



16224 - Pathways to compact white dwarf binaries

Cycle: 28, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) CPD-65-264	STIS/CCD STIS/FUV-MAMA	1	19-Jan-2022 15:00:18.0	yes
02	(2) TYC-8467-109-1	STIS/CCD STIS/FUV-MAMA	4	19-Jan-2022 15:00:19.0	yes

Proposal 16224 (STScI Edit Number: 0, Created: Wednesday, January 19, 2022 at 3:00:35 PM Eastern Standard Time) - Overview

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
17	(2) TYC-8467-109-1	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:20.0	yes
03	(3) 2MASS-J00212706-1101097	STIS/CCD STIS/FUV-MAMA	4	19-Jan-2022 15:00:22.0	yes
04	(4) CPD-82-849	STIS/CCD STIS/FUV-MAMA	3	19-Jan-2022 15:00:23.0	yes
05	(5) BD-11-3376	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:24.0	yes
06	(6) TYC-6434-457-1	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:25.0	yes
07	(7) TYC-4917-1249-1	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:26.0	yes
16	(7) TYC-4917-1249-1	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:26.0	yes
08	(8) 2MASS-J06281844-7621467	STIS/CCD STIS/FUV-MAMA	4	19-Jan-2022 15:00:28.0	yes
09	(9) BD-15-83	STIS/CCD STIS/FUV-MAMA	3	19-Jan-2022 15:00:29.0	yes
18	(9) BD-15-83	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:30.0	yes
10	(10) TYC-6992-827-1	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:31.0	yes
11	(11) TYC-8394-1331-1	STIS/CCD STIS/FUV-MAMA	1	19-Jan-2022 15:00:32.0	yes
12	(12) 2MASS-J18361702-5110583	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:32.0	yes
13	(13) TYC-6086-1317-1	STIS/CCD STIS/FUV-MAMA	1	19-Jan-2022 15:00:33.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
14	(14) TYC-6617-835-1	STIS/CCD STIS/FUV-MAMA	2	19-Jan-2022 15:00:34.0	yes
15	(15) TYC-110-755-1	STIS/CCD STIS/FUV-MAMA	1	19-Jan-2022 15:00:34.0	yes

40 Total Orbits Used

ABSTRACT

Close binaries containing at least one white dwarf (WD) are thought to be the progenitors of some of the Galaxy's most exotic objects, such as cataclysmic variables, AM CVn binaries, hot subdwarf stars, double degenerates and thermonuclear supernovae (SN), including the cosmologically important SN Ia. This zoo of possible evolutionary outcomes demonstrates the complexity of trying to study the population of WD binaries as a whole. However, without a detailed understanding of the evolution of WD binaries, we will remain unable to unravel the pathways towards thermonuclear SN and the conditions under which they ignite, and equally, we will not be able to accurately predict or model the low-frequency gravitational background from galactic WD binaries. Here we propose to take a step back in time to the last stage at which all of these systems were part of the same population of detached WD plus main-sequence star binaries. The properties of these binaries can reveal their past evolution and measure how common different evolutionary channels are. However, at optical wavelengths the WD components are overwhelmed by their main-sequence companions making it difficult to determine their masses. Using TESS data we are able to circumvent this by measuring the rotation rate of the stars and comparing this to rotational broadening measurements, to measure the binary inclinations and thus WD masses for dozens of systems. However, this method relies on the alignment of the spin and orbit of the stars which is by no means proven. Here we request HST/STIS data to confirm if our method yields the correct WD masses for these powerful probes of WD binary evolution.

OBSERVING DESCRIPTION

The targets of this program are close (spatially unresolved by HST) white dwarf + F/G/K binaries. The main-sequence star totally dominates the optical light of these systems, and the white dwarf is the only detectable in the far-ultraviolet. We will acquire the systems on the bright main-sequence star using the standard procedure, and then switch to G140L spectroscopy of the white dwarf.

Target acquisition:

All target acquisitions require very short exposure times less, than the minimum exposure time of the STIS CCD. We have therefore set the acquisition times to that minimum value of 0.1sec. All targets are safe from saturating the acquisition exposure by a factor ~ 10 in exposure time.

FUV spectroscopy:

We used DA white dwarf models, which we scaled (assuming $\log g=8$) to the Gaia parallax and GALEX FUV magnitude to estimate an effective temperature. Those scaled models were then used as input for the ETC simulator to compute the BUFFER-TIME, and gauge the expected S/N.

2 gyro mode: we do not foresee any effect on this program.

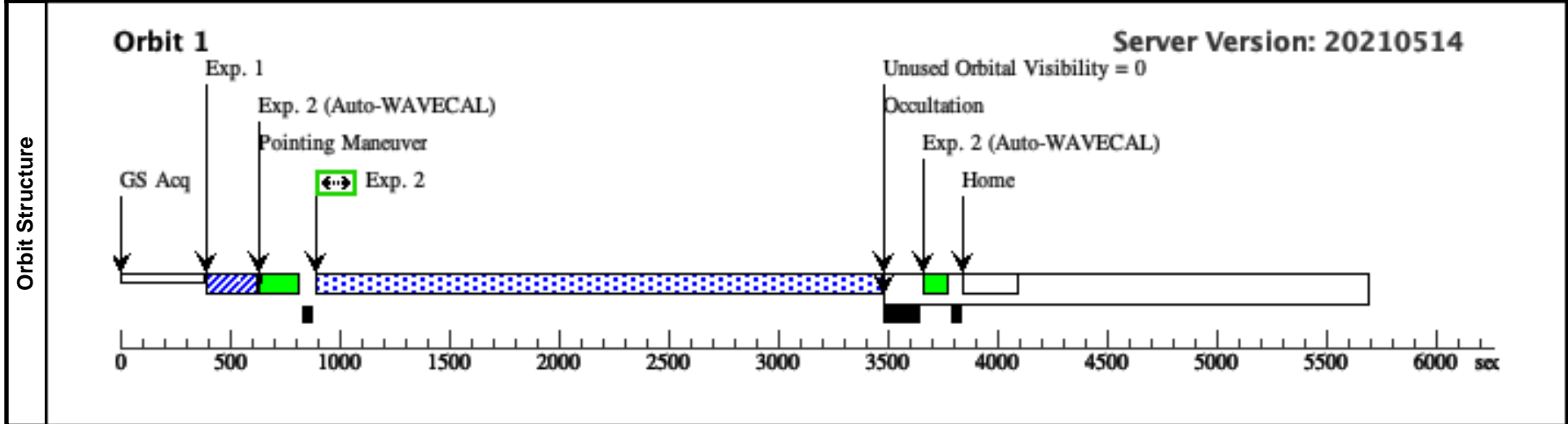
Proposal 16224 - CPD-65-264 (01) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

Visit	Proposal 16224, CPD-65-264 (01), completed				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/CCD, STIS/FUV-MAMA				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	CPD-65-264	RA: 03 45 24.5900 (56.3524583d) Dec: -65 04 50.90 (-65.08081d) Equinox: J2000	Proper Motion RA: 10.9 mas/yr Proper Motion Dec: 14.2 mas/yr Epoch of Position: 2015.5	V=11.17+/-0.05 FUV=16.448 NUV=15.265	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO					

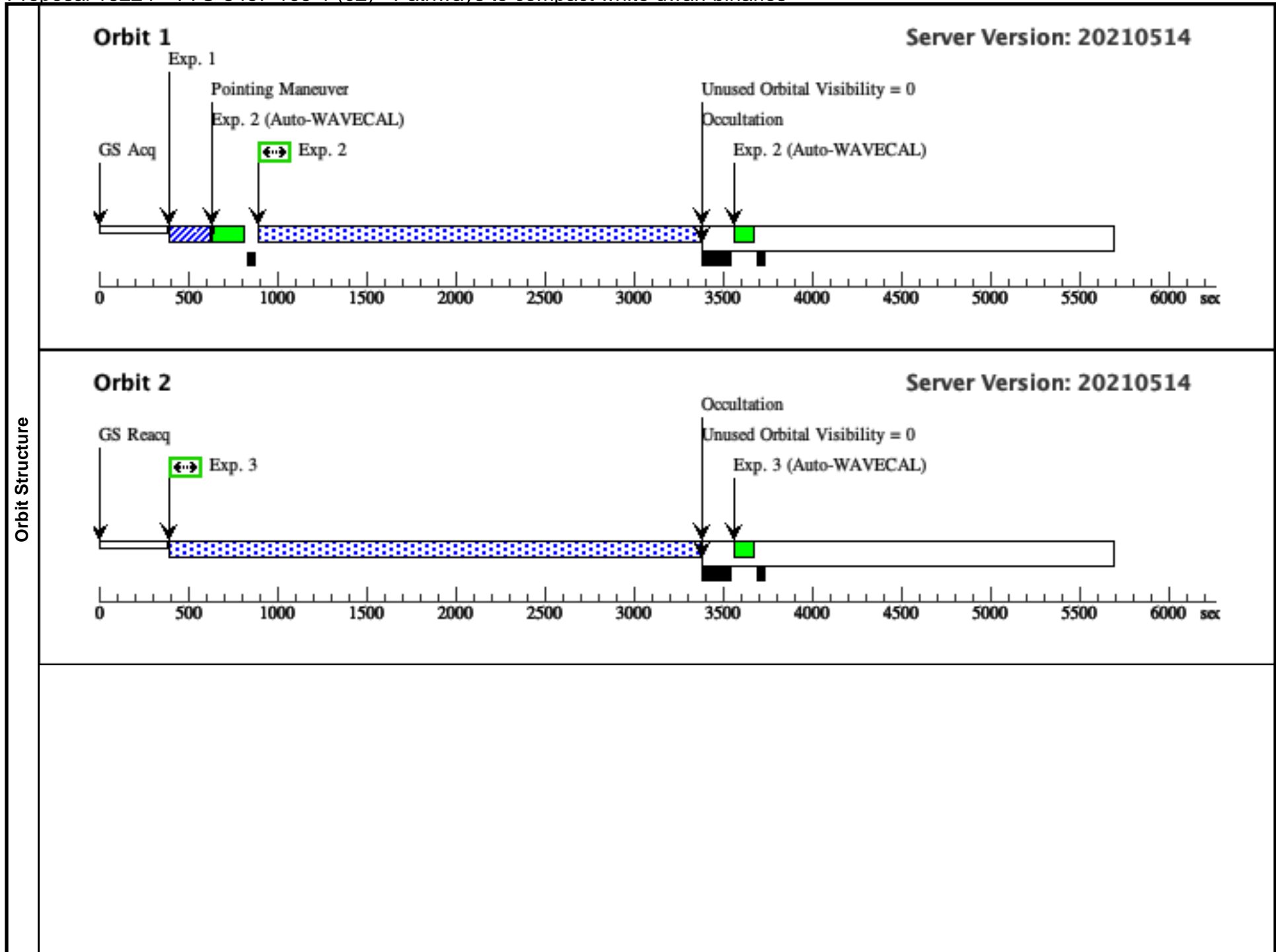
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(STIS.ta.144 5262)	(1) CPD-65-264	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [=>]	[1]
	2	(STIS.sp.14 45292)	(1) CPD-65-264	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=15 00			2526 Secs (2526 Secs) [=>]	[1]

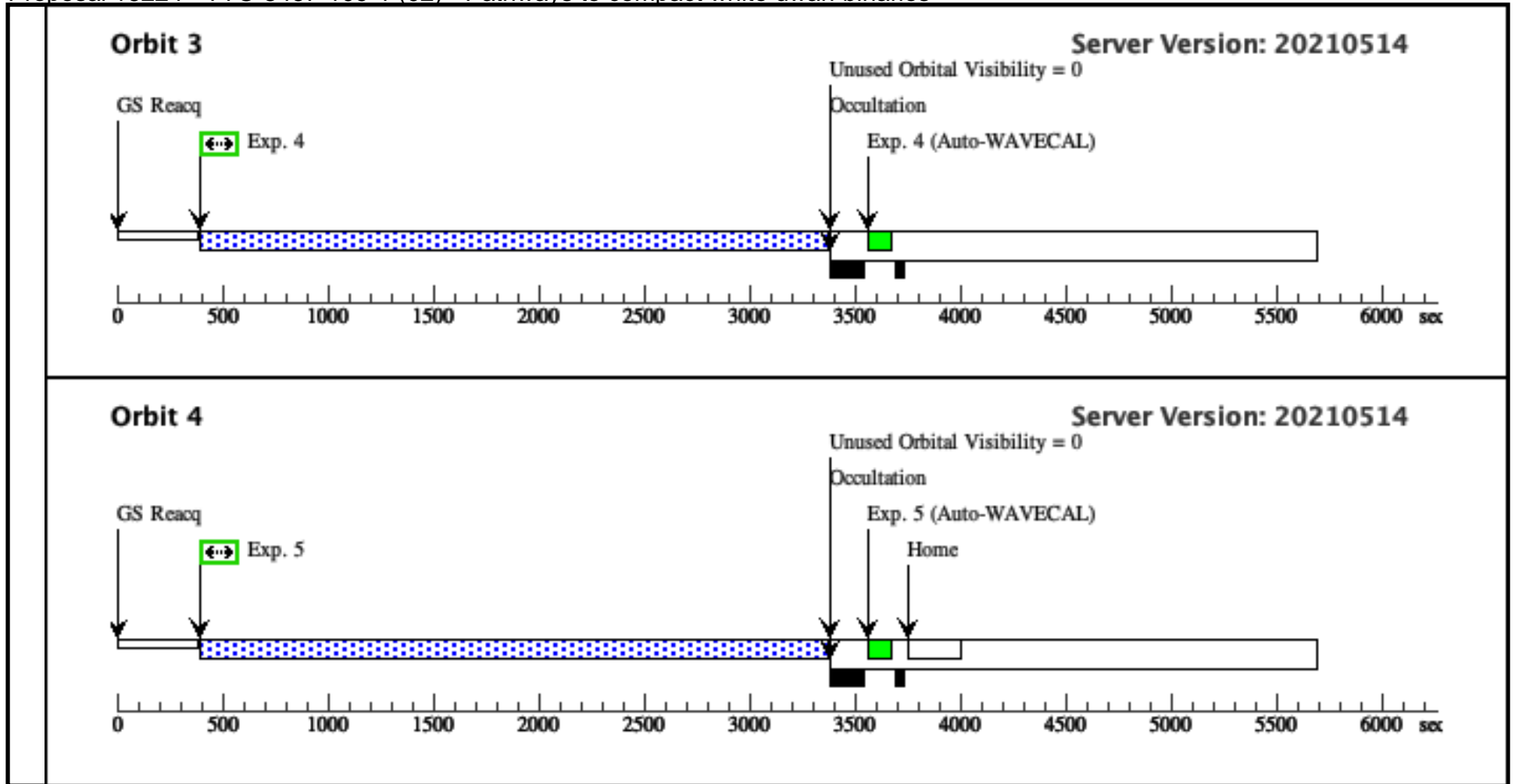


Proposal 16224 - TYC-8467-109-1 (02) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

Visit	Proposal 16224, TYC-8467-109-1 (02), failed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	TYC-8467-109-1	RA: 00 09 48.4000 (2.4516667d) Dec: -56 45 2.20 (-56.75061d) Equinox: J2000	Proper Motion RA: 12.9 mas/yr Proper Motion Dec: -15.8 mas/yr Epoch of Position: 2015.5	V=11.37+/-0.05 FUV=20.820 NUV=17.120	Reference Frame: ICRS				
	<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(STIS.ta.144 5263)	(2) TYC-8467-109-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs)	
									[==>]	[1]
	2	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2429 Secs (2429 Secs)	
									[==>]	[1]
	3	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2927 Secs (2927 Secs)	
								[==>]	[2]	
	4	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2927 Secs (2927 Secs)	
								[==>]	[3]	
	5	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2927 Secs (2927 Secs)	
								[==>]	[4]	

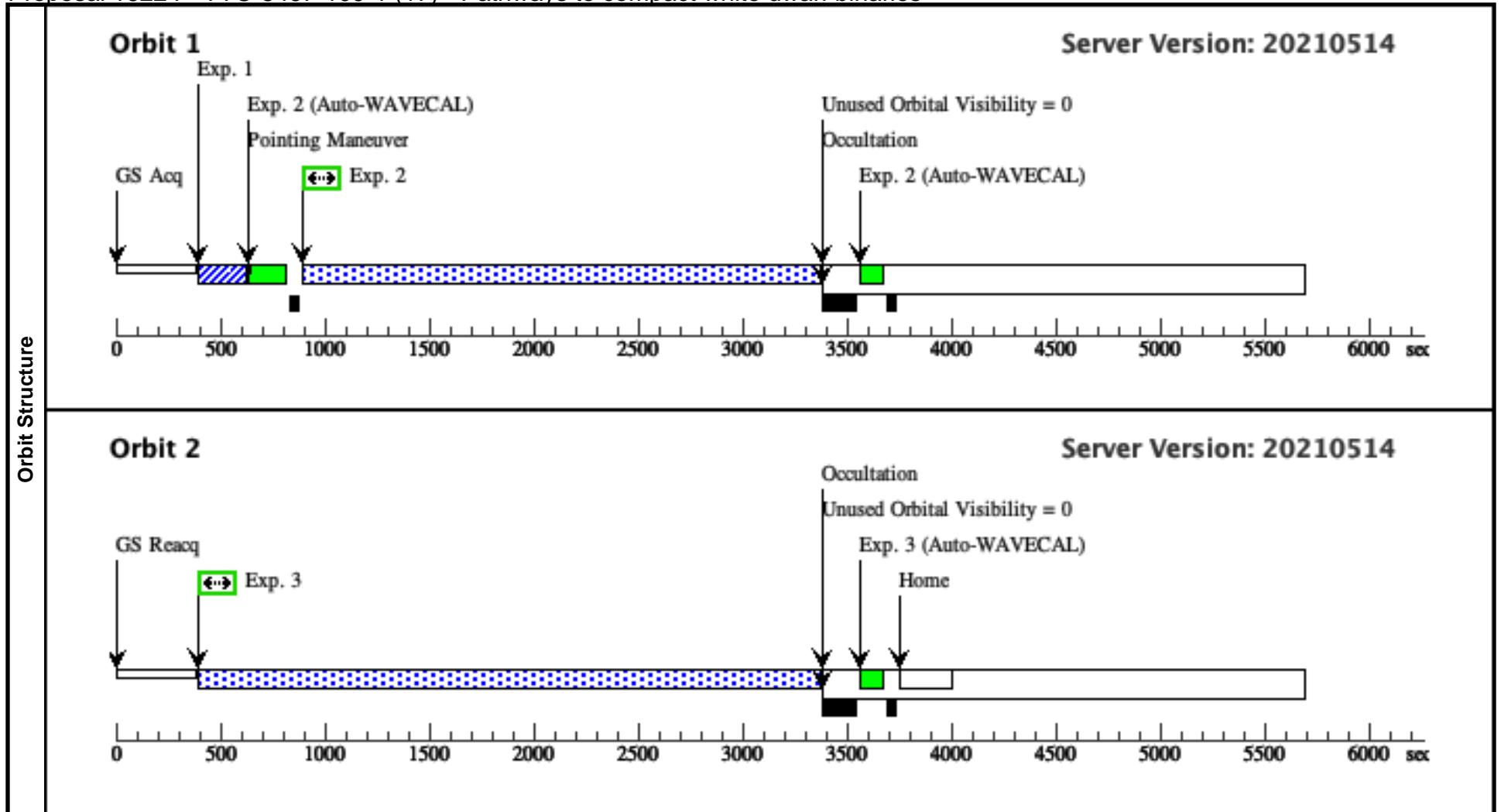




Proposal 16224 - TYC-8467-109-1 (17) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

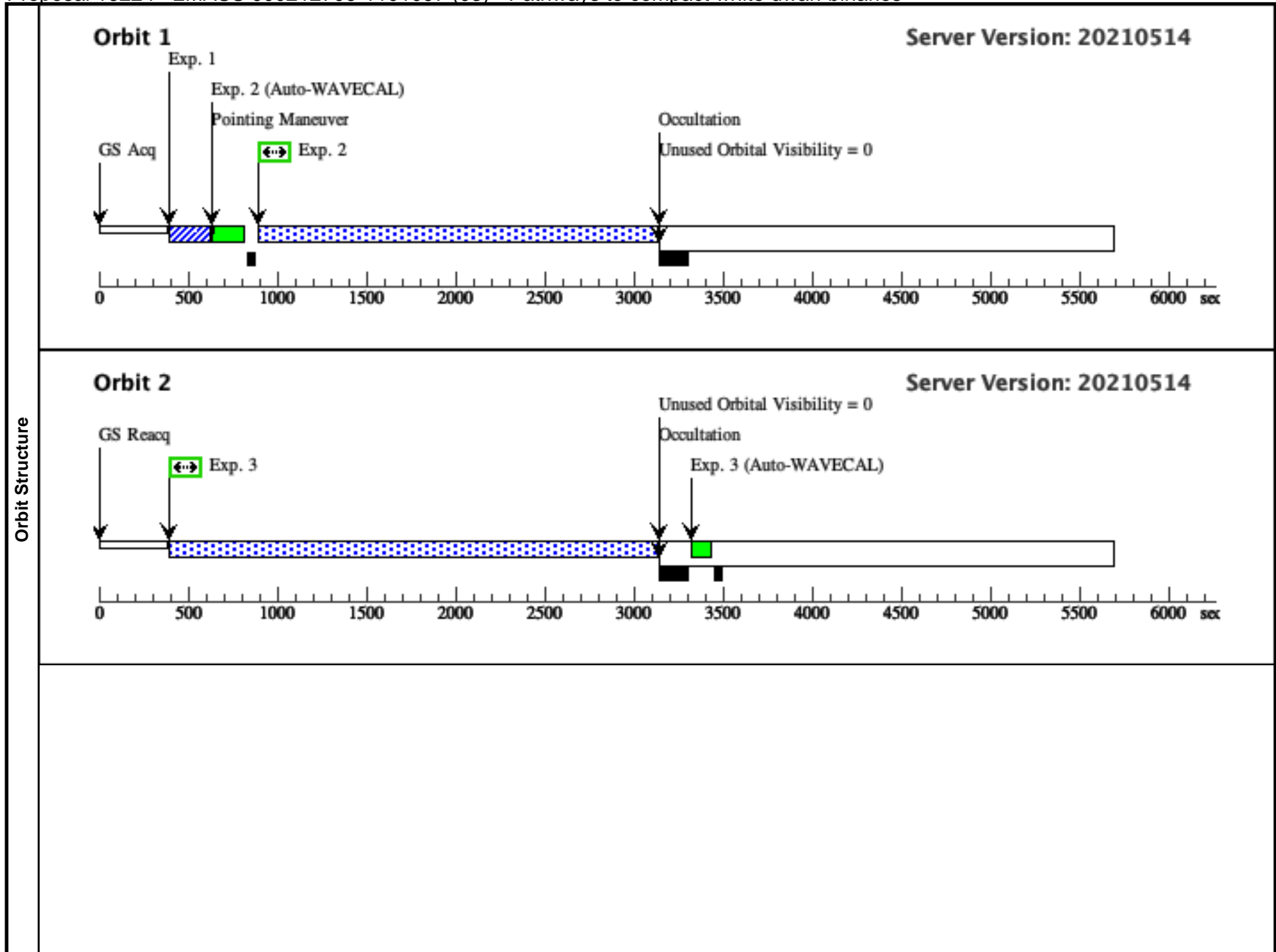
Visit	Proposal 16224, TYC-8467-109-1 (17) Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)																																								
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>TYC-8467-109-1</td> <td>RA: 00 09 48.4000 (2.4516667d) Dec: -56 45 2.20 (-56.75061d) Equinox: J2000</td> <td>Proper Motion RA: 12.9 mas/yr Proper Motion Dec: -15.8 mas/yr Epoch of Position: 2015.5</td> <td>V=11.37+/-0.05 FUV=20.820 NUV=17.120</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p> <i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO </p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	TYC-8467-109-1	RA: 00 09 48.4000 (2.4516667d) Dec: -56 45 2.20 (-56.75061d) Equinox: J2000	Proper Motion RA: 12.9 mas/yr Proper Motion Dec: -15.8 mas/yr Epoch of Position: 2015.5	V=11.37+/-0.05 FUV=20.820 NUV=17.120	Reference Frame: ICRS																											
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Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(STIS.ta.144 5263)</td> <td>(2) TYC-8467-109-1</td> <td>STIS/CCD, ACQ, F28X50LP</td> <td>MIRROR</td> <td>ACQTYPE=POINT</td> <td></td> <td></td> <td>0.1 Secs (0.1 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>(STIS.sp.14 45293)</td> <td>(2) TYC-8467-109-1</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.5</td> <td>G140L 1425 A</td> <td>BUFFER-TIME=30 00</td> <td></td> <td></td> <td>2429 Secs (2429 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>(STIS.sp.14 45293)</td> <td>(2) TYC-8467-109-1</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.5</td> <td>G140L 1425 A</td> <td>BUFFER-TIME=30 00</td> <td></td> <td></td> <td>2927 Secs (2927 Secs) [==>]</td> <td>[2]</td> </tr> </tbody> </table>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	(STIS.ta.144 5263)	(2) TYC-8467-109-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]	2	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2429 Secs (2429 Secs) [==>]	[1]	3	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2927 Secs (2927 Secs) [==>]	[2]
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																
1	(STIS.ta.144 5263)	(2) TYC-8467-109-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]																																
2	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2429 Secs (2429 Secs) [==>]	[1]																																
3	(STIS.sp.14 45293)	(2) TYC-8467-109-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2927 Secs (2927 Secs) [==>]	[2]																																

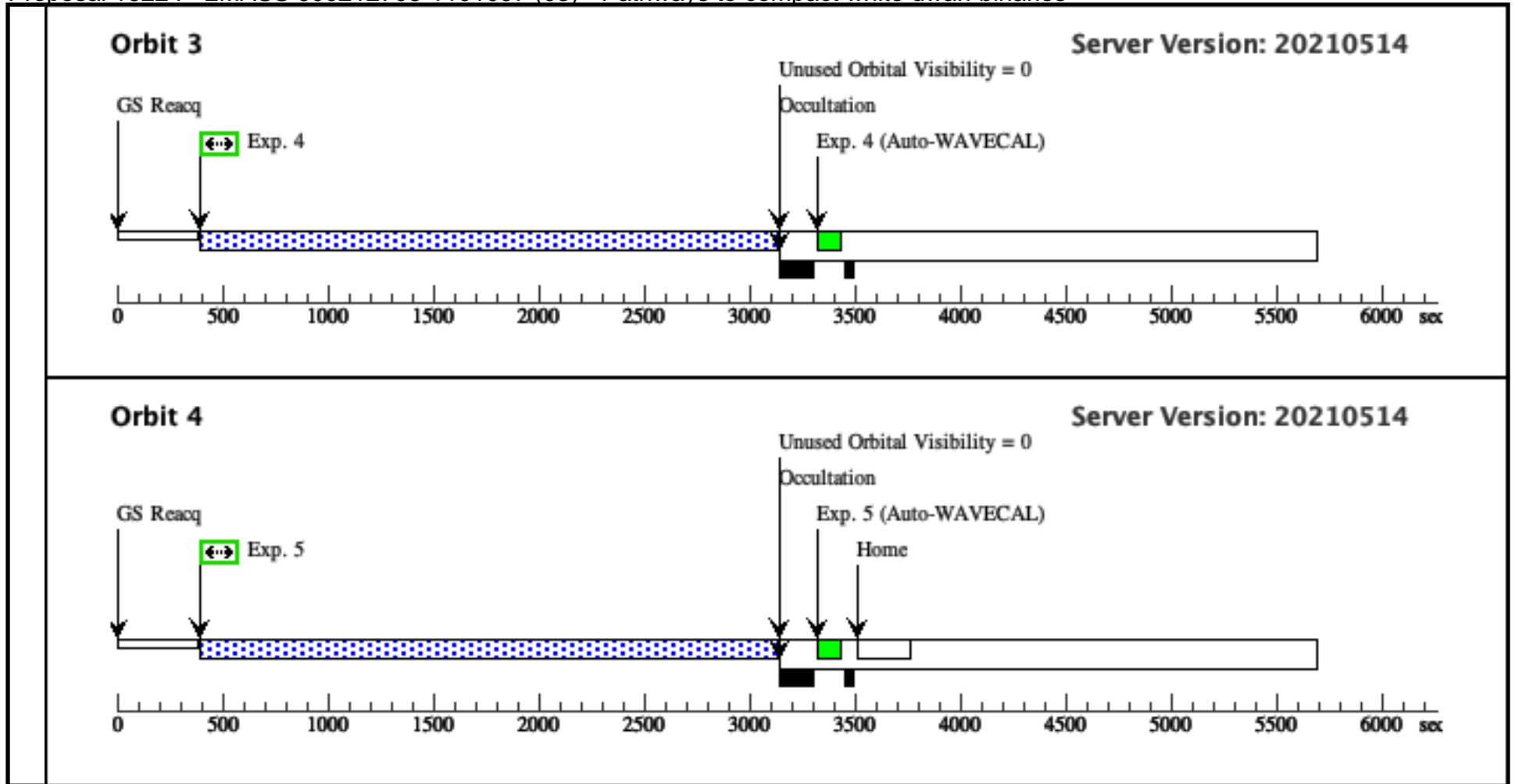


Proposal 16224 - 2MASS-J00212706-1101097 (03) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

Visit	Proposal 16224, 2MASS-J00212706-1101097 (03), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	2MASS-J00212706-1101097	RA: 00 21 27.1200 (5.3630000d) Dec: -11 01 9.80 (-11.01939d) Equinox: J2000	Proper Motion RA: 38.6 mas/yr Proper Motion Dec: 8.1 mas/yr Epoch of Position: 2015.5	V=11.97+/-0.05 FUV=21.164 NUV=17.889	Reference Frame: ICRS				
	<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(STIS.ta.144 5267)	(3) 2MASS-J002127 06-1101097	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs)	
									[==>]	[1]
	2	(STIS.sp.14 45268)	(3) 2MASS-J002127 06-1101097	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2189 Secs (2189 Secs)	
									[==>]	[1]
	3	(STIS.sp.14 45268)	(3) 2MASS-J002127 06-1101097	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2729 Secs (2729 Secs)	
								[==>]	[2]	
	4	(STIS.sp.14 45268)	(3) 2MASS-J002127 06-1101097	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2687 Secs (2687 Secs)	
								[==>]	[3]	
	5	(STIS.sp.14 45268)	(3) 2MASS-J002127 06-1101097	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2687 Secs (2687 Secs)	
								[==>]	[4]	

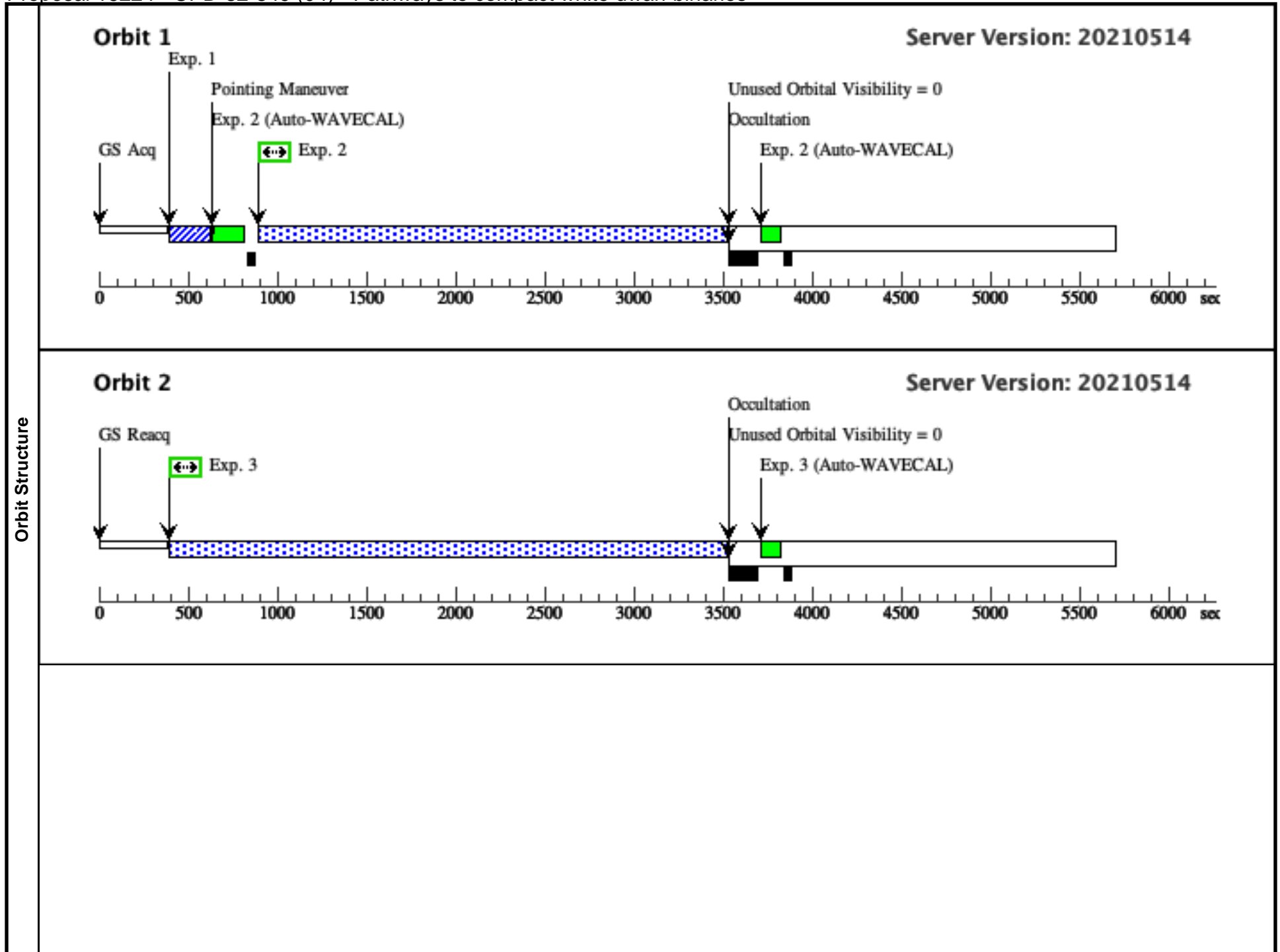


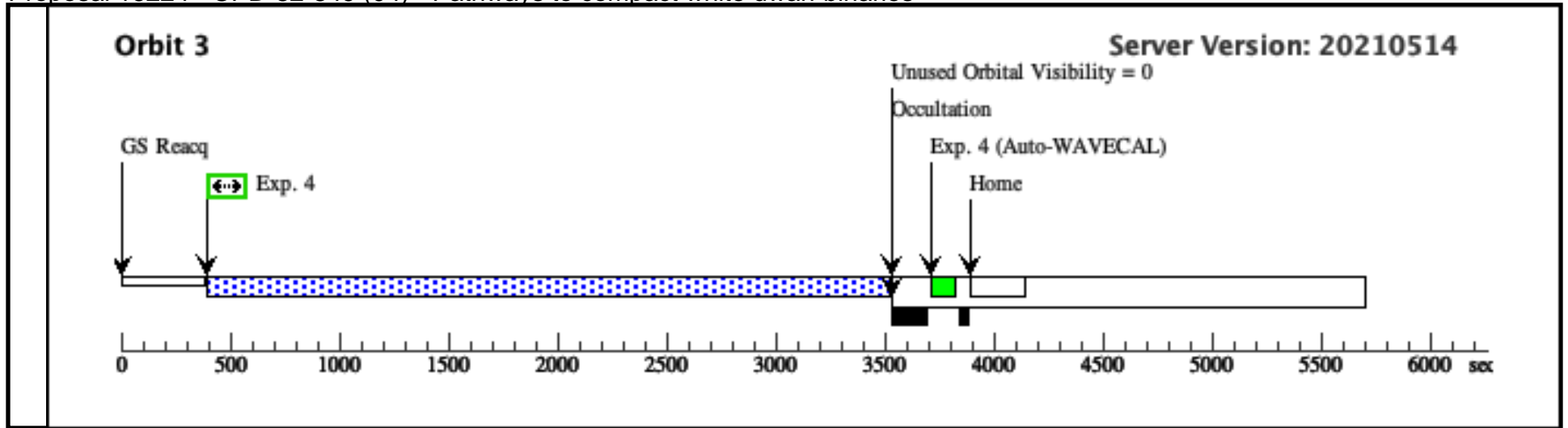


Proposal 16224 - CPD-82-849 (04) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

Visit	Proposal 16224, CPD-82-849 (04), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	# Name Target Coordinates Targ. Coord. Corrections Fluxes Miscellaneous (4) CPD-82-849 RA: 21 18 47.1800 (319.6965833d) Dec: -81 45 17.50 (-81.75486d) Equinox: J2000 Proper Motion RA: 4.5 mas/yr Epoch of Position: 2015.5 Proper Motion Dec: 26.8 mas/yr FUV=20.438 NUV=16.539 Reference Frame: ICRS <i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO								
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(STIS.ta.144 5271)	(4) CPD-82-849	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	(STIS.sp.14 45272)	(4) CPD-82-849	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2574 Secs (2574 Secs) [==>]	[1]
	3	(STIS.sp.14 45272)	(4) CPD-82-849	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			3072 Secs (3072 Secs) [==>]	[2]
	4	(STIS.sp.14 45272)	(4) CPD-82-849	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			3072 Secs (3072 Secs) [==>]	[3]

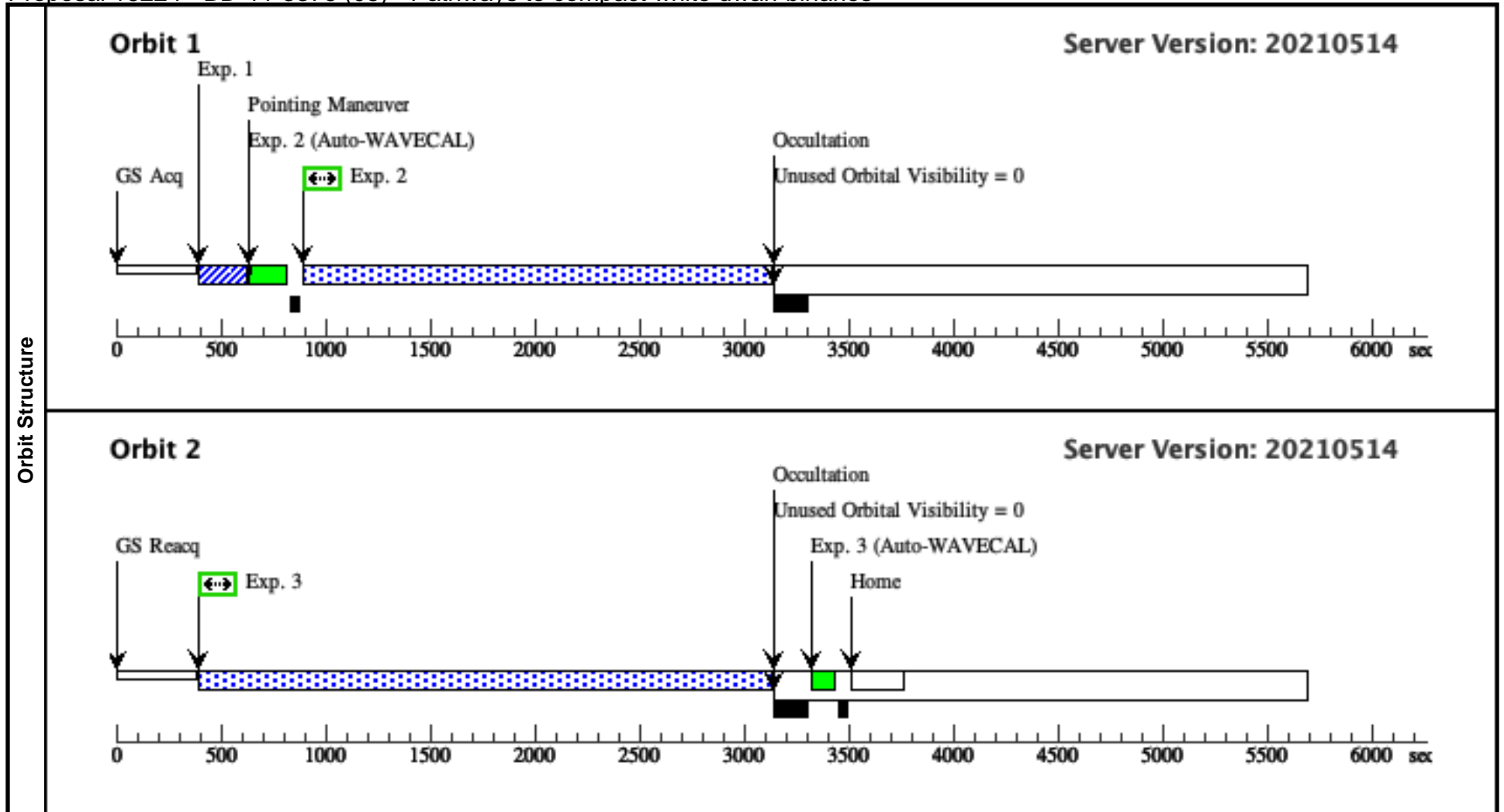




Proposal 16224 - BD-11-3376 (05) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

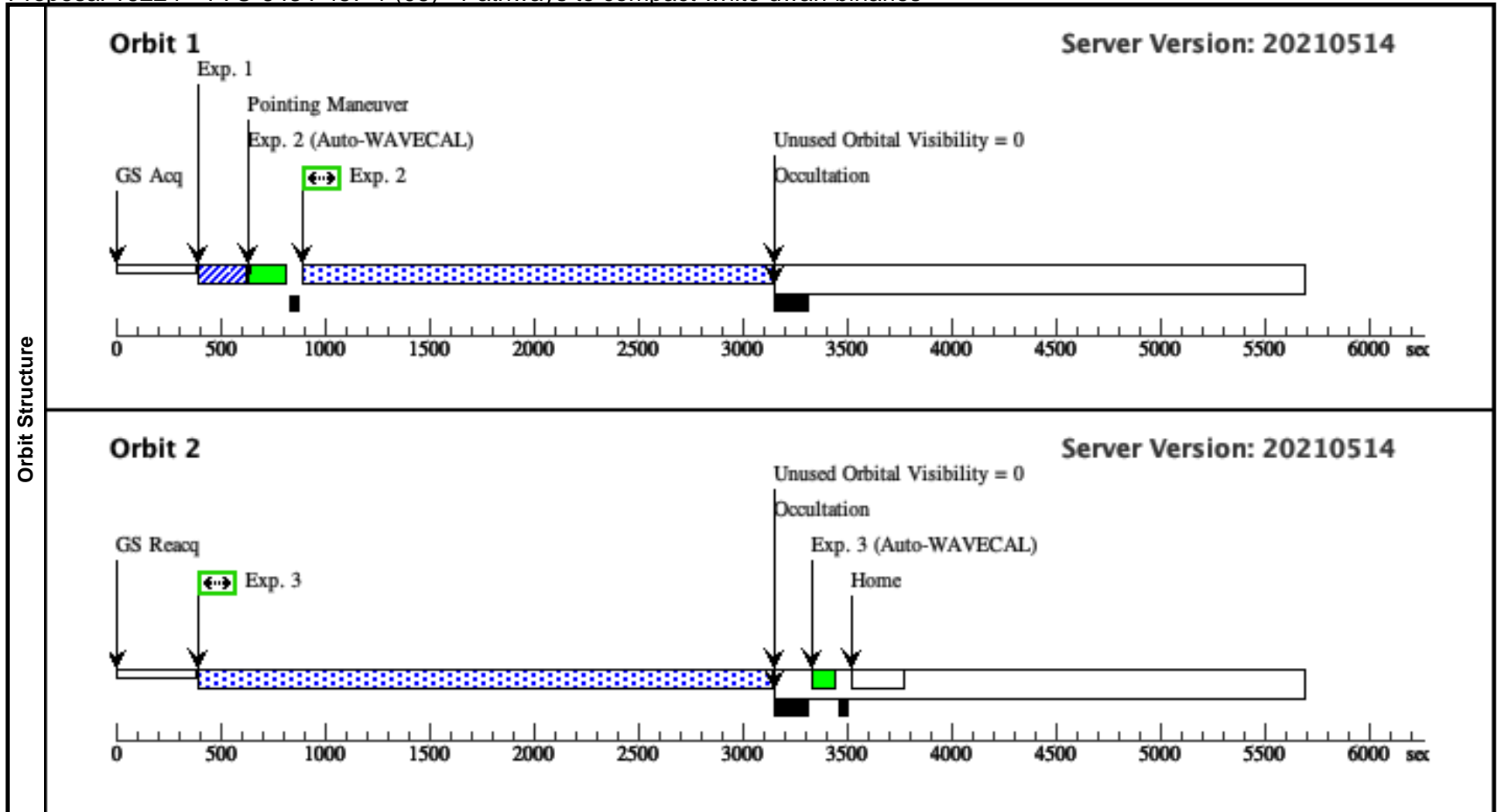
Visit	Proposal 16224, BD-11-3376 (05), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)																																																	
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(5)	BD-11-3376	RA: 12 50 13.5200 (192.5563333d) Dec: -11 52 3.00 (-11.86750d) Equinox: J2000	Proper Motion RA: -8.9 mas/yr Proper Motion Dec: -68.1 mas/yr Epoch of Position: 2015.5	V=10.80+/-0.05 FUV=18.032 NUV=15.691	Reference Frame: ICRS																																													
<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO																																																		
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BD-11-3376 (STIS.ta.144 5273)</td> <td>(5) BD-11-3376</td> <td>STIS/CCD, ACQ, F28X50LP</td> <td>MIRROR</td> <td>ACQTYPE=POINT</td> <td></td> <td></td> <td>0.1 Secs (0.1 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>BD-11-3376 (STIS.sp.14 45274)</td> <td>(5) BD-11-3376</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.5</td> <td>G140L 1425 A</td> <td>BUFFER-TIME=25 00</td> <td></td> <td></td> <td>2189 Secs (2189 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>BD-11-3376 (STIS.sp.14 45274)</td> <td>(5) BD-11-3376</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.5</td> <td>G140L 1425 A</td> <td>BUFFER-TIME=25 00</td> <td></td> <td></td> <td>2729 Secs (2729 Secs) [==>]</td> <td>[2]</td> </tr> </tbody> </table>										#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	BD-11-3376 (STIS.ta.144 5273)	(5) BD-11-3376	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]	2	BD-11-3376 (STIS.sp.14 45274)	(5) BD-11-3376	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=25 00			2189 Secs (2189 Secs) [==>]	[1]	3	BD-11-3376 (STIS.sp.14 45274)	(5) BD-11-3376	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=25 00			2729 Secs (2729 Secs) [==>]	[2]
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																									
1	BD-11-3376 (STIS.ta.144 5273)	(5) BD-11-3376	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]																																									
2	BD-11-3376 (STIS.sp.14 45274)	(5) BD-11-3376	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=25 00			2189 Secs (2189 Secs) [==>]	[1]																																									
3	BD-11-3376 (STIS.sp.14 45274)	(5) BD-11-3376	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=25 00			2729 Secs (2729 Secs) [==>]	[2]																																									



Proposal 16224 - TYC-6434-457-1 (06) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:35 GMT 2022

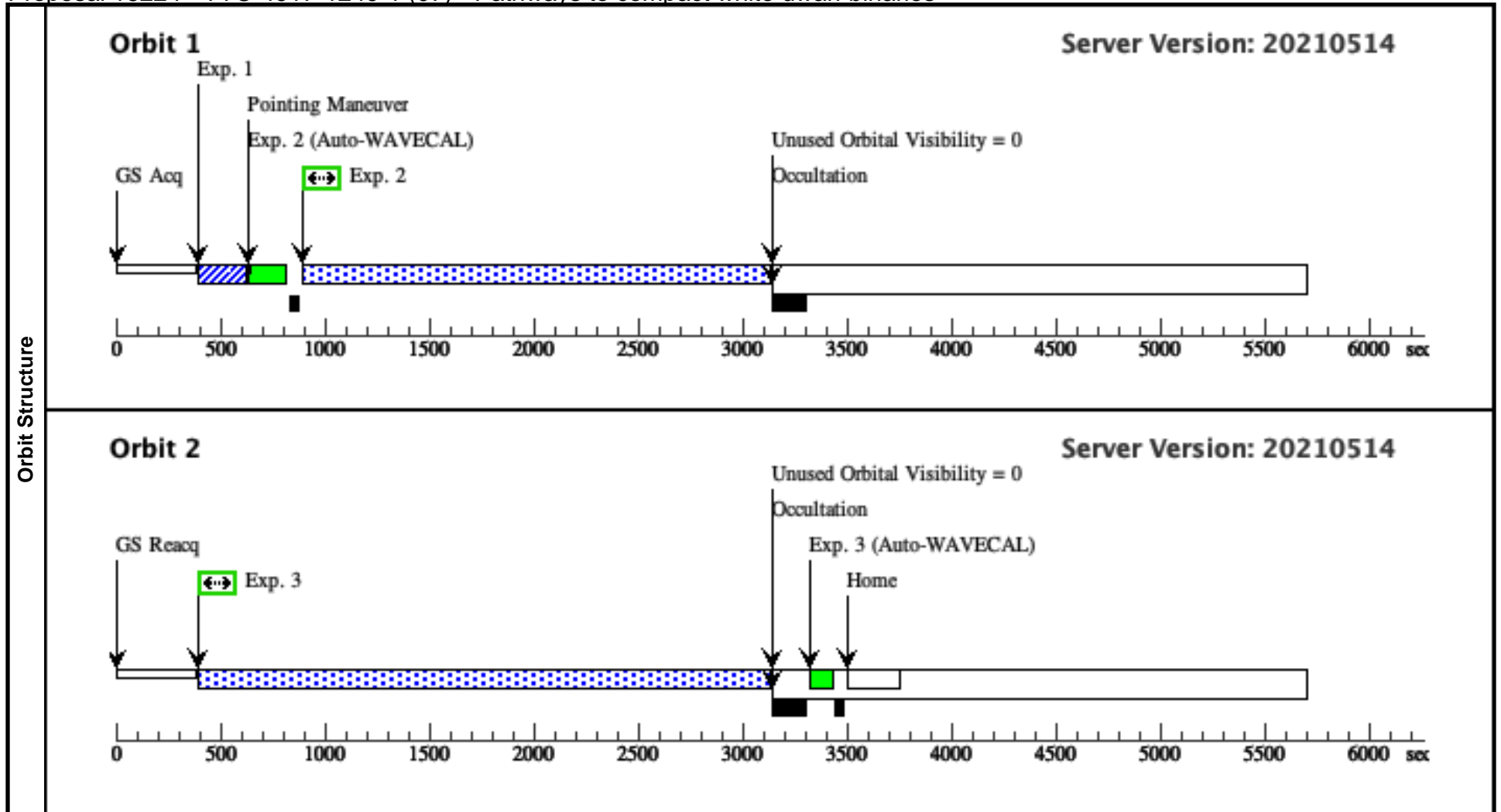
Visit	Proposal 16224, TYC-6434-457-1 (06), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	TYC-6434-457-1	RA: 02 38 35.4000 (39.6475000d) Dec: -23 32 41.90 (-23.54497d) Equinox: J2000	Proper Motion RA: -32.9 mas/yr Proper Motion Dec: -43.0 mas/yr Epoch of Position: 2015.5	V=11.31+/-0.05 FUV=18.714 NUV=16.135	Reference Frame: ICRS				
	<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-6434-4 57-1 (STIS.ta.144 5277)	(6) TYC-6434-457-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	TYC-6434-4 57-1 (STIS.sp.14 45278)	(6) TYC-6434-457-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2197 Secs (2197 Secs) [==>]	[1]
	3	TYC-6434-4 57-1 (STIS.sp.14 45278)	(6) TYC-6434-457-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2737 Secs (2737 Secs) [==>]	[2]



Proposal 16224 - TYC-4917-1249-1 (07) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

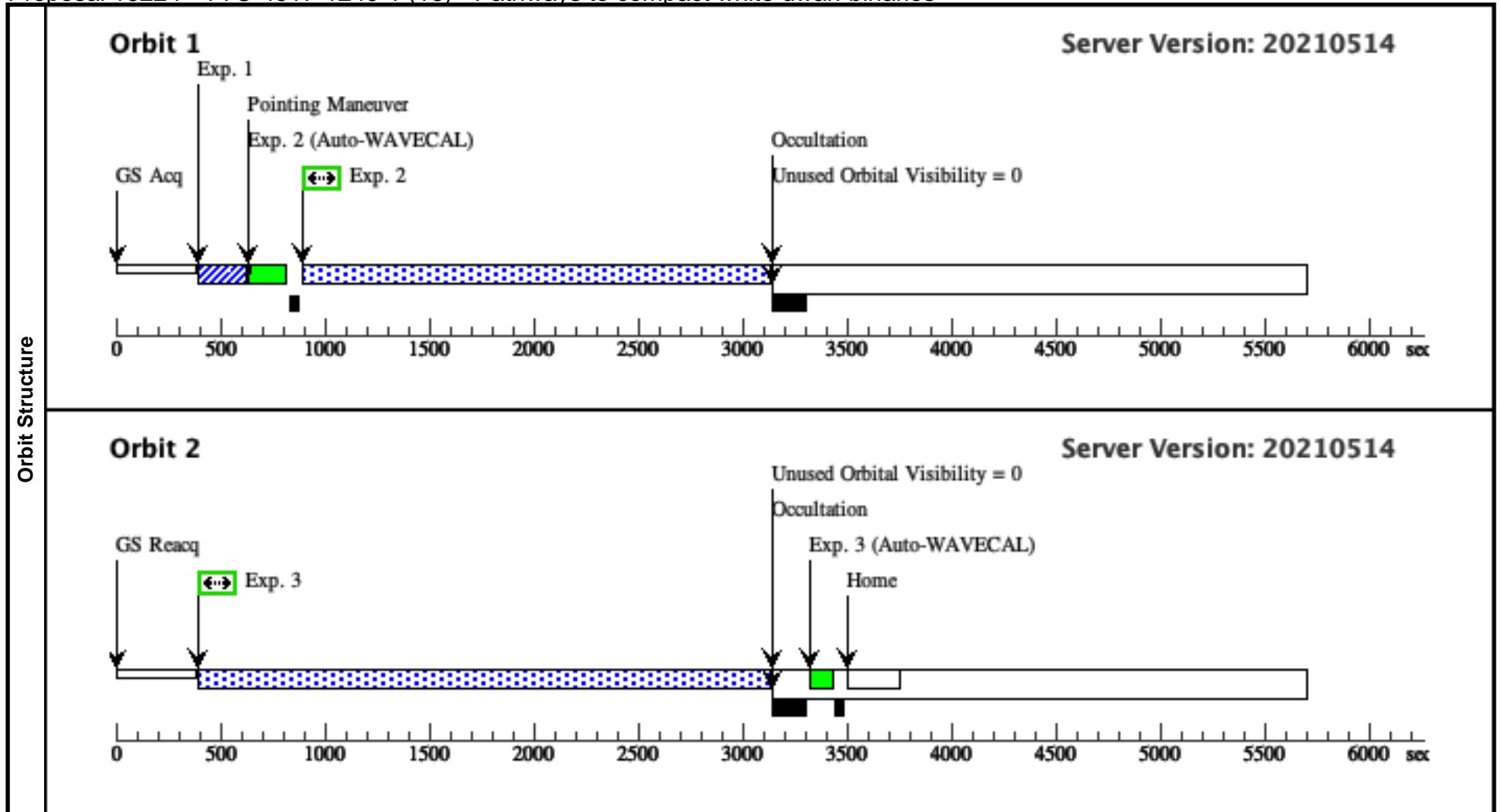
Visit	Proposal 16224, TYC-4917-1249-1 (07), failed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	TYC-4917-1249-1	RA: 10 56 30.8300 (164.1284583d) Dec: -04 06 9.60 (-4.10267d) Equinox: J2000	Proper Motion RA: 8.5 mas/yr Proper Motion Dec: -11.9 mas/yr Epoch of Position: 2015.5	V=11.26+/-0.05 FUV=18.744 NUV=16.028	Reference Frame: ICRS				
	Comments: Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-4917-1 249-1 (STIS.ta.144 5279)	(7) TYC-4917-1249-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	TYC-4917-1 249-1 (STIS.sp.14 45280)	(7) TYC-4917-1249-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2182 Secs (2182 Secs) [==>]	[1]
	3	TYC-4917-1 249-1 (STIS.sp.14 45280)	(7) TYC-4917-1249-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2722 Secs (2722 Secs) [==>]	[2]



Proposal 16224 - TYC-4917-1249-1 (16) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

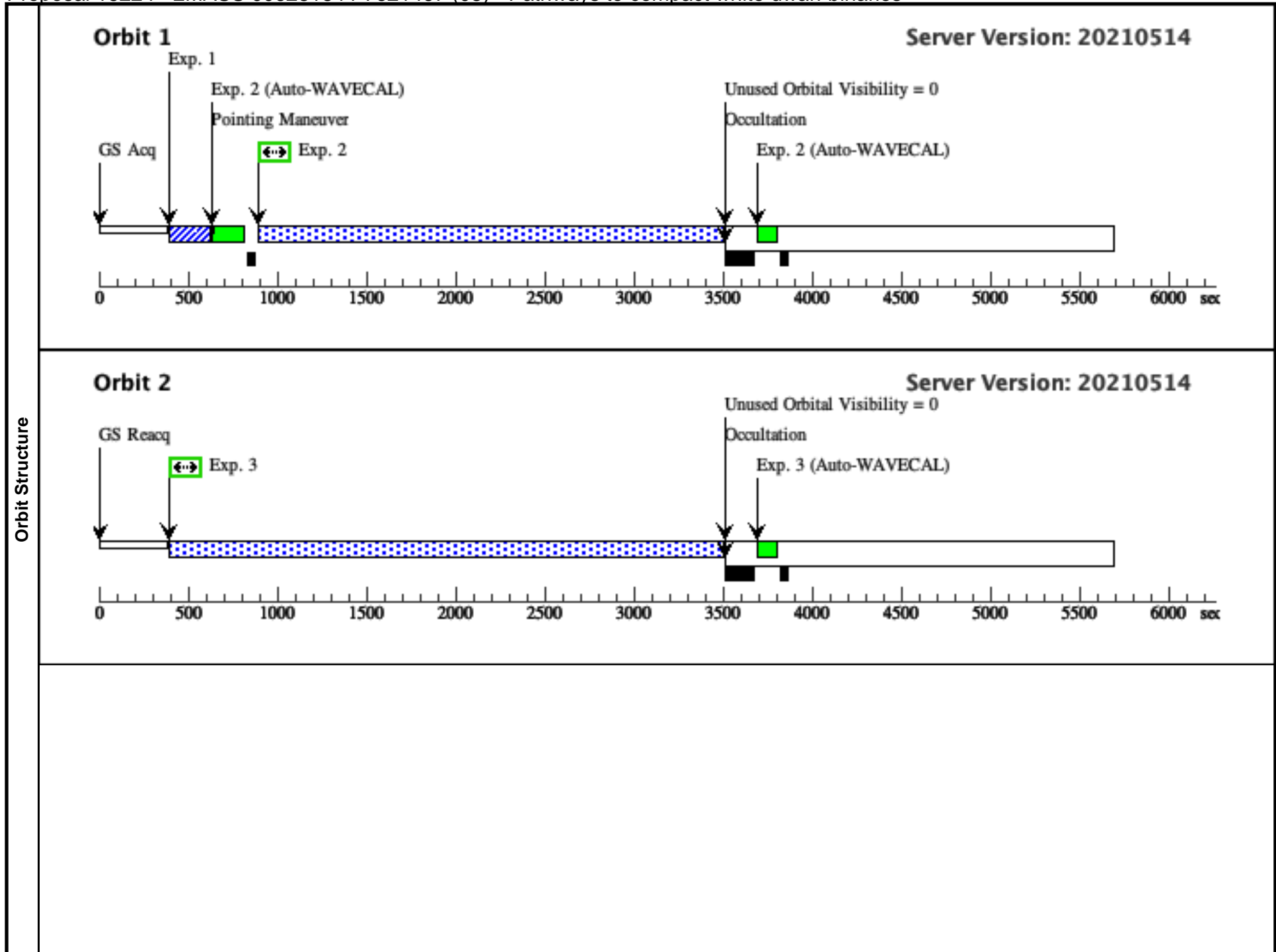
Visit	Proposal 16224, TYC-4917-1249-1 (16), scheduled Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	TYC-4917-1249-1	RA: 10 56 30.8300 (164.1284583d) Dec: -04 06 9.60 (-4.10267d) Equinox: J2000	Proper Motion RA: 8.5 mas/yr Proper Motion Dec: -11.9 mas/yr Epoch of Position: 2015.5	V=11.26+/-0.05 FUV=18.744 NUV=16.028	Reference Frame: ICRS				
	Comments: Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-4917-1 249-1 (STIS.ta.144 5279)	(7) TYC-4917-1249- 1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	TYC-4917-1 249-1 (STIS.sp.14 45280)	(7) TYC-4917-1249- 1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2182 Secs (2182 Secs) [==>]	[1]
	3	TYC-4917-1 249-1 (STIS.sp.14 45280)	(7) TYC-4917-1249- 1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2722 Secs (2722 Secs) [==>]	[2]

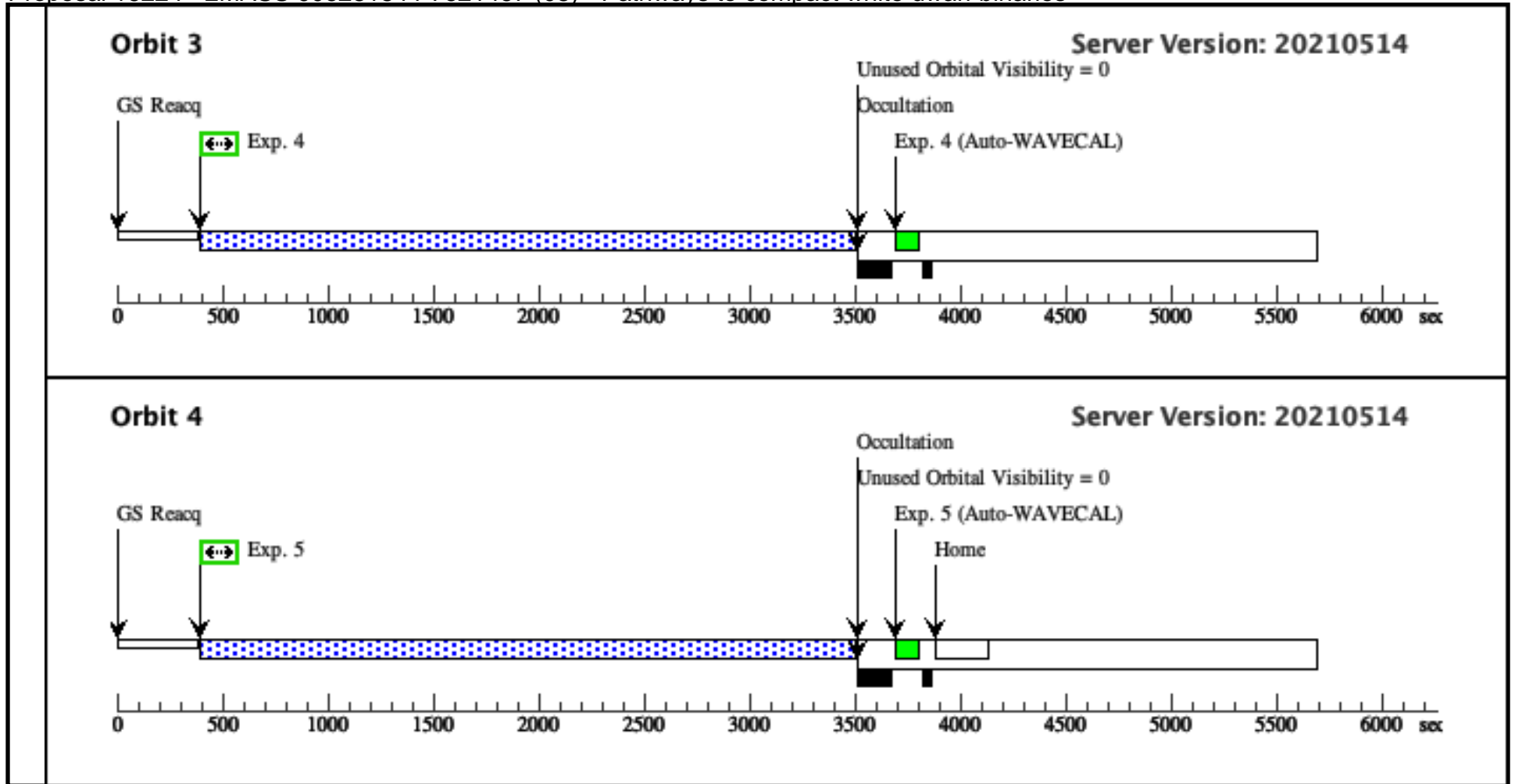


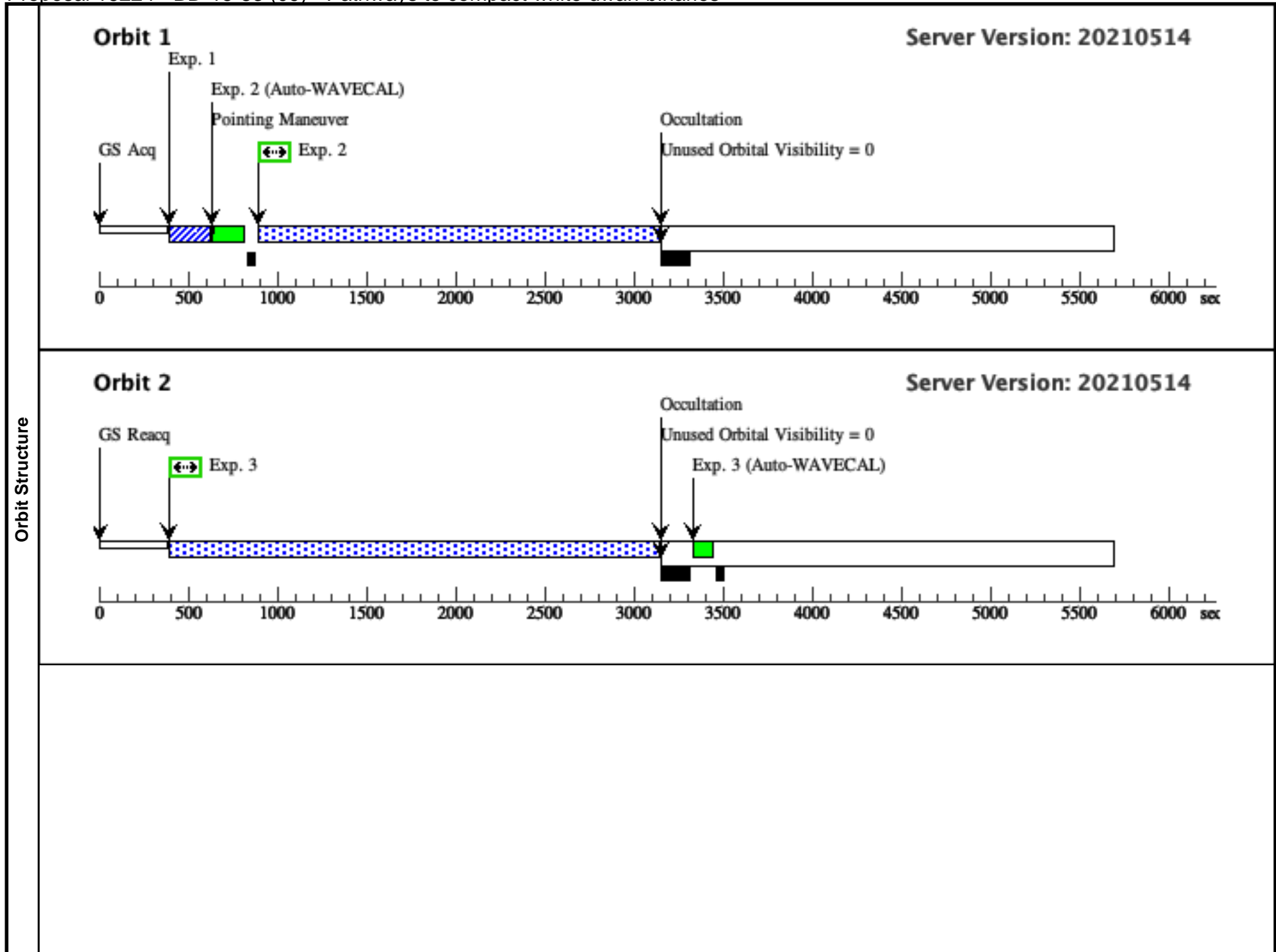
Proposal 16224 - 2MASS-J06281844-7621467 (08) - Pathways to compact white dwarf binaries

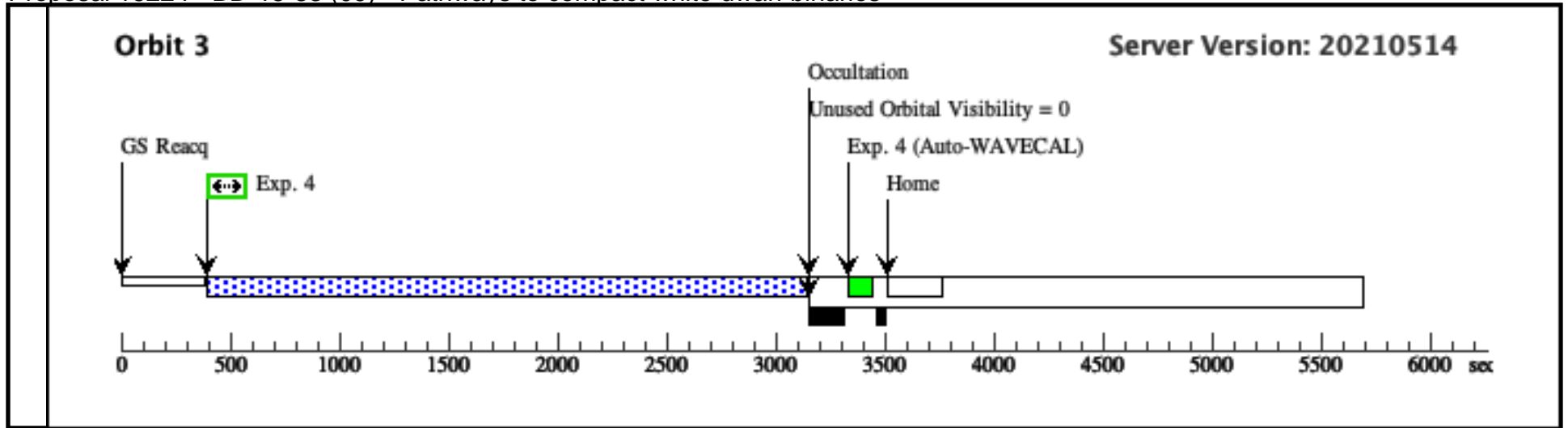
Wed Jan 19 20:00:36 GMT 2022

Visit	Proposal 16224, 2MASS-J06281844-7621467 (08), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)																											
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(8)</td> <td>2MASS-J06281844-7621467</td> <td>RA: 06 28 18.4500 (97.0768750d) Dec: -76 21 45.80 (-76.36272d) Equinox: J2000</td> <td>Proper Motion RA: 1.0 mas/yr Proper Motion Dec: 56.2 mas/yr Epoch of Position: 2015.5</td> <td>V=12.02+/-0.05 FUV=21.092 NUV=17.656</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(8)	2MASS-J06281844-7621467	RA: 06 28 18.4500 (97.0768750d) Dec: -76 21 45.80 (-76.36272d) Equinox: J2000	Proper Motion RA: 1.0 mas/yr Proper Motion Dec: 56.2 mas/yr Epoch of Position: 2015.5	V=12.02+/-0.05 FUV=21.092 NUV=17.656	Reference Frame: ICRS	<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO				
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																							
(8)	2MASS-J06281844-7621467	RA: 06 28 18.4500 (97.0768750d) Dec: -76 21 45.80 (-76.36272d) Equinox: J2000	Proper Motion RA: 1.0 mas/yr Proper Motion Dec: 56.2 mas/yr Epoch of Position: 2015.5	V=12.02+/-0.05 FUV=21.092 NUV=17.656	Reference Frame: ICRS																							
<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO																												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																		
	1	2MASS-J06281844-7621467 (STIS.ta.1445281)	(8) 2MASS-J06281844-7621467	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]																		
	2	2MASS-J06281844-7621467 (STIS.sp.1445283)	(8) 2MASS-J06281844-7621467	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=3000			2559 Secs (2559 Secs) [==>]	[1]																		
	3	2MASS-J06281844-7621467 (STIS.sp.1445283)	(8) 2MASS-J06281844-7621467	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=3000			3057 Secs (3057 Secs) [==>]	[2]																		
	4	2MASS-J06281844-7621467 (STIS.sp.1445283)	(8) 2MASS-J06281844-7621467	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=3000			3057 Secs (3057 Secs) [==>]	[3]																		
	5	2MASS-J06281844-7621467 (STIS.sp.1445283)	(8) 2MASS-J06281844-7621467	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=3000			3057 Secs (3057 Secs) [==>]	[4]																		





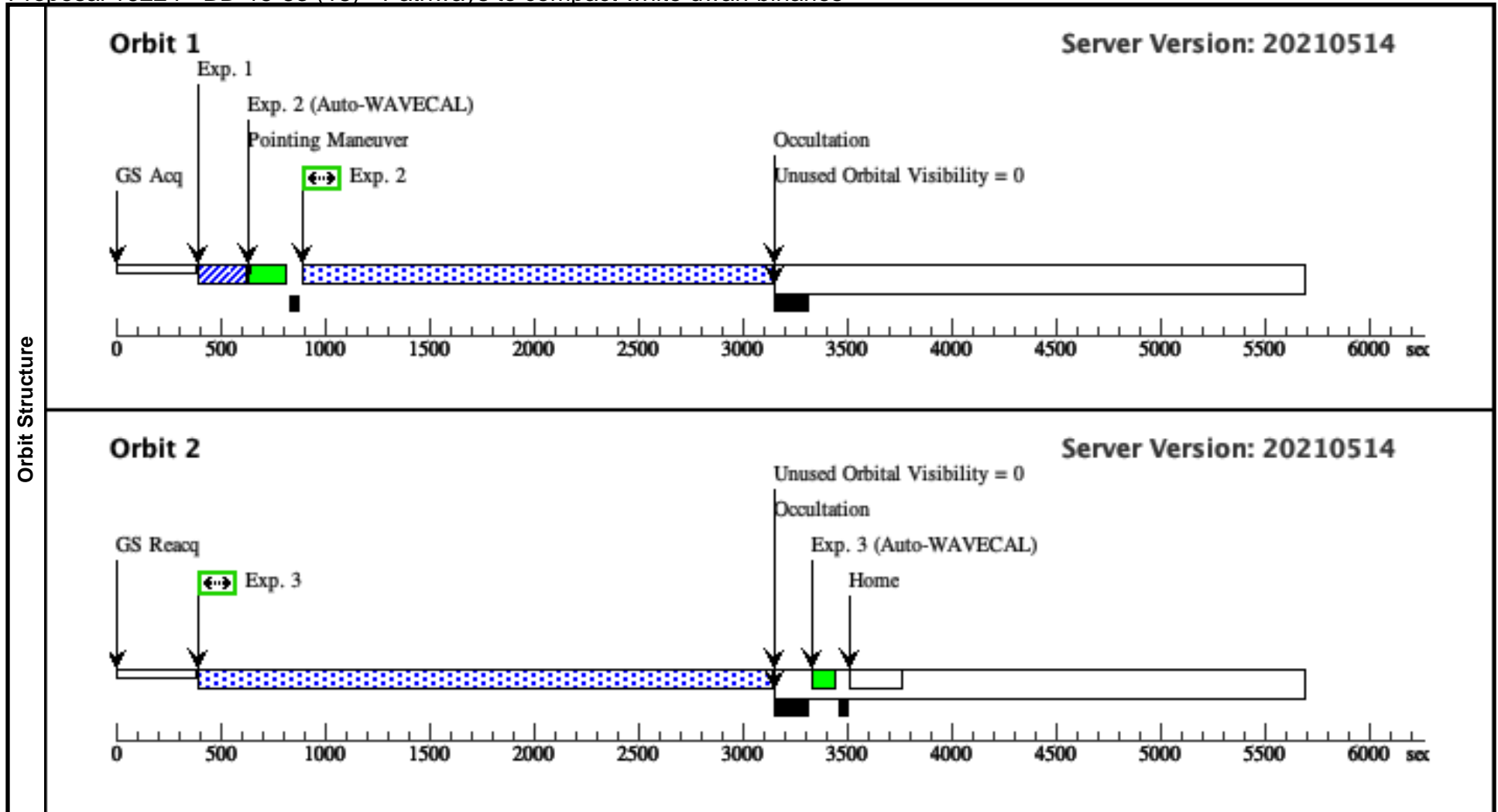




Proposal 16224 - BD-15-83 (18) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

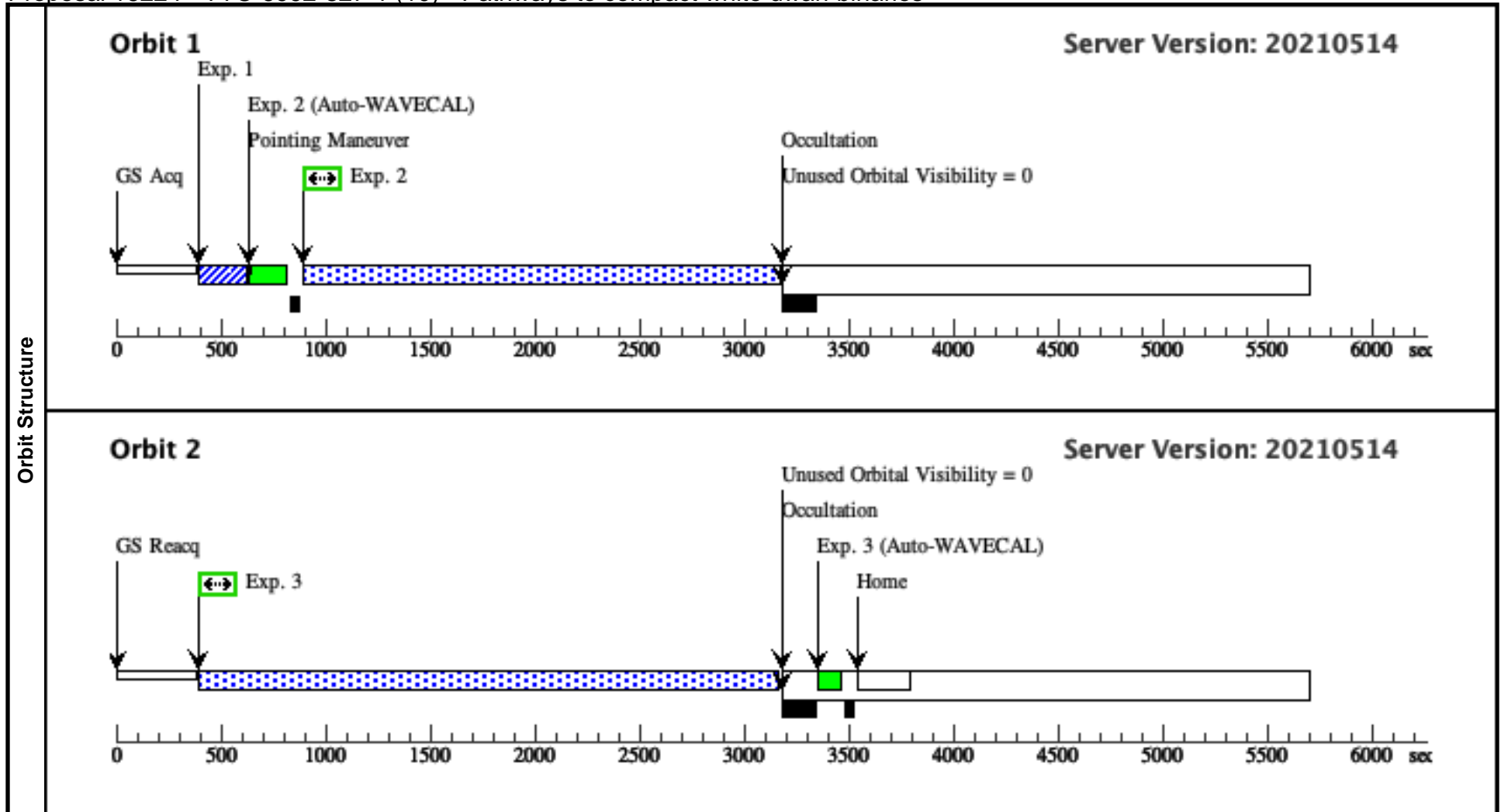
Visit	Proposal 16224, BD-15-83 (18) Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(9)	BD-15-83	RA: 00 29 45.3400 (7.4389167d) Dec: -15 09 17.90 (-15.15497d) Equinox: J2000	Proper Motion RA: 60.4 mas/yr Proper Motion Dec: -54.4 mas/yr Epoch of Position: 2015.5	V=11.33+/-0.05 FUV=19,399 NUV=17.146	Reference Frame: ICRS				
	<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	BD-15-83 (STIS.ta.144 5284)	(9) BD-15-83	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs)	
									[==>]	[1]
	2	BD-15-83 (STIS.sp.14 45285)	(9) BD-15-83	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2196 Secs (2196 Secs)	
								[==>]	[1]	
3	BD-15-83 (STIS.sp.14 45285)	(9) BD-15-83	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=30 00			2736 Secs (2736 Secs)		
								[==>]	[2]	



Proposal 16224 - TYC-6992-827-1 (10) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

Visit	Proposal 16224, TYC-6992-827-1 (10), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(10)	TYC-6992-827-1	RA: 00 01 13.3800 (.3057500d) Dec: -33 27 7.00 (-33.45194d) Equinox: J2000	Proper Motion RA: -12.8 mas/yr Proper Motion Dec: -11.4 mas/yr Epoch of Position: 2015.5	V=11.05+/-0.05 FUV=18.014 NUV=16.944	Reference Frame: ICRS				
	<i>Comments:</i> Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-6992-827-1 (STIS.ta.144 5298)	(10) TYC-6992-827-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	TYC-6992-827-1 (STIS.sp.14 45299)	(10) TYC-6992-827-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=25 00			2220 Secs (2220 Secs) [==>]	[1]
	3	TYC-6992-827-1 (STIS.sp.14 45299)	(10) TYC-6992-827-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=25 00			2760 Secs (2760 Secs) [==>]	[2]



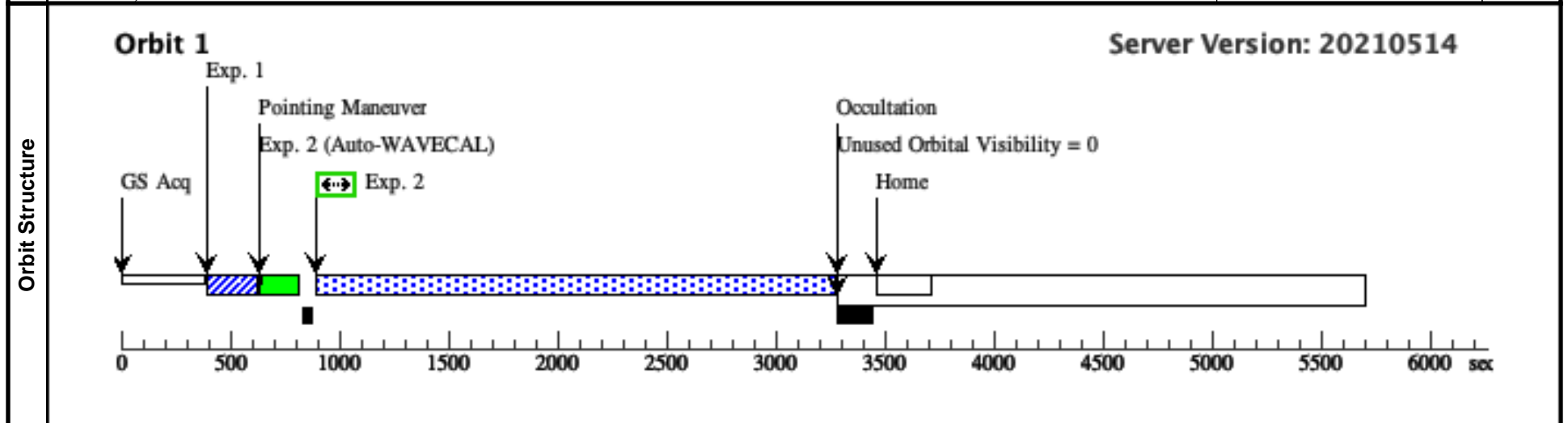
Proposal 16224 - TYC-8394-1331-1 (11) - Pathways to compact white dwarf binaries

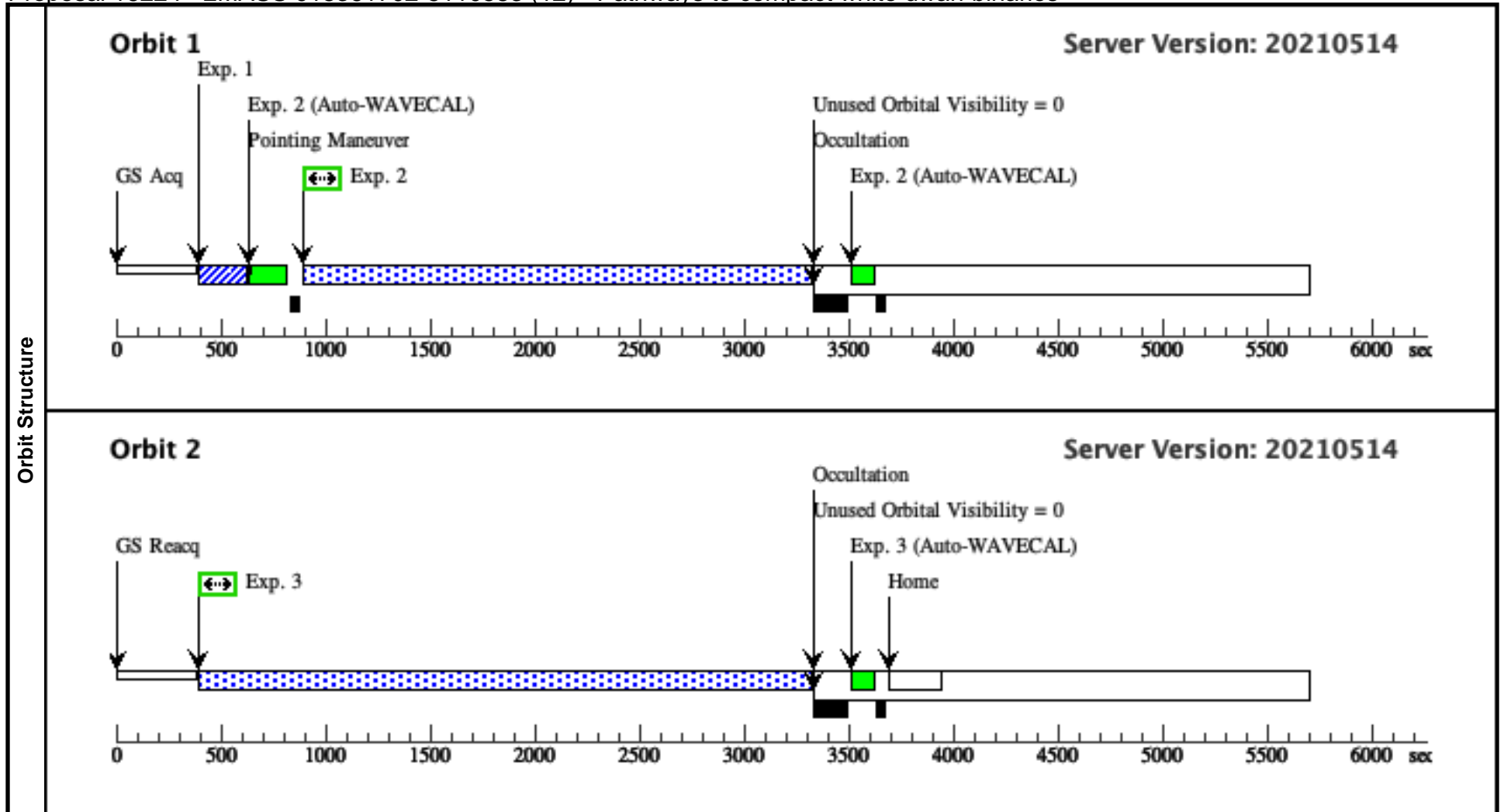
Wed Jan 19 20:00:36 GMT 2022

Visit	Proposal 16224, TYC-8394-1331-1 (11), completed				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/CCD, STIS/FUV-MAMA				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
Fixed Targets	(11)	TYC-8394-1331-1	RA: 19 47 21.6800 (296.8403333d) Dec: -46 52 31.90 (-46.87553d) Equinox: J2000	Proper Motion RA: -6.4 mas/yr Proper Motion Dec: -9.6 mas/yr Epoch of Position: 2015.5	V=10.93+/-0.05 FUV=17.104 NUV=16.813	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=STAR					
	Description=[COMPOSITE SPECTRAL TYPE] Extended=NO					

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	TYC-8394-1331-1 (STIS.ta.144 5301)	(11) TYC-8394-1331-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	TYC-8394-1331-1 (STIS.sp.14 45302)	(11) TYC-8394-1331-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=20 00			2325 Secs (2325 Secs) [==>]	[1]





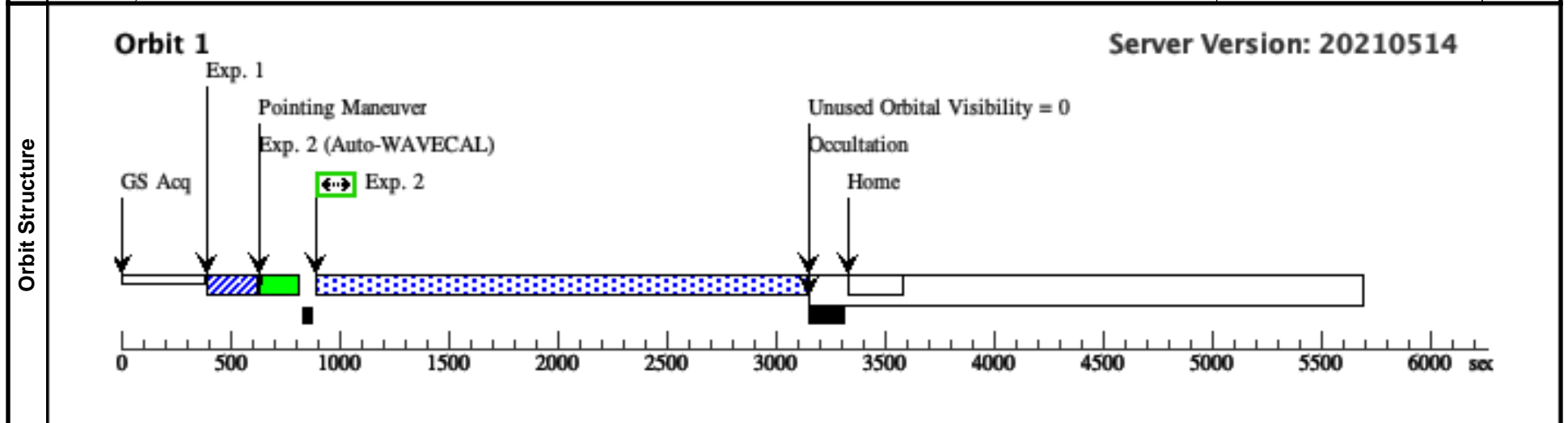
Proposal 16224 - TYC-6086-1317-1 (13) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

Visit	Proposal 16224, TYC-6086-1317-1 (13), completed				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/CCD, STIS/FUV-MAMA				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	TYC-6086-1317-1	RA: 11 41 41.1200 (175.4213333d) Dec: -15 41 8.60 (-15.68572d) Equinox: J2000	Proper Motion RA: -28.8 mas/yr Proper Motion Dec: -9.0 mas/yr Epoch of Position: 2015.5	V=11.10+/-0.05 FUV=16.772 NUV=14.356	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO					

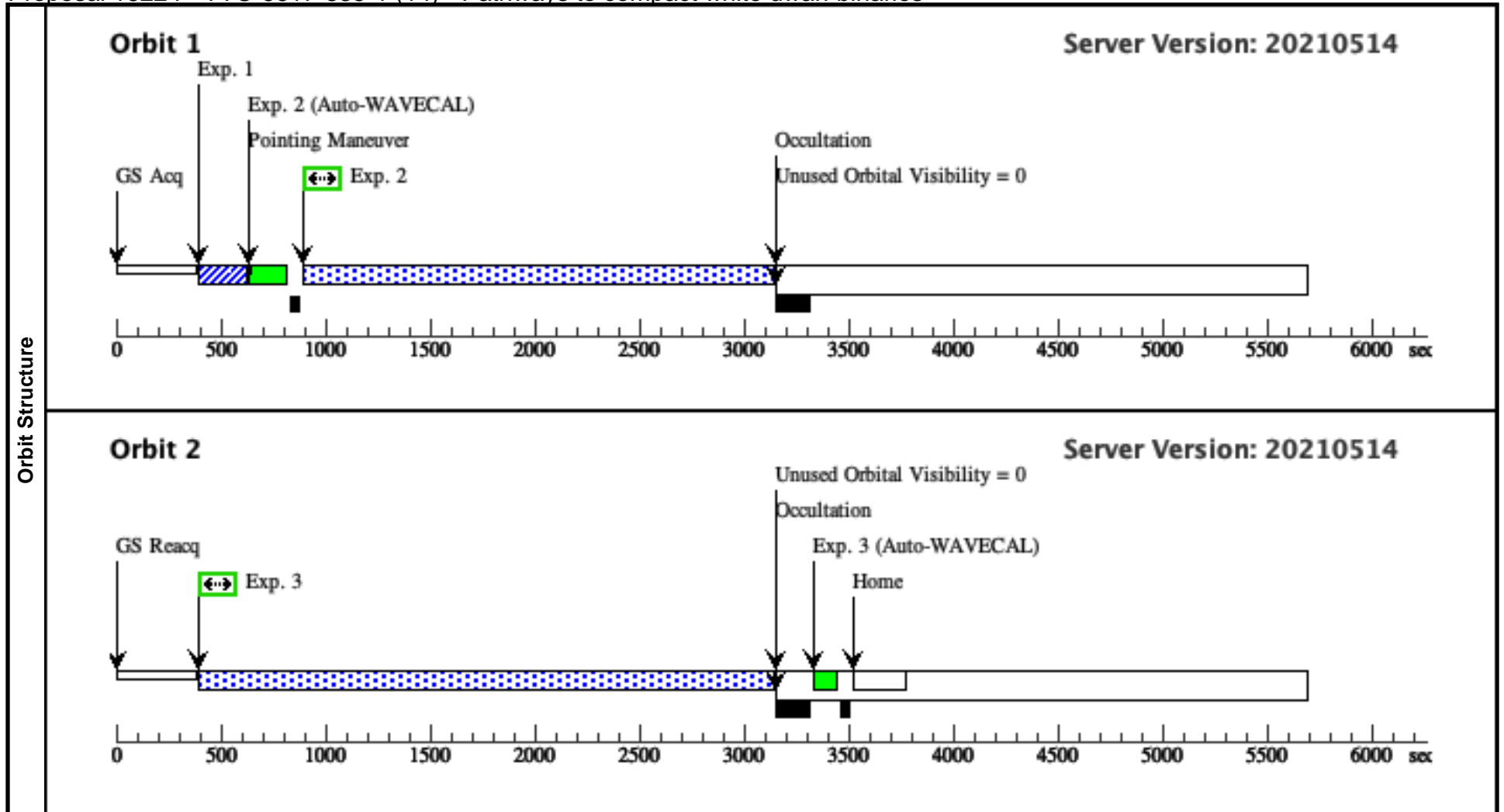
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-6086-1 317-1 (STIS.ta.144 5308)	(13) TYC-6086-1317 -1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [=>]	[1]
	2	TYC-6086-1 317-1 (STIS.sp.14 45309)	(13) TYC-6086-1317 -1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=20 00			2196 Secs (2196 Secs) [=>]	[1]



Proposal 16224 - TYC-6617-835-1 (14) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

Visit	Proposal 16224, TYC-6617-835-1 (14), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets	# (14) Name TYC-6617-835-1 Target Coordinates RA: 10 08 4.5000 (152.0187500d) Dec: -24 03 35.70 (-24.05992d) Equinox: J2000 Targ. Coord. Corrections Proper Motion RA: 16.9 mas/yr Proper Motion Dec: -9.3 mas/yr Epoch of Position: 2015.5 Fluxes V=11.58+/-0.05 FUV=18.313 NUV=16.049 Miscellaneous Reference Frame: ICRS Comments: Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO								
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-6617-835-1 (STIS.ta.1445310)	(14) TYC-6617-835-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [==>]	[1]
	2	TYC-6617-835-1 (STIS.sp.1445311)	(14) TYC-6617-835-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=2000			2197 Secs (2197 Secs) [==>]	[1]
	3	TYC-6617-835-1 (STIS.sp.1445311)	(14) TYC-6617-835-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=2000			2737 Secs (2737 Secs) [==>]	[2]



Proposal 16224 - TYC-110-755-1 (15) - Pathways to compact white dwarf binaries

Wed Jan 19 20:00:36 GMT 2022

Visit	Proposal 16224, TYC-110-755-1 (15), completed				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/CCD, STIS/FUV-MAMA				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(15)	TYC-110-755-1	RA: 05 06 53.6400 (76.7235000d) Dec: +06 06 55.80 (6.11550d) Equinox: J2000	Proper Motion RA: -13.5 mas/yr Proper Motion Dec: -9.5 mas/yr Epoch of Position: 2015.5	V=10.50+/-0.05 FUV=16.921 NUV=14.888	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=STAR Description=[COMPOSITE SPECTRAL TYPE] Extended=NO					

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TYC-110-75 5-1 (STIS.ta.144 5312)	(15) TYC-110-755-1	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			0.1 Secs (0.1 Secs) [=>]	[1]
	2	TYC-110-75 5-1 (STIS.sp.14 45313)	(15) TYC-110-755-1	STIS/FUV-MAMA, TIME-TAG, 52X0.5	G140L 1425 A	BUFFER-TIME=15 00			2185 Secs (2185 Secs) [=>]	[1]

