



## 14854 - COS FUV Spectroscopic Sensitivity Monitoring

Cycle: 24, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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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>
01	(1) WD0308-565	COS/FUV COS/NUV	1	13-Sep-2017 16:01:41.0	yes
02	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:01:44.0	yes
03	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	13-Sep-2017 16:01:45.0	yes
04	(1) WD0308-565	COS/FUV COS/NUV	1	13-Sep-2017 16:01:46.0	yes

Proposal 14854 (STScI Edit Number: 2, Created: Wednesday, September 13, 2017 3:02:10 PM EST) - Overview

<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>
05	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:01:48.0	yes
06	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	13-Sep-2017 16:01:50.0	yes
07	(1) WD0308-565	COS/FUV COS/NUV	1	13-Sep-2017 16:01:51.0	yes
08	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:01:52.0	yes
09	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	13-Sep-2017 16:01:54.0	yes
10	(1) WD0308-565	COS/FUV COS/NUV	1	13-Sep-2017 16:01:55.0	yes
11	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:01:57.0	yes
13	(1) WD0308-565	COS/FUV COS/NUV	1	13-Sep-2017 16:01:59.0	yes
17	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:02:00.0	yes
18	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	13-Sep-2017 16:02:03.0	yes
19	(1) WD0308-565	COS/FUV COS/NUV	1	13-Sep-2017 16:02:04.0	yes

<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>
20	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:02:05.0	yes
21	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	13-Sep-2017 16:02:07.0	yes
22	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	13-Sep-2017 16:02:08.0	yes
23	(2) GD71	COS/FUV COS/NUV	1	13-Sep-2017 16:02:09.0	yes

26 Total Orbits Used

### **ABSTRACT**

Monitor the sensitivity of each FUV grating mode to detect any change due to contamination or other causes. The FUV gratings are the most heavily used modes on COS and have also experienced several changes in the time-dependent spectroscopic sensitivity since launch. These trends are grating, segment, and wavelength dependent.

### **OBSERVING DESCRIPTION**

To track the TDS as a function of wavelength we obtain exposures with all FUV gratings every month. There are 2 types of monitoring sequences which occur on alternating months. (i) Full monitoring sequence every other month (except May - Jul when GD71 is unavailable): 3 orbits in 2 visits. The 1 orbit visit (GD71) covers the G130M/1096/FUVB, G160M/1577/FUVA, and G160M/1623/FUVA modes. The 2 orbit visit (WD0308) covers G130M/1222, G130M/1291, G130M/1327, G130M/1055/FUVA, G160M/1577/FUVB, G160M/1623/FUVB, G140L/1105, G140L/1280 modes. These comprise the reddest and bluest central wavelengths of each grating with additional coverage of the G130M blue modes. (ii) Reduced monitoring sequence in alternating months: 1 orbit visit (WD0308) to monitor the complete wavelength range of the standard modes using one central wavelength per grating. The modes covered are G130M/1291, G160M/1623, and G140L/1280. To transition from LP3 to LP4 we will execute a complete visit in July at LP4 instead of a reduced one (total of 2 orbits since GD71 is not visible), and a correspondent complete orbit at LP3 (2 orbits, standard mode only). In case of zero point issues in the LP3-LP4 transfer we will reinstate one contingency GD71 orbit at LP3 to be

executed in August.

SNR requirements:

- SNR of 15 per resel at wavelength of least sensitivity for the standard modes, SNR of 25 per resel at wavelength of most sensitivity for the blue modes. For the blue modes, this will ensure  $S/N > 15$  for  $\lambda > 1030$  ang for 1096/FUVB,  $\lambda > 1130$  Ang for 1055/FUVA and 1222/FUVB
- TDS calibration better than 2% for standard modes and 10% for blue modes

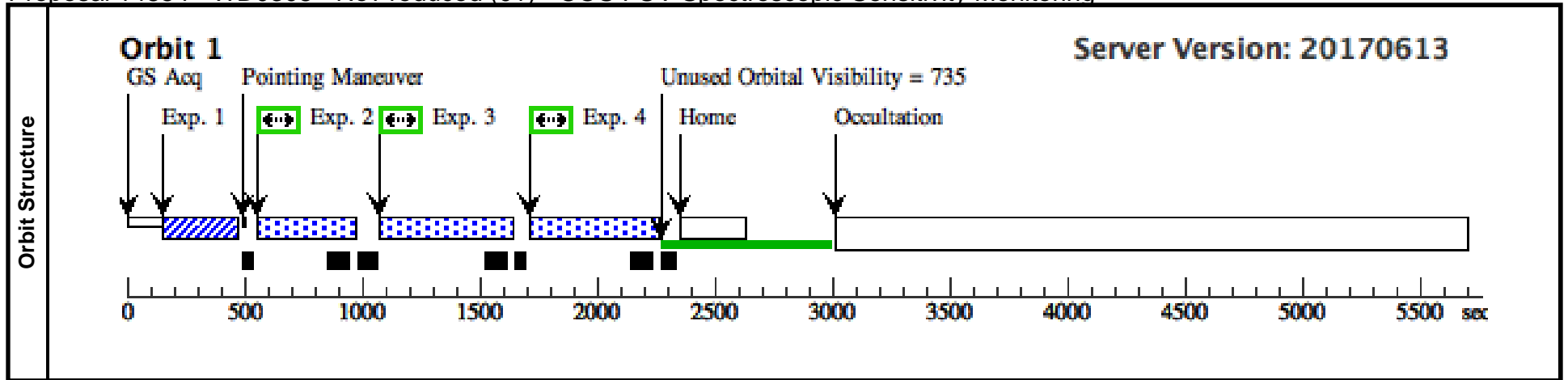
Time constraints:

- Reduced monitoring sequence should occur every 2 months starting in November 2016
- Complete monitoring sequence should occur every 2 months starting in December 2016
- GD71 is unschedulable May-July 2017
- April complete visit to be executed within 2 weeks from LP4 special calibration program. Visit on hold until special program dates are set.
- July complete visits to be executed before and after LP4 move. Visits on hold until LP4 move dates are set.

Proposal 14854 - WD0308 - Nov reduced (01) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:10 GMT 2017

<b>Visit</b>	<b>Proposal 14854, WD0308 - Nov reduced (01), completed</b> <b>Diagnostic Status: Error</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 21-NOV-2016:00:00:00 AND 27-NOV-2016:00:00:00									
	(G130M/1291 (01.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode. (WD0308 - Nov reduced (01)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
<b>Diagnosics</b>										
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS				
Comments: Coordinates from Charle's proposal Extended=NO										
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) [==>]	[1]
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences negligible.										
2	G130M/1291 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3				244 Secs (244 Secs) [==>]	[1]
Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.										
3	G160M/1623 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0				400 Secs (400 Secs) [==>]	[1]
Comments: ETC buffer time is 719, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 300 cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.										
4	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3				280 Secs (280 Secs) [==>]	[1]
Comments: ETC buffer time is 451, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.										



Proposal 14854 - WD0308 - Dec complete (02) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:10 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, WD0308 - Dec complete (02), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 26-DEC-2016:00:00:00 AND 01-JAN-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p>																	
	<p>(G130M/1222 (02.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1291 (02.003)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1327 (02.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1055/FUVA (02.005)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(WD0308 - Dec complete (02)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(G130M/1327 (02.004)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.</p>																	
<b>Fixed Targets</b>	<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>WD0308-565</td> <td>RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000</td> <td>Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000</td> <td>V=14.07+/-0.02</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Coordinates from Charle's proposal Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS													

Proposal 14854 - WD0308 - Dec complete (02) - COS FUV Spectroscopic Sensitivity Monitoring

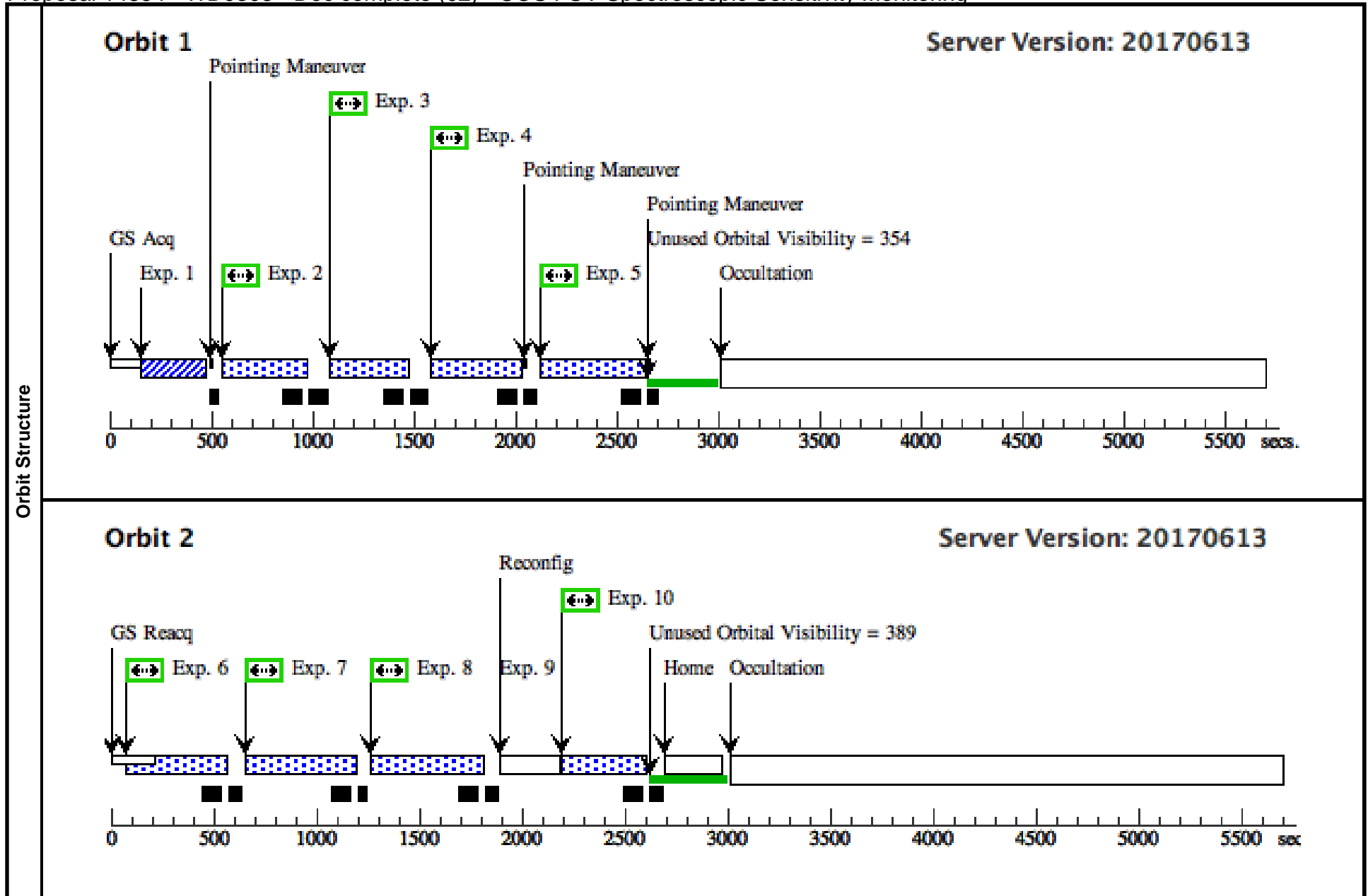
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3		45 Secs (45 Secs) [==>]	[1]
<p><i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3			226 Secs (226 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 395 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 126 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
3	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3			244 Secs (244 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
4	G130M/132 7 (COS.sp.839 569)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=21 2; FP-POS=3			312 Secs (312 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
5	G130M/105 5/FUVA (COS.sp.839 570)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH			334 Secs (334 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is larger than exptime (1482) Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 224 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested. While the program is optimized for FUVA we use the low SNR FUVB data to constraint the blue edge of the wavelength range.</i></p>									
6	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0			290 Secs (290 Secs) [==>]	[2]
<p><i>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									

Exposures



Proposal 14854 - WD0308 - Dec complete (02) - COS FUV Spectroscopic Sensitivity Monitoring

7	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0	400 Secs (400 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 799, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 300          Continue use of 1 FP-POS</p> <p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							
8	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 451, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							
9	DARK		S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[2]
<p>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</p>							
10	G140L/1105 /FUVA (COS.sp.839 572)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 362, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							



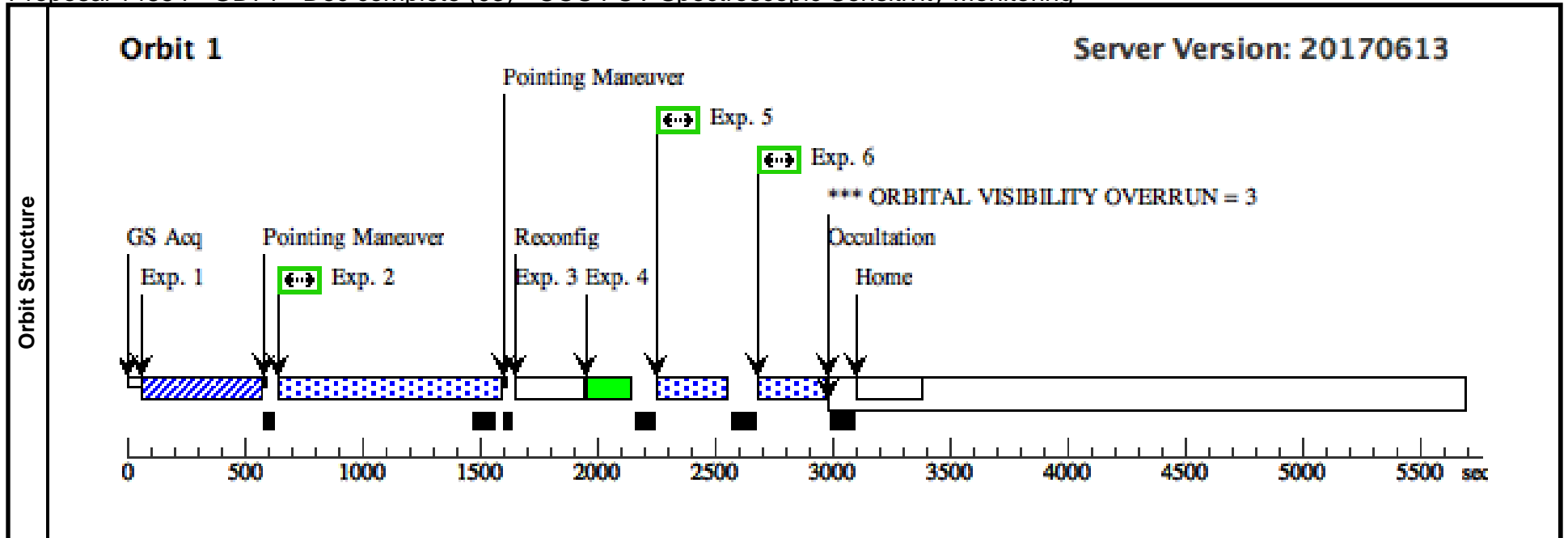
Proposal 14854 - GD71 - Dec complete (03) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:10 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, GD71 - Dec complete (03), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 26-DEC-2016:00:00:00 AND 01-JAN-2017:00:00:00</p> <p><i>Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation</i></p> <p><i>George Chapman added Exposure 3</i></p> <p><i>Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.</i></p>																	
	<p>(G130M/1096/FUVB (03.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1096/FUVA WAVECAL (03.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(GD71 - Dec complete (03)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(GD71 - Dec complete (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>																	
<b>Diagnosics</b>																		
<b>Fixed Targets</b>	<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>GD71</td> <td>RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000</td> <td>Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000</td> <td>V=13.06+/-0.01</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Use sma RA, DEC and PM as in proposal 12392 by Bohlin et al.</i></p> <p><i>Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS													

Proposal 14854 - GD71 - Dec complete (03) - COS FUV Spectroscopic Sensitivity Monitoring

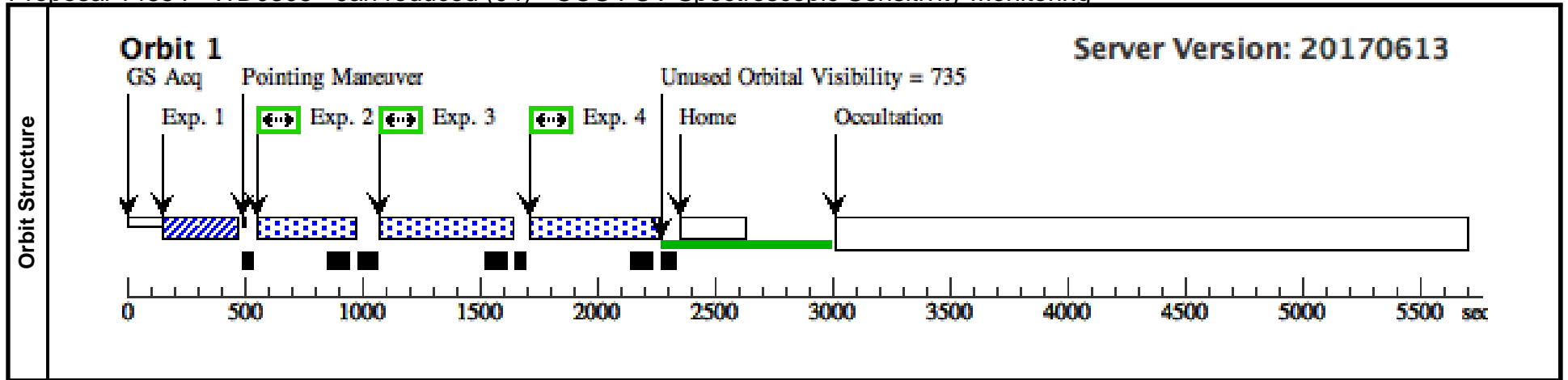
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	ACQ/IM (COS.ta.839 574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB					90 Secs (90 Secs) [==>]	[1]
	<i>Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.</i>										
	2	G130M/109 6/FUVB (COS.sp.839 576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=64 4; FP-POS=3; SEGMENT=B				744 Secs (744 Secs) [==>]	[1]
	<i>Comments: FUVB only (all ETC warnings come from FUVA). Set buffer-time = exptime - 100 sec = 644 to maximize time on target.</i>										
	3		DARK	S/C, DATA, NONE				QASISTATES COS FUV HVLOW HVL OW		1 Secs (1 Secs) [==>]	[1]
	<i>Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.</i>										
	4	G130M/109 6/FUVA W AVECAL	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO				140 Secs (140 Secs) [==>]	[1]
	5	G160M/157 7/FUVA (COS.sp.839 579)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A				102 Secs (102 Secs) [==>]	[1]
	<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										
6	G160M/162 3/FUVA (COS.sp.839 581)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A				154 Secs (154 Secs) [==>]	[1]	
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>											



Proposal 14854 - WD0308 - Jan reduced (04) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<b>Proposal 14854, WD0308 - Jan reduced (04), completed</b> <b>Diagnostic Status: Error</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 23-JAN-2017:00:00:00 AND 29-JAN-2017:00:00:00																																																																																															
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4	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3			280 Secs (280 Secs) [==>]	[1]																																																																																							
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Proposal 14854 - WD0308 - Feb complete (05) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, WD0308 - Feb complete (05), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 20-FEB-2017:00:00:00 AND 26-FEB-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p>																	
	<p>(G130M/1222 (05.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1291 (05.003)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1327 (05.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1055/FUVA (05.005)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(WD0308 - Feb complete (05)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(G130M/1327 (05.004)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.</p>																	
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<p><b>Fixed Targets</b></p>																		

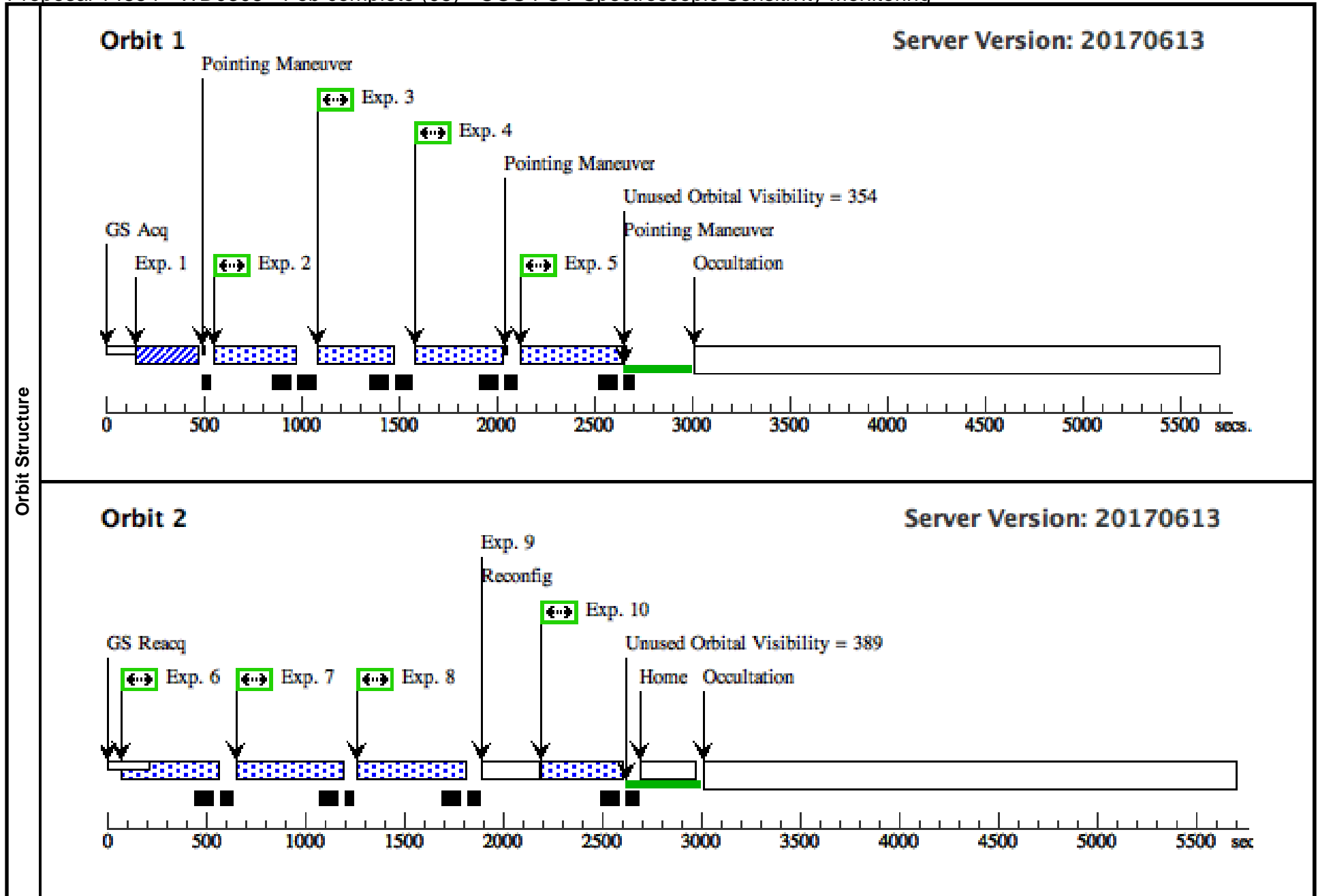


Proposal 14854 - WD0308 - Feb complete (05) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3		45 Secs (45 Secs) [==>]	[1]
<p><i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3			226 Secs (226 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 395 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 126 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
3	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3			244 Secs (244 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
4	G130M/132 7 (COS.sp.839 569)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=21 2; FP-POS=3			312 Secs (312 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
5	G130M/105 5/FUVA (COS.sp.839 570)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH			334 Secs (334 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is larger than exptime (1482) Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 224 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested. While the program is optimized for FUVA we use the low SNR FUVB data to constrain the blue edge of the wavelength range.</i></p>									
6	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0			290 Secs (290 Secs) [==>]	[2]
<p><i>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									

Proposal 14854 - WD0308 - Feb complete (05) - COS FUV Spectroscopic Sensitivity Monitoring

7	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0	400 Secs (400 Secs) [==>]	[2]
<p><i>Comments: ETC buffer time is 799, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 300 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>							
8	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3	280 Secs (280 Secs) [==>]	[2]
<p><i>Comments: ETC buffer time is 451, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS</i></p>							
9	DARK		S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[2]
<p><i>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</i></p>							
10	G140L/1105 /FUVA (COS.sp.839 572)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A	280 Secs (280 Secs) [==>]	[2]
<p><i>Comments: ETC buffer time is 362, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS</i></p>							



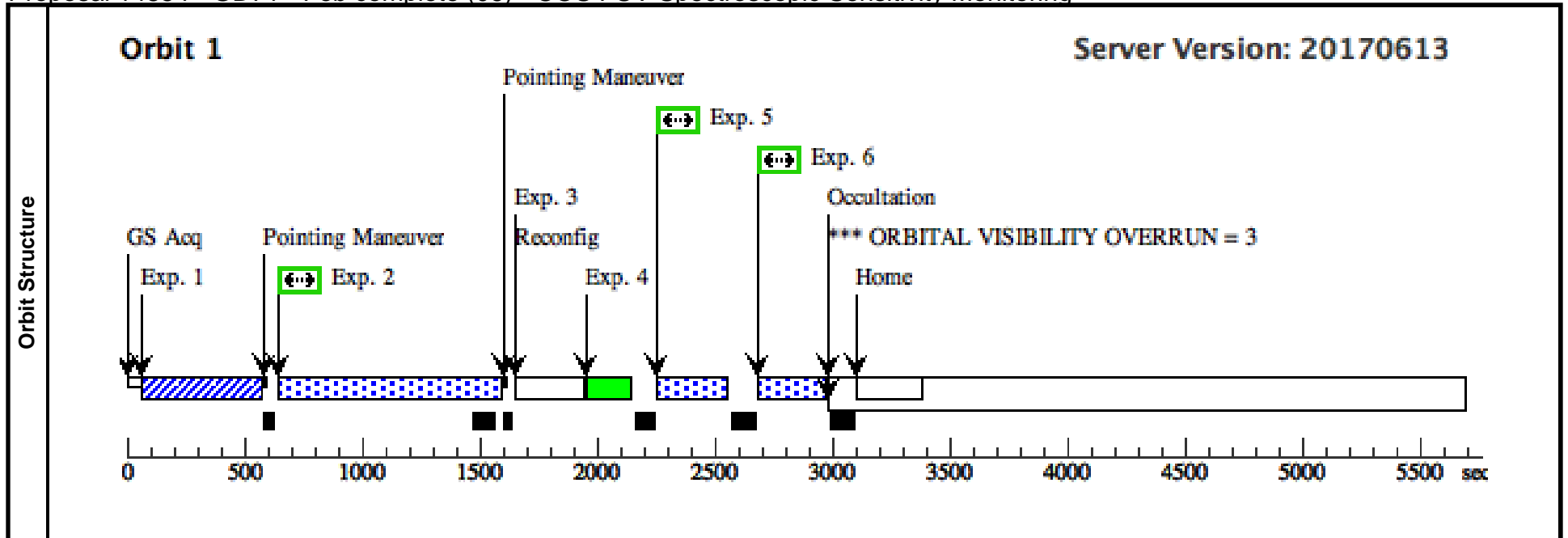
Proposal 14854 - GD71 - Feb complete (06) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, GD71 - Feb complete (06), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 20-FEB-2017:00:00:00 AND 26-FEB-2017:00:00:00</p> <p><i>Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation</i></p> <p><i>George Chapman added Exposure 3</i></p> <p><i>Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.</i></p>																	
	<b>Diagnostics</b>	<p>(G130M/1096/FUVB (06.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1096/FUVA WAVECAL (06.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(GD71 - Feb complete (06)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(GD71 - Feb complete (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>																
<b>Fixed Targets</b>		<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>GD71</td> <td>RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000</td> <td>Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000</td> <td>V=13.06+/-0.01</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Use sma RA, DEC and PM as in proposal 12392 by Bohlin et al.</i></p> <p><i>Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS													

Proposal 14854 - GD71 - Feb complete (06) - COS FUV Spectroscopic Sensitivity Monitoring

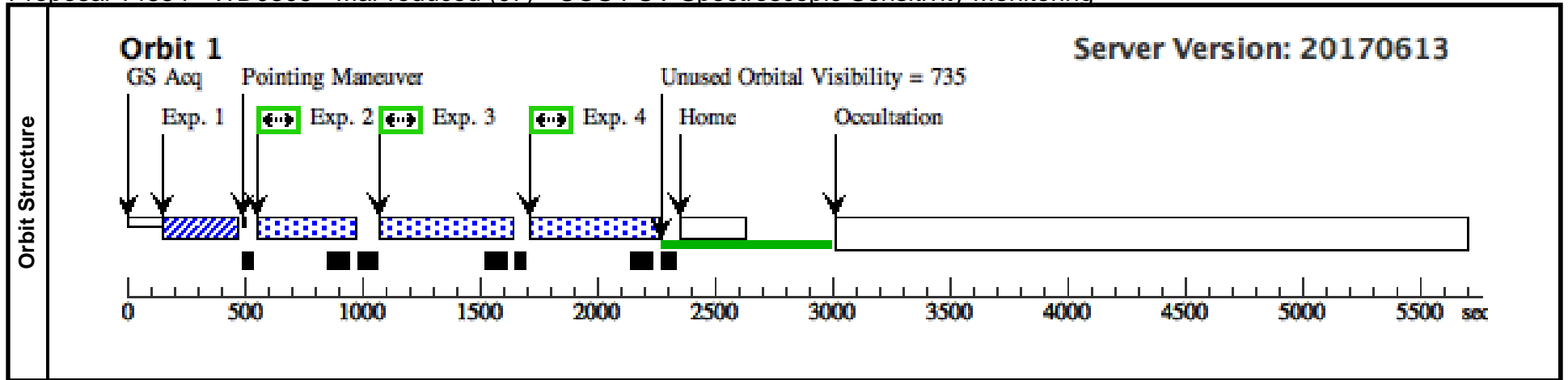
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IM (2) GD71 (COS.ta.839 574)	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) [==>]	[1]	
	<i>Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.</i>									
	2	G130M/109 (2) GD71 6/FUVB (COS.sp.839 576)	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=64 4; FP-POS=3; SEGMENT=B			744 Secs (744 Secs) [==>]	[1]	
	<i>Comments: FUVB only (all ETC warnings come from FUVA). Set buffer-time = exptime - 100 sec = 644 to maximize time on target.</i>									
	3	DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL OW		1 Secs (1 Secs) [==>]	[1]	
	<i>Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.</i>									
4	G130M/109 WAVE 6/FUVA W AVECAL	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO			140 Secs (140 Secs) [==>]	[1]		
5	G160M/157 (2) GD71 7/FUVA (COS.sp.839 579)	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A			102 Secs (102 Secs) [==>]	[1]		
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										
6	G160M/162 (2) GD71 3/FUVA (COS.sp.839 581)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A			154 Secs (154 Secs) [==>]	[1]		
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										



Proposal 14854 - WD0308 - Mar reduced (07) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<b>Proposal 14854, WD0308 - Mar reduced (07), completed</b> <b>Diagnostic Status: Error</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 20-MAR-2017:00:00:00 AND 26-MAR-2017:00:00:00																																																																																															
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4	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3			280 Secs (280 Secs) [==>]	[1]																																																																																							
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Proposal 14854 - WD0308 - Apr complete (08) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, WD0308 - Apr complete (08), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 10-APR-2017:00:00:00 AND 28-APR-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p> <p><i>Cycle 24 comment: April complete visit to be executed within 2 weeks from LP4 special calibration program. On hold until date of special program is set.</i></p>																
	<p>(G130M/1222 (08.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1291 (08.003)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1327 (08.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1055/FUVA (08.005)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(WD0308 - Apr complete (08)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(G130M/1327 (08.004)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.</p>																
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<p><b>Fixed Targets</b></p>																	

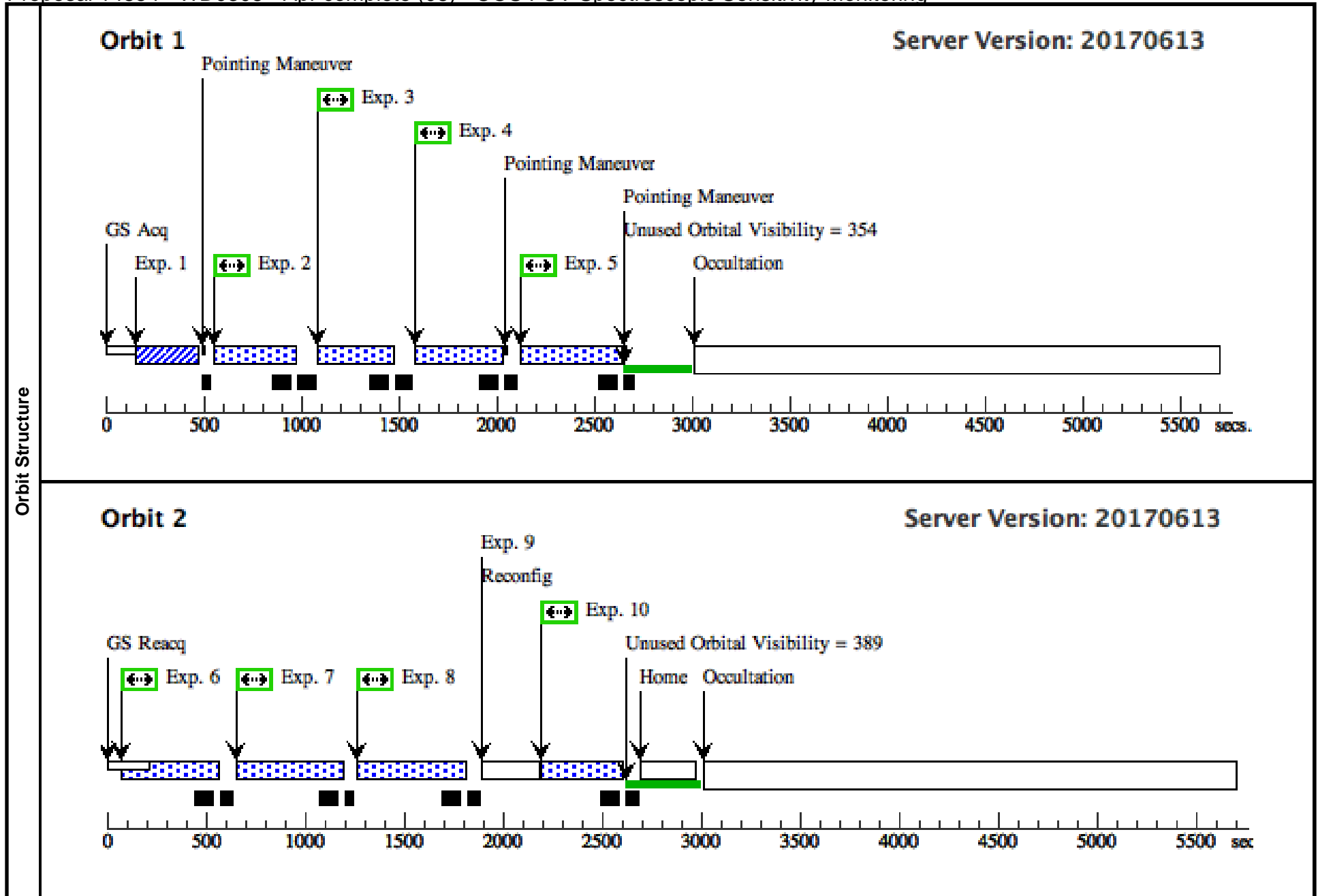
Proposal 14854 - WD0308 - Apr complete (08) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3		45 Secs (45 Secs) [==>]	[1]
<p><i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3			226 Secs (226 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 395 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 126 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
3	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3			244 Secs (244 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
4	G130M/132 7 (COS.sp.839 569)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=21 2; FP-POS=3			312 Secs (312 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									
5	G130M/105 5/FUVA (COS.sp.839 570)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH			334 Secs (334 Secs) [==>]	[1]
<p><i>Comments: ETC buffer time is larger than exptime (1482) Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 224 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested. While the program is optimized for FUVA we use the low SNR FUVB data to constraint the blue edge of the wavelength range.</i></p>									
6	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0			290 Secs (290 Secs) [==>]	[2]
<p><i>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190 Continue use of 1 FP-POS</i></p> <p><i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i></p>									

Exposures

Proposal 14854 - WD0308 - Apr complete (08) - COS FUV Spectroscopic Sensitivity Monitoring

7	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0	400 Secs (400 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 799, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 300          Continue use of 1 FP-POS</p> <p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							
8	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 451, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							
9	DARK		S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[2]
<p>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</p>							
10	G140L/1105 /FUVA (COS.sp.839 572)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 362, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							



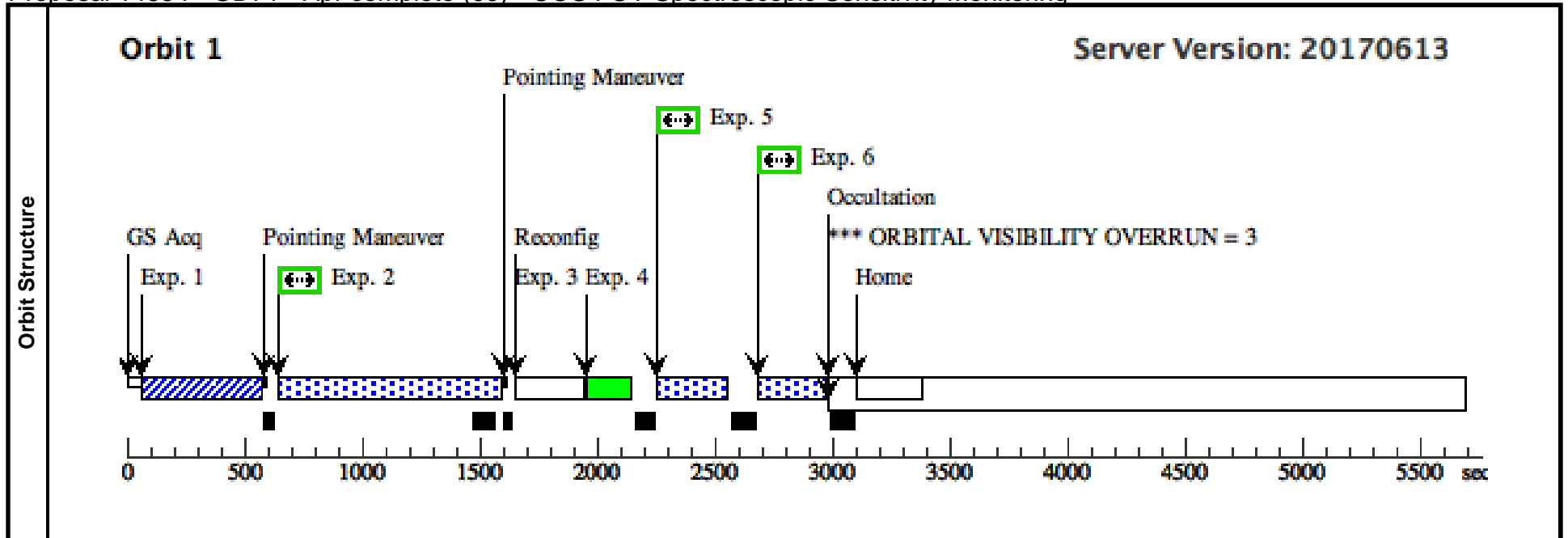
Proposal 14854 - GD71 - Apr complete (09) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, GD71 - Apr complete (09), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 03-APR-2017:00:00:00 AND 08-APR-2017:00:00:00</p> <p><i>Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation</i>  <i>George Chapman added Exposure 3</i>  <i>Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.</i></p> <p><i>Cycle 24 comment: April complete visit to be executed within 2 weeks from LP4 special calibration program. On hold until date of special program is defined.</i></p>					
	<p>(G130M/1096/FUVB (09.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1096/FUVA WAVECAL (09.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(GD71 - Apr complete (09)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(GD71 - Apr complete (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>					
<b>Diagnosics</b>						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS
<p><i>Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.</i>  <i>Extended=NO</i></p>						

Proposal 14854 - GD71 - Apr complete (09) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IM (2) GD71 (COS.ta.839 574)	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) [==>]	[1]	
	<i>Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.</i>									
	2	G130M/109 (2) GD71 6/FUVB (COS.sp.839 576)	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=64 4; FP-POS=3; SEGMENT=B			744 Secs (744 Secs) [==>]	[1]	
	<i>Comments: FUVB only (all ETC warnings come from FUVA). Set buffer-time = exptime - 100 sec = 644 to maximize time on target.</i>									
	3	DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL OW		1 Secs (1 Secs) [==>]	[1]	
	<i>Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.</i>									
4	G130M/109 WAVE 6/FUVA W AVECAL	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO			140 Secs (140 Secs) [==>]	[1]		
5	G160M/157 (2) GD71 7/FUVA (COS.sp.839 579)	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A			102 Secs (102 Secs) [==>]	[1]		
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										
6	G160M/162 (2) GD71 3/FUVA (COS.sp.839 581)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A			154 Secs (154 Secs) [==>]	[1]		
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										

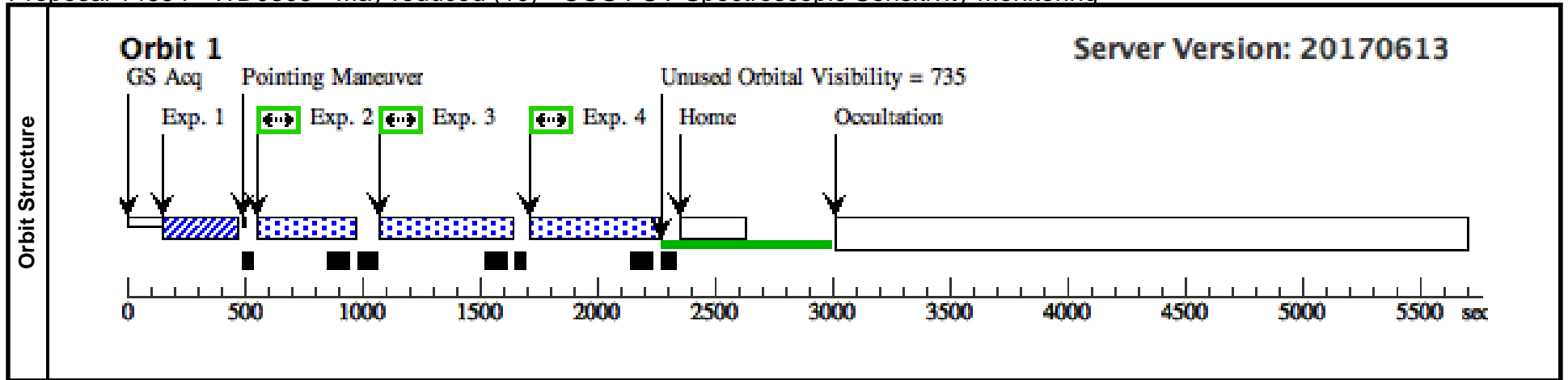


Proposal 14854 - WD0308 - May reduced (10) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<b>Proposal 14854, WD0308 - May reduced (10), completed</b> <b>Diagnostic Status: Error</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 22-MAY-2017:00:00:00 AND 28-MAY-2017:00:00:00										
	(G130M/1291 (10.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode. (WD0308 - May reduced (10)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
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Comments: Coordinates from Charle's proposal Extended=NO											
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) [==>]	[1]	
	Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences negligible.										
	2	G130M/1291 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3				244 Secs (244 Secs) [==>]	[1]
	Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.										
3	G160M/1623 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0				400 Secs (400 Secs) [==>]	[1]	
Comments: ETC buffer time is 719, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 300 cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.											
4	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3				280 Secs (280 Secs) [==>]	[1]	
Comments: ETC buffer time is 451, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.											





Proposal 14854 - WD0308 - Jun complete (11) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

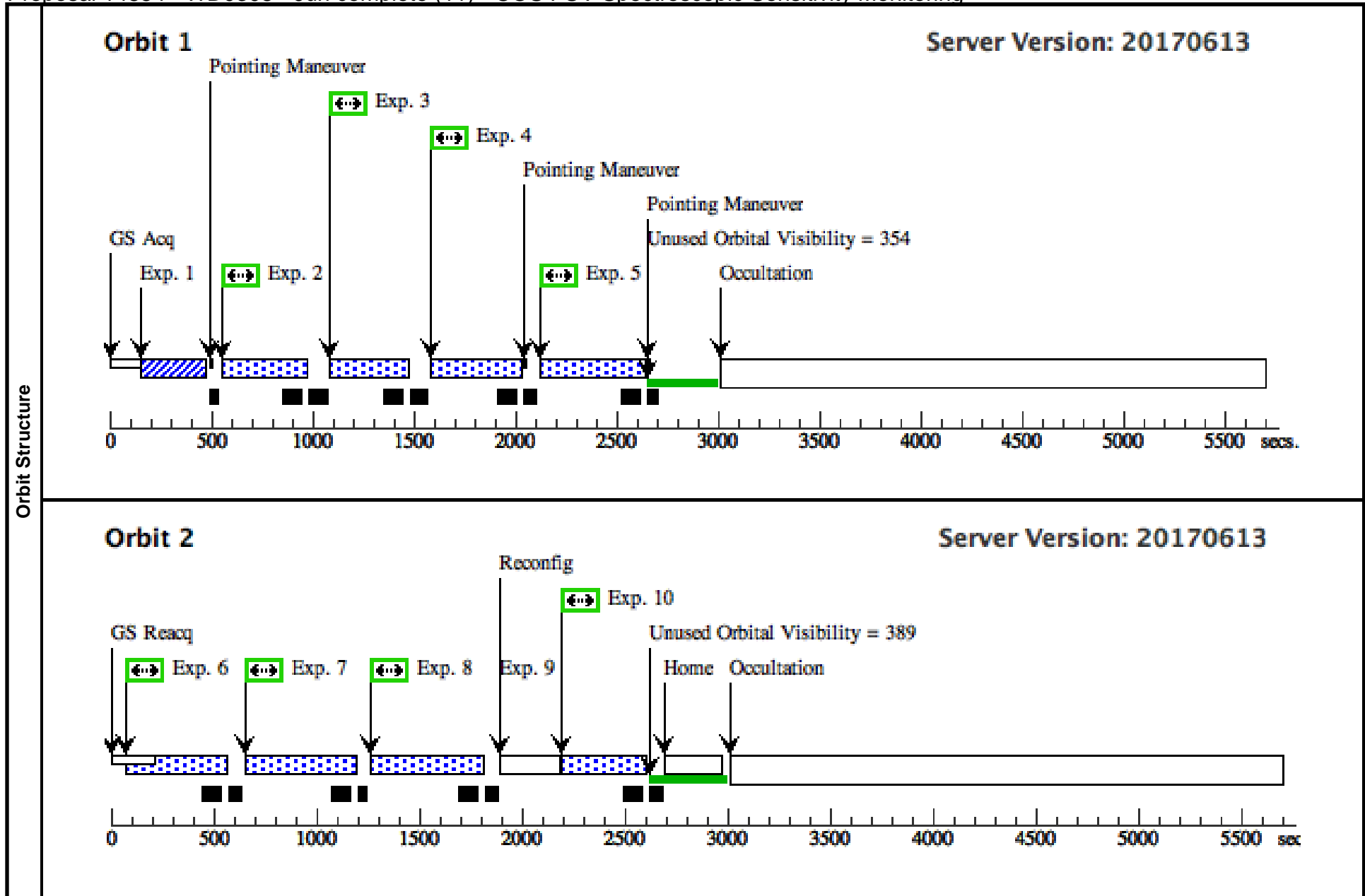
<b>Visit</b>	<p><b>Proposal 14854, WD0308 - Jun complete (11), completed</b></p> <p><b>Diagnostic Status: Error</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 26-JUN-2017:00:00:00 AND 02-JUL-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p>																	
	<p>(G130M/1222 (11.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1291 (11.003)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1327 (11.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(G130M/1055/FUVA (11.005)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.</p> <p>(WD0308 - Jun complete (11)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p> <p>(G130M/1327 (11.004)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.</p>																	
<b>Diagnosics</b>	<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>WD0308-565</td> <td>RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000</td> <td>Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000</td> <td>V=14.07+/-0.02</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Coordinates from Charle's proposal Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS													
<p><b>Fixed Targets</b></p>																		

Proposal 14854 - WD0308 - Jun complete (11) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3		45 Secs (45 Secs) [==>]	[1]
<i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3			226 Secs (226 Secs) [==>]	[1]
<i>Comments: ETC buffer time is 395 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 126 Continue use of 1 FP-POS</i>									
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
3	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3			244 Secs (244 Secs) [==>]	[1]
<i>Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS</i>									
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
4	G130M/132 7 (COS.sp.839 569)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=21 2; FP-POS=3			312 Secs (312 Secs) [==>]	[1]
<i>Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212 Continue use of 1 FP-POS</i>									
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
5	G130M/105 5/FUVA (COS.sp.839 570)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH			334 Secs (334 Secs) [==>]	[1]
<i>Comments: ETC buffer time is larger than exptime (1482) Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 224 Continue use of 1 FP-POS</i>									
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested. While the program is optimized for FUVA we use the low SNR FUVB data to constraint the blue edge of the wavelength range.</i>									
6	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0			290 Secs (290 Secs) [==>]	[2]
<i>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190 Continue use of 1 FP-POS</i>									
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									

Proposal 14854 - WD0308 - Jun complete (11) - COS FUV Spectroscopic Sensitivity Monitoring

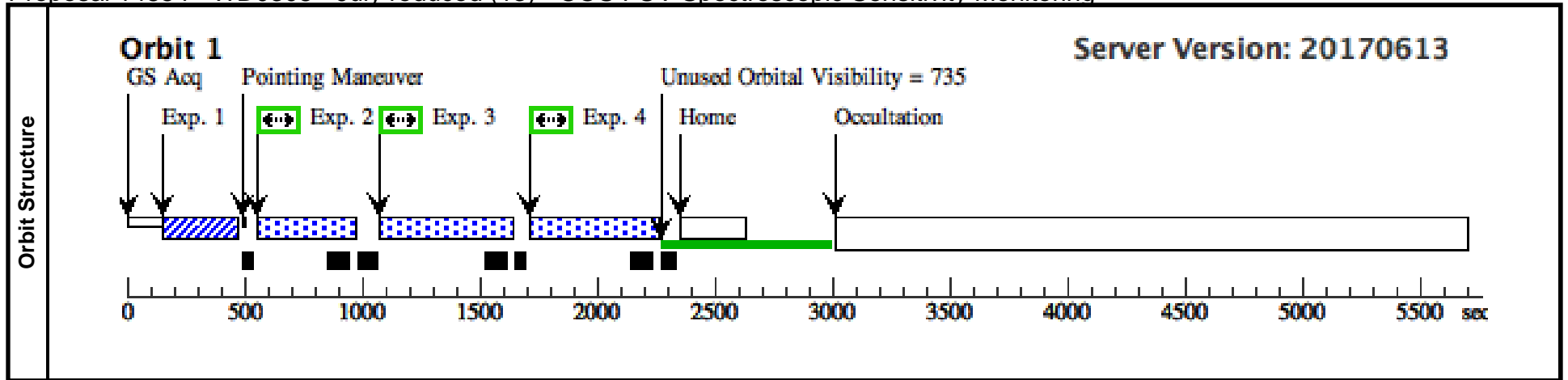
7	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0	400 Secs (400 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 799, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 300          Continue use of 1 FP-POS</p> <p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							
8	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 451, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							
9	DARK		S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[2]
<p>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</p>							
10	G140L/1105 /FUVA (COS.sp.839 572)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 362, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							



Proposal 14854 - WD0308 - July reduced (13) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<b>Proposal 14854, WD0308 - July reduced (13), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 24-JUL-2017:00:00:00 AND 30-JUL-2017:00:00:00																																																																																														
	(WD0308 - July reduced (13)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.																																																																																														
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Proposal 14854 - WD0308 - Aug complete (17) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, WD0308 - Aug complete (17), completed</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 21-AUG-2017:00:00:00 AND 27-AUG-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p>					
	<p>(WD0308 - Aug complete (17)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>					
<b>Diagnosics</b>						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS
<p><i>Comments: Coordinates from Charle's proposal</i></p> <p><i>Extended=NO</i></p>						

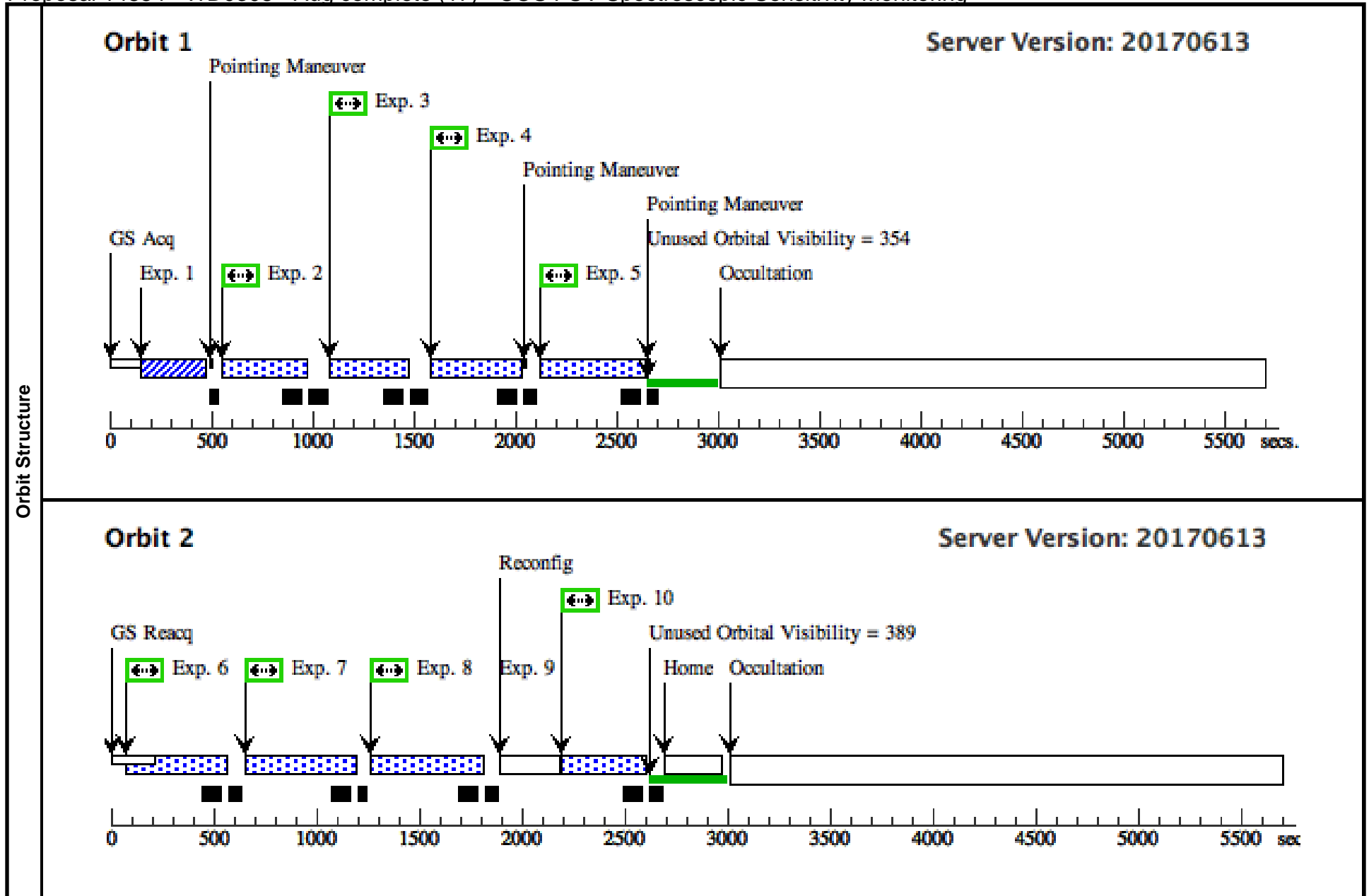


Proposal 14854 - WD0308 - Aug complete (17) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3	45 Secs (45 Secs) [==>]	[1]	
	<i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
	2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3; LIFETIME-POS=L P3		226 Secs (226 Secs) [==>]	[1]	
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<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>										
5	G130M/105 5/FUVA (COS.sp.839 570)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=L P2		334 Secs (334 Secs) [==>]	[1]		
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Proposal 14854 - WD0308 - Aug complete (17) - COS FUV Spectroscopic Sensitivity Monitoring

6	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0	290 Secs (290 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190</p> <p>Continue use of 1 FP-POS</p> <p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							
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8	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3	280 Secs (280 Secs) [==>]	[2]
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9	DARK		S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[2]
<p>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</p>							
10	G140L/1105 /FUVA (COS.sp.839 572)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 362, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180</p> <p>Continue use of 1 FP-POS</p>							



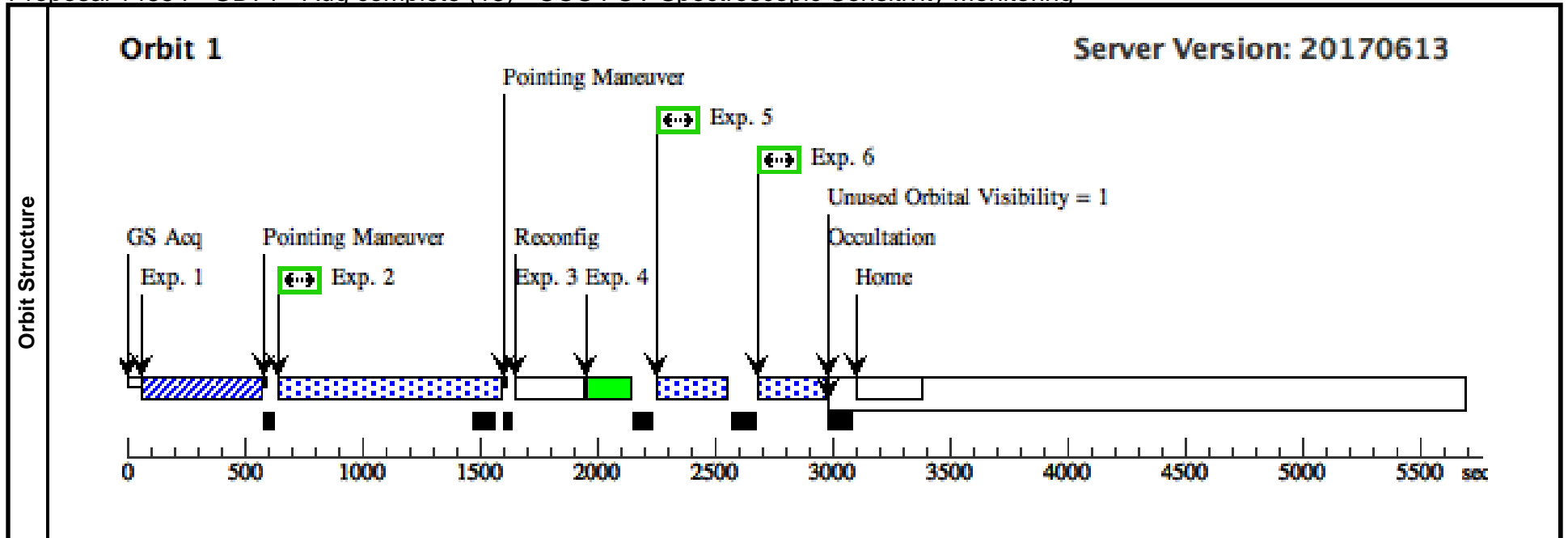
Proposal 14854 - GD71 - Aug complete (18) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, GD71 - Aug complete (18), completed</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 21-AUG-2017:00:00:00 AND 27-AUG-2017:00:00:00</p> <p><i>Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation</i></p> <p><i>George Chapman added Exposure 3</i></p> <p><i>Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.</i></p>																	
	<p><b>Diagnosics</b></p> <p>(GD71 - Aug complete (18)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>																	
<b>Fixed Targets</b>	<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>GD71</td> <td>RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000</td> <td>Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000</td> <td>V=13.06+/-0.01</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Use sma RA, DEC and PM as in proposal 12392 by Bohlin et al.</i></p> <p><i>Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS
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Proposal 14854 - GD71 - Aug complete (18) - COS FUV Spectroscopic Sensitivity Monitoring

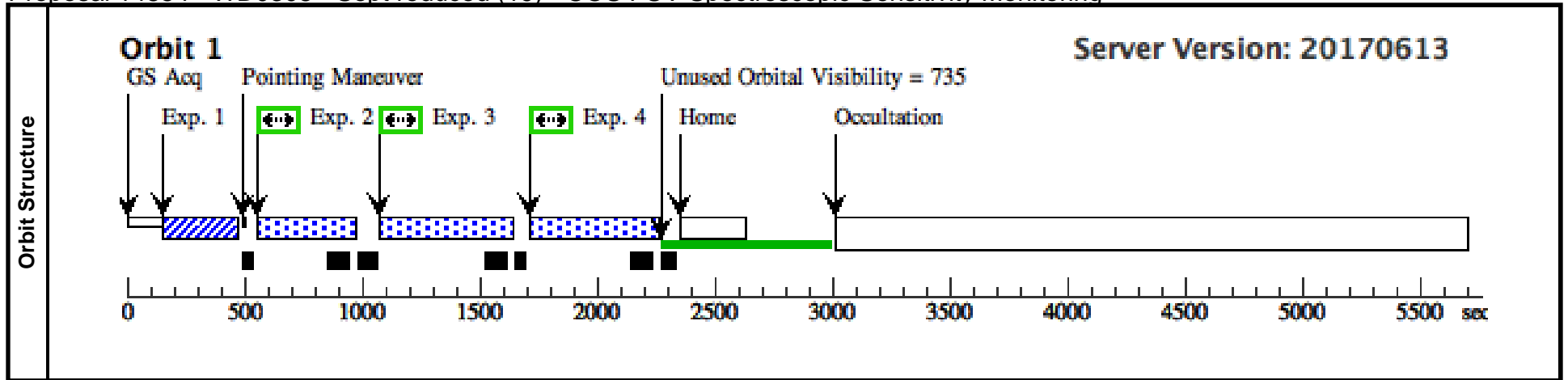
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IM (COS.ta.839 574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB			90 Secs (90 Secs) [==>]	[1]	
	<i>Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.</i>									
	2	G130M/109 6/FUVB (COS.sp.839 576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=64 4; FP-POS=3; SEGMENT=B; LIFETIME-POS=L P2			740 Secs (740 Secs) [==>]	[1]
	<i>Comments: FUVB only (all ETC warnings come from FUVA). Set buffer-time = exptime - 100 sec = 644 to maximize time on target.</i>									
	3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL OW		1 Secs (1 Secs) [==>]	[1]
	<i>Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.</i>									
4	G130M/109 6/FUVA W AVECAL	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=L P2			140 Secs (140 Secs) [==>]	[1]	
5	G160M/157 7/FUVA (COS.sp.839 579)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A			102 Secs (102 Secs) [==>]	[1]	
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										
6	G160M/162 3/FUVA (COS.sp.839 581)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A			154 Secs (154 Secs) [==>]	[1]	
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>										



Proposal 14854 - WD0308 - Sept reduced (19) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<b>Proposal 14854, WD0308 - Sept reduced (19), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/FUV, COS/NUV Special Requirements: SCHED 100%; BETWEEN 25-DEC-2017:00:00:00 AND 01-JAN-2018:00:00:00; ON HOLD <i>On Hold Comments: On hold until TDS strategy at LP4 is defined</i>																																																																																																			
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<b>Exposures</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ACQ/IM (839564)</td> <td>(1) WD0308-565</td> <td>COS/NUV, ACQ/IMAGE, BOA</td> <td>MIRRORA</td> <td></td> <td></td> <td></td> <td>45 Secs (45 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">                     Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences negligible.                 </td> </tr> <tr> <td>2</td> <td>G130M/129 1 (COS.sp.839 565)</td> <td>(1) WD0308-565</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=14 4; FP-POS=3; LIFETIME-POS=L P3</td> <td></td> <td></td> <td>244 Secs (244 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">                     Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin.                      Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144                      Continue use of 1 FP-POS                      cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.                 </td> </tr> <tr> <td>3</td> <td>G160M/162 3 (COS.sp.839 566)</td> <td>(1) WD0308-565</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G160M 1623 A</td> <td>FP-POS=3; BUFFER-TIME=30 0</td> <td></td> <td></td> <td>400 Secs (400 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">                     Comments: ETC buffer time is 719, larger than exptime                      Target has been observed before no need to 2/3 factor                      Set buffer time = exptime - 100 = 300                      cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.                 </td> </tr> <tr> <td>4</td> <td>G140L/1280 (COS.sp.839 567)</td> <td>(1) WD0308-565</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G140L 1280 A</td> <td>BUFFER-TIME=18 0; FP-POS=3</td> <td></td> <td></td> <td>280 Secs (280 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">                     Comments: ETC buffer time is 451, larger than exptime                      Target has been observed before no need to 2/3 factor                      Set buffer time = exptime - 100 = 180                      Continue use of 1 FP-POS                      cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.                 </td> </tr> </tbody> </table>										#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) [==>]	[1]	Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences negligible.										2	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3; LIFETIME-POS=L P3			244 Secs (244 Secs) [==>]	[1]	Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.										3	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0			400 Secs (400 Secs) [==>]	[1]	Comments: ETC buffer time is 719, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 300 cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.										4	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3			280 Secs (280 Secs) [==>]	[1]	Comments: ETC buffer time is 451, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
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	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) [==>]	[1]																																																																																										
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	2	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3; LIFETIME-POS=L P3			244 Secs (244 Secs) [==>]	[1]																																																																																										
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3	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0			400 Secs (400 Secs) [==>]	[1]																																																																																											
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4	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3			280 Secs (280 Secs) [==>]	[1]																																																																																											
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Proposal 14854 - WD0308 - LP3 reconnection (20) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

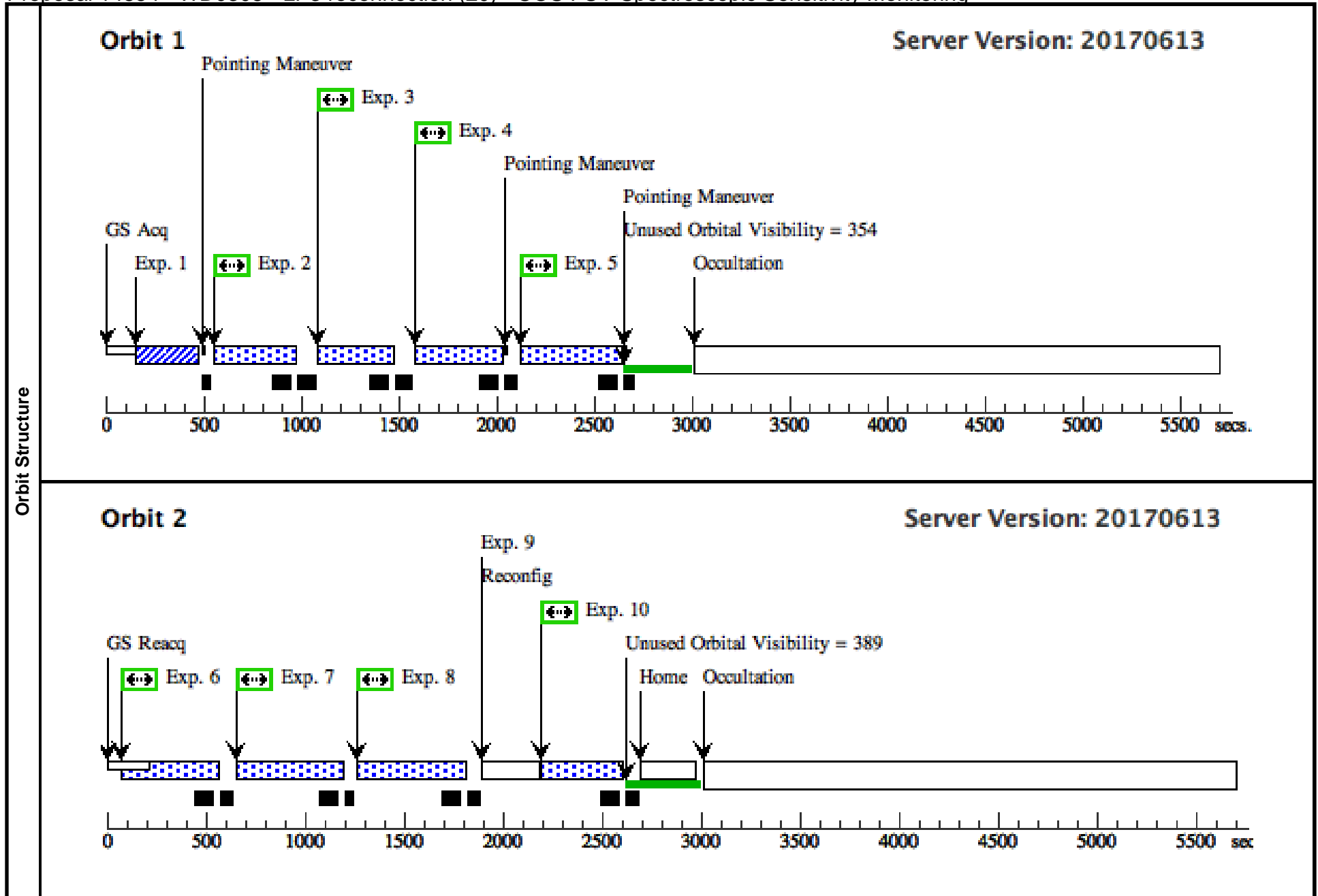
<b>Visit</b>	<p><b>Proposal 14854, WD0308 - LP3 reconnection (20), implementation</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 24-SEP-2017:00:00:00 AND 01-OCT-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p>					
	<p>(WD0308 - LP3 reconnection (20)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>					
<b>Diagnosics</b>						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS
<p><i>Comments: Coordinates from Charle's proposal</i></p> <p><i>Extended=NO</i></p>						

Proposal 14854 - WD0308 - LP3 reconnection (20) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3	45 Secs (45 Secs) [==>]	[1]	
	<i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
	2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3; LIFETIME-POS=L P3		226 Secs (226 Secs) [==>]	[1]	
	<i>Comments: ETC buffer time is 395 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 126 Continue use of 1 FP-POS</i>									
	<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
3	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3; LIFETIME-POS=L P3		244 Secs (244 Secs) [==>]	[1]		
<i>Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS</i>										
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>										
4	G130M/132 7 (COS.sp.839 569)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=21 2; FP-POS=3; LIFETIME-POS=L P3		312 Secs (312 Secs) [==>]	[1]		
<i>Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212 Continue use of 1 FP-POS</i>										
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>										
5	G130M/105 5/FUVA (COS.sp.839 570)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=L P2		334 Secs (334 Secs) [==>]	[1]		
<i>Comments: ETC buffer time is larger than exptime (1482) Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 224 Continue use of 1 FP-POS</i>										
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested. While the program is optimized for FUVA we use the low SNR FUVB data to constrain the blue edge of the wavelength range.</i>										

Proposal 14854 - WD0308 - LP3 reconnection (20) - COS FUV Spectroscopic Sensitivity Monitoring

6	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0; LIFETIME-POS=L P3	290 Secs (290 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190</p> <p>Continue use of 1 FP-POS</p> <p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							
7	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0; LIFETIME-POS=L P3	400 Secs (400 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 799, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 300</p> <p>Continue use of 1 FP-POS</p> <p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							
8	G140L/1280 (COS.sp.839 567)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3; LIFETIME-POS=L P3	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 451, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180</p> <p>Continue use of 1 FP-POS</p>							
9	DARK		S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[2]
<p>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</p>							
10	G140L/1105 (COS.sp.839 572)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	280 Secs (280 Secs) [==>]	[2]
<p>Comments: ETC buffer time is 362, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180</p> <p>Continue use of 1 FP-POS</p>							



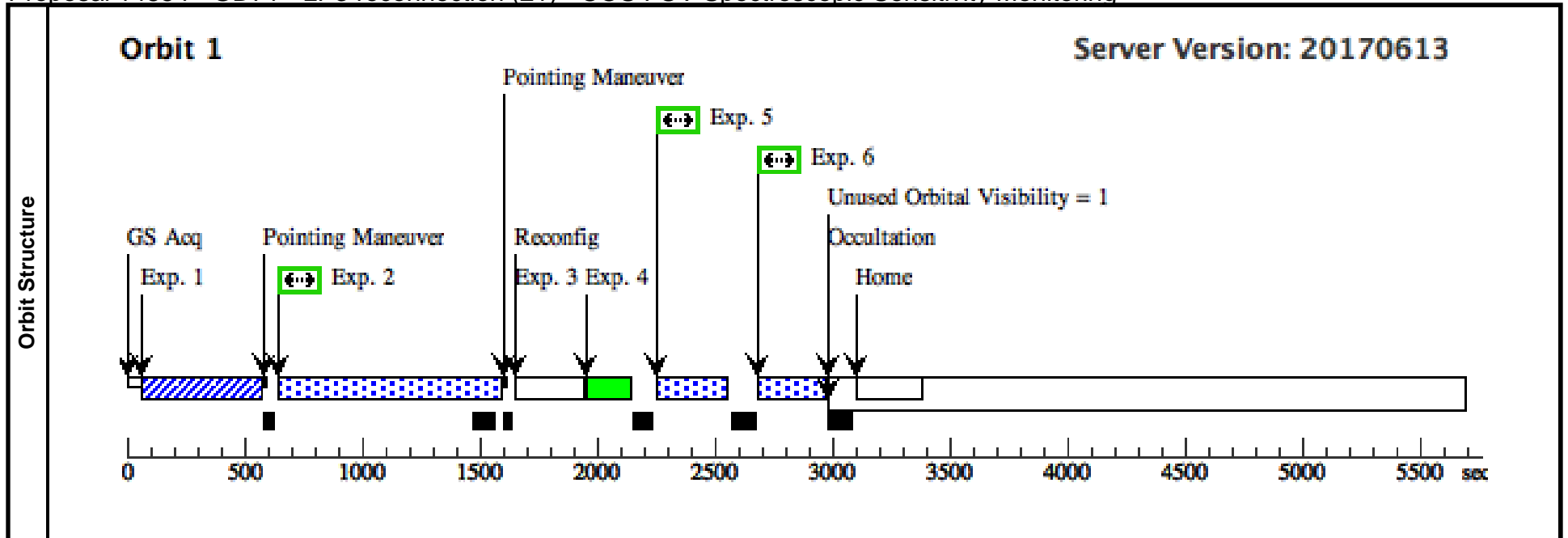
Proposal 14854 - GD71 - LP3 reconnection (21) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, GD71 - LP3 reconnection (21), implementation</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 24-SEP-2017:00:00:00 AND 01-OCT-2017:00:00:00</p> <p><i>Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation</i></p> <p><i>George Chapman added Exposure 3</i></p> <p><i>Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.</i></p>																	
	<b>Diagnostics</b>	<p>(GD71 - LP3 reconnection (21)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>																
<b>Fixed Targets</b>		<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>GD71</td> <td>RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000</td> <td>Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000</td> <td>V=13.06+/-0.01</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Use sma RA, DEC and PM as in proposal 12392 by Bohlin et al.</i></p> <p><i>Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS													

Proposal 14854 - GD71 - LP3 reconnection (21) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ/IM (COS.ta.839 574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB			90 Secs (90 Secs) [==>]	[1]
	<i>Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.</i>								
	2	G130M/109 6/FUVB (COS.sp.839 576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=64 4; FP-POS=3; SEGMENT=B; LIFETIME-POS=L P2		740 Secs (740 Secs) [==>]	[1]
	<i>Comments: FUVB only (all ETC warnings come from FUVA). Set buffer-time = exptime - 100 sec = 644 to maximize time on target.</i>								
	3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs) [==>]	[1]
	<i>Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.</i>								
4	G130M/109 6/FUVA W AVECAL	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=L P2		140 Secs (140 Secs) [==>]	[1]	
5	G160M/157 7/FUVA (COS.sp.839 579)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3		102 Secs (102 Secs) [==>]	[1]	
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>									
6	G160M/162 3/FUVA (COS.sp.839 581)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3		154 Secs (154 Secs) [==>]	[1]	
<i>Comments: FUVA only (all ETC warnings come from FUVB). Buffer-time for FUVA is <math>2.35e6/6513 = 360</math> sec, which is larger than exp time, so set buffer time to exptime. 2.35e6 is the number of events that each buffer can record 6513 cts/sec is the count rate in FUVA, per ETC calculation above Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i>									



Proposal 14854 - WD0308 - LP4 reconnection (22) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, WD0308 - LP4 reconnection (22), implementation</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 02-OCT-2017:00:00:00 AND 09-OCT-2017:00:00:00</p> <p><i>Comments: George Chapman added Exposure 9</i></p> <p><i>No LP2 exposures needed</i></p>					
	<p>(WD0308 - LP4 reconnection (22)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>					
<b>Diagnosics</b>						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS
<p><i>Comments: Coordinates from Charle's proposal</i></p> <p><i>Extended=NO</i></p>						

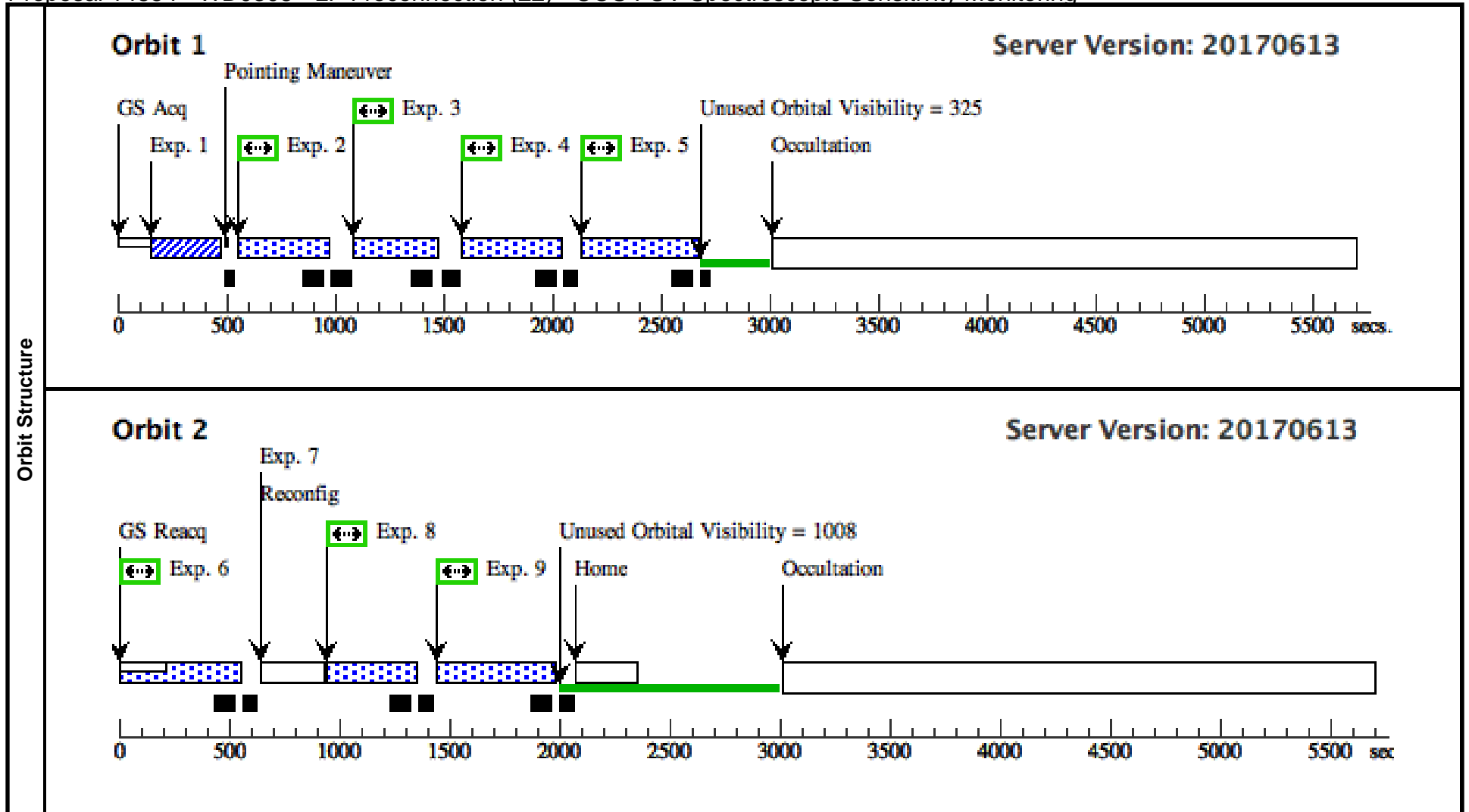


Proposal 14854 - WD0308 - LP4 reconnection (22) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3	45 Secs (45 Secs) [==>]	[1]	
	<i>Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
	2	G130M/122 2 (COS.sp.839 568)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=12 6; FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH		226 Secs (226 Secs) [==>]	[1]	
	<i>Comments: ETC buffer time is 395 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 126 Continue use of 1 FP-POS</i>									
	<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>									
3	G130M/129 1 (COS.sp.839 565)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH		244 Secs (244 Secs) [==>]	[1]		
<i>Comments: ETC buffer time is 322 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS</i>										
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>										
4	G160M/157 7 (COS.sp.839 571)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=19 0; LIFETIME-POS=L P4; SEGMENT=BOTH		290 Secs (290 Secs) [==>]	[1]		
<i>Comments: ETC buffer time is 599, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190 Continue use of 1 FP-POS</i>										
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>										
5	G160M/162 3 (COS.sp.839 566)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=30 0; LIFETIME-POS=L P4; SEGMENT=BOTH		400 Secs (400 Secs) [==>]	[1]		
<i>Comments: ETC buffer time is 799, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 300 Continue use of 1 FP-POS</i>										
<i>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</i>										

Proposal 14854 - WD0308 - LP4 reconnection (22) - COS FUV Spectroscopic Sensitivity Monitoring

6	G140L/1280 (1) WD0308-565 (COS.sp.839 567)	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 0; FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH	280 Secs (280 Secs)	[==>]	[2]
<p>Comments: ETC buffer time is 451, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							
7	DARK	S/C, DATA, NONE		QASISTATES COS FUV HVLOW HVL OW	1 Secs (1 Secs)	[==>]	[2]
<p>Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.</p>							
8	G140L/1105 (1) WD0308-565 /FUVA (COS.sp.839 572)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	280 Secs (280 Secs)	[==>]	[2]
<p>Comments: ETC buffer time is 362, larger than exptime          Target has been observed before no need to 2/3 factor          Set buffer time = exptime - 100 = 180          Continue use of 1 FP-POS</p>							
9	G130M/132 (1) WD0308-565 7/FUVA (COS.sp.839 569)	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=21 2; FP-POS=3; LIFETIME-POS=L P4; SEGMENT=A	312 Secs (312 Secs)	[==>]	[2]
<p>Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin.          Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212          Continue use of 1 FP-POS</p>							
<p>cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.</p>							



Proposal 14854 - GD71 - LP4 reconnection (23) - COS FUV Spectroscopic Sensitivity Monitoring

Wed Sep 13 20:02:11 GMT 2017

<b>Visit</b>	<p><b>Proposal 14854, GD71 - LP4 reconnection (23), scheduling</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 02-OCT-2017:00:00:00 AND 09-OCT-2017:00:00:00</p> <p><i>Comments: No LP2 exposures needed</i></p>
	<p>(GD71 - LP4 reconnection (23)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>

<b>Diagnosics</b>	<p>(GD71 - LP4 reconnection (23)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.</p>
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	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous							
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<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
		1	ACQ/IM (2) GD71 (COS.ta.839 574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) [==>]
	<p><i>Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.</i></p>									
	2	G160M/157 7/FUVA (COS.sp.839 579)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4			102 Secs (102 Secs) [==>]	[1]
	<p><i>Comments: FUVA only (all ETC warnings come from FUVB).</i></p> <p><i>Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.</i></p> <p><i>2.35e6 is the number of events that each buffer can record</i></p> <p><i>6513 cts/sec is the count rate in FUVA, per ETC calculation above</i></p> <p><i>Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime</i></p> <p><i>Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i></p>									
	3	G160M/162 3/FUVA (COS.sp.839 581)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4			154 Secs (154 Secs) [==>]	[1]
	<p><i>Comments: FUVA only (all ETC warnings come from FUVB).</i></p> <p><i>Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.</i></p> <p><i>2.35e6 is the number of events that each buffer can record</i></p> <p><i>6513 cts/sec is the count rate in FUVA, per ETC calculation above</i></p> <p><i>Set buffer-time = exptime b/c exptime - 100 &lt; 80 which is the minimum exptime</i></p> <p><i>Cycle 24 comment: FUVA TDS is shallower than ETC prediction, so no need to update exposure time (SNR @ 1749 will be larger than 13)</i></p>									

