

16324 - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Cycle: 28, 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 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:21.0	yes
02	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	05-Nov-2021 09:00:23.0	yes
03	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:25.0	yes
53	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:27.0	yes

Proposal 16324 (STScI Edit Number: 4, Created: Friday, November 5, 2021 at 8:00:43 AM Eastern Standard Time) - Overview

	Targets used in Visit	Configurations used in Visit		Last Orbit Planner Run	OP Current with Visit?
04	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	05-Nov-2021 09:00:29.0	yes
05	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:31.0	yes
06	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	05-Nov-2021 09:00:33.0	yes
07	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:35.0	yes
08	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:38.0	yes
09	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	05-Nov-2021 09:00:39.0	yes
10	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	05-Nov-2021 09:00:41.0	yes
11	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	05-Nov-2021 09:00:42.0	yes

³¹ Total Orbits Used

ABSTRACT

The FUV gratings are the most used modes on COS. They have experienced changes in sensitivity since the instrument was installed. The trends in the time-dependent spectroscopic sensitivity depend on the grating, segment and wavelength. This calibration proposal is to monitor the sensitivity

Proposal 16324 (STScI Edit Number: 4, Created: Friday, November 5, 2021 at 8:00:43 AM Eastern Standard Time) - Overview of each FUV grating mode at several cenwave settings on an approximately bi-monthly schedule, and to characterize the observed trends.

OBSERVING DESCRIPTION

As part of the standard monitoring sequence the standard stars, WD0308-565 and GD71, will be observed every two months (except for May-July, during which time GD71 is unavailable).

Each sequence consists of 5 orbits: a 3 orbit visit (target WD0308-565) that covers

G130M/1055/FUVA,

G130M/1222,

G130M/1291,

G130M/1327/FUVA,

G160M/1533/FUVB

G160M/1577/FUVB,

G160M/1623/FUVB,

G140L/800/FUVA

G140L/1105/FUVA,

G140L/1280,

and a 2 orbit visit (target GD71) that covers

G130M/1096/FUVB,

G160M/1533/FUVA,

G160M/1577/FUVA,

G160M/1623/FUVA.

These comprise the shortest and longest central wavelengths of the normal modes with each grating. Additionally, G130M/1055, and 1096 (the blue modes) and G130M/1291 are included. Also included is G160M/1577, which used to be the shortest cenwave before the introduction of G160M/1533 in Cycle 26. The observations will be done at LP4, except for G130M/1055 and G130M/1096, which will be done at LP2.

We have added TDS connection visits for G130M/1291 and 1327 at LP5 in visit 05, and for G140L/800 at LP3 in visit 03, to enable the calibration

Proposal 16324 (STScI Edit Number: 4, Created: Friday, November 5, 2021 at 8:00:43 AM Eastern Standard Time) - Overview of these cenwaves at new lifetime positions. The TDS connection exposures at LP3 in Visit 03 should temporarily not be calibrated.

The October visit 10 exposures will occur after the move to LP5 and LP3. G130M/1291 and 1300 exposures have been changed from LP4 to LP5, and G140L exposures have been changed from LP4 to LP3. G160M and G130M/1055/1096/1222 cenwaves are unchanged.

SNR requirements:

- The general requirement is for an SNR of 15 per resel at the wavelength of least sensitivity for the standard modes, and SNR of 15 per resel beyond some minimum wavelength for the blue modes and c1222. The G140L/800 and 1280 modes have slightly different criteria, to provide SNR of >~5 per resel at wavelengths below ~1080 Ang.
- The aim is to obtain TDS calibration better than 2% for standard modes and 10% for blue modes.

ETC calculations:

- The ETC calculations use CALSPEC standard model versions wd0308_565_mod_003.fits and gd71_mod_010.fits against which the TDS model slopes are referenced.
- The ETC calculations are specified by requiring SNR of 15 at specific wavelengths, except for the following:

G140L/800 SNR of 6 per resel at 1045 Ang (only FUVA is used)

G140L/1280 SNR of 12 per resel at 1090 Ang (lies on FUVB)

- For the blue modes and c1222, the wavelengths specified for SNR of 15 are:

990 Ang for c1096 (Only FUVB is used)

1120 Ang for c1055 (lies on FUVA)

1130 Ang for c1222 (lies on FUVB)

Time constraints:

- Complete monitoring sequence should occur every 2 months starting in December 2018.
- GD71 is unschedulable May-July 2018, and therefore that sequence will consist of only one visit.

The exposure times and organization of visits follows the scheme used in Cycle 27. As in Cycle 27, for all but one set of the WD0308-565 observations using G160M, the specifications now are SEGMENT=B (i.e. segment A is turned off). The one exception is the June sequence (visit

Proposal 16324 (STScI Edit Number: 4, Created: Friday, November 5, 2021 at 8:00:43 AM Eastern Standard Time) - Overview 07) for which the specifications are SEGMENT=BOTH for these modes, because GD71 is not available during this period.

Proposal 16324 - WD0308-DEC (01) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

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	Proposal 16324, WD0308-DEC	(01), completed			Fri Nov 05 13:00:43 GMT 2021			
.≝	Diagnostic Status: No Diagnost	tics						
/is	Scientific Instruments: S/C, COS	S/FUV, COS/NUV						
_	Special Requirements: SCHED 100%; BETWEEN 26-DEC-2020:00:00 AND 08-JAN-2021:00:00:00							
	Comments: All G160M observati	ions are with SEGMENT = B (i.e. segment A is tui	rned off).					
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
ets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS			
Ιğ		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr					
⊒		Equinox: J2000	Epoch of Position: 2000					
ğ	Comments: Coordinates carried	over from Cycle 25 proposal, checked against SIN	MBAD, which uses the GAIA DR2 catalog.					
ĬĚ	Proper motions changed to mas/y Category=STAR	yr, from SIMBAD, also using the GAIA DR2 catal	og.					
I۳	Description=[DB]							
	Extended=NO							

Proposal 16324 - WD0308-DEC (01) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	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)	
	(839304)							[==>]	[1]
Com Cycl	ments: cycle 2 e 28 comment:	4 comment: exposure twe continue to use the	e times not reduced following updated he same exposure time since difference	ETC calculations, es do not affect orb	differences not enough to it request.	affect orbit requeste	d.		
2	G130M/105	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=28			393 Secs (393 Secs)	
	5/LP2 (COS.sp.145	1055 A	3;			[==>]			
	7645)				FP-POS=3;				
					SEGMENT=BOTH;				[1]
					LIFETIME-POS=L P2				
Com Set b	ments: ETC bi	uffer time is 1831 sec xptime - 110 sec							
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
	2 (COS.sp.145			1222 A	7;			[==>]	
	7646)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Com	ments: ETC bi	uffer time is 392 sec. xptime - 110 sec							
4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
	1 (COS.sp.145	, ,		1291 A 6;	6;			[==>]	
	7647)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Com Set h	ments: ETC bi	uffer time is 323 sec. xptime - 110 sec							
5	G140L/1280	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			366 Secs (366 Secs)	
	(COS.sp.145 7781)			1280 A	6;			[==>]	
	7701)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
		uffer time is 460 sec. xptime - 110 sec							•
6		DARK	S/C, DATA, NONE			QASISTATES CO	S	1 Secs (1 Secs)	
						FUV HVLOW HV OW	L	[==>]	[1]
Com	ments: Work-a	around to efficiently s	chedule the reconfiguration to SEG-A	. Eliminates SPSS	induced gaps.	011			1
7	G160M/153	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/B (COS.sp.145			1533 A	BUFFER-TIME=11			[==>]	
	7649)				3;				
					LIFETIME-POS=L P4;				[2]
					SEGMENT=B				
Com	ments: ETC bi	uffer time is 502 sec.							
Set b	ouffer time = ex	xptime - 110 sec.							

Proposal 16324 - WD0308-DEC (01) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

8 G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=3; 275 Secs (275 Secs) [r=>]
(COS.sp.145 7650) [r=>]

P4;

Comments: ETC buffer time is 606 sec.

,	Set buffer time = exptime - 110 sec					
- [) 01001v1/102 (1) w D0300-303	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	372 Secs (372 Secs)	
	3/B (COS.sp.145 7651)		1623 A	BUFFER-TIME=26 2;	[==>]	
	, 301)			LIFETIME-POS=L P4;		[2]

LIFETIME-POS=L

SEGMENT=B

[2]

Comments: ETC buffer time is 760 sec. Set buffer time = exptime - 110 sec

10	DARK	S/C, DATA, NONE	QASISTATES COS	1 Secs (1 Secs)	
			FUV HVLOW HVL OW	[==>]	[2]

SEGMENT=B

Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

11	G140L/800/ (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25	367 Secs (367 Secs)	
	FUVA		800 A	7;	[==>]	
	(COS.sp.145 7778)			FP-POS=3;		
	,			SEGMENT=A;		[2]
				LIFETIME-POS=L P4		

Comments: ETC buffer time is 350 sec.
Set buffer time = exptime - 110 sec

Se	t buffer time = exptime - 110 sec					
12	G140L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22	332 Secs (332 Secs)	
	/FUVA		1105 A	2;	[==>]	
	(COS.sp.145 7846)			FP-POS=3;		
				SEGMENT=A;		[3]
				LIFETIME-POS=L		

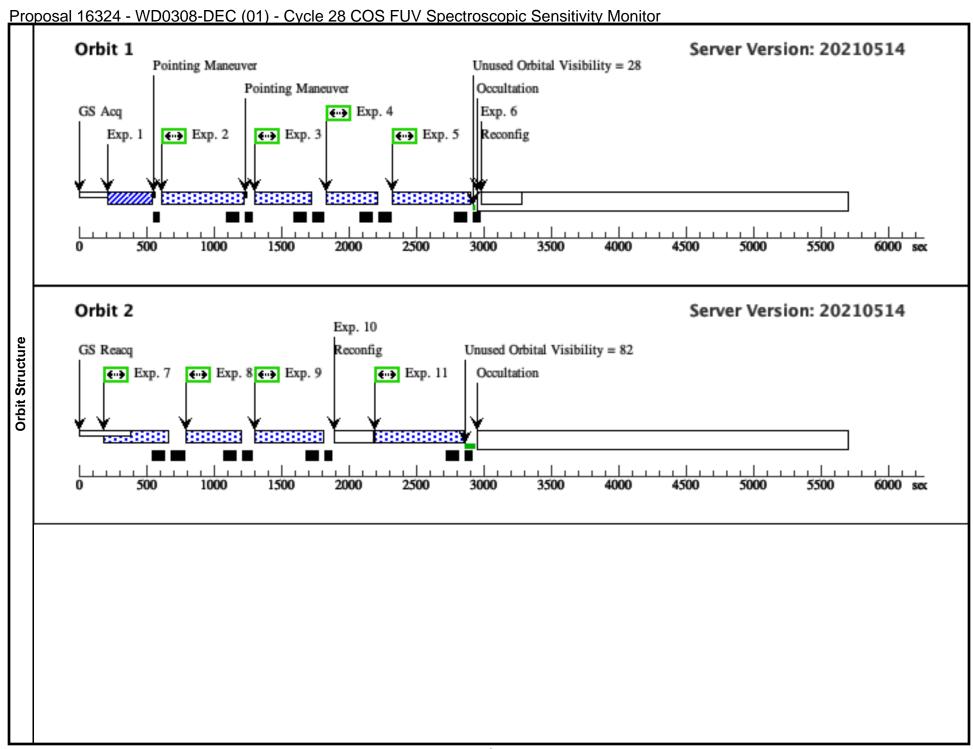
P4

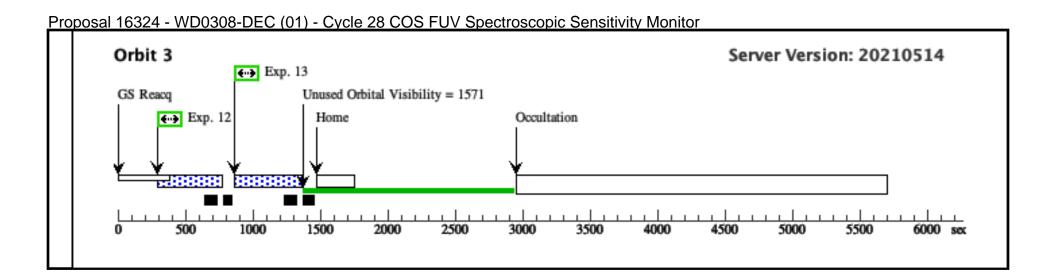
Comments: ETC buffer time is 358 sec.

Set	$buffer\ time = exp$	time - 110 sec					
13		1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16	274 Secs (274 Secs)	
	7/FUVA (COS.sp.145			1327 A	4;	[==>]	1
	7657)				FP-POS=3;		ĺ
	,				LIFETIME-POS=L P4;		[3]

SEGMENT=A

Comments: ETC buffer time is 324 sec. set buffer time = exptime - 110 sec





Proposal 16324 - GD71-DEC (02) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Proposal 16324, GD71-DEC (02), completed Fri Nov 05 13:00:43 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: S/C, COS/FUV, COS/NUV

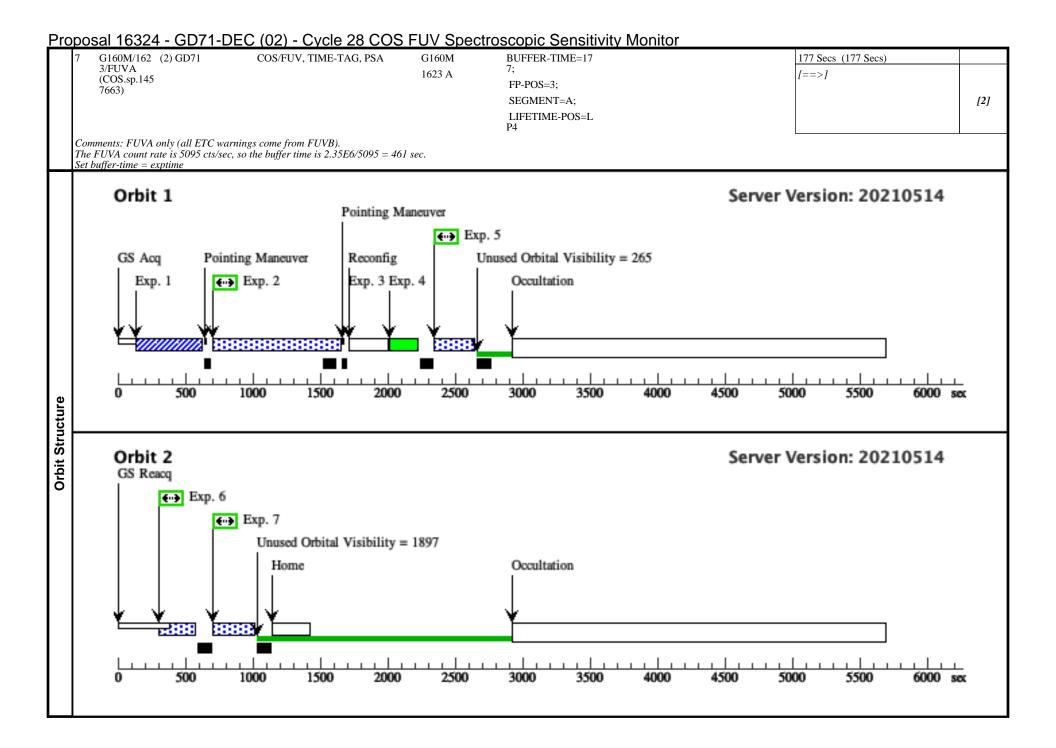
Special Requirements: SCHED 100%; BETWEEN 26-DEC-2020:00:00:00 AND 08-JAN-2021:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3
All G160M observations are with SEGMENT = A (i.e. segment B is turned off).

	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
ets	(2)	GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
۱ğ			Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr		
<u>a</u>			Equinox: J2000	Epoch of Position: 2000		
Fixed		s from previous co-ordinate. STAR n=[DA]	notions updated with values from SIMBAD, which s are in decimal places in seconds of time and arcs			

Proposal 16324 - GD71-DEC (02) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

(E I	oel (C Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	Q/IM	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)	
574	OS.ta.839							[==>]	[1]
Comment Cycle 28	ts: Exptime	e for S/N of 60 is we continue to i	105.5 sec, using 90 sec leads to S/N of 55 use the same exposure time since differenc	i. es do not affect orbi	it request.				
2 G13	30M/109	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=63			744 Secs (744 Secs)	
6/F0 2	UVB/LP			1096 A	4;			[==>]	
(CC	OS.sp.145				FP-POS=3;				[11
765	9)				SEGMENT=B; LIFETIME-POS=L				[1]
					P2				
The FUV	B count ra	only (all ETC wa te is 585 cts/sec optime - 110 sec	urnings come from FUVA). , so the buffer time is 2.35E6/585 = 4017 s	sec.					
3		DARK	S/C, DATA, NONE			QASISTATES CO	S	1 Secs (1 Secs)	
						FUV HVLOW HV OW	L	[==>]	[1]
Commen	ts: Work-a	round to efficien	atly schedule the SEG-B to SEG-A reconfig	guration. Eliminate	s SPSS induced gaps.	0.11			
4 G13	30M/109	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
	UVA W ECAL/L			1096 A	SEGMENT=A;			[==>]	
P2					FLASH=NO;				[1]
					LIFETIME-POS=L P2				' '
Comment mber 201	ts: Cycle 2 7 and Apr	8: the exposure il 2020.	time has been updated to 160 seconds. Th	is was determined o		lecrease by about 12	percent in the sumn	ned count-rate with time over the period be	tween De
		(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			106 Secs (106 Secs)	
	UVA OS.sp.145			1533 A	6; ED DOS_2.			I ==> J	
766					FP-POS=3; SEGMENT=A;				[1]
					LIFETIME-POS=L				[1]
					P4				
The FUV		te is 9240 cts/se	urnings come from FUVB). c, so the buffer time is 2.35E6/9240 = 254	sec.					
6 G16	50M/157		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=13			135 Secs (135 Secs)	
	UVA OS.sp.145			1577 A	5;			[==>]	
766	51)				FP-POS=3;				
					SEGMENT=A;				[2]
					LIFETIME-POS=L P4				
The FUV	ts: FUVA e A count ra r-time = ex	te is 6674 cts/se	urnings come from FUVB). c, so the buffer time is 2.35E6/6674 = 352	sec.					•



Proposal 16324 - WD0308-FEB (03) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

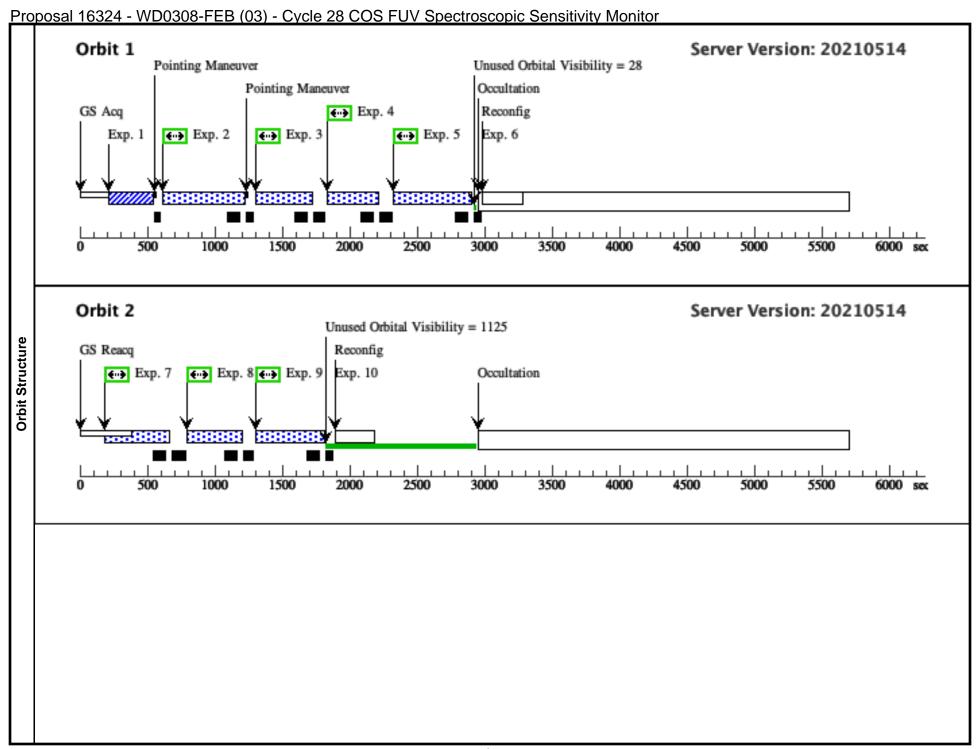
	podal room in the	300 1 <u>EB (00)</u>	· · · · · · · · · · · · · · · · · · ·						
	Proposal 16324, WD0308-FEB	(03), failed			Fri Nov 05 13:00:43 GMT 2021				
<u>.</u> =:	Diagnostic Status: No Diagnost	tics							
/is	Scientific Instruments: S/C, COS								
_	Special Requirements: SCHED	100%; BETWEEN 18-FEB-2021:00:00:00 AND 2	27-FEB-2021:00:00:00						
	Comments: All G160M observations are with SEGMENT = B (i.e. segment A is turned off).								
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
gets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS				
Ιğ		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr						
⊒ I		Equinox: J2000	Epoch of Position: 2000						
Fixed	Comments: Coordinates carried over from Cycle 25 proposal, checked against SIMBAD, which uses the GAIA DR2 catalog. Proper motions changed to mas/yr, from SIMBAD, also using the GAIA DR2 catalog. Category=STAR Description=[DB]								
	Extended=NO								

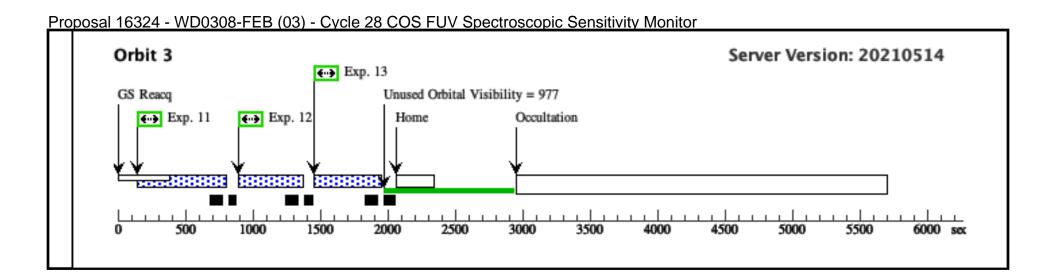
Proposal 16324 - WD0308-FEB (03) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	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				45 Secs (45 Secs)	
	(839564)							[==>]	[1]
Con	nments: See Visi								1
2	G130M/105 5/LP2	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=28 3;			393 Secs (393 Secs)	
	(COS.sp.145			1055 A	FP-POS=3;			[==>]	
	7645)				SEGMENT=BOTH;				[1]
					LIFETIME-POS=L				
C	nments: See Visi	: 01			P2				
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
	2	(1) 11 20300 303		1222 A	7;			[==>]	
	(COS.sp.145 7646)			1222 11	FP-POS=3;			1>1	
	, 0.0,				LIFETIME-POS=L				[1]
					P4;				
Cor	nments: See Visi	it 01 comments			SEGMENT=BOTH				
4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
	1		,	1291 A	6;			[==>]	
	(COS.sp.145 7647)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Cor	nments: See Visi	it 01 comments			SEGMENT-BOTT				
5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			366 Secs (366 Secs)	
	(COS.sp.145	()		1280 A	6;			[==>1	
	7781)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Cor	nments: See Visi	it 01 comments.			SEGMENT-BOTT				
6		DARK	S/C, DATA, NONE			QASISTATES CC	os	1 Secs (1 Secs)	
						FUV HVLOW HV OW	'L	[==>]	[1]
Con	nments: Work-a	round to efficiently .	schedule the reconfiguration to SEG-A	. Eliminates SPSS	induced gaps.				· I
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/B (COS.sp.145			1533 A	BUFFER-TIME=11			[==>]	
	7649)				3;				
					LIFETIME-POS=L P4;				[2]
					SEGMENT=B				
Con	nments: See Visi	it 01 comments.							L

Proposal 16324 - WD0308-FEB (03) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

	G160M/157 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;		275 Secs (275 Secs)	
(7/B (COS.sp.145 7650)		1577 A	BUFFER-TIME=16 5;	i	[==>]	
	,			LIFETIME-POS=L P4;			[2]
				SEGMENT=B			
	nents: See Visit 01 comments.						
	G160M/162 (1) WD0308-565 3/B	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;		372 Secs (372 Secs)	
((COS.sp.145 7651)		1623 A	BUFFER-TIME=26 2;		[==>]	
	,			LIFETIME-POS=L P4;			[2
				SEGMENT=B			
Comm	nents: See Visit 01 comments.						
10	DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL	1 Secs (1 Secs)	
					FUV HVLOW HVL OW	I = = > J	[2
Comm	nents: Work-around to efficiently s	schedule the reconfiguration to SEG-	A. Eliminates SPS	S induced gaps.	0,11		
	G140L/800/ (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25		367 Secs (367 Secs)	
I	FUVA	,	800 A	7;		[==>1	
((COS.sp.145 7778)			FP-POS=3;		, ,	
				SEGMENT=A;			[:
				LIFETIME-POS=L P4			
Comm	nents: See Visit 01 comments.						
2 (G140L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22		332 Secs (332 Secs)	
	/FUVA (COS.sp.145		1105 A	2;		[==>]	
5	(CO3.sp.143 7846)			FP-POS=3;			
				SEGMENT=A;			[.
				LIFETIME-POS=L			
~	nents: See Visit 01 comments.			P4			
	G130M/132 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16		274 Secs (274 Secs)	
7	7/FUVA	COS/TOV, THVIE-TAG, FSA	1327 A	4;		[==>]	
((COS.sp.145 7657)		1321 A	FP-POS=3;		[/]	
,	1031)			LIFETIME-POS=L			[3
				P4;			
				SEGMENT=A			
Comm	nents: See Visit 01 comments.						





Proposal 16324 - WD0308-FEB (53) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

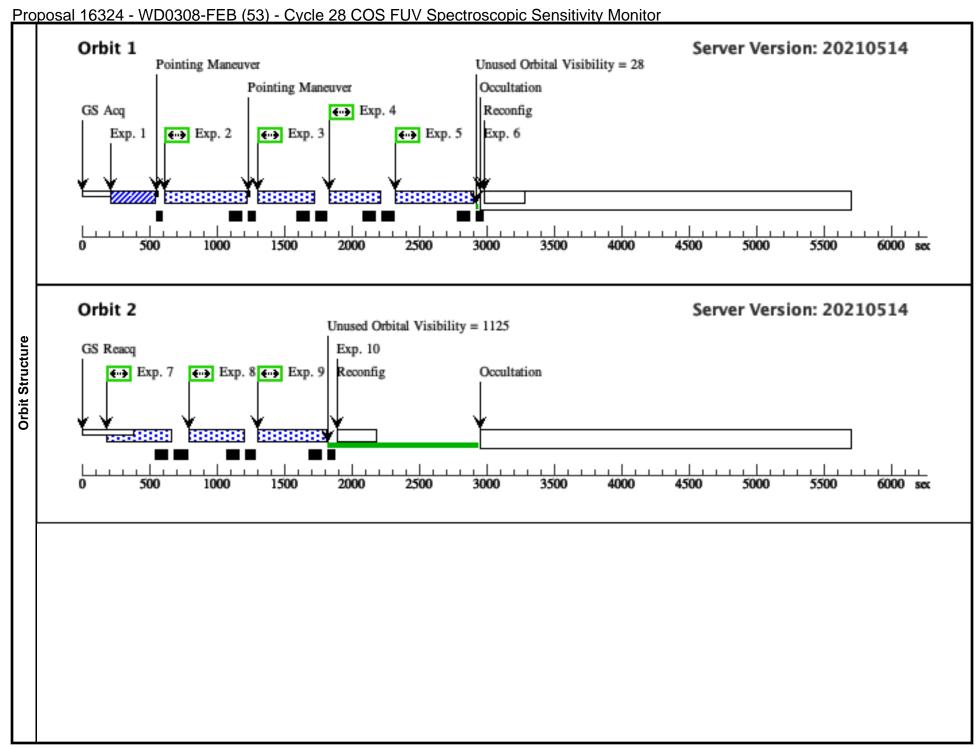
	Proposal 16324, WD0308-FEB	(53), completed	TO V Opodiredeopie Goriottivity		Fri Nov 05 13:00:44 GMT 2021				
ي. ا	Diagnostic Status: No Diagnost	ics							
/is	Scientific Instruments: S/C, COS								
[Special Requirements: SCHED 100%								
	Comments: All G160M observati	ions are with $SEGMENT = B$ (i.e. segment A is tun	rned off).						
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
ets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS				
8		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr						
⊒ I		Equinox: J2000	Epoch of Position: 2000						
٦									
Proper motions changed to mas/yr, from SIMBAD, also using the GAIA DR2 catalog. Category=STAR									
iÎ	Description=[DB]								
	Extended=NO								

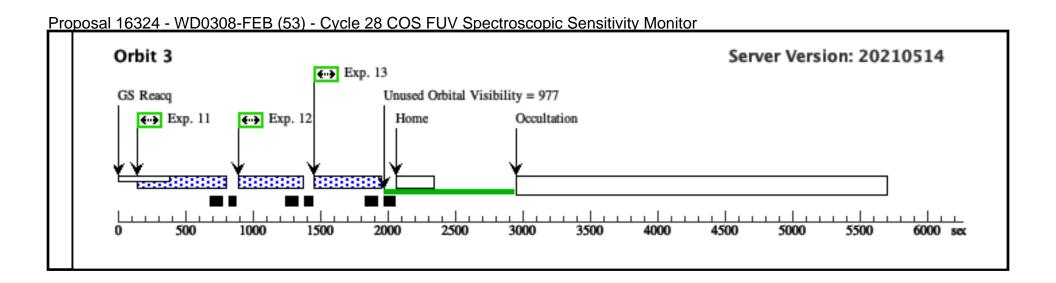
Proposal 16324 - WD0308-FEB (53) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbi
ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
							[==>]	[1]
			G1202.5	DATES TO 40			202 7 (202 7)	
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA						
(COS.sp.145			1055 A				[==>]	
7645)								[1
				LIFETIME-POS=L				'-
				P2				
		COS/FIIV TIME-TAG PSA	G130M	BUFFER-TIME=15			267 Secs. (267 Secs.)	
2	* *	COS/10 V, TIME-1AG, 15A		7;				
(COS.sp.145 7646)			122211	FP-POS=3;				
,				LIFETIME-POS=L				[1
ments: See Vis	sit 01 comments			SEGMENT-BOTH			L	
		COS/FUV. TIME-TAG. PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
1	* *			6;				
7647)				FP-POS=3;				
				LIFETIME-POS=L				[1
ments: See Vis	sit 01 comments			SEGMENT-BOTTI				
		COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			366 Secs (366 Secs)	
(COS.sp.145	()		1280 A	6;				
7781)								
								[1
				,				
ments: See Vis	sit 01 comments.			SEGMENT-BOTT				
	DARK	S/C, DATA, NONE			QASISTATES CO	OS T	1 Secs (1 Secs)	
					OW OW	/L	[==>]	[1]
ments: Work-a	around to efficiently s	schedule the reconfiguration to SEG-A	. Eliminates SPSS	induced gaps.				•
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
3/B (COS.sp.145			1533 A	BUFFER-TIME=11			I==>J	
7649)								
				P4;				[2
				SEGMENT=B				
							· · · · · · · · · · · · · · · · · · ·	
	### COS.sp.145 #### COS.sp.145 ##### COS.sp.145 ####################################	ACQ/IM	### ACQ/IM (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA (839564) ###################################	COS NUV ACQ/IMAGE BOA MIRRORA	ACQ/IM	ACO_ITM	(ETC Run) ACQ1M (1) WD0308-565 COS/NUV, ACQ/IMAGE, BOA MIRRORA MIPPOSS—3; MIPPER-TIME=18 MIPPE	ACQUIM 1) WD0308-565 COS/RUV, ACQ-IMAGE, BOA MIRRORA ACQUIM 1) WD0308-565 COS/RUV, TIME-TAG, PSA G130M BUFFER-TIME=28 393 Secs (393 Secs) [==>]

Proposal 16324 - WD0308-FEB (53) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

	60M/157 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;		275 Secs (275 Secs)	
7/B (CC 765	OS.sp.145		1577 A	BUFFER-TIME=16 5;	i	[==>]	
				LIFETIME-POS=L P4;			[2]
				SEGMENT=B			
Comment	ts: See Visit 01 comments.						
	60M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;		372 Secs (372 Secs)	
3/B (CO 765	OS.sp.145		1623 A	BUFFER-TIME=26 2;	j	[==>]	
, 00	·-·			LIFETIME-POS=L P4;			[2]
				SEGMENT=B			
Comment	ts: See Visit 01 comments.						
0	DARK	S/C, DATA, NONE			QASISTATES COS	1 Secs (1 Secs)	
					FUV HVLOW HVL OW	[==>]	[2
Comment	ts: Work-around to efficiently s	chedule the reconfiguration to SEG-2	A. Eliminates SPSS	S induced gaps.			
1 G14	40L/800/ (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25		367 Secs (367 Secs)	
FUV			800 A	7;		f==>1	
777	OS.sp.145 78)			FP-POS=3;			
	,			SEGMENT=A;			[3
				LIFETIME-POS=L			
,	4 C W:-!4 O1			P4			
	ts: See Visit 01 comments. 40L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22		332 Secs (332 Secs)	
/FU	JVA	COS/FOV, TIME-TAG, FSA	1105 A	2;		[==>]	
(CO 784	OS.sp.145		1103 A	FP-POS=3;		[>]	
/04	+0)			SEGMENT=A;			[.
				LIFETIME-POS=L			
				P4			
	ts: See Visit 01 comments.						
	30M/132 (1) WD0308-565 TUVA	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16 4;		274 Secs (274 Secs)	
(CO	OS.sp.145		1327 A	4; FP-POS=3:		[==>]	
765	57)			LIFETIME-POS=L			[3
				P4;			
				SEGMENT=A			
	ts: See Visit 01 comments.						





Proposal 16324 - GD71-FEB (04) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Proposal 16324, GD71-FEB (04), completed Fri Nov 05 13:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: S/C, COS/FUV, COS/NUV

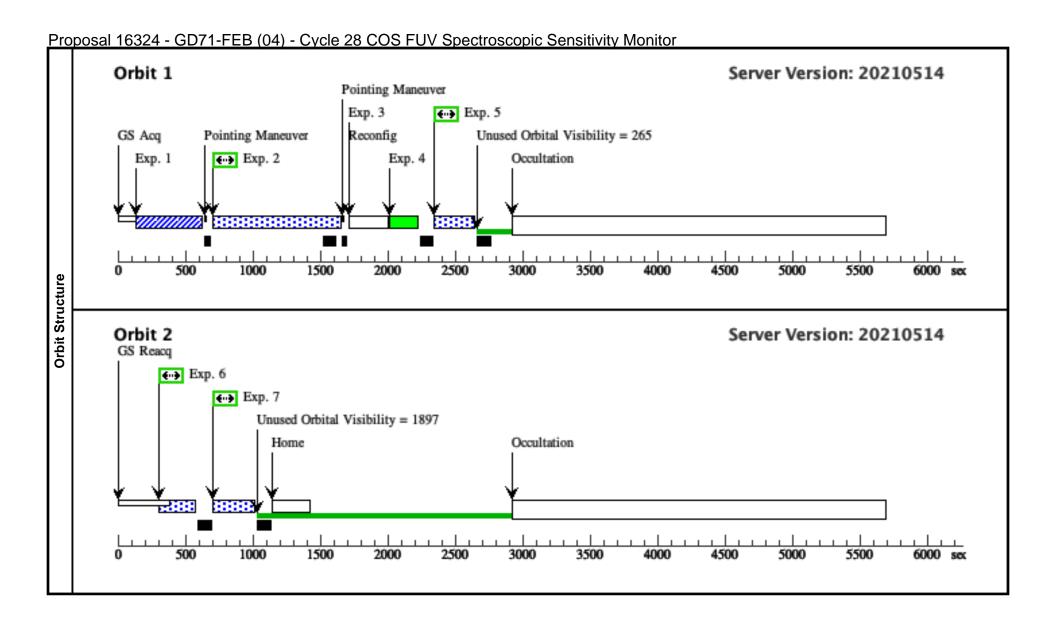
Special Requirements: SCHED 100%; BETWEEN 18-FEB-2021:00:00:00 AND 27-FEB-2021:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3
All G160M observations are with SEGMENT = A (i.e. segment B is turned off).

	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
ts	(2) GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS			
§		Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr					
<u>a</u>		Equinox: J2000	Epoch of Position: 2000					
1 8	Comments: Co-ordinates and proper motions updated with values from SIMBAD, which uses the GAIA DR2 catalog. Differences from previous co-ordinates are in decimal places in seconds of time and arcsec, within the stated errors. Category=STAR Description=[DA] Extended=NO							

Proposal 16324 - GD71-FEB (04) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	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	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)	
	574)							I = => J	[1]
Co	omments: See Vis	sit 02 comments.							
2	G130M/109 6/FUVB/LP	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=63			744 Secs (744 Secs)	
	2			1096 A	4; FP-POS=3;			[==>]	
	(COS.sp.145 7659)				SEGMENT=B;				[1]
	1007)				LIFETIME-POS=L P2				129
Со	omments: See Vis	sit 02 comments.							
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
						FUV HVLOW HVL OW		[==>]	[1]
Со	omments: Work-a	around to efficientl	ly schedule the SEG-B to SEG-A reconfig	uration. Eliminate.	s SPSS induced gaps.				•
4	G130M/109	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
	6/FUVA W AVECAL/L			1096 A	SEGMENT=A;			[==>]	
	P2				FLASH=NO;				[1]
					LIFETIME-POS=L P2				
Co	omments: See Vis	sit 02 comments.			1 2				1
5	G160M/153		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			106 Secs (106 Secs)	
	3/FUVA			1533 A	6;			[==>]	
	(COS.sp.145 7660)				FP-POS=3;				
					SEGMENT=A;				[1]
					LIFETIME-POS=L P4				
Со	omments: See Vis	sit 02 comments.							
6	G160M/157	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=13			135 Secs (135 Secs)	
	7/FUVA (COS.sp.145			1577 A	5;			[==>]	
	7661)				FP-POS=3;				523
					SEGMENT=A;				[2]
					LIFETIME-POS=L P4				
Со	omments: See Vis	sit 02 comments.							
7	G160M/162	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17			177 Secs (177 Secs)	
	3/FUVA (COS.sp.145			1623 A	7;			[==>]	
	7663)				FP-POS=3;				[2]
					SEGMENT=A;				[2]
					LIFETIME-POS=L P4				
Co	omments: See Vis	sit 02 comments.							•



Proposal 16324 - WD0308-APR (05) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

÷	, poda: 100= 1 11200	000 / 11 1 (00) Oycic 20 000	TO TOPOCHIOCOPIC CONCINITION	1110111101				
ı	Proposal 16324, WD0308-APR	(05), completed			Fri Nov 05 13:00:44 GMT 2021			
ي. ا	Diagnostic Status: No Diagnost	tics						
/is	Scientific Instruments: S/C, COS	cientific Instruments: S/C, COS/FUV, COS/NUV						
_	Special Requirements: SCHED 1							
	Comments: All G160M observati							
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
ets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS			
Ιğ		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr					
<u>a</u>		Equinox: J2000	Epoch of Position: 2000					
٦	Proper motions changed to mas/yr, from SIMBAD, also using the GAIA DR2 catalog.							
Ι×̈́								
ΙŒ	Category=STAR							
1	Description=[DB]							
	Extended=NO							

Proposal 16324 - WD0308-APR (05) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

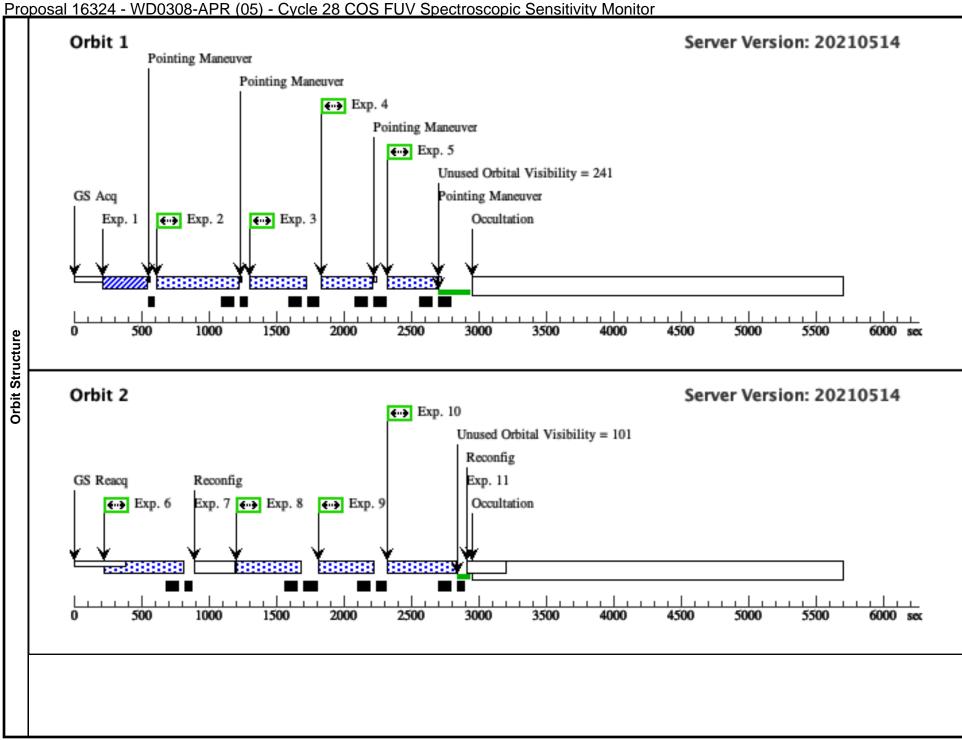
	Label T (ETC Run)	Carget	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
	(839564)							[==>]	[1]
Con	nments: See Visit								
2	G130M/105 (1 5/LP2	1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=28 3;			393 Secs (393 Secs)	
	(COS.sp.145			1055 A	FP-POS=3;			[==>]	
	7645)				SEGMENT=BOTH;				[1]
					LIFETIME-POS=L P2				
Con	nments: See Visit	01 comments.							
3	G130M/122 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
	(COS.sp.145			1222 A	7;			[==>]	
	7646)				FP-POS=3; LIFETIME-POS=L				[1]
					P4;				[1]
					SEGMENT=BOTH				
Con	nments: See Visit	01 comments.							
4	G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
	(COS.sp.145			1291 A	6; FP-POS=3;			[==>]	
	7647)				LIFETIME-POS=L				[1]
					P4;				[1]
					SEGMENT=BOTH				
Con	nments: See Visit								
5	G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12 6;			236 Secs (236 Secs)	
	(COS.sp.145			1291 A	FP-POS=3;			[==>]	
	7647)				LIFETIME-POS=L				[1]
					P5;				1-3
					SEGMENT=BOTH				
Con	nments: See Visit								1
6	G140L/1280 (COS sp. 145	1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25 6;			366 Secs (366 Secs)	
	(COS.sp.145 7781)			1280 A	FP-POS=3;			[==>]	
					LIFETIME-POS=L				[2]
					P4;				
					SEGMENT=BOTH				
Con	nments: See Visit						~		
_	Ľ	DARK	S/C, DATA, NONE			QASISTATES CO FUV HVLOW HV	OS T.	1 Secs (1 Secs)	
7						OW	_	[==>]	[2]

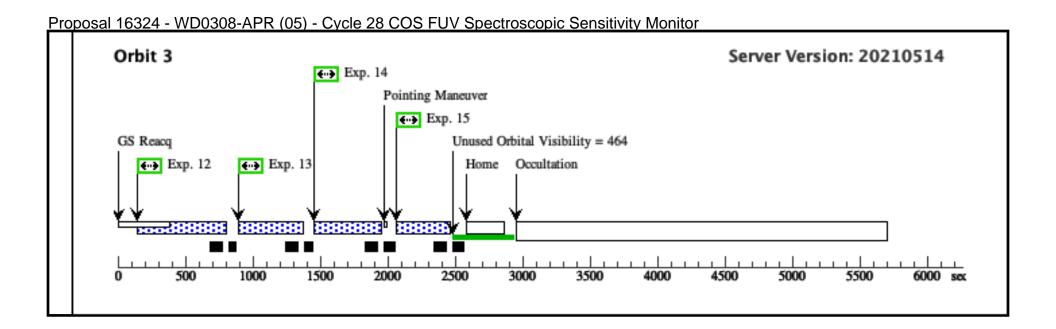
Proposal 16324 - WD0308-APR (05) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor G160M/153 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=3: 223 Secs (223 Secs) 3/B 1533 A BUFFER-TIME=11 *[==>1* (COS.sp.145 7649) LIFETIME-POS=L [2] P4; SEGMENT=B Comments: See Visit 01 comments. G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=3; 275 Secs (275 Secs) 7/B 1577 A BUFFER-TIME=16 [==>] (COS.sp.145 7650) LIFETIME-POS=L [2] SEGMENT=B Comments: See Visit 01 comments. 10 G160M/162 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=3; 372 Secs (372 Secs) 1623 A BUFFER-TIME=26 f = = > 1(COS.sp.145 2; 7651) LIFETIME-POS=L [2] SEGMENT=B Comments: See Visit 01 comments. 11 DARK S/C, DATA, NONE **OASISTATES COS** 1 Secs (1 Secs) **FUV HVLOW HVL** *[==>1* [2] OWComments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps. 12 G140L/800/ (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L BUFFER-TIME=25 367 Secs (367 Secs) **FUVA** 7; 800 A *[==>1* (COS.sp.145 FP-POS=3; 7778) SEGMENT=A; [3] LIFETIME-POS=L Comments: See Visit 01 comments. 13 G140L/1105 (1) WD0308-565 G140L BUFFER-TIME=22 332 Secs (332 Secs) COS/FUV. TIME-TAG. PSA /FUVA 1105 A *[==>1* (COS.sp.145 FP-POS=3; 7846) SEGMENT=A; [3] LIFETIME-POS=L P4 Comments: See Visit 01 comments. 14 G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=16 274 Secs (274 Secs) 7/FUVA 1327 A [==>](COS.sp.145 FP-POS=3; 7657) LIFETIME-POS=L [3] P4; SEGMENT=A Comments: See Visit 01 comments.

Comments: See Visit 01 comments.

SEGMENT=A

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D		/AA\	200 EUV/0	copic Sensitivity Monitor
Proposal 1637/L.	- (31)/1-APR /	11161 - L VCIA 7X L	$1 \times 1 \times$	CODIC SANCITIVITY MACHITAR
1 1000361 10324	- U <i>ui</i> I-ai ii i	1001 - 6766 20 (, , , , , , , , , , , , , , , , , , ,	JODIG OGHSHIVILV IVIOLIHOL

Proposal 16324, GD71-APR (06), completed Fri Nov 05 13:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: S/C, COS/FUV, COS/NUV

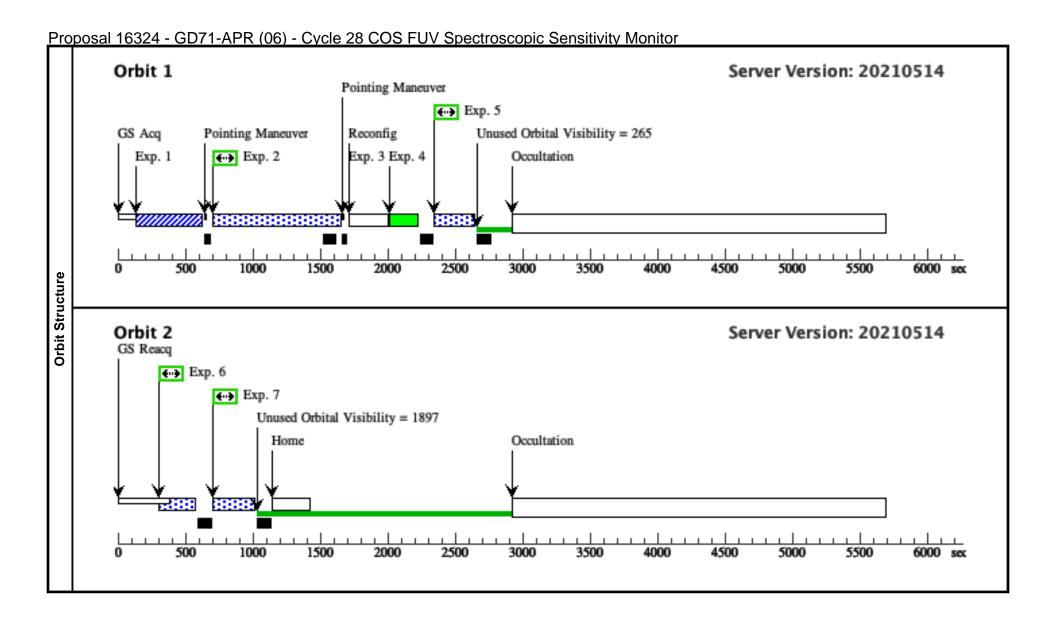
Special Requirements: SCHED 100%; BETWEEN 10-APR-2021:00:00:00 AND 23-APR-2021:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3
All G160M observations are with SEGMENT = A (i.e. segment B is turned off).

	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
ts	(2)	GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS	
rget			Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr			
⊒			Equinox: J2000	Epoch of Position: 2000			
Fixed	Comments: Co-ordinates and proper motions updated with values from SIMBAD, which uses the GAIA DR2 catalog. Differences from previous co-ordinates are in decimal places in seconds of time and arcsec, within the stated errors. Category=STAR Description=[DA] Extended=NO						

Proposal 16324 - GD71-APR (06) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	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	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)	
	574)							[==>]	[1]
Comments: See Visit 02 comments.									
2	G130M/109	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=63			744 Secs (744 Secs)	
6/FUVB/LP 2				1096 A	4; FP-POS=3;			[==>]	
	(COS.sp.145 7659)				SEGMENT=B;				[1]
	7037)				LIFETIME-POS=L				[1]
Comments: FUVB only (all ETC warnings come from FUVA). See Visit 02 comments.									
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
						FUV HVLOW HVL OW	•	[==>]	[1]
Con	ments: Work-a	around to efficiently	y schedule the SEG-B to SEG-A reconfig	uration Eliminates	s SPSS induced gans	OW			
1	G130M/109		COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
	6/FUVA W AVECAL/L		2,00	1096 A	SEGMENT=A;			[==>]	
	P2				FLASH=NO;				[1]
					LIFETIME-POS=L P2				[1]
Comments: See Visit 02 comments.									
5	G160M/153	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			106 Secs (106 Secs)	
3/FUVA (COS.sp.145				1533 A	6; FP-POS=3;			[==>]	
	7660)				SEGMENT=A;				[1]
					LIFETIME-POS=L				[1]
					P4				
Comments: FUVA only (all ETC warnings come from FUVB). See Visit 02 comments.									
5	G160M/157	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=13			135 Secs (135 Secs)	
	7/FUVA (COS.sp.145			1577 A	5;			[==>]	
	7661)				FP-POS=3;				
					SEGMENT=A;				[2
					LIFETIME-POS=L P4				
Con See	Comments: FUVA only (all ETC warnings come from FUVB). See Visit 02 comments.								
7	G160M/162		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17			177 Secs (177 Secs)	
	3/FUVA (COS.sp.145		•	1623 A	7;			[==>]	
	7663)				FP-POS=3;				
					SEGMENT=A;				[2
					LIFETIME-POS=L P4				1
			nings come from FUVB).		- '				



Proposal 16324 - WD0308-JUN (07) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Proposal 16324, WD0308-JUN (07), completed Fri Nov 05 13:00:44 GMT 2021

Diagnostic Status: No Diagnostics Visit

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 05-JUN-2021:00:00:00 AND 18-JUN-2021:00:00:00

Comments: All G160M observations are with SEGMENT = B (i.e. segment A is turned off) for all other WD0308-565 visits.

However, for the June visit, since GD71 is not available, we use SEGMENT = BOTH to keep track of the segment A response, and the first DARK exposure (exp. 006 in the other visits) has been removed.

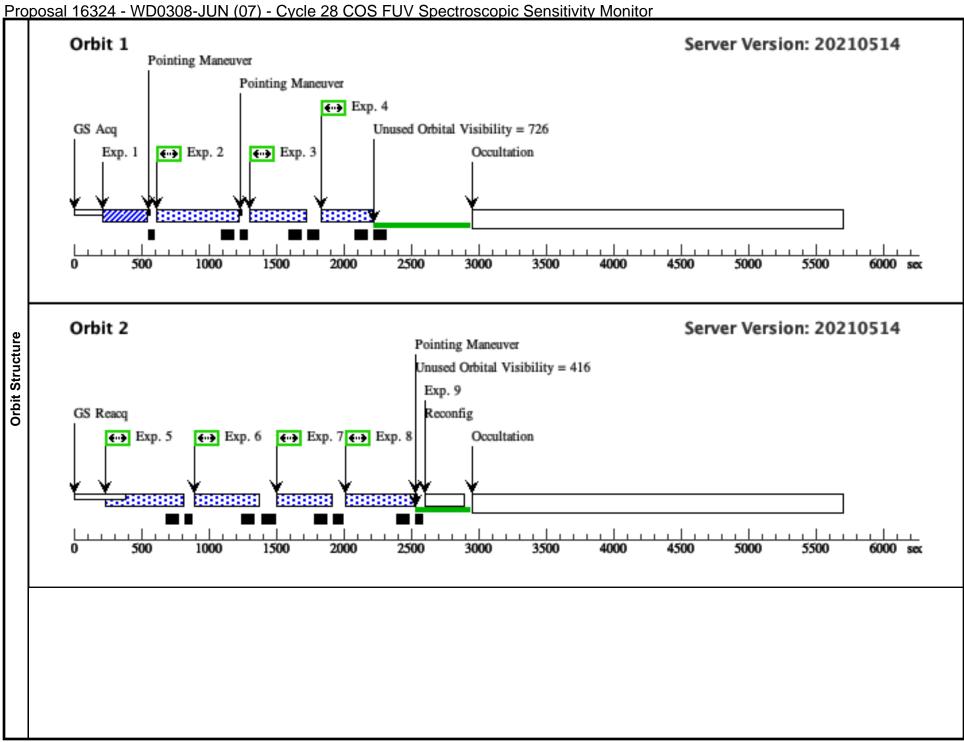
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
ts	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS
§			Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr		
⊒ I			Equinox: J2000	Epoch of Position: 2000		
Fixed	Comments Proper mo Category= Descriptio Extended=	otions changed to mas/yr, fro -STAR n=[DB]	from Cycle 25 proposal, checked against SIMBAD, om SIMBAD, also using the GAIA DR2 catalog.	which uses the GAIA DR2 catalog.		

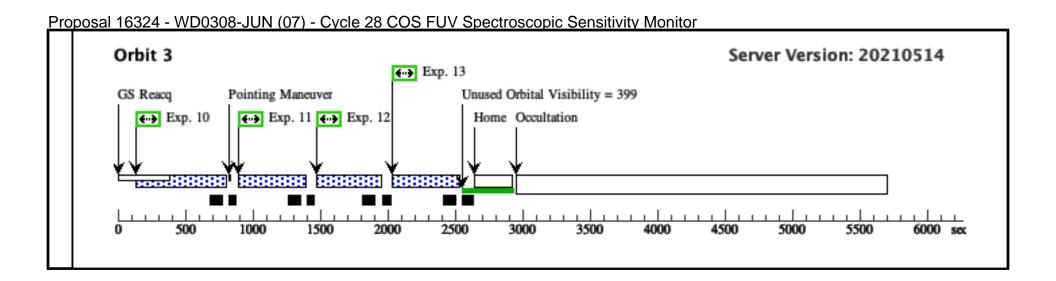
Proposal 16324 - WD0308-JUN (07) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

(ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ACQ/IM (1) WD0308-5	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
						[==>]	[1]
						1	1
	665 COS/FUV, TIME-TAG, PSA						
(COS.sp.145		1055 A				[==>]	
7645)				:			[1]
			LIFETIME-POS=L	,			[2]
ments: See Visit 01 comments.			12				
G130M/122 (1) WD0308-5	665 COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
2 (COS sp. 145		1222 A	<i>'</i>			I = = > J	
7646)							
							[1]
ments: See Visit 01 comments.	•						'
G130M/129 (1) WD0308-5	665 COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
1 (COS sp. 145		1291 A	6;			[==>]	
7647)							
							[1]
ments: See Visit 01 comments							
G140L/1280 (1) WD0308-5	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			366 Secs (366 Secs)	
(COS.sp.145		1280 A	6;			[==>]	
7701)							
							[2]
ments: See Visit 01 comments	:						•
G160M/153 (1) WD0308-5	665 COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
(COS.sp.145		1533 A				[==>]	
7649)			LIFETIME-POS=L				[2]
			,				
ments: See Visit 01 comments							-1
		G160M	FP-POS=3;			275 Secs (275 Secs)	
7/Both		1577 A		;		<i>[==>1</i>	
(COS.sp.145 7650)			5;				
			LIFETIME-POS=L				[2]
mante: Saa Visit 01 comments			SECMENT-BUTT				1
nems. See visit 01 comments.	•						
m m m m	(839564) nents: See Visit 01 comments G130M/105 (1) WD0308-5 5/LP2 (COS.sp.145 7645) ments: See Visit 01 comments G130M/122 (1) WD0308-5 2 (COS.sp.145 7646) nents: See Visit 01 comments G130M/129 (1) WD0308-5 1 (COS.sp.145 7647) ments: See Visit 01 comments G140L/1280 (1) WD0308-5 (COS.sp.145 7781) nents: See Visit 01 comments G160M/153 (1) WD0308-5 3/Both (COS.sp.145 7649) ments: See Visit 01 comments G160M/157 (1) WD0308-5 7649)	(839564) ments: See Visit 01 comments. G130M/105 (1) WD0308-565 5/LP2 (COS.sp.145 7645) ments: See Visit 01 comments. G130M/122 (1) WD0308-565 2 (COS.sp.145 7646) ments: See Visit 01 comments. G130M/129 (1) WD0308-565 1 (COS.sp.145 7647) ments: See Visit 01 comments. G140L/1280 (1) WD0308-565 (COS.sp.145 7781) ments: See Visit 01 comments. G160M/153 (1) WD0308-565 3/Both (COS.sp.145 7649) ments: See Visit 01 comments. G160M/157 (1) WD0308-565 7/Both (COS.sp.145 7/Both	(839564) ments: See Visit 01 comments. G130M/105 (1) WD0308-565 S1P2 (COS.sp.145 (COS.sp.145 G130M/122 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M 1222 A G130M/122 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L G160M/1280 (1) WD0308-565 G140L G160M/153 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M G160M/153 (1) WD0308-565 G160M/153 (1) WD0308-565 G160M/153 (1) WD0308-565 G160M/157 (1) WD0308-565	Memis: See Visit 01 comments. GI30M/105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA GI30M BUFFER-TIME=28 3; FP-POS=3; SEGMENT=BOTH LIFETIME-POS=L P2 FP-POS=3; SEGMENT=BOTH LIFETIME-POS=L P2 FP-POS=3; LIFETIME-POS=L P4; SEGMENT=BOTH LIFETIME-POS=L P4; LIF	(839546) ments: See Visit OI comments. G130M/105 (1) WD0308-565 S1,P2 G130M/105 (1) WD0308-565 S1,P2 G130M/105 (1) WD0308-565 G130M/105 (1) WD0308-565 G130M/105 (1) WD0308-565 G130M/102 (1) WD0308-565 G130M/103 (1) WD0308	Results: See Visit 01 comments. See See V	

Proposal 16324 - WD0308-JUN (07) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

UU				ectroscopic Sensitivity Monitor		
8	G160M/162 (1) WD0308-565 3/Both	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	372 Secs (372 Secs)	
	(COS.sp.145 7651)		1623 A	BUFFER-TIME=26 2;	[==>J	
	7031)			LIFETIME-POS=L		[2]
				P4;		
				SEGMENT=BOTH		
Cor	mments: See Visit 01 comments.					
9	DARK	S/C, DATA, NONE		QASISTATES COS	1 Secs (1 Secs)	
				FUV HVLOW HVL OW	[==>]	[2
Cor	mments: Work-ground to efficiently	schedule the reconfiguration to SEG	A Fliminates SPS			
0	G140L/800/ (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25	367 Secs (367 Secs)	
	FUVA	COS/1 C V, TIME 171G, 1571	800 A	7;	[==>]	
	(COS.sp.145 7778)		000 A	FP-POS=3;	1>1	
				SEGMENT=A;		[3
				LIFETIME-POS=L		
				P3		
oı	mments: See Visit 01 comments.					
1	G140L/800/ (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25	367 Secs (367 Secs)	
	FUVA (COS.sp.145		800 A	7;	[==>]	
	7778)			FP-POS=3;		
				SEGMENT=A;		[.
				LIFETIME-POS=L P4		
701	mments: See Visit 01 comments.			17		
	G140L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22	332 Secs (332 Secs)	
_	/FUVA		1105 A	2;	[==>1	
	(COS.sp.145 7846)		110571	FP-POS=3;	11	
	7040)			SEGMENT=A;		Į.
				LIFETIME-POS=L		
				P4		
oı	mments: See Visit 01 comments.					
3	G130M/132 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16	274 Secs (274 Secs)	
	7/FUVA (COS.sp.145		1327 A	4;	[==>]	
	7657)			FP-POS=3;		_
				LIFETIME-POS=L P4;		[3
				SEGMENT=A		





Proposal 16324 - WD0308-AUG (08) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

1 1	7003ai 10324 - WD03	000-A00 (00) - Cycle 20 CO3	rov specifoscopic sensitivity	IVIOTIILOI						
	Proposal 16324, WD0308-AUG	(08), completed			Fri Nov 05 13:00:44 GMT 2021					
<u>.</u>	Diagnostic Status: No Diagnost	ics								
/is	Scientific Instruments: S/C, COS/FUV, COS/NUV									
-	Special Requirements: SCHED 100%; BETWEEN 10-AUG-2021:00:00:00 AND 24-AUG-2021:00:00:00									
	Comments: All G160M observations are with SEGMENT = B (i.e. segment A is turned off).									
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
gets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS					
Ιğ		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr							
<u>a</u>		Equinox: J2000	Epoch of Position: 2000							
ğ										
۱ž	Proper motions changed to mas/yr, from SIMBAD, also using the GAIA DR2 catalog. Category=STAR									
Ι╙	Description=[DB]									
	Extended=NO									

Proposal 16324 - WD0308-AUG (08) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orb
1	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
C	(839564)	-: 01						[==>]	[1
2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=28			393 Secs (393 Secs)	
_	5/LP2	` /	COS/10 V, 11WIE-17AG, 13A	1055 A	3;			[==>]	
	(COS.sp.145 7645)			1033 A	FP-POS=3;			1>1	
	7043)				SEGMENT=BOTH;				[1
					LIFETIME-POS=L P2				
Con	nments: See Vis	sit 01 comments.			1 2				
3	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
	(COS.sp.145			1222 A	7;			[==>]	
	7646)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Con	ments: See Vis	sit 01 comments.							
4	G130M/129	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
	1 (COS sn 145			1291 A	6;			[==>]	
	(COS.sp.145 7647)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1
					SEGMENT=BOTH				
Con	ments: See Vis	sit 01 comments.							1
5	G140L/1280	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			366 Secs (366 Secs)	
	(COS.sp.145 7781)			1280 A	6;			[==>]	
	7701)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Con	ments: See Vis	sit 01 comments.			SEGNIENT-BOTT				1
6		DARK	S/C, DATA, NONE			QASISTATES CO	os	1 Secs (1 Secs)	
						FUV HVLOW HV OW	L	[==>]	[1]
Con	ments: Work-a	around to efficiently	schedule the reconfiguration to SEG-A	. Eliminates SPSS	induced gaps.				•
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/B (COS.sp.145			1533 A	BUFFER-TIME=11			[==>]	
	7649)				3;				
					LIFETIME-POS=L P4;				[2
					SEGMENT=B				
									1

				SEGMENT=B		
Co	mments: See Visit 01 comments.					
9	G160M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	372 Secs (372 Secs)	
	3/B (COS.sp.145 7651)		1623 A	BUFFER-TIME=26 2; LIFETIME-POS=L P4; SEGMENT=B	[==>]	[2]
Co	mments: See Visit 01 comments.					
10	DARK	S/C, DATA, NONE		QASISTATES COS	1 Secs (1 Secs)	

10	Dinn	S/C, DATA, NONE		1 Bees (1 Bees)			
					FUV HVLOW HVL OW	[==>]	[2]
Coi	mments: Work-around to efficiently s	chedule the reconfiguration to SEG-A	A. Eliminates SPSS in	iduced gaps.			
11	G140L/800/ (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25		367 Secs (367 Secs)	
	FUVA		800 A	7;		[==>]	

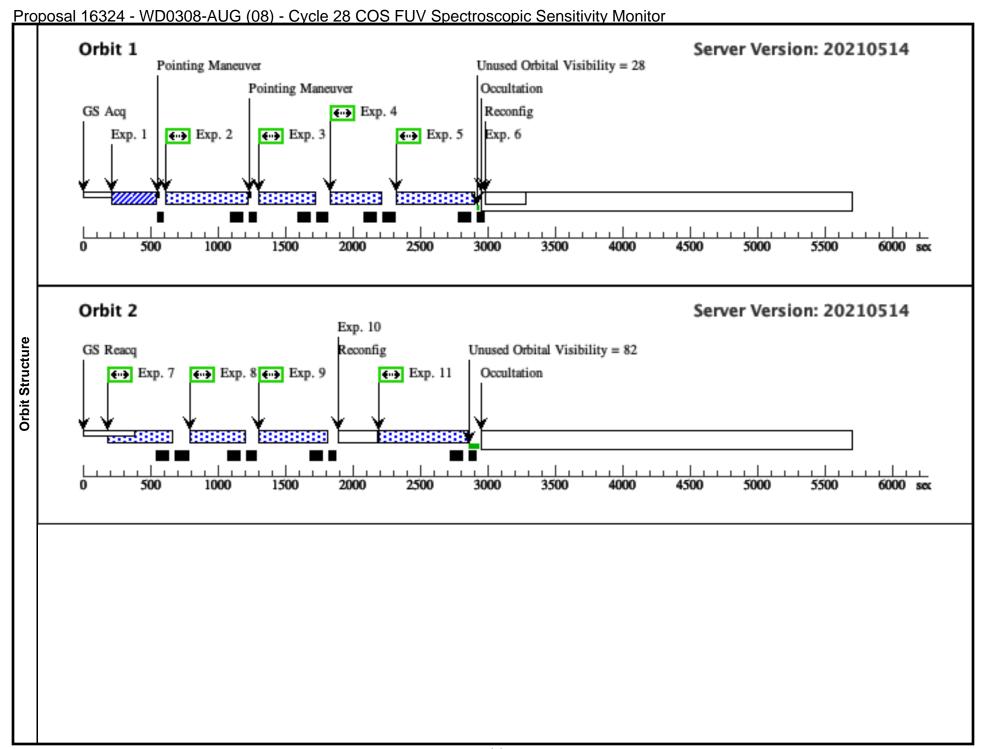
(COS.sp.145 7778)	FP-POS=3;		
1116)	SEGMENT=A;		[2]
	LIFETIME-POS=L P4		
Comments: See Visit 01 comments.			

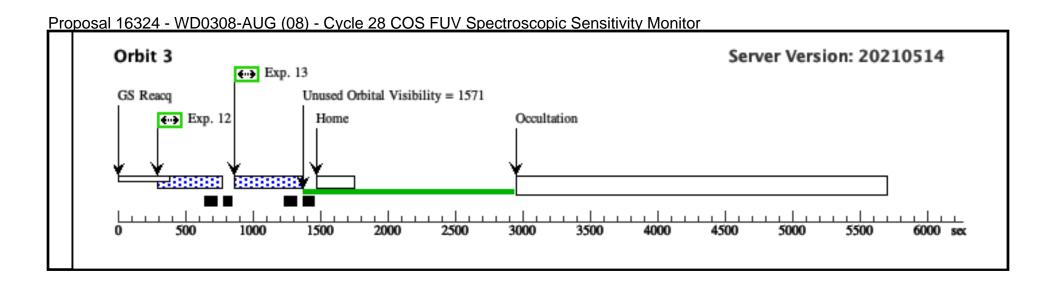
CO	ninenis. See visit of comments.					
12	G140L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22	332 Secs (332 Secs)	
	/FUVA		1105 A	2;	I==>1	
	(COS.sp.145 7846)			FP-POS=3;		
	, 5 . 5,			SEGMENT=A;		[3]
				LIFETIME-POS=L P4		

				P4		
(Comments: See Visit 01 comments.					
1		COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16	274 Secs (274 Secs)	
	7/FUVA		1327 A	4;	I==>1	
	(COS.sp.145 7657)			FP-POS=3;		
	, 50.7)			LIFETIME-POS=L		[3]
				P4;		

SEGMENT=A

Comments: See Visit 01 comments.





Proposal 16324 - GD71-AUG (09) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Proposal 16324, GD71-AUG (09), completed Fri Nov 05 13:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: S/C, COS/FUV, COS/NUV

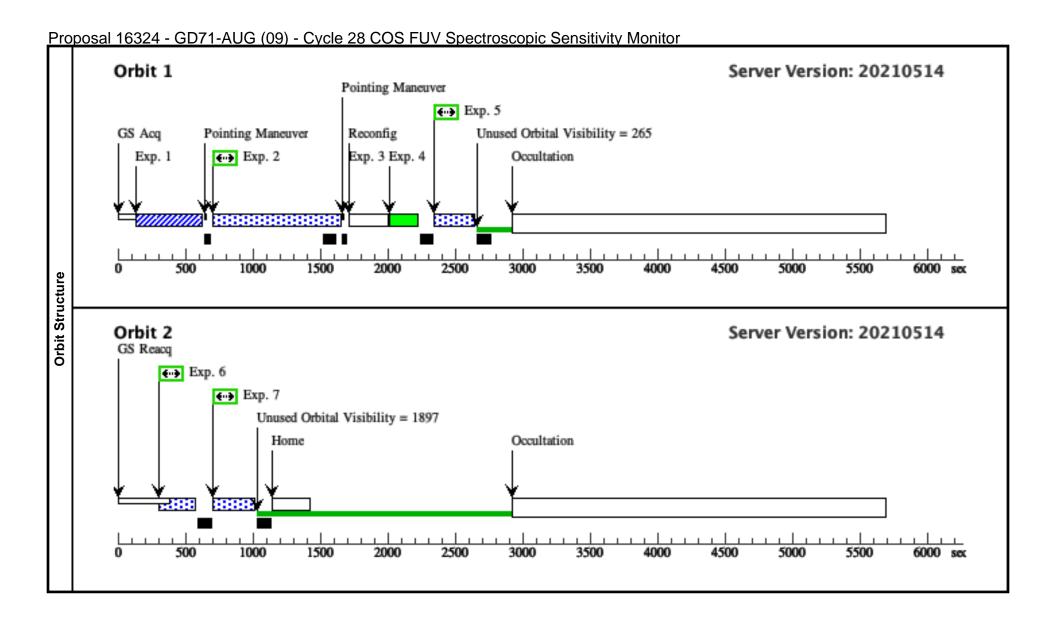
Special Requirements: SCHED 100%; BETWEEN 15-AUG-2021:00:00:00 AND 29-AUG-2021:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3
All G160M observations are with SEGMENT = A (i.e. segment B is turned off).

	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
ts	(2)	GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS			
rget			Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr					
⊒			Equinox: J2000	Epoch of Position: 2000					
Fixed	Comments: Co-ordinates and proper motions updated with values from SIMBAD, which uses the GAIA DR2 catalog. Differences from previous co-ordinates are in decimal places in seconds of time and arcsec, within the stated errors.								

Proposal 16324 - GD71-AUG (09) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	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	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) I = > 1	
	574)							[==>]	[1]
Com	<i>ments: See Vis</i> G130M/109	sit 02 comments.	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=63			744 Secs (744 Secs)	
۷	6/FUVB/LP	(2) GD/1	COS/FOV, TIME-TAG, FSA	1096 A	4;			[==>]	
	2 (COS.sp.145			107071	FP-POS=3;				
	7659)				SEGMENT=B;				[1]
					LIFETIME-POS=L P2				
	ments: FUVB Visit 02 comme		ings come from FUVA).						·!
3	visii 02 comme	DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
						FUV HVLOW HVL OW		I = => J	[1]
Com	ments: Work-a	around to efficiently	schedule the SEG-B to SEG-A reconfig	uration. Eliminate	s SPSS induced gaps.				
4	G130M/109	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
	6/FUVA W AVECAL/L			1096 A	SEGMENT=A;			[==>]	
	P2				FLASH=NO;				[1]
					LIFETIME-POS=L P2				
Com	ments: See Vis	sit 02 comments.							-
5	G160M/153		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			106 Secs (106 Secs)	
	3/FUVA (COS.sp.145			1533 A	6;			[==>]	
	7660)				FP-POS=3; SEGMENT=A;				[1]
					LIFETIME-POS=L				[1]
					P4				
	ments: FUVA Visit 02 comme		ings come from FUVB).						
5	G160M/157		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=13			135 Secs (135 Secs)	
	7/FUVA (COS.sp.145			1577 A	5;			[==>]	
	7661)				FP-POS=3;				72
					SEGMENT=A; LIFETIME-POS=L				[2]
					P4				
Com See \	ments: FUVA Visit 02 comme	only (all ETC warn	ings come from FUVB).						
7	G160M/162		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17			177 Secs (177 Secs)	
	3/FUVA (COS.sp.145			1623 A	7; ED DOS-2.			[==>]	
	7663)				FP-POS=3; SEGMENT=A;				[2]
					LIFETIME-POS=L				[2]
					P4				1



Proposal 16324 - WD0308-OCT (10) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

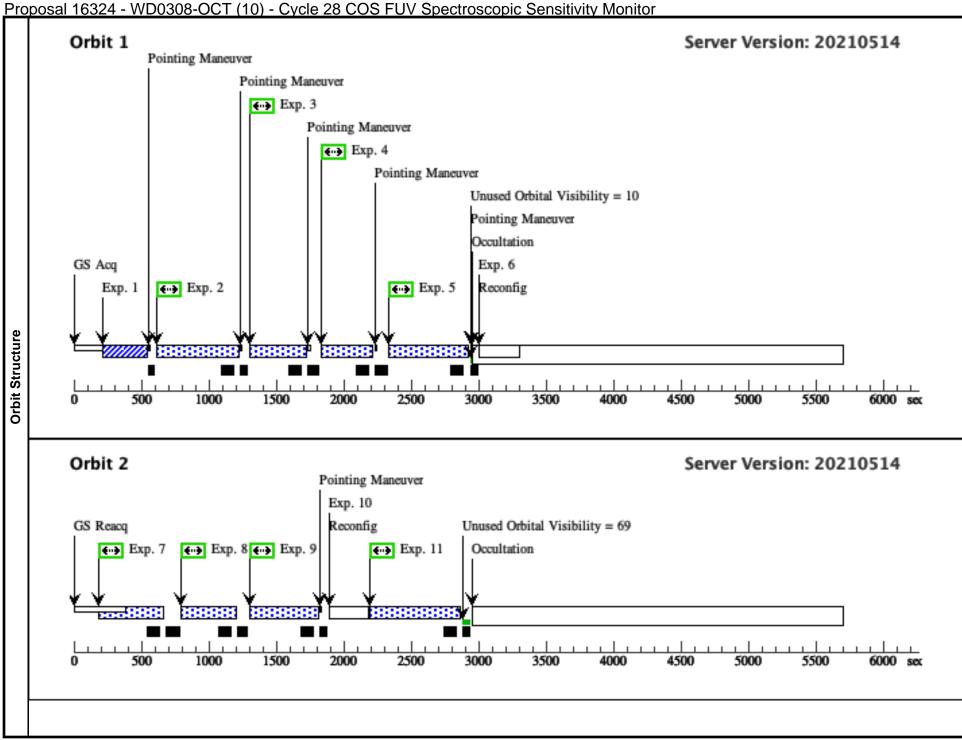
	Proposal 16324, WD0308-OCT	(10), scheduling	· · · · · · · · · · · · · · · · · · ·		Fri Nov 05 13:00:44 GMT 2021			
ي. ا	Diagnostic Status: No Diagnost	ics						
/is	Scientific Instruments: S/C, COS							
_	Special Requirements: SCHED 1	Special Requirements: SCHED 100%; BETWEEN 20-OCT-2021:00:00:00 AND 18-DEC-2021:00:00:00						
	Comments: All G160M observati	ons are with $SEGMENT = B$ (i.e. segment A is tur	rned off).					
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
ış.	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr	V=14.07+/-0.02	Reference Frame: ICRS			
Ę		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr					
a l		Equinox: J2000	Epoch of Position: 2000					
	Comments: Coordinates carried over from Cycle 25 proposal, checked against SIMBAD, which uses the GAIA DR2 catalog.							
ĬĚ	Proper motions changed to mas/yr, from SIMBAD, also using the GAIA DR2 catalog. Category=STAR							
I۳	Description=[DB]							
	Extended=NO							

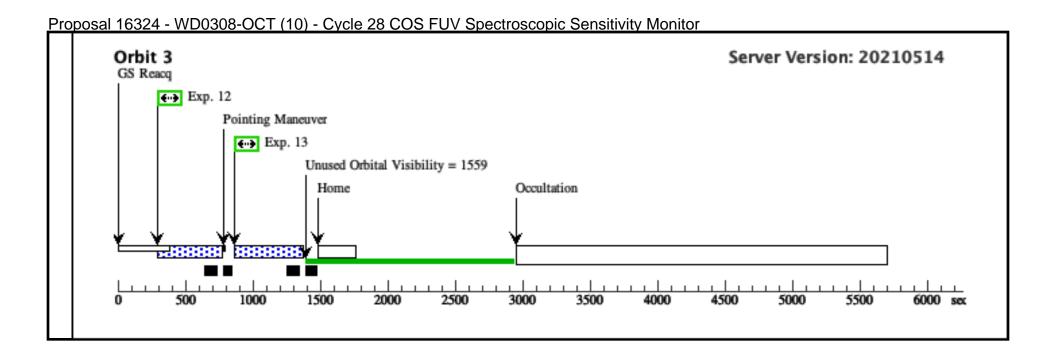
Proposal 16324 - WD0308-OCT (10) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orb
1	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
C	(839564)	5-14 O.1						[==>]	[1]
$\frac{Com}{2}$		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=28			393 Secs (393 Secs)	
2	5/LP2	` /	COS/TOV, TIME-TAG, TSA	1055 A	3;			[==>]	
	(COS.sp.145 7645)	i		1055 A	FP-POS=3;			1>1	
	7043)				SEGMENT=BOTH;				[1
					LIFETIME-POS=L P2				
Com	ments: See Vi	sit 01 comments.							
3	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
	(COS.sp.145	j		1222 A	7;			[==>]	
	7646)				FP-POS=3;				
					LIFETIME-POS=L P4;				[1
					SEGMENT=BOTH				
Com	ments: See Vi	sit 01 comments.							
4	G130M/129	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			236 Secs (236 Secs)	
	(COS.sp.145 7647)	į		1291 A	6;			[==>]	
	7647)				FP-POS=3; LIFETIME-POS=L				,,
					P5;				[1
					SEGMENT=BOTH				
Com		sit 01 comments.							
5	G140L/1280	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			366 Secs (366 Secs)	
	(COS.sp.145 7781)	•		1280 A	6; FP-POS=3;			[==>]	
					LIFETIME-POS=L				[1]
					P3;				[1.
					SEGMENT=BOTH				
Com	ments: See Vi	sit 01 comments.							
6		DARK S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL	OS 71	1 Secs (1 Secs)		
						OW OW	L	[==>]	[1]
Com	omments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.								
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/B (COS.sp.145	i		1533 A	BUFFER-TIME=11			[==>]	
	7649)				3;				12
					LIFETIME-POS=L P4;				[2
					SEGMENT=B				

Proposal 16324 - WD0308-OCT (10) - Cycle 28 COS FLIV Spectroscopic Sensitivity Monitor

osai	16324 - WDU3U6-	OCT (10) - Cycle 28 C	<u>05 FUV SI</u>	ectroscopic Sensitivity Monitor		
	0M/157 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	275 Secs (275 Secs)	
	7/B (COS.sp.145 7650)		1577 A	BUFFER-TIME=16 5:	[==>]	
7650				J, LIFETIME-POS=L		[2]
				P4;		[2]
				SEGMENT=B		
	s: ETC buffer time is 606 sec. time = exptime - 110 sec					
	0M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	372 Secs (372 Secs)	
3/B (CO:	3/B (COS.sp.145 7651)		1623 A	BUFFER-TIME=26 2:	[==>]	
7651	1)			z; LIFETIME-POS=L		[2
				P4;		12
				SEGMENT=B		
omments	s: See Visit 01 comments.					•
0	DARK	S/C, DATA, NONE		QASISTATES COS	1 Secs (1 Secs)	
				FUV HVLOW HVL OW	[==>]	[
'omments	s: Work-ground to efficiently	schedule the reconfiguration to SEG	A Fliminates SPS	-		
	G140L/800/ (1) WD0308-565 FUVA	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25	367 Secs (367 Secs)	
FUV			800 A	7;	[==>1	
7778	S.sp.145			FP-POS=3;	,	
	-,			SEGMENT=A;		[
				LIFETIME-POS=L		
	C. U.: Ol			Р3		
	s: See Visit 01 comments. 0L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22	332 Secs (332 Secs)	
/FUV	/FUVA	COS/TOV, TIME-TAG, FSA	1105 A	2;	[==>]	
(CO: 7846	S.sp.145		1103 A	FP-POS=3;	[>]	
7040	J)			SEGMENT=A;		1
				LIFETIME-POS=L		
				P3		
	s: See Visit 01 comments.					
	G130M/132 (1) WD0308-565 7/FUVA (COS.sp.145	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=16 4;	274 Secs (274 Secs)	
(CO:				FP-POS=3;	[==>]	
7657	/)			LIFETIME-POS=L		
				P5;		"
				SEGMENT=A		
'ommants	s: See Visit 01 comments.					





Proposal 16324 - GD71-OCT (11) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

Proposal 16324, GD71-OCT (11), completed Fri Nov 05 13:00:44 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: S/C, COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 16-OCT-2021:00:00:00 AND 29-OCT-2021:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3
All G160M observations are with SEGMENT = A (i.e. segment B is turned off).

	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
ts	(2)	GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS			
rget			Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr					
<u>a</u> [Equinox: J2000	Epoch of Position: 2000					
Fixed	Comments: Co-ordinates and proper motions updated with values from SIMBAD, which uses the GAIA DR2 catalog. Differences from previous co-ordinates are in decimal places in seconds of time and arcsec, within the stated errors. Category=STAR Description=[DA] Extended=NO								

Proposal 16324 - GD71-OCT (11) - Cycle 28 COS FUV Spectroscopic Sensitivity Monitor

#	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	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)	
_	574)							[==>]	[1]
2	mments: See Vi: G130M/109	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=63			744 Secs (744 Secs)	
_	6/FUVB/LP	6/FUVB/LP	1096 A	4;			[==>]		
	(COS.sp.145				FP-POS=3;				
	7659)				SEGMENT=B;				[1]
					LIFETIME-POS=L P2				
	mments: FUVB Visit 02 comm		rnings come from FUVA).						
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL OW	 S	1 Secs (1 Secs)	
								[==>]	[1]
Cor	mments: Work-	around to efficient	tly schedule the SEG-B to SEG-A reconfig	uration. Eliminate	s SPSS induced gaps.				
4	G130M/109	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
	6/FUVA W AVECAL/L			1096 A	SEGMENT=A;			[==>]	
	P2				FLASH=NO;				[1]
					LIFETIME-POS=L P2				
Comments: See Visit 02 comments.									
5	G160M/153 (2) GD71 3/FUVA	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			106 Secs (106 Secs)		
	(COS.sp.145			1533 A	6; FP-POS=3;			[==>]	
	7660)				SEGMENT=A;				[1]
					LIFETIME-POS=L				
C	EIIIA	· ····································			P4				
Cor See	mments: FUVA Visit 02 comm	oniy (all ETC wa. ents.	rnings come from FUVB).						
6	G160M/157	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=13			135 Secs (135 Secs)	
	7/FUVA (COS.sp.145			1577 A	5; FP-POS=3;			[==>]	
	7661)				SEGMENT=A;				[2]
					LIFETIME-POS=L				1-1
					P4				
	mments: FUVA Visit 02 comm		rnings come from FUVB).						
7	G160M/162	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17			177 Secs (177 Secs)	
	3/FUVA (COS.sp.145		1623 A	7; FP-POS=3;			[==>]		
	7663)				SEGMENT=A:				[2]
					LIFETIME-POS=L				[2]
					P4				
Cor	mments: FUVA Visit 02 comm	only (all ETC wa	rnings come from FUVB).						

