Chapter 5 - Detailed Observation Designs

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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.

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Grating Step Test	**ACTIVITY ID: 27NNDETECT01-** **START TIME: 00-053/12:35:35.333**

Activity ID: Orbit 27 Target N Inst N OAPEL DETECT SeqNo 01 -

Title	**Grating Step Test**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE-CDS 00000070:00:0**	**00-053/12:35:35.333**		**IEE-000/01:10:46.666**	
End	**IEE-CDS 00000050:00:0**	**00-053/12:55:48.666**		**IEE-000/00:50:33.333**	
Duration	**00000020:00:0**	**000/00:20:13.333**		**000/00:20:13.333**	

Top Label	**27NNDETECT01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Procedure to return NIMS Grating position Housekeeping via CDS and MROH

Design Detail

NIMS Housekeeping values, including Grating Position, are copied using 6MCOPY commands from NIMS memory locations to CDS memory locations at selected MF times to collect every other grating position over the NIMS grating cycle. These CDS locations are sent down via a 6MROH command during I27 Cruise after the I27 Encounter period.

NIMS Real-Time Software Reload — ACTIVITY ID: 27NNHRPELE01- / START TIME: 00-053/13:28:10.000

Activity ID: Orbit 27 Target N Inst N OAPEL HRPELE SeqNo 01 -

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

Time System	CDS	Load ID	Calendar Date 02/22/00 Week 08
Start	IEE-CDS 00000018:00:0	00-053/13:28:10.000	IEE-000/00:18:12.000
End	IEE-CDS 00000015:00:0	00-053/13:31:12.000	IEE-000/00:15:10.000
Duration	00000003:00:0	000/00:03:02.000	000/00:03:02.000

Top Label 27NNHRPELE01-
Bottom Label

Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

NIMS real-time 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 I27 reload OAPELS are:
27NNHRPELE01, 27NNICHAAC01, 27NNMOSAIC01, 27NNPROMTH01, 27NNCAMAXT01, 27NNAMRANI01, 27NNTVASHT01, 27NNGLOBAL02, 27NNRELOAD01

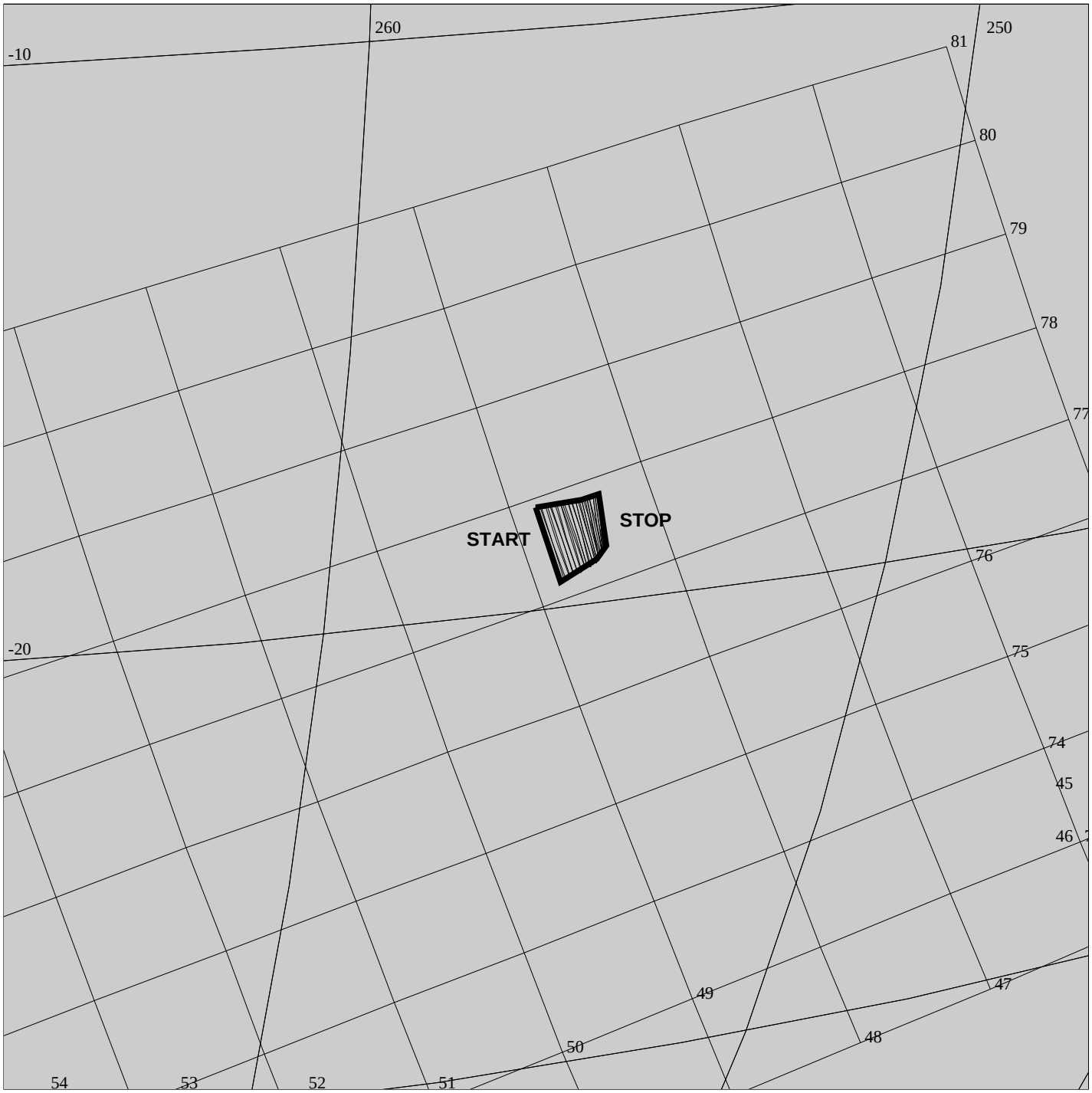
27INREGION01 did not have a reload.

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.

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DA:TT= 0 TMC= 1 C= 5.00 XC= 0.00 BS= 0/2732 TC= 1(-18.6 255.7)
A= 182 pD= 900 SR=17.450 RA50=250.54 DEC50=-41.07 cone= 48.82 clock= 77.54
117DA:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/2732
1:#s= 1 Cs= -8.90 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 900 rD= 2

27INHRPELE01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INHRPELE01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 -CDS 11:00:0 **BODY PLOT TIME:TARGET-TIME D= 900 S= 5.000**

OBSERVATION:27INHRPELE01 **DESCRIP:IO_PELE_OBSERVATION**

Io Pele Observation	**ACTIVITY ID: 27INHRPELE01-** **START TIME: 00-053/13:34:14.000**

Activity ID: Orbit 27 Target N Inst N OAPEL HRPELE SeqNo 01 -

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

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE-CDS 00000012:00:0**	**00-053/13:34:14.000**		**IEE-000/00:12:08.000**	
End	**IEE-CDS 00000005:00:0**	**00-053/13:41:18.666**		**IEE-000/00:05:03.333**	
Duration	**00000007:00:0**	**000/00:07:04.666**		**000/00:07:04.666**	

Top Label	**27INHRPELE01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Nightside observation of Pele to map thermal emission from the hot spot.

Data Returned

Design Detail

BTG=0.8726, TICS=269, FMT=MPW

1 Rim Target Time
5 Rim Obsservation centered at -18 deg Lat, 256 deg W. Lon
1 scan, Nyquist, LM

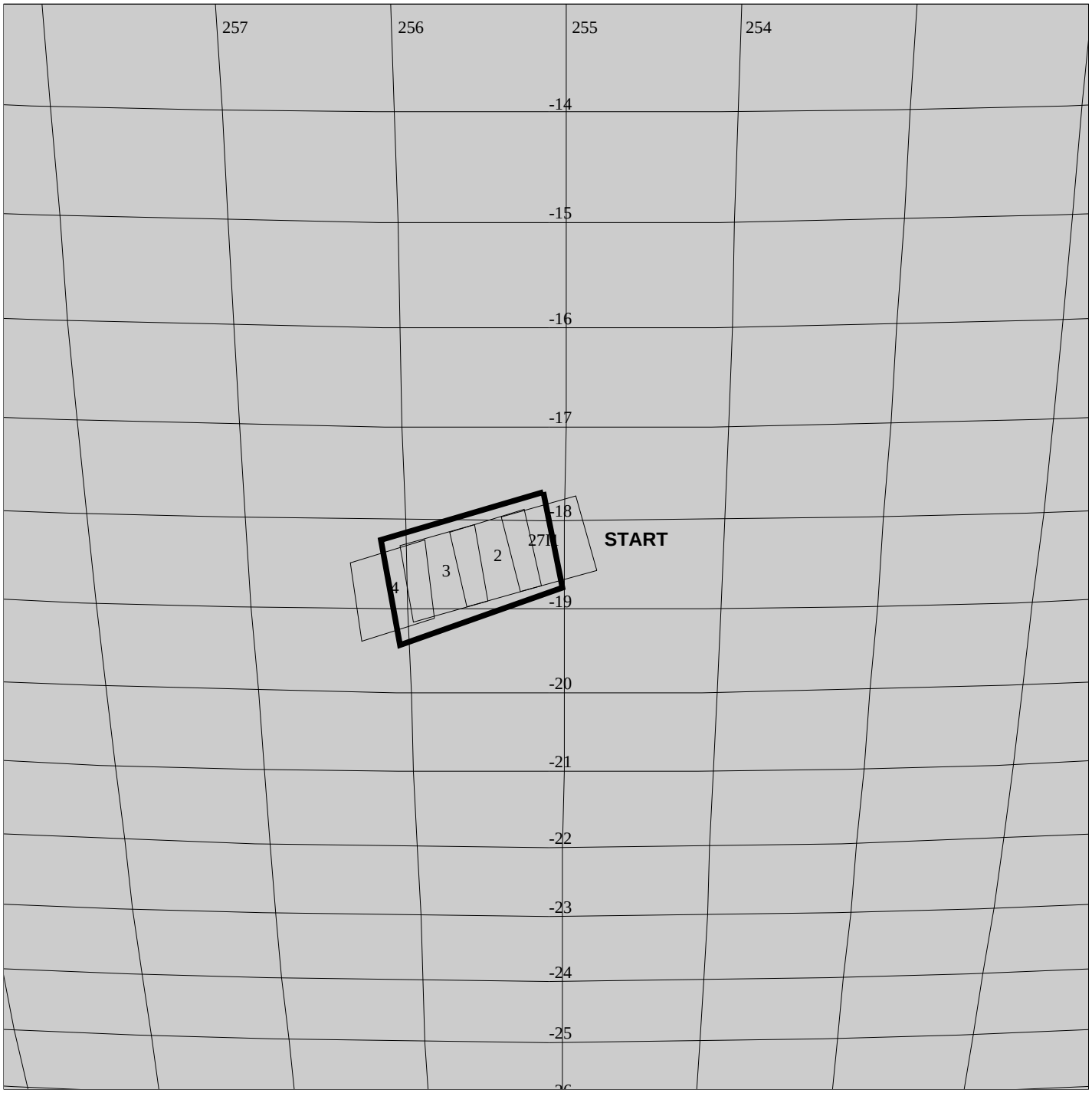
Gain State 2 (to prevent saturation)
Collaborative observation with SSI.

Saturated Pixels.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM180

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IA:TT= 0 TMC= 1 C= -8.53 XC= 0.00 BS=65/3644 TC= 1(-18.5 255.6)
A= 70 pD= 84 SR=17.450 RA50=286.74 DEC50=-63.90 cone= 76.14 clock= 60.84
118IA:#SB= 1 Cs= 5.70 XCs= 0.00 TPP= 26 SR= 2.900 RR=12.000 BM=F RC= 1 BS=68/3644
1:#s= 4 #p= 1 Cr= 0.00 XCr= 0.00

27INPELE__01

DESIGN G3.2 herb : 2/ 4/2000 9:11:42

FILE:P.27ISPELE__01

TARGET BODY : IO

MINI:m.27ISPELE__01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 -CDS 06:00:0

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

OBSERVATION:27ISPELE__01

DESCRIP:PELE IN DARKNESS

SSI Io Pele Observation — **ACTIVITY ID: 27ISPELE__01-** / **START TIME: 00-053/13:40:32.000**

Activity ID: Orbit 27 Target N Inst S OAPEL PELE__ SeqNo 01 -

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

Time System	**CDS**	**Load ID**	**Calendar Date**	**02/22/00**	**Week 08**
Start	**IEE-CDS 00000005:70:0**	**00-053/13:40:32.000**		**IEE-000/00:05:50.000**	
End	**IEE-CDS 00000004:80:0**	**00-053/13:41:26.000**		**IEE-000/00:04:56.000**	
Duration	**00000000:81:0**	**000/00:00:54.000**		**000/00:00:54.000**	

Top Label	**27ISPELE__01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Nightside Ride-along behind SSI to look at Pele hotspot.

Data Returned

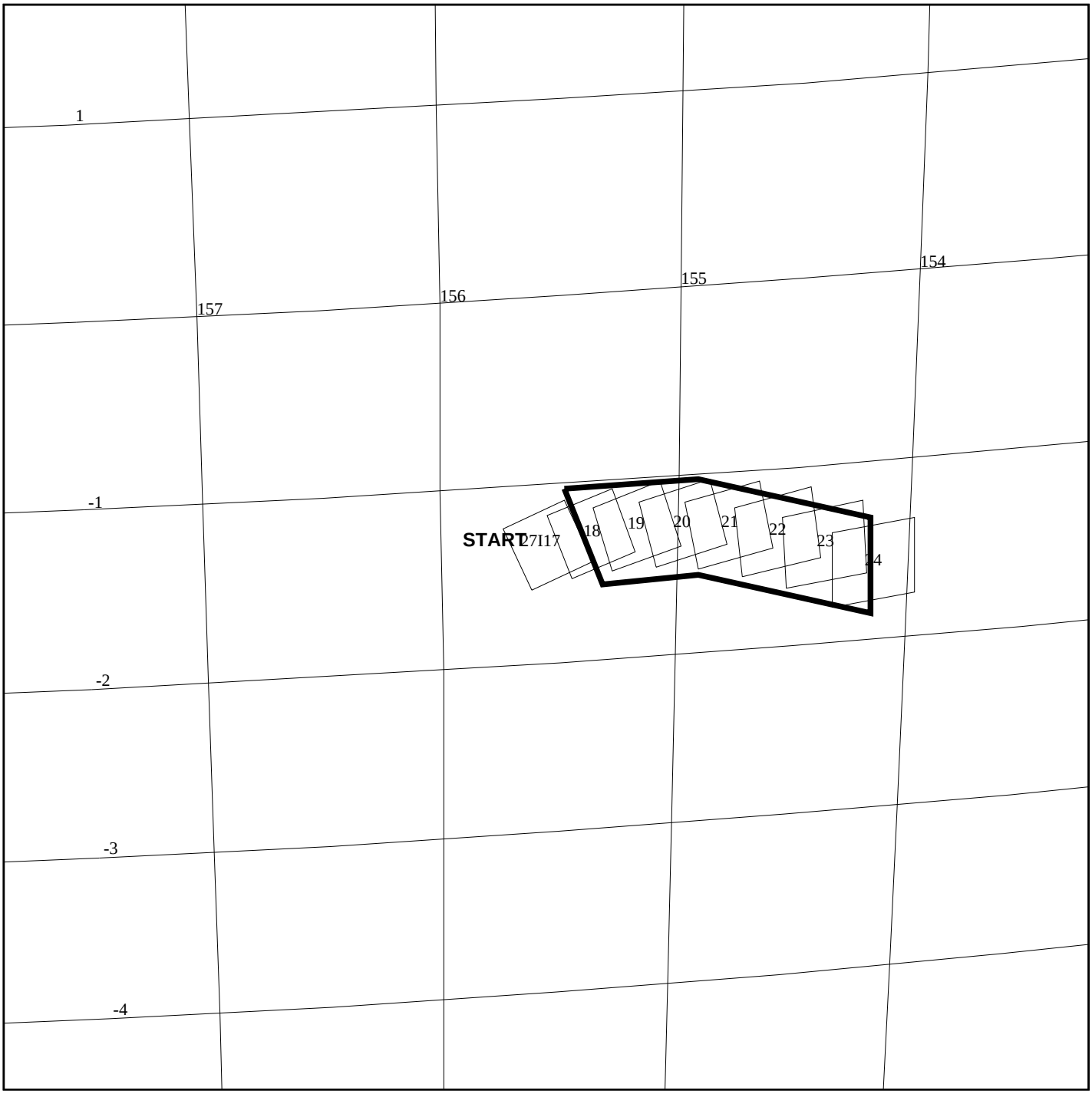
Design Detail

Ride-along behind SSI.
single swath.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144

Galileo Activity Plan Form **01/31/00 14:29:49 rev 6/95**



165ID:TT= 0 TMC= 1 C= 6.50 XC= -19.00 BS=65/5464 TC= 1(-1.284 154.848)
A= 168 pD= 188 SR=17.450 RA50= 29.46 DEC50=-28.84 cone=140.92 clock= 31.66
118ID:#SB= 1 Cs= -0.80 XCs= 6.00 TPP= 26 SR= 2.800 RR=12.000 BM=F RC= 1 BS=68/5464
1:#s= 8 #p= 1 Cr= 0.00 XCr= 0.00

27ISPROMTH01

DESIGN G3.2 herb : 2/ 4/2000 9:12:14

FILE:P.27ISPROMTH01

TARGET BODY : IO

MINI:m.27ISPROMTH01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 04:00:0

BODY PLOT TIME:TARGET-TIME D= 188 S= 10.000

OBSERVATION:27ISPROMTH01

DESCRIP:PROMETHEUS

SSI Io Prometheus Observation — **ACTIVITY ID: 27ISPROMTH01-** / **START TIME: 00-053/13:50:10.666**

Activity ID: Orbit 27 Target N Inst S OAPEL PROMTH SeqNo 01 -

Title	**SSI Io Prometheus Observation**			**Instrument**	**SSI**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS**	**00000003:70:0**	**00-053/13:50:10.666**		**IEE+000/00:03:48.666**
End	**IEE+CDS**	**00000005:70:0**	**00-053/13:52:12.000**		**IEE+000/00:05:50.000**
Duration		**00000002:00:0**	**000/00:02:01.333**		**000/00:02:01.333**

Top Label **27ISPROMTH01-**
Bottom Label

Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

High resolution dayside ride-along behind SSI across Prometheus hotspot region.

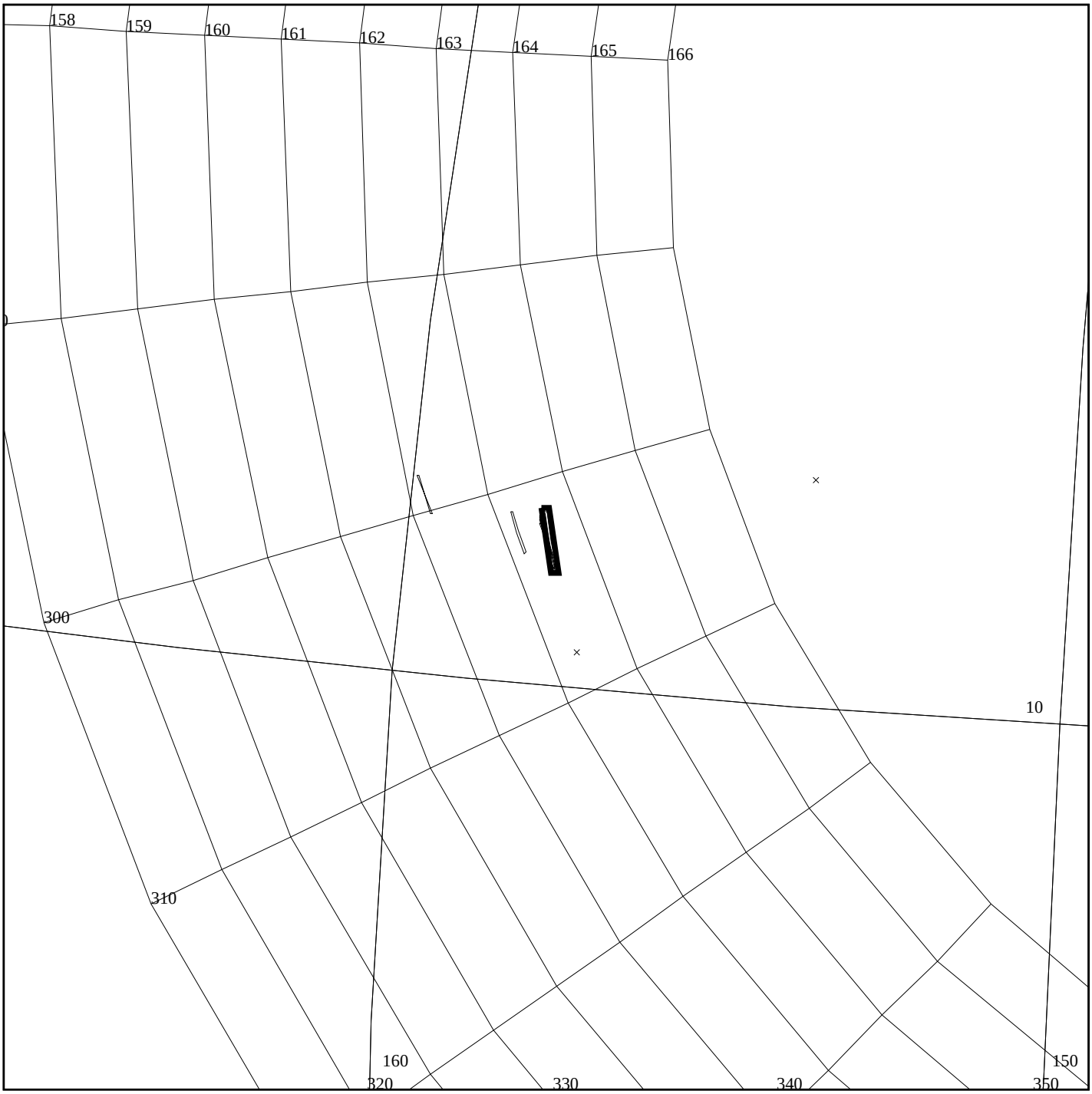
Data Returned

Design Detail

ride-along behind SSI.
single swath.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM288



165DD:TT= 0 TMC= 1 C= -9.00 XC= -3.00 BS=41/6008 TC= 1(12 157)
A= 302 pD= 354 SR=17.450 RA50= 44.20 DEC50= 10.16 cone=163.55 clock=303.03
117DD:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS=41/6008
1:#s= 1 Cs= 3.40 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 354 rD= 36

27INICHAAC01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INICHAAC01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 7:00:0 **BODY PLOT TIME:TARGET-TIME D= 354 S= 4.000**

OBSERVATION:27INICHAAC01 **DESCRIP:IO_CHAAC**

Io Chaac Observation — **ACTIVITY ID: 27INICHAAC01-** / **START TIME: 00-053/13:51:25.333**

Activity ID: Orbit 27 Target N Inst N OAPEL ICHAAC SeqNo 01 -

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

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000005:00:0**	**00-053/13:51:25.333**		**IEE+000/00:05:03.333**	
End	**IEE+CDS 00000009:00:0**	**00-053/13:55:28.000**		**IEE+000/00:09:00.000**	
Duration	**00000004:00:0**	**000/00:04:02.666**		**000/00:04:02.666**	

Top Label	**27INICHAAC01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside observation of the Chaac region to investigate surface composition. The observed area includes the "Golf Course" (Chaac) at 12N, 157W.

Data Returned

Design Detail

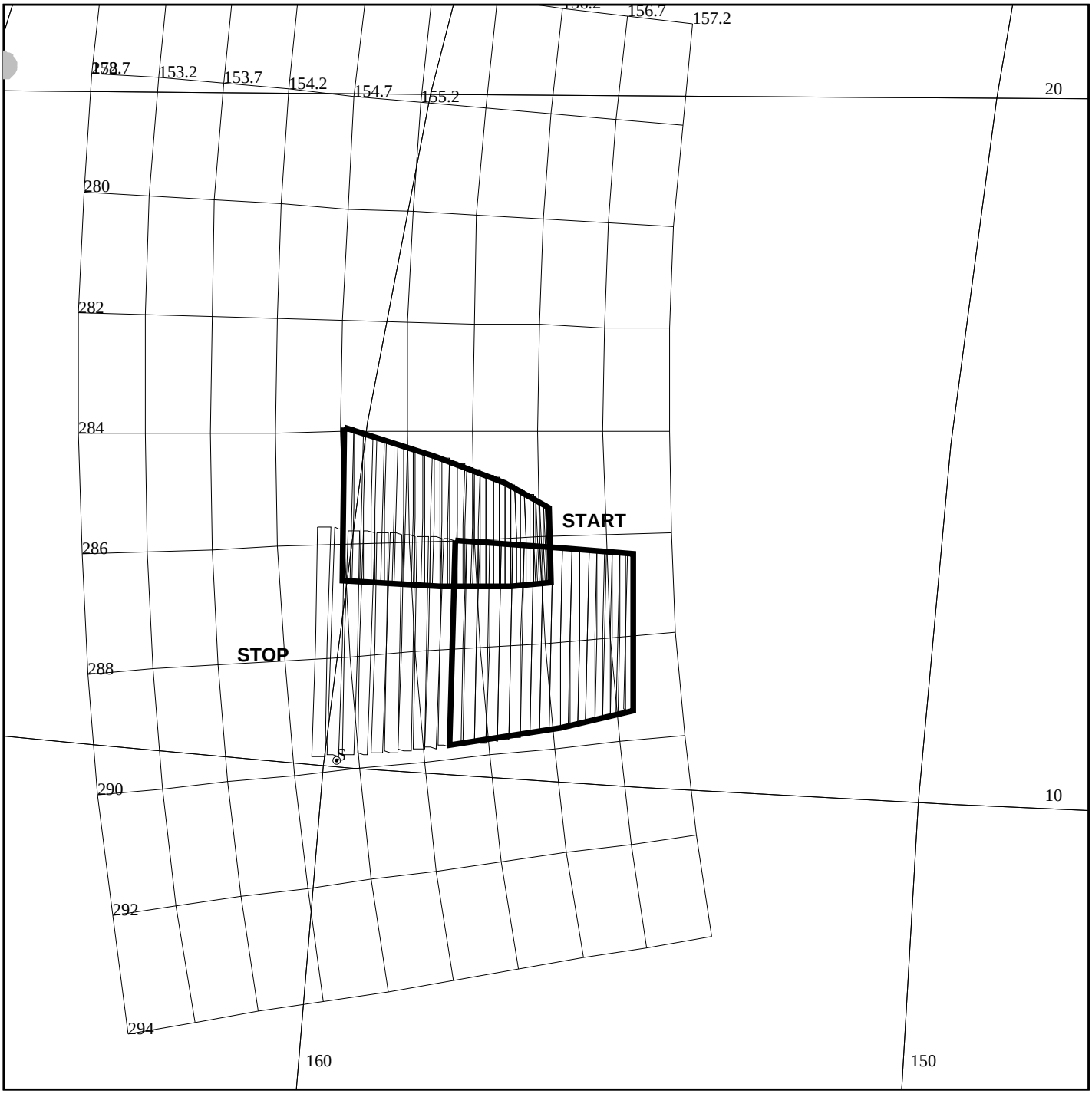
BTG=0.4493, TICS=140, FMT=MPW

Target to 12 deg Latitude, 157 deg W. Longitude.
2 Rim scan, LM, Nyquist.
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM288

Galileo Activity Plan Form **01/31/00 14:29:49 rev 6/95**



165DE:TT= 0 TMC= 1 C= 5.00 XC= -3.00 BS= 0/6736 TC= 1(13 157)
A= 182 pD= 3076 SR=17.450 RA50= 51.02 DEC50= 16.63 cone=156.25 clock=286.15
117DE:#SB= 1 OR= 0.030 RR=10.000 BM=F RC= 1 BS= 0/6736
1:#s= 2 Cs= -15.10 XCs= 0.00 Cr= 17.50 XCr= 7.00 sD= 1520 rD= 36

27INMOSAIC01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INMOSAIC01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 11:00:0 **BODY PLOT TIME:TARGET-TIME D= 3076 S= 5.000**

OBSERVATION:27INMOSAIC01 **DESCRIP:IO_GOLF_COURSE_MOSAIC**

Io Mosaic Obs	**ACTIVITY ID: 27INMOSAIC01-** **START TIME: 00-053/13:57:29.333**

Activity ID: Orbit 27 Target N Inst N OAPEL MOSAIC SeqNo 01 -

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

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000011:00:0**	**00-053/13:57:29.333**		**IEE+000/00:11:07.333**	
End	**IEE+CDS 00000026:00:0**	**00-053/14:12:39.333**		**IEE+000/00:26:17.333**	
Duration	**00000015:00:0**	**000/00:15:10.000**		**000/00:15:10.000**	

Top Label	**27INMOSAIC01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside observation to investigate surface composition of the Chaac hot spot region. Chaac was first detected in I25 as a hot spot.

Data Returned

Design Detail

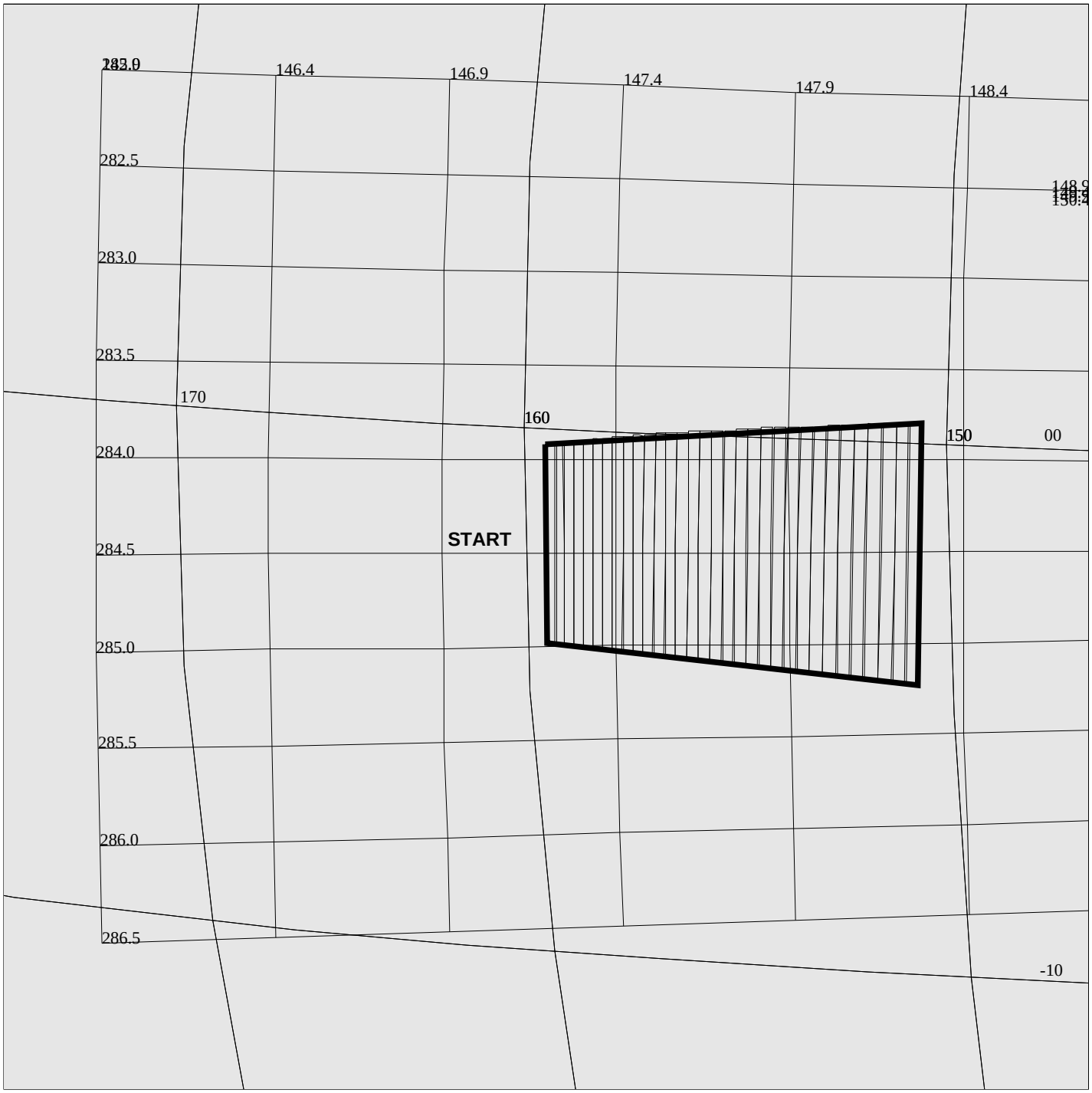
BTG=2.3183, TICS=710, FMT=MPW

1 Rim Target, 2 scans, LM, Nyquist
Center Target at 12 deg Latitude, 157 deg W. Longitude
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144B
Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM288

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DF:TT= 0 TMC= 1 C= -9.00 XC= 0.00 BS= 0/0376 TC= 1(-2 155)
A= 182 pD= 1628 SR=17.450 RA50= 60.11 DEC50= 19.30 cone=147.23 clock=284.46
117DF:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0376
1:#s= 1 Cs= 16.10 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1628 rD= 2

27INPROMTH01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INPROMTH01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 31:00:0 **BODY PLOT TIME:TARGET-TIME D= 1628 S= 5.000**

OBSERVATION:27INPROMTH01 **DESCRIP:PROMETHEUS_OBSERVATION**

Io Prometheus Observation	**ACTIVITY ID: 27INPROMTH01-** **START TIME: 00-053/14:16:42.000**

Activity ID: Orbit 27 Target N Inst N OAPEL PROMTH SeqNo 01 -

Title	**Io Prometheus Observation**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000030:00:0**	**00-053/14:13:40.000**		**IEE+000/00:30:20.000**	
End	**IEE+CDS 00000040:00:0**	**00-053/14:16:42.000**		**IEE+000/00:40:26.666**	
Duration	**00000010:00:0**	**000/00:10:06.666**		**000/00:10:06.666**	

Top Label	**27INPROMTH01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside observation of Prometheus region in collaboration with SSI, to investigate surface composition, SO2 distribution and temperature distribution.

Data Returned

Design Detail

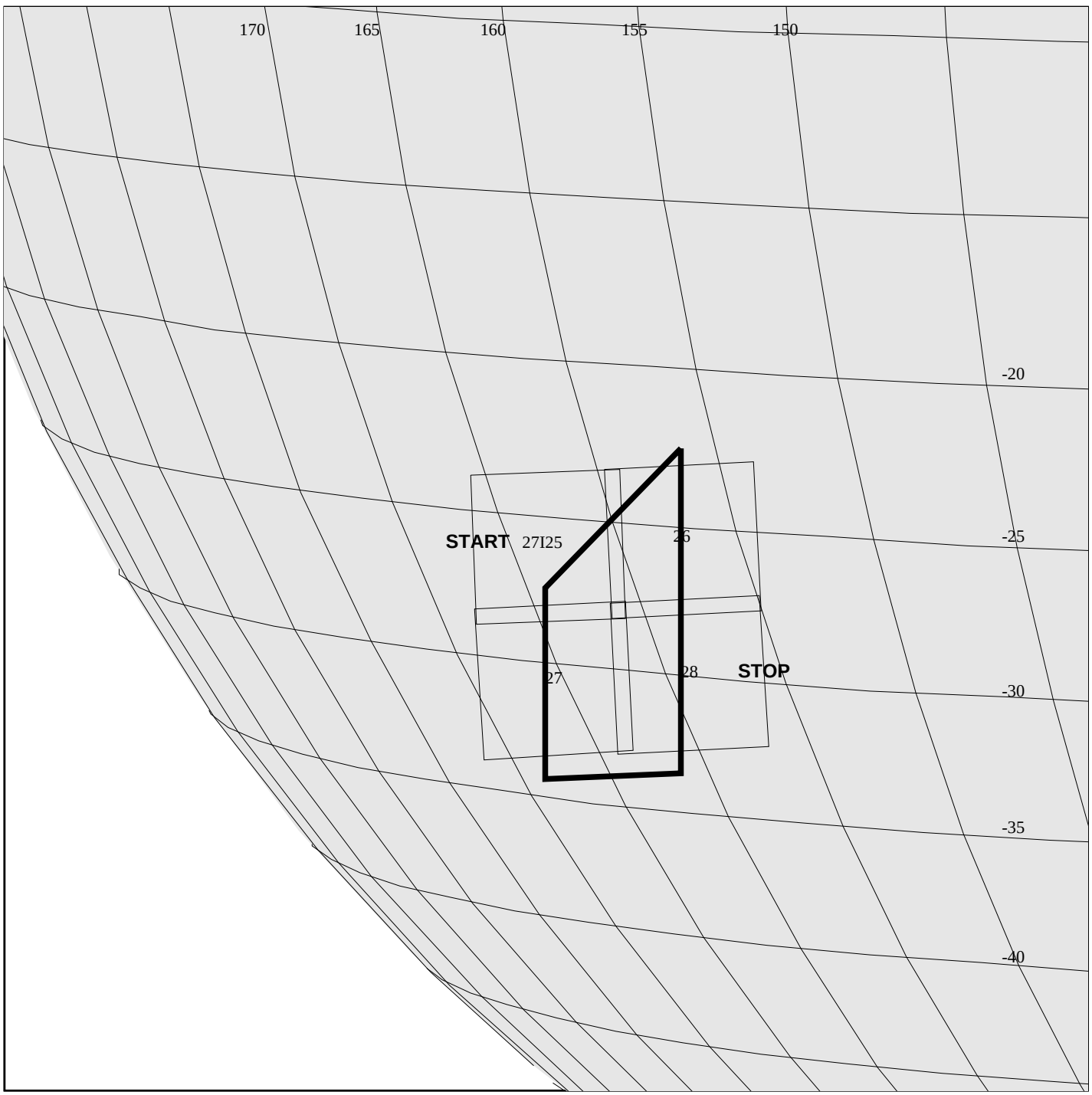
BTG=1.7929, TICS=510, FMT=MPW

1 Rim Target
Center at -2 deg Latitude, 155 deg W. Longitude
One scan, 9 Rims long, LM, Nyquist
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360

Galileo Activity Plan Form	**01/31/00 14:29:49**	**rev 6/95**



165IE:TT= 0 TMC= 1 C= -3.65 XC= -3.65 BS= 0/2198 TC= 1(-27.9 161.0)
A= 160 pD= 84 SR=17.450 RA50= 61.04 DEC50= 17.87 cone=146.62 clock=287.33
118IE:#SB= 1 Cs= 7.30 XCs= 0.00 TPP= 26 SR= 3.700 RR= 4.900 BM=F RC= 1 BS= 3/2198
1:#s= 2 #p= 2 Cr= -7.30 XCr= 7.30

27INTOHIL_01

DESIGN G3.2 herb : 2/ 4/2000 9:14:29

FILE:P.27ISTOHIL_01

TARGET BODY : IO

MINI:m.27ISTOHIL_01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 41:00:0

BODY PLOT TIME:TARGET-TIME D= 84 S= 3.500

OBSERVATION:27ISTOHIL_01

DESCRIP:TOHIL MONS STEREO

SSI Io Tohil Observation	**ACTIVITY ID: 27ISTOHIL_01-** **START TIME: 00-053/14:26:48.666**

Activity ID: Orbit 27 Target N Inst S OAPEL TOHIL_ SeqNo 01 -

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

Time System	**CDS**	**Load ID**	**Calendar Date**	**02/22/00**	**Week 08**
Start	**IEE+CDS 00000040:00:0**	**00-053/14:26:48.666**		**IEE+000/00:40:26.666**	
End	**IEE+CDS 00000041:40:0**	**00-053/14:28:16.000**		**IEE+000/00:41:54.000**	
Duration	**00000001:40:0**	**000/00:01:27.334**		**000/00:01:27.334**	

Top Label	**27ISTOHIL_01-**						
Bottom Label							
Plot Key	**NIMS**	**Type**	**SCI**				
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**		
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**		

Observation Objective

Dayside ride-along behind SSI 2X2 mosaic of Tohil region.

Data Returned

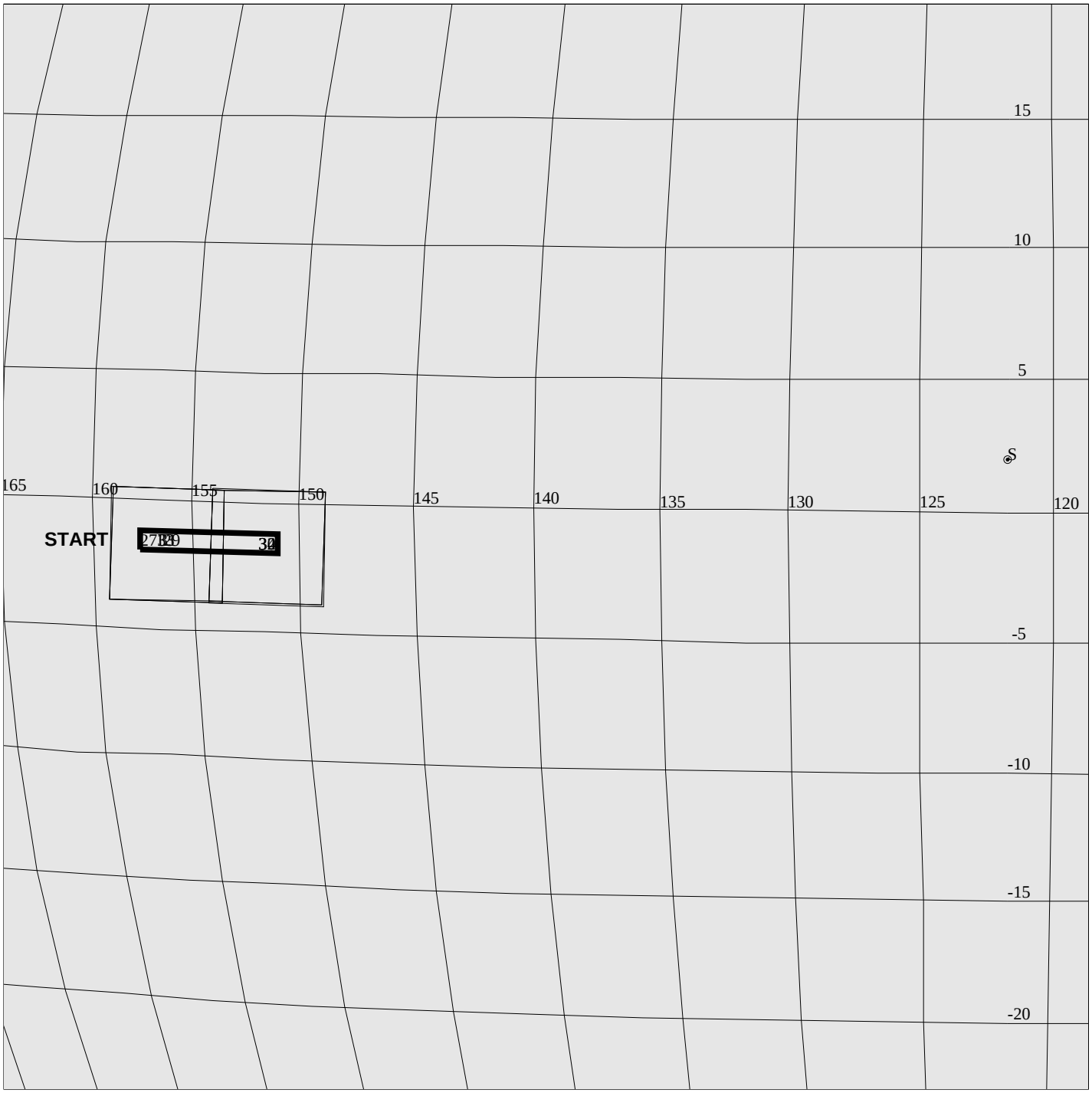
Design Detail

ride-along behind SSI.
2X2 mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360

Galileo Activity Plan Form	**01/31/00 14:29:49**	**rev 6/95**



165IF:TT= 0 TMC= 1 C= -3.65 XC= 0.00 BS= 0/2562 TC= 1(-1.7 153.8)
A= 262 pD= 136 SR=17.450 RA50= 60.46 DEC50= 20.50 cone=146.65 clock=282.43
118IF:#SB= 1 Cs= 7.30 XCs= 0.00 TPP= 26 SR= 3.700 RR= 3.700 BM=F RC= 1 BS= 3/2562
1:#s= 2 #p= 3 Cr= -7.30 XCr= 0.00

27INPROMTH02

DESIGN G3.2 herb : 2/ 4/2000 9:12:47

FILE:P.27ISPROMTH02

TARGET BODY : IO

MINI:m.27ISPROMTH02

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 43:00:0

BODY PLOT TIME:TARGET-TIME D= 136 S= 2.500

OBSERVATION:27ISPROMTH02

DESCRIP:PROMETHEUS COLOR

SSI Io Prometheus Observation — **ACTIVITY ID: 27ISPROMTH02-** / **START TIME: 00-053/14:28:16.666**

Activity ID: Orbit 27 Target N Inst S OAPEL PROMTH SeqNo 02 -

Title	**SSI Io Prometheus Observation**	**Instrument**	**SSI**
Requestor	**NIMS-SWG/M. SEGURA**	**Team NIMS**	**Working Group SWG**

Time System	**CDS**	**Load ID**	**Calendar Date**	**02/22/00**	**Week 08**
Start	**IEE+CDS**	**00000041:40:0**	**00-053/14:28:16.666**		**IEE+000/00:41:54.000**
End	**IEE+CDS**	**00000044:00:0**	**00-053/14:30:51.333**		**IEE+000/00:44:29.333**
Duration		**00000002:51:0**	**000/00:02:35.333**		**000/00:02:35.333**

Top Label	**27ISPROMTH02-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside ride-along behind SSI 2x1 across Prometheus hotspot region.

.

Data Returned

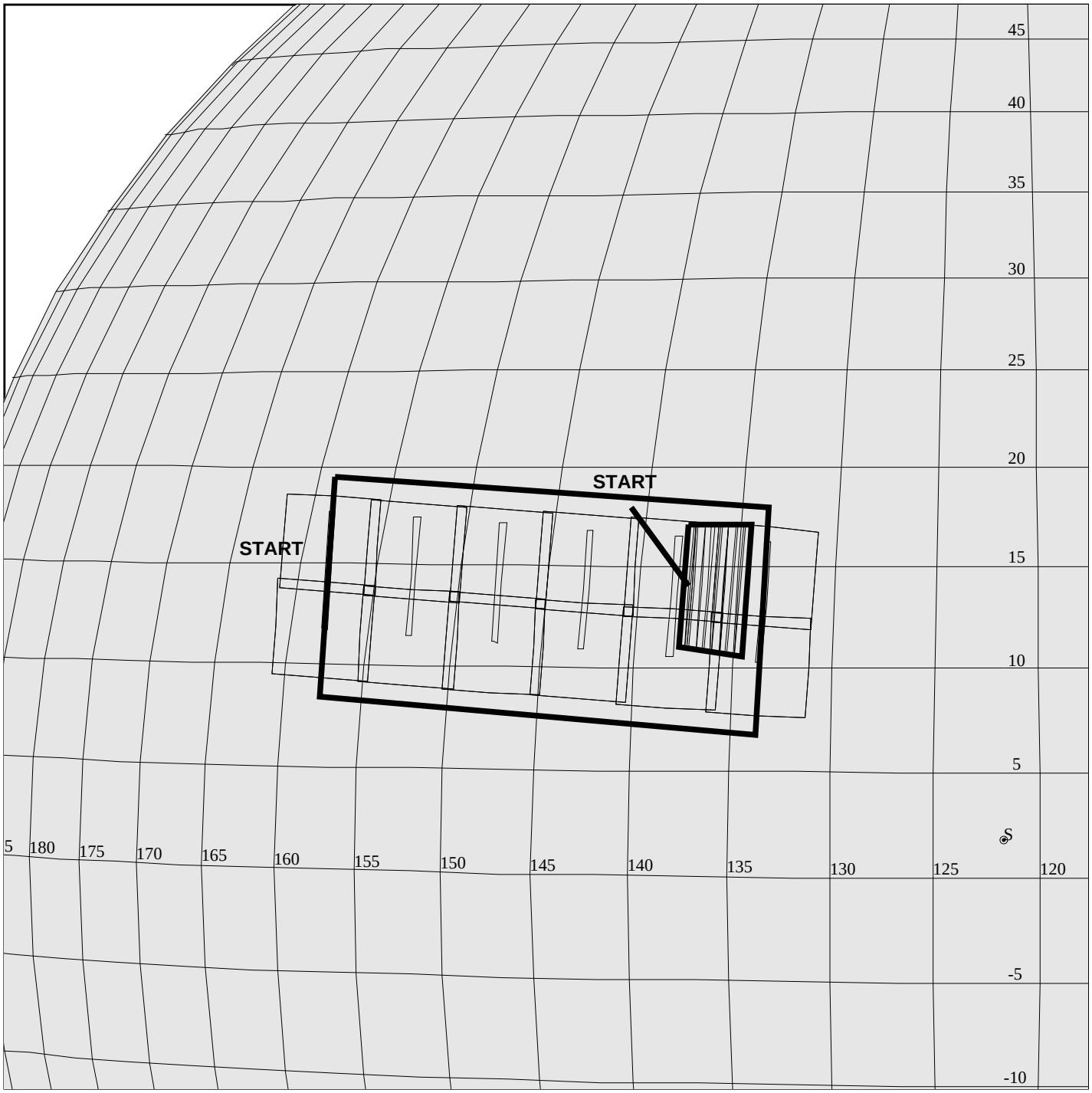
Design Detail

ride-along behind SSI.
2x1, multiple filters.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Safe Mode (XS), Gain 2, Grating Start 0, MPW, IXS017, IXS015

Galileo Activity Plan Form **01/31/00 14:29:49 rev 6/95**



165IG:TT= 0 TMC= 1 C= -18.25 XC= -3.65 BS= 0/3106 TC= 1(13.1 145.2)
A= 306 pD= 898 SR=17.450 RA50= 60.22 DEC50= 22.43 cone=146.39 clock=278.94
118IG:#SB= 1 Cs= 0.00 XCs= 7.30 TPP= 26 SR= 3.000 RR= 3.000 BM=F RC= 1 BS= 3/3106
1:#s= 2 #p= 6 Cr= 7.30 XCr= -7.30
116IG:OR= 4.000 Cs= -6.50 XCs= -6.00 sD= 200 BS=65/3288 TF=N
116JG:OR= 0.030 Cs= 3.60 XCs= 0.00 sD= 364 BS=85/3470 TF=N

27INCAMAXT01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27ISCAMAXT01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 00-053/13:46:22.000 +CDS 46:00:0

BODY PLOT TIME:TARGET-TIME D= 898 S= 2.000

OBSERVATION:27ISCAMAXT01

DESCRIP:CAMAXTLI PATERA/HOTSPOT

Io Camxtli Observation	**ACTIVITY ID: 27INCAMAXT01-** **START TIME: 00-053/14:36:55.333**

Activity ID: Orbit 27 Target N Inst N OAPEL CAMAXT SeqNo 01 -

Title	**Io Camaxtli Observation**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000050:00:0**	**00-053/14:36:55.333**		**IEE+000/00:50:33.333**	
End	**IEE+CDS 00000052:00:0**	**00-053/14:38:56.666**		**IEE+000/00:52:34.666**	
Duration	**00000002:00:0**	**000/00:02:01.333**		**000/00:02:01.333**	

Top Label	**27INCAMAXT01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside observation of Camaxtli (9805A) hot spot, first detected by NIMS and SSI in E15. Objective is to investigate surface composition. Collaborative observation with SSI.

Data Returned

Design Detail

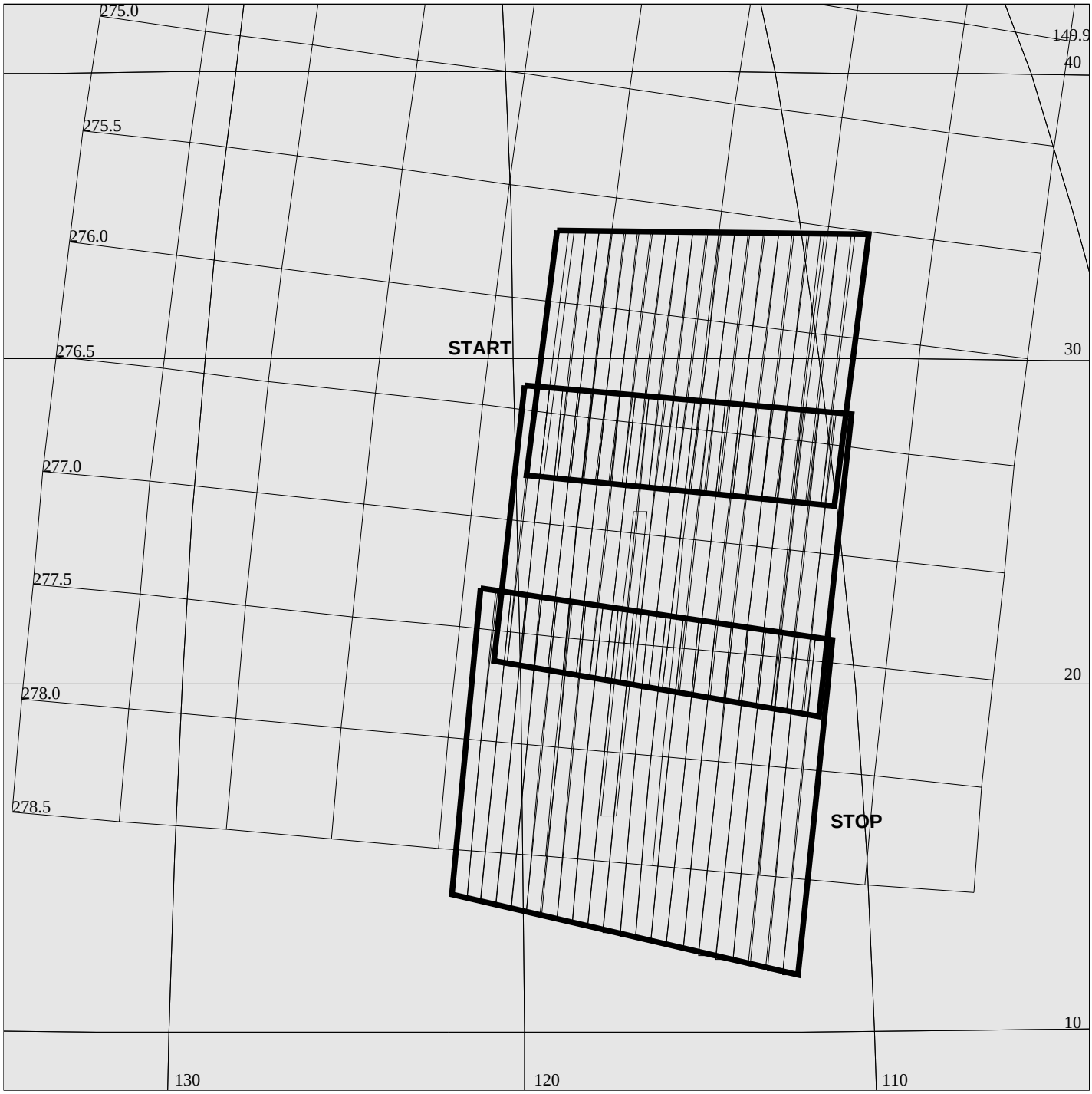
BTG=0.3456, TICS=108, FMT=MPW

Short NIMS observation included in SSI observation.
Gain State 2.
Centered at 13 deg Latitude, 137 deg W. Longitude

Ride-along with SSI also recorded.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360



165DH:TT= 0 TMC= 1 C= -6.00 XC= -6.00 BS=10/4744 TC= 1(25 115)
A= 142 pD= 3446 SR= 5.000 RA50= 57.18 DEC50= 23.04 cone=148.88 clock=276.27
117DH:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/4744
1:#s= 3 Cs= 11.20 XCs= 0.00 Cr= -11.40 XCr= 7.00 sD= 1126 rD= 34

27INAMRANI01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INAMRANI01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 55:00:0 **BODY PLOT TIME:TARGET-TIME D= 3446 S= 3.500**

OBSERVATION:27INAMRANI01 **DESCRIP:IO_GOLF_COURSE_MOSAIC**

Io Amirani Observation	**ACTIVITY ID: 27INAMRANI01-** **START TIME: 00-053/14:42:59.333**

Activity ID: Orbit 27 Target N Inst N OAPEL AMRANI SeqNo 01 -

Title	**Io Amirani Observation**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000056:00:0**	**00-053/14:42:59.333**		**IEE+000/00:56:37.333**	
End	**IEE+CDS 00000074:00:0**	**00-053/15:01:11.333**		**IEE+000/01:14:49.333**	
Duration	**00000018:00:0**	**000/00:18:12.000**		**000/00:18:12.000**	

Top Label	**27INAMRANI01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Collaborative observation with SSI to investigate surface composition of the Amirani hot spot.

Data Returned

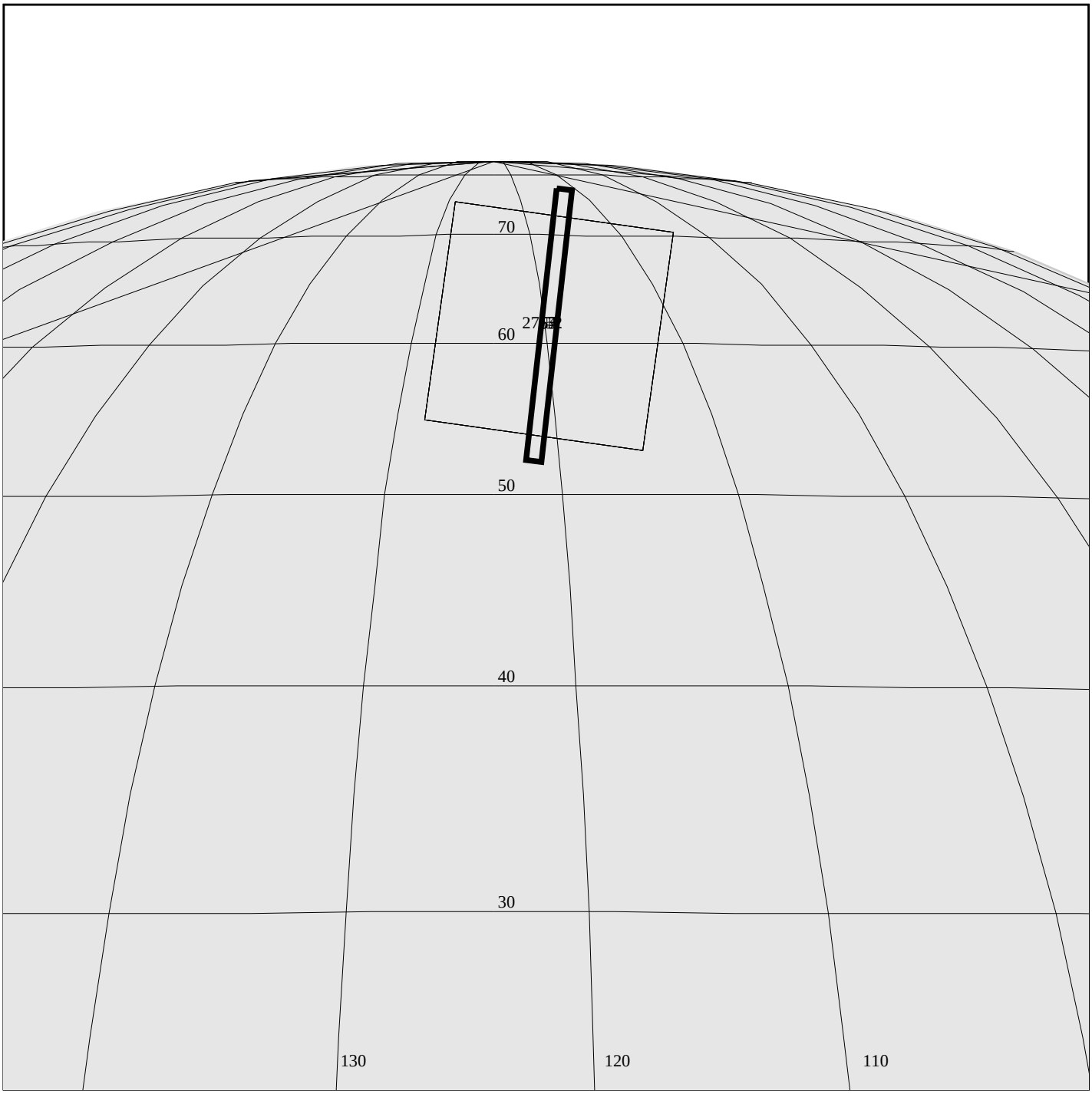
Design Detail

BTG=3.2255, TICS=987, FMT=MPW

Target Time: 1 Rim
Center at 25 deg Latitude, 115 deg W. Longitude
3 scan mosaic, Nyquist, LM
Gain State 2

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM360



165II:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS=65/8386 TC= 1(61.3 119.7)
A= 290 pD= 110 SR=17.450 RA50= 58.27 DEC50= 24.35 cone=147.49 clock=274.58

27INTVASHT01

DESIGN G3.2 herb : 2/ 4/2000 9:15:10

FILE:P.27ISTVASHT01

TARGET BODY : IO

MINI:m.27ISTVASHT01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 75:00:0

BODY PLOT TIME:TARGET-TIME D= 110 S= 2.800

OBSERVATION:27ISTVASHT01

DESCRIP:TVASHTAR CATENA COLOR

SSI Io Tvashtar Observation

ACTIVITY ID: 27ISTVASHT01-
START TIME: 00-053/15:01:11.333

Activity ID: Orbit 27 Target N Inst S OAPEL TVASHT SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS	00000074:00:0	00-053/15:01:11.333		IEE+000/01:14:49.333
End	IEE+CDS	00000078:00:0	00-053/15:05:14.000		IEE+000/01:18:52.000
Duration		00000004:00:0	000/00:04:02.667		000/00:04:02.667

Top Label	27ISTVASHT01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Dayside ride-along behind SSI 1x1 across Tvashtar caldera region.
.

Data Returned

Design Detail

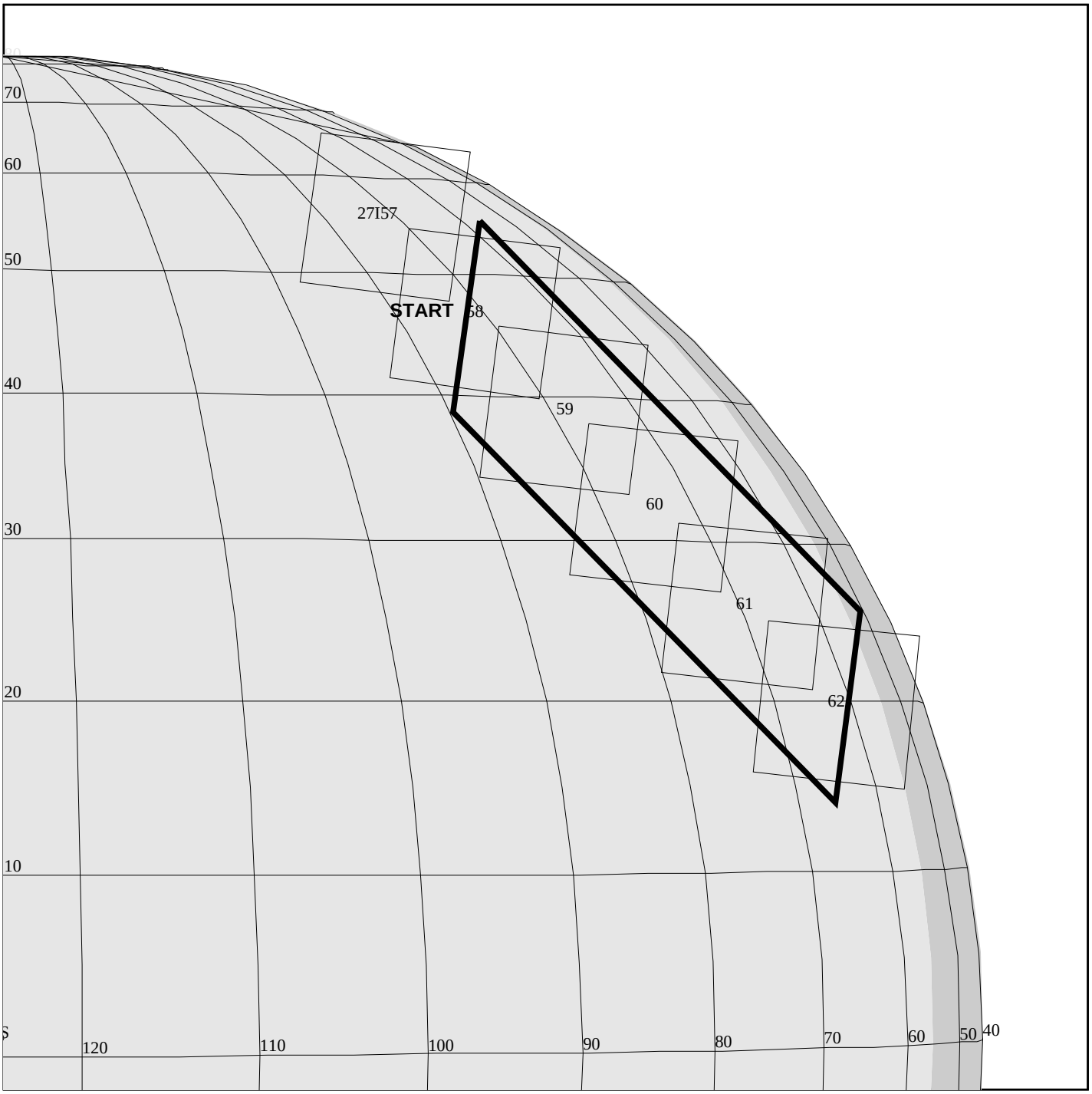
ride-along behind SSI.
1x1, multiple filters.

Single N/S jailbar.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165IJ:TT= 0 TMC= 1 C= 0.00 XC= 0.00 BS= 0/9478 TC= 1(55.5 82.0)
A= 160 pD= 136 SR=17.450 RA50= 57.37 DEC50= 23.88 cone=148.43 clock=274.87
118IJ:#SB= 1 Cs= 5.50 XCs= 4.50 TPP= 26 SR= 4.400 RR=12.000 BM=F RC= 1 BS= 3/9478
1:#s= 6 #p= 1 Cr= 0.00 XCr= 0.00

27INZALTRM01

DESIGN G3.2 herb : 2/ 4/2000 9:15:43

FILE:P.27ISZALTRM01

TARGET BODY : IO

MINI:m.27ISZALTRM01

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:

START:IEE 00-053/13:46:22.000 +CDS 81:00:0

BODY PLOT TIME:TARGET-TIME D= 136 S= 1.800

OBSERVATION:27ISZALTRM01

DESCRIP:ZAL/TERMINATOR

SSI Io Zal Terminator Observation — **ACTIVITY ID: 27ISZALTRM01-** / **START TIME: 00-053/15:05:14.000**

Activity ID: Orbit 27 Target N Inst S OAPEL ZALTRM SeqNo 01 -

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

Time System	**CDS**	**Load ID**	**Calendar Date**	**02/22/00**	**Week 08**
Start	**IEE+CDS**	**00000078:00:0**	**00-053/15:05:14.000**		**IEE+000/01:18:52.000**
End	**IEE+CDS**	**00000081:80:0**	**00-053/15:09:09.333**		**IEE+000/01:22:47.333**
Duration		**00000003:80:0**	**000/00:03:55.333**		**000/00:03:55.333**

Top Label	**27ISZALTRM01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside ride-along behind SSI 1x6 near-terminator mosaic in the Zal region.
.

Data Returned

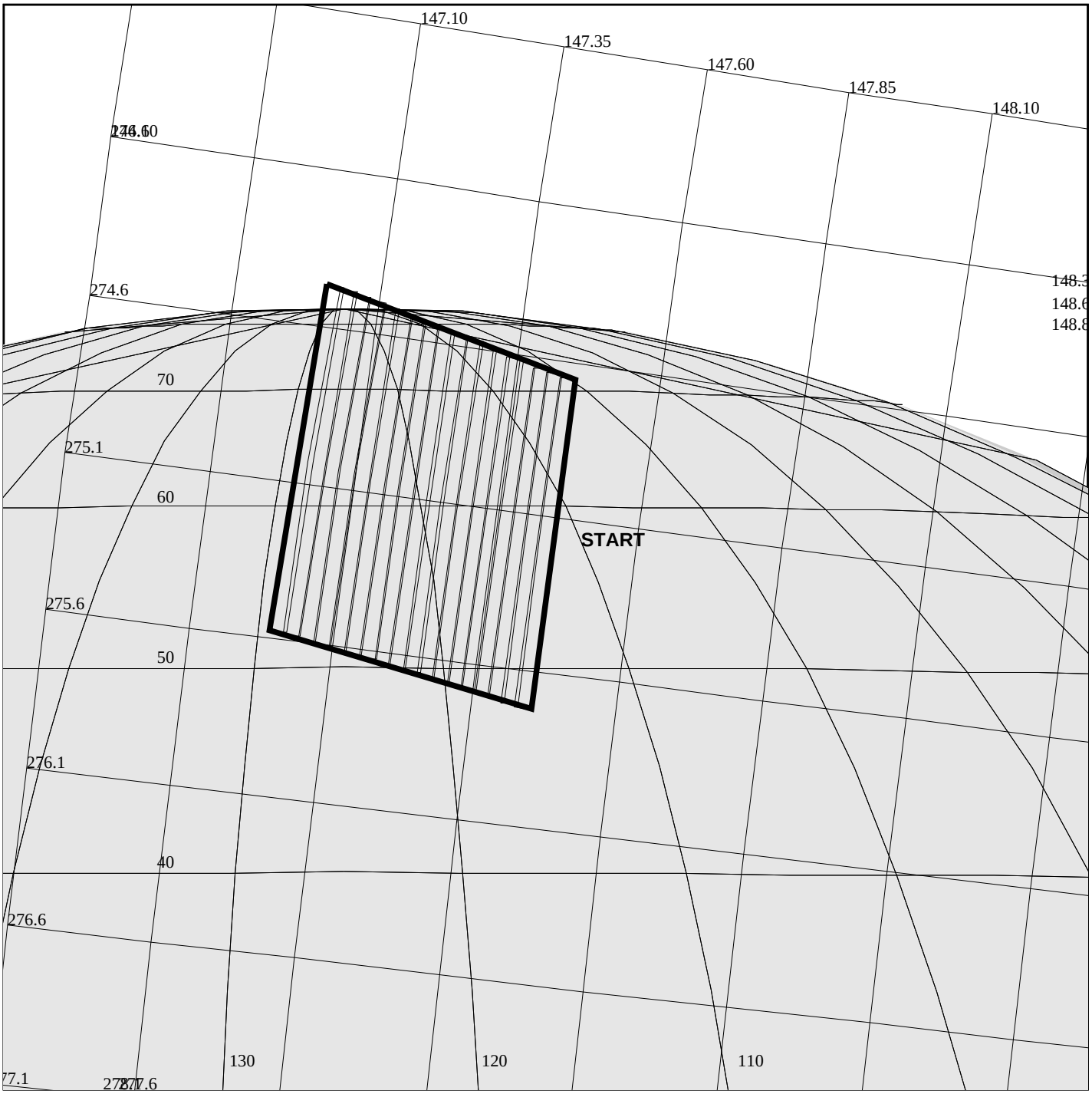
Design Detail

ride-along behind SSI.
1x6 mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A

Galileo Activity Plan Form **01/31/00 14:29:49 rev 6/95**



165EJ:TT= 0 TMC= 1 C= 4.00 XC= 1.20 BS= 0/0568 TC= 1(61.3 119.7)
A= 182 pD= 0 SR=17.450 RA50= 58.44 DEC50= 24.05 cone=147.45 clock=275.19
117EJ:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0568
1:#s= 1 Cs= -8.90 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 900 rD= 2

27INTVASHT01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INTVASHT01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 87:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 3.000**

OBSERVATION:27INTVASHT01 **DESCRIP:IO_TVASH_OBSERVATION**

Io Tvashtar Observation	**ACTIVITY ID: 27INTVASHT01-** **START TIME: 00-053/15:13:19.333**

Activity ID: Orbit 27 Target N Inst N OAPEL TVASHT SeqNo 01 -

Title	**Io Tvashtar Observation**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000086:00:0**	**00-053/15:13:19.333**		**IEE+000/01:26:57.333**	
End	**IEE+CDS 00000090:00:0**	**00-053/15:17:22.000**		**IEE+000/01:31:00.000**	
Duration	**00000004:00:0**	**000/00:04:02.666**		**000/00:04:02.666**	

Top Label	**27INTVASHT01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

To image Tvashtar caldera, which was seen in I25 to be erupting vigorously. NIMS will study temperature distribution of the eruption materials.

Data Returned

Design Detail

BTG=0.6336, TICS=192, FMT=MPW

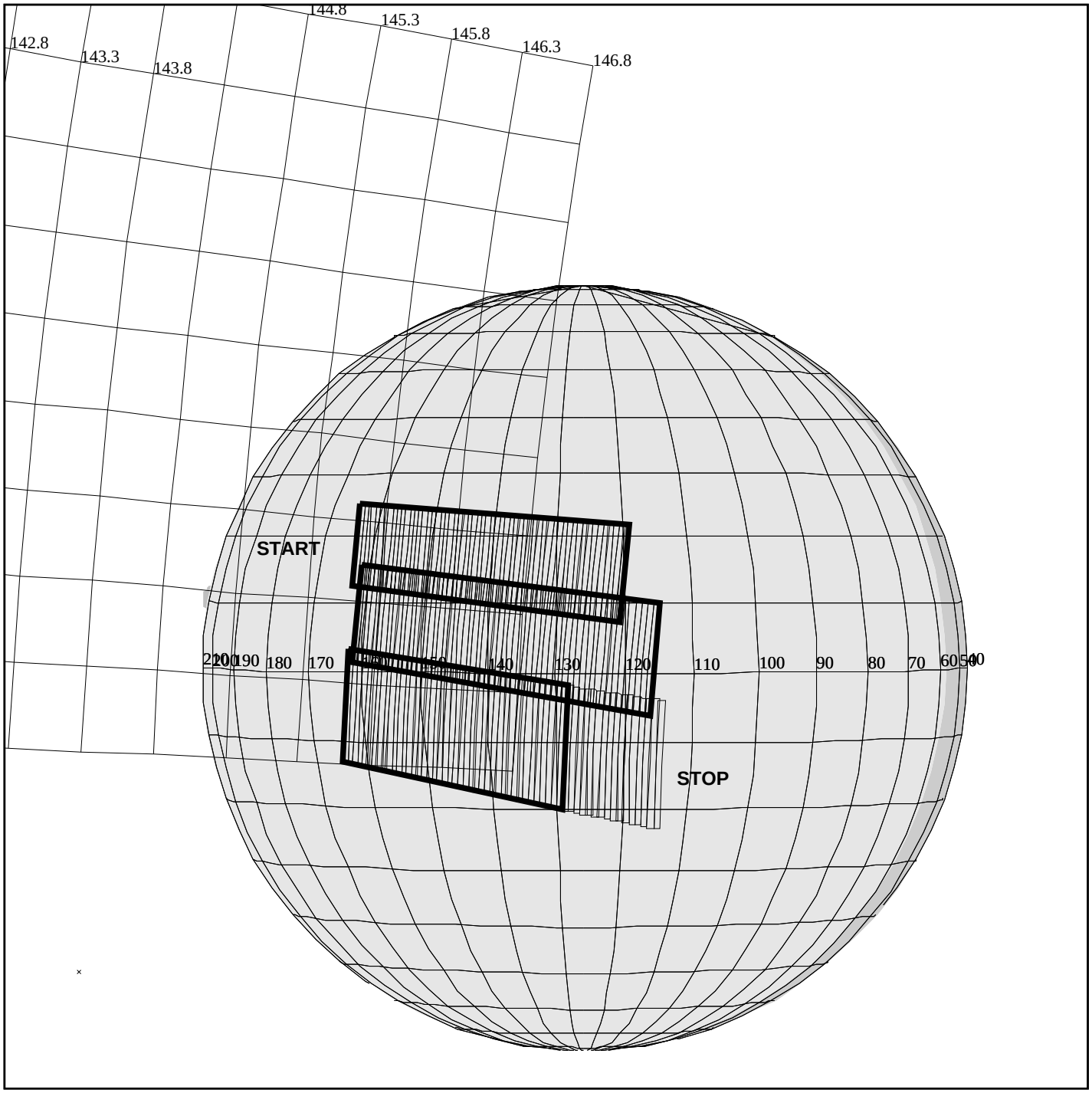
NIMS mosaic over Tvashtar
Long Map
Gain State 2
Collaborative observation with SSI.

Centered at 60 deg Latitude, 120 deg W. Longitude

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM144A

Galileo Activity Plan Form 01/31/00 14:29:49 rev 6/95



165DI:TT= 0 TMC= 1 C= -28.50 XC= -12.50 BS= 0/1660 TC= 3
A= 182 pD= 0 SR=17.450 RA50= 60.95 DEC50= 23.00 cone=145.58 clock=278.30
117DI:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/1660
1:#s= 3 Cs= 30.10 XCs= 0.00 Cr= -27.00 XCr= 6.50 sD= 3016 rD= 20

27INREGION01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INREGION01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS: **THINNING:NIM 2**

START:IEE 00-053/13:46:22.000 +CDS 93:00:0 **BODY PLOT TIME:TARGET-TIME D= 0 S= 0.700**

OBSERVATION:27INREGION01 **DESCRIP:IO_REGIONAL_MAP**

Io Regional Obs	**ACTIVITY ID: 27INREGION01-** **START TIME: 00-053/15:17:22.000**

Activity ID: Orbit 27 Target N Inst N OAPEL REGION SeqNo 01 -

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

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000090:00:0**	**00-053/15:17:22.000**		**IEE+000/01:31:00.000**	
End	**IEE+CDS 00000142:00:0**	**00-053/16:09:56.666**		**IEE+000/02:23:34.666**	
Duration	**00000052:00:0**	**000/00:52:34.666**		**000/00:52:34.666**	

Top Label	**27INREGION01-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Dayside mosaic of Prometheus and Bosphorus Regio region to investigate surface composition, SO2 distribution and thermal emission.

Data Returned

Design Detail

BTG=2.3903, TICS=2435, FMT=MPW

4 Rims Target
3 scans, Long Map, Nyquist
Centered at Io center/equator
Gain State 2

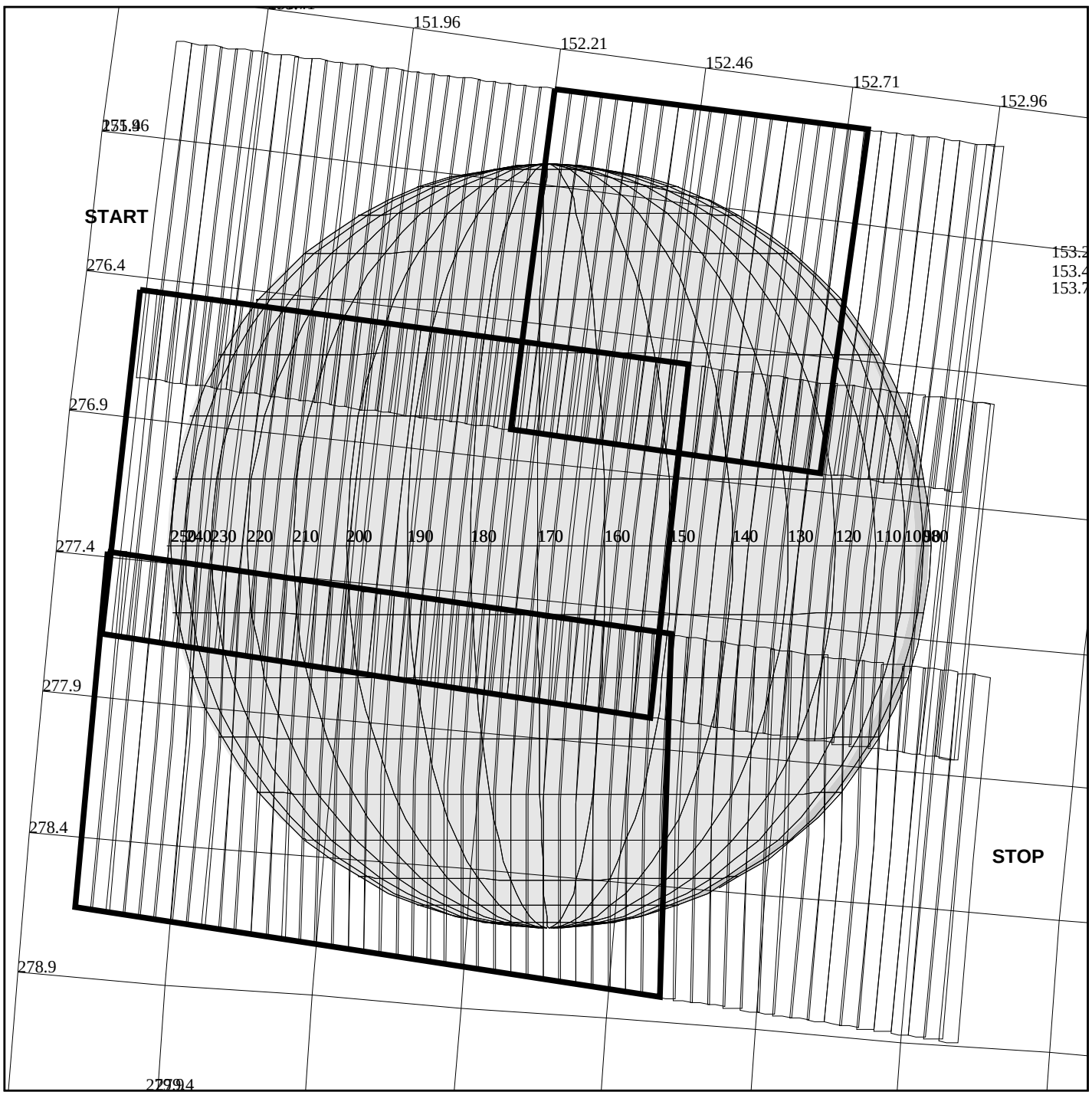
Latitude coverage: -20 to +20 deg
Longitude coverage: 115 to 165 deg W.

Last third of last swath not recorded.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM120

Galileo Activity Plan Form	**01/31/00 14:29:49**	**rev 6/95**



165EI:TT= 0 TMC= 1 C= -12.50 XC= -8.50 BS= 0/9162 TC= 3
A= 728 pD= 0 SR=17.450 RA50= 54.41 DEC50= 22.16 cone=151.58 clock=276.16
117EI:#SB= 1 OR= 0.060 RR=12.000 BM=F RC= 1 BS= 0/9162
1:#s= 3 Cs= 27.50 XCs= 0.00 Cr= -23.50 XCr= 7.00 sD= 1396 rD= 24

27INGLOBAL01

TARGET G3.1 lisac: 1/26/2000 8:52:24

FILE:P.27INGLOBAL01

TARGET BODY : IO

MINI:m.target

S/C EPH:/DATA/NAVIO/000105-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 00-053/13:46:22.000 +CDS 354:00:0

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

OBSERVATION:27INGLOBAL01

DESCRIP:IO_GLOBAL_MAP

Io Global Obs	ACTIVITY ID: 27INGLOBAL01- START TIME: 00-053/19:40:15.333

Activity ID: Orbit 27 Target N Inst N OAPEL GLOBAL SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	02/22/00 Week 08
Start	IEE+CDS 00000350:00:0	00-053/19:40:15.333		IEE+000/05:53:53.333	
End	IEE+CDS 00000390:00:0	00-053/20:20:42.000		IEE+000/06:34:20.000	
Duration	00000040:00:0	000/00:40:26.666		000/00:40:26.666	

Top Label	27INGLOBAL01-				
Bottom Label					
Plot Key	NIMS	Type	SCI		
CDS Bytes	150	Report Options	BOTH	Scan Platform	No
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective

Io global observation to investigate SO2 distribution, temperature distribution and composition.

Data Returned

Design Detail

BTG=1.0368, TICS=1057, FMT=MPW

Global observation using 3 swaths
Gain State 2

Central meridian: 170 deg W. Longitude

Not enough bits to ground to return the entire mosaic.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

Fixed Long Map (XLM), Gain 2, Grating Start 0, MPW, ILM442, ILM036

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Grating Step Test	**ACTIVITY ID: 27NNDETECT02-** **START TIME: 00-053/20:30:48.666**

Activity ID: Orbit 27 Target N Inst N OAPEL DETECT SeqNo 02 -

Title	**Grating Step Test**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**02/22/00 Week 08**
Start	**IEE+CDS 00000400:00:0**	**00-053/20:30:48.666**		**IEE+000/06:44:26.666**	
End	**IEE+CDS 00000420:00:0**	**00-053/20:51:02.000**		**IEE+000/07:04:40.000**	
Duration	**00000020:00:0**	**000/00:20:13.333**		**000/00:20:13.333**	

Top Label	**27NNDETECT02-**				
Bottom Label					
Plot Key	**NIMS**	**Type**	**SCI**		
CDS Bytes	**150**	**Report Options**	**BOTH**	**Scan Platform**	**No**
CDS Source	**OAP**	**Spin State**	**DUAL**	**DMS**	**No**

Observation Objective

Procedure to return NIMS Grating position Housekeeping via CDS and MROH

Design Detail

NIMS Housekeeping values, including Grating Position, are copied using 6MCOPY commands from NIMS memory locations to CDS memory locations at selected MF times to collect every other grating position over the NIMS grating cycle. These CDS locations are sent down via a 6MROH command during I27 Cruise after the I27 Encounter period.

NIMS Real-Time PCT Calibration	**ACTIVITY ID: 27NNPCTRLT01-** **START TIME: 00-071/02:00:25.800**

Activity ID: Orbit 27 Target N Inst N OAPEL PCTRLT SeqNo 01 -

Title	**NIMS Real-Time PCT Calibration**			**Instrument**	**NIMS**
Requestor	**NIMS-SWG/M. SEGURA**	**Team**	**NIMS**	**Working Group**	**SWG**

Time System	**CDS**	**Load ID**		**Calendar Date**	**03/11/00 Week 11**
Start	**PCT+CDS 0:00:0**	**00-071/02:00:25.800**		**PCT+000/00:00:00.000**	
End	**PCT+CDS 00000465:00:0**	**00-071/09:50:35.800**		**PCT+000/07:50:10.000**	
Duration	**00000465:00:0**	**000/07:50:10.000**		**000/07:50:10.000**	

Top Label	**27NNPCTRLT01-**				
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 an NIMS photometric calibration usint the PCT target.
The data will be used to calibrate the NIMS visible detectors.
The calibration data will be returned using Real-Time telemetry.
At this time the off sun angle is about x.x degrees.

Data Returned

Design Detail

1) Turn off PCT heaters 6 hours before calibration.
2) Scan Platform is at Safe/Unstow (cone = 153.00, clock = 0.00)
3) Chopper on, Gain State 4,
4) Set NIMS to Long Map Mode, ETB = PCT252,
Mirror Blocking (1B, 1B) (11011, 11011)
5) Select 2 RIMs of Dark in Real-Time (Return 2 LM grating cycle)
6) Slew to PCT (cone 54.88, clock = 244.07)
7) Select 10 RIMS of PCT in Real-Time (Return 10 LM grating cycles)
8) Slew to Safe (cone = 153.00, clock = 0.00)
9) NIMS to Safe Mode, Reset Mirror Blocking (00,00) (00000, 00000)
10) Chopper Off.

Fixed Long Map (XLM), Gain 4, Grating Start 0, R/T, PCT252

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NIMS RCT Real Time Calibration — ACTIVITY ID: 27NNRCTRLT01- / START TIME: 00-072/10:00:31.733

Activity ID: Orbit 27 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 03/12/00 Week 11
Start	RTA+CDS 00000000:00:0	00-072/10:00:31.733	RTA+000/00:00:00.000
End	RTA+CDS 00000787:00:0	00-072/23:16:16.400	RTA+000/13:15:44.666
Duration	00000787:00:0	000/13:15:44.666	000/13:15:44.666

Top Label	27NNRCTRLT01-				
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 NIMS OPCAL has been included in the RCT calibration for GEM.
Perform NIMS Optical Calibration to calibrate the NIMS grating.

This is a GEM 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) 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.

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

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