



18361 - A deep dive into the interstellar forges shaping Lyman alpha emission

Cycle: 34, Proposal Category: GO

(HWO Precursor Science (HPS))

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Dr. Annalisa Citro (CoI)	University of Minnesota - Twin Cities
Dr. Bethan Lesley James (CoI) (ESA Member)	Space Telescope Science Institute - ESA - JWST

VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(11) L08A11 (12) L08A0	COS/FUV COS/NUV	2	17-Aug-2026 11:00:18.0	yes
02	(8) L08A8 (9) L08A9 (12) L08A0	COS/FUV COS/NUV	2	17-Aug-2026 11:00:20.0	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>
03	(7) L08A7 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:22.0	yes
04	(10) L08A10 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:24.0	yes
05	(3) L08A3 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:27.0	yes
07	(4) L08A4 (12) L08A0	COS/FUV COS/NUV	2	17-Aug-2026 11:00:28.0	yes
08	(1) L08A1 (12) L08A0	COS/FUV COS/NUV	2	17-Aug-2026 11:00:30.0	yes
09	(2) L08A2 (5) L08A5 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:32.0	yes
10	(6) L08A6 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:34.0	yes
11	(2) L08A2 (6) L08A6 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:36.0	yes
12	(2) L08A2 (12) L08A0	COS/FUV COS/NUV	3	17-Aug-2026 11:00:39.0	yes

29 Total Orbits Used

ABSTRACT

The Ly α line of hydrogen is a critical probe of galaxies from the nearby Universe to the Epoch of Reionization, making it key to observationally constraining galaxy evolution. However, the line is resonant and undergoes a complex radiative transfer process in the ISM of galaxies, limiting our understanding of Ly α profiles and what properties can be recovered from them. Ly α photons are the result of UV radiation from stars, resonantly scattered by hydrogen atoms and absorbed by dust, so that Ly α profiles are expected to vary spatially in galaxies. However, the effect of neutral gas content and kinematics on the line profiles have never been directly evaluated. Furthermore, how Ly α profiles vary in galaxies, an information critical to designing observation strategies with HWO, is still poorly known.

We propose to map Ly α spectra using a grid of 11 new COS apertures in the Ly α -emitting galaxy LARS08. LARS08 has a unique multi-wavelength dataset tracing every component of the ISM relevant to Ly α transfer at high angular resolution, including 21cm cubes tracing HI content and kinematics at 3.5" resolution, and Ha and Hb cubes needed to recover the intrinsic Ly α profiles and dust. The proposed apertures are designed to capture a wide range of the ISM properties thought to impact Ly α profiles. We will use these observations as a case study to measure spatially-varying Ly α profiles, capturing the total Ly α output and kinematics at every position. With the exquisite supporting data, we will determine how Ly α profiles are built by different regions of the ISM within a galaxy, providing a consistency check for simulations and helping pave the way for future HWO observations.

OBSERVING DESCRIPTION

These observations aim to obtain Far-UV spectra with COS in 11 new, distinct apertures in the nearby ($z=0.038$) star-forming galaxy LARS 08 (SDSS J125013.55+073439.5). The main purpose of these observations is to obtain emission/absorption spectra of the Lyman-alpha line at 1216 Å, the exposure times have been calculated with this goal in mind. A secondary goal is to observe low ionization state metal lines from the neutral ISM, including SiII 1260 and OI 1302, when possible.

The 29 orbits we have been awarded will be distributed between the different apertures to detect and resolve the Lyman-alpha line at different positions, based on predictions from previous H α flux and Ly-alpha imaging. We use the G130M grating with CENWAVE = 1222, that allows observations of the Ly-alpha line at $z=0.038$.

The apertures have a grid layout, which is set relative to the aperture that was already observed in program 12583, that targeted the brightest UV cluster in the galaxy. The offset between the proposed apertures is set by ancillary observations with the worst angular resolution (VLA 21cm line maps, $\sim 3.6''$). Coordinates are based on the coordinates of the aperture previously observed with COS, extracted from the NUV acquisition image. Given the coordinates and flux distribution are well-known, we perform target acquisition on the same cluster in the NUV with ACQ/IMAGE, with exposure times based on the flux in the previous NUV acquisition images.

After target acquisition, we obtain a COS NUV image of the target aperture to verify its position; our analysis will be modified in case of offset.

Our apertures are centered on mostly extended Lyman-alpha regions which we assume fill the COS aperture. To alleviate flux calibration uncertainties that arise when observing extended targets with the COS FUV PSA, we will use images of the target galaxy previously obtained with ACS/SBC (specifically in F125LP and F140LP) and perform synthetic photometry at the position of the apertures to re-calibrate the spectra.

COS ETC runs for each science exposure assume an exposure time of 1000s, close to our longest integration times.

While we have flux values in a long-pass filter overlapping with the Lyman-alpha line and thus have an approximate constraint for the fluxes, the Lyman-alpha line profile shape is not known, thus the count rate could be under-estimated for some apertures. For this reason and because the buffer fill times are otherwise very large (on the order of 10,000s), we fix the buffer time to be the exposure time for each science exposure.

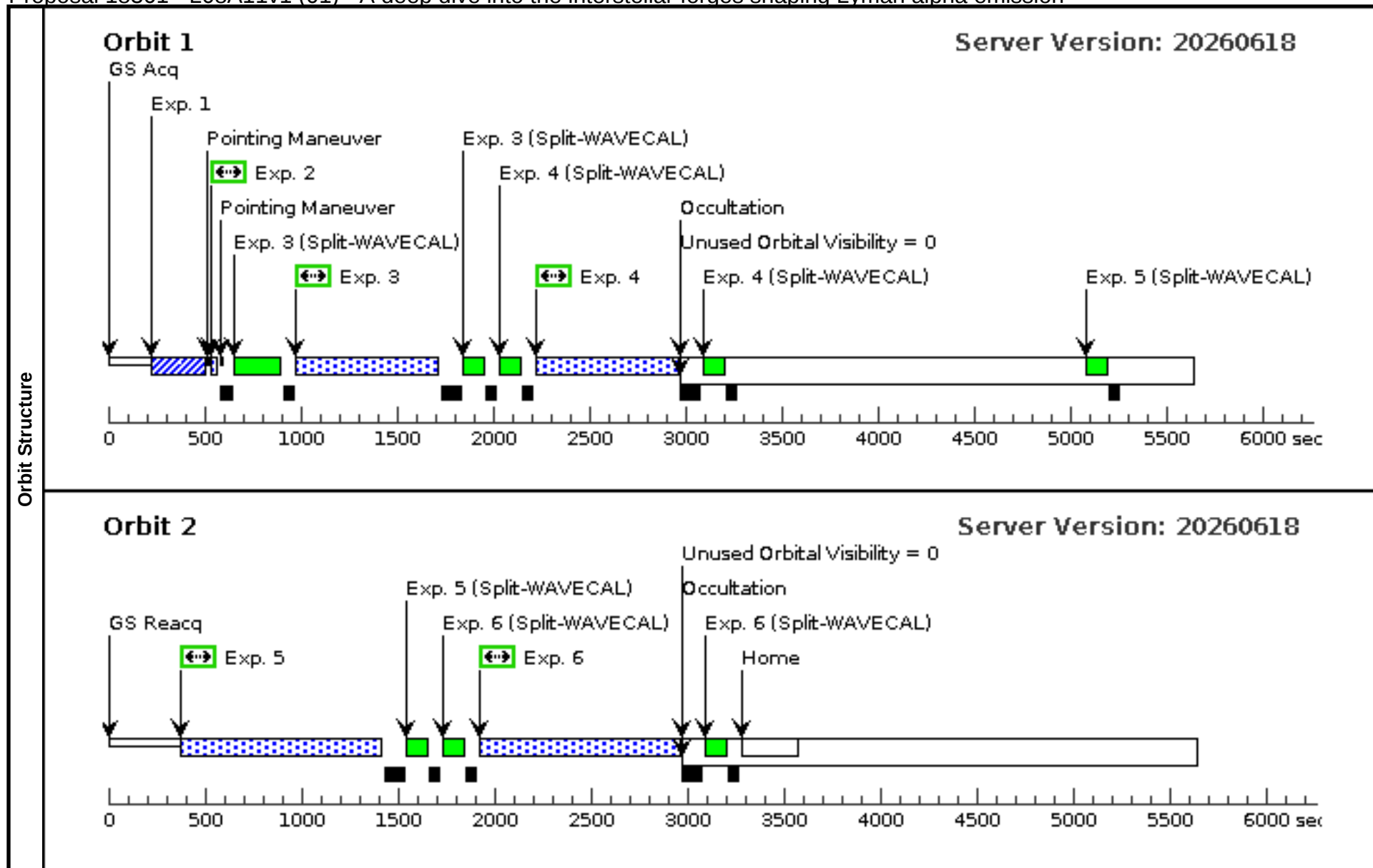
To achieve the goals of the proposal, Lyman-alpha spectra with $S/N < 20$ are sufficient, thus we only use two FP-POS for galaxies with a single orbit, otherwise we use all four FP-POS settings.

Proposal 18361 - L08A11v1 (01) - A deep dive into the interstellar forges shaping Lyman alpha emission

Visit	Proposal 18361, L08A11v1 (01) Mon Aug 17 15:00:40 GMT 2026				
	Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: PCS MODE FINE				
Diagnostics	(L08A11v1 (01)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS (Exp1_L08A11 (01.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp2_L08A11 (01.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp3_L08A11 (01.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp4_L08A11 (01.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(11)	L08A11	Offset from L08A0 RA Offset: 9.9E-4 Degrees Dec Offset: 0.0 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 4 .41e-16 erg/s/cm2/AA
Fixed Targets	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A11 should be shifted by dRA=+3.0 arcsec, dDEC=0 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES				
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA
Fixed Targets	Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO				

Proposal 18361 - L08A11v1 (01) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A11_ NUV_im (COS.im.23 64862)	(11) L08A11	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 11 (COS.sp.236 5011)	(11) L08A11	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 8			688 Secs (688 Secs)	
									[==>]	[1]
Exposures	4	Exp2_L08A 11 (COS.sp.236 5011)	(11) L08A11	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 8			688 Secs (688 Secs)	
									[==>]	[1]
	5	Exp3_L08A 11 (COS.sp.236 5011)	(11) L08A11	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp4_L08A 11 (COS.sp.236 5011)	(11) L08A11	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]

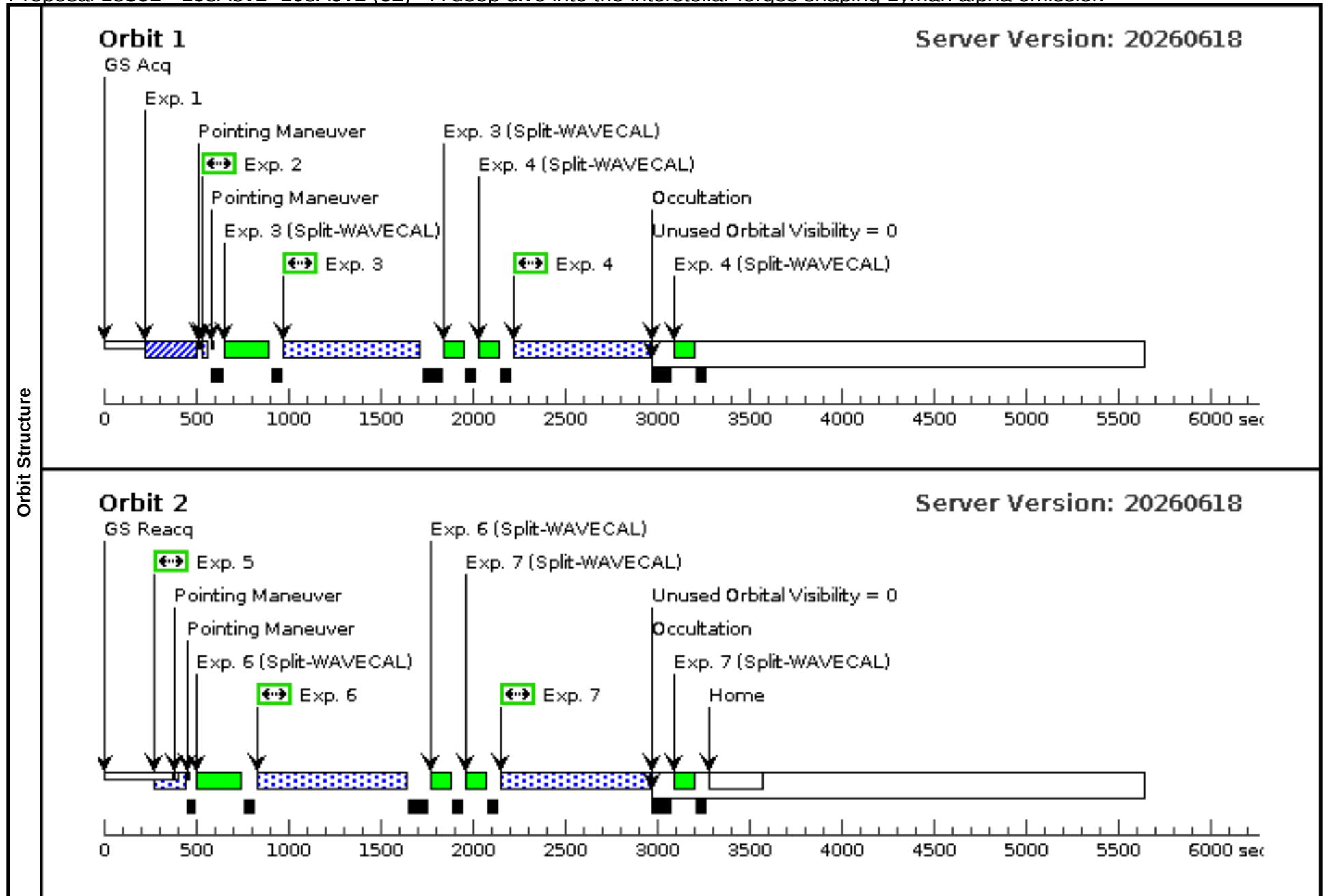


Proposal 18361 - L08A8v1+L08A9v1 (02) - A deep dive into the interstellar forges shaping Lyman alpha emission

Visit	Proposal 18361, L08A8v1+L08A9v1 (02)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning					
	Scientific Instruments: COS/FUV, COS/NUV					
	Special Requirements: PCS MODE FINE					
Diagnostics	(L08A8v1+L08A9v1 (02)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(Exp1_L08A08 (02.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A08 (02.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp1_L08A09 (02.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A09 (02.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	L08A8	Offset from L08A0 RA Offset: 0.0 Degrees Dec Offset: -3.6 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 2 .78e-16 erg/s/cm2/AA	Offset Position (L08A8)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A8 should be shifted by dRA=0 arcsec, dDEC=-3.6 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(9)	L08A9	Offset from L08A0 RA Offset: 9.9E-4 Degrees Dec Offset: -3.6 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 2 .78e-16 erg/s/cm2/AA	Offset Position (L08A9)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A9 should be shifted by dRA=+3.6 arcsec, dDEC=-3.6 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/AA	Reference Frame: ICRS
	Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO					

Proposal 18361 - L08A8v1+L08A9v1 (02) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A08_ NUV_im (COS.im.23 64862)	(8) L08A8	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 08 (COS.sp.236 5008)	(8) L08A8	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 8			688 Secs (688 Secs)	
									[==>]	[1]
	4	Exp2_L08A 08 (COS.sp.236 5008)	(8) L08A8	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 8			688 Secs (688 Secs)	
									[==>]	[1]
	5	LA08A09_ NUV_im (COS.im.23 64862)	(9) L08A9	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[2]
	6	Exp1_L08A 09 (COS.sp.236 5009)	(9) L08A9	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=76 1			761 Secs (761 Secs)	
									[==>]	[2]
	7	Exp2_L08A 09 (COS.sp.236 5009)	(9) L08A9	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=76 1			761 Secs (761 Secs)	
									[==>]	[2]



Proposal 18361 - L08A7v1 (03) - A deep dive into the interstellar forges shaping Lyman alpha emission

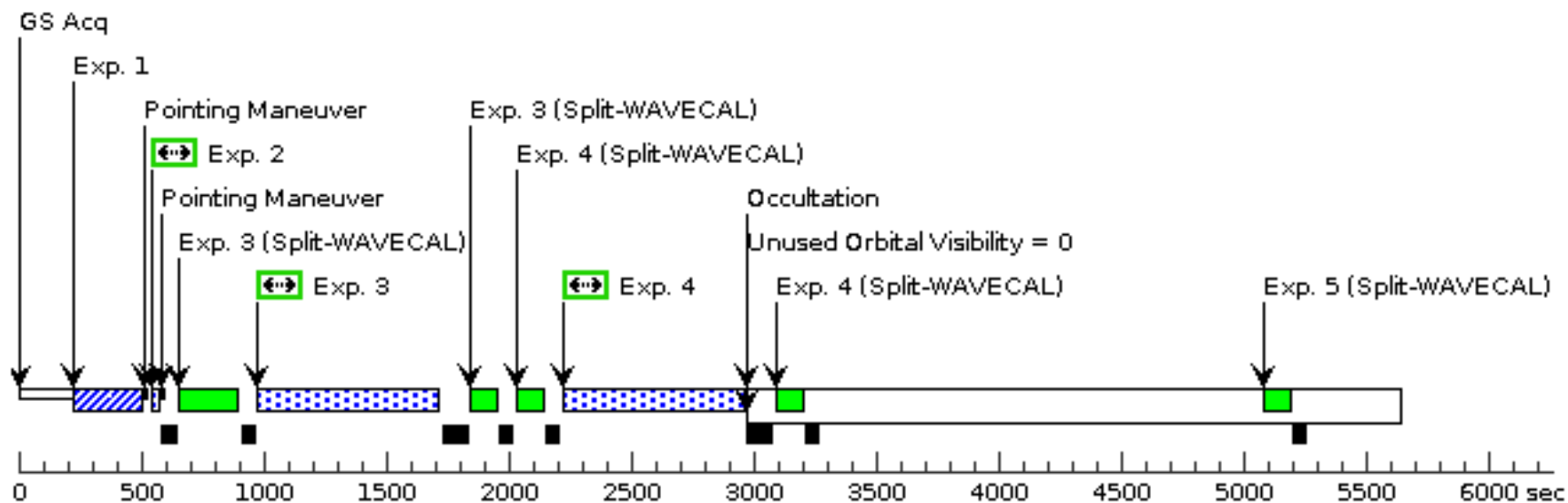
Visit	Proposal 18361, L08A7v1 (03)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: PCS MODE FINE					
Diagnostics	(L08A7v1 (03)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(L08A7v1 (03)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Exp1_L08A7 (03.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A7 (03.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp3_L08A7 (03.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp4_L08A7 (03.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp5_L08A7 (03.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	(Exp6_L08A7 (03.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	L08A7	Offset from L08A0 RA Offset: -9.9E-4 Degrees Dec Offset: -3.6 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 9 .60e-17 erg/s/cm2/AA	Offset Position (L08A7)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A7 should be shifted by dRA=-3.6 arcsec, dDEC=-3.6 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO						

Proposal 18361 - L08A7v1 (03) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A07_ NUV_im (COS.im.23 64862)	(7) L08A7	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 7 (COS.sp.236 5007)	(7) L08A7	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=69 1			687 Secs (687 Secs)	
									[==>]	[1]
	4	Exp2_L08A 7 (COS.sp.236 5007)	(7) L08A7	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 8			688 Secs (688 Secs)	
									[==>]	[1]
	5	Exp3_L08A 7 (COS.sp.236 5007)	(7) L08A7	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp4_L08A 7 (COS.sp.236 5007)	(7) L08A7	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]
	7	Exp5_L08A 7 (COS.sp.236 5007)	(7) L08A7	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[3]
	8	Exp6_L08A 7 (COS.sp.236 5007)	(7) L08A7	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[3]

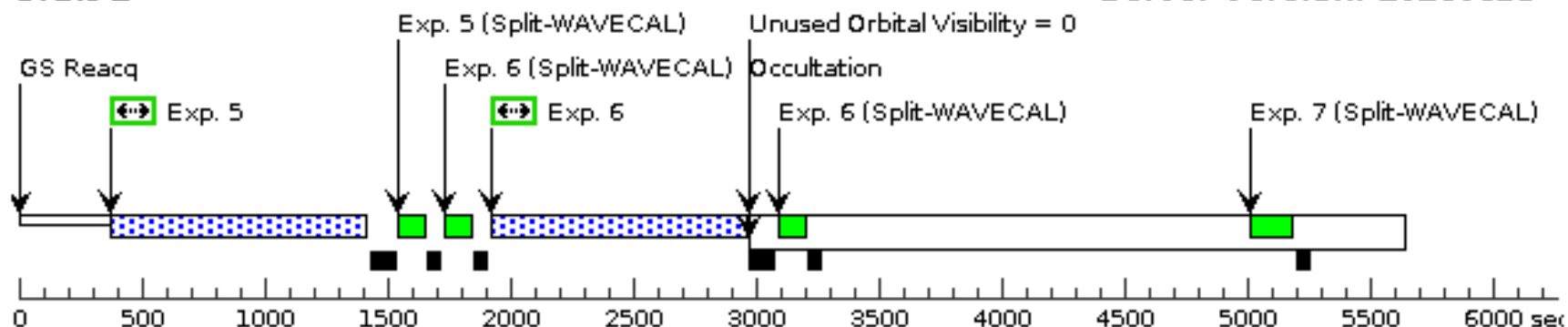
Orbit 1

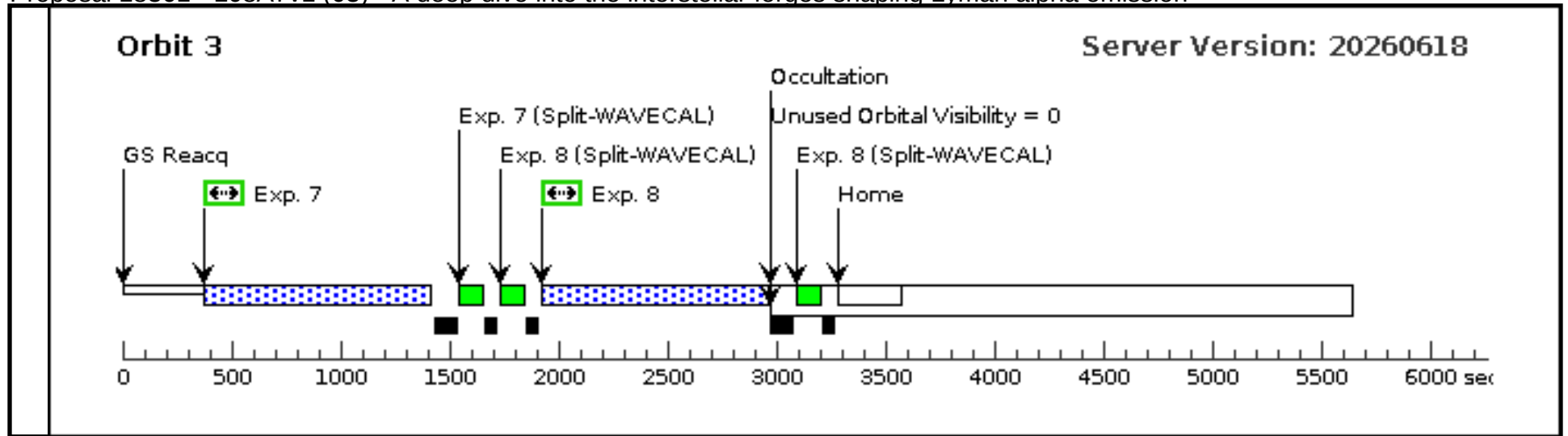
Server Version: 20260618



Orbit 2

Server Version: 20260618





Proposal 18361 - L08A10v1 (04) - A deep dive into the interstellar forges shaping Lyman alpha emission

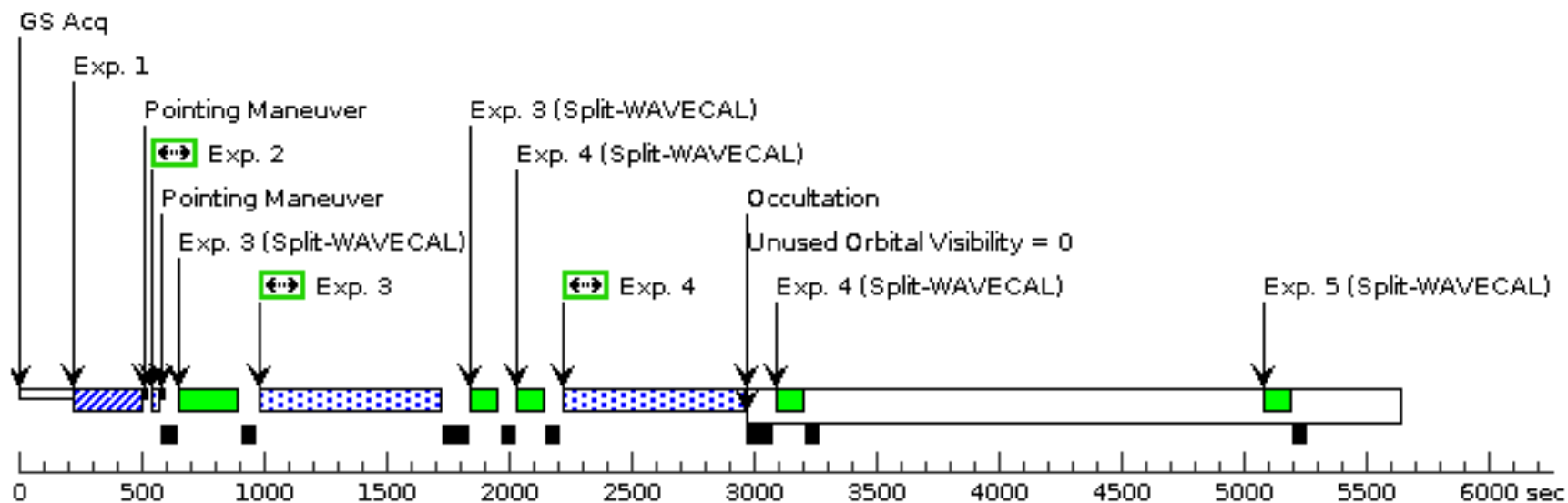
Visit	Proposal 18361, L08A10v1 (04)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning					
	Scientific Instruments: COS/FUV, COS/NUV					
	Special Requirements: PCS MODE FINE					
Diagnostics	(L08A10v1 (04)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(L08A10v1 (04)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Exp1_L08A10 (04.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A10 (04.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp3_L08A10 (04.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp4_L08A10 (04.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp5_L08A10 (04.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	(Exp6_L08A10 (04.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	L08A10	Offset from L08A0 RA Offset: 0.00198 Degrees Dec Offset: -3.6 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 2 .09e-17 erg/s/cm2/AA	Offset Position (L08A10)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A10 should be shifted by dRA=+7.2 arcsec, dDEC=-3.6 arcsec from the brightest UV cluster in the acquisition image.					
	Category=EXT-MEDIUM					
	Description=[EMISSION LINE NEBULA, STAR FORMING REGION]					
	Extended=YES					
(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS	
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target.						
Category=EXT-MEDIUM						
Description=[EMISSION LINE NEBULA, STAR FORMING REGION]						
Extended=NO						

Proposal 18361 - L08A10v1 (04) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A10_ NUV_im (COS.im.23 64862)	(10) L08A10	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 10 (COS.sp.236 5010)	(10) L08A10	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 6			686 Secs (686 Secs)	
									[==>]	[1]
	4	Exp2_L08A 10 (COS.sp.236 5010)	(10) L08A10	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 6			686 Secs (686 Secs)	
									[==>]	[1]
	5	Exp3_L08A 10 (COS.sp.236 5010)	(10) L08A10	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp4_L08A 10 (COS.sp.236 5010)	(10) L08A10	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]
	7	Exp5_L08A 10 (COS.sp.236 5010)	(10) L08A10	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[3]
	8	Exp6_L08A 10 (COS.sp.236 5010)	(10) L08A10	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[3]

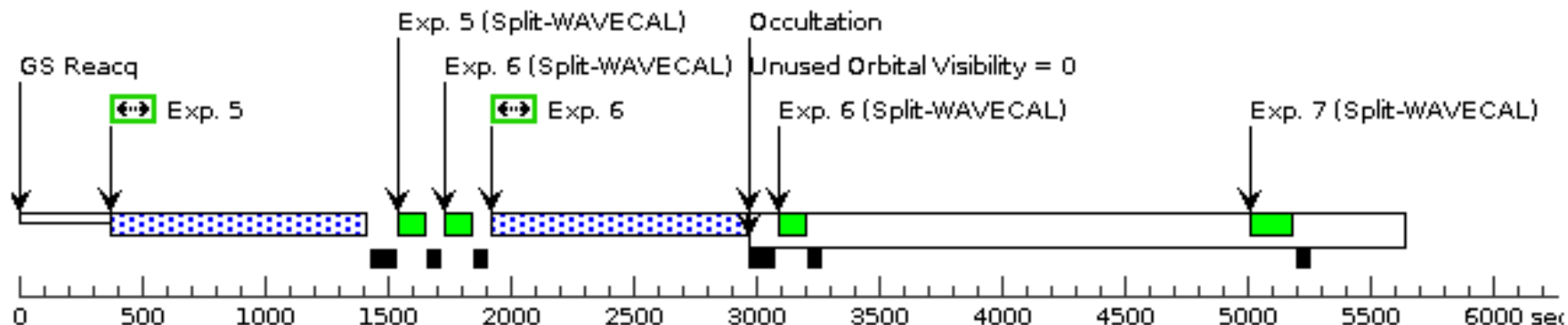
Orbit 1

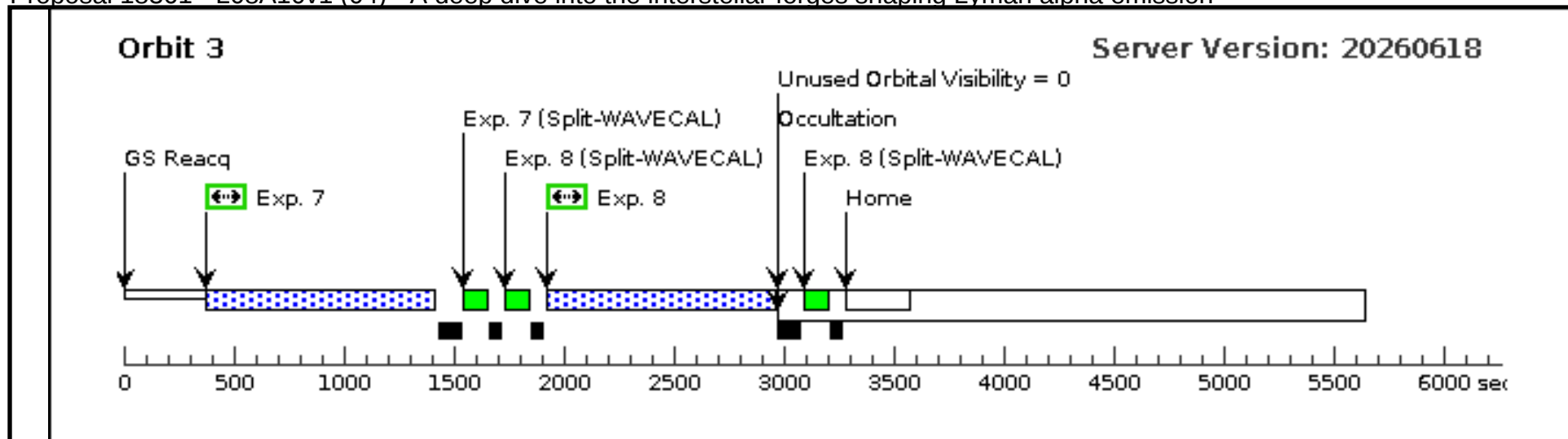
Server Version: 20260618



Orbit 2

Server Version: 20260618





Proposal 18361 - L08A3v1 (05) - A deep dive into the interstellar forges shaping Lyman alpha emission

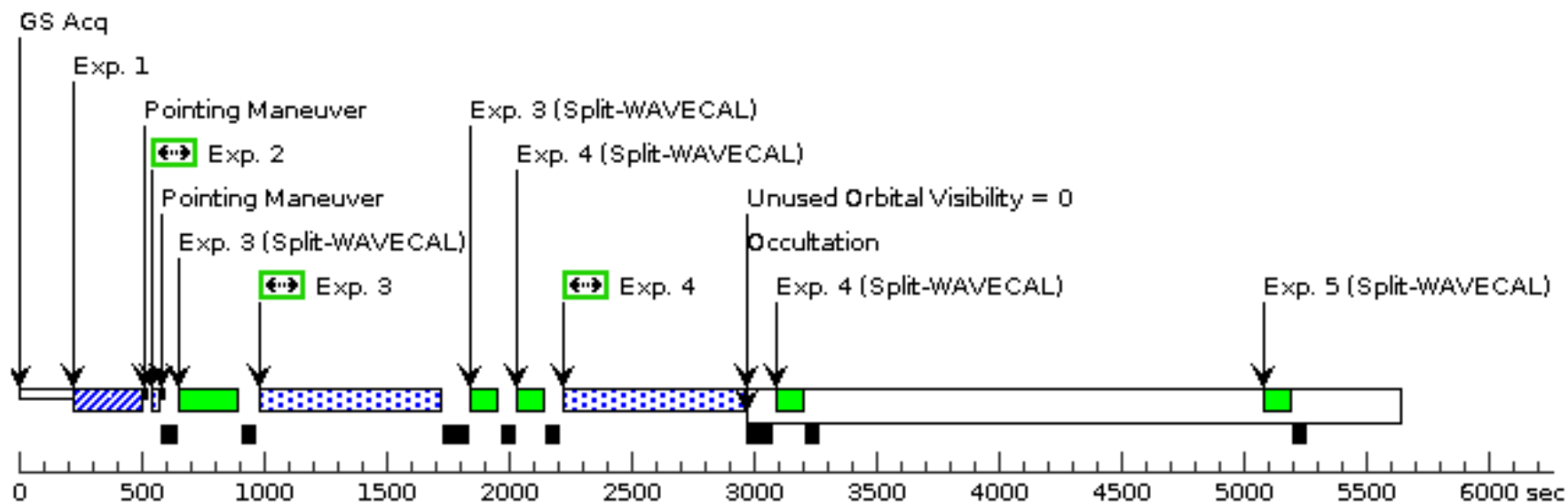
Visit	Proposal 18361, L08A3v1 (05)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning					
	Scientific Instruments: COS/FUV, COS/NUV					
	Special Requirements: PCS MODE FINE					
Diagnostics	(L08A3v1 (05)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(L08A3v1 (05)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Exp1_L08A3 (05.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A3 (05.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp4_L08A3 (05.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp5_L08A3 (05.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp6_L08A3 (05.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	(Exp7_L08A3 (05.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	L08A3	Offset from L08A0 RA Offset: -9.9E-4 Degrees Dec Offset: -7.2 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 3 .37e-17 erg/s/cm2/AA	Offset Position (L08A3)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A3 should be shifted by dRA=-3.6 arcsec, dDEC=-7.2 arcsec from the brightest UV cluster in the acquisition image.					
	Category=EXT-MEDIUM					
	Description=[EMISSION LINE NEBULA, STAR FORMING REGION]					
	Extended=YES					
(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS	
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target.						
Category=EXT-MEDIUM						
Description=[EMISSION LINE NEBULA, STAR FORMING REGION]						
Extended=NO						

Proposal 18361 - L08A3v1 (05) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A03_ NUV_im (COS.im.23 64862)	(3) L08A3	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 3 (COS.sp.236 5003)	(3) L08A3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 8			686 Secs (686 Secs)	
									[==>]	[1]
	4	Exp2_L08A 3 (COS.sp.236 5003)	(3) L08A3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 8			686 Secs (686 Secs)	
									[==>]	[1]
	5	Exp4_L08A 3 (COS.sp.236 5003)	(3) L08A3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp5_L08A 3 (COS.sp.236 5003)	(3) L08A3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]
	7	Exp6_L08A 3 (COS.sp.236 5003)	(3) L08A3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[3]
	8	Exp7_L08A 3 (COS.sp.236 5003)	(3) L08A3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[3]

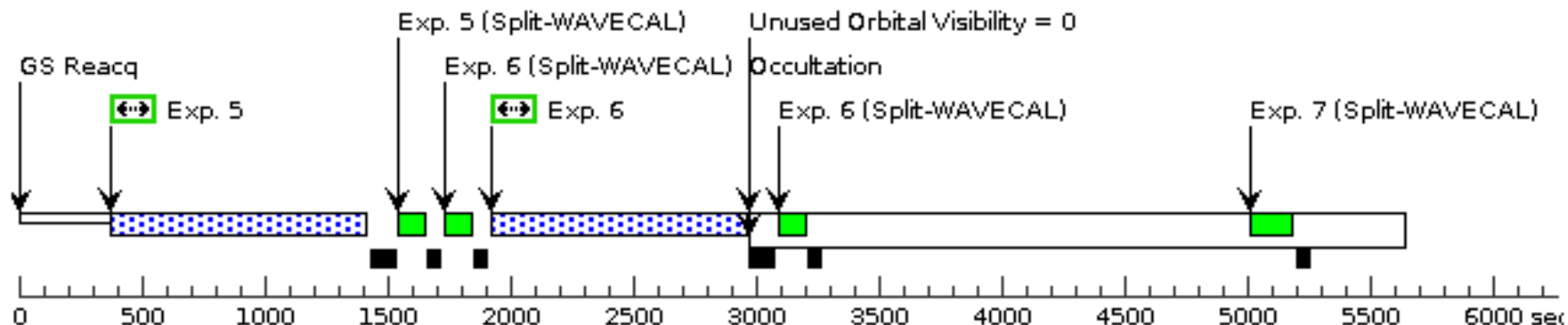
Orbit 1

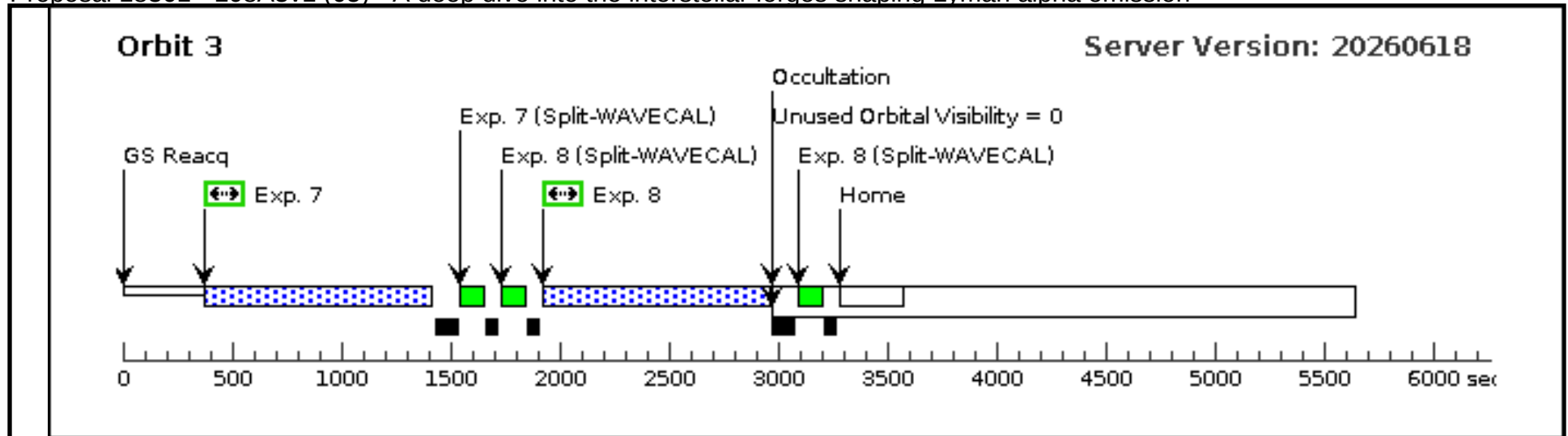
Server Version: 20260618



Orbit 2

Server Version: 20260618



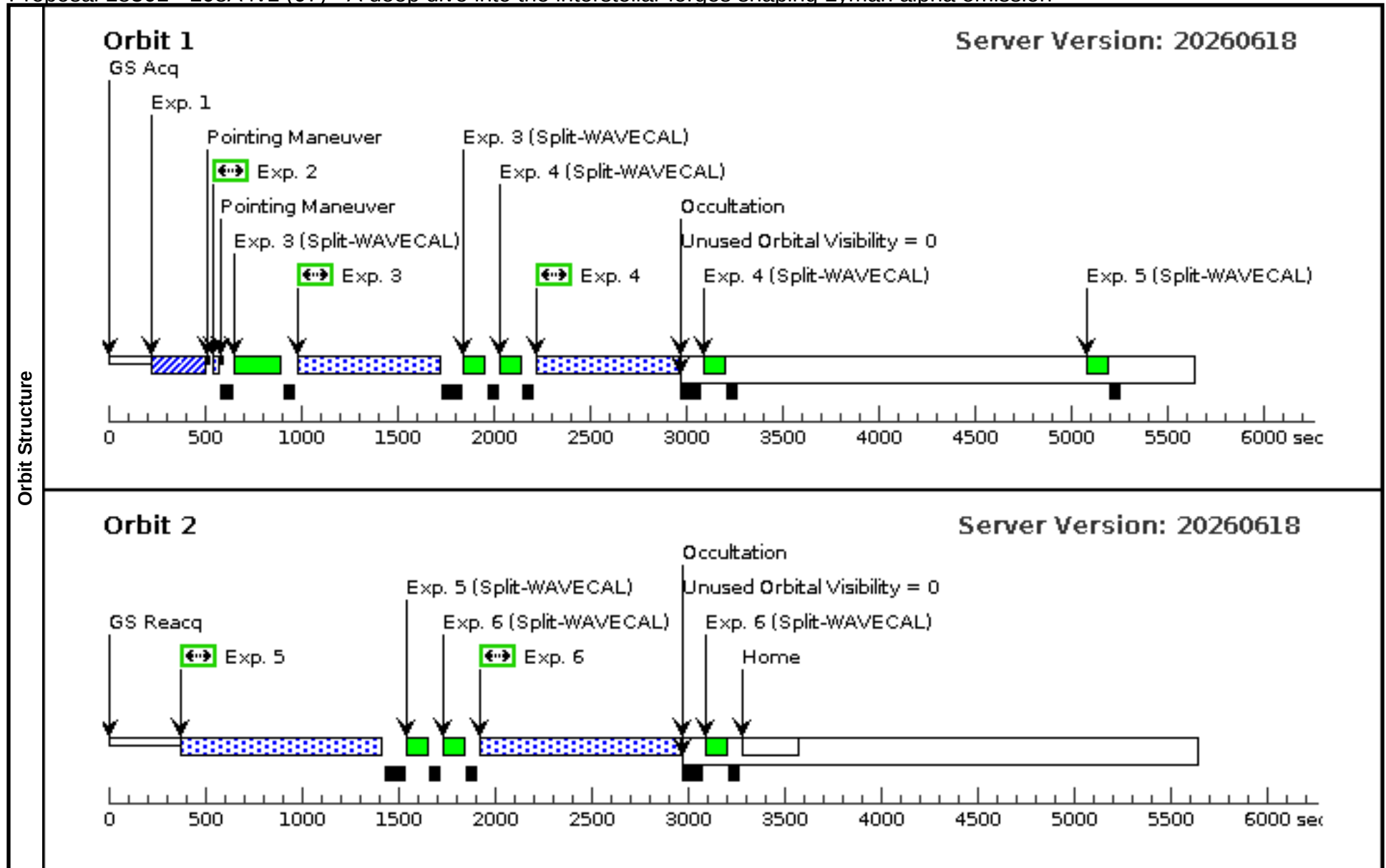


Proposal 18361 - L08A4v1 (07) - A deep dive into the interstellar forges shaping Lyman alpha emission

Visit	Proposal 18361, L08A4v1 (07)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning					
	Scientific Instruments: COS/FUV, COS/NUV					
	Special Requirements: PCS MODE FINE					
Diagnostics	(L08A4v1 (07)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(Exp1_L08A4 (07.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A4 (07.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp3_L08A4 (07.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp4_L08A4 (07.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	L08A4	Offset from L08A0 RA Offset: 0.0 Secs Dec Offset: -7.2 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 4 .08e-16 erg/s/cm2/AA	Offset Position (L08A4)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A4 should be shifted by dRA=0 arcsec, dDEC=-7.2 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/AA	Reference Frame: ICRS
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO						

Proposal 18361 - L08A4v1 (07) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A4_N UV_im (COS.im.23 64862)	(4) L08A4	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 4 (COS.sp.236 5004)	(4) L08A4	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 7			687 Secs (687 Secs)	
									[==>]	[1]
Exposures	4	Exp2_L08A 4 (COS.sp.236 5004)	(4) L08A4	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 6			686 Secs (686 Secs)	
									[==>]	[1]
	5	Exp3_L08A 4 (COS.sp.236 5004)	(4) L08A4	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp4_L08A 4 (COS.sp.236 5004)	(4) L08A4	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]

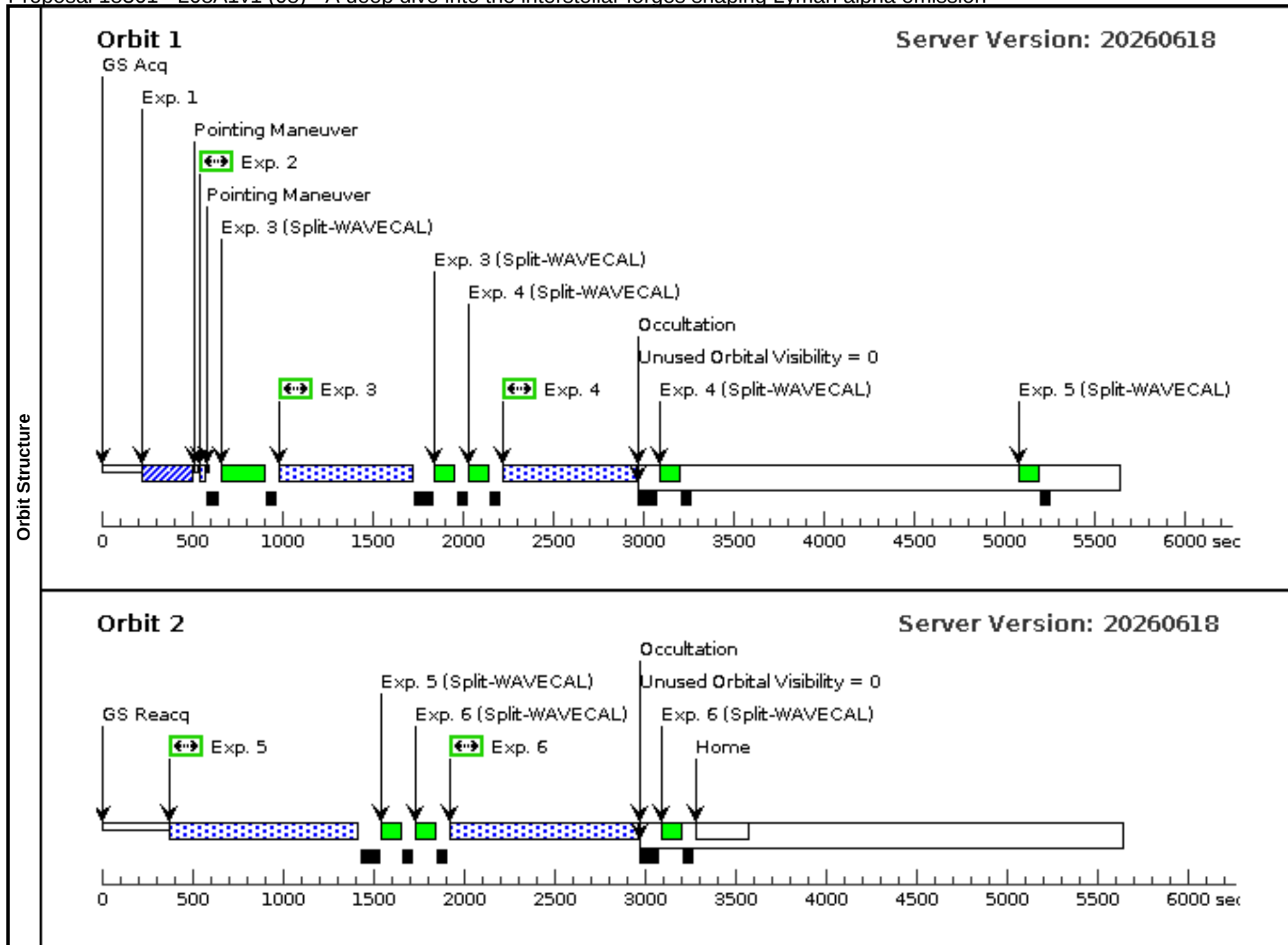


Proposal 18361 - L08A1v1 (08) - A deep dive into the interstellar forges shaping Lyman alpha emission

Visit	Proposal 18361, L08A1v1 (08)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning					
	Scientific Instruments: COS/FUV, COS/NUV					
	Special Requirements: PCS MODE FINE					
Diagnostics	(L08A1v1 (08)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(Exp1_L08A1 (08.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A1 (08.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp3_L08A1 (08.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp4_L08A1 (08.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	L08A1	Offset from L08A0 RA Offset: 0.0 Degrees Dec Offset: -10.8 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 3 .43e-17 erg/s/cm2/AA	Offset Position (L08A1)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A1 should be shifted by dRA=0 arcsec, dDEC=-10.8 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO						

Proposal 18361 - L08A1v1 (08) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A1_N UV_im (COS.im.23 64862)	(1) L08A1	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 1 (COS.sp.236 5001)	(1) L08A1	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
Exposures	4	Exp2_L08A 1 (COS.sp.236 5001)	(1) L08A1	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	5	Exp3_L08A 1 (COS.sp.236 5001)	(1) L08A1	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp4_L08A 1 (COS.sp.236 5001)	(1) L08A1	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]



Proposal 18361 - L08A5v1+L08A2v1 (09) - A deep dive into the interstellar forges shaping Lyman alpha emission

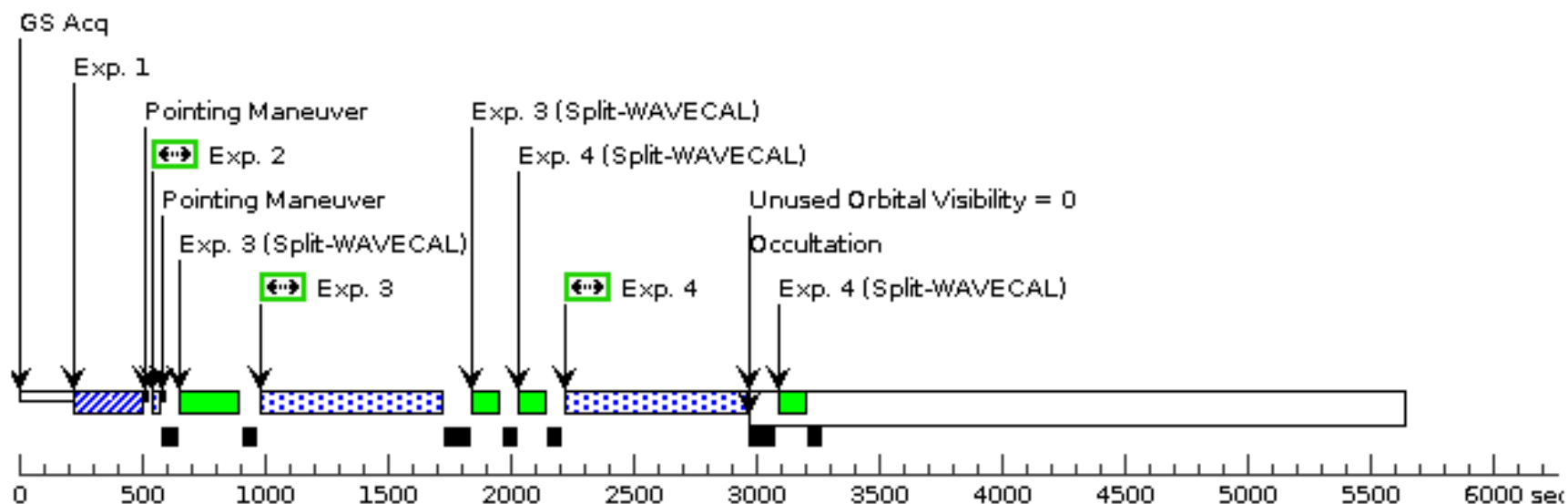
Visit	Proposal 18361, L08A5v1+L08A2v1 (09)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning					
	Scientific Instruments: COS/FUV, COS/NUV					
	Special Requirements: PCS MODE FINE					
Diagnostics	(L08A5v1+L08A2v1 (09)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(L08A5v1+L08A2v1 (09)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Exp1_L08A5 (09.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A5 (09.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp1_L08A2 (09.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A2 (09.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp3_L08A2 (09.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	(Exp4_L08A2 (09.009)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	L08A2	Offset from L08A0 RA Offset: 9.9E-4 Degrees Dec Offset: -10.8 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 6 .22e-17 erg/s/cm2/AA	Offset Position (L08A2)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A2 should be shifted by dRA=3.6 arcsec, dDEC=-10.8 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(5)	L08A5	Offset from L08A0 RA Offset: 9.9E-4 Degrees Dec Offset: -7.2 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 1 .48e-16 erg/s/cm2/AA	Offset Position (L08A5)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A5 should be shifted by dRA=+3.6 arcsec, dDEC=-7.2 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS
	Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO					

Proposal 18361 - L08A5v1+L08A2v1 (09) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs) [==>]	[1]
	2	LA08A5_N UV_im (COS.im.23 64862)	(5) L08A5	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs) [==>]	[1]
	3	Exp1_L08A 5 (COS.sp.236 5005)	(5) L08A5	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 6			686 Secs (686 Secs) [==>]	[1]
	4	Exp2_L08A 5 (COS.sp.236 5005)	(5) L08A5	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=68 6			686 Secs (686 Secs) [==>]	[1]
	5	LA08A2_N UV_im (COS.im.23 64862)	(2) L08A2	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs) [==>]	[2]
	6	Exp1_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=76 1			761 Secs (761 Secs) [==>]	[2]
	7	Exp2_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=76 1			761 Secs (761 Secs) [==>]	[2]
	8	Exp3_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs) [==>]	[3]
	9	Exp4_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs) [==>]	[3]

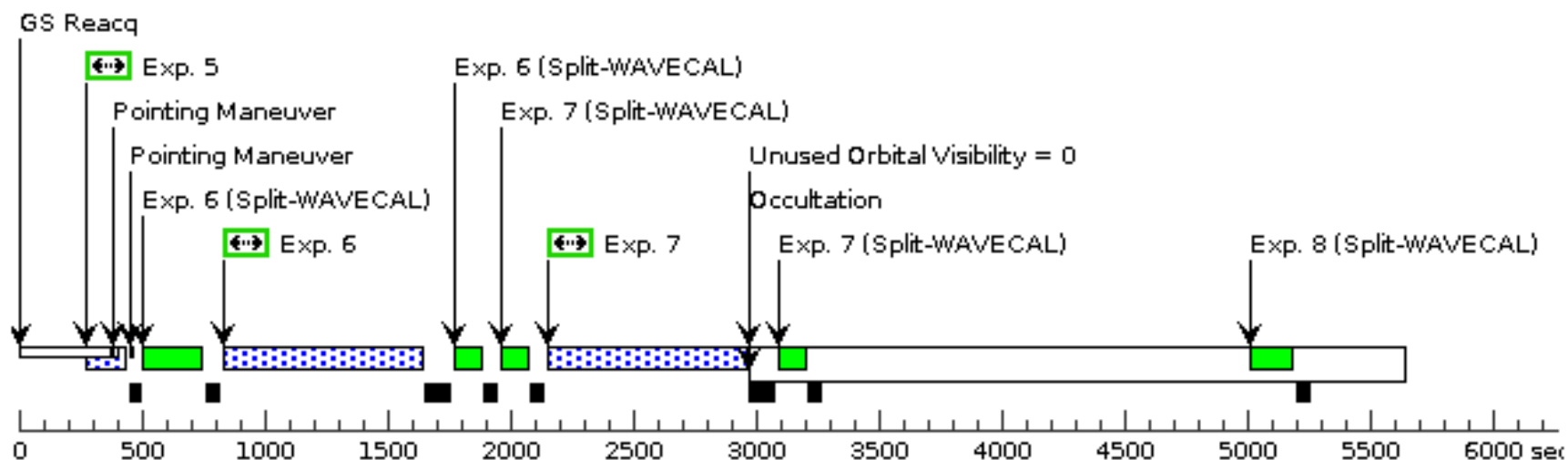
Orbit 1

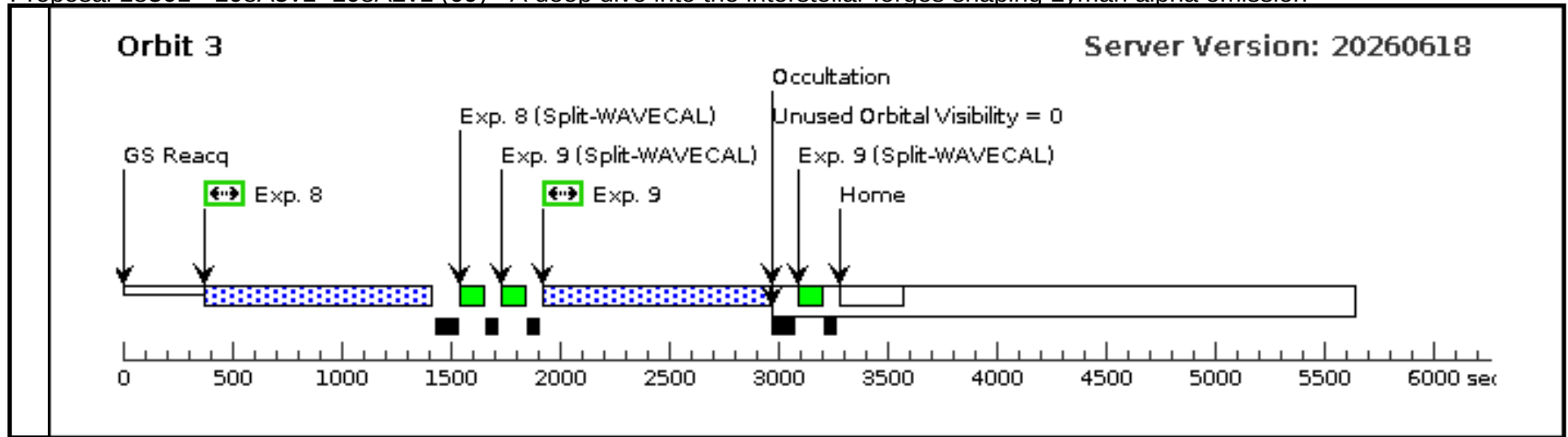
Server Version: 20260618



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Proposal 18361 - L08A6v1 (10) - A deep dive into the interstellar forges shaping Lyman alpha emission

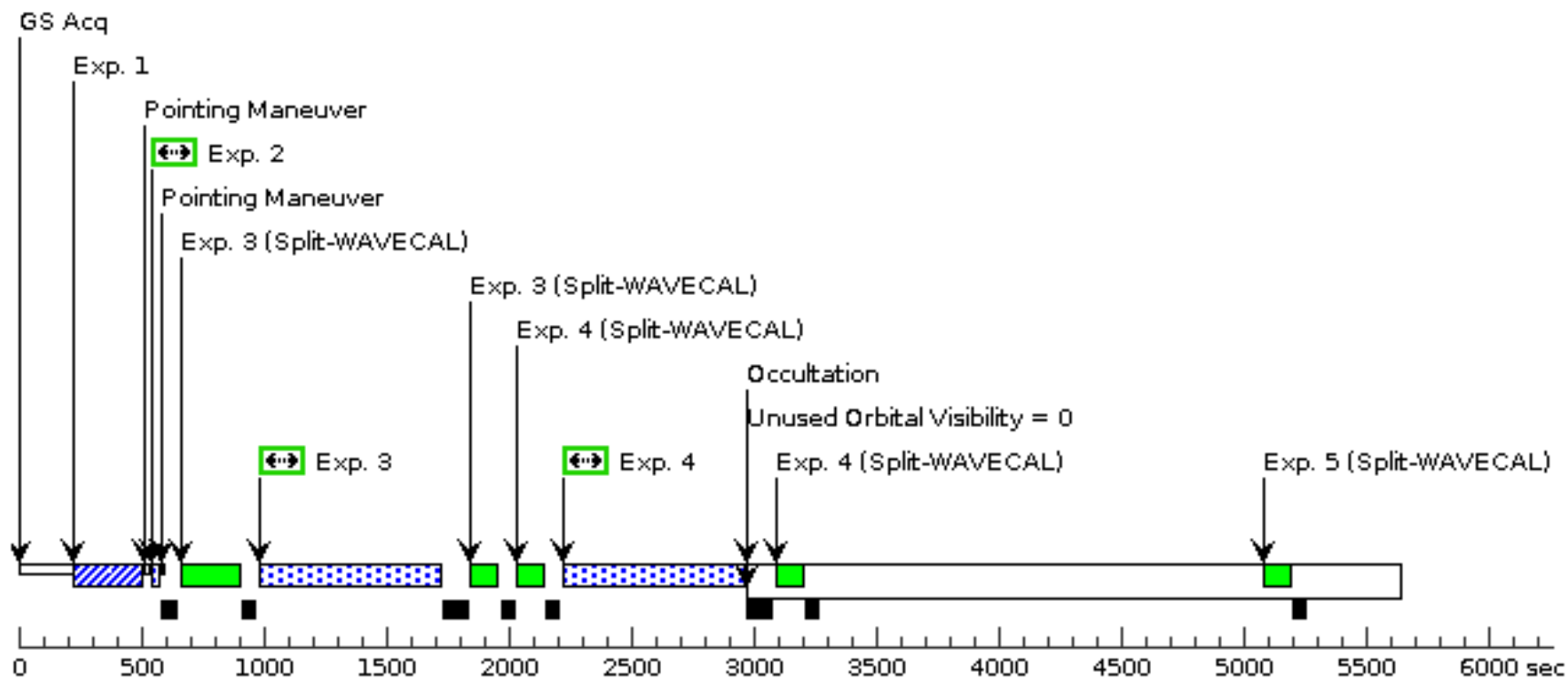
Visit	Proposal 18361, L08A6v1 (10)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: PCS MODE FINE					
Diagnostics	(L08A6v1 (10)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(L08A6v1 (10)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Exp1_L08A6 (10.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp2_L08A6 (10.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp3_L08A6 (10.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp4_L08A6 (10.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp5_L08A6 (10.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	(Exp6_L08A6 (10.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	L08A6	Offset from L08A0 RA Offset: 0.00198 Degrees Dec Offset: -7.2 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 4 .12e-17 erg/s/cm2/AA	Offset Position (L08A6)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A6 should be shifted by dRA=+7.2 arcsec, dDEC=-7.2 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO						

Proposal 18361 - L08A6v1 (10) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A6_N UV_im (COS.im.23 64862)	(6) L08A6	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp1_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	4	Exp2_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	5	Exp3_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp4_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]
	7	Exp5_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[3]
	8	Exp6_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[3]

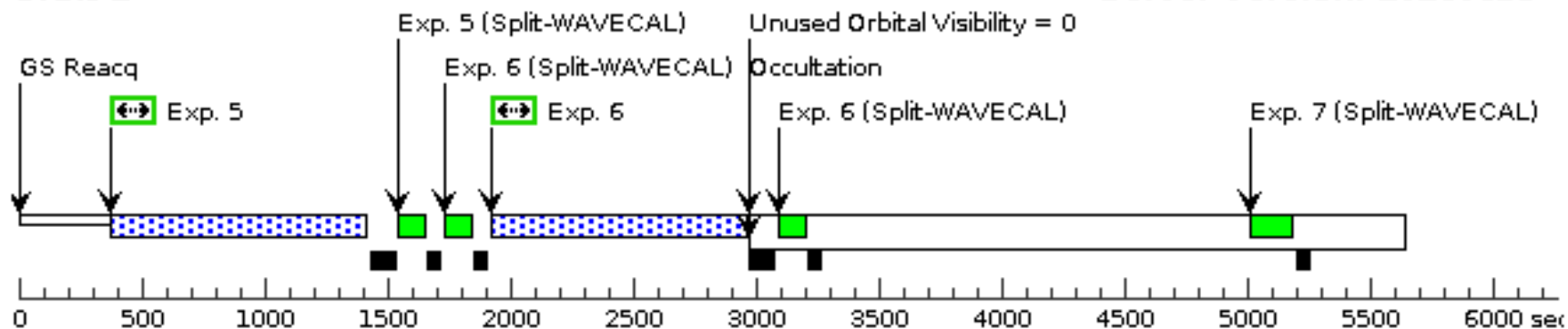
Orbit 1

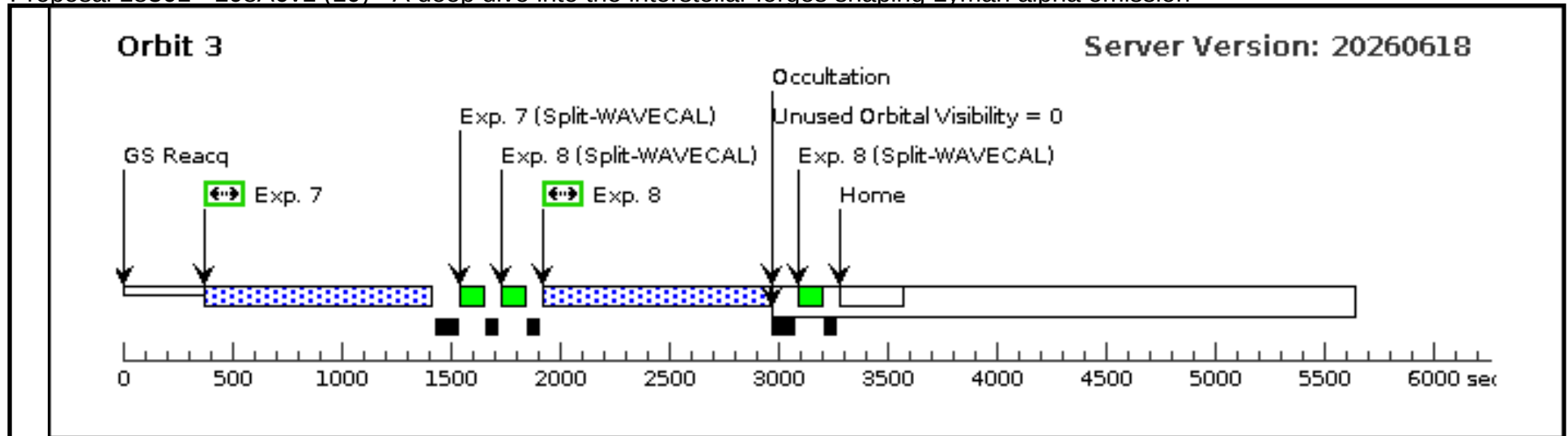
Server Version: 20260618



Orbit 2

Server Version: 20260618



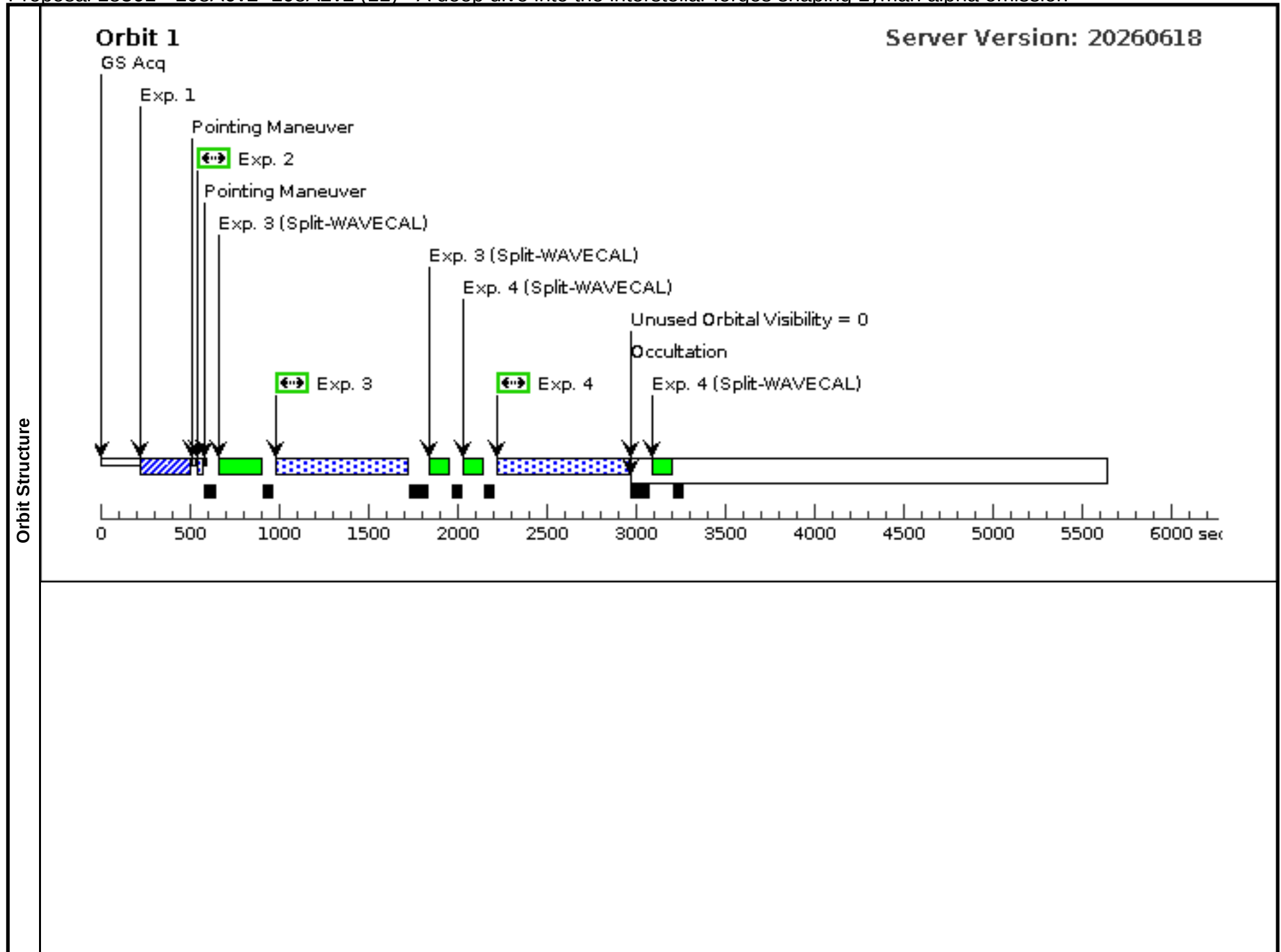


Proposal 18361 - L08A6v2+L08A2v2 (11) - A deep dive into the interstellar forges shaping Lyman alpha emission

Visit	Proposal 18361, L08A6v2+L08A2v2 (11) Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: PCS MODE FINE					Mon Aug 17 15:00:40 GMT 2026
	Diagnostics (L08A6v2+L08A2v2 (11)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS (L08A6v2+L08A2v2 (11)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Exp7_L08A6 (11.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp8_L08A6 (11.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp5_L08A2 (11.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp6_L08A2 (11.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp7_L08A2 (11.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details. (Exp8_L08A2 (11.009)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	L08A2	Offset from L08A0 RA Offset: 9.9E-4 Degrees Dec Offset: -10.8 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 6 .22e-17 erg/s/cm2/AA	Offset Position (L08A2)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A2 should be shifted by dRA=3.6 arcsec, dDEC=-10.8 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(6)	L08A6	Offset from L08A0 RA Offset: 0.00198 Degrees Dec Offset: -7.2 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 4 .12e-17 erg/s/cm2/AA	Offset Position (L08A6)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A6 should be shifted by dRA=+7.2 arcsec, dDEC=-7.2 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/AA	Reference Frame: ICRS
	Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO					

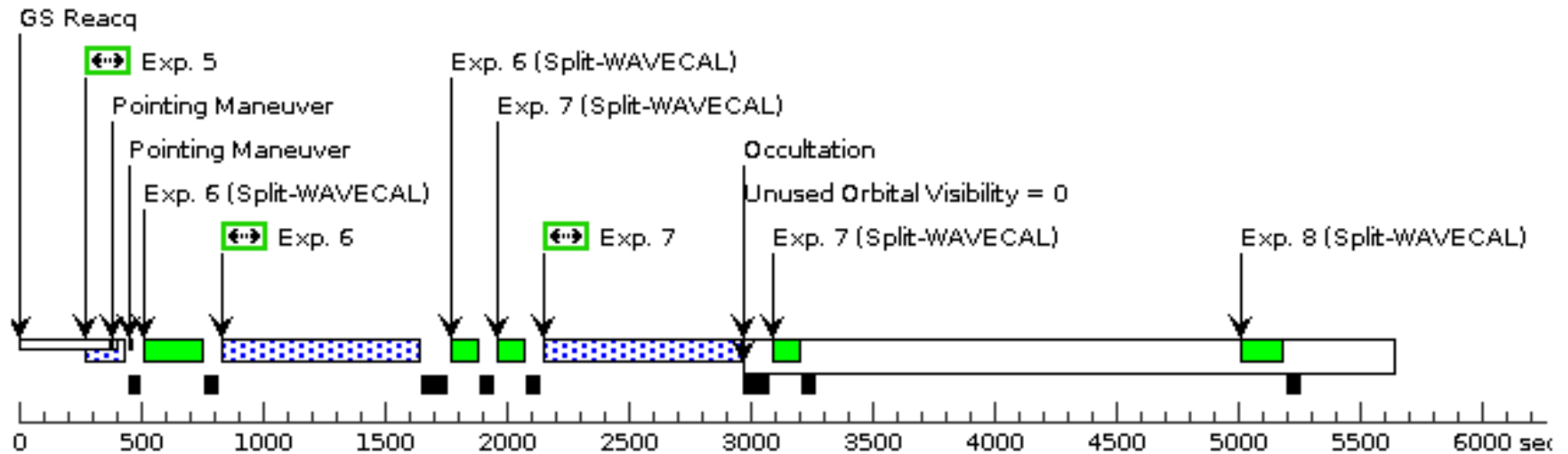
Proposal 18361 - L08A6v2+L08A2v2 (11) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A6_N UV_im (COS.im.23 64862)	(6) L08A6	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp7_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	4	Exp8_L08A 6 (COS.sp.236 5006)	(6) L08A6	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	5	LA08A2_N UV_im (COS.im.23 64862)	(2) L08A2	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[2]
	6	Exp5_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=76 1			761 Secs (761 Secs)	
									[==>]	[2]
	7	Exp6_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=76 0			760 Secs (760 Secs)	
									[==>]	[2]
	8	Exp7_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[3]
	9	Exp8_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[3]



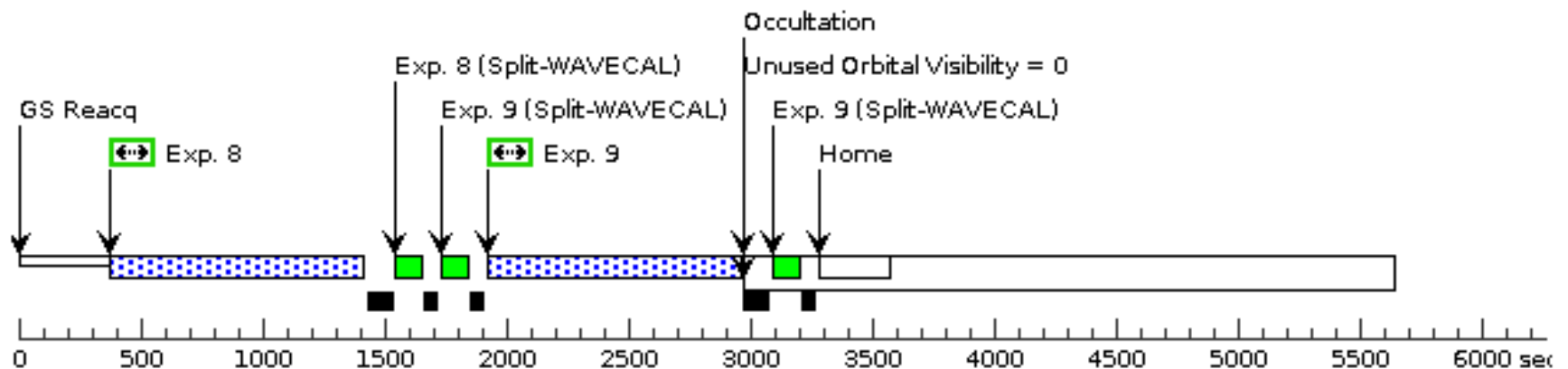
Orbit 2

Server Version: 20260618



Orbit 3

Server Version: 20260618



Proposal 18361 - L08A2v3 (12) - A deep dive into the interstellar forges shaping Lyman alpha emission

Visit	Proposal 18361, L08A2v3 (12)					Mon Aug 17 15:00:40 GMT 2026
	Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: PCS MODE FINE					
Diagnostics	(L08A2v3 (12)) Warning (Orbit Planner): COS EXPOSURE TIME ROUNDED DOWN TO NEAREST 0.1 SECONDS					
	(L08A2v3 (12)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Exp9_L08A2 (12.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp10_L08A2 (12.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp11_L08A2 (12.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp12_L08A2 (12.006)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	(Exp13_L08A2 (12.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
Fixed Targets	(Exp14_L08A2 (12.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	L08A2	Offset from L08A0 RA Offset: 9.9E-4 Degrees Dec Offset: -10.8 Arcsec	Redshift: 0.038206	V=16.79+/-0.01 f_acs-sbc_f125lp(1426.5AA)= 6 .22e-17 erg/s/cm2/AA	Offset Position (L08A2)
	Comments: This aperture is set relative to the aperture in program 12583, which was centered on the brightest UV cluster in galaxy LARS08. Aperture L08A2 should be shifted by dRA=3.6 arcsec, dDEC=-10.8 arcsec from the brightest UV cluster in the acquisition image. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=YES					
	(12)	L08A0	RA: 12 50 13.6488 (192.5568700d) Dec: +07 34 47.26 (7.57979d) Equinox: J2000	Redshift: 0.038206	V=16.79+/-0.01 f_nuv-acq= 5.20e-16 erg/s/cm2/ AA	Reference Frame: ICRS
Comments: This target is used as a reference to the position of the other apertures. We will not acquire spectra for this target. Category=EXT-MEDIUM Description=[EMISSION LINE NEBULA, STAR FORMING REGION] Extended=NO						

Proposal 18361 - L08A2v3 (12) - A deep dive into the interstellar forges shaping Lyman alpha emission

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acq_ap0 (COS.ta.236 2200)	(12) L08A0	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30.4 Secs (30.4 Secs)	
									[==>]	[1]
	2	LA08A2_N UV_im (COS.im.23 64862)	(2) L08A2	COS/NUV, ACCUM, PSA	MIRRORA				18 Secs (18 Secs)	
									[==>]	[1]
	3	Exp9_L08A 2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	4	Exp10_L08 A2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=68 5			685 Secs (685 Secs)	
									[==>]	[1]
	5	Exp11_L08 A2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=3; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[2]
	6	Exp12_L08 A2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=4; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[2]
	7	Exp13_L08 A2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=1; BUFFER-TIME=99 0			990 Secs (990 Secs)	
									[==>]	[3]
	8	Exp14_L08 A2 (COS.sp.236 5002)	(2) L08A2	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FLASH=YES; LIFETIME-POS=L P7; FP-POS=2; BUFFER-TIME=98 9			989 Secs (989 Secs)	
									[==>]	[3]

