



## 16481 - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

Cycle: 28, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

### INVESTIGATORS

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Proposal 16481 (STScI Edit Number: 1, Created: Monday, April 19, 2021 at 11:00:45 AM 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) 2MASSJ11432669-7804454	COS/FUV COS/NUV	3	19-Apr-2021 12:00:34.0	yes
1S	(1) 2MASSJ11432669-7804454 CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	1	19-Apr-2021 12:00:36.0	yes
2C	(2) SZ10	COS/FUV COS/NUV	2	19-Apr-2021 12:00:37.0	yes
2D	(2) SZ10	COS/FUV COS/NUV	2	19-Apr-2021 12:00:38.0	yes
2E	(2) SZ10	COS/FUV COS/NUV	2	19-Apr-2021 12:00:39.0	yes
2S	(2) SZ10 CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	1	19-Apr-2021 12:00:40.0	yes
3C	(3) V-XX-CHA	COS/FUV COS/NUV	3	19-Apr-2021 12:00:41.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
3D	(3) V-XX-CHA	COS/FUV COS/NUV	3	19-Apr-2021 12:00:42.0	yes
3E	(3) V-XX-CHA	COS/FUV COS/NUV	3	19-Apr-2021 12:00:43.0	yes
3S	(3) V-XX-CHA CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	1	19-Apr-2021 12:00:44.0	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  $M_{\text{sun}}$ . 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:

Proposal 16481 (STScI Edit Number: 1, Created: Monday, April 19, 2021 at 11:00:45 AM Eastern Standard Time) - Overview

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

**Proposal 16481, 2MASSJ11432669-7804454-COS (1C), scheduling**

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:15:40:00; 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

*Comments: vstatus; 1C; 2MASSJ11432669-7804454; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; 2MASS J11432669-7804454 ; COS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/2mass-j11432669-7804454/*

*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 125% of requested G160M and 142% of requested G130M*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 1S,1C 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 = 3*

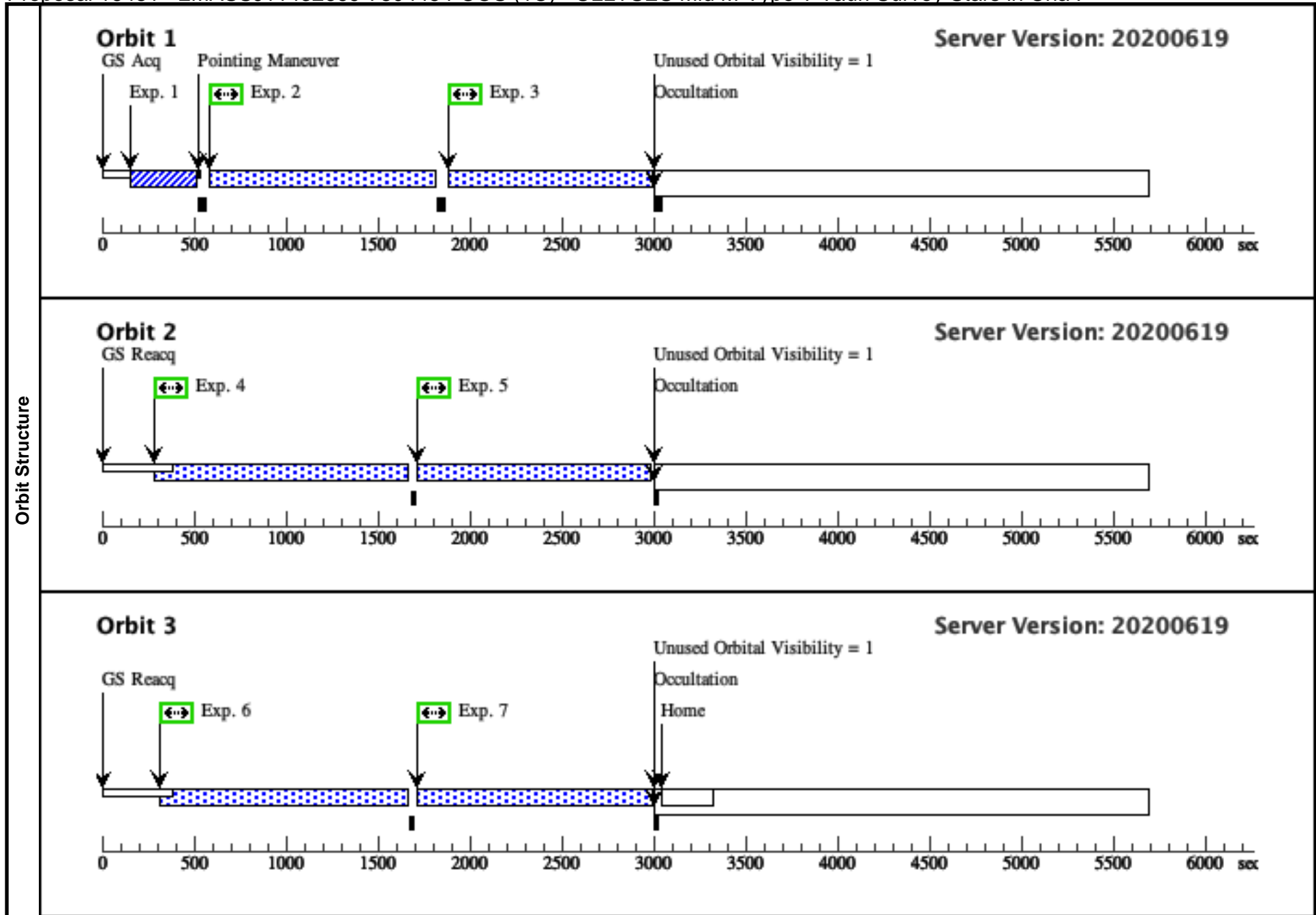
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	2MASSJ11432669-7804454 Alt Name1: EPS-CHA-17 Alt Name2: J11432669-7804454	RA: 11 43 26.4730 (175.8603042d) Dec: -78 04 45.57 (-78.07932d) Equinox: J2000	Proper Motion RA: -43.97987647 mas/yr Proper Motion Dec: -6.523979272999999 mas/yr Parallax: 0.005536115213" Epoch of Position: 2015.5	V=17.33 SpT=M5.5; A_V=0.40; V=17.3; J=11.6	Reference Frame: ICRS
<p><i>Comments: 2MASSJ11432669-7804454 : eps Cha 17, J11432669-7804454</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11432669-7804454&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11432669-7804454&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160</i></p> <p><i>M*: 0.14 ; log(dm/dt): -8.71</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:03, v0.6</i></p> <hr/> <p><i>tstatus; 2MASSJ11432669-7804454; 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: ; 2MASS J11432669-7804454</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 ...</i></p> <p><i>BVR photometry is only 1-3% of CTTS template; use reddened M5 model in optical</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 16481 - 2MASSJ11432669-7804454-COS (1C) - ULLYSES Mid 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 (1479785)	(1) 2MASSJ1143266 9-7804454	COS/NUV, ACQ/IMAGE, PSA	MIRRORB			31 Secs (31 Secs) [==>]	[1]
	<p>Comments: Worst-case ETC run (1479786) gives 20 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.4 scaled to B = 18.1                      S/N: used 2massj11432669-780445_lya2_etc_scaled_pAV0.50_M5phot.txt                      BOP: used 2massj11432669-780445_lya2_x4.00_etc_M5phot.txt                      SEDs and an IDL program to make them are on Box in 16481/2mass-j11432669-7804454/seds                      Also compare combine_acc_star.png to manara2017.png to see that this hybrid model is a reasonable approximation to the spectrum of this star in the 3400 to 4600 A range (Manara et al. 2017, A&amp;A, 604, A127), except for the optical emission lines, which aren't relevant for this purpose                      Replacing the CTTS template with the M5 dwarf above 3700 A only leads to a 10% increase in the acquisition exposure time, so using the hybrid model may not be strictly necessary for COS imaging acqs</p>								
	2	G130M/129 1-3 (1479787)	(1) 2MASSJ1143266 9-7804454	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=41 51.0; FP-POS=3		743.0 Secs (1058 Secs) [==>1058.0 Secs ]	[1]
	<p>Comments: Worst-case ETC run (1479788) gives 0.17 cts/s in brightest pixel</p> <p>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)                      Input file: spring-survey-iodo-crp04feb21.csv                      Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160                      M*: 0.14 ; log(dm/dt): -8.71                      For exptime=743.0 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): 379.0 cts/s/segment                      brightest pixel: 0.037 cts/s/pix at 1304.8 A                      Calculation performed 2021-02-12T16:30:02, v0.21</p>								
3	G130M/129 1-4 (1479787)	(1) 2MASSJ1143266 9-7804454	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=41 51.0; FP-POS=4		743.0 Secs (1058 Secs) [==>1058.0 Secs ]	[1]	
<p>Comments: Worst-case ETC run (1479788) gives 0.17 cts/s in brightest pixel</p> <p>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)                      Input file: spring-survey-iodo-crp04feb21.csv                      Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160                      M*: 0.14 ; log(dm/dt): -8.71                      For exptime=743.0 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): 379.0 cts/s/segment                      brightest pixel: 0.037 cts/s/pix at 1304.8 A                      Calculation performed 2021-02-12T16:30:02, v0.21</p>									
4	G160M/158 9-3 (1479789)	(1) 2MASSJ1143266 9-7804454	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=14 636.0; FP-POS=3		967.5 Secs (1221.5 Secs) [==>1221.5 Secs ]	[2]	
<p>Comments: Worst-case ETC run (1479790) gives 0.15 cts/s in brightest pixel</p> <p>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; cos.fuv,g160m,c1589,psa,mjd#59305; fp-pos=None, segment=None)                      Input file: spring-survey-iodo-crp04feb21.csv                      Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160                      M*: 0.14 ; log(dm/dt): -8.71                      For exptime=967.5 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): 107.5 cts/s/segment                      brightest pixel: 0.011 cts/s/pix at 1446.2 A                      Calculation performed 2021-02-12T16:29:58, v0.21</p>									

Proposal 16481 - 2MASSJ11432669-7804454-COS (1C) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

5	G160M/158 9-4 (1479789)	(1) 2MASSJ1143266 9-7804454	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=14 636.0; FP-POS=4	967.5 Secs (1221.5 Secs) [==>1221.5 Secs ]	[2]
<p>Comments: Worst-case ETC run (1479790) gives 0.15 cts/s in brightest pixel</p> <p>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1589,psa,mjd#59305; fp-pos=None, segment=None)            Input file: spring-survey-iodo-crp04feb21.csv            Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160            M*: 0.14 ; log(dm/dt): -8.71            For exptime=967.5 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): 107.5 cts/s/segment            brightest pixel: 0.011 cts/s/pix at 1446.2 A            Calculation performed 2021-02-12T16:29:58, v0.21</p>							
6	G160M/162 3-1 (1479791)	(1) 2MASSJ1143266 9-7804454	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 350.0; FP-POS=1	993.8 Secs (1222.8 Secs) [==>1222.8 Secs ]	[3]
<p>Comments: Worst-case ETC run (1479793) gives 0.15 cts/s in brightest pixel</p> <p>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59305; fp-pos=None, segment=None)            Input file: spring-survey-iodo-crp04feb21.csv            Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160            M*: 0.14 ; log(dm/dt): -8.71            For exptime=993.8 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): 102.5 cts/s/segment            brightest pixel: 0.011 cts/s/pix at 1446.2 A            Calculation performed 2021-02-12T16:30:00, v0.21</p>							
7	G160M/162 3-2 (1479791)	(1) 2MASSJ1143266 9-7804454	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=15 350.0; FP-POS=2	993.8 Secs (1222.8 Secs) [==>1222.8 Secs ]	[3]
<p>Comments: Worst-case ETC run (1479793) gives 0.15 cts/s in brightest pixel</p> <p>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,psa,mjd#59305; fp-pos=None, segment=None)            Input file: spring-survey-iodo-crp04feb21.csv            Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160            Worst-case ETC run (1479790) gives 0.15 cts/s in brightest pixel            M*: 0.14 ; log(dm/dt): -8.71            For exptime=993.8 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): 102.5 cts/s/segment            brightest pixel: 0.011 cts/s/pix at 1446.2 A            Calculation performed 2021-02-12T16:30:00, v0.21</p>							



**Proposal 16481, 2MASSJ11432669-7804454-STIS (1S), scheduling**

**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 1S,1C WITHIN 1D

*Comments: vstatus; 1S; 2MASSJ11432669-7804454; S/STIS approved for submission; S/WF 16/03/21; intrev: complete; S/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; 2MASS J11432669-7804454; STIS; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/2mass-j11432669-7804454/*

*vcheck; Selected ACQ strategy?; yes, F28X50LP*

*vcheck; Possible ACQ or Sci spoilers?; no*

*vcheck; Field BOT clear?; yes; the only unknown corresponds to a target with Gaia G ~ 20*

*vcheck; Visual BOT check for stars not in catalog?; yes*

*vcheck; Orbit packing finalized?; yes ...*

*G430L and G750L times are at 85% of recommended, and G230L is at recommended*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 1S,1C 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*

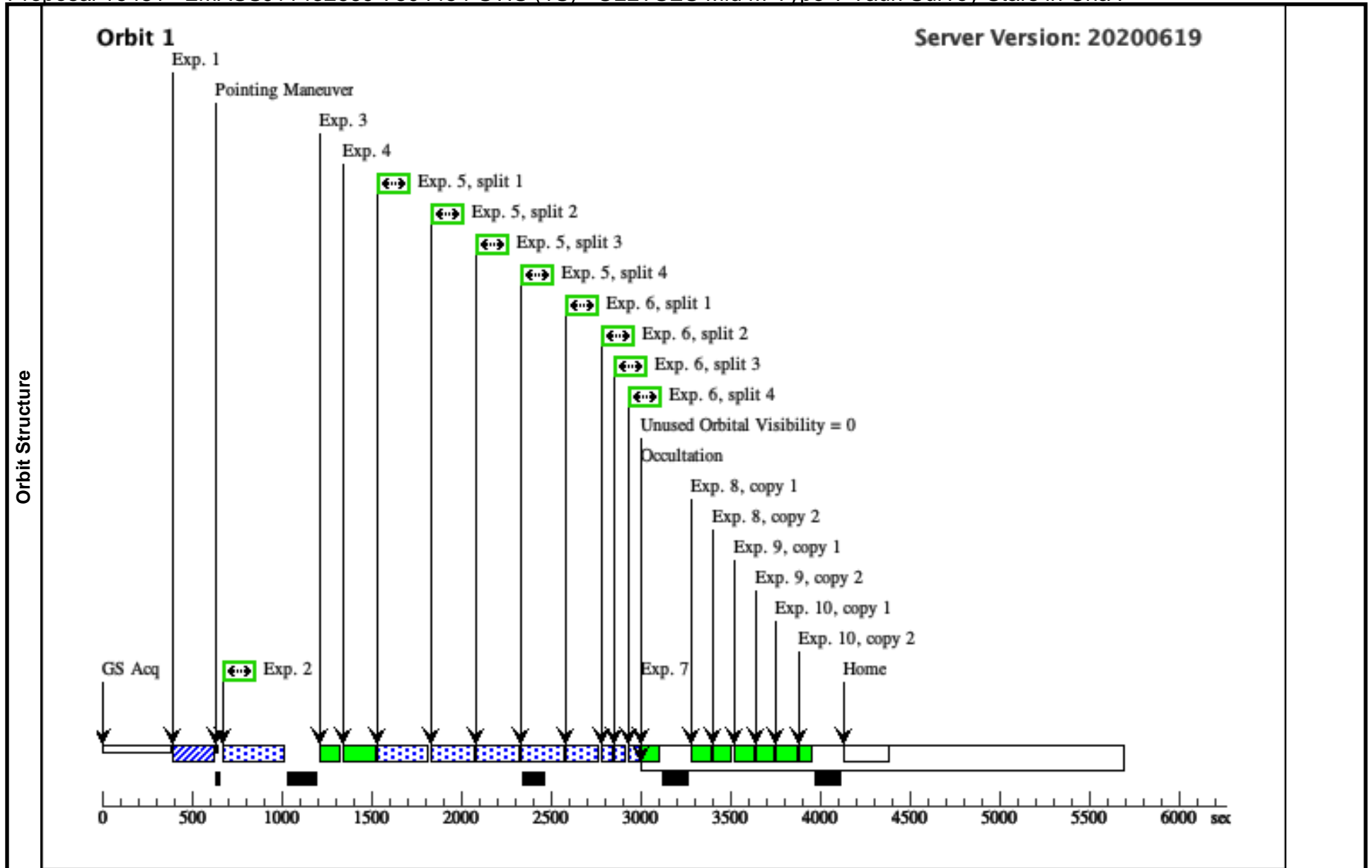
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	2MASSJ11432669-7804454 Alt Name1: EPS-CHA-17 Alt Name2: J11432669-7804454	RA: 11 43 26.4730 (175.8603042d) Dec: -78 04 45.57 (-78.07932d) Equinox: J2000	Proper Motion RA: -43.97987647 mas/yr Proper Motion Dec: -6.523979272999999 mas/yr Parallax: 0.005536115213" Epoch of Position: 2015.5	V=17.33 SpT=M5.5; A_V=0.40; V=17.3; J=11.6	Reference Frame: ICRS
<p><i>Comments: 2MASSJ11432669-7804454 : eps Cha 17, J11432669-7804454</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11432669-7804454&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11432669-7804454&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: M5.5; A_V: 0.4; Distance (pc): 160</i></p> <p><i>M*: 0.14; log(dm/dt): -8.71</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:03, v0.6</i></p> <hr/> <p><i>tstatus; 2MASSJ11432669-7804454; 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: ; 2MASS J11432669-7804454</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 ...</i></p> <p><i>BVR photometry is only 1-3% of CTIS template; use reddened M5 model in optical</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 16481 - 2MASSJ11432669-7804454-STIS (1S) - ULLYSES Mid 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 (1479814)	(1) 2MASSJ11432669-7804454 STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	<p><i>Comments: Nominal ETC run gives 0.47 sec for S/N = 40 Worst-case ETC run (1479815) gives saturation in 20 sec</i></p>								
	2	G230L/2376 (1479808)	(1) 2MASSJ11432669-7804454 STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=19 1			191 Secs (191 Secs) [==>]	[1]
	<p><i>Comments: Worst-case ETC run (1479809) gives 11.3 cts/s in brightest pixel</i></p> <p><i>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305</i>  <i>Input file: spring-survey-iodo-crp04feb21.csv</i>  <i>Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160</i>  <i>M*: 0.14 ; log(dm/dt): -8.71</i>  <i>For exptime=69.2 s, spectral region:</i>  <i>2800.0 +- 15.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 2455.7 cts/s/segment</i>  <i>brightest pixel: 1.178 cts/s/pix at 2796.8 A</i>  <i>Calculation performed 2021-02-12T16:30:03, v0.21</i></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 (1479810)	(1) 2MASSJ11432669-7804454 STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4			822 Secs (822 Secs) [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]	
<p><i>Comments: Worst-case ETC run (1479811) gives saturation in 1178 sec Used CR-SPLIT = 4 and GAIN = 4 to guard against saturation on emission lines (ETC 1483630)</i></p> <p><i>2massj11432669-780445_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g430l,c4300,52x2,mjd#59305</i>  <i>WARNING: operating mode = ACCUM</i>  <i>Input file: spring-survey-iodo-crp04feb21.csv</i>  <i>Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160</i>  <i>M*: 0.14 ; log(dm/dt): -8.71</i>  <i>For exptime=27.7 s, n_reads=2, spectral region:</i>  <i>4000.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 53545.9 cts/s/segment</i>  <i>brightest pixel: 38.180 cts/s/pix at 4560.5 A</i>  <i>Calculation performed 2021-02-12T16:30:03, v0.21</i></p>									

Proposal 16481 - 2MASSJ11432669-7804454-STIS (1S) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

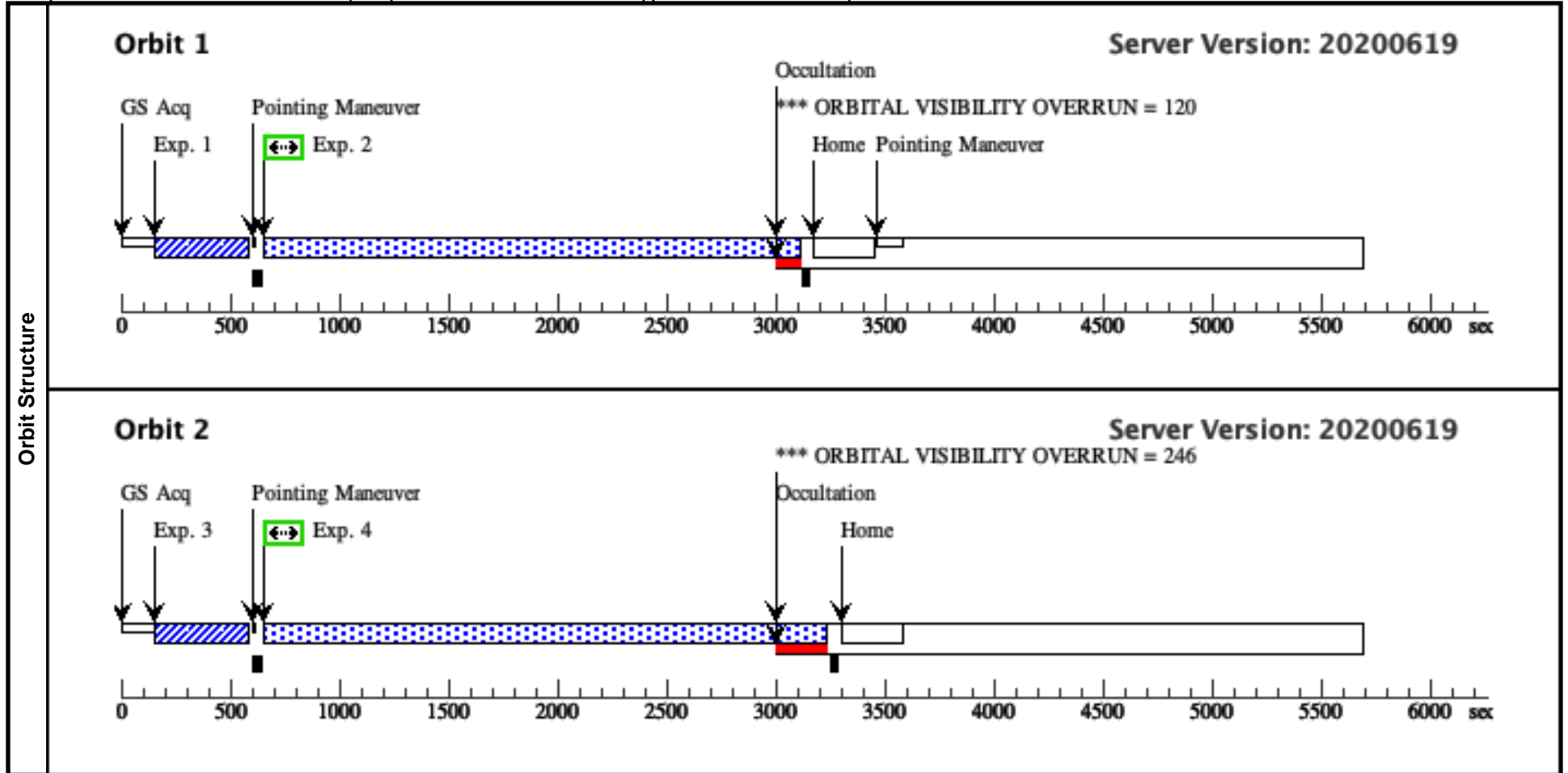
6	G750L/7751 (1) 2MASSJ1143266 STIS/CCD, ACCUM, 52X2 (1479812) 9-7804454	G750L 7751 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4	114 Secs (114 Secs)	[1]
<p><i>Comments: Worst-case ETC run (1479813) gives saturation in 1863 sec Used CR-SPLIT = 4 and GAIN = 4 to guard against saturation on emission lines (ETC 1483631)</i></p> <p><i>2massj11432669-780445_1ya2_etc_scaled_pAV0.50.txt; stis,ccd,g750l,c7751,52x2,mjd#59305</i>  <i>WARNING: operating mode = ACCUM</i>  <i>Input file: spring-survey-todo-crp04feb21.csv</i>  <i>Spectral type: M5.5 ; A_V: 0.4 ; Distance (pc): 160</i>  <i>M*: 0.14 ; log(dm/dt): -8.71</i>  <i>For exptime=2.4 s, n_reads=2, spectral region:</i>  <i>5700.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 132258.3 cts/s/segment</i>  <i>brightest pixel: 273.972 cts/s/pix at 6563.9 A</i>  <i>Calculation performed 2021-02-12T16:30:03, v0.21</i></p>					
7	G750L/7751 WAVE WAVECAL	G750L 7751 A	STIS/CCD, ACCUM, 52X0.1	[==>]	[1]
8	G750L/7751 CCDFLAT CCDFLAT 1	G750L 7751 A	STIS/CCD, ACCUM, 0.3X0.09	[==>(Copy 1)] [==>(Copy 2)]	[1]
9	G750L/7751 CCDFLAT CCDFLAT 2	G750L 7751 A	STIS/CCD, ACCUM, 52X0.1	[==>(Copy 1)] [==>(Copy 2)]	[1]
10	G750L/7751 CCDFLAT CCDFLAT 3	G750L 7751 A	STIS/CCD, ACCUM, 52X2	[==>(Copy 1)] [==>(Copy 2)]	[1]



<b>Visit</b>	<p><b>Proposal 16481, SZ10-COS (2C), implementation</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; 2C; SZ10; 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.; Sz 10 ; COS ; WF</i></p> <p><i>vcheck; ETC numbers entered in APT?; yes ...</i></p> <p><i>see comments in the COS acquisition for details about the hybrid model used</i></p> <p><i>vcheck; Any screening violations?; no</i></p> <p><i>vcheck; M-dwarf check complete and added to box folder?; yes ...</i></p> <p><i>located at: box/ullyses_tech/ullyses_proposals/survey/revised-mstar-bop.xls</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/16481/sz-10/</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 94% of requested G160M and 90% 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 2S,2C,2D,2E 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 = 6</i></p>																																			
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			Epoch of Position: 2015.5																																	

Proposal 16481 - SZ10-COS (2C) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

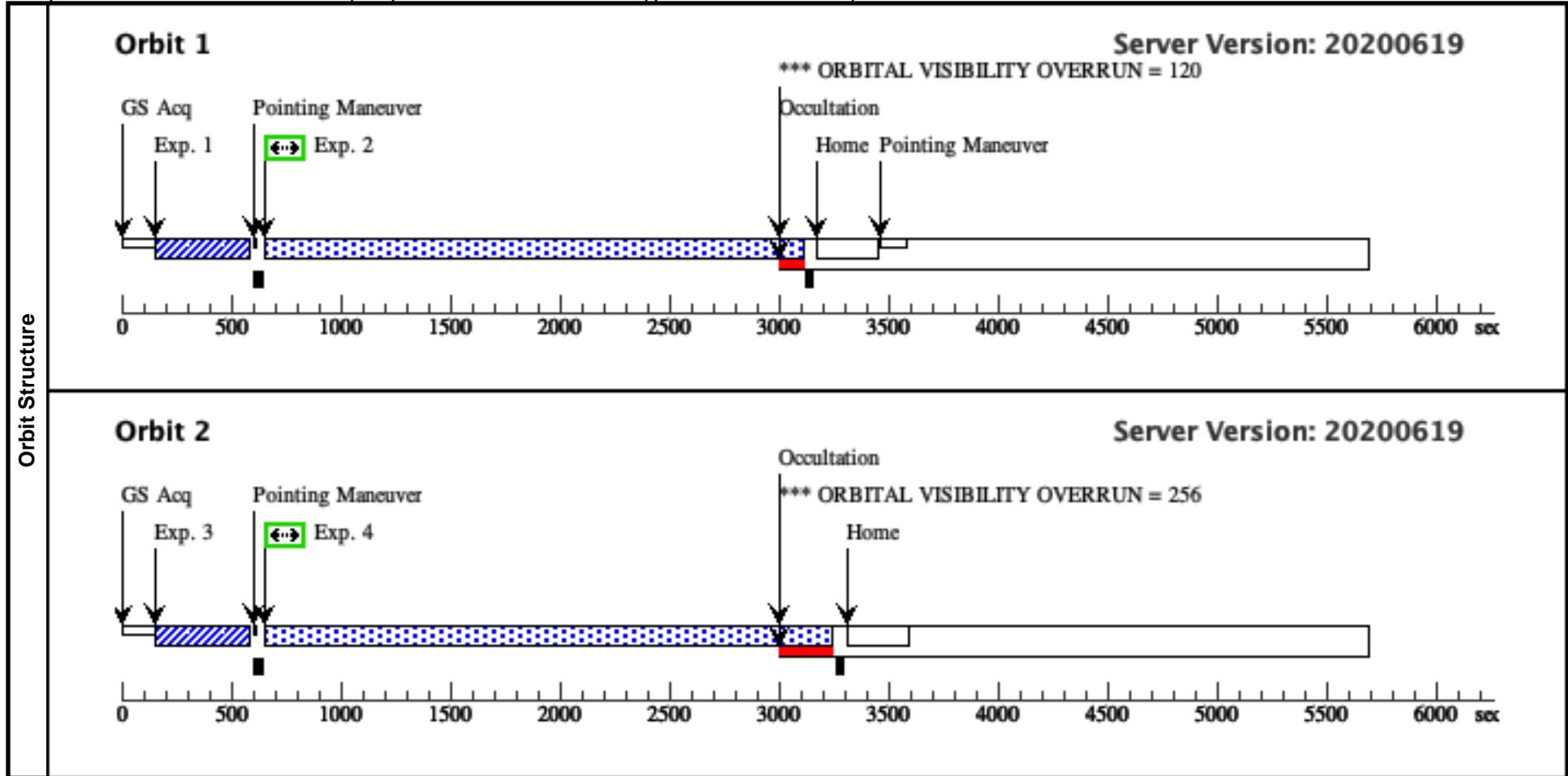
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ/Image (2) SZ10 (1479839)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				67 Secs (67 Secs) [==>]	[1]
	<p>Comments: Worst-case ETC run (1479840) gives 8.8 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.8 scaled to B = 17.06 S/N: used t12_lya2_etc_scaled_pAV0.50_M5phot.txt BOP: used t12_lya2_x4.00_etc_M5phot.txt SEDs and an IDL program to make them are on Box in 16481/sz-10/seds</p>								
	2	G160M/158 (2) SZ10 9-3 (1479856)	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=18 211.0; FP-POS=3			2457.9 Secs (2245.9 Secs) [==>2245.9 Secs ]	[1]
	<p>Comments: Worst-case ETC run (1479857) gives 0.057 cts/s in brightest pixel</p> <p>t12_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: M4.5 ; A_V: 0.8 ; Distance (pc): 160 M*: 0.19 ; log(dm/dt): -8.7 For exptime=2457.9 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): 86.4 cts/s/segment brightest pixel: 0.004 cts/s/pix at 1446.2 A Calculation performed 2021-02-12T16:30:18, v0.21</p>								
3	ACQ/Image (2) SZ10 (1479839)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB			NEW OBSET FULL ACQ		67 Secs (67 Secs) [==>]	[2]
<p>Comments: Worst-case ETC run (1479840) gives 8.8 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.8 scaled to B = 17.06 S/N: used t12_lya2_etc_scaled_pAV0.50_M5phot.txt BOP: used t12_lya2_x4.00_etc_M5phot.txt SEDs and an IDL program to make them are on Box in 16481/sz-10/seds</p>									
4	G160M/158 (2) SZ10 9-4 (1479856)	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=18 211.0; FP-POS=4				2457.9 Secs (2371.9 Secs) [==>2371.9 Secs ]	[2]
<p>Comments: Worst-case ETC run (1479857) gives 0.057 cts/s in brightest pixel</p> <p>t12_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: M4.5 ; A_V: 0.8 ; Distance (pc): 160 M*: 0.19 ; log(dm/dt): -8.7 For exptime=2457.9 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): 86.4 cts/s/segment brightest pixel: 0.004 cts/s/pix at 1446.2 A Calculation performed 2021-02-12T16:30:18, v0.21</p>									



<b>Visit</b>	<p><b>Proposal 16481, SZ10-COS (2D), implementation</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; 2D; SZ10; 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.; Sz 10 ; COS ; WF</i></p> <p><i>vcheck; ETC numbers entered in APT?; yes ...</i></p> <p><i>see comments in the COS acquisition for details about the hybrid model used</i></p> <p><i>vcheck; Any screening violations?; no</i></p> <p><i>vcheck; M-dwarf check complete and added to box folder?; yes ...</i></p> <p><i>located at: box/ullyses_tech/ullyses_proposals/survey/revise-mstar-bop.xls</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/16481/sz-10/</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 94% of requested G160M and 90% 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 2S,2C,2D,2E 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 = 6</i></p>																																			
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	Alt Name1: T12	Dec: -77 21 50.78 (-77.36411d)	Proper Motion Dec: 1.90512557 mas/yr	SpT=M4.5; A_V=0.80; U=16.7;																																
	Alt Name2: J11025504-7721508	Equinox: J2000	Parallax: 0.005487175315"	V=16.2; J=11.6																																
			Epoch of Position: 2015.5																																	
<p><i>Comments: T12 : Sz 10, J11025504-7721508</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11025504-7721508&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11025504-7721508&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160</i></p> <p><i>M*: 0.19 ; log(dm/dt): -8.7</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>t12_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:22, v0.6</i></p> <hr/> <p><i>tstatus; SZ10; 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: ; Sz 10, Ass Cha T 2-12</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 ...</i></p> <p><i>BVR photometry is only 4-8% of CTIS template; use reddened M5 model in optical</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 16481 - SZ10-COS (2D) - ULLYSES Mid 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) SZ10 (1479839)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				67 Secs (67 Secs) [==>]	[1]
	<p>Comments: Worst-case ETC run (1479840) gives 8.8 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.8 scaled to B = 17.06 S/N: used t12_lya2_etc_scaled_pAV0.50_M5phot.txt BOP: used t12_lya2_x4.00_etc_M5phot.txt SEDs and an IDL program to make them are on Box in 16481/sz-10/seds</p>								
	2	G160M/162 (2) SZ10 3-1 (1479858)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=18 576.0; FP-POS=1			2524.6 Secs (2235.6 Secs) [==>2235.6 Secs ]	[1]
	<p>Comments: Worst-case ETC run (1479859) gives 0.056 cts/s in brightest pixel</p> <p>t12_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: M4.5 ; A_V: 0.8 ; Distance (pc): 160 M*: 0.19 ; log(dm/dt): -8.7 For exptime=2524.6 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): 84.7 cts/s/segment brightest pixel: 0.004 cts/s/pix at 1446.2 A Calculation performed 2021-02-12T16:30:20, v0.21</p>								
3	ACQ/Image (2) SZ10 (1479839)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB			NEW OBSET FULL ACQ		67 Secs (67 Secs) [==>]	[2]
<p>Comments: Worst-case ETC run (1479840) gives 8.8 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.8 scaled to B = 17.06 S/N: used t12_lya2_etc_scaled_pAV0.50_M5phot.txt BOP: used t12_lya2_x4.00_etc_M5phot.txt SEDs and an IDL program to make them are on Box in 16481/sz-10/seds</p>									
4	G160M/162 (2) SZ10 3-2 (1479858)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=18 576.0; FP-POS=2				2524.6 Secs (2371.6 Secs) [==>2371.6 Secs ]	[2]
<p>Comments: Worst-case ETC run (1479859) gives 0.056 cts/s in brightest pixel</p> <p>t12_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: M4.5 ; A_V: 0.8 ; Distance (pc): 160 M*: 0.19 ; log(dm/dt): -8.7 For exptime=2524.6 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): 84.7 cts/s/segment brightest pixel: 0.004 cts/s/pix at 1446.2 A Calculation performed 2021-02-12T16:30:20, v0.21</p>									



**Proposal 16481, SZ10-COS (2E), implementation**

**Diagnostic Status: Warning**

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; 2E; SZ10; 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 10 ; COS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/sz-10/*

*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 94% of requested G160M and 90% of requested G130M*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 2S,2C,2D,2E 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 = 6*

**Diagnosics**

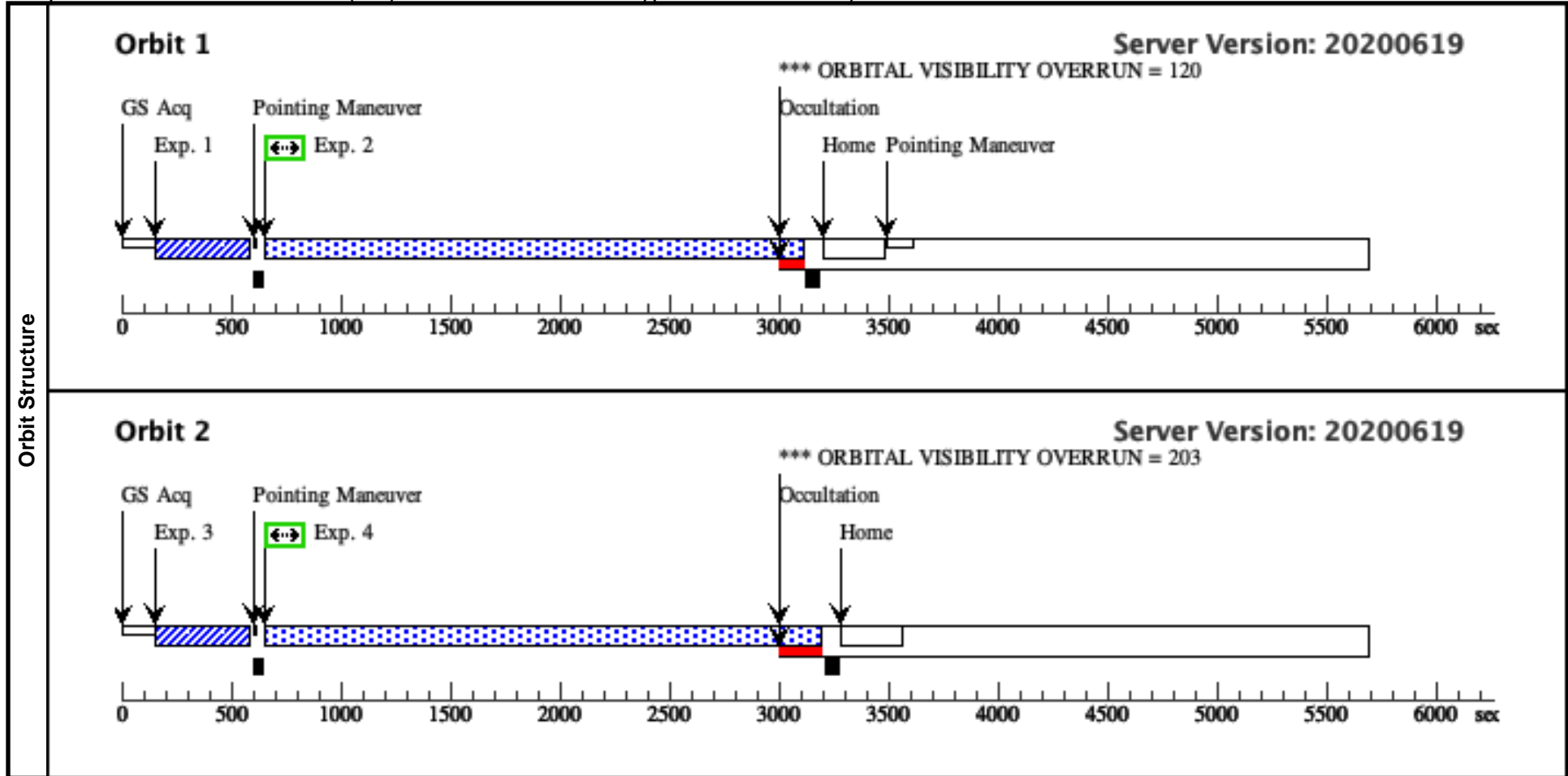
(SZ10-COS (2E)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(SZ10-COS (2E)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SZ10	RA: 11 02 54.9132 (165.7288050d)	Proper Motion RA: -23.58961478 mas/yr	V=16.25	Reference Frame: ICRS
	Alt Name1: T12	Dec: -77 21 50.78 (-77.36411d)	Proper Motion Dec: 1.90512557 mas/yr	SpT=M4.5; A_V=0.80; U=16.7;	
	Alt Name2: J11025504-7721508	Equinox: J2000	Parallax: 0.005487175315"	V=16.2; J=11.6	
			Epoch of Position: 2015.5		
<p><i>Comments: T12 : Sz 10, J11025504-7721508</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11025504-7721508&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11025504-7721508&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160</i></p> <p><i>M*: 0.19 ; log(dm/dt): -8.7</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>t12_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:22, v0.6</i></p> <hr/> <p><i>tstatus; SZ10; 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: ; Sz 10, Ass Cha T 2-12</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 ...</i></p> <p><i>BVR photometry is only 4-8% of CTIS template; use reddened M5 model in optical</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 16481 - SZ10-COS (2E) - ULLYSES Mid 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) SZ10 (1479839)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				67 Secs (67 Secs) [==>]	[1]
	<p>Comments: Worst-case ETC run (1479840) gives 8.8 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.8 scaled to B = 17.06                      S/N: used t12_lya2_etc_scaled_pAV0.50_M5phot.txt                      BOP: used t12_lya2_x4.00_etc_M5phot.txt                      SEDs and an IDL program to make them are on Box in 16481/sz-10/seds</p>								
	2	G130M/129 (2) SZ10 1-3 (1479854)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=49 43.0; FP-POS=3			2616.7 Secs (2288.7 Secs) [==>2288.7 Secs ]	[1]
	<p>Comments: Worst-case ETC run (1479855) gives 0.095 cts/s in brightest pixel</p> <p>t12_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)                      Input file: spring-survey-todo-crp04feb21.csv                      Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160                      M*: 0.19 ; log(dm/dt): -8.7                      For exptime=2616.7 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): 318.3 cts/s/segment                      brightest pixel: 0.012 cts/s/pix at 1304.8 A                      Calculation performed 2021-02-12T16:30:22, v0.21</p>								
Exposures	3	ACQ/Image (2) SZ10 (1479839)	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		NEW OBSET FULL ACQ		67 Secs (67 Secs) [==>]	[2]
	<p>Comments: Worst-case ETC run (1479840) gives 8.8 cts/s in brightest pixel</p> <p>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M5 dwarf with A_V = 0.8 scaled to B = 17.06                      S/N: used t12_lya2_etc_scaled_pAV0.50_M5phot.txt                      BOP: used t12_lya2_x4.00_etc_M5phot.txt                      SEDs and an IDL program to make them are on Box in 16481/sz-10/seds</p>								
	4	G130M/129 (2) SZ10 1-4 (1479854)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=49 43.0; FP-POS=4			2616.7 Secs (2371.7 Secs) [==>2371.7 Secs ]	[2]
	<p>Comments: Worst-case ETC run (1479855) gives 0.095 cts/s in brightest pixel</p> <p>t12_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)                      Input file: spring-survey-todo-crp04feb21.csv                      Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160                      M*: 0.19 ; log(dm/dt): -8.7                      For exptime=2616.7 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): 318.3 cts/s/segment                      brightest pixel: 0.012 cts/s/pix at 1304.8 A                      Calculation performed 2021-02-12T16:30:22, v0.21</p>								



**Proposal 16481, SZ10-STIS (2S), scheduling**

**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,2E WITHIN 1D

*Comments: vstatus; 2S; SZ10; S/STIS approved for submission; S/WF 16/03/21 ; intrev: complete; P/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; Sz 10 ; STIS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/sz-10/*

*vcheck; Selected ACQ strategy?; yes, F28X50LP*

*vcheck; Possible ACQ or Sci spoilers?; no*

*vcheck; Field BOT clear?; yes; the only unknown is invisible in Galex and exceedingly faint in DSS*

*vcheck; Visual BOT check for stars not in catalog?; yes*

*vcheck; Orbit packing finalized?; yes ...*

*G430L, G750L times were set to 150% of those found for the hybrid model, and G230L time was set to 175%*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 2S,2C,2D,2E 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*

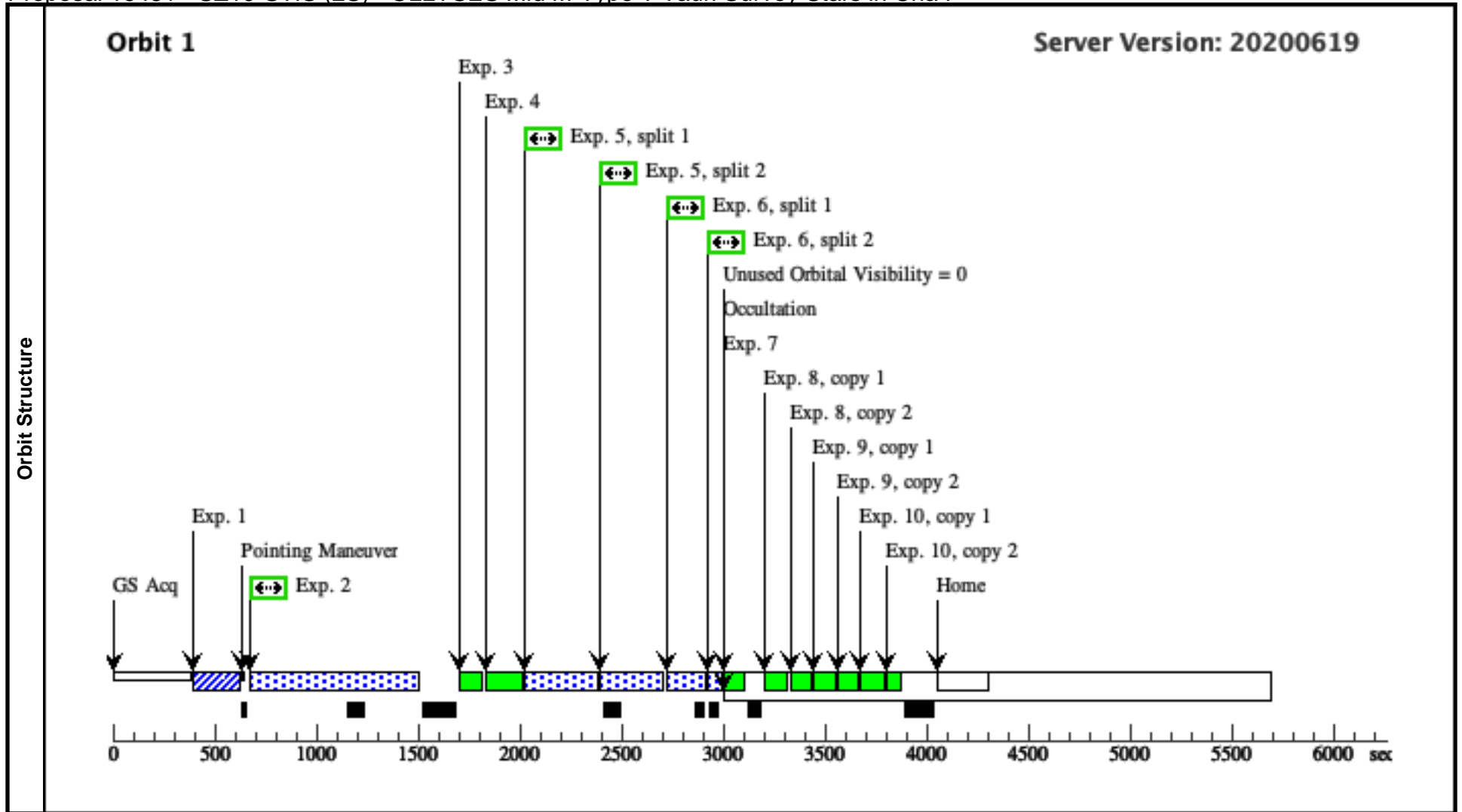
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SZ10	RA: 11 02 54.9132 (165.7288050d)	Proper Motion RA: -23.58961478 mas/yr	V=16.25	Reference Frame: ICRS
	Alt Name1: T12	Dec: -77 21 50.78 (-77.36411d)	Proper Motion Dec: 1.90512557 mas/yr	SpT=M4.5; A_V=0.80; U=16.7;	
	Alt Name2: J11025504-7721508	Equinox: J2000	Parallax: 0.005487175315"	V=16.2; J=11.6	
			Epoch of Position: 2015.5		
<p><i>Comments: T12 : Sz 10, J11025504-7721508</i></p> <p><i>Region: Cha I</i></p> <p><i>Simbad: <a href="https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11025504-7721508&amp;submit=submit+id">https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11025504-7721508&amp;submit=submit+id</a></i></p> <p><i>Target coordinates are from Gaia DR2.</i></p> <p><i>Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160</i></p> <p><i>M*: 0.19 ; log(dm/dt): -8.7</i></p> <p><i>Input file: spring-survey-todo-crp04feb21.csv</i></p> <p><i>t12_lya2_etc_scaled_pAV0.50.txt</i></p> <p><i>Calculation performed 2021-02-12T16:30:22, v0.6</i></p> <hr/> <p><i>tstatus; SZ10; 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: ; Sz 10, Ass Cha T 2-12</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 ...</i></p> <p><i>BVR photometry is only 4-8% of CTTS template; use reddened M5 model in optical</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 16481 - SZ10-STIS (2S) - ULLYSES Mid 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 (1479860)	(2) SZ10	STIS/CCD, ACQ, F28X50LP	MIRROR			1 Secs (1 Secs) [==>]	[1]	
	<p><i>Comments: Nominal ETC run gives 0.14 sec for S/N = 40 Worst-case ETC run (1479861) gives saturation in 6.3 sec</i></p>									
	2	G230L/2376 (1479862)	(2) SZ10	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=34 0			681 Secs (681 Secs) [==>]	[1]
	<p><i>Comments: Worst-case ETC run (1479863) gives 5.7 cts/s in brightest pixel</i></p> <p><i>t12_lya2_etc_scaled_pAV0.50.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305</i>  <i>Input file: spring-survey-todo-crp04feb21.csv</i>  <i>Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160</i>  <i>M*: 0.19 ; log(dm/dt): -8.7</i>  <i>For exptime=139.1 s, spectral region:</i>  <i>2800.0 +- 15.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 2383.6 cts/s/segment</i>  <i>brightest pixel: 0.592 cts/s/pix at 2796.8 A</i>  <i>Calculation performed 2021-02-12T16:30:22, v0.21</i></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 (1479864)	(2) SZ10	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=2; GAIN=4			557 Secs (557 Secs) [==>(Split 1)] [==>(Split 2)]	[1]	
<p><i>Comments: Worst-case ETC run (1479865) gives saturation in 2083 sec Used GAIN = 4 to guard against saturation on emission lines (ETC 1483626)</i></p> <p><i>t12_lya2_etc_scaled_pAV0.50.txt; stis,ccd,g430l,c4300,52x2,mjd#59305</i>  <i>WARNING: operating mode = ACCUM</i>  <i>Input file: spring-survey-todo-crp04feb21.csv</i>  <i>Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160</i>  <i>M*: 0.19 ; log(dm/dt): -8.7</i>  <i>For exptime=45.8 s, n_reads=2, spectral region:</i>  <i>4000.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 45535.3 cts/s/segment</i>  <i>brightest pixel: 24.670 cts/s/pix at 4560.5 A</i>  <i>Calculation performed 2021-02-12T16:30:22, v0.21</i></p>										

Proposal 16481 - SZ10-STIS (2S) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

6	G750L/7751 (2) SZ10 (1479866)	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=2; GAIN=4	68 Secs (68 Secs)	
					[==>(Split 1)]	[1]
<p><i>Comments: Worst-case ETC run (1479868) gives saturation in 571 sec Used GAIN = 4 to guard against saturation on emission lines (ETC 1483627)</i></p> <p><i>t12_lya2_etc_scaled_pAV0.50.txt; stis.ccd.g750l,c7751,52x2,mjd#59305</i>  <i>WARNING: operating mode = ACCUM</i>  <i>Input file: spring-survey-todo-crp04feb21.csv</i>  <i>Spectral type: M4.5 ; A_V: 0.8 ; Distance (pc): 160</i>  <i>M*: 0.19 ; log(dm/dt): -8.7</i>  <i>For exptime=3.3 s, n_reads=2, spectral region:</i>  <i>5700.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 110837.0 cts/s/segment</i>  <i>brightest pixel: 207.036 cts/s/pix at 6563.9 A</i>  <i>Calculation performed 2021-02-12T16:30:22, v0.21</i></p>						
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 16481, V-XX-CHA-COS (3C), scheduling**

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:15:40:00; 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

*Comments: vstatus; 3C; V-XX-CHA; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; XX Cha ; COS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/xx-cha/*

*vcheck; Selected ACQ strategy?; yes, BOA/MirrorA*

*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 86% of requested G160M and 102% of requested G130M*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 3S,3C,3D,3E 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 = 9*

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	V-XX-CHA	RA: 11 11 39.5775 (167.9149063d)	Proper Motion RA: -21.90155246 mas/yr	V=15.28	Reference Frame: ICRS
	Alt Name1: T49	Dec: -76 20 15.04 (-76.33751d)	Proper Motion Dec: 0.084109441 mas/yr	SpT=M3.5; A_V=1.00; U=15.0;	
	Alt Name2: J11113965-7620152	Equinox: J2000	Parallax: 0.005249111516"	V=15.3; J=10.5	
			Epoch of Position: 2015.5		

*Comments: T49 : XX Cha, J11113965-7620152*

*Region: Cha I*

*Simbad: <https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11113965-7620152&submit=submit+id>*

*Target coordinates are from Gaia DR2.*

*Spectral type: M3.5 ; A\_V: 1.0 ; Distance (pc): 160*

*M\*: 0.25 ; log(dm/dt): -7.41*

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

*t49\_lya2\_etc\_scaled\_pAV0.50.txt*

*Calculation performed 2021-02-12T16:30:32, v0.6*

---

*tstatus: V-XX-CHA; 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: ; XX Cha, Sz 39, Ass Cha T 2-49, HBC 586*

*tcheck; Target info verification status?; OK*

*tcheck; Coordinates & P.M. verified, epoch checked?; yes*

*tcheck; Adopted SED compared to Observations?; yes ...*

*BVR photometry is only 2-10% of CTTS template; use reddened M5 model in optical*

*Category=STAR*

*Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]*

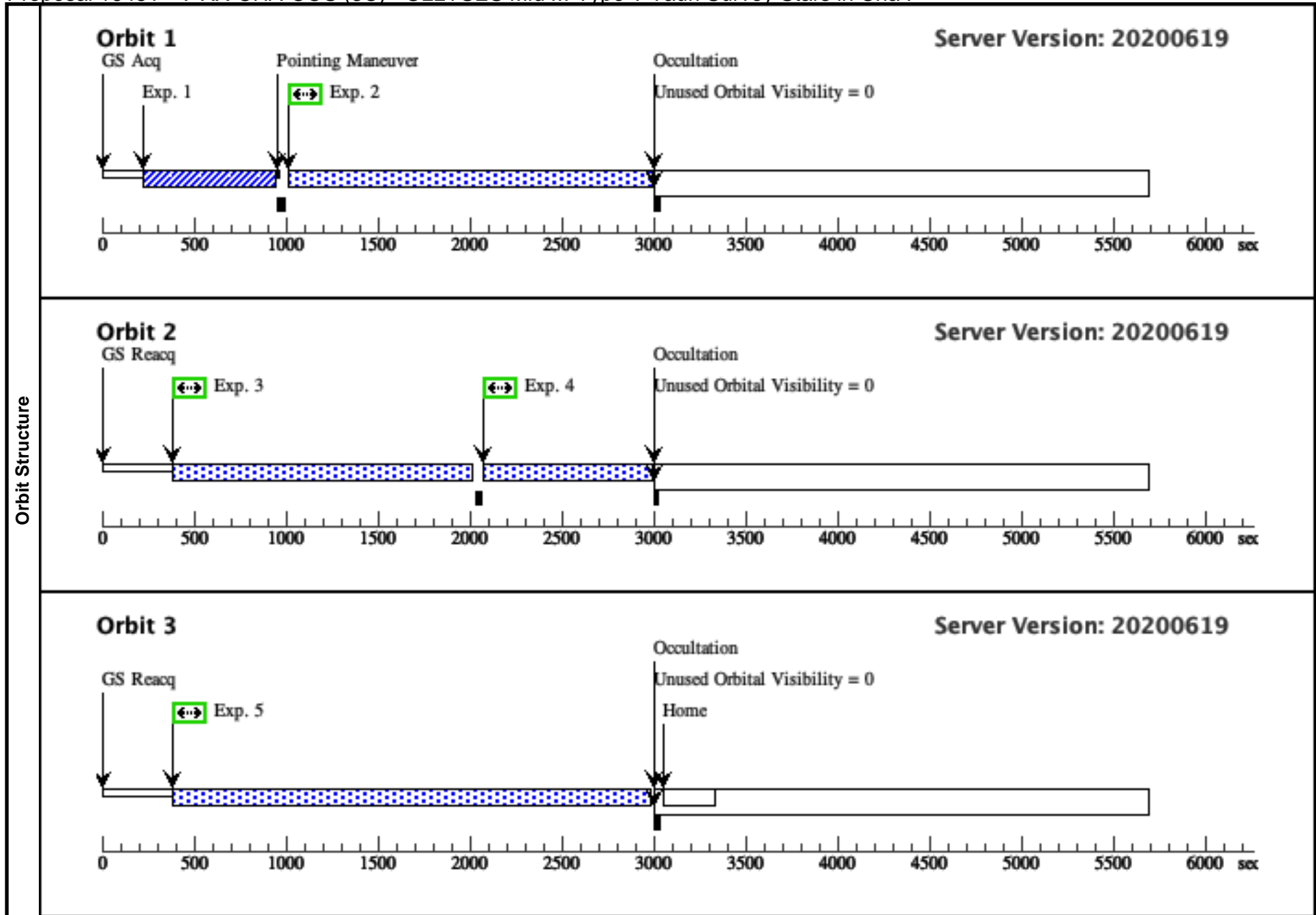
*Extended=NO*

Proposal 16481 - V-XX-CHA-COS (3C) - ULLYSES Mid 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 (1479880)	(3) V-XX-CHA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			246 Secs (246 Secs) [==>]	[1]	
	<p><i>Comments: Worst-case ETC run (1479881) gives 11 cts/s in brightest pixel Doubled ETC exposure time due to low Galax NUV flux</i></p> <p><i>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M3 dwarf with A_V = 1.0 scaled to B = 16.67 S/N: used t49_lya2_etc_scaled_pAV0.50_M3phot.txt BOP: used t49_lya2_x4.00_etc_M3phot.txt SEDs and an IDL program to make them are on Box in 16481/xx-cha/seds</i></p>									
	2	G160M/158 9-3 (1479885)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=13 875.0; FP-POS=3			2008 Secs (1762 Secs) [==>1762.0 Secs ]	[1]
	<p><i>Comments: Worst-case ETC run (1479886) gives 0.048 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=1964.2 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): 113.4 cts/s/segment</i>  <i>brightest pixel: 0.003 cts/s/pix at 1402.8 A</i>  <i>Calculation performed 2021-02-12T16:30:27, v0.21</i></p>									
3	G160M/158 9-4 (1479885)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=13 875.0; FP-POS=4			1574 Secs (1574 Secs) [==>]	[2]	
<p><i>Comments: Worst-case ETC run (1479886) gives 0.048 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=1964.2 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): 113.4 cts/s/segment</i>  <i>brightest pixel: 0.003 cts/s/pix at 1402.8 A</i>  <i>Calculation performed 2021-02-12T16:30:27, v0.21</i></p>										
4	G160M/162 3-1 (1479887)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=14 343.0; FP-POS=1			784 Secs (784 Secs) [==>]	[2]	
<p><i>Comments: Worst-case ETC run (1479888) gives 0.033 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=1924.3 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): 109.7 cts/s/segment</i>  <i>brightest pixel: 0.003 cts/s/pix at 1548.5 A</i>  <i>Calculation performed 2021-02-12T16:30:29, v0.21</i></p>										

Proposal 16481 - V-XX-CHA-COS (3C) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

5	G160M/162 (3) V-XX-CHA 3-2 (1479887)	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=14 343.0; FP-POS=2	2552 Secs (2552 Secs)	
					[==>]	[3]
<p><i>Comments: Worst-case ETC run (1479888) gives 0.033 cts/s in brightest pixel</i></p> <p><i>t49_lya2_etc_scaled_pAV0.50.txt; cos,fuv,g160m,c1623,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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i></p> <p><i>M*: 0.25 ; log(dm/dt): -7.41</i></p> <p><i>For exptime=1924.3 s, spectral region:</i></p> <p><i>1549.0 +- 1.0 A achieves SNR=20.0 / 6-pix-resel for combined c1589 &amp; c1623</i></p> <p><i>The exptime for this c1623 exposure has been halved because c1589 &amp; c1623 target the same line.</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): 109.7 cts/s/segment</i></p> <p><i>brightest pixel: 0.003 cts/s/pix at 1548.5 A</i></p> <p><i>Calculation performed 2021-02-12T16:30:29, v0.21</i></p>						



**Proposal 16481, V-XX-CHA-COS (3D), scheduling**

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:15:40:00; 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

*Comments: vstatus; 3D; V-XX-CHA; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; XX Cha ; COS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/xx-cha/*

*vcheck; Selected ACQ strategy?; yes, BOA/MirrorA*

*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 86% of requested G160M and 102% of requested G130M*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 3S,3C,3D,3E 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 = 9*

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	V-XX-CHA	RA: 11 11 39.5775 (167.9149063d)	Proper Motion RA: -21.90155246 mas/yr	V=15.28	Reference Frame: ICRS
	Alt Name1: T49	Dec: -76 20 15.04 (-76.33751d)	Proper Motion Dec: 0.084109441 mas/yr	SpT=M3.5; A_V=1.00; U=15.0;	
	Alt Name2: J11113965-7620152	Equinox: J2000	Parallax: 0.005249111516"	V=15.3; J=10.5	
			Epoch of Position: 2015.5		

*Comments: T49 : XX Cha, J11113965-7620152*

*Region: Cha I*

*Simbad: <https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11113965-7620152&submit=submit+id>*

*Target coordinates are from Gaia DR2.*

*Spectral type: M3.5 ; A\_V: 1.0 ; Distance (pc): 160*

*M\*: 0.25 ; log(dm/dt): -7.41*

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

*t49\_lya2\_etc\_scaled\_pAV0.50.txt*

*Calculation performed 2021-02-12T16:30:32, v0.6*

---

*tstatus: V-XX-CHA; 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: ; XX Cha, Sz 39, Ass Cha T 2-49, HBC 586*

*tcheck; Target info verification status?; OK*

*tcheck; Coordinates & P.M. verified, epoch checked?; yes*

*tcheck; Adopted SED compared to Observations?; yes ...*

*BVR photometry is only 2-10% of CTTS template; use reddened M5 model in optical*

*Category=STAR*

*Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]*

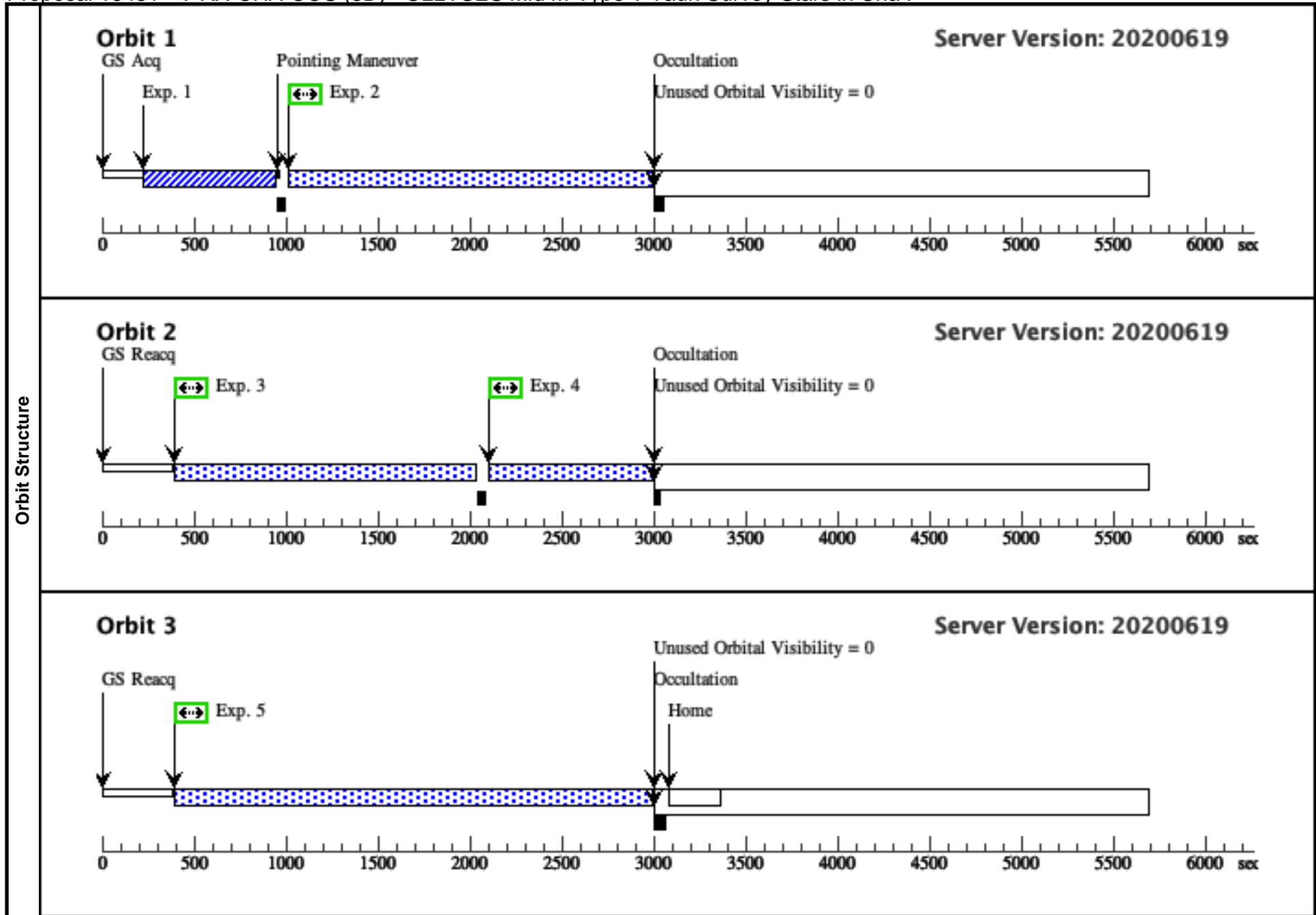
*Extended=NO*

Proposal 16481 - V-XX-CHA-COS (3D) - ULLYSES Mid 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 (1479880)	(3) V-XX-CHA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			246 Secs (246 Secs) [==>]	[1]	
	<p><i>Comments: Worst-case ETC run (1479881) gives 11 cts/s in brightest pixel Doubled ETC exposure time due to low Galax NUV flux</i></p> <p><i>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M3 dwarf with A_V = 1.0 scaled to B = 16.67 S/N: used t49_lya2_etc_scaled_pAV0.50_M3phot.txt BOP: used t49_lya2_x4.00_etc_M3phot.txt SEDs and an IDL program to make them are on Box in 16481/xx-cha/seds</i></p>									
	2	G130M/129 1-3A (1479883)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=3			2051 Secs (1805 Secs) [==>1805.0 Secs ]	[1]
	<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=6651.5 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): 313.4 cts/s/segment</i>  <i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>									
3	G130M/129 1-3B (1479883)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=3			1588 Secs (1588 Secs) [==>]	[2]	
<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=6651.5 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): 313.4 cts/s/segment</i>  <i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>										
4	G130M/129 1-4A (1479883)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=4			840 Secs (840 Secs) [==>]	[2]	
<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=6651.5 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): 313.4 cts/s/segment</i>  <i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>										

Proposal 16481 - V-XX-CHA-COS (3D) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

5	G130M/129 (3) V-XX-CHA 1-4B (1479883)	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=4	2552 Secs (2552 Secs) [==>]	[3]
<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i></p> <p><i>M*: 0.25 ; log(dm/dt): -7.41</i></p> <p><i>For exptime=6651.5 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): 313.4 cts/s/segment</i></p> <p><i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i></p> <p><i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>						



**Proposal 16481, V-XX-CHA-COS (3E), scheduling**

**Diagnostic Status: No Diagnostics**

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 29-APR-2021:09:00:00 AND 11-MAY-2021:15:40:00; 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

*Comments: vstatus; 3E; V-XX-CHA; P/COS approved for submission; P/WF 16/03/21 ; intrev: complete; P/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; XX Cha ; COS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/xx-cha/*

*vcheck; Selected ACQ strategy?; yes, BOA/MirrorA*

*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 86% of requested G160M and 102% of requested G130M*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 3S,3C,3D,3E 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 = 9*

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	V-XX-CHA	RA: 11 11 39.5775 (167.9149063d)	Proper Motion RA: -21.90155246 mas/yr	V=15.28	Reference Frame: ICRS
	Alt Name1: T49	Dec: -76 20 15.04 (-76.33751d)	Proper Motion Dec: 0.084109441 mas/yr	SpT=M3.5; A_V=1.00; U=15.0;	
	Alt Name2: J11113965-7620152	Equinox: J2000	Parallax: 0.005249111516"	V=15.3; J=10.5	
			Epoch of Position: 2015.5		

*Comments: T49 : XX Cha, J11113965-7620152*

*Region: Cha I*

*Simbad: <https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11113965-7620152&submit=submit+id>*

*Target coordinates are from Gaia DR2.*

*Spectral type: M3.5 ; A\_V: 1.0 ; Distance (pc): 160*

*M\*: 0.25 ; log(dm/dt): -7.41*

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

*t49\_lya2\_etc\_scaled\_pAV0.50.txt*

*Calculation performed 2021-02-12T16:30:32, v0.6*

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*tstatus: V-XX-CHA; 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: ; XX Cha, Sz 39, Ass Cha T 2-49, HBC 586*

*tcheck; Target info verification status?; OK*

*tcheck; Coordinates & P.M. verified, epoch checked?; yes*

*tcheck; Adopted SED compared to Observations?; yes ...*

*BVR photometry is only 2-10% of CTTS template; use reddened M5 model in optical*

*Category=STAR*

*Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]*

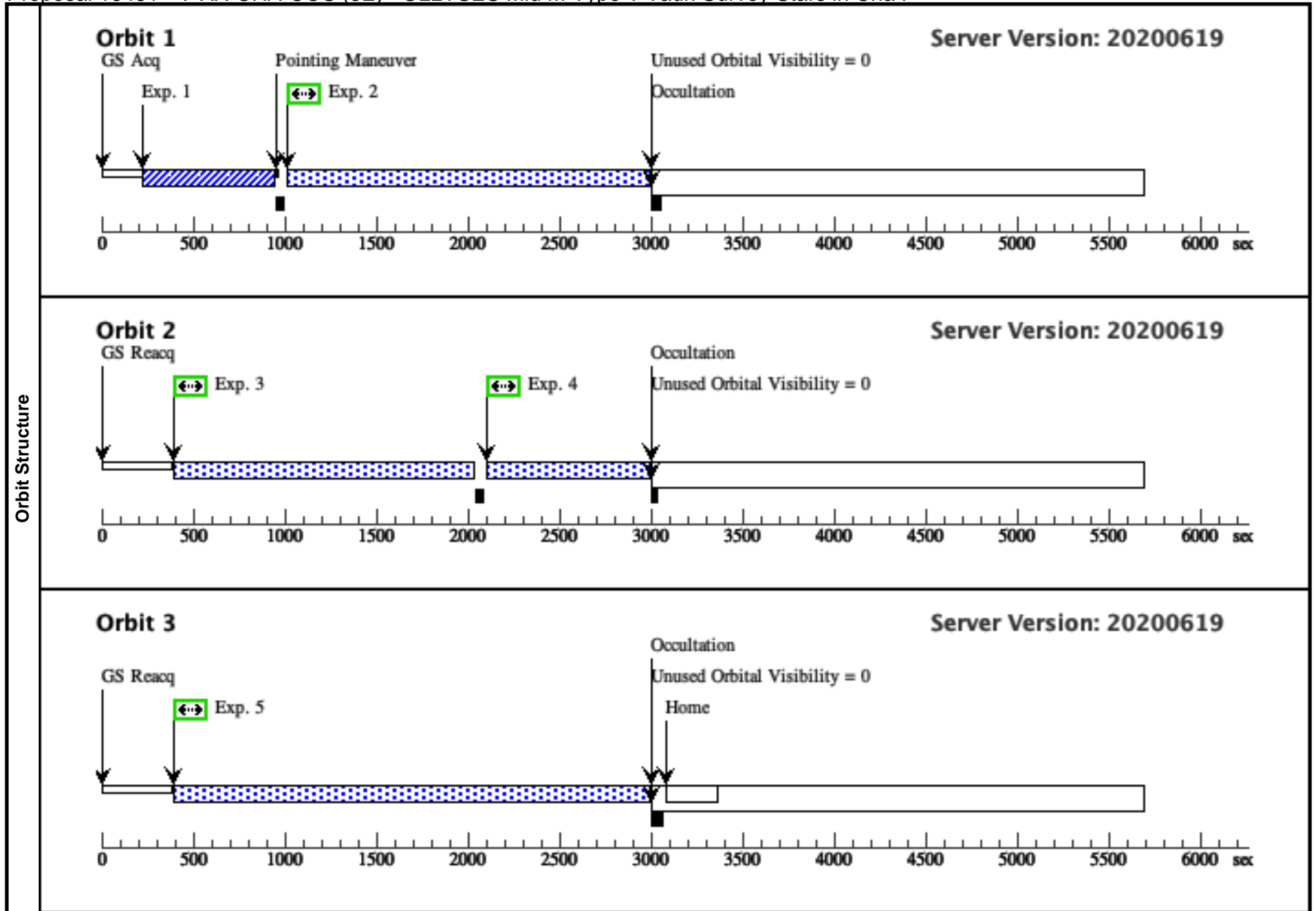
*Extended=NO*

Proposal 16481 - V-XX-CHA-COS (3E) - ULLYSES Mid 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 (1479880)	(3) V-XX-CHA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			246 Secs (246 Secs) [==>]	[1]	
	<p><i>Comments: Worst-case ETC run (1479881) gives 11 cts/s in brightest pixel Doubled ETC exposure time due to low Galax NUV flux</i></p> <p><i>Used a hybrid model; both components are scaled up by 4x for BOP below 3700 A: CTTS template (+0.5 A_V for S/N case only) above 3700 A: M3 dwarf with A_V = 1.0 scaled to B = 16.67 S/N: used t49_lya2_etc_scaled_pAV0.50_M3phot.txt BOP: used t49_lya2_x4.00_etc_M3phot.txt SEDs and an IDL program to make them are on Box in 16481/xx-cha/seds</i></p>									
	2	G130M/129 1-3A (1479883)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=3			2051 Secs (1805 Secs) [==>1805.0 Secs ]	[1]
	<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=6651.5 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): 313.4 cts/s/segment</i>  <i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>									
Exposures	3	G130M/129 1-3B (1479883)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=3		1588 Secs (1588 Secs) [==>]	[2]	
	<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=6651.5 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): 313.4 cts/s/segment</i>  <i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>									
	4	G130M/129 1-4A (1479883)	(3) V-XX-CHA	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 20.0; FP-POS=4		840 Secs (840 Secs) [==>]	[2]	
	<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=6651.5 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): 313.4 cts/s/segment</i>  <i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>									

Proposal 16481 - V-XX-CHA-COS (3E) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

5	G130M/129 (3) V-XX-CHA 1-4B (1479883)	COS/FUV, TIME-TAG, PSA  1291 A	G130M  20.0; FP-POS=4	BUFFER-TIME=50	2552 Secs (2552 Secs)	
					[==>]	[3]
<p><i>Comments: Worst-case ETC run (1479884) gives 0.095 cts/s in brightest pixel</i></p> <p><i>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i></p> <p><i>M*: 0.25 ; log(dm/dt): -7.41</i></p> <p><i>For exptime=6651.5 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): 313.4 cts/s/segment</i></p> <p><i>brightest pixel: 0.002 cts/s/pix at 1402.7 A</i></p> <p><i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>						



**Proposal 16481, V-XX-CHA-STIS (3S), scheduling**

**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 3S,3C,3D,3E WITHIN 1D

*Comments: vstatus; 3S; V-XX-CHA; S/STIS approved for submission; S/WF 16/03/21 ; intrev: complete; S/CP 16/03/21*

*vcheck; Enter targ name & Inst. & Resp. Sci.; XX Cha ; STIS ; WF*

*vcheck; ETC numbers entered in APT?; yes ...*

*see comments in the COS acquisition for details about the hybrid model used*

*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/16481/xx-cha/*

*vcheck; Selected ACQ strategy?; yes, F28X50LP*

*vcheck; Possible ACQ or Sci spoilers?; no*

*vcheck; Field BOT clear?; yes; neither unknown corresponds to a source in GaLEX or DSS*

*vcheck; Visual BOT check for stars not in catalog?; yes*

*vcheck; Orbit packing finalized?; yes ...*

*times were set to 200% of those found for the hybrid model, and the remaining 389 sec were given to G230L*

*vcheck; Buffer times optimized?; yes*

*vcheck; Verify visit grouping correct; yes ...*

*STIS visit has GROUP 3S,3C,3D,3E 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
(3)	V-XX-CHA	RA: 11 11 39.5775 (167.9149063d)	Proper Motion RA: -21.90155246 mas/yr	V=15.28	Reference Frame: ICRS
	Alt Name1: T49	Dec: -76 20 15.04 (-76.33751d)	Proper Motion Dec: 0.084109441 mas/yr	SpT=M3.5; A_V=1.00; U=15.0;	
	Alt Name2: J11113965-7620152	Equinox: J2000	Parallax: 0.005249111516"	V=15.3; J=10.5	
			Epoch of Position: 2015.5		

*Comments: T49 : XX Cha, J11113965-7620152*

*Region: Cha I*

*Simbad: <https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J11113965-7620152&submit=submit+id>*

*Target coordinates are from Gaia DR2.*

*Spectral type: M3.5 ; A\_V: 1.0 ; Distance (pc): 160*

*M\*: 0.25 ; log(dm/dt): -7.41*

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

*t49\_lya2\_etc\_scaled\_pAV0.50.txt*

*Calculation performed 2021-02-12T16:30:32, v0.6*

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*tstatus: V-XX-CHA; 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: ; XX Cha, Sz 39, Ass Cha T 2-49, HBC 586*

*tcheck; Target info verification status?; OK*

*tcheck; Coordinates & P.M. verified, epoch checked?; yes*

*tcheck; Adopted SED compared to Observations?; yes ...*

*BVR photometry is only 2-10% of CTTS template; use reddened M5 model in optical*

*Category=STAR*

*Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]*

*Extended=NO*

Proposal 16481 - V-XX-CHA-STIS (3S) - ULLYSES Mid 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
1	ACQ (1479966)	(3) V-XX-CHA	STIS/CCD, ACQ, F28X50LP	MIRROR				0.5 Secs (0.5 Secs) [==>]	[1]
<p>Comments: Nominal ETC run gives 0.09 sec for S/N = 40 Worst-case ETC run (1479966) gives saturation in 3.9 sec</p>									
2	G230L/2376 (1479968)	(3) V-XX-CHA	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=24 0			481 Secs (481 Secs) [==>]	[1]
<p>Comments: Worst-case ETC run (1479969) gives 24.9 cts/s in brightest pixel</p> <p>t49_lya2_etc_scaled_pAV0.50.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305 Input file: spring-survey-todo-crp04feb21.csv Spectral type: M3.5 ; A_V: 1.0 ; Distance (pc): 160 M*: 0.25 ; log(dm/dt): -7.41 For exptime=31.4 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): 3269.3 cts/s/segment brightest pixel: 2.584 cts/s/pix at 2801.6 A Calculation performed 2021-02-12T16:30:32, 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 (1483483)	(3) V-XX-CHA	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4			678 Secs (678 Secs) [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p>Comments: Worst-case ETC run (1483484) gives saturation in 1260 sec Used CR-SPLIT = 4 and GAIN = 4 to guard against saturation on emission lines (ETC 1483569)</p> <p>t49_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: M3.5 ; A_V: 1.0 ; Distance (pc): 160 M*: 0.25 ; log(dm/dt): -7.41 For exptime=6.3 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): 81406.2 cts/s/segment brightest pixel: 64.024 cts/s/pix at 5178.8 A Calculation performed 2021-02-12T16:30:32, v0.21</p>									

Exposures

Proposal 16481 - V-XX-CHA-STIS (3S) - ULLYSES Mid M-Type T Tauri Survey Stars in Cha I

6	G750L/7751 (3) V-XX-CHA (1479972)	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=2; GAIN=4	60 Secs (60 Secs)	
					[==>(Split 1)]	[1]
<p><i>Comments: Worst-case ETC run (1479974) gives saturation in 356 sec Used GAIN = 4 to guard against saturation on emission lines (ETC 1483576)</i></p> <p><i>t49_lya2_etc_scaled_pAV0.50.txt; stis.ccd.g750l,c7751,52x2,mjd#59305</i>  <i>WARNING: operating mode = ACCUM</i>  <i>Input file: spring-survey-todo-crp04feb21.csv</i>  <i>Spectral type: M3.5 ; A_V: 1.0 ; Distance (pc): 160</i>  <i>M*: 0.25 ; log(dm/dt): -7.41</i>  <i>For exptime=2.0 s, n_reads=2, spectral region:</i>  <i>5700.0 +- 5.0 A achieves SNR=20.0 / 2-pix-resel</i>  <i>A factor of 2.0 has been applied to the exptime in each exposure.</i>  <i>global countrate (brightest segment): 222258.9 cts/s/segment</i>  <i>brightest pixel: 481.274 cts/s/pix at 6563.9 A</i>  <i>Calculation performed 2021-02-12T16:30:32, v0.21</i></p>						
7	G750L/7751 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A		[==>]	[1]
8	G750L/7751 CCDFLAT 1	STIS/CCD, ACCUM, 0.3X0.09	G750L 7751 A		[==>(Copy 1)] [==>(Copy 2)]	[1]
9	G750L/7751 CCDFLAT 2	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A		[==>(Copy 1)] [==>(Copy 2)]	[1]
10	G750L/7751 CCDFLAT 3	STIS/CCD, ACCUM, 52X2	G750L 7751 A		[==>(Copy 1)] [==>(Copy 2)]	[1]

