15535 - Cycle 26 COS FUV Spectroscopic Sensitivity Monitor

Cycle: 26, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:27.0	yes
51	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:29.0	yes
02	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	1	30-Oct-2019 09:00:31.0	yes
03	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:33.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
53	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:35.0	yes
04	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:37.0	yes
05	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:39.0	yes
06	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:40.0	yes
56	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:42.0	yes
07	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:44.0	yes
57	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:47.0	yes
08	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:49.0	yes
58	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:51.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
09	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:53.0	yes
10	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:55.0	yes
60	(1) WD0308-565 DARK	COS/FUV COS/NUV S/C	3	30-Oct-2019 09:00:57.0	yes
11	(2) GD71 DARK WAVE	COS/FUV COS/NUV S/C	2	30-Oct-2019 09:00:59.0	yes

42 Total Orbits Used

ABSTRACT

The FUV gratings are the most used modes on COS. They have experienced changes in sensitivity since the instrument was installed. The trends in the time-dependent spectroscopic sensitivity depend on the grating, segment and wavelength. This calibration proposal is to monitor the sensitivity of each FUV grating mode at several cenwave settings on an approximately bi-monthly schedule, and to characterize the observed trends.

OBSERVING DESCRIPTION

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

Each sequence consists of 3 orbits: a 2 orbit visit (target WD0308-565) that covers
G130M/1055/FUVA,
G130M/1222,
G130M/1291,
G130M/1327/FUVA,

G160M/1577/FUVB,
G160M/1623/FUVB,
G140L/1105/FUVA,
G140L/1280,

and a 1 orbit visit (target GD71) that covers
G130M/1096/FUVB,
G160M/1577/FUVA,
G160M/1623/FUVA.

These comprise the reddest and bluest central wavelengths of each grating with additional coverage of the G130M blue modes. The observations will be done at LP4, except for G130M/1055 and G130M/1096, which will be done at LP2.

SNR requirements:
- SNR of 15 per resel at wavelength of least sensitivity for the standard modes, SNR of 25 per resel at wavelength of most sensitivity for the blue modes. For the blue modes, this will ensure S/N > 15 for l> 1030 ang for 1096/FUVB, l>1130 Ang for 1055/FUVA and 1222/FUVB
- TDS calibration better than 2% for standard modes and 10% for blue modes

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

2019 Jan 31 update:

The new cenwaves have been added to the visits, so each seqence consists now of 5 orbits.
The 3 orbit visit (target WD0308-565) covers, in addition to the list above,
G160M/1533/FUVB
G140L/800/FUVA

and the 2 orbit visit (target GD71) additionally covers
G160M/1533/FUVA

Because of the addition of one orbit to each visit, the order of exposures, and the exposure times have been revised as necessary. Furthermore, for all but one set of the WD0308-565 observations using G160M, the specifications now are SEGMENT=B (i.e. segment A is turned off). The one exception is the June sequence (visit 07) for which the specifications are SEGMENT=BOTH for these modes, because GD71 is not available during this period.

Visit

Proposal 15535, WD0308 - Dec complete (01), completed Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 26-DEC-2018:00:00:00 AND 08-JAN-2019:00:00:00

Diagnostics

(WD0308 - Dec complete (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(WD0308 - Dec complete (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	 ***[1]***
	Comments: cycle 26 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.								
2	G130M/1222 (COS.sp.1184026)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=176; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			176 Secs (254 Secs) *[==>254.0 Secs]*	 ***[1]***
	Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS* *Cy 26 exposure time relative to Cy25 (COS.sp.1021684) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
3	G130M/1291 (COS.sp.1184029)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=131; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			231 Secs (309 Secs) *[==>309.0 Secs]*	 ***[1]***
	Comments: ETC buffer time is 322 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* *Cy 26 exposure time relative to Cy25 (COS.sp.1021690) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
4	G130M/1055/LP2 (COS.sp.1184033)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=185; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			285 Secs (363 Secs) *[==>363.0 Secs]*	 ***[1]***
	Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 224* *Continue use of 1 FP-POS* *While the program is optimized for FUVA we use the low SNR FUVB data to constraint the blue edge of the wavelength range.* *Cy 26 exposure time relative to Cy25 (COS.sp.1021696) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								

5	G160M/1577 (COS.sp.1184034)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=164; LIFETIME-POS=LP4; SEGMENT=BOTH		264 Secs (342 Secs) *[==>342.0 Secs]*	***[1]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 190

Continue use of 1 FP-POS

Cy 26 exposure time relative to Cy25 (COS.sp.1021702) not significant.

Use Cy25 value and allow the orbit planner to adjust durations.

6	G160M/1623 (COS.sp.1184035)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=268; LIFETIME-POS=LP4; SEGMENT=BOTH		368 Secs (418 Secs) *[==>418.0 Secs]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

Cy 26 exposure time relative to Cy25 (COS.sp.1021704) not significant.

Use Cy25 value and allow the orbit planner to adjust durations.

7	G140L/1280 (COS.sp.1184038)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH		328 Secs (378 Secs) *[==>378.0 Secs]*	***[2]***

Comments: ETC buffer time is 451, 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

Cy 26 exposure time is 282 seconds, compared with Cy25 (COS.sp.1021719) time of 328 seconds, due to a shallower TDS.

Use Cy25 value and allow the orbit planner to adjust durations.

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

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

	9	G140L/1105 /FUVA (COS.sp.118 4043)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (377 Secs) *[==>377.0 Secs]*	***[2]***

Comments: ETC buffer time is 362, 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

Cy 26 exposure time is 283 seconds, compared with Cy25 (COS.sp.1021720) time of 327 seconds, due to a shallower TDS.

Use Cy25 value and allow the orbit planner to adjust durations.

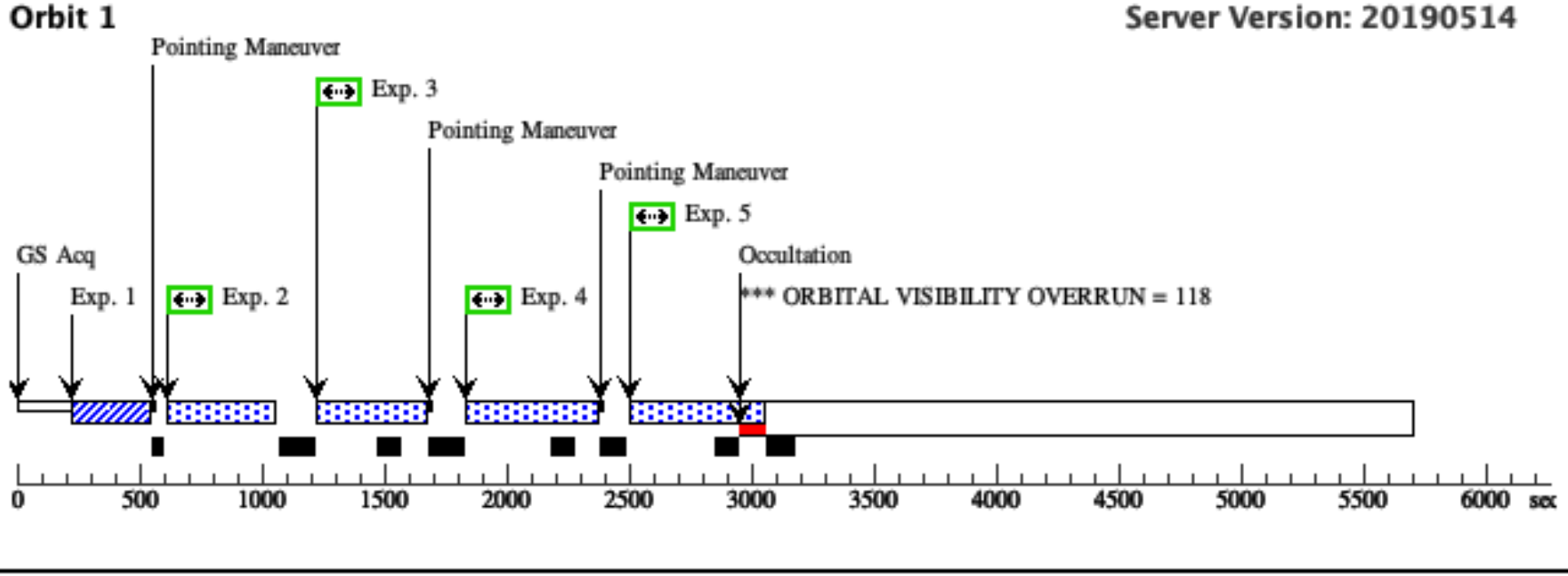
	10	G130M/1327/FUVA (COS.sp.1184044)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (328 Secs) *[==>328.0 Secs]*	***[2]***

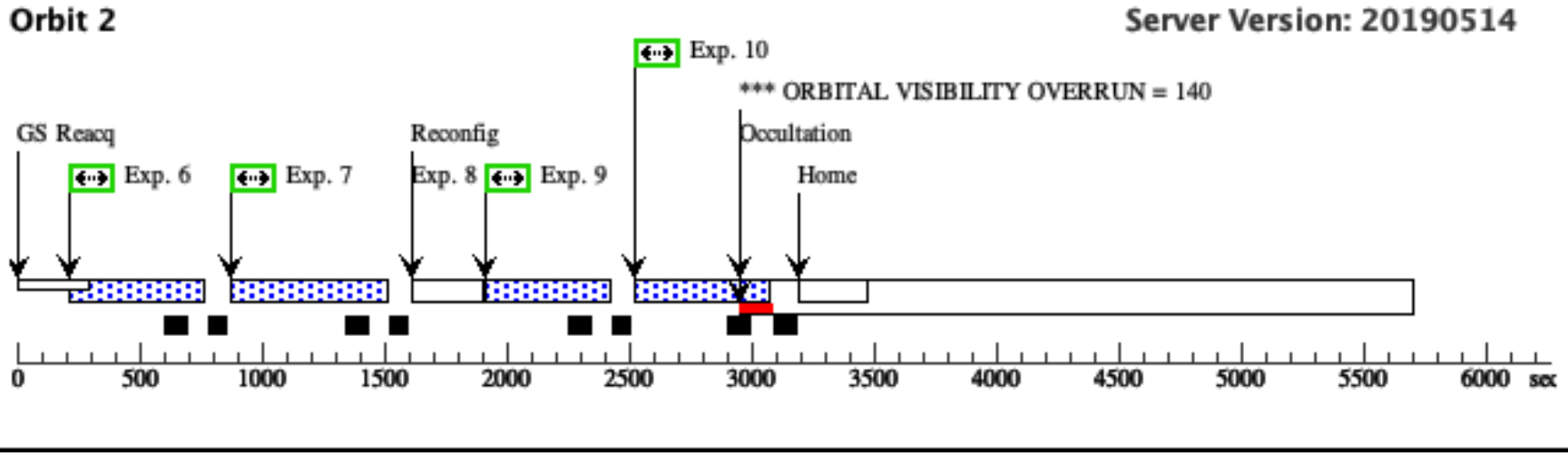
Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin.
Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212
Continue use of 1 FP-POS

Cy 26 exposure time relative to Cy25 (COS.sp.1021693) not significant.

Use Cy25 value and allow the orbit planner to adjust durations.

Orbit Structure





Visit

Proposal 15535, WD0308 - Dec complete (51), withdrawn Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 21-FEB-2019 AND 22-MAR-2019

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	*[1]*
	Comments: cycle 26 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.								
2	G130M/1222 (COS.sp.1184026)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=176; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			176 Secs (176 Secs) *[==>]*	*[1]*
	Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS* *Cy 26 exposure time relative to Cy25 (COS.sp.1021684) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
3	G130M/1291 (COS.sp.1184029)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=131; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			231 Secs (231 Secs) *[==>]*	*[1]*
	Comments: ETC buffer time is 322 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* *Cy 26 exposure time relative to Cy25 (COS.sp.1021690) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
4	G130M/1055/LP2 (COS.sp.1184033)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=185; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			285 Secs (285 Secs) *[==>]*	*[1]*
	Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 224* *Continue use of 1 FP-POS* *While the program is optimized for FUVA we use the low SNR FUVB data to constraint the blue edge of the wavelength range.* *Cy 26 exposure time relative to Cy25 (COS.sp.1021696) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								

5	G160M/1577 (COS.sp.1184034)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=164; LIFETIME-POS=LP4; SEGMENT=BOTH		264 Secs (264 Secs) [==>]	***[1]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 190

Continue use of 1 FP-POS

Cy 26 exposure time relative to Cy25 (COS.sp.1021702) not significant.

Use Cy25 value and allow the orbit planner to adjust durations.

6	G160M/1623 (COS.sp.1184035)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=268; LIFETIME-POS=LP4; SEGMENT=BOTH		368 Secs (368 Secs) [==>]	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

Cy 26 exposure time relative to Cy25 (COS.sp.1021704) not significant.

Use Cy25 value and allow the orbit planner to adjust durations.

7	G140L/1280 (COS.sp.1184038)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH		328 Secs (328 Secs) [==>]	***[2]***

Comments: ETC buffer time is 451, 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

Cy 26 exposure time is 282 seconds, compared with Cy25 (COS.sp.1021719) time of 328 seconds, due to a shallower TDS.

Use Cy25 value and allow the orbit planner to adjust durations.

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

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

	9	G140L/1105 /FUVA (COS.sp.1184043)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 362, 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

Cy 26 exposure time is 283 seconds, compared with Cy25 (COS.sp.1021720) time of 327 seconds, due to a shallower TDS.

Use Cy25 value and allow the orbit planner to adjust durations.

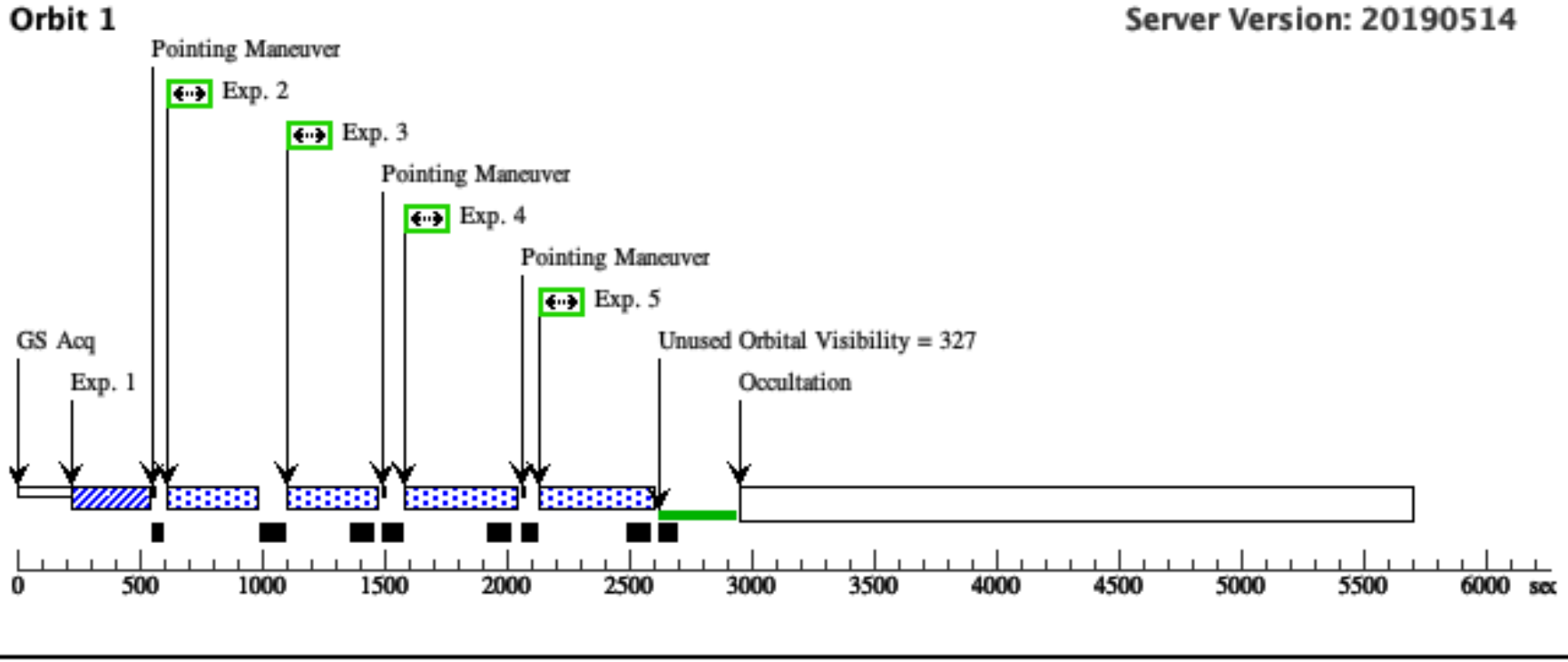
	10	G130M/1327/FUVA (COS.sp.1184044)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[2]***

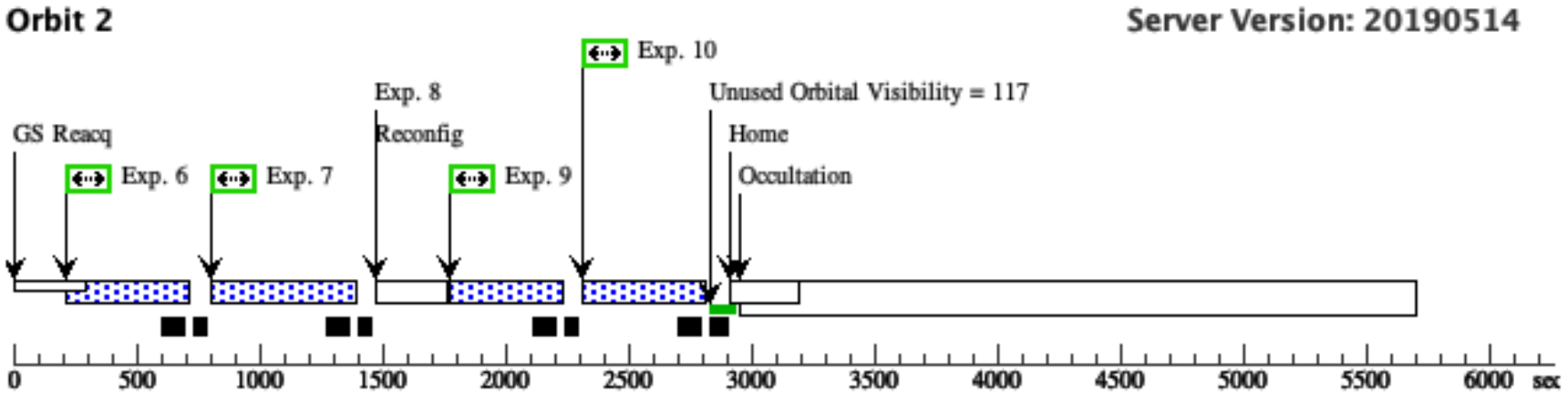
Comments: ETC buffer time is 320 sec. Target has been observed before and so no need for 2/3 safety margin.
Since buffer time larger than exptime use buffer time = exptime -100 sec to maximize time on target = 212
Continue use of 1 FP-POS

Cy 26 exposure time relative to Cy25 (COS.sp.1021693) not significant.

Use Cy25 value and allow the orbit planner to adjust durations.

Orbit Structure





Visit

Proposal 15535, GD71 - Dec complete (02), completed Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; BETWEEN 26-DEC-2018:00:00:00 AND 08-JAN-2019:00:00:00

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.

Diagnostics

(GD71 - Dec complete (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

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

Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Carried over from Cycle 25 proposal.
Category=STAR
Description=[DA]
Extended=NO

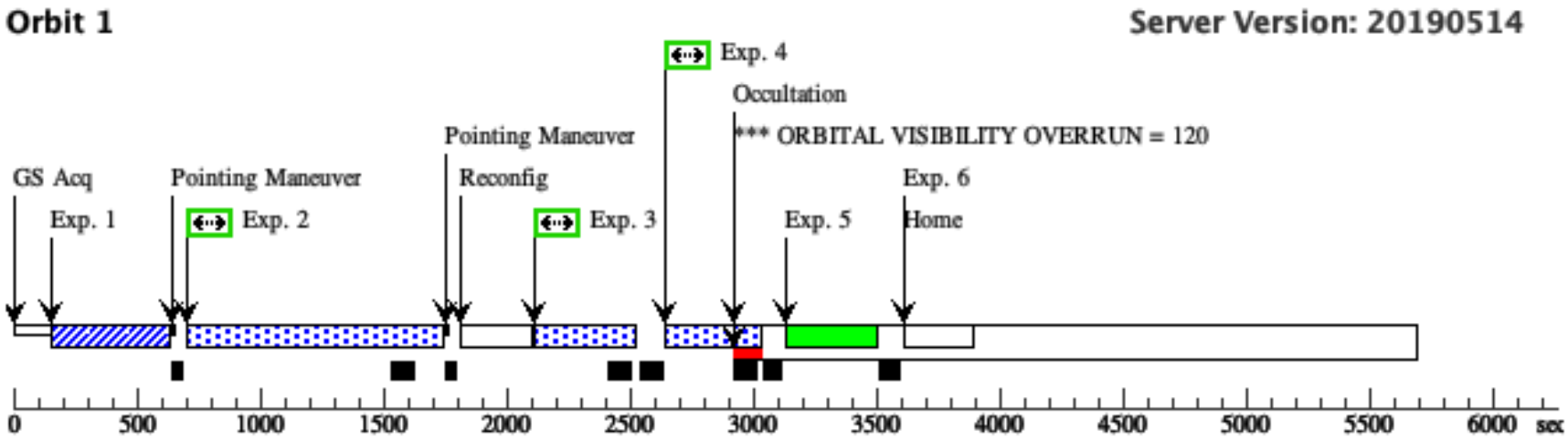
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.839574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) *[==>]*	***[1]***
	Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.								
2	G130M/1096/FUVB/LP2 (COS.sp.1184046)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=644; FP-POS=3; SEGMENT=B; LIFETIME-POS=LP2			744 Secs (836 Secs) *[==>836.0 Secs]*	***[1]***
	Comments: FUVB only (all ETC warnings come from FUVA). *Set buffer-time = exptime - 100 sec = 644 to maximize time on target.* *Cy 26 exposure time relative to Cy25, and Cy24 (COS.sp.839576) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
3	G160M/1577/FUVA (COS.sp.1184047)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=111; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			111 Secs (203 Secs) *[==>203.0 Secs]*	***[1]***
	Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* *Cy 26 exposure time relative to Cy25 (COS.sp.1021723) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
4	G160M/1623/FUVA (COS.sp.1184049)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=162; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			162 Secs (254 Secs) *[==>254.0 Secs]*	***[1]***
	Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime* *Cy 26 exposure time relative to Cy25 (COS.sp.1021734) not significant.* *Use Cy25 value and allow the orbit planner to adjust durations.*								
5	G130M/1096/FUVA WAVECAL/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=LP2			140 Secs (140 Secs) *[==>]*	***[1]***

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

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

Orbit Structure



Visit

Proposal 15535, WD0308-FEB-withDELTA (03), failed Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 18-FEB-2019:00:00:00 AND 27-FEB-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 487, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

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

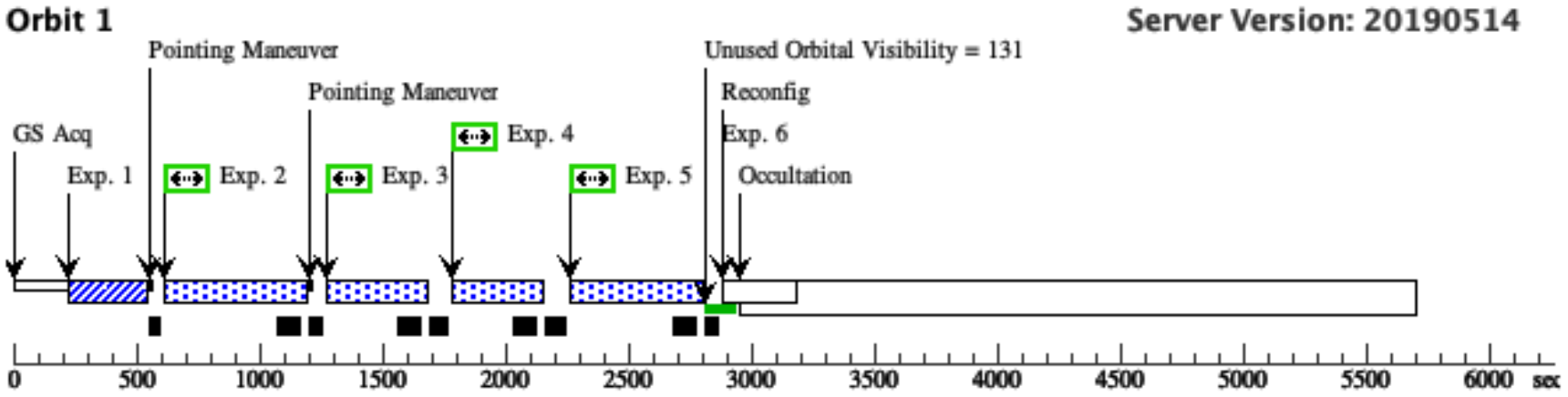
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

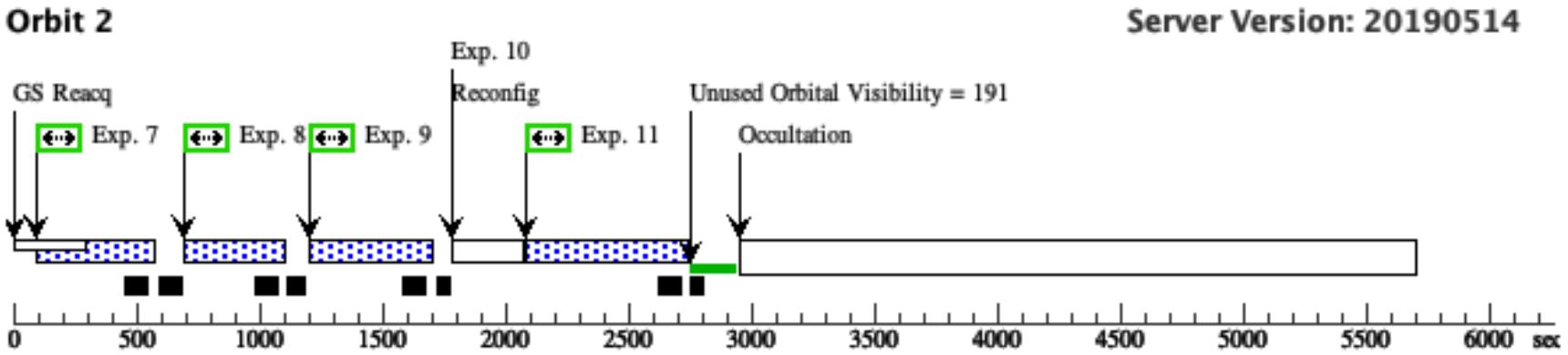
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***

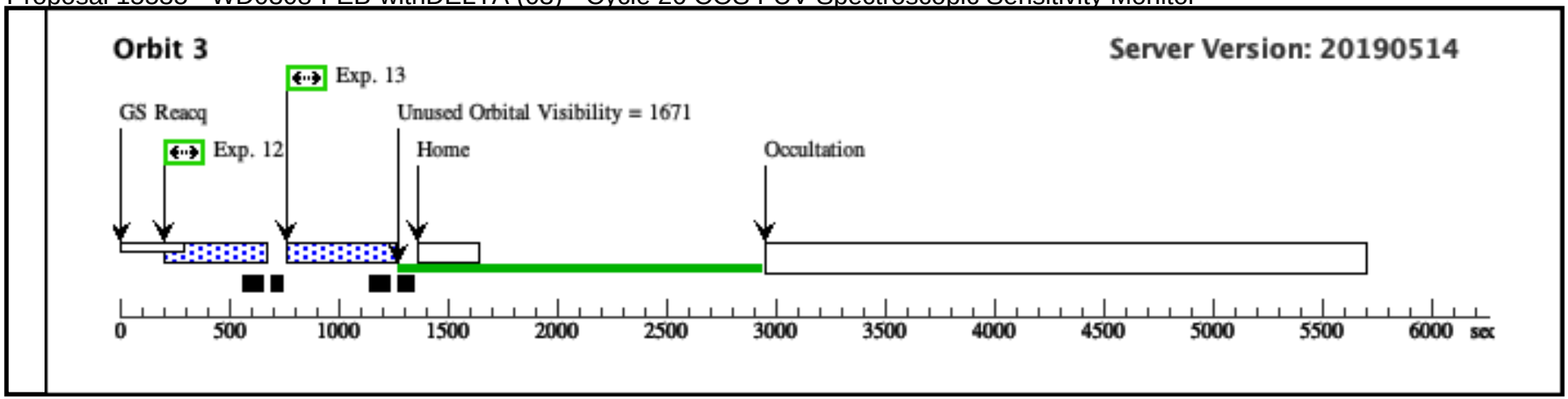
Comments: ETC buffer time is 362, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 263
Continue use of 1 FP-POS

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure



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Server Version: 20190514
Exp. 13
GS Reacq
Unused Orbital Visibility = 1671
Exp. 12
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Proposal 15535 - WD0308-FEB-withDELTA (53) - Cycle 26 COS FUV Spectroscopic Sensitivity Monitor

Visit

Proposal 15535, WD0308-FEB-withDELTA (53), completed Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 18-FEB-2019:00:00:00 AND 23-APR-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	 ***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	 ***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 487, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

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

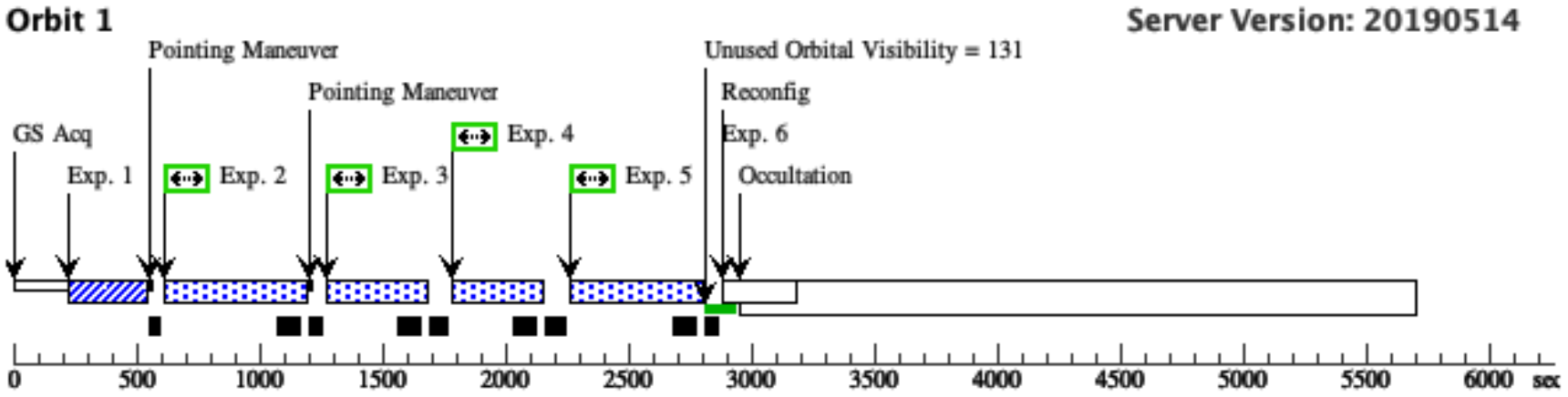
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

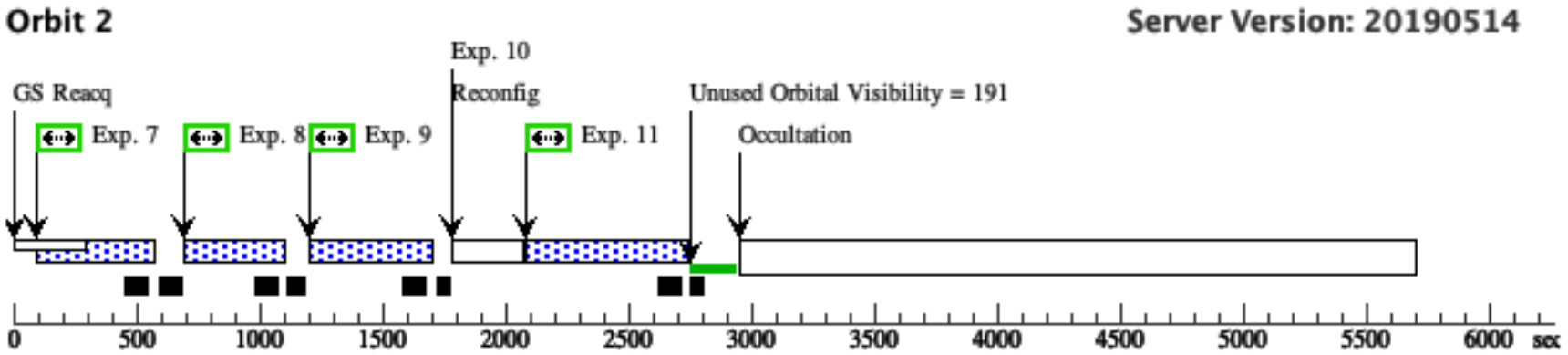
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***

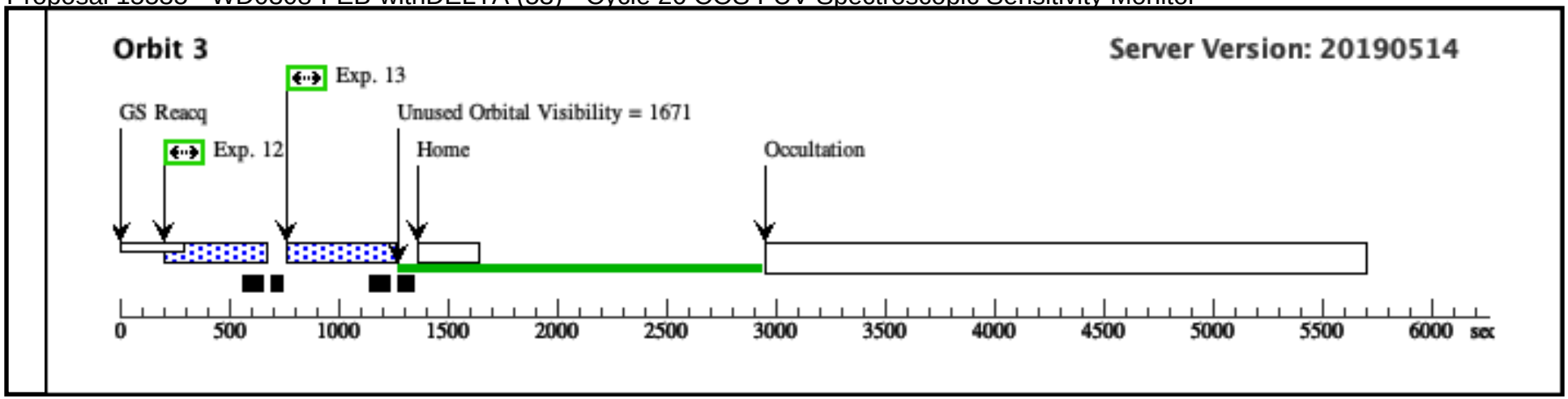
Comments: ETC buffer time is 362, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 263
Continue use of 1 FP-POS

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure






Orbit 3
Server Version: 20190514
Exp. 13
GS Reacq
Unused Orbital Visibility = 1671
Exp. 12
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, GD71-FEB-withDELTA (04), completed Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 18-FEB-2019:00:00:00 AND 27-FEB-2019:00:00:00

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.

New cenwave G160M/1533/A has been added to this visit.

Fixed Targets

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

Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Carried over from Cycle 25 proposal.
Category=STAR
Description=[DA]
Extended=NO

Exposures

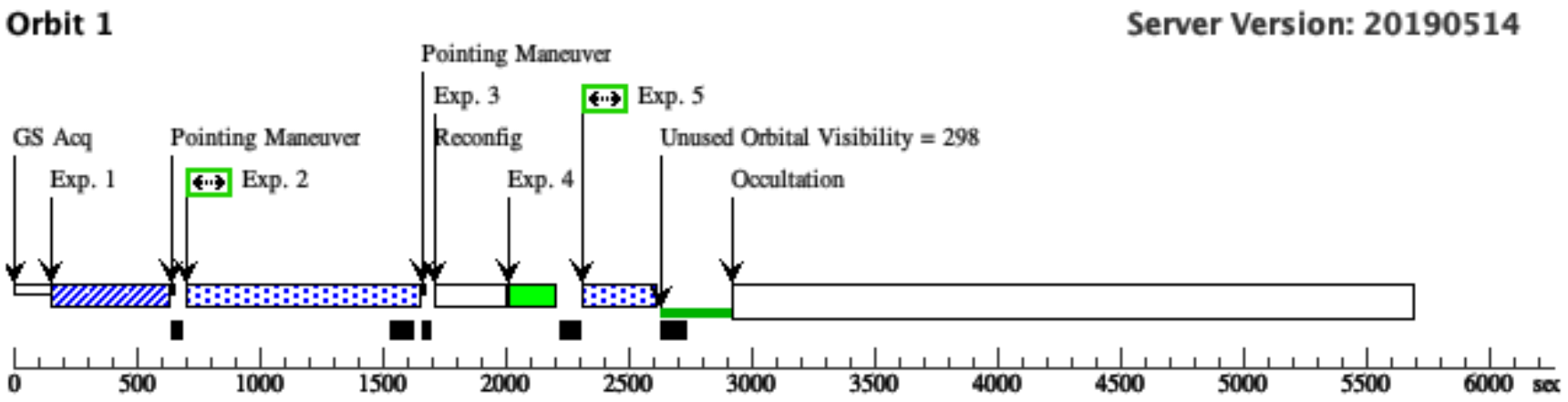
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.839574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) *[==>]*	***[1]***
Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.									
2	G130M/1096/FUVB/LP2 (COS.sp.839576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=644; FP-POS=3; SEGMENT=B; LIFETIME-POS=LP2			744 Secs (744 Secs) *[==>]*	***[1]***
Comments: FUVB only (all ETC warnings come from FUVA). *Set buffer-time = exptime - 100 sec = 644 to maximize time on target.*									
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/1096/FUVA WAVECAL/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=LP2			140 Secs (140 Secs) *[==>]*	***[1]***
5	G160M/1533/FUVA (COS.sp.131 1884)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=103; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			103 Secs (103 Secs) *[==>]*	***[1]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									
6	G160M/1577/FUVA (COS.sp.131 1885)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=132; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			132 Secs (132 Secs) *[==>]*	***[2]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									

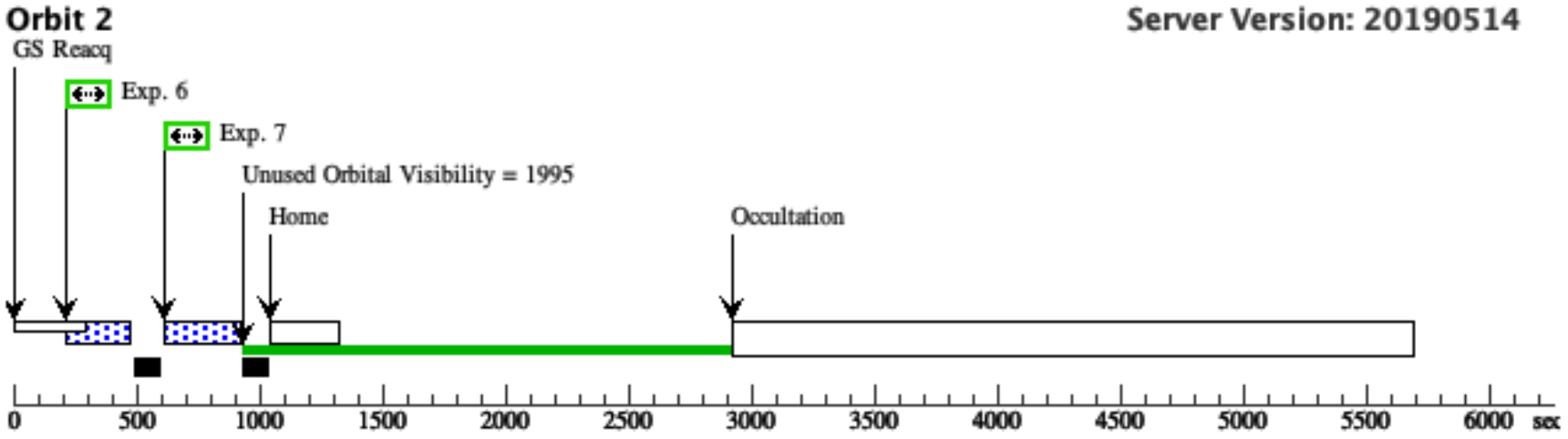
7	G160M/162 3/FUVA (COS.sp.131 1886)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=172; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	172 Secs (172 Secs) [==>]	[2]

Comments: FUVA only (all ETC warnings come from FUVB).

Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.
2.35e6 is the number of events that each buffer can record
6513 cts/sec is the count rate in FUVA, per ETC calculation above
Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime

Orbit Structure





Visit

Proposal 15535, WD0308-APR-withDELTA (05), completed Wed Oct 30 13:01:00 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 10-APR-2019:00:00:00 AND 23-APR-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

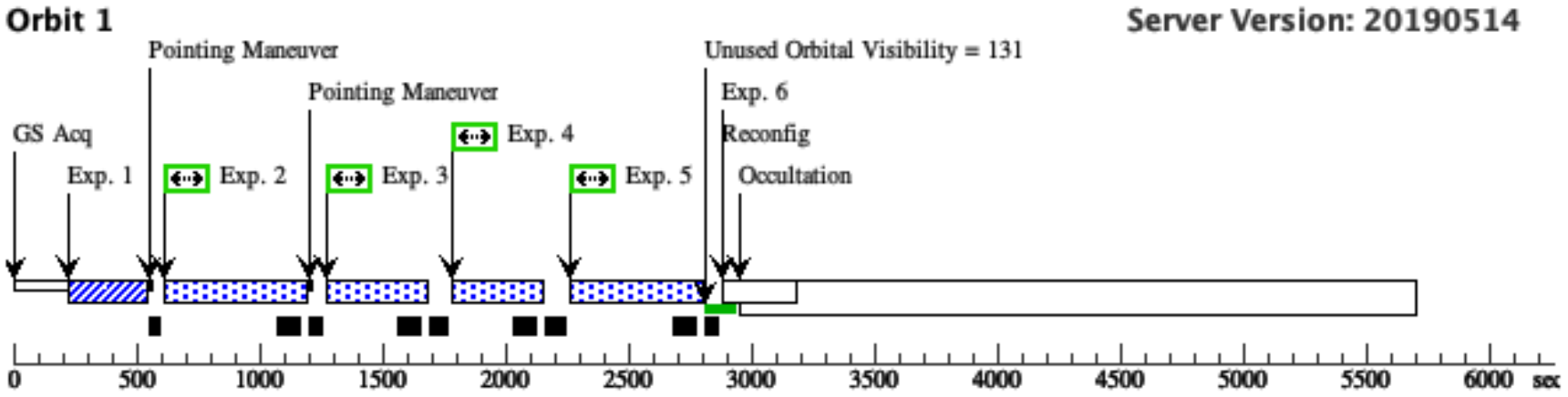
Exposures

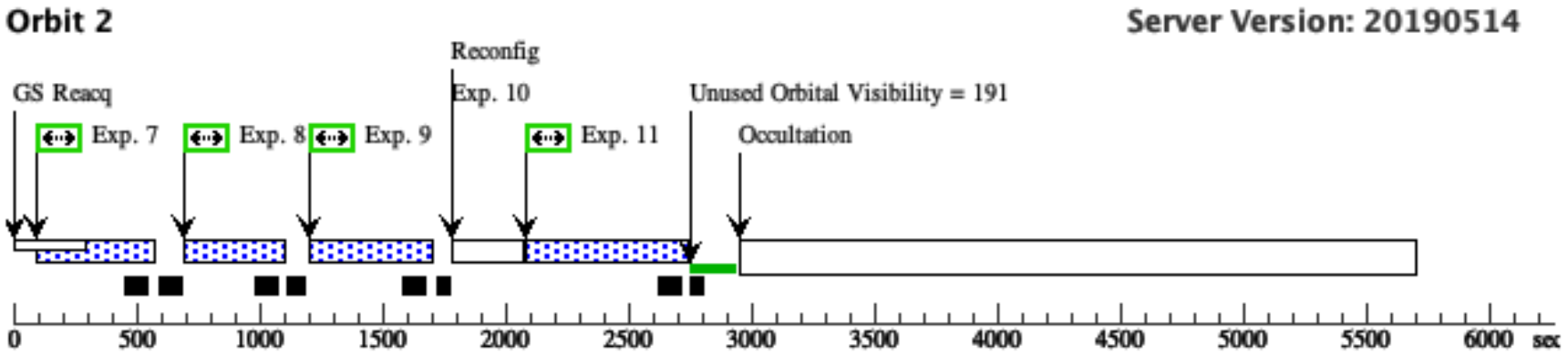
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	 ***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	 ***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

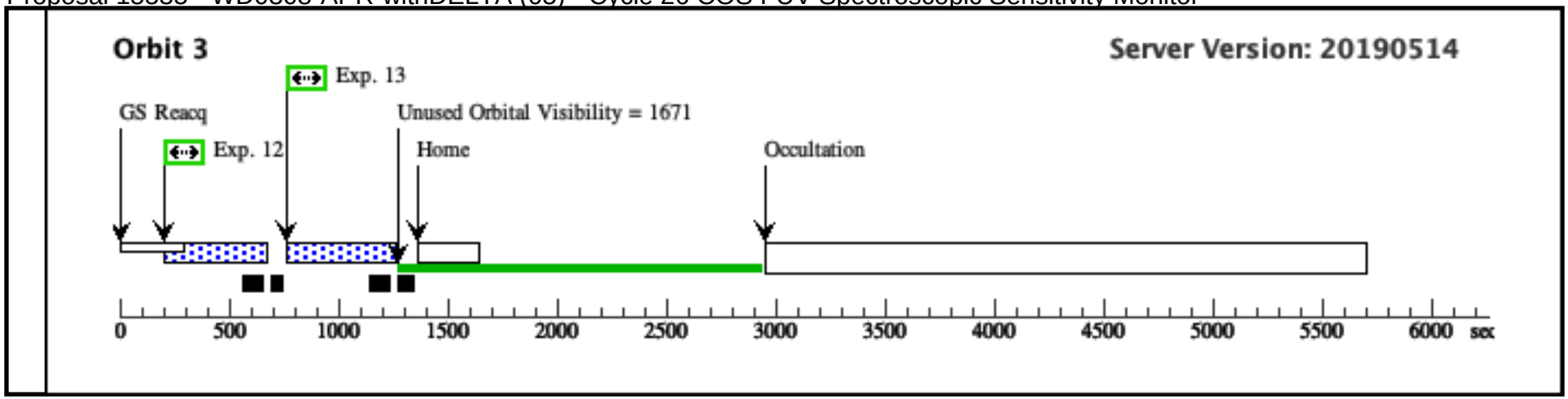
7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs)	
							[==>]	***[2]***
	Comments: ETC buffer time is 487, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*							
8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs)	
							[==>]	***[2]***
	Comments: ETC buffer time is 599, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*							
9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs)	
							[==>]	***[2]***
	Comments: ETC buffer time is 799, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 300* *Continue use of 1 FP-POS*							
10		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW	1 Secs (1 Secs)	
							[==>]	***[2]***
	Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.							
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs)	
							[==>]	***[2]***
	Comments: ETC buffer time is 362, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 263* *Continue use of 1 FP-POS*							

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.1021693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure



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Exp. 13
GS Reacq
Unused Orbital Visibility = 1671
Exp. 12
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Occultation
0
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1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, GD71-APR-withDELTA (06), failed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 10-APR-2019:00:00:00 AND 23-APR-2019:00:00:00

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.

New cenwave G160M/1533/A has been added to this visit.

Fixed Targets

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

Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Carried over from Cycle 25 proposal.
Category=STAR
Description=[DA]
Extended=NO

Exposures

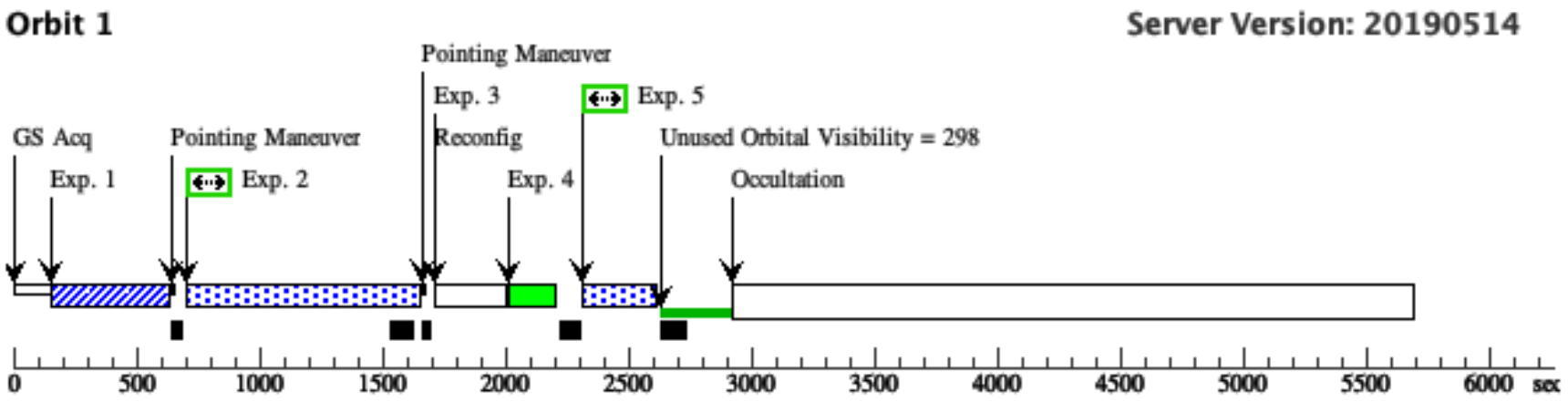
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.839574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) *[==>]*	***[1]***
Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.									
2	G130M/1096/FUVB/LP2 (COS.sp.839576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=644; FP-POS=3; SEGMENT=B; LIFETIME-POS=LP2			744 Secs (744 Secs) *[==>]*	***[1]***
Comments: FUVB only (all ETC warnings come from FUVA). *Set buffer-time = exptime - 100 sec = 644 to maximize time on target.*									
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/1096/FUVA WAVECAL/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=LP2			140 Secs (140 Secs) *[==>]*	***[1]***
5	G160M/1533/FUVA (COS.sp.131 1884)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=103; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			103 Secs (103 Secs) *[==>]*	***[1]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									
6	G160M/1577/FUVA (COS.sp.131 1885)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=132; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			132 Secs (132 Secs) *[==>]*	***[2]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									

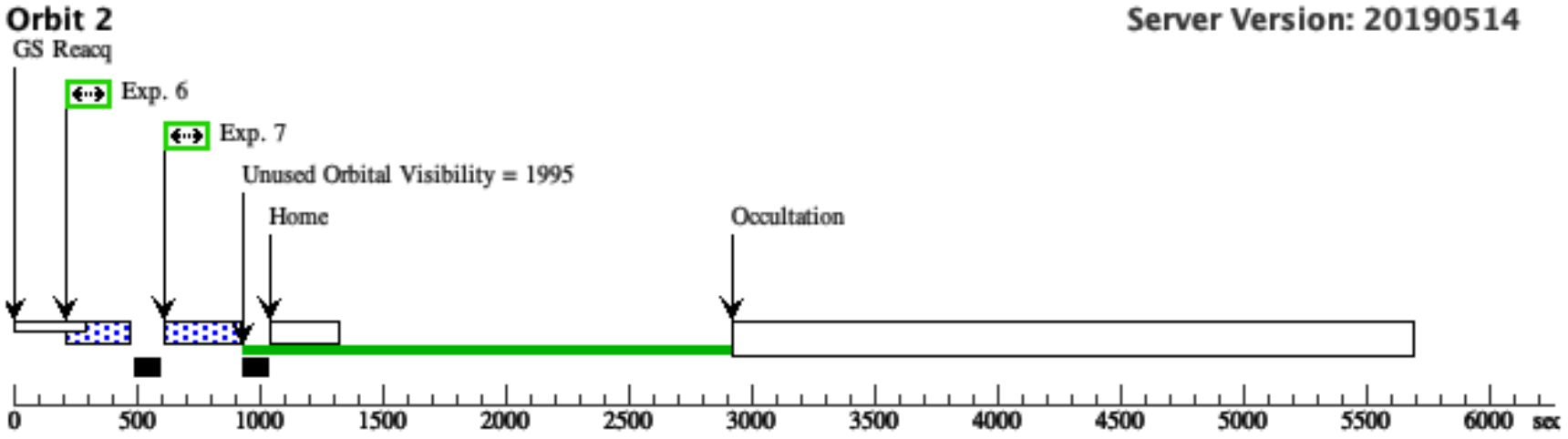
7	G160M/162 3/FUVA (COS.sp.131 1886)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=172; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	172 Secs (172 Secs) *[==>]*	*[2]*

Comments: FUVA only (all ETC warnings come from FUVB).

Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.
2.35e6 is the number of events that each buffer can record
6513 cts/sec is the count rate in FUVA, per ETC calculation above
Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime

Orbit Structure





Visit

Proposal 15535, GD71-APR-withDELTA (56), withdrawn Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%

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.

New cenwave G160M/1533/A has been added to this visit.

Fixed Targets

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

Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Carried over from Cycle 25 proposal.
Category=STAR
Description=[DA]
Extended=NO

Exposures

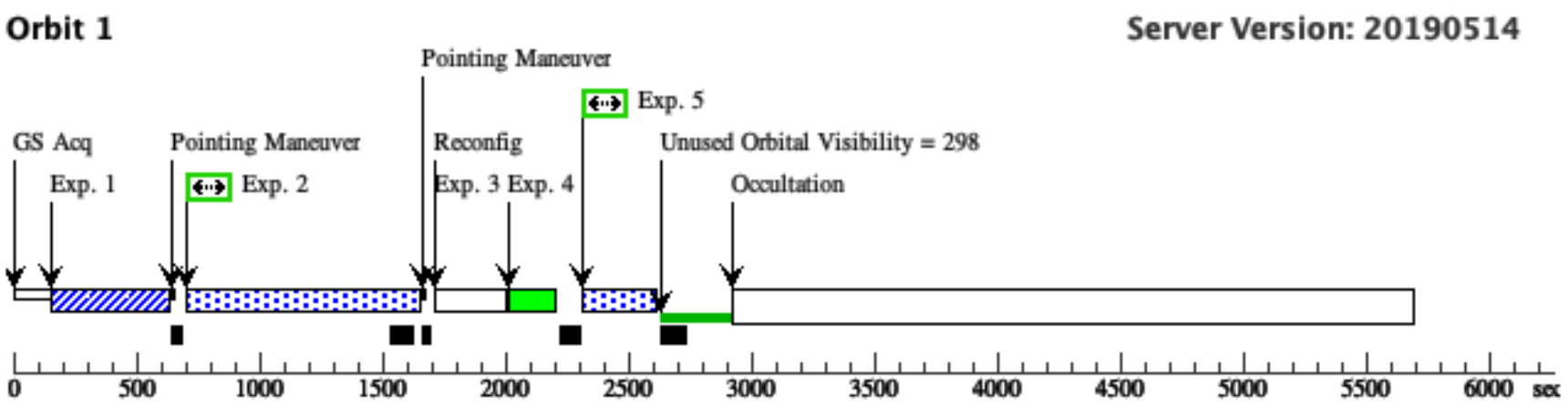
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.839574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) *[==>]*	***[1]***
Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.									
2	G130M/1096/FUVB/LP2 (COS.sp.839576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=644; FP-POS=3; SEGMENT=B; LIFETIME-POS=LP2			744 Secs (744 Secs) *[==>]*	***[1]***
Comments: FUVB only (all ETC warnings come from FUVA). *Set buffer-time = exptime - 100 sec = 644 to maximize time on target.*									
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/1096/FUVA WAVECAL/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=LP2			140 Secs (140 Secs) *[==>]*	***[1]***
5	G160M/1533/FUVA (COS.sp.131 1884)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=103; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			103 Secs (103 Secs) *[==>]*	***[1]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									
6	G160M/1577/FUVA (COS.sp.131 1885)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=132; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			132 Secs (132 Secs) *[==>]*	***[2]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									

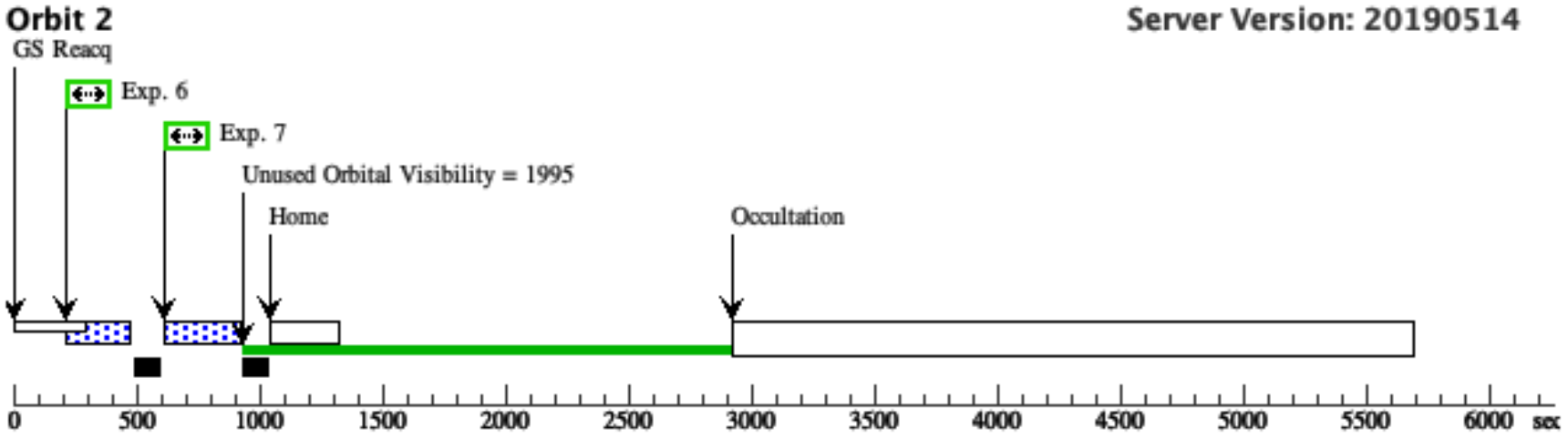
7	G160M/162 3/FUVA (COS.sp.131 1886)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=172; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	172 Secs (172 Secs) [==>]	[2]

Comments: FUVA only (all ETC warnings come from FUVB).

Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.
2.35e6 is the number of events that each buffer can record
6513 cts/sec is the count rate in FUVA, per ETC calculation above
Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime

Orbit Structure





Visit

Proposal 15535, WD0308-JUN-withDELTA (07), failed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 05-JUN-2019:00:00:00 AND 18-JUN-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations for the June observations, visit 07, are now with SEGMENT = BOTH.

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

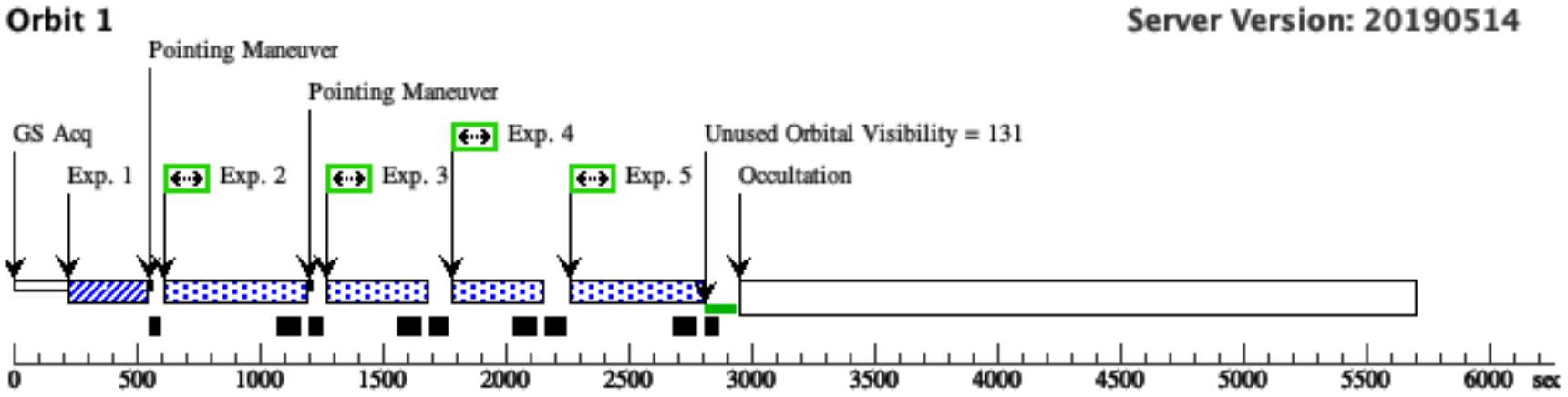
Exposures

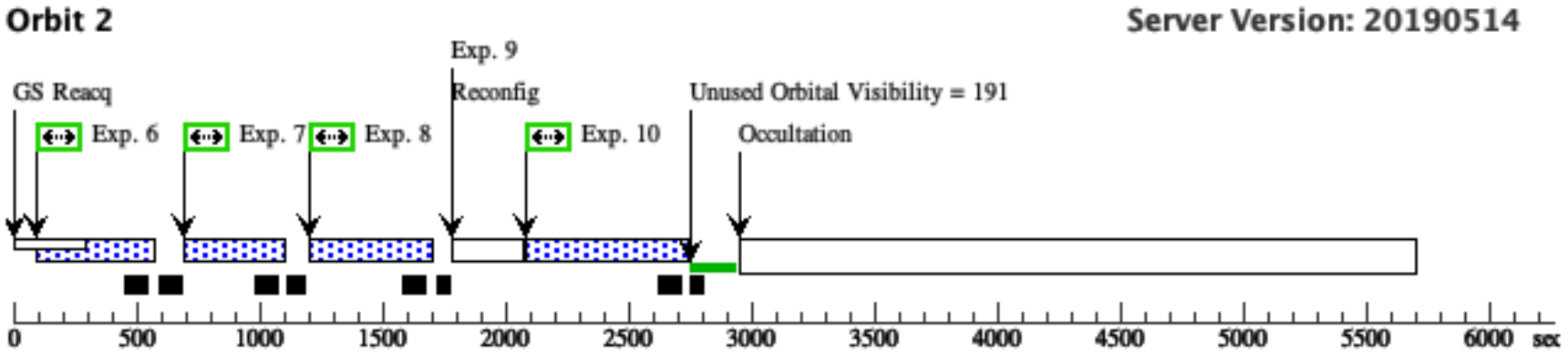
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 451, 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*									

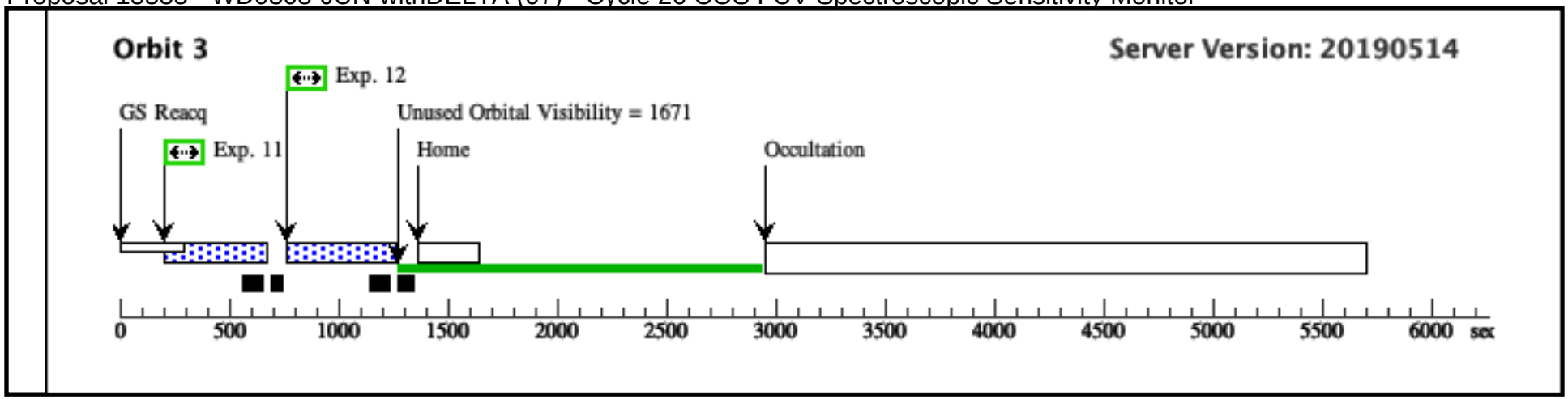
6	G160M/1533/BOTH (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=BOTH		222 Secs (222 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 487, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*								
7	G160M/1577/BOTH (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=BOTH		273 Secs (273 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 599, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*								
8	G160M/1623/BOTH (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=BOTH		369 Secs (369 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 799, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 300* *Continue use of 1 FP-POS*								
9		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW	1 Secs (1 Secs) *[==>]*	***[2]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.								
10	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 362, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 263* *Continue use of 1 FP-POS*								

	11	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	12	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure



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Exp. 11
Home
Occultation
0
500
1000
1500
2000
2500
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3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, WD0308-JUN-withDELTA (57), completed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations for the June observations, visit 07, are now with SEGMENT = BOTH.

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

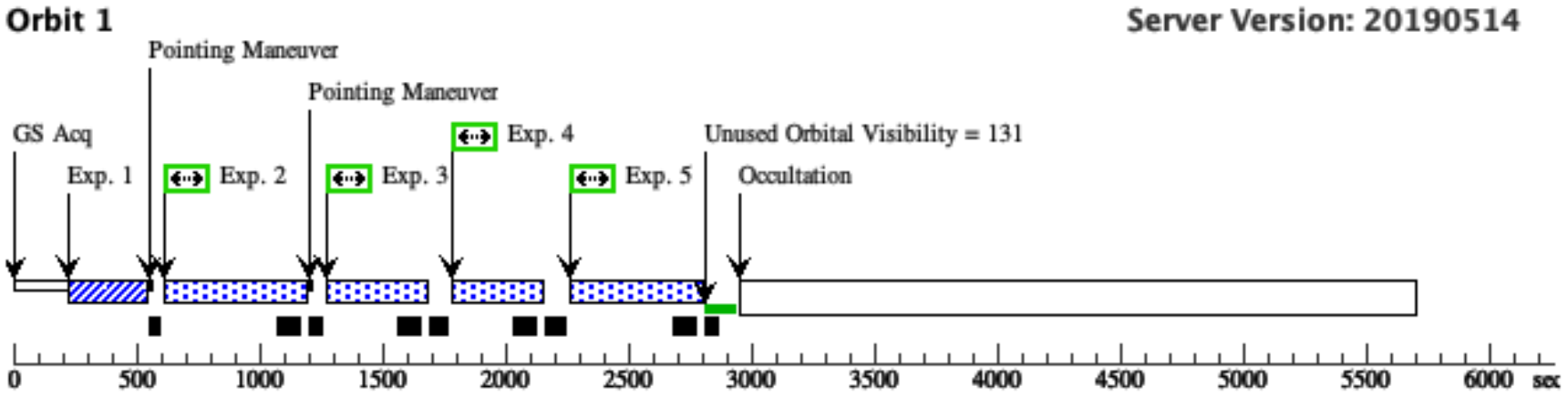
Exposures

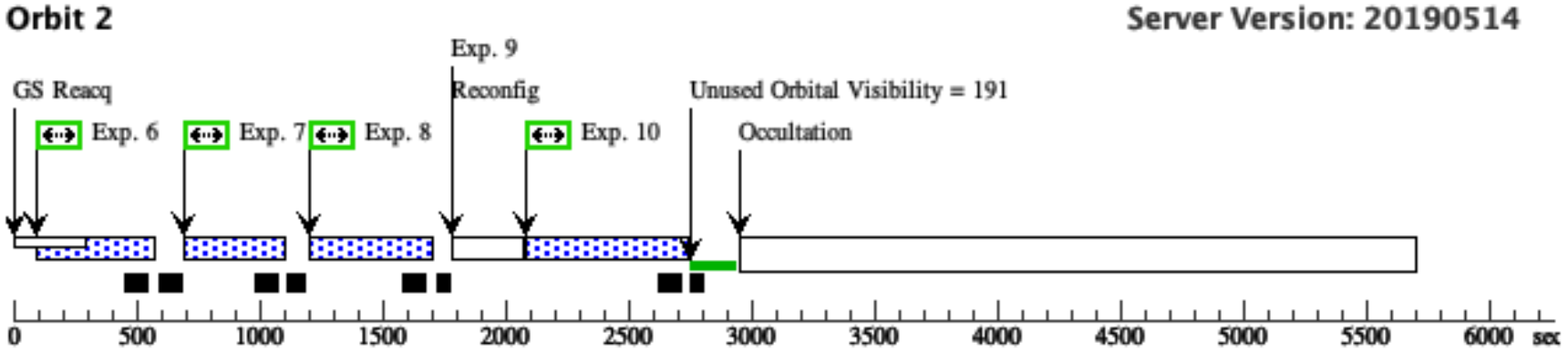
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 451, 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*									

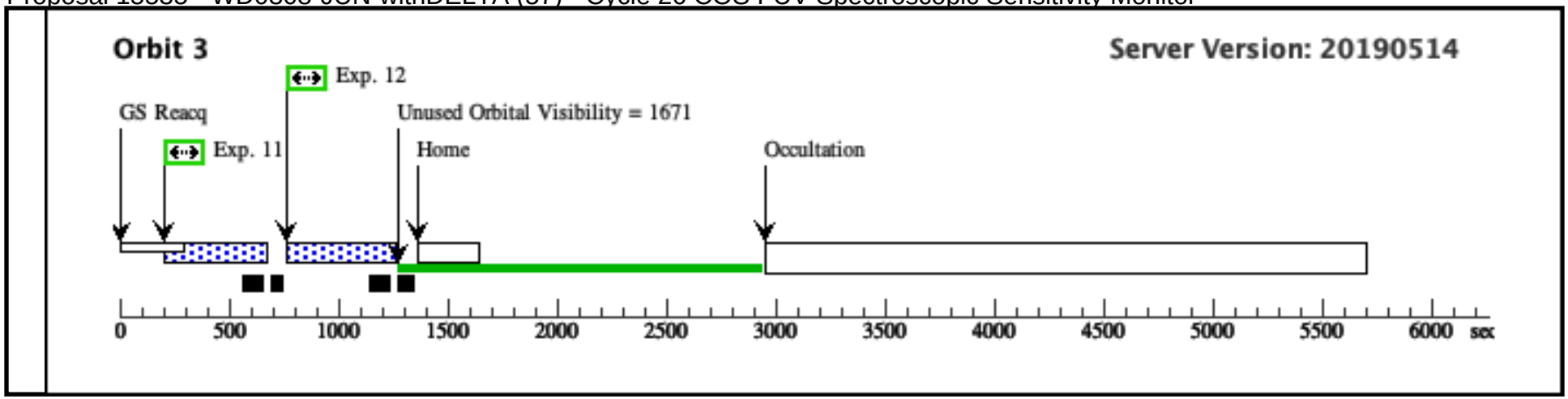
6	G160M/1533/BOTH (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=BOTH		222 Secs (222 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 487, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*								
7	G160M/1577/BOTH (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=BOTH		273 Secs (273 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 599, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*								
8	G160M/1623/BOTH (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=BOTH		369 Secs (369 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 799, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 300* *Continue use of 1 FP-POS*								
9		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW	1 Secs (1 Secs) *[==>]*	***[2]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.								
10	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***
Comments: ETC buffer time is 362, larger than exptime *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100 = 263* *Continue use of 1 FP-POS*								

	11	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	12	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure



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Server Version: 20190514
Exp. 12
GS Reacq
Unused Orbital Visibility = 1671
Exp. 11
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, WD0308-AUG-withDELTA (08), completed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 04-AUG-2019:00:00:00 AND 17-AUG-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	 ***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	 ***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 487, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

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

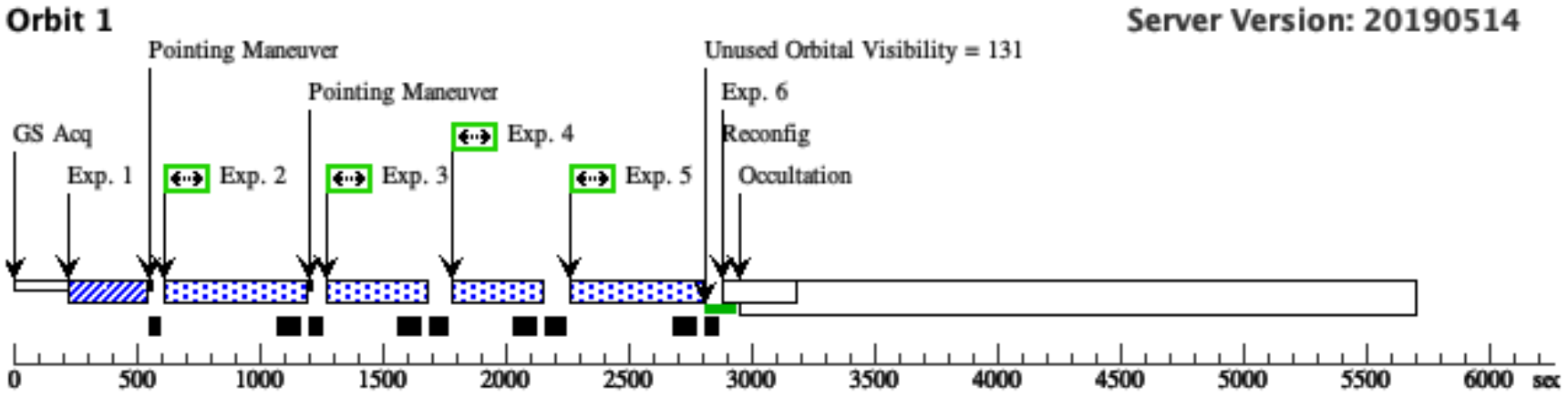
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

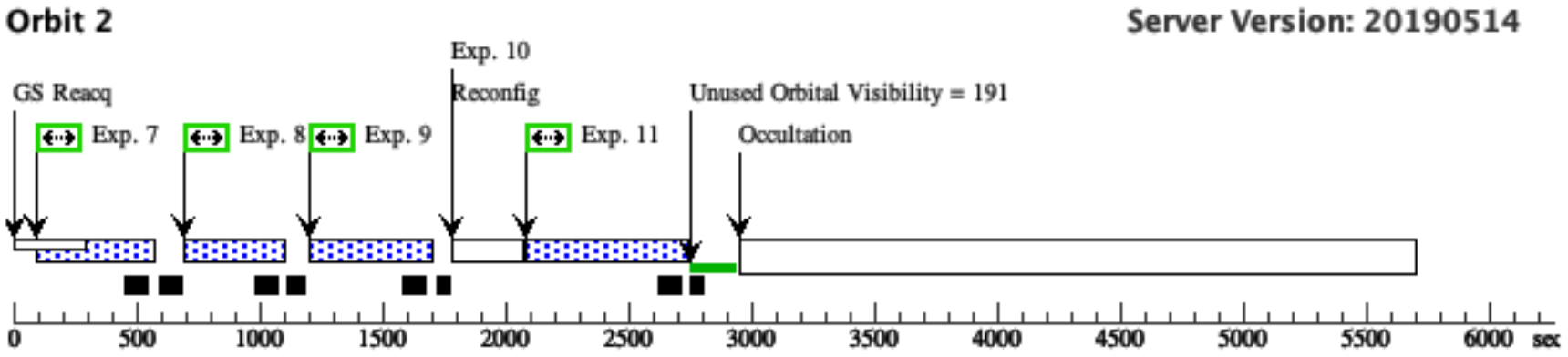
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***

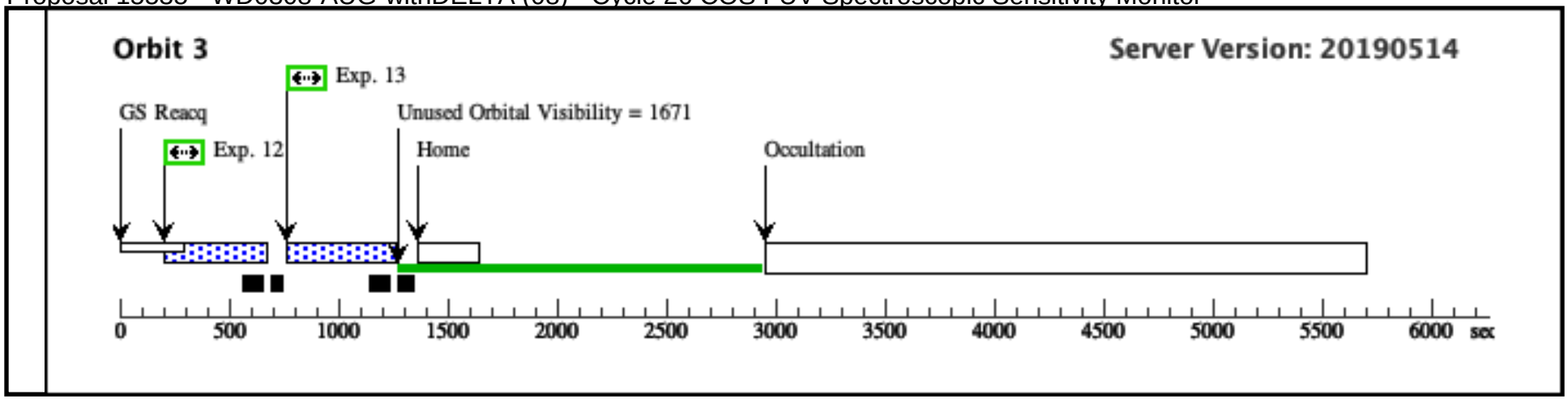
Comments: ETC buffer time is 362, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 263
Continue use of 1 FP-POS

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure






Orbit 3
Server Version: 20190514
Exp. 13
GS Reacq
Unused Orbital Visibility = 1671
Exp. 12
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, WD0308-AUG-withDELTA (58), completed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 19-AUG-2019 AND 08-SEP-2019

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	 ***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	 ***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 487, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

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

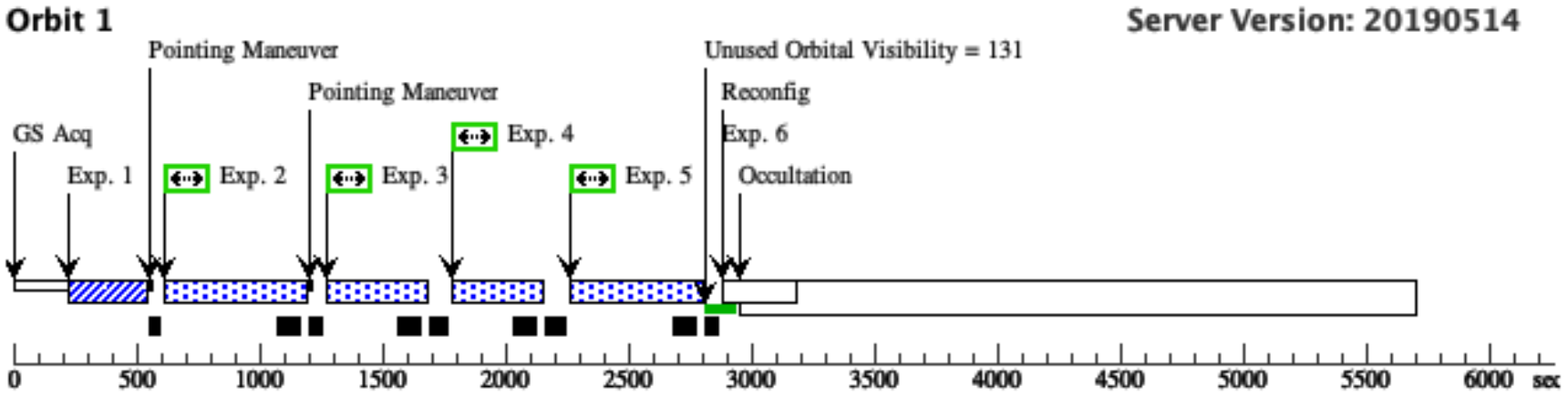
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

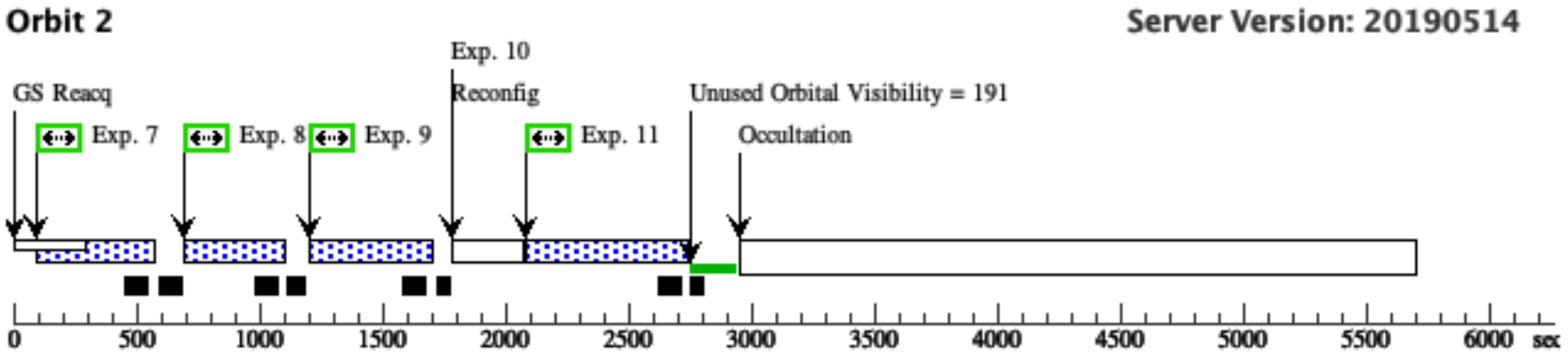
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***

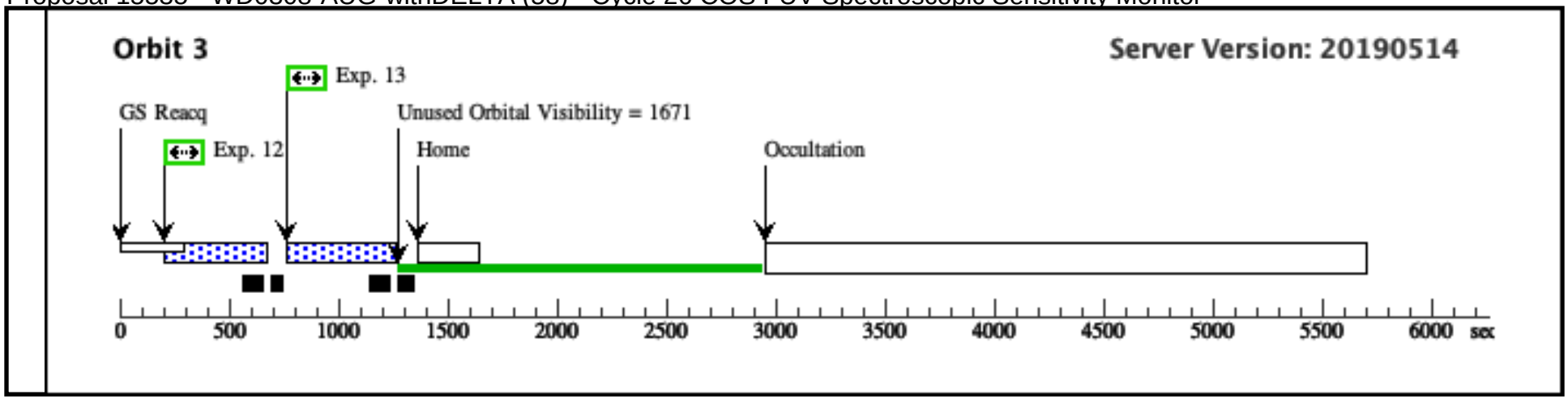
Comments: ETC buffer time is 362, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 263
Continue use of 1 FP-POS

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.1021693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure






Orbit 3
Server Version: 20190514
Exp. 13
GS Reacq
Unused Orbital Visibility = 1671
Exp. 12
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, GD71-AUG-withDELTA (09), completed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 14-AUG-2019:00:00:00 AND 27-AUG-2019:00:00:00

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.

New cenwave G160M/1533/A has been added to this visit.

Fixed Targets

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

Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Carried over from Cycle 25 proposal.
Category=STAR
Description=[DA]
Extended=NO

Exposures

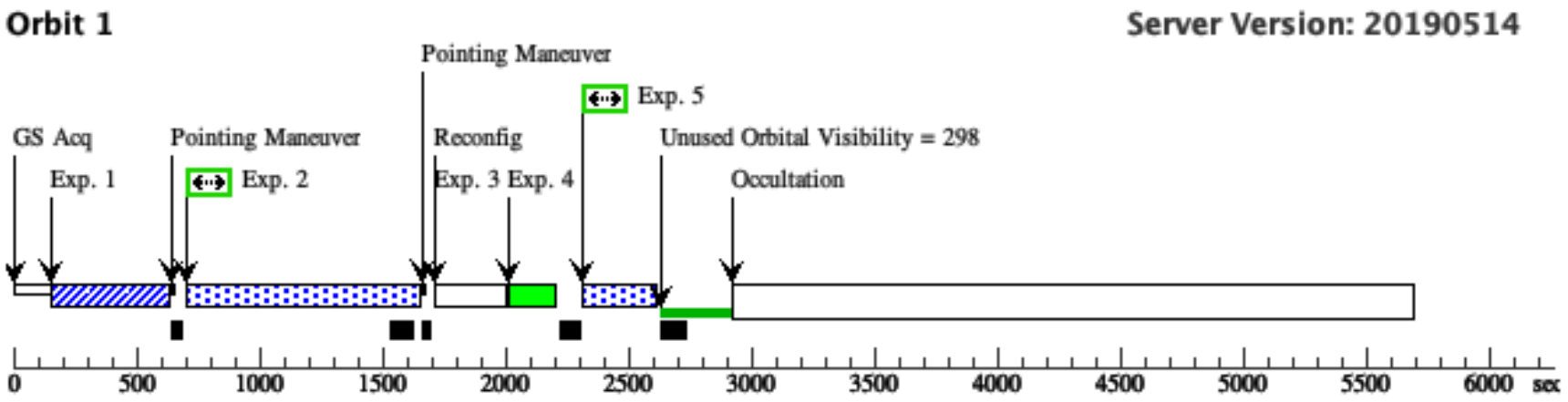
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.839574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) *[==>]*	***[1]***
Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.									
2	G130M/1096/FUVB/LP2 (COS.sp.839576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=644; FP-POS=3; SEGMENT=B; LIFETIME-POS=LP2			744 Secs (744 Secs) *[==>]*	***[1]***
Comments: FUVB only (all ETC warnings come from FUVA). *Set buffer-time = exptime - 100 sec = 644 to maximize time on target.*									
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/1096/FUVA WAVECAL/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=LP2			140 Secs (140 Secs) *[==>]*	***[1]***
5	G160M/1533/FUVA (COS.sp.1311884)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=103; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			103 Secs (103 Secs) *[==>]*	***[1]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									
6	G160M/1577/FUVA (COS.sp.1311885)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=132; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			132 Secs (132 Secs) *[==>]*	***[2]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									

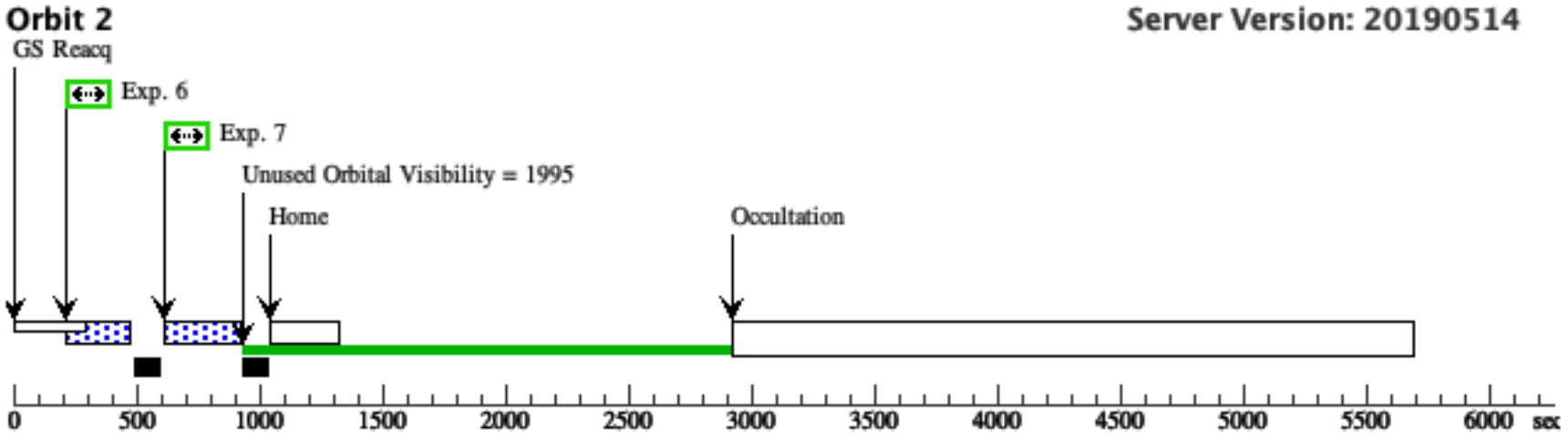
7	G160M/162 3/FUVA (COS.sp.131 1886)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=172; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	172 Secs (172 Secs) [==>]	[2]

Comments: FUVA only (all ETC warnings come from FUVB).

Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.
2.35e6 is the number of events that each buffer can record
6513 cts/sec is the count rate in FUVA, per ETC calculation above
Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime

Orbit Structure





Visit

Proposal 15535, WD0308-OCT-withDELTA (10), failed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 06-OCT-2019:00:00:00 AND 29-OCT-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	 ***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	 ***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	 ***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 487, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

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

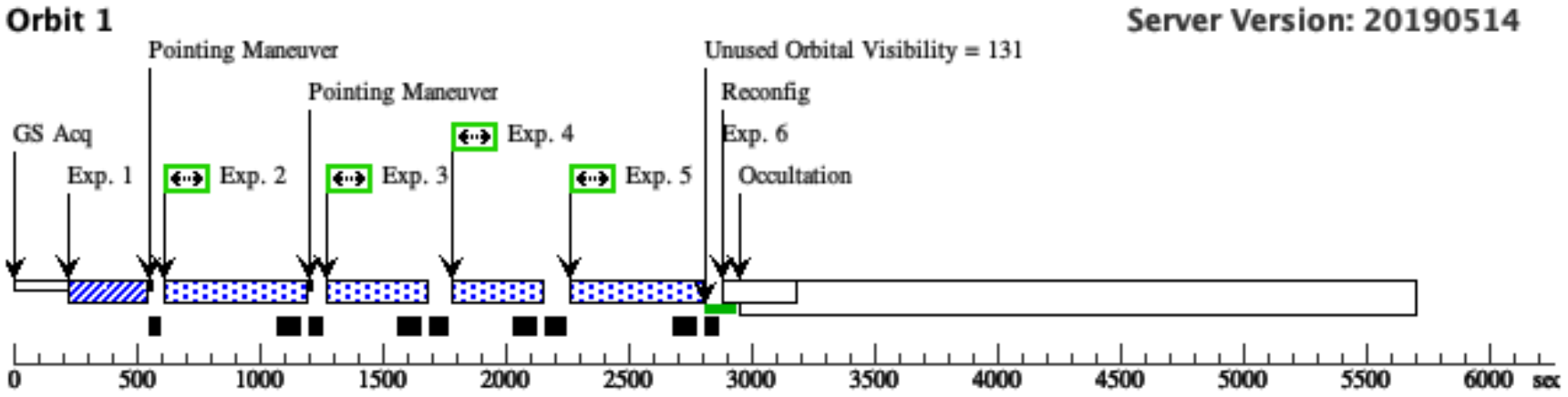
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

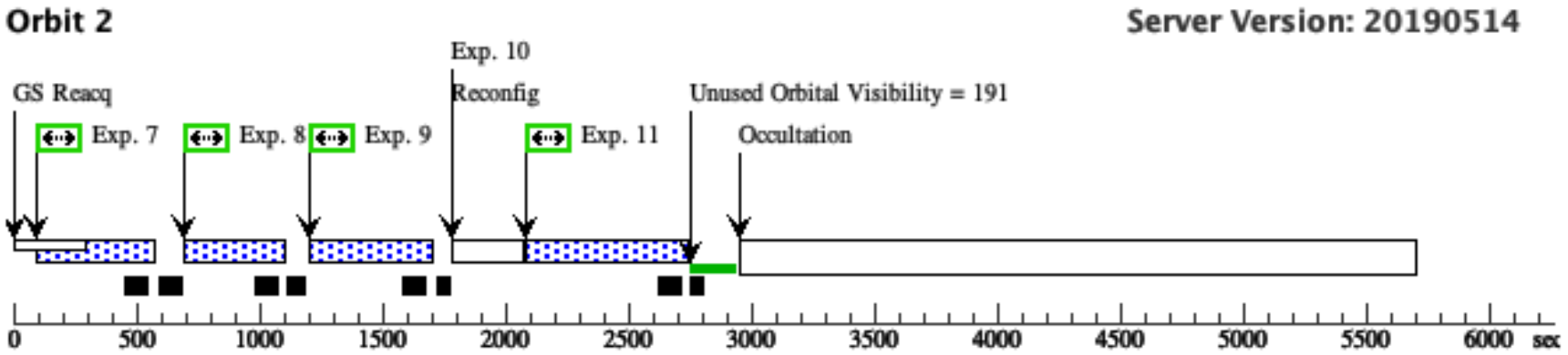
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***

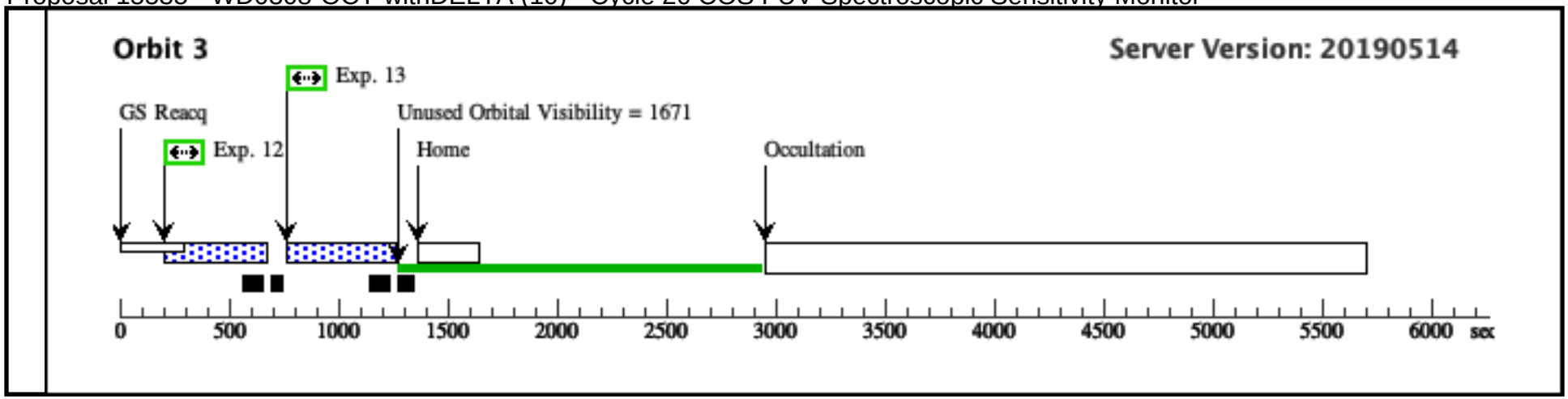
Comments: ETC buffer time is 362, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 263
Continue use of 1 FP-POS

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure



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Exp. 12
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Occultation
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15535, WD0308-OCT-withDELTA (60) Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 06-NOV-2019:00:00:00 AND 21-NOV-2019:00:00:00

Comments: New cenwaves G160M/1533/B and G140L/800/A have been added to the visit.
All G160M observations are now with SEGMENT = B (i.e. segment A is turned off).

Fixed Targets

#	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 carried over from Cycle 25 proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (839564)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs (45 Secs) *[==>]*	***[1]***
Comments: cycle 24 comment: exposure times not reduced following updated ETC calculations, differences not enough to affect orbit requested.									
2	G130M/1055/LP2 (COS.sp.1302752)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1055 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=BOTH; LIFETIME-POS=LP2			363 Secs (363 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is larger than exptime (1482) *Target has been observed before no need to 2/3 factor* *Set buffer time = exptime - 100* *Continue use of 1 FP-POS*									
3	G130M/1222 (COS.sp.1302754)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=154; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			254 Secs (254 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 395 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 = 126* *Continue use of 1 FP-POS*									
4	G130M/1291 (COS.sp.1311908)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=133; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			233 Secs (233 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 322 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*									
5	G140L/1280 (COS.sp.1021719)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=228; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=BOTH			328 Secs (328 Secs) *[==>]*	***[1]***
Comments: ETC buffer time is 451, 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*									
6		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.									

7	G160M/1533/B (COS.sp.1311897)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=3; BUFFER-TIME=122; LIFETIME-POS=LP4; SEGMENT=B		222 Secs (222 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 487, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

8	G160M/1577/B (COS.sp.1311899)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=173; LIFETIME-POS=LP4; SEGMENT=B		273 Secs (273 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 599, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100

Continue use of 1 FP-POS

9	G160M/1623/B (COS.sp.1311901)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=269; LIFETIME-POS=LP4; SEGMENT=B		369 Secs (369 Secs) *[==>]*	***[2]***

Comments: ETC buffer time is 799, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 300
Continue use of 1 FP-POS

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

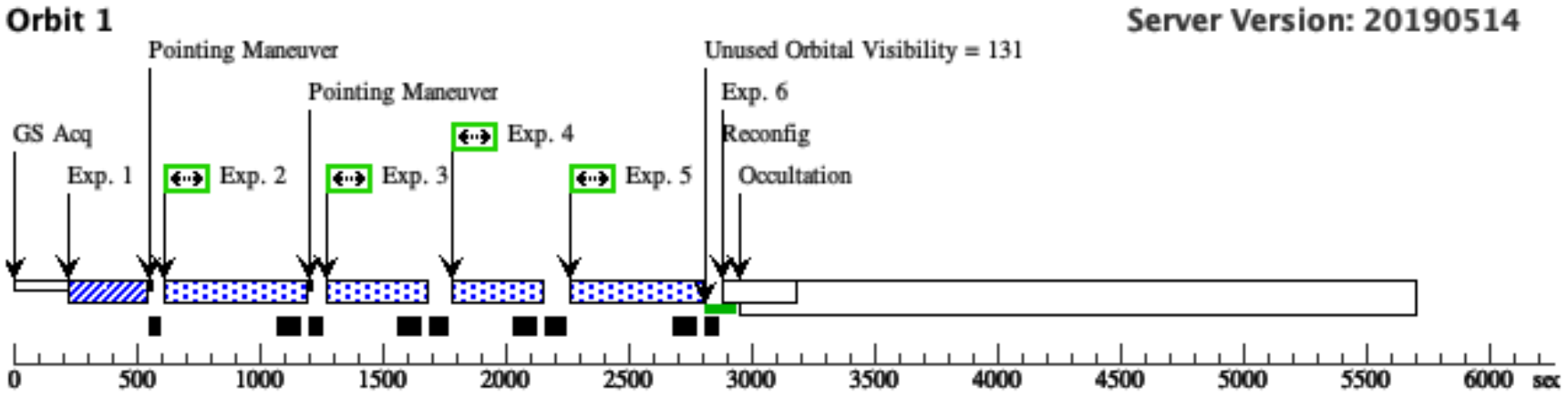
Comments: Work-around to efficiently schedule the reconfiguration to SEG-A. Eliminates SPSS induced gaps.

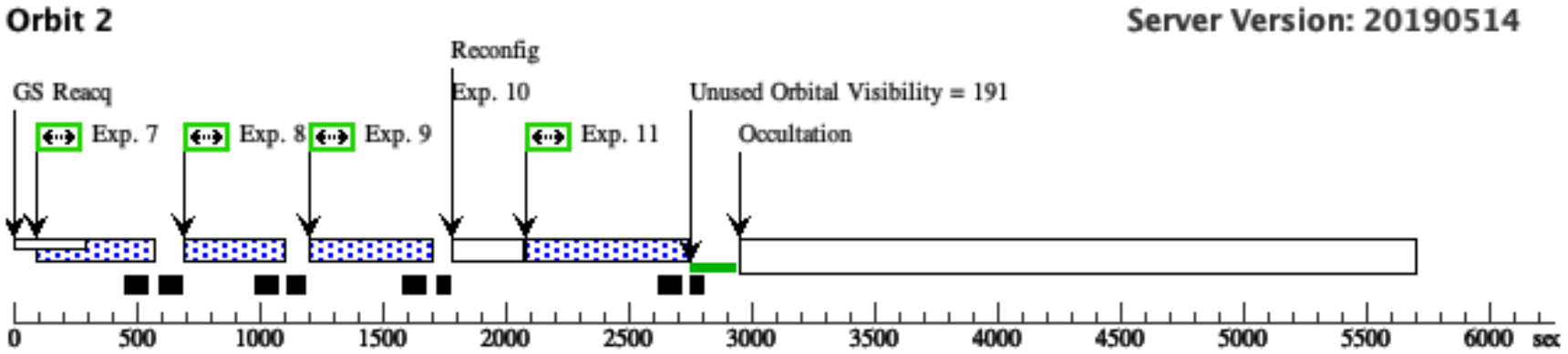
11	G140L/800/FUVA (COS.sp.1302815)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=263; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4		363 Secs (363 Secs) *[==>]*	***[2]***

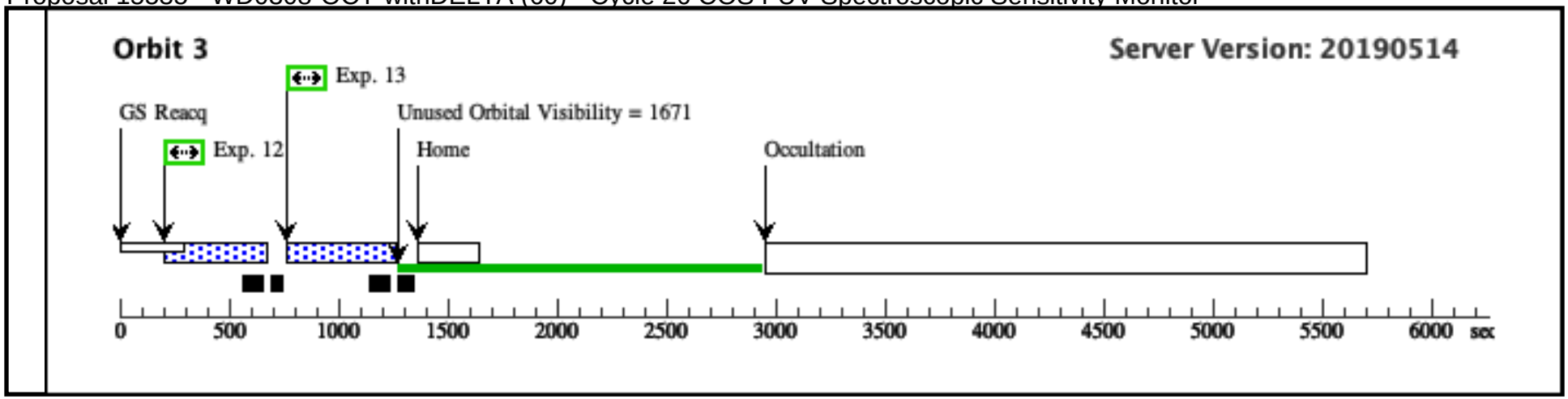
Comments: ETC buffer time is 362, larger than exptime
Target has been observed before no need to 2/3 factor
Set buffer time = exptime - 100 = 263
Continue use of 1 FP-POS

	12	G140L/1105 /FUVA (COS.sp.102 1720)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=227; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	327 Secs (327 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 362, 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*						
	13	G130M/1327/FUVA (COS.sp.102 1693)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=178; FP-POS=3; LIFETIME-POS=LP4; SEGMENT=A	278 Secs (278 Secs) *[==>]*	***[3]***
		Comments: ETC buffer time is 320 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*						

Orbit Structure



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GS Reacq
Unused Orbital Visibility = 1671
Exp. 12
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Occultation
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Proposal 15535 - GD71-OCT-withDELTA (11) - Cycle 26 COS FUV Spectroscopic Sensitivity Monitor

Visit

Proposal 15535, GD71-OCT-withDELTA (11), completed Wed Oct 30 13:01:01 GMT 2019

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 16-OCT-2019:00:00:00 AND 29-OCT-2019:00:00:00

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.

New cenwave G160M/1533/A has been added to this visit.

Fixed Targets

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

Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Carried over from Cycle 25 proposal.
Category=STAR
Description=[DA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.839574)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				90 Secs (90 Secs) *[==>]*	***[1]***
Comments: Exptime for S/N of 60 is 105.5 sec, using 90 sec leads to S/N of 55.									
2	G130M/1096/FUVB/LP2 (COS.sp.839576)	(2) GD71	COS/FUV, TIME-TAG, PSA	G130M 1096 A	BUFFER-TIME=644; FP-POS=3; SEGMENT=B; LIFETIME-POS=LP2			744 Secs (744 Secs) *[==>]*	***[1]***
Comments: FUVB only (all ETC warnings come from FUVA). *Set buffer-time = exptime - 100 sec = 644 to maximize time on target.*									
3		DARK	S/C, DATA, NONE			QASISTATES COS FUV HVLOW HVLOW		1 Secs (1 Secs) *[==>]*	***[1]***
Comments: Work-around to efficiently schedule the SEG-B to SEG-A reconfiguration. Eliminates SPSS induced gaps.									
4	G130M/1096/FUVA WAVECAL/LP2	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1096 A	FP-POS=3; SEGMENT=A; FLASH=NO; LIFETIME-POS=LP2			140 Secs (140 Secs) *[==>]*	***[1]***
5	G160M/1533/FUVA (COS.sp.1311884)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=103; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			103 Secs (103 Secs) *[==>]*	***[1]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									
6	G160M/1577/FUVA (COS.sp.1311885)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=132; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4			132 Secs (132 Secs) *[==>]*	***[2]***
Comments: FUVA only (all ETC warnings come from FUVB). *Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.* *2.35e6 is the number of events that each buffer can record* *6513 cts/sec is the count rate in FUVA, per ETC calculation above* *Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime*									

7	G160M/162 3/FUVA (COS.sp.131 1886)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=172; FP-POS=3; SEGMENT=A; LIFETIME-POS=LP4	172 Secs (172 Secs) *[==>]*	*[2]*

Comments: FUVA only (all ETC warnings come from FUVB).

Buffer-time for FUVA is 2.35e6/6513 = 360 sec, which is larger than exp time, so set buffer time to exptime.
2.35e6 is the number of events that each buffer can record
6513 cts/sec is the count rate in FUVA, per ETC calculation above
Set buffer-time = exptime b/c exptime - 100 < 80 which is the minimum exptime

Orbit Structure