



# 17727 - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's magnetosphere and rings

Cycle: 32, Proposal Category: GO

(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>
<b>Dr. Pippa Molyneux (PI) (Contact)</b>	<b>Southwest Research Institute</b>
Dr. Tracy M Becker (CoI)	Southwest Research Institute
Dr. Joshua Kammer (CoI)	Southwest Research Institute
Dr. Kurt David Retherford (CoI)	Southwest Research Institute

## VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(3) THEBE-LEADING	STIS/CCD STIS/NUV-MAMA	1	08-Dec-2025 17:00:14.0	yes
02	(4) THEBE-TRAILING	STIS/CCD STIS/NUV-MAMA	1	08-Dec-2025 17:00:15.0	yes
03	(1) AMALTHEA-LEADING CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	08-Dec-2025 17:00:16.0	yes
3A	(1) AMALTHEA-LEADING	STIS/CCD STIS/NUV-MAMA	1	08-Dec-2025 17:00:16.0	yes
3B	(1) AMALTHEA-LEADING CCDFLAT	STIS/CCD	1	08-Dec-2025 17:00:17.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
04	(2) AMALTHEA-TRAILING CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	08-Dec-2025 17:00:18.0	yes
4A	(2) AMALTHEA-TRAILING	STIS/CCD STIS/NUV-MAMA	1	08-Dec-2025 17:00:19.0	yes
4B	(2) AMALTHEA-TRAILING CCDFLAT	STIS/CCD	1	08-Dec-2025 17:00:20.0	yes

10 Total Orbits Used

### **ABSTRACT**

Jupiter's inner moons are an important aspect of the Jupiter system, acting as sources and sinks for the rings and providing clues to the evolution of the system as a whole. However, very few spectral observations of the inner satellites have been performed to date, and the only previous observations by HST, which were obtained using the Faint Object Spectrograph, suffer from instrumental artifacts that hamper their interpretation. We propose new STIS observations of the largest inner moons, Amalthea and Thebe, to investigate their surface compositions and search for signatures of interactions with the Jovian magnetospheric plasma. We will also constrain their grain sizes, providing insight on the contribution of electrostatic lofting to Jupiter's gossamer rings. We plan to observe Thebe using the G230L and G430L gratings, to search for absorption features related to sulfur species and reflectance peaks associated with small grains. At Amalthea, we will perform similar observations and also use G750L to search for a 0.7-micron absorption related to hydrated silicates, constraining the origin of a 3-micron absorption feature previously observed on the trailing hemisphere. The proposed observations are highly relevant to future observation of the Jupiter system by JUICE, providing the opportunity to investigate temporal variations and filling a gap between the JUICE-UVS and MAJIS spectrographs.

### **OBSERVING DESCRIPTION**

Our program aims to obtain STIS spectra of Jupiter's largest inner moons, Amalthea and Thebe, from the mid-UV through visible wavelengths.

We will use two orbits to observe the leading and trailing hemispheres of Thebe. Each orbit includes one observation using STIS G230L and one using STIS 430L.

For Amalthea we require two 2-orbit visits: one visit to observe the leading hemisphere and one to observe the trailing hemisphere. The first orbit of each visit is a stare using the STIS G230L mode for the longest time possible. The second orbit uses the STIS G430L and G730L modes, but with a

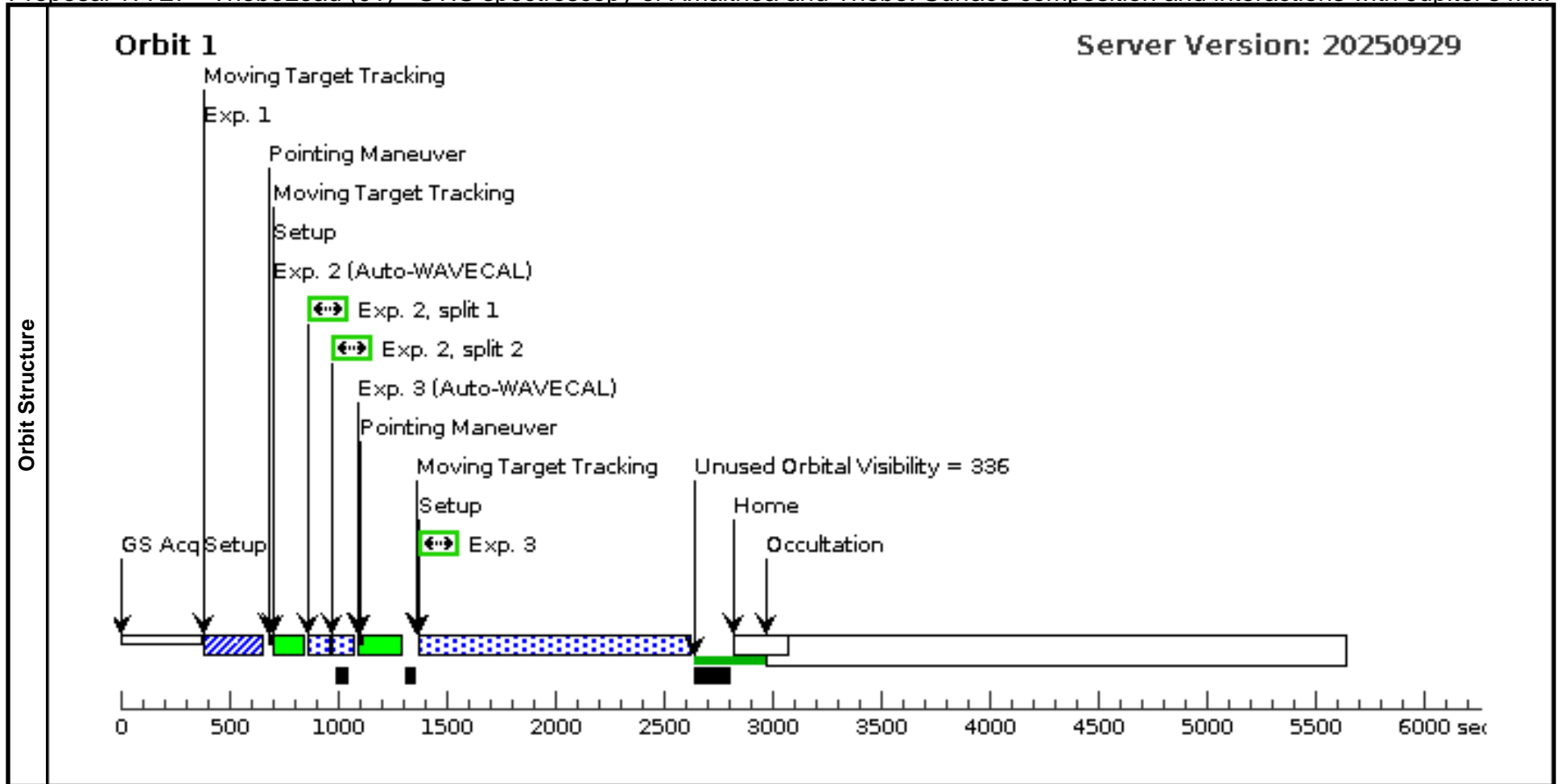
narrower slit which we step across Amalthea in three steps to constrain any spatial variability in surface composition.

For ETC runs we used a Castelli-Kurucz G2V model to represent the expected reflected solar spectrum. We used the largest angular diameters expected during Cycle 32 (0.084 arcsec for Amalthea; 0.039 arcsec for Thebe) and Vmag/arcsec<sup>2</sup> values from JPL Horizons. We have requested observations within 8 weeks of Jupiter opposition on 7 Dec 2024 to maximize the apparent size and brightness of both objects. This is particularly important for Thebe, which is the smaller, dimmer object.

Proposal 17727 - ThebeLead (01) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's m...

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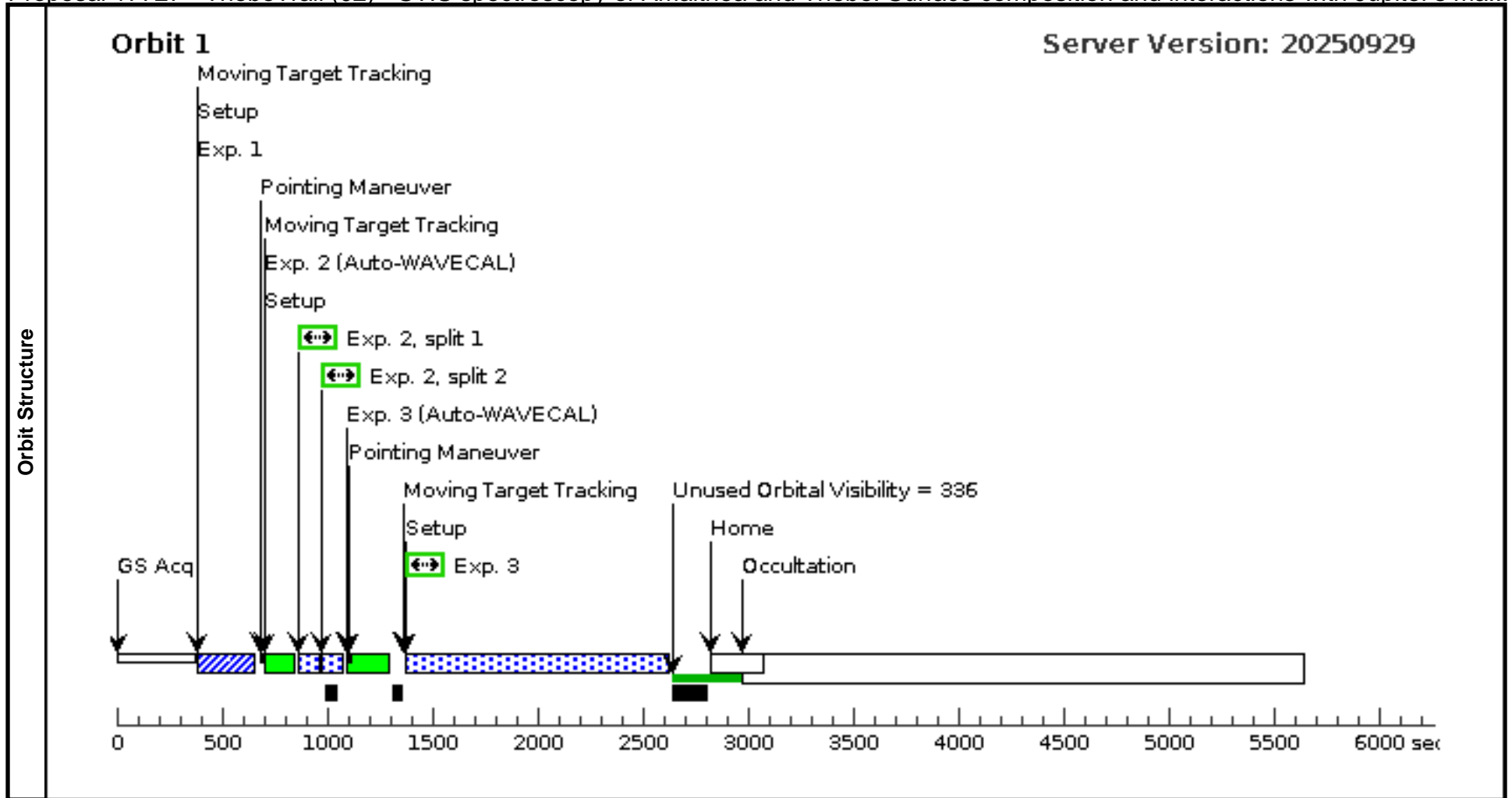
<b>Visit</b>	<b>Proposal 17727, ThebeLead (01), completed</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: BETWEEN 12-OCT-2024:00:00:00 AND 01-FEB-2025:00:00:00 <i>Comments: Single orbit visit to observe Thebe's leading hemisphere</i>									
	<b>Diagnosics</b> (ThebeLead (01)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
<b>Solar System Targets</b>	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(3)	THEBE-LEADING	STD=JUPITER	STD=THEBE			NOT OCC OF THEBE-LEADING BY EARTH JUPITER FROM EARTH, SEP OF THEBE-LEADING IO FROM EARTH GT 20", SEP OF THEBE-LEADING EUROPA FROM EARTH GT 20", SEP OF THEBE-LEADING GANYMEDE FROM EARTH GT 20", SEP OF THEBE-LEADING CALLISTO FROM EARTH GT 20", OLG OF THEBE-LEADING BETWEEN 75 105, SEP OF THEBE-LEADING JUPITER FROM EARTH GT 30"			
<i>Comments: Description=SATELLITE THEBE</i>										
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ThebeLead Acq (STIS.ta.193 0940)	(3) THEBE-LEADI NG	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	2	ThebeLead G430L (STIS.sp.19 30942)	(3) THEBE-LEADI NG	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	SIZEAXIS2=80			110 Secs (184 Secs) [==>92.0 Secs (Split 1)] [==>92.0 Secs (Split 2)]	[1]
	3	ThebeLead G230L (STIS.sp.19 30945)	(3) THEBE-LEADI NG	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=11 54			1200 Secs (1237 Secs) [==>1237.0 Secs ]	[1]



Proposal 17727 - ThebeTrail (02) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's ma...

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<b>Visit</b>	<b>Proposal 17727, ThebeTrail (02), completed</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: BETWEEN 12-OCT-2024:00:00:00 AND 01-FEB-2025:00:00:00 <i>Comments: Identical to Visit 1 except the target is Thebe's trailing hemisphere</i>									
	<b>Diagnosics</b> (ThebeTrail (02)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
<b>Solar System Targets</b>	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(4)	THEBE-TRAILING	STD=JUPITER	STD=THEBE		NOT OCC OF THEBE-TRAILING BY JUPITER FROM EARTH, SEP OF THEBE-TRAILING IO FROM EARTH GT 30", SEP OF THEBE-TRAILING EUROPA FROM EARTH GT 30", SEP OF THEBE-TRAILING GANYMEDE FROM EARTH GT 30", SEP OF THEBE-TRAILING CALLISTO FROM EARTH GT 30", OLG OF THEBE-TRAILING BETWEEN 255 285, SEP OF THEBE-TRAILING JUPITER FROM EARTH GT 30"	EARTH			
<i>Comments: Description=SATELLITE THEBE</i>										
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ThebeTrailA cq (STIS.ta.193 0940)	(4) THEBE-TRAILI NG	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	2	ThebeTrailG 430L (STIS.sp.19 30942)	(4) THEBE-TRAILI NG	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	SIZEAXIS2=80			110 Secs (184 Secs) [==>92.0 Secs (Split 1)] [==>92.0 Secs (Split 2)]	[1]
	3	ThebeTrailG 230L (STIS.sp.19 30945)	(4) THEBE-TRAILI NG	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=11 54			1200 Secs (1237 Secs) [==>1237.0 Secs ]	[1]



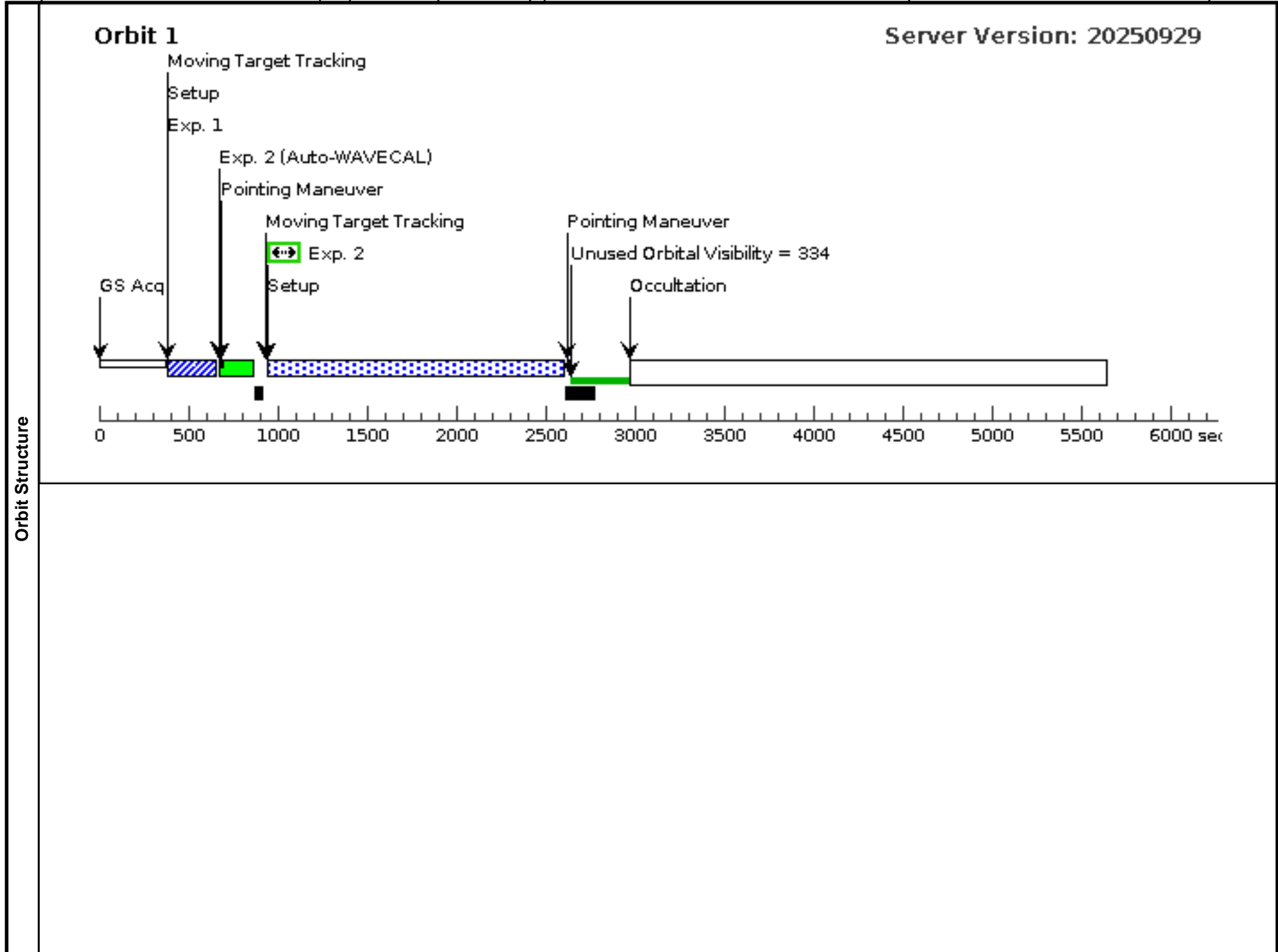
Proposal 17727 - AmaltheaLead (03) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's...

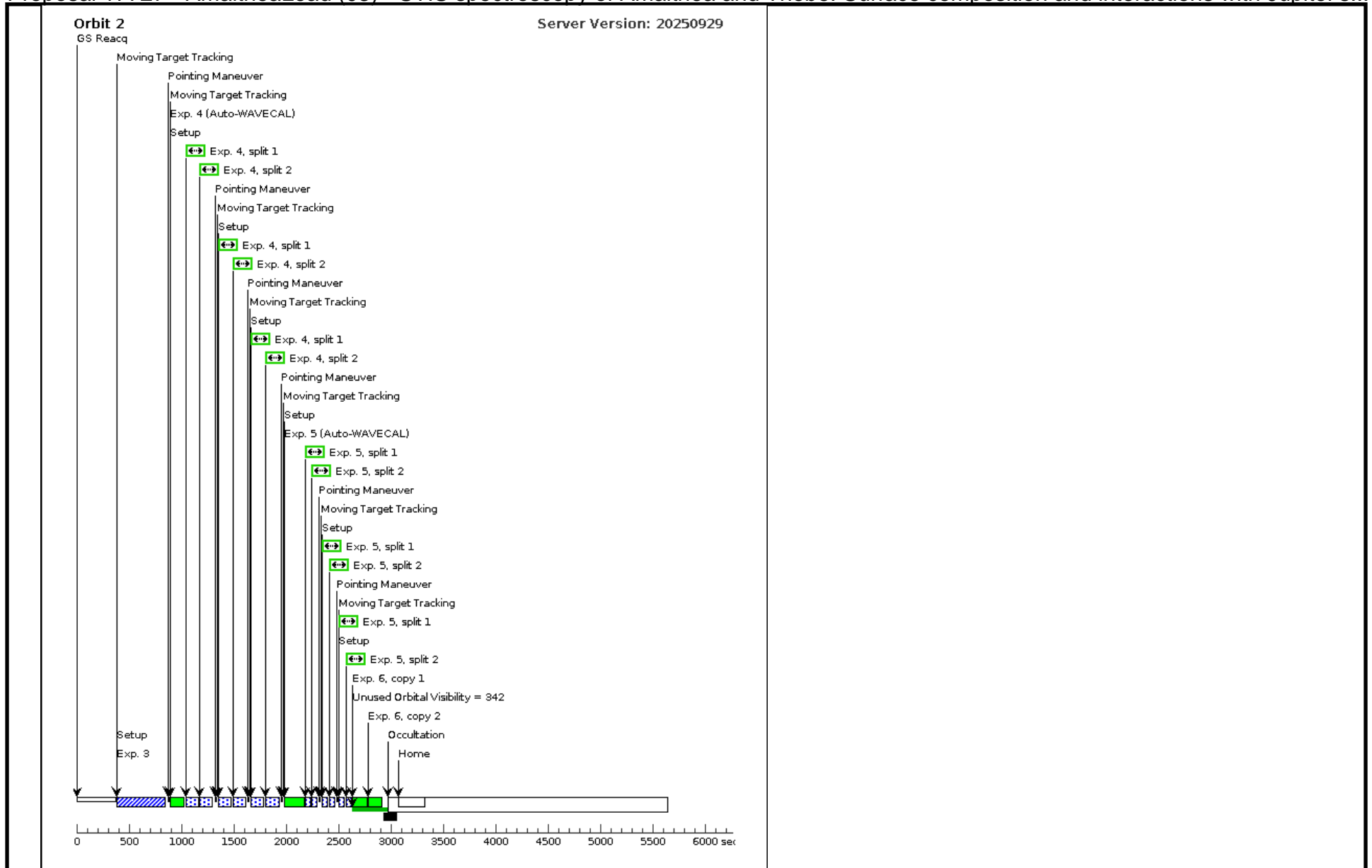
Mon Dec 08 22:00:21 GMT 2025

<b>Visit</b>	<b>Proposal 17727, AmaltheaLead (03), withdrawn</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: BETWEEN 14-NOV-2025:00:00:00 AND 06-MAR-2026:00:00:00 <i>Comments: 2 orbit visit to observe Amalthea's leading hemisphere</i>						
	<b>Diagnosics</b> (AmaltheaLead (03)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	Pattern Type=STIS-PERP-TO-SLIT Purpose=MOSAIC Number Of Points=3 Point Spacing=0.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0.0 Angle Between Sides= Center Pattern=true			(4), (5)	
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>
	(1)	AMALTHEA-LEADING	STD=JUPITER	STD=AMALTHEA		NOT OCC OF AMALTHEA-LEADING BY JUPITER FROM EARTH, SEP OF AMALTHEA-LEADING IO FROM EARTH GT 25", SEP OF AMALTHEA-LEADING EUROPA FROM EARTH GT 25", SEP OF AMALTHEA-LEADING GANYMEDE FROM EARTH GT 25", SEP OF AMALTHEA-LEADING CALLISTO FROM EARTH GT 25", OLG OF AMALTHEA-LEADING BETWEEN 50 130, SEP OF AMALTHEA-LEADING JUPITER FROM EARTH GT 30"	EARTH
<i>Comments: Description=SATELLITE AMALTHEA</i>							

Proposal 17727 - AmaltheaLead (03) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	AmalLeadA cq (STIS.ta.193 0840)	(1) AMALTHEA-LE ADING	STIS/CCD, ACQ, F28X50LP	MIRROR			1 Secs (1 Secs) [==>]	[1]	
	2	AmalLeadG 230L (STIS.sp.19 30928)	(1) AMALTHEA-LE ADING	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=10 80		1600 Secs (1650 Secs) [==>1650.0 Secs ]	[1]	
	<i>Comments: Buffer time is 4/5 of the value from the ETC calculation</i>									
	3	AmalLeadP eakup (STIS.ta.193 1129)	(1) AMALTHEA-LE ADING	STIS/CCD, ACQ/PEAK, 52X0.05E1	MIRROR				1 Secs (1 Secs) [==>]	[2]
	4	AmalLeadG 430L (STIS.sp.19 31017)	(1) AMALTHEA-LE ADING	STIS/CCD, ACCUM, 52X0.05E1	G430L 4300 A	SIZEAXIS2=80		Pattern 1, Exps 4-4 i n AmaltheaLead (03) (1)	200 Secs (690 Secs) [==>115.0 Secs (Pattern 1, Split 1)] [==>115.0 Secs (Pattern 1, Split 2)] [==>115.0 Secs (Pattern 2, Split 1)] [==>115.0 Secs (Pattern 2, Split 2)] [==>115.0 Secs (Pattern 3, Split 1)] [==>115.0 Secs (Pattern 3, Split 2)]	[2]
	5	AmalLeadG 750L (STIS.sp.19 31018)	(1) AMALTHEA-LE ADING	STIS/CCD, ACCUM, 52X0.05E1	G750L 7751 A	SIZEAXIS2=80		Pattern 1, Exps 5-5 i n AmaltheaLead (03) (1)	50 Secs (240 Secs) [==>40.0 Secs (Pattern 1, Split 1)] [==>40.0 Secs (Pattern 1, Split 2)] [==>40.0 Secs (Pattern 2, Split 1)] [==>40.0 Secs (Pattern 2, Split 2)] [==>40.0 Secs (Pattern 3, Split 1)] [==>40.0 Secs (Pattern 3, Split 2)]	[2]
6	FringeFlat	CCDFLAT	STIS/CCD, ACCUM, 52X0.05	G750L 7751 A				[==>(Copy 1)] [==>(Copy 2)]	[2]	

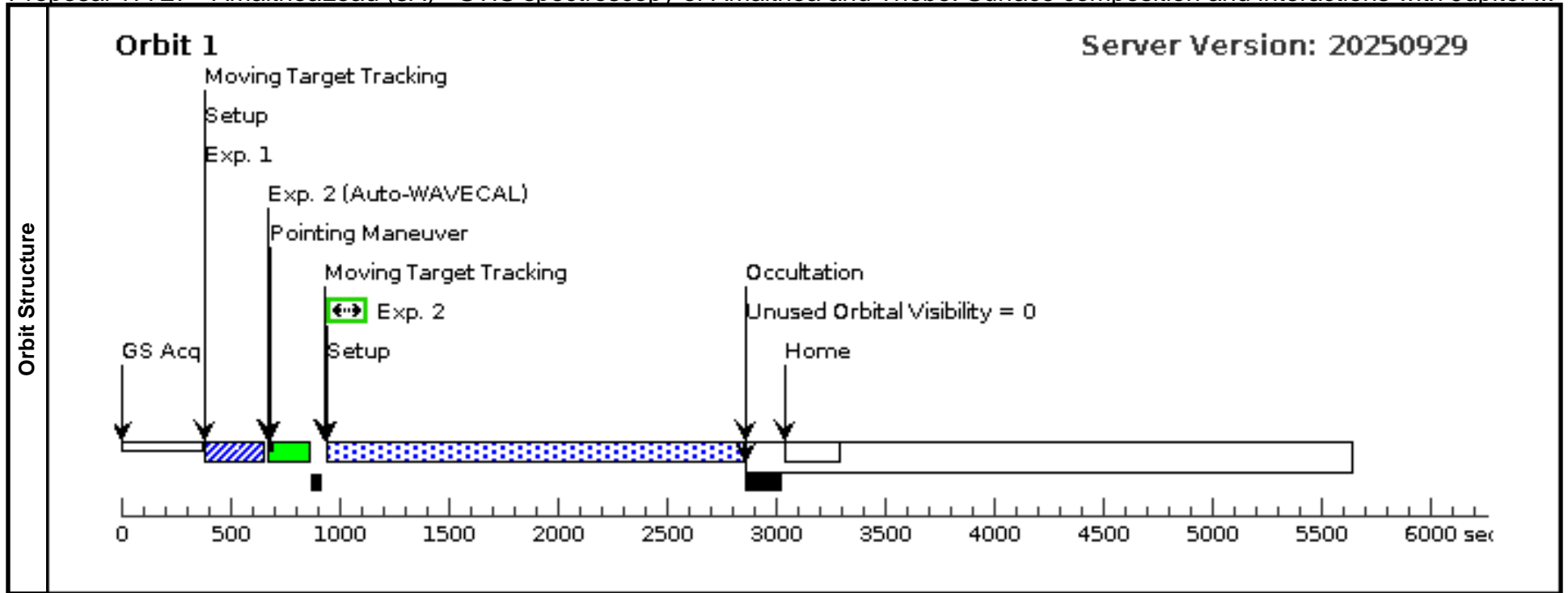




Proposal 17727 - AmaltheaLead (3A) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter'...

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<b>Visit</b>	<b>Proposal 17727, AmaltheaLead (3A), implementation</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: SCHED 100%; BETWEEN 14-NOV-2025:00:00:00 AND 06-MAR-2026:00:00:00 <i>Comments: 2 orbit visit to observe Amalthea's leading hemisphere</i>									
	<b>Diagnosics</b> (AmaltheaLead (3A)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
<b>Solar System Targets</b>	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	AMALTHEA-LEADING	STD=JUPITER	STD=AMALTHEA		NOT OCC OF AMALTHEA-LEADING BY JUPITER FROM EARTH, SEP OF AMALTHEA-LEADING IO FROM EARTH GT 25", SEP OF AMALTHEA-LEADING EUROPA FROM EARTH GT 25", SEP OF AMALTHEA-LEADING GANYMEDE FROM EARTH GT 25", SEP OF AMALTHEA-LEADING CALLISTO FROM EARTH GT 25", OLG OF AMALTHEA-LEADING BETWEEN 50 130, SEP OF AMALTHEA-LEADING JUPITER FROM EARTH GT 30"	EARTH			
<i>Comments: Description=SATELLITE AMALTHEA</i>										
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	AmalLeadA cq (STIS.ta.193 0840)	(1) AMALTHEA-LEADING	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	2	AmalLeadG 230L (STIS.sp.19 30928)	(1) AMALTHEA-LEADING	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=10 80			1600 Secs (1898 Secs) [==>1898.0 Secs ]	[1]
<i>Comments: Buffer time is 4/5 of the value from the ETC calculation</i>										



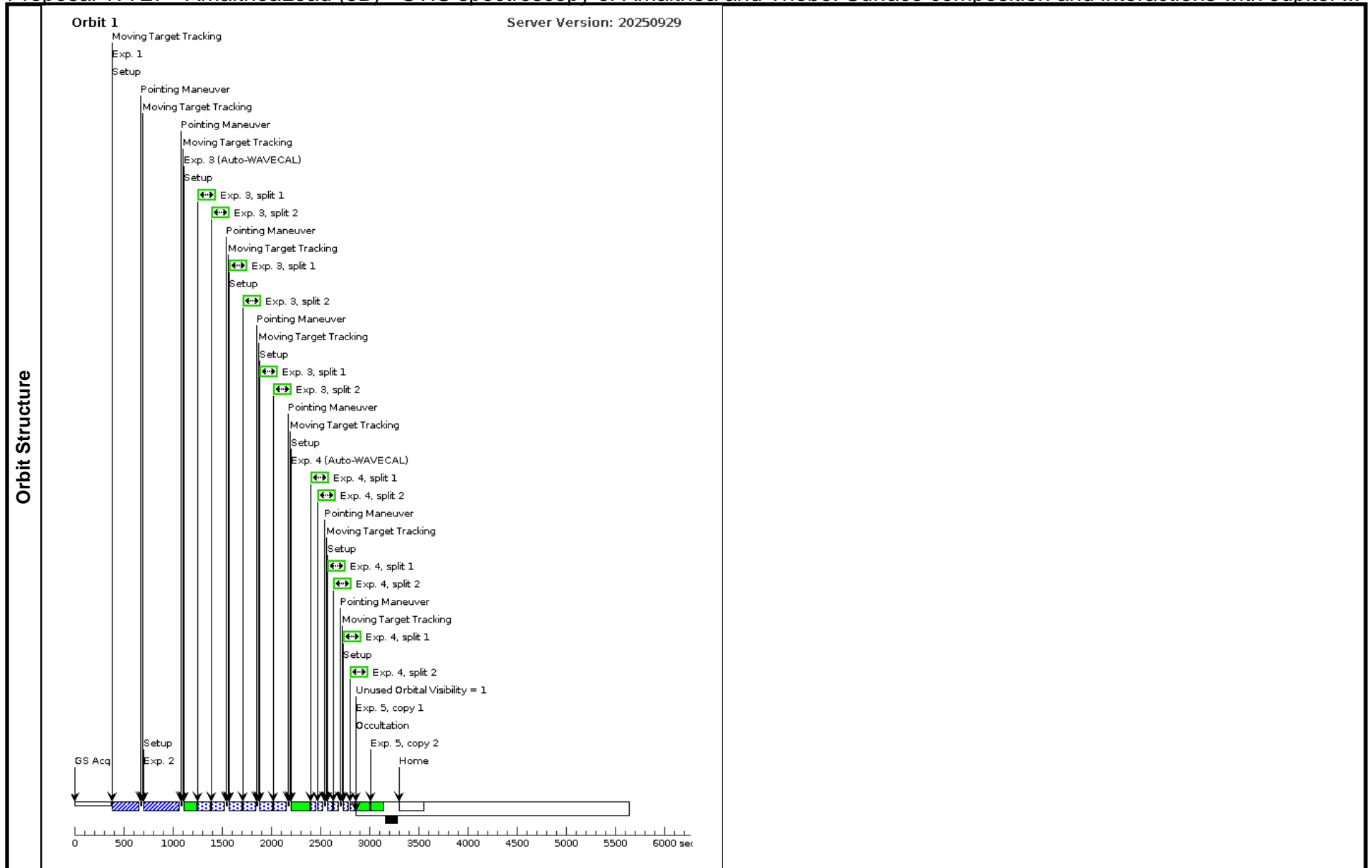
Proposal 17727 - AmaltheaLead (3B) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter'...

Mon Dec 08 22:00:21 GMT 2025

<b>Visit</b>	<b>Proposal 17727, AmaltheaLead (3B), implementation</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/CCD Special Requirements: SCHED 100%; BETWEEN 14-NOV-2025:00:00:00 AND 06-MAR-2026:00:00:00 <i>Comments: 2 orbit visit to observe Amalthea's leading hemisphere</i>						
	<b>Diagnosics</b> (AmaltheaLead (3B)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	Pattern Type=STIS-PERP-TO-SLIT Purpose=MOSAIC Number Of Points=3 Point Spacing=0.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0.0 Angle Between Sides= Center Pattern=true			(3), (4)	
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>
	(1)	AMALTHEA-LEADING	STD=JUPITER	STD=AMALTHEA		NOT OCC OF AMALTHEA-LEADING BY JUPITER FROM EARTH, SEP OF AMALTHEA-LEADING IO FROM EARTH GT 25", SEP OF AMALTHEA-LEADING EUROPA FROM EARTH GT 25", SEP OF AMALTHEA-LEADING GANYMEDE FROM EARTH GT 25", SEP OF AMALTHEA-LEADING CALLISTO FROM EARTH GT 25", OLG OF AMALTHEA-LEADING BETWEEN 50 130, SEP OF AMALTHEA-LEADING JUPITER FROM EARTH GT 30"	EARTH
<i>Comments: Description=SATELLITE AMALTHEA</i>							

Proposal 17727 - AmaltheaLead (3B) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter'...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	AmalLeadAcq (STIS.ta.1930840)	(1) AMALTHEA-LE ADING	STIS/CCD, ACQ, F28X50LP	MIRROR					1 Secs (1 Secs) [==>]	[1]
	2	AmalLeadPeakup (STIS.ta.1931129)	(1) AMALTHEA-LE ADING	STIS/CCD, ACQ/PEAK, 52X0.05E1	MIRROR					1 Secs (1 Secs) [==>]	[1]
	3	AmalLeadG430L (STIS.sp.1931017)	(1) AMALTHEA-LE ADING	STIS/CCD, ACCUM, 52X0.05E1	G430L 4300 A	SIZEAXIS2=80		Pattern 1, Exps 3-3 in AmaltheaLead (3B) (1)	200 Secs (696 Secs) [==>116.0 Secs (Pattern 1, Split 1)] [==>116.0 Secs (Pattern 1, Split 2)] [==>116.0 Secs (Pattern 2, Split 1)] [==>116.0 Secs (Pattern 2, Split 2)] [==>116.0 Secs (Pattern 3, Split 1)] [==>116.0 Secs (Pattern 3, Split 2)]	[1]	
	4	AmalLeadG750L (STIS.sp.1931018)	(1) AMALTHEA-LE ADING	STIS/CCD, ACCUM, 52X0.05E1	G750L 7751 A	SIZEAXIS2=80		Pattern 1, Exps 4-4 in AmaltheaLead (3B) (1)	50 Secs (246 Secs) [==>41.0 Secs (Pattern 1, Split 1)] [==>41.0 Secs (Pattern 1, Split 2)] [==>41.0 Secs (Pattern 2, Split 1)] [==>41.0 Secs (Pattern 2, Split 2)] [==>41.0 Secs (Pattern 3, Split 1)] [==>41.0 Secs (Pattern 3, Split 2)]	[1]	
	5	FringeFlat	CCDFLAT	STIS/CCD, ACCUM, 52X0.05	G750L 7751 A				[==>(Copy 1)] [==>(Copy 2)]	[1]	



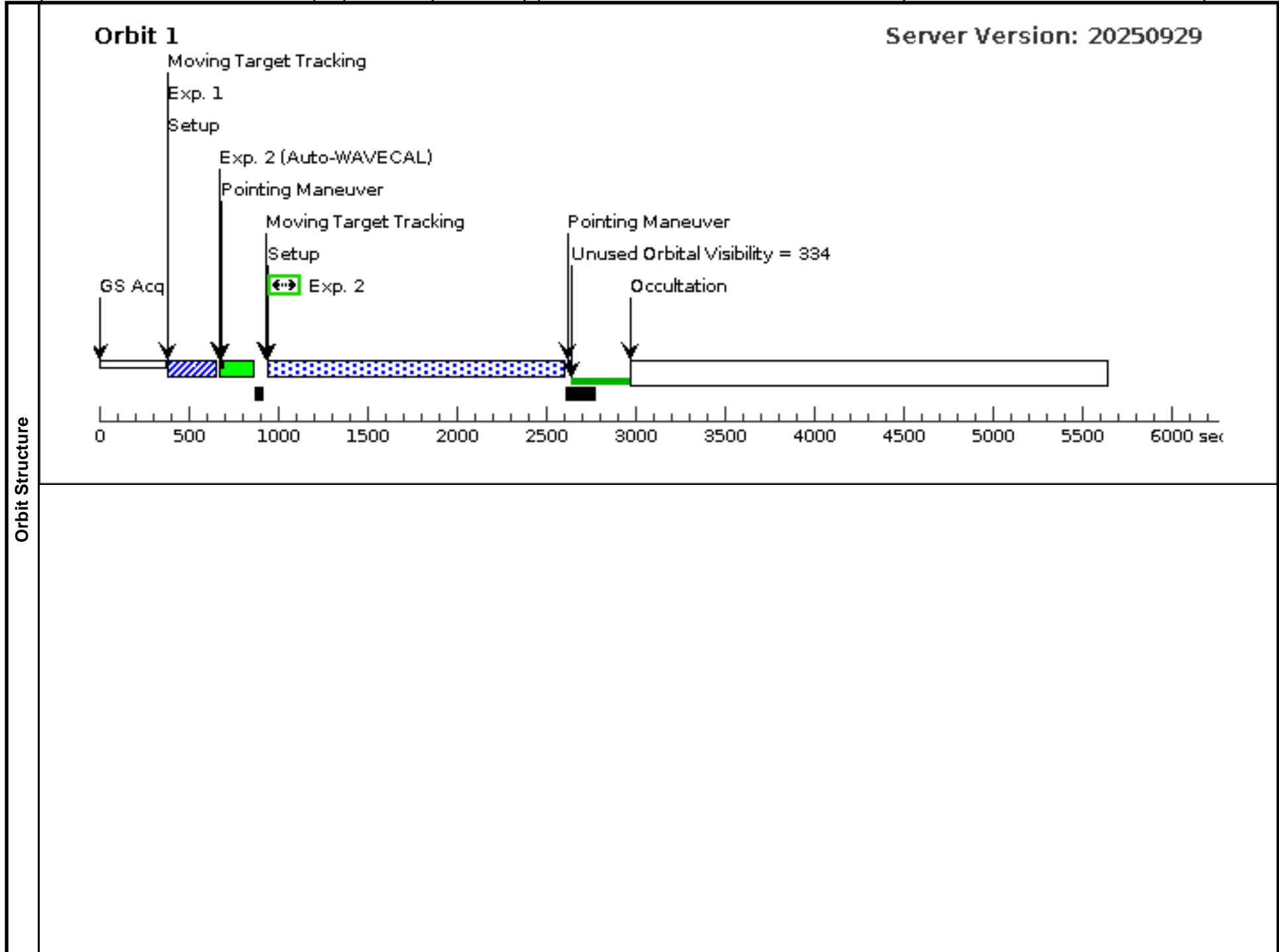
Proposal 17727 - AmaltheaTrail (04) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's ...

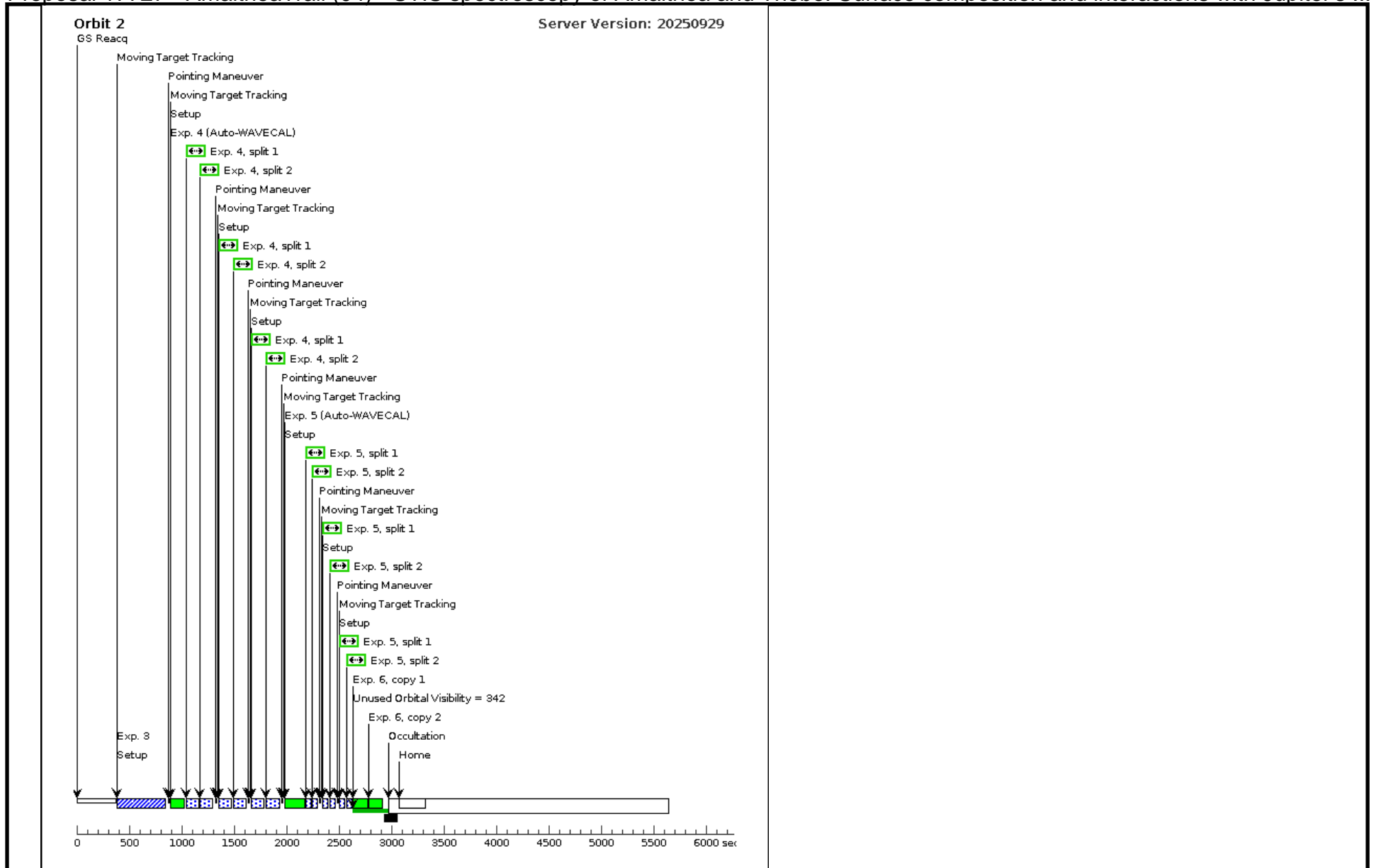
Mon Dec 08 22:00:21 GMT 2025

<b>Visit</b>	<b>Proposal 17727, AmaltheaTrail (04), withdrawn</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: BETWEEN 14-NOV-2025:00:00:00 AND 06-MAR-2026:00:00:00 <i>Comments: Identical to visit 3 but targeting Amalthea's trailing hemisphere</i>						
	<b>Diagnosics</b> (AmaltheaTrail (04)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
<b>Patterns</b>	#	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	Pattern Type=STIS-PERP-TO-SLIT Purpose=MOSAIC Number Of Points=3 Point Spacing=0.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0.0 Angle Between Sides= Center Pattern=true			(4), (5)	
<b>Solar System Targets</b>	#	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>
	(2)	AMALTHEA-TRAILING	STD=JUPITER	STD=AMALTHEA		NOT OCC OF AMALTHEA-TRAILING BY JUPITER FROM EARTH, SEP OF AMALTHEA-TRAILING IO FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING EUROPA FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING GANYMEDE FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING CALLISTO FROM EARTH GT 25", OLG OF AMALTHEA-TRAILING BETWEEN 230 310, SEP OF AMALTHEA-TRAILING JUPITER FROM EARTH GT 30"	EARTH
<i>Comments: Description=SATELLITE AMALTHEA</i>							

Proposal 17727 - AmaltheaTrail (04) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	AmalTrailAcq (STIS.ta.1930840)	(2) AMALTHEA-T RAILING	STIS/CCD, ACQ, F28X50LP	MIRROR					1 Secs (1 Secs) [==>]	[1]
	2	AmalTrailG230L (STIS.sp.1930928)	(2) AMALTHEA-T RAILING	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=10 80			1600 Secs (1650 Secs) [==>1650.0 Secs ]	[1]
	3	AmalTrailPeakup (STIS.ta.1931129)	(2) AMALTHEA-T RAILING	STIS/CCD, ACQ/PEAK, 52X0.05E1	MIRROR					1 Secs (1 Secs) [==>]	[2]
	4	AmalTrailG430L (STIS.sp.1931017)	(2) AMALTHEA-T RAILING	STIS/CCD, ACCUM, 52X0.05E1	G430L 4300 A		SIZEAXIS2=80		Pattern 1, Exps 4-4 in AmaltheaTrail (04) (1)	200 Secs (690 Secs) [==>115.0 Secs (Pattern 1, Split 1)] [==>115.0 Secs (Pattern 1, Split 2)] [==>115.0 Secs (Pattern 2, Split 1)] [==>115.0 Secs (Pattern 2, Split 2)] [==>115.0 Secs (Pattern 3, Split 1)] [==>115.0 Secs (Pattern 3, Split 2)]	[2]
	5	AmalTrail750L (STIS.sp.1931018)	(2) AMALTHEA-T RAILING	STIS/CCD, ACCUM, 52X0.05E1	G750L 7751 A		SIZEAXIS2=80		Pattern 1, Exps 5-5 in AmaltheaTrail (04) (1)	50 Secs (240 Secs) [==>40.0 Secs (Pattern 1, Split 1)] [==>40.0 Secs (Pattern 1, Split 2)] [==>40.0 Secs (Pattern 2, Split 1)] [==>40.0 Secs (Pattern 2, Split 2)] [==>40.0 Secs (Pattern 3, Split 1)] [==>40.0 Secs (Pattern 3, Split 2)]	[2]
	6	FringeFlat	CCDFLAT	STIS/CCD, ACCUM, 52X0.05	G750L 7751 A					[==>(Copy 1)] [==>(Copy 2)]	[2]





Proposal 17727 - AmaltheaTrail (4A) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's...

Mon Dec 08 22:00:21 GMT 2025

<b>Visit</b>	<b>Proposal 17727, AmaltheaTrail (4A), implementation</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: SCHED 100%; BETWEEN 14-NOV-2025:00:00:00 AND 06-MAR-2026:00:00:00 <i>Comments: Identical to visit 3 but targeting Amalthea's trailing hemisphere</i>									
	<b>Diagnosics</b> (AmaltheaTrail (4A)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
<b>Solar System Targets</b>	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(2)	AMALTHEA-TRAILING	STD=JUPITER	STD=AMALTHEA		NOT OCC OF AMALTHEA-TRAILING BY JUPITER FROM EARTH, SEP OF AMALTHEA-TRAILING IO FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING EUROPA FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING GANYMEDE FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING CALLISTO FROM EARTH GT 25", OLG OF AMALTHEA-TRAILING BETWEEN 230 310, SEP OF AMALTHEA-TRAILING JUPITER FROM EARTH GT 30"	EARTH			
<i>Comments: Description=SATELLITE AMALTHEA</i>										
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	AmalTrailA cq (STIS.ta.193 0840)	(2) AMALTHEA-T RAILING	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	2	AmalTrailG 230L (STIS.sp.19 30928)	(2) AMALTHEA-T RAILING	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=10 80			1600 Secs (1898 Secs) [==>1898.0 Secs ]	[1]



Proposal 17727 - AmaltheaTrail (4B) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's...

Mon Dec 08 22:00:21 GMT 2025

<b>Visit</b>	<b>Proposal 17727, AmaltheaTrail (4B), implementation</b> <b>Diagnostic Status: Informational</b> Scientific Instruments: STIS/CCD Special Requirements: SCHED 100%; BETWEEN 14-NOV-2025:00:00:00 AND 06-MAR-2026:00:00:00 <i>Comments: Identical to visit 3 but targeting Amalthea's trailing hemisphere</i>						
	<b>Diagnosics</b> (AmaltheaTrail (4B)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	Pattern Type=STIS-PERP-TO-SLIT Purpose=MOSAIC Number Of Points=3 Point Spacing=0.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0.0 Angle Between Sides= Center Pattern=true			(3), (4)	
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>
	(2)	AMALTHEA-TRAILING	STD=JUPITER	STD=AMALTHEA		NOT OCC OF AMALTHEA-TRAILING BY JUPITER FROM EARTH, SEP OF AMALTHEA-TRAILING IO FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING EUROPA FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING GANYMEDE FROM EARTH GT 25", SEP OF AMALTHEA-TRAILING CALLISTO FROM EARTH GT 25", OLG OF AMALTHEA-TRAILING BETWEEN 230 310, SEP OF AMALTHEA-TRAILING JUPITER FROM EARTH GT 30"	EARTH
<i>Comments: Description=SATELLITE AMALTHEA</i>							

Proposal 17727 - AmaltheaTrail (4B) - STIS spectroscopy of Amalthea and Thebe: Surface composition and interactions with Jupiter's...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	AmalTrailAcq (STIS.ta.1930840)	(2) AMALTHEA-T RAILING	STIS/CCD, ACQ, F28X50LP	MIRROR					1 Secs (1 Secs) [==>]	[1]
	2	AmalTrailPeakup (STIS.ta.1931129)	(2) AMALTHEA-T RAILING	STIS/CCD, ACQ/PEAK, 52X0.05E1	MIRROR					1 Secs (1 Secs) [==>]	[1]
	3	AmalTrailG430L (STIS.sp.1931017)	(2) AMALTHEA-T RAILING	STIS/CCD, ACCUM, 52X0.05E1	G430L 4300 A	SIZEAXIS2=80		Pattern 1, Exps 3-3 in AmaltheaTrail (4B) (1)	200 Secs (696 Secs) [==>116.0 Secs (Pattern 1, Split 1)] [==>116.0 Secs (Pattern 1, Split 2)] [==>116.0 Secs (Pattern 2, Split 1)] [==>116.0 Secs (Pattern 2, Split 2)] [==>116.0 Secs (Pattern 3, Split 1)] [==>116.0 Secs (Pattern 3, Split 2)]	[1]	
	4	AmalTrail750L (STIS.sp.1931018)	(2) AMALTHEA-T RAILING	STIS/CCD, ACCUM, 52X0.05E1	G750L 7751 A	SIZEAXIS2=80		Pattern 1, Exps 4-4 in AmaltheaTrail (4B) (1)	50 Secs (246 Secs) [==>41.0 Secs (Pattern 1, Split 1)] [==>41.0 Secs (Pattern 1, Split 2)] [==>41.0 Secs (Pattern 2, Split 1)] [==>41.0 Secs (Pattern 2, Split 2)] [==>41.0 Secs (Pattern 3, Split 1)] [==>41.0 Secs (Pattern 3, Split 2)]	[1]	
	5	FringeFlat	CCDFLAT	STIS/CCD, ACCUM, 52X0.05	G750L 7751 A				[==>(Copy 1)] [==>(Copy 2)]	[1]	

