



## 16197 - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Cycle: 28, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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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	(9) 2MASS-J15345704-1418486	STIS/CCD STIS/FUV-MAMA	2	01-Dec-2021 13:00:19.0	yes
02	(9) 2MASS-J15345704-1418486	STIS/CCD STIS/NUV-MAMA	1	01-Dec-2021 13:00:20.0	yes
03	(8) LHS-2021 (11) OFFSET-LHS-2021	STIS/CCD STIS/FUV-MAMA	3	01-Dec-2021 13:00:21.0	yes
04	(8) LHS-2021 (11) OFFSET-LHS-2021	STIS/CCD STIS/NUV-MAMA	2	01-Dec-2021 13:00:22.0	yes
05	(10) LP-412-31	STIS/CCD STIS/FUV-MAMA	4	01-Dec-2021 13:00:24.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
06	(10) LP-412-31	STIS/CCD STIS/NUV-MAMA	3	01-Dec-2021 13:00:25.0	yes
07	(5) VB-10	STIS/CCD STIS/FUV-MAMA	2	01-Dec-2021 13:00:26.0	yes
08	(5) VB-10	STIS/CCD STIS/NUV-MAMA	2	01-Dec-2021 13:00:27.0	yes
58	(5) VB-10	STIS/CCD STIS/NUV-MAMA	2	01-Dec-2021 13:00:28.0	yes
09	(7) DENIS-J104814.6-395606	STIS/CCD STIS/FUV-MAMA	3	01-Dec-2021 13:00:30.0	yes
10	(7) DENIS-J104814.6-395606	STIS/CCD STIS/NUV-MAMA	2	01-Dec-2021 13:00:31.0	yes
11	(6) LP-666-9	STIS/CCD STIS/FUV-MAMA	5	01-Dec-2021 13:00:33.0	yes
12	(6) LP-666-9	STIS/CCD STIS/NUV-MAMA	4	01-Dec-2021 13:00:35.0	yes

35 Total Orbits Used

## **ABSTRACT**

The recent discovery of the seven planet TRAPPIST--1 system, including three habitable zone planets, has opened up a new avenue for studying temperate terrestrial planets, with potentially habitable atmospheres. This system and others like it around the lowest-mass stars will be prime targets for both planet searches and studies to directly characterize the atmospheres of Earth-sized exoplanets. Understanding these atmospheric observations and the potential prospect of such exoplanets to develop and sustain life critically depends on the high-energy stellar radiation environment from X-ray to ultraviolet wavelengths because of the ability of this emission to drive atmospheric mass-loss, and its strong influence on planetary photochemistry, including its ability to catalyze prebiotic chemical pathways. However, little is known about the X-ray to UV radiation field of stars at the end of the main sequence. We propose a survey of the joint X-ray and UV emission of a sample of M7-M9 dwarfs, to provide the basis for estimating the high-energy stellar radiation environment around these stars across a range of activity levels, and to use these spectral observations as inputs to planetary photochemistry models. Furthermore, these observations will probe the nature of chromospheric and coronal heating in the coolest

## **OBSERVING DESCRIPTION**

This program focuses on the joint FUV and NUV emissions of 6 target very-low mass stars with additional Chandra observations of two of these targets to complete the measurements of the sample's X-ray to NUV emissions. Our program will additionally have ground based support to capture their optical emission features to relate them to these new high-energy measurements. The observations will further form the inputs for modeling of photochemistry in the atmospheres of exoplanets around these very-low mass stars.

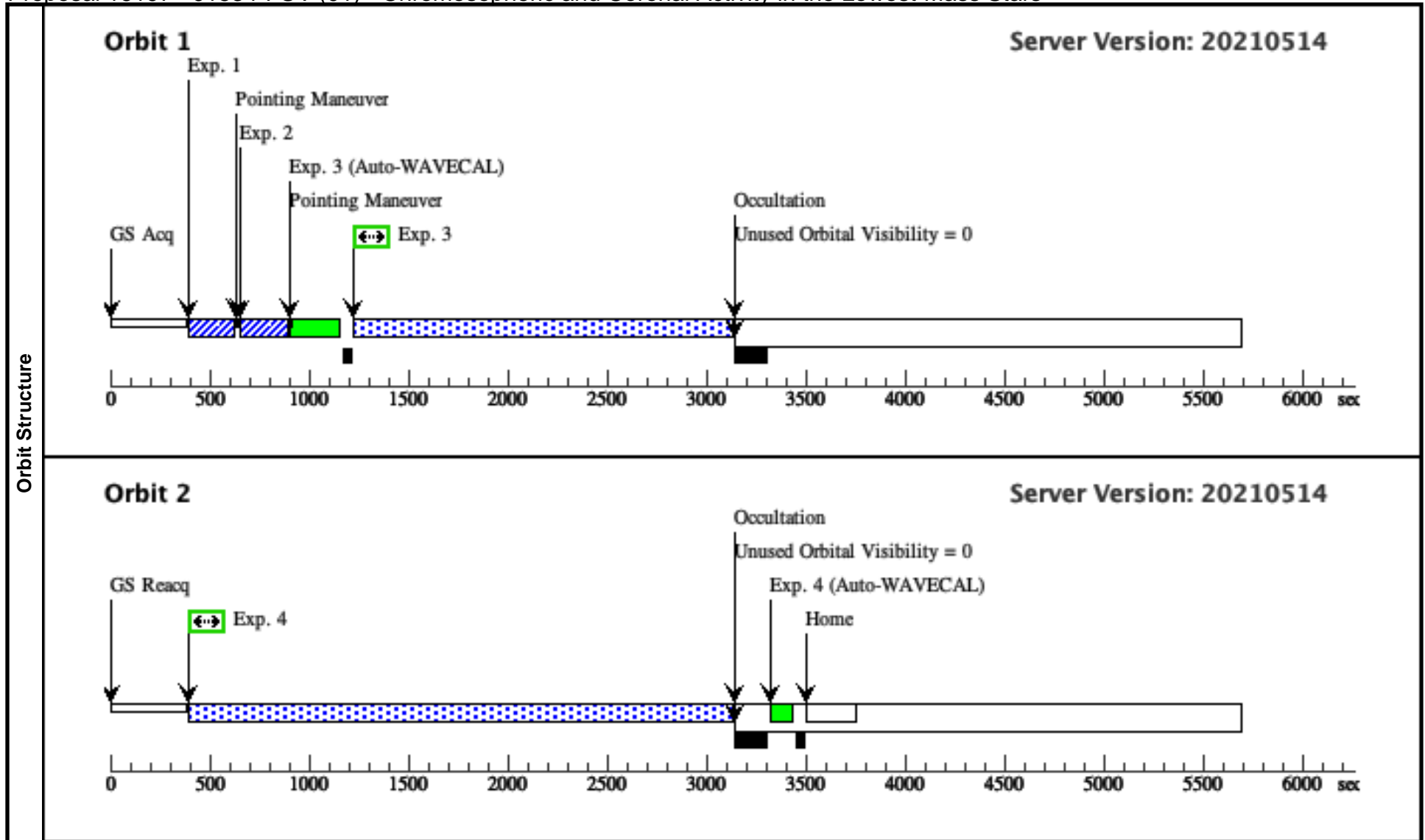
The NUV measurements with STIS G230L will capture the entire NUV spectrum, with particular emphasis on the Mg II emission features that will be the most prominent lines. In the FUV, we will use STIS G140M to target the Lyman alpha emission of each target, as the strongest FUV line. Measurements of additional features like Nv at 1239/1243 angstroms will also be possible if strong enough as an additional upper atmosphere diagnostic. The moderate resolution of the G140M grating enables for the clear reconstruction of the Lyman alpha profile to accounting for the attenuation of the ISM. Because of the importance of the Lyman alpha measurements, the FUV visits need to take place at points along the Earth's orbit that aligns the ISM attenuation with the radial velocity of the Earth's airglow. This coordination provides the necessary overlap in the observed Lyman alpha profiles to facilitate the accurate reconstruction of the intrinsic emission. Using TIME-TAG mode our program will further assess the variability of these targets in the NUV and FUV, including emission line variations in quiescence on short time scales, and the possibility of capturing high-energy flaring behavior.

Using the combined X-ray to NUV emissions of the very-low mass stars we will drive exoplanet atmospheric models to determine the possibility of sustaining prebiotic chemical pathways, and driving the abiotic production of biosignatures. We will then compare these exoplanets around the lowest-mass stellar hosts to similar objects around more massive M-dwarfs.

Proposal 16197 - J1534-FUV (01) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:35 GMT 2021

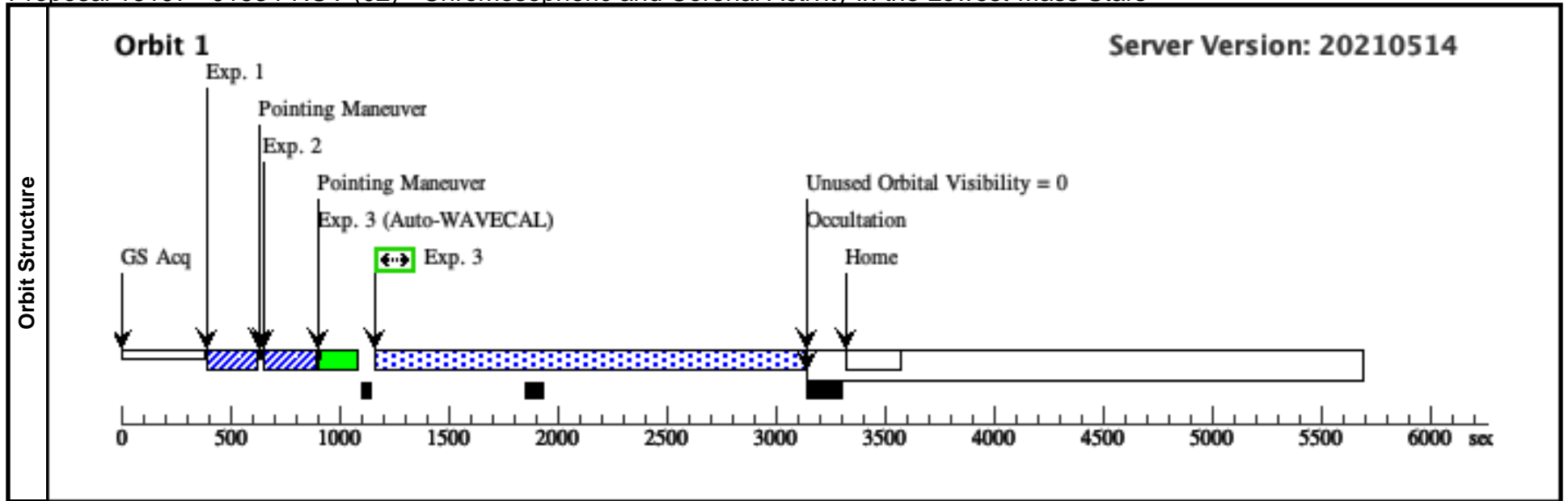
<b>Visit</b>	<b>Proposal 16197, J1534-FUV (01), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: BETWEEN 09-MAY-2020:00:00:00 AND 25-NOV-2020:00:00:00; BETWEEN 09-MAY-2021:00:00:00 AND 25-NOV-2021:00:00:00; BETWEEN 09-MAY-2022:00:00:00 AND 25-NOV-2022:00:00:00; BETWEEN 09-MAY-2023:00:00:00 AND 25-NOV-2023:00:00:00; GROUP 01,02 WITHIN 21D Comments: 2 Orbits of FUV. To ensure that the Lyman alpha airglow emission coincides spectrally with the ISM absorption trough, Hubble must not observe this target between Nov 25 and May 9 (any year).										
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
(9)		2MASS-J15345704-1418486	RA: 15 34 55.9525 (233.7331354d) Dec: -14 18 54.37 (-14.31510d) Equinox: J2000	Proper Motion RA: -0.06319881938134887 sec of time/yr Proper Motion Dec: -0.330204000078993 arcsec/yr Parallax: 0.0916785" Epoch of Position: 2015.5	V=18.14 J = 11.38, sloan i = 14.165, gaia dr2 G=15.77, gaia dr2 G_BP = 19.3267	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											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>	
	1	J1534-FUV_acq (STIS.ta.145 2190)	(9) 2MASS-J15345704-1418486	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]	
	Comments: TA at S/N ~ 100, uses V = 18.7; Phoenix M dwarf Models M8 2500. 5.; U = 19.19 flare in STIS.ta.1452209										
	2	J1534-FUV_acqP (STIS.ta.145 2194)	(9) 2MASS-J15345704-1418486	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				2 Secs (2 Secs) [==>]	[1]	
	Comments: 1 sec gives just over S/N of 40; Phoenix M dwarf Models M8 2500. 5., V=18.7; TA at S/N of 80; U=19.19 flare in STIS.ta.1452215										
3	(STIS.sp.14 52488)	(9) 2MASS-J15345704-1418486	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=18 90			1890 Secs (1890 Secs) [==>]	[1]		
Comments: Sci - User spectrum ETC; U=19.19 flare, LyA flux of 1.32E-13 erg/s/cm2 -- STIS.sp.1452521											
4	(STIS.sp.14 52499)	(9) 2MASS-J15345704-1418486	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 27			2727 Secs (2727 Secs) [==>]	[2]		
Comments: Sci - User spectrum ETC; U=19.19 flare, LyA flux of 1.32E-13 erg/s/cm2 -- STIS.sp.1452521											



Proposal 16197 - J1534-NUV (02) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:35 GMT 2021

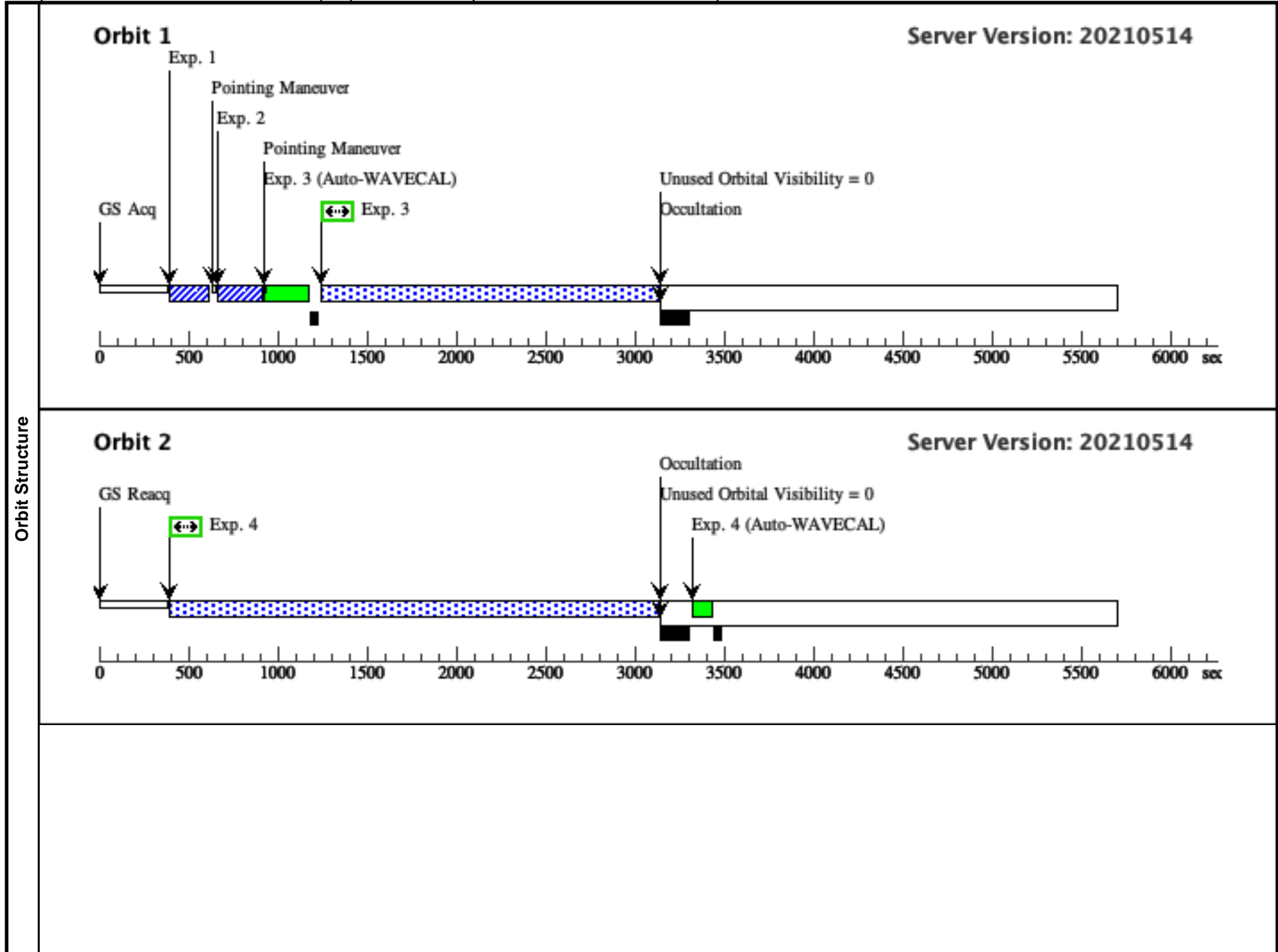
<b>Visit</b>	<b>Proposal 16197, J1534-NUV (02), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none) <i>Comments: 1 Orbit of NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.</i>										
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
(9)		2MASS-J15345704-1418486	RA: 15 34 55.9525 (233.7331354d) Dec: -14 18 54.37 (-14.31510d) Equinox: J2000	Proper Motion RA: -0.06319881938134887 sec of time/yr Proper Motion Dec: -0.330204000078993 arcsec/yr Parallax: 0.0916785" Epoch of Position: 2015.5	V=18.14 J = 11.38, sloan i = 14.165, gaia dr2 G=15.77, gaia dr2 G_BP = 19.3267	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[M V-IV] Extended=NO											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>	
	1	J1534-NUV_acq (STIS.ta.145 2190)	(9) 2MASS-J15345704-1418486	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs)		
										[==>]	[1]
	<i>Comments: TA at S/N ~ 100, uses V = 18.7; Phoenix M dwarf Models M8 2500. 5.; U = 19.19 flare in STIS.ta.1452209</i>										
2	J1534-NUV_acqP (STIS.ta.145 2194)	(9) 2MASS-J15345704-1418486	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR					2 Secs (2 Secs)		
									[==>]	[1]	
<i>Comments: 1 sec gives just over S/N of 40; Phoenix M dwarf Models M8 2500. 5., V=18.7; TA at S/N of 80; U=19.19 flare in STIS.ta.1452215</i>											
3	(STIS.sp.14 52530)	(9) 2MASS-J15345704-1418486	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=69 0			1955 Secs (1955 Secs)		
									[==>]	[1]	
<i>Comments: Sci - User Spectrum ETC; U = 19.19 flare -- STIS.sp.1452536</i>											

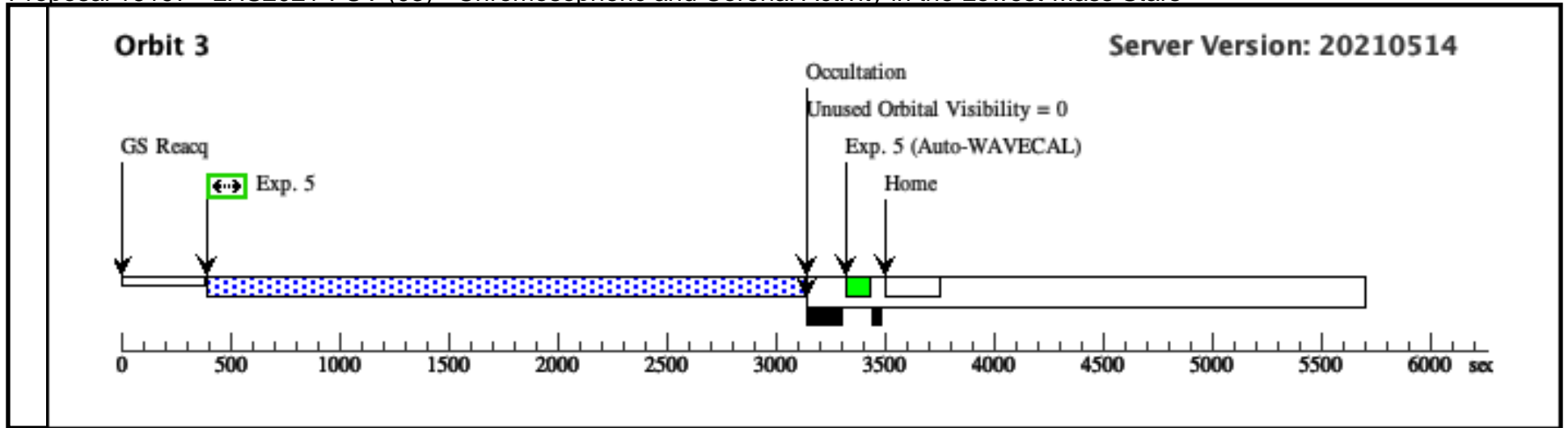


Proposal 16197 - LHS2021-FUV (03) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:35 GMT 2021

Visit	Proposal 16197, LHS2021-FUV (03), scheduling									
	Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: BETWEEN 10-JUL-2020:00:00:00 AND 18-FEB-2021:00:00:00; BETWEEN 10-JUL-2021:00:00:00 AND 18-FEB-2022:00:00:00; BETWEEN 10-JUL-2022:00:00:00 AND 18-FEB-2023:00:00:00; GROUP 03,04 WITHIN 21D Comments: 3 Orbits of FUV. To ensure that the Lyman alpha airglow emission coincides spectrally with the ISM absorption trough, Hubble must not observe this target between Feb 18 and July 10 (any year).									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	LHS-2021	RA: 08 30 32.0569 (127.6335704d) Dec: +09 47 8.32 (9.78564d) Equinox: J2000	Proper Motion RA: -0.033120621434495505 sec of time/yr Proper Motion Dec: -0.4588729999113639 arcsec/yr Parallax: 0.0598986" Epoch of Position: 2015.5	V=19.063	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										
(11)	OFFSET-LHS-2021	RA: 08 30 31.6661 (127.6319421d) Dec: +09 47 7.15 (9.78532d) Equinox: J2000	Proper Motion RA: 8.297340903295485 mas/yr Proper Motion Dec: 22.555511539498838 mas/yr Parallax: 0.0061775497022455506" Epoch of Position: 2015.5	V=14.88 G = 14.2	Reference Frame: ICRS					
Comments: Gaia DR2 source: 599891555546067200 ; Bp - Rp = 1.8 , V-mag is from APASS Henden '16; Teff~4000 Category=STAR Description=[K 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	LHS2021-F (11) OFFSET-LHS-2 UV_acq_OF 021 FSET (STIS.ta.147 1786)	STIS/CCD, ACQ, F28X50LP	MIRROR					0.4 Secs (0.4 Secs) [==>]	[1]
Comments: OFFSET star is V=14.88 Kurucz Model K7V - STIS.ta.1471786 -> S/N ~ 70 [V=19.063, Phoenix M dwarf Models M7.5 2600. 5., S/N = 70; U=19.73 flare in STIS.ta.1452237 old info for sci target]										
2	LHS2021-F (8) LHS-2021 UV_acqP (STIS.ta.145 2258)	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR					2.5 Secs (2.5 Secs) [==>]	[1]	
Comments: S/N = 56, Phoenix M dwarf Models M7.5 2600. 5., V= 19.063, U=19.73 flare STIS.ta.1452260										
3	(STIS.sp.14 52550)	(8) LHS-2021	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=18 80			1870 Secs (1870 Secs) [==>]	[1]	
Comments: Sci - User Spectrum ETC; U = 19.73 flare LyA - 8.33E-14 erg/s/cm2 -- STIS.sp.1452558										
4	(STIS.sp.14 52550)	(8) LHS-2021	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 23			2723 Secs (2723 Secs) [==>]	[2]	
Comments: Sci - User Spectrum ETC; U = 19.73 flare LyA - 8.33E-14 erg/s/cm2 -- STIS.sp.1452558										
5	(STIS.sp.14 52550)	(8) LHS-2021	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 23			2723 Secs (2723 Secs) [==>]	[3]	
Comments: Sci - User Spectrum ETC; U = 19.73 flare LyA - 8.33E-14 erg/s/cm2 -- STIS.sp.1452558										

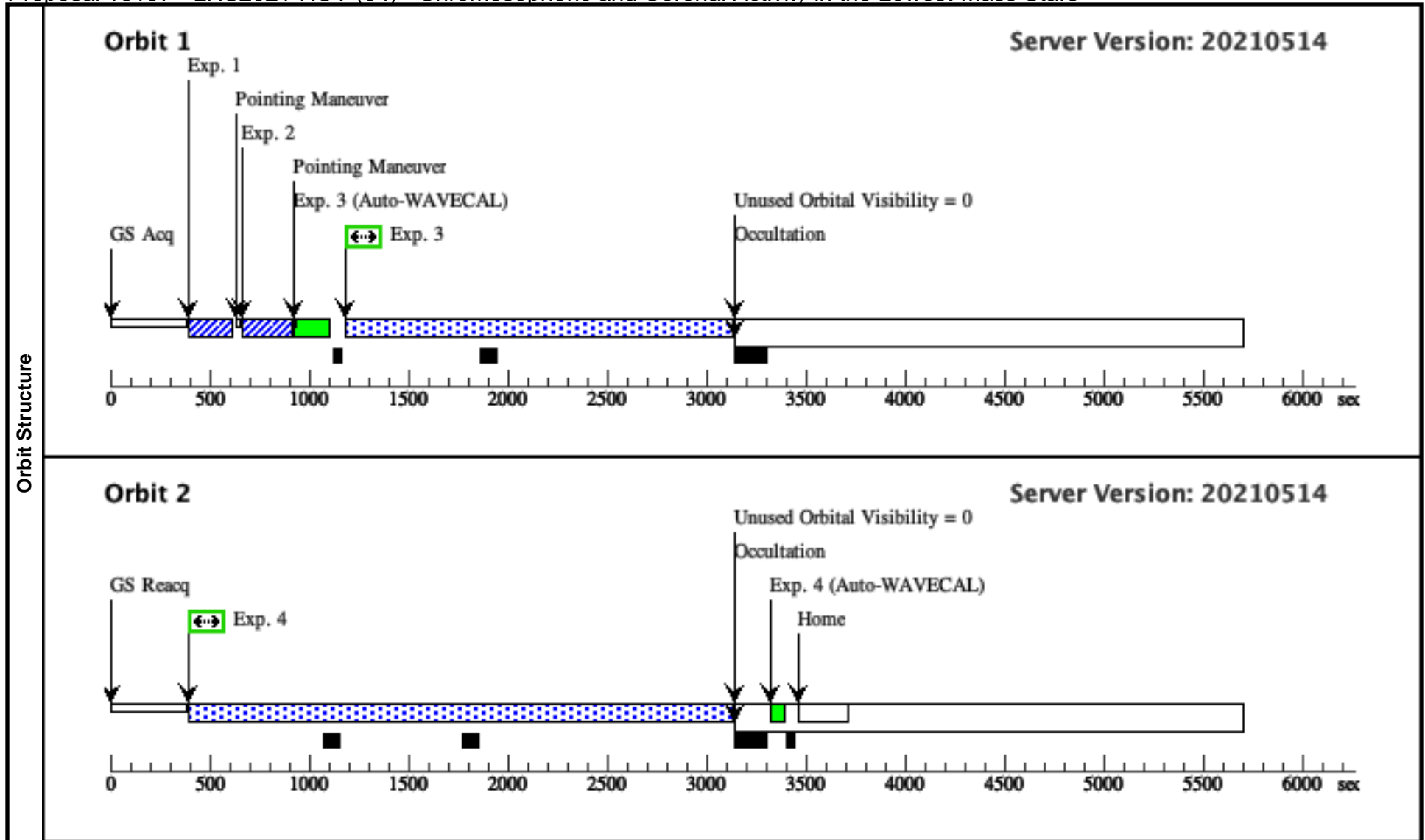




Proposal 16197 - LHS2021-NUV (04) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

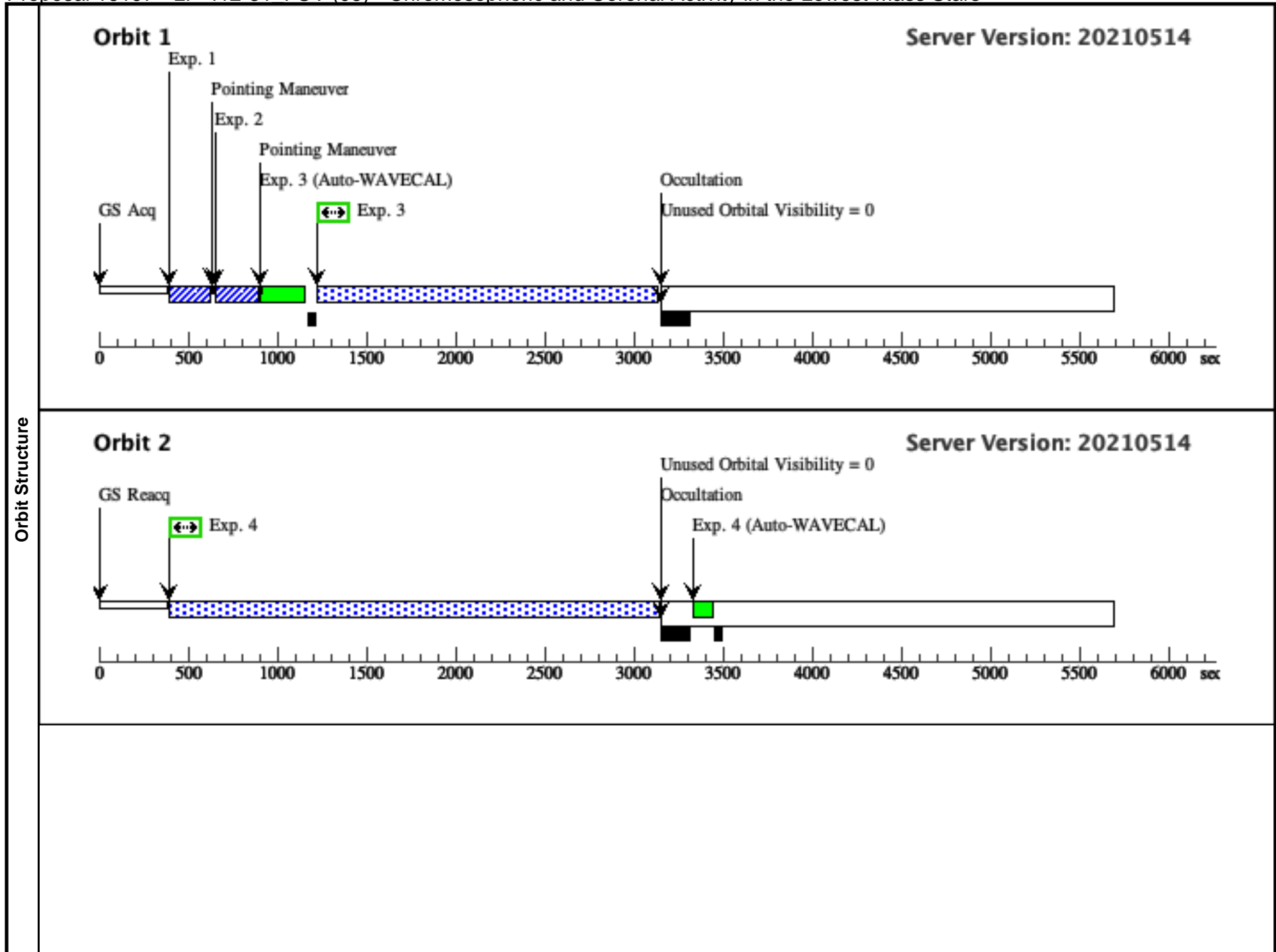
Visit	<b>Proposal 16197, LHS2021-NUV (04), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none) <i>Comments: 2 Orbits of NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.</i>										
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
Fixed Targets	(8)	LHS-2021	RA: 08 30 32.0569 (127.6335704d) Dec: +09 47 8.32 (9.78564d) Equinox: J2000	Proper Motion RA: -0.033120621434495505 sec of time/yr Proper Motion Dec: -0.4588729999113639 arcsec/yr Parallax: 0.0598986" Epoch of Position: 2015.5	V=19.063	Reference Frame: ICRS					
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[M V-IV] Extended=NO										
Fixed Targets	(11)	OFFSET-LHS-2021	RA: 08 30 31.6661 (127.6319421d) Dec: +09 47 7.15 (9.78532d) Equinox: J2000	Proper Motion RA: 8.297340903295485 mas/yr Proper Motion Dec: 22.555511539498838 mas/yr Parallax: 0.0061775497022455506" Epoch of Position: 2015.5	V=14.88 G = 14.2	Reference Frame: ICRS					
	<i>Comments: Gaia DR2 source: 599891555546067200 ; Bp - Rp = 1.8 , V-mag is from APASS Henden '16; Teff~4000</i> Category=STAR Description=[K 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	LHS2021-N UV_acq_OF FSET (STIS.ta.147 1786)	(11) OFFSET-LHS-2	STIS/CCD, ACQ, F28X50LP	MIRROR				0.4 Secs (0.4 Secs) [==>]	[1]	
	<i>Comments: OFFSET star is V=14.88 Kurucz Model K7V - STIS.ta.1471786 -&gt; S/N ~ 70</i> [V=19.063, Phoenix M dwarf Models M7.5 2600. 5., S/N = 70; U=19.73 flare in STIS.ta.1452237 old info for science target]										
	2	LHS2021-N UV_acqP (STIS.ta.145 2258)	(8) LHS-2021	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				2.5 Secs (2.5 Secs) [==>]	[1]	
	<i>Comments: S/N = 56, Phoenix M dwarf Models M7.5 2600. 5., V= 19.063, U=19.73 flare STIS.ta.1452260</i>										
3	(STIS.sp.14 52571)	(8) LHS-2021	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=69 0			1935 Secs (1935 Secs) [==>]	[1]	
<i>Comments: Sci - User Spectrum ETC; U=19.73 flare -- STIS.sp.1452579</i>											
4	(STIS.sp.14 52571)	(8) LHS-2021	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A		BUFFER-TIME=69 0			2725 Secs (2725 Secs) [==>]	[2]	
<i>Comments: Sci - User Spectrum ETC; U=19.73 flare -- STIS.sp.1452579</i>											

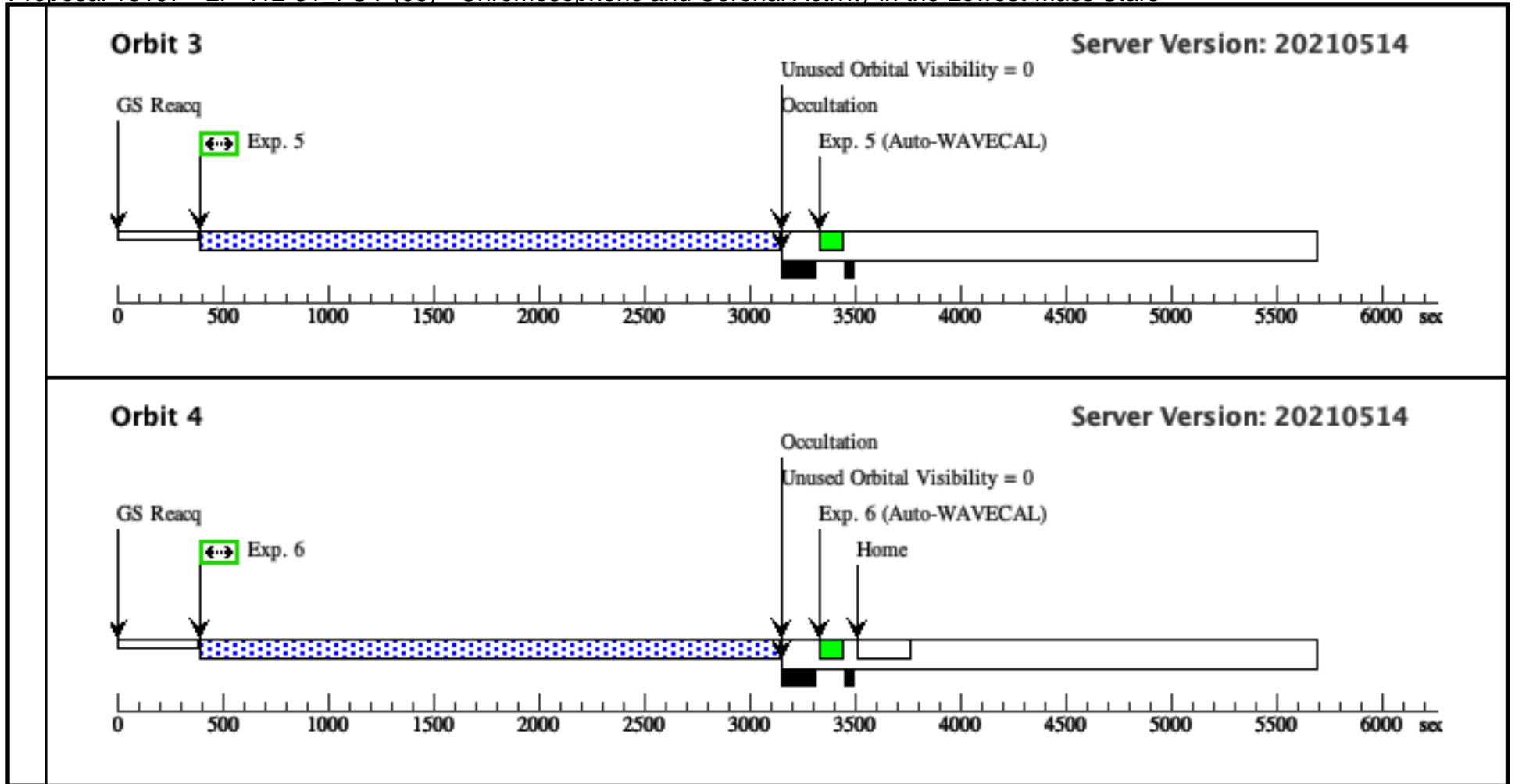


Proposal 16197 - LP-412-31 FUV (05) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

<b>Visit</b>	<b>Proposal 16197, LP-412-31_FUV (05), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: BETWEEN 16-APR-2020:00:00:00 AND 13-DEC-2020:00:00:00; BETWEEN 16-APR-2021:00:00:00 AND 13-DEC-2021:00:00:00; BETWEEN 16-APR-2022:00:00:00 AND 13-DEC-2022:00:00:00; BETWEEN 16-APR-2023:00:00:00 AND 13-DEC-2023:00:00:00; GROUP 05,06 WITHIN 21D Comments: 4 Orbits of LP412-31 in FUV. To ensure that the Lyman alpha airglow emission coincides spectrally with the ISM absorption trough, Hubble must not observe this target between Dec 13 and April 16 (any year).																																																																																																																																											
	<b>Fixed Targets</b>	<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>(10)</td> <td>LP-412-31</td> <td>RA: 03 21 0.0963 (50.2504013d) Dec: +18 54 18.79 (18.90522d) Equinox: J2000</td> <td>Proper Motion RA: 0.02487245679087445 sec of time/yr Proper Motion Dec: -0.25715700007822306 arcsec/yr Parallax: 0.0682785" Epoch of Position: 2015.5</td> <td>V=18.881</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=STAR Description=[M V-IV] Extended=NO										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(10)	LP-412-31	RA: 03 21 0.0963 (50.2504013d) Dec: +18 54 18.79 (18.90522d) Equinox: J2000	Proper Motion RA: 0.02487245679087445 sec of time/yr Proper Motion Dec: -0.25715700007822306 arcsec/yr Parallax: 0.0682785" Epoch of Position: 2015.5	V=18.881	Reference Frame: ICRS																																																																																																																					
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<b>Exposures</b>	<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>LP-412-31_ FUV_acq (1452274)</td> <td>(10) LP-412-31</td> <td>STIS/CCD, ACQ, F28X50LP</td> <td>MIRROR</td> <td></td> <td></td> <td></td> <td>1 Secs (1 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">Comments: V=18.881; Phoenix M dwarf Models M7.5 2600. 5., S/N=78; U =19.58 flare STIS.ta.1452276</td> </tr> <tr> <td>2</td> <td>LP-412-31_ FUV_acqP (STIS.ta.1452279)</td> <td>(10) LP-412-31</td> <td>STIS/CCD, ACQ/PEAK, 52X0.1</td> <td>MIRROR</td> <td></td> <td></td> <td></td> <td>2 Secs (2 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">Comments: Phoenix M dwarf Models M7.5 2600. 5., V=18.881, S/N = 53; U=19.58 flare STIS.ta.1452280</td> </tr> <tr> <td>3</td> <td>(STIS.sp.14 52598)</td> <td>(10) LP-412-31</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.2</td> <td>G140M 1222 A</td> <td>BUFFER-TIME=18 97</td> <td></td> <td></td> <td>1897 Secs (1897 Secs) [==&gt;]</td> <td>[1]</td> </tr> <tr> <td colspan="10">Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609</td> </tr> <tr> <td>4</td> <td>(STIS.sp.14 52598)</td> <td>(10) LP-412-31</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.2</td> <td>G140M 1222 A</td> <td>BUFFER-TIME=27 34</td> <td></td> <td></td> <td>2734 Secs (2734 Secs) [==&gt;]</td> <td>[2]</td> </tr> <tr> <td colspan="10">Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609</td> </tr> <tr> <td>5</td> <td>(STIS.sp.14 52598)</td> <td>(10) LP-412-31</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.2</td> <td>G140M 1222 A</td> <td>BUFFER-TIME=27 34</td> <td></td> <td></td> <td>2734 Secs (2734 Secs) [==&gt;]</td> <td>[3]</td> </tr> <tr> <td colspan="10">Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609</td> </tr> <tr> <td>6</td> <td>(STIS.sp.14 52598)</td> <td>(10) LP-412-31</td> <td>STIS/FUV-MAMA, TIME-TAG, 52X0.2</td> <td>G140M 1222 A</td> <td>BUFFER-TIME=27 34</td> <td></td> <td></td> <td>2734 Secs (2734 Secs) [==&gt;]</td> <td>[4]</td> </tr> <tr> <td colspan="10">Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609</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	LP-412-31_ FUV_acq (1452274)	(10) LP-412-31	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]	Comments: V=18.881; Phoenix M dwarf Models M7.5 2600. 5., S/N=78; U =19.58 flare STIS.ta.1452276										2	LP-412-31_ FUV_acqP (STIS.ta.1452279)	(10) LP-412-31	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				2 Secs (2 Secs) [==>]	[1]	Comments: Phoenix M dwarf Models M7.5 2600. 5., V=18.881, S/N = 53; U=19.58 flare STIS.ta.1452280										3	(STIS.sp.14 52598)	(10) LP-412-31	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=18 97			1897 Secs (1897 Secs) [==>]	[1]	Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609										4	(STIS.sp.14 52598)	(10) LP-412-31	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 34			2734 Secs (2734 Secs) [==>]	[2]	Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609										5	(STIS.sp.14 52598)	(10) LP-412-31	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 34			2734 Secs (2734 Secs) [==>]	[3]	Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609										6	(STIS.sp.14 52598)	(10) LP-412-31	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 34			2734 Secs (2734 Secs) [==>]	[4]	Comments: Sci - User Spectrum ETC; U = 19.58 flare LyA - 9.47E-14 erg/s/cm2; STIS.sp.1452609									
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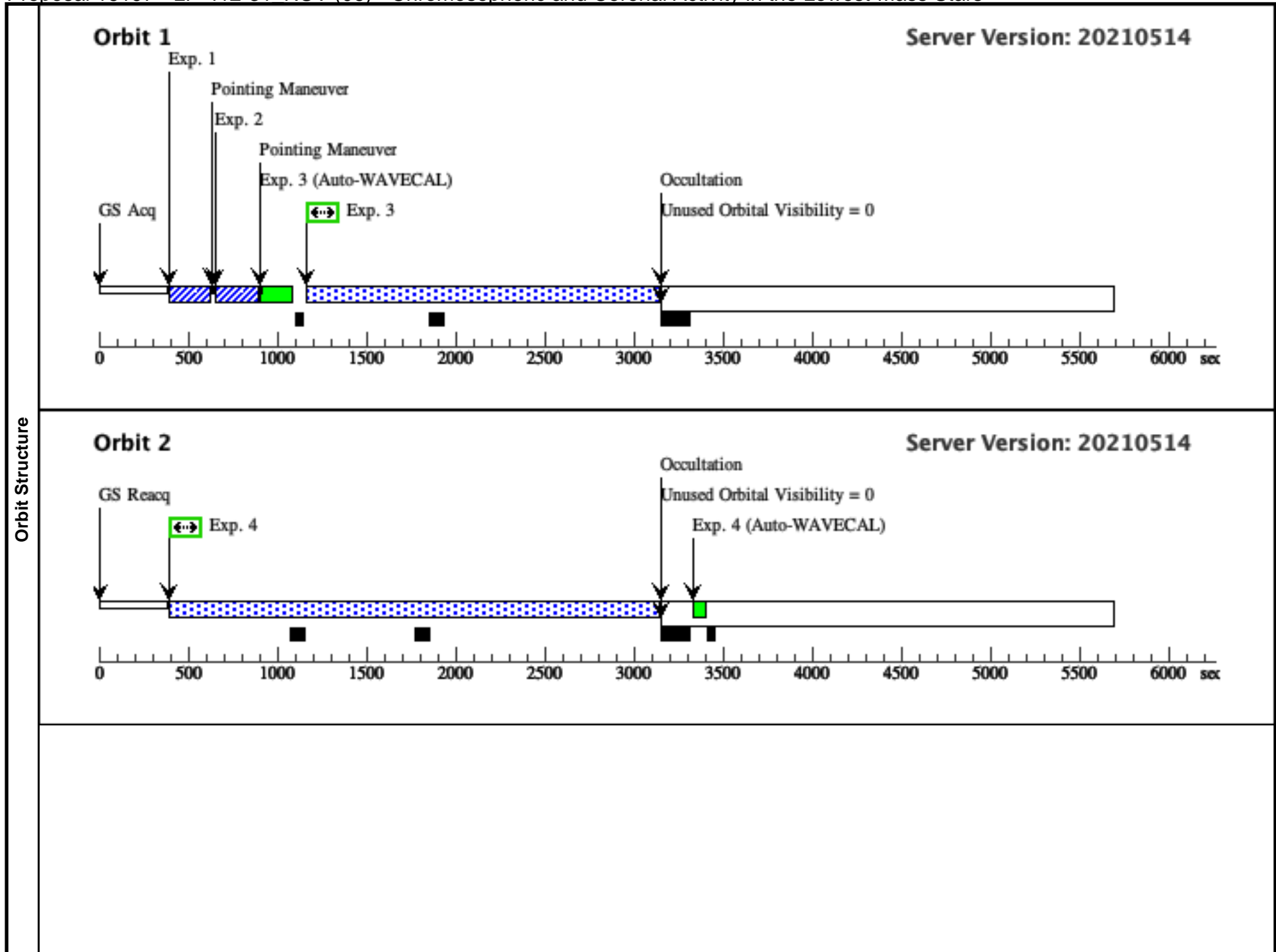


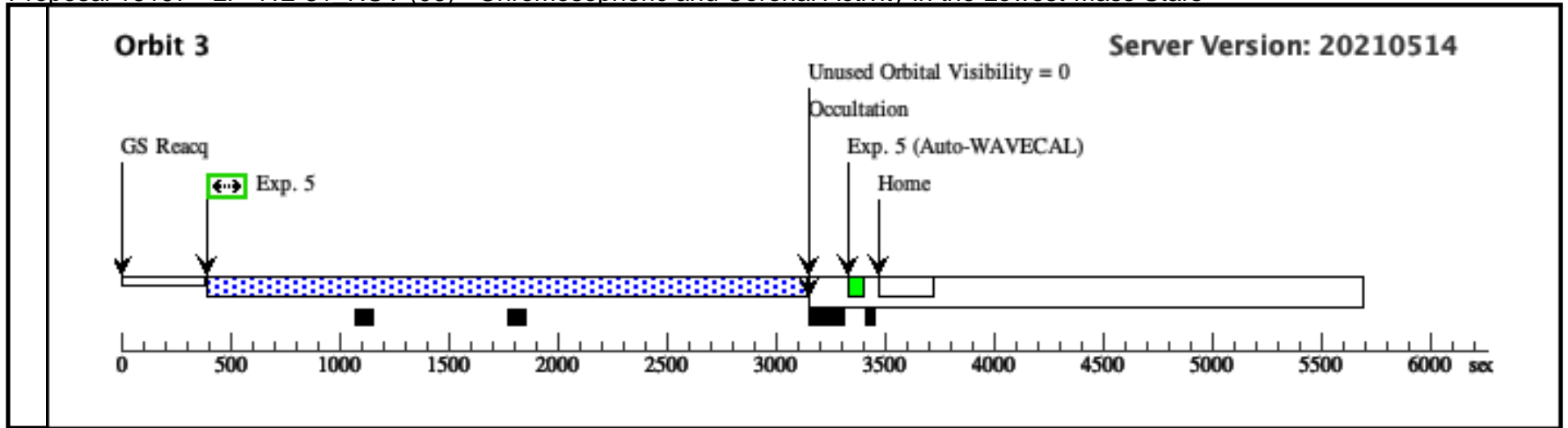


Proposal 16197 - LP-412-31 NUV (06) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

Visit	<b>Proposal 16197, LP-412-31_NUV (06), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none) <i>Comments: 3 Orbits of LP412-31 in NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.</i>																																																																																																																							
	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>(10)</td> <td>LP-412-31</td> <td>RA: 03 21 0.0963 (50.2504013d) Dec: +18 54 18.79 (18.90522d) Equinox: J2000</td> <td>Proper Motion RA: 0.02487245679087445 sec of time/yr Proper Motion Dec: -0.25715700007822306 arcsec/yr Parallax: 0.0682785" Epoch of Position: 2015.5</td> <td>V=18.881</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=[M V-IV]                      Extended=NO</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(10)	LP-412-31	RA: 03 21 0.0963 (50.2504013d) Dec: +18 54 18.79 (18.90522d) Equinox: J2000	Proper Motion RA: 0.02487245679087445 sec of time/yr Proper Motion Dec: -0.25715700007822306 arcsec/yr Parallax: 0.0682785" Epoch of Position: 2015.5	V=18.881	Reference Frame: ICRS																																																																																																	
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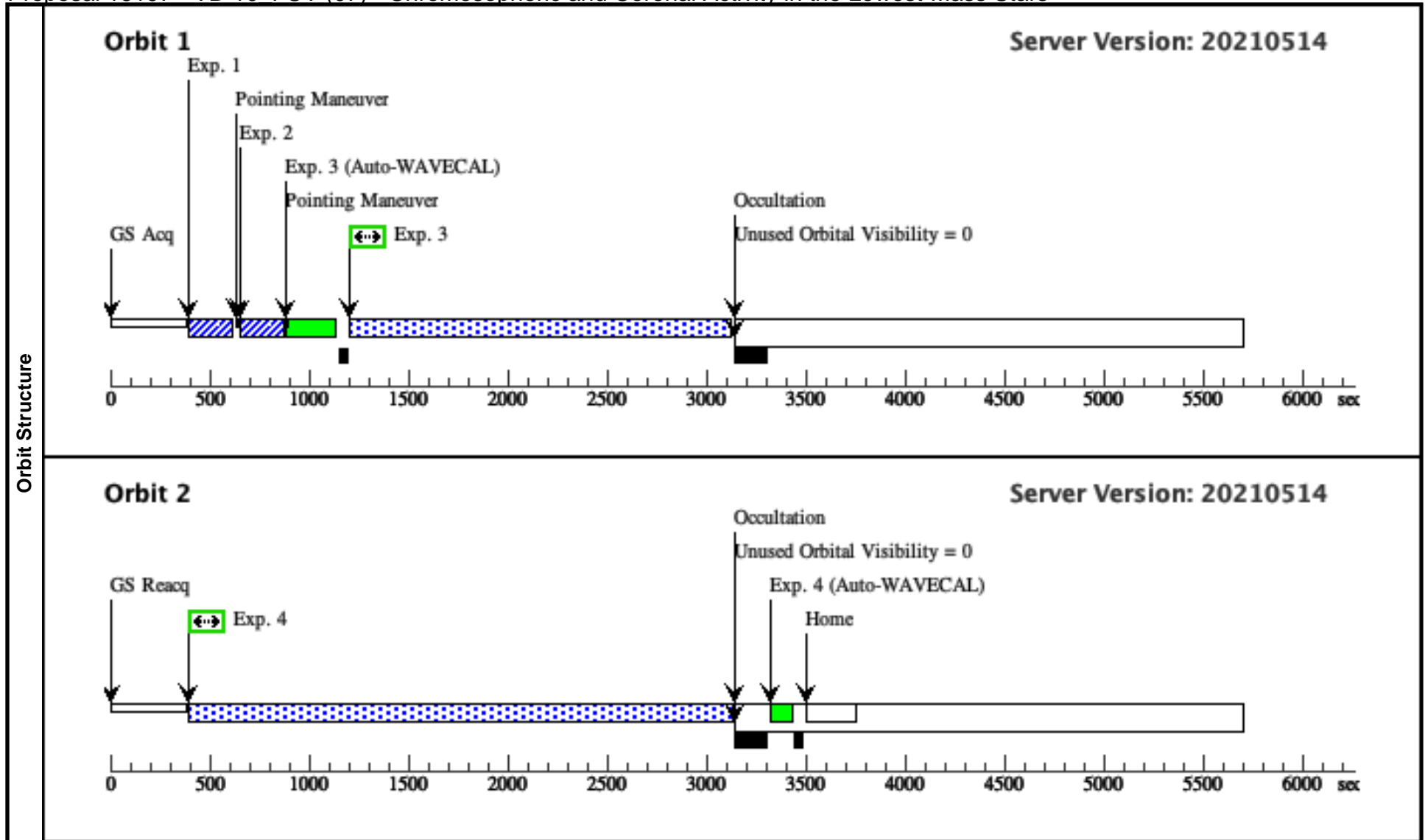




Proposal 16197 - VB-10 FUV (07) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

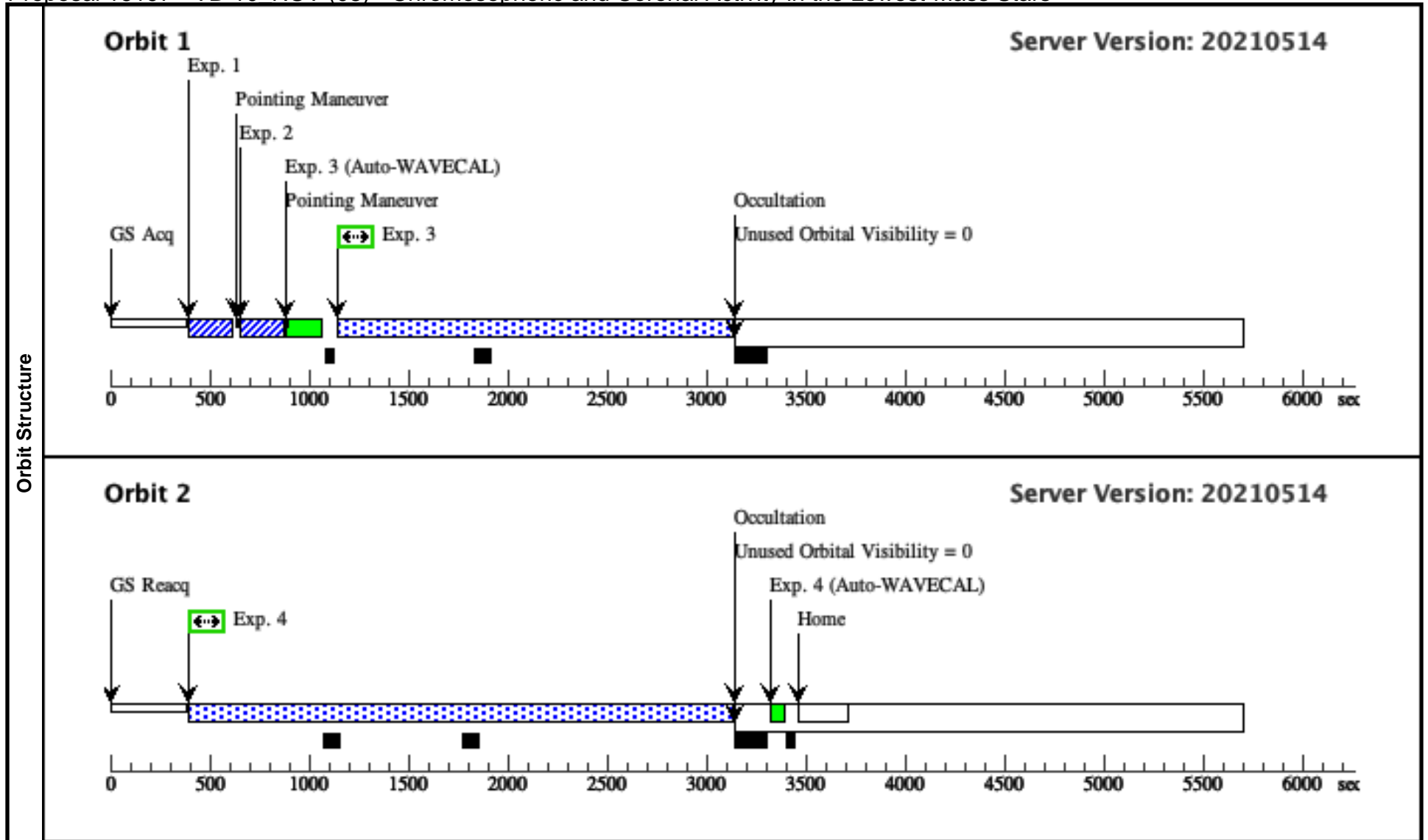
<b>Visit</b>	<b>Proposal 16197, VB-10_FUV (07), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: BETWEEN 21-JUN-2020:00:00:00 AND 04-FEB-2021:00:00:00; BETWEEN 21-JUN-2021:00:00:00 AND 04-FEB-2022:00:00:00; BETWEEN 21-JUN-2022:00:00:00 AND 04-FEB-2023:00:00:00; GROUP 07,08 WITHIN 21D <i>Comments: 2 Orbits of FUV. To ensure that the Lyman alpha airglow emission coincides spectrally with the ISM absorption trough, Hubble must not observe this target between Feb 4 and June 21 (any year).</i>										
	<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
(5)		VB-10	RA: 19 16 56.9898 (289.2374575d) Dec: +05 08 40.43 (5.14456d) Equinox: J2000	Proper Motion RA: -0.04003976188370212 sec of time/yr Proper Motion Dec: -1.3652730000103475 arcsec/yr Parallax: 0.1689620" Epoch of Position: 2015.5	V=17.3	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[M V-IV] Extended=NO											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>	
	1	VB-10_FU V_acq (STIS.ta.145 2285)	(5) VB-10	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs) [==>]	[1]	
	<i>Comments: V=17.3, Phoenix M dwarf Models M8 2500. 5, S/N = 86; U=18 flare STIS.ta.1452288</i>										
	2	VB-10_FU V_acqP (STIS.ta.145 2296)	(5) VB-10	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				0.6 Secs (0.6 Secs) [==>]	[1]	
	<i>Comments: Phoenix M dwarf Models M8 2500. 5., V=17.3, S/N =86; U=18 flare STIS.ta.1452299</i>										
3	(STIS.sp.14 52643)	(5) VB-10	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=19 07			1907 Secs (1907 Secs) [==>]	[1]		
<i>Comments: Sci - User Spectrum ETC; U=18 flare LyA - 3.62E-13 erg/s/cm2 -- STIS.sp.1452649</i>											
4	(STIS.sp.14 52643)	(5) VB-10	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 23			2723 Secs (2723 Secs) [==>]	[2]		
<i>Comments: Sci - User Spectrum ETC; U=18 flare LyA - 3.62E-13 erg/s/cm2 -- STIS.sp.1452649</i>											



Proposal 16197 - VB-10 NUV (08) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

<b>Visit</b>	<b>Proposal 16197, VB-10_NUV (08), failed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none) <i>Comments: 2 Orbits of NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.</i>										
	<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
(5)		VB-10	RA: 19 16 56.9898 (289.2374575d) Dec: +05 08 40.43 (5.14456d) Equinox: J2000	Proper Motion RA: -0.04003976188370212 sec of time/yr Proper Motion Dec: -1.3652730000103475 arcsec/yr Parallax: 0.1689620" Epoch of Position: 2015.5	V=17.3	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[M V-IV] Extended=NO											
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	VB-10_NU V_acq (STIS.ta.145 2285)	(5) VB-10	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs) [==>]	[1]	
	<i>Comments: V=17.3, Phoenix M dwarf Models M8 2500. 5, S/N = 86; U=18 flare STIS.ta.1452288</i>										
	2	VB-10_NU V_acqP (STIS.ta.145 2296)	(5) VB-10	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				0.6 Secs (0.6 Secs) [==>]	[1]	
	<i>Comments: Phoenix M dwarf Models M8 2500. 5., V=17.3, S/N =86; U=18 flare STIS.ta.1452299</i>										
3	(STIS.sp.14 52654)	(5) VB-10	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0				1972 Secs (1972 Secs) [==>]	[1]	
<i>Comments: Sci - User Spectrum ETC; U=18 flare -- STIS.sp.1452658</i>											
4	(STIS.sp.14 52654)	(5) VB-10	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0				2725 Secs (2725 Secs) [==>]	[2]	
<i>Comments: Sci - User Spectrum ETC; U=18 flare -- STIS.sp.1452658</i>											

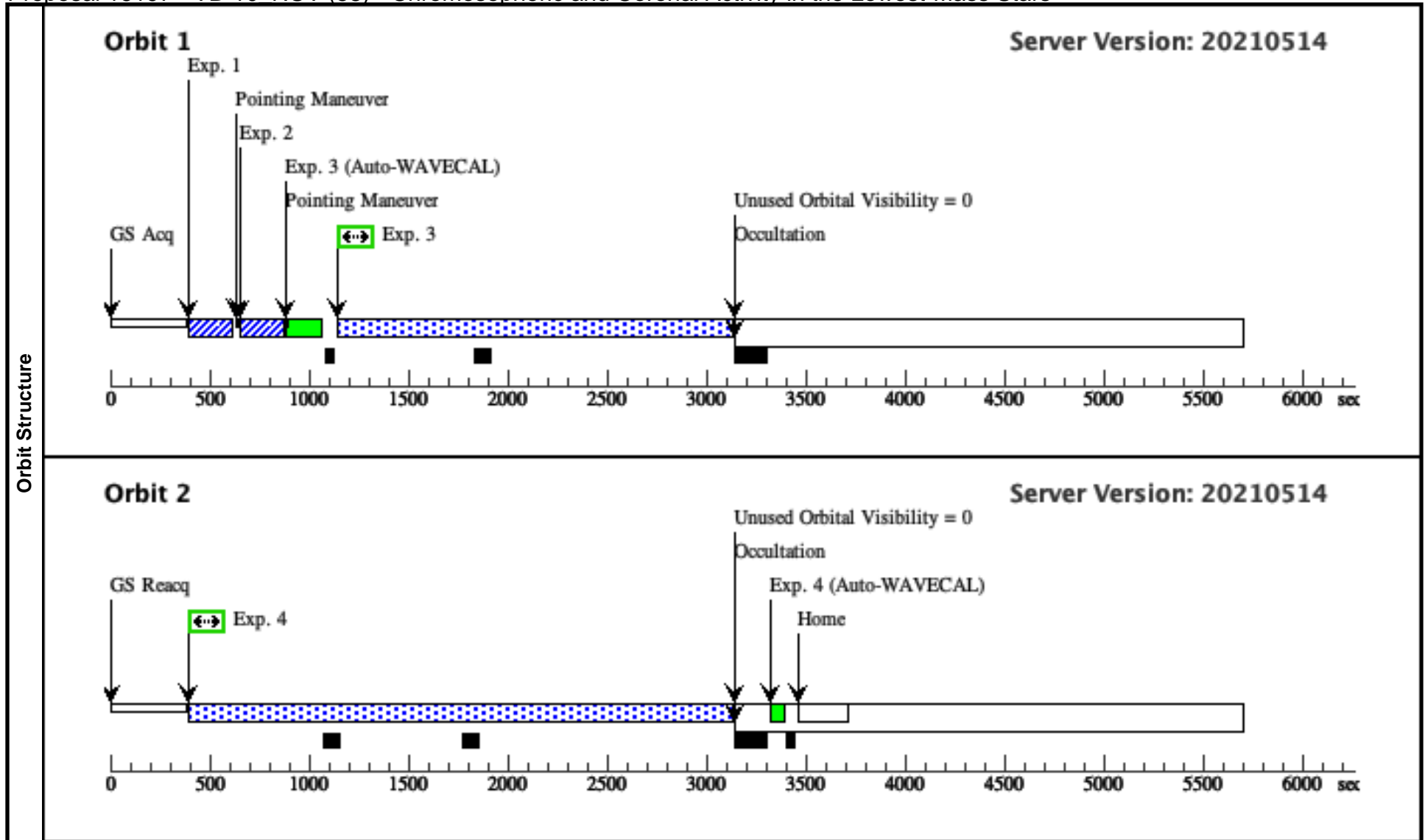


Orbit Structure

Proposal 16197 - VB-10 NUV (58) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

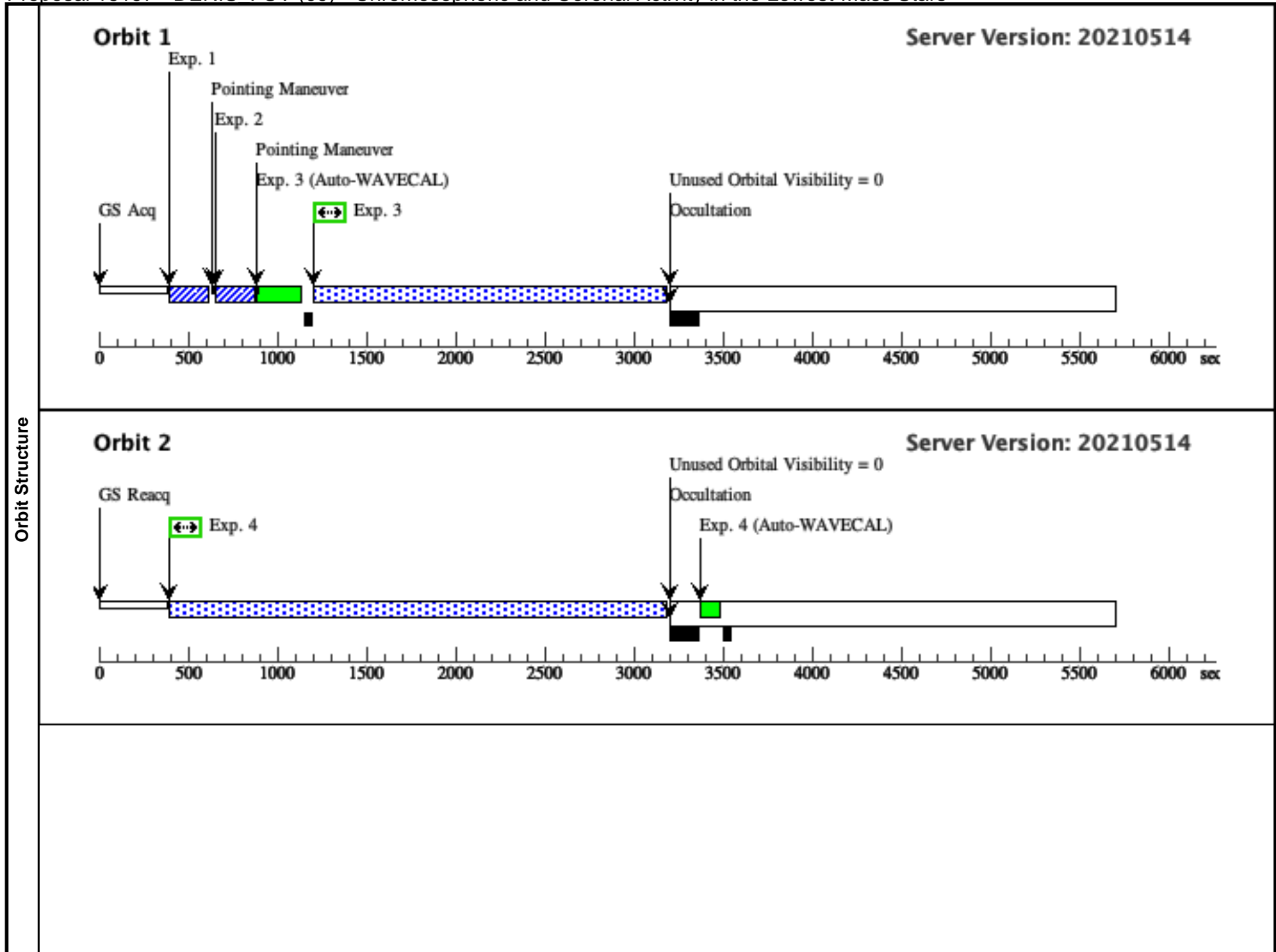
Visit	<b>Proposal 16197, VB-10_NUV (58), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: BETWEEN 21-JUN-2021 AND 04-APR-2022 Comments: 2 Orbits of NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.																					
	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>VB-10</td> <td>RA: 19 16 56.9898 (289.2374575d) Dec: +05 08 40.43 (5.14456d) Equinox: J2000</td> <td>Proper Motion RA: -0.04003976188370212 sec of time/yr Proper Motion Dec: -1.3652730000103475 arcsec/yr Parallax: 0.1689620" Epoch of Position: 2015.5</td> <td>V=17.3</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=STAR Description=[M V-IV] Extended=NO										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	VB-10	RA: 19 16 56.9898 (289.2374575d) Dec: +05 08 40.43 (5.14456d) Equinox: J2000	Proper Motion RA: -0.04003976188370212 sec of time/yr Proper Motion Dec: -1.3652730000103475 arcsec/yr Parallax: 0.1689620" Epoch of Position: 2015.5	V=17.3
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																
(5)	VB-10	RA: 19 16 56.9898 (289.2374575d) Dec: +05 08 40.43 (5.14456d) Equinox: J2000	Proper Motion RA: -0.04003976188370212 sec of time/yr Proper Motion Dec: -1.3652730000103475 arcsec/yr Parallax: 0.1689620" Epoch of Position: 2015.5	V=17.3	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	VB-10_NU V_acq (STIS.ta.145 2285)	(5) VB-10	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs) [==>]	[1]												
	Comments: V=17.3, Phoenix M dwarf Models M8 2500. 5, S/N = 86; U=18 flare STIS.ta.1452288																					
	2	VB-10_NU V_acqP (STIS.ta.145 2296)	(5) VB-10	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				0.6 Secs (0.6 Secs) [==>]	[1]												
	Comments: Phoenix M dwarf Models M8 2500. 5, V=17.3, S/N =86; U=18 flare STIS.ta.1452299																					
3	(STIS.sp.14 52654)	(5) VB-10	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			1972 Secs (1972 Secs) [==>]	[1]													
Comments: Sci - User Spectrum ETC; U=18 flare -- STIS.sp.1452658																						
4	(STIS.sp.14 52654)	(5) VB-10	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			2725 Secs (2725 Secs) [==>]	[2]													
Comments: Sci - User Spectrum ETC; U=18 flare -- STIS.sp.1452658																						

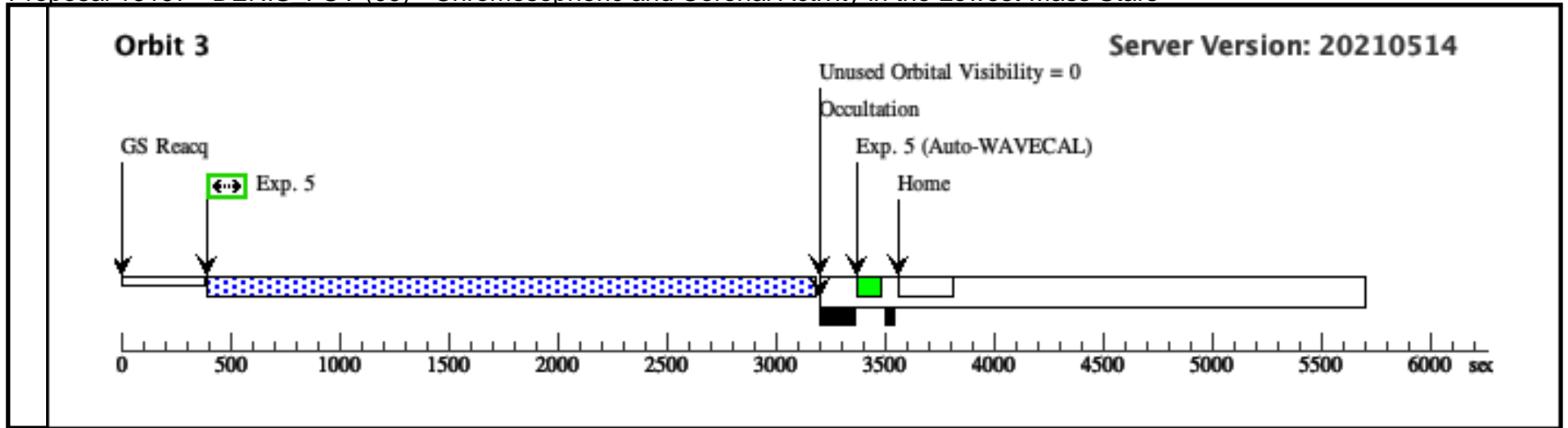


Proposal 16197 - DENIS\_FUV (09) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

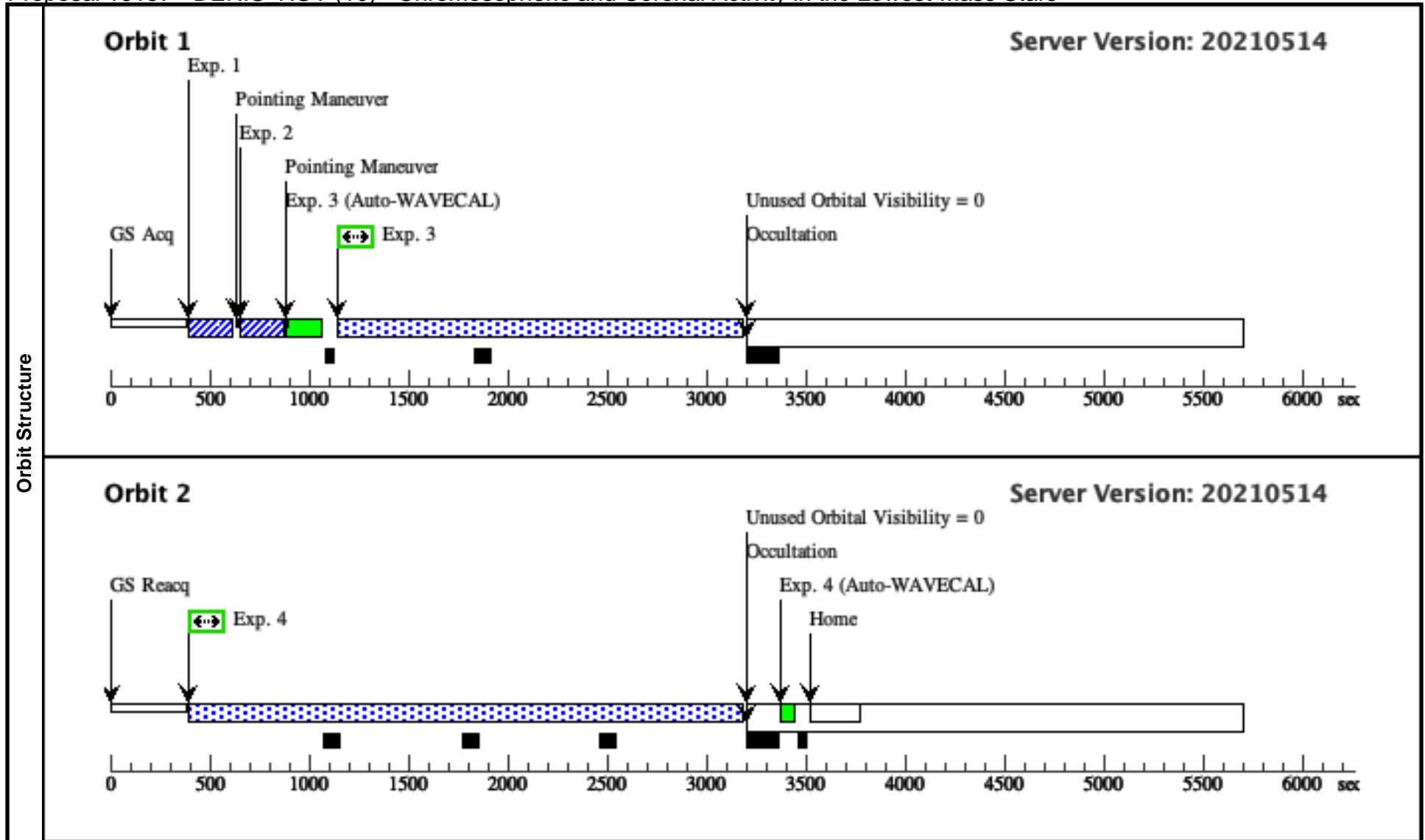
Visit	<b>Proposal 16197, DENIS_FUV (09), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: GROUP 09,10 WITHIN 21D Comments: 3 Orbits of FUV.										
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
Fixed Targets	(7)	DENIS-J104814.6-395606	RA: 10 48 12.9841 (162.0541004d) Dec: -39 56 22.16 (-39.93949d) Equinox: J2000	Proper Motion RA: -0.1025296128745344 sec of time/yr Proper Motion Dec: -0.98809999926817 arcsec/yr Parallax: 0.2472157" Epoch of Position: 2015.5	V=17.532	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	DENIS_FU V_acq (STIS.ta.1452308)	(7) DENIS-J104814.6-395606	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs) [==>]	[1]	
	Comments: V=17.532; Phoenix M dwarf Models M9.5 2300. 5, S/N = 95.4; U flare = 18.23 STIS.ta.1452310										
	2	DENIS_FU V_acqP (STIS.ta.1452314)	(7) DENIS-J104814.6-395606	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				0.6 Secs (0.6 Secs) [==>]	[1]	
	Comments: Phoenix M dwarf Models M9.5 2300. 5, V=17.532, S/N = 100; U=18.23 flare STIS.ta.1452315										
	3	(STIS.sp.14 52678)	(7) DENIS-J104814.6-395606	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=19 62			1962 Secs (1962 Secs) [==>]	[1]	
	Comments: Sci - User Spectrum ETC; U = 18.23 flare, LyA 2.97E-13 erg/s/cm2 -- STIS.sp.1452684										
4	(STIS.sp.14 52678)	(7) DENIS-J104814.6-395606	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 78			2778 Secs (2778 Secs) [==>]	[2]		
Comments: Sci - User Spectrum ETC; U = 18.23 flare, LyA 2.97E-13 erg/s/cm2 -- STIS.sp.1452684											
5	(STIS.sp.14 52678)	(7) DENIS-J104814.6-395606	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 78			2778 Secs (2778 Secs) [==>]	[3]		
Comments: Sci - User Spectrum ETC; U = 18.23 flare, LyA 2.97E-13 erg/s/cm2 -- STIS.sp.1452684											





Proposal 16197 - DENIS\_NUV (10) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

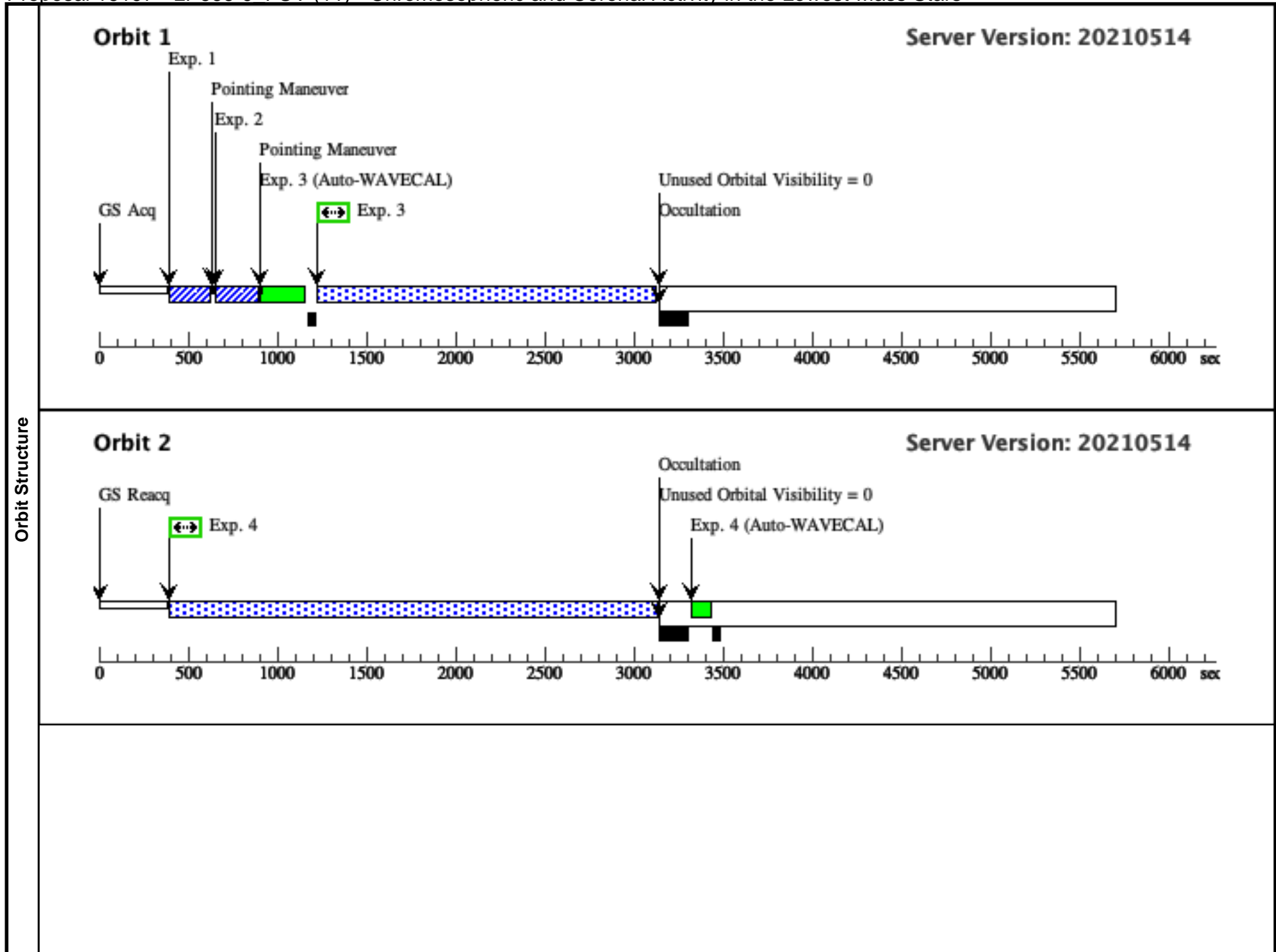
<b>Visit</b>	<b>Proposal 16197, DENIS_NUV (10), completed</b> <span style="float: right;">Wed Dec 01 18:00:36 GMT 2021</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none) <i>Comments: 2 Orbits of NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.</i>										
	<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
(7)		DENIS-J104814.6-395606	RA: 10 48 12.9841 (162.0541004d) Dec: -39 56 22.16 (-39.93949d) Equinox: J2000	Proper Motion RA: -0.1025296128745344 sec of time/yr Proper Motion Dec: -0.988099999926817 arcsec/yr Parallax: 0.2472157" Epoch of Position: 2015.5	V=17.532	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=STAR Description=[M V-IV] Extended=NO											
<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	DENIS_NU V_acq (STIS.ta.145 2308)	(7) DENIS-J104814.6-395606	STIS/CCD, ACQ, F28X50LP	MIRROR				0.2 Secs (0.2 Secs) [==>]	[1]	
	<i>Comments: V=17.532; Phoenix M dwarf Models M9.5 2300. 5, S/N = 95.4; U flare = 18.23 STIS.ta.1452310</i>										
	2	DENIS_NU V_acqP (STIS.ta.145 2314)	(7) DENIS-J104814.6-395606	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				0.6 Secs (0.6 Secs) [==>]	[1]	
	<i>Comments: Phoenix M dwarf Models M9.5 2300. 5., V=17.532, S/N = 100; U=18.23 flare STIS.ta.1452315</i>										
3	(STIS.sp.14 52689)	(7) DENIS-J104814.6-395606	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			2027 Secs (2027 Secs) [==>]	[1]		
<i>Comments: Sci - User Spectrum ETC; U = 18.23 flare -- STIS.sp.1452691</i>											
4	(STIS.sp.14 52689)	(7) DENIS-J104814.6-395606	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			2780 Secs (2780 Secs) [==>]	[2]		
<i>Comments: Sci - User Spectrum ETC; U = 18.23 flare -- STIS.sp.1452691</i>											



Proposal 16197 - LP666-9 FUV (11) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

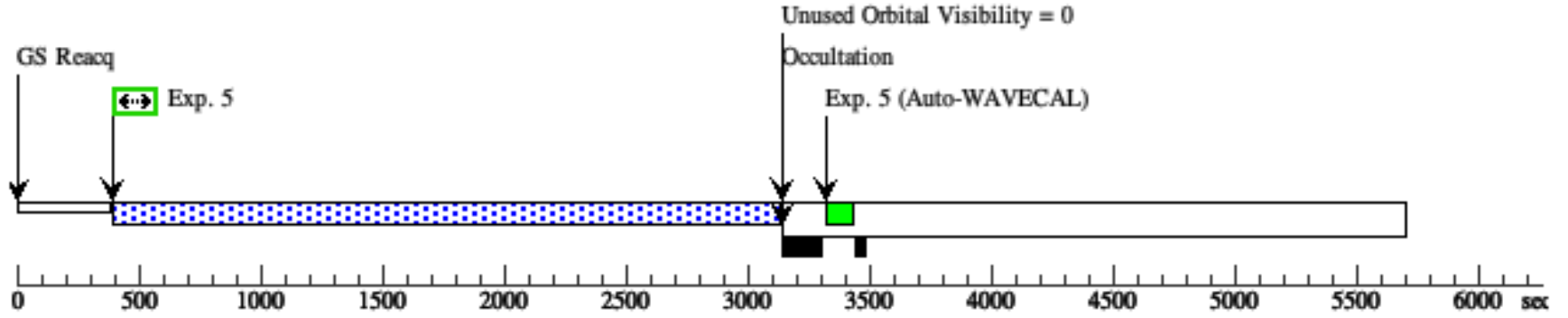
Wed Dec 01 18:00:36 GMT 2021

Visit	<b>Proposal 16197, LP666-9_FUV (11), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/CCD, STIS/FUV-MAMA Special Requirements: BETWEEN 06-JUL-2020:00:00:00 AND 12-MAR-2021:00:00:00; BETWEEN 06-JUL-2021:00:00:00 AND 12-MAR-2022:00:00:00; BETWEEN 06-JUL-2022:00:00:00 AND 12-MAR-2023:00:00:00; GROUP 11,12 WITHIN 21D Comments: 5 Orbits of FUV. To ensure that the Lyman alpha airglow emission coincides spectrally with the ISM absorption trough, Hubble must not observe this target between Mar 12 and July 6 (any year).																					
	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>(6)</td> <td>LP-666-9</td> <td>RA: 08 53 35.6257 (133.3984404d) Dec: -03 29 35.29 (-3.49314d) Equinox: J2000</td> <td>Proper Motion RA: -0.03452260607607156 sec of time/yr Proper Motion Dec: -0.1994139999624167 arcsec/yr Parallax: 0.1153036" Epoch of Position: 2015.5</td> <td>V=18.959</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=STAR Description=[M V-IV] Extended=NO										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(6)	LP-666-9	RA: 08 53 35.6257 (133.3984404d) Dec: -03 29 35.29 (-3.49314d) Equinox: J2000	Proper Motion RA: -0.03452260607607156 sec of time/yr Proper Motion Dec: -0.1994139999624167 arcsec/yr Parallax: 0.1153036" Epoch of Position: 2015.5	V=18.959
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																
(6)	LP-666-9	RA: 08 53 35.6257 (133.3984404d) Dec: -03 29 35.29 (-3.49314d) Equinox: J2000	Proper Motion RA: -0.03452260607607156 sec of time/yr Proper Motion Dec: -0.1994139999624167 arcsec/yr Parallax: 0.1153036" Epoch of Position: 2015.5	V=18.959	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	LP666-9_F UV_acq (STIS.ta.145 2318)	(6) LP-666-9	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]												
	Comments: V=18.959, Phoenix M dwarf Models M9.5 2300. 5., S/N = 111; U = 19.66 flare STIS.ta.1452320																					
	2	LP666-9_F UV_acqP (STIS.ta.145 2326)	(6) LP-666-9	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				2 Secs (2 Secs) [==>]	[1]												
	Comments: V=18.959, S/N=90, Phoenix M dwarf Models M9.5 2300. 5.; U = 19.66 STIS.ta.1452329																					
	3	(STIS.sp.14 52696)	(6) LP-666-9	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=18 83			1883 Secs (1883 Secs) [==>]	[1]												
	Comments: Sci User Spectrum ETC; U=19.66 flare LyA - 8.87E-14 erg/s/cm2 --STIS.sp.1452699																					
	4	(STIS.sp.14 52698)	(6) LP-666-9	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 20			2720 Secs (2720 Secs) [==>]	[2]												
Comments: Sci User Spectrum ETC; U=19.66 flare LyA - 8.87E-14 erg/s/cm2 --STIS.sp.1452699																						
5	(STIS.sp.14 52698)	(6) LP-666-9	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 20			2720 Secs (2720 Secs) [==>]	[3]													
Comments: Sci User Spectrum ETC; U=19.66 flare LyA - 8.87E-14 erg/s/cm2 --STIS.sp.1452699																						
6	(STIS.sp.14 52698)	(6) LP-666-9	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 20			2720 Secs (2720 Secs) [==>]	[4]													
Comments: Sci User Spectrum ETC; U=19.66 flare LyA - 8.87E-14 erg/s/cm2 --STIS.sp.1452699																						
7	(STIS.sp.14 52698)	(6) LP-666-9	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140M 1222 A	BUFFER-TIME=27 20			2720 Secs (2720 Secs) [==>]	[5]													
Comments: Sci User Spectrum ETC; U=19.66 flare LyA - 8.87E-14 erg/s/cm2 --STIS.sp.1452699																						



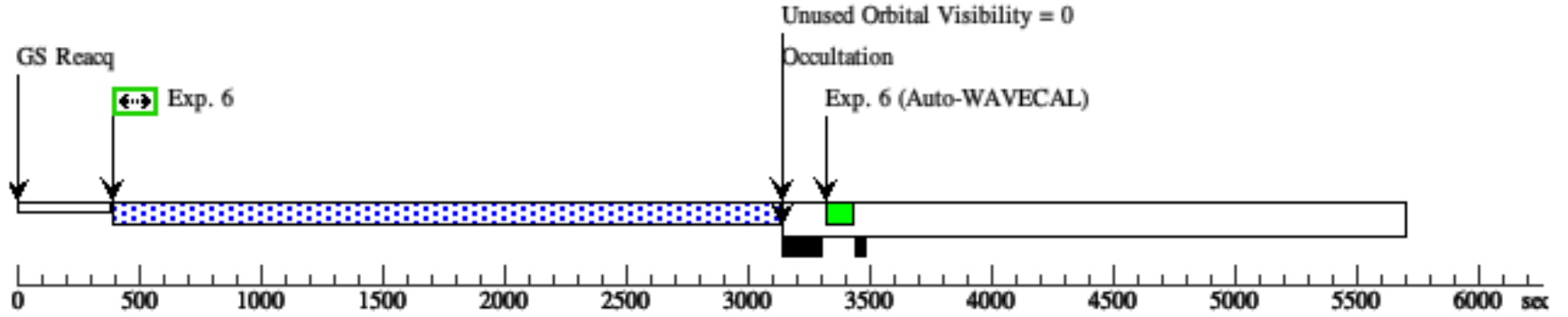
### Orbit 3

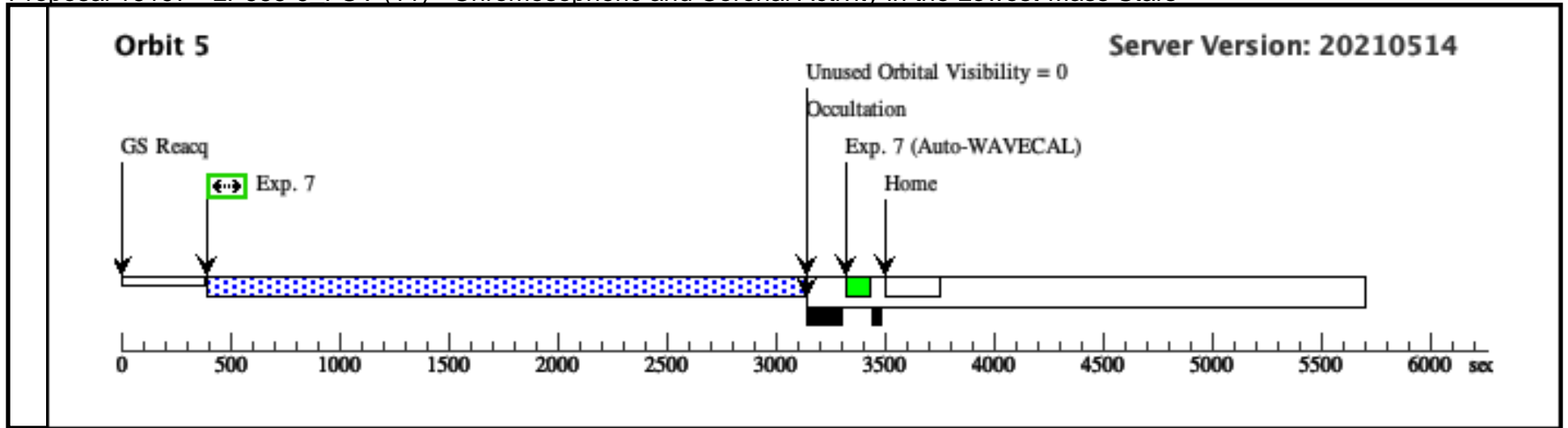
Server Version: 20210514



### Orbit 4

Server Version: 20210514





Proposal 16197 - LP666-9 NUV (12) - Chromospheric and Coronal Activity in the Lowest-Mass Stars

Wed Dec 01 18:00:36 GMT 2021

Visit	<b>Proposal 16197, LP666-9_NUV (12), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none) <i>Comments: 4 Orbits of NUV. No requirement included but if possible, preference for NUV visit to coincide with FUV visit.</i>									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(6)	LP-666-9	RA: 08 53 35.6257 (133.3984404d) Dec: -03 29 35.29 (-3.49314d) Equinox: J2000	Proper Motion RA: -0.03452260607607156 sec of time/yr Proper Motion Dec: -0.1994139999624167 arcsec/yr Parallax: 0.1153036" Epoch of Position: 2015.5	V=18.959	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> 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	LP666-9_N UV_acq (STIS.ta.145 2318)	(6) LP-666-9	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	<i>Comments: V=18.959, Phoenix M dwarf Models M9.5 2300. 5., S/N = 111; U = 19.66 flare STIS.ta.1452320</i>									
	2	LP666-9_N UV_acqP (STIS.ta.145 2326)	(6) LP-666-9	STIS/CCD, ACQ/PEAK, 52X0.1	MIRROR				2 Secs (2 Secs) [==>]	[1]
	<i>Comments: V=18.959, S/N=90, Phoenix M dwarf Models M9.5 2300. 5.; U = 19.66 STIS.ta.1452329</i>									
	3	(STIS.sp.14 52700)	(6) LP-666-9	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			1948 Secs (1948 Secs) [==>]	[1]
	<i>Comments: Sci - User Spectrum ETC; U=19.66 flare -- STIS.sp.1452701</i>									
4	(STIS.sp.14 52700)	(6) LP-666-9	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			2722 Secs (2722 Secs) [==>]	[2]	
<i>Comments: Sci - User Spectrum ETC; U=19.66 flare -- STIS.sp.1452701</i>										
5	(STIS.sp.14 52700)	(6) LP-666-9	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			2722 Secs (2722 Secs) [==>]	[3]	
<i>Comments: Sci - User Spectrum ETC; U=19.66 flare -- STIS.sp.1452701</i>										
6	(STIS.sp.14 52700)	(6) LP-666-9	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=69 0			2722 Secs (2722 Secs) [==>]	[4]	
<i>Comments: Sci - User Spectrum ETC; U=19.66 flare -- STIS.sp.1452701</i>										

