

# 14435 - COS FUV Spectroscopic Sensitivity Monitoring

Cycle: 23, Proposal Category: CAL/COS

(Calibration)

(Availability Mode: RESTRICTED)

## **INVESTIGATORS**

Name	Institution	E-Mail
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Dr. John Henry Debes (CoI)	Space Telescope Science Institute	debes@stsci.edu
Dr. Charles R. Proffitt (CoI)	Space Telescope Science Institute	proffitt@stsci.edu

## **VISITS**

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
13	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	09-Nov-2016 11:00:47.0	yes
14	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	09-Nov-2016 11:00:48.0	yes
15	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	09-Nov-2016 11:00:50.0	yes
16	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	09-Nov-2016 11:00:51.0	yes

Proposal 14435 (STScI Edit Number: 3, Created: Wednesday, November 9, 2016 11:01:11 AM EST) - Overview

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
17	(6) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	09-Nov-2016 11:00:52.0	yes
02	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	09-Nov-2016 11:00:54.0	yes
04	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	09-Nov-2016 11:00:56.0	yes
06	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	09-Nov-2016 11:00:58.0	yes
08	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	09-Nov-2016 11:01:01.0	yes
10	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	09-Nov-2016 11:01:03.0	yes
12	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	09-Nov-2016 11:01:04.0	yes
01	(1) WD0308-565	COS/FUV COS/NUV	1	09-Nov-2016 11:01:06.0	yes
03	(1) WD0308-565	COS/FUV COS/NUV	1	09-Nov-2016 11:01:06.0	yes
05	(1) WD0308-565	COS/FUV COS/NUV	1	09-Nov-2016 11:01:07.0	yes
07	(1) WD0308-565	COS/FUV COS/NUV	1	09-Nov-2016 11:01:08.0	yes

Proposal 14435 (STScI Edit Number: 3, Created: Wednesday, November 9, 2016 11:01:11 AM EST) - Overview

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used		OP Current with Visit?
09	(1) WD0308-565	COS/FUV COS/NUV	1	09-Nov-2016 11:01:09.0	yes
11	(1) WD0308-565	COS/FUV COS/NUV	1	09-Nov-2016 11:01:09.0	yes

23 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, has been in place since C21. Should any drastic changes occur, the contingency orbits will be activated.

#### **OBSERVING DESCRIPTION**

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, has been in place since C21. Should any drastic changes occur, the contingency orbits will be activated.

Proposal 14435 - GD71 (13)	- COS FLIV Spectros	conic Sensitivity Monitoring
1 10003al 14433 - GD <i>I</i> 1 (13)		

**Proposal 14435, GD71 (13), completed**Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2015:00:00:00 AND 03-JAN-2016:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation

George Chapman added Exposure 3

Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.

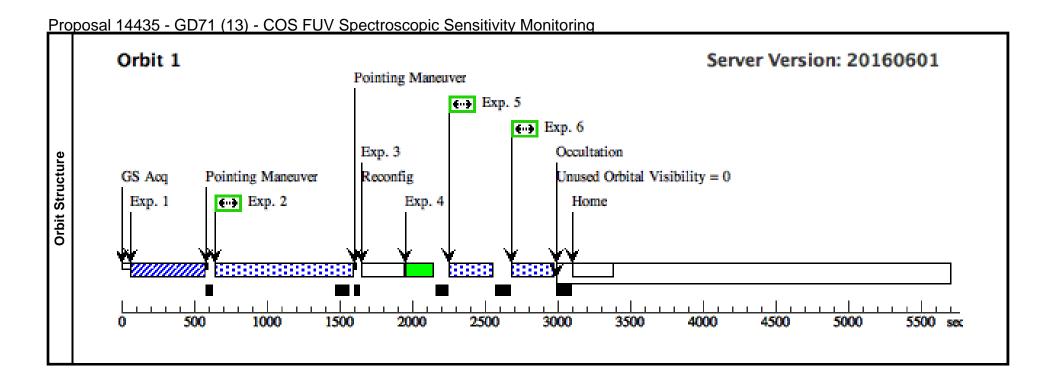
(GD71 (13)) Warning (Form): For the best data quality,

(GD71 (13)) 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
] [36	(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		
۵.			Equinox: J2000	Epoch of Position: 2000		
×	Comm	ents: Use sma RA, D	EC amd PM as in proposal 12392 by Bohlin et al.			
证	Extend	led=NO				

Proposal 14435 - GD71 (13) - COS FUV Spectroscopic Sensitivity Monitoring

04797) nts: Exptime	(6) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB					
ıts: Exptime O sec leads	o fou S/N of 60 is						90 Secs (90 Secs)	
) sec leads	of an C/M of 60 in						[==>]	[1]
30M/109	to S/N of 55	105.5 sec which leads to visibility overru	n. COS.ta.404797					
	(6) GD71	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=64			744 Secs (744 Secs)	
FUVB OS.sp.418			1096 A	4;			[==>]	
03.sp.416 8)				FP-POS=3;				[1]
				SEGMENT=B				
ıts: Set buff	er-time = exptim	e - 100 sec = 644 to maximize time on tar	get (see Cy 20 IHB :	section 5.4.1)				
	DARK	S/C, DATA, NONE					1 Secs (1 Secs)	
							[==>]	[1]
ıts: Work-a	round to efficient	tly schedule the SEG-B to SEG-A reconfig	guration. Eliminates	SPSS induced gaps.	0,11			
	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			140 Secs (140 Secs)	
			1096 A	SEGMENT=A;			[==>]	677
VECAL				FLASH=NO				[1]
60M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)	
FUVA			1577 A	2;			[==>]	
08.sp.413				FP-POS=3;				[1]
,				SEGMENT=A				
s the numbe	er of events that e	each buffer can record	han exp time, so set l	buffer time to exptime.				
	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
FUVA			1623 A	4;			[==>]	
03.sp.415 4)				FP-POS=3;				[1]
,				SEGMENT=A				
113   13   14   15   16   16   16   16   16   16   16	ts: Work-a 30M/109 UVA W 'ECAL 60M/157 UVA 0S.sp.413 )) ts: Buffer-i the numbe (sec is the o 60M/162 UVA 0S.sp.413 4)	DARK  ts: Work-around to efficien  30M/109 WAVE  UVA W FECAL  60M/157 (6) GD71  UVA  DS.sp.413  ))  ts: Buffer-time for FUVA is the number of events that effect is the count rate in FUVA  OS.sp.413  UVA  DS.sp.413  1)	DARK S/C, DATA, NONE  ts: Work-around to efficiently schedule the SEG-B to SEG-A reconfig 30M/109 WAVE COS/FUV, TIME-TAG, WCA UVA W FECAL  60M/157 (6) GD71 COS/FUV, TIME-TAG, PSA UVA DS. sp.413  1))  ts: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger to the number of events that each buffer can record sec is the count rate in FUVA, per ETC calculation above 60M/162 (6) GD71 COS/FUV, TIME-TAG, PSA UVA DS. sp.413  4)  ts: Buffer time is 345 sec=2.35e6/7635	DARK S/C, DATA, NONE  ts: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates 30M/109 WAVE COS/FUV, TIME-TAG, WCA G130M 1096 A  ECAL 1096 A  COS/FUV, TIME-TAG, PSA G160M 1097 A  SS. sp. 413  1577 A  1577 A	ts: Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)  DARK S/C, DATA, NONE  ts: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.  30M/109 WAVE COS/FUV, TIME-TAG, WCA G130M FP-POS=3; UVA W ECAL 1096 A SEGMENT=A; FLASH=NO  60M/157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10 UVA DS.sp.413 ))  FP-POS=3; SEGMENT=A  ts: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime. the number of events that each buffer can record (sec is the count rate in FUVA, per ETC calculation above)  60M/162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15 UVA 1623 A 4; DS.sp.413 (b) FP-POS=3; SEGMENT=A  ts: Buffer time is 345 sec=2.35e6/7635	DARK S/C, DATA, NONE QASISTATES COS FUV HVLOW HV	DARK S/C, DATA, NONE QASISTATES COS FUV HVLOW HVL OW  ts: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.  30M/109 WAVE COS/FUV, TIME-TAG, WCA G130M FP-POS=3; UVA W FECAL 1096 A SEGMENT=A; FLASH=NO  60M/157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10 UVA OS. sp. 413 1096 SEGMENT=A  ts: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime. the number of events that each buffer can record sec is the count rate in FUVA, per ETC calculation above  60M/162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15 UVA SISSP, 413 1623 A FP-POS=3; SEGMENT=A  1623 A FP-POS=3; SEGMENT=A  1623 A SEGMENT=A  1624 SEGMENT=A  1625 SEGMENT=A  1626 SEGMENT=A  1627 SEGMENT=A  1628 SEGMENT=A	See Set buffer-time = exptime - 100 sec = 644 to maximize time on target (see Cy 20 IHB section 5.4.1)   DARK   S/C, DATA, NONE   QASISTATES COS FUV HVLOW HVL OW   [==>]



Proposal 14435 - GD71 (14) - COS FUV Spectroscopic Sensitivity Monitoring

Proposal 14435, GD71 (14), completed Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 22-FEB-2016:00:00:00 AND 28-FEB-2016:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation

George Chapman added Exposure 3

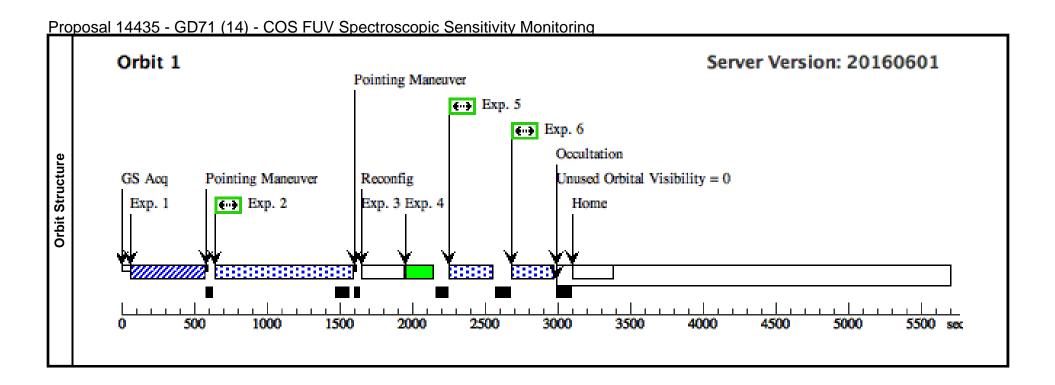
Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.

(GD71 (14)) 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
] [36	(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		
۵.			Equinox: J2000	Epoch of Position: 2000		
×	Comm	ents: Use sma RA, D	EC amd PM as in proposal 12392 by Bohlin et al.			
证	Extend	led=NO				

Proposal 14435 - GD71 (14) - 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]	
Co Us	omments: Exptim sing 90 sec leads	ne for S/N of 60 is 1 to S/N of 55	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=64			744 Secs (744 Secs)		
	6/FUVB (COS.sp.418			1096 A	4;			[==>]		
	698)				FP-POS=3;				[1]	
					SEGMENT=B					
Co	omments: Set bu <u>f</u>	,	e - 100 sec = 644 to maximize time on tar	get (see Cy 20 IHB	section 5.4.1)					
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL		1 Secs (1 Secs)		
						OW OW	,	[==>]	[1]	
Со	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;			[==>]	F17	
	TIVECTE				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					
2.3	35e6 is the numb	er of events that ea	2.35e6/8770 = 268 sec, which is larger t 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			1623 A	4;			[==>]		
	(COS.sp.413 984)				FP-POS=3;				[1]	
	,				SEGMENT=A					
Co wh	omments: Buffer here 7635 is cts/s	time is 345 sec=2. sec in FUVA	35e6/7635							
			e - 100 < 80 which is the minimum exptin	пе						



Proposal 14435.	- GD71 (15)	- COS FUV	Spectroscopic	Sensitivity Monitoring
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Proposal 14435, GD71 (15), completed

Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 18-APR-2016:00:00:00 AND 24-APR-2016:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation

George Chapman added Exposure 3

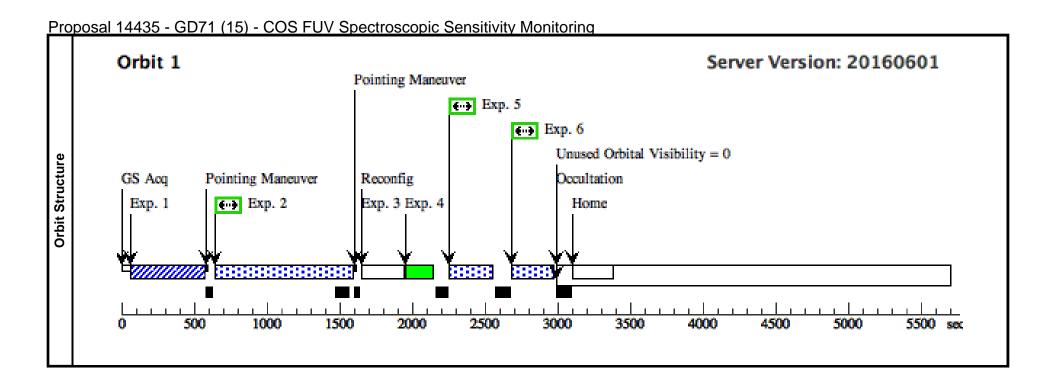
Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.

(GD71 (15)) 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.

_	_					
Ų.	} !	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
8	9	(6) GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
2			Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr		
ع ا	,		Equinox: J2000	Epoch of Position: 2000		
×	}	Comments: Use sma RA, DEC amd F	PM as in proposal 12392 by Bohlin et al.			
Ιij	: 12	Extended=NO				

Proposal 14435 - GD71 (15) - COS FUV Spectroscopic Sensitivity Monitoring

14797) ts: Exptime	o S/N of 55	COS/NUV, ACQ/IMAGE, BOA  105.5 sec which leads to visibility overru.  COS/FUV, TIME-TAG, PSA	MIRRORB n. COS.ta.404797				90 Secs (90 Secs)	
ts: Exptime 0 sec leads t 30M/109 UVB OS.sp.418	o S/N of 55		n. COS.ta.404797					1
<u>) sec leads t</u> 30M/109 EUVB OS.sp.418	o S/N of 55		n. COS.ta.404797				[==>]	[1]
UVB OS.sp.418	(6) GD71	COS/FUV, TIME-TAG, PSA						
OS.sp.418		, -,	G130M	BUFFER-TIME=64			744 Secs (744 Secs)	
			1096 A	4;			[==>]	
				FP-POS=3;				[1]
				SEGMENT=B				
ts: Set buffe	er-time = exptim	e - $100$ $sec$ = $644$ to maximize time on tar	get (see Cy 20 IHB :	section 5.4.1)				
]	DARK	S/C, DATA, NONE					1 Secs (1 Secs)	
							[==>]	[1]
ts: Work-ar	round to efficient	tly schedule the SEG-B to SEG-A reconfig	guration. Eliminates	SPSS induced gaps.	0.11			1
	WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			140 Secs (140 Secs)	
UVA W			1096 A	SEGMENT=A;			[==>]	
LCAL				FLASH=NO				[1]
60M/157	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)	
UVA			1577 A	2;			[==>]	Ī
)). ))				FP-POS=3;				[1]
,				SEGMENT=A				
the numbe	r of events that e	each buffer can record	han exp time, so set l	buffer time to exptime.				
	(6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15			154 Secs (154 Secs)	
UVA			1623 A	4;			[==>]	
98.sp.413 4)				FP-POS=3;				[1]
				SEGMENT=A				
ti 3(UI - 6(LO)) ti 1/s 6(LO)) ti 3	s: Work-an 0M/109 JVA W ECAL  0M/157 JVA S.sp.413 s: Buffer-t the numbe ec is the c 0M/162 JVA S.sp.413	DARK  S: Work-around to efficient  OM/109 WAVE  JVA W  GCAL  OM/157 (6) GD71  JVA  S: Buffer-time for FUVA is the number of events that exect is the count rate in FUV  OM/162 (6) GD71  JVA  S. sp. 413  S: Buffer time is 345 sec=2  S is cts/sec in FUVA	DARK S/C, DATA, NONE  S: Work-around to efficiently schedule the SEG-B to SEG-A reconfig  0M/109 WAVE COS/FUV, TIME-TAG, WCA  UVA W  ECAL  0M/157 (6) GD71 COS/FUV, TIME-TAG, PSA  UVA  S: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger to the number of events that each buffer can record  ec is the count rate in FUVA, per ETC calculation above  0M/162 (6) GD71 COS/FUV, TIME-TAG, PSA  UVA  S: Sp.413  S: Buffer time is 345 sec=2.35e6/7635	DARK S/C, DATA, NONE  S: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates OM/109 WAVE COS/FUV, TIME-TAG, WCA G130M JVA W ECAL 1096 A  OM/157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M JVA S.sp.413 1577 A  S: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set the number of events that each buffer can record ec is the count rate in FUVA, per ETC calculation above OM/162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M JVA S.sp.413  S: Buffer time is 345 sec=2.35e6/7635	DARK S/C, DATA, NONE  S: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.  OM/109 WAVE COS/FUV, TIME-TAG, WCA G130M FP-POS=3;  UVA W GCAL 1096 A SEGMENT=A;  FLASH=NO  OM/157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10  UVA 1577 A 2;  FP-POS=3;  SEGMENT=A  S: Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime. the number of events that each buffer can record ec is the count rate in FUVA, per ETC calculation above  OM/162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15  UVA 1623 A 4;  FP-POS=3;  SEGMENT=A  S: Buffer time is 345 sec=2.35e6/7635	DARK S/C, DATA, NONE  QASISTATES COS FUV HVLOW HVL OW  SE Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.  OM/109 WAVE COS/FUV, TIME-TAG, WCA G130M FP-POS=3;  JVA A W GCAL  1096 A SEGMENT=A;  FLASH=NO  OM/157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10  JVA 1577 A 2;  FP-POS=3;  SEGMENT=A  SE Buffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime. The second rate in FUVA, per ETC calculation above  OM/162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15  JVA S.Sp.413  FP-POS=3;  SEGMENT=A  1623 A 4;  FP-POS=3;  SEGMENT=A  SEGMENT=A  SEGMENT=A  SEGMENT=A	DARK S/C, DATA, NONE  QASISTATES COS FUV HVLOW HVL OW  S: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.  OM/109 WAVE COS/FUV, TIME-TAG, WCA G130M FP-POS=3;  JVA W BCAL  OM/157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10  JVA S.S.p.413  FP-POS=3;  SEGMENT=A  SEGMENT=A	DARK S/C, DATA, NONE $ \begin{array}{c} QASISTATES COS \\ FUV HVLOW HVL \\ OW \\ \\ \hline \\ (E=>)I \\ \\ (E=>)I \\ \hline \\ (E=>)I \\ \\ (E=>)I \\ \hline \\ (E=>)I \\ \\ (E=>)I \\$



Proposal 14435	- GD71 (16)	- COS FUV	Spectroscopic	Sensitivity Monitoring
1 1000301 17733				

**Proposal 14435, GD71 (16), completed**Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 22-AUG-2016:00:00:00 AND 28-AUG-2016:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation

George Chapman added Exposure 3

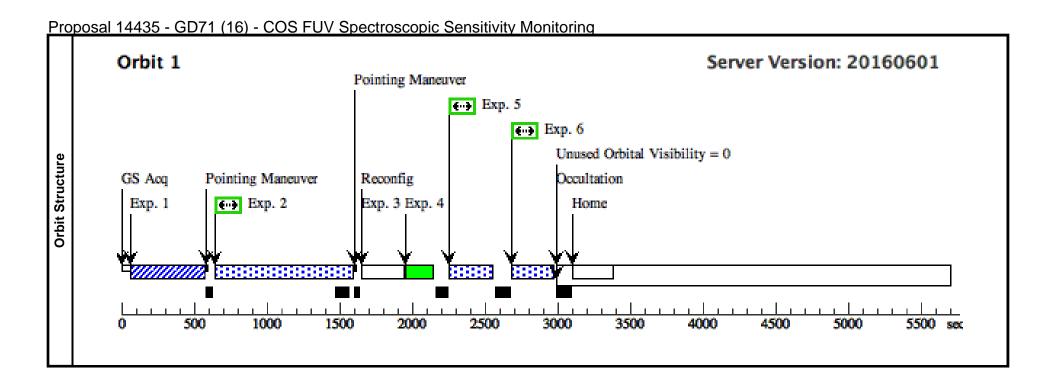
Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.

(GD71 (16)) 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	
ge	(6)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS	
۱			Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr			
٦			Equinox: J2000	Epoch of Position: 2000			
	Comment Extended		EC amd PM as in proposal 12392 by Bohlin et al.				

Proposal 14435 - GD71 (16) - COS FUV Spectroscopic Sensitivity Monitoring

eads to S/N of 55 109 (6) GD71 418 t buffer-time = exptin DARK	COS/NUV, ACQ/IMAGE, BOA is 105.5 sec which leads to visibility overru  COS/FUV, TIME-TAG, PSA  me - 100 sec = 644 to maximize time on tai  S/C, DATA, NONE	G130M 1096 A	BUFFER-TIME=64 4; FP-POS=3; SEGMENT=B section 5.4.1)	QASISTATES COS FUV HVLOW HVL OW		90 Secs (90 Secs)  [==>]  744 Secs (744 Secs)  [==>]  1 Secs (1 Secs)	[1]		
ptime for S/N of 60 is eads to S/N of 55 109 (6) GD71 418 t buffer-time = exptin DARK	COS/FUV, TIME-TAG, PSA  me - 100 sec = 644 to maximize time on tai  S/C, DATA, NONE	G130M 1096 A	4; FP-POS=3; SEGMENT=B	FUV HVLOW HVL		744 Secs (744 Secs) [==>]			
eads to S/N of 55 109 (6) GD71 418 t buffer-time = exptin DARK	COS/FUV, TIME-TAG, PSA  me - 100 sec = 644 to maximize time on tai  S/C, DATA, NONE	G130M 1096 A	4; FP-POS=3; SEGMENT=B	FUV HVLOW HVL		[==>]	[1]		
418  t buffer-time = exptin  DARK	me - 100 sec = 644 to maximize time on tai S/C, DATA, NONE	1096 A	4; FP-POS=3; SEGMENT=B	FUV HVLOW HVL		[==>]	[1]		
.418 <u>t buffer-time = exptin</u> DARK	S/C, DATA, NONE		FP-POS=3; SEGMENT=B	FUV HVLOW HVL			[1]		
<i>t buffer-time = exptin</i> DARK	S/C, DATA, NONE	rget (see Cy 20 IHB	SEGMENT=B	FUV HVLOW HVL		1 Secs (1 Secs)	[1]		
DARK	S/C, DATA, NONE	rget (see Cy 20 IHB		FUV HVLOW HVL		1 Secs (1 Secs)			
DARK	S/C, DATA, NONE	rget (see Cy 20 IHB	section 5.4.1)	FUV HVLOW HVL		1 Secs (1 Secs)			
				FUV HVLOW HVL		1 Secs (1 Secs)			
ork-around to efficier									
ork-around to efficier						[==>]	[1]		
Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
109 WAVE	COS/FUV, TIME-TAG, WCA	G130M	FP-POS=3;			140 Secs (140 Secs)			
		1096 A	SEGMENT=A;			[==>]			
L			FLASH=NO				[1]		
157 (6) GD71	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=10			102 Secs (102 Secs)			
		1577 A	2;			[==>]			
.415			FP-POS=3;				[1]		
			SEGMENT=A						
umber of events that	each buffer can record	han exp time, so set	buffer time to exptime.						
	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=15		<del></del>	154 Secs (154 Secs)			
		1623 A	4;			[==>]	T		
.413			FP-POS=3;				[1]		
			SEGMENT=A						
	W L 157 (6) GD71 .413 .413 .416 count rate in FU 162 (6) GD71 .413 .413 .416 count rate in FU .413	W L  157 (6) GD71 COS/FUV, TIME-TAG, PSA  413  Affer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger to the count rate in FUVA, per ETC calculation above  162 (6) GD71 COS/FUV, TIME-TAG, PSA  413  Affer time is 345 sec=2.35e6/7635  Cts/sec in FUVA	W L 1096 A  157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M 1577 A  1577 A	W L 1096 A SEGMENT=A; FLASH=NO  157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A  after-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime. The count rate in FUVA, per ETC calculation above  162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15 4; FP-POS=3; SEGMENT=A  after time is 345 sec=2.35e6/7635 cts/sec in FUVA	W L 1096 A SEGMENT=A; FLASH=NO  157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A  Iffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime.  In the count rate in FUVA, per ETC calculation above  162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15 4; 413 FP-POS=3; SEGMENT=A  Iffer time is 345 sec=2.35e6/7635 cts/sec in FUVA	UL L 1096 A SEGMENT=A; FLASH=NO  157 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=10 2; FP-POS=3; SEGMENT=A  Iffer-time for FUVA is 2.35e6/8770 = 268 sec, which is larger than exp time, so set buffer time to exptime. In the count rate in FUVA, per ETC calculation above  162 (6) GD71 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=15 4; 413 1623 A 4; FP-POS=3; SEGMENT=A  Iffer time is 345 sec=2.35e6/7635 cts/sec in FUVA	The state of the count rate in FUVA, per ETC calculation above   1623 A   1623 A		



Proposal 14435	- GD71 (17)	- COS FUV	Spectroscopic	Sensitivity Monitoring
1 1000301 17733	- 001 1 (111			

**Proposal 14435, GD71 (17), implementation**Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 17-OCT-2016:00:00:00 AND 23-OCT-2016:00:00:00

Comments: exposure 4: GO wavecal to calculate the OSM shifts of the G130M/1096/FUVB observation

George Chapman added Exposure 3

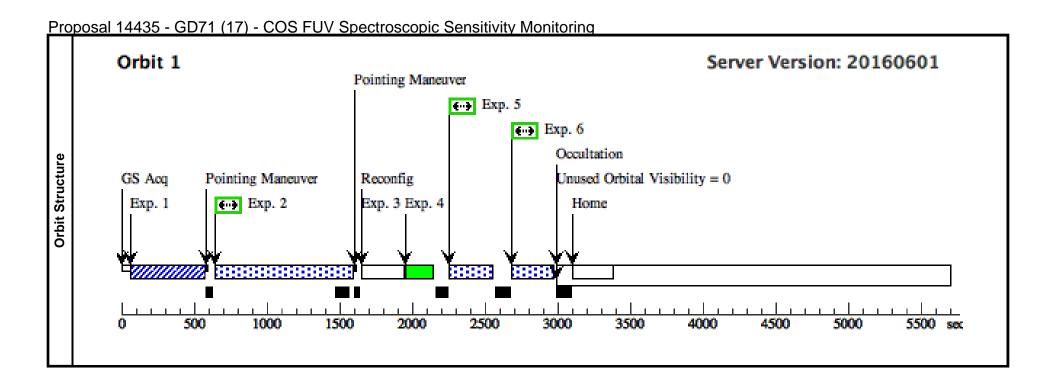
Optimized the exposure time for the G130M/1096 setting to increase its SNR (exp time = 744 s) while remaining within the allocated time.

(GD71 (17)) 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
] ae	(6)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
<u>ā</u>			Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr		
۵ ا			Equinox: J2000	Epoch of Position: 2000		
×	Comme	ents: Use sma RA, D	DEC amd PM as in proposal 12392 by Bohlin et al.			
证	Extende	ed=NO				

Proposal 14435 - GD71 (17) - 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]
	mments: Exptim ing 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=64			744 Secs (744 Secs)	
	6/FUVB (COS.sp.418			1096 A	4;			[==>]	
	698)				FP-POS=3;				[1]
					SEGMENT=B				
Co	mments: Set bu <u>f</u>	fer-time = exptim	e - $100$ $sec$ = $644$ to maximize time on tar	get (see Cy 20 IHB	section 5.4.1)				1
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL		1 Secs (1 Secs)	
						OW OW		[==>]	[1]
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)									
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				
2.3	35e6 is the numb	er of events that e	2.35e6/8770 = 268 sec, which is larger theach 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			1623 A	4;			[==>]	
	(COS.sp.413 984)				FP-POS=3;				[1]
1	•				SEGMENT=A				



Proposal 14435, WD0308 - complete (02), completed Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

Name

WD0308-565

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

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2015:00:00:00 AND 03-JAN-2016:00:00:00

Comments: George Chapman added Exposure 9

(WD0308 - complete (02)) 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.

Fixed Targets Diagnostics

**Target Coordinates** RA: 03 09 47.9200 (47.4496667d) Targ. Coord. Corrections Proper Motion RA: 0.018141 sec of time/yr Fluxes V=14.07+/-0.02

Reference Frame: ICRS

Miscellaneous

Dec: -56 23 49.41 (-56.39706d) Equinox: J2000

Proper Motion Dec: 0.0643 arcsec/yr

Epoch of Position: 2000

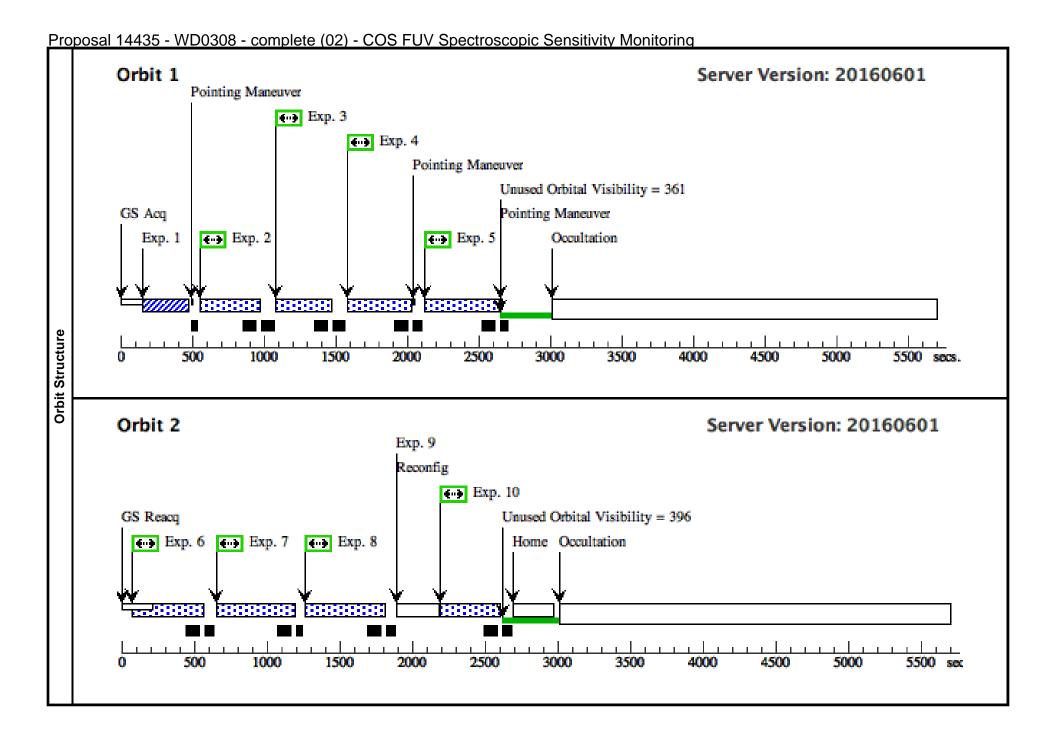
Comments: Coordinates from Charle's proposal Extended=NO

Proposal 14435 - WD0308 - complete (02) - 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	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI	[	45 Secs (45 Secs)	
	(396029)					O BASE1B3		[==>]	[1]
2	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			226 Secs (226 Secs)	
	(COS.sp.395 840)	i		1222 A	6; FP-POS=3			[==>]	[1]
bu		ime - 100 sec to maxi	/3 * ETC buffer time is 2/3*455 which imize time on target = 126	is larger than expti	me. Set				
3	G130M/129	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14			244 Secs (244 Secs)	
	1 (COS.sp.395 841)	i		1291 A	4; FP-POS=3			[==>]	[1]
Sir	mments: ETC b ce buffer time l ntinue use of 1	arger than exptime u	Target has been observed before and se buffer time = exptime -100 sec to m	so no need for 2/3 s aximize time on tarş	afety margin. get = 144				
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			312 Secs (312 Secs)	
	7 (COS on 205	•		1327 A	2;			[==>]	
	(COS.sp.395 843)	,			FP-POS=3				[1]
Sin		arger than exptime u	Target has been observed before and se buffer time = exptime -100 sec to m						
		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=23			334 Secs (334 Secs)	
<b>.</b>   "	5/FUVA	(1) 1120000 000	000,101,11112,1110,1211	1055 A	4;			[==>]	
3	(OS.sp.5241 17)				FP-POS=3;			,	[1]
5	• /				SEGMENT=BOTH				
Ta Sei	get has been o	uffer time is larger th bserved before no ne exptime - 100 = 224 FP-POS	han exptime ed to 2/3 factor						
6		(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	get has been o	ouffer time is 632, lar bserved before no ne exptime - 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]
Ta	get has been o	ouffer time is 794, lar bserved before no ne exptime - 100 = 300							
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)	j		1280 A	0; FP-POS=3			[==>]	[2]
Ta Sei	get has been o	ouffer time is 479, lar bserved before no ne exptime - 100 = 180 FP-POS							
-									

Proposal 14435 - WD0308 - complete (02) - COS FUV Spectroscopic Sensitivity Monitoring

	DARK S/C, DATA, NONE				QASISTATES COS	1 Secs (1 Secs)	
					FUV HVLOW HVL OW	[==>]	[2]
Comme	ents: Work-around to efficiently s	chedule the reconfiguration to SEG-	A. Eliminates SPS	SS induced gaps.			
	G140L/1105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA /FUVA (OS.sp.3958 53)	COS/FUV, TIME-TAG, PSA	IME-TAG, PSA G140L	BUFFER-TIME=18	3	280 Secs (280 Secs)	
		1105 A 0;		[==>]			
53			F	FP-POS=3;			[2]
	,			SEGMENT=A			



<u>P</u>	oposal 14435 - WD0308 - complete (04) - COS FUV Spectroscopic Sensitivity Monitoring	
	Proposal 14435, WD0308 - complete (04), completed	Wed Nov 09 16:01:11 GMT 2016
<u>.</u>	Diagnostic Status: Warning	
<u>:v</u>	Scientific Instruments: S/C, COS/FUV, COS/NUV	
1	Special Requirements: SCHED 100%; BETWEEN 22-FEB-2016:00:00:00 AND 28-FEB-2016:00:00:00	
	Comments: George Chapman added Exposure 9	

	<b>≃</b> 1	(WD0308 - complete (04)) 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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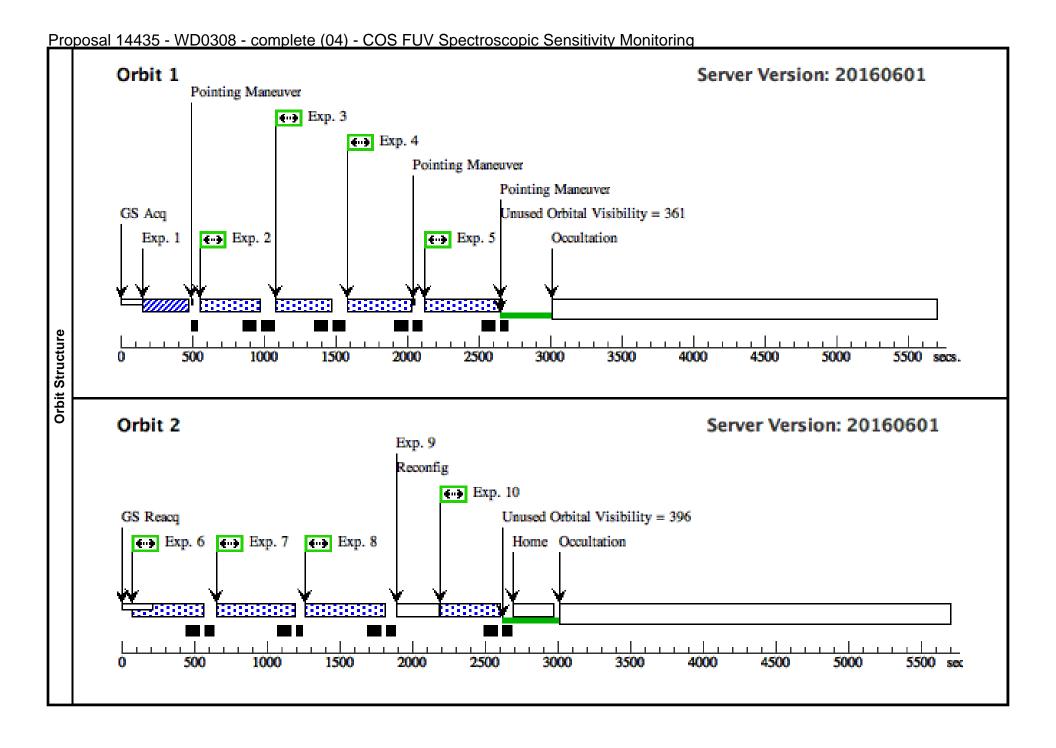
ב							
ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
] B.	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS	
<u>a</u> ا			Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 0.0643 arcsec/yr			
<u>ق</u>			Equinox: J2000	Epoch of Position: 2000			
×e	Commen	nts: Coordinates from Ch ed=NO	arle's proposal				
l iT	Extende	d=NO					

Proposal 14435 - 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 BASEIBS		[==>]	[1]
2	G130M/122	(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]
buf		ime - 100 sec to max	/3 * ETC buffer time is 2/3*455 which imize time on target = 126	is larger than exptin	me. Set				
3	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]
Sin		ärger than exptime u	. Target has been observed before and use buffer time = exptime -100 sec to m						
4		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			312 Secs (312 Secs)	
	7 (COS.sp.395			1327 A	2;			[==>]	647
	843)				FP-POS=3				[1]
Sin	ce buffer time l	arger than exptime u	. Target has been observed before and use buffer time = exptime -100 sec to m						
	ntinue use of 1								
5	G130M/105 5/FUVA	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=23 4;			334 Secs (334 Secs)	
	(OS.sp.5241			1055 A	FP-POS=3;			I = => J	[1]
5	17)				SEGMENT=BOTH				[1]
Tar Set	get has been of	uffer time is larger ti bserved before no ne xptime - 100 = 224 FP-POS							
6	G160M/157 7	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	(395846)			1577 A	BUFFER-TIME=19 0			[==>]	[2]
Tar	get has been of	uffer time is 632, lar bserved before no ne xptime - 100 = 190	ger than exptime ed 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]
Tar	get has been of	uffer time is 794, lar bserved before no ne xptime - 100 = 300	ger than exptime ed to 2/3 factor						
8	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			[==>]	[2]
Tar Set	get has been of	uffer time is 479, lar bserved before no ne xptime - 100 = 180 FP-POS	ger than exptime ed to 2/3 factor						

Proposal 14435 - WD0308 - complete (04) - COS FUV Spectroscopic Sensitivity Monitoring

9	DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL OW	$\frac{1 \text{ Secs } (1 \text{ Secs})}{I = => I}$	[2]
Comme	ents: Work-around to efficiently s	chedule the reconfiguration to SEG-A	A. Eliminates SPS	SS induced gaps.			
/I (0	G140L/1105 (1) WD0308-565 FUVA OS.sp.3958 3)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A		280 Secs (280 Secs) [==>]	[2]
Target Set buf	ents: ETC buffer time is 398 , larg has been observed before no need fer time = exptime - 100 = 180 ue use of 1 FP-POS						



	1	Prop	osal 14435	- WD0308 -	complete (	(06) - COS	S FUV Spe	ectroscopic S	<u>Sensitivity</u>	<b>Monitoring</b>	
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Proposal 14435, WD0308 - complete (06), completed

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 18-APR-2016:00:00:00 AND 24-APR-2016:00:00:00

Comments: George Chapman added Exposure 9

**Diagnostics** 

Name

WD0308-565

(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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**Target Coordinates** RA: 03 09 47.9200 (47.4496667d)

Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr

Fluxes

V=14.07+/-0.02 Reference Frame: ICRS

Miscellaneous

Wed Nov 09 16:01:11 GMT 2016

Dec: -56 23 49.41 (-56.39706d)

Equinox: J2000

Targ. Coord. Corrections

Epoch of Position: 2000

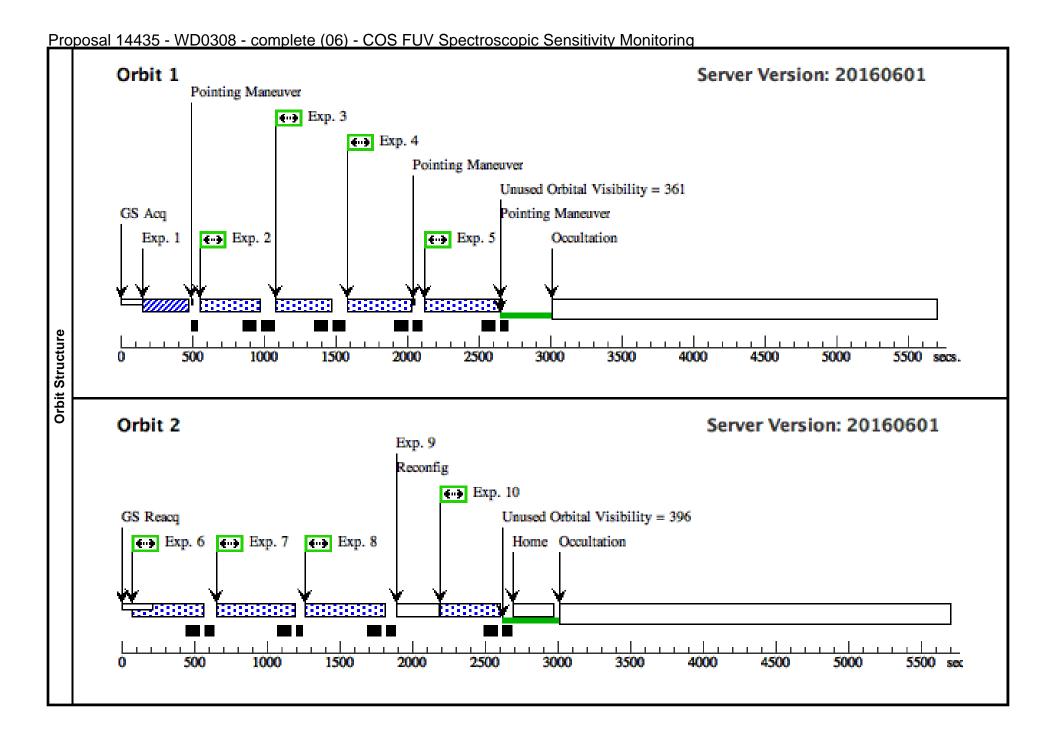
| Comments: Coordinates from Charle's proposal | Extended=NO

Proposal 14435 - WD0308 - complete (06) - 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	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
	(396029)							[==>]	[1]
2	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12 6;	2		226 Secs (226 Secs)	
	(COS.sp.395 840)	i		1222 A	FP-POS=3			[==>]	[1]
Co buj	omments: Buffer ffer-time = expt	time calculated as i ime - 100 sec to ma	2/3 * ETC buffer time is 2/3*455 which ximize time on target = 126	is larger than exptin	ne. Set				
Co	ntinue use of 1							Tana sana	
3	G130M/129 1	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14 4;	1		244 Secs (244 Secs)	
	(COS.sp.395 841)	j		1291 A	FP-POS=3			[==>]	[1]
Sir		arger than exptime	c. Target has been observed before and use buffer time = exptime -100 sec to m						
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=2	[		312 Secs (312 Secs)	
	7 (COS.sp.395 843)	j		1327 A	2; FP-POS=3			[==>]	[1]
Sin		arger than exptime	c. Target has been observed before and use buffer time = exptime -100 sec to m						
5	,	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=23	3		334 Secs (334 Secs)	
ľ	5/FUVA	(-)		1055 A	4;			[==>]	
5	(OS.sp.5241 17)				FP-POS=3; SEGMENT=BOTI	-I			[1]
Ta Sei	rget has been o	uffer time is larger bserved before no n exptime - 100 = 224 FP-POS	eed to 2/3 factor						
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 o	nuffer time is 632, la bserved before no n exptime - 100 = 190	eed 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	0		[==>]	[2]
Ta	rget has been o	ouffer time is 794, la bserved before no n exptime - 100 = 300	eed to 2/3 factor						
8	G140L/1230	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18	3		280 Secs (280 Secs)	
	(COS.sp.395 854)	j		1280 A	0; FP-POS=3			[==>]	[2]
Ta Sei	rget has been o	nuffer time is 479, la bserved before no n exptime - 100 = 180 FP-POS	eed to 2/3 factor						

Proposal 14435 - WD0308 - complete (06) - COS FUV Spectroscopic Sensitivity Monitoring

9	DARK	S/C, DATA, NONE			QASISTATES COS	1 Secs (1 Secs)	
					FUV HVLOW HVL OW	[==>J	[2]
Com	ments: Work-around to efficiently s	chedule the reconfiguration to SEG-	A. Eliminates SPS	SS induced gaps.			
10	G140L/1105 (1) WD0308-565 /FUVA (OS.sp.3958 53)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A		280 Secs (280 Secs) [==>]	[2]
Targ Set b	ments: ETC buffer time is 398 , larg get has been observed before no nee buffer time = exptime - 100 = 180 tinue use of 1 FP-POS						



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Proposal 14435, WD0308 - complete (08), completed Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

Name

WD0308-565

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

Special Requirements: SCHED 100%; BETWEEN 20-JUN-2016:00:00:00 AND 26-JUN-2016:00:00:00

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.

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**Diagnostics** 

**Target Coordinates** Targ. Coord. Corrections Fluxes Miscellaneous V=14.07+/-0.02 Reference Frame: ICRS RA: 03 09 47.9200 (47.4496667d) Proper Motion RA: 0.018141 sec of time/yr

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

Equinox: J2000 Epoch of Position: 2000

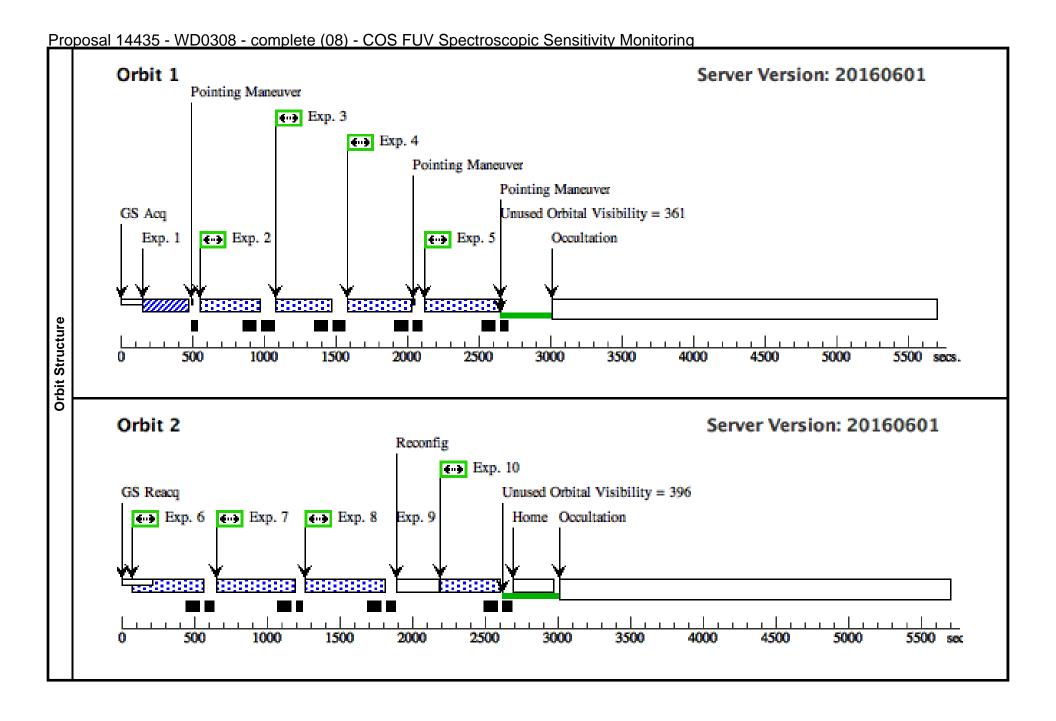
| Comments: Coordinates from Charle's proposal | Extended=NO

Proposal 14435 - WD0308 - complete (08) - 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	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
	(396029)							[==>]	[1]
2	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12	2		226 Secs (226 Secs)	
	(COS.sp.395 840)			1222 A	6; FP-POS=3			[==>]	[1]
Co bu <u>j</u>	mments: Buffer fer-time = expt	time calculated as 2, ime - 100 sec to maxi	/3 * ETC buffer time is 2/3*455 which imize time on target = 126	is larger than exptin	me. Set				
Co	ntinue use of 1								_
3	G130M/129	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14 4;	1		244 Secs (244 Secs)	
	(COS.sp.395 841)			1291 A	FP-POS=3			[==>]	[1]
Sin		ärger than exptime u	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	[		312 Secs (312 Secs)	
	7 (COS.sp.395 843)			1327 A	2; FP-POS=3			[==>]	[1]
Sin		arger than exptime u	Target has been observed before and se buffer time = exptime -100 sec to m						
5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=23	3		334 Secs (334 Secs)	
	5/FUVA	( )	., .,	1055 A	4;			[==>1	
<u>Co</u>	(OS.sp.5241 17)				FP-POS=3; SEGMENT=BOTH	<del>I</del>			[1]
Tai Set	rget has been ol	uffer time is larger th bserved before no neo xptime - 100 = 224 FP-POS	han exptime ed to 2/3 factor						
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]
Tai	rget has been of	uffer time is 632, lar bserved before no ned xptime - 100 = 190							
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=3	0		[==>]	[2]
Ta	rget has been of	uffer time is 794, lar bserved before no ne xptime - 100 = 300							
8	G140L/1230	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18	3		280 Secs (280 Secs)	
	(COS.sp.395 854)			1280 A	0; FP-POS=3			[==>]	[2]
Tai Set	rget has been of	uffer time is 479, lar bserved before no ned xptime - 100 = 180 FP-POS							
					20				

Proposal 14435 - WD0308 - complete (08) - COS FUV Spectroscopic Sensitivity Monitoring

)	DARK	S/C, DATA, NONE			QASISTATES COS	1 Secs (1 Secs)	
					FUV HVLOW HVL OW	[==>]	[2]
Comn	nents: Work-around to efficiently s	schedule the reconfiguration to SEG-2	A. Eliminates SPS	S induced gaps.			•
	G140L/1105 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18		280 Secs (280 Secs)	
,	/FUVA (OS.sp.3958		1105 A	0;		[==>]	
	(O3.sp.3938 53)			FP-POS=3;			[2]
	•			SEGMENT=A			



<u> </u>	Proposal 14435 - WD0308 - complete (10) - COS FUV Spectroscopic Sensitivity Monitoring	
	Proposal 14435, WD0308 - complete (10), completed	Wed Nov 09 16:01:11 GMT 2016

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 22-AUG-2016:00:00:00 AND 28-AUG-2016:00:00:00

Comments: George Chapman added Exposure 9

(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.

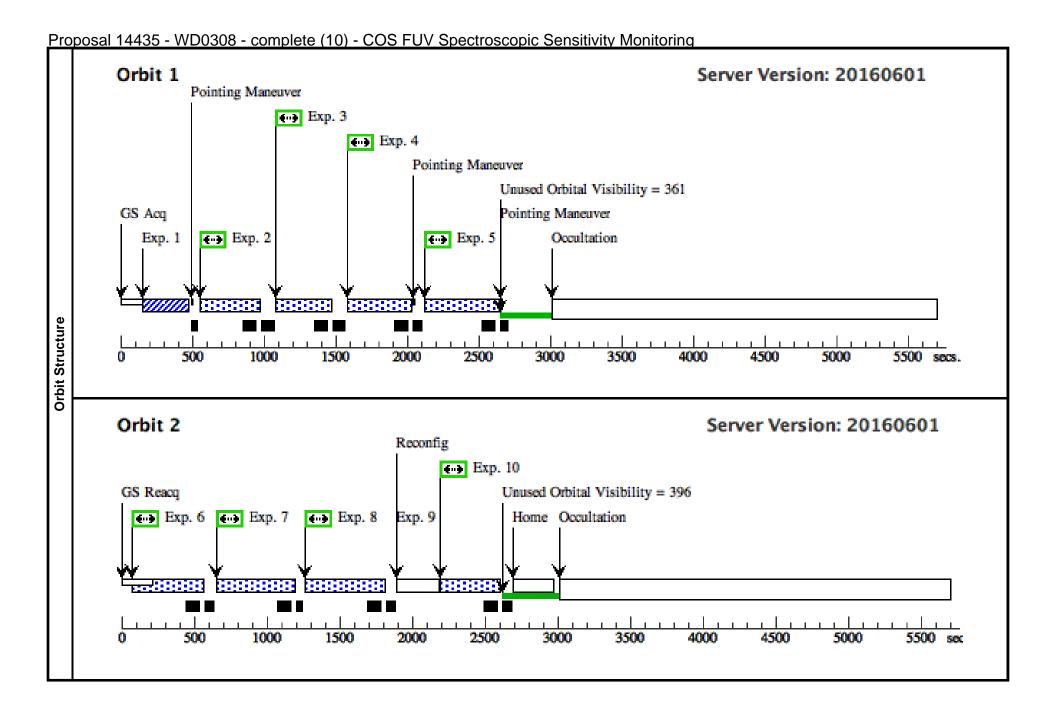
ts	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous		
g	(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper Motion RA: 0.018141 sec of time/yr	V=14.07+/-0.02	Reference Frame: ICRS		
<u>a</u>			Dec: -56 23 49.41 (-56.39706d)	Proper Motion Dec: 0.0643 arcsec/yr				
٦			Equinox: J2000	Epoch of Position: 2000				
l. <u>×</u>	Comments: Coordinates from Charle's proposal Extended=NO							

Proposal 14435 - 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	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs)	
	(396029)							[==>]	[1]
2	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12	2		226 Secs (226 Secs)	
	(COS.sp.395 840)	i		1222 A	6; FP-POS=3			[==>]	[1]
Co buj	omments: Buffer time calculated as 2/3 * ETC buffer time is 2/3*455 which is larger than exptime. Set suffer-time = exptime - 100 sec to maximize time on target = 126								
Co	ntinue use of 1								
3	G130M/129 (1) WD0308-565		COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14 4;	1		244 Secs (244 Secs)	
	(COS.sp.395 841)	i		1291 A	FP-POS=3			[==>]	[1]
Sin	Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 144 Continue use of 1 FP-POS								
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=2	[		312 Secs (312 Secs)	
	7 (COS.sp.395 843)	j		1327 A	2; FP-POS=3			[==>]	[1]
Sin	Comments: ETC buffer time is 330 sec. Target has been observed before and so no need for 2/3 safety margin. Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212 Continue use of 1 FP-POS								
5	,	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=2	3		334 Secs (334 Secs)	
	5/FUVA	( )		1055 A	4;			[==>]	
<u>Co</u>	(OS.sp.5241 17)				FP-POS=3; SEGMENT=BOTI	·I			[1]
Ta. Set	Comments: ETC buffer time is larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 224 Continue use of 1 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	Comments: ETC buffer time is 632, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 190								
7		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			400 Secs (400 Secs)	
	3 (395848)			1623 A	BUFFER-TIME=3	0		[==>]	[2]
Ta	rget has been o	ouffer time is 794, la bserved before no n exptime - 100 = 300	eed to 2/3 factor						
8		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=13	3		280 Secs (280 Secs)	
	(COS.sp.395 854)	j		1280 A	0; FP-POS=3			[==>]	[2]
Ta. Set	rget has been o	nuffer time is 479, la bserved before no n exptime - 100 = 180 FP-POS	eed to 2/3 factor						

Proposal 14435 - WD0308 - complete (10) - COS FUV Spectroscopic Sensitivity Monitoring

9	DARK	S/C, DATA, NONE			QASISTATES COS	1 Secs (1 Secs)	
					FUV HVLOW HVL OW	[==>J	[2]
Com	nments: Work-around to efficiently s	chedule the reconfiguration to SEG-	A. Eliminates SPS	SS induced gaps.			
10	G140L/1105 (1) WD0308-565 /FUVA (OS.sp.3958 53)	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=18 0; FP-POS=3; SEGMENT=A		280 Secs (280 Secs) [==>]	[2]
Targ Set l	nments: ETC buffer time is 398 , lar get has been observed before no nee ouffer time = exptime - 100 = 180 tinue use of 1 FP-POS						



Proposal 14435 - WD0308 - complete (12) - COS FUV Spectroscopic Sensitivity Monitoring	
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Proposal 14435, WD0308 - complete (12), implementation Wed Nov 09 16:01:11 GMT 2016

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Diagnostic Status: Warning

Name

WD0308-565

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

Special Requirements: SCHED 100%; BETWEEN 17-OCT-2016:00:00:00 AND 23-OCT-2016:00:00:00

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.

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Target CoordinatesTarg. Coord. CorrectionsFluxesMiscellaneousRA: 03 09 47.9200 (47.4496667d)Proper Motion RA: 0.018141 sec of time/yrV=14.07+/-0.02Reference 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 Extended=NO

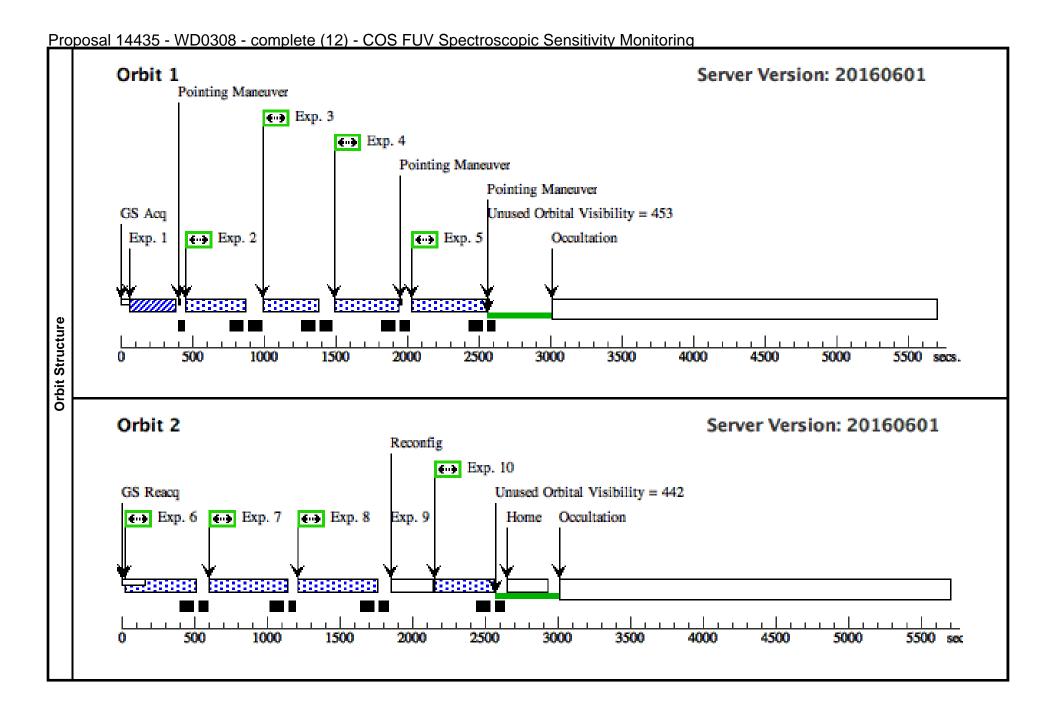
39

Proposal 14435 - 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	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA		GS ACQ SCENARI		45 Secs (45 Secs)	
	(396029)					O SINGLE		[==>]	[1]
2	G130M/122	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=12			226 Secs (226 Secs)	_
	(COS.sp.395 840)	5		1222 A	6; FP-POS=3			[==>]	[1]
buj	fer-time = expt	time - 100 sec to mo	s 2/3 * ETC buffer time is 2/3*455 whick aximize time on target = 126	is larger than exptin	me. Set				
$\frac{Co}{2}$	ntinue use of 1		COS TINI TINE THE CORE	G12014				244.5 (244.5 )	T
3	G130M/129 1	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14 4;			244 Secs (244 Secs)	
	(COS.sp.395 841)	5		1291 A	FP-POS=3			[==>]	[1]
Sin		lärger than exptime	ec. Target has been observed before and e use buffer time = exptime -100 sec to n						
4	G130M/132	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=21			312 Secs (312 Secs)	
	7 (COS.sp.395 843)	5		1327 A	2; FP-POS=3			[==>]	[1]
Sin	mments: ETC b ice buffer time b ntinue use of 1	lärger than exptime	ec. Target has been observed before and e use buffer time = exptime -100 sec to n	l so no need for 2/3 s naximize time on targ	afety margin. get = 212				
5		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=23			334 Secs (334 Secs)	
	5/FUVA			1055 A	4;			[==>]	
<u>Co</u>	(OS.sp.5241 17)				FP-POS=3; SEGMENT=BOTH				[1]
Tai Set	rget has been o	ouffer time is largen bserved before no 1 exptime - 100 = 22: FP-POS	need to 2/3 factor						
6		(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M	FP-POS=3;			290 Secs (290 Secs)	
	7 (395846)			1577 A	BUFFER-TIME=19			[==>]	[2]
Tai	rget has been o	ouffer time is 632, l bserved before no 1 exptime - 100 = 190	arger than exptime need to 2/3 factor 0						
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]
Tai	rget has been o	ouffer time is 794, l bserved before no i exptime - 100 = 300	arger than exptime need to 2/3 factor 0						
8	G140L/1230	(1) WD0308-565		G140L	BUFFER-TIME=18			280 Secs (280 Secs)	
	(COS.sp.395 854)	5		1280 A	0; FP-POS=3			[==>]	[2]
Tai Set	rget has been o	bserved before no 1 exptime - 100 = 180							
					40				

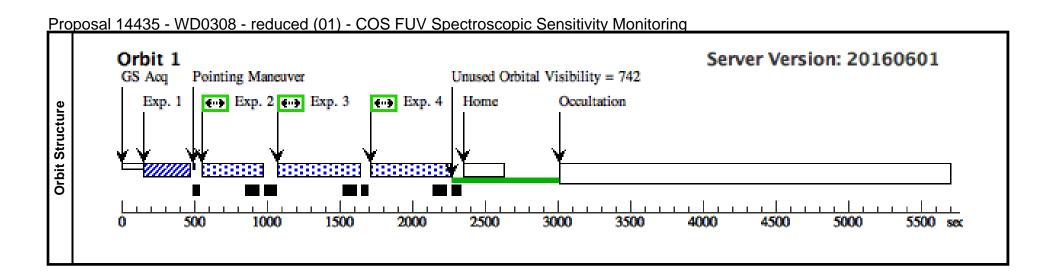
Proposal 14435 - WD0308 - complete (12) - COS FUV Spectroscopic Sensitivity Monitoring

Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.    10   G140L/1105 (1) WD0308-565   COS/FUV, TIME-TAG, PSA   G140L   BUFFER-TIME=18   280 Secs (280 Secs)   FUVA   (OS.sp.3958   1105 A   TD DOS 6   TD DOS 6	9	DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVL	1 Secs (1 Secs)	
10 G140L/1105 (1) WD0308-565 COS/FUV, TIME-TAG, PSA G140L BUFFER-TIME=18 (OS.sp.3958 FP-POS=3;   280 Secs (280 Secs)							[==>]	[2]
/FUVA (OS.sp.3958 53)	Con	nments: Work-around to efficiently s	chedule the reconfiguration to SEG	A. Eliminates SPS	SS induced gaps.			
(OS.sp.3958 53) FP-POS=3; [==>]	10	` /	COS/FUV, TIME-TAG, PSA	G140L	BUFFER-TIME=18		280 Secs (280 Secs)	
53) 1 [2]		(OS.sp.3958	1105 A	I = => I				
SEGMENT=A				FP-POS=3;			[2]	
					SEGMENT=A			
			d to 2/3 factor					
Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180		atinue use of 1 FP-POS						



Pro	pposal 14435 - WD0308	3 - reduced (01) - COS F	UV Spectros	scopic Sensitivity I	Monitoring		
	Proposal 14435, WD0308 - reduced		•		•	Wed Nov 09 16:01:11	GMT 2016
Visit	Diagnostic Status: Warning	•					
ΙΞ̈́	Scientific Instruments: COS/FUV, Co	OS/NUV					
	Special Requirements: SCHED 100%	6; BETWEEN 23-NOV-2015:00:00:00 A	AND 29-NOV-2015	5:00:00:00			
Diagnostics	(WD0308 - reduced (01)) Warning (F	Form): For the best data quality, it is stro	ngly recommended	that all four FP-POS position	s be used when observing at a g	given COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ.	Coord. Corrections	Fluxes	Miscellaneous	
Targets	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper	r Motion RA: 0.018141 sec of	time/yr V=14.07+/-0.02	Reference Frame: ICRS	
<u>a</u>		Dec: -56 23 49.41 (-56.39706d)	Proper	r Motion Dec: 0.0643 arcsec/y	r		
15		Equinox: J2000	Epoch	of Position: 2000			
Fixed	Comments: Coordinates from Charle Extended=NO	s's proposal					
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Sp	ecial 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]
ı	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	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	so no need for 2/3 s aximize time on tar	safety margin. get = 144			
l s	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 r Set buffer time = exptime - 100 = 300	need to 2/3 factor					
I	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;		[==>]	[1]
1	35.7			FP-POS=3			[*]

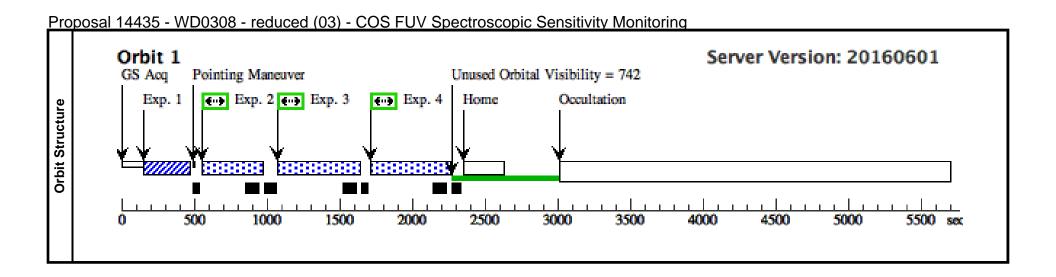
Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS



	Proposal 14435, WD0308 - reduced	d (03), completed				Wed Nov 09 16:01:11	GMT 2016
Visit	Diagnostic Status: Warning						
>	Scientific Instruments: COS/FUV, C						
		6; BETWEEN 18-JAN-2016:00:00:00 A					
Diagnostics	(WD0308 - reduced (03)) Warning (	Form): For the best data quality, it is stro	ngiy recommended i	tnat all four FP-POS positions be used	i when observing at a given	n COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ. (	Coord. Corrections	Fluxes	Miscellaneous	
<b>Targets</b>	(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			
ق		Equinox: J2000	Epoch	of Position: 2000			
Fixed	Comments: Coordinates from Charle Extended=NO	e's proposal					
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Special Re	qs. Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
		COCATTI ACOMA CE DOA	MIRRORA			45 Secs (45 Secs)	
	1 ACQ/IM (1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIKKOKA			+3 BCCs (+3 BCCs)	_
	1 ACQ/IM (1) WD0308-565 (396029)	COS/NUV, ACQ/IMAGE, BOA	MIKKOKA			[==>]	[1]
			G130M	BUFFER-TIME=14			[1]
	(396029)			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 so		G130M 1291 A so no need for 2/3 so	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 so	COS/FUV, TIME-TAG, PSA  ec. Target has been observed before and e use buffer time = exptime -100 sec to m	G130M 1291 A so no need for 2/3 so	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 so	COS/FUV, TIME-TAG, PSA  ec. Target has been observed before and e use buffer time = exptime -100 sec to m	G130M 1291 A so no need for 2/3 so aximize time on targ	4; FP-POS=3 afety margin. set = 144		[==>] 244 Secs (244 Secs) [==>]	
Exposures	(396029)  2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841)  Comments: ETC buffer time is 330 so	cc. Target has been observed before and e use buffer time = exptime -100 sec to m  COS/FUV, TIME-TAG, PSA	G130M 1291 A so no need for 2/3 so aximize time on targ	4; FP-POS=3 afety margin. set = 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 ssince 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, 1 Target has been observed before no Set buffer time = exptime - 100 = 30  4 G140L/1230 (1) WD0308-565	cc. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA Carger than exptime need to 2/3 factor	G130M 1291 A so no need for 2/3 so aximize time on targ	4; FP-POS=3  afety margin. ret = 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 ssince 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, 1 Target has been observed before no Set buffer time = exptime - 100 = 30	cc. Target has been observed before and e use buffer time = exptime -100 sec to m COS/FUV, TIME-TAG, PSA Carger than exptime need to 2/3 factor	G130M 1291 A so no need for 2/3 so aximize time on targ G160M 1623 A	4; FP-POS=3 afety margin. ret = 144 FP-POS=3; BUFFER-TIME=30 0		I == >   244 Secs (244 Secs)	[1]

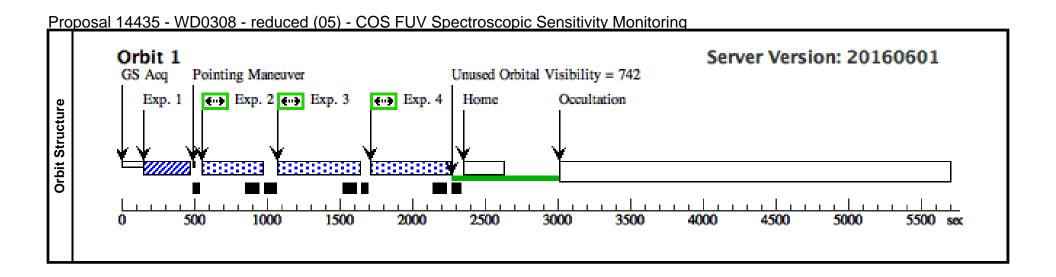
45

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



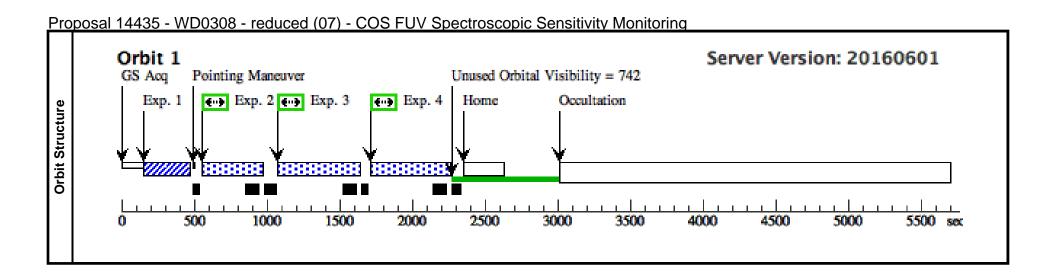
Pro	pposal 14435 - WD0308	s - reduced (05) - COS F	UV <u>Spectros</u>	scopic Sensitivity	Monitor	ing		
	Proposal 14435, WD0308 - reduced						Wed Nov 09 16:01:12	GMT 2016
Visit	Diagnostic Status: Warning							
Ϊ́Ξ	Scientific Instruments: COS/FUV, CO	OS/NUV						
	Special Requirements: SCHED 100%	; BETWEEN 21-MAR-2016:00:00:00 A	AND 27-MAR-2016	:00:00:00				
Diagnostics	(WD0308 - reduced (05)) Warning (F	Form): For the best data quality, it is stro	ngly recommended t	that all four FP-POS positio	ons be used wh	nen observing at a give	en 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 Extended=NO	'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)						[==>]	[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	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 su	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, la 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)	
1	(COS.sp.395 854)		1280 A	0;			[==>]	[1]
1	'/			FP-POS=3				1-1

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



l	Proposal 14435, WD0308 - reduced	i (07), completed				Wed Nov 09 16:01:12	GMT 2016
Visit	Diagnostic Status: Warning						
>	Scientific Instruments: COS/FUV, C						
		6; BETWEEN 23-MAY-2016:00:00:00 A					
Diagnostics	(WD0308 - reduced (07)) Warning (i	Form): For the best data quality, it is stro	ngly recommended th	hat all four FP-POS positions be used	when observing at a give	n COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ. C	Coord. Corrections	Fluxes	Miscellaneous	
<b>Targets</b>	(1) WD0308-565	RA: 03 09 47.9200 (47.4496667d)	Proper N	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 N	Motion Dec: 0.0643 arcsec/yr			
g		Equinox: J2000	Epoch o	of Position: 2000			
Fixed	Comments: Coordinates from Charle Extended=NO	e's proposal					
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els.	Opt. Params. Special Rec	s. 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]
						244 Secs (244 Secs)	
	2 G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M	BUFFER-TIME=14		244 Secs (244 Secs)	
	2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=14 4; FP-POS=3		[==>]	[1]
res	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 say	4; FP-POS=3 fety margin.			[1]
sures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 say	4; FP-POS=3 fety margin.			[1]
Exposures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A so no need for 2/3 say naximize time on targe	4; FP-POS=3 fety margin. et = 144		[==>]	[1]
Exposures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	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 say taximize time on targe G160M	4; FP-POS=3 fety margin. et = 144 FP-POS=3; BUFFER-TIME=30		I==>J  400 Secs (400 Secs)	
Exposures	1 (COS.sp.395 841)  Comments: ETC buffer time is 330 ss 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, larget has been observed before no 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  larger than exptime need to 2/3 factor 0	1291 A so no need for 2/3 say taximize time on targe G160M	4; FP-POS=3  fety margin. et = 144  FP-POS=3; BUFFER-TIME=30 0		I==>J  400 Secs (400 Secs)	
Exposures	1 (COS.sp.395 841)  Comments: ETC buffer time is 330 so 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, larget has been observed before no 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  larger than exptime need to 2/3 factor 0	1291 A  so no need for 2/3 say naximize time on targe  G160M  1623 A	4; FP-POS=3 fety margin. et = 144 FP-POS=3; BUFFER-TIME=30 0		I==>J	

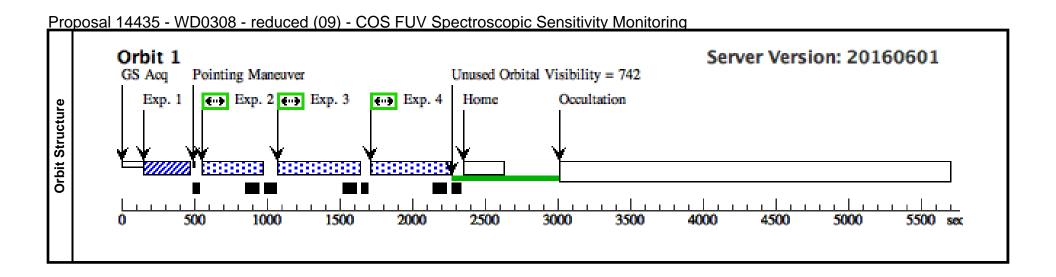
Comments: ETC buffer time is 479, larger than exptime Target has been observed before no need to 2/3 factor Set buffer time = exptime - 100 = 180 Continue use of 1 FP-POS



	Proposal 14435, WD0308 - reduced	(09), completed			Wed Nov 09 16:01:12	GMT 2016
Visit	Diagnostic Status: Warning					
>	Scientific Instruments: COS/FUV, Co					
		6; BETWEEN 25-JUL-2016:00:00:00 AI				
Diagnostics	(WD0308 - reduced (09)) Warming (f	orm): For the best data quality, it is stroi	ongly recommended that all four FP-POS position	ons be used when observing at a given	n COS CENWAVE setting.	
ts	# Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	
<b>Targets</b>	(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	c/yr		
তু		Equinox: J2000	Epoch of Position: 2000			
Fixed	Comments: Coordinates from Charle Extended=NO	's proposal				
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els. Opt. Params. S	Special Regs. 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)	
	2 G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	4.			
	2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841)	COS/FUV, TIME-TAG, FSA	1291 A 4; FP-POS=3		[==>]	[1]
res	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and a use buffer time = exptime -100 sec to ma	FP-POS=3  so no need for 2/3 safety margin.		[==>]	[1]
sures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e c use buffer time = exptime -100 sec to m	FP-POS=3  so no need for 2/3 safety margin.		[==>] 400 Secs (400 Secs)	[1]
Exposures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e c use buffer time = exptime -100 sec to m	FP-POS=3  so no need for 2/3 safety margin. taximize time on target = 144		. ,	[1]
Exposures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e use buffer time = exptime -100 sec to me COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	FP-POS=3  so no need for 2/3 safety margin. taximize time on target = 144  G160M FP-POS=3; 1623 A BUFFER-TIME=30		400 Secs (400 Secs)	
Exposures	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 r Set buffer time = exptime - 100 = 300  4 G140L/1230 (1) WD0308-565	ec. Target has been observed before and a use buffer time = exptime -100 sec to make to COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	so no need for 2/3 safety margin. taximize time on target = 144  G160M FP-POS=3; 1623 A BUFFER-TIME=30 0  G140L BUFFER-TIME=18		400 Secs (400 Secs)	
Exposures	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 a use buffer time = exptime -100 sec to make to COS/FUV, TIME-TAG, PSA arger than exptime need to 2/3 factor	so no need for 2/3 safety margin. taximize time on target = 144  G160M FP-POS=3; 1623 A BUFFER-TIME=30 0		400 Secs (400 Secs) [==>]	

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

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L	Proposal 14435, WD0308 - reduced	l (11), scheduled			Wed Nov 09 16:01:12	GMT 2016
Visit	Diagnostic Status: Warning					
>	Scientific Instruments: COS/FUV, Co					
<b>'</b>		6; BETWEEN 19-SEP-2016:00:00:00 A			GOO OFFINITION OF	
Diagnostics	(WD0308 - reduced (11)) Warming (i	rorm): For the best data quanty, it is stro	ngly recommended that all four FP-POS positions	s be used when observing at a given	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/y	vr		
ם.		Equinox: J2000	Epoch of Position: 2000			
Fixed	Comments: Coordinates from Charle Extended=NO	e's proposal				
	# Label Target (ETC Run)	Config,Mode,Aperture	Spectral Els. Opt. Params. Spe	ecial 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)				[==>]	[1]
			G14001		244 Secs (244 Secs)	
	2 G130M/129 (1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M BUFFER-TIME=14		ZITBEES (ZITBEES)	
	2 G130M/129 (1) WD0308-565 1 (COS.sp.395 841)	5 COS/FUV, TIME-TAG, PSA	1291 A BUFFER-TIME=14 4; FP-POS=3		[==>]	[1]
res	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	5 COS/FUV, TIME-TAG, PSA ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A 4; FP-POS=3  so no need for 2/3 safety margin.		` '	[1]
sures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A 4; FP-POS=3  so no need for 2/3 safety margin.		` '	[1]
Exposures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e use buffer time = exptime -100 sec to m	1291 A 4; FP-POS=3  so no need for 2/3 safety margin. aximize time on target = 144		[==>]	[1]
Exposures	1 (COS.sp.395 841) Comments: ETC buffer time is 330 se	ec. Target has been observed before and e use buffer time = exptime -100 sec to m  COS/FUV, TIME-TAG, PSA  larger than exptime need to 2/3 factor	1291 A 4; FP-POS=3  so no need for 2/3 safety margin. aximize time on target = 144  G160M FP-POS=3; 1623 A BUFFER-TIME=30		[==>] 400 Secs (400 Secs)	
Exposures	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 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  larger than exptime need to 2/3 factor 0	1291 A  FP-POS=3  so no need for 2/3 safety margin. aximize time on target = 144  G160M  FP-POS=3; 1623 A  BUFFER-TIME=30 0  G140L  BUFFER-TIME=18		[==>] 400 Secs (400 Secs)	
Exposures	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  larger than exptime need to 2/3 factor 0	1291 A 4; FP-POS=3  so no need for 2/3 safety margin. aximize time on target = 144  G160M FP-POS=3; 1623 A BUFFER-TIME=30 0		[==>]  400 Secs (400 Secs) [==>]	

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

