



13973 - NUV Spectroscopic Sensitivity Monitoring

Cycle: 22, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Joanna Taylor (PI) (Contact)	Space Telescope Science Institute	jotaylor@stsci.edu
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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	14-Oct-2014 21:08:36.0	yes
L2	(1) WD1057+719	COS/NUV	1	14-Oct-2014 21:08:38.0	yes
L3	(1) WD1057+719	COS/NUV	1	14-Oct-2014 21:08:39.0	yes
M1	(2) G191B2B	COS/NUV	1	14-Oct-2014 21:08:41.0	yes
M2	(2) G191B2B	COS/NUV	1	14-Oct-2014 21:08:43.0	yes
M3	(2) G191B2B	COS/NUV	1	14-Oct-2014 21:08:45.0	yes

6 Total Orbits Used

ABSTRACT

Purpose is to monitor sensitivity of each NUV grating mode to detect any change due to contamination or other causes. The same basic strategy as employed in previous cycles is used here.

The G285M observations are falling slightly below the required SNR of 26. However, G285M is only used for 4 Target Acquisitions in Cycle 22. We are currently meeting our TDS characterization requirements (2%) with the current G285M SNR as well.

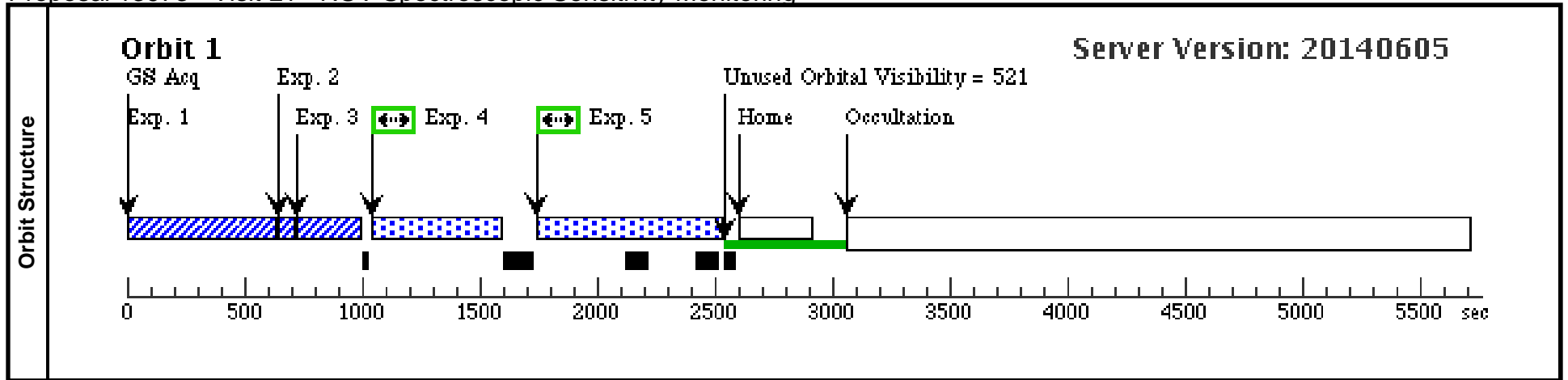
OBSERVING DESCRIPTION

Obtain exposures in all NUV gratings -- G230L, G185M, G225M, and G285M -- 3 times a year. The first two gratings have stable behavior, while the last two are experiencing steady sensitivity declines.

Proposal 13973 - Visit L1 - NUV Spectroscopic Sensitivity Monitoring

Wed Oct 15 01:08:47 GMT 2014

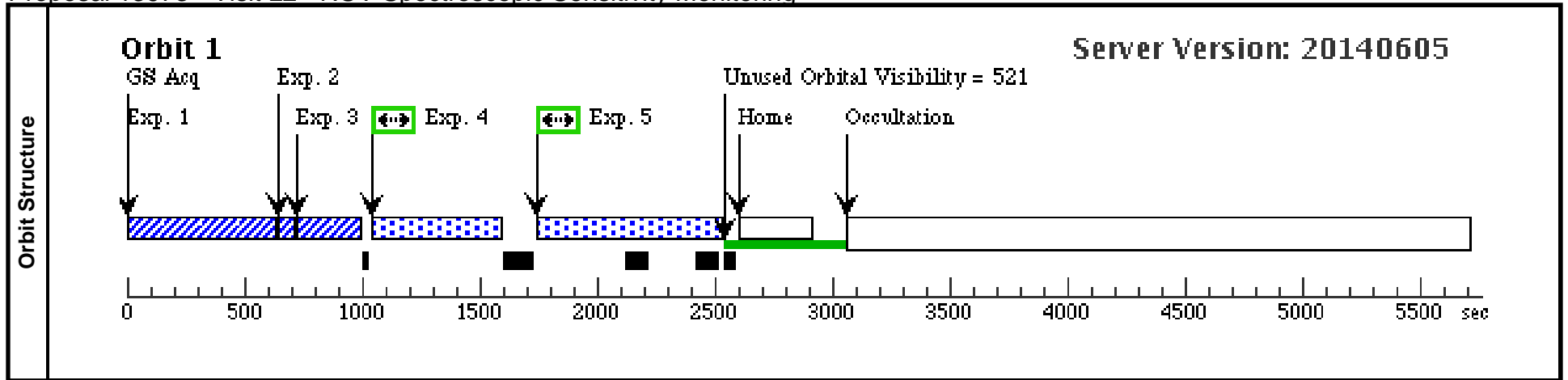
Visit	Proposal 13973, Visit L1, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 20-JAN-2015:00:00:00 AND 26-JAN-2015:00:00:00									
Diagnostics	(Visit L1) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
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>									
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.641 044)	(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.641 045)	(1) WD1057+719	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A				0.7 Secs (0.7 Secs) [==>]	[1]
	3	G230L - AC Q/PEAKD (COS.sa.641 044)	(1) WD1057+719	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	CENTER=FLUX-W T-FLR; NUM-POS=9.0; STEP-SIZE=1.			0.7 Secs (0.7 Secs) [==>]	[1]
	4	G230L - 263 5 A (COS.sp.641 047)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=47 1; FP-POS=3			540.0 Secs (540 Secs) [==>]	[1]
	5	G230L - 295 0 A (COS.sp.641 048)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=30 4; FP-POS=3			700.0 Secs (700 Secs) [==>]	[1]



Proposal 13973 - Visit L2 - NUV Spectroscopic Sensitivity Monitoring

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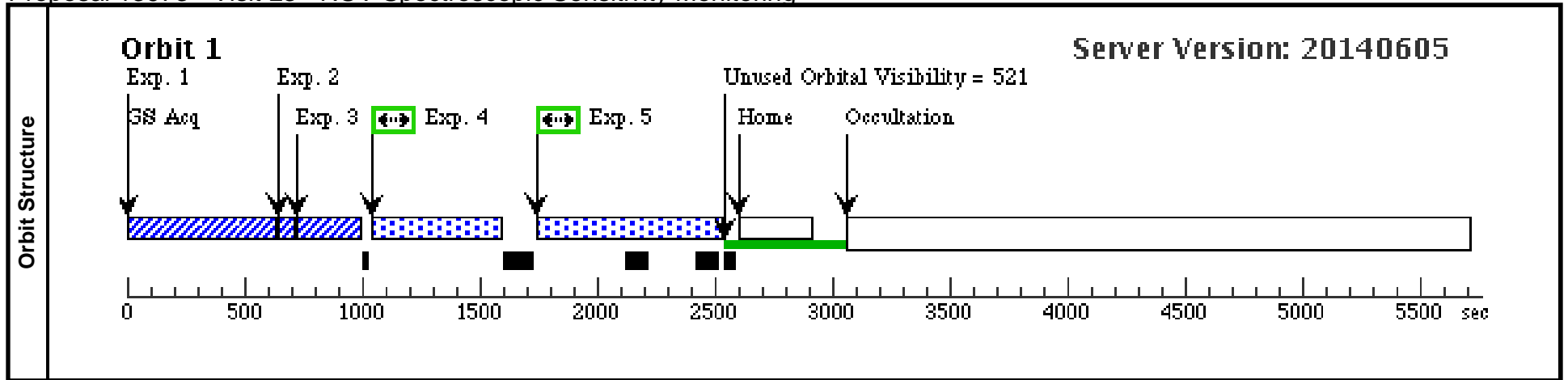
Visit	Proposal 13973, Visit L2, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 16-APR-2015:00:00:00 AND 22-APR-2015:00:00:00									
Diagnostics	(Visit L2) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
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>									
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.641 044)	(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.641 045)	(1) WD1057+719	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A				1.0 Secs (1 Secs) [==>]	[1]
	3	G230L - AC Q/PEAKD (COS.sa.641 044)	(1) WD1057+719	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	CENTER=FLUX-W T-FLR; NUM-POS=9.0; STEP-SIZE=1.			0.7 Secs (0.7 Secs) [==>]	[1]
	4	G230L - 263 5 A (COS.sp.641 047)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=47 1; FP-POS=3			540.0 Secs (540 Secs) [==>]	[1]
	5	G230L - 295 0 A (COS.sp.641 048)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=30 4; FP-POS=3			700.0 Secs (700 Secs) [==>]	[1]



Proposal 13973 - Visit L3 - NUV Spectroscopic Sensitivity Monitoring

Wed Oct 15 01:08:47 GMT 2014

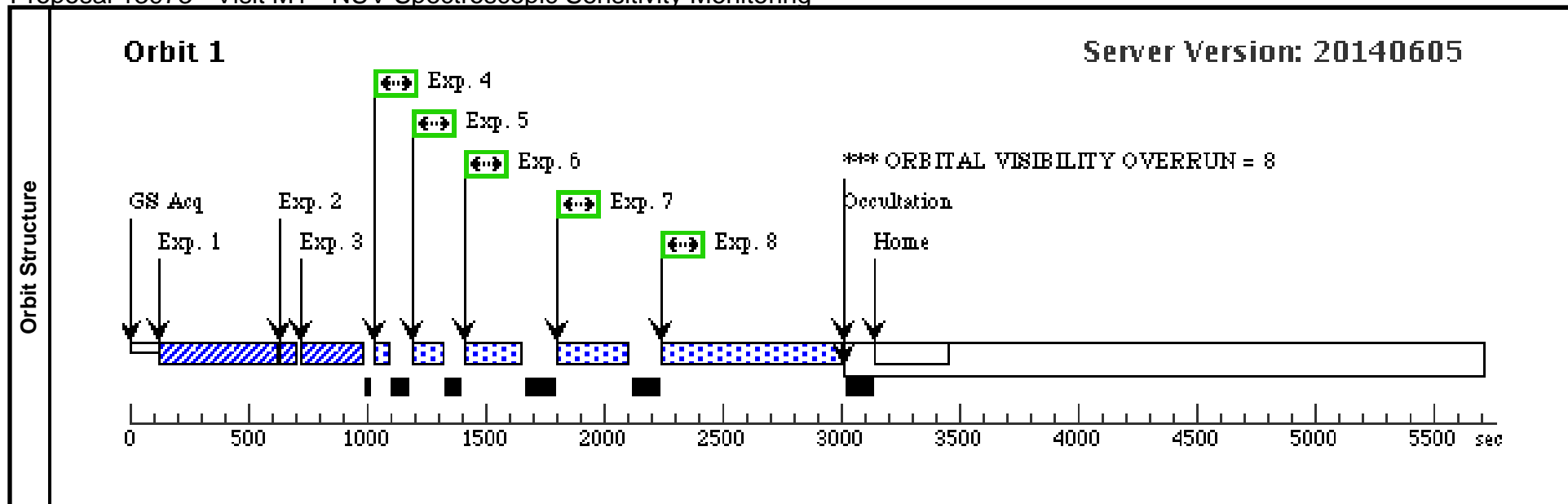
Visit	Proposal 13973, Visit L3, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 22-SEP-2015:00:00:00 AND 28-SEP-2015:00:00:00									
Diagnostics	(Visit L3) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
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>									
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.641 044)	(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.641 045)	(1) WD1057+719	COS/NUV, ACQ/PEAKXD, PSA	G230L 2635 A				1.0 Secs (1 Secs) [==>]	[1]
	3	G230L - AC Q/PEAKD (COS.sa.641 044)	(1) WD1057+719	COS/NUV, ACQ/PEAKD, PSA	G230L 2635 A	CENTER=FLUX-W T-FLR; NUM-POS=9.0; STEP-SIZE=1.			0.7 Secs (0.7 Secs) [==>]	[1]
	4	G230L - 263 5 A (COS.sp.641 047)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=47 1; FP-POS=3			540.0 Secs (540 Secs) [==>]	[1]
	5	G230L - 295 0 A (COS.sp.641 048)	(1) WD1057+719	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=30 4; FP-POS=3			700.0 Secs (700 Secs) [==>]	[1]



Proposal 13973 - Visit M1 - NUV Spectroscopic Sensitivity Monitoring

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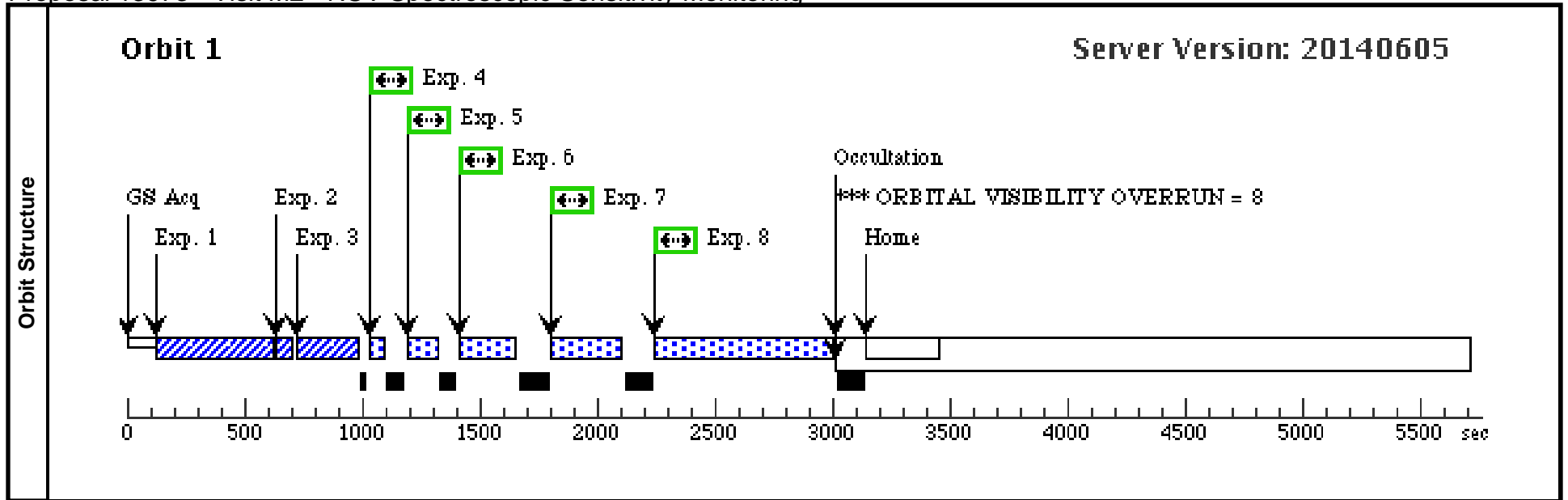
Visit	Proposal 13973, Visit M1, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 20-JAN-2015:00:00:00 AND 26-JAN-2015:00:00:00									
	(Visit M1) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting. (Visit M1) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	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>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G185M - A CQ/SEARCH H (COS.sa.641 049)	(2) G191B2B	COS/NUV, ACQ/SEARCH, PSA	G185M 1921 A	STEP-SIZE=1.767; SCAN-SIZE=3			1.0 Secs (1 Secs) [==>]	[1]
	2	G185M - A CQ/PEAKXD D (COS.sa.641 050)	(2) G191B2B	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				1.0 Secs (1 Secs) [==>]	[1]
	3	G185M - A CQ/PEAKD (COS.sa.641 051)	(2) G191B2B	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	STEP-SIZE=0.6; NUM-POS=9.0			1.0 Secs (1 Secs) [==>]	[1]
	4	G185M - 19 21 A (COS.sp.641 054)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=80; FP-POS=3			47.0 Secs (47 Secs) [==>]	[1]
	5	G185M - 17 86A (COS.sp.641 055)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1786 A	BUFFER-TIME=80; FP-POS=3			42.0 Secs (42 Secs) [==>]	[1]
	6	G225M - 21 86 A (COS.sp.641 056)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2186 A	BUFFER-TIME=80. ; FP-POS=3			92.0 Secs (92 Secs) [==>]	[1]
	7	G285M - 26 17 A (COS.sp.641 057)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G285M 2617 A	BUFFER-TIME=17 9.0; FP-POS=3			180.0 Secs (180 Secs) [==>]	[1]
	8	G285M - 30 94 A (COS.sp.641 058)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G285M 3094 A	BUFFER-TIME=63 9.0; FP-POS=3			675.0 Secs (675 Secs) [==>]	[1]



Proposal 13973 - Visit M2 - NUV Spectroscopic Sensitivity Monitoring

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Visit	Proposal 13973, Visit M2, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 21-APR-2015:00:00:00 AND 27-APR-2015:00:00:00									
	(Visit M2) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit M2) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
Fixed Targets	#	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>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G185M - A CQ/SEARCH H (COS.sa.641 049)	(2) G191B2B	COS/NUV, ACQ/SEARCH, PSA	G185M 1921 A	STEP-SIZE=1.767; SCAN-SIZE=3			1.0 Secs (1 Secs) [==>]	[1]
	2	G185M - A CQ/PEAKXD D (COS.sa.641 050)	(2) G191B2B	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				1.0 Secs (1 Secs) [==>]	[1]
	3	G185M - A CQ/PEAKD (COS.sa.641 051)	(2) G191B2B	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	STEP-SIZE=0.6; NUM-POS=9.0			1.0 Secs (1 Secs) [==>]	[1]
	4	G185M - 19 21 A (COS.sp.641 054)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=80; FP-POS=3			47.0 Secs (47 Secs) [==>]	[1]
	5	G185M - 17 86A (COS.sp.641 055)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1786 A	BUFFER-TIME=80; FP-POS=3			42.0 Secs (42 Secs) [==>]	[1]
	6	G225M - 21 86 A (COS.sp.641 056)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2186 A	BUFFER-TIME=80. ; FP-POS=3			92.0 Secs (92 Secs) [==>]	[1]
	7	G285M - 26 17 A (COS.sp.641 057)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G285M 2617 A	BUFFER-TIME=17 9; FP-POS=3			180.0 Secs (180 Secs) [==>]	[1]
	8	G285M - 30 94 A (COS.sp.641 058)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G285M 3094 A	BUFFER-TIME=63 9; FP-POS=3			675.0 Secs (675 Secs) [==>]	[1]



Proposal 13973 - Visit M3 - NUV Spectroscopic Sensitivity Monitoring

Wed Oct 15 01:08:48 GMT 2014

Visit	Proposal 13973, Visit M3, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV Special Requirements: SCHED 100%; BETWEEN 22-SEP-2015:00:00:00 AND 28-SEP-2015:00:00:00									
	(Visit M3) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting. (Visit M3) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	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>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G185M - A CQ/SEARCH H (COS.sa.641 049)	(2) G191B2B	COS/NUV, ACQ/SEARCH, PSA	G185M 1921 A	STEP-SIZE=1.767; SCAN-SIZE=3			1.0 Secs (1 Secs) [==>]	[1]
	2	G185M - A CQ/PEAKXD D (COS.sa.641 050)	(2) G191B2B	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				1.0 Secs (1 Secs) [==>]	[1]
	3	G185M - A CQ/PEAKD (COS.sa.641 051)	(2) G191B2B	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	STEP-SIZE=0.6; NUM-POS=9.0			1.0 Secs (1 Secs) [==>]	[1]
	4	G185M - 19 21 A (COS.sp.641 054)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=80; FP-POS=3			47.0 Secs (47 Secs) [==>]	[1]
	5	G185M - 17 86A (COS.sp.641 055)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G185M 1786 A	BUFFER-TIME=80; FP-POS=3			42.0 Secs (42 Secs) [==>]	[1]
	6	G225M - 21 86 A (COS.sp.641 056)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G225M 2186 A	BUFFER-TIME=80. ; FP-POS=3			92.0 Secs (92 Secs) [==>]	[1]
	7	G285M - 26 17 A (COS.sp.641 057)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G285M 2617 A	BUFFER-TIME=17 9; FP-POS=3			180.0 Secs (180 Secs) [==>]	[1]
	8	G285M - 30 94 A (COS.sp.641 058)	(2) G191B2B	COS/NUV, TIME-TAG, PSA	G285M 3094 A	BUFFER-TIME=63 9; FP-POS=3			675.0 Secs (675 Secs) [==>]	[1]

