Chapter 5 - Detailed Observation Designs

Contents

Introduction to Chapter 5

Detailed Observation Designs

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

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

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

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

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

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

NIMS Software Reload	ACTIVITY ID: 18NNJUPRTS01- START TIME: 98-325/17:50:58.534

Activity ID: Orbit 18 Target N Inst N OAPEL JUPRTS SeqNo 01 -

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

Time System CDS Load ID Calendar Date 11/21/98 Week 47

Start	JEE-CDS 00000811:00:0	98-325/17:50:58.534	JEE-000/13:40:00.666
End	JEE-CDS 00000801:00:0	98-325/18:01:05.200	JEE-000/13:29:54.000
Duration	00000010:00:0	000/00:10:06.666	000/00:10:06.666

Top Label 18NNJUPRTS01
Bottom Label

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

Observation Objective

NIMS Software Reload

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

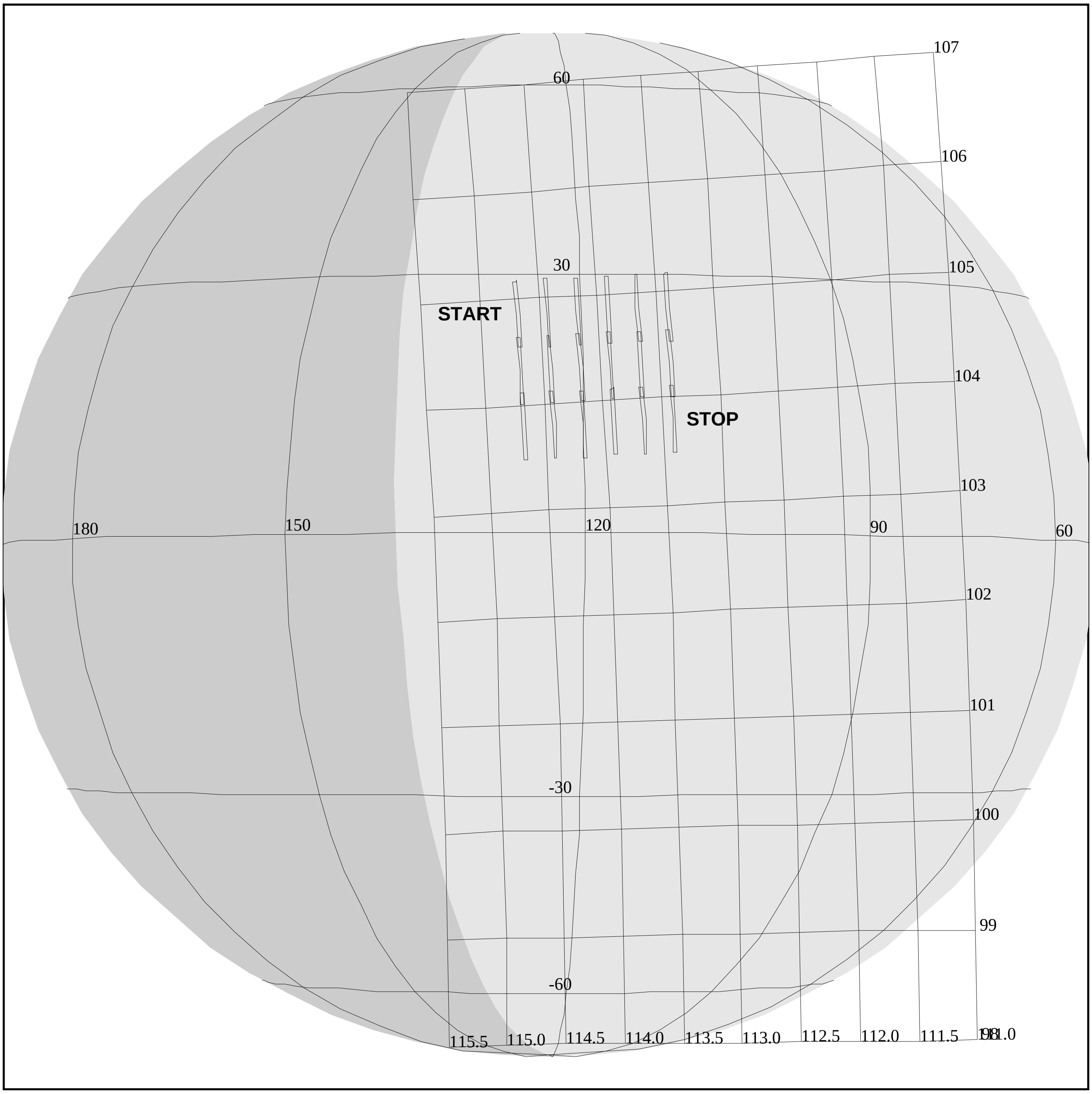
The NIMS E18 reload OAPELs are:
18NNJUPRTS01, 18NNWHTOVL01, 18NNJUPRTS02, 18NNGLOBAL01, 18NNSUCOMP01, 18NNSUCOMP03, 18NNGLOBAL02, 18NNJUPRTS03, 18NNHRSPEC01, 18NNRELOAD01

18ENSUCOMP02 did not have a RELOAD.

Design Detail

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

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



165DA:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/7894 TC= 1(25 127)
A= 728 pD= 3266 SR=17.450 RA50=284.58 DEC50=-21.54 cone=114.68 clock=104.86
117DA:#SB= 1 OR= 0.060 RR=12.000 BM=F RC= 1 BS= 0/7894
1:#s= 3 Cs= -20.90 XCs= 0.00 Cr= 26.60 XCr= -8.10 sD= 1052 rD= 18

18JNJUPRTS01

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18JNJUPRTS01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

THINNING:NIM 7

START:JEE 98-326/07:30:59.200 -CDS 796:00:0

BODY PLOT TIME:TARGET-TIME D= 3266 S= 1.000

OBSERVATION:18JNJUPRTS01

DESCRIP:Jupiter_Realtime_Observation

Jupiter Realtime Observation	ACTIVITY ID: 18JNJUPRTS01* START TIME: 98-325/18:02:05.867

Activity ID: Orbit 18 Target J Inst N OAPEL JUPRTS SeqNo 01 *

Title	Jupiter Realtime Observation			Instrument	NIMS
Requestor	NIMS-AWG/A. OCAMPO	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID		Calendar Date	11/21/98	Week	47

Start	JEE-CDS 00000800:00:0	98-325/18:02:05.867	JEE-000/13:28:53.333
End	JEE-CDS 00000776:00:0	98-325/18:26:21.867	JEE-000/13:04:37.333
Duration	00000024:00:0	000/00:24:16.000	000/00:24:16.000

Top Label	18JNJUPRTS01*
Bottom Label	

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

Observation Objective

Search for Jupiter atmospheric composition and thermal variations over time.

FREE_RTS= 0.32 Mbits

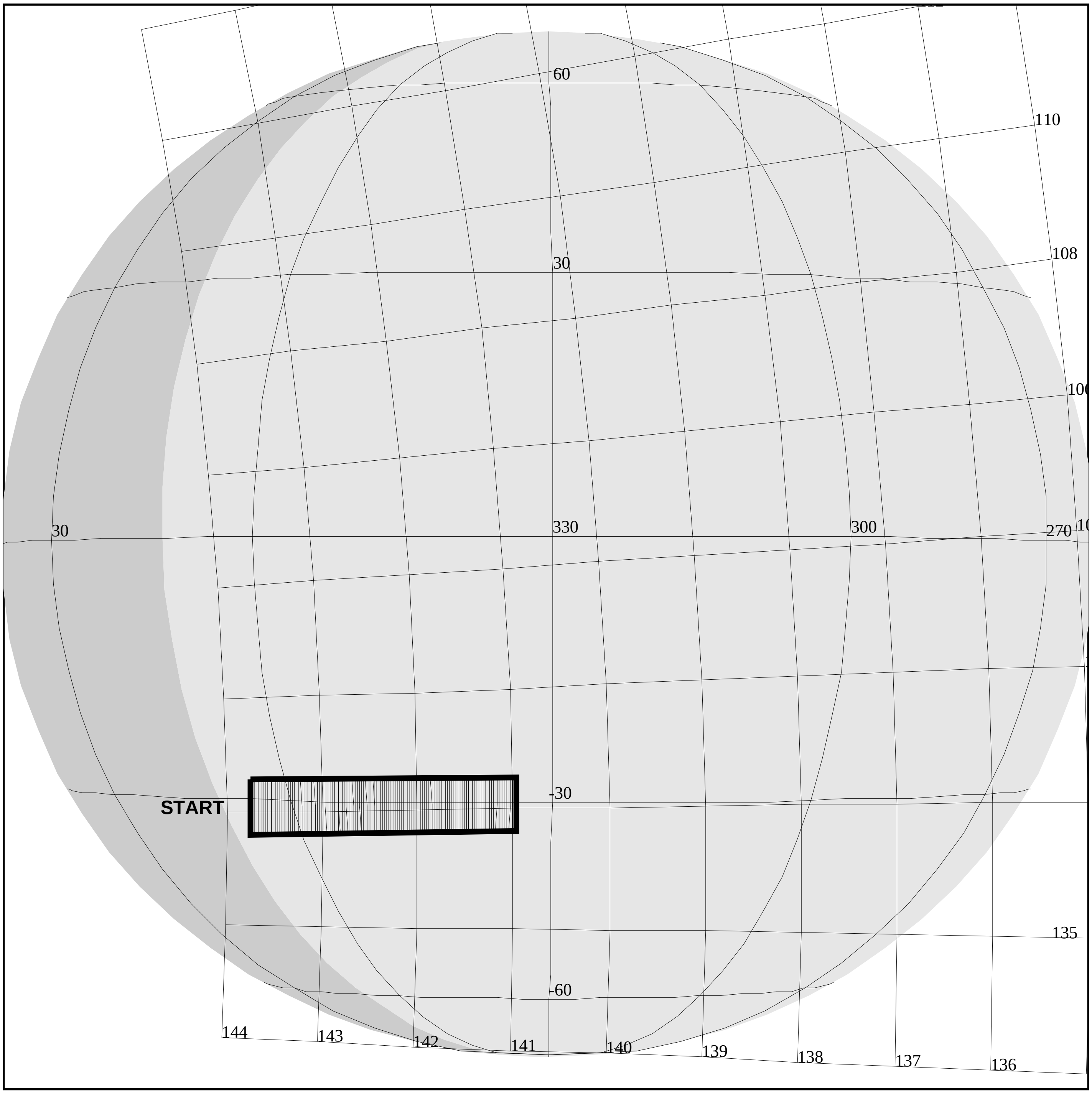
Data Returned

Design Detail

Long map. Three scans Total duration 20 RIMS long.
Nyquist sampling not necessary. Longitude - not dependent.
No overlap in FOV.

Long Map (LM), Gain 2, Grating Start 0, R/T, E18JLM408

Galileo Activity Plan Form 11/03/98 17:30:34 rev 6/95



165DJ:TT= 0 TMC= 1 C= 55.00 XC= 0.00 BS= 0/7236 TC= 1(-30 330)
A= 728 pD= 3084 SR=17.450 RA50=315.87 DEC50=-19.76 cone=143.75 clock=100.09
117DJ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7236
1:#s= 1 Cs= -30.80 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 3084 rD= 2

18JNWHTOVL01

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18JNWHTOVL01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:JEE 98-326/07:30:59.200 -CDS 415:00:0

OBSERVATION:18JNWHTOVL01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 3084 S= 1.000

DESCRIP:JUPITER_WHITE_OVAL

Jupiter White Oval		ACTIVITY ID:	18JNWHTOVL01-
		START TIME:	98-326/00:27:19.867

Activity ID: Orbit 18 Target J Inst N OAPEL WHTOVL SeqNo 01 -

Title	Jupiter White Oval			Instrument	NIMS
Requestor	NIMS-AWG/K. BAINES	Team	NIMS	Working Group	AWG

Time System CDS Load ID Calendar Date 11/22/98 Week 47

Start	JEE-CDS 00000419:00:0	98-326/00:27:19.867	JEE-000/07:03:39.333
End	JEE-CDS 00000398:00:0	98-326/00:48:33.867	JEE-000/06:42:25.333
Duration	00000021:00:0	000/00:21:14.000	000/00:21:14.000

Top Label 18JNWHTOVL01-
Bottom Label

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

Observation Objective

To observe the newly created white oval, which was formed in the Spring of 1998, from the merging of two white ovals previously named BC and DE. This data set will provide a second view of this new feature first observed by NIMS in E17.

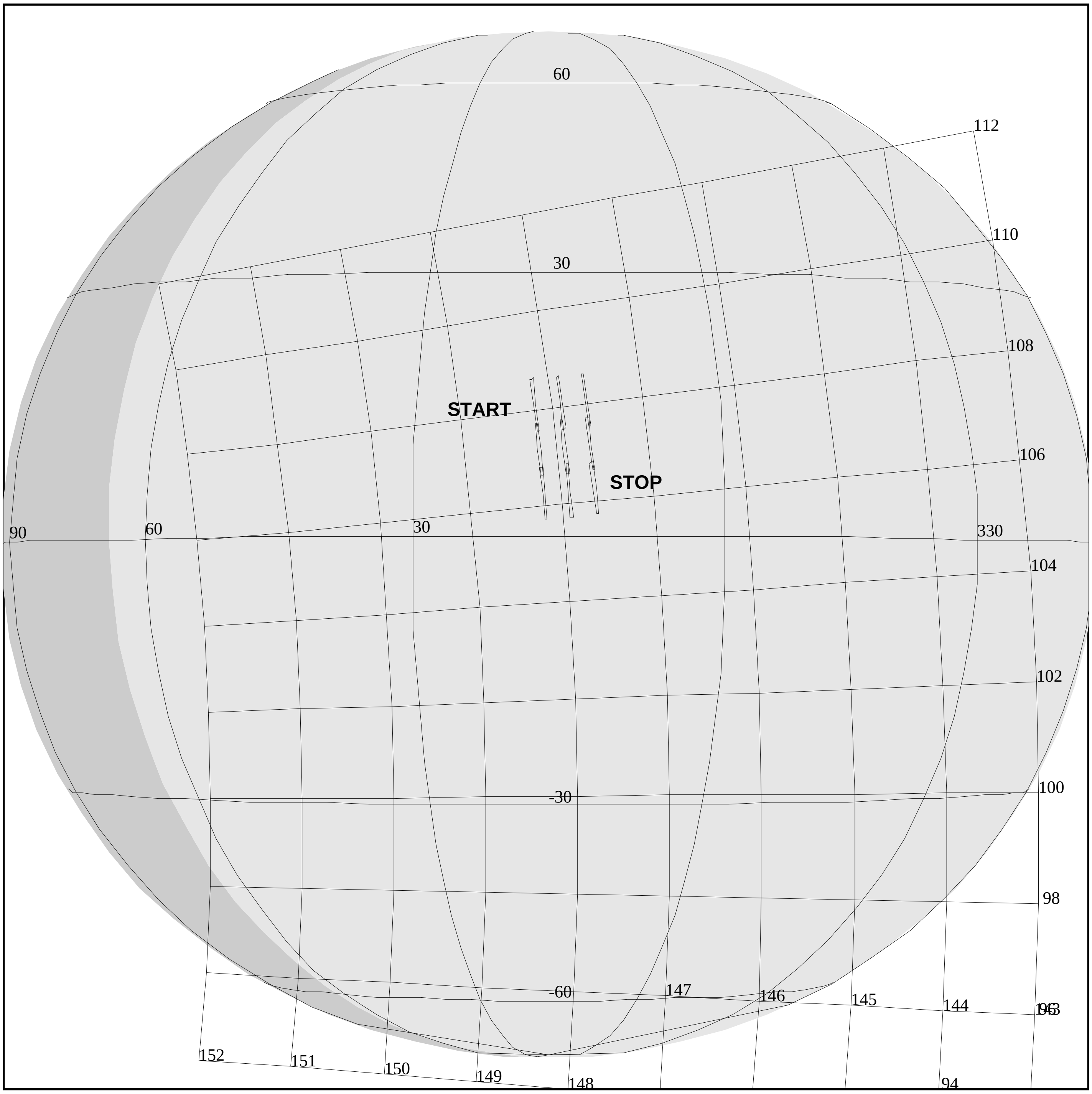
Data Returned

Design Detail

4 Rims of targeting time, one scan 12 Rims long.
Longitude coverage: 350 degrees to 357 degrees (centered)
Latitude: 30 degrees South
Long map mode, Nyquist sampling

Long Map (LM), Gain 2, Grating Start 0, MPW, E18JSB253B, E18JSB253B

Galileo Activity Plan Form 11/03/98 17:30:34 rev 6/95



165DB:TT= 0 TMC= 1 C= 4.00 XC= 8.00 BS= 0/3434 TC= 1(10 16)
A= 728 pD= 1628 SR=17.450 RA50=319.13 DEC50=-14.27 cone=148.19 clock=108.11
117DB:#SB= 1 OR= 0.060 RR=12.000 BM=F RC= 1 BS= 0/3434
1:#s= 3 Cs= -10.15 XCs= 0.00 Cr= 14.00 XCr= -8.00 sD= 514 rD= 36

18JNJUPRTS02

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18JNJUPRTS02

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:JEE 98-326/07:30:59.200 -CDS 326:00:0

OBSERVATION:18JNJUPRTS02

THINNING:NIM 7

BODY PLOT TIME:TARGET-TIME D= 1628 S= 1.000

DESCRIP:Jupiter_Realtime_Observation

Jupiter Realtime Observation	ACTIVITY ID: 18JNJUPRTS02* START TIME: 98-326/01:57:19.200

Activity ID: Orbit 18 Target J Inst N OAPEL JUPRTS SeqNo 02 *

Title	Jupiter Realtime Observation			Instrument	NIMS
Requestor	NIMS-AWG/A. OCAMPO	Team	NIMS	Working Group	AWG

Time System CDS   Load ID   Calendar Date 11/22/98 Week 47

Start	JEE-CDS 00000330:00:0	98-326/01:57:19.200	JEE-000/05:33:40.000
End	JEE-CDS 00000316:00:0	98-326/02:11:28.534	JEE-000/05:19:30.666
Duration	00000014:00:0	000/00:14:09.334	000/00:14:09.334

Top Label 18JNJUPRTS02*
Bottom Label

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

Observation Objective

Search for Jupiter atmospheric composition and thermal variations over time.

FREE_RTS= 0.16 Mbits

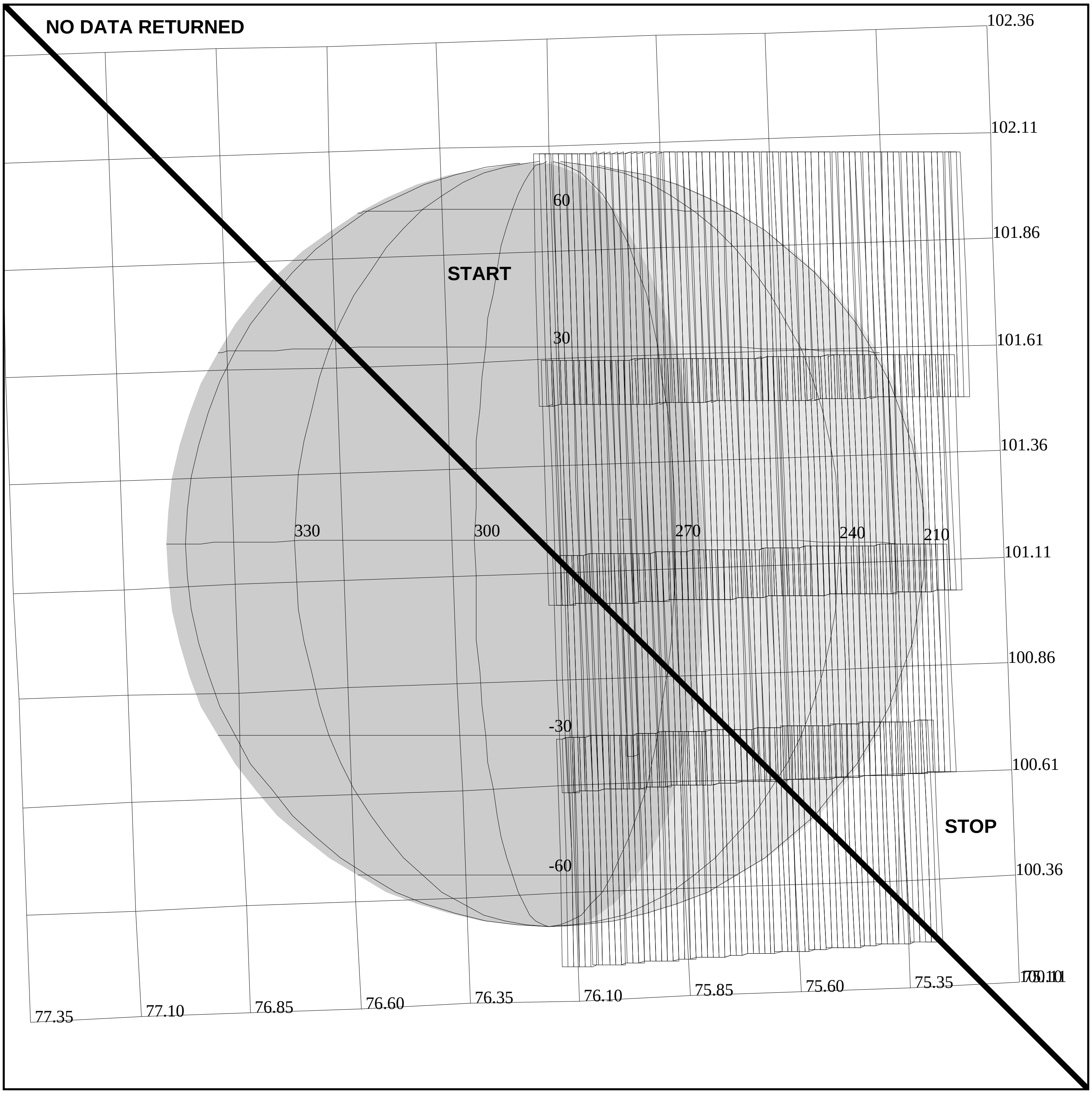
Data Returned

Design Detail

Long map. Three scans, each three RIMS long.
Nyquist sampling not necessary - lit surface only
not longitude dependent. No overlap in FOV.
NIMS R/T only returns every seventh FOV.

Long Map (LM), Gain 2, Grating Start 0, R/T, E18JLM408

Galileo Activity Plan Form   11/03/98 17:30:34   rev 6/95



165DC:TT= 0 TMC= 1 C= 0.00 XC= 10.50 BS= 0/3484 TC= 3
A= 728 pD= 6892 SR=17.450 RA50=242.85 DEC50=-21.73 cone= 76.13 clock=101.80
117DC:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/3484
1:#s= 4 Cs= -17.00 XCs= 0.00 Cr= 17.00 XCr= -8.00 sD= 1708 rD= 20

18ENGLOBAL01

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18ENGLOBAL01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS: **THINNING:NIM 1**

START:EEE 98-326/11:38:42.533 -CDS 296:00:0 **BODY PLOT TIME:TARGET-TIME D= 6892 S= 0.700**

OBSERVATION:18ENGLOBAL01 **DESCRIP:Europa_Global_Observation**

Europa Global Observation	ACTIVITY ID: 18ENGLOBAL01- START TIME: 98-326/06:35:22.533

Activity ID: Orbit 18 Target E Inst N OAPEL GLOBAL SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	11/22/98	Week	47

Start	EEE-CDS 300:00:0	98-326/06:35:22.533	EEE-000/05:03:20.000
End	EEE-CDS 00000264:00:0	98-326/07:11:46.533	EEE-000/04:26:56.000
Duration	00000036:00:0	000/00:36:24.000	000/00:36:24.000

Top Label	18ENGLOBAL01-
Bottom Label	

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

Observation Objective

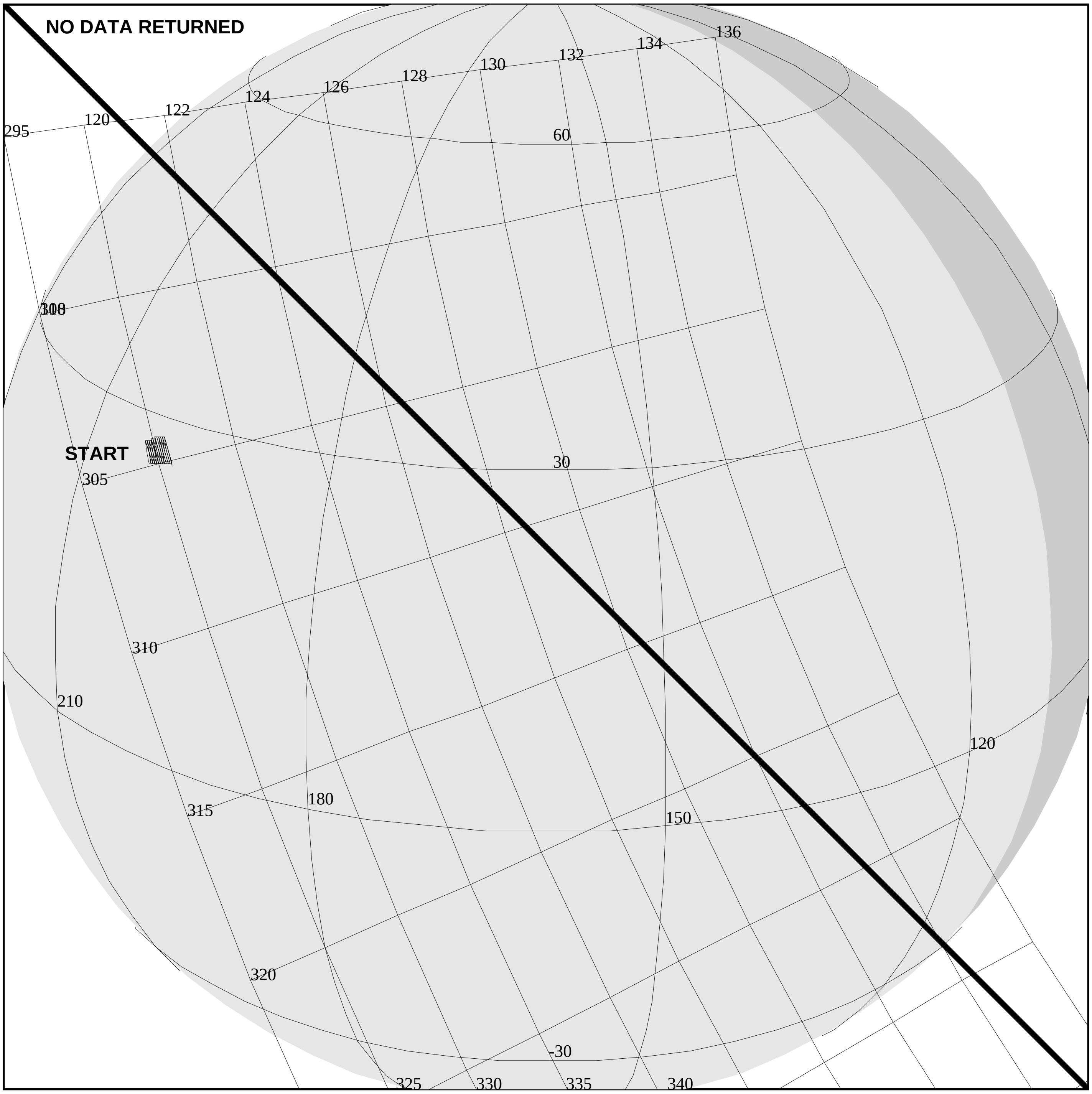
Europa global mosaic of the trailing hemisphere covering
West longitudes 290-213 degrees at 50 KM resolution.

No Data Returned, S/C Safed

Design Detail

NIMS mode = LM Record FMT = MPW Gain state = 4,3,4
Grating position = 0 Tics = 1848,
PPR_RA=0.349

Galileo Activity Plan Form 11/03/98 17:30:34 rev 6/95



165DD:TT= 0 TMC= 1 C= -3.50 XC= 0.00 BS= 0/9903 TC= 1(27 200)
A= 182 pD= 718 SR=17.450 RA50= 50.54 DEC50= -1.73 cone=119.79 clock=304.57
117DD:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/9903
1:#s= 1 Cs= 7.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 718 rD= 2

18ENSUCOMP01

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18ENSUCOMP01

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS: **THINNING:NIM 1**

START:EEE 98-326/11:38:42.533 +CDS 14:00:0 **BODY PLOT TIME:TARGET-TIME D= 718 S= 1.000**

OBSERVATION:18ENSUCOMP01 **DESCRIP:Europa_Surface_Composition**

Europa Surface Composition		ACTIVITY ID:	18ENSUCOMP01-
		START TIME:	98-326/11:51:51.199

Activity ID: Orbit 18 Target E Inst N OAPEL SUCOMP SeqNo 01 -

Title	Europa Surface Composition			Instrument	NIMS
Requestor	NIMS-SWG/J. SHIRLEY	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	11/22/98	Week	47

Start	EEE+CDS 13:00:0	98-326/11:51:51.199	EEE+000/00:13:08.666
End	EEE+CDS 00000018:00:0	98-326/11:56:54.533	EEE+000/00:18:12.000
Duration	00000005:00:0	000/00:05:03.334	000/00:05:03.334

Top Label	18ENSUCOMP01-
Bottom Label	

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

Observation Objective

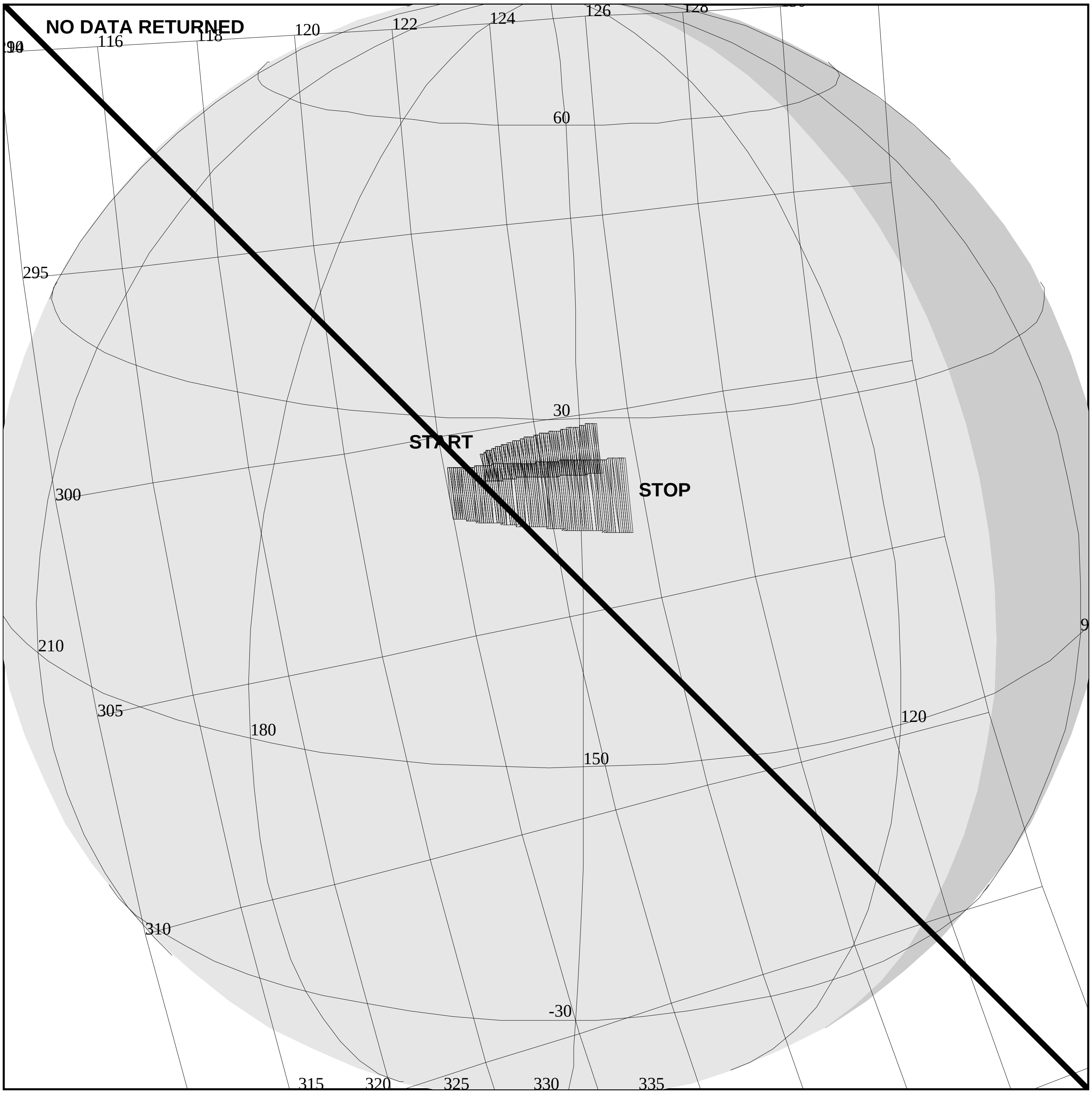
Europa surface composition observation centered at latitude 27 degrees and West longitude 200 degrees covering complex intersecting dark linea.

No Data Returned, S/C Safed

Design Detail

NIMS mode = LM Record FMT = MPW Gain state = 3
Grating position = 0 Tics = 213

Galileo Activity Plan Form   11/03/98 17:30:35   rev 6/95



165DE:TT= 0 TMC= 1 C= -15.00 XC= -6.00 BS= 0/0813 TC= 1(25 155)
A= 182 pD= 5632 SR=17.450 RA50= 47.18 DEC50= 1.01 cone=122.81 clock=300.93
117DE:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0813
1:#s= 2 Cs= 27.95 XCs= 0.00 Cr= -29.90 XCr= 7.00 sD= 2802 rD= 22

18ENSUCOMP02

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18ENSUCOMP02

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:EEE 98-326/11:38:42.533 +CDS 19:00:0

OBSERVATION:18ENSUCOMP02

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 5632 S= 1.000

DESCRIP:NIMS_EUROPA_SURFACE_COMPOSITION_

Europa Surface Composition	ACTIVITY ID: 18ENSUCOMP02- START TIME: 98-326/11:56:54.533

Activity ID: Orbit 18 Target E Inst N OAPEL SUCOMP SeqNo 02 -

Title	Europa Surface Composition			Instrument	NIMS
Requestor	NIMS-SWG/J. SHIRLEY	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	11/22/98	Week 47

Start	EEE+CDS 18:00:0	98-326/11:56:54.533	EEE+000/00:18:12.000
End	EEE+CDS 00000050:00:0	98-326/12:29:15.866	EEE+000/00:50:33.333
Duration	00000032:00:0	000/00:32:21.333	000/00:32:21.333

Top Label 18ENSUCOMP02-
Bottom Label

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

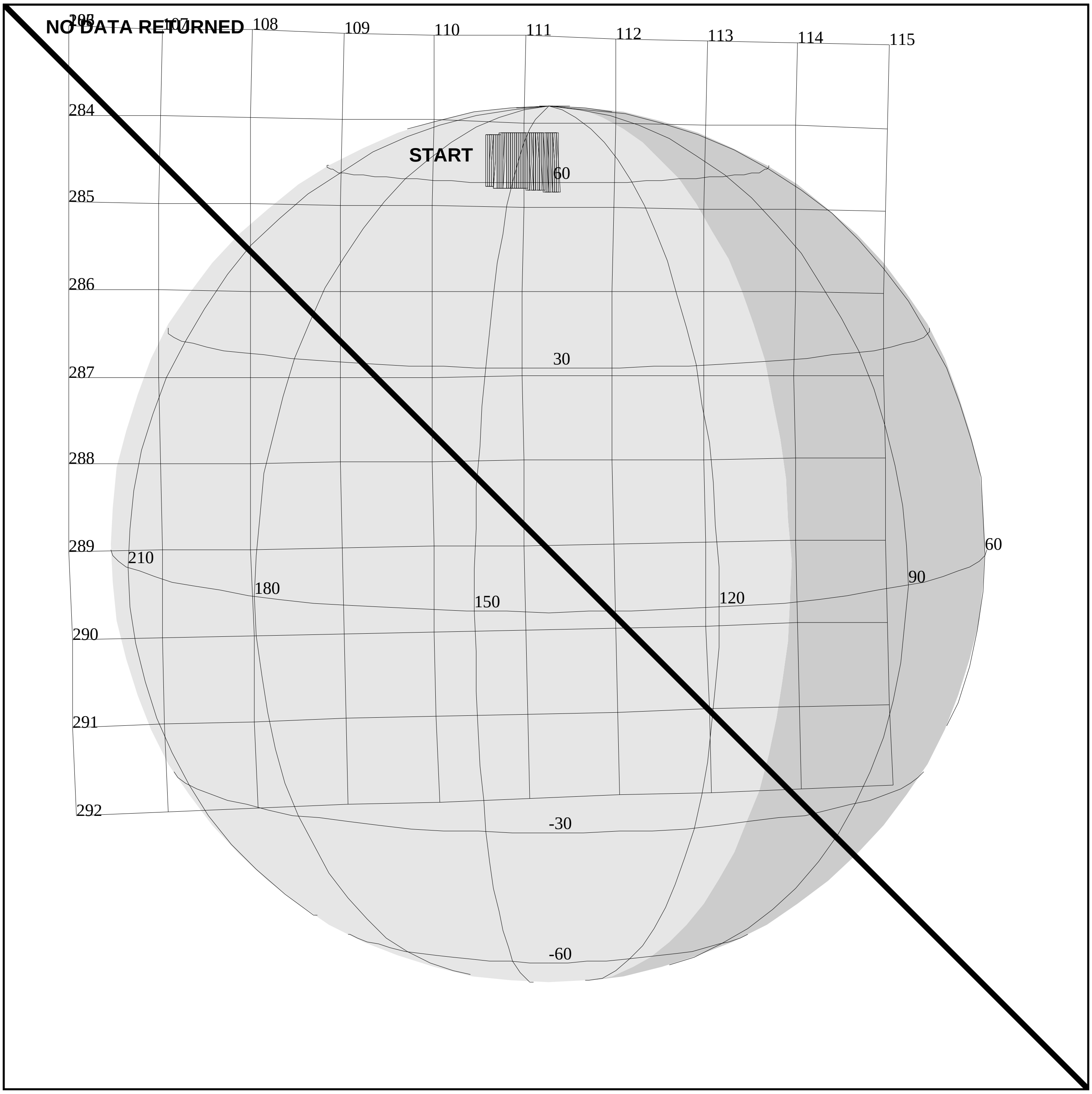
Observation Objective

Europa surface composition observation centered on latitude +25 degrees and West longitude at 155 degrees, imaging sharply defined dark linea.

No Data Returned, S/C Safed

Design Detail

NIMS mode = LM Record FMT = MPW Gain state = 3
Grating position = 0 Tics = 1637



165DF:TT= 0 TMC= 1 C= -6.25 XC= 0.00 BS= 0/6637 TC= 1(65 150)
A= 182 pD= 1264 SR=17.450 RA50= 56.49 DEC50= 17.75 cone=110.59 clock=284.46
117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/6637
1:#s= 1 Cs= 12.50 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1264 rD= 2

18ENSUCOMP03

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18ENSUCOMP03

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:EEE 98-326/11:38:42.533 +CDS 51:00:0

OBSERVATION:18ENSUCOMP03

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 1264 S= 0.800

DESCRIP:Europa_Surface_Composition

Europa Surface Composition		ACTIVITY ID:	18ENSUCOMP03-
		START TIME:	98-326/12:29:15.866

Activity ID: Orbit 18 Target E Inst N OAPEL SUCOMP SeqNo 03 -

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

Time System	CDS	Load ID		Calendar Date	11/22/98	Week 47

Start	EEE+CDS 50:00:0	98-326/12:29:15.866	EEE+000/00:50:33.333
End	EEE+CDS 00000058:00:0	98-326/12:37:21.199	EEE+000/00:58:38.666
Duration	00000008:00:0	000/00:08:05.333	000/00:08:05.333

Top Label 18ENSUCOMP03-
Bottom Label

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

Observation Objective

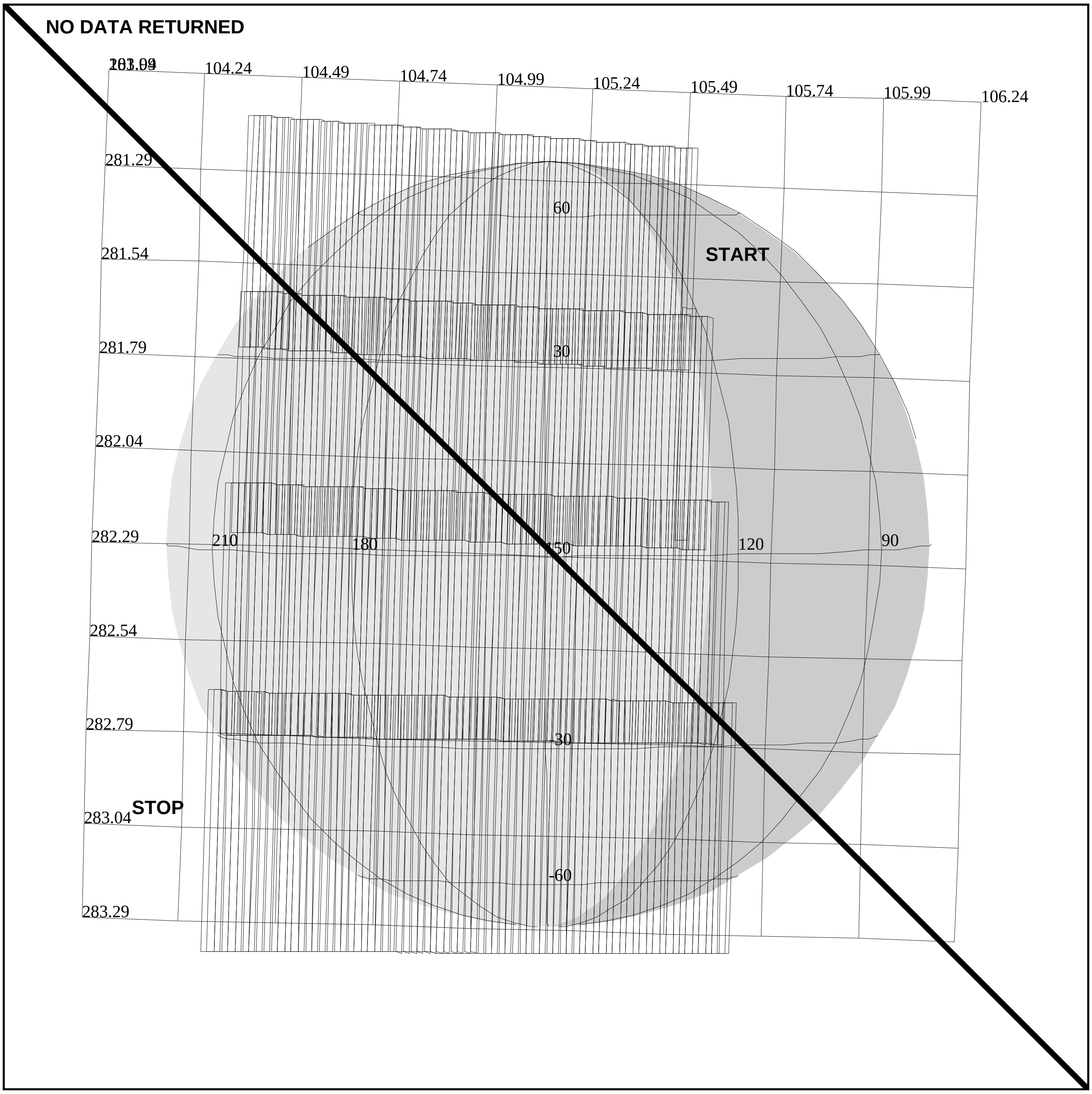
Europa surface composition observation covering North polar region centered at latitude +83 degrees and West longitude 150 degrees.

No Data Returned, S/C Safed

Design Detail

NIMS mode = LM Record FMT = MPW Gain state = 4
Grating position = 0 Tics = 372,
PPR_RA=0.070

Galileo Activity Plan Form 11/03/98 17:30:35 rev 6/95



165DG:TT= 0 TMC= 1 C= 6.00 XC= -13.00 BS= 0/3583 TC= 3
A= 182 pD= 7998 SR=17.450 RA50= 61.06 DEC50= 21.67 cone=105.51 clock=281.49
117DG:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/3583
1:#s= 4 Cs= -19.60 XCs= 0.00 Cr= 20.00 XCr= 8.00 sD= 1980 rD= 20

18ENGLOBAL02

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18ENGLOBAL02

TARGET BODY : EUROPA

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:EEE 98-326/11:38:42.533 +CDS 254:00:0

OBSERVATION:18ENGLOBAL02

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 7998 S= 0.700

DESCRIP:Europa_Global_Observation

Europa Global Observation	ACTIVITY ID: 18ENGLOBAL02- START TIME: 98-326/16:42:02.533

Activity ID: Orbit 18 Target E Inst N OAPEL GLOBAL SeqNo 02 -

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

Time System	CDS	Load ID		Calendar Date	11/22/98	Week	47

Start	EEE+CDS 00000300:00:0	98-326/16:42:02.533	EEE+000/05:03:20.000
End	EEE+CDS 00000345:00:0	98-326/17:27:32.533	EEE+000/05:48:50.000
Duration	00000045:00:0	000/00:45:30.000	000/00:45:30.000

Top Label	18ENGLOBAL02-
Bottom Label	

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

Observation Objective

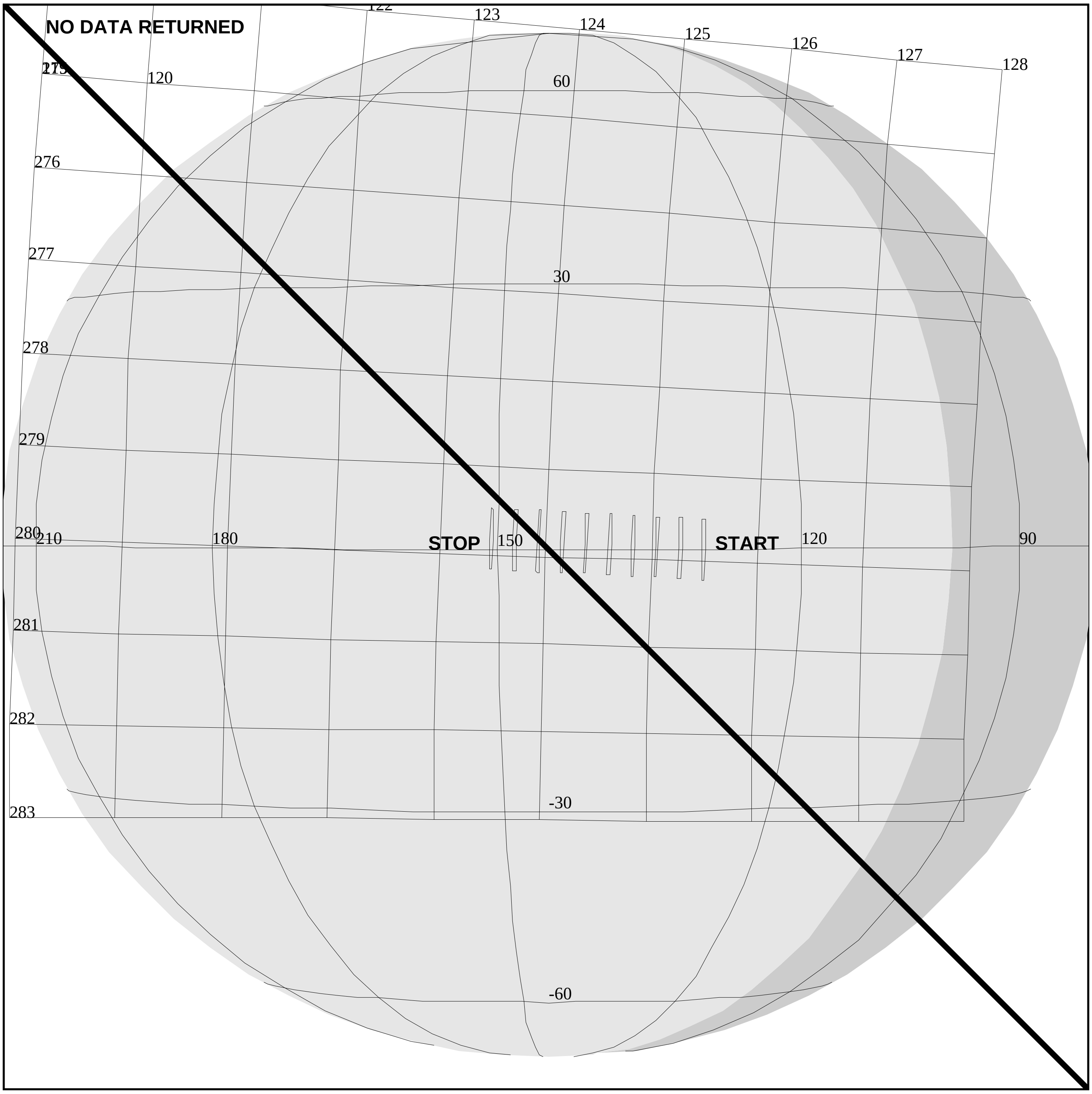
Europa global mosaic imaging portions of the leading and trailing hemispheres, covering West longitudes 210-120 degrees at ~50 KM resolution.

No Data Returned, S/C Safed

Design Detail

NIMS mode = LM Record FMT = MPW TICS=2340, PPR_RA= 0.439
Gain state = 3,4,3,4,3,4,3 Grating position = 0

Galileo Activity Plan Form 11/03/98 17:30:35 rev 6/95



165DH:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/4877 TC= 1(0 130)
A= 728 pD= 1810 SR=17.450 RA50= 40.29 DEC50= 17.28 cone=125.51 clock=279.85
117DH:#SB= 1 OR= 0.070 RR=12.000 BM=F RC= 1 BS= 0/4877
1:#s= 1 Cs= -48.00 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1810 rD= 40

18JNJUPRTS03

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18JNJUPRTS03

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:JEE 98-326/07:30:59.200 +CDS 616:00:0

OBSERVATION:18JNJUPRTS03

THINNING:NIM 7

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

DESCRIP:Jupiter_Realtime_Observation

Jupiter Realtime Observation — ACTIVITY ID: 18JNJUPRTS03*
START TIME: 98-326/17:49:47.200

Activity ID: Orbit 18 Target J Inst N OAPEL JUPRTS SeqNo 03 *

Title	Jupiter Realtime Observation			Instrument	NIMS
Requestor	NIMS-AWG/A. OCAMPO	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID		Calendar Date	11/22/98	Week	47

Start	JEE+CDS 00000612:00:0	98-326/17:49:47.200	JEE+000/10:18:48.000
End	JEE+CDS 00000626:00:0	98-326/18:03:56.533	JEE+000/10:32:57.333
Duration	00000014:00:0	000/00:14:09.333	000/00:14:09.333

Top Label   18JNJUPRTS03*
Bottom Label

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

Observation Objective

Search for Jupiter atmospheric composition and thermal variations over time.

FREE_RTS= 0.16 Mbits

No Data Returned, S/C Safed

Design Detail

Long map. One scan, ten RIMS long.
Equator - Nyquist sampling not necessary.
Longitude - not dependent. No overlap in FOV.

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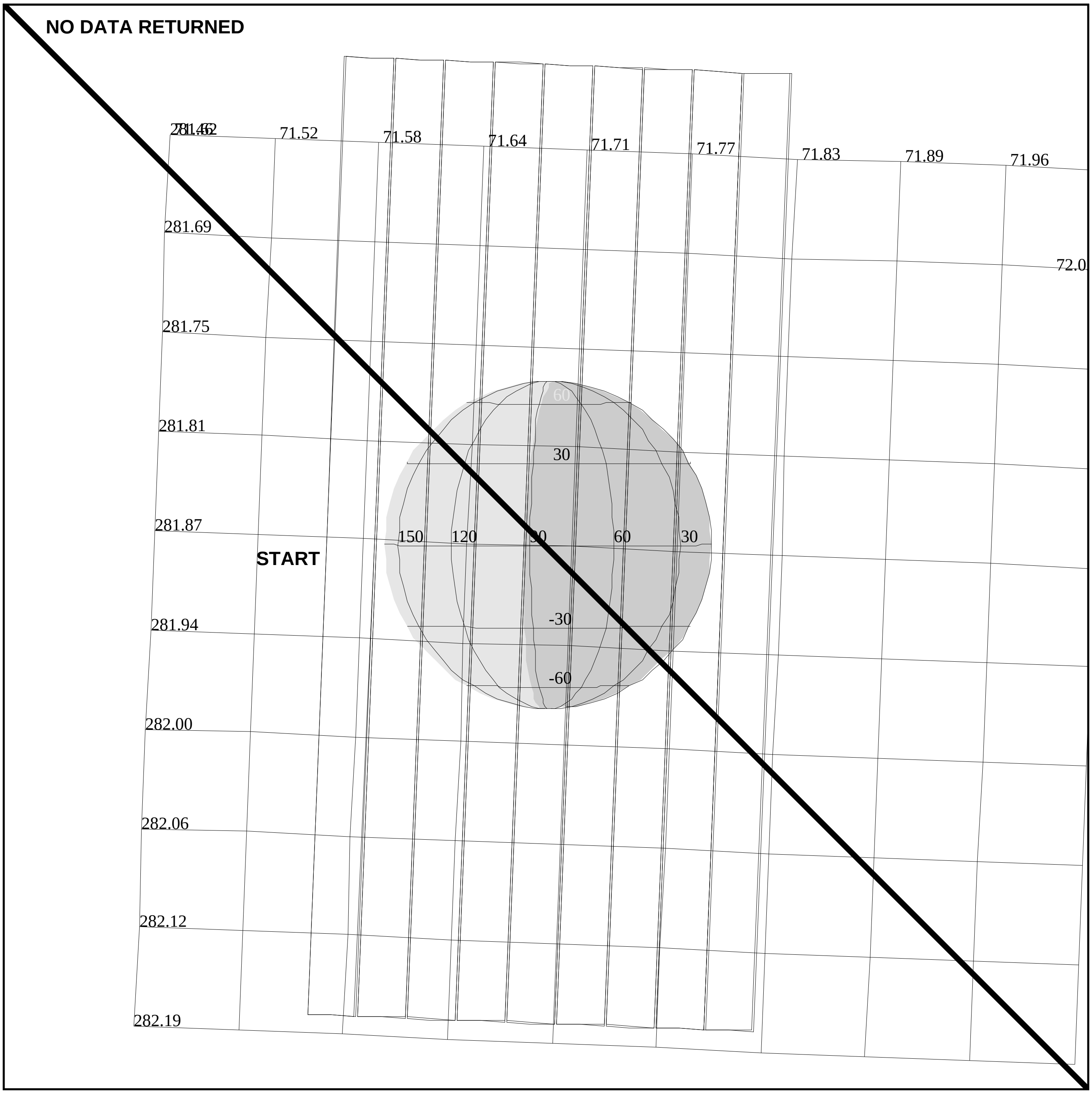

165DI:TT= 0 TMC= 1 C= -2.20 XC= 0.00 BS= 0/4077 TC= 3
A= 728 pD= 900 SR=17.450 RA50= 97.94 DEC50= 24.62 cone= 71.57 clock=281.87
117DI:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/4077
1:#s= 2 Cs= 4.38 XCs= 0.00 Cr= -4.48 XCr= 0.00 sD= 442 rD= 16

18INHRSPEC01

TARGET G3.1 lisac:10/30/1998 14:54:21

FILE:P.18INHRSPEC01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/T-980928-tour.NS

PERIAPSIS:

START:IEE 98-327/11:11:13.866 -CDS 426:00:0

OBSERVATION:18INHRSPEC01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 900 S= 0.300

DESCRIP:Io_Monitoring_at_High_Spec_Res

Io Monitoring at High Spectral Resolutio	ACTIVITY ID:	18INHRSPEC01-
	START TIME:	98-327/03:56:27.200

Activity ID: Orbit 18 Target I Inst N OAPEL HRSPEC SeqNo 01 -

Title	Io Monitoring at High Spectral Resolutio		Instrument		NNIMS
Requestor	NIMS-SWG/R. LOPES	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	11/23/98	Week	47

Start	IEE-CDS 00000430:00:0	98-327/03:56:27.200	IEE-000/07:14:46.666
End	IEE-CDS 00000421:16:0	98-327/04:05:22.533	IEE-000/07:05:51.333
Duration	00000008:75:0	000/00:08:55.333	000/00:08:55.333

Top Label	18INHRSPEC01-
Bottom Label	

Plot Key	NIMS	Type	SCI		
CDS Bytes	0	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective

Io monitoring at high spectral resolution in preparation of the I24 and I25 orbits. Data provides another opportunity to accomplish a time sample of the hot spot monitoring campaign continued through the prime mission.

No Data Returned, S/C Safed

Design Detail

Global Mosaic in Long Map, 360 wavelengths, record mode is MPW.
Central longitude is approximately 65 degrees West.
NIMS resolution is approximately 500 km/pixel.
Cost is approximately 1.5 Mbits, 250 tics.

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NIMS Chopper Off	ACTIVITY ID: 18NNCHOPOF01- START TIME: 98-327/04:28:48.533

Activity ID: Orbit 18 Target N Inst N OAPEL CHOPOF SeqNo 01 -

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

Time System CDS Load ID Calendar Date 11/23/98 Week 47

Start	IEE-CDS 00000398:00:0	98-327/04:28:48.533	IEE-000/06:42:25.333
End	IEE-CDS 00000388:00:0	98-327/04:38:55.200	IEE-000/06:32:18.666
Duration	00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label 18NNCHOPOF01-
Bottom Label

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

Observation Objective

NIMS Chopper Off

Commands Not Executed, S/C Safed

Design Detail

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NIMS Star Calibration	ACTIVITY ID: 18HNSTRCAL01- START TIME: 98-344/17:41:00.000

Activity ID: Orbit 18 Target H Inst N OAPEL STRCAL SeqNo 01 -

Title	NIMS Star Calibration			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	12/10/98	Week	50

Start	98-344/17:41:00.000
End	98-344/18:22:00.000
Duration	000/00:41:00.000

Top Label	18HNSTRCAL01-
Bottom Label	

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

Observation Objective

NIMS Star Calibration.

Build up a NIMS star calibration spectrum of the star Sirius.

Data Returned

Design Detail

Scan back and forth across the star (Sirius) in Fixed Map mode, gain state 4, MPW. Start at grating start position 0 and increment the grating start position by 1 every Rim. A total of 24 Rims recorded.

One scan cycle every 17 mf, roughly 5 1/3 times per Rim (grating position).

The star is sub-pixel.

This observation is performed in Cruise mode.

Fixed Map (XM), Gain 4, Grating Start 0, MPW, E18STRCAL17, E18STRCAL15

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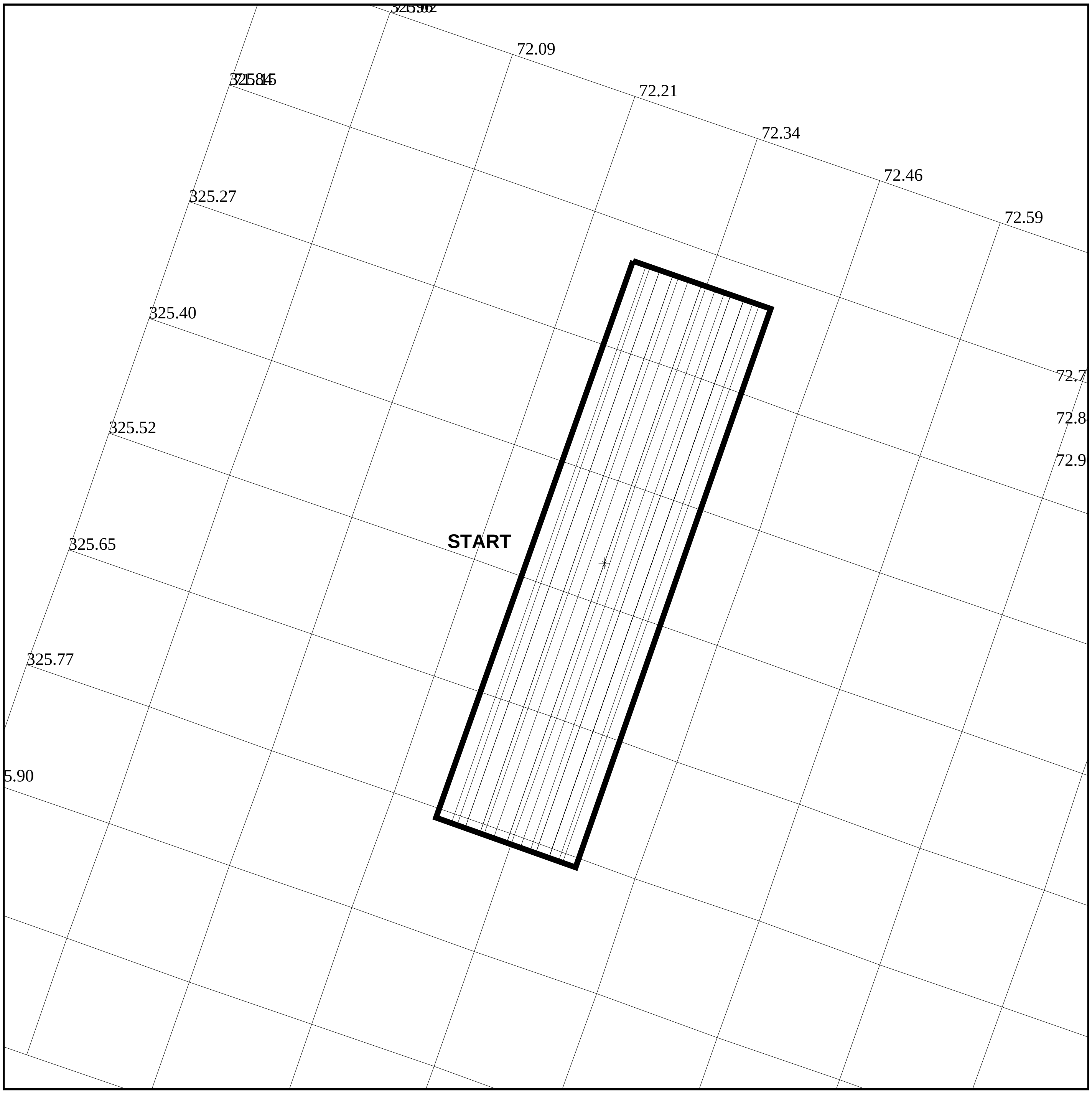

165FA:TT= 0 TMC= 1 C= -1.00 XC= 0.00 BS= 0/8625 TC=14(Sirius)
A= 728 pD= 0 SR=17.450 RA50=100.79 DEC50=-16.65 cone= 72.28 clock=325.48
117FA:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/8625
1:#s=128 Cs= 2.00 XCs= 0.00 Cr= -2.00 XCr= 0.00 sD= 18 rD= 16

18HNSTARCAL1

DESIGN G3.2 lisac:12/ 3/1998 10:38:23

FILE:P.18HNSTARCAL1

CENTRAL BODY:JUPITER III

MINI:m.18HNSTARCAL1

S/C EPH:/DATA/NAVIO/E19-T-981116.NS

PERIAPSIS:

START:RDC 98-344/15:30:04.333 +CDS 132:00:0

OBSERVATION:18HNSTARCAL1

THINNING:NIM 2

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

DESCRIP:NIMS_E18_PRIME_STAR_CALIBRATION

NIMS RCT Real Time Calibration	ACTIVITY ID: 18NNRCTRLT01- START TIME: 99-007/14:00:05.933

Activity ID: Orbit 18 Target N Inst N OAPEL RCTRLT SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	01/07/99	Week	54

Start	RTA+CDS 00000000:00:0	99-007/14:00:05.933	RTA+000/00:00:00.000
End	RTA+CDS 00000787:00:0	99-008/03:15:50.599	RTA+000/13:15:44.666
Duration	00000787:00:0	000/13:15:44.666	000/13:15:44.666

Top Label 18NNRCTRLT01-
Bottom Label

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

Observation Objective

This observation is a NIMS radiometric calibration using the RCT target. The data will be used to calibrate the NIMS thermal detectors. The calibration data will be returned using Real Time Telemetry. An OPCAL is also performed.

Data Returned

Design Detail

a Library Sequence.

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

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

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