15660 - Testing M Dwarf Mass Loss Across the Fully Convective Boundary

Cycle: 26, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. Christopher Michael Johns-Krull (PI) (Contact)	**Rice University**	**cmj@rice.edu**
Dr. Brian Erland Wood (CoI)	Naval Research Laboratory	brian.wood@nrl.navy.mil
Dr. Hans-Reinhard Mueller (CoI)	Dartmouth College	hans.mueller@dartmouth.edu

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) WOLF-359	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:02:50.0	yes
02	(9) G-272-61A	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:02:52.0	yes
03	(7) BD+44-2051	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:02:55.0	yes
04	(7) BD+44-2051	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:02:56.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(7) BD+44-2051	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:02:58.0	yes
06	(8) BD+44-2051B	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:03:00.0	yes
07	(8) BD+44-2051B	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:02.0	yes
08	(8) BD+44-2051B	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:04.0	yes
09	(6) GJ-644-C	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:03:06.0	yes
10	(6) GJ-644-C	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:07.0	yes
11	(6) GJ-644-C	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:09.0	yes
12	(3) -OMI02-ERI-C	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	25-Sep-2019 10:03:10.0	yes
13	(3) -OMI02-ERI-C	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:12.0	yes
14	(4) ROSS-248	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:03:14.0	yes
15	(4) ROSS-248	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:15.0	yes
16	(2) V-EZ-AQR	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	25-Sep-2019 10:03:18.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
17	(2) V-EZ-AQR	STIS/CCD STIS/FUV-MAMA	3	25-Sep-2019 10:03:19.0	yes

50 Total Orbits Used

ABSTRACT

Studies of the rotational distribution of open clusters show that the efficiency of stellar spin down dramatically decreases once stars become fully convective. It is generally understood that this stellar spin down is the result of magnetized stellar winds torquing down the stars as they age. The magnetic field properties of fully convetive stars suggest they should still efficiently spin down, yet they do not. One potential explanation is that the mass loss rates from dwarfs dramatically decreases once stars become fully convective. We will test this hypothesis using HST+STIS to measure astrospheric absorption in a sample of nearby M dwarfs to see if the winds of fully convective stars are significantly weaker as group relative to the partially radiative M dwarfs.

OBSERVING DESCRIPTION

We plan to observe 8 late M dwarfs stars with STIS. Our project is focused on detecting and measuring astrospheric absorption in the H I Lyman-alpha line at 1216 Angstroms, using the E140M grating, but confidence in this analysis is significantly improved with information provided by observations of the Mg II h & k lines near 2800 Angstroms, so we also be observe the Mg II lines using the E230H grating. We acquire each of our stars with a short exposure onto the STIS/CCD. An accurate wavelength scale for the Mg II observations is important for our purposes so we perform a peakup before our E230H observations. The brightness of our targets vary, so we choose different apertures for acquitsition and peak up as needed.

After acquisition and peakup, we spend 1-2 orbits as needed obtaining the E230H spectrum of the 2574-2851 Angstrom wavelength range, through the 0.2x0.09 aperture. The remaining 2-7 orbits (as needed) are spent observing

the 1150-1700 Angstrom range with the E140M grating, through the 0.2x0.2 aperture. The E140M grating does not have quite the resolution of E230H, but its R= 45,800 resolution is good enough to study the H I Lyman-alpha line profile in the detail that we require. Because M dwarfs are known to be variable, we plan on obtaining our spectra in TIME-TAG mode.

Estimating expected S/N for our planned spectra requires first estimating Lyman-alpha and Mg II fluxes, which can be done roughly by extrapolating from previously observed M dwarfs, particularly EV Lac. Chromospheric line fluxes (such as Mg II and Lyman-alpha) are related to X-ray fluxes through known scaling laws (Wood et al. 2005a). Thus, Lyman-alpha or MgII fluxes for our stars can be estimated from known X-ray luminosities of our target stars. We expect our E230H spectra to attain a sufficient signal-to-noise of S/N>15 per resolution element at line center for the strong Mg II lines, and the E140M spectrum to achieve a peak S/N>10 within the H I Lyman-alpha line.

All of our targets are comfortably in compliance with STIS/MAMA bright object limits, as verified using both Table 13.44 in the STIS Instrument Handbook and the online STIS exposure time calculator. However, there is concern with regards to using COS or STIS to observe stars that flare, as M dwarfs in particular are known to do. A particularly massive flare could in principle violate Bright Object limits, even if the quiescent emission is orders of magnitude below them. In order to be sure our observations comply with the BOP rules, we utilized the Mdwarf_template_v5 Excel spreadsheet provided by our STIS Contact Scientist Tala Monroe and filled out all the required information for our different observing configurations. We then used the STIS ETC following the steps in Section 5 of the "Bright Object Protection Considerations for M Dwarf Flare Events" ISR 2017-02. With the exception

of one target plus science exposure setting, all of our targets produced no bright object safety warnings in the ETC. The one exception is our E230H observation of GJ-166C. The total count rate in the case of the large flare predicted by the Excel spreadsheet generated a total count rate that exceeds the limit for irregularly-variable sources of 40 percent of the bright limit 200000 counts per second. However, our STIS Contact Scientist said this was OK in an email on Dec. 5, 2018.

Visit

Proposal 15660, WOLF-359 (01), scheduling Wed Sep 25 14:03:20 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 01-JAN-2019:00:00:00 AND 17-MAY-2019:00:00:00; BETWEEN 20-JUN-2019:00:00:00 AND 31-DEC-2019:00:00:00

Diagnostics

(WOLF-359 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

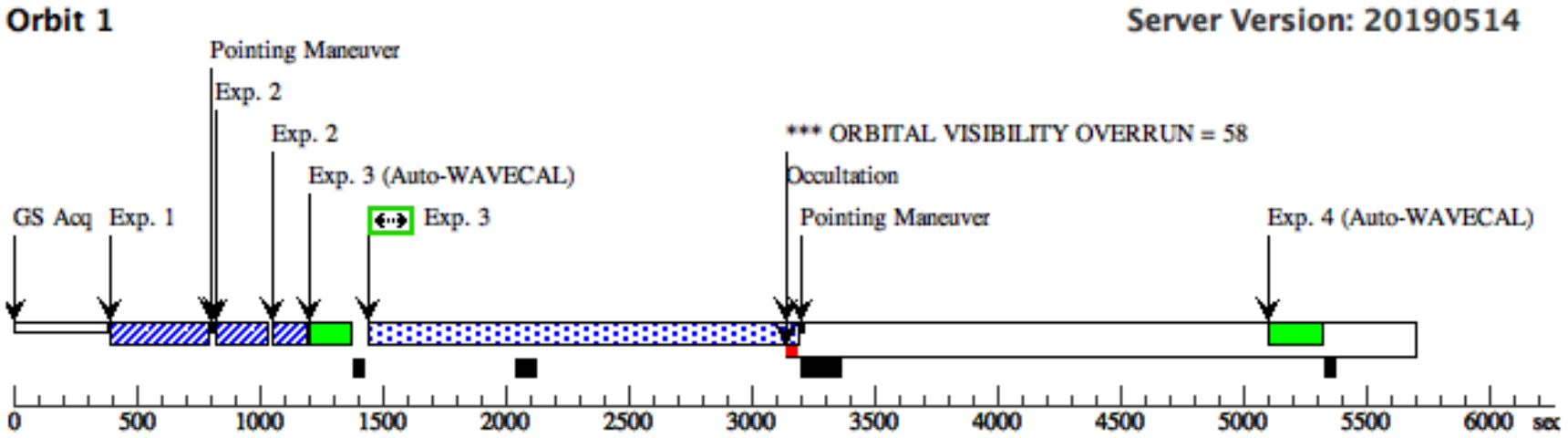
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WOLF-359	RA: 10 56 28.8648 (164.1202700d)	Proper Motion RA: -3842.0 mas/yr	V=13.507+/-0.1	Reference Frame: ICRS
	Alt Name1: CN-LEO	Dec: +07 00 52.77 (7.01466d)	Proper Motion Dec: -2725.0 mas/yr	U = 16.706	
	Alt Name2: GJ-406	Equinox: J2000	Parallax: 0.4191"		
			Epoch of Position: 2000.0		

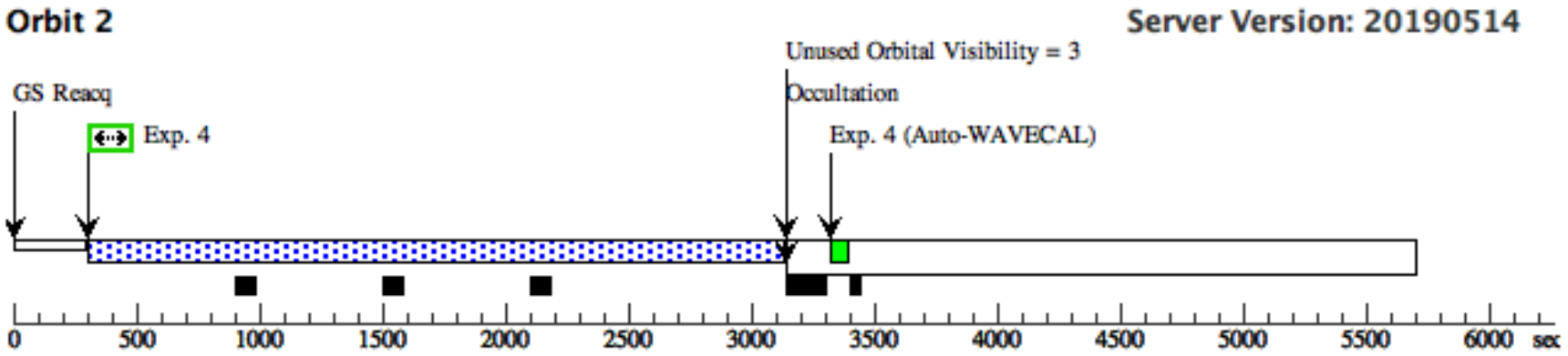
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

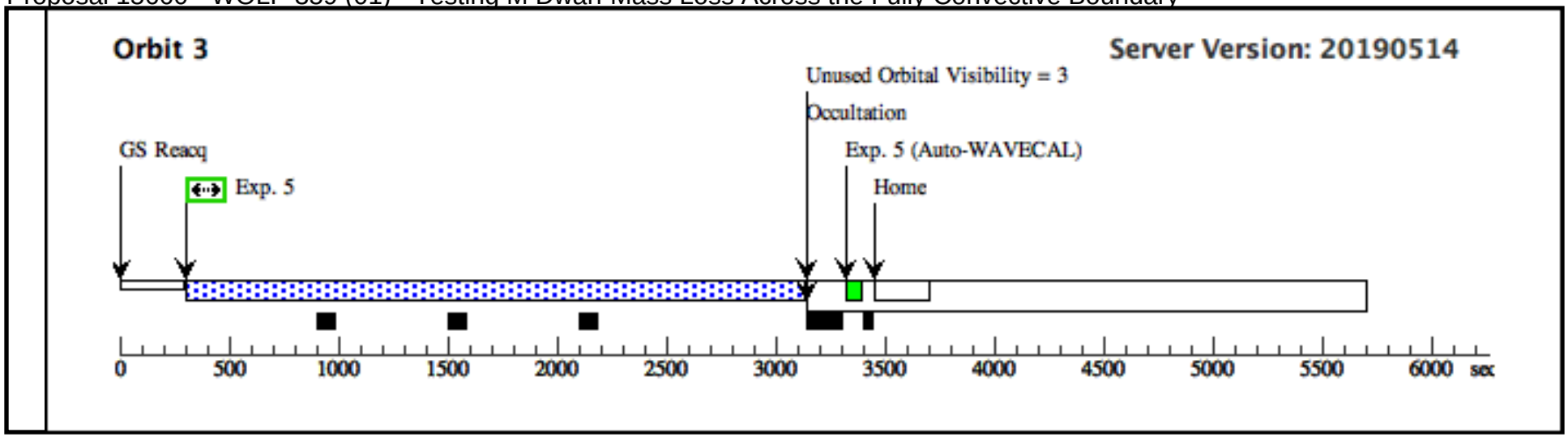
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1301512)	(1) WOLF-359	STIS/CCD, ACQ, F25ND3	MIRROR				27 Secs (27 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1301523)	(1) WOLF-359	STIS/CCD, ACQ/PEAK, 0.2X0.09	MIRROR				0.1 Secs (0.1 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302727)	(1) WOLF-359	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1730 Secs (1730 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302728)	(1) WOLF-359	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2810 Secs (2810 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1302728)	(1) WOLF-359	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2810 Secs (2810 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 3
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, GJ-65-A (02), scheduled Wed Sep 25 14:03:20 GMT 2019

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 26-FEB-2019:00:00:00 AND 14-NOV-2019:00:00:00

Fixed Targets

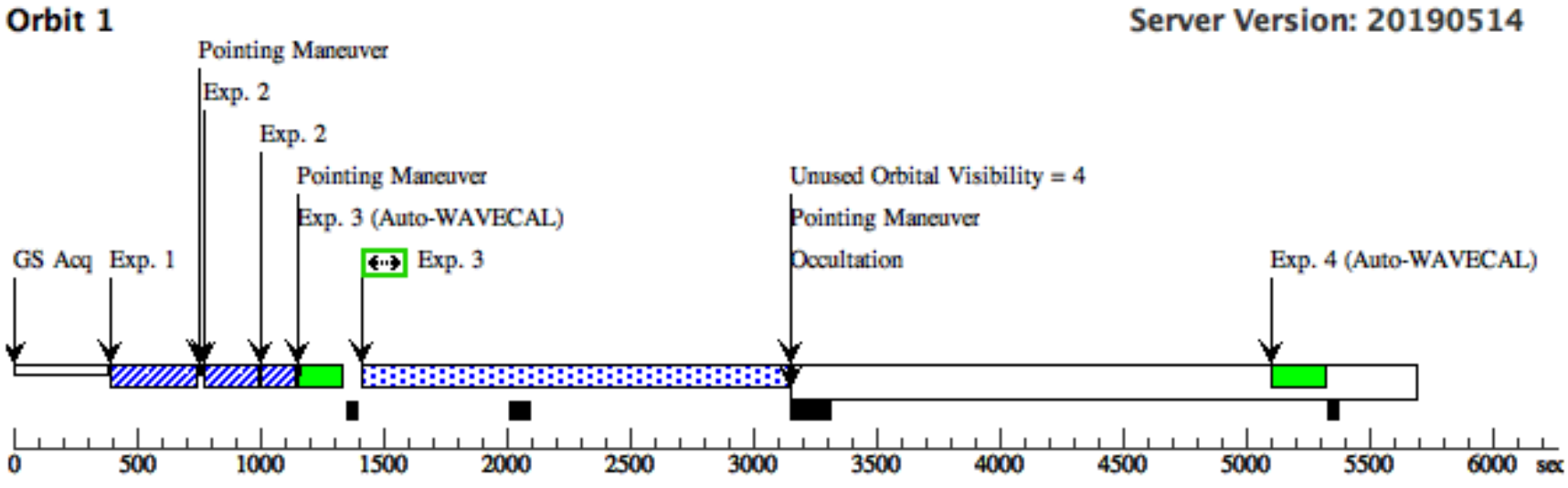
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	G-272-61A Alt Name1: GJ-65-A	RA: 01 39 5.0542 (24.7710592d) Dec: -17 56 54.15 (-17.94837d) Equinox: J2000	Proper Motion RA: 0.23726857937494034 sec of time/yr Proper Motion Dec: 0.53204 arcsec/yr Parallax: 0.3699318" Epoch of Position: 2015.5	V=12.7+/-0.1	Reference Frame: ICRS

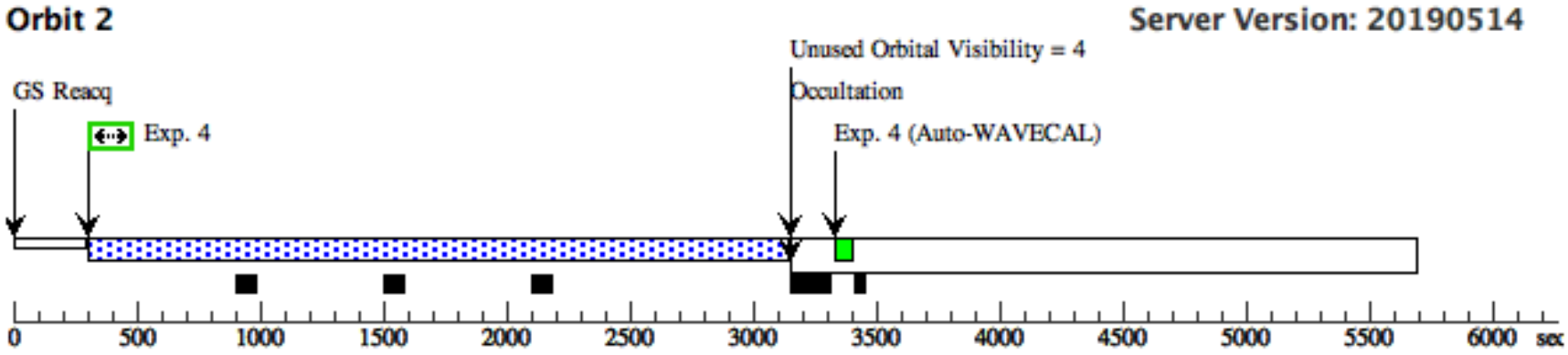
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

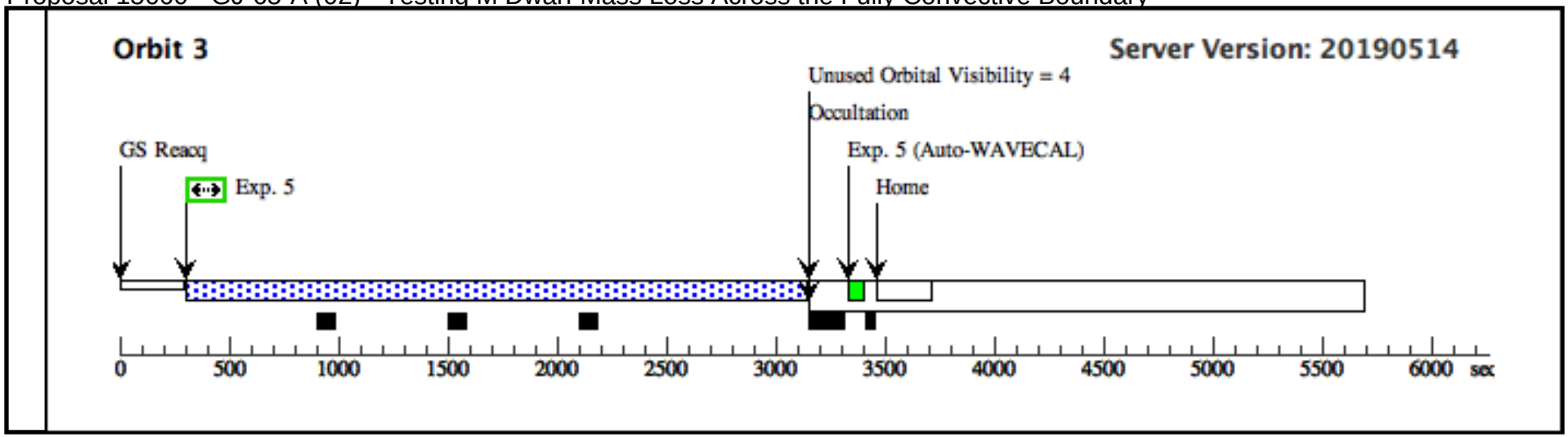
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1373628)	(9) G-272-61A	STIS/CCD, ACQ, F25ND3	MIRROR				15 Secs (15 Secs)	
								[==>]	***[1]***
2	(SSTIS.ta.1373629)	(9) G-272-61A	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs (0.1 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1373632)	(9) G-272-61A	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1710 Secs (1710 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1373631)	(9) G-272-61A	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2820 Secs (2820 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1373631)	(9) G-272-61A	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2820 Secs (2820 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 4
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, BD+44-2051_1 (03), implementation Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Fixed Targets

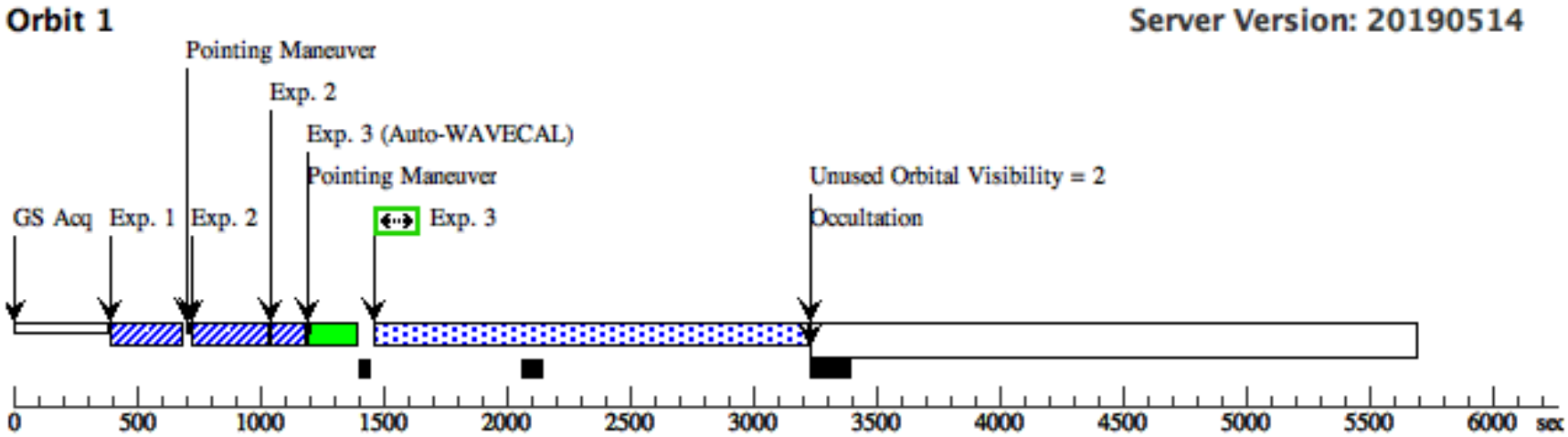
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	BD+44-2051	RA: 11 05 28.5780 (166.3690750d)	Proper Motion RA: -4410.43 mas/yr	V=8.78+/-0.1	Reference Frame: ICRS
	Alt Name1: GJ-412-A	Dec: +43 31 36.39 (43.52678d)	Proper Motion Dec: 942.93 mas/yr	U=11.44	
	Alt Name2: GSC-03012-02528	Equinox: J2000	Parallax: 0.20627"		
			Epoch of Position: 2000.0		

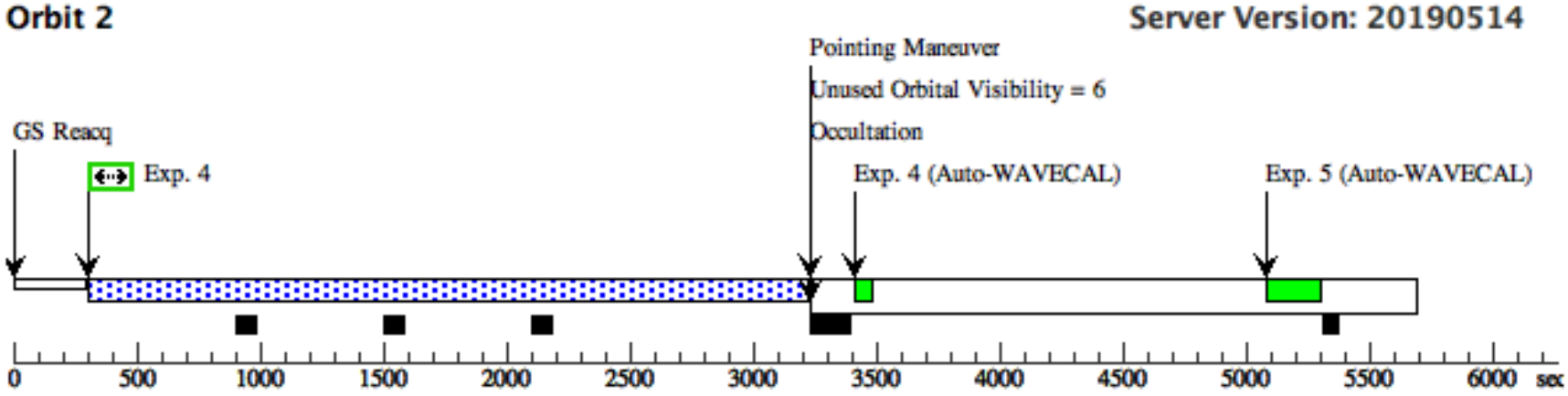
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

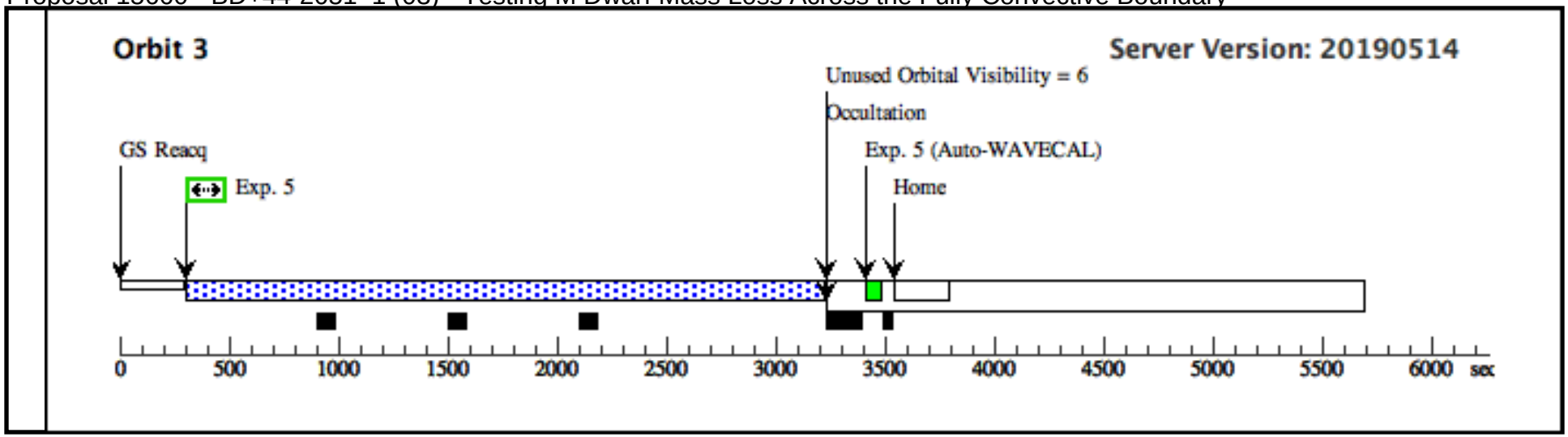
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1301955)	(7) BD+44-2051	STIS/CCD, ACQ, F25ND3	MIRROR				1 Secs (1 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1301977)	(7) BD+44-2051	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				0.6 Secs (0.6 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302004)	(7) BD+44-2051	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1740 Secs (1740 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302005)	(7) BD+44-2051	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1302047)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 6
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, BD+44-2051_2 (04), implementation Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Diagnostics

(BD+44-2051_2 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

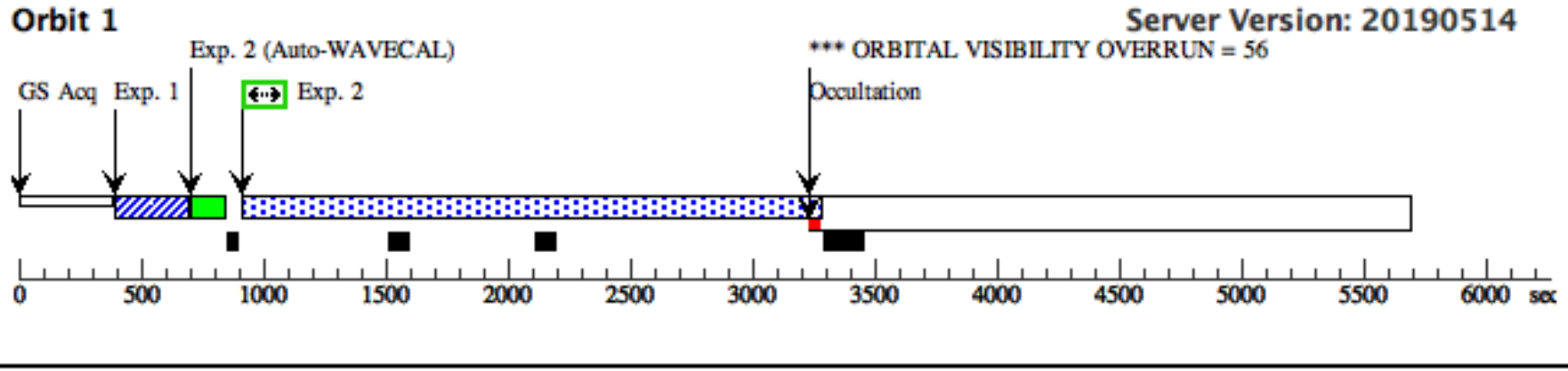
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	BD+44-2051	RA: 11 05 28.5780 (166.3690750d)	Proper Motion RA: -4410.43 mas/yr	V=8.78+/-0.1	Reference Frame: ICRS
	Alt Name1: GJ-412-A	Dec: +43 31 36.39 (43.52678d)	Proper Motion Dec: 942.93 mas/yr	U=11.44	
	Alt Name2: GSC-03012-02528	Equinox: J2000	Parallax: 0.20627"		
			Epoch of Position: 2000.0		

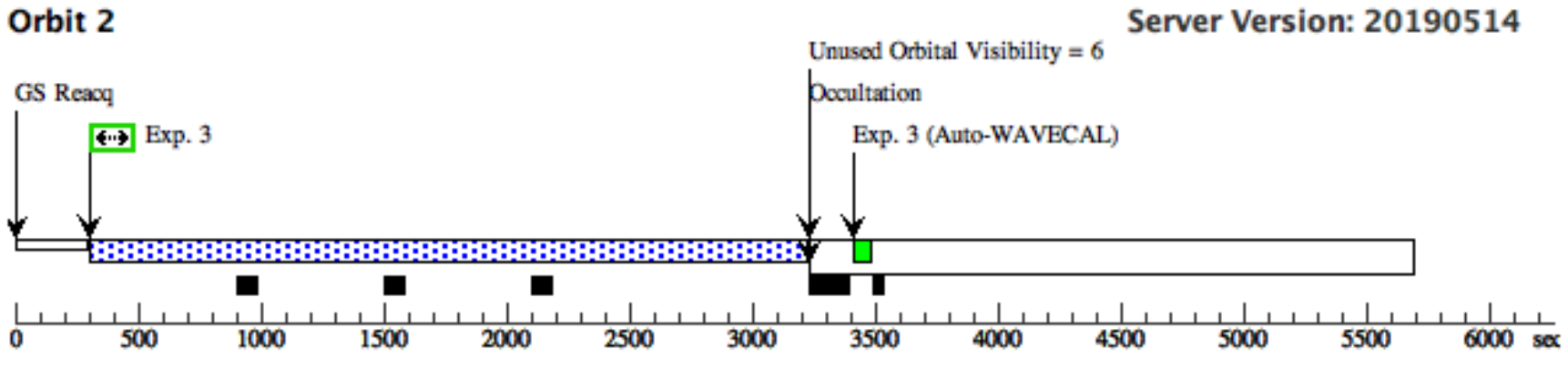
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

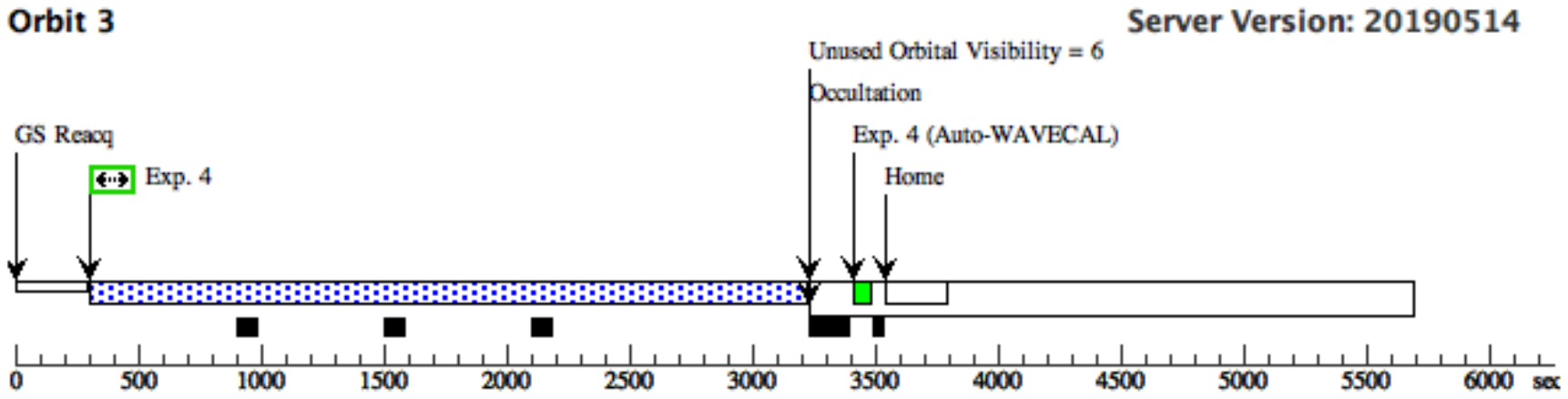
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1301955)	(7) BD+44-2051	STIS/CCD, ACQ, F25ND3	MIRROR				1 Secs (1 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302069)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2350 Secs (2350 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302047)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302047)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure







Visit

Proposal 15660, BD+44-2051_3 (05), implementation Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Diagnostics

(BD+44-2051_3 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

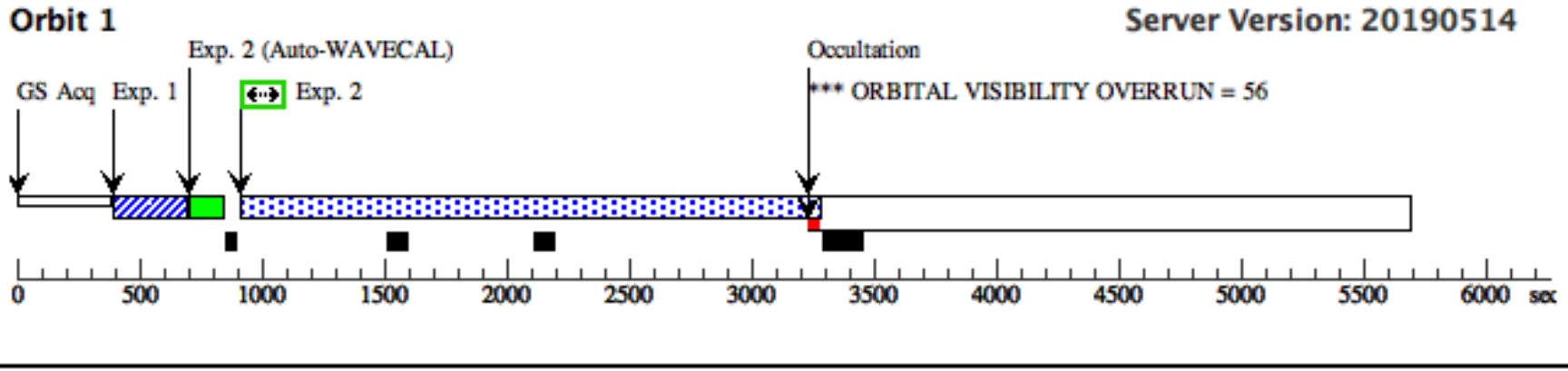
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	BD+44-2051	RA: 11 05 28.5780 (166.3690750d)	Proper Motion RA: -4410.43 mas/yr	V=8.78+/-0.1	Reference Frame: ICRS
	Alt Name1: GJ-412-A	Dec: +43 31 36.39 (43.52678d)	Proper Motion Dec: 942.93 mas/yr	U=11.44	
	Alt Name2: GSC-03012-02528	Equinox: J2000	Parallax: 0.20627"		
			Epoch of Position: 2000.0		

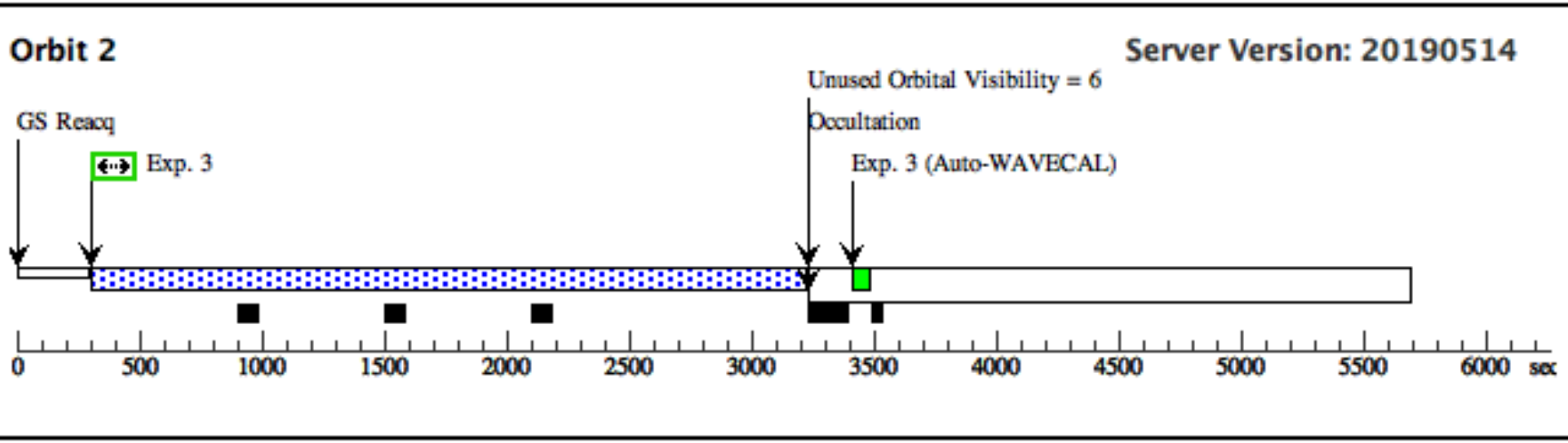
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

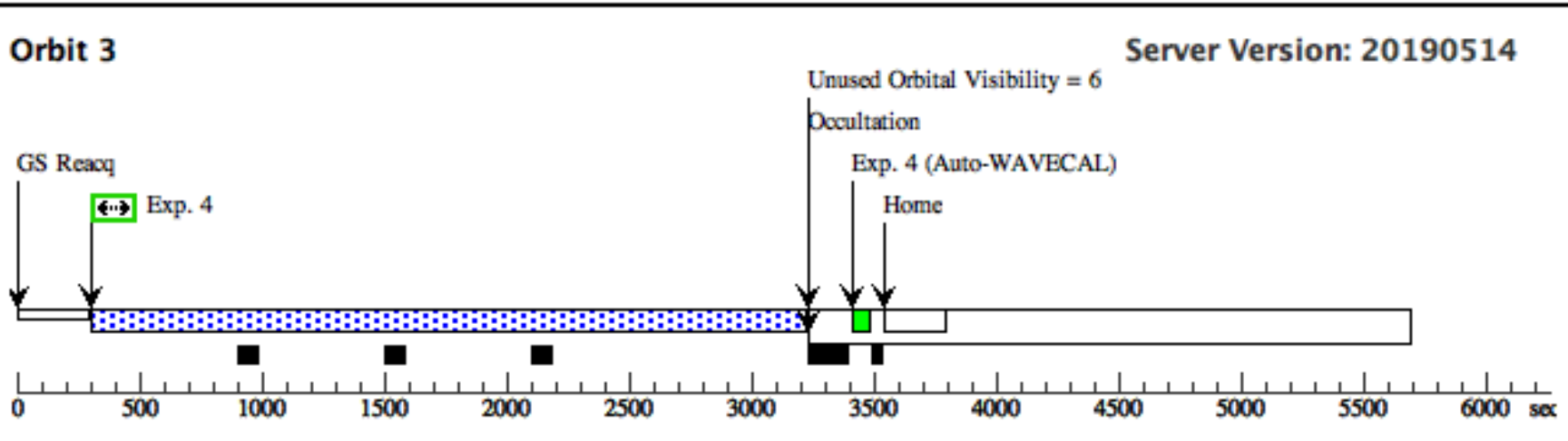
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1301955)	(7) BD+44-2051	STIS/CCD, ACQ, F25ND3	MIRROR				1 Secs (1 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302069)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2350 Secs (2350 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302047)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302047)	(7) BD+44-2051	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure







Visit

Proposal 15660, BD+44-2051B_1 (06), scheduling Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Diagnostics

(BD+44-2051B_1 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

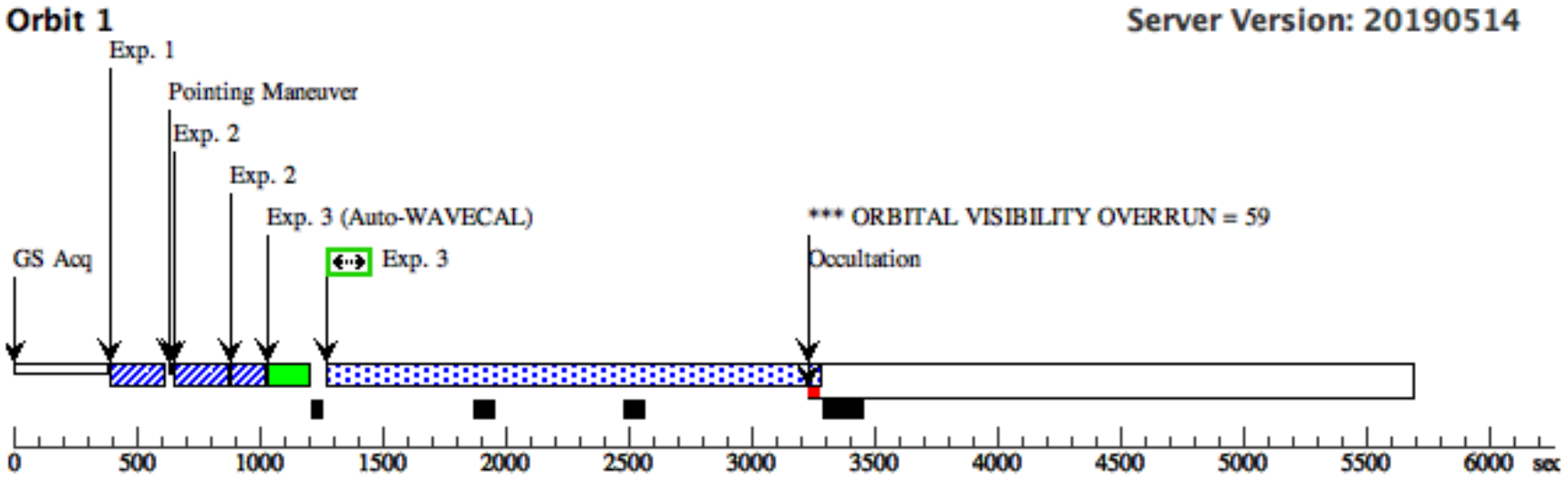
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	BD+44-2051B	RA: 11 05 30.8856 (166.3786900d)	Proper Motion RA: -4339.891 mas/yr	V=14.45	Reference Frame: ICRS
	Alt Name1: GJ-412-B	Dec: +43 31 17.88 (43.52163d)	Proper Motion Dec: 960.780 mas/yr	B=16.45	
		Equinox: J2000	Parallax: 0.2040592"		
			Epoch of Position: 2000.0		

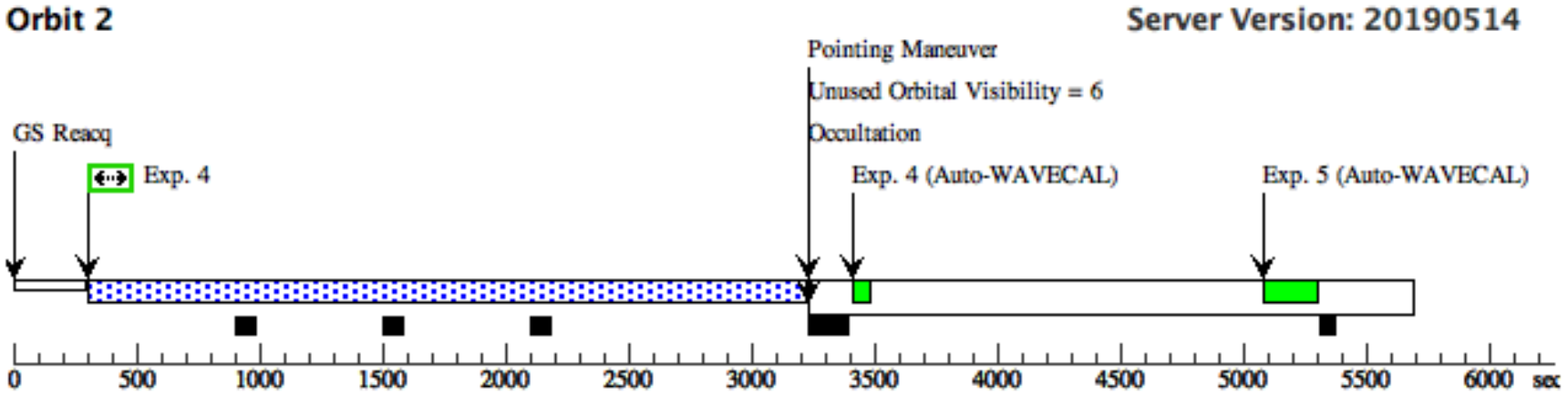
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

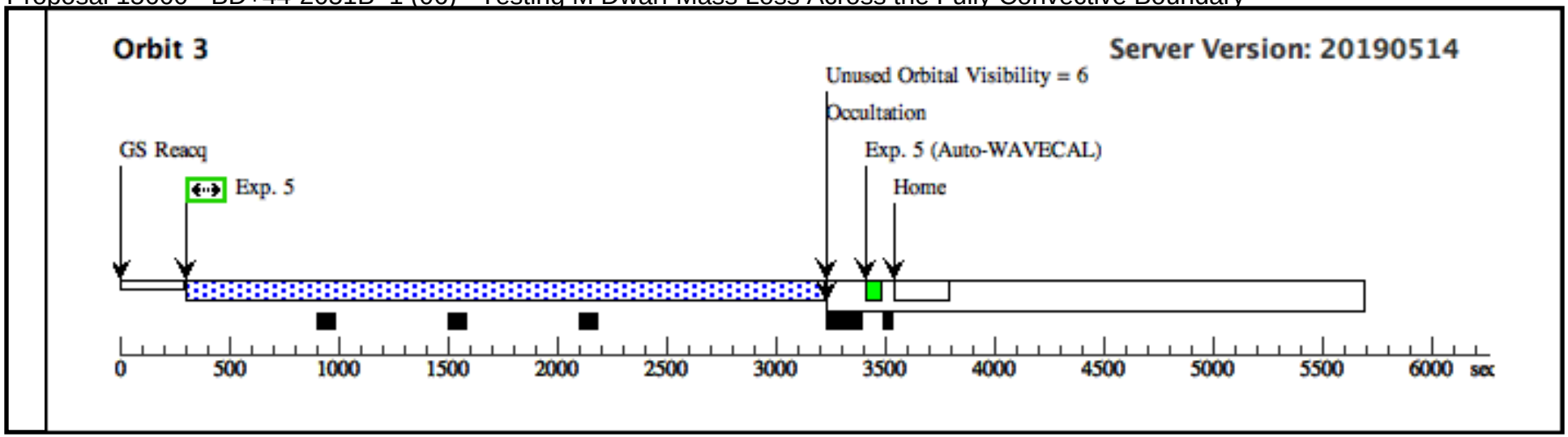
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302100)	(8) BD+44-2051B	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1302109)	(8) BD+44-2051B	STIS/CCD, ACQ/PEAK, 0.2X0.09	MIRROR				0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302153)	(8) BD+44-2051B	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1990 Secs (1990 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302157)	(8) BD+44-2051B	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1302182)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 6
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, BD+44-2051B_2 (07), scheduling Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Diagnostics

(BD+44-2051B_2 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

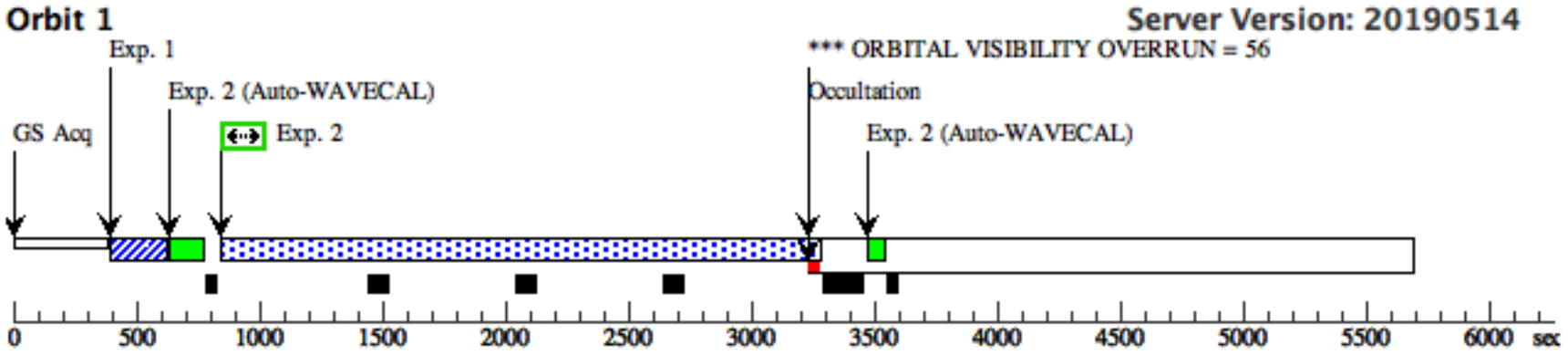
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	BD+44-2051B	RA: 11 05 30.8856 (166.3786900d)	Proper Motion RA: -4339.891 mas/yr	V=14.45	Reference Frame: ICRS
	Alt Name1: GJ-412-B	Dec: +43 31 17.88 (43.52163d)	Proper Motion Dec: 960.780 mas/yr	B=16.45	
		Equinox: J2000	Parallax: 0.2040592"		
			Epoch of Position: 2000.0		

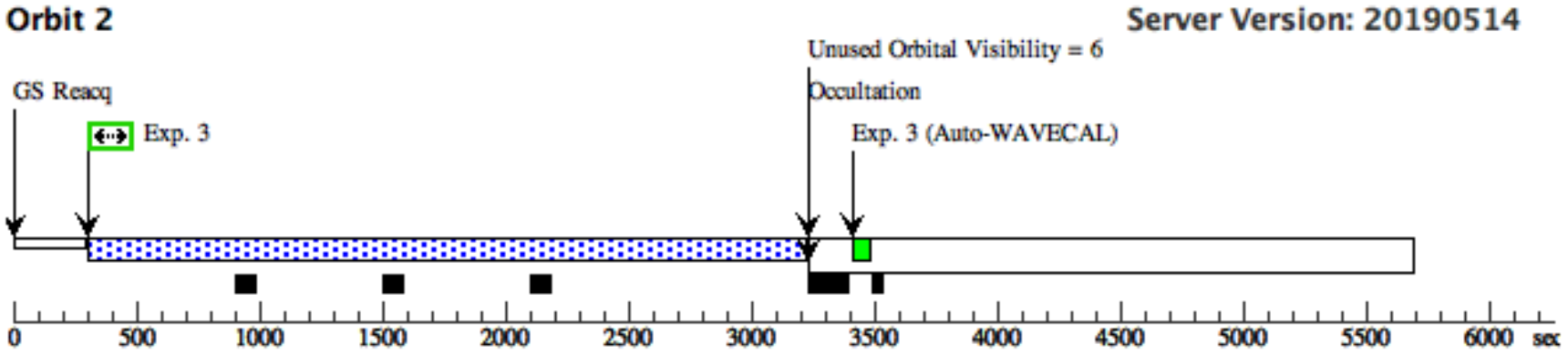
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

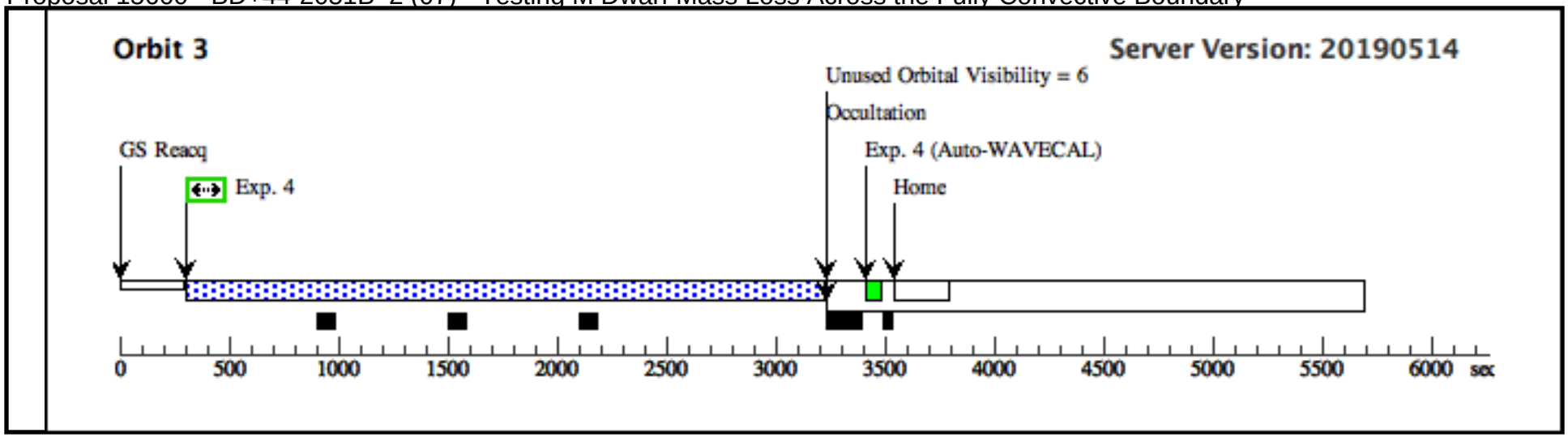
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302100)	(8) BD+44-2051B	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302307)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2420 Secs (2420 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302182)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302182)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 6
Occultation
GS Reacq
Exp. 4
Exp. 4 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, BD+44-2051B_3 (08), scheduling Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Diagnostics

(BD+44-2051B_3 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

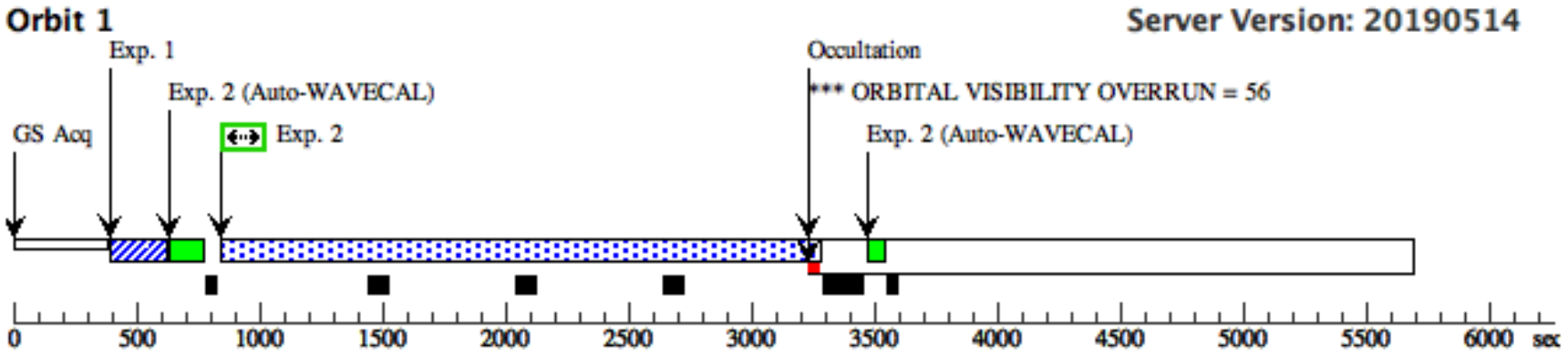
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	BD+44-2051B	RA: 11 05 30.8856 (166.3786900d)	Proper Motion RA: -4339.891 mas/yr	V=14.45	Reference Frame: ICRS
	Alt Name1: GJ-412-B	Dec: +43 31 17.88 (43.52163d)	Proper Motion Dec: 960.780 mas/yr	B=16.45	
		Equinox: J2000	Parallax: 0.2040592"		
			Epoch of Position: 2000.0		

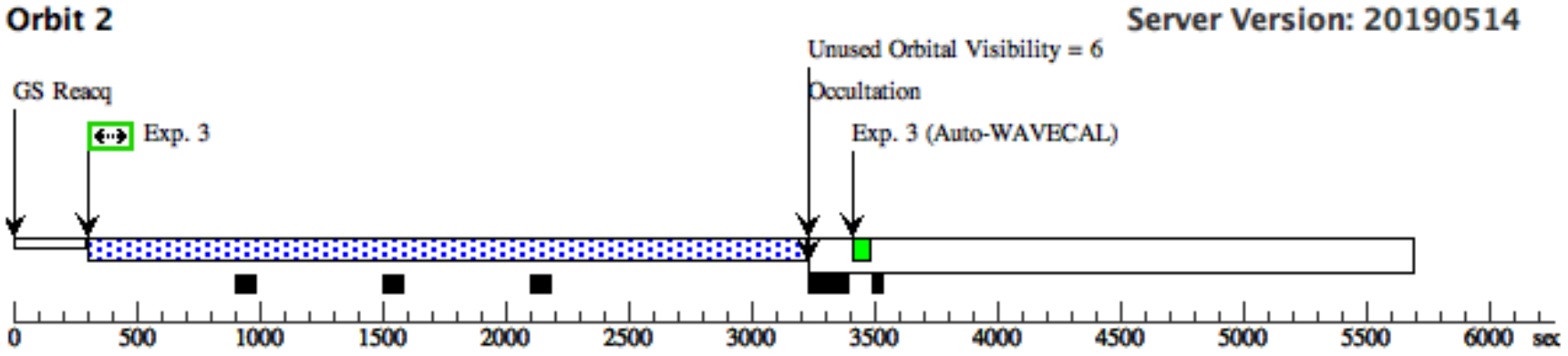
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

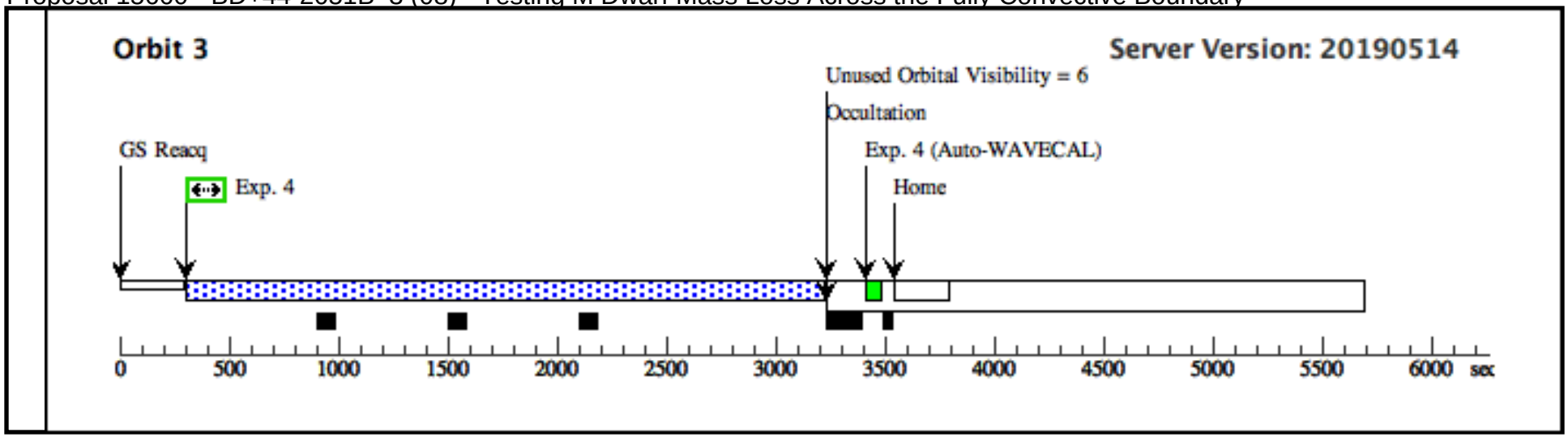
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302100)	(8) BD+44-2051B	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302307)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2420 Secs (2420 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302182)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302182)	(8) BD+44-2051B	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 6
Occultation
GS Reacq
Exp. 4
Exp. 4 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, GJ-644-C_1 (09), completed Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 26-MAY-2019:00:00:00 AND 11-DEC-2019:00:00:00

Diagnostics

(GJ-644-C_1 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

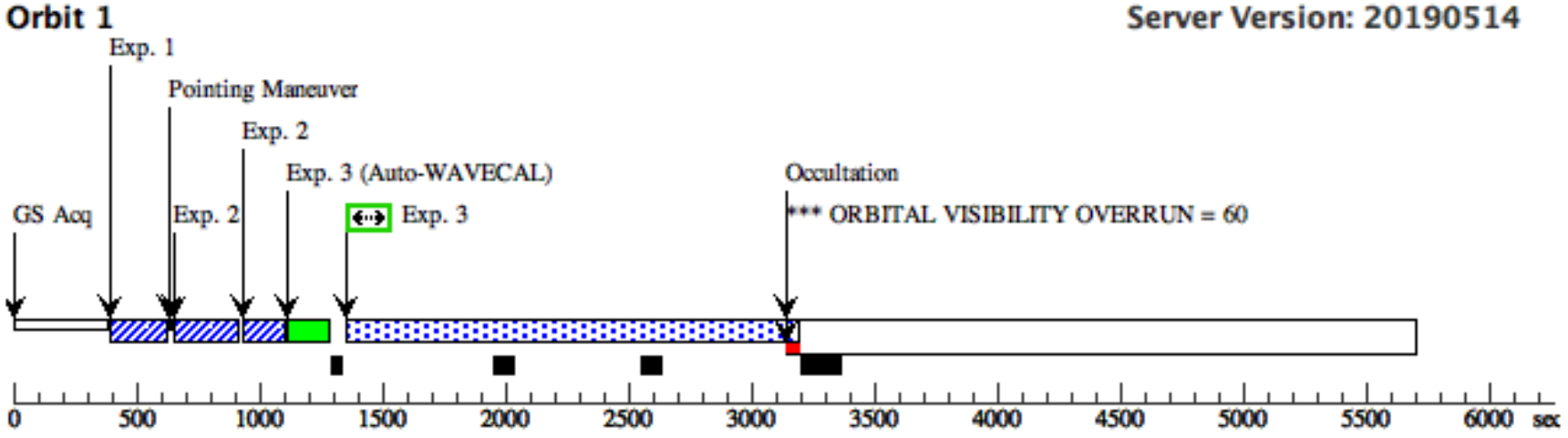
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	GJ-644-C	RA: 16 55 35.2561 (253.8969004d)	Proper Motion RA: -813.418 mas/yr	V=16.916+/-0.1	Reference Frame: ICRS
	Alt Name1: VB-8	Dec: -08 23 40.75 (-8.39465d)	Proper Motion Dec: -870.611 mas/yr	B=18.7	
		Equinox: J2000	Parallax: 0.1538139"		
			Epoch of Position: 2000.0		

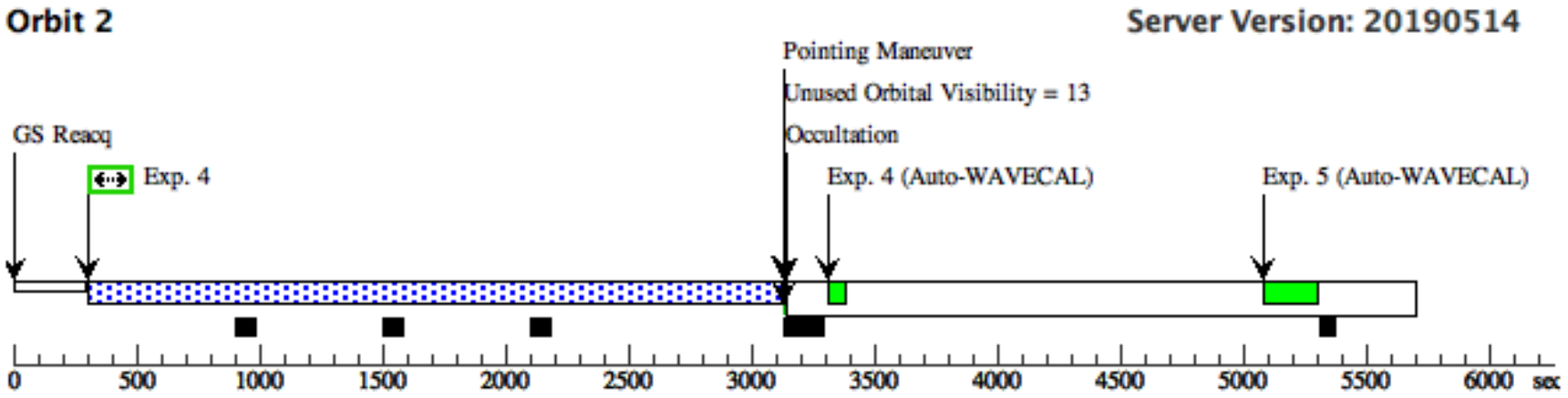
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

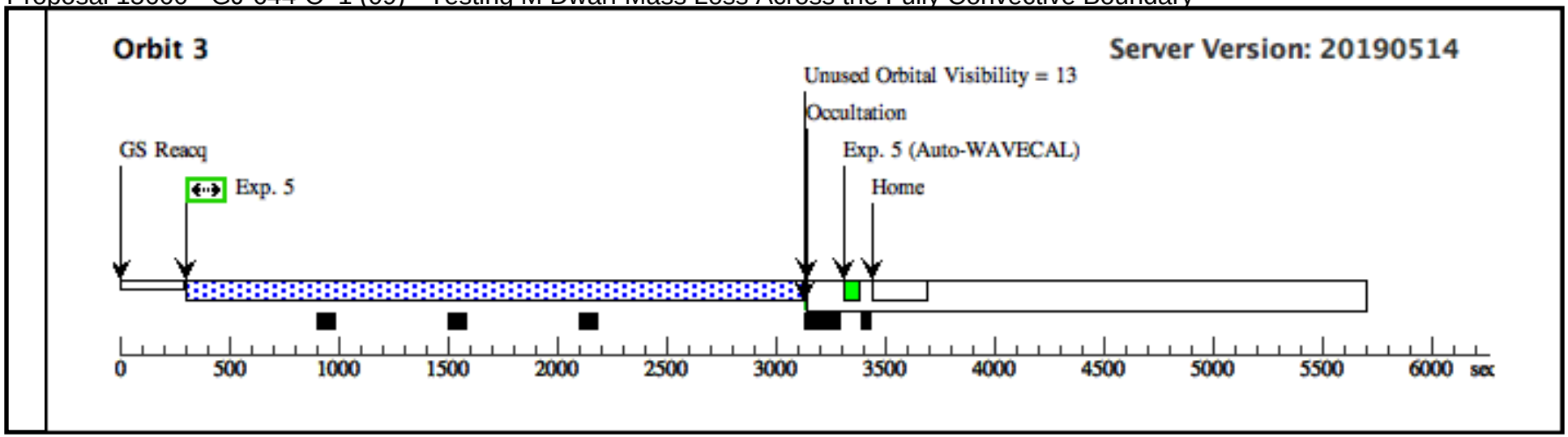
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302328)	(6) GJ-644-C	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1302333)	(6) GJ-644-C	STIS/CCD, ACQ/PEAK, 0.2X0.09	MIRROR				4.0 Secs (4 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302370)	(6) GJ-644-C	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1820 Secs (1820 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302368)	(6) GJ-644-C	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			2800 Secs (2800 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1302365)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2800 Secs (2800 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 13
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, GJ-644-C_2 (10), completed Wed Sep 25 14:03:21 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 26-MAY-2019:00:00:00 AND 11-DEC-2019:00:00:00

Diagnostics

(GJ-644-C_2 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

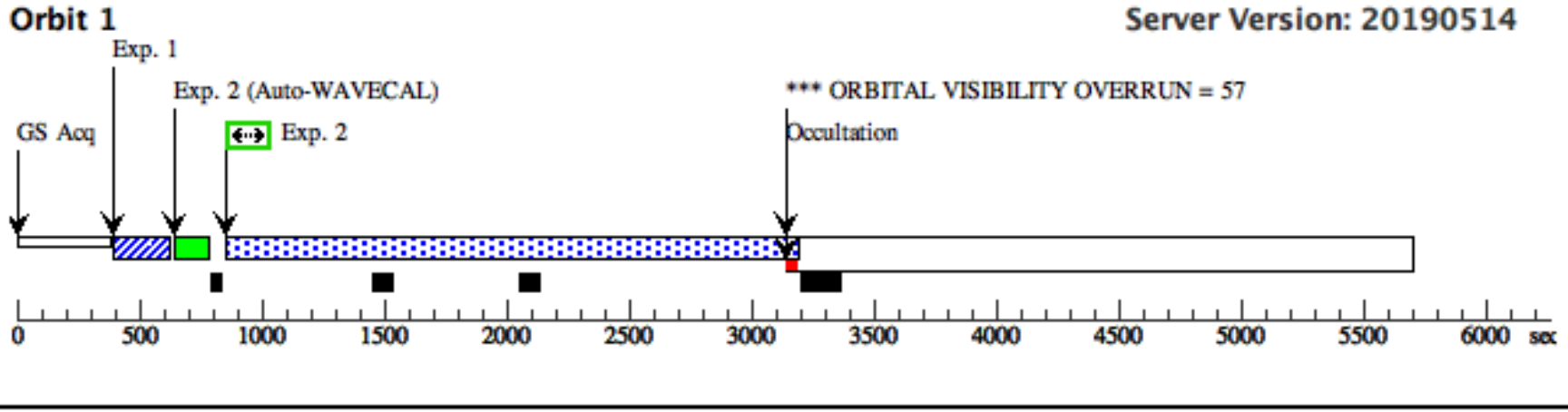
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	GJ-644-C	RA: 16 55 35.2561 (253.8969004d)	Proper Motion RA: -813.418 mas/yr	V=16.916+/-0.1	Reference Frame: ICRS
	Alt Name1: VB-8	Dec: -08 23 40.75 (-8.39465d)	Proper Motion Dec: -870.611 mas/yr	B=18.7	
		Equinox: J2000	Parallax: 0.1538139"		
			Epoch of Position: 2000.0		

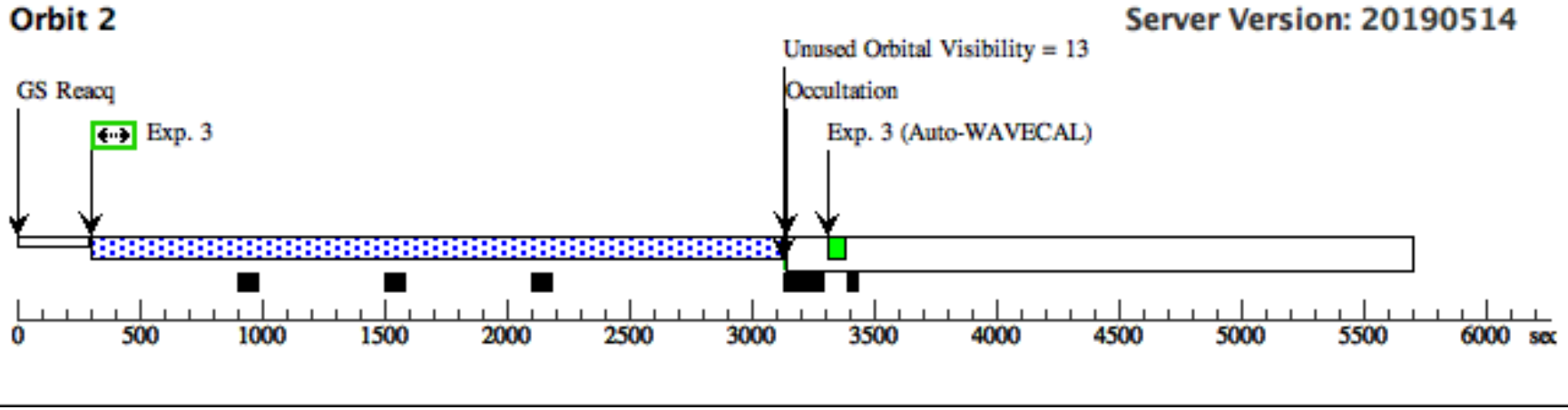
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

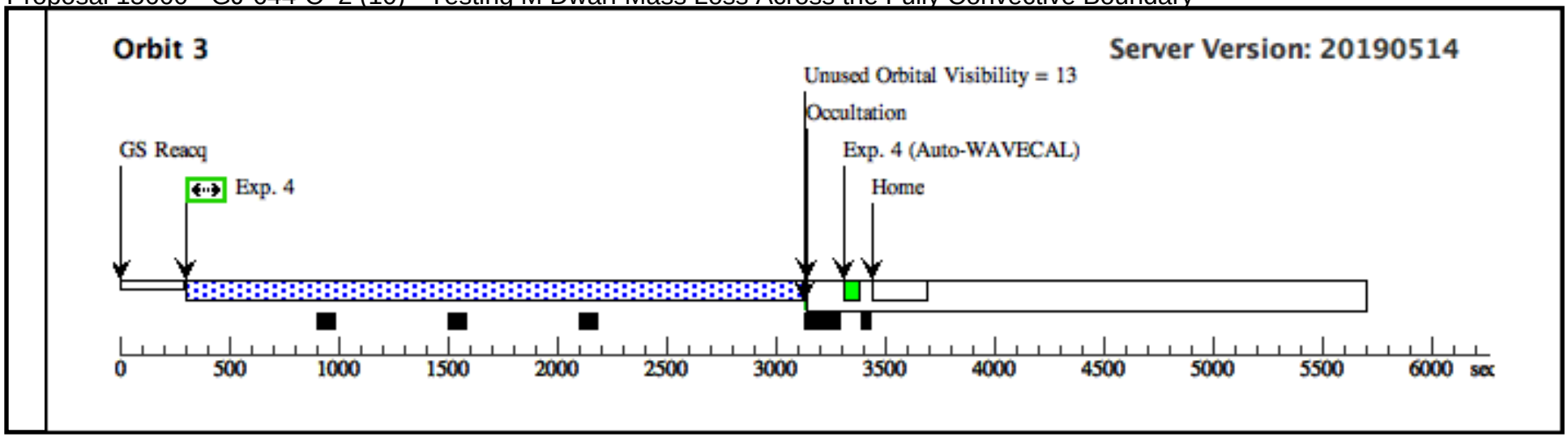
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302328)	(6) GJ-644-C	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302374)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2320 Secs (2320 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302365)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2800 Secs (2800 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302365)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2800 Secs (2800 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 13
Occultation
GS Reacq
Exp. 4
Exp. 4 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, GJ-644-C_3 (11), completed Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 26-MAY-2019:00:00:00 AND 11-DEC-2019:00:00:00

Diagnostics

(GJ-644-C_3 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

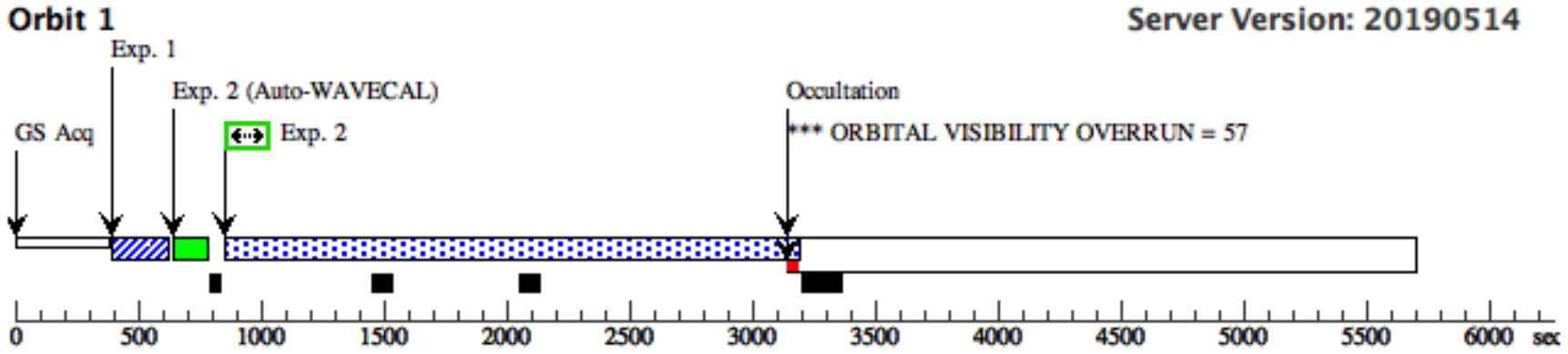
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	GJ-644-C	RA: 16 55 35.2561 (253.8969004d)	Proper Motion RA: -813.418 mas/yr	V=16.916+/-0.1	Reference Frame: ICRS
	Alt Name1: VB-8	Dec: -08 23 40.75 (-8.39465d)	Proper Motion Dec: -870.611 mas/yr	B=18.7	
		Equinox: J2000	Parallax: 0.1538139"		
			Epoch of Position: 2000.0		

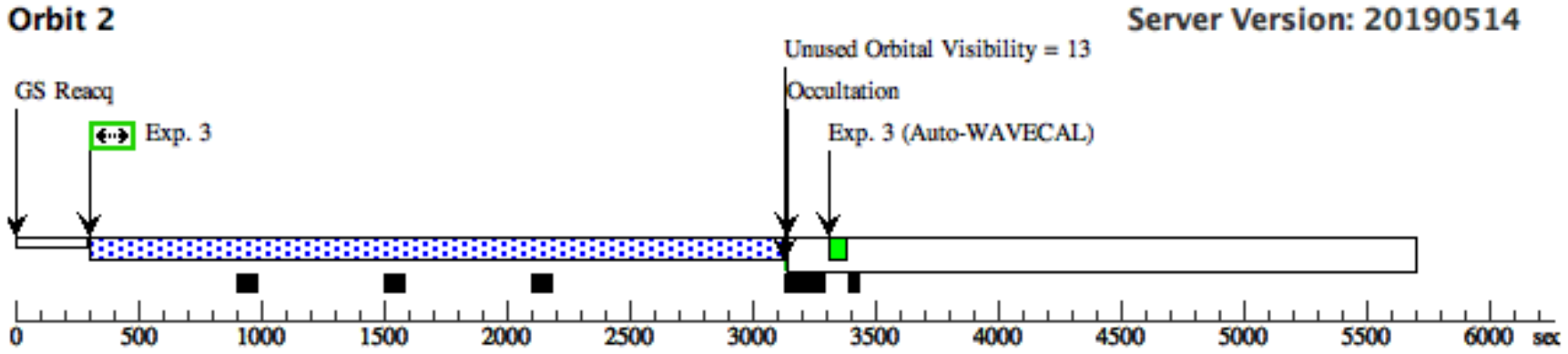
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

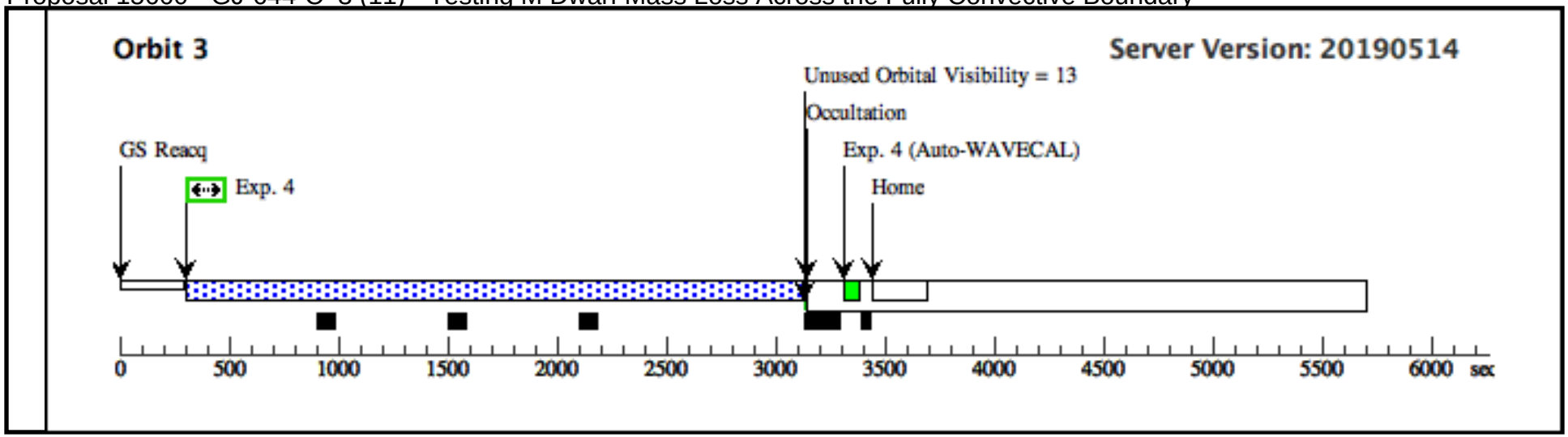
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302328)	(6) GJ-644-C	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302374)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2320 Secs (2320 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302365)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2800 Secs (2800 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302365)	(6) GJ-644-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2800 Secs (2800 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 13
Occultation
GS Reacq
Exp. 4
Exp. 4 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, GJ-166-C_1 (12), completed Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 07-MAY-2019:00:00:00 AND 03-DEC-2019:00:00:00

Diagnostics

(GJ-166-C_1 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

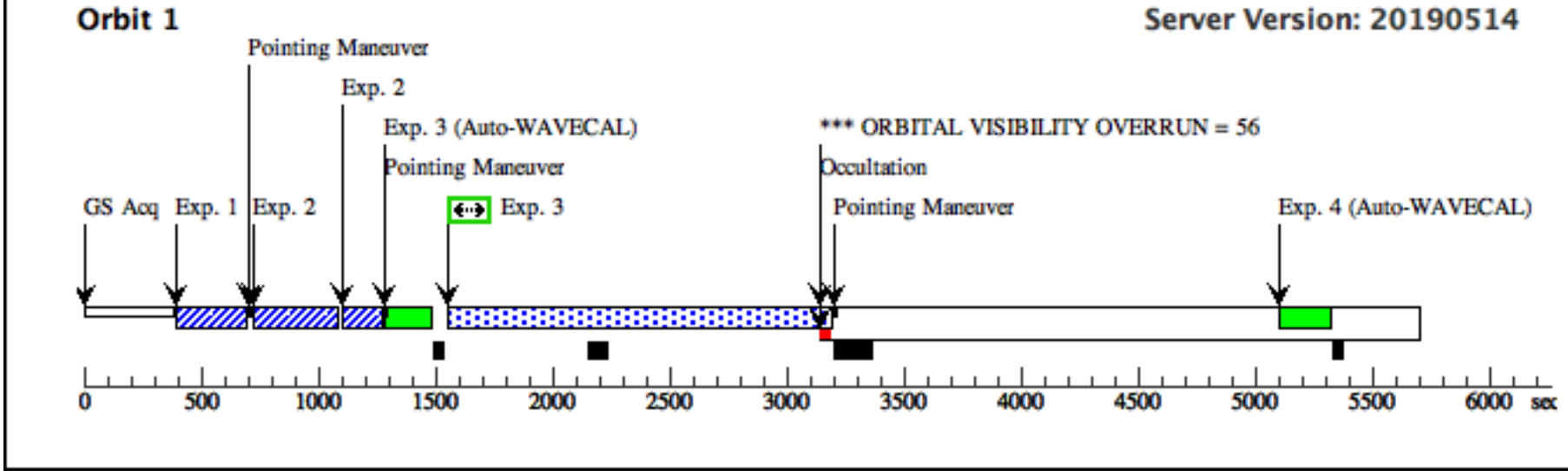
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	-OMI02-ERI-C	RA: 04 15 21.5389 (63.8397454d)	Proper Motion RA: -2250.118 mas/yr	V=11.17+/-0.1	Reference Frame: ICRS
	Alt Name1: DY-ERI	Dec: -07 39 20.72 (-7.65576d)	Proper Motion Dec: -3408.280 mas/yr	B = 12.85	
	Alt Name2: GJ-166-C	Equinox: J2000	Parallax: 0.1995"		
			Epoch of Position: 2000.0		

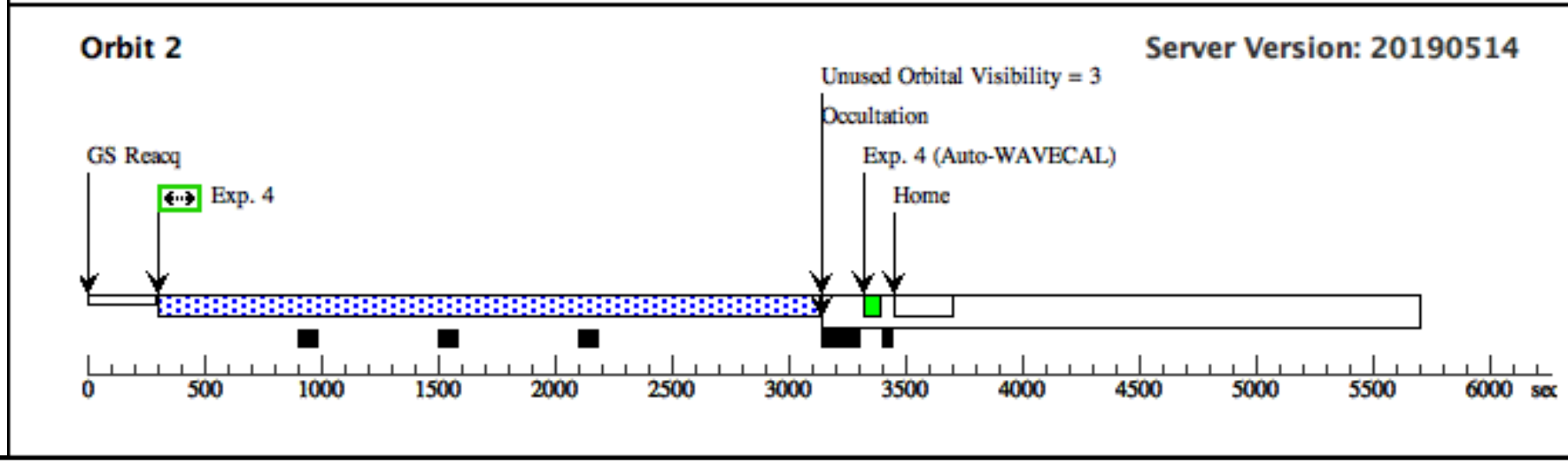
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302381)	(3) -OMI02-ERI-C	STIS/CCD, ACQ, F25ND3	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1302385)	(3) -OMI02-ERI-C	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				4.0 Secs (4 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302724)	(3) -OMI02-ERI-C	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1620 Secs (1620 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302463)	(3) -OMI02-ERI-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2810 Secs (2810 Secs)	
								[==>]	***[2]***

Orbit Structure





Visit

Proposal 15660, GJ-166-C_2 (13), completed Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 07-MAY-2019:00:00:00 AND 03-DEC-2019:00:00:00

Diagnostics

(GJ-166-C_2 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

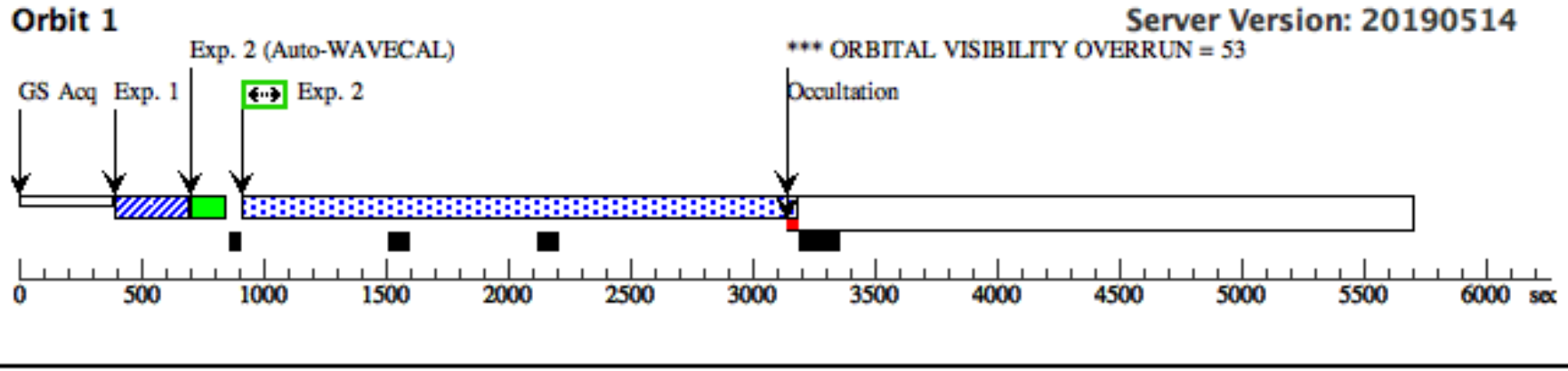
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	-OMI02-ERI-C	RA: 04 15 21.5389 (63.8397454d)	Proper Motion RA: -2250.118 mas/yr	V=11.17+/-0.1	Reference Frame: ICRS
	Alt Name1: DY-ERI	Dec: -07 39 20.72 (-7.65576d)	Proper Motion Dec: -3408.280 mas/yr	B = 12.85	
	Alt Name2: GJ-166-C	Equinox: J2000	Parallax: 0.1995"		
			Epoch of Position: 2000.0		

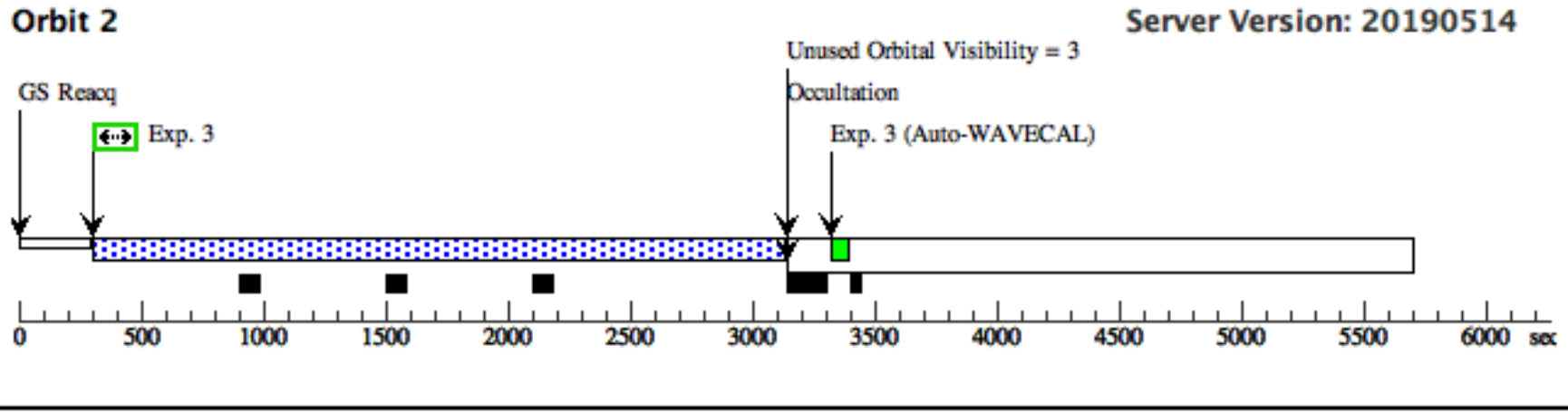
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

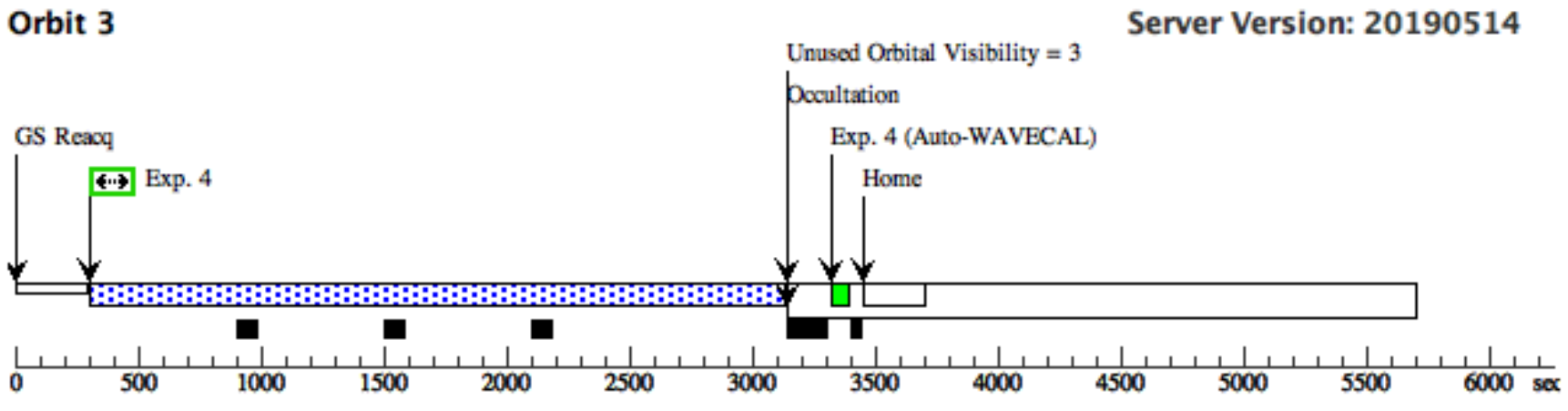
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302381)	(3) -OMI02-ERI-C	STIS/CCD, ACQ, F25ND3	MIRROR				2 Secs (2 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302465)	(3) -OMI02-ERI-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2250 Secs (2250 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302463)	(3) -OMI02-ERI-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2810 Secs (2810 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302463)	(3) -OMI02-ERI-C	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2810 Secs (2810 Secs)	
								[==>]	***[3]***

Orbit Structure







Visit

Proposal 15660, ROSS-248_1 (14), scheduling Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Fixed Targets

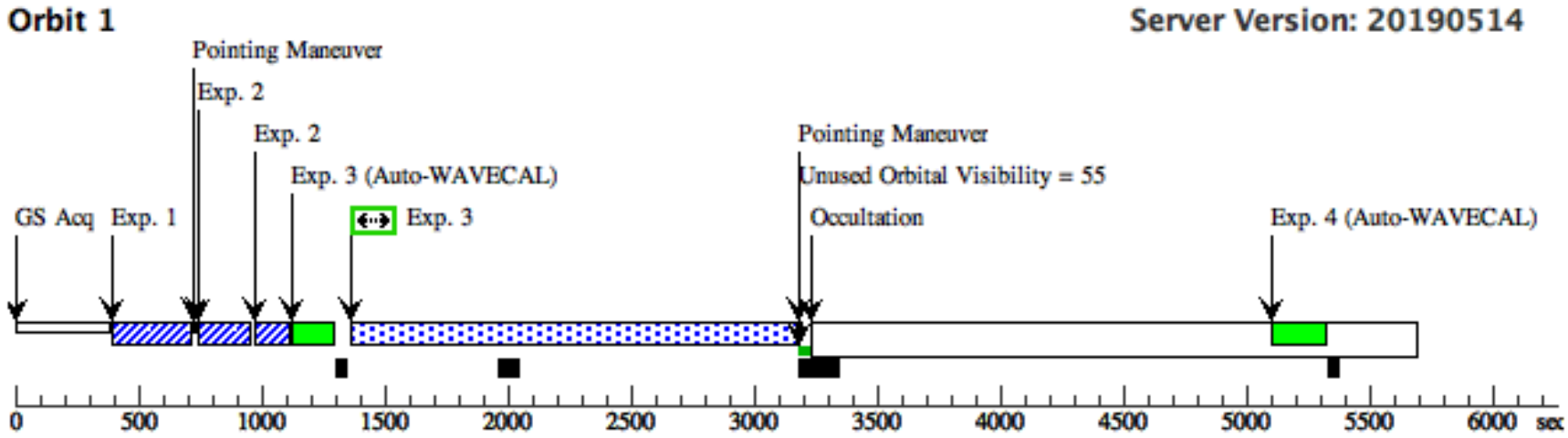
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	ROSS-248	RA: 23 41 55.0361 (355.4793171d)	Proper Motion RA: 112.692 mas/yr	V=12.28+/-0.1	Reference Frame: ICRS
	Alt Name1: HH-AND	Dec: +44 10 38.83 (44.17745d)	Proper Motion Dec: -1592.055 mas/yr	B = 14.19	
	Alt Name2: GJ-905	Equinox: J2000	Parallax: 0.3169558"		
			Epoch of Position: 2000.0		

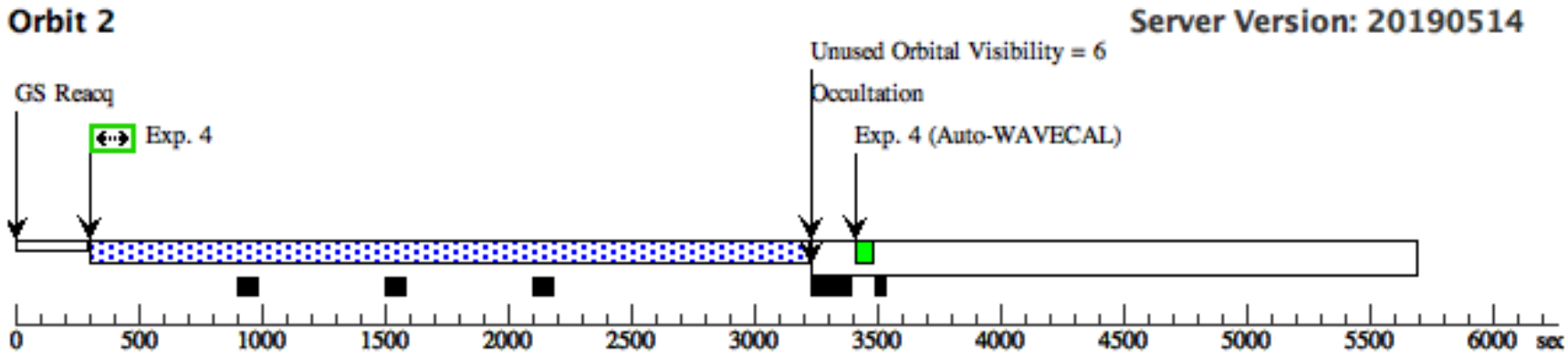
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

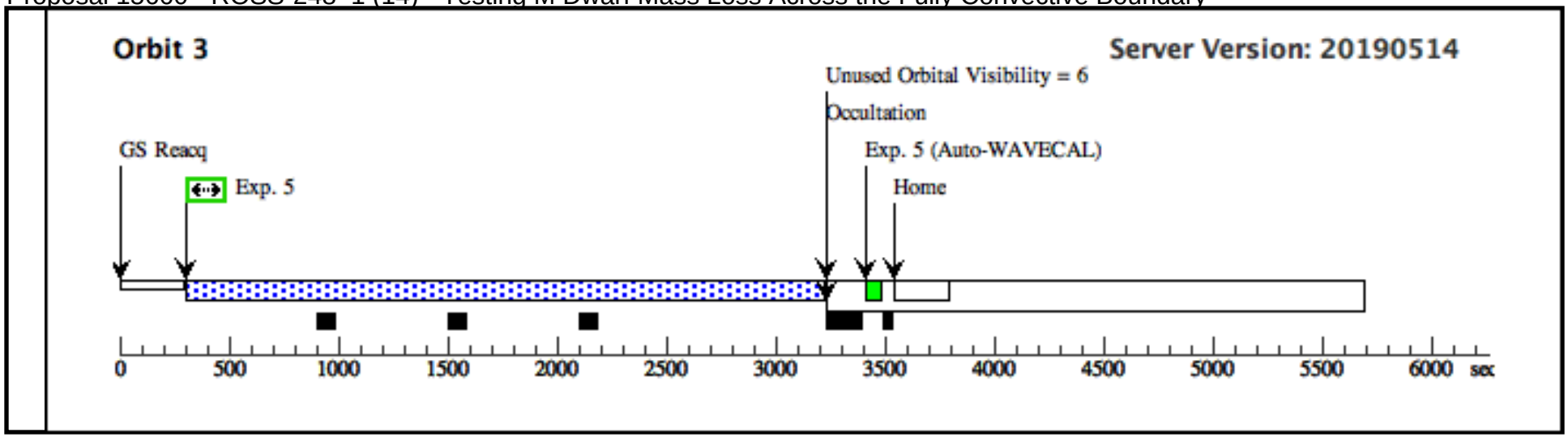
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302390)	(4) ROSS-248	STIS/CCD, ACQ, F25ND3	MIRROR				7 Secs (7 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1302393)	(4) ROSS-248	STIS/CCD, ACQ/PEAK, 0.2X0.09	MIRROR				0.1 Secs (0.1 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302396)	(4) ROSS-248	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1790 Secs (1790 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302398)	(4) ROSS-248	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1302398)	(4) ROSS-248	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 6
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, ROSS-248_2 (15), scheduling Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Diagnostics

(ROSS-248_2 (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

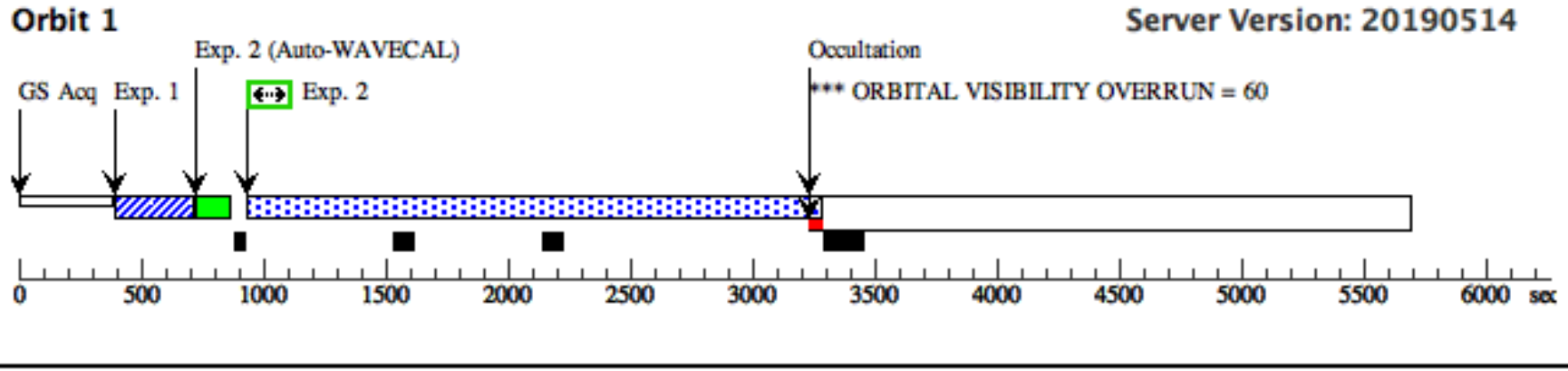
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	ROSS-248	RA: 23 41 55.0361 (355.4793171d)	Proper Motion RA: 112.692 mas/yr	V=12.28+/-0.1	Reference Frame: ICRS
	Alt Name1: HH-AND	Dec: +44 10 38.83 (44.17745d)	Proper Motion Dec: -1592.055 mas/yr	B = 14.19	
	Alt Name2: GJ-905	Equinox: J2000	Parallax: 0.3169558"		
			Epoch of Position: 2000.0		

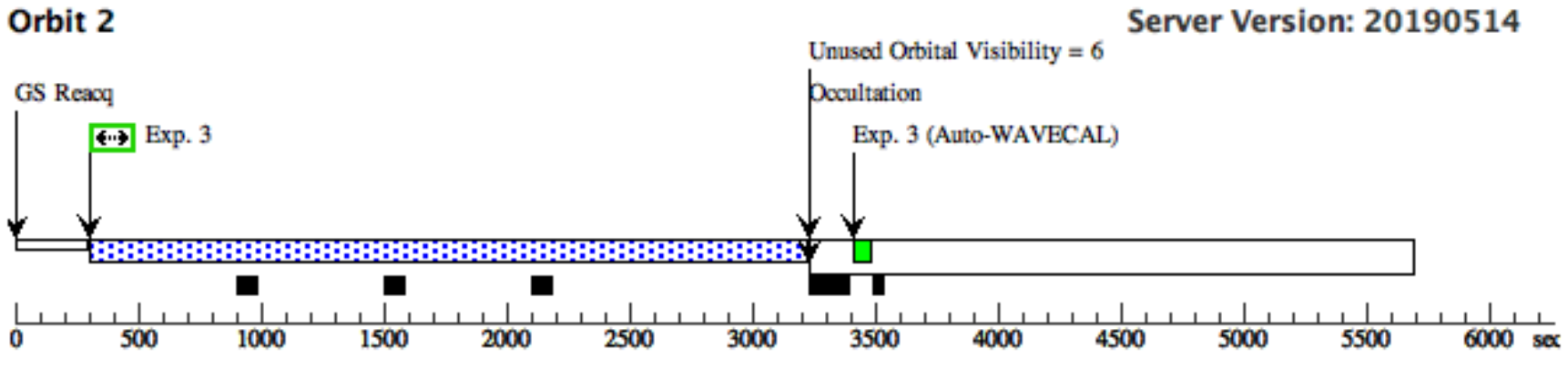
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

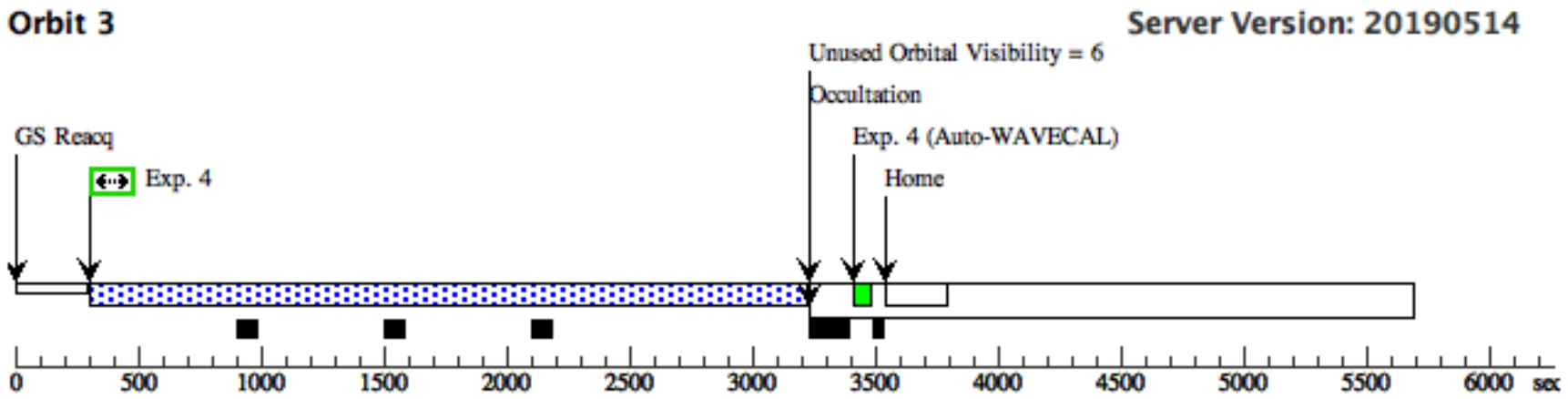
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302390)	(4) ROSS-248	STIS/CCD, ACQ, F25ND3	MIRROR				7 Secs (7 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302400)	(4) ROSS-248	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2330 Secs (2330 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302398)	(4) ROSS-248	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302398)	(4) ROSS-248	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2900 Secs (2900 Secs)	
								[==>]	***[3]***

Orbit Structure







Visit

Proposal 15660, EZ-Aqr_1 (16), scheduling Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 01-JAN-2019:00:00:00 AND 27-APR-2019:00:00:00; BETWEEN 26-JUN-2019:00:00:00 AND 31-DEC-2019:00:00:00

Diagnostics

(EZ-Aqr_1 (16)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

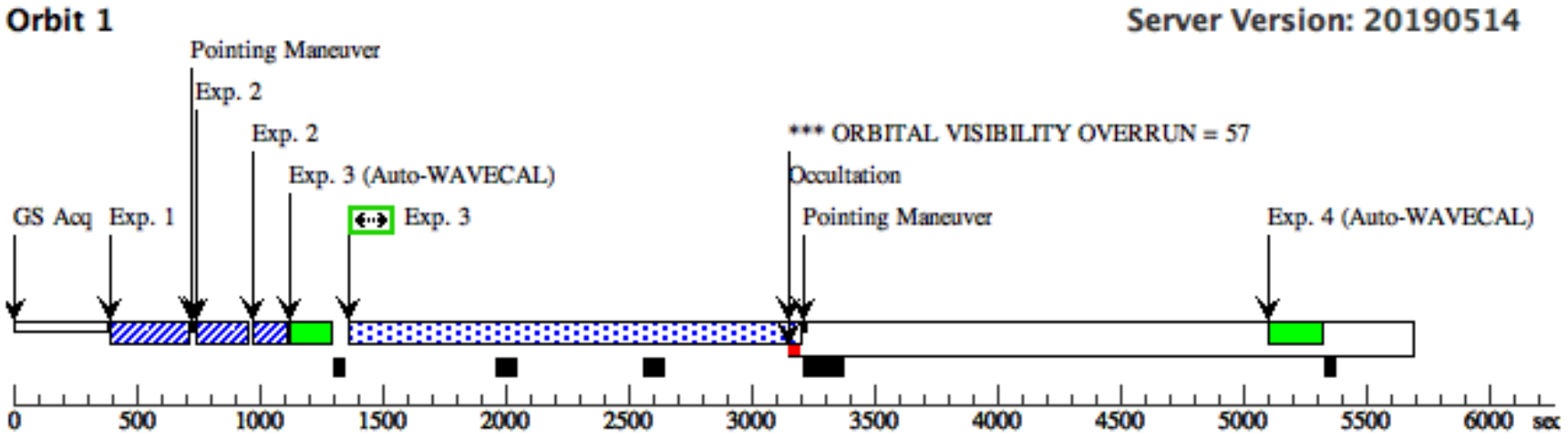
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-EZ-AQR	RA: 22 38 33.5760 (339.6399000d)	Proper Motion RA: 2314.8 mas/yr	V=12.361+/-0.1	Reference Frame: ICRS
	Alt Name1: GJ-866	Dec: -15 17 59.76 (-15.29993d)	Proper Motion Dec: 2295.3 mas/yr	U = 15.762	
		Equinox: J2000	Parallax: 0.2936"		
			Epoch of Position: 2000.0		

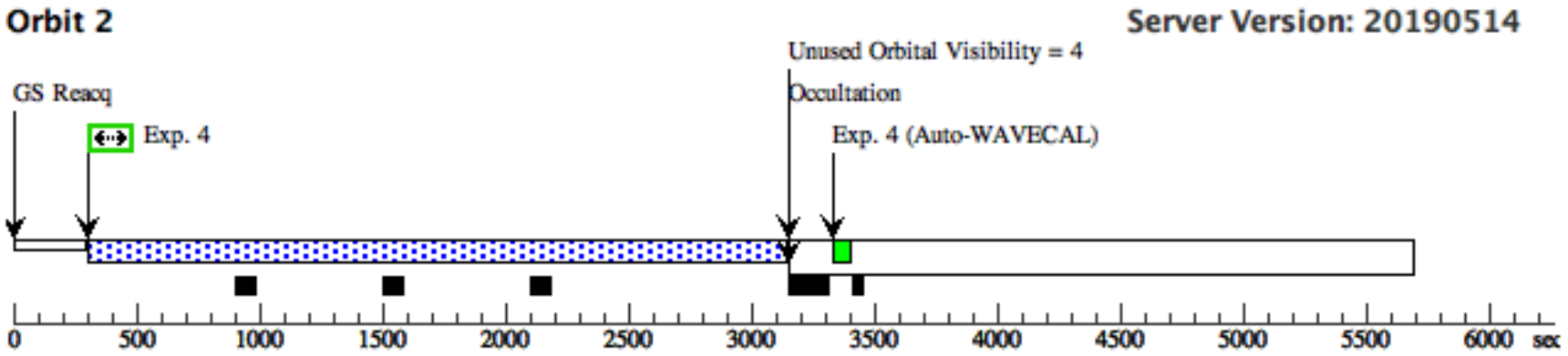
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
Extended=NO

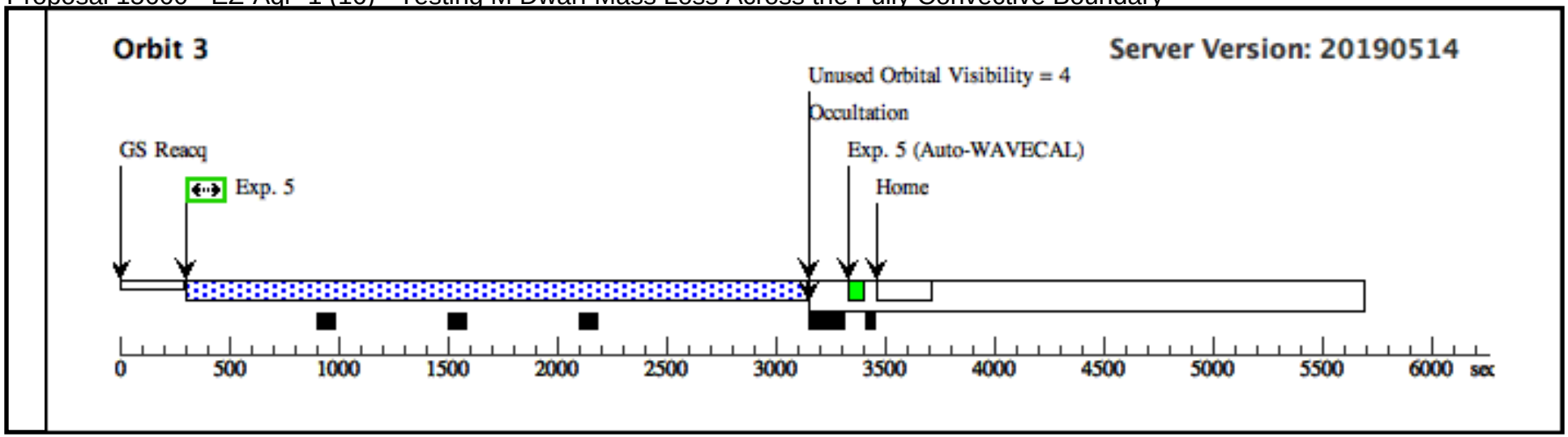
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(STIS.ta.1302402)	(2) V-EZ-AQR	STIS/CCD, ACQ, F25ND3	MIRROR				7 Secs (7 Secs)	
								[==>]	***[1]***
2	(STIS.ta.1302426)	(2) V-EZ-AQR	STIS/CCD, ACQ/PEAK, 0.2X0.09	MIRROR				0.1 Secs (0.1 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302440)	(2) V-EZ-AQR	STIS/NUV-MAMA, TIME-TAG, 0.2X0.09	E230H 2713 A	BUFFER-TIME=600			1820 Secs (1820 Secs)	
								[==>]	***[1]***
4	(STIS.sp.1302438)	(2) V-EZ-AQR	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2820 Secs (2820 Secs)	
								[==>]	***[2]***
5	(STIS.sp.1302438)	(2) V-EZ-AQR	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2820 Secs (2820 Secs)	
								[==>]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20190514
Unused Orbital Visibility = 4
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15660, EZ-Aqr_2 (17), scheduling Wed Sep 25 14:03:22 GMT 2019

Diagnostic Status: Warning

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: BETWEEN 01-JAN-2019:00:00:00 AND 27-APR-2019:00:00:00; BETWEEN 26-JUN-2019:00:00:00 AND 31-DEC-2019:00:00:00

Diagnostics

(EZ-Aqr_2 (17)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-EZ-AQR	RA: 22 38 33.5760 (339.6399000d)	Proper Motion RA: 2314.8 mas/yr	V=12.361+/-0.1	Reference Frame: ICRS
	Alt Name1: GJ-866	Dec: -15 17 59.76 (-15.29993d)	Proper Motion Dec: 2295.3 mas/yr	U = 15.762	
		Equinox: J2000	Parallax: 0.2936"		
			Epoch of Position: 2000.0		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=STAR
Description=[M V-IV]
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.1302402)	(2) V-EZ-AQR	STIS/CCD, ACQ, F25ND3	MIRROR				7 Secs (7 Secs)	
								[==>]	***[1]***
2	(STIS.sp.1302441)	(2) V-EZ-AQR	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2240 Secs (2240 Secs)	
								[==>]	***[1]***
3	(STIS.sp.1302438)	(2) V-EZ-AQR	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2820 Secs (2820 Secs)	
								[==>]	***[2]***
4	(STIS.sp.1302438)	(2) V-EZ-AQR	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	BUFFER-TIME=600			2820 Secs (2820 Secs)	
								[==>]	***[3]***

Orbit Structure