16906 - COS FUV LP6 Calibration: Profiles, Traces, Sensitivities, Flat Fields, and Spatial Resolution

Cycle: 29, 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	COS/FUV COS/NUV	2	26-Apr-2022 07:00:14.0	yes
02	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:17.0	yes
03	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:19.0	yes
04	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:21.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:23.0	yes
06	(1) WD0308-565	COS/FUV COS/NUV	2	26-Apr-2022 07:00:26.0	yes
07	(2) GD71	COS/FUV COS/NUV	2	26-Apr-2022 07:00:29.0	yes
08	(2) GD71	COS/FUV COS/NUV	3	26-Apr-2022 07:00:33.0	yes
09	(2) GD71	COS/FUV COS/NUV	3	26-Apr-2022 07:00:37.0	yes
57	(2) GD71	COS/FUV COS/NUV	2	26-Apr-2022 07:00:41.0	yes
55	(1) WD0308-565	COS/FUV COS/NUV	1	26-Apr-2022 07:00:43.0	yes

23 Total Orbits Used

ABSTRACT

This program obtains observations of two spectrophotometric white dwarf standard stars (WD0308-565 and GD71) at all COS2025-compliant cenwaves and FP-POS at LP6 for G160M modes. The data will be used to determine the 2D cross-dispersion spectral profiles and traces required to perform two-zone extraction, as well as the sensitivities and flat-fields for accurate flux calibration. Additionally, the data will be used to determine the spatial resolution of the detectors. WD0308-565 is the primary target for this program due to its status as a flux standard and TDS target. GD71 is used to more efficiently calibrate Segment A.

The main requirement for this program is to achieve S/N of about 50 per resel, which is driven by the requirement for obtaining profiles that are sufficiently accurate that the contours can be located such that the enclosed flux errors are less than 1%. This program ties in with the FUV spectroscopic sensitivity monitoring program (PID 16830) during which near-contemporaneous observations at the new LP will be obtained to monitor any rapid evolution in the gain.

OBSERVING DESCRIPTION

This program contains 9 visits; visits 1-6 contain the WD0308-565 observations, and visits 7-9 contain the GD71 observations. It is modeled after PID 14910, which served the same purpose for LP4, with the following changes made:

(1) The G160M portions of visits 3-5 go to LP6 via the selection of the LIFETIME-POS optional parameter. No special commanding is necessary for this (including HV, focus, and aperture). The remaining grating exposures are removed.

(2) Each cenwave (all FPPOS) is now contained in its own visit. Planning the visits this way keeps them to 2-3 orbits each, which will help with scheduling.

(3) Each visit begins with 2 ACQ/IMAGE target acquisition exposures, which help to get the target more accurately centered and guard against TA failures.

(4) The exposure times per cenwave are increased to account for decreased sensitivity of detector (TDS). The orbit count is higher for this program due to the overheads added by split-wavecals at LP6. Buffer times are modified for the WD0308-565 visits to minimize buffer readout time between exposures in order to fit longer integration. Exposure times are calucated to acheive S/N~50 at the same wavelengths used for the LP4 program, which have been shown to be adequate for these purposes.

Scheduling notes:

All visits per target should execute within two weeks of each other. Additionally, program 16830 visits 5a and 6 will be tied to this program, and we request that these execute as close to the visits in this program as possible.

Visit

Proposal 16906, WD0308 1533 (01), completed Tue Apr 26 11:00:43 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of WD0308-565 with cenwave 1533

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

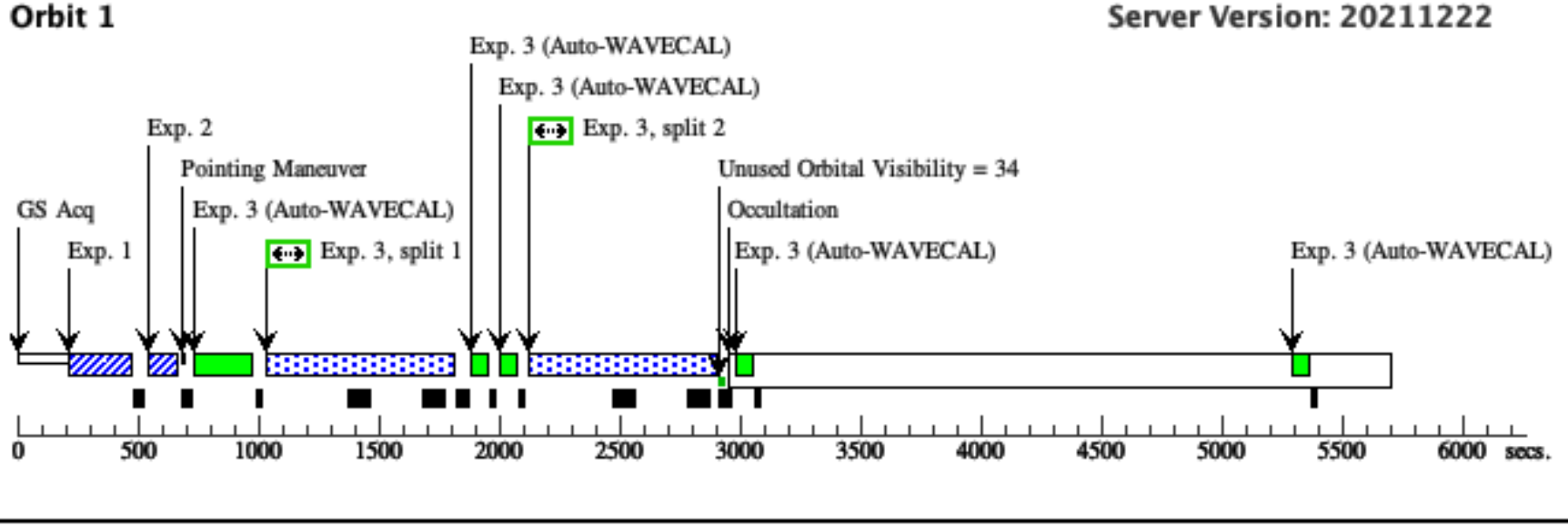
Comments: Coordinates from Charle's proposal
Category=STAR
Description=[DB]
Extended=NO

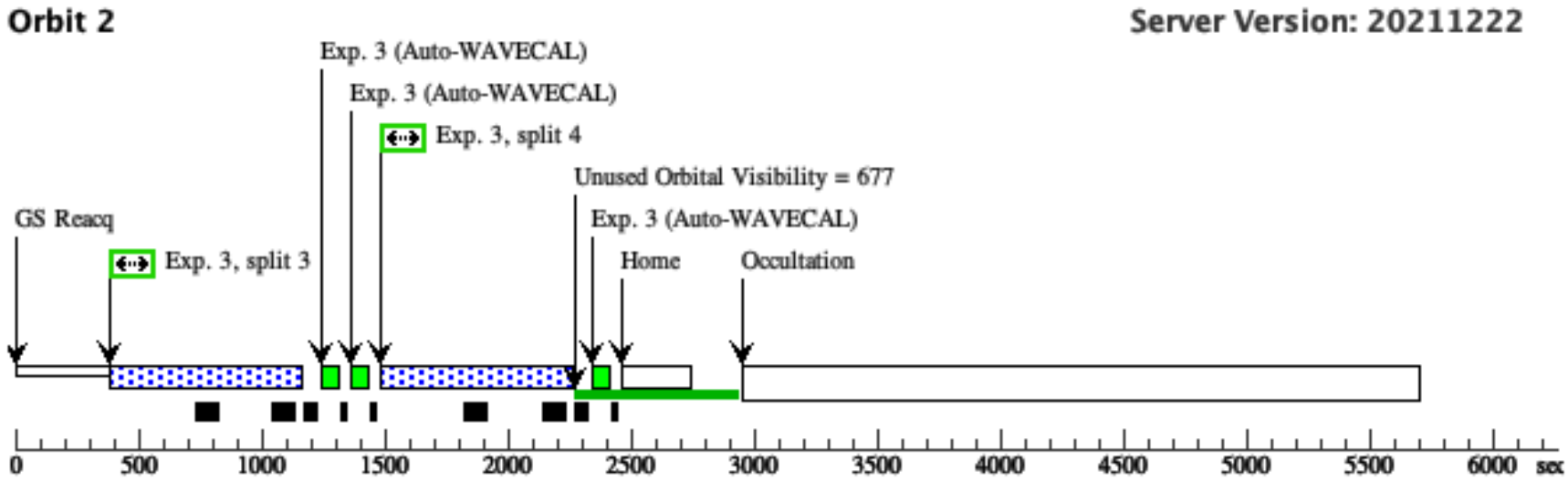
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	 ***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	 ***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1533 (COS.sp.1690867)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=310			725 Secs (2900 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]*** ***[2]***

Comments: 2900s gives S/N~50 at 1450A
2900/4 = 725s per FPPOS
*BFT = 501 * 2/3 = 334, but using n-100/m we can lower to 310 to minimize time between exposures.*

Orbit Structure





Visit

Proposal 16906, WD0308 1577 (02), completed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of WD0308-565 with cenwave 1577

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

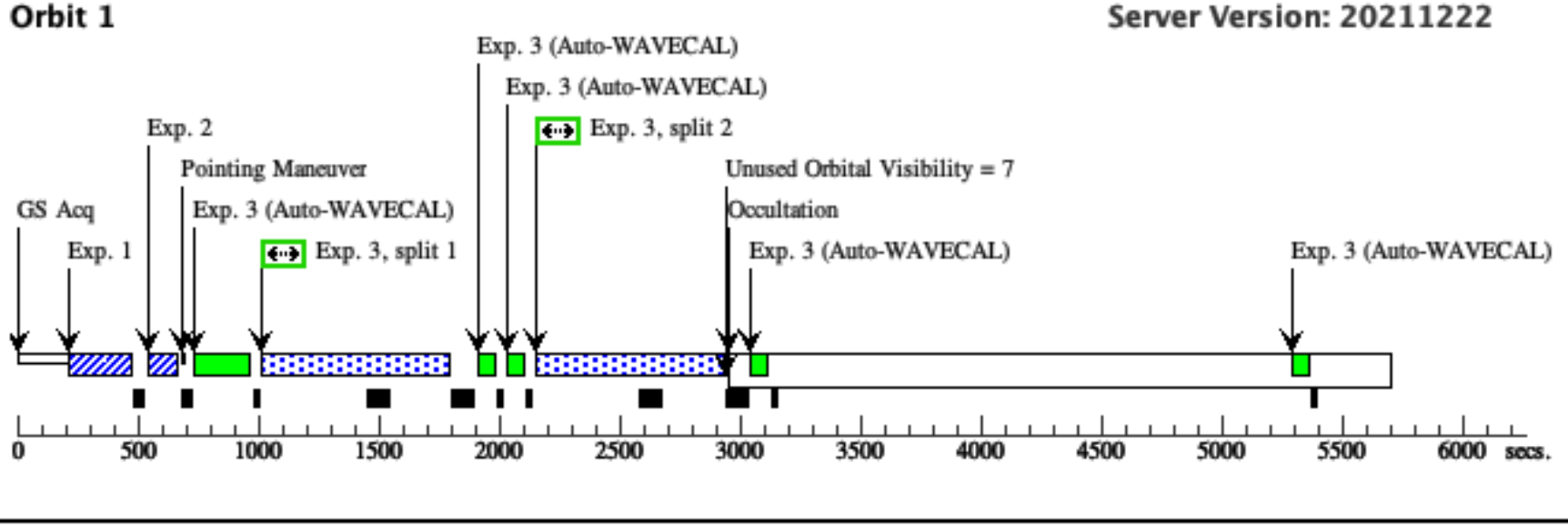
Comments: Coordinates from Charle's proposal
Category=STAR
Description=[DB]
Extended=NO

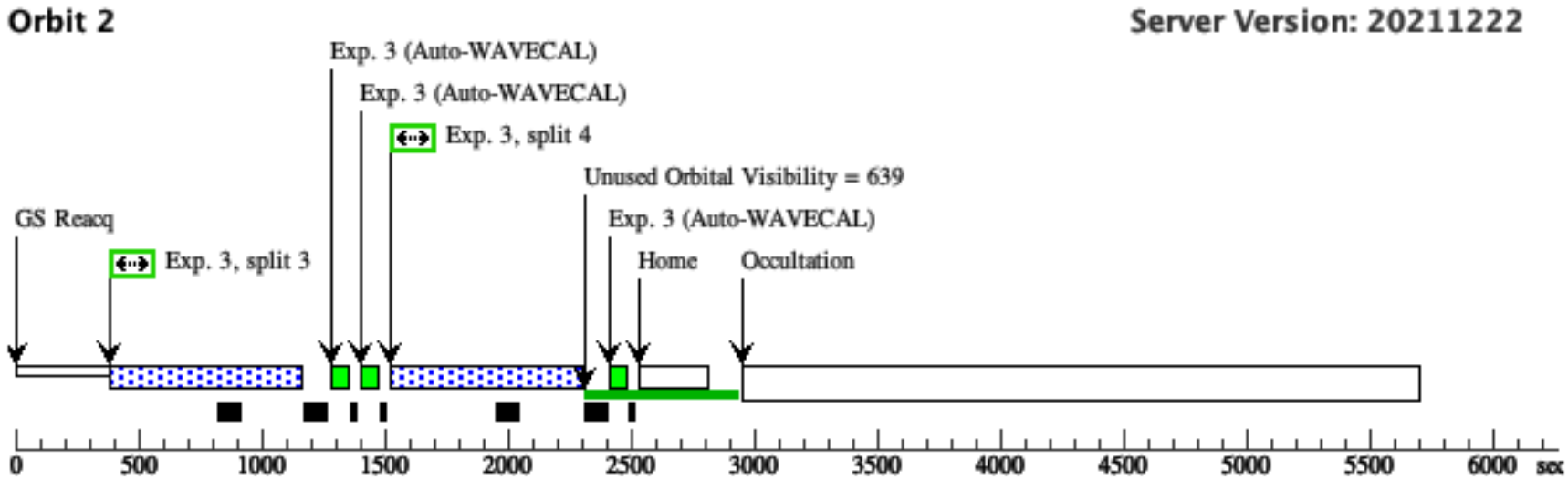
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1577 (COS.sp.1690868)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=398			725 Secs (2900 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*

Comments: 2900s gives S/N~50 at 1500A
2900/4 = 725s per FPPOS
*BFT = 636 * 2/3 = 424, but using n-100/m we can lower to 398 to minimize time between exposures.*

Orbit Structure





Visit

Proposal 16906, WD0308 1589 (03), completed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of WD0308-565 with cenwave 1589

Fixed Targets

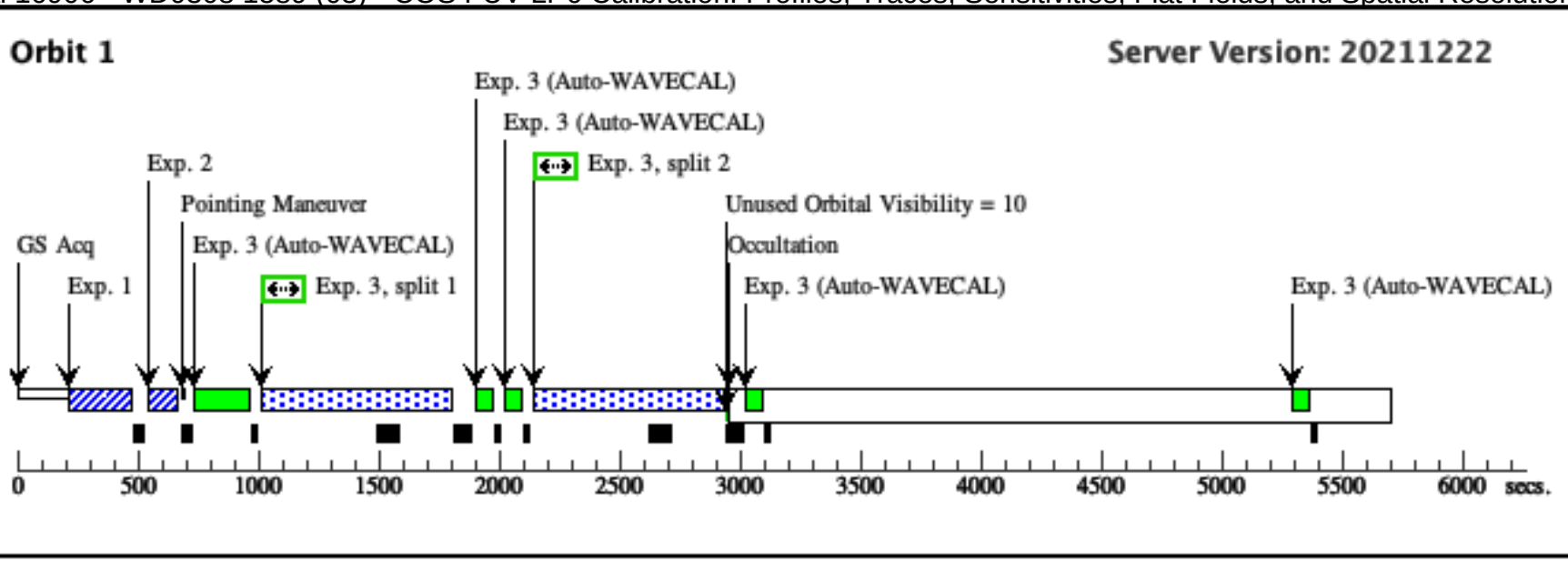
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

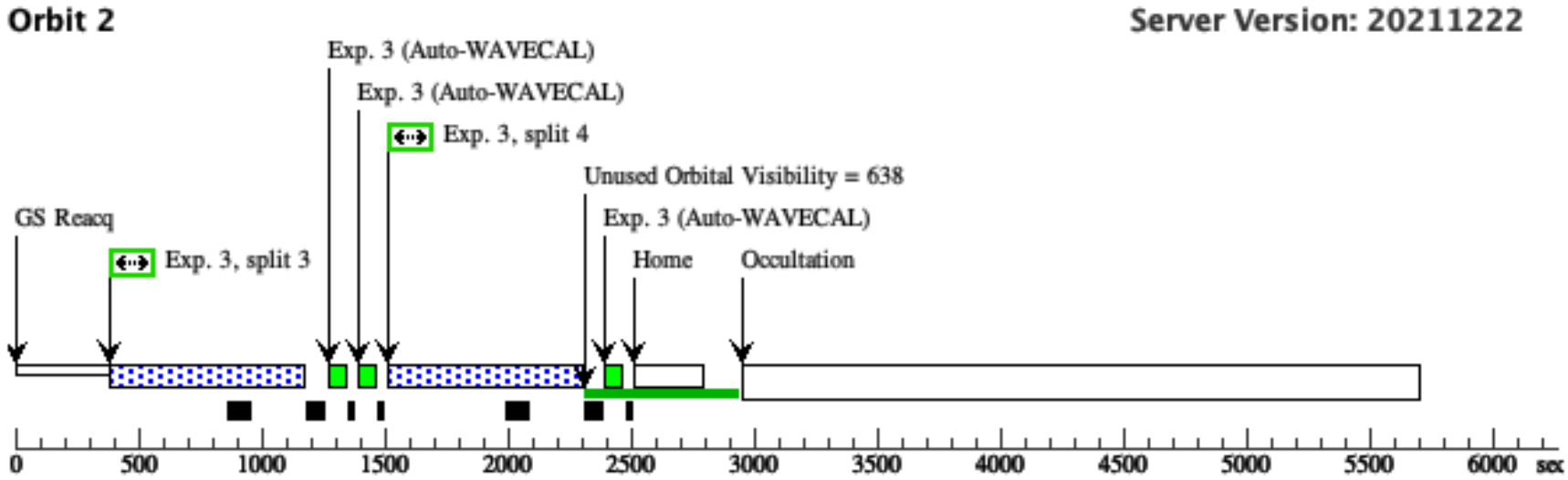
Comments: Coordinates from Charle's proposal
Category=STAR
Description=[DB]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1589 (COS.sp.1688847)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1589 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=444			735 Secs (2940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]*** ***[2]***
Comments: 2940s gives S/N~50 at 1510A *2940/4 = 735s per FPPOS* *BFT = 666 * 2/3 = 444*									

Orbit Structure





Visit

Proposal 16906, WD0308 1600 (04), completed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of WD0308-565 with cenwave 1600

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

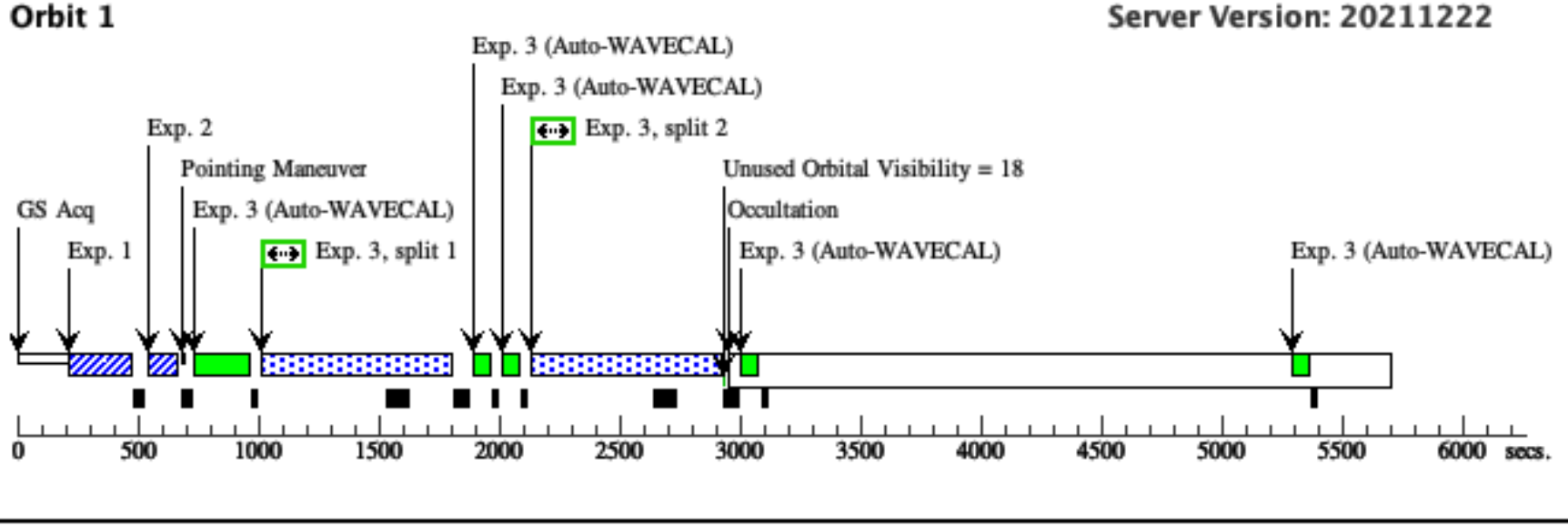
Comments: Coordinates from Charle's proposal
Category=STAR
Description=[DB]
Extended=NO

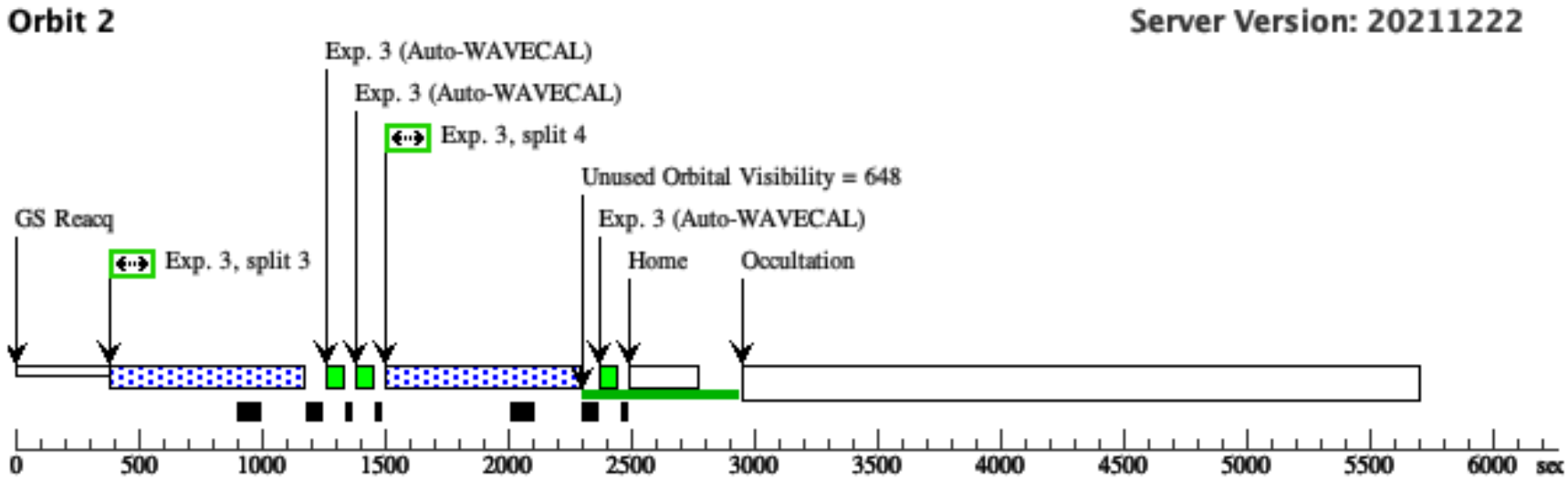
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1600 (COS.sp.1688848)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=478			735 Secs (2940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]*** ***[2]***

Comments: 2940s gives S/N~50 at 1520A
2940/4 = 735s per FPPOS
*BFT = 717 s * 2/3 = 478*

Orbit Structure





Visit

Proposal 16906, WD0308 1611 (05), failed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of WD0308-565 with cenwave 1611

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

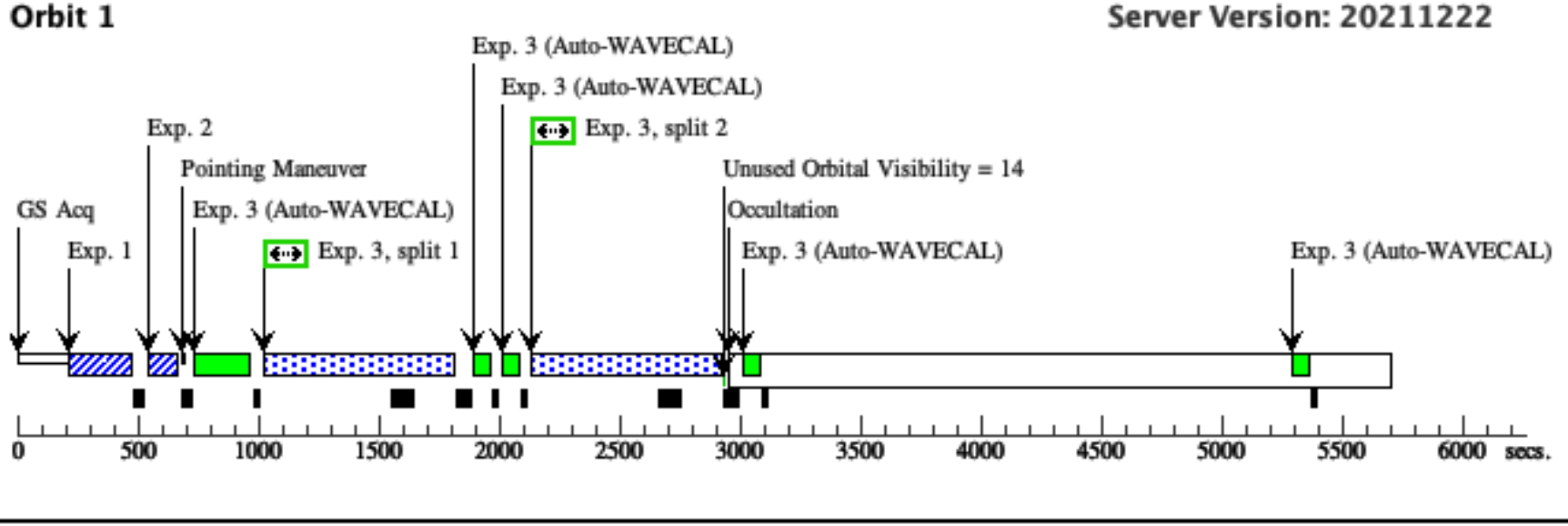
Comments: Coordinates from Charle's proposal
Category=STAR
Description=[DB]
Extended=NO

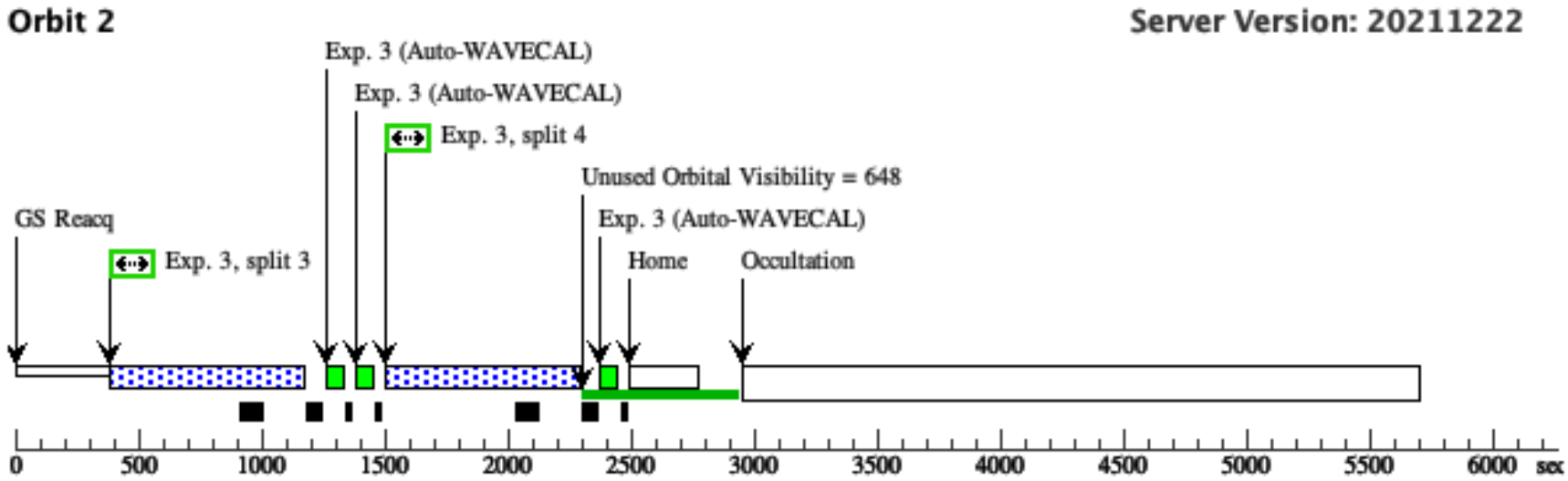
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1611 (COS.sp.1688849)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=496			735 Secs (2940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*

Comments: 2940s gives S/N~50 at 1530A
2940/4 = 735s per FPPOS
*BFT = 745 * 2/3 = 496*

Orbit Structure





Visit

Proposal 16906, WD0308 1623 (06), completed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of WD0308-565 with cenwave 1623

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

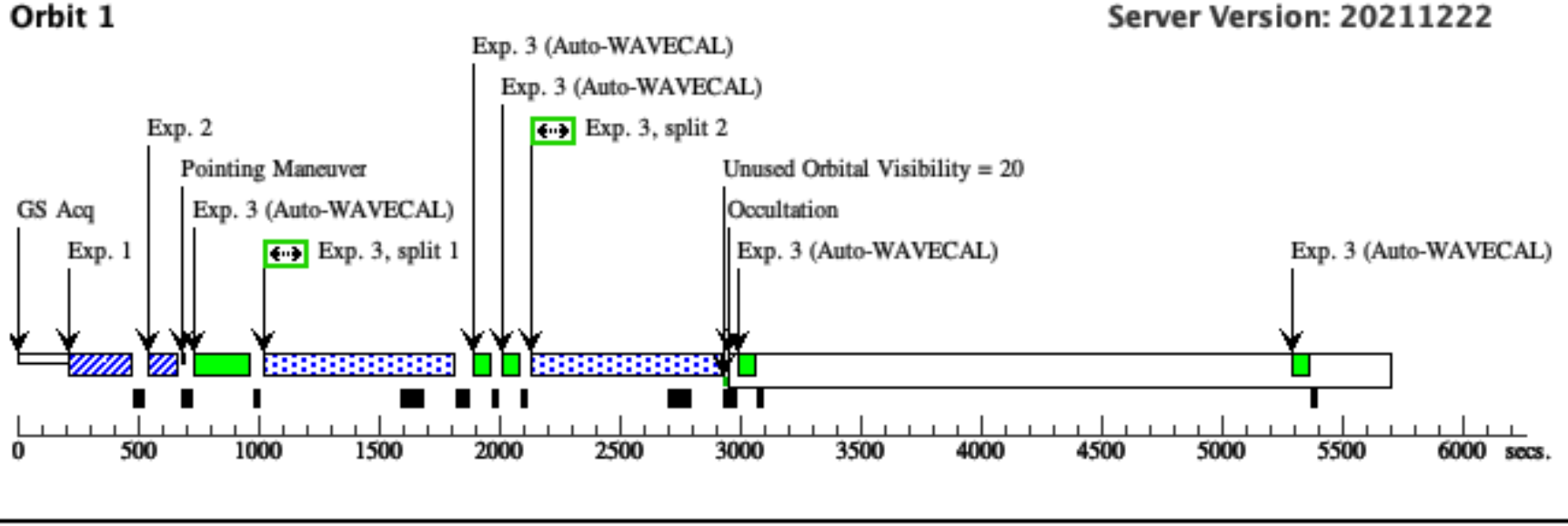
Comments: Coordinates from Charle's proposal
Category=STAR
Description=[DB]
Extended=NO

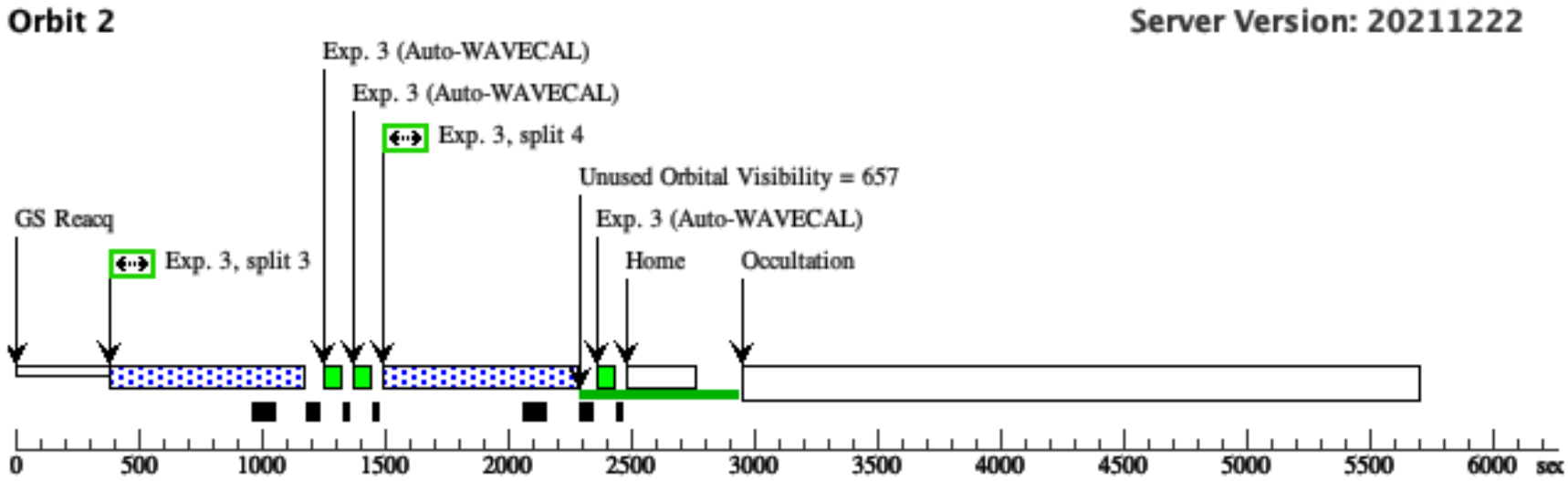
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1623 (COS.sp.1688850)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=538			735 Secs (2940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*

Comments: 2940s gives S/N~50 at 1540A
2940/4 = 735s per FPPOS
*BFT = 807 * 2/3 = 538*

Orbit Structure





Visit

Proposal 16906, GD71 1533 1577 (07), failed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of GD71 with Segment A only with cenwaves 1533 + 1577

Fixed Targets

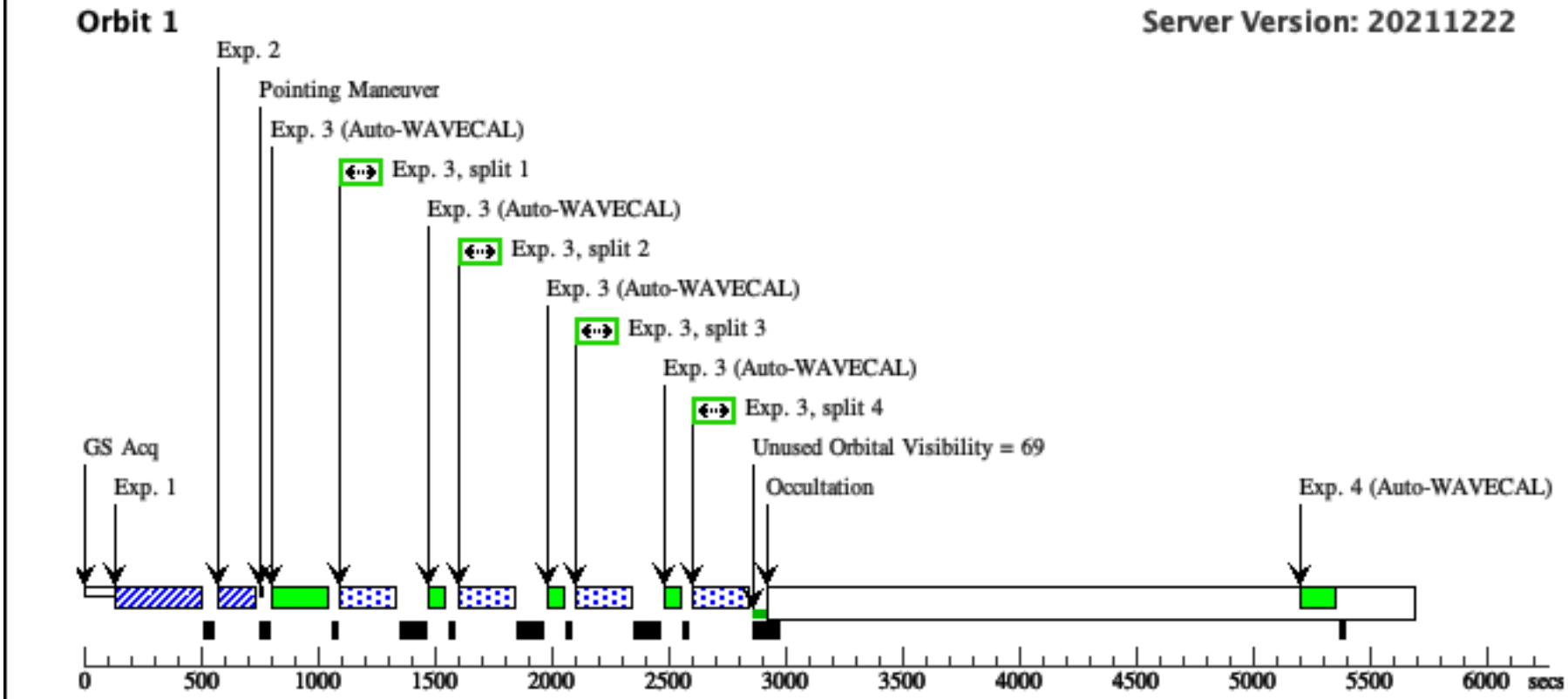
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
		Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr		
		Equinox: J2000	Epoch of Position: 2000		

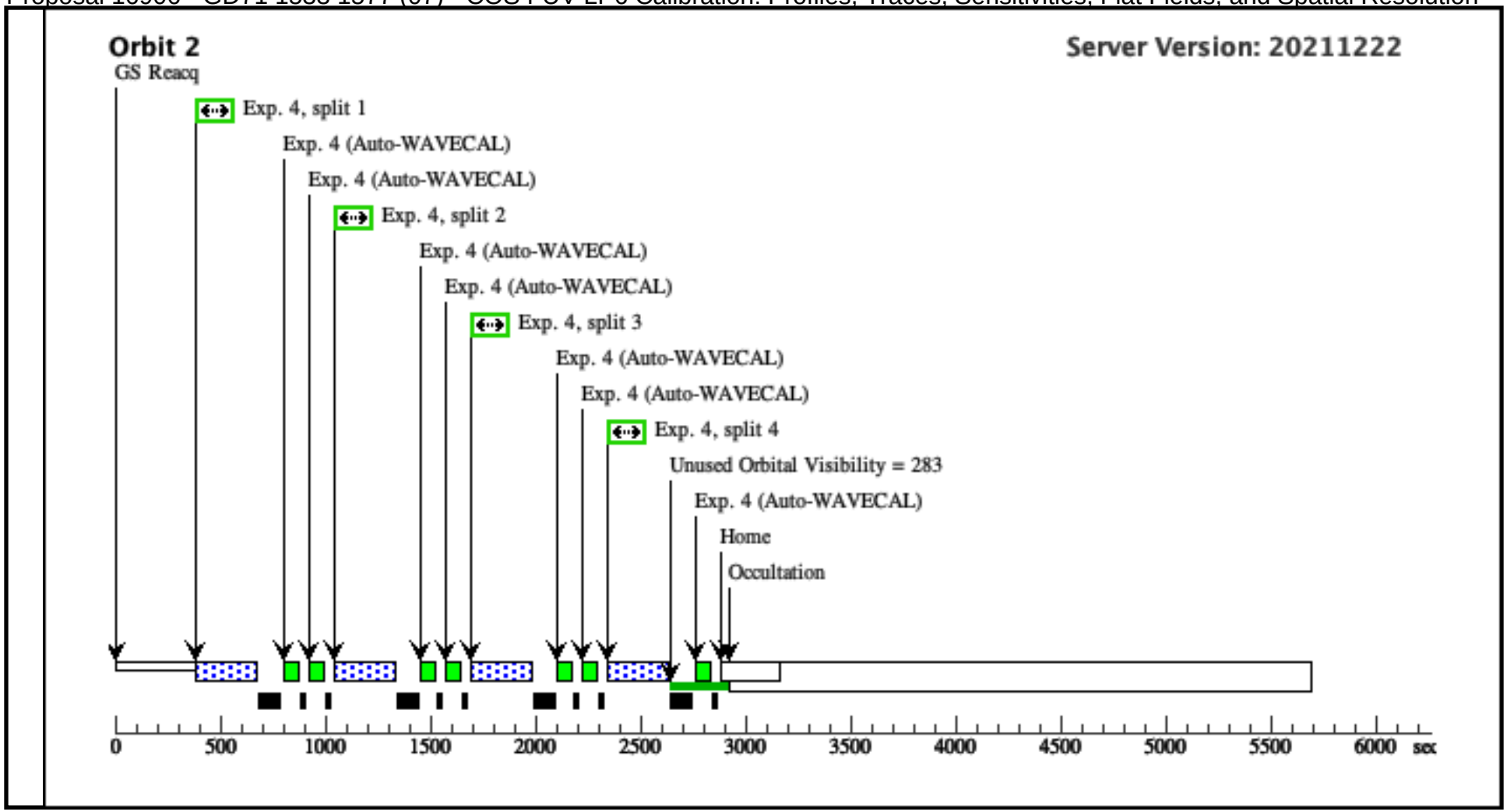
Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Category=STAR
Description=[DA]
Extended=NO

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.1683600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	 ***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
2	ACQ/IM (COS.ta.1683600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	 ***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
3	1533 (COS.sp.1689536)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=178			190 Secs (760 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
Comments: 760s gives S/N=50 at 1620A *760/4 = 190s per FPPOS* *BFT (seg A) = 267 * 2/3 = 178*									
4	1577 (COS.sp.1689540)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=254			235 Secs (940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]***
Comments: 940s gives S/N=50 at 1660A *940/4 = 235s per FPPOS* *BFT (seg A) = 381 * 2/3 = 254*									

Orbit Structure




Orbit 2
Server Version: 20211222
GS Reacq
Exp. 4, split 1
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 2
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 3
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 4
Unused Orbital Visibility = 283
Exp. 4 (Auto-WAVECAL)
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16906, GD71 1589 1600 (08), failed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of GD71 with Segment A only with cenwaves 1589 + 1600

Fixed Targets

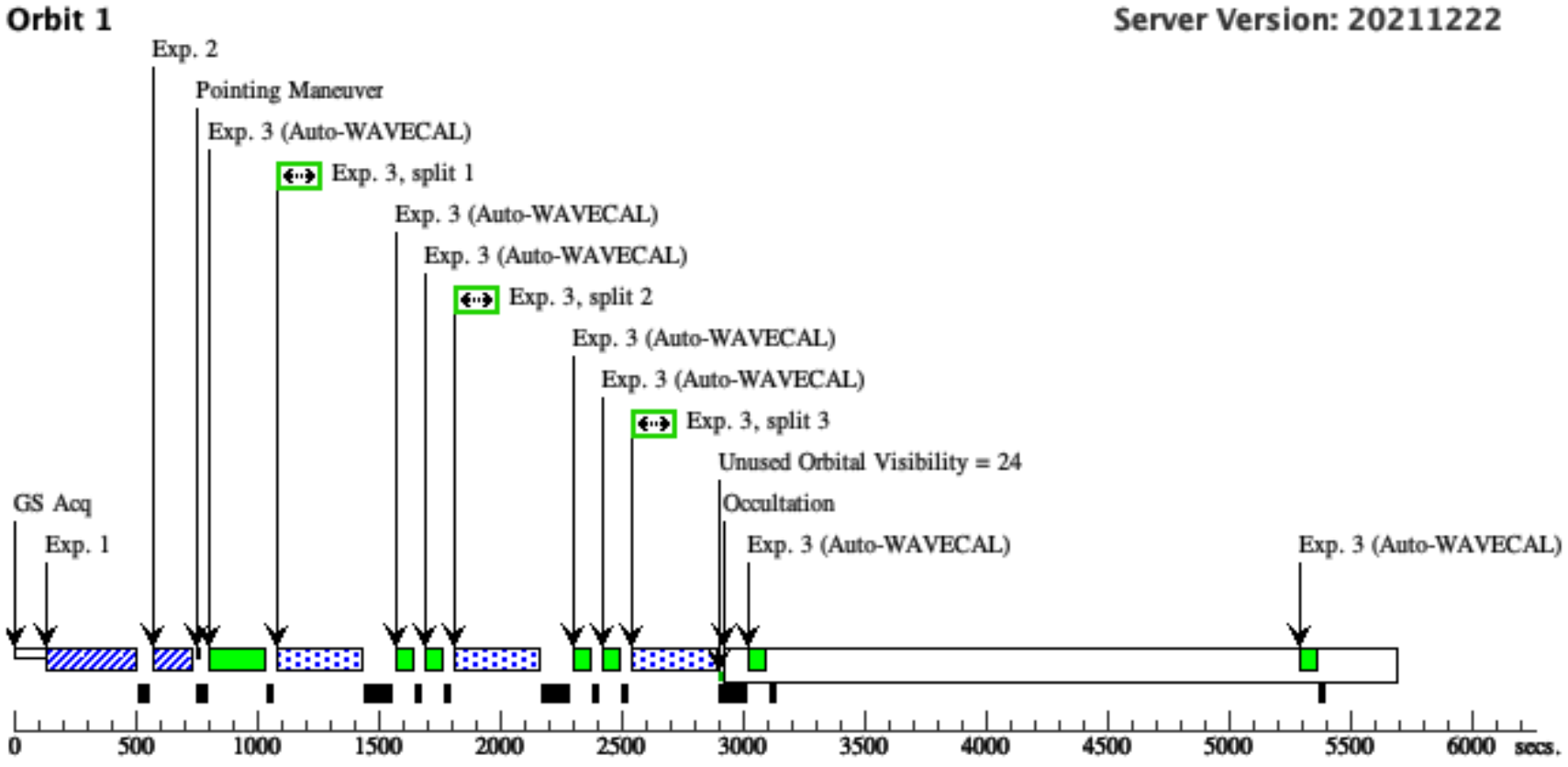
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS

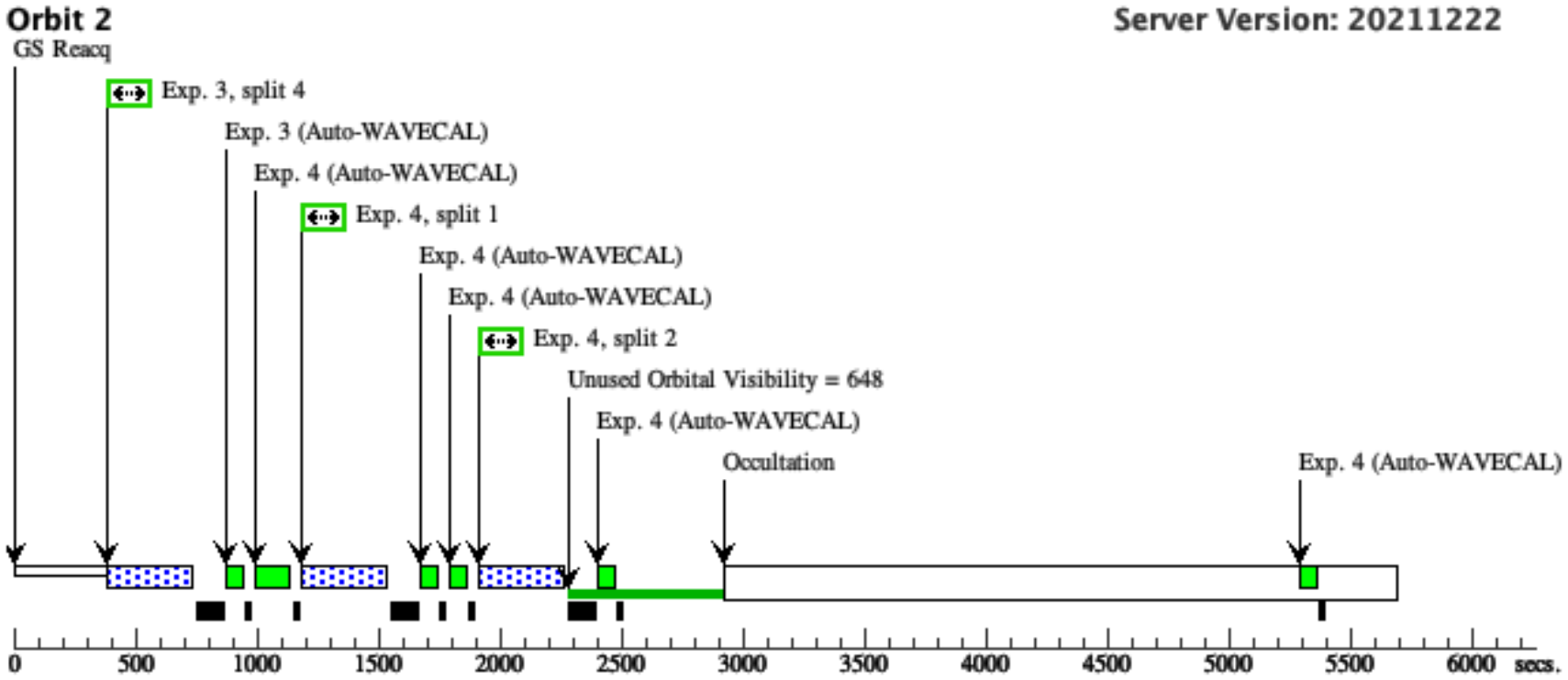
Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Category=STAR
Description=[DA]
Extended=NO

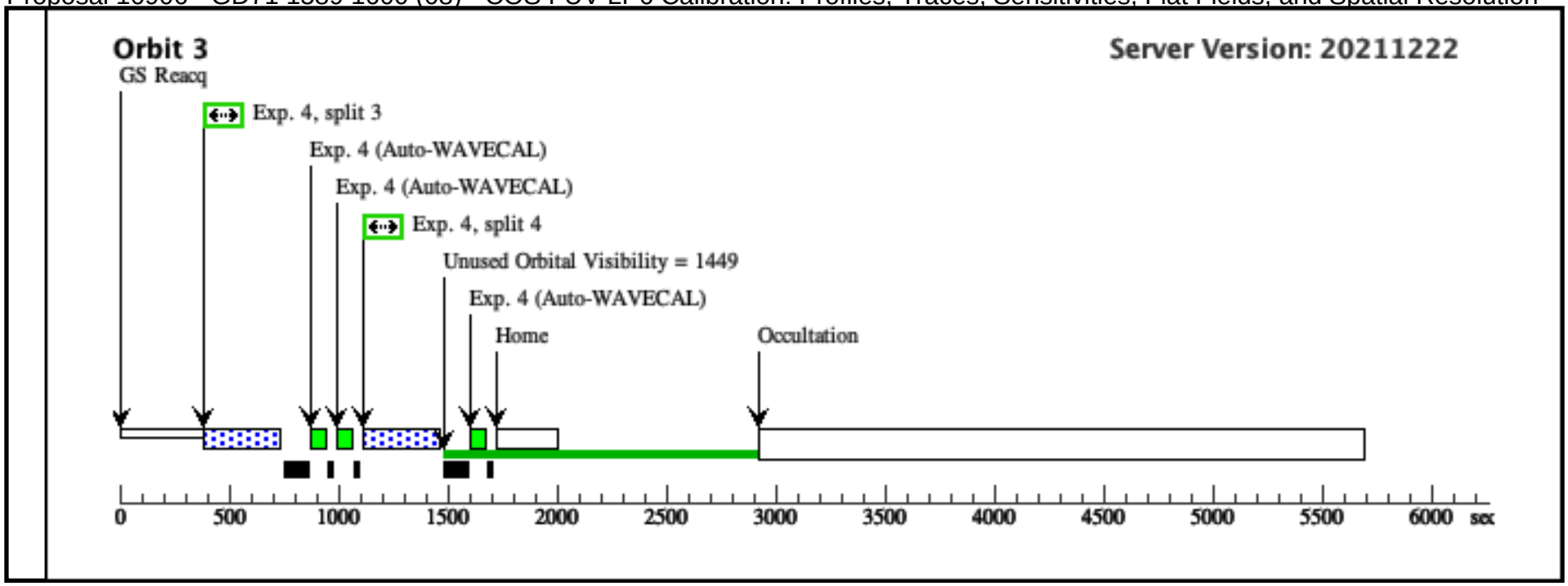
Exposures

#	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.168 3600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	 ***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
2	ACQ/IM (COS.ta.168 3600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	 ***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
3	1589 (COS.sp.168 9533)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1589 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=278			300 Secs (1200 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]*** ***[2]***
Comments: 1200s gives S/N~50 at 1670A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 417 * 2/3 = 278*									
4	1600 (COS.sp.168 9532)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=298			300 Secs (1200 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]*** ***[3]***
Comments: 1200s gives S/N~50 at 1680A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 447 * 2/3 = 298*									

Orbit Structure




Orbit 2
Server Version: 20211222
GS Reacq
Exp. 3, split 4
Exp. 3 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 2
Unused Orbital Visibility = 648
Exp. 4 (Auto-WAVECAL)
Occultation
Exp. 4 (Auto-WAVECAL)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
secs.


Orbit 3
Server Version: 20211222
GS Reacq
Exp. 4, split 3
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 4
Unused Orbital Visibility = 1449
Exp. 4 (Auto-WAVECAL)
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16906, GD71 1611 1623 (09), completed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Visit containing observations of GD71 with Segment A only with cenwaves 1611 + 1623

Fixed Targets

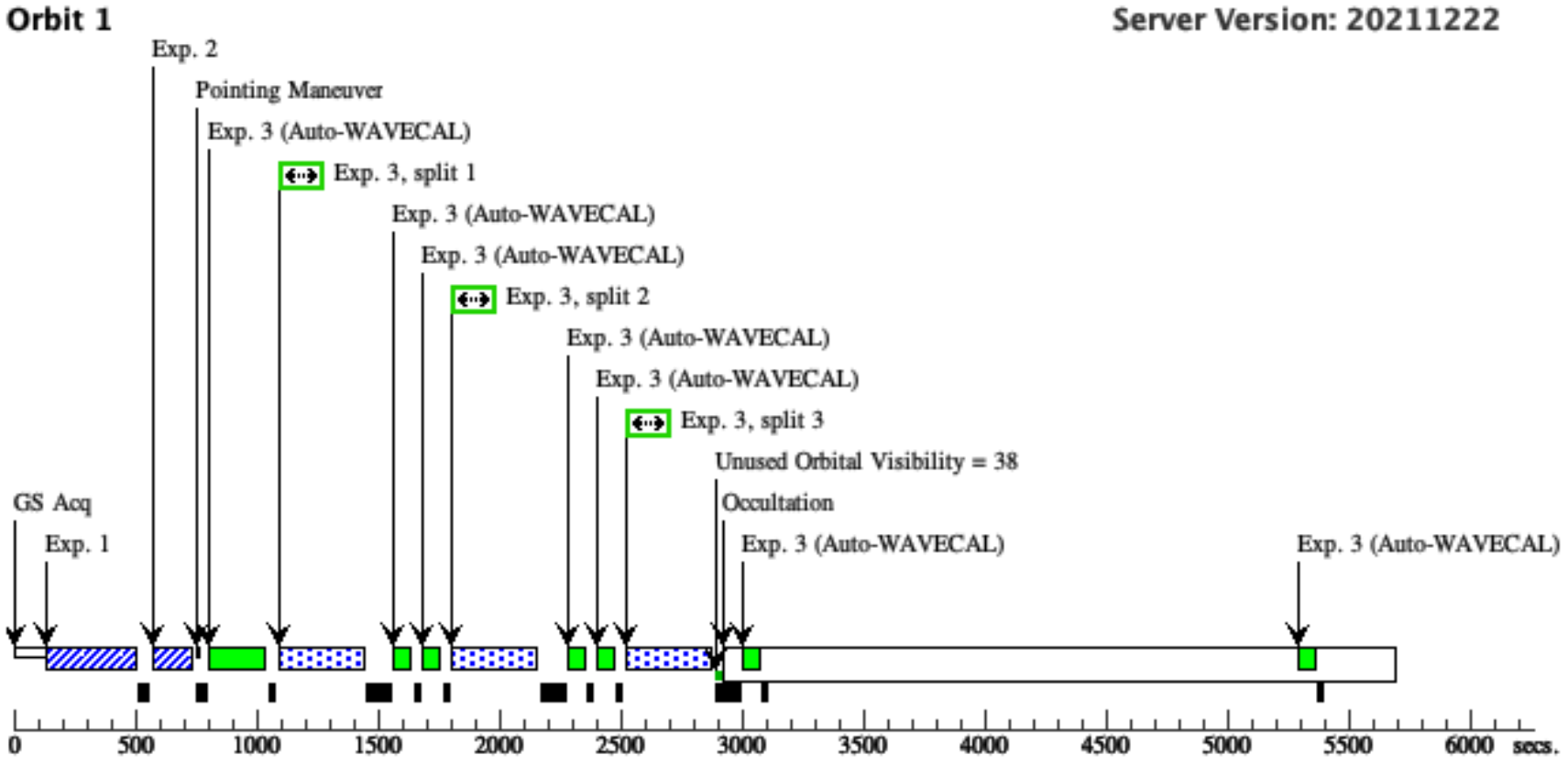
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GD71	RA: 05 52 27.6100 (88.1150417d) Dec: +15 53 13.80 (15.88717d) Equinox: J2000	Proper Motion RA: 85 mas/yr Proper Motion Dec: -174 mas/yr Epoch of Position: 2000	V=13.06+/-0.01	Reference Frame: ICRS

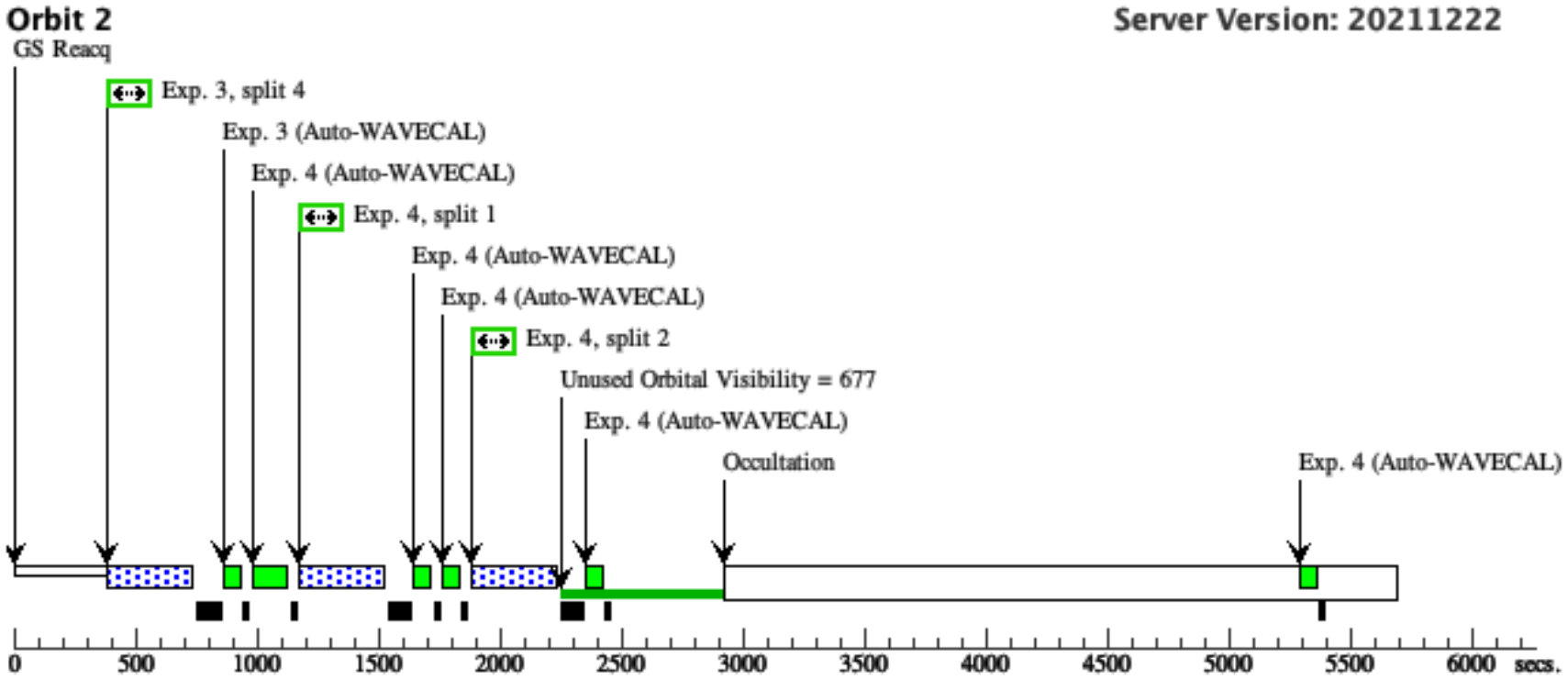
Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Category=STAR
Description=[DA]
Extended=NO

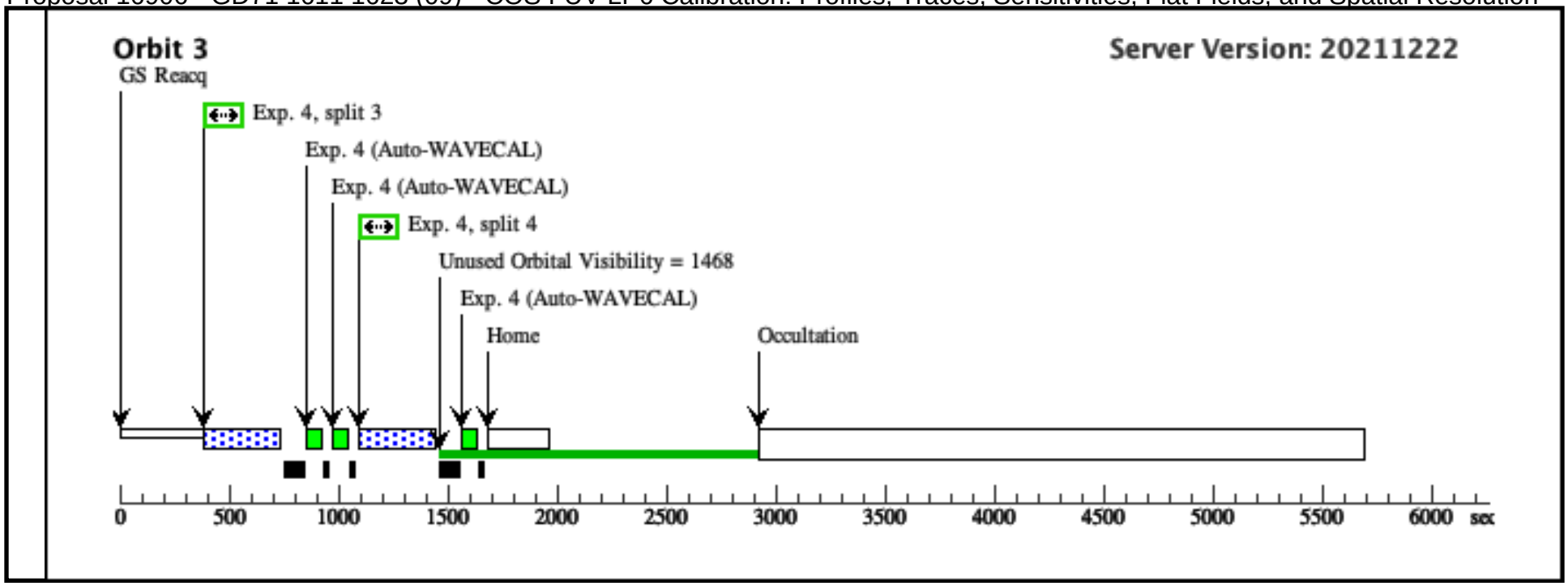
Exposures

#	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.168 3600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	 ***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
2	ACQ/IM (COS.ta.168 3600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	 ***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
3	1611 (COS.sp.168 9531)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=309			300 Secs (1200 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]*** ***[2]***
Comments: 1200s gives S/N~50 at 1690A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 464 * 2/3 = 309*									
4	1623 (COS.sp.168 9530)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=339			300 Secs (1200 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]*** ***[3]***
Comments: 1200s gives S/N~50 at 1700A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 509 * 2/3 = 339*									

Orbit Structure




Orbit 2
Server Version: 20211222
GS Reacq
Exp. 3, split 4
Exp. 3 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 2
Unused Orbital Visibility = 677
Exp. 4 (Auto-WAVECAL)
Occultation
Exp. 4 (Auto-WAVECAL)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
secs.


Orbit 3
Server Version: 20211222
GS Reacq
Exp. 4, split 3
Exp. 4 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 4
Unused Orbital Visibility = 1468
Exp. 4 (Auto-WAVECAL)
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16906, GD71 1577 + 1589 (57), completed Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Repeat visit containing observations of GD71 with Segment A only with cenwaves 1577 (all FPPOS) and 1589 (FPPOS 1-3)

Fixed Targets

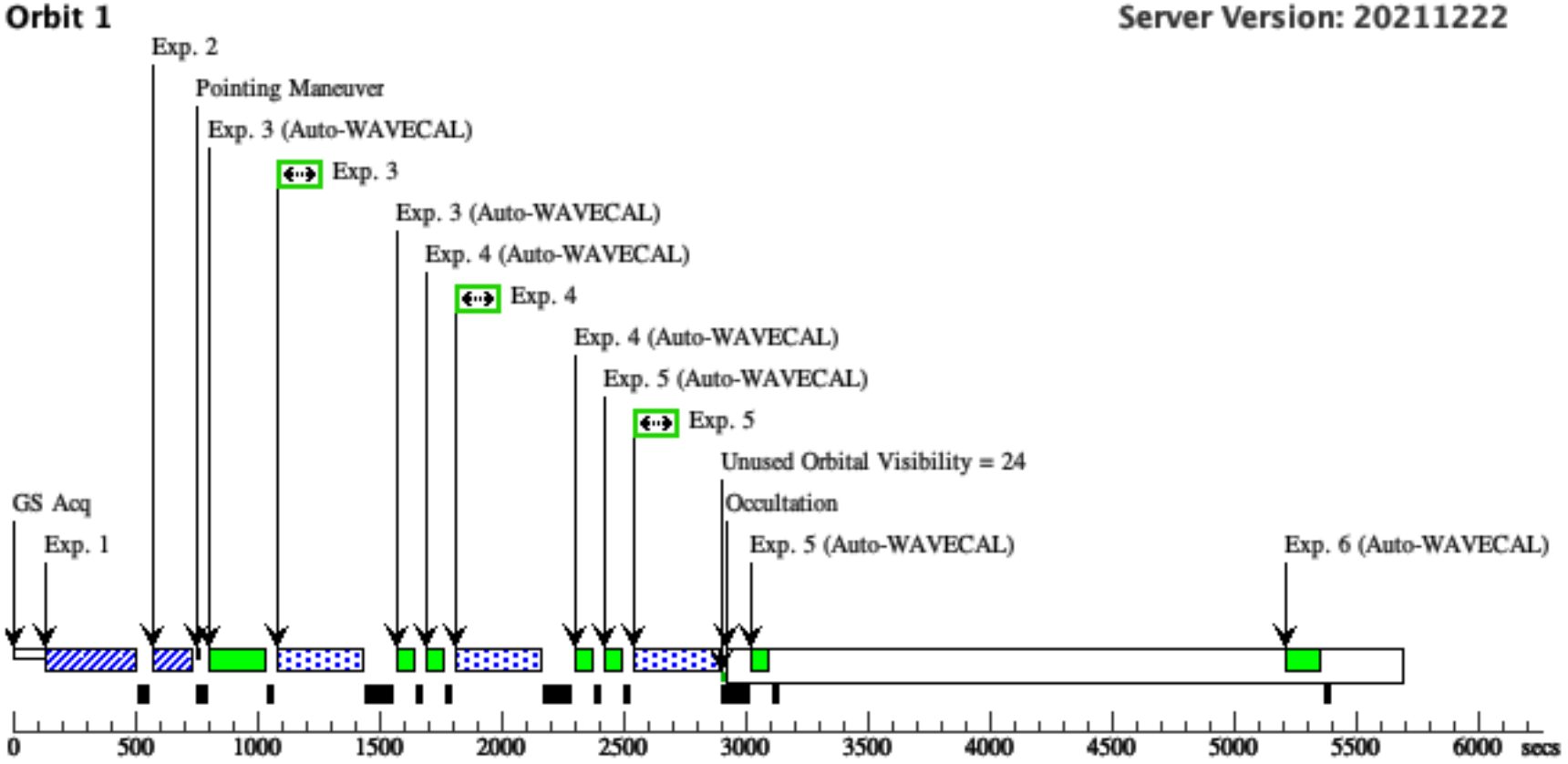
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GD71	RA: 05 52 27.6100 (88.1150417d)	Proper Motion RA: 85 mas/yr	V=13.06+/-0.01	Reference Frame: ICRS
		Dec: +15 53 13.80 (15.88717d)	Proper Motion Dec: -174 mas/yr		
		Equinox: J2000	Epoch of Position: 2000		

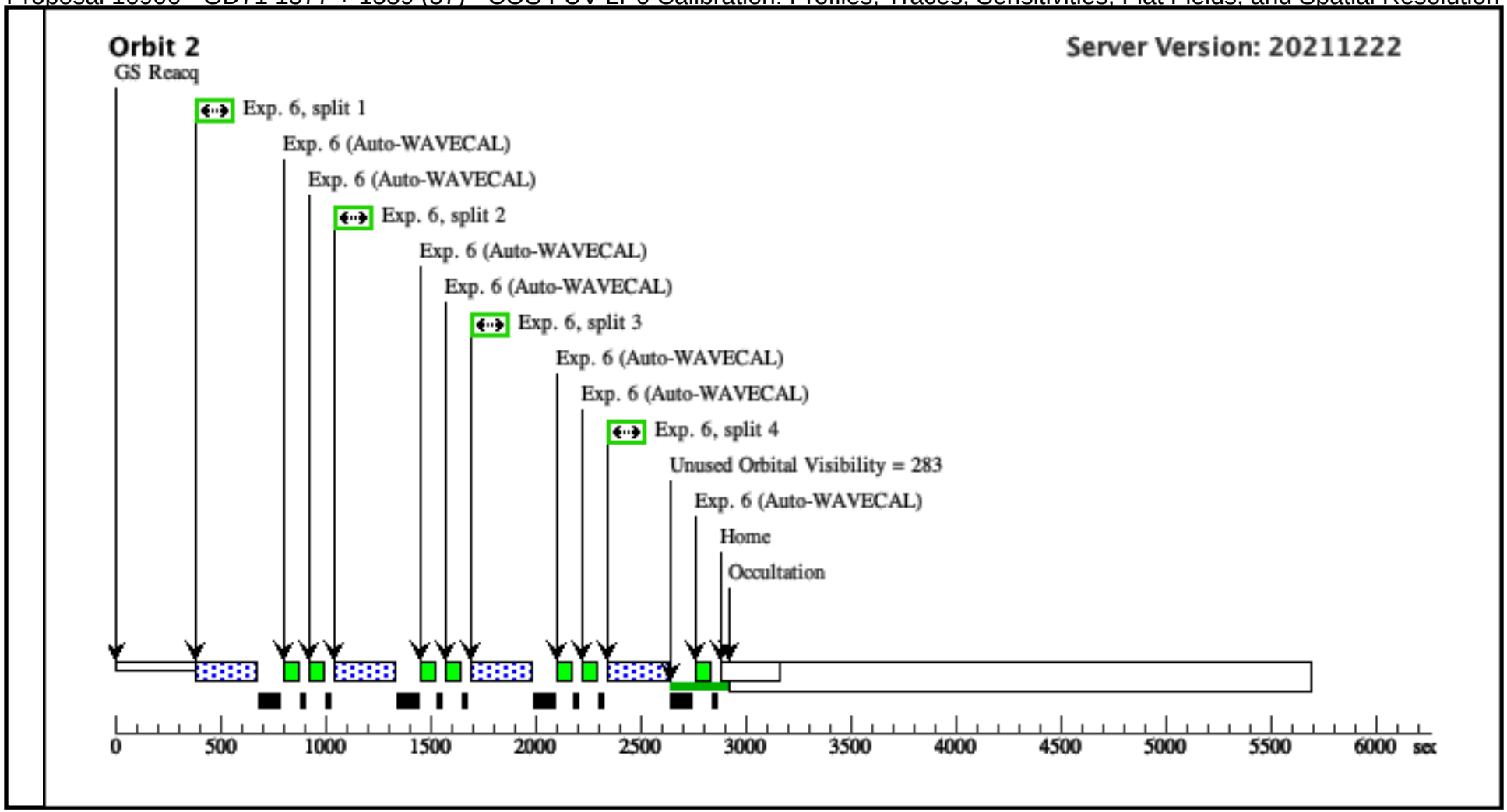
Comments: Use sma RA, DEC amd PM as in proposal 12392 by Bohlin et al.
Category=STAR
Description=[DA]
Extended=NO

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.1683600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
2	ACQ/IM (COS.ta.1683600)	(2) GD71	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				26 Secs (26 Secs) *[==>]*	***[1]***
Comments: 25.8 seconds for S/N = 30 for ACQ/IM									
3	1589 fppos 1 (COS.sp.1689533)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1589 A	FP-POS=1; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=278			300 Secs (300 Secs) *[==>]*	***[1]***
Comments: 1200s gives S/N~50 at 1670A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 417 * 2/3 = 278*									
4	1589 fppos 2 (COS.sp.1689533)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1589 A	FP-POS=2; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=278			300 Secs (300 Secs) *[==>]*	***[1]***
Comments: 1200s gives S/N~50 at 1670A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 417 * 2/3 = 278*									
5	1589 fppos 3 (COS.sp.1689533)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1589 A	FP-POS=3; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=278			300 Secs (300 Secs) *[==>]*	***[1]***
Comments: 1200s gives S/N~50 at 1670A *1200/4 = 300 s per FPPOS* *BFT (seg A) = 417 * 2/3 = 278*									
6	1577 fppos all (COS.sp.1689540)	(2) GD71	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=ALL; LIFETIME-POS=LP6; SEGMENT=A; BUFFER-TIME=254			235 Secs (940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***
Comments: 940s gives S/N=50 at 1660A *940/4 = 235s per FPPOS* *BFT (seg A) = 381 * 2/3 = 254*									

Orbit Structure




Orbit 2
Server Version: 20211222
GS Reacq
Exp. 6, split 1
Exp. 6 (Auto-WAVECAL)
Exp. 6 (Auto-WAVECAL)
Exp. 6, split 2
Exp. 6 (Auto-WAVECAL)
Exp. 6 (Auto-WAVECAL)
Exp. 6, split 3
Exp. 6 (Auto-WAVECAL)
Exp. 6 (Auto-WAVECAL)
Exp. 6, split 4
Unused Orbital Visibility = 283
Exp. 6 (Auto-WAVECAL)
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16906, WD0308 1611 (55) Tue Apr 26 11:00:44 GMT 2022

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Repeat visit containing observations of WD0308 with cenwave 1611 FPPOS 3 + 4

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WD0308-565	RA: 03 09 47.9200 (47.4496667d) Dec: -56 23 49.41 (-56.39706d) Equinox: J2000	Proper Motion RA: 0.018141 sec of time/yr Proper Motion Dec: 0.0643 arcsec/yr Epoch of Position: 2000	V=14.07+/-0.02	Reference Frame: ICRS

Comments: Coordinates from Charle's 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 (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
2	ACQ/IM (COS.ta.1683597)	(1) WD0308-565	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	***[1]***
Comments: 10.3 sec for S/N = 30 for the ACQ/IM									
3	1611 fppos 3 (COS.sp.1688849)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=3; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=496			735 Secs (735 Secs) *[==>]*	***[1]***
Comments: 2940s gives S/N~50 at 1530A *2940/4 = 735s per FPPOS* *BFT = 745 * 2/3 = 496*									
4	1611 fppos 4 (COS.sp.1688849)	(1) WD0308-565	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=4; LIFETIME-POS=LP6; SEGMENT=BOTH; BUFFER-TIME=496			735 Secs (735 Secs) *[==>]*	***[1]***
Comments: 2940s gives S/N~50 at 1530A *2940/4 = 735s per FPPOS* *BFT = 745 * 2/3 = 496*									

Orbit Structure