Chapter 5 - Detailed Observation Designs

<u>Contents</u>

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: 33NNMARDUK01-
START TIME: 02-017/13:47:39.733

Activity ID: Orbit 33 Target N Inst N OAPEL MARDUK 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 01/17/02 Week 03

Start	IEE-CDS	00000000:00:0	02-017/13:47:39.733	IEE-000/00:00:00.000
End	IEE-CDS	00000000:00:0	02-017/13:49:51.066	IEE-000/00:00:00.000
Duration		00000000:00:0	000/00:02:21.33	000/00:00:00.000

Top Label 33NNMARDUK01-
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

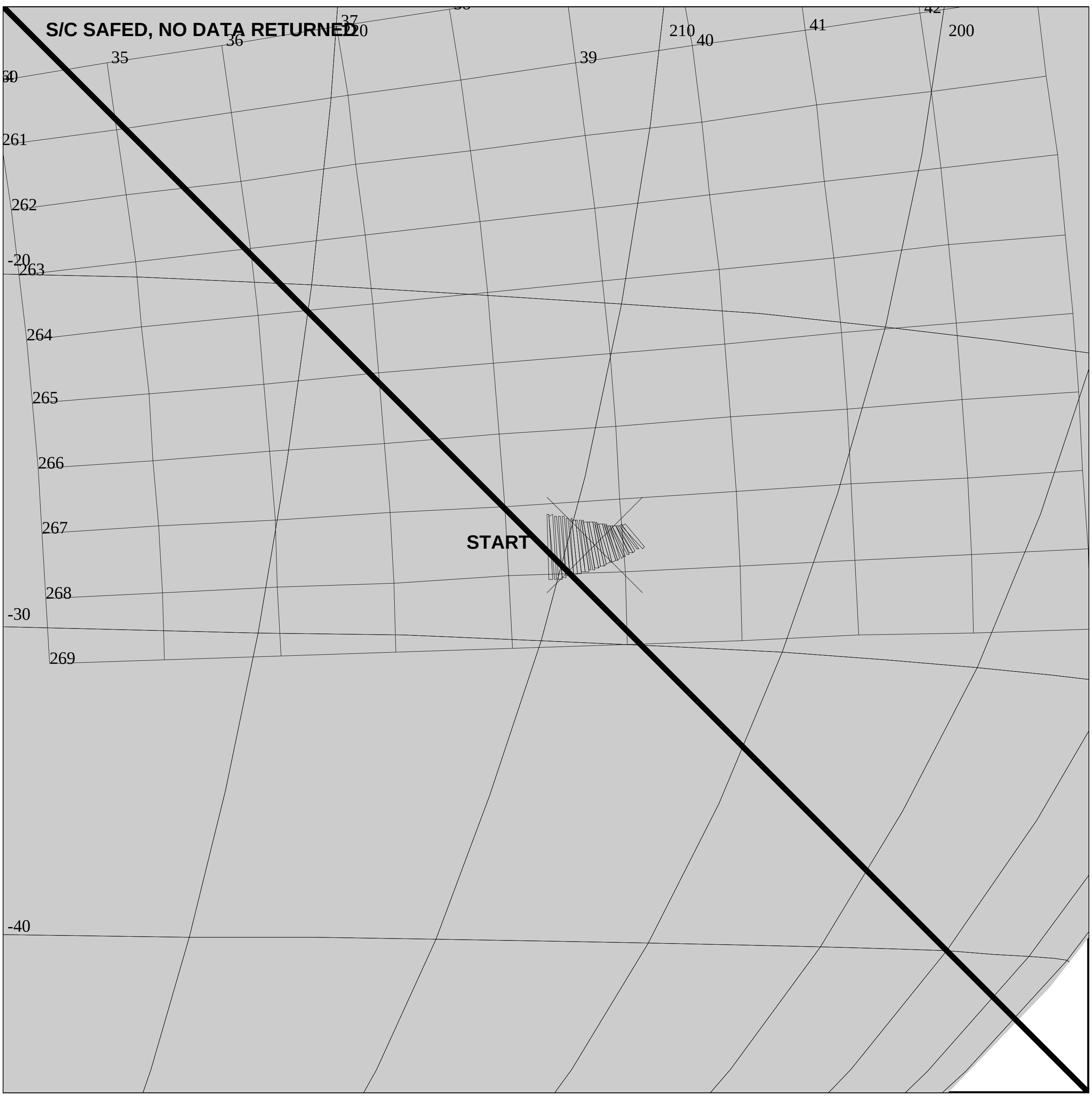
NIMS reload
Each NIMS GMM observation will have an instrument reload before the start of each observation. Each reload has its own OAPEL form, but only this first is included in the NIMSGUIDE. The NIMS I33 reload OAPELs are:

33NNMARDUK01, 33NNKANEHE01, 33NNMOSAIC01, 33NNMOSAIC02, 33NNREGION01, 33NNGLOBAL01, 33NNGLOBAL02, 33NNGLOBAL01, 33NNGLOBAL02, 33NNGLOBAL03, 33NNRELOAD01.

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.



165DB:TT= 0 TMC= 1 C= -7.00 XC= 0.00 BS= 0/0239 TC= 1(-27 209)
A= 182 pD= 1446 SR=17.450 RA50=237.27 DEC50=-17.43 cone= 38.36 clock=267.62
117DB:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/0239
1:#s= 1 Cs= 14.30 XCs= 0.00 Cr= 0.00 XCr= 0.00 sD= 1446 rD= 34

33INMARDUK01

DESIGN G3.2 yande:11/12/2001 9: 3: 7

FILE:P.33INMARDUK01

TARGET BODY : IO

MINI:m.33INMARDUK01

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

START:IEE 02-017/14:08:53.066 -CDS 14:00:0

OBSERVATION:33INMARDUK01

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 1446 S= 3.000

DESCRIP:IO_PELE_OBSERVATION

Io Marduk Obs

ACTIVITY ID: 33INMARDUK01-
START TIME: 02-017/13:54:23.000

Activity ID: Orbit 33 Target I Inst N OAPEL MARDUK SeqNo 01 -

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

Time System CDS Load ID Calendar Date 01/17/02 Week 03

Start	IEE-CDS	00000015:00:0	02-017/13:54:23.000	IEE-000/00:15:10.000
End	IEE-CDS	00000008:00:0	02-017/14:01:27.667	IEE-000/00:08:05.333
Duration		00000007:00:0	000/00:07:04.667	000/00:07:04.667

Top Label 33INMARDUK01-
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

Nightside observation of Marduk hot spot to map thermal emission and search for high temperature volcanism.

S/C SAFED, No Data Returned

Design Detail

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

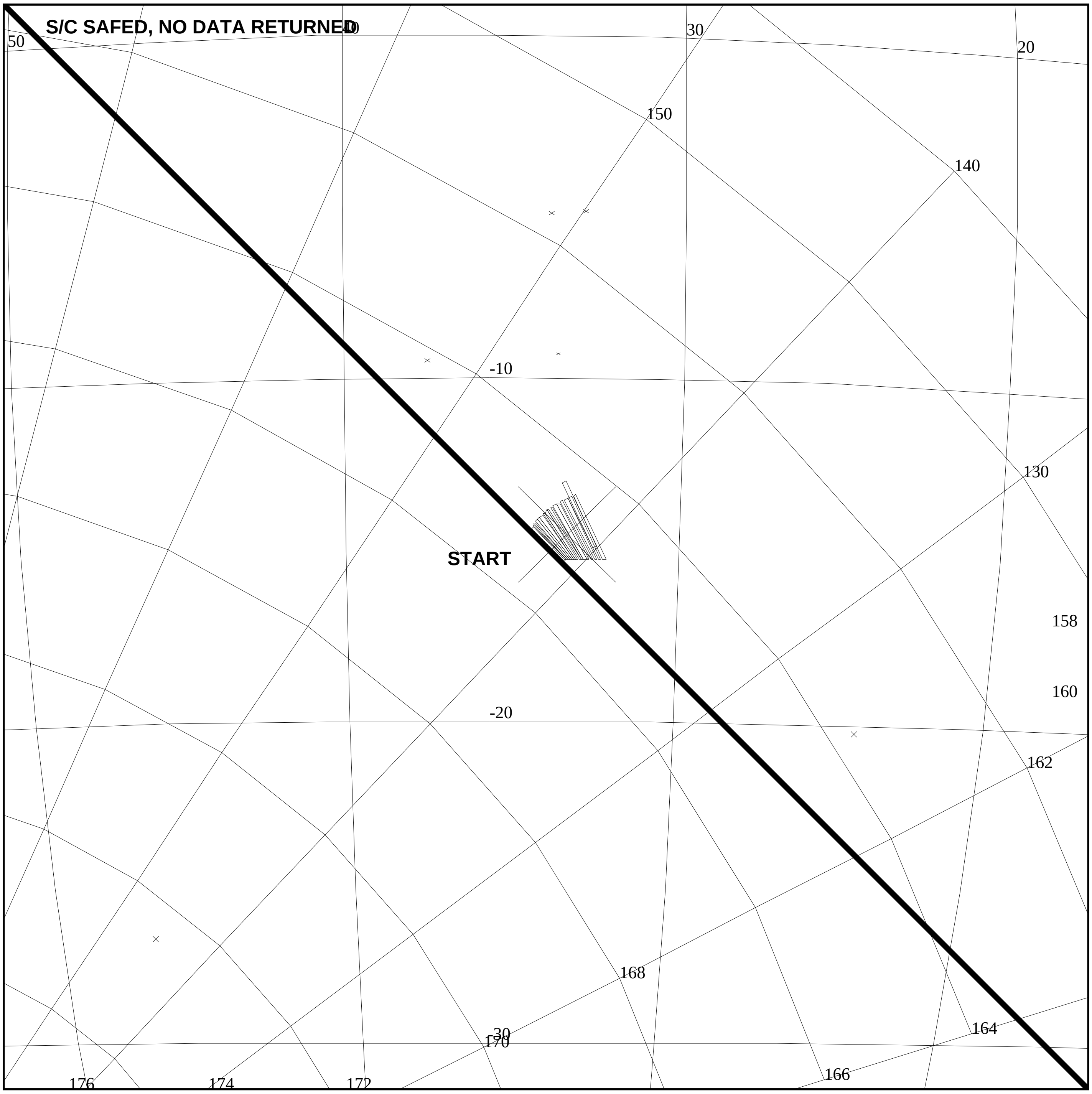
One-scan mosaic centered on Marduk.
Center at 27 deg S. latitude, 209 deg W. longitude.

Gain state 1 to avoid high temperature saturation.

BOOMS - cone angle = 40 degrees.

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, ILM408

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



165DC:TT=   0 TMC= 1 C=   4.50 XC=   1.60 BS= 0/4607 TC= 1(-14.5   33.4   )
A= 182 pD=   868 SR=17.450 RA50= 87.12 DEC50= 34.77 cone=165.21 clock=141.96
117DC:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS=20/4607
1:#s= 1 Cs=   -8.60 XCs=   0.00 Cr=   0.00 XCr=   8.00 sD=   868 rD=   2

33INKANEHE01

DESIGN G3.2 yande:11/28/2001 9:39: 3

FILE:P.33INKANEHE01

TARGET BODY : IO

MINI:m.33INKANEHE01

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 02-017/14:08:53.066 +CDS 10:00:0

BODY PLOT TIME:TARGET-TIME D= 868 S= 2.500

OBSERVATION:33INKANEHE01

DESCRIP:IO_KANEHEKILI

Io Kanehekili Obs		ACTIVITY ID:	33INKANEHE01-
		START TIME:	02-017/14:18:39.000

Activity ID: Orbit 33 Target I Inst N OAPEL KANEHE SeqNo 01 -

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

Time System CDS Load ID Calendar Date 01/17/02 Week 03

Start	IEE+CDS	00000009:00:0	02-017/14:18:39.000	IEE+000/00:09:06.000
End	IEE+CDS	00000015:00:0	02-017/14:24:43.000	IEE+000/00:15:10.000
Duration		00000006:00:0	000/00:06:04.000	000/00:06:04.000

Top Label 33INKANEHE01-
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 a part of the Kanehekili hot spot for thermal mapping and to search for high temperature volcanism.

S/C SAFED, No Data Returned

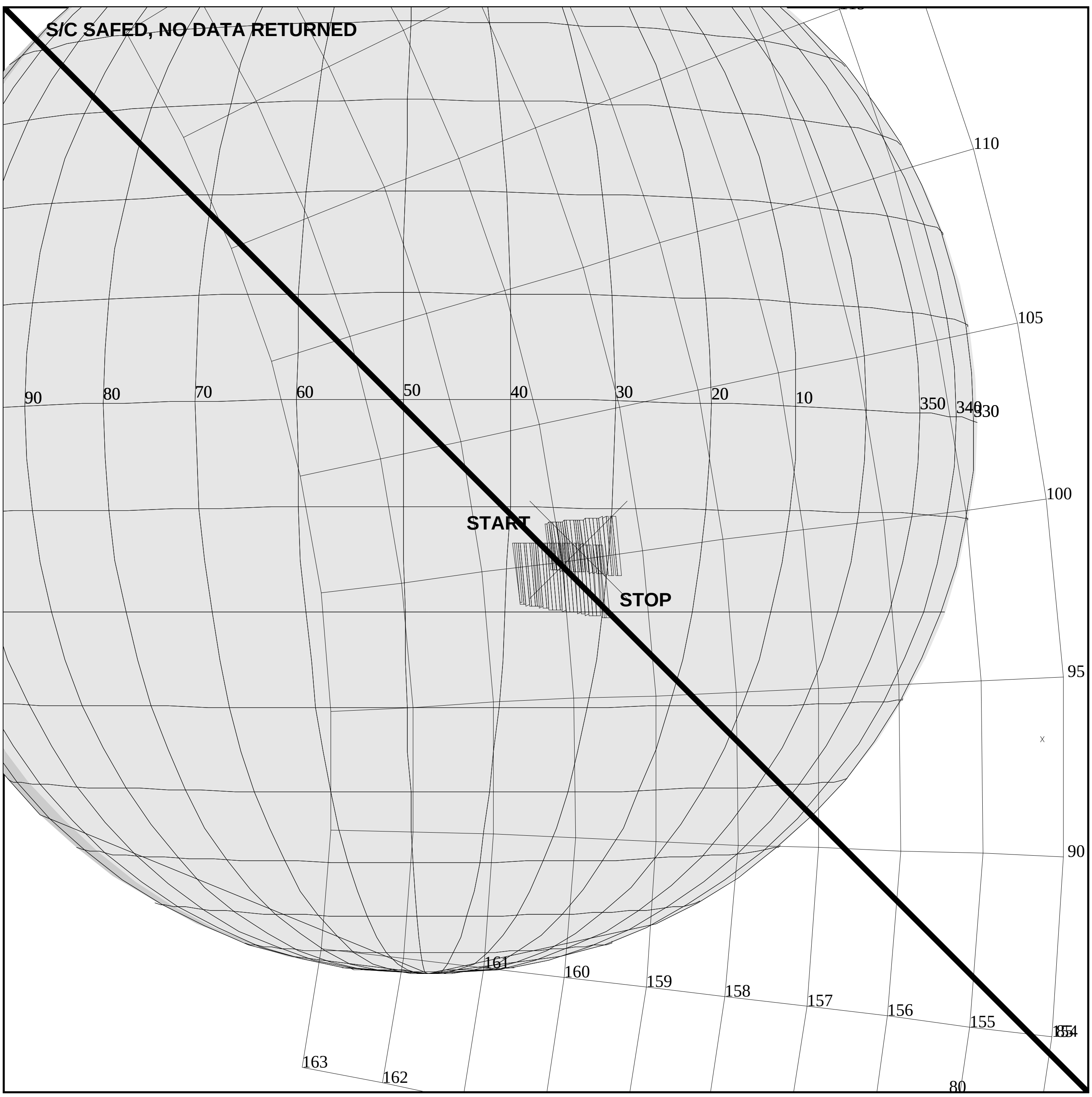
Design Detail

BTG=1.52 MB, TICS=213, FMT=MPW, LM, Gain State 2

One-scan mosaic centered on Kanehekili.
Center at 14.5 deg S. latitude, 33.4 deg W. longitude.

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

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



165DD:TT= 0 TMC= 1 C= 6.50 XC= 1.50 BS= 0/8065 TC= 1(-14 33)
A= 282 pD= 2720 SR=17.450 RA50= 76.16 DEC50= 25.86 cone=160.15 clock=100.57
117DD:#SB= 1 OR= 0.030 RR=10.000 BM=F RC= 1 BS= 0/8065
1:#s= 2 Cs= -13.25 XCs= -1.20 Cr= 17.00 XCr= -3.00 sD= 1338 rD= 44

33INMOSAIC01

DESIGN G3.2 yande:11/12/2001 15:29:17

FILE:P.33INMOSAIC01

TARGET BODY : IO

MINI:m.33INMOSAIC01

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 02-017/14:08:53.066 +CDS 29:00:0

BODY PLOT TIME:TARGET-TIME D= 2720 S= 1.000

OBSERVATION:33INMOSAIC01

DESCRIP:IO_MOSAIC_OB

Io Mosaic Obs	ACTIVITY ID: 33INMOSAIC01- START TIME: 02-017/14:37:11.732

Activity ID: Orbit 33 Target I 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	01/17/02	Week	03

Start	IEE+CDS	00000028:00:0	02-017/14:37:11.732	IEE+000/00:28:18.666
End	IEE+CDS	00000044:00:0	02-017/14:53:22.399	IEE+000/00:44:29.333
Duration		00000016:00:0	000/00:16:10.667	000/00:16:10.667

Top Label 33INMOSAIC01-
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 thermal emission and SO2 distribution over the Kanehekili hot spots and surrounding area.

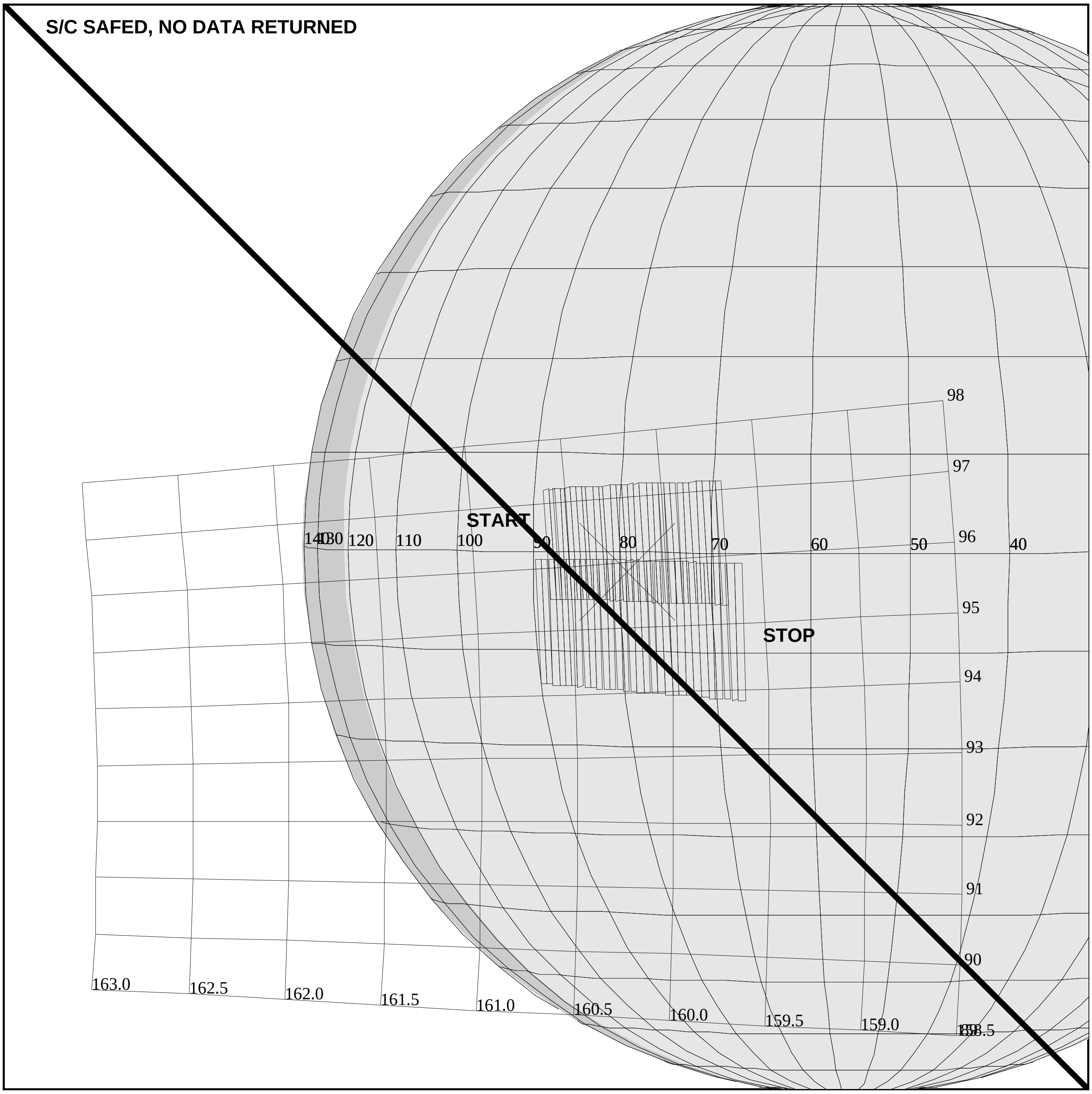
S/C SAFED, No Data Returned

Design Detail

BTG=1.52 MB, TICS=213, FMT=MPW, LM, Gain State 2

Two-scan mosaic covering both main hot spots of Kanehekili located at (14 S, 33 W) and (17 S, 35W).

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



165DE:TT= 0 TMC= 1 C= 7.00 XC= 3.00 BS= 0/5527 TC= 1(-2 79)
A= 364 pD= 3088 SR=17.450 RA50= 76.64 DEC50= 24.44 cone=160.61 clock= 96.36
117DE:#SB= 1 OR= 0.030 RR=10.000 BM=F RC= 1 BS= 0/5527
1:#s= 2 Cs= -15.10 XCs= -1.00 Cr= 15.10 XCr= -5.50 sD= 1522 rD= 44

33INMOSAIC02

DESIGN G3.2 yande:11/12/2001 9: 3:15

FILE:P.33INMOSAIC02

TARGET BODY : IO

MINI:m.33INMOSAIC02

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:IEE 02-017/14:08:53.066 +CDS 70:00:0

BODY PLOT TIME:TARGET-TIME D= 3088 S= 1.000

OBSERVATION:33INMOSAIC02

DESCRIP:IO_MOSAIC_OB_2

Io Mosaic Obs	ACTIVITY ID:	33INMOSAIC02-
	START TIME:	02-017/15:18:39.066

Activity ID: Orbit 33 Target I Inst N OAPEL MOSAIC SeqNo 02 -

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

Time System	CDS	Load ID		Calendar Date	01/17/02	Week	03

Start	IEE+CDS	00000069:00:0	02-017/15:18:39.066	IEE+000/01:09:46.000
End	IEE+CDS	00000087:00:0	02-017/15:36:51.066	IEE+000/01:27:58.000
Duration		00000018:00:0	000/00:18:12.000	000/00:18:12.000

Top Label	33INMOSAIC02-
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 thermal emission and SO2 distribution over the Hi'iaka hot spot and surrounding area.

S/C SAFED, No Data Returned

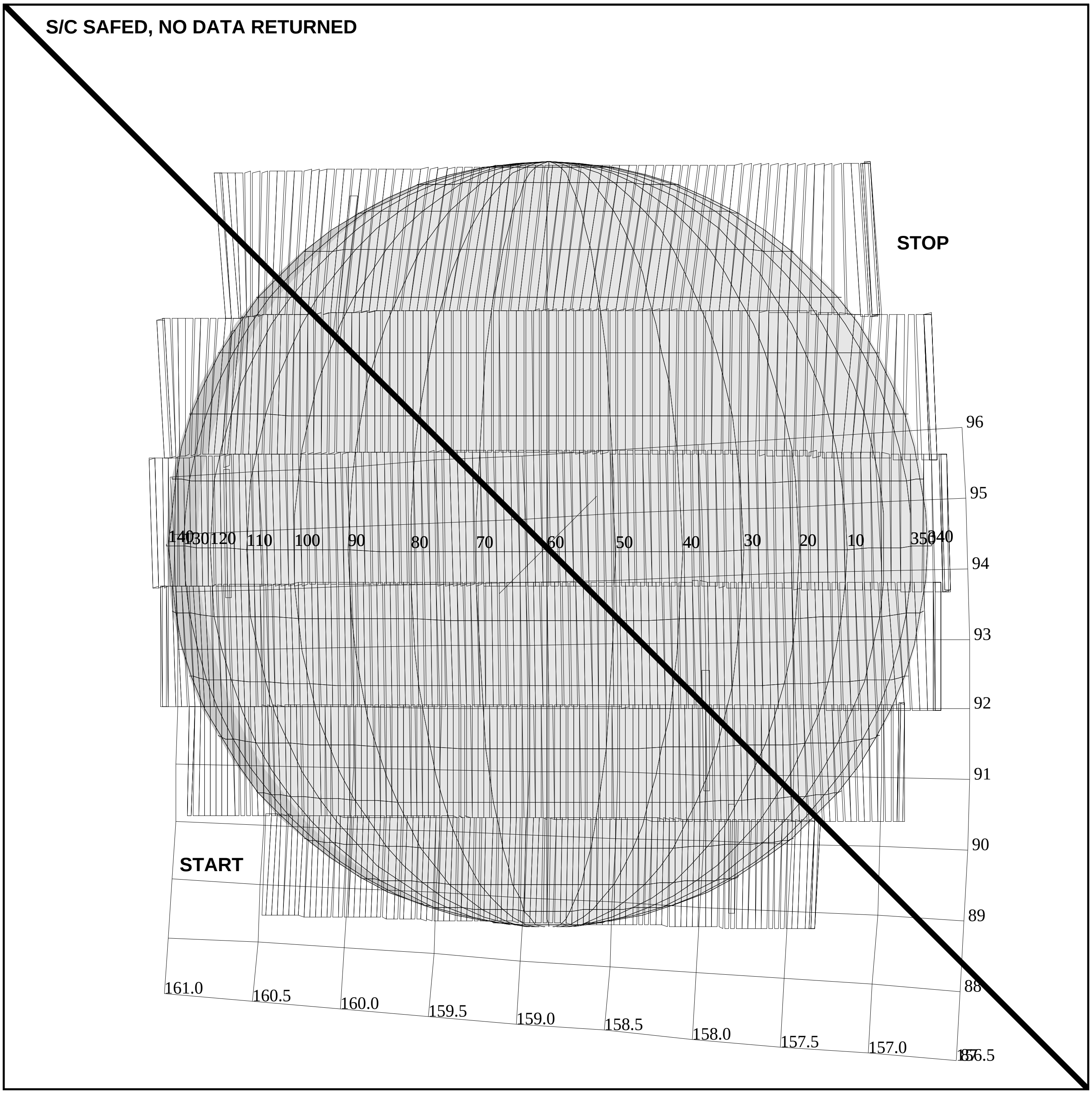
Design Detail

BTG=1.52 MB, TICS=213, FMT=MPW, LM, Gain State 2

Two-scan mosaic covering the Hi'iaka region.
Centered at -2 degrees S latitude, 79 degrees W. longitude.

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

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



165DF:TT= 0 TMC= 1 C= 28.00 XC= -33.00 BS= 0/9531 TC= 3
A= 546 pD= 0 SR=17.450 RA50= 76.67 DEC50= 22.10 cone=160.46 clock= 89.33
117DF:#SB= 6 OR= 0.110 RR=12.000 BM=F RC= 1 BS= 0/9531
1:#s= 1 Cs= -52.50 XCs= 1.70 Cr= 0.00 XCr= 7.20 sD= 1370 rD= 44
2:#s= 1 Cs= -61.80 XCs= 2.10 Cr= 57.50 XCr= 7.80 sD= 1604 rD= 46
3:#s= 1 Cs= -61.50 XCs= 1.70 Cr= 62.30 XCr= 6.90 sD= 1596 rD= 46
4:#s= 1 Cs= -58.00 XCs= 1.20 Cr= 61.20 XCr= 6.70 sD= 1506 rD= 48
5:#s= 1 Cs= -52.50 XCs= 0.80 Cr= 57.00 XCr= 7.00 sD= 1368 rD= 48
6:#s= 1 Cs= -42.00 XCs= 0.70 Cr= 48.80 XCr= 7.30 sD= 1102 rD= 48

33INREGION01

DESIGN G3.2 yande:11/19/2001 9:26:27

FILE:P.33INREGION01

TARGET BODY : IO

MINI:m.33INREGION01

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

START:IEE 02-017/14:08:53.066 +CDS 92:00:0

OBSERVATION:33INREGION01

THINNING:NIM 2

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

DESCRIP:IO_REGIONAL_MAP

Io Region Obs	ACTIVITY ID:	33INREGION01-
	START TIME:	02-017/15:38:47.732

Activity ID: Orbit 33 Target I Inst N OAPEL REGION SeqNo 01 -

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

Time System	CDS	Load ID		Calendar Date	01/17/02	Week	03

Start	IEE+CDS	00000088:84:0	02-017/15:38:47.732	IEE+000/01:29:54.666
End	IEE+CDS	00000140:33:0	02-017/16:30:48.399	IEE+000/02:21:55.333
Duration		00000051:40:0	000/00:52:00.667	000/00:52:00.667

Top Label	33INREGION01-
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

Global observation of Io centered at about 60 degrees W. longitude.
This observation will cover much of the Jupiter-facing hemisphere,
not before imaged by NIMS at high resolution.
To search for new hot spots, map thermal emission and determine
the distribution of SO2 and the 1-micron absorber.

S/C SAFED, No Data Returned

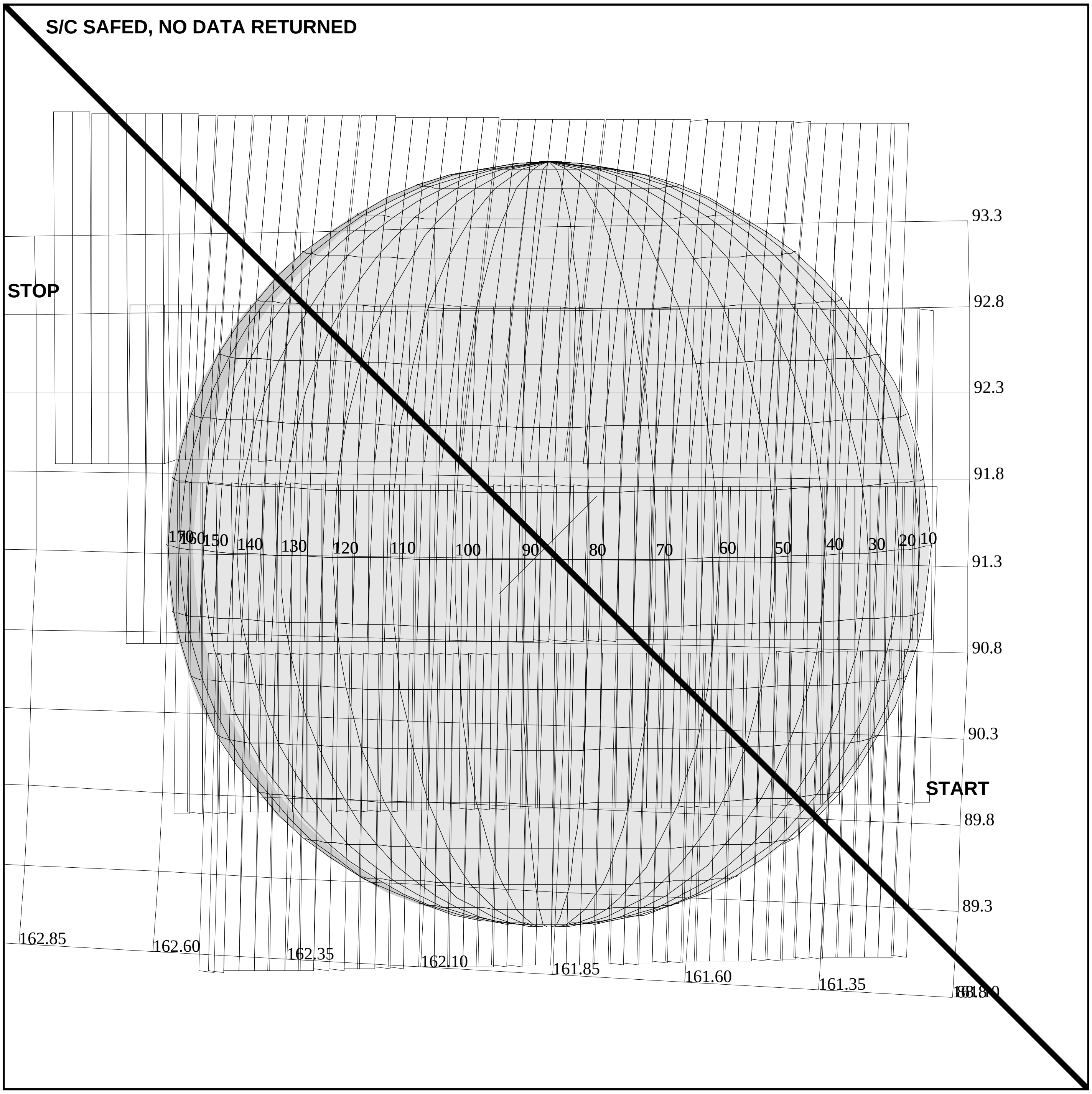
Design Detail

BTG=1.52 MB, TICS=213, FMT=MPW, SM, Gain State 2

Six-scan regional-scale mosaic covering entire disk of Io.
Centered at 60 degrees W. longitude.

Fixed Short Map (XSM), Gain 2, Grating Start 0, MPW, ISM102

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



165DG:TT= 0 TMC= 1 C= -12.00 XC= -8.00 BS= 0/7023 TC= 3
A= 546 pD= 0 SR=17.450 RA50= 77.44 DEC50= 22.37 cone=161.20 clock= 89.89
117DG:#SB= 1 OR= 0.030 RR=12.000 BM=F RC= 1 BS= 0/7023
1:#s= 4 Cs= 24.90 XCs= -1.40 Cr= -22.20 XCr= 6.20 sD= 2508 rD= 48

33INGLOBAL01

DESIGN G3.2 yande:11/12/2001 12:44:25

FILE:P.33INGLOBAL01

TARGET BODY : IO

MINI:m.33INGLOBAL01

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

START:IEE 02-017/14:08:53.066 +CDS 298:00:0

OBSERVATION:33INGLOBAL01

THINNING:NIM 2

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

DESCRIP:IO_GLOBAL_OB

Io Global Obs		ACTIVITY ID:	33INGLOBAL01-
		START TIME:	02-017/19:07:49.666

Activity ID: Orbit 33 Target I 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 01/17/02 Week 03

Start	IEE+CDS	00000295:00:0	02-017/19:07:49.666	IEE+000/04:58:16.666
End	IEE+CDS	00000354:00:0	02-017/20:07:29.000	IEE+000/05:57:56.000
Duration		00000059:00:0	000/00:59:39.334	000/00:59:39.334

Top Label 33INGLOBAL01-
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

Global observation of Io centered at about 86 degrees W. longitude.
This observation will cover part of the Jupiter-facing hemisphere,
Objective is to monitor activity of known hot spots, search for
new hot spots and map SO2 distribution and distribution of the 1-micron
absorber.

S/C SAFED, No Data Returned

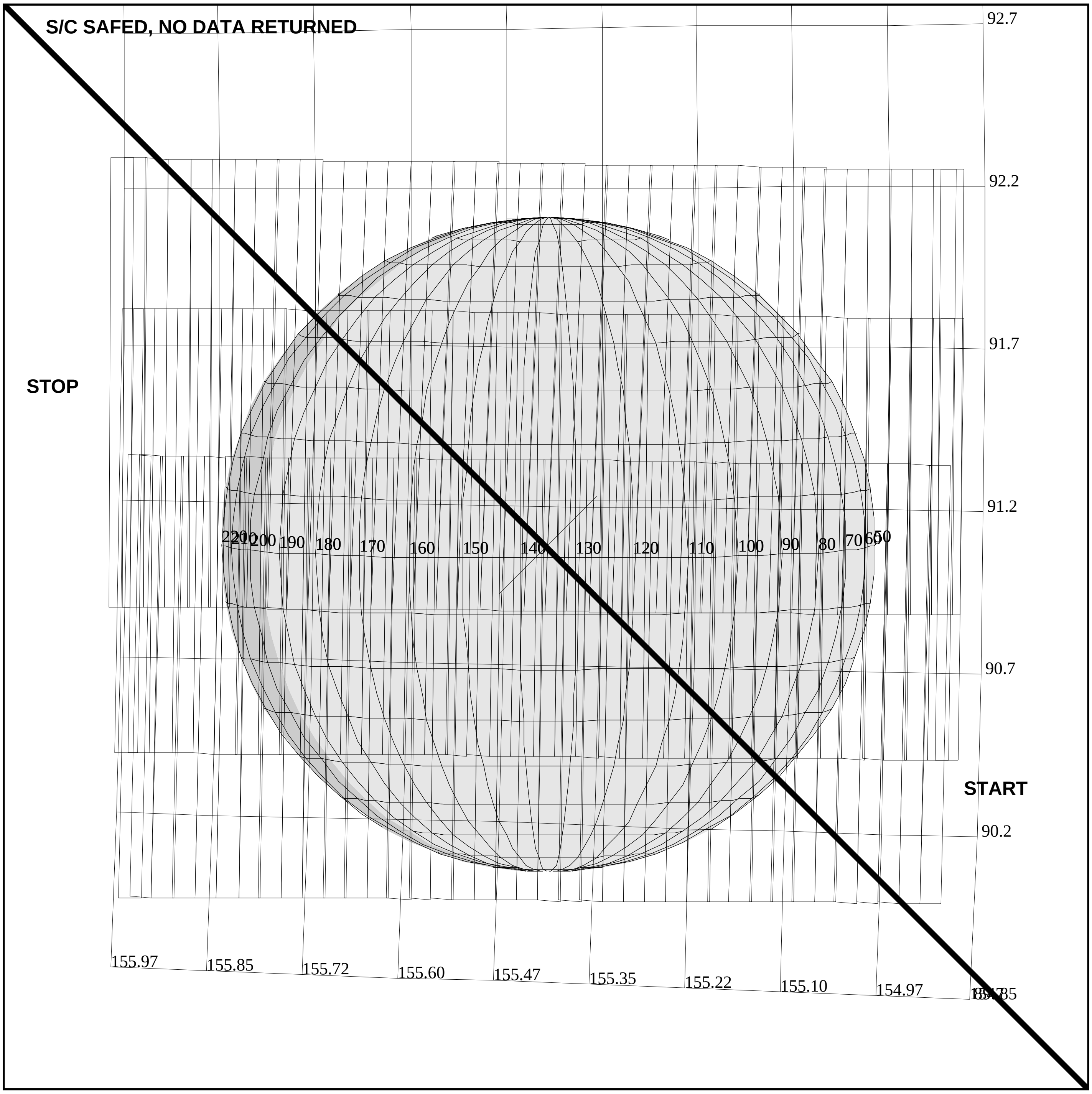
Design Detail

BTG=1.52 MB, TICS=213, FMT=LPU, SM, Gain State 2

Four-scan global mosaic covering entire disk of Io.
Centered at 86 degrees W. longitude.

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252

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



165DK:TT= 0 TMC= 1 C= -9.00 XC= -3.00 BS= 0/1077 TC= 3
A= 242 pD= 0 SR=17.450 RA50= 70.66 DEC50= 21.82 cone=154.90 clock= 90.67
117DK:#SB= 1 OR= 0.040 RR=12.000 BM=F RC= 1 BS= 0/1077
1:#s= 3 Cs= 13.00 XCs= 0.00 Cr= -18.50 XCr= 3.50 sD= 994 rD= 48

33INGLOBAL02

DESIGN G3.2 yande:11/12/2001 12:34: 2

FILE:P.33INGLOBAL02

TARGET BODY : IO

MINI:m.33INGLOBAL02

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

START:IEE 02-017/14:08:53.066 +CDS 595:00:0

OBSERVATION:33INGLOBAL02

THINNING:NIM 2

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

DESCRIP:IO_GLOBAL_OB_2

Io Global Obs	ACTIVITY ID: 33INGLOBAL02- START TIME: 02-018/00:09:08.333

Activity ID: Orbit 33 Target I Inst N OAPEL GLOBAL SeqNo 02 -

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

Time System CDS Load ID Calendar Date 01/17/02 Week 03

Start	IEE+CDS	00000593:00:0	02-018/00:09:08.333	IEE+000/09:59:35.333
End	IEE+CDS	00000612:00:0	02-018/00:28:21.000	IEE+000/10:18:48.000
Duration		00000019:00:0	000/00:19:12.667	000/00:19:12.667

Top Label 33INGLOBAL02-
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

Global observation of Io centered at about 135 degrees W. longitude. To search for new hot spots, mositor activity of known hot spots and investigate distribution of SO2. Spatial resolution is comparable to best in Galileo main mission (~120 km/pixel).

S/C SAFED, No Data Returned

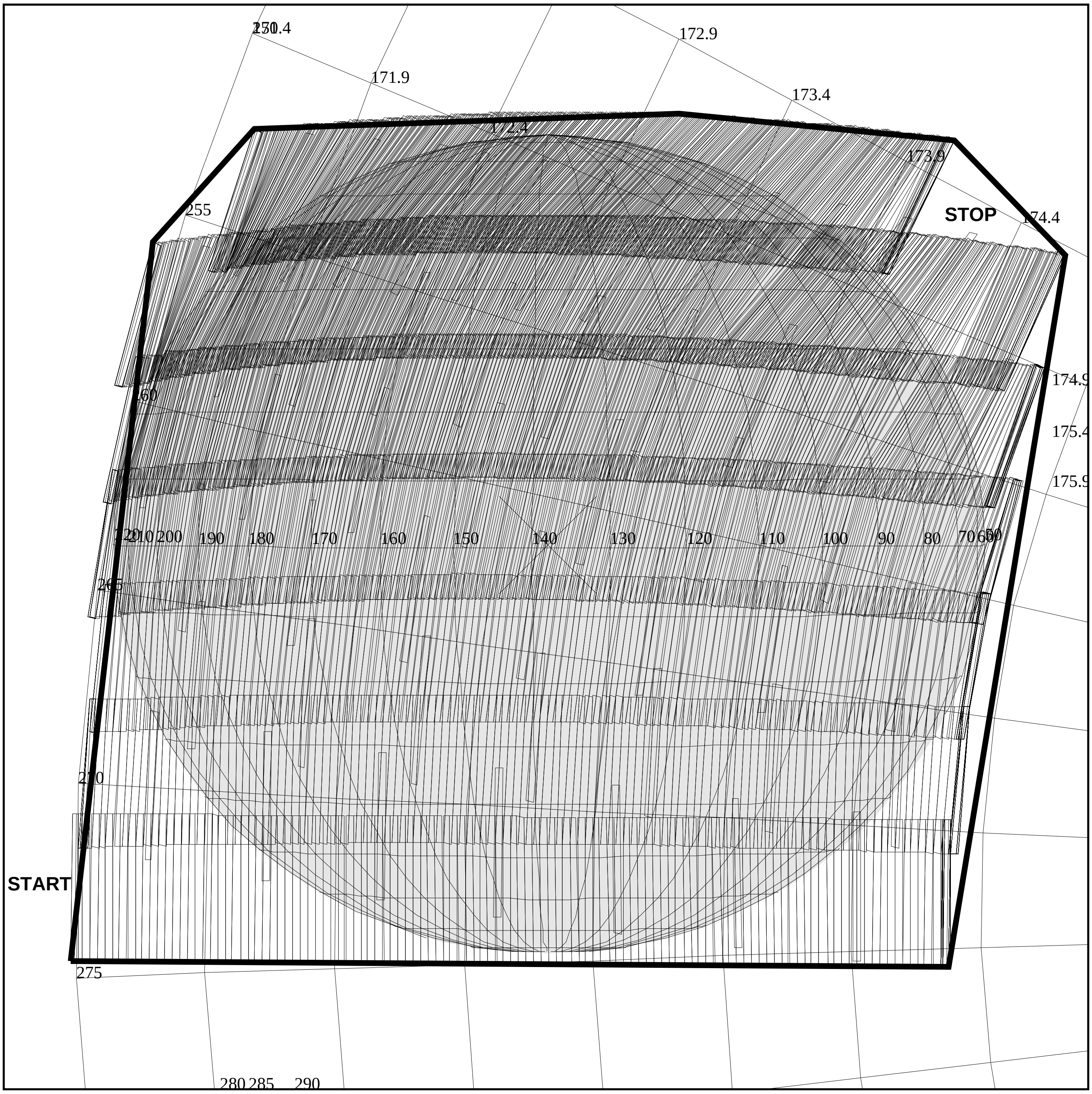
Design Detail

BTG=1.52 MB, TICS=213, FMT=LPU, SM, Gain State 2

Three-scan global mosaic covering entire disk of Io.
Centered at 135 degrees W. longitude.

Fixed Long Map (XLM), Gain 2, Grating Start 0, LPU, ILM252

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




```
165DH:TT=   0 TMC= 1 C=  -29.50 XC=   23.50 BS= 0/5227 TC= 3
   A= 728 pD=     0 SR=17.450 RA50=107.13 DEC50= 22.42 cone=171.39 clock=272.68
117DH:#SB= 5 OR= 0.750 RR=12.000 BM=F RC=  1 BS= 0/5227
   1:#s=  2 Cs=   58.50 XCs=    0.00 Cr=  -57.90 XCr=   -7.70 sD=   350 rD=    52
   2:#s=  1 Cs=   58.50 XCs=    0.00 Cr=  -57.90 XCr=   -7.70 sD=   406 rD=    46
   3:#s=  1 Cs=   59.90 XCs=    0.00 Cr=  -58.60 XCr=   -7.70 sD=   542 rD=    46
   4:#s=  2 Cs=   59.50 XCs=    0.00 Cr=  -59.00 XCr=   -7.70 sD=   766 rD=    62
   5:#s=  1 Cs=   45.50 XCs=    0.00 Cr=  -53.50 XCr=   -7.70 sD=   662 rD=    66
```

33JNGLOBAL01

DESIGN G3.2 yande:11/19/2001 8:58:15

FILE:P.33JNGLOBAL01

CENTRAL BODY:JUPITER III

MINI:m.33JNGLOBAL01

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 02-017/16:22:21.066 +CDS 3288:00:0

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

OBSERVATION:33JNGLOBAL01

DESCRIP:JUPITER_GLOBAL_OBS

Jupiter Global Obs	ACTIVITY ID: 33JNGLOBAL01- START TIME: 02-019/23:43:24.666

Activity ID: Orbit 33 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	01/19/02	Week	03

Start	JEE+CDS	00003283:84:0	02-019/23:43:24.666	JEE+002/07:20:24.666
End	JEE+CDS	00003311:00:0	02-020/00:10:47.333	JEE+002/07:47:47.333
Duration		00000027:07:0	000/00:27:22.667	000/00:27:22.667

Top Label 33JNGLOBAL01-
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

Full-disk multi-color map of Jupiter to examine cloud morphology and microphysical properties.
First of 3 observations to cover the globe for the final Jupiter global mosaic of the Galileo GMM mission.

Design Detail

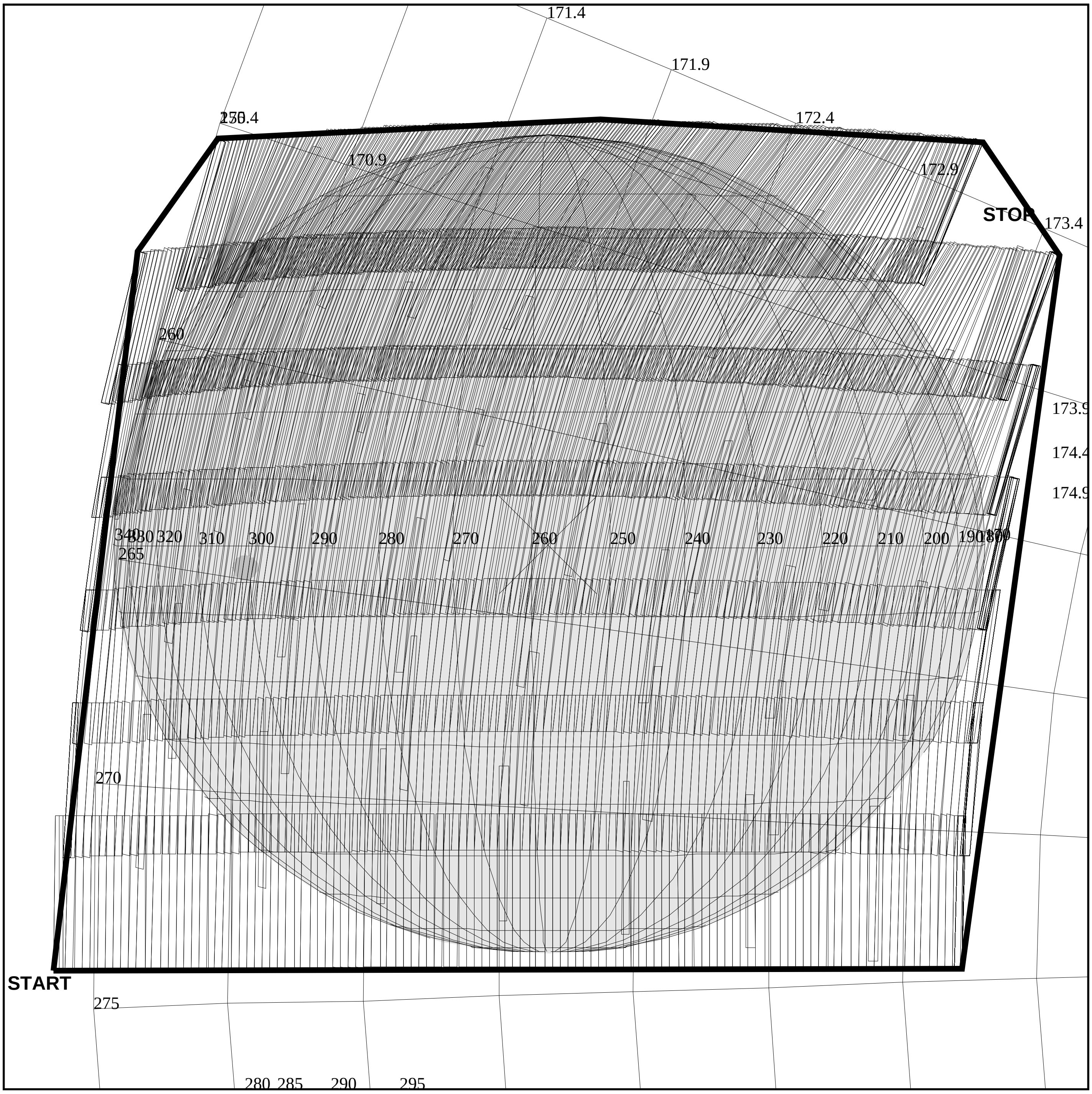
BTG=1.52 MB, TICS=213, FMT=MPW, XM, Gain State 2

Multi-tiered mosaic.
Pole to pole coverage achieved with 7 tiers.
Central meridian at 138 degrees W. longitude.
Spatial resolution about 1180 km per pixel.
Phase angle near 3 degrees.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

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

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



165DI:TT= 0 TMC= 1 C= -29.50 XC= 23.00 BS= 0/1263 TC= 3
A= 728 pD= 0 SR=17.450 RA50=108.31 DEC50= 22.31 cone=170.29 clock=272.43
117DI:#SB= 3 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/1263
1:#s= 3 Cs= 58.00 XCs= -0.80 Cr= -57.50 XCr= -6.50 sD= 324 rD= 52
2:#s= 3 Cs= 58.00 XCs= -0.80 Cr= -57.50 XCr= -6.50 sD= 592 rD= 52
3:#s= 1 Cs= 48.00 XCs= -0.80 Cr= -53.50 XCr= -6.50 sD= 558 rD= 64

33JNGLOBAL02

DESIGN G3.2 yande:11/19/2001 9: 0:53

FILE:P.33JNGLOBAL02

CENTRAL BODY:JUPITER III

MINI:m.33JNGLOBAL02

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

START:JEE 02-017/16:22:21.066 +CDS 3486:00:0

OBSERVATION:33JNGLOBAL02

THINNING:NIM 2

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

DESCRIP:JUPITER_GLOBAL_OBS

Jupiter Global Obs	ACTIVITY ID: 33JNGLOBAL02- START TIME: 02-020/03:03:36.666

Activity ID: Orbit 33 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	01/20/02	Week	03

Start	JEE+CDS	00003481:84:0	02-020/03:03:36.666	JEE+002/10:40:36.666
End	JEE+CDS	00003505:18:0	02-020/03:27:08.666	JEE+002/11:04:08.666
Duration		00000023:25:0	000/00:23:32.000	000/00:23:32.000

Top Label	33JNGLOBAL02-
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

Full-disk multi-color map of Jupiter to examine cloud morphology and microphysical properties.
Second of 3 observations to cover the globe for the final Jupiter global mosaic of the Galileo GMM mission.

Design Detail

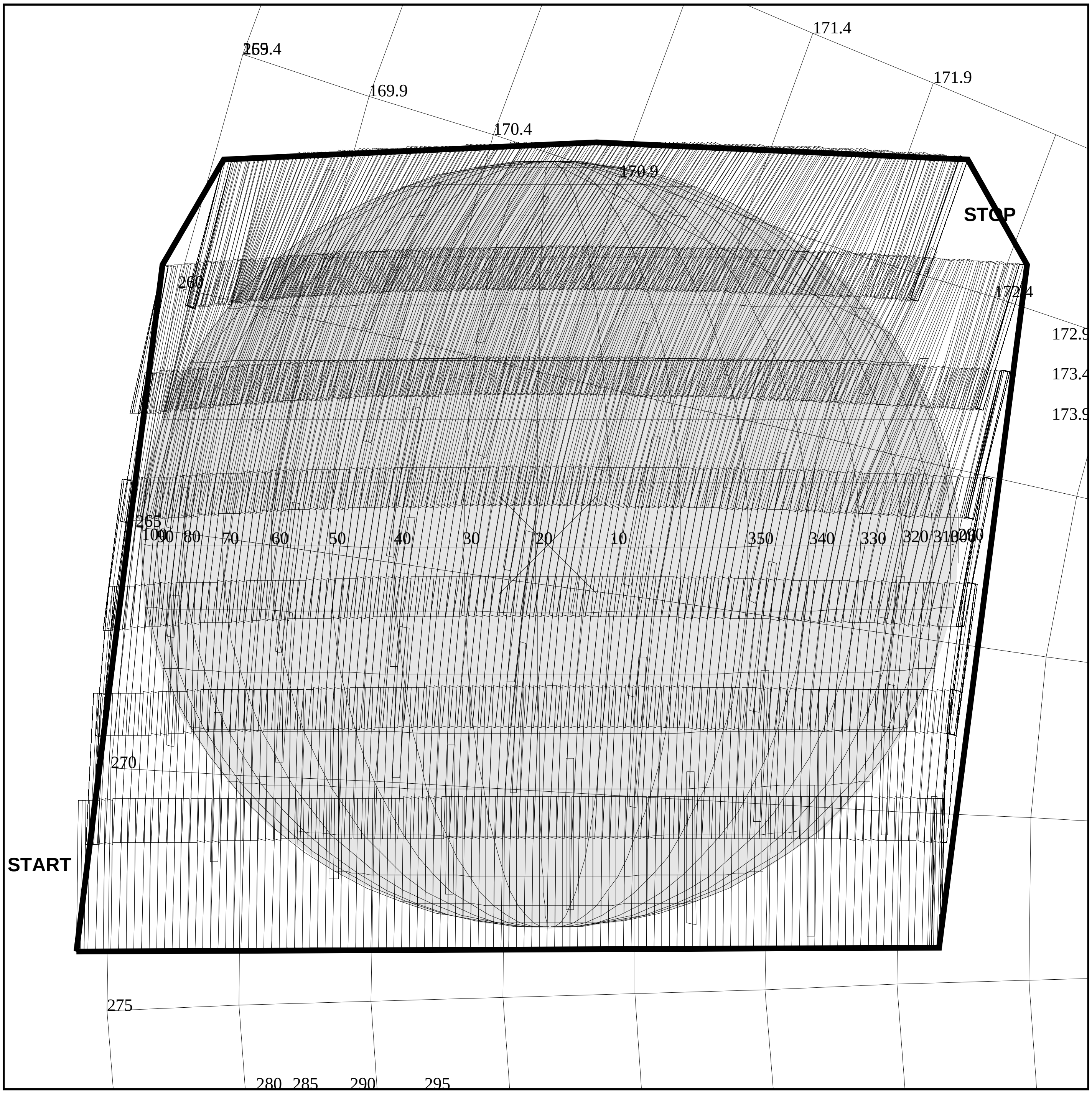
BTG=1.52 MB, TICS=213, FMT=MPW, XM, Gain State 2

Multi-tiered mosaic.
Pole to pole coverage achieved with 7 tiers.
Central meridian at 258 degrees W. longitude.
Spatial resolution about 1230 km per pixel.
Phase angle near 4 degrees.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

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

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



165DM:TT= 0 TMC= 1 C= -29.00 XC= 22.50 BS= 0/7481 TC= 3
A= 728 pD= 0 SR=17.450 RA50=109.37 DEC50= 22.20 cone=169.30 clock=272.24
117DM:#SB= 3 OR= 0.750 RR=12.000 BM=F RC= 1 BS= 0/7481
1:#s= 4 Cs= 56.50 XCs= -1.10 Cr= -56.00 XCr= -6.00 sD= 328 rD= 52
2:#s= 2 Cs= 56.00 XCs= -1.10 Cr= -55.50 XCr= -6.00 sD= 488 rD= 52
3:#s= 1 Cs= 48.00 XCs= -1.10 Cr= -52.50 XCr= -6.00 sD= 476 rD= 64

33JNGLOBAL03

DESIGN G3.2 yande:11/19/2001 9: 1:43

FILE:P.33JNGLOBAL03

CENTRAL BODY:JUPITER III

MINI:m.33JNGLOBAL03

S/C EPH:/DATA/NAVIO/011018-tour.NS

PERIAPSIS:

THINNING:NIM 2

START:JEE 02-017/16:22:21.066 +CDS 3685:00:0

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

OBSERVATION:33JNGLOBAL03

DESCRIP:JUPITER_GLOBAL_OBS_2

Jupiter Global Obs	ACTIVITY ID: 33JNGLOBAL03- START TIME: 02-020/06:24:54.000

Activity ID: Orbit 33 Target J Inst N OAPEL GLOBAL SeqNo 03 -

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

Time System	CDS	Load ID		Calendar Date 01/20/02	Week 03

Start	JEE+CDS	00003681:00:0	02-020/06:24:54.000	JEE+002/14:01:54.000
End	JEE+CDS	00003702:00:0	02-020/06:46:08.000	JEE+002/14:23:08.000
Duration		00000021:00:0	000/00:21:14.000	000/00:21:14.000

Top Label 33JNGLOBAL03-
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

Full-disk multi-color map of Jupiter to examine cloud morphology and microphysical properties.
Third of 3 observations to cover the globe for the final Jupiter global mosaic of the Galileo GMM mission.

Design Detail

BTG=1.52 MB, TICS=213, FMT=MPW, XM, Gain State 2

Multi-tiered mosaic.
Pole to pole coverage achieved with 7 tiers.
Central meridian at 18 degrees W. longitude.
Spatial resolution about 1280 km per pixel.
Phase angle near 5 degrees.

SPACECRAFT IN CRUISE MODE - UNCOMPENSATED SPACECRAFT WOBBLE PRESENT

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

NIMS Chopper Off	ACTIVITY ID: 33NNCHOPOF01-
	START TIME: 02-020/08:34:32.266

Activity ID: Orbit 33 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	01/20/02	Week	03

Start	JEE+CDS	00000000:00:0	02-020/08:34:32.266	JEE+000/00:00:00.000
End	JEE+CDS	00000000:00:0	02-020/08:39:35.600	JEE+000/00:00:00.000
Duration		00000000:00:0	000/00:05:03.333	000/00:00:00.000

Top Label   33NNCHOPOF01-
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: 33NNRCTRLT01-
START TIME: 02-032/11:59:59.700

Activity ID: Orbit 33 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	02/01/02	Week	05

Start	RTA+CDS	00000000:00:0	02-032/11:59:59.700	RTA+000/00:00:00.000
End	RTA+CDS	00000000:00:0	02-033/01:21:34.400	RTA+000/00:00:00.000
Duration		00000000:00:0	000/13:21:34.700	000/00:00:00.000

Top Label 33NNRCTRLT01-
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.

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

NIMS RCT Calibration		ACTIVITY ID:	33NNRCTCAL01-
		START TIME:	02-077/12:30:12.266

Activity ID: Orbit 33 Target N Inst N OAPEL RCTCAL SeqNo 01 -

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

Time System CDS Load ID Calendar Date 03/18/02 Week 11

Start	CAL+CDS	00000000:00:0	02-077/12:30:12.266	RTA+000/00:00:00.000
End	CAL+CDS	00000793:00:0	02-078/01:51:58.266	RTA+000/13:21:46.000
Duration		00000793:00:0	000/13:21:46.000	000/13:21:46.000

Top Label 33NNRCTCAL01-
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 recorded.

This calibration looks at the RCT after the RCT heaters have been off and watches it cool off for 13 RIMs. The first two recorded RIMs are looking at dark sky as the scan platform slews from safe/unstow to 0 degrees cone.

This is the FINAL NIMS RCT calibration.

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
4) Pause playback before using scan platform.
5) Turn off RCT Heaters.
6) Slew to RCT (cone = 0.0)
7) Record 13 Rims
8) Slew scan platform to Safe position (cone = 153.0) .
9) Chopper off.

Fixed Long Map (XLM), Gain 1, Grating Start 0, MPW, LM442, LM408

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