



17319 - Cycle 31 COS NUV Spectroscopic Sensitivity Monitor

Cycle: 31, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Jacqueline Hernandez (PI) (Contact)	Space Telescope Science Institute
Dr. Leonardo Dos Santos (CoI) (Contact)	Space Telescope Science Institute
Dr. Marc Rafelski (CoI)	Space Telescope Science Institute
Dr. Svea S Hernandez (CoI) (ESA Member)	Space Telescope Science Institute - ESA - JWST

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>
L1	(1) WD1057+719	COS/NUV	1	21-Jun-2024 11:00:16.0	yes
L2	(1) WD1057+719	COS/NUV	1	21-Jun-2024 11:00:16.0	yes
M1	(2) G191B2B	COS/NUV	1	21-Jun-2024 11:00:18.0	yes
M2	(2) G191B2B	COS/NUV	1	21-Jun-2024 11:00:19.0	yes

4 Total Orbits Used

ABSTRACT

This program monitors the sensitivity of three NUV gratings to detect any changes due to contamination or other causes. Observations execute twice a year (in approximately March and September). Beginning in Cycle 24, additional cenwaves were added for the medium-resolution gratings (G185M/2010, G285M/2850, G225M/2306, and G225M/2410). Beginning in Cycle 26, monitoring of G285M was discontinued due to its low sensitivity and lack of usage over the past few HST cycles. Observations with the G285M grating are Available but Unsupported; users interested in medium-resolution spectroscopic coverage between 2500 and 3200 Å are encouraged to use STIS instead.

OBSERVING DESCRIPTION

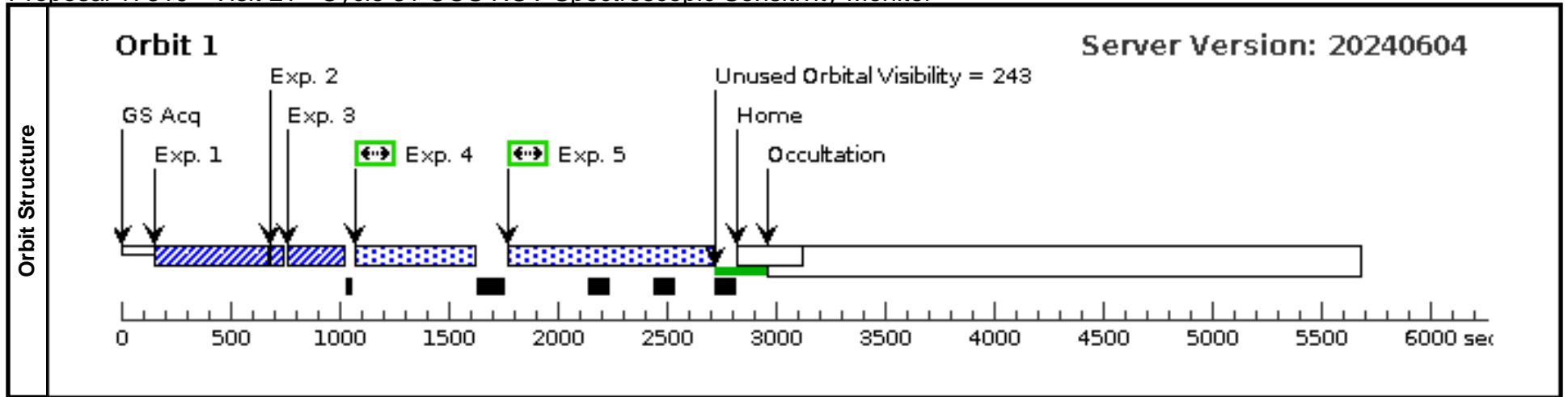
Obtain exposures in three NUV gratings -- G230L, G185M, and G225M -- two times a year in order to measure the time-dependent sensitivity. The first two gratings have stable behavior, while the last is experiencing a steady sensitivity decline. Visits for L modes (L1, L2) and M modes (M1, M2) are one orbit each, for a total of four orbits. This was increased from four to six orbits for Cycles 24 and 25, because four extra cenwaves were added to the M gratings. It was reduced back to four orbits in Cycle 26 due to the removal of G285M from the program.

For Cycles 29 and 31, the exposure and buffer times were updated for the G225M exposures due to the nontrivial TDS of that grating. No updates were needed for the G230L or G185M exposures.

Proposal 17319 - Visit L1 - Cycle 31 COS NUV Spectroscopic Sensitivity Monitor

Fri Jun 21 15:00:19 GMT 2024

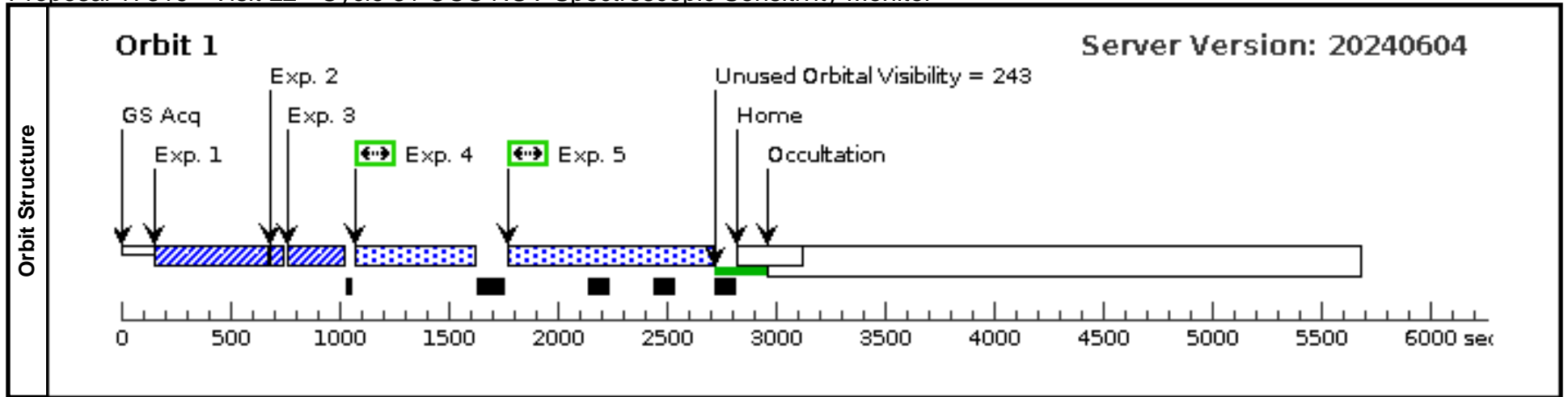
Visit	Proposal 17319, Visit L1, completed Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 03-MAR-2024:00:00:00 AND 24-MAR-2024:00:00:00									
	(Visit L1) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS (Visit L1) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	WD1057+719	RA: 11 00 34.2200 (165.1425833d) Dec: +71 38 2.99 (71.63416d) Equinox: J2000	Proper Motion RA: -0.00973 sec of time/yr Proper Motion Dec: -0.02 arcsec/yr Epoch of Position: 2000.0	V=14.68	Reference Frame: ICRS				
Comments: HST FASTEX standard PM, coords from USNOB GSC2 coords are 11:00:34.25, 71:38:02.97, 1997.19 epoch Category=STAR Description=[DA] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G230L - AC Q/SEARCH (COS.sa.102 6871)	(1) WD1057+719	COS/NUV, ACQ/SEARCH, PSA	G230L 2635 A	SCAN-SIZE=3; STEP-SIZE=1.767			0.7 Secs (0.7 Secs) [==>]	[1]
	2	G230L - AC Q/PEAKXD (COS.sa.102 6873)	(1) WD1057+719	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A				1.0 Secs (1 Secs) [==>]	[1]
	3	G230L - AC Q/PEAKD (COS.sa.102 6871)	(1) WD1057+719	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	CENTER=FLUX-W T-FLR; NUM-POS=9.0; STEP-SIZE=0.6			0.7 Secs (0.7 Secs) [==>]	[1]
	4	G230L - 263 5 A (COS.sp.102 6883)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=48 0; FP-POS=3			540.0 Secs (540 Secs) [==>]	[1]
	5	G230L - 295 0 A (COS.sp.102 6886)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=30 0; FP-POS=3			850.0 Secs (850 Secs) [==>]	[1]



Proposal 17319 - Visit L2 - Cycle 31 COS NUV Spectroscopic Sensitivity Monitor

Fri Jun 21 15:00:20 GMT 2024

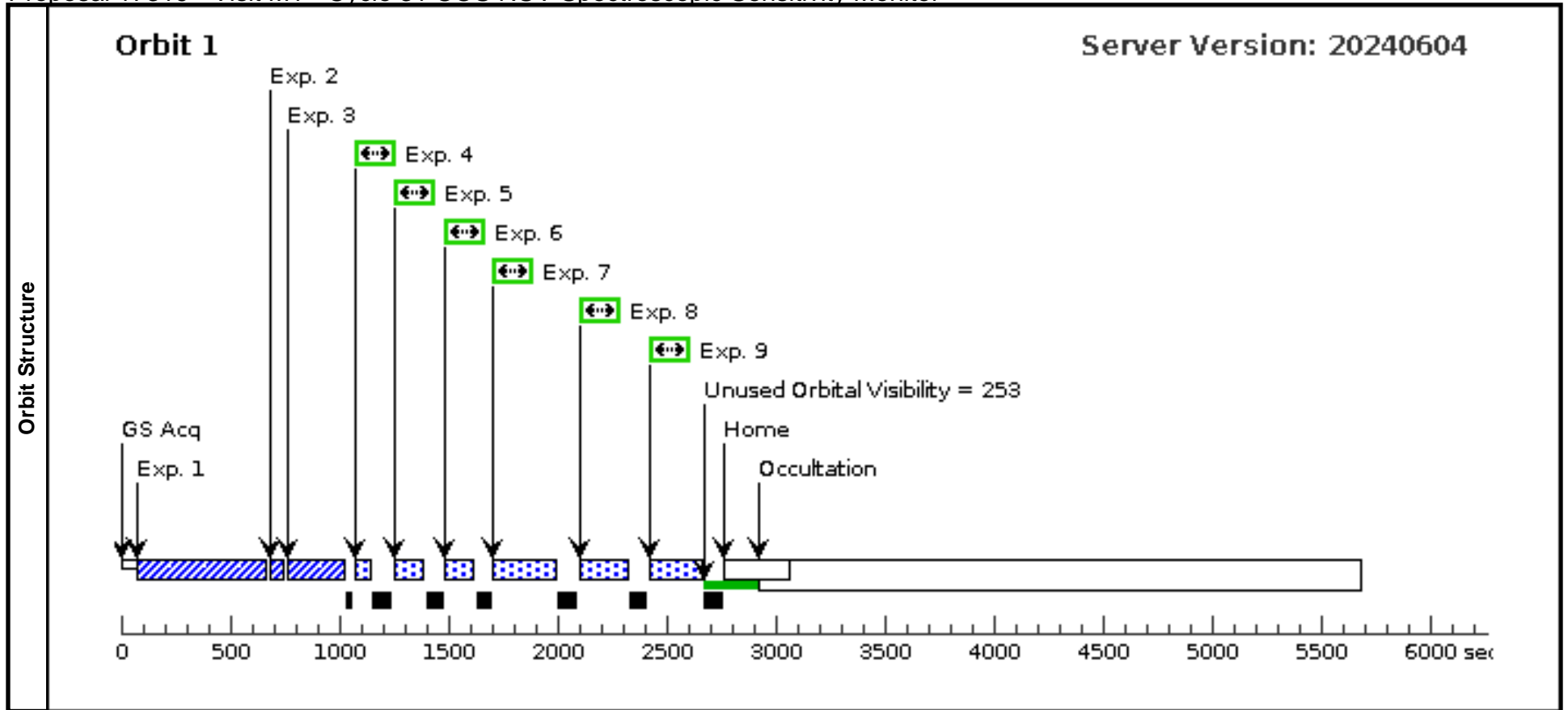
Visit	Proposal 17319, Visit L2, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 30-AUG-2024:00:00:00 AND 27-SEP-2024:00:00:00									
	(Visit L2) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS (Visit L2) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS									
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Proposal 17319 - Visit M1 - Cycle 31 COS NUV Spectroscopic Sensitivity Monitor

Fri Jun 21 15:00:20 GMT 2024

Visit	Proposal 17319, Visit M1, completed Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 03-MAR-2024:00:00:00 AND 24-MAR-2024:00:00:00																											
	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>(2)</td> <td>G191B2B</td> <td>RA: 05 05 30.6060 (76.3775250d) Dec: +52 49 52.74 (52.83132d) Equinox: J2000</td> <td>Proper Motion RA: 0.00071 sec of time/yr Proper Motion Dec: -0.0907 arcsec/yr Epoch of Position: 1991.25</td> <td>V=11.79</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: coords, PM from Hipparcos</i> <i>Category=STAR</i> <i>Description=[DA]</i> <i>Extended=NO</i> </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	G191B2B	RA: 05 05 30.6060 (76.3775250d) Dec: +52 49 52.74 (52.83132d) Equinox: J2000	Proper Motion RA: 0.00071 sec of time/yr Proper Motion Dec: -0.0907 arcsec/yr Epoch of Position: 1991.25	V=11.79	Reference Frame: ICRS	<i>Comments: coords, PM from Hipparcos</i> <i>Category=STAR</i> <i>Description=[DA]</i> <i>Extended=NO</i>				
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	1	G185M - A CQ/SEARCA H (COS.sa.102 6877)	(2) G191B2B	COS/NUV, ACQ/SEARCH, PSA	G185M 2010 A	STEP-SIZE=1.767; SCAN-SIZE=3			1.0 Secs (1 Secs) [==>]	[1]																		
	2	G185M - A CQ/PEAKXD (COS.sa.102 6879)	(2) G191B2B	COS/NUV, ACQ/PEAKXD, PSA	G185M 2010 A				1.0 Secs (1 Secs) [==>]	[1]																		
	3	G185M - A CQ/PEAKD (COS.sa.102 6877)	(2) G191B2B	COS/NUV, ACQ/PEAKD, PSA	G185M 2010 A	STEP-SIZE=0.6; NUM-POS=9.0			1.0 Secs (1 Secs) [==>]	[1]																		
	4	G185M - 20 10 A (COS.sp.102 6887)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=80; FP-POS=3			56 Secs (56 Secs) [==>]	[1]																		
	5	G185M - 19 21 A (COS.sp.102 6891)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=80; FP-POS=3			47 Secs (47 Secs) [==>]	[1]																		
	6	G185M - 17 86 A (COS.sp.102 6892)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1786 A	BUFFER-TIME=80; FP-POS=3			41 Secs (41 Secs) [==>]	[1]																		
	7	G225M - 24 10 A (COS.sp.186 5219)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2410 A	BUFFER-TIME=19 8; FP-POS=3			136 Secs (136 Secs) [==>]	[1]																		
	8	G225M - 23 06 A (COS.sp.186 5220)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2306 A	BUFFER-TIME=19 7; FP-POS=3			130 Secs (130 Secs) [==>]	[1]																		
	9	G225M - 21 86 A (COS.sp.186 5221)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2186 A	BUFFER-TIME=22 3; FP-POS=3			151 Secs (151 Secs) [==>]	[1]																		



Proposal 17319 - Visit M2 - Cycle 31 COS NUV Spectroscopic Sensitivity Monitor

Fri Jun 21 15:00:20 GMT 2024

Visit	Proposal 17319, Visit M2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 30-AUG-2024:00:00:00 AND 20-SEP-2024:00:00:00																											
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