16596 - ULLYSES Late K- and Mid M-type T Tauri Survey Stars in Cha I and Eta Cha

Cycle: 29, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
1S	(1) RECX-6 CCDFLAT WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	30-Jul-2021 17:03:25.0	yes
1T	(1) RECX-6 WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	30-Jul-2021 17:03:27.0	yes
1U	(1) RECX-6 WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	30-Jul-2021 17:03:28.0	yes
2C	(2) V-SY-CHA	COS/FUV COS/NUV	3	30-Jul-2021 17:03:29.0	yes
2D	(2) V-SY-CHA	COS/FUV COS/NUV	3	30-Jul-2021 17:03:31.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
2E	(2) V-SY-CHA	COS/FUV COS/NUV	3	30-Jul-2021 17:03:32.0	yes
2F	(2) V-SY-CHA	COS/FUV COS/NUV	2	30-Jul-2021 17:03:34.0	yes
2S	(2) V-SY-CHA CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	1	30-Jul-2021 17:03:35.0	yes

21 Total Orbits Used

ABSTRACT

The Space Telescope Science Institute (STScI) Director has decided to devote up to 1000 orbits of Director's Discretionary time in observing Cycles 27-29 to a new Hubble Ultraviolet Legacy program focused on star formation and associated stellar physics. This new program, ULLYSES (UV Legacy Library of Young Stars as Essential Standards), will provide a UV spectroscopic reference sample of young (< 10 Myr) high- and low-mass stars. It will target over ~150 OB stars in the Magellanic Clouds and lower metallicity galaxies in the Local Group, and ~40 T Tauri stars and brown dwarfs in the Milky Way. In addition, ULLYSES will monitor 4 typical T Tauri stars over different rotational phases through at least three rotation periods, and over timescales of months to years. The resulting library will provide template spectra of massive stars at metallicities substantially below the well studied, while the low mass sample will cover a wide range of ages, accretion rates, and masses, including objects down to well below 0.5 M_sun. The legacy of this large UV dataset on the first 10 Myr of stellar evolution will be enhanced by complementary datasets obtained by the scientific community. In addition to the core goals of the program related to stellar astrophysics of low and high mass stars, this data will also enable exciting science in the fields of ISM, CGM, jets, and exoplanets. ULLYSES will be modeled after the Frontier Fields program: all data obtained will be non-proprietary. The implementation team at STScI is developing high-level science data products and a sophisticated database and website for disseminating data from the ULLYSES program and ancillary datasets for the ULLYSES target sample from space and ground-based facilities.

OBSERVING DESCRIPTION

This proposal includes a subset of the low mass ULLYSES survey stars. Each target will be observed with the COS c1291 + c1589 + c1623 settings, as well as with STIS G230L, G430L, and G750L. All observations will normally be constrained to occur within 1 day.

Signal-to-noise requirements used to determine the desired exposures times were defined as follows:

COS/G130M/c1291: N V 1239 +- 1 A -- S/N=10/6-pix-resel at the peak of the line
COS/G160M/c1589: C IV 1549 +- 1 A -- S/N=20/6-pix-resel at the peak of the line (combined c1589 & c1623)
COS/G160M/c1623: C IV 1549 +- 1 A -- S/N=20/6-pix-resel at the peak of the line (combined c1589 & c1623)
STIS/G230L/52X2: Mg II 2800 +-15 A -- S/N=20/2-pix-resel at the peak of the line
STIS/G430L/52X2: continuum average 4000 +-5 A -- S/N=20/2-pix-resel (2 reads)
STIS/G750L/52X2: continuum average 5700 +-5 A -- S/N=20/2-pix-resel (2 reads)

Additional details about the scientific motivation and technical implementation strategy of the ULLYSES observations can be found at http://www.stsci.edu/stsci-research/research-topics-and-programs/ullyses. The ULLYSES program is based on the recommendations of a working group led by Sally Oey; the full text of that group's report can be found at http://www.stsci.edu/files/live/sites/www/files/home/stsci-research/research-topics-and-programs/ullyses/_documents/HSTUV-report-ULLYSES.pdf.

Visit

Proposal 16596, RECX-6-STIS (1S) Fri Jul 30 21:03:36 GMT 2021

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2021:00:00:00 AND 20-MAR-2022:00:00:00; GROUP 1S,1T,1U WITHIN 2D

Comments: vstatus; 1S; RECX-6; P/STIS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; RECX 6 ; STIS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/recx-6/mdwarf/
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/recx-6/
vcheck; Selected ACQ strategy?; yes, F28X50LP
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 82% of planned G140L, 92% of planned G230L, 200% of planned G430L & G750L
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; yes ...
Visit 1S has GROUP 1S,1T,1U WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated STIS orbits = 9

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RECX-6 Alt Name1: V-EL-CHA Alt Name2: 2MASSJ08423879-7854427	RA: 08 42 38.6218 (130.6609242d) Dec: -78 54 42.30 (-78.91175d) Equinox: J2000	Proper Motion RA: -29.106366554155997 mas/yr Proper Motion Dec: 27.014262804959003 mas/yr Parallax: 0.010193333540815998" Epoch of Position: 2016	V=14.1 SpT=M3; A_V=0.00; V=14.1	Reference Frame: ICRS

Comments: RECX-6 : V-EL-CHA, 2MASSJ08423879-7854427
Region: Eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=RECX+6&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94
M: 0.3 ; log(dm/dt): -10.6*
Input file: targets_up_to_May30-2022.csv
recx6_lya2_etc.txt
Calculation performed 2021-06-18T15:04:37, 0.24
---
tstatus; RECX-6; P/STIS approved for submission; S/ins not started; P/WF 30/07/21; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; EL Cha
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 63% and 115% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE 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 (1526122)	(1) RECX-6	STIS/CCD, ACQ, F28X50LP	MIRROR				0.5 Secs (0.5 Secs) *[==>]*	***[1]***
	Comments: Nominal ETC run gives 0.05 sec for S/N = 40 *Worst-case ETC run (1526123) gives saturation in 1.98 sec*								
2	G230L/2376 (1526603)	(1) RECX-6	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=559			2190 Secs (2190 Secs) *[==>]*	***[1]***
	Comments: Worst-case ETC run (1526607) gives 1.35 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *recx6_lya2_etc.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=205.2 s, spectral region:* *2800.0 +- 15.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 2340.0 cts/s/segment* *brightest pixel: 0.405 cts/s/pix at 2796.8 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
3	G230L/2376 WAVECAL	WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	***[1]***
4	G140L/1425 (1526602)	(1) RECX-6	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=1223			2447 Secs (2447 Secs) *[==>]*	***[2]***
	Comments: Worst-case ETC run (1526606) gives 0.24 cts/s in brightest pixel *recx6_lya2_etc.txt; stis,fuvmama,g140l,c1425,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=1361.4 s, spectral region:* *1549.0 +- 2.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 786.4 cts/s/segment* *brightest pixel: 0.290 cts/s/pix at 1304.7 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
5	G140L/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***
6	G140L/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[3]***
7	G140L/1425 (1526602)	(1) RECX-6	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=791			1583 Secs (1583 Secs) *[==>]*	***[3]***
	Comments: Worst-case ETC run (1526606) gives 0.24 cts/s in brightest pixel *recx6_lya2_etc.txt; stis,fuvmama,g140l,c1425,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=1361.4 s, spectral region:* *1549.0 +- 2.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 786.4 cts/s/segment* *brightest pixel: 0.290 cts/s/pix at 1304.7 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								

8	G430L/4300 (1) RECX-6 (1526604)	STIS/CCD, ACCUM, 52X0.2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1	284 Secs (284 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***

Comments: Worst-case ETC run (1526608) gives saturation in 616 sec

recx6_lya2_etc.txt; stis,ccd,g430l,c4300,52x2,mjd#59670
WARNING: operating mode = ACCUM
Input file: targets_up_to_May30-2022.csv
Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94
M: 0.3 ; log(dm/dt): -10.6*
For exptime=65.2 s, n_reads=2, spectral region:
4000.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 39032.7 cts/s/segment
brightest pixel: 15.294 cts/s/pix at 4560.5 A
Calculation performed 2021-06-18T15:04:36, v0.24

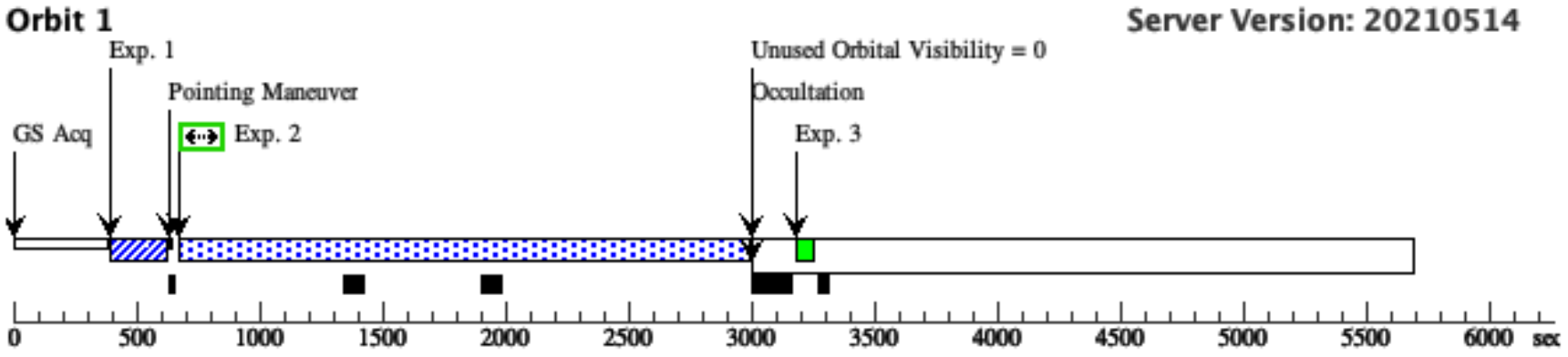
9	G430L/4300 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.2	G430L 4300 A		*[==>]*	***[3]***
10	G750L/7751 (1) RECX-6 (1526605)	STIS/CCD, ACCUM, 52X0.2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1	32 Secs (32 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[3]***

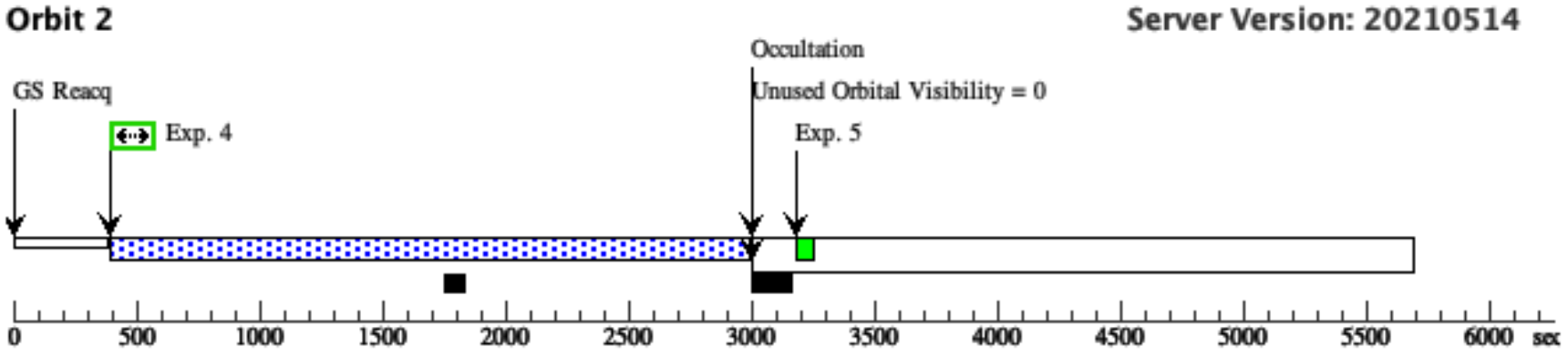
Comments: Worst-case ETC run (1526609) gives saturation in 53 sec

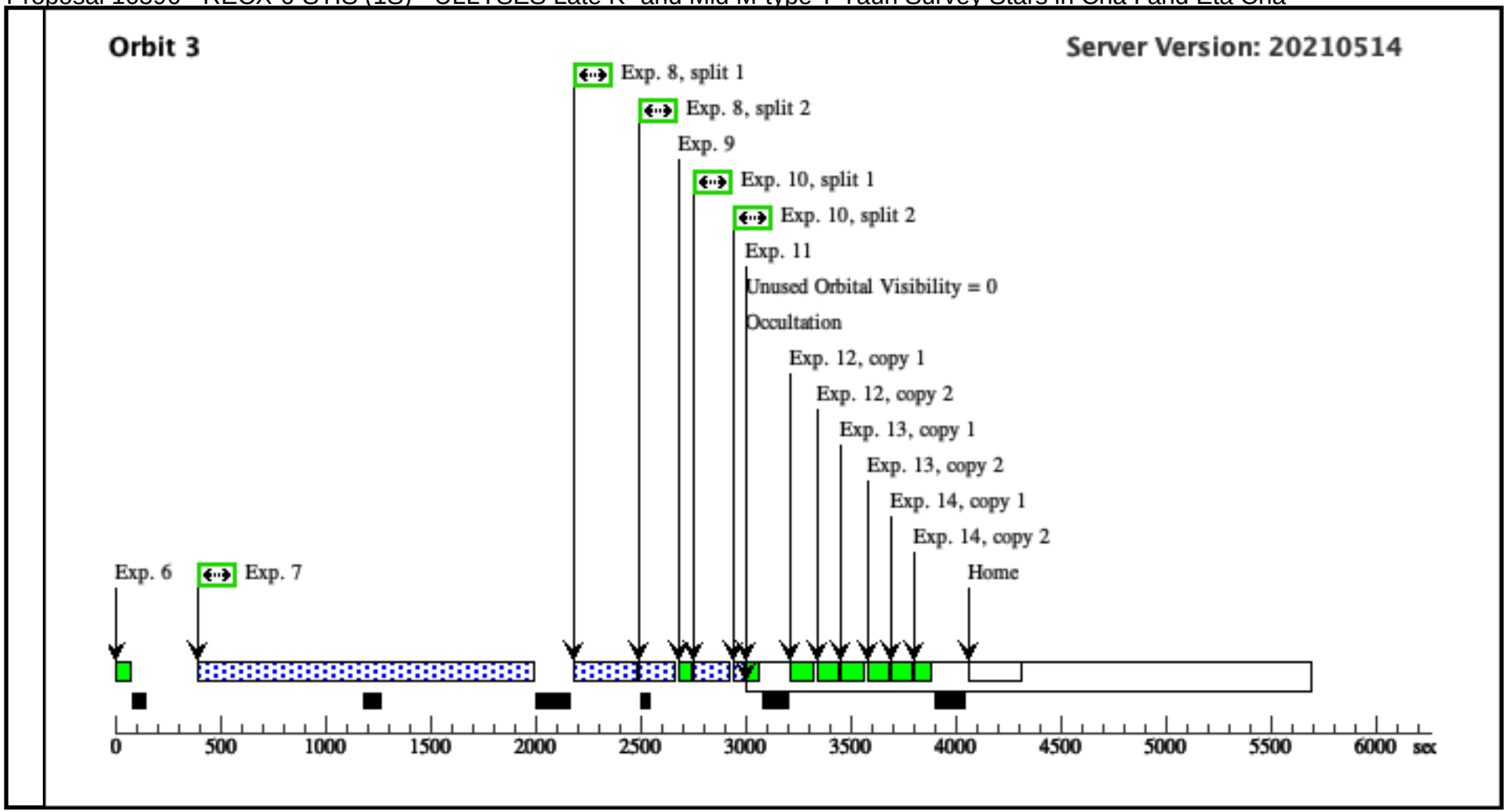
recx6_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59670
WARNING: operating mode = ACCUM
Input file: targets_up_to_May30-2022.csv
Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94
M: 0.3 ; log(dm/dt): -10.6*
For exptime=7.2 s, n_reads=2, spectral region:
5700.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 89476.9 cts/s/segment
brightest pixel: 180.018 cts/s/pix at 6563.9 A
Calculation performed 2021-06-18T15:04:37, v0.24

11	G750L/7751 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.2	G750L 7751 A		*[==>]*	***[3]***
12	G750L/7751 CCDFLAT CCDFLAT 1	STIS/CCD, ACCUM, 0.3X0.09	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[3]***
13	G750L/7751 CCDFLAT CCDFLAT 2	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[3]***
14	G750L/7751 CCDFLAT CCDFLAT 3	STIS/CCD, ACCUM, 52X0.2	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20210514
Exp. 8, split 1
Exp. 8, split 2
Exp. 9
Exp. 10, split 1
Exp. 10, split 2
Exp. 11
Unused Orbital Visibility = 0
Occultation
Exp. 12, copy 1
Exp. 12, copy 2
Exp. 13, copy 1
Exp. 13, copy 2
Exp. 14, copy 1
Exp. 14, copy 2
Home
Exp. 6
Exp. 7
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16596, RECX-6-STIS (1T) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2021:00:00:00 AND 20-MAR-2022:00:00:00

Comments: vstatus; 1T; RECX-6; P/STIS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; RECX 6 ; STIS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/recx-6/mdwarf/
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/recx-6/
vcheck; Selected ACQ strategy?; yes, F28X50LP
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 82% of planned G140L, 92% of planned G230L, 200% of planned G430L & G750L
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; ; yes ...
Visit 1S has GROUP 1S,1T,1U WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated STIS orbits = 9

Fixed Targets

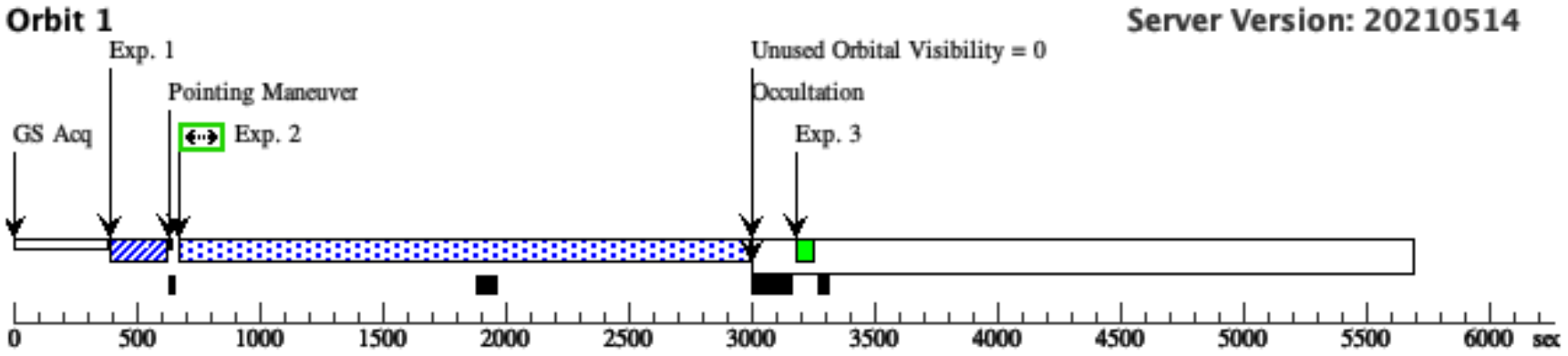
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RECX-6 Alt Name1: V-EL-CHA Alt Name2: 2MASSJ08423879-7854427	RA: 08 42 38.6218 (130.6609242d) Dec: -78 54 42.30 (-78.91175d) Equinox: J2000	Proper Motion RA: -29.106366554155997 mas/yr Proper Motion Dec: 27.014262804959003 mas/yr Parallax: 0.010193333540815998" Epoch of Position: 2016	V=14.1 SpT=M3; A_V=0.00; V=14.1	Reference Frame: ICRS

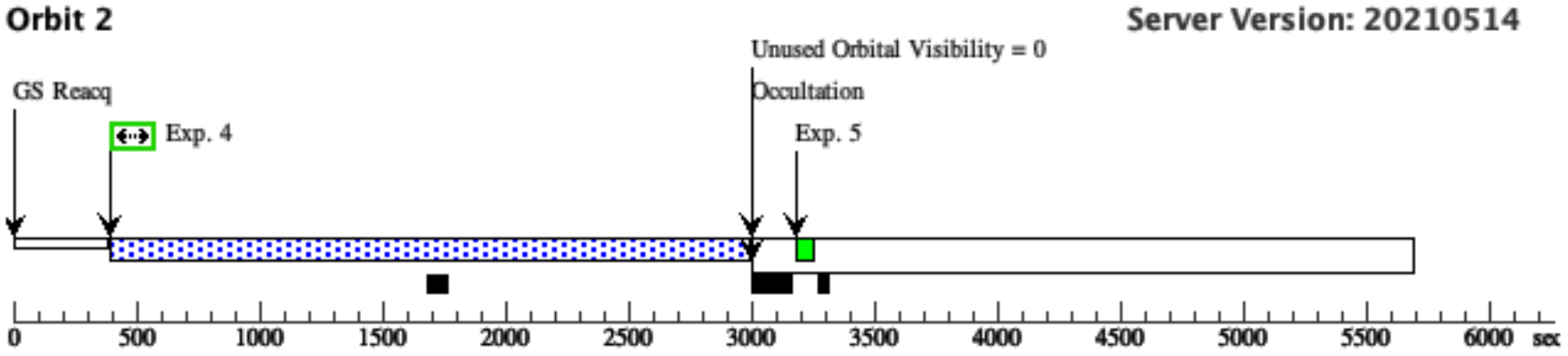
Comments: RECX-6 : V-EL-CHA, 2MASSJ08423879-7854427
Region: Eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=RECX+6&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94
M: 0.3 ; log(dm/dt): -10.6*
Input file: targets_up_to_May30-2022.csv
recx6_lya2_etc.txt
Calculation performed 2021-06-18T15:04:37, 0.24
---
tstatus; RECX-6; P/STIS approved for submission; S/ins not started; P/WF 30/07/21; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; EL Cha
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 63% and 115% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]
Extended=NO

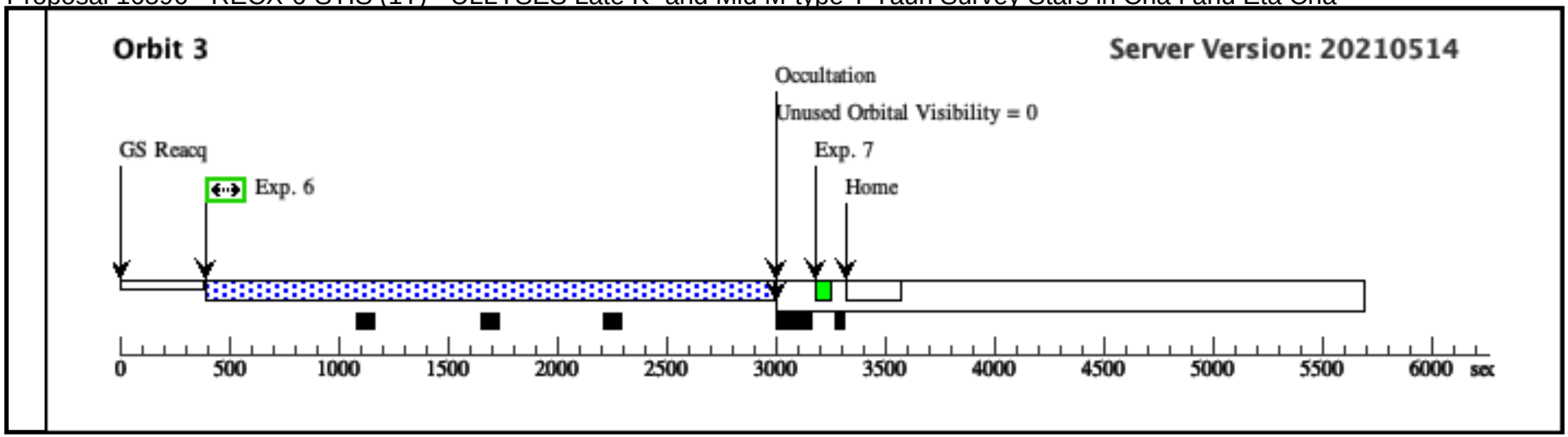
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (1526122)	(1) RECX-6	STIS/CCD, ACQ, F28X50LP	MIRROR				0.5 Secs (0.5 Secs)	
								[==>]	***[1]***
	Comments: Nominal ETC run gives 0.05 sec for S/N = 40 *Worst-case ETC run (1526123) gives saturation in 1.98 sec*								
2	G140L/1425 (1526602)	(1) RECX-6	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=1094			2190 Secs (2190 Secs)	
								[==>]	***[1]***
	Comments: Worst-case ETC run (1526606) gives 0.24 cts/s in brightest pixel *recx6_lya2_etc.txt; stis,fuvmama,g140l,c1425,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=1361.4 s, spectral region:* *1549.0 +- 2.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 786.4 cts/s/segment* *brightest pixel: 0.290 cts/s/pix at 1304.7 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
3	G140L/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[1]***
4	G140L/1425 (1526602)	(1) RECX-6	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=1293			2588 Secs (2588 Secs)	
								[==>]	***[2]***
	Comments: Worst-case ETC run (1526606) gives 0.24 cts/s in brightest pixel *recx6_lya2_etc.txt; stis,fuvmama,g140l,c1425,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=1361.4 s, spectral region:* *1549.0 +- 2.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 786.4 cts/s/segment* *brightest pixel: 0.290 cts/s/pix at 1304.7 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
5	G140L/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***
6	G230L/2376 (1526603)	(1) RECX-6	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=559			2447 Secs (2447 Secs)	
								[==>]	***[3]***
	Comments: Worst-case ETC run (1526607) gives 1.35 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *recx6_lya2_etc.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=205.2 s, spectral region:* *2800.0 +- 15.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 2340.0 cts/s/segment* *brightest pixel: 0.405 cts/s/pix at 2796.8 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
7	G230L/2376 WAVECAL	WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20210514
Occultation
Unused Orbital Visibility = 0
GS Reacq
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16596, RECX-6-STIS (1U) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 28-DEC-2021:00:00:00 AND 20-MAR-2022:00:00:00

Comments: vstatus; 1U; RECX-6; P/STIS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; RECX 6 ; STIS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/recx-6/mdwarf/
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/recx-6/
vcheck; Selected ACQ strategy?; yes, F28X50LP
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 82% of planned G140L, 92% of planned G230L, 200% of planned G430L & G750L
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; ; yes ...
Visit 1S has GROUP 1S,1T,1U WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated STIS orbits = 9

Fixed Targets

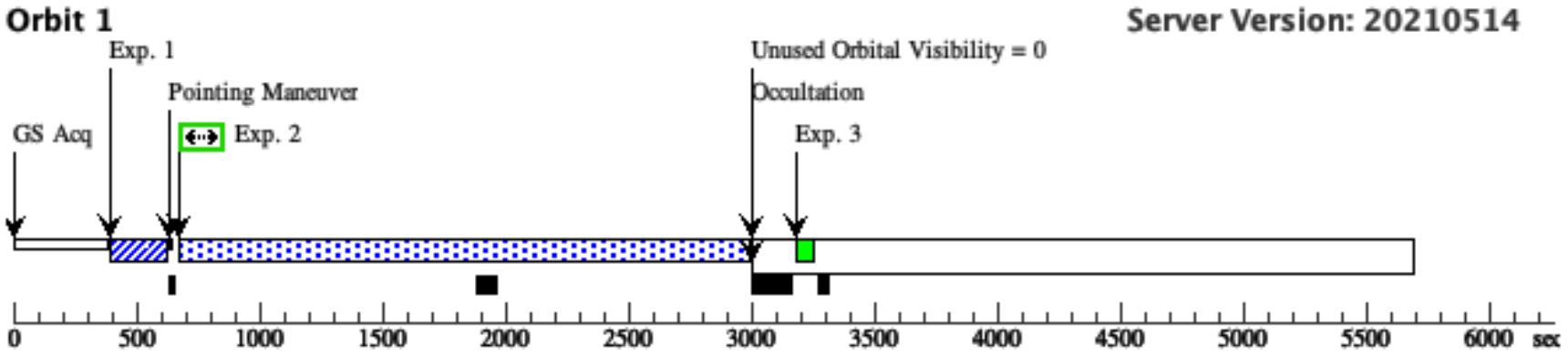
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RECX-6 Alt Name1: V-EL-CHA Alt Name2: 2MASSJ08423879-7854427	RA: 08 42 38.6218 (130.6609242d) Dec: -78 54 42.30 (-78.91175d) Equinox: J2000	Proper Motion RA: -29.106366554155997 mas/yr Proper Motion Dec: 27.014262804959003 mas/yr Parallax: 0.010193333540815998" Epoch of Position: 2016	V=14.1 SpT=M3; A_V=0.00; V=14.1	Reference Frame: ICRS

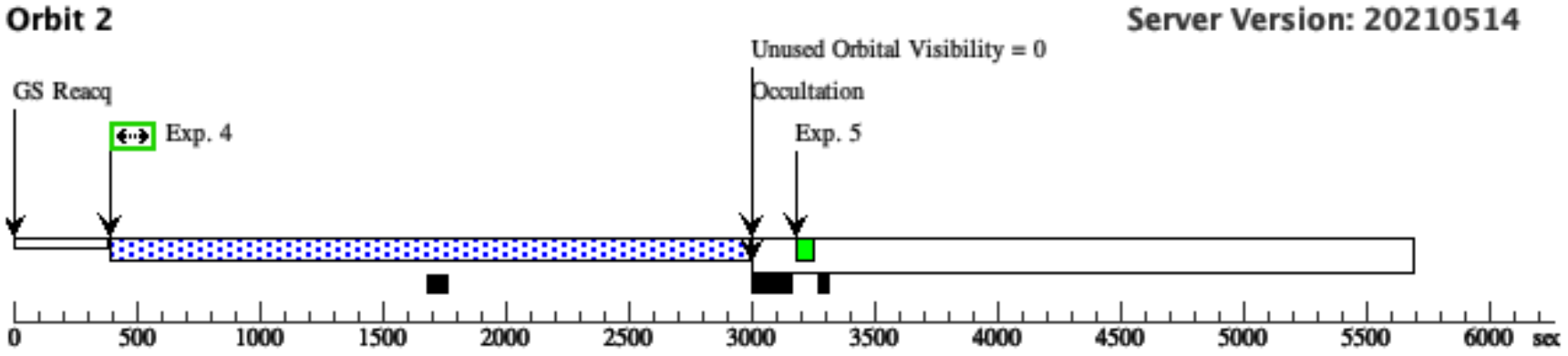
Comments: RECX-6 : V-EL-CHA, 2MASSJ08423879-7854427
Region: Eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=RECX+6&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94
M: 0.3 ; log(dm/dt): -10.6*
Input file: targets_up_to_May30-2022.csv
recx6_lya2_etc.txt
Calculation performed 2021-06-18T15:04:37, 0.24
---
tstatus; RECX-6; P/STIS approved for submission; S/ins not started; P/WF 30/07/21; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; EL Cha
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 63% and 115% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]
Extended=NO

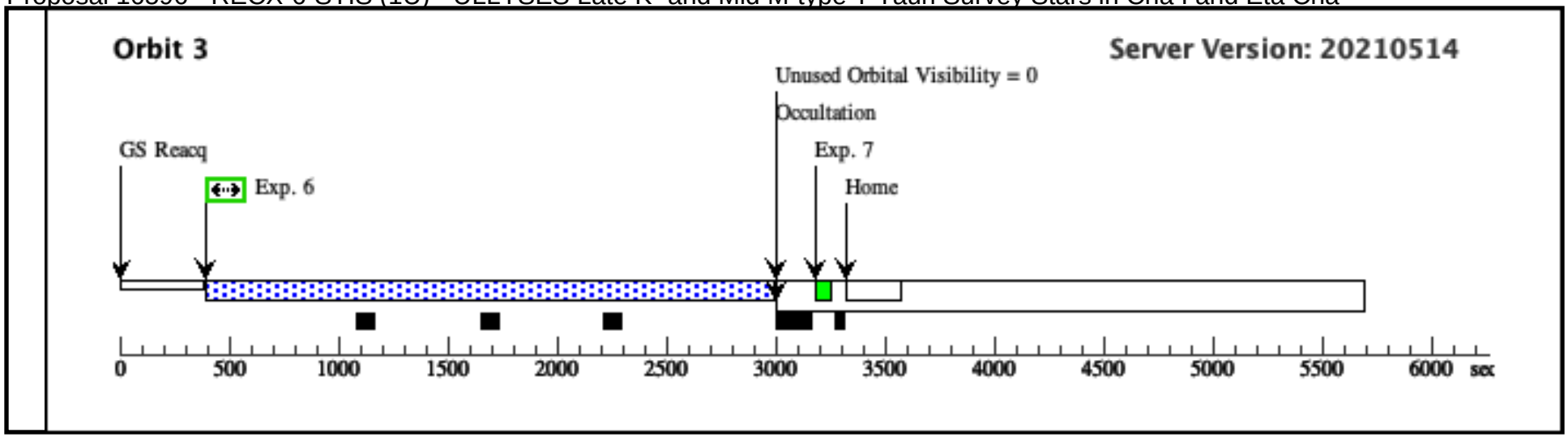
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (1526122)	(1) RECX-6	STIS/CCD, ACQ, F28X50LP	MIRROR				0.5 Secs (0.5 Secs) *[==>]*	*[1]*
	Comments: Nominal ETC run gives 0.05 sec for S/N = 40 *Worst-case ETC run (1526123) gives saturation in 1.98 sec*								
2	G140L/1425 (1526602)	(1) RECX-6	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=1094			2190 Secs (2190 Secs) *[==>]*	*[1]*
	Comments: Worst-case ETC run (1526606) gives 0.24 cts/s in brightest pixel *recx6_lya2_etc.txt; stis,fuvmama,g140l,c1425,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=1361.4 s, spectral region:* *1549.0 +- 2.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 786.4 cts/s/segment* *brightest pixel: 0.290 cts/s/pix at 1304.7 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
3	G140L/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[1]*
4	G140L/1425 (1526602)	(1) RECX-6	STIS/FUV-MAMA, TIME-TAG, 52X0.2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=1293			2588 Secs (2588 Secs) *[==>]*	*[2]*
	Comments: Worst-case ETC run (1526606) gives 0.24 cts/s in brightest pixel *recx6_lya2_etc.txt; stis,fuvmama,g140l,c1425,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=1361.4 s, spectral region:* *1549.0 +- 2.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 786.4 cts/s/segment* *brightest pixel: 0.290 cts/s/pix at 1304.7 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
5	G140L/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[2]*
6	G230L/2376 (1526603)	(1) RECX-6	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=559			2447 Secs (2447 Secs) *[==>]*	*[3]*
	Comments: Worst-case ETC run (1526607) gives 1.35 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *recx6_lya2_etc.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: M3 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.3 ; log(dm/dt): -10.6* *For exptime=205.2 s, spectral region:* *2800.0 +- 15.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 2340.0 cts/s/segment* *brightest pixel: 0.405 cts/s/pix at 2796.8 A* *Calculation performed 2021-06-18T15:04:36, v0.24*								
7	G230L/2376 WAVECAL	WAVE	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				*[==>]*	*[3]*

Orbit Structure






Orbit 3
Server Version: 20210514
Unused Orbital Visibility = 0
Occultation
GS Reacq
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16596, V-SY-CHA-COS (2C) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 23-JAN-2022:00:00:00 AND 06-MAY-2022:00:00:00

Comments: vstatus; 2C; V-SY-CHA; P/COS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; SY Cha ; COS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; N/A
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/sy-cha/
vcheck; Selected ACQ strategy?; PSA/MirrorB
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 80% of requested G160M and 81% of requested G130M
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; yes ...
STIS visit has GROUP 1S,1C,1D,1E,1F WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated COS orbits = 11

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-SY-CHA	RA: 10 56 30.2741 (164.1261421d)	Proper Motion RA: -23.737510876376 mas/yr	V=13.8	Reference Frame: ICRS
	Alt Name1: T4	Dec: -77 11 39.36 (-77.19427d)	Proper Motion Dec: 2.8038014841109997 mas/yr	SpT=K7; A_V=0.50; U=14.5; V =13.8	
	Alt Name2: J10563044-7711393	Equinox: J2000	Parallax: 0.005532986967397"		
			Epoch of Position: 2016		

Comments: V-SY-Cha : T4, J10563044-7711393
Region: Cha I
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SY+Cha&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
Input file: targets_up_to_May30-2022.csv
t4_lya2_etc_scaled_pAV0.50.txt
Calculation performed 2021-06-18T15:04:52, 0.24
---
tstatus; V-SY-CHA; P/COS approved for submission; S/STIS approved for submission; P/WF 30/07/21; S/WF 30/07/21
tcheck; APT/SIMBAD target names: ; Sz 3, Ass Cha T 2-4
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 79% and 189% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE 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/Image (1526033)	(2) V-SY-CHA	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				270 Secs (270 Secs) *[==>]*	*[1]*
	Comments: Multiplied ETC recommendation by 2 *Worst-case ETC run (1526034) gives 4.4 cts/s in brightest pixel*								
2	G160M/1589-3 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=3			807 Secs (807 Secs) *[==>]*	*[1]*
	Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4404.6 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.9 cts/s/segment* *brightest pixel: 0.002 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:48, v0.24*								
3	G160M/1589-4 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=4			807 Secs (807 Secs) *[==>]*	*[1]*
	Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4404.6 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.9 cts/s/segment* *brightest pixel: 0.002 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:48, v0.24*								
4	G160M/1623-1 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=1			1223 Secs (1223 Secs) *[==>]*	*[2]*
	Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4507.9 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.1 cts/s/segment* *brightest pixel: 0.001 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:50, v0.24*								

	5	G160M/162 3-2 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=2	1223 Secs (1223 Secs) *[==>]*	***[2]***

Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4507.9 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.1 cts/s/segment
brightest pixel: 0.001 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:50, v0.24

	6	G130M/129 1-3 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=3	1213 Secs (1213 Secs) *[==>]*	***[3]***

Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

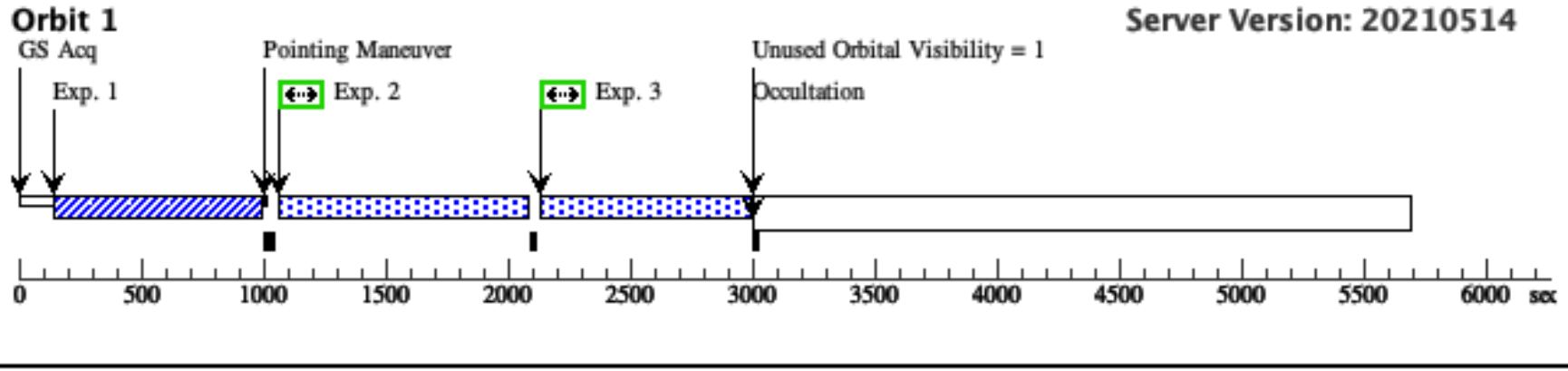
t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

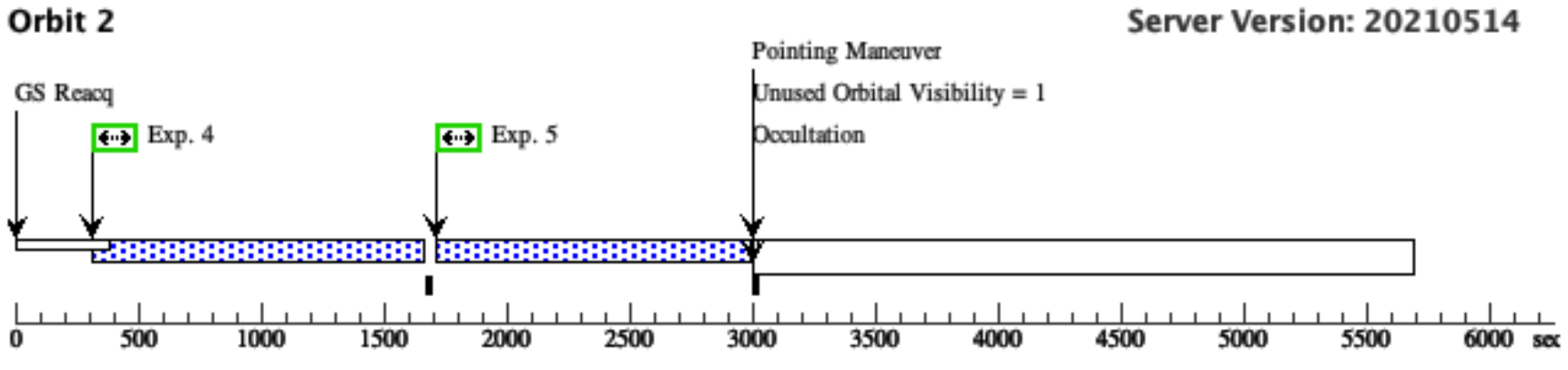
	7	G130M/129 1-4 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=4	1213 Secs (1213 Secs) *[==>]*	***[3]***

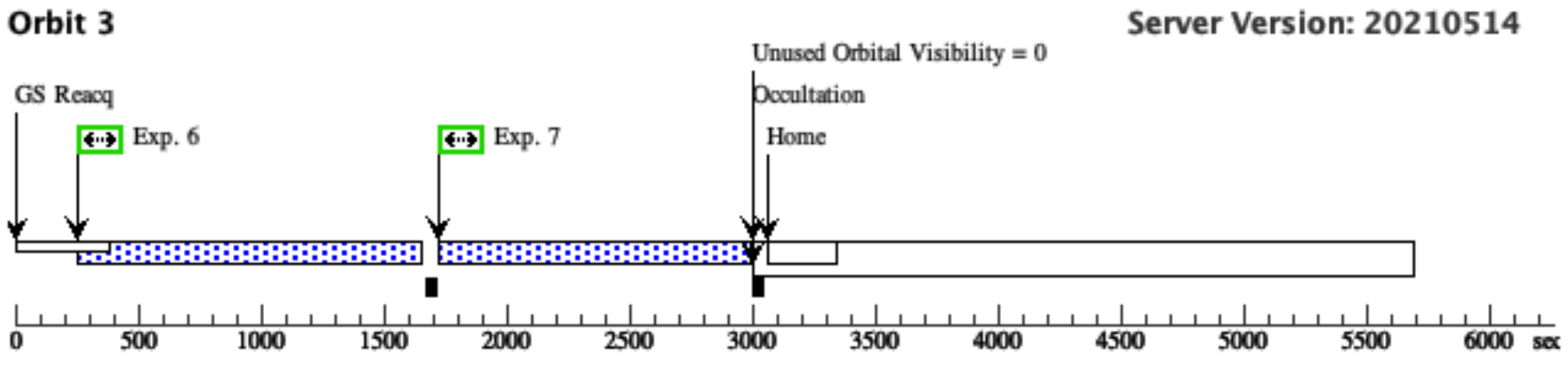
Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

Orbit Structure







Visit

Proposal 16596, V-SY-CHA-COS (2D) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 23-JAN-2022:00:00:00 AND 06-MAY-2022:00:00:00

Comments: vstatus; 2D; V-SY-CHA; P/COS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; SY Cha ; COS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; N/A
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/sy-cha/
vcheck; Selected ACQ strategy?; PSA/MirrorB
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 80% of requested G160M and 81% of requested G130M
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; yes ...
STIS visit has GROUP 1S,1C,1D,1E,1F WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated COS orbits = 11

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-SY-CHA	RA: 10 56 30.2741 (164.1261421d)	Proper Motion RA: -23.737510876376 mas/yr	V=13.8	Reference Frame: ICRS
	Alt Name1: T4	Dec: -77 11 39.36 (-77.19427d)	Proper Motion Dec: 2.8038014841109997 mas/yr	SpT=K7; A_V=0.50; U=14.5; V =13.8	
	Alt Name2: J10563044-7711393	Equinox: J2000	Parallax: 0.005532986967397"		
			Epoch of Position: 2016		

Comments: V-SY-Cha : T4, J10563044-7711393
Region: Cha I
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SY+Cha&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
Input file: targets_up_to_May30-2022.csv
t4_lya2_etc_scaled_pAV0.50.txt
Calculation performed 2021-06-18T15:04:52, 0.24
---
tstatus; V-SY-CHA; P/COS approved for submission; S/STIS approved for submission; P/WF 30/07/21; S/WF 30/07/21
tcheck; APT/SIMBAD target names: ; Sz 3, Ass Cha T 2-4
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 79% and 189% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE 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/Image (1526033)	(2) V-SY-CHA	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				270 Secs (270 Secs) *[==>]*	***[1]***
	Comments: Multiplied ETC recommendation by 2 *Worst-case ETC run (1526034) gives 4.4 cts/s in brightest pixel*								
2	G160M/1623-1 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=1			802 Secs (802 Secs) *[==>]*	***[1]***
	Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4507.9 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.1 cts/s/segment* *brightest pixel: 0.001 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:50, v0.24*								
3	G160M/1623-2 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=2			802 Secs (802 Secs) *[==>]*	***[1]***
	Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4507.9 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.1 cts/s/segment* *brightest pixel: 0.001 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:50, v0.24*								
4	G160M/1589-3 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=3			1223 Secs (1223 Secs) *[==>]*	***[2]***
	Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4404.6 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.9 cts/s/segment* *brightest pixel: 0.002 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:48, v0.24*								

	5	G160M/158 9-4 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=4	1223 Secs (1223 Secs) *[==>]*	***[2]***

Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4404.6 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.9 cts/s/segment
brightest pixel: 0.002 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:48, v0.24

	6	G130M/129 1-3 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=3	1213 Secs (1213 Secs) *[==>]*	***[3]***

Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

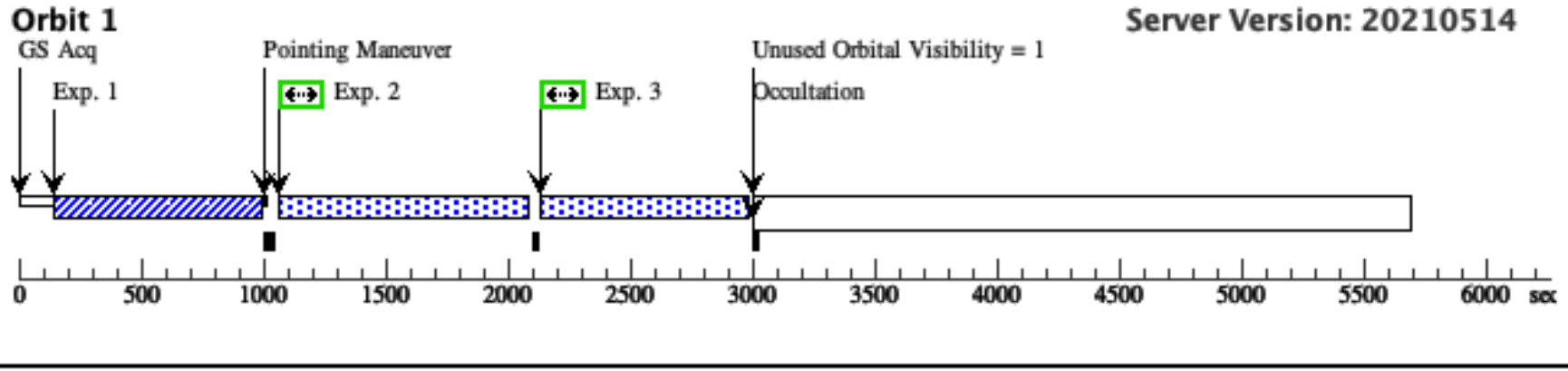
t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

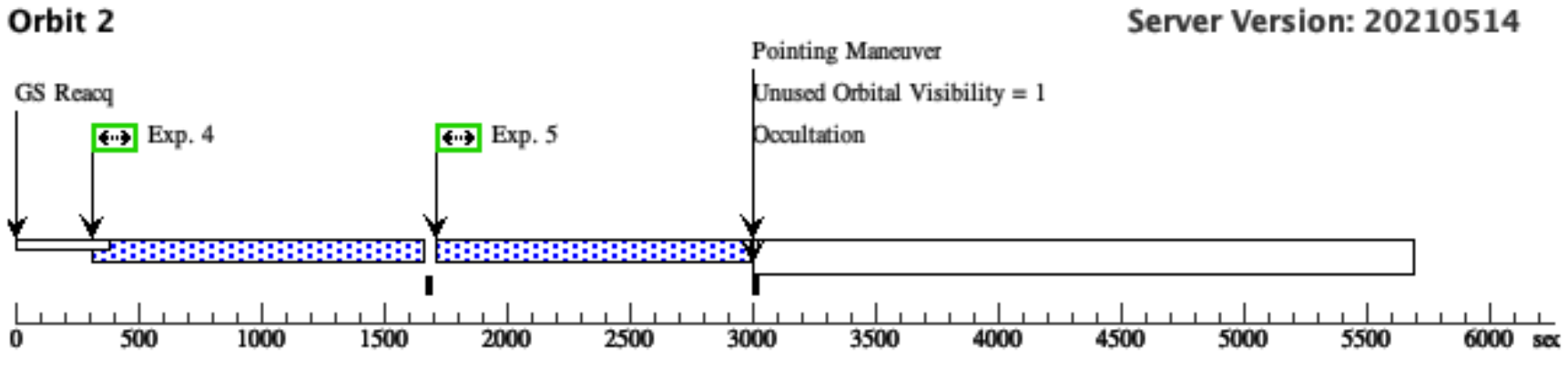
	7	G130M/129 1-4 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=4	1213 Secs (1213 Secs) *[==>]*	***[3]***

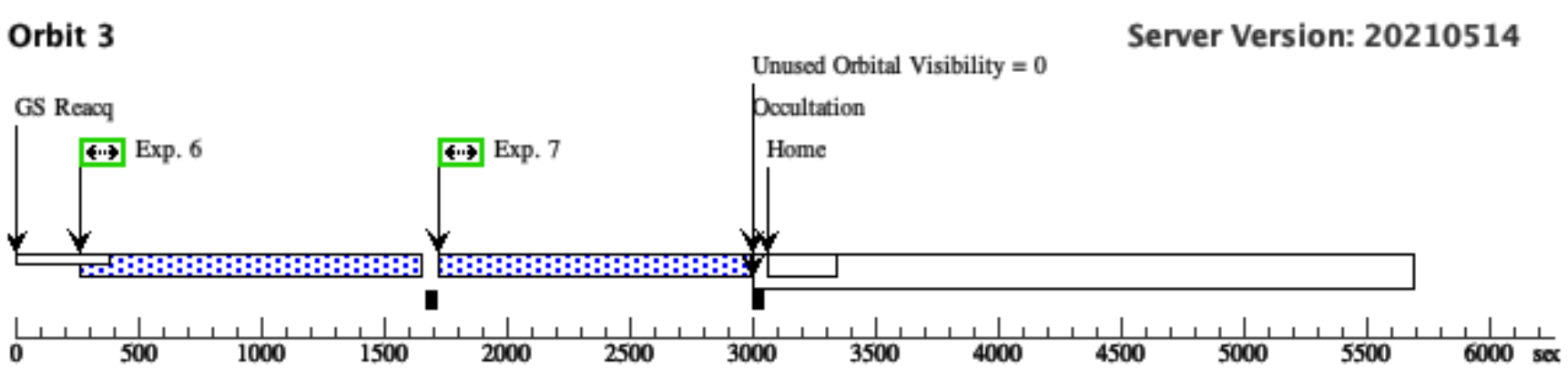
Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

Orbit Structure







Visit

Proposal 16596, V-SY-CHA-COS (2E) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 23-JAN-2022:00:00:00 AND 06-MAY-2022:00:00:00

Comments: vstatus; 2E; V-SY-CHA; P/COS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; SY Cha ; COS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; N/A
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/sy-cha/
vcheck; Selected ACQ strategy?; PSA/MirrorB
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 80% of requested G160M and 81% of requested G130M
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; yes ...
STIS visit has GROUP 1S,1C,1D,1E,1F WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated COS orbits = 11

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-SY-CHA	RA: 10 56 30.2741 (164.1261421d)	Proper Motion RA: -23.737510876376 mas/yr	V=13.8	Reference Frame: ICRS
	Alt Name1: T4	Dec: -77 11 39.36 (-77.19427d)	Proper Motion Dec: 2.8038014841109997 mas/yr	SpT=K7; A_V=0.50; U=14.5; V =13.8	
	Alt Name2: J10563044-7711393	Equinox: J2000	Parallax: 0.005532986967397"		
			Epoch of Position: 2016		

Comments: V-SY-Cha : T4, J10563044-7711393
Region: Cha I
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SY+Cha&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
Input file: targets_up_to_May30-2022.csv
t4_lya2_etc_scaled_pAV0.50.txt
Calculation performed 2021-06-18T15:04:52, 0.24
---
tstatus; V-SY-CHA; P/COS approved for submission; S/STIS approved for submission; P/WF 30/07/21; S/WF 30/07/21
tcheck; APT/SIMBAD target names: ; Sz 3, Ass Cha T 2-4
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 79% and 189% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE 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/Image (1526033)	(2) V-SY-CHA	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				270 Secs (270 Secs) *[==>]*	*[1]*
	Comments: Multiplied ETC recommendation by 2 *Worst-case ETC run (1526034) gives 4.4 cts/s in brightest pixel*								
2	G160M/1589-3 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=3			807 Secs (807 Secs) *[==>]*	*[1]*
	Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4404.6 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.9 cts/s/segment* *brightest pixel: 0.002 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:48, v0.24*								
3	G160M/1589-4 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=4			807 Secs (807 Secs) *[==>]*	*[1]*
	Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4404.6 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.9 cts/s/segment* *brightest pixel: 0.002 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:48, v0.24*								
4	G160M/1623-1 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=1			1223 Secs (1223 Secs) *[==>]*	*[2]*
	Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=4507.9 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623* *The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 67.1 cts/s/segment* *brightest pixel: 0.001 cts/s/pix at 1446.2 A* *Calculation performed 2021-06-18T15:04:50, v0.24*								

	5	G160M/162 3-2 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=2	1223 Secs (1223 Secs) *[==>]*	***[2]***

Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4507.9 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.1 cts/s/segment
brightest pixel: 0.001 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:50, v0.24

	6	G130M/129 1-3 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=3	1213 Secs (1213 Secs) *[==>]*	***[3]***

Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

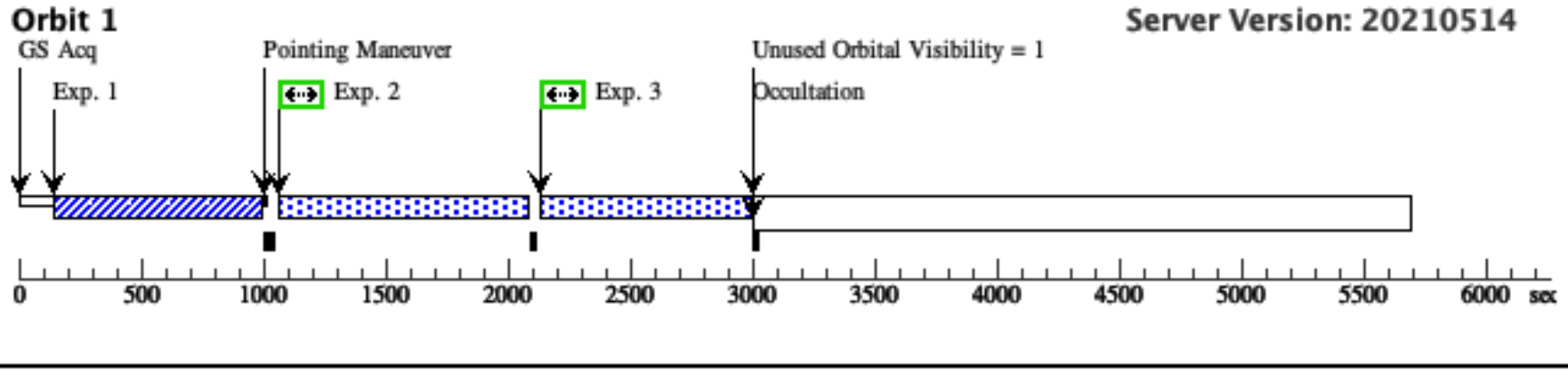
t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

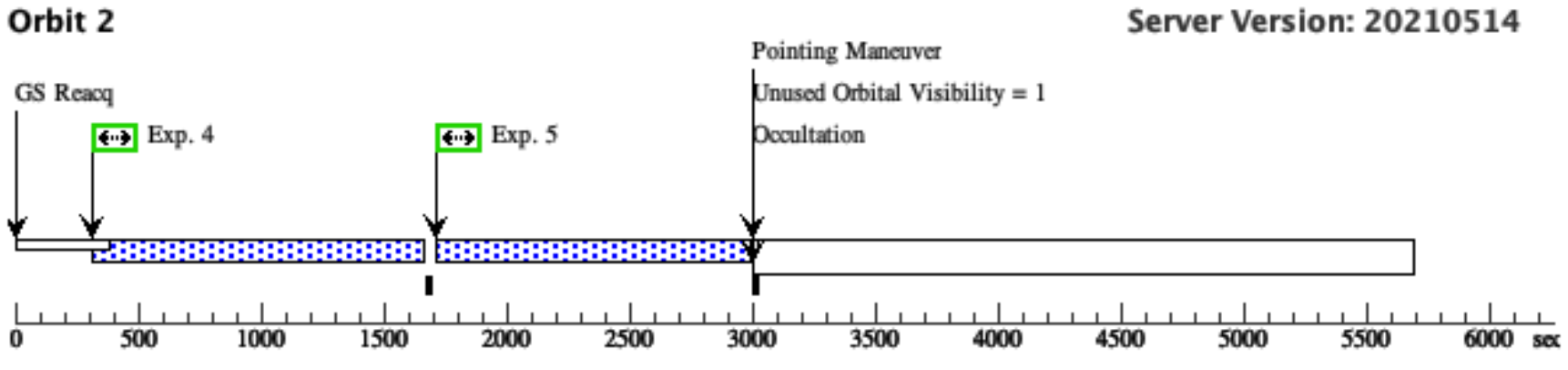
	7	G130M/129 1-4 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=4	1213 Secs (1213 Secs) *[==>]*	***[3]***

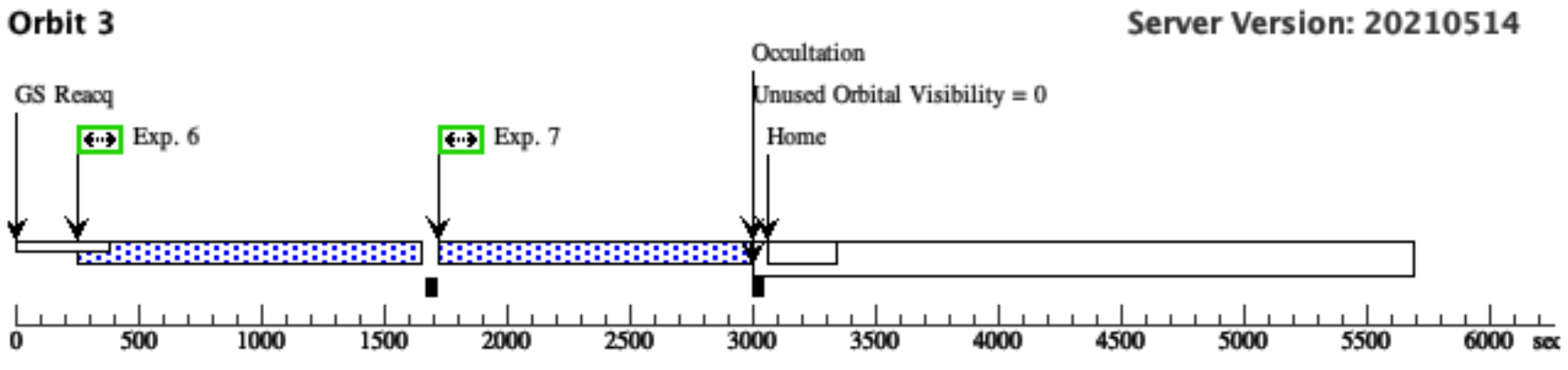
Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

Orbit Structure







Visit

Proposal 16596, V-SY-CHA-COS (2F) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 23-JAN-2022:00:00:00 AND 06-MAY-2022:00:00:00

Comments: vstatus; 2F; V-SY-CHA; P/COS approved for submission; P/WF 30/07/21 ; intrev: complete ; P/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; SY Cha ; COS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; N/A
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/sy-cha/
vcheck; Selected ACQ strategy?; PSA/MirrorB
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes ...
obtained 80% of requested G160M and 81% of requested G130M
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; yes ...
STIS visit has GROUP 1S,1C,1D,1E,1F WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated COS orbits = 11

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-SY-CHA	RA: 10 56 30.2741 (164.1261421d)	Proper Motion RA: -23.737510876376 mas/yr	V=13.8	Reference Frame: ICRS
	Alt Name1: T4	Dec: -77 11 39.36 (-77.19427d)	Proper Motion Dec: 2.8038014841109997 mas/yr	SpT=K7; A_V=0.50; U=14.5; V =13.8	
	Alt Name2: J10563044-7711393	Equinox: J2000	Parallax: 0.005532986967397"		
			Epoch of Position: 2016		

Comments: V-SY-Cha : T4, J10563044-7711393
Region: Cha I
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SY+Cha&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
Input file: targets_up_to_May30-2022.csv
t4_lya2_etc_scaled_pAV0.50.txt
Calculation performed 2021-06-18T15:04:52, 0.24
---
tstatus; V-SY-CHA; P/COS approved for submission; S/STIS approved for submission; P/WF 30/07/21; S/WF 30/07/21
tcheck; APT/SIMBAD target names: ; Sz 3, Ass Cha T 2-4
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 79% and 189% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE 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/Image (1526033)	(2) V-SY-CHA	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				270 Secs (270 Secs) *[==>]*	***[1]***

Comments: Multiplied ETC recommendation by 2
Worst-case ETC run (1526034) gives 4.4 cts/s in brightest pixel

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
2	G130M/1291-3 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=3			823 Secs (823 Secs) *[==>]*	***[1]***

Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
3	G130M/1291-4 (1526036)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3933; FP-POS=4			823 Secs (823 Secs) *[==>]*	***[1]***

Comments: Worst-case ETC run (1526037) gives 0.09 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=5519.5 s, spectral region:
1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 291.9 cts/s/segment
brightest pixel: 0.005 cts/s/pix at 1304.8 A
Calculation performed 2021-06-18T15:04:52, v0.24

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
4	G160M/1589-3 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=3			744 Secs (744 Secs) *[==>]*	***[2]***

Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4404.6 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.9 cts/s/segment
brightest pixel: 0.002 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:48, v0.24

	5	G160M/158 9-4 (1526038)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=11424; FP-POS=4	744 Secs (744 Secs) [==>] / ***[2]***

Comments: Worst-case ETC run (1526039) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4404.6 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1589 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.9 cts/s/segment
brightest pixel: 0.002 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:48, v0.24

	6	G160M/162 3-1 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=1	334 Secs (334 Secs) [==>] / ***[2]***

Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

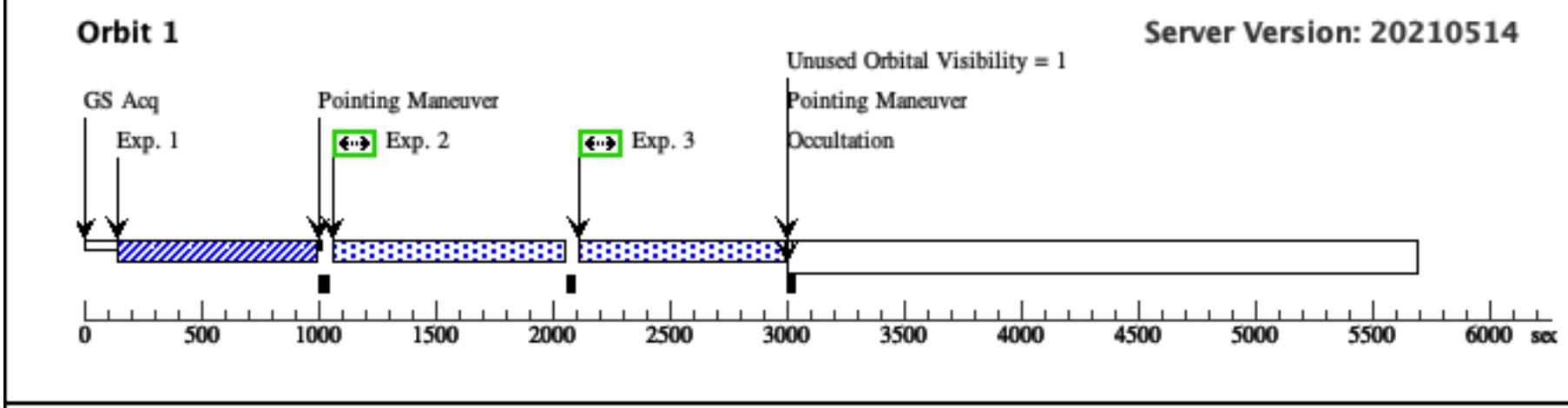
t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4507.9 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.1 cts/s/segment
brightest pixel: 0.001 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:50, v0.24

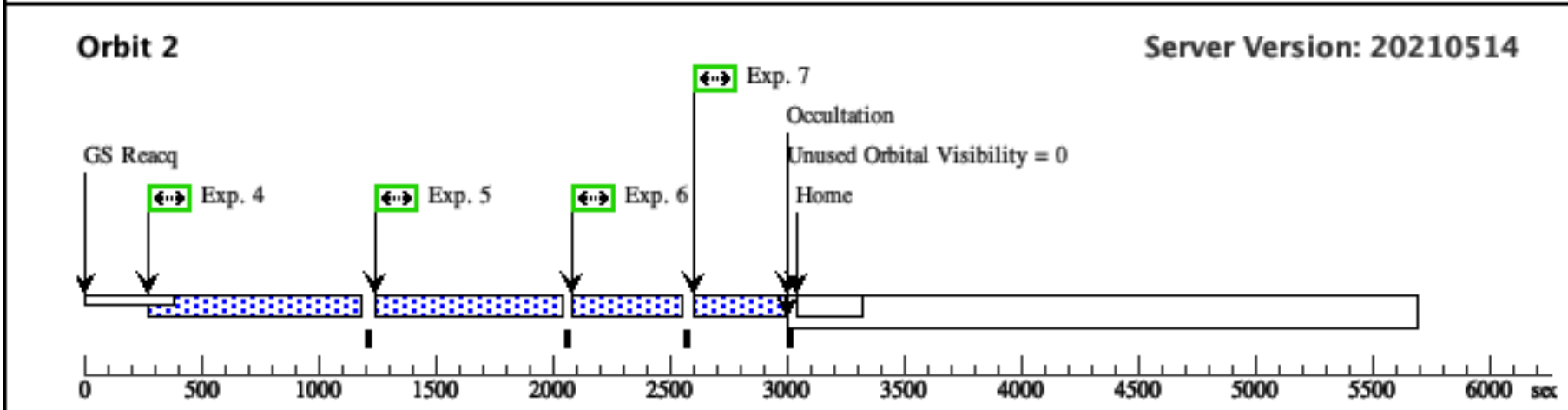
	7	G160M/162 3-2 (1526040)	(2) V-SY-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=12519; FP-POS=2	334 Secs (334 Secs) [==>] / ***[2]***

Comments: Worst-case ETC run (1526042) gives 0.02 cts/s in brightest pixel
Buffer time is 2/3 of the worst-case calculation

t4_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59670; fp-pos=None, segment=None)
Input file: targets_up_to_May30-2022.csv
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
For exptime=4507.9 s, spectral region:
1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 & c1623
The exptime for this c1623 exposure has been halved because c1589 & c1623 target the same line.
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 67.1 cts/s/segment
brightest pixel: 0.001 cts/s/pix at 1446.2 A
Calculation performed 2021-06-18T15:04:50, v0.24

Orbit Structure





Visit

Proposal 16596, V-SY-CHA-STIS (2S) Fri Jul 30 21:03:37 GMT 2021

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 23-JAN-2022:00:00:00 AND 06-MAY-2022:00:00:00; GROUP 2S,2C,2D,2E,2F WITHIN 2D

Comments: vstatus; 2S; V-SY-CHA; S/STIS approved for submission; S/WF 30/07/21 ; intrev: complete ; S/JRD 29/07/21
vcheck; Enter targ name & Inst. & Resp. Sci.; SY Cha ; STIS ; WF
vcheck; ETC numbers entered in APT?; yes
vcheck; Any screening violations?; no
vcheck; M-dwarf check complete and added to box folder?; N/A
vcheck; S/N ETC calcs done & documented?; yes
vcheck; Field images checked & saved?; yes ...
located at: ~/Box/ullyses_tech/ullyses_proposals/survey_c29/16596/sy-cha/
vcheck; Selected ACQ strategy?; yes, F28X50LP
vcheck; Possible ACQ or Sci spoilers?; no
vcheck; Field BOT clear?; yes; unknown corresponds to a very faint Galex and DSS target
vcheck; Visual BOT check for stars not in catalog?; yes
vcheck; Orbit packing finalized?; yes; all gratings 182-187% of recommended
vcheck; Buffer times optimized?; yes
vcheck; Verify visit grouping correct; yes ...
STIS visit has GROUP 1S,1C,1D,1E,1F WITHIN 2D
vcheck; phase constraint for ground based observations added?; N/A
vcheck; BETWEENS for coordinated observations added?; yes, for ground-based coordination
vcheck; Is visit ready for int. review?; yes
Allocated STIS orbits = 1

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	V-SY-CHA	RA: 10 56 30.2741 (164.1261421d)	Proper Motion RA: -23.737510876376 mas/yr	V=13.8	Reference Frame: ICRS
	Alt Name1: T4	Dec: -77 11 39.36 (-77.19427d)	Proper Motion Dec: 2.8038014841109997 mas/yr	SpT=K7; A_V=0.50; U=14.5; V =13.8	
	Alt Name2: J10563044-7711393	Equinox: J2000	Parallax: 0.005532986967397"		
			Epoch of Position: 2016		

Comments: V-SY-Cha : T4, J10563044-7711393
Region: Cha I
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SY+Cha&NbIdent=1&Radius=2&Radius.unit=arcmin&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160
M: 0.78 ; log(dm/dt): -9.41*
Input file: targets_up_to_May30-2022.csv
t4_lya2_etc_scaled_pAV0.50.txt
Calculation performed 2021-06-18T15:04:52, 0.24
---
tstatus; V-SY-CHA; P/COS approved for submission; S/STIS approved for submission; P/WF 30/07/21; S/WF 30/07/21
tcheck; APT/SIMBAD target names: ; Sz 3, Ass Cha T 2-4
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. verified, epoch checked?; OK
tcheck; Adopted SED compared to Observations?; yes ...
results lie between 79% and 189% of model, consistent with normal variability
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE 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 (1526082)	(2) V-SY-CHA	STIS/CCD, ACQ, F28X50LP	MIRROR				0.6 Secs (0.6 Secs) *[==>]*	***[1]***
	Comments: Nominal ETC run gives 0.06 sec for S/N = 40 *Worst-case ETC run (1526083) gives saturation in 1.57 sec*								
2	G230L/2376 (1526084)	(2) V-SY-CHA	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=485			971 Secs (971 Secs) *[==>]*	***[1]***
	Comments: Worst-case ETC run (1526085) gives 3.0 cts/s in brightest pixel *Buffer time is 2/3 of the worst-case calculation* *t4_lya2_etc_scaled_pAV0.50.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59670* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=265.8 s, spectral region:* *2800.0 +- 15.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 2344.5 cts/s/segment* *brightest pixel: 0.315 cts/s/pix at 2796.8 A* *Calculation performed 2021-06-18T15:04:52, v0.24*								
3	G230L/2376 WAVECAL	WAVE	STIS/NUV-MAMA, ACCUM, 52X0.1	G230L 2376 A				*[==>]*	***[1]***
4	G430L/4300 WAVECAL	WAVE	STIS/CCD, ACCUM, 52X0.1	G430L 4300 A				*[==>]*	***[1]***
5	G430L/4300 (1526086)	(2) V-SY-CHA	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1			312 Secs (312 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
	Comments: Worst-case ETC run (1526087) gives saturation in 363 sec *t4_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g430l,c4300,52x2,mjd#59670* *WARNING: operating mode = ACCUM* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=85.6 s, n_reads=2, spectral region:* *4000.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 38516.6 cts/s/segment* *brightest pixel: 13.225 cts/s/pix at 4560.5 A* *Calculation performed 2021-06-18T15:04:52, v0.24*								
6	G750L/7751 (1526088)	(2) V-SY-CHA	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1			25 Secs (25 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[1]***
	Comments: Worst-case ETC run (1526089) gives saturation in 44 sec *t4_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g750l,c7751,52x2,mjd#59670* *WARNING: operating mode = ACCUM* *Input file: targets_up_to_May30-2022.csv* *Spectral type: K7 ; A_V: 0.5 ; Distance (pc): 160* *M*: 0.78 ; log(dm/dt): -9.41* *For exptime=6.7 s, n_reads=2, spectral region:* *5700.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 77410.7 cts/s/segment* *brightest pixel: 125.650 cts/s/pix at 6563.9 A* *Calculation performed 2021-06-18T15:04:52, v0.24*								

	7	G750L/7751 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A	*[==>]*	***[1]***
	8	G750L/7751 CCDFLAT CCDFLAT 1	STIS/CCD, ACCUM, 0.3X0.09	G750L 7751 A	*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***
	9	G750L/7751 CCDFLAT CCDFLAT 2	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A	*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***
	10	G750L/7751 CCDFLAT CCDFLAT 3	STIS/CCD, ACCUM, 52X2	G750L 7751 A	*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Orbit Structure