18249 - Rocky Worlds DDT: HST Observations of TOI 771

Cycle: 33, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Dr. Hannah Diamond-Lowe (PI) (Contact)	**Space Telescope Science Institute**
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Dr. Ian Wong (CoI)	Space Telescope Science Institute
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Hannah Braun (CoI)	Space Telescope Science Institute
Ryan Kunzer (CoI)	Space Telescope Science Institute
Kyle Conroy (CoI)	Space Telescope Science Institute

Name	*Institution*
Dr. Mercedes Lopez-Morales (CoI)	Space Telescope Science Institute
Dr. I. Neill Reid (CoI)	Space Telescope Science Institute

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) TOI-771	COS/FUV COS/NUV	4	12-May-2026 17:00:16.0	yes
02	(1) TOI-771	COS/FUV COS/NUV	4	12-May-2026 17:00:18.0	yes
03	(1) TOI-771	COS/FUV COS/NUV	4	12-May-2026 17:00:19.0	yes
04	(1) TOI-771	COS/FUV COS/NUV	4	12-May-2026 17:00:20.0	yes
05	(1) TOI-771	COS/FUV COS/NUV	3	12-May-2026 17:00:21.0	yes
06	(1) TOI-771	COS/FUV COS/NUV	3	12-May-2026 17:00:22.0	yes
07	(1) TOI-771 WAVE	STIS/CCD STIS/NUV-MAMA	3	12-May-2026 17:00:23.0	yes
08	(1) TOI-771 WAVE	STIS/CCD STIS/NUV-MAMA	3	12-May-2026 17:00:24.0	yes
09	(1) TOI-771 CCDFLAT WAVE	STIS/CCD	1	12-May-2026 17:00:24.0	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

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.

Visit

Proposal 18249, G130M-Flare1 (01) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Flare Monitoring

Fixed Targets

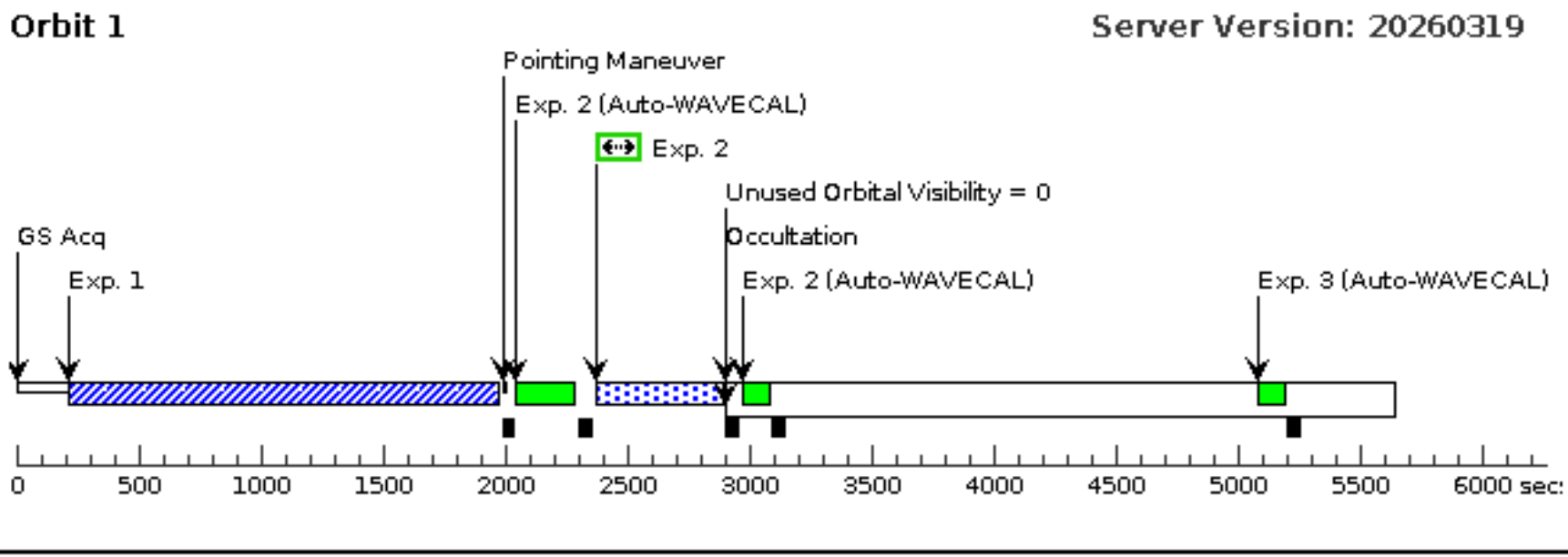
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

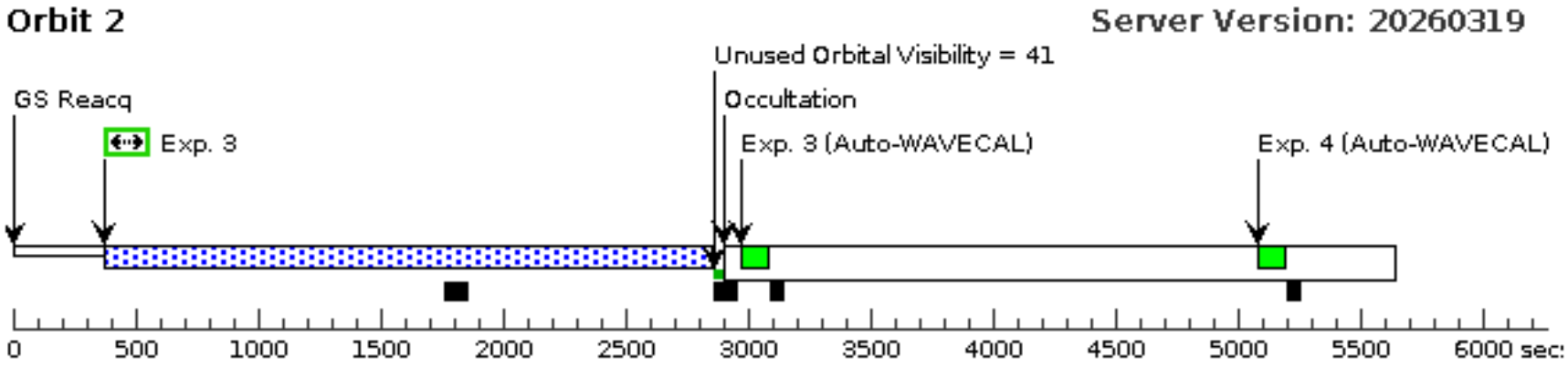
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

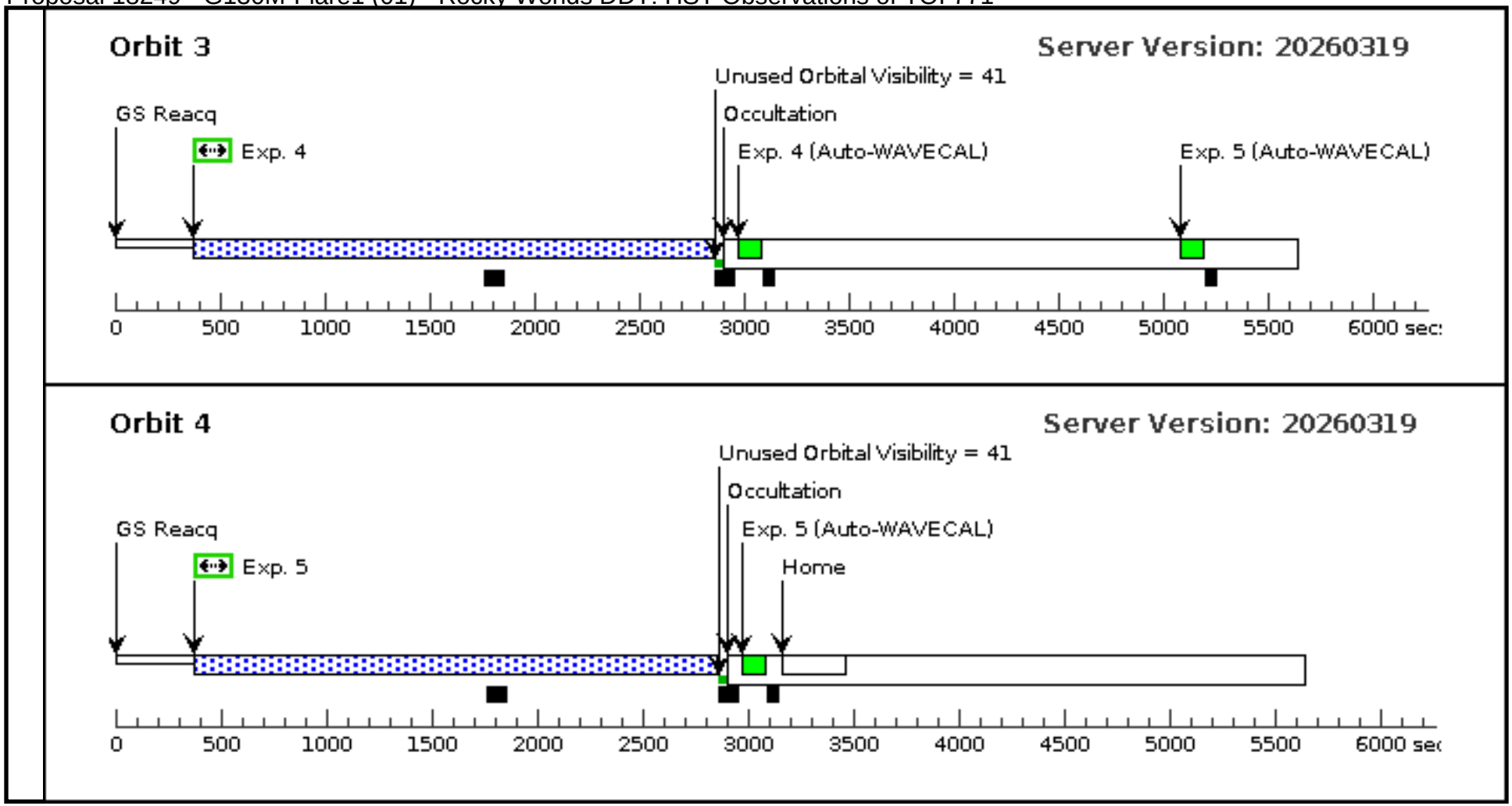
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (COS.ta.2336257)	(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/1222-FP1 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=1350			470 Secs (470 Secs) *[==>]*	***[1]***
3	G130M/1222-FP2 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[2]***
4	G130M/1222-FP3 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[3]***
5	G130M/1222-FP4 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[4]***

Orbit Structure



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Exp. 5 (Auto-WAVECAL)
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6000 sec
Orbit 4
Server Version: 20260319
Unused Orbital Visibility = 41
Occultation
GS Reacq
Exp. 5 (Auto-WAVECAL)
Exp. 5
Home
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500
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6000 sec

Visit

Proposal 18249, G130M-Flare2 (02) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Flare Monitoring

Fixed Targets

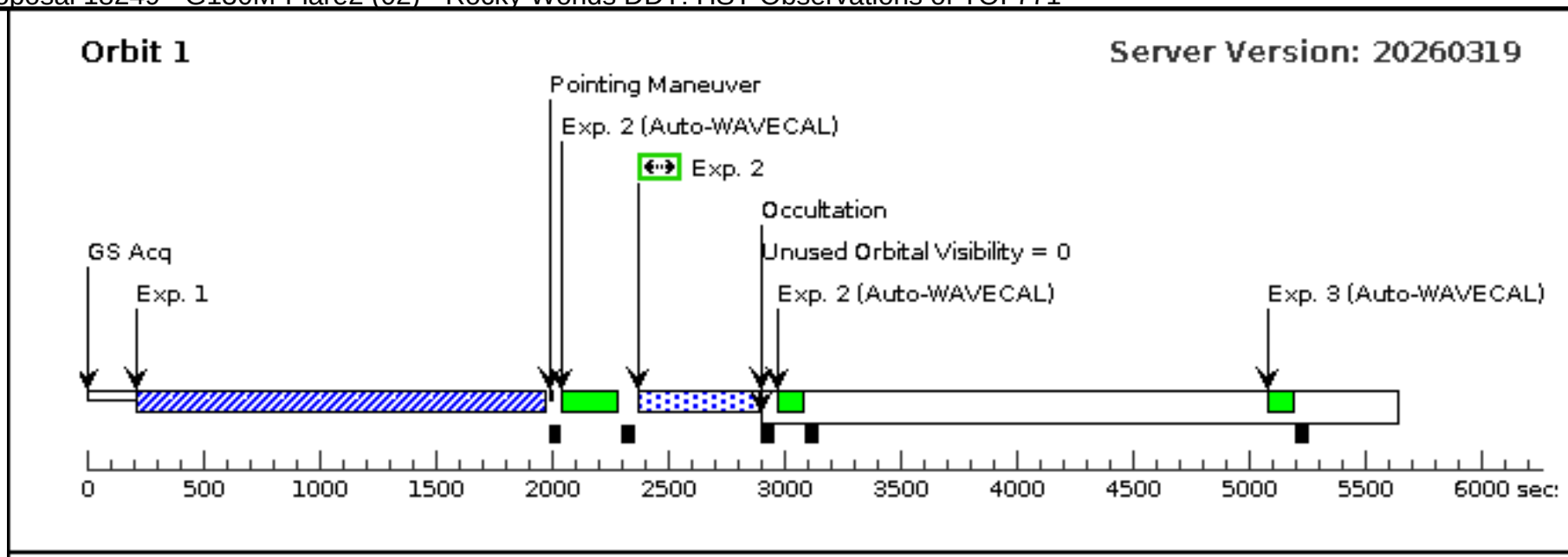
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

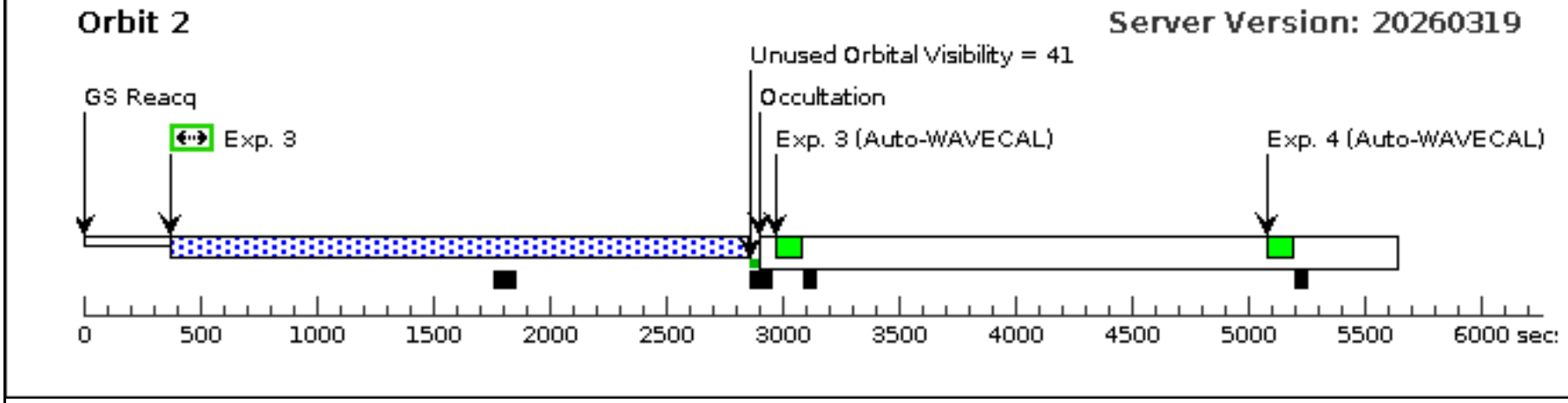
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

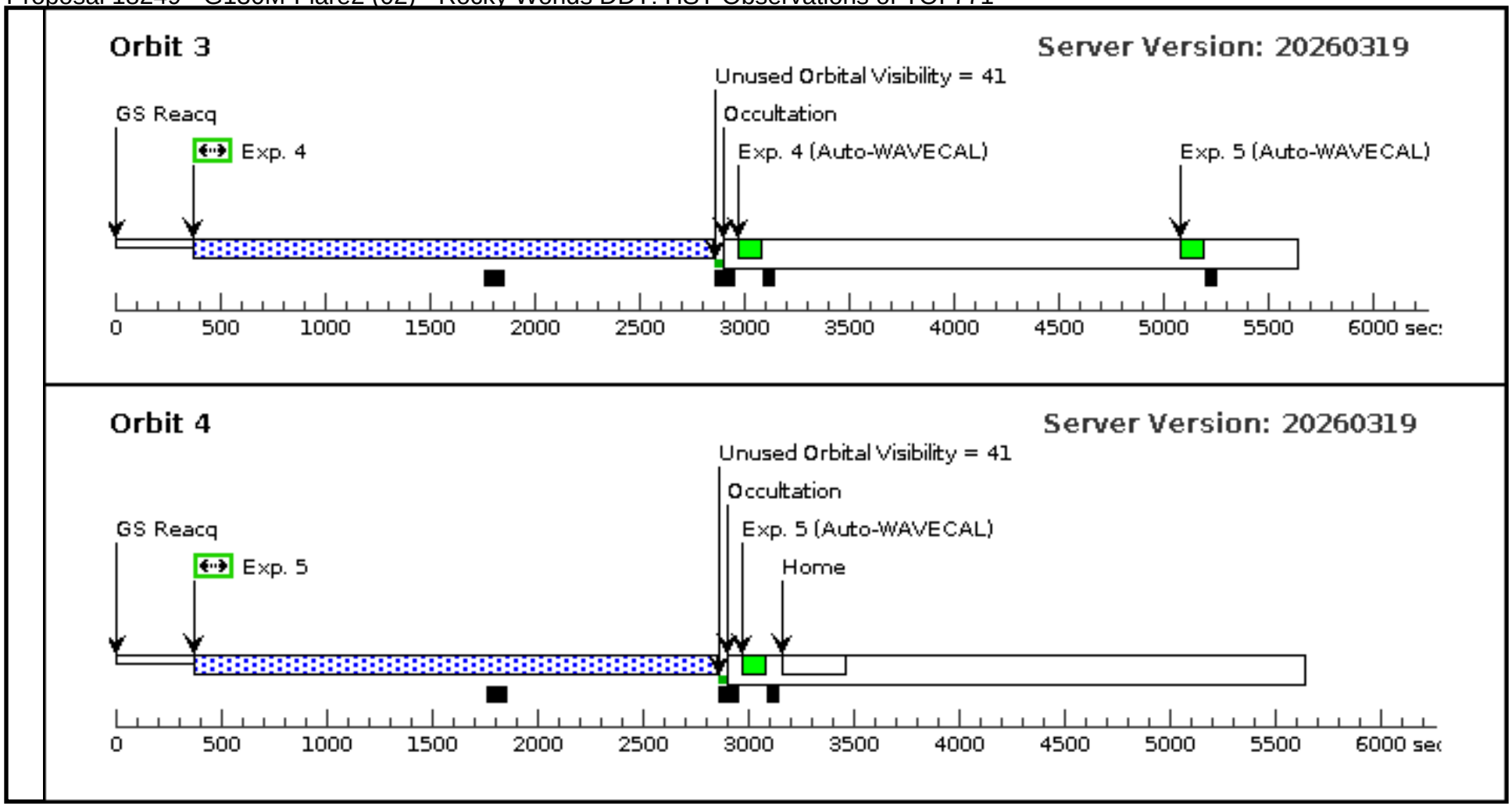
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (COS.ta.2336257)	(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/1222-FP1 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=1350			470 Secs (470 Secs) *[==>]*	***[1]***
3	G130M/1222-FP2 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[2]***
4	G130M/1222-FP3 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[3]***
5	G130M/1222-FP4 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[4]***

Orbit Structure



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Exp. 5 (Auto-WAVECAL)
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Orbit 4
Server Version: 20260319
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Occultation
GS Reacq
Exp. 5 (Auto-WAVECAL)
Exp. 5
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Visit

Proposal 18249, G130M-Flare3 (03) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Flare Monitoring

Fixed Targets

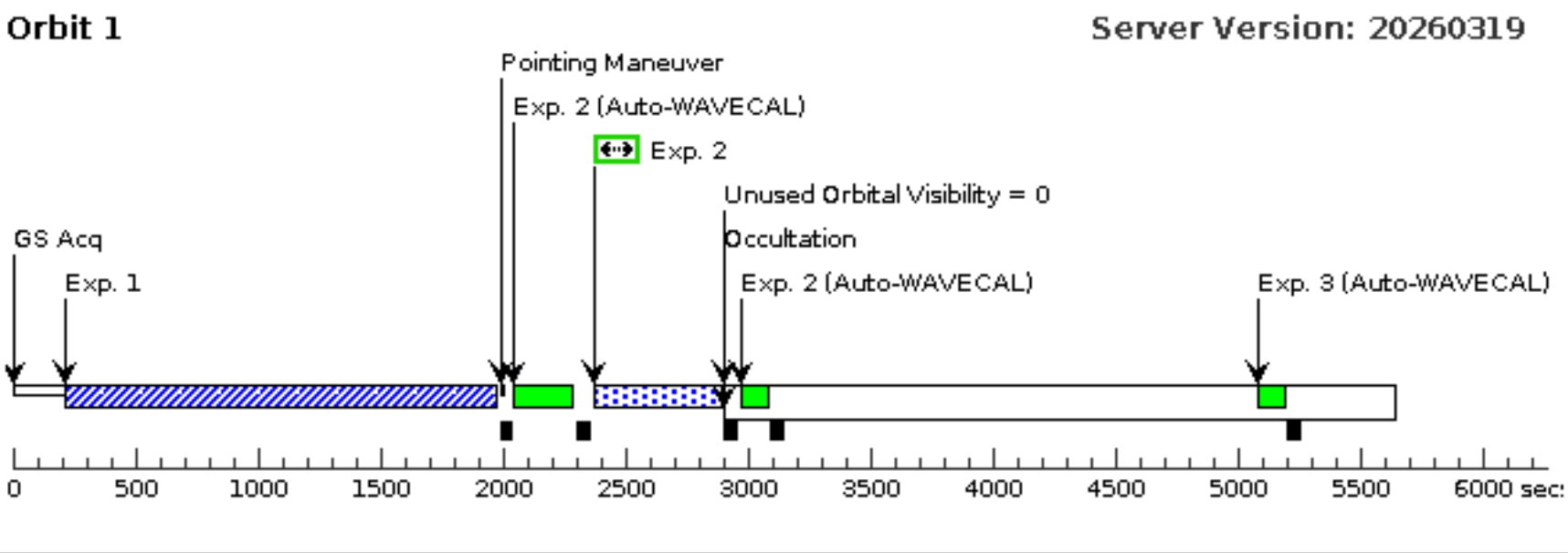
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

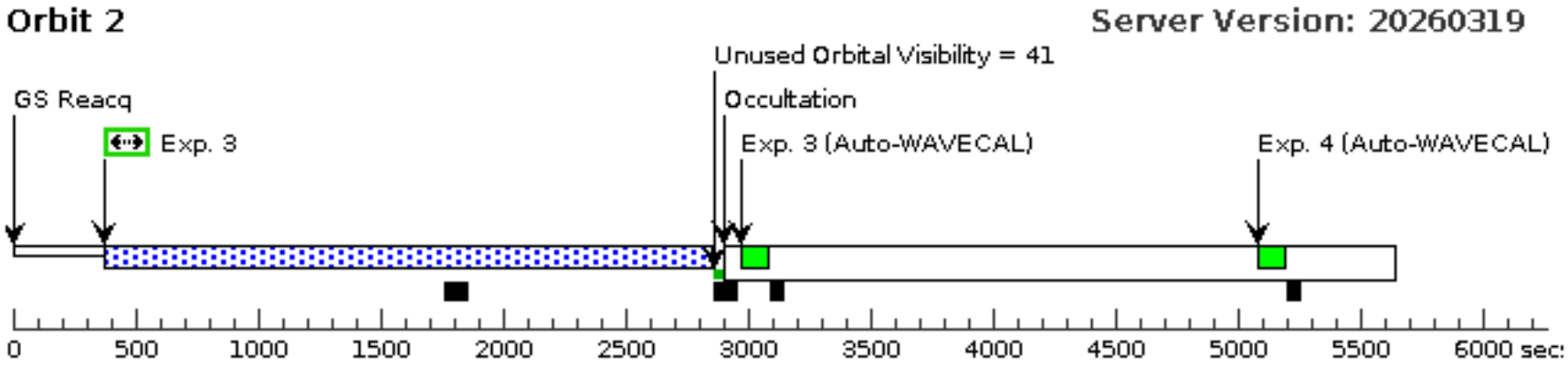
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

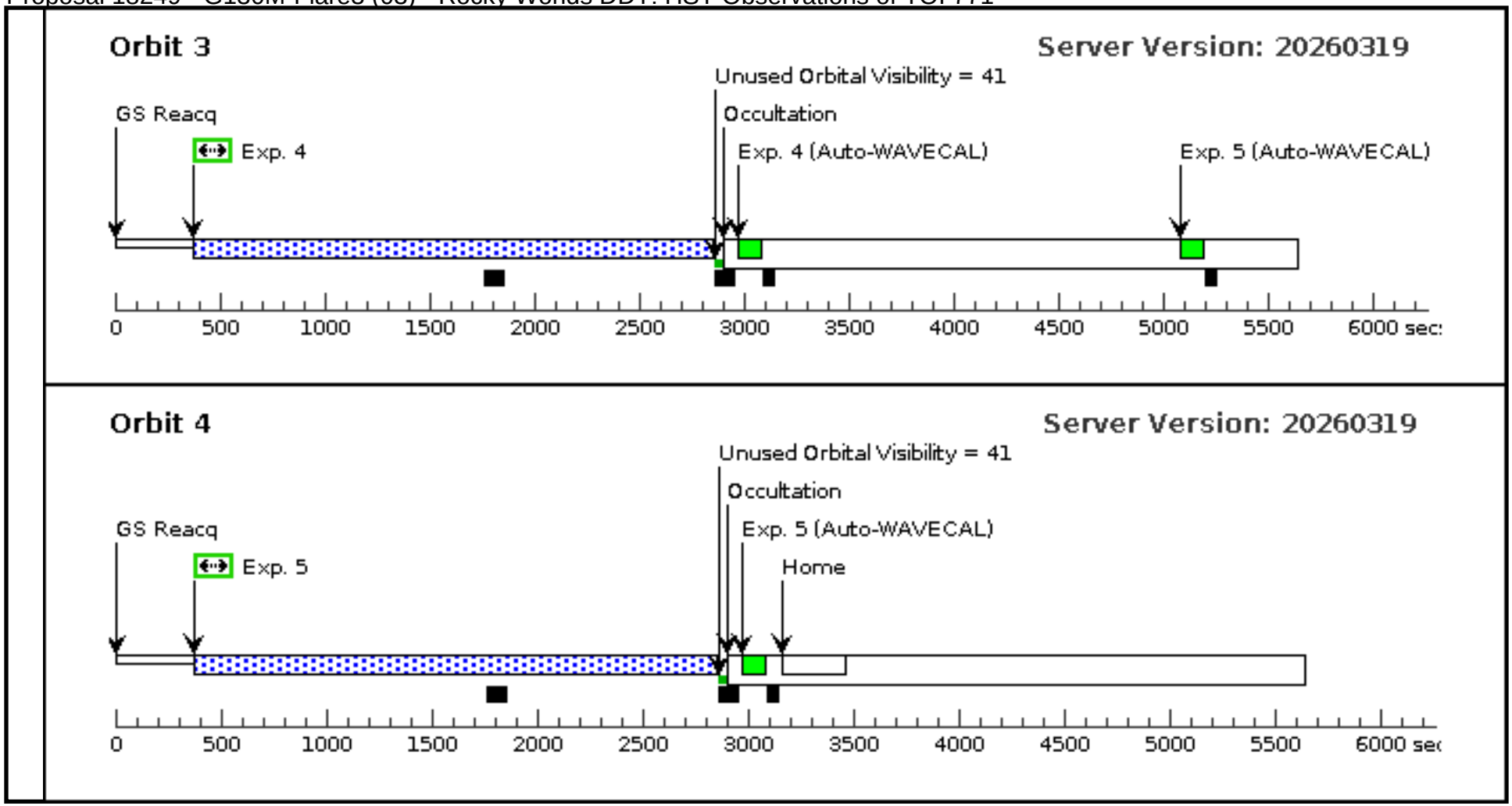
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (COS.ta.2336257)	(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/1222-FP1 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=1350			470 Secs (470 Secs) *[==>]*	***[1]***
3	G130M/1222-FP2 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[2]***
4	G130M/1222-FP3 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[3]***
5	G130M/1222-FP4 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[4]***

Orbit Structure



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Orbit 4
Server Version: 20260319
Unused Orbital Visibility = 41
Occultation
GS Reacq
Exp. 5 (Auto-WAVECAL)
Exp. 5
Home
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Visit

Proposal 18249, G130M-Flare4 (04) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Flare Monitoring

Fixed Targets

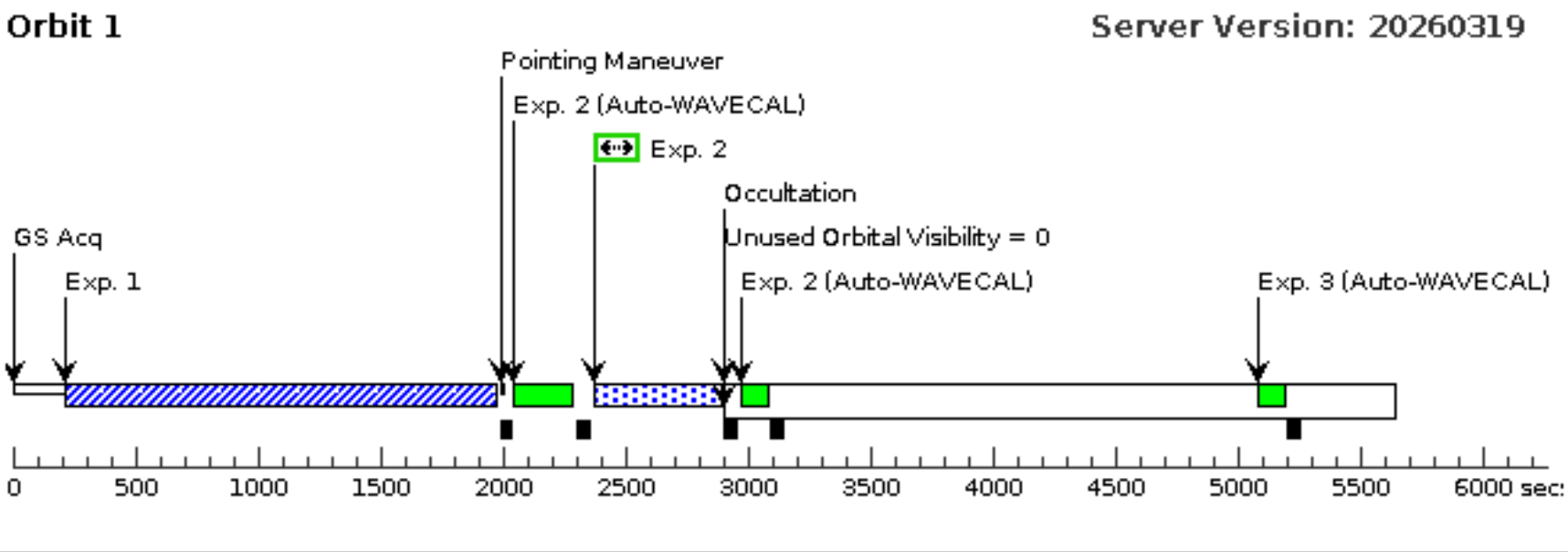
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

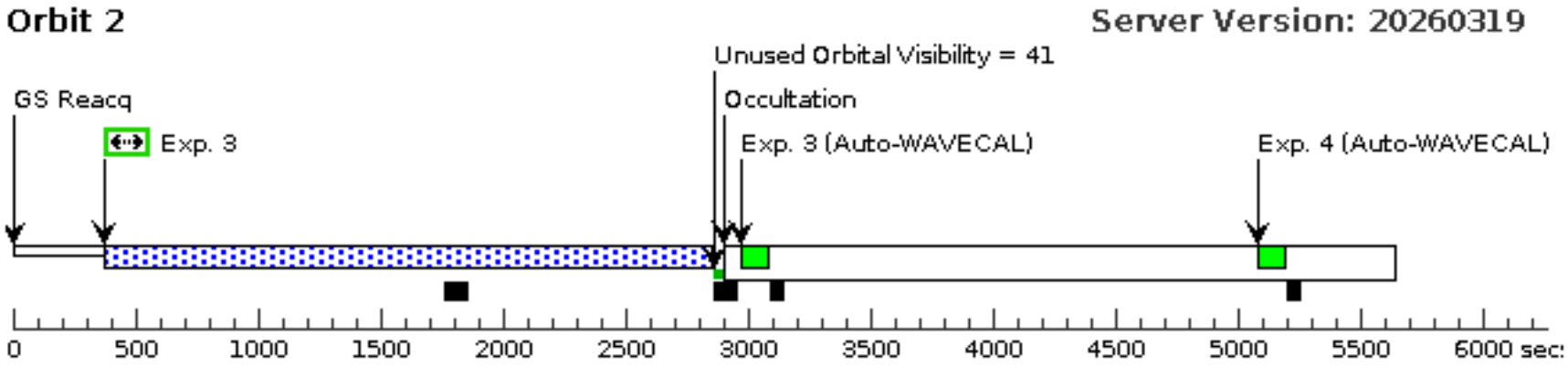
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

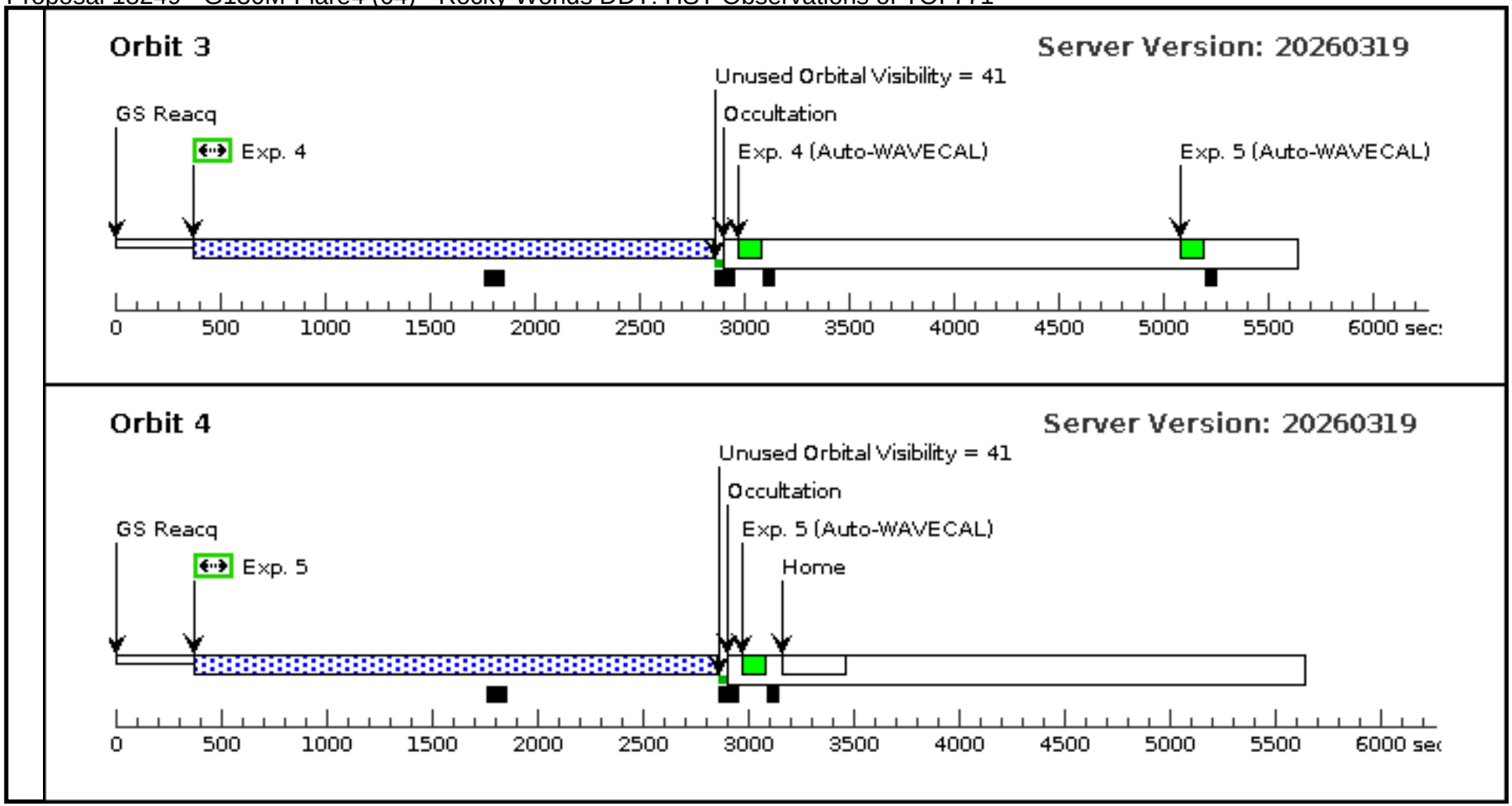
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (COS.ta.2336257)	(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/1222-FP1 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=1350			470 Secs (470 Secs) *[==>]*	***[1]***
3	G130M/1222-FP2 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[2]***
4	G130M/1222-FP3 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[3]***
5	G130M/1222-FP4 (COS.sp.2336261)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=1350			2426 Secs (2426 Secs) *[==>]*	***[4]***

Orbit Structure



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GS Reacq
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Server Version: 20260319
Unused Orbital Visibility = 41
Occultation
GS Reacq
Exp. 5 (Auto-WAVECAL)
Exp. 5
Home
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Visit

Proposal 18249, G160M-Coverage1 (05) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: FUV coverage for emission lines, primarily CIV Using CENWAVE 1600 to avoid Si IV, which would be to bright in a flaring condition. This line is well detected in archival data.

Diagnostics

(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.

Fixed Targets

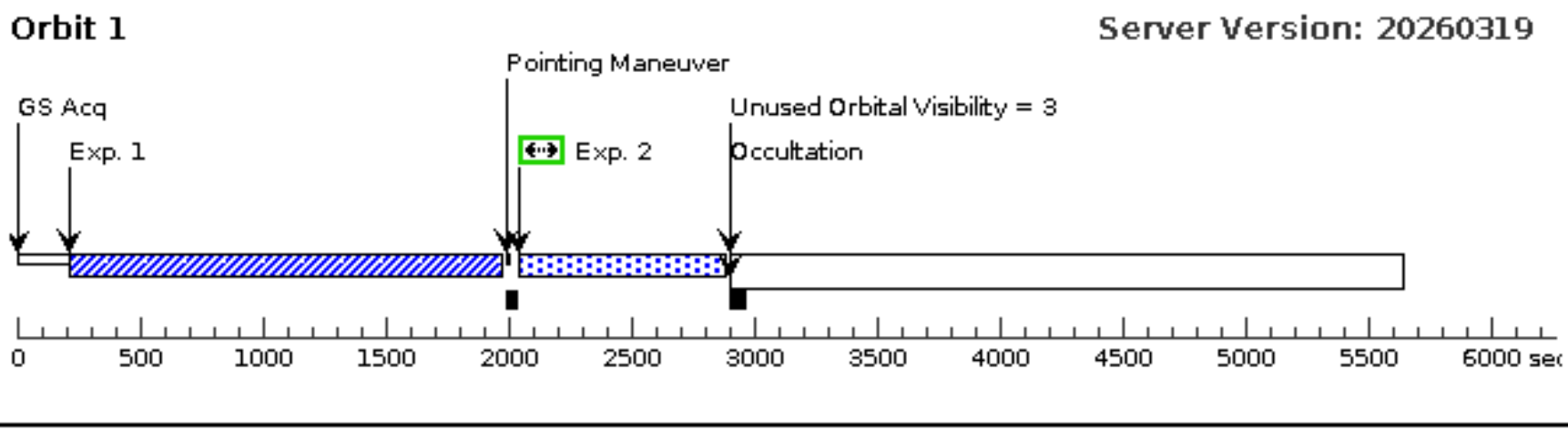
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

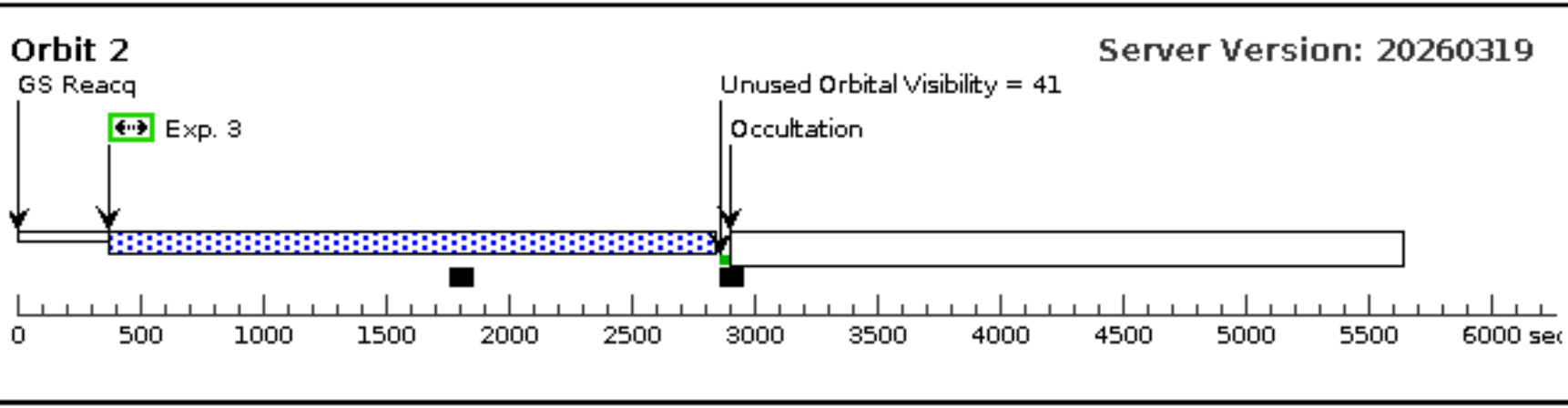
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

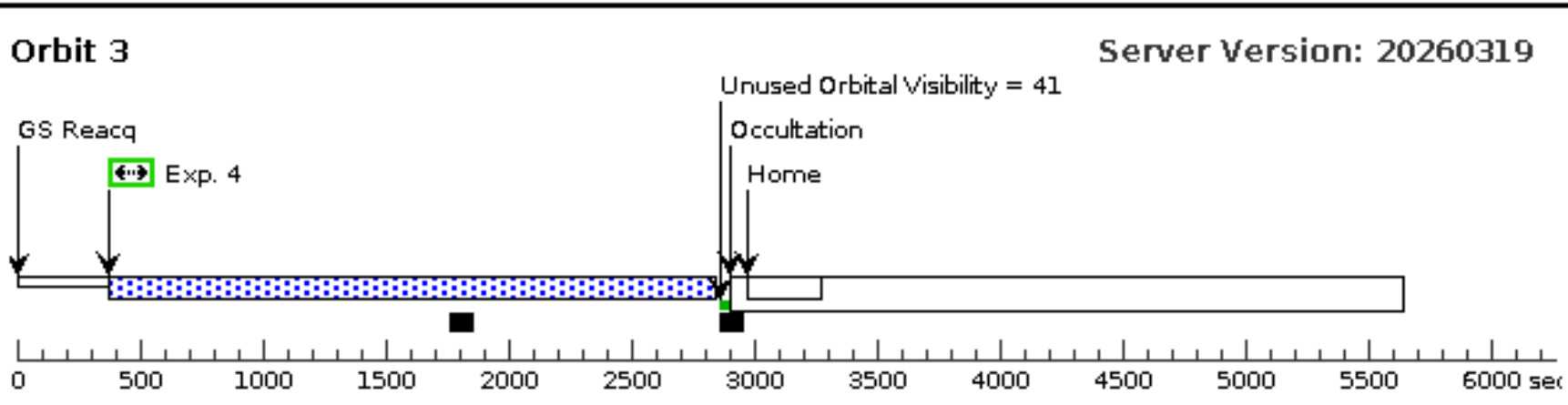
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (COS.ta.2336257)	(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	G160M/1600-FP1 (COS.sp.2336263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=1350			620 Secs (620 Secs) *[==>]*	***[1]***
3	G160M/1600-FP2 (COS.sp.2336263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=2; BUFFER-TIME=1350			2422 Secs (2422 Secs) *[==>]*	***[2]***
4	G160M/1600-FP3 (COS.sp.2336263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=1350			2422 Secs (2422 Secs) *[==>]*	***[3]***

Orbit Structure







Visit

Proposal 18249, G160M-Coverage2 (06) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: FUV coverage for emission lines, primarily CIV Using CENWAVE 1600 to avoid Si IV, which would be to bright in a flaring condition. This line is well detected in archival data.

Diagnostics

(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

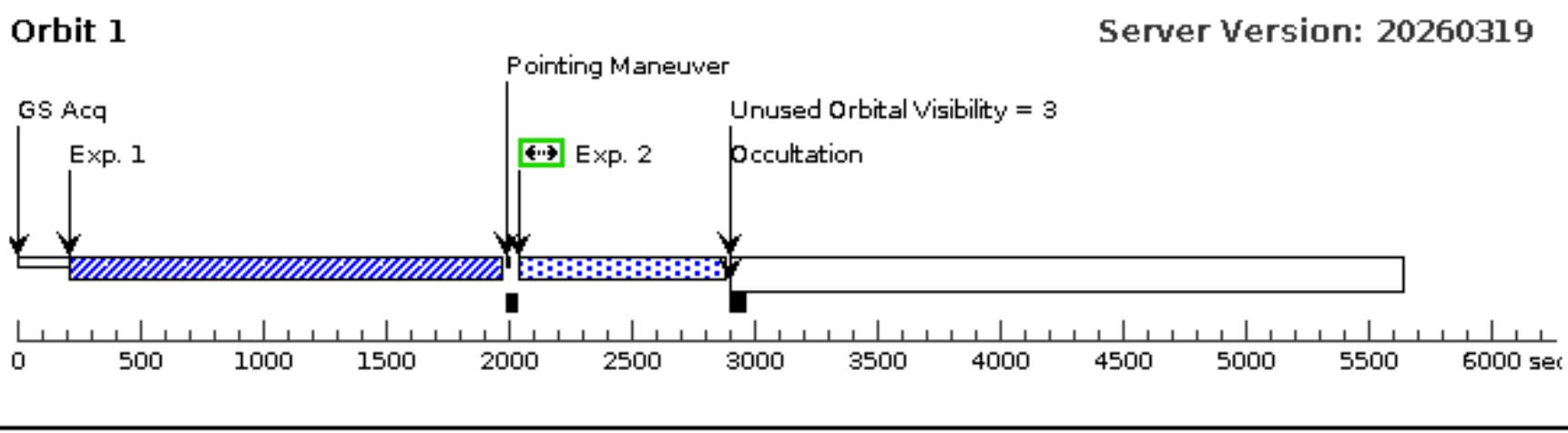
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

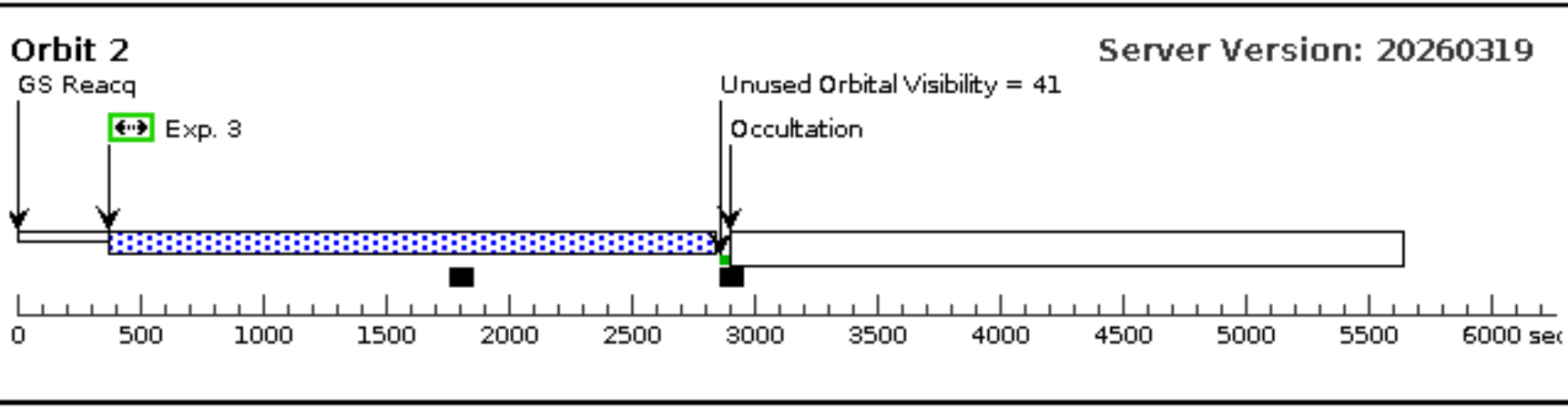
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

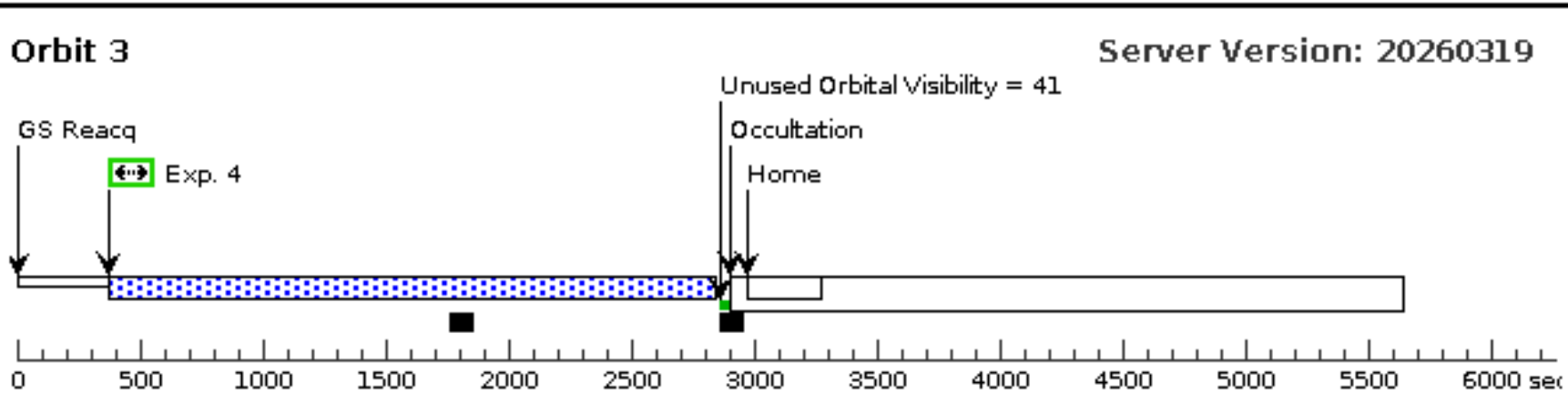
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (COS.ta.2336257)	(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	G160M/1600-FP1 (COS.sp.2336263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=1350			620 Secs (620 Secs) *[==>]*	***[1]***
3	G160M/1600-FP3 (COS.sp.2336263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=1350			2422 Secs (2422 Secs) *[==>]*	***[2]***
4	G160M/1600-FP4 (COS.sp.2336263)	(1) TOI-771	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=4; BUFFER-TIME=1350			2422 Secs (2422 Secs) *[==>]*	***[3]***

Orbit Structure







Visit

Proposal 18249, STIS-Coverage1 (07) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD

Special Requirements: SCHED 100%

Comments: UV/Vis characterization

Fixed Targets

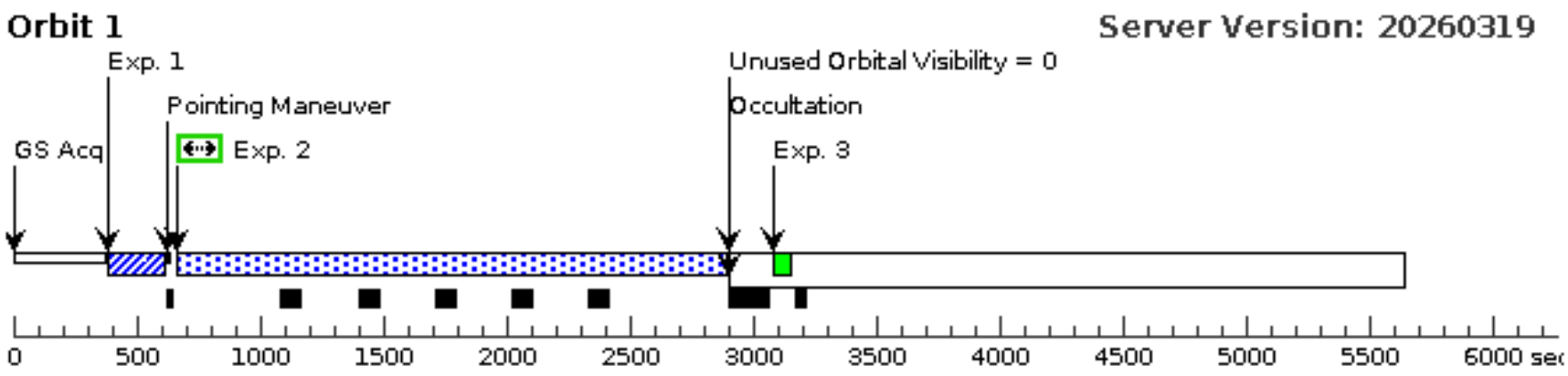
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

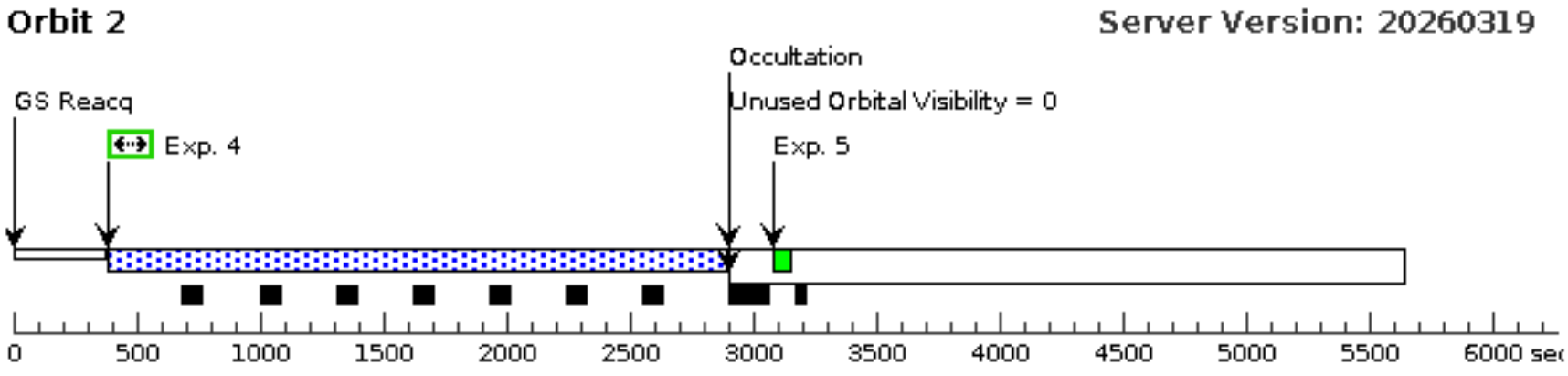
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

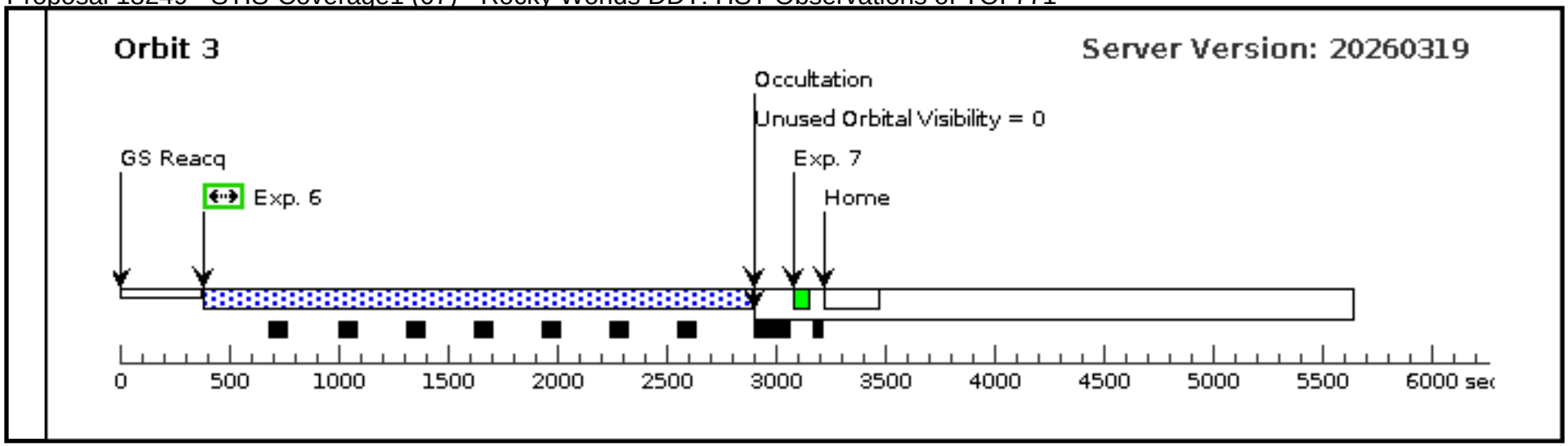
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (STIS.ta.2336259)	(1) TOI-771	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) *[==>]*	*[1]*
2	G230L exp1 (STIS.sp.2302015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=310; WAVECAL=NO			2100 Secs (2100 Secs) *[==>]*	*[1]*
3		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	*[1]*
4	G230L exp2 (STIS.sp.2302015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=310; WAVECAL=NO			2499 Secs (2499 Secs) *[==>]*	*[2]*
5		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	*[2]*
6	G230L exp1 (STIS.sp.2302015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=310; WAVECAL=NO			2499 Secs (2499 Secs) *[==>]*	*[3]*
7		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	*[3]*

Orbit Structure






Orbit 3
Server Version: 20260319
Occultation
Unused Orbital Visibility = 0
GS Reacq
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18249, STIS-Coverage2 (08) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD

Special Requirements: SCHED 100%

Comments: UV/Vis characterization

Fixed Targets

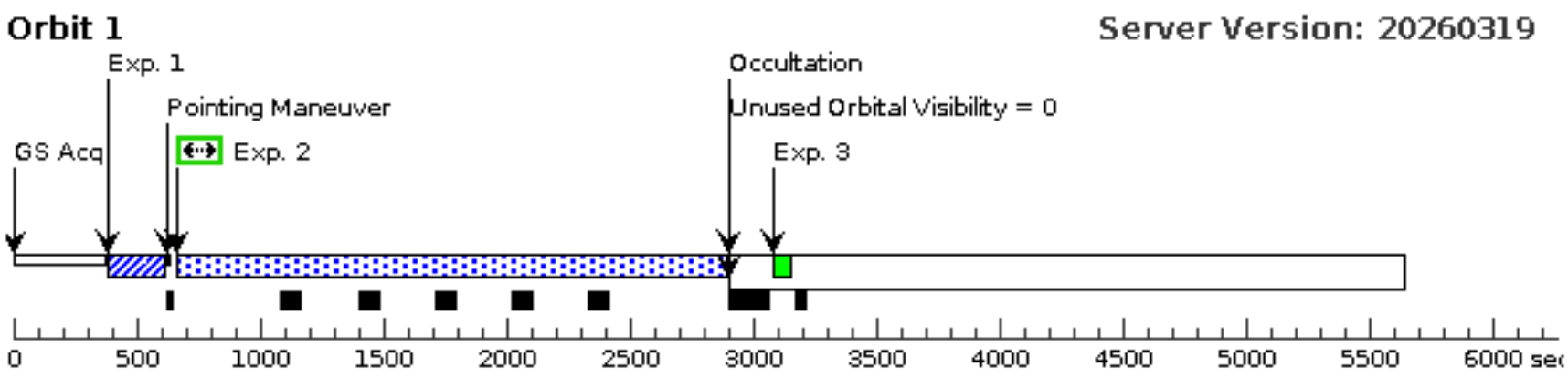
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	TOI-771 Alt Name1: 2MASS-J10562716-7259054	RA: 10 56 27.3381 (164.1139088d) Dec: -72 59 6.66 (-72.98518d) Equinox: J2000	Proper Motion RA: 39.3 mas/yr Proper Motion Dec: -76.417 mas/yr Parallax: 0.03944" Epoch of Position: 2016 Radial Velocity: -5.9 km/sec	V=11.75	Reference Frame: ICRS

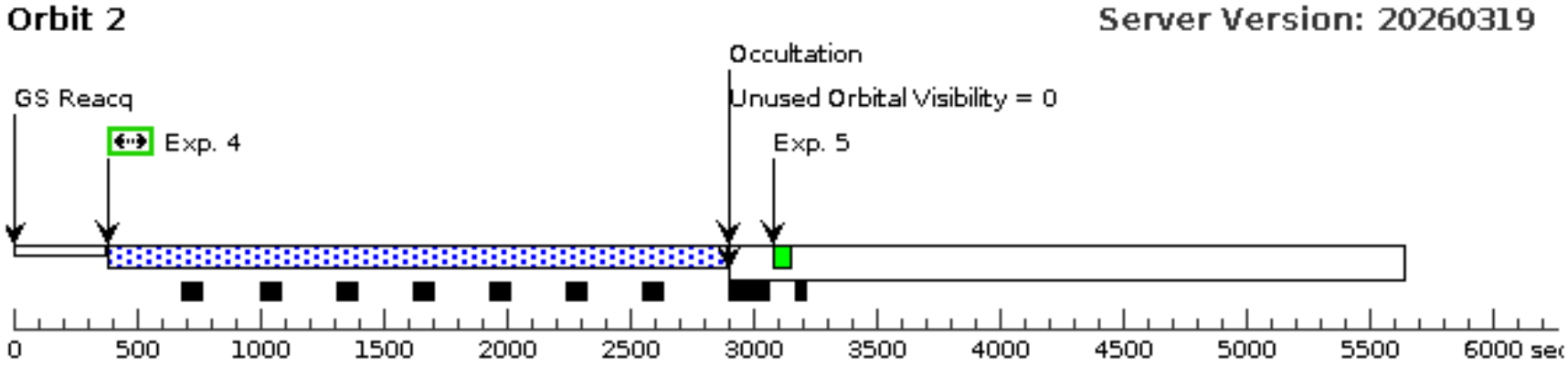
Comments:
Category=STAR
Description=[EXTRA-SOLAR PLANETARY SYSTEM, M V-IV]
Extended=NO

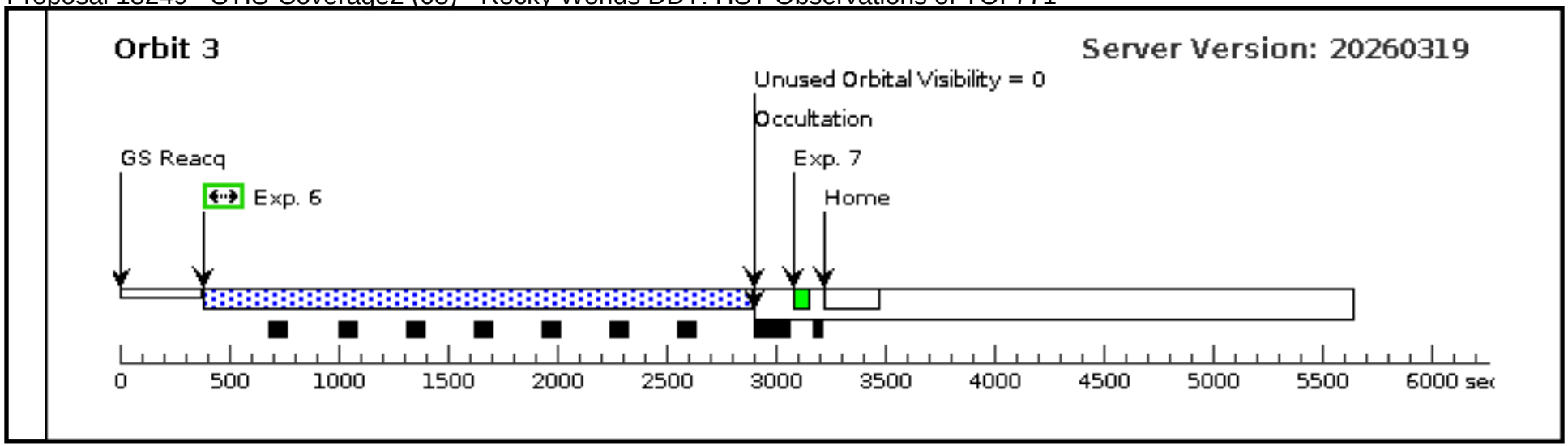
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Acquisition (STIS.ta.2336259)	(1) TOI-771	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) *[==>]*	 ***[1]***
2	G230L exp1 (STIS.sp.2302015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=3100; WAVECAL=NO			2100 Secs (2100 Secs) *[==>]*	 ***[1]***
3		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	***[1]***
4	G230L exp2 (STIS.sp.2302015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=3100; WAVECAL=NO			2499 Secs (2499 Secs) *[==>]*	 ***[2]***
5		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	***[2]***
6	G230L exp1 (STIS.sp.2302015)	(1) TOI-771	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=3100; WAVECAL=NO			2499 Secs (2499 Secs) *[==>]*	 ***[3]***
7		WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20260319
Unused Orbital Visibility = 0
Occultation
GS Reacq
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18249, STIS-Coverage3 (09) Tue May 12 21:00:25 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD

Special Requirements: SCHED 100%

Comments: UV/Vis 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.2336259)	(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, 52X0.2	G430L 4300 A	CR-SPLIT=5			1280 Secs (1280 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]* *[==>(Split 5)]*	*[1]*
4	G750L (STIS.sp.2300929)	(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]*

Orbit Structure