16480 - ULLYSES T Tauri Survey Star ECHA J0844-7833 in eta Cha

Cycle: 28, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
1C	(1) ECHA-J0844.2-7833	COS/FUV COS/NUV	3	12-May-2021 10:01:09.0	yes
1S	(1) ECHA-J0844.2-7833 CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	2	12-May-2021 10:01:11.0	yes
AC	(1) ECHA-J0844.2-7833	COS/FUV COS/NUV	3	12-May-2021 10:01:13.0	yes
AS	(1) ECHA-J0844.2-7833 CCDFLAT WAVE	STIS/CCD STIS/NUV-MAMA	2	12-May-2021 10:01:14.0	yes

10 Total Orbits Used

ABSTRACT

The Space Telescope Science Institute (STScI) Director has decided to devote up to 1000 orbits of Director's Discretionary time in observing Cycles 27-29 to a new Hubble Ultraviolet Legacy program focused on star formation and associated stellar physics. This new program, ULLYSES (UV Legacy Library of Young Stars as Essential Standards), will provide a UV spectroscopic reference sample of young (< 10 Myr) high- and low-mass

stars. It will target over ~150 OB stars in the Magellanic Clouds and lower metallicity galaxies in the Local Group, and ~40 T Tauri stars and brown dwarfs in the Milky Way. In addition, ULLYSES will monitor 4 typical T Tauri stars over different rotational phases through at least three rotation periods, and over timescales of months to years. The resulting library will provide template spectra of massive stars at metallicities substantially below the well studied, while the low mass sample will cover a wide range of ages, accretion rates, and masses, including objects down to well below 0.5 M_sun. The legacy of this large UV dataset on the first 10 Myr of stellar evolution will be enhanced by complementary datasets obtained by the scientific community. In addition to the core goals of the program related to stellar astrophysics of low and high mass stars, this data will also enable exciting science in the fields of ISM, CGM, jets, and exoplanets. ULLYSES will be modeled after the Frontier Fields program: all data obtained will be non-proprietary. The implementation team at STScI is developing high-level science data products and a sophisticated database and website for disseminating data from the ULLYSES program and ancillary datasets for the ULLYSES target sample from space and ground-based facilities.

OBSERVING DESCRIPTION

This is a placeholder visit to allow determination of LRP schedulability. Detailed implementaton, including ETC calculations, BOP checks and detailed justification has yet to be done. There may be significant changes in the final flight version.

Intent is to coordinate the objects in this program with TESS, which should observe them during TESS sector 37.
current ESTIMATE for BETWEENs to ensure this are:
02 APR 2021 19:45 - 14 APR 2021 08:55
15 APR 2021 14:25 - 27 APR 2021 22:05

This proposal includes a subset of the low mass ULLYSES survey stars. Each target will be observed with the COS c1291 + c1611 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=15/6-pix-resel at the peak of the line
COS/G160M/c1611: C IV 1549 +- 1 A -- S/N=30/6-pix-resel at the peak of the line
STIS/G230L/52X2: Mg II 2800 +-15 A -- S/N=20/2-pix-resel at the peak of the line
STIS/G430L/52X2: continuum average 4000 +-5 A -- S/N=20/2-pix-resel (2 reads)
STIS/G750L/52X2: continuum average 5700 +-5 A -- S/N=20/2-pix-resel (2 reads)

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

Visit

Proposal 16480, ECHA-J0844.2-7833-COS (1C), failed Wed May 12 14:01:15 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 02-APR-2021:18:15:00 AND 14-APR-2021:08:25:00; BETWEEN 15-APR-2021:12:55:00 AND 27-APR-2021:21:35:00

Comments: vstatus; 1C; ECHA-J0844.2-7833; P/COS approved for submission; P/DS 09/02/21 ; intrev: completed ; P/CP 08/02/21
vcheck; Enter targ name & Inst. & Resp. Sci.; ECHA-J0844.2-7833 ; COS ; DS
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/16480/recx16/
vcheck; Selected ACQ strategy?; PSA, MIRRORB, S/N=40
vcheck; Possible ACQ or Sci spoilers?; No
vcheck; Field BOT clear?; Yes
vcheck; Visual BOT check for stars not in catalog?; Good
vcheck; Orbit packing finalized?; Yes ...
obtained 102% of requested G160M and 103% of c1291
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?; Yes
vcheck; BETWEENS for coordinated observations added?; Yes ...
02 APR 2021 18:15 to 14 APR 2021 08:25 and 15 APR 2021 12:55 - 27 APR 2021 21:35
vcheck; Is visit ready for int. review?; Yes
Allocated COS orbits = 3

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ECHA-J0844.2-7833	RA: 08 44 9.0041 (131.0375171d)	Proper Motion RA: -29.53769542 mas/yr	V=18.4	Reference Frame: ICRS
	Alt Name1: RECX-16	Dec: -78 33 45.37 (-78.56260d)	Proper Motion Dec: 26.23196401 mas/yr	SpT=M6.0; A_V=0.00; U=19.3; V=18.4; J=12.5; G=16.3; R=17.36	
	Alt Name2: J08440914-7833457	Equinox: J2000	Parallax: 0.01015392897"		
			Epoch of Position: 2015.5		

Comments: ECHA J0844.2-7833 : RECX 16, J08440914-7833457
Region: eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J08440914-7833457&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
Input file: spring-survey-todo-crp06dec20.csv
echaj08442-7833_lya2_etc.txt
Calculation performed 2020-12-08T03:53:58, v0.4
---
tstatus; ECHA-J0844.2-7833; P/COS approved for submission; S/STIS approved for submission; P/DS 09/02/21; S/DS 09/02/21
tcheck; APT/SIMBAD target names: ; ECHA-J0844.2-7833 ...
Default SIMBAD name is DENIS J084409.1-783345, aka 2MASS J08440915-7833457, RECX 16
tcheck; Target info verification status?; OK ...
Flam(B) = 3e-16 at 4444 Angstroms and Flam(V) = 5.3e-16 at 5540 Angstroms from Vizier photometry viewer linked from SIMBAD page. R = 17.36 from NOMAD
tcheck; Coordinates & P.M. verified, epoch checked?; Yes
tcheck; Adopted SED compared to Observations?; Yes
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/Image (COS.ta.1476476)	(1) ECHA-J0844.2-7833	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				114 Secs (114 Secs) *[==>]*	***[1]***
	Comments: BOP check with 4X spectrum COS.ta.1476476, B.P. = 7.608 *Baseline SED with S/N=40 COS.ta.1476475 requires 114s, B.P. = 1.964*								
2	G130M/1291-3 (COS.sp.1476478)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3727; FP-POS=3			975 Secs (975 Secs) *[==>]*	***[1]***
	Comments: 4X BOP check: COS.sp.1476478, B.P. = 0.098 *Baseline S/N calc: COS.sp.1476477, B.P. = 0.096* *echaj08442-7833_lya2_etc.txt; cos,fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=946.5 s, spectral region:* *1239.0 +- 1.0 A achieves SNR=15.0 / 6-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 425.5 cts/s/segment* *brightest pixel: 0.047 cts/s/pix at 1304.8 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
3	G130M/1291-4 (COS.sp.1476478)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3727; FP-POS=4			975 Secs (975 Secs) *[==>]*	***[1]***
	Comments: 4X BOP check: COS.sp.1476478, B.P. = 0.098 *Baseline S/N calc: COS.sp.1476477, B.P. = 0.096* *echaj08442-7833_lya2_etc.txt; cos,fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=946.5 s, spectral region:* *1239.0 +- 1.0 A achieves SNR=15.0 / 6-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 425.5 cts/s/segment* *brightest pixel: 0.047 cts/s/pix at 1304.8 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
4	G160M/1623-1 (COS.sp.1477098)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=6000; FP-POS=1			1181 Secs (1181 Secs) *[==>]*	***[2]***
	Comments: 4X BOP calculation: COS.sp.1477098, B.P. = 0.042 *echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=2358.8 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 107.6 cts/s/segment* *brightest pixel: 0.013 cts/s/pix at 1640.5 A* *Calculation performed 2020-12-08T03:53:56, v0.12*								

5	G160M/1623-2 (COS.sp.1477098)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=6000; FP-POS=2	1181 Secs (1181 Secs) *[==>]*	***[2]***

Comments: 4X BOP calculation: COS.sp.1477098, B.P. = 0.042

echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2358.8 s, spectral region:
1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 107.6 cts/s/segment
brightest pixel: 0.013 cts/s/pix at 1640.5 A
Calculation performed 2020-12-08T03:53:56, v0.12

6	G160M/1589-3 (COS.sp.1477097)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=6000; FP-POS=3	1218 Secs (1218 Secs) *[==>]*	***[3]***

Comments: 4X BOP calculation: COS.sp.1477097, B.P. = 0.044

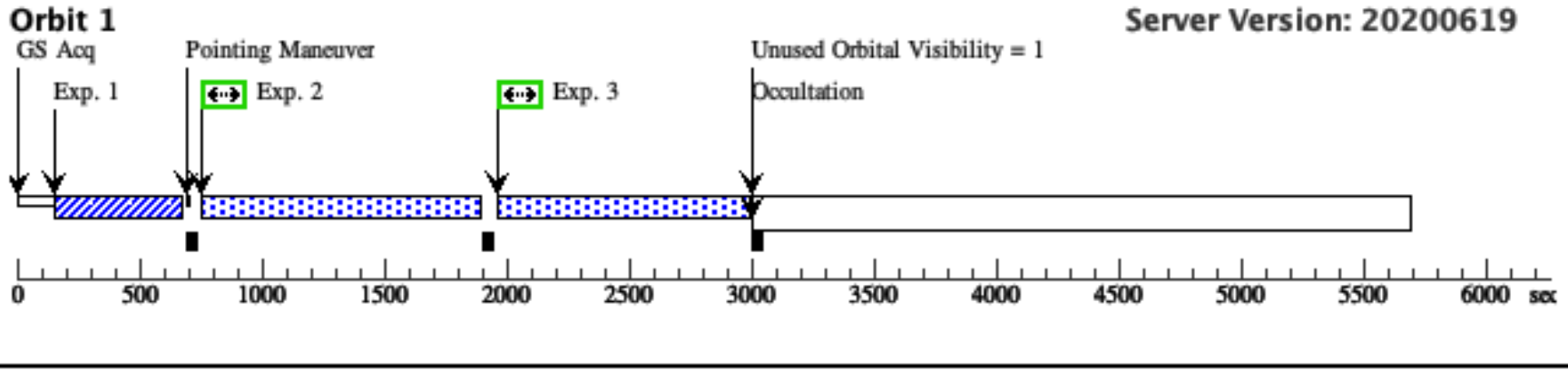
echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2358.8 s, spectral region:
1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 107.6 cts/s/segment
brightest pixel: 0.013 cts/s/pix at 1640.5 A
Calculation performed 2020-12-08T03:53:56, v0.12

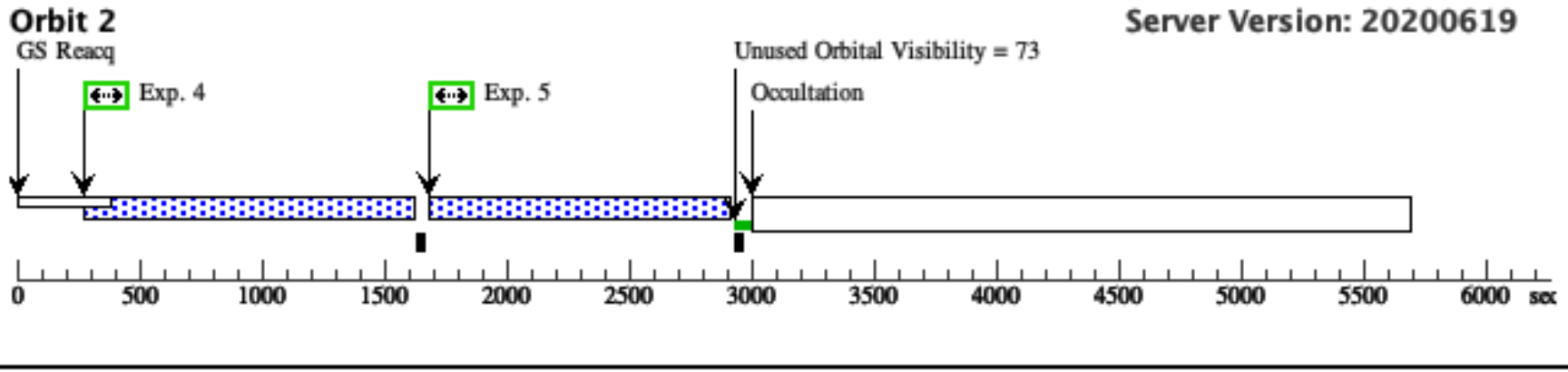
7	G160M/1589-4 (COS.sp.1477097)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=6000; FP-POS=4	1218 Secs (1218 Secs) *[==>]*	***[3]***

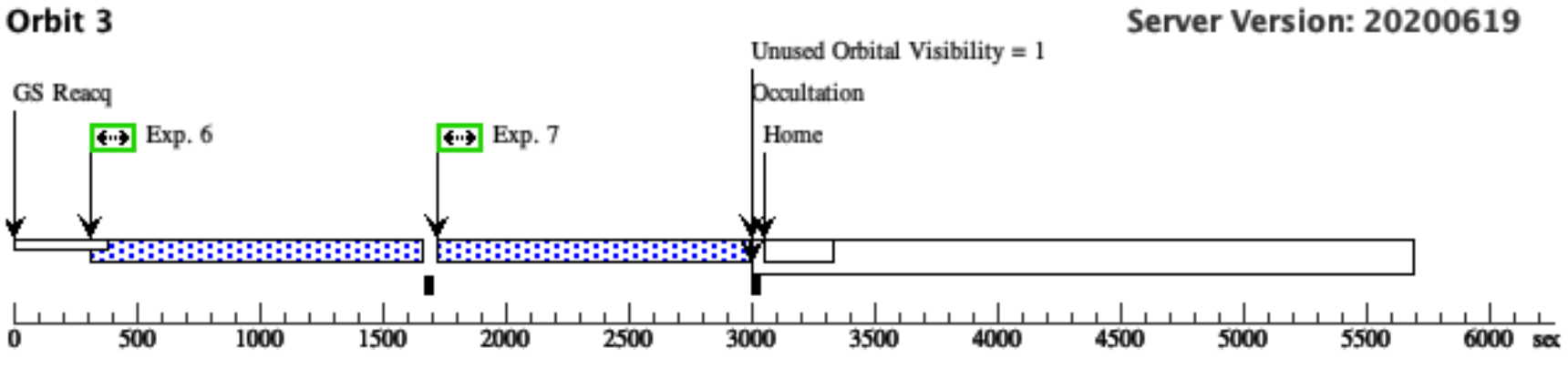
Comments: 4X BOP calculation: COS.sp.1477097, B.P. = 0.044

echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2358.8 s, spectral region:
1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 107.6 cts/s/segment
brightest pixel: 0.013 cts/s/pix at 1640.5 A
Calculation performed 2020-12-08T03:53:56, v0.12

Orbit Structure







Visit

Proposal 16480, ECHA-J0844.2-7833-STIS (1S), failed Wed May 12 14:01:15 GMT 2021

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 02-APR-2021:18:15:00 AND 14-APR-2021:10:00:00; BETWEEN 15-APR-2021:12:55:00 AND 27-APR-2021:23:10:00; GROUP 1S,1C WITHIN 1D

Comments: vstatus; 1S; ECHA-J0844.2-7833; P/STIS approved for submission; P/DS 09/02/21 ; intrev: completed ; P/CP 08/02/21
vcheck; Enter targ name & Inst. & Resp. Sci.; ECHA-J0844.2-7833 ; STIS ; DS
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/16480/recx16/
vcheck; Selected ACQ strategy?; S/N=80 using R mag with F28X50LP
vcheck; Possible ACQ or Sci spoilers?; No
vcheck; Field BOT clear?; Yes
vcheck; Visual BOT check for stars not in catalog?; Good
vcheck; Orbit packing finalized?; Yes
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?; Yes
vcheck; BETWEENS for coordinated observations added?; Yes ...
02 APR 2021 18:15 to 14 APR 2021 10:00 and 15 APR 2021 12:55 - 27 APR 2021 23:10
vcheck; Is visit ready for int. review?; Yes
Allocated STIS orbits = 2
We require both the STIS orbits within the same visit to avoid any chance of extra offset between G430L and G230L observations for this highly variable target. For the majority of the ULLYSES T Tauri targets all STIS observations are attempted within a single orbit.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ECHA-J0844.2-7833	RA: 08 44 9.0041 (131.0375171d)	Proper Motion RA: -29.53769542 mas/yr	V=18.4	Reference Frame: ICRS
	Alt Name1: RECX-16	Dec: -78 33 45.37 (-78.56260d)	Proper Motion Dec: 26.23196401 mas/yr	SpT=M6.0; A_V=0.00; U=19.3; V=18.4; J=12.5; G=16.3; R=17.36	
	Alt Name2: J08440914-7833457	Equinox: J2000	Parallax: 0.01015392897"		
			Epoch of Position: 2015.5		

Comments: ECHA J0844.2-7833 : RECX 16, J08440914-7833457
Region: eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J08440914-7833457&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
Input file: spring-survey-todo-crp06dec20.csv
echaj08442-7833_lya2_etc.txt
Calculation performed 2020-12-08T03:53:58, v0.4
---
tstatus; ECHA-J0844.2-7833; P/COS approved for submission; S/STIS approved for submission; P/DS 09/02/21; S/DS 09/02/21
tcheck; APT/SIMBAD target names: ; ECHA-J0844.2-7833 ...
Default SIMBAD name is DENIS J084409.1-783345, aka 2MASS J08440915-7833457, RECX 16
tcheck; Target info verification status?; OK ...
Flam(B) = 3e-16 at 4444 Angstroms and Flam(V) = 5.3e-16 at 5540 Angstroms from Vizier photometry viewer linked from SIMBAD page. R = 17.36 from NOMAD
tcheck; Coordinates & P.M. verified, epoch checked?; Yes
tcheck; Adopted SED compared to Observations?; Yes
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1476537)	(1) ECHA-J0844.2-7833	STIS/CCD, ACQ, F28X50LP	MIRROR				11 Secs (11 Secs) *[==>]*	***[1]***
	Comments: 4 X BOP check: STIS.ta.1476537, B.P. = 369.197 *Baseline SED (Castelli-Kurucz M6V 3500 5.0 spectrum renormalized to Johnson R=16.36 vegamag) with S/N=80: STIS.ta.1476535 requires 11s, B.P. = 212.483*								
2	G230L/2376 (STIS.sp.1476540)	(1) ECHA-J0844.2-7833	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=714			1195 Secs (1195 Secs) *[==>]*	***[1]***
	Comments: BOP check with 4X spectrum: STIS.sp.1476540, B.P. = 6.094 *Baseline ETC calc with spectrum: STIS.sp.1476539, B.P. = 1.525* *echaj08442-7833_lya2_etc.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=53.1 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): 2435.1 cts/s/segment* *brightest pixel: 1.531 cts/s/pix at 2796.8 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
3	G230L/2376 WAVECAL	WAVE	STIS/NUV-MAMA, ACCUM, 52X0.1	G230L 2376 A				*[==>]*	***[1]***
4	G750L/7751 (STIS.sp.1476607)	(1) ECHA-J0844.2-7833	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4			260 Secs (260 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
	Comments: BOP check with echaj08442-7833_lya2_x4.00_etc.txt (4X sed spectrum): STIS.sp.1476607, B.P. = 1639.951 *Baseline ETC calc (Castelli-Kurucz M6V 3500 5.0 spectrum renormalized to Flam = 5.3e-16 in Johnson V): STIS.sp.1476606, B.P. = 2.858* *echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305* *WARNING: operating mode = ACCUM* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=2.5 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): 166402.4 cts/s/segment* *brightest pixel: 411.806 cts/s/pix at 6563.9 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
5	G750L/7751 WAVECAL	WAVE	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>]*	***[1]***

6	G750L/7751 CCDFLAT CCDFLAT 1	STIS/CCD, ACCUM, 0.3X0.09	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Comments: echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2.5 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): 166402.4 cts/s/segment
brightest pixel: 411.806 cts/s/pix at 6563.9 A
Calculation performed 2020-12-08T03:53:58, v0.12

7	G750L/7751 CCDFLAT CCDFLAT 3	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Comments: echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2.5 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): 166402.4 cts/s/segment
brightest pixel: 411.806 cts/s/pix at 6563.9 A
Calculation performed 2020-12-08T03:53:58, v0.12

8	G750L/7751 CCDFLAT CCDFLAT 2	STIS/CCD, ACCUM, 52X2	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Comments: echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2.5 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): 166402.4 cts/s/segment
brightest pixel: 411.806 cts/s/pix at 6563.9 A
Calculation performed 2020-12-08T03:53:58, v0.12

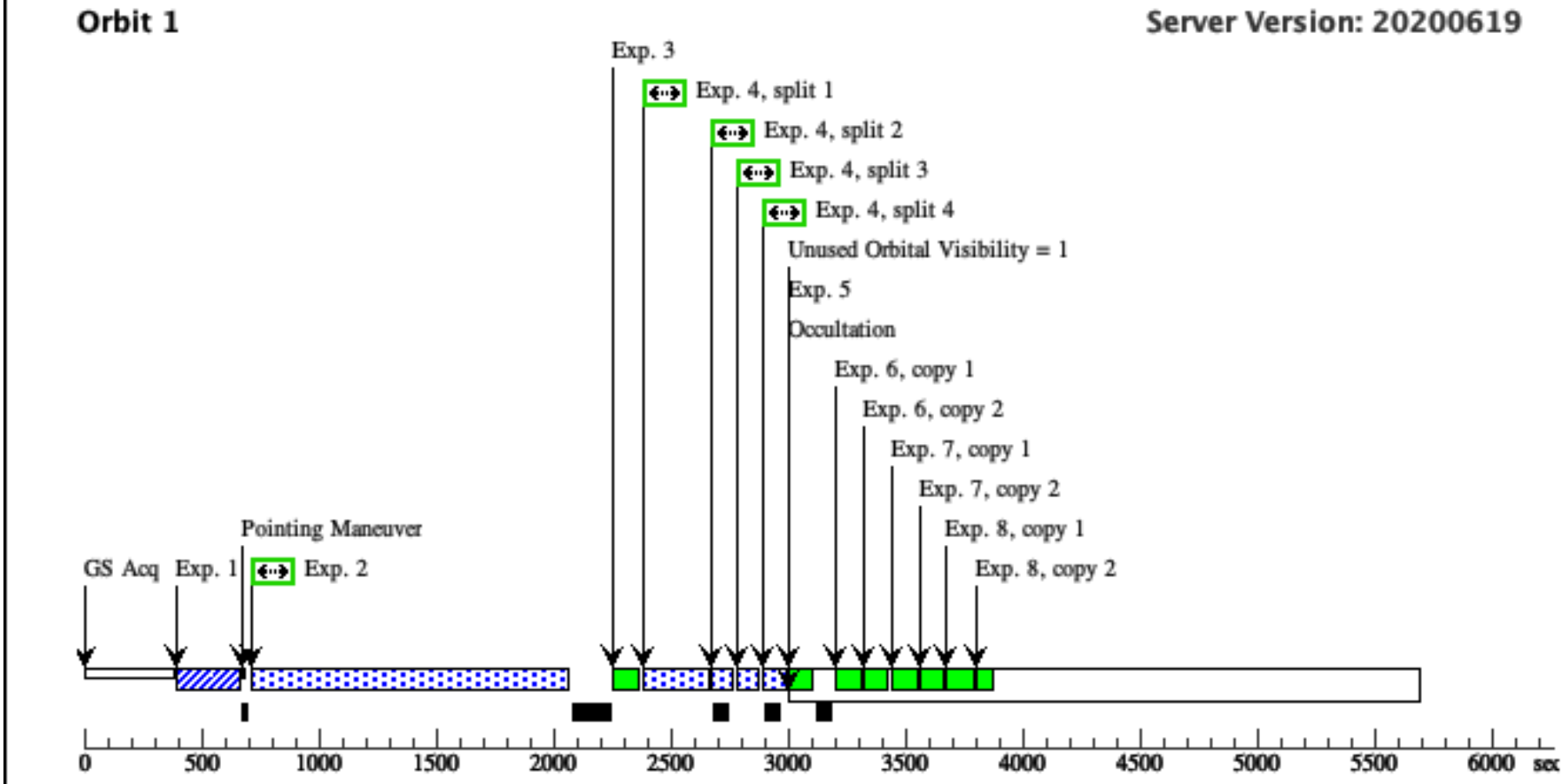
9	G430L/4300 (STIS.sp.14 76605)	(1) ECHA-J0844.2-7 833	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4	2250 Secs (2250 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***

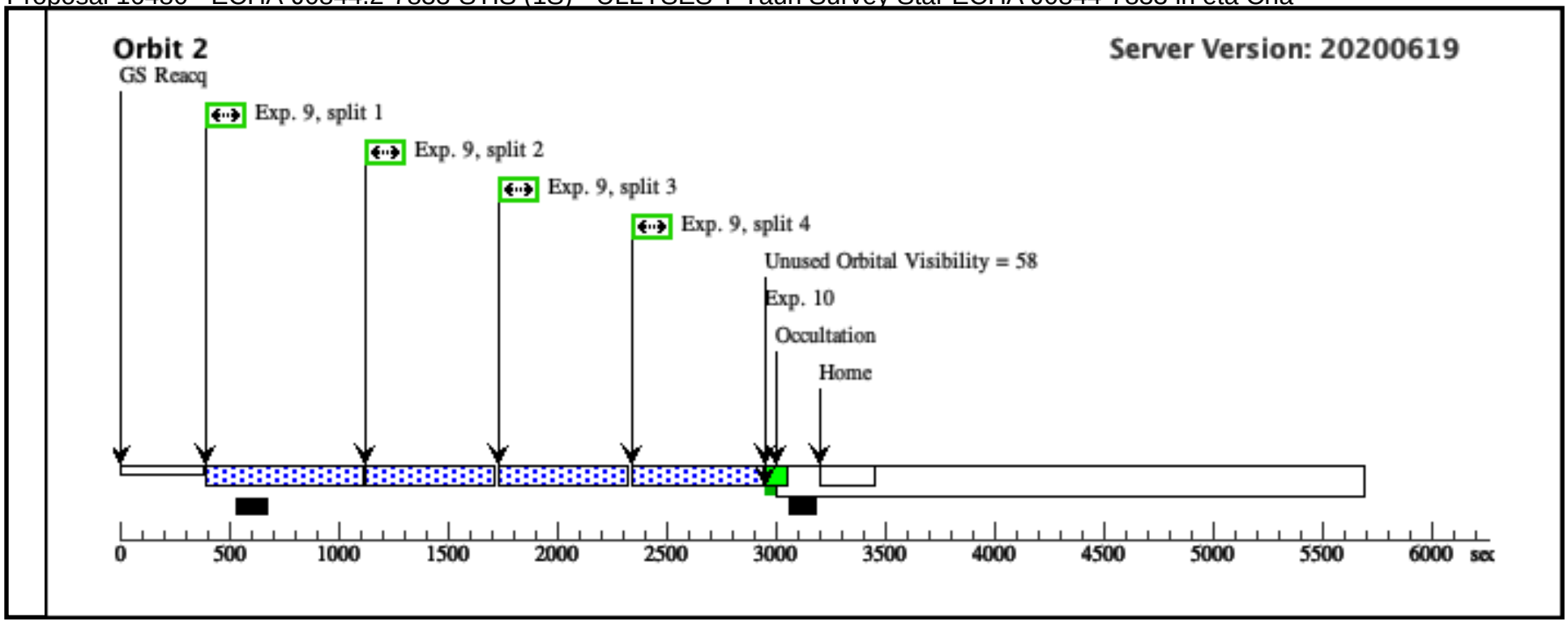
Comments: BOP check with echaj08442-7833_lya2_x4.00_etc.txt (4X sed spectrum): STIS.sp.1476605, B.P. = 185.710
Baseline ETC calc (Castelli-Kurucz M6V 3500 5.0 spectrum renormalized to Flam = 3.0e-16 in Johnson B)): STIS.sp.1476604, B.P. = 0.773

echaj08442-7833_lya2_etc.txt; stis,ccd,g430l,c4300,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=21.9 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): 56669.0 cts/s/segment
brightest pixel: 46.428 cts/s/pix at 4560.5 A
Calculation performed 2020-12-08T03:53:58, v0.12

	10	G430L/4300 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.1	G430L 4300 A	*[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20200619
GS Reacq
Exp. 9, split 1
Exp. 9, split 2
Exp. 9, split 3
Exp. 9, split 4
Unused Orbital Visibility = 58
Exp. 10
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16480, ECHA-J0844.2-7833-COS (AC) Wed May 12 14:01:15 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%; BETWEEN 12-MAY-2021:00:00:00 AND 10-JUL-2021:23:59:00

Comments: vstatus; AC; ECHA-J0844.2-7833; P/COS approved for submission; P/DS 09/02/21 ; intrev: completed ; P/CP 08/02/21
vcheck; Enter targ name & Inst. & Resp. Sci.; ECHA-J0844.2-7833 ; COS ; DS
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/16480/recx16/
vcheck; Selected ACQ strategy?; PSA, MIRRORB, S/N=40
vcheck; Possible ACQ or Sci spoilers?; No
vcheck; Field BOT clear?; Yes
vcheck; Visual BOT check for stars not in catalog?; Good
vcheck; Orbit packing finalized?; Yes ...
obtained 102% of requested G160M and 103% of c1291
vcheck; Buffer times optimized?; Yes
vcheck; Verify visit grouping correct; Yes ...
STIS visit has GROUP AS,AC WITHIN 1D
vcheck; phase constraint for ground based observations added?; Yes
vcheck; BETWEENS for coordinated observations added?; Yes ...
12 MAY 2021 00:00 to 10 JUL 2021 23:59 to ensure ground based coordination
However, coordination with TESS in sector 39 requires the following BETWEENS:
27 MAY 2021 07:00 to 09 JUN 2021 05:35 and 10 JUN 2021 09:10 - 24 JUN 2021 00:55
vcheck; Is visit ready for int. review?; Yes
Allocated COS orbits = 3

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ECHA-J0844.2-7833	RA: 08 44 9.0041 (131.0375171d)	Proper Motion RA: -29.53769542 mas/yr	V=18.4	Reference Frame: ICRS
	Alt Name1: RECX-16	Dec: -78 33 45.37 (-78.56260d)	Proper Motion Dec: 26.23196401 mas/yr	SpT=M6.0; A_V=0.00; U=19.3; V=18.4; J=12.5; G=16.3; R=17.36	
	Alt Name2: J08440914-7833457	Equinox: J2000	Parallax: 0.01015392897"		
			Epoch of Position: 2015.5		

Comments: ECHA J0844.2-7833 : RECX 16, J08440914-7833457
Region: eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J08440914-7833457&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
Input file: spring-survey-todo-crp06dec20.csv
echaj08442-7833_lya2_etc.txt
Calculation performed 2020-12-08T03:53:58, v0.4
---
tstatus; ECHA-J0844.2-7833; P/COS approved for submission; S/STIS approved for submission; P/DS 09/02/21; S/DS 09/02/21
tcheck; APT/SIMBAD target names: ; ECHA-J0844.2-7833 ...
Default SIMBAD name is DENIS J084409.1-783345, aka 2MASS J08440915-7833457, RECX 16
tcheck; Target info verification status?; OK ...
Flam(B) = 3e-16 at 4444 Angstroms and Flam(V) = 5.3e-16 at 5540 Angstroms from Vizier photometry viewer linked from SIMBAD page. R = 17.36 from NOMAD
tcheck; Coordinates & P.M. verified, epoch checked?; Yes
tcheck; Adopted SED compared to Observations?; Yes
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/Image (COS.ta.1476476)	(1) ECHA-J0844.2-7833	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				114 Secs (114 Secs) *[==>]*	***[1]***
	Comments: BOP check with 4X spectrum COS.ta.1476476, B.P. = 7.608 *Baseline SED with S/N=40 COS.ta.1476475 requires 114s, B.P. = 1.964*								
2	G130M/1291-3 (COS.sp.1476478)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3727; FP-POS=3			975 Secs (975 Secs) *[==>]*	***[1]***
	Comments: 4X BOP check: COS.sp.1476478, B.P. = 0.098 *Baseline S/N calc: COS.sp.1476477, B.P. = 0.096* *echaj08442-7833_lya2_etc.txt; cos,fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=946.5 s, spectral region:* *1239.0 +- 1.0 A achieves SNR=15.0 / 6-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 425.5 cts/s/segment* *brightest pixel: 0.047 cts/s/pix at 1304.8 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
3	G130M/1291-4 (COS.sp.1476478)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3727; FP-POS=4			975 Secs (975 Secs) *[==>]*	***[1]***
	Comments: 4X BOP check: COS.sp.1476478, B.P. = 0.098 *Baseline S/N calc: COS.sp.1476477, B.P. = 0.096* *echaj08442-7833_lya2_etc.txt; cos,fuv,g130m,c1291,psa,mjd#59305; fp-pos=None, segment=None)* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=946.5 s, spectral region:* *1239.0 +- 1.0 A achieves SNR=15.0 / 6-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 425.5 cts/s/segment* *brightest pixel: 0.047 cts/s/pix at 1304.8 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
4	G160M/1623-1 (COS.sp.1477098)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=6000; FP-POS=1			1181 Secs (1181 Secs) *[==>]*	***[2]***
	Comments: 4X BOP calculation: COS.sp.1477098, B.P. = 0.042 *echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=2358.8 s, spectral region:* *1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel* *A factor of 2.0 has been applied to the exptime in each exposure.* *global countrate (brightest segment): 107.6 cts/s/segment* *brightest pixel: 0.013 cts/s/pix at 1640.5 A* *Calculation performed 2020-12-08T03:53:56, v0.12*								

5	G160M/1623-2 (COS.sp.1477098)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=6000; FP-POS=2	1181 Secs (1181 Secs) *[==>]*	***[2]***

Comments: 4X BOP calculation: COS.sp.1477098, B.P. = 0.042

echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2358.8 s, spectral region:
1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 107.6 cts/s/segment
brightest pixel: 0.013 cts/s/pix at 1640.5 A
Calculation performed 2020-12-08T03:53:56, v0.12

6	G160M/1589-3 (COS.sp.1477097)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=6000; FP-POS=3	1218 Secs (1218 Secs) *[==>]*	***[3]***

Comments: 4X BOP calculation: COS.sp.1477097, B.P. = 0.044

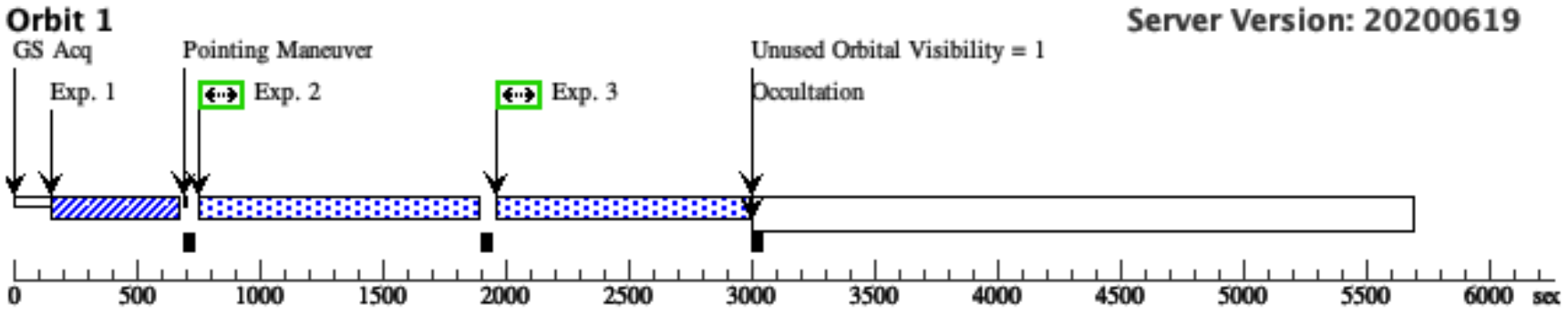
echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2358.8 s, spectral region:
1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 107.6 cts/s/segment
brightest pixel: 0.013 cts/s/pix at 1640.5 A
Calculation performed 2020-12-08T03:53:56, v0.12

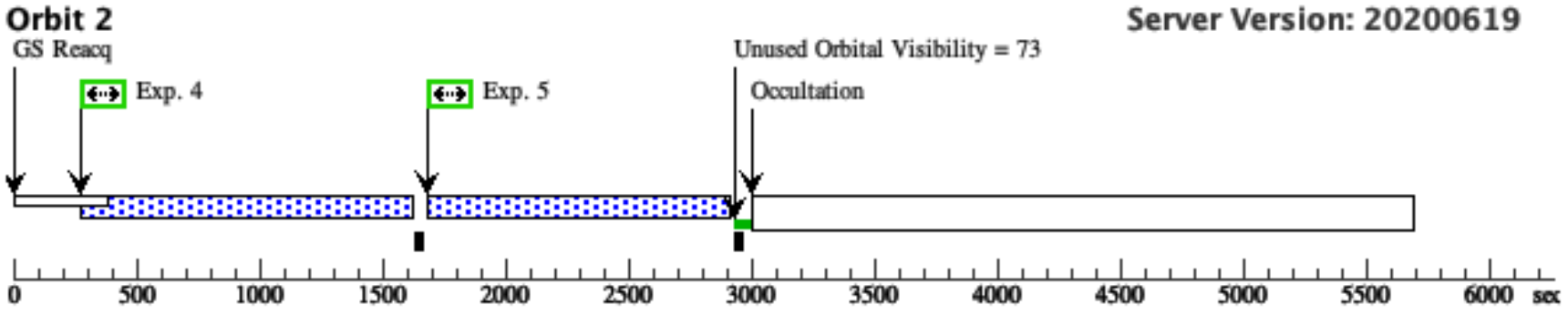
7	G160M/1589-4 (COS.sp.1477097)	(1) ECHA-J0844.2-7833	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=6000; FP-POS=4	1218 Secs (1218 Secs) *[==>]*	***[3]***

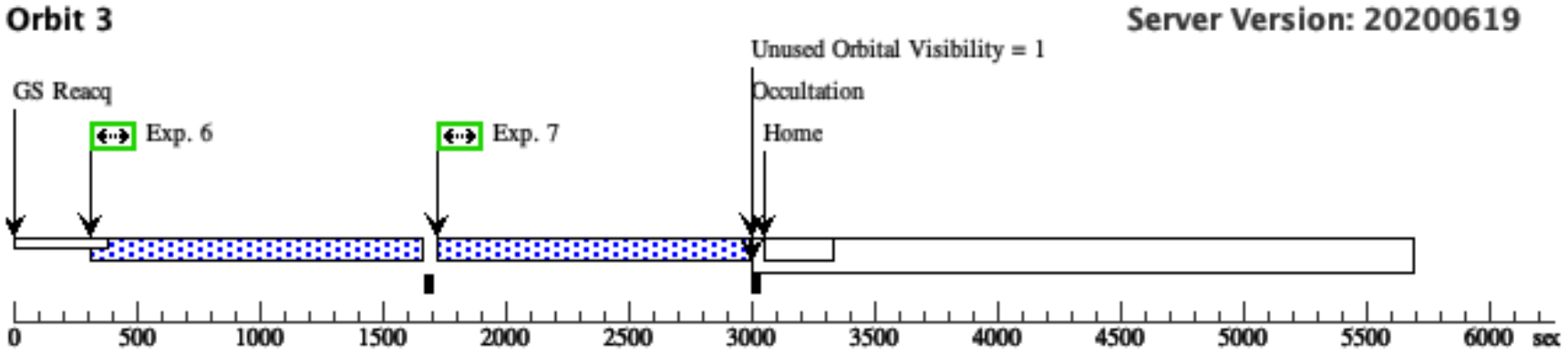
Comments: 4X BOP calculation: COS.sp.1477097, B.P. = 0.044

echaj08442-7833_lya2_etc.txt; cos,fuv,g160m,c1611,psa,mjd#59305; fp-pos=None, segment=None)
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2358.8 s, spectral region:
1549.0 +- 1.0 A achieves SNR=30.0 / 6-pix-resel
A factor of 2.0 has been applied to the exptime in each exposure.
global countrate (brightest segment): 107.6 cts/s/segment
brightest pixel: 0.013 cts/s/pix at 1640.5 A
Calculation performed 2020-12-08T03:53:56, v0.12

Orbit Structure







Visit

Proposal 16480, ECHA-J0844.2-7833-STIS (AS) Wed May 12 14:01:16 GMT 2021

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 12-MAY-2021:00:00:00 AND 10-JUL-2021:23:59:00; GROUP AS,AC WITHIN 1D

Comments: vstatus; AS; ECHA-J0844.2-7833; P/STIS approved for submission; P/DS 09/02/21 ; intrev: completed ; P/CP 08/02/21
vcheck; Enter targ name & Inst. & Resp. Sci.; ECHA-J0844.2-7833 ; STIS ; DS
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/16480/recx16/
vcheck; Selected ACQ strategy?; S/N=80 using R mag with F28X50LP
vcheck; Possible ACQ or Sci spoilers?; No
vcheck; Field BOT clear?; Yes
vcheck; Visual BOT check for stars not in catalog?; Good
vcheck; Orbit packing finalized?; Yes
vcheck; Buffer times optimized?; Yes
vcheck; Verify visit grouping correct; Yes ...
STIS visit has GROUP AS, AC WITHIN 1D
vcheck; phase constraint for ground based observations added?; Yes
vcheck; BETWEENS for coordinated observations added?; Yes ...
12 MAY 2021 00:00 to 10 JUL 2021 23:59 to ensure ground based coordination
However, coordination with TESS in sector 39 requires the following BETWEENS:
27 MAY 2021 07:00 to 09 JUN 2021 07:10 and 10 JUN 2021 09:10 - 24 JUN 2021 02:30
vcheck; Is visit ready for int. review?; Yes
Allocated STIS orbits = 2
We require both the STIS orbits within the same visit to avoid any chance of extra offset between G430L and G230L observations for this highly variable target. For the majority of the ULLYSES T Tauri targets all STIS observations are attempted within a single orbit.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ECHA-J0844.2-7833	RA: 08 44 9.0041 (131.0375171d)	Proper Motion RA: -29.53769542 mas/yr	V=18.4	Reference Frame: ICRS
	Alt Name1: RECX-16	Dec: -78 33 45.37 (-78.56260d)	Proper Motion Dec: 26.23196401 mas/yr	SpT=M6.0; A_V=0.00; U=19.3; V=18.4; J=12.5; G=16.3; R=17.36	
	Alt Name2: J08440914-7833457	Equinox: J2000	Parallax: 0.01015392897"		
			Epoch of Position: 2015.5		

Comments: ECHA J0844.2-7833 : RECX 16, J08440914-7833457
Region: eta Cha
Simbad: https://simbad.u-strasbg.fr/simbad/sim-id?Ident=2MASS+J08440914-7833457&submit=submit+id
Target coordinates are from Gaia DR2.
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
Input file: spring-survey-todo-crp06dec20.csv
echaj08442-7833_lya2_etc.txt
Calculation performed 2020-12-08T03:53:58, v0.4
---
tstatus; ECHA-J0844.2-7833; P/COS approved for submission; S/STIS approved for submission; P/DS 09/02/21; S/DS 09/02/21
tcheck; APT/SIMBAD target names: ; ECHA-J0844.2-7833 ...
Default SIMBAD name is DENIS J084409.1-783345, aka 2MASS J08440915-7833457, RECX 16
tcheck; Target info verification status?; OK ...
Flam(B) = 3e-16 at 4444 Angstroms and Flam(V) = 5.3e-16 at 5540 Angstroms from Vizier photometry viewer linked from SIMBAD page. R = 17.36 from NOMAD
tcheck; Coordinates & P.M. verified, epoch checked?; Yes
tcheck; Adopted SED compared to Observations?; Yes
Category=STAR
Description=[T TAURI STAR, PRE-MAIN SEQUENCE STAR]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1476537)	(1) ECHA-J0844.2-7833	STIS/CCD, ACQ, F28X50LP	MIRROR				11 Secs (11 Secs) *[==>]*	***[1]***
	Comments: 4 X BOP check: STIS.ta.1476537, B.P. = 369.197 *Baseline SED (Castelli-Kurucz M6V 3500 5.0 spectrum renormalized to Johnson R=16.36 vegamag) with S/N=80: STIS.ta.1476535 requires 11s, B.P. = 212.483*								
2	G230L/2376 (STIS.sp.1476540)	(1) ECHA-J0844.2-7833	STIS/NUV-MAMA, TIME-TAG, 52X2	G230L 2376 A	WAVECAL=NO; BUFFER-TIME=714			1195 Secs (1195 Secs) *[==>]*	***[1]***
	Comments: BOP check with 4X spectrum: STIS.sp.1476540, B.P. = 6.094 *Baseline ETC calc with spectrum: STIS.sp.1476539, B.P. = 1.525* *echaj08442-7833_lya2_etc.txt; stis,nuvmama,g230l,c2376,52x2,mjd#59305* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=53.1 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): 2435.1 cts/s/segment* *brightest pixel: 1.531 cts/s/pix at 2796.8 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
3	G230L/2376 WAVECAL	WAVE	STIS/NUV-MAMA, ACCUM, 52X0.1	G230L 2376 A				*[==>]*	***[1]***
4	G750L/7751 (STIS.sp.1476607)	(1) ECHA-J0844.2-7833	STIS/CCD, ACCUM, 52X2	G750L 7751 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4			260 Secs (260 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
	Comments: BOP check with echaj08442-7833_lya2_x4.00_etc.txt (4X sed spectrum): STIS.sp.1476607, B.P. = 1639.951 *Baseline ETC calc (Castelli-Kurucz M6V 3500 5.0 spectrum renormalized to Flam = 5.3e-16 in Johnson V): STIS.sp.1476606, B.P. = 2.858* *echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305* *WARNING: operating mode = ACCUM* *Input file: spring-survey-todo-crp06dec20.csv* *Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94* *M*: 0.052000000000000005 ; log(dm/dt): -10.18* *For exptime=2.5 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): 166402.4 cts/s/segment* *brightest pixel: 411.806 cts/s/pix at 6563.9 A* *Calculation performed 2020-12-08T03:53:58, v0.12*								
5	G750L/7751 WAVECAL	WAVE	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>]*	***[1]***

6	G750L/7751 CCDFLAT CCDFLAT 1	STIS/CCD, ACCUM, 0.3X0.09	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Comments: echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2.5 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): 166402.4 cts/s/segment
brightest pixel: 411.806 cts/s/pix at 6563.9 A
Calculation performed 2020-12-08T03:53:58, v0.12

7	G750L/7751 CCDFLAT CCDFLAT 3	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Comments: echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2.5 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): 166402.4 cts/s/segment
brightest pixel: 411.806 cts/s/pix at 6563.9 A
Calculation performed 2020-12-08T03:53:58, v0.12

8	G750L/7751 CCDFLAT CCDFLAT 2	STIS/CCD, ACCUM, 52X2	G750L 7751 A		*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Comments: echaj08442-7833_lya2_etc.txt; stis,ccd,g750l,c7751,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=2.5 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): 166402.4 cts/s/segment
brightest pixel: 411.806 cts/s/pix at 6563.9 A
Calculation performed 2020-12-08T03:53:58, v0.12

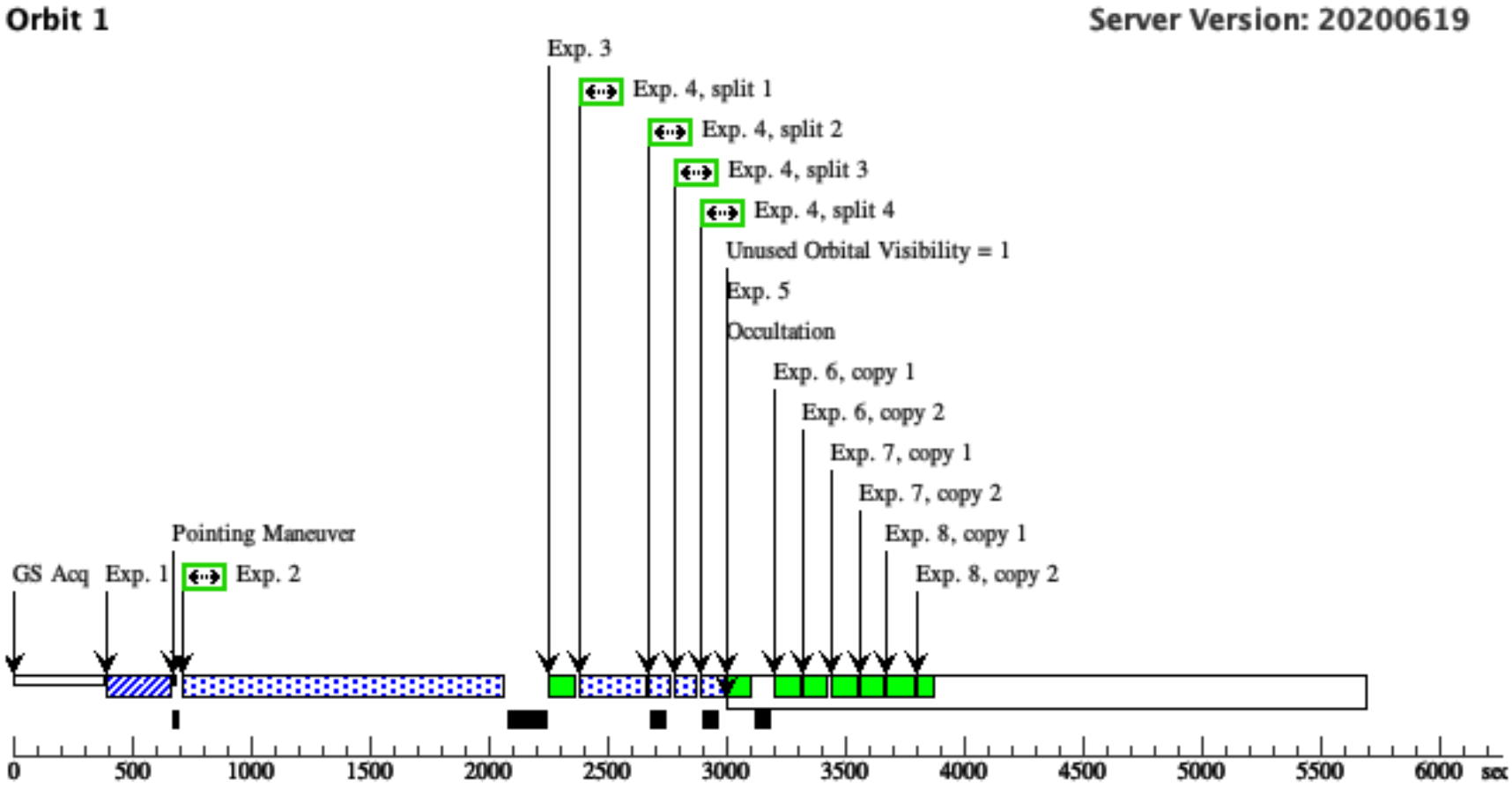
9	G430L/4300 (STIS.sp.14 76605) (1) ECHA-J0844.2-7 833	STIS/CCD, ACCUM, 52X2	G430L 4300 A	WAVECAL=NO; CR-SPLIT=4; GAIN=4	2250 Secs (2250 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***

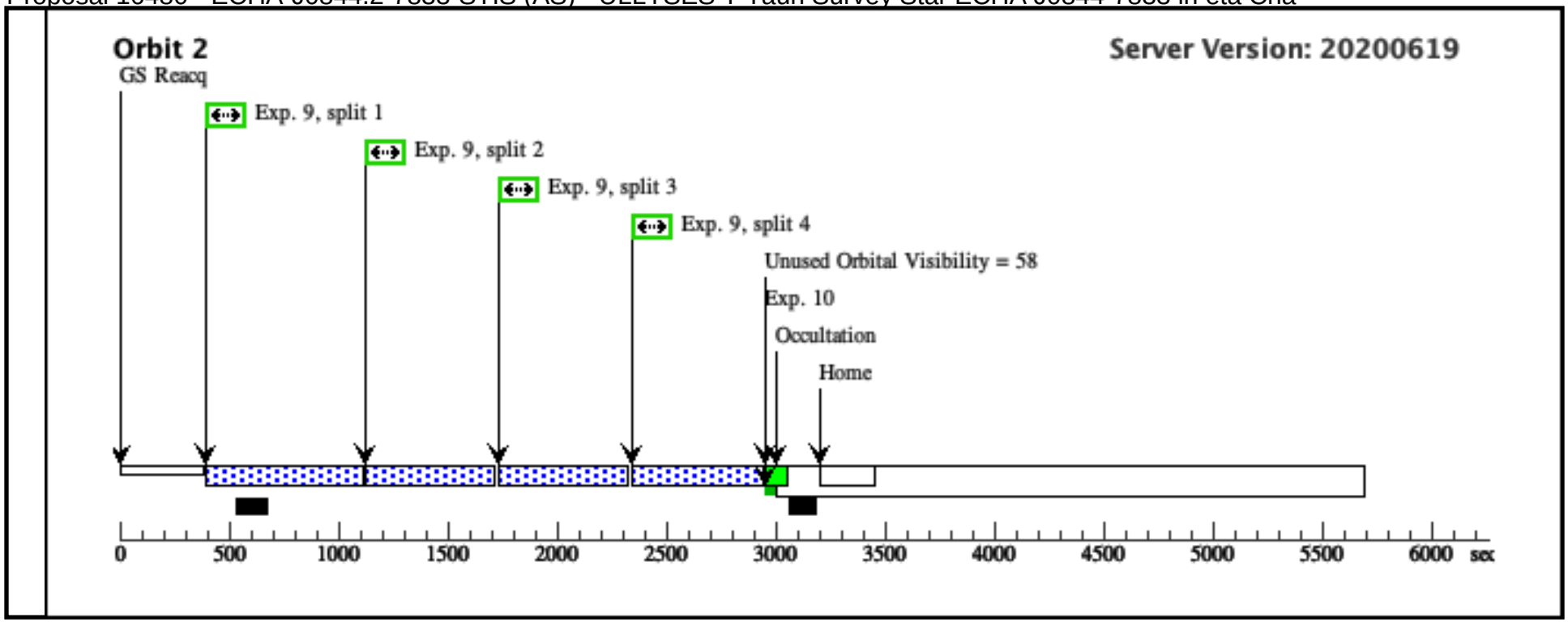
Comments: BOP check with echaj08442-7833_lya2_x4.00_etc.txt (4X sed spectrum): STIS.sp.1476605, B.P. = 185.710
Baseline ETC calc (Castelli-Kurucz M6V 3500 5.0 spectrum renormalized to Flam = 3.0e-16 in Johnson B)): STIS.sp.1476604, B.P. = 0.773

echaj08442-7833_lya2_etc.txt; stis,ccd,g430l,c4300,52x2,mjd#59305
WARNING: operating mode = ACCUM
Input file: spring-survey-todo-crp06dec20.csv
Spectral type: M6.0 ; A_V: 0.0 ; Distance (pc): 94
M: 0.052000000000000005 ; log(dm/dt): -10.18*
For exptime=21.9 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): 56669.0 cts/s/segment
brightest pixel: 46.428 cts/s/pix at 4560.5 A
Calculation performed 2020-12-08T03:53:58, v0.12

	10	G430L/4300 WAVE WAVECAL	STIS/CCD, ACCUM, 52X0.1	G430L 4300 A	*[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20200619
GS Reacq
Exp. 9, split 1
Exp. 9, split 2
Exp. 9, split 3
Exp. 9, split 4
Unused Orbital Visibility = 58
Exp. 10
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec