



15310 - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Cycle: 25, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) CD-25-11113	COS/FUV COS/NUV	1	29-Dec-2017 21:00:20.0	yes
02	(2) 2MASS-J16025243-2402226	COS/FUV COS/NUV	1	29-Dec-2017 21:00:21.0	yes
03	(3) V-V1154-SCO	COS/FUV COS/NUV	1	29-Dec-2017 21:00:22.0	yes
04	(4) CD-22-11315	COS/FUV COS/NUV	1	29-Dec-2017 21:00:23.0	yes

Proposal 15310 (STScI Edit Number: 0, Created: Friday, December 29, 2017 9:00:43 PM EST) - Overview

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
05	(5) NAME-V-V1001-SCO-A	COS/FUV COS/NUV	1	29-Dec-2017 21:00:24.0	yes
06	(6) BD-21-4301	COS/FUV COS/NUV	1	29-Dec-2017 21:00:25.0	yes
07	(7) V-V1157-SCO	COS/FUV COS/NUV	1	29-Dec-2017 21:00:25.0	yes
08	(8) 2MASS-J15584772-1757595	COS/FUV COS/NUV	1	29-Dec-2017 21:00:26.0	yes
09	(9) 2MASS-J16081474-1908327	COS/FUV COS/NUV	1	29-Dec-2017 21:00:27.0	yes
10	(10) 2MASS-J16132929-2311075	COS/FUV COS/NUV	1	29-Dec-2017 21:00:28.0	yes
11	(11) V-V1152-SCO	COS/FUV COS/NUV	1	29-Dec-2017 21:00:28.0	yes
12	(12) V-V1156-SCO	COS/FUV COS/NUV	1	29-Dec-2017 21:00:29.0	yes
13	(13) 2MASS-J16193396-2228294	COS/FUV COS/NUV	1	29-Dec-2017 21:00:30.0	yes
14	(14) WA-OPH-1	COS/FUV COS/NUV	1	29-Dec-2017 21:00:30.0	yes
15	(15) 2MASS-J16130271-2257446	COS/FUV COS/NUV	1	29-Dec-2017 21:00:31.0	yes
16	(16) V-V2505-OPH	COS/FUV COS/NUV	1	29-Dec-2017 21:00:32.0	yes
17	(17) 2MASS-J16025396-2022480	COS/FUV COS/NUV	1	29-Dec-2017 21:00:32.0	yes
18	(18) 2MASS-J16085673-2033460	COS/FUV COS/NUV	1	29-Dec-2017 21:00:33.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
19	(19) GSC-06208-00834	COS/FUV COS/NUV	1	29-Dec-2017 21:00:34.0	yes
20	(20) 2MASS-J16061254-2036472	COS/FUV COS/NUV	1	29-Dec-2017 21:00:35.0	yes
21	(21) 2MASS-J16004277-2127380	COS/FUV COS/NUV	1	29-Dec-2017 21:00:35.0	yes
22	(22) 2MASS-J16010801-2113184	COS/FUV COS/NUV	1	29-Dec-2017 21:00:36.0	yes
23	(23) BD-18-4244	COS/FUV COS/NUV	1	29-Dec-2017 21:00:37.0	yes
24	(24) 2MASS-J15570234-1950419	COS/FUV COS/NUV	1	29-Dec-2017 21:00:37.0	yes
25	(25) 2MASS-J16023910-2542078	COS/FUV COS/NUV	1	29-Dec-2017 21:00:38.0	yes
26	(26) 2MASS-J16025123-2401574	COS/FUV COS/NUV	1	29-Dec-2017 21:00:39.0	yes
27	(27) PZ99-J161019.1-250230	COS/FUV COS/NUV	1	29-Dec-2017 21:00:39.0	yes
28	(28) PGZ2001-J161031.9-191305	COS/FUV COS/NUV	1	29-Dec-2017 21:00:40.0	yes
29	(29) 2MASS-J16230783-2300596	COS/FUV COS/NUV	1	29-Dec-2017 21:00:41.0	yes
30	(30) 2MASS-J15580815-2405529	COS/FUV COS/NUV	1	29-Dec-2017 21:00:41.0	yes

30 Total Orbits Used

ABSTRACT

There is a discrepancy between the frequency of rocky planets in the inner AU known around Sun-like stars and the frequency of stars observed to be undergoing the collisions that form these planets. The discrepancy may indicate that rocky planets are less common than believed or that they form very differently than we have imagined, producing little or no debris signature. A third, less dramatic possibility is that planet-forming systems retain a tenuous reservoir of gas that whisks away the warm dust (debris) produced by planet-forming collisions. Over the past decade, it has been recognized that fluorescent FUV molecular hydrogen emission is an excellent tracer of gas in the planet forming regions of disks around young stars. Therefore, we will use HST COS with the G130M grating to survey the FUV spectrum between 1140 - 1450 Ang for molecular hydrogen emission from a sample of 30 stars in the 11 Myr old Upper Scorpius star forming region. These data will test whether small amounts of disk gas remove the debris from planet forming collisions, or whether rocky planet formation possibly proceeds much differently than currently thought.

OBSERVING DESCRIPTION

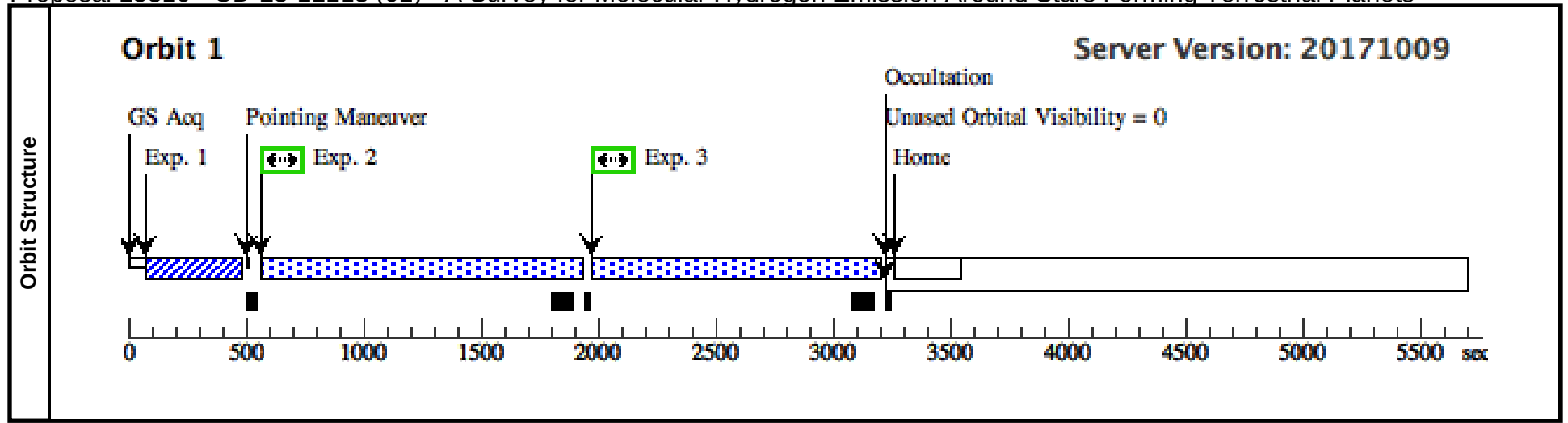
The goal of this program is to survey a sample of 30 K stars in the Upper Sco star forming region to search for residual gas disks among these stars by detecting molecular hydrogen (H₂) emission lines coming from the disk. We will observe each of our target stars in the FUV using HST+COS with the G130M grating. These H₂ lines are excited by Ly-alpha and OVI emission. Young stars are very magnetically active and should have sufficient chromospheric emission in these lines to excite H₂. COS with the G130M grating provides the highest sensitivity to the narrow H₂ lines we seek to observe due to its high effective area and high resolution ($R \sim 16,000$). We will use one central wavelength settings (CENWAVE 1223) in order to avoid Ly-alpha exposure and obtain the best possible sensitivity. After guide star acquisition and target peak up, we will have about 2100 sec of total exposure time available for each target to be split between the FPOS settings. We expect very high quality spectra of ~ 20 available H₂ lines at high S/N that will allow us to reach very faint sensitivities to molecular gas. If there is residual molecular disk gas in the inner few AU around any of our target stars, we should easily detect the H₂ emission lines. The recorded bandpass also covers the strongest bands of the recently discovered FUV fluorescent emissions from CO. This Upper Sco gas disk Survey will also determine the relative abundances of CO and H₂ in any detected disks. HST+COS is the most sensitive instrument for detecting small amounts of disk gas in the inner few AU, and high resolution, high S/N spectra are the key to detecting this gas in emission.

This is a survey in order to find what fraction of these young stars display H₂ emission. Without knowing the frequency of residual gas disks in Upper Sco it is hard to predict for certain what fraction of our targets will display the emission we are looking for. However, if we assume that 20% of our sample will show H₂ emission to match the statistics of the Kepler planets, then we would expect to detect this emission in 6 of our 30 stars. The amount of our time request is driven entirely by statistics and the goal to obtain meaningful results. If we find 6 of 30 stars with H₂ emission, we would measure a residual disk fraction of 20%. We would also find that the lower bound for this fraction (at the 95% confidence limit) is 9.5%, while

the upper bound at the 95% confidence limit is 37.3%. With such small number statistics, the resulting uncertainties are relatively large. If our hypothesis is correct, there would be only a 0.13% chance of failing to detect H₂ emission in any of our targets and there is a 1.5% chance of detecting only 1 star.

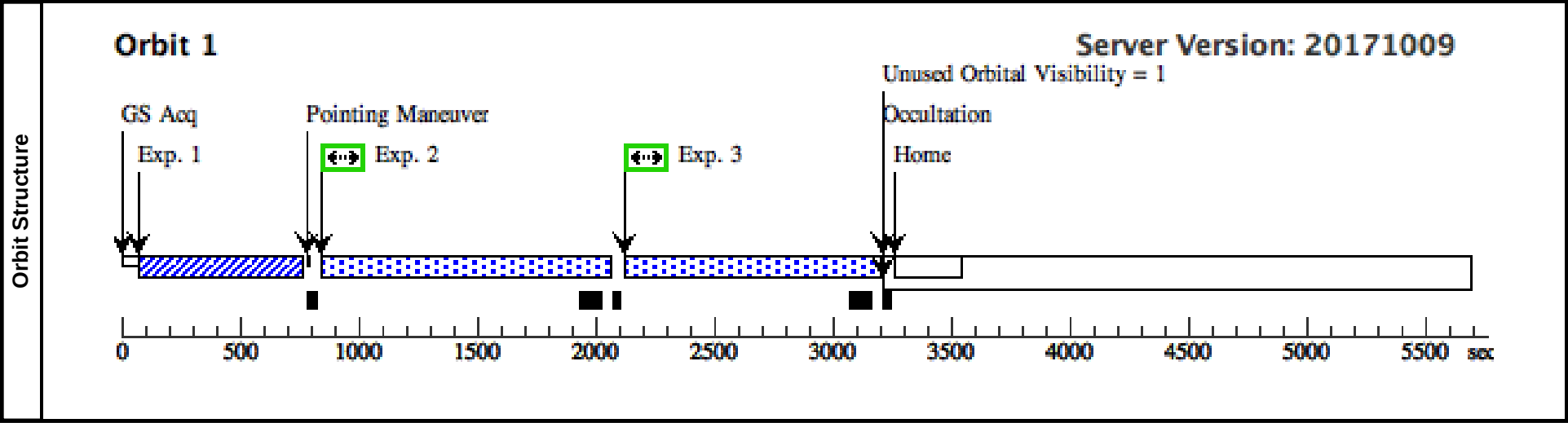
Proposal 15310 - CD-25-11113 (01) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, CD-25-11113 (01), scheduling										Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K0.5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(CD-25-11113 (01)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(1)	CD-25-11113	RA: 15 49 21.0040 (237.3375167d)	Proper Motion RA: -13.9 mas/yr	V=11.116+/-0.08	Reference Frame: ICRS					
		Alt Name1: 2MASS-J15492100-2600062	Dec: -26 00 6.26 (-26.00174d)	Proper Motion Dec: -25.9 mas/yr							
			Equinox: J2000	Epoch of Position: 2000.0							
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]											
Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	ACQ/IMAG E (1012342)	(1) CD-25-11113	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				50 Secs (50 Secs)		
									[==>]	[1]	
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active) WTTS used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616 and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 11.8 from Hog et al. (2000, A&A, 355, 27). Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1012326) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012338)	(1) CD-25-11113	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1069; FLASH=YES; FP-POS=1			1179 Secs (1179 Secs)		
									[==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the mean Av for Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012340) with Av = 0.0 to verify no warnings.											
3	Spectrum (1012338)	(1) CD-25-11113	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1069; FLASH=YES; FP-POS=2			1179 Secs (1179 Secs)			
								[==>]	[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the mean Av for Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012340) with Av = 0.0 to verify no warnings.											



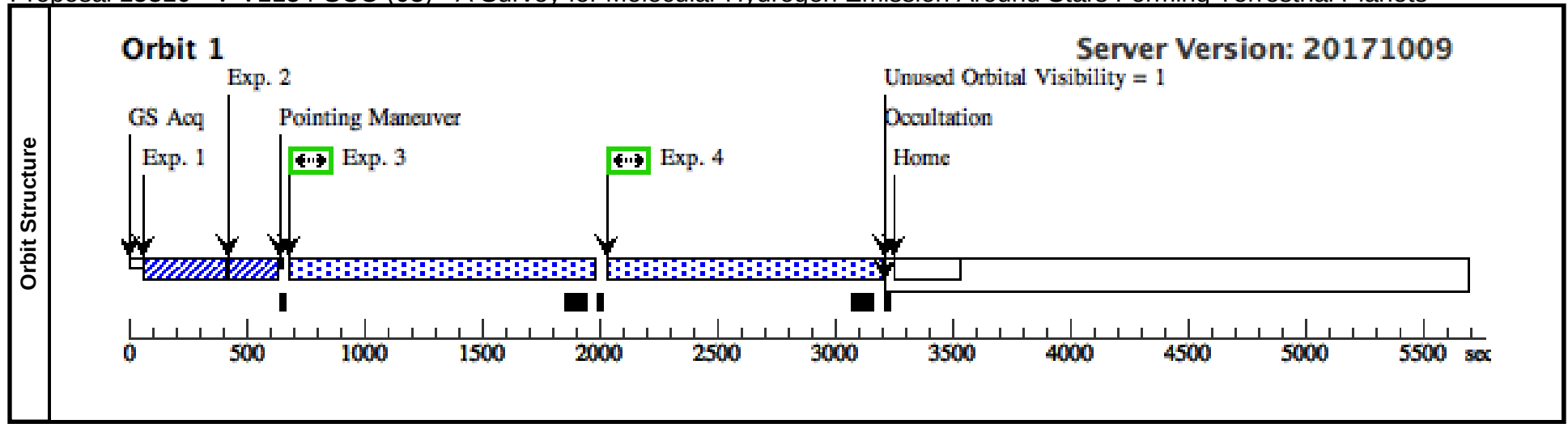
Proposal 15310 - 2MASS-J16025243-2402226 (02) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16025243-2402226 (02), scheduling										Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K0 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16025243-2402226 (02)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(2)	2MASS-J16025243-2402226	RA: 16 02 52.4157 (240.7183988d) Dec: -24 02 22.76 (-24.03966d) Equinox: J2000	Proper Motion RA: -13.4 mas/yr Proper Motion Dec: -10.2 mas/yr Epoch of Position: 2015.0	V=11.5+/-0.3	Reference Frame: ICRS					
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012541)	(2) 2MASS-J160252 43-2402226	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				190 Secs (190 Secs)		
										[==>]	[1]
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active) WTTS used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616 and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to V = 11.5. Magnitude is determined from measured J=8.525 (Cutri et al. 2003yCat.2246....0C) and V-J = 1.435 from Bessell & Brett (1988, PASP, 100, 1134) and applying the measured Av. Used Av = 2.3 which is the measured extinction from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012542) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012555)	(2) 2MASS-J160252 43-2402226	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=92 1; FLASH=YES; FP-POS=1			1031 Secs (1031 Secs)		
										[==>]	[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 2.3 which is the measured Av from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012558) with Av = 0.0 to verify no warnings.											
3	Spectrum (1012555)	(2) 2MASS-J160252 43-2402226	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=92 1; FLASH=YES; FP-POS=1			1031 Secs (1031 Secs)			
									[==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 2.3 which is the measured Av from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012558) with Av = 0.0 to verify no warnings.											



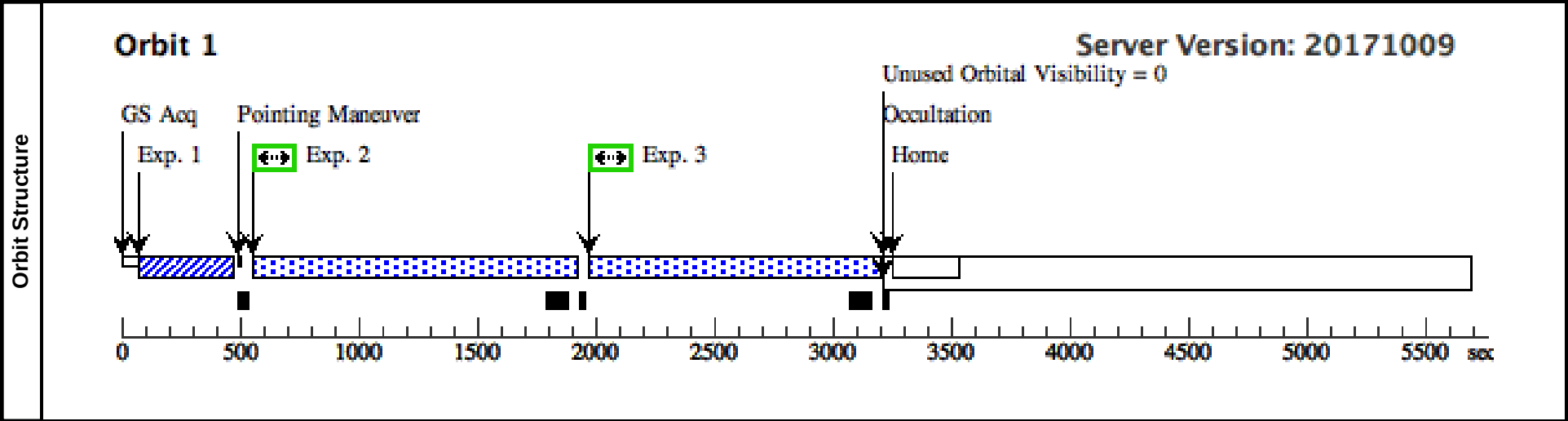
Proposal 15310 - V-V1154-SCO (03) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, V-V1154-SCO (03), implementation										Sat Dec 30 02:00:43 GMT 2017	
	Diagnostic Status: Warning											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Comments: This is a K6 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).												
Diagnostics	(V-V1154-SCO (03)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(3)	V-V1154-SCO	RA: 16 02 10.4334 (240.5434725d)		Proper Motion RA: -20.8 mas/yr		V=9.3+/-0.1		Reference Frame: ICRS			
			Dec: -22 41 28.79 (-22.69133d)		Proper Motion Dec: -33.6 mas/yr							
			Equinox: J2000		Epoch of Position: 2015.0							
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.												
Category=STAR												
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]												
Extended=NO												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/PEAK XD (1034096)	(3) V-V1154-SCO	COS/NUV, ACQ/PEAKXD, PSA		G230L 3360 A	STRIPE=DEF			55 Secs (55 Secs)		
										[>=>]	[1]	
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active) WTTS used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 11.9 from Simbad. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 and a factor of 4 brighter (B = 10.39; ETC# 1034099) to verify no warnings if Av is over-estimated and the star varies.											
	2	PEAKD (1034101)	(3) V-V1154-SCO	COS/NUV, ACQ/PEAKD, PSA		G230L 3360 A	CENTER=FLUX-W T-FLR; NUM-POS=5; STEP-SIZE=0.9			12.5 Secs (12.5 Secs)		
										[>=>]	[1]	
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active) WTTS used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 11.9 from Simbad. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 and a factor of 4 brighter (B = 10.39; ETC# 1034102) to verify no warnings if Av is over-estimated and the star varies.											
	3	Spectrum (1012592)	(3) V-V1154-SCO	COS/FUV, TIME-TAG, PSA		G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1003; FLASH=YES; FP-POS=1			1113 Secs (1113 Secs)		
										[>=>]	[1]	
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012600) with Av = 0.0 to verify no warnings.											
4	Spectrum (1012592)	(3) V-V1154-SCO	COS/FUV, TIME-TAG, PSA		G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1003; FLASH=YES; FP-POS=2			1113 Secs (1113 Secs)			
									[>=>]	[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012600) with Av = 0.0 to verify no warnings.												



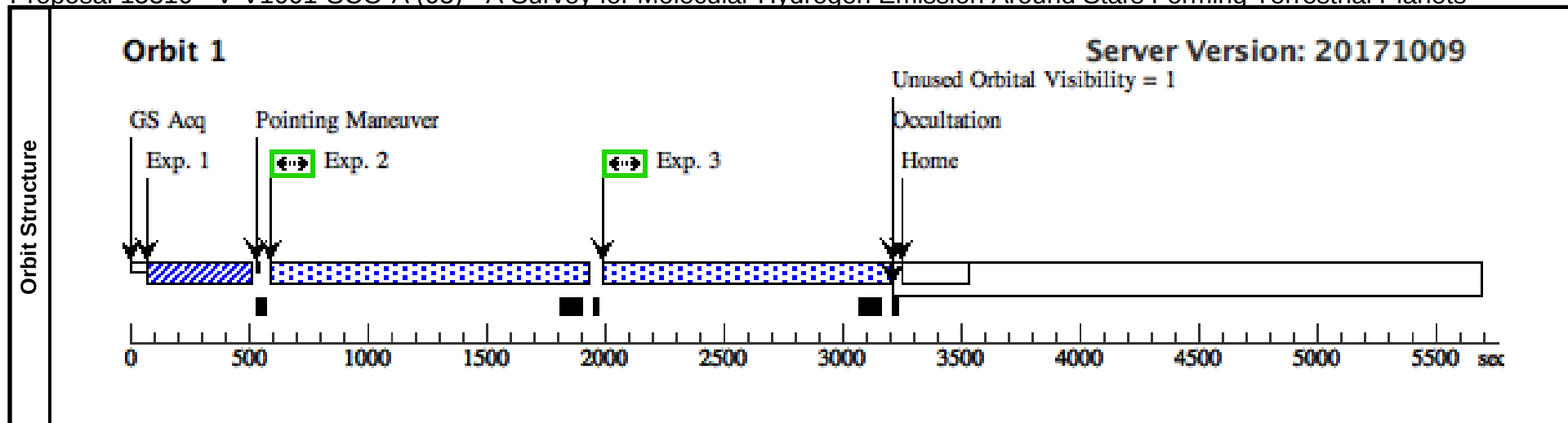
Proposal 15310 - CD-22-11315 (04) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, CD-22-11315 (04), scheduling										Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K0 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(CD-22-11315 (04)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(4)	CD-22-11315	RA: 16 03 35.4858 (240.8978575d) Dec: -22 45 56.48 (-22.76569d) Equinox: J2000	Proper Motion RA: -12.9 mas/yr Proper Motion Dec: -24.2 mas/yr Epoch of Position: 2015.0	V=10.969+/-0.05	Reference Frame: ICRS					
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	ACQ/IMAG E (1012608)	(4) CD-22-11315	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				45 Secs (45 Secs) [==>]	[1]	
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active) WTTS used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 11.9 from Hog et al. (2000, A&A, 355, 27). Used Av = 1.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012609) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012611)	(4) CD-22-11315	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1070; FLASH=YES; FP-POS=1			1180 Secs (1180 Secs) [==>]	[1]	
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012614) with Av = 0.0 to verify no warnings.										
	3	Spectrum (1012611)	(4) CD-22-11315	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1070; FLASH=YES; FP-POS=2			1180 Secs (1180 Secs) [==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012614) with Av = 0.0 to verify no warnings.											



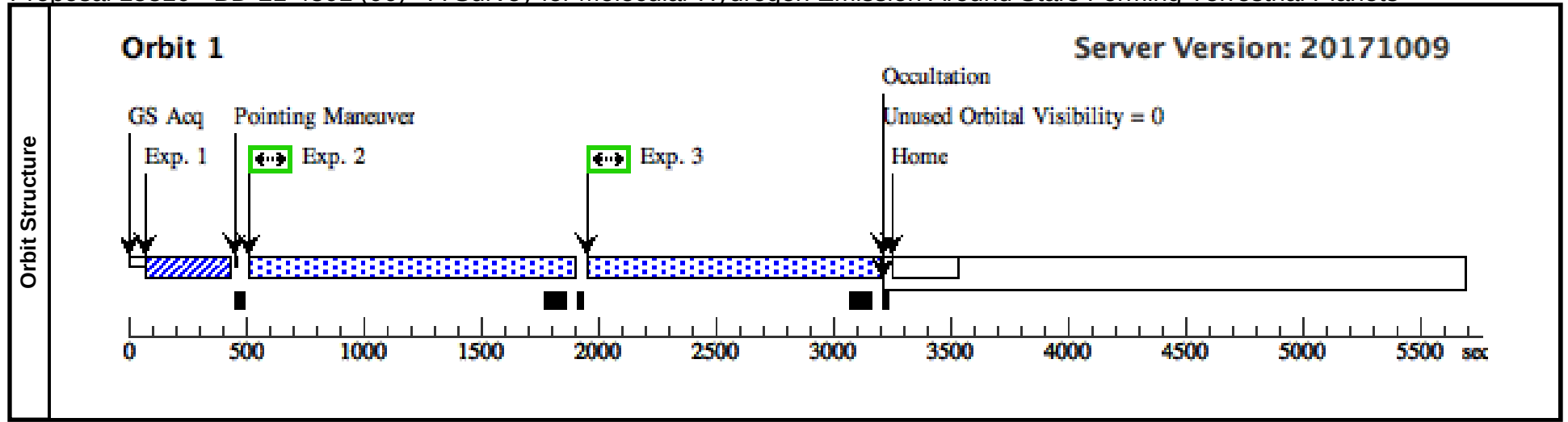
Proposal 15310 - V-V1001-SCO-A (05) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, V-V1001-SCO-A (05), scheduling										Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K0 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(V-V1001-SCO-A (05)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	NAME-V-V1001-SCO-A	RA: 16 11 59.2566 (242.9969025d)		Proper Motion RA: -14.7 mas/yr		V=11.69+/-0.05		Reference Frame: ICRS		
			Dec: -19 06 53.66 (-19.11491d)		Proper Motion Dec: -22.9 mas/yr						
			Equinox: J2000		Epoch of Position: 2015.0						
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]											
Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012637)	(5) NAME-V-V1001 -SCO-A	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				66 Secs (66 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active) K0 WTTS used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spec trum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to V = 11.69 from Terranegra et al. (1994, A&A, 104, 557) . Used Av = 0.6 which is the mean Av for Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1012638) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012641)	(5) NAME-V-V1001 -SCO-A	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 48; FLASH=YES; FP-POS=1			1158 Secs (1158 Secs)		
									[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.6 which is the mean Av for Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012642) with Av = 0.0 to verify no warnings.										
3	Spectrum (1012641)	(5) NAME-V-V1001 -SCO-A	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 48; FLASH=YES; FP-POS=2			1158 Secs (1158 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.6 which is the mean Av for Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012642) with Av = 0.0 to verify no warnings.											



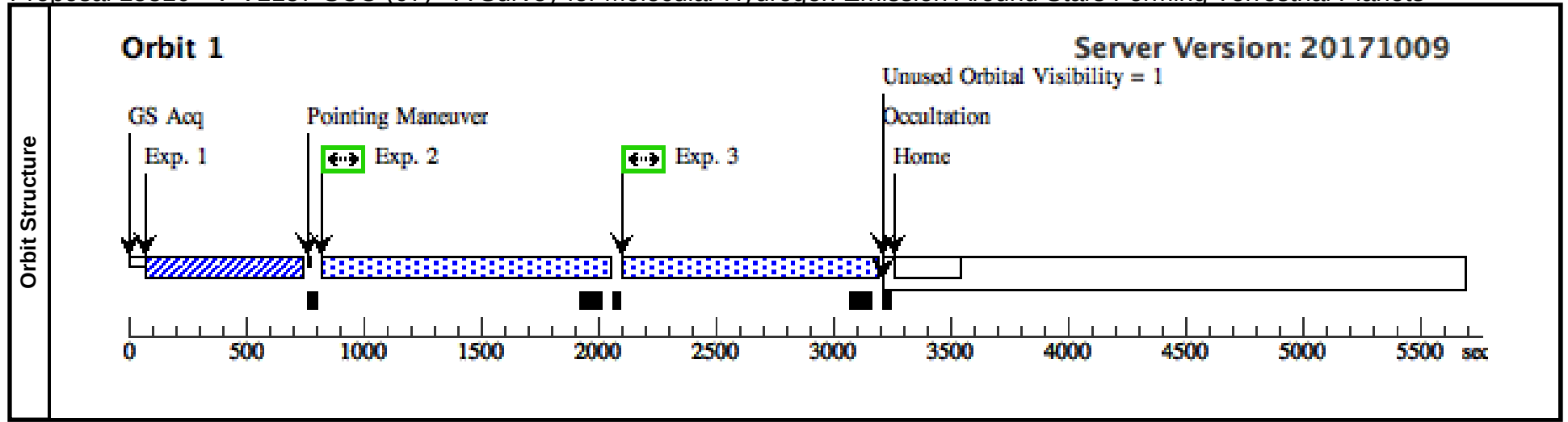
Proposal 15310 - BD-21-4301 (06) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, BD-21-4301 (06), scheduling									Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K0 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(BD-21-4301 (06)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	BD-21-4301	RA: 16 13 18.5820 (243.3274250d) Dec: -22 12 48.99 (-22.21361d) Equinox: J2000	Proper Motion RA: -10.7 mas/yr Proper Motion Dec: -21.3 mas/yr Epoch of Position: 2000.0	V=10.432+/-0.05	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012672)	(6) BD-21-4301	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				25 Secs (25 Secs)	
									[==>]	[1]
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 11.4 from Hog et al. (2000, A&A, 355, 27). Used Av = 0.9 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012673) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012674)	(6) BD-21-4301	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 90; FLASH=YES; FP-POS=1			1200 Secs (1200 Secs)	
									[==>]	[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.9 from Carpenter et al. (2009, 705, 1646). Also ran ETC (1012675) with Av = 0.0 to verify no warnings.										
3	Spectrum (1012674)	(6) BD-21-4301	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 90; FLASH=YES; FP-POS=2			1200 Secs (1200 Secs)		
								[==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.9 from Carpenter et al. (2009, 705, 1646). Also ran ETC (1012675) with Av = 0.0 to verify no warnings.										



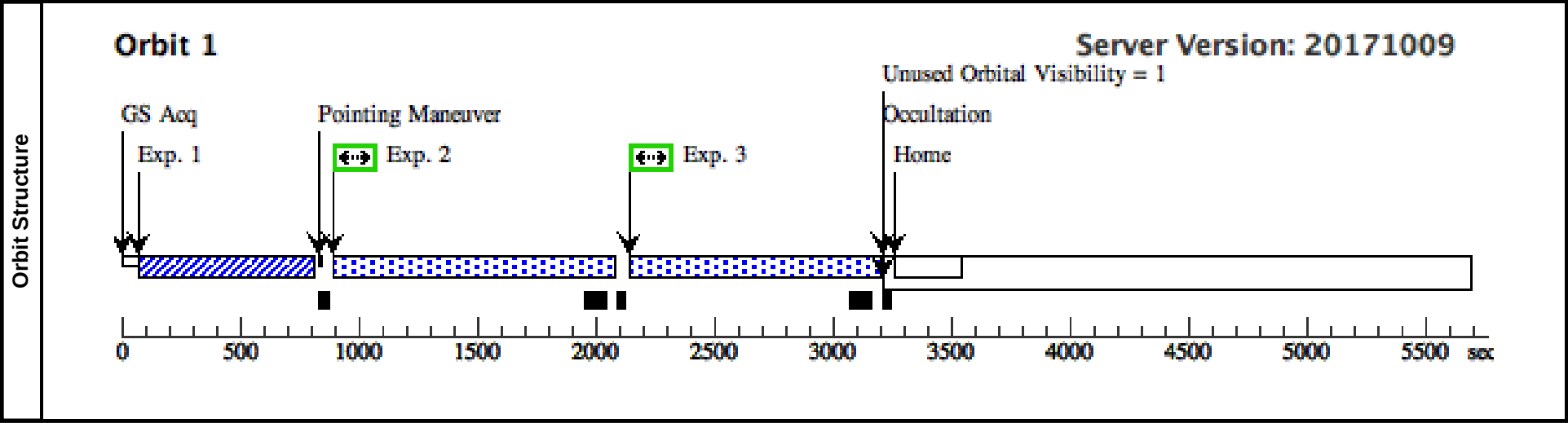
Proposal 15310 - V-V1157-SCO (07) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, V-V1157-SCO (07), scheduling									Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(V-V1157-SCO (07)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	V-V1157-SCO	RA: 16 11 20.5664 (242.8356933d) Dec: -18 20 55.40 (-18.34872d) Equinox: J2000	Proper Motion RA: -10.4 mas/yr Proper Motion Dec: -26.2 mas/yr Epoch of Position: 2015.0	V=12.45+/-0.1	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012685)	(7) V-V1157-SCO	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				180 Secs (180 Secs) [==>]	[1]
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spec trum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.2 from Simbad. Used Av = 0.7 from Carpenter et al. (20 09, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012686) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012688)	(7) V-V1157-SCO	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=92 9; FLASH=YES; FP-POS=1			1039 Secs (1039 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.7 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012691) with Av = 0.0 to verify no warnings.									
	3	Spectrum (1012688)	(7) V-V1157-SCO	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=92 9; FLASH=YES; FP-POS=2			1039 Secs (1039 Secs) [==>]	[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.7 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012691) with Av = 0.0 to verify no warnings.										



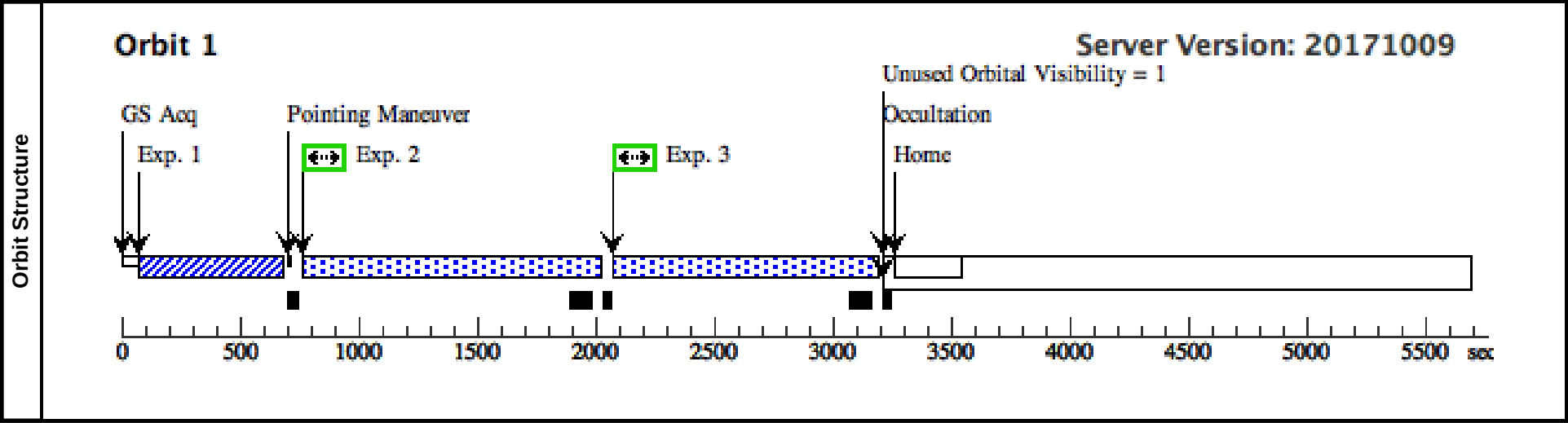
Proposal 15310 - 2MASS-J15584772-1757595 (08) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J15584772-1757595 (08), scheduling									Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K4 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(2MASS-J15584772-1757595 (08)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	2MASS-J15584772-1757595	RA: 15 58 47.7062 (239.6987758d) Dec: -17 58 0.02 (-17.96667d) Equinox: J2000	Proper Motion RA: -12.8 mas/yr Proper Motion Dec: -20.8 mas/yr Epoch of Position: 2015.0	V=12.09+/-0.1	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012705)	(8) 2MASS-J155847 72-1757595	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				215 Secs (215 Secs)	
									[==>]	[1]
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically activeK2 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spect rum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.3 from Hog et al. (2000, A&A, 355, 27). Used Av = 1.8 f rom Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012706) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012707)	(8) 2MASS-J155847 72-1757595	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=89 4; FLASH=YES; FP-POS=1			1004 Secs (1004 Secs)	
									[==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 1.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012709) with Av = 0.0 to verify no warnings.									
3	Spectrum (1012707)	(8) 2MASS-J155847 72-1757595	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=89 4; FLASH=YES; FP-POS=2			1004 Secs (1004 Secs)		
								[==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 1.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012709) with Av = 0.0 to verify no warnings.										



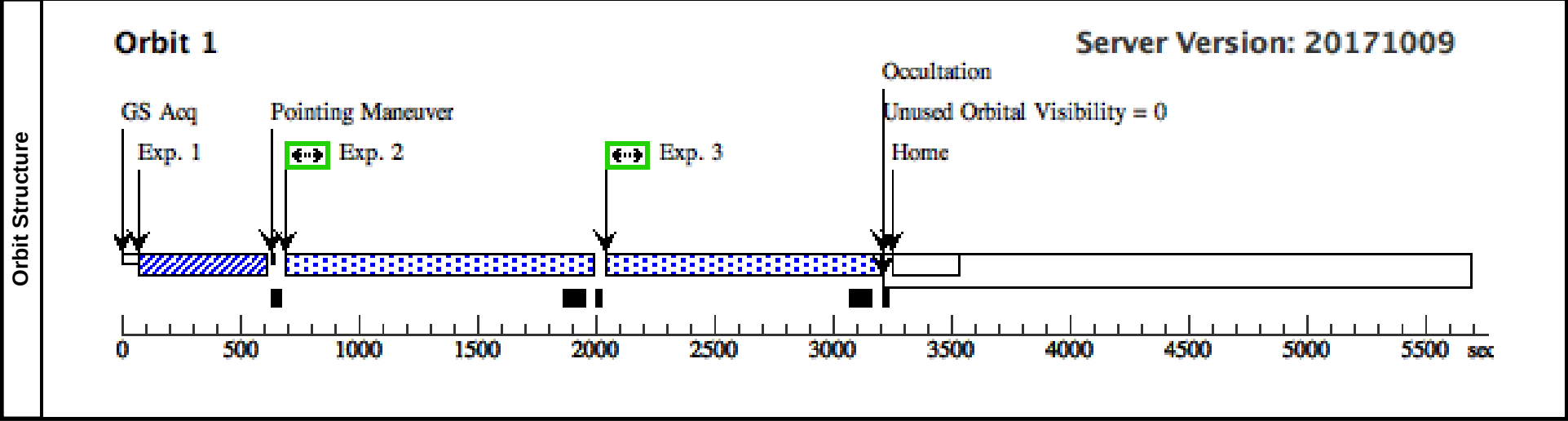
Proposal 15310 - 2MASS-J16081474-1908327 (09) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16081474-1908327 (09), scheduling										Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K2 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16081474-1908327 (09)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(9)	2MASS-J16081474-1908327	RA: 16 08 14.7327 (242.0613862d) Dec: -19 08 33.12 (-19.14253d) Equinox: J2000		Proper Motion RA: -8.5 mas/yr Proper Motion Dec: -27.6 mas/yr Parallax: 0.00704" Epoch of Position: 2015.0		V=11.72+/-0.2		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012715)	(9) 2MASS-J160814 74-1908327	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				150 Secs (150 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.0 from . Used Av = 1.6 Hog et al. (2000, A&A, 355, 27). Used Av = 1.6 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012719) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012720)	(9) 2MASS-J160814 74-1908327	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=95 9; FLASH=YES; FP-POS=1			1069 Secs (1069 Secs)		
									[==>]		[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.6 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012721) with Av = 0.0 to verify no warnings.											
3	Spectrum (1012720)	(9) 2MASS-J160814 74-1908327	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=95 9; FLASH=YES; FP-POS=2			1069 Secs (1069 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.6 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012721) with Av = 0.0 to verify no warnings.											



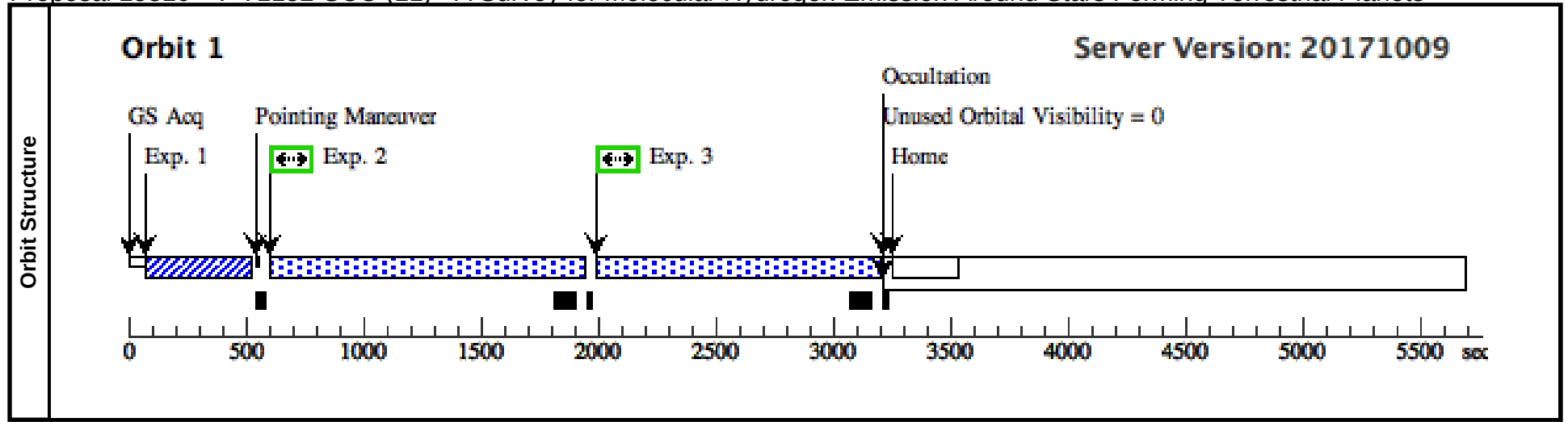
Proposal 15310 - 2MASS-J16132929-2311075 (10) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16132929-2311075 (10), scheduling									Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K1 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(2MASS-J16132929-2311075 (10)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	2MASS-J16132929-2311075	RA: 16 13 29.2786 (243.3719942d) Dec: -23 11 7.95 (-23.18554d) Equinox: J2000	Proper Motion RA: -8.9 mas/yr Proper Motion Dec: -25.3 mas/yr Epoch of Position: 2015.0	V=11.3+/-0.2	Reference Frame: ICRS				
	Comments:									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012724)	(10) 2MASS-J16132 929-2311075	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				115 Secs (115 Secs)	
									[==>]	[1]
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.5 from Simbad. Used Av = 2.0 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012725) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012730)	(10) 2MASS-J16132 929-2311075	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1000; FLASH=YES; FP-POS=1			1110 Secs (1110 Secs)	
									[==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 2.0 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012731) with Av = 0.0 to verify no warnings.									
3	Spectrum (1012730)	(10) 2MASS-J16132 929-2311075	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1000; FLASH=YES; FP-POS=2			1110 Secs (1110 Secs)		
								[==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 2.0 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012731) with Av = 0.0 to verify no warnings.										



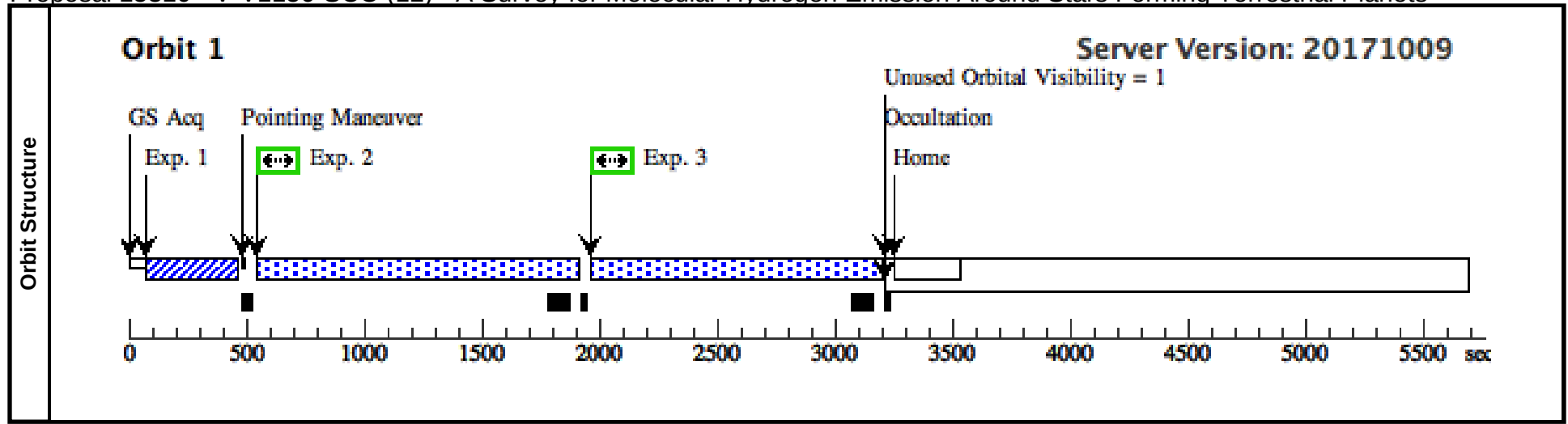
Proposal 15310 - V-V1152-SCO (11) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, V-V1152-SCO (11), scheduling									Sat Dec 30 02:00:43 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K3 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnos	(V-V1152-SCO (11)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(11)	V-V1152-SCO	RA: 16 01 25.6165 (240.3567354d) Dec: -22 40 40.64 (-22.67796d) Equinox: J2000	Proper Motion RA: -12.1 mas/yr Proper Motion Dec: -23.5 mas/yr Epoch of Position: 2015.0		V=13.44+/-0.1		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012733)	(11) V-V1152-SCO	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				70 Secs (70 Secs) [==>]	[1]
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.0 from Hog et al. (2000, A&A, 355, 27). Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012734) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012735)	(11) V-V1152-SCO	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 45; FLASH=YES; FP-POS=1			1155 Secs (1155 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012736) with Av = 0.0 to verify no warnings.									
3	Spectrum (1012735)	(11) V-V1152-SCO	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 45; FLASH=YES; FP-POS=2			1155 Secs (1155 Secs) [==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012736) with Av = 0.0 to verify no warnings.										



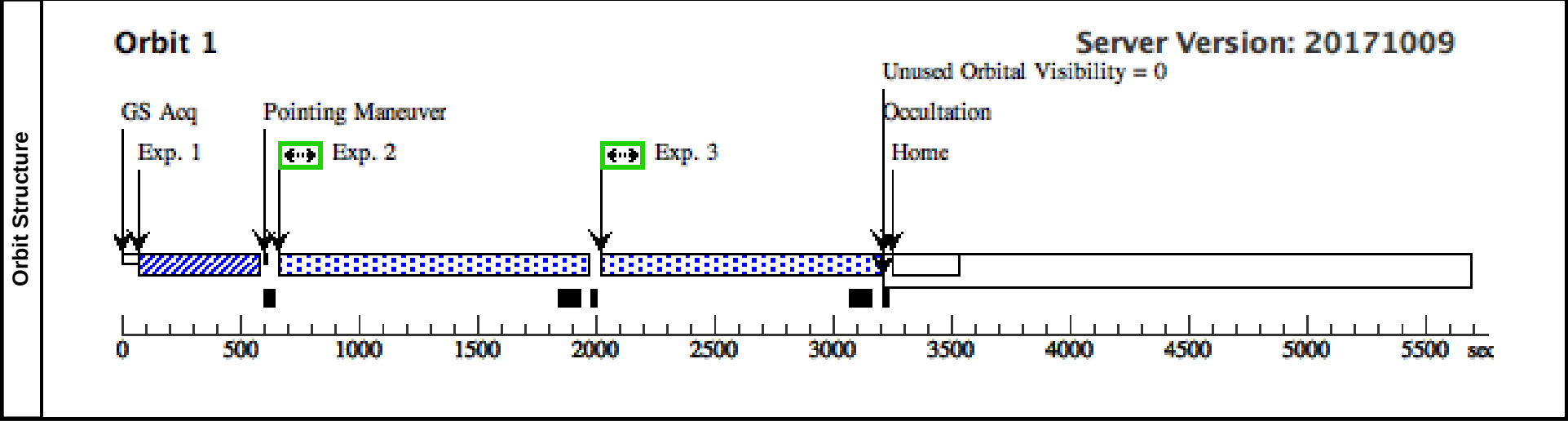
Proposal 15310 - V-V1156-SCO (12) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, V-V1156-SCO (12), scheduling										Sat Dec 30 02:00:43 GMT 2017	
	Diagnostic Status: Warning											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Comments: This is a K2.5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).												
Diagnostics	(V-V1156-SCO (12)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(12)	V-V1156-SCO	RA: 16 04 47.7393 (241.1989138d)		Proper Motion RA: -10.6 mas/yr		V=11.51+/-0.2		Reference Frame: ICRS			
			Dec: -19 30 23.24 (-19.50646d)		Proper Motion Dec: -21.3 mas/yr							
			Equinox: J2000		Epoch of Position: 2015.0							
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.												
Category=STAR												
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]												
Extended=NO												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	ACQ/IMAG E (1012761)	(12) V-V1156-SCO	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				40 Secs (40 Secs)			
									[==>]		[1]	
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.4 from Hog et al. (2000, A&A, 355, 27). Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012762) to verify no warnings if Av is over-estimated.											
	2	Spectrum (1012764)	(12) V-V1156-SCO	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 74; FLASH=YES; FP-POS=1				1184 Secs (1184 Secs)		
										[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012765) with Av = 0.0 to verify no warnings.											
3	Spectrum (1012764)	(12) V-V1156-SCO	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 74; FLASH=YES; FP-POS=2				1184 Secs (1184 Secs)			
									[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.2 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012765) with Av = 0.0 to verify no warnings.												



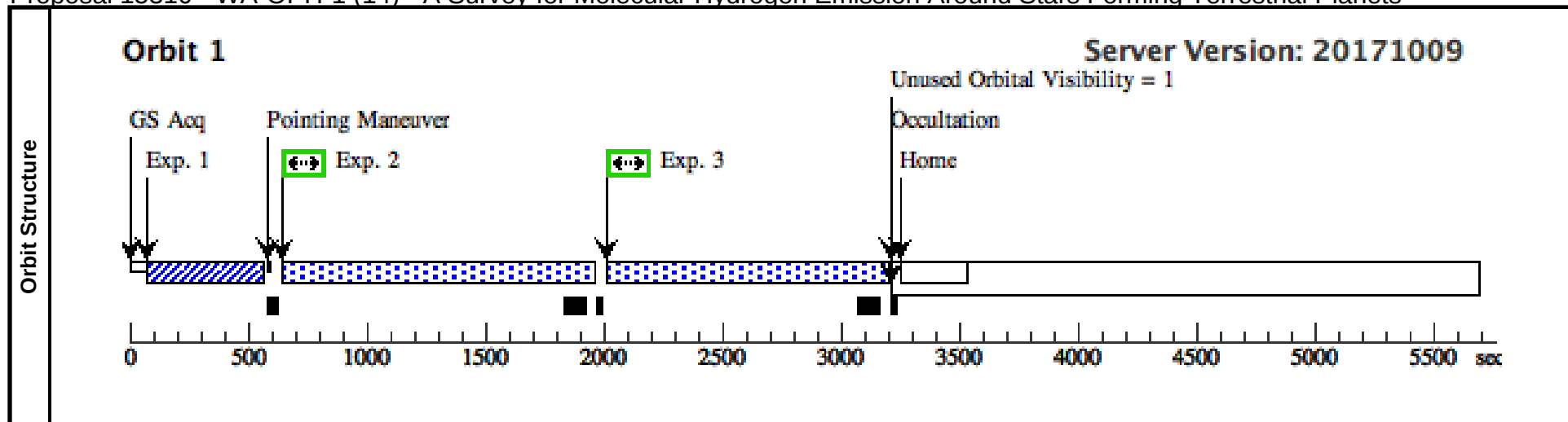
Proposal 15310 - 2MASS-J16193396-2228294 (13) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16193396-2228294 (13), scheduling										Sat Dec 30 02:00:44 GMT 2017	
	Diagnostic Status: Warning											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Comments: This is a K0.5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).												
Diagnostics	(2MASS-J16193396-2228294 (13)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.											
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous						
	(13)	2MASS-J16193396-2228294	RA: 16 19 33.9551 (244.8914796d) Dec: -22 28 29.85 (-22.47496d) Equinox: J2000	Proper Motion RA: -10.2 mas/yr Proper Motion Dec: -25.2 mas/yr Epoch of Position: 2015.0	V=11.312+/-0.05	Reference Frame: ICRS						
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	ACQ/IMAG E (1012767)	(13) 2MASS-J16193 396-2228294	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100 Secs (100 Secs)			
									[==>]		[1]	
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.5 from Hog et al. (2000, A&A, 355, 27). Used Av = 1.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012770) to verify no warnings if Av is over-estimated.											
	2	Spectrum (1012773)	(13) 2MASS-J16193 396-2228294	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 15; FLASH=YES; FP-POS=1				1125 Secs (1125 Secs)		
									[==>]		[1]	
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012777) with Av = 0.0 to verify no warnings.											
3	Spectrum (1012773)	(13) 2MASS-J16193 396-2228294	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 15; FLASH=YES; FP-POS=2				1125 Secs (1125 Secs)			
								[==>]		[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012777) with Av = 0.0 to verify no warnings.												



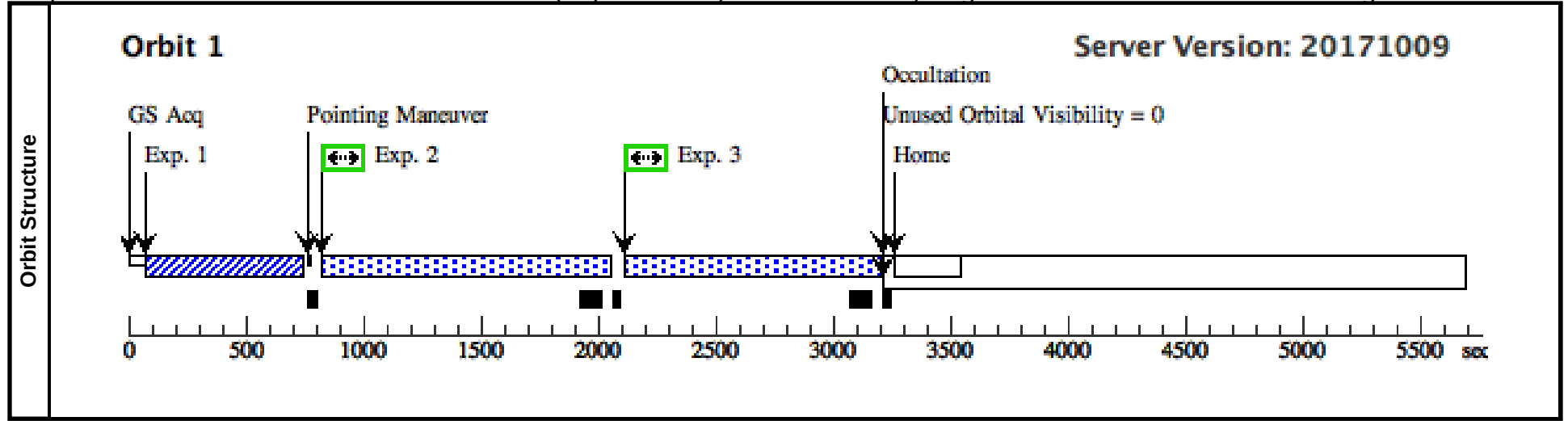
Proposal 15310 - WA-OPH-1 (14) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, WA-OPH-1 (14), scheduling								Sat Dec 30 02:00:44 GMT 2017	
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K2 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(WA-OPH-1 (14)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(14)	WA-OPH-1	RA: 16 11 8.8953 (242.7870638d) Dec: -19 04 47.29 (-19.07980d) Equinox: J2000	Proper Motion RA: -10.4 mas/yr Proper Motion Dec: -24.7 mas/yr Epoch of Position: 2015.0	V=12.073+/-0.05	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012783)	(14) WA-OPH-1	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				90 Secs (90 Secs) [==>]	[1]
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.0 from Simbad. Used Av = 0.6 which is the average extinction for Upper Sco from Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1012785) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012787)	(14) WA-OPH-1	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 24; FLASH=YES; FP-POS=1			1134 Secs (1134 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the average extinction for Upper Sco from Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012789) with Av = 0.0 to verify no warnings.									
	3	Spectrum (1012787)	(14) WA-OPH-1	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 24; FLASH=YES; FP-POS=2			1134 Secs (1134 Secs) [==>]	[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the average extinction for Upper Sco from Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012789) with Av = 0.0 to verify no warnings.										



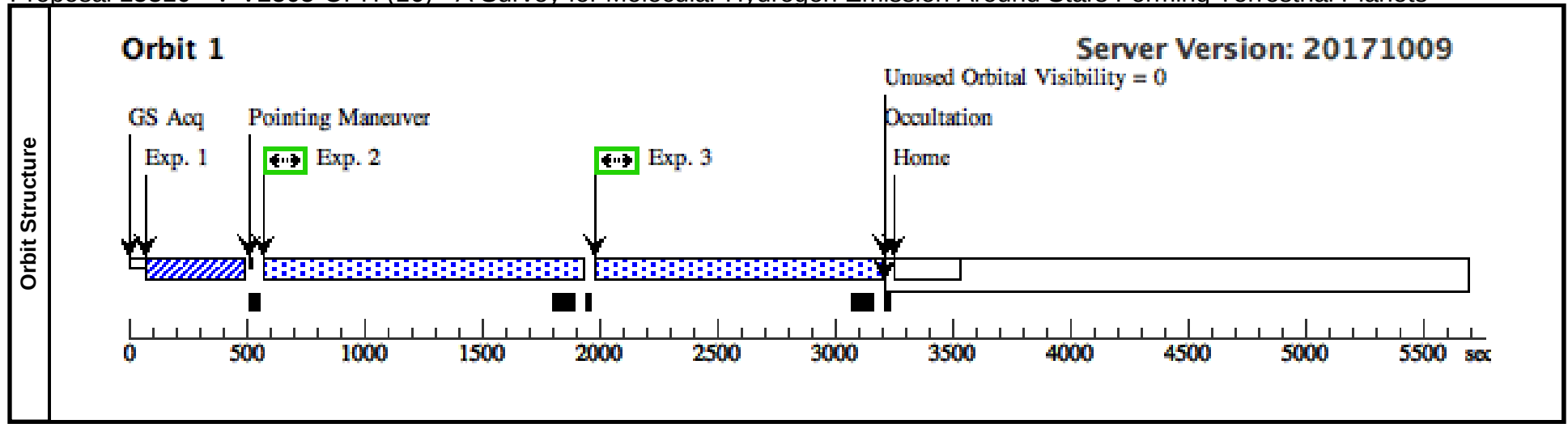
Proposal 15310 - 2MASS-J16130271-2257446 (15) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16130271-2257446 (15), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K4.5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16130271-2257446 (15)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(15)	2MASS-J16130271-2257446	RA: 16 13 2.7063 (243.2612762d) Dec: -22 57 44.88 (-22.96247d) Equinox: J2000		Proper Motion RA: -7.9 mas/yr Proper Motion Dec: -25.1 mas/yr Epoch of Position: 2015.0		V=11.813+/-0.2		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012793)	(15) 2MASS-J16130 271-2257446	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				180 Secs (180 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.6 from Simbad. Used Av = 2.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012794) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012795)	(15) 2MASS-J16130 271-2257446	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=93 0; FLASH=YES; FP-POS=1			1040 Secs (1040 Secs)		
									[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 2.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012796) with Av = 0.0 to verify no warnings.										
3	Spectrum (1012795)	(15) 2MASS-J16130 271-2257446	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=93 0; FLASH=YES; FP-POS=2			1040 Secs (1040 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 2.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012796) with Av = 0.0 to verify no warnings.											



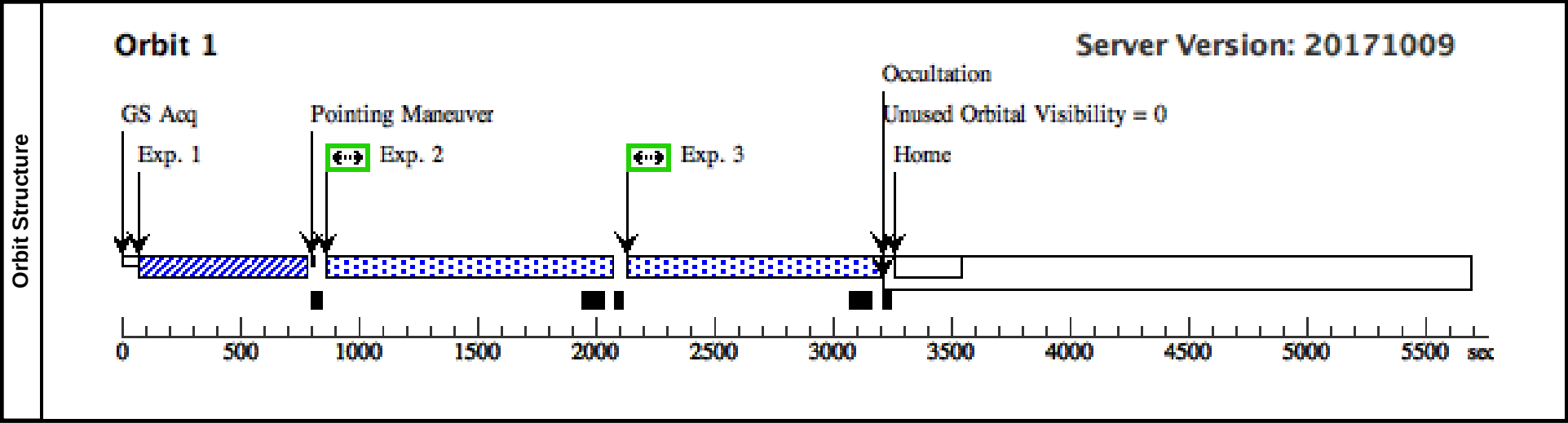
Proposal 15310 - V-V2505-OPH (16) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, V-V2505-OPH (16), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K2 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(V-V2505-OPH (16)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(16)	V-V2505-OPH	RA: 16 29 48.6877 (247.4528654d)		Proper Motion RA: -5.4 mas/yr		V=11.315+/-0.05		Reference Frame: ICRS		
			Dec: -21 52 12.28 (-21.87008d)		Proper Motion Dec: -23.3 mas/yr						
			Equinox: J2000		Epoch of Position: 2015.0						
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]											
Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012798)	(16) V-V2505-OPH	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				56 Secs (56 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spec trum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.5 from Hog et al. (2000, A&A, 355, 27). Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1012799) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012800)	(16) V-V2505-OPH	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 59; FLASH=YES; FP-POS=1			1169 Secs (1169 Secs)		
									[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012801) with Av = 0.0 to verify no warnings.										
3	Spectrum (1012800)	(16) V-V2505-OPH	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 59; FLASH=YES; FP-POS=2			1169 Secs (1169 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012801) with Av = 0.0 to verify no warnings.											



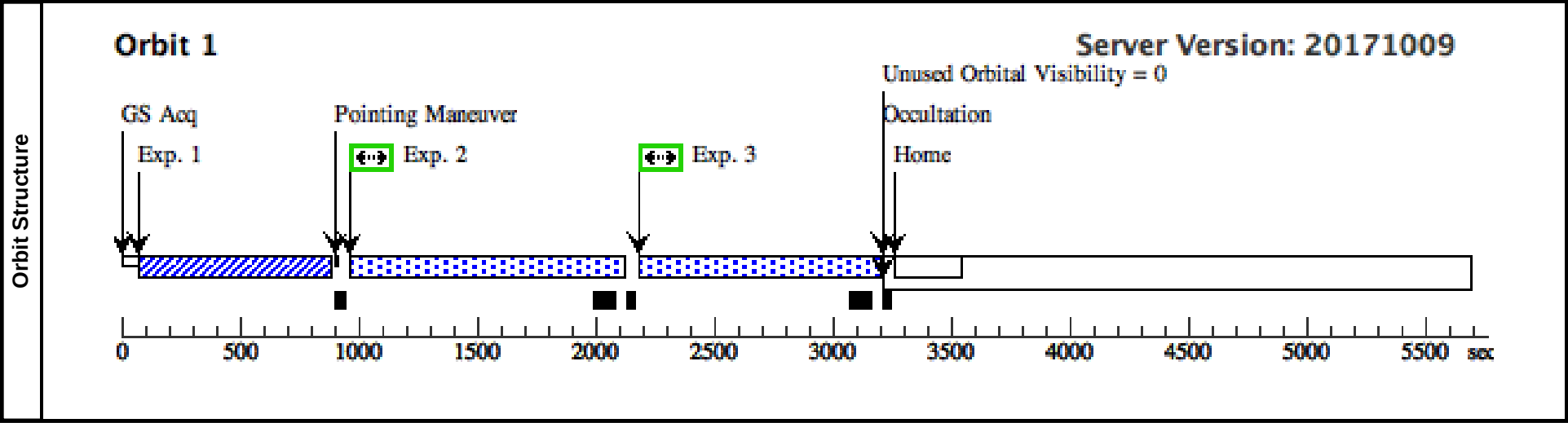
Proposal 15310 - 2MASS-J16025396-2022480 (17) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16025396-2022480 (17), scheduling									Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K6 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(2MASS-J16025396-2022480 (17)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(17)	2MASS-J16025396-2022480	RA: 16 02 53.9611 (240.7248379d) Dec: -20 22 48.00 (-20.38000d) Equinox: J2000	Proper Motion RA: -8.5 mas/yr Proper Motion Dec: -21.7 mas/yr Epoch of Position: 2000.0	V=12.487+/-0.05	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1012805)	(17) 2MASS-J16025396-2022480	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				200 Secs (200 Secs) [==>]	[1]
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.4 from Simbad. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1012806) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1012807)	(17) 2MASS-J16025396-2022480	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=910; FLASH=YES; FP-POS=1			1020 Secs (1020 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012809) with Av = 0.0 to verify no warnings.									
	3	Spectrum (1012807)	(17) 2MASS-J16025396-2022480	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=910; FLASH=YES; FP-POS=2			1020 Secs (1020 Secs) [==>]	[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012809) with Av = 0.0 to verify no warnings.										



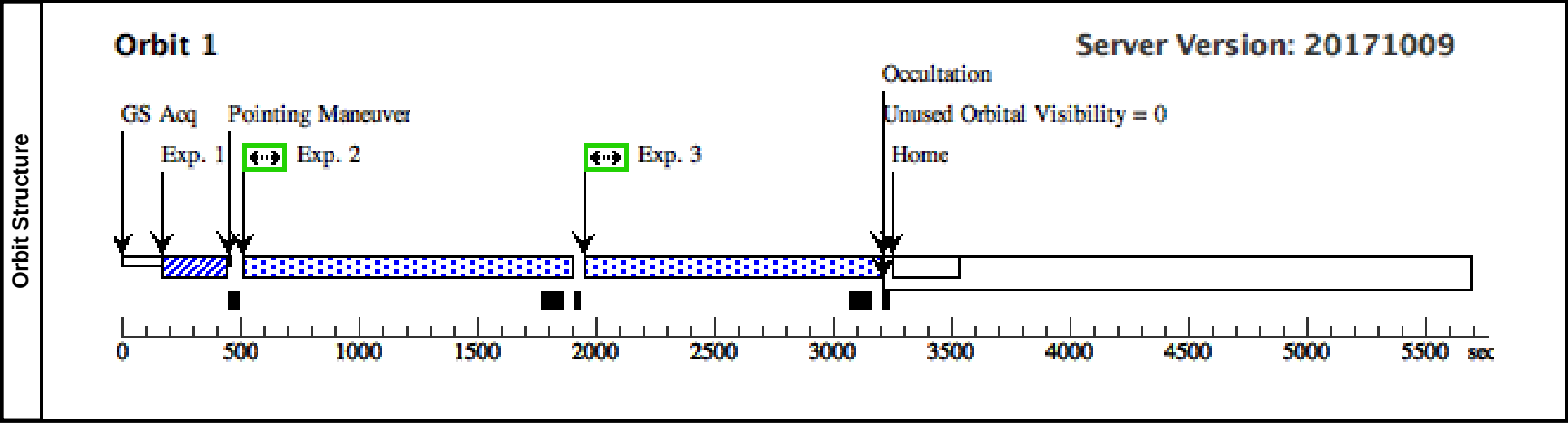
Proposal 15310 - 2MASS-J16085673-2033460 (18) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16085673-2033460 (18), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16085673-2033460 (18)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(18)	2MASS-J16085673-2033460	RA: 16 08 56.7187 (242.2363279d) Dec: -20 33 46.22 (-20.56284d) Equinox: J2000		Proper Motion RA: -9.1 mas/yr Proper Motion Dec: -24.3 mas/yr Epoch of Position: 2015.0		V=12.4+/-0.2		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012965)	(18) 2MASS-J16085673-2033460	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				250 Secs (250 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.3 from Simbad. Used Av = 1.4 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012966) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012968)	(18) 2MASS-J16085673-2033460	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=860; FLASH=YES; FP-POS=1			970 Secs (970 Secs)		
									[==>]		[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.4 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012971) with Av = 0.0 to verify no warnings.											
	3	Spectrum (1012968)	(18) 2MASS-J16085673-2033460	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=860; FLASH=YES; FP-POS=2			970 Secs (970 Secs)		
									[==>]		[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.4 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012971) with Av = 0.0 to verify no warnings.											



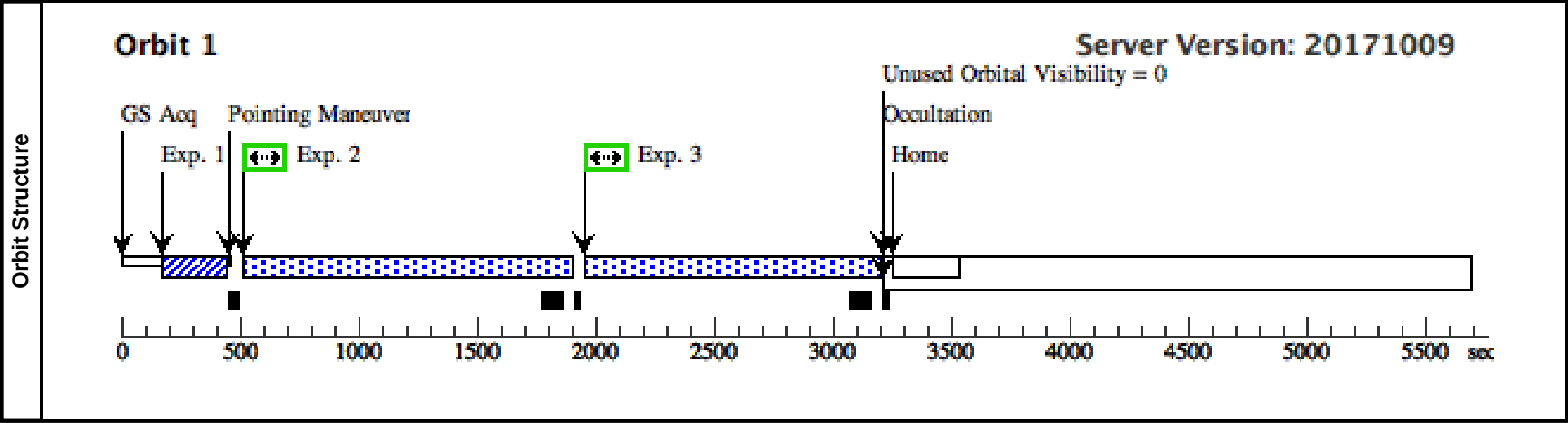
Proposal 15310 - GSC-06208-00834 (19) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, GSC-06208-00834 (19), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K6 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(GSC-06208-00834 (19)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(19)	GSC-06208-00834	RA: 16 06 31.6772 (241.6319883d)		Proper Motion RA: -11.7 mas/yr		V=12.959+/-0.13		Reference Frame: ICRS		
			Dec: -20 36 23.64 (-20.60657d)		Proper Motion Dec: -23.5 mas/yr						
			Equinox: J2000		Epoch of Position: 2015.0						
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[CIRCUMSTELLAR MATTER, K V-IV, T TAURI STAR]											
Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1012977)	(19) GSC-06208-008 34	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				26 Secs (26 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to V = 12.959 from Kiraga (2012, Aca, 62, 67). Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1012980) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1012983)	(19) GSC-06208-008 34	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1089; FLASH=YES; FP-POS=1			1199 Secs (1199 Secs)		
									[==>]		[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012984) with Av = 0.0 to verify no warnings.											
3	Spectrum (1012983)	(19) GSC-06208-008 34	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1089; FLASH=YES; FP-POS=2			1199 Secs (1199 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1012984) with Av = 0.0 to verify no warnings.											



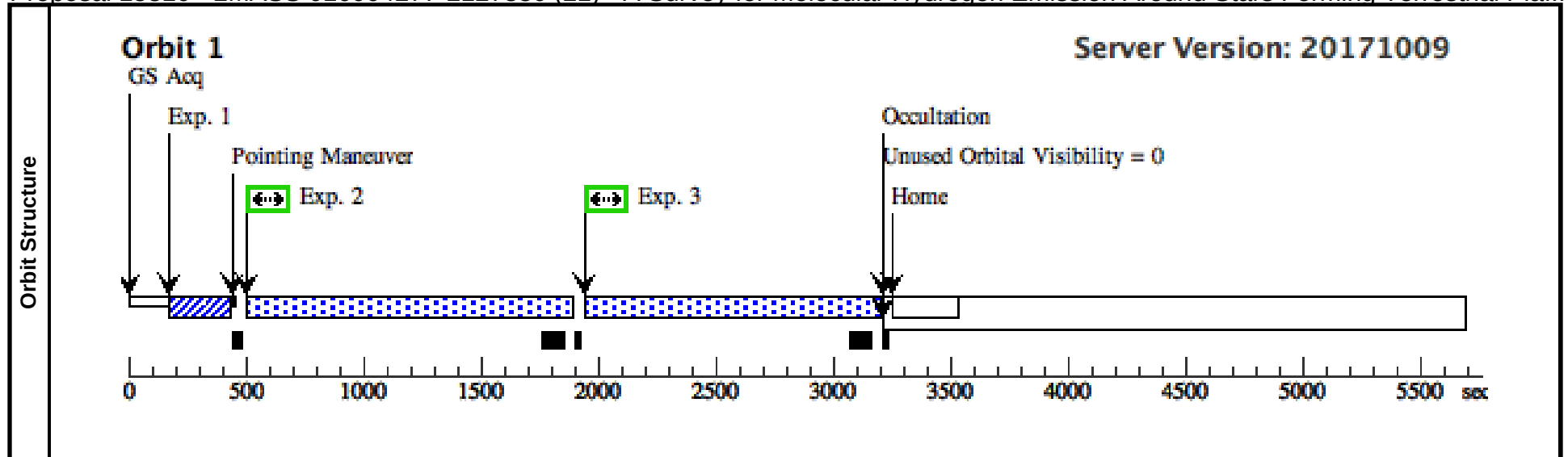
Proposal 15310 - 2MASS-J16061254-2036472 (20) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16061254-2036472 (20), scheduling										Sat Dec 30 02:00:44 GMT 2017	
	Diagnostic Status: Warning											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Comments: This is a K5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).												
Diagnostics	(2MASS-J16061254-2036472 (20)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.											
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous						
	(20)	2MASS-J16061254-2036472	RA: 16 06 12.5317 (241.5522154d) Dec: -20 36 47.64 (-20.61323d) Equinox: J2000	Proper Motion RA: -11.3 mas/yr Proper Motion Dec: -23.0 mas/yr Epoch of Position: 2015.0	V=12.737+/-0.2	Reference Frame: ICRS						
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	ACQ/IMAG E (1012991)	(20) 2MASS-J16061254-2036472	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				25 Secs (25 Secs)			
									[==>]		[1]	
	Comments: Exposure time estimate uses K0V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 14.0 from Simbad. Used Av = 1.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1012992) to verify no warnings if Av is over-estimated.											
	2	Spectrum (1012994)	(20) 2MASS-J16061254-2036472	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 90; FLASH=YES; FP-POS=1				1200 Secs (1200 Secs)		
									[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012997) with Av = 0.0 to verify no warnings.												
3	Spectrum (1012994)	(20) 2MASS-J16061254-2036472	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 90; FLASH=YES; FP-POS=2				1200 Secs (1200 Secs)			
								[==>]		[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1012997) with Av = 0.0 to verify no warnings.												



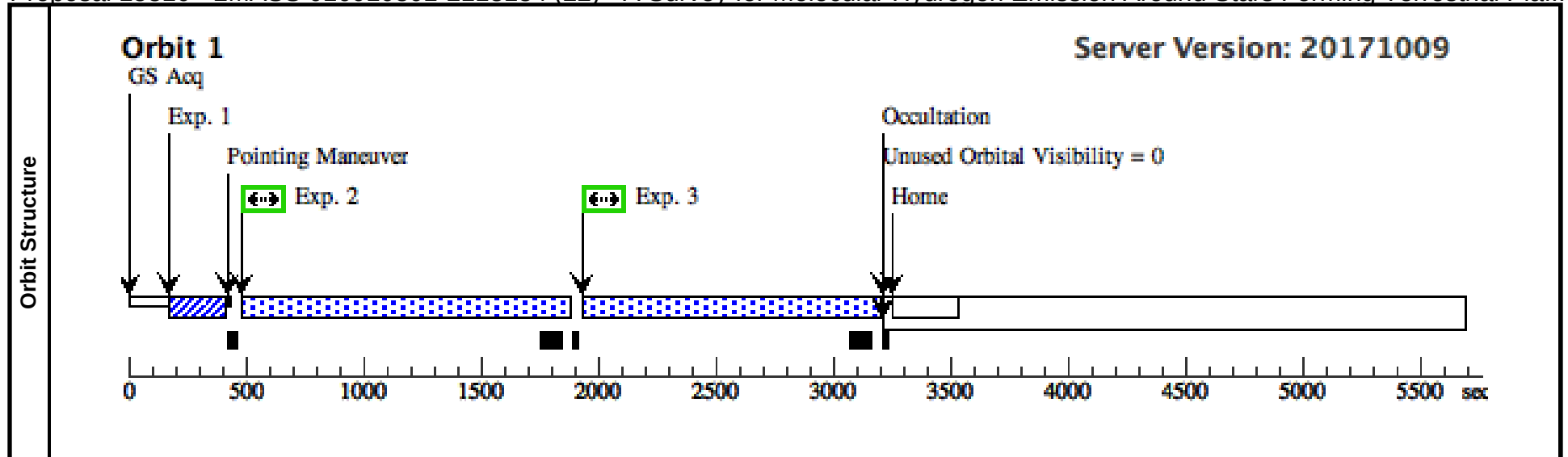
Proposal 15310 - 2MASS-J16004277-2127380 (21) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16004277-2127380 (21), scheduling										Sat Dec 30 02:00:44 GMT 2017	
	Diagnostic Status: Warning											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Comments: This is a K8 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).												
Diagnostics	(2MASS-J16004277-2127380 (21)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(21)	2MASS-J16004277-2127380	RA: 16 00 42.7515 (240.1781312d) Dec: -21 27 38.42 (-21.46067d) Equinox: J2000		Proper Motion RA: -18.7 mas/yr Proper Motion Dec: -27.4 mas/yr Epoch of Position: 2015.0		V=12.9+/-0.2		Reference Frame: ICRS			
	Comments: Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	ACQ/IMAG E (1013251)	(21) 2MASS-J16004 277-2127380	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				22 Secs (22 Secs)			
									[==>]		[1]	
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 14.2 from Simbad. Used Av = 0.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1013258) to verify no warnings if Av is over-estimated.											
	2	Spectrum (1013271)	(21) 2MASS-J16004 277-2127380	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 93; FLASH=YES; FP-POS=1				1203 Secs (1203 Secs)		
									[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013279) with Av = 0.0 to verify no warnings.												
3	Spectrum (1013271)	(21) 2MASS-J16004 277-2127380	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 93; FLASH=YES; FP-POS=2				1203 Secs (1203 Secs)			
								[==>]		[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.8 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013279) with Av = 0.0 to verify no warnings.												



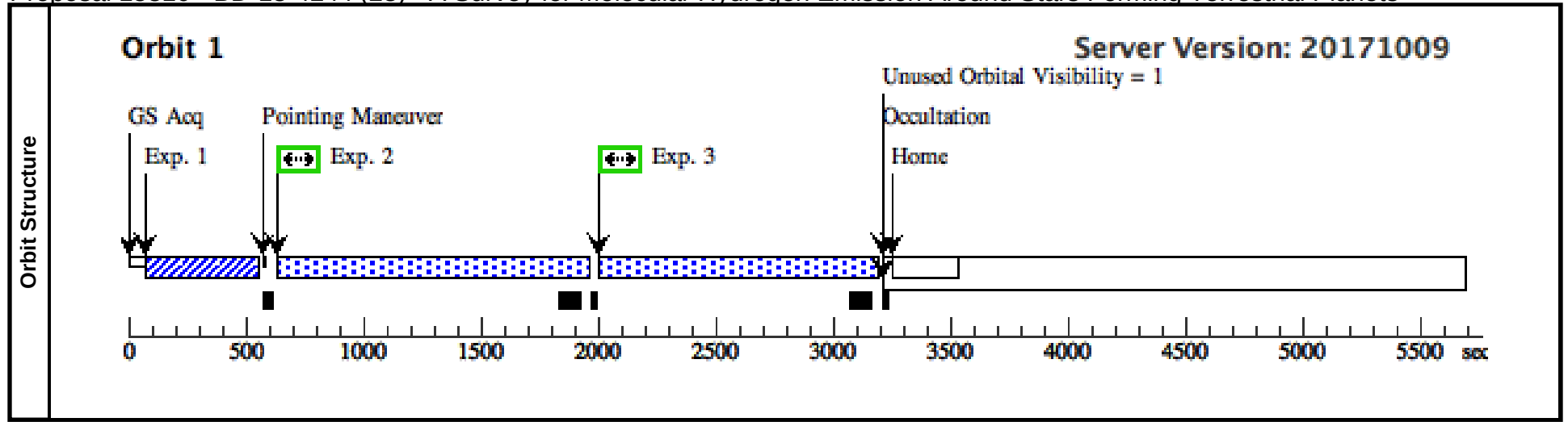
Proposal 15310 - 2MASS-J16010801-2113184 (22) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16010801-2113184 (22), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K8 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16010801-2113184 (22)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(22)	2MASS-J16010801-2113184	RA: 16 01 8.0120 (240.2833833d) Dec: -21 13 18.48 (-21.22180d) Equinox: J2000		Proper Motion RA: -12.8 mas/yr Proper Motion Dec: -21.9 mas/yr Epoch of Position: 2000.0		V=12.5+/-0.11		Reference Frame: ICRS		
	Comments: listed as M0 by Simbad, but K by Luhman et al.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1013297)	(22) 2MASS-J16010801-2113184	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				10 Secs (10 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to V = 12.51 from Kiraga (2012, AcA, 62 67). Used Av = 0.0 from Carpenter et al. (2009, ApJ, 705, 1646).										
	2	Spectrum (1013303)	(22) 2MASS-J16010801-2113184	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1105; FLASH=YES; FP-POS=1			1215 Secs (1215 Secs)		
									[==>]		[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.0 from Carpenter et al. (2009, ApJ, 705, 1646).											
	3	Spectrum (1013303)	(22) 2MASS-J16010801-2113184	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1105; FLASH=YES; FP-POS=2			1215 Secs (1215 Secs)		
									[==>]		[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.0 from Carpenter et al. (2009, ApJ, 705, 1646).											



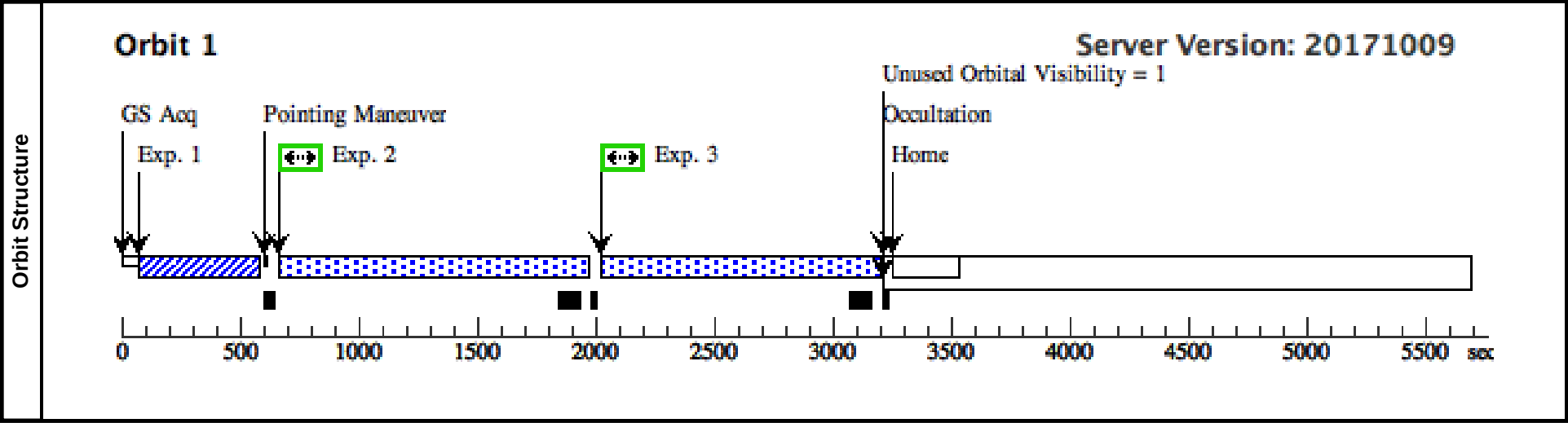
Proposal 15310 - BD-18-4244 (23) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, BD-18-4244 (23), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K6 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(BD-18-4244 (23)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(23)	BD-18-4244	RA: 16 12 40.5065 (243.1687771d)	Proper Motion RA: -9.8 mas/yr	V=10.829+/-0.05	Reference Frame: ICRS					
			Dec: -18 59 28.59 (-18.99127d)	Proper Motion Dec: -21.7 mas/yr							
			Equinox: J2000	Epoch of Position: 2015.0							
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]											
Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	ACQ/IMAG E (1013305)	(23) BD-18-4244	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				85 Secs (85 Secs)		
									[==>]	[1]	
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.1 from Torres et al. (2006, A&A, 460, 695). Used Av = 1.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1013308) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1013312)	(23) BD-18-4244	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 29; FLASH=YES; FP-POS=1			1139 Secs (1139 Secs)		
									[==>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013317) with Av = 0.0 to verify no warnings.											
3	Spectrum (1013312)	(23) BD-18-4244	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 29; FLASH=YES; FP-POS=2			1139 Secs (1139 Secs)			
								[==>]	[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.3 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013317) with Av = 0.0 to verify no warnings.											



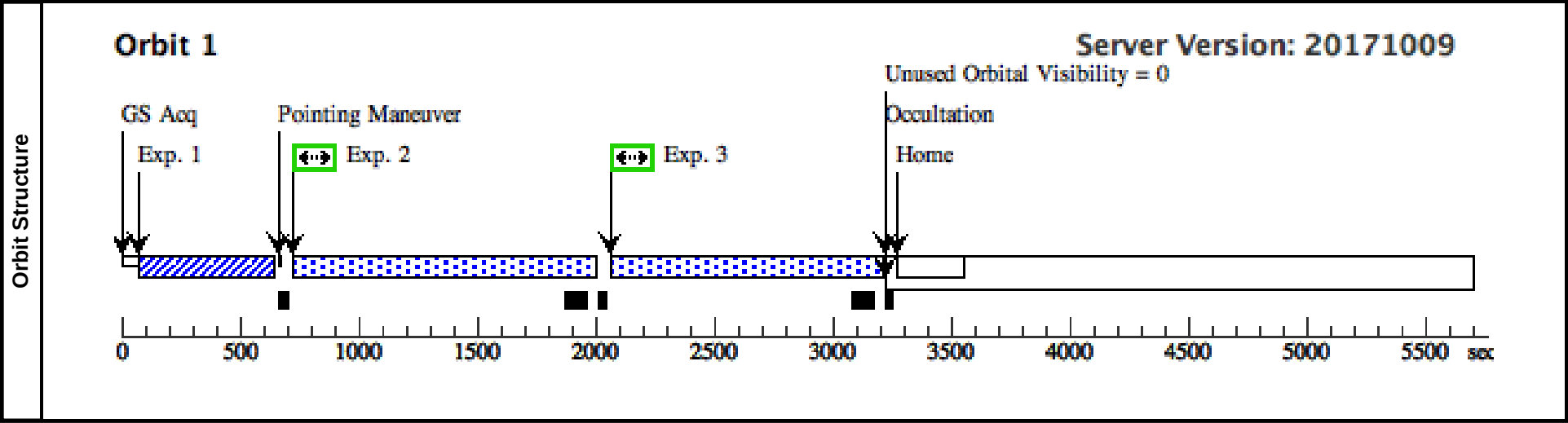
Proposal 15310 - 2MASS-J15570234-1950419 (24) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J15570234-1950419 (24), scheduling									Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K7 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(2MASS-J15570234-1950419 (24)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(24)	2MASS-J15570234-1950419	RA: 15 57 2.3364 (239.2597350d) Dec: -19 50 42.38 (-19.84511d) Equinox: J2000	Proper Motion RA: -11.4 mas/yr Proper Motion Dec: -25.0 mas/yr Epoch of Position: 2015.0	V=11.665+/-0.05	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1013324)	(24) 2MASS-J15570234-1950419	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100 Secs (100 Secs) [==>]	[1]
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.6 from Cutri et al. (2003yCat.2246....0C). Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1013328) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1013329)	(24) 2MASS-J15570234-1950419	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 14; FLASH=YES; FP-POS=1			1124 Secs (1124 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1013331) with Av = 0.0 to verify no warnings.									
	3	Spectrum (1013329)	(24) 2MASS-J15570234-1950419	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 14; FLASH=YES; FP-POS=2			1124 Secs (1124 Secs) [==>]	[1]
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1013331) with Av = 0.0 to verify no warnings.										



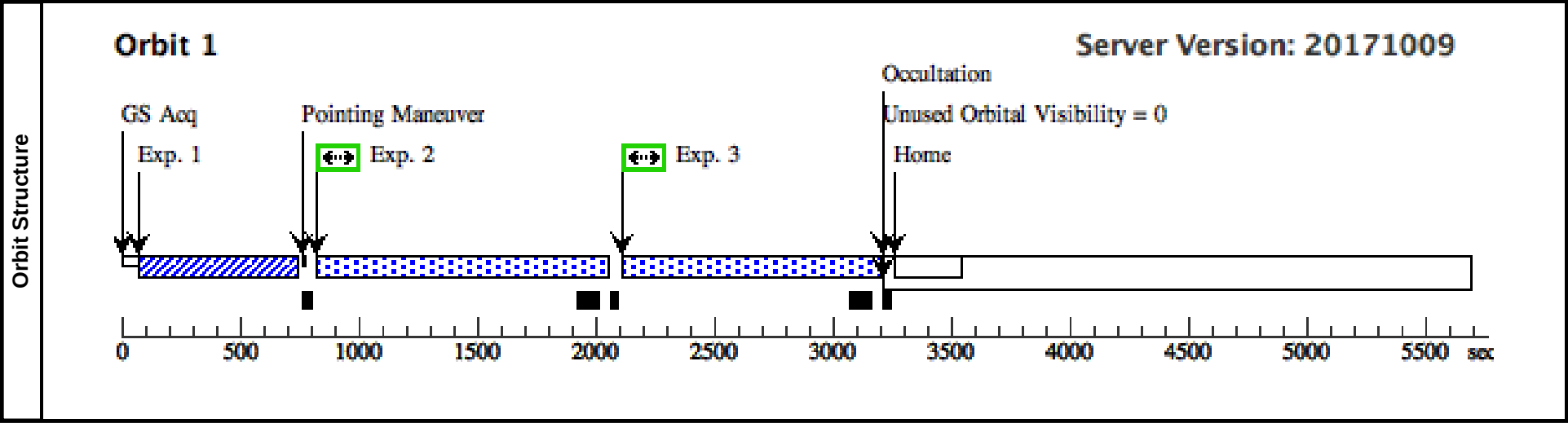
Proposal 15310 - 2MASS-J16023910-2542078 (25) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16023910-2542078 (25), scheduling									Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K7 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(2MASS-J16023910-2542078 (25)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(25)	2MASS-J16023910-2542078	RA: 16 02 39.0820 (240.6628417d) Dec: -25 42 8.35 (-25.70232d) Equinox: J2000	Proper Motion RA: -20.4 mas/yr Proper Motion Dec: -31.9 mas/yr Epoch of Position: 2015.0		V=13.7+/-0.3		Reference Frame: ICRS		
	Comments:									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1013336)	(25) 2MASS-J16023 910-2542078	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				130 Secs (130 Secs)	
									[>=>]	[1]
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spec trum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.2 from Simbad. Used Av = 0.0 from Carpenter et al. (20 09, ApJ, 705, 1646).									
	2	Spectrum (1013338)	(25) 2MASS-J16023 910-2542078	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=98 4; FLASH=YES; FP-POS=1			1094 Secs (1094 Secs)	
									[>=>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.0 from Carpenter et al. (2009, ApJ, 705, 1646).									
3	Spectrum (1013338)	(25) 2MASS-J16023 910-2542078	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=98 4; FLASH=YES; FP-POS=2			1094 Secs (1094 Secs)		
								[>=>]	[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to al l our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that ma y appear in this region. Used Av = 0.0 from Carpenter et al. (2009, ApJ, 705, 1646).										



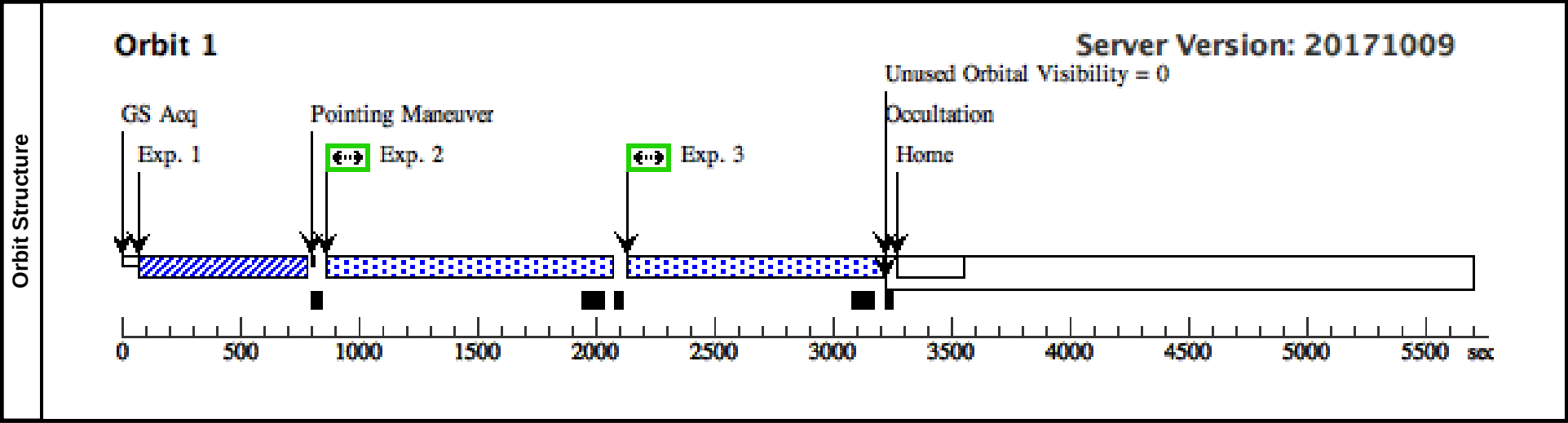
Proposal 15310 - 2MASS-J16025123-2401574 (26) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16025123-2401574 (26), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K4 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16025123-2401574 (26)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(26)	2MASS-J16025123-2401574	RA: 16 02 51.2146 (240.7133942d) Dec: -24 01 57.83 (-24.03273d) Equinox: J2000		Proper Motion RA: -12.2 mas/yr Proper Motion Dec: -24.3 mas/yr Epoch of Position: 2015.0		V=12.6+/-0.3		Reference Frame: ICRS		
	Comments: Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1013351)	(26) 2MASS-J16025123-2401574	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				180 Secs (180 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.8 from Zacharias et al. (2012yCat.1322....0Z). Used Av = 0.6 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1013352) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1013353)	(26) 2MASS-J16025123-2401574	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=93 0; FLASH=YES; FP-POS=1			1040 Secs (1040 Secs)		
									[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013359) with Av = 0.0 to verify no warnings.										
3	Spectrum (1013353)	(26) 2MASS-J16025123-2401574	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=93 0; FLASH=YES; FP-POS=2			1040 Secs (1040 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013359) with Av = 0.0 to verify no warnings.											



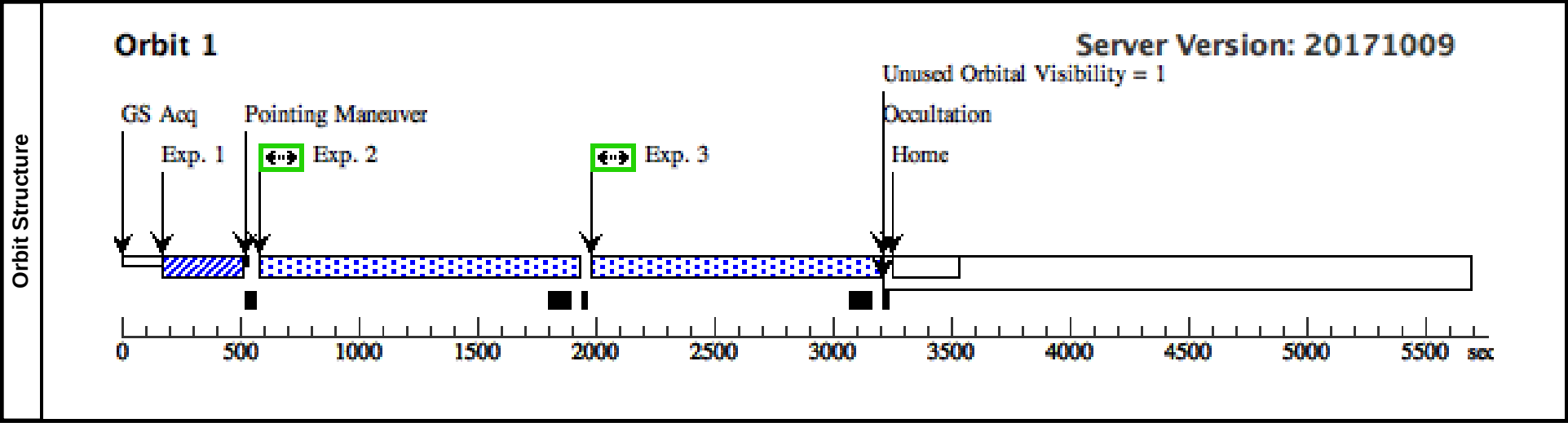
Proposal 15310 - PZ99-J161019.1-250230 (27) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Planets

Visit	Proposal 15310, PZ99-J161019.1-250230 (27), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K7 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(PZ99-J161019.1-250230 (27)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(27)	PZ99-J161019.1-250230	RA: 16 10 19.1784 (242.5799100d)		Proper Motion RA: -10.8 mas/yr		V=11.978+/-0.05		Reference Frame: ICRS		
			Dec: -25 02 30.58 (-25.04183d)		Proper Motion Dec: -23.0 mas/yr						
			Equinox: J2000		Epoch of Position: 2015.0						
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR]											
Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1013371)	(27) PZ99-J161019.1 -250230	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				200 Secs (200 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.5 from Hog et al. (2000, A&A, 355, 27). Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1013373) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1013377)	(27) PZ99-J161019.1 -250230	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=91 4; FLASH=YES; FP-POS=1			1024 Secs (1024 Secs)		
									[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1013379) with Av = 0.0 to verify no warnings.										
3	Spectrum (1013377)	(27) PZ99-J161019.1 -250230	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=91 4; FLASH=YES; FP-POS=2			1024 Secs (1024 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1013379) with Av = 0.0 to verify no warnings.											



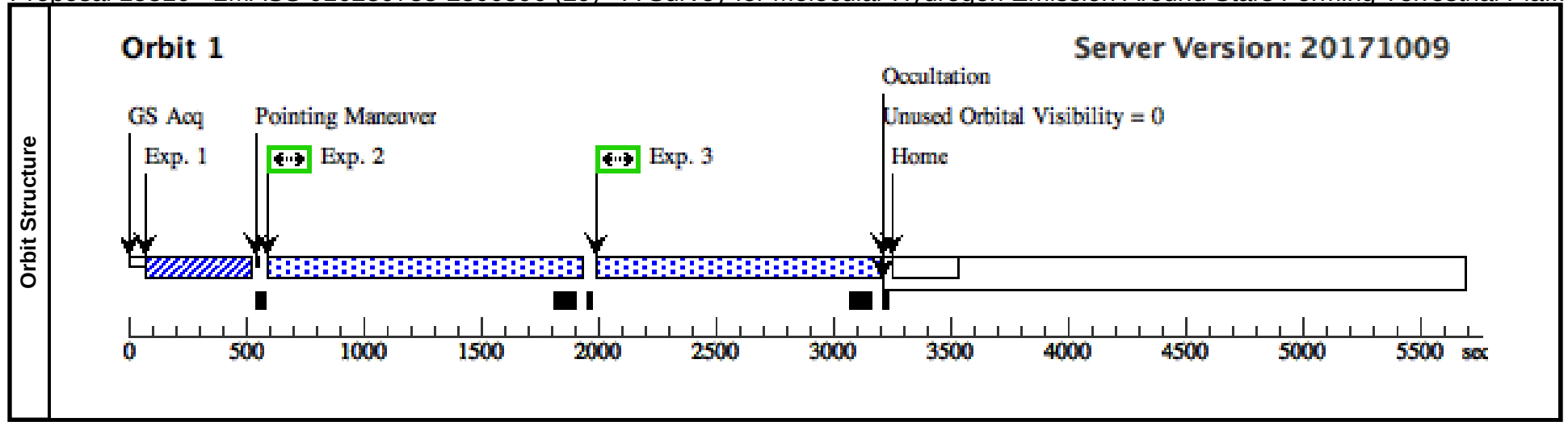
Proposal 15310 - PGZ2001-J161031.9-191305 (28) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, PGZ2001-J161031.9-191305 (28), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K7 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(PGZ2001-J161031.9-191305 (28)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(28)	PGZ2001-J161031.9-191305	RA: 16 10 31.9409 (242.6330871d) Dec: -19 13 6.44 (-19.21846d) Equinox: J2000		Proper Motion RA: -9.6 mas/yr Proper Motion Dec: -24.4 mas/yr Epoch of Position: 2015.0		V=13.56+/-0.05		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	ACQ/IMAG E (1013400)	(28) PGZ2001-J1610 31.9-191305	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				60 Secs (60 Secs)		
									[==>]		[1]
	Comments: Exposure time estimate uses K7V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 15.1 from Zacharias et al. (2012yCat.1322....0Z). Used Av = 1.1 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1013401) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1013403)	(28) PGZ2001-J1610 31.9-191305	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 54; FLASH=YES; FP-POS=1			1164 Secs (1164 Secs)		
									[==>]		[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.1 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013406) with Av = 0.0 to verify no warnings.										
3	Spectrum (1013403)	(28) PGZ2001-J1610 31.9-191305	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=10 54; FLASH=YES; FP-POS=2			1164 Secs (1164 Secs)			
								[==>]		[1]	
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 1.1 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013406) with Av = 0.0 to verify no warnings.											



Proposal 15310 - 2MASS-J16230783-2300596 (29) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J16230783-2300596 (29), scheduling										Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning										
	Scientific Instruments: COS/FUV, COS/NUV										
	Special Requirements: (none)										
Comments: This is a K3.5 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).											
Diagnostics	(2MASS-J16230783-2300596 (29)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(29)	2MASS-J16230783-2300596	RA: 16 23 7.8149 (245.7825621d) Dec: -23 01 0.37 (-23.01677d) Equinox: J2000	Proper Motion RA: -7.2 mas/yr Proper Motion Dec: -24.6 mas/yr Epoch of Position: 2015.0	V=11.952+/-0.05	Reference Frame: ICRS					
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	ACQ/IMAG E (1013421)	(29) 2MASS-J16230783-2300596	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				68 Secs (68 Secs) [==>]	[1]	
	Comments: Exposure time estimate uses K2V Pickles star with the spectrum of LkCa 19 (a chromospherically active K0 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 12.7 from Simbad. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran with Av = 0.0 (ETC# 1013423) to verify no warnings if Av is over-estimated.										
	2	Spectrum (1013428)	(29) 2MASS-J16230783-2300596	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1047; FLASH=YES; FP-POS=1			1157 Secs (1157 Secs) [==>]	[1]	
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1013434) with Av = 0.0 to verify no warnings.										
3	Spectrum (1013428)	(29) 2MASS-J16230783-2300596	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=1047; FLASH=YES; FP-POS=2			1157 Secs (1157 Secs) [==>]	[1]		
Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.6 which is the median Av of Upper Sco as given by Fang et al. (2017, ApJ, 842, 123). Also ran ETC (1013434) with Av = 0.0 to verify no warnings.											



Proposal 15310 - 2MASS-J15580815-2405529 (30) - A Survey for Molecular Hydrogen Emission Around Stars Forming Terrestrial Pla...

Visit	Proposal 15310, 2MASS-J15580815-2405529 (30), scheduling									Sat Dec 30 02:00:44 GMT 2017
	Diagnostic Status: Warning									
	Scientific Instruments: COS/FUV, COS/NUV									
	Special Requirements: (none)									
Comments: This is a K4 TTS from Luhman & Mamajek (2012, ApJ, 758, 31).										
Diagnostics	(2MASS-J15580815-2405529 (30)) Warning (Form): For the best data quality, it is strongly recommended that the maximum number of allowed FP-POS positions is used when observing at a given COS CENWAVE setting. See full description for details.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(30)	2MASS-J15580815-2405529	RA: 15 58 8.1299 (239.5338746d) Dec: -24 05 53.35 (-24.09815d) Equinox: J2000	Proper Motion RA: -18.4 mas/yr Proper Motion Dec: -24.4 mas/yr Epoch of Position: 2015.0	V=12.7+/-0.2	Reference Frame: ICRS				
	Comments:									
	Category=STAR Description=[CIRCUMSTELLAR MATTER, K V-IV, PRE-MAIN SEQUENCE STAR, T TAURI STAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E (1013540)	(30) 2MASS-J15580815-2405529	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				200 Secs (200 Secs) [==>]	[1]
	Comments: Exposure time estimate uses K5V Pickles star with the spectrum of RECX-1 (a chromospherically active K5 WTTS) used below 3200 Ang. This spectrum downloaded from the ST archive (STIS-G230L spectrum from GO-11616) and scaled to produce calibrated spectrum for a star of this class as shown in Ingleby et al. (2013, ApJ, 767, 112). Normalized to B = 13.5 from Zacharias et al. (2012yCat.1322....0Z). Used Av = 0.5 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran with Av = 0.0 (ETC# 1013549) to verify no warnings if Av is over-estimated.									
	2	Spectrum (1013552)	(30) 2MASS-J15580815-2405529	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=910; FLASH=YES; FP-POS=1			1020 Secs (1020 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.5 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013563) with Av = 0.0 to verify no warnings.									
	3	Spectrum (1013552)	(30) 2MASS-J15580815-2405529	COS/FUV, TIME-TAG, PSA	G130M 1222 A	SEGMENT=BOTH; BUFFER-TIME=910; FLASH=YES; FP-POS=2			1020 Secs (1020 Secs) [==>]	[1]
	Comments: Exposure time calculation run with a template of the COS spectrum of the WTTS LkCa 19 taken from program 11616 and provided by the PI of that program (G. Herczeg). This star is similarly active to all our target stars and has Av = 0.0 and the same distance as our target stars. This observation did not cover the region below 1132 Ang; however, there should only be a handful of weak H2 emission lines that may appear in this region. Used Av = 0.5 from Carpenter et al. (2009, ApJ, 705, 1646). Also ran ETC (1013563) with Av = 0.0 to verify no warnings.									

