



# 17159 - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at $z \sim 2.2$

Cycle: 30, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>
<b>Dr. Xin Wang (PI) (Contact)</b>	<b>Chinese Academy of Sciences</b>
Dr. Zheng Cai (CoI)	Tsinghua University
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Prof. Xiaohui Fan (CoI)	University of Arizona
Dr. Harry Teplitz (CoI)	California Institute of Technology
Dr. Fuyan Bian (CoI) (ESA Member)	European Southern Observatory - Chile
Prof. XianZhong Zheng (CoI)	Purple Mountain Observatory, CAS
Dr. Anahita Alavi (CoI)	California Institute of Technology
Dr. James Colbert (CoI)	California Institute of Technology
Prof. Matthew A. Malkan (CoI)	University of California - Los Angeles
Dr. Alaina L. Henry (CoI)	Space Telescope Science Institute
Mr. Zihao Li (CoI)	Tsinghua University

## 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) BOSS1244-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:35.0	yes
02	(1) BOSS1244-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:35.0	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	(1) BOSS1244-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:36.0	yes
04	(1) BOSS1244-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:36.0	yes
05	(1) BOSS1244-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:37.0	yes
06	(1) BOSS1244-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:37.0	yes
56	(3) BOSS1244-LYC-FLIP	WFC3/UVIS	1	31-Aug-2023 10:00:37.0	yes
07	(1) BOSS1244-LYC	WFC3/UVIS	1	31-Aug-2023 10:00:38.0	yes
57	(3) BOSS1244-LYC-FLIP	WFC3/UVIS	1	31-Aug-2023 10:00:38.0	yes
08	(2) BOSS1542-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:39.0	yes
09	(2) BOSS1542-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:39.0	yes
10	(2) BOSS1542-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:39.0	yes
11	(2) BOSS1542-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:40.0	yes
12	(2) BOSS1542-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:40.0	yes
13	(2) BOSS1542-LYC	WFC3/UVIS	3	31-Aug-2023 10:00:41.0	yes
51	(4) BOSS1542-LYC-FLIP	WFC3/UVIS	3	31-Aug-2023 10:00:41.0	yes
52	(4) BOSS1542-LYC-FLIP	WFC3/UVIS	3	31-Aug-2023 10:00:42.0	yes
53	(4) BOSS1542-LYC-FLIP	WFC3/UVIS	1	31-Aug-2023 10:00:42.0	yes
14	(2) BOSS1542-LYC	WFC3/UVIS	1	31-Aug-2023 10:00:42.0	yes

47 Total Orbits Used

## ABSTRACT

Collectively young massive stars dominate over supermassive black holes in producing the Lyman-continuum (LyC) radiation that reionized the Universe. Yet the direct measurement of such escaping LyC radiation has been challenging. ~50% of galaxies in the reionization epoch reside in protoclusters, hence the knowledge about LyC escaping from overdense environments is crucial. We propose to obtain deep WFC3/UVIS imaging in two massive protocluster fields at  $z \sim 2.2$ , efficiently measuring the absolute LyC escape fraction ( $f_{\text{esc}}$ ) of 28 extreme emission line galaxies (EELGs) in total. These EELGs are identified from the existing deep WFC3/G141 slitless spectroscopy of the entire fields, showing prominent [O III]+H $\beta$  emission with extremely high equivalent width, perfect analogs of currently known galaxies at  $z \sim 8$ . Targeting multiple overdensities helps mitigate

the line-of-sight variations of intergalactic medium (IGM) transmission. The goals of this proposal are as follows. 1) Measure  $f_{\text{esc}}$  of these EELGs residing in overdensities to 3-sigma upper limits of 1.6% (0.5%) per galaxy (sightline), to probe the environmental dependence of  $f_{\text{esc}}$ . 2) Test whether faint galaxies or rare bright galaxies with high  $f_{\text{esc}}$  dominate the reionization process, and calibrate the observational proxies of LyC leakage for future JWST work. 3) Break the degeneracy between  $f_{\text{esc}}$  and the LyC production efficiency to measure the production rate of IGM-ionizing photons, constraining if the ionizing budget from EELGs is sufficient for reionization. Exploiting the unique UV capabilities of HST, our program presents a giant leap forward to establish the link between LyC escape and large-scale structure formation.

## **OBSERVING DESCRIPTION**

In this program, we obtain in total 38 orbits of WFC3/UVIS imaging in the central regions of two galaxy protoclusters at  $z \sim 2.2$ . The entire allocation is equally divided into two pointings (each on one protocluster field) with 18 orbits of F225W and 1 orbit of F475W, to cover the extreme emission line galaxies in these fields identified from existing spectroscopy. We employ some orient constraints to maximize the number of line emitters covered within the WFC3/UVIS footprint. We adopt full-orbit long exposures for the F225W imaging, to minimize the amount of post-flash needed to mitigate the charge transfer inefficiency and hence the background noise caused by the post-flash flux. To reach the desired level of 20 e-/pix recommended by STScI, we still need a post-flash of 10 e- for our F225W exposures, to optimally compensate for the loss of charge transfer efficiency over the entire CCD chips.

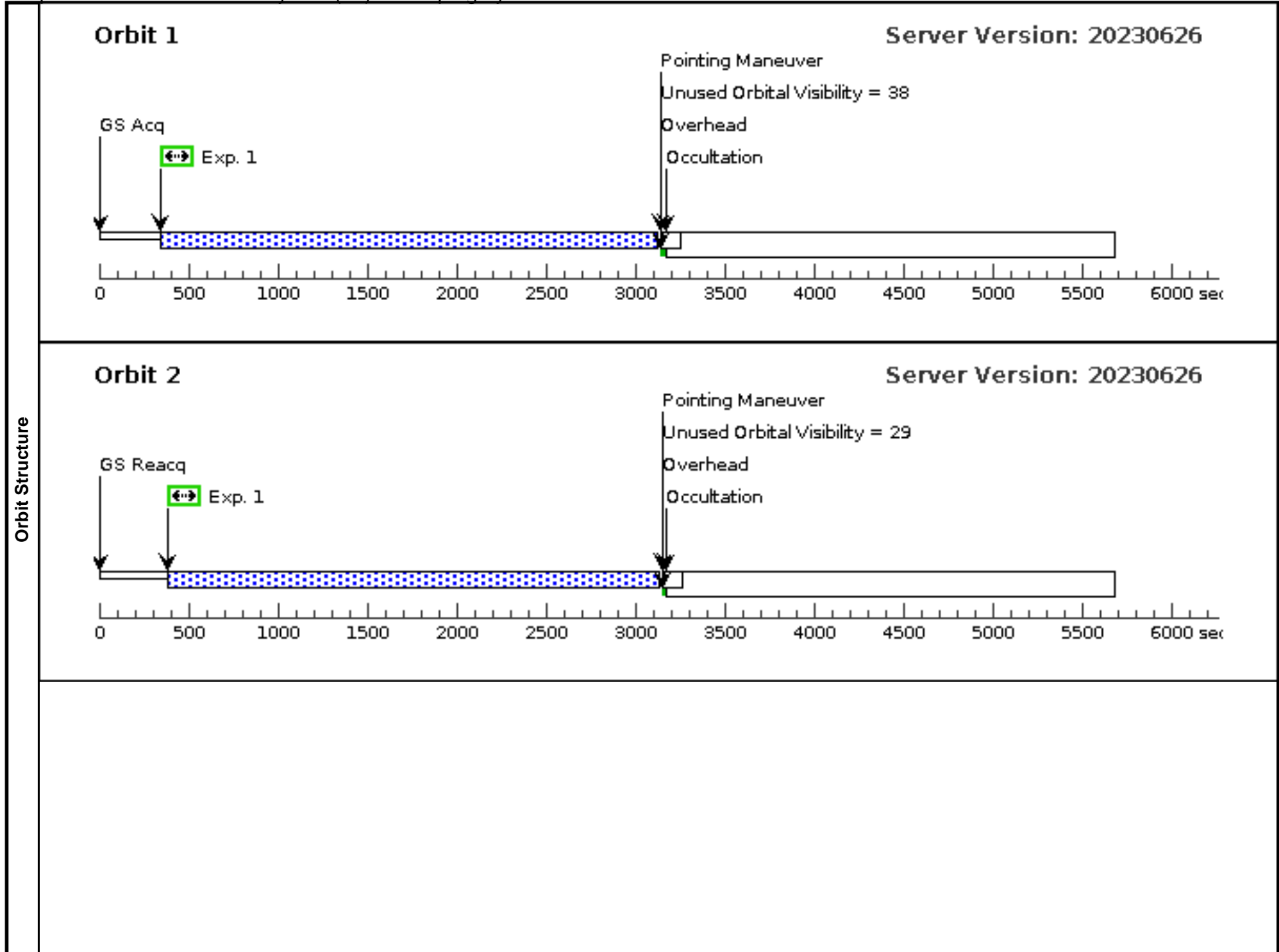
To speed up and facilitate the scheduling and executing processes given our full-orbit long F225W exposures and the reduced gyro capabilities of the aging telescope, we design a UVIS-DITHER-LINE-3PT dither pattern with moderate point spacing so that throughout our program, all F225W visits comprise three orbits. As a result, per pointing, we will conduct six F225W visits (each at 3-orbit depth) and one F475W visit (at 1-orbit depth separated into three exposures using the same dither pattern). Moreover, we request that per pointing, at least two out of the six F225W visits have the same telescope orient angle, so there is a chance that the same set of guide stars can be used for multiple visits (and thus  $\geq 6$  individual exposures), which is highly conducive to straightforward astrometric alignment and cosmic ray flagging through median stacking.

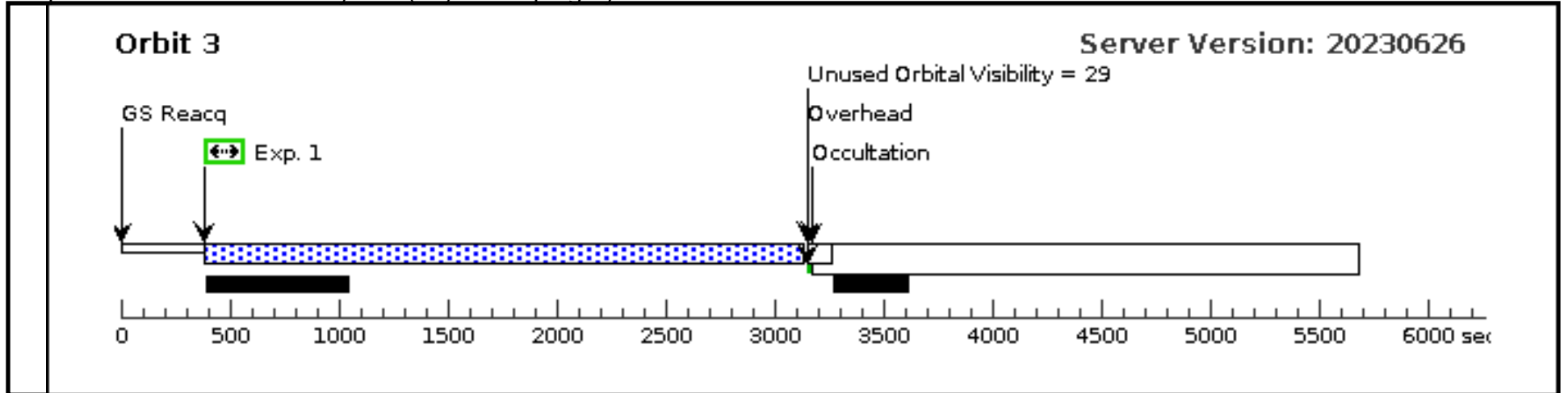
The best-case scenario is that per pointing all three pairs of F225W visits have exactly the same orient. But if not possible given scheduling constraints, we request that the three pairs of F225W visits per pointing have orients with  $\pm 180$  or  $\pm 90$  deg offsets in between, to maximize the overlapping spatial coverage of these visits to secure the maximum depth of the largest area in the sky, crucial to our science goals. In addition, for each pointing, the 1-orbit F475W visit should have orient identical to either one of the orients of the three pairs of the F225W visits, for the sake of maximum overlap in spatial coverage.

Proposal 17159 - boss1244-lyc-v1 (01) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v1 (01), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 107D TO 117 D <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS		
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181284 0)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-lyc-v1 (01) (3)	2750 Secs (8250 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		[2]
								[=>(Pattern 3)]		[3]	

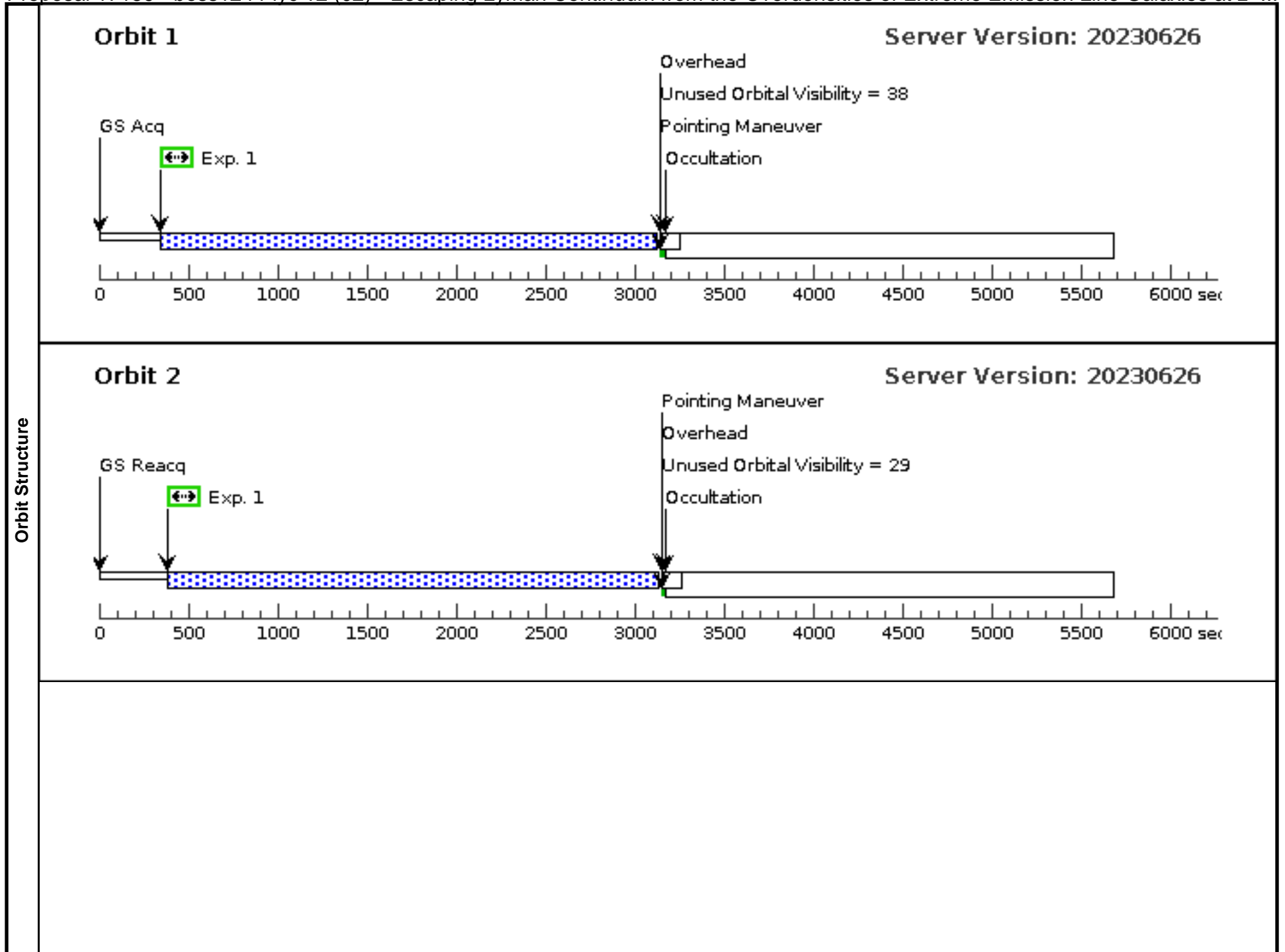


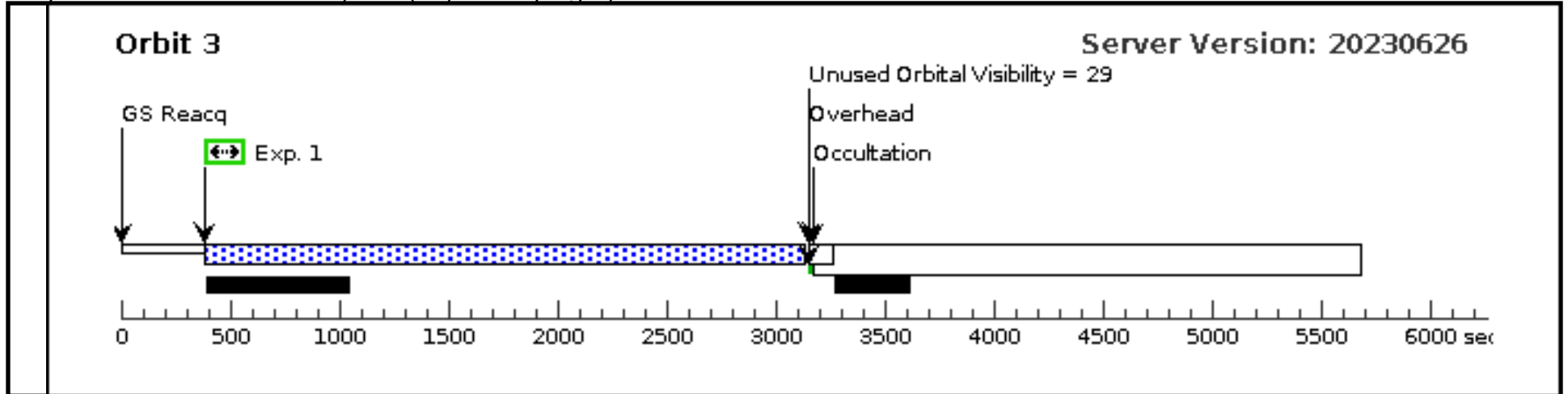


Proposal 17159 - boss1244-lyc-v2 (02) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v2 (02), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 01 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS		
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181284 0)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-lyc-v2 (0 2) (3)	2750 Secs (8250 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		[2]
								[=>(Pattern 3)]		[3]	

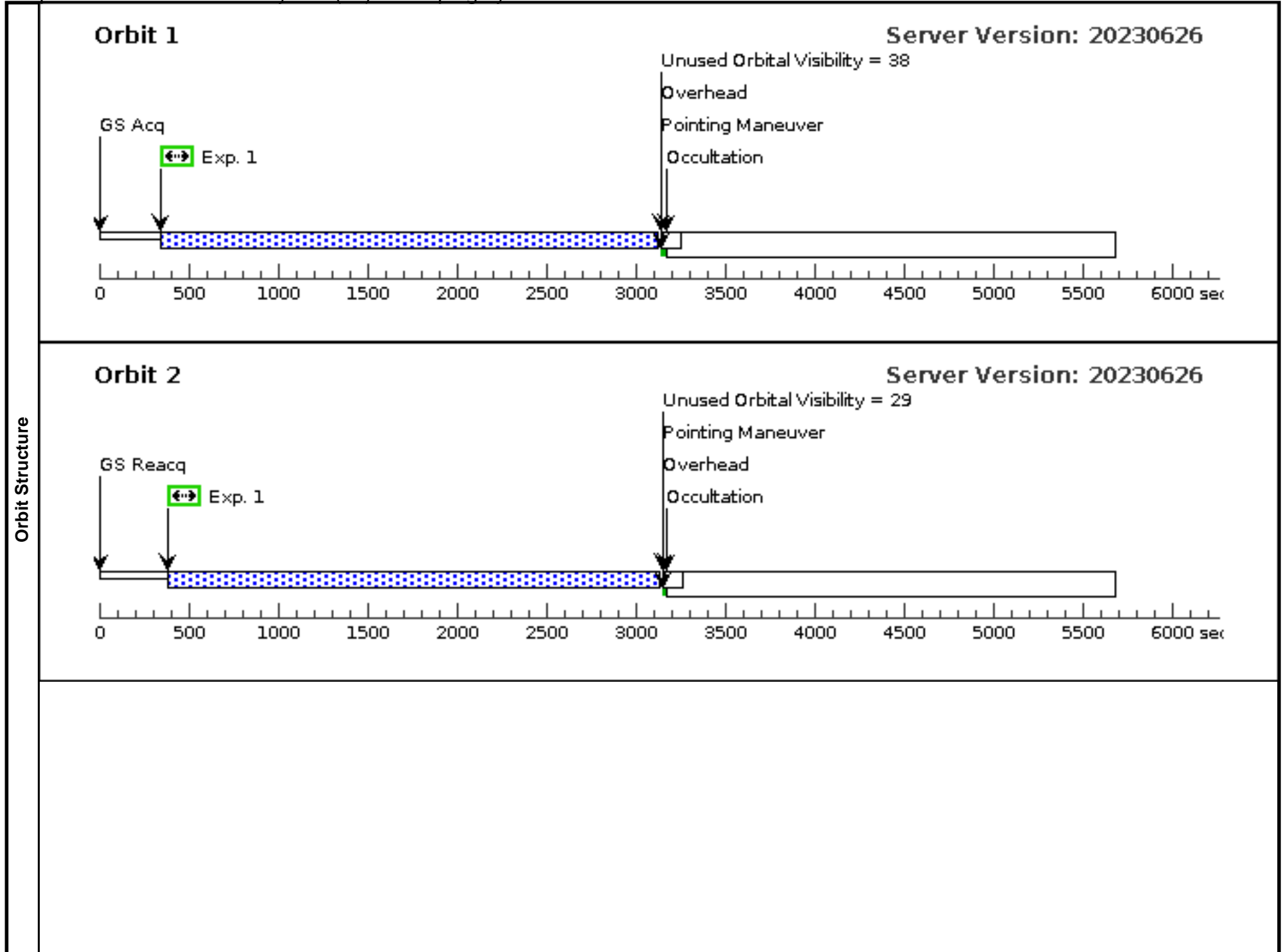


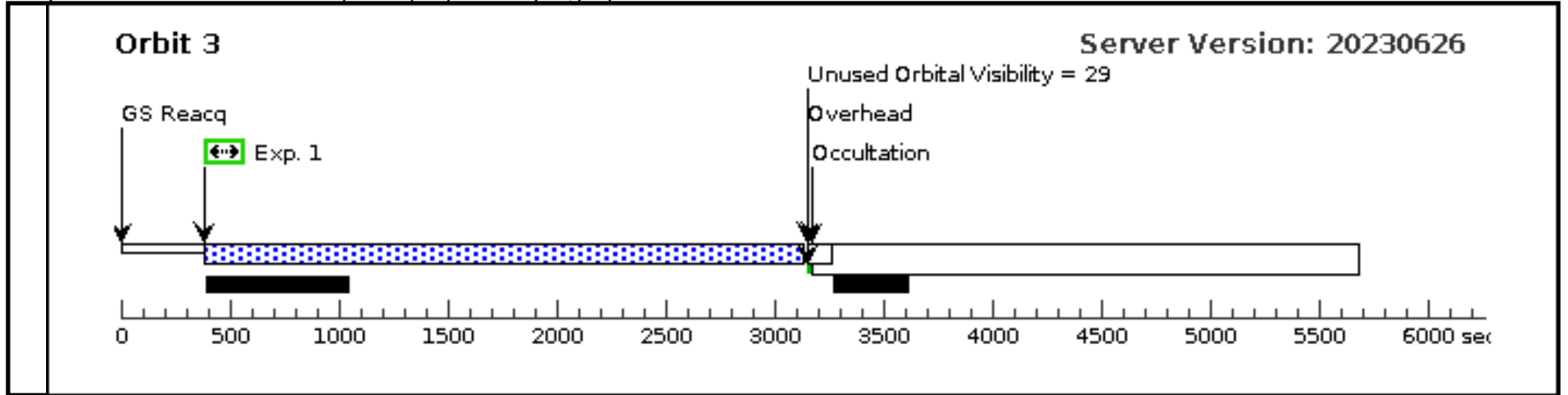


Proposal 17159 - boss1244-lyc-v3 (03) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v3 (03), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 01 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS		
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181284 0)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-lyc-v3 (03) (3)	2750 Secs (8250 Secs)		
										[=>(Pattern 1)]	[1]
										[=>(Pattern 2)]	[2]
									[=>(Pattern 3)]	[3]	

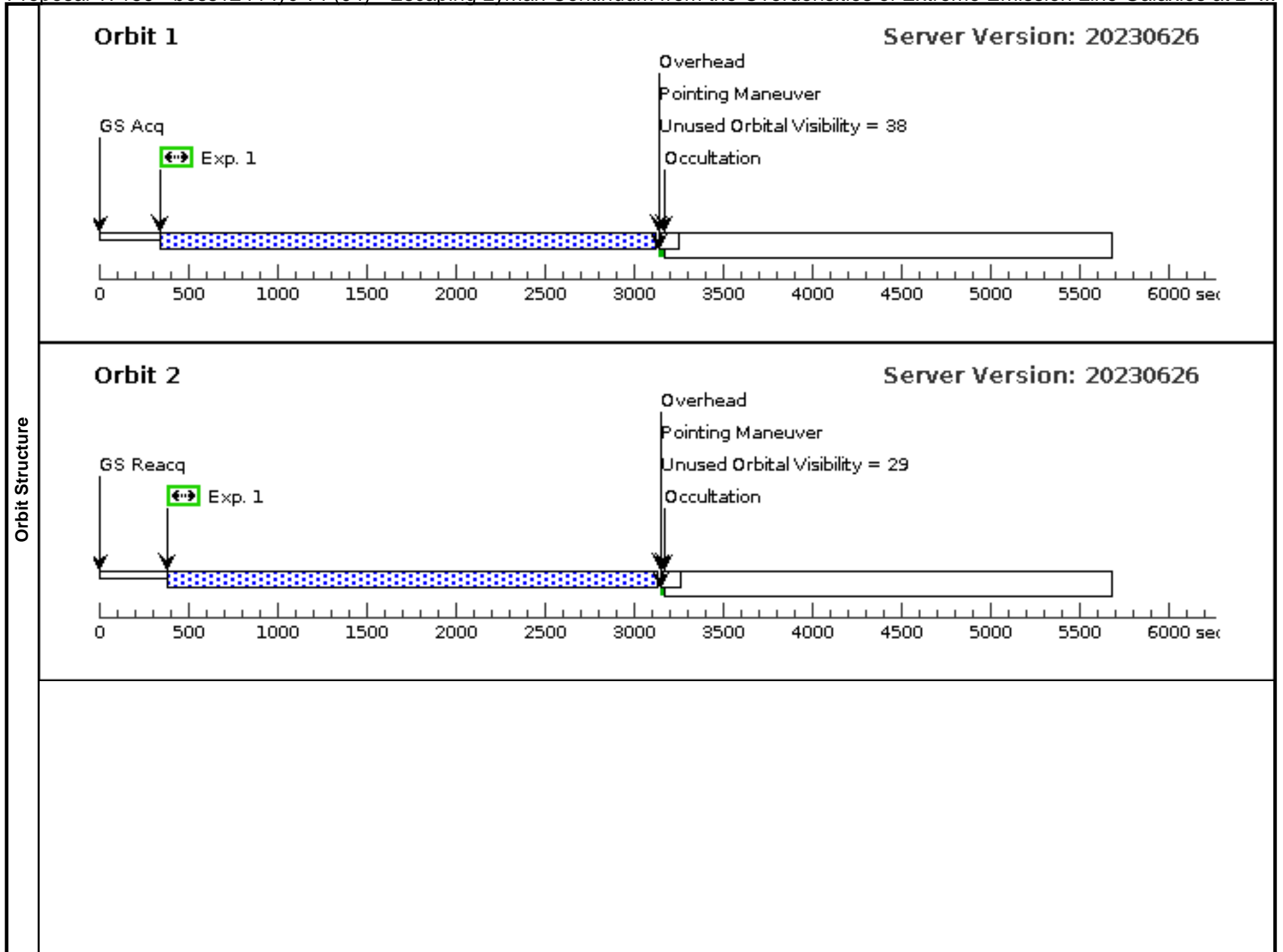


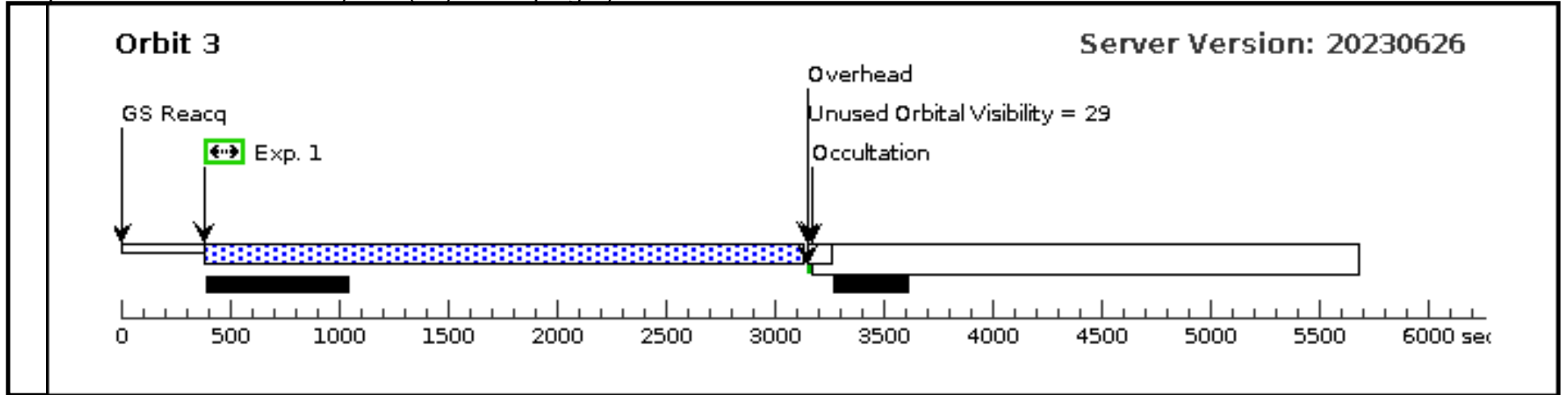


Proposal 17159 - boss1244-lyc-v4 (04) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v4 (04), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 01 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>	
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS	
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(WFC3UVI S.im.181284 0)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-lyc-v4 (04) (3)	2750 Secs (8250 Secs)	
									[=>(Pattern 1)]	[1]
									[=>(Pattern 2)]	[2]
								[=>(Pattern 3)]	[3]	

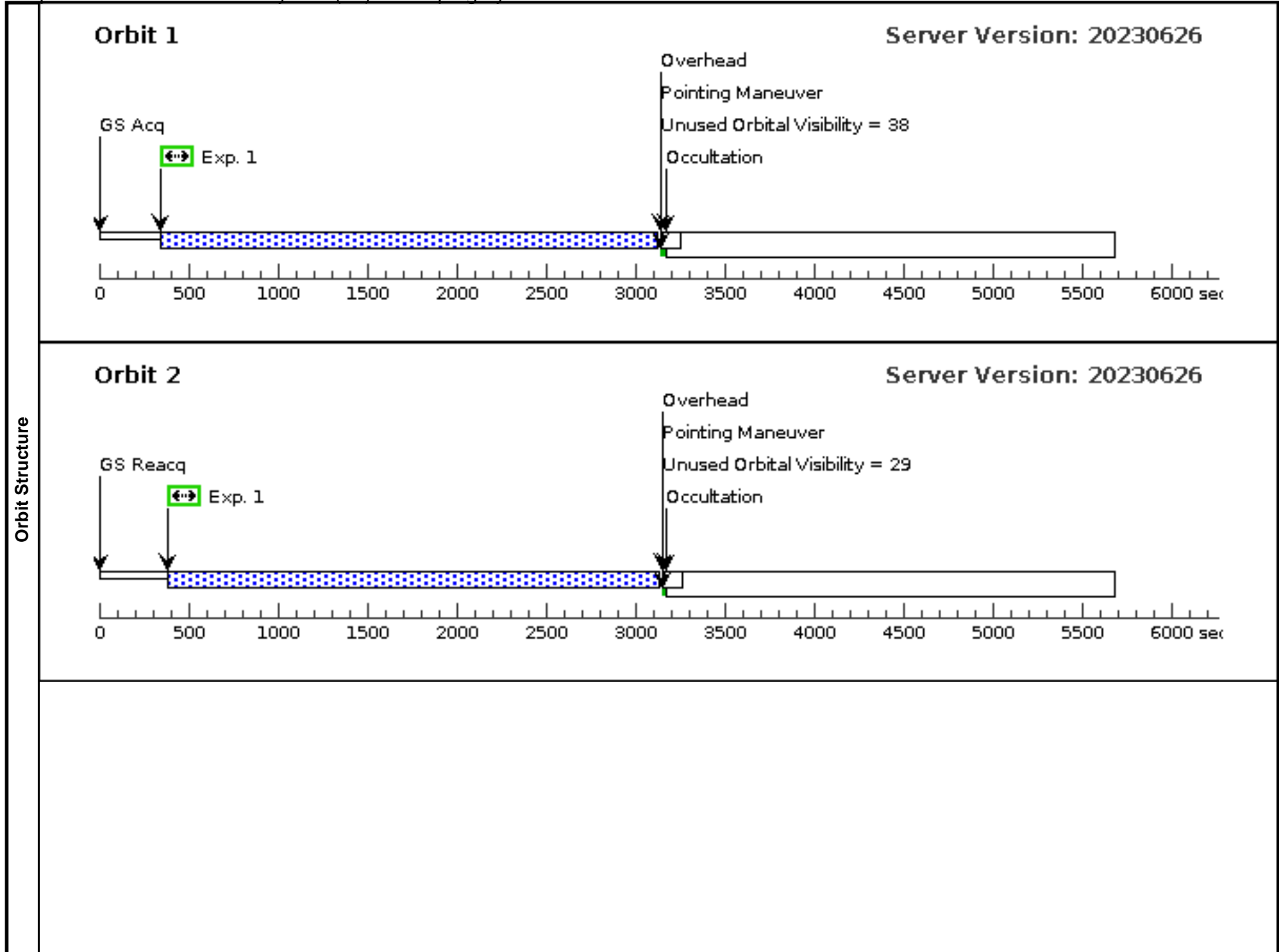


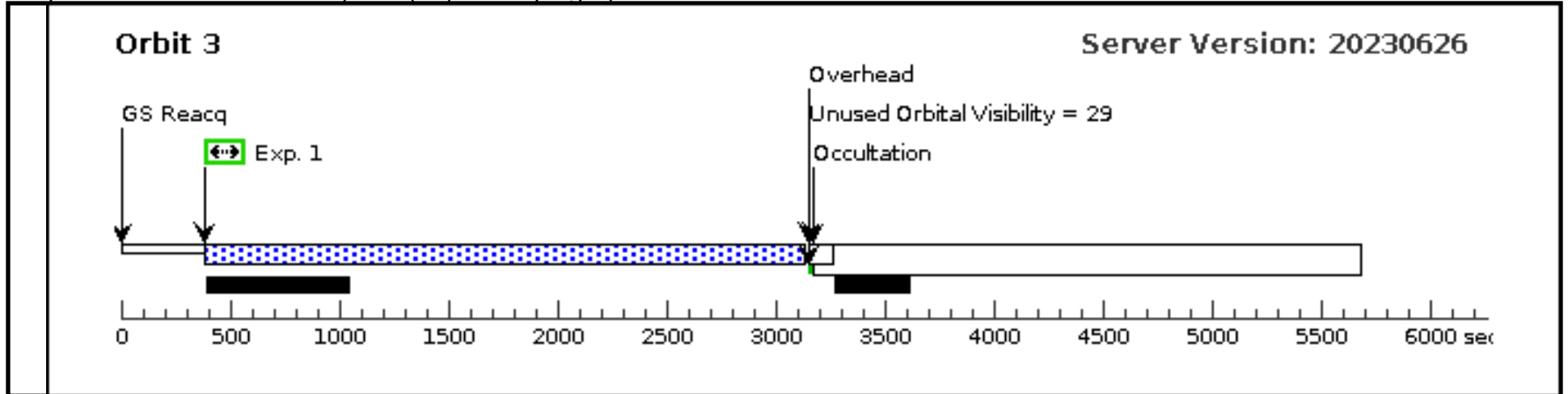


Proposal 17159 - boss1244-lyc-v5 (05) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v5 (05), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 01 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS		
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181284 0)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-lyc-v5 (05) (3)	2750 Secs (8250 Secs)		
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										[=>(Pattern 2)]	[2]
									[=>(Pattern 3)]	[3]	

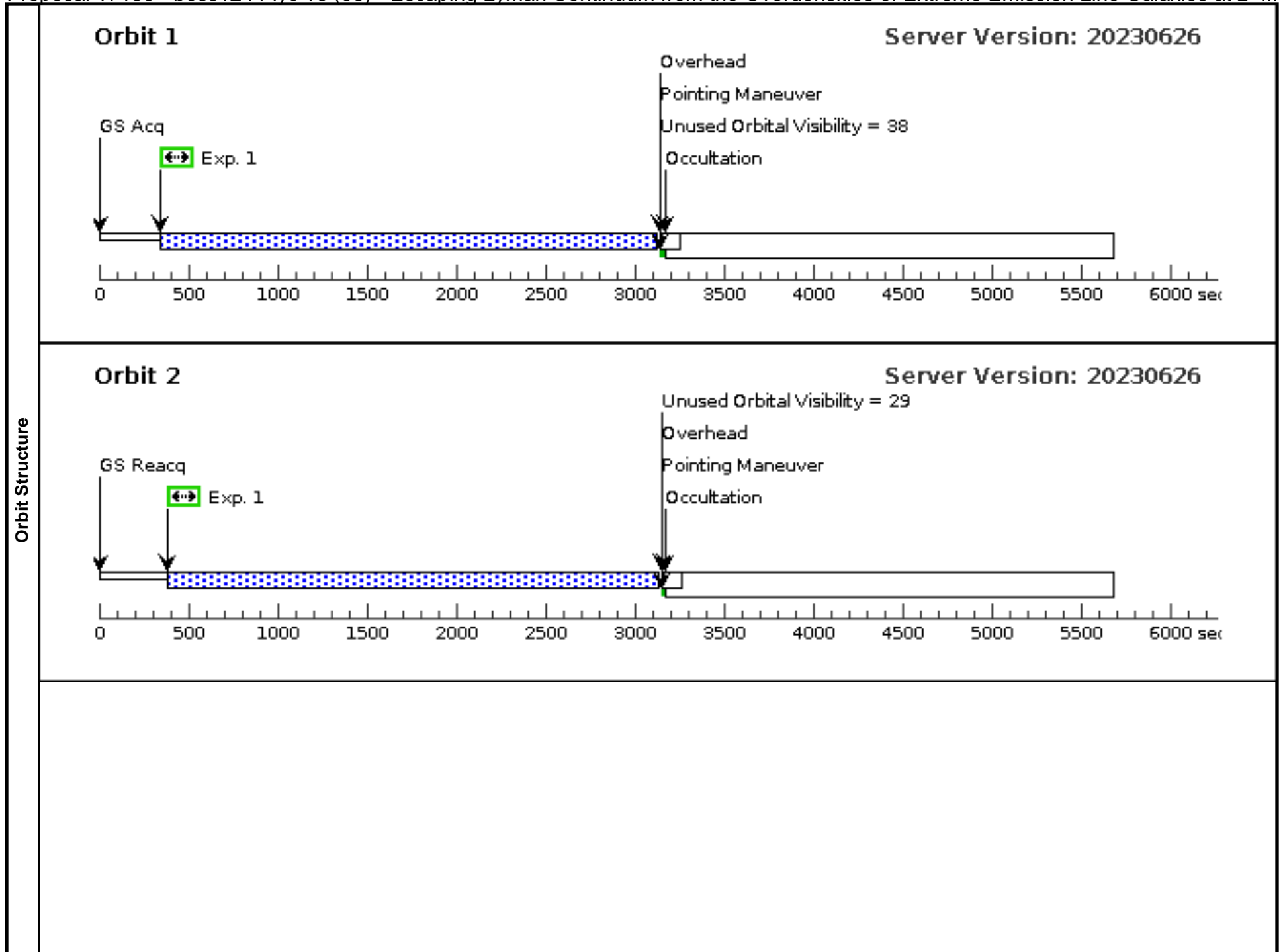


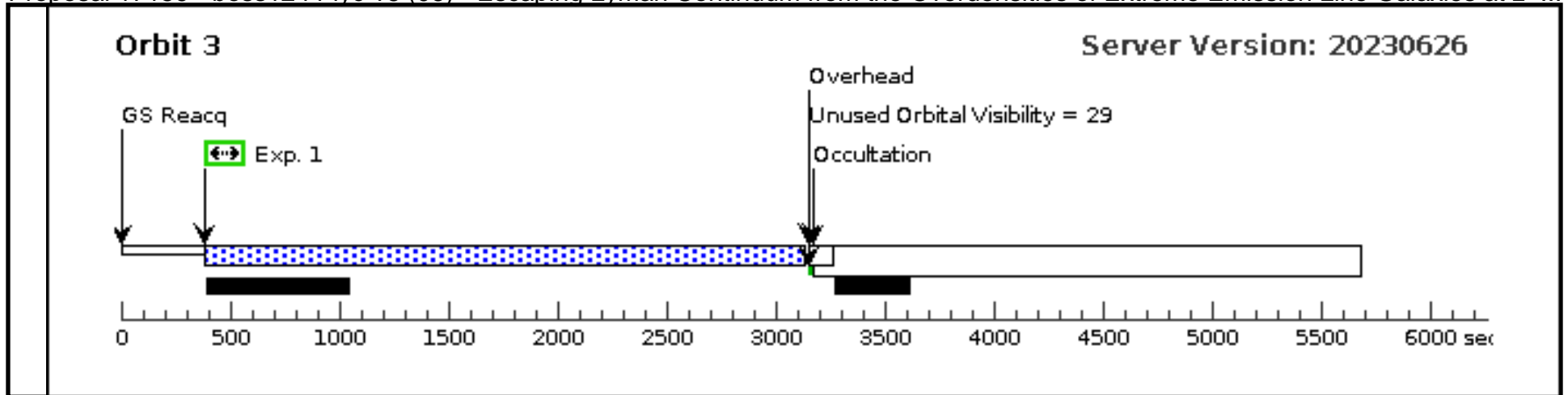


Proposal 17159 - boss1244-lyc-v6 (06) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v6 (06), failed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 01 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS		
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181284 0)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-lyc-v6 (06) (3)	2750 Secs (8250 Secs)		
										[=>(Pattern 1)]	[1]
										[=>(Pattern 2)]	[2]
									[=>(Pattern 3)]	[3]	





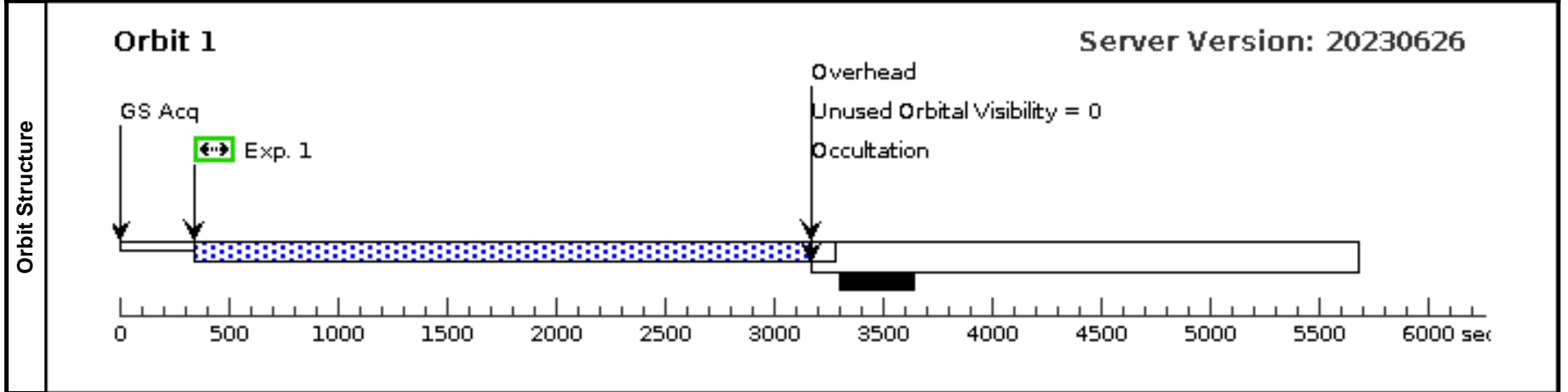
Proposal 17159 - boss1244-lyc-v7 (56) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1244-lyc-v7 (56), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 57 <i>Comments: To ensure timely execution of this orbit, we created a new target which opens the schedulability window in late 2023 to early 2024. Please help schedule the repeat of this orbit during this window. If not possible, then please contact the PI to discuss the possibility to revert back to the original setting of this orbit, such that it can be scheduled in mid-2024.</i>				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	BOSS1244-LYC-FLIP	RA: 12 43 31.4031 (190.8808462d) Dec: +35 54 3.96 (35.90110d) Equinox: J2000		V=24.00+/-0.05	Reference Frame: ICRS
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]						

<b>Exposures</b>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(WFC3UVI S.im.181284 0)	(3) BOSS1244-LYC-FLIP	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10	POS TARG 0,0			2788 Secs (2788 Secs) [==>]



Proposal 17159 - boss1244-uvc (07) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~2.2

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	Proposal 17159, boss1244-uvc (07), failed <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 01 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 01-07), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Patterns</b>	#	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>						
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)						
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(1)	BOSS1244-LYC	RA: 12 43 31.3362 (190.8805675d) Dec: +35 54 2.22 (35.90062d) Equinox: J2000		V=24.00+/-0.05	Reference Frame: ICRS					
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	#	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>	
	1	(WFC3UVIS S.im.181088 5)	(1) BOSS1244-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W		POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-uvc (07) (3)	835 Secs (2505 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	
<b>Orbit Structure</b>	<b>Orbit 1</b>										
	Server Version: 20230626 <p>The diagram shows a horizontal timeline from 0 to 6000 seconds. Key events are marked with vertical arrows: GS Acq at ~200s, three 'Exp. 1' exposures (each in a green box with an eye icon) at ~400s, ~1300s, and ~2200s, and 'Occultation' at ~3200s. 'Pointing Maneuver Overhead' is indicated between the exposures. A black bar at the bottom indicates the total duration of 27 seconds of unused orbital visibility.</p>										

Proposal 17159 - boss1244-uvc-repeat (57) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies ...

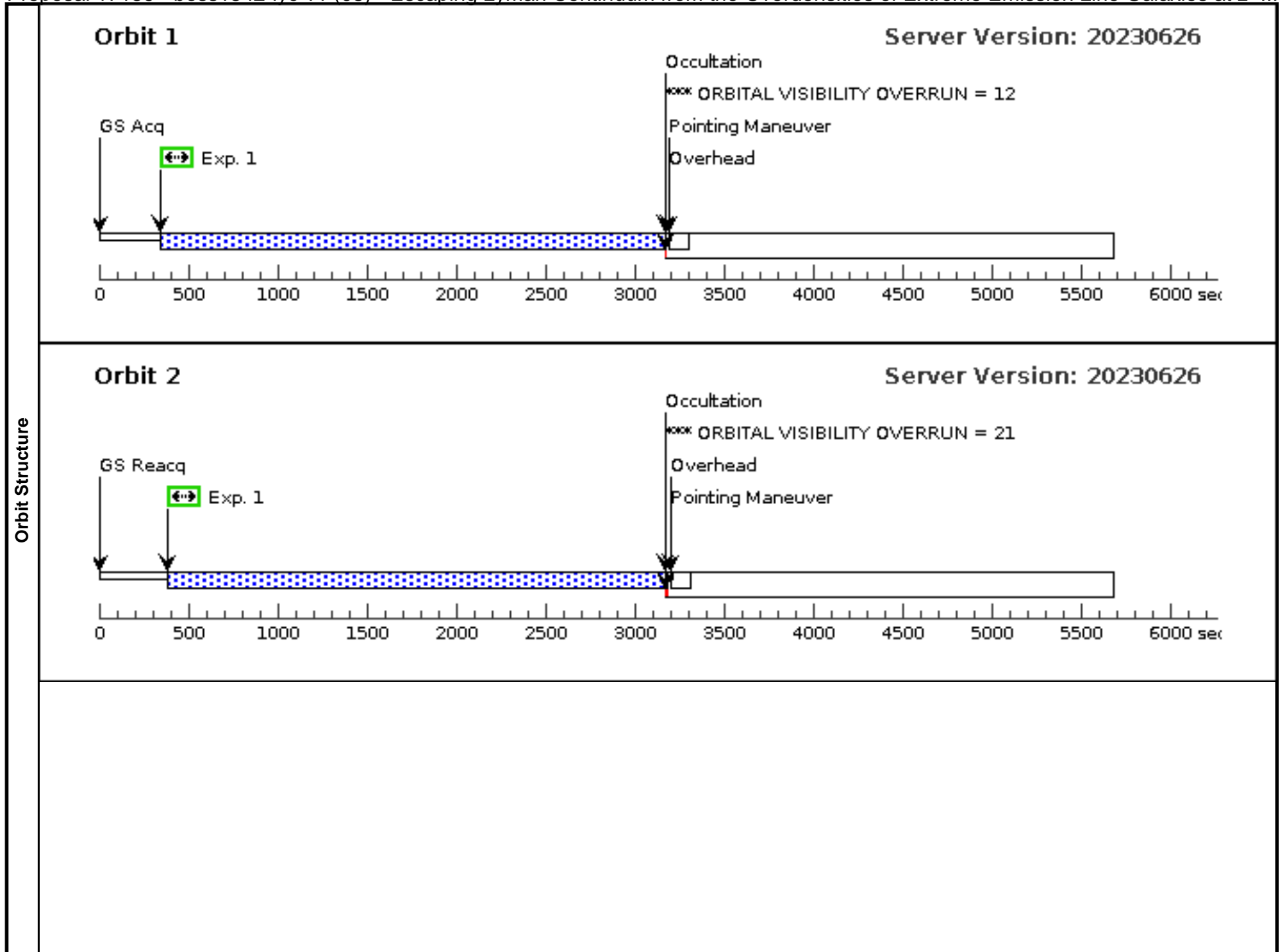
Thu Aug 31 14:00:43 GMT 2023

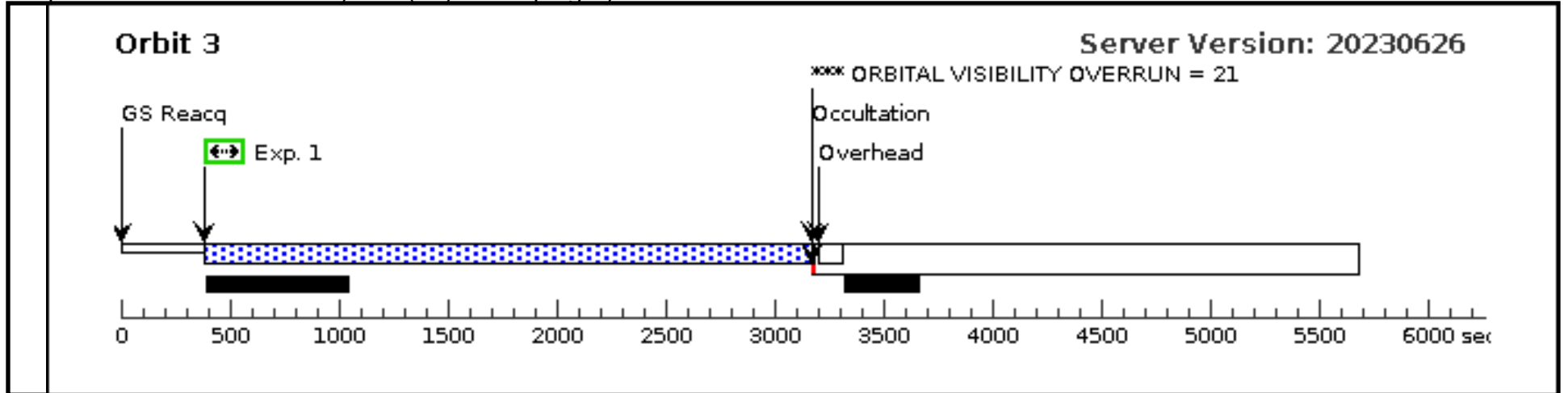
<b>Visit</b>	<p><b>Proposal 17159, boss1244-uvc-repeat (57), implementation</b></p> <p><b>Diagnostic Status: No Diagnostics</b></p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: ORIENT 291D TO 296 D</p> <p><i>Comments: *IMPORTANT*</i></p> <p><i>PI prefers the orient of 293.5 deg. To ensure timely execution of this visit, which is the only F475W imaging in this field, we created a new target which opens the schedulability window in late 2023 to early 2024. Please help schedule the repeat of this visit during this window. If not possible, then please contact the PI to discuss the possibility to revert back to the original setting of this visit, such that it can be scheduled in mid-2024.</i></p>									
	<b>Patterns</b>	#	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1)	
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>	
	(3)	BOSS1244-LYC-FLIP	RA: 12 43 31.4031 (190.8808462d) Dec: +35 54 3.96 (35.90110d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS	
	<p><i>Comments:</i></p> <p><i>Category=CLUSTER OF GALAXIES</i></p> <p><i>Description=[HIGH REDSHIFT CLUSTER]</i></p>									
<b>Exposures</b>	#	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(WFC3UVI S.im.181088 5)	(3) BOSS1244-LYC-FLIP	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W		POS TARG 0,0	Pattern 3, Exps 1-1 in boss1244-uvc-repeat (57) (3)	844 Secs (2532 Secs)	
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
<b>Orbit Structure</b>	<p><b>Orbit 1</b> <span style="float: right;"><b>Server Version: 20230626</b></span></p> <p>The diagram shows a horizontal timeline from 0 to 6000 seconds. Key events are marked with arrows and labels: 'GS Acq' at ~100s, 'Exp. 1' (green box) at ~400s, 'Overhead' (Pointing Maneuver) at ~1300s, 'Overhead' (Pointing Maneuver) at ~2200s, and 'Overhead' (Occultation) at ~3200s. Three 'Exp. 1' exposures are shown as blue checkered bars between the overhead periods. A note indicates 'Unused Orbital Visibility = 0' during the occultation phase.</p>									

Proposal 17159 - boss1542-lyc-v1 (08) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1542-lyc-v1 (08), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 95D TO 105 D <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>									
	<b>Diagnosics</b> (boss1542-lyc-v1 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v1 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v1 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000			V=24.00+/-0.05	Reference Frame: ICRS			
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 in boss1542-lyc-v1 (08) (3)	2800 Secs (8400 Secs)	
									[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	

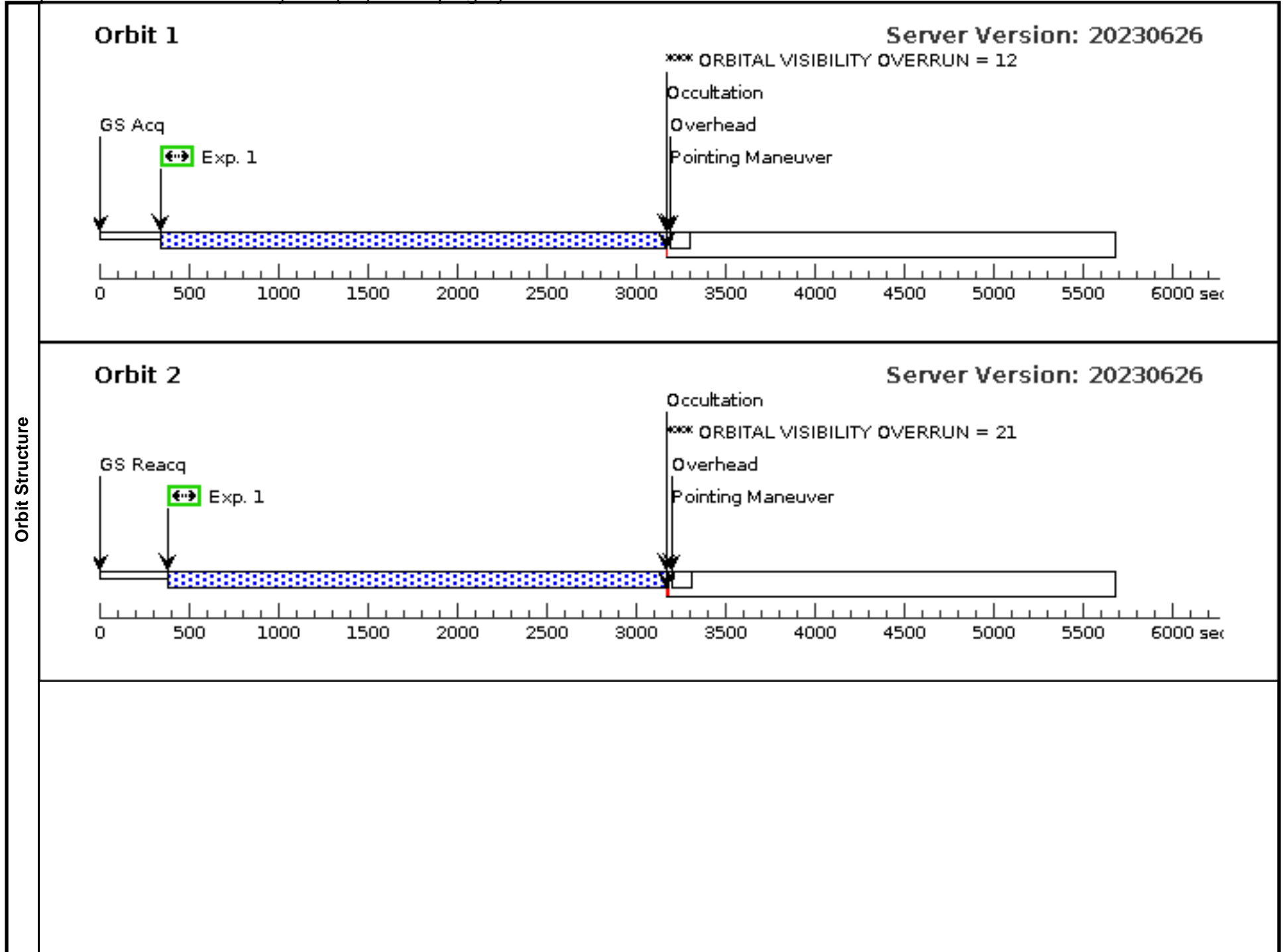


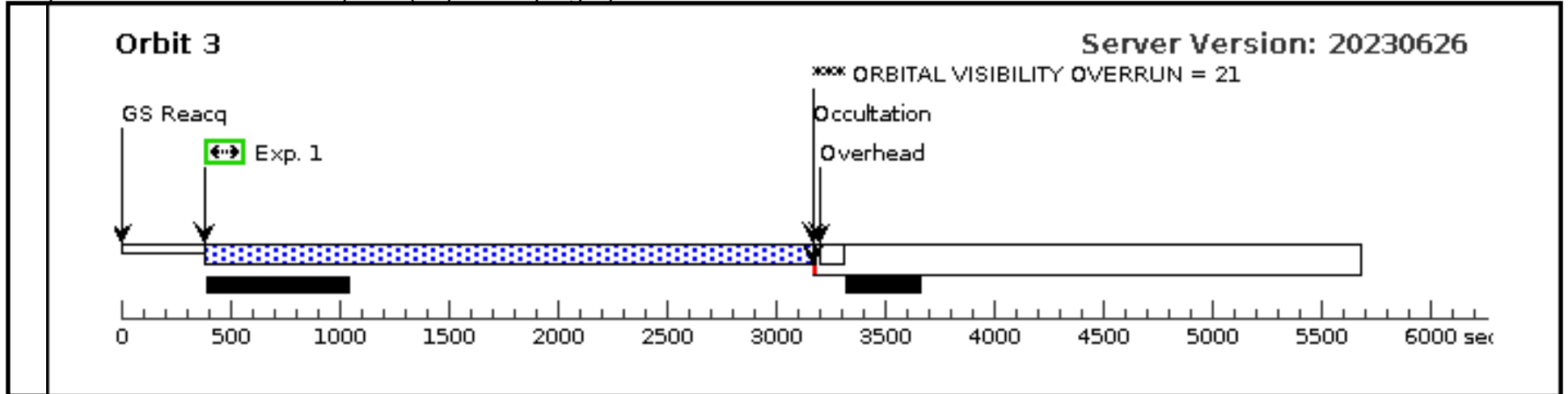


Proposal 17159 - boss1542-lyc-v2 (09) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1542-lyc-v2 (09), failed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 08 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>									
	<b>Diagnosics</b> (boss1542-lyc-v2 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v2 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v2 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false							(1)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000			V=24.00+/-0.05	Reference Frame: ICRS			
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 i n boss1542-lyc-v2 (0 9) (3)	2800 Secs (8400 Secs)	
									[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	

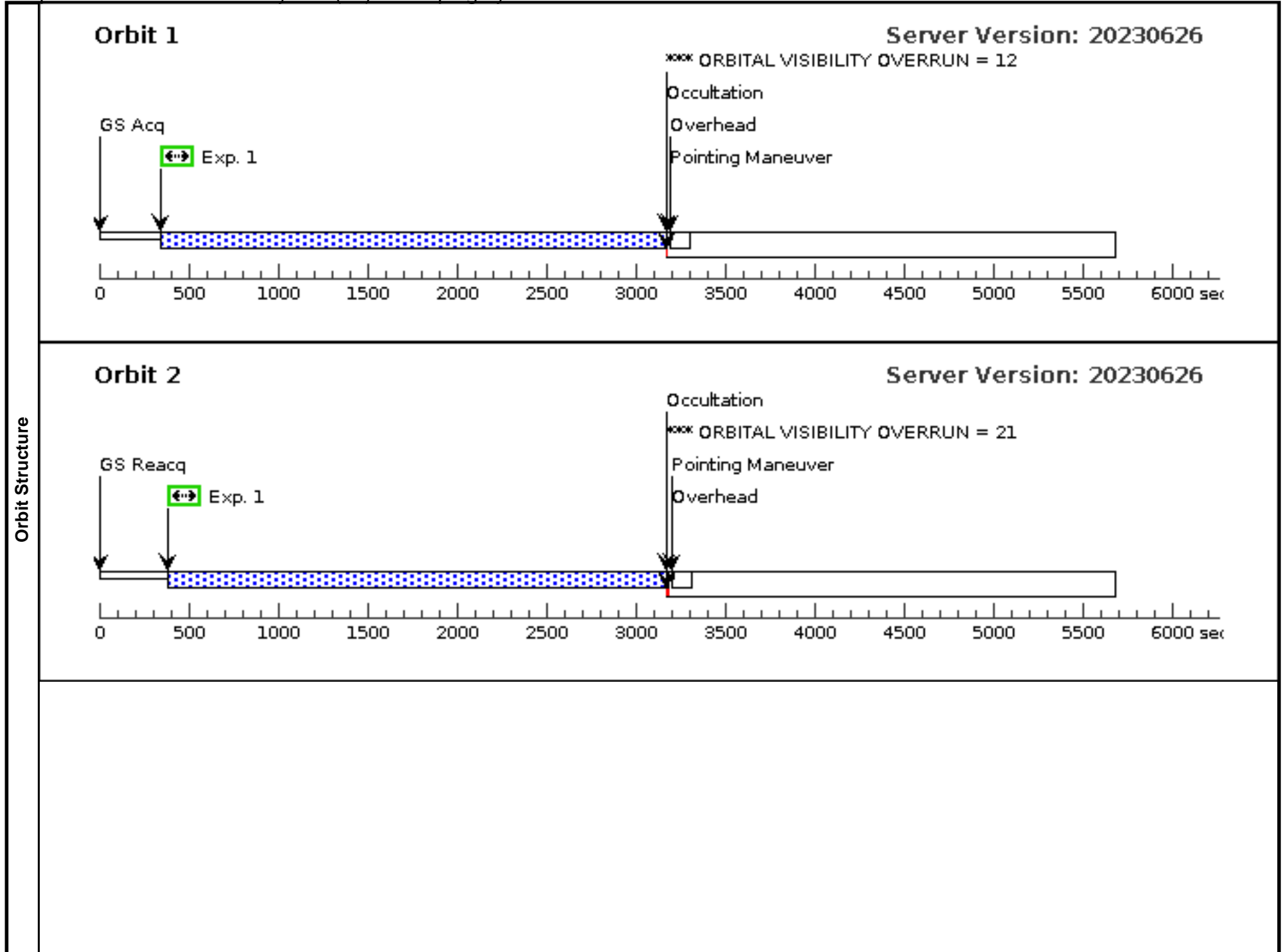


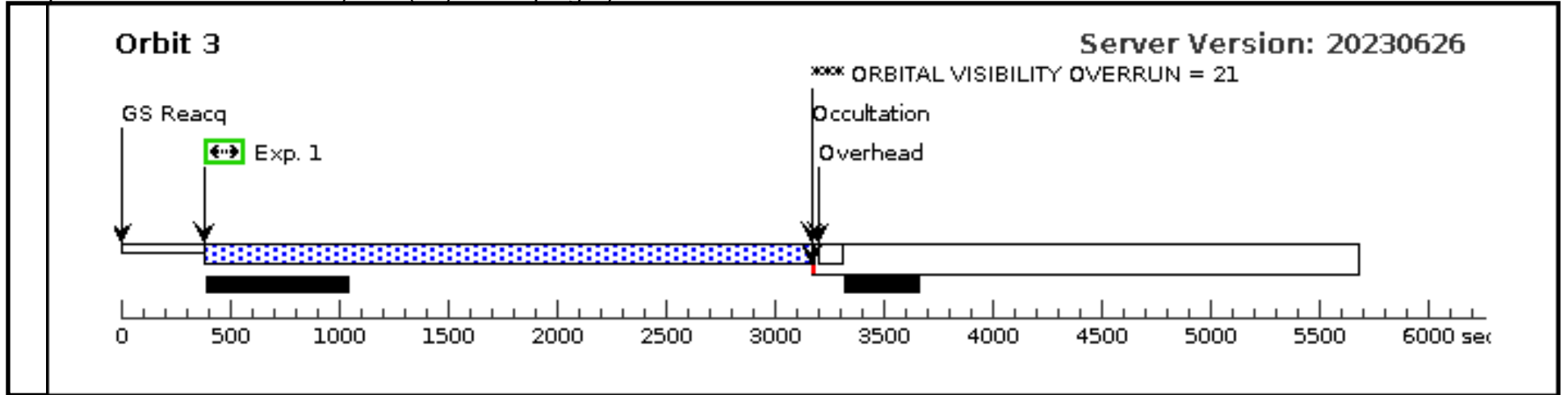


Proposal 17159 - boss1542-lyc-v3 (10) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1542-lyc-v3 (10), completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 08 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Diagnosics</b> (boss1542-lyc-v3 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v3 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v3 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>		
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false							(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>				
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000			V=24.00+/-0.05	Reference Frame: ICRS				
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>	
	1	(WFC3UVI S.im.181084 8)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 i n boss1542-lyc-v3 (10) (3)	2800 Secs (8400 Secs)		
										[==>(Pattern 1)]	[1]
										[==>(Pattern 2)]	[2]
									[==>(Pattern 3)]	[3]	

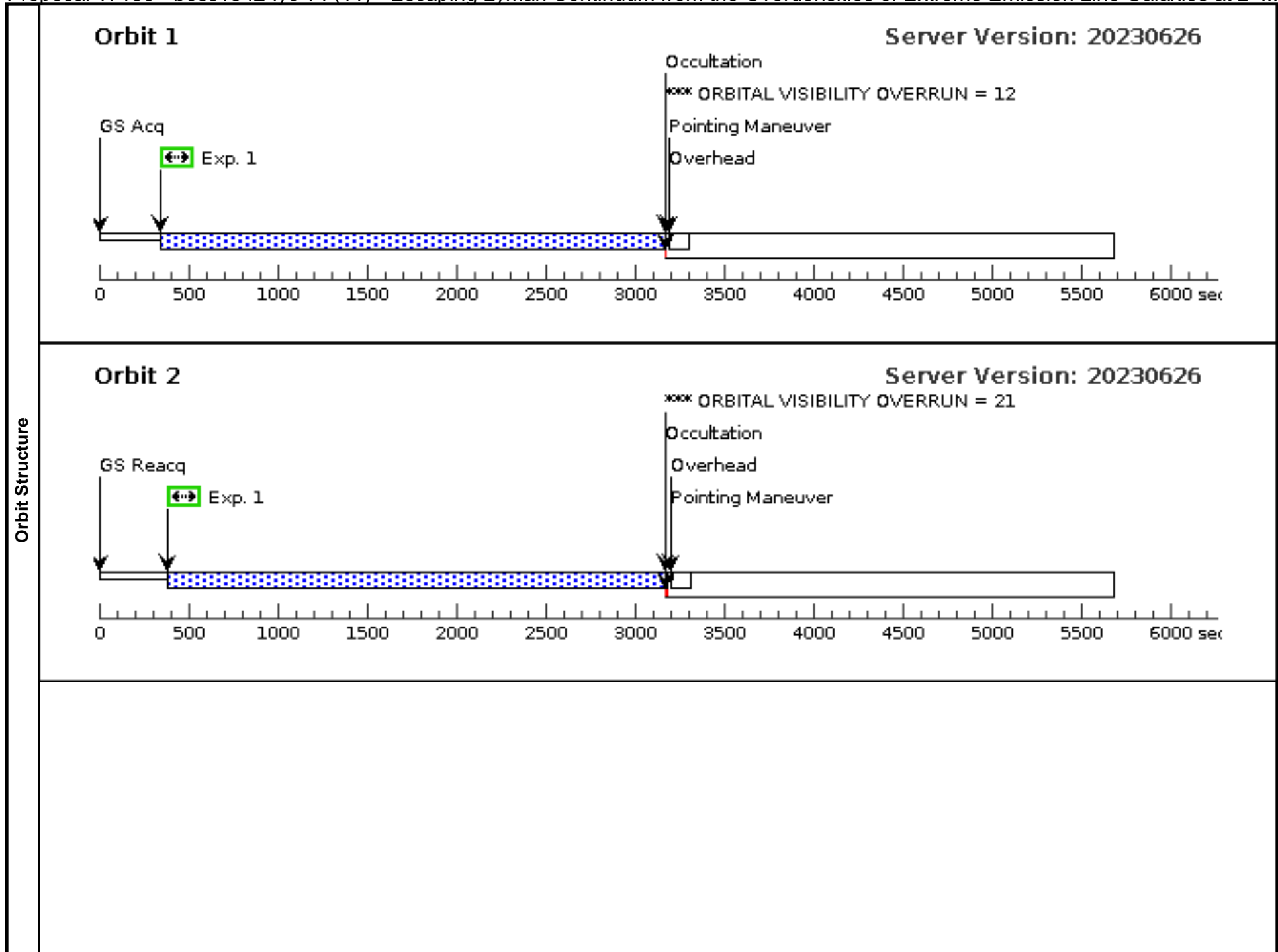


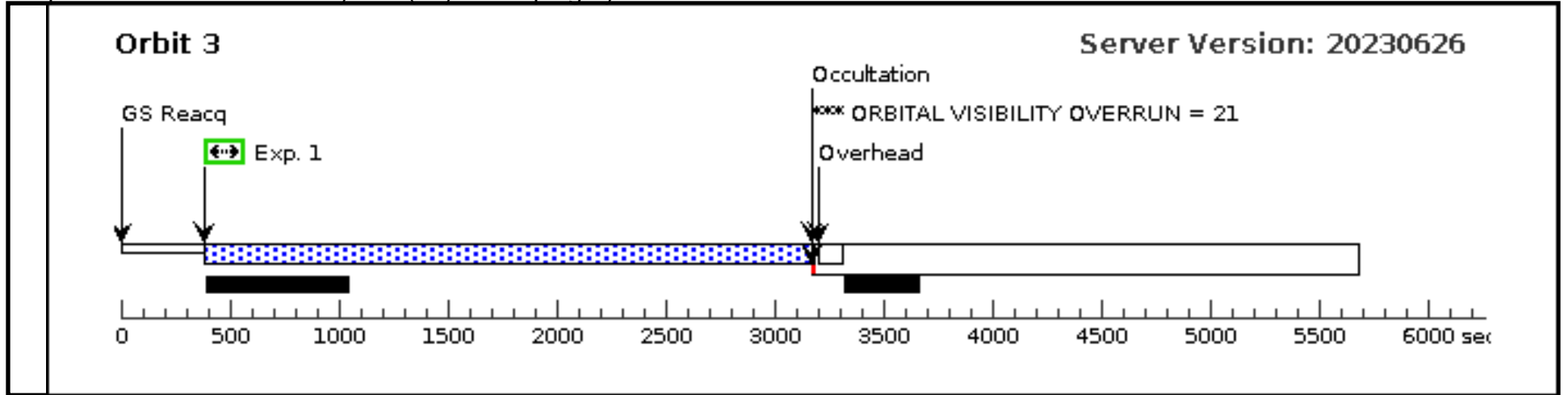


Proposal 17159 - boss1542-lyc-v4 (11) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1542-lyc-v4 (11), failed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 08 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>									
	<b>Diagnosics</b>	(boss1542-lyc-v4 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v4 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v4 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
<b>Patterns</b>		<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000			V=24.00+/-0.05	Reference Frame: ICRS			
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 i n boss1542-lyc-v4 (1 1) (3)	2800 Secs (8400 Secs)	
									[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	

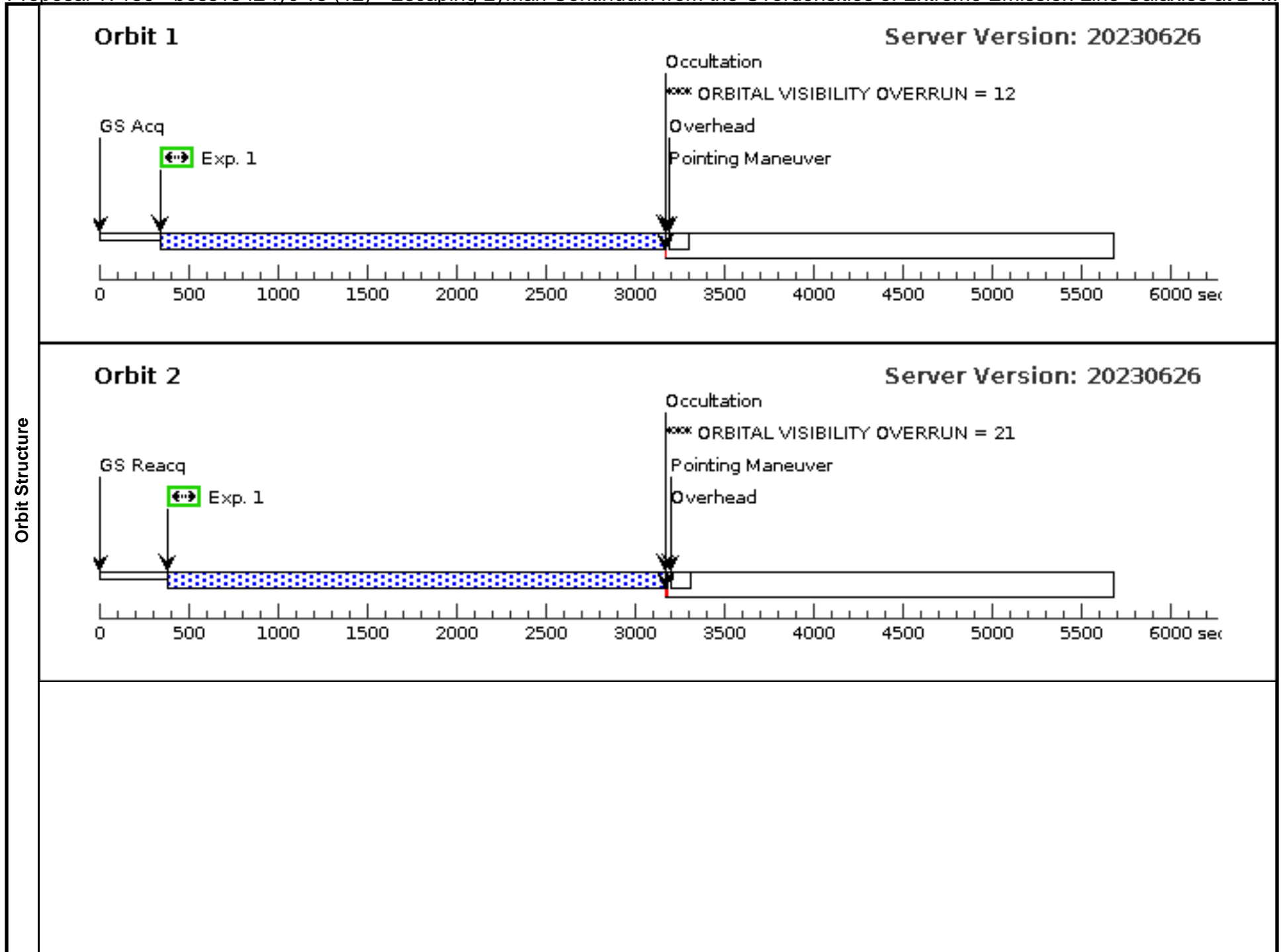


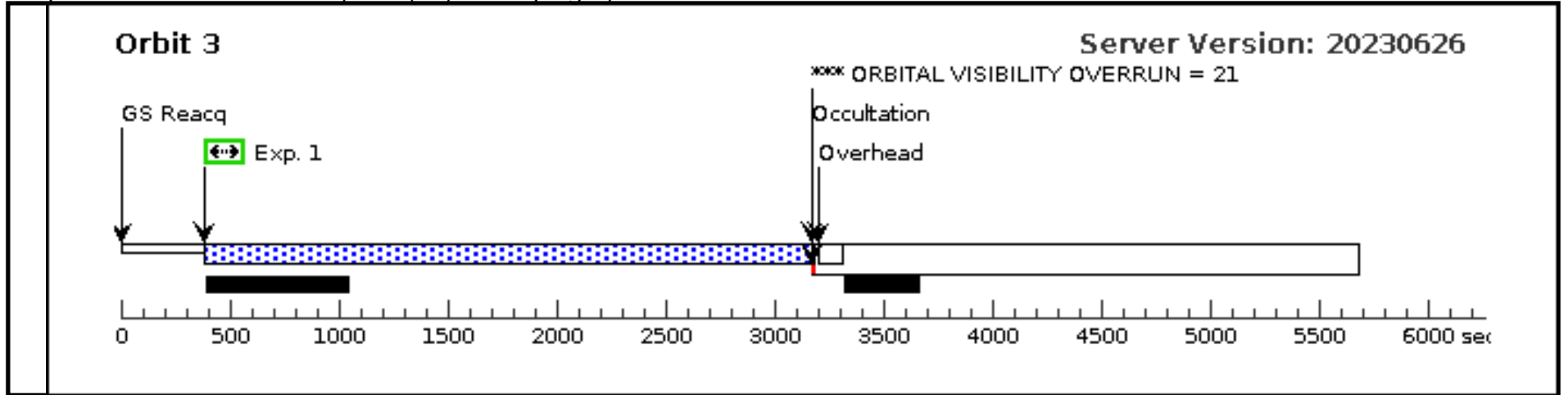


Proposal 17159 - boss1542-lyc-v5 (12) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1542-lyc-v5 (12), failed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 08 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>										
	<b>Diagnosics</b> (boss1542-lyc-v5 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v5 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (boss1542-lyc-v5 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>		
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false							(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>				
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000			V=24.00+/-0.05	Reference Frame: ICRS				
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 i n boss1542-lyc-v5 (1 2) (3)	2800 Secs (8400 Secs)		
										[==>(Pattern 1)]	[1]
										[==>(Pattern 2)]	[2]
									[==>(Pattern 3)]	[3]	

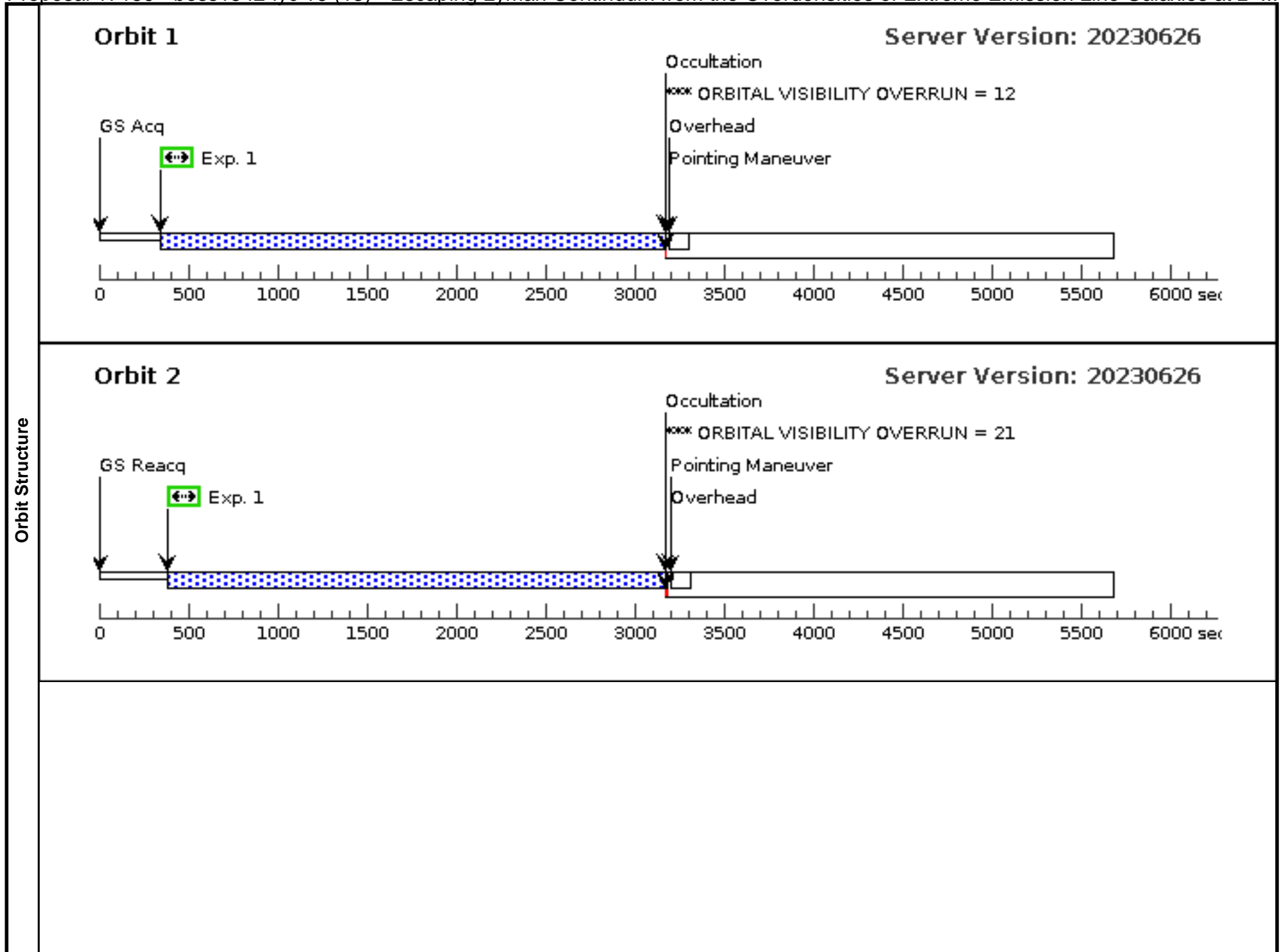


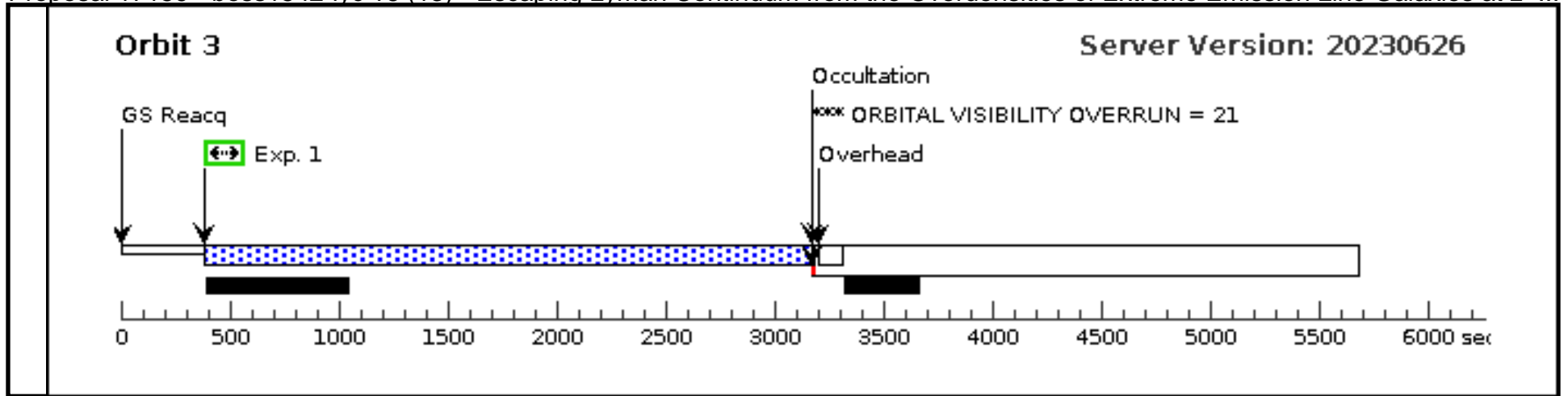


Proposal 17159 - boss1542-lyc-v6 (13) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<p><b>Proposal 17159, boss1542-lyc-v6 (13), failed</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: SAME ORIENT AS 08</p> <p><i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i></p>									
	<p>(boss1542-lyc-v6 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(boss1542-lyc-v6 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(boss1542-lyc-v6 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p>									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000			V=24.00+/-0.05	Reference Frame: ICRS			
<p><i>Comments:</i></p> <p><i>Category=CLUSTER OF GALAXIES</i></p> <p><i>Description=[HIGH REDSHIFT CLUSTER]</i></p>										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 i n boss1542-lyc-v6 (1 3) (3)	2800 Secs (8400 Secs)	
									[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	[2]
								[==>(Pattern 3)]	[3]	

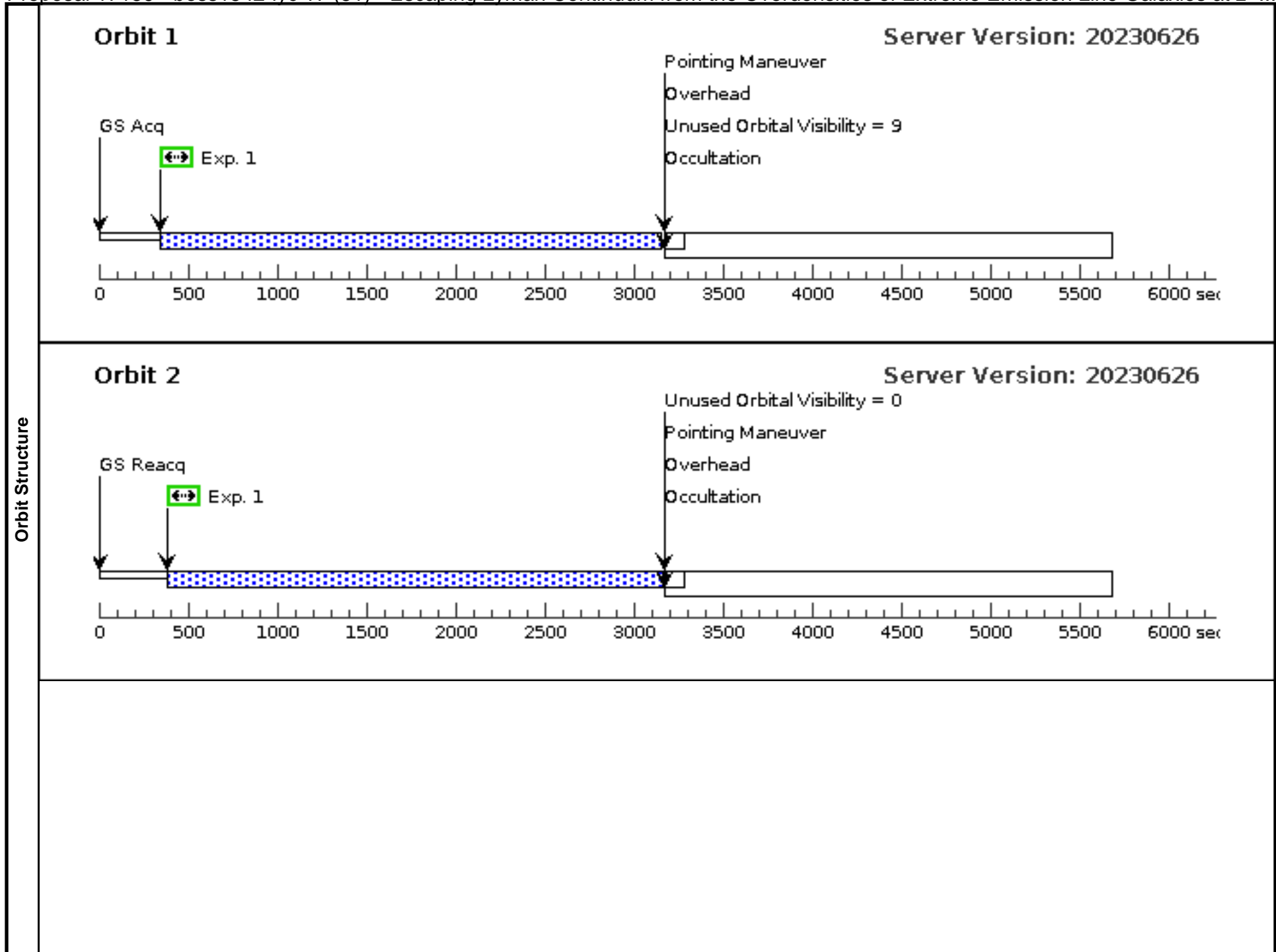


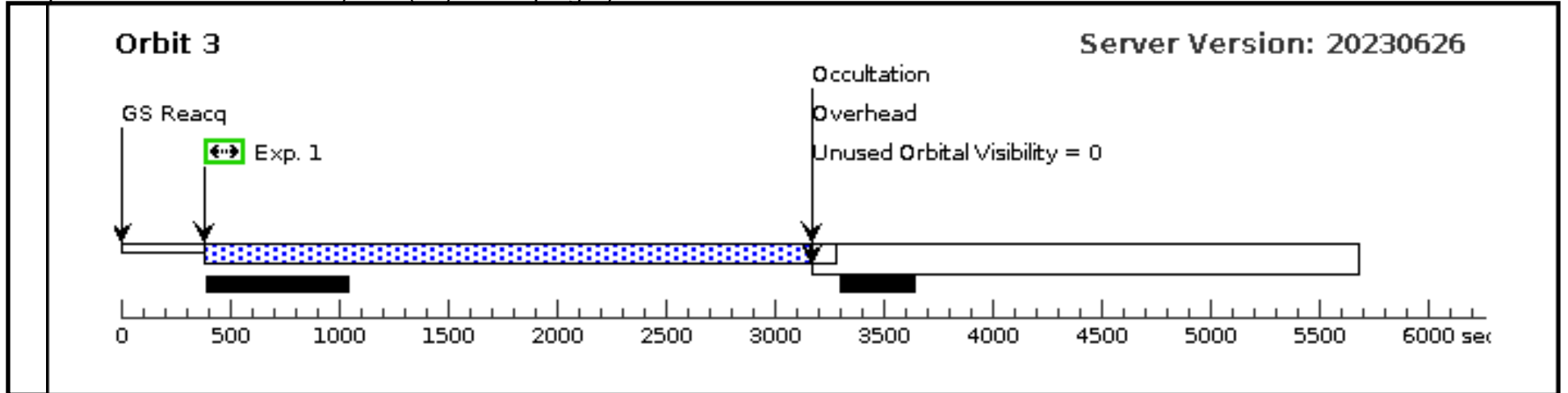


Proposal 17159 - boss1542-lyc-v7 (51) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<p><b>Proposal 17159, boss1542-lyc-v7 (51)</b></p> <p><b>Diagnostic Status: No Diagnostics</b></p> <p>Scientific Instruments: WFC3/UVIS</p> <p>Special Requirements: ORIENT 280.6D TO 285.6 D</p> <p><i>Comments: *IMPORTANT*</i></p> <p><i>PI prefers the orient of 283.1 deg. To ensure timely execution of this visit, we created a new target which opens the schedulability window in early 2024. Please help schedule the repeat of this visit during this window. If not possible, then please contact the PI to discuss the possibility to revert back to the original setting of this visit, such that it can be scheduled in mid-2024.</i></p>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false				(1)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>			<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>		
	(4)	BOSS1542-LYC-FLIP	RA: 15 42 53.6619 (235.7235912d) Dec: +38 50 28.61 (38.84128d) Equinox: J2000					V=24.00+/-0.05	Reference Frame: ICRS		
<p><i>Comments:</i></p> <p><i>Category=CLUSTER OF GALAXIES</i></p> <p><i>Description=[HIGH REDSHIFT CLUSTER]</i></p>											
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(4) BOSS1542-LYC-FLIP	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 in boss1542-lyc-v7 (51) (3)	2779 Secs (8337 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		[2]
									[=>(Pattern 3)]		[3]

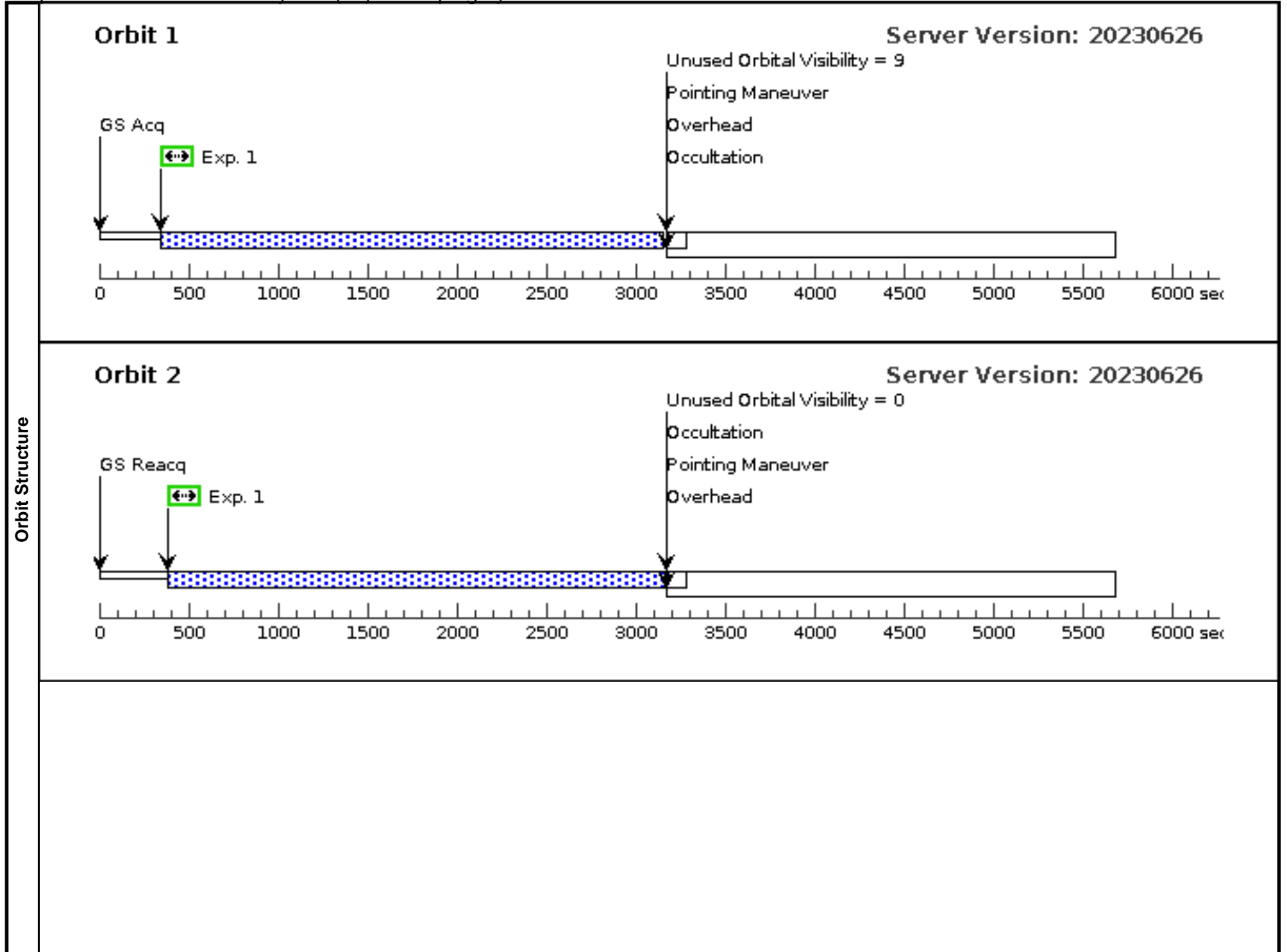


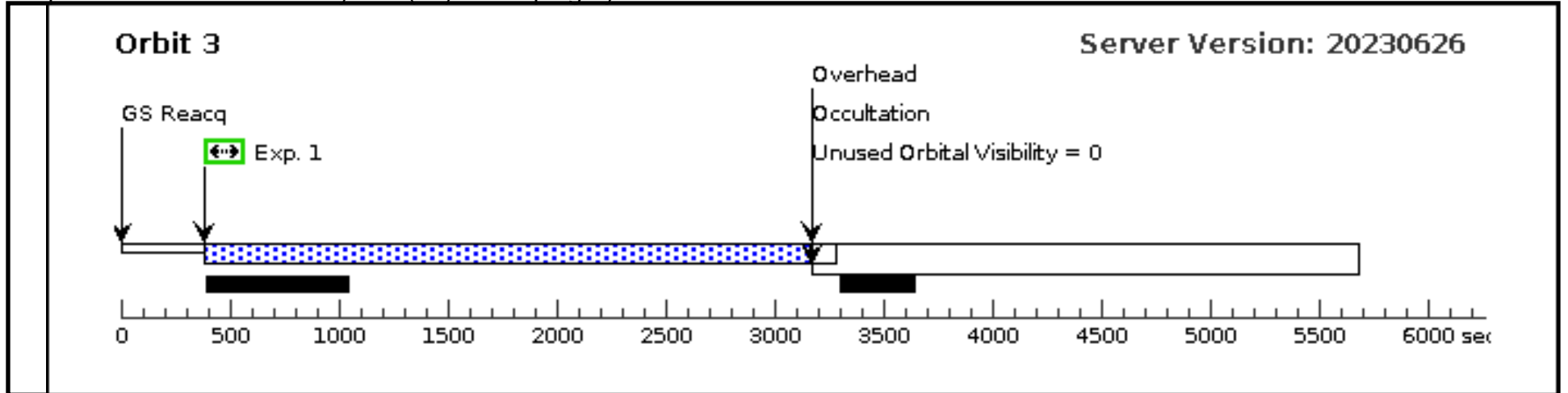


Proposal 17159 - boss1542-lyc-v8 (52) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	<b>Proposal 17159, boss1542-lyc-v8 (52)</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 51 <i>Comments: To ensure timely execution of this visit, we created a new target which opens the schedulability window in early 2024. Please help schedule the repeat of this visit during this window. If not possible, then please contact the PI to discuss the possibility to revert back to the original setting of this visit, such that it can be scheduled in mid-2024.</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(3)		Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(4)	BOSS1542-LYC-FLIP	RA: 15 42 53.6619 (235.7235912d) Dec: +38 50 28.61 (38.84128d) Equinox: J2000				V=24.00+/-0.05		Reference Frame: ICRS		
	<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>		<b>Orbit</b>
	1	(WFC3UVI S.im.181084 8)	(4) BOSS1542-LYC-FLIP	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10		Pattern 3, Exps 1-1 in boss1542-lyc-v8 (5 2) (3)	2779 Secs (8337 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		[2]
								[=>(Pattern 3)]		[3]	





Proposal 17159 - boss1542-lyc-v9 (53) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~...

Thu Aug 31 14:00:43 GMT 2023

<b>Visit</b>	Proposal 17159, boss1542-lyc-v9 (53) <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 51 <i>Comments: To ensure timely execution of this visit, we created a new target which opens the schedulability window in early 2024. Please help schedule the repeat of this visit during this window. If not possible, then please contact the PI to discuss the possibility to revert back to the original setting of this visit, such that it can be scheduled in mid-2024.</i>										
	<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
(4)		BOSS1542-LYC-FLIP	RA: 15 42 53.6619 (235.7235912d) Dec: +38 50 28.61 (38.84128d) Equinox: J2000		V=24.00+/-0.05	Reference Frame: ICRS					
<b>Exposures</b>	<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
1	(WFC3UVI S.im.181084 8)	(4) BOSS1542-LYC-FLIP	WFC3/UVIS, ACCUM, UVIS-CENTER	F225W	FLASH=10			2788 Secs (2788 Secs) [==>]	[1]		
<b>Orbit Structure</b>	Server Version: 20230626 Unused Orbital Visibility = 0										
	<p>The diagram shows a horizontal timeline from 0 to 6000 seconds. Key events are marked with arrows: 'GS Acq' at 0s, 'Exp. 1' (a green box with a double-headed arrow) from approximately 300s to 3200s, 'Occultation' and 'Overhead' starting at 3200s. A blue checkered bar is positioned below the 'Exp. 1' label, indicating the exposure period. A solid black bar is shown below the 'Occultation' and 'Overhead' labels. The text 'Unused Orbital Visibility = 0' is positioned above the timeline.</p>										

Proposal 17159 - boss1542-uvc (14) - Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~2.2

Thu Aug 31 14:00:43 GMT 2023

Visit	Proposal 17159, boss1542-uvc (14), completed <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 08 <i>Comments: If there is an over-subscription in the scheduling windows or problems assigning a single orient for all 19 orbits (visits 08-14), please contact the PI immediately to discuss the possibilities and requirements to use the +/-180 or +/- 90 deg orient offsets for a subset of visits.</i>									
	(boss1542-uvc (14)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Diagnostics										
Patterns	#	Primary Pattern		Secondary Pattern	Exposures					
	(3)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	BOSS1542-LYC	RA: 15 42 53.6483 (235.7235346d) Dec: +38 50 26.71 (38.84075d) Equinox: J2000		V=24.00+/-0.05	Reference Frame: ICRS				
<i>Comments:</i> Category=CLUSTER OF GALAXIES Description=[HIGH REDSHIFT CLUSTER]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(WFC3UVI S.im.181088 5)	(2) BOSS1542-LYC	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W		POS TARG 0,0	Pattern 3, Exps 1-1 in boss1542-uvc (14) (3)	850 Secs (2550 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
Orbit Structure	Server Version: 20230626 *** ORBITAL VISIBILITY OVERRUN = 18									