

r/a Callisto Feature Observation

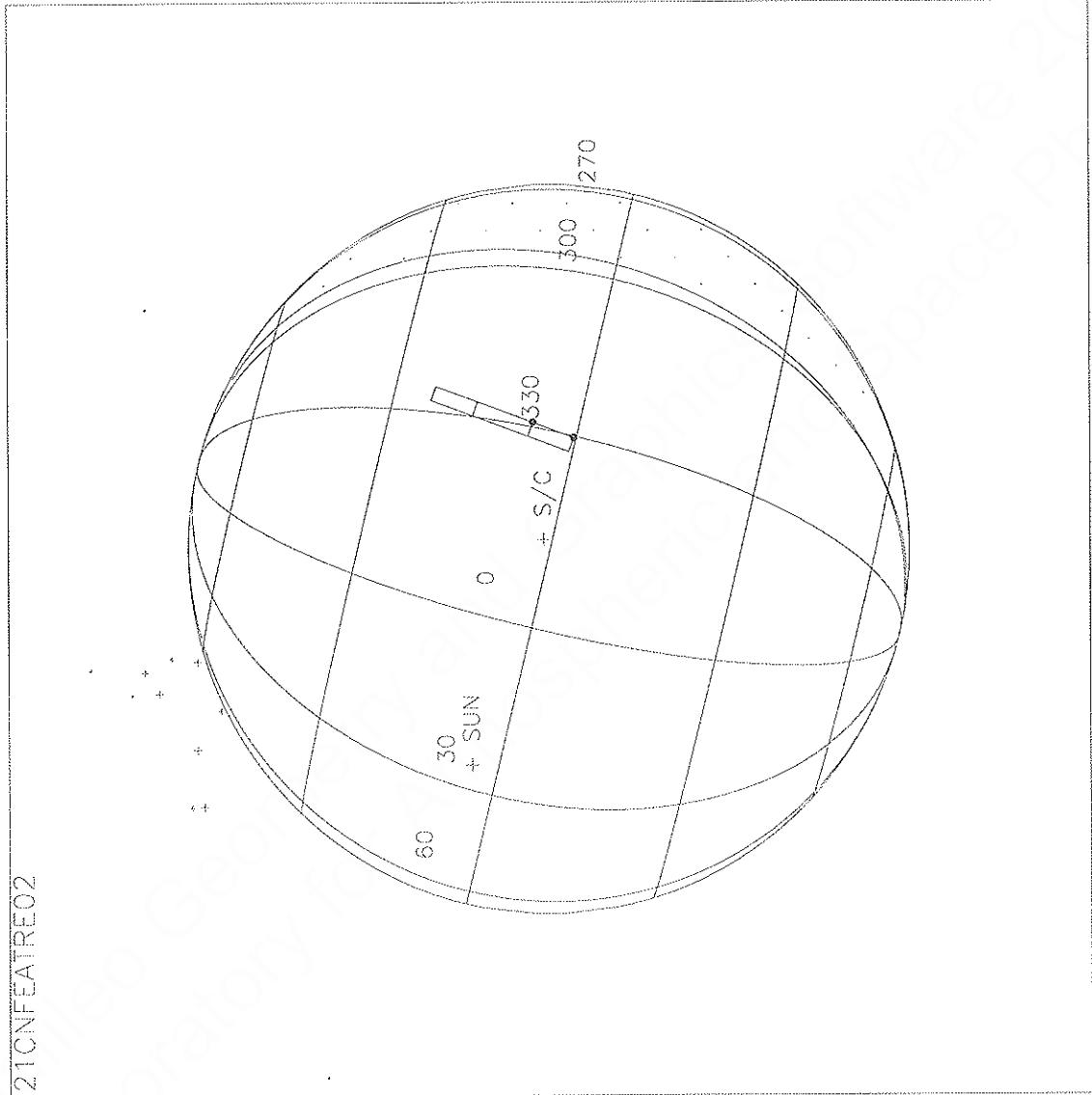
ACTIVITY ID: 21CUFEATRE02+

START TIME: 99-181/09:32:26.466

Activity ID:	Orbit 21	OAPEL	CUFEATRE	SeqNo	02+				
Title	r/a Callisto Feature Observation			Instrument	UVS				
Requestor	UVS-SWG/W. SWEET X30523		Team	UVS	Working Group	SWG			
Time	System	CDS	Load ID	21A	Calendar Date	06/30/99	Week	78	
Start	CEE+CDS 00000108:00:0			99-181/09:32:26.466	CEE+000/01:49:12.000				
End	CEE+CDS 00000132:00:0			99-181/09:56:42.466	CEE+000/02:13:28.000				
Duration	00000024:00:0			000/00:24:16.000	000/00:24:16.000				
Top Label	21CUFEATRE02+								
Bottom Label	NIMS ride-along								
Plot Key	UVS	Type	SCI						
CDS Bytes	38	Report Options	BOTH		Scan Platform	Yes			
CDS Source	OAP	Spin State	DUAL		DMS	Yes			
<b>Observation Objective</b>									
<p>21CUFEATRE03: Ride-along with NIMS 21CNFEATRE03 to observe Callisto features in the MUV at phase angles not obtainable from Earth. Data will complement the NIMS surface property measurements.</p> <p>R<sub>j</sub> = 25.6 UVS configuration: full F/F scans.  <math>((1008 \text{ bps}) * (1201)) * 0.333 \text{ (compression)} = 0.404 \text{ mbtg}</math></p>									
<b>Design Detail</b>									
CDS	RIM COMMAND PARAMETERS			PSID					
0	000 COMMENT UVS RIM 0			-----					
38	002 CMDRS			(384CB)					
	003 1 34UVS,07,S,N,N,N,S,0, ON,OFF,OFF, ON,OFF,NOOVR,1,00,9C,00,00			(157CB)					
	023 21 34UVS,07,S,N,N,N,S,0, ON,OFF,OFF,OFF,OFF,NOOVR,1,00,9C,00,00								

Thu Jul 1 13:39:52 1999

21CNFEATURE02



Start UTC TIME : 1999-181 // 09:36:24.057  
No End Time:  
Start SCLK : 1/05061541:00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 54.65 / 21.55 Deg  
S/C to Body Center : 55912.39 Km ( 23.267743 RC )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Callisto Atmosphere Observation

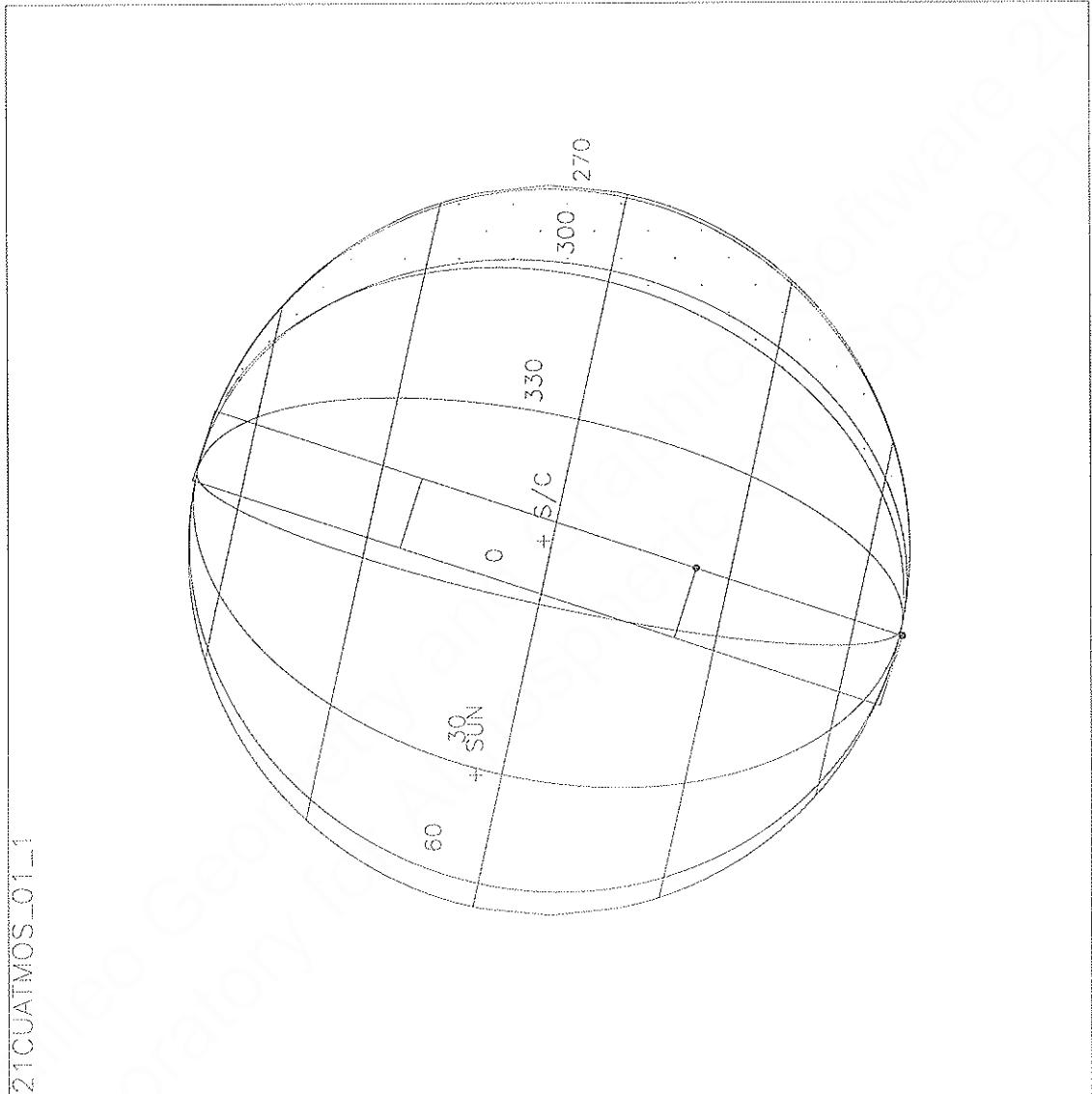
ACTIVITY ID: 21CUATMOS\_01-

START TIME: 99-181/16:41:09.132

Activity ID:	Orbit 21	OAPEL CUATMOS_	SeqNo	01-
Title	Callisto Atmosphere Observation	Instrument	UVS	
Requestor	UVS-SWG/W. SWEET X30523	Team	UVS	Working Group SWG
Time	System CDS	Load ID	21A	Calendar Date 06/30/99 Week 78
Start	CEE+CDS 0000532:00:0	99-181/16:41:09.132	CEE+000/08:57:54.666	
End	CEE+CDS 0000806:00:0	99-181/21:18:11.799	CEE+000/13:34:57.333	
Duration	00000274:00:0	000/04:37:02.667	000/04:37:02.667	
Top Label	21CUATMOS_01-			
Bottom Label	real-time			
Plot Key	UVS	Type	SCI	
CDS Bytes	558	Report Options	BOTH	Scan Platform Yes
CDS Source	OAP	Spin State	DUAL	DMS No
<b>Observation Objective</b>				
21CUATMOS_01: Callisto atmosphere observation to study potential long-term variability. Observe Callisto's atmosphere for ~4 1/2 hours.				
Rj = 22.5				
1st 1 3/4 hours, on Callisto with 1304. 2nd 1 3/4 hours, on Callisto with 1356. 3rd 1 hour: 20 RIMs 2 slits off brt lmb w/ 1216 20 RIMs 1 radii off brt lmb w/ 1216 20 RIMs 3 radii off brt lmb w/ 1216				
17712 bits/flush * 5 flushes = 0.08856 mbtg				
<b>Design Detail</b>				
CDS	RIM COMMAND PARAMETERS	PSID		
0	000 COMMENT UVS RIM 0	(384CE)		
28	003+UVFLUSH DISCRD,UVS	(349CA)		
66	003 CMDRS	(157CE)		
004	1 34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,94,45,00,00	(165CA) RA/Dec=57.58/22.15		
109	106 34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,B6,45,00,00	(165CB) RA/Dec=57.64/22.16		
214	211 34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,5A,45,00,00	(165CL) RA/Dec=57.68/22.16		
274	271 34UVS,07,S,N,N,N,N,S,0, ON,OFF,OFF,OFF,OFF,NOOVR,1,00,9C,00,00	(165CC) RA/Dec=57.19/22.02		
54	004 TARGET TMC on body	(349CD) RA/Dec=56.82/21.91		
54	074 TARGET TMC on body	(349CE) RA/Dec=55.94/21.64		
28	107+UVFLUSH PACKET,UVS	(349CF)		
54	144 TARGET TMC on body	(165CD) RA/Dec=57.19/22.02		
28	212+UVFLUSH PACKET,UVS	(349CC) RA/Dec=57.68/22.16		
54	214 TARGET TMC +0.2 radii off body	(165CB) RA/Dec=57.58/22.15		
28	232+UVFLUSH PACKET,UVS	(349CA) RA/Dec=57.64/22.16		
54	234 TARGET TMC +1 radii off body	(165CC) RA/Dec=56.82/21.91		
28	252+UVFLUSH PACKET,UVS	(349CE) RA/Dec=55.94/21.64		
54	254 TARGET TMC +3 radii off body	(165CD) RA/Dec=55.94/21.64		
28	273+UVFLUSH PACKET,UVS	(349CF)		

Thu Jul 1 13:41:13 1999

21 QUATMOS\_01\_-

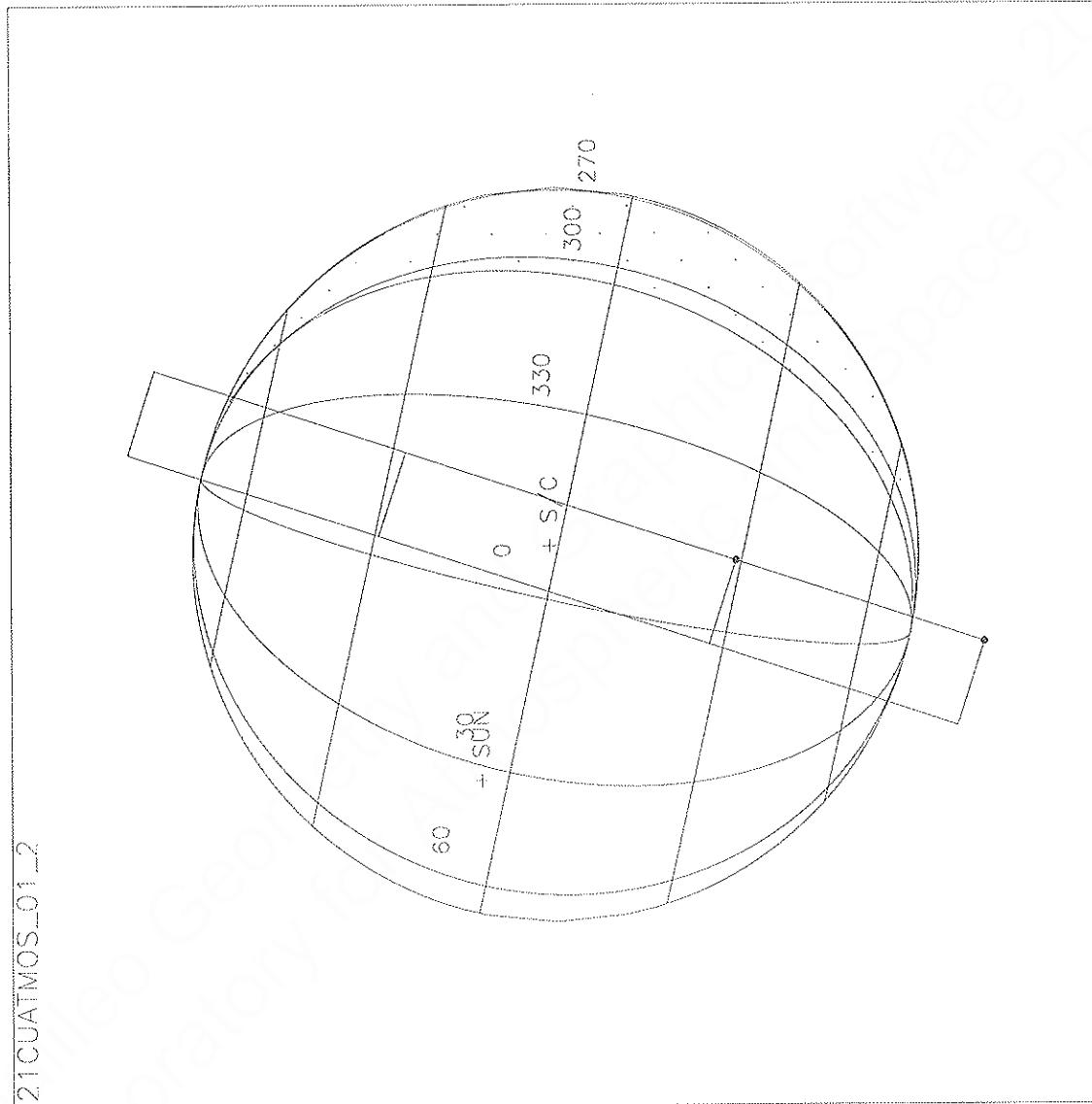


Start UTC TIME : 1999-181 // 16:49:09.375  
No End Time :  
Start SCLK : 1/05061969:00:00:0

Target Body : CALLISTO  
Target Ra/Dec : 57.57 / 22.15 Deg  
S/C to Body Center : 275955.6 Km ( 114.83796 Rc )  
Z-axis Pointing ( Rc / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:42:31 1999

21CUATMOS\_01\_2

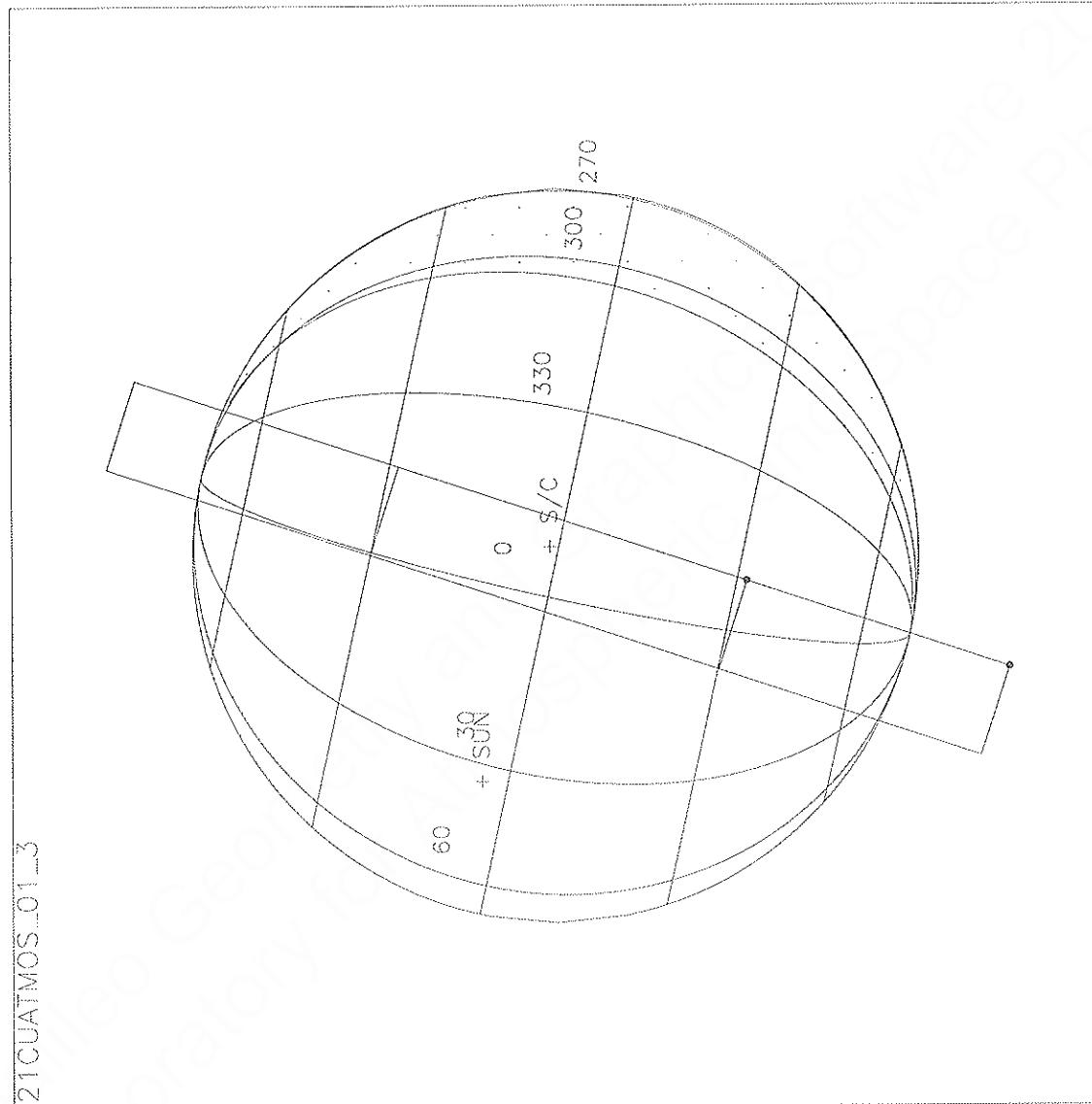


Start UTC\_TIME : 1999-181 // 18:35:19.37  
No End Time:  
Start SCLK : 1/05562074:00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 57.65 / 22.16 Deg  
S/C to Body Center : 330863.3 Km ( 137.72923 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:43:52 1999

21CUATMOS\_01\_3

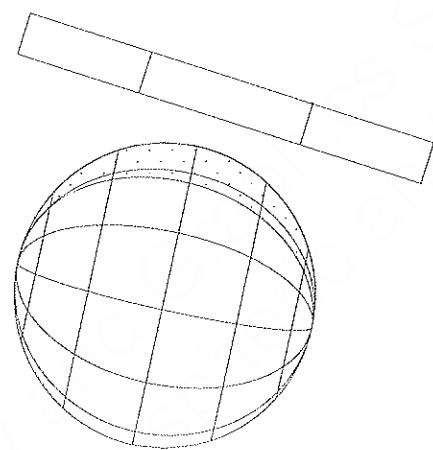


Start UTC TIME : 1999-181 // 19:09:42.036  
No End Time :  
Start SCLK : 1/05062108:00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 57.66/ 22.16 Deg  
S/C to Body Center : 34891.30 Km ( 145.19892 RC )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:45:24 1999

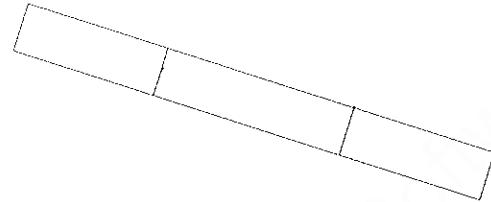
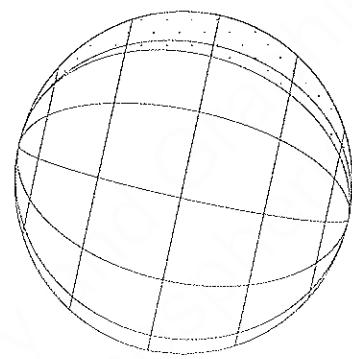
210QUATMOS\_01\_4



Start UTC TIME : 1999-181 // 20:21:29.367  
No End Time :  
Start SCLK : 1/05062179:00:0:0  
Target Body : CALLISTO  
Target Ra/Dec : 57.68/ 22.17 Deg  
S/C to Body Center : 386649.2 Km ( 160.90270 R<sub>C</sub> )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:46:41 1999

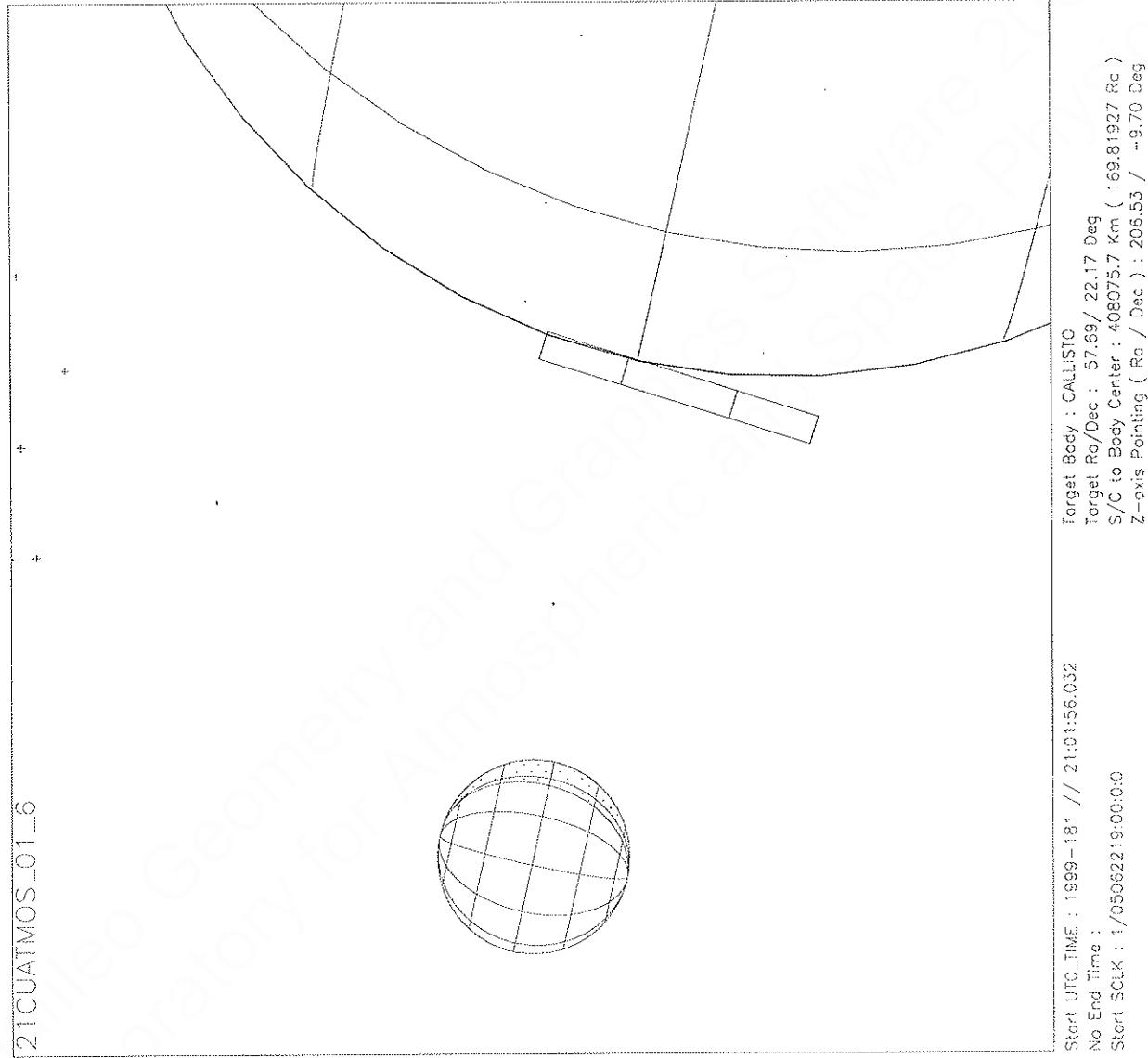
21CJATMOS\_01\_5



Start UTC\_TIME : 1999-18: // 20:41:42.700  
No End Time :  
Start SCLK : 1/05062198:00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 57.69/ 22.17 Deg  
S/C to Body Center : 397346.5 Km ( 165.35434 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:47:55 1999



Callisto Surface Observation

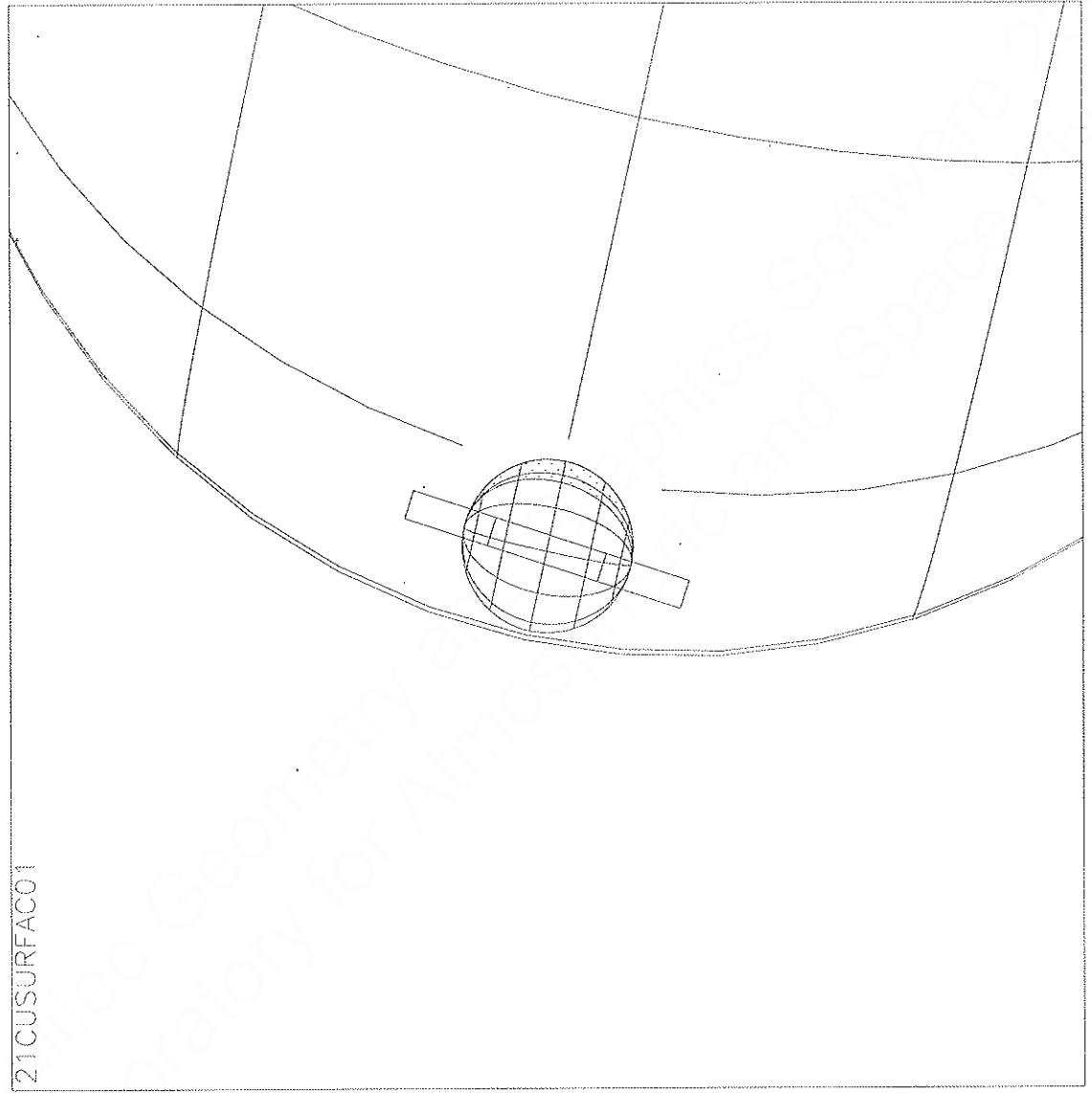
ACTIVITY ID: 21CUSURFAC01-

START TIME: 99-181/22:42:07.132

Activity ID:	Orbit 21	OAPEL	CUSURFAC	SeqNo	01-
Title	Callisto Surface Observation			Instrument	UVS
Requestor	UVS-SWG/W. SWEET X30523		Team UVS	Working Group	SWG
Time System	CDS	Load ID	21A	Calendar Date	06/30/99 Week 78
Start	CEE+CDS 0000889:00:0		99-181/22:42:07.132		CEE+000/14:58:52.666
End	CEE+CDS 0000955:00:0		99-181/23:48:51.132		CEE+000/16:05:36.666
Duration	00000066:00:0		000/01:06:44.000		000/01:06:44.000
Top Label	21CUSURFAC01-				
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
<b>Observation Objective</b>					
<p>21CUSURFAC01: Observe Callisto's surface for ~ 1 hour. This observation will complement the nominal mission observations to derive phase curves for several locations on Callisto, to obtain a high SNR at wavelengths shorter than 2200 Å to see if there are distinctive features in this spectral region.</p> <p>Rj = 19.8</p> <p>UVS configuration: F/N full scans at 1 ms integration.</p> <p>17712 bits/flush * 1 flush = 0017712 mbtg MBTG = 0.017712</p>					
<b>Design Detail</b>					
CDS RIM COMMAND PARAMETERS		PSID			
---	---	---			
0 000 COMMENT UVS RIM 0		(384CF)			
28 003+UVFLUSH DISCRD,UVS		(349CG)			
38 003 CMDRS		(157CF)			
54 004 1 34UVS,07,S,N,N,N,S,0, ON,ON,OFF, ON,OFF,NOOVR,2,00,9C,01,2C					
54 066 63 34UVS,07,S,N,N,N,S,0, ON,OFF,OFF,OFF,NOOVR,1,00,9C,00,00					
54 004 TARGET with TMC on body		(165CE) RA/Dec=57.71/22.17			
28 065+UVFLUSH PACKET,UVS		(349CH)			

Thu Jul 1 13:49:23 1999

21CUSURFACE01



Start UTC TIME : 1999-181 // 22:50:07.362  
No End Time :  
Start SCLK : 1/05062326:00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 57.70 / 22.17 Deg  
S/C to Body Center : 466073.8 Km ( 193.95497 Rc )  
Z-axis Pointing ( Ro / Dec ) : 206.53 / -9.70 Deg

Callisto Atmosphere Observation

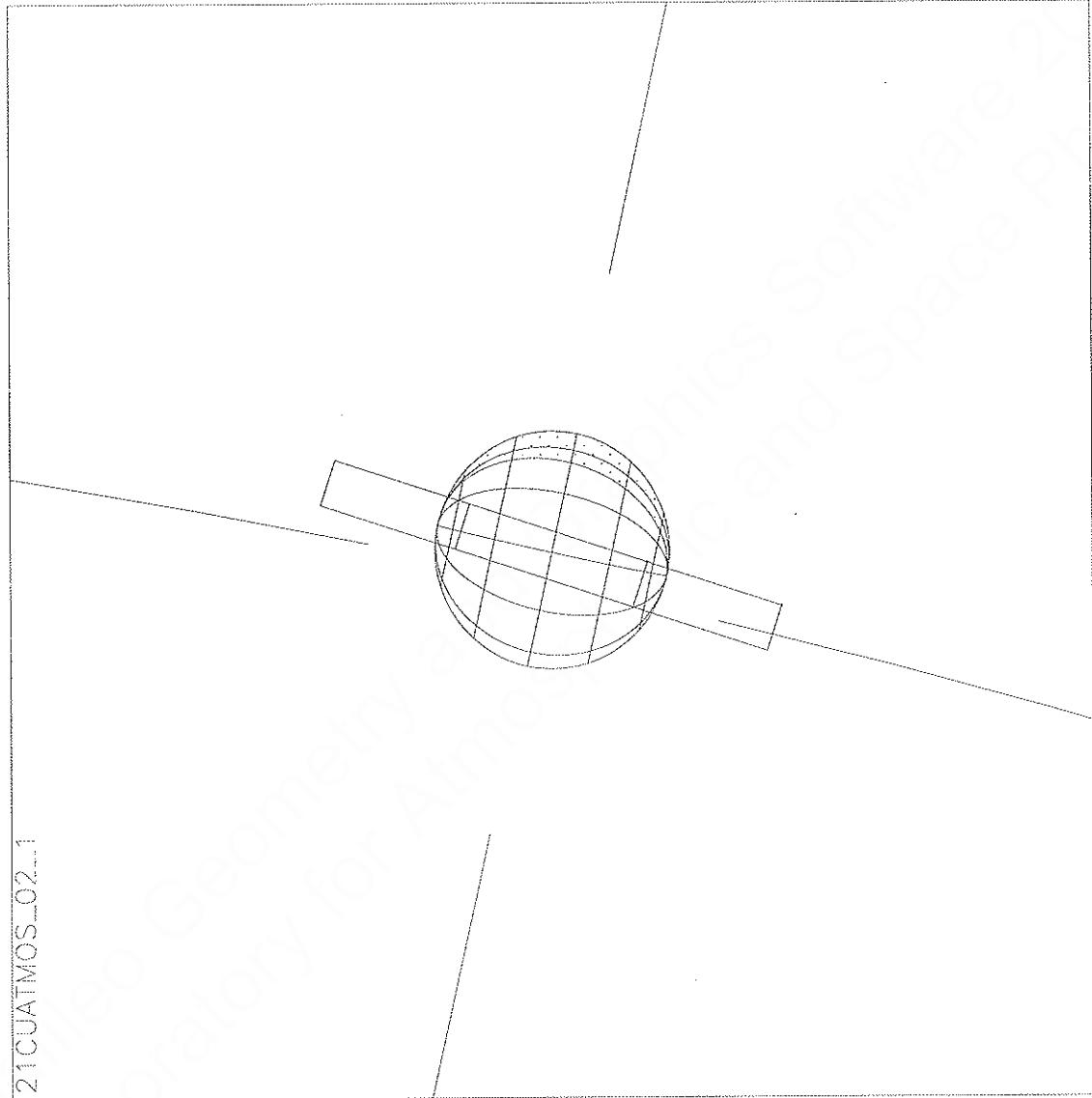
ACTIVITY ID: 21CUATMOS\_02-

START TIME: 99-182/01:12:46.466

Activity ID:	Orbit 21	OAPEL CUATMOS_	SeqNo	02-
Title	Callisto Atmosphere Observation	Instrument	UVS	
Requestor	UVS-SWG/W.SWEET X30523	Team	UVS	Working Group SWG
Time	System CDS	Load ID	2IA	Calendar Date
Start	CEE+CDS 00001038:00:0	99-182/01:12:46.466		CEE+000/17:29:32.000
End	CEE+CDS 00001312:00:0	99-182/05:49:49.132		CEE+000/22:06:34.666
Duration	00000274:00:0	000/04:37:02.666		000/04:37:02.666
Top Label	21CUATMOS_02-			
Bottom Label	real-time			
Plot Key	UVS	Type	SCI	
CDS Bytes	558	Report Options	BOTH	Scan Platform Yes
CDS Source	OAP	Spin State	DUAL	DMS No
<b>Observation Objective</b>				
21CUATMOS_02: Callisto atmosphere observation to study potential long-term variability. Observe Callisto's atmosphere for ~4 1/2 hours.				
Rj = 16.3 1st 1 3/4 hours, on Callisto with 1304. 2nd 1 3/4 hours, on Callisto with 1356. 3rd 1 hour: 20 RIMs 2 slits off brt limb w/ 1216 20 RIMs 1 radii off brt limb w/ 1216 20 RIMs 3 radii off brt limb w/ 1216  17712 bits/flush * 5 flushes = 0.08856 mbtg				
<b>Design Detail</b>				
CDS	RIM COMMAND PARAMETERS	PSID		
0	000 COMMENT UVS RIM 0	(384CG)		
28	003+UVFLUSH DISCRD,UVS	(349CT)		
66	003 CMDRS	(157CG)		
004	1 34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,94,45,00,00	(165CF)	RA/Dec=57.71/22.17	
109	106 34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,B6,45,00,00	(165CM)	RA/Dec=57.71/22.17	
214	211 34UVS,D1,F,N,N,N,S,0,OFF,OFF, ON, ON,OFF,NOOVR,1,5A,45,00,00	(349CJ)		
274	271 34UVS,07,S,N,N,N,S,0, ON,OFF,OFF,OFF,OFF,NOOVR,1,00,9C,00,00	(349CK)		
54	004 TARGET with TMC on body	(165CN)	RA/Dec=57.71/22.17	
54	074 TARGET with TMC on body	(165CL)	RA/Dec=57.71/22.17	
28	107+UVFLUSH PACKET,UVS	(349CK)		
54	144 TARGET with TMC on body	(165CG)	RA/Dec=57.71/22.17	
28	212+UVFLUSH PACKET,UVS	(349CK)		
54	214 TARGET with TMC +0.2 radii off body	(165CG)	RA/Dec=57.21/22.02	
28	232+UVFLUSH PACKET,UVS	(349CL)		
54	234 TARGET with TMC +1 radii off body	(165CH)	RA/Dec=56.84/21.91	
28	252+UVFLUSH PACKET,UVS	(349CM)		
54	254 TARGET with TMC +3 radii off body	(165CI)	RA/Dec=55.96/21.64	
28	273+UVFLUSH PACKET,UVS	(349CN)		

Thu Jul 1 13:50:45 1999

21CUATMOS\_02\_1

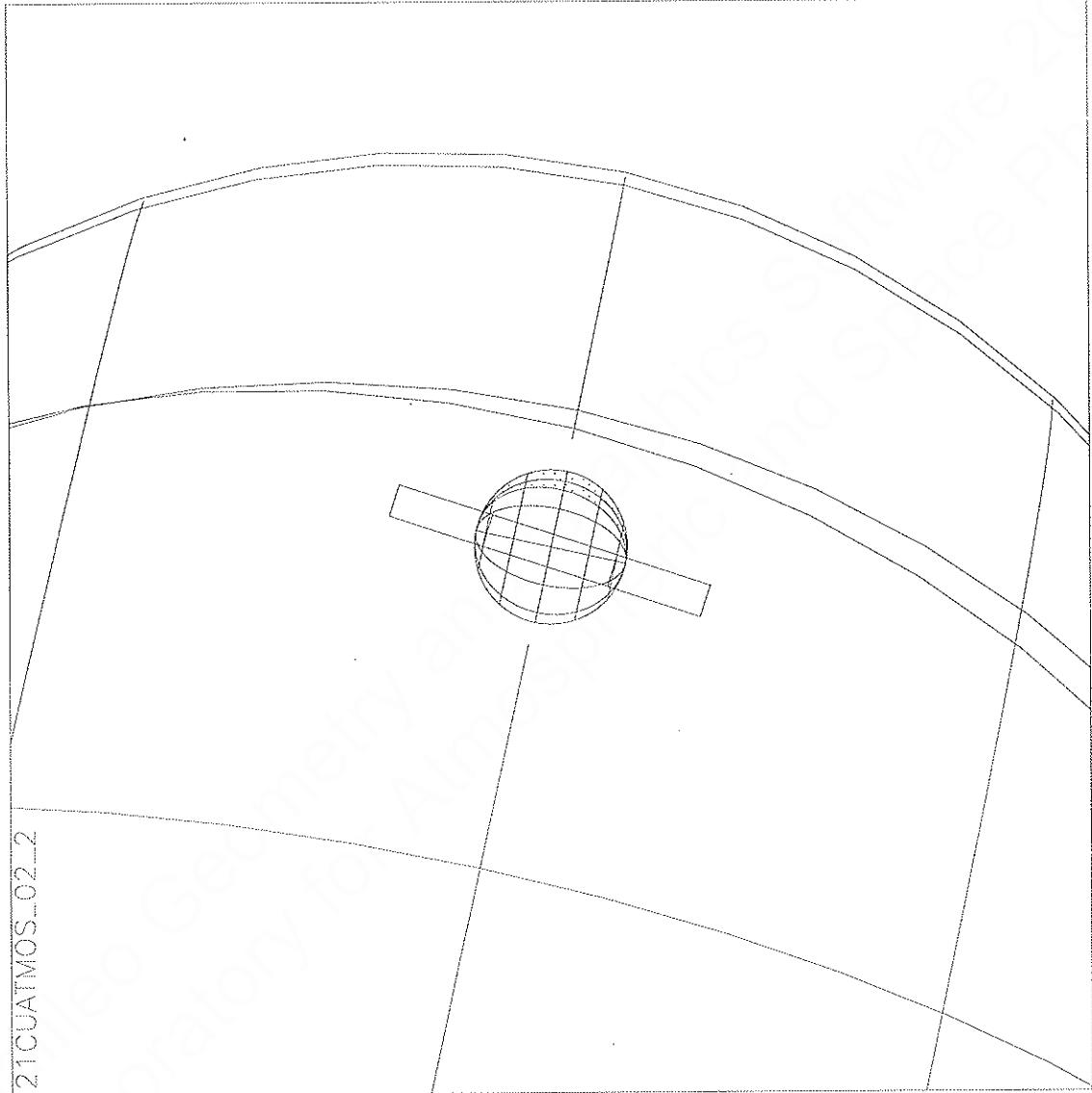


Start UTC\_TIME : 1999-07-01 13:50:45.690  
No\_End Time :  
Start SCLK : 1/05062475.00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 57.70 / 22.17 Deg  
S/C to Body Center : 548829.7 Km ( 228.39356 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:51:53 1999

21CUATMOS\_02\_2



Start UTC\_TIME : 1999-182 // 02:30:32.687

No End Time :

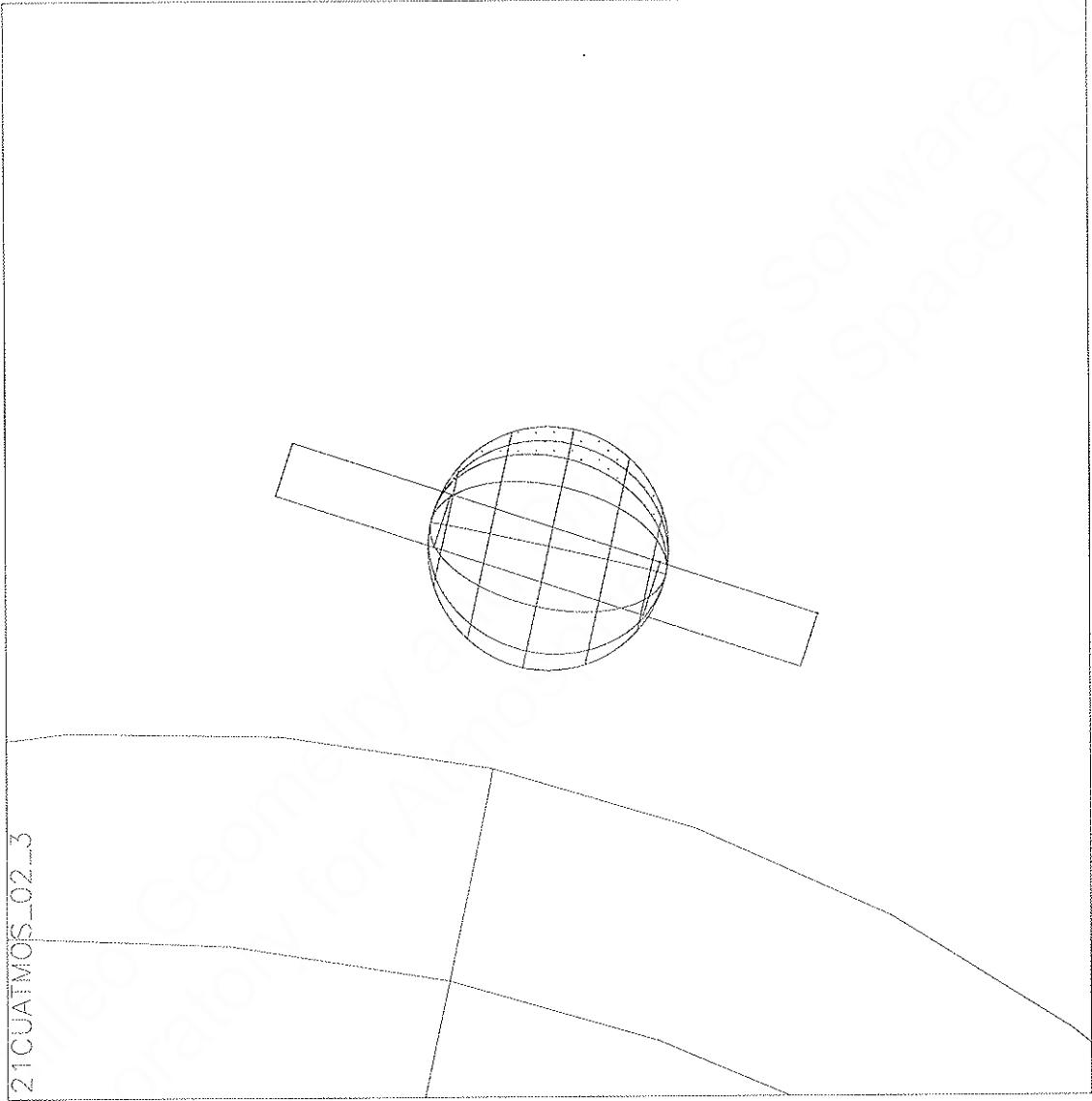
Start SCLK : 1/05052544:00:00

Target Body : CALLISTO

Target Ro/Dec : 57.69/ 22.17 Deg  
S/C to Body Center : 588102.4 Km ( 244.73675 Rc )  
Z-axis Pointing ( Rc / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 13:54:58 1999

21CJATMOS\_02\_3

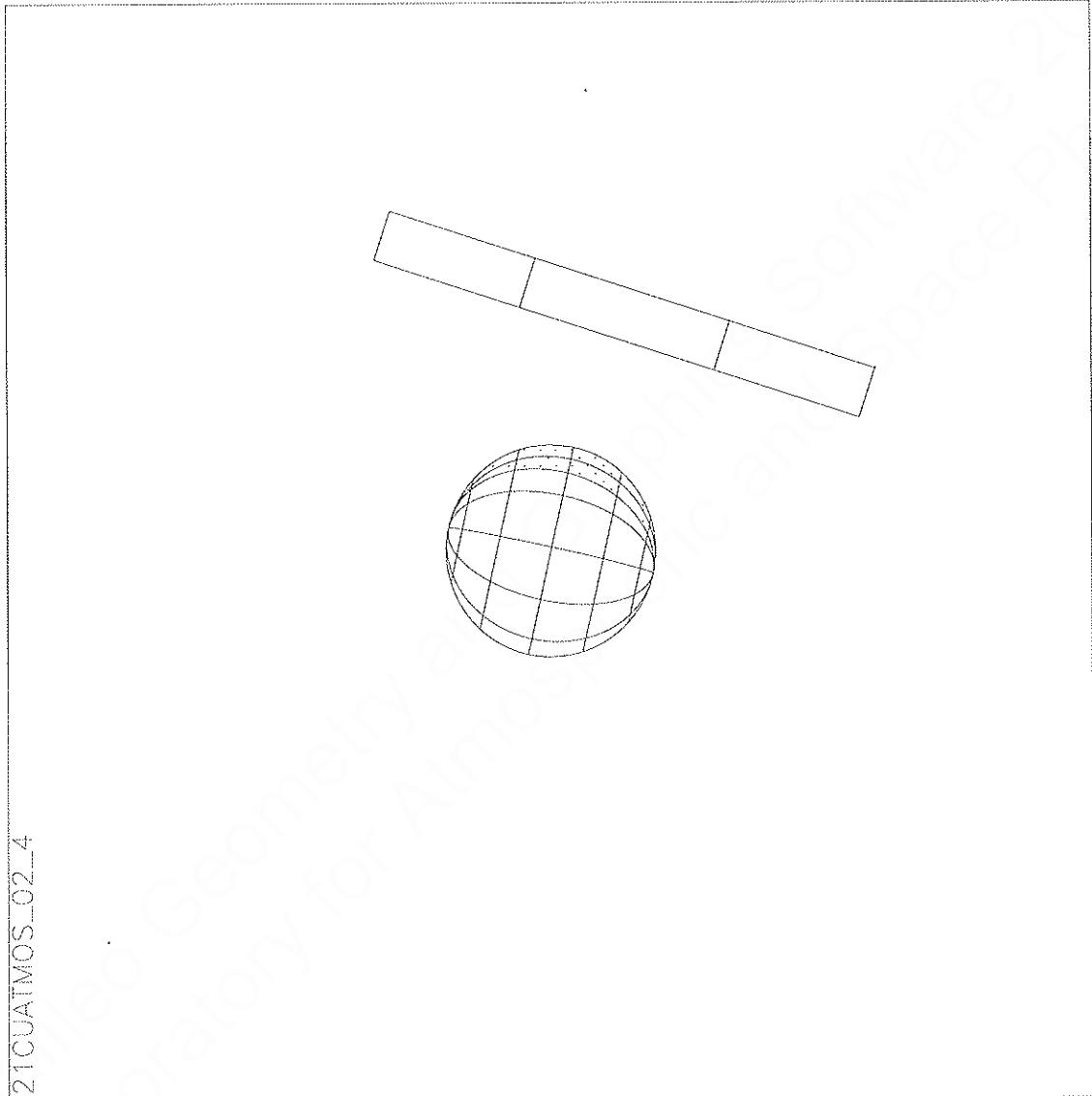


Start UTC\_TIME : 1999-182 // 03:41:19.35:  
No End Time:  
Start SCLK : 1/05062614:00:00

Target Body : CALLISTO  
Target Ra/Dec : 57.70 / 22.17 Deg  
S/C to Body Center : 628664.6 Km ( 261.61655 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 14:09:39 1999

21CUATMOS\_02\_A

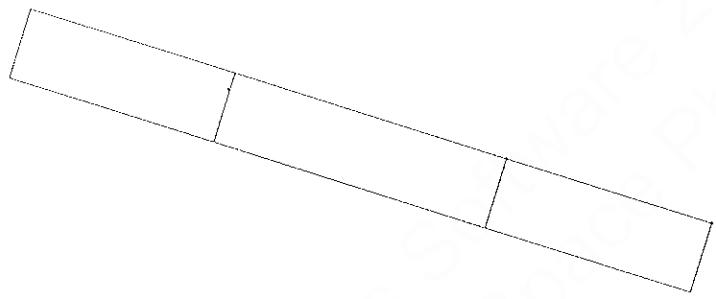
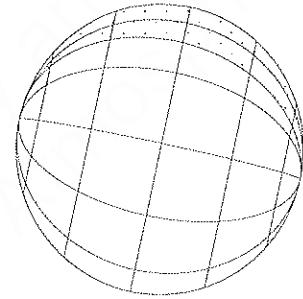


Start UTC\_TIME : 1999-182 // 04:53:06.682  
No End Time :  
Start SCLK : 1/05062685:00:0:0

Target Body : CALLISTO  
Target Ra/Dec : 37.70 / 22.17 Deg  
S/C to Body Center : 670636.4 Km ( 279.08299 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / ~9.70 Deg

Thu Jul 1 14:13:52 1999

21CUATMOS\_02\_5

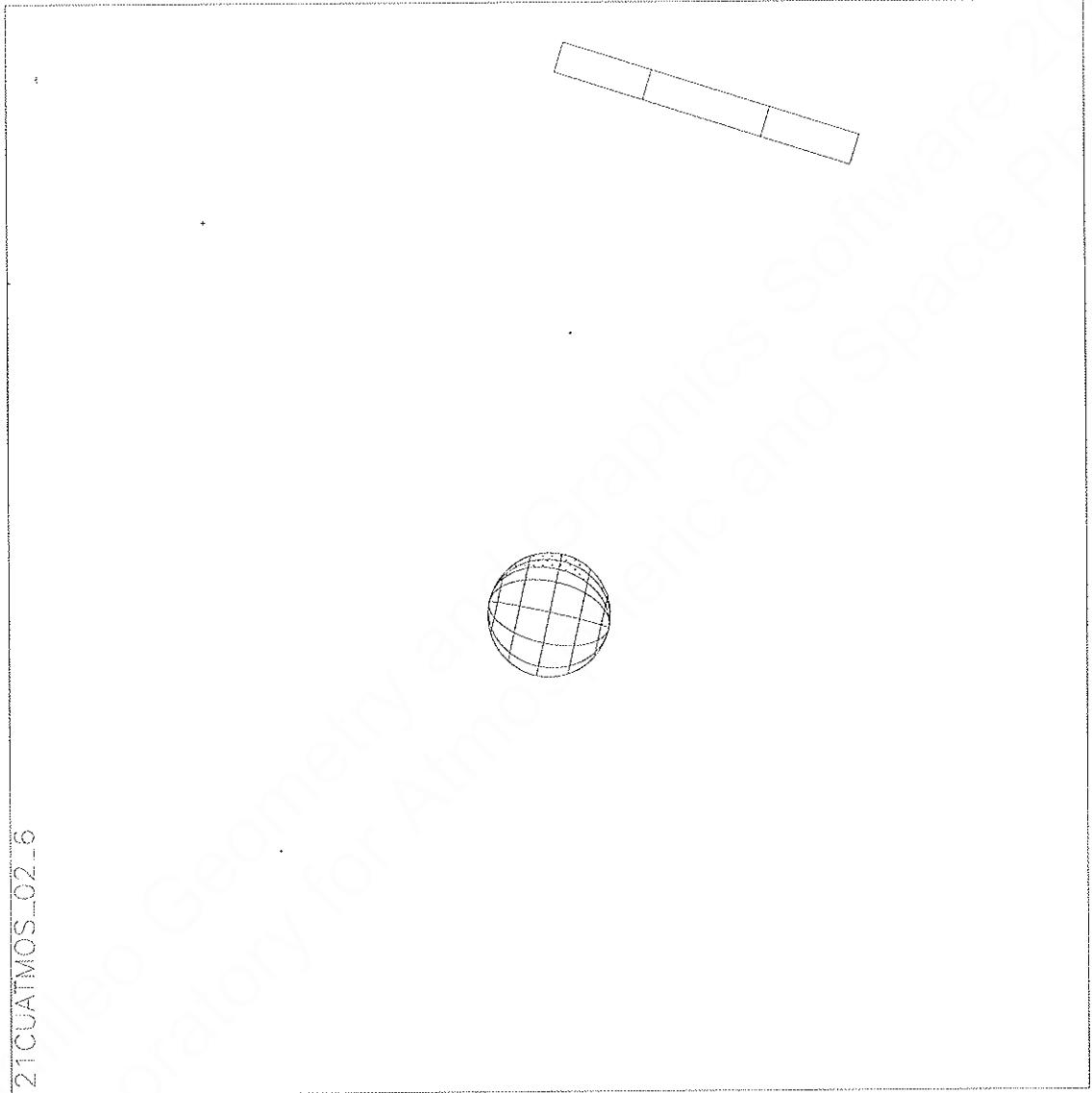


Start UTC\_TIME : 1999-182 // 05:13:20.015  
No\_End\_Time :  
Start\_SCLK : 1/05062705:00:00

Target Body : CALLISTO  
Target Ra,Dec : 57.71 / 22.17 Deg  
S/C to Body Center : 682623.7 Km ( 284.07147 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 14:15:03 1999

21CUATMOS\_02\_5



Start UTC\_TIME : 1999-182 // 05:33:33.347  
No End Time :  
Start SCLK : 1/05062725:00:0:0  
Target Body : CALLISTO  
Target Ra/Dec : 57.71 / 22.17 Deg  
S/C to Body Center : 694687.6 Km ( 289.09179 Rc )  
Z-axis Pointing ( Ra / Dec ) : 206.53 / -9.70 Deg

Io Surface Observation

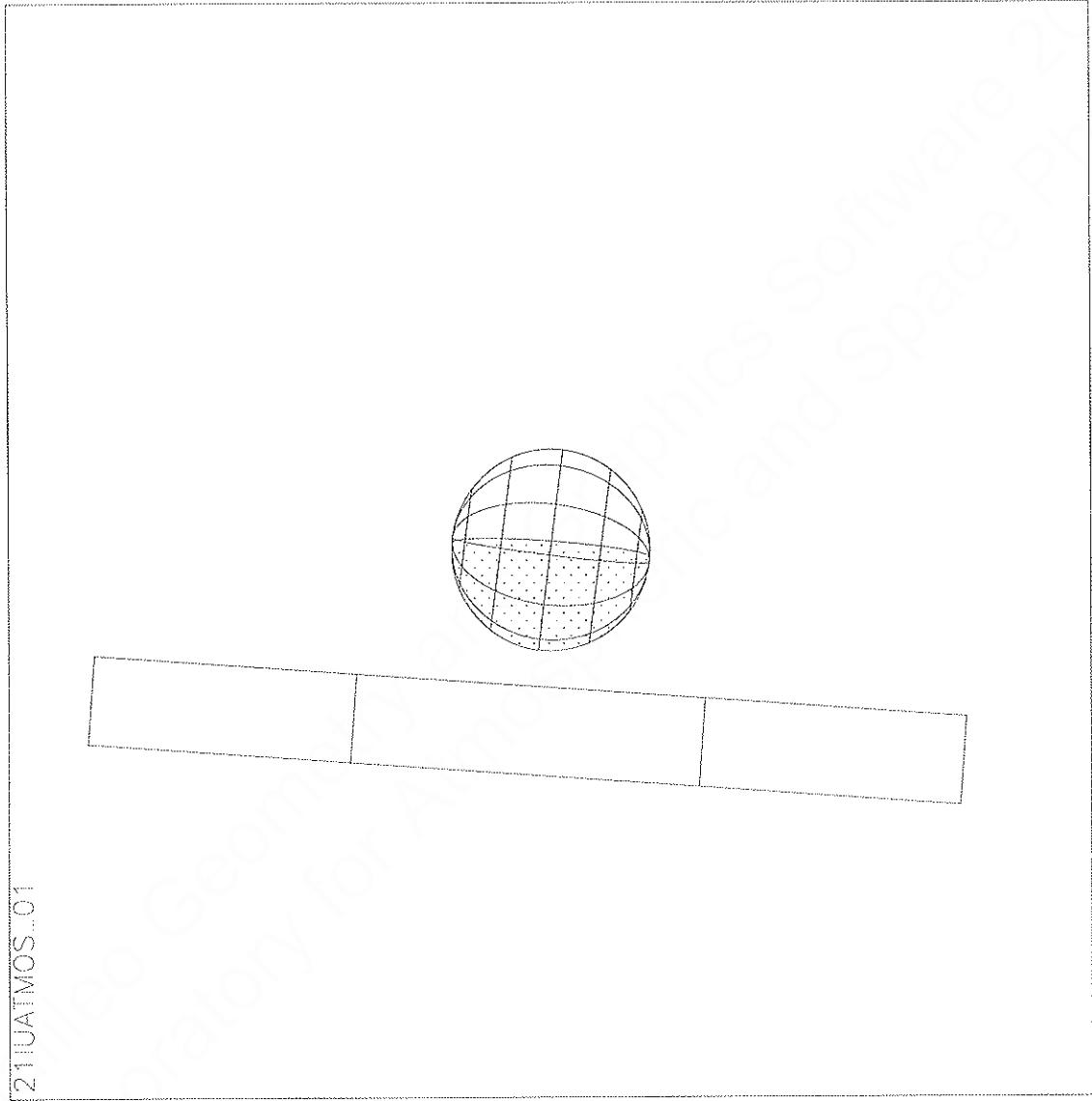
ACTIVITY ID: 2IIUATMOS\_01-

START TIME: 99-182/11:16:24.333

Activity ID:	Orbit 21	OAPEL IUATMOS...	SeqNo	01-
Title	Io Surface Observation		Instrument	UVS
Requestor	UVS-SWG/W.SWEET X30523	Team	UVS	Working Group SWG
Time System	CDS	Load ID	21A	Calendar Date
Start	IEE-CDS 00001059:00:0		99-182/11:16:24.333	IEE-000/17:50:46.000
End	IEE-CDS 0000930:00:0		99-182/13:26:50.333	IEE-000/15:40:20.000
Duration	00000129:00:0		000/02:10:26.000	000/02:10:26.000
Top Label	2IIUATMOS_01-			
Bottom Label	real-time			
Plot Key	UVS	Type	SCI	
CDS Bytes	230	Report Options	BOTH	Scan Platform Yes
CDS Source	OAP	Spin State	DUAL	DMS No
<b>Observation Objective</b>				
2IIUATMOS_01: Io atmosphere observation and possible Io aurora. Observe Io in total eclipse with TMC on and satellite completely in Jupiter's umbra.  Rj = 12.8  UVS configuration: G/G full scan  17712 bit/flush * 1 flush = 0.017712 mbtg  Note: Waiver G-14 for cone 75 and G-15 for 12.8 Rj.				
<b>Design Detail</b>				
CDS	RIM COMMAND PARAMETERS	PSID		
0	COMMENT UVS RIM 0	(384CH)		
28	003+UVFLUSH DISCRD,UVS	(349CO)		
66	003 CMDRS	(157CH)		
004	1 34UVS,07,S,N,N,N,S,O,OFF, ON,OFF, ON,OFF,NOOVR,1,2C,9D,00,00			
064	61 34UVS,07,S,N,N,N,S,O, ON,OFF,OFF,OFF,OFF,NOOVR,1,00,9C,00,00			
065	62 34UVS,07,S,N,N,N,S,O,OFF, ON,OFF, ON,OFF,NOOVR,1,2C,9D,00,00			
129	126 34UVS,07,S,N,N,N,S,O, ON,OFF,OFF,OFF,OFF,NOOVR,1,00,9C,00,00			
54	004 TARGET with TMC on body	(165CJ) RA/Dec=285.16/-24.28		
54	065 TARGET with TMC on body	(165CZ) RA/Dec=289.04/-23.77		
28	127+UVFLUSH PACKET,UVS	(349CP)		

Thu Jul 1 14:16:21 1999

211UATMOS\_01



Start UTC TIME : 1999-182 // 11:21:22.668

No End Time :

Start SCUK : 1/05063069:00:0:0

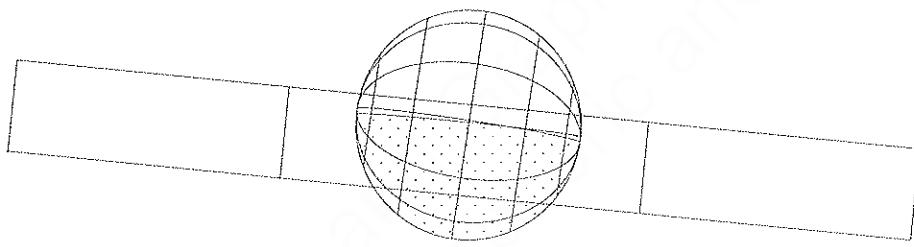
Target Body : IO

Target Ra/Dec : 284.94/-24.31 Deg

S/C to Body Center : 915073.1 Km ( 501.58856 Ri )  
Z-axis Pointing ( Rc / Dec ) : 206.53 / -9.70 Deg

Thu Jul 1 14:17:26 1999

211UATMOS\_01\_2



Start UTC\_TIME : 1999-182 // 12:26:05.333  
No\_End Time :  
Start SCLK : 1/05063133:00:0:0

Target Body : IO  
Target\_Rg/Dec : 289.01/-23.78 Deg  
S/C to Body Center : 833456.6 Km ( 456.85127 Ri )  
Z-axis Pointing ( Rg / Dec ) : 206.53 / -9.70 Deg