



## 16329 - Cycle 28 COS NUV Spectroscopic Sensitivity Monitor

Cycle: 28, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
<b>Dr. William J. Fischer (PI) (Contact)</b>	<b>Space Telescope Science Institute</b>	<b>wfischer@stsci.edu</b>
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Kate Rowlands (CoI) (Contact)	Space Telescope Science Institute	krowlands@stsci.edu

### 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	06-Jul-2020 14:01:14.0	yes
L2	(1) WD1057+719	COS/NUV	1	06-Jul-2020 14:01:15.0	yes
M1	(2) G191B2B	COS/NUV	1	06-Jul-2020 14:01:16.0	yes
M2	(2) G191B2B	COS/NUV	1	06-Jul-2020 14:01:18.0	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 February and August). 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. Given these considerations, the user community is urged to use STIS instead. If for any reason there is a need to use COS/G285M, the monitoring of this mode will be reinstated.

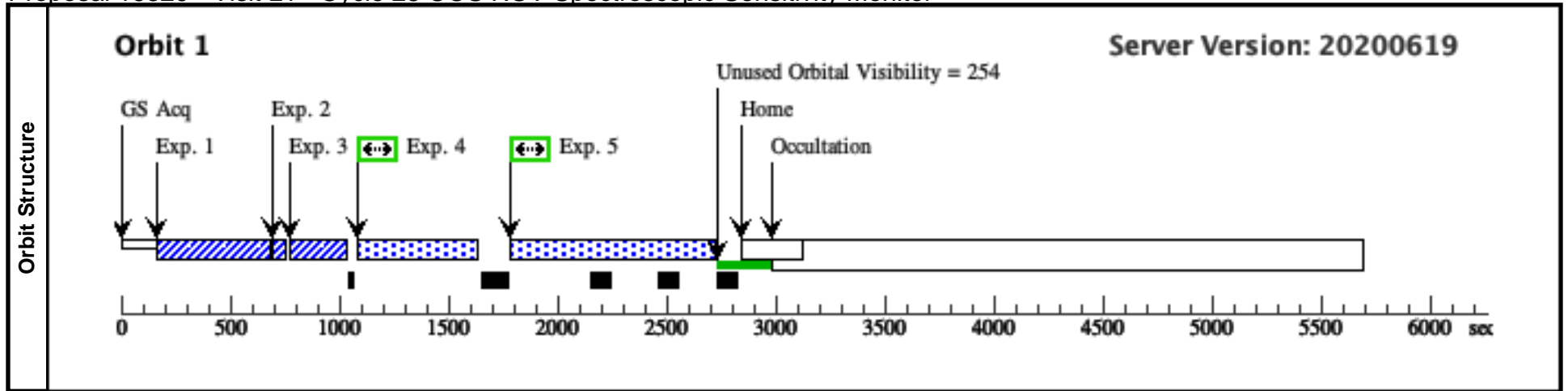
**OBSERVING DESCRIPTION**

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.

Proposal 16329 - Visit L1 - Cycle 28 COS NUV Spectroscopic Sensitivity Monitor

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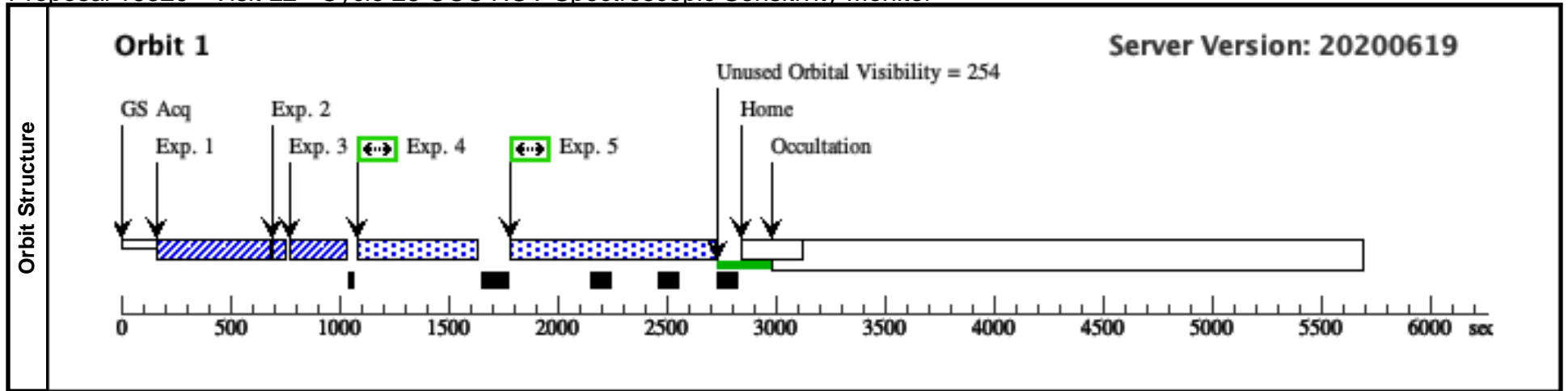
Visit		<b>Proposal 16329, Visit L1</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 20-JAN-2021:00:00:00 AND 10-FEB-2021:00:00:00								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(1)	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			
	<i>Comments: HST FASTEX standard PM, coords from USNOB</i>  <i>GSC2 coords are 11:00:34.25, 71:38:02.97, 1997.19 epoch</i> 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 16329 - Visit L2 - Cycle 28 COS NUV Spectroscopic Sensitivity Monitor

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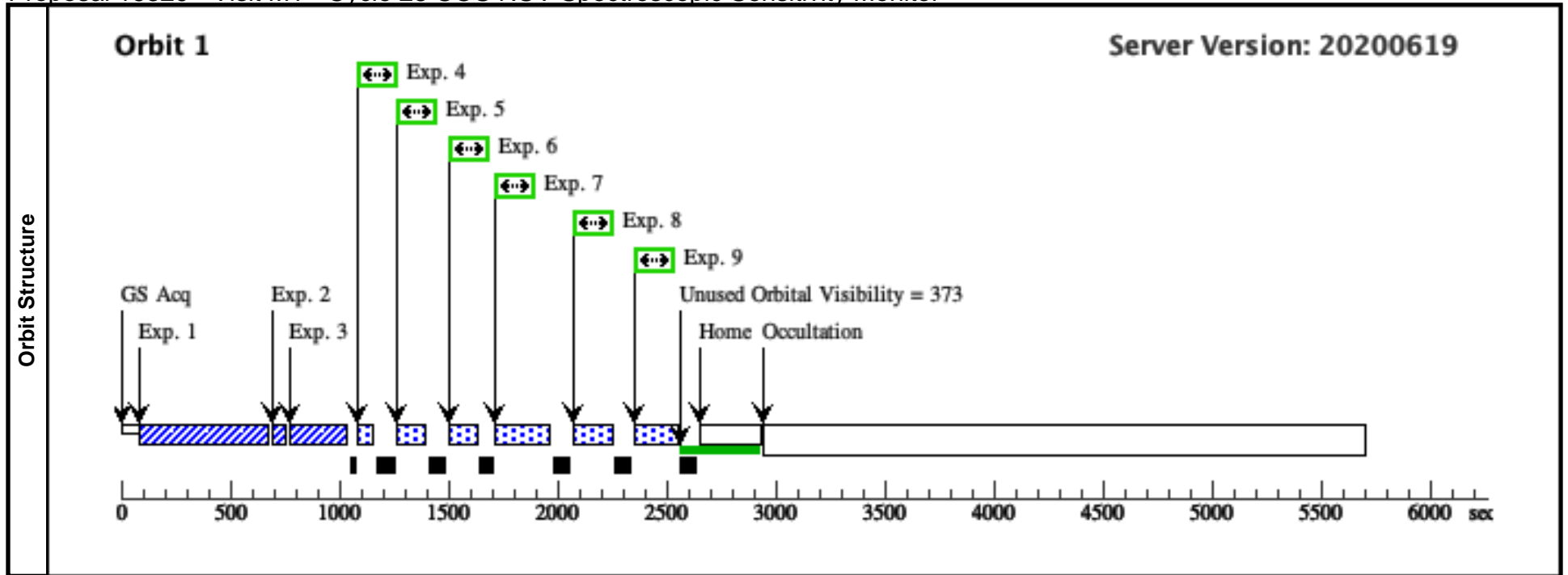
Visit	<b>Proposal 16329, Visit L2</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 01-AUG-2021:00:00:00 AND 20-AUG-2021:00:00:00																											
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Proposal 16329 - Visit M1 - Cycle 28 COS NUV Spectroscopic Sensitivity Monitor

Mon Jul 06 18:01:19 GMT 2020

Visit	<b>Proposal 16329, Visit M1</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 20-JAN-2021:00:00:00 AND 10-FEB-2021:00:00:00																					
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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.102 6905)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2410 A	BUFFER-TIME=15 7; FP-POS=3			101 Secs (101 Secs) [==>]	[1]												
	8	G225M - 23 06 A (COS.sp.102 6906)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2306 A	BUFFER-TIME=15 6; FP-POS=3			96 Secs (96 Secs) [==>]	[1]												
	9	G225M - 21 86 A (COS.sp.102 6907)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2186 A	BUFFER-TIME=17 8; FP-POS=3			112 Secs (112 Secs) [==>]	[1]												





Proposal 16329 - Visit M2 - Cycle 28 COS NUV Spectroscopic Sensitivity Monitor

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