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.

Each NIMS observation of an impact consists of 1092 scans across Jupiter. The Pointer plots show only one of these scans.

NIMS POWER ON — ACTIVITY ID: SLNNNIMSON01-
START TIME: SLC-CDS 00007110:90:0

Activity ID Orbit SL Target N Inst N OAPEL NIMSON SeqNo 01 Multi -
Title NIMS POWER ON
Requestor J. HUI — Working Group SWG
Bottom Label NIMS — Plot Key NIMS — Science Team NIMS

Time System UTC — Load ID C3 — Calendar Date 07/12/94 — Week 28

Start	SLC-CDS 00007110:90:0	94-193/06:29:00	SLC-004/23:50:00
End	SLC-CDS 00007107:03:0	94-193/06:33:00	SLC-004/23:46:00
Duration	00000003:87:0	000/00:04:00	000/00:04:00

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

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

Instrument Compression:

DDS 0	SSI 0	PWS 0	EUV 0	EPD 0	NIM% 0	UVS 0
MAG 0	AACS 0	PWSW 0	HIC 0	PPR 0	NIMS 0	PLS 0

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 power NIMS instrument on.

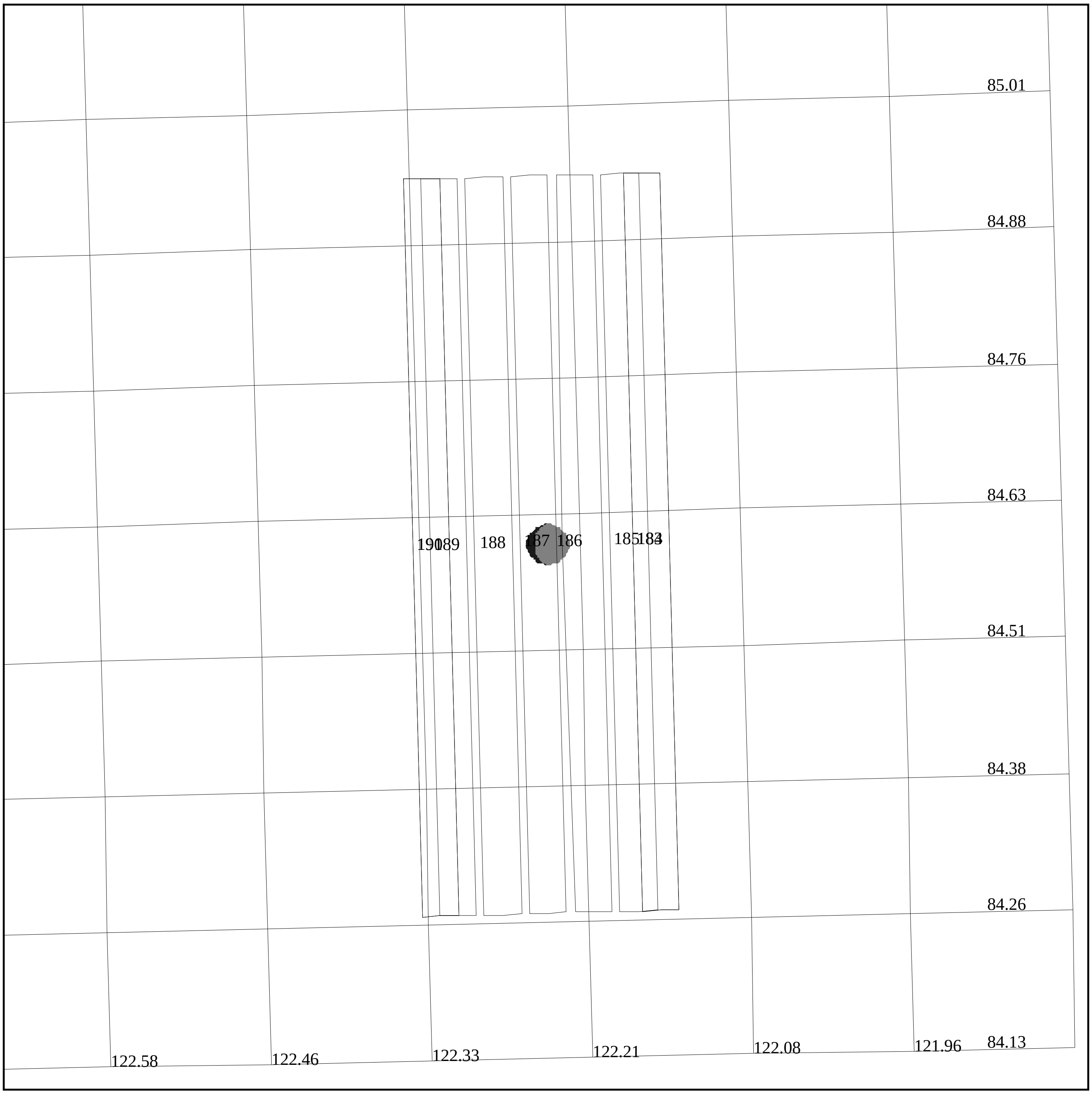
Design Detail

CDS 67 POINTER Design N Frames 0.00 Exc Alias

Use Library Sequence.

Created on 04/22/94 — Version 5 — 07/11/94
Last Changed 07/06/94 — Changed By J. HUI — 13:16:54

Galileo Activity Plan Form — rev 6/93



165JA:TT= 0 TMC= 1 C= -1.40 XC= 0.00 BS= 0/3166 TC= 3
A= 728 pD= 182 SR=17.450 RA50=176.34 DEC50= 6.74 cone=122.15 clock= 84.60
117JA:#SB= 1 OR= 0.910 RR= 0.910 BM=F RC= 1 BS= 0/3166
1:#s= 6 Cs= 3.00 XCs= 0.00 Cr= -3.00 XCr= 0.00 sD= 16 rD= 16

SLJNREFJUP01

POINTER E2.0 bradc: 6/27/1994 13:44:47

FILE:P.SLJNREFJUP01

CENTRAL BODY:JUPITER III

MINI:m.target

S/C EPH:/DATA/NAVIO/SHOELEVY.NSC

PERIAPSIS:94-202/12:00:00

START:94-195/08:08:59.733

OBSERVATION:SLJNREFJUP01

Mode:XM, Gr_Strt 2, Gain 2, Chop Ref, Gr_Off 4

17 Wavelengths

Every second NIMS Footprint, 8 per slew

Slew Rate: .92 mrad/sec, 3.0 mrad wide Box Scan

Only 1/2 cycle of 6 cycles plotted

THINNING:NIM 2

BODY PLOT TIME:TARGET-TIME D= 182

DESCRIP:NIMS REFERENCE SPECTRA OF JUPITER

REFERENCE SPECTRA OF JUPITER BEFORE SL-9

ACTIVITY ID: SLJNREFJUP01+
START TIME: SLC-CDS 00004168:62:0

Activity ID Orbit SL Target J Inst N OAPEL REFJUP SeqNo 01 Multi +
Title REFERENCE SPECTRA OF JUPITER BEFORE SL-9
Requestor J. HUI Working Group SWG
Bottom Label NIMS Plot Key NIMS Science Team NIMS

Time System UTC Load ID C3 Calendar Date 07/14/94 Week 28

Start	SLC-CDS 00004168:62:0	94-195/08:04:00	SLC-002/22:15:00
End	SLC-CDS 00004161:69:0	94-195/08:11:00	SLC-002/22:08:00
Duration	00000006:84:0	000/00:07:00	000/00:07:00

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

RECORD: Format MPW Record Duration 1:00:0 Tic Duration
Multiple Records Acq Start/Stop Cycles 1 Start Tics 0 Track

Instrument Compression:

DDS 0	SSI 0	PWS 0	EUV 0	EPD 0	NIM% 100	UVS 1
MAG 0	AACS 0	PWSW 0	HIC 0	PPR 0	NIMS 1	PLS 0

REALTIME: RTS FORMAT RTS Rate Playback YES 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

This observation will give NIMS reference spectra of Jupiter before the first shoemaker-Levy 9 fragment impact.

Design Detail

CDS 191 POINTER Design Y Frames 0.00 Exc Alias

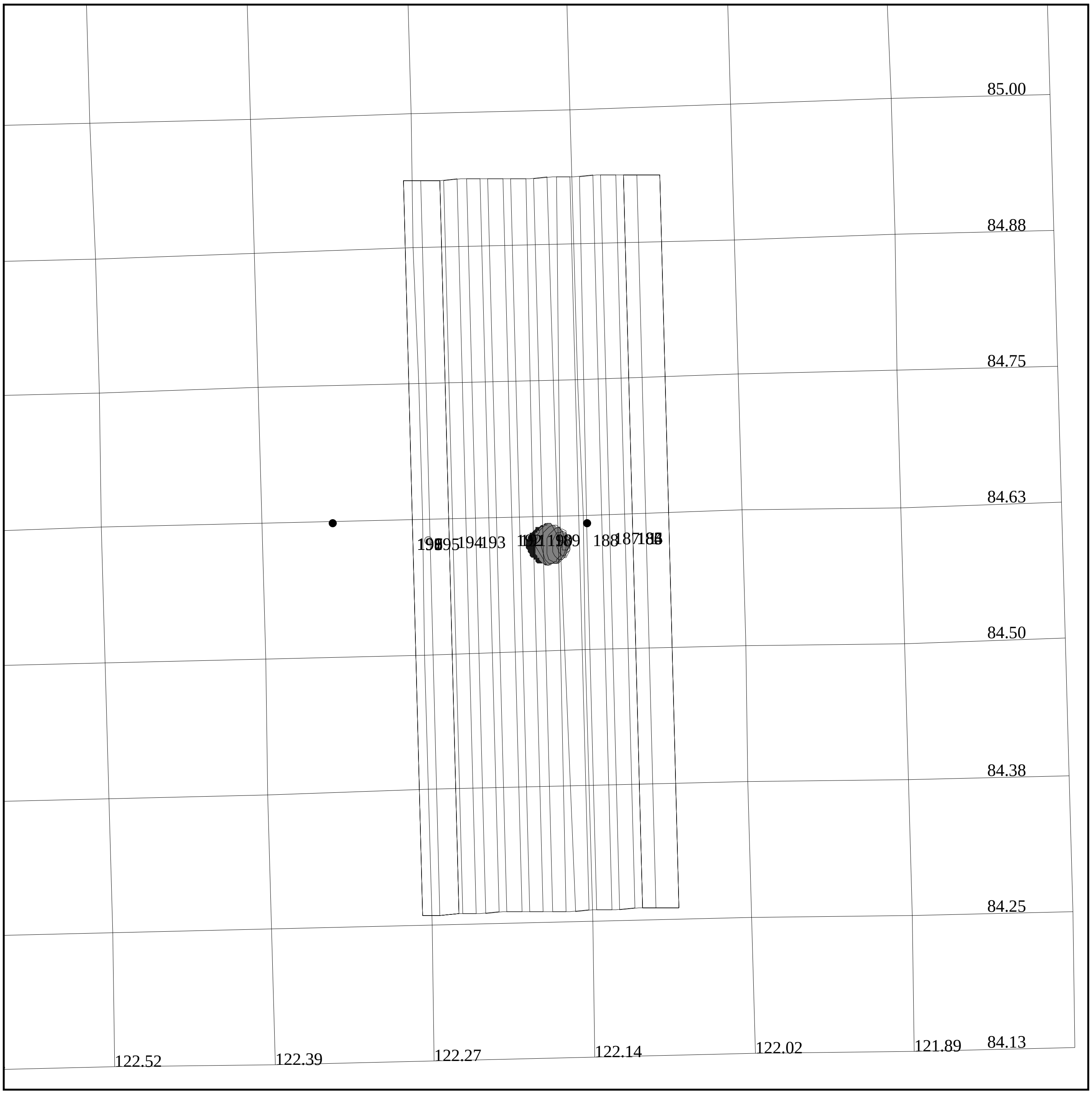
TARGET 72 CSMOS 24 CMDRS 52 SCIREC 18 SCITLM 25

NIMS will be in Fixed Map mode (XM, 17 wavelengths).
Gain=2, Chopper=Reference, Grating start=2, and Grating offset=4.
Target to Jupiter and offset in cone 1.5 mrad.
Scan back and forth in box mode (no cross-cone slew) for 3 mrad/swath.
The cycle time for each swath is 5 1/3 seconds at slew rate of 0.91 mrad/sec
The observation will last 1 RIM (recorded), but will playback only one complete cycle of data, i.e. 10 2/3 seconds.
UVS will be riding along in this observation.

Fixed Map (XM), Gain 2, Grating Start 2, Chopper Ref, MPW

Created on 03/25/94 Version 23 |07/11/94
Last Changed 07/06/94 Changed By J. HUI |13:16:57

Galileo Activity Plan Form rev 6/93



165JB:TT=   0 TMC= 1 C=   -1.40 XC=   0.00 BS= 0/2459 TC= 3
A= 728 pD=   0 SR=17.450 RA50=176.29 DEC50= 6.77 cone=122.09 clock= 84.60
117JB:#SB= 3 OR= 0.910 RR= 0.910 BM=F RC= 1 BS= 0/2459
1:#s=546 Cs=   3.00 XCs=   0.00 Cr=   -3.00 XCr=   0.00 sD=   16 rD=   16

SLJNFRAGMC01

POINTER E2.0 bradc: 6/27/1994 13:44:47

FILE:P.SLJNFRAGMC01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/SHOELEVY.NSC

PERIAPSIS:94-202/12:00:00

START:SLC 94-198/06:19:00 -CDS 47:00:0

OBSERVATION:SLJNFRAGMC01

Mode:XM, Gr_Strt 2, Gain 2, Chop Ref, Gr_Off 4

17 Wavelengths

Every NIMS Footprint, 16 per slew

Slew Rate: .92 mrad/sec, 3.0 mrad wide Box Scan

Only 1/2 cycle of 546 cycles plotted

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 0

DESCRIP:NIMS FRAGMENT C OBSERVATION

NIMS OBSERVATION OF SL-9 FRAGMENT C — ACTIVITY ID: SLJNFRAGMC01+ — START TIME: SLC-CDS 00000052:00:0

Activity ID Orbit SL Target J Inst N OAPEL FRAGMC SeqNo 01 Multi +
Title NIMS OBSERVATION OF SL-9 FRAGMENT C
Requestor J. HUI Working Group SWG
Bottom Label NIMS Plot Key NIMS Science Team NIMS

Time System EPOCH Load ID C3 Calendar Date 07/17/94 Week 28

Start	SLC-CDS 00000052:00:0	94-198/05:26:26	SLC-000/00:52:34
End	SLC+CDS 00000049:00:0	94-198/07:08:32	SLC+000/00:49:32
Duration	00000101:00:0	000/01:42:06	000/01:42:06

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

RECORD: Format MPW Record Duration 60:00:0 Tic Duration
Multiple Records Acq Start/Stop Cycles 1 Start Tics 0 Track

Instrument Compression:

DDS 0	SSI 0	PWS 0	EUV 0	EPD 0	NIM% 100	UVS 1
MAG 0	AACS 0	PWSW 0	HIC 0	PPR 0	NIMS 1	PLS 0

REALTIME: RTS FORMAT RTS Rate Playback YES 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 will observe the Shoemaker-Levy 9 fragment C impact on Jupiter to study the impact flash and subsequent events such as the fireball.

Design Detail

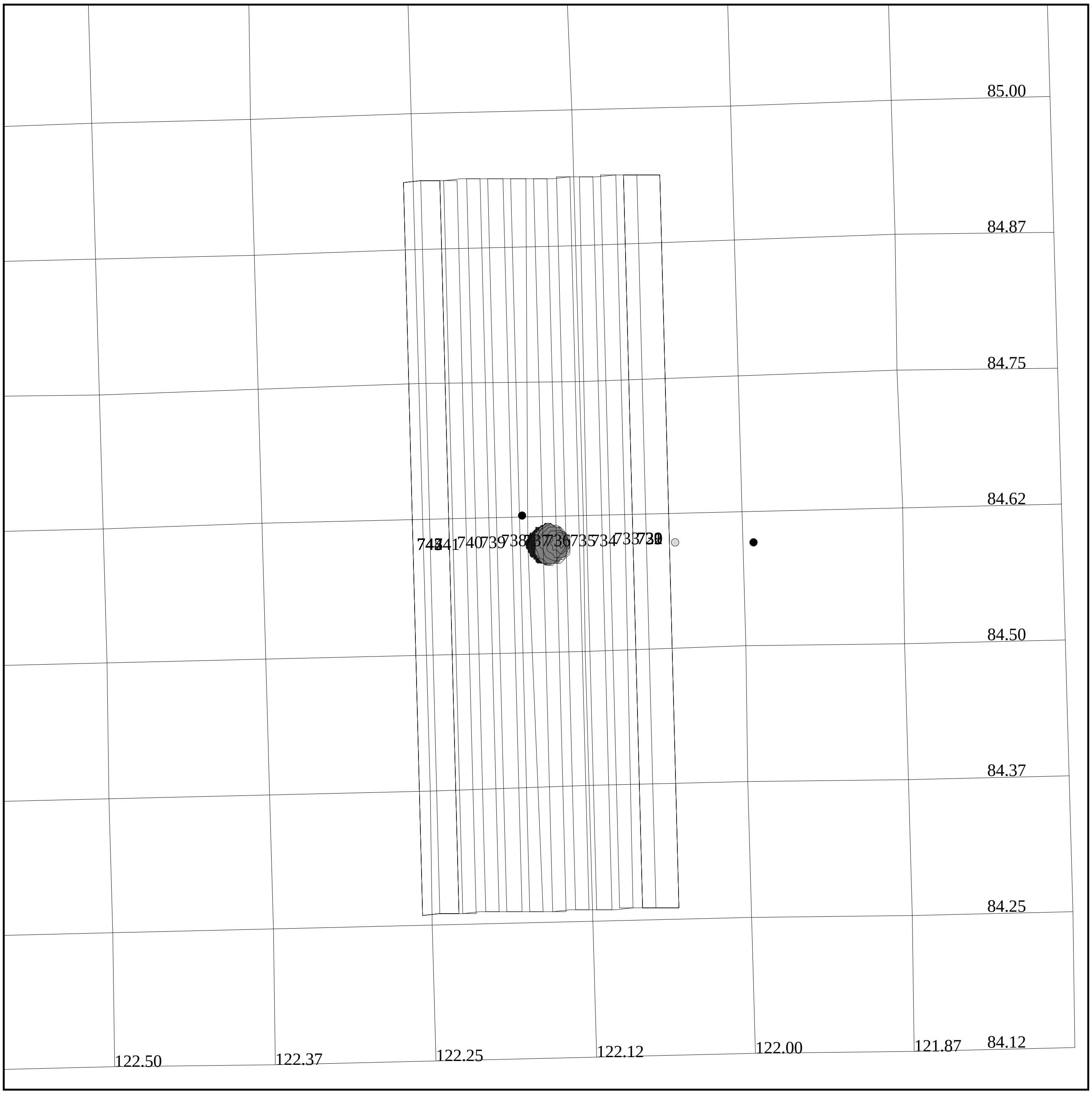
CDS 189 POINTER Design Y Frames 0.00 Exc Alias

TARGET 72 CSMOS 50 CMDRS 24 SCIREC 18 SCITLM 25

NIMS will be in Fixed Map mode (XM, 17 wavelengths).
Gain=2, Chopper=Reference, Grating start=2, and Grating offset=4.
Target to Jupiter and offset 1.5 mrad in cone.
Scan back and forth in box mode (no cross-cone slew) for 3 mrad/swath.
The cycle time for each swath is 5 1/3 seconds at slew rate of 0.91 mrad/sec
The observation will last 96mins, but will record only one hour of data.
This observation will be play backed only if there is more downlink bits after the NIMS fragment G and R observations have been play backed.
UVS will be riding along in this observation.
Fixed Map (XM), Gain 2, Grating Start 2, Chopper Ref, MPW

Created on 03/25/94 Version 23 |07/11/94
Last Changed 06/17/94 Changed By J. HUI |13:17:01

Galileo Activity Plan Form rev 6/93



165JC:TT= 0 TMC= 1 C= -1.40 XC= 0.00 BS= 0/0465 TC= 3
A= 728 pD= 0 SR=17.450 RA50=176.27 DEC50= 6.78 cone=122.07 clock= 84.60
117JC:#SB= 3 OR= 0.910 RR= 0.910 BM=F RC= 1 BS= 0/0465
1:#s=546 Cs= 3.00 XCs= 0.00 Cr= -3.00 XCr= 0.00 sD= 16 rD= 16

SLJNFRAGMF01

POINTER E2.0 bradc: 6/27/1994 13:44:47

FILE:P.SLJNFRAGMF01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/SHOELEVY.NSC

PERIAPSIS:94-202/12:00:00

START:SLF 94-198/23:43:29 -CDS 47:00:0

OBSERVATION:SLJNFRAGMF01

Mode:XM, Gr_Strt 2, Gain 2, Chop Ref, Gr_Off 4

17 Wavelengths

Every NIMS Footprint, 16 per slew

Slew Rate: .92 mrad/sec, 3.0 mrad wide Box Scan

Only 1/2 cycle of 546 cycles plotted

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 0

DESCRIP:NIMS FRAGMENT F OBSERVATION

NIMS OBSERVATION OF SL-9 FRAGMENT F

ACTIVITY ID: SLJNFRAGMF01+
START TIME: SLF-CDS 00000053:00:0

Activity ID Orbit SL Target J Inst N OAPEL FRAGMF SeqNo 01 Multi +
Title NIMS OBSERVATION OF SL-9 FRAGMENT F
Requestor J. HUI Working Group SWG
Bottom Label NIMS Plot Key NIMS Science Team NIMS

Time System EPOCH Load ID C3 Calendar Date 07/17/94 Week 28

Start	SLF-CDS 00000053:00:0	94-198/22:49:54	SLF-000/00:53:35
End	SLF+CDS 00000049:00:0	94-199/00:33:01	SLF+000/00:49:32
Duration	00000102:00:0	000/01:43:07	000/01:43:07

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

RECORD: Format MPW Record Duration 60:00:0 Tic Duration
Multiple Records Acq Start/Stop Cycles 1 Start Tics 0 Track

Instrument Compression:

DDS 0	SSI 0	PWS 0	EUV 0	EPD 0	NIM% 100	UVS 1
MAG 0	AACS 0	PWSW 0	HIC 0	PPR 0	NIMS 1	PLS 0

REALTIME: RTS FORMAT RTS Rate Playback YES 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 will observe the Shoemaker-Levy 9 fragment F impact on Jupiter to study the impact flash and subsequent events such as the fireball.

Design Detail

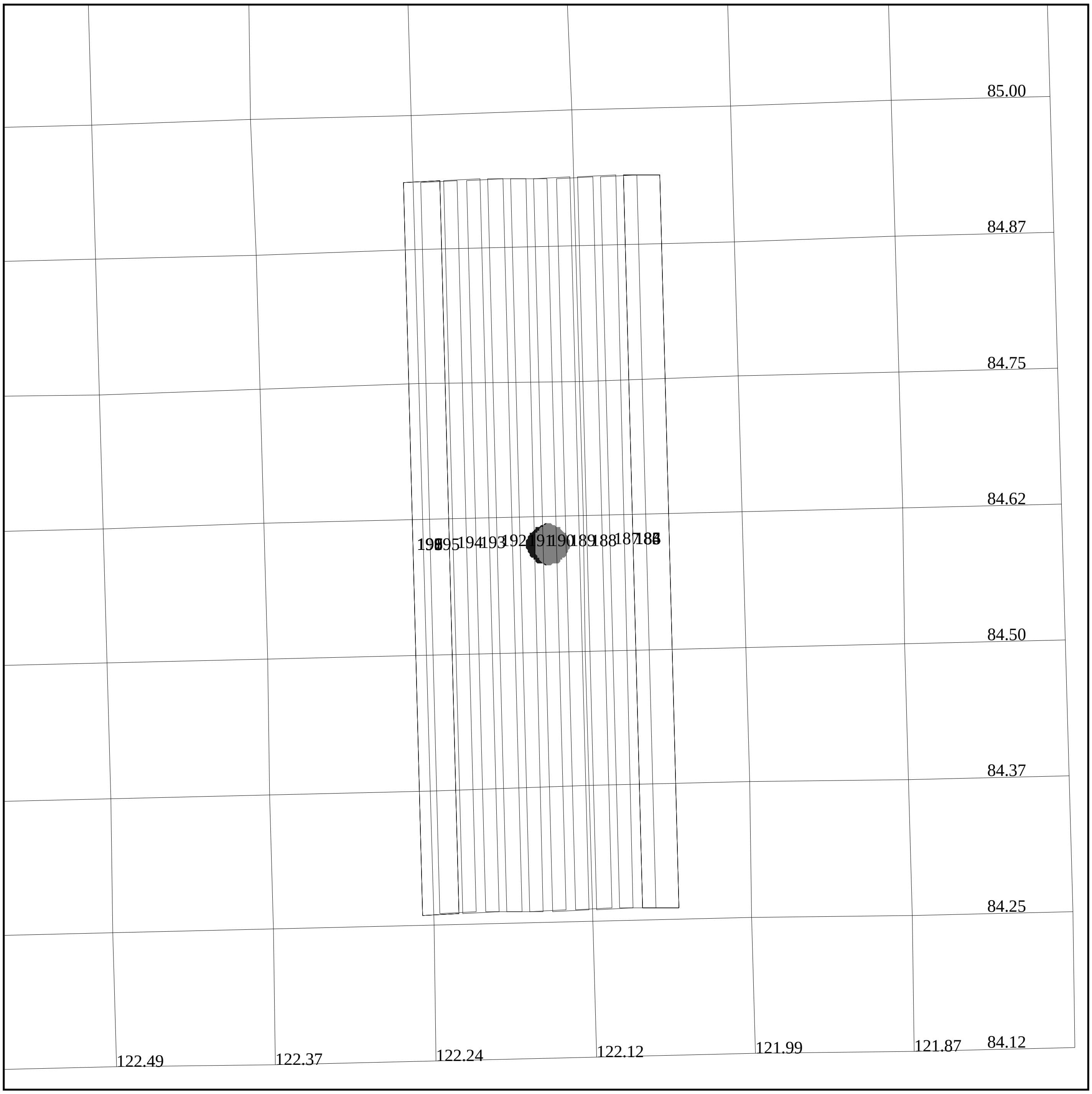
CDS 165 POINTER Design Y Frames 0.00 Exc Alias

TARGET 72 CSMOS 50 CMDRS 0 SCIREC 18 SCITLM 25

NIMS will be in Fixed Map mode (XM, 17 wavelengths).
Gain=2, Chopper=Reference, Grating start=2, and Grating offset=4.
Target to Jupiter and offset 1.5 mrad in cone.
Scan back and forth in box mode (no cross-cone slew) for 3 mrad/swath.
The cycle time for each swath is 5 1/3 seconds at slew rate of 0.91 mrad/sec
The observation will last 96 mins, but will record only one hour of data.
This observation will be play backed only if there is more downlink bits after the NIMS fragment G and R observations have been play backed.
UVS will be riding along in this observation.
Fixed Map (XM), Gain 2, Grating Start 2, Chopper Ref, MPW

Created on 03/25/94 Version 25 |07/11/94
Last Changed 06/17/94 Changed By J. HUI |13:17:04

Galileo Activity Plan Form rev 6/93



165JD:TT= 0 TMC= 1 C= -1.40 XC= 0.00 BS= 0/9816 TC= 3
A= 728 pD= 0 SR=17.450 RA50=176.26 DEC50= 6.78 cone=122.06 clock= 84.60
117JD:#SB= 3 OR= 0.910 RR= 0.910 BM=F RC= 1 BS= 0/9816
1:#s=546 Cs= 3.00 XCs= 0.00 Cr= -3.00 XCr= 0.00 sD= 16 rD= 16

SLJNFRAGMG01

POINTER E2.0 jhui : 7/11/1994 15:41:18

FILE:P.SLJNFRAGMG01

CENTRAL BODY:JUPITER III

MINI:m.SLJNFRAGMG01

S/C EPH:/DATA/NAVIO/SHOELEVY.NSC

PERIAPSIS:94-202/12:00:00

START:SLG 94-199/07:04:20 -CDS 47:00:0

OBSERVATION:SLJNFRAGMG01

Mode:XM, Gr_Strt 2, Gain 2, Chop Ref, Gr_Off 4

17 Wavelengths

Every NIMS Footprint, 16 per slew

Slew Rate: .92 mrad/sec, 3.0 mrad wide Box Scan

Only 1/2 cycle of 546 cycles plotted

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 0

DESCRIP:NIMS FRAGMENT G OBSERVATION

```
NIMS OBSERVATION OF SL-9                   ACTIVITY ID: SLJNFRAGMG01+
FRAGMENT G                                  START TIME: SLG-CDS 00000052:00:0
```

```
Activity ID  Orbit SL  Target J  Inst N  OAPEL FRAGMG  SeqNo 01  Multi +
Title        NIMS OBSERVATION OF SL-9 FRAGMENT G
Requestor    J. HUI                                 Working Group  SWG
Bottom Label NIMS                Plot Key  NIMS     Science Team   NIMS
```

```
Time System  EPOCH     Load ID  C3      Calendar Date  07/18/94  Week 29

Start        SLG-CDS 00000052:00:0   94-199/06:11:46   SLG-000/00:52:34
End          SLG+CDS 00000050:00:0   94-199/07:54:53   SLG+000/00:50:33
Duration             00000102:00:0      000/01:43:07       000/01:43:07
```

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

```
RECORD:  Format  MPW   Record Duration    60:00:0   Tic Duration
Multiple Records       Acq Start/Stop Cycles  1   Start Tics     0  Track

                          Instrument Compression:
  DDS 0      SSI  0      PWS  0      EUV 0     EPD 0     NIM% 100  UVS 1
  MAG 0     AACS  0      PWSW 0      HIC 0     PPR 0     NIMS 1    PLS 0
```

```
REALTIME: RTS FORMAT       RTS Rate       Playback YES   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 will observe the Shoemaker-Levy 9 fragment G impact on Jupiter to study the impact flash and subsequent events such as the fireball.

Design Detail

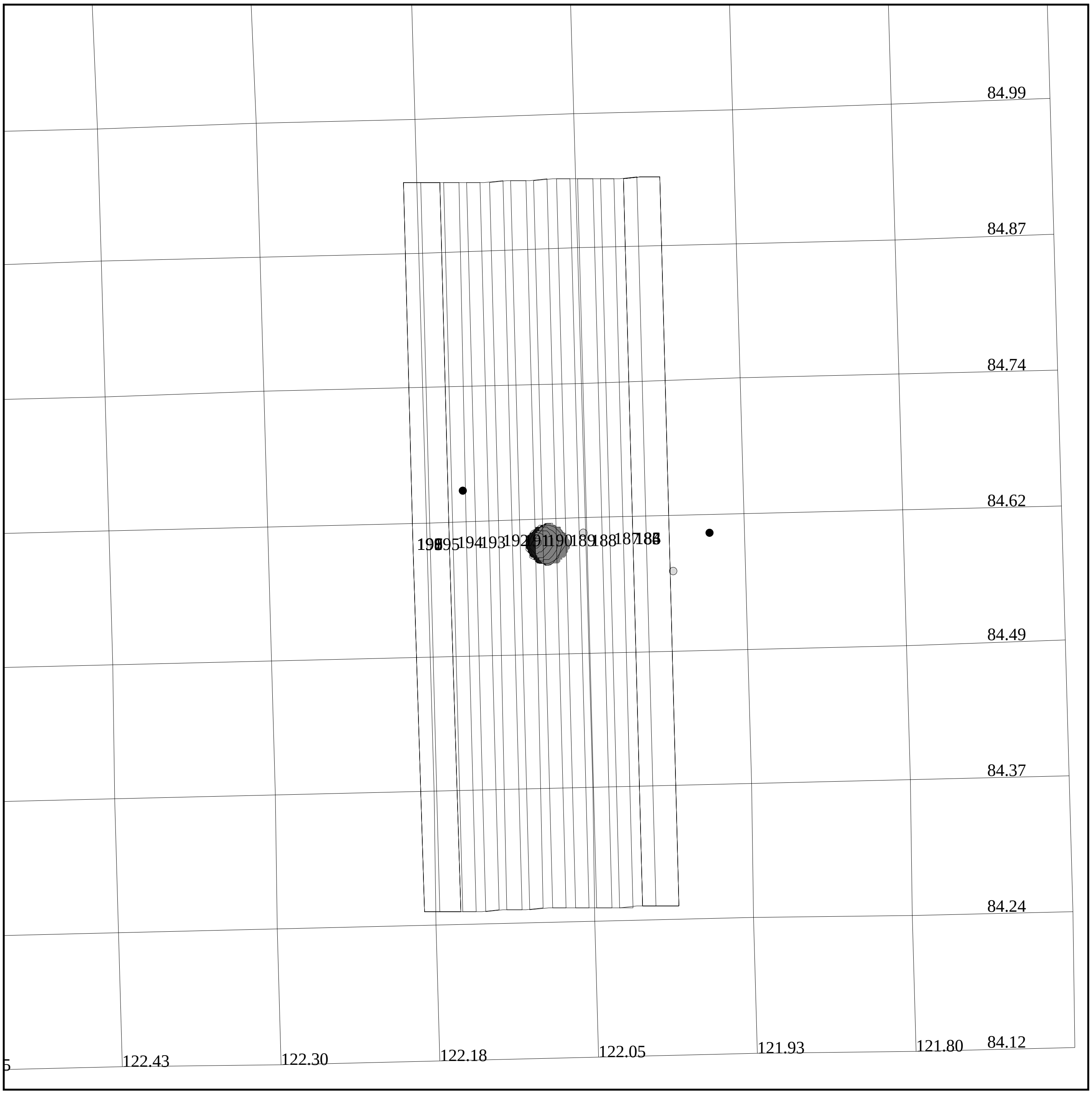
```
 CDS   189  POINTER Design Y  Frames     0.00  Exc      Alias

 TARGET     72  CSMOS      50  CMDRS      24  SCIREC     18  SCITLM     25
```

NIMS will be in Fixed Map mode (XM, 17 wavelengths).
Gain=2, Chopper=Reference, Grating start=2, and Grating offset=4.
Target to Jupiter and offset 1.5 mrad in cone.
Scan back and forth in box mode (no cross-cone slew) for 3 mrad/swath.
The cycle time for each swath is 5 1/3 seconds at slew rate of 0.91 mrad/sec
The observation will last 96 mins, but will record only one hour of data.
This observation will be playback according to an editing scheme, TBD.
(Play 10.667 seconds of continuous data during the impact, and 2.5 mins worth of jail bar data.) UVS will be riding along in this observation.
Fixed Map (XM), Gain 2, Grating Start 2, Chopper Ref, MPW

```
Created on     03/25/94      Version     23                        |07/11/94
Last Changed   06/17/94      Changed By  J. HUI                    |13:17:07
```

Galileo Activity Plan Form   rev 6/93



165JE:TT= 0 TMC= 1 C= -1.40 XC= 0.00 BS= 0/6572 TC= 3
A= 728 pD= 0 SR=17.450 RA50=176.21 DEC50= 6.81 cone=122.00 clock= 84.60
117JE:#SB= 3 OR= 0.910 RR= 0.910 BM=F RC= 1 BS= 0/6572
1:#s=456 Cs= 3.00 XCs= 0.00 Cr= -3.00 XCr= 0.00 sD= 16 rD= 16

SLJNFRAGMR01

POINTER E2.0 bradc: 6/27/1994 13:44:47

FILE:P.SLJNFRAGMR01

CENTRAL BODY:JUPITER

MINI:m.target

S/C EPH:/DATA/NAVIO/SHOELEVY.NSC

PERIAPSIS:94-202/12:00:00

START:SLR 94-202/05:08:31 -CDS 47:00:0

OBSERVATION:SLJNFRAGMR01

Mode:XM, Gr_Strt 2, Gain 2, Chop Ref, Gr_Off 4

17 Wavelengths

Every NIMS Footprint, 16 per slew

Slew Rate: .92 mrad/sec, 3.0 mrad wide Box Scan

Only 1/2 cycle of 546 cycles plotted

THINNING:NIM 1

BODY PLOT TIME:TARGET-TIME D= 0

DESCRIP:NIMS FRAGMENT R OBSERVATION

NIMS OBSERVATION OF SL-9 FRAGMENT R — ACTIVITY ID: SLJNFRAGMR01+ — START TIME: SLR-CDS 00000052:00:0

```
Activity ID  Orbit SL  Target J  Inst N  OAPEL FRAGMR  SeqNo 01  Multi +
Title        NIMS OBSERVATION OF SL-9 FRAGMENT R
Requestor    J. HUI                                Working Group  SWG
Bottom Label NIMS                Plot Key  NIMS    Science Team   NIMS

Time System  EPOCH     Load ID  C3      Calendar Date  07/21/94  Week 29

Start        SLR-CDS 00000052:00:0   94-202/04:15:57   SLR-000/00:52:34
End          SLR+CDS 00000050:00:0   94-202/05:59:04   SLR+000/00:50:33
Duration             00000102:00:0      000/01:43:07      000/01:43:07

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

RECORD:  Format  MPW   Record Duration    60:00:0   Tic Duration
Multiple Records       Acq Start/Stop Cycles  1   Start Tics     0  Track

                          Instrument Compression:
  DDS 0      SSI  0      PWS  0      EUV 0     EPD 0     NIM% 100  UVS 1
  MAG 0     AACS  0      PWSW 0      HIC 0     PPR 0     NIMS 1    PLS 0

REALTIME: RTS FORMAT       RTS Rate       Playback YES   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 will observe the Shoemaker-Levy 9 fragment R impact on Jupiter to study the impact flash and subsequent events such as the fireball.

Design Detail

```
 CDS   203  POINTER Design Y  Frames     0.00  Exc      Alias

 TARGET     72  CSMOS      50  CMDRS      38  SCIREC     18  SCITLM     25
```

NIMS will be in Fixed Map mode (XM, 17 wavelengths).
Gain=2, Chopper=Reference, Grating start=2, and Grating offset=4.
Target to Jupiter and offset 1.5 mrad in cone.
Scan back and forth in box mode (no cross-cone slew) for 3 mrad/swath.
The cycle time for each swath is 5 1/3 seconds at slew rate of 0.91 mrad/sec
The observation will last 96 mins, but will record only one hour of data.
This observation will be playback according to an editing scheme, TBD.
(Play 10.667 seconds of continuous data during the impact, and 2.5 mins worth of jail bar data.) UVS will be riding along in this observation.
Fixed Map (XM), Gain 2, Grating Start 2, Chopper Ref, MPW

```
Created on     03/25/94      Version     21                    |07/11/94
Last Changed   06/17/94      Changed By  J. HUI                |13:17:11
```

Galileo Activity Plan Form — rev 6/93

NIMS POWER OFF

ACTIVITY ID: SLNNNIMOFF01-
START TIME: SLC+CDS 00007556:04:0

```
Activity ID  Orbit SL  Target N  Inst N  OAPEL NIMOFF  SeqNo 01  Multi -
Title        NIMS POWER OFF
Requestor    J. HUI                                 Working Group  SWG
Bottom Label NIMS                Plot Key  NIMS     Science Team   NIMS

Time System  UTC      Load ID  C3      Calendar Date  07/22/94  Week 29

Start        SLC+CDS 00007556:04:0   94-203/13:39:00   SLC+005/07:20:00
End          SLC+CDS 00007559:01:0   94-203/13:42:00   SLC+005/07:23:00
Duration             00000002:88:0      000/00:03:00       000/00:03:00

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

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

                          Instrument Compression:
  DDS 0      SSI  0      PWS  0      EUV 0     EPD 0     NIM% 0    UVS 0
  MAG 0     AACS  0      PWSW 0      HIC 0     PPR 0     NIMS 0    PLS 0

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

Power NIMS instrument off.

Design Detail

```
 CDS    50  POINTER Design N  Frames     0.00  Exc      Alias

 TARGET     72  CSMOS      50  CMDRS      38  SCIREC     18  SCITLM     25
```

Use Library Sequence.

```
Created on     04/22/94     Version     7                      |07/11/94
Last Changed   07/06/94     Changed By  J. HUI                 |13:17:14
```

Galileo Activity Plan Form rev 6/93