Proposal 16906 (STScI Edit Number: 0, Created: Tuesday, April 26, 2022 at 6:00:43 AM Eastern Standard Time) - Overview



16906 - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

Cycle: 29, Proposal Category: CAL/COS (Availability Mode: RESTRICTED)

INVESTIGATORS

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VISITS

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
01	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:14.0	yes
02	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:17.0	yes
03	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:19.0	yes
04	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:21.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
05	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:23.0	yes
06	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:26.0	yes
07	(2) GD71	COS/FUV COS/NUV	2	26-Apr-2022 07:00:29.0	yes
08	(2) GD71	COS/FUV COS/NUV	3	26-Apr-2022 07:00:33.0	yes
09	(2) GD71	COS/FUV COS/NUV	3	26-Apr-2022 07:00:37.0	yes
57	(2) GD71	COS/FUV COS/NUV	2	26-Apr-2022 07:00:41.0	yes
55	(1) WD0308-565	COS/FUV COS/NUV	1	26-Apr-2022 07:00:43.0	yes

Propagal 16006 (STSal Edit Number: 0. Croated: Tugaday, April 26, 2022 at 6:00:42 AM Eastern Standard Time). Overview

23 Total Orbits Used

ABSTRACT

This program obtains observations of two spectrophotometric white dwarf standard stars (WD0308-565 and GD71) at all COS2025-compliant cenwaves and FP-POS at LP6 for G160M modes. The data will be used to determine the 2D cross-dispersion spectral profiles and traces required to perform two-zone extraction, as well as the sensitivities and flat-fields for accurate flux calibration. Additionally, the data will be used to determine the spatial resolution of the detectors. WD0308-565 is the primary target for this program due to its status as a flux standard and TDS target. GD71 is used to more efficiently calibrate Segment A.

The main requirement for this program is to achieve S/N of about 50 per resel, which is driven by the requirement for obtaining profiles that are sufficiently accurate that the contours can be located such that the enclosed flux errors are less than 1%. This program ties in with the FUV spectroscopic sensitivity monitoring program (PID 16830) during which near-contemporaneous observations at the new LP will be obtained to monitor any rapid evolution in the gain.

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OBSERVING DESCRIPTION

This program contains 9 visits; visits 1-6 contain the WD0308-565 observations, and visits 7-9 contain the GD71 observations. It is modeled after PID 14910, which served the same purpose for LP4, with the following changes made:

(1) The G160M portions of visits 3-5 go to LP6 via the selection of the LIFETIME-POS optional parameter. No special commanding is necessary for this (including HV, focus, and aperture). The remaining grating exposures are removed.

(2) Each cenwave (all FPPOS) is now contained in its own visit. Planning the visits this way keeps them to 2-3 orbits each, which will help with scheduling.

(3) Each visit begins with 2 ACQ/IMAGE target acquisition exposures, which help to get the target more accurately centered and guard against TA failures.

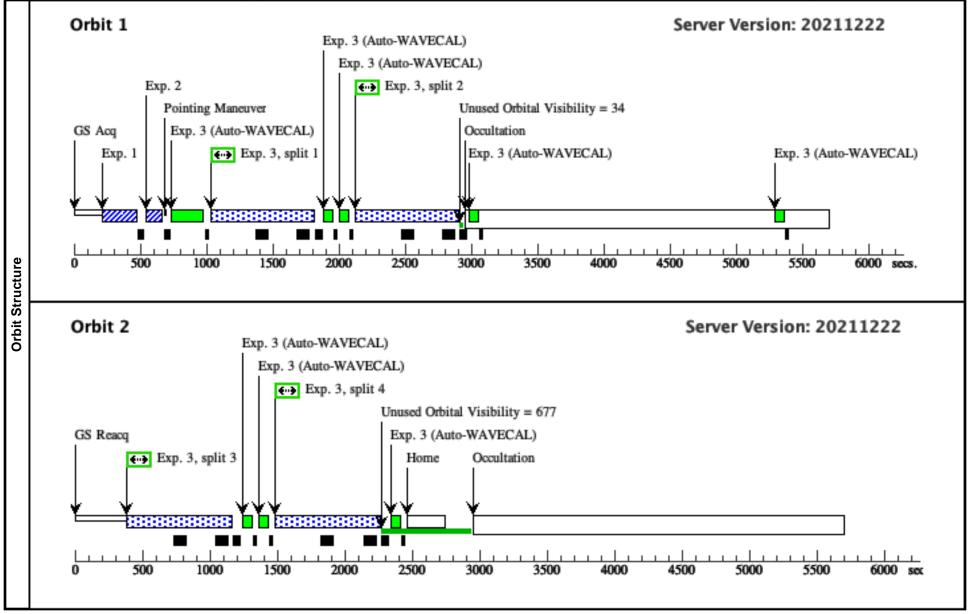
(4) The exposure times per cenwave are increased to account for decreased sensitivity of detector (TDS). The orbit count is higher for this program due to the overheads added by split-wavecals at LP6. Buffer times are modified for the WD0308-565 visits to minimize buffer readout time between exposures in order to fit longer integration. Exposure times are calucated to acheive S/N~50 at the same wavelengths used for the LP4 program, which have been shown to be adequate for these purposes.

Scheduling notes:

All visits per target should execute within two weeks of each other. Additionally, program 16830 visits 5a and 6 will be tied to this program, and we request that these execute as close to the visits in this program as possible.

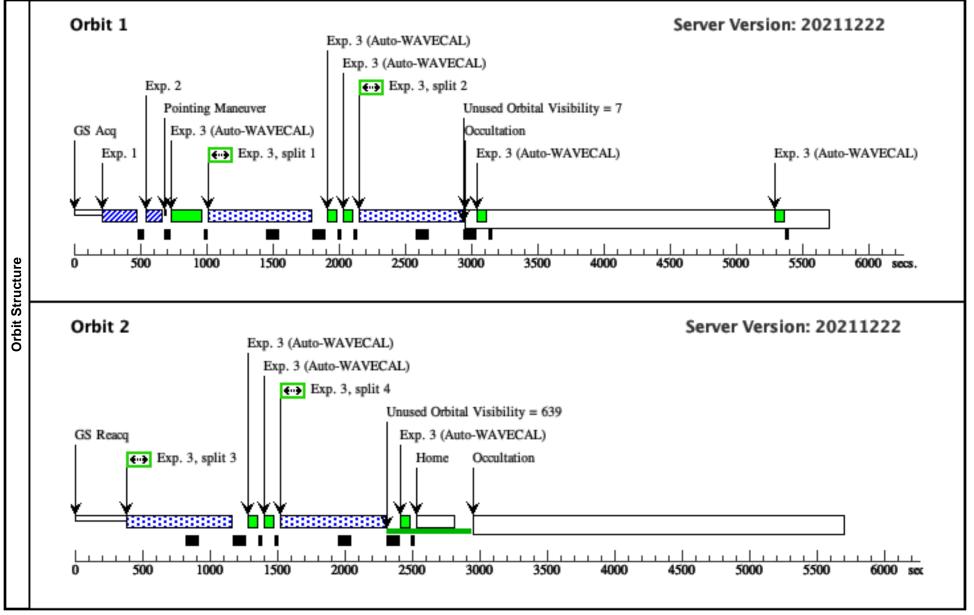
	Prop	posal 16906, V	VD0308 1533 (01),	completed					Tue Apr 26 11:00:43	3 GMT 202
Ľ	Diag	gnostic Status	: No Diagnostics							
Visit	Scie	ntific Instrum	ents: COS/FUV, CO	S/NUV						
	Spec	cial Requireme	ents: SCHED 100%							
	Com	ments: Visit c	ontaining observation	ons of WD0308-565 with cenwave 1533						
6	#	Name	9	Target Coordinates	Targ.	Coord. Corrections		Fluxes	Miscellaneous	
Targets	(1)	WD0	308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	Motion RA: 0.018141	sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
arg				Dec: -56 23 49.41 (-56.39706d)	Proper	Motion Dec: 0.0643 a	rcsec/yr			
Ĥ				Equinox: J2000	Epoch	of Position: 2000				
Fixed	Cate Desc	ments: Coord gory=STAR cription=[DB] nded=NO	inates from Charle's	: proposal						
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Req	s. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)	
		(COŠ.ta.168 3597)							[==>]	[1]
	Com	ments: 10.3 s	ec for S/N = 30 for t	he ACQ/IM						
Ś	2	ACQ/IM (COS.ta.168	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)	
ĕ		(COS.ta. 168 3597)							[==>]	[1]
Exposures	Com	ments: 10.3 s	ec for S/N = 30 for t	he ACQ/IM						-!
ğ	3	1533	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			725 Secs (2900 Secs)	
ш		(COS.sp.169 0867)			1533 A	LIFETIME-POS=	L		[==>(Split 1)]	
		0807)				P6;			[==>(Split 2)]	[1]
						SEGMENT=BOT	H;		[==>(Split 3)]	
						BUFFER-TIME=3	31		[==>(Split 4)]	[2]
						0			-	

Proposal 16906 - WD0308 1533 (01) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



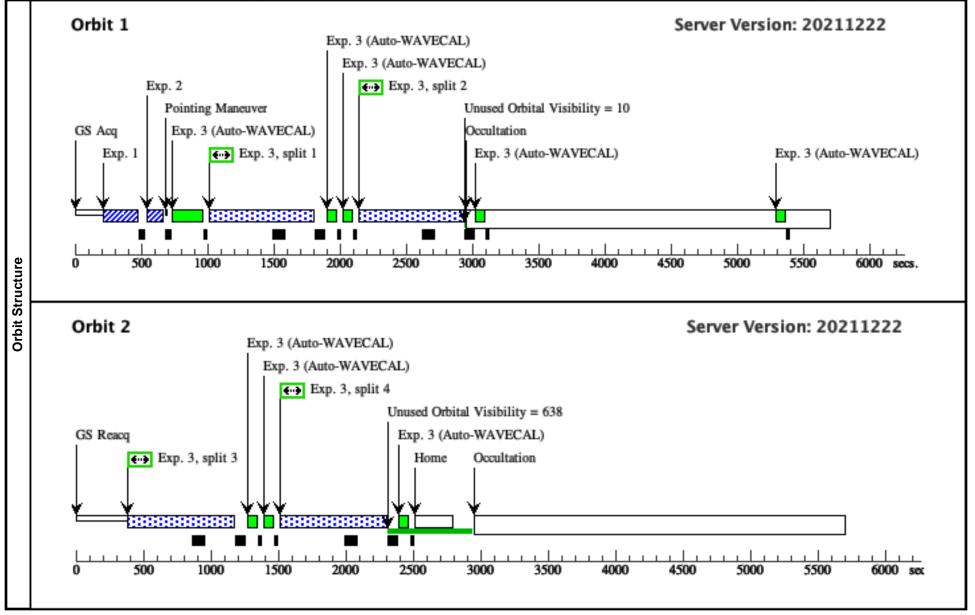
		ý v	VD0308 1577 (02),	completed					Tue Apr 26 11:00:44	GMT 202
Visit		<i>.</i>	: No Diagnostics ents: COS/FUV, CO	S /NILIN/						
>			ents: SCHED 100%	5/NU V						
	-	1		ons of WD0308-565 with cenwave 1577						
	#	Name		Target Coordinates	Targ. (Coord. Corrections		Fluxes	Miscellaneous	
ers	(1)	WD03	308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	Motion RA: 0.018141	sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
l argets				Dec: -56 23 49.41 (-56.39706d)	Proper	Motion Dec: 0.0643 a	rcsec/yr			
				Equinox: J2000	Epoch	of Position: 2000				
Fixed	Cate Desc	nments: Coord egory=STAR cription=[DB] nded=NO	inates from Charle's	proposal						
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Requ	. Groups	Exp. Time (Total)/[Actual Dur.]	Orbi
	1	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)	
		(COŠ.ta.168 3597)							[==>]	[1]
	Com		ec for $S/N = 30$ for t	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
S	2	ACQ/IM (COS.ta.168	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)	
ar e		(COS.ta.108 3597)							[==>]	[1]
SS	Com	ments: 10.3 se	ec for S/N = 30 for t	he ACQ/IM						
Exposures	3	1577	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			725 Secs (2900 Secs)	
Û		(COS.sp.169 0868)			1577 A	LIFETIME-POS=	L		[==>(Split 1)]	[1]
		0000)				P6;			[==>(Split 2)]	[1]
						SEGMENT=BOT	·		[==>(Split 3)]	
						BUFFER-TIME=	39		[==>(Split 4)]	[2]

Proposal 16906 - WD0308 1577 (02) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



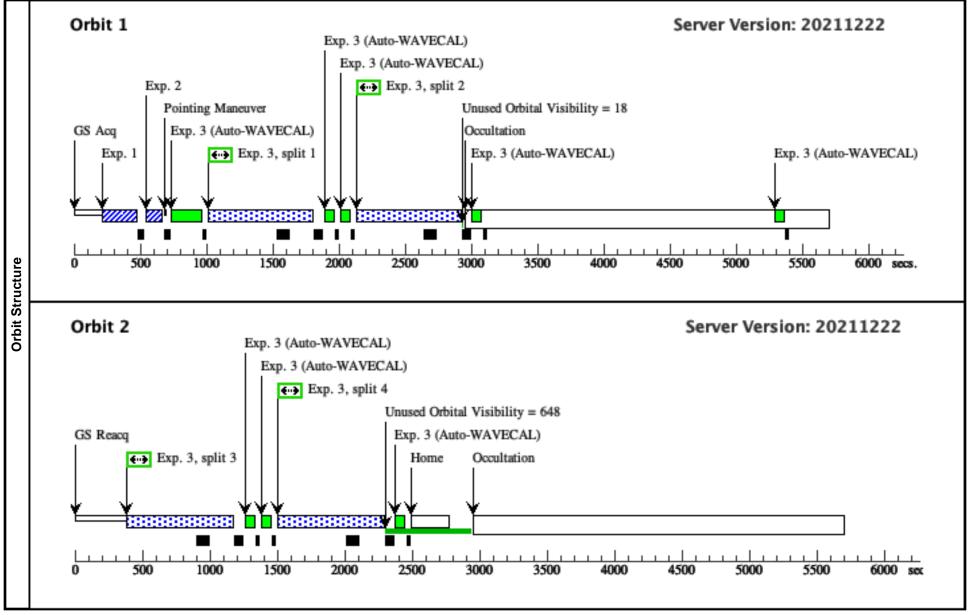
ments: Visit con	ts: SCHED 100%							
Name		ns of WD0308-565 with cenwave 1589 Target Coordinates	Targ. (Coord. Corrections		Fluxes	Miscellaneous	
WD030	8-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Proper	Motion RA: 0.018141 Motion Dec: 0.0643 a	2	V=14.07+/-0.02	Reference Frame: ICRS	
nded=NO Label	Farget	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs	. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ACQ/IM (COS.ta.168 3597)	()	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) [==>]	[1]
ACQ/IM (COS.ta.168	<i>JJJ</i> _ <i>J</i>	<u>e ACQ/IM</u> COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) [==>]	[1]
,	for $S/N = 30$ for th	e ACQ/IM						
1589 (COS.sp.168 8847)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1589 A	FP-POS=ALL; LIFETIME-POS= P6;	L		735 Secs (2940 Secs) $[==>(Split 1)]$ $[==>(Split 2)]$	[1]
					,		[==>(Split 3)] [==>(Split 4)]	[2]
n n n	ory=STAR iption=[DB] ded=NO Label ((ETC Run) ACQ/IM ((COS.ta.168 3597) nents: 10.3 sec ACQ/IM ((COS.ta.168 3597) nents: 10.3 sec (COS.ta.168 8597) nents: 10.3 sec (COS.sp.168	nents: Coordinates from Charle's p ory=STAR iption=[DB] ded=NO Label Target (ETC Run) ACQ/IM (1) WD0308-565 (COS.ta.168 3597) nents: 10.3 sec for $S/N = 30$ for the ACQ/IM (1) WD0308-565 (COS.ta.168 3597) nents: 10.3 sec for $S/N = 30$ for the 1589 (1) WD0308-565 (COS.sp.168	Equinox: J2000tequinox: J2000tequinox: J2000tequinox: J2000tequinox: J2000tequinox: J2000Label Target Config,Mode,Aperture (ETC Run)ACQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA (COS.ta.168 3597)tents: 10.3 sec for $S/N = 30$ for the ACQ/IMACQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA (COS.ta.168 3597)tents: 10.3 sec for $S/N = 30$ for the ACQ/IMTOS/NUV, ACQ/IMAGE, BOA (COS.ta.168 3597)tents: 10.3 sec for $S/N = 30$ for the ACQ/IMTOS/SUB (1) WD0308-565 COS/NUV, ACQ/IMAGE, PSA (COS.sp.168 8847)	Equinox: J2000EpochEpochtory=STARipition=[DB]ded=NOLabel Config,Mode,ApertureSpectral Els.(ETC Run)Config,Mode,ApertureSpectral Els.(ETC Run)MIRRORAACQ/IM(1) WD0308-565COS/NUV, ACQ/IMAGE, BOAMIRRORA(COS.ta.168 3597)MIRRORACOS/NUV, ACQ/IMAGE, BOAMIRRORA(COS.ta.168 3597)ments: 10.3 sec for S/N = 30 for the ACQ/IMCOS/NUV, ACQ/IMAGE, BOAMIRRORA(COS.ta.168 3597)ments: 10.3 sec for S/N = 30 for the ACQ/IM(COS.sp.168G160M(COS.sp.168(1) WD0308-565COS/FUV, TIME-TAG, PSAG160M(COS.sp.1681589 A1589 A	Equinox: J2000Epoch of Position: 2000tents: Coordinates from Charle's proposaltory=STARiption=[DB]Config,Mode,ApertureSpectral Els.Opt. Params.Coordinates from Charle's proposalded=NOLabelTargetConfig,Mode,ApertureSpectral Els.Opt. Params.ACQ/IM(1) WD0308-565COS/NUV, ACQ/IMAGE, BOAMIRRORAACQ/IMACQ/IM(1) WD0308-565COS/NUV, ACQ/IMAGE, BOAMIRRORAIDS/N = 30 for the ACQ/IMACQ/IM(1) WD0308-565COS/FUV, TIME-TAG, PSAG160MFP-POS=ALL;(COS.sp.168COS/FUV, TIME-TAG, PSAG160MFP-POS=ALL;(COS.sp.168SEGMENT=BOTBUFFER-TIME-44	Equinox: J2000 tents: Coordinates from Charle's proposal tory=STAR iption=[DB] ded=NO Label Target Config,Mode,Aperture Spectral Els. Opt. Params. Special Reqs (CTC Run) COS/NUV, ACQ/IMAGE, BOA MIRRORA ACQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA MIRRORA (COS.ta.168 3597) tents: 10.3 sec for S/N = 30 for the ACQ/IM ACQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA MIRRORA (COS.ta.168 3597) tents: 10.3 sec for S/N = 30 for the ACQ/IM tents: 10.3 sec for S/N = 30 for the ACQ/IM 1589 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=ALL; (COS.sp.168 8847) IS89 A LIFETIME-POS=L P6; SEGMENT=BOTH; BUFFER-TIME=44 4	Equinox: J200 Epoch of Position: 2000 Target Config,Mode,Aperture Spectral Els. Opt. Params. Special Reqs. Groups COS/NUV, ACQ/IMAGE, BOA MIRRORA CQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA MIRRORA CQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA MIRRORA ACQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA MIRRORA COS ta. 168 3597) nents: 10.3 sec for S/N = 30 for the ACQ/IM ACQ/IM (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=ALL; COS sp. 168 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=LL; COS sp. 168 S847) (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=LL; SEGMENT=BOTH; BUFFER-TIME=44 4	Equinox: J2000Epoch of Position: 2000entry: Coordinates from Charle's proposalory=STAR iption=[DB]det-NOLabel (ET C Run)Spectral Els.Opt. Params.Special Reqs.GroupsExp. Time (Total)/[Actual Dur.](ET C Run)10 Sees (10 Sees)ACQ/IM (1) WD0308-565COS/NUV, ACQ/IMAGE, BOA MIRORAMIRORA10 Sees (10 Sees)I 0 Sees (10 Sees)(COS.ta.168 3597)entrs: 10.3 sec for S/N = 30 for the ACQ/IMACQ/IM(1) WD0308-565COS/NUV, ACQ/IMAGE, BOA MIRORAMIRORAI 0 Sees (10 Sees)(COS.ta.168 3597)entrs: 10.3 sec for S/N = 30 for the ACQ/IMI 10 Sees (10 Sees)(COS.ta.168 3597)I 10 Sees (10 Sees)(COS.ta.168 3597)I 10 Sees (10 Sees)(COS.ta.168 3597)I 10 Sees (2940 Sees)I 10 Sees (2940 Sees)[1589 ALIFETIME-POS=L P6; SEGMENT=BOTH; BUFFER-TIME=44SUFFER-TIME=44A(1) WD0308-565COS/IUV, TIME-TAG, PSAGl60MFP-POS=ALL; P6; SEGMENT=BOTH; BUFFER-TIME=44 </td

Proposal 16906 - WD0308 1589 (03) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



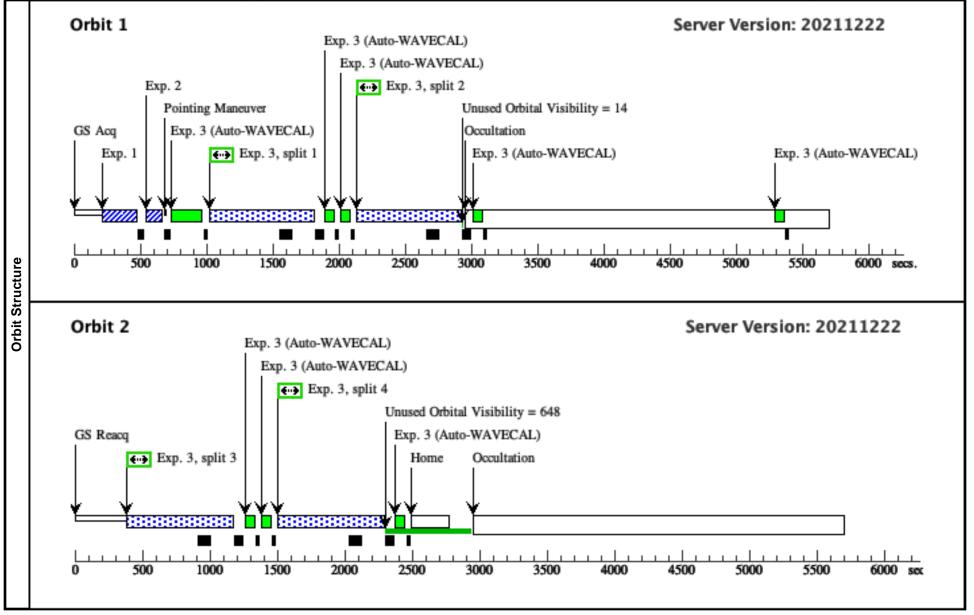
Visit	Diag Scier	gnostic Status: ntific Instrume	VD0308 1600 (04), : No Diagnostics ents: COS/FUV, CO ents: SCHED 100%						Tue Apr 26 11:00:44	GMT 202
	1	1	ontaining observation	ons of WD0308-565 with cenwave 1600 Target Coordinates	Targ	Coord. Corrections		Fluxes	Miscellaneous	
Fixed Targets	Cate Desc	WD03	308-565 inates from Charle's	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Proper	Motion RA: 0.018141 Motion Dec: 0.0643 a of Position: 2000	2	V=14.07+/-0.02	Reference Frame: ICRS	
	#		Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs	. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) [==>]	[1]
	Com	uments: 10.3 se	ec for $S/N = 30$ for t	he ACQ/IM						
Ires	2	ACQ/IM (COS.ta.168 3597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				$\frac{10 \text{ Secs } (10 \text{ Secs})}{[==>]}$	[1]
nsc	Com	ments: 10.3 se	ec for S/N = 30 for t	he ACQ/IM						
Exposures	3	1600 (COS.sp.168 8848)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=ALL; LIFETIME-POS= P6;	_		735 Secs (2940 Secs) [==>(Split 1)] [==>(Split 2)]	[1]
						SEGMENT=BOT BUFFER-TIME=- 8	2		[==>(Split 3)] [==>(Split 4)]	[2]

Proposal 16906 - WD0308 1600 (04) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



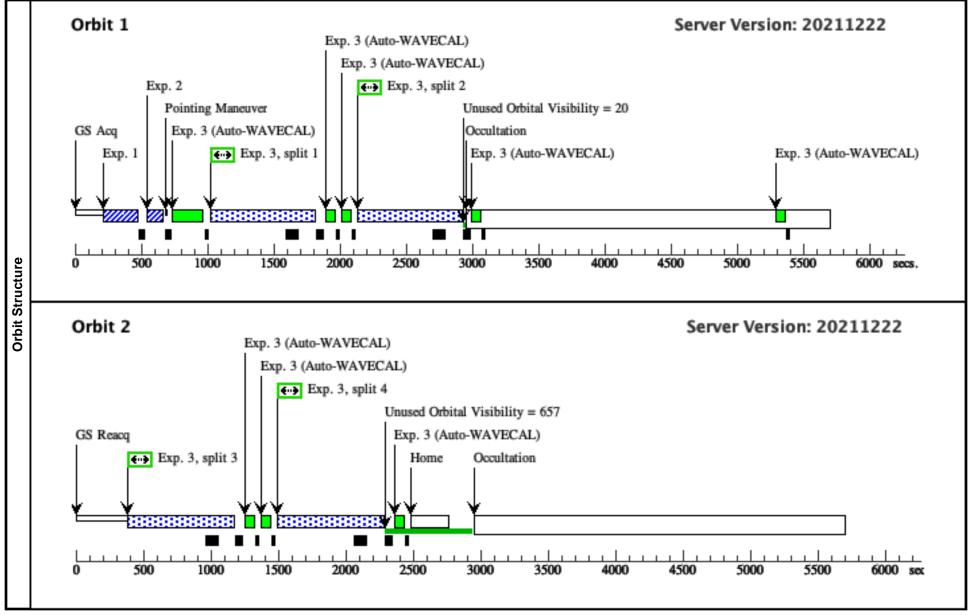
Visit	Diag Scie	gnostic Status: entific Instrume	VD0308 1611 (05), No Diagnostics nts: COS/FUV, CO						Tue Apr 26 11:00:44	GMT 202
	1	1	nts: SCHED 100% ontaining observation	ons of WD0308-565 with cenwave 1611						
S	#	Name		Target Coordinates	Targ.	Coord. Corrections		Fluxes	Miscellaneous	
Targets	(1)	WD03	08-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper	Motion RA: 0.018141 Motion Dec: 0.0643 at of Position: 2000	2	V=14.07+/-0.02	Reference Frame: ICRS	
Fixed	Cate Dese	nments: Coordi egory=STAR cription=[DB] ended=NO	nates from Charle's	proposal						
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs	. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)	
		(COS.ta.168 3597)							[==>]	[1]
	Com	ıments: 10.3 se	c for S/N = 30 for t	he ACQ/IM						
6	2	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)	
Exposures		(COS.ta.168 3597)							[==>]	[1]
os	Com	iments: 10.3 se	c for $S/N = 30$ for t	he ACQ/IM						
х р	3	1611 (COS.sp.168	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			735 Secs (2940 Secs)	
ш		(COS.sp.108 8849)			1611 A	LIFETIME-POS= P6;	L		[==>(Split 1)] $[==>(Split 2)]$	[1]
						SEGMENT=BOT BUFFER-TIME=4	2		$\begin{bmatrix} z = -S(Split 3) \end{bmatrix}$	[2]
						6			[==>(Split 4)]	

Proposal 16906 - WD0308 1611 (05) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



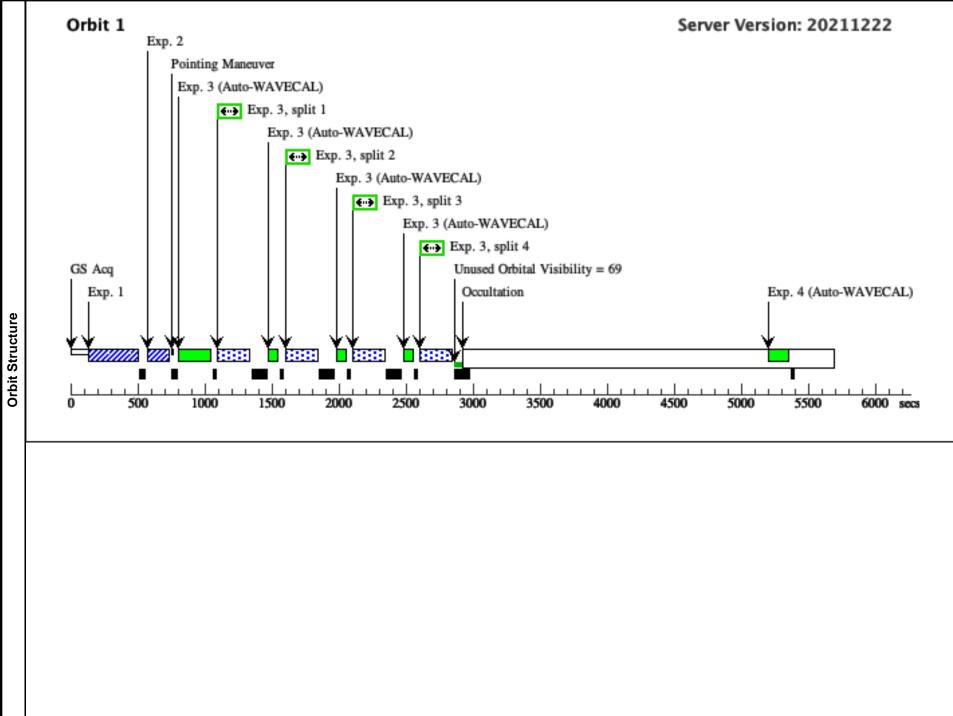
Visit	Diag Scie	gnostic Status ntific Instrume	VD0308 1623 (06), No Diagnostics nts: COS/FUV, CO nts: SCHED 100%	•					Tue Apr 26 11:00:44	GMT 202
	<i>Com</i> #	ments: Visit co Name		ons of WD0308-565 with cenwave 1623 Target Coordinates	Targ.	Coord. Corrections		Fluxes	Miscellaneous	
ΕİΧ	Cate Desc	WD03	08-565 nates from Charle's	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Proper	Motion RA: 0.018141 Motion Dec: 0.0643 a of Position: 2000	2	V=14.07+/-0.02	Reference Frame: ICRS	
	#	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.168 3597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) [==>]	[1]
	Com	ments: 10.3 se	c for $S/N = 30$ for t	he ACQ/IM						
	2	ACQ/IM (COS.ta.168 3597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				$\frac{10 \text{ Secs } (10 \text{ Secs})}{[==>]}$	[1]
nsc	Com	ments: 10.3 se	c for $S/N = 30$ for t	he ACQ/IM						
Exposures	3	1623 (COS.sp.168 8850)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=ALL; LIFETIME-POS= P6;	_		735 Secs (2940 Secs) [==>(Split 1)] [==>(Split 2)]	[1]
						SEGMENT=BOT BUFFER-TIME=: 8	2		[==>(Split 3)] [==>(Split 4)]	[2]

Proposal 16906 - WD0308 1623 (06) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

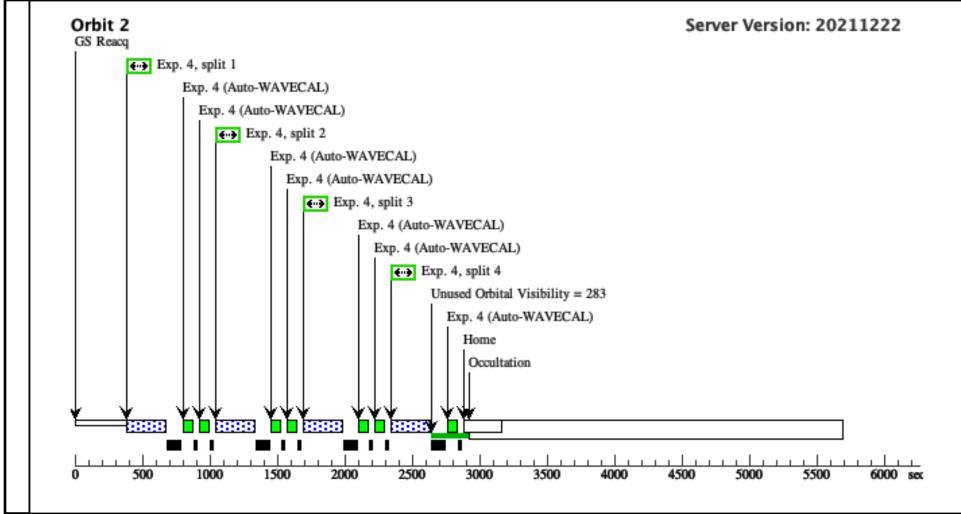


	Proposal 16906, GD71 1533 1577	(07), failed					Tue Apr 26 11:00:44	GMT 202
ij	Diagnostic Status: No Diagnostics							
Visit	Scientific Instruments: COS/FUV, C	COS/NUV						
-	Special Requirements: SCHED 100	%						
	Comments: Visit containing observe	ations of GD71 with Segment A only with c	enwaves 1533 + 13	577				
S	# Name	Target Coordinates	Targ.	Coord. Corrections	Flu	xes	Miscellaneous	
Targets	(2) GD71	RA: 05 52 27.6100 (88.1150417d)	Proper	Motion RA: 85 mas/yr	V=	13.06+/-0.01	Reference Frame: ICRS	
arç		Dec: +15 53 13.80 (15.88717d)	Proper	Motion Dec: -174 mas/y	/r			
Ĕ		Equinox: J2000	Epoch	of Position: 2000				
Fixed	Comments: Use sma RA, DEC amd Category=STAR Description=[DA] Extended=NO	PM as in proposal 12392 by Bohlin et al.						
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1 ACQ/IM (2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs)	_
	(COS.ta.168 3600)						[==>]	[1]
	Comments: 25.8 seconds for $S/N = .$	30 for ACO/IM						-
	2 ACQ/IM (2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs)	Т
	(COS.ta.168	000,110 1,1102,12011	minutoria				[==>]	[1]
	3600)							[1]
	Comments: 25.8 seconds for $S/N = .$	· ~	C1 (0)(1
	3 1533 (2) GD71 (COS.sp.168	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			190 Secs (760 Secs)	
Exposures	9536)		1533 A	LIFETIME-POS=L P6;			[==>(Split 1)]	
sul				SEGMENT=A;			[==>(Split 2)]	[1]
ö				BUFFER-TIME=17	,		[==>(Split 3)]	2-3
Ň				8			[==>(Split 4)]	
_	Comments: 760s gives S/N=50 at 16 760/4 = 190s per FPPOS BFT (seg A) = 267 * 2/3 = 178	520A						
	4 1577 (2) GD71	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			235 Secs (940 Secs)	
	(COS.sp.168 9540)		1577 A	LIFETIME-POS=L			[==>(Split 1)]	
	<i>7340)</i>			Рб;			[==>(Split 2)]	
				SEGMENT=A;			[==>(Split 3)]	[2]
				BUFFER-TIME=25			[==>(Split 4)]	
	Comments: 940s gives S/N=50 at 10 940/4 = 235s per FPPOS BFT (seg A) = 381 * 2/3 = 254	560A		•				

Proposal 16906 - GD71 1533 1577 (07) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

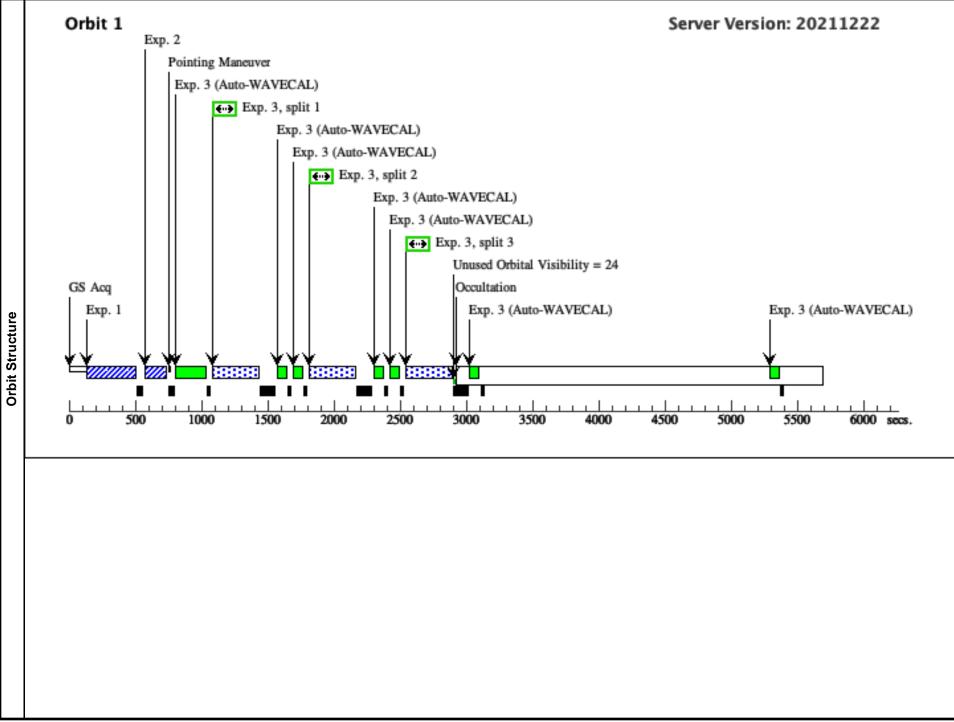


Proposal 16906 - GD71 1533 1577 (07) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

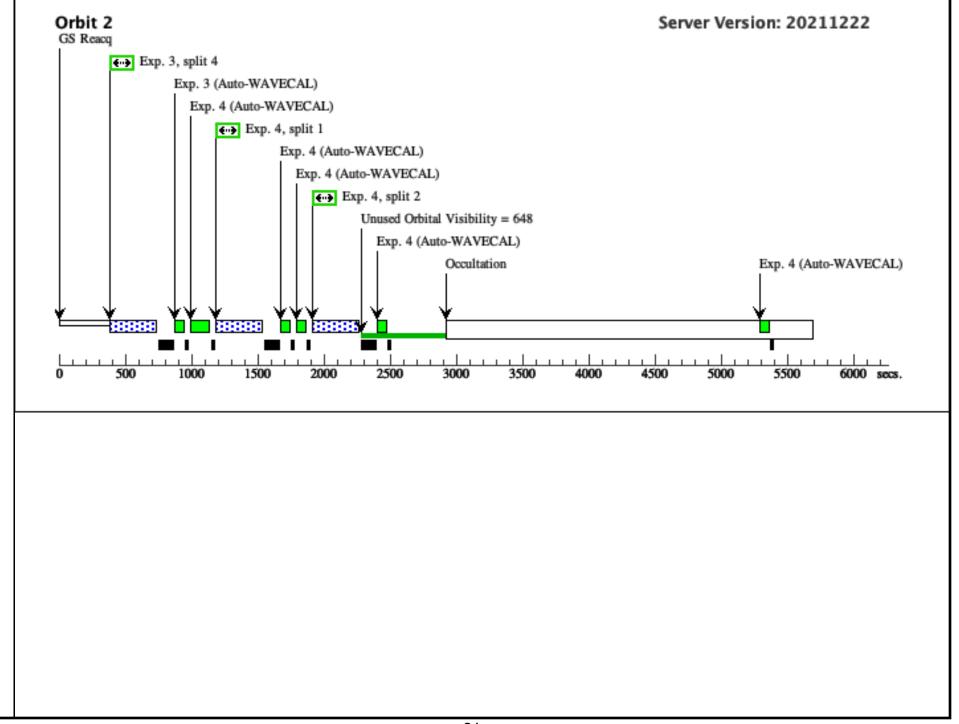


Prc	<u>posal 16906</u>	<u>5 - GD71 1</u>	<u> 1589 1600 (08) - COS FUV</u>	LP6 Calib	ration: Profiles,	Traces, Sei	<u>nsitivities, Fla</u>	<u>at Fields, and Spatial Reso</u>	lution
	Proposal 16906, G	D71 1589 1600	(08), failed					Tue Apr 26 11:00:44	GMT 2022
ij	Diagnostic Status:	No Diagnostics	5						
Visit	Scientific Instrume	nts: COS/FUV,	COS/NUV						
-	Special Requirement	nts: SCHED 100	0%						
	Comments: Visit co	ntaining observ	ations of GD71 with Segment A only with ce	enwaves 1589 + 10	500				
S	# Name		Target Coordinates	Targ.	Coord. Corrections	Flu	ixes	Miscellaneous	
Targets	(2) GD71		RA: 05 52 27.6100 (88.1150417d)	Proper	Motion RA: 85 mas/yr	V=	13.06+/-0.01	Reference Frame: ICRS	
arç			Dec: +15 53 13.80 (15.88717d)	Proper	Motion Dec: -174 mas/	yr			
Ë			Equinox: J2000	Epoch	of Position: 2000				
Fixed	Comments: Use sm Category=STAR Description=[DA] Extended=NO	a RA, DEC amd	PM as in proposal 12392 by Bohlin et al.						
	# 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/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs)	
	(COS.ta.168 3600)							[==>]	[1]
	Comments: 25.8 set	conds for $S/N =$	30 for ACO/IM						
	2 ACQ/IM	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs)	
	(COŠ.ta.168 3600)	. ,						[==>]	[1]
	Comments: 25.8 see	conds for S/N =	30 for ACQ/IM						
	3 1589	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			300 Secs (1200 Secs)	
ŝ	(COS.sp.168 9533)			1589 A	LIFETIME-POS=L			[==>(Split 1)]	
ure	2000)				P6;			[==>(Split 2)]	[1]
os					SEGMENT=A;			[==>(Split 3)]	
Exposures					BUFFER-TIME=27 8			[==>(Split 4)]	[2]
-	Comments: 1200s g 1200/4 = 300 s per BFT (seg A) = 417	FPPOS	1670A						
	4 1600	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			300 Secs (1200 Secs)	
	(COS.sp.168 9532)			1600 A	LIFETIME-POS=L			[==>(Split 1)]	[2]
	//				P6;			[==>(Split 2)]	[4]
					SEGMENT=A; BUFFER-TIME=29			[==>(Split 3)]	[2]
					8 8	,		[==>(Split 4)]	[3]
L	Comments: 1200s g 1200/4 = 300 s per BFT (seg A) = 447	gives S/N~50 at FPPOS * 2/3 = 298	1680A						

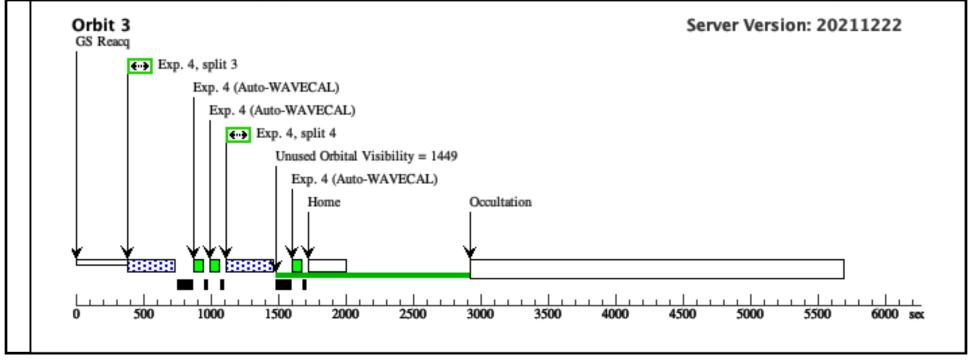
Proposal 16906 - GD71 1589 1600 (08) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



Proposal 16906 - GD71 1589 1600 (08) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

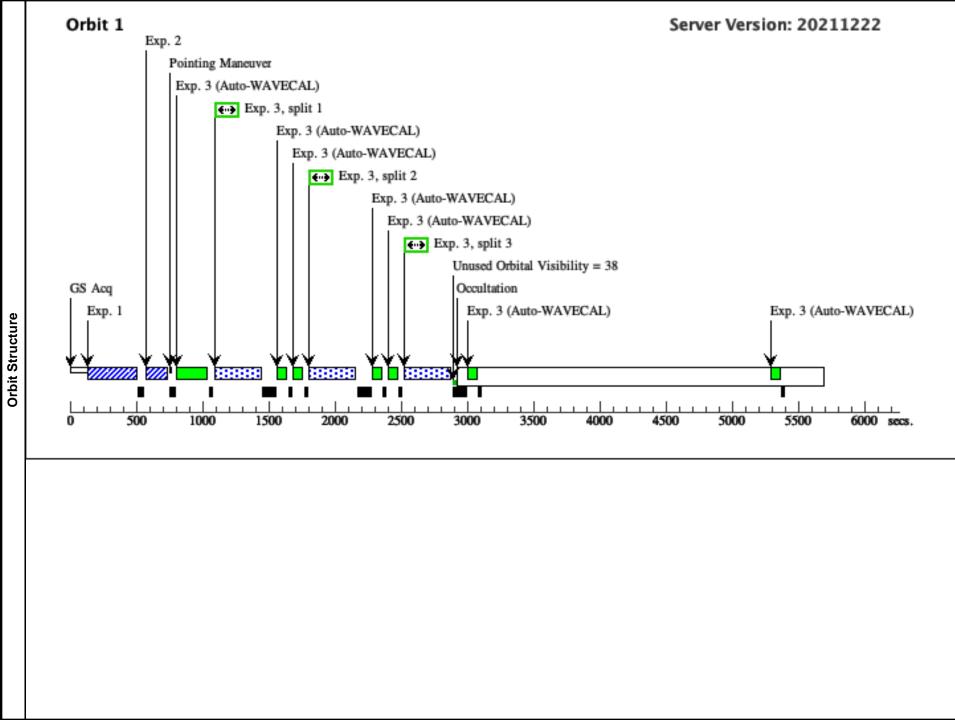


Proposal 16906 - GD71 1589 1600 (08) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

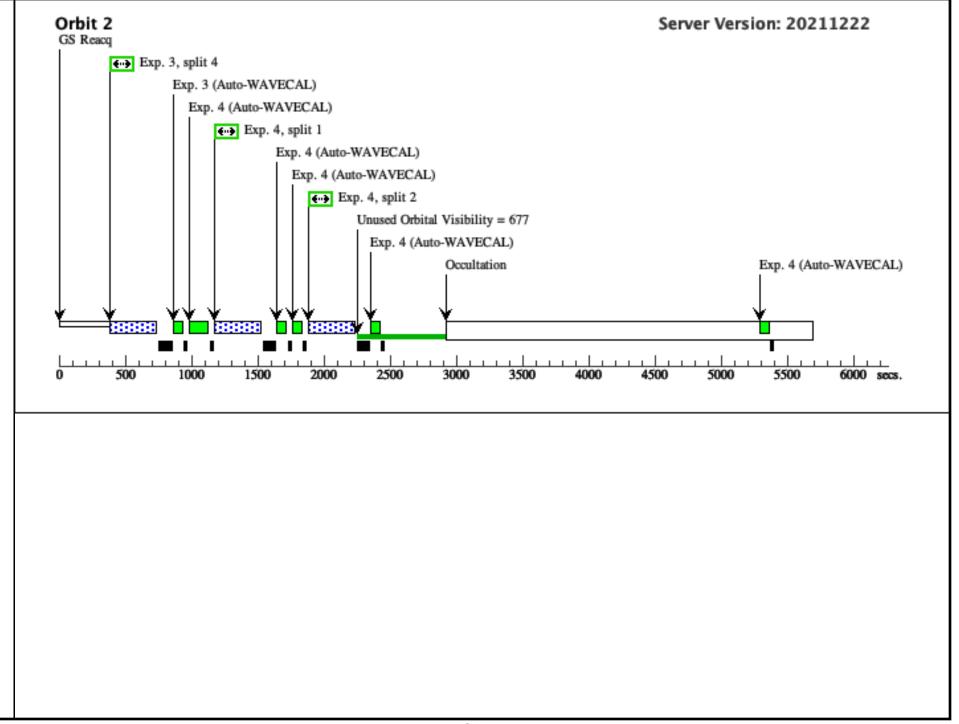


	Proposal 16906, GD71 1611 1623	(09), completed					Tue Apr 26 11:00:44	GMT 202
	Diagnostic Status: No Diagnostic						Ĩ	
Visit	Scientific Instruments: COS/FUV,	COS/NUV						
>	Special Requirements: SCHED 10							
		pations of GD71 with Segment A only with a	enwaves 1611 + 10	523				
	# Name	Target Coordinates	Targ.	Coord. Corrections	Fh	uxes	Miscellaneous	
Targets	(2) GD71	RA: 05 52 27.6100 (88.1150417d)	Proper	Motion RA: 85 mas/yr	V=	=13.06+/-0.01	Reference Frame: ICRS	
ľg		Dec: +15 53 13.80 (15.88717d)	Proper	Motion Dec: -174 mas/y	yr			
Ta		Equinox: J2000	Epoch	of Position: 2000				
ΕİΧ	Comments: Use sma RA, DEC ama Category=STAR Description=[DA] Extended=NO	l PM as in proposal 12392 by Bohlin et al.						
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1 ACQ/IM (2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs)	
	(COS.ta.168 3600)						[==>]	[1]
	<i>Comments: 25.8 seconds for S/N =</i>	30 for ACO/IM						-1
ľ	2 ACQ/IM (2) GD71	COS/NUV, ACO/IMAGE, BOA	MIRRORB				26 Secs (26 Secs)	
	(COŠ.ta.168 3600)						[==>]	[1]
	<i>Comments:</i> 25.8 seconds for $S/N =$	20 for ACO/IM						[1]
- F	3 1611 (2) GD71	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			300 Secs (1200 Secs)	1
	(COS.sp.168	CO5/F0V, 11ME-1AO, F5A	1611 A	LIFETIME-POS=L			[==>(Split 1)]	-
Exposures	9531)		1011 A	P6;			I = >(Split 2)I $I = >(Split 2)I$	[1]
su				SEGMENT=A;			[==>(Split 2)] $[==>(Split 3)]$	[1]
g				BUFFER-TIME=30)		$\frac{1-2}{(Split 3)}$	
ы				9			[>(Spiii 4)]	[2]
	<i>Comments: 1200s gives S/N~50 at 1200/4 = 300 s per FPPOS</i> <i>BFT (seg A) = 464 * 2/3 = 309</i>	1690A						
ľ	4 1623 (2) GD71	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			300 Secs (1200 Secs)	
	(COS.sp.168 9530)		1623 A	LIFETIME-POS=L			[==>(Split 1)]	
	3330)			Рб;			[==>(Split 2)]	[2]
				SEGMENT=A;			[==>(Split 3)]	
					3		[==>(Split 4)]	[3]
	Comments: 1200s gives S/N~50 at 1200/4 = 300 s per FPPOS BFT (seg A) = 509 * 2/3 = 339	1700A		BUFFER-TIME=33 9	3			_

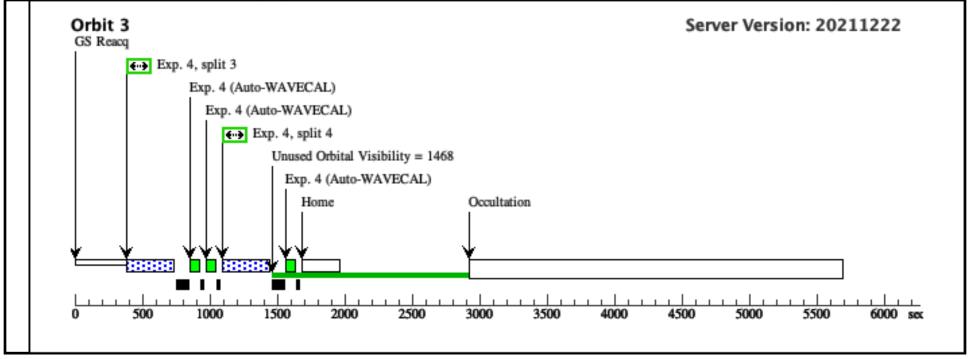
Proposal 16906 - GD71 1611 1623 (09) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



Proposal 16906 - GD71 1611 1623 (09) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



Proposal 16906 - GD71 1611 1623 (09) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

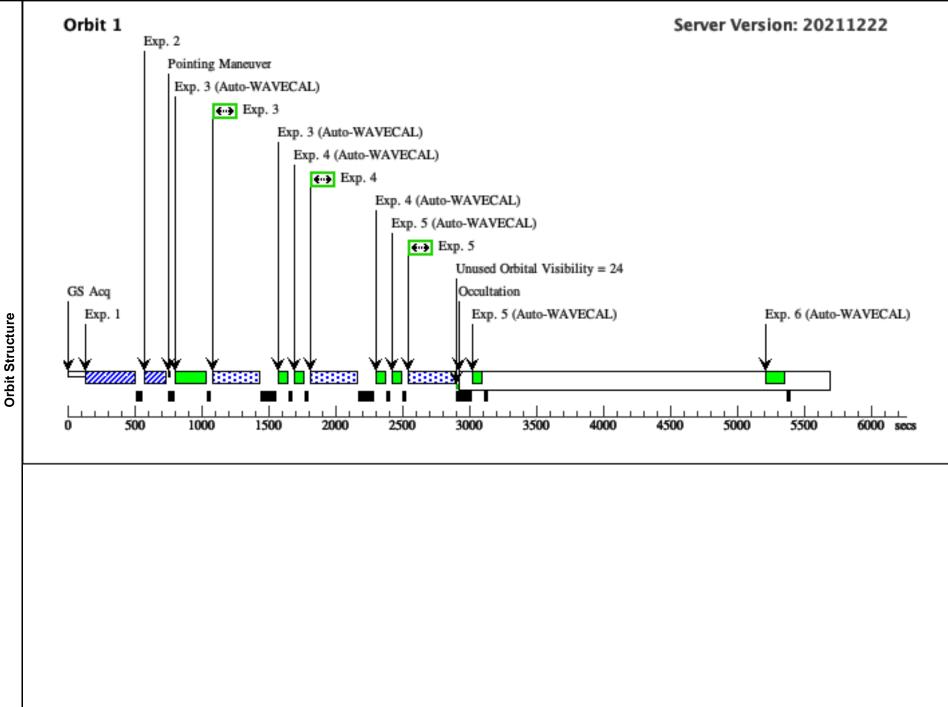


Proposal 16906 - GD71 1577 + 1589 (57) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

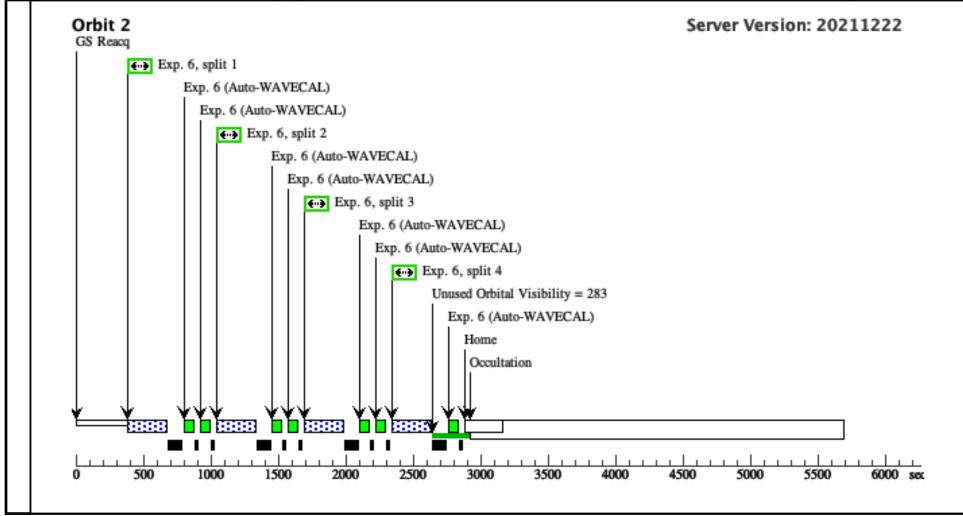
	Proposal 16906, GD71 1577 +	Tue Apr 26 11:00:44 GMT 2022							
Visit	Diagnostic Status: No Diagno								
	Scientific Instruments: COS/FU								
	Special Requirements: SCHED 100%								
	Comments: Repeat visit containing observations of GD71 with Segment A only with cenwaves 1577 (all FPPOS) and 1589 (FPPOS 1-3)								
6	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
lets	(2) GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS				
arg		Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr						
ixed T		Equinox: J2000	Epoch of Position: 2000						
	Comments: Use sma RA, DEC Category=STAR Description=[DA] Extended=NO	amd PM as in proposal 12392 by Bohlin et al.							

#	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.168	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) [==>]			
C	3600)		- ACO/IM					[==>]	[1]		
$\frac{Con}{2}$	ACQ/IM	$\frac{econds \text{ for } S/N = 30 \text{ for}}{(2) \text{ GD71}}$	COS/NUV, ACO/IMAGE, BOA	MIRRORB				26 Saga (26 Saga)			
2	(COS.ta.168		COS/NUV, ACQ/INIAGE, DOA	MIKKOKB				26 Secs (26 Secs) [==>1			
C	3600)		ACO/M					1	[1]		
Con 3	1589 fppos	$\frac{econds \ for \ S/N = 30 \ for}{(2) \ GD71}$	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=1;			300 Secs (300 Secs)			
5	1		CO5/F0V, TIME-TAO, F5A	1589 A	LIFETIME-POS=L			[==>]			
	(COS.sp.168 9533)			1507 1	P6;			1>			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				SEGMENT=A;				[1]		
					BUFFER-TIME=27 8						
Con	nments· 1200s	gives S/N~50 at 1670A	4		0						
Comments: 1200s gives S/N~50 at 1670A 1200/4 = 300 s per FPPOS BFT (seg A) = 417 * 2/3 = 278											
BF I	$\frac{1}{1589} (seg A) = 417$		COS/FUV, TIME-TAG, PSA	G160M	FP-POS=2;			300 Secs (300 Secs)			
4	2		CO5/10 V, HIVE-1AO, 15A	1589 A	LIFETIME-POS=L			[==>]			
	(COS.sp.168 9533)			100711	P6;						
	,				SEGMENT=A;				[1]		
					BUFFER-TIME=27 8						
Con	nments: 1200s	gives S/N~50 at 1670A	1		0						
120	$\begin{array}{l} 220/4 = 300 \ s \ per \ FPOS \\ BFT (seg \ A) = 417 \ * 2/3 = 278 \end{array}$										
5	1589 fppos		COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			300 Secs (300 Secs)			
5	3 (COS.sp.168		1589 A	LIFETIME-POS=L			[==>]				
	(COS.sp.108 9533)				P6;						
					SEGMENT=A;				[1]		
					BUFFER-TIME=27 8						
Con	Comments: 1200s gives S/N~50 at 1670A										
1200/4 = 300 s per FPPOS BFT (seg A) = 417 * 2/3 = 278											
6	1577 (seg A) = 417		COS/FUV, TIME-TAG, PSA	G160M	FP-POS=ALL;			235 Secs (940 Secs)			
	11		- , -,	1577 A	LIFETIME-POS=L			[==>(Split 1)]			
	(COS.sp.168 9540)				Р6;			[==>(Split 2)]			
					SEGMENT=A;			[==>(Split 3)]	[2]		
					BUFFER-TIME=25 4			[==>(Split 4)]			
Car	nments· 940s o	ives S/N=50 at 1660A						L	1		
(an											

Proposal 16906 - GD71 1577 + 1589 (57) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



Proposal 16906 - GD71 1577 + 1589 (57) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution



Visit	Proposal 16906 - WD0308 1611 (55) - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution Proposal 16906, WD0308 1611 (55) Tue Apr 26 11:00:44 GMT 2022 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none) Comments: Repeat visit containing observations of WD0308 with cenwave 1611 FPPOS 3 + 4										
6	# Name	Target Coordinates	Targ. Coord. Corrections			Fluxes	Miscellaneous				
Targets	(1) WD0308-565	Proper Motion RA: 0.018141 sec of time/yr V=14.07+/-0.02 Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000			Reference Frame: ICRS						
Fixed	Equinox: J2000 Epoch of Position: 2000 Comments: Coordinates from Charle's proposal Category=STAR Description=[DB] Extended=NO										
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs	. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit			
	1 ACQ/IM (1) WD0308-565 (COS.ta.168 3597)	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) [==>]	[1]			
	,	Comments: 10.3 sec for $S/N = 30$ for the ACQ/IM									
	2 ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs)				
	(COŠ.ta.168 3597)						[==>]	[1]			
	Comments: 10.3 sec for $S/N = 30$ for the ACQ/IM										
	3 1611 fppos (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			735 Secs (735 Secs)				
Exposures	3 (COS.sp.168 8849)		1611 A	LIFETIME-POS=1 P6; SEGMENT=BOT1			[==>]	[1]			
	Comments: 2940s gives S/N~50 at 15	530A		BUFFER-TIME=4 6	49						
	2940/4 = 735s per FPPOS BFT = 745 * 2/3 = 496										
	4 1611 fppos (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=4;			735 Secs (735 Secs)	<u> </u>			
	4 (COS.sp.168		1611 A	LIFETIME-POS= P6;	L		[==>]				
	8849)			SEGMENT=BOT	H;			[1]			
				BUFFER-TIME=4 6	19						
	Comments: 2940s gives S/N~50 at 15 2940/4 = 735s per FPPOS BFT = 745 * 2/3 = 496	30A									



