SSI LUNAR PHASE ANGLE COVERAGE — **ACTIVITY ID: E2LSLUNMOS08-**
START TIME: ECA+CDS 00000113:00:0

Activity ID	Orbit E2	Target L	Inst S	OAPEL LUNMOS	SeqNo 08	Multi -	
Title	SSI Lunar Phase Angle Coverage						
Requestor	SSI				Working Group		
Bottom Label		Plot Key	SSI		Science Team	SSI	

Time System	CDS	Load ID	EE11	Calendar Date / / Week
Start	ECA+CDS 00000113:00:0	92-343/17:03:40	ECA+000/01:54:15	
End	ECA+CDS 00000134:00:0	92-343/17:24:54	ECA+000/02:15:29	
Duration	00000021:00:0	000/00:21:14	000/00:21:14	

Inertial SP N Earth Ref N Spin Stat D Coop Imag F DSP .F. RSTrack

RECORD: Format Record Duration Tic Duration
Multiple Records Acq Start/Stop Cycles 0 Start Tics 0 Track

Instrument Compression:

DDS F	SSI F	PWS F	EUV F	EPD T	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR T	NIMS T	PLS F

REALTIME: RTS FORMAT RTS Rate Playback Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 Bits-to-Ground 0 Playback S/S Cycles 0

Observation Objective

Calibration to EM1 LUNMAP12. Provides photometric mapping of the moon and photometry of new areas of the moon. This is needed to obtain the most accurate compositional mapping (and topography from photoclinometry) as well as to derive additional information on surface properties. Will also provide a real test of supposedly physically rigorous photometric models.

Design Detail

CDS 297 POINTER Design N Frames 0.00 Exc Alias

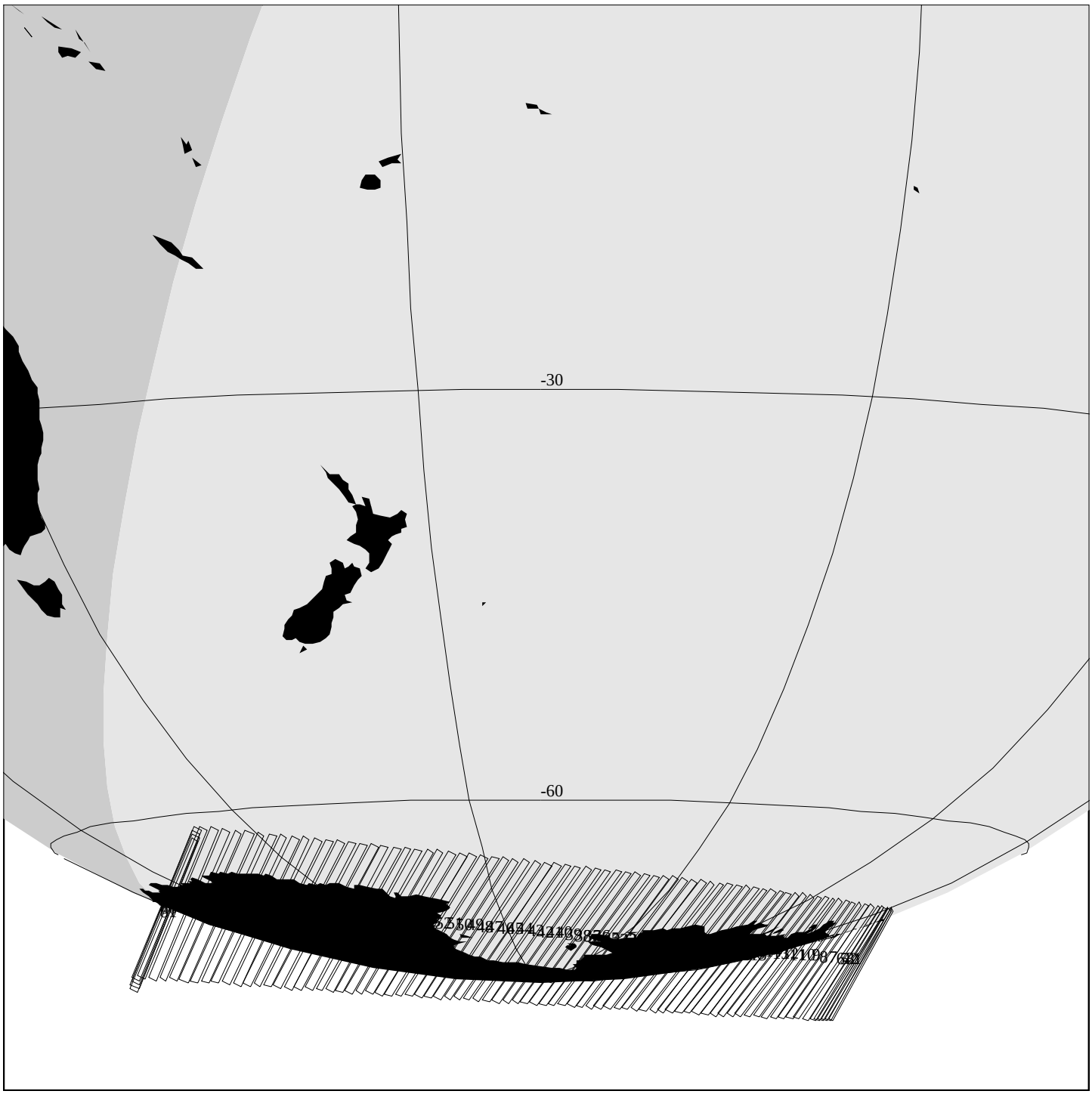
Approximately 21 degrees phase angle, 4.4 km/pix resolution (SSI),
5 mosaic positions through 7 filters (plus 3 dark frames for calibration).
Compressed, real time.
Assumed 2 rims for TARGET PA.

Fixed Map (XM)
Gain State 1
Grating Start Position 0
Chopper Mode 63Hz

SSI PICNOS: E2L0930 - E2L0967

Created on	Version	|07/18/94
Last Changed	Changed By SSI	|14:50:20

Galileo Activity Plan Form rev 6/93



E2WNANTAR_01

POINTER C5.1

FILE:P.E2WNANTAR_01

CENTRAL BODY:EARTH

MINI:m.E2WNANTAR_01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/17:29:57.400

ACTIVITY:E2WNANTAR_01 **DESCRIP:ANTARCTICA**

ANTARCTICA MOSAIC — **ACTIVITY ID: E2WNANTAR 01***
START TIME: ECA+CDS 00000135:00:0

Activity ID	Orbit E2	Target W	Inst N	OAPEL ANTAR	SeqNo 01	Multi *	
Title	Antarctica mosaic						
Requestor	R. LOPES				Working Group		
Bottom Label			Plot Key	NIMS	Science Team	NIMS	

Time System	CDS	Load ID EE11	Calendar Date / /	Week
Start	ECA+CDS 00000135:00:0	92-343/17:25:55	ECA+000/02:16:30	
End	ECA+CDS 00000179:00:0	92-343/18:10:24	ECA+000/03:00:59	
Duration	00000044:00:0	000/00:44:29	000/00:44:29	

Inertial SP Y Earth Ref N Spin Stat D Coop Imag T DSP .F. RSTrack

RECORD: Format Record Duration Tic Duration
Multiple Records Acq Start/Stop Cycles 0 Start Tics 0 Track

Instrument Compression:

DDS F	SSI T	PWS F	EUV F	EPD F	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR F	NIMS T	PLS F

REALTIME: RTS FORMAT RTS Rate Playback Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 Bits-to-Ground 0 Playback S/S Cycles 0

Observation Objective

NIMS observation of Antarctica aiming to detect and characterize polar stratospheric clouds (catalysts for ozone destruction) and to monitor changes since observations were made in 1990, at the same time of the year.

This is the highest priority Earth observation for NIMS.

Design Detail

CDS 234 POINTER Design Y Frames 0.00 Exc Alias

NIMS mosaic of Antarctica using Long Map, Double Nyquist rate (15 micro-radians per second). SSI will ride along and take pictures 'on the fly'.

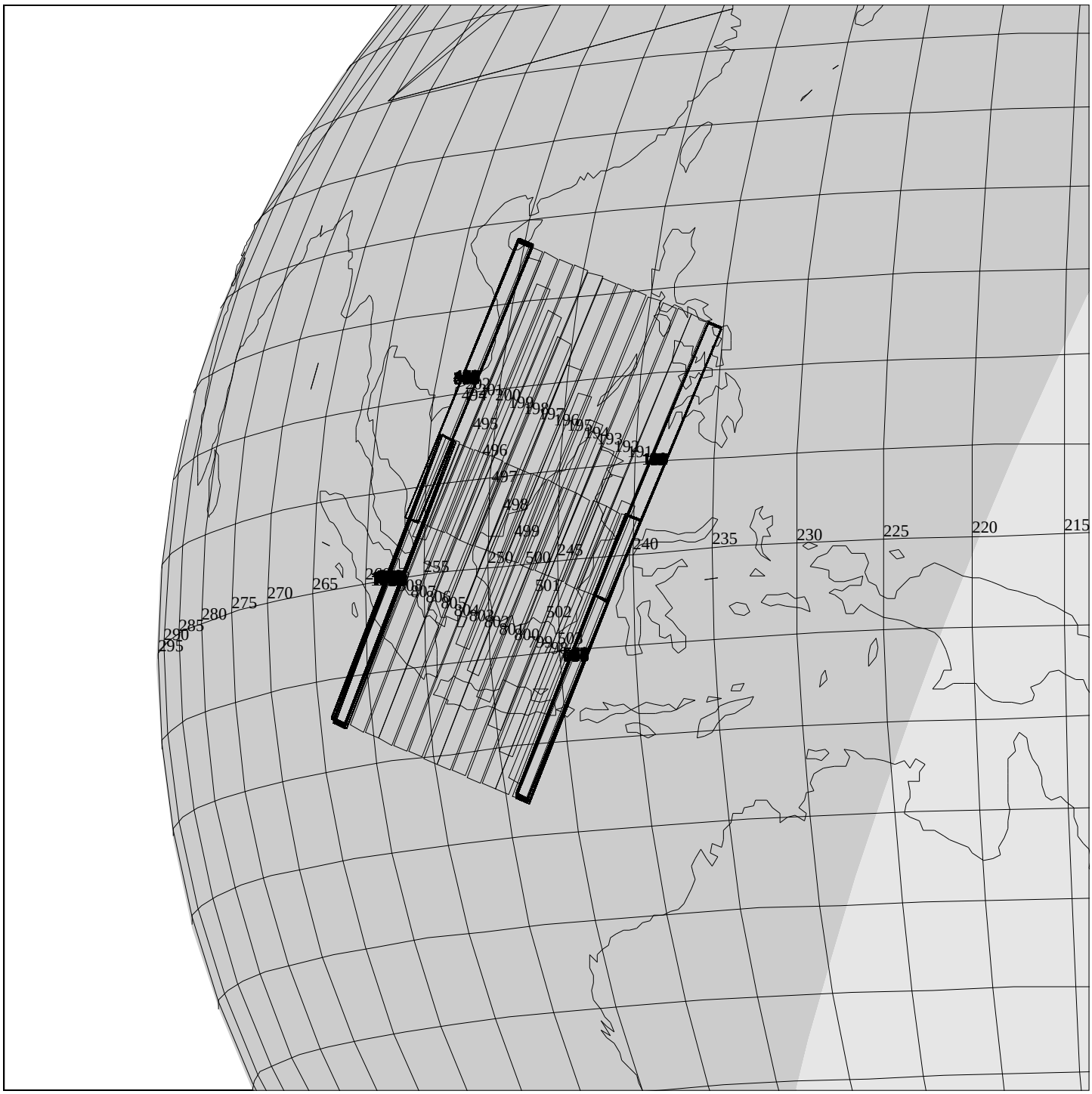
Long Map
Gain State 1
Grating Start Position 0
Chopper Mode 63 Hz

Mosaic: Single EW swath across Antarctica and the Southern limb.

SSI PICNOS: E2W0110 - E2W0189

Created on	02/06/92	Version	37	|	07/18/94
Last Changed	11/30/92	Changed By	C. BYRNE	|	14:53:21

Galileo Activity Plan Form rev 6/93



E2WNLTNING01

POINTER C5.1

FILE:P.E2WSLTNING01

CENTRAL BODY:EARTH

MINI:m.E2WSLTNING01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/20:29:56.066

ACTIVITY:E2WSLTNING01 **DESCRIP:LIGHTNING SEARCH**

LIGHTNING/INDONESIA DARK OBSERVATION ACTIVITY ID: E2WNLTNING01*
START TIME: ECA+CDS 00000317:00:0

Activity ID Orbit E2 Target W Inst N OAPEL LTNING SeqNo 01 Multi *
Title Lightning/Indonesia dark observation
Requestor H. Breneman/R. LOPES Working Group
Bottom Label Plot Key NIMS Science Team NIMS

Time System CDS Load ID EE11 Calendar Date / / Week

Start	ECA+CDS 00000317:00:0	92-343/20:29:56	ECA+000/05:20:31
End	ECA+CDS 00000332:00:0	92-343/20:45:06	ECA+000/05:35:41
Duration	00000015:00:0	000/00:15:10	000/00:15:10

Inertial SP Y Earth Ref N Spin Stat D Coop Imag T DSP .F. RSTrack

RECORD: Format Record Duration Tic Duration
Multiple Records Acq Start/Stop Cycles 0 Start Tics 0 Track

Instrument Compression:

DDS F	SSI T	PWS F	EUV F	EPD F	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR F	NIMS T	PLS F

REALTIME: RTS FORMAT RTS Rate Playback Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 Bits-to-Ground 0 Playback S/S Cycles 0

Observation Objective

Nightime mosaic of Indonesia

Design Detail

CDS 0 POINTER Design Y Frames 0.00 Exc Alias WSLTNING01

Ridealong with SSI observation of lightning over dark Indonesia. Slew rate of 0.55 mrad/sec, SSI mode 60 2.3 sec, 5 frames in each position except for 4th (last) position where only 4 frames are taken (total = 19 SSI frames).

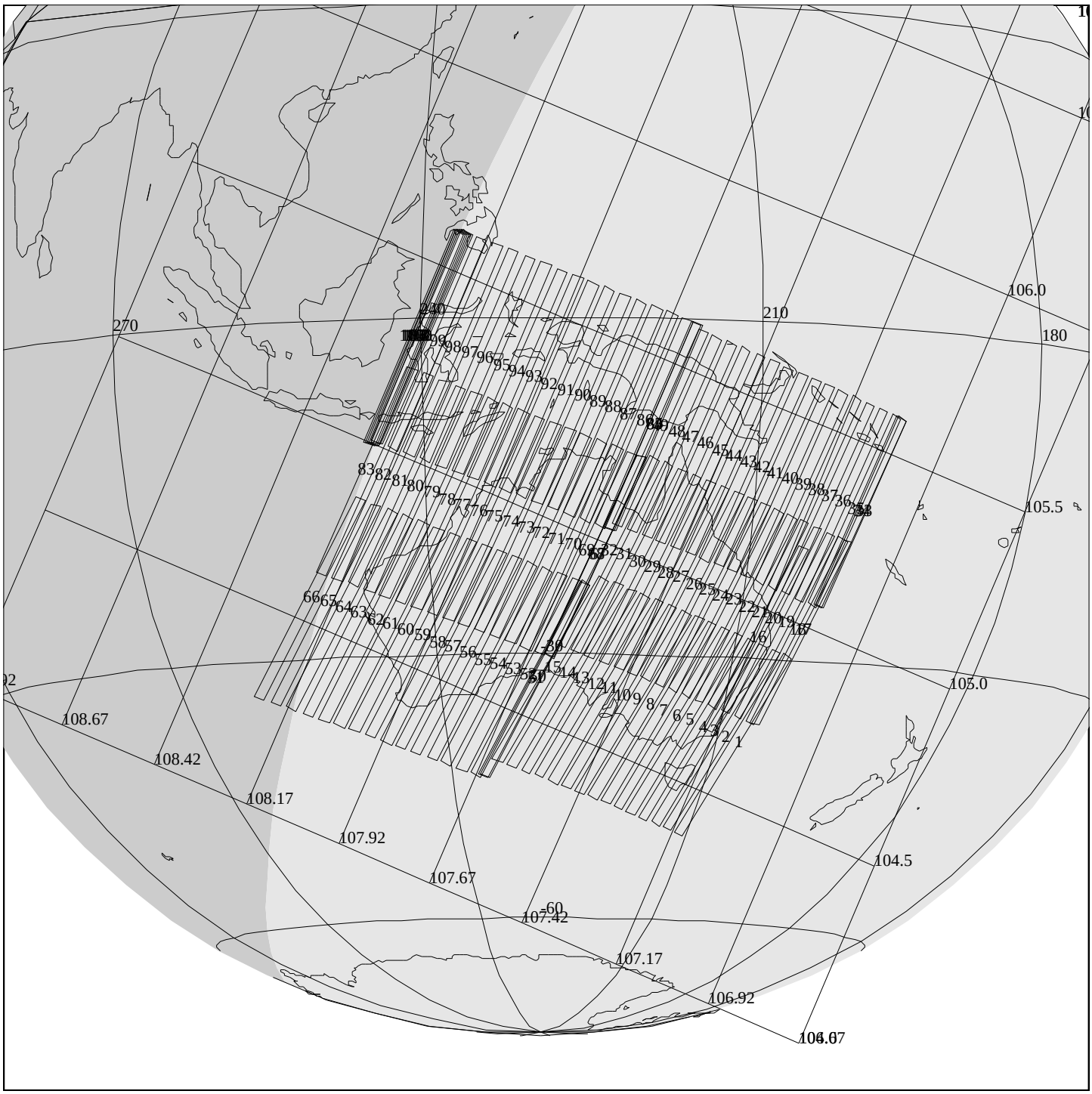
Fixed Map
Gain State 1
Grating Start Position 0
Chopper Mode 63 Hz

Mosaic: 2 swaths; East to west, north to south.

SSI PICNOS: E2W0200 - E2W0218

Created on	10/23/92	Version	3	|	07/18/94
Last Changed	11/30/92	Changed By	C. BYRNE	|	14:53:25

Galileo Activity Plan Form rev 6/93



E2WNAUSIE_01

POINTER C5.1

FILE:P.E2WNAUSIE_01

CENTRAL BODY:EARTH

MINI:m.E2WNAUSIE_01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/20:50:09.400

ACTIVITY:E2WNAUSIE_01 **DESCRIP:AUSTRALIA**

AUSTRALIA MOSAIC

ACTIVITY ID: E2WNAUSIE 01*
START TIME: ECA+CDS 00000337:00:0

Activity ID Orbit E2 Target W Inst N OAPEL AUSIE SeqNo 01 Multi *
Title Australia mosaic
Requestor R. LOPES Working Group
Bottom Label Plot Key NIMS Science Team NIMS

Time System CDS Load ID EE11 Calendar Date / / Week

Start	ECA+CDS 00000337:00:0	92-343/20:50:09	ECA+000/05:40:44
End	ECA+CDS 00000397:00:0	92-343/21:50:49	ECA+000/06:41:24
Duration	00000060:00:0	000/01:00:40	000/01:00:40

Inertial SP Y Earth Ref N Spin Stat D Coop Imag T DSP .F. RSTrack

RECORD: Format Record Duration Tic Duration
Multiple Records Acq Start/Stop Cycles 0 Start Tics 0 Track

Instrument Compression:

DDS F	SSI T	PWS F	EUV F	EPD F	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR F	NIMS T	PLS F

REALTIME: RTS FORMAT RTS Rate Playback Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 Bits-to-Ground 0 Playback S/S Cycles 0

Observation Objective

NIMS observation of Australia, achieved under optimal lighting conditions (phase angle about 78 degrees), which will be used to calibrate NIMS spectra and to obtain unique spectra of the Earth in the 2 to 5 microns region.

Design Detail

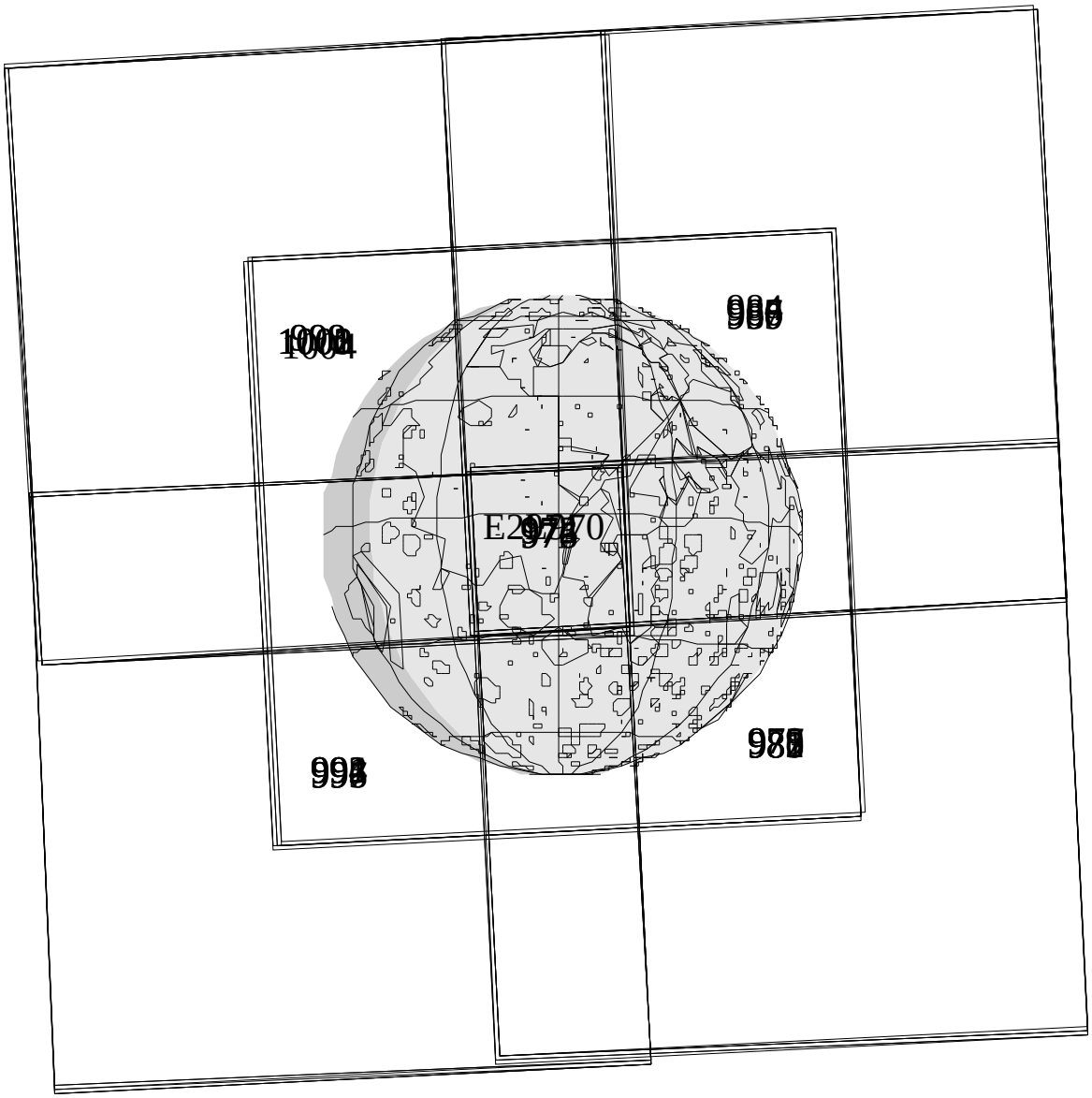
CDS 212 POINTER Design Y Frames 0.00 Exc Alias

Map of illuminated Australian continent extending to Papua - New Guinea in Long Map Double Nyquist mode scanning at 15 microradians per second. SSI will ride along and obtain images 'on the fly'.
Long Map
Gain State 1
Grating Start Position 0
Chopper Mode 63 Hz

Mosaic: 6 swaths total. Start at SE coast of Australia. Three swaths scan east to west over Eastern Australia, south to north. Reposition to south-central Australia. Three more swaths east to west, south to north, over Western Austalia ending near Borneo. Designed to chase the Terminator.
SSI PICNOS: E2W0220 - E2W0339

Created on	02/06/92	Version	11	|07/18/94
Last Changed	11/30/92	Changed By	C. BYRNE	|14:53:29

Galileo Activity Plan Form rev 6/93



E2LSLUNMOS09

POINTER C5.1

FILE:P.E2LSLUNMOS09

CENTRAL BODY: MOON

MINI:m.E2LSLUNMOS09

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/21:55:52.733

ACTIVITY:E2LSLUNMOS09 **DESCRIP:SSI CALIBRATION TO EM1 MAPCAL01**

SSI LUNAR PHASE ANGLE COVERAGE **ACTIVITY ID: E2LSLUNMOS09-**
START TIME: ECA+CDS 00000371:00:0

Activity ID Orbit E2 Target L Inst S OAPEL LUNMOS SeqNo 09 Multi -
Title SSI Lunar Phase Angle Coverage
Requestor SSI Working Group
Bottom Label Plot Key SSI Science Team SSI

Time System	CDS	Load ID EE11	Calendar Date / /	Week
Start	ECA+CDS	00000371:00:0	92-343/21:24:32	ECA+000/06:15:07
End	ECA+CDS	00000410:00:0	92-343/22:03:58	ECA+000/06:54:33
Duration		00000039:00:0	000/00:39:26	000/00:39:26

Inertial SP N Earth Ref N Spin Stat D Coop Imag F DSP .F. RSTrack

RECORD: Format Record Duration Tic Duration
Multiple Records Acq Start/Stop Cycles 0 Start Tics 0 Track

Instrument Compression:

DDS F	SSI F	PWS F	EUV F	EPD T	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR T	NIMS T	PLS F

REALTIME: RTS FORMAT RTS Rate Playback Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 Bits-to-Ground 0 Playback S/S Cycles 0

Observation Objective

Calibration to EM1 MAPCAL01. Provides photometric mapping of the moon and photometry of new areas of the moon. This is needed to obtain the most accurate compositional mapping (and topography from photoclinometry) as well as to derive additional information on surface properties. Will also provide a real test of supposedly physically rigorous photometric models.

Design Detail

CDS 297 POINTER Design N Frames 0.00 Exc Alias

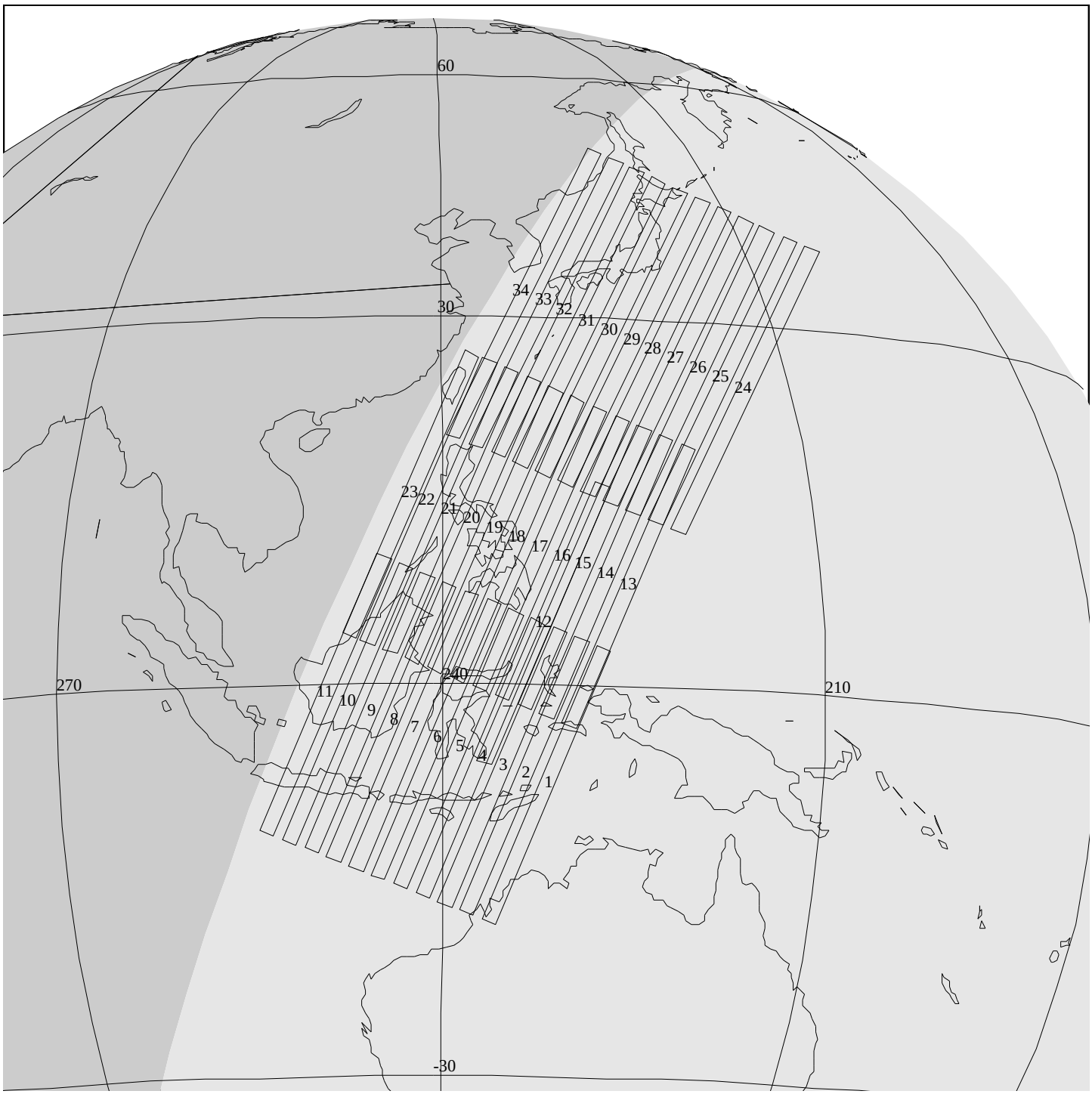
Approximately 32 degrees phase angle, 5.1 km/pix resolution (SSI),
5 mosaic positions through 7 filters.
60 2/3 SEC FRAME RATE, UNCOMPRESSED, real time.
Assumed 4 rims for TARGET PA.

Long Map (LM)
Gain State 1
Grating Start Position 0
Chopper Mode 63 Hz

SSI PICNOS: E2L0970 - E2L1004

Created on Version |07/18/94
Last Changed Changed By SSI |14:50:20

Galileo Activity Plan Form rev 6/93



E2WNINDO__01

POINTER C5.1

FILE:P.E2WNINDO__01

CENTRAL BODY:EARTH

MINI:m.E2WNINDO__01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/22:34:18.066

ACTIVITY:E2WNINDO__01 **DESCRIP:INDONESIA/EAST ASIA**

INDONESIA MOSAIC — ACTIVITY ID: E2WNINDO 01*
START TIME: ECA+CDS 00000440:00:0

Activity ID	Orbit E2	Target W	Inst N	OAPEL INDO		SeqNo 01	Multi *
Title	Indonesia mosaic						
Requestor	R. LOPES				Working Group		
Bottom Label			Plot Key	NIMS	Science Team		NIMS

Time System	CDS	Load ID EE11	Calendar Date / /	Week
Start	ECA+CDS	00000440:00:0	92-343/22:34:18	ECA+000/07:24:53
End	ECA+CDS	00000460:00:0	92-343/22:54:31	ECA+000/07:45:06
Duration		00000020:00:0	000/00:20:13	000/00:20:13

Inertial SP Y Earth Ref N Spin Stat D Coop Imag T DSP .F. RSTrack

RECORD: Format — Record Duration — Tic Duration
Multiple Records — Acq Start/Stop Cycles 0 — Start Tics 0 — Track

Instrument Compression:

DDS F	SSI T	PWS F	EUV F	EPD F	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR F	NIMS T	PLS F

REALTIME: RTS FORMAT — RTS Rate — Playback — Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 — Bits-to-Ground 0 — Playback S/S Cycles 0

Observation Objective

NIMS mosaic of Indonesia in Long map, with SSI cooperative imaging.

Design Detail

CDS 200 POINTER Design Y Frames 0.00 Exc Alias

Map of illuminated Indonesia, Philippines and Japan near the Terminator.

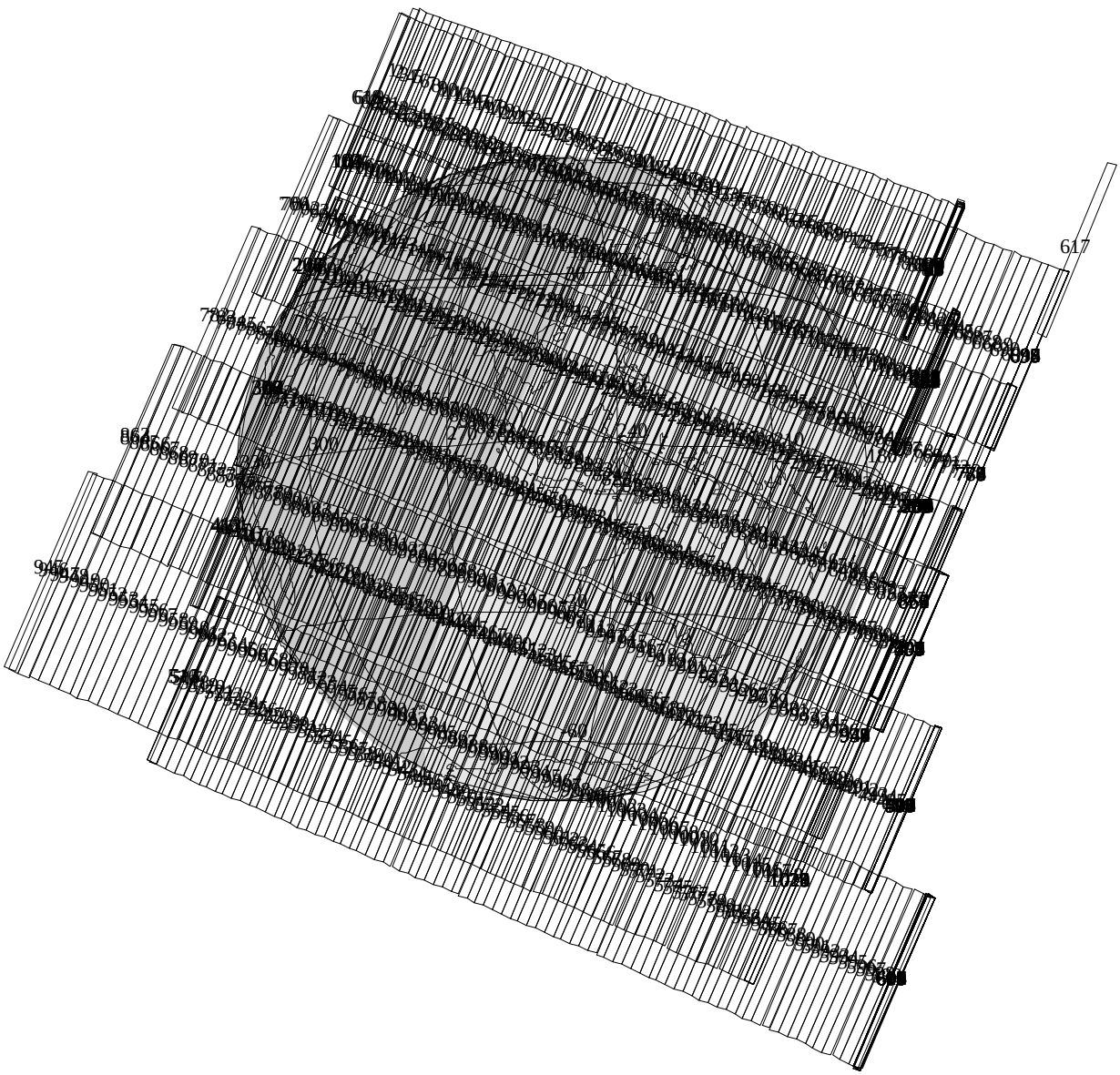
Long Map, Double Nyquist, rate = 0.02 mrad/sec.
Long Map
Gain State 1
Grating Start Position 0
Chopper Mode 63 Hz

Mosaic: Three swaths east to west. First swath over Indonesia, second swath over the Philippines and the third swath over Japan.

SSI PICNOS: E2W0350 - E2W0388

Created on	10/23/92	Version	3	|	07/18/94
Last Changed	11/30/92	Changed By	C. BYRNE	|	14:53:33

Galileo Activity Plan Form — rev 6/93



E2WNGMOS__01

POINTER C5.1

FILE:P.E2WNGMOS__01

CENTRAL BODY:EARTH

MINI:m.E2WNGMOS__01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/23:10:42.066

ACTIVITY:E2WNGMOS__01 **DESCRIP:GLOBAL MOSAIC**

GLOBAL MOSAIC OF THE EARTH — ACTIVITY ID: E2WNGMOS 01*
START TIME: ECA+CDS 00000476:00:0

Activity ID Orbit E2 Target W Inst N OAPEL GMOS SeqNo 01 Multi *
Title Global Mosaic of the Earth
Requestor R. LOPES — Working Group
Bottom Label — Plot Key NIMS — Science Team NIMS

Time System CDS — Load ID EE11 — Calendar Date / / — Week

Start	ECA+CDS 00000476:00:0	92-343/23:10:42	ECA+000/08:01:17
End	ECA+CDS 00000771:00:0	92-344/04:08:59	ECA+000/12:59:34
Duration	00000295:00:0	000/04:58:17	000/04:58:17

Inertial SP Y Earth Ref N Spin Stat D Coop Imag T DSP .F. RSTrack

RECORD: Format — Record Duration — Tic Duration
Multiple Records — Acq Start/Stop Cycles 0 — Start Tics 0 Track

Instrument Compression:

DDS F	SSI T	PWS F	EUV F	EPD F	NIM%	UVS F
MAG F	AACS	PWSW	HIC F	PPR F	NIMS F	PLS F

REALTIME: RTS FORMAT — RTS Rate — Playback — Duration

DDS	EUV	PLS	EPD	NIMS
MAG	HIC	PWS	UVS	OPNAV

Tracks 0.0000 — Bits-to-Ground 0 — Playback S/S Cycles 0

Observation Objective

To obtain two NIMS global mosaics of the Earth with SSI cooperative imaging.

Two full mosaics of the Earth, one after the other, are observed here. Each mosaic has a separate entry in the NIMS Obstab.

Design Detail

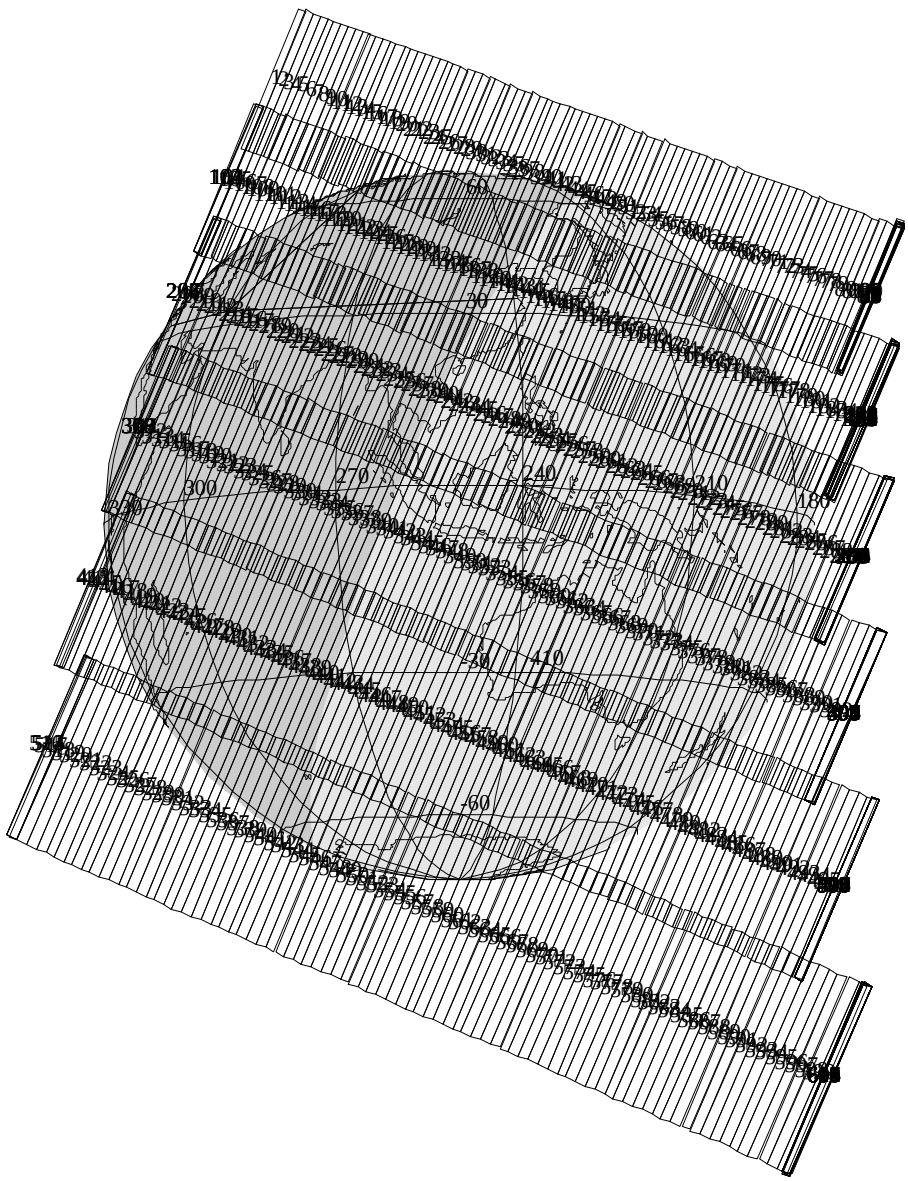
CDS 125 POINTER Design Y Frames 0.00 Exc Alias

Two complete NIMS mosaics obtained in Long Map for best determination of distributions of gaseous species. Scan rate is 30 microradians/sec. Scans are concentrated near the Terminator for best signal levels. There is at least a 20% overlap between NIMS swaths.
Long Map
Gain State 1 | Pointer Plots for each separate
Grating Start Position 0 | mosaic are plotted on the following
Chopper Mode 63 Hz | two pages.

Mosaic: 6 swaths west to east across the Earth starting at the North pole, north to south to the South pole, followed by 5 more swaths across the Earth in the same manner. Terminator crosses the center of the mosaic.
SSI PICNOS: E2W0420 - E2W0692

Created on 02/05/92 — Version 8 — |07/18/94
Last Changed 11/30/92 — Changed By C. BYRNE — |14:53:37

Galileo Activity Plan Form — rev 6/93



E2WNGMOS__01 A

POINTER C5.1

FILE:P.E2WNGMOS__01

CENTRAL BODY:EARTH

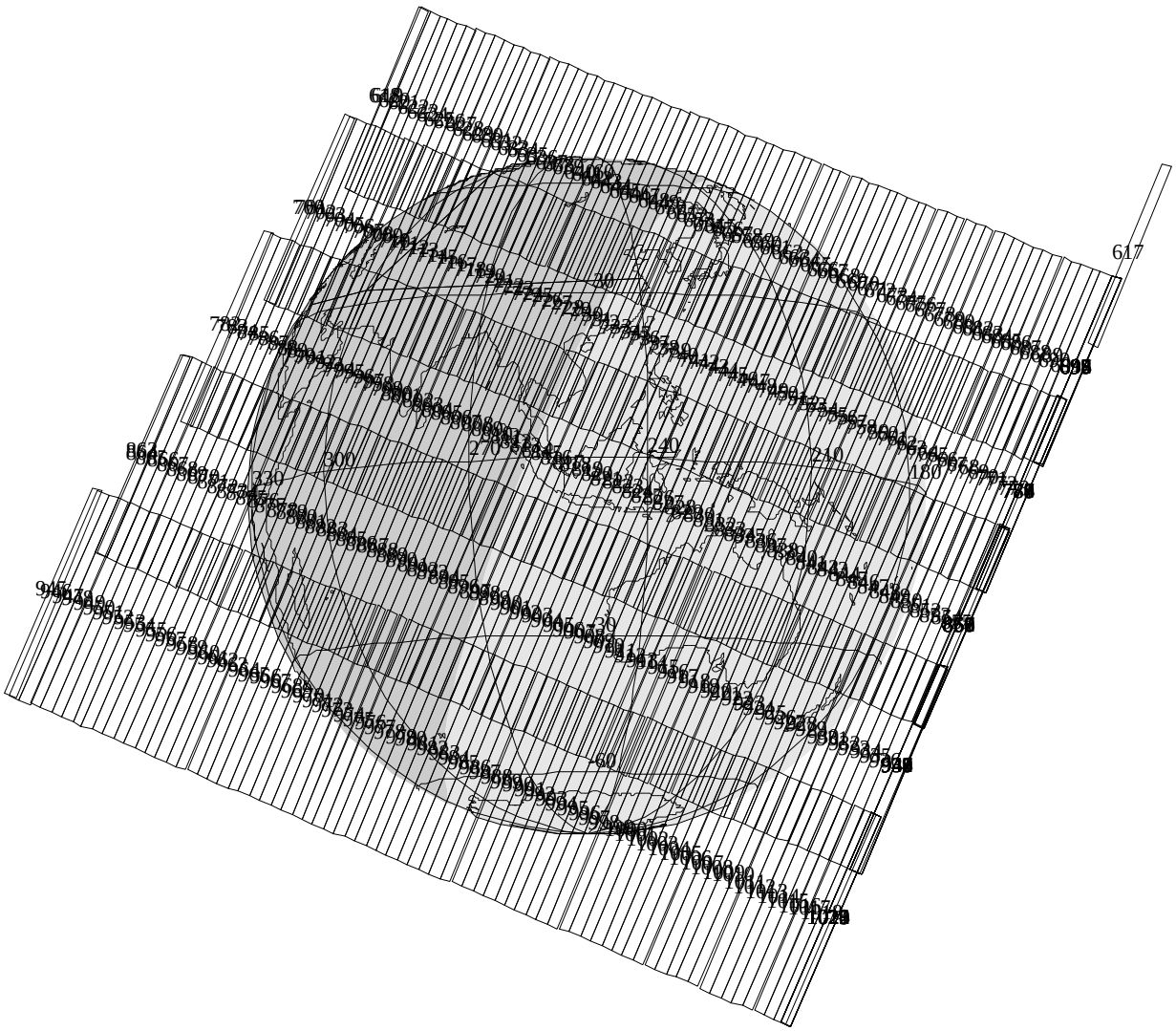
MINI:m.E2WNGMOS__01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/23:10:42.066

ACTIVITY:E2WNGMOS__01 **DESCRIP:GLOBAL MOSAIC**



E2WNGMOS__01 B

POINTER C5.1

FILE:P.E2WNGMOS__01

CENTRAL BODY:EARTH

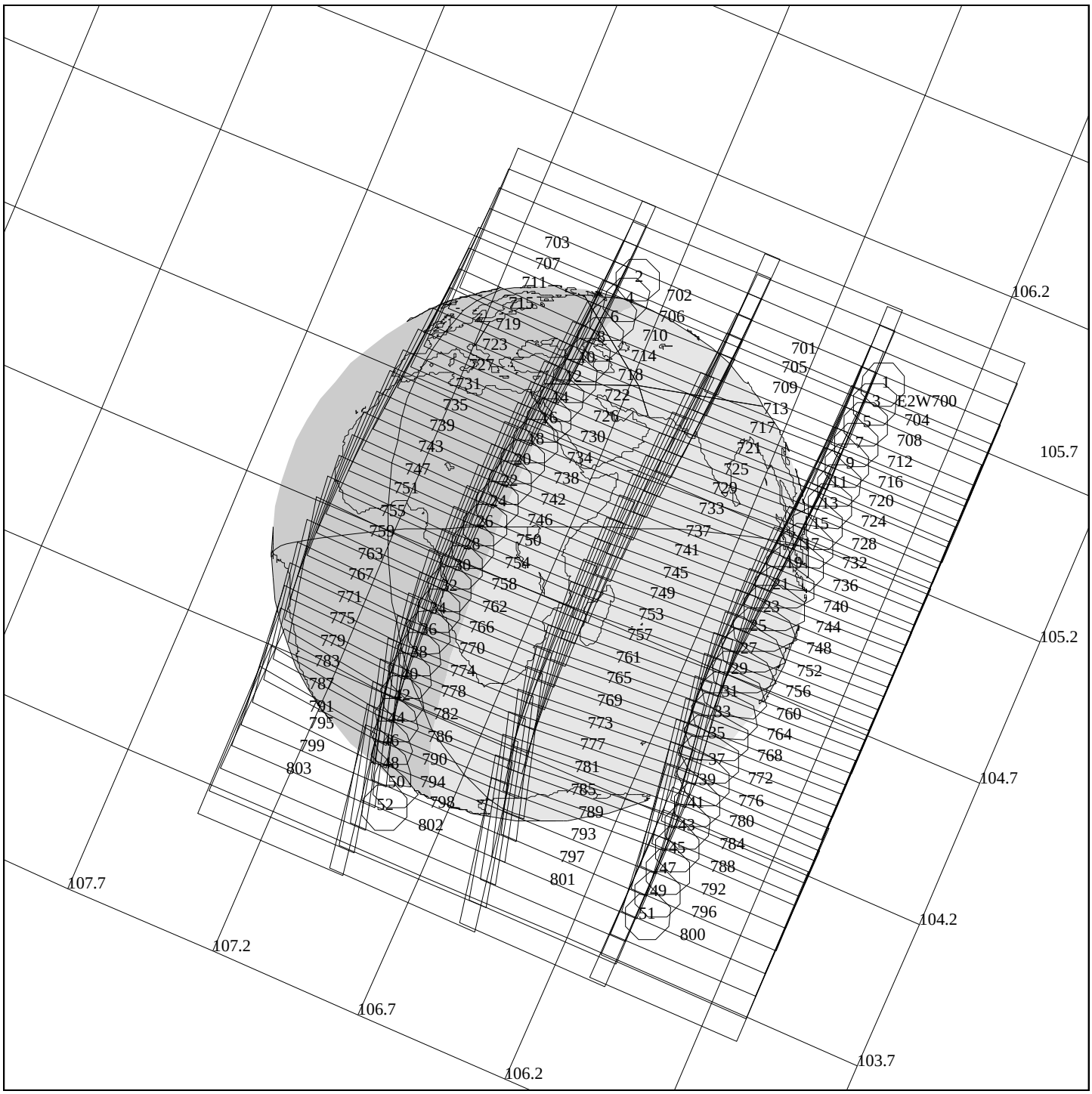
MINI:m.E2WNGMOS__01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-343/23:10:42.066

ACTIVITY:E2WNGMOS__01 **DESCRIP:GLOBAL MOSAIC**



E2WPBUDLIT01

POINTER C5.1

FILE:P.E2WPBUDLIT01

CENTRAL BODY:EARTH

MINI:m.E2WPBUDLIT01

S/C EPH:/gptr/eph/E2IDA-111491.t

PERIAPSIS:92-343/15:10:23

START:92-344/04:14:02.066

ACTIVITY:E2WPBUDLIT01 **DESCRIP:E RAD BUDGET**