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 GASPEC, GASCUR and GASPER observations together provide a meridional albedo map of Gaspra with samples every 15 degrees of Gaspra's rotation (corresponding to about 18 minutes between observations). The frequency of samples in each of the 3 types of observations is given below:

1) GASPEC - Full Map mode observations at Long Map Nyquist sampling rates (0.03 mrad/sec) every 90 degrees of Gaspra's rotation.

2) GASCUR - Short Map mode observations every 30 degrees of Gaspra's rotation when GASPEC observations are not planned.

3) GASPER - Fixed Map mopde observations every 15 degrees of Gaspra's rotation except when GASPEC or GASCUR observations are not planned.

Some additional observations have been added to the original Gaspra Nimsguide. These are observations where NIMS is riding along behind SSI: GAPSLTCRVC01, GAPSLTCRVC02, GAPSLTCRVC03, GAPSLTCRVC04. Since these observations were not considered as NIMS observations during the Gaspra planning stage, the pointer plots show the footprint of SSI and not NIMS.

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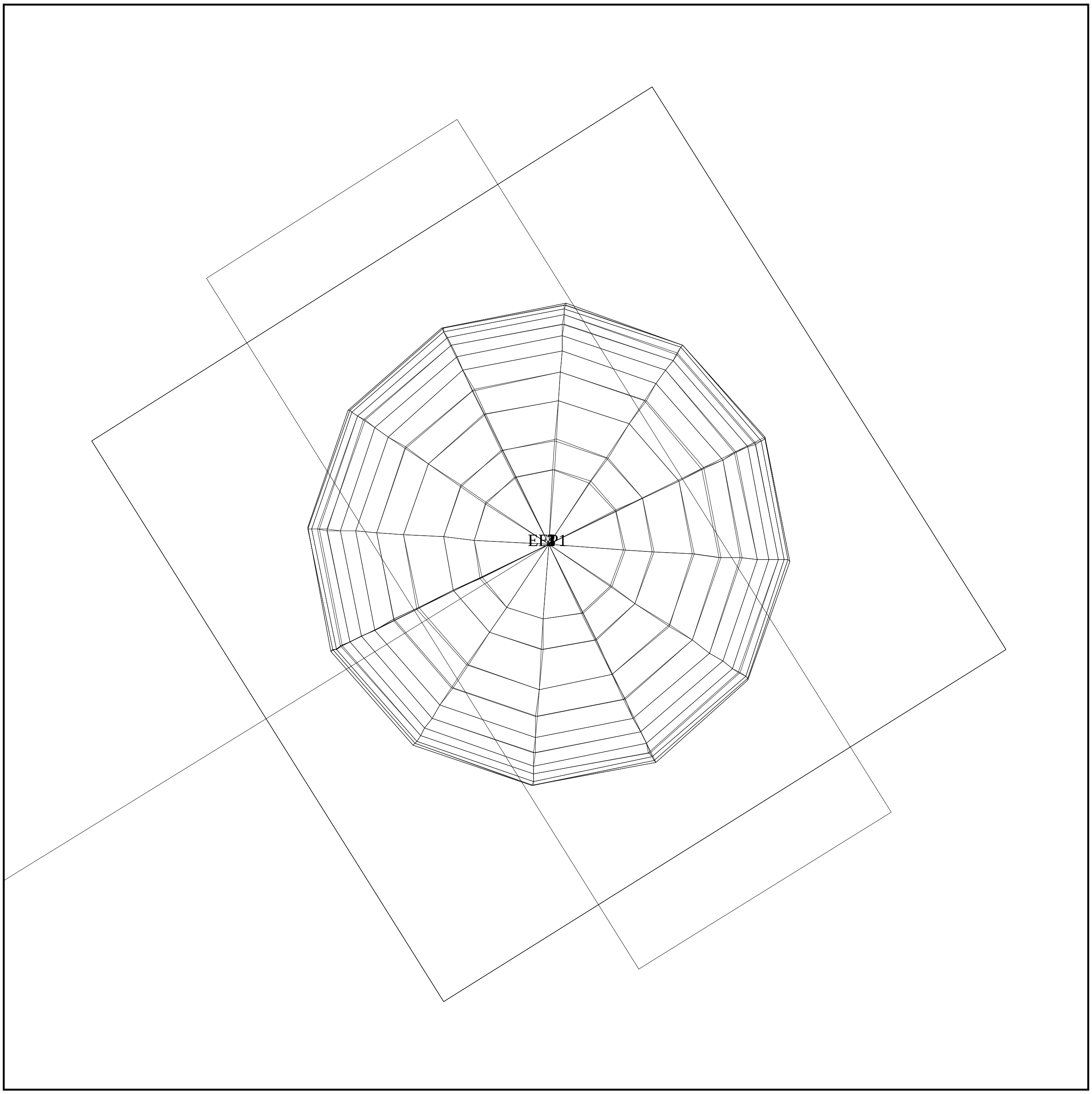


GAPSLTCRVC01

POINTER C4.1Wsusan: 9/23/1991 13:37:48

FILE:P.GAPSLTCRVC01

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVC01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 477:00:0

ACTIVITY:GAPSLTCRVC01 **DESCRIP:4-COLOR LIGHTCURVE**

Gaspra Distant Light Curve	ACTIVITY ID: GAPSLTCRVC01*
	START TIME: 91-302/14:45:50

Activity ID: Orbit GA Target P Inst S OAPEL LTCRVC SeqNo 01 Multi *

Title	Gaspra Distant Light Curve			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000468:00:0	91-302/14:45:50	GCA-000/07:53:12
End	GCA-CDS	00000465:00:0	91-302/14:48:52	GCA-000/07:50:10
Duration		00000003:00:0	000/00:03:02	000/00:03:02

Top Label GAPSLTCRVC01*
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	216	Report Options		Real Time Activity	No

Observation Objective

This observation is part of SSI’s final rotation Gaspra ’movie’ and lightcurve Each segment of the total lightcurve covers 30 degrees of rotation of Gaspra. Every third segment is through four filters to give data on the color of Gaspra. The remaining segments are through a single filter.

Design Detail

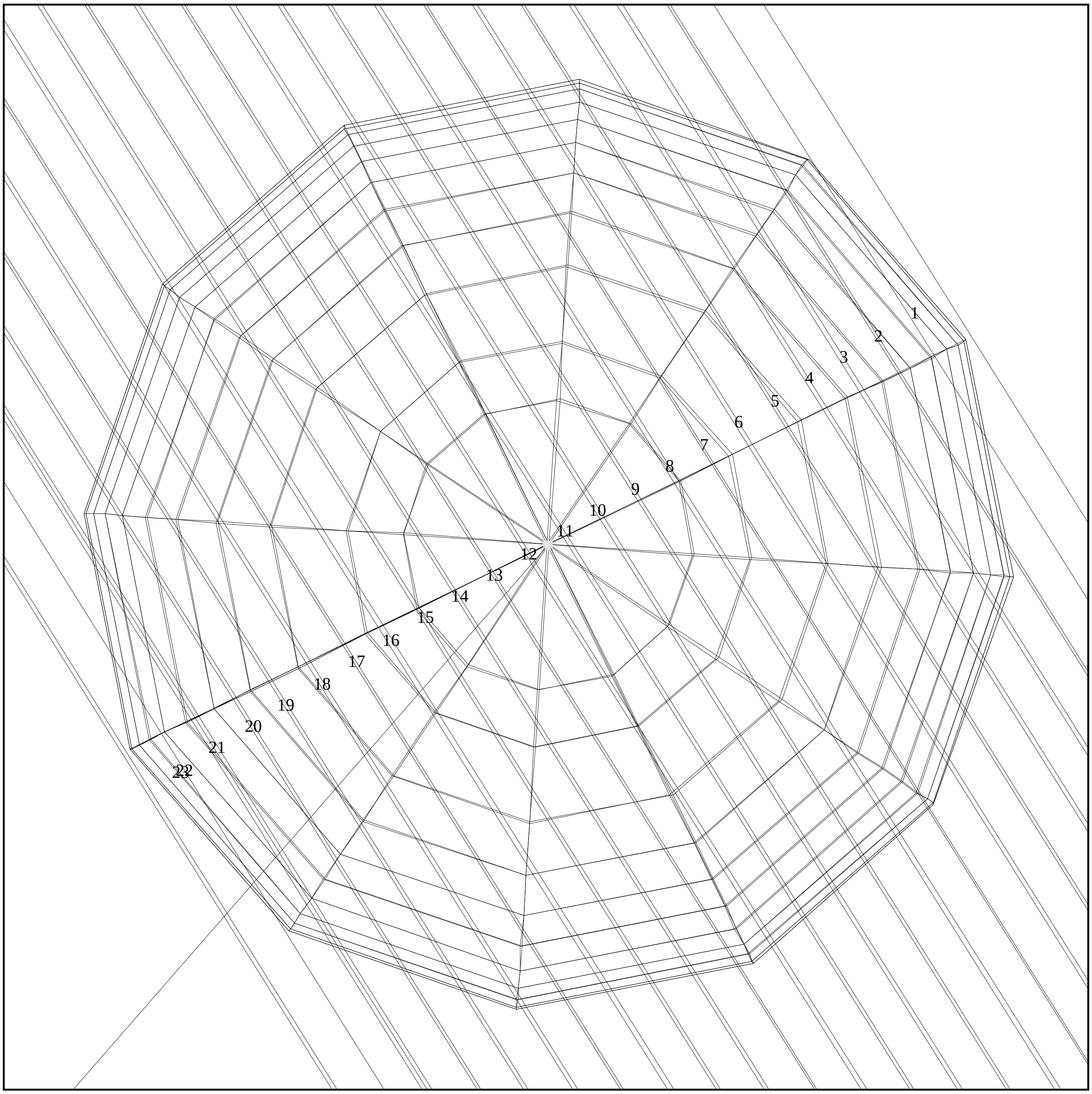
Alias

NIMS will ride-along behind SSI in various modes.
Here, NIMS is in Full Map mode

Full Map (FM), Gain 4, Grating Start 0, Chopper 63Hz, AI8

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPEC01

POINTER C4.1Wsusan: 9/23/1991 13:39:38

FILE:P.GAPNGASPEC01

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPEC01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 473:00:0

ACTIVITY:GAPNGASPEC01 **DESCRIP:NIMS 1ST 204 WVLNGHT LM NYQ RATE**

Gaspra Highest Spectral Resolution Map ACTIVITY ID: GAPNGASPEC01+
START TIME: 91-302/14:38:45

Activity ID: Orbit GA Target P Inst N OAPEL GASPEC SeqNo 01 Multi +

Title	Gaspra Highest Spectral Resolution Map			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000473:00:0	91-302/14:38:45	GCA-000/07:58:15
End	GCA-CDS 00000469:66:0	91-302/14:42:04	GCA-000/07:54:56
Duration	00000003:25:0	000/00:03:19	000/00:03:19

Top Label GAPNGASPEC01+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	181	Report Options	Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

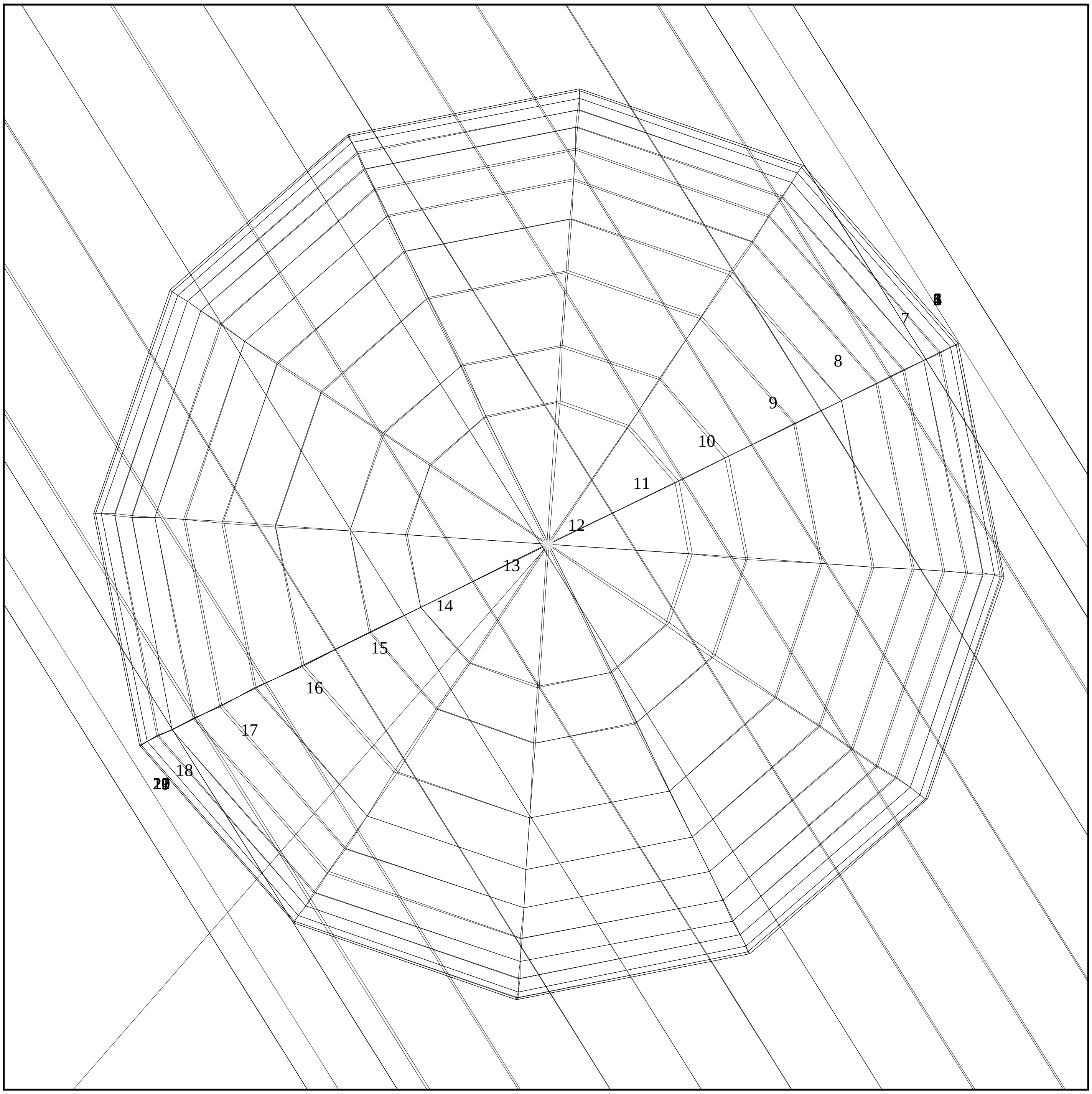
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Full Map mode at Long Map Nyquist sampling rate (0.03 mrad/sec). This is one of five Full Map observations in the Gaspra Far Encounter, the fifth of which verifies the observation in Full Map mode of the first quadrant.

Full Map (FM), Gain 4, Grating Start 0, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER01

POINTER C4.1Wsusan: 9/23/1991 13:41:47

FILE:P.GAPNGASPER01

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 459:00:0

ACTIVITY:GAPNGASPER01 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam   ACTIVITY ID: GAPNGASPER01-
START TIME: 91-302/14:52:54

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 01 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes Team NIMS	Working Group	AWG

Time System CDS   Load ID EE3   Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000459:00:0	91-302/14:52:54	GCA-000/07:44:06
End	GCA-CDS 00000458:67:0	91-302/14:53:10	GCA-000/07:43:50
Duration	00000000:24:0	000/00:00:16	000/00:00:16

Top Label   GAPNGASPER01-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

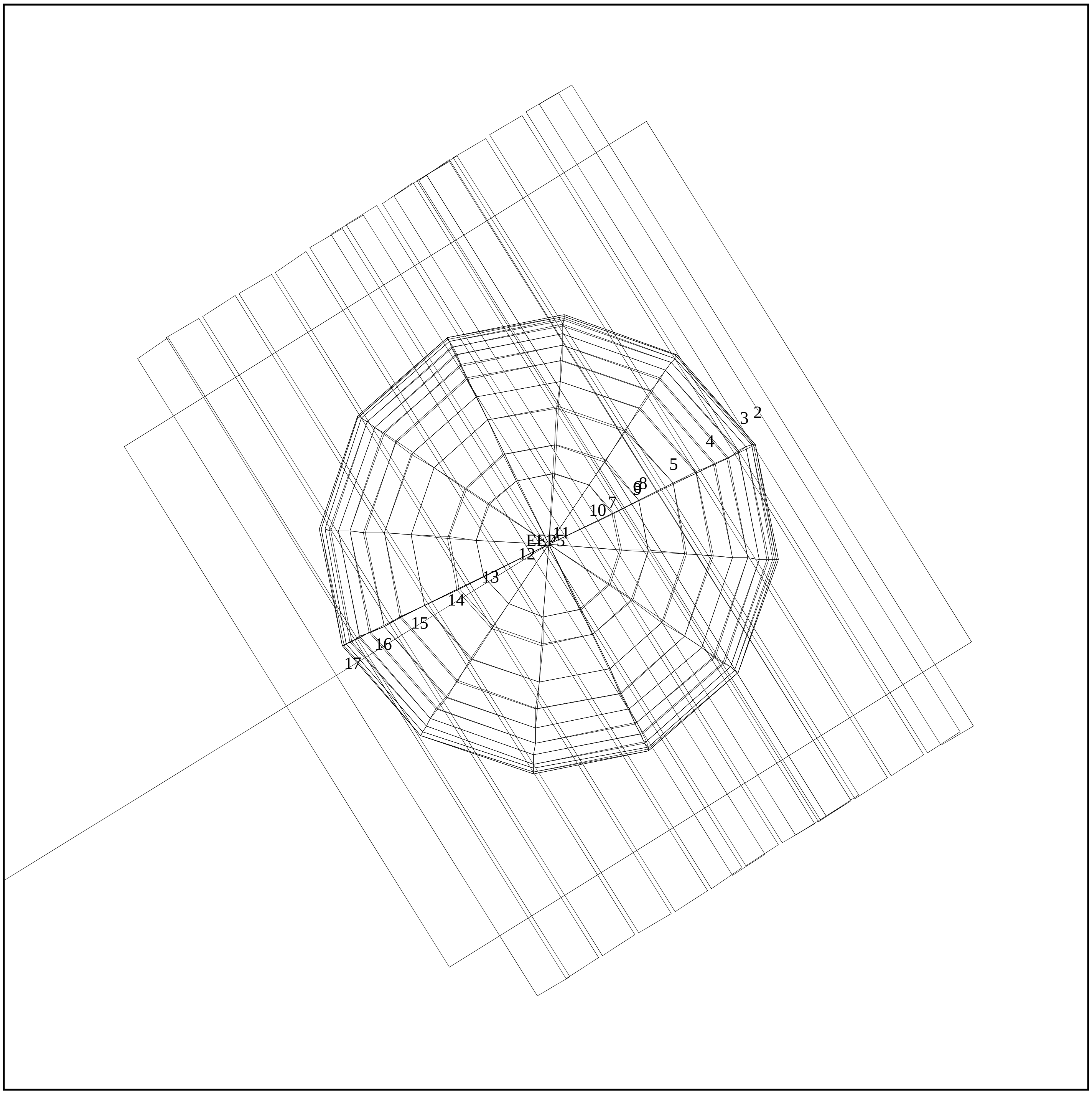
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed   05/03/95   Changed By FEL   10/08/91 13:58:04

Galileo Activity Plan Form   rev 5/95



GAPNGASCUR01

POINTER C4.1Wsusan: 9/23/1991 13:45:43

FILE:P.GAPSLTCRVB01

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 442:00:0

ACTIVITY:GAPSLTCRVB01 **DESCRIP:SSI LTCRVB01/NIMS GASCUR01**

Gaspra Spectral Light Curve	ACTIVITY ID:	GAPNGASCUR01+
	START TIME:	91-302/15:10:06

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 01 Multi +

Title	Gaspra Spectral Light Curve			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000442:00:0	91-302/15:10:06	GCA-000/07:26:54
End	GCA-CDS 00000440:61:0	91-302/15:11:26	GCA-000/07:25:34
Duration	00000001:30:0	000/00:01:20	000/00:01:20

Top Label GAPNGASCUR01+
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra's rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

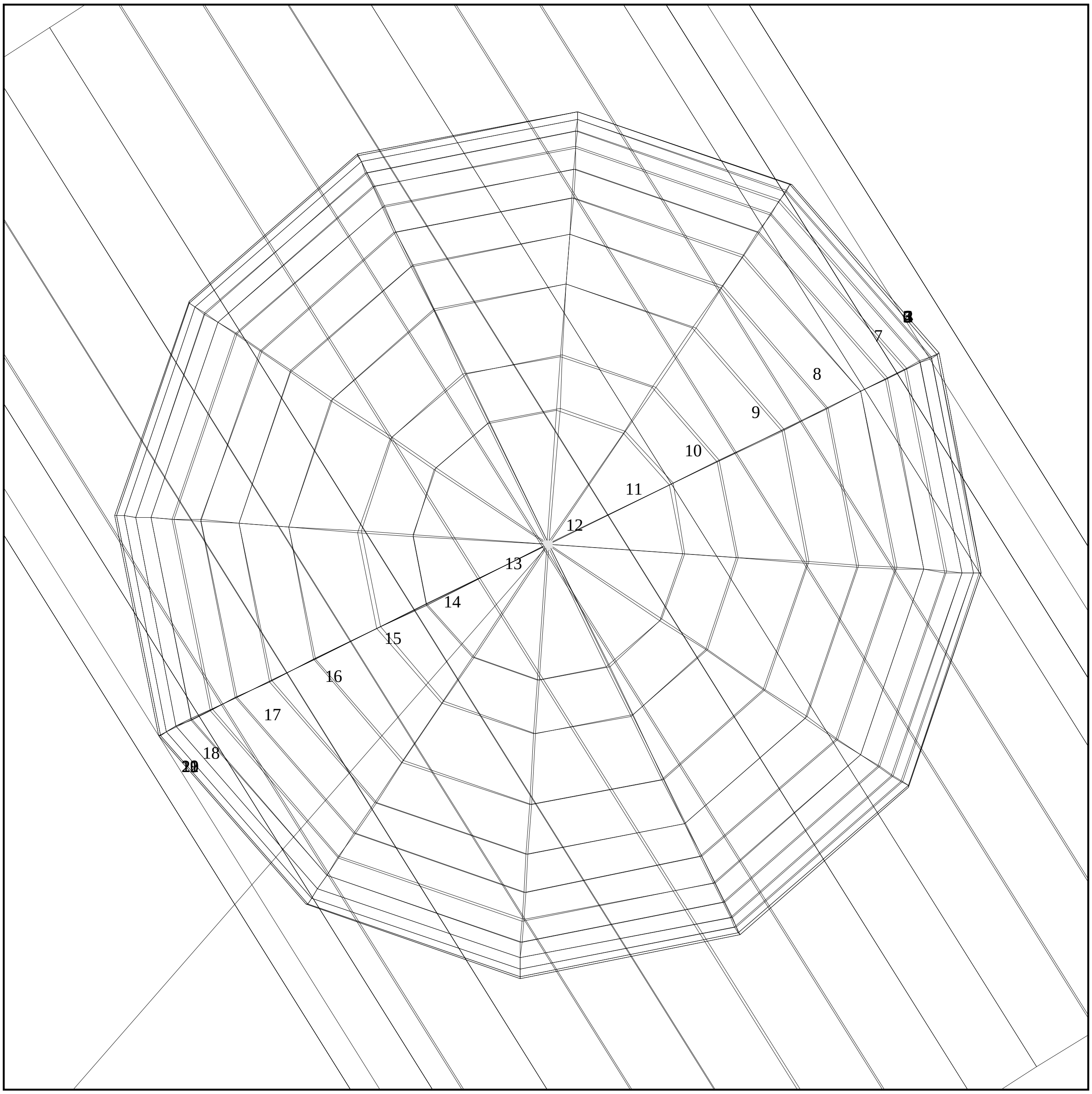
Alias GAPSLTCRVB01

SSI will cover the error ellipse in 4 colors every 90 degrees (before GASPECs) and 1 color every 30 degrees (during GASCURs). NIMS utilizes the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

Last Changed	05/03/95	Changed By	FEL	10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER02

POINTER C4.1Wsusan: 9/23/1991 13:48:15

FILE:P.GAPNGASPER02

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER02

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 424:00:0

ACTIVITY:GAPNGASPER02 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam		ACTIVITY ID:	GAPNGASPER02-
		START TIME:	91-302/15:28:18

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 02 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000424:00:0	91-302/15:28:18	GCA-000/07:08:42
End	GCA-CDS 00000423:67:0	91-302/15:28:34	GCA-000/07:08:26
Duration	00000000:24:0	000/00:00:16	000/00:00:16

Top Label GAPNGASPER02-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

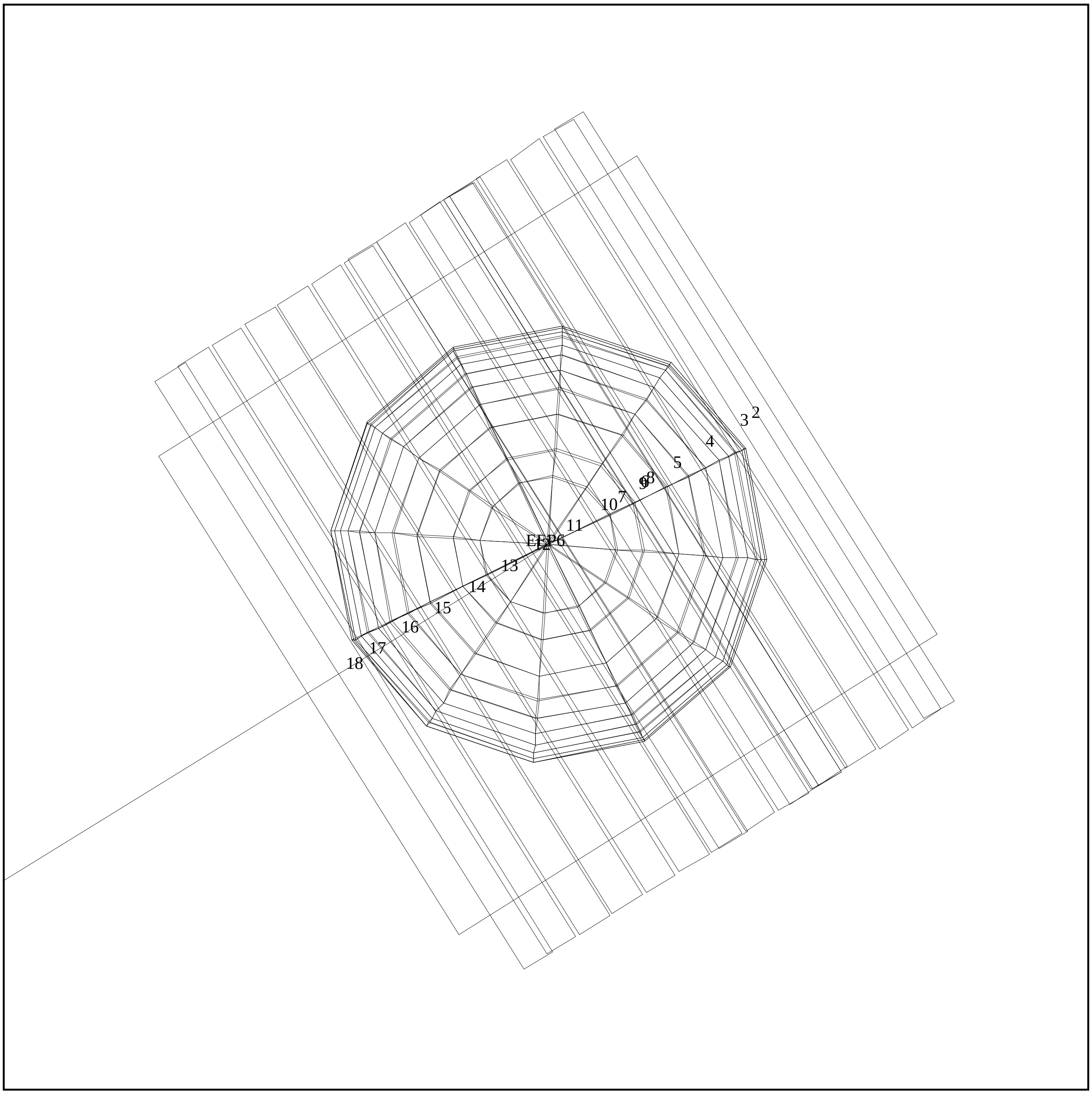
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASCUR02

POINTER C4.1Wsusan: 9/23/1991 13:50:40

FILE:P.GAPSLTCRVB02

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB02

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 407:00:0

ACTIVITY:GAPSLTCRVB02 **DESCRIP:SSI LTCRVB02/NIMS GASCUR02**

Gaspra Spectral Light Curve — ACTIVITY ID: GAPNGASCUR02+ — START TIME: 91-302/15:45:29

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 02 Multi +

Title	Gaspra Spectral Light Curve	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000407:00:0	91-302/15:45:29	GCA-000/06:51:31
End	GCA-CDS 00000405:47:0	91-302/15:46:59	GCA-000/06:50:01
Duration	00000001:44:0	000/00:01:30	000/00:01:30

Top Label GAPNGASCUR02+
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra's rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB02

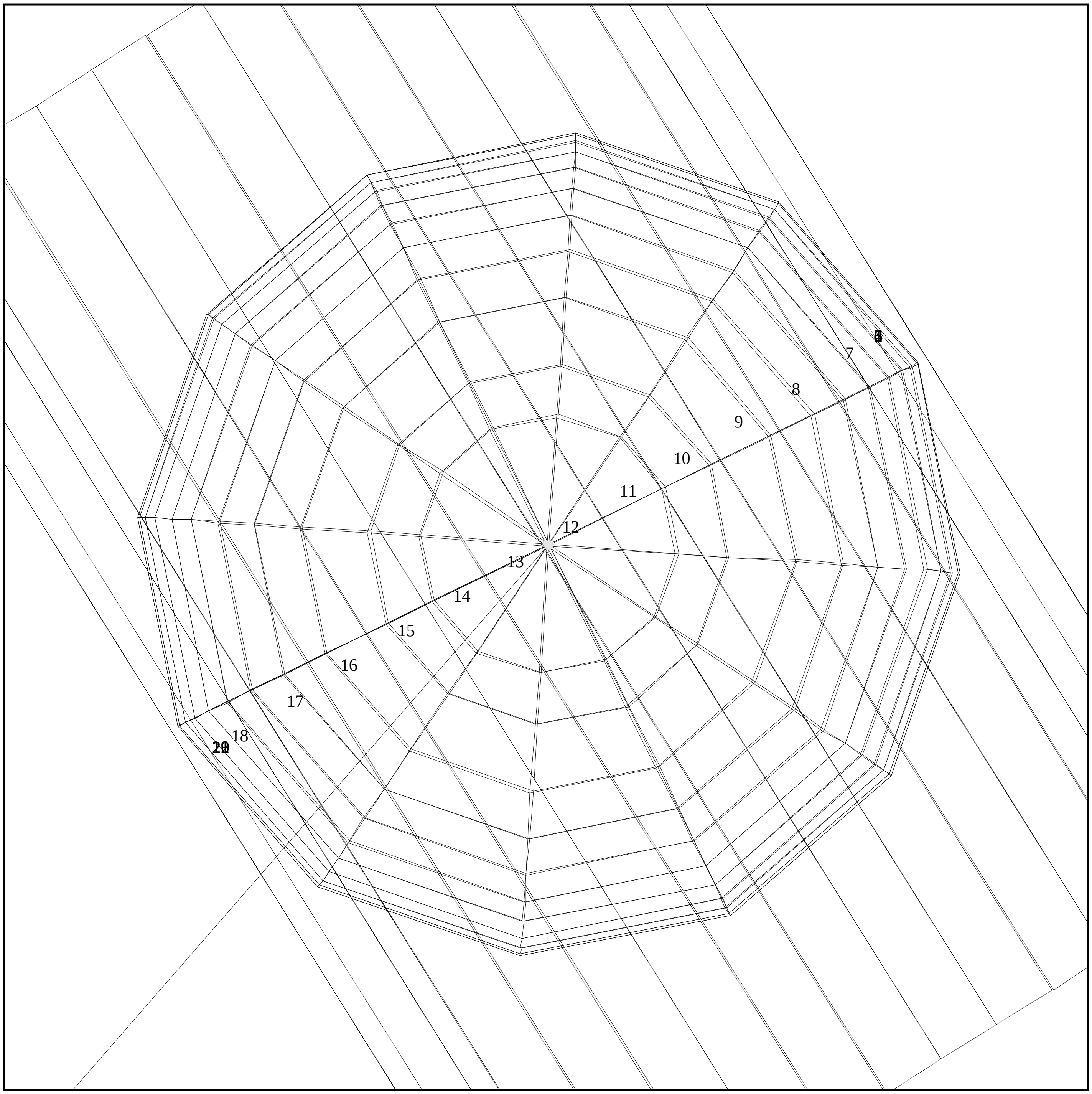
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER03

POINTER C4.1Wsusan: 9/23/1991 13:53:15

FILE:P.GAPNGASPER03

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER03

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 389:00:0

ACTIVITY:GAPNGASPER03 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam   ACTIVITY ID: GAPNGASPER03-
START TIME: 91-302/16:03:41

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 03 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes Team NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000389:00:0	91-302/16:03:41	GCA-000/06:33:19
End	GCA-CDS 00000388:67:0	91-302/16:03:57	GCA-000/06:33:03
Duration	00000000:24:0	000/00:00:16	000/00:00:16

Top Label GAPNGASPER03-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

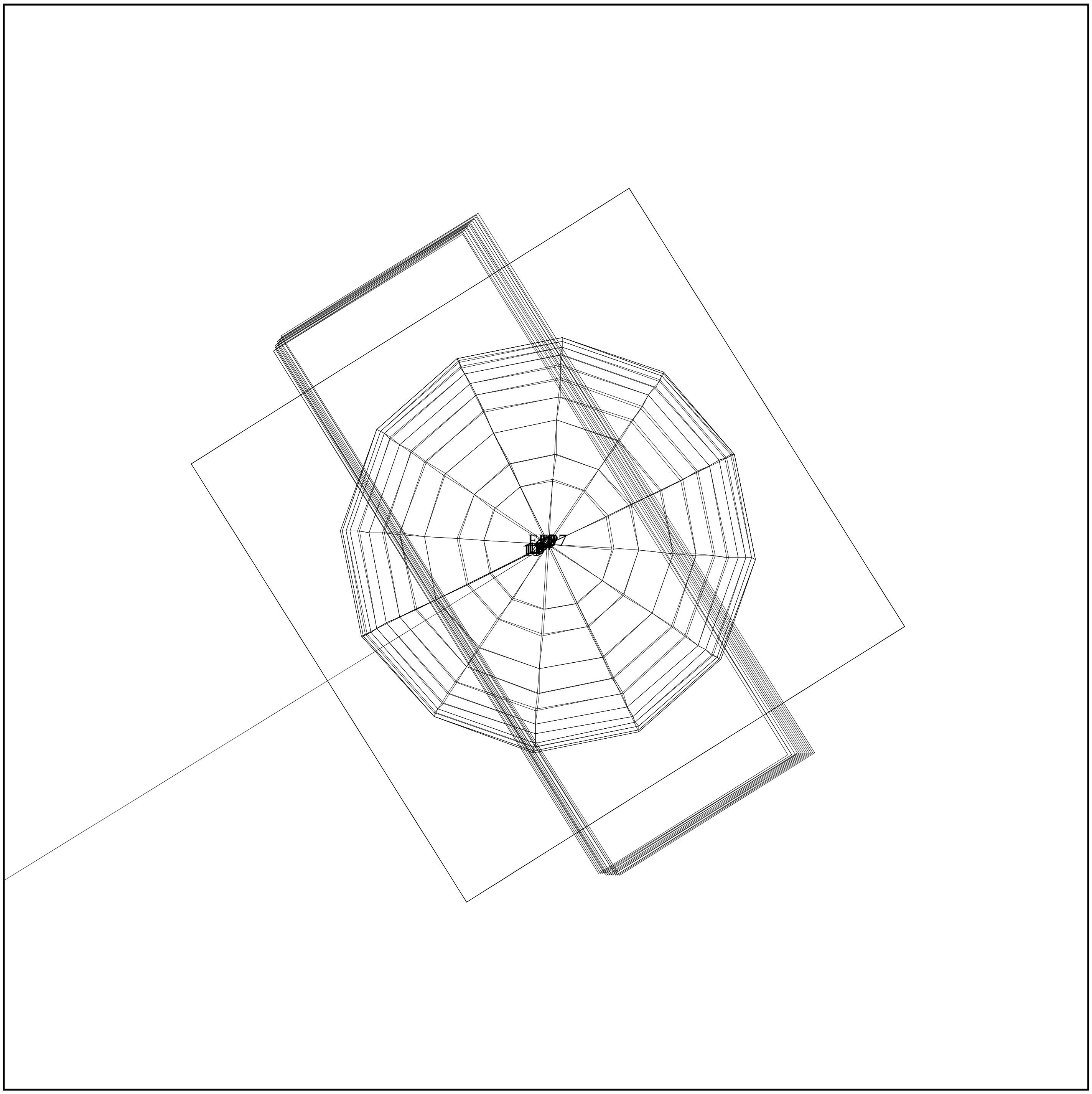
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPSLTCRVC02

POINTER C4.1Wsusan: 9/23/1991 13:56:24

FILE:P.GAPSLTCRVC02

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVC02

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 372:00:0

ACTIVITY:GAPSLTCRVC02 **DESCRIP:4-FILTER LIGHTCURVE**

Gaspra Distant Light Curve ACTIVITY ID: GAPSLTCRVC02*
START TIME: 91-302/16:35:02

Activity ID: Orbit GA Target P Inst S OAPEL LTCRVC SeqNo 02 Multi *

Title	Gaspra Distant Light Curve			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000360:00:0	91-302/16:35:02	GCA-000/06:04:00
End	GCA-CDS	00000357:00:0	91-302/16:38:04	GCA-000/06:00:58
Duration		00000003:00:0	000/00:03:02	000/00:03:02

Top Label GAPSLTCRVC02*
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	216	Report Options	Real Time Activity	No

Observation Objective

This observation is part of SSI's final rotation Gaspra 'movie' and lightcurve Each segment of the total lightcurve covers 30 degrees of rotation of Gaspra. Every third segment is through four filters to give data on the color of Gaspra. The remaining segments are through a single filter.

Design Detail

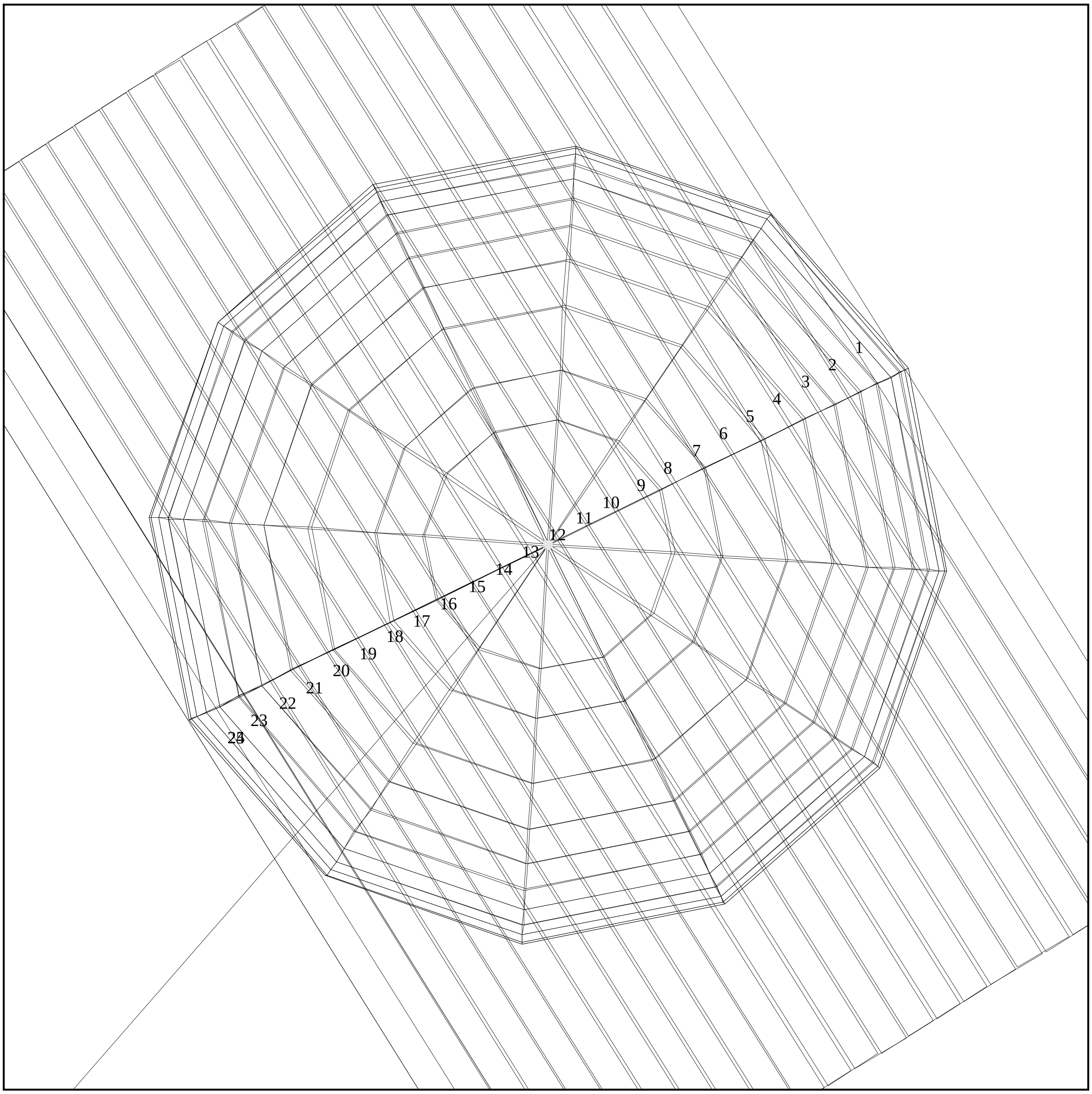
Alias

NIMS will ride-along behind SSI in various modes.
Here, NIMS is in Full Map mode

Full Map (FM), Gain 4, Grating Start 0, Chopper 63Hz, AI8

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPEC02

POINTER C4.1Wsusan: 9/23/1991 14:37:58

FILE:P.GAPNGASPEC02

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPEC02

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 368:00:0

ACTIVITY:GAPNGASPEC02 DESCRIP:2ND NIMS 204 WVLNGTH LM NYQ RATE

Gaspra Highest Spectral Resolution Map		ACTIVITY ID:	GAPNGASPEC02+
		START TIME:	91-302/16:24:55

Activity ID: Orbit GA Target P Inst N OAPEL GASPEC SeqNo 02 Multi +

Title	Gaspra Highest Spectral Resolution Map			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	EE3	Calendar Date	10/29/91	Week	44

Start	GCA-CDS	00000368:00:0	91-302/16:24:55	GCA-000/06:12:05
End	GCA-CDS	00000364:42:0	91-302/16:28:30	GCA-000/06:08:30
Duration		00000003:49:0	000/00:03:35	000/00:03:35

Top Label	GAPNGASPEC02+				
Bottom Label					
Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

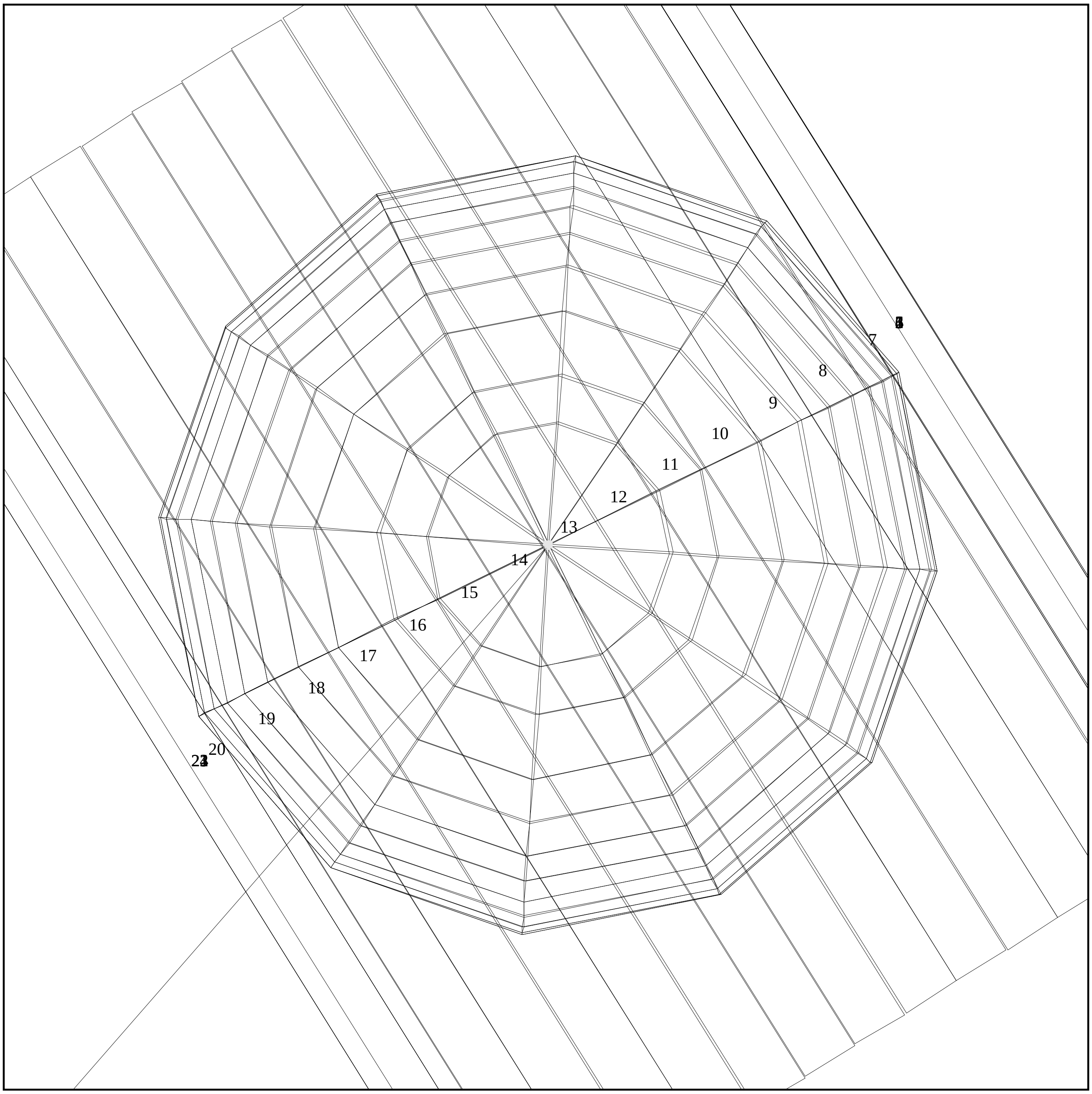
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Full Map mode at Long Map Nyquist sampling rate (0.03 mrad/sec). This is one of five Full Map observations in the Gaspra Far Encounter, the fifth of which verifies the observation in Full Map mode of the first quadrant.

Full Map (FM), Gain 4, Grating Start 0, Chopper 63Hz, MPW

				10/08/91
Last Changed	05/03/95	Changed By	FEL	13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER04

POINTER C4.1Wsusan: 9/23/1991 14:41:40

FILE:P.GAPNGASPER04

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER04

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 354:00:0

ACTIVITY:GAPNGASPER04 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam ACTIVITY ID: GAPNGASPER04-
START TIME: 91-302/16:39:04

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 04 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000354:00:0	91-302/16:39:04	GCA-000/05:57:56
End	GCA-CDS	00000353:65:0	91-302/16:39:22	GCA-000/05:57:38
Duration		00000000:26:0	000/00:00:18	000/00:00:18

Top Label GAPNGASPER04-
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	181	Report Options	Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

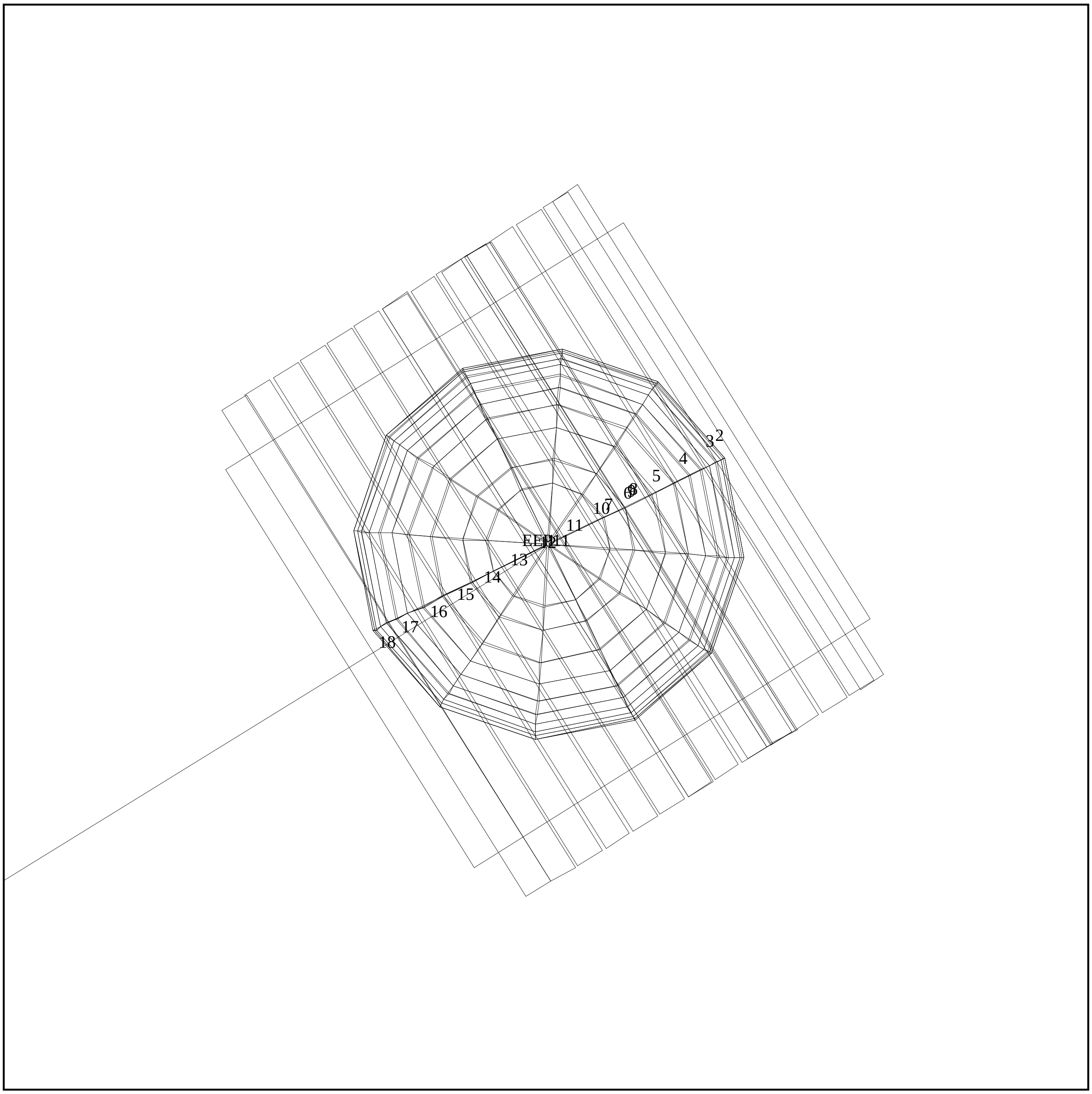
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASCUR03

POINTER C4.1Wsusan: 9/23/1991 14:46:16

FILE:P.GAPSLTCRVB03

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB03

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 337:00:0

ACTIVITY:GAPSLTCRVB03 **DESCRIP:SSI LTCRVB03/NIMS GASCUR03**

Gaspra Spectral Light Curve	ACTIVITY ID: GAPNGASCUR03+ START TIME: 91-302/16:56:16

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 03 Multi +

Title	Gaspra Spectral Light Curve	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS   Load ID EE3   Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000337:00:0	91-302/16:56:16	GCA-000/05:40:44
End	GCA-CDS 00000335:56:0	91-302/16:57:40	GCA-000/05:39:20
Duration	00000001:35:0	000/00:01:24	000/00:01:24

Top Label   GAPNGASCUR03+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	181	Report Options	Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra’s rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB03

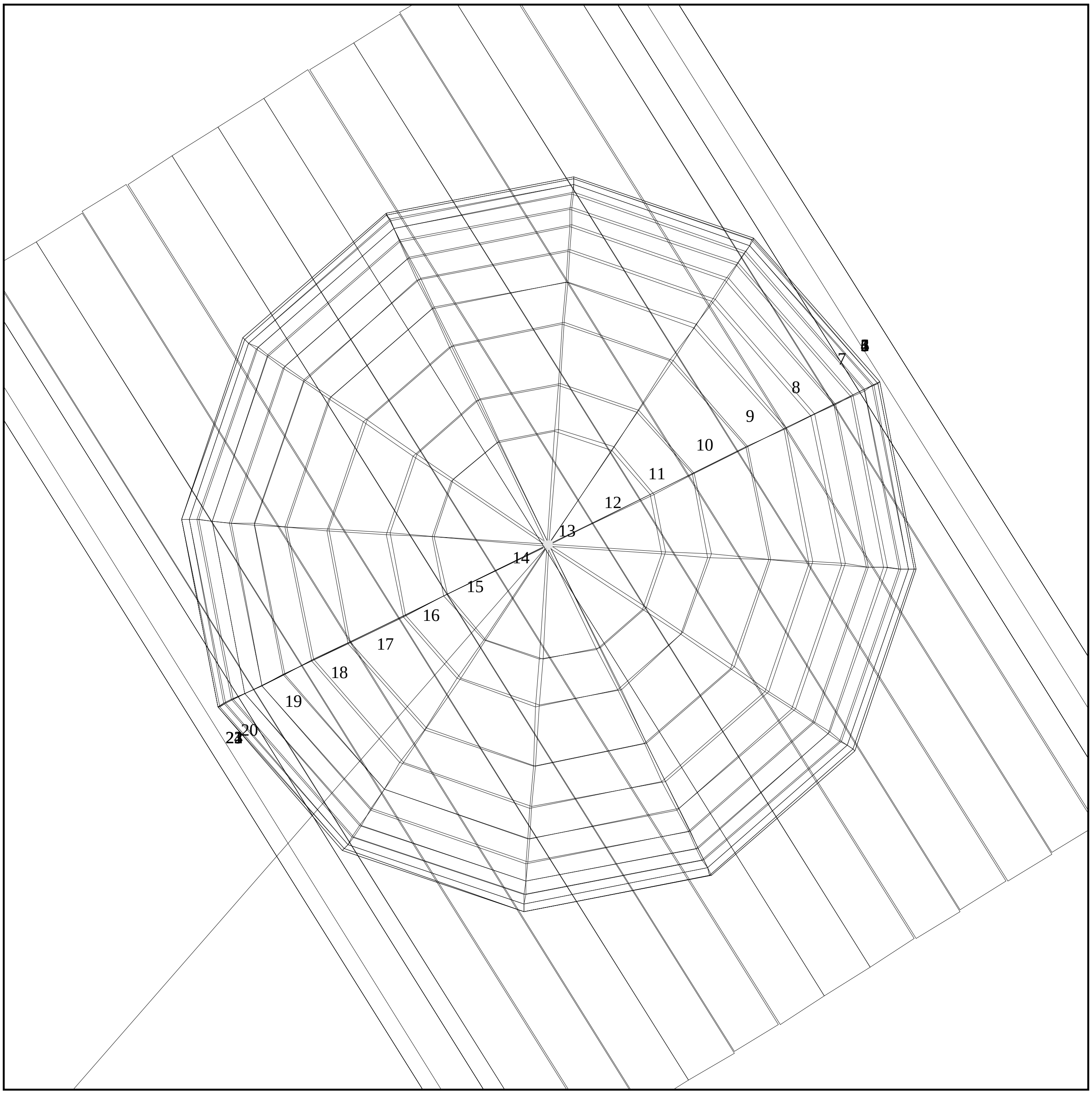
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER05

POINTER C4.1Wsusan: 9/23/1991 14:52:13

FILE:P.GAPNGASPER05

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER05

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 319:00:0

ACTIVITY:GAPNGASPER05 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam	ACTIVITY ID: GAPNGASPER05- START TIME: 91-302/17:14:28

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 05 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000319:00:0	91-302/17:14:28	GCA-000/05:22:32
End	GCA-CDS 00000318:65:0	91-302/17:14:45	GCA-000/05:22:15
Duration	00000000:26:0	000/00:00:17	000/00:00:17

Top Label GAPNGASPER05-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

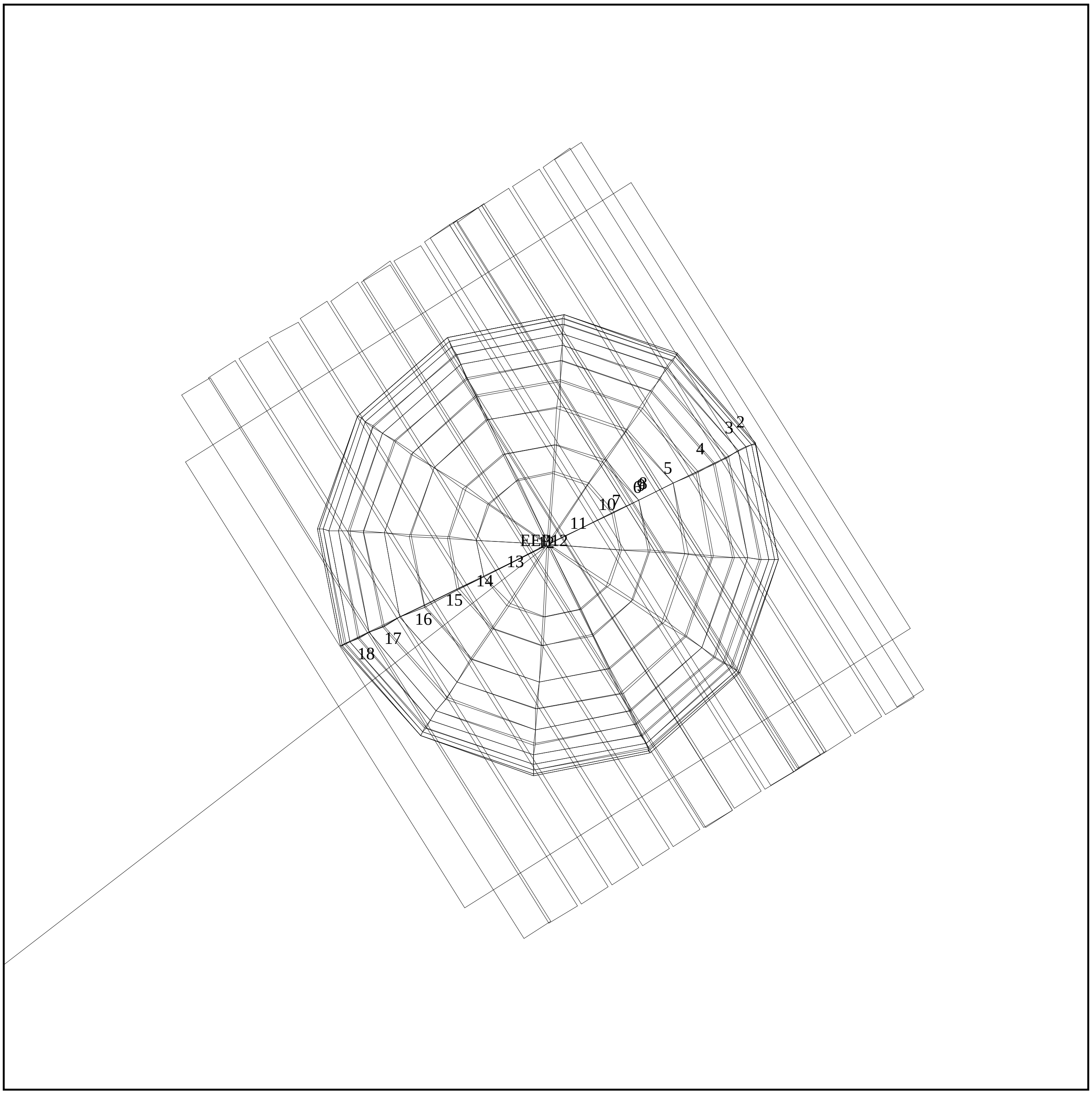
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASCUR04

POINTER C4.1Wsusan: 9/23/1991 14:54:30

FILE:P.GAPSLTCRVB04

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB04

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 302:00:0

ACTIVITY:GAPSLTCRVB04 **DESCRIP:SSI LTCRVB04/NIMS GASCUR04**

Gaspra Spectral Light Curve ACTIVITY ID: GAPNGASCUR04+
START TIME: 91-302/17:31:39

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 04 Multi +

Title	Gaspra Spectral Light Curve			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000302:00:0	91-302/17:31:39	GCA-000/05:05:21
End	GCA-CDS 00000300:56:0	91-302/17:33:03	GCA-000/05:03:57
Duration	00000001:35:0	000/00:01:24	000/00:01:24

Top Label GAPNGASCUR04+
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra’s rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB04

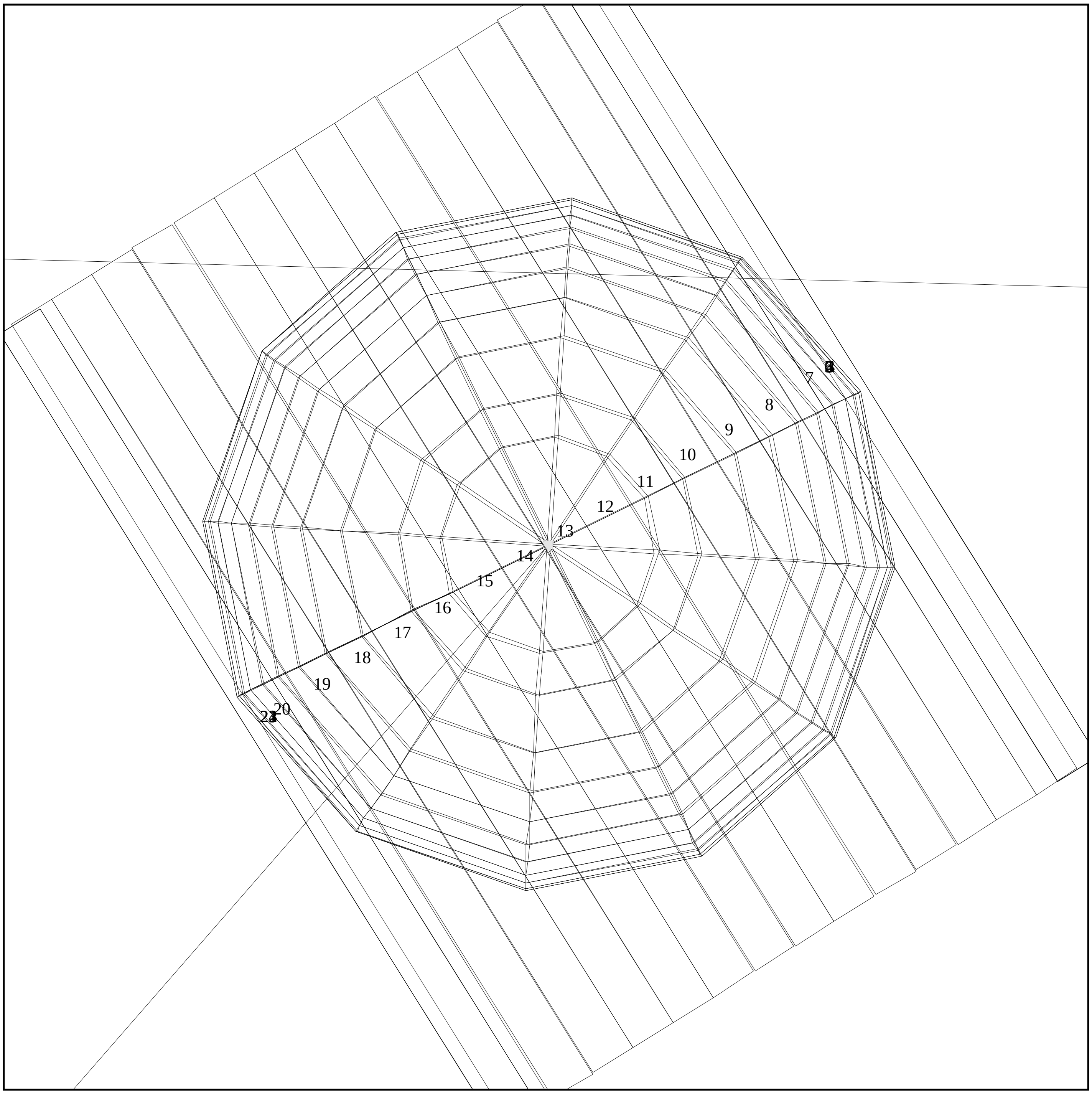
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER06

POINTER C4.1Wsusan: 9/23/1991 14:56:53

FILE:P.GAPNGASPER06

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER06

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 284:00:0

ACTIVITY:GAPNGASPER06 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam		ACTIVITY ID:	GAPNGASPER06-
		START TIME:	91-302/17:49:51

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 06 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes Team NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000284:00:0	91-302/17:49:51	GCA-000/04:47:09
End	GCA-CDS 00000283:65:0	91-302/17:50:08	GCA-000/04:46:52
Duration	00000000:26:0	000/00:00:17	000/00:00:17

Top Label GAPNGASPER06-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

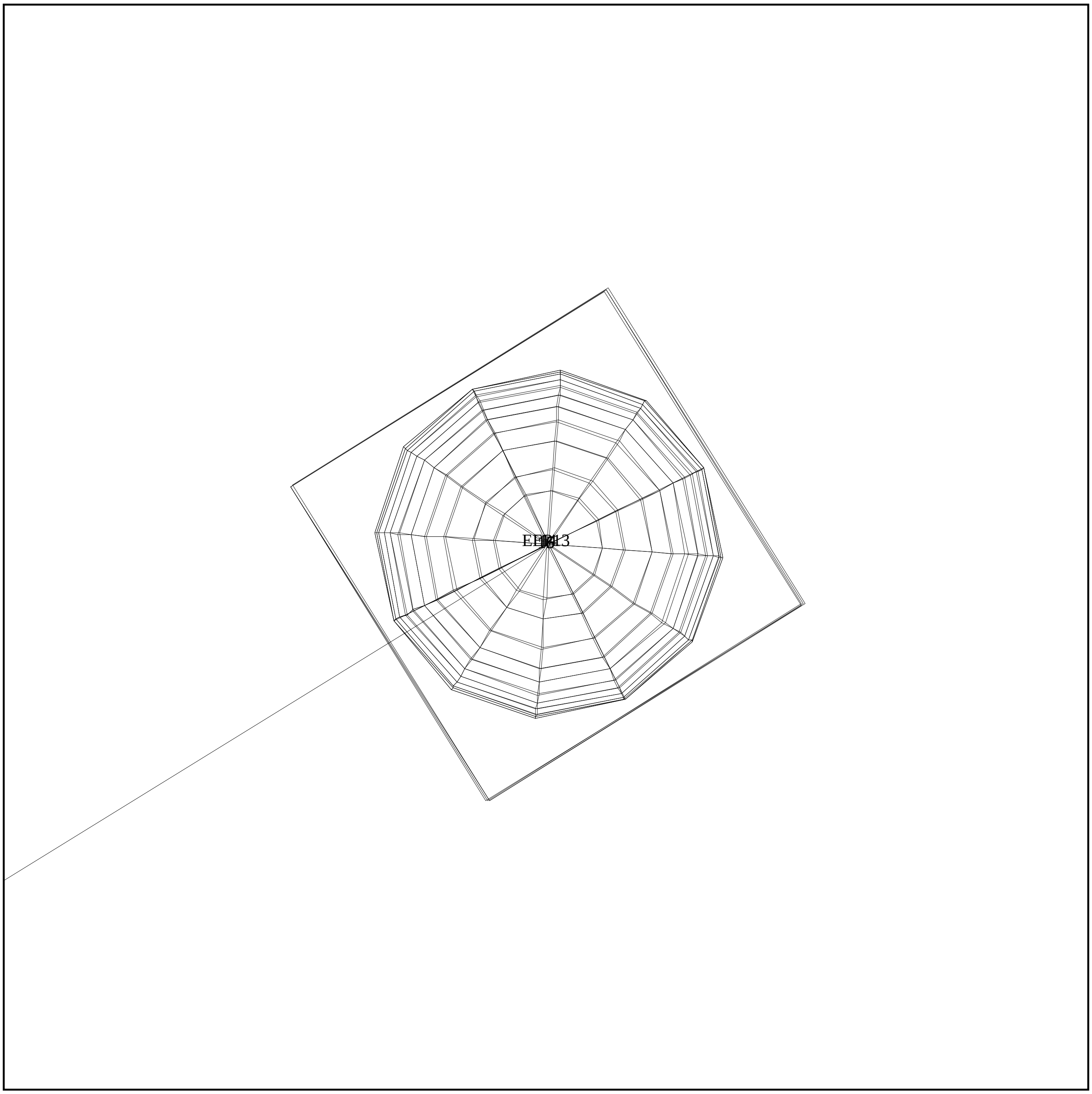
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPSLTCRVC03

POINTER C4.1Wsusan: 9/23/1991 14:58:53

FILE:P.GAPSLTCRVC03

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVC03

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 267:00:0

ACTIVITY:GAPSLTCRVC03 **DESCRIP:4-FILTER LIGHTCURVE**

Gaspra Distant Light Curve		ACTIVITY ID:	GAPSLTCRVC03*
		START TIME:	91-302/18:24:14

Activity ID: Orbit GA Target P Inst S OAPEL LTCRVC SeqNo 03 Multi *

Title	Gaspra Distant Light Curve			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000252:00:0	91-302/18:24:14	GCA-000/04:14:48
End	GCA-CDS 00000249:00:0	91-302/18:27:16	GCA-000/04:11:46
Duration	00000003:00:0	000/00:03:02	000/00:03:02

Top Label GAPSLTCRVC03*
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	128	Report Options		Real Time Activity	No

Observation Objective

This observation is part of SSI's final rotation Gaspra 'movie' and lightcurve Each segment of the total lightcurve covers 30 degrees of rotation of Gaspra. Every third segment is through four filters to give data on the color of Gaspra. The remaining segments are through a single filter.

Design Detail

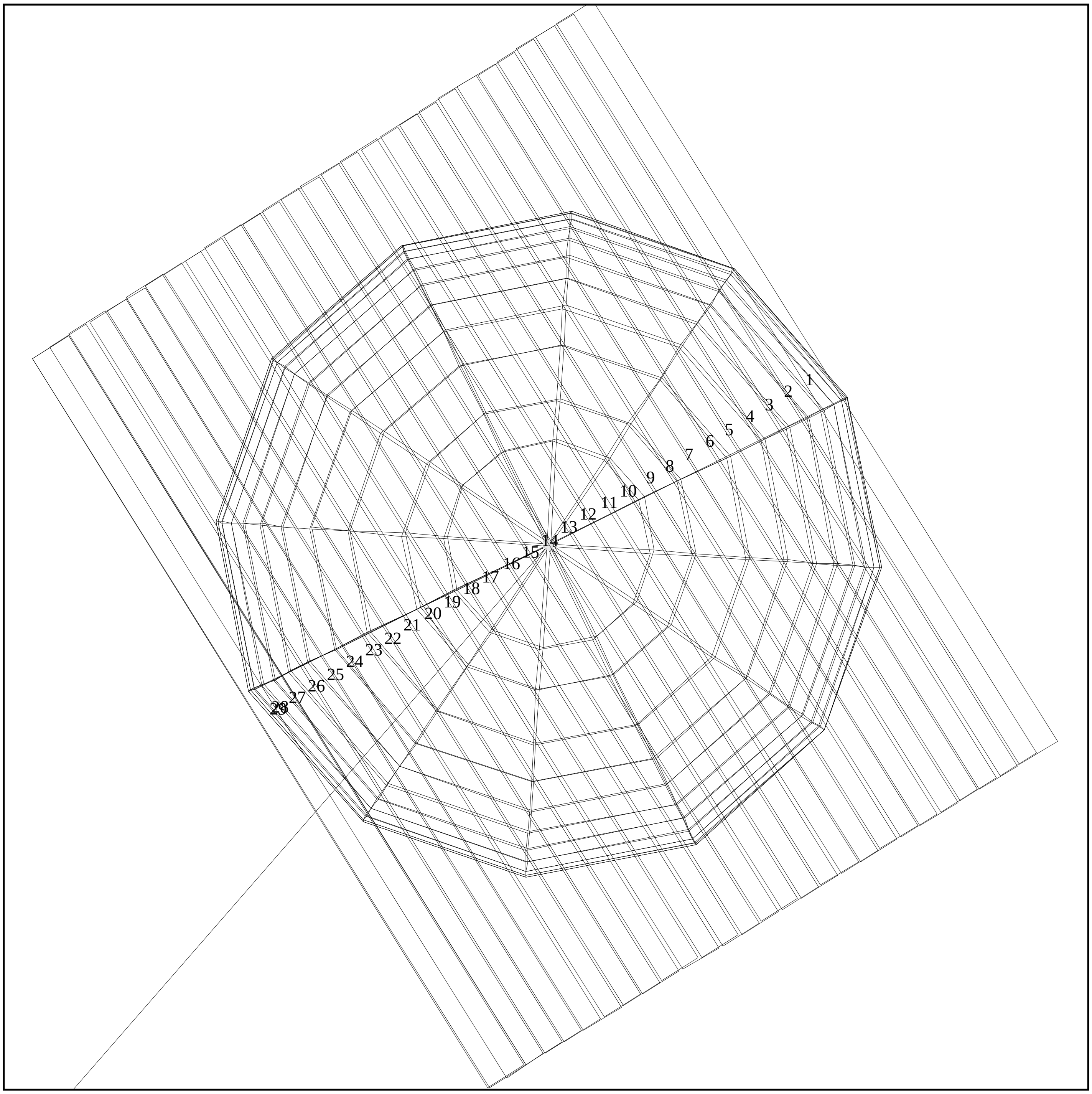
Alias

NIMS will ride-along behind SSI in various modes.
Here, NIMS is in Fixed Map mode

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, HCM

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPEC03

POINTER C4.1Wsusan: 9/23/1991 15: 8:51

FILE:P.GAPNGASPEC03

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPEC03

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 263:00:0

ACTIVITY:GAPNGASPEC03 **DESCRIP:3RD NIMS 204 WVLNGTH LM NYQ**

Gaspra Highest Spectral Resolution Map ACTIVITY ID: GAPNGASPEC03-
START TIME: 91-302/18:11:05

Activity ID: Orbit GA Target P Inst N OAPEL GASPEC SeqNo 03 Multi -

Title Gaspra Highest Spectral Resolution Map Instrument NIMS

Requestor C. Byrnes Team NIMS Working Group AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000263:00:0	91-302/18:11:05	GCA-000/04:25:55
End	GCA-CDS	00000258:78:0	91-302/18:15:16	GCA-000/04:21:44
Duration		00000004:13:0	000/00:04:11	000/00:04:11

Top Label GAPNGASPEC03-
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 181 Report Options Real Time Activity No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

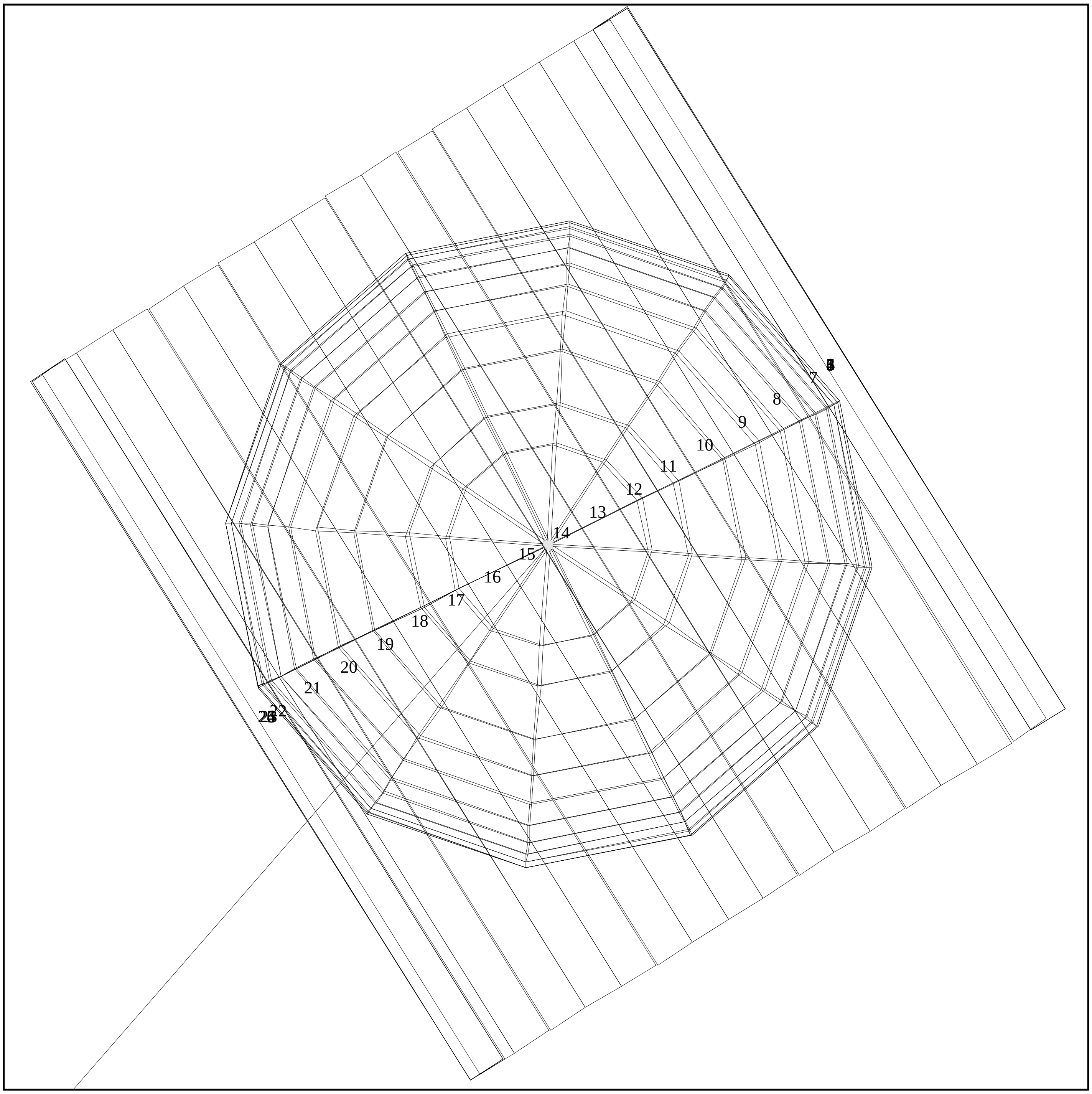
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Full Map mode at Long Map Nyquist sampling rate (0.03 mrad/sec). This is one of five Full Map observations in the Gaspra Far Encounter, the fifth of which verifies the observation in Full Map mode of the first quadrant.

Full Map (FM), Gain 4, Grating Start 0, Chopper 63Hz, MPW

10/08/91
Last Changed 05/03/95 Changed By FEL 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER07

POINTER C4.1Wsusan: 9/23/1991 15:11:34

FILE:P.GAPNGASPER07

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER07

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 249:00:0

ACTIVITY:GAPNGASPER07 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam	ACTIVITY ID:	GAPNGASPER07-
	START TIME:	91-302/18:25:14

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 07 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000249:00:0	91-302/18:25:14	GCA-000/04:11:46
End	GCA-CDS	00000424:63:0	91-302/18:25:33	GCA-000/04:11:27
Duration		00000000:28:0	000/00:00:19	000/00:00:19

Top Label GAPNGASPER07-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

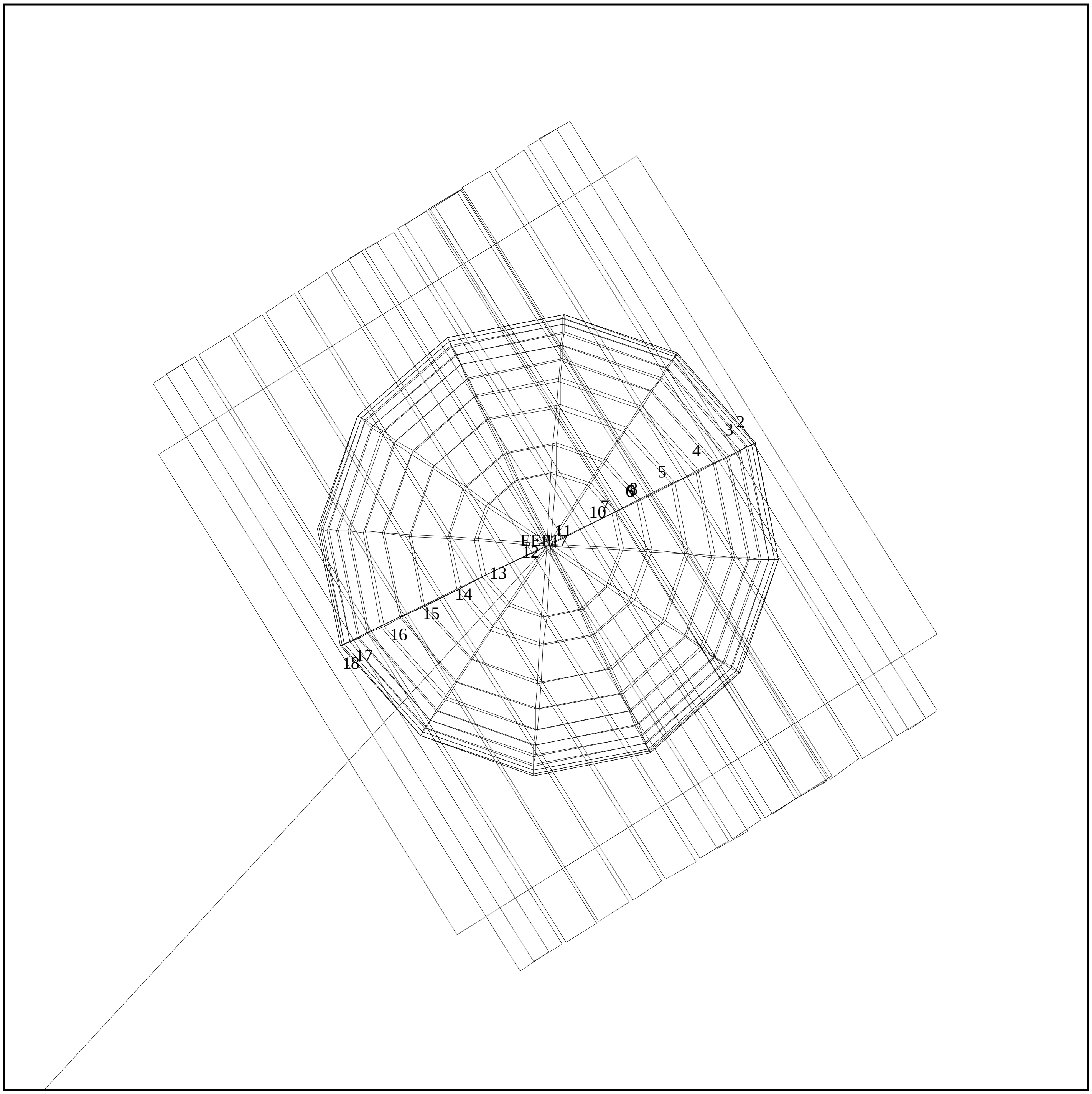
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASCUR05

POINTER C4.1Wsusan: 9/23/1991 15:17:20

FILE:P.GAPSLTCRVB05

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB05

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 232:00:0

ACTIVITY:GAPSLTCRVB05 **DESCRIP:SSI LTCRVB05/NIMS GASCUR05**

Gaspra Spectral Light Curve	ACTIVITY ID:	GAPNGASCUR05+
	START TIME:	91-302/18:42:26

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 05 Multi +

Title	Gaspra Spectral Light Curve	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000232:00:0	91-302/18:42:26	GCA-000/03:54:34
End	GCA-CDS 00000230:59:0	91-302/18:25:33	GCA-000/03:53:12
Duration	00000001:32:0	000/00:01:22	000/00:01:22

Top Label GAPNGASCUR05+
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra's rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB05

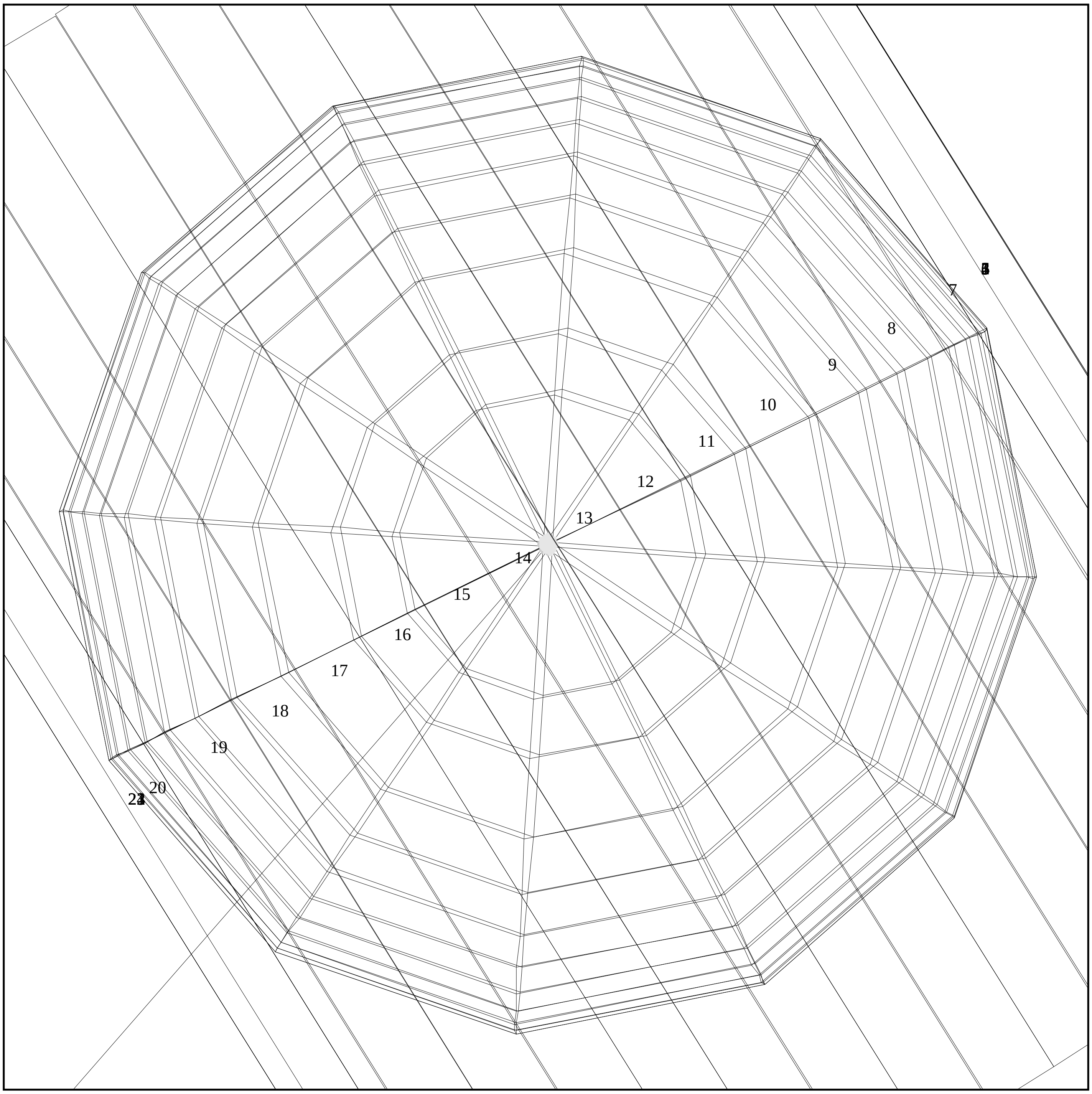
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

				10/08/91
Last Changed	05/03/95	Changed By	FEL	13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER08

POINTER C4.1Wsusan: 9/23/1991 15:20:31

FILE:P.GAPNGASPER08

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER08

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 214:00:0

ACTIVITY:GAPNGASPER08 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam   ACTIVITY ID: GAPNGASPER08-
START TIME: 91-302/19:00:38

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 08 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS   Load ID EE3   Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000214:00:0	91-302/19:00:38	GCA-000/03:36:22
End	GCA-CDS 00000213:63:0	91-302/19:00:56	GCA-000/03:36:04
Duration	00000000:28:0	000/00:00:18	000/00:00:18

Top Label GAPNGASPER08-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

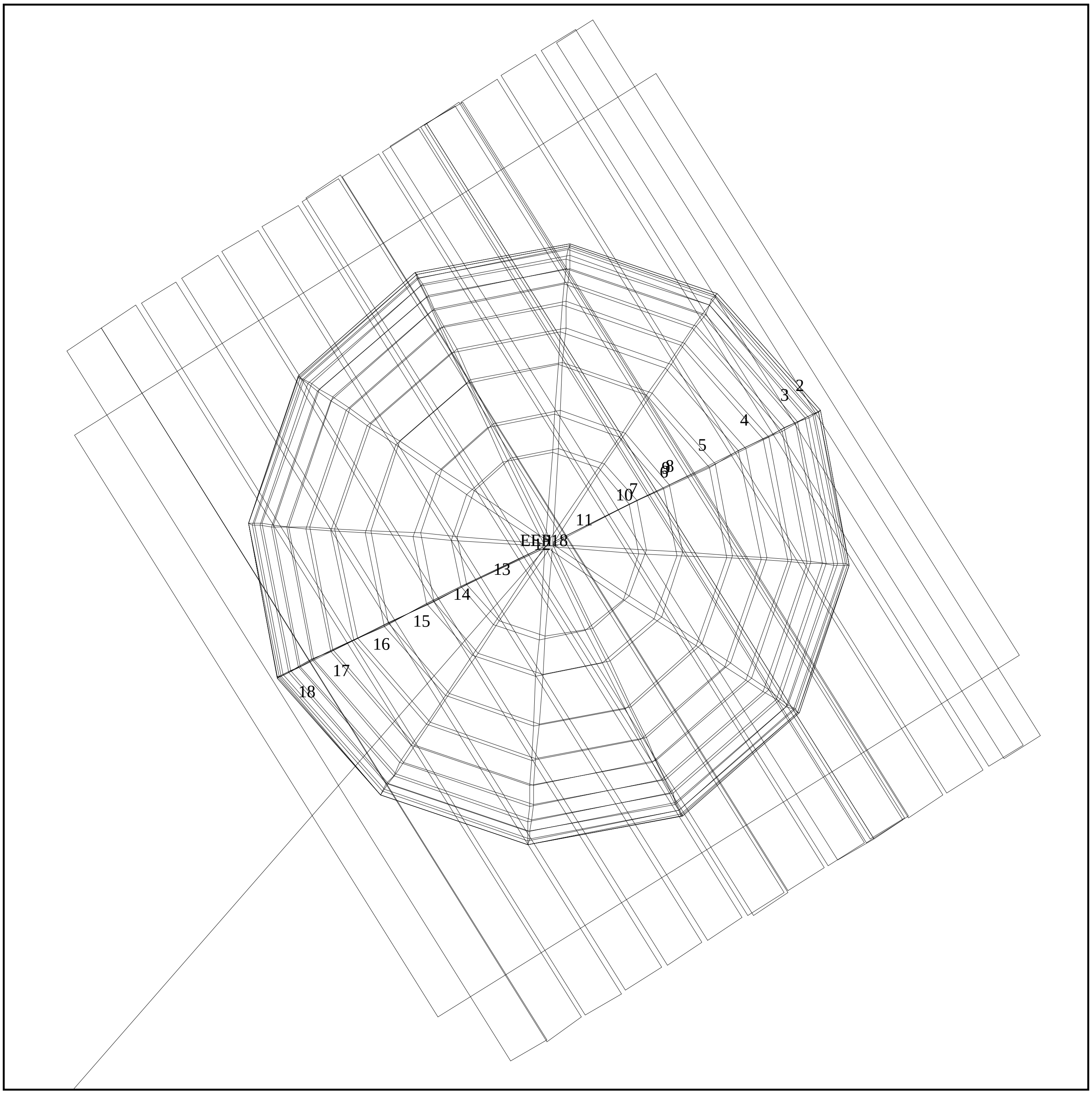
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

10/08/91
Last Changed 05/03/95 Changed By FEL 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASCUR06

POINTER C4.1Wsusan: 9/23/1991 15:25:31

FILE:P.GAPSLTCRVB06

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB06

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 197:00:0

ACTIVITY:GAPSLTCRVB06 **DESCRIP:SSI LTCRVB06/NIMS GASCUR06**

Gaspra Spectral Light Curve	ACTIVITY ID: GAPNGASCUR06+ START TIME: 91-302/19:17:49

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 06 Multi +

Title	Gaspra Spectral Light Curve	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000197:00:0	91-302/19:17:49	GCA-000/03:19:11
End	GCA-CDS	00000195:77:0	91-302/19:18:59	GCA-000/03:18:01
Duration		00000001:14:0	000/00:01:10	000/00:01:10

Top Label GAPNGASCUR06+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	181	Report Options	Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra’s rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB06

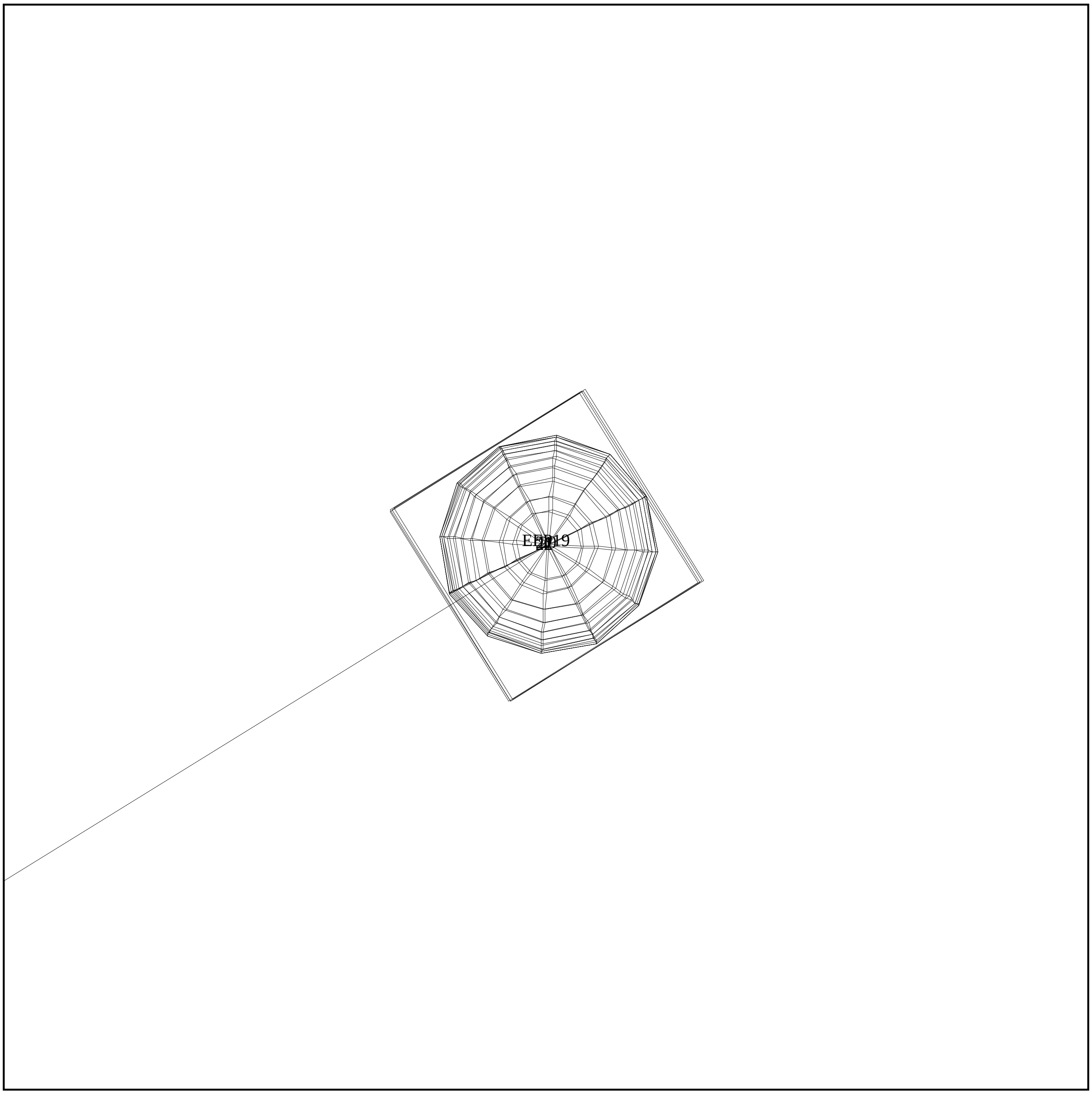
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

Last Changed 05/03/95	Changed By FEL	10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPSLTCRVC04

POINTER C4.1Wsusan: 9/25/1991 8:13: 5

FILE:P.GAPSLTCRVC04

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVC04

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 162:00:0

ACTIVITY:GAPSLTCRVC04 **DESCRIP:4-FILTER LIGHTCURVE**

Gaspra Distant Light Curve	ACTIVITY ID: GAPSLTCRVC04* START TIME: 91-302/20:13:26

Activity ID: Orbit GA Target P Inst S OAPEL LTCRVC SeqNo 04 Multi *

Title	Gaspra Distant Light Curve			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID EE3	Calendar Date	10/29/91	Week 44

Start	GCA-CDS	00000144:00:0	91-302/20:13:26	GCA-000/02:25:36
End	GCA-CDS	00000141:00:0	91-302/20:16:28	GCA-000/02:22:34
Duration		00000003:00:0	000/00:03:02	000/00:03:02

Top Label	GAPSLTCRVC04*
Bottom Label	

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	128	Report Options	Real Time Activity	No

Observation Objective

This observation is part of SSI's final rotation Gaspra 'movie' and lightcurve Each segment of the total lightcurve covers 30 degrees of rotation of Gaspra. Every third segment is through four filters to give data on the color of Gaspra. The remaining segments are through a single filter.

Design Detail

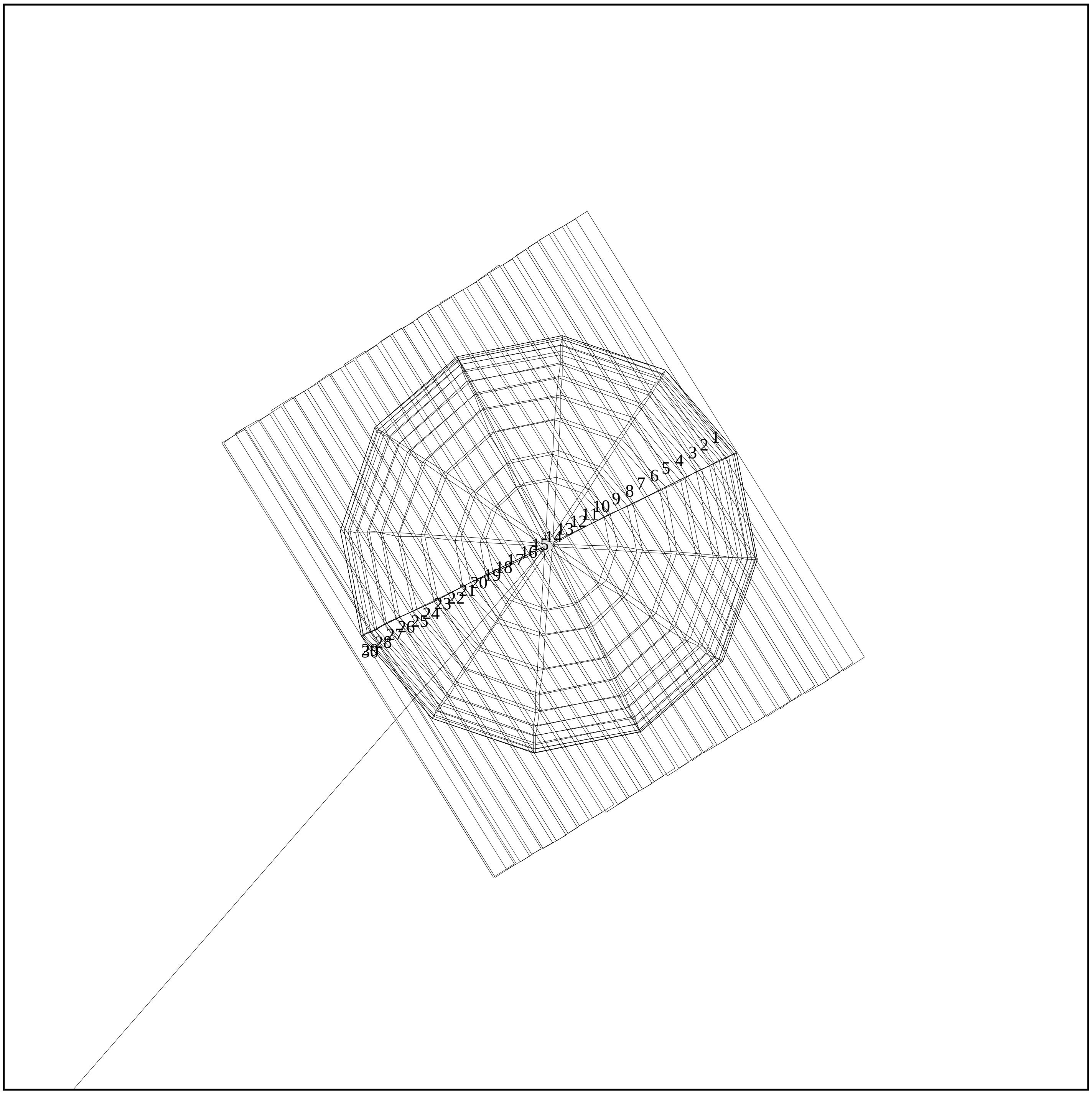
Alias

NIMS will ride-along behind SSI in various modes.
Here, NIMS is in Short Map mode

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM

Last Changed	05/03/95	Changed By	FEL	10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPEC04

POINTER C4.1Wsusan: 9/25/1991 8:14:41

FILE:P.GAPNGASPEC04

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPEC04

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 158:00:0

ACTIVITY:GAPNGASPEC04 **DESCRIP:4TH NIMS 204 WVLGTHS LM NYQ RATE**

Gaspra Highest Spectral Resolution Map		ACTIVITY ID:	GAPNGASPEC04-
		START TIME:	91-302/19:57:15

Activity ID: Orbit GA Target P Inst N OAPEL GASPEC SeqNo 04 Multi -

Title	Gaspra Highest Spectral Resolution Map			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000158:00:0	91-302/19:57:15	GCA-000/02:39:45
End	GCA-CDS 00000153:61:0	91-302/20:01:38	GCA-000/02:35:22
Duration	00000004:30:0	000/00:04:23	000/00:04:23

Top Label GAPNGASPEC04-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

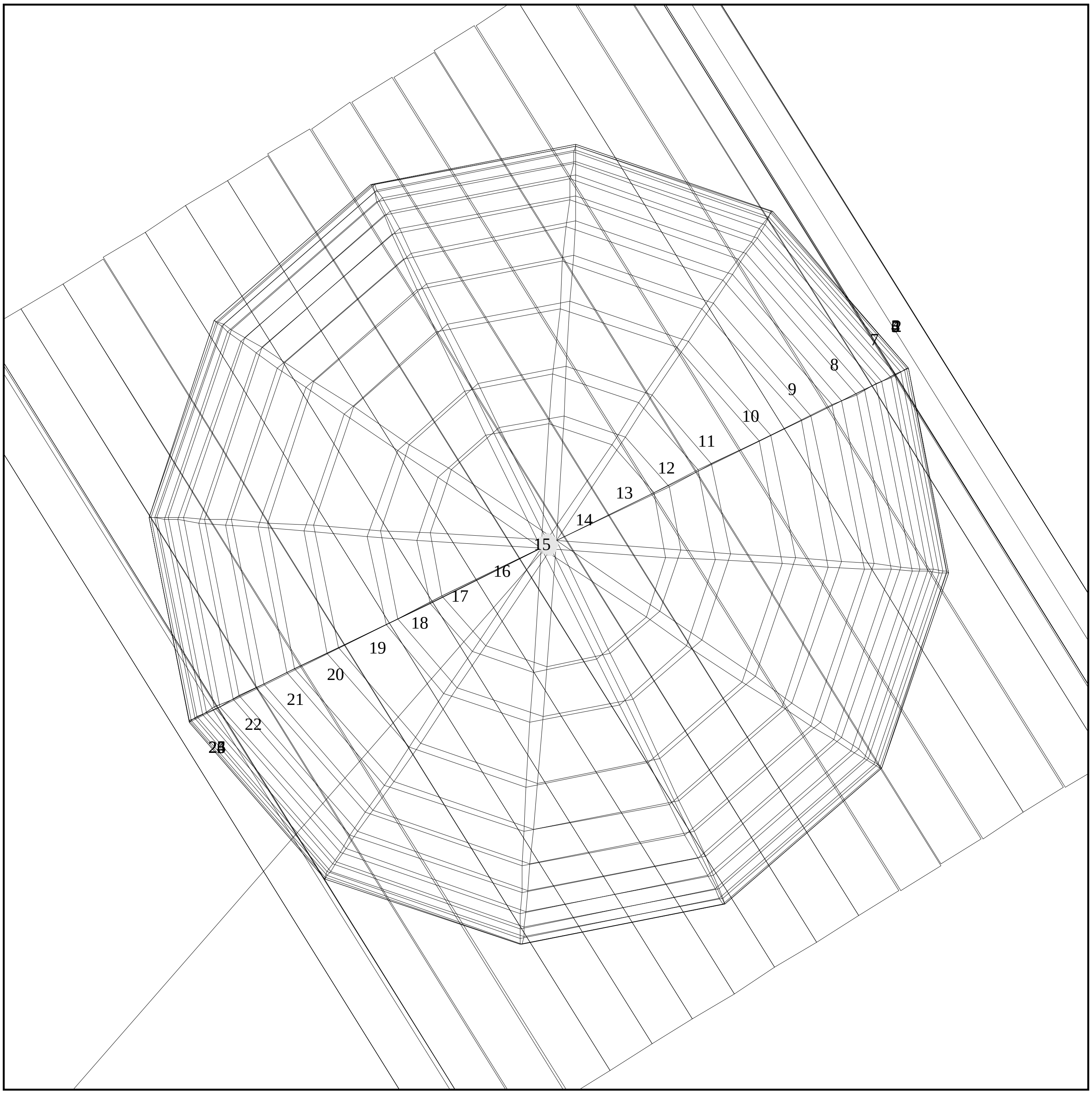
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Full Map mode at Long Map Nyquist sampling rate (0.03 mrad/sec). This is one of five Full Map observations in the Gaspra Far Encounter, the fifth of which verifies the observation in Full Map mode of the first quadrant.

Full Map (FM), Gain 4, Grating Start 0, Chopper 63Hz, MPW

				10/08/91
Last Changed	05/03/95	Changed By	FEL	13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER10

POINTER C4.1Wsusan: 9/25/1991 9: 8:36

FILE:P.GAPNGASPER10

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER10

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 144:00:0

ACTIVITY:GAPNGASPER10 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam ACTIVITY ID: GAPNGASPER10-
START TIME: 91-302/20:11:24

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 10 Multi -

Title Gaspra 15 Degree Periodic Rotation Sam Instrument NIMS

Requestor C. Byrnes Team NIMS Working Group AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000144:00:0	91-302/20:11:24	GCA-000/02:25:36
End	GCA-CDS	00000143:59:0	91-302/20:11:46	GCA-000/02:25:14
Duration		00000000:32:0	000/00:00:22	000/00:00:22

Top Label GAPNGASPER10-
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 181 Report Options Real Time Activity No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

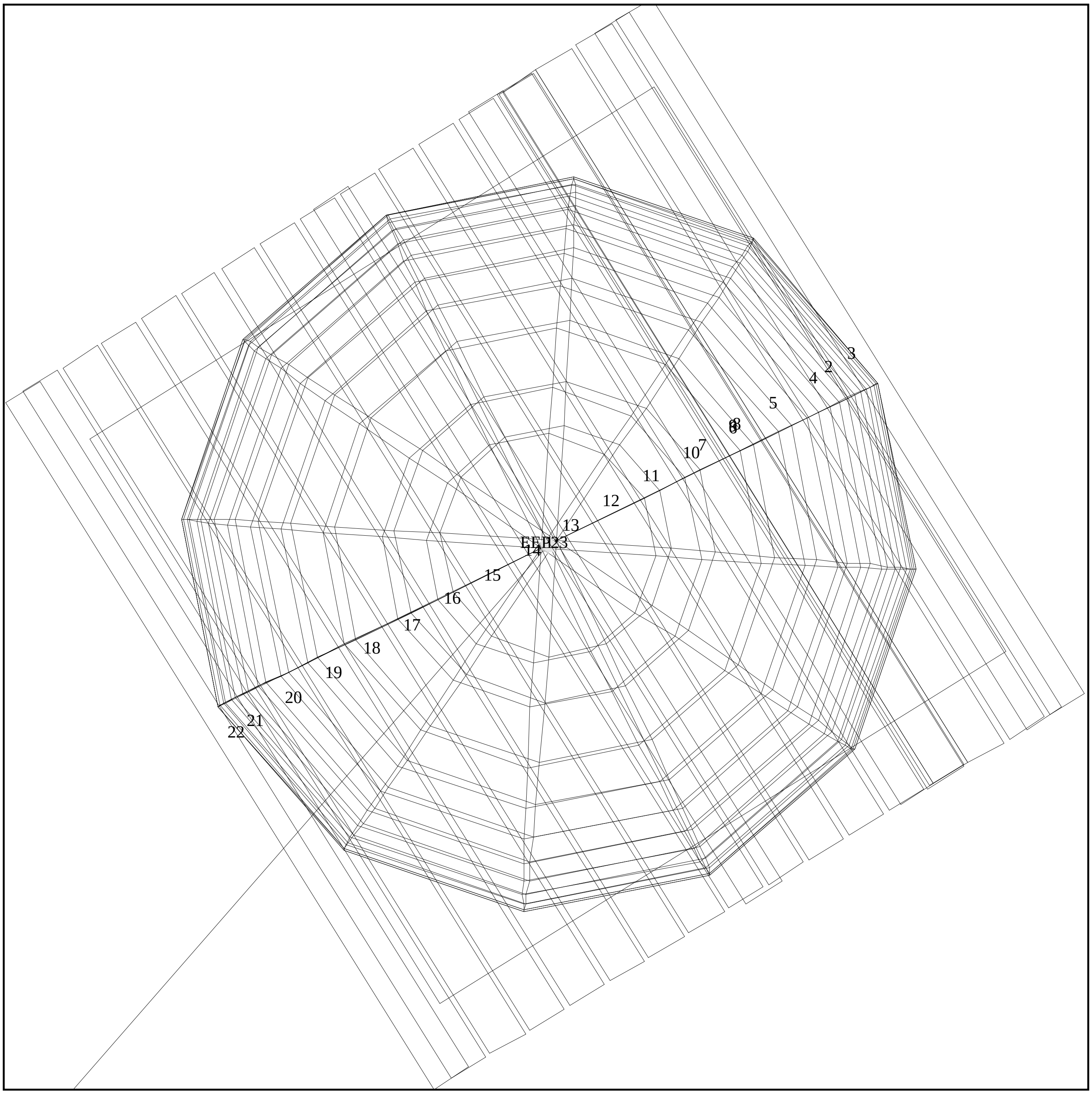
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASCUR07

POINTER C4.1Wsusan: 9/25/1991 9:10:38

FILE:P.GAPSLTCRVB07

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB07

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 127:00:0

ACTIVITY:GAPSLTCRVB07 **DESCRIP:SSI LTCRV07/NIMS GASCUR07**

Gaspra Spectral Light Curve — ACTIVITY ID: GAPNGASCUR07+ — START TIME: 91-302/20:28:36

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 07 Multi +

Title	Gaspra Spectral Light Curve	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000127:00:0	91-302/20:28:36	GCA-000/02:08:24
End	GCA-CDS	00000126:28:0	91-302/20:29:18	GCA-000/02:07:42
Duration		00000000:63:0	000/00:00:42	000/00:00:42

Top Label GAPNGASCUR07+
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	181	Report Options	Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra's rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB07

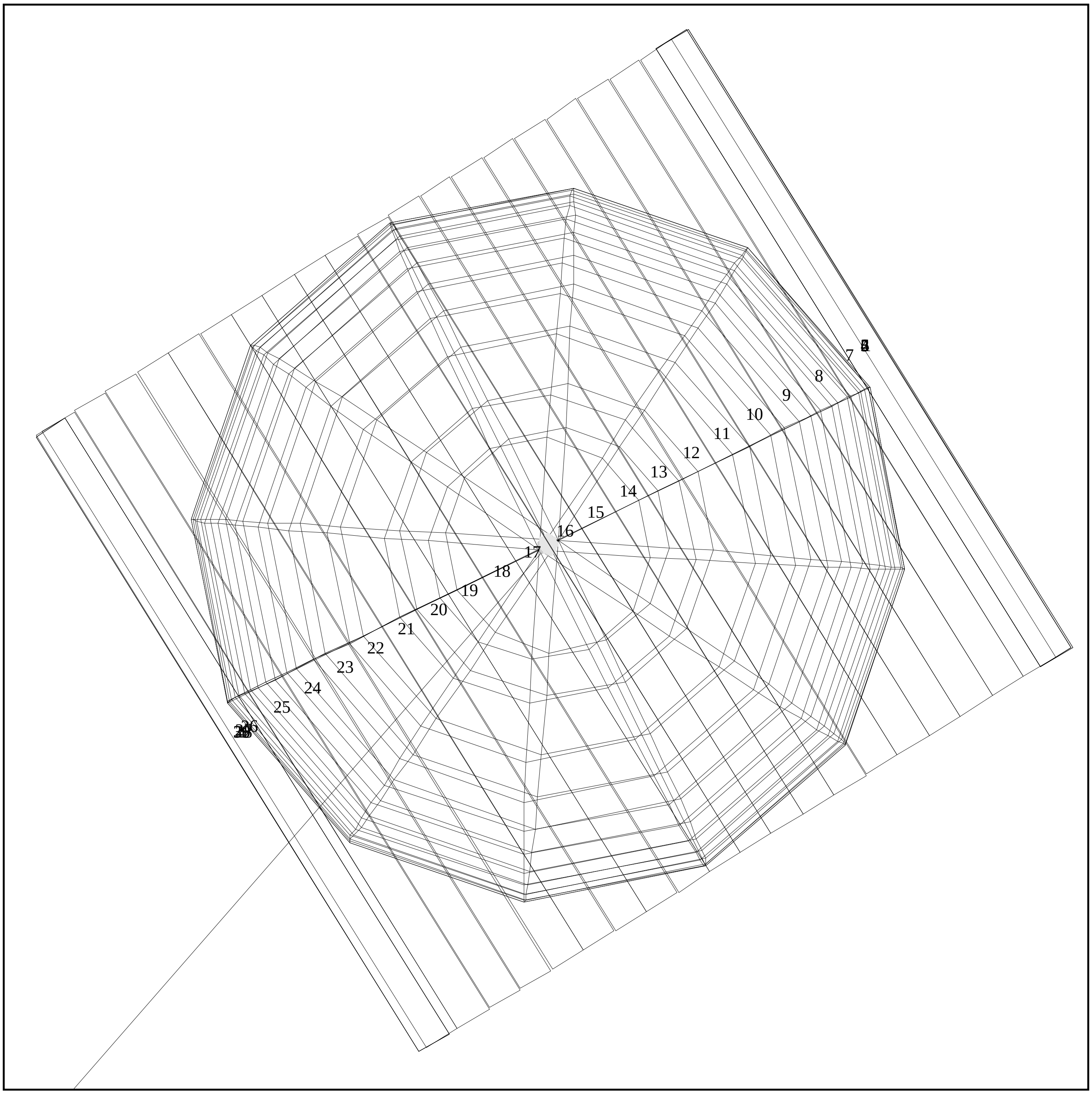
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 4, Grating Start 2, Chopper 63Hz, HCM,MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER11

POINTER C4.1Wsusan: 9/25/1991 9:12:30

FILE:P.GAPNGASPER11

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER11

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 109:00:0

ACTIVITY:GAPNGASPER11 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam   ACTIVITY ID: GAPNGASPER11-
START TIME: 91-302/20:46:48

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 11 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes Team NIMS	Working Group	AWG

Time System CDS   Load ID EE3   Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000109:00:0	91-302/20:46:48	GCA-000/01:50:12
End	GCA-CDS 00000108:61:0	91-302/20:47:08	GCA-000/01:49:52
Duration	00000000:30:0	000/00:00:20	000/00:00:20

Top Label GAPNGASPER11-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

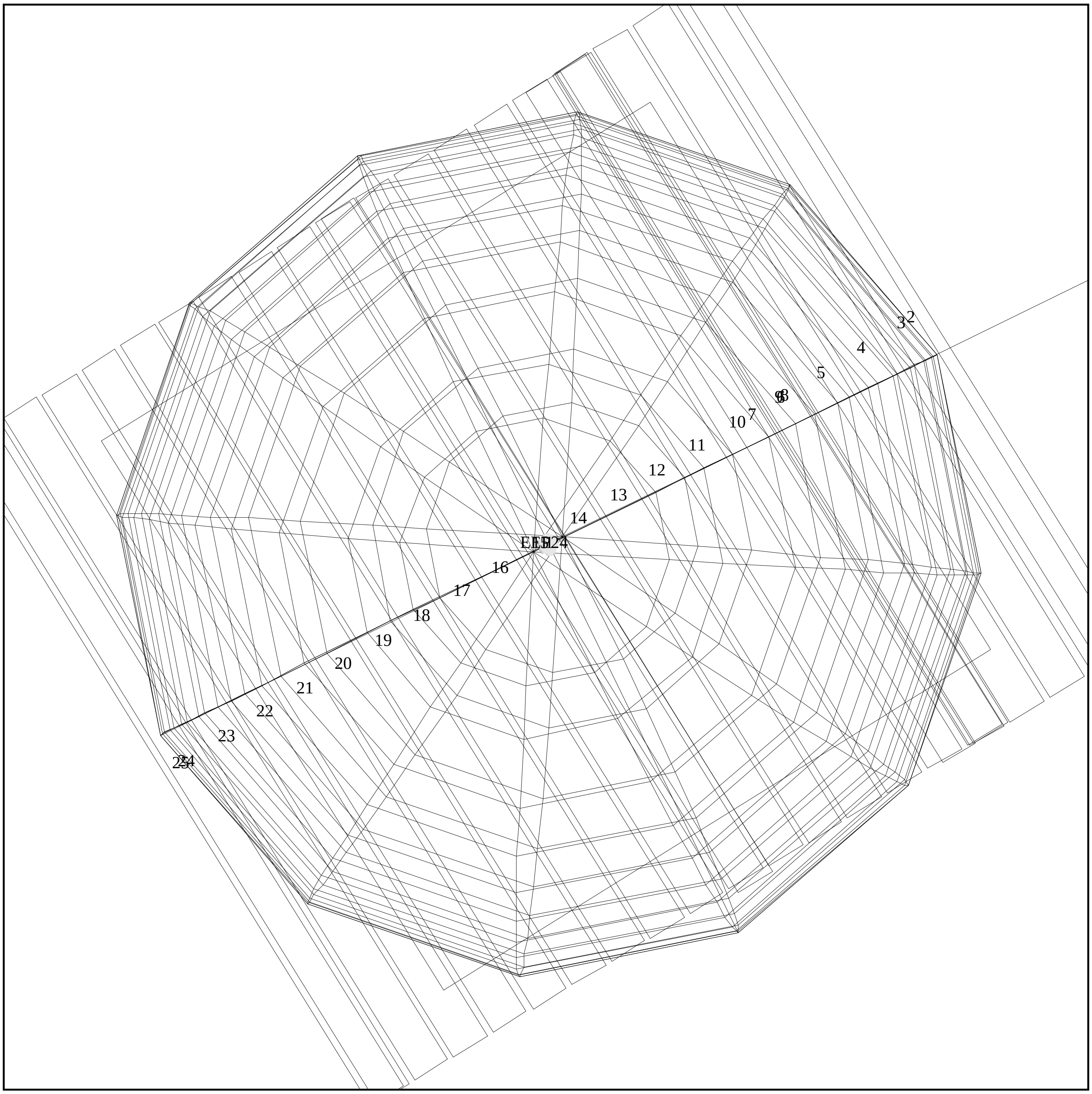
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 4, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95   Changed By FEL   10/08/91 13:58:04

Galileo Activity Plan Form   rev 5/95



GAPNGASCUR08

POINTER C4.1Wsusan: 9/25/1991 9:29:35

FILE:P.GAPSLTCRVB08

CENTRAL BODY:PLUTO

MINI:m.GAPSLTCRVB08

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 92:00:0

ACTIVITY:GAPSLTCRVB08 **DESCRIP:SSI LTCRVB08/NIMS GASCUR08**

Gaspra Spectral Light Curve		ACTIVITY ID:	GAPNGASCUR08+
		START TIME:	91-302/21:03:59

Activity ID: Orbit GA Target P Inst N OAPEL GASCUR SeqNo 08 Multi +

Title	Gaspra Spectral Light Curve		Instrument	NIMS
Requestor	C. Byrnes	Team NIMS	Working Group	AWG

Time System	CDS	Load ID EE3	Calendar Date	10/29/91	Week 44

Start	GCA-CDS	00000092:00:0	91-302/21:03:59	GCA-000/01:33:01
End	GCA-CDS	00000090:08:0	91-302/21:05:55	GCA-000/01:31:05
Duration		00000001:83:0	000/00:01:56	000/00:01:56

Top Label	GAPNGASCUR08+
Bottom Label	

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will observe the spectral light curve of Gaspra periodically throughout a full rotation of Gaspra (7.04 hours). This observation, combined with others, give 15 degree samples of Gaspra's rotation. Rotationally resolved data will aid in determining the nature of spectral differences on the surface of Gaspra, an asteroid suspected to have originated from a differentiated parent body.

Design Detail

Alias GAPSLTCRVB08

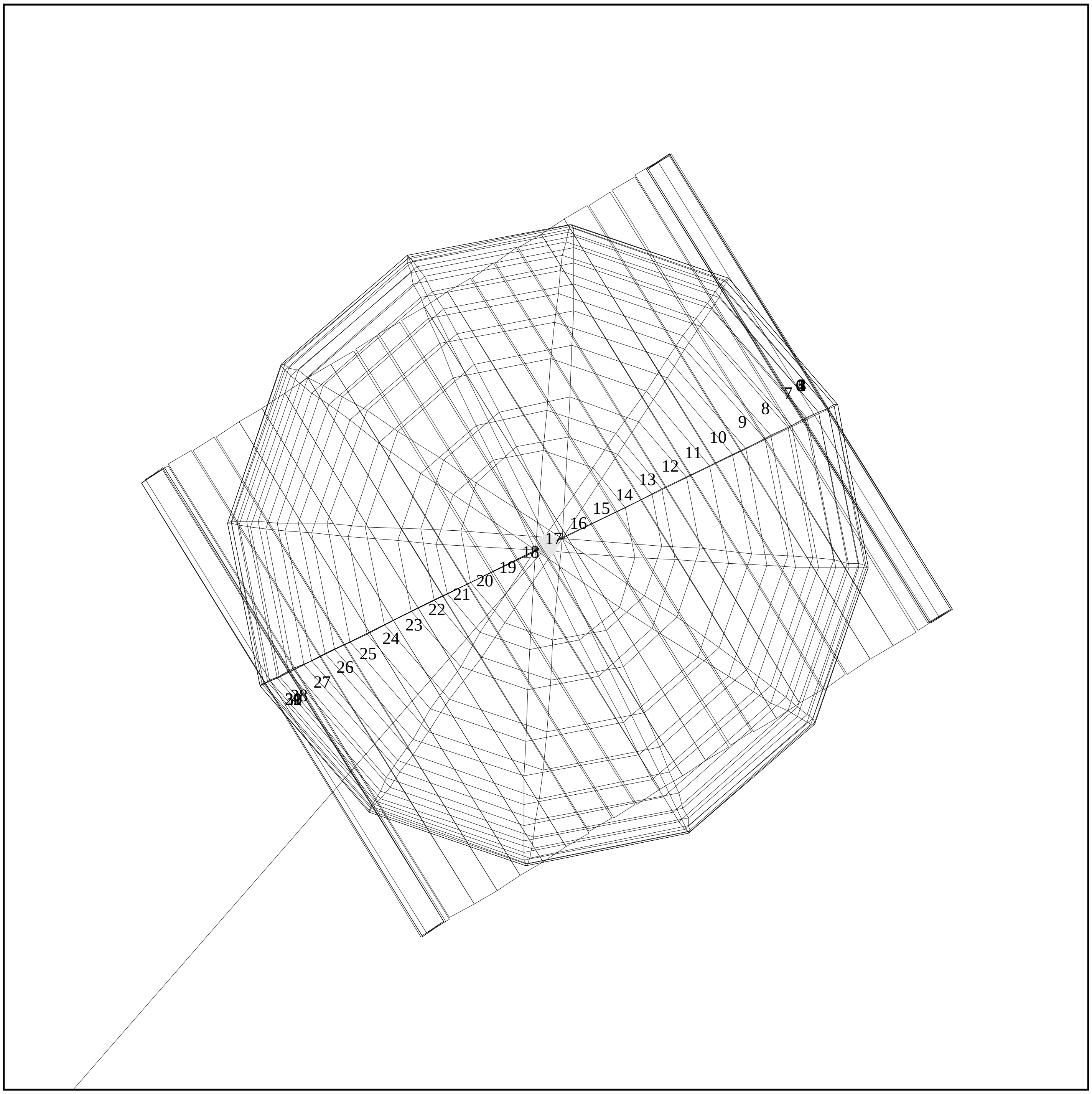
SSI will cover the error ellipse in 4 colors every 90 degrees (before

the SSI readout time (26.667 sec) to scan as much as is possible, repositions -0.5 mrad while the recorder winds down from SSI rates and up to NIMS rates, then finishes the single swath.

Short Map (SM), Gain 3, Grating Start 2, Chopper 63Hz, HCM,MPW

				10/08/91
Last Changed	05/03/95	Changed By	FEL	13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPER12

POINTER C4.1Wsusan: 9/25/1991 9:31:52

FILE:P.GAPNGASPER12

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPER12

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 80:00:0

ACTIVITY:GAPNGASPER12 **DESCRIP:NIMS 17 WVLNGTH NYQ RATE**

Gaspra 15 Degree Periodic Rotation Sam	ACTIVITY ID:	GAPNGASPER12-
	START TIME:	91-302/21:16:07

Activity ID: Orbit GA Target P Inst N OAPEL GASPER SeqNo 12 Multi -

Title	Gaspra 15 Degree Periodic Rotation Sam	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000080:00:0	91-302/21:16:07	GCA-000/01:20:53
End	GCA-CDS 00000079:65:0	91-302/21:16:24	GCA-000/01:20:36
Duration	00000000:26:0	000/00:00:17	000/00:00:17

Top Label GAPNGASPER12-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

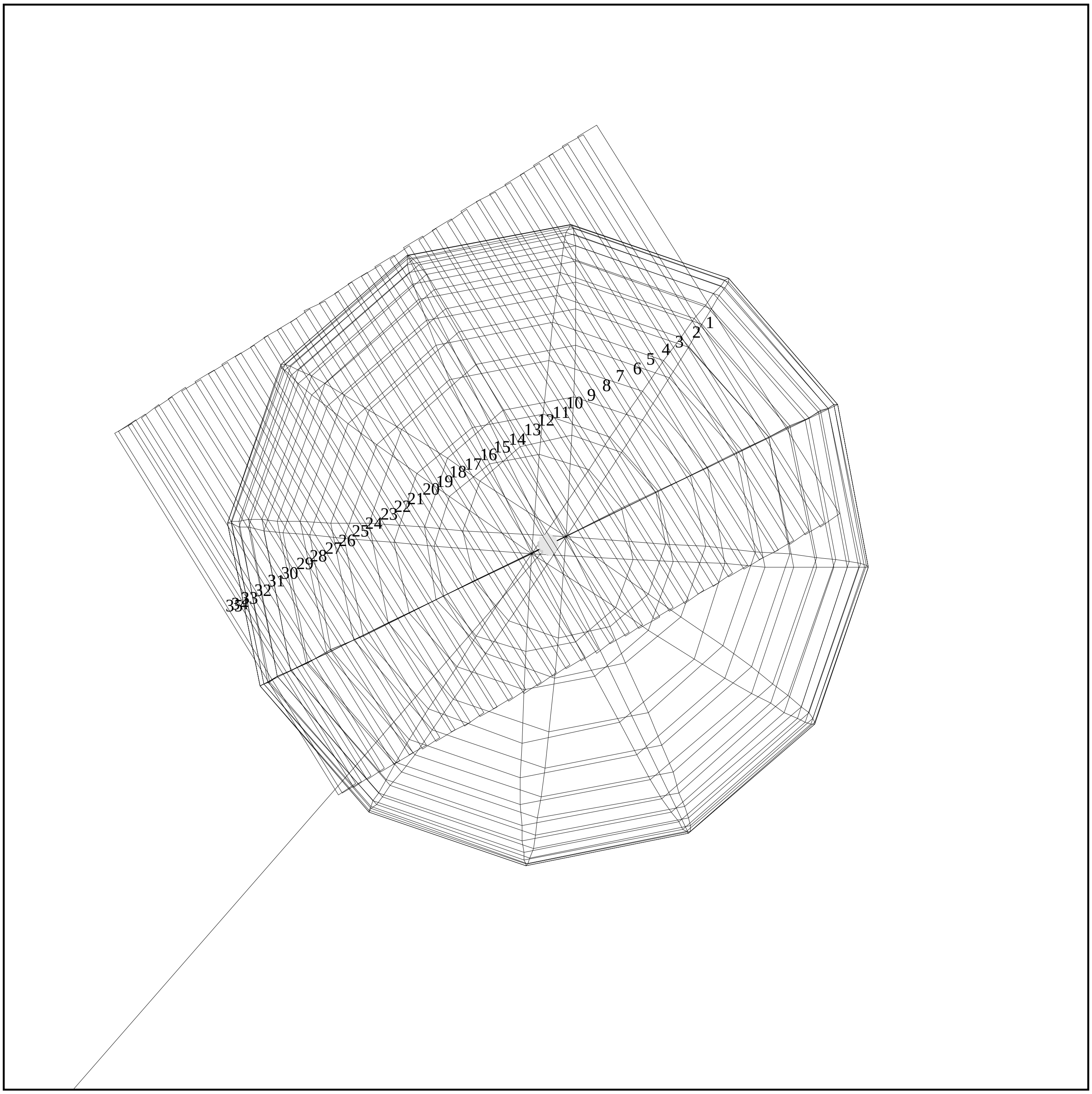
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Fixed Map mode at Nyquist sampling rate (0.75 mrad/sec). This is one of 11 Fixed Map observations in the Gaspra Far Encounter, The Fixed Map observation planned for GEE-CDS 179:00:0 is missing due to negotiations with UVS.

Fixed Map (XM), Gain 3, Grating Start 6, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPEC05

POINTER C4.1Wsusan: 9/25/1991 9:34:24

FILE:P.GAPNGASPEC05

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPEC05

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 64:00:0

ACTIVITY:GAPNGASPEC05 **DESCRIP:NIMS 204 WVLGTHS@LM NYQUIST RATE**

Gaspra Highest Spectral Resolution Map	ACTIVITY ID: GAPNGASPEC05- START TIME: 91-302/21:32:18

Activity ID: Orbit GA Target P Inst N OAPEL GASPEC SeqNo 05 Multi -

Title	Gaspra Highest Spectral Resolution Map			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000064:00:0	91-302/21:32:18	GCA-000/01:04:42
End	GCA-CDS	00000058:89:0	91-302/21:37:22	GCA-000/00:59:38
Duration		00000005:02:0	000/00:05:04	000/00:05:04

Top Label GAPNGASPEC05-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

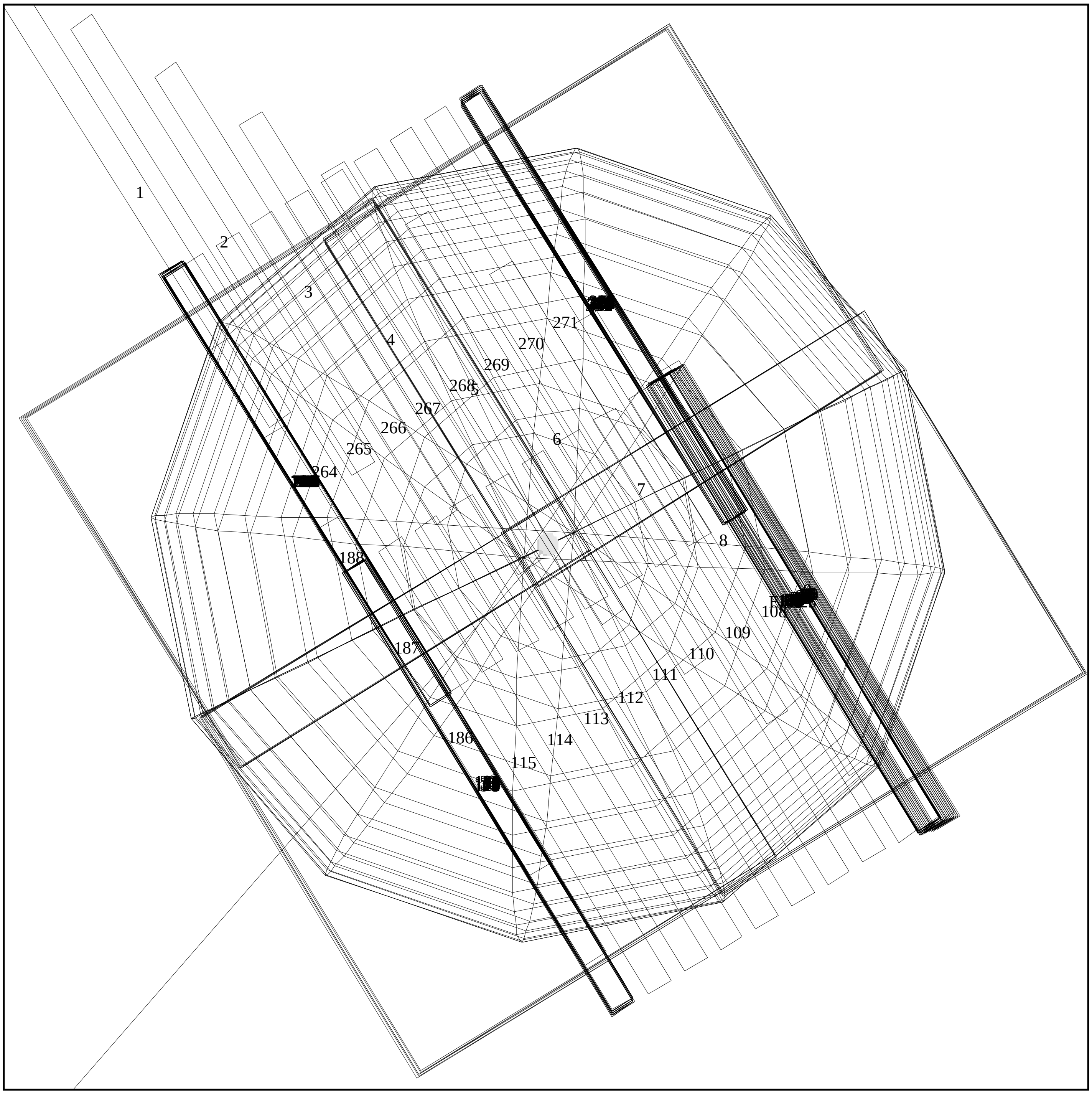
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Full Map mode at Long Map Nyquist sampling rate (0.03 mrad/sec). This is one of five Full Map observations in the Gaspra Far Encounter, the fifth of which verifies the observation in Full Map mode of the first quadrant.

Full Map (FM), Gain 1, Grating Start 0, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASVIS01

POINTER C4.1Wsusan: 9/25/1991 9:50:30

FILE:P.GAPS6FILTR01

CENTRAL BODY:PLUTO

MINI:m.GAPS6FILTR01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 58:00:0

ACTIVITY:GAPS6FILTR01 **DESCRIP:6-FILT 2X2 MOS**

Gaspra Lower Phase Vista		ACTIVITY ID:	GAPNGASVIS01*
		START TIME:	91-302/21:38:22

Activity ID: Orbit GA Target P Inst N OAPEL GASVIS SeqNo 01 Multi *

Title	Gaspra Lower Phase Vista			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID EE3	Calendar Date	10/29/91	Week 44

Start	GCA-CDS	00000058:00:0	91-302/21:38:22	GCA-000/00:58:38
End	GCA-CDS	00000054:52:0	91-302/21:41:50	GCA-000/00:55:10
Duration		00000003:39:0	000/00:03:28	000/00:03:28

Top Label	GAPNGASVIS01*
Bottom Label	

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	89	Report Options		Real Time Activity	No

Observation Objective

This observation will be done in two modes. If Gaspra is captured while in the first, Gaspra will be analyzed in 408 wavelengths. If Gaspra is sampled while NIMS is in the second mode, 17 wavelength samples will be made.

Design Detail

Alias GAPS6FILTR01

This observation is a ride-along with a 6 filter, 2x2 SSI mosaic in IM4 (8.667 sec shutter cycle). It will be the first opportunity to use the special sequence capability of the NIMS instrument.

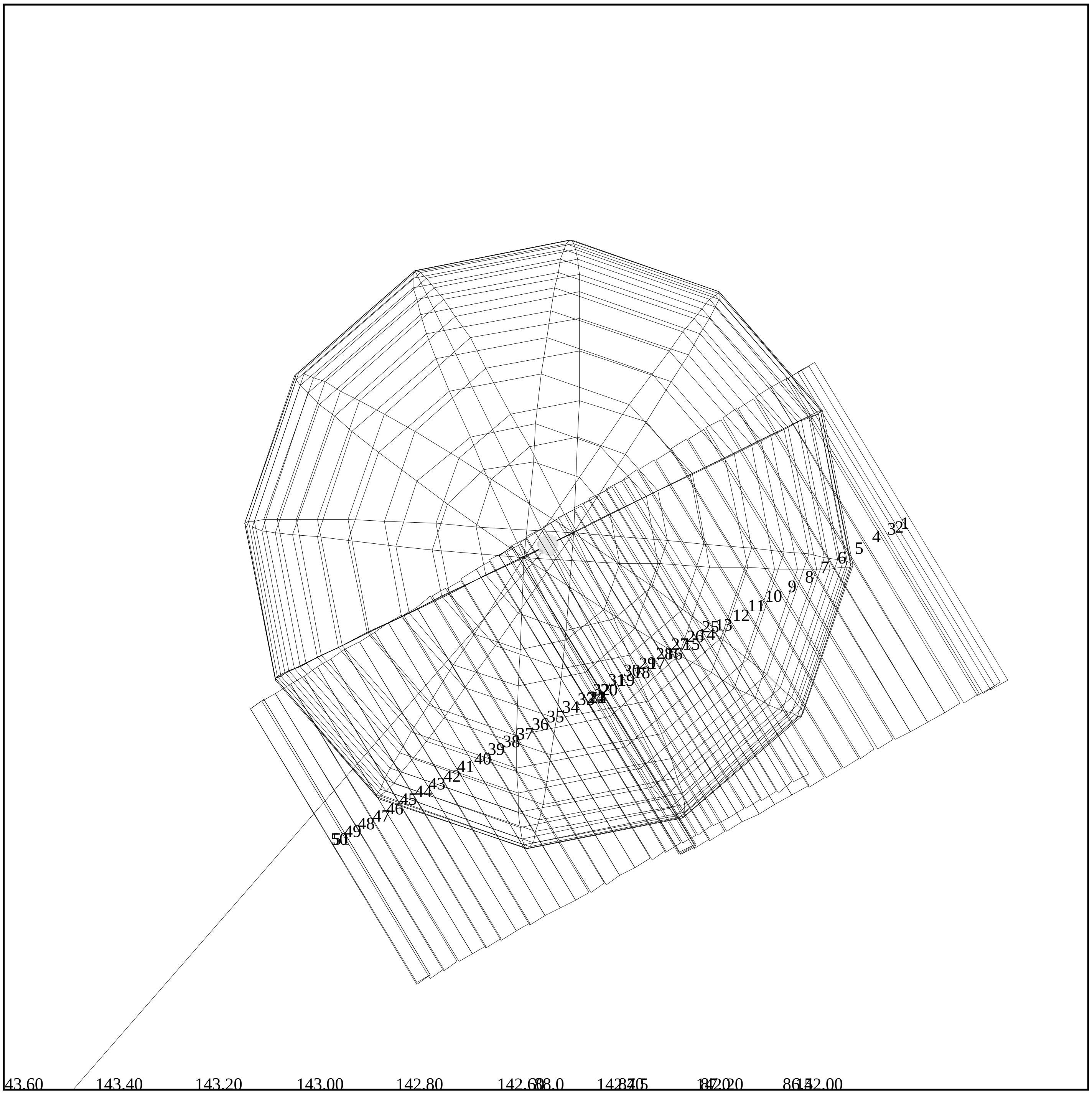
NIMS will be commanded to Long Map mode while SSI shutters with 6 filters, and then will be commanded into Fixed Map mode while the scan platform slews at 1.2 mrad/sec to the next position of the 2x2 mosiac. This NIMS mode is a variation of the NIMS Stop-and-Slide mode.

Special Sequence 12: Stop-and-Slide using Fixed Map and Long Map

Fixed Map (XM), Gain 1, Grating Start 6, Chopper 63Hz, IM4, Repeat 6
Long Map (LM), Gain 1, Grating Start 0, Chopper 63Hz, IM4, Repeat 3

Last Changed	05/03/95	Changed By	FEL	10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASPEC06

POINTER C4.1Wsusan: 9/25/1991 10: 3:18

FILE:P.GAPNGASPEC06

CENTRAL BODY:PLUTO

MINI:m.GAPNGASPEC06

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 52:00:0

ACTIVITY:GAPNGASPEC06 **DESCRIP:NIMS 204 WVLGTHS@LM NYQUIST RATE**

Gaspra Highest Spectral Resolution Map   ACTIVITY ID: GAPNGASPEC06-
START TIME: 91-302/21:44:26

Activity ID: Orbit GA Target P Inst N OAPEL GASPEC SeqNo 06 Multi -

Title	Gaspra Highest Spectral Resolution Map			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS   Load ID EE3   Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000052:00:0	91-302/21:44:26	GCA-000/00:52:34
End	GCA-CDS	00000045:13:0	91-302/21:51:22	GCA-000/00:45:38
Duration		00000006:78:0	000/00:06:56	000/00:06:56

Top Label   GAPNGASPEC06-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	181	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a disk spectral integration of Gaspra which, when combined with other observations, will provide 15 degree rotational samples. Rotationally resolved data will help determine the nature of spectral differences on Gaspra, suspected to have originated from a differentiated parent body.

Design Detail

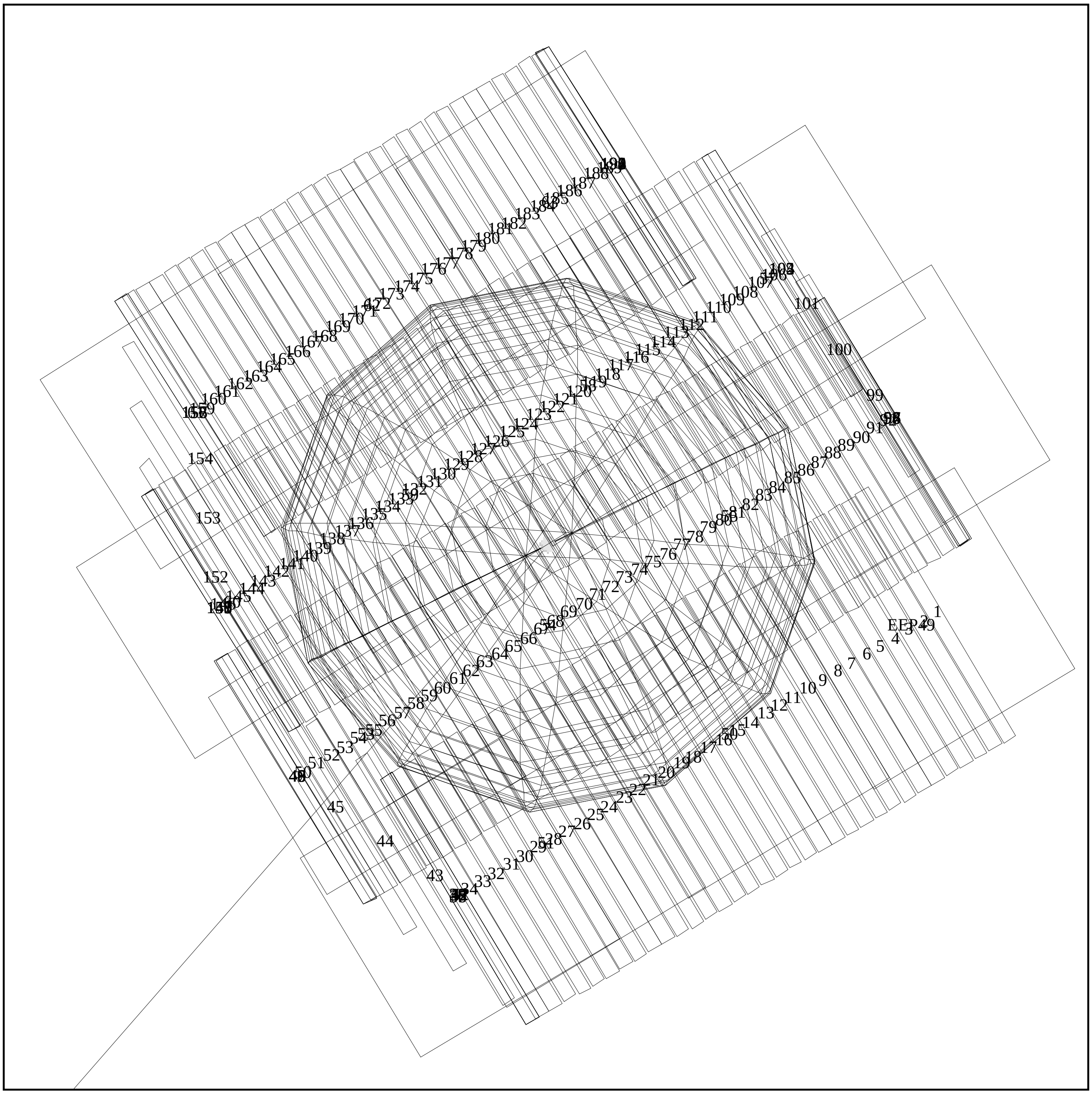
Alias

NIMS will map the error ellipse plus scan platform error with a single swath in Full Map mode at Long Map Nyquist sampling rate (0.03 mrad/sec). This is one of five Full Map observations in the Gaspra Far Encounter, the fifth of which verifies the observation in Full Map mode of the first quadrant.

Full Map (FM), Gain 1, Grating Start 0, Chopper 63Hz, MPW

Last Changed   05/03/95   Changed By FEL   10/08/91 13:58:04

Galileo Activity Plan Form   rev 5/95



GAPNGASVIS02

POINTER C4.1Wsusan: 9/25/1991 10:11:10

FILE:P.GAPSTWKINS01

CENTRAL BODY:PLUTO

MINI:m.GAPSTWKINS01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 44:00:0

ACTIVITY:GAPSTWKINS01 **DESCRIP:4X4X1 TWEAK INSURANCE**

Gaspra Lower Phase Vista

ACTIVITY ID: GAPNGASVIS02*
START TIME: 91-302/21:52:31

Activity ID: Orbit GA Target P Inst N OAPEL GASVIS SeqNo 02 Multi *

Title	Gaspra Lower Phase Vista	Instrument	NIMS
Requestor	C. Byrnes	Team NIMS Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000044:00:0	91-302/21:52:31	GCA-000/00:44:29
End	GCA-CDS 00000041:78:0	91-302/21:54:41	GCA-000/00:42:19
Duration	00000002:13:0	000/00:02:10	000/00:02:10

Top Label GAPNGASVIS02*
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	37	Report Options		Real Time Activity	No

Observation Objective

This observation provides an insurance against a tweak failure by covering the untweaked error ellipse.

Design Detail

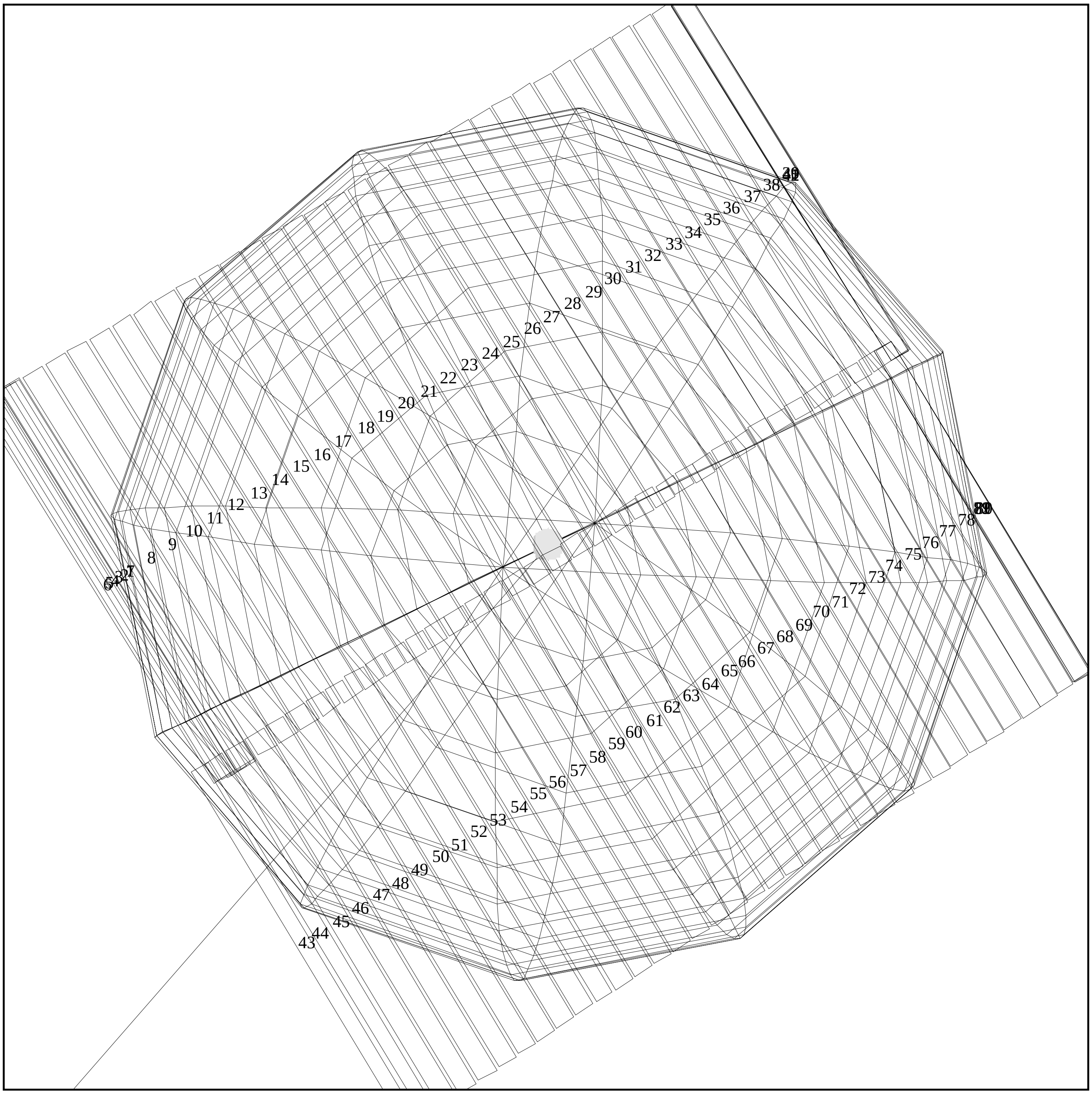
Alias GAPSTWKINS01

This observation is a ride-along with a 1 filter, 4x4 SSI mosaic in IM4 (8.667 sec shutter cycle). NIMS will use the Fixed Map mode while the scan platform slews at 0.85 mrad/sec.

Fixed Map (XM), Gain 1, Grating Start 6, Chopper 63Hz, IM4

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGSCHEM02

POINTER C4.1Wsusan: 9/25/1991 10:15: 5

FILE:P.GAPNGSCHEM02

CENTRAL BODY:PLUTO

MINI:m.GAPNGSCHEM02

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 42:00:0

ACTIVITY:GAPNGSCHEM02 **DESCRIP:NIMS 102 WVLNGTH HEMISPHERES**

Gaspra Chemical Study	ACTIVITY ID: GAPNGSCHEM02+ START TIME: 91-302/21:55:26

Activity ID: Orbit GA Target P Inst N OAPEL GSCHEM SeqNo 02 Multi +

Title	Gaspra Chemical Study			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000041:11:0	91-302/21:55:26	GCA-000/00:41:34
End	GCA-CDS 00000035:20:0	91-302/22:01:24	GCA-000/00:35:36
Duration	00000005:82:0	000/00:05:58	000/00:05:58

Top Label GAPNGSCHEM02+
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	386	Report Options		Real Time Activity	No

Observation Objective

Study chemical heterogeneity of Gaspra usiong 102 wavelengths.

Design Detail

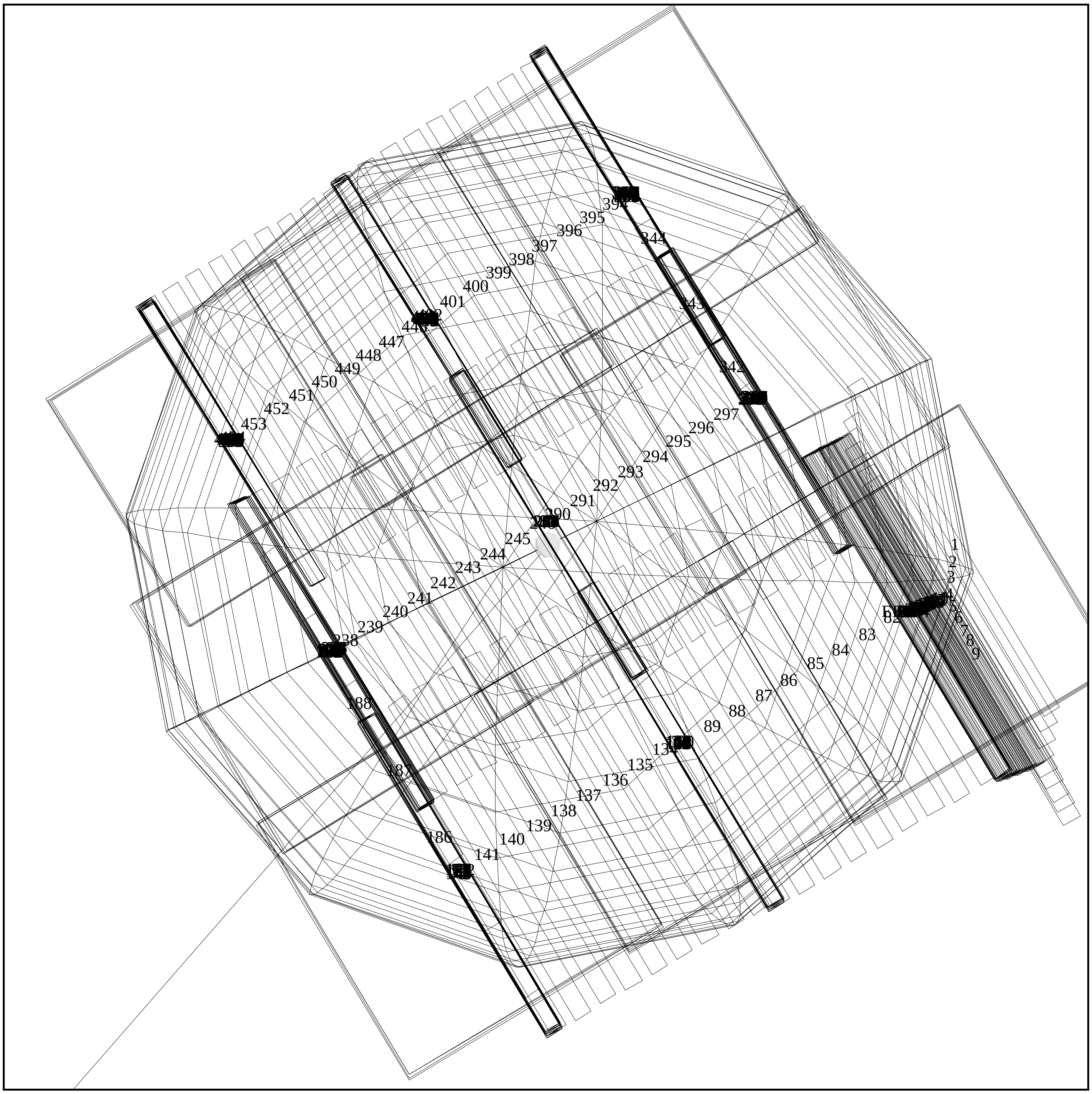
Alias

This OAPEL was originally the 2nd of 4 separate scans of the error ellipse in Short Map mode at Nyquist sampling rate (0.11 mrad/sec). The first of those scans, GSCHEM01, was replaced with GASPEC06 after growth in the OPNAV-reported 1 sigma error ellipse size late in sequencing. Therefore, GSCHEM02 now marks the first of 3 separate error ellipse scans. In the actual sequence, the GSCHEM03 OAPEL has been incorporated into the GSCHEM02 activity. That is, the NIMS observation GSCHEM02 actually includes both GSCHEM02 and GSCHEM03 OAPELS to agree with their definitions: that each would cover each hemisphere of the error ellipse without attention to the amount of overlap between the two strips. GSCHEM04 will then scan the center of the error ellipse which has minimal coverage in GSCHEM02.

Short Map (SM), Gain 1, Grating Start 2, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASNAP01

POINTER C4.1Wsusan: 9/25/1991 10:17:29

FILE:P.GAPS4FILTR01

CENTRAL BODY:PLUTO

MINI:m.GAPS4FILTR01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.662 -CDS 35:00:0

ACTIVITY:GAPS4FILTR01 **DESCRIP:3X3 4-FILTER MOSAIC**

Gaspra Snapshot at Lower Phase Angles   ACTIVITY ID: GAPNGASNAP01*
START TIME: 91-302/22:01:44

Activity ID: Orbit GA Target P Inst N OAPEL GASNAP SeqNo 01 Multi *

Title Gaspra Snapshot at Lower Phase Angles Instrument NIMS

Requestor C. Byrnes Team NIMS Working Group AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000034:81:0	91-302/22:01:44	GCA-000/00:35:16
End	GCA-CDS 00000030:19:0	91-302/22:06:28	GCA-000/00:30:32
Duration	00000004:62:0	000/00:04:44	000/00:04:44

Top Label GAPNGASNAP01*
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 112 Report Options Real Time Activity No

Observation Objective

NIMS will acquire the highest spectral resolution data of Gaspra (408 wavelengths) if captured in the NIMS field of view while SSI takes their highest resolution, four color observation of Gaspra. Otherwise, NIMS will acquire a Fixed Map spectrum of Gaspra as the scan platform slews into position for the next SSI frame.

Design Detail

Alias GAPS4FILTR01

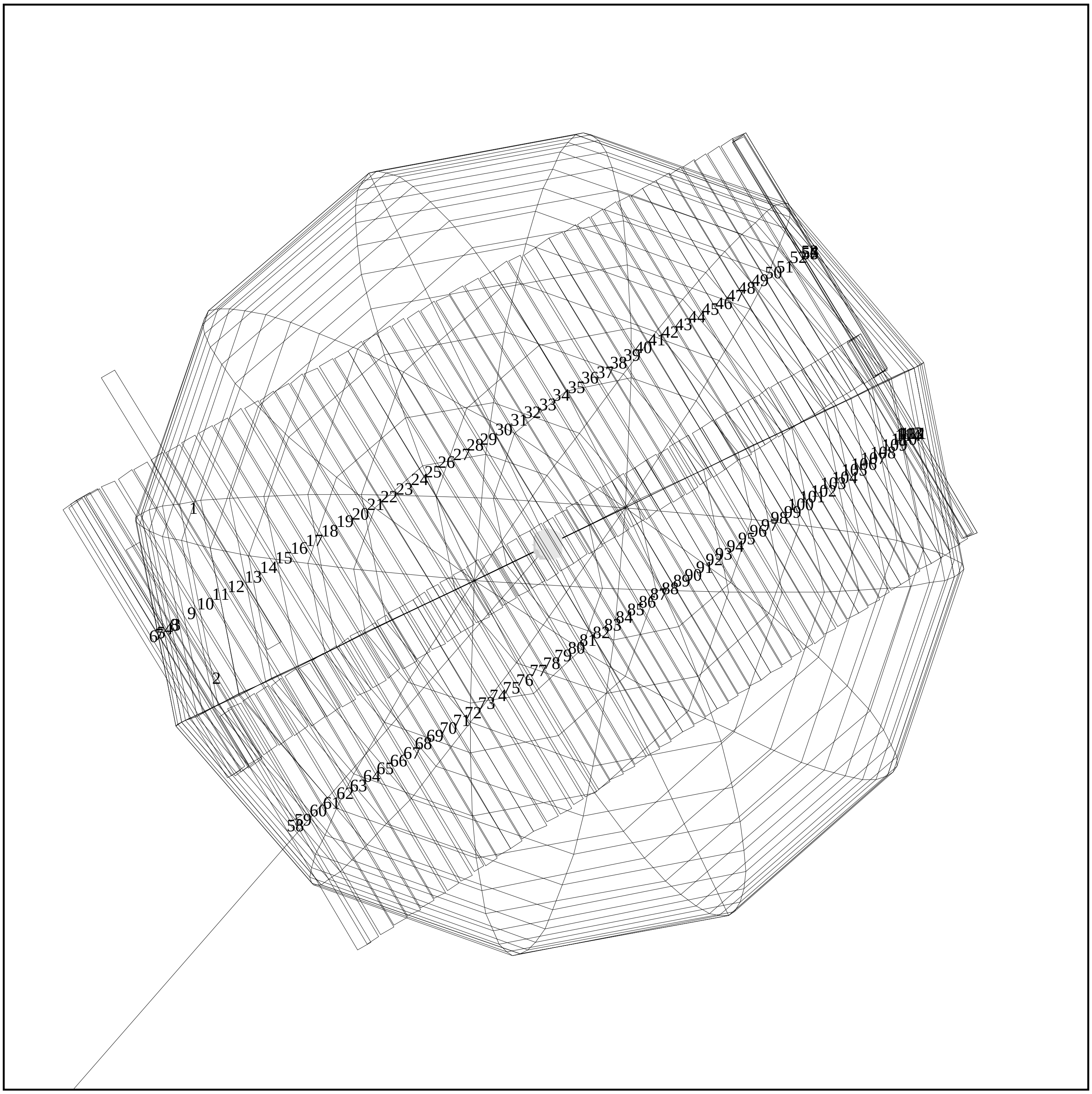
SSI will shutter a 3x3 mosaic with 4 filters. As the scan platform slews between the 4 filter sets, NIMS will be commanded through a Special Sequence to Fixed Map mode. When the scan platform is stationary for shuttering of the 4 filter sets, NIMS will be commanded to Long Map mode. This NIMS mode is a variation of the NIMS Stop and Slide Mode.

Special Sequence 13: Stop-and-Slide using Long Map and Fixed Map

Long Map (LM), Gain 1, Grating Start 0, Chopper 63Hz, IM4, Repeat 2
Fixed Map (XM), Gain 1, Grating Start 6, Chopper 63Hz, IM4, Repeat 4

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGSCHEM04

POINTER C4.1Wsusan: 9/25/1991 10:26:14

FILE:P.GAPNGSCHEM04

CENTRAL BODY:PLUTO

MINI:m.GAPNGSCHEM04

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 29:00:0

ACTIVITY:GAPNGSCHEM04 **DESCRIP:NIMS 102 WVLNGTH CTR ELLIPSE**

Gaspra Chemical Study ACTIVITY ID: GAPNGSCHEM04+
START TIME: 91-302/22:08:09

Activity ID: Orbit GA Target P Inst N OAPEL GSCHEM SeqNo 04 Multi +

Title Gaspra Chemical Study Instrument NIMS

Requestor C. Byrnes Team NIMS Working Group AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS	00000028:49:0	91-302/22:08:09	GCA-000/00:28:51
End	GCA-CDS	00000020:20:0	91-302/22:16:34	GCA-000/00:20:26
Duration		00000008:29:0	000/00:08:25	000/00:08:25

Top Label GAPNGSCHEM04+
Bottom Label

Plot Key NIMS Riding Plot Key Conflict Yes
CDS Bytes 401 Report Options Real Time Activity No

Observation Objective

Study chemical heterogeneity of Gaspra usiong 102 wavelengths.

Design Detail

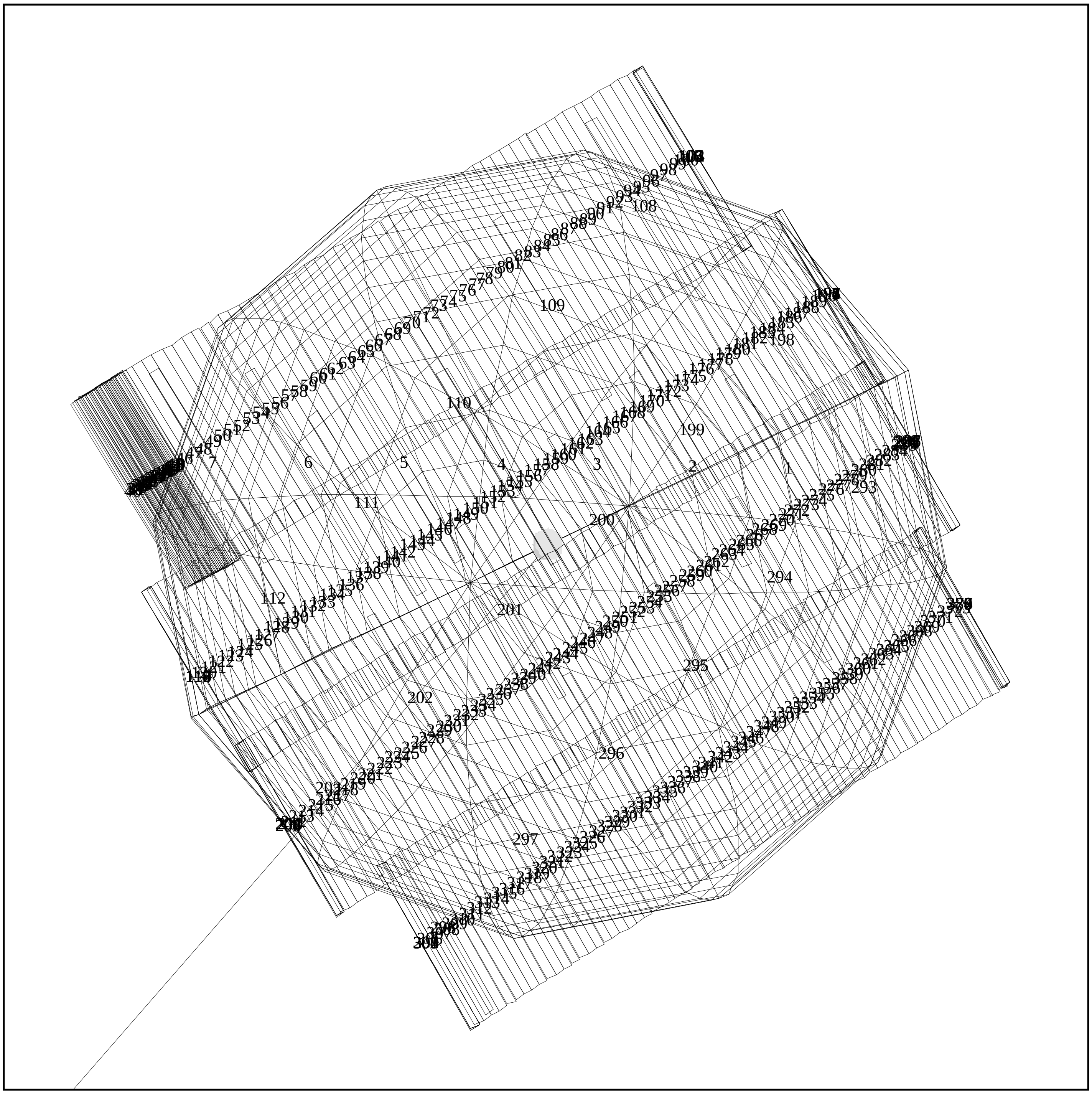
Alias

This is the last of 3 separate scans of the error ellipse in Short Map mode. This scan will cover the most probable position of Gaspra in the error ellipse (center of ellipse). Scans will be done at Nyquist rate (0.11 mrad/sec).

Short Map (SM), Gain 1, Grating Start 2, Chopper 63Hz, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95



GAPNGASMAP01

POINTER C4.1Wsusan: 9/25/1991 10:30:25

FILE:P.GAPNGASMAP01

CENTRAL BODY:PLUTO

MINI:m.GAPNGASMAP01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 20:00:0

ACTIVITY:GAPNGASMAP01 **DESCRIP:NIMS 17 WVLNGTHS FULL ELLIPSE**

Gaspra Chemical Heterogeneity Map   ACTIVITY ID: GAPNGASMAP01-
START TIME: 91-302/22:17:27

Activity ID: Orbit GA Target P Inst N OAPEL GASMAP SeqNo 01 Multi -

Title	Gaspra Chemical Heterogeneity Map	Instrument	NIMS
Requestor	C. Byrnes Team NIMS	Working Group	AWG

Time System CDS   Load ID EE3   Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000019:31:0	91-302/22:17:27	GCA-000/00:19:33
End	GCA-CDS 00000015:55:0	91-302/22:21:14	GCA-000/00:15:46
Duration	00000003:67:0	000/00:03:47	000/00:03:47

Top Label   GAPNGASMAP01-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	753	Report Options		Real Time Activity	No

Observation Objective

Observe the distribution of composition at a compromise between phase angle (affects spectral sensitivity) and spatial resolution.

Design Detail

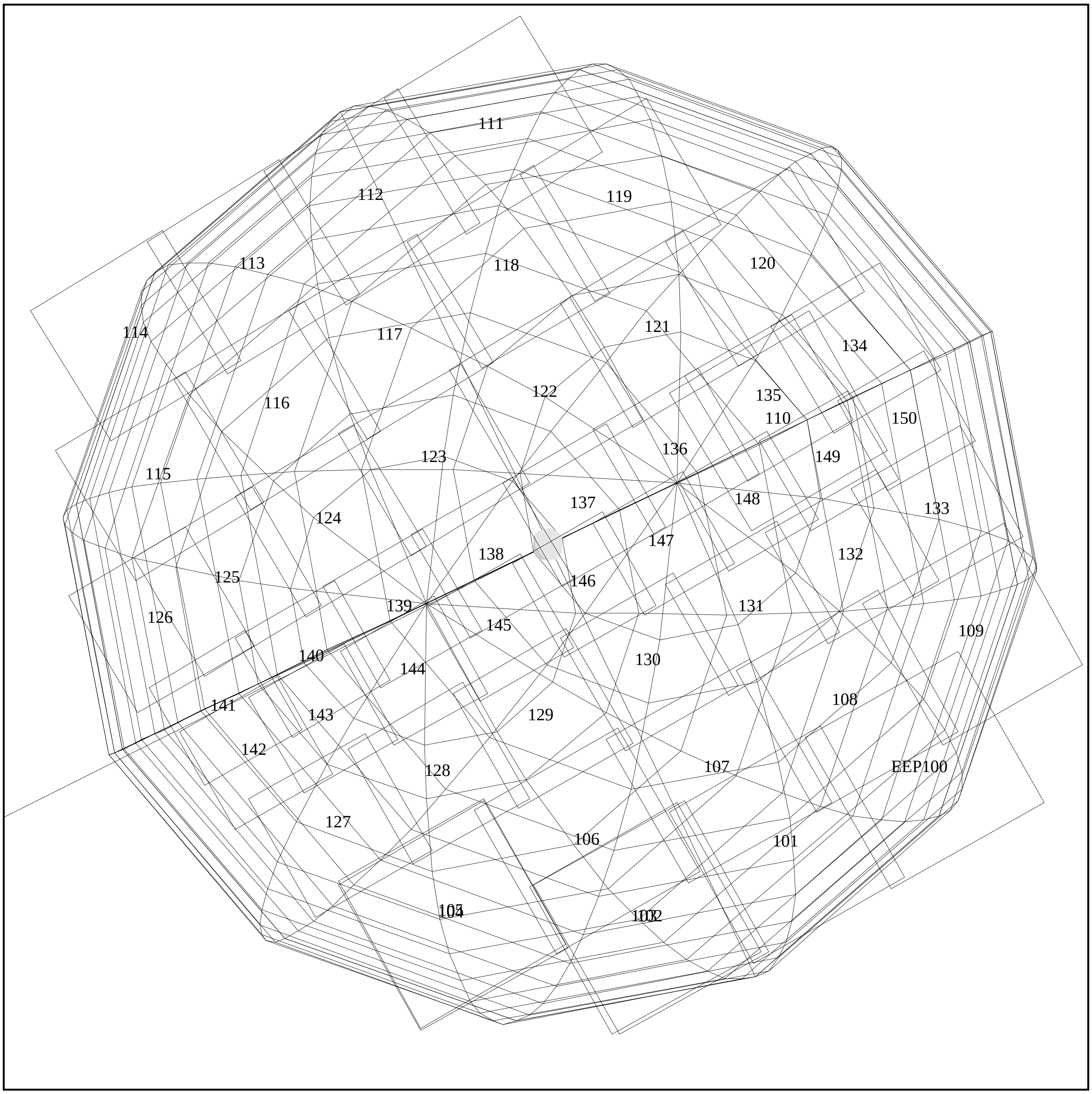
Alias

The first of 2 Fixed Map observations of Gaspra, NIMS will scan the error ellipse plus scan platform pointing errpr at 0.75 mrad/sec. The phase angle for this Fixed Map observation is lower that the observation at -16 Rims.

Fixed Map (XM), Gain 1, Grating Start 6, Chopper 63Hz, MPW

Last Changed   05/03/95   Changed By FEL   10/08/91 13:58:04

Galileo Activity Plan Form   rev 5/95



GAPNGASPAT01

POINTER C4.1Wsusan: 9/25/1991 10:35: 5

FILE:P.GAPSHIPHAS01

CENTRAL BODY:PLUTO

MINI:m.GAPSHIPHAS01

S/C EPH:/gptr/eph/EE3P-091691.t

PERIAPSIS:91-302/22:37:59.0

START:GEE 91-302/22:37:00.666 -CDS 15:00:0

ACTIVITY:GAPSHIPHAS01 **DESCRIP:7X7 1-FILTER HIGH PHASE**

Gaspra Highest Spatial Resolution Obs   ACTIVITY ID: GAPNGASPAT01*
START TIME: 91-302/22:21:50

Activity ID: Orbit GA Target P Inst N OAPEL GASPAT SeqNo 01 Multi *

Title Gaspra Highest Spatial Resolution Obs Instrument NIMS

Requestor C. Byrnes Team NIMS Working Group AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA-CDS 00000015:00:0	91-302/22:21:50	GCA-000/00:15:10
End	GCA-CDS 00000007:39:0	91-302/22:29:30	GCA-000/00:07:30
Duration	00000007:52:0	000/00:07:40	000/00:07:40

Top Label GAPNGASPAT01*
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	351	Report Options		Real Time Activity	No

Observation Objective

This is the highest priority NIMS observation with the best NIMS spatial resolution of the encounter at the lowest spectral resolution (17 wavelengths). However, Gaspra will be observed at higher phase angles than desired for NIMS observations.

Design Detail

Alias GAPSHIPHAS01

This observation includes a SSI mosaic which affords plenty of overlap between swaths. The slew rate was reduced as much as possible to 0.84 mrad/sec, 0.09 mrad/sec over the NIMS Nyquist rate, while still insuring the appropriate overlap between SSI frames. Due to the priority of the SSI science, the activity name given to this observation is SSI’s HIPHAS01 in the sequence products.

Fixed Map (XM), Gain 1, Grating Start 6, Chopper 63Hz, IM4

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95

Gaspra PCT Calibration	ACTIVITY ID: GANNPCTCAL01- START TIME: 91-303/01:35:58

Activity ID: Orbit GA Target N Inst N OAPEL PCTCAL SeqNo 01 Multi -

Title	Gaspra PCT Calibration			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA+CDS 00000177:00:0	91-303/01:35:58	GCA+000/02:58:58
End	GCA+CDS 00000221:67:0	91-303/02:20:27	GCA+000/03:43:27
Duration	00000044:00:0	000/00:44:29	000/00:44:29

Top Label GANNPCTCAL01-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	492	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a PCT Calibration for better analysis of data taken at Gaspra. This is the first full NIMS PCT Calibration that will be unsaturated for ALL NIMS detectors.

Design Detail

Alias

NIMS will calibrate by positioning the scan platform to the PCT and taking data in Long Map mode, Gain State 1. This is the gain state used during Gaspra closest approach. The spacecraft will be in Alspin. Two RIMs of the PCT Cal will be recorded: one RIM in Chopper 63Hz mode and one RIM in Chopper Reference mode. No Dark values are taken in Chopper Ref mode.

Long Map (LM), Gain 1, Grating Start 0, Chopper 63Hz, MPW
Long Map (LM), Gain 1, Grating Start 0, Chopper Ref, MPW

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95

Gaspra RCT Calibration	ACTIVITY ID: GANNRCTCAL01- START TIME: 91-303/08:40:38

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

Title	Gaspra RCT Calibration			Instrument	NIMS
Requestor	C. Byrnes	Team	NIMS	Working Group	AWG

Time System	CDS	Load ID	EE3	Calendar Date	10/29/91	Week 44

Start	GCA+CDS	00000597:00:0	91-303/08:40:38	GCA+000/10:03:38
End	GCA+CDS	00000604:67:0	91-303/08:47:42	GCA+000/10:10:42
Duration		00000007:00:0	000/00:07:04	000/00:07:04

Top Label   GANNRCTCAL01-
Bottom Label

Plot Key	NIMS	Riding Plot Key		Conflict	Yes
CDS Bytes	259	Report Options		Real Time Activity	No

Observation Objective

NIMS will perform a RCT Calibration for better analysis of data taken at Gaspra.

Design Detail

Alias

The RCT Calibration should be performed with the spacecraft -Z axis sun-pointed =/- 8 degrees in order to satisfy sun avoidance flight rules. After sufficient time (6.5 hours) for the RCT to equilibrate after the RCT Heater is turned on, NIMS will position the scan platform to the RCT and take data in Long Map mode, Gain State 1. Two RIMS of the RCT Cal will be recorded: one RIM in Chopper Reference mode and one RIM in Chopper 63Hz mode. No Dark values are taken in Chopper Ref mode.

Long Map (LM), Gain 1, Grating Start 0, Chopper Ref, MPW
Long Map (LM), Gain 1, Grating Start 0, Chopper 63Hz, MPW

Last Changed	05/03/95	Changed By	FEL	10/08/91 13:58:04

Galileo Activity Plan Form   rev 5/95

Gaspra NIMS Turn Off Sequence.	ACTIVITY ID: GANNTURNOF01- START TIME: 91-303/10:09:37

Activity ID: Orbit GA Target N Inst N OAPEL TURNOF SeqNo 01 Multi -

Title Gaspra NIMS Turn Off Sequence. Instrument NIMS

Requestor C. Byrnes Team NIMS Working Group AWG

Time System CDS Load ID EE3 Calendar Date 10/29/91 Week 44

Start	GCA+CDS 00000683:00:0	91-303/10:09:37	GCA+000/11:30:35
End	GCA+CDS 00000690:67:0	91-303/10:16:42	GCA+000/11:37:40
Duration	00000007:00:0	000/00:07:05	000/00:07:05

Top Label GANNTURNOF01-
Bottom Label

Plot Key	NIMS	Riding Plot Key	Conflict	Yes
CDS Bytes	267	Report Options	Real Time Activity	No

Observation Objective

Turn off NIMS and turn on needed heaters.

Design Detail

Alias

Turn off the NIMS instrument. Turn on the Replacement Heater and Shield Heater. Move the scan platform to the Safe, Unstow position.

Last Changed 05/03/95 Changed By FEL 10/08/91 13:58:04

Galileo Activity Plan Form rev 5/95