



18249 - Rocky Worlds DDT: HST Observations of TOI 771

Cycle: 33, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Dr. Munazza Alam (CoI)	Space Telescope Science Institute
Rachel Cooper (CoI)	Space Telescope Science Institute
Tyler Baines (CoI)	Space Telescope Science Institute
Taylor James Bell (CoI) (ESA Member)	Space Telescope Science Institute - ESA - JWST
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Dr. Leonardo Ubeda (CoI)	Space Telescope Science Institute
Dr. Ian Wong (CoI)	Space Telescope Science Institute
Dr. Joshua D. Lothringer (CoI)	Space Telescope Science Institute
Ms. Misty Cracraft (CoI)	Space Telescope Science Institute
Dr. Joseph Filippazzo (CoI)	Space Telescope Science Institute
Mr. Douglas Ray Long (CoI)	Space Telescope Science Institute
Dr. Achrene Dyrek (CoI) (ESA Member)	Space Telescope Science Institute - ESA - JWST
Dr. Elena Manjavacas (CoI) (ESA Member)	Space Telescope Science Institute - ESA - JWST
Mees Fix (CoI)	Space Telescope Science Institute
Dr. Christopher Britt (CoI)	Space Telescope Science Institute
Hannah Braun (CoI)	Space Telescope Science Institute
Ryan Kunzer (CoI)	Space Telescope Science Institute
Kyle Conroy (CoI)	Space Telescope Science Institute

<i>Name</i>	<i>Institution</i>
Dr. Mercedes Lopez-Morales (CoI)	Space Telescope Science Institute
Dr. I. Neill Reid (CoI)	Space Telescope Science 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	(1) TOI-771	COS/FUV COS/NUV	4	07-Jul-2026 16:00:15.0	yes
02	(1) TOI-771	COS/FUV COS/NUV	4	07-Jul-2026 16:00:17.0	yes
03	(1) TOI-771	COS/FUV COS/NUV	4	07-Jul-2026 16:00:18.0	yes
04	(1) TOI-771	COS/FUV COS/NUV	4	07-Jul-2026 16:00:19.0	yes
05	(1) TOI-771	COS/FUV COS/NUV	3	07-Jul-2026 16:00:20.0	yes
06	(1) TOI-771	COS/FUV COS/NUV	3	07-Jul-2026 16:00:20.0	yes
07	(1) TOI-771 WAVE	STIS/CCD STIS/NUV-MAMA	3	07-Jul-2026 16:00:21.0	yes
08	(1) TOI-771 WAVE	STIS/CCD STIS/NUV-MAMA	3	07-Jul-2026 16:00:22.0	yes
09	(1) TOI-771 CCDFLAT WAVE	STIS/CCD	1	07-Jul-2026 16:00:23.0	yes

29 Total Orbits Used

ABSTRACT

Rocky Worlds is a joint JWST and HST Director's Discretionary Program designed to implement the top recommendations from the Working Group on Strategic Exoplanet Initiatives with HST and JWST. The HST side of the Rocky Worlds DDT focuses on ultraviolet (UV) characterization of the

Proposal 18249 (STScI Edit Number: 4, Created: Tuesday, July 7, 2026, 3:00:23PM Eastern Standard Time) - Overview

nearby M-dwarf hosts of the rocky planets observed with JWST. We will use COS and STIS to measure the UV to blue-optical spectra of these stars, including UV flare monitoring and measuring the wings of the Ly-alpha profile where appropriate. With these observations we will constrain the high-energy output of these host M dwarfs in the UV, which can be applied to planetary models of atmospheric escape, as well as photochemistry if a planetary atmosphere is present. Complementary observations and analysis to fill in the rest of the M-dwarf panchromatic spectra, from the X-ray to the infrared, are encouraged.

Each M-dwarf planet host observed by HST in the Rocky Worlds DDT program has its own Program ID. The observations in this program will focus on TOI 771

OBSERVING DESCRIPTION

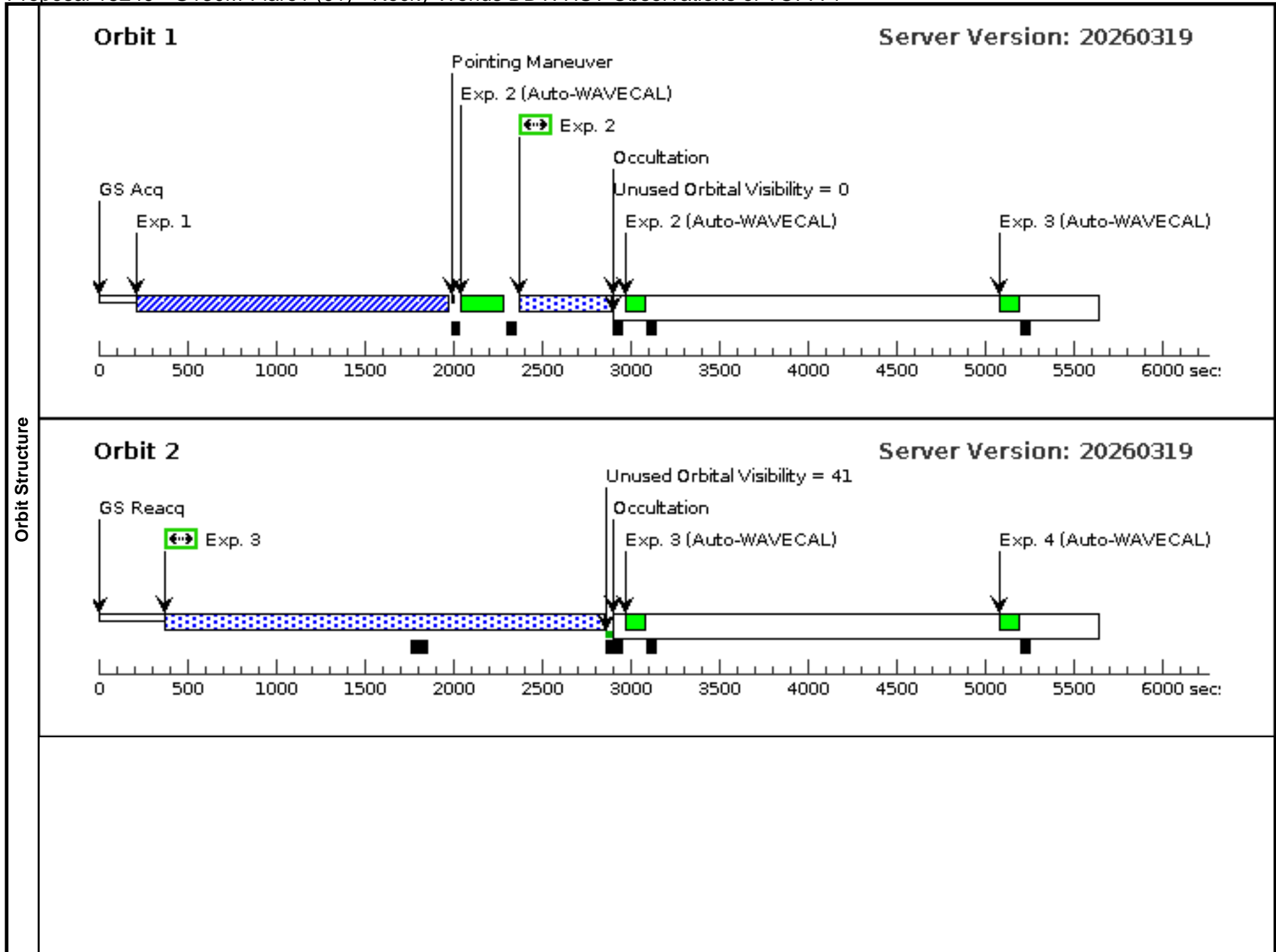
HST observations of TOI-771. 16 orbits of flare monitoring using G130M/1222, with time to account for long acquisitions. 6 orbits of FUV line coverage with G160M/1533 which provides complete coverage with G130M/1222 of 1070-1710 Angstroms. We obtain NUV/Vis low resolution spectroscopy with STIS G230L, G430L, and G750L and the 52x0.2 slit in order to construct an accurate stellar SED in seven orbits. All UV observations are obtained in time-tag mode to allow for light curves to be generated in the case of a flare or serendipitous transit.

For all observation SNR calculations we used archival spectroscopy of GJ 3929 from GO 17904 (PI: Diamond-Lowe), with a radius and distance scaled SED. For STIS CCD calculations we assumed a Phoenix M3.5 T=3400 K SED scaled to the Gaia G=13.34.

Proposal 18249 - G130M-Flare1 (01) - Rocky Worlds DDT: HST Observations of TOI 771

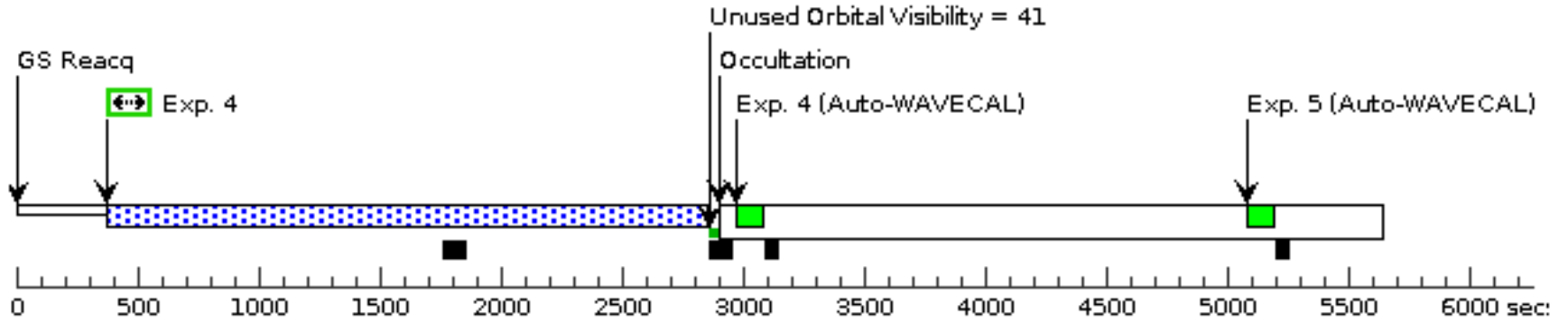
Tue Jul 07 20:00:23 GMT 2026

Visit	Proposal 18249, G130M-Flare1 (01), completed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 2026.163:15 AND 2026.164 Comments: Flare Monitoring																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>TOI-771 Alt Name1: 2MASS-J10562716-7259054</td> <td>RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000</td> <td>Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec</td> <td>V=11.75</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	Acquisition (COS.ta.233 6257)	(1) TOI-771	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				770 Secs (770 Secs) [==>]	[1]												
	Comments: Lifetime check for G160M: Initial look is ~4 counts total in the Brightest emission line per FP-POS. We should be ok.																					
	2	G130M/122 2-FP1 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=13 50			470 Secs (470 Secs) [==>]	[1]												
	3	G130M/122 2-FP2 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[2]												
	4	G130M/122 2-FP3 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[3]												
5	G130M/122 2-FP4 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[4]													



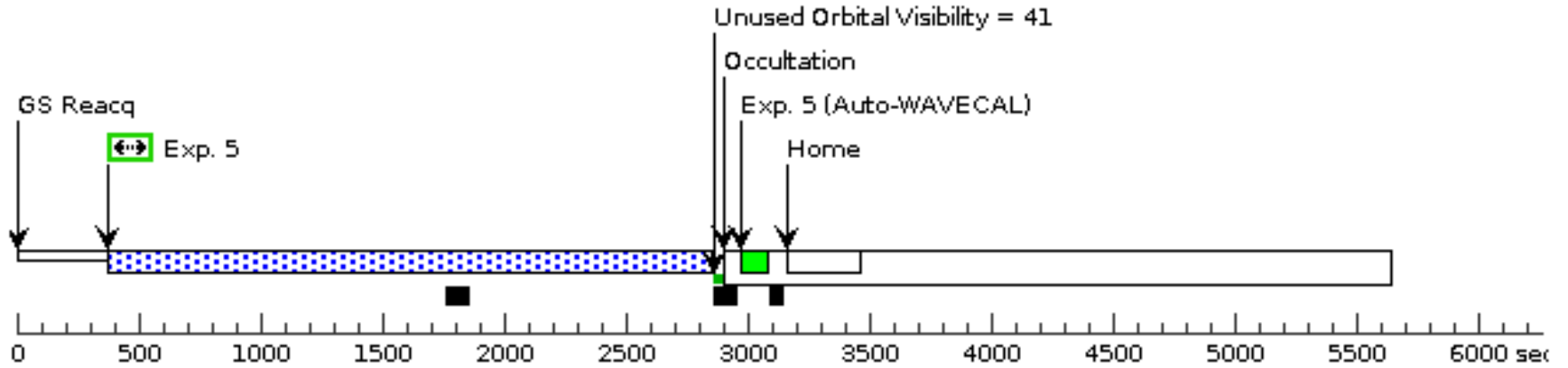
Orbit 3

Server Version: 20260319



Orbit 4

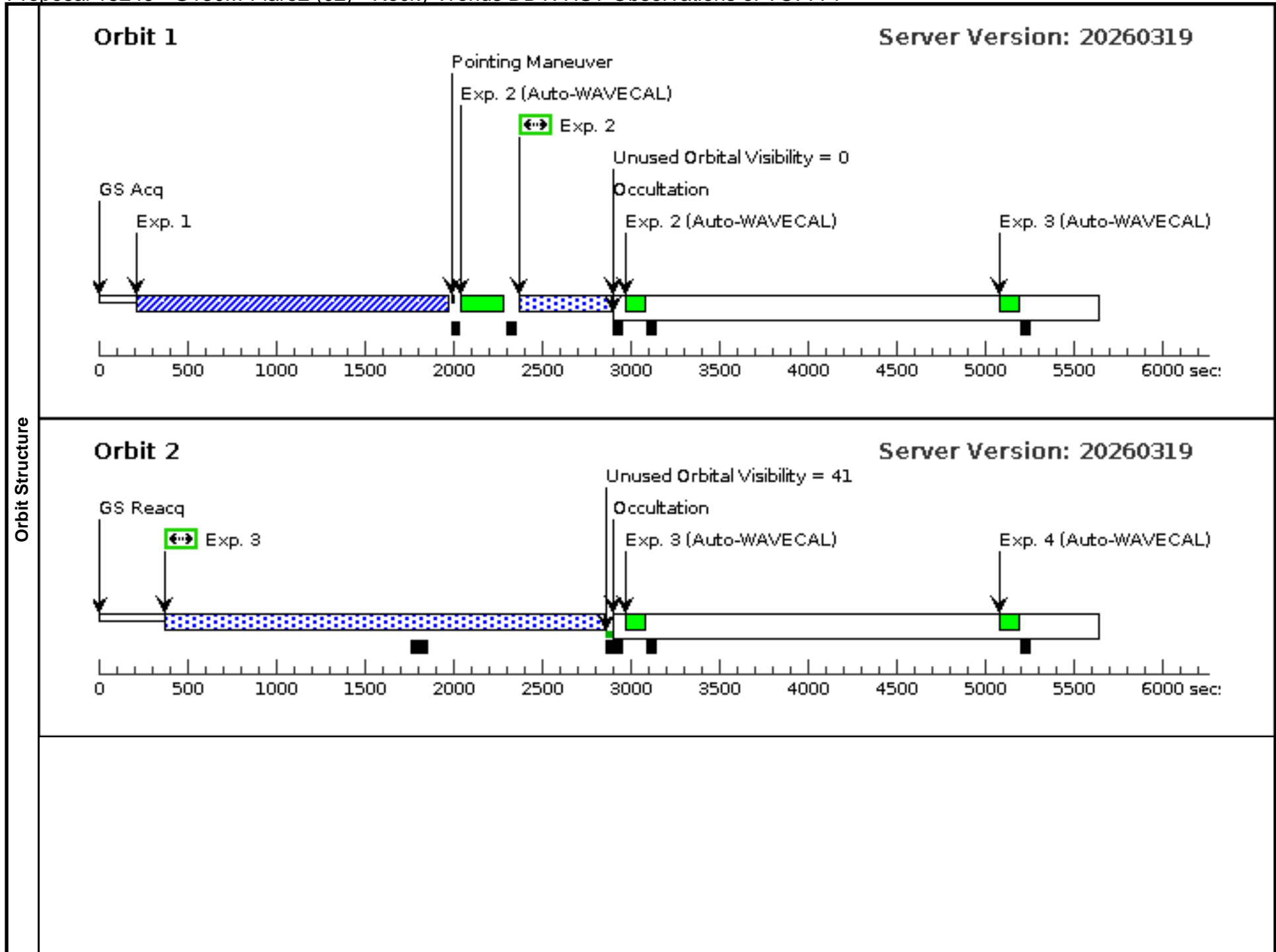
Server Version: 20260319



Proposal 18249 - G130M-Flare2 (02) - Rocky Worlds DDT: HST Observations of TOI 771

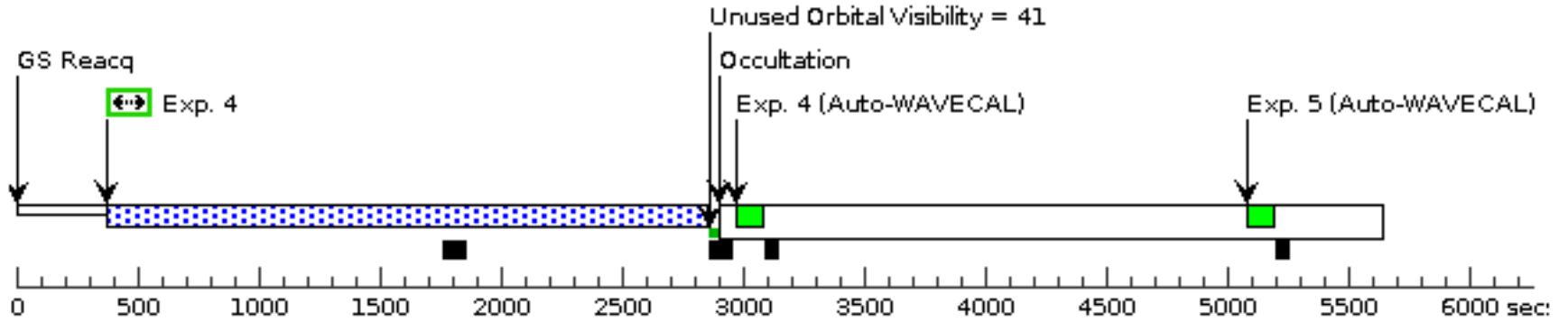
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Visit	Proposal 18249, G130M-Flare2 (02), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 2026.214:18 AND 2026.216 Comments: Flare Monitoring																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>TOI-771 Alt Name1: 2MASS-J10562716-7259054</td> <td>RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000</td> <td>Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec</td> <td>V=11.75</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75
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(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS																	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	Acquisition (COS.ta.233 6257)	(1) TOI-771	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				770 Secs (770 Secs) [==>]	[1]												
	Comments: Lifetime check for G160M: Initial look is ~4 counts total in the Brightest emission line per FP-POS. We should be ok.																					
	2	G130M/122 2-FP1 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=13 50			470 Secs (470 Secs) [==>]	[1]												
	3	G130M/122 2-FP2 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[2]												
	4	G130M/122 2-FP3 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[3]												
5	G130M/122 2-FP4 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[4]													



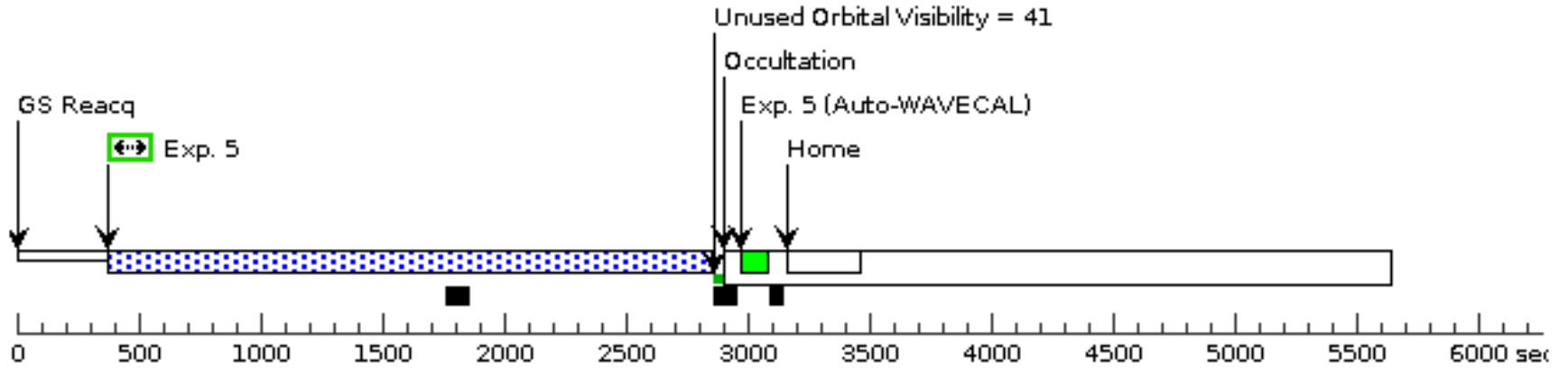
Orbit 3

Server Version: 20260319



Orbit 4

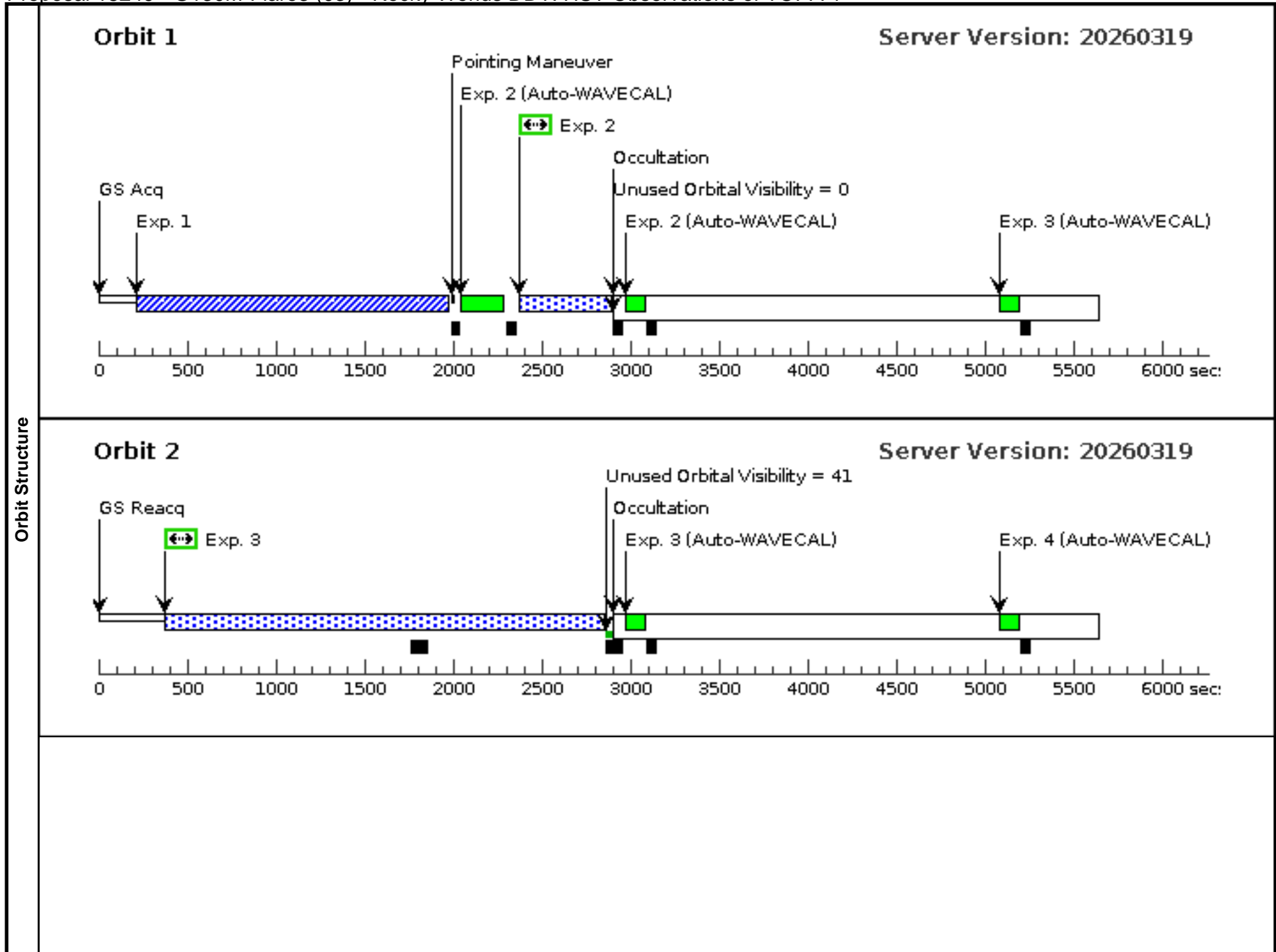
Server Version: 20260319



Proposal 18249 - G130M-Flare3 (03) - Rocky Worlds DDT: HST Observations of TOI 771

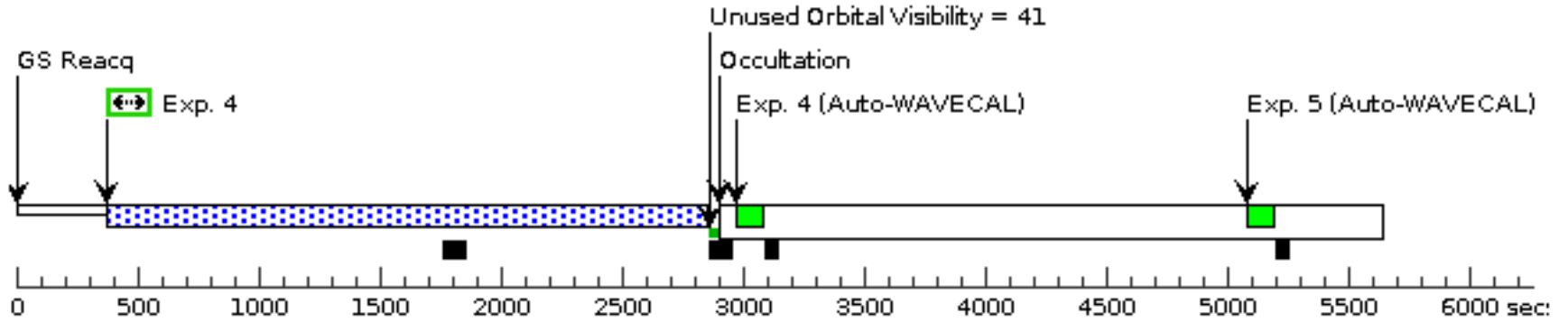
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Visit	Proposal 18249, G130M-Flare3 (03), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100% Comments: Flare Monitoring									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS			
	Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acquisition (COS.ta.233 6257)	(1) TOI-771	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				770 Secs (770 Secs) [==>]	[1]
	Comments: Lifetime check for G160M: Initial look is ~4 counts total in the Brightest emission line per FP-POS. We should be ok.									
	2	G130M/122 2-FP1 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=13 50			470 Secs (470 Secs) [==>]	[1]
	3	G130M/122 2-FP2 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[2]
	4	G130M/122 2-FP3 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[3]
5	G130M/122 2-FP4 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[4]	



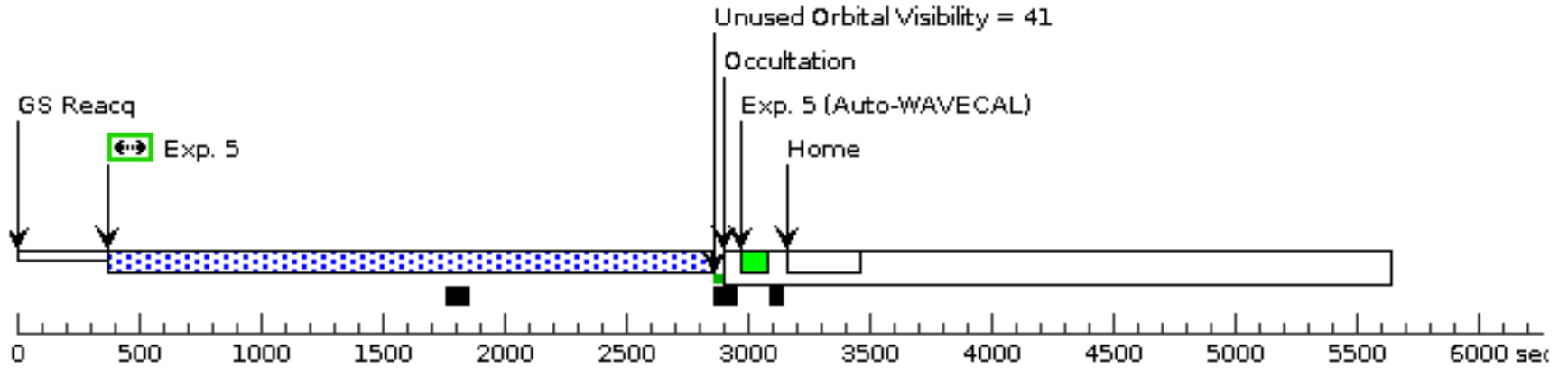
Orbit 3

Server Version: 20260319



Orbit 4

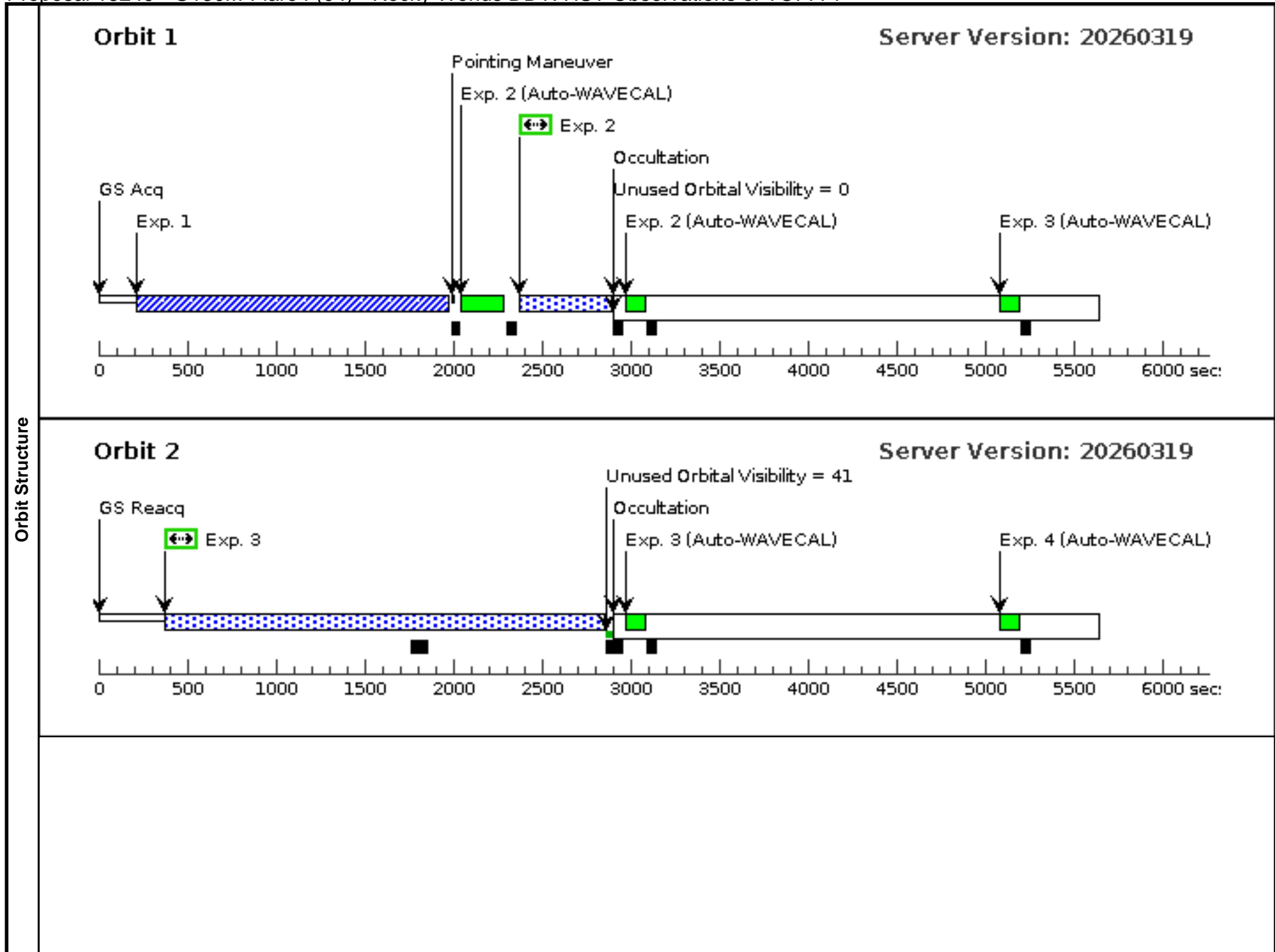
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Proposal 18249 - G130M-Flare4 (04) - Rocky Worlds DDT: HST Observations of TOI 771

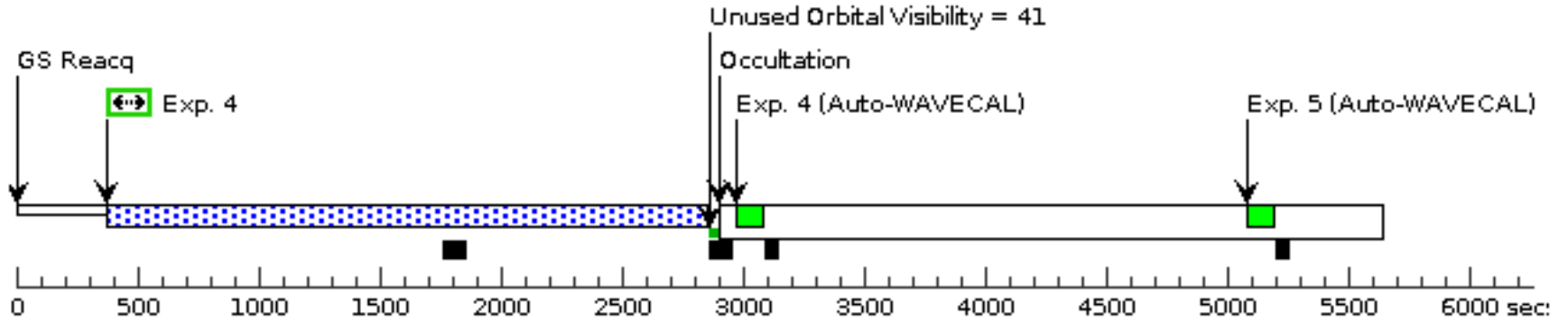
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Visit	Proposal 18249, G130M-Flare4 (04), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100% <i>Comments: Flare Monitoring</i>									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS			
	<i>Comments:</i> Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acquisition (COS.ta.233 6257)	(1) TOI-771	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				770 Secs (770 Secs) [==>]	[1]
	<i>Comments: Lifetime check for G160M: Initial look is ~4 counts total in the Brightest emission line per FP-POS. We should be ok.</i>									
	2	G130M/122 2-FP1 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=13 50			470 Secs (470 Secs) [==>]	[1]
	3	G130M/122 2-FP2 (COS.sp.233 6261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=13 50			2426 Secs (2426 Secs) [==>]	[2]
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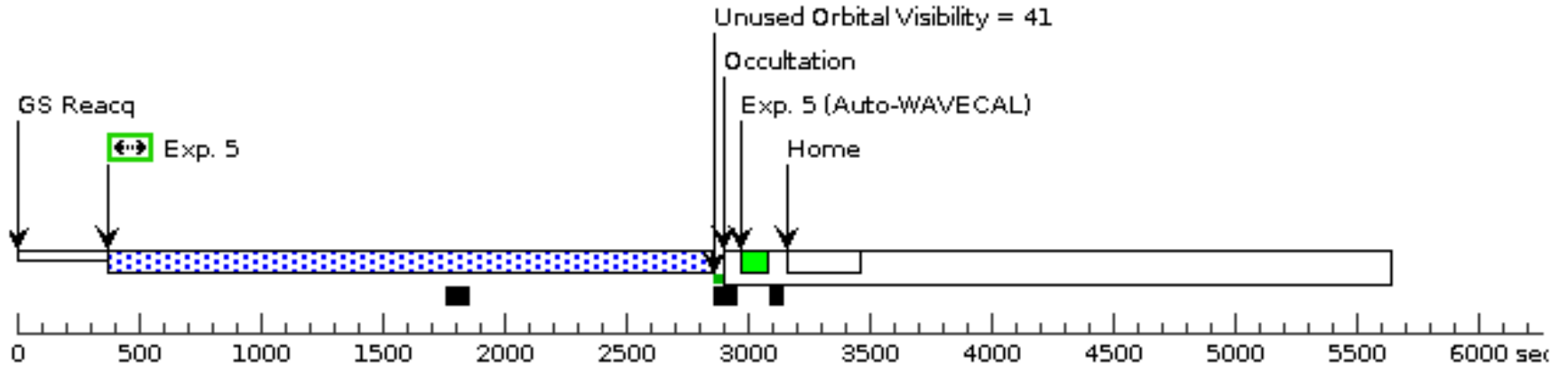
Orbit 3

Server Version: 20260319



Orbit 4

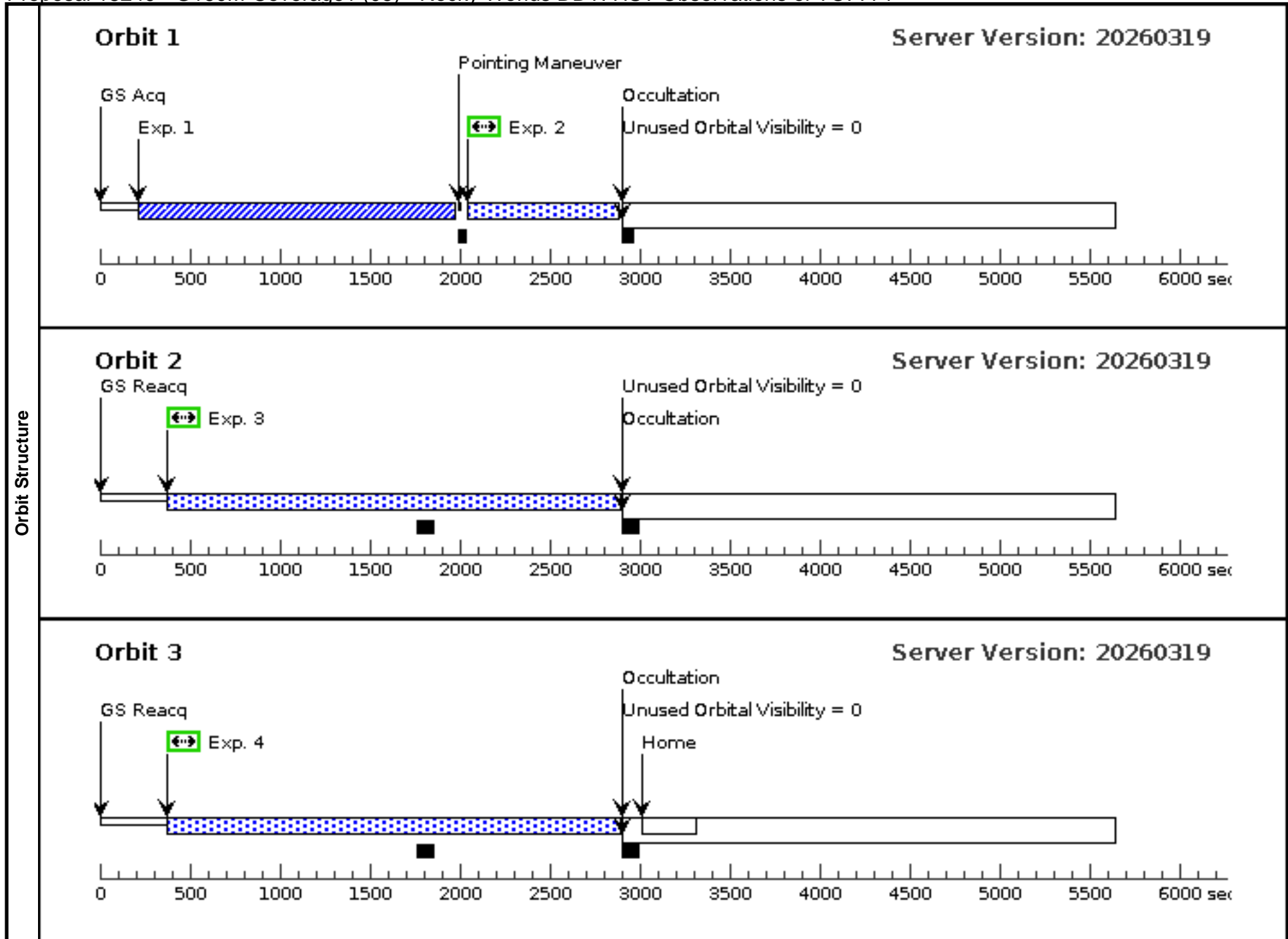
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Proposal 18249 - G160M-Coverage1 (05) - Rocky Worlds DDT: HST Observations of TOI 771

Tue Jul 07 20:00:24 GMT 2026

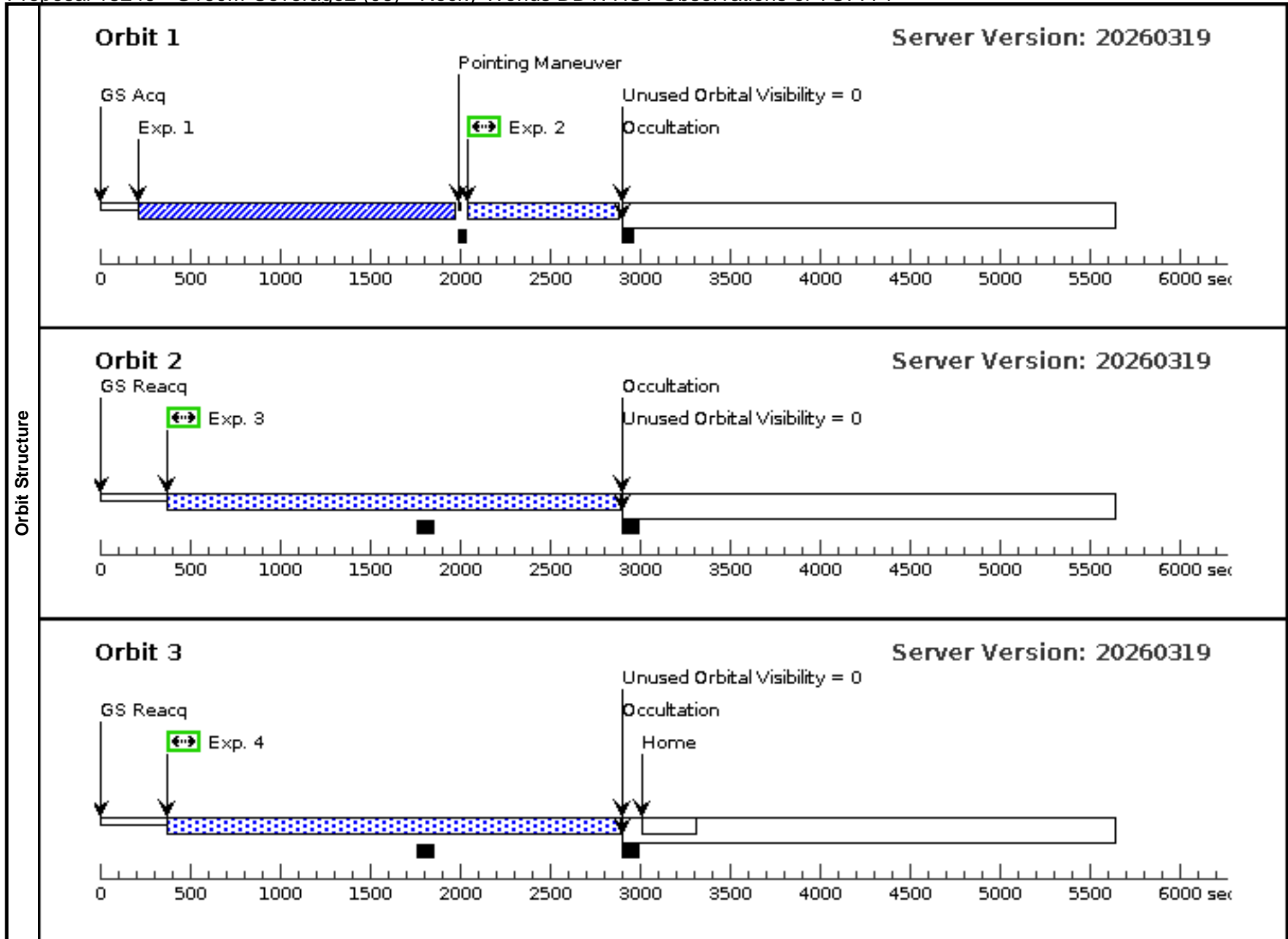
Visit	Proposal 18249, G160M-Coverage1 (05), implementation Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100% <i>Comments: FUV coverage for emission lines</i>																																																												
	(G160M-Coverage1 (05)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions at a given COS cenwave (or 2 positions for certain exception cases). See extended explanation in the diagnostic browser.																																																												
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Proposal 18249 - G160M-Coverage2 (06) - Rocky Worlds DDT: HST Observations of TOI 771

Tue Jul 07 20:00:24 GMT 2026

Visit	Proposal 18249, G160M-Coverage2 (06), implementation Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100% <i>Comments: FUV coverage for emission line</i>										
	(G160M-Coverage2 (06)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions at a given COS cenwave (or 2 positions for certain exception cases). See extended explanation in the diagnostic browser.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec		V=11.75	Reference Frame: ICRS				
<i>Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO</i>											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	Acquisition (COS.ta.233 6257)	(1) TOI-771	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				770 Secs (770 Secs) [==>]	[1]	
	<i>Comments: Lifetime check for G160M: Initial look is ~4 counts total in the Brightest emission line per FP-POS. We should be ok.</i>										
	2	G160M/153 3-FP1 (COS.sp.233 6263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=1; BUFFER-TIME=13 50				612 Secs (612 Secs) [==>]	[1]
	3	G160M/153 3-FP3 (COS.sp.233 6263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=13 50				2463 Secs (2463 Secs) [==>]	[2]
4	G160M/153 3-FP4 (COS.sp.233 6263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=4; BUFFER-TIME=13 50				2463 Secs (2463 Secs) [==>]	[3]	

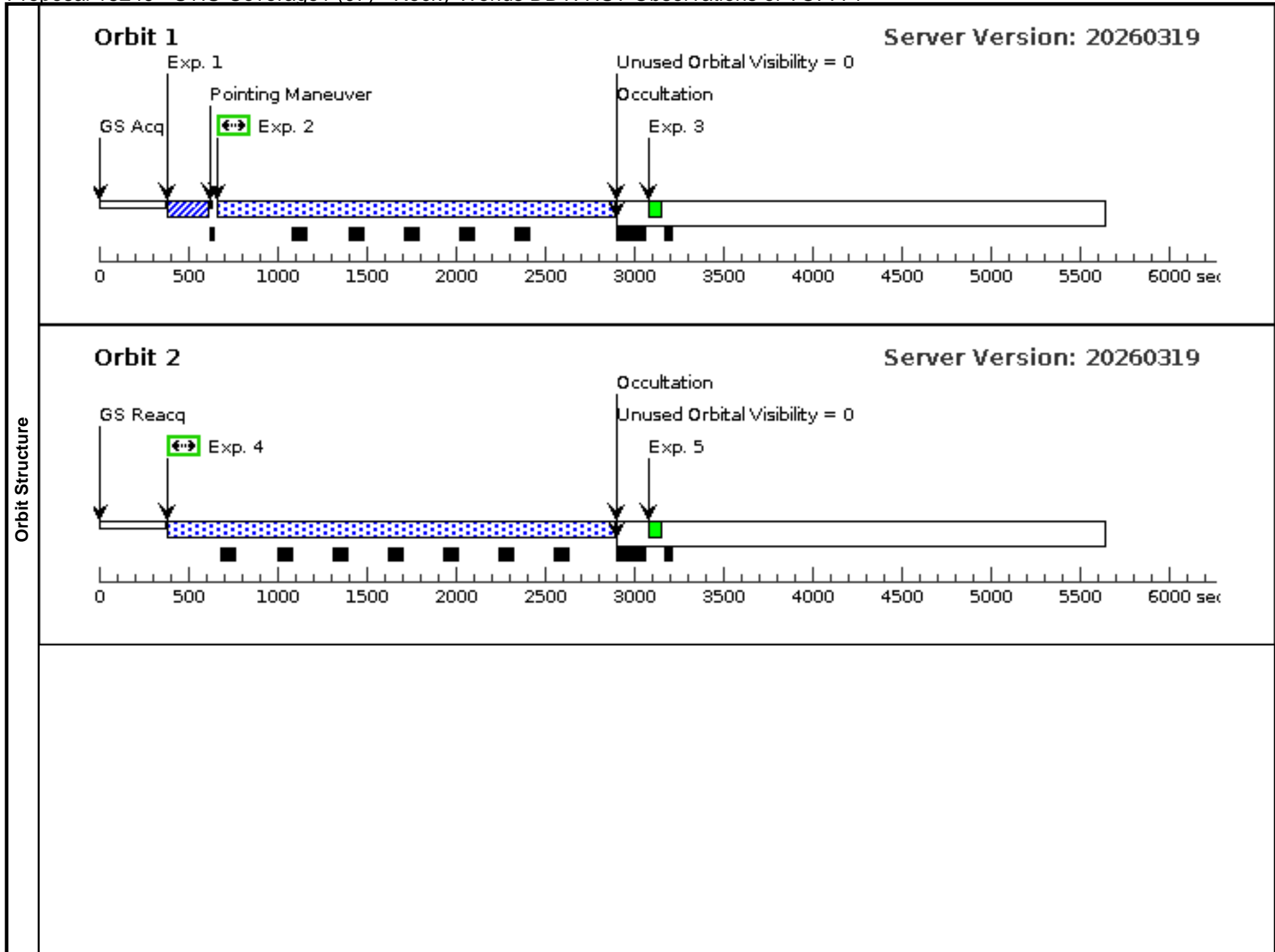


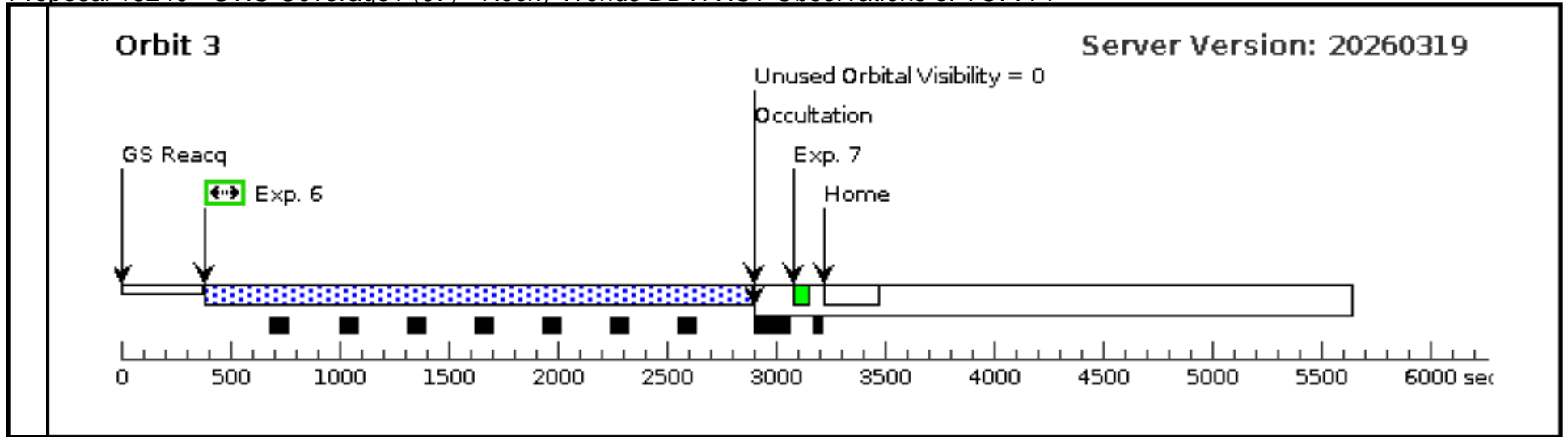
Orbit Structure

Proposal 18249 - STIS-Coverage1 (07) - Rocky Worlds DDT: HST Observations of TOI 771

Tue Jul 07 20:00:24 GMT 2026

Visit	Proposal 18249, STIS-Coverage1 (07), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: SCHED 100% <i>Comments: UVVis characterization</i>																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>TOI-771 Alt Name1: 2MASS-J10562716-7259054</td> <td>RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000</td> <td>Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec</td> <td>V=11.75</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO</i></p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	Acquisition (STIS.ta.233 6259)	(1) TOI-771	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]												
	2	G230L exp1 (STIS.sp.23 02015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=31 0; WAVECAL=NO		2100 Secs (2100 Secs) [==>]	[1]												
	3		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				[==>]	[1]												
	4	G230L exp2 (STIS.sp.23 02015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=31 0; WAVECAL=NO		2499 Secs (2499 Secs) [==>]	[2]												
	5		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				[==>]	[2]												
	6	G230L exp1 (STIS.sp.23 02015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=31 0; WAVECAL=NO		2499 Secs (2499 Secs) [==>]	[3]												
	7		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				[==>]	[3]												





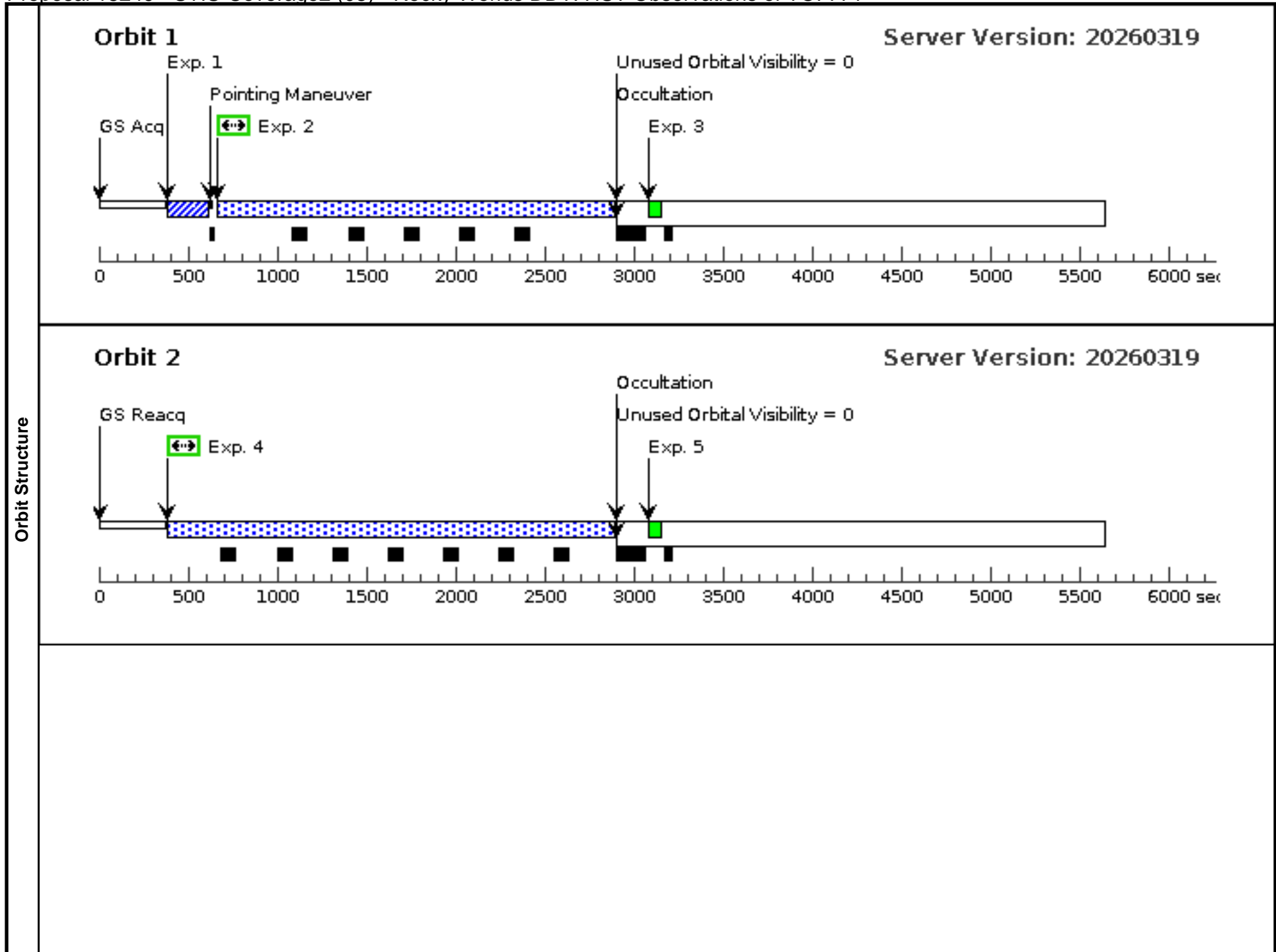
Proposal 18249 - STIS-Coverage2 (08) - Rocky Worlds DDT: HST Observations of TOI 771

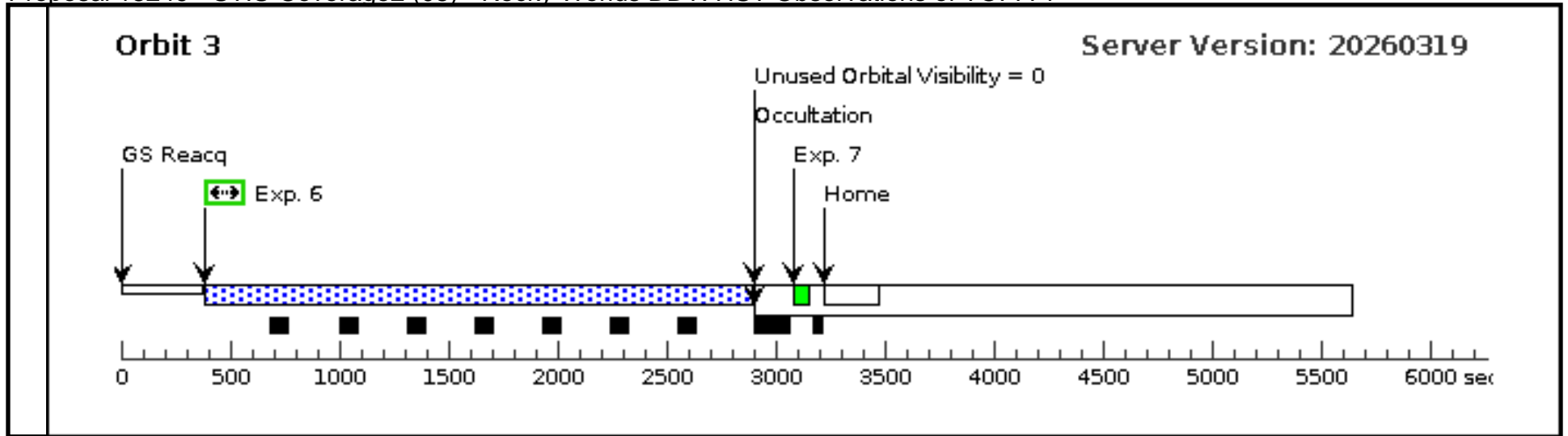
Tue Jul 07 20:00:24 GMT 2026

Visit	Proposal 18249, STIS-Coverage2 (08), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: SCHED 100% Comments: UVVis characterization				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS
Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO						

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
		1	Acquisition (STIS.ta.233 6259)	(1) TOI-771	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]
	2	G230L exp1 (STIS.sp.23 02015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=31 0; WAVECAL=NO			2100 Secs (2100 Secs) [==>]	[1]
	3		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				[==>]	[1]
	4	G230L exp2 (STIS.sp.23 02015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=31 0; WAVECAL=NO			2499 Secs (2499 Secs) [==>]	[2]
	5		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				[==>]	[2]
	6	G230L exp1 (STIS.sp.23 02015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=31 0; WAVECAL=NO			2499 Secs (2499 Secs) [==>]	[3]
	7		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				[==>]	[3]





Proposal 18249 - STIS-Coverage3 (09) - Rocky Worlds DDT: HST Observations of TOI 771

Tue Jul 07 20:00:24 GMT 2026

Visit	Proposal 18249, STIS-Coverage3 (09), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD Special Requirements: SCHED 100% Comments: UVVis characterization																
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>TOI-771 Alt Name1: 2MASS-J10562716-7259054</td> <td>RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000</td> <td>Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec</td> <td>V=11.75</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: Category=STAR Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV] Extended=NO					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit							
	1	Acquisition (STIS.ta.233 6259)	(1) TOI-771	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]							
	2		WAVE	STIS/CCD, ACCUM, 52X0.2	G430L 4300 A				[==>]	[1]							
	3	G430L	(1) TOI-771	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A		CR-SPLIT=5		1235 Secs (1235 Secs) [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)] [==>(Split 5)]	[1]							
	4	G750L (STIS.sp.23 00929)	(1) TOI-771	STIS/CCD, ACCUM, 52X0.2	G750L 7751 A		CR-SPLIT=5; WAVECAL=NO		275 Secs (275 Secs) [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)] [==>(Split 5)]	[1]							
	5		WAVE	STIS/CCD, ACCUM, 52X0.2	G750L 7751 A				[==>]	[1]							
	6	G750L FringeFlat	CCDFLAT	STIS/CCD, ACCUM, 0.3X0.09	G750L 7751 A				[==>(Copy 1)] [==>(Copy 2)]	[1]							

