



18435 - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of Reionization

Cycle: 34, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) J0125+0834	COS/FUV COS/NUV	5	19-Aug-2026 11:05:01.0	yes
02	(2) J0135+2206	COS/FUV COS/NUV	5	19-Aug-2026 11:05:02.0	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	(3) J0142+0641	COS/FUV COS/NUV	5	19-Aug-2026 11:05:03.0	yes
04	(4) J0149+2935	COS/FUV COS/NUV	5	19-Aug-2026 11:05:04.0	yes
05	(5) J0741+1739	COS/FUV COS/NUV	5	19-Aug-2026 11:05:06.0	yes
06	(6) J0933+3413	COS/FUV COS/NUV	5	19-Aug-2026 11:05:07.0	yes
07	(7) J1055+4758	COS/FUV COS/NUV	5	19-Aug-2026 11:05:08.0	yes
08	(8) J1155+5922	COS/FUV COS/NUV	5	19-Aug-2026 11:05:09.0	yes
09	(9) J1330+5213	COS/FUV COS/NUV	5	19-Aug-2026 11:05:10.0	yes
10	(10) J1431+3825	COS/FUV COS/NUV	5	19-Aug-2026 11:05:11.0	yes
11	(11) J1458+3637	COS/FUV COS/NUV	5	19-Aug-2026 11:05:12.0	yes

55 Total Orbits Used

ABSTRACT

JWST has revealed the properties of the galaxies that likely reionized the universe: compact star-forming galaxies that are highly ionized and very efficient producers of ionizing photons. These observed conditions push the limit of low-redshift observations and the current generation of stellar models. Theory suggests that these extreme conditions may be due to very bursty star formation histories, accreting black holes, exotic stellar population, top-heavy initial mass function, extremely dense conditions, gas that is undergoing catastrophic cooling, or have a highly clumpy gaseous distribution. Low-redshift observations of galaxies with similar ionization conditions are extremely rare, such that only three galaxies with similar ionization properties have LyC observations with HST. Here, we propose 55 orbits of HST/COS G140L+G160M observations to probe the LyC and Ly-alpha properties of the 11 most extremely ionized and efficient producers of ionizing photons in the SDSS at $z \sim 0.3$. These observations will 1)

test the astrophysics of LyC escape in highly ionized nebular conditions to infer whether indirect LyC indicators can be used for the highly ionized conditions of the epoch of reionization, 2) discern whether highly ionized conditions enable Ly-alpha photons to efficiently escape, and 3) reveal whether the nebular continuum dominates the light of highly ionized high-redshift galaxies. These observations will fortify HST's legacy of LyC observations by revealing the astrophysics of extremely rare local conditions that have been commonly found during the epoch of reionization, and cement the methods to reveal the sources of cosmic reionization.

OBSERVING DESCRIPTION

Each target will first be acquired with ACQ/IMAGE using MIRRORA. The acquisition ETC calculations use the observed GALEX NUV magnitudes, with SED-based estimates when required. Exposure times are chosen to obtain S/N (>20) in a (9x9) pixel box. The maximum ACQ/IMAGE time per exposure is 700 s for any target. All galaxies are assumed to have radii ($<0.2''$), ensuring that essentially all of the UV emission falls within the COS aperture.

We will use two COS/FUV spectroscopic configurations:

1) G140L/800 to measure the Lyman continuum. The observations use COS/FUV, G140L, CENWAVE=800, TIME-TAG, SEGMENT=A, with All FP-POS positions. The LyC is observed near $912(1+z)$, corresponding to observed wavelengths of approximately (1185-1310) for the sample. The ETC calculations are designed to detect an escaping LyC continuum corresponding to ($f_{\rm esc}=5\%$) at ($>3\sigma$) significance after binning by 400 pixels. Following Izotov et al. 2018, the intrinsic LyC flux density is estimated from the extinction-corrected SDSS H-alpha flux using the $(I_{\rm H\text{-}alpha})/I(912)$ -EW relation, and the ETC normalization is reduced by a factor of 20 to represent ($f_{\rm esc}=5\%$). The resulting expected LyC flux densities are approximately 1.3×10^{-18} - 2.0×10^{-17} erg s $^{-1}$ cm $^{-2}$ A $^{-1}$ across the sample. In addition to the LyC measurement, G140L/800 provides broad FUV spectral coverage extending to approximately rest-frame 1500 for the lower-redshift targets, allowing independent measurements of the UV continuum.

2) G160M to resolve the Ly-alpha line profile. The observations use COS/FUV, G160M, TIME-TAG, with target-specific central wavelengths of 1533, 1577, 1589, or 1623 selected according to redshift so that Ly-alpha falls securely in the center of the detector and away from the detector gap. The Ly-alpha line is observed at $(1215.67(1+z))$, corresponding to approximately 1581-1744 for the sample. For the ETC calculations, the continuum is normalized using the GALEX NUV photometry, supplemented by the SED-based estimates where appropriate, and extrapolated to rest-frame 1216 assuming ($f_{\lambda} \propto \lambda^{-2}$). The resulting continuum flux densities near Ly-alpha span approximately $(3.9 \times 10^{-17}$ - 5.5×10^{-16} erg s $^{-1}$ cm $^{-2}$ A $^{-1}$). Exposure times are chosen to obtain S/N (>3) in the continuum near Ly-alpha after binning by 100 pixels. The Ly-alpha

Proposal 18435 (STScI Edit Number: 0, Created: Wednesday, August 19, 2026, 10:05:12AM Eastern Standard Time) - Overview
emission itself is expected to be substantially brighter than the continuum, and the G160M resolution of <50 km/ resolves the blue and red Ly-alpha peaks and measure their velocity structure.

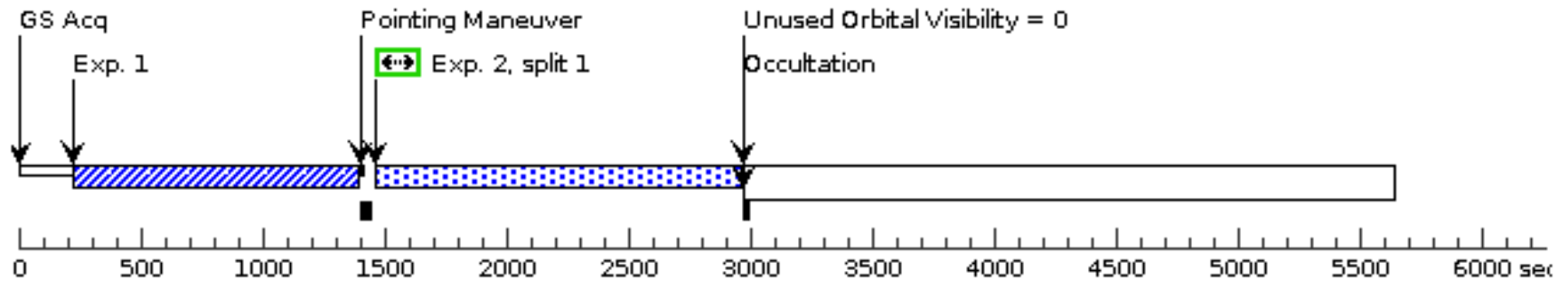
Each target requires approximately 0.5 orbit for target acquisition, 1.5 orbits for the G160M spectrum, and 3 orbits for the G140L spectrum, for a total of 5 orbits per target and 55 orbits for the full sample.

Proposal 18435 - J0125 (01) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J0125 (01)										Wed Aug 19 15:05:12 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(1)	J0125+0834	RA: 01 25 30.7100 (21.3779583d)		Redshift: 0.3393		V=20.22+/-0.02		Reference Frame: ICRS			
			Dec: +08 34 2.04 (8.56723d)				FUV=21.57+/-0.39,					
			Equinox: J2000				NUV=20.78+/-0.21					
	Comments: $F(1216*(1+z) = 1629) = 2e-16$											
	$F(912*(1+z) = 1221) = 1.33e-17$											
	Category=GALAXY											
	Description=[EMISSION LINE NEBULA, STARBURST]											
	Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	Acquisition (COS.ta.236 6362)	(1) J0125+0834	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				477 Secs (477 Secs)			
									[==>]		[1]	
	2	Lyman Cont inuum (COS.sp.236 6364)	(1) J0125+0834	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=12 015;			1200 Secs (6231 Secs)			
									[==>1294.0 Secs (Split 1)]		[1]	
									[==>1214.0 Secs (Split 2)]			
									[==>1214.0 Secs (Split 3)]		[2]	
									[==>2509.0 Secs (Split 4)]		[3]	
	3	Ly-alpha (COS.sp.236 6365)	(1) J0125+0834	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=17 013;			1200 Secs (4850 Secs)			
									[==>1211.0 Secs (Split 1)]			
									[==>1211.0 Secs (Split 2)]		[4]	
								[==>1214.0 Secs (Split 3)]				
								[==>1214.0 Secs (Split 4)]		[5]		

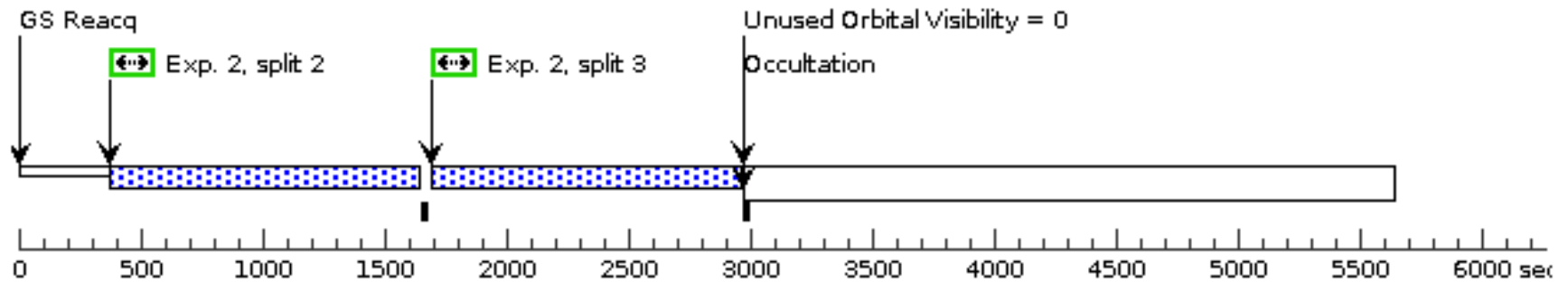
Orbit 1

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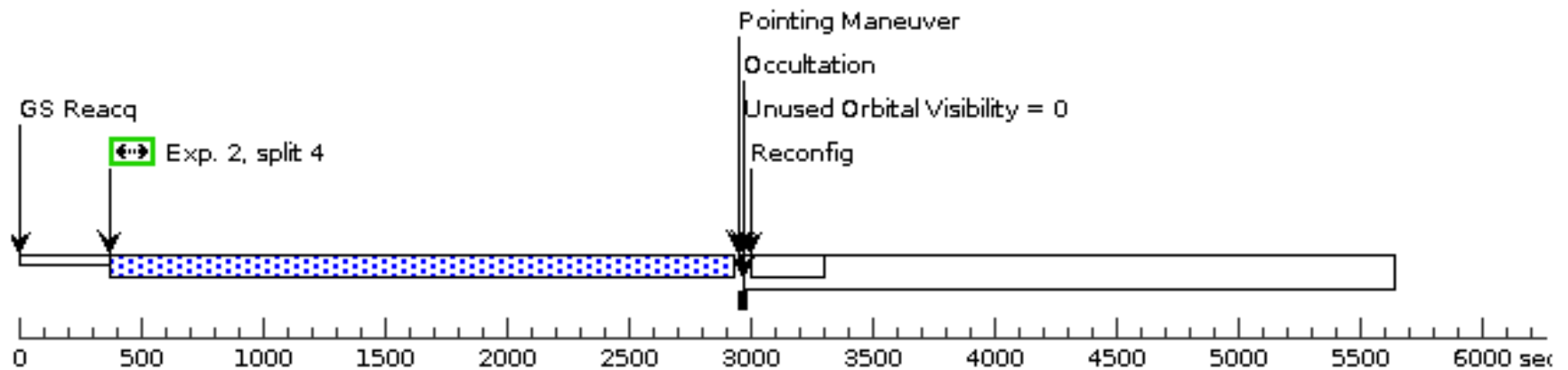
Orbit 2

Server Version: 20260618



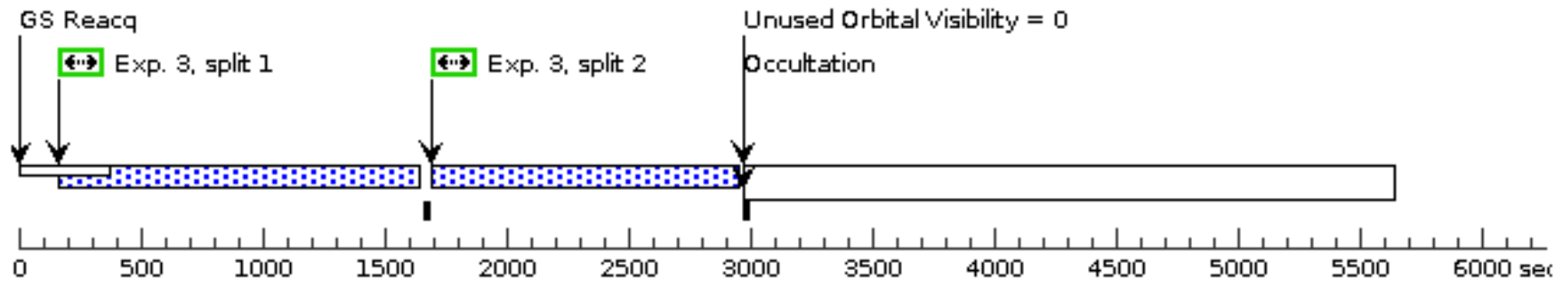
Orbit 3

Server Version: 20260618



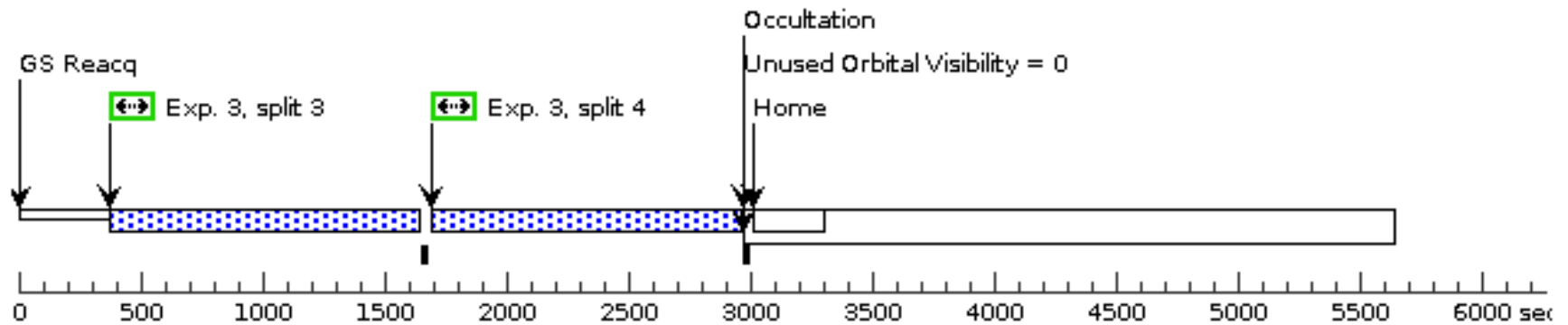
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

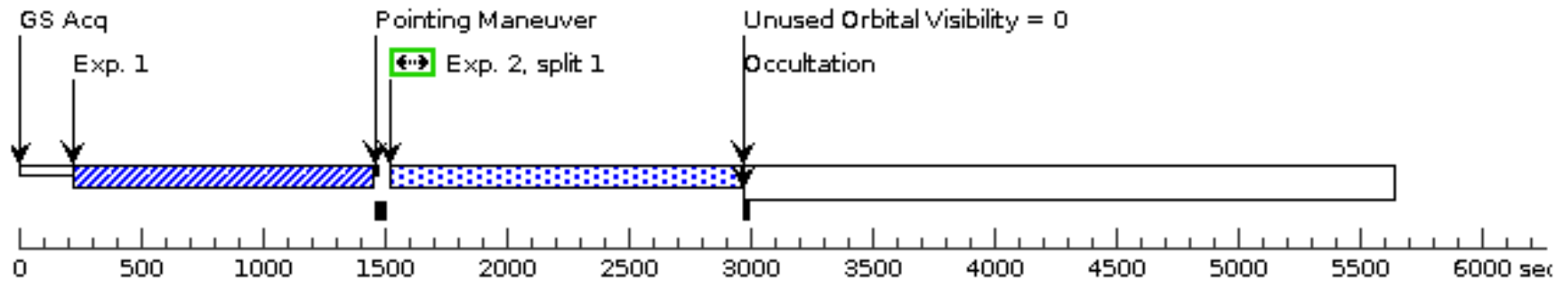


Proposal 18435 - J0135 (02) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J0135 (02) Wed Aug 19 15:05:13 GMT 2026 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	J0135+2206	RA: 01 35 40.1600 (23.9173333d) Dec: +22 06 6.97 (22.10194d) Equinox: J2000 Comments: $F(1216*(1+z) = 1581) = 2e-16$ $F(912*(1+z) = 1186.0) = 5e-18$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO	Redshift: 0.3004	V=22.01+/-0.18 NUV=20.84+/-0.40	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acquisition (COS.ta.236 6376)	(2) J0135+2206	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				507 Secs (507 Secs)	
									[==>]	[1]
	2	Lyman Cont inuum (COS.sp.236 6377)	(2) J0135+2206	COS/FUV, TIME-TAG, PSA	G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 030			1500 Secs (6177 Secs)	
									[==>1236.0 Secs (Split 1)]	[1]
									[==>1215.0 Secs (Split 2)]	[2]
									[==>1215.0 Secs (Split 3)]	
									[==>2511.0 Secs (Split 4)]	[3]
	3	Ly-alpha (COS.sp.236 6380)	(2) J0135+2206	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 013			1200 Secs (4608 Secs)	
									[==>1103.0 Secs (Split 1)]	
									[==>1201.0 Secs (Split 2)]	[4]
									[==>1151.0 Secs (Split 3)]	
									[==>1153.0 Secs (Split 4)]	[5]

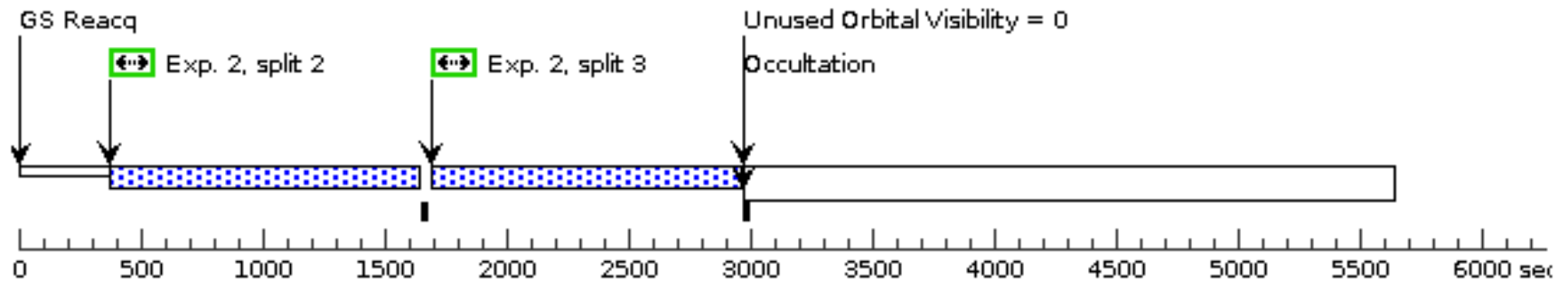
Orbit 1

Server Version: 20260618



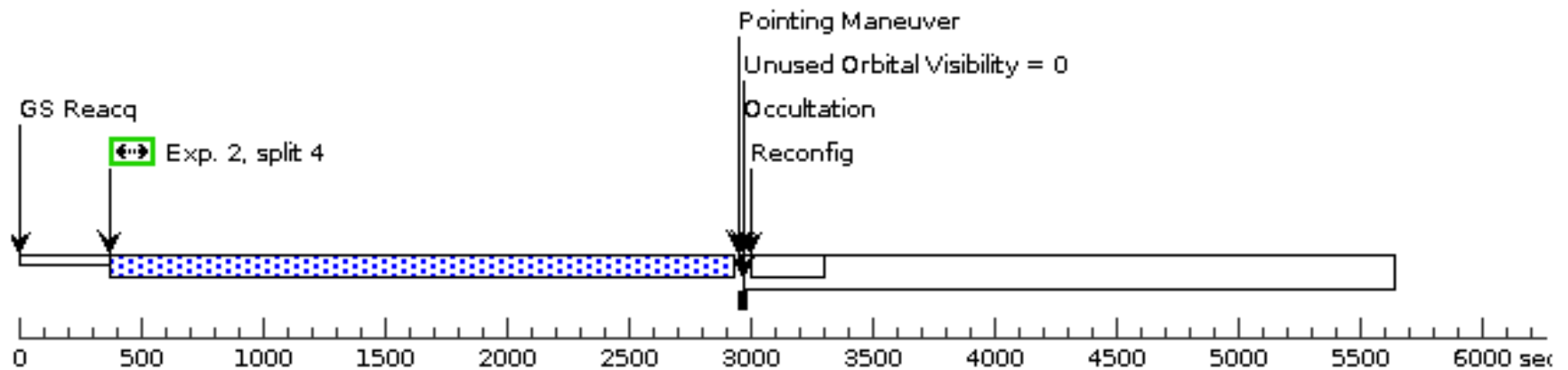
Orbit 2

Server Version: 20260618



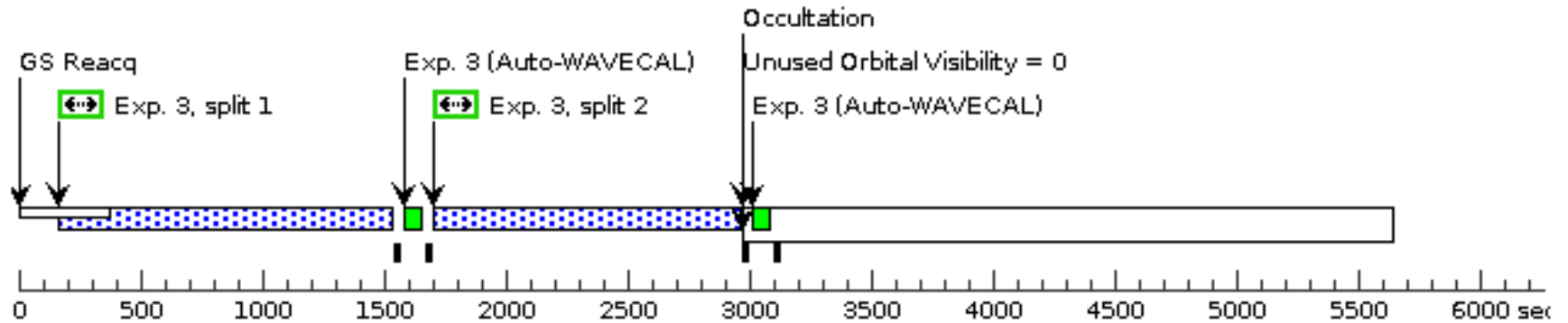
Orbit 3

Server Version: 20260618



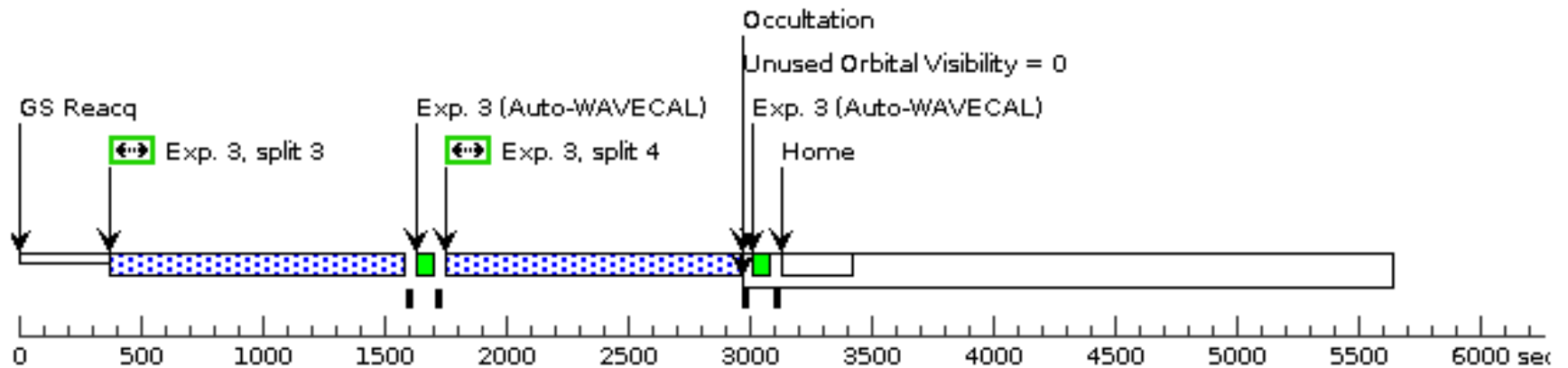
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

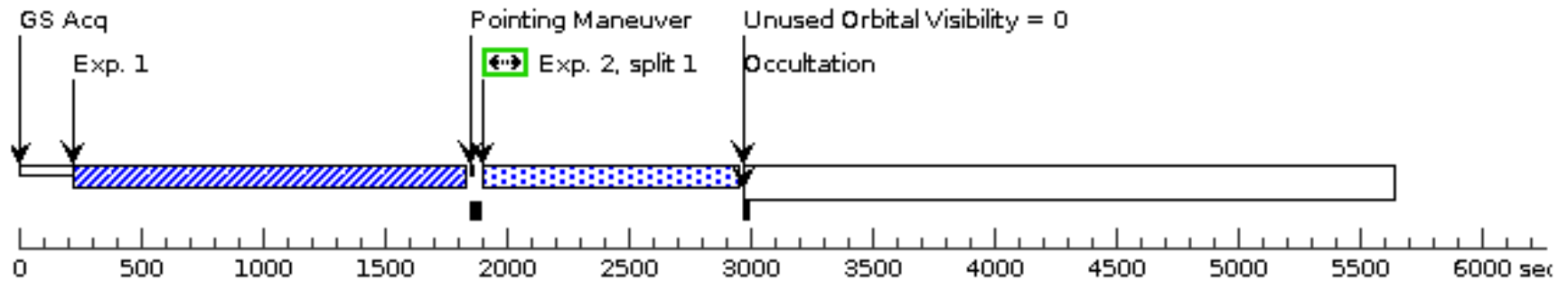


Proposal 18435 - J0142 (03) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J0142 (03)										Wed Aug 19 15:05:13 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(3)	J0142+0641	RA: 01 42 19.1300 (25.5797083d)		Redshift: 0.3836		V=21.5+/-0.07		Reference Frame: ICRS			
			Dec: +06 41 30.87 (6.69191d)				NUV=22.50+/-0.64					
			Equinox: J2000									
			Comments: $F(1216*(1+z) = 1682.5) = 3.85e-17$ $F(912*(1+z) = 1261.8) = 1.3e-18$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	Acquisition (COS.ta.236 6382)	(3) J0142+0641	COS/NUV, ACQ/IMAGE, PSA		MIRRORA				700 Secs (700 Secs)		
										[==>]		[1]
	2	Lyman Cont inuum (COS.sp.236 6385)	(3) J0142+0641	COS/FUV, TIME-TAG, PSA		G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 037			1500 Secs (5809 Secs)		
										[==>848.0 Secs (Split 1)]		[1]
										[==>1214.0 Secs (Split 2)]		[2]
										[==>1214.0 Secs (Split 3)]		
										[==>2533.0 Secs (Split 4)]		[3]
	3	Ly-alpha (COS.sp.236 6386)	(3) J0142+0641	COS/FUV, TIME-TAG, PSA		G160M 1589 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 694			1200 Secs (4580 Secs)		
										[==>1091.0 Secs (Split 1)]		
										[==>1187.0 Secs (Split 2)]		[4]
										[==>1151.0 Secs (Split 3)]		
									[==>1151.0 Secs (Split 4)]		[5]	

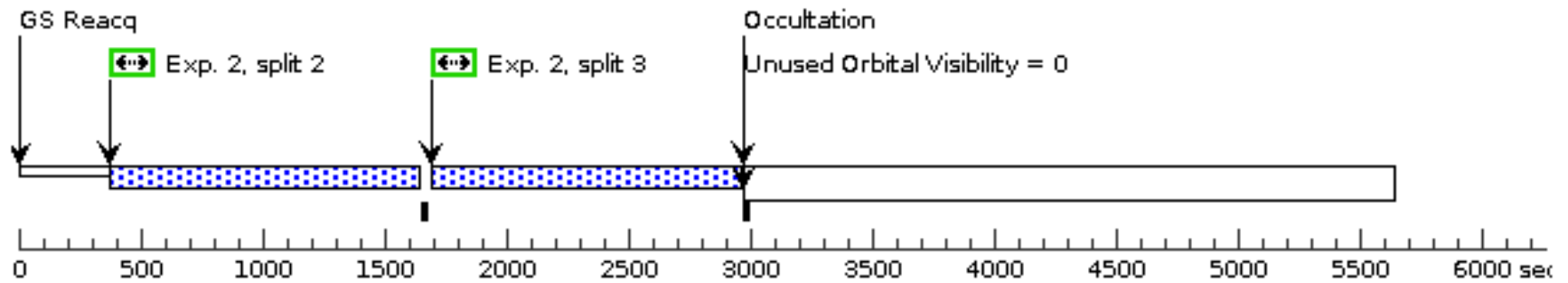
Orbit 1

Server Version: 20260618



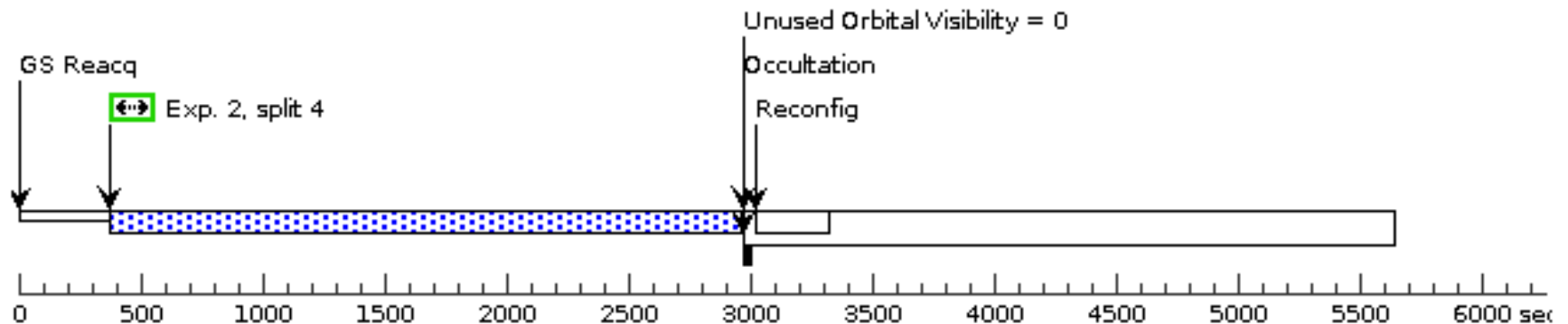
Orbit 2

Server Version: 20260618



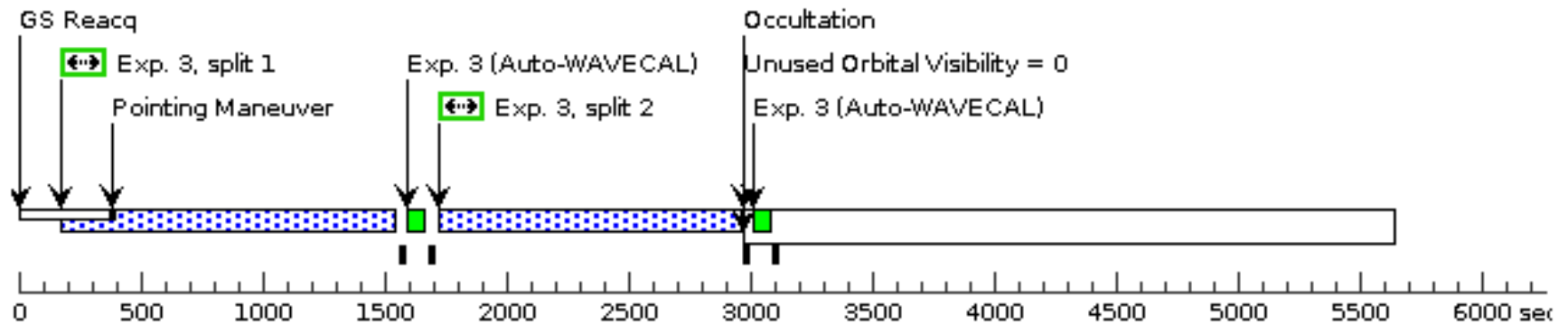
Orbit 3

Server Version: 20260618



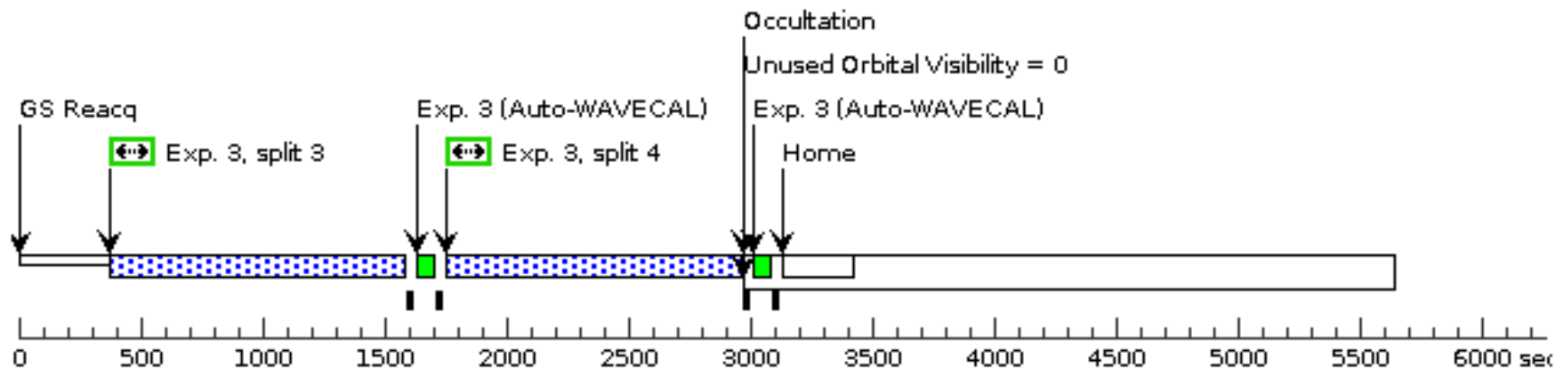
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

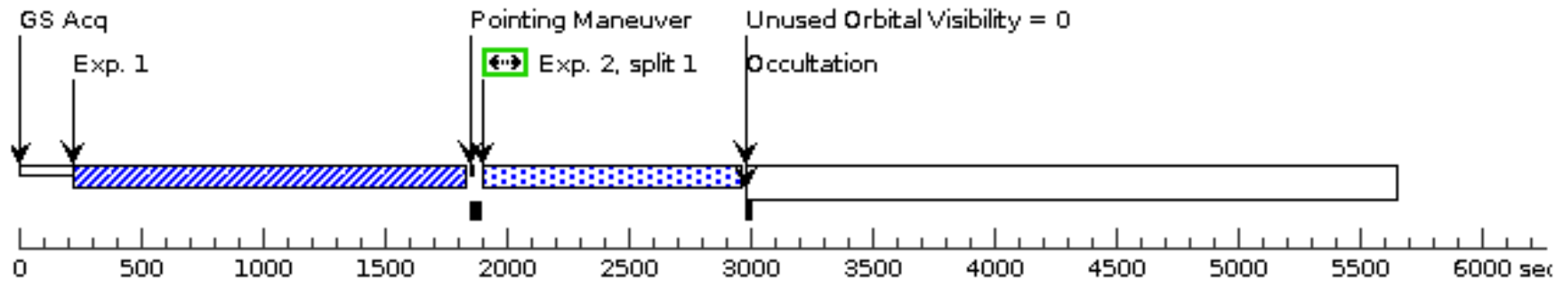


Proposal 18435 - J0149 (04) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J0149 (04)										Wed Aug 19 15:05:13 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(4)	J0149+2935	RA: 01 49 14.4500 (27.3102083d)			Redshift: 0.3103		V=22.09+/-0.05		Reference Frame: ICRS		
			Dec: +29 35 48.54 (29.59682d)					NUV=22.46+/-0.64				
			Equinox: J2000									
			Comments: $F(1216*(1+z) = 1593.3) = 4.45e-17$ $F(912*(1+z) = 1195.0) = 1.03e-17$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	Acquisition (COS.ta.236 6387)	(4) J0149+2935	COS/NUV, ACQ/IMAGE, PSA		MIRRORA				700 Secs (700 Secs)		
										[==>]		[1]
	2	Lyman Cont inuum (COS.sp.236 6388)	(4) J0149+2935	COS/FUV, TIME-TAG, PSA		G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 020			1500 Secs (5827 Secs)		
										[==>854.0 Secs (Split 1)]		[1]
										[==>1214.0 Secs (Split 2)]		
										[==>1220.0 Secs (Split 3)]		[2]
										[==>2539.0 Secs (Split 4)]		[3]
	3	Ly-alpha (COS.sp.236 6389)	(4) J0149+2935	COS/FUV, TIME-TAG, PSA		G160M 1533 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 456			1200 Secs (4592 Secs)		
										[==>1091.0 Secs (Split 1)]		
										[==>1193.0 Secs (Split 2)]		[4]
										[==>1151.0 Secs (Split 3)]		
									[==>1157.0 Secs (Split 4)]		[5]	

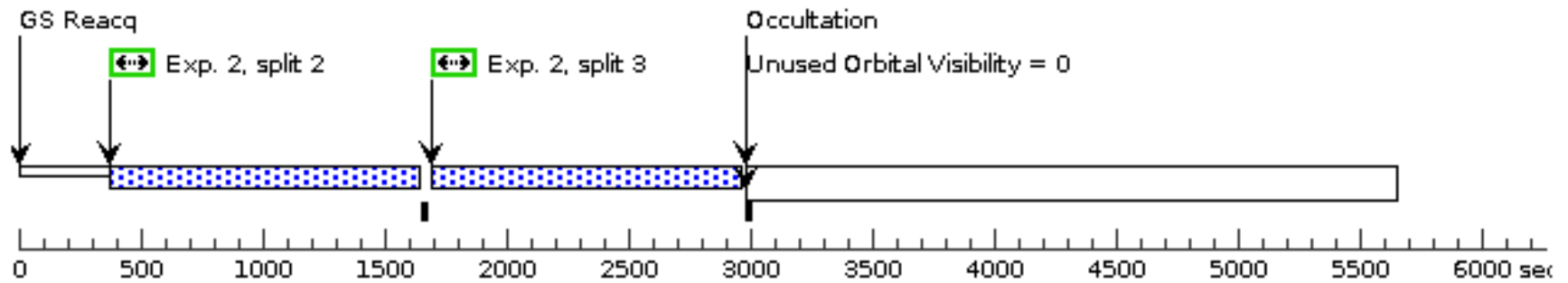
Orbit 1

Server Version: 20260618



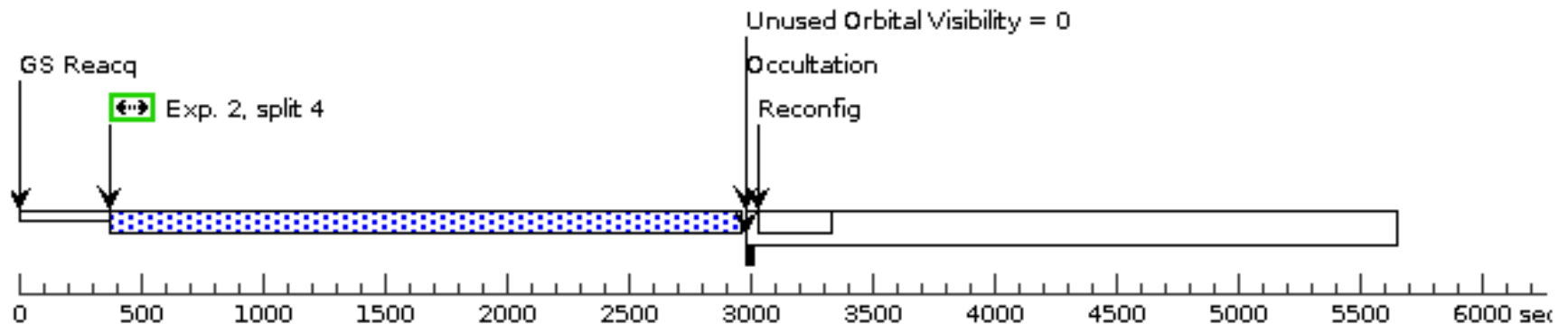
Orbit 2

Server Version: 20260618



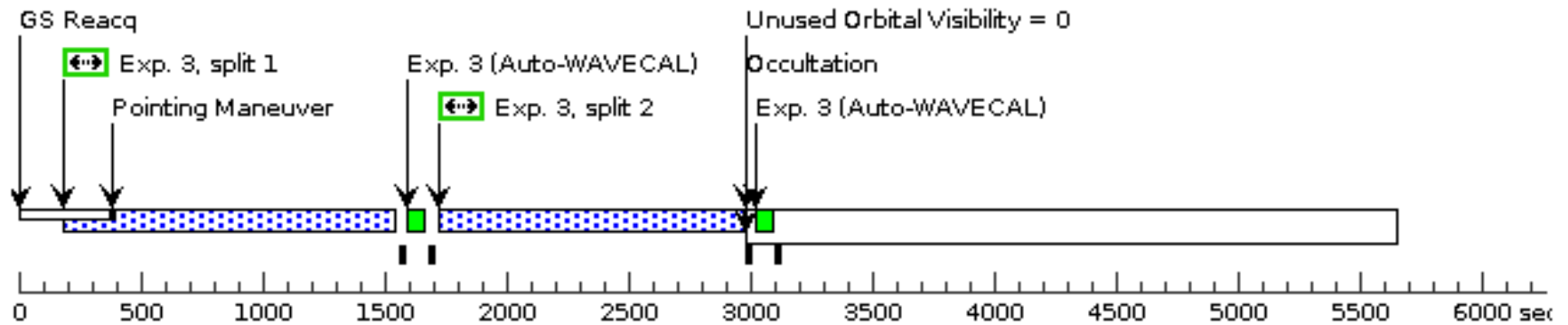
Orbit 3

Server Version: 20260618



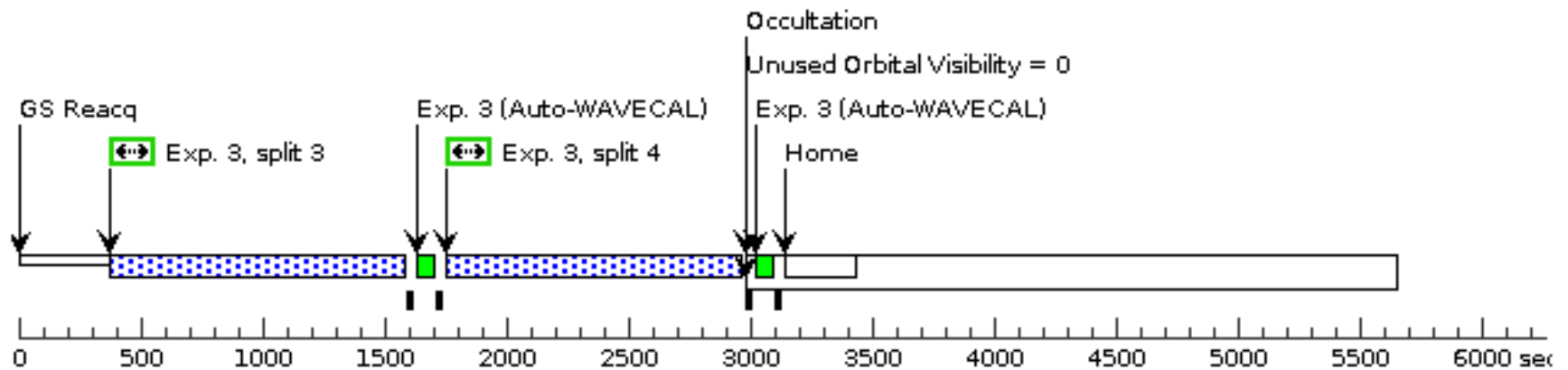
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

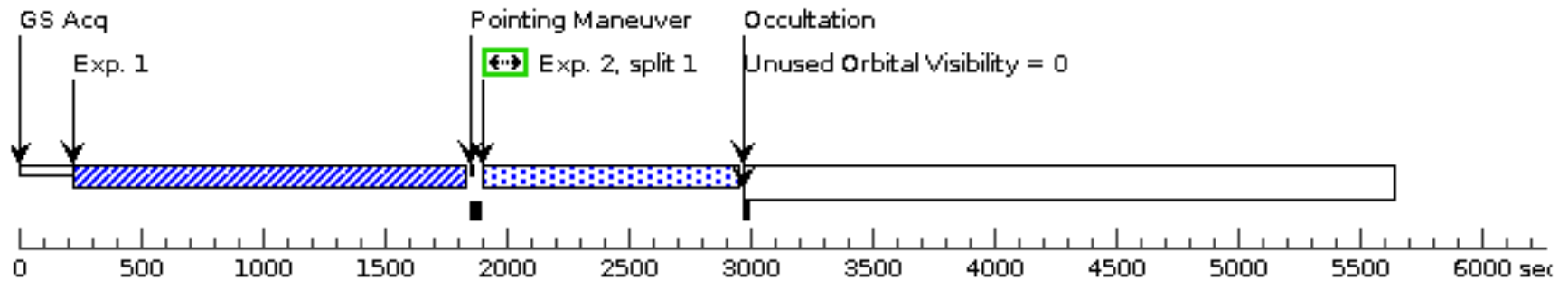


Proposal 18435 - J0741 (05) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J0741 (05)										Wed Aug 19 15:05:13 GMT 2026		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: COS/FUV, COS/NUV												
	Special Requirements: (none)												
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous				
	(5)	J0741+1739	RA: 07 41 37.9400 (115.4080833d)		Redshift: 0.3405		V=21.05+/-0.03		Reference Frame: ICRS				
			Dec: +17 39 50.59 (17.66405d)				FUV=20.97+/-0.19,						
			Equinox: J2000				NUV=21.37+/-0.23						
			Comments: $F(1216*(1+z) = 1630.0) = 1.16e-16$ $F(912*(1+z) = 1222.5) = 3.33e-18$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	Acquisition (COS.ta.236 6390)	(5) J0741+1739	COS/NUV, ACQ/IMAGE, PSA		MIRRORA				700 Secs (700 Secs)			
										[==>]		[1]	
	2	Lyman Cont inuum (COS.sp.236 6391)	(5) J0741+1739	COS/FUV, TIME-TAG, PSA		G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11;				1500 Secs (5806 Secs)		
											[==>847.0 Secs (Split 1)]		[1]
							SEGMENT=A;				[==>1213.0 Secs (Split 2)]		
							BUFFER-TIME=12 033				[==>1214.0 Secs (Split 3)]		[2]
											[==>2532.0 Secs (Split 4)]		[3]
	3	Ly-alpha (COS.sp.236 6392)	(5) J0741+1739	COS/FUV, TIME-TAG, PSA		G160M 1533 A	FP-POS=ALL; FLASH=NO;				1200 Secs (4578 Secs)		
							SEGMENT=BOTH;				[==>1091.0 Secs (Split 1)]		
						LIFETIME-POS=L P10;				[==>1186.0 Secs (Split 2)]		[4]	
						BUFFER-TIME=17 250				[==>1150.0 Secs (Split 3)]			
										[==>1151.0 Secs (Split 4)]		[5]	

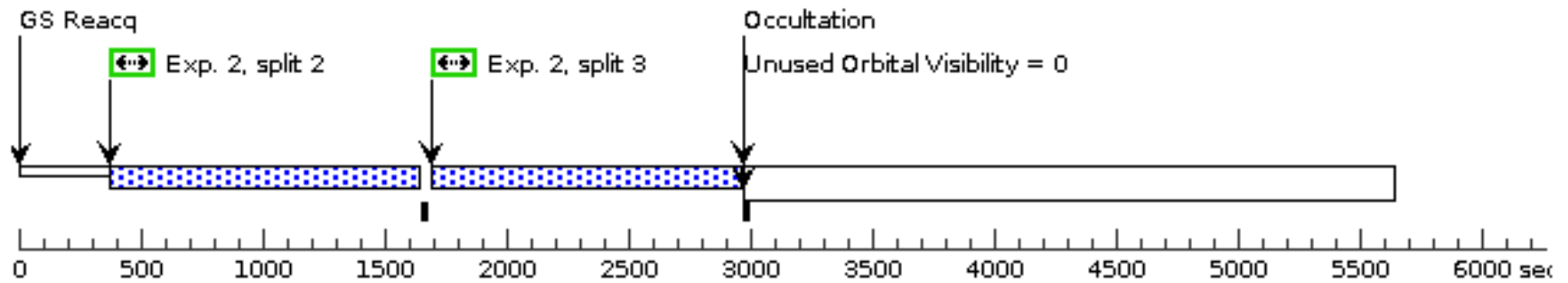
Orbit 1

Server Version: 20260618



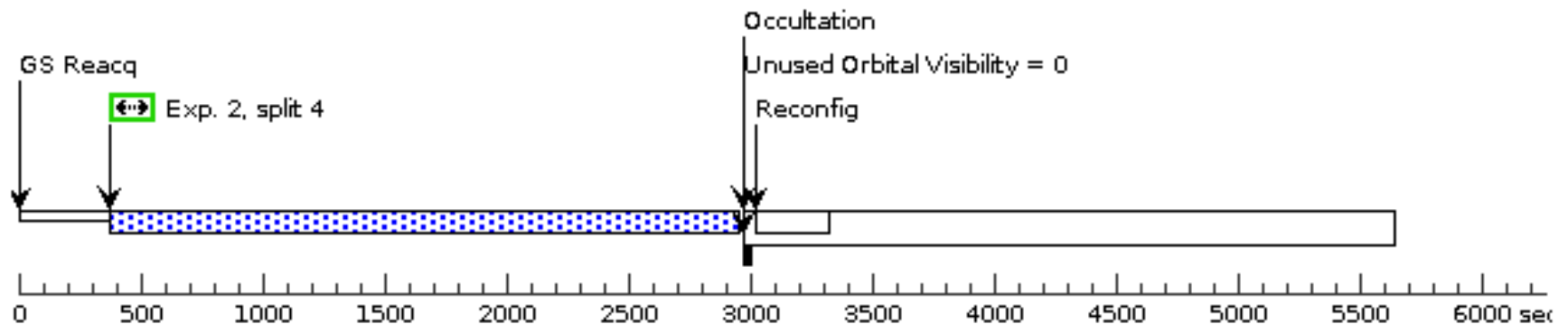
Orbit 2

Server Version: 20260618



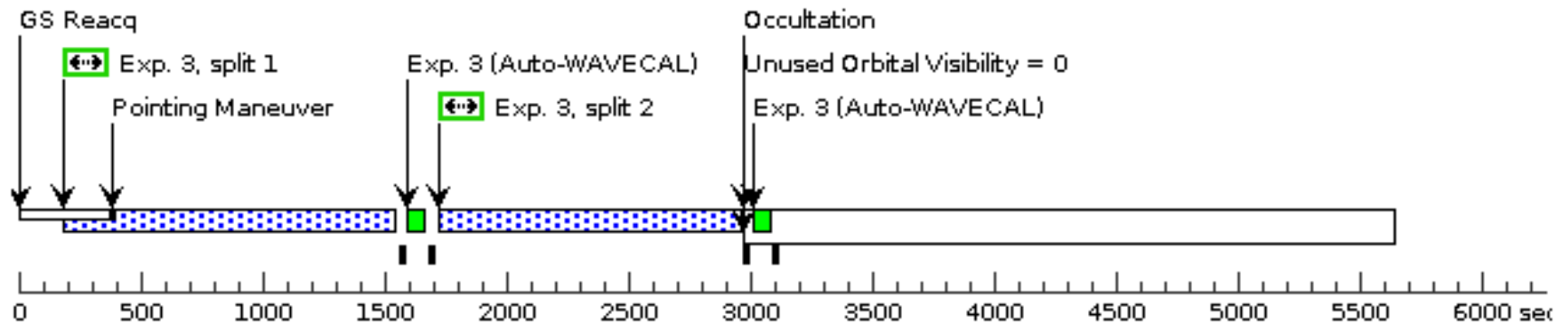
Orbit 3

Server Version: 20260618



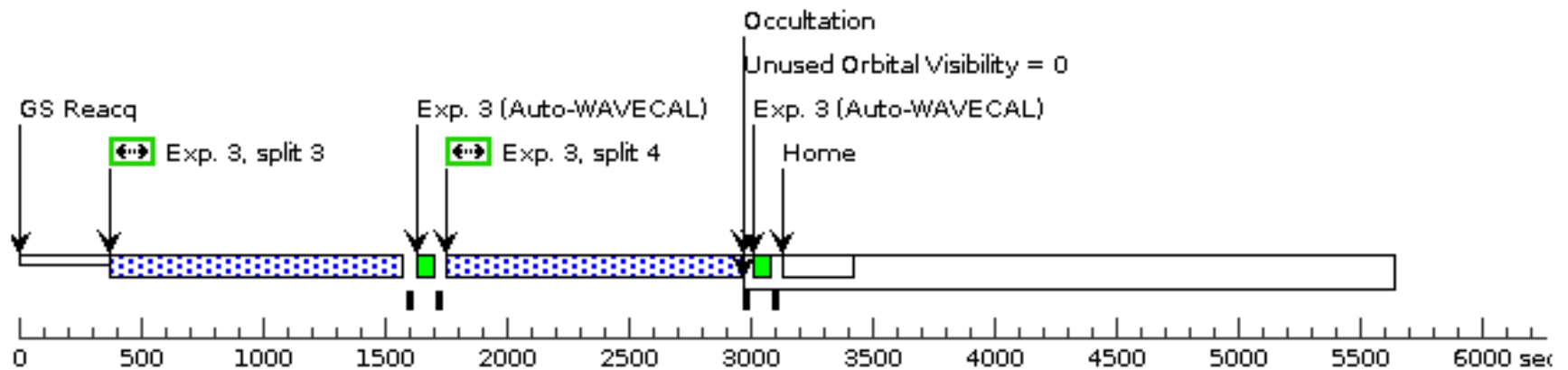
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

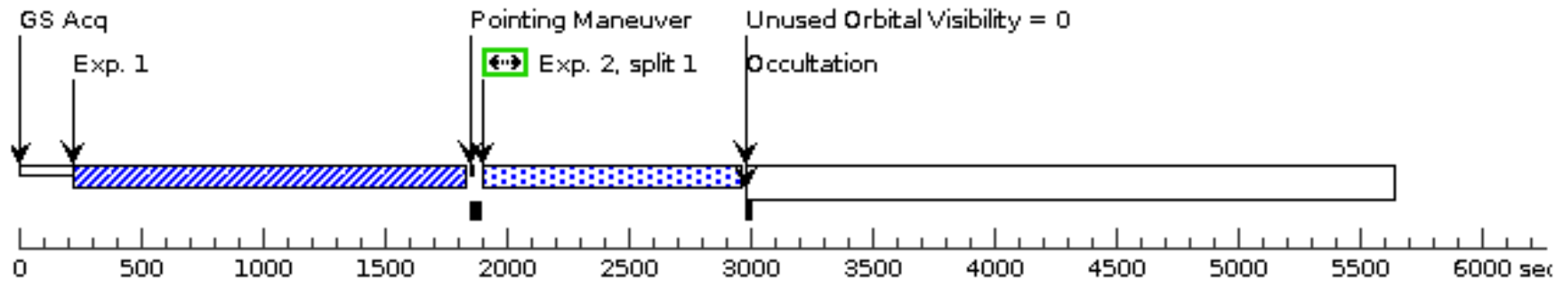


Proposal 18435 - J0933 (06) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J0933 (06) Wed Aug 19 15:05:13 GMT 2026									
	Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	J0933+3413	RA: 09 33 22.5100 (143.3437917d) Dec: +34 13 35.03 (34.22640d) Equinox: J2000 Comments: $F(1216*(1+z) = 1650.6) = 4.85e-17$ $F(912*(1+z) = 1237.9) = 7.52e-18$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO	Redshift: 0.3574	V=22.12+/-0.08 NUV=22.29+/-0.51	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acquisition (COS.ta.236 6393)	(6) J0933+3413	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				700 Secs (700 Secs)	
									[==>]	[1]
	2	Lyman Cont inuum (COS.sp.236 6394)	(6) J0933+3413	COS/FUV, TIME-TAG, PSA	G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 026			1500 Secs (5839 Secs)	
									[==>858.0 Secs (Split 1)]	[1]
									[==>1214.0 Secs (Split 2)]	
									[==>1224.0 Secs (Split 3)]	[2]
									[==>2543.0 Secs (Split 4)]	[3]
	3	Ly-alpha (COS.sp.236 6395)	(6) J0933+3413	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 666			1200 Secs (4600 Secs)	
									[==>1096.0 Secs (Split 1)]	
									[==>1192.0 Secs (Split 2)]	[4]
									[==>1151.0 Secs (Split 3)]	
									[==>1161.0 Secs (Split 4)]	[5]

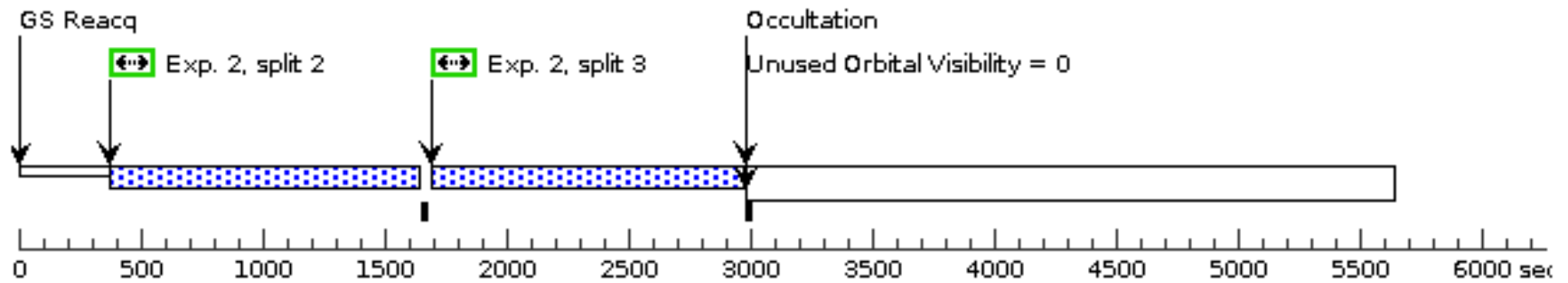
Orbit 1

Server Version: 20260618



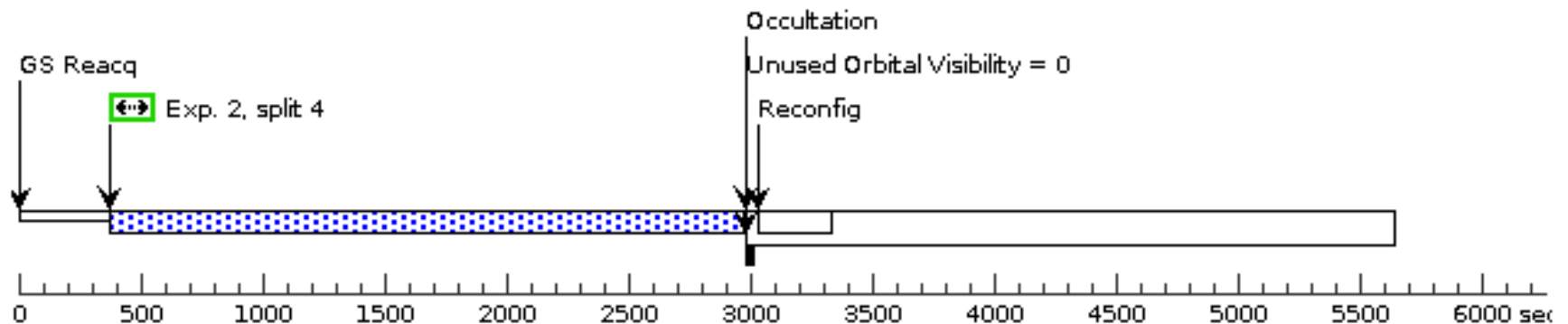
Orbit 2

Server Version: 20260618



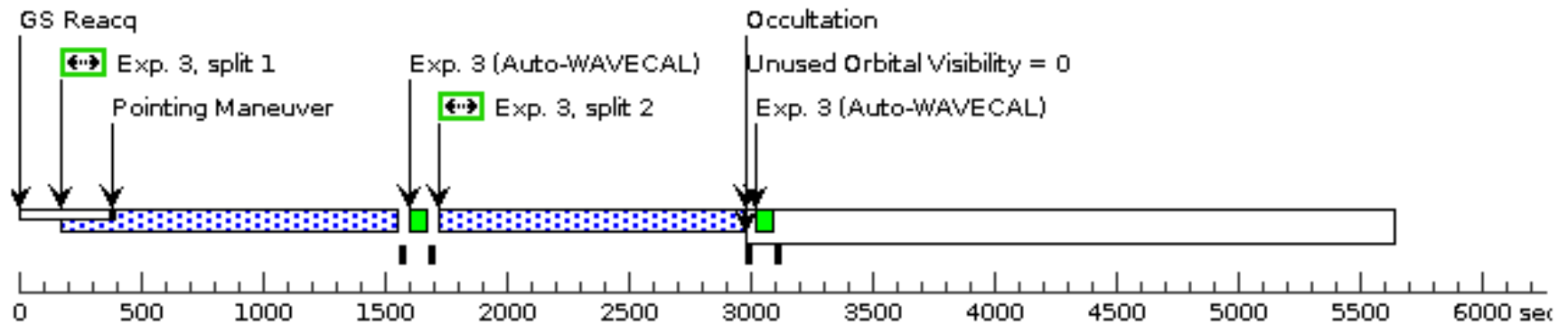
Orbit 3

Server Version: 20260618



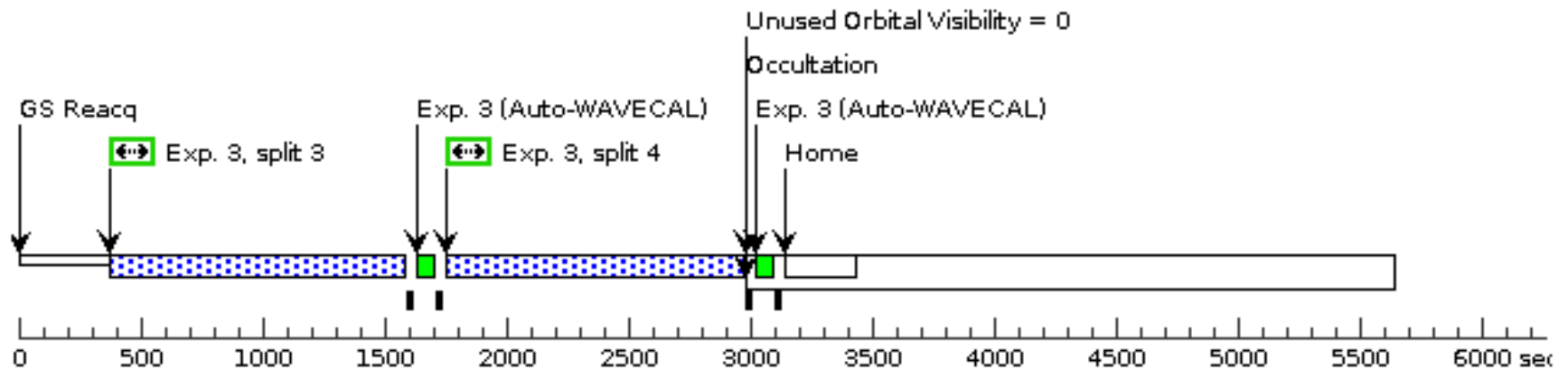
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

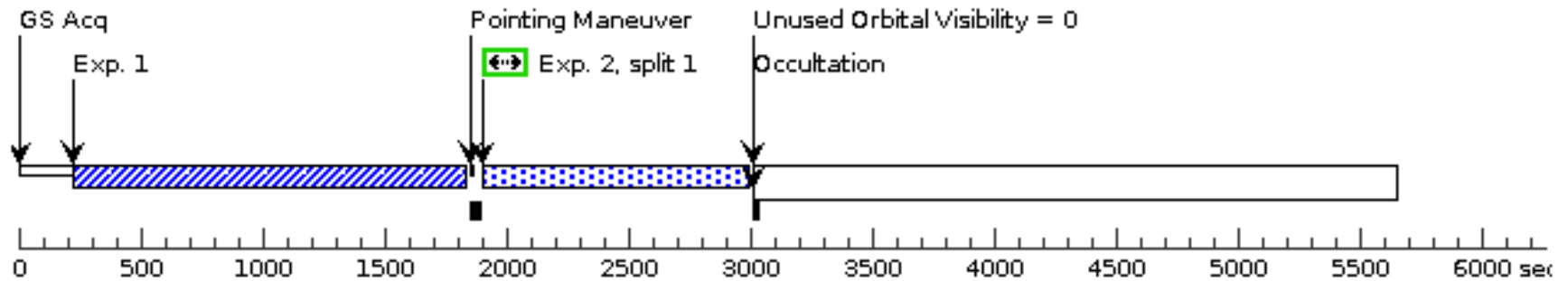


Proposal 18435 - J1056 (07) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J1056 (07)										Wed Aug 19 15:05:13 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(7)	J1055+4758	RA: 10 56 42.4200 (164.1767500d)		Redshift: 0.4347		V=21.45+/-0.04		Reference Frame: ICRS			
			Dec: +47 58 50.81 (47.98078d)				FUV=21.74+/-0.54,					
			Equinox: J2000				NUV=21.35+/-0.33					
	Comments: $F(1216*(1+z) = 1744) = 1.03e-16$											
	$F(912*(1+z) = 1308) = 3.02e-18$											
	Category=GALAXY											
	Description=[EMISSION LINE NEBULA, STARBURST]											
	Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	Acquisition (COS.ta.236 6297)	(7) J1055+4758	COS/NUV, ACQ/IMAGE, PSA		MIRRORA				700 Secs (700 Secs)		
										[==>]		[1]
	2	Lyman Cont inuum (COS.sp.236 6289)	(7) J1055+4758	COS/FUV, TIME-TAG, PSA		G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 034			1200 Secs (5887 Secs)		
										[==>882.0 Secs (Split 1)]		[1]
										[==>2567.0 Secs (Split 2)]		[2]
										[==>1219.0 Secs (Split 3)]		
										[==>1219.0 Secs (Split 4)]		[3]
	3	Ly-alpha (COS.sp.236 6285)	(7) J1055+4758	COS/FUV, TIME-TAG, PSA		G160M 1623 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 585			1200 Secs (4672 Secs)		
										[==>1168.0 Secs (Split 1)]		
										[==>1168.0 Secs (Split 2)]		[4]
										[==>1168.0 Secs (Split 3)]		
									[==>1168.0 Secs (Split 4)]		[5]	

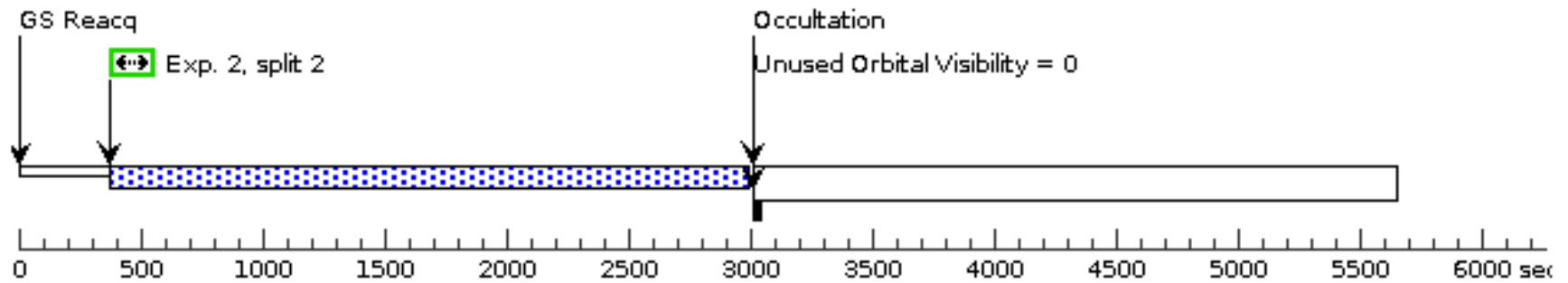
Orbit 1

Server Version: 20260618



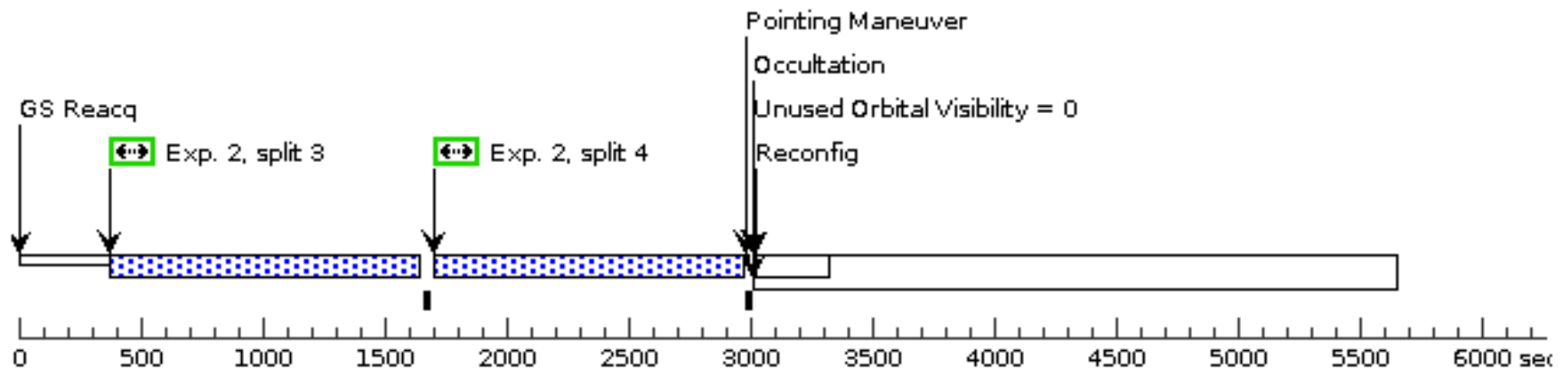
Orbit 2

Server Version: 20260618



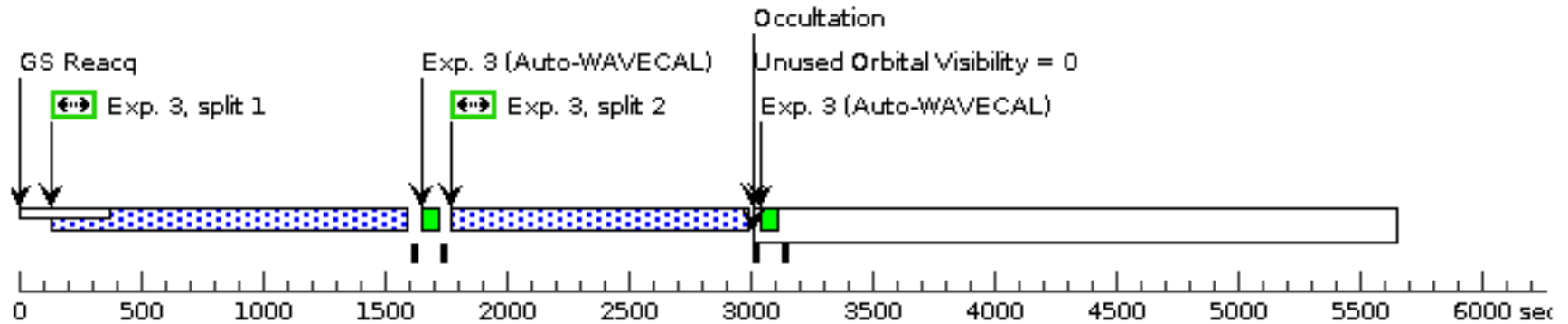
Orbit 3

Server Version: 20260618



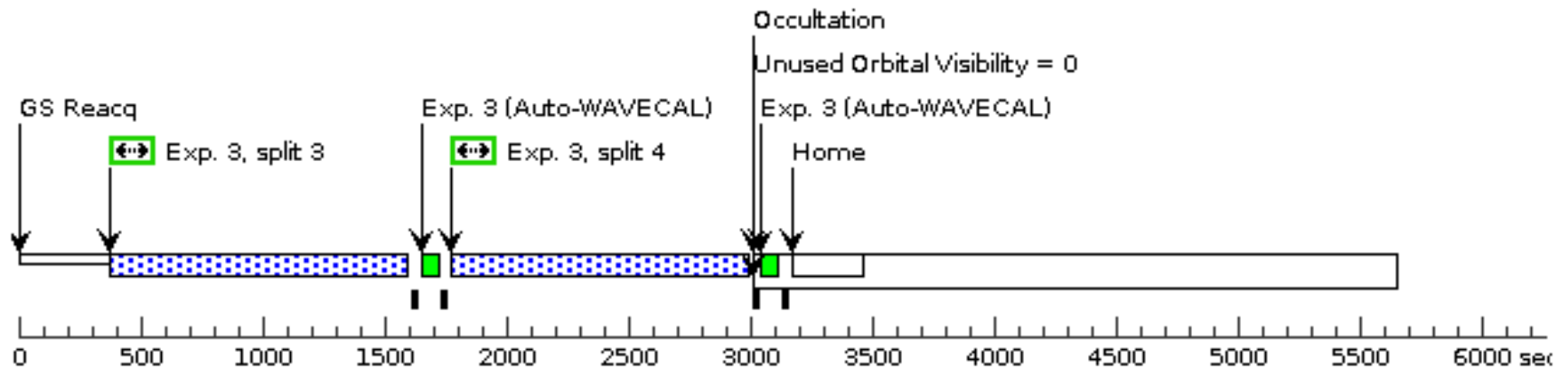
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

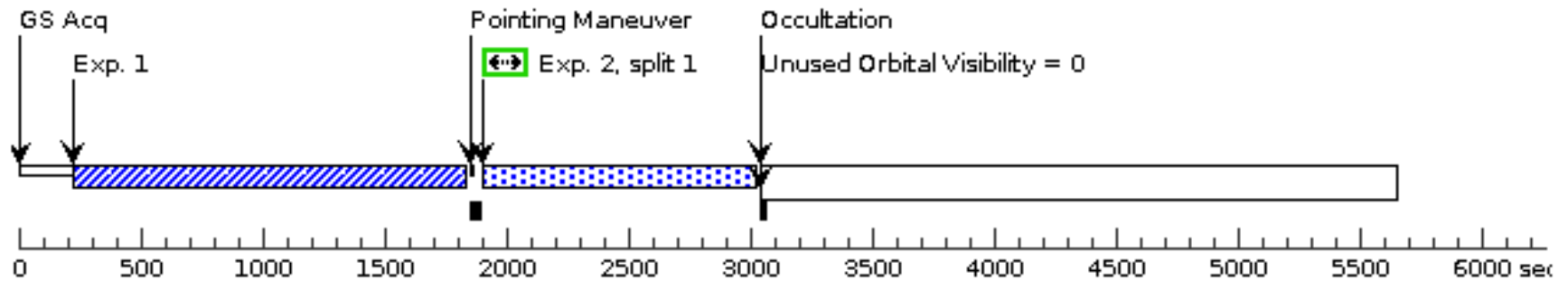


Proposal 18435 - J1155 (08) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J1155 (08)										Wed Aug 19 15:05:13 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(8)	J1155+5922	RA: 11 55 23.8200 (178.8492500d)		Redshift: 0.3589		V=22.02+/-0.05		Reference Frame: ICRS			
			Dec: +59 22 3.95 (59.36776d)				FUV=22.38+/-0.56,					
			Equinox: J2000				NUV=21.60+/-0.13					
	Comments: $F(1216*(1+z) = 1652) = 9.13e-17$ $F(912*(1+z) = 1239.3) = 1.89e-17$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	Acquisition (COS.ta.236 6303)	(8) J1155+5922	COS/NUV, ACQ/IMAGE, PSA		MIRRORA				700 Secs (700 Secs)		
										[==>]		[1]
	2	Lyman Cont inuum (COS.sp.236 6305)	(8) J1155+5922	COS/FUV, TIME-TAG, PSA		G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 005			1500 Secs (5986 Secs)		
										[==>915.0 Secs (Split 1)]		[1]
										[==>1247.0 Secs (Split 2)]		
										[==>1248.0 Secs (Split 3)]		[2]
										[==>2576.0 Secs (Split 4)]		[3]
	3	Ly-alpha (COS.sp.236 6306)	(8) J1155+5922	COS/FUV, TIME-TAG, PSA		G160M 1577 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 560			1200 Secs (4738 Secs)		
										[==>1137.0 Secs (Split 1)]		
										[==>1232.0 Secs (Split 2)]		[4]
										[==>1184.0 Secs (Split 3)]		
									[==>1185.0 Secs (Split 4)]		[5]	

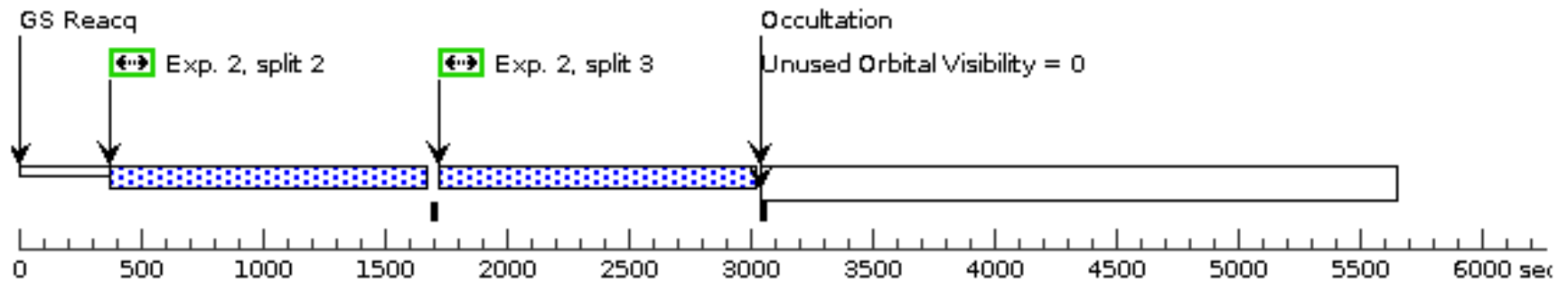
Orbit 1

Server Version: 20260618



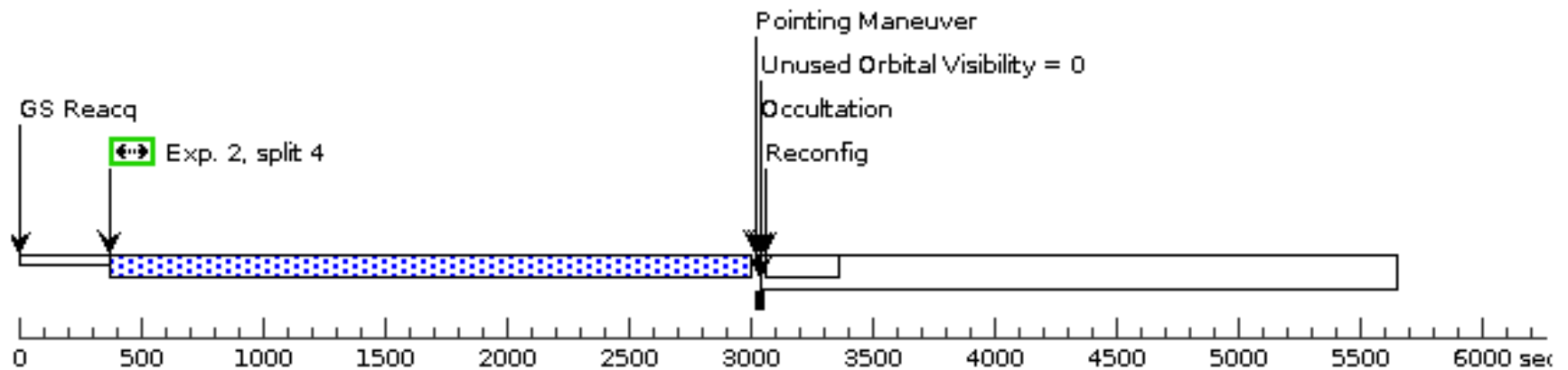
Orbit 2

Server Version: 20260618



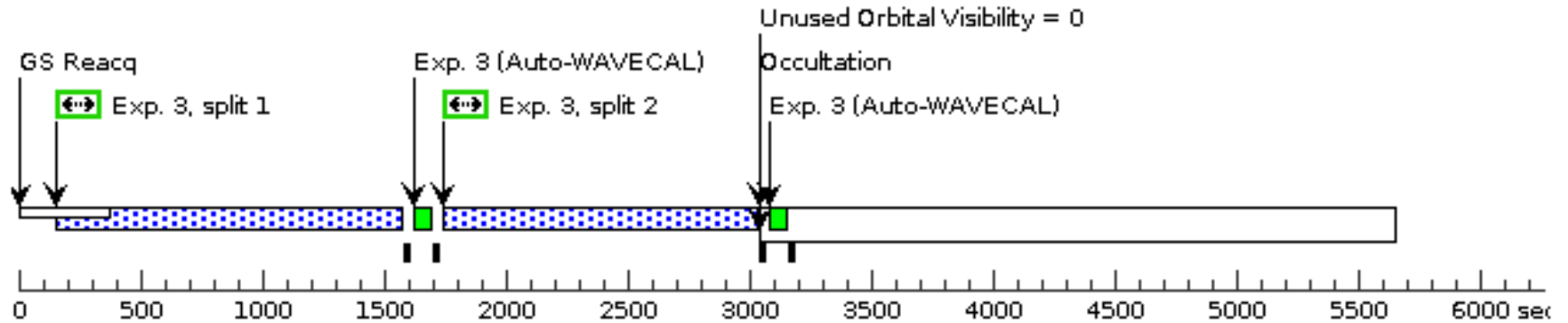
Orbit 3

Server Version: 20260618



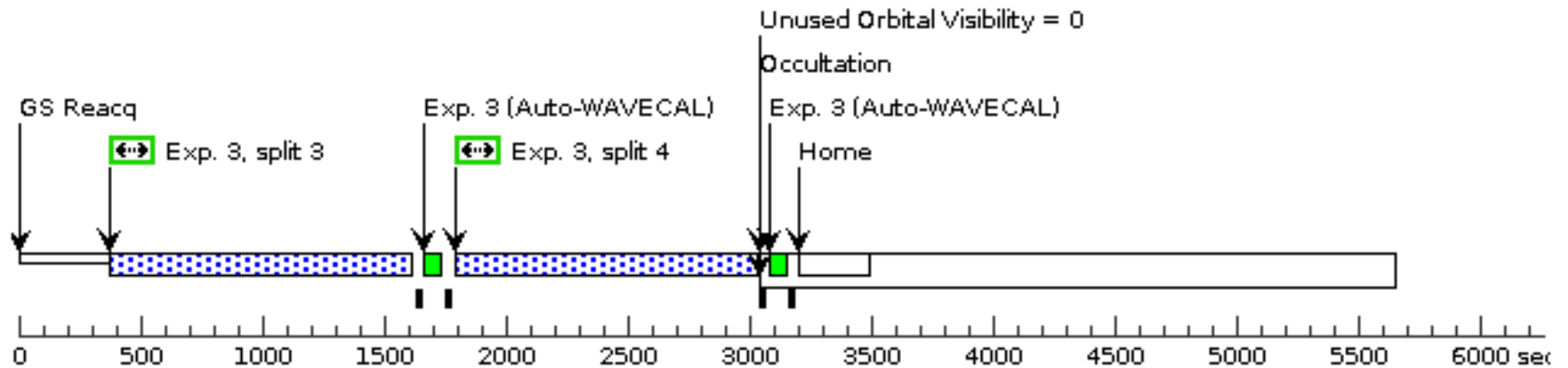
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

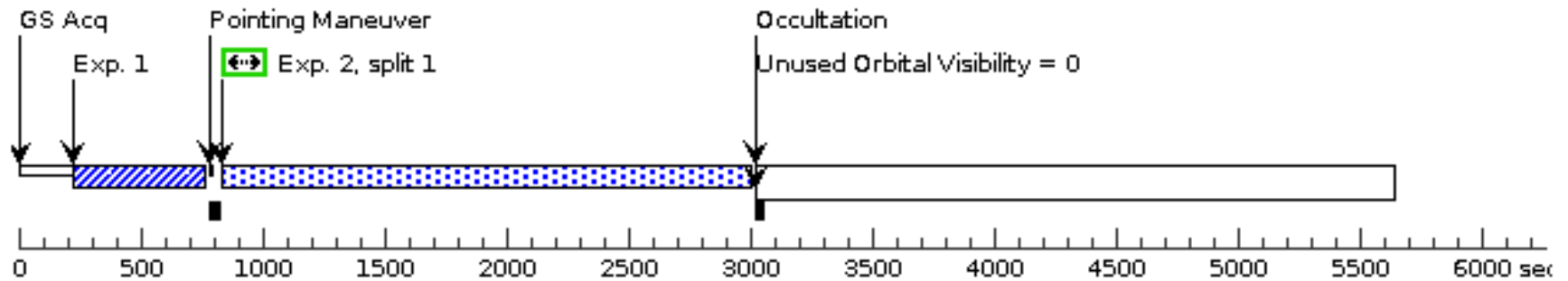


Proposal 18435 - J1330 (09) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J1330 (09)										Wed Aug 19 15:05:13 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(9)	J1330+5213	RA: 13 30 47.0800 (202.6961667d)		Redshift: 0.3316		V=21.28+/-0.04		Reference Frame: ICRS			
			Dec: +52 13 58.53 (52.23293d)				NUV = 19.70 +/- 0.1,					
			Equinox: J2000				FUV = 21.00+/- 0.29					
	Comments: $F(1216*(1+z) = 1619) = 5.47e-16$											
	$F(912*(1+z) = 1214) = 1.97e-17$											
	Category=GALAXY											
	Description=[EMISSION LINE NEBULA, STARBURST]											
	Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	Acquisition (COS.ta.236 6309)	(9) J1330+5213	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				165 Secs (165 Secs)			
									[==>]		[1]	
	2	Lyman Cont inuum (COS.sp.236 6310)	(9) J1330+5213	COS/FUV, TIME-TAG, PSA	G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=11 121			1500 Secs (7026 Secs)			
									[==>1967.0 Secs (Split 1)]		[1]	
									[==>1234.0 Secs (Split 2)]		[2]	
									[==>1243.0 Secs (Split 3)]			
									[==>2582.0 Secs (Split 4)]		[3]	
	3	Ly-alpha (COS.sp.236 6311)	(9) J1330+5213	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=16 513			1200 Secs (4678 Secs)			
									[==>1116.0 Secs (Split 1)]			
									[==>1211.0 Secs (Split 2)]		[4]	
									[==>1175.0 Secs (Split 3)]			
								[==>1176.0 Secs (Split 4)]		[5]		

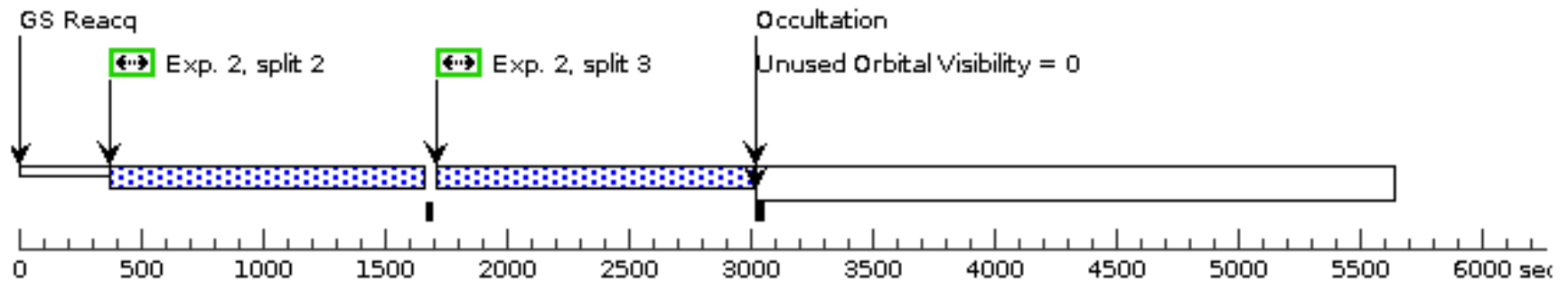
Orbit 1

Server Version: 20260618



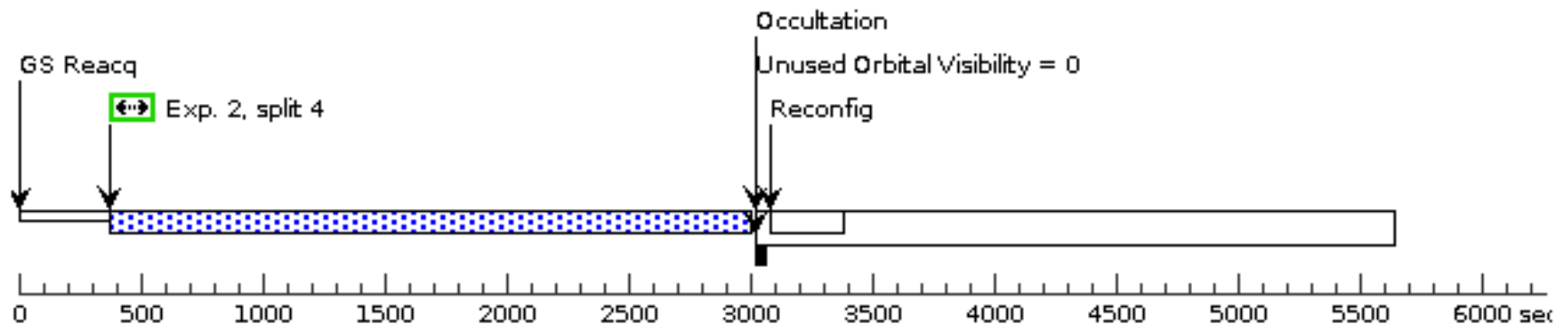
Orbit 2

Server Version: 20260618



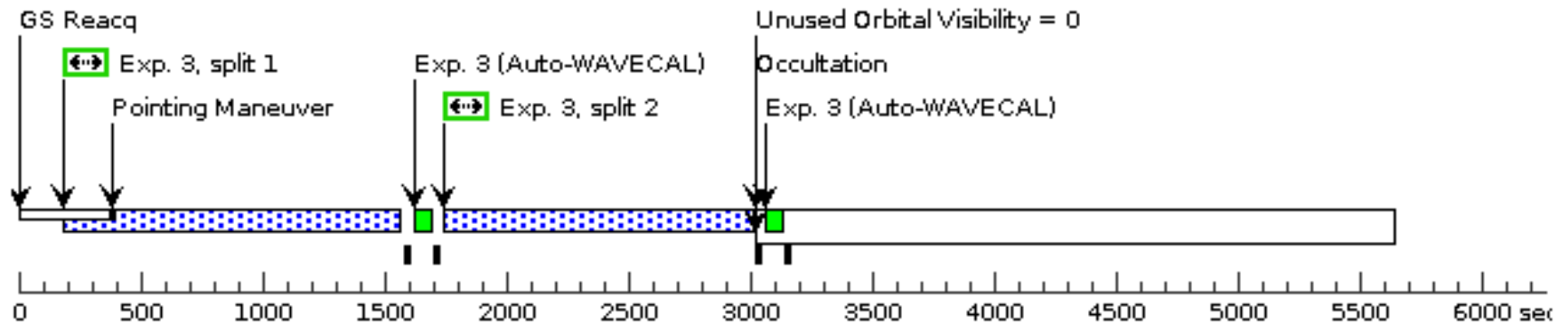
Orbit 3

Server Version: 20260618



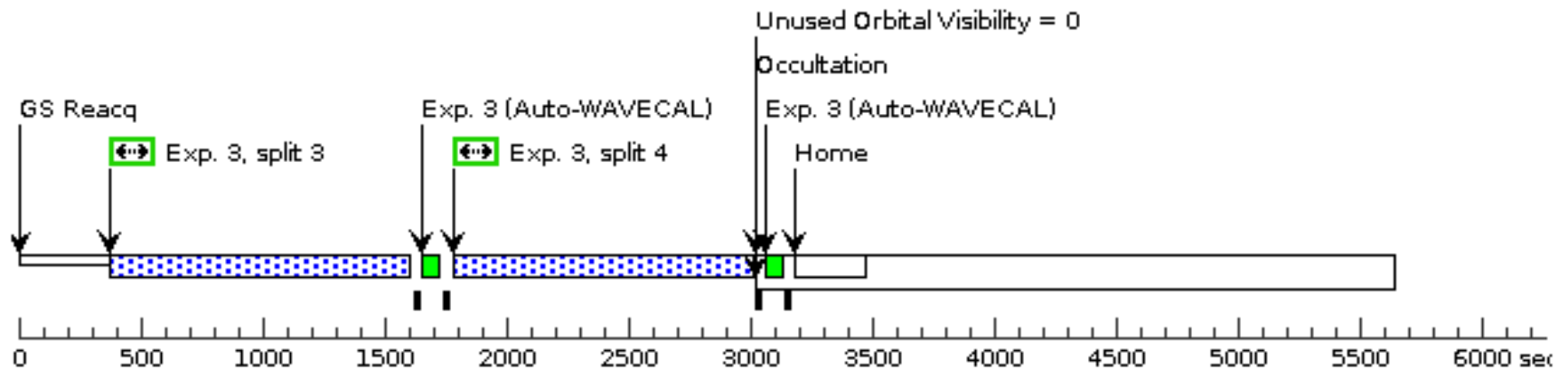
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

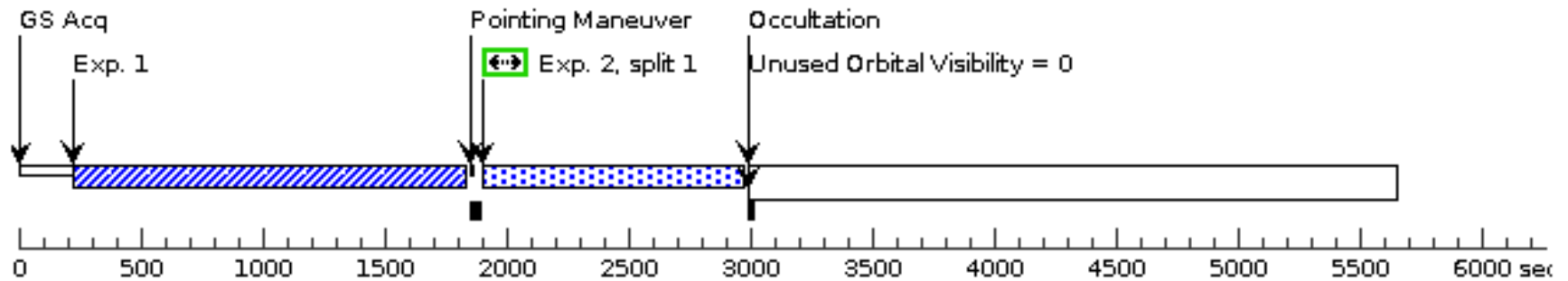


Proposal 18435 - J1431 (10) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J1431 (10) Wed Aug 19 15:05:13 GMT 2026 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	J1431+3825	RA: 14 31 7.1000 (217.7795833d) Dec: +38 25 33.95 (38.42610d) Equinox: J2000 Comments: $F(1216*(1+z) = 1616) = 6.03e-17$ $F(912*(1+z) = 1212) = 6.62e-18$ Category=GALAXY Description=[EMISSION LINE NEBULA, STARBURST] Extended=NO	Redshift: 0.3289	V=22.22+/-0.10 NUV = 22.10	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Acquisition (COS.ta.236 6312)	(10) J1431+3825	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				700 Secs (700 Secs)	
									[==>]	[1]
	2	Lyman Cont inuum (COS.sp.236 6354)	(10) J1431+3825	COS/FUV, TIME-TAG, PSA	G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 027			1500 Secs (5854 Secs)	
									[==>863.0 Secs (Split 1)]	[1]
									[==>1221.0 Secs (Split 2)]	
									[==>1222.0 Secs (Split 3)]	[2]
									[==>2548.0 Secs (Split 4)]	[3]
	3	Ly-alpha (COS.sp.236 6355)	(10) J1431+3825	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 410			1200 Secs (4610 Secs)	
									[==>1099.0 Secs (Split 1)]	
									[==>1194.0 Secs (Split 2)]	[4]
									[==>1158.0 Secs (Split 3)]	
									[==>1159.0 Secs (Split 4)]	[5]

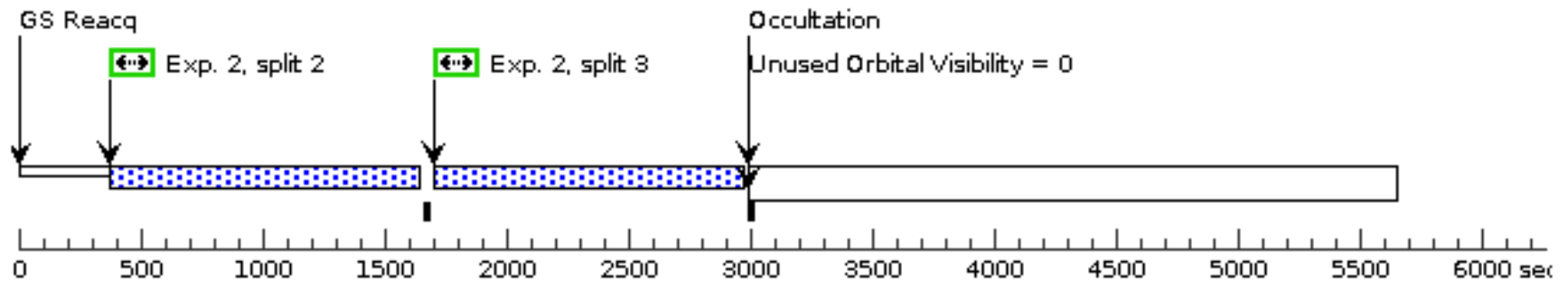
Orbit 1

Server Version: 20260618



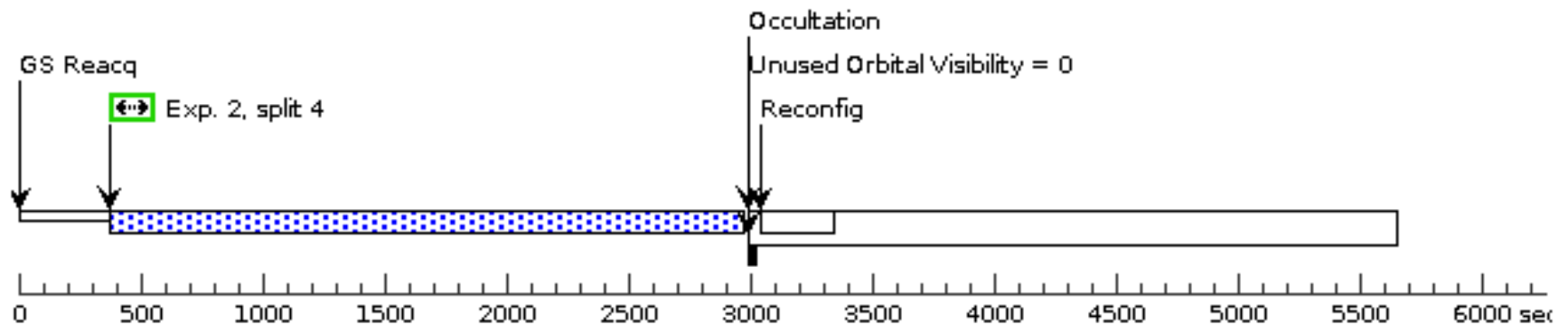
Orbit 2

Server Version: 20260618



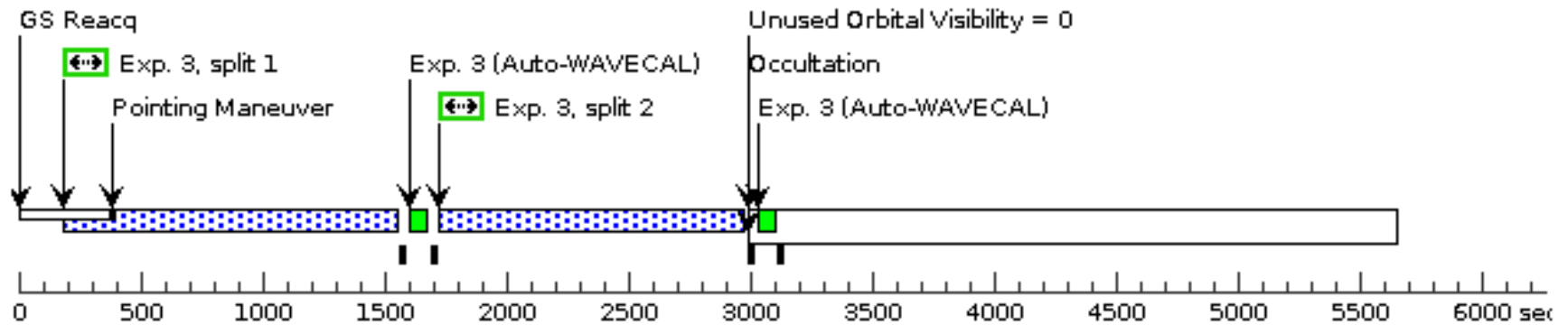
Orbit 3

Server Version: 20260618



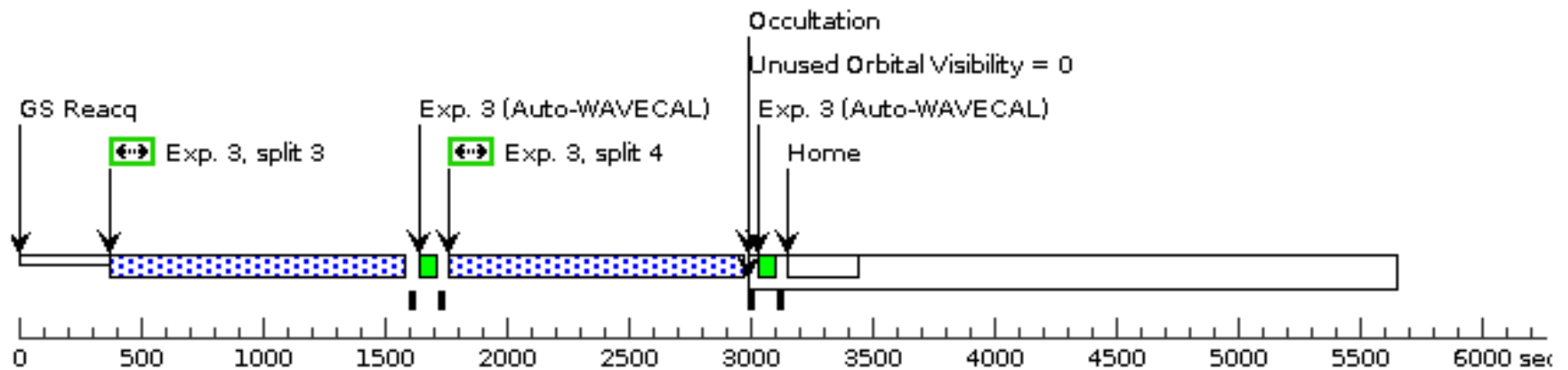
Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

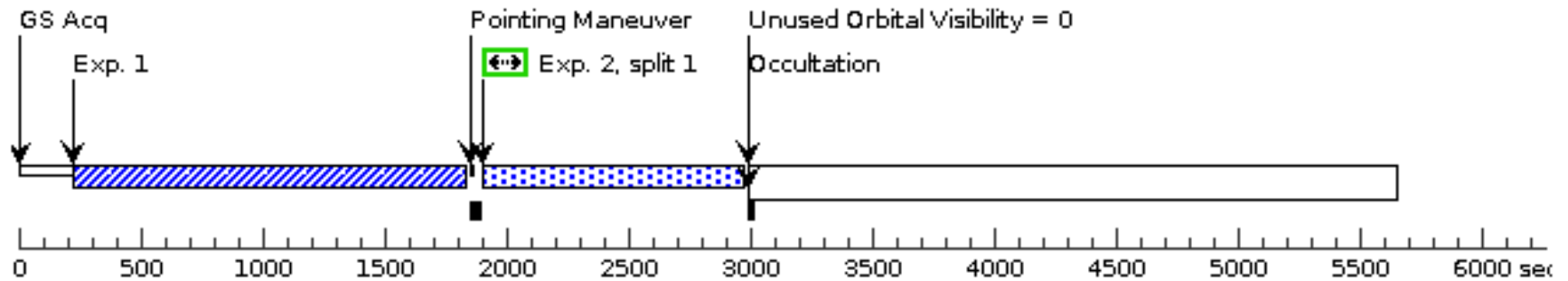


Proposal 18435 - J1458 (11) - Lyman Continuum and Lyman Alpha escape in the high-ionization conditions observed in the Epoch of ...

Visit	Proposal 18435, J1458 (11)										Wed Aug 19 15:05:13 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/FUV, COS/NUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(11)	J1458+3637	RA: 14 58 6.5200 (224.5271667d)		Redshift: 0.3587		V=22.31+/-0.10		Reference Frame: ICRS			
			Dec: +36 37 30.23 (36.62506d)				FUV=22.1+/-0.29,					
			Equinox: J2000				NUV=22.05+/-0.25					
	Comments: $F(1216*(1+z) = 1615) = 6.04e-17$											
	$F(912*(1+z) = 1239) = 4.16e-18$											
	Category=GALAXY											
	Description=[EMISSION LINE NEBULA, STARBURST]											
	Extended=NO											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	Acquisition (COS.ta.236 6358)	(11) J1458+3637	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				700 Secs (700 Secs)			
									[==>]		[1]	
	2	Lyman Cont inuum (COS.sp.236 6360)	(11) J1458+3637	COS/FUV, TIME-TAG, PSA	G140L 800 A	FP-POS=ALL; LIFETIME-POS=L P11; SEGMENT=A; BUFFER-TIME=12 032			1500 Secs (5830 Secs)			
									[==>863.0 Secs (Split 1)]		[1]	
									[==>1221.0 Secs (Split 2)]			
									[==>1222.0 Secs (Split 3)]		[2]	
									[==>2524.0 Secs (Split 4)]		[3]	
	3	Ly-alpha (COS.sp.236 6361)	(11) J1458+3637	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=ALL; FLASH=NO; SEGMENT=BOTH; LIFETIME-POS=L P10; BUFFER-TIME=17 661			1200 Secs (4634 Secs)			
									[==>1158.0 Secs (Split 1)]			
									[==>1159.0 Secs (Split 2)]		[4]	
									[==>1158.0 Secs (Split 3)]			
								[==>1159.0 Secs (Split 4)]		[5]		

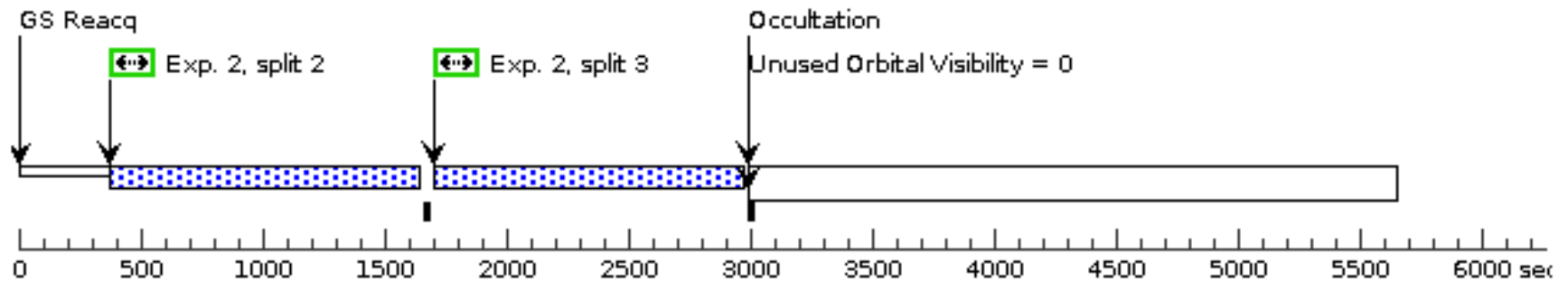
Orbit 1

Server Version: 20260618



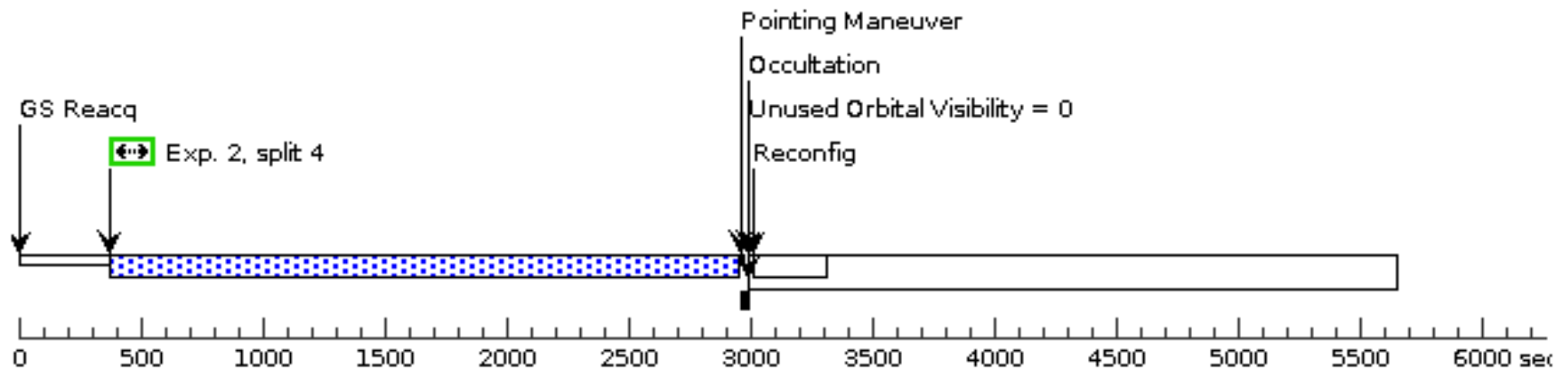
Orbit 2

Server Version: 20260618



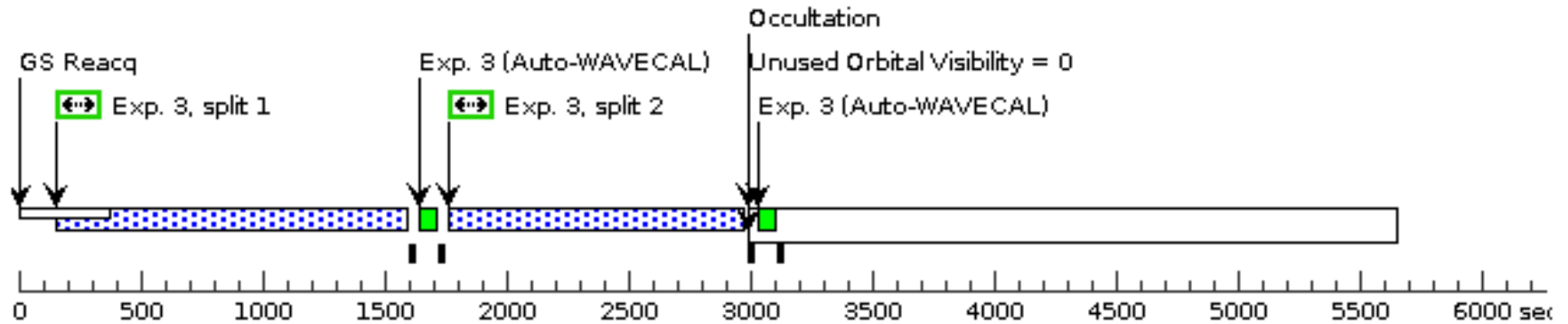
Orbit 3

Server Version: 20260618



Orbit 4

Server Version: 20260618



Orbit 5

Server Version: 20260618

