667	000/00:16:10.667

Top Label	E4NNRELOAD09-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

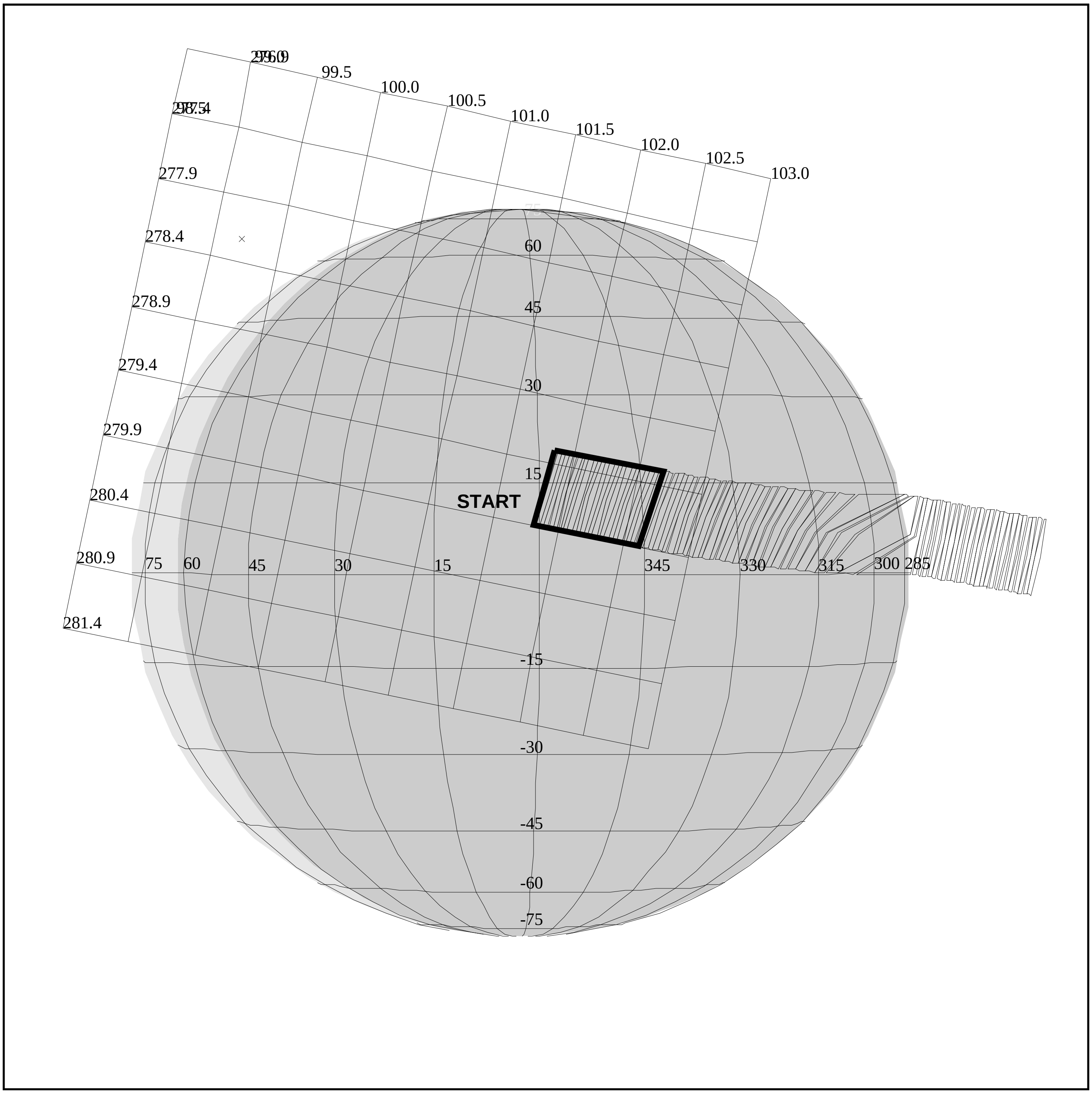
Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

Galileo Activity Plan Form 11/15/96 10:45:24 rev 6/95



165FK:TT= 0 TMC= 1 C= -15.00 XC= -5.00 BS= 0/7496 TC= 1(12 330)
A= 364 pD= 4368 SR=17.450 RA50= 84.28 DEC50= 26.04 cone=102.39 clock=279.11
117FK:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7496
1:#s= 2 Cs= 43.50 XCs= 0.00 Cr= -50.00 XCr= 8.00 sD= 4368 rD= 40

E4JNFEA5UM01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA5UM01

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JHP 96-353/02:21:58.733 +CDS 03336:00:0 **BODY PLOT TIME:TARGET-TIME D= 4368 S= 0.750**

OBSERVATION:E4JNFEA5UM01 **DESCRIP:E4_FEAT_5_MICRON_#2**

Jupiter Campaign feat. 5 micron map # 2 ACTIVITY ID: E4JNFEA5UM01-
START TIME: 96-355/10:32:00.733

Activity ID: Orbit E4 Target J Inst N OAPEL FEA5UM SeqNo 01 -

Title	Jupiter Campaign feat. 5 micron map # 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JHP+CDS 00003333:00:0	96-355/10:32:00.733	JHP+002/08:10:02.000
End	JHP+CDS 00003384:20:0	96-355/11:23:48.066	JHP+002/09:01:49.333
Duration	00000051:20:0	000/00:51:47.333	000/00:51:47.333

Top Label E4JNFEA5UM01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

High spectral resolution 5-micron nighttime map of trace species within the hot spot campaign feature. This is the second 5-um map obtained during the high phase angle sciturn, the other having been obtained during OAPEL FEA53M. The hot spot, centered at 313 degrees West longitude (system III), 7 degrees North latitude, observed near 60 degrees emission angle during the phase angle ~148 degrees rotation. The hot spot is scanned in the 80 wavelengths specified by NIMS wavelength table J5M80B: 4.28 - 5.22 microns.

Data Returned

Design Detail

Longmap, Nyquist-sampled observation of 4*1 (40*10 mrad) area centered on the hot spot campaign feature. S/C distance about 1.38 million KM, map covers 55200*13800 KM. About 24 minutes of scanning, accumulating 1.450 MBTG and using 0.0484 tracks. 2 minutes reserved for targetting. Spacecraft is turned off-earthline for this observation.
Wavelength table: J5M80B, TLM: LPU
Note 10/18/96: Playback reduced to 209 secs to satisfy new downlink budget dictated by the new solar conjunction playback constraint.

Only first 7 Rims of swath recorded and playedback.

Long Map (LM), Gain 4, Grating Start 0, LPU, E4J5M253B, E4J5M80B

Galileo Activity Plan Form 11/15/96 10:45:24 rev 6/95

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Reload NIMS Memory		ACTIVITY ID:	E4NNRELOAD10-
		START TIME:	96-355/15:19:10.000

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 10 -

Title	Reload NIMS Memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID Calendar Date 12/20/96 Week 51

Start	EEE+CDS	00001923:00:0	96-355/15:19:10.000	EEE+001/08:24:22.000
End	EEE+CDS	00001939:00:0	96-355/15:35:20.666	EEE+001/08:40:32.666
Duration		00000016:00:0	000/00:16:10.666	000/00:16:10.666

Top Label E4NNRELOAD10-
Bottom Label

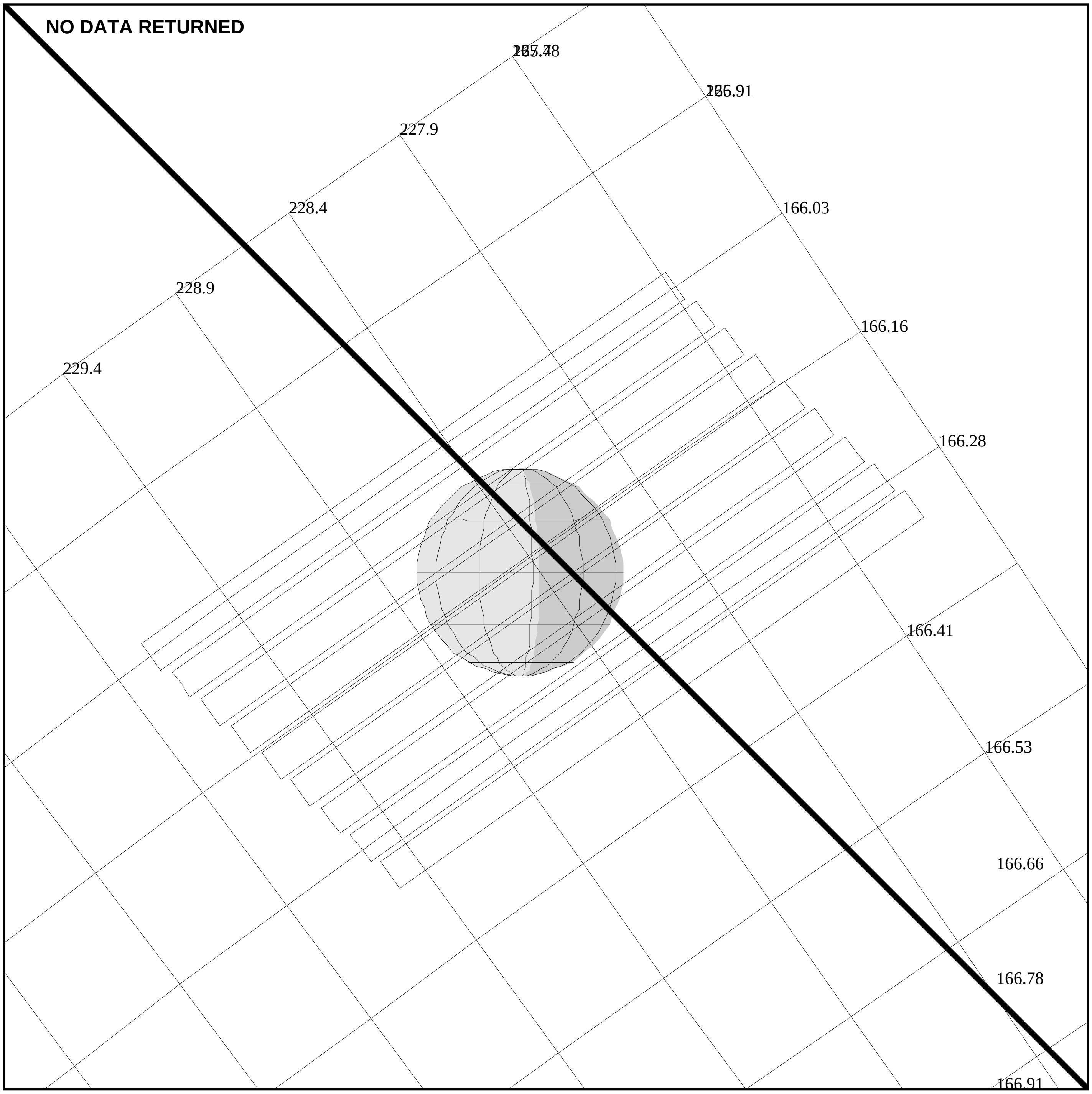
Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference



165FL:TT= 0 TMC= 1 C= -2.40 XC= 0.50 BS= 0/4462 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 14.16 DEC50= 7.22 cone=166.03 clock=228.62
117FL:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/4462
1:#s= 1 Cs= 4.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 456 rD= 2

E4CNGLOBAL01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4CNGLOBAL01

TARGET BODY : CALLISTO

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JSP 96-355/16:50:09.933 -CDS 58:00:0

OBSERVATION:E4CNGLOBAL01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.200

DESCRIP:CALLISTO GLOBAL MAP

Callisto Global Coverage		ACTIVITY ID:	E4CNGLOBAL01-
		START TIME:	96-355/15:46:27.933

Activity ID: Orbit E4 Target C Inst N OAPEL GLOBAL SeqNo 01 -

Title	Callisto Global Coverage			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JSP-CDS	00000063:00:0	96-355/15:46:27.933	JSP-000/01:03:42.000
End	JSP-CDS	00000055:00:0	96-355/15:54:33.267	JSP-000/00:55:36.666
Duration		00000008:00:0	000/00:08:05.334	000/00:08:05.334

Top Label E4CNGLOBAL01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	142	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

The objective is to obtain the best combined spatial and spectral resolution of Callisto's surface, to investigate the mineralogy and to determine the distribution of compositional units. This observation will aid in science planning for future orbits.

No Data Returned

Design Detail

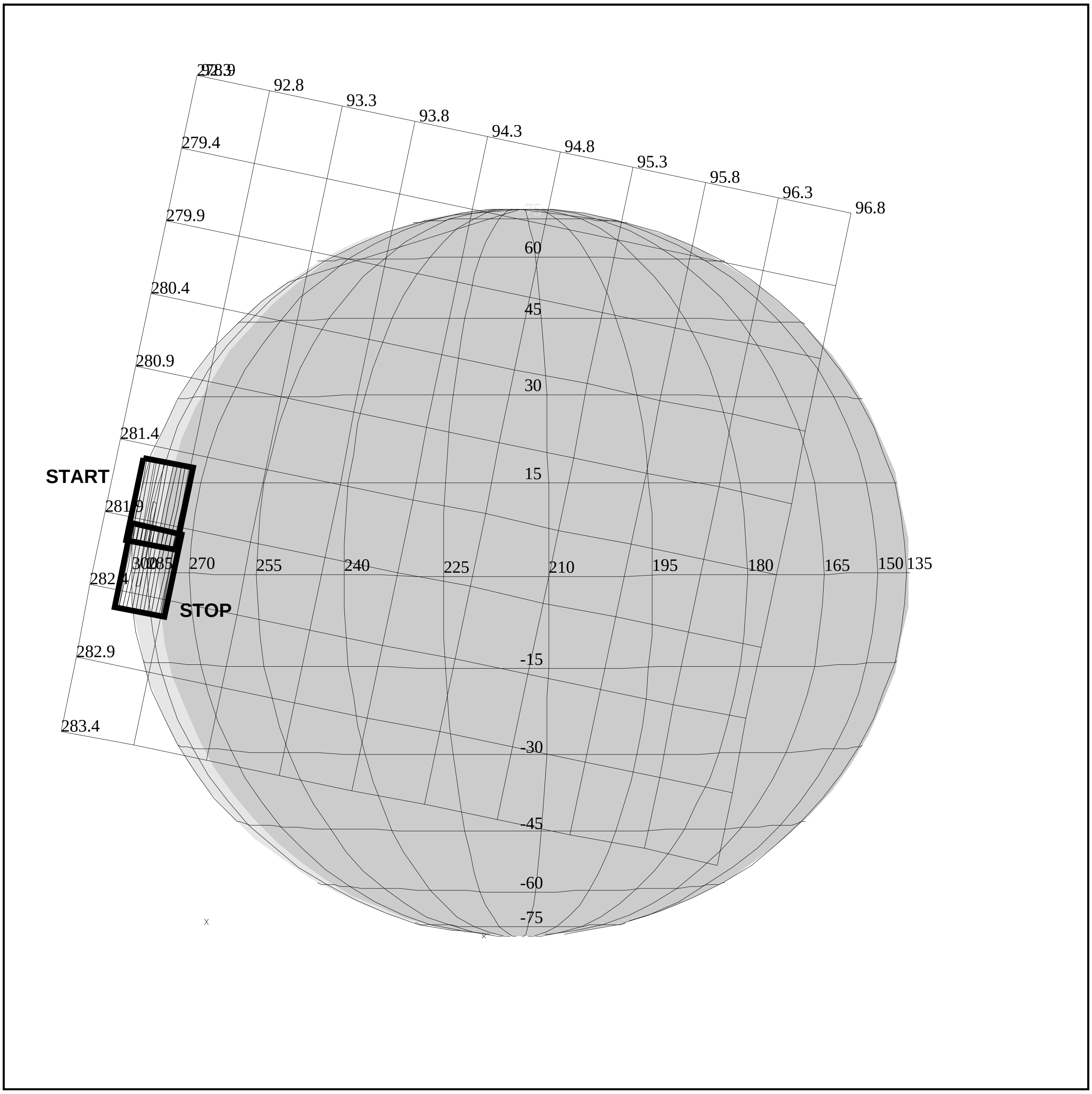
Continuous slew full disk mosaic at Callisto closest approach.
Cover all lit longitudes and latitudes.
Observation contains 1 swath/scan. UVS ridealong.

Instrument mode: LM	Spatial resolution: 742.5 km/nimsel
Instrument gain state: 4	Spectral resolution: 48
Phase angle: 74.43	Coverage in nimsels:

Wavelengths P/B: 204
Wavelength table: CLM204 (0.69 - 4.92 microns)
Record ETB (Edit table): CLM245

Long Map (LM), Gain 4, Grating Start 0, LPU, E4CLM245, E4CLM204

Galileo Activity Plan Form 11/15/96 10:45:24 rev 6/95



165FN:TT= 0 TMC= 1 C= -1.30 XC= 0.00 BS= 0/2470 TC= 1(12 290)
A= 728 pD= 0 SR=17.450 RA50= 95.69 DEC50= 25.34 cone= 92.44 clock=281.77
117FN:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/2470
1:#s= 2 Cs= 5.60 XCs= 0.00 Cr= -5.50 XCr= 8.00 sD= 156 rD= 32

E4JNFEA16001

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA16001

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS: **THINNING:NIM 2**

START:JSP 96-355/16:50:09.933 -CDS 14:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750**

OBSERVATION:E4JNFEA16001 **DESCRIP:E4_FEA_160_PHASE_01**

```
Jupiter Camp. feat. 160 deg. phase Prt 1 ACTIVITY ID:   E4JNFEA16001-
                                          START TIME:   96-355/16:30:57.267

Activity ID: Orbit E4  Target J  Inst N  OAPEL FEA160  SeqNo 01 -

Title        Jupiter Camp. feat. 160 deg. phase Prt 1Instrument      NIMS
Requestor    NIMS-AWG/K. BAINES        Team   NIMS  Working Group    AWG

Time System  CDS       Load ID  E4A     Calendar Date  12/20/96  Week  51

Start        JSP-CDS 00000019:00:0 96-355/16:30:57.267   JSP-000/00:19:12.666
End          JSP-CDS 00000011:81:0 96-355/16:38:08.600   JSP-000/00:12:01.333
Duration             00000007:10:0    000/00:07:11.333       000/00:07:11.333

Top Label    E4JNFEA16001-
Bottom Label

Plot Key     NIMS      Type            SCI
CDS Bytes        121   Report Options  BOTH         Scan Platform      Yes
CDS Source   OAP       Spin State      DUAL         DMS                Yes
```

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the first observation obtained on a rotation with phase angle approximately 160 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with eastern (leading) edge of feature (a region of hot spots) near the bright limb, assuming feature coordinates 7 degrees North latitude and 310 degrees West longitude (System III).

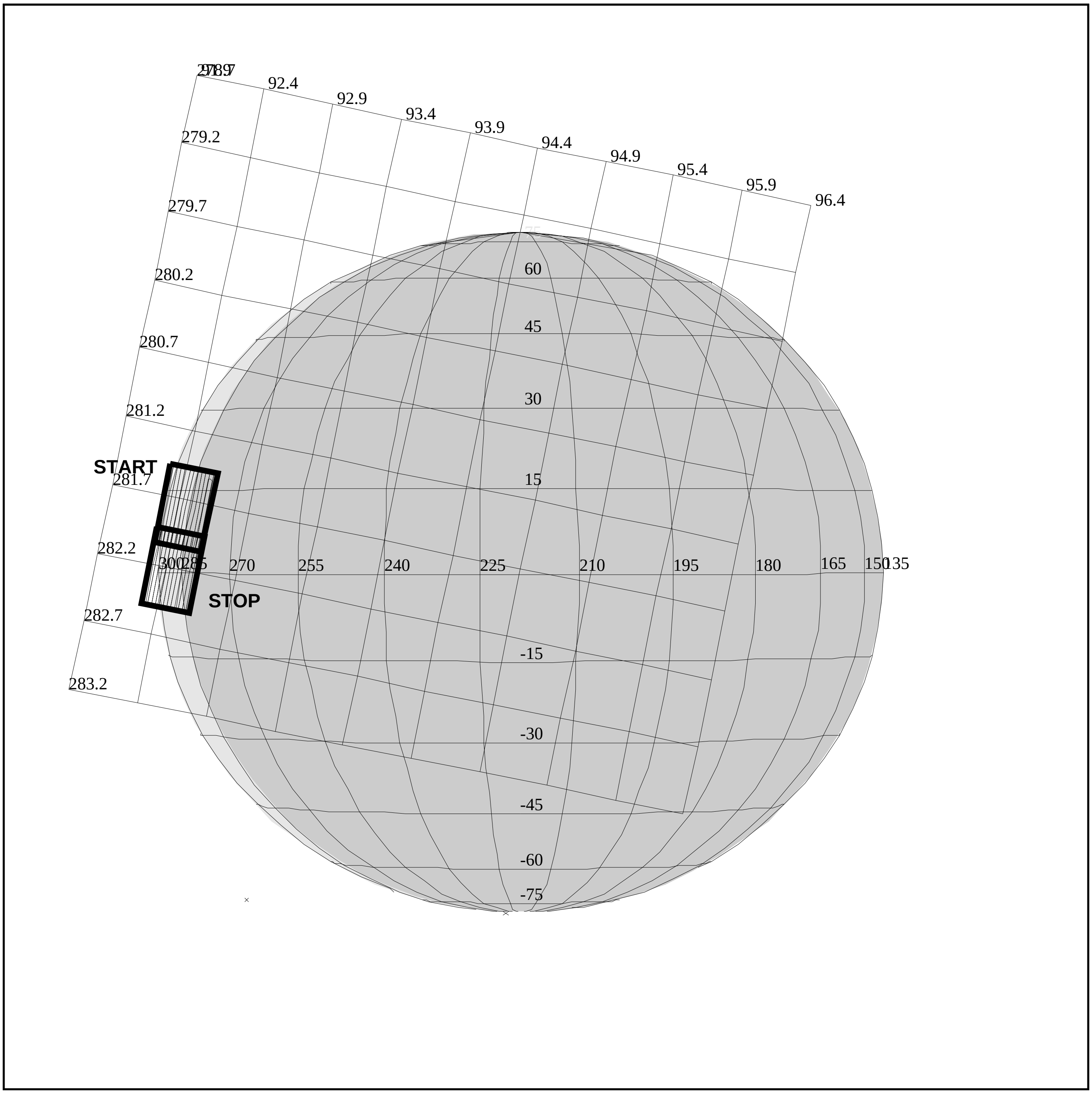
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 1*1 (10*10 mrad) area centered on hot spot near 310 degrees west longitude, 7 degrees North latitude.
S/C distance about 1.58 million KM, NIMS IFOV (NIMSEL) = 790 KM;
1*1 mosaic covers 15800*15800 KM, about 2 minutes of scanning, accumulating 0.0307 MBTG in 4 colors, and using 0.0040 tracks.
4 minutes reserved for targetting.
Spacecraft is turned off-Earthline for this observation.
Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: Eastern edge of feature should be just rising over the bright limb (window for this set of OAPEL observations positioned as late as possible).

Short Map (SM), Gain 2, Grating Start 0, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form   11/15/96 10:45:24   rev 6/95



165FO:TT= 0 TMC= 1 C= -2.00 XC= 0.00 BS= 0/3926 TC= 1(12 290)
A= 364 pD= 0 SR=17.450 RA50= 95.82 DEC50= 25.34 cone= 92.32 clock=281.78
117FO:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/3926
1:#s= 2 Cs= 5.85 XCs= 0.00 Cr= -6.00 XCr= 8.00 sD= 162 rD= 32

E4JNFEA16002

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA16002

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JSP 96-355/16:50:09.933 -CDS 6:00:0

OBSERVATION:E4JNFEA16002

THINNING:NIM 2

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

DESCRIP:E4_FEA_160_PHASE_02

Jupiter Camp. feat. 160 deg. phase Prt 2 ACTIVITY ID: E4JNFEA16002-
START TIME: 96-355/16:41:03.933

Activity ID: Orbit E4 Target J Inst N OAPEL FEA160 SeqNo 02 -

Title	Jupiter Camp. feat. 160 deg. phase Prt 2	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team NIMS Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JSP-CDS	00000009:00:0	96-355/16:41:03.933	JSP-000/00:09:06.000
End	JSP-CDS	00000004:00:0	96-355/16:46:07.267	JSP-000/00:04:02.666
Duration		00000005:00:0	000/00:05:03.334	000/00:05:03.334

Top Label E4JNFEA16002-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the second observation obtained on a rotation with phase angle approximately 160 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with eastern edge of feature (a region of hot spots) near minimum airmass, assuming feature coordinates 7 degrees North latitude and 310 degrees West longitude (System III).

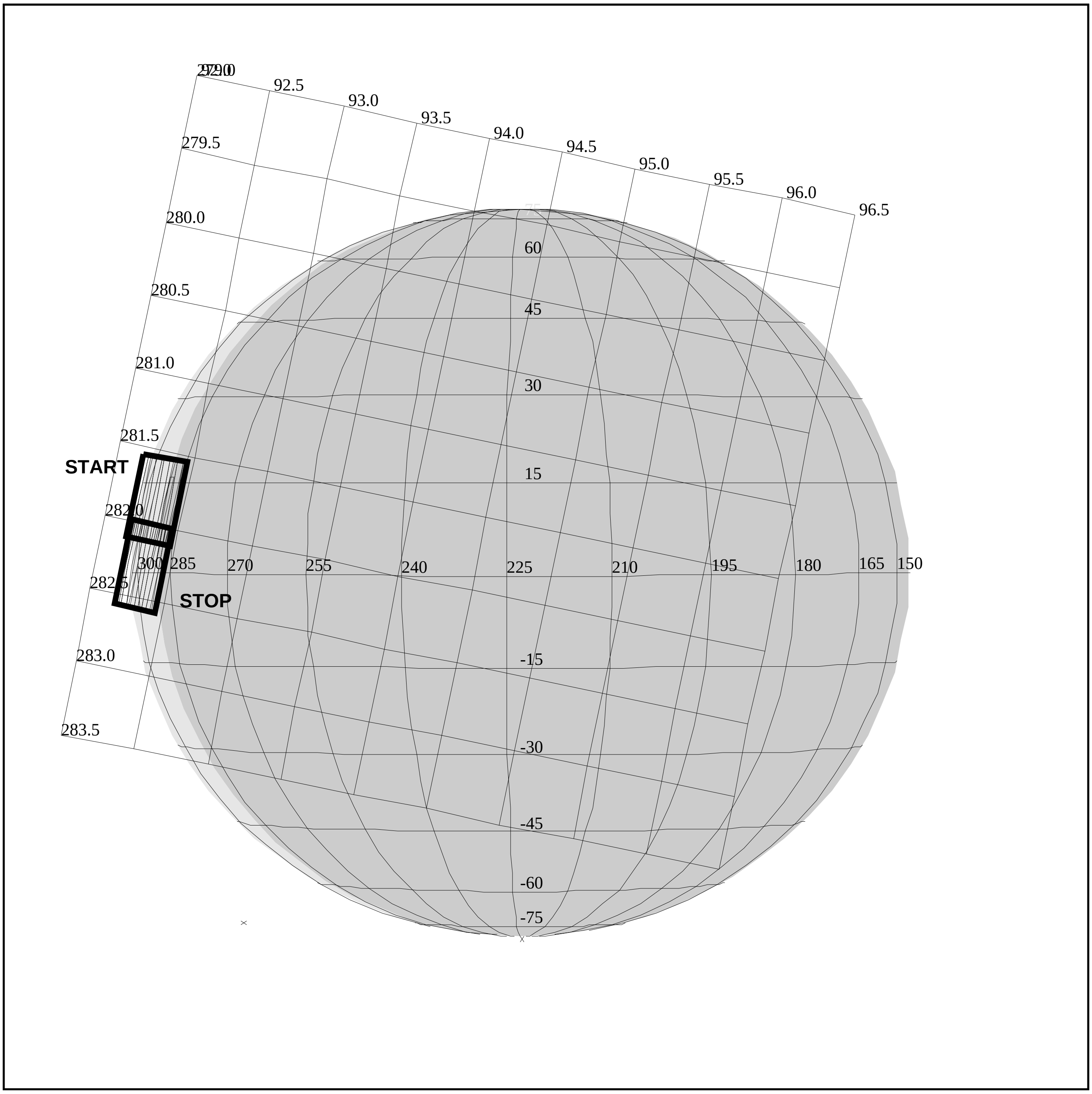
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 1*1 (10*10 mrad) area centered on hot spot near 310 degrees West longitude, 7 degrees North latitude.
S/C distance about 1.58 million KM, NIMS IFOV (NIMSEL) = 790 KM;
1*1 mosaic covers 15800*15800 KM, about 2 minutes of scanning, accumulating 0.0307 MBTG in 4 colors, and using 0.0040 tracks.
2 minutes reserved for targetting.
Spacecraft is turned off-Earthline for this observation.
Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: Eastern edge of feature should be just rising over the bright limb (window for this set of OAPEL observations positioned as late as possible).

Short Map (SM), Gain 2, Grating Start 0, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form 11/15/96 10:45:24 rev 6/95



165FP:TT= 0 TMC= 1 C= -3.20 XC= 0.00 BS= 0/5200 TC= 1(12 290)
A= 364 pD= 0 SR=17.450 RA50= 95.95 DEC50= 25.35 cone= 92.20 clock=281.80
117FP:#SB= 1 OR= 0.100 RR=12.000 BM=F RC= 1 BS= 0/5200
1:#s= 2 Cs= 4.75 XCs= 0.00 Cr= -4.75 XCr= 8.00 sD= 132 rD= 32

E4JNFEA16003

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4JNFEA16003

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JSP 96-355/16:50:09.933 +CDS 01:00:0

OBSERVATION:E4JNFEA16003

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.750

DESCRIP:E4_FEA_160_PHASE_03

Jupiter Camp. feat. 160 deg. phase Prt 3	ACTIVITY ID: E4JNFEA16003- START TIME: 96-355/16:48:08.600

Activity ID: Orbit E4 Target J Inst N OAPEL FEA160 SeqNo 03 -

Title	Jupiter Camp. feat. 160 deg. phase Prt 3	Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES Team NIMS	Working Group	AWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JSP-CDS	00000002:00:0	96-355/16:48:08.600	JSP-000/00:02:01.333
End	JSP+CDS	00000002:83:0	96-355/16:53:06.599	JSP+000/00:02:56.666
Duration		00000004:83:0	000/00:04:57.999	000/00:04:57.999

Top Label E4JNFEA16003-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	121	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

One of 20 OAPELs constituting the feature tracks for this feature campaign. This is the third observation obtained on a rotation with phase angle approximately 160 degrees. Jupiter imaged in 4 colors, using NIMS downlink wavelength table JFT04A. This observation acquired with eastern edge of feature (a region of hot spots) near the evening terminator, assuming feature coordinates 7 degrees North latitude and 310 degrees West longitude (System III).

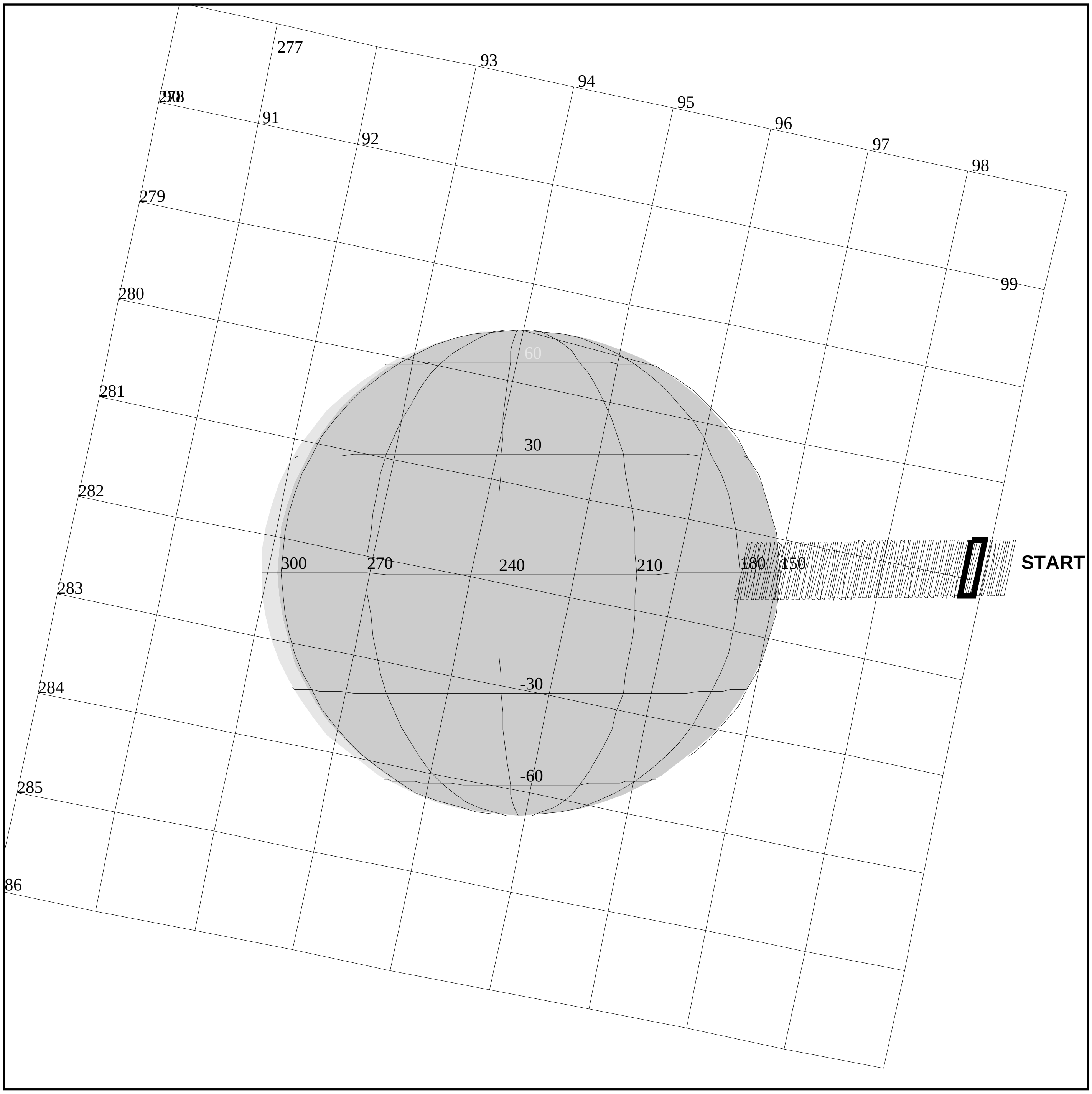
Data Returned

Design Detail

Shortmap, Nyquist-sampled observation of 1*1 (10*10 mrad) area centered on hot spot near 310 degrees west longitude, 7 degrees North latitude.
S/C distance about 1.58 million KM, NIMS IFOV (NIMSEL) = 790 KM;
1*1 mosaic covers 15800*15800 KM, about 2 minutes of scanning, accumulating 0.0307 MBTG in 4 colors, and using 0.0040 tracks.
2 minutes reserved for targetting.
This is the last off-Earthline observation accomplished during this Science Turn (A 2.5 hour pad is needed at the end of this nominal observation time to allow for flexibility in feature selection).
Wavelength table: JFT04A, TLM: LPU
Note 10/18/96: Eastern edge of feature should be just rising over the (window for this set of OAPEL observations positioned as late as possible).

Short Map (SM), Gain 2, Grating Start 0, LPU, E4JFT68A, E4JFT04A

Galileo Activity Plan Form 11/15/96 10:45:25 rev 6/95



165FM:TT=   0 TMC= 1 C=   83.00 XC= -18.00 BS= 0/9022 TC= 9
A= 728 pD=   0 SR=17.450 RA50= 88.11 DEC50= 25.09 cone= 99.23 clock=280.82
117FM:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9022
1:#s= 1 Cs= -54.80 XCs=   12.00 Cr=   0.00 XCr=   0.00 sD= 5498 rD=   2

E4RNMRING_01

TARGET G2.0 jdods:11/ 5/1996 16:32:16

FILE:P.E4RNMRING_01

CENTRAL BODY:JUPITER

MINI:m.target.e4.961105

S/C EPH:/DATA/NAVIO/T-960909-TOUR.NS

PERIAPSIS:

START:JSP 96-355/16:50:09.933   +CDS 22:00:0

OBSERVATION:E4RNMRING_01

THINNING:NIM   8

BODY PLOT TIME:TARGET-TIME D=   0 S= 0.500

DESCRIP:MAIN RING OBSERVATION

Main Ring Observation — ACTIVITY ID: E4RNMRING 01-
START TIME: 96-355/17:07:21.266

Activity ID: Orbit E4 Target R Inst N OAPEL MRING SeqNo 01 -

Title	Main Ring Observation			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	JSP+CDS	00000017:00:0	96-355/17:07:21.266	JSP+000/00:17:11.333
End	JSP+CDS	00000052:40:0	96-355/17:43:11.266	JSP+000/00:53:01.333
Duration		00000035:40:0	000/00:35:50.000	000/00:35:50.000

Top Label E4RNMRING 01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

To study the composition and particle sizes of the main ring band.
Resolution: 775 Km,
Phase angle: 150 degrees,
Number of Wavelengths: 102,
Tilt ~ 0.5 degrees.

Data Returned

Design Detail

Target to center of Jupiter and offset to ring plane edge (1.85 RJ)
slew to the edge of Jupiter. Slew rate at 0.03 mrad/sec.
Instrument mode: Full Map.
Number of Wavelengths: 102.
Gain state: 4
Chopper: Reference.
Record: LPU.
Observation start time should be the start of the umbra time.
Wavelength table: RFM102.

(B) Only 1 Rim of 30 Rims recorded returned.
(A) An additional Rim of 1 wavelength from detector 8 returned
to monitor detector 8 failure.

Full Map (FM), Gain 4, Grating Start 0, LPU, E4RFM126, E4RFM001
Full Map (FM), Gain 4, Grating Start 0, LPU, E4RFM126, E4RFM96

Galileo Activity Plan Form 11/15/96 10:45:25 rev 6/95

NIMS SAFE AND CHOPOF	ACTIVITY ID: E4NNCHOPOF01 START TIME: 96-355/17:46:47.333

Activity ID: Orbit E4 Target N Inst N OAPEL CHOPOF SeqNo 01

Title	NIMS SAFE AND CHOPOF			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4A Calendar Date 12/20/96 Week 51

Start	EEE+CDS	00002069:00:0	96-355/17:46:47.333	EEE+001/10:51:59.333
End	EEE+CDS	00002079:00:0	96-355/17:56:54.000	EEE+001/11:02:06.000
Duration		00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label E4NNCHOPOF01
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	52	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To preserve the NIMS chopper life.

Design Detail

Use a NIMSTAB PA to reset wavelength table with parameters 04,C4,02,00,00 and to issue a 37IOP,0,0 to put NIMS in safe.
Then:
Use two NIMS 37IST commands to turn chopper off:
37IST,0,1,0,0,OFF,0,0,0 (Change Chopper Ref to 63Hz)
37IST,0,1,1,0,OFF,0,0,0 (Change Chopper 63Hz to OFF)
Also use a NIMS 37MB command to reset the mirror positions:
37MB,0,0,0,0,0,0 (00000,00000)

Galileo Activity Plan Form 11/15/96 10:45:25 rev 6/95

```
NIMS PCT Real Time Calibration            ACTIVITY ID:   E4NNPCTRLT01-
                                           START TIME:   96-360/18:59:42.333
```

```
Activity ID: Orbit E4  Target N  Inst N  OAPEL PCTRLT  SeqNo 01 -

Title        NIMS PCT Real Time Calibration          Instrument      NIMS
Requestor    NIMS-SWG/J. HUI           Team   NIMS  Working Group    SWG
```

```
Time System  CDS       Load ID  E4B     Calendar Date  12/25/96  Week  52

Start        PCT+CDS 00000000:00:0 96-360/18:59:42.333   PCT+000/00:00:00.000
End          PCT+CDS 00003313:00:0 96-363/02:49:30.999   PCT+002/07:49:48.666
Duration             00003313:00:0    002/07:49:48.666       002/07:49:48.666
```

```
Top Label    E4NNPCTRLT01-
Bottom Label

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

Observation Objective

This observation is a NIMS photometric calibration using the PCT target.
The data will be used to calibrate the NIMS visible detectors.
The calibration data will be returned via RealTime.
This calibration will take place during the cruise of the E4 Encounter
when the sun-angle is about 2 degrees.

Data Returned

Design Detail

```
 1) Turn off Shield Heaters 48 hours before the calibration.
 2) Turn off PCT heaters 6 hours before calibration.
 3) Scan Platform is at Safe/Unstow (cone=153.00, clock=0.00)
 4) Chopper on, Gain State 4,
 5) Set NIMS to Long Map Mode, ETB=PCT252,
    Mirror Blocking (1B,1B) (11011,11011)
 6) Select 1 Rim of Dark in Real Time (Return 1 LM grating cycle)
 7) Slew to PCT (cone = 54.88, clock = 244.07)
 8) Select 10 Rims of PCT in Real Time (Return 10 LM grating cycles)
 9) Slew to Safe (cone = 153.00, clock = 0.00)
10) NIMS to Safe Mode, Reset Mirror Blocking (00,00) (00000,00000)
11) Chopper Off
```

Long Map (LM), Gain 4, Grating Start 0, RT, E4PCT252

Galileo Activity Plan Form   11/15/96 10:45:25   rev 6/95

E4 Memory check	ACTIVITY ID:	E4NNMEMCHK01-
	START TIME:	97-018/23:48:40.000

Activity ID: Orbit E4 Target N Inst N OAPEL MEMCHK SeqNo 01 -

Title	E4 Memory check			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS   Load ID E4B   Calendar Date 01/18/97 Week 3

Start	EEE+CDS 00043728:00:0	97-018/23:48:40.000	EEE+030/16:53:52.000
End	EEE+CDS 00046644:84:0	97-021/00:58:00.000	EEE+032/18:03:12.000
Duration	00002916:84:0	002/01:09:20.000	002/01:09:20.000

Top Label E4NNMEMCHK02-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Record checksum results of different segments of NIMS memory over a 2 day period. Analysis of the results will be part of an ongoing investigation into NIMS software anomaly.
This takes place about +/- 1 day around J5 perijove while the spacecraft is inside of Ganymede’s orbit where the NIMS halts occur.

J5 perijove takes place during Solar Conjunction. That is why the CheckSums must be saved until after Solar Conjunction.

Design Detail

1) Reload NIMS software without restarting.
   37PL, 37MRL and 6MCOPYs only.
2) CheckSum portions of NIMS RAM, then
   6MCOPY the result to NIMS RAM addresses greater than 1800
3) Occupy NIMS RAM addresses 1800 - 18F9

Galileo Activity Plan Form   11/15/96 10:45:25   rev 6/95

E4 Memory check	ACTIVITY ID: E4NNMEMCHK02- START TIME: 97-039/21:20:20.666

Activity ID: Orbit E4 Target N Inst N OAPEL MEMCHK SeqNo 02 -

Title	E4 Memory check			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4C	Calendar Date	02/08/97	Week	6

Start	EEE+CDS	00073489:00:0	97-039/21:20:20.666	EEE+051/14:25:32.666
End	EEE+CDS	00073603:35:0	97-039/23:16:00.000	EEE+051/16:21:12.000
Duration		00000114:35:0	000/01:55:39.334	000/01:55:39.334

Top Label	E4NNMEMCHK02-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

NIMS memory data readout as part of the instrument software anomaly investigation. Results will show current memory status and checksums acquired during the period of 1 day on either side of Jupiter close approach.

This OAPEL deals with the MRO of the CheckSums saved to NIMS RAM space during J5 MEMCHK01. This takes place after solar conjuction after J5 apojove.

Design Detail

1) Use many 6MROHs to read back NIMS RAM from memory locations 1000 - 18F9.

Ground Station problems caused the loss of almost all of the NIMS MROs. Only locations 1280 - 12FF were received. A planned NIMS reload 8 hours after the start of the MROs caused the NIMS RAM space to be over-written so that later MROs could not return the lost CheckSum values. A total bust.

Galileo Activity Plan Form 11/15/96 10:45:25 rev 6/95

Reload NIMS memory		ACTIVITY ID:	E4NNRELOAD11-
		START TIME:	97-040/07:27:00.666

Activity ID: Orbit E4 Target N Inst N OAPEL RELOAD SeqNo 11 -

Title	Reload NIMS memory			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date	02/09/97	Week	6

Start	EEE+CDS	00074089:00:0	97-040/07:27:00.666	EEE+052/00:32:12.666
End	EEE+CDS	00074097:81:0	97-040/07:36:00.000	EEE+052/00:41:12.000
Duration		00000008:81:0	000/00:08:59.334	000/00:08:59.334

Top Label E4NNRELOAD11-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Memory load from CDS to NIMS and restart.
Diagnostic checksum, processor halt, memory reload from CDS, instrument restart, and operational mode set.

Design Detail

6CKSUM - Check Sum NIMS RAM 1000 - 14BC
37PL - Halt NIMS Processor (37PL)
37MRL - Memory Reallocate
6MCOPY - Copy flight software from CDS to NIMS 1000
6MCOPY - Copy flight software from CDS to NIMS 1598
37IRT - Instrument Reset
37MN - Memory Normal
37IST - Chopper Reference

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NIMS INSTRUMENT PREP FOR E6	ACTIVITY ID: E4NNE6PREP01- START TIME: 97-045/23:00:23.333

Activity ID: Orbit E4 Target N Inst N OAPEL E6PREP SeqNo 01 -

Title	NIMS INSTRUMENT PREP FOR E6			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	E4C	Calendar Date	02/14/97	Week	7

Start	EEE+CDS	00082133:00:0	97-045/23:00:23.333	EEE+057/16:05:35.333
End	EEE+CDS	00082163:00:0	97-045/23:30:43.333	EEE+057/16:35:55.333
Duration		00000030:00:0	000/00:30:20.000	000/00:30:20.000

Top Label E4NNE6PREP01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	50	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

NIMS heater configuration in preparation for data taking in the E6 orbit.

Design Detail

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Optical Calibration	ACTIVITY ID: J5NNOPCAL 01- START TIME: 97-047/18:19:55.666

Activity ID: Orbit J5 Target N Inst N OAPEL OPCAL SeqNo 01 -

Title	Optical Calibration			Instrument	NIMS
Requestor	NIMS-SWG/J. HUI	Team	NIMS	Working Group	SWG

Time System CDS Load ID E4C Calendar Date 02/16/97 Week 7

Start	TBD+CDS 00039513:00:0	97-047/18:19:55.666	TBD+027/17:52:02.000
End	TBD+CDS 00039530:00:0	97-047/18:37:06.999	TBD+027/18:09:13.333
Duration	00000017:00:0	000/00:17:11.333	000/00:17:11.333

Top Label J5NNOPCAL 01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	217	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

To perform an Optical Calibration of the NIMS instrument.

Data Returned

Design Detail

Long Map
Gain State 4
Mirror Block 1B,1B (11011,11011) (select mirror positions 8-11)
ETB selects Detectors 1 and 2 only.
Select NIMS in Real Time for 3 RIMs.
Three Long Map grating cycles returned.
OPCAL lamp is turned on at RIMS 1 and 3.
RIM 2 is Dark.

Long Map (LM), Gain 4, Grating Start 0, RT, E4OPCAL48

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