



## 17530 - Hot and cool - hot companions as probes of red supergiants

Cycle: 31, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>
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Dr. Abel Schootemeijer (CoI) (ESA Member)	Universitat Bonn, Argelander Institute for Astronomy
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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) PMMR-124 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:48.0	yes

Proposal 17530 (STScI Edit Number: 0, Created: Monday, June 24, 2024 at 10:01:15 AM 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>
02	(2) DACHS-SMC-1-13 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:50.0	yes
03	(3) PMMR-44 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:50.0	yes
04	(4) RMC-29 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:51.0	yes
05	(5) M2002-SMC-54134 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:52.0	yes
06	(6) BBB-SMC-348 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:53.0	yes
07	(7) PMMR-61 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:54.0	yes
08	(8) SKKM-108 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:55.0	yes

Proposal 17530 (STScI Edit Number: 0, Created: Monday, June 24, 2024 at 10:01:15 AM 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>
09	(9) PMMR-60 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:56.0	yes
10	(10) DACHS-SMC-2-27 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:58.0	yes
11	(11) SKKM-232 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	1	24-Jun-2024 11:00:59.0	yes
12	(12) SKKM-238 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	2	24-Jun-2024 11:01:00.0	yes
13	(13) PMMR-149 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	2	24-Jun-2024 11:01:01.0	yes
14	(14) DACHS-SMC-2-10 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	2	24-Jun-2024 11:01:02.0	yes
15	(15) SKKM-202 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	2	24-Jun-2024 11:01:04.0	yes

Proposal 17530 (STScI Edit Number: 0, Created: Monday, June 24, 2024 at 10:01:15 AM 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>
16	(16) PMMR-118 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	2	24-Jun-2024 11:01:05.0	yes
17	(17) LHA-115-S-33 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	2	24-Jun-2024 11:01:06.0	yes
18	(18) LHA-115-S-30 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	3	24-Jun-2024 11:01:08.0	yes
19	(19) LHA-115-S-37 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	3	24-Jun-2024 11:01:09.0	yes
20	(20) PMMR-70 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	3	24-Jun-2024 11:01:11.0	yes
21	(21) BBB-SMC-307 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	3	24-Jun-2024 11:01:12.0	yes
22	(22) B31 ANY	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA WFC3/UVIS	3	24-Jun-2024 11:01:14.0	yes

38 Total Orbits Used

## **ABSTRACT**

Most massive stars are born in binary systems, with 70% expected to interact with a companion within their lifetimes. The consequences of these interactions for subsequent evolutionary stages and for the endpoints of stellar evolution are still not well understood, particularly in both low-metallicity environments and for the red supergiant (RSG) phase: the final evolutionary stage before supernova for the majority of massive stars. Ultra-violet (UV) photometric observations of the Small Magellanic Cloud (SMC) have identified almost 100 RSGs with UV bright companions. As UV photometry alone can not independently determine stellar parameters of the companion or constrain the level of circumstellar extinction, we propose a unique survey of these RSG binaries in the UV using STIS spectroscopy. We have selected 22 binary systems that contain the most massive RSGs, the brightest companions and the dustiest binary systems. These observations will allow us to accurately determine the ages and masses of the hot companions and the extinction towards these systems to provide an independent calibration to RSG luminosities and masses and determine the frequency of interactions in RSG binary systems. These results will break degeneracies in the mass estimates of RSGs and their hot companions in the low-metallicity environment of the SMC, in orbital configurations and mass ranges that may result in hot Wolf-Rayet stars, stripped envelope supernovae and ultimately double compact object binary systems. Parallel observations focus on obtaining uniquely deep UV images of the SMC to identify the blue core helium burning sequence.

## **OBSERVING DESCRIPTION**

In this study we will observe red supergiant + B-type star binary systems in the SMC with the goal of characterising the B-type star and determining extinction parameters.

Each target will be observed with the STIS/MAMA G140L and G230L gratings using the 52x0.2 slit for the former, and the 52x2 slit for the latter. Our targets range in FUV(1700) AB magnitude from 14.5 to 19.4, which we convert into flux measurements for use in the STIS ETC. We have rough estimates of effective temperatures based on these magnitudes and assuming the stars are near main sequence stars (all B-type), and exposure times have been estimated so as to deliver a signal-to-noise ratio (s/n) of 40 per two-pixel resolution element at the position of the important Si IV lines at 1400. Simulating G140L data shows that we need at least this s/n to achieve our science goals.

The G230L data are required mainly for defining the NUV continuum shape, and will be rebinned to lower resolution (and in any case this region is not so critical for determining spectral types). Hence a s/n ratio of only 10 is required for the G203L exposures. The overlap region between

G140L and G230L data will be used to correct the G140L for potential slit losses and hence tweak the flux calibration.

Each target consists of 1, 2 or 3 orbits to reach the desired  $S/N=40$  with the G140L setup and  $S/N=10$  with the G230L setup. Target acquisition will focus on the RSG star using the F28X50LP filter, the RSG component of each system is sufficiently bright in the optical to use the minimum exposure for acquisition.

For each fixed target we have included the description [B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]. This is to highlight two points:

1. We do not know the spectral type of the B-type companion to great precision
2. Each binary system contains a red supergiant star (RSG) which has the spectral type  $\sim K I$

There is no or minimal flux from the RSG star in the selected science configuration e.g. STIS.sp.1891701, which is an estimate for our longest exposure, bluest setting and one of the most luminous RSGs.

Coordinate parallels:

The requested parallel dataset will yield a sensitive view of the faint, blue stellar population in the SMC with F300X, F390W and F475X

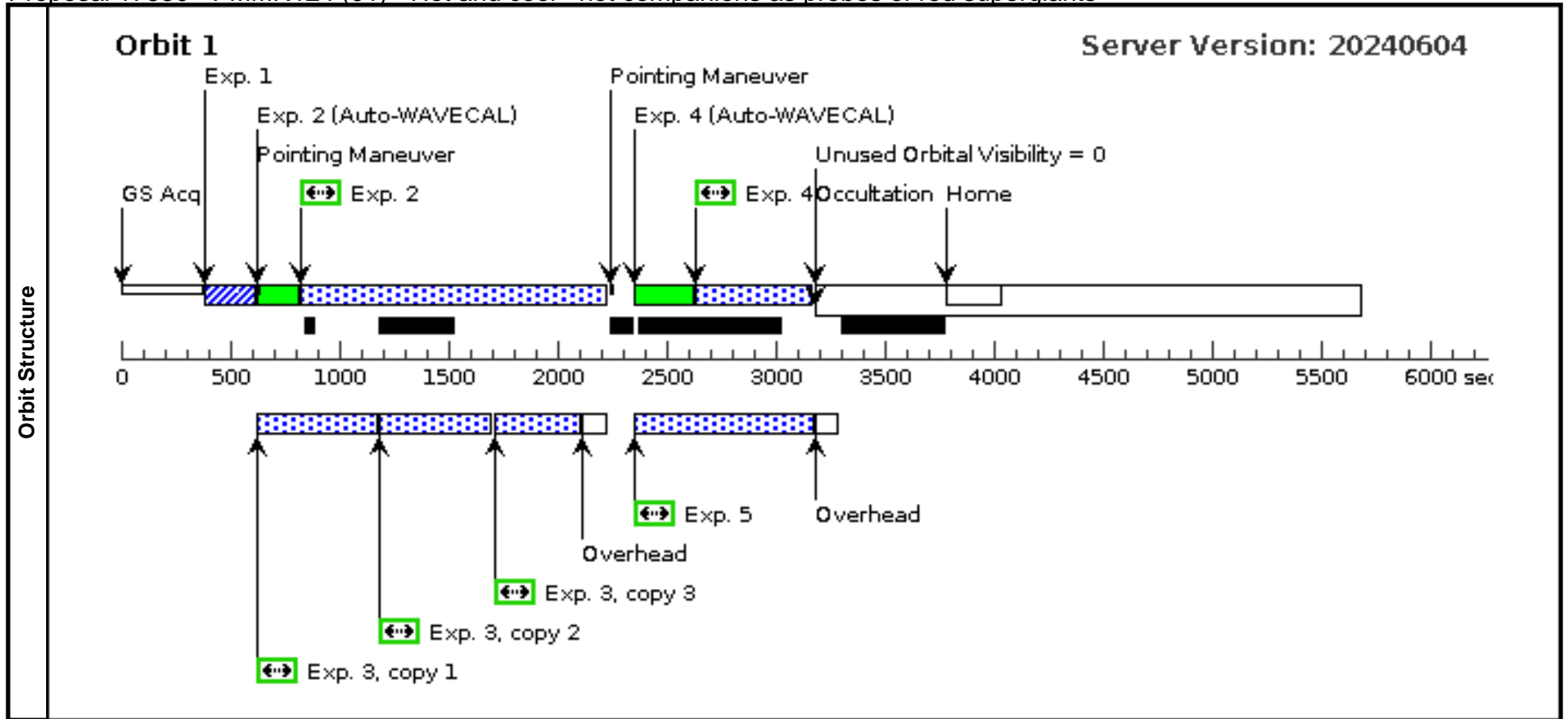
We cannot dither because of the parallel nature of the observations, but this slightly benefits efficiency and does not impact Dolphot stellar photometry which operates on single exposures. Our sensitivity estimates are based on two orbit visits (of which there are 6). Accounting for guide star acquisition, three exposures per orbit of STIS spectroscopy, WFC3 overheads per-exposure [readout/filter changes] per orbit and standard target visibility time, we are able to achieve three exposures in F300X and F475X, plus a pair with F390W. In longer visits of three orbit duration (of which there are 5), we will add exposures correspondingly.

For 11 single orbit spectroscopic visits, we plan shallower integrations, and fewer exposures per filter, observing only in F300X and F475X.

Proposal 17530 - PMMR124 (01) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:15 GMT 2024

Visit	<b>Proposal 17530, PMMR124 (01), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(1)	PMMR-124	RA: 01 01 43.5982 (15.4316592d) Dec: -72 38 25.32 (-72.64037d) Equinox: J2000	Proper Motion RA: 1.9595465777973175E-4 sec of time/yr Proper Motion Dec: - 0.0013439999065667507 arcsec/yr Epoch of Position: 2000	V=12.96 UVIT F172M = 14.5	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, K III-I]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	PMMR124-ACQ (STIS.ta.188 9529)	(1) PMMR-124	STIS/CCD, ACQ, F28X50LP	MIRROR					0.1 Secs (0.1 Secs)	
										[==>]	[1]
	2	PMMR-124-G140L (STIS.sp.18 89477)	(1) PMMR-124	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in PMMR124 (01)		1391 Secs (1391 Secs)	
										[==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in PMMR124 (01)		390 Secs X 3 (1170 Secs)	
										[==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]
4	PMMR124-G230L (STIS.sp.19 26103)	(1) PMMR-124	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 4-5 in PMMR124 (01)		494 Secs (494 Secs)		
									[==>]	[1]	
5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 4-5 in PMMR124 (01)		799 Secs (799 Secs)		
									[==>]	[1]	

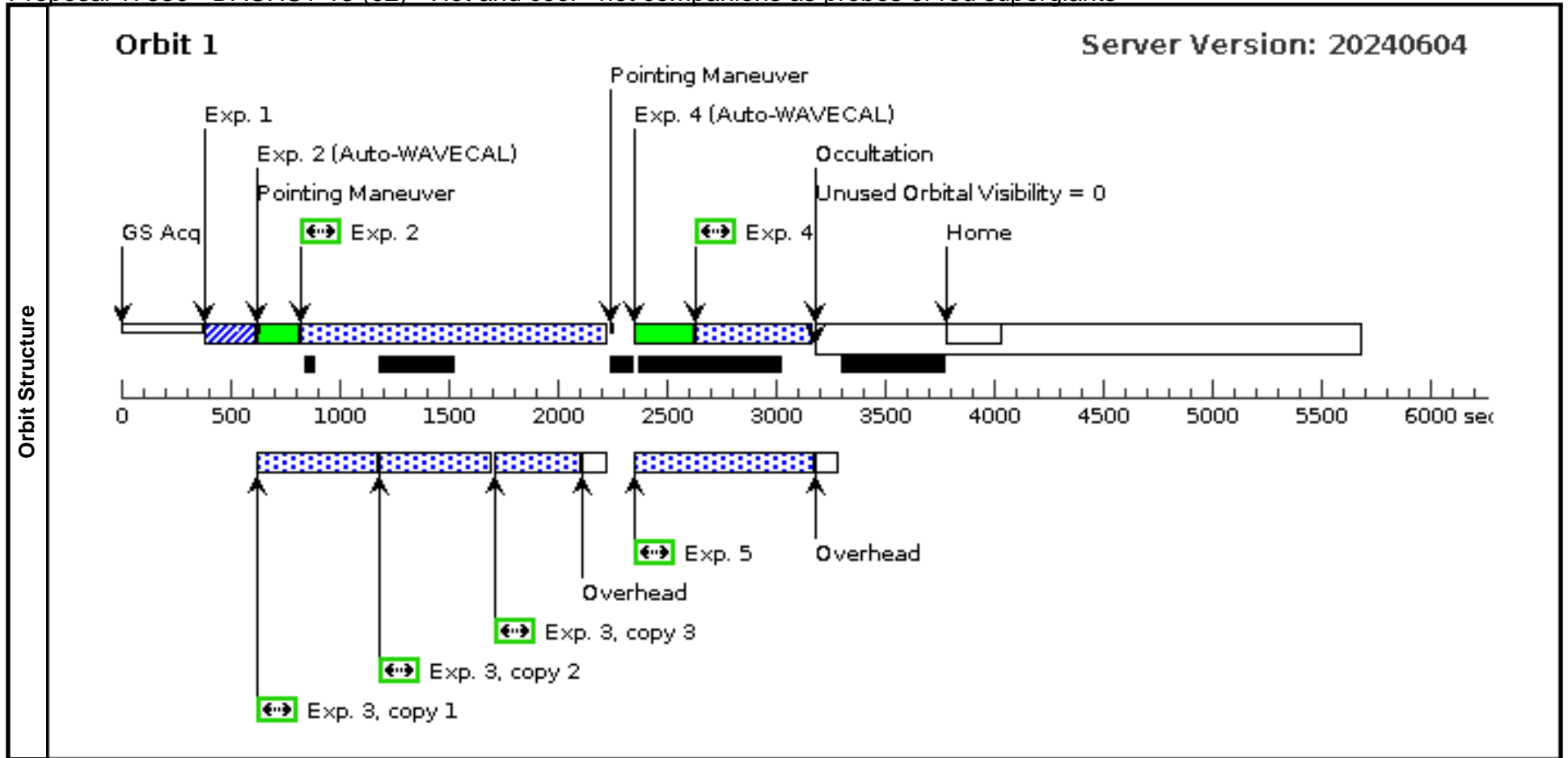




Proposal 17530 - DACHS1-13 (02) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

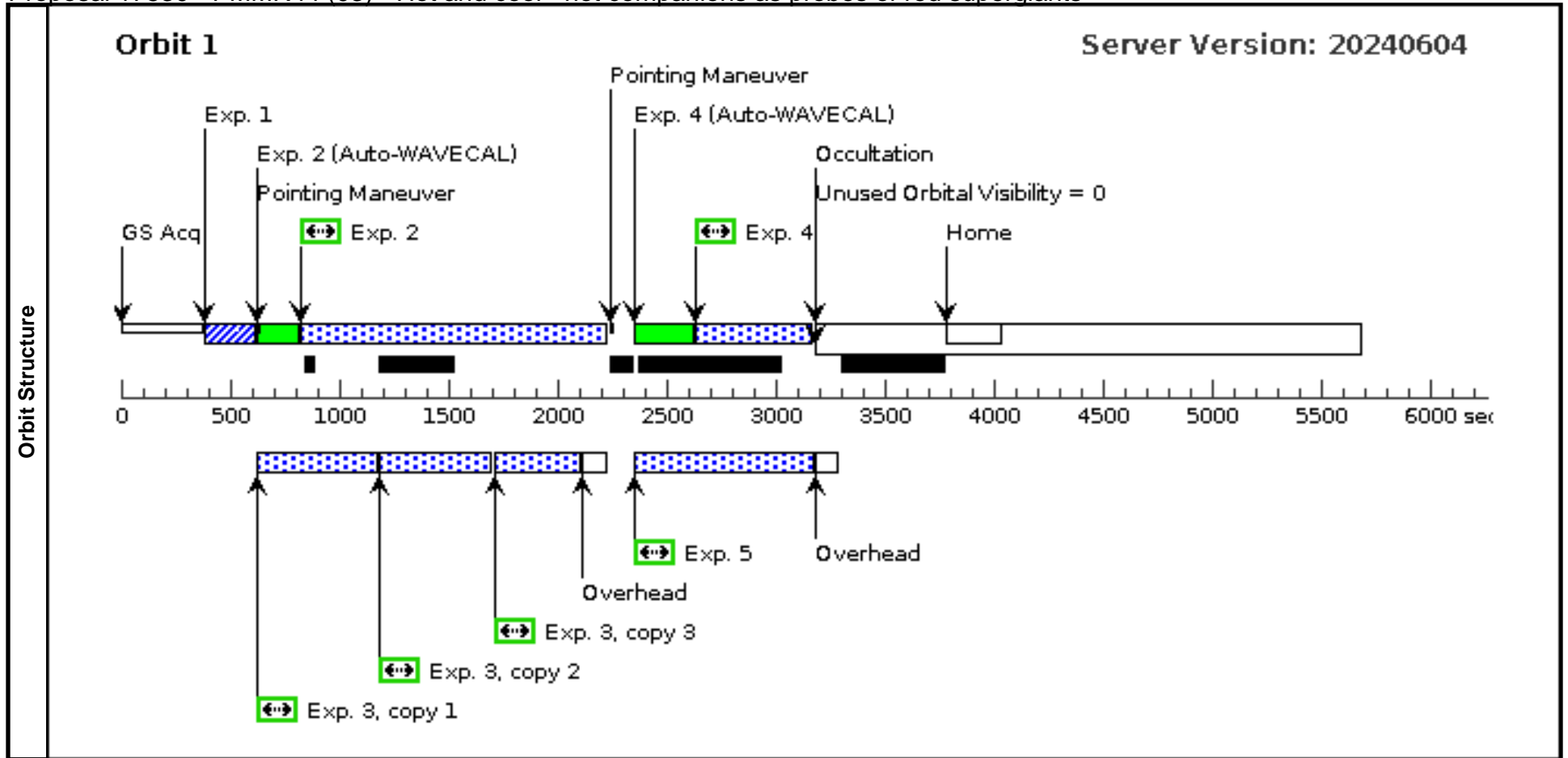
Visit	<b>Proposal 17530, DACHS1-13 (02), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)																						
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>DACHS-SMC-1-13</td> <td>RA: 00 52 26.4869 (13.1103621d) Dec: -72 45 16.02 (-72.75445d) Equinox: J2000</td> <td>Proper Motion RA: 1.933883216661894E-4 sec of time/yr Proper Motion Dec: -0.0014149999060464324 arcsec/yr Epoch of Position: 2015.5</td> <td>V=12.38</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, K III-I]</p>											#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	DACHS-SMC-1-13	RA: 00 52 26.4869 (13.1103621d) Dec: -72 45 16.02 (-72.75445d) Equinox: J2000	Proper Motion RA: 1.933883216661894E-4 sec of time/yr Proper Motion Dec: -0.0014149999060464324 arcsec/yr Epoch of Position: 2015.5	V=12.38
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																		
(2)	DACHS-SMC-1-13	RA: 00 52 26.4869 (13.1103621d) Dec: -72 45 16.02 (-72.75445d) Equinox: J2000	Proper Motion RA: 1.933883216661894E-4 sec of time/yr Proper Motion Dec: -0.0014149999060464324 arcsec/yr Epoch of Position: 2015.5	V=12.38	Reference Frame: ICRS																		
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit													
	1	DACHS1-1 3-ACQ (STIS.ta.188 9530)	(2) DACHS-SMC-1-13	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]													
	2	DACHS1-1 3-G140L (STIS.sp.18 89478)	(2) DACHS-SMC-1-13	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in DACHS1-13 (02)	1391 Secs (1391 Secs) [==>]	[1]													
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in DACHS1-13 (02)	390 Secs X 3 (1170 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]													
	4	DACHS-SM C-1-13-G23 0L (STIS.sp.19 26104)	(2) DACHS-SMC-1-13	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 4-5 in DACHS1-13 (02)	494 Secs (494 Secs) [==>]	[1]													
	5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 4-5 in DACHS1-13 (02)	799 Secs (799 Secs) [==>]	[1]													



Proposal 17530 - PMMR44 (03) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

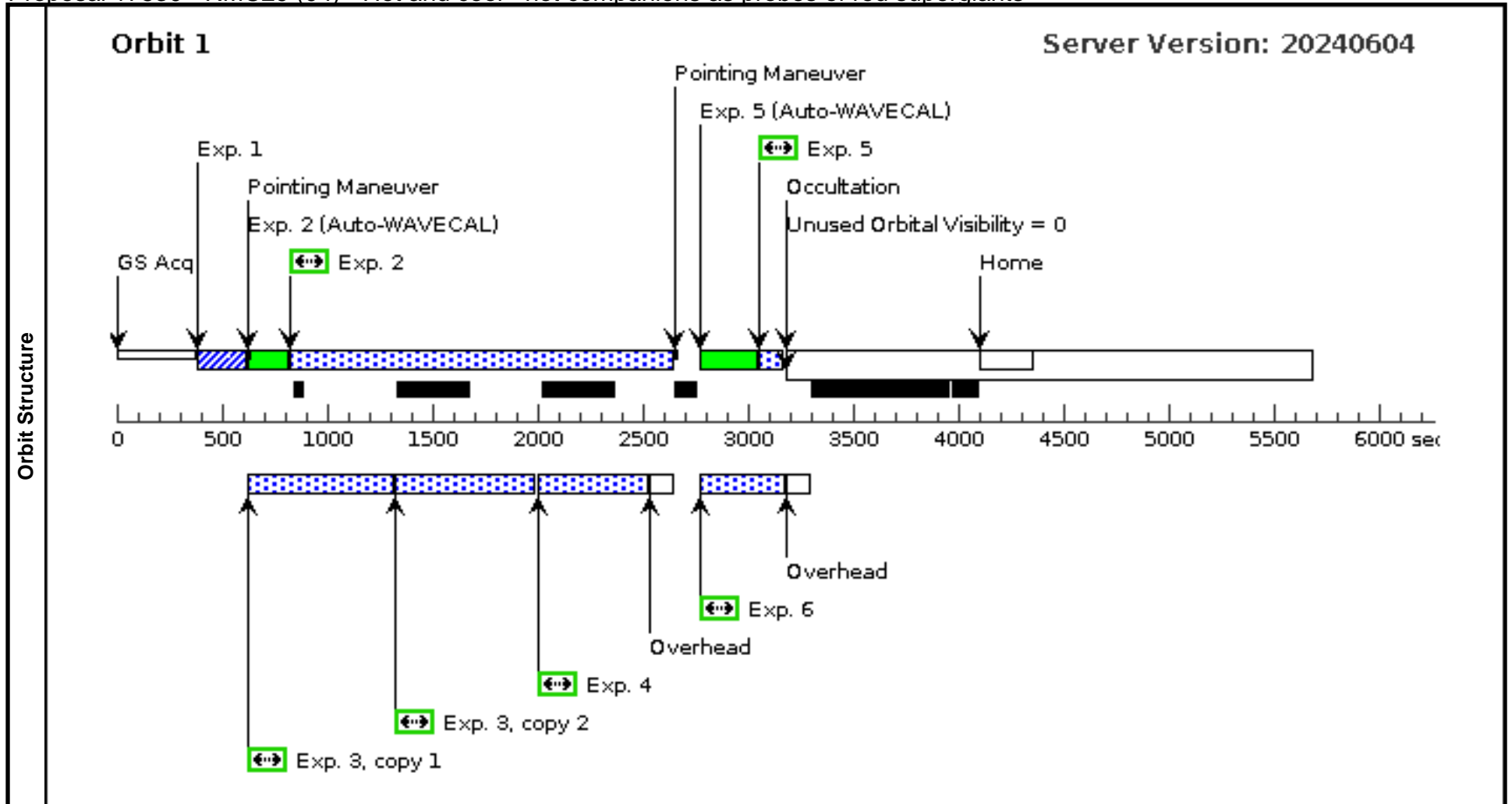
Visit		<b>Proposal 17530, PMMR44 (03), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(3)	PMMR-44	RA: 00 51 32.8134 (12.8867225d) Dec: -72 05 49.37 (-72.09705d) Equinox: J2000	Proper Motion RA: 1.7414556663842103E-4 sec of time/yr Proper Motion Dec: - 0.0013269999499243568 arcsec/yr Epoch of Position: 2015.5	V=12.98	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, K III-I]											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	PMMR44-A (3) PMMR-44 CQ (STIS.ta.188 9530)	(3) PMMR-44	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs)		
									[==>]		[1]
	2	PMMR44-G (3) PMMR-44 140L (STIS.sp.18 89479)	(3) PMMR-44	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Gro up 2-3 in PMMR44 (03)	1391 Secs (1391 Secs)		
									[==>]		[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Gro up 2-3 in PMMR44 (03)	390 Secs X 3 (1170 Secs)		
								[==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]		[1]	
4	PMMR44-G (3) PMMR-44 230L (STIS.sp.19 26124)	(3) PMMR-44	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Gro up 4-5 in PMMR44 (03)	494 Secs (494 Secs)			
								[==>]		[1]	
5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Gro up 4-5 in PMMR44 (03)	799 Secs (799 Secs)			
								[==>]		[1]	



Proposal 17530 - RMC29 (04) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

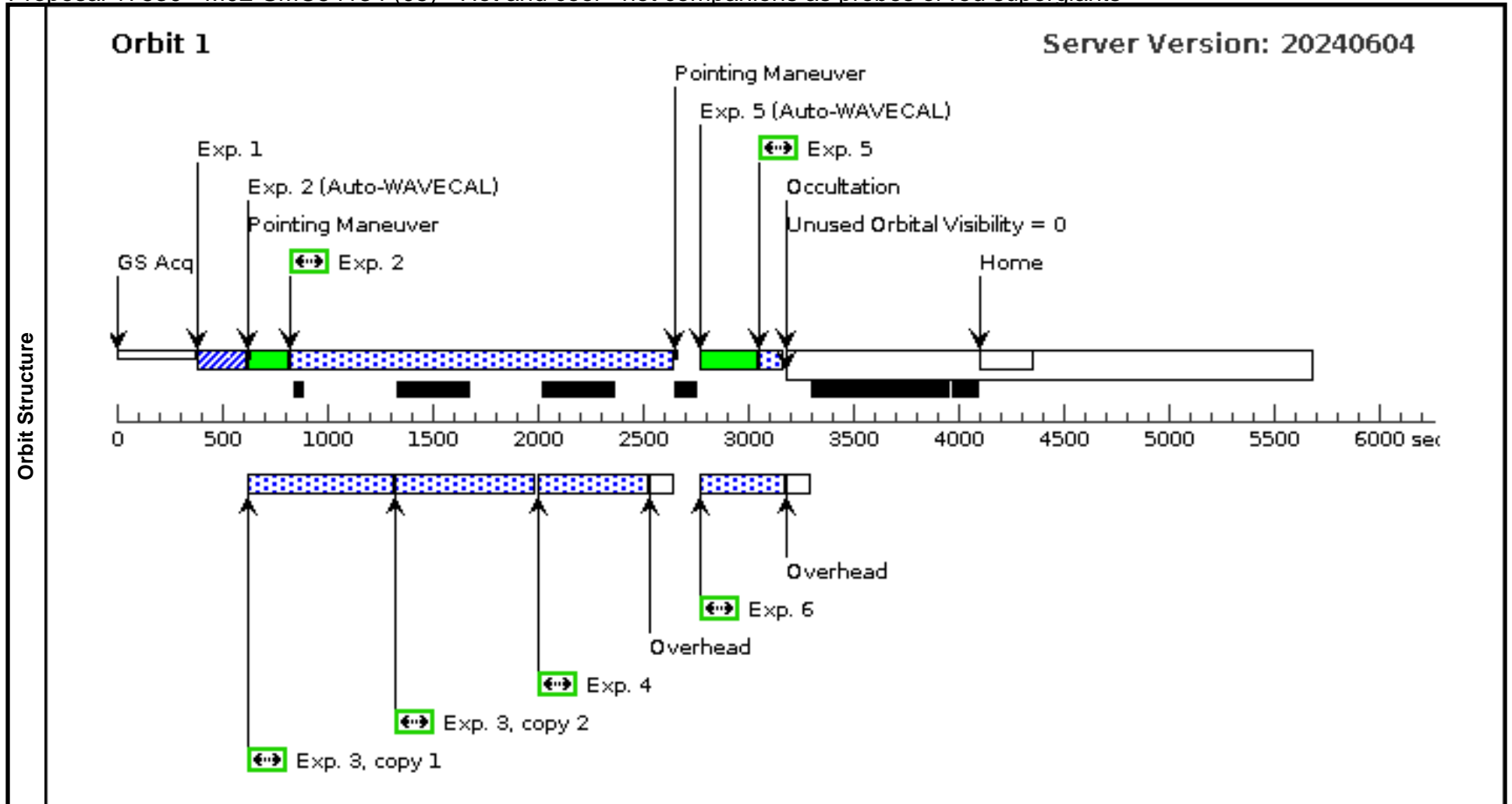
Visit		Proposal 17530, RMC29 (04), implementation									
		Diagnostic Status: No Diagnostics									
		Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
		Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(4)	RMC-29	RA: 01 03 18.5674 (15.8273642d) Dec: -72 06 46.12 (-72.11281d) Equinox: J2000	Proper Motion RA: 1.651777323413432E-4 sec of time/yr Proper Motion Dec: -0.001458999864256242 arcsec/yr Epoch of Position: 2015.5	V=12.53	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, K III-I]											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	RMC29-AC Q (STIS.ta.188 9531)	(4) RMC-29	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]	
	2	RMC29-G1 40L (STIS.sp.18 89480)	(4) RMC-29	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-4 in RMC29 (0 4)	1810 Secs (1810 Secs) [==>]	[1]	
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-4 in RMC29 (0 4)	535 Secs X 2 (1070 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]	
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 2-4 in RMC29 (0 4)	500 Secs (500 Secs) [==>]	[1]	
	5	RMC29-G2 30L (STIS.sp.19 26125)	(4) RMC-29	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 5-6 in RMC29 (0 4)	70 Secs (70 Secs) [==>]	[1]	
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in RMC29 (0 4)	400 Secs (400 Secs) [==>]	[1]	



Proposal 17530 - M02-SMC54134 (05) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

Visit	<b>Proposal 17530, M02-SMC54134 (05), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, 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>(5)</td> <td>M2002-SMC-54134</td> <td>RA: 01 02 37.9515 (15.6581313d) Dec: -72 35 54.77 (-72.59855d) Equinox: J2000</td> <td>Proper Motion RA: 1.769960918748873E-4 sec of time/yr Proper Motion Dec: -0.0013299999181981548 arcsec/yr Epoch of Position: 2015.5</td> <td>V=13.26</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, K III-I]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	M2002-SMC-54134	RA: 01 02 37.9515 (15.6581313d) Dec: -72 35 54.77 (-72.59855d) Equinox: J2000	Proper Motion RA: 1.769960918748873E-4 sec of time/yr Proper Motion Dec: -0.0013299999181981548 arcsec/yr Epoch of Position: 2015.5	V=13.26
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																
(5)	M2002-SMC-54134	RA: 01 02 37.9515 (15.6581313d) Dec: -72 35 54.77 (-72.59855d) Equinox: J2000	Proper Motion RA: 1.769960918748873E-4 sec of time/yr Proper Motion Dec: -0.0013299999181981548 arcsec/yr Epoch of Position: 2015.5	V=13.26	Reference Frame: ICRS																	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	M02-SMC5 4134-ACQ 34 (STIS.ta.188 9534)	(5) M2002-SMC-541 34	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]												
	2	M02-SMC5 4134-G140L 34 (STIS.sp.18 89481)	(5) M2002-SMC-541 34	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-4 in M02-SMC 54134 (05)	1810 Secs (1810 Secs) [==>]	[1]												
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-4 in M02-SMC 54134 (05)	535 Secs X 2 (1070 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]												
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 2-4 in M02-SMC 54134 (05)	500 Secs (500 Secs) [==>]	[1]												
	5	M02-SMC5 4134-G230L 34 (STIS.sp.19 26126)	(5) M2002-SMC-541 34	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 5-6 in M02-SMC 54134 (05)	70 Secs (70 Secs) [==>]	[1]												
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in M02-SMC 54134 (05)	400 Secs (400 Secs) [==>]	[1]												

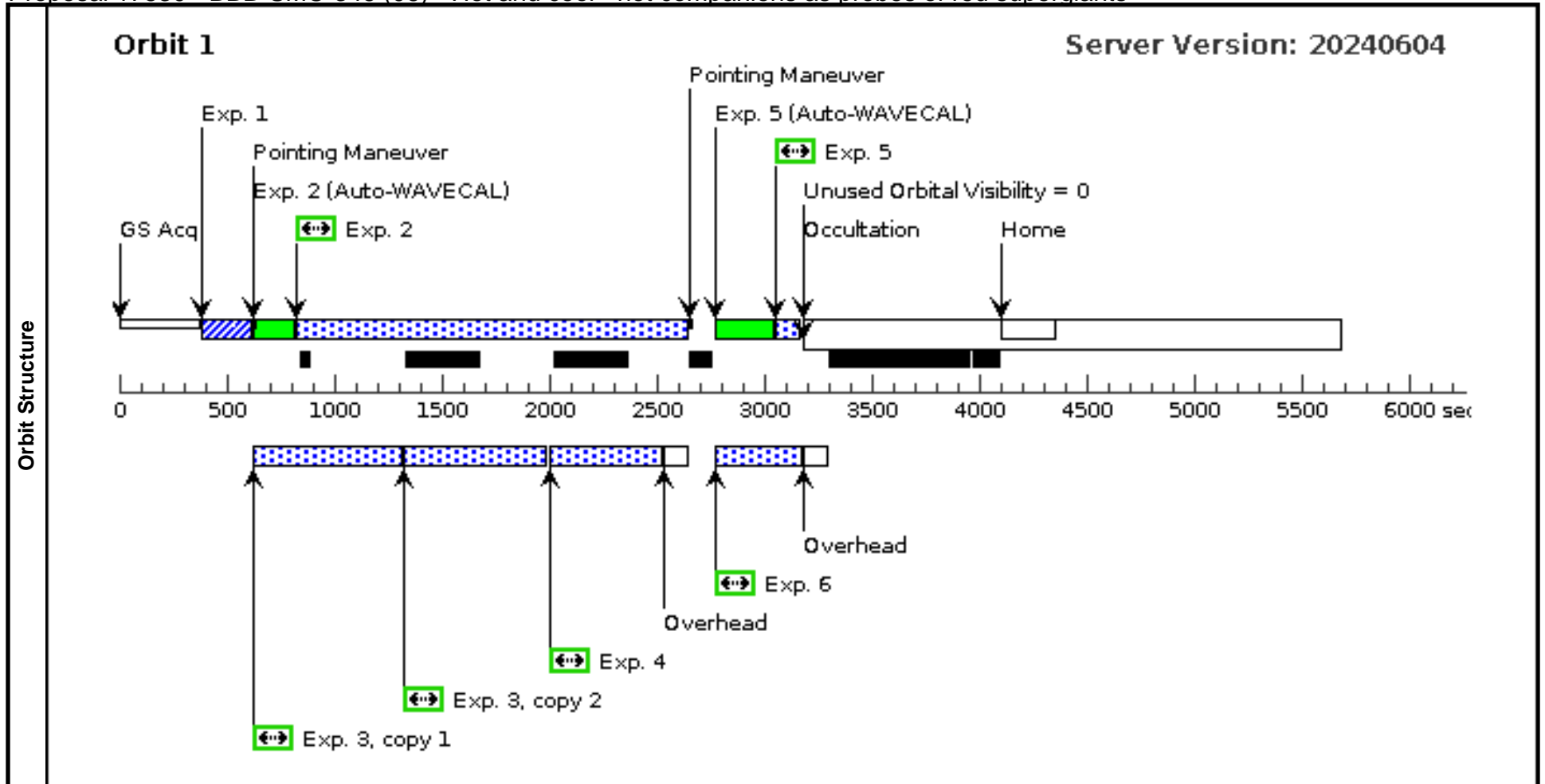




Proposal 17530 - BBB-SMC-346 (06) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

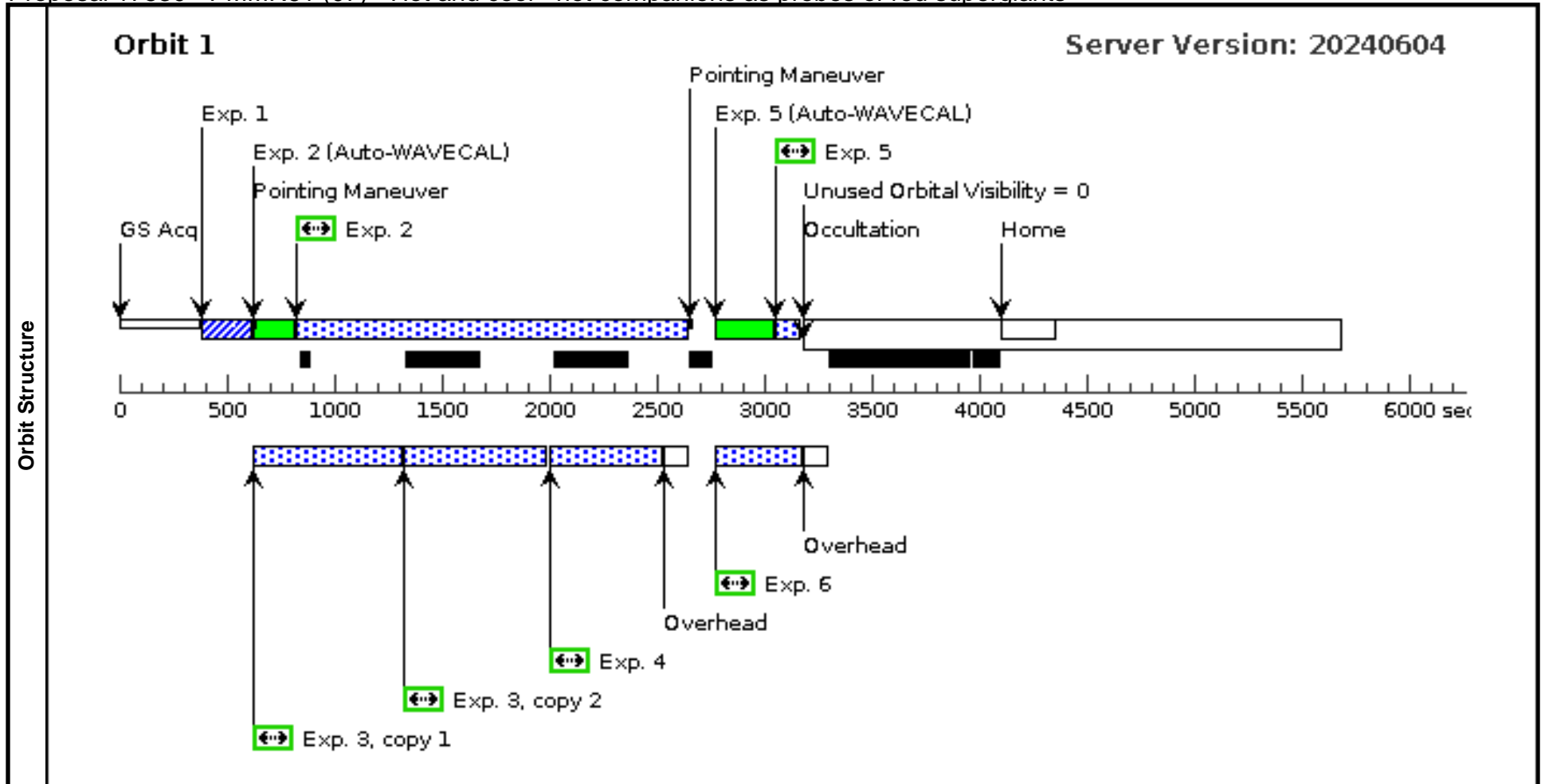
Visit	<b>Proposal 17530, BBB-SMC-346 (06), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(6)	BBB-SMC-348	RA: 01 05 27.4411 (16.3643379d) Dec: -72 17 4.36 (-72.28454d) Equinox: J2000	Proper Motion RA: 1.914839925365838E-4 sec of time/yr Proper Motion Dec: -0.0013159999298295588 arcsec/yr Epoch of Position: 2015.5	V=13.13	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	BBB-SMC-346-ACQ (STIS.ta.188 9529)	(6) BBB-SMC-348	STIS/CCD, ACQ, F28X50LP	MIRROR					0.1 Secs (0.1 Secs)	
										[==>]	[1]
	2	BBB-SMC-346-G140L (STIS.sp.18 89482)	(6) BBB-SMC-348	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				Prime + Parallel Group 2-4 in BBB-SMC-346 (06)	1810 Secs (1810 Secs)	
										[==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20			Prime + Parallel Group 2-4 in BBB-SMC-346 (06)	535 Secs X 2 (1070 Secs)	
										[==>(Copy 1)] [==>(Copy 2)]	[1]
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5			Prime + Parallel Group 2-4 in BBB-SMC-346 (06)	500 Secs (500 Secs)	
									[==>]	[1]	
5	BBB-SMC-346-G230L (STIS.sp.19 26127)	(6) BBB-SMC-348	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				Prime + Parallel Group 5-6 in BBB-SMC-346 (06)	70 Secs (70 Secs)		
									[==>]	[1]	
6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5			Prime + Parallel Group 5-6 in BBB-SMC-346 (06)	400 Secs (400 Secs)		
									[==>]	[1]	



Proposal 17530 - PMMR61 (07) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

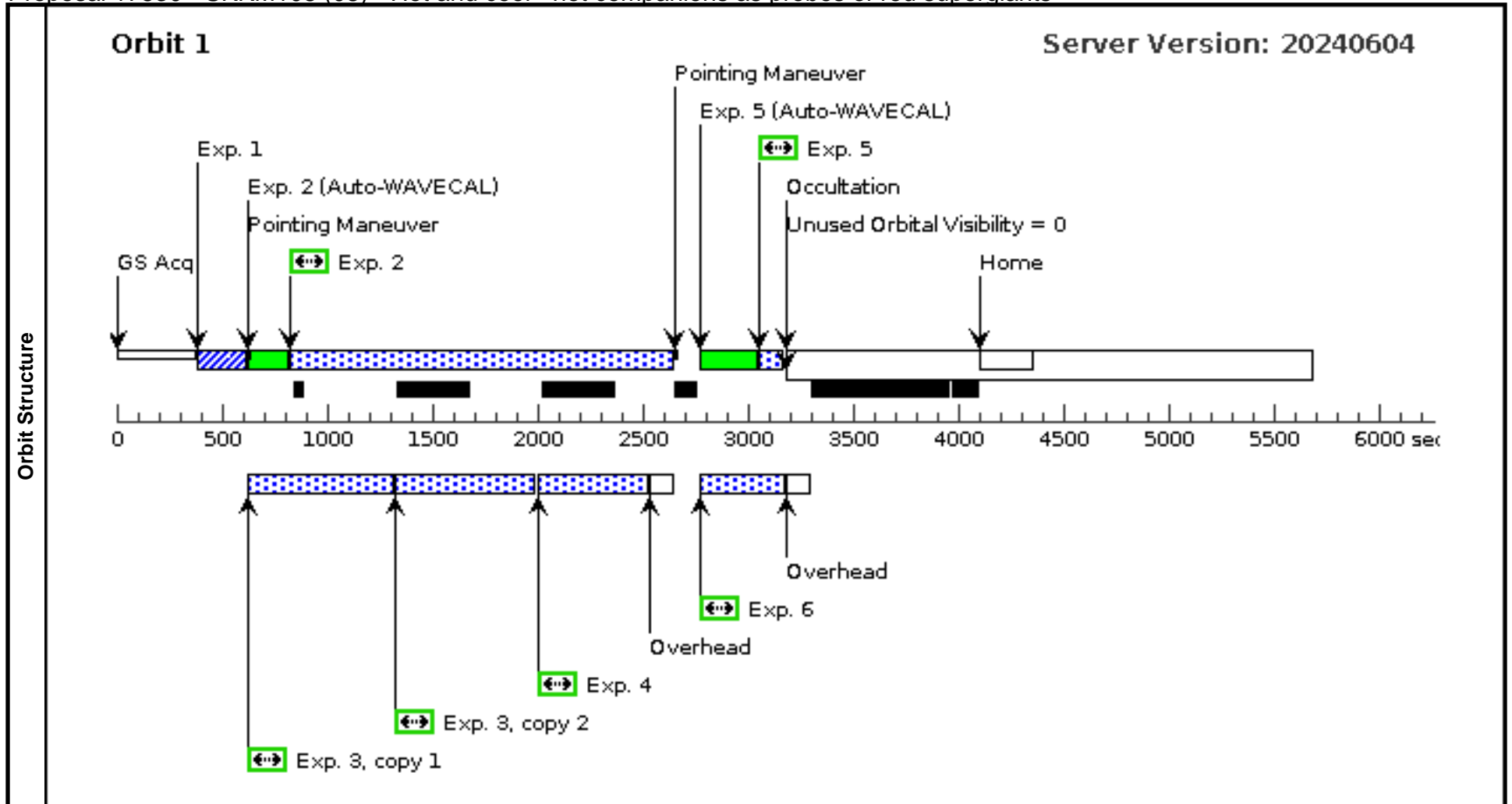
Visit	<b>Proposal 17530, PMMR61 (07), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)																											
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(7)</td> <td>PMMR-61</td> <td>RA: 00 53 44.5044 (13.4354350d) Dec: -72 33 19.33 (-72.55537d) Equinox: J2000</td> <td>Proper Motion RA: 1.8279826402983342E-4 sec of time/yr Proper Motion Dec: - 0.0013879999869459425 arcsec/yr Epoch of Position: 2015.5</td> <td>V=13.11</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]                 </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(7)	PMMR-61	RA: 00 53 44.5044 (13.4354350d) Dec: -72 33 19.33 (-72.55537d) Equinox: J2000	Proper Motion RA: 1.8279826402983342E-4 sec of time/yr Proper Motion Dec: - 0.0013879999869459425 arcsec/yr Epoch of Position: 2015.5	V=13.11	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]				
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																						
(7)	PMMR-61	RA: 00 53 44.5044 (13.4354350d) Dec: -72 33 19.33 (-72.55537d) Equinox: J2000	Proper Motion RA: 1.8279826402983342E-4 sec of time/yr Proper Motion Dec: - 0.0013879999869459425 arcsec/yr Epoch of Position: 2015.5	V=13.11	Reference Frame: ICRS																							
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]																												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																		
	1	PMMR61-A (7) PMMR-61 CQ (STIS.ta.188 9529)	(7) PMMR-61	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]																		
	2	PMMR61-G (7) PMMR-61 140L (STIS.sp.18 89483)	(7) PMMR-61	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-4 in PMMR61 (07)	1810 Secs (1810 Secs) [==>]	[1]																		
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-4 in PMMR61 (07)	535 Secs X 2 (1070 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]																		
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 2-4 in PMMR61 (07)	500 Secs (500 Secs) [==>]	[1]																		
	5	PMMR61-G (7) PMMR-61 230L (STIS.sp.19 26129)	(7) PMMR-61	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 5-6 in PMMR61 (07)	70 Secs (70 Secs) [==>]	[1]																		
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in PMMR61 (07)	400 Secs (400 Secs) [==>]	[1]																		



Proposal 17530 - SKKM108 (08) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

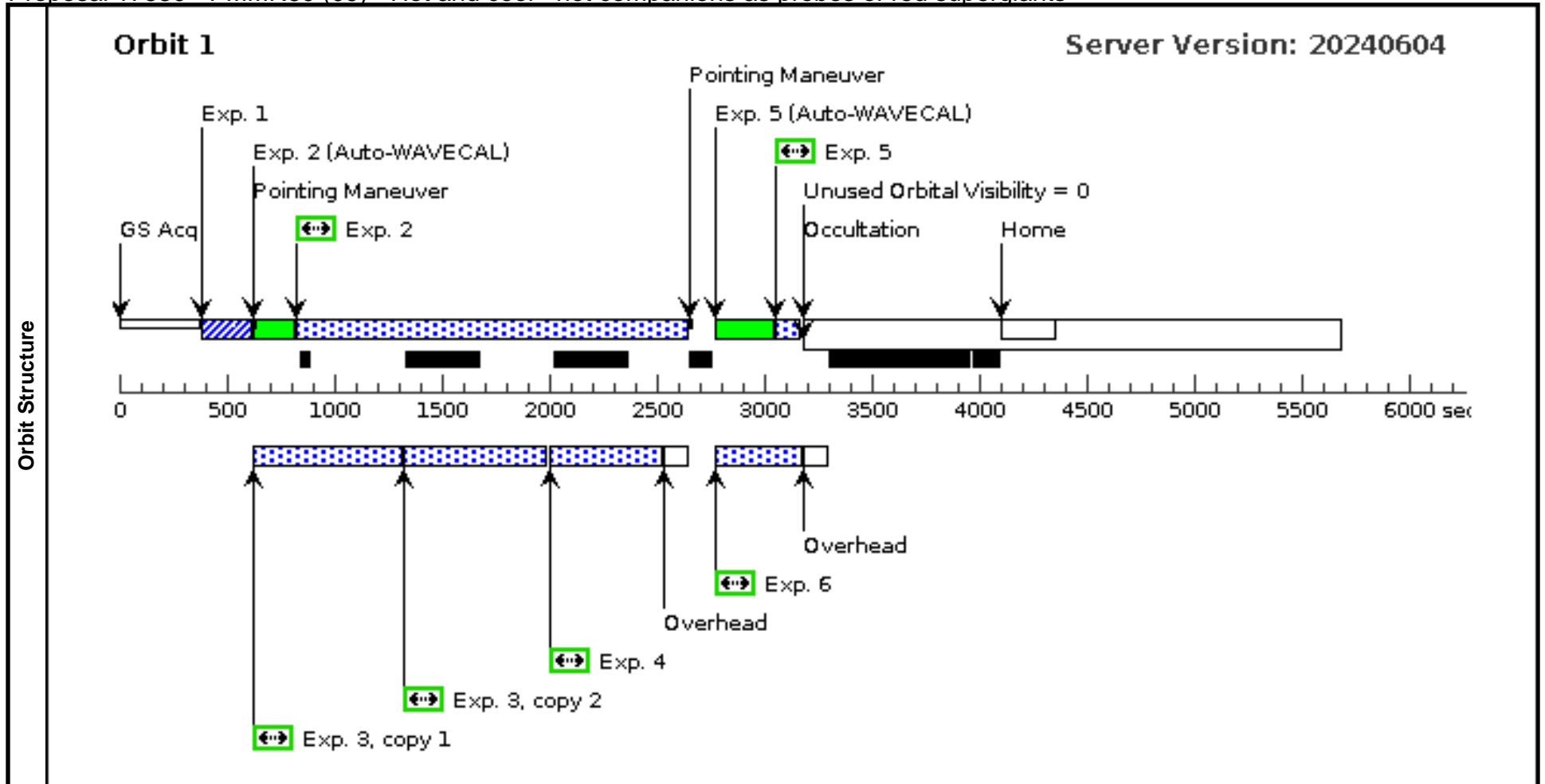
Visit	<b>Proposal 17530, SKKM108 (08), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(8)	SKKM-108	RA: 00 53 23.6216 (13.3484233d) Dec: -72 47 1.45 (-72.78374d) Equinox: J2000	Proper Motion RA: 1.9258109090075756E-4 sec of time/yr Proper Motion Dec: - 0.0013759999092144426 arcsec/yr Epoch of Position: 2015.5	V=13.0	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	SKKM108-ACQ (STIS.ta.188 9533)	(8) SKKM-108	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs)	[==>]	[1]
	2	SKKM108-G140L (STIS.sp.18 89484)	(8) SKKM-108	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-4 in SKKM108 (08)	1810 Secs (1810 Secs)	[==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-4 in SKKM108 (08)	535 Secs X 2 (1070 Secs)	[==>(Copy 1)] [==>(Copy 2)]	[1]
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 2-4 in SKKM108 (08)	500 Secs (500 Secs)	[==>]	[1]
	5	SKKM108-G230L (STIS.sp.19 26130)	(8) SKKM-108	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 5-6 in SKKM108 (08)	70 Secs (70 Secs)	[==>]	[1]
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in SKKM108 (08)	400 Secs (400 Secs)	[==>]	[1]



Proposal 17530 - PMMR60 (09) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

Visit		<b>Proposal 17530, PMMR60 (09), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(9)	PMMR-60	RA: 00 53 39.6626 (13.4152608d) Dec: -72 32 9.09 (-72.53586d) Equinox: J2000	Proper Motion RA: 1.792682956581234E-4 sec of time/yr Proper Motion Dec: - 0.0014180000789565383 arcsec/yr Epoch of Position: 2015.5	V=13.0	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	PMMR60-A (9) PMMR-60 CQ (STIS.ta.188 9533)	(9) PMMR-60	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs)		
									[==>]		[1]
	2	PMMR60-G (9) PMMR-60 140L (STIS.sp.19 26133)	(9) PMMR-60	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-4 in PMMR60 (09)	1810 Secs (1810 Secs)		
									[==>]		[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-4 in PMMR60 (09)	535 Secs X 2 (1070 Secs)		
									[==>(Copy 1)] [==>(Copy 2)]		[1]
4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 2-4 in PMMR60 (09)	500 Secs (500 Secs)			
								[==>]		[1]	
5	PMMR60-G (9) PMMR-60 230L (STIS.sp.19 26134)	(9) PMMR-60	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 5-6 in PMMR60 (09)	70 Secs (70 Secs)			
								[==>]		[1]	
6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in PMMR60 (09)	400 Secs (400 Secs)			
								[==>]		[1]	

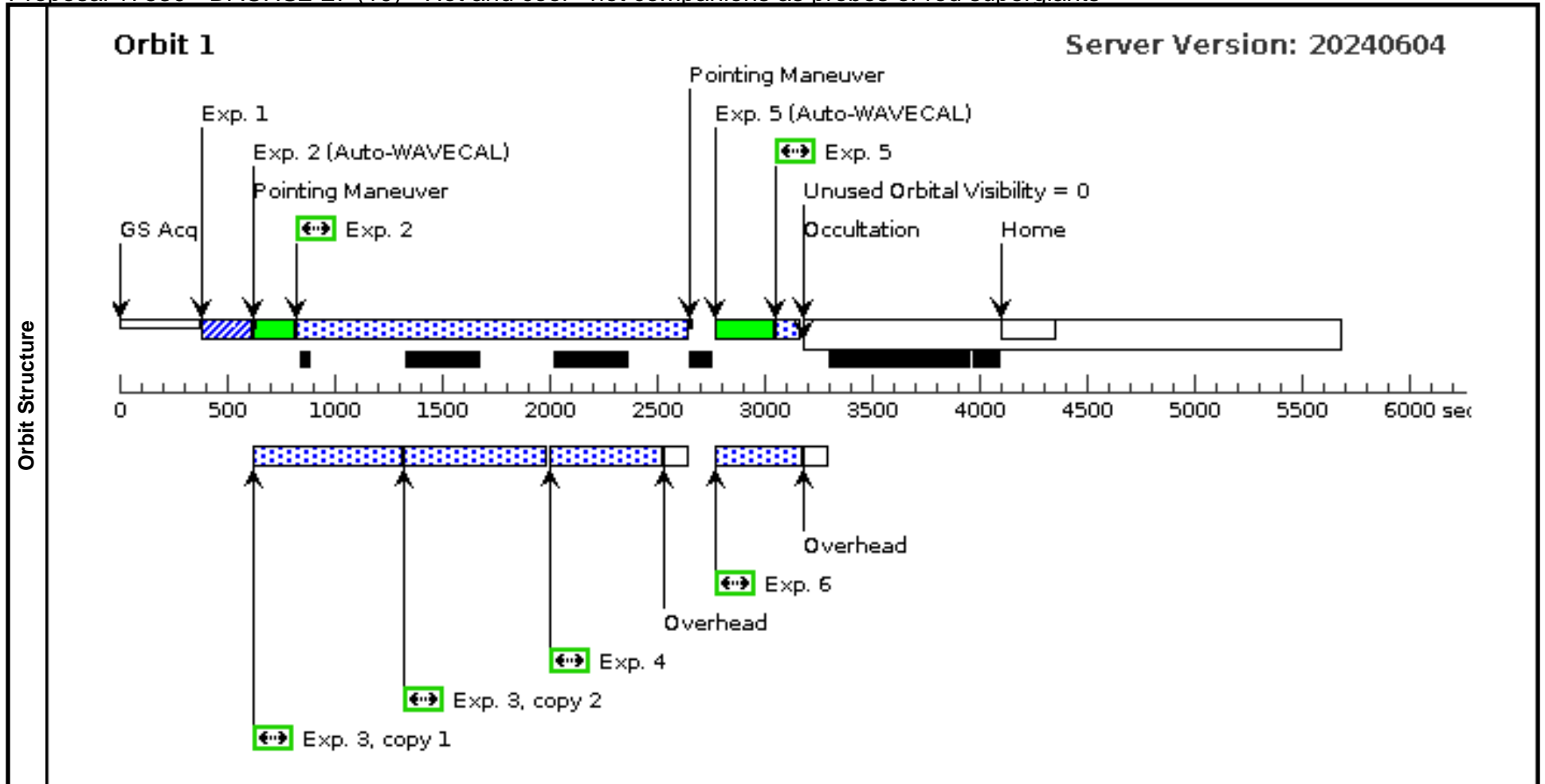




Proposal 17530 - DACHS2-27 (10) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

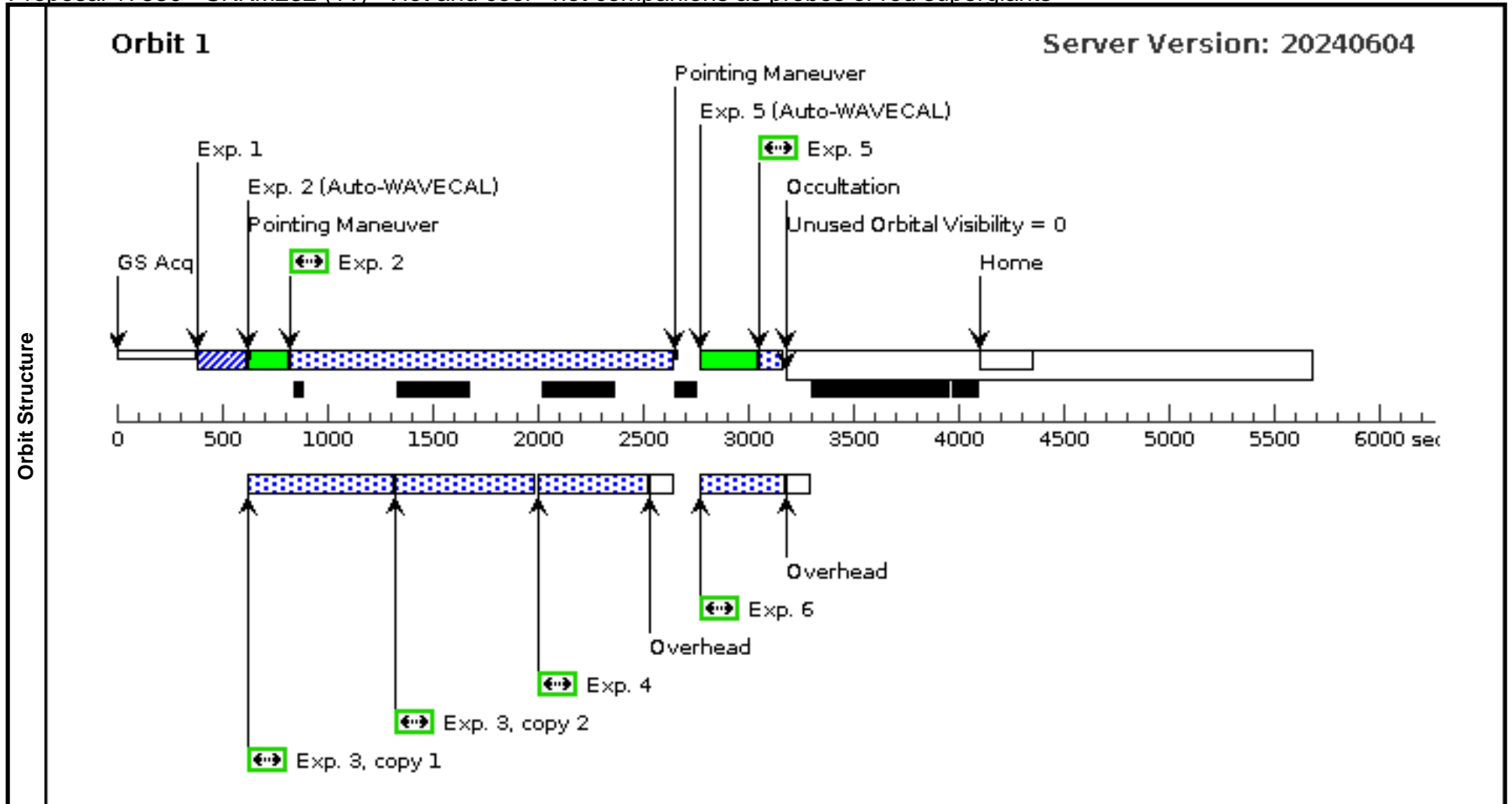
Visit		Proposal 17530, DACHS2-27 (10), implementation									
		Diagnostic Status: No Diagnostics									
		Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
		Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(10)	DACHS-SMC-2-27	RA: 01 04 6.8488 (16.0285367d) Dec: -72 03 55.64 (-72.06546d) Equinox: J2000	Proper Motion RA: 1.539309435968182E-4 sec of time/yr Proper Motion Dec: -0.0013720000879402505 arcsec/yr Epoch of Position: 2015.5	V=13.1	Reference Frame: ICRS					
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
		Category=STAR									
		Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	DACHS2-2 7-ACQ (STIS.ta.188 9529)	(10) DACHS-SMC-2 -27	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]	
	2	DACHS2-2 7-G140L (STIS.sp.19 26133)	(10) DACHS-SMC-2 -27	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Gro up 2-4 in DACHS2-2 7 (10)	1810 Secs (1810 Secs) [==>]	[1]	
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Gro up 2-4 in DACHS2-2 7 (10)	535 Secs X 2 (1070 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]	
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Gro up 2-4 in DACHS2-2 7 (10)	500 Secs (500 Secs) [==>]	[1]	
	5	DACHS2-2 7-G230L (STIS.sp.19 26134)	(10) DACHS-SMC-2 -27	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Gro up 5-6 in DACHS2-2 7 (10)	70 Secs (70 Secs) [==>]	[1]	
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Gro up 5-6 in DACHS2-2 7 (10)	400 Secs (400 Secs) [==>]	[1]	



Proposal 17530 - SKKM232 (11) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

Visit	<b>Proposal 17530, SKKM232 (11), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)										
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(11)	SKKM-232	RA: 01 02 34.4464 (15.6435267d) Dec: -72 02 58.13 (-72.04948d) Equinox: J2000	Proper Motion RA: 1.8083756993425993E-4 sec of time/yr Proper Motion Dec: -0.0013500000477506546 arcsec/yr Epoch of Position: 2015.5	V=13.02	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	SKKM232-ACQ (STIS.ta.188 9534)	(11) SKKM-232	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs)	[==>]	[1]
	2	SKKM232-G140L (STIS.sp.19 26133)	(11) SKKM-232	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-4 in SKKM232 (11)	1810 Secs (1810 Secs)	[==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-4 in SKKM232 (11)	535 Secs X 2 (1070 Secs)	[==>(Copy 1)] [==>(Copy 2)]	[1]
	4		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 2-4 in SKKM232 (11)	500 Secs (500 Secs)	[==>]	[1]
	5	SKKM232-G230L (STIS.sp.19 26134)	(11) SKKM-232	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A			Prime + Parallel Group 5-6 in SKKM232 (11)	70 Secs (70 Secs)	[==>]	[1]
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in SKKM232 (11)	400 Secs (400 Secs)	[==>]	[1]

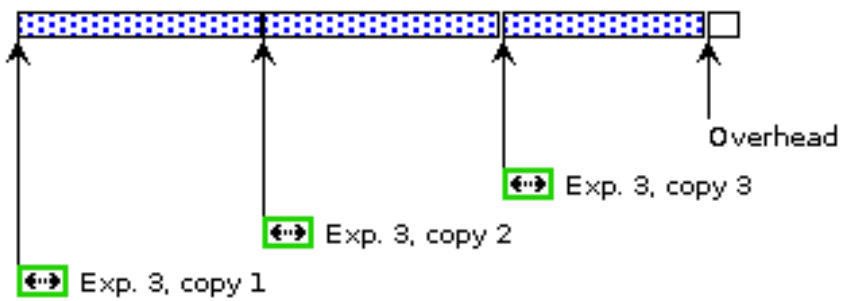
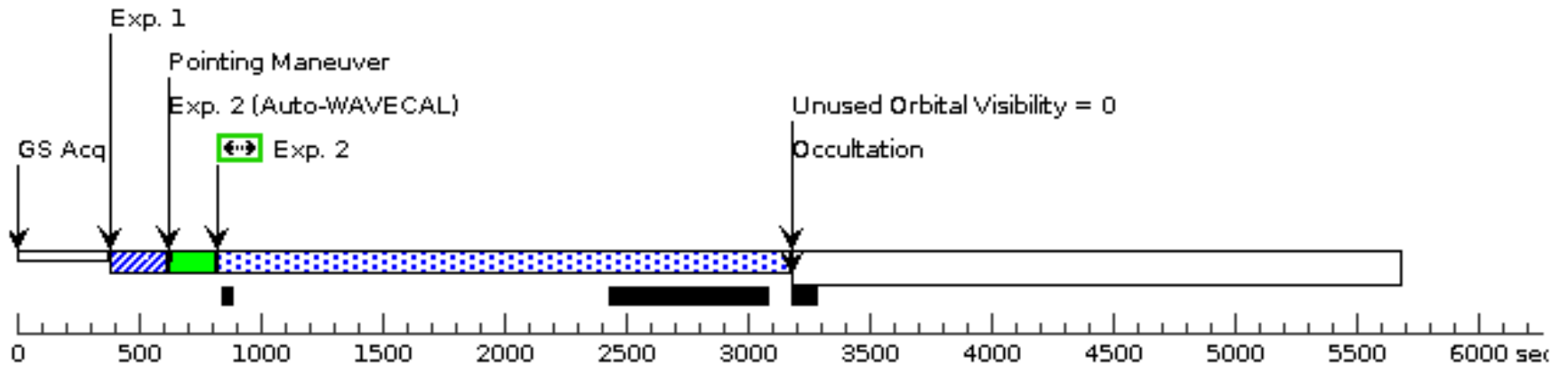


Proposal 17530 - SKKM238 (12) - Hot and cool - hot companions as probes of red supergiants

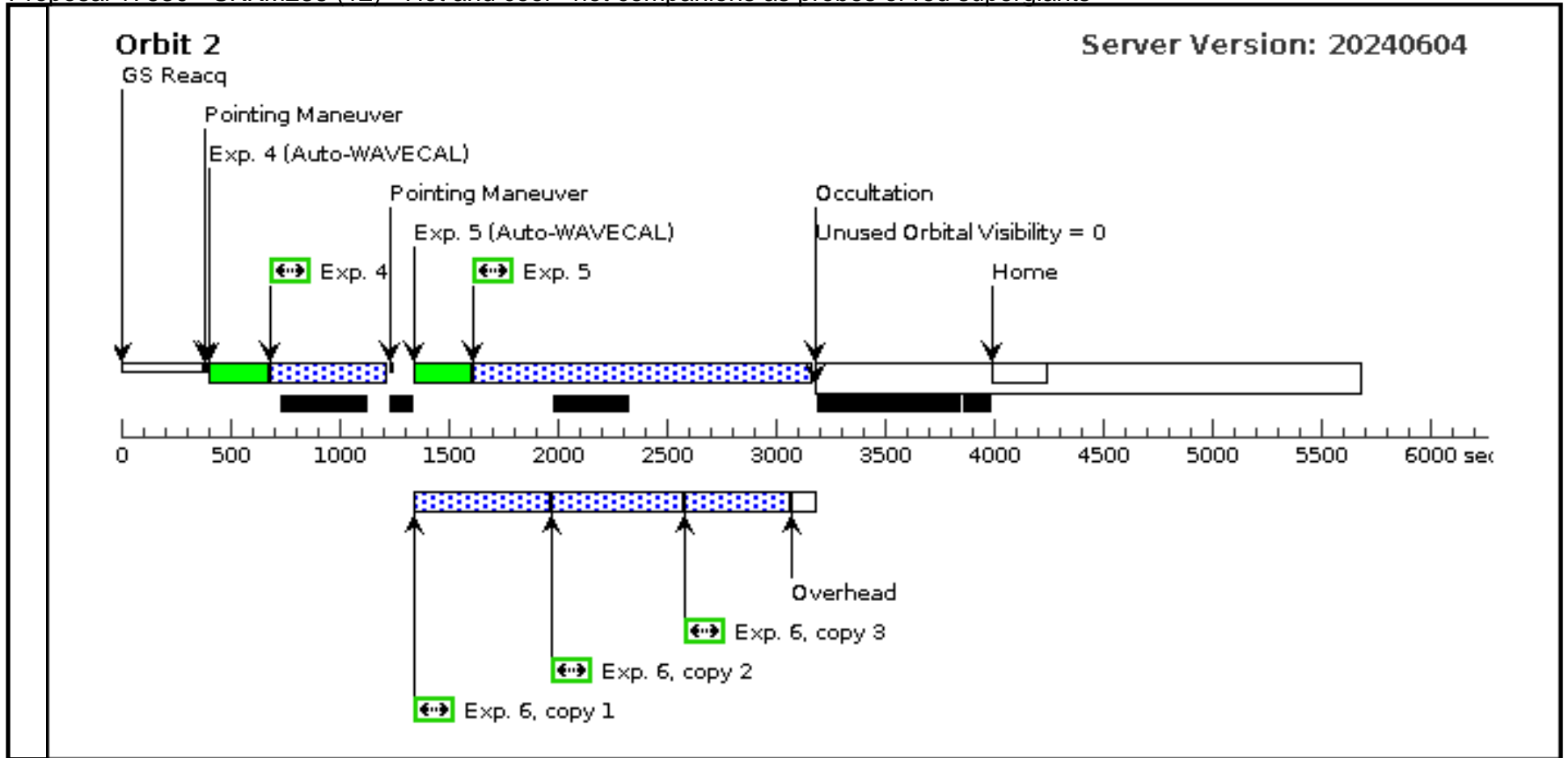
Mon Jun 24 15:01:16 GMT 2024

Visit	<b>Proposal 17530, SKKM238 (12), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, 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>(12)</td> <td>SKKM-238</td> <td>RA: 01 02 40.7830 (15.6699292d) Dec: -72 17 17.33 (-72.28815d) Equinox: J2000</td> <td>Proper Motion RA: 1.8122246781956245E-4 sec of time/yr Proper Motion Dec: -0.0013720000879402505 arcsec/yr Epoch of Position: 2015.5</td> <td>V=13.5</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(12)	SKKM-238	RA: 01 02 40.7830 (15.6699292d) Dec: -72 17 17.33 (-72.28815d) Equinox: J2000	Proper Motion RA: 1.8122246781956245E-4 sec of time/yr Proper Motion Dec: -0.0013720000879402505 arcsec/yr Epoch of Position: 2015.5	V=13.5
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(12)	SKKM-238	RA: 01 02 40.7830 (15.6699292d) Dec: -72 17 17.33 (-72.28815d) Equinox: J2000	Proper Motion RA: 1.8122246781956245E-4 sec of time/yr Proper Motion Dec: -0.0013720000879402505 arcsec/yr Epoch of Position: 2015.5	V=13.5	Reference Frame: ICRS																	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	SKKM238-ACQ (STIS.ta.188 9534)	(12) SKKM-238	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]												
	2	SKKM238-G140L (STIS.sp.18 89488)	(12) SKKM-238	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in SKKM238 (12)	2335 Secs (2335 Secs) [==>]	[1]												
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in SKKM238 (12)	740 Secs X 3 (2241 Secs) [==>747.0 Secs (Copy 1)] [==>747.0 Secs (Copy 2)] [==>747.0 Secs (Copy 3)]	[1]												
	4	SKKM238-G230L (STIS.sp.19 26135)	(12) SKKM-238	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				636 Secs (494 Secs) [==>494.0 Secs ]	[2]												
	5	SKKM238-G140L (STIS.sp.18 89488)	(12) SKKM-238	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 5-6 in SKKM238 (12)	1680 Secs (1538 Secs) [==>1538.0 Secs ]	[2]												
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X	FLASH=5		Prime + Parallel Group 5-6 in SKKM238 (12)	550 Secs X 3 (1434 Secs) [==>478.0 Secs (Copy 1)] [==>478.0 Secs (Copy 2)] [==>478.0 Secs (Copy 3)]	[2]												

**Orbit 1**



Orbit Structure



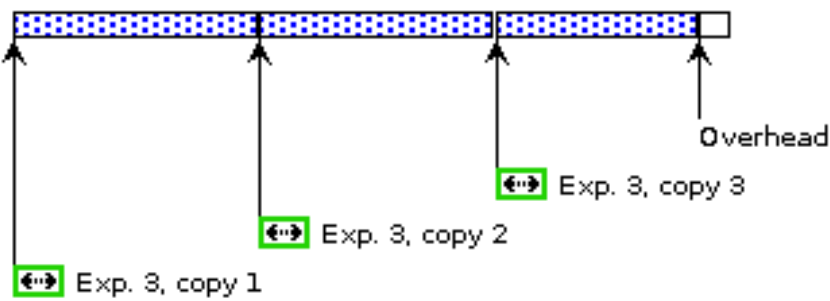
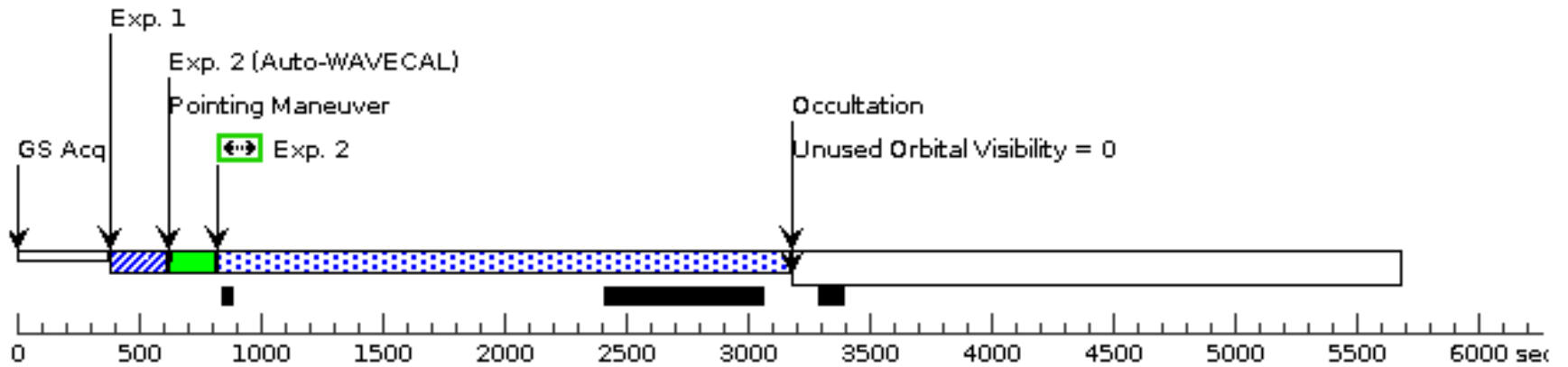
Proposal 17530 - PMMR149 (13) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

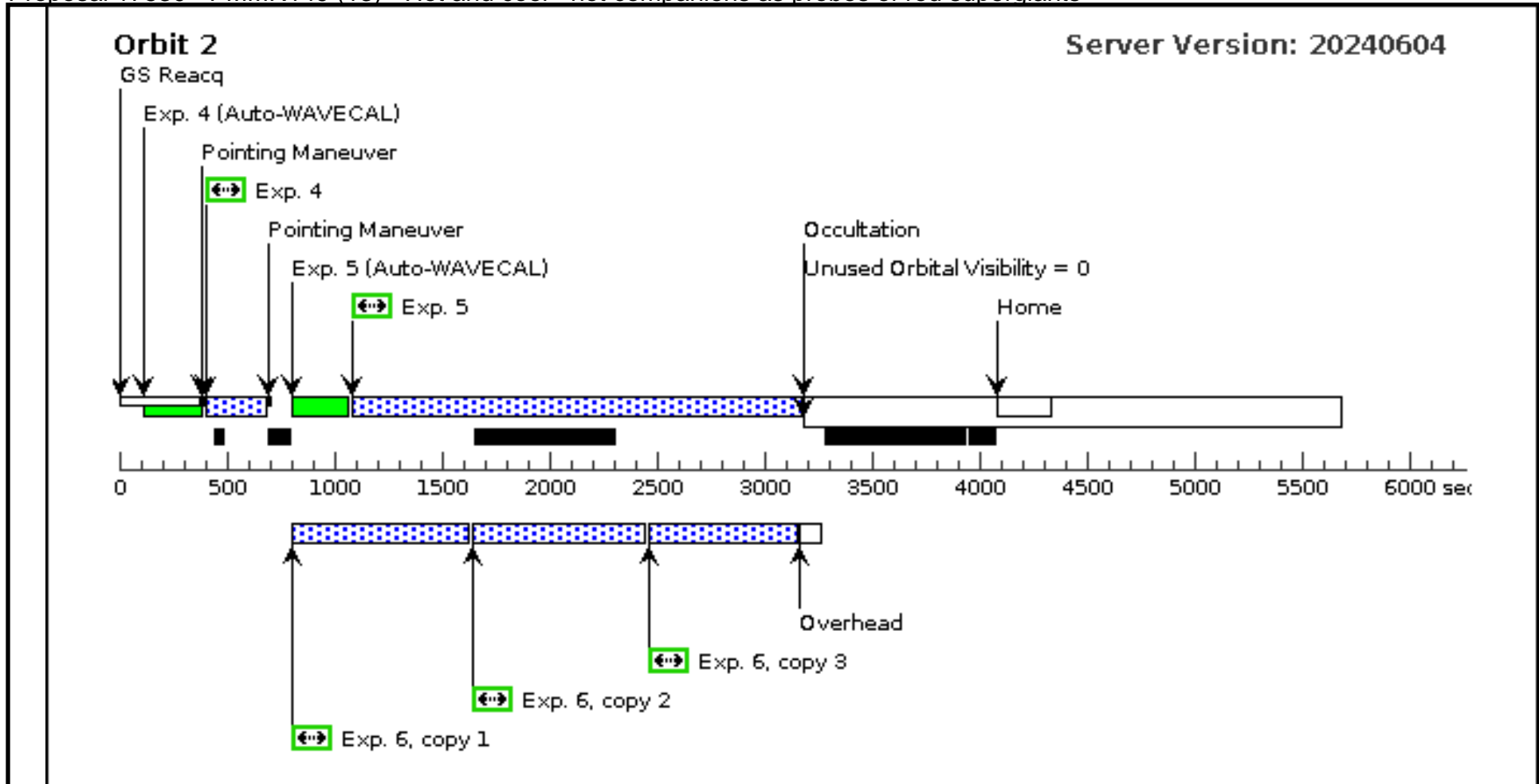
Visit	<b>Proposal 17530, PMMR149 (13), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(13)</td> <td>PMMR-149</td> <td>RA: 01 03 37.2948 (15.9053950d) Dec: -71 58 44.93 (-71.97915d) Equinox: J2000</td> <td>Proper Motion RA: 2.1743597120107942E-4 sec of time/yr Proper Motion Dec: - 0.0014089999694988364 arcsec/yr Epoch of Position: 2015.5</td> <td>V=12.98</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(13)	PMMR-149	RA: 01 03 37.2948 (15.9053950d) Dec: -71 58 44.93 (-71.97915d) Equinox: J2000	Proper Motion RA: 2.1743597120107942E-4 sec of time/yr Proper Motion Dec: - 0.0014089999694988364 arcsec/yr Epoch of Position: 2015.5	V=12.98
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(13)	PMMR-149	RA: 01 03 37.2948 (15.9053950d) Dec: -71 58 44.93 (-71.97915d) Equinox: J2000	Proper Motion RA: 2.1743597120107942E-4 sec of time/yr Proper Motion Dec: - 0.0014089999694988364 arcsec/yr Epoch of Position: 2015.5	V=12.98	Reference Frame: ICRS																	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	PMMR149-ACQ (STIS.ta.188 9529)	(13) PMMR-149	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]												
	2	SKKM238-G140L (STIS.sp.18 89489)	(13) PMMR-149	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in PMMR149 (13)	2335 Secs (2335 Secs) [==>]	[1]												
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in PMMR149 (13)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]												
	4	SKKM238-G230L (STIS.sp.19 26137)	(13) PMMR-149	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				243 Secs (243 Secs) [==>]	[2]												
	5	SKKM238-G140L (STIS.sp.18 89489)	(13) PMMR-149	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 5-6 in PMMR149 (13)	2073 Secs (2073 Secs) [==>]	[2]												
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 5-6 in PMMR149 (13)	690 Secs X 3 (2070 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]												



**Orbit 1**



Orbit Structure

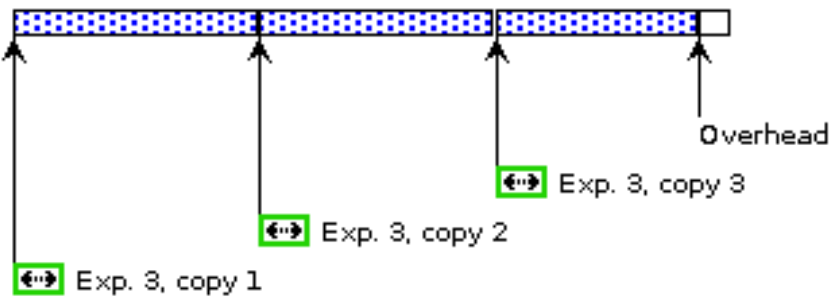
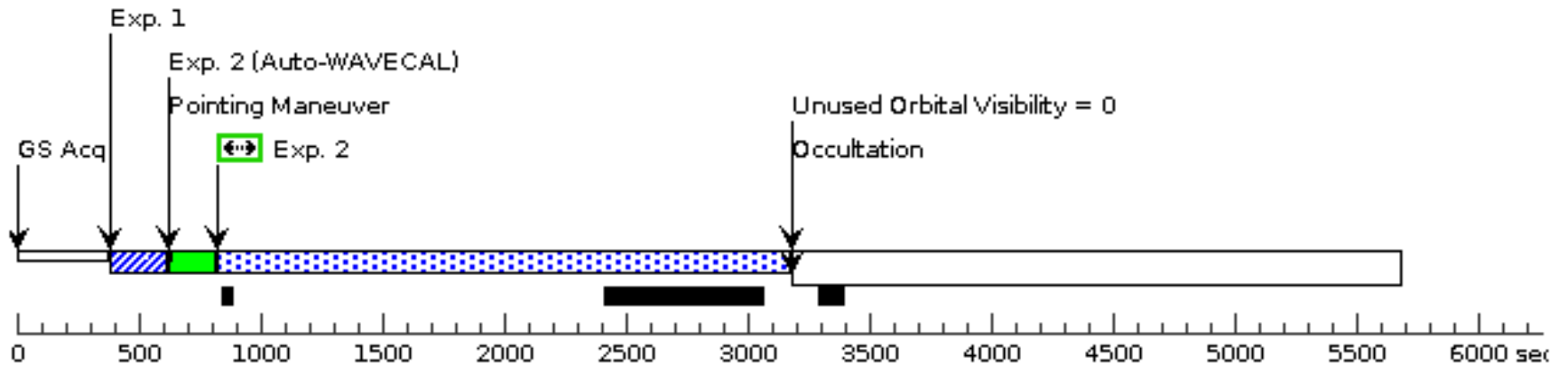


Proposal 17530 - DACHS2-10 (14) - Hot and cool - hot companions as probes of red supergiants

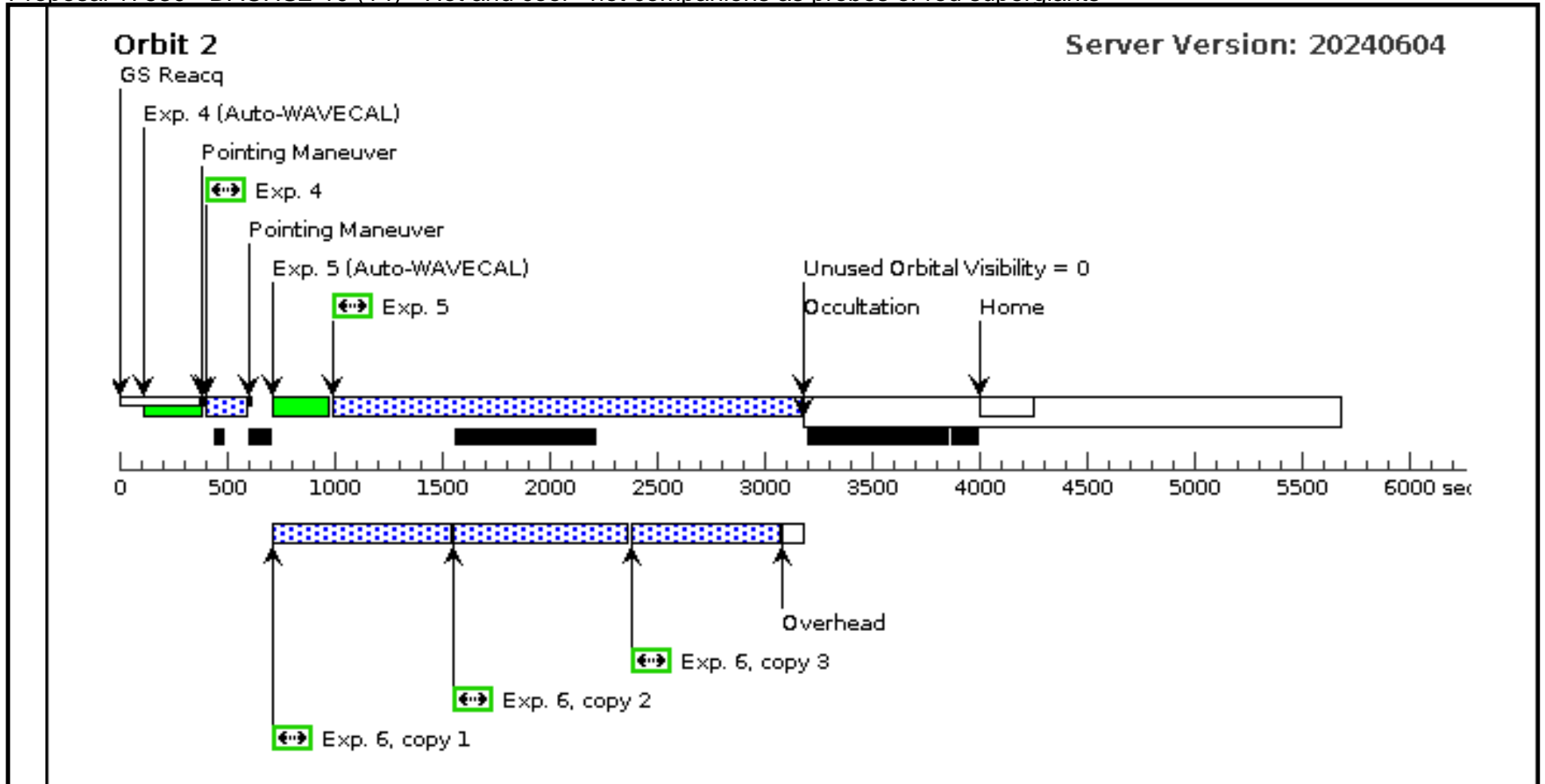
Mon Jun 24 15:01:16 GMT 2024

Visit		Proposal 17530, DACHS2-10 (14), implementation									
Diagnostic Status: No Diagnostics											
Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA											
Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(14)	DACHS-SMC-2-10	RA: 01 03 10.9442 (15.7956008d) Dec: -72 18 32.75 (-72.30910d) Equinox: J2000	Proper Motion RA: 1.801139036278899E-4 sec of time/yr Proper Motion Dec: -0.001386999293092405 arcsec/yr Epoch of Position: 2015.5	V=12.9	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	DACHS2-1 0-ACQ (STIS.ta.188 9531)	(14) DACHS-SMC-2 -10	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]	
	2	DACHS2-1 0-G140L (STIS.sp.18 89490)	(14) DACHS-SMC-2 -10	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Gro up 2-3 in DACHS2-1 0 (14)	2335 Secs (2335 Secs) [==>]	[1]	
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Gro up 2-3 in DACHS2-1 0 (14)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]	
	4	DACHS2-1 0-G230L (STIS.sp.19 26141)	(14) DACHS-SMC-2 -10	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				150 Secs (150 Secs) [==>]	[2]	
	5	DACHS2-1 0-G140L (STIS.sp.18 89871)	(14) DACHS-SMC-2 -10	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Gro up 5-6 in DACHS2-1 0 (14)	2166 Secs (2166 Secs) [==>]	[2]	
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Gro up 5-6 in DACHS2-1 0 (14)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]	

**Orbit 1**



Orbit Structure

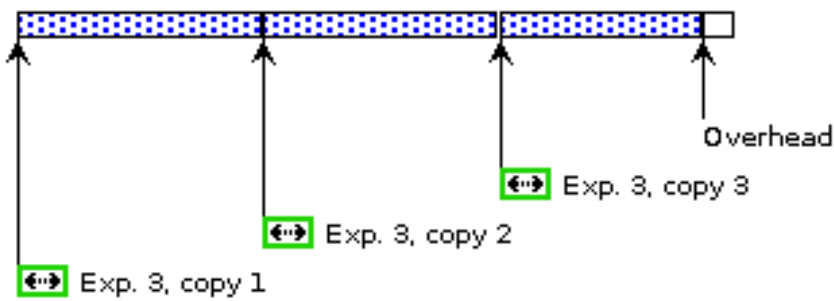
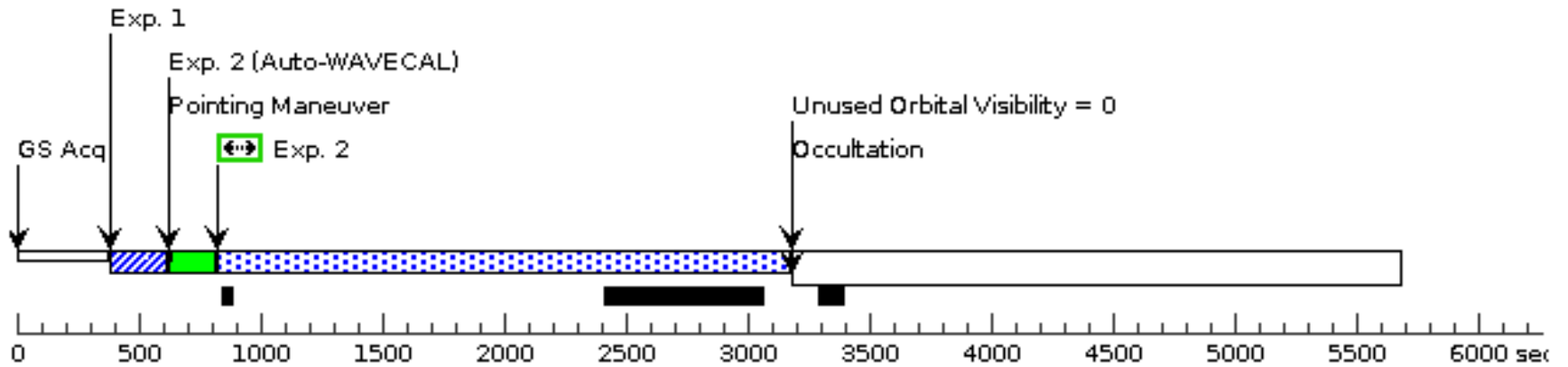


Proposal 17530 - SKKM202 (15) - Hot and cool - hot companions as probes of red supergiants

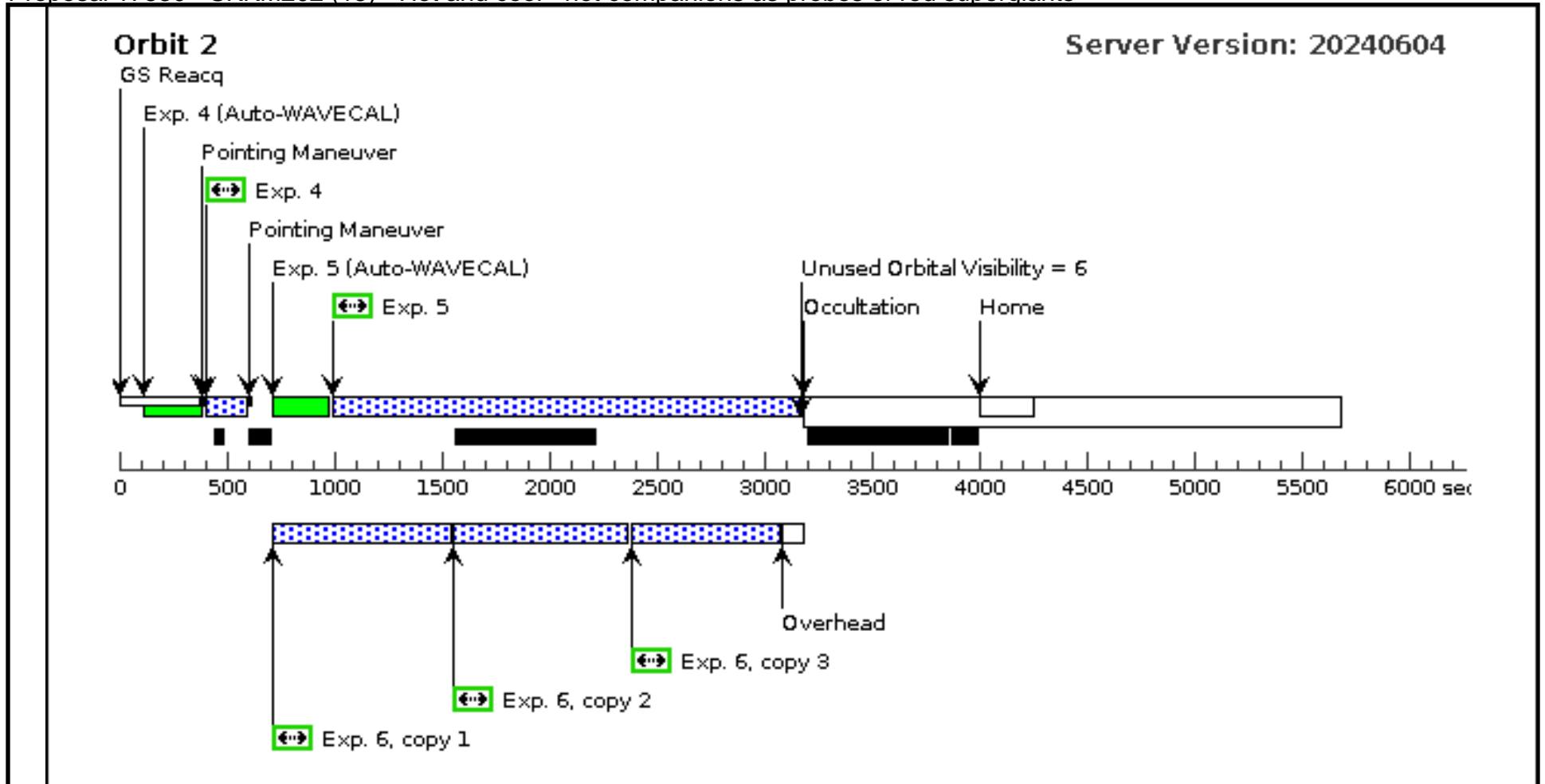
Mon Jun 24 15:01:16 GMT 2024

Visit		Proposal 17530, SKKM202 (15), implementation									
		Diagnostic Status: No Diagnostics									
		Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
		Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(15)	SKKM-202	RA: 01 00 44.4607 (15.1852529d) Dec: -71 59 38.78 (-71.99411d) Equinox: J2000	Proper Motion RA: 1.9798468285752712E-4 sec of time/yr Proper Motion Dec: - 0.0013600000102087506 arcsec/yr Epoch of Position: 2015.5	V=13.41	Reference Frame: ICRS					
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
		Category=STAR									
		Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	SKKM202-ACQ (STIS.ta.188 9533)	(15) SKKM-202	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs)	[==>]	[1]
	2	SKKM202-G140L (STIS.sp.18 89882)	(15) SKKM-202	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in SKKM202 (15)	2335 Secs (2335 Secs)	[==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in SKKM202 (15)	740 Secs X 3 (2220 Secs)	[==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]
	4	SKKM202-G230L (STIS.sp.19 26142)	(15) SKKM-202	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				150 Secs (150 Secs)	[==>]	[2]
	5	SKKM202-G140L (STIS.sp.18 89883)	(15) SKKM-202	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 5-6 in SKKM202 (15)	2160 Secs (2160 Secs)	[==>]	[2]
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 5-6 in SKKM202 (15)	695 Secs X 3 (2085 Secs)	[==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]

**Orbit 1**



Orbit Structure



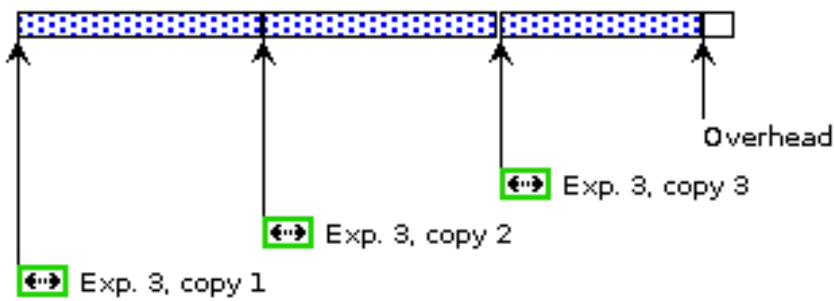
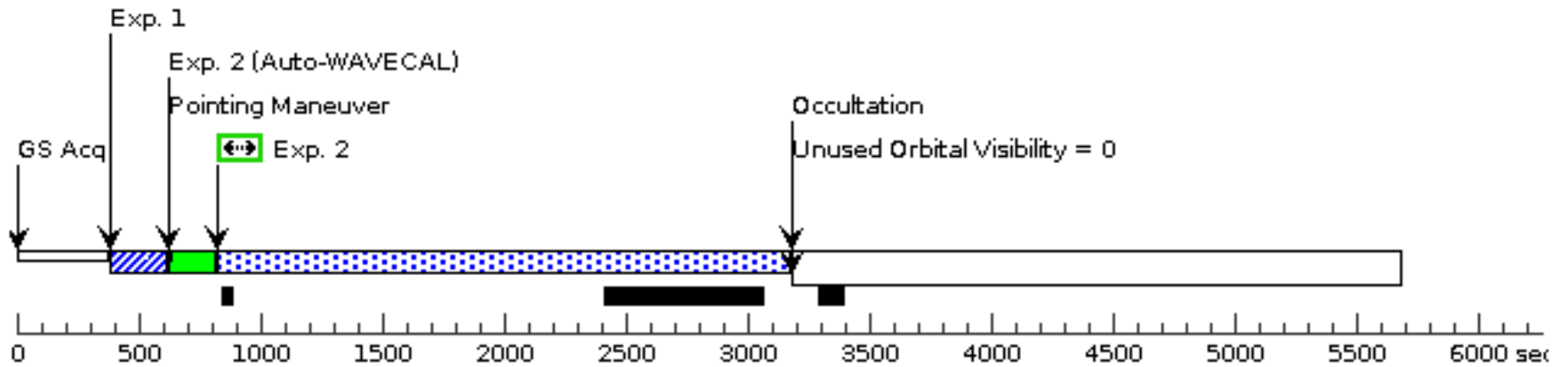


Proposal 17530 - PMMR118 (16) - Hot and cool - hot companions as probes of red supergiants

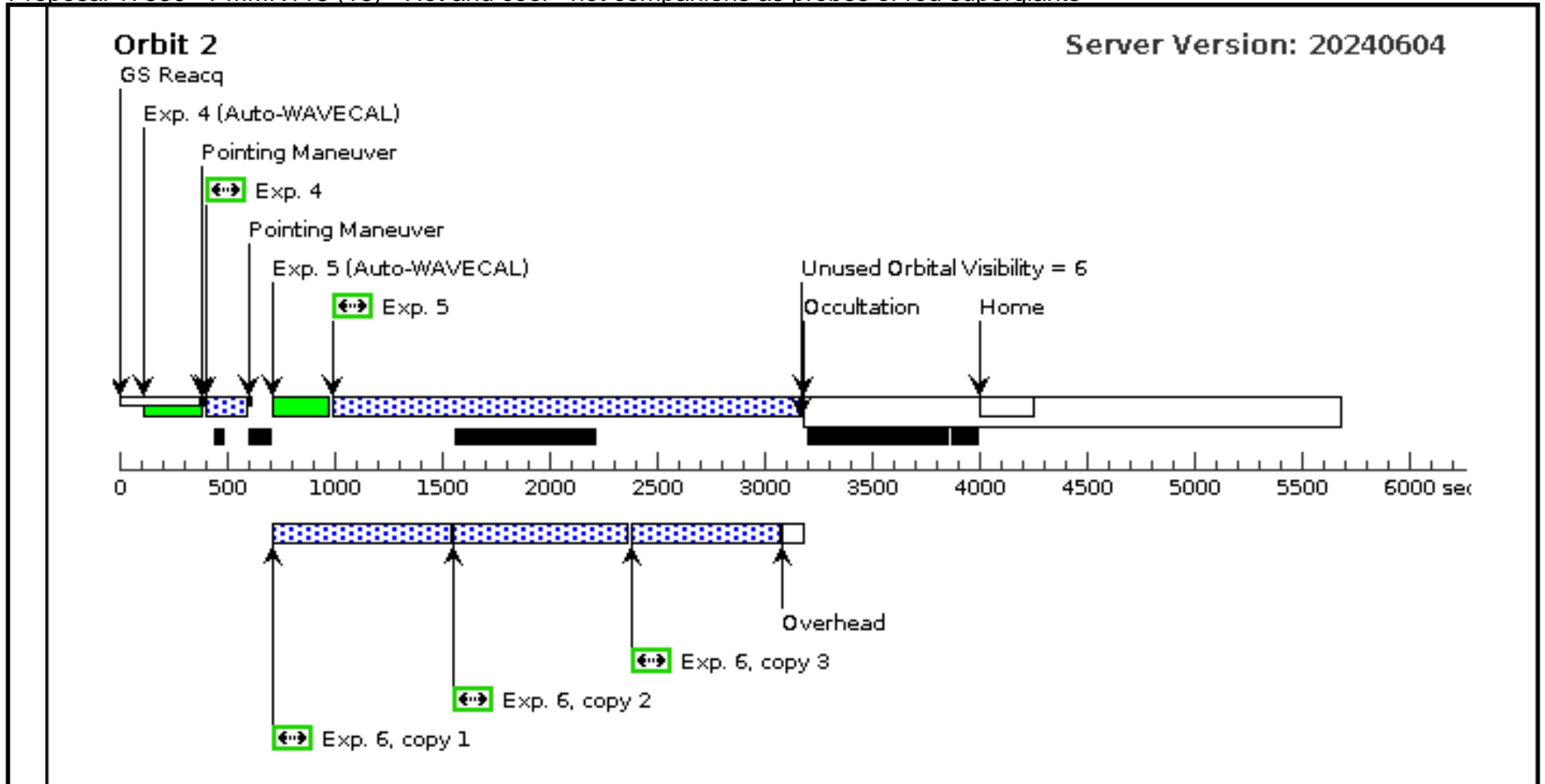
Mon Jun 24 15:01:16 GMT 2024

Visit	<b>Proposal 17530, PMMR118 (16), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, 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>(16)</td> <td>PMMR-118</td> <td>RA: 01 01 3.6672 (15.2652800d) Dec: -72 02 58.61 (-72.04961d) Equinox: J2000</td> <td>Proper Motion RA: 1.9057301622914762E-4 sec of time/yr Proper Motion Dec: -0.001244000077349483 arcsec/yr Epoch of Position: 2015.5</td> <td>V=13.03</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(16)	PMMR-118	RA: 01 01 3.6672 (15.2652800d) Dec: -72 02 58.61 (-72.04961d) Equinox: J2000	Proper Motion RA: 1.9057301622914762E-4 sec of time/yr Proper Motion Dec: -0.001244000077349483 arcsec/yr Epoch of Position: 2015.5	V=13.03
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(16)	PMMR-118	RA: 01 01 3.6672 (15.2652800d) Dec: -72 02 58.61 (-72.04961d) Equinox: J2000	Proper Motion RA: 1.9057301622914762E-4 sec of time/yr Proper Motion Dec: -0.001244000077349483 arcsec/yr Epoch of Position: 2015.5	V=13.03	Reference Frame: ICRS																	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
	1	PMMR118-ACQ (STIS.ta.188 9529)	(16) PMMR-118	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]												
	2	PMMR118-G140L (STIS.sp.19 26144)	(16) PMMR-118	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in PMMR118 (16)	2335 Secs (2335 Secs) [==>]	[1]												
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in PMMR118 (16)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]												
	4	PMMR118-G230L (STIS.sp.19 26143)	(16) PMMR-118	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				150 Secs (150 Secs) [==>]	[2]												
	5	PMMR118-G140L (STIS.sp.19 26144)	(16) PMMR-118	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 5-6 in PMMR118 (16)	2160 Secs (2160 Secs) [==>]	[2]												
	6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 5-6 in PMMR118 (16)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]												

### Orbit 1



Orbit Structure

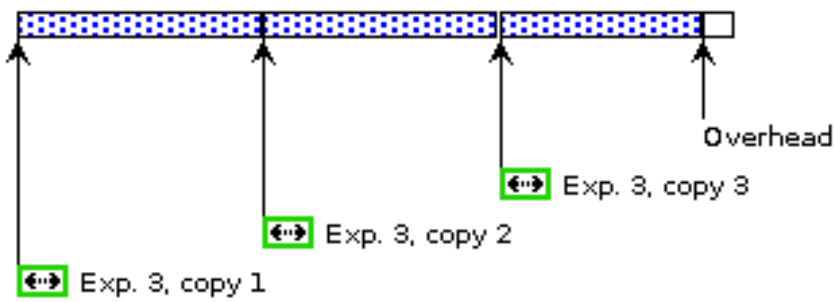
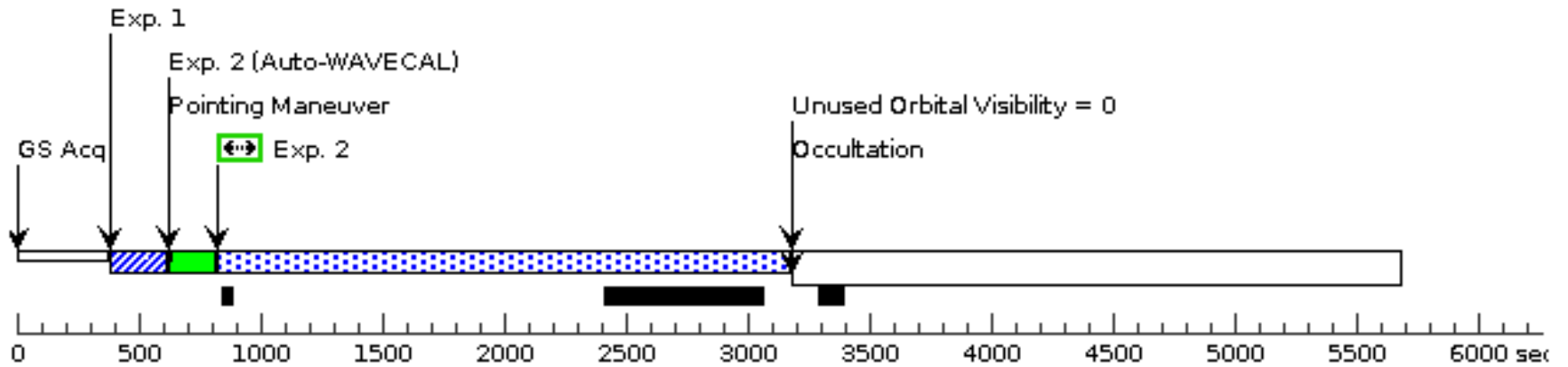


Proposal 17530 - LHA115-S-33 (17) - Hot and cool - hot companions as probes of red supergiants

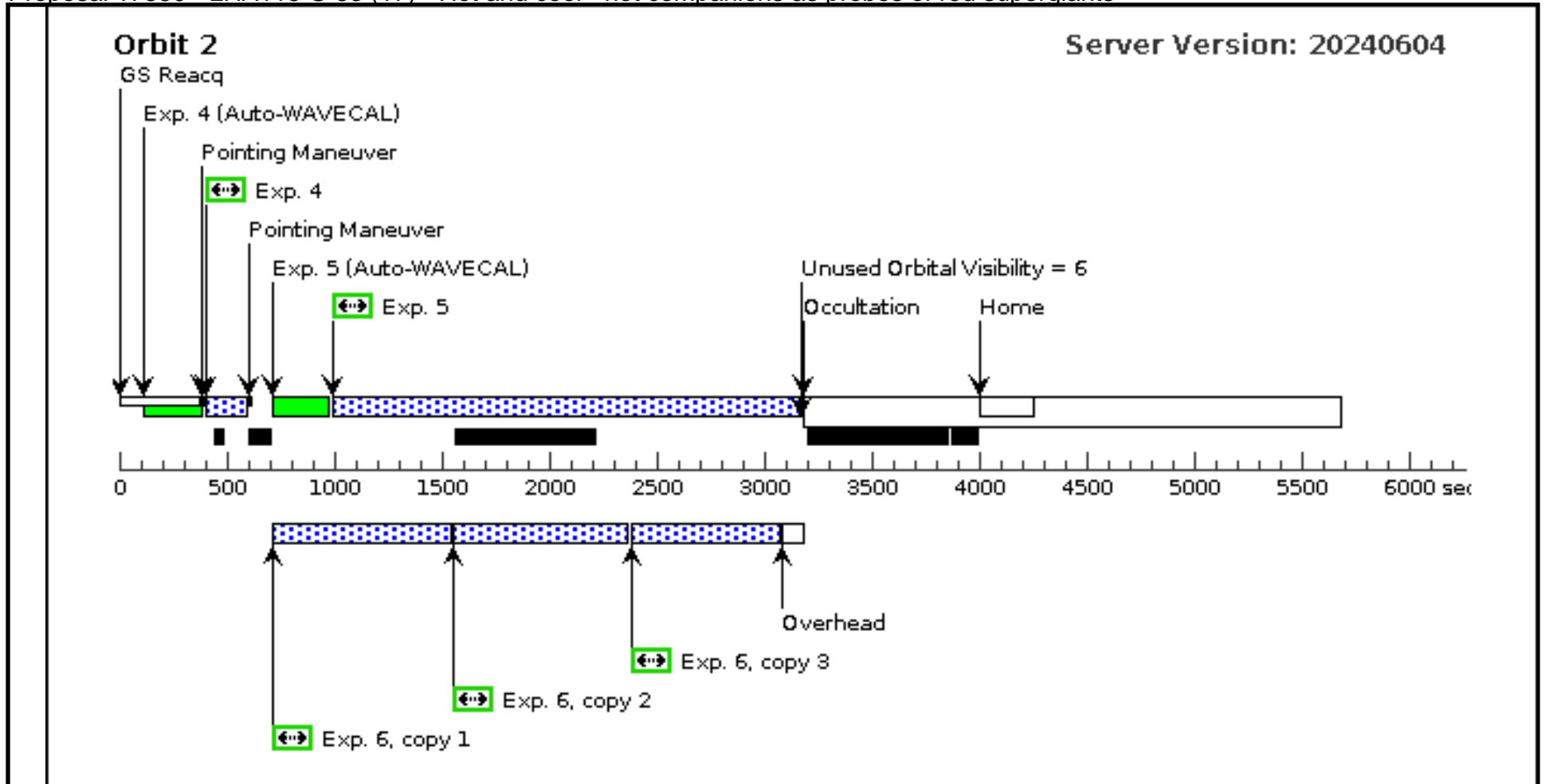
Mon Jun 24 15:01:16 GMT 2024

Visit	<b>Proposal 17530, LHA115-S-33 (17), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(17)	LHA-115-S-33	RA: 01 01 26.9335 (15.3622229d) Dec: -72 01 41.31 (-72.02814d) Equinox: J2000	Proper Motion RA: 1.6680180656495388E-4 sec of time/yr Proper Motion Dec: -0.0013290000651977607 arcsec/yr Epoch of Position: 2015.5	V=12.81	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LHA115-S-33-ACQ (STIS.ta.188 9531)	(17) LHA-115-S-33	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs)	
									[==>]	[1]
	2	LHA115-S-33-G140L (STIS.sp.19 26145)	(17) LHA-115-S-33	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in LHA115-S-33 (17)	2335 Secs (2335 Secs)	
									[==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 2-3 in LHA115-S-33 (17)	740 Secs X 3 (2220 Secs)	
									[==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]
	4	LHA115-S-33-G230L (STIS.sp.19 26143)	(17) LHA-115-S-33	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				150 Secs (150 Secs)	
								[==>]	[2]	
5	LHA115-S-33-G140L (STIS.sp.19 26145)	(17) LHA-115-S-33	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 5-6 in LHA115-S-33 (17)	2160 Secs (2160 Secs)		
								[==>]	[2]	
6		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 5-6 in LHA115-S-33 (17)	695 Secs X 3 (2085 Secs)		
								[==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]	

**Orbit 1**



Orbit Structure

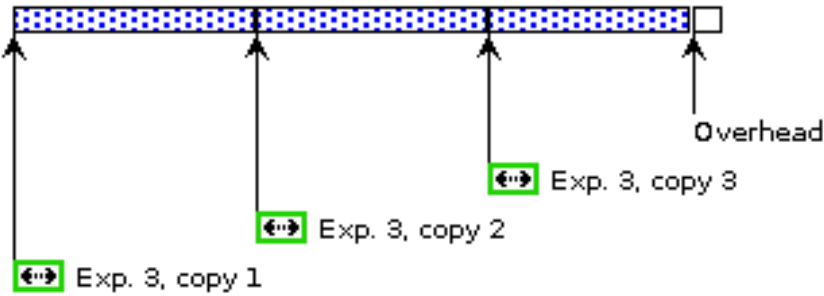
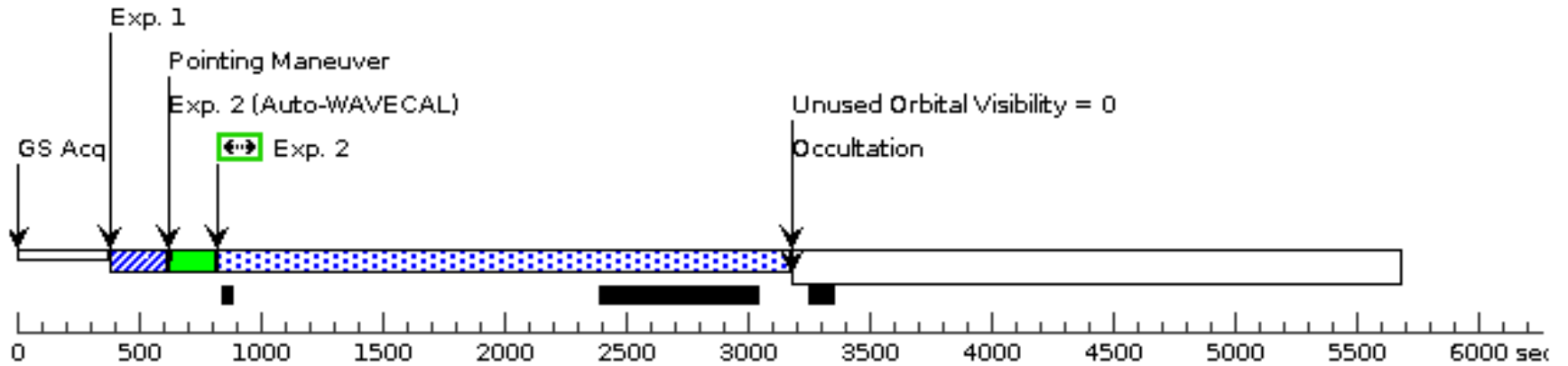


Proposal 17530 - LHA115-S-30 (18) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:16 GMT 2024

Visit	<b>Proposal 17530, LHA115-S-30 (18), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	Fixed Targets									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
(18)	LHA-115-S-30	RA: 01 00 41.5282 (15.1730342d) Dec: -72 10 36.99 (-72.17694d) Equinox: J2000	Proper Motion RA: 1.6139653432693983E-4 sec of time/yr Proper Motion Dec: - 0.0013049999097347609 arcsec/yr Epoch of Position: 2015.5	V=12.17	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LHA115-S-30-ACQ (STIS.ta.188 9530)	(18) LHA-115-S-30	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]
	2	LHA115-S-30-G140L (STIS.sp.18 89494)	(18) LHA-115-S-30	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in LHA115-S-30 (18)	2335 Secs (2335 Secs) [==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 2-3 in LHA115-S-30 (18)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]
	4	LHA115-S-30-G140L (STIS.sp.18 89494)	(18) LHA-115-S-30	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 4-5 in LHA115-S-30 (18)	2711 Secs (2711 Secs) [==>]	[2]
	5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 4-5 in LHA115-S-30 (18)	839 Secs X 3 (2517 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]
	6	LHA115-S-30-G230L (STIS.sp.19 26092)	(18) LHA-115-S-30	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				170 Secs (170 Secs) [==>]	[3]
	7	LHA115-S-30-G140L (STIS.sp.18 89494)	(18) LHA-115-S-30	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 7-8 in LHA115-S-30 (18)	2146 Secs (2146 Secs) [==>]	[3]
	8		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	FLASH=17		Prime + Parallel Group 7-8 in LHA115-S-30 (18)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[3]

**Orbit 1**

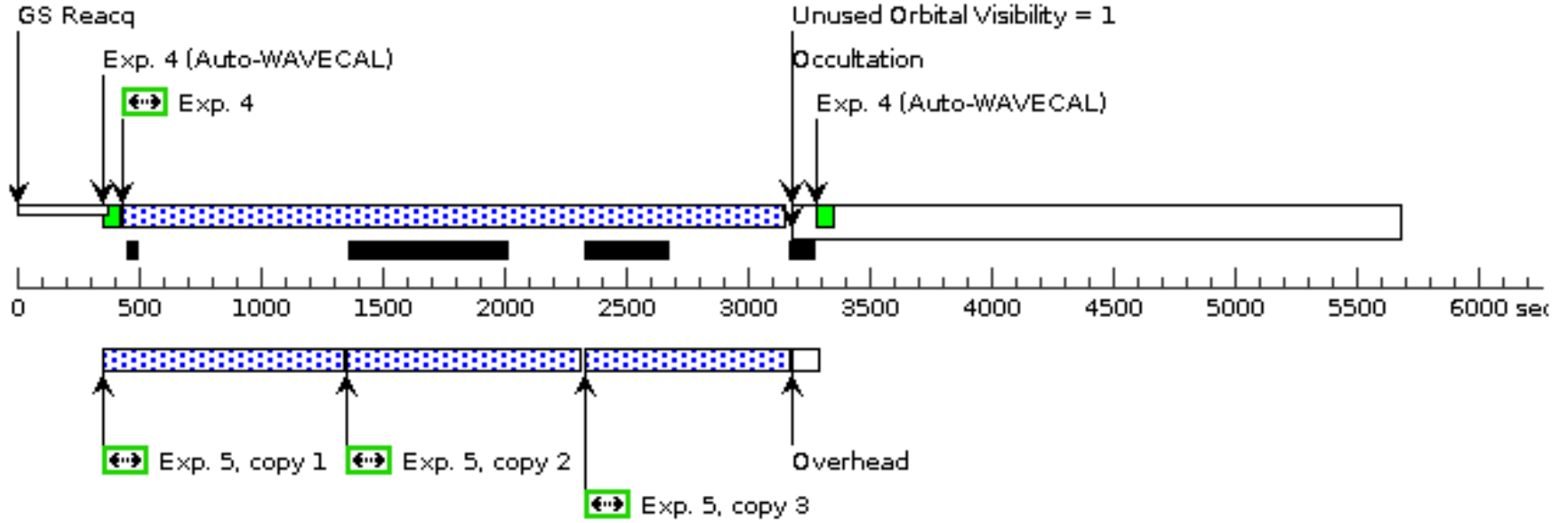


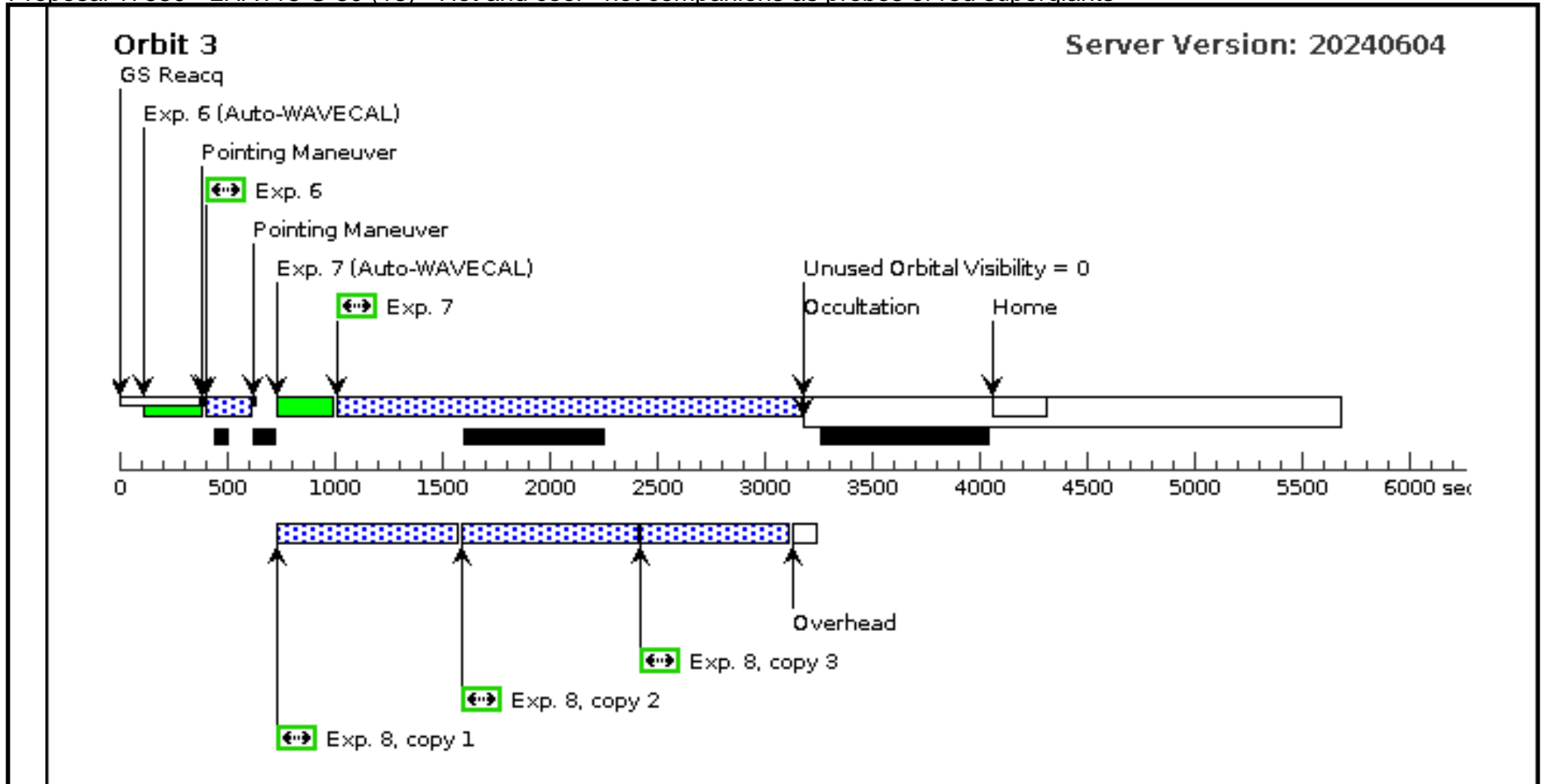
Orbit Structure



### Orbit 2

Server Version: 20240604



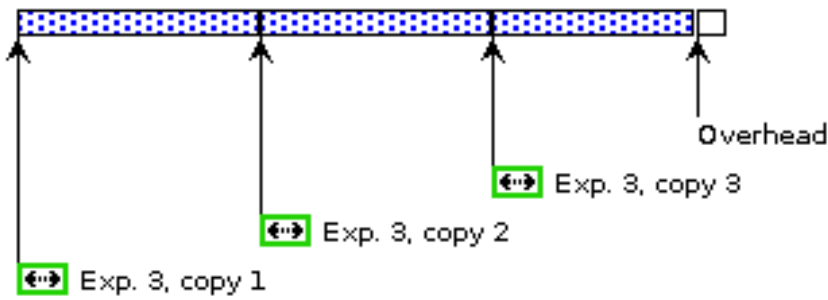
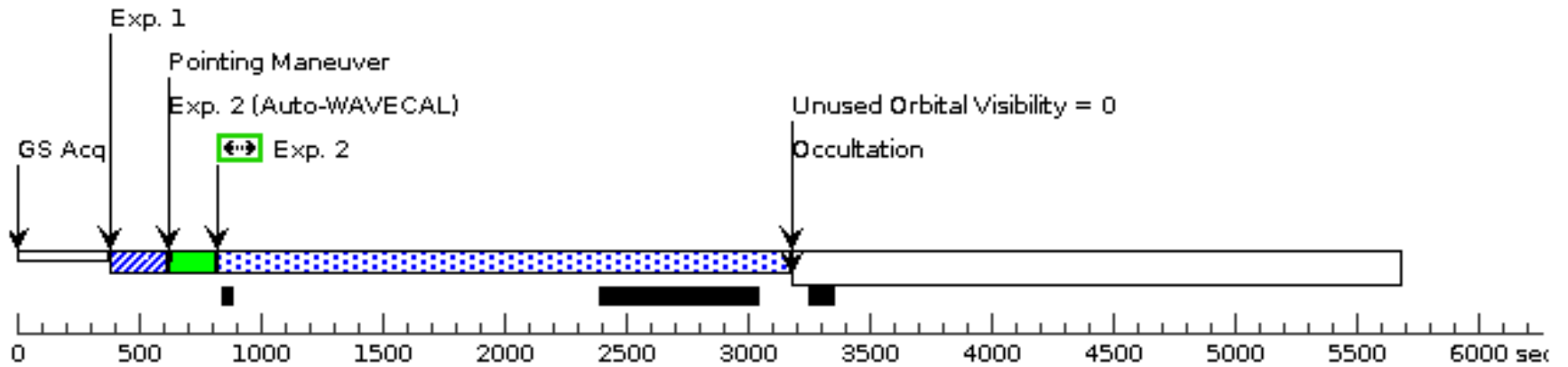


Proposal 17530 - LHA115-S-37 (19) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:17 GMT 2024

Visit	<b>Proposal 17530, LHA115-S-37 (19), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(19)	LHA-115-S-37	RA: 01 03 6.5119 (15.7771329d) Dec: -72 28 35.50 (-72.47653d) Equinox: J2000	Proper Motion RA: 2.0325710999690374E-4 sec of time/yr Proper Motion Dec: -0.0012900000683657709 arcsec/yr Epoch of Position: 2015.5	V=12.93	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	LHA115-S-37-ACQ (STIS.ta.188 9531)	(19) LHA-115-S-37	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]
	2	LHA115-S-37-G140L (STIS.sp.18 91453)	(19) LHA-115-S-37	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in LHA115-S-37 (19)	2335 Secs (2335 Secs) [==>]	[1]
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 2-3 in LHA115-S-37 (19)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]
	4	LHA115-S-37-G140L (STIS.sp.18 91454)	(19) LHA-115-S-37	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 4-5 in LHA115-S-37 (19)	2711 Secs (2711 Secs) [==>]	[2]
	5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 4-5 in LHA115-S-37 (19)	839 Secs X 3 (2517 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]
	6	LHA115-S-37-G230L (STIS.sp.18 91456)	(19) LHA-115-S-37	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				170 Secs (170 Secs) [==>]	[3]
	7	LHA115-S-37-G140L (STIS.sp.18 91455)	(19) LHA-115-S-37	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 7-8 in LHA115-S-37 (19)	2146 Secs (2146 Secs) [==>]	[3]
	8		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	FLASH=17		Prime + Parallel Group 7-8 in LHA115-S-37 (19)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[3]

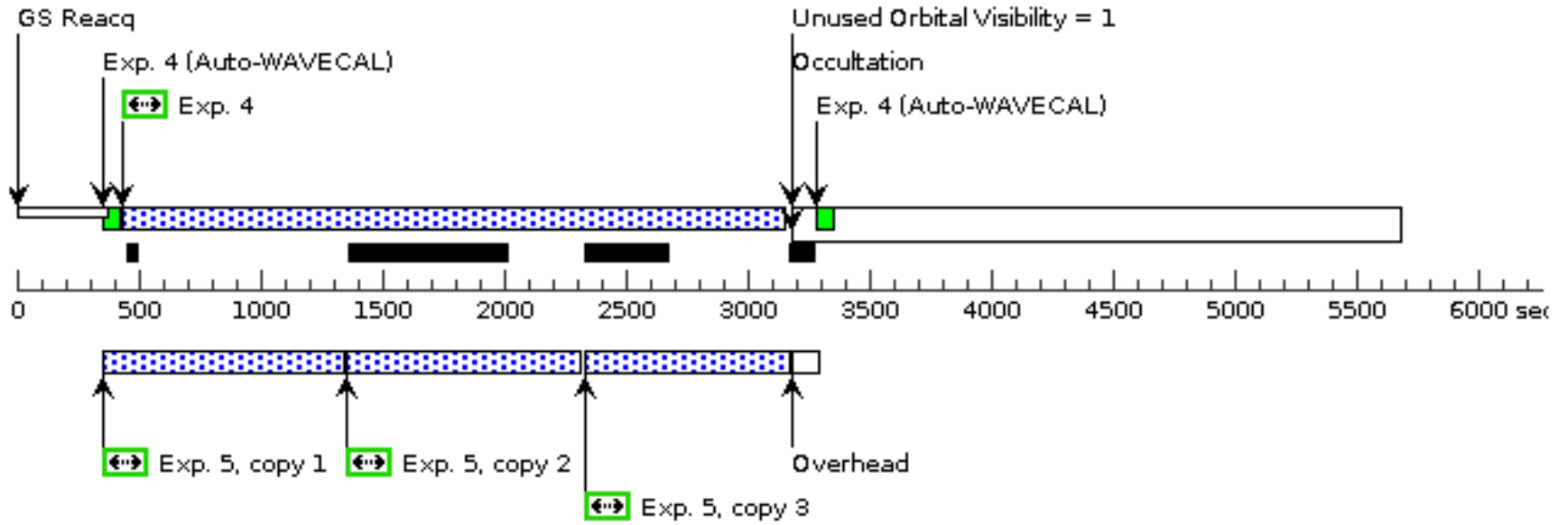
**Orbit 1**

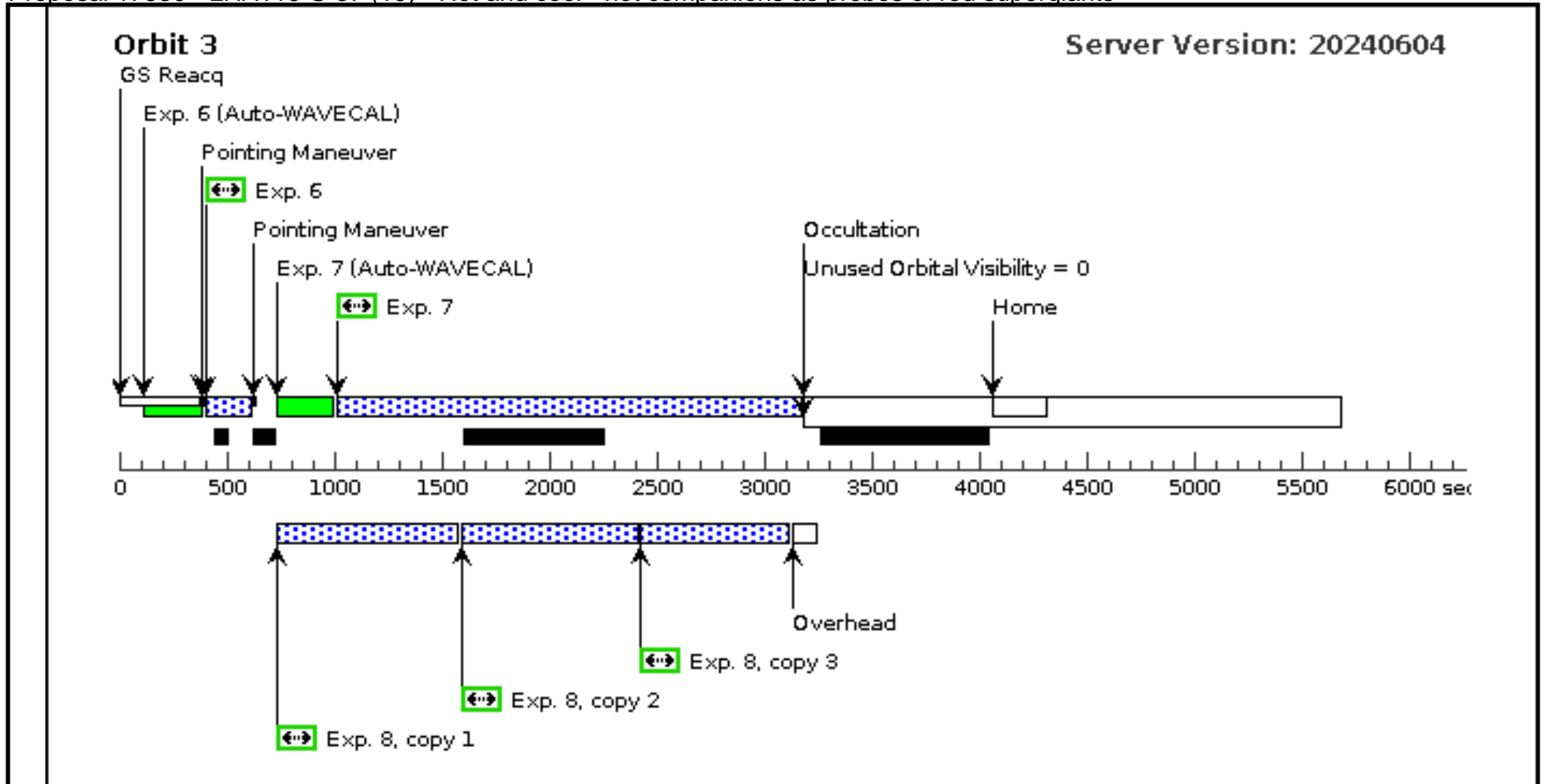


Orbit Structure

### Orbit 2

Server Version: 20240604

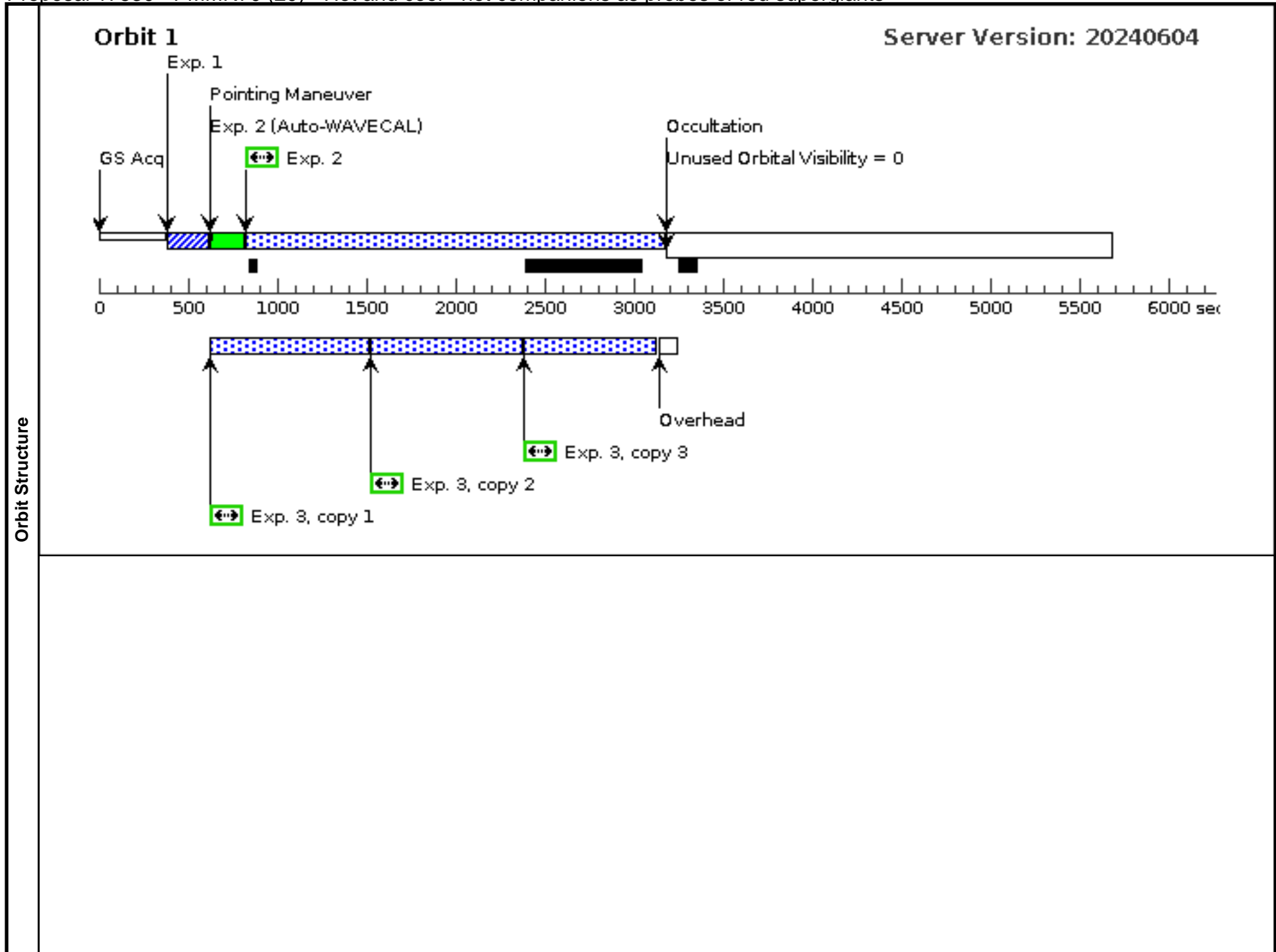




Proposal 17530 - PMMR70 (20) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:17 GMT 2024

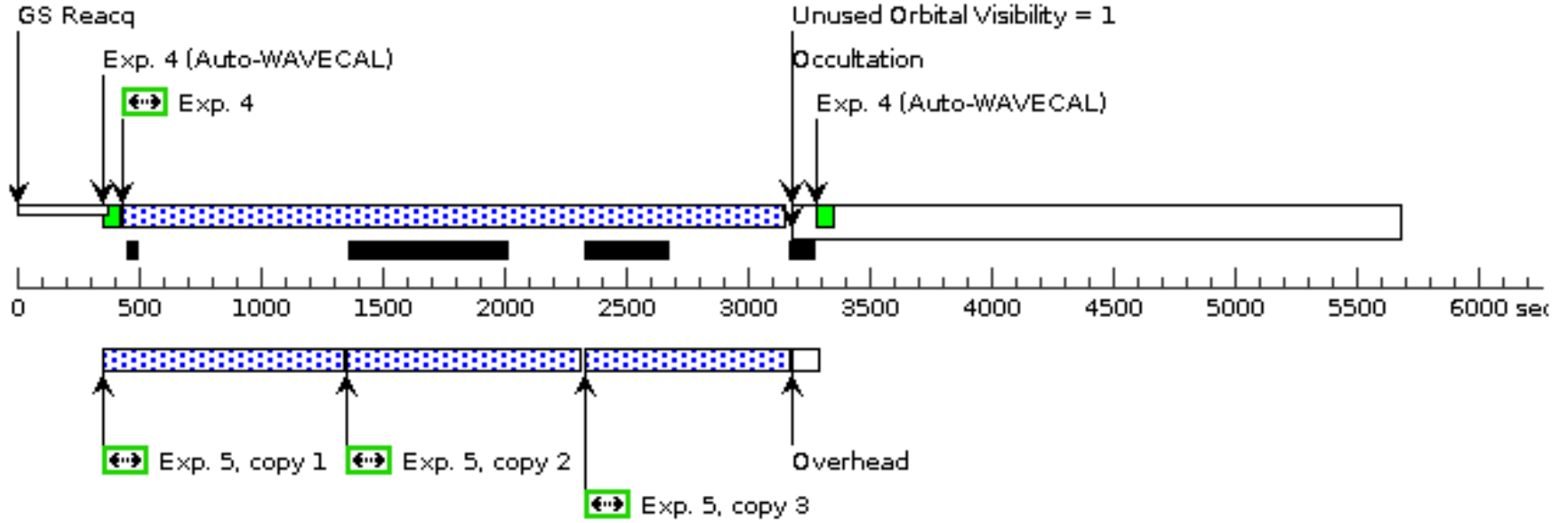
Visit		Proposal 17530, PMMR70 (20), implementation									
		Diagnostic Status: No Diagnostics									
		Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
		Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(20)	PMMR-70	RA: 00 54 35.9116 (13.6496317d) Dec: -72 34 14.44 (-72.57068d) Equinox: J2000	Proper Motion RA: 1.7961527006782134E-4 sec of time/yr Proper Motion Dec: - 0.0013990000070407405 arcsec/yr Epoch of Position: 2015.5	V=12.22 UVIT F172M = 19.4 AB	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	PMMR70-A (20) PMMR-70 CQ (STIS.ta.188 9530)	(20) PMMR-70	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]	
	2	PMMR70-G (20) PMMR-70 140L (STIS.sp.18 91458)	(20) PMMR-70	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in PMMR70 (20)	2335 Secs (2335 Secs) [==>]	[1]	
	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 2-3 in PMMR70 (20)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]	
	4	PMMR70-G (20) PMMR-70 140L (STIS.sp.18 91459)	(20) PMMR-70	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 4-5 in PMMR70 (20)	2711 Secs (2711 Secs) [==>]	[2]	
	5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 4-5 in PMMR70 (20)	839 Secs X 3 (2517 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]	
	6	PMMR70-G (20) PMMR-70 230L (STIS.sp.18 91456)	(20) PMMR-70	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				170 Secs (170 Secs) [==>]	[3]	
	7	PMMR70-G (20) PMMR-70 140L (STIS.sp.18 91460)	(20) PMMR-70	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 7-8 in PMMR70 (20)	2146 Secs (2146 Secs) [==>]	[3]	
	8		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	FLASH=17		Prime + Parallel Group 7-8 in PMMR70 (20)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[3]	

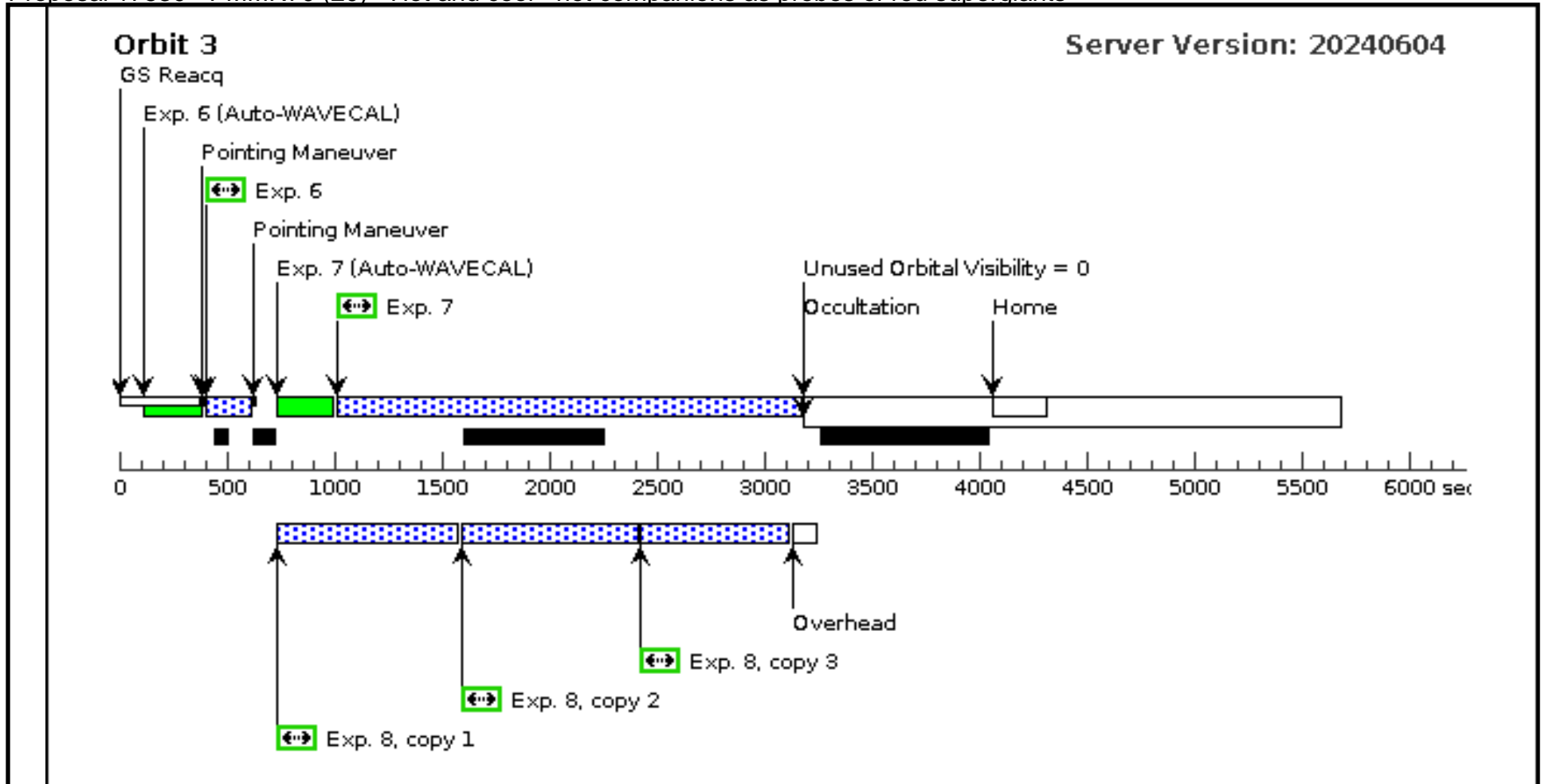




### Orbit 2

Server Version: 20240604



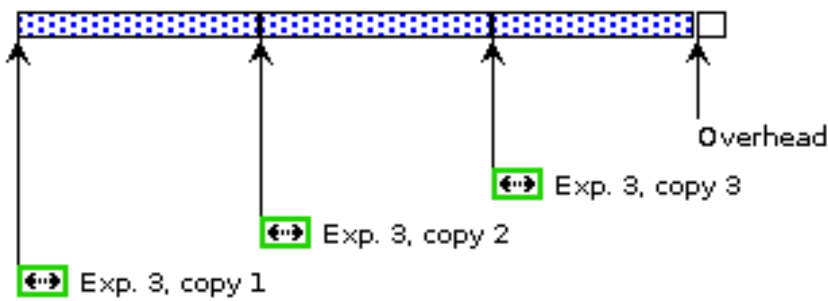
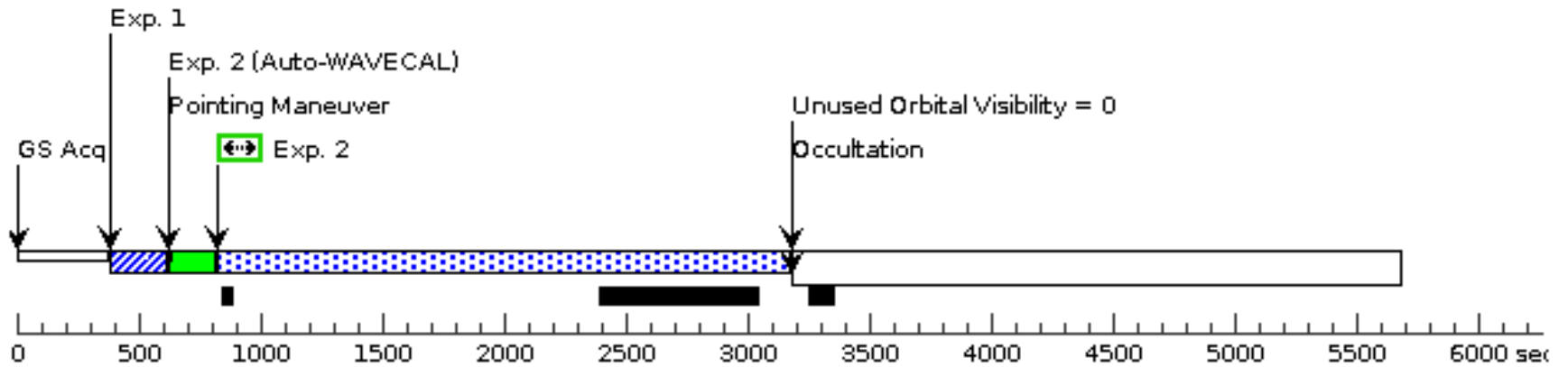


Proposal 17530 - BBB-SMC-307 (21) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:17 GMT 2024

Visit	<b>Proposal 17530, BBB-SMC-307 (21), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA Special Requirements: (none)									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(21)	BBB-SMC-307	RA: 01 06 1.3814 (16.5057558d) Dec: -72 52 43.32 (-72.87870d) Equinox: J2000	Proper Motion RA: 1.834266522728797E-4 sec of time/yr Proper Motion Dec: -0.001270999996449973 arcsec/yr Epoch of Position: 2015.5	V=12.77	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, K III-I]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	BBB-SMC-307-ACQ (STIS.ta.188 9531)	(21) BBB-SMC-307	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]
2	BBB-SMC-307-G140L (STIS.sp.19 26146)	(21) BBB-SMC-307	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in BBB-SMC-307 (21)	2335 Secs (2335 Secs) [==>]	[1]	
3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 2-3 in BBB-SMC-307 (21)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]	
4	BBB-SMC-307-G140L (STIS.sp.19 26146)	(21) BBB-SMC-307	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 4-5 in BBB-SMC-307 (21)	2711 Secs (2711 Secs) [==>]	[2]	
5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 4-5 in BBB-SMC-307 (21)	839 Secs X 3 (2517 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]	
6	BBB-SMC-307-G230L (STIS.sp.18 91456)	(21) BBB-SMC-307	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				170 Secs (170 Secs) [==>]	[3]	
7	BBB-SMC-307-G140L (STIS.sp.19 26146)	(21) BBB-SMC-307	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 7-8 in BBB-SMC-307 (21)	2107 Secs (2107 Secs) [==>]	[3]	
8		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	FLASH=17		Prime + Parallel Group 7-8 in BBB-SMC-307 (21)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[3]	

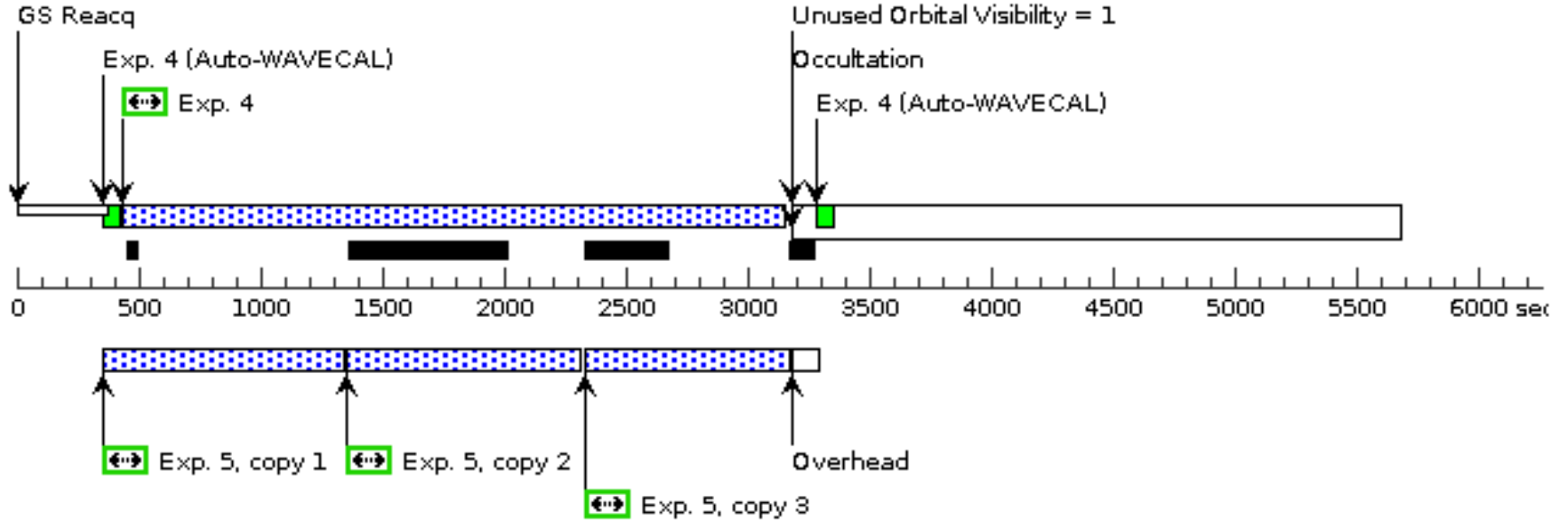
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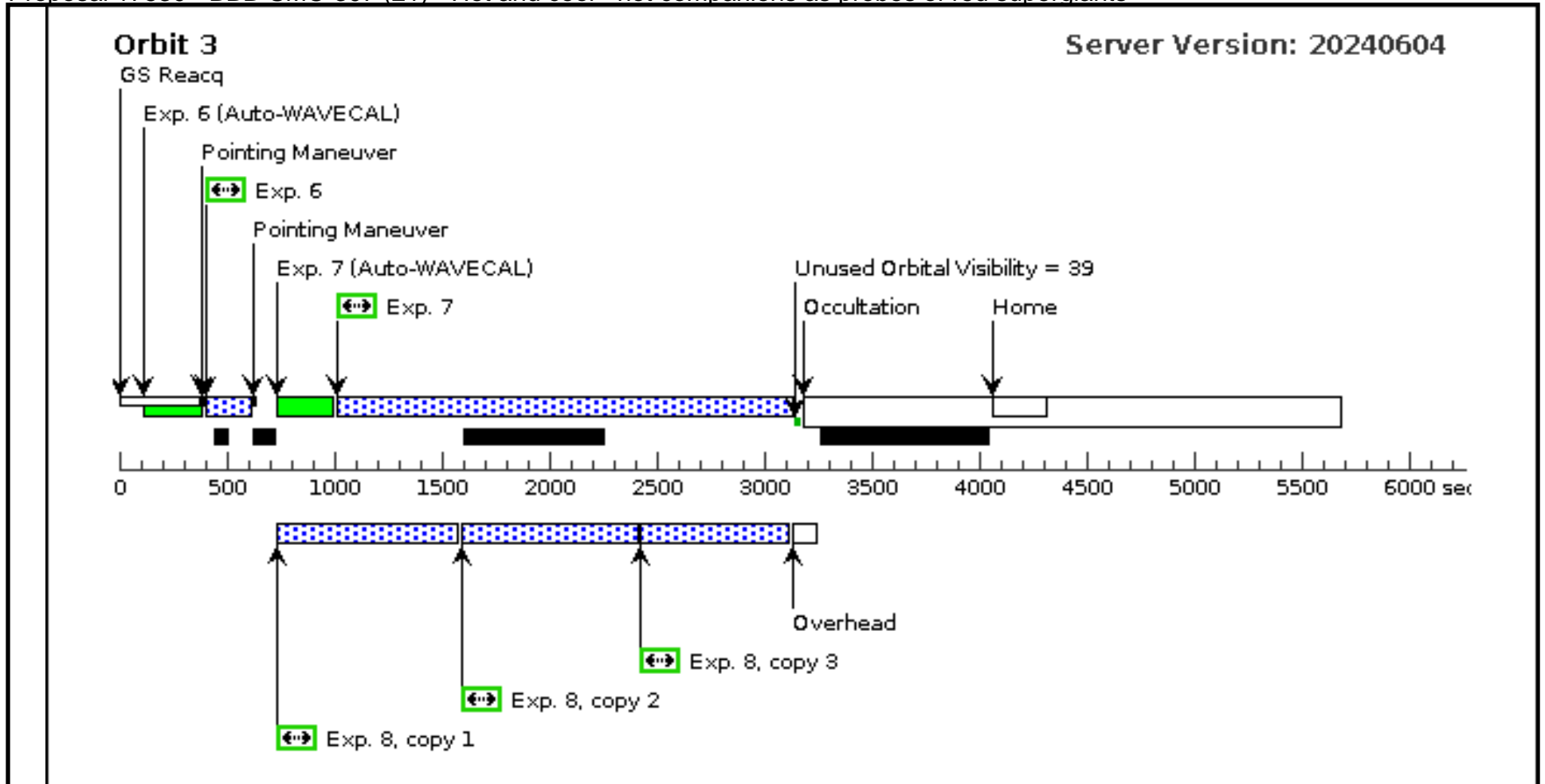


Orbit Structure

**Orbit 2**

Server Version: 20240604



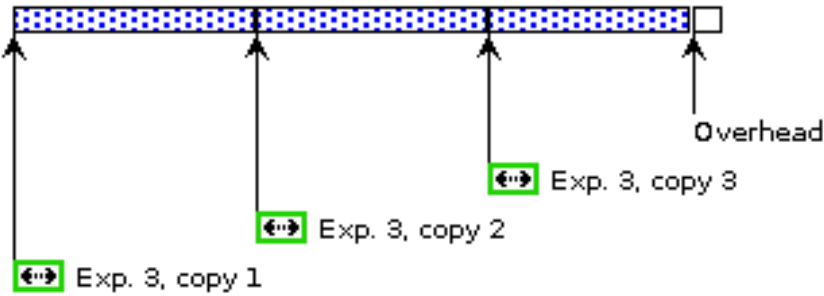
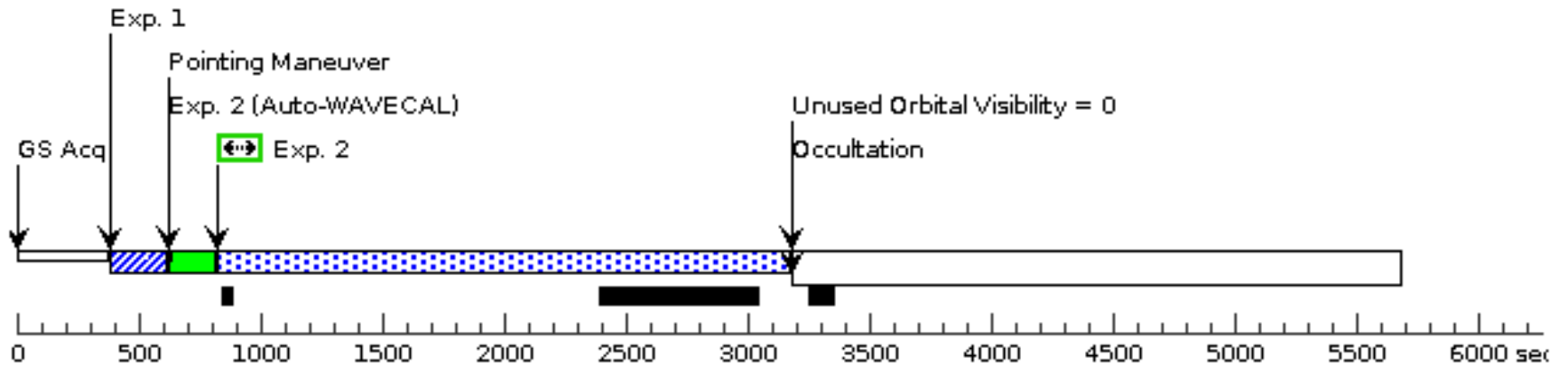


Proposal 17530 - B31 (22) - Hot and cool - hot companions as probes of red supergiants

Mon Jun 24 15:01:17 GMT 2024

Visit	<b>Proposal 17530, B31 (22), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS, STIS/NUV-MAMA, 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>(22)</td> <td>B31</td> <td>RA: 00 56 9.4247 (14.0392696d) Dec: -72 28 9.49 (-72.46930d) Equinox: J2000</td> <td>Proper Motion RA: 1.4961541724223647E-4 sec of time/yr Proper Motion Dec: -0.001262000091628579 arcsec/yr Epoch of Position: 2015.5</td> <td>V=14.28 F225W=15.16</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>                      Category=STAR                      Description=[B0-B2 V-IV, B3-B5 V-IV, B6-B9.5 V-IV, INTERACTING BINARY, K III-I]</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(22)	B31	RA: 00 56 9.4247 (14.0392696d) Dec: -72 28 9.49 (-72.46930d) Equinox: J2000	Proper Motion RA: 1.4961541724223647E-4 sec of time/yr Proper Motion Dec: -0.001262000091628579 arcsec/yr Epoch of Position: 2015.5	V=14.28 F225W=15.16	Reference Frame: ICRS																																																																													
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																																																														
(22)	B31	RA: 00 56 9.4247 (14.0392696d) Dec: -72 28 9.49 (-72.46930d) Equinox: J2000	Proper Motion RA: 1.4961541724223647E-4 sec of time/yr Proper Motion Dec: -0.001262000091628579 arcsec/yr Epoch of Position: 2015.5	V=14.28 F225W=15.16	Reference Frame: ICRS																																																																																															
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>B31-ACQ (STIS.ta.188 9531)</td> <td>(22) B31</td> <td>STIS/CCD, ACQ, F28X50LP</td> <td>MIRROR</td> <td></td> <td></td> <td></td> <td>0.1 Secs (0.1 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>B31-G140L (STIS.sp.18 91469)</td> <td>(22) B31</td> <td>STIS/FUV-MAMA, ACCUM, 52X0.2</td> <td>G140L 1425 A</td> <td></td> <td></td> <td>Prime + Parallel Group 2-3 in B31 (22)</td> <td>2335 Secs (2335 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td></td> <td>ANY</td> <td>WFC3/UVIS, ACCUM, UVIS-FIX</td> <td>F475X</td> <td></td> <td></td> <td>Prime + Parallel Group 2-3 in B31 (22)</td> <td>740 Secs X 3 (2220 Secs) [==&gt;(Copy 1)] [==&gt;(Copy 2)] [==&gt;(Copy 3)]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td>B31-G140L (STIS.sp.18 91466)</td> <td>(22) B31</td> <td>STIS/FUV-MAMA, ACCUM, 52X0.2</td> <td>G140L 1425 A</td> <td></td> <td></td> <td>Prime + Parallel Group 4-5 in B31 (22)</td> <td>2711 Secs (2711 Secs) [==&gt;]</td> <td>[2]</td> </tr> <tr> <td>5</td> <td></td> <td>ANY</td> <td>WFC3/UVIS, ACCUM, UVIS-FIX</td> <td>F300X</td> <td>FLASH=20</td> <td></td> <td>Prime + Parallel Group 4-5 in B31 (22)</td> <td>839 Secs X 3 (2517 Secs) [==&gt;(Copy 1)] [==&gt;(Copy 2)] [==&gt;(Copy 3)]</td> <td>[2]</td> </tr> <tr> <td>6</td> <td>B31-G230L (STIS.sp.18 91467)</td> <td>(22) B31</td> <td>STIS/NUV-MAMA, ACCUM, 52X2</td> <td>G230L 2376 A</td> <td></td> <td></td> <td></td> <td>170 Secs (170 Secs) [==&gt;]</td> <td>[3]</td> </tr> <tr> <td>7</td> <td>B31-G140L (STIS.sp.18 91469)</td> <td>(22) B31</td> <td>STIS/FUV-MAMA, ACCUM, 52X0.2</td> <td>G140L 1425 A</td> <td></td> <td></td> <td>Prime + Parallel Group 7-8 in B31 (22)</td> <td>2107 Secs (2107 Secs) [==&gt;]</td> <td>[3]</td> </tr> <tr> <td>8</td> <td></td> <td>ANY</td> <td>WFC3/UVIS, ACCUM, UVIS-FIX</td> <td>F390W</td> <td>FLASH=17</td> <td></td> <td>Prime + Parallel Group 7-8 in B31 (22)</td> <td>695 Secs X 3 (2085 Secs) [==&gt;(Copy 1)] [==&gt;(Copy 2)] [==&gt;(Copy 3)]</td> <td>[3]</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	B31-ACQ (STIS.ta.188 9531)	(22) B31	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]	2	B31-G140L (STIS.sp.18 91469)	(22) B31	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in B31 (22)	2335 Secs (2335 Secs) [==>]	[1]	3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 2-3 in B31 (22)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]	4	B31-G140L (STIS.sp.18 91466)	(22) B31	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 4-5 in B31 (22)	2711 Secs (2711 Secs) [==>]	[2]	5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 4-5 in B31 (22)	839 Secs X 3 (2517 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]	6	B31-G230L (STIS.sp.18 91467)	(22) B31	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				170 Secs (170 Secs) [==>]	[3]	7	B31-G140L (STIS.sp.18 91469)	(22) B31	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 7-8 in B31 (22)	2107 Secs (2107 Secs) [==>]	[3]	8		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	FLASH=17		Prime + Parallel Group 7-8 in B31 (22)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[3]
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																																																																										
1	B31-ACQ (STIS.ta.188 9531)	(22) B31	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs (0.1 Secs) [==>]	[1]																																																																																											
2	B31-G140L (STIS.sp.18 91469)	(22) B31	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 2-3 in B31 (22)	2335 Secs (2335 Secs) [==>]	[1]																																																																																											
3		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F475X			Prime + Parallel Group 2-3 in B31 (22)	740 Secs X 3 (2220 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[1]																																																																																											
4	B31-G140L (STIS.sp.18 91466)	(22) B31	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 4-5 in B31 (22)	2711 Secs (2711 Secs) [==>]	[2]																																																																																											
5		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F300X	FLASH=20		Prime + Parallel Group 4-5 in B31 (22)	839 Secs X 3 (2517 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[2]																																																																																											
6	B31-G230L (STIS.sp.18 91467)	(22) B31	STIS/NUV-MAMA, ACCUM, 52X2	G230L 2376 A				170 Secs (170 Secs) [==>]	[3]																																																																																											
7	B31-G140L (STIS.sp.18 91469)	(22) B31	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Prime + Parallel Group 7-8 in B31 (22)	2107 Secs (2107 Secs) [==>]	[3]																																																																																											
8		ANY	WFC3/UVIS, ACCUM, UVIS-FIX	F390W	FLASH=17		Prime + Parallel Group 7-8 in B31 (22)	695 Secs X 3 (2085 Secs) [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)]	[3]																																																																																											

**Orbit 1**



Orbit Structure



**Orbit 2**

Server Version: 20240604

