Proposal 17326 (STScI Edit Number: 1, Created: Friday, June 21, 2024 at 10:01:01 AM Eastern Standard Time) - Overview



17326 - Cycle 31 COS FUV Spectroscopic Sensitivity Monitor

Cycle: 31, Proposal Category: CAL/COS (Availability Mode: RESTRICTED)

INVESTIGATORS

Name	Institution		
Jacqueline Hernandez (PI) (Contact)	Space Telescope Science Institute		
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VISITS

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
1A	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:36.0	yes
1B	(1) WD0308-565	COS/FUV COS/NUV	2	21-Jun-2024 11:00:38.0	yes
02	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:40.0	yes
3A	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:42.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
3B	(1) WD0308-565	COS/FUV COS/NUV	2	21-Jun-2024 11:00:44.0	yes
04	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:46.0	yes
5A	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:47.0	yes
5B	(1) WD0308-565	COS/FUV COS/NUV	2	21-Jun-2024 11:00:49.0	yes
06	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:51.0	yes
07	(3) WD1057+719 DARK WAVE	COS/FUV S/C	4	21-Jun-2024 11:00:53.0	yes
8A	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:55.0	yes
8B	(1) WD0308-565	COS/FUV COS/NUV	2	21-Jun-2024 11:00:57.0	yes
9A	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	21-Jun-2024 11:00:58.0	yes
9B	(3) WD1057+719 DARK WAVE	COS/FUV COS/NUV S/C	3	21-Jun-2024 11:01:01.0	yes

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31 Total Orbits Used

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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 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 6 orbits: a 2 orbit visit (target WD0308-565) that covers G130M/1055, G130M/1222, G130M/1291, G130M/1327/FUVA, G140L/800/FUVA, G140L/1105/FUVA, G140L/1105/FUVA,

a 2 orbit visit (target WD0308-565) that covers G160M/1533/FUVB G160M/1577/FUVB, G160M/1611/FUVB, G160M/1623/FUVB,

and a 2 orbit visit (target GD71) that covers G130M/1096/FUVB, G160M/1533/FUVA, G160M/1577/FUVA,

Proposal 17326 (STScI Edit Number: 1, Created: Friday, June 21, 2024 at 10:01:01 AM Eastern Standard Time) - Overview G160M/1611/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 G130M 1291 and 1327 observations will be done at LP5, G140L observations will be done at LP3, G130M/1222 observations will be done at LP4, G160M observations will be done at LP6, and G130M/1055 and G130M/1096 will be done at LP2.

In Cycle 30, LP4-LP6 connection exposures for G160M/1533, 1577, 1611 and 1623 were added to check sensitivity changes between LPs, two G160M cenwaves per visit.

G160M/1611 was added in Cycle 29 in order to monitor this highly used but untracked cenwave, and to investigate the detector position vs wavelength dependence of the TDS.

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 $>\sim$ 5 per resel at wavelengths below ~1080 Ang.

- The aim is to obtain TDS calibration better than 2% for standard modes and 5% for blue modes.

ETC calculations:

- The ETC calculations use CALSPEC standard model versions wd0308_565_mod_006.fits and gd71_mod_011.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)

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Time constraints:

- Complete monitoring sequence should occur every 2 months starting in December 2023.

- GD71 is unschedulable May-July, and therefore that sequence will consist of only one visit.

The exposure times and organization of visits follows the scheme used in Cycle 30, with the exception of the exposure times for cenwaves 1291, 1533/FUVA, 1577/FUVA, 1611/FUVA and 1623/FUVA, which have been updated to reflect the most recent exposure times following updates to the FLUXTAB. As in Cycle 28, for all but four sets of the WD0308-565 observations using G160M, the specifications now are SEGMENT=B (i.e. segment A is turned off). One exception is the June sequence (visit 7A, 7B) for which the specifications are SEGMENT=BOTH for these modes, because GD71 is not available during this period. Additionally three other exceptions exist in Cycle 30 to support a Cycle 30 CO program which requires monitoring of G160M/1533 and 1577 at both LP6 and LP4 using both segements, such monitoring continued in Cycle 31.

In Cycle 29, an additional NUV ACQ/IMAGE was added at the beginning of the second orbit of the 2 orbit WD0308-565 visits to protect against guide star reaquisition failures, which this particular target is prone to.

In Cycle 30, the WD0308-565 visit was split into 2x2 orbits to ease scheduling, avoiding 4 orbit visits.

In Cycle 31, the NUV MAMA underwent an anomolous shutdown in late May 2024 due to a program exceeding the global count rate limit and then in June 2024 HST went into reduced gyro mode. Because of reduced gyro mode, the target GD71 is no longer available until late August and must be switched out with WD1057+719. Due to the several shutdowns and failed GS acquisitions, G160M lacked data for 3 months and will continue to lack data until August. In order to obtain FUV TDS data and the fact the NUV MAMA is still shut down, the NUV ACQ/IMG has been replaced with FUV ACQ/SEARCH, ACQ/PEAKXD, and ACQ/PEAKD for this June 2024 observation. The 07 visit will consist of G160M observations of both stripes and G130M/1096 FUVB. All SNR except G130M/1096/FUVB meet the 15 resel requirement. G130M/1096/FUVB will meet the SNR 7 resel at 1030A, as dictated in the TIR 2018-1.

In Cycle 31 in June, G160M/1611 was removed.

Proposal 17326 (STScl Edit Number: 1, Created: Friday, June 21, 2024 at 10:01:01 AM Eastern Standard Time) - Overview In Cycle 31 in June, HST went into reduced gyro mode (RGM). Due to this, GD71 will be replaced with WD1057+719. As this new target is dimmer, WD1057+719 can observe all the G160M observations with both segments. WD1057+719 is unscheduable in July-August so the contingicy visit in July will continue to be observed with WD308-565. All ETC calculations have been updated for the G160M and G130M/1096/FUVB observations for this new target. The remaining sequences occur as following: a 2 orbit visit (target WD0308-565) that covers G130M/1055, G130M/1222, G130M/1221, G130M/1221, G130M/1227/FUVA, G140L/800/FUVA, G140L/1105/FUVA, G140L/1105/FUVA, G140L/1280,

a 3 orbit visit (target WD1057+719) that covers G130M/1096/FUVB, G160M/1533, G160M/1577, G160M/1623.

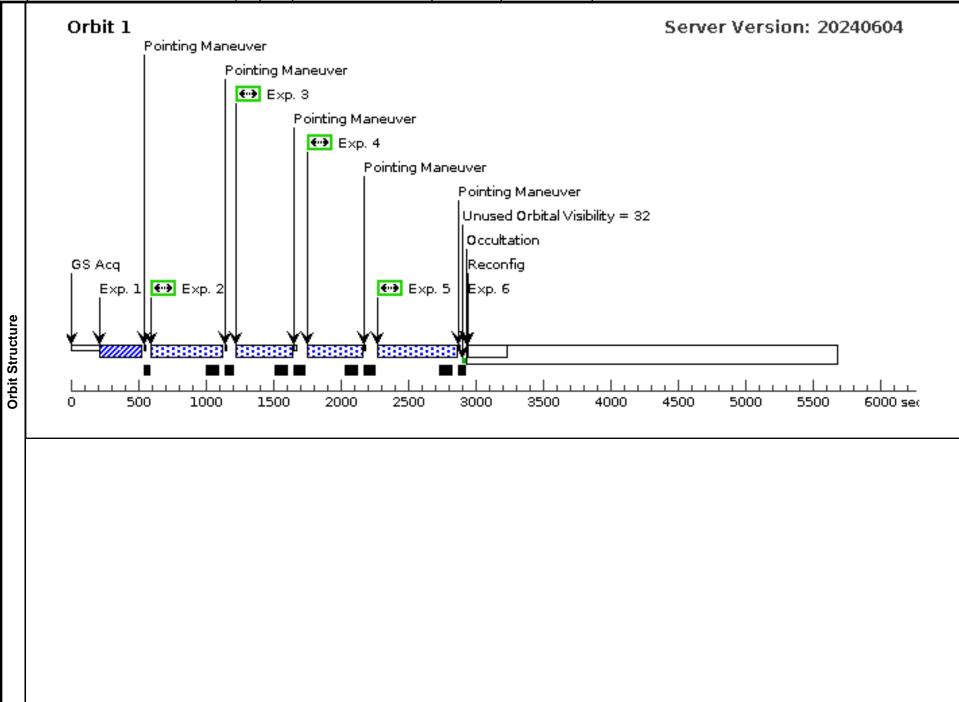
The 3 orbit visit covers both LP4 and LP6 of G160M.

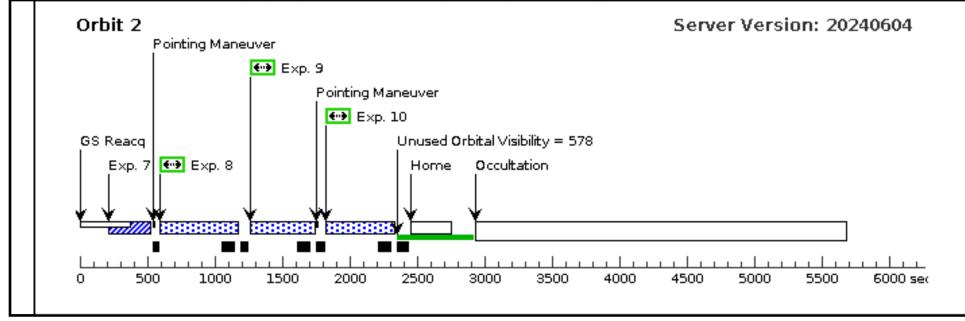
All SNR requirements remain the same except for G130M/1096/FUVB, where the same is ~7 SNR at 1030A. The quality of the data will be comparable.

	Proposal 17326, WD0308-DEC	(1A), completed			Fri Jun 21 15:01:02 GMT 2024
isit	Diagnostic Status: Warning				
Ĭ	Scientific Instruments: S/C, COS/	/FUV, COS/NUV			
	Special Requirements: SCHED 10	00%; BETWEEN 12-DEC-2023:00:00:00 AND	24-DEC-2023:00:00:00		
Diagnostics	(WD0308-DEC (1A)) Warning (F	Form): For the best data quality, it is generally rea	quired to use all four FP-POS positions when obse	rving at a given COS cenwave.	
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
argets	(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
١ ð		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr		
Tal		Equinox: J2000	Epoch of Position: 2000		
Fixed		over from Cycle 25 proposal, checked against SII r, from SIMBAD, also using the GAIA DR2 catal			

	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ļ	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
ļ		· /							[==>]	[1]
	Con Cyci	iments: cycle 2 le 28 comment:	4 comment: exposure we continue to use th	times not reduced following updated E he same exposure time since difference	ETC calculations, a s do not affect orbi	<i>lifferences not enough to it request.</i>	affect orbit requested.			
	2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=20			318 Secs (318 Secs)	
		5/LP2 (COS.sp.154 0024)			1055 A	8; FP-POS=3;			[==>]	
		0024)				SEGMENT=BOTH;				[1]
						LIFETIME-POS=L				[1]
						P2				
	Com	ments: Cycle 2	29 comment: exposure	e time updated following blue modes T	DS and FLUXTAB	update.				
	ETC Set l	C buffer time is buffer time = e:	1377 sec xptime - 110 sec							
	3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
		2/LP4 (COS.sp.145			1222 A	7; FP-POS=3;			[==>]	
		7646)				LIFETIME-POS=L				[1]
						P4;				[1]
						SEGMENT=BOTH				
s			uffer time is 392 sec. xptime - 110 sec							1
are	4	G130M/129 1/LP5	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			259 Secs (259 Secs)	
Exposures		(COS.sp.186			1291 A	9; FP-POS=3;			[==>]	
х Х		5092)				LIFETIME-POS=L				[1]
ш						P5;				
						SEGMENT=BOTH				
			ıffer time is 344 sec. xptime - 110 sec							1
	5	G140L/1280 /LP3	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=26 1;			371 Secs (371 Secs)	-
		(COS.sp.182			1280 A	FP-POS=3;			[==>]	
		0354)				LIFETIME-POS=L				[1]
						P3;				
						SEGMENT=BOTH				
	Con	iments: Cycle 3	30 comment: exposure	e time updated following FLUXTAB up	date.					
		C buffer time is buffer time = e:	520 sec. xptime - 110 sec							
	6		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
							FUV HVLOW HVL OW		[==>]	[1]
	Com	nments: Work-a	round to efficiently se	chedule the reconfiguration to SEG-A.	Eliminates SPSS i	induced gaps.				-
	7	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
		(839564)							[==>]	[2]
				times not reduced following updated E he same exposure time since difference.			affect orbit requested.			
	Cyci	e 20 comment.	we commute to use if	e sune exposure time since afference.	, ao noi ajjeei orbi	i request.				

8 G140L/800/ (1) WD0308-565 FUVA/LP3 (COS.sp.145 7778)	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=25 7; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	367 Secs (367 Secs) [==>]	[2]
Comments: ETC buffer time is 350 sec. Set buffer time = exptime - 110 sec					
9 G140L/1105 (1) WD0308-565 /FUVA/LP3 (COS.sp.145 7846)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=22 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	<u>332 Secs (332 Secs)</u> [==>]	[2]
Comments: ETC buffer time is 358 sec. Set buffer time = exptime - 110 sec					
10 G130M/132 (1) WD0308-565 7/FUVA/LP 5 (COS.sp.145 7657) Comments: ETC buffer time is 324 sec	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=16 4; FP-POS=3; LIFETIME-POS=L P5; SEGMENT=A	274 Secs (274 Secs) [==>]	[2]

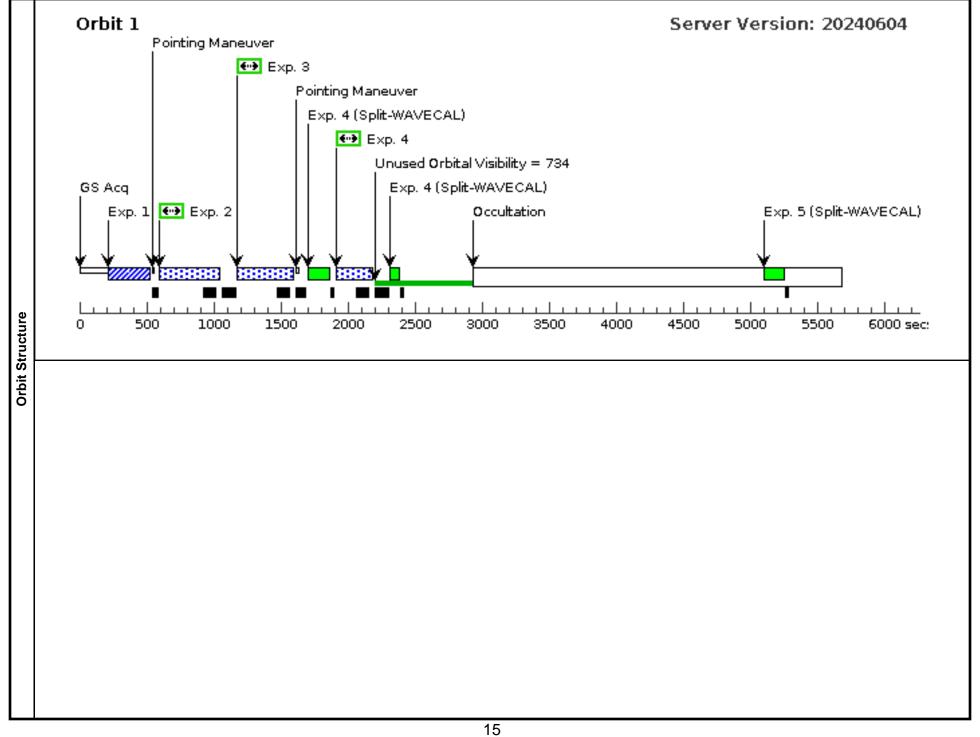


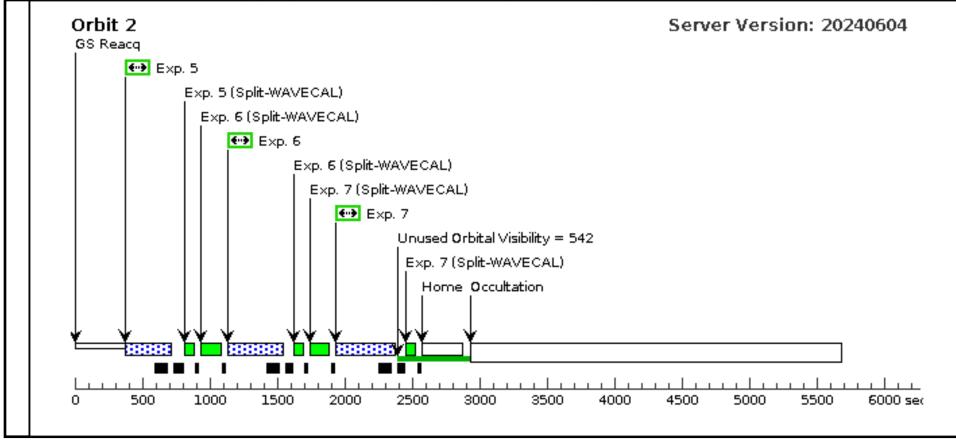


	Proposal 17326, WD0308-DEC	(1B), completed			Fri Jun 21 15:01:02 GMT 2024					
	Diagnostic Status: Warning									
.±	cientific Instruments: COS/FUV, COS/NUV									
/is	Special Requirements: SCHED 1	Special Requirements: SCHED 100%; BETWEEN 12-DEC-2023:00:00 AND 24-DEC-2023:00:00:00								
ſ		Comments: All G160M observations are with SEGMENT = BOTH. Using "SEGMENT=BOTH" instead of "SEGMENT=B" for both LP4 and LP6 observations for the G160M settings to support a Cycle 30 GO rogram which needs both segments monitored at LP4 and LP6. (FUVA is also observed for G160M using GD71 in visit 02).								
	1533 & 1577 LP4. Split over visit	ts 1B and 1C due to scheduling constraints.								
Diagnostics	(WD0308-DEC (1B)) Warning (I	Form): For the best data quality, it is generally rec	quired to use all four FP-POS positions when obse	rving at a given COS cenwave.						
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
its	(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					
argets		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr							
Tal		Equinox: J2000	Epoch of Position: 2000							
Fixed.		over from Cycle 25 proposal, checked against SII yr, from SIMBAD, also using the GAIA DR2 catal								

#	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 Cyc	nments: cycle 2 le 28 comment	24 comment: exposure : we continue to use t	e times not reduced following updated he same exposure time since differenc	ETC calculations, es do not affect orb	differences not enough to it request.	o affect orbit requeste	ed.		
2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/BOTH/LP 4			1533 A	BUFFER-TIME=11 3;			[==>]	
	(COS.sp.145 7649)				3, LIFETIME-POS=L				[1]
	101)				P4;				[-]
					SEGMENT=BOTH				
		uffer time is 502 sec. xptime - 110 sec.							
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			291 Secs (291 Secs)	
	7/BOTH/LP 4			1577 A	BUFFER-TIME=18	3		[==>]	
	(COS.sp.154 0036)				1; LIFETIME-POS=L				[1]
	0050)				P4;				
					SEGMENT=BOTH				
		uffer time is 644 sec. xptime - 110 sec							
4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
3	3/BOTH/LP 6			1533 A	BUFFER-TIME=11			[==>]	
5	(COS.sp.145 7649)				3; LIFETIME-POS=L				[1]
ryposu ca	7049)				P6;				[1]
ì					SEGMENT=BOTH				
		uffer time is 502 sec. xptime - 110 sec.							
5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			291 Secs (291 Secs)	
	7/BOTH/LP 6			1577 A	BUFFER-TIME=18	3		[==>]	
	(COS.sp.154 0036)				1; LIFETIME-POS=L				[2]
	0050)				P6;				[2]
					SEGMENT=BOTH				
Con Set	nments: ETC b buffer time = e	uffer time is 644 sec. xptime - 110 sec							
6	G160M/161	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			360 Secs (360 Secs)	
	1/BOTH/LP 6			1611 A	BUFFER-TIME=25	5		[==>]	
	(COS.sp.154				0;				[2]
	0046)				LIFETIME-POS=L P6;				[2]
					SEGMENT=BOTH				
Con	nments: ETC b	uffer time is 755 sec. xptime - 110 sec							
Set	oujjer time = e	лрите - 110 sec							

7	G160M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	388 Secs (388 Secs)	
	3/BOTH/LP 6 (COS.sp.154		1623 A	BUFFER-TIME=27 8;	[==>]	
	0050)			LIFETIME-POS=L P6;		[2]
				SEGMENT=BOTH		
	omments: ETC buffer time is 814 sec. et buffer time = exptime - 110 sec					

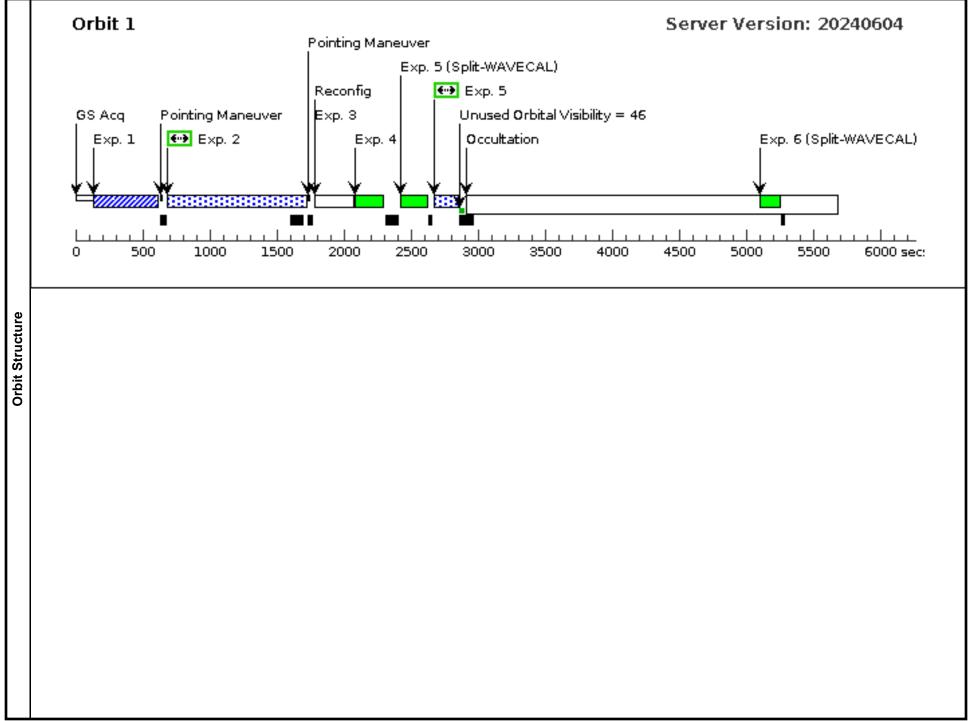


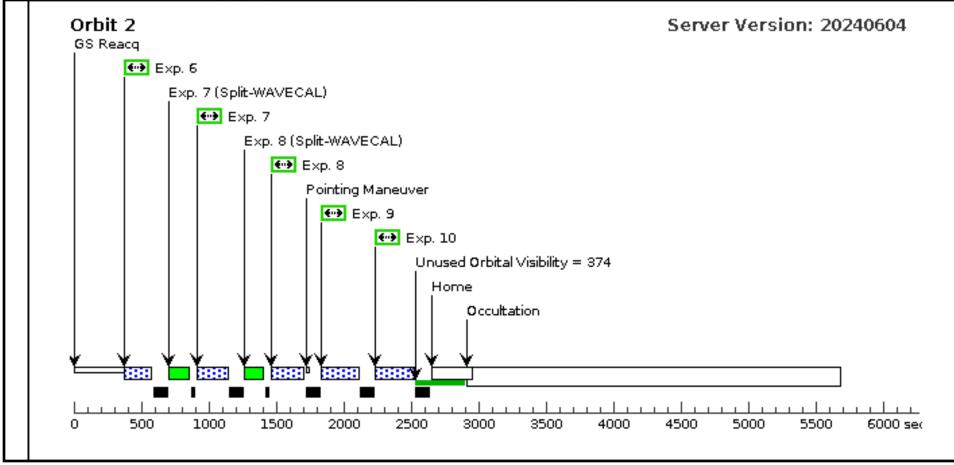


	Proposal 17326, GD71-DEC	(02), completed			Fri Jun 21 15:01:02 GMT 2024				
	Diagnostic Status: Warning	· · · · ·							
I	Scientific Instruments: S/C, COS/FUV, COS/NUV								
isit	Special Requirements: SCHED								
>	George Chapman added Expo.	Comments: exposure 4: GO wavecal to calculate the OSM 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).							
	1533 & 1577 LP4								
Diagnostics		orm): For the best data quality, it is generally require							
6	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
argets	(2) GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS				
l g		Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr						
lμ		Equinox: J2000	Epoch of Position: 2000						
Fixed	Comments: Co-ordinates and [Differences from previous co-o Category=STAR Description=[DA] Extended=NO	proper motions updated with values from SIMBAD, or ordinates are in decimal places in seconds of time and	which uses the GAIA DR2 catalog. ad arcsec, within the stated errors.						

#	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)	
	(COD.td.05) 574)							[==>]	[1]
Co Cy	mments: Exptim cle 28 comment	ne for S/N of 60 : we continue to	is 105.5 sec, using 90 sec leads to S/N of 55 use the same exposure time since difference	es do not affect orb	it request.				
2	G130M/109	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=71			829 Secs (829 Secs)	
	6/FUVB/LP 2			1096 A	9; ED DOS 2:			[==>]	
	(COS.sp.182 0351)				FP-POS=3; SEGMENT=B;				
	0331)				LIFETIME-POS=L				[1]
					P2				
Co	mments: Cycle .	30 comment: exp	posure time updated following FLUXTAB up	pdate.					
Th	VVB only (all ET e FUVB count r buffer-time = e	ate is 549 cts/se	ne from FUVA). c, so the buffer time is 2.35E6/566 = 4280 s c	ec.					
3		DARK	S/C, DATA, NONE			QASISTATES COS	5	1 Secs (1 Secs)	
						FUV HVLOW HVI OW		[==>]	[1]
Co	mments: Work-	around to efficie	ntly schedule the SEG-B to SEG-A reconfig	uration Eliminate	s SPSS induced gaps	0			23
4	G130M/109		COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
	6/FUVA W AVECAL/L			1096 A	SEGMENT=A;			[==>]	
Ś	P2				FLASH=NO;				[1]
ure					LIFETIME-POS=L				
	mments: Cycle 2 per 2017 and Ap	28: the exposure ril 2020.	time has been updated to 160 seconds. Th	is was determined a	P2 after characterizing the a	lecrease by about 12 p	percent in the summ	ed count-rate with time over the period bet	ween Dece
5	G160M/153	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=12			125 Secs (125 Secs)	
	3/FUVA/LP 6			1533 A	5; FP-POS=3;			[==>]	
	(COS.sp.186 5093)				SEGMENT=A;				[1]
	5095)				LIFETIME-POS=L				[1]
					P6				
Th	mments: FUVA e FUVA count r buffer-time = e	ate is 8265 cts/s	rarnings come from FUVB). ec, so the buffer time is 2.35E6/8265 = 284	sec.					
6	G160M/157	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
	7/FUVA/LP 6			1577 A	4; FP-POS=3;			[==>]	
	(COS.sp.186 5094)				SEGMENT=A;				[2]
	5094)				LIFETIME-POS=L				[2]
					P6				
Th	mments: FUVA e FUVA count r buffer-time = e	ate is 5794 cts/s	earnings come from FUVB). ec, so the buffer time is 2.35E6/5794 = 406	sec.					
	55	1							

7 G160M/161 (2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17	178 Secs (178 Secs)	
1/FUVA/LP 6 (COS.sp.186 5095)		1611 A	8; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P6	[==>]	[2]
Comments: FUVA only (all ETC w The FUVA count rate is 4685 cts/s Set buffer-time = exptime	varnings come from FUVB). ec, so the buffer time is 2.35E6/4685 = 50	2 sec.			
8 G160M/162 (2) GD71 3/FUVA/LP 6 (COS.sp.186 5082)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=19 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P6	<u>192 Secs (192 Secs)</u> [==>]	[2]
Set buffer-time = exptime	ec, so the buffer time is $2.35E6/4294 = 54$				
9 G160M/153 (2) GD71 3/FUVA/LP 4 (COS.sp.186 5093)	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=12 5; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	125 Secs (125 Secs) [==>]	[2]
Comments: FUVA only (all ETC w The FUVA count rate is 8265 cts/s Set buffer-time = exptime	varnings come from FUVB). ec, so the buffer time is 2.35E6/8265 = 28	4 sec.			
10 G160M/157 (2) GD71 7/FUVA/LP 4 (COS.sp.186 5094)	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	154 Secs (154 Secs) [==>]	[2]
Comments: FUVA only (all ETC w The FUVA count rate is 5794 cts/s Set buffer-time = exptime	varnings come from FUVB). ec, so the buffer time is 2.35E6/5794 = 40	6 sec.			1

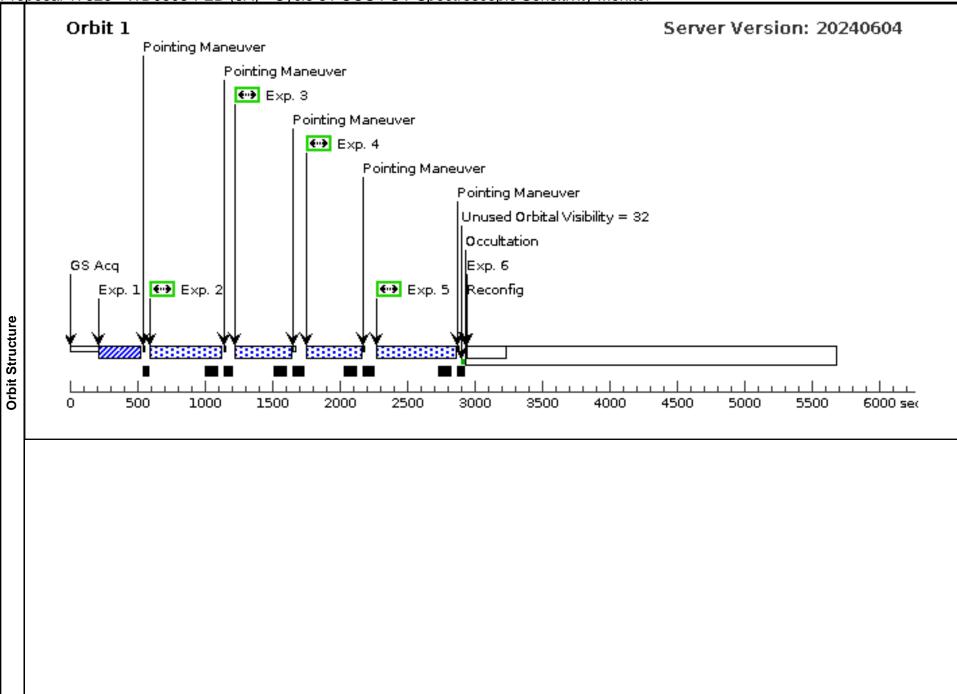


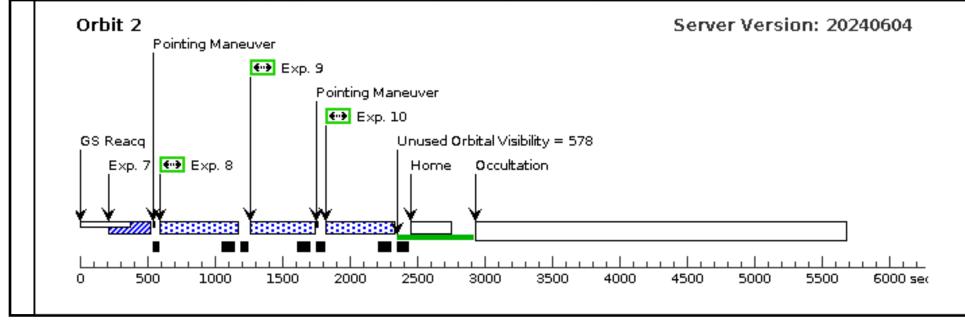


	Proposal 17326, WD0308-FEB				Fri Jun 21 15:01:02 GMT 2024					
isit	Diagnostic Status: Warning									
i i i i i i i i i i i i i i i i i i i										
	Special Requirements: SCHED 100%; BETWEEN 03-FEB-2024:00:00 AND 24-FEB-2024:00:00:00									
Diagnostics	(WD0308-FEB (3A)) Warning (F	Form): For the best data quality, it is generally rec	quired to use all four FP-POS positions when obser	rving at a given COS cenwave.						
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
argets	(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					
١ð		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr							
Tal		Equinox: J2000	Epoch of Position: 2000							
Fixed .		over from Cycle 25 proposal, checked against SII rr, from SIMBAD, also using the GAIA DR2 cata								

	#	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)	
	Con	· · · · · ·	A comment exposur	e times not reduced following updated I	FTC calculations	differences not enough to	affect orbit requested		[==>]	[1]
	Cyc	cle 28 comment.	: we continue to use the	the same exposure time since difference	es do not affect orbi	pit request.	ujjeci orbii requesica.			
	2	G130M/105 5/LP2	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=20 8;			318 Secs (318 Secs)	<u> </u> '
	l	(COS.sp.154 0024)			1055 A	FP-POS=3;			[==>]	
	l	0024)				SEGMENT=BOTH;				[1]
						LIFETIME-POS=L P2				
	Con	nments: Cycle 2	29 comment: exposur	re time updated following blue modes T	DS and FLUXTAB					L
	ETC Set i	C buffer time is buffer time = e.	1377 sec exptime - 110 sec							
	3	G130M/122 2/LP4	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15 7;			267 Secs (267 Secs)	<u> </u>
	l	(COS.sp.145			1222 A	7, FP-POS=3;			[==>]	
	l	7646)				LIFETIME-POS=L				[1]
						P4; SEGMENT=BOTH				
			uffer time is 392 sec.			SEGMENT-DO III				
ŝ		buffer time = e.	exptime - 110 sec							1
Exposures	4	1/LP5	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 9;			259 Secs (259 Secs) [==>]	+
pos	l	(COS.sp.186 5092)			1291 A	FP-POS=3;			[==>]	
Ä	l					LIFETIME-POS=L P5;				[1]
						P3; SEGMENT=BOTH				
			puffer time is 344 sec. exptime - 110 sec							
	5	G140L/1280 /LP3	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=26 1;			371 Secs (371 Secs)	-
	l	(COS.sp.182			1280 A	FP-POS=3;			[==>]	
	l	0354)				LIFETIME-POS=L				[1]
	l					P3; SECMENT DOTU				
	Con	mments: Cycle	30 comment: exposu	re time updated following FLUXTAB up	ndate	SEGMENT=BOTH				
	ETC	C buffer time is	520 sec.	s line updated jonowing i Doning of	uuic.					
- I	Set l 6	<i>buffer time</i> $= e$.	exptime - 110 sec DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	Τ
	0		DAKK	5/C, DATA, NONE			FUV HVLOW HVL		[==>]	[1]
	Con	mments· Work-(around to efficiently :	schedule the reconfiguration to SEG-A.	Fliminates SPSS	induced eans	OW		1 · j	[1]
ļ	7	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA	mulecu Sups.			45 Secs (45 Secs)	
ļ	l	(839564)	~ /						[==>]	[2]
				e times not reduced following updated I			affect orbit requested.			
	Cyci	le 28 commeni.	we continue to use it	the same exposure time since difference	s do not ajjeci orvi	it request.				
	1									

8	G140L/800/ (1) WD0308-565 FUVA/LP3	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25 7:	367 Secs (367 Secs)	
	(COS.sp.145		800 A	FP-POS=3:	[==>]	
	7778)			SEGMENT=A;		[2]
				LIFETIME-POS=L P3		
	nments: ETC buffer time is 350 sec. buffer time = exptime - 110 sec					
9	G140L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=22	332 Secs (332 Secs)	
	/FUVA/LP3 (COS.sp.145		1105 A	2; FP-POS=3;	[==>]	
	7846)			SEGMENT=A;		[2]
				LIFETIME-POS=L		1-1
				P3		
	nments: ETC buffer time is 358 sec. buffer time = exptime - 110 sec					
10	G130M/132 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16	274 Secs (274 Secs)	
	7/FUVA/LP 5		1327 A	4; ED DOG 2:	[==>]	
	(COS.sp.145 7657)			FP-POS=3; LIFETIME-POS=L		[2]
	(657)			P5;		[2]
				SEGMENT=A		
	nments: ETC buffer time is 324 sec. buffer time = exptime - 110 sec					

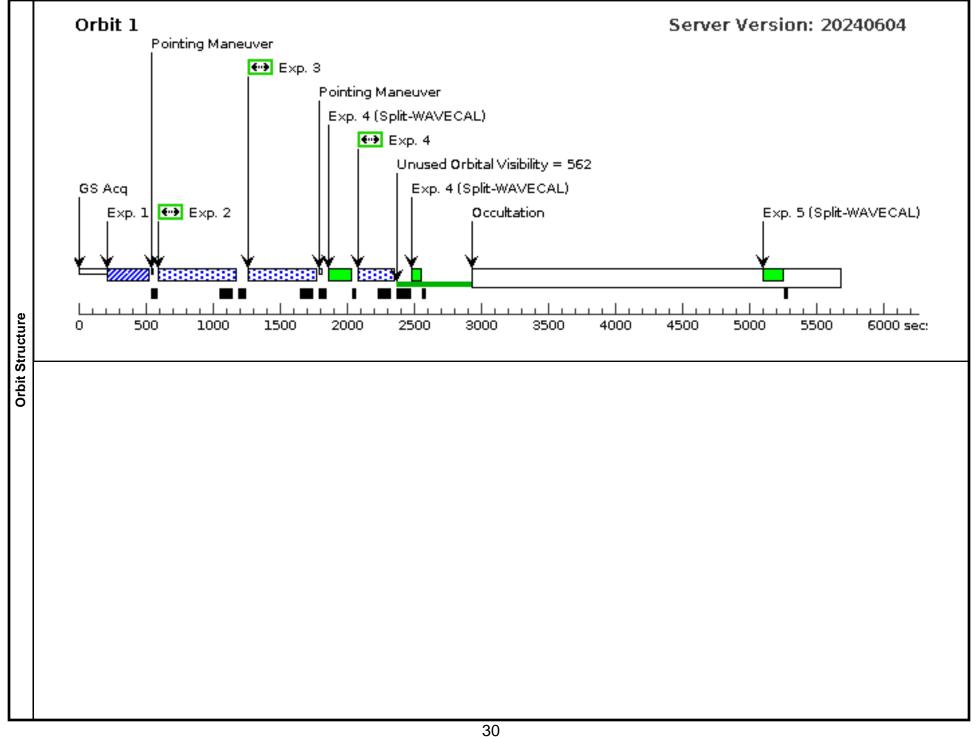


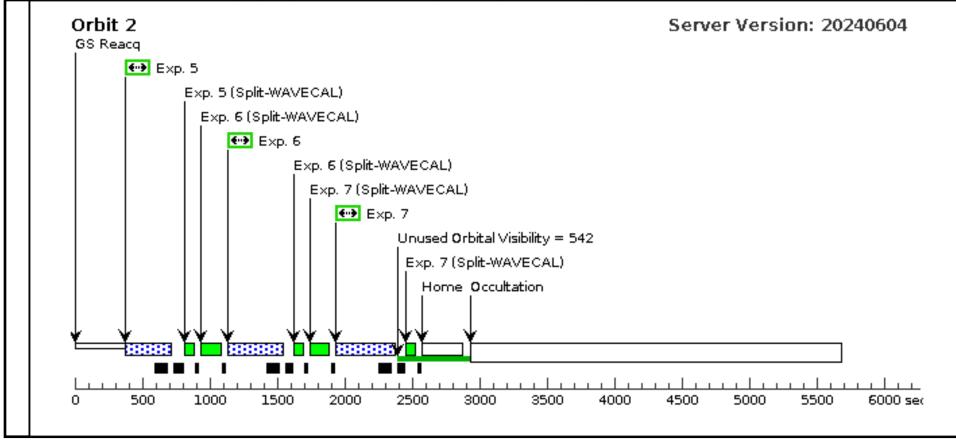


	Proposal 17326, WD0308-FEB			monto	Fri Jun 21 15:01:02 GMT 2024					
	Diagnostic Status: Warning	111 Juli 21 15.01.02 GWT 2024								
	Scientific Instruments: COS/FUV	/, COS/NUV								
	Special Requirements: SCHED 1	00%; BETWEEN 03-FEB-2024:00:00:00 AND 2	24-FEB-2024:00:00:00							
	Comments: All G160M observation	ons are with $SEGMENT = B$ (i.e. segment A is turned)	rned off).							
	1611 & 1623 LP4	511 & 1623 I P4								
Diagnostics	(WD0308-FEB (3B)) Warning (F	Form): For the best data quality, it is generally req	uired to use all four FP-POS positions when obser	rving at a given COS cenwave.						
	# 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					
arge		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr							
Tai		Equinox: J2000	Epoch of Position: 2000							
Fixed ⁻	Comments: Coordinates carried of Proper motions changed to mas/y Category=STAR Description=[DB] Extended=NO									

#	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]
Com Cycl	ments: cycle 2 e 28 comment	24 comment: exposure : we continue to use t	e times not reduced following updated the same exposure time since differenc	ETC calculations, es do not affect orb	differences not enough to it request.	o affect orbit request	ed.		
2	G160M/161	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			360 Secs (360 Secs)	
	1/B/LP4 (COS.sp.154 0046)			1611 A	BUFFER-TIME=25 0;	5		[==>]	
	00+0)				LIFETIME-POS=L P4;				[1]
					SEGMENT=B				
		uffer time is 755 sec. xptime - 110 sec							
3	G160M/162	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			388 Secs (388 Secs)	
	3/B/LP4 (COS.sp.154			1623 A	BUFFER-TIME=27	7		[==>]	
	0050)				8; LIFETIME-POS=L				[1]
					P4; SEGMENT=B				
Com	ments: ETC b	uffer time is 814 sec.			SEGMEN I=B				
	ouffer time = e	xptime - 110 sec		~					
4	G160M/153 3/B/LP6	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	(COS.sp.145 7649)			1533 A	BUFFER-TIME=11 3;	1		[==>]	
	7049)				LIFETIME-POS=L				[1]
					P6; SEGMENT=B				
		uffer time is 502 sec.			SEGMENT-D				
Set b		xptime - 110 sec.		G160M	ED DOG 2.			201 Same (201 Same)	
5	7/B/LP6	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	1577 A	FP-POS=3; BUFFER-TIME=18	2		291 Secs (291 Secs) [==>]	
	(COS.sp.154 0036)			107711	1;	5			
	,				LIFETIME-POS=L P6;				[2]
					SEGMENT=B				
		uffer time is 644 sec.							
Set b		xptime - 110 sec (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			360 Secs (360 Secs)	
	1/B/LP6	. ,	200/10 (, IIIII) I/10, ID/1	1611 A	BUFFER-TIME=25	5		[==>]	
	(COS.sp.154 0046)				0;				
					LIFETIME-POS=L P6;				[2]
					SEGMENT=B				
Com	ments: ETC b	uffer time is 755 sec.							-
Set b	ouffer time = e	xptime - 110 sec							

·	G160M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	388 Secs (388 Secs)	
	3/B/LP6 (COS.sp.154 0050)		1623 A	BUFFER-TIME=27 8;	[==>]	
	0000)			LIFETIME-POS=L P6;		[2]
				SEGMENT=B		
	omments: ETC buffer time is 814 sec. et buffer time = exptime - 110 sec					

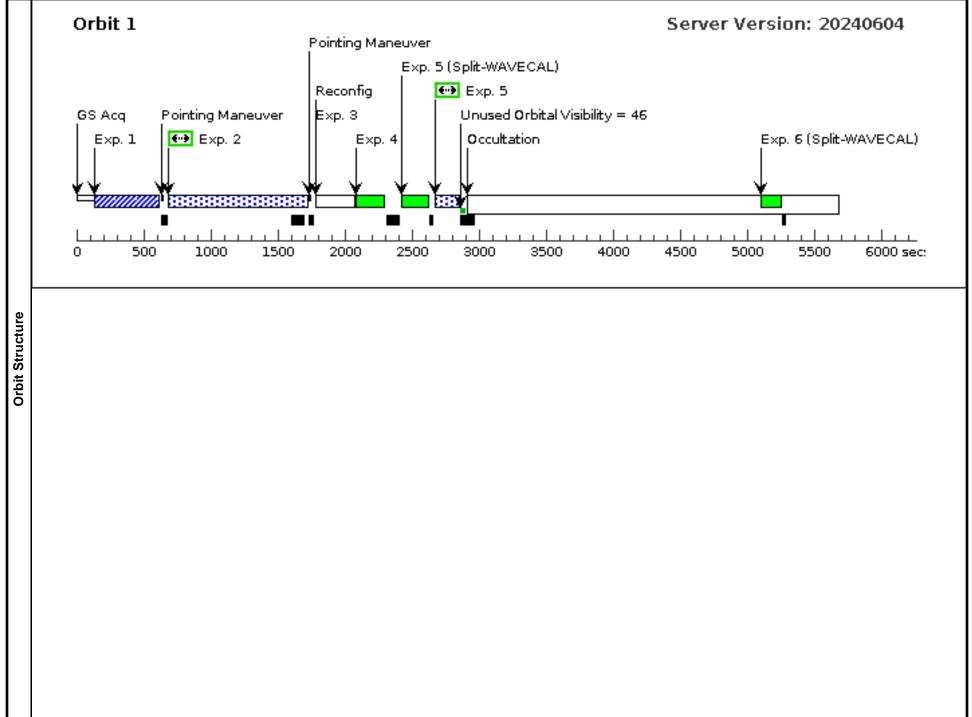


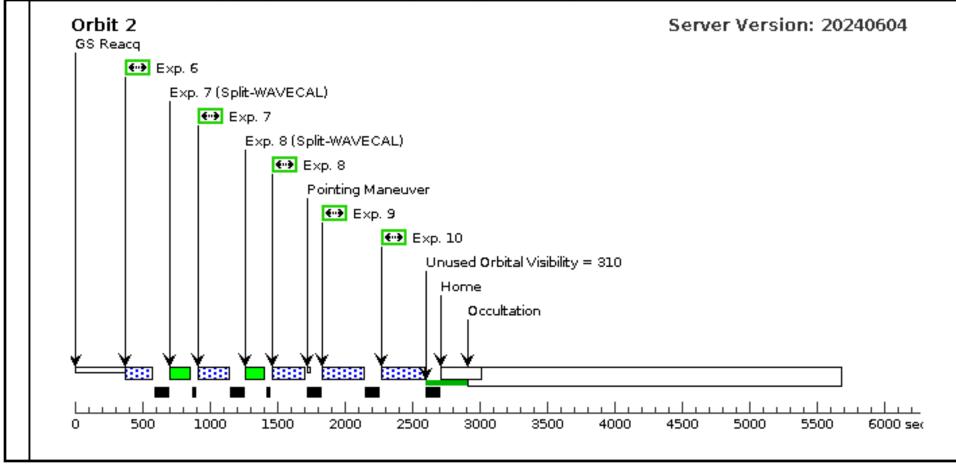


	Proposal 17326, GD71-FEB (04), completed			Fri Jun 21 15:01:02 GMT 2024						
Visit	Diagnostic Status: Warning										
	Scientific Instruments: S/C, CC										
	Special Requirements: SCHED	Special Requirements: SCHED 100%; BETWEEN 10-FEB-2024:00:00:00 AND 24-FEB-2024:00:00:00									
	George Chapman added Expos	omments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation eorge Chapman added Exposure 3 Il G160M observations are with SEGMENT = A (i.e. segment B is turned off).									
	1611 & 1623 LP4	611 & 1623 LP4									
Diagnostic		rm): For the best data quality, it is generally require									
6	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous						
argets	(2) GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS						
l g		Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr								
- Pa		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										

-	#	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)	
		(COS.ta.839 574)							[==>]	[1]
	Con	nments: See Vis	it 02 comments.							
	2	G130M/109 6/FUVB/LP	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=71			829 Secs (829 Secs)	
		2			1096 A	9; FP-POS=3;			[==>]	
		(COS.sp.182 0351)				SEGMENT=B;				[1]
		0001)				LIFETIME-POS=L				[-]
						P2				
	Con	nments: Cycle 3	0 comment: exposure	e time updated following FLUXTAB up	odate.					
	The	FUVB count re	C warnings come from tte is 549 cts/sec, so tl xptime - 110 sec	n FUVA). he buffer time is 2.35E6/566 = 4280 se	ec.					
	3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
							FUV HVLOW HVL OW		[==>]	[1]
	Con	nments: Work-a	round to efficiently sc	chedule the SEG-B to SEG-A reconfigu	uration. Eliminates	s SPSS induced gaps.				1
	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]
Exposures						LIFETIME-POS=L P2				
ns	Con	nmants: Saa Vis	it 02 comments.			FZ				L
0 d	5	G160M/153		COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=12			125 Secs (125 Secs)	
ш	-	3/FUVA/LP	(_) =		1533 A	5;			[==>]	
		(COS.sp.186				FP-POS=3;				
		5093)				SEGMENT=A;				[1]
						LIFETIME-POS=L P6				
	The			gs come from FUVB). the buffer time is 2.35E6/8265 = 284 .	sec.					
	6	G160M/157	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
		7/FUVA/LP 6			1577 A	4;			[==>]	
		(COS.sp.186 5094)				FP-POS=3; SEGMENT=A;				[2]
		5094)				LIFETIME-POS=L				[2]
						P6				
	The			gs come from FUVB). the buffer time is 2.35E6/5794 = 406 .	sec.					

7 G160M/161 (2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17	178 Secs (178 Secs)	
1/FUVA/LP 6 (COS.sp.186 5095)		1611 A	8; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P6	[==>]	[2]
Comments: FUVA only (all ETC wa The FUVA count rate is 4685 cts/se Set buffer-time = exptime	arnings come from FUVB). ec, so the buffer time is 2.35E6/4685 = 50	2 sec.			
8 G160M/162 (2) GD71 3/FUVA/LP 6 (COS.sp.186 5082)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=19 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P6	192 Secs (192 Secs) [==>]	[2]
Set buffer-time = exptime	ec, so the buffer time is 2.35E6/4294 = 54				
9 G160M/161 (2) GD71 1/FUVA/LP 4 (COS.sp.186 5095)	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=17 8; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	178 Secs (178 Secs) [==>]	[2]
Comments: FUVA only (all ETC we The FUVA count rate is 4685 cts/se Set buffer-time = exptime	arnings come from FUVB). ec, so the buffer time is 2.35E6/4685 = 50	2 sec.			
10 G160M/162 (2) GD71 3/FUVA/LP 4 (COS.sp.186 5082)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=19 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	<u>192 Secs (192 Secs)</u> [==>]	[2]
Comments: FUVA only (all ETC wa The FUVA count rate is 4294 cts/se Set buffer-time = exptime	arnings come from FUVB). cc, so the buffer time is 2.35E6/4294 = 54	7 sec.		L	

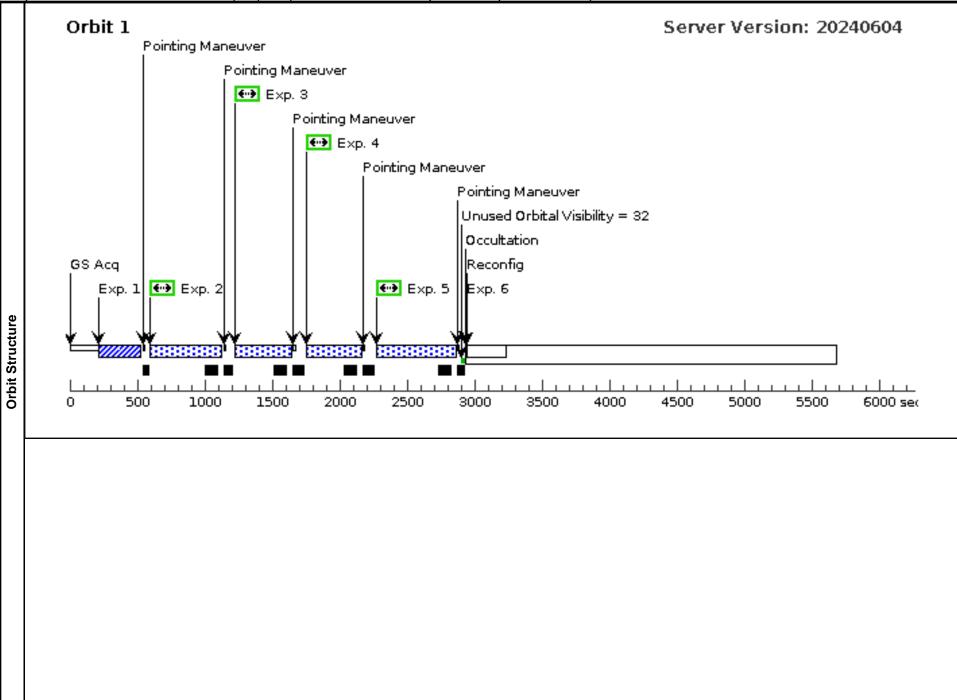


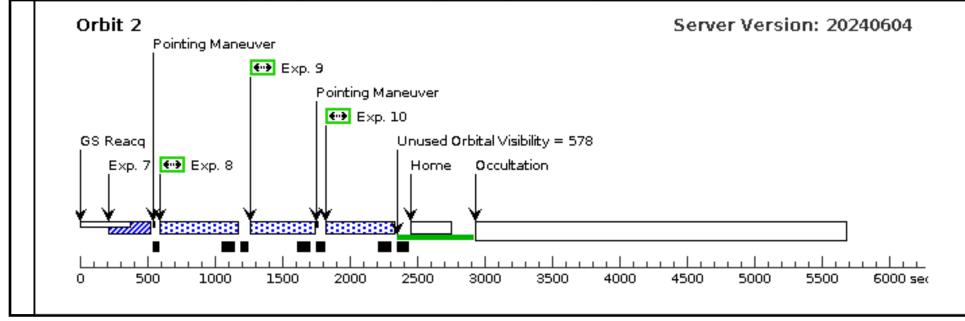


	Proposal 17326, WD0308-APR	(5A), withdrawn			Fri Jun 21 15:01:02 GMT 2024				
isit	Diagnostic Status: Warning								
i i i i i i i i i i i i i i i i i i i	Scientific Instruments: S/C, COS	/FUV, COS/NUV							
	Special Requirements: SCHED 100%; BETWEEN 10-APR-2024:00:00:00 AND 24-APR-2024:00:00:00								
Diagnostics	(WD0308-APR (5A)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions when observing at a given COS cenwave.								
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
argets	(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				
စီ		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr						
Ta I		Equinox: J2000	Epoch of Position: 2000						
Fixed .		over from Cycle 25 proposal, checked against SII or, from SIMBAD, also using the GAIA DR2 catal							

	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ļ	1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
ļ		· /							[==>]	[1]
	Com Cycl	iments: cycle 2 le 28 comment:	4 comment: exposure we continue to use t	e times not reduced following updated i he same exposure time since difference	ETC calculations, a s do not affect orb	differences not enough to it request.	affect orbit requested.			
	2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=20			318 Secs (318 Secs)	
		5/LP2 (COS.sp.154 0024)			1055 A	8; FP-POS=3;			[==>]	
		0024)				SEGMENT=BOTH;				[1]
						LIFETIME-POS=L				[1]
						P2				
	Com	ments: Cycle 2	29 comment: exposur	e time updated following blue modes T	DS and FLUXTAB	update.				
	ETC Set l	C buffer time is buffer time = e:	1377 sec xptime - 110 sec							
	3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			267 Secs (267 Secs)	
		2/LP4 (COS.sp.145			1222 A	7; FP-POS=3;			[==>]	
		7646)				LIFETIME-POS=L				[1]
						P4;				[1]
						SEGMENT=BOTH				
s			uffer time is 392 sec. xptime - 110 sec							1
Exposures	4	G130M/129 1/LP5	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			259 Secs (259 Secs)	
osi		(COS.sp.186			1291 A	9; FP-POS=3;			[==>]	
х Х		5092)				LIFETIME-POS=L				[1]
ш						Р5;				
						SEGMENT=BOTH				
			uffer time is 344 sec. xptime - 110 sec							1
	5	G140L/1280 /LP3	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=26 1;			371 Secs (371 Secs)	-
		(COS.sp.182			1280 A	FP-POS=3;			[==>]	
		0354)				LIFETIME-POS=L				[1]
						P3;				2-3
						SEGMENT=BOTH				
	Com	ments: Cycle 3	30 comment: exposur	e time updated following FLUXTAB up	odate.					
		C buffer time is buffer time = e:	520 sec. xptime - 110 sec							
	6		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
							FUV HVLOW HVL OW		[==>]	[1]
	Com	nments: Work-a	around to efficiently s	schedule the reconfiguration to SEG-A.	Eliminates SPSS	induced gaps.				
	7	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
		(839564)							[==>]	[2]
				e times not reduced following updated I he same exposure time since difference			affect orbit requested.			
	Cyci	ie 20 commeni.	we continue to use in	he same exposure time since afference	s do noi ajjeci orbi	ii requesi.				

8 G140L/800/ (1) WD0308-565 FUVA/LP3 (COS.sp.145 7778)	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=25 7; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	367 Secs (367 Secs) [==>]	[2]
Comments: ETC buffer time is 350 sec. Set buffer time = exptime - 110 sec					
9 G140L/1105 (1) WD0308-565 /FUVA/LP3 (COS.sp.145 7846)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=22 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	332 Secs (332 Secs) [==>]	[2]
Comments: ETC buffer time is 358 sec. Set buffer time = exptime - 110 sec					
10 G130M/132 (1) WD0308-565 7/FUVA/LP 5 (COS.sp.145 7657)	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=16 4; FP-POS=3; LIFETIME-POS=L P5; SEGMENT=A	274 Secs (274 Secs) [==>J	[2]
Comments: ETC buffer time is 324 sec. set buffer time = exptime - 110 sec					

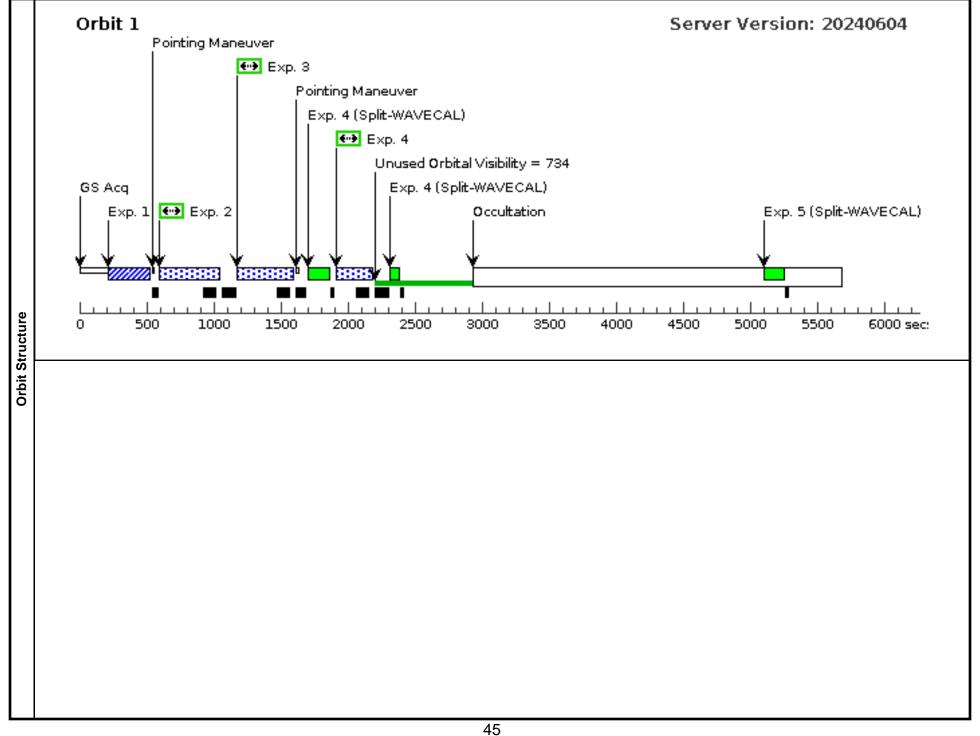


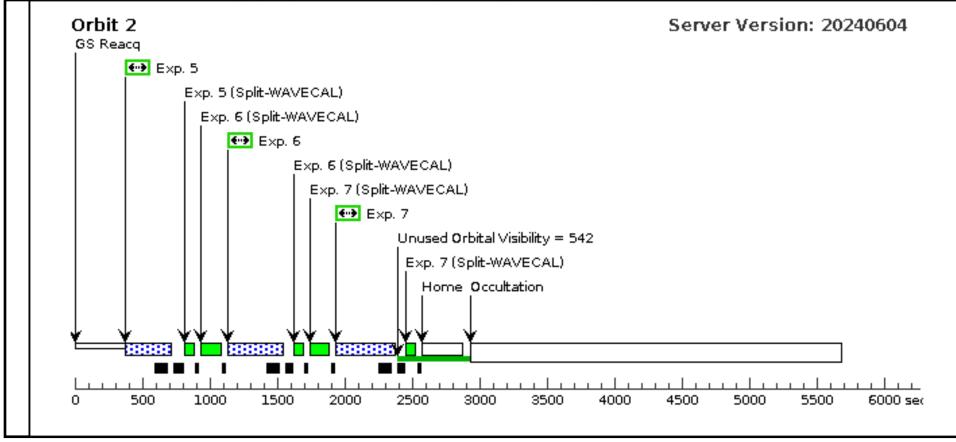


Ē	Proposal 17326, WD0308-APR				Fri Jun 21 15:01:02 GMT 2024					
	Diagnostic Status: Warning									
.±	Scientific Instruments: COS/FUV	/, COS/NUV								
/is	Special Requirements: SCHED 1	Special Requirements: SCHED 100%; BETWEEN 10-APR-2024:00:00:00 AND 24-APR-2024:00:00:00								
[Comments: All G160M observations are with SEGMENT = BOTH. Using "SEGMENT=BOTH" instead of "SEGMENT=B" for both LP4 and LP6 observations for the G160M settings to support a Cycle 30 GO or ogram which needs both segments monitored at LP4 and LP6. (FUVA is also observed for G160M using GD71 in visit 06).									
	1533 & 1577 LP4									
Diagnostics	(WD0308-APR (5B)) Warning (F	Form): For the best data quality, it is generally rec	quired to use all four FP-POS positions when obse	rving at a given COS cenwave.						
	# 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					
arge		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr							
Ta		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] Extende=NO									

#	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]
Co. Cyc	mments: cycle 2 cle 28 comment	24 comment: exposure : we continue to use the	e times not reduced following updated he same exposure time since differenc	ETC calculations, es do not affect orb	differences not enough to it request.	o affect orbit request	ed.		
2	G160M/153	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/BOTH/LP 4 (COS.sp.145			1533 A	BUFFER-TIME=11 3;	l		[==>]	
	(CO3.sp.145 7649)				LIFETIME-POS=L P4; SEGMENT=BOTH				[1]
		uffer time is 502 sec. exptime - 110 sec.							
3	G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			291 Secs (291 Secs)	
	7/BOTH/LP 4			1577 A	BUFFER-TIME=18 1;	3		[==>]	
	(COS.sp.154 0036)				LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH	[
Co. Set	mments: ETC b buffer time = e	uffer time is 644 sec. exptime - 110 sec							
4	G160M/153	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/BOTH/LP 6			1533 A	BUFFER-TIME=11	l		[==>]	
5	(COS.sp.145	i			3;				(1)
	7649)				LIFETIME-POS=L P6;				[1]
í					SEGMENT=BOTH	[
		uffer time is 502 sec. exptime - 110 sec.							
5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			291 Secs (291 Secs)	
	7/BOTH/LP 6			1577 A	BUFFER-TIME=18 1;	3		[==>]	
	(COS.sp.154 0036)				LIFETIME-POS=L				[2]
					Рб;				
					SEGMENT=BOTH	[
Co Set	mments: ETC b buffer time = e	uffer time is 644 sec. exptime - 110 sec							
6	G160M/161	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			360 Secs (360 Secs)	
	1/BOTH/LP 6			1611 A	BUFFER-TIME=25	5		[==>]	
	(COS.sp.154				0;				
	0046)				LIFETIME-POS=L P6;				[2]
					SEGMENT=BOTH	[
Co. Set	mments: ETC b buffer time = e	uffer time is 755 sec. exptime - 110 sec							-
501									

2			COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	388 Secs (388 Secs)	
	6	SOTH/LP OS.sp.154		1623 A	BUFFER-TIME=27 8;	[==>]	
	005				LIFETIME-POS=L P6;		[2]
					SEGMENT=BOTH		
		nts: ETC buffer time is 814 sec. er time = exptime - 110 sec					





	Proposal 17326, GD71-APR	(06), completed			Fri Jun 21 15:01:03 GMT 2024					
	Diagnostic Status: Warning									
	Scientific Instruments: S/C, CO	OS/FUV, COS/NUV								
Visit	Special Requirements: SCHEI	D 100%; BETWEEN 10-APR-2024:00:00:00 AND 2	24-APR-2024:00:00:00							
>	George Chapman added Expo	comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation eorge Chapman added Exposure 3 Il G160M observations are with SEGMENT = A (i.e. segment B is turned off).								
	1533 & 1577 LP4									
Diagnostics		orm): For the best data quality, it is generally require		g at a given COS cenwave.						
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
argets	(2) GD71	RA: 05 52 27.6200 (88.1150833d)	Proper Motion RA: 76.841 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS					
- Š		Dec: +15 53 13.23 (15.88701d)	Proper Motion Dec: -172.944 mas/yr							
⊢		Equinox: J2000	Epoch of Position: 2000							
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										

Label Target Config,Mode,Aperture Spectral Els. **Opt. Params.** Special Reqs. Groups Exp. Time (Total)/[Actual Dur.] (ETC Run) ACQ/IM (2) GD71 COS/NUV, ACQ/IMAGE, BOA MIRRORB 90 Secs (90 Secs) (COS.ta.839 [==>] 574) Comments: See Visit 02 comments. G130M/109 (2) GD71 829 Secs (829 Secs) COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=71 6/FUVB/LP 9; 1096 A [==>] 2 FP-POS=3; (COS.sp.182 SEGMENT=B: 0351) LIFETIME-POS=L P2 Comments: Cycle 30 comment: exposure time updated following FLUXTAB update. FUVB only (all ETC warnings come from FUVA). The FUVB count rate is 549 cts/sec, so the buffer time is 2.35E6/566 = 4280 sec. *Set buffer-time = exptime - 110 sec* 3 DARK S/C, DATA, NONE 1 Secs (1 Secs) OASISTATES COS FUV HVLOW HVL [==>]OW Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps. G130M/109 WAVE COS/FUV, TIME-TAG, WCA G130M FP-POS=3; 160 Secs (160 Secs) 6/FUVA W 1096 A SEGMENT=A; [==>] AVECAL/L FLASH=NO; P2 Exposures LIFETIME-POS=L P2 Comments: See Visit 02 comments. G160M/153 (2) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=12 125 Secs (125 Secs) 3/FUVA/LP 5; 1533 A [==>] 6 FP-POS=3; (COS.sp.186 5093) SEGMENT=A: LIFETIME-POS=L P6 Comments: FUVA only (all ETC warnings come from FUVB). The FUVA count rate is 8265 cts/sec, so the buffer time is 2.35E6/8265 = 284 sec. *Set buffer-time = exptime* 6 G160M/157 (2) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15 154 Secs (154 Secs) 7/FUVA/LP 4; 1577 A [==>] 6 FP-POS=3; (COS.sp.186 5094) SEGMENT=A; LIFETIME-POS=L P6 Comments: FUVA only (all ETC warnings come from FUVB). The FUVA count rate is 5794 cts/sec. so the buffer time is 2.35E6/5794 = 406 sec. *Set buffer-time = exptime*

Orbit

[1]

[1]

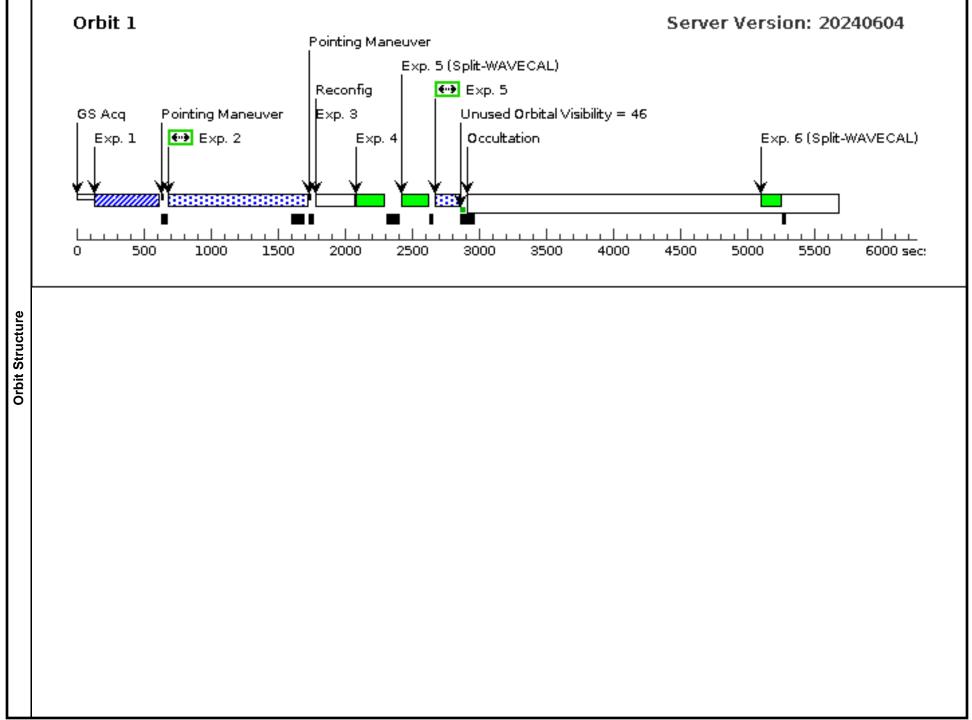
[1]

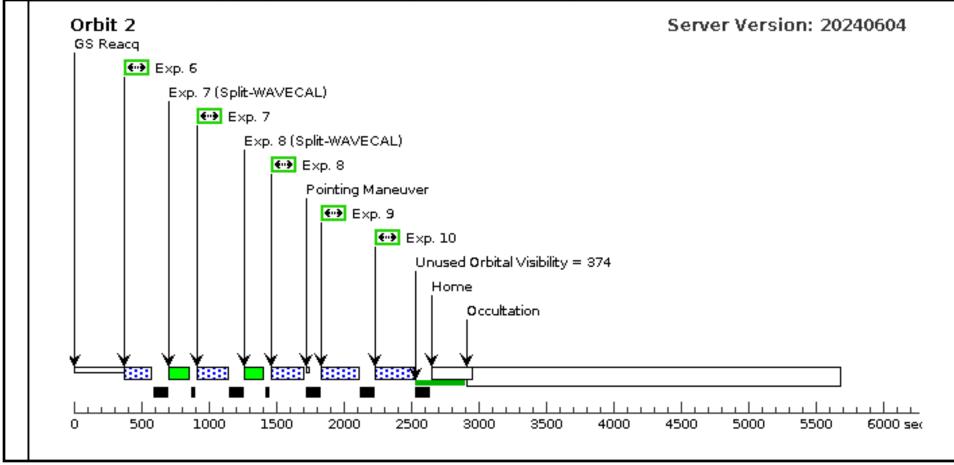
[1]

[1]

[2]

7 G160M/161 (2) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=17	178 Secs (178 Secs)	
1/FUVA/LP 6 (COS.sp.186 5095)		1611 A	8; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P6	[==>]	[2]
Comments: FUVA only (all ETC was The FUVA count rate is 4685 cts/se Set buffer-time = exptime	urnings come from FUVB). c, so the buffer time is 2.35E6/4685 = 50	2 sec.			
8 G160M/162 (2) GD71 3/FUVA/LP 6 (COS.sp.186 5082)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=19 2; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P6	192 Secs (192 Secs) [==>]	[2]
Set buffer-time = exptime	c, so the buffer time is $2.35E6/4294 = 54$				
9 G160M/153 (2) GD71 3/FUVA/LP 4 (COS.sp.186 5093)	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=12 5; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	125 Secs (125 Secs) [==>]	[2]
Comments: FUVA only (all ETC was The FUVA count rate is 8265 cts/se Set buffer-time = exptime	urnings come from FUVB). c, so the buffer time is 2.35E6/8265 = 28	4 sec.			
10 G160M/157 (2) GD71 7/FUVA/LP 4 (COS.sp.186 5094)	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P4	154 Secs (154 Secs) [==>]	[2]
Comments: FUVA only (all ETC wa The FUVA count rate is 5794 cts/se Set buffer-time = exptime	urnings come from FUVB). c, so the buffer time is 2.35E6/5794 = 40	6 sec.			

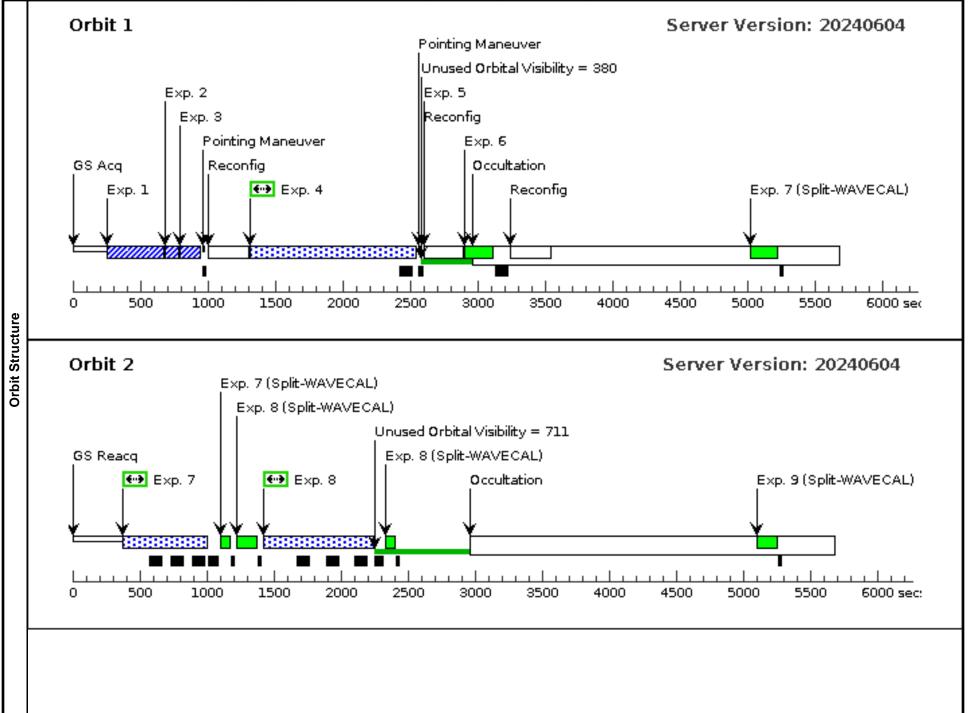


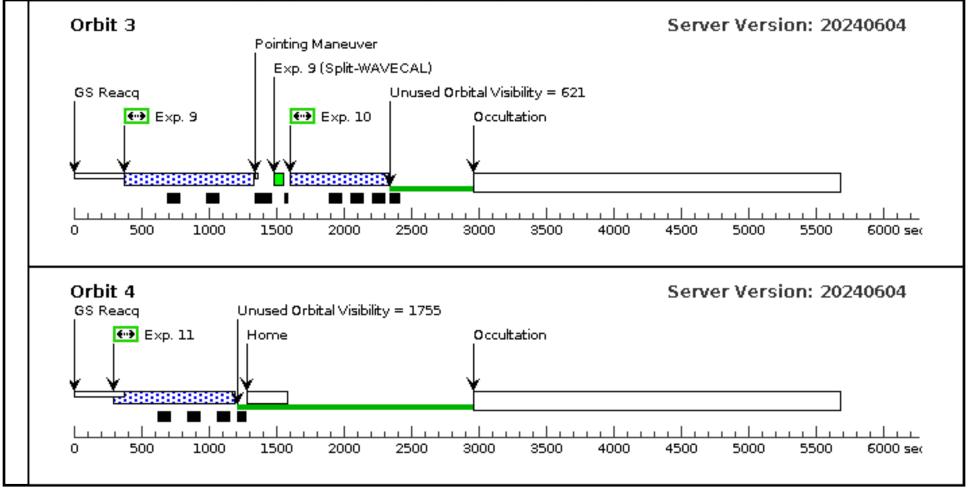


÷	10				ormor					
L		Proposal 17326, WD1057-JUN (07),	scheduled			Fri Jun 21 15:01:03 GMT 2024				
L		Diagnostic Status: Warning								
L		Scientific Instruments: S/C, COS/FUV	V							
L		Special Requirements: GYRO MODE	E 1G; SCHED 100%; BETWEEN 02-JUN-202	24:00:00:00 AND 30-JUN-2024:00:00:00						
	8	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 = BOTH								
		1533 & 1577 LP4								
		In Cycle 31 June, HST went into reduced gyro mode and made GD71 unscheduable for most of the year until late August. Due to this, target WD1057+719 has been exchanged for GD71. As complete G160M observations has not been taken since February 2024 and will not be until late August 2024 due to availabity of GD71, the Cycle 31 June orbits will be instead used for complete G160M observations with the target WD1057+719. Four orbits have been alloted to June and all four will be used for G160M, thus no changes to the total amount of orbits given in this cycle.								
1	Diagnostics	(WD1057-JUN (07)) Warning (Form)	: For the best data quality, it is generally requ	ired to use all four FP-POS positions when observing	g at a given COS cenwav	re.				
Г		# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	<u>~</u>	(3) WD1057+719	RA: 11 00 34.2200 (165.1425833d)	Proper Motion RA: -0.00973 sec of time/yr	V=14.68	Reference Frame: ICRS				
	ets		Dec: +71 38 2.99 (71.63416d)	Proper Motion Dec: -0.02 arcsec/yr						
L	argets		Equinox: J2000	Epoch of Position: 2000.0						
	ed Tá	Comments: HST FASTEX standard PM, coords from USNOB								
	-	GSC2 coords are 11:00:34.25, 71:38: Category=STAR Description=[DA] Extended=NO	SC2 coords are 11:00:34.25, 71:38:02.97, 1997.19 epoch Category=STAR Description=[DA]							

	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ļ		ACQ/SEAR	(3) WD1057+719	COS/FUV, ACQ/SEARCH, PSA	G160M	SCAN-SIZE=3;			1 Secs (1 Secs)	
	1	CH (COS.sa.192			1623 A	STEP-SIZE=1.767;			[==>]	T '
	1	5727)				LIFETIME-POS=L P6				[1]
	of rea and v	educed gyro mo will continue to	ode, the target GD71	71 is no longer available until late August Igust. In order to obtain FUV TDS data a	st and must be switc.	ched out with WD1057+7	719. Due to the sever	ral shutdowns and faile	une 2024 HST went into reduced gyro moa ed GS acqusitions, G160M lacked data for with FUV ACQ/SEARCH, ACQ/PEAKXD	r 3 months
ļ		ACQ/PEAK	(3) WD1057+719		G160M	NUM-POS=3;			1 Secs (1 Secs)	
	1	XD (COS.sa.192			1623 A	STEP-SIZE=1.3;			[==>]	
	1	5727)				CENTER=FLUX-W	7			
ļ	1					T; LIFETIME-POS=L				[1]
ł	L					P6				
ļ	3		(3) WD1057+719	COS/FUV, ACQ/PEAKD, PSA	G160M	STEP-SIZE=0.9;			1 Secs (1 Secs)	
ļ	l	D (COS.sa.192			1623 A	CENTER=FLUX-W	7		[==>]	!
ļ	1	5727)				T-FLR;				[1]
ļ	1					NUM-POS=5; LIFETIME-POS=L				[1]
ł	L					P6				
ļ	4		(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=90			1014 Secs (1014 Secs)	
ŝ	l –	6/FUVB/LP 2			1096 A	4;			[==>]	
nr.	1	(COS.sp.192				FP-POS=3;				
Exposures	1	5731)				SEGMENT=B;				[1]
S	l					LIFETIME-POS=L P2				
	and a eve c FUV The H	allows the abil comparable TL /B only (all ET FUVB count ra	lity to observe with l DS data quality to th FC warnings come fr	both segments for all G160M observation he previous GD71 observations.	s GD71 unschedua ns, which will incre	ble from Jan-August and ease the time used in visit	l due to this, GD71 h ts by a total of 10%.	nas been replaced with In the TIR 2018-01, th	WD1057+719. WD1057+719 is dimmer to be team advises that an S/N of ~7 at 1030.0	than GD71 90 will achi
	5		DARK	S/C, DATA, NONE			QASISTATES CC		1 Secs (1 Secs)	
	1						FUV HVLOW HV OW	/L	[==>]	[1]
	Com	iments: Work-	around to efficiently	y schedule the SEG-B to SEG-A reconfigu	uration. Eliminate	s SPSS induced gaps.	0 N			
		G130M/109	<i>uu</i> 2	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	Τ
l	1	6/FUVA W AVECAL/L			1096 A	SEGMENT=A;			[==>]	
ł	1	P2				FLASH=NO;			-	[1]
						LIFETIME-POS=L P2				[*]
	Com mber	iments: Cycle 2 r 2017 and Apr	?8: the exposure tim ril 2020.	ve has been updated to 160 seconds. This	s was determined a		'ecrease by about 12	percent in the summea	d count-rate with time over the period betw	veen Dece

7 (G160M/153	(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=16	578 Secs (578 Secs)	
3	3/LP6	(3) (101037171)		1533 A	0;	[==>]	
	(COS.sp.192 5732)			1000 11	FP-POS=3;		
	5752)				SEGMENT=BOTH;		[2]
					LIFETIME-POS=L		
					P6		
Comm and al	ents: In June llows the abili	Cycle 31, Hubble w ity to observe with b	ent into reduced gyro mode. This ma oth segments for all G160M observat	kes GD71 unsched ions_which will in	luable from Jan-August and due to this, GD71 has been replaced crease the time used in visits by a total of 10%.	l with WD1057+719. WD1057+719 is a	limmer than GD71
			om segments för att Grööm öbserva	ions, which will in	ereuse me une useu m visus by a lotal of 1070.		
	Buffer fill time ffer-time = 2.	239 seconds 39 * (2/3)					
		(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=21	766 Secs (766 Secs)	
7	7/LP6	(0)		1577 A	6;	[==>]	
	(COS.sp.192 5430)				FP-POS=3;		
	5150)				SEGMENT=BOTH;		[2]
					LIFETIME-POS=L		
					P6		
Comm	ents: In June	Cycle 31, Hubble w	ent into reduced gyro mode. This ma oth segments for all G160M observat	kes GD71 unsched	luable from Jan-August and due to this, GD71 has been replaced crease the time used in visits by a total of 10%.	l with WD1057+719. WD1057+719 is a	limmer than GD71
			om segments för att G100M observat	ions, which will th	crease me ume usea in visus by a lotal of 1076.		
	Buffer fill time ffer-time = 32	2324 seconds					
		(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=28	909 Secs (909 Secs)	
3	3/LP6	(3) WD1037+719	CO3/10 V, 11ME-1AO, 13A	1623 A	5;	[==>]	
	(COS.sp.192			1025 A	FP-POS=3;	1==>1	
	5431)				SEGMENT=BOTH;		[3]
					LIFETIME-POS=L		1-1
					P6		
Comm	ents: In June	Cycle 31, Hubble w	ent into reduced gyro mode. This ma	kes GD71 unsched	luable from Jan-August and due to this, GD71 has been replaced	l with WD1057+719. WD1057+719 is a	limmer than GD71
and al	llows the abili	ity to observe with b	oth segments for all G160M observat	ions, which will in	crease the time used in visits by a total of 10%.		
		2427 seconds					
	$\frac{\text{ffer-time} = 42}{\text{G160M}/153}$	(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=16	578 Secs (578 Secs)	
	3/LP4	(3) WD1037+719	CO3/FOV, HME-TAO, FSA	1533 A	0;	````´´	
	(COS.sp.192			1555 A	FP-POS=3;	[==>]	
	5432)				SEGMENT=BOTH;		[3]
					LIFETIME-POS=L		[0]
					P4		
					luable from Jan-August and due to this, GD71 has been replaced	l with WD1057+719. WD1057+719 is a	limmer than GD71
and al	llows the abili	ity to observe with b	oth segments for all G160M observat	ions, which will in	crease the time used in visits by a total of 10%.		
ETC B	Buffer fill time	239 seconds					
	ffer-time = 2			C1(0)/		766 9 (766 9)	
-	G160M/157 7/LP4	(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=21 6;	766 Secs (766 Secs)	
((COS.sp.192			1577 A	FP-POS=3;	[==>]	
5	5433)				SEGMENT=BOTH;		[4]
							[4]
					LIFETIME-POS=L P4		
Comm	nents: In June	Cycle 31, Hubble w	ent into reduced gyro mode. This ma	kes GD71 unsched	luable from Jan-August and due to this, GD71 has been replaced	d with WD1057+719. WD1057+719 is a	limmer than GD71
					crease the time used in visits by a total of 10%.		
ETC R	Buffer fill time	e 324 seconds					
	ffer-time = 32						

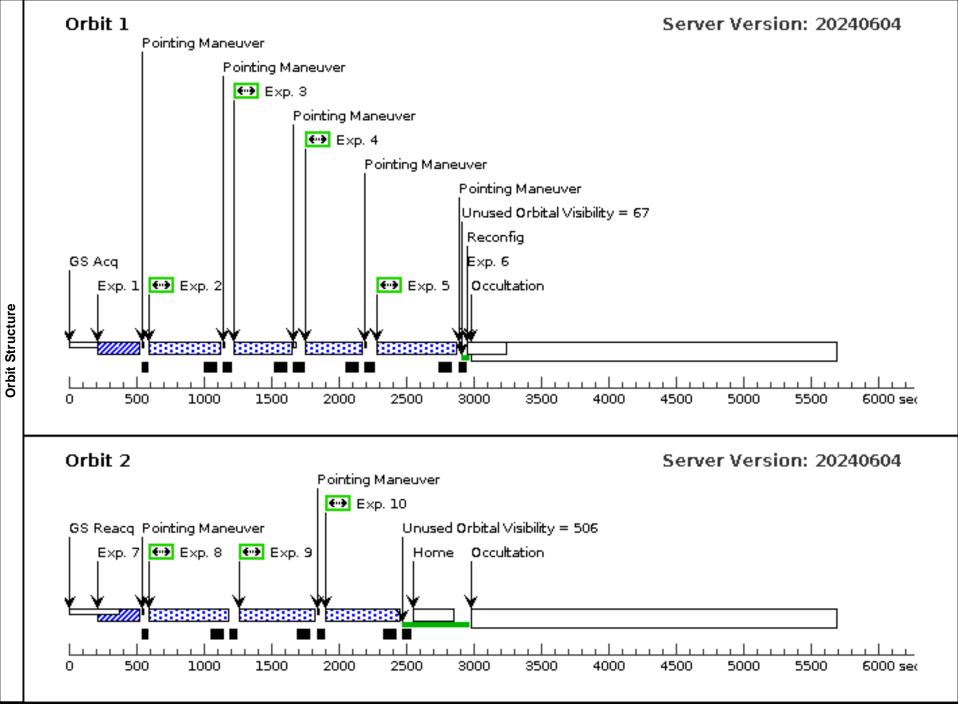




	Proposal 17326, WD0308-AUG	(8A), implementation			Fri Jun 21 15:01:03 GMT 2024				
isit	Diagnostic Status: Warning								
i i i i i i i i i i i i i i i i i i i	Scientific Instruments: S/C, COS	/FUV, COS/NUV							
	Special Requirements: GYRO MODE 1G; SCHED 90%; BETWEEN 04-AUG-2024:00:00 AND 25-AUG-2024:00:00:00								
Diagnostics									
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
argets	(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				
١ ð		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr						
a T		Equinox: J2000	Epoch of Position: 2000						
Fixed [.]		over from Cycle 25 proposal, checked against SII r, from SIMBAD, also using the GAIA DR2 cata.							

	#	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)	
		(1925399)							[==>]	[1]
	Com Cycl	ments: cycle 2 e 28 comment:	4 comment: exposure we continue to use the	times not reduced following updated he same exposure time since difference	ETC calculations, set so the set of the set	differences not enough to it request.	affect orbit requested.			
	2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			321 Secs (321 Secs)	
		5/LP2 (COS.sp.192			1055 A	1;			[==>]	
		5738)				FP-POS=3; SEGMENT=BOTH:				
						LIFETIME-POS=L				[1]
						P2				
	Com	ments: Cycle 2	29 comment: exposure	e time updated following blue modes T	DS and FLUXTAB	Bupdate.				
	Cycl	e 32 comment:	exposure time updat	ed following blue modes TDS and FLU	JXTAB update.					
		buffer time is uffer time = e:	1334 sec xptime - 110 sec							
	3	G130M/122 2/LP4	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			269 Secs (269 Secs)	
		(COS.sp.192			1222 A	9; FP-POS=3:			[==>]	
		5401)				LIFETIME-POS=L				[1]
						P4;				1-1
~						SEGMENT=BOTH				
Exposures			uffer time is 424 sec. xptime - 110 sec							_
SO	4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16			276 Secs (276 Secs)	
ЦХ.		1/LP5 (COS.sp.192			1291 A	6; FP-POS=3;			[==>]	
ш		5741)				LIFETIME-POS=L				[1]
						P5;				[1]
						SEGMENT=BOTH				
			uffer time is 366 sec. xptime - 110 sec							
	5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			369 Secs (369 Secs)	
		/LP3 (COS.sp.192			1280 A	9;			[==>]	
		5742)				FP-POS=3; LIFETIME-POS=L				[1]
						P3;				[1]
						SEGMENT=BOTH				
	Com	ments: Cycle 3	30 comment: exposure	e time updated following FLUXTAB up	odate.					
	ETC Set b	buffer time is uffer time = e	554 sec. xptime - 110 sec							
	6		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
							FUV HVLOW HVL OW		[==>]	[1]
	Com	ments: Work-a	around to efficiently s	chedule the reconfiguration to SEG-A.	Eliminates SPSS	induced gaps.				
	7	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
		(1925405)							[==>]	[2]
	Com Cycl	ments: cycle 2 e 28 comment:	4 comment: exposure we continue to use the	times not reduced following updated the same exposure time since difference	ETC calculations, es do not affect orb	differences not enough to it request.	affect orbit requested.			

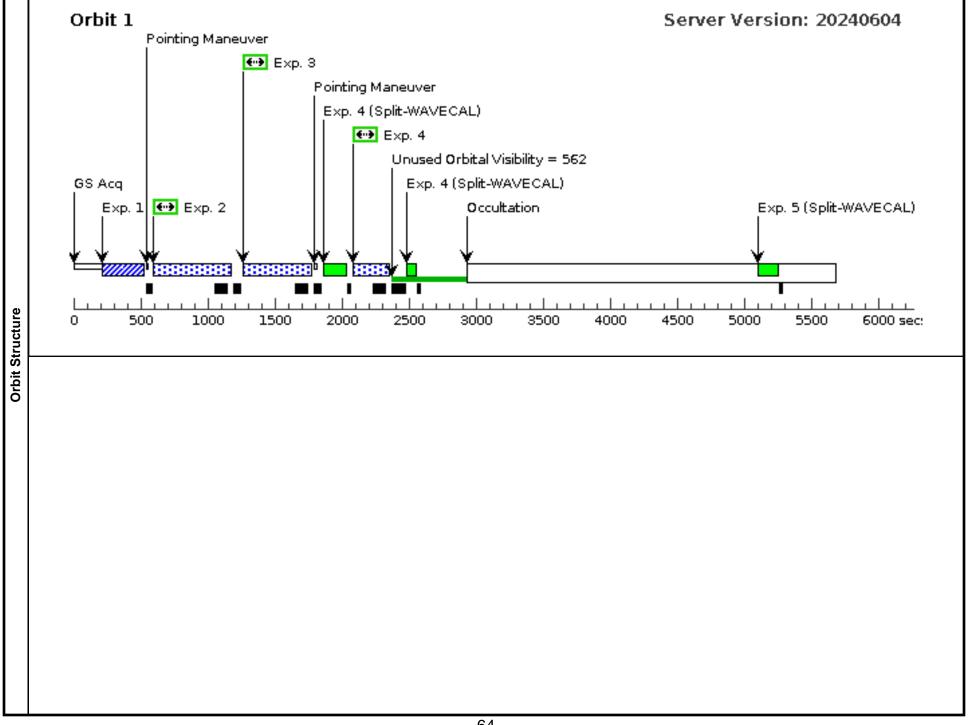
8 G140L/800/ (1) WD0308-565 FUVA/LP3 (COS.sp.192 5748)	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=26 3; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	373 Secs (373 Secs) [==>]	[2]
Comments: ETC buffer time is 396 sec. Set buffer time = exptime - 110 sec					
9 G140L/1105 (1) WD0308-565 /FUVA/LP3 (COS.sp.192 5749)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=30 3; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	413 Secs (413 Secs) [==>]	[2]
Comments: ETC buffer time is 408 sec. Set buffer time = exptime - 110 sec					
10 G130M/132 (1) WD0308-565 7/FUVA/LP 5 (COS.sp.192 5750)	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=20 4; FP-POS=3; LIFETIME-POS=L P5; SEGMENT=A	<u>314 Secs (314 Secs)</u> [==>]	[2]
<i>Comments: ETC buffer time is 362 sec.</i> <i>set buffer time = exptime - 110 sec</i>					

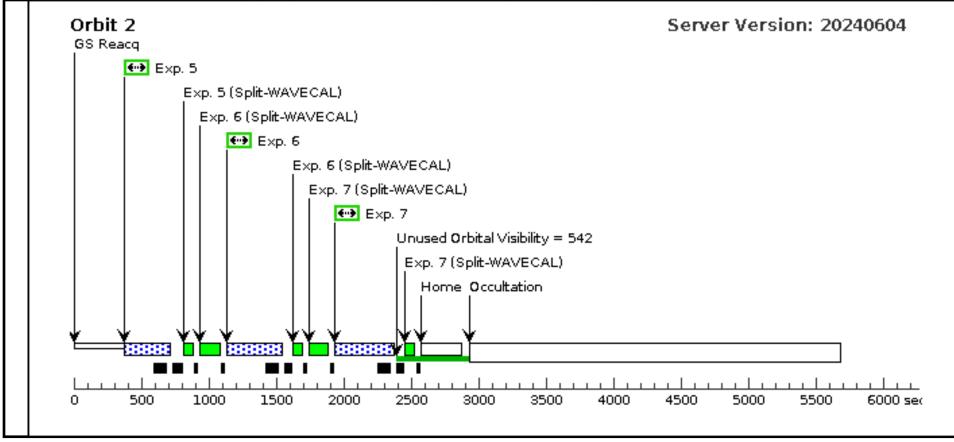


	Proposal 17326, WD0308-AU	G (8B), implementation			Fri Jun 21 15:01:03 GMT	2024				
	Diagnostic Status: Warning									
sit	Scientific Instruments: COS/FU	Scientific Instruments: COS/FUV, COS/NUV								
Īž	Special Requirements: SCHED 100%; BETWEEN 04-AUG-2024:00:00:00 AND 25-AUG-2024:00:00:00									
	Comments: All G160M observat	Comments: All G160M observations are with SEGMENT = B (i.e. segment A is turned off).								
	1611 & 1623 LP4									
cs	(WD0308-AUG (8B)) Warning	(Form): For the best data quality, it is generally really	quired to use all four FP-POS positions when obse	erving at a given COS cenwave.						
sti										
aqno										
Dia	,									
F	# 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					
arge		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 66.919 mas/yr							
a l		Equinox: J2000	Epoch of Position: 2000							
ן. ספ		l over from Cycle 25 proposal, checked against SIM								
Fixe	Proper motions changed to mas, Category=STAR	/yr, from SIMBAD, also using the GAIA DR2 catal	log.							
	Description=[DB]									

#	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]
Com Cycl	nments: cycle 2 le 28 comment.	4 comment: exposure : we continue to use th	times not reduced following updated he same exposure time since differenc	ETC calculations, of es do not affect orb	differences not enough to it request.	o affect orbit request	ed.		
2	G160M/161	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			360 Secs (360 Secs)	
	1/BOTH/LP 4 (COS.sp.154			1611 A	BUFFER-TIME=25 0;	i		[==>]	
	0046)				LIFETIME-POS=L P4;				[1]
					SEGMENT=BOTH				
Com Set b	nments: ETC bi buffer time = e.	uffer time is 755 sec. xptime - 110 sec							
3	G160M/162	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			388 Secs (388 Secs)	
	3/BOTH/LP			1623 A	BUFFER-TIME=27	,		[==>]	
	(COS.sp.154 0050)				8; LIFETIME-POS=L				[1]
	0050)				P4;				[1]
					SEGMENT=BOTH				
		uffer time is 814 sec. xptime - 110 sec							
4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			223 Secs (223 Secs)	
	3/BOTH/LP 6			1533 A	BUFFER-TIME=11			[==>]	
	(COS.sp.145				3;				
	7649)				LIFETIME-POS=L P6;				[1]
					SEGMENT=BOTH				
		uffer time is 502 sec. xptime - 110 sec.							
5	G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			291 Secs (291 Secs)	
	7/BOTH/LP 6			1577 A	BUFFER-TIME=18	6		[==>]	
	(COS.sp.154				1; LIFETIME-POS=L				[2]
	0036)				P6;				[2]
					SEGMENT=BOTH				
		uffer time is 644 sec. xptime - 110 sec							
6	G160M/161	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			360 Secs (360 Secs)	
	1/BOTH/LP 6			1611 A	BUFFER-TIME=25	i		[==>]	
	(COS.sp.154				0;				
	0046)				LIFETIME-POS=L P6;				[2]
					SEGMENT=BOTH				
Com	ments: ETC b	uffer time is 755 sec.							
Set l	buffer time = e.	xptime - 110 sec							

7	G160M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;	388 Secs (388 Secs)	
	3/BOTH/LP 6 (COS.sp.154		1623 A	BUFFER-TIME=27 8;	[==>]	
	0050)			LIFETIME-POS=L P6;		[2]
				SEGMENT=BOTH		
	omments: ETC buffer time is 814 sec. et buffer time = exptime - 110 sec					

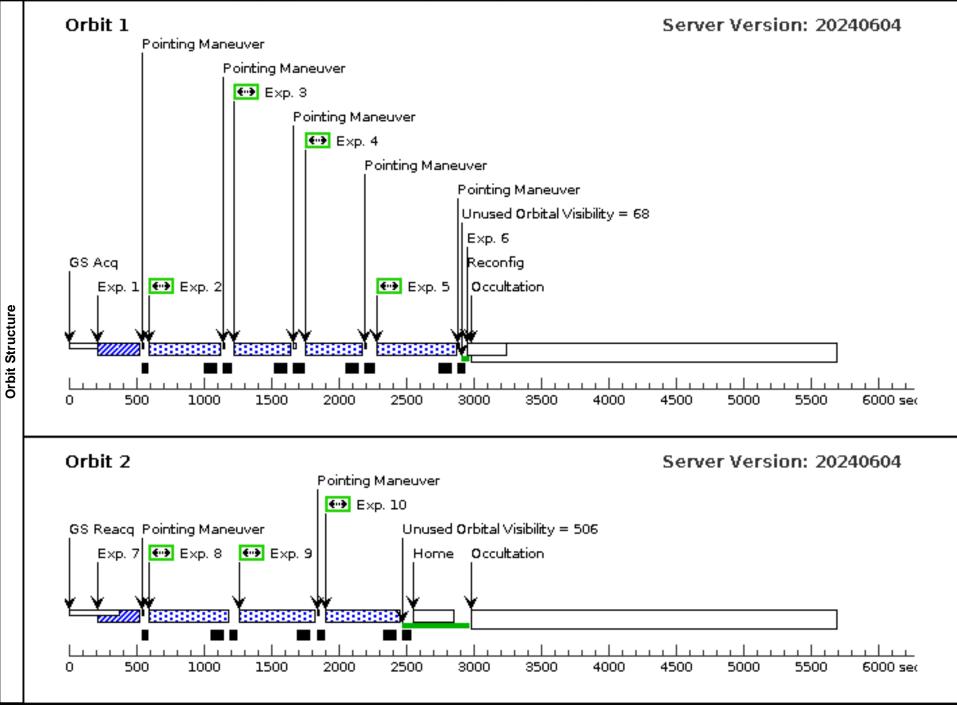




	Proposal 17326, WD0308-OCT	(9A)			Fri Jun 21 15:01:03 GMT 2024					
isit	Diagnostic Status: Warning									
÷	Scientific Instruments: S/C, COS									
	Special Requirements: GYRO M	pecial Requirements: GYRO MODE 1G; SCHED 90%; BETWEEN 06-OCT-2024:00:00:00 AND 20-OCT-2024:00:00:00								
agnostics										
ä										
	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
ā	# Name (1) WD0308-565	Target Coordinates RA: 03 09 47.9200 (47.4496667d)	Targ. Coord. Corrections Proper Motion RA: 149.241 mas/yr	Fluxes V=14.07+/-0.02	Miscellaneous Reference Frame: ICRS					
		0								
ā		RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 149.241 mas/yr							

	#	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)	
		(1925399)							[==>]	[1]
	Con Cyci	iments: cycle 2 le 28 comment.	4 comment: exposure we continue to use th	e times not reduced following updated i he same exposure time since difference	ETC calculations, set so the set of the set	differences not enough to it request.	affect orbit requested.			
	2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			321 Secs (321 Secs)	
		5/LP2 (COS.sp.192			1055 A	1;			[==>]	
		(COS.sp.192 5738)				FP-POS=3;				
						SEGMENT=BOTH; LIFETIME-POS=L				[1]
						P2				
	Com	ments: Cycle 2	29 comment: exposure	e time updated following blue modes T	DS and FLUXTAB	B update.				
	Cyci	le 32 comment.	exposure time updat	ted following blue modes TDS and FLU	JXTAB update.					
		C buffer time is buffer time = e.	1334 sec xptime - 110 sec							
	3	G130M/122 2/LP4	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=15			268 Secs (268 Secs)	
		(COS.sp.192			1222 A	8; FP-POS=3;			[==>]	
		5740)				LIFETIME-POS=L				[1]
						P4;				[-]
6						SEGMENT=BOTH				
Exposures			uffer time is 421 sec. xptime - 110 sec							
so	4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=16			276 Secs (276 Secs)	
xp		1/LP5 (COS.sp.192			1291 A	6; ED DOG 2:			[==>]	
ш		5741)				FP-POS=3; LIFETIME-POS=L				[1]
						P5;				[1]
						SEGMENT=BOTH				
			uffer time is 366 sec. xptime - 110 sec							
	5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=25			369 Secs (369 Secs)	
		/LP3 (COS.sp.192			1280 A	9; ED DOG 2:			[==>]	
		5742)				FP-POS=3; LIFETIME-POS=L				[1]
						P3;				[1]
						SEGMENT=BOTH				
	Com	ments: Cycle .	30 comment: exposure	e time updated following FLUXTAB up	odate.					
	ETC Set l	C buffer time is buffer time = e.	554 sec. xptime - 110 sec							
	6		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
							FUV HVLOW HVL OW		[==>]	[1]
	Con	nments: Work-a	around to efficiently s	chedule the reconfiguration to SEG-A.	Eliminates SPSS	induced gaps.				
	7	ACQ/IM	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
		(1925405)							[==>]	[2]
				e times not reduced following updated i he same exposure time since difference			affect orbit requested.			
	Cyci	ie 20 comment.	me commue to use it	ne same exposure time since difference	s ao noi ajjeei oro	n request.				

8 G140L/800/ (1) WD0308-565 FUVA/LP3 (COS.sp.192 5748)	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=26 3; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	373 Secs (373 Secs) [==>]	[2]
Comments: ETC buffer time is 396 sec. Set buffer time = exptime - 110 sec					
9 G140L/1105 (1) WD0308-565 /FUVA/LP3 (COS.sp.192 5749)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=30 3; FP-POS=3; SEGMENT=A; LIFETIME-POS=L P3	413 Secs (413 Secs) [==>]	[2]
Comments: ETC buffer time is 408 sec. Set buffer time = exptime - 110 sec					
10 G130M/132 (1) WD0308-565 7/FUVA/LP 5 (COS.sp.192 5750) Comments: ETC buffer time is 362 sec. set buffer time = exptime - 110 sec	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=20 4; FP-POS=3; LIFETIME-POS=L P5; SEGMENT=A	314 Secs (314 Secs) [==>]	[2]



Proposal 17326, WD1057-OCT (9B)			Fri Jun 21 15:01:03 GMT 2024				
Diagnostic Status: Warning								
Scientific Instruments: S/C, COS/H	FUV, COS/NUV							
Special Requirements: GYRO MO	DE 1G; SCHED 80%; BETWEEN 01-OCT-202	4:00:00:00 AND 20-OCT-2024:00:00:00						
George Chapman added Exposure 3								
All GIOUM observations are with SEGMENT = BOTH								
1533 & 1577 LP4								
In Cycle 32, HST went into reduced	d gyro mode and made GD71 unscheduable for 1	nost of the year until September. Due to this, target V	VD1057+719 has been e	xchanged for GD71.				
(WD1057-OCT (9B)) Warning (Fo	orm): For the best data quality, it is generally requ	uired to use all four FP-POS positions when observin	g at a given COS cenwa	ve.				
	, , , , , , , , , , , , , , , , , , , ,	I I I I I I I I I I I I I I I I I I I	6 6					
# Nome	Towast Coordinates	Tong Coord Connections	Elwag	Miscellaneous				
	8	8						
(3) WD1057+719		1 5	V=14.68	Reference Frame: ICRS				
	· · · · · ·	1 2						
	1	Epoch of Position: 2000.0						
	l							
I M, COOTUS JIOM OSNOD								
	38:02.97, 1997.19 epoch							
Description=[DA]								
	Diagnostic Status: Warning Scientific Instruments: S/C, COS/F Special Requirements: GYRO MO Comments: exposure 4: GO wavec George Chapman added Exposure All G160M observations are with S 1533 & 1577 LP4 In Cycle 32, HST went into reduced (WD1057-OCT (9B)) Warning (For # Name (3) WD1057+719 Comments: HST FASTEX standard PM, coords from USNOB	Diagnostic Status: Warning Scientific Instruments: S/C, COS/FUV, COS/NUV Special Requirements: GYRO MODE 1G; SCHED 80%; BETWEEN 01-OCT-202 Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/109 George Chapman added Exposure 3 All G160M observations are with SEGMENT = BOTH 1533 & 1577 LP4 In Cycle 32, HST went into reduced gyro mode and made GD71 unscheduable for r (WD1057-OCT (9B)) Warning (Form): For the best data quality, it is generally req # Name # Name (3) WD1057+719 RA: 11 00 34.2200 (165.1425833d) Dec: +71 38 2.99 (71.63416d) Equinox: J2000 Comments: HST FASTEX standard PM, coords from USNOB GSC2 coords are 11:00:34.25, 71:38:02.97, 1997.19 epoch	Diagnostic Status: Warning Scientific Instruments: S/C, COS/FUV, COS/NUV Special Requirements: GYRO MODE 1G; SCHED 80%; BETWEEN 01-OCT-2024:00:00:00 AND 20-OCT-2024:00:00:00 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 = BOTH 1533 & 1577 LP4 In Cycle 32, HST went into reduced gyro mode and made GD71 unscheduable for most of the year until September. Due to this, target V (WD1057-OCT (9B)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions when observin # Name # Name (3) WD1057+719 RA: 11 00 34.2200 (165.1425833d) Proper Motion RA: -0.00973 sec of time/yr Dec: +71 38 2.99 (71.63416d) Proper Motion Dec: -0.02 arcsec/yr Equinox: J2000 Epoch of Position: 2000.0 Comments: HST FASTEX standard PM, coords from USNOB GSC2 coords are 11:00:34.25, 71:38:02.97, 1997.19 epoch	Diagnostic Status: Warning Scientific Instruments: S/C, COS/FUV, COS/NUV Special Requirements: GYRO MODE 1G; SCHED 80%; BETWEEN 01-OCT-2024:00:00:00 AND 20-OCT-2024:00:00:00 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 = BOTH 1533 & 1577 LP4 In Cycle 32, HST went into reduced gyro mode and made GD71 unscheduable for most of the year until September. Due to this, target WD1057+719 has been et (WD1057-OCT (9B)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions when observing at a given COS cenwa # Name Target Coordinates Targ. Coord. Corrections Fluxes (3) WD1057+719 RA: 11 00 34.2200 (165.1425833d) Proper Motion RA: -0.00973 sec of time/yr V=14.68 Dec: +71 38 2.99 (71.63416d) Proper Motion Dec: -0.02 arcsec/yr Equinox: J2000 Epoch of Position: 2000.0 Comments: HST FASTEX standard PGOC Strong St				

	#	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.192	(3) WD1057+719	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				30 Secs (30 Secs)	
		5424)							[==>]	[1]
	Com	ments: Exptim	ne for S/N of 55 is 27 s	seconds.						
	In cy	ycle 32, we rep	laced GD71 with WD	1057+719 due to HST going into redu	ced gyro mode. The	original exptime for S/	N of 55 for GD71 was	90 seconds, so we use	30 seconds to achieve the same S/N as b	efore.
	2		(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=90			1014 Secs (1014 Secs)	
		6/FUVB/LP 2			1096 A	4; FP-POS=3;			[==>]	
		(COS.sp.192 5751)				SEGMENT=B;				[1]
		5751)				LIFETIME-POS=L				[1]
						P2				
	rve v o the FUV The	with both segm e previous GD2 /B only (all ET FUVB count re	ents which will reduce 71 observations. 7C warnings come from ate is 217 cts/sec, so t	e time used in visits. A draw back will i	nscheduable. Due to be increased exposu	this, GD71 has been re re time. In the TIR 2016	placed with WD10574 8-01, the team advises	+719. WD1057+719 is that an S/N of ~7 at 10	dimmer than GD71 and allows the abil 30.00 will achieve comparable TDS dat	ity to obse a quality t
		buffer-time = e	xptime - 110 sec							
	3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL		1 Secs (1 Secs)	
							OW		[==>]	[1]
	Com		00 2	chedule the SEG-B to SEG-A reconfigu						
Exposures	4	G130M/109 6/FUVA W	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			160 Secs (160 Secs)	
sur		AVECAL/L			1096 A	SEGMENT=A;			[==>]	
öd		P2				FLASH=NO;				[1]
ы						LIFETIME-POS=L P2				
		ments: Cycle 2 r 2017 and Apr		has been updated to 160 seconds. This	s was determined af	ter characterizing the d	lecrease by about 12 pe	ercent in the summed c	ount-rate with time over the period betw	veen Dece
	5		(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=16			578 Secs (578 Secs)	
		3/LP4 (COS.sp.192			1533 A	0;			[==>]	
		5752)				FP-POS=3;				[2]
						SEGMENT=BOTH; LIFETIME-POS=L	;			[2]
						P4				
	Com Set b	nments: ETC B buffer-time = 2	uffer fill time 239 seco 39 * (2/3)	onds						
	6		(3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=21			766 Secs (766 Secs)	
		7/LP4 (COS.sp.192			1577 A	6; FP-POS=3;			[==>]	
		5753)				SEGMENT=BOTH:				[2]
						LIFETIME-POS=L	,			[2]
						P4				
	Com	nments: ETC B buffer-time = 3	uffer fill time 324 seco	onds						
	set t	ouffer-time = 5	24 * (2/3)							

	1/153 (3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=16	578 Secs (578 Secs)	
3/LP6 (COS.s 5752)	sp.192		1533 A	0; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=L P6	[==>]	[2]
rve with both	n segments which will reduc	duced gyro mode and making GD71 e time used in visits.	unscheduable. Du	e to this, GD71 has been replaced with WD1057+719. WD10.	57+719 is dimmer than GD71 and allows th	ne ability to ob.
ETC buffer-ti Set buffer-tin	time = 239 ne = 239*(2/3)					
8 G160M	1/157 (3) WD1057+719		G160M	BUFFER-TIME=21	766 Secs (766 Secs)	
(COS.s	7/LP6 (COS.sp.192 5753)		1577 A	6; FP-POS=3:	[==>]	
5753)				SEGMENT=BOTH;		[3]
				LIFETIME-POS=L P6		
	ETC Buffer fill time 324 seco ne = 324 * (2/3)	onds				
9 G160M 3/LP6	1/162 (3) WD1057+719	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=28	909 Secs (909 Secs)	
(COS.s	sp.192		1623 A	5; FP-POS=3;	[==>]	
5754)				SEGMENT=BOTH;		[3]
				LIFETIME-POS=L P6		
	ETC Buffer fill time 427 seco	onds				
Set buffer-tin	ne = 427 * (2/3)					

