

13967 - COS FUV Spectroscopic Sensitivity Monitoring

Cycle: 22, Proposal Category: CAL/COS

(Calibration)

(Availability Mode: RESTRICTED)

INVESTIGATORS

Name	Institution	E-Mail
Dr. Hugues Sana (PI) (ESA Member) (Contact)	Space Telescope Science Institute - ESA	hsana@stsci.edu
Dr. John Henry Debes (CoI)	Space Telescope Science Institute	debes@stsci.edu
Dr. Charles R. Proffitt (CoI)	Computer Sciences Corporation	proffitt@stsci.edu

VISITS

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
21	(6) GD71 WAVE	COS/FUV	1	30-Jan-2015 21:12:09.0	yes
23	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	30-Jan-2015 21:12:11.0	yes
24	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	30-Jan-2015 21:12:13.0	yes
26	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	30-Jan-2015 21:12:14.0	yes

Proposal 13967 (STScI Edit Number: 6, Created: Friday, January 30, 2015 9:12:43 PM EST) - Overview

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	d Last Orbit Planner Run	OP Current with Visit?
30	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	30-Jan-2015 21:12:16.0	yes
32	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	30-Jan-2015 21:12:17.0	yes
01	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:20.0	yes
03	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:22.0	yes
04	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:25.0	yes
06	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:29.0	yes
08	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:31.0	yes
10	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:33.0	yes
12	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Jan-2015 21:12:36.0	yes
02	(1) WD0308-565	COS/FUV COS/NUV	1	30-Jan-2015 21:12:37.0	yes

Proposal 13967 (STScI Edit Number: 6, Created: Friday, January 30, 2015 9:12:43 PM EST) - Overview

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
05	(1) WD0308-565	COS/FUV COS/NUV	1	30-Jan-2015 21:12:38.0	yes
07	(1) WD0308-565	COS/FUV COS/NUV	1	30-Jan-2015 21:12:39.0	yes
09	(1) WD0308-565	COS/FUV COS/NUV	1	30-Jan-2015 21:12:40.0	yes
11	(1) WD0308-565	COS/FUV COS/NUV	1	30-Jan-2015 21:12:41.0	yes

25 Total Orbits Used

ABSTRACT

To track the time dependent sensitivity as a function of wavelength we will obtain exposures in all FUV gratings every month. There will be 2 types of monitoring sequences which will occur on alternating months. The complete monitoring sequence will use 3 orbits in 2 visits (except May - July when GD71 is unavailable). The 1 orbit visit will cover the G130M/1096/FUVB, G160M/1577/FUVA, and G160M/1623/FUVA modes. The 2 orbit visit will cover G130M/1222, G130M/1291, G130M/1327, G130M/1055/FUVA, G160M/1577/FUVB, G160M/1623/FUVB, G140L/1105, G140L/1230 modes. These comprise the reddest and bluest central wavelengths of each grating with additional coverage of the G130M blue modes. The reduced monitoring sequence in alternating months will use a 1 orbit visit to monitor the complete wavelength range of the standard modes using one central wavelength per grating. The modes covered are G130M/1291, G160M/1623, and G140L/1230. This reduced monitoring scheme, relative to C20, is put in place in C21 given that the slopes of the TDS seen to have stabilized at ~0%. Should any drastic changes occur, the contingency orbits will be activated.

Specific for Cy 22:

Visit 21 for GD71 has a dispersed ACQ in case MIRROB issue are not solved by November

Visit 3 has to be done at LP2 (soon before the LP change); Visit 4 has to be done at LP3 (soon after the LP change)

OBSERVING DESCRIPTION

Track the time dependence of sensitivity as a function of wavelength. Obtain exposures in all FUV gratings every month. Every month there will be 2 visits totaling 3 orbits (except May-July when GD71 is unavailable). The 1 orbit visit will cover the G130M/1096/FUVB, G160M/1577/FUVA,

Proposal 13967 (STScl Edit Number: 6, Created: Friday, January 30, 2015 9:12:43 PM EST) - Overview and G160M/1623/FUVA central wavelengths. The 2 orbit visit will cover G130M/1222, G130M/1291, G130M/1327, G160M/1577/FUVB, G160M/1623/FUVB, G140L/1105/FUVA, and G140L/1230 central wavelengths. These comprise the reddest and bluest central wavelengths of each grating with additional coverage of the new G130M blue modes.

Proposal 13967 - GD71-DISP.ACQ (21) - COS FUV Spectroscopic Sensitivity Monitoring

Proposal 13967, GD71-DISP.ACQ (21), completed Sat Jan 31 02:12:43 GMT 2015

Diagnostic Status: Warning Scientific Instruments: COS/FUV

Special Requirements: SCHED 100%; BETWEEN 24-NOV-2014:00:00:00 AND 30-NOV-2014:00:00:00

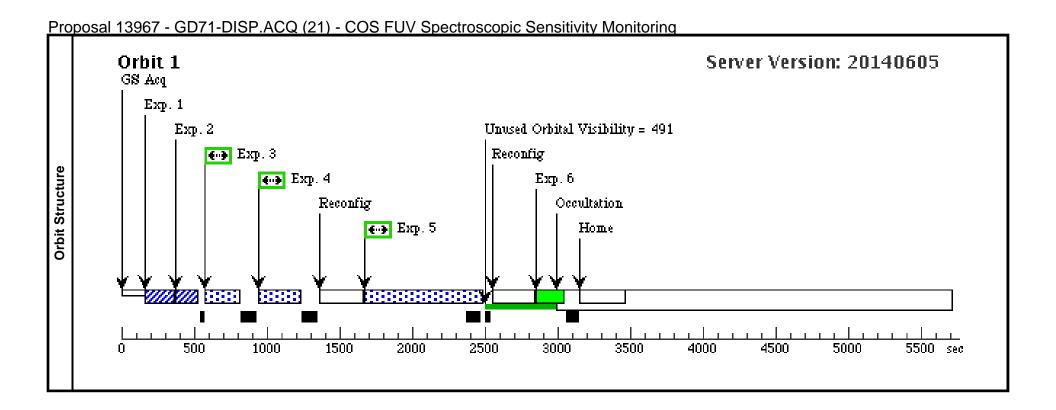
Comments: Modified to include a GO wavecal (exposure 6) to calculate the OSM shifts of the G130M/1096/FUVB observation

Jul 28 2014: Modified acquisition strategy (from MIRRORB to dispersed ACQ) following issue with MIRRORB ACQ; reshuffling the exposure orders (G160M, then G130M) to fit within 1 orbit -- hsana@stsi.edu

SS	(GD71-DISP.ACQ (21)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.							
Sti	(ACQ/IM (21.001)) Warning (Form): SEGMENT=A is atypical for FUV ACQ/PEAKXD. See full description for details.							
1 2								
iag								
ق	i							
ets	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
] B.	(6) GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS			
<u>a</u>		Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr					
ق ا	Equinox: J2000 Epoch of Position: 2000							
l š	Comments: Use sma RA, DEC a	amd PM as in proposal 12392 by Bohlin et al.						
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Proposal 13967 - GD71-DISP.ACQ (21) - COS FUV Spectroscopic Sensitivity Monitoring

# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1 ACQ/IM (6) GD ²	71 COS/FUV, ACQ/PEAKXD, PS	SA G160M	SEGMENT=A			0.3 Secs (0.3 Secs)	
(COS.sa.626 924)		1623 A				[==>]	[1]
Comments: Exptime for S/N outling 90 sec leads to S/N outliness	of 60 is 105.5 sec which leads to visibility ove f 55	errun. COS.ta.404797					
	2 strategy for visits 29 and 31 ad SNR in Segment A only: 0.2617						
2 ACQ/IM (6) GD ²	71 COS/FUV, ACQ/PEAKD, PSA	G160M	NUM-POS=5;			0.2 Secs (0.2 Secs)	
(COS.sa.626 923)		1623 A	STEP-SIZE=0.9;			[==>]	
923)			CENTER=FLUX-W T-FLR;	,			[1]
			SEGMENT=A				
Comments: Exptime for S/N outsing 90 sec leads to S/N o	T of 60 is 105.5 sec which leads to visibility ove f 55	errun. COS.ta.404797					
3 G160M/157 (6) GD	71 COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)	
7/FUVA (COS.sp.413		1577 A	2;			[==>]	
980)			FP-POS=3;				[1]
			SEGMENT=A				
2.35e6 is the number of eve	FUVA is 2.35e6/8770 = 268 sec, which is larg nts that each buffer can record te in FUVA, per ETC calculation above	er than exp time, so sei	t buffer time to exptime.				
4 G160M/162 (6) GD		G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
3/FUVA (COS.sp.413		1623 A	4;			[==>]	
984)			FP-POS=3; SEGMENT=A				[1]
Comments: Buffer time is 3	45 sec-2 35e6/7635		SEGMENT-11				1
where 7635 is cts/sec in FU	TVA						
Set buffer-time = exptime b	/c exptime - 100 < 80 which is the minimum ex 71 COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=50			600 Secs (600 Secs)	1
5 G130M/109 (6) GD			0;			[==>]	
5 G130M/109 (6) GD7 6/FUVB		1096 Δ				1///	
6/FUVB (COS.sp.418		1096 A	FP-POS=3;				[1]
6/FUVB		1096 A	FP-POS=3; SEGMENT=B				[1]
6/FUVB (COS.sp.418 698) Comments: Buffer time = 2	.35e6/656 = 3582 sec.		SEGMENT=B				[1]
6/FUVB (COS.sp.418 698) Comments: Buffer time = 2 Set buffer-time = exptime - 6 G130M/109 WAVE	.35e6/656 = 3582 sec. 100 sec = 500 to maximize time on target (see		SEGMENT=B			140 Secs (140 Secs)	[1]
6/FUVB (COS.sp.418 698) Comments: Buffer time = 2 Set buffer-time = exptime -	.35e6/656 = 3582 sec. 100 sec = 500 to maximize time on target (see	Cy 20 IHB section 5.4.	SEGMENT=B				[1]



Proposal 13967 - GD71 (23) - COS FUV Spectroscopic	: Sensitivit	y Monitoring
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Proposal 13967, GD71 (23), scheduled Sat Jan 31 02:12:43 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 02-FEB-2015:00:00:00 AND 09-FEB-2015:00:00:00

Comments: Modified to include a GO wavecal (exposure 4) to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3

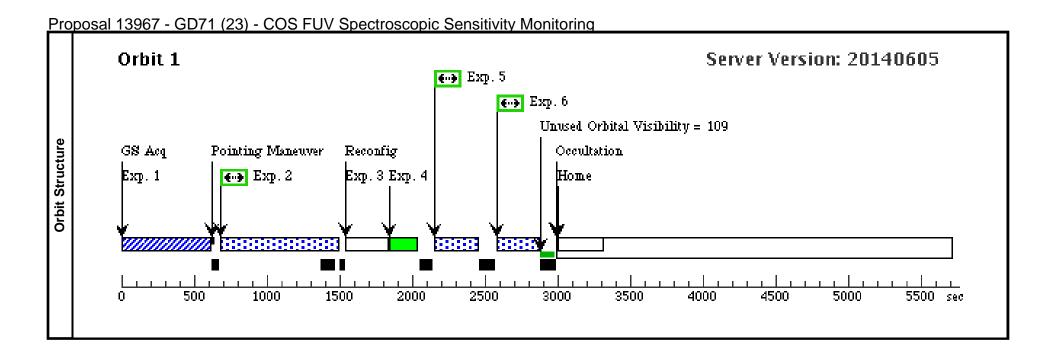
HAS to be done at LP2 close before the LP move

Diagnostics (GD71 (23)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
] g	(6)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
<u>a</u>			Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr		
<u>ق</u>			Equinox: J2000	Epoch of Position: 2000		
Fixe	Comments:	Use sma RA, DEC amd PM	M as in proposal 12392 by Bohlin et al.			

Proposal 13967 - GD71 (23) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM	(6) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)	
	(404797)							[==>]	[1]
	omments: Exptim sing 90 sec leads		: 105.5 sec which leads to visibility overru	n. COS.ta.404797					
2	G130M/109	(6) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=50			600 Secs (600 Secs)	
	6/FUVB (COS.sp.418			1096 A	0;			[==>]	
	698)				FP-POS=3;				[1]
					SEGMENT=B				
	omments: Buffer : et buffer-time = e.		56 = 3582 sec. = 500 to maximize time on target (see Cy	20 IHB section 5.4.	1)				
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
,						FUV HVLOW HVI OW	_	[==>]	[1]
	ommants: Work-	around to officion	atly schedule the SEG-B to SEG-A reconfig	uration Fliminate	s SPSS induced gams	011			
	G130M/109		COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3:			140 Secs (140 Secs)	
<u>}</u> ₹	6/FUVA W	WAVL	COS/10 V, TIME-1AG, WCA	1096 A	SEGMENT=A;			[==>]	
i	AVECAL			1070 A	FLASH=NO			1>1	[1]
5	G160M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)	
	7/FUVA	(0) 02 11		1577 A	2;			[==>]	
	(COS.sp.413 980)				FP-POS=3;				[1]
	, ,				SEGMENT=A				
2.	35e6 is the numb	er of events that c	s 2.35e6/8770 = 268 sec, which is larger ti each buffer can record VA, per ETC calculation above	nan exp time, so set	buffer time to exptime.				
6	G160M/162	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
	3/FUVA (COS.sp.413			1623 A	4;			[==>]	
	984)				FP-POS=3;				[1]
					SEGMENT=A				
	omments: Buffer : here 7635 is cts/s		2.35e6/7635						
Se	et buffer-time = e.	xptime b/c exptin	ne - 100 < 80 which is the minimum exptin	ıe					



Proposal 13967 - GD71 (24) - COS FUV Spectroscopic Sensitivity Monitoring

Proposal 13967, GD71 (24), implementation Sat Jan 31 02:12:43 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 09-FEB-2015:00:00:00 AND 16-FEB-2015:00:00:00

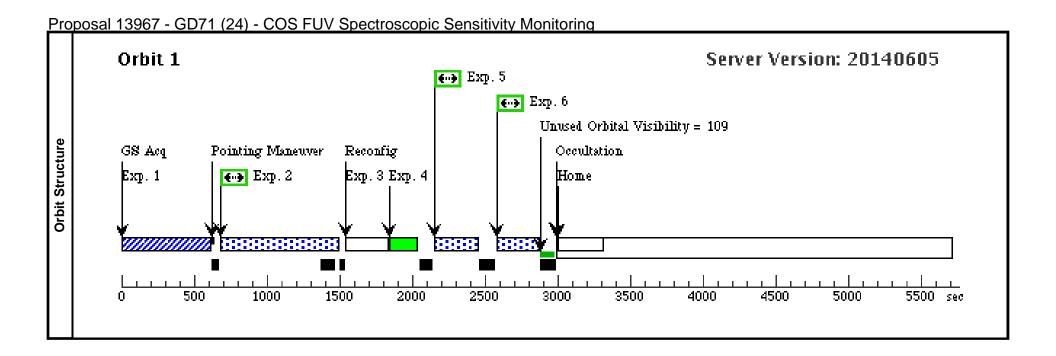
Comments: Modified to include a GO wavecal (exposure 4) to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3

HAS to be done at LP3 soon after the LP move

Diagnostics									
its									
rge	(6) GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS				
Tar									
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Proposal 13967 - GD71 (24) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM	(6) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)	
	(404797)							[==>]	[1]
	omments: Exptim sing 90 sec leads		105.5 sec which leads to visibility overru	n. COS.ta.404797					
2	G130M/109	(6) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=50			600 Secs (600 Secs)	
	6/FUVB (COS.sp.418			1096 A	0;			[==>]	
	698)				FP-POS=3;				[1]
	-				SEGMENT=B				
		time = 2.35e6/65 xptime - 100 sec :	6 = 3582 sec. = 500 to maximize time on target (see Cy	20 IHB section 5.4.	1)				
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)	
,						FUV HVLOW HVL OW		[==>]	[1]
	omments: Work-a	around to efficien	tly schedule the SEG-B to SEG-A reconfig	uration. Eliminate	s SPSS induced gaps.				
$\frac{7}{4}$	G130M/109	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			140 Secs (140 Secs)	
<u> </u>	6/FUVA W AVECAL			1096 A	SEGMENT=A;			[==>]	
i	AVECAL				FLASH=NO				[1]
5	G160M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)	
	7/FUVA (COS.sp.413			1577 A	2;			[==>]	
	980)				FP-POS=3;				[1]
					SEGMENT=A				
2.	35e6 is the numb	er of events that e	s 2.35e6/8770 = 268 sec, which is larger ti each buffer can record VA, per ETC calculation above	han exp time, so set	buffer time to exptime.				
6	G160M/162	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
	3/FUVA (COS.sp.413			1623 A	4;			[==>]	
	984)				FP-POS=3;				[1]
					SEGMENT=A				
	omments: Buffer here 7635 is cts/s	time is 345 sec=2 ec in FUVA	2.35e6/7635						
Se	et buffer-time = e.	xptime b/c exptim	ne - 100 < 80 which is the minimum exptin	пе					



Proposal 13967	- GD71 (26) -	COS FUV	Spectroscopic	Sensitivity Monitoring
1 10003a1 13301	0011(201			

Proposal 13967, GD71 (26), scheduling Sat Jan 31 02:12:43 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 13-APR-2015:00:00:00 AND 20-APR-2015:00:00:00

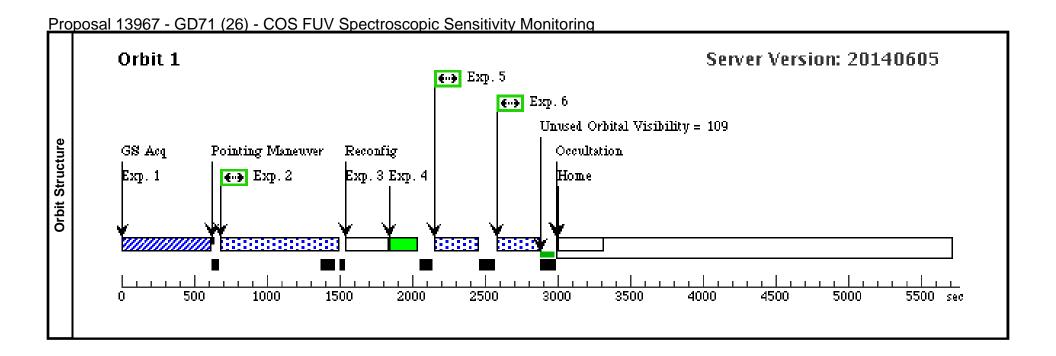
Comments: Modified to include a GO wavecal (exposure 4) to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3

(GD71 (26)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
l ge	(6)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS	
<u>a</u>			Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr			
ָק <u></u>			Equinox: J2000	Epoch of Position: 2000			
×	Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.						
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Proposal 13967 - GD71 (26) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
1	ACQ/IM	(6) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)		
	(404797)							[==>]	[1]	
	omments: Exptim sing 90 sec leads		105.5 sec which leads to visibility overru	n. COS.ta.404797						
2	G130M/109	(6) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=50			600 Secs (600 Secs)		
	6/FUVB (COS.sp.418			1096 A	0;			I = => J		
	698)				FP-POS=3;				[1]	
					SEGMENT=B					
		time = 2.35e6/656 xptime - 100 sec =	5 = 3582 sec. = 500 to maximize time on target (see Cy	20 IHB section 5.4.	1)					
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)		
						FUV HVLOW HVL OW	r	[==>]	[1]	
4	Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/109	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			140 Secs (140 Secs)		
-	6/FUVA W AVECAL			1096 A	SEGMENT=A;			[==>]		
	AVECAL				FLASH=NO				[1]	
5	G160M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)		
	7/FUVA (COS.sp.413			1577 A	2;			[==>]		
	980)				FP-POS=3;				[1]	
					SEGMENT=A					
2.	35e6 is the number	er of events that e	2.35e6/8770 = 268 sec, which is larger ti ach buffer can record 'A, per ETC calculation above	han exp time, so set	buffer time to exptime.					
6	G160M/162	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)		
	3/FUVA (COS.sp.413			1623 A	4;			[==>]		
	984)				FP-POS=3;				[1]	
					SEGMENT=A					
	omments: Buffer i here 7635 is cts/s	time is 345 sec=2. ec in FUVA	.35e6/7635							
			e - 100 < 80 which is the minimum exptin	10						



Proposal 13967	- GD71 (30) -	COS FUV	Spectroscopic	Sensitivity Monitoring
1 10003a1 13301	- OD1 1 (30) -		Opeciloscopic	

Proposal 13967, GD71 (30), scheduling Sat Jan 31 02:12:44 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 11-AUG-2015:00:00:00 AND 17-AUG-2015:00:00:00

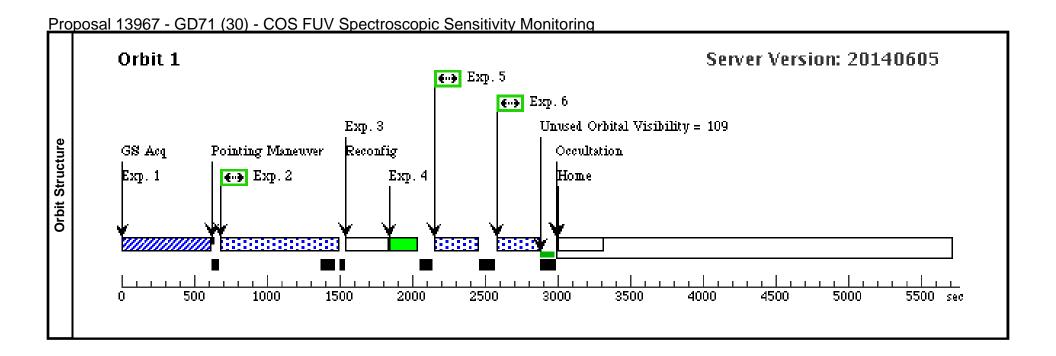
Comments: Modified to include a GO wavecal (exposure 4) to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3

(GD71 (30)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

<u>ያ</u> #	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
<u> </u>		Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr		
3		Equinox: J2000	Epoch of Position: 2000		

Proposal 13967 - GD71 (30) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
1		(6) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)		
	(404797)							[==>]	[1]	
	mments: Exptim ing 90 sec leads		05.5 sec which leads to visibility overru	n. COS.ta.404797						
2	G130M/109	(6) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=50			600 Secs (600 Secs)		
	6/FUVB (COS.sp.418			1096 A	0;			[==>]		
	698)				FP-POS=3;				[1]	
					SEGMENT=B					
		time = 2.35e6/656 xptime - 100 sec =	= 3582 sec. 500 to maximize time on target (see Cy	20 IHB section 5.4.	1)					
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)		
						FUV HVLOW HVL OW		[==>]	[1]	
Cor	Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/109		COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			140 Secs (140 Secs)		
•	6/FUVA W	,,,,,,,	505/16 v, 111/12 1110, well	1096 A	SEGMENT=A;			[==>]		
	AVECAL			10,011	FLASH=NO				[1]	
	G160M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)		
5		(-)			2;					
5	7/FUVA			1577 A	۷,			I==>1		
5	(COS.sp.413			1577 A	FP-POS=3;			[==>]	[1]	
5				1577 A				[==>]	[1]	
2.3.	(COS.sp.413 980) mments: Buffer- 5e6 is the numb	er of events that ea	2.35e6/8770 = 268 sec, which is larger ti ich buffer can record A, per ETC calculation above		FP-POS=3; SEGMENT=A			[==>]	[1]	
2.3.	(COS.sp.413 980) mments: Buffer- 5e6 is the numb 70 cts/sec is the G160M/162	er of events that ea count rate in FUVA	ich buffer can record		FP-POS=3; SEGMENT=A			[==>] 154 Secs (154 Secs)	[1]	
2.3.	(COS.sp.413 980) mments: Buffer- 5e6 is the numb 70 cts/sec is the G160M/162 3/FUVA	er of events that ea count rate in FUVA	nch buffer can record A, per ETC calculation above	han exp time, so set	FP-POS=3; SEGMENT=A buffer time to exptime. BUFFER-TIME=15 4;				[1]	
2.3.	(COS.sp.413 980) mments: Buffer- 5e6 is the numb 70 cts/sec is the G160M/162	er of events that ea count rate in FUVA	nch buffer can record A, per ETC calculation above	han exp time, so set G160M	FP-POS=3; SEGMENT=A buffer time to exptime. BUFFER-TIME=15			154 Secs (154 Secs)	[1]	



Proposal 13967	GD71 (32)	- COS FUV	Spectroscopic	Sensitivity Monitoring
1 10003a1 13301	0011021			

Proposal 13967, GD71 (32), scheduling Sat Jan 31 02:12:44 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 19-OCT-2015:00:00:00 AND 26-OCT-2015:00:00:00

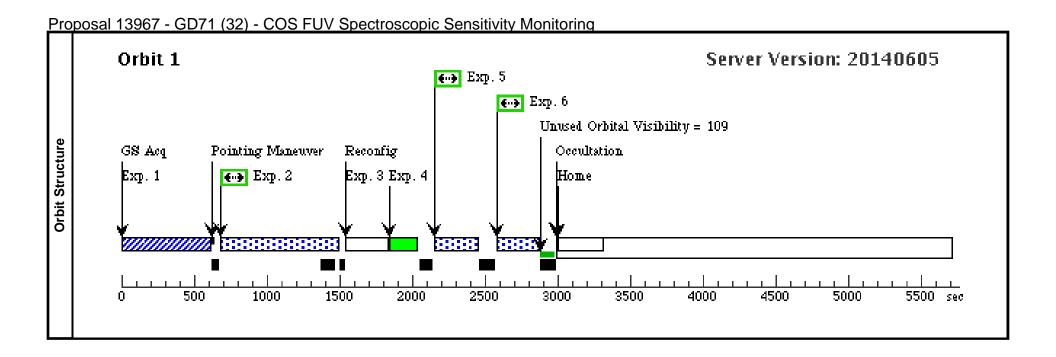
Comments: Modified to include a GO wavecal (exposure 4) to calculate the OSM shifts of the G130M/1096/FUVB observation George Chapman added Exposure 3

(GD71 (32)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
g	(6)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS	
<u>a</u> ∐			Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr			
٦			Equinox: J2000	Epoch of Position: 2000			
×	Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.						
ΙŒ							

Proposal 13967 - GD71 (32) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
1	ACQ/IM	(6) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs)		
	(404797)							[==>]	[1]	
	omments: Exptim sing 90 sec leads		s 105.5 sec which leads to visibility overru	n. COS.ta.404797					_	
2	G130M/109	(6) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=50			600 Secs (600 Secs)		
	6/FUVB (COS.sp.418			1096 A	0;			[==>]		
	698)				FP-POS=3;				[1]	
					SEGMENT=B					
	omments: Buffer : et buffer-time = e.		66 = 3582 sec. = 500 to maximize time on target (see Cy	20 IHB section 5.4.	1)					
3		DARK	S/C, DATA, NONE			QASISTATES COS		1 Secs (1 Secs)		
.						FUV HVLOW HVI OW		[==>]	[1]	
	omments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/109		COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3:			140 Secs (140 Secs)		
	6/FUVA W	WAVE	COS/10 V, TIME TAG, WEA	1096 A	SEGMENT=A;			[==>]		
i	AVECAL			107071	FLASH=NO			1>1	[1]	
5	G160M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)		
	7/FUVA			1577 A	2;			[==>]		
	(COS.sp.413 980)				FP-POS=3;				[1]	
	,				SEGMENT=A					
2.	35e6 is the numb	er of events that c	s 2.35e6/8770 = 268 sec, which is larger ti each buffer can record VA, per ETC calculation above	han exp time, so set	buffer time to exptime.					
6	G160M/162	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)		
	3/FUVA (COS.sp.413			1623 A	4;			[==>]		
	984)				FP-POS=3;				[1]	
					SEGMENT=A					
	omments: Buffer here 7635 is cts/s		2.35e6/7635							
			ne - 100 < 80 which is the minimum exptin	ne						



D 140007 WD0000	1 ((0.4)	000 5111/0	1 0 10 10 14 14 16 1
Proposal 13967 - WD0308	- complete (()1)	- COS FUV Spectro	scopic Sensitivity Monitoring

Proposal 13967, WD0308 - complete (01), completed Sat Jan 31 02:12:44 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 24-NOV-2014:00:00:00 AND 30-NOV-2014:00:00:00

Comments: George Chapman added Exposure 9

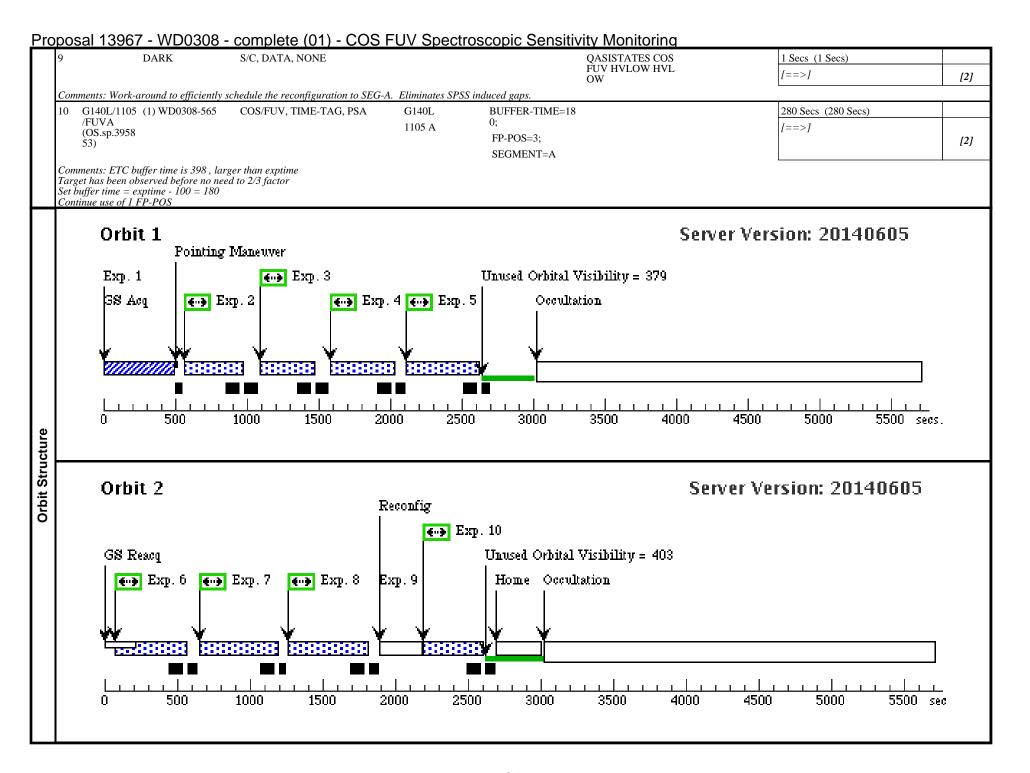
Diagnostics (WD0308 - complete (01)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

ets	#
Targe	(1)
ixed	Coi

ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
эб.	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS
Гаг			Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 0.0643 arcsec/yr		
ნ			Equinox: J2000	Epoch of Position: 2000		
xe	Comme	ents: Coordinates from Charle	's proposal			
证						

Proposal 13967 - WD0308 - complete (01) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (396029)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3		45 Secs (45 Secs)	
_		(1) WD0200 565	COOLET TAKE TAKE DOA	C120M	DUEEED TIME 10	O BI ISETES		[==>]	[1]
2	G130M/122 2	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12 6;			226 Secs (226 Secs)	
	(COS.sp.395 840)			1222 A	FP-POS=3			[==>]	[1]
bи	ffer-time = expti	me - 100 sec to maxii	3 * ETC buffer time is 2/3*455 which mize time on target = 126	is larger than exptii	me. Set				
Co I c	ontinue use of 1 I hecked with Alai	P-POS 1 Welty and Karla Pe	eterson to confirm that there are no iss	sues using the 1222	central wavelength prior	r to Cycle 20			
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			244 Secs (244 Secs)	
	1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
Sir		rger than exptime us	Target has been observed before and se buffer time = exptime -100 sec to m						
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			312 Secs (312 Secs)	
	7 (COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
Exposures 5	G130M/105 5/FUVA (OS.sp.5241 17)	FP-POS (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH			334 Secs (334 Secs) [==>]	[1]
Ta Se	rget has been ob	uffer time is larger th served before no nee optime - 100 = 224 FP-POS			SEGMEN I=BOTH				
6	G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	7 (395846)			1577 A	BUFFER-TIME=19 0)		[==>]	[2]
Ta	rget has been ob	uffer time is 632, larg served before no nee optime - 100 = 190	eer than exptime d to 2/3 factor						
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=30)		[==>]	[2]
Co Ta Sei	omments: ETC bi rget has been ob t buffer time = e:	uffer time is 794, larg served before no nee optime - 100 = 300	eer than exptime d to 2/3 factor						
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
Ta Se	rget has been ob	offer time is 479, larg served before no nee optime - 100 = 180 FP-POS							



Proposal 13967, WD0308 - complete (03), scheduled Sat Jan 31 02:12:44 GMT 2015

Miscellaneous

Reference Frame: ICRS

Diagnostic Status: Warning

Name WD0308-565

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

Special Requirements: SCHED 100%; BETWEEN 02-FEB-2015:00:00:00 AND 09-FEB-2015:00:00:00

Comments: George Chapman added Exposure 9

HAS to be done at LP2 close before the LP move

(WD0308 - complete (03)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

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Diagnostics

 Target Coordinates
 Targ. Coord. Corrections
 Fluxes

 RA: 03 09 47.9200 (47.4496667d)
 Proper Motion RA: 0.018141 sec of time/yr
 V=14.07+/-0.02

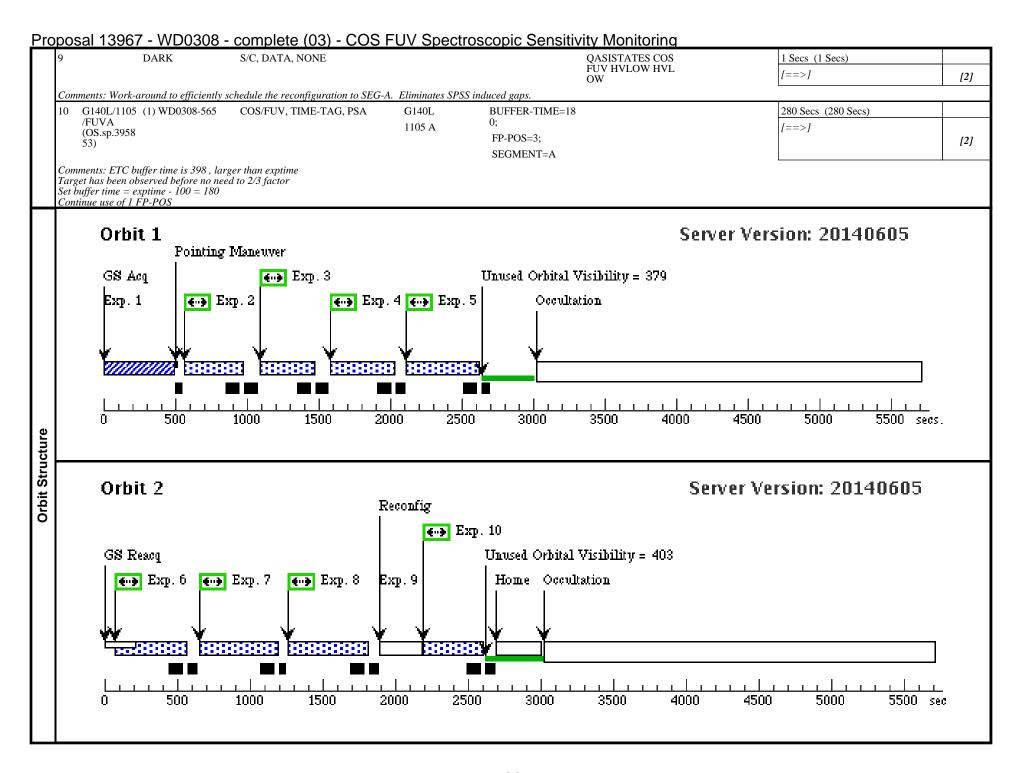
Dec: -56 23 49.41 (-56.39706d) Proper Motion Dec: 0.0643 arcsec/yr

Equinox: J2000 Epoch of Position: 2000

Comments: Coordinates from Charle's proposal

Proposal 13967 - WD0308 - complete (03) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (396029)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=1	2		[==>] 226 Secs (226 Secs)	[1]
-	2	(1) WD0300 303	COS/10 V, TIME 1710, 1571	1222 A	6;	_		[==>]	
	(COS.sp.395 840)			1222 11	FP-POS=3			[>]	[1]
			3 * ETC buffer time is 2/3*455 which mize time on target = 126	is larger than exptir	ne. Set				
Co I o	ontinue use of 1 I checked with Ala	P-POS n Welty and Karla Pe	eterson to confirm that there are no iss	sues using the 1222	central wavelength pri	or to Cycle 20			
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=1			244 Secs (244 Secs)	
	1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
Si		rger than exptime us	Target has been observed before and see buffer time = exptime -100 sec to m						
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=2	1		312 Secs (312 Secs)	
	(COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
Si	nce buffer time le ontinue use of 1 1 G130M/105	rger than exptime us	Target has been observed before and see buffer time = exptime -100 sec to ma	aximize time on targ	BUFFER-TIME=2	3		334 Secs (334 Secs)	
Expo	5/FUVA (OS.sp.5241 17)			1055 A	4; FP-POS=3; SEGMENT=BOT	T.		[==>]	[1]
To Se	arget has been ob	offer time is larger th served before no nee optime - 100 = 224 FP-POS			SEGMENT-BOT				
6	G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	7 (395846)			1577 A	BUFFER-TIME=	9		[==>]	[2]
Tc	irget has been ob	uffer time is 632, larg served before no nee optime - 100 = 190	eer than exptime d to 2/3 factor		-				
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=3	30		[==>]	[2]
Co To Se	omments: ETC b urget has been ob t buffer time = e	uffer time is 794, larg served before no nee optime - 100 = 300	er than exptime d to 2/3 factor						<u>'</u>
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=1	8		280 Secs (280 Secs)	
	(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
To Se	irget has been ob	iffer time is 479, larg served before no nee cptime - 100 = 180 FP-POS							•



Proposal 13967, WD0308 - complete (04), implementation Sat Jan 31 02:12:44 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 09-FEB-2015:00:00:00 AND 16-FEB-2015:00:00:00

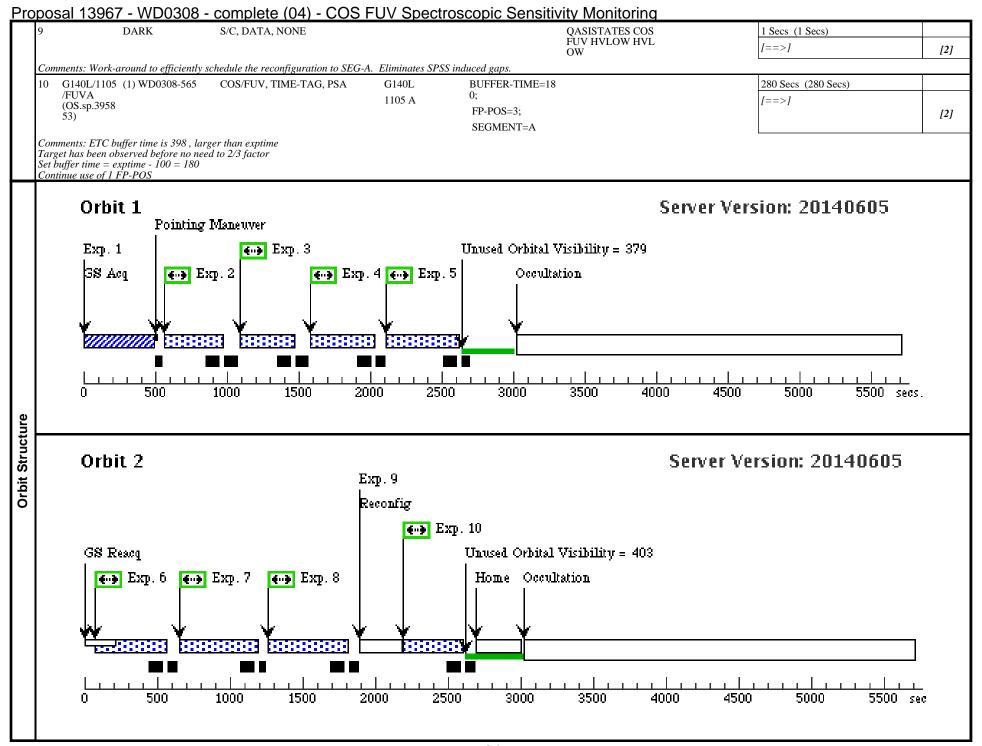
Comments: George Chapman added Exposure 9

HAS to be done at LP3 soon after the LP move

Diagnostics		08 - complete (04)) Warn	ning (Form): For the best data quality, it is strongly	y recommended that all four FP-POS positions be used	d when observing at a given	COS CENWAVE setting.
ets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS
<u>a</u> [(1)		Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 0.0643 arcsec/yr		
وٰ ا			Equinox: J2000	Epoch of Position: 2000		
<u>×</u>	Comme	nts: Coordinates from Cl	narle's proposal			
<u>Г</u> Ш						

Proposal 13967 - WD0308 - complete (04) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (396029)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O BASE1B3	[45 Secs (45 Secs)	
-						O BASE1B3		[==>]	[1]
2	G130M/122 2	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12 6;			226 Secs (226 Secs)	
	(COS.sp.395 840)			1222 A	FP-POS=3			[==>]	[1]
bu	ffer-time = expti	me - 100 sec to maxi	3 * ETC buffer time is 2/3*455 which mize time on target = 126	is larger than exptii	me. Set				
Co I o	ntinue use of 1 I hecked with Alar	FP-POS 1 Welty and Karla Pe	eterson to confirm that there are no iss	sues using the 1222	central wavelength prior	r to Cycle 20			
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			244 Secs (244 Secs)	
	1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
Si		rger than exptime us	Target has been observed before and se buffer time = exptime -100 sec to m						•
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			312 Secs (312 Secs)	
	7 (COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
တ္သ	ontinue use of 1 I		se buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3;			334 Secs (334 Secs) [==>]	[1]
Co To Se	rget has been ob	uffer time is larger th served before no nee optime - 100 = 224 FP-POS			SEGMENT=BOTH				
6	G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	7 (395846)			1577 A	BUFFER-TIME=19 0)		[==>]	[2]
Ta	rget has been ob	uffer time is 632, larg served before no nee optime - 100 = 190	ger than exptime ed to 2/3 factor						
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=30)		[==>]	[2]
Ca Ta Se	omments: ETC bi rget has been ob t buffer time = ex	uffer time is 794, larg served before no nee aptime - 100 = 300	ger than exptime ed to 2/3 factor						
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
Ta Se	rget has been ob	offer time is 479, larg served before no nee optime - 100 = 180 FP-POS							•



Proposal 13967 - WD0308 -	complete (06)) - COS FUV	Spectroscopic Sensitivit	v Monitorina
1 1000001 10001 VVD0000			Opcoli obcopio oci ibili vit	

Proposal 13967, WD0308 - complete (06), scheduling

Sat Jan 31 02:12:44 GMT 2015

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Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 13-APR-2015:00:00:00 AND 20-APR-2015:00:00:00

Comments: George Chapman added Exposure 9

(WD0308 - complete (06)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

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	argets	(1)
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	Fixed	Ca

Diagnostics

Name Target Coordinates Targ. Coord. Corrections Fluxes Miscellaneous

(1) WD0308-565 RA: 03 09 47.9200 (47.4496667d) Proper Motion RA: 0.018141 sec of time/yr V=14.07+/-0.02 Reference Frame: ICRS

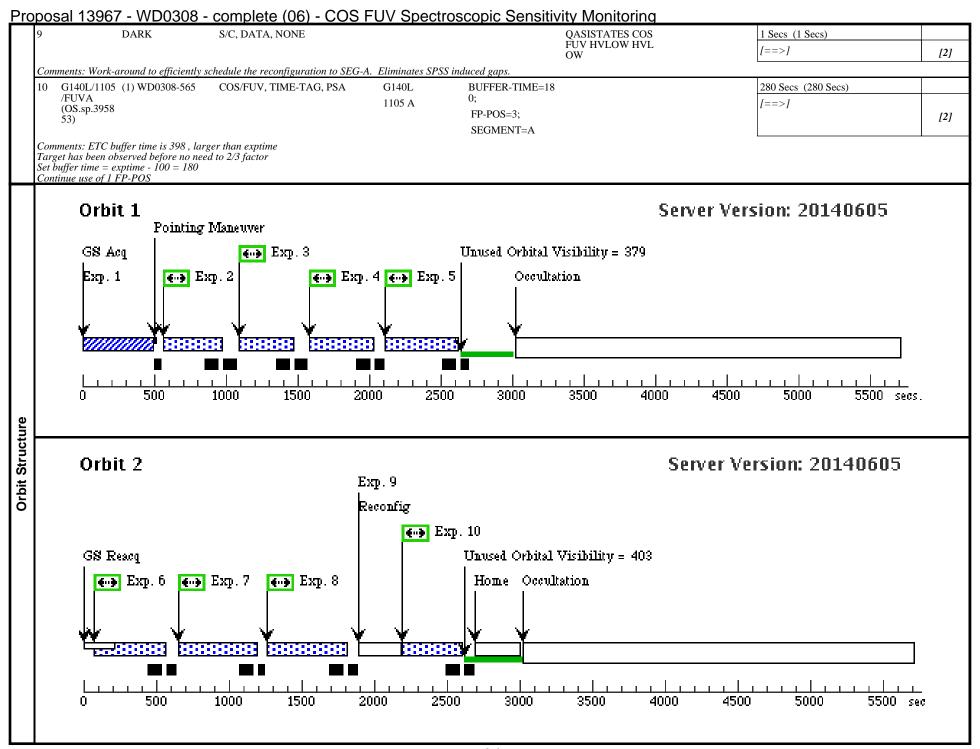
Dec: -56 23 49.41 (-56.39706d) Proper Motion Dec: 0.0643 arcsec/yr

Equinox: J2000 Epoch of Position: 2000

Comments: Coordinates from Charle's proposal

Proposal 13967 - WD0308 - complete (06) - COS FUV Spectroscopic Sensitivity Monitoring

(396029) G130M/122 2 (COS.sp.395 840) ments: Buffer t	(1) WD0308-565 (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA COS/FUV, TIME-TAG, PSA	MIRRORA				45.9 (45.9)	T
G130M/122 2 (COS.sp.395 840) nments: Buffer to ter-time = exptin	· /	COS/FUV, TIME-TAG, PSA					45 Secs (45 Secs)	
2 (COS.sp.395 840) nments: Buffer t er-time = exptin	· /	555/16 1, IIIII 1716, IBA	G130M	BUFFER-TIME=12)		[==>] 226 Secs (226 Secs)	[1]
840) nments: Buffer t er-time = exptin			1222 A	6;	•		[==>]	
er-time = exptii			· •	FP-POS=3			,	[1]
tinue use of 1 F		3 * ETC buffer time is 2/3*455 which mize time on target = 126	is larger than exptin	me. Set				
		eterson to confirm that there are no is:	sues using the 1222	central wavelength prio	or to Cycle 20			
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			244 Secs (244 Secs)	
1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
e buffer time la	rger than exptime us	Target has been observed before and se buffer time = exptime -100 sec to m						
G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M				312 Secs (312 Secs)	
7 (COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
e buffer time la	rger than exptime us	Target has been observed before and se buffer time = exptime -100 sec to m	so no need for 2/3 s aximize time on targ	afety margin. get = 212				
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M		3		334 Secs (334 Secs)	
(OS.sp.5241 17)			1055 A	FP-POS=3;	ı		[==>]	[1]
get has been ob buffer time = ex	served before no nee ptime - 100 = 224			SEGMENT-BOTT	•			
G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
7 (395846)			1577 A	BUFFER-TIME=19	9		[==>]	[2]
get has been ob	served before no nee	ger than exptime ed to 2/3 factor		-				
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
3 (395848)			1623 A	BUFFER-TIME=30	0		[==>]	[2]
nments: ETC by get has been ob buffer time = ex	ffer time is 794, larg served before no nee ptime - 100 = 300	ger than exptime ed to 2/3 factor						
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L		3		280 Secs (280 Secs)	
(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
get has been ob buffer time = ex	served before no nee ptime - 100 = 180							<u>'</u>
	tinue use of 1 F G130M/132 7 (COS.sp.395 843) timents: ETC but tinue use of 1 F G130M/105 5/FUVA (OS.sp.5241 17) timents: ETC but tet has been ob: touffer time = ex tinue use of 1 F G160M/157 7 (395846) timents: ETC but tet has been ob: touffer time = ex G160M/162 3 (395848) timents: ETC but tet has been ob: touffer time = ex G140L/1230 (COS.sp.395 854) timents: ETC but tet has been ob: touffer time = ex G140L/1230 (COS.sp.395 854)	tinue use of 1 FP-POS G130M/132 (1) WD0308-565 7 (COS.sp.395 843) ments: ETC buffer time is 330 sec. we buffer time larger than exptime use tinue use of 1 FP-POS G130M/105 (1) WD0308-565 5/FUVA (OS.sp.5241 17) ments: ETC buffer time is larger the test has been observed before no need tinue use of 1 FP-POS G160M/157 (1) WD0308-565 7 (395846) ments: ETC buffer time is 632, large thas been observed before no need tinue use of 1 FP-POS G160M/157 (1) WD0308-565 3 (395848) ments: ETC buffer time is 794, large thas been observed before no need touffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 (COS.sp.395 854) ments: ETC buffer time is 479, large timents: ETC buffer time is 479, large	G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 7 (COS.sp.395 843) ments: ETC buffer time is 330 sec. Target has been observed before and the buffer time larger than exptime use buffer time = exptime -100 sec to ments: ETC buffer time is larger than exptime (OS.sp.5241 17) ments: ETC buffer time is larger than exptime text has been observed before no need to 2/3 factor buffer time = exptime - 100 = 224 tinue use of 1 FP-POS G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 7 (395846) ments: ETC buffer time is 632, larger than exptime text has been observed before no need to 2/3 factor buffer time = exptime - 100 = 190 G160M/162 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 3 (395848) ments: ETC buffer time is 794, larger than exptime text has been observed before no need to 2/3 factor buffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA (COS.sp.395 854) ments: ETC buffer time is 479, larger than exptime text has been observed before no need to 2/3 factor buffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA (COS.sp.395 854)	G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M 7 (COS.sp.395 843) ments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 s e buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on targ tinue use of 1 FP-POS G130M/105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M 5/FUVA (OS.sp.5241 17) ments: ETC buffer time is larger than exptime tet has been observed before no need to 2/3 factor outfer time = exptime - 100 = 224 tinue use of 1 FP-POS G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M 7 (395846) ments: ETC buffer time is 632, larger than exptime tet has been observed before no need to 2/3 factor outfer time = exptime - 100 = 190 G160M/162 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M 3 (395848) ments: ETC buffer time is 794, larger than exptime tet has been observed before no need to 2/3 factor outfer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L (COS.sp.395 854) ments: ETC buffer time is 479, larger than exptime tet has been observed before no need to 2/3 factor outfer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L (COS.sp.395 854)	G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M 1327 A 2; FP-POS=3 1327 A 3; FP-POS=3 1327 A 3; FP-POS=3 1327 A 4; FP-POS=3 1327 A 1577 A 157	G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=21 (COS.sp.395 FP-POS=3 (COS.sp.395 G150M) G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=21 (COS.sp.395 G150M) G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=21 (COS.sp.5241 G130M) G130M/105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=23 (COS.sp.5241 G150M) G150M G15	timue use of 1 FP-POS G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=21 (COS sp.395 FP-POS=3 843) ments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. e buffer time is e buffer time e exptime -100 sec to maximize time on target = 212 timue use of 1 FP-POS G130M/105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=23 5/FUVA (OS sp.5241 FP-POS=3; 17) ments: ETC buffer time is larger than exptime even that been observed before no need to 2/3 factor rutgler time = exptime - 100 = 224 timue use of 1 FP-POS G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=3; G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G160M FP-POS=3; G160M/162 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L BUFFER-TIME=18 (COS sp.395) G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L BUFFER-TIME=18 (COS sp.395) G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L BUFFER-TIME=18 (COS sp.395) FP-POS=3	Sinus use of 1 FF-POS Sinus Sinu



Proposal 13967 - WD0308 -	complete (08) - COS FUV	Spectroscopic	Sensitivity	Monitorina
1 1000301 10307 110000	CONTIDICTO (CC		Opcoli ocoopio		IVIOLITOTITI

Proposal 13967, WD0308 - complete (08), scheduling

Sat Jan 31 02:12:44 GMT 2015

Sit

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 08-JUN-2015:00:00:00 AND 15-JUN-2015:00:00:00

Comments: George Chapman added Exposure 9

(WD0308 - complete (08)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

ts	#
Targets	(1)
Fixed	Ca

Diagnostics

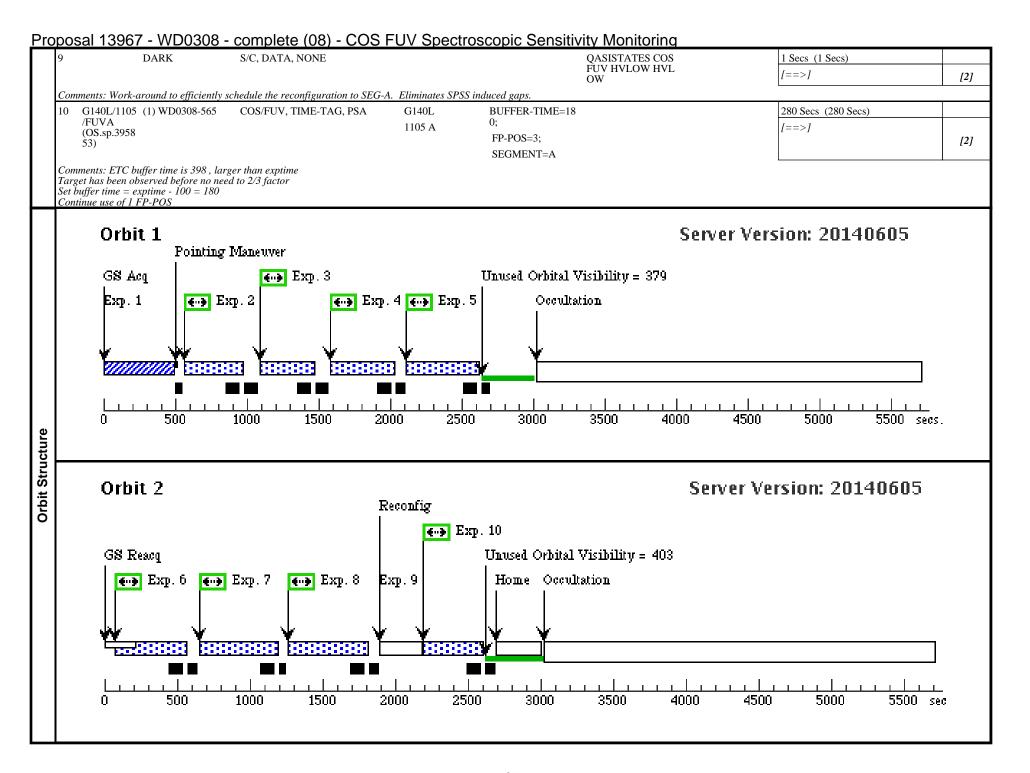
 Name
 Target Coordinates
 Targ. Coord. Corrections
 Fluxes
 Miscellaneous

)
 WD0308-565
 RA: 03 09 47.9200 (47.4496667d)
 Proper Motion RA: 0.018141 sec of time/yr
 V=14.07+/-0.02
 Reference Frame: ICRS

 Dec: -56 23 49.41 (-56.39706d)
 Proper Motion Dec: 0.0643 arcsec/yr
 Equinox: J2000
 Epoch of Position: 2000

Proposal 13967 - WD0308 - complete (08) - COS FUV Spectroscopic Sensitivity Monitoring

(ETC Run)			Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ACQ/IM (396029)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	<i>[11]</i>
	(1) WD0308-565	COS/FUV. TIME-TAG. PSA	G130M	BUFFER-TIMF-1	2.		[==>] 226 Secs. (226 Secs.)	[1]
2	(1) 11 20300-303	000/101, 11mL-1710,10A		6;	_		` ′	1
(COS.sp.395 840)			-	FP-POS=3			,	[1]
			is larger than exptin	ne. Set				
		terson to confirm that there are no iss	sues using the 1222	central wavelength pri	or to Cycle 20			
		COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=1			244 Secs (244 Secs)	
1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
nce buffer time la	rger than exptime us							
G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M		1		312 Secs (312 Secs)	
(COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
nce buffer time la ontinue use of 1 I	rger than exptime us P-POS	e buffer time = exptime -100 sec to m	aximize time on targ	get = 212	2		224 5 (224 5)	
5/FUVA	(1) WD0308-565	COS/FUV, TIME-TAG, PSA			3			
(OS.sp.5241 17)			1055 A	FP-POS=3;	н		[==>]	[1]
rget has been ob t buffer time = e:	served before no nee optime - 100 = 224				-			
		COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
7 (395846)			1577 A	BUFFER-TIME=1	9		[==>]	[2]
rget has been ob	served before no nee	er than exptime d to 2/3 factor		Ü				1
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
3 (395848)			1623 A	BUFFER-TIME=3	30		[==>]	[2]
omments: ETC bi erget has been ob t buffer time = e:	uffer time is 794, larg served before no nee optime - 100 = 300	er than exptime d to 2/3 factor						
	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L		8		280 Secs (280 Secs)	
(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
rget has been ob t buffer time = e:	served before no nee optime - 100 = 180							
	(COS.sp.395 840) mments: Buffer iffer-time = exptine intinue use of 1 Fineked with Alar G130M/129 1 (COS.sp.395 841) mments: ETC burget has been obtat buffer time = exptine intinue use of 1 Fineked intinue use of 1 Fineke	840) mments: Buffer time calculated as 2/s. ffer-time = exptime - 100 sec to maxin minimue use of 1 FP-POS hecked with Alan Welty and Karla Pe G130M/129 (1) WD0308-565 1 (COS.sp.395 841) mments: ETC buffer time is 330 sec. nce buffer time larger than exptime us minimue use of 1 FP-POS G130M/132 (1) WD0308-565 7 (COS.sp.395 843) mments: ETC buffer time is 330 sec. nce buffer time larger than exptime us minimue use of 1 FP-POS G130M/105 (1) WD0308-565 5/FUVA (OS.sp.5241 17) mments: ETC buffer time is larger tha riget has been observed before no nee to buffer time = exptime - 100 = 224 minimue use of 1 FP-POS G160M/157 (1) WD0308-565 7 (395846) mments: ETC buffer time is 632, larger thas been observed before no nee to buffer time = exptime - 100 = 190 G160M/162 (1) WD0308-565 3 (395848) mments: ETC buffer time is 794, larger thas been observed before no nee to buffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 (COS.sp.395 854) mments: ETC buffer time is 479, larger thas been observed before no nee to buffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 (COS.sp.395 854)	(COS.sp.395 840) mments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which ffer-time = exptime - 100 sec to maximize time on target = 126 minimue use of 1 FP-POS hecked with Alan Welty and Karla Peterson to confirm that there are no is. G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 1 (COS.sp.395 841) mments: ETC buffer time is 330 sec. Target has been observed before and noe buffer time larger than exptime use buffer time = exptime -100 sec to minimue use of 1 FP-POS G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 7 (COS.sp.395 843) mments: ETC buffer time is 330 sec. Target has been observed before and noe buffer time larger than exptime use buffer time = exptime -100 sec to minimue use of 1 FP-POS G130M/105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 5/FUVA (OS.sp.5241 17) mments: ETC buffer time is larger than exptime riget has been observed before no need to 2/3 factor to buffer time = exptime -100 = 224 minimue use of 1 FP-POS G160M/157 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 7 (395846) G160M/152 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 3 (395848) mments: ETC buffer time is 632, larger than exptime riget has been observed before no need to 2/3 factor to buffer time = exptime - 100 = 190 G160M/162 (1) WD0308-565 COS/FUV, TIME-TAG, PSA 3 (395848) mments: ETC buffer time is 794, larger than exptime riget has been observed before no need to 2/3 factor to buffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA (COS.sp.395 854) mments: ETC buffer time is 479, larger than exptime riget has been observed before no need to 2/3 factor to buffer time = exptime - 100 = 300 G140L/1230 (1) WD0308-565 COS/FUV, TIME-TAG, PSA (COS.sp.395 854)	(COS.sp.395 840) mments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptitifer-time exptime - 100 sec to maximize time on target = 126 minue use of 1 FP-POS hecked with Alan Welty and Karla Peterson to confirm that there are no issues using the 1222 G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M 1 (COS.sp.395 841) mments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 secee buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on targetime use of 1 FP-POS G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M 7 (COS.sp.395 843) mments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 second to the second time to the second time on target time larger than exptime use buffer time = exptime -100 sec to maximize time on target time that the second time time to the second time time time to the second time time time to the second time time time time time time time time	C(OS.sp.395 840) 1222 A 6; FP.POS=3 mments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set fler-time = exptime = 100 sec to maximize time on target = 126 minute use of 1 FP-POS hecked with Alan Welty and Karla Peterson to confirm that there are no issues using the 1222 central wavelength pric G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=1. (COS.sp.395 841) TP-POS=3 mments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. The set buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 minute use of 1 FP-POS G130M/122 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=2 (COS.sp.395 843) FP-POS=3 H327 A H328 A H328 A H329 A H329 A H329 A H329 A H329 A H321 A H321 A H322 A H321 A H322 A H321 A H322 A H	COS.sp.395 840 1222 A FP.POS=3 mments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set lifer-time = exptime - 100 sec to maximize time on target = 126 minime use of 1 FP-POS G130M/129 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=14 LCOS.sp.395 Moments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. tece buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 G130M/132 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G130M BUFFER-TIME=21 C17 C17 C18	1222 A 6: S4(0) S4(0) TP-POS=3 Minnenests: Buffer time calculated as 2/3 ** ETC buffer time is 2/3*455 which is larger than exprime. Set fifer-time = exprime - 100 sec to maximize time on target = 126 Minne use of 1 FP-POS hecked with Alan Welty and Karla Peterson to confirm that there are no issues using the 1222 central wavelength prior to Cycle 20 GI 300M129 (1) WDD308-565 COSFUV, TIME-TAG, PSA GI 300M BUFFER-TIME=14 (COS.sp.3.935 S41) S41 FP-POS=3 Minnents: ETC buffer time is 3/30 sec. Target has been observed before and so no need for 2/3 safety margin. web buffer time larger than exprime use buffer time = exprime - 100 sec to maximize time on target = 144 minutes use of 1 FP-POS GI 300M122 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 300M BUFFER-TIME=21 (COS.sp.3.935 S43) GI 300M122 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 300M BUFFER-TIME=21 (COS.sp.3.935 S43) MINUTES: ETC buffer time is 3/30 sec. Target has been observed before and so no need for 2/3 safety margin. web subject time larger than exprime use buffer time = exprime - 100 sec to maximize time on target = 212 white use of 1 FP-POS GI 300M105 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 300M BUFFER-TIME=23 SFUVA (OS.sp.3241 17) SEGMENT=BOTH minnents: ETC buffer time is larger than exprime reget has been observed before no need to 2/3 factor buffer time is larger than exprime reget has been observed before no need to 2/3 factor buffer time = exprime - 100 = 190 GI 600M167 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3; (3) S848) GI 600M162 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3; (3) S848) GI 600M162 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3; (3) S848) GI 600M162 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3; (3) S848) GI 600M162 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3; (3) S848) GI 600M162 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3; (3) S848) GI 600M162 (1) WD0308-565 COSFUV, TIME-TAG, PSA GI 600M FP-POS=3 MINUTES ETC buffer time is 479, larger than exprime reget has been observed bef	1222 A 61 FP-POS-3



Proposal 13067 - W/D0308 .	complete (10) - COS FUV Spectroscopic Sensitivity Monito	orina
P10008al 13907 - WD0300 ·	complete (10) - COS FOV Spectroscopic Sensitivity Monito	JHHU

Proposal 13967, WD0308 - complete (10), scheduling Sat Jan 31 02:12:45 GMT 2015

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 11-AUG-2015:00:00:00 AND 17-AUG-2015:00:00:00

Comments: George Chapman added Exposure 9

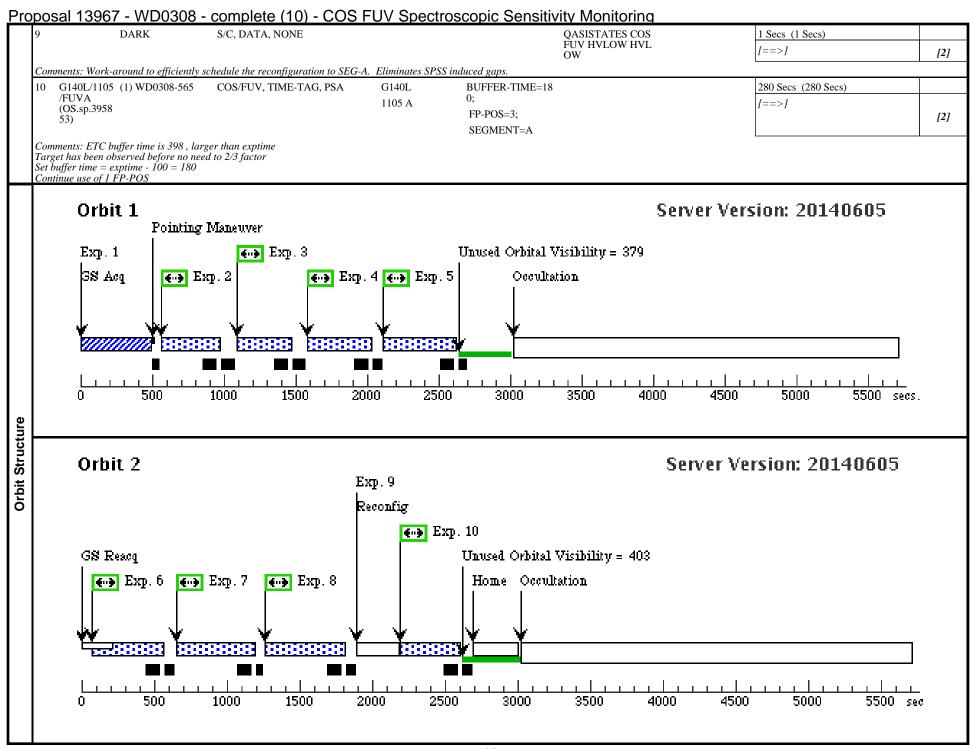
Diagnostics (WD0308 - complete (10)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

Jets	#
Targe	(1)
Fixed	Ca

ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
ge.	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS
Га			Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 0.0643 arcsec/yr		
তু			Equinox: J2000	Epoch of Position: 2000		
×e	Comm	nents: Coordinates from Charle's	's proposal			

Proposal 13967 - WD0308 - complete (10) - COS FUV Spectroscopic Sensitivity Monitoring

	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (396029)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	F33
2		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=1	2.		[==>] 226 Secs (226 Secs)	[1]
	2	(1) 11 20300-303	555/101, 11mL-170,15A	1222 A	6;	_		[==>]	1
	(COS.sp.395 840)			-	FP-POS=3			L . J	[1]
			3 * ETC buffer time is 2/3*455 which mize time on target = 126	is larger than exptir	ne. Set				
	ontinue use of 1 I hecked with Alan		eterson to confirm that there are no iss	sues using the 1222	central wavelength pri	or to Cycle 20			
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=1			244 Secs (244 Secs)	
	1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
Si		rger than exptime us	Target has been observed before and se buffer time = exptime -100 sec to m						
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=2	1		312 Secs (312 Secs)	
	7 (COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
Sin	nce buffer time lo ontinue use of 1 l	rger than exptime us FP-POS	Target has been observed before and the buffer time = exptime -100 sec to m.	aximize time on targ	get = 212	2		224 Sage (224 Sage)	
SO ြ	5/FUVA	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=2 4;	3		334 Secs (334 Secs)	
Exp	(OS.sp.5241 17)			1055 A	FP-POS=3; SEGMENT=BOT	н		[==>]	[1]
Ta Se	rget has been ob	uffer time is larger the served before no nee optime - 100 = 224 FP-POS							
6		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	7 (395846)			1577 A	BUFFER-TIME=1	9		[==>]	[2]
Ta	rget has been ob	uffer time is 632, larg served before no nee xptime - 100 = 190	ger than exptime d to 2/3 factor		Ü				
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=3	30		[==>]	[2]
Co To Se	omments: ETC bi erget has been ob t buffer time = e.	uffer time is 794, larg served before no nee xptime - 100 = 300	ger than exptime d to 2/3 factor						
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=1	8		280 Secs (280 Secs)	
	(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
Ta Se	rget has been ob	ıffer time is 479, larg served before no nee xptime - 100 = 180 FP-POS							



Proposal 13967, WD0308 - complete (12), scheduling

Sat Jan 31 02:12:45 GMT 2015

Sit

Diagnostic Status: Warning

Name

WD0308-565

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

Special Requirements: SCHED 100%; BETWEEN 19-OCT-2015:00:00:00 AND 26-OCT-2015:00:00:00

Equinox: J2000

Comments: George Chapman added Exposure 9

(WD0308 - complete (12)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

ets	#
Targe	(1)
Fixed	Ca

Diagnostics

 Target Coordinates
 Targ. Coord. Corrections
 Fluxes
 Miscellaneous

 RA: 03 09 47.9200 (47.4496667d)
 Proper Motion RA: 0.018141 sec of time/yr
 V=14.07+/-0.02
 Reference Frame: ICRS

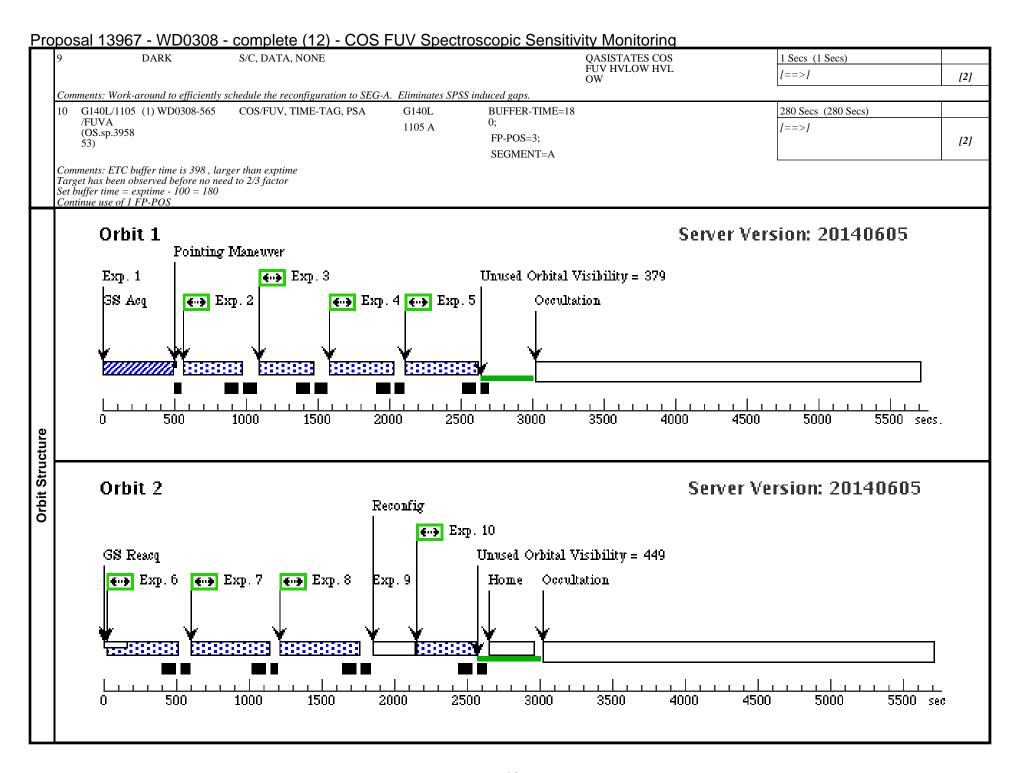
 Dec: -56 23 49.41 (-56.39706d)
 Proper Motion Dec: 0.0643 arcsec/yr
 V=14.07+/-0.02
 Reference Frame: ICRS

Epoch of Position: 2000

omments: Coordinates from Charle's proposal

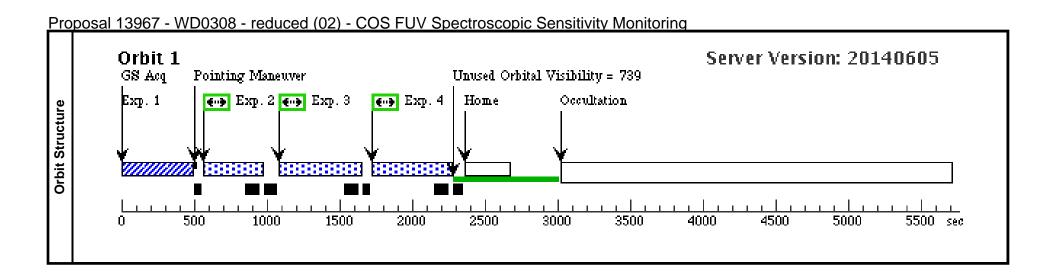
Proposal 13967 - WD0308 - complete (12) - COS FUV Spectroscopic Sensitivity Monitoring

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (396029)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI O SINGLE		45 Secs (45 Secs)	
		(1) WD0200 565	COCKETTY TIME TAC DOA	C120M	DUEEED TIME 10	OBINGEE		[==>]	[1]
2	G130M/122 2	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12 6;			226 Secs (226 Secs)	
	(COS.sp.395 840)			1222 A	FP-POS=3			[==>]	[1]
bиj	fer-time = expti	me - 100 sec to maxii	3 * ETC buffer time is 2/3*455 which mize time on target = 126	is larger than exptii	me. Set				
Co I c	ntinue use of 1 I hecked with Alar	FP-POS 1 Welty and Karla Pe	eterson to confirm that there are no is:	sues using the 1222	central wavelength prior	r to Cycle 20			
3		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14	•		244 Secs (244 Secs)	
	1 (COS.sp.395 841)			1291 A	4; FP-POS=3			[==>]	[1]
Sir		rger than exptime us	Target has been observed before and se buffer time = exptime -100 sec to m						
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			312 Secs (312 Secs)	
	7 (COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
Exposures 5	ntinue use of 1 I G130M/105 5/FUVA (OS.sp.5241 17)	FP-POS (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=23 4; FP-POS=3; SEGMENT=BOTH			334 Secs (334 Secs) [==>]	[1]
Ta Sei	rget has been ob	offer time is larger th served before no nee optime - 100 = 224 FP-POS			SEGMENT-BOTTI				
6	G160M/157	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	7 (395846)			1577 A	BUFFER-TIME=19 0)		[==>]	[2]
Ta	rget has been ob	uffer time is 632, larg served before no nee aptime - 100 = 190	eer than exptime d to 2/3 factor						
7	G160M/162	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=30)		[==>]	[2]
Co Ta Sei	mments: ETC bi rget has been ob buffer time = es	uffer time is 794, larg served before no nee xptime - 100 = 300	eer than exptime d to 2/3 factor						
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
Ta Sei	rget has been ob	offer time is 479, larg served before no nee xptime - 100 = 180 FP-POS							•



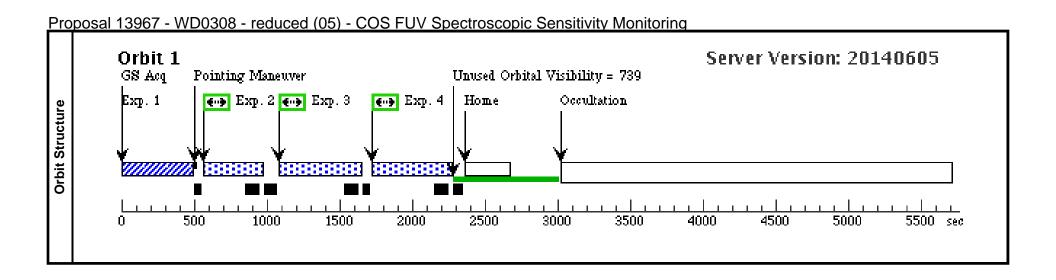
Г.,	Proposal 13967, WD0308 - reduced	l (02), completed				Sat Jan 31 02:12:45	GMT 2015
Visit	Diagnostic Status: Warning						
>	Scientific Instruments: COS/NUV, C						
		6; BETWEEN 29-DEC-2014:00:00:00 A					
Diagnostics	(WD0308 - reduced (02)) Warning (I	Form): For the best data quality, it is stro	ngly recommended th	nat all four FP-POS positions be used	d when observing at a given	n COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ. C	Coord. Corrections	Fluxes	Miscellaneous	
Targets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper I	Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
ā		Dec: -56 23 49.41 (-56.39706d)	Proper I	Motion Dec: 0.0643 arcsec/yr			
ق		Equinox: J2000	Epoch o	of Position: 2000			
Fixed	Comments: Coordinates from Charle	's proposal					
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Special Re	eqs. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1 ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			45 Secs (45 Secs)	
	(396029)					[==>]	[1]
		COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14		[==>] 244 Secs (244 Secs)	[1]
	(396029)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3		• •	[1]
res	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	COS/FUV, TIME-TAG, PSA ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 sa	4; FP-POS=3 fety margin.		244 Secs (244 Secs)	
sures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 sa	4; FP-POS=3 fety margin.		244 Secs (244 Secs)	
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 sa aximize time on targe	4; FP-POS=3 fety margin. et = 144		244 Secs (244 Secs) [==>]	
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565	ec. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	1291 A so no need for 2/3 sa aximize time on targe G160M	4; FP-POS=3 fety margin. et = 144 FP-POS=3; BUFFER-TIME=30		244 Secs (244 Secs) [==>] 400 Secs (400 Secs)	[1]
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3 (395848) Comments: ETC buffer time is 794, le Target has been observed before no of Set buffer time = exptime - 100 = 300 4 G140L/1230 (1) WD0308-565	ec. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	1291 A so no need for 2/3 sa aximize time on targe G160M	4; FP-POS=3 fety margin. et = 144 FP-POS=3; BUFFER-TIME=30 0		244 Secs (244 Secs) [==>] 400 Secs (400 Secs)	[1]
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3 (395848) Comments: ETC buffer time is 794, la Target has been observed before no is Set buffer time = exptime - 100 = 300	ec. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	so no need for 2/3 sa aximize time on targe G160M 1623 A	4; FP-POS=3 fety margin. et = 144 FP-POS=3; BUFFER-TIME=30 0		244 Secs (244 Secs) [==>] 400 Secs (400 Secs) [==>]	[1]

Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS



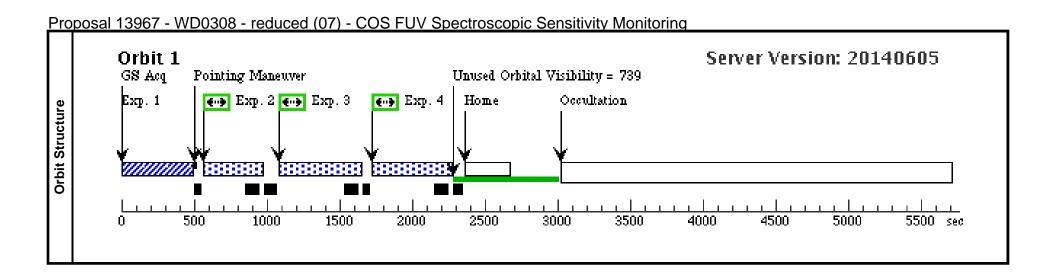
	Proposal 13967, WD0308 - reduced	3 - reduced (05) - COS F				Sat Jan 31 02:12:45	GMT 2015
Visit	Diagnostic Status: Warning						
5	Scientific Instruments: COS/NUV, C	OS/FUV					
		; BETWEEN 09-MAR-2015:00:00:00					
Diagnostics	(WD0308 - reduced (05)) Warning (F	Form): For the best data quality, it is stro	ngly recommended	that all four FP-POS positions be used	l when observing at a give	n COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ.	Coord. Corrections	Fluxes	Miscellaneous	
Targets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
ā		Dec: -56 23 49.41 (-56.39706d)	Proper	Motion Dec: 0.0643 arcsec/yr			
তু		Equinox: J2000	Epoch	of Position: 2000			
Fixed	Comments: Coordinates from Charle	's proposal					
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Special Re	qs. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1 ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			45 Secs (45 Secs)	
		, ,					
	(396029) (1) WD0308-363					[==>]	[1]
		COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14		[==>] 244 Secs (244 Secs)	[1]
	(396029)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3		• •	[1]
res	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	COS/FUV, TIME-TAG, PSA c. Target has been observed before and use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 s	4; FP-POS=3 afety margin.		244 Secs (244 Secs)	
sures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime	c. Target has been observed before and use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 s	4; FP-POS=3 afety margin.		244 Secs (244 Secs)	
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS	c. Target has been observed before and use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 s aximize time on targ	4; FP-POS=3 afety margin. get = 144		244 Secs (244 Secs) [==>]	
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3	cc. Target has been observed before and use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime teed to 2/3 factor	1291 A so no need for 2/3 s aximize time on tars G160M	4; FP-POS=3 afety margin. get = 144 FP-POS=3; BUFFER-TIME=30		244 Secs (244 Secs) [==>] 400 Secs (400 Secs)	[1]
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3 (395848) Comments: ETC buffer time is 794, la Target has been observed before no n Set buffer time = exptime - 100 = 300 4 G140L/1230 (1) WD0308-565	cc. Target has been observed before and use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	1291 A so no need for 2/3 s aximize time on tars G160M	4; FP-POS=3 afety margin. get = 144 FP-POS=3; BUFFER-TIME=30 0		244 Secs (244 Secs) [==>] 400 Secs (400 Secs)	[1]
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3 (395848) Comments: ETC buffer time is 794, la Target has been observed before no notes of the second of the s	cc. Target has been observed before and use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	so no need for 2/3 s aximize time on targ G160M 1623 A	4; FP-POS=3 afety margin. get = 144 FP-POS=3; BUFFER-TIME=30 0		244 Secs (244 Secs) [==>] 400 Secs (400 Secs) [==>]	[1]

Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS



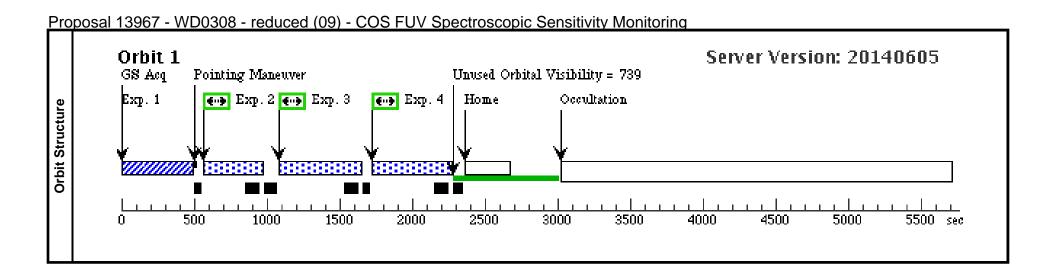
Pro	pposal 13967 - WD0308	- reduced (07) - COS F	UV Spectros	scopic Sensitivity	Monitoring			
	Proposal 13967, WD0308 - reduced				•		Sat Jan 31 02:12:45	GMT 2015
洪	Diagnostic Status: Warning							
Visit	Scientific Instruments: COS/NUV, CO	OS/FUV						
	Special Requirements: SCHED 100%	; BETWEEN 11-MAY-2015:00:00:00 A	AND 18-MAY-2015	5:00:00:00				
Diagnostics	(WD0308 - reduced (07)) Warning (F	orm): For the best data quality, it is stro	ngly recommended	that all four FP-POS position	is be used when ob	oserving at a given CC	OS CENWAVE setting.	
ß	# Name	Target Coordinates	Targ.	Coord. Corrections	Fluxe	es	Miscellaneous	
Targets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	Motion RA: 0.018141 sec of	f time/yr V=14	1.07+/-0.02	Reference Frame: ICRS	
a.		Dec: -56 23 49.41 (-56.39706d)	Proper	Motion Dec: 0.0643 arcsec/	yr			
		Equinox: J2000		of Position: 2000	,			
Fixed	Comments: Coordinates from Charle'	s proposal						
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Sp	oecial Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
ı	1 ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
	(396029)						[==>]	[1]
	2 G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			244 Secs (244 Secs)	
	1 (COS.sp.395 841)		1291 A	4; FP-POS=3			[==>]	[1]
res	Comments: ETC buffer time is 330 sec Since buffer time larger than exptime Continue use of 1 FP-POS	c. Target has been observed before and use buffer time = exptime -100 sec to m	so no need for 2/3 so aximize time on targ	afety margin. get = 144				
l s	3 G160M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
Exposures	3 (395848)		1623 A	BUFFER-TIME=30 0			[==>]	[1]
"	Comments: ETC buffer time is 794, la Target has been observed before no n Set buffer time = exptime - 100 = 300	eed to 2/3 factor						
	4 G140L/1230 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)		1280 A	0; ED DOG 2			[==>]	[1]
1	'/			FP-POS=3				1-3

Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS



	Proposal 13967, WD0308 - reduced	l (09), scheduling				Sat Jan 31 02:12:45	GMT 2015
Visit	Diagnostic Status: Warning						
>	Scientific Instruments: COS/NUV, C						
		6; BETWEEN 13-JUL-2015:00:00:00 A					
Diagnostics	(WD0308 - reduced (09)) Warning (F	Form): For the best data quality, it is stro	ngly recommended	that all four FP-POS positions be used	when observing at a give	n COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ.	Coord. Corrections	Fluxes	Miscellaneous	
Targets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
٦a		Dec: -56 23 49.41 (-56.39706d)	Proper	Motion Dec: 0.0643 arcsec/yr			
ق		Equinox: J2000	Epoch	of Position: 2000			
Fixed	Comments: Coordinates from Charle	's proposal					
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Special Re	qs. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1 ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			45 Secs (45 Secs)	
	(396029)					[==>]	[1]
		COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14		[==>] 244 Secs (244 Secs)	[1]
	(396029)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3			[1]
res	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	COS/FUV, TIME-TAG, PSA ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 s	4; FP-POS=3 afety margin.		244 Secs (244 Secs)	
sures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 s	4; FP-POS=3 afety margin.		244 Secs (244 Secs)	
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 s aximize time on targ	4; FP-POS=3 afety margin. get = 144		244 Secs (244 Secs) [==>]	
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3	ec. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	1291 A so no need for 2/3 s aximize time on targ	4; FP-POS=3 afety margin. get = 144 FP-POS=3; BUFFER-TIME=30		244 Secs (244 Secs) [==>] 400 Secs (400 Secs)	[1]
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3 (395848) Comments: ETC buffer time is 794, la Target has been observed before no r Set buffer time = exptime - 100 = 300 4 G140L/1230 (1) WD0308-565	ec. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	1291 A so no need for 2/3 s aximize time on targ	4; FP-POS=3 afety margin. get = 144 FP-POS=3; BUFFER-TIME=30 0		244 Secs (244 Secs) [==>] 400 Secs (400 Secs)	[1]
Exposures	(396029) 2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841) Comments: ETC buffer time is 330 se Since buffer time larger than exptime Continue use of 1 FP-POS 3 G160M/162 (1) WD0308-565 3 (395848) Comments: ETC buffer time is 794, la Target has been observed before no n Set buffer time = exptime - 100 = 300	ec. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	so no need for 2/3 s aximize time on targ G160M 1623 A	4; FP-POS=3 afety margin. get = 144 FP-POS=3; BUFFER-TIME=30 0		244 Secs (244 Secs) [==>] 400 Secs (400 Secs) [==>]	[1]

Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS



Pro	pposal 13967 - WD0308	B - reduced (11) - COS F	UV <u>Spectros</u>	scopic Sensitivity	Monitor	ing		
	Proposal 13967, WD0308 - reduced		•				Sat Jan 31 02:12:45	GMT 2015
ة	Diagnostic Status: Warning							
Visit	Scientific Instruments: COS/NUV, Co	OS/FUV						
	Special Requirements: SCHED 100%	; BETWEEN 14-SEP-2015:00:00:00 A	ND 21-SEP-2015:00	0:00:00				
Diagnostics	(WD0308 - reduced (11)) Warning (F	Form): For the best data quality, it is stro	ngly recommended t	that all four FP-POS positio	ns be used wh	en observing at a give	n COS CENWAVE setting.	
Targets	# Name	Target Coordinates	Targ. (Coord. Corrections		Fluxes	Miscellaneous	
ge	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	Motion RA: 0.018141 sec	of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
ā		Dec: -56 23 49.41 (-56.39706d)	Proper	Motion Dec: 0.0643 arcsec	:/yr			
٦		Equinox: J2000 Epoch of Position: 2000						
Fixed	Comments: Coordinates from Charle	's proposal						
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. S	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)	
	(396029)						I==>I	[1]
	2 G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			244 Secs (244 Secs)	
	(COS.sp.395 841)		1291 A	4; FP-POS=3			[==>]	[1]
res	Since huffer time larger than exptime	c. Target has been observed before and use buffer time = exptime -100 sec to m	so no need for 2/3 so aximize time on targ	afety margin. set = 144				
l so	3 G160M/162 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
Exposure	3 (395848)		1623 A	BUFFER-TIME=30 0			[==>]	[1]
"	Comments: ETC buffer time is 794, le Target has been observed before no n Set buffer time = exptime - 100 = 300	need to 2/3 factor						
1	4 G140L/1230 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)		1280 A	0; FP-POS=3			[==>]	[1]

Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS

