



# 17226 - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at $3 < z < 4$

Cycle: 30, Proposal Category: GO

(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) XMM-2075	WFC3/IR	1	13-Jul-2022 12:03:47.0	yes
02	(2) XMM-1120	WFC3/IR	1	13-Jul-2022 12:03:48.0	yes
03	(3) XMM-2457	WFC3/IR	1	13-Jul-2022 12:03:49.0	yes
04	(4) XMM-2293	WFC3/IR	1	13-Jul-2022 12:03:49.0	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>
05	(5) COS-195616	WFC3/IR	1	13-Jul-2022 12:03:50.0	yes
06	(6) COS-226441	WFC3/IR	1	13-Jul-2022 12:03:50.0	yes
07	(7) COS-179370	WFC3/IR	1	13-Jul-2022 12:03:51.0	yes
08	(8) COS-113684	WFC3/IR	1	13-Jul-2022 12:03:52.0	yes
09	(9) COS-208070	WFC3/IR	1	13-Jul-2022 12:03:52.0	yes
10	(10) COS-131925	WFC3/IR	1	13-Jul-2022 12:03:53.0	yes
11	(11) XMM-2399	WFC3/IR	1	13-Jul-2022 12:03:53.0	yes
12	(12) COS-111740	WFC3/IR	1	13-Jul-2022 12:03:54.0	yes

12 Total Orbits Used

## ABSTRACT

One of the biggest tensions between observations and theory lies in the existence of quiescent ultra-massive galaxies (UMGs) recently confirmed at  $z > 3$ . Understanding how the star formation activity is halted is one of the most important outstanding problems in galaxy evolution, but the physics of this quenching remain uncertain. Multiple processes have been proposed with different timescales. The simultaneous measurements of star-formation histories and stellar mass density represent the most promising way to discriminate between them. However, little is known about the sizes and structures of UMGs at  $z > 3$ . Recently, the largest sample to-date of UMGs ( $M_{\text{star}} > 10^{11} M_{\text{sun}}$ ) at  $3 < z < 4$  has been spectroscopically confirmed by the MAGAZ3NE survey. The proposed program will provide deep F160W imaging for all MAGAZ3NE UMGs, enabling the measurement, for the first time, of size, structure, and central stellar mass density within 1 kpc for a representative sample of 16 spectroscopically confirmed UMGs at  $3 < z < 4$ . This knowledge will inform us on the formation and quenching mechanisms, and we will investigate the connection between quenching and morphological transformation. We will constrain the pair fractions, quantifying systematic effects of blending on the number density of UMGs at  $3 < z < 4$ , which provides very strong constraints on models of galaxy formation. Finally, for the quiescent UMGs ( $\sim 1/2$  of the sample), we will derive dynamical masses by combining size and Sersic index measurements with their stellar velocity dispersions, investigating the dynamical-to-stellar mass ratios and placing constraints on the IMF in  $3 < z < 4$  UMGs.

## OBSERVING DESCRIPTION

Proposal 17226 (STScI Edit Number: 1, Created: Wednesday, July 13, 2022 at 11:03:54 AM Eastern Standard Time) - Overview

This is a program to obtain WFC3/IR observations in the F160W filter of 12 high-redshift galaxies. The galaxies are quite bright. Each observation will be carried out using a non pre-defined dithering pattern, composed of 4 dithers. The dithering pattern is the same used in another 2 successful programs (12328 and 12990).

The coordinates of two targets have been slightly corrected with respect to those defined in Phase-1.

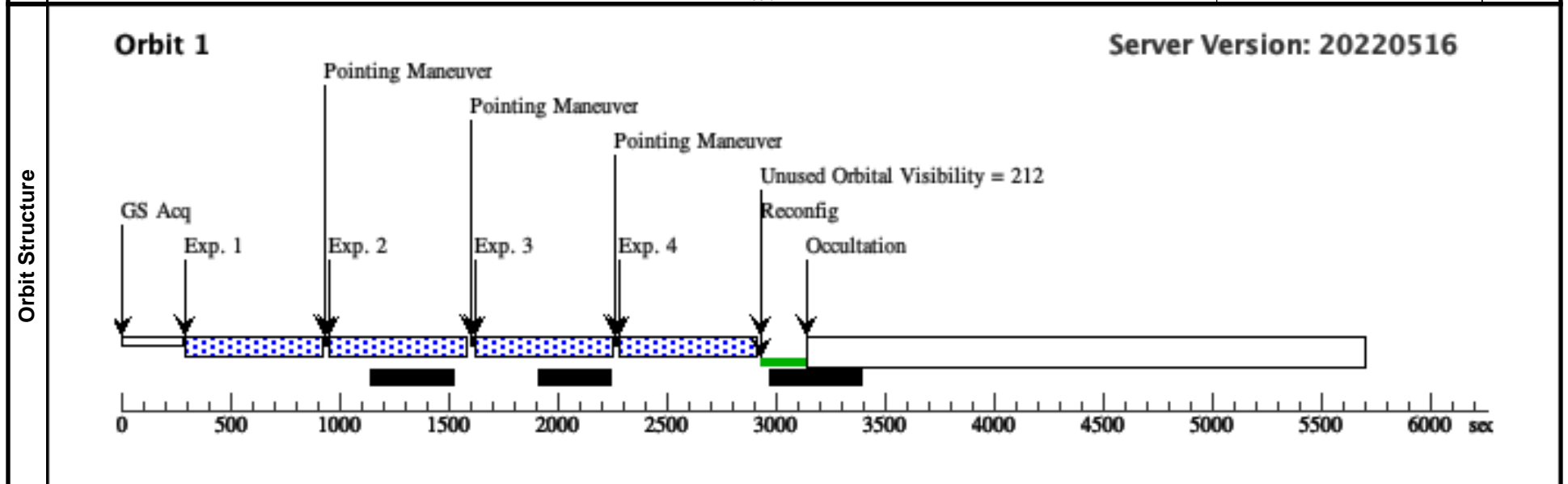
Proposal 17226 - XMM-2075 (01) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:54 GMT 2022

<b>Visit</b>	Proposal 17226, XMM-2075 (01), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	XMM-2075	RA: 02 17 32.8632 (34.3869300d) Dec: -05 28 57.39 (-5.48261d) Equinox: J2000		V=(?) H=21.94	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=GALAXY Description=[HIGH REDSHIFT GALAXY]					

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) XMM-2075	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0; GS ACQ SCENARI O ONEB1B3		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(1) XMM-2075	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(1) XMM-2075	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(1) XMM-2075	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474, 0.788		602.937703 Secs (602.938 Secs) [==>]	[1]



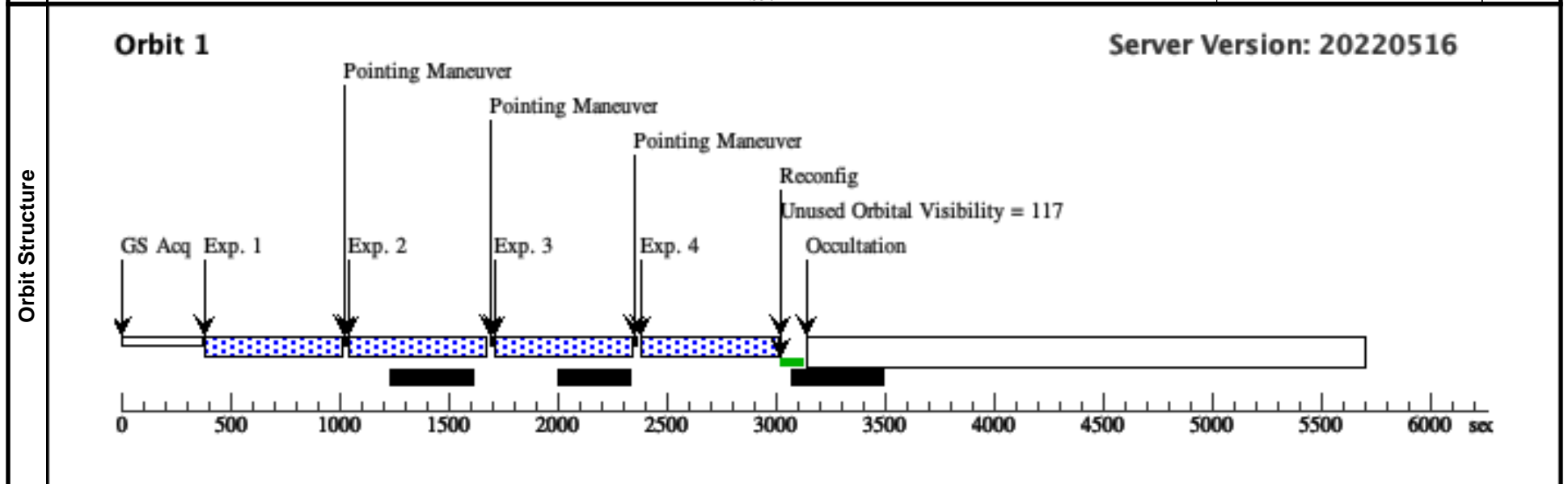
Proposal 17226 - XMM-1120 (02) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, XMM-1120 (02), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	XMM-1120	RA: 02 27 10.0973 (36.7920721d) Dec: -04 34 44.96 (-4.57916d) Equinox: J2000		V=(?) H=22.25	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) XMM-1120	(2) XMM-1120	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2	(2) XMM-1120	(2) XMM-1120	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3	(2) XMM-1120	(2) XMM-1120	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4	(2) XMM-1120	(2) XMM-1120	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474, 0.788		602.937703 Secs (602.938 Secs) [==>]	[1]



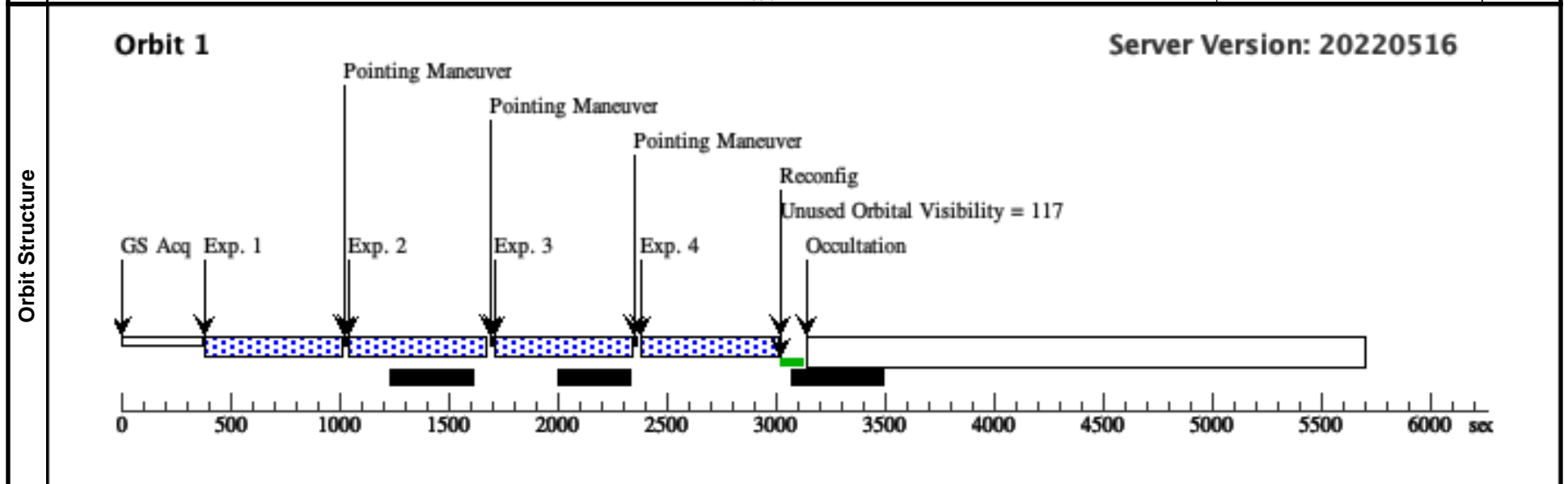
Proposal 17226 - XMM-2457 (03) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, XMM-2457 (03), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	XMM-2457	RA: 02 26 56.0453 (36.7335221d) Dec: -04 32 11.63 (-4.53656d) Equinox: J2000		V=(?) H=22.63	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(3) XMM-2457	(3) XMM-2457	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2	(3) XMM-2457	(3) XMM-2457	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3	(3) XMM-2457	(3) XMM-2457	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4	(3) XMM-2457	(3) XMM-2457	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



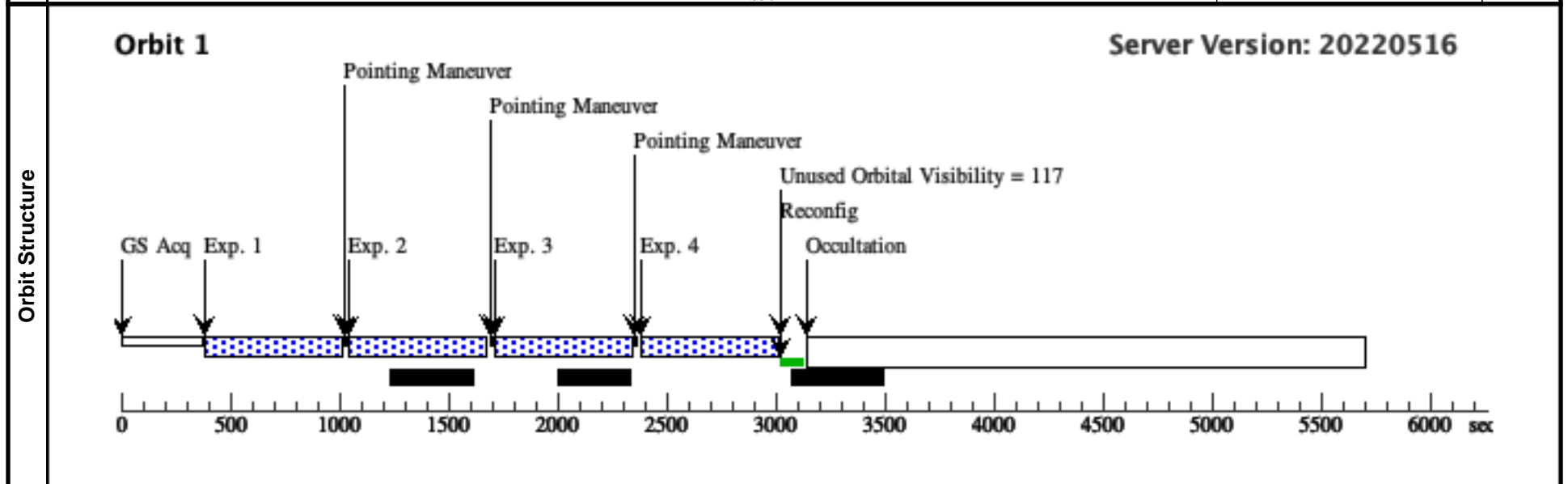
Proposal 17226 - XMM-2293 (04) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, XMM-2293 (04), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	XMM-2293	RA: 02 26 34.0754 (36.6419808d) Dec: -04 22 19.37 (-4.37205d) Equinox: J2000		V=(?) H=22.47	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(4) XMM-2293	(4) XMM-2293	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2	(4) XMM-2293	(4) XMM-2293	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3	(4) XMM-2293	(4) XMM-2293	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4	(4) XMM-2293	(4) XMM-2293	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



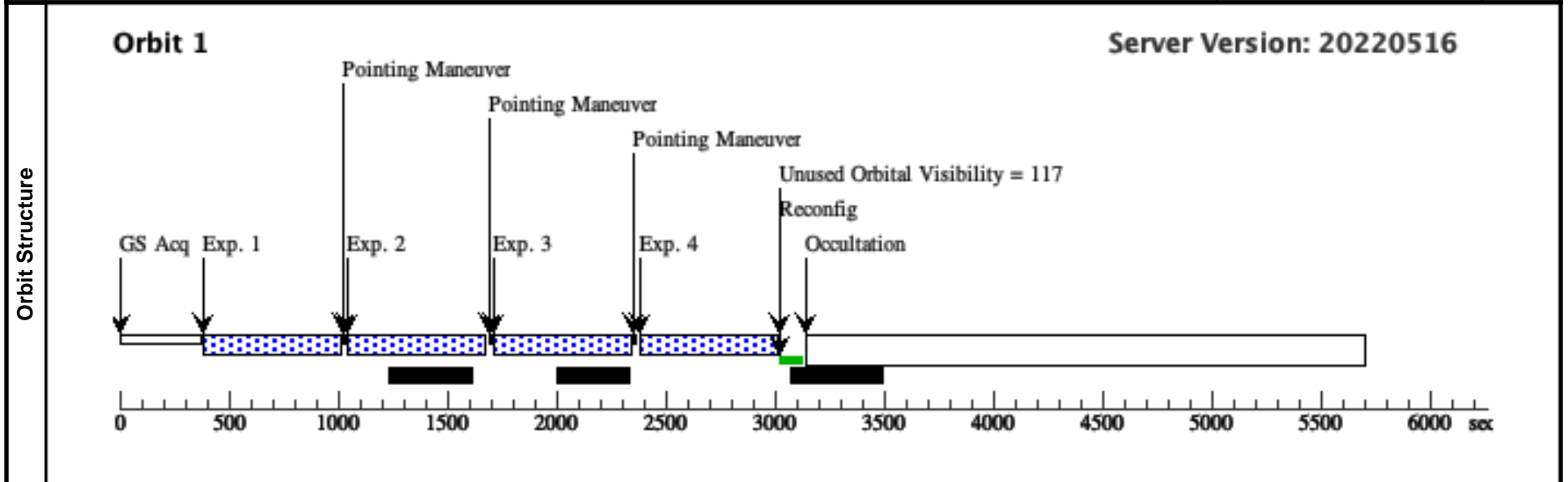
Proposal 17226 - COS-195616 (05) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-195616 (05), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	COS-195616	RA: 09 59 24.5904 (149.8524600d) Dec: +02 43 10.13 (2.71948d) Equinox: J2000		V=(?) H=22.70	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=GALAXY Description=[HIGH REDSHIFT GALAXY]					

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) COS-195616	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(5) COS-195616	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(5) COS-195616	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(5) COS-195616	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]





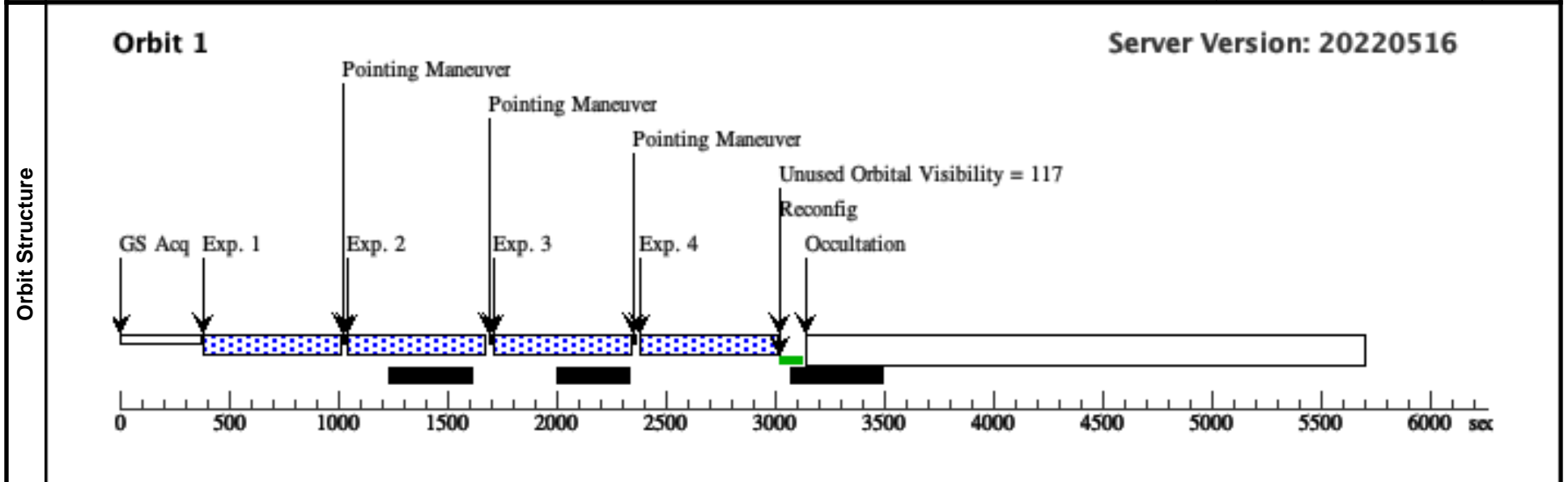
Proposal 17226 - COS-226441 (06) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-226441 (06), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	COS-226441	RA: 09 57 36.1560 (149.4006500d) Dec: +02 28 10.63 (2.46962d) Equinox: J2000		V=(?) H=22.46	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=GALAXY Description=[HIGH REDSHIFT GALAXY]					

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) COS-226441	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(6) COS-226441	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(6) COS-226441	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(6) COS-226441	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



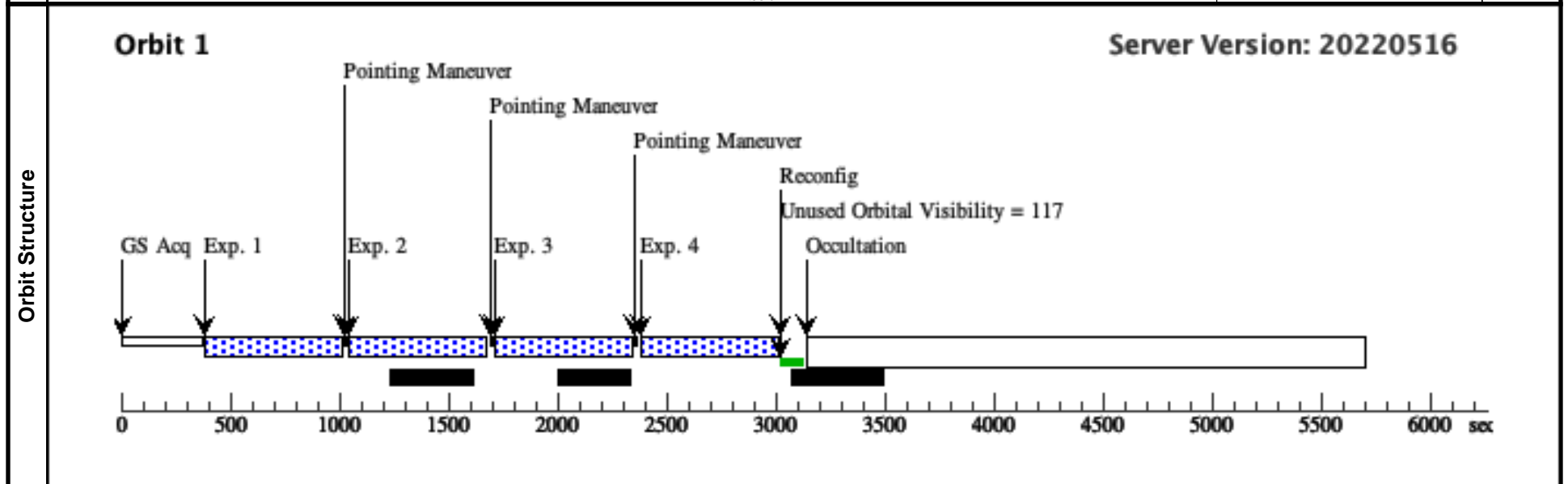
Proposal 17226 - COS-179370 (07) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-179370 (07), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	COS-179370	RA: 09 59 24.3900 (149.8516250d) Dec: +02 25 36.51 (2.42681d) Equinox: J2000		V=(?) H=23.51	Reference Frame: ICRS
	<i>Comments:</i>					
	Category=GALAXY Description=[HIGH REDSHIFT GALAXY]					

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(7) COS-179370	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(7) COS-179370	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(7) COS-179370	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(7) COS-179370	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



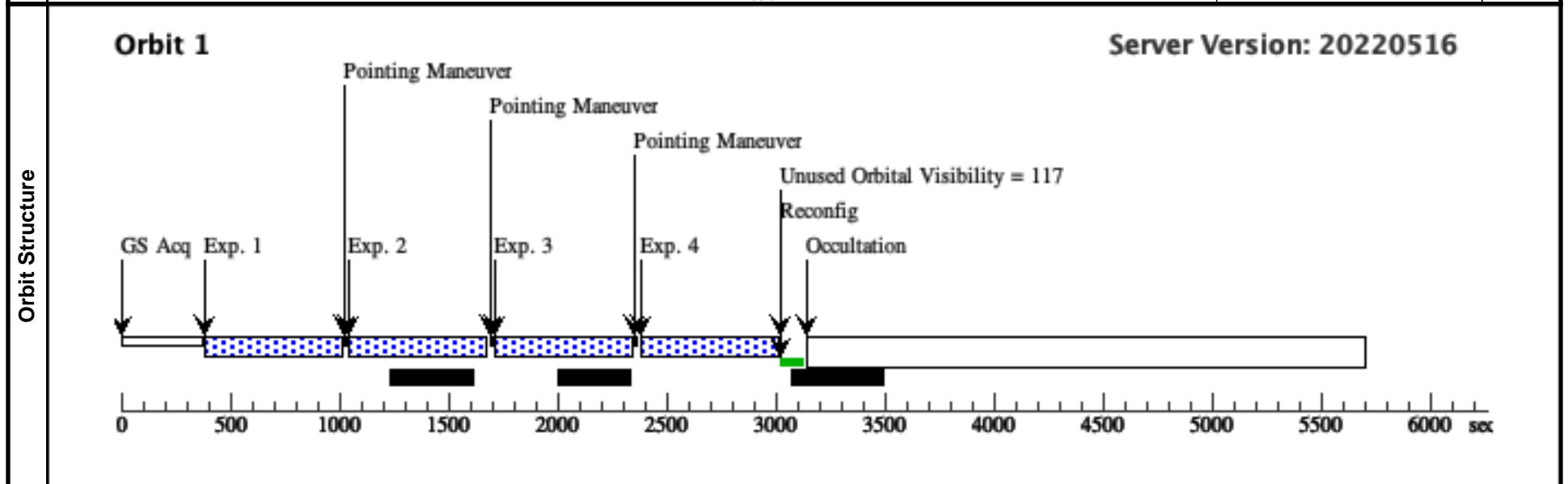
Proposal 17226 - COS-113684 (08) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-113684 (08), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	COS-113684	RA: 09 59 43.8912 (149.9328800d) Dec: +02 07 24.28 (2.12341d) Equinox: J2000		V=(?) H=22.58	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) COS-113684	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(8) COS-113684	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(8) COS-113684	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(8) COS-113684	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



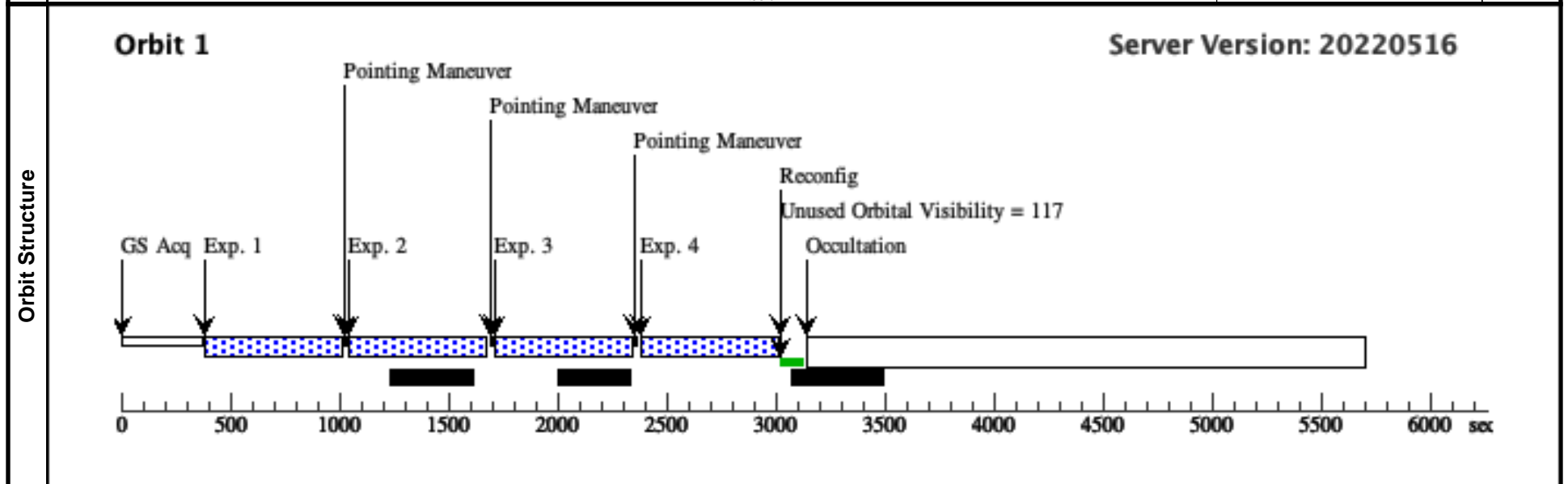
Proposal 17226 - COS-208070 (09) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-208070 (09), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(9)	COS-208070	RA: 09 57 53.8150 (149.4742292d) Dec: +01 51 57.52 (1.86598d) Equinox: J2000		V=(?) H=22.61	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	<b>#</b>	<b>Label</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		(9) COS-208070	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(9) COS-208070	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(9) COS-208070	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(9) COS-208070	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



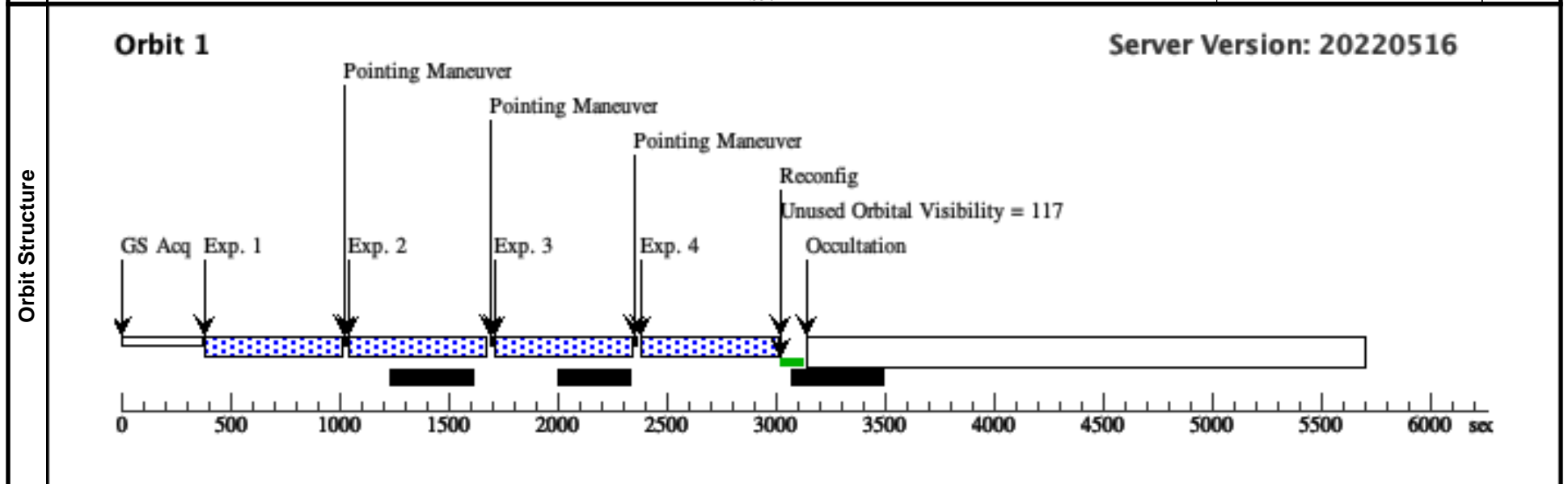
Proposal 17226 - COS-131925 (10) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-131925 (10), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	COS-131925	RA: 10 01 42.6624 (150.4277600d) Dec: +02 30 20.87 (2.50580d) Equinox: J2000		V=(?) H=21.32	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) COS-131925	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(10) COS-131925	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(10) COS-131925	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(10) COS-131925	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



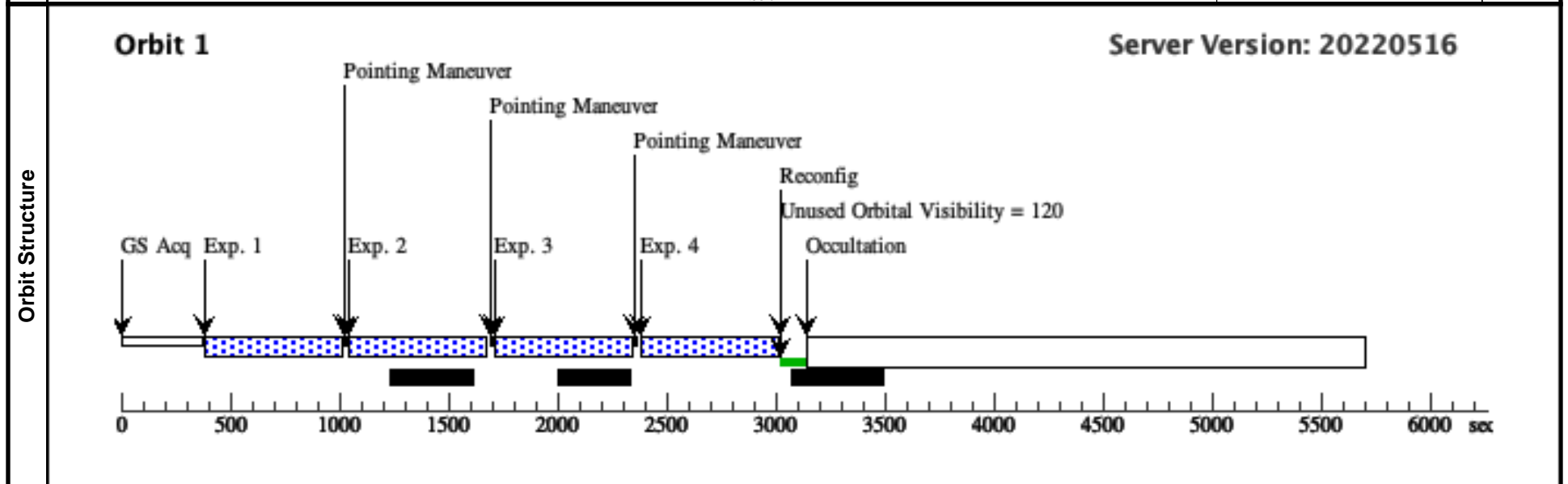
Proposal 17226 - XMM-2399 (11) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, XMM-2399 (11), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(11)	XMM-2399	RA: 02 18 1.8281 (34.5076171d) Dec: -05 05 11.81 (-5.08661d) Equinox: J2000		V=(?) H=22.95	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(11) XMM-2399	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(11) XMM-2399	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(11) XMM-2399	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(11) XMM-2399	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]



Proposal 17226 - COS-111740 (12) - Characterizing Growth and Quenching Pathways of the Most Massive Galaxies at  $3 < z < 4$

Wed Jul 13 16:03:55 GMT 2022

<b>Visit</b>	Proposal 17226, COS-111740 (12), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: WFC3/IR				
	Special Requirements: (none)				

<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(12)	COS-111740	RA: 09 58 53.7460 (149.7239417d) Dec: +02 10 38.63 (2.17740d) Equinox: J2000		V=(?) H=21.10	Reference Frame: ICRS
<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]						

<b>Exposures</b>	<b>#</b>	<b>Label</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		(12) COS-111740	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0,0		602.937703 Secs (602.938 Secs) [==>]	[1]
	2		(12) COS-111740	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 1.355,0. 424		602.937703 Secs (602.938 Secs) [==>]	[1]
	3		(12) COS-111740	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG 0.881,1. 212		602.937703 Secs (602.938 Secs) [==>]	[1]
	4		(12) COS-111740	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=13; SAMP-SEQ=SPAR S50	POS TARG -0.474,0 .788		602.937703 Secs (602.938 Secs) [==>]	[1]

