Activity ID: Orbit 10 **OAPEL** EUEURDRK **SeqNo** 01-

Title UVS EUROPA ECLIPSE 01 **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/16/97 **Week** 38

Start	JEE-CDS 00003574:00:0	97-259/10:56:33.267	JEE-002/12:13:42.666
End	JEE-CDS 00003558:00:0	97-259/11:12:43.933	JEE-002/11:57:32.000
Duration	00000016:00:0	000/00:16:10.666	000/00:16:10.666

Top Label 10EUEURDRK01-

Bottom Label (real-time)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective

UVS real-time Europa Eclipse observation. Obtain UVS N-Channel data while Europa is near the eclipse umbra of Jupiter. Data will be used to characterize the lower atmospheric UV airglow emissions of Europa while in eclipse.

10EUEURDRK01- Europa eclipse measurment. Target and stare at Europa using TMC in real-time using the UVS 10 bps RTS rate.

UVS Configuration = N/N 44-step 3064 Å

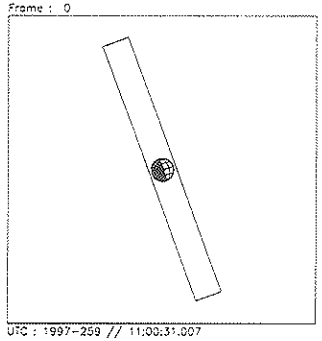
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

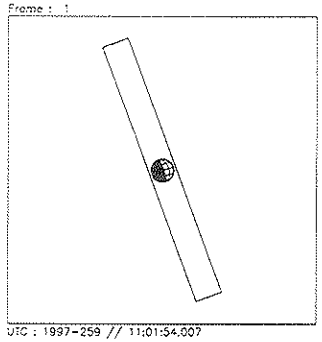
```
CDS RIM Command Parameters                          Psid
--- --- ------- ----------                          ----
0   000 COMMENT UVS RIM 0                           (384CA)
28  003+UVFLUSH DISCRD,UVS                          (349CA)
54  004 TARGET  with TMC on body                    (165CA)
38  003 CMDRS                                       (157CA)
    004     1   34UVS,D9,F,N,N,N,S,0,OFF,  ON,OFF,  ON,OFF,NOOVR,1,69,65,00,00
    016     13  34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
28  015+UVFLUSH PACKET,UVS                          (349CB)
```

Frame : 0



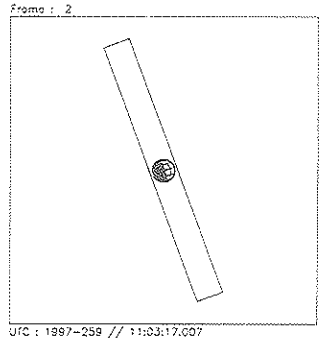
UTC : 1997-259 // 11:00:31.007
SCLK: 1/04133061:00:0:0

Frame : 1



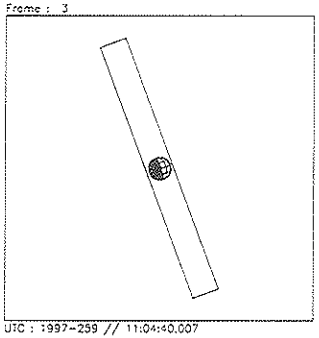
UTC : 1997-259 // 11:01:54.007
SCLK: 1/04133062:33:5:0

Frame : 2



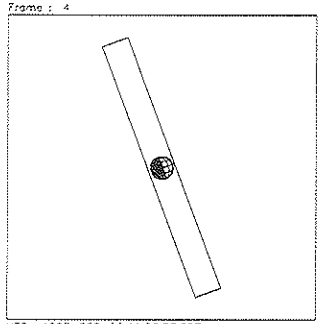
UTC : 1997-259 // 11:03:17.007
SCLK: 1/04133063:67:0:0

Frame : 3



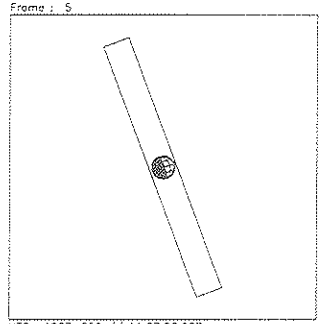
UTC : 1997-259 // 11:04:40.007
SCLK: 1/04133065:09:5:0

Frame : 4



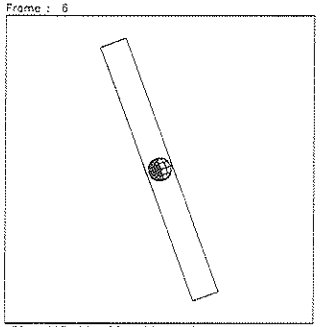
UTC : 1997-259 // 11:06:03.007
SCLK: 1/04133066:43:0:0

Frame : 5



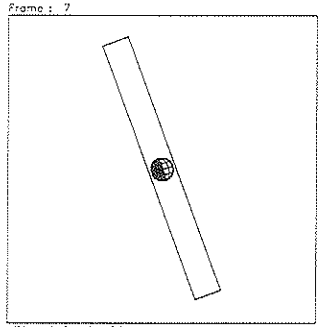
UTC : 1997-259 // 11:07:26.007
SCLK: 1/04133067:76:5:0

Frame : 6



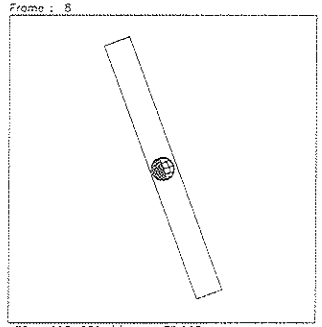
UTC : 1997-259 // 11:08:49.007
SCLK: 1/04133069:19:0:0

Frame : 7



UTC : 1997-259 // 11:10:12.007
SCLK: 1/04133070:52:5:0

Frame : 8



UTC : 1997-259 // 11:11:35.007
SCLK: 1/04133071:86:0:0

Start UTC_TIME : 1997-259 // 11:00:31.007
End UTC_TIME : 1997-259 // 11:11:38.340
Start SCLK : 1/04133061:00:0:0
Delta Time between FOV : 83.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 90.18/ 95.39 Deg
S/C to Body Center : 209695:. Km (1339.9103 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL EUPHAS93 **SeqNo** 01-

Title UVS EUROPA PHASE (~93 deg) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/16/97 **Week** 38

Start	JEE-CDS 00003397:00:0	97-259/13:55:31.267	JEE-002/09:14:44.666
End	JEE-CDS 00003379:00:0	97-259/14:13:43.267	JEE-002/08:56:32.666
Duration	00000018:00:0	000/00:18:12.000	000/00:18:12.000

Top Label 10EUPHAS9301-

Bottom Label (real-time)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective

Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth.

Target to body and stare at Europa using TMC in real-time at ~93° phase (104° longitude) using the UVS 10bps RTS rate.

UVS Configuration = F/N Full Scans, 1 ms integration

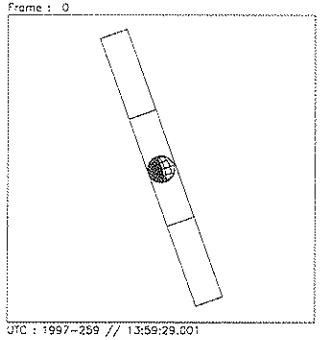
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

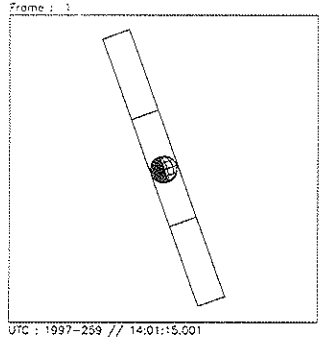
```
CDS  RIM  Command  Parameters                                  PSID
---  ---  -------  ----------                                  ----
0    000  COMMENT  UVS RIM 0                                   (384CB)
28   003+UVFLUSH  DISCRD,UVS                                   (349CC)
38   003  CMDRS                                               (157CB)
     004      1   34UVS,07,S,N,N,N,S,0,  ON,  ON,OFF,  ON,OFF,NOOVR,2,00,9C,01,2C
     018     15   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54   004  TARGET   with TMC on body                           (165CB)
28   017+UVFLUSH  PACKET,UVS                                   (349CD)
```

Frame : 0



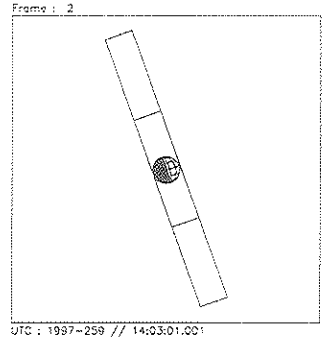
UTC : 1997-259 // 13:59:29.001
SCLK: 1/04133238:00:0:0

Frame : 1



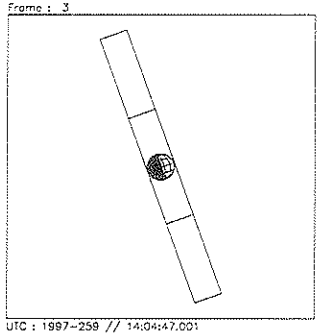
UTC : 1997-259 // 14:01:15.001
SCLK: 1/04133239:68:0:0

Frame : 2



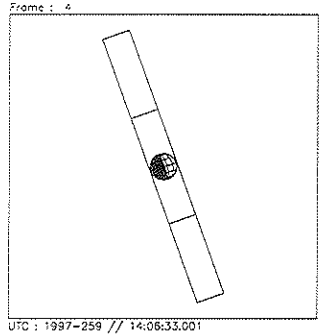
UTC : 1997-259 // 14:03:01.001
SCLK: 1/04133241:45:0:0

Frame : 3



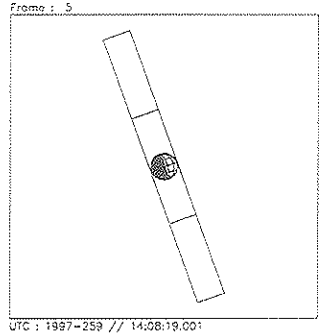
UTC : 1997-259 // 14:04:47.001
SCLK: 1/04133243:22:0:0

Frame : 4



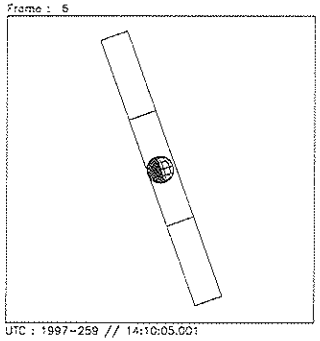
UTC : 1997-259 // 14:06:33.001
SCLK: 1/04133244:90:0:0

Frame : 5



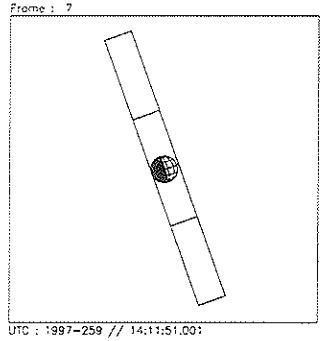
UTC : 1997-259 // 14:08:19.001
SCLK: 1/04133246:67:0:0

Frame : 6



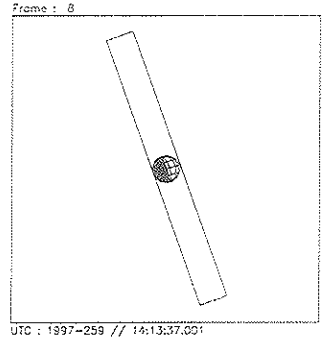
UTC : 1997-259 // 14:10:05.001
SCLK: 1/04133248:44:0:0

Frame : 7



UTC : 1997-259 // 14:11:51.001
SCLK: 1/04133250:21:0:0

Frame : 8



UTC : 1997-259 // 14:13:37.001
SCLK: 1/04133251:89:0:0

Start UTC_TIME : 1997-259 // 13:59:29.001
End UTC_TIME : 1997-259 // 14:13:38.334
Start SCLK : 1/04133238:00:0:0
Delta Time between FOV : 106.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 92.06/ 95.44 Deg
S/C to Body Center : 1896873. Km (1211.9317 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 **OAPEL** CUGLOBAL **SeqNo** 01+

Title UVS R/A W/ NIMS CALLISTO GLOBAL 01 **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/16/97 **Week** 38

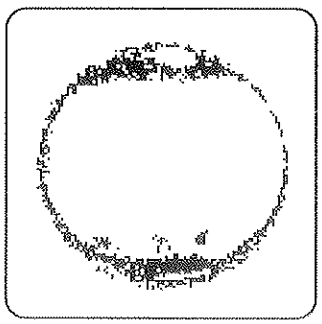
Start	CTE-CDS 00000400:08:0	97-259/17:34:50.733	CTE-000/06:44:32.000
End	CTE-CDS 00000369:73:0	97-259/18:05:28.067	CTE-000/06:13:54.666
Duration	00000030:26:0	000/00:30:37.334	000/00:30:37.334

Top Label 10CUGLOBAL01+

Bottom Label (recorded)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	38	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	Yes

Observation Objective



Ride-along w/NIMS Callisto Global01 observation. Extend the surface scattering property measurements into the ultraviolet (1600 - 3200) in concert with NIMS measurements to infer information about particle size, and refractive and absorption properties of the surface materials.

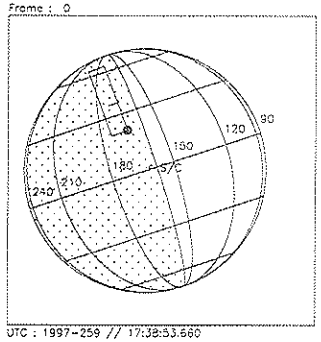
UVS Configuration = F/F Full Scans

PB D/L Mbits = (1008 bps) (25 rims)(60.667 s/RIM) = 1.5288 Mbit
Rj = 28.6, compression 1.54
MBPG = 0.993

Design Detail

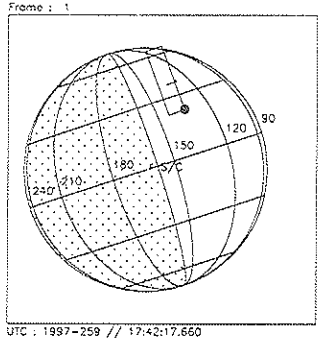
```
CDS RIM Command Parameters                                    DSN
--- --- ------- ----------                                    ---
0   004 TARGET  (NIMS Target)
0       CSMOS   (NIMS Csmos)
0   004 SCIREC  (NIMS Scirec)
38  003 CMDRS                                  (157CC)
    004     1   34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    029    26   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

Frame : 0



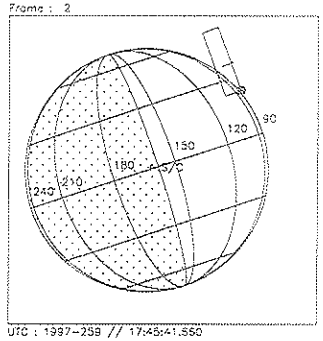
UTC : 1997-259 // 17:38:53.660
SCLK: 1/04133455:00:0:0

Frame : 1



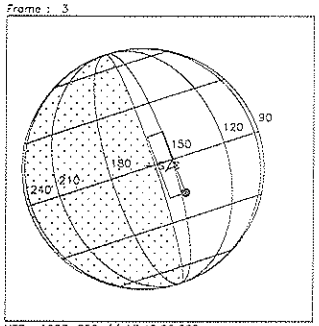
UTC : 1997-259 // 17:42:17.660
SCLK: 1/04133458:33:0:0

Frame : 2



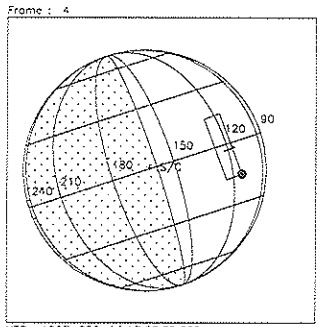
UTC : 1997-259 // 17:45:41.550
SCLK: 1/04133461:66:0:0

Frame : 3



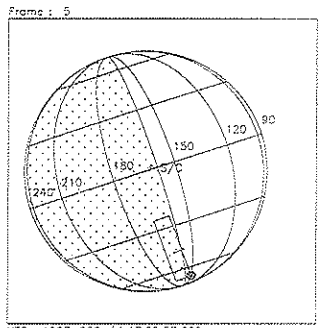
UTC : 1997-259 // 17:49:05.660
SCLK: 1/04133465:08:0:0

Frame : 4



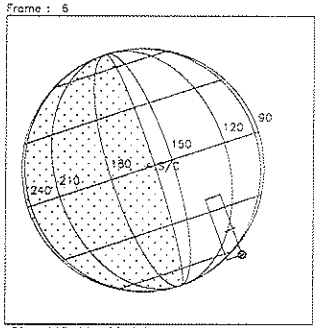
UTC : 1997-259 // 17:52:29.660
SCLK: 1/04133468:41:0:0

Frame : 5



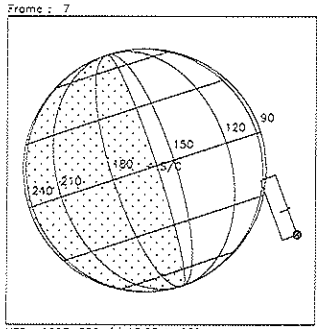
UTC : 1997-259 // 17:55:53.660
SCLK: 1/04133471:74:0:0

Frame : 6



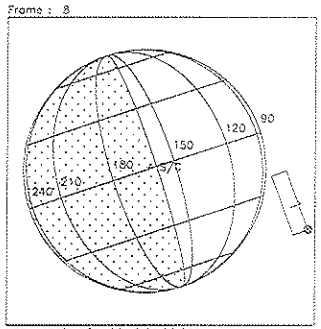
UTC : 1997-259 // 17:59:17.660
SCLK: 1/04133475:16:0:0

Frame : 7



UTC : 1997-259 // 18:02:41.660
SCLK: 1/04133478:49:0:0

Frame : 8



UTC : 1997-259 // 18:06:05.660
SCLK: 1/04133481:82:0:0

Start UTC_TIME : 1997-259 // 17:38:53.660
End UTC_TIME : 1997-259 // 18:06:11.659
Start SCLK : 1/04133455:00:0:0
Delta Time between FOV : 204.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 89.99/ 95.39 Deg
S/C to Body Center : 191231.3 Km (79.580236 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

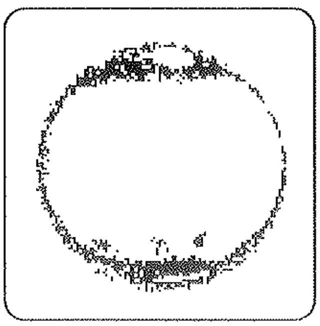
Activity ID: Orbit	10	**OAPEL**	EULON100	**SeqNo**	01-
Title	UVS EUROPA LONGITUDE (~100 deg)			**Instrument**	UVS
Requestor	UVS-SWG/W.SWEET 30523	**Team**	UVS	**Working Group**	SWG

Time System	CDS	**Load ID**	10A	**Calendar Date**	09/16/97	Week	38

Start	JEE-CDS 00003006:00:0	97-259/20:30:51.933	JEE-002/02:39:24.000
End	JEE-CDS 00002997:00:0	97-259/20:39:57.933	JEE-002/02:30:18.000
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label	10EULON10001-				
Bottom Label	(real-time)				
Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective



Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth to supplement and complement the NIMS surface property measurements.

Target and stare at Europa with TMC in real-time at ~100° (131°) longitude and 92° phase angle using the UVS 10bps RTS rate.

UVS Configuration = F/N Full Scans, 1 ms integration

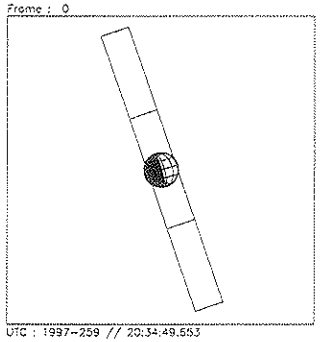
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

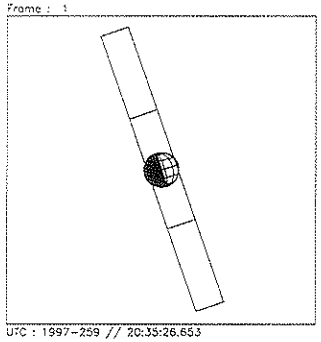
```
CDS RIM Command Parameters
--- --- ------- ----------
0   000 COMMENT UVS RIM 0                              (348CC)
28  003+UVFLUSH DISCRD,UVS                             (349CE)
38  003 CMDRS                                          (157CD)
    004       1   34UVS,07,S,N,N,N,S,0, ON, ON,OFF, ON,OFF,NOOVR,2,00,9C,01,2C
    009       6   34UVS,C1,F,N,N,N,S,0,OFF,OFF, ON,OFF,OFF,NOOVR,1,2C,05,00,00
54  004 TARGET  with TMC on body                       (165CC)
28  008+UVFLUSH PACKET,UVS                             (349CF)
```

Frame : 0



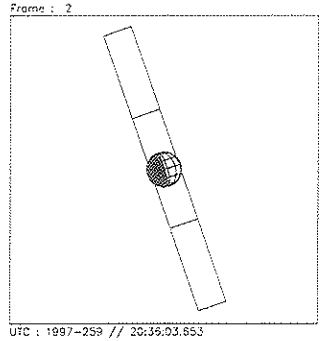
UTC : 1997-259 // 20:34:49.653
SCLK: 1/04133629:00:0:0

Frame : 1



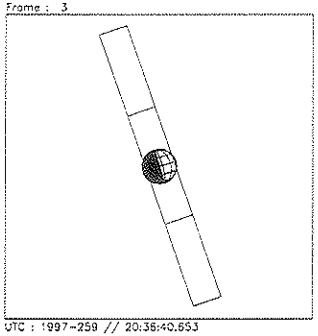
UTC : 1997-259 // 20:35:26.653
SCLK: 1/04133629:55:5:0

Frame : 2



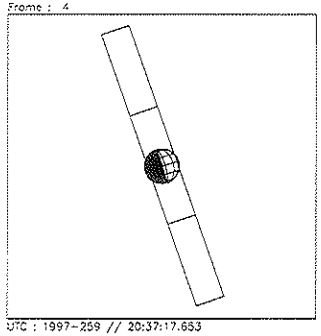
UTC : 1997-259 // 20:36:03.653
SCLK: 1/04133630:20:0:0

Frame : 3



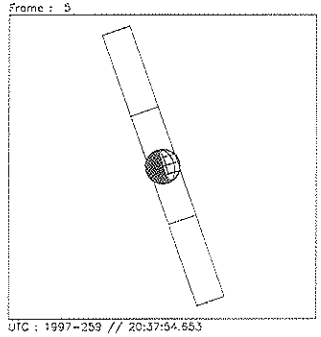
UTC : 1997-259 // 20:36:40.653
SCLK: 1/04133630:75:5:0

Frame : 4



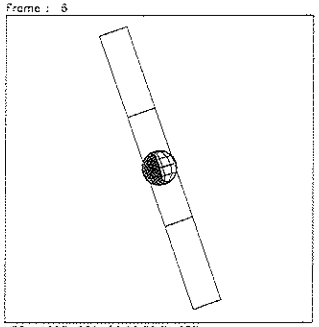
UTC : 1997-259 // 20:37:17.653
SCLK: 1/04133631:40:0:0

Frame : 5



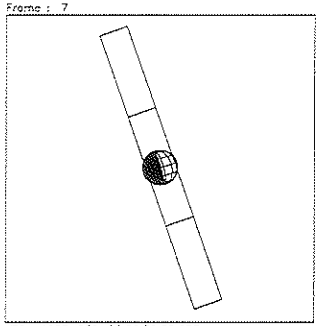
UTC : 1997-259 // 20:37:54.653
SCLK: 1/04133632:04:5:0

Frame : 6



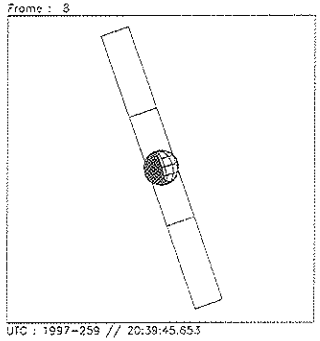
UTC : 1997-259 // 20:38:31.653
SCLK: 1/04133632:60:0:0

Frame : 7



UTC : 1997-259 // 20:39:08.653
SCLK: 1/04133633:24:5:0

Frame : 8



UTC : 1997-259 // 20:39:45.653
SCLK: 1/04133633:80:0:0

Start UTC_TIME : 1997-259 // 20:34:49.653
End UTC_TIME : 1997-259 // 20:39:52.986
Start SCLK : 1/04133629:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 93.97/ 95.48 Deg
S/C to Body Center : 148182:. Km (946.85602 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL CUNOLAT_ SeqNo 01-

Title UVS CALLISTO NORTH LATITUDE Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/16/97 Week 38

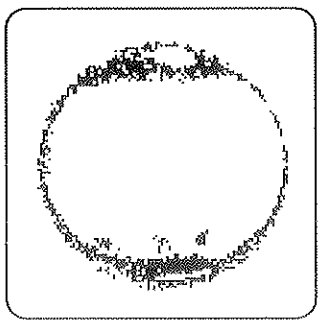
Start	CTE-CDS 00000085:00:0	97-259/22:53:26.067	CTE-000/01:25:56.666
End	CTE-CDS 00000074:00:0	97-259/23:04:33.400	CTE-000/01:14:49.333
Duration	00000011:00:0	000/00:11:07.333	000/00:11:07.333

Top Label 10CUNOLAT_01-

Bottom Label (recorded)

Plot Key	UVS	Type	SCI		
CDS Bytes	90	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective



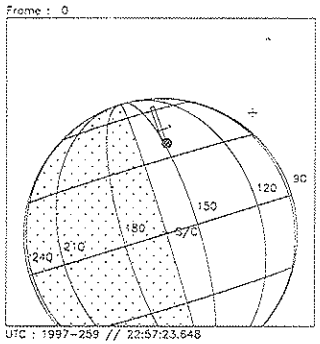
Observe Callisto Northern latitudes. High northern latitudes.

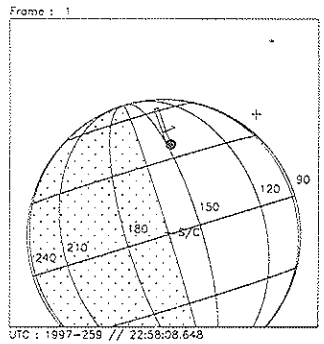
UVS configuration: 1216 - 1304 Å 16 step mini-scans

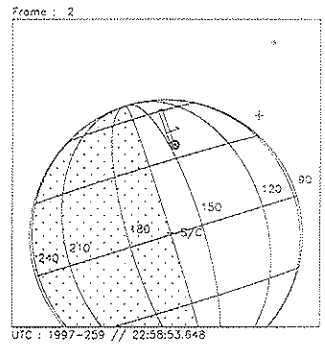
(1008 bps) (6.132 rims)(60.677 s/RIM) = 0.375
Rj = 27, compression ~ 1.3
MBTG = 0.288

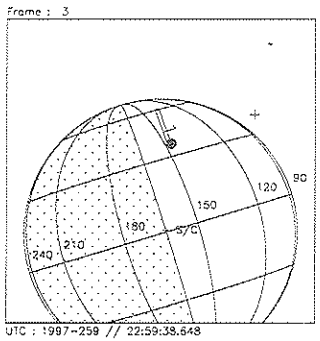
Design Detail

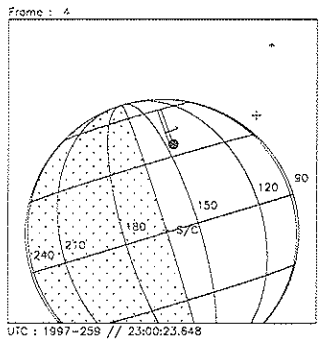
```
CDS RIM Command Parameter                                                    DSN
--- --- ------- ---------                                                    ---
38  003 CMDRS                                                          (157CE)
    004     1   34UVS,D1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,5A,45,00,39
    010     7   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
27  004 TARGET  (4 RIM Posn_slew)                                      (165CD)
25  003 SCIREC                                                         (175CD)
```

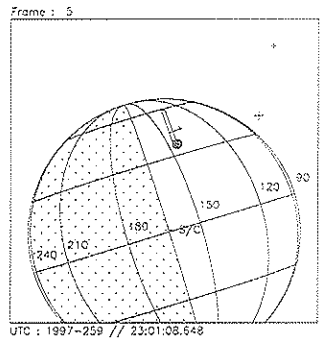


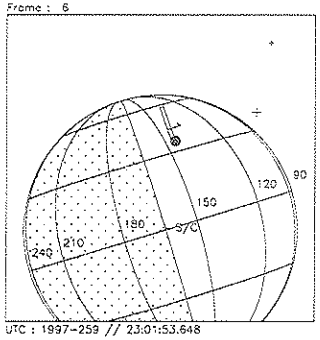


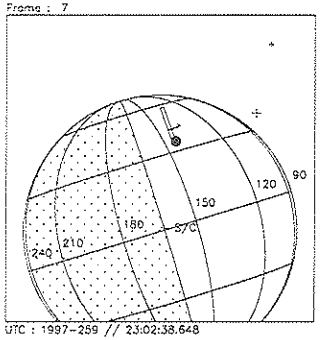


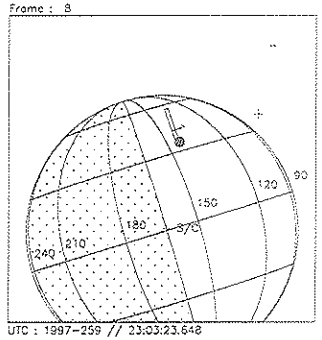












Start UTC_TIME : 1997-259 // 22:57:23.648
End UTC_TIME : 1997-259 // 23:03:27.648
Start SCLK : 1/04133770:00:0:0
Delta Time between FOV : 45.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 93.59/ 95.22 Deg
S/C to Body Center : 39126.89 Km (16.282518 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL CUASGARD SeqNo 01+

Title UVS R/A W/ NIMS ASGARD CRATER Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/16/97 Week 38

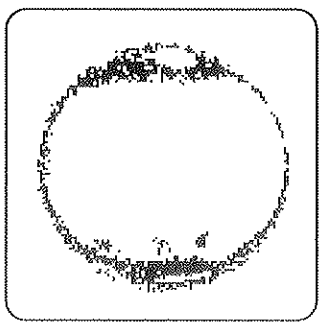
Start	CTE-CDS 00000021:08:0	97-259/23:58:03.400	CTE-000/00:21:19.333
End	CTE-CDS 00000010:04:0	97-260/00:09:13.400	CTE-000/00:10:09.333
Duration	00000011:04:0	000/00:11:10.000	000/00:11:10.000

Top Label 10CUASGARD01+

Bottom Label (recorded)

Plot Key	UVS	Type	SCI		
CDS Bytes	38	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective



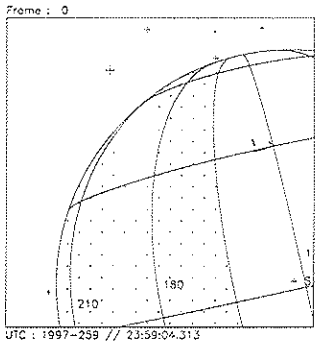
Ride-along with the NIMS Callisto Asgard Crater observation to observe Callisto in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

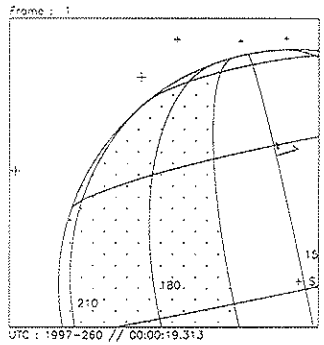
Playback of this observation will require [(1008 bps) * (9 RIMS) * (60.667 s/RIM)] = 0.550 Mbits of UVS data.

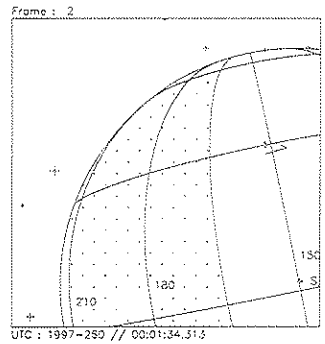
UVS Configuration = F/F Full Scans
Rj=26.4, compression ~1.4
MBTC = 0.393

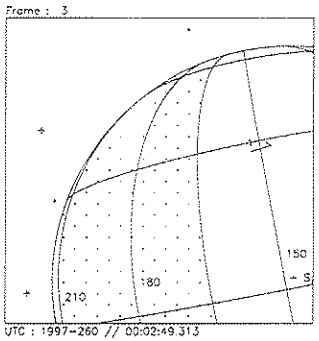
Design Detail

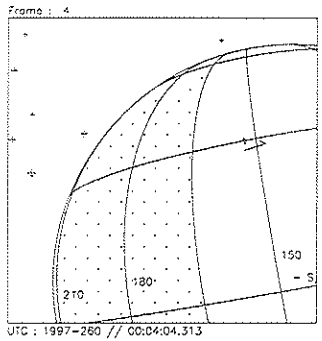
```
CDS RIM Command Parameters                                    (HEX)
--- --- ------- ----------
0   001 TARGET  (NIMS Target)
0       CSMOS   (NIMS Csmos)
0   002 SCIREC  (NIMS Scirec)
38  003 CMDRS                                          (157CF)
    004     1   34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    013     9   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

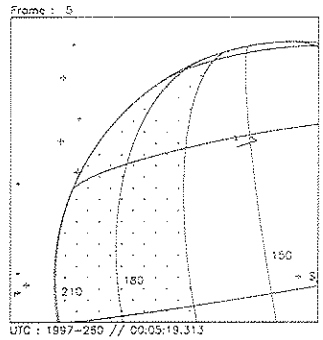


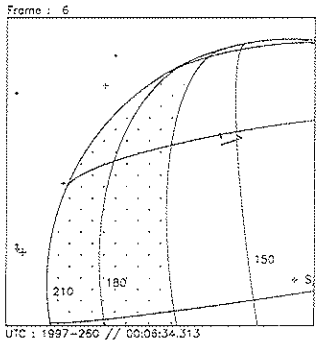


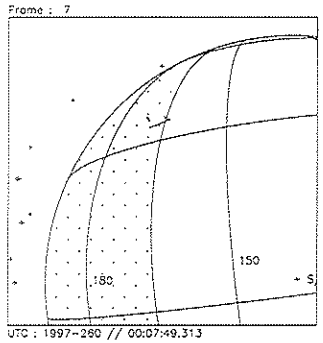


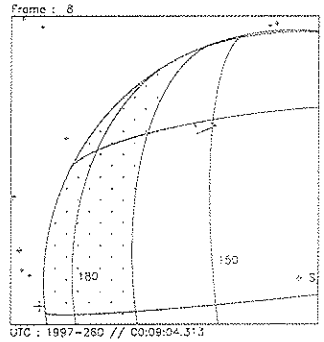












Start UTC_TIME : 1997-259 // 23:59:04.313
End UTC_TIME : 1997-260 // 00:09:10.979
Start SCLK : 1/04133831:00:0:0
Delta Time between FOV : 75.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 106.72/ 94.54 Deg
S/C to Body Center : 9996.017 Km (4.1598075 Rc)
Z-axis Pointing (Ra / Dec) : 137.29 / 18.98 Deg

Activity ID: Orbit 10 **OAPEL** CUBRTLMB **SeqNo** 01-

Title UVS CALLISTO BRIGHT LIMB SCAN (O & H) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 **Week** 38

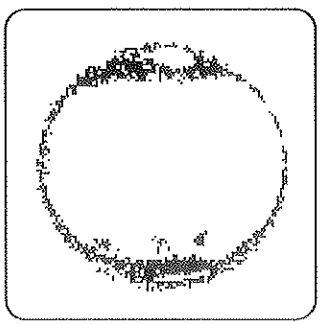
Start	CTE-CDS 00000010:00:0	97-260/00:09:16.067	CTE-000/00:10:06.666
End	CTE+CDS 00000000:02:0	97-260/00:19:24.066	CTE+000/00:00:01.333
Duration	00000010:02:0	000/00:10:07.999	000/00:10:07.999

Top Label 10CUBRTLMB01-

Bottom Label (recorded)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	65	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	Yes

Observation Objective



Measure the altitude distribution of volatiles near the sub-solar point to determine the escape rates from the Jovian satellites when the atmosphere is in full solar illumination. Search for outgassing of atomic H (1216 Å) and atomic O (1304 Å).

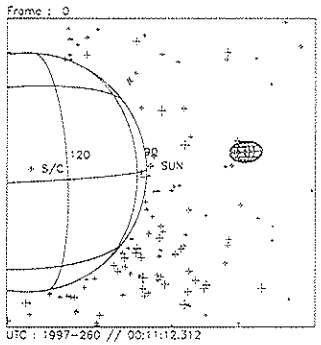
11 RIM Callisto Bright Limb Drift Observation (4 RIM target slew + 7 RIM recorded drift). Target s/p to ~1 Rc off satellite bright limb and allow the s/c motion to drift the FOV onto the bright limb.

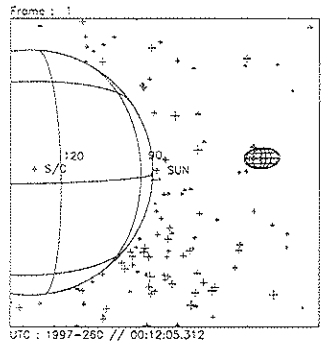
Playback of this observation will require [(7 RIMs)*(1008 bps)*(60.677 s/RIM)] =
0.428136 Mbits
Rj=26.3, compression ~ 3
MBTG = 0.128

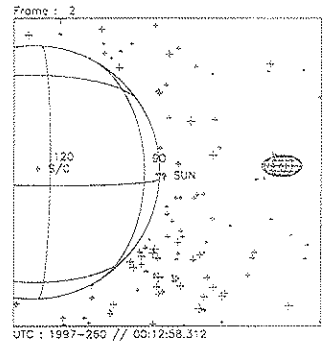
UVS Configuration = G/G 16-step mini-scan 1216/1304 Å

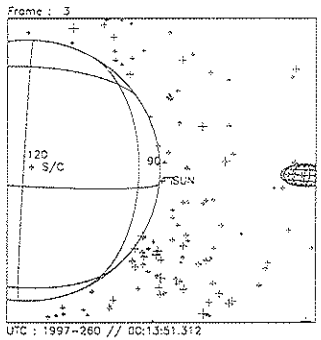
Design Detail

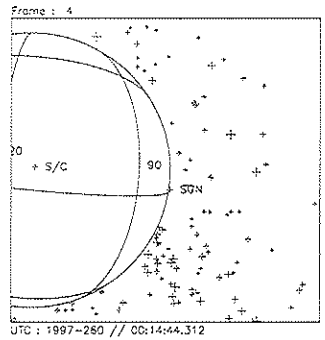
CDS	RIM	Command	Parameter	PSTD
38	001	CMDRS		(157CG)
	003	1	34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,5A,45,00,39	
	009	8	34UVS,C1,F,N,N,N,S,0,OFF,OFF, ON,OFF,OFF,NOOVR,1,2C,05,00,00	
27	004	TARGET	(4 RIM Posn_slew)	(165CE)
	004	SCIREC	(7 RIM @ 7.68 kbps) <- Deleted, will use FPSG recording around c/a	

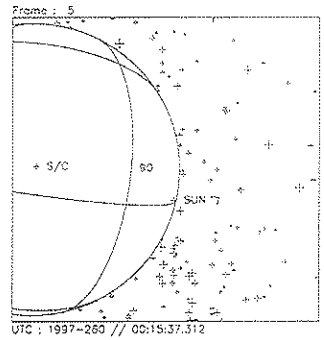


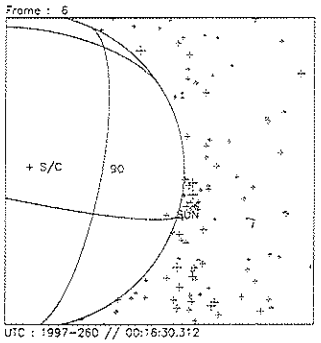


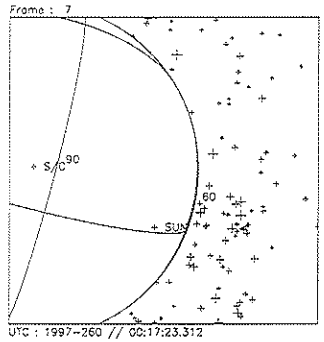


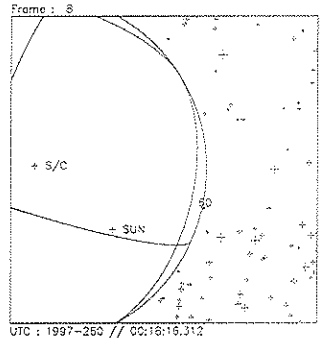






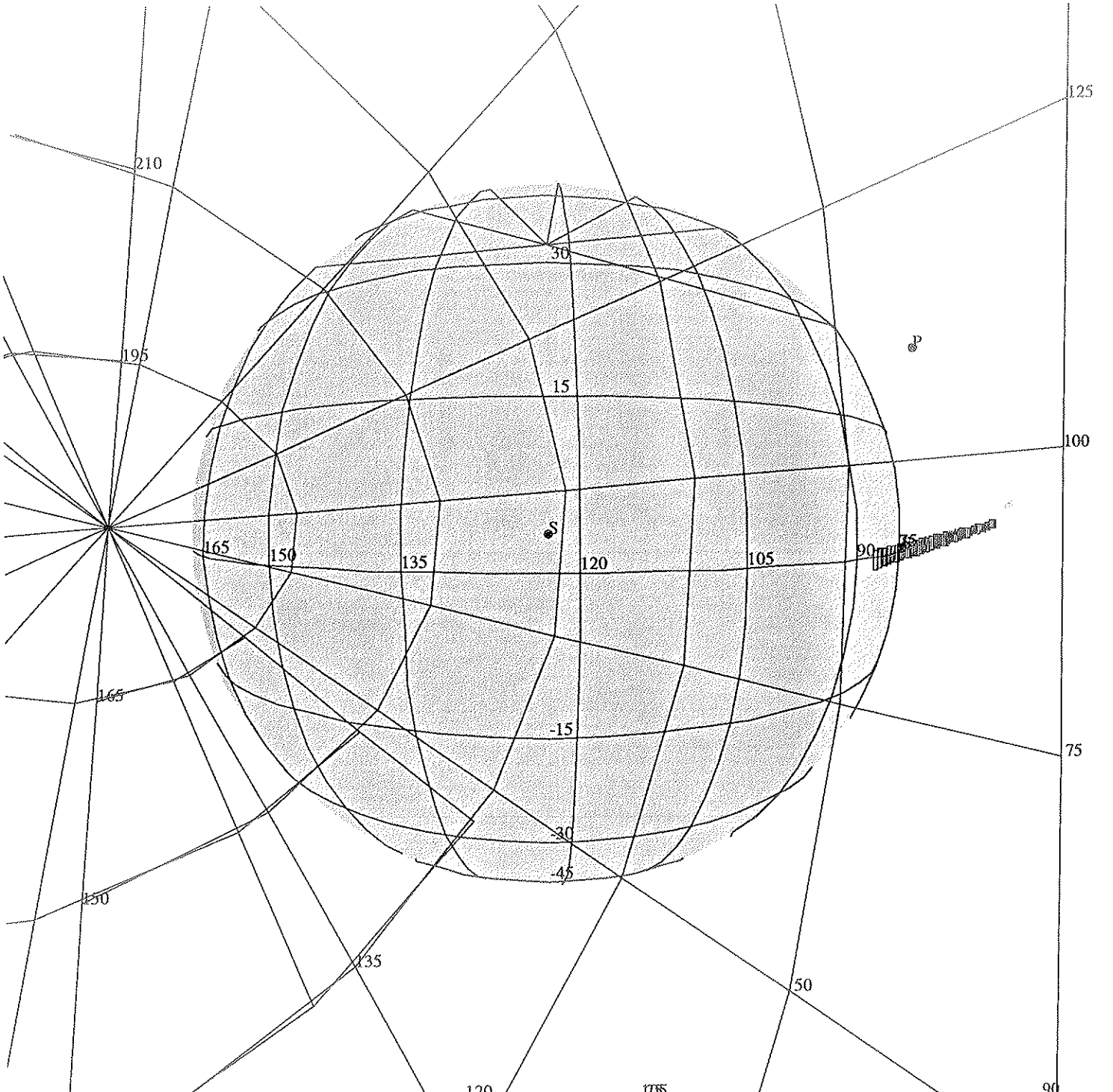






Start UTC_TIME : 1997-260 // 00:11:12.312
End UTC_TIME : 1997-260 // 00:18:16.979
Start SCLK : 1/04133843:00:0:0
Delta Time between FOV : 53.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 128.45/ 93.14 Deg
S/C to Body Center : 4739.809 Km (1.9724547 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg



165CE:TT= 0 TMC= 1 C=-667.00 XC= -8.09 BS= 0/8784 TC= 3
A= 728 pD= 0 SR=17.430 RA50=228.97 DEC50=-24.08 cone= 99.13 clock= 91.65

ARGET G3.1 lisac: 8/25/1997 12:50:26

ILE:P.10CUBRTLMB01

ARGET BODY : CALLISTO

INI:m.target

/C EPH:/DATA/NAVIO/T-970801-tour.NS

ERIAPSIS: THINNING: :UVS 1

TART:CTE 97-260/00:19:22.733 -CDS 06:00:0 BODY PLOT TIME:TARGET-TIME D= 0 S= 0.500

Activity ID: Orbit 10 **OAPEL** CUBRTLMB **SeqNo** 02-

Title UVS CALLISTO BRIGHT LIMB SCAN (O & H) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 **Week** 38

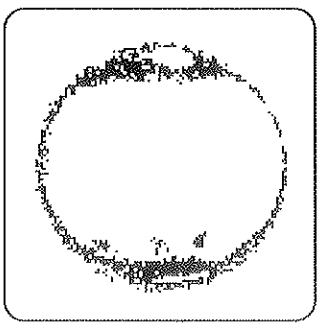
Start	CTE+CDS 00000001:00:0	97-260/00:20:23.399	CTE+000/00:01:00.666
End	CTE+CDS 00000008:00:0	97-260/00:27:28.066	CTE+000/00:08:05.333
Duration	00000007:00:0	000/00:07:04.667	000/00:07:04.667

Top Label 10CUBRTLMB02-

Bottom Label (recorded)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	90	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	Yes

Observation Objective



Measure the altitude distribution of volatiles near the sub-solar point to determine the escape rates from the Jovian satellites when the atmosphere is in full solar illumination. Search for outgassing of atomic H (1216 Å) and atomic O (1304 Å).

7 RIM Callisto Bright Limb Drift observation (1 RIM target slew + 6 RIM recorded data). Target s/p to ~1000 Km off satellite limb and allow s/c motion to drift FOV onto the bright limb sub-solar point.

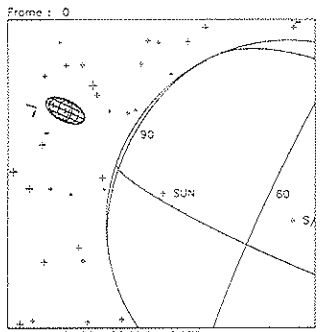
Playback of this observation will require [(6 RIMS)*(1008 bps)*(60.677)] = 0.367 Mbits
Rj=26.3, compression = 3
MBTG = 0.110

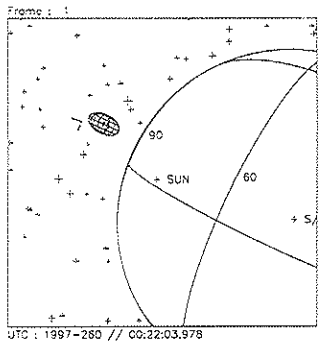
UVS Configuration = G/G 16-step mini-scan 1216/1304 Å

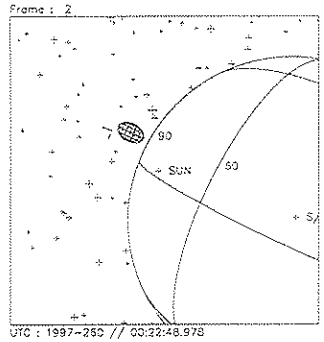
NIMS will ride-along with this observation at 28.8 kbps.

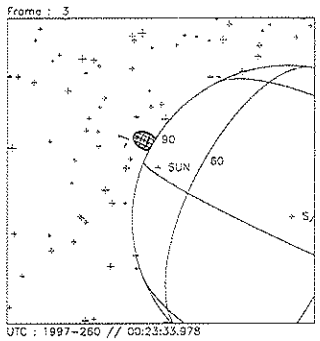
Design Detail

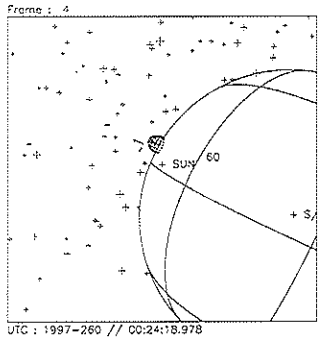
CDS	RIM	Command	Parameter	PKT
38	000	CMDRS		(157CH)
	001	1	34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,5A,45,00,39	
	007	7	34UVS,C1,F,N,N,N,S,0,OFF,OFF, ON,OFF,OFF,NOOVR,1,2C,05,00,00	
27	000	TARGET	(1 RIM Posn_slew)	(165CF)
25	001	SCIREC	(6 RIM record @ 28.8 kbps = MPW)	(175CB)

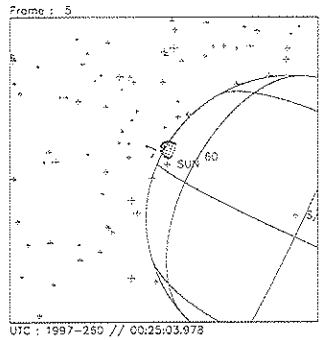


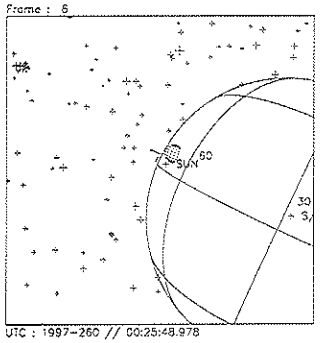


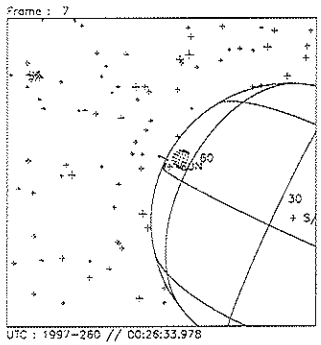


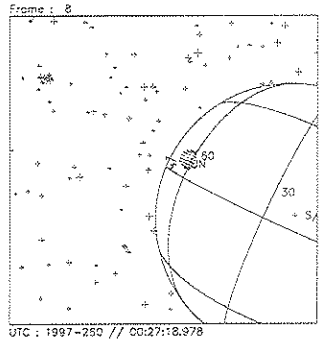












Start UTC_TIME : 1997-260 // 00:21:18.978
End UTC_TIME : 1997-260 // 00:27:22.978
Start SCLK : 1/04133853:00:0:0
Delta Time between FOV : 45.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 156.35/281.80 Deg
S/C to Body Center : 3159.479 Km (1.3148052 Rc)
Z-axis Pointing (Ra / Dec) : 137.21 / 19.06 Deg

Activity ID: Orbit 10 OAPEL CUPALIMP SeqNo 01+

Title UVS R/A W/ NIMS PALIMPSEST OBS **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 **Week** 38

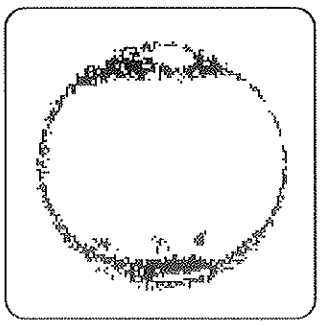
Start	CTE+CDS 00000008:00:0	97-260/00:27:28.066	CTE+000/00:08:05.333
End	CTE+CDS 00000015:00:0	97-260/00:34:32.733	CTE+000/00:15:10.000
Duration	00000007:00:0	000/00:07:04.667	000/00:07:04.667

Top Label 10CUPALIMP01+

Bottom Label (recorded)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	38	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	Yes

Observation Objective



Ride-along with the NIMS Callisto Palimpsest observation to observe Callisto in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

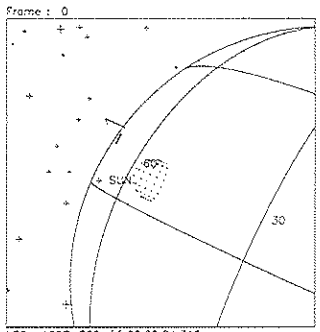
Playback of this observation will require [(5 RIMS)*(1008 bps)*(60.677)] = 0.306 Mbits

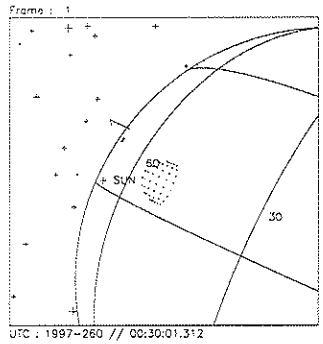
Rj = 26.3, compression = 1.4
MBPG = 0.219

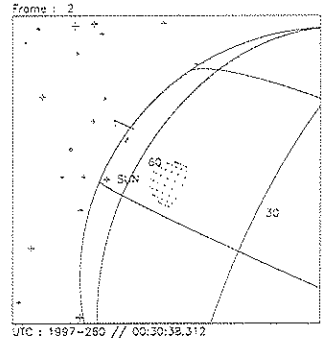
UVS Configuration = F/F Full Scans

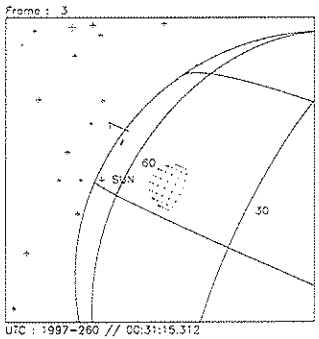
Design Detail

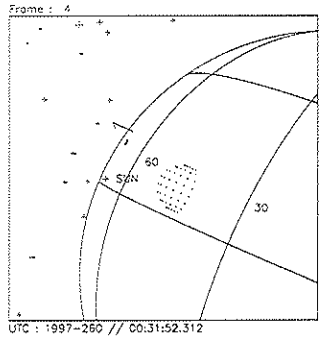
```
CDS RIM Command Parameters
... ... ........ ..........
0    002 TARGET   (NIMS Target)
0    002 CSMOS    (NIMS Csmos)
0    002 SCIREC   (NIMS Scirec)
38   001 CMDRS                              (157CI)
     002     1    34UVS,07,S,N,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
     007     6    34UVS,C1,F,N,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

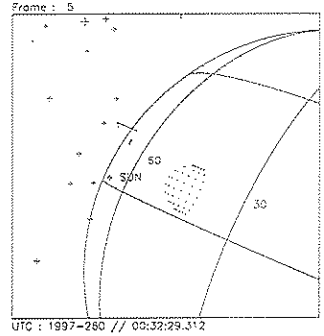


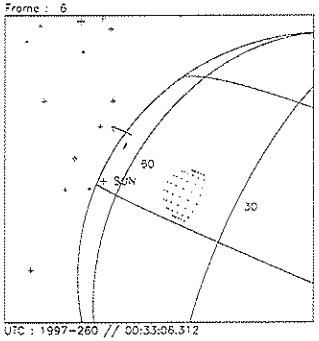


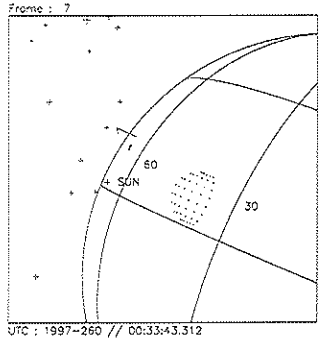


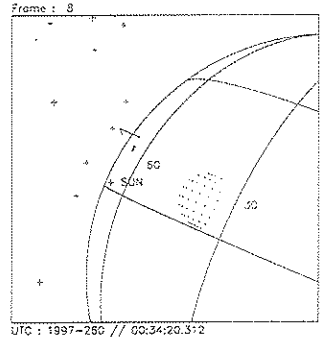












Start UTC_TIME : 1997-260 // 00:29:24.312
End UTC_TIME : 1997-260 // 00:34:27.545
Start SCLK : 1/04133861:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 117.49/276.88 Deg
S/C to Body Center : 5863.178 Km (2.4399410 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL CUSMTHPL SeqNo 01+

Title UVS R/A W/ NIMS SMOOTH POLE Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/17/97 Week 38

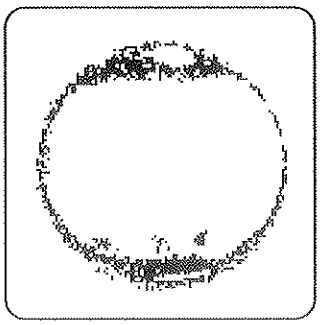
Start	CTE+CDS 00000017:00:0	97-260/00:36:34.066	CTE+000/00:17:11.333
End	CTE+CDS 00000029:00:0	97-260/00:48:42.066	CTE+000/00:29:19.333
Duration	00000012:00:0	000/00:12:08.000	000/00:12:08.000

Top Label 10CUSMTHPL01+

Bottom Label (recorded)

Plot Key	UVS	Type	SCI		
CDS Bytes	38	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective



Ride-along with the NIMS Smooth Pole observationto observe Callisto in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

Playback of this observation will require [(11 RIMS)*(1008 bps)*(60.667 s/RIM)] = 0.673 Mbits of UVS data.

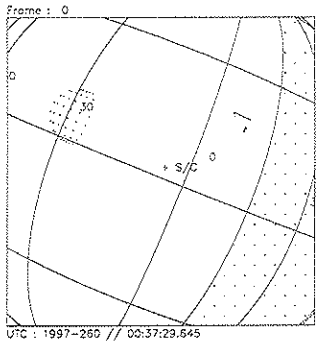
Rj = 26, compression ~1.4
MBTG = 0.481

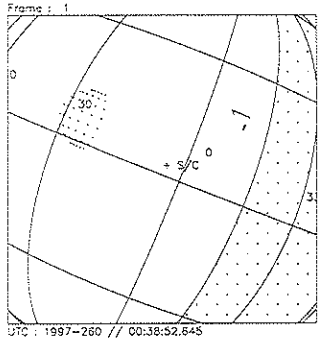
UVS Configuration = F/F Full Scans

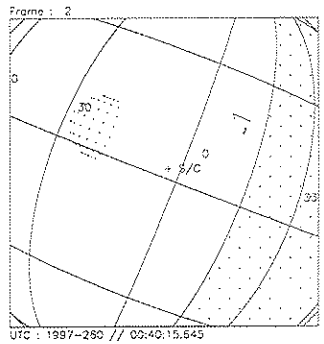
Design Detail

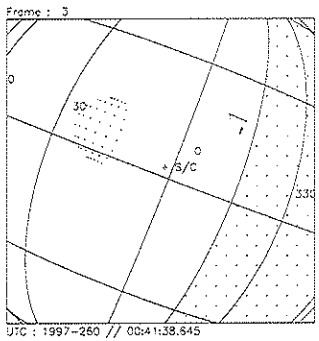
```
CDS  RIM  Command  Parameters
---  ---  -------  ----------
0         TARGET   (NIMS Target)
0         CSMOS    (NIMS Csmos)
0         SCIREC   (NIMS Scirec)
38   000  CMDRS                                  (157CJ)
     001       1   34UVS,07,S,N,N,N,S,0,  ON,OFF,  ON,  ON,OFF,NOOVR,1,00,9C,00,00
     012      12   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

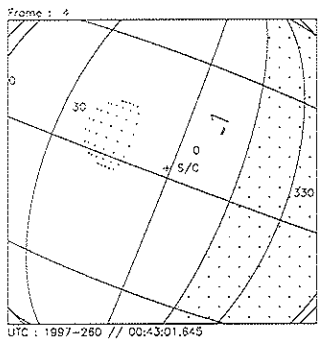
Nov 12, 97
Wendy says only part was played back.

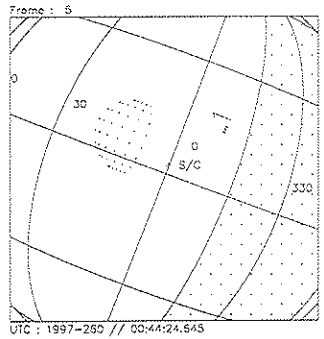


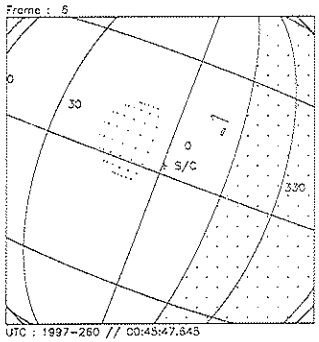


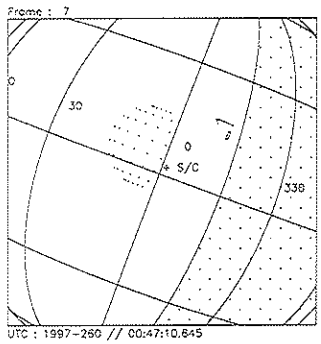


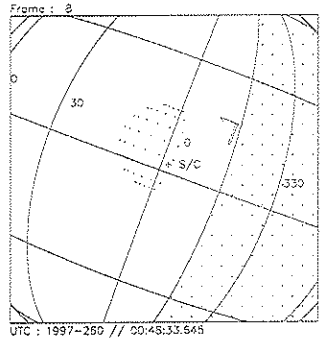












Start UTC_TIME : 1997-260 // 00:37:29.645
End UTC_TIME : 1997-260 // 00:48:36.977
Start SCLK : 1/04133869:00:0:0
Delta Time between FOV : 83.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 105.24/276.17 Deg
S/C to Body Center : 9430.897 Km (3.9246347 Rc)
Z-axis Pointing (Ra / Dec) : 137.20 / 18.99 Deg

UVS R/A W/ NIMS VALHALLA OBS

ACTIVITY ID: 10CUVALHAL01+

START TIME: 97-260/00:50:40.733

Activity ID: Orbit 10 **OAPEL** CUVALHAL **SeqNo** 01+

Title UVS R/A W/ NIMS VALHALLA OBS **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 Week 38

Start	CTE+CDS 00000030:87:0	97-260/00:50:40.733	CTE+000/00:31:18.000
End	CTE+CDS 00000042:78:0	97-260/01:02:42.733	CTE+000/00:43:20.000
Duration	00000011:82:0	000/00:12:02.000	000/00:12:02.000

Top Label 10CUVALHAL01+

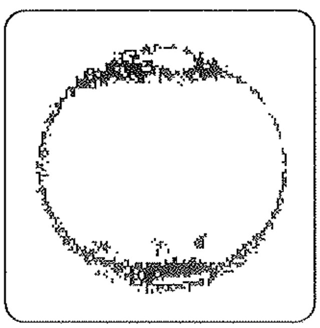
Bottom Label (recorded)

Plot Key UVS **Type** SCI

CDS Bytes 38 **Report Options** BOTH **Scan Platform** Yes

CDS Source OAP **Spin State** DUAL **DMS** Yes

Observation Objective



Ride-along with the NIMS Callisto Valhala observation to observe Callisto in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

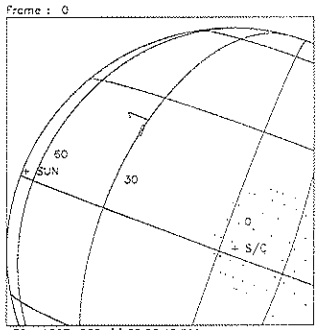
Playback of this observation will require [(9 RIMS)*(1008 bps)*(60.677)] = 0.550 Mbits of UVS data.

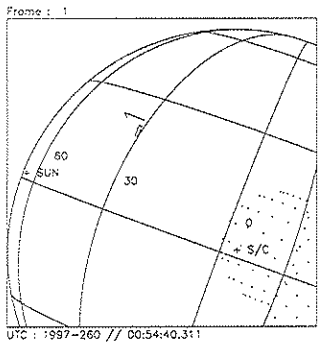
Rj = 26, compression ~ 1.4
MBTG = 0.393

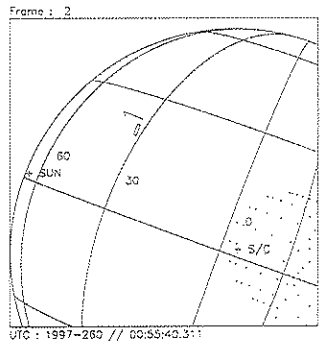
UVS Configuration = F/F Full Scans

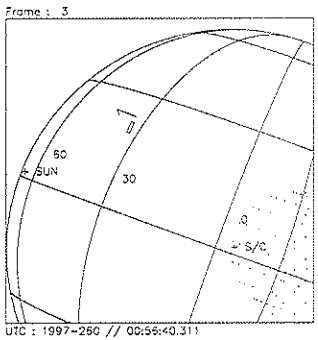
Design Detail

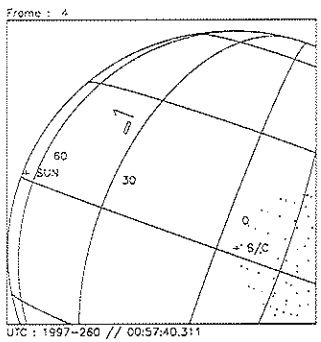
```
CDS RIM Command Parameters
--- --- ------- ----------
0   004 TARGET  (NIMS Target)
0   004 CSMOS   (NIMS Csmos)
0   004 SCIREC  (NIMS Scirec)
38  000 CMDRS                         (157CK)
    001     1   34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    010    10   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

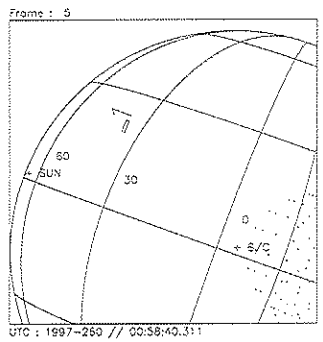


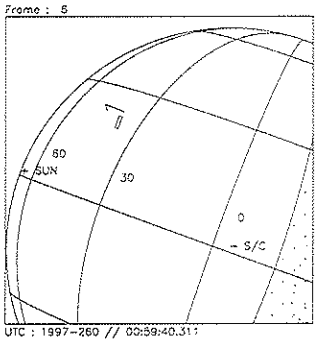


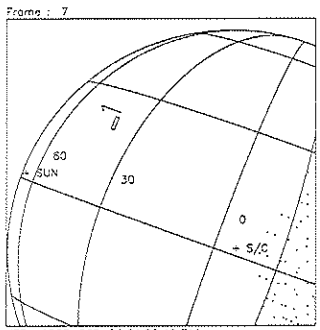


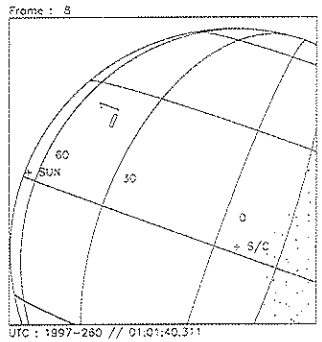












Start UTC_TIME : 1997-260 // 00:53:40.311
End UTC_TIME : 1997-260 // 01:01:45.644
Start SCLK : 1/04133885:00:0:0
Delta Time between FOV : 60.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 96.87/275.74 Deg
S/C to Body Center : 16964.05 Km (7.0595316 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

UVS R/A W/ NIMS CATENA

ACTIVITY ID: 10CUCATENA01+

START TIME: 97-260/01:25:06.066

Activity ID: Orbit 10 OAPEL CUCATENA SeqNo 01+

Title UVS R/A W/ NIMS CATENA Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/17/97 Week 38

Start	CEE+CDS 00000065:00:0	97-260/01:25:06.066	CEE+000/01:05:43.333
End	CEE+CDS 00000093:00:0	97-260/01:53:24.733	CEE+000/01:34:02.000
Duration	00000028:00:0	000/00:28:18.667	000/00:28:18.667

Top Label 10CUCATENA01+

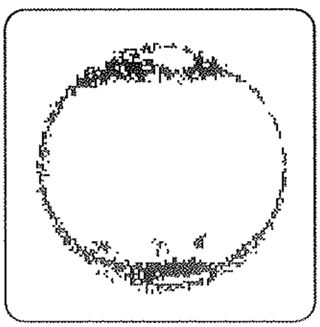
Bottom Label (recorded)

Plot Key UVS Type SCI

CDS Bytes 38 Report Options BOTH Scan Platform Yes

CDS Source OAP Spin State DUAL DMS Yes

Observation Objective



Ride-along with the NIMS Callisto Catena observationto observe Callisto in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

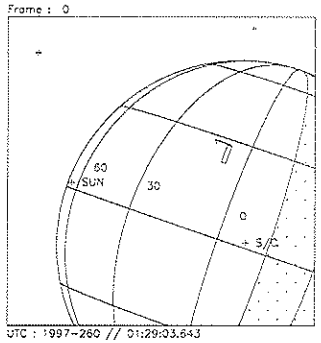
Playback of this observation will require [(24.7 RIMS)*(1008 bps)*(60.667 s/RIM)] = 1.510 Mbits of UVS data.

Rj = 26, compression ~ 1.4
MBTG = 1.079

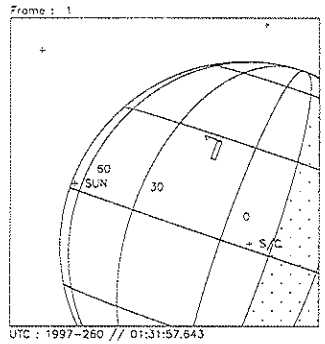
UVS Configuration = F/F Full Scans

Design Detail

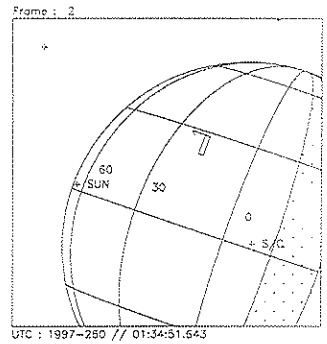
```
CDS RIM Command Parameters                    RSID
--- --- -------- ----------                    ----
0       TARGET   (NIMS Target)
0       CSMOS    (NIMS Csmos)
0       SCIREC   (NIMS Scirec)
38  000 CMDRS                          (157CL)
    001      1   34UVS,07,S,N,N,N,S,0, ON,OFF,OFF, ON,OFF,NOOVR,1,00,9C,00,00
    028     28   34UVS,C1,F,N,N,N,S,0,OFF,OFF, ON,OFF,OFF,NOOVR,1,2C,05,00,00
```



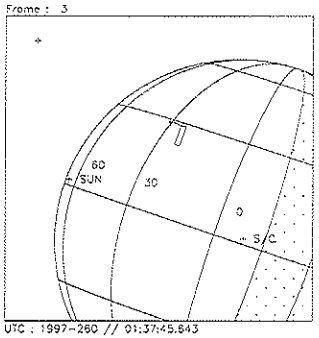
UTC : 1997-260 // 01:29:03.643
SCLK: 1/04133920:00:0:0



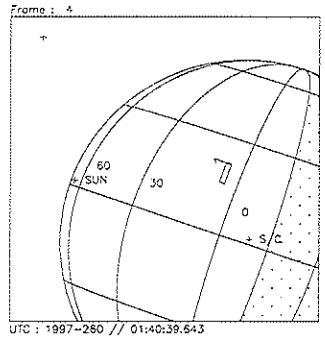
UTC : 1997-260 // 01:31:57.643
SCLK: 1/04133922:79:0:0



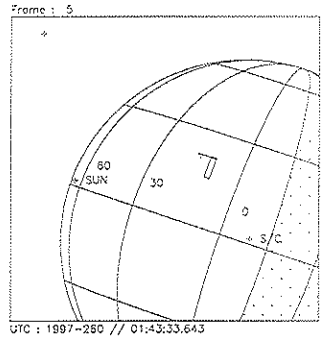
UTC : 1997-260 // 01:34:51.643
SCLK: 1/04133925:67:0:0



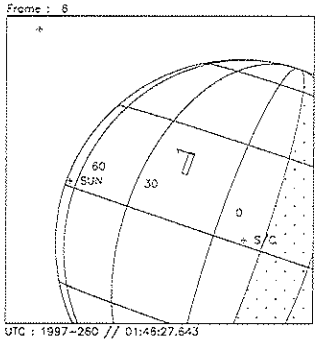
UTC : 1997-260 // 01:37:45.643
SCLK: 1/04133928:55:0:0



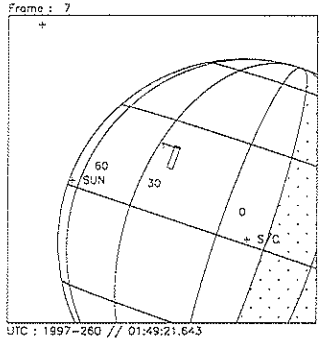
UTC : 1997-260 // 01:40:39.643
SCLK: 1/04133931:43:0:0



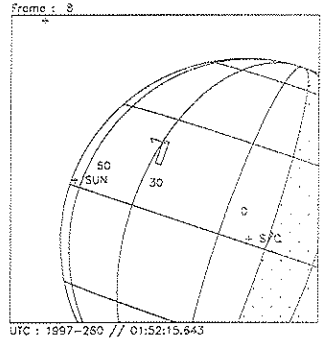
UTC : 1997-260 // 01:43:33.643
SCLK: 1/04133934:31:0:0



UTC : 1997-260 // 01:46:27.643
SCLK: 1/04133937:19:0:0



UTC : 1997-260 // 01:49:21.643
SCLK: 1/04133940:07:0:0



UTC : 1997-260 // 01:52:15.643
SCLK: 1/04133942:86:0:0

Start UTC_TIME : 1997-260 // 01:29:03.643
End UTC_TIME : 1997-260 // 01:52:18.975
Start SCLK : 1/04133920:00:0:0
Delta Time between FOV : 174.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 91.74/275.48 Deg
S/C to Body Center : 33731.06 Km (14.037064 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL EUPHAS95 SeqNo 01-

Title UVS EUROPA PHASE (~95 deg) Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/17/97 Week 38

Start	CTE+CDS 00000210:00:0	97-260/03:51:42.733	CTE+000/03:32:20.000
End	CTE+CDS 00000235:00:0	97-260/04:16:59.399	CTE+000/03:57:36.666
Duration	00000025:00:0	000/00:25:16.666	000/00:25:16.666

Top Label 10EUPHAS9501-

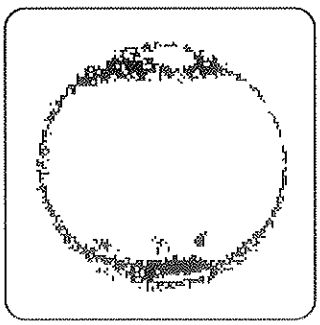
Bottom Label (real-time)

Plot Key UVS Type SCI

CDS Bytes 148 Report Options BOTH Scan Platform Yes

CDS Source OAP Spin State DUAL DMS No

Observation Objective



Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth to supplement and complement the NIMS surface property measurements.

Target and stare at Europa with TMC in real-time at ~95° phase (~165° longitude) using the UVS 10bps RTS rate.

UVS Configuration = F/F Full Scans

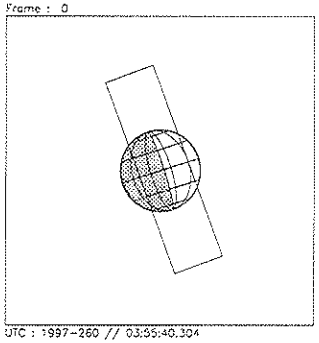
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

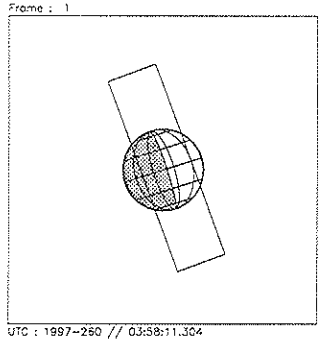
```
CDS  RIM  Command  Parameters                                    (CSTL)
---  ---  -------  ----------                                    ------
0    000  COMMENT  UVS RIM 0                                    (384CD)
28   003  +UVFLUSH DISCRD,UVS                                    (349CG)
38   003  CMDRS                                                 (157CM)
     004      1    34UVS,07,S,N,N,N,S,0,  ON,OFF,  OFF,  ON,OFF,NOOVR,1,00,9C,00,00
     024     21    34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54   004  TARGET   with TMC on body                            (165CG)
28   023  +UVFLUSH PACKET,UVS                                   (349CH)
```

Frame : 0



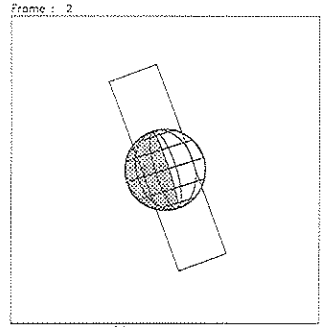
UTC : 1997-260 // 03:55:40.304
SCLK: 1/04134065:00:0:0

Frame : 1



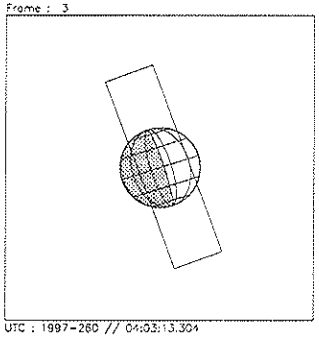
UTC : 1997-260 // 03:58:11.304
SCLK: 1/04134067:44:5:0

Frame : 2



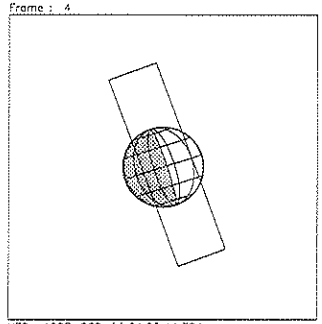
UTC : 1997-260 // 04:00:42.304
SCLK: 1/04134069:89:0:0

Frame : 3



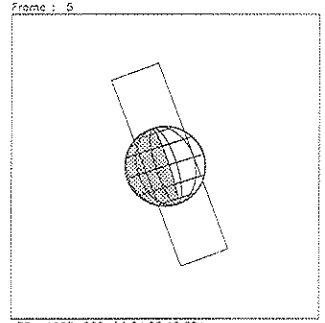
UTC : 1997-260 // 04:03:13.304
SCLK: 1/04134072:42:5:0

Frame : 4



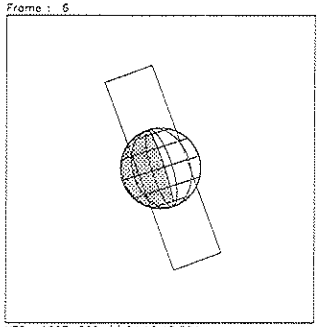
UTC : 1997-260 // 04:05:44.304
SCLK: 1/04134074:87:0:0

Frame : 5



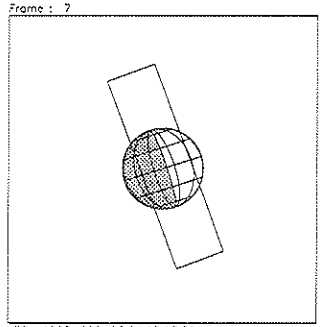
UTC : 1997-260 // 04:08:15.304
SCLK: 1/04134077:40:5:0

Frame : 6



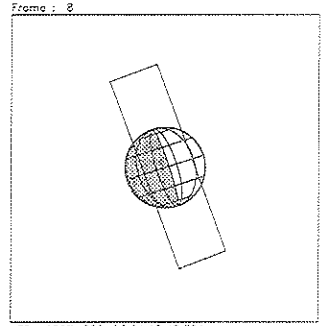
UTC : 1997-260 // 04:10:46.304
SCLK: 1/04134079:85:0:0

Frame : 7



UTC : 1997-260 // 04:13:17.304
SCLK: 1/04134082:38:5:0

Frame : 8



UTC : 1997-260 // 04:15:48.304
SCLK: 1/04134084:83:0:0

Start UTC_TIME : 1997-260 // 03:55:40.304
End UTC_TIME : 1997-260 // 04:15:53.637
Start SCLK : 1/04134065:00:0:0
Delta Time between FOV : 151.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 90.38/ 95.31 Deg
S/C to Body Center : 1116609. Km (713.48812 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL CUGLOBAL SeqNo 02+

Title UVS R/A W/ NIMS CALLISTO GLOBAL 02 **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 **Week** 38

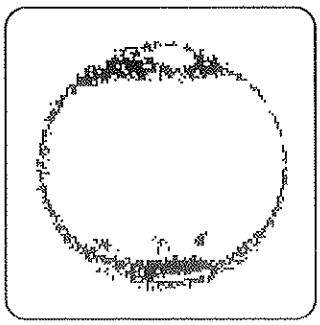
Start	CEE+CDS 00000380:00:0	97-260/06:43:36.066	CEE+000/06:24:13.333
End	CEE+CDS 00000410:00:0	97-260/07:13:56.066	CEE+000/06:54:33.333
Duration	00000030:00:0	000/00:30:20.000	000/00:30:20.000

Top Label 10CUGLOBAL02+

Bottom Label (recorded)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	38	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	Yes

Observation Objective



Ride-along w/NIMS Callisto Global02 observation. Extend the surface scattering property measurements into the ultraviolet (1600 - 3200) in concert with NIMS measurements to infer information about particle size, and refractive and absorption properties of the surface materials.

UVS Configuration = F/F Full Scans

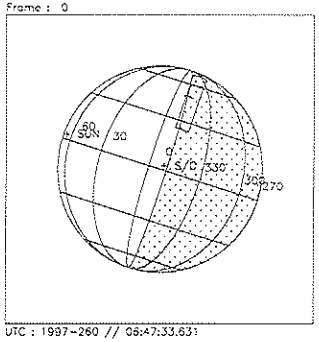
Playback of this observation will require [(25 RIMS)*(1008 bps)*(60.667 s/RIM)] = 1.529 Mbits of UVS data.

Rj = 24, compression = 1.5
MBPG = 1.019

Design Detail

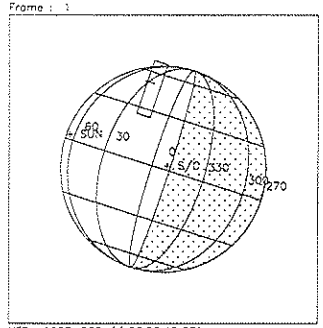
```
CDS RIM Command Parameters                                    DSTO
--- --- -------- ----------
0       TARGET   (NIMS Target)
0       CSMOS    (NIMS Csmos)
0       SCIREC   (NIMS Scirec)
38  003 CMDRS                                  (157CN)
    004     1    34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    030    26    34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

Frame : 0



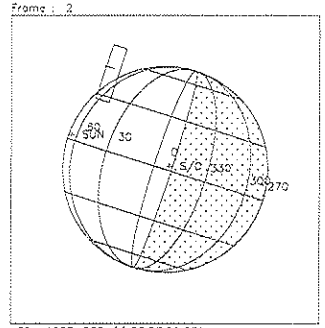
UTC : 1997-260 // 06:47:33.631
SCLK: 1/04134235:00:0:0

Frame : 1



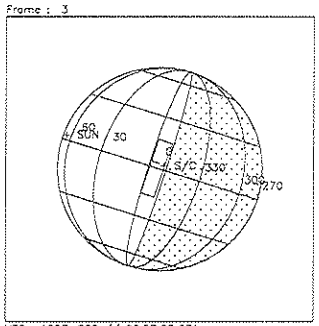
UTC : 1997-260 // 06:50:42.631
SCLK: 1/04134238:10:6:0

Frame : 2



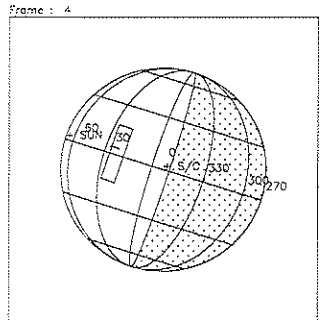
UTC : 1997-260 // 06:53:51.631
SCLK: 1/04134241:21:0:0

Frame : 3



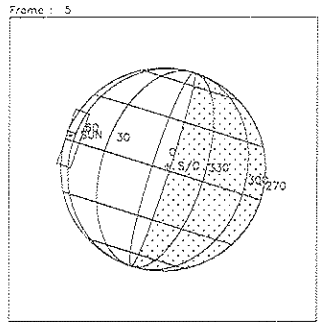
UTC : 1997-260 // 06:57:00.631
SCLK: 1/04134244:31:5:0

Frame : 4



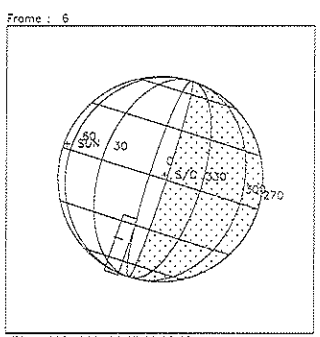
UTC : 1997-260 // 07:00:09.631
SCLK: 1/04134247:42:0:0

Frame : 5



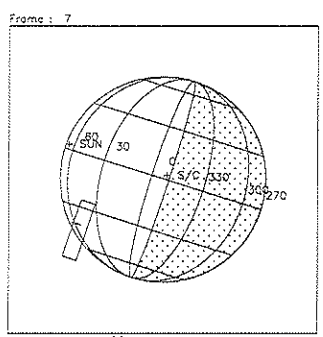
UTC : 1997-260 // 07:03:18.631
SCLK: 1/04134250:52:5:0

Frame : 6



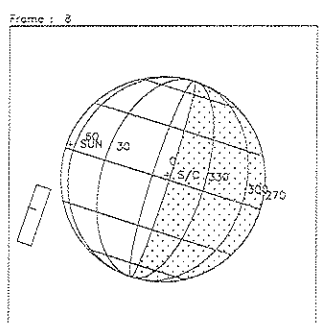
UTC : 1997-260 // 07:06:27.631
SCLK: 1/04134253:63:0:0

Frame : 7



UTC : 1997-260 // 07:09:36.631
SCLK: 1/04134256:73:5:0

Frame : 8



UTC : 1997-260 // 07:12:45.631
SCLK: 1/04134259:84:0:0

Start UTC_TIME : 1997-260 // 06:47:33.631
End UTC_TIME : 1997-260 // 07:12:50.297
Start SCLK : 1/04134235:00:0:0
Delta Time between FOV : 189.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 87.56/275.27 Deg
S/C to Body Center : 185886.2 Km (77.355886 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

ACTIVITY ID: 10GUPHAS7701-

START TIME: 97-260/10:26:02.600

Activity ID: Orbit 10 **OAPEL** GUPHAS77 **SeqNo** 01-

Title UVS GANYMEDE PHASE (~77 deg) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 **Week** 38

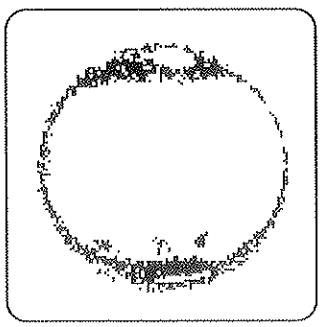
Start	JEE-CDS 00002180:00:0	97-260/10:26:02.600	JEE-001/12:44:13.333
End	JEE-CDS 00002156:00:0	97-260/10:50:18.600	JEE-001/12:19:57.333
Duration	00000024:00:0	000/00:24:16.000	000/00:24:16.000

Top Label 10GUPHAS7701-

Bottom Label (real-time)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective



Observe Ganymede in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth to supplement and complement the NIMS surface property measurements.

Target and stare at Ganymede using TMC in real-time at ~77° phase (~30° longitude) using the UVS 10bps RTS rate.

UVS Configuration = F/N Full Scans, 1 ms integration

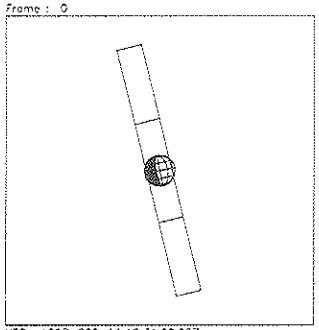
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

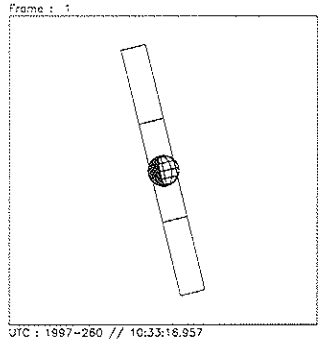
```
CDS RIM Command Parameters                                  (CSTL)
--- --- -------- ----------                                  ----
0   000 COMMENT UVS RIM 0                                   (384CE)
28  003+UVFLUSH DISCRD,UVS                                  (349CI)
38  001 CMDRS                                               (157CO)
    002      1   34UVS,07,S,N,N,N,S,0,  ON,  ON,OFF,  ON,OFF,NOOVR,2,00,9C,01,2C
    022     19   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54  002 TARGET  with TMC on body                            (155CH)
28  021+UVFLUSH PACKET,UVS                                  (349CJ)
```

Frame : 0



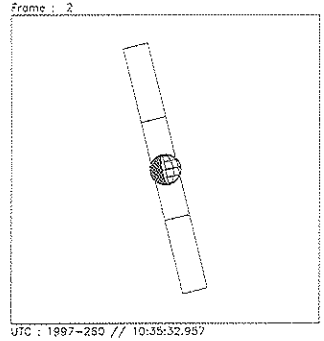
UTC : 1997-260 // 10:31:00.957
SCLK: 1/04134456:00:0:0

Frame : 1



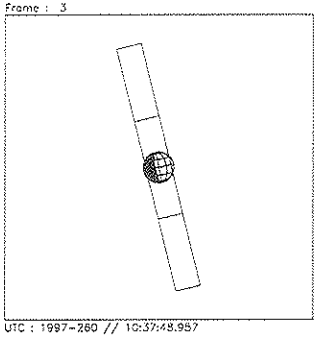
UTC : 1997-260 // 10:33:16.957
SCLK: 1/04134458:22:0:0

Frame : 2



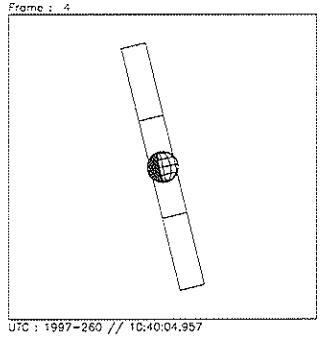
UTC : 1997-260 // 10:35:32.957
SCLK: 1/04134460:44:0:0

Frame : 3



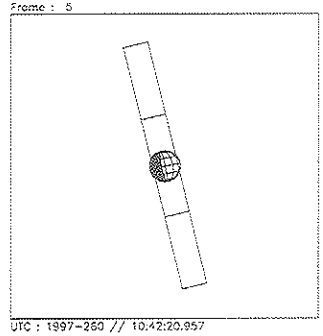
UTC : 1997-260 // 10:37:48.957
SCLK: 1/04134462:66:0:0

Frame : 4



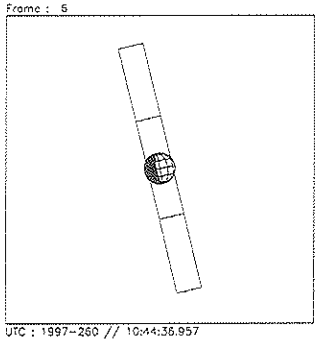
UTC : 1997-260 // 10:40:04.957
SCLK: 1/04134464:88:0:0

Frame : 5



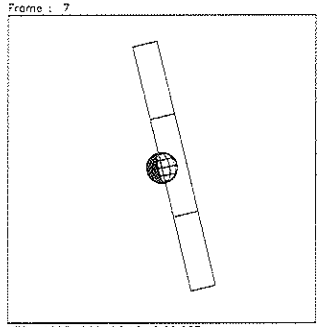
UTC : 1997-260 // 10:42:20.957
SCLK: 1/04134467:19:0:0

Frame : 6



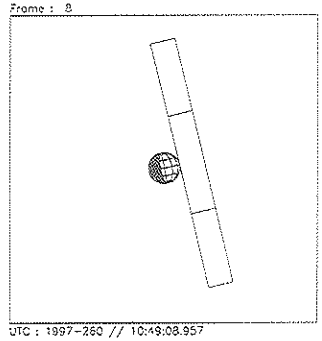
UTC : 1997-260 // 10:44:36.957
SCLK: 1/04134469:41:0:0

Frame : 7



UTC : 1997-260 // 10:46:52.957
SCLK: 1/04134471:63:0:0

Frame : 8



UTC : 1997-260 // 10:49:08.957
SCLK: 1/04134473:85:0:0

Start UTC_TIME : 1997-260 // 10:31:00.957
End UTC_TIME : 1997-260 // 10:49:12.956
Start SCLK : 1/04134456:00:0:0
Delta Time between FOV : 136.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : GANYMEDE
Target Cone/Clock : 108.66/ 95.70 Deg
S/C to Body Center : 2441011. Km (926.73143 Rg)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 **OAPEL** CUNTRLCL **SeqNo** 01-

Title UVS CALLISTO NEUTRAL CLOUD **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/17/97 **Week** 38

Start	JEE-CDS 00001444:00:0	97-260/22:50:13.267	JEE-001/00:20:02.666
End	JEE-CDS 00001260:00:0	97-261/01:56:15.933	JEE-000/21:14:00.000
Duration	00000184:00:0	000/03:06:02.666	000/03:06:02.666

Top Label 10CUNTRLCL01-

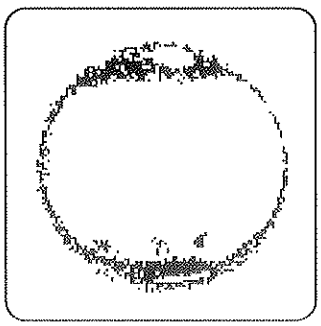
Bottom Label (real-time)

Plot Key UVS **Type** SCI

CDS Bytes 518 **Report Options** BOTH **Scan Platform** Yes

CDS Source OAP **Spin State** DUAL **DMS** No

Observation Objective



~3 hour UVS real-time Callisto Neutral Cloud observation. Observe Callisto's extended atmosphere to compliment Callisto bright limb observations.

UVS Configuration: 1 radii from body, 30 rims, 1304/1319 1-step quiet G/G
on body, 60 rims, 1216/1304 16-step G/G
1 radii off body, 30 rims, 1304/1319 1-step quiet G/G
3 radii off body, 30 rims, 1216/1304 16-step G/G
5 radii off body, 30 rims, 1216/1304 16-stp G/G

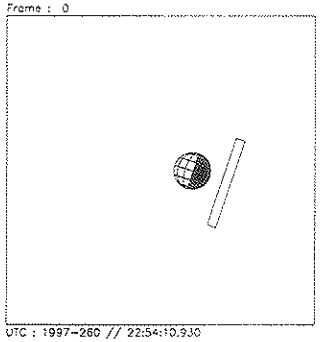
(17712 bit/flush) * 5 flushes = 0.08856 mbtg

MBTG = 0.08856

Design Detail

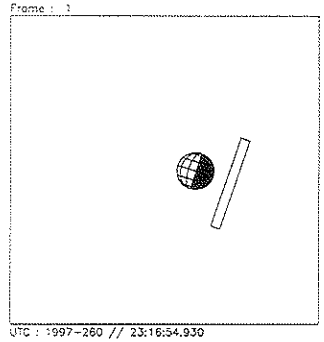
```
CDS  RIM Command  Parameters                                  Design Detail
---  --- -------  ----------                                  -------------
0    000 COMMENT UVS RIM 0                                   (384CF)
28   002+UVFLUSH DISCRD,UVS                                  (349CK)
80   003 CMDRS                                               (157CP)
     004      1   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,9C,05,00,0A
     034     31   34UVS,D1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,5A,45,00,39
     094     91   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,9C,05,00,0A
     124    121   34UVS,D1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,5A,45,00,39
     184    181   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54   004 TARGET  with TMC 1 radii off body                   (165CI)
28   033+UVFLUSH PACKET,UVS                                  (349CL)
54   034 TARGET  with TMC on body                            (165CJ)
28   093+UVFLUSH PACKET,UVS                                  (349CM)
54   094 TARGET  with TMC -1 radii off body                  (165CK)
28   123+UVFLUSH PACKET,UVS                                  (349CN)
54   124 TARGET  with TMC -3 radii off body                  (165CL)
28   153+UVFLUSH PACKET,UVS                                  (349CO)
54   154 TARGET  with TMC -5 radii off body                  (165CM)
28   183+UVFLUSH PACKET,UVS                                  (349CP)
```

Frame : 0



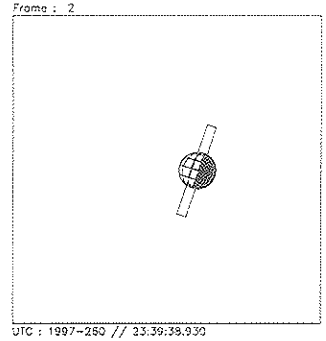
UTC : 1997-260 // 22:54:10.930
SCLK: 1/04135191:00:0:0

Frame : 1



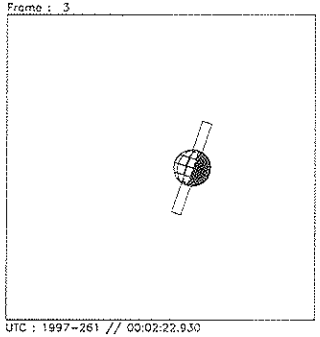
UTC : 1997-260 // 23:16:54.930
SCLK: 1/04135213:44:0:0

Frame : 2



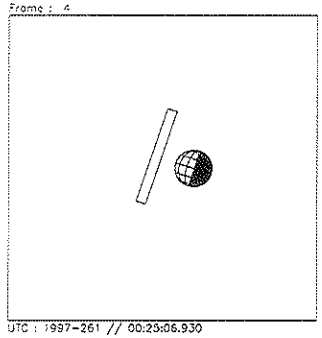
UTC : 1997-260 // 23:39:38.930
SCLK: 1/04135235:88:0:0

Frame : 3



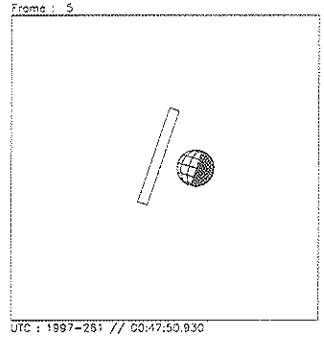
UTC : 1997-261 // 00:02:22.930
SCLK: 1/04135258:41:0:0

Frame : 4



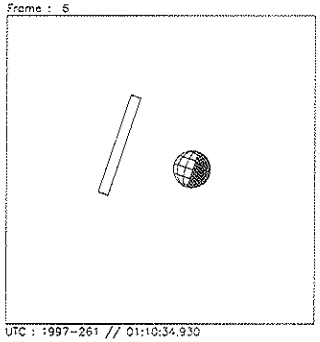
UTC : 1997-261 // 00:25:06.930
SCLK: 1/04135280:85:0:0

Frame : 5



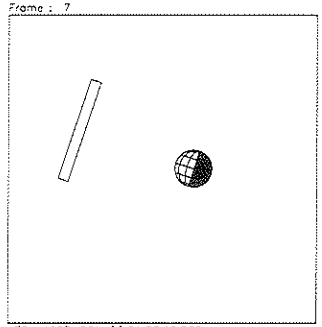
UTC : 1997-261 // 00:47:50.930
SCLK: 1/04135303:38:0:0

Frame : 6



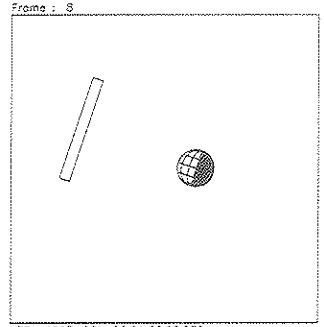
UTC : 1997-261 // 01:10:34.930
SCLK: 1/04135325:82:0:1

Frame : 7



UTC : 1997-261 // 01:33:18.930
SCLK: 1/04135348:35:0:1

Frame : 8



UTC : 1997-261 // 01:56:02.930
SCLK: 1/04135370:79:0:1

Start UTC_TIME : 1997-260 // 22:54:10.930
End UTC_TIME : 1997-261 // 01:56:10.924
Start SCLK : 1/04135191:00:0:0
Delta Time between FOV : 1364.000
FOVs : F Channel(0.1x0.4), N/C Channel(0.1x1.0)

Target Body : CALLISTO
Target Cone/Clock : 86.88/275.24 Deg
S/C to Body Center : 682466.7 Km (284.00610 Rc)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

ACTIVITY ID: 10IUPHAS5501-

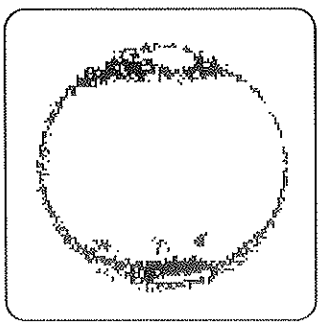
START TIME: 97-261/02:59:57.933

Activity ID:	Orbit 10	OAPEL 1UPHAS55		SeqNo 01-	
Title	UVS IO PHASE 55			Instrument	UVS
Requestor	UVS-SWG/W.SWEET 30523	Team VUS		Working Group	SWG

Time System	CDS	Load ID 10A	Calendar Date	09/18/97	Week 38
Start	JEE-CDS 00001197:00:0	97-261/02:59:57.933	JEE-000/20:10:18.000		
End	JEE-CDS 00001171:00:0	97-261/03:26:15.267	JEE-000/19:44:00.666		
Duration	00000026:00:0	000/00:26:17.334	000/00:26:17.334		

Top Label	10IUPHAS5501-				
Bottom Label	(real-time)				
Plot Key	UVS	Type	SCI		
CDS Bytes	148	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective



Io Phase Observation. Longitude = 45°, phase angle = 55°. Stare at Io for 20 rims with TMC.

UVS configuration: 1304-1479 Å G/G 16 step mini-scans

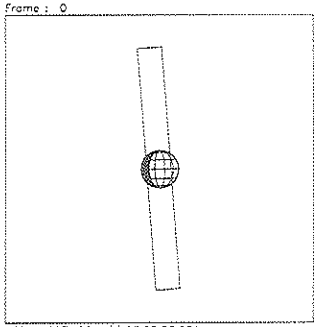
1 flush

1 flush * 17712 bits/sec = 0.018 MBTG

Design Detail

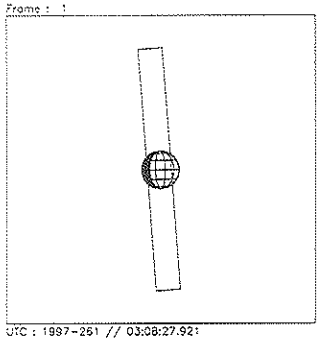
```
CDS RIM Command Parameters                                    (CRC)
--- --- -------- ----------                                   -----
0   000 COMMENT UVS RIM 0                                    (384CM)
28  003+UVFLUSH DISCRD,UVS                                   (349DC)
38  003 CMDRS                                                (157CW)
    004     1   34UVS,D1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,94,45,00,73
    024     21  34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54  004 TARGET  with TMC on body                             (165CT)
28  023+UVFLUSH PACKET,UVS                                   (349DD)
```

Frame : 0



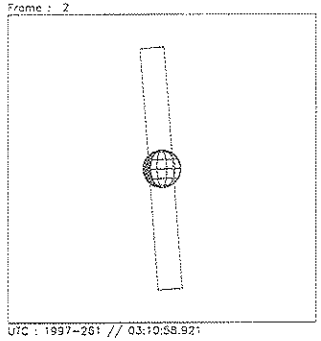
UTC : 1997-261 // 03:05:56.921
SCLK: 1/04135440:00:0:0

Frame : 1



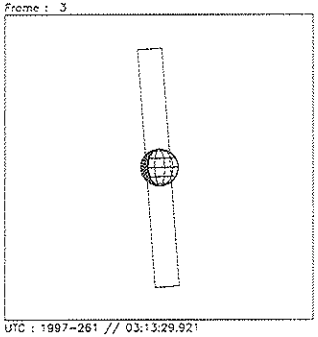
UTC : 1997-261 // 03:08:27.921
SCLK: 1/04135442:44:5:0

Frame : 2



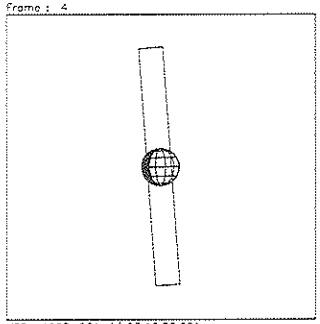
UTC : 1997-261 // 03:10:58.921
SCLK: 1/04135444:89:0:0

Frame : 3



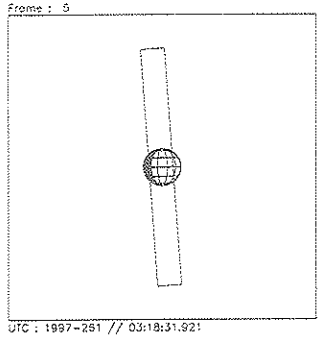
UTC : 1997-261 // 03:13:29.921
SCLK: 1/04135447:42:5:0

Frame : 4



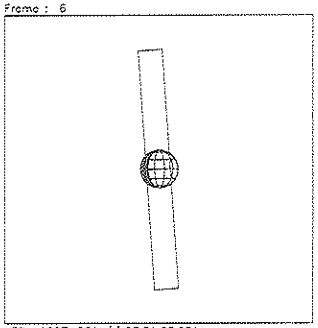
UTC : 1997-261 // 03:16:00.921
SCLK: 1/04135449:87:0:0

Frame : 5



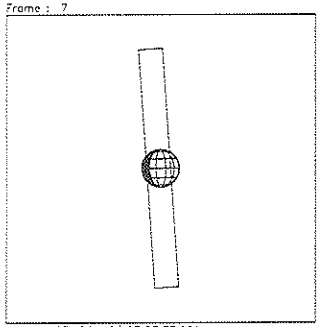
UTC : 1997-261 // 03:18:31.921
SCLK: 1/04135452:40:5:0

Frame : 6



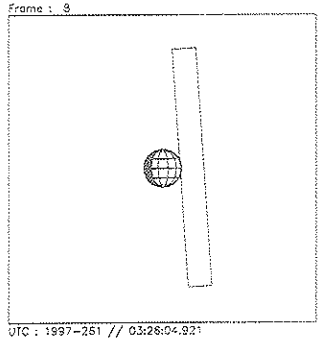
UTC : 1997-261 // 03:21:02.921
SCLK: 1/04135454:85:0:0

Frame : 7



UTC : 1997-261 // 03:23:33.921
SCLK: 1/04135457:38:5:0

Frame : 8



UTC : 1997-261 // 03:26:04.921
SCLK: 1/04135459:83:0:0

Start UTC_TIME : 1997-261 // 03:05:56.921
End UTC_TIME : 1997-261 // 03:26:10.254
Start SCLK : 1/04135440:00:0:0
Delta Time between FOV : 151.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : IO
Target Cone/Clock : 130.59/ 96.68 Deg
S/C to Body Center : 1337634. Km (733.21141 RI)
Z-axis Pointing (Ra / Dec) : 137.26 / 18.98 Deg

Activity ID: Orbit 10 **OAPEL** EULON250 **SeqNo** 01-

Title UVS EUROPA LONGITUDE (~250 deg) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/18/97 **Week** 38

Start	JEE-CDS 00000975:00:0	97-261/06:44:25.933	JEE-000/16:25:50.000
End	JEE-CDS 00000966:00:0	97-261/06:53:31.933	JEE-000/16:16:44.000
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label 10EULON25001-

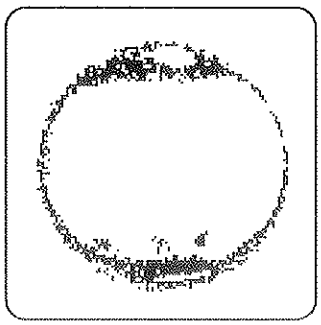
Bottom Label (real-time)

Plot Key UVS **Type** SCI

CDS Bytes 148 **Report Options** BOTH **Scan Platform** Yes

CDS Source OAP **Spin State** DUAL **DMS** No

Observation Objective



Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth.

Target to body and stare at Europa using TMC in real-time at ~250 (287°) longitude and 103° phase angle using the UVS 10bps RTS rate.

UVS Configuration = F/F Full Scans

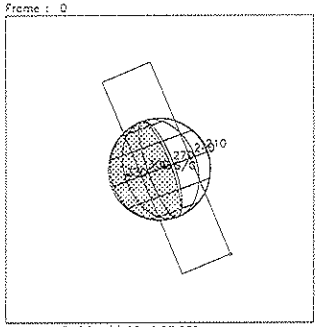
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

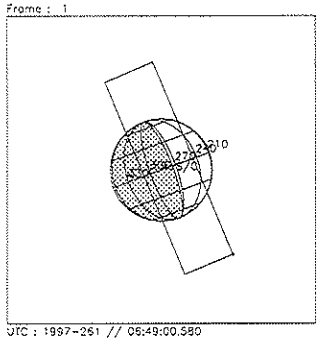
```
CDS RIM Command Parameters                                  (CSTL)
--- --- -------- ----------                                 ------
0   000 COMMENT UVS RIM 0                                   (384CG)
28  003+UVFLUSH DISCRD,UVS                                  (349CQ)
38  003 CMDRS                                               (157CQ)
    004      1    34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    009      6    34UVS.C1,F,N,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54  004 TARGET  with TMC on body                            (165CN)
28  008+UVFLUSH PACKET,UVS                                  (349CR)
```

Frame : 0



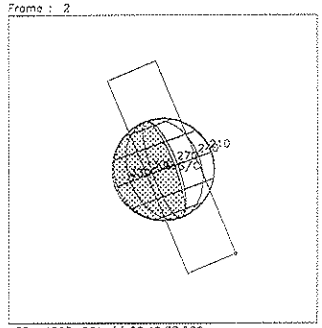
UTC : 1997-261 // 06:48:23.580
SCLK: 1/04135660:00:0:0

Frame : 1



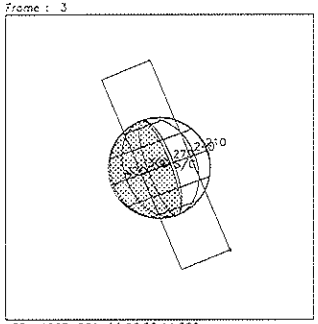
UTC : 1997-261 // 06:49:00.580
SCLK: 1/04135660:55:5:0

Frame : 2



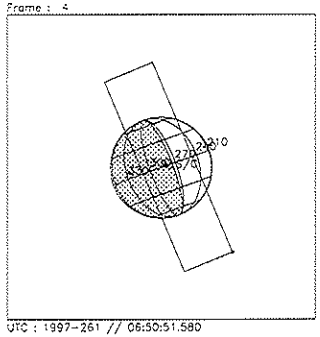
UTC : 1997-261 // 06:49:37.580
SCLK: 1/04135661:20:0:0

Frame : 3



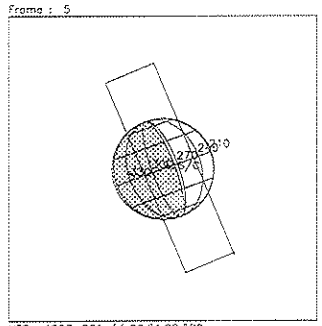
UTC : 1997-261 // 06:50:14.580
SCLK: 1/04135661:75:5:0

Frame : 4



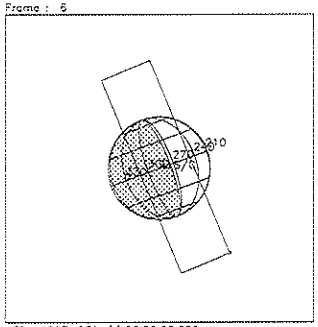
UTC : 1997-261 // 06:50:51.580
SCLK: 1/04135662:40:0:0

Frame : 5



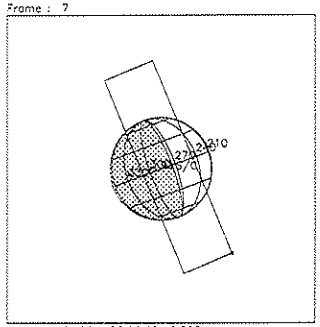
UTC : 1997-261 // 06:51:28.580
SCLK: 1/04135663:04:5:0

Frame : 6



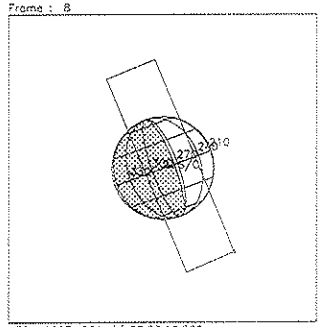
UTC : 1997-261 // 06:52:05.580
SCLK: 1/04135663:60:0:0

Frame : 7



UTC : 1997-261 // 06:52:42.580
SCLK: 1/04135664:24:5:0

Frame : 8



UTC : 1997-261 // 06:53:19.580
SCLK: 1/04135664:80:0:0

Start UTC_TIME : 1997-261 // 06:48:23.580
End UTC_TIME : 1997-261 // 06:53:26.913
Start SCLK : 1/04135660:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 82.52/ 94.81 Deg
S/C to Body Center : 910134.0 Km (581.55530 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL EULON270 SeqNo 01-

Title UVS EUROPA LONGITUDE (~270 deg) Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/18/97 Week 38

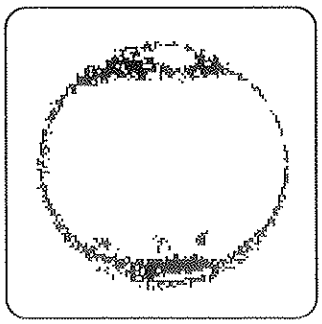
Start	JEE-CDS 00000779:00:0	97-261/10:02:36.600	JEE-000/13:07:39.333
End	JEE-CDS 00000770:00:0	97-261/10:11:42.600	JEE-000/12:58:33.333
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label 10EULON27001-

Bottom Label (real-time)

Plot Key	UVS	Type	SCI		
CDS Bytes	148	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	No

Observation Objective



Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth.

Target to body and stare at Europa using TMC in real-time at ~270° (294°) longitude and 96° phase angle using the UVS 10bps RTS rate.

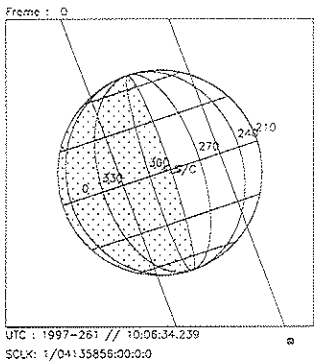
UVS Configuration = P/F Full Scans

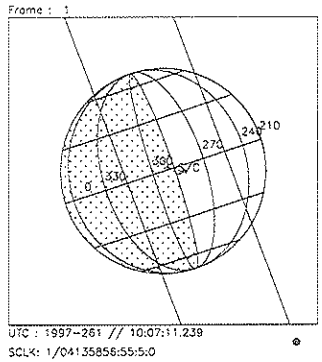
(17712 bits/flush) * 1 flush = 0.0177 mbtg

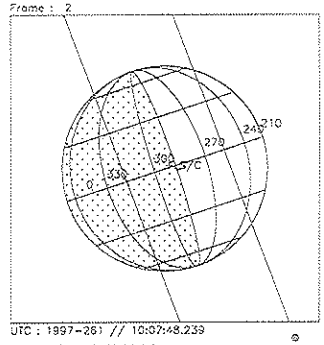
MBTG = 0.0177

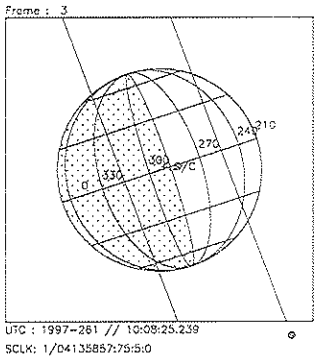
Design Detail

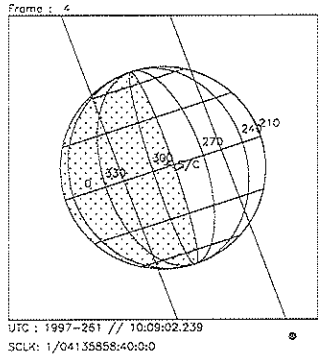
```
CDS  RIM  Command  Parameters                                  OSTI
---  ---  -------  ----------                                  ----
0    000  COMMENT  UVS RIM 0                                   (384CH)
28   003+UVFLUSH  DISCRD,UVS                                   (349CS)
38   003  CMDRS                                               (157CR)
     004      1    34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
     009      6    34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54   004  TARGET   with TMC on body                           (165CO)
28   008+UVFLUSH  PACKET,UVS                                   (349CT)
```

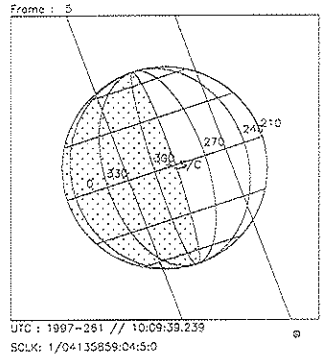


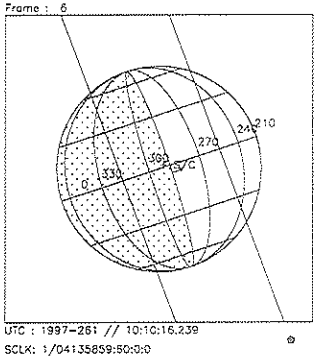


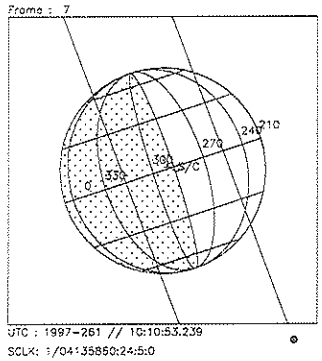


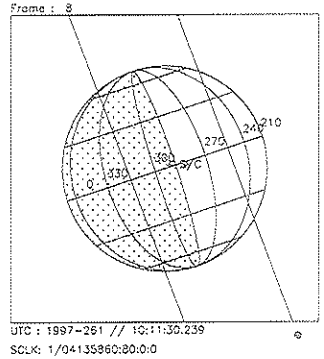












Start UTC_TIME : 1997-261 // 10:06:34.239
End UTC_TIME : 1997-261 // 10:11:37.572
Start SCLK : 1/04135856:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 89.42/ 95.03 Deg
S/C to Body Center : 887531.7 Km (567.11293 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 **OAPEL** EULON290 **SeqNo** 01-

Title UVS EUROPA LONGITUDE (~290 deg) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/18/97 **Week** 38

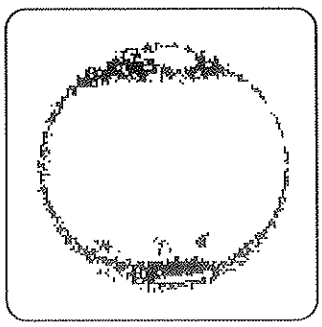
Start	JEE-CDS 00000474:00:0	97-261/15:10:59.933	JEE-000/07:59:16.000
End	JEE-CDS 00000465:00:0	97-261/15:20:05.933	JEE-000/07:50:10.000
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label 10EULON29001-

Bottom Label (real-time)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective



Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth.

Target to body and stare at Europa using TMC in real-time at ~290° (300°) longitude and 82°phase angle using the UVS 10bps RTS rate.

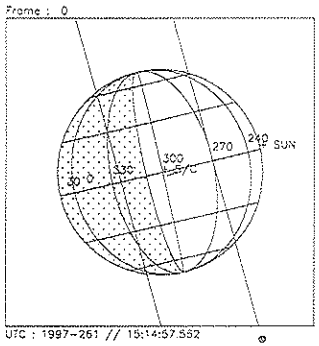
UVS Configuration = F/F Full Scans

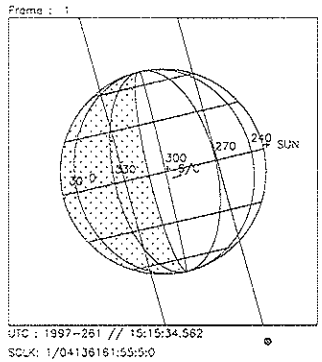
(17712 bits/flush) * 1 flush = 0.0177 mbtg

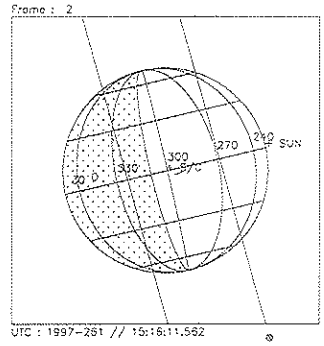
MBTG = 0.0177

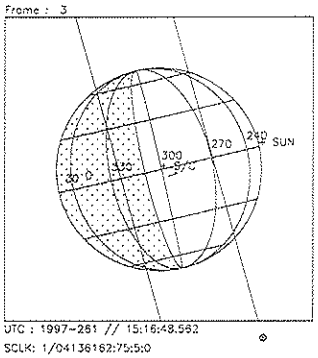
Design Detail

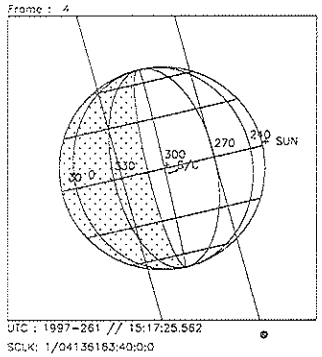
```
CDS RIM Command Parameters                                  Hex
--- --- ------- ----------                                  ---
 0   000 COMMENT UVS RIM 0                                  (384CI)
28   003+UVFLUSH DISCRD,UVS                                 (349CU)
38   003 CMDRS                                              (157CS)
     004     1   34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
     009     6   34UVS,C1,P,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54   004 TARGET  with TMC on body                           (165CP)
28   008+UVFLUSH PACKET,UVS                                 (349CV)
```

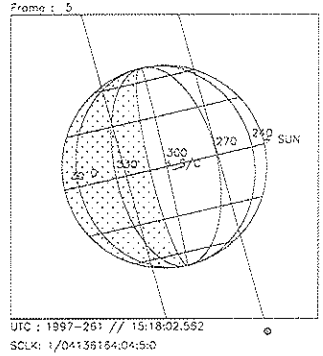


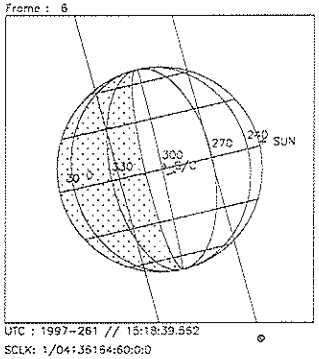


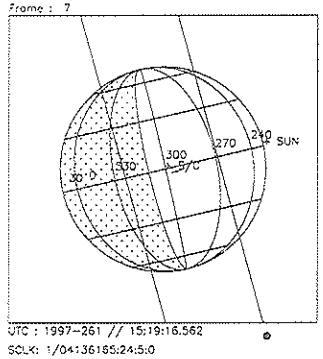


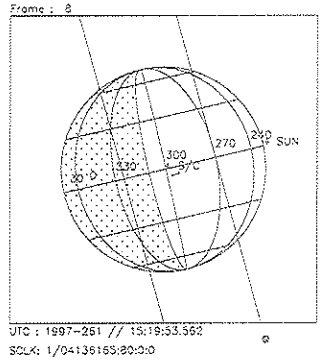












Start UTC_TIME : 1997-261 // 15:14:57.562
End UTC_TIME : 1997-261 // 15:20:00.895
Start SCLK : 1/04136161:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 103.94/ 95.51 Deg
S/C to Body Center : 821157.1 Km (524.70105 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL IUCHEMIS SeqNo 03+

Title UVS R/A W/NIMS IO CHEMIS 3 Instrument UVS

Requestor UVS-SWG/W. SWEET X30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/18/97 Week 38

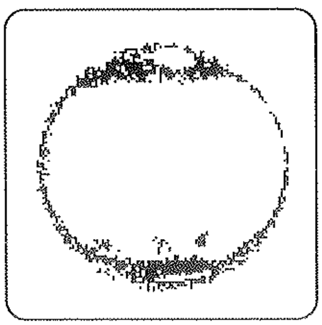
Start	IEE-CDS 00000535:00:0	97-261/19:43:00.480	IEE-000/09:00:56.666
End	IEE-CDS 00000526:00:0	97-261/19:52:06.480	IEE-000/08:51:50.666
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label 10IUCHEMIS03+

Bottom Label (ride-along)

Plot Key	UVS	Type	SCI		
CDS Bytes	38	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective



Ride-along with the NIMS Io Chemis observation to observe Io in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

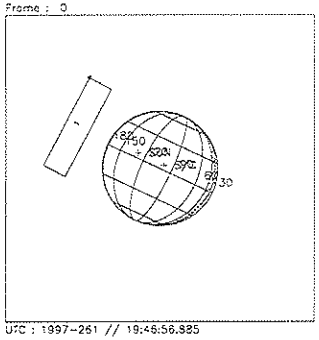
Playback of this observation will require [(1008 bps) * (4.98 RIMS) * (60.667 s/RIM)] = 0.305 Mbits of UVS data.

UVS Configuration = F/F Full Scans
Rj=9, compression ~2.5
MBTG = 0.123

Design Detail

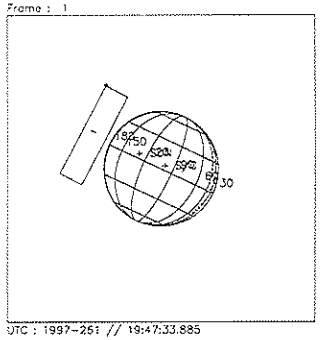
```
CDS RIM Command Parameters
--- --- -------- ----------
0   003 TARGET   (NIMS Target)
0   001 SCIREC   (NIMS Scirec)
38  004 CMDRS                        (157CZ)
    005      1   34UVS,07,S,N,N,N,S,0, ON,OFF,OFF, ON,OFF,NOOVR,1,00,9C,00,00
    010      5   34UVS,C1,F,N,N,N,S,0,OFF,OFF, ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

Frame : 0



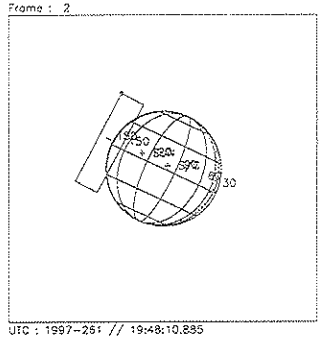
UTC : 1997-261 // 19:46:56.885
SCLK: 1/04136430:00:0:0

Frame : 1



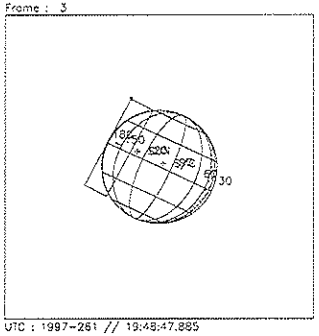
UTC : 1997-261 // 19:47:33.885
SCLK: 1/04136430:55:5:0

Frame : 2



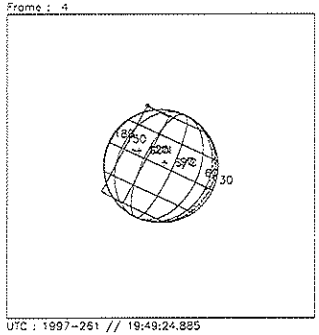
UTC : 1997-261 // 19:48:10.885
SCLK: 1/04136431:20:0:0

Frame : 3



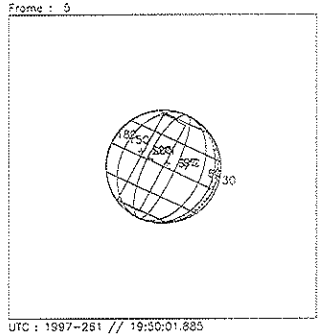
UTC : 1997-261 // 19:48:47.885
SCLK: 1/04136431:75:5:0

Frame : 4



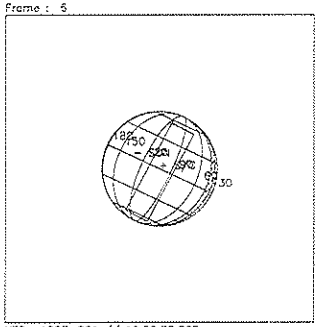
UTC : 1997-261 // 19:49:24.885
SCLK: 1/04136432:40:0:0

Frame : 5



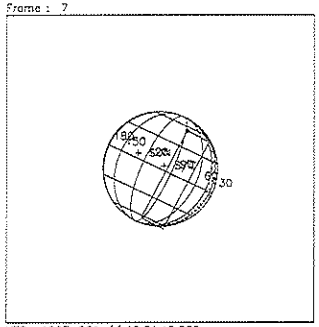
UTC : 1997-261 // 19:50:01.885
SCLK: 1/04136433:04:5:0

Frame : 6



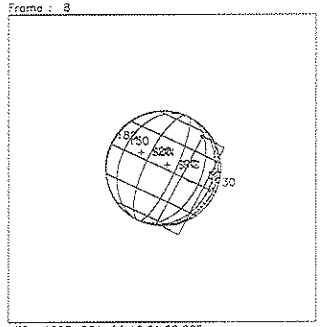
UTC : 1997-261 // 19:50:38.885
SCLK: 1/04136433:60:0:0

Frame : 7



UTC : 1997-261 // 19:51:15.885
SCLK: 1/04136434:24:5:0

Frame : 8



UTC : 1997-261 // 19:51:52.885
SCLK: 1/04136434:80:0:0

Start UTC_TIME : 1997-261 // 19:46:56.885
End UTC_TIME : 1997-261 // 19:52:00.218
Start SCLK : 1/04136430:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : IO
Target Cone/Clock : 144.68/272.27 Deg
S/C to Body Center : 447420.2 Km (245.24913 Ri)
Z-axis Pointing (Ra / Dec) : 137.22 / 18.98 Deg

Activity ID: Orbit 10 **OAPEL** EULON300 **SeqNo** 01-

Title UVS EUROPA LONGITUDE (~300 deg) **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/18/97 **Week** 38

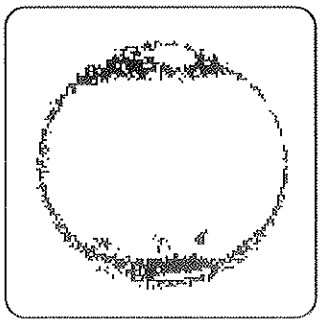
Start	JEE-CDS 00000198:00:0	97-261/19:50:03.933	JEE-000/03:20:12.000
End	JEE-CDS 00000189:00:0	97-261/19:59:09.933	JEE-000/03:11:06.000
Duration	00000009:00:0	000/00:09:06.000	000/00:09:06.000

Top Label 10EULON30001-

Bottom Label (real-time)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective



Observe Europa in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth.

Target to body and stare at Europa using TMC in real-time at ~300° (303`) longitude and 64` phase angle using the UVS 10bps RTS rate.

UVS Configuration = F/F Full Scans

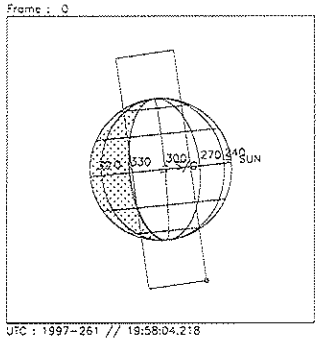
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

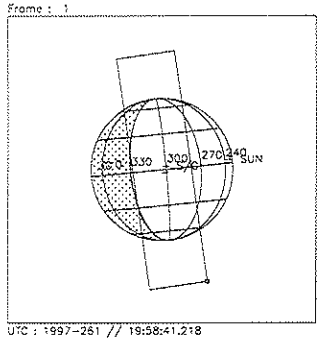
```
CDS  RIM Command  Parameters                                    RSTU
---  --- -------  ----------                                    ----
0    000 COMMENT UVS RIM 0                                     (384CJ)
28   003+UVFLUSH DISCRD,UVS                                    (349CW)
38   003 CMDRS                                                 (157CT)
     004      1    34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
     009      6    34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
54   004 TARGET  with TMC on body                              (165CQ)
28   008+UVFLUSH PACKET,UVS                                    (349CX)
```

Frame : 0



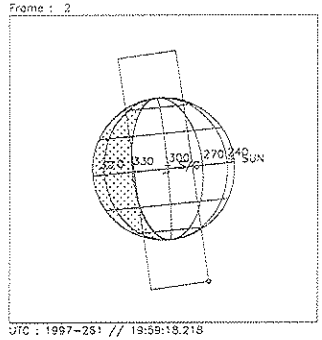
UTC : 1997-261 // 19:58:04.218
SCLK: 1/04136441:00:0:0

Frame : 1



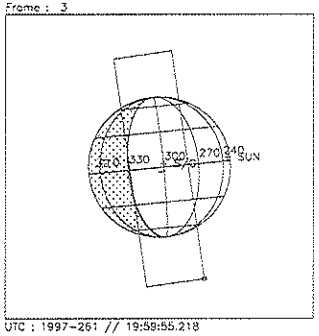
UTC : 1997-261 // 19:58:41.218
SCLK: 1/04136441:55:5:0

Frame : 2



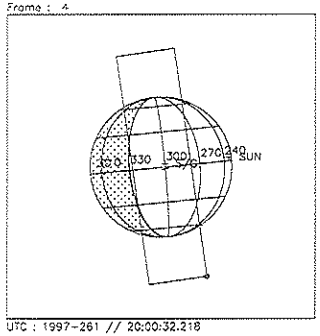
UTC : 1997-261 // 19:59:18.218
SCLK: 1/04136442:20:0:0

Frame : 3



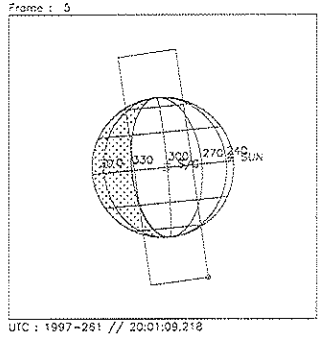
UTC : 1997-261 // 19:59:55.218
SCLK: 1/04136442:75:5:0

Frame : 4



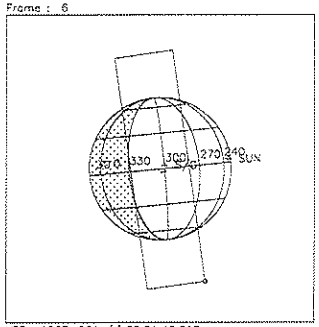
UTC : 1997-261 // 20:00:32.218
SCLK: 1/04136443:40:0:0

Frame : 5



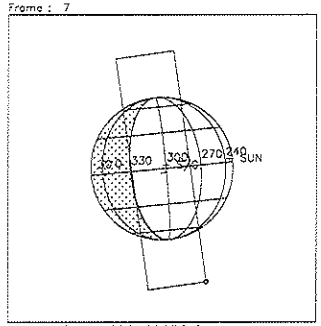
UTC : 1997-261 // 20:01:09.218
SCLK: 1/04136444:04:5:0

Frame : 6



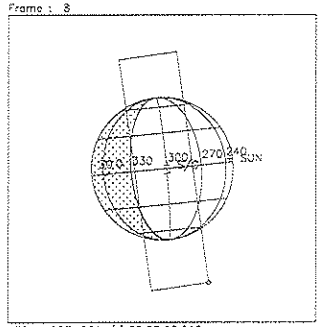
UTC : 1997-261 // 20:01:46.218
SCLK: 1/04136444:80:0:0

Frame : 7



UTC : 1997-261 // 20:02:23.218
SCLK: 1/04136445:24:5:0

Frame : 8



UTC : 1997-261 // 20:03:00.218
SCLK: 1/04136445:80:0:0

Start UTC_TIME : 1997-261 // 19:58:04.218
End UTC_TIME : 1997-261 // 20:03:07.551
Start SCLK : 1/04136441:00:0:0
Delta Time between FOV : 37.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 121.76/ 96.19 Deg
S/C to Body Center : 736690.8 Km (470.72893 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg

Activity ID: Orbit 10 OAPEL IUHRSPEC SeqNo 01+

Title UVS R/A W/ NIMS IO HIGH SPECTRAL RESOLUT Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/19/97 Week 38

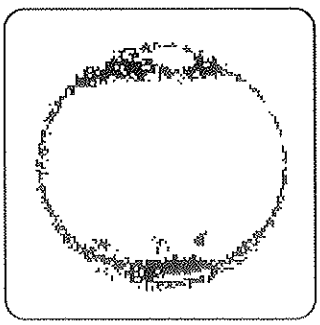
Start	IEE-CDS 00000004:00:0	97-262/04:39:54.480	IEE-000/00:04:02.666
End	IEE+CDS 00000010:00:0	97-262/04:54:03.812	IEE+000/00:10:06.666
Duration	00000014:00:0	000/00:14:09.332	000/00:14:09.332

Top Label 10IUHRSPEC01+

Bottom Label (recorded)

Plot Key	UVS	Type	SCI		
CDS Bytes	38	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective



Ride-along with the NIMS Io High Resolusion observation to observe Io in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

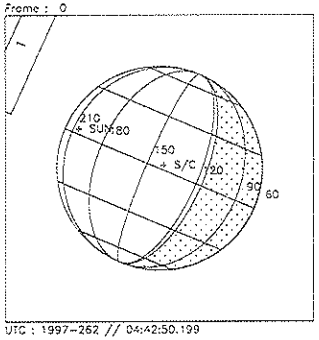
Playback of this observation will require [(1008 bps) * (10 RIMS) * (60.667 s/RIM)] = 0.612 Mbits of UVS data.

UVS Configuration = F/F Full Scans
Rj=9.8ompression ~2.0
MBTG = 0.306

Design Detail

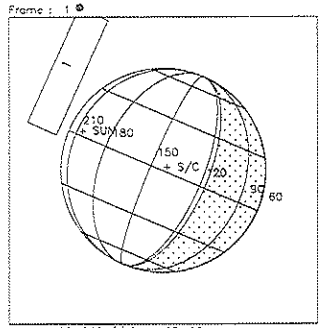
```
CDS RIM Command Parameters                                    RSU
--- --- ------- ----------
0   004 TARGET  (NIMS Target)
0       CSMOS   (NIMS Csmos)
0   004 SCIREC  (NIMS Scirec)
38  003 CMDRS                                  (157CY)
    004     1   34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    004    10   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

Frame : 0



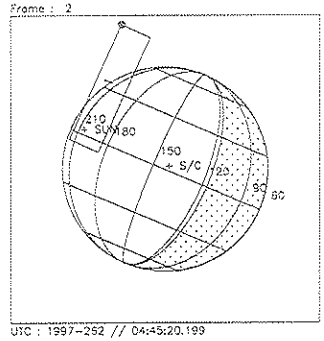
UTC : 1997-262 // 04:42:50.199
SCLK: 1/04136960:00:0:0

Frame : 1



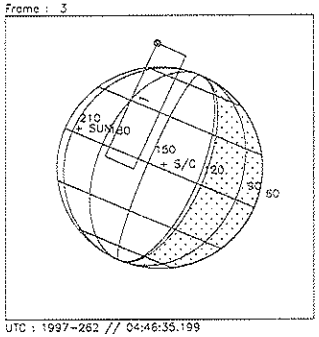
UTC : 1997-262 // 04:44:05.199
SCLK: 1/04136961:21:5:0

Frame : 2



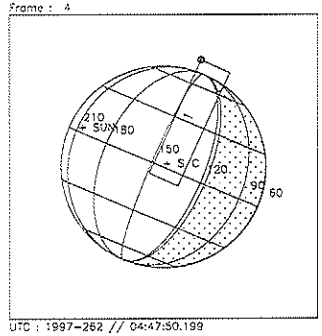
UTC : 1997-262 // 04:45:20.199
SCLK: 1/04136962:43:0:0

Frame : 3



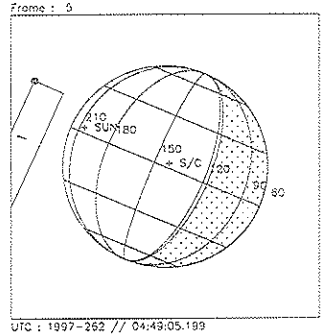
UTC : 1997-262 // 04:46:35.199
SCLK: 1/04136963:64:5:0

Frame : 4



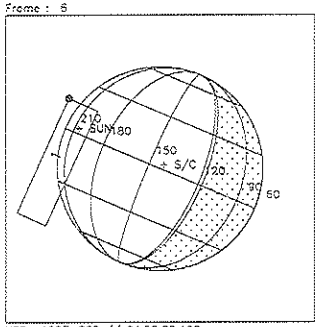
UTC : 1997-262 // 04:47:50.199
SCLK: 1/04136964:86:0:0

Frame : 5



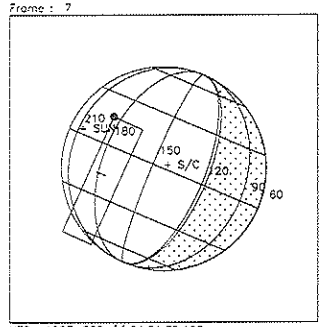
UTC : 1997-262 // 04:49:05.199
SCLK: 1/04136966:15:5:0

Frame : 6



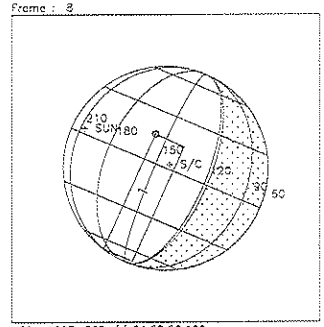
UTC : 1997-262 // 04:50:20.199
SCLK: 1/04136967:38:0:0

Frame : 7



UTC : 1997-262 // 04:51:35.199
SCLK: 1/04136968:59:5:0

Frame : 8



UTC : 1997-262 // 04:52:50.199
SCLK: 1/04136969:81:0:0

Start UTC_TIME : 1997-262 // 04:42:50.199
End UTC_TIME : 1997-262 // 04:52:56.866
Start SCLK : 1/04136960:00:0:0
Delta Time between FOV : 75.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : IO
Target Cone/Clock : 109.84/274.51 Deg
S/C to Body Center : 319692.3 Km (175.23629 Ri)
Z-axis Pointing (Ra / Dec) : 137.27 / 18.98 Deg

Activity ID: Orbit 10 OAPEL IUVOLCAN SeqNo 03+

Title UVS R/A W/ NIMS IO VOLCANO 3 Instrument UVS

Requestor UVS-SWG/W.SWEET 30523 Team UVS Working Group SWG

Time System CDS Load ID 10A Calendar Date 09/19/97 Week 38

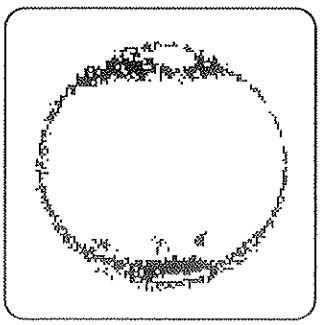
Start	IEE+CDS 00000328:00:0	97-262/10:15:35.812	IEE+000/05:31:38.666
End	IEE+CDS 00000332:00:0	97-262/10:19:38.479	IEE+000/05:35:41.333
Duration	00000004:00:0	000/00:04:02.667	000/00:04:02.667

Top Label 10IUVOLCANO3+

Bottom Label (recorded)

Plot Key	UVS	Type	SCI		
CDS Bytes	38	Report Options	BOTH	Scan Platform	Yes
CDS Source	OAP	Spin State	DUAL	DMS	Yes

Observation Objective



Ride-along with the NIMS Io Volcano observation to observe Io in the 1600Å to 3200Å wavelength regions at phase angles not obtainable from the Earth. Data will supplement and complement the NIMS surface property measurements.

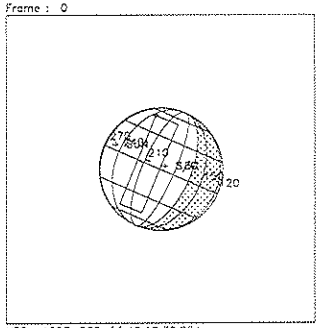
Playback of this observation will require [(1008 bps) * (1.46 RIMS) * (60.667 s/RIM)] = 0.089 Mbits of UVS data.

UVS Configuration = F/F Full Scans
Rj=10, compression =2.5
MBTG = 0.036

Design Detail

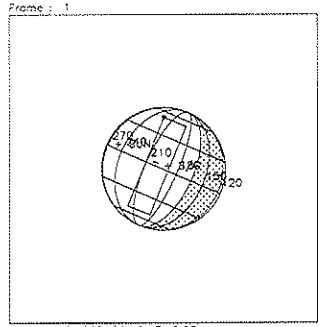
```
CDS RIM Command Parameters                                    (CSE)
--- --- -------- ----------
0   001 TARGET   (NIMS Target)
0       CSMOS    (NIMS Csmos)
0   002 SCIREC   (NIMS Scirec)
38  003 CMDRS                                  (157CX)
    004     1    34UVS,07,S,N,N,N,S,0,  ON,OFF,OFF,  ON,OFF,NOOVR,1,00,9C,00,00
    006     3    34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
```

Frame : 0



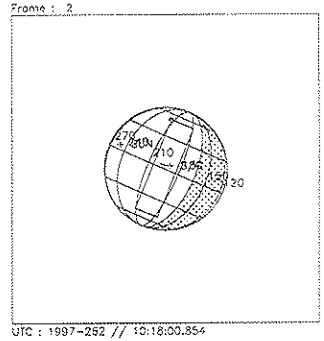
UTC : 1997-262 // 10:17:30.854
SCLK: 1/04137291:00:0:0

Frame : 1



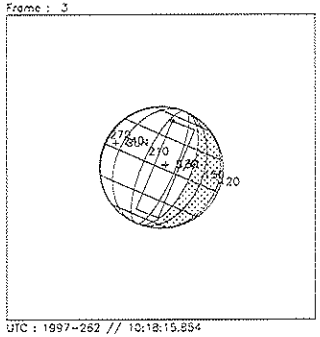
UTC : 1997-262 // 10:17:45.854
SCLK: 1/04137291:22:5:0

Frame : 2



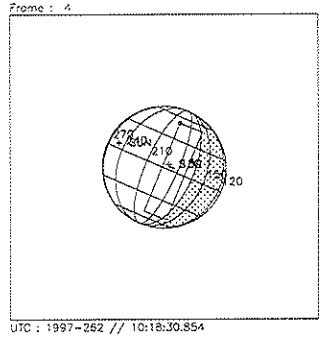
UTC : 1997-262 // 10:18:00.854
SCLK: 1/04137291:45:0:0

Frame : 3



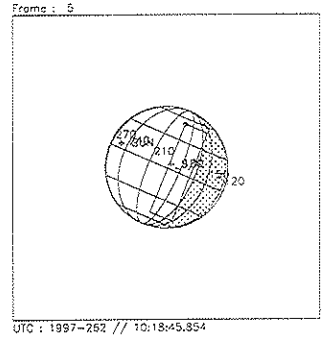
UTC : 1997-262 // 10:18:15.854
SCLK: 1/04137291:67:5:0

Frame : 4



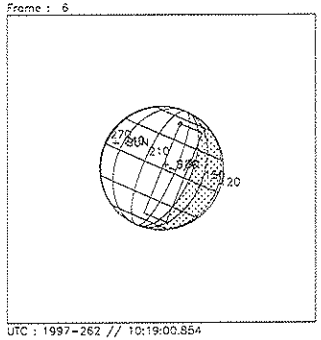
UTC : 1997-262 // 10:18:30.854
SCLK: 1/04137291:90:0:0

Frame : 5



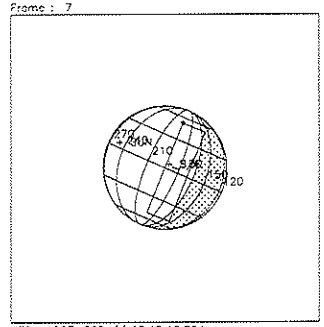
UTC : 1997-262 // 10:18:45.854
SCLK: 1/04137292:21:5:0

Frame : 6



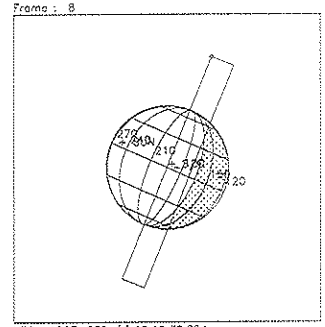
UTC : 1997-262 // 10:19:00.854
SCLK: 1/04137292:44:0:0

Frame : 7



UTC : 1997-262 // 10:19:15.854
SCLK: 1/04137292:66:5:0

Frame : 8



UTC : 1997-262 // 10:19:30.854
SCLK: 1/04137292:89:0:0

Start UTC_TIME : 1997-262 // 10:17:30.854
End UTC_TIME : 1997-262 // 10:19:32.187
Start SCLK : 1/04137291:00:0:0
Delta Time between FOV : 15.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : IO
Target Cone/Clock : 139.53/280.72 Deg
S/C to Body Center : 403726.0 Km (221.29857 Ri)
Z-axis Pointing (Ra / Dec) : 161.75 / 7.00 Deg

Activity ID: Orbit 10 OAPEL IUIODARK SeqNo 01-

Title UVS IO ECLIPSE 01 **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/19/97 **Week** 38

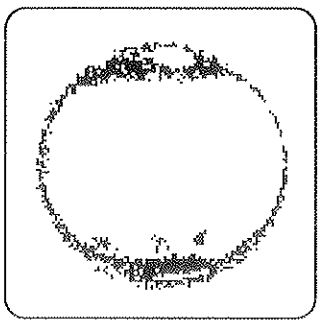
Start	JEE+CDS 00001372:00:0	97-262/22:17:30.599	JEE+000/23:07:14.666
End	JEE+CDS 00001391:00:0	97-262/22:36:43.266	JEE+000/23:26:27.333
Duration	00000019:00:0	000/00:19:12.667	000/00:19:12.667

Top Label 10IUIODARK01-

Bottom Label (real-time)

Plot Key	UVS	**Type**	SCI		
CDS Bytes	148	**Report Options**	BOTH	**Scan Platform**	Yes
CDS Source	OAP	**Spin State**	DUAL	**DMS**	No

Observation Objective



UVS real-time Io Eclipse observation. Obtain UVS G-Channel data while Io is being eclipsed by Jupiter. Data will be used to characterize the lower atmospheric UV airglow emissions of Io while in eclipse.

10IUIODARK01- Io eclipse measurment. Target and stare at Io using TMC in real-time using the UVS 10 bps RTS rate.

UVS Configuration = 1304-1479 Å 16 step G/G

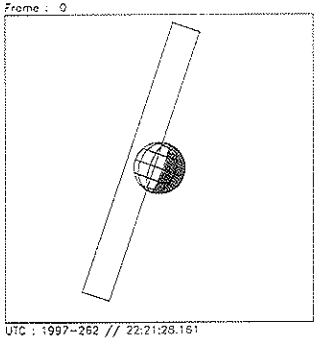
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

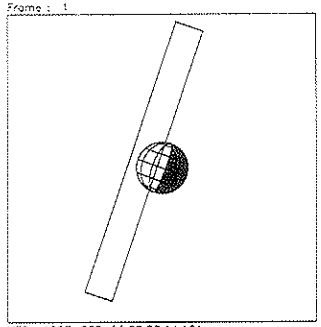
```
CDS RIM Command Parameters                    Psi
--- --- ------- ----------                    ---
0   000 COMMENT UVS RIM 0                     (384CK)
28  003+UVFLUSH DISCRD,UVS                    (349CY)
54  004 TARGET  with TMC on body              (365CR)
38  003 CMDRS                                 (157CU)
    004      1   34UVS,D1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,94,45,00,73
    016     13   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
28  015+UVFLUSH PACKET,UVS                    (349CZ)
```

Frame : 0



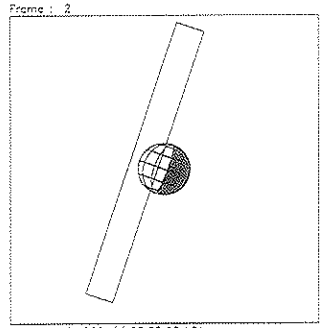
UTC : 1997-262 // 22:21:28.161
SCLK: 1/04138007:00:0:0

Frame : 1



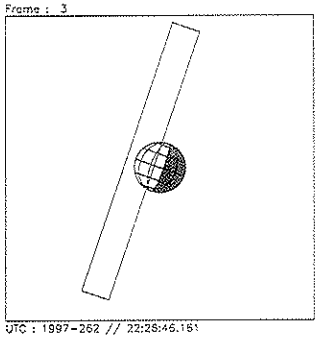
UTC : 1997-262 // 22:23:14.161
SCLK: 1/04138008:68:0:0

Frame : 2



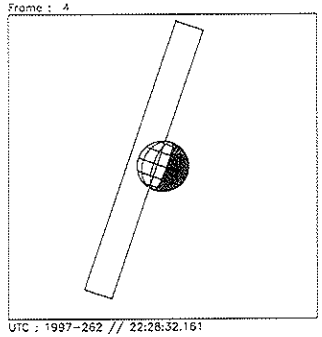
UTC : 1997-262 // 22:25:00.161
SCLK: 1/04138010:45:0:0

Frame : 3



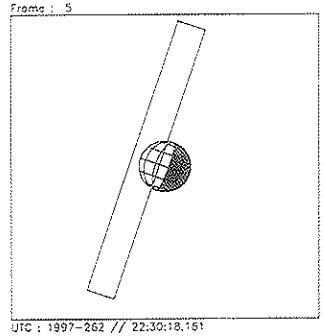
UTC : 1997-262 // 22:26:46.161
SCLK: 1/04138012:22:0:0

Frame : 4



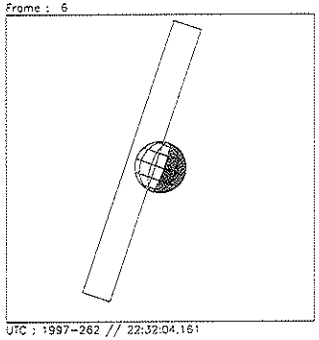
UTC : 1997-262 // 22:28:32.161
SCLK: 1/04138013:90:0:0

Frame : 5



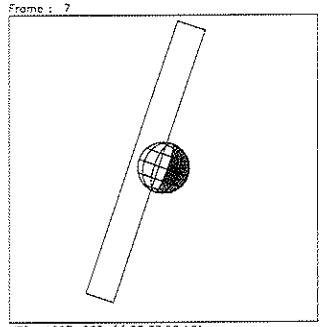
UTC : 1997-262 // 22:30:18.161
SCLK: 1/04138015:67:0:0

Frame : 6



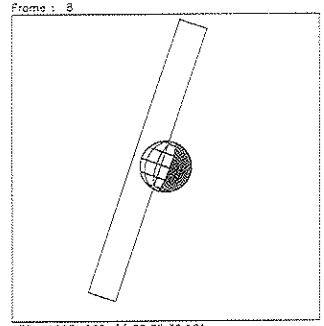
UTC : 1997-262 // 22:32:04.161
SCLK: 1/04138017:44:0:0

Frame : 7



UTC : 1997-262 // 22:33:50.161
SCLK: 1/04138019:21:0:0

Frame : 8



UTC : 1997-262 // 22:35:36.161
SCLK: 1/04138020:89:0:0

Start UTC_TIME : 1997-262 // 22:21:28.161
End UTC_TIME : 1997-262 // 22:35:37.494
Start SCLK : 1/04138007:00:0:0
Delta Time between FOV : 106.0000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : IO
Target Cone/Clock : 122.06/280.29 Deg
S/C to Body Center : 1149591. Km (630.13725 Ri)
Z-axis Pointing (Ra / Dec) : 161.75 / 7.00 Deg

Activity ID: Orbit 10 **OAPEL** EUEURDRK **SeqNo** 02-

Title UVS EUROPA ECLIPSE 02 **Instrument** UVS

Requestor UVS-SWG/W.SWEET 30523 **Team** UVS **Working Group** SWG

Time System CDS **Load ID** 10A **Calendar Date** 09/20/97 **Week** 38

Start	JEE+CDS 00001476:00:0	97-263/00:02:39.933	JEE+001/00:52:24.000
End	JEE+CDS 00001492:00:0	97-263/00:18:50.599	JEE+001/01:08:34.666
Duration	00000016:00:0	000/00:16:10.666	000/00:16:10.666

Top Label 10EUEURDRK02-

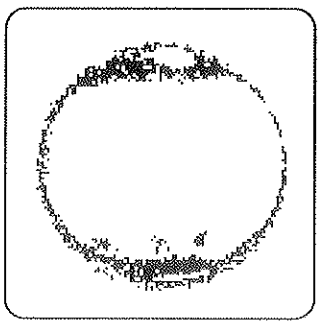
Bottom Label (real-time)

Plot Key UVS **Type** SCI

CDS Bytes 148 **Report Options** BOTH **Scan Platform** Yes

CDS Source OAP **Spin State** DUAL **DMS** No

Observation Objective



UVS real-time Europa Eclipse observation. Obtain UVS G-Channel to search for O and H while Europa is being eclipsed by Jupiter. Data will be used to characterize the lower atmospheric UV airglow emissions of Europa while in eclipse.

10EUEURDRK02- Europa eclipse measurment. Target and stare at Europa using TMC in real-time using the UVS 10 bps RTS rate.

UVS Configuration = 1216/1304 Å 16-step mini-scan G/G

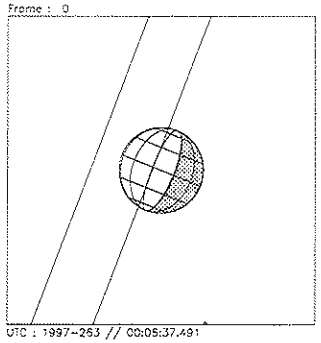
(17712 bits/flush) * 1 flush = 0.0177 mbtg

MBTG = 0.0177

Design Detail

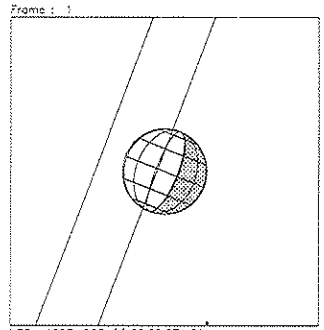
```
CDS RIM Command Parameters                    Psi
--- --- ------- ----------                    ---
0   000 COMMENT UVS RIM 0                     (384CL)
28  003+UVFLUSH DISCRD,UVS                    (349DA)
54  004 TARGET  with TMC on body              (165CS)
38  003 CMDRS                                 (157CV)
    004     1   34UVS,D1,F,N,N,N,S,0,OFF,OFF,  ON,  ON,OFF,NOOVR,1,5A,45,00,39
    016    13   34UVS,C1,F,N,N,N,S,0,OFF,OFF,  ON,OFF,OFF,NOOVR,1,2C,05,00,00
28  035+UVFLUSH PACKET,UVS                    (349DB)
```

Frame : 0



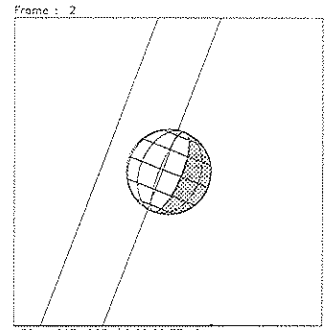
UTC : 1997-263 // 00:05:37.491
SCLK: 1/04138111:00:0:0

Frame : 1



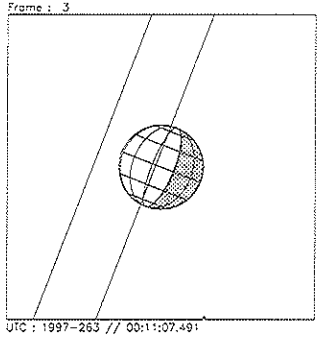
UTC : 1997-263 // 00:08:07.491
SCLK: 1/04138112:44:0:0

Frame : 2



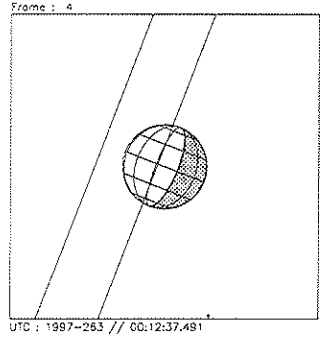
UTC : 1997-263 // 00:09:37.491
SCLK: 1/04138113:88:0:0

Frame : 3



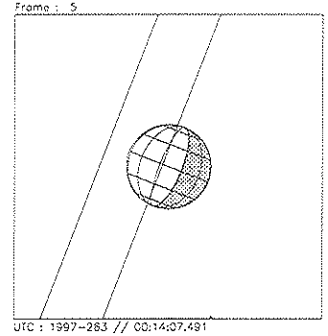
UTC : 1997-263 // 00:11:07.491
SCLK: 1/04138115:41:0:0

Frame : 4



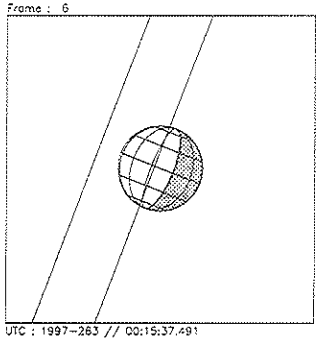
UTC : 1997-263 // 00:12:37.491
SCLK: 1/04138116:85:0:0

Frame : 5



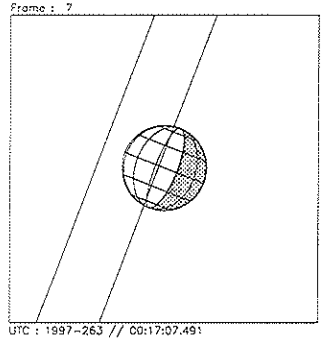
UTC : 1997-263 // 00:14:07.491
SCLK: 1/04138118:38:0:0

Frame : 6



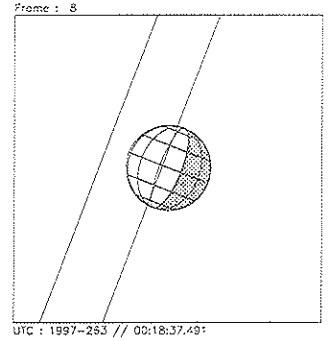
UTC : 1997-263 // 00:15:37.491
SCLK: 1/04138119:82:0:0

Frame : 7



UTC : 1997-263 // 00:17:07.491
SCLK: 1/04138121:35:0:0

Frame : 8



UTC : 1997-263 // 00:18:37.491
SCLK: 1/04138122:79:0:0

Start UTC_TIME : 1997-263 // 00:06:37.491
End UTC_TIME : 1997-263 // 00:18:45.491
Start SCLK : 1/04138111:00:0:0
Delta Time between FOV : 90.00000
FOVs : F Channel(0.1x0.4), N/G Channel(0.1x1.0)

Target Body : EUROPA
Target Cone/Clock : 103.60/274.66 Deg
S/C to Body Center : 1228085. Km (784.71883 Re)
Z-axis Pointing (Ra / Dec) : 137.25 / 19.00 Deg