



15680 - COS FUV Time Dependent Sensitivity - Target Connection Preparing for One-Gyro Operations

Cycle: 26, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

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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) WD1057+719 DARK WAVE	COS/FUV COS/NUV S/C	2	13-Sep-2019 13:00:13.0	yes
52	(1) WD1057+719 DARK WAVE	COS/FUV COS/NUV S/C	2	13-Sep-2019 13:00:14.0	yes
53	(1) WD1057+719 DARK WAVE	COS/FUV COS/NUV S/C	2	13-Sep-2019 13:00:16.0	yes

6 Total Orbits Used

ABSTRACT

The visibility of one of the targets (GD 71) used for the FUV TDS monitor is severely affected under one-gyro operations. The modes in the current TDS program using this target are G130M/1096/FUVB, G160M/1577/FUVA and G160M/1623A. In one-gyro operations, these modes will be covered using the flux standard, WD1057+719, which was used until 2012 while COS was operating at LP1. Furthermore, the G160M/segment B modes, all of which are currently tracked by WD0308-565 will be moved over to the new target WD1057+719. This program is designed to provide the relative scaling at for all the modes that will be tracked by WD1057+719 during one-gyro operations. G130M/1096/FUVB observations will be obtained at LP2 and the G160M observations at LP4.

OBSERVING DESCRIPTION

The program consists of one visit, with two orbits. The target is the flux standard White Dwarf WD1057+719.

The target will be acquired using NUV ACQ/IM with MIRROR A. Then it will be observed with the G130M/1096/FUVB setting (with segment A turned off). Since there are no lamp lines available in this setting, a WAVECAL observation will be obtained after turning on segment A. The remaining modes, G160M/1533, 1577 and 1623 will be observed after the WAVECAL.

The exposure times specified are those required, and should not be auto-adjusted.

Since these observations will be used in conjunction with the regular FUV TDS targets to provide the scaling, the scheduling windows have been restricted to those for specified for complete sequences in the Cy 26 FUV TDS monitoring program, 15535 (PI Sankrit).

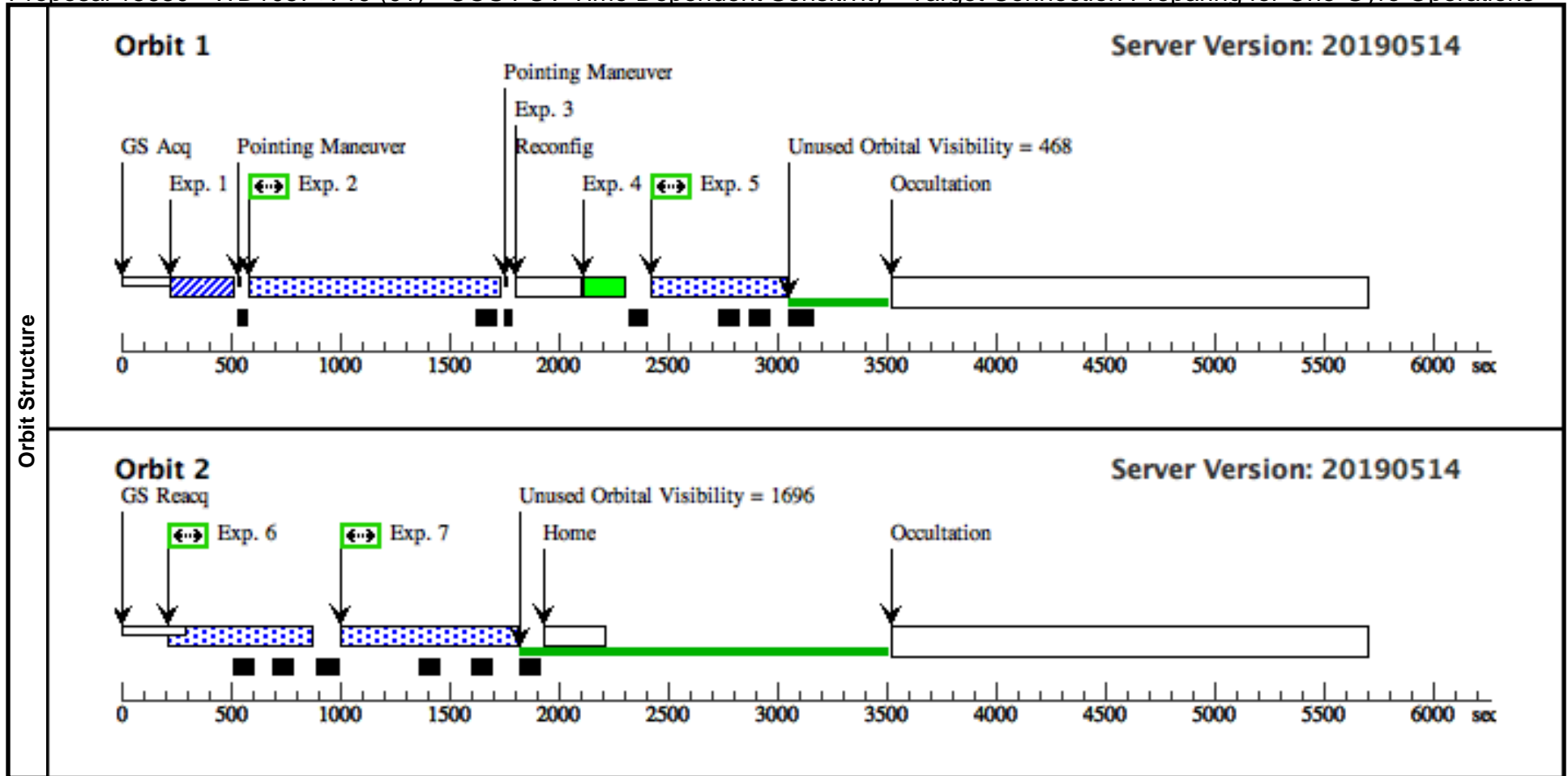
NOTE added June 3, 2019: the failure of visit 06 (target GD71) of Cycle 26 FUV TDS monitoring program, 15535 led to two additional external orbits being approved for the program. These are being utilized in visit 52. The window specified for the visit starts two weeks after the end of the window for visit 09 program 15535, the next observation of GD71.

Proposal 15680 - WD1057+719 (01) - COS FUV Time Dependent Sensitivity - Target Connection Preparing for One-Gyro Operations

Visit	<p>Proposal 15680, WD1057+719 (01), completed Fri Sep 13 17:00:16 GMT 2019</p> <p>Diagnostic Status: No Diagnostics</p> <p>Scientific Instruments: S/C, COS/FUV, COS/NUV</p> <p>Special Requirements: BETWEEN 18-FEB-2019:00:00:00 AND 27-FEB-2019:00:00:00; BETWEEN 10-APR-2019:00:00:00 AND 23-APR-2019:00:00:00; BETWEEN 04-AUG-2019:00:00:00 AND 27-AUG-2019:00:00:00; BETWEEN 06-OCT-2019:00:00:00 AND 29-OCT-2019:00:00:00</p>					
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(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	V=14.68+/-0.02	Reference Frame: ICRS
	<p><i>Comments: From program I2806 (PI Massa), which has:</i></p> <p><i>From Wolfe's TIR2009_02</i></p> <p><i>Category=STAR</i></p> <p><i>Description=[DA]</i></p> <p><i>Extended=NO</i></p>					

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#	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.131 1402)	(1) WD1057+719	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				33 Secs (33 Secs) [==>]	[1]
<i>Comments: ACQ time of 33 seconds yields S/N of 60.</i>									
2	G130M/109 6/FUVB (COS.sp.131 1389)	(1) WD1057+719	COS/FUV, TIME-TAG, PSA	G130M 1096 A	FP-POS=3; LIFETIME-POS=L P2; SEGMENT=B; BUFFER-TIME=84 7			947 Secs (947 Secs) [==>]	[1]
<i>Comments: Buffer time is exposure time - 100 sec. Note that FUVB will be turned off.</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/WAVECA L/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; LIFETIME-POS=L P2; SEGMENT=BOTH; FLASH=NO			140 Secs (140 Secs) [==>]	[1]
<i>Comments: Exposure time same as wavecal for current TDS program 15384. Although both segments will remain on, only the FUVB segment has lines that are usable. This wavecal will be applied to the data from exposure 2, for which FUVB will be turned off.</i>									
5	G160M/153 3 (1303223)	(1) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH; BUFFER-TIME=13 8			425 Secs (425 Secs) [==>]	[1]
<i>Comments: Buffer time is 2/3 of the ETC calculated buffer time of 207 sec.</i>									
6	G160M/157 7 (1303224)	(1) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH; BUFFER-TIME=18 0			528 Secs (528 Secs) [==>]	[2]
<i>Comments: Buffer time is 2/3 of the ETC calculated buffer time of 269 sec.</i>									
7	G160M/162 3 (1303225)	(1) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH; BUFFER-TIME=23 8			671 Secs (671 Secs) [==>]	[2]
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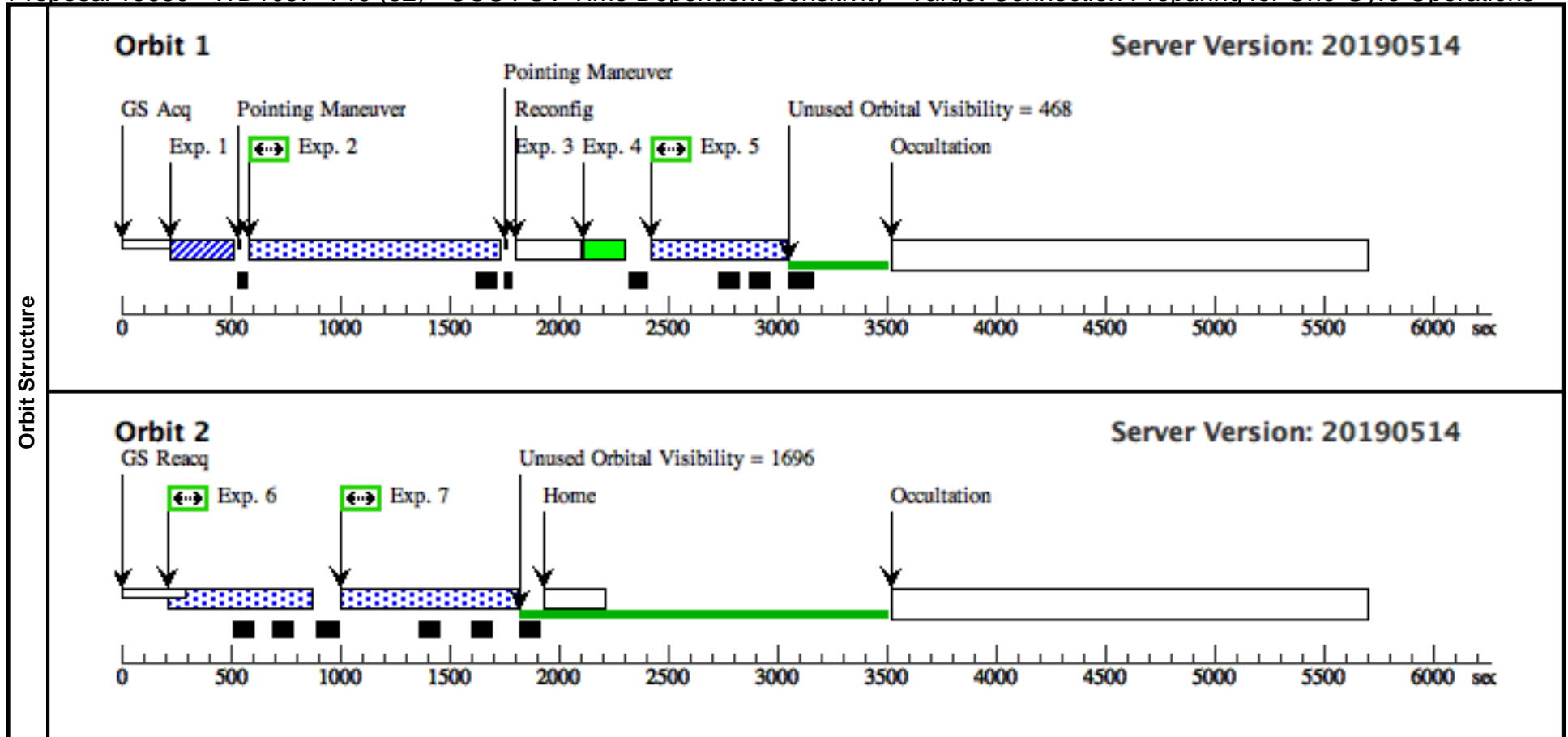


Proposal 15680 - WD1057+719 (52) - COS FUV Time Dependent Sensitivity - Target Connection Preparing for One-Gyro Operations

Visit	Proposal 15680, WD1057+719 (52), completed Fri Sep 13 17:00:17 GMT 2019 Diagnostic Status: No Diagnostics Scientific Instruments: S/C, COS/FUV, COS/NUV Special Requirements: BETWEEN 09-SEP-2019:00:00:00 AND 20-SEP-2019:00:00:00					
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
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Exposures

