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: START TIME:	32NNTHPELE01- 01-289/00:17:10.133

Activity ID: Orbit 32 Target N Inst N OAPEL THPELE 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	10/1 6/0	Wee	42

Start	IEE-CDS 00000000:00:0	01-289/00:17:10.133	IEE-000/00:00:00.000
End	IEE-CDS 00000000:00:0	01-289/00:20:10.133	IEE-000/00:00:00.000
Duration	00000000:00:0	000/00:03:00.000	000/00:00:00.000

Top Label   32NNTHPELE01-
Bottom Label

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

Observation Objective

NIMS reload
Each NIMS GMM observation will have an instrument reload before the start of each observation. Each reload has its own OAPEL form, but only this first is included in the NIMSGUIDE. The NIMS I32 reload OAPELs are:

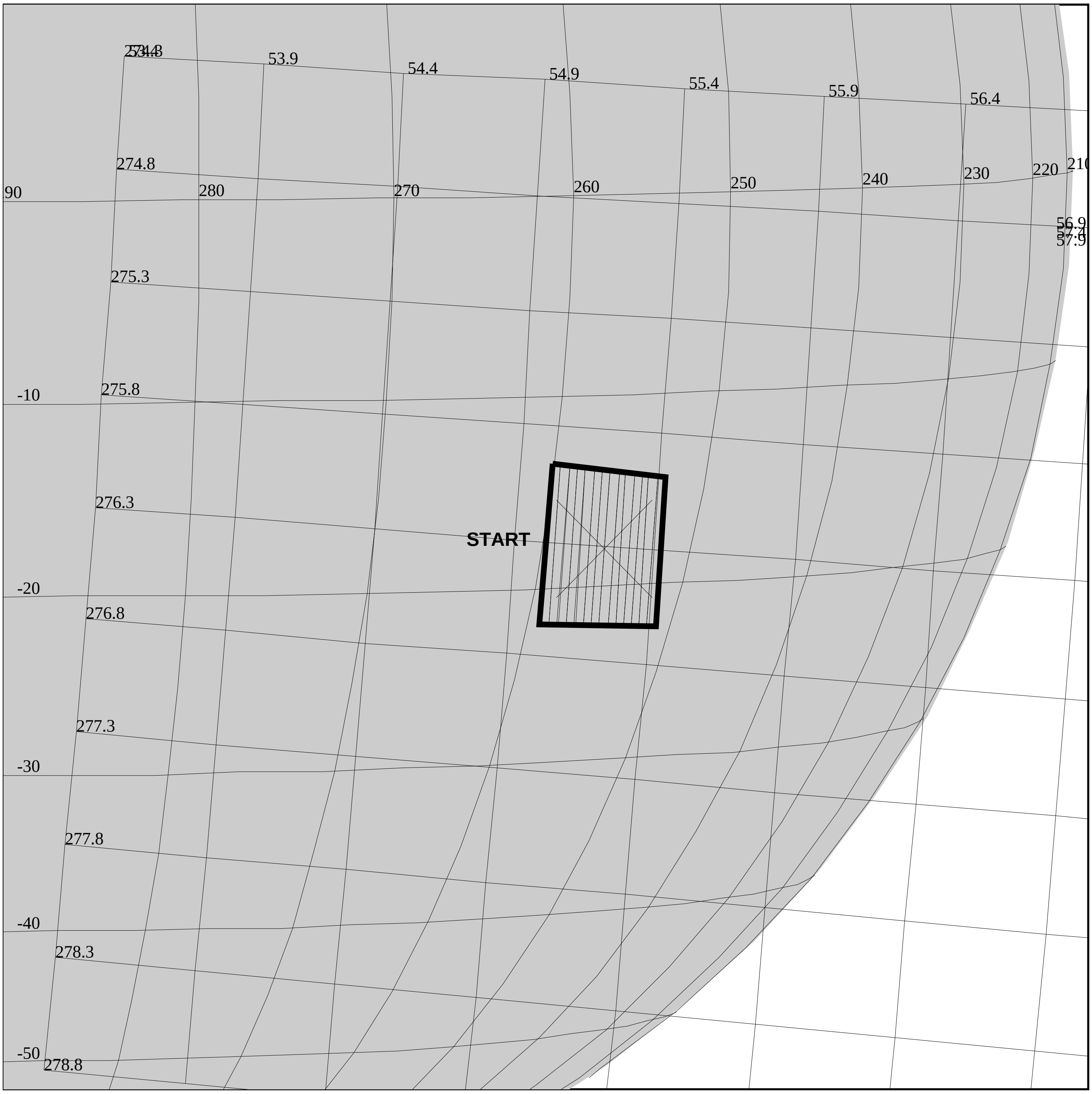
32NNTHPELE01, 32NNTHLOKI01, 32NNTHPELE02, 32NNTHERML01, 32NNEMAKNG01, 32NNITUPAN01, 32NNICHAAC01, 32NNHTSPOT01, 32NNREGION01, 32NNREGION02, 32NNGLOBAL01, 32NNGLOBAL02, 32NNRELOAD01.

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.

Galileo Activity Plan Form   12/31/00 10:48:23   rev 1/99



165DA:TT= 0 TMC= 1 C= -3.51 XC= 0.00 BS= 0/8570 TC= 1(-18.0 256.0)
A= 182 pD= 720 SR=17.450 RA50=224.60 DEC50=-22.06 cone= 55.06 clock=276.34
117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/8570
1:#s= 1 Cs= 7.10 XCs= 0.00 Cr= 0.00 XCr= 8.00 sD= 720 rD= 2

32INTHPELE01

DESIGN G3.2 yande: 8/23/2001 13:58:49

FILE:P.32INTHPELE01

TARGET BODY : IO

MINI:m.32INTHPELE01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-289/01:22:53.466 -CDS 59:00:0

BODY PLOT TIME:TARGET-TIME D= 720 S= 2.000

OBSERVATION:32INTHPELE01

DESCRIP:IO_PELE_OBS

Io Pele Map		ACTIVITY ID:	32INTHPELE01-
		START TIME:	01-289/00:21:12.800

Activity ID: Orbit 32 Target I Inst N OAPEL THPELE SeqNo 01 -

Title	Io Pele Map			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	10/16/01	Week	42

Start	IEE-CDS	00000061:00:0	01-289/00:21:12.800	IEE-000/01:01:40.666
End	IEE-CDS	00000056:00:0	01-289/00:26:16.133	IEE-000/00:56:37.333
Duration		00000005:00:0	000/00:05:03.333	000/00:05:03.333

Top Label	32INTHPELE01-
Bottom Label	

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

Observation Objective

Observe Pele hot spot and surrounding area in darkness for thermal mapping.

Data Returned

Design Detail

BTG=1.52 MB, TICS=213, FMT=MPW, LM, Gain State 1

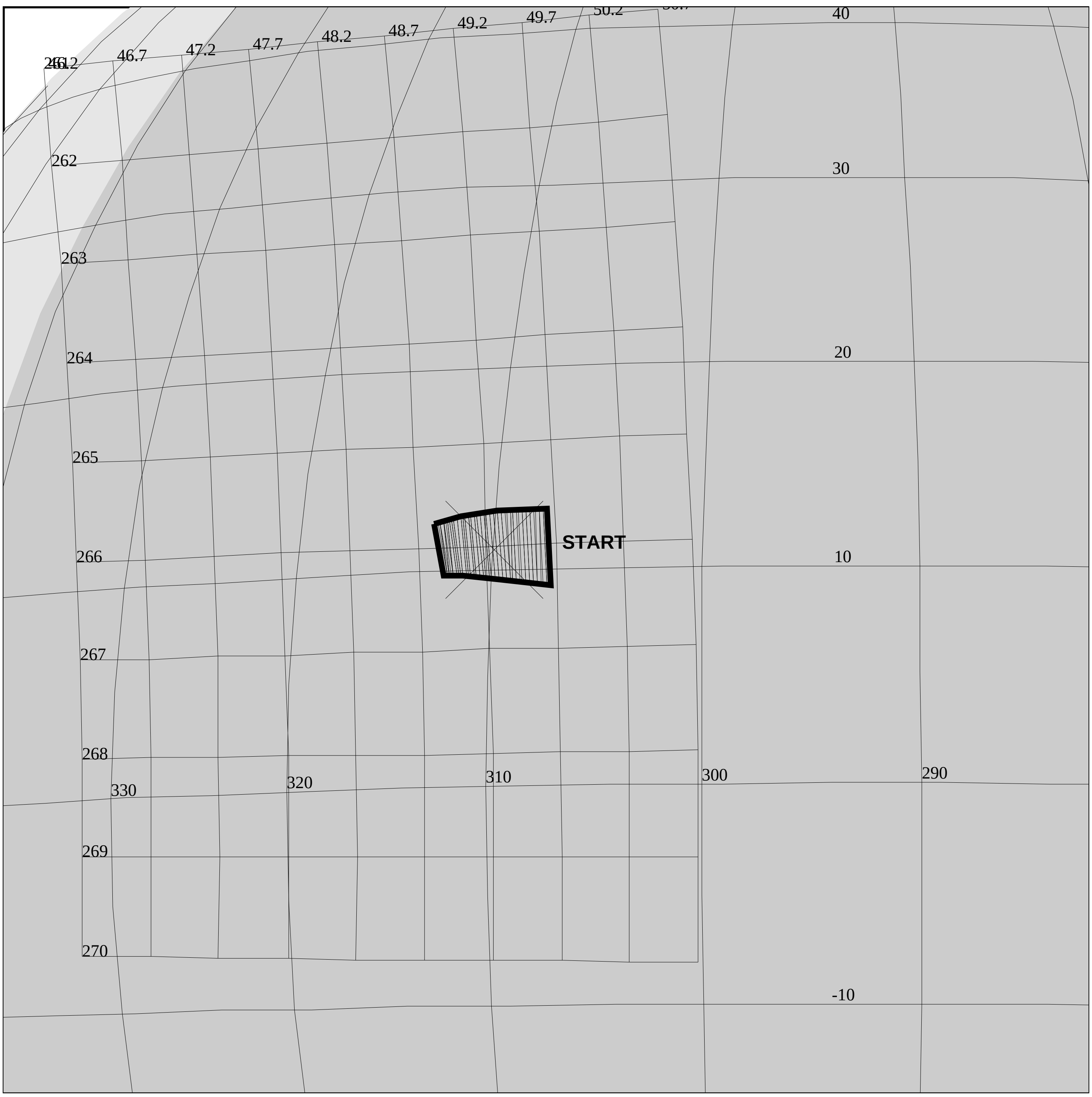
One-scan mosaic centered on Pele.
Center at 18 deg S. latitude, 256 deg W. longitude.

Gain state 1 to avoid high temperature saturation.

BOOMS - cone angle = 56 degrees.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360



165DB:TT= 0 TMC= 1 C= 7.05 XC= 0.00 BS= 0/4212 TC= 1(11 310)
A= 182 pD= 1818 SR=17.450 RA50=232.25 DEC50=-15.52 cone= 49.70 clock=266.03
117DB:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/4212
1:#s= 1 Cs= -18.10 XCs= -2.00 Cr= 0.00 XCr= 8.00 sD= 1818 rD= 2

32INTHLOKI01

DESIGN G3.2 yande: 8/23/2001 13:58:39

FILE:P.32INTHLOKI01

TARGET BODY : IO

MINI:m.32INTHLOKI01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 -CDS 28:00:0

OBSERVATION:32INTHLOKI01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 1818 S= 2.000

DESCRIP:IO_LOKI_OBS

Io Loki Map		ACTIVITY ID:	32INTHLOKI01-
		START TIME:	01-289/00:53:34.133

Activity ID: Orbit 32 Target I Inst N OAPEL THLOKI SeqNo 01 -

Title	Io Loki Map			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	10/16/01	Week	42

Start	IEE-CDS	00000029:00:0	01-289/00:53:34.133	IEE-000/00:29:19.333
End	IEE-CDS	00000018:00:0	01-289/01:04:41.466	IEE-000/00:18:12.000
Duration		00000011:00:0	000/00:11:07.333	000/00:11:07.333

Top Label	32INTHLOKI01-
Bottom Label	

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

Observation Objective

Observe Loki, Io’s most powerful hot spot, in darkness for thermal mapping. This observations will cover significantly more area than the observation obtained in I24.

Data Returned

Design Detail

BTG=3.46 MB, TICS=530, FMT=MPW, LM, Gain State 1

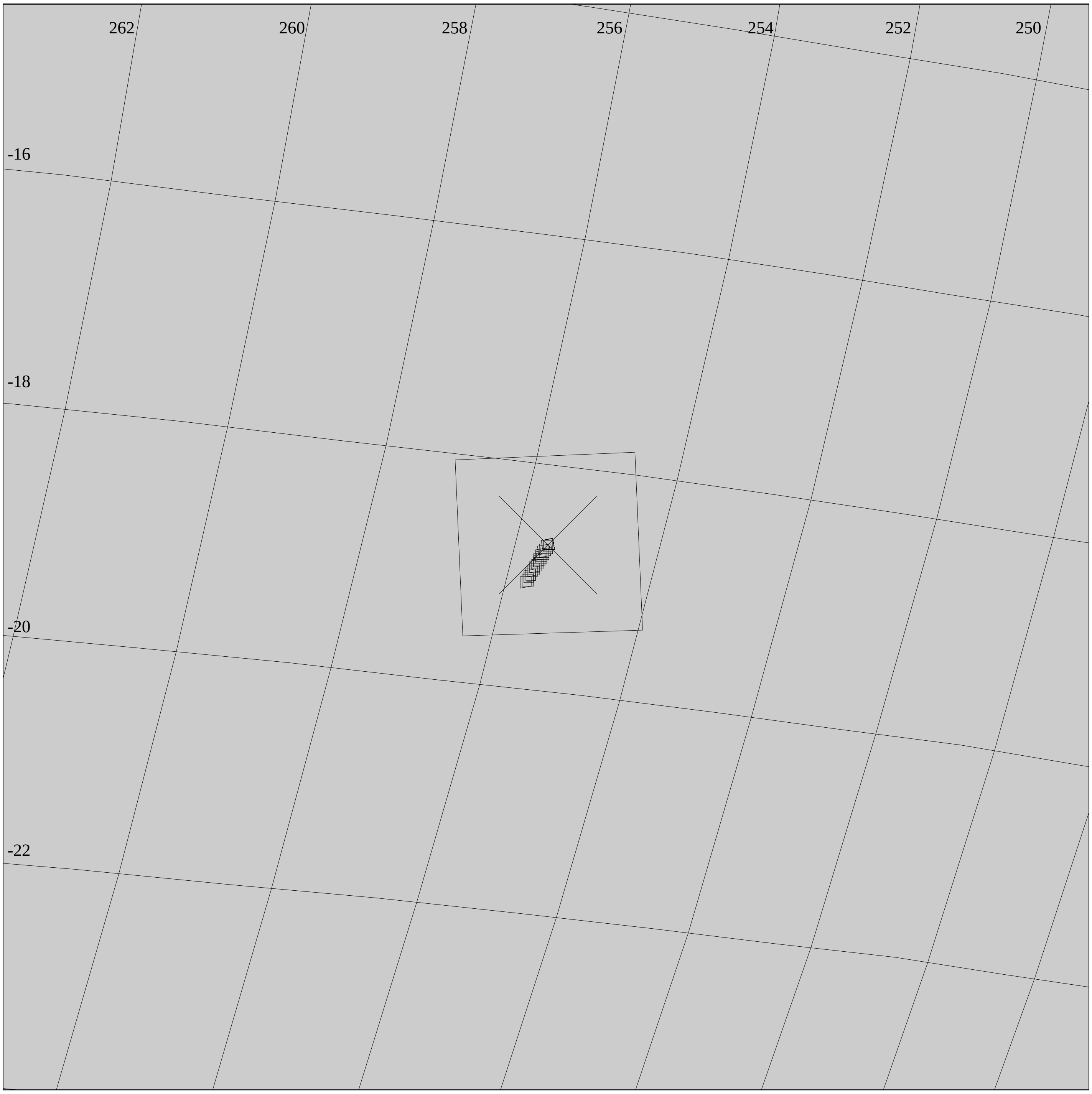
Single scan mosaic centered on Loki caldera.
Center at 11 deg N. latitude, 310 deg W. longitude.

Gain state 1 to avoid high temperature saturation.

BOOMS - cone angle = 51 degrees.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360



165IB:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/6396 TC= 1(-18.7 255.55)
A= 342 pD= 162 SR=17.450 RA50=222.11 DEC50=-11.84 cone= 60.20 clock=265.49

32INPELE__01

DESIGN G3.2 frank: 3/ 1/2002 15:15: 0

FILE:P.32ISPELE__01

TARGET BODY : IO

MINI:m.32INPELE__01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 -CDS 16:00:0

OBSERVATION:32ISPELE__01

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 162 S= 10.000

DESCRIP:PELE

SSI Io Pele Obs

ACTIVITY ID:	32INPELE__01-
START TIME:	01-289/01:04:41.466

Activity ID: Orbit 32 Target I Inst N OAPEL PELE__ SeqNo 01 -

Title	SSI Io Pele OBS			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	10/16/01	Week 42

Start	IEE-CDS	00000018:00:0	01-289/01:04:41.466	IEE-000/00:18:12.000
End	IEE-CDS	00000015:00:0	01-289/01:07:43.466	IEE-000/00:15:10.000
Duration		00000003:00:0	000/00:03:02.000	000/00:03:02.000

Top Label	32INPELE__01-
Bottom Label	

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

Observation Objective

Ride-along with SSI Pele observation 32ISPELE__01.

View of Pele at night to look for hot material and estimate temperatures.
Lower resolution than I24 (30 m/pixel), but frames cover more territory.

Design Detail

ALIAS: 32ISPELE__01

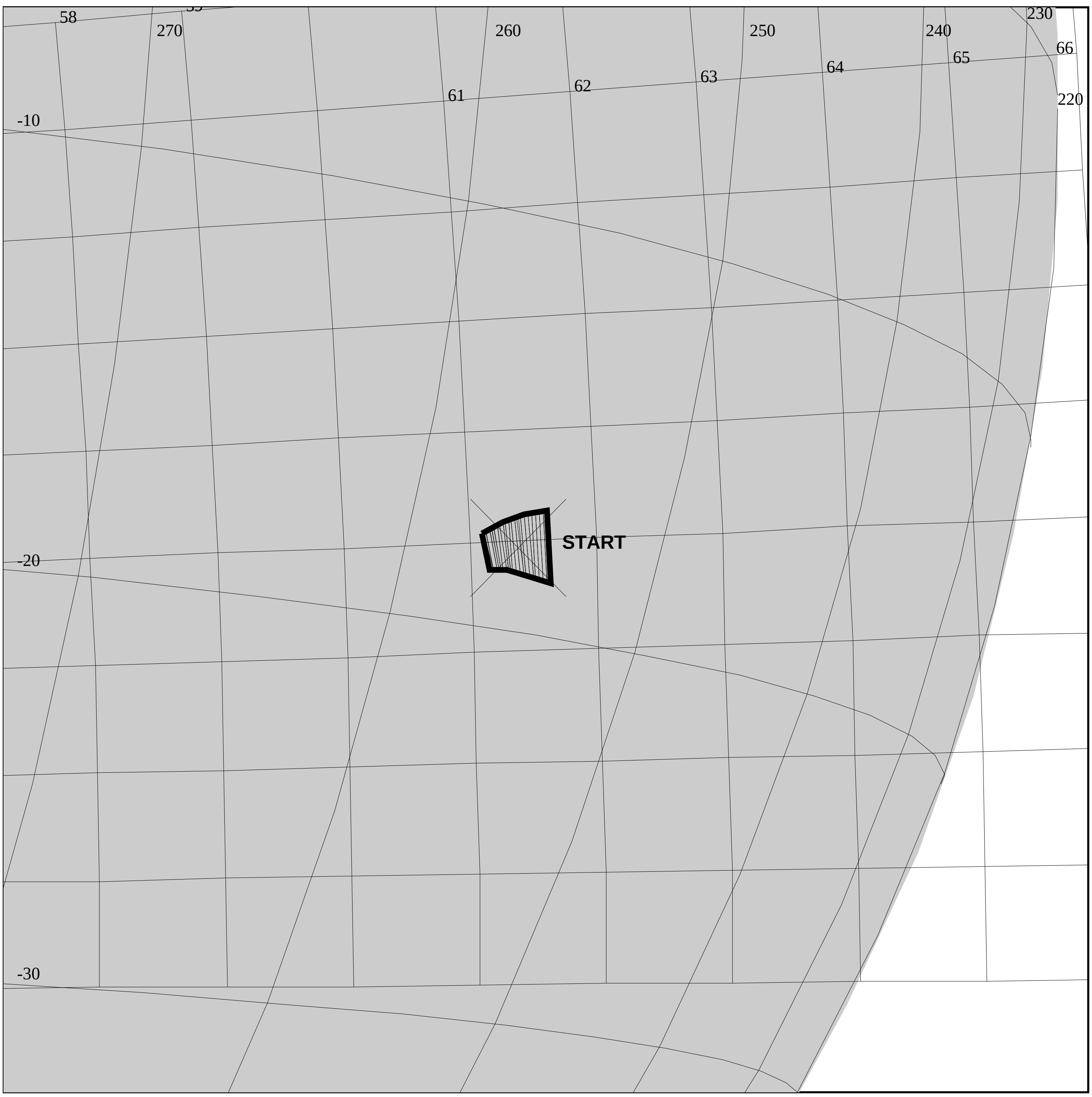
Single IM8 footprint, CLR and 9680A filters, 3 frames CLR + 2 frames 9680A, 5 frames total; viewing through booms, 2 records.
Latitude -18.8 deg, longitude 255.55 deg W., resolution 61 m/pixel

NIMS: ride-along behind second record.
Fixed Spectrometer (Safe) mode, Gain State 2, Chopper Reference.
NIMS footprint drifts across the center of the SSI frame.

BOOMS - cone angle = 60 degrees.

Fixed Spectrometer (XS), Gain 2, Grating Start 0, IM8, IXS17, IXS15

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



165DC:TT= 0 TMC= 1 C= 4.20 XC= 0.00 BS= 0/6760 TC= 1(-18.0 256.0)
A= 182 pD= 1084 SR=17.450 RA50=221.49 DEC50= -9.36 cone= 61.62 clock=263.07
117DC:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/6760
1:#s= 1 Cs= -10.75 XCs= -2.00 Cr= 0.00 XCr= 8.00 sD= 1084 rD= 2

32INTHPELE02

DESIGN G3.2 yande: 8/23/2001 13:58:59

FILE:P.32INTHPELE02

TARGET BODY : IO

MINI:m.32INTHPELE02

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-289/01:22:53.466 -CDS 14:00:0

BODY PLOT TIME:TARGET-TIME D= 1084 S= 3.500

OBSERVATION:32INTHPELE02

DESCRIP:IO_PELE_OBS_02

Io Pele Map — ACTIVITY ID: 32INTHPELE02- START TIME: 01-289/01:07:43.466

Activity ID: Orbit 32 Target I Inst N OAPEL THPELE SeqNo 02 -

Title	Io Pele Map			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID	Calendar Date 10/16/01	Week 42

Start	IEE-CDS	00000015:00:0	01-289/01:07:43.466	IEE-000/00:15:10.000
End	IEE-CDS	00000008:00:0	01-289/01:14:48.133	IEE-000/00:08:05.333
Duration		00000007:00:0	000/00:07:04.667	000/00:07:04.667

Top Label 32INTHPELE02-
Bottom Label

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

Observation Objective

High-resolution observation of Pele hot spot in darkness for thermal mapping.

Data Returned

Design Detail

BTG=2.07 MB, TICS=319, FMT=MPW, LM, Gain State 1

One-scan mosaic centered on Pele.
Center at 18 deg S. latitude, 256 deg W. longitude.

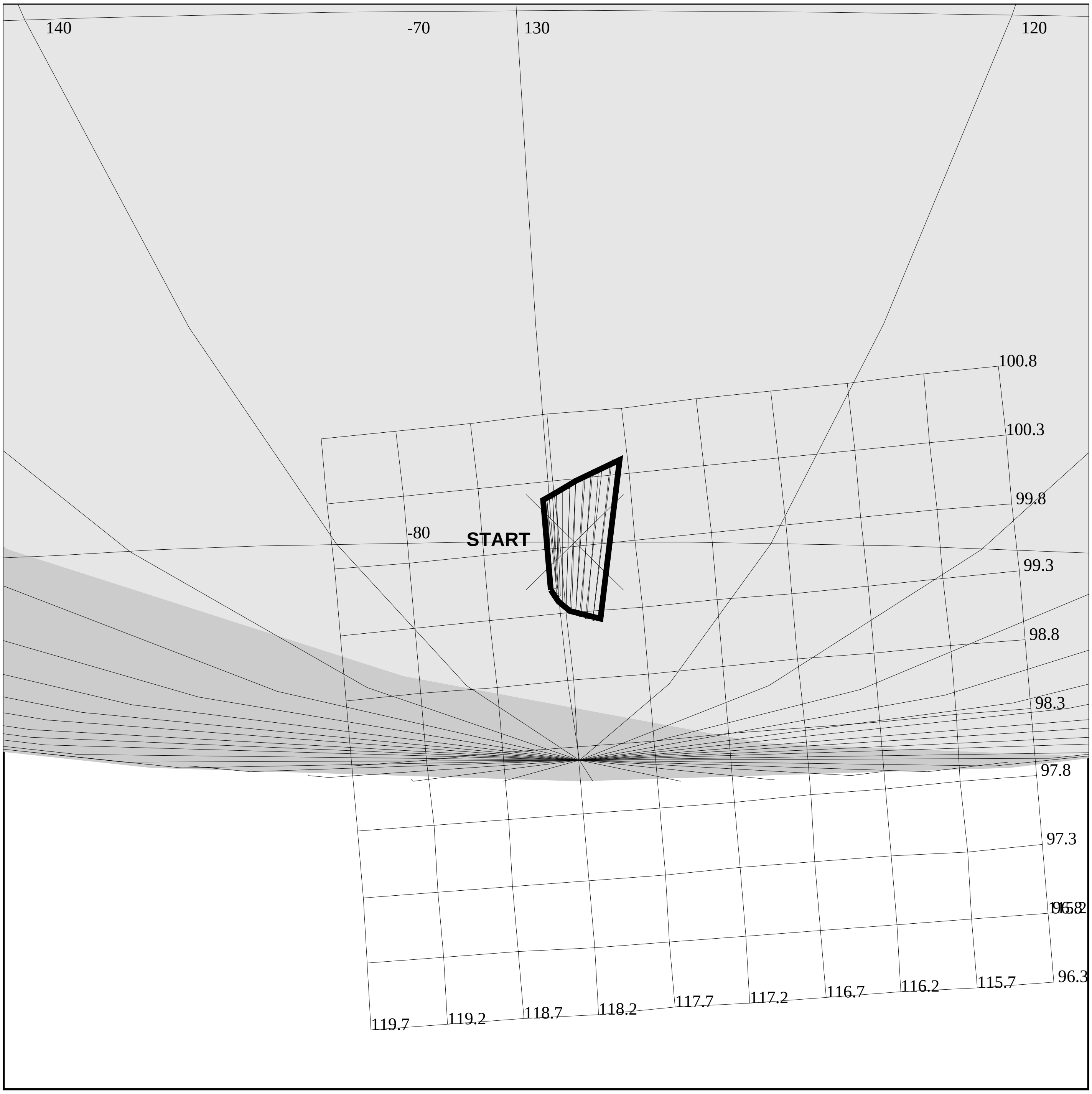
Gain state 1 to avoid high temperature saturation.

BOOMS - cone angle = 66 degrees.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360

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



165DD:TT= 0 TMC= 1 C= 3.00 XC= 0.00 BS= 0/0400 TC= 1(-80 129)
A= 182 pD= 546 SR=17.450 RA50= 36.80 DEC50= 23.39 cone=118.26 clock= 99.81
117DD:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0400
1:#s= 1 Cs= -5.35 XCs= 0.00 Cr= 0.00 XCr= 8.00 sD= 546 rD= 2

32INTHERML01

DESIGN G3.2 yande: 8/23/2001 13:58:27

FILE:P.32INTHERML01

TARGET BODY : IO

MINI:m.32INTHERML01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-289/01:22:53.466 +CDS 06:00:0

BODY PLOT TIME:TARGET-TIME D= 546 S= 9.000

OBSERVATION:32INTHERML01

DESCRIP:IO_THERMAL

Io Thermal Map ACTIVITY ID: 32INTHERML01-
START TIME: 01-289/01:27:56.799

Activity ID: Orbit 32 Target I Inst N OAPEL THERML SeqNo 01 -

Title	Io Thermal Map			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	10/16/01	Week 42

Start	IEE+CDS	00000005:00:0	01-289/01:27:56.799	IEE+000/00:05:03.333
End	IEE+CDS	00000009:00:0	01-289/01:31:59.466	IEE+000/00:09:06.000
Duration		00000004:00:0	000/00:04:02.667	000/00:04:02.667

Top Label 32INTHERML01-
Bottom Label

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

Observation Objective

High resolution observation of south polar region for thermal and SO2 mapping.

Data Returned

Design Detail

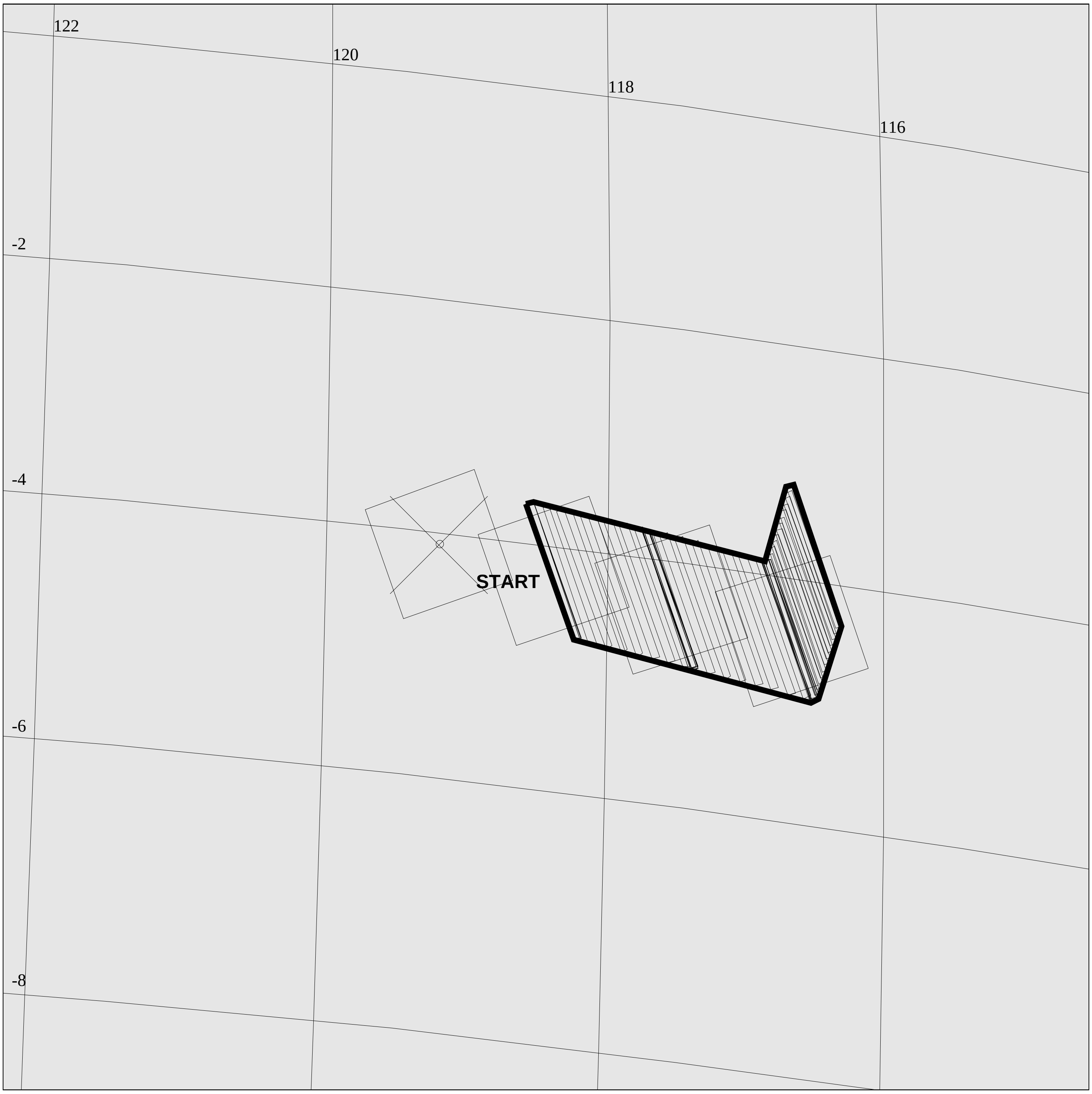
BTG=0.69 MB, TICS=240, FMT=MPW, LM, Gain State 2

Short one-scan mosaic of south polar region.
Center at 80 deg S. latitude, 129 deg W. longitude.

High southern latitude mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360



165ID:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/1128 TC= 1(-4.1 119.2)
A= 174 pD= 84 SR=17.450 RA50= 19.52 DEC50= 51.43 cone=110.51 clock=132.94
118ID:#SB= 1 Cs= -6.80 XCs= -4.30 TPP= 26 SR= 2.800 RR=12.000 BM=F RC= 1 BS= 3/1128
1:#s= 4 #p= 1 Cr= 0.00 XCr= 0.00

32INEMAKNG02

DESIGN G3.2 frank: 3/ 5/2002 15:17:12

FILE:P.32ISEMAKNG01

TARGET BODY : IO

MINI:m.32ISEMAKNG01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 10:00:0

OBSERVATION:32ISEMAKNG01

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 84 S= 10.000

DESCRIP:EMAKONG HIGH RESOLUTION

SSI Io Emakong Obs	ACTIVITY ID: 32INEMAKNG02- START TIME: 01-289/01:31:59.466

Activity ID: Orbit 32 Target I Inst N OAPEL EMAKNG SeqNo 02 -

Title	SSI Io Emakong OBS			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000009:00:0	01-289/01:31:59.466	IEE+000/00:09:06.000
End	IEE+CDS	00000010:40:0	01-289/01:33:26.799	IEE+000/00:10:33.333
Duration		00000001:40:0	000/00:01:27.333	000/00:01:27.333

Top Label 32INEMAKNG02-
Bottom Label

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

Observation Objective

Ride-along with SSI Emakong observation 32ISEMAKNG01.

High-resolution view of lava channel; the channel morphology may provide constraints on lava viscosity. Recovers a high-resolution observation lost on I25. Lower resolution (~150 m/pixel) context was acquired on I25.

Design Detail

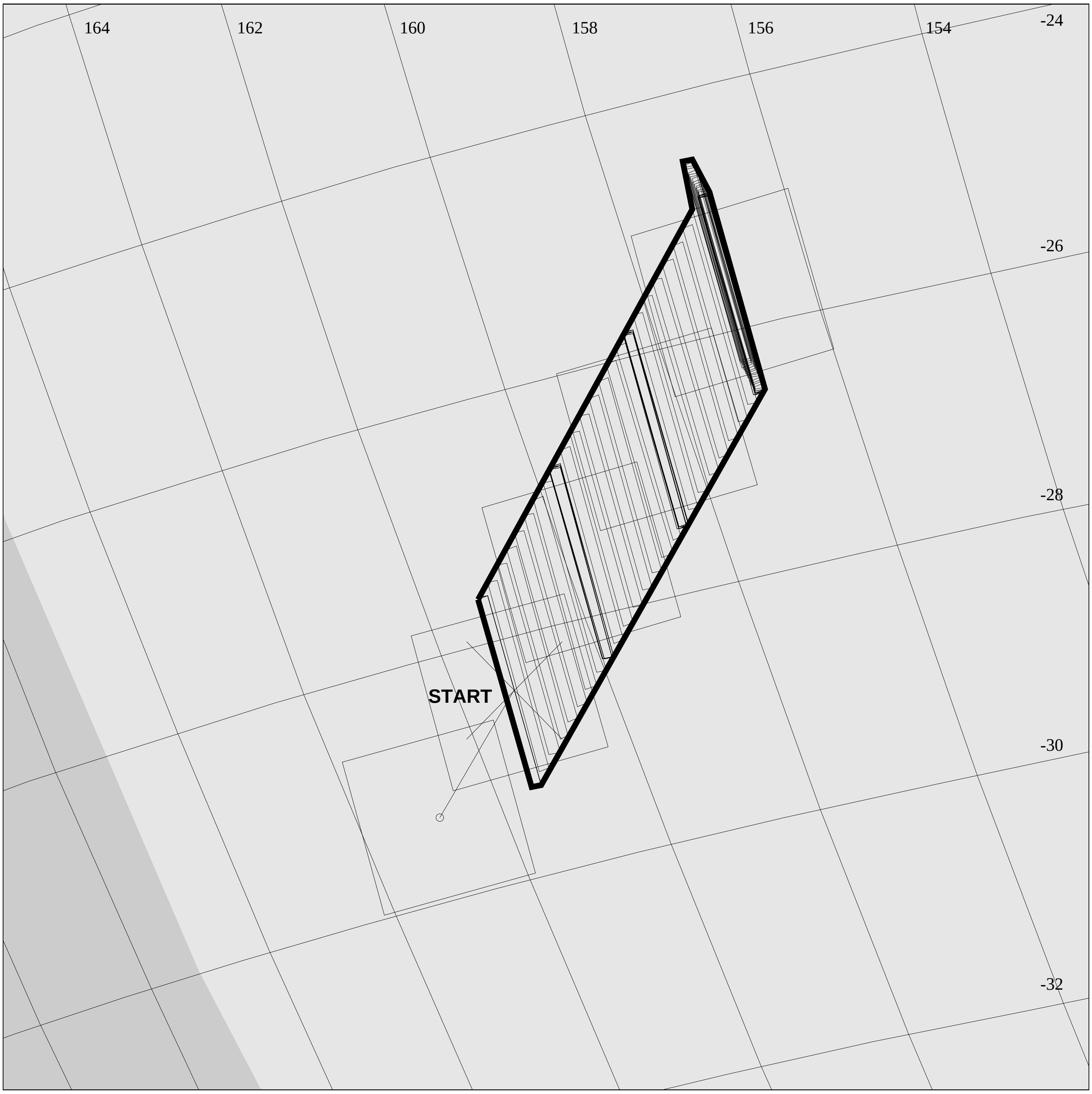
ALIAS: 32ISEMAKNG01

4x1 Im4 mosaic, CLR filter, 1 record, 430 tics.
Latitude -4.7 deg, longitude 117.4 deg W. Resolution 34.6 m/pixel.

NIMS: ride-along behind SSI.
Long Map mode, Gain State 2, Chopper Reference.
NIMS footprints slew across the SSI mosaic with no overlap.

Fixed Long Map (XLM), Gain 2, Grating Start 0, IM4, ILM408, ILM360

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



165IF:TT= 0 TMC= 1 C= 5.50 XC= -5.30 BS= 0/1856 TC= 1(-28.43 161.23)
A= 312 pD= 110 SR=17.450 RA50= 52.38 DEC50= 34.80 cone=133.18 clock=111.68
118IF:#SB= 1 Cs= -5.21 XCs= 5.30 TPP= 26 SR= 2.800 RR=12.000 BM=F RC= 1 BS= 3/1856
1:#s= 5 #p= 1 Cr= 0.00 XCr= 0.00

32INTOHIL_01

DESIGN G3.2 frank: 3/ 5/2002 13: 6:33

FILE:P.32ISTOHIL_01

TARGET BODY : IO

MINI:m.32ISTOHIL_01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 14:00:0

OBSERVATION:32ISTOHIL_01

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 110 S= 10.000

DESCRIP:TOHIL NEAR TERMINATOR

SSI Io Tohil Obs — ACTIVITY ID: 32INTOHIL_01-
START TIME: 01-289/01:35:08.132

Activity ID: Orbit 32 Target I Inst N OAPEL TOHIL_ SeqNo 01 -

Title	SSI Io Tohil OBS			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000012:10:0	01-289/01:35:08.132	IEE+000/00:12:14.666
End	IEE+CDS	00000014:60:0	01-289/01:37:42.799	IEE+000/00:14:49.333
Duration		00000002:50:0	000/00:02:34.667	000/00:02:34.667

Top Label 32INTOHIL_01-
Bottom Label

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

Observation Objective

Ride-along with SSI Emakong observation 32ISTOHIL_01.

High-resolution observation of Tohil Mons near terminator to examine relationship between the mountain and nearby paterae as well as erosion mechanisms.

Design Detail

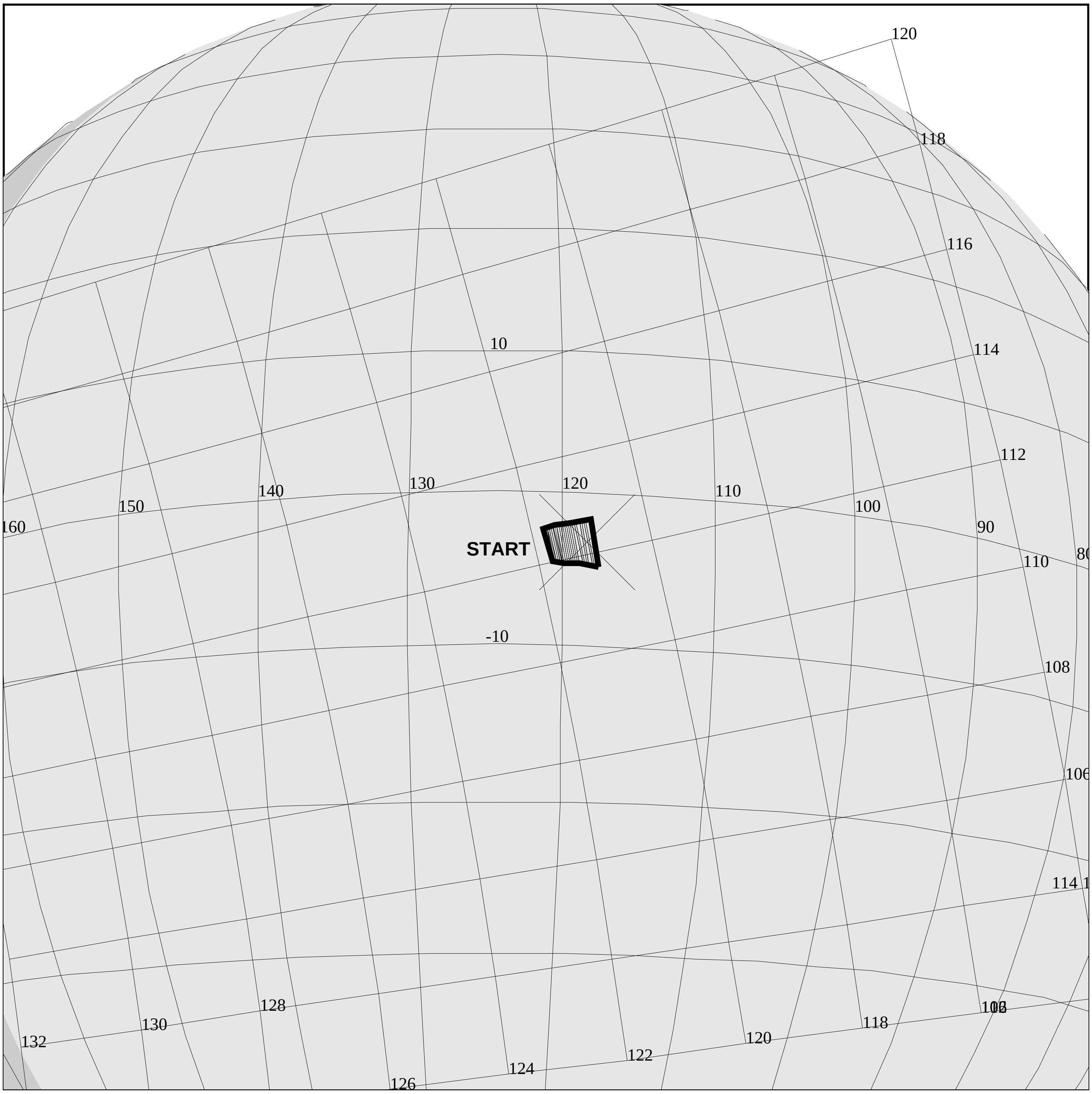
ALIAS: 32ISTOHIL_01

1x5 Im8 mosaic, CLR filter, 1 record, 1102 tics.
Latitude -25.6 deg, longitude 157.6 deg W. Resolution 54 m/pixel.

NIMS: ride-along behind SSI.
Long Map mode, Gain State 2, Chopper Reference.
NIMS footprints slew across the SSI mosaic with no overlap.

Fixed Long Map (XLM), Gain 2, Grating Start 0, IM8, ILM408, ILM360

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



165DE:TT= 0 TMC= 1 C= 11.20 XC= 2.00 BS= 0/2766 TC= 1(-3.3 118.5)
A= 182 pD= 1818 SR=17.450 RA50= 38.45 DEC50= 34.70 cone=121.75 clock=112.36
117DE:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/2766
1:#s= 1 Cs= -18.10 XCs= -2.50 Cr= 0.00 XCr= 8.00 sD= 1818 rD= 2

32INEMAKNG01

DESIGN G3.2 yande: 9/18/2001 11: 3:34

FILE:P.32INEMAKNG01

TARGET BODY : IO

MINI:m.32INEMAKNG01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-289/01:22:53.466 +CDS 19:00:0

BODY PLOT TIME:TARGET-TIME D= 1818 S= 1.300

OBSERVATION:32INEMAKNG01

DESCRIP:IO_EMAKONG

Io Emakong Obs	ACTIVITY ID: 32INEMAKNG01- START TIME: 01-289/01:41:05.466

Activity ID: Orbit 32 Target I Inst N OAPEL EMAKNG SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date 10/16/01	Week 42

Start	IEE+CDS	00000018:00:0	01-289/01:41:05.466	IEE+000/00:18:12.000
End	IEE+CDS	00000029:00:0	01-289/01:52:12.799	IEE+000/00:29:19.333
Duration		00000011:00:0	000/00:11:07.333	000/00:11:07.333

Top Label 32INEMAKNG01-
Bottom Label

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

Observation Objective

To investigate thermal and SO2 distribution inside and around Emakong caldera, a region where we have detected patches of SO2 very near active lava or sulfur flows.

Data Returned

Design Detail

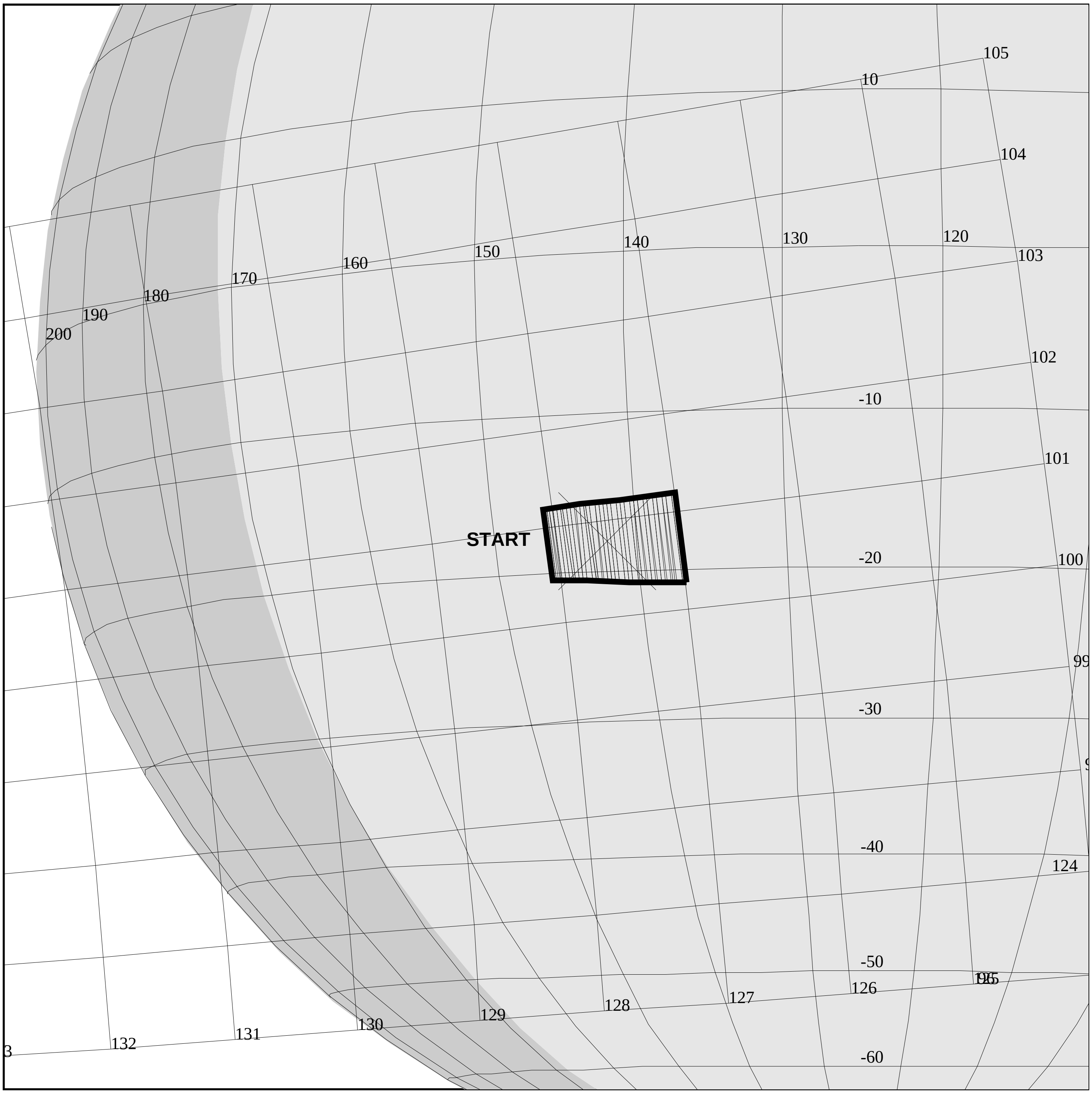
BTG=3.05 MB, TICS=108, FMT=MPW, LM, Gain State 2

one-scan mosaic covering caldera and extending east and west.
Center at 4 deg S. latitude, 120 deg W. longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM408, ILM288

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



165DF:TT= 0 TMC= 1 C= 8.30 XC= 0.50 BS= 0/5678 TC= 1(-18 142)
A= 182 pD= 1638 SR=17.450 RA50= 47.20 DEC50= 26.21 cone=128.07 clock=100.83
117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/5678
1:#s= 1 Cs= -16.30 XCs= -1.00 Cr= 0.00 XCr= 8.00 sD= 1638 rD= 2

32INITUPAN01

DESIGN G3.2 yande: 8/23/2001 13:57:28

FILE:P.32INITUPAN01

TARGET BODY : IO

MINI:m.32INITUPAN01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 35:00:0

OBSERVATION:32INITUPAN01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 1638 S= 1.500

DESCRIP:IO_TUPAN

Io Tupan Obs ACTIVITY ID: 32INITUPAN01-
START TIME: 01-289/01:57:16.132

Activity ID: Orbit 32 Target I Inst N OAPEL ITUPAN SeqNo 01 -

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

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000034:00:0	01-289/01:57:16.132	IEE+000/00:34:22.666
End	IEE+CDS	00000044:00:0	01-289/02:07:22.799	IEE+000/00:44:29.333
Duration		00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label 32INITUPAN01-
Bottom Label

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

Observation Objective

To investigate thermal and SO2 distribution inside and around Tupan Patera, an active caldera that displays red deposits.

Data Returned

Design Detail

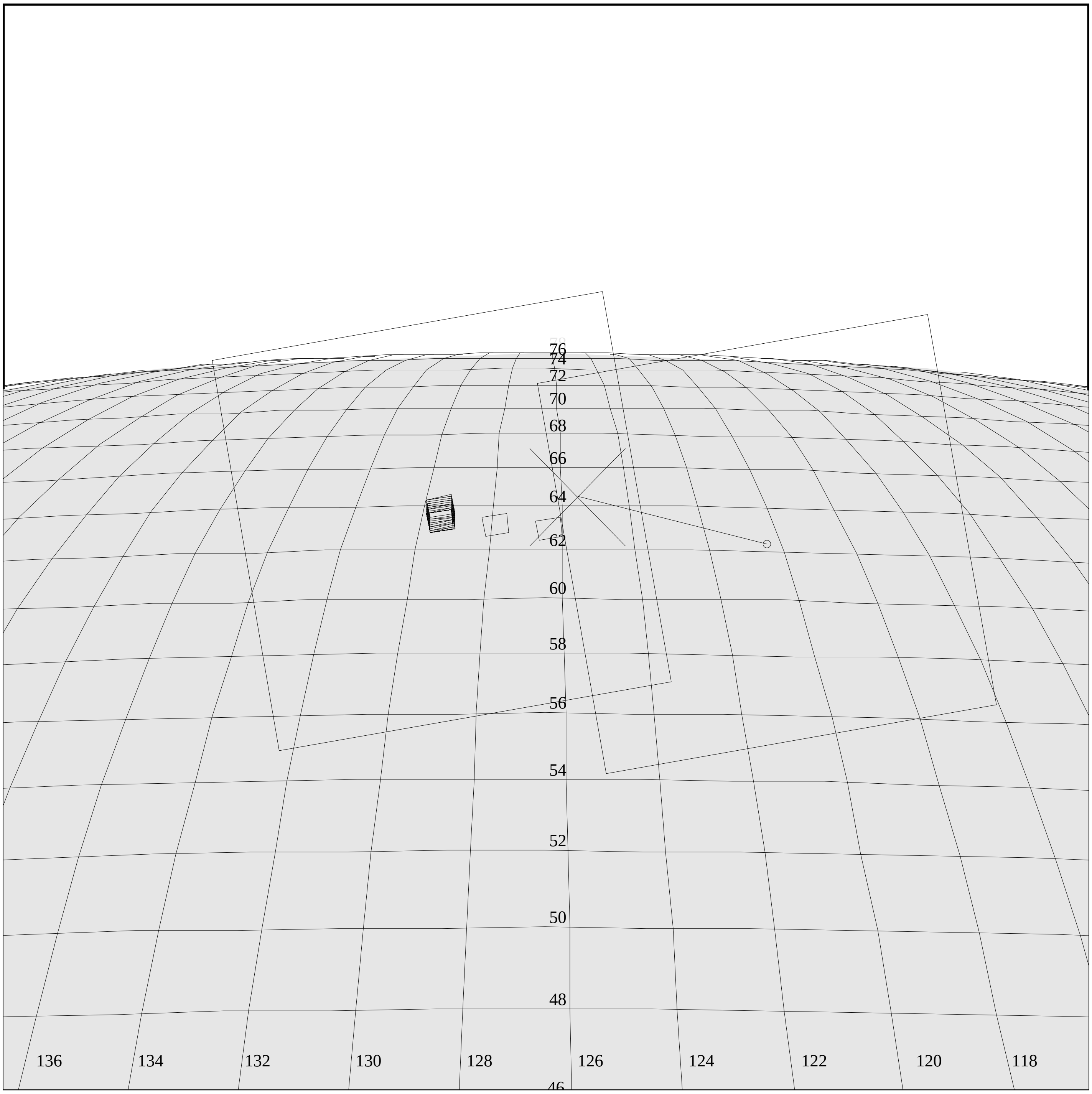
BTG=3.05 MB, TICS=477, FMT=MPW, LM, Gain State 2

one-scan mosaic centered on Tupan.
Center at 30 deg S. latitude, 160 deg W. longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360

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



165IL:TT= 0 TMC= 1 C= -3.65 XC= -1.63 BS=26/7498 TC= 1(64.4 125.5)
A= 222 pD= 32 SR=17.450 RA50= 42.95 DEC50= 29.89 cone=124.90 clock=106.05
118IL:#SB= 1 Cs= 6.50 XCs= 1.63 TPP= 26 SR= 3.300 RR=12.000 BM=F RC= 1 BS=29/7498
1:#s= 2 #p= 1 Cr= 0.00 XCr= 0.00

32INTVASHT01

DESIGN G3.2 frank: 3/ 5/2002 13: 4:59

FILE:P.32ISTVASHT01

TARGET BODY : IO

MINI:m.32ISTVASHT01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 45:00:0

OBSERVATION:32ISTVASHT01

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 32 S= 8.000

DESCRIP:TVASHTAR

SSI Io Tvashtar Obs — ACTIVITY ID: 32INTVASHT01- START TIME: 01-289/02:07:22.799

Activity ID: Orbit 32 Target I Inst N OAPEL TVASHT SeqNo 01 -

Title	SSI Io Tvashtar OBS			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000044:00:0	01-289/02:07:22.799	IEE+000/00:44:29.333
End	IEE+CDS	00000046:00:0	01-289/02:09:24.132	IEE+000/00:46:30.666
Duration		00000002:00:0	000/00:02:01.333	000/00:02:01.333

Top Label 32INTVASHT01-
Bottom Label

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

Observation Objective

Ride-along with SSI Tvashtar observation 32ISTVASHT01.

First medium range look at Tvashtar since the large plume eruption in late 2000; will be used to investigate the changes that have occurred since the last good look in February 2000 (I27). Should reveal whether Tvashtar is still active and identify the specific sites of any activity.

Design Detail

ALIAS: 32ISTVASHT01

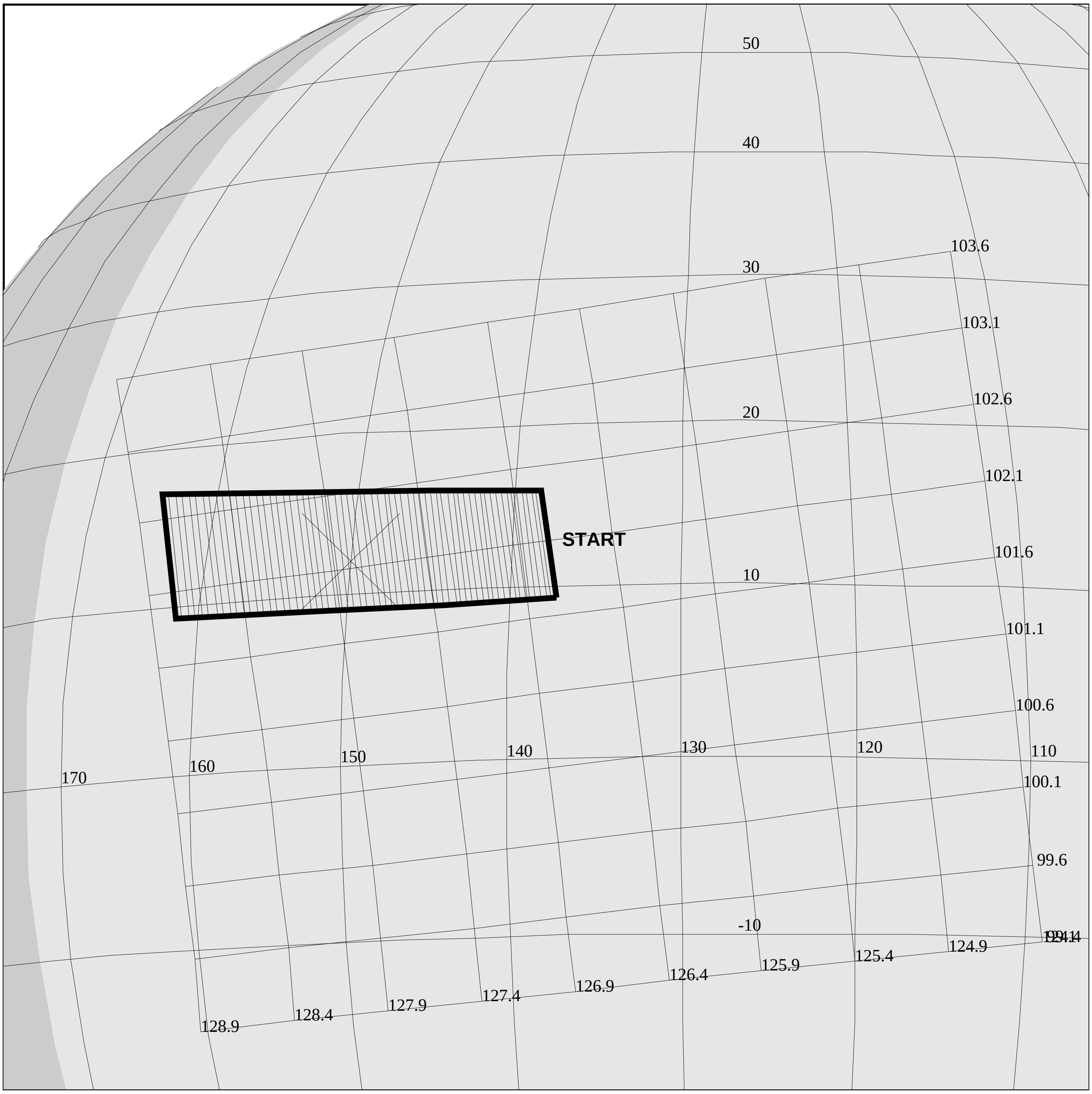
1x2 Im8 mosaic, CLR filter, 1 record, 462 tics.
Latitude +62.5 deg, longitude 122.5 deg W. Resolution 355 m/pixel.

NIMS: ride-along behind SSI.
Fixed Spectrometer (Safe) mode, Gain State 2, Chopper 63 Hz.
NIMS footprints in center of second SSI frame.

CHOPPER 63 HZ MODE

Fixed Spectrometer (XS), Gain 2, Grating Start 0, IM8, IXS17, IXS15

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



165DG:TT= 0 TMC= 1 C= -18.50 XC= -1.00 BS= 0/7862 TC= 1(12 150)
A= 142 pD= 1636 SR=17.450 RA50= 45.54 DEC50= 26.97 cone=126.73 clock=102.08
117DG:#SB= 1 OR= 0.050 RR=12.000 BM=F RC= 1 BS= 0/7862
1:#s= 1 Cs= 32.40 XCs= 3.00 Cr= 0.00 XCr= 8.00 sD= 1636 rD= 2

32INICHAAC01

DESIGN G3.2 yande: 8/23/2001 13:56: 9

FILE:P.32INICHAAC01

TARGET BODY : IO

MINI:m.32INICHAAC01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 47:00:0

OBSERVATION:32INICHAAC01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 1636 S= 1.700

DESCRIP:IO_CHAAC

Io Chaac Obs		ACTIVITY ID:	32INICHAAC01-
		START TIME:	01-289/02:09:24.132

Activity ID: Orbit 32 Target I Inst N OAPEL ICHAAC SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	10/16/01	Week	42

Start	IEE+CDS	00000046:00:0	01-289/02:09:24.132	IEE+000/00:46:30.666
End	IEE+CDS	00000056:00:0	01-289/02:19:30.799	IEE+000/00:56:37.333
Duration		00000010:00:0	000/00:10:06.667	000/00:10:06.667

Top Label 32INICHAAC01-
Bottom Label

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

Observation Objective

To investigate thermal and SO2 distribution inside the Chaac caldera and other small calderas in the region, some of which have very bright white deposits.

Data Returned

Design Detail

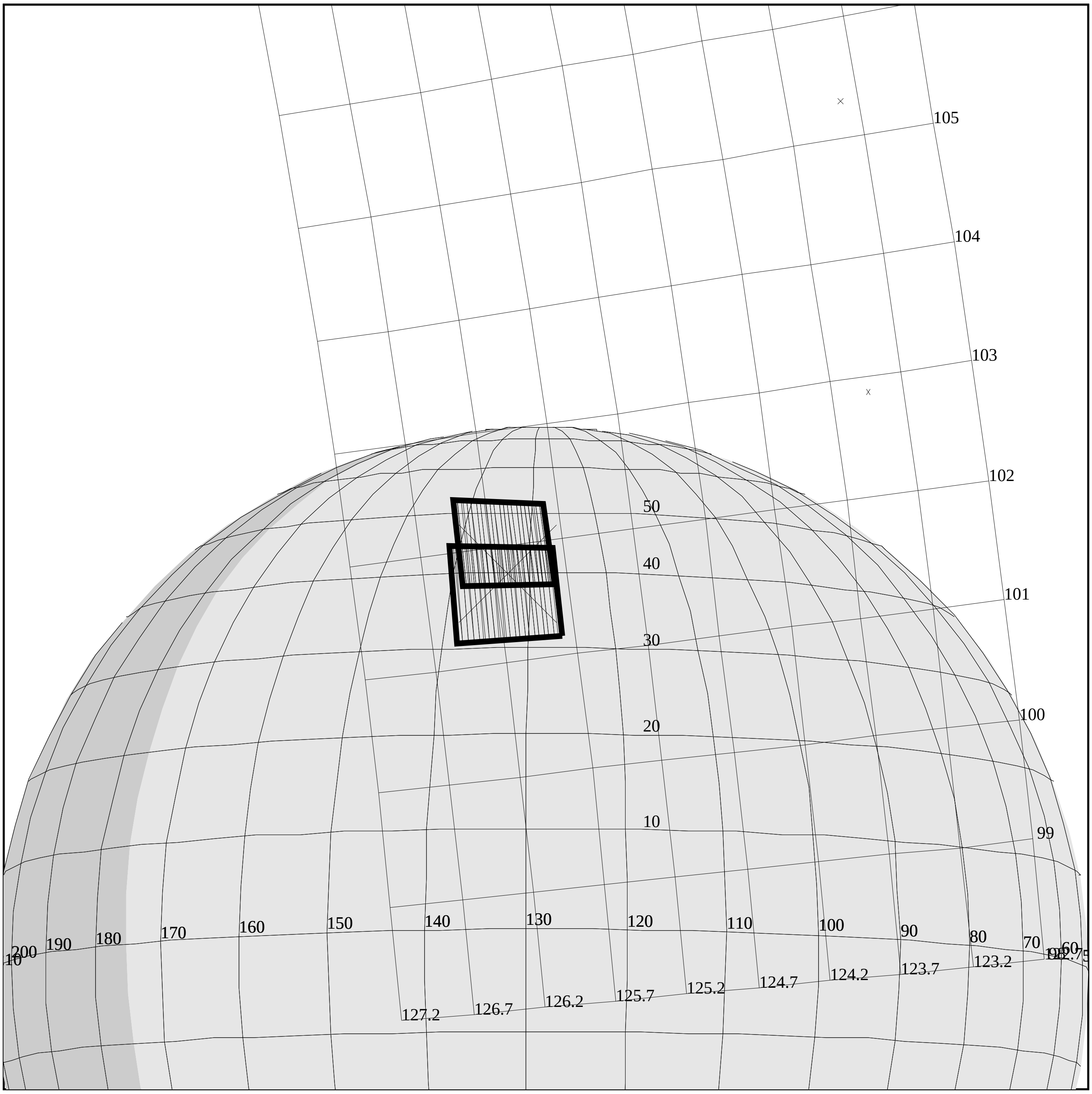
BTG=3.05 MB, TICS=455, FMT=MPW, LM, Gain State 2

one-scan mosaic going from Chaac to the east.
Center at 12 deg N. latitude, 158 deg W. longitude.

Scan platform slew rate increased from nominal 0.03 to 0.06 to cover twice as much territory in the allotted time.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360



165DH:TT= 0 TMC= 1 C= -5.50 XC= 2.80 BS= 0/0410 TC= 1(40 133)
A= 182 pD= 2178 SR=17.450 RA50= 44.53 DEC50= 26.73 cone=125.79 clock=101.96
117DH:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0410
1:#s= 2 Cs= 10.50 XCs= 1.30 Cr= -10.00 XCr= -7.00 sD= 1064 rD= 46

32INHTSPOT01

DESIGN G3.2 yande: 9/28/2001 13: 5:37

FILE:P.32INHTSPOT01

TARGET BODY : IO

MINI:m.32INHTSPOT01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 01-289/01:22:53.466 +CDS 61:00:0

BODY PLOT TIME:TARGET-TIME D= 2178 S= 1.000

OBSERVATION:32INHTSPOT01

DESCRIP:PROMETHEUS_PLUME

Io Hot Spot Obs		ACTIVITY ID:	32INHTSPOT01-
		START TIME:	01-289/02:23:33.466

Activity ID: Orbit 32 Target I Inst N OAPEL HTSPOT SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	10/16/01	Week	42

Start	IEE+CDS	00000060:00:0	01-289/02:23:33.466	IEE+000/01:00:40.000
End	IEE+CDS	00000073:00:0	01-289/02:36:42.132	IEE+000/01:13:48.666
Duration		00000013:00:0	000/00:13:08.666	000/00:13:08.666

Top Label	32INHTSPOT01-
Bottom Label	

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

Observation Objective

To investigate thermal and SO2 distribution around a new hot spot recently discovered in I31.

Data Returned

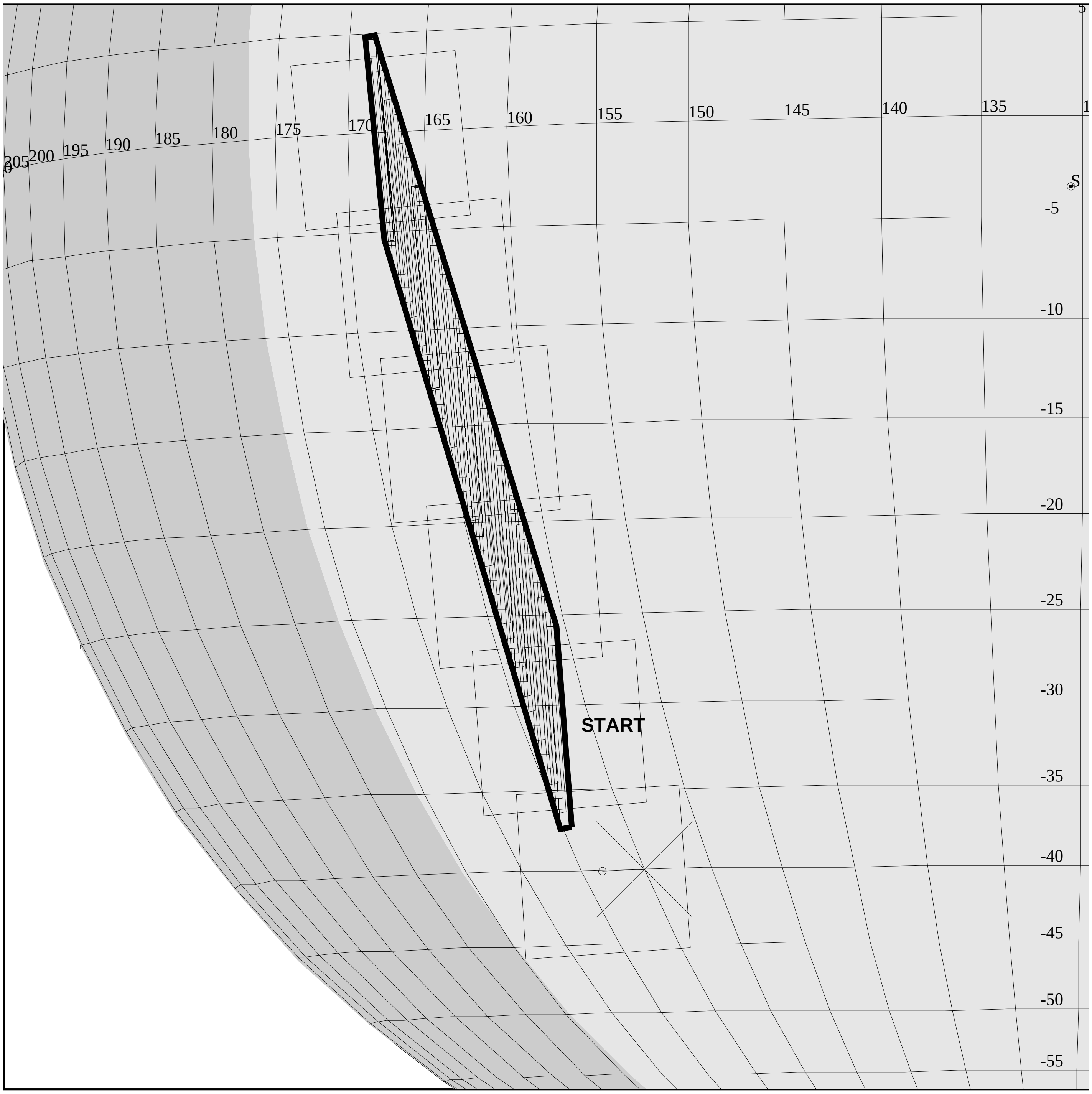
Design Detail

BTG=4.57 MB, TICS=583, FMT=MPW, LM, Gain State 2

two-scan mosaic across the new hot spot region.
Center at 40 deg N. latitude, 133 deg W. longitude.
This observation originally targetted the Prometheus region (32INPROMTH01).

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM72
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144A
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM144B
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM288
Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408, ILM360



165IJ:TT= 0 TMC= 1 C= 2.04 XC= 0.00 BS= 0/2958 TC= 1(-40.0 160.0)
A= 342 pD= 136 SR=17.450 RA50= 47.80 DEC50= 21.60 cone=127.74 clock= 94.97
118IJ:#SB= 1 Cs= 1.72 XCs= 7.31 TPP= 26 SR= 2.800 RR=12.000 BM=F RC= 1 BS= 3/2958
1:#s= 6 #p= 1 Cr= 0.00 XCr= 0.00

32INTERMIN01

DESIGN G3.2 frank: 3/ 5/2002 13: 1:25

FILE:P.32ISTERMIN01

TARGET BODY : IO

MINI:m.32ISTERMIN01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 75:00:0

OBSERVATION:32ISTERMIN01

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 136 S= 2.000

DESCRIP:TERMINATOR

SSI Io Terminator Obs		ACTIVITY ID:	32INTERMIN01-
		START TIME:	01-289/02:36:42.132

Activity ID: Orbit 32 Target I Inst N OAPEL TERMIN SeqNo 01 -

Title	SSI Io Terminator OBS			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS   Load ID   Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000073:10:0	01-289/02:36:42.132	IEE+000/01:13:48.666
End	IEE+CDS	00000075:70:0	01-289/02:39:30.132	IEE+000/01:16:36.666
Duration		00000002:70:0	000/00:02:48.000	000/00:02:48.000

Top Label   32INTERMIN01-
Bottom Label

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

Observation Objective

Ride-along with SSI Terminator observation 32ISTERMIN01.

Coverage of Mycenae Regio, Tohil Mons and Patera, Culann Patera, and another patera west of Prometheus, in the near-terminator viewing geometry which is best for observing the topography of geologic features. The topographic information will improve our understanding of these features greatly.

Design Detail

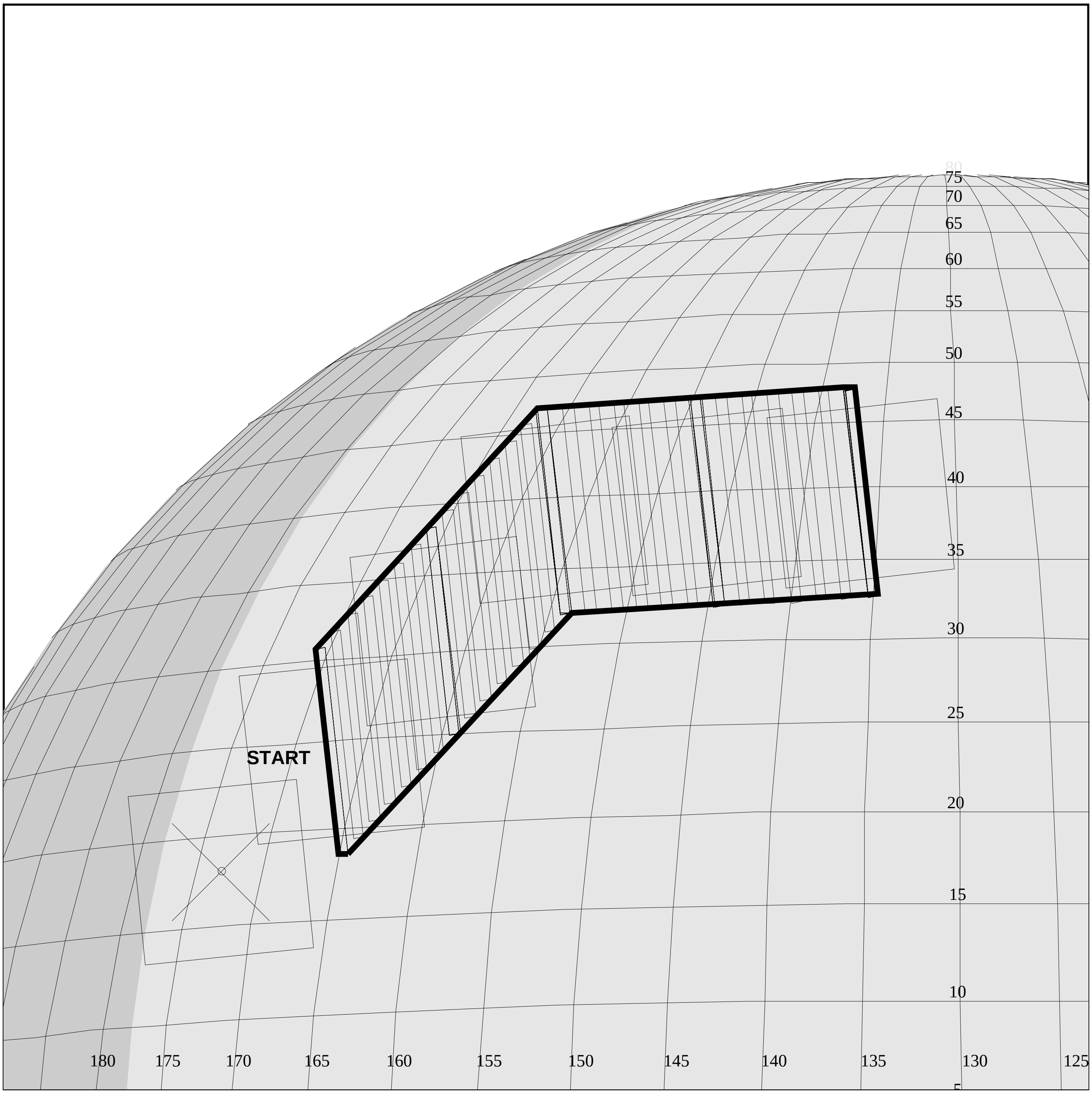
ALIAS: 32ISTERMIN01

6x1 IM8 mosaic, CLR filter, 1 record, 1315 tics.
Latitude -45 to +4 deg, longitude 160 to 170 deg W. Resolution 332 m/pixel.

NIMS: ride-along behind SSI.
Long Map mode, Gain State 2, Chopper Reference.
NIMS footprints slew across the SSI mosaic with some overlap.

Fixed Long Map (XLM), Gain 2, Grating Start 0, IM8, ILM408, ILM360

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



165IK:TT=   0 TMC= 1 C=   0.00 XC=   0.00 BS=13/3322 TC= 1(18.0   173.0   )
A= 212 pD=   136 SR=17.450 RA50= 47.60 DEC50= 24.61 cone=128.16 clock= 98.76
118IK:#SB= 1 Cs=   -5.90 XCs=   5.20 TPP=   26 SR= 2.800 RR=12.000 BM=F RC= 1 BS=16/3322
1:#s= 4 #p= 1 Cr=   0.00 XCr=   0.00
116IK:OR= 3.700 Cs=   -7.30 XCs=   -0.40 sD=   18 BS=56/3322 TF=N
116JK:OR= 3.700 Cs=   -7.30 XCs=   -0.40 sD=   18 BS=69/3322 TF=N

32INTERMIN02

DESIGN G3.2 frank: 3/ 5/2002 13: 3:29

FILE:P.32ISTERMIN02

TARGET BODY :   IO

MINI:m.32ISTERMIN02

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466   +CDS 77:00:0

OBSERVATION:32ISTERMIN02

THINNING:NIM   1

BODY PLOT TIME:TARGET-TIME D= 136 S= 2.000

DESCRIP:TERMINATOR

SSI Io Terminator Obs   ACTIVITY ID: 32INTERMIN02-
START TIME: 01-289/02:39:30.132

Activity ID: Orbit 32 Target I Inst N OAPEL TERMIN SeqNo 02 -

Title	SSI Io Terminator OBS			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000075:70:0	01-289/02:39:30.132	IEE+000/01:16:36.666
End	IEE+CDS	00000077:80:0	01-289/02:41:38.132	IEE+000/01:18:44.666
Duration		00000002:10:0	000/00:02:08.000	000/00:02:08.000

Top Label 32INTERMIN02-
Bottom Label

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

Observation Objective

Ride-along with SSI Terminator observation 32ISTERMIN02.

Near-terminator observation covering Zamama, Volund, a possible shield volcano, and two intriguing large, yellow paterae to the north. Will provide significant insight into the emplacement of flows at Zamama and Volund, and into the true nature of the potential shield volcano and the northern paterae.

Observation modified to look at new hotspot first seen in I31.

Design Detail

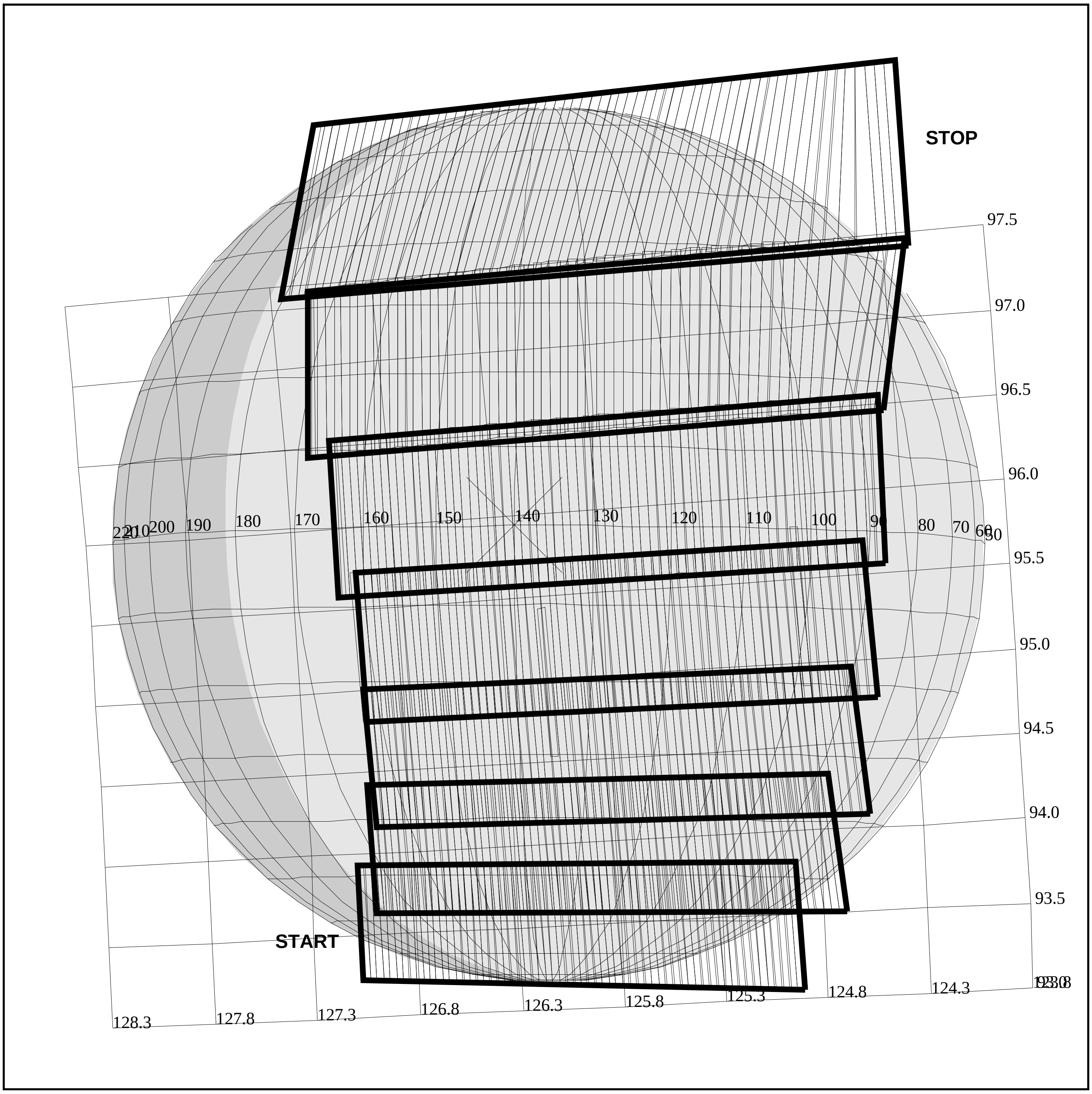
ALIAS: 32ISTERMIN02

6x1 IM8 mosaic, CLR filter, 1 record, 1315 tics.
Latitude +14 to +45 deg, longitude 130 to 178 deg W. Resolution 340 m/pixel.

NIMS: ride-along behind SSI.
Long Map mode, Gain State 2, Chopper Reference.
NIMS footprints slew across the SSI mosaic with no overlap.

Fixed Long Map (XLM), Gain 2, Grating Start 0, IM8, ILM408, ILM360

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



165DI:TT= 0 TMC= 1 C= 15.00 XC= -33.20 BS= 0/9146 TC= 1(0 140)
A= 182 pD= 11636 SR=17.450 RA50= 47.37 DEC50= 20.41 cone=127.09 clock= 93.62
117DI:#SB= 1 OR= 0.060 RR=12.000 BM=F RC= 1 BS= 0/9146
1:#s= 7 Cs= -32.35 XCs= 1.00 Cr= 32.60 XCr= 7.60 sD= 1628 rD= 40

32INREGION01

DESIGN G3.2 yande: 9/ 6/2001 18:38: 1

FILE:P.32INREGION01

TARGET BODY : IO

MINI:m.32INREGION01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466 +CDS 109:00:0

OBSERVATION:32INREGION01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D=11636 S= 0.800

DESCRIP:IO_REGION_01

Io Regional Map	ACTIVITY ID: 32INREGION01- START TIME: 01-289/03:11:04.799

Activity ID: Orbit 32 Target I Inst N OAPEL REGION SeqNo 01 -

Title	Io Regional Map			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System	CDS	Load ID		Calendar Date	10/16/01	Week	42

Start	IEE+CDS	00000107:00:0	01-289/03:11:04.799	IEE+000/01:48:11.333
End	IEE+CDS	00000170:00:0	01-289/04:14:46.799	IEE+000/02:51:53.333
Duration		00000063:00:0	000/01:03:42.000	000/01:03:42.000

Top Label 32INREGION01-
Bottom Label

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

Observation Objective

To map distribution of hot spots and SO2 from pole to pole.

Data Returned

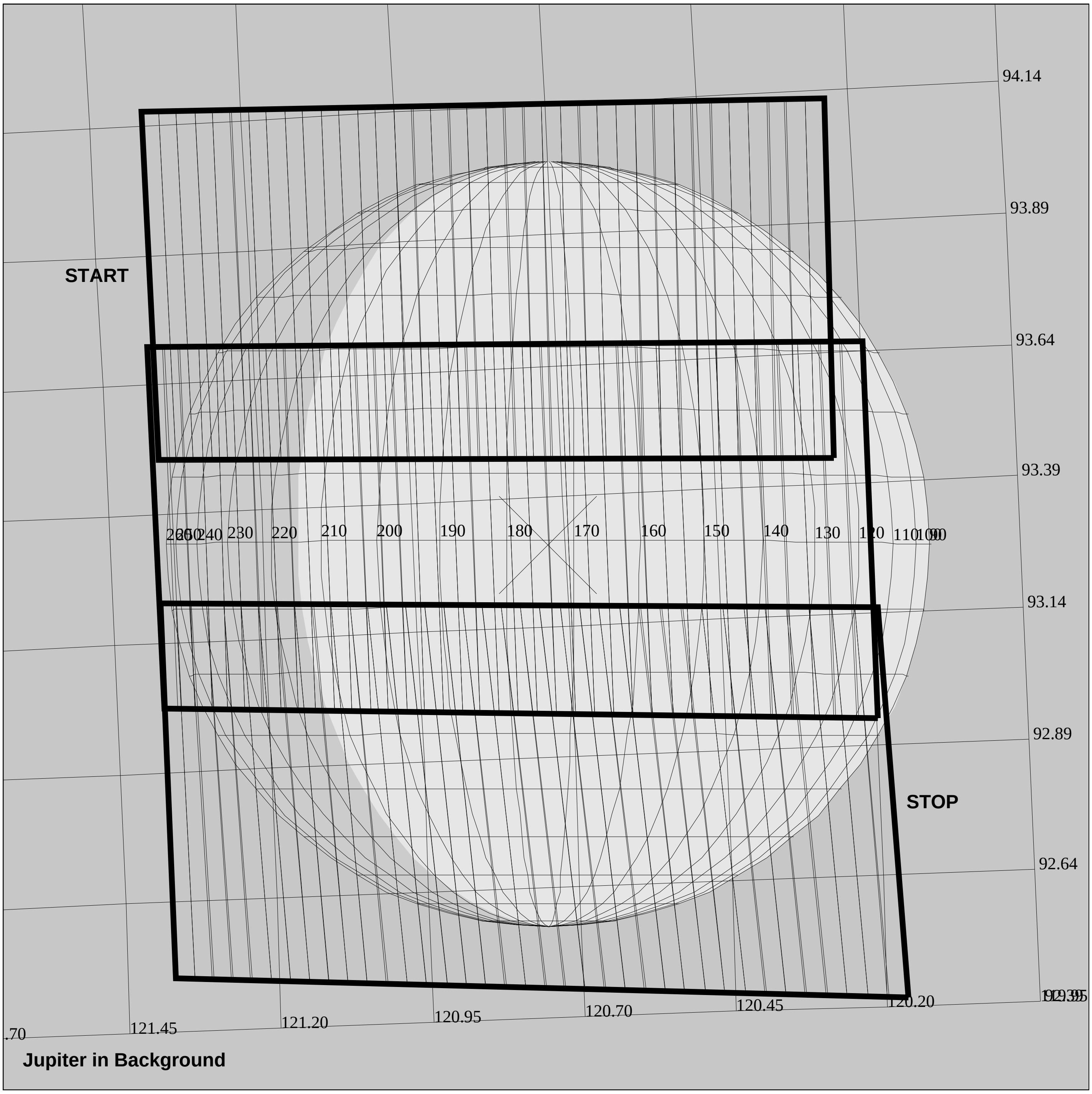
Design Detail

BTG=10.37 MB, TICS=969, FMT=LPU, FM, Gain State 2

Pole to pole multi-scan (7) mosaic of the central longitudes of Io.
Entire disk not covered.
Center at 0 deg N. latitude, 135 deg W. longitude.
Equatorial longitudinal coverage: 90 to 165 degress W. longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Full Map (XFM), Gain 2, Grating Start 0, LPU, IFM120, IFM36A
Fixed Full Map (XFM), Gain 2, Grating Start 0, LPU, IFM120, IFM48A
Fixed Full Map (XFM), Gain 2, Grating Start 0, LPU, IFM120, IFM84
Fixed Full Map (XFM), Gain 2, Grating Start 0, LPU, IFM120, IFM36D
Fixed Full Map (XFM), Gain 2, Grating Start 0, LPU, IFM120, IFM120



165DJ:TT=   0 TMC= 1 C=   11.00 XC=   8.00 BS= 0/0642 TC= 3
A= 182 pD= 5816 SR=17.450 RA50= 41.43 DEC50= 19.15 cone=121.36 clock= 93.83
117DJ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0642
1:#s= 3 Cs= -19.05 XCs=   -1.00 Cr=   18.75 XCr=   -6.00 sD= 1916 rD=   34

32INREGION02

DESIGN G3.2 yande: 9/ 6/2001 19:12:57

FILE:P.32INREGION02

TARGET BODY :   IO

MINI:m.32INREGION02

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:IEE 01-289/01:22:53.466   +CDS 337:00:0

OBSERVATION:32INREGION02

THINNING:NIM   2

BODY PLOT TIME:TARGET-TIME D= 5816 S= 0.700

DESCRIP:IO_REGION_01

Io Regional Map ACTIVITY ID: 32INREGION02-
START TIME: 01-289/07:03:38.132

Activity ID: Orbit 32 Target I Inst N OAPEL REGION SeqNo 02 -

Title	Io Regional Map			Instrument	NIMS
Requestor	NIMS-SWG/M. SEGURA	Team	NIMS	Working Group	SWG

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	IEE+CDS	00000337:00:0	01-289/07:03:38.132	IEE+000/05:40:44.666
End	IEE+CDS	00000370:00:0	01-289/07:37:00.132	IEE+000/06:14:06.666
Duration		00000033:00:0	000/00:33:22.000	000/00:33:22.000

Top Label 32INREGION02-
Bottom Label

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

Observation Objective

To map distribution of hot spots and SO2 from pole to pole.

Data Returned

Design Detail

BTG=10.37 MB, TICS=794, FMT=LPU, LM, Gain State 2

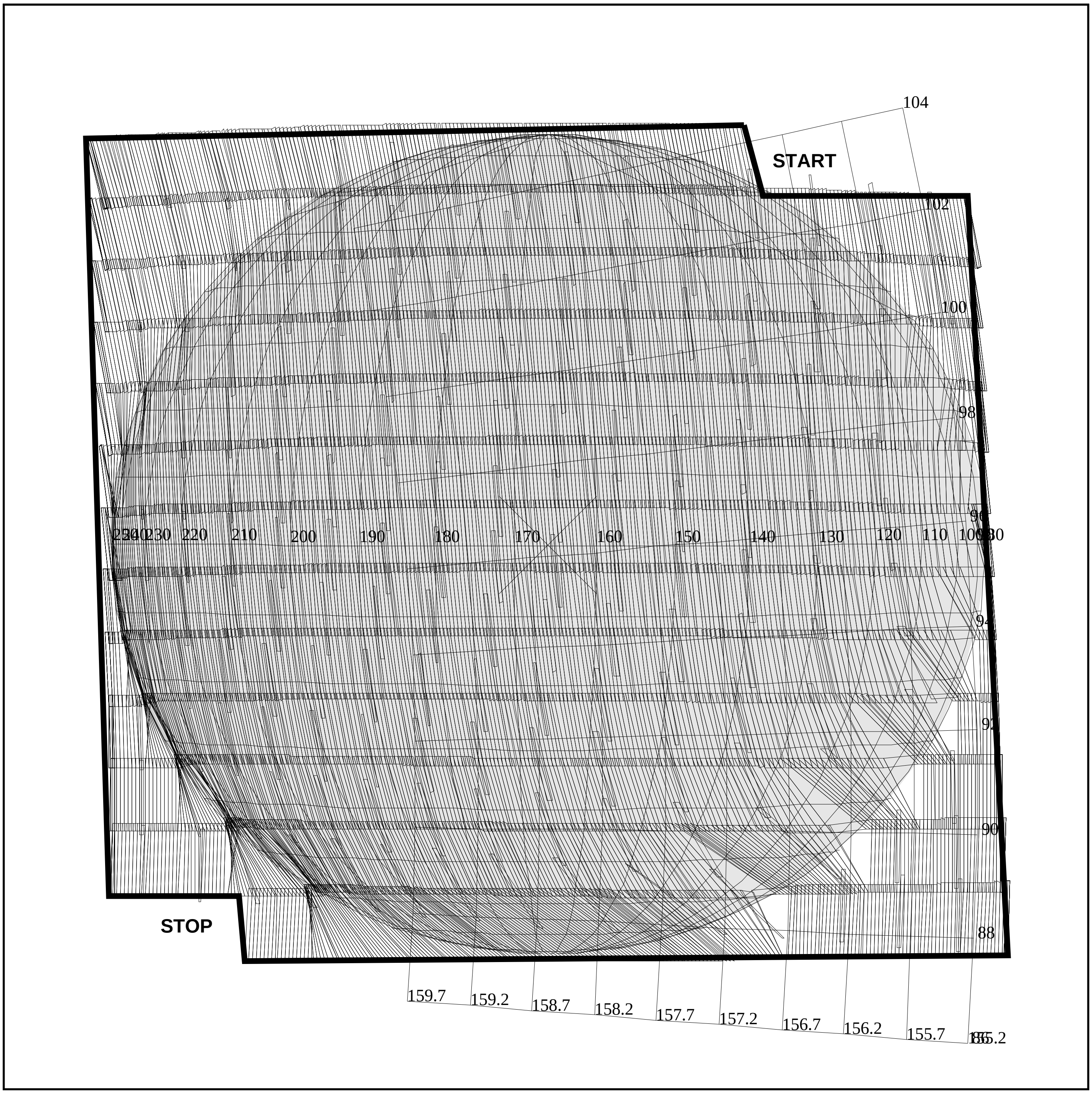
Pole to pole three scan mosaic of the entire disk of Io.
Center at 0 deg N. latitude, 175 deg W. longitude.
Equatorial longitudinal coverage: 85 to 265 degress W. longitude.

Jupiter is in the background behind Io.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252, ILM72A
Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252, ILM72B
Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252, ILM144
Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252, ILM108
Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252, ILM252

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



165DK:TT= 0 TMC= 1 C= -65.70 XC= 40.20 BS= 0/3522 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 77.28 DEC50= 28.02 cone=154.82 clock=102.57
117DK:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/3522
1:#s= 13 Cs= 120.10 XCs= 23.00 Cr= -117.50 XCr= -31.23 sD= 502 rD= 62

32JNGLOBAL01

DESIGN G3.2 yande: 9/13/2001 16:34:55

FILE:P.32JNGLOBAL01

CENTRAL BODY:JUPITER III

MINI:m.32JNGLOBAL01

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:JEE 01-288/23:55:56.133 +CDS 1263:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.800**

OBSERVATION:32JNGLOBAL01 **DESCRIP:JUPITER_GLOBAL_01**

Jupiter Global Obs		ACTIVITY ID:	32JNGLOBAL01-
		START TIME:	01-289/21:12:58.133

Activity ID: Orbit 32 Target J Inst N OAPEL GLOBAL SeqNo 01 -

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

Time System CDS Load ID Calendar Date 10/16/01 Week 42

Start	JEE+CDS	00001263:00:0	01-289/21:12:58.133	JEE+000/21:17:02.000
End	JEE+CDS	00001308:00:0	01-289/21:58:28.133	JEE+000/22:02:32.000
Duration		00000045:00:0	000/00:45:30.000	000/00:45:30.000

Top Label 32JNGLOBAL01-
Bottom Label

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

Observation Objective

Jupiter global observation.
Northern aurora loop also observed.

Data Returned

Design Detail

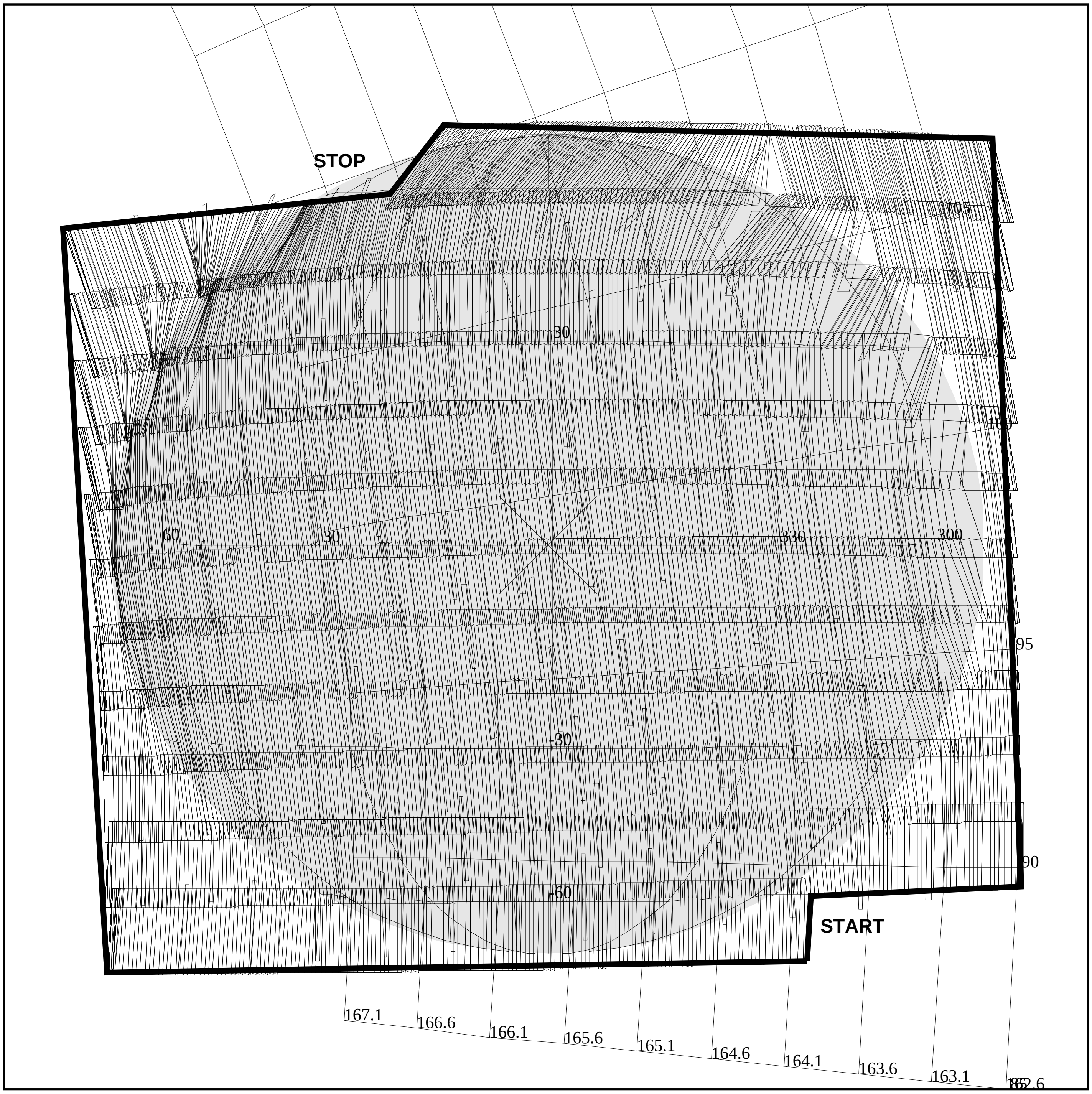
BTG=3.64 MB, TICS=213, FMT=LPU, XM, Gain State 2

Pole to pole 13 scan mosaic of the entire disk of Jupiter.
Center at 0 deg N. latitude, 165 deg W. longitude.
Equatorial longitudinal coverage: 75 to 255 degress W. longitude.
Mosaic starts at the north polar region.
Northern aurora loop centered near 170 W. longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM7

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



165DL:TT= 0 TMC= 1 C= -54.00 XC= -41.50 BS= 0/3582 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 85.66 DEC50= 22.88 cone=162.59 clock= 89.08
117DL:#SB= 1 OR= 0.760 RR=12.000 BM=F RC= 1 BS= 0/3582
1:#s= 12 Cs= 107.50 XCs= -6.00 Cr= -106.00 XCr= 13.70 sD= 502 rD= 64

32JNGLOBAL02

DESIGN G3.2 yande: 9/13/2001 15:55:19

FILE:P.32JNGLOBAL02

CENTRAL BODY:JUPITER III

MINI:m.32JNGLOBAL02

S/C EPH:/DATA/NAVIO/010810-tour.NS

PERIAPSIS:

START:JEE 01-288/23:55:56.133 +CDS 1593:00:0

OBSERVATION:32JNGLOBAL02

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 0 S= 0.800

DESCRIP:JUPITER_GLOBAL_02

Jupiter Global Obs	ACTIVITY ID: 32JNGLOBAL02- START TIME: 01-290/02:46:38.133

Activity ID: Orbit 32 Target J Inst N OAPEL GLOBAL SeqNo 02 -

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

Time System	CDS	Load ID		Calendar Date	10/17/01	Week 42

Start	JEE+CDS	00001593:00:0	01-290/02:46:38.133	JEE+001/02:50:42.000
End	JEE+CDS	00001638:00:0	01-290/03:32:08.133	JEE+001/03:36:12.000
Duration		00000045:00:0	000/00:45:30.000	000/00:45:30.000

Top Label 32JNGLOBAL02-
Bottom Label

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

Observation Objective

Jupiter global observation.
Southern aurora loop also observed.

Data Returned

Design Detail

BTG=3.64 MB, TICS=213, FMT=LPU, XM, Gain State 2

Pole to pole 12 scan mosaic of the entire disk of Jupiter.
Center at 0 deg N. latitude, 0 deg W. longitude.
Equatorial longitudinal coverage: 270 to 90 degress W. longitude.
Mosaic starts at the south polar region.
Southern aurora loop centered near 10 W. longitude.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Map (XM), Gain 2, Grating Start 0, LPU, JXM10, JXM7

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

NIMS Chopper Off		ACTIVITY ID:	32NNCHOPOF01-
		START TIME:	01-290/21:35:54.066

Activity ID: Orbit 32 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	10/17/01	Week	42

Start	JEE+CDS	00000000:00:0	01-290/21:35:54.066	JEE+000/00:00:00.000
End	JEE+CDS	00000000:00:0	01-290/21:40:57.400	JEE+000/00:00:00.000
Duration		00000000:00:0	000/00:05:03.333	000/00:00:00.000

Top Label   32NNCHOPOF01-
Bottom Label

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

Observation Objective

Turn off NIMS Chopper.

Design Detail

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

NIMS RCT Real Time Calibration	ACTIVITY ID: 32NNRCTRLT01- START TIME: 01-346/15:10:51.466

Activity ID: Orbit 32 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 12/12/00 Week 50

Start	RTA+CDS	00000000:00:0	01-346/15:10:51.466	RTA+000/00:00:00.000
End	RTA+CDS	00000000:00:0	01-347/04:21:33.400	RTA+000/00:00:00.000
Duration		00000000:00:0	000/13:10:41.933	000/00:00:00.000

Top Label 32NNRCTRLT01-
Bottom Label

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

Observation Objective

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

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

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

Data Returned

Design Detail

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

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

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