17913 - The False positive in the Lyman Continuum escape fraction estimation

Cycle: 32, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Yu-Heng Lin (PI) (Contact)	**California Institute of Technology**
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Dr. Daniel Masters (CoI)	California Institute of Technology
Alexandra Le Reste (CoI)	University of Minnesota - Twin Cities
Dr. Annalisa Citro (CoI)	University of Minnesota - Twin Cities
Dr. Axel Runnholm (CoI) (ESA Member)	Stockholm University
Dr. Keunho J. Kim (CoI)	California Institute of Technology
Dr. Noah Sidney James Rogers (CoI)	Northwestern University

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) J012217+052044	ACS/WFC	3	10-Mar-2025 08:00:13.0	yes
02	(1) J012217+052044	ACS/WFC	1	10-Mar-2025 08:00:14.0	yes
03	(2) J1127+4610	ACS/WFC	3	10-Mar-2025 08:00:15.0	yes
04	(2) J1127+4610	ACS/WFC	4	10-Mar-2025 08:00:15.0	yes
05	(3) J0232-0426	ACS/WFC	4	10-Mar-2025 08:00:16.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
06	(3) J0232-0426	ACS/WFC	3	10-Mar-2025 08:00:17.0	yes
07	(4) J1046+5827	ACS/WFC	4	10-Mar-2025 08:00:18.0	yes

22 Total Orbits Used

ABSTRACT

When calculating the reionization history, the Lyman Continuum escape fraction (fesc) cannot be measured directly at high redshift and therefore remains severely unconstrained. The fesc can only be referred from the indirect fesc indicators derived from the low-z studies. However, the indirect fesc indicators are only derived from spatially integrated properties, neglect the false positives in the regression, and imply an overproduction of ionizing photons that would lead to a very early reionization history.

This proposal aims at understanding the discrepancy between observed reionization constraints and the local Lyman Continuum emitters. We propose imaging 4 galaxies with resolved maps of escape fraction proxies derived from optical emission lines to identify for the first time their spatial variations in these galaxies. These 4 galaxies are exclusively selected from the false positive sample in the Lyman Continuum escape fraction estimation. Their emission line maps can only be produced by the ACS/WFC ramp filters. This will allow us to understand whether the global (integrated) properties of these galaxies (star formation rate density, [OIII]/[OII] ratio, and dust extinction) are a good indicator of their estimated Lyman Continuum escape fraction. The applicability of these results to faint z>6 galaxies will become increasingly important for studying galaxies in the epoch of reionization.

OBSERVING DESCRIPTION

We observe 4 galaxies in 4 pointings, separated into 7 visits (3galaxies with 2 visit, and 1galaxy with 1 visit.)

For each galaxies, we are taking 6 sets of images. For Each set of images, we uses 1 filter, subarray aperture, and split the image into 3-dither exposures. (18 exposures for each galaxies).

We manually setup the three-point dithers pattern to arrange the exposures into the orbits. The dither pattern (-0.125, 0.125), (0, 0), (0.1125, -0.1125) is setted. The difference in the last point is intentional to give us 2.5 and 2.25 pixel shifts for better sampling.

To easy scheduling, we do not request special observation requirements for the 7 pointings. However, ideally an execution of visits at a similar time within a few weeks would be appreciated.

Visit

Proposal 17913, J012217+052044 1st (01), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(OII (01.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (01.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (01.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hbeta (01.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hbeta (01.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hbeta (01.006)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (01.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (01.008)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (01.009)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hbeta_cont (01.010)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hbeta_cont (01.011)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hbeta_cont (01.012)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (01.013)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

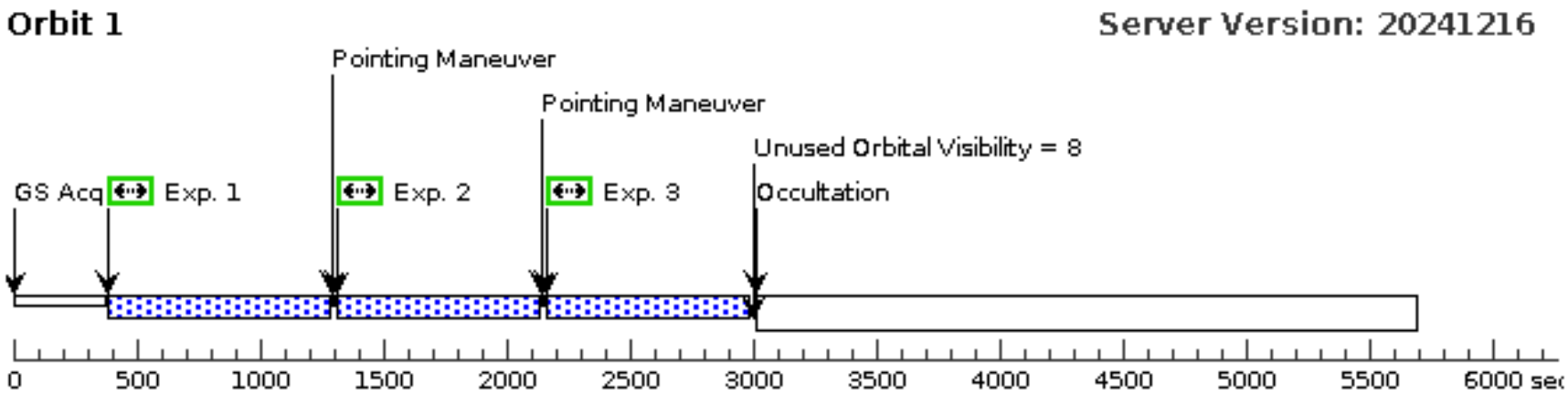
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J012217+052044	RA: 01 22 16.6621 (20.5694254d) Dec: +05 20 44.02 (5.34556d) Equinox: J2000		V=20.83+/-0.1	Reference Frame: ICRS

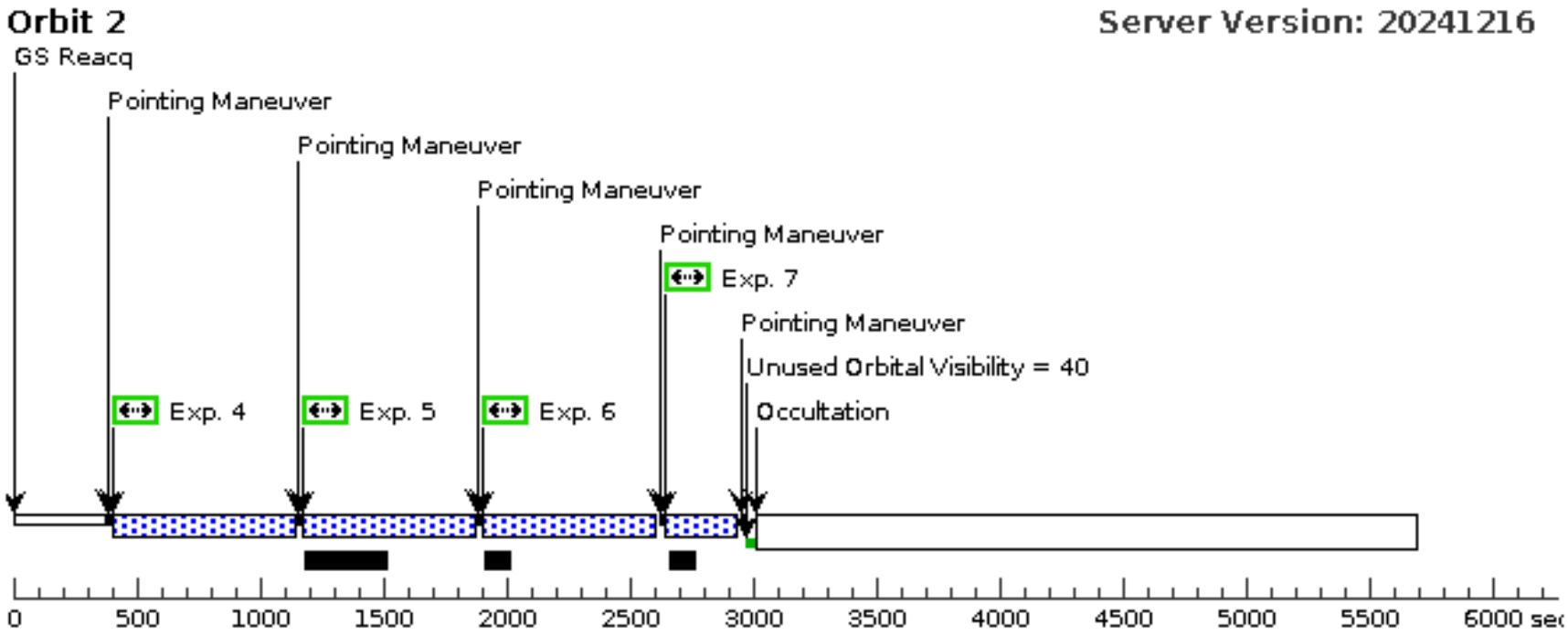
Comments:
Category=GALAXY
Description=[STARBURST]

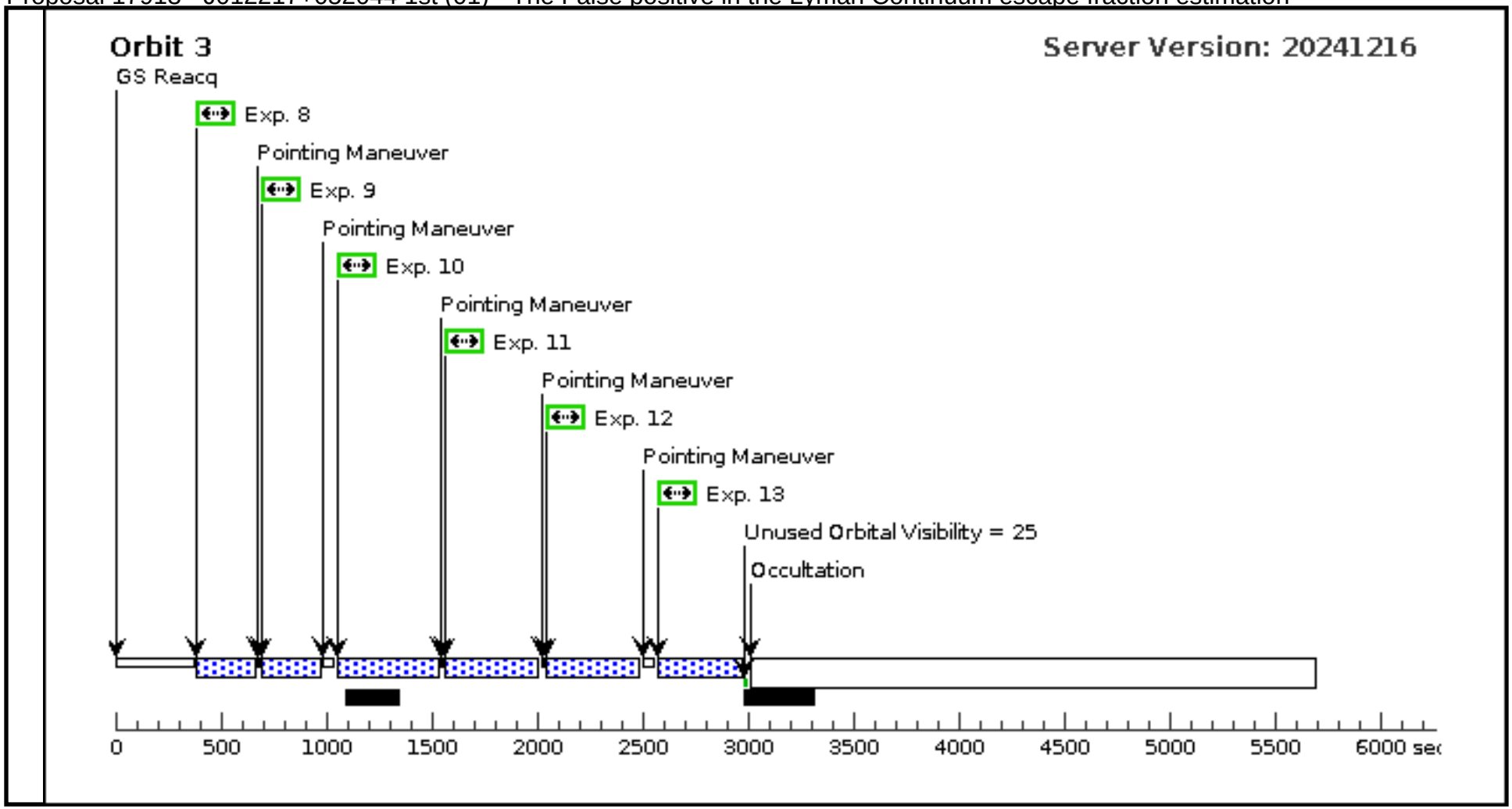
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	OII	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 5090 A		POS TARG -0.125,0.125		600 Secs (689 Secs)	
								[==>689.0 Secs]	***[1]***
2	OII	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 5090 A		POS TARG 0,0		600 Secs (697 Secs)	
								[==>697.0 Secs]	***[1]***
3	OII	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 5090 A		POS TARG 0.1125,-0.1125		600 Secs (697 Secs)	
								[==>697.0 Secs]	***[1]***
4	Hbeta	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6638 A		POS TARG -0.125,0.125		410 Secs (577 Secs)	
								[==>577.0 Secs]	***[2]***
5	Hbeta	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6638 A		POS TARG 0,0		410 Secs (577 Secs)	
								[==>577.0 Secs]	***[2]***
6	Hbeta	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6638 A		POS TARG 0.1125,-0.1125		410 Secs (577 Secs)	
								[==>577.0 Secs]	***[2]***
7	OIII	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6811 A		POS TARG -0.125,0.125		100 Secs (150 Secs)	
								[==>150.0 Secs]	***[2]***
8	OIII	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6811 A		POS TARG 0,0		100 Secs (150 Secs)	
								[==>150.0 Secs]	***[3]***
9	OIII	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6811 A		POS TARG 0.1125,-0.1125		100 Secs (150 Secs)	
								[==>150.0 Secs]	***[3]***
10	Hbeta_cont	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6120 A		POS TARG -0.125,0.125		200 Secs (320 Secs)	
								[==>320.0 Secs]	***[3]***
11	Hbeta_cont	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6120 A		POS TARG 0,0		200 Secs (320 Secs)	
								[==>320.0 Secs]	***[3]***
12	Hbeta_cont	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6120 A		POS TARG 0.1125,-0.1125		200 Secs (320 Secs)	
								[==>320.0 Secs]	***[3]***
13	Ha_cont	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8140 A		POS TARG -0.125,0.125		200 Secs (257 Secs)	
								[==>257.0 Secs]	***[3]***

Orbit Structure



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Exp. 9
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Exp. 10
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Exp. 12
Pointing Maneuver
Exp. 13
Unused Orbital Visibility = 25
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17913, J012217+052044 2nd (02), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Ha_cont (02.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (02.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (02.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (02.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (02.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

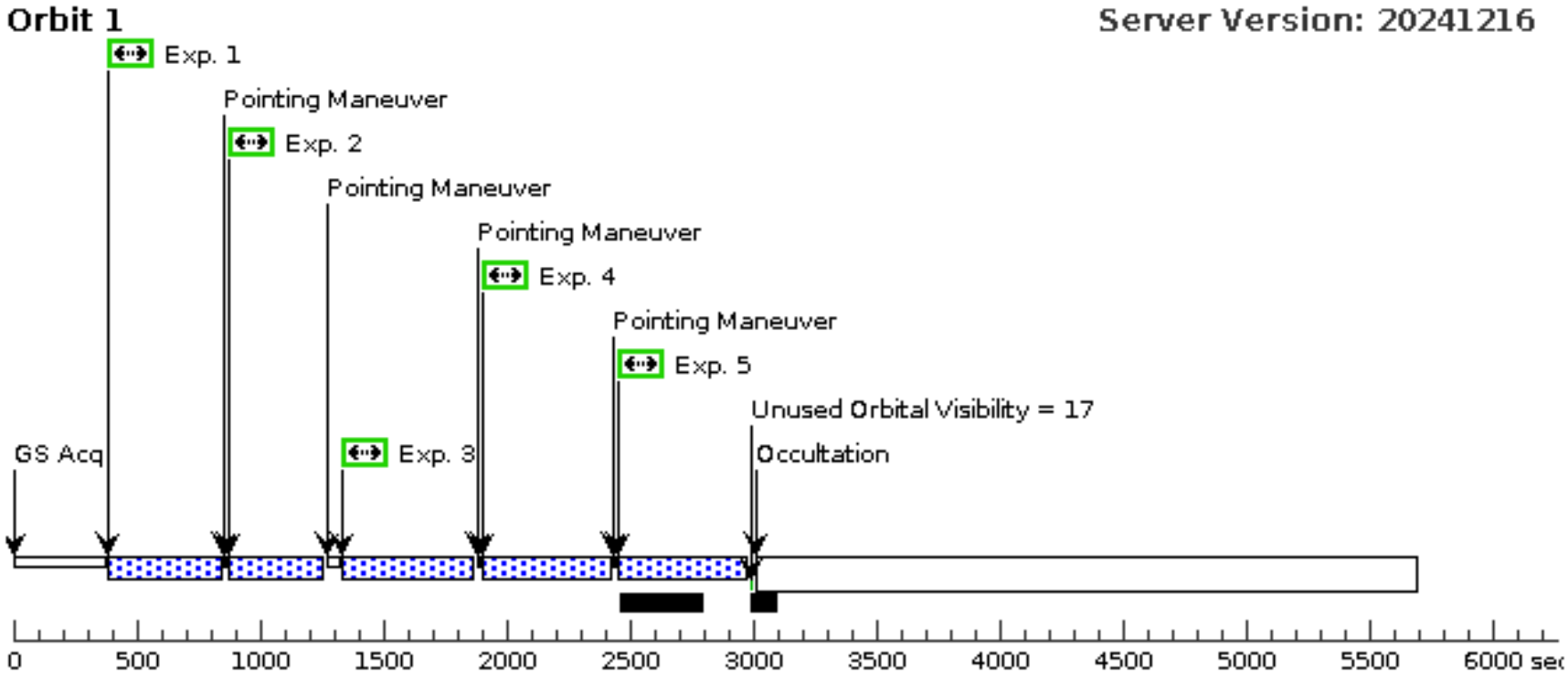
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J012217+052044	RA: 01 22 16.6621 (20.5694254d) Dec: +05 20 44.02 (5.34556d) Equinox: J2000		V=20.83+/-0.1	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Ha_cont	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8140 A		POS TARG 0,0		200 Secs (257 Secs) *[==>257.0 Secs]*	 ***[1]***
2	Ha_cont	(1) J012217+052044	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8140 A		POS TARG 0.1125,-0.1125		200 Secs (257 Secs) *[==>257.0 Secs]*	 ***[1]***
3	Ha	(1) J012217+052044	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 8962 A		POS TARG -0.125,0.125		300 Secs (395 Secs) *[==>395.0 Secs]*	 ***[1]***
4	Ha	(1) J012217+052044	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 8962 A		POS TARG 0,0		300 Secs (395 Secs) *[==>395.0 Secs]*	 ***[1]***
5	Ha	(1) J012217+052044	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 8962 A		POS TARG 0.1125,-0.1125		300 Secs (395 Secs) *[==>395.0 Secs]*	 ***[1]***

Orbit Structure



Visit

Proposal 17913, J1127+4610 1st (03), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(OII (03.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (03.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (03.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

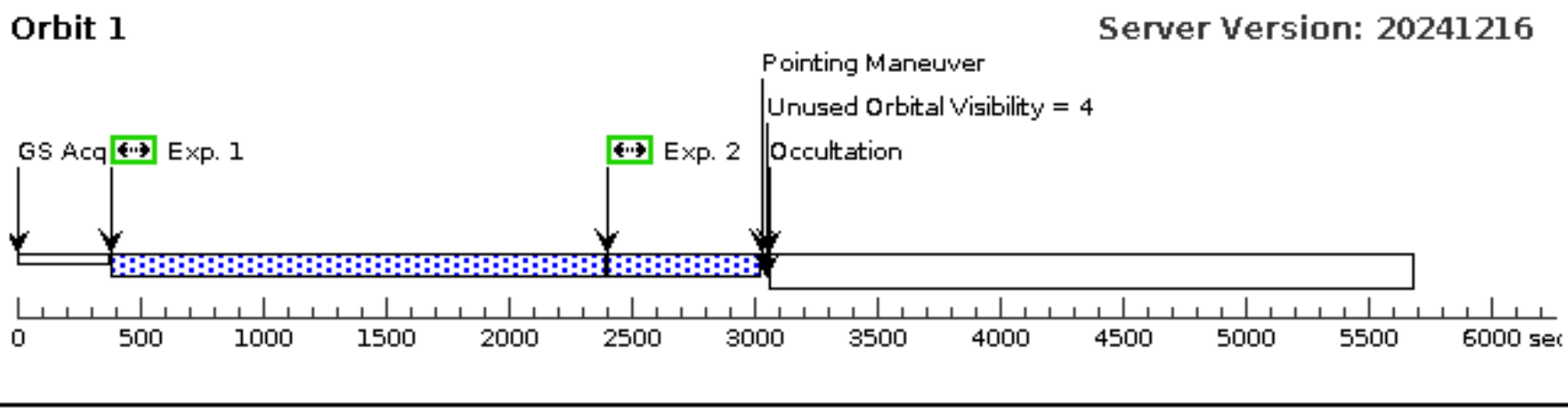
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	J1127+4610	RA: 11 27 21.0000 (171.8375000d) Dec: +46 10 42.50 (46.17847d) Equinox: J2000		V=22.22+/-0.2	Reference Frame: ICRS

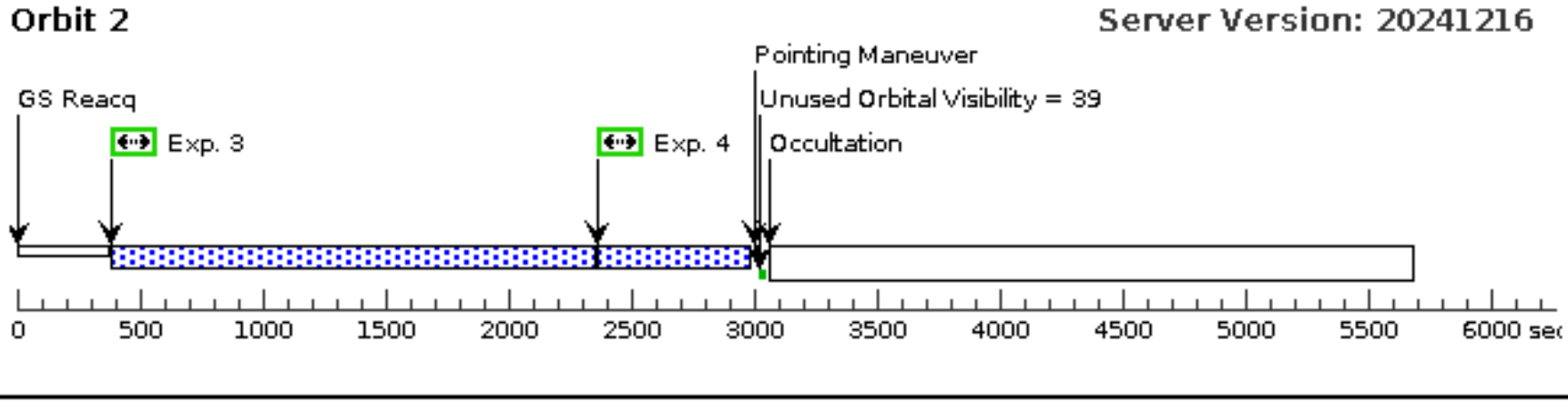
Comments:
Category=GALAXY
Description=[STARBURST]

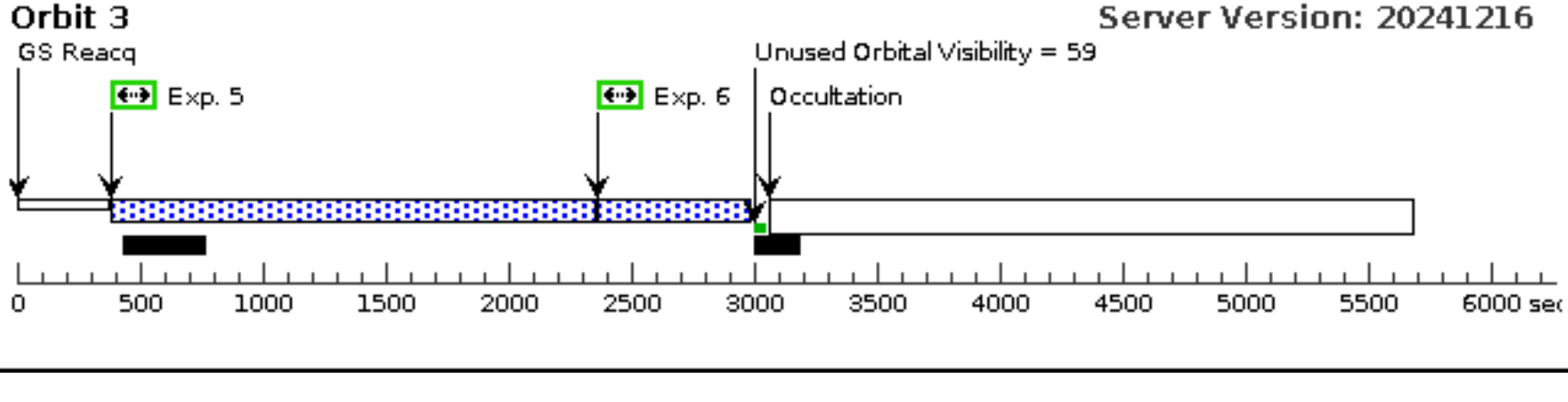
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	OII	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 4928 A		POS TARG -0.125,0.125		1800 Secs (1800 Secs)	
								[==>]	***[1]***
2	Hb_cont	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	F550M		POS TARG -0.125,0.125		450 Secs (450 Secs)	
								[==>]	***[1]***
3	OII	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 4928 A		POS TARG 0,0		1800 Secs (1800 Secs)	
								[==>]	***[2]***
4	Hb_cont	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	F550M		POS TARG 0,0		450 Secs (450 Secs)	
								[==>]	***[2]***
5	OII	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 4928 A		POS TARG 0.1125,-0.1125		1800 Secs (1800 Secs)	
								[==>]	***[3]***
6	Hb_cont	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	F550M		POS TARG 0.1125,-0.1125		450 Secs (450 Secs)	
								[==>]	***[3]***

Orbit Structure







Visit

Proposal 17913, J1127+4610 2nd (04), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Hb (04.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (04.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (04.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (04.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (04.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (04.008)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (04.010)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (04.011)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (04.012)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

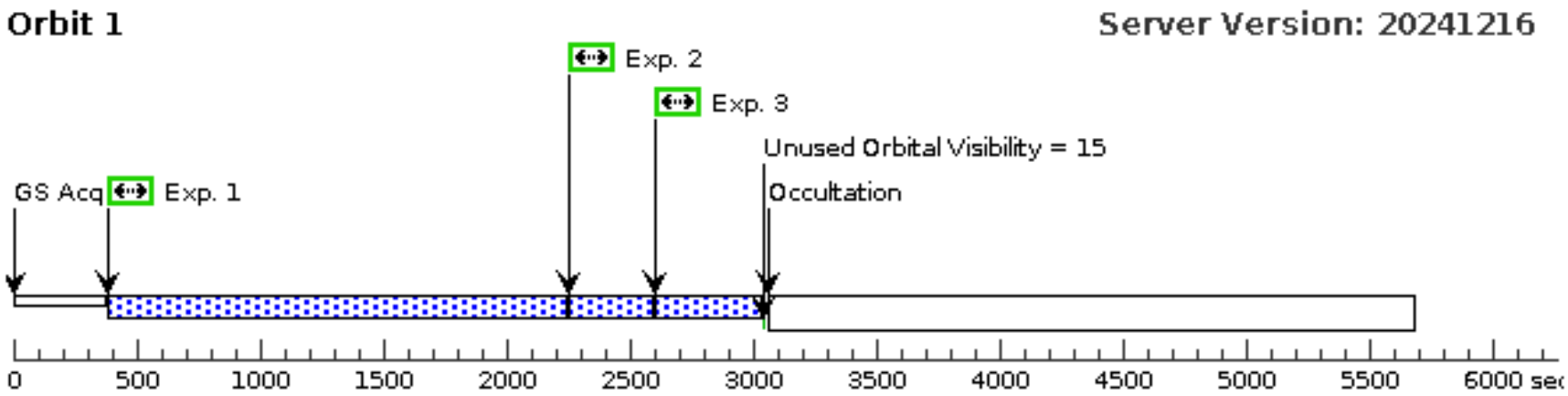
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	J1127+4610	RA: 11 27 21.0000 (171.8375000d) Dec: +46 10 42.50 (46.17847d) Equinox: J2000		V=22.22+/-0.2	Reference Frame: ICRS

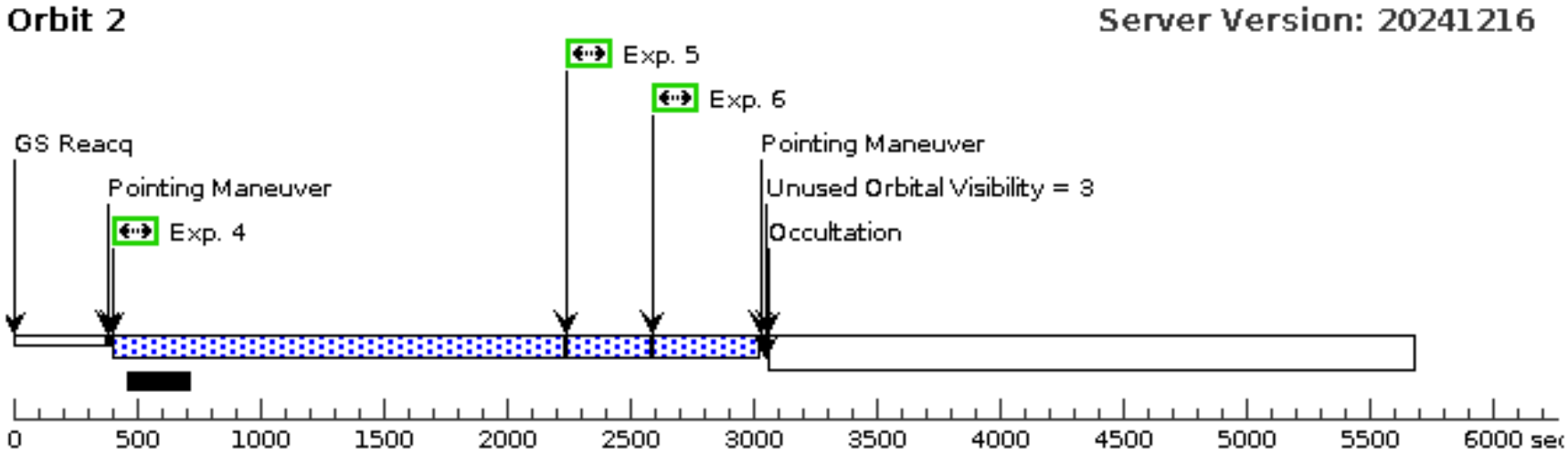
Comments:
Category=GALAXY
Description=[STARBURST]

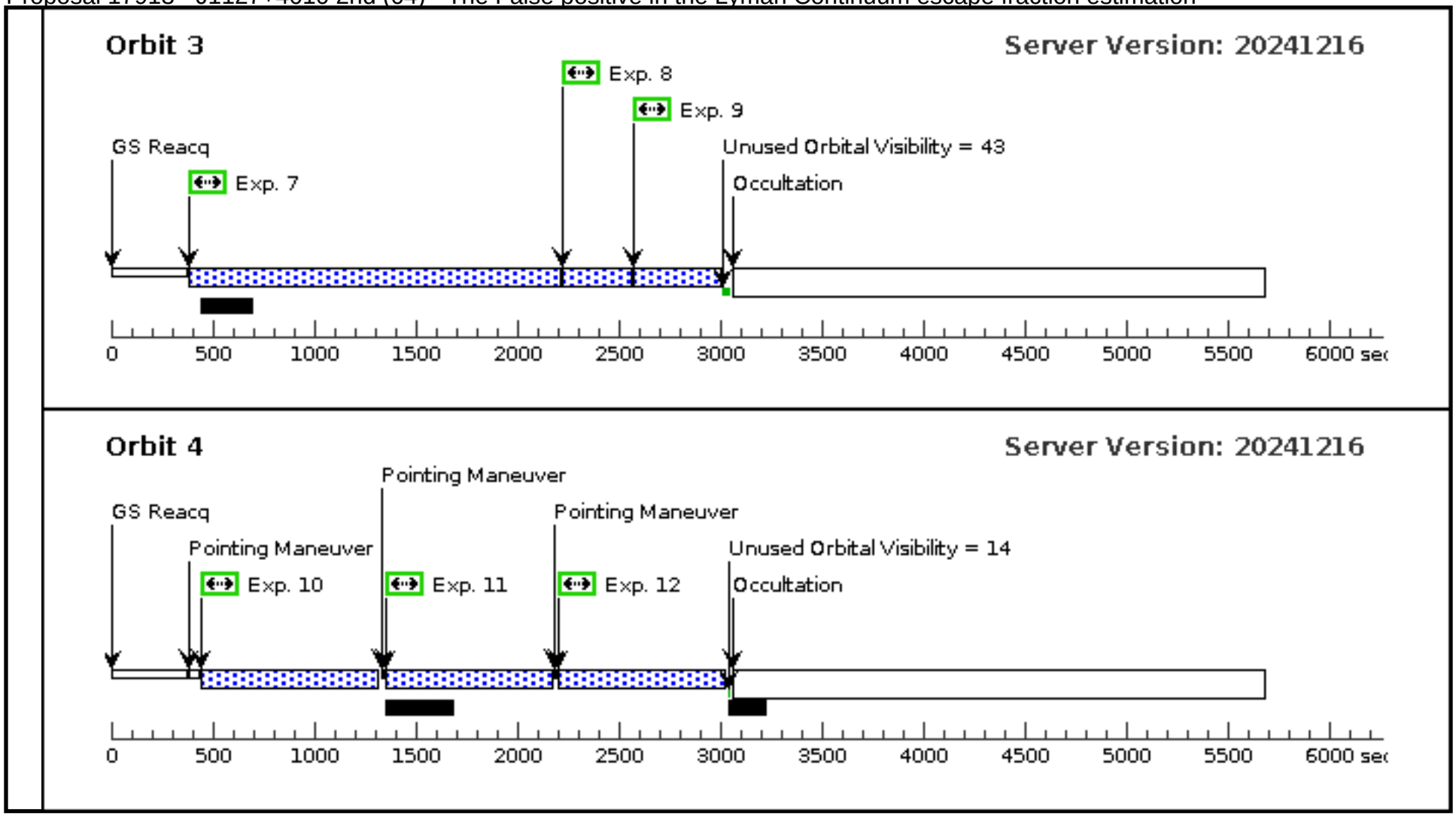
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Hb	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6427 A		POS TARG -0.125,0 .125		1700 Secs (1650 Secs) *[==>1650.0 Secs]*	 ***[1]***
2	OIII	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6596 A		POS TARG -0.125,0 .125		200 Secs (200 Secs) *[==>200.0 Secs]*	 ***[1]***
3	Ha_cont	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	F775W		POS TARG -0.125,0 .125		240 Secs (250 Secs) *[==>250.0 Secs]*	 ***[1]***
4	Hb	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6427 A		POS TARG 0,0		1700 Secs (1650 Secs) *[==>1650.0 Secs]*	 ***[2]***
5	OIII	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6596 A		POS TARG 0,0		200 Secs (200 Secs) *[==>200.0 Secs]*	 ***[2]***
6	Ha_cont	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	F775W		POS TARG 0,0		240 Secs (250 Secs) *[==>250.0 Secs]*	 ***[2]***
7	Hb	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6427 A		POS TARG 0.1125,-0.1125		1700 Secs (1650 Secs) *[==>1650.0 Secs]*	 ***[3]***
8	OIII	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6596 A		POS TARG 0.1125,-0.1125		200 Secs (200 Secs) *[==>200.0 Secs]*	 ***[3]***
9	Ha_cont	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-MRAMPQ	F775W		POS TARG 0.1125,-0.1125		240 Secs (250 Secs) *[==>250.0 Secs]*	 ***[3]***
10	Ha	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR853N 8678 A		POS TARG -0.125,0 .125		700 Secs (700 Secs) *[==>]*	 ***[4]***
11	Ha	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR853N 8678 A		POS TARG 0,0		700 Secs (700 Secs) *[==>]*	 ***[4]***
12	Ha	(2) J1127+4610	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR853N 8678 A		POS TARG 0.1125,-0.1125		700 Secs (700 Secs) *[==>]*	 ***[4]***

Orbit Structure



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GS Reacq
Exp. 7
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1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20241216
Pointing Maneuver
GS Reacq
Pointing Maneuver
Pointing Maneuver
Unused Orbital Visibility = 14
Exp. 10
Exp. 11
Exp. 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17913, J0232-0426 1st (05), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(OII (05.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (05.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (05.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (05.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (05.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (05.006)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (05.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (05.008)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (05.009)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

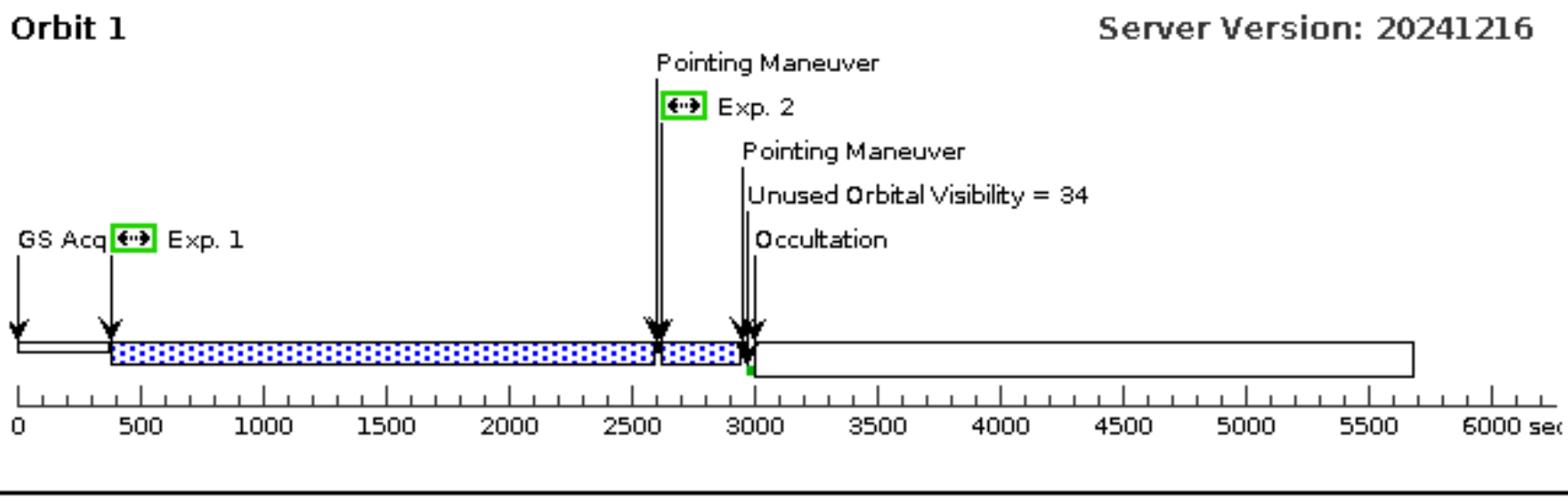
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	J0232-0426	RA: 02 32 16.0900 (38.0670417d) Dec: -04 26 26.71 (-4.44075d) Equinox: J2000		V=21.93+/-0.2	Reference Frame: ICRS

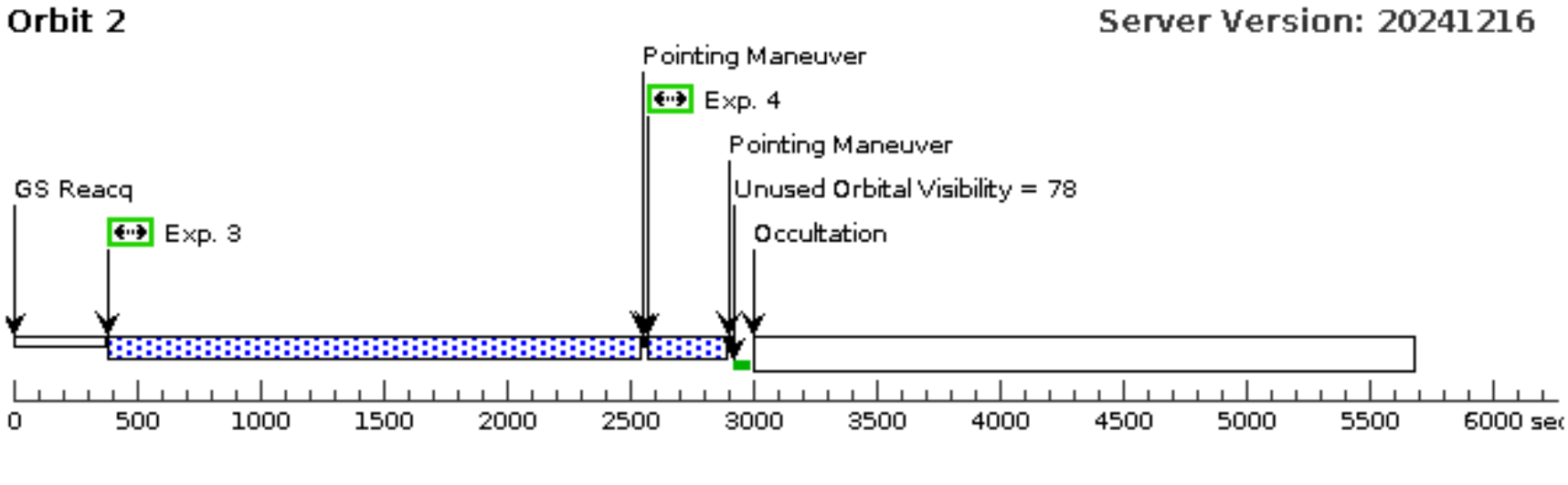
Comments:
Category=GALAXY
Description=[STARBURST]

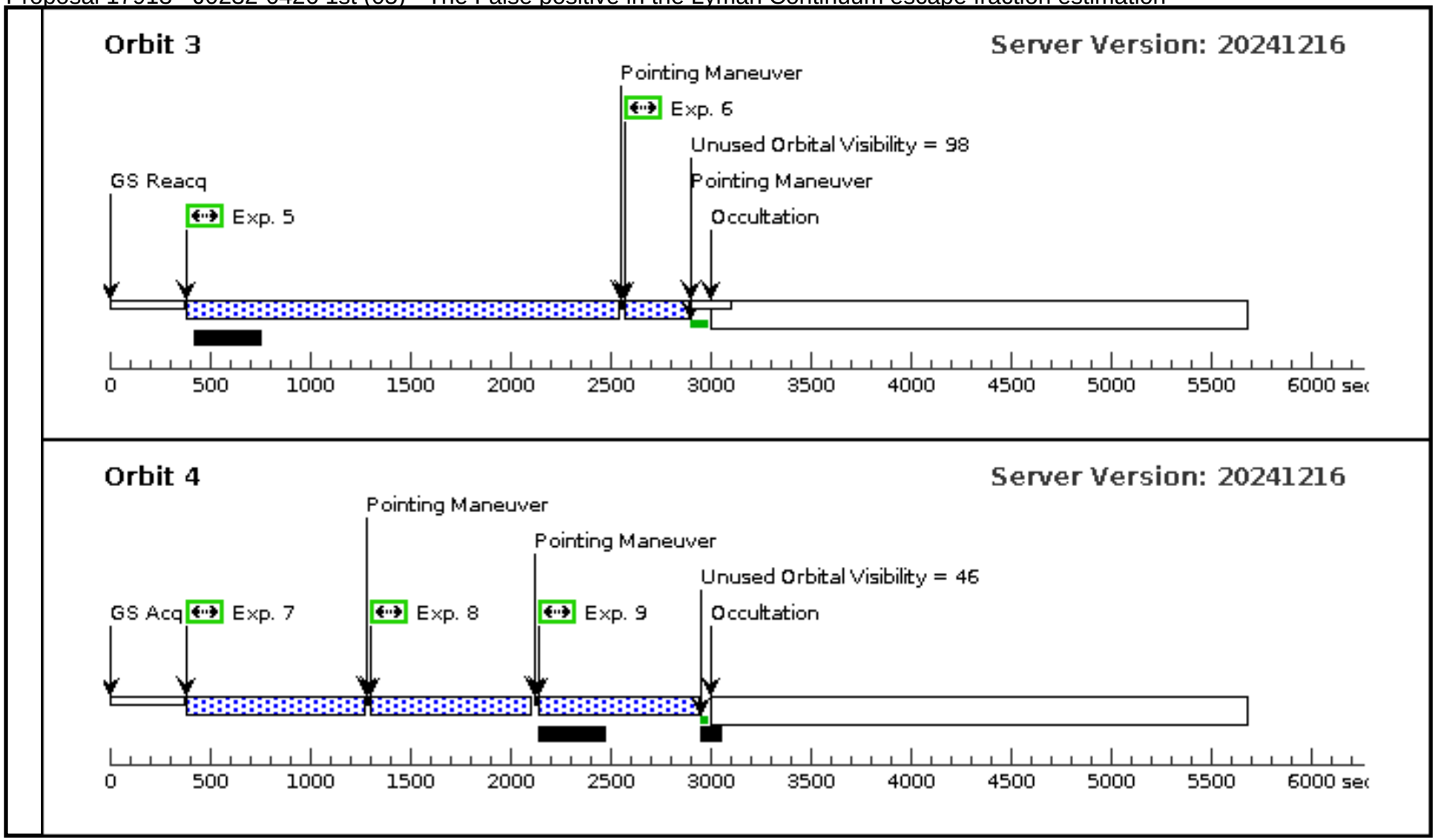
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	OII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5413 A		POS TARG -0.125,0.125		2000 Secs (2000 Secs) *[==>]*	 ***[1]***
2	OIII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7244 A		POS TARG 0,0		150 Secs (150 Secs) *[==>]*	 ***[1]***
3	OII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5413 A		POS TARG 0.1125,-0.1125		2000 Secs (2000 Secs) *[==>]*	 ***[2]***
4	OIII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7244 A		POS TARG -0.125,0.125		150 Secs (150 Secs) *[==>]*	 ***[2]***
5	OII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR551N 5413 A		POS TARG 0,0		2000 Secs (2000 Secs) *[==>]*	 ***[3]***
6	OIII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7244 A		POS TARG 0.1125,-0.1125		150 Secs (150 Secs) *[==>]*	 ***[3]***
7	Ha	(3) J0232-0426	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 9532 A		POS TARG -0.125,0.125		680 Secs (680 Secs) *[==>]*	 ***[4]***
8	Ha	(3) J0232-0426	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 9532 A		POS TARG 0,0		680 Secs (680 Secs) *[==>]*	 ***[4]***
9	Ha	(3) J0232-0426	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 9532 A		POS TARG 0.1125,-0.1125		680 Secs (680 Secs) *[==>]*	 ***[4]***

Orbit Structure






Orbit 3
Server Version: 20241216
Pointing Maneuver
Exp. 6
Unused Orbital Visibility = 98
GS Reacq
Exp. 5
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20241216
Pointing Maneuver
Pointing Maneuver
Unused Orbital Visibility = 46
GS Acq
Exp. 7
Exp. 8
Exp. 9
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17913, J0232-0426 2nd (06), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(OIII (06.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (06.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb_cont (06.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (06.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (06.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (06.006)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb_cont (06.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (06.008)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (06.009)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (06.010)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb_cont (06.011)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (06.012)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

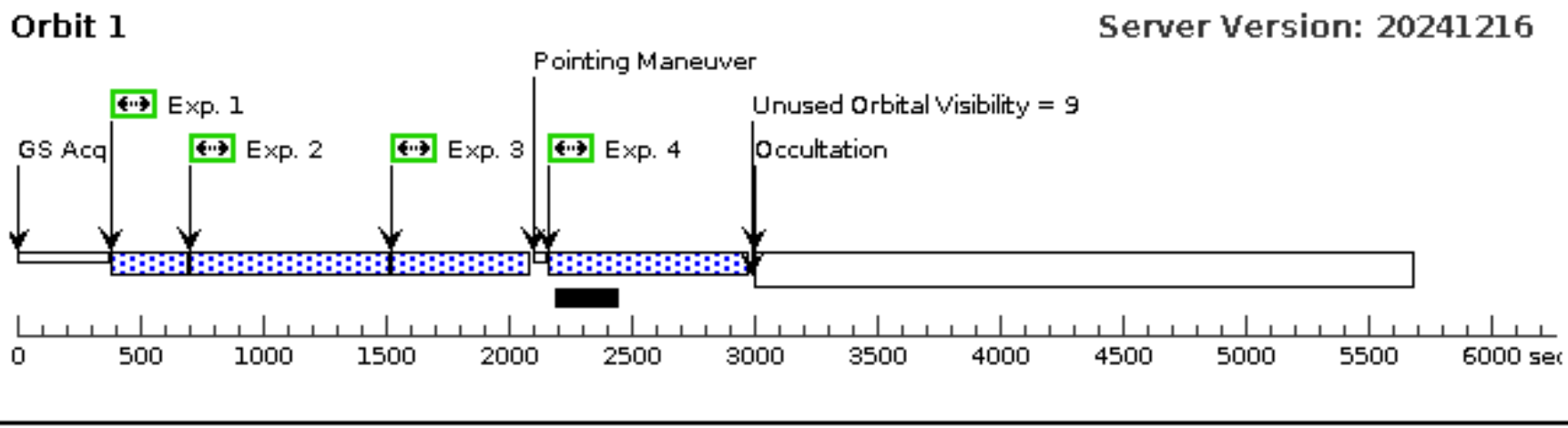
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	J0232-0426	RA: 02 32 16.0900 (38.0670417d) Dec: -04 26 26.71 (-4.44075d) Equinox: J2000		V=21.93+/-0.2	Reference Frame: ICRS

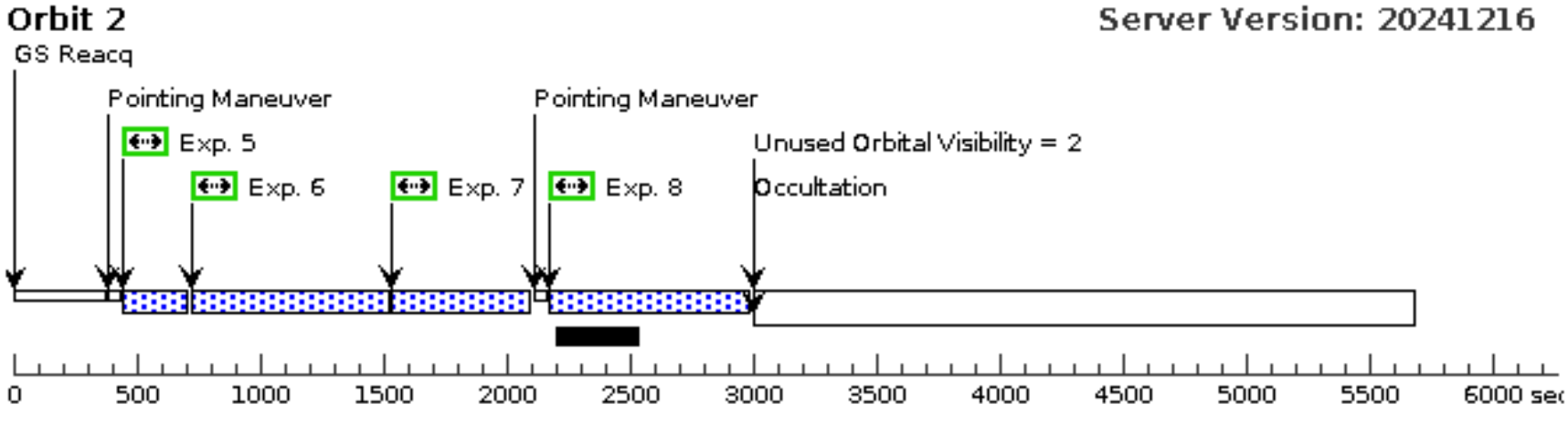
Comments:
Category=GALAXY
Description=[STARBURST]

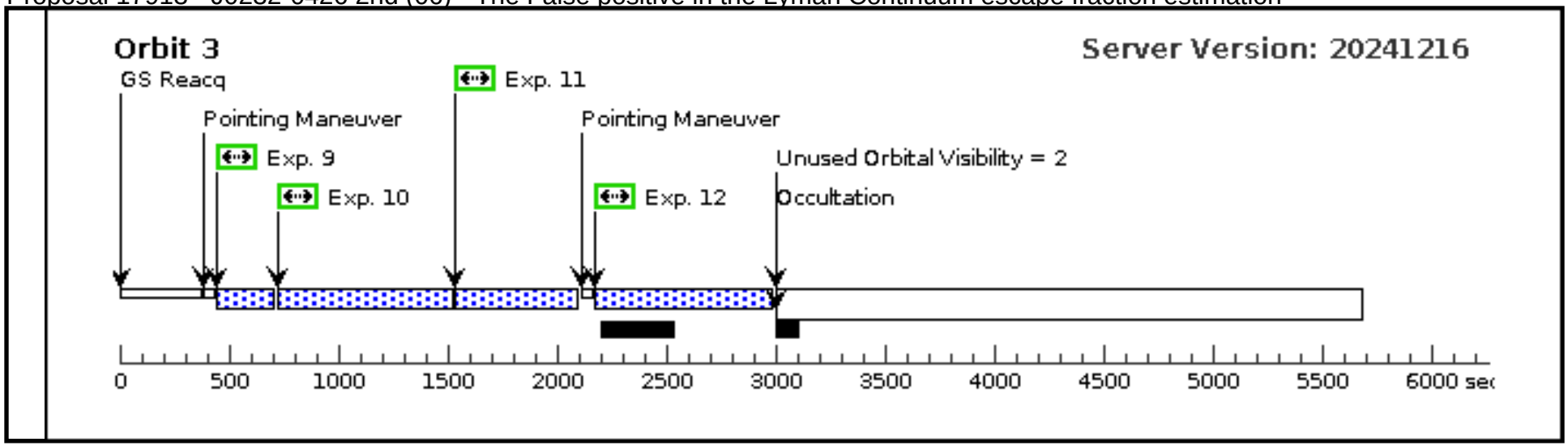
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	OIII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7244 A		POS TARG -0.125,0.125		100 Secs (100 Secs)	
								[==>]	***[1]***
2	Hb	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7060 A		POS TARG -0.125,0.125		670 Secs (670 Secs)	
								[==>]	***[1]***
3	Hb_cont	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6470 A		POS TARG -0.125,0.125		400 Secs (400 Secs)	
								[==>]	***[1]***
4	Ha_cont	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8920 A		POS TARG -0.125,0.125		670 Secs (670 Secs)	
								[==>]	***[1]***
5	OIII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7244 A		POS TARG 0,0		100 Secs (97 Secs)	
								[==>97.0 Secs]	***[2]***
6	Hb	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7060 A		POS TARG 0,0		670 Secs (667 Secs)	
								[==>667.0 Secs]	***[2]***
7	Hb_cont	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6470 A		POS TARG 0,0		400 Secs (397 Secs)	
								[==>397.0 Secs]	***[2]***
8	Ha_cont	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8920 A		POS TARG 0,0		670 Secs (667 Secs)	
								[==>667.0 Secs]	***[2]***
9	OIII	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7244 A		POS TARG 0.1125,-0.1125		100 Secs (97 Secs)	
								[==>97.0 Secs]	***[3]***
10	Hb	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 7060 A		POS TARG 0.1125,-0.1125		670 Secs (667 Secs)	
								[==>667.0 Secs]	***[3]***
11	Hb_cont	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6470 A		POS TARG 0.1125,-0.1125		400 Secs (397 Secs)	
								[==>397.0 Secs]	***[3]***
12	Ha_cont	(3) J0232-0426	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8920 A		POS TARG 0.1125,-0.1125		670 Secs (667 Secs)	
								[==>667.0 Secs]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20241216
GS Reacq
Pointing Maneuver
Exp. 9
Exp. 10
Exp. 11
Pointing Maneuver
Exp. 12
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17913, J1046+5827 (07), implementation Mon Mar 10 12:00:19 GMT 2025

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(OII (07.001)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb_cont (07.002)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (07.003)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (07.004)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (07.005)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (07.006)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb_cont (07.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (07.008)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (07.009)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (07.010)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OII (07.011)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb_cont (07.012)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Hb (07.013)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(OIII (07.014)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha_cont (07.015)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (07.016)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (07.017)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

(Ha (07.018)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

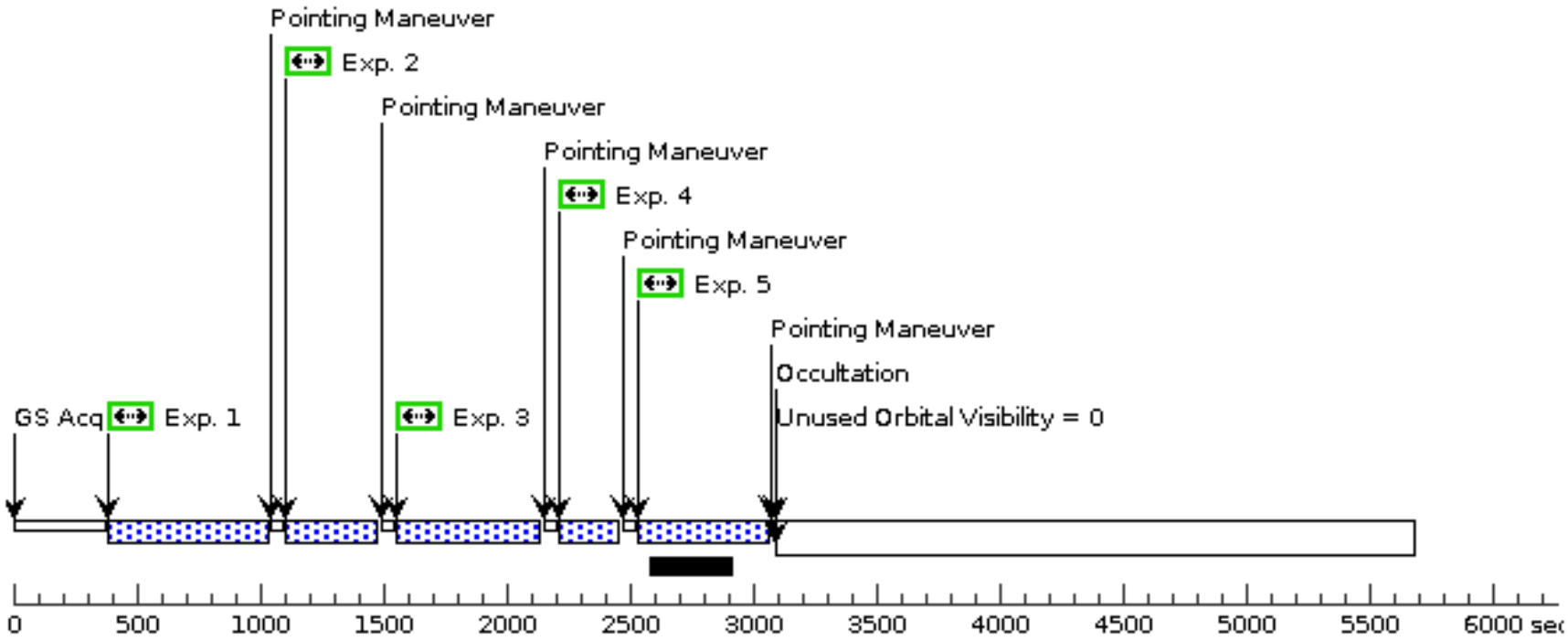
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	J1046+5827	RA: 10 46 1.9800 (161.5082500d) Dec: +58 27 56.95 (58.46582d) Equinox: J2000		V=21.23+/-0.2	Reference Frame: ICRS

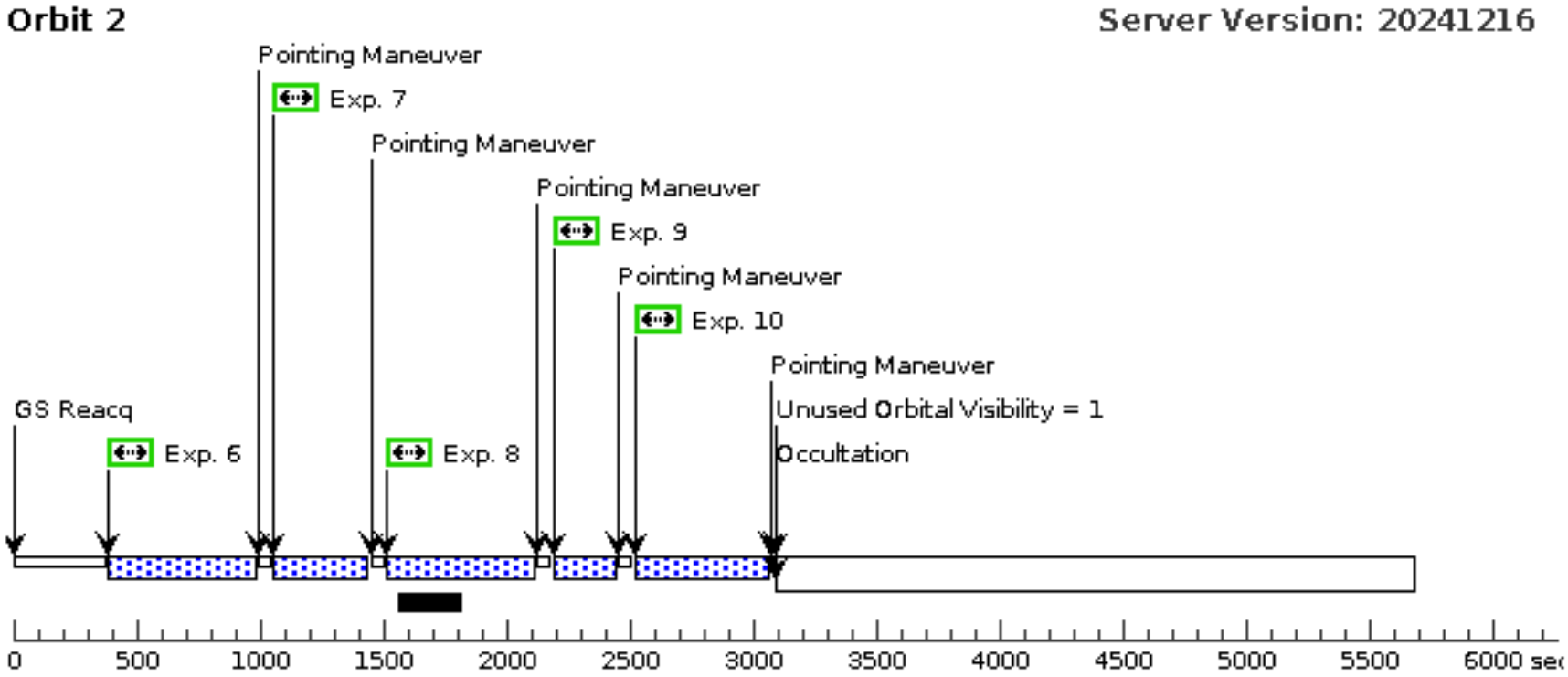
Comments:
Category=GALAXY
Description=[STARBURST]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	OII	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 5205 A		POS TARG -0.125,0.125		420 Secs (439 Secs)	
								[==>439.0 Secs]	***[1]***
2	Hb_cont	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6120 A		POS TARG -0.125,0.125		210 Secs (229 Secs)	
								[==>229.0 Secs]	***[1]***
3	Hb	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6790 A		POS TARG -0.125,0.125		400 Secs (419 Secs)	
								[==>419.0 Secs]	***[1]***
4	OIII	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 6969 A		POS TARG -0.125,0.125		80 Secs (99 Secs)	
								[==>99.0 Secs]	***[1]***
5	Ha_cont	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8140 A		POS TARG -0.125,0.125		350 Secs (369 Secs)	
								[==>369.0 Secs]	***[1]***
6	OII	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 5205 A		POS TARG 0,0		420 Secs (451 Secs)	
								[==>451.0 Secs]	***[2]***
7	Hb_cont	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6120 A		POS TARG 0,0		210 Secs (241 Secs)	
								[==>241.0 Secs]	***[2]***
8	Hb	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6790 A		POS TARG 0,0		400 Secs (431 Secs)	
								[==>431.0 Secs]	***[2]***
9	OIII	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 6969 A		POS TARG 0,0		80 Secs (111 Secs)	
								[==>111.0 Secs]	***[2]***
10	Ha_cont	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8140 A		POS TARG 0,0		350 Secs (381 Secs)	
								[==>381.0 Secs]	***[2]***
11	OII	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR505N 5205 A		POS TARG 0.1125,-0.1125		420 Secs (455 Secs)	
								[==>455.0 Secs]	***[3]***
12	Hb_cont	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR647M 6120 A		POS TARG 0.1125,-0.1125		210 Secs (245 Secs)	
								[==>245.0 Secs]	***[3]***
13	Hb	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR656N 6790 A		POS TARG 0.1125,-0.1125		400 Secs (435 Secs)	
								[==>435.0 Secs]	***[3]***
14	OIII	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-IRAMPQ	FR716N 6969 A		POS TARG 0.1125,-0.1125		80 Secs (115 Secs)	
								[==>115.0 Secs]	***[3]***
15	Ha_cont	(4) J1046+5827	ACS/WFC, ACCUM, WFC1-MRAMPQ	FR914M 8140 A		POS TARG 0.1125,-0.1125		350 Secs (385 Secs)	
								[==>385.0 Secs]	***[3]***
16	Ha	(4) J1046+5827	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 9167 A		POS TARG -0.125,0.125		450 Secs (726 Secs)	
								[==>726.0 Secs]	***[4]***
17	Ha	(4) J1046+5827	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 9167 A		POS TARG 0,0		450 Secs (726 Secs)	
								[==>726.0 Secs]	***[4]***
18	Ha	(4) J1046+5827	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR931N 9167 A		POS TARG 0.1125,-0.1125		450 Secs (726 Secs)	
								[==>726.0 Secs]	***[4]***

Orbit Structure

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Exp. 7
Pointing Maneuver
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Exp. 9
Pointing Maneuver
Exp. 10
Pointing Maneuver
Unused Orbital Visibility = 1
Occultation
GS Reacq
Exp. 6
Exp. 8
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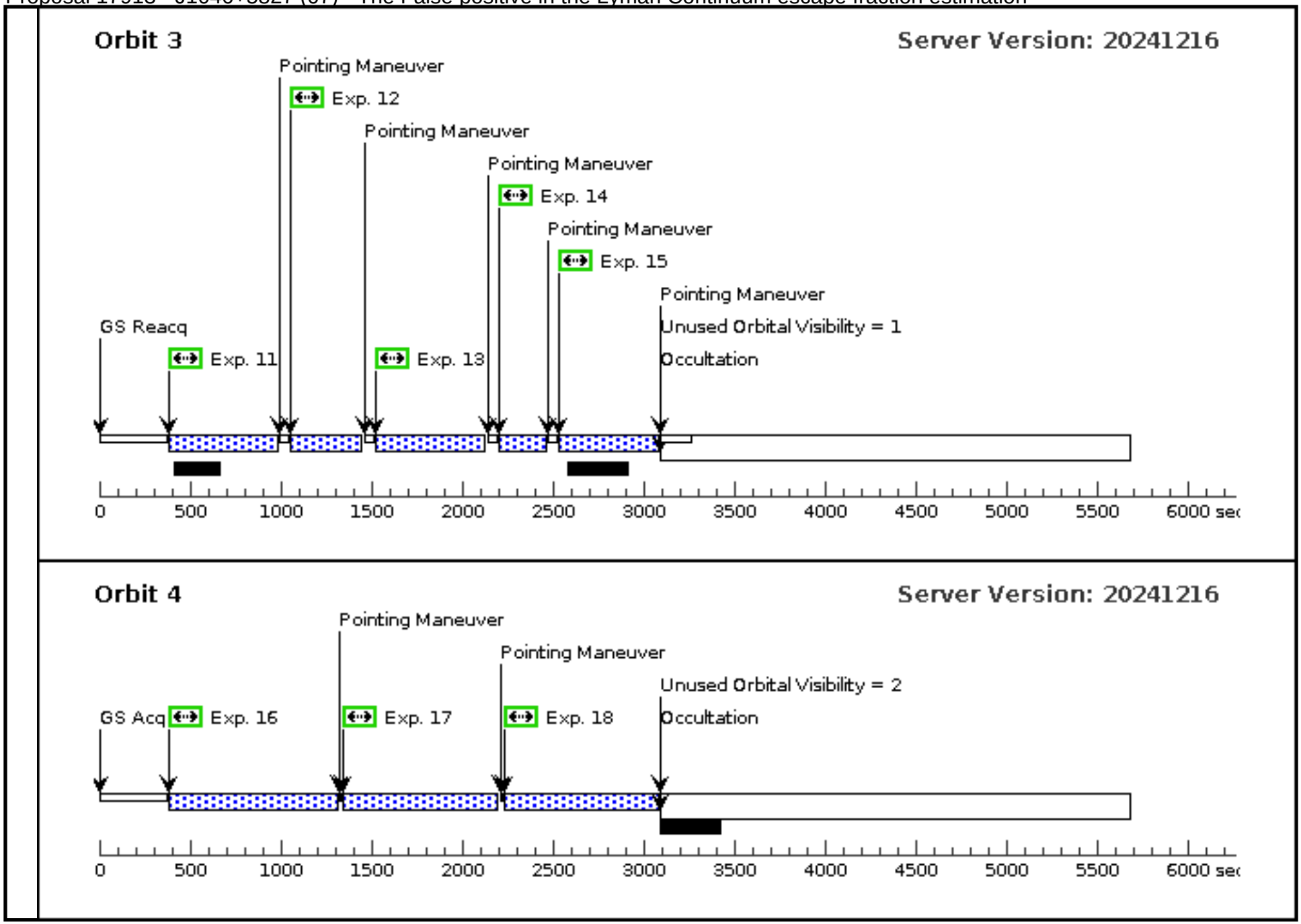
Orbit 3
Server Version: 20241216
Pointing Maneuver
Exp. 12
Pointing Maneuver
Pointing Maneuver
Exp. 14
Pointing Maneuver
Exp. 15
Pointing Maneuver
Unused Orbital Visibility = 1
Occultation
GS Reacq
Exp. 11
Exp. 13
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20241216
Pointing Maneuver
Pointing Maneuver
Unused Orbital Visibility = 2
Occultation
GS Acq
Exp. 16
Exp. 17
Exp. 18
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500
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1500
2000
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6000 sec