



## 16482 - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

Cycle: 28, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

### INVESTIGATORS

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Proposal 16482 (STScI Edit Number: 1, Created: Friday, April 16, 2021 at 2:00:30 PM Eastern Standard Time) - Overview

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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>
1C	(1) CHX18N	COS/FUV COS/NUV	2	16-Apr-2021 15:00:23.0	yes
1D	(1) CHX18N	COS/FUV COS/NUV	3	16-Apr-2021 15:00:24.0	yes
1S	(1) CHX18N CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	1	16-Apr-2021 15:00:26.0	yes
2C	(2) SZ45	COS/FUV COS/NUV	2	16-Apr-2021 15:00:27.0	yes
2D	(2) SZ45	COS/FUV COS/NUV	2	16-Apr-2021 15:00:28.0	yes
2S	(2) SZ45 CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	1	16-Apr-2021 15:00:29.0	yes

11 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  $M_{\text{sun}}$ . 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

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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](http://www.stsci.edu/files/live/sites/www/files/home/stsci-research/research-topics-and-programs/ullyses/_documents/HSTUV-report-ULLYSES.pdf).

Proposal 16482 - CHX18N-COS (1C) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

Fri Apr 16 19:00:30 GMT 2021

<b>Visit</b>	<p><b>Proposal 16482, CHX18N-COS (1C), scheduling</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:17:15:00; BETWEEN 12-MAY-2021:19:40:00 AND 25-MAY-2021:22:30:00; BETWEEN 27-MAY-2021:07:00:00 AND 09-JUN-2021:07:10:00; BETWEEN 10-JUN-2021:09:10:00 AND 24-JUN-2021:02:30:00</p> <p><i>Comments: vstatus; 1C; CHX18N; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21</i></p> <p><i>vcheck; Enter targ name &amp; Inst. &amp; Resp. Sci.; CHX 18N ; COS ; WF</i></p> <p><i>vcheck; ETC numbers entered in APT?; yes</i></p> <p><i>vcheck; Any screening violations?; no</i></p> <p><i>vcheck; M-dwarf check complete and added to box folder?; N/A</i></p> <p><i>vcheck; S/N ETC calcs done &amp; documented?; yes</i></p> <p><i>vcheck; Field images checked &amp; saved?; yes ...</i></p> <p><i>located at: box/ullyses_tech/ullyses_proposals/survey/16482/chx-18n/</i></p> <p><i>vcheck; Selected ACQ strategy?; yes, PSA/MirrorB</i></p> <p><i>vcheck; Possible ACQ or Sci spoilers?; no</i></p> <p><i>vcheck; Field BOT clear?; yes</i></p> <p><i>vcheck; Visual BOT check for stars not in catalog?; yes</i></p> <p><i>vcheck; Orbit packing finalized?; yes ...</i></p> <p><i>obtained 120% of requested G160M and 91% of requested G130M</i></p> <p><i>vcheck; Buffer times optimized?; yes</i></p> <p><i>vcheck; Verify visit grouping correct; yes ...</i></p> <p><i>STIS visit has GROUP 1S,1C,1D WITHIN 1D</i></p> <p><i>vcheck; phase constraint for ground based observations added?; N/A</i></p> <p><i>vcheck; BETWEENS for coordinated observations added?; yes</i></p> <p><i>vcheck; Is visit ready for int. review?; yes</i></p> <p><i>Allocated COS orbits = 5</i></p>					
	<p>(CHX18N-COS (1C)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(CHX18N-COS (1C)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>					
<b>Diagnosics</b>						
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(1)	CHX18N Alt Name1: J11114632-7620092	RA: 11 11 46.2413 (167.9426721d) Dec: -76 20 8.95 (-76.33582d) Equinox: J2000	Proper Motion RA: -21.79623633 mas/yr Proper Motion Dec: -0.33890975 mas/yr Parallax: 0.005194435529" Epoch of Position: 2015.5	V=11.96 SpT=K2; A_V=0.80; U=12.0; V=12.0; J=9.11	Reference Frame: ICRS
<p><i>Comments: CHX18N : J11114632-7620092</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11114632-7620092&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11114632-7620092&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160</i></p> <p><i>M*: 1.25 ; log(dm/dt): -8.09</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>chx18n_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:42, v0.6</i></p> <p>-----</p> <p><i>tstatus; CHX18N; P/COS approved for submission; S/STIS approved for submission; P/WF 16/03/21; S/WF 16/03/21</i></p> <p><i>tcheck; APT/SIMBAD target names: ; CHX 18N</i></p> <p><i>tcheck; Target info verification status?; OK</i></p> <p><i>tcheck; Coordinates &amp; P.M. verified, epoch checked?; yes</i></p> <p><i>tcheck; Adopted SED compared to Observations?; yes, BVRI phot lie above modeled SED by factors of up to 2.1, consistent with normal variability</i></p> <p><i>Category=STAR</i></p> <p><i>Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]</i></p> <p><i>Extended=NO</i></p>						

Proposal 16482 - CHX18N-COS (1C) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/Image (1479465)	(1) CHX18N	COS/NUV, ACQ/IMAGE, PSA	MIRRORB			32 Secs (32 Secs) [==>]	[1]	
	<i>Comments: Worst-case ETC run (1479468) gives 19 cts/s in brightest pixel</i>									
	2	G160M/158 9-3 (1479472)	(1) CHX18N	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=19 401.0; FP-POS=3			945.1 Secs (1164.1 Secs) [==>1164.1 Secs ]	[1]
	<i>Comments: Worst-case ETC run (1479474) gives 0.068 cts/s in brightest pixel</i>									
	<i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g160m,c1589,psa,mjd#59305; fp-pos=None, segment=None) Input file: spring-survey-todo-crp04feb21.csv Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160 M*: 1.25 ; log(dm/dt): -8.09 For exptime=945.1 s, spectral region: 1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623 The exptime for this c1589 exposure has been halved because c1589 &amp; c1623 target the same line. A factor of 2.0 has been applied to the exptime in each exposure. global countrate (brightest segment): 81.1 cts/s/segment brightest pixel: 0.005 cts/s/pix at 1548.4 A Calculation performed 2021-02-12T16:30:38, v0.21</i>									
3	G160M/158 9-4 (1479472)	(1) CHX18N	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=19 401.0; FP-POS=4			945.1 Secs (1164.1 Secs) [==>1164.1 Secs ]	[1]	
<i>Comments: Worst-case ETC run (1479474) gives 0.068 cts/s in brightest pixel</i>										
<i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g160m,c1589,psa,mjd#59305; fp-pos=None, segment=None) Input file: spring-survey-todo-crp04feb21.csv Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160 M*: 1.25 ; log(dm/dt): -8.09 For exptime=945.1 s, spectral region: 1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623 The exptime for this c1589 exposure has been halved because c1589 &amp; c1623 target the same line. A factor of 2.0 has been applied to the exptime in each exposure. global countrate (brightest segment): 81.1 cts/s/segment brightest pixel: 0.005 cts/s/pix at 1548.4 A Calculation performed 2021-02-12T16:30:38, v0.21</i>										
4	ACQ/Image (1479465)	(1) CHX18N	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		NEW OBSET FULL ACQ		32 Secs (32 Secs) [==>]	[2]	
<i>Comments: Worst-case ETC run (1479468) gives 19 cts/s in brightest pixel</i>										
5	G160M/162 3-1 (1479473)	(1) CHX18N	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=19 546.0; FP-POS=1			942.2 Secs (1137 Secs) [==>1137 Secs ]	[2]	
<i>Comments: Worst-case ETC run (1479475) gives 0.069 cts/s in brightest pixel</i>										
<i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g160m,c1623,psa,mjd#59305; fp-pos=None, segment=None) Input file: spring-survey-todo-crp04feb21.csv Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160 M*: 1.25 ; log(dm/dt): -8.09 For exptime=942.2 s, spectral region: 1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623 The exptime for this c1623 exposure has been halved because c1589 &amp; c1623 target the same line. A factor of 2.0 has been applied to the exptime in each exposure. global countrate (brightest segment): 80.5 cts/s/segment brightest pixel: 0.005 cts/s/pix at 1548.4 A Calculation performed 2021-02-12T16:30:40, v0.21</i>										

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6 G160M/162 (1) CHX18N COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=19  
 3-2 546.0;  
 (1479473) 1623 A FP-POS=2

942.2 Secs (1137 Secs)

[=>1137 Secs ]

[2]

Comments: Worst-case ETC run (1479475) gives 0.069 cts/s in brightest pixel

chx18n\_lya2\_etc\_scaled\_pAV0.50.txt; cos,fuv.g160m.c1623,psa,mjd#59305; fp-pos=None, segment=None)

Input file: spring-survey-todo-crp04feb21.csv

Spectral type: K2 ; A\_V: 0.8 ; Distance (pc): 160

M\*: 1.25 ; log(dm/dt): -8.09

For exptime=942.2 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): 80.5 cts/s/segment

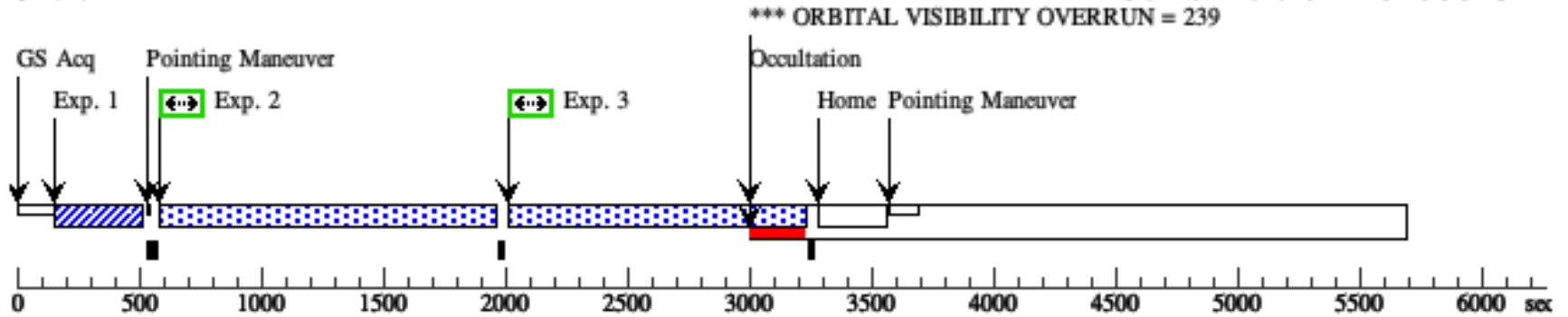
brightest pixel: 0.005 cts/s/pix at 1548.4 A

Calculation performed 2021-02-12T16:30:40, v0.21

Orbit Structure

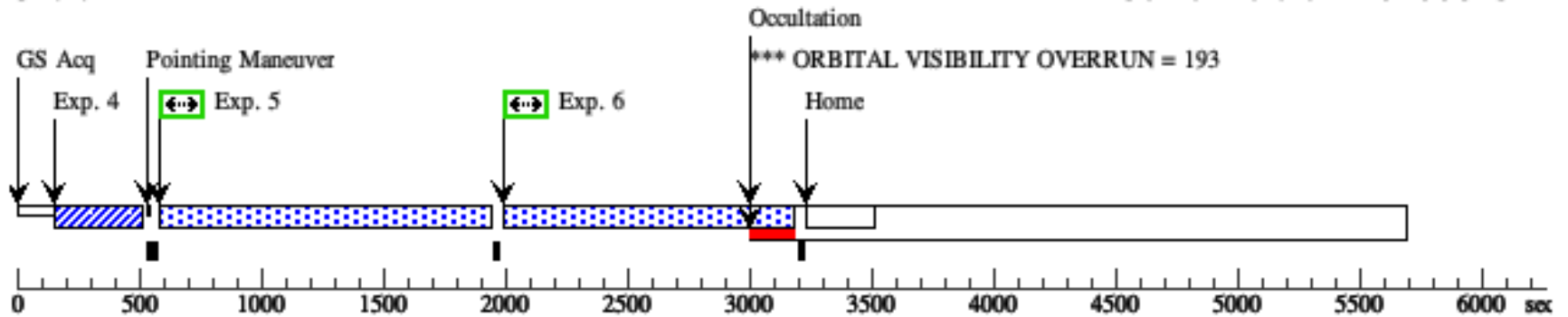
Orbit 1

Server Version: 20200619



Orbit 2

Server Version: 20200619



Proposal 16482 - CHX18N-COS (1D) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

Fri Apr 16 19:00:30 GMT 2021

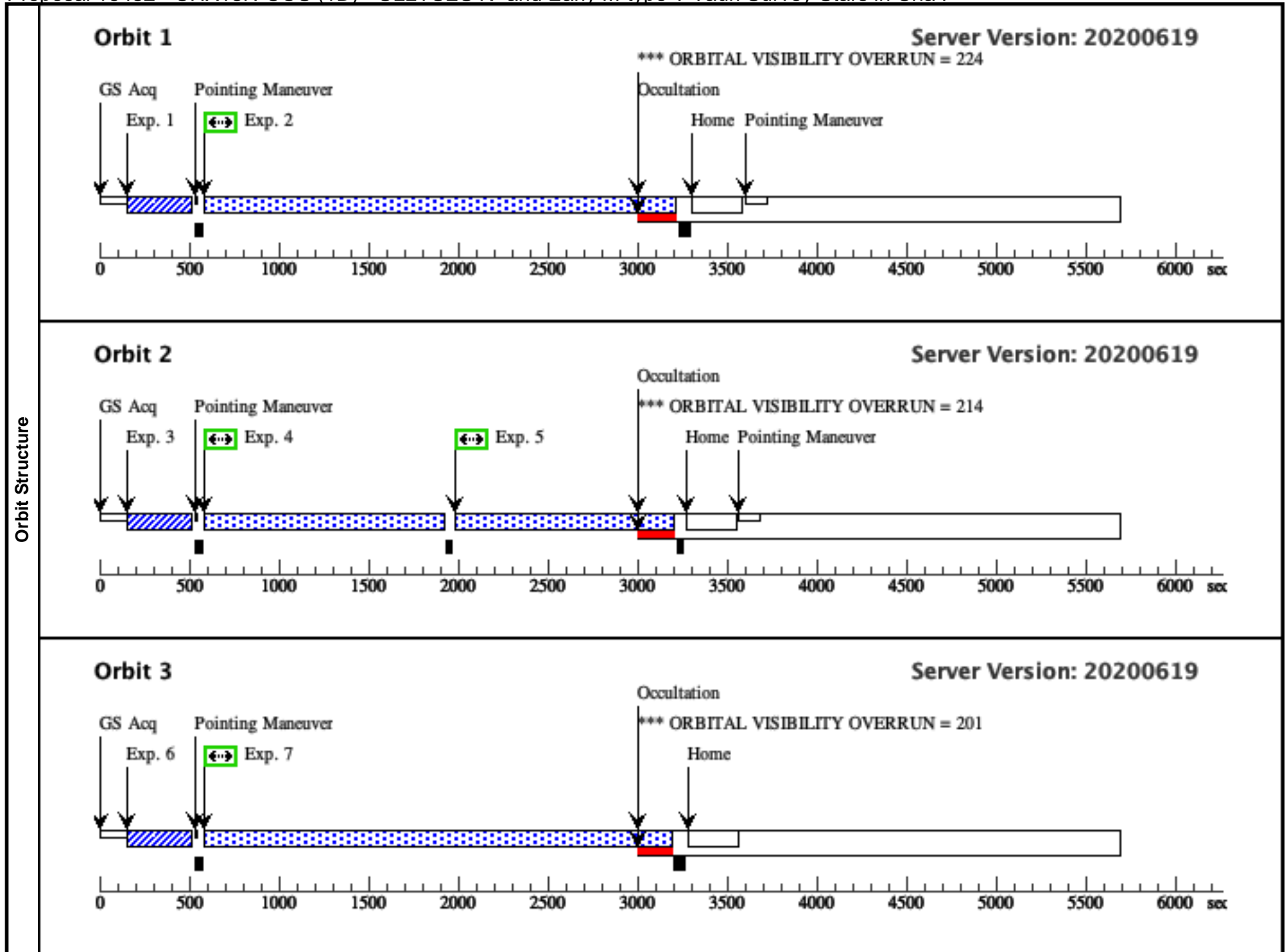
<b>Visit</b>	<p><b>Proposal 16482, CHX18N-COS (1D), scheduling</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: COS/FUV, COS/NUV</p> <p>Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:15:40:00; BETWEEN 12-MAY-2021:19:40:00 AND 25-MAY-2021:20:55:00; BETWEEN 27-MAY-2021:07:00:00 AND 09-JUN-2021:05:35:00; BETWEEN 10-JUN-2021:09:10:00 AND 24-JUN-2021:00:55:00</p> <p><i>Comments: vstatus; 1D; CHX18N; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21</i></p> <p><i>vcheck; Enter targ name &amp; Inst. &amp; Resp. Sci.; CHX 18N ; COS ; WF</i></p> <p><i>vcheck; ETC numbers entered in APT?; yes</i></p> <p><i>vcheck; Any screening violations?; no</i></p> <p><i>vcheck; M-dwarf check complete and added to box folder?; N/A</i></p> <p><i>vcheck; S/N ETC calcs done &amp; documented?; yes</i></p> <p><i>vcheck; Field images checked &amp; saved?; yes ...</i></p> <p><i>located at: box/ullyses_tech/ullyses_proposals/survey/16482/chx-18n/</i></p> <p><i>vcheck; Selected ACQ strategy?; yes, PSA/MirrorB</i></p> <p><i>vcheck; Possible ACQ or Sci spoilers?; no</i></p> <p><i>vcheck; Field BOT clear?; yes</i></p> <p><i>vcheck; Visual BOT check for stars not in catalog?; yes</i></p> <p><i>vcheck; Orbit packing finalized?; yes ...</i></p> <p><i>obtained 120% of requested G160M and 91% of requested G130M</i></p> <p><i>vcheck; Buffer times optimized?; yes</i></p> <p><i>vcheck; Verify visit grouping correct; yes ...</i></p> <p><i>STIS visit has GROUP 1S,1C,1D WITHIN 1D</i></p> <p><i>vcheck; phase constraint for ground based observations added?; N/A</i></p> <p><i>vcheck; BETWEENS for coordinated observations added?; yes</i></p> <p><i>vcheck; Is visit ready for int. review?; yes</i></p> <p><i>Allocated COS orbits = 5</i></p>																																			
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<b>Fixed Targets</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>CHX18N</td> <td>RA: 11 11 46.2413 (167.9426721d)</td> <td>Proper Motion RA: -21.79623633 mas/yr</td> <td>V=11.96</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: J11114632-7620092</td> <td>Dec: -76 20 8.95 (-76.33582d)</td> <td>Proper Motion Dec: -0.33890975 mas/yr</td> <td>SpT=K2; A_V=0.80; U=12.0; V=12.0; J=9.11</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Parallax: 0.005194435529"</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Epoch of Position: 2015.5</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: CHX18N : J11114632-7620092</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11114632-7620092&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11114632-7620092&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160</i></p> <p><i>M*: 1.25 ; log(dm/dt): -8.09</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>chx18n_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:42, v0.6</i></p> <p>-----</p> <p><i>tstatus; CHX18N; P/COS approved for submission; S/STIS approved for submission; P/WF 16/03/21; S/WF 16/03/21</i></p> <p><i>tcheck; APT/SIMBAD target names: ; CHX 18N</i></p> <p><i>tcheck; Target info verification status?; OK</i></p> <p><i>tcheck; Coordinates &amp; P.M. verified, epoch checked?; yes</i></p> <p><i>tcheck; Adopted SED compared to Observations?; yes, BVRI phot lie above modeled SED by factors of up to 2.1, consistent with normal variability</i></p> <p><i>Category=STAR</i></p> <p><i>Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]</i></p> <p><i>Extended=NO</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	CHX18N	RA: 11 11 46.2413 (167.9426721d)	Proper Motion RA: -21.79623633 mas/yr	V=11.96	Reference Frame: ICRS		Alt Name1: J11114632-7620092	Dec: -76 20 8.95 (-76.33582d)	Proper Motion Dec: -0.33890975 mas/yr	SpT=K2; A_V=0.80; U=12.0; V=12.0; J=9.11				Equinox: J2000	Parallax: 0.005194435529"						Epoch of Position: 2015.5		
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																														
(1)	CHX18N	RA: 11 11 46.2413 (167.9426721d)	Proper Motion RA: -21.79623633 mas/yr	V=11.96	Reference Frame: ICRS																															
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		Equinox: J2000	Parallax: 0.005194435529"																																	
			Epoch of Position: 2015.5																																	

Proposal 16482 - CHX18N-COS (1D) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/Image (1479465)	(1) CHX18N	COS/NUV, ACQ/IMAGE, PSA	MIRRORB			32 Secs (32 Secs) [==>]	[1]	
	<i>Comments: Worst-case ETC run (1479468) gives 19 counts in brightest pixel</i>									
	2	G130M/129 1-3A (1479470)	(1) CHX18N	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=52 97.0; FP-POS=3			2463 Secs (2463 Secs) [==>]	[1]
	<i>Comments: Worst-case ETC run (1479471) gives 0.095 cts/s in brightest pixel</i>									
	<i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)</i>									
	<i>Input file: spring-survey-todo-crp04feb21.csv</i>									
3	ACQ/Image (1479465)	(1) CHX18N	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		NEW OBSET FULL ACQ		32 Secs (32 Secs) [==>]	[2]	
<i>Comments: Worst-case ETC run (1479468) gives 19 counts in brightest pixel</i>										
4	G130M/129 1-3B (1479470)	(1) CHX18N	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=52 97.0; FP-POS=3			1169 Secs (1169 Secs) [==>]	[2]	
<i>Comments: Worst-case ETC run (1479471) gives 0.095 cts/s in brightest pixel</i>										
<i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)</i>										
<i>Input file: spring-survey-todo-crp04feb21.csv</i>										
<i>Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160</i>										
<i>M*: 1.25 ; log(dm/dt): -8.09</i>										
<i>For exptime=3951.8 s, spectral region:</i>										
<i>1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel</i>										
<i>A factor of 2.0 has been applied to the exptime in each exposure.</i>										
<i>global countrate (brightest segment): 297.0 cts/s/segment</i>										
<i>brightest pixel: 0.002 cts/s/pix at 1304.9 A</i>										
<i>Calculation performed 2021-02-12T16:30:42, v0.21</i>										
5	G130M/129 1-4A (1479470)	(1) CHX18N	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=52 97.0; FP-POS=4			1169 Secs (1169 Secs) [==>]	[2]	
<i>Comments: Worst-case ETC run (1479471) gives 0.095 cts/s in brightest pixel</i>										
<i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)</i>										
<i>Input file: spring-survey-todo-crp04feb21.csv</i>										
<i>Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160</i>										
<i>M*: 1.25 ; log(dm/dt): -8.09</i>										
<i>For exptime=3951.8 s, spectral region:</i>										
<i>1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel</i>										
<i>A factor of 2.0 has been applied to the exptime in each exposure.</i>										
<i>global countrate (brightest segment): 297.0 cts/s/segment</i>										
<i>brightest pixel: 0.002 cts/s/pix at 1304.9 A</i>										
<i>Calculation performed 2021-02-12T16:30:42, v0.21</i>										
6	ACQ/Image (1479465)	(1) CHX18N	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		NEW OBSET FULL ACQ		32 Secs (32 Secs) [==>]	[3]	
<i>Comments: Worst-case ETC run (1479468) gives 19 counts in brightest pixel</i>										

Proposal 16482 - CHX18N-COS (1D) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

7	G130M/129 (1) CHX18N 1-4B (1479470)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=52 97.0; FP-POS=4	2440 Secs (2440 Secs)	
					[==>]	[3]
<p><i>Comments: Worst-case ETC run (1479471) gives 0.095 cts/s in brightest pixel</i></p> <p><i>chx18n_lya2_etc_scaled_pAV0.50.txt; cos.fuv.g130m.c1291.psa.mjd#59305; fp-pos=None, segment=None)</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160</i></p> <p><i>M*: 1.25 ; log(dm/dt): -8.09</i></p> <p><i>For exptime=3951.8 s, spectral region:</i></p> <p><i>1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel</i></p> <p><i>A factor of 2.0 has been applied to the exptime in each exposure.</i></p> <p><i>global countrate (brightest segment): 297.0 cts/s/segment</i></p> <p><i>brightest pixel: 0.002 cts/s/pix at 1304.9 A</i></p> <p><i>Calculation performed 2021-02-12T16:30:42, v0.21</i></p>						



Orbit Structure

Proposal 16482 - CHX18N-STIS (1S) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

Fri Apr 16 19:00:30 GMT 2021

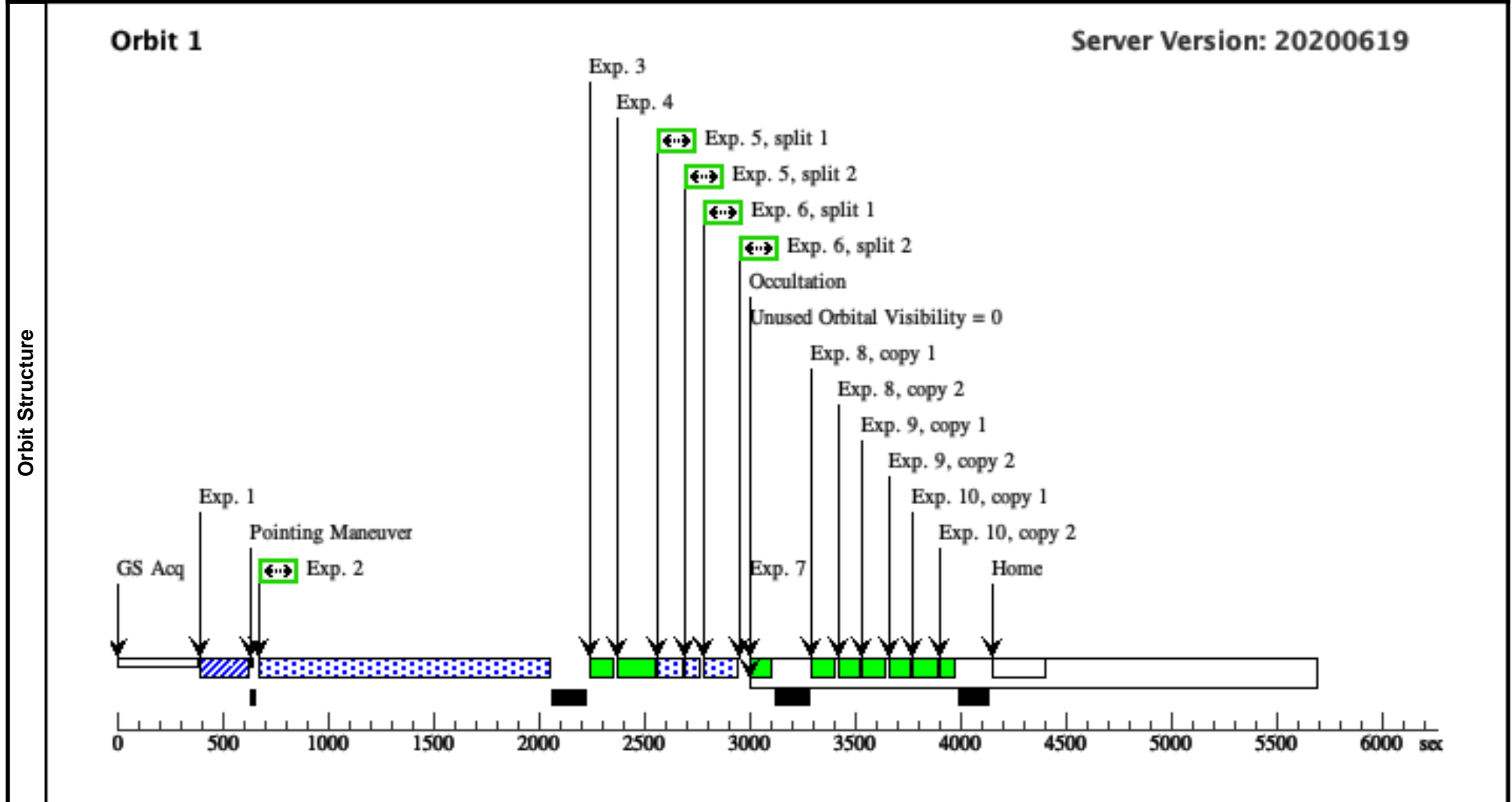
<b>Visit</b>	<p><b>Proposal 16482, CHX18N-STIS (1S), scheduling</b></p> <p><b>Diagnostic Status: No Diagnostics</b></p> <p>Scientific Instruments: STIS/NUV-MAMA, STIS/CCD</p> <p>Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:18:50:00; BETWEEN 12-MAY-2021:19:40:00 AND 26-MAY-2021:00:05:00; BETWEEN 27-MAY-2021:07:00:00 AND 09-JUN-2021:08:45:00; BETWEEN 10-JUN-2021:09:10:00 AND 24-JUN-2021:04:05:00; GROUP 1S,1C,1D WITHIN 1D</p> <p><i>Comments: vstatus; 1S; CHX18N; S/STIS approved for submission; S/WF 16/03/21; intrev: complete; S/CP 16/03/21</i></p> <p><i>vcheck; Enter targ name &amp; Inst. &amp; Resp. Sci.; CHX 18N ; STIS ; WF</i></p> <p><i>vcheck; ETC numbers entered in APT?; yes</i></p> <p><i>vcheck; Any screening violations?; no</i></p> <p><i>vcheck; M-dwarf check complete and added to box folder?; N/A</i></p> <p><i>vcheck; S/N ETC calcs done &amp; documented?; yes</i></p> <p><i>vcheck; Field images checked &amp; saved?; yes ...</i></p> <p><i>located at: box/ullyses_tech/ullyses_proposals/survey/16482/chx-18n/</i></p> <p><i>vcheck; Selected ACQ strategy?; yes, F28X50LP</i></p> <p><i>vcheck; Possible ACQ or Sci spoilers?; no</i></p> <p><i>vcheck; Field BOT clear?; yes; unknowns all correspond to very faint Galex and DSS targets</i></p> <p><i>vcheck; Visual BOT check for stars not in catalog?; yes</i></p> <p><i>vcheck; Orbit packing finalized?; yes; filled remainder of orbit with G230L</i></p> <p><i>vcheck; Buffer times optimized?; yes</i></p> <p><i>vcheck; Verify visit grouping correct; yes ...</i></p> <p><i>STIS visit has GROUP 1S,1C,1D WITHIN 1D</i></p> <p><i>vcheck; phase constraint for ground based observations added?; N/A</i></p> <p><i>vcheck; BETWEENS for coordinated observations added?; yes</i></p> <p><i>vcheck; Is visit ready for int. review?; yes</i></p> <p><i>Allocated STIS orbits = 1</i></p>																						
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																		
(1)	CHX18N	RA: 11 11 46.2413 (167.9426721d)	Proper Motion RA: -21.79623633 mas/yr	V=11.96	Reference Frame: ICRS																		
	Alt Name1: J11114632-7620092	Dec: -76 20 8.95 (-76.33582d) Equinox: J2000	Proper Motion Dec: -0.33890975 mas/yr Parallax: 0.005194435529" Epoch of Position: 2015.5	SpT=K2; A_V=0.80; U=12.0; V=12.0; J=9.11																			
<b>Fixed Targets</b>																							

Proposal 16482 - CHX18N-STIS (1S) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ (1479569)	(1) CHX18N	STIS/CCD, ACQ, F28X50LP	MIRROR			0.3 Secs (0.3 Secs) [==>]	[1]
	<p>Comments: Nominal ETC run gives 0.03 sec for S/N = 40 Worst-case ETC run (1479588) gives saturation in 0.76 sec</p>								
	2	G230L/2376 (1479596)	(1) CHX18N	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=64 6.0		1222.8 Secs (1222.8 Secs) [==>]	[1]
	<p>Comments: Worst-case ETC run (1479597) gives 6.9 cts/s in brightest pixel</p> <p>chx18n_lya2_etc_scaled_pAV0.50.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305 Input file: spring-survey-todo-crp04feb21.csv Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160 M*: 1.25 ; log(dm/dt): -8.09 For exptime=114.9 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): 2473.0 cts/s/segment brightest pixel: 0.714 cts/s/pix at 2788.8 A Calculation performed 2021-02-12T16:30:42, v0.21</p>								
	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 (1479598)	(1) CHX18N	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1		79.0 Secs (79 Secs) [==>(Split 1)] [==>(Split 2)]	[1]	
<p>Comments: Worst-case ETC run (1479599) gives saturation in 147 sec</p> <p>chx18n_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g430l,c4300,52x2,mjd#59305 WARNING: operating mode = ACCUM Input file: spring-survey-todo-crp04feb21.csv Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160 M*: 1.25 ; log(dm/dt): -8.09 For exptime=39.5 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): 48278.1 cts/s/segment brightest pixel: 29.423 cts/s/pix at 4871.0 A Calculation performed 2021-02-12T16:30:42, v0.21</p>									
6	G750L/7751 (1479600)	(1) CHX18N	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1		6.2 Secs (6.2 Secs) [==>(Split 1)] [==>(Split 2)]	[1]	
<p>Comments: Worst-case ETC run (1479601) gives saturation in 19 sec</p> <p>chx18n_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g750l,c7751,52x2,mjd#59305 WARNING: operating mode = ACCUM Input file: spring-survey-todo-crp04feb21.csv Spectral type: K2 ; A_V: 0.8 ; Distance (pc): 160 M*: 1.25 ; log(dm/dt): -8.09 For exptime=3.1 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): 128838.9 cts/s/segment brightest pixel: 254.467 cts/s/pix at 6563.9 A Calculation performed 2021-02-12T16:30:42, v0.21</p>									

Proposal 16482 - CHX18N-STIS (1S) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

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]



Proposal 16482 - SZ45-COS (2C) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

Fri Apr 16 19:00:30 GMT 2021

**Proposal 16482, SZ45-COS (2C), implementation**  
**Diagnostic Status: No Diagnostics**  
 Scientific Instruments: COS/FUV, COS/NUV  
 Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:17:15:00; BETWEEN 12-MAY-2021:19:40:00 AND 25-MAY-2021:22:30:00; BETWEEN 27-MAY-2021:07:00:00 AND 09-JUN-2021:07:10:00; BETWEEN 10-JUN-2021:09:10:00 AND 24-JUN-2021:02:30:00  
 Comments: vstatus; 2C; SZ45; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21  
 vcheck; Enter targ name & Inst. & Resp. Sci.; Sz 45 ; COS ; 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/revise-mstar-bop.xls  
 vcheck; S/N ETC calcs done & documented?; yes  
 vcheck; Field images checked & saved?; yes ...  
     located at: box/ullyses\_tech/ullyses\_proposals/survey/16482/sz-45/  
 vcheck; Selected ACQ strategy?; yes, 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 153% of requested G160M and 84% of requested G130M  
 vcheck; Buffer times optimized?; yes  
 vcheck; Verify visit grouping correct; yes ...  
     STIS visit has GROUP 2S,2C,2D WITHIN 1D  
 vcheck; phase constraint for ground based observations added?; N/A  
 vcheck; BETWEENS for coordinated observations added?; yes  
 vcheck; Is visit ready for int. review?; yes  
 Allocated COS orbits = 4

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SZ45	RA: 11 17 36.8740 (169.4036417d)	Proper Motion RA: -22.00052613 mas/yr	V=13.5	Reference Frame: ICRS
	Alt Name1: HBC-590	Dec: -77 04 38.14 (-77.07726d)	Proper Motion Dec: -1.425437694 mas/yr	SpT=M0.5; A_V=0.70; U=13.5;	
	Alt Name2: J11173700-7704381	Equinox: J2000	Parallax: 0.00530845585999999"	V=13.5; J=10.3	
			Epoch of Position: 2015.5		
<p>Comments: Sz45 : HBC 590, J11173700-7704381                      Region: Cha I                      Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11173700-7704381&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11173700-7704381&amp;submit=submit+id</a>                      Target coordinates are from Gaia DR2.                      Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160                      M*: 0.51 ; log(dm/dt): -8.09                      Input file: spring-survey-todo-crp04feb21.csv                      sz45_lya2_etc_scaled_pAV0.50.txt                      Calculation performed 2021-02-12T16:30:13, v0.6</p> <hr/> <p>tstatus: SZ45; P/COS approved for submission; S/STIS approved for submission; P/WF 16/03/21; S/WF 16/03/21                      tcheck; APT/SIMBAD target names: ; Ass Cha T 1-32                      tcheck; Target info verification status?; OK                      tcheck; Coordinates &amp; P.M. verified, epoch checked?; yes                      tcheck; Adopted SED compared to Observations?; yes, BVRI phot lie within modeled SED by factors of 0.4-2.3, consistent with normal variability                      Category=STAR                      Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]                      Extended=NO</p>					

Proposal 16482 - SZ45-COS (2C) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ/Image (2) SZ45 (1479604)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				26 Secs (26 Secs) [==>]	[1]
	<i>Comments: Worst-case ETC run (1479605) gives 22 cts/s in brightest pixel</i>								
	2	G160M/158 (2) SZ45 9-3 (1479608)	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=18 888.0; FP-POS=3			745.6 Secs (1050.6 Secs) [==>1050.6 Secs ]	[1]
	<i>Comments: Worst-case ETC run (1479609) gives 0.086 cts/s in brightest pixel</i>  <i>sz45_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59305; fp-pos=None, segment=None)</i> <i>Input file: spring-survey-todo-crp04feb21.csv</i> <i>Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160</i> <i>M*: 0.51 ; log(dm/dt): -8.09</i> <i>For exptime=745.6 s, spectral region:</i> <i>1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623</i> <i>The exptime for this c1589 exposure has been halved because c1589 &amp; c1623 target the same line.</i> <i>A factor of 2.0 has been applied to the exptime in each exposure.</i> <i>global countrate (brightest segment): 83.3 cts/s/segment</i> <i>brightest pixel: 0.007 cts/s/pix at 1548.4 A</i> <i>Calculation performed 2021-02-12T16:30:08, v0.21</i>								
3	G160M/158 (2) SZ45 9-4 (1479608)	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=18 888.0; FP-POS=4			745.6 Secs (1050.6 Secs) [==>1050.6 Secs ]	[1]	
<i>Comments: Worst-case ETC run (1479609) gives 0.086 cts/s in brightest pixel</i>  <i>sz45_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59305; fp-pos=None, segment=None)</i> <i>Input file: spring-survey-todo-crp04feb21.csv</i> <i>Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160</i> <i>M*: 0.51 ; log(dm/dt): -8.09</i> <i>For exptime=745.6 s, spectral region:</i> <i>1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623</i> <i>The exptime for this c1589 exposure has been halved because c1589 &amp; c1623 target the same line.</i> <i>A factor of 2.0 has been applied to the exptime in each exposure.</i> <i>global countrate (brightest segment): 83.3 cts/s/segment</i> <i>brightest pixel: 0.007 cts/s/pix at 1548.4 A</i> <i>Calculation performed 2021-02-12T16:30:08, v0.21</i>									
4	G160M/162 (2) SZ45 3-1 (1479610)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=19 095.0; FP-POS=1			743.4 Secs (1222.4 Secs) [==>1222.4 Secs ]	[2]	
<i>Comments: Worst-case ETC run (1479611) gives 0.086 cts/s in brightest pixel</i>  <i>sz45_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59305; fp-pos=None, segment=None)</i> <i>Input file: spring-survey-todo-crp04feb21.csv</i> <i>Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160</i> <i>M*: 0.51 ; log(dm/dt): -8.09</i> <i>For exptime=743.4 s, spectral region:</i> <i>1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623</i> <i>The exptime for this c1623 exposure has been halved because c1589 &amp; c1623 target the same line.</i> <i>A factor of 2.0 has been applied to the exptime in each exposure.</i> <i>global countrate (brightest segment): 82.4 cts/s/segment</i> <i>brightest pixel: 0.007 cts/s/pix at 1548.4 A</i> <i>Calculation performed 2021-02-12T16:30:10, v0.21</i>									

Proposal 16482 - SZ45-COS (2C) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

5 G160M/162 (2) SZ45 COS/FUV, TIME-TAG, PSA G160M BUFFER-TIME=19  
 3-2 1623 A 095.0;  
 (1479610) FP-POS=2

743.4 Secs (1222.4 Secs)

[==>1222.4 Secs ]

[2]

Comments: Worst-case ETC run (1479611) gives 0.086 cts/s in brightest pixel

sz45\_lya2\_etc\_scaled\_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59305; fp-pos=None, segment=None)

Input file: spring-survey-todo-crp04feb21.csv

Spectral type: M0.5 ; A\_V: 0.7 ; Distance (pc): 160

M\*: 0.51 ; log(dm/dt): -8.09

For exptime=743.4 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): 82.4 cts/s/segment

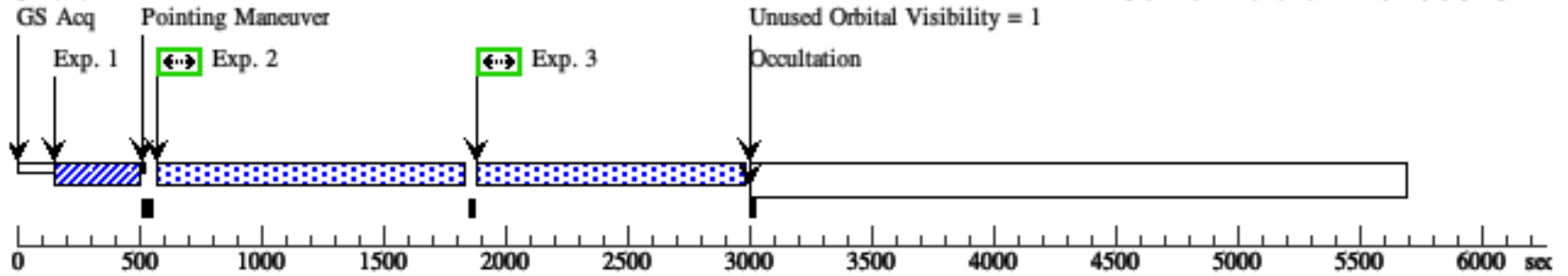
brightest pixel: 0.007 cts/s/pix at 1548.4 A

Calculation performed 2021-02-12T16:30:10, v0.21

Orbit Structure

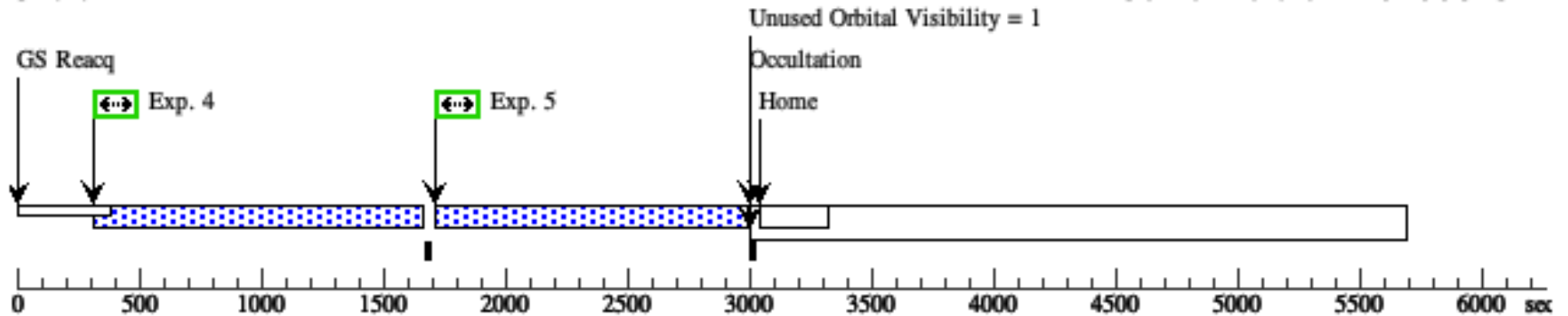
Orbit 1

Server Version: 20200619



Orbit 2

Server Version: 20200619



Proposal 16482 - SZ45-COS (2D) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

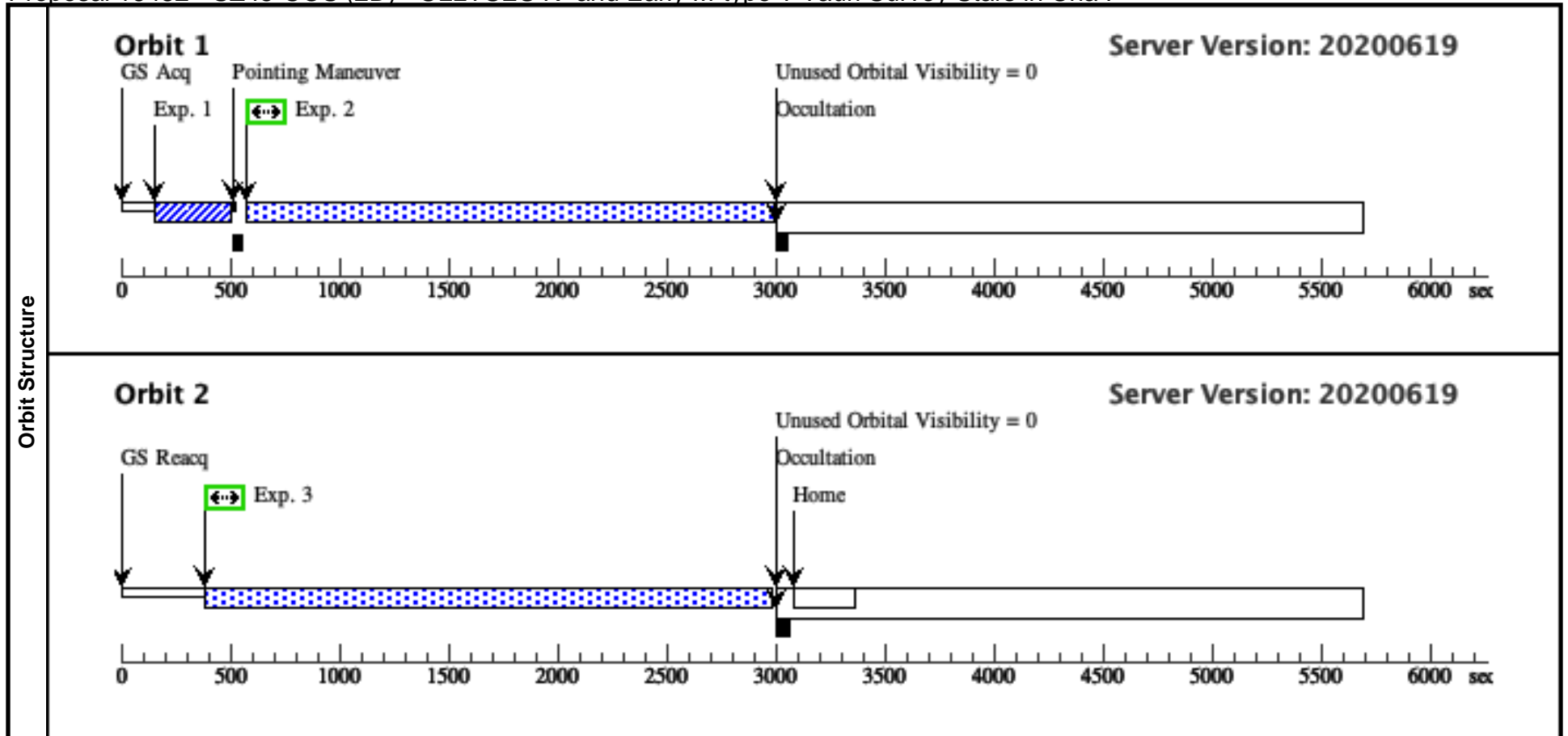
Fri Apr 16 19:00:30 GMT 2021

**Proposal 16482, SZ45-COS (2D), implementation**  
**Diagnostic Status: No Diagnostics**  
 Scientific Instruments: COS/FUV, COS/NUV  
 Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:17:15:00; BETWEEN 12-MAY-2021:19:40:00 AND 25-MAY-2021:22:30:00; BETWEEN 27-MAY-2021:07:00:00 AND 09-JUN-2021:07:10:00; BETWEEN 10-JUN-2021:09:10:00 AND 24-JUN-2021:02:30:00  
*Comments: vstatus; 2D; SZ45; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21*  
*vcheck; Enter targ name & Inst. & Resp. Sci.; Sz 45 ; COS ; 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/revised-mstar-bop.xls*  
*vcheck; S/N ETC calcs done & documented?; yes*  
*vcheck; Field images checked & saved?; yes ...*  
*located at: box/ullyses\_tech/ullyses\_proposals/survey/16482/sz-45/*  
*vcheck; Selected ACQ strategy?; yes, 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 153% of requested G160M and 84% of requested G130M*  
*vcheck; Buffer times optimized?; yes*  
*vcheck; Verify visit grouping correct; yes ...*  
*STIS visit has GROUP 2S,2C,2D WITHIN 1D*  
*vcheck; phase constraint for ground based observations added?; N/A*  
*vcheck; BETWEENS for coordinated observations added?; yes*  
*vcheck; Is visit ready for int. review?; yes*  
 Allocated COS orbits = 4

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SZ45	RA: 11 17 36.8740 (169.4036417d)	Proper Motion RA: -22.00052613 mas/yr	V=13.5	Reference Frame: ICRS
	Alt Name1: HBC-590	Dec: -77 04 38.14 (-77.07726d)	Proper Motion Dec: -1.425437694 mas/yr	SpT=M0.5; A_V=0.70; U=13.5;	
	Alt Name2: J11173700-7704381	Equinox: J2000	Parallax: 0.00530845585999999"	V=13.5; J=10.3	
			Epoch of Position: 2015.5		
<p><i>Comments: Sz45 : HBC 590, J11173700-7704381</i>                      Region: Cha I                      Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11173700-7704381&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11173700-7704381&amp;submit=submit+id</a>                      Target coordinates are from Gaia DR2.                      Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160                      M*: 0.51 ; log(dm/dt): -8.09                      Input file: spring-survey-todo-crp04feb21.csv                      sz45_lya2_etc_scaled_pAV0.50.txt                      Calculation performed 2021-02-12T16:30:13, v0.6</p> <hr/> <p><i>tstatus: SZ45; P/COS approved for submission; S/STIS approved for submission; P/WF 16/03/21; S/WF 16/03/21</i>  <i>tcheck; APT/SIMBAD target names: ; Ass Cha T 1-32</i>  <i>tcheck; Target info verification status?; OK</i>  <i>tcheck; Coordinates &amp; P.M. verified, epoch checked?; yes</i>  <i>tcheck; Adopted SED compared to Observations?; yes, BVRI phot lie within modeled SED by factors of 0.4-2.3, consistent with normal variability</i>                      Category=STAR                      Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]                      Extended=NO</p>					

Proposal 16482 - SZ45-COS (2D) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ/Image (2) SZ45 (1479604)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				26 Secs (26 Secs)	
								[==>]	[1]
	<i>Comments: Worst-case ETC run (1479605) gives 22 cts/s in brightest pixel</i>								
	2	G130M/129 (2) SZ45 1-3 (1479606)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=52 60.0; FP-POS=3			2861.5 Secs (2250.5 Secs)	
								[==>2250.5 Secs ]	[1]
<i>Comments: Worst-case ETC run (1479607) gives 0.095 cts/s in brightest pixel</i>									
<i>sz45_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)</i> <i>Input file: spring-survey-todo-crp04feb21.csv</i> <i>Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160</i> <i>M*: 0.51 ; log(dm/dt): -8.09</i> <i>For exptime=2861.5 s, spectral region:</i> <i>1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel</i> <i>A factor of 2.0 has been applied to the exptime in each exposure.</i> <i>global countrate (brightest segment): 299.1 cts/s/segment</i> <i>brightest pixel: 0.003 cts/s/pix at 1304.9 A</i> <i>Calculation performed 2021-02-12T16:30:12, v0.21</i>									
	3	G130M/129 (2) SZ45 1-4 (1479606)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=52 60.0; FP-POS=4			2861.5 Secs (2551.5 Secs)	
								[==>2551.5 Secs ]	[2]
<i>Comments: Worst-case ETC run (1479607) gives 0.095 cts/s in brightest pixel</i>									
<i>sz45_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)</i> <i>Input file: spring-survey-todo-crp04feb21.csv</i> <i>Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160</i> <i>M*: 0.51 ; log(dm/dt): -8.09</i> <i>For exptime=2861.5 s, spectral region:</i> <i>1239.0 +- 1.0 A achieves SNR=10.0 / 6-pix-resel</i> <i>A factor of 2.0 has been applied to the exptime in each exposure.</i> <i>global countrate (brightest segment): 299.1 cts/s/segment</i> <i>brightest pixel: 0.003 cts/s/pix at 1304.9 A</i> <i>Calculation performed 2021-02-12T16:30:12, v0.21</i>									



Proposal 16482 - SZ45-STIS (2S) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

Fri Apr 16 19:00:30 GMT 2021

**Proposal 16482, SZ45-STIS (2S), implementation**  
**Diagnostic Status: No Diagnostics**  
 Scientific Instruments: STIS/NUV-MAMA, STIS/CCD  
 Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:18:50:00; BETWEEN 12-MAY-2021:19:40:00 AND 26-MAY-2021:00:05:00; BETWEEN 27-MAY-2021:07:00:00 AND 09-JUN-2021:08:45:00; BETWEEN 10-JUN-2021:09:10:00 AND 24-JUN-2021:04:05:00; GROUP 2S,2C,2D WITHIN 1D  
 Comments: vstatus; 2S; SZ45; S/STIS approved for submission; S/WF 16/03/21 ; intrev: complete; S/CP 16/03/21  
 vcheck; Enter targ name & Inst. & Resp. Sci.; Sz 45 ; 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/revise-mstar-bop.xls  
 vcheck; S/N ETC calcs done & documented?; yes  
 vcheck; Field images checked & saved?; yes ...  
 located at: box/ullyses\_tech/ullyses\_proposals/survey/16482/sz-45/  
 vcheck; Selected ACQ strategy?; yes, F28X50LP  
 vcheck; Possible ACQ or Sci spoilers?; no  
 vcheck; Field BOT clear?; yes; unknowns all correspond to very faint Galex and DSS targets  
 vcheck; Visual BOT check for stars not in catalog?; yes  
 vcheck; Orbit packing finalized?; yes; filled remainder of orbit with G230L  
 vcheck; Buffer times optimized?; yes  
 vcheck; Verify visit grouping correct; yes ...  
 STIS visit has GROUP 2S,2C,2D WITHIN 1D  
 vcheck; phase constraint for ground based observations added?; N/A  
 vcheck; BETWEENS for coordinated observations added?; yes  
 vcheck; Is visit ready for int. review?; yes  
 Allocated STIS orbits = 1

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SZ45	RA: 11 17 36.8740 (169.4036417d)	Proper Motion RA: -22.00052613 mas/yr	V=13.5	Reference Frame: ICRS
	Alt Name1: HBC-590	Dec: -77 04 38.14 (-77.07726d)	Proper Motion Dec: -1.425437694 mas/yr	SpT=M0.5; A_V=0.70; U=13.5;	
	Alt Name2: J11173700-7704381	Equinox: J2000	Parallax: 0.00530845585999999"	V=13.5; J=10.3	
			Epoch of Position: 2015.5		
	Comments: Sz45 : HBC 590, J11173700-7704381 Region: Cha I Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11173700-7704381&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11173700-7704381&amp;submit=submit+id</a> Target coordinates are from Gaia DR2. Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160 M*: 0.51 ; log(dm/dt): -8.09 Input file: spring-survey-todo-crp04feb21.csv sz45_lya2_etc_scaled_pAV0.50.txt Calculation performed 2021-02-12T16:30:13, v0.6 ----- tstatus; SZ45; P/COS approved for submission; S/STIS approved for submission; P/WF 16/03/21; S/WF 16/03/21 tcheck; APT/SIMBAD target names: ; Ass Cha T 1-32 tcheck; Target info verification status?; OK tcheck; Coordinates & P.M. verified, epoch checked?; yes tcheck; Adopted SED compared to Observations?; yes, BVRI phot lie within modeled SED by factors of 0.4-2.3, consistent with normal variability Category=STAR Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR] Extended=NO				

Proposal 16482 - SZ45-STIS (2S) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ (2) SZ45 (1479630)	STIS/CCD, ACQ, F28X50LP	MIRROR				0.3 Secs (0.3 Secs) [==>]	[1]
	<p>Comments: Nominal ETC run gives 0.03 sec for S/N = 40 Worst-case ETC run (1479631) gives saturation in 0.71 sec</p>								
	2	G230L/2376 (2) SZ45 (1479634)	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=63 8.0			1235.0 Secs (1235 Secs) [==>]	[1]
	<p>Comments: Worst-case ETC run (1479635) gives 8.3 cts/s in brightest pixel</p> <p>sz45_lya2_etc_scaled_pAV0.50.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305 Input file: spring-survey-todo-crp04feb21.csv Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160 M*: 0.51 ; log(dm/dt): -8.09 For exptime=96.0 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): 2505.1 cts/s/segment brightest pixel: 0.852 cts/s/pix at 2788.8 A Calculation performed 2021-02-12T16:30:12, v0.21</p>								
	3	G230L/2376 WAVE WAVECAL	STIS/NUV-MAMA, ACCUM, 52X0.1	G230L 2376 A				[==>]	[1]
	4	G430L/4300 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.1	G430L 4300 A				[==>]	[1]
5	G430L/4300 (2) SZ45 (1479636)	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1			69.4 Secs (69.4 Secs) [==>(Split 1)] [==>(Split 2)]	[1]	
<p>Comments: Worst-case ETC run (1479637) gives saturation in 132 sec</p> <p>sz45_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g430l,c4300,52x2,mjd#59305 WARNING: operating mode = ACCUM Input file: spring-survey-todo-crp04feb21.csv Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160 M*: 0.51 ; log(dm/dt): -8.09 For exptime=34.7 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): 50380.8 cts/s/segment brightest pixel: 32.676 cts/s/pix at 4871.0 A Calculation performed 2021-02-12T16:30:12, v0.21</p>									
6	G750L/7751 (2) SZ45 (1479638)	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=2; GAIN=1			5.8 Secs (5.8 Secs) [==>(Split 1)] [==>(Split 2)]	[1]	
<p>Comments: Worst-case ETC run (1479639) gives saturation in 17 sec</p> <p>sz45_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g750l,c7751,52x2,mjd#59305 WARNING: operating mode = ACCUM Input file: spring-survey-todo-crp04feb21.csv Spectral type: M0.5 ; A_V: 0.7 ; Distance (pc): 160 M*: 0.51 ; log(dm/dt): -8.09 For exptime=2.8 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): 135027.7 cts/s/segment brightest pixel: 273.616 cts/s/pix at 6563.9 A Calculation performed 2021-02-12T16:30:13, v0.21</p>									

Proposal 16482 - SZ45-STIS (2S) - ULLYSES K- and Early M-type T Tauri Survey Stars in Cha I

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]

