



## 15862 - Confirmation of a Large, Robust Sample of $z=9-10$ Galaxies in the CANDELS Fields

Cycle: 27, 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) EGS6811	WFC3/IR	1	04-Jun-2020 12:00:22.0	yes
02	(2) EGS44164-OFFSET	WFC3/IR	2	04-Jun-2020 12:00:23.0	yes
03	(4) EGS20381	WFC3/IR	2	04-Jun-2020 12:00:25.0	yes
04	(5) EGS26890	WFC3/IR	1	04-Jun-2020 12:00:26.0	yes
05	(6) EGS40898	WFC3/IR	1	04-Jun-2020 12:00:27.0	yes
06	(7) COSMOS20646	WFC3/IR	2	04-Jun-2020 12:00:29.0	yes
07	(8) COSMOS47074	WFC3/IR	1	04-Jun-2020 12:00:30.0	yes
09	(10) UDS7815	WFC3/IR	2	04-Jun-2020 12:00:32.0	yes
10	(11) UDS18697	WFC3/IR	2	04-Jun-2020 12:00:34.0	yes

14 Total Orbits Used

**ABSTRACT**

The galaxy population at  $z > 8$  probes the earliest phases of galaxy evolution, constraining the physical processes regulating gas cooling and star formation. Previous studies using an incomplete filter set found few galaxies at  $z > 9$ , implying a sharp drop in the star formation rate (SFR) density. This would be inconsistent with the observed increase in the stellar-mass to halo-mass (SMHM) ratio from  $z=4$  to  $z=7$ . Either this SMHM evolutionary trend reverses course just before  $z=8$  (disfavored by the data), or the SFR density at  $z>9$  is larger.

We have built a sample of 11 bright ( $H<26.5$ )  $z=9-10$  candidate galaxies in the CANDELS fields, 3X larger than previous samples in these fields, leveraging a HST+Spitzer photometric redshift selection method. This sample favors continued SMHM evolution, but most candidates have significant integrated redshift probability at  $z < 8$  due to incomplete photometric coverage.

We propose followup F105W and F140W imaging that will cover gaps in the wavelength coverage - a robust measurement in F105W will reject lower-redshift solutions, while a detection in F140W will provide a second detection band, ensuring no sources are spurious. This imaging can be accomplished in only 14 orbits, an efficient use leveraging thousands of archival HST orbits and Spitzer/IRAC hours invested in these fields.

Studying these earliest galaxies is one of the main science themes of the James Webb Space Telescope (JWST). Our proposed followup F105W and

F140W imaging will yield a reference sample of robust  $z=9-10$  candidate galaxies ready for spectroscopic observations in JWST Cycle 1 (six candidates are in a field due to be observed by a selected ERS program).

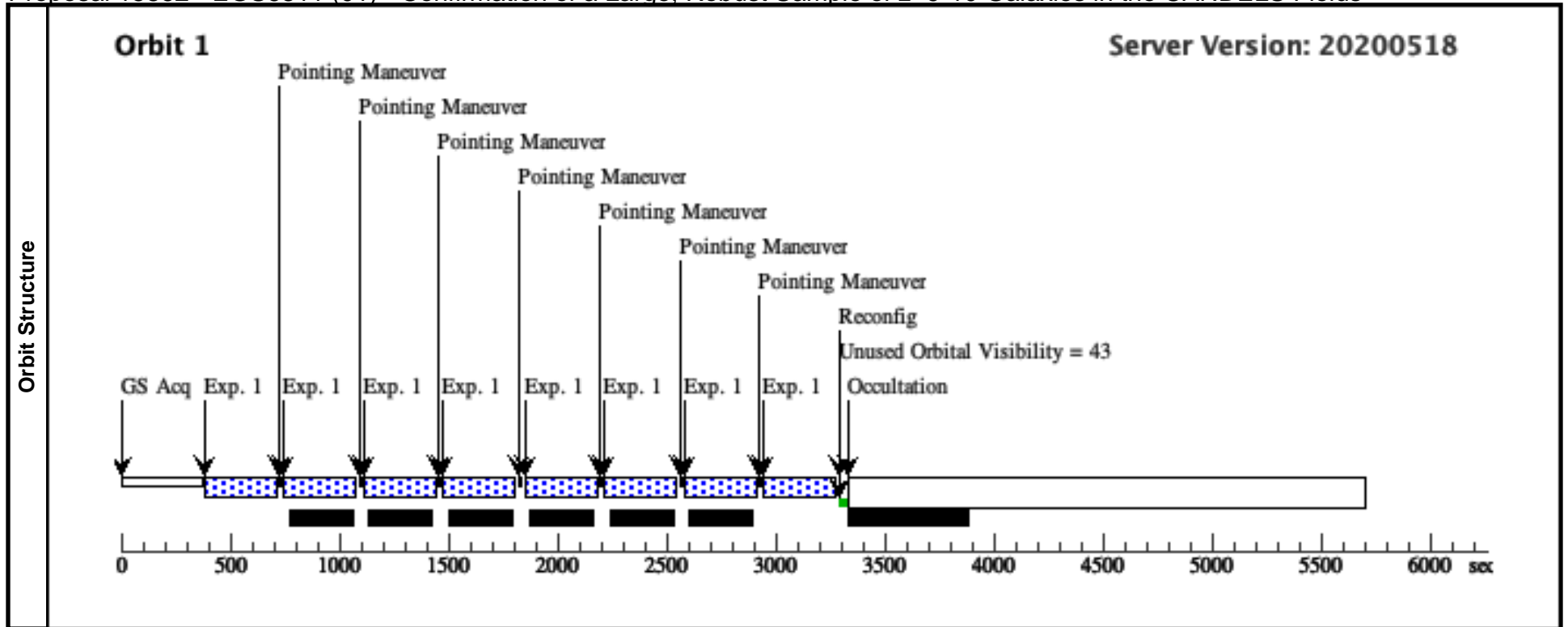
### **OBSERVING DESCRIPTION**

In this program, we are observing candidate  $z > 7$  galaxies in F105W (1 orbit), to confirm the Lyman break, and in F140W (1 orbit), to better constrain the UV spectral slope. We construct one visit for each source, of either 1 or 2 orbits, depending on whether it needs one or both filters. We set up our exposure to obtain 8 independent dither positions in one orbit, doing a 4-exposure dither blob sequence, then doing a small offset, and repeating. We initially center each pointing on our object of interest, and then explore whether they need to be shifted, either due to proximity to a very bright star, or the edge of existing data. We only shift one pointing, EGS44164 (visit 2), by 20" to the SW, to keep the full F105W frame on top of the existing CANDELS F160W imaging. However, our source of interest is still near the center. We do not require any ORIENT constraints.

Proposal 15862 - EGS6811 (01) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

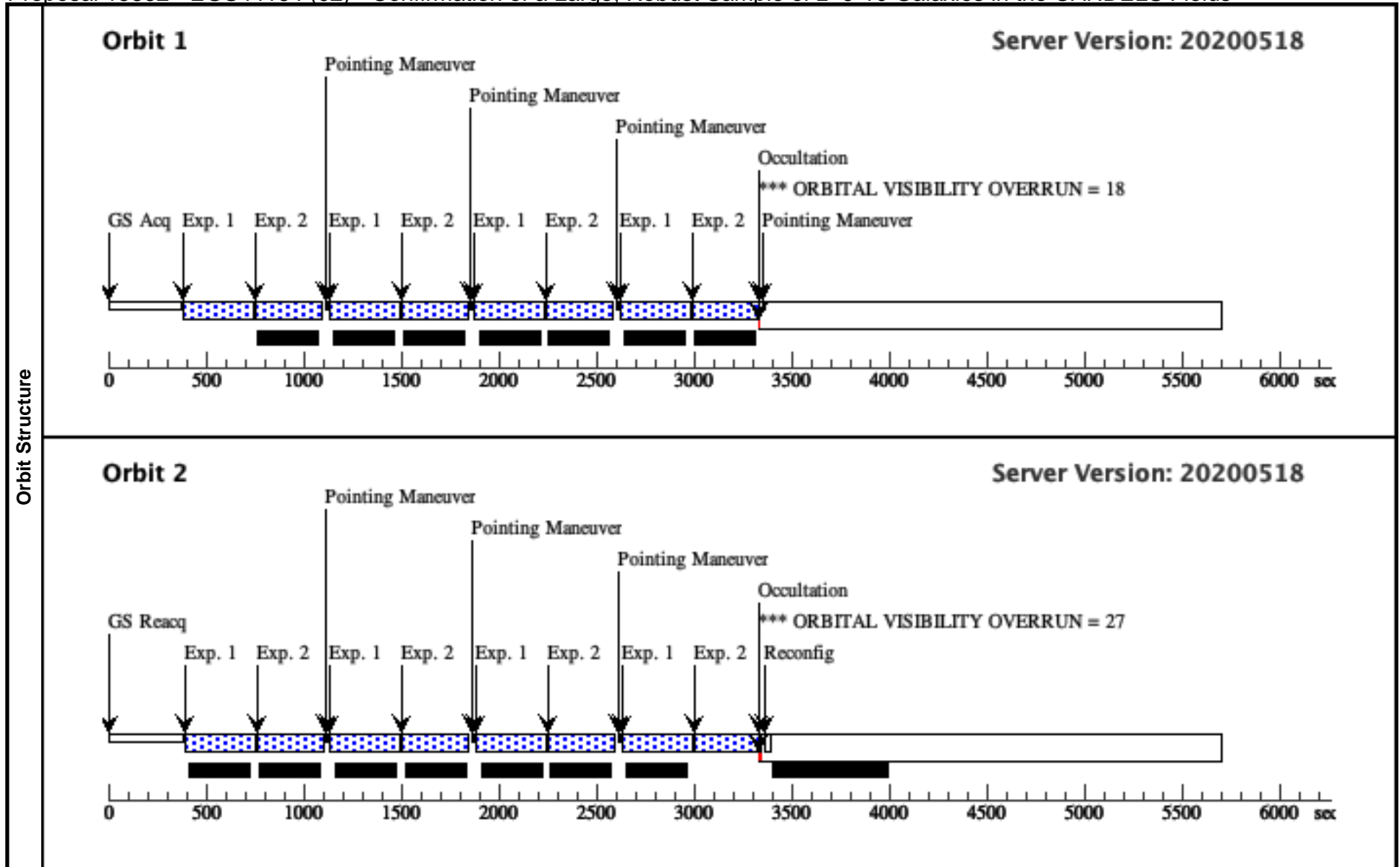
Visit	Proposal 15862, EGS6811 (01), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(1)	EGS6811	RA: 14 20 8.4912 (215.0353800d) Dec: +52 53 26.40 (52.89067d) Equinox: J2000			V=25.2	Reference Frame: ICRS			
	Comments: Category=GALAXY Description=[HIGH REDSHIFT GALAXY]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS6811_Y	(1) EGS6811	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=13			Pattern 1, Exps 1-1 i n EGS6811 (01) (1)	302.938471 Secs (2423.508 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)] [=>(Pattern 2,1)] [=>(Pattern 2,2)] [=>(Pattern 2,3)] [=>(Pattern 2,4)]



Proposal 15862 - EGS44164 (02) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

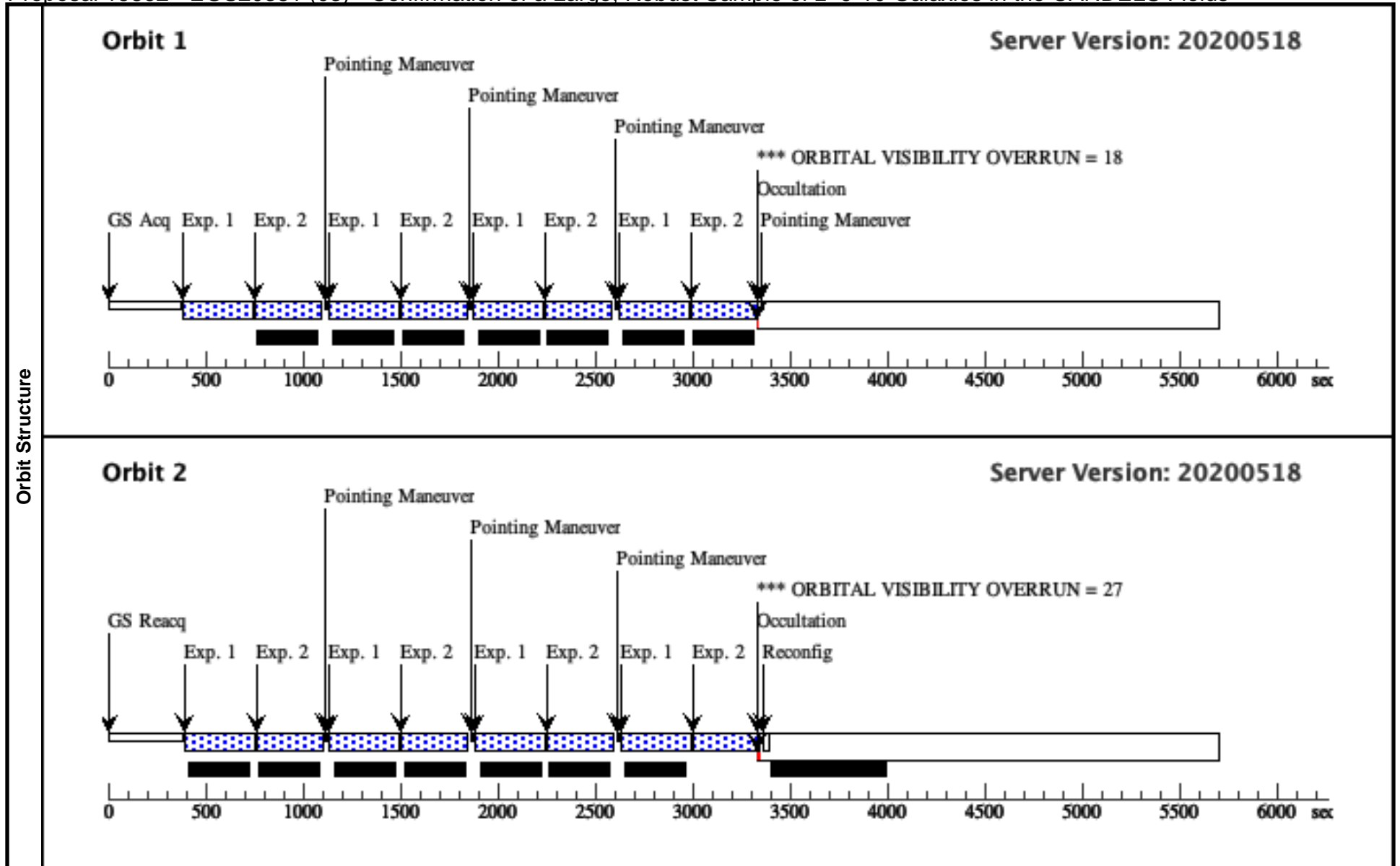
<b>Visit</b>	Proposal 15862, EGS44164 (02), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/IR Special Requirements: (none)									
	(EGS44164 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (EGS44164 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Diagnosics</b>										
<b>Patterns</b>	#	Primary Pattern		Secondary Pattern		Exposures				
	(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1-2)				
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	EGS44164-OFFSET	RA: 14 20 51.0970 (215.2129042d) Dec: +53 03 56.47 (53.06569d) Equinox: J2000  <i>Comments: Offset a few arcsec from the source to put more of the image on the CANDELS field</i> <i>Category=GALAXY</i> <i>Description=[HIGH REDSHIFT GALAXY]</i>		V=25.4	Reference Frame: ICRS				
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS44164_Y	(2) EGS44164-OFFSET	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=14		Pattern 1, Exps 1-2 in EGS44164 (02) (1)	327.938986 Secs (2623.512 Secs)	
									[=>(Pattern 1,1)]	[1]
									[=>(Pattern 1,2)]	
									[=>(Pattern 1,3)]	
									[=>(Pattern 1,4)]	
								[=>(Pattern 2,1)]	[2]	
								[=>(Pattern 2,2)]		
								[=>(Pattern 2,3)]		
								[=>(Pattern 2,4)]		
2	EGS44164_F140W	(2) EGS44164-OFFSET	WFC3/IR, MULTIACCUM, IR	F140W	SAMP-SEQ=SPARS 25; NSAMP=14			Pattern 1, Exps 1-2 in EGS44164 (02) (1)	327.938986 Secs (2623.512 Secs)	
								[=>(Pattern 1,1)]	[1]	
								[=>(Pattern 1,2)]		
								[=>(Pattern 1,3)]		
								[=>(Pattern 1,4)]		
								[=>(Pattern 2,1)]	[2]	
								[=>(Pattern 2,2)]		
								[=>(Pattern 2,3)]		
								[=>(Pattern 2,4)]		



Proposal 15862 - EGS20381 (03) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

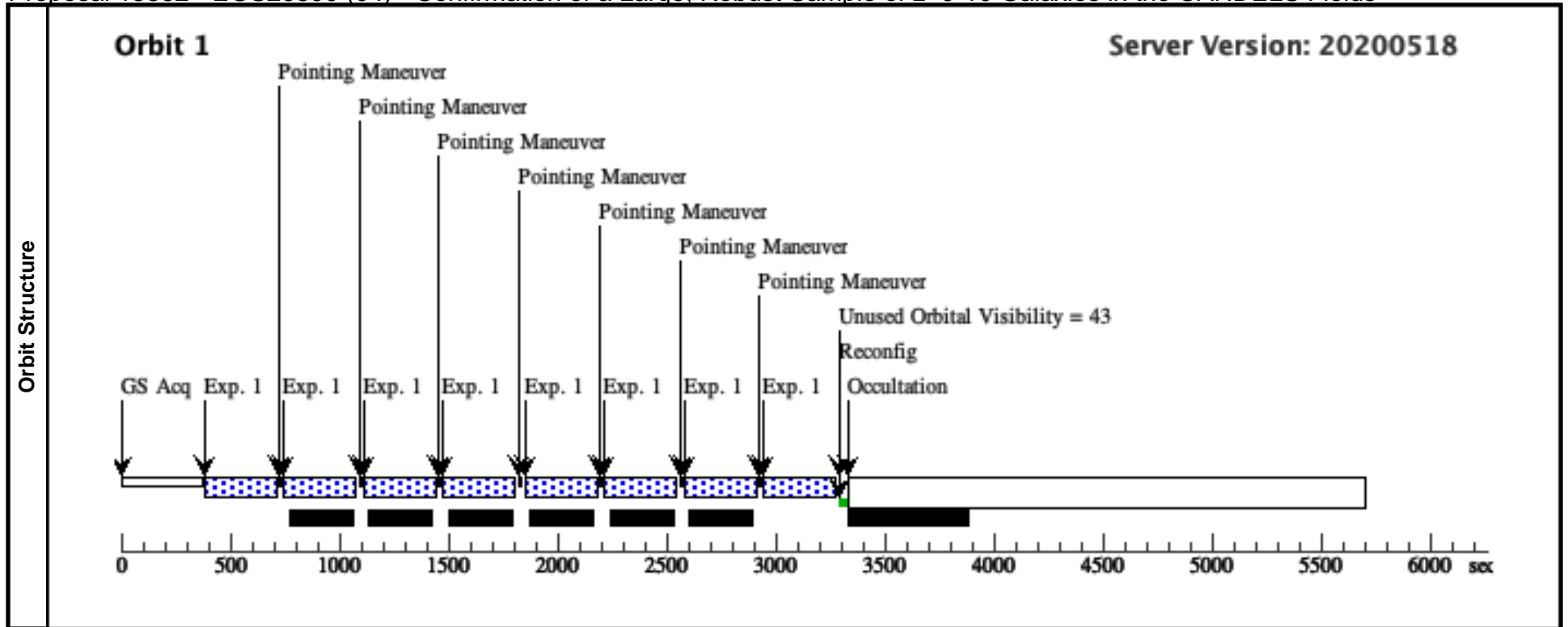
<b>Visit</b>	Proposal 15862, EGS20381 (03), scheduled <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
	(EGS20381 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (EGS20381 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>						
	(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1-2)				
<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)	EGS20381	RA: 14 20 45.2184 (215.1884100d) Dec: +53 02 1.12 (53.03364d) Equinox: J2000		V=26.1	Reference Frame: ICRS				
Comments: 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	EGS20381_Y	(4) EGS20381	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=14		Pattern 1, Exps 1-2 in EGS20381 (03) (1)	327.938986 Secs (2623.512 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)]	[1]
2	EGS20381_F140W	(4) EGS20381	WFC3/IR, MULTIACCUM, IR	F140W	SAMP-SEQ=SPARS 25; NSAMP=14		Pattern 1, Exps 1-2 in EGS20381 (03) (1)	327.938986 Secs (2623.512 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)] [=>(Pattern 2,1)] [=>(Pattern 2,2)] [=>(Pattern 2,3)] [=>(Pattern 2,4)]	[2]	



Proposal 15862 - EGS26890 (04) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

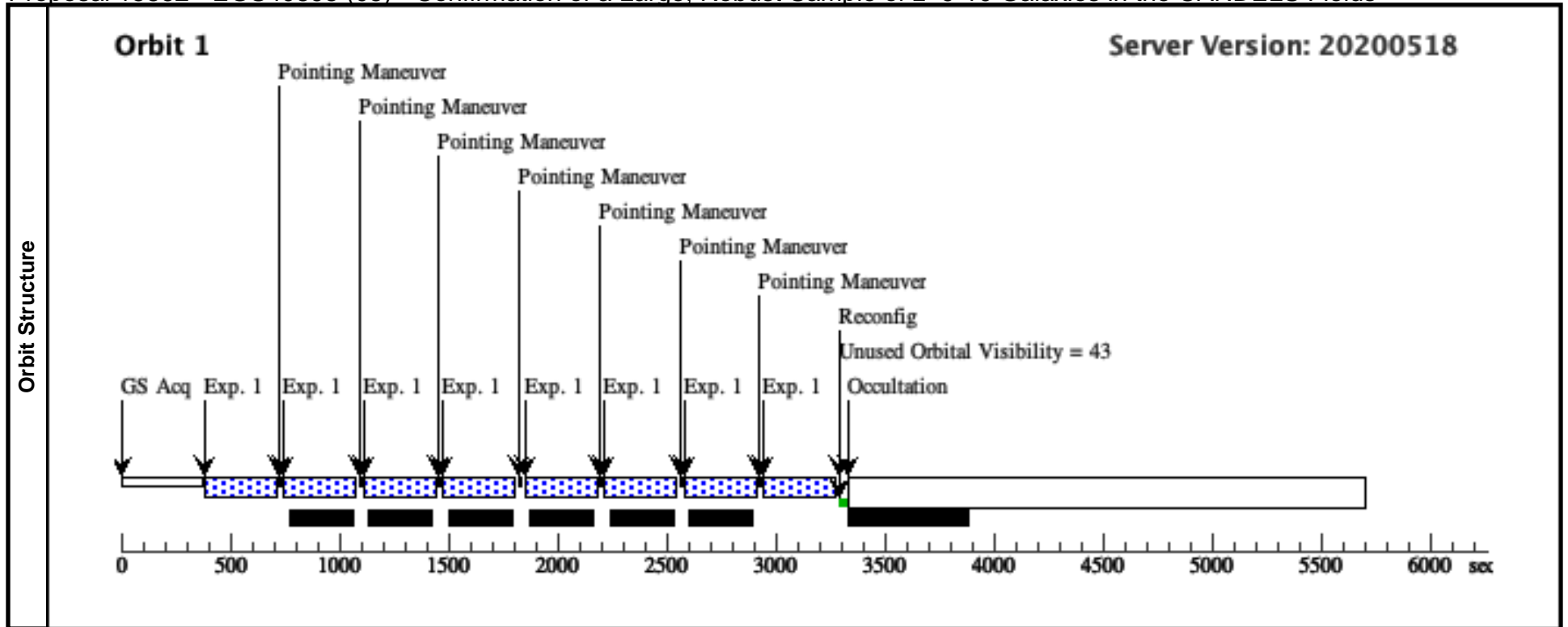
<b>Visit</b>	<b>Proposal 15862, EGS26890 (04), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			
(1)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 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>			
	(5)	EGS26890	RA: 14 19 52.2096 (214.9675400d) Dec: +52 55 58.68 (52.93297d) Equinox: J2000			V=26.1	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	EGS26890_Y	(5) EGS26890	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=13		Pattern 1, Exps 1-1 in EGS26890 (04) (1)	302.938471 Secs (2423.508 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)] [=>(Pattern 2,1)] [=>(Pattern 2,2)] [=>(Pattern 2,3)] [=>(Pattern 2,4)]	[1]



Proposal 15862 - EGS40898 (05) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

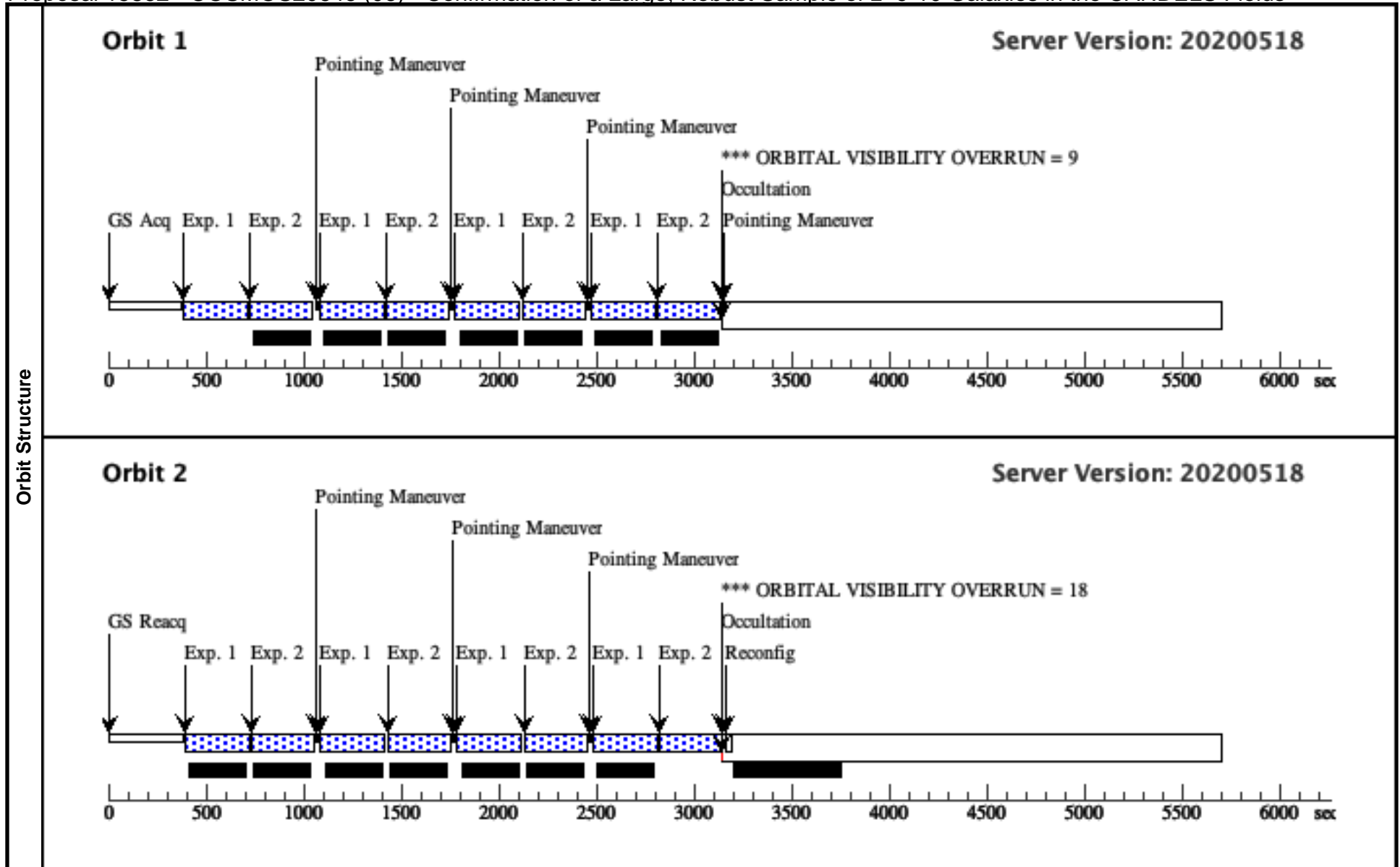
Visit	Proposal 15862, EGS40898 (05), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(6)	EGS40898	RA: 14 19 31.9176 (214.8829900d) Dec: +52 50 25.49 (52.84041d) Equinox: J2000			V=26.5	Reference Frame: ICRS			
	<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS40898_Y	(6) EGS40898	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=13			Pattern 1, Exps 1-1 in EGS40898 (05) (1)	302.938471 Secs (2423.508 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)] [=>(Pattern 2,1)] [=>(Pattern 2,2)] [=>(Pattern 2,3)] [=>(Pattern 2,4)]



Proposal 15862 - COSMOS20646 (06) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

<b>Visit</b>	Proposal 15862, COSMOS20646 (06), completed Diagnostic Status: Warning Scientific Instruments: WFC3/IR Special Requirements: (none)									
	(COSMOS20646 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (COSMOS20646 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Diagnosics</b>										
<b>Patterns</b>	#	Primary Pattern		Secondary Pattern		Exposures				
	(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1-2)				
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	COSMOS20646	RA: 10 00 19.6440 (150.0818500d) Dec: +02 15 45.90 (2.26275d) Equinox: J2000		V=25.4	Reference Frame: ICRS				
Comments: 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	COSMOS20646_Y	(7) COSMOS20646	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=13			Pattern 1, Exps 1-2 in COSMOS20646 (06) (1) [==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 1,3)] [==>(Pattern 1,4)]	302.938471 Secs (2423.508 Secs)
2	COSMOS20646_F140W	(7) COSMOS20646	WFC3/IR, MULTIACCUM, IR	F140W	SAMP-SEQ=SPARS 25; NSAMP=13			Pattern 1, Exps 1-2 in COSMOS20646 (06) (1) [==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 1,3)] [==>(Pattern 1,4)] [==>(Pattern 2,1)] [==>(Pattern 2,2)] [==>(Pattern 2,3)] [==>(Pattern 2,4)]	302.938471 Secs (2423.508 Secs)	[2]



Proposal 15862 - COSMOS47074 (07) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

Visit	<b>Proposal 15862, COSMOS47074 (07), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	COSMOS47074	RA: 10 00 30.3336 (150.1263900d) Dec: +02 23 1.60 (2.38378d) Equinox: J2000		V=26.3	Reference Frame: ICRS				
	<i>Comments:</i> Category=GALAXY Description=[HIGH REDSHIFT GALAXY]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COSMOS47074_Y	(8) COSMOS47074	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=12			Pattern 1, Exps 1-1 in COSMOS47074 (07) (1)	277.937956 Secs (2223.504 Secs) [==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 1,3)] [==>(Pattern 1,4)] [==>(Pattern 2,1)] [==>(Pattern 2,2)] [==>(Pattern 2,3)] [==>(Pattern 2,4)]



Proposal 15862 - UDS7815 (09) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

<b>Visit</b>	<b>Proposal 15862, UDS7815 (09), scheduling</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
	(UDS7815 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (UDS7815 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>				
	(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1-2)				
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(10)	UDS7815	RA: 02 17 34.2775 (34.3928229d) Dec: -05 15 35.68 (-5.25991d) Equinox: J2000		V=25.8	Reference Frame: ICRS				
Comments: 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	UDS7815_Y	(10) UDS7815	WFC3/IR, MULTIACCUM, IR	F098M	SAMP-SEQ=SPARS 25; NSAMP=13		Pattern 1, Exps 1-2 in UDS7815 (09) (1)	302.938471 Secs (2423.508 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)]	[1]
2	UDS7815_F140W	(10) UDS7815	WFC3/IR, MULTIACCUM, IR	F140W	SAMP-SEQ=SPARS 25; NSAMP=13		Pattern 1, Exps 1-2 in UDS7815 (09) (1)	302.938471 Secs (2423.508 Secs) [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 1,3)] [=>(Pattern 1,4)] [=>(Pattern 2,1)] [=>(Pattern 2,2)] [=>(Pattern 2,3)] [=>(Pattern 2,4)]	[2]	



Proposal 15862 - UDS18697 (10) - Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields

Thu Jun 04 16:00:35 GMT 2020

<b>Visit</b>	<b>Proposal 15862, UDS18697 (10), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: (none)									
	(UDS18697_J (10.001) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes (UDS18697_J2 (10.002) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>						
	(1)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=2 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1), (2)				
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(11)	UDS18697	RA: 02 17 1.3500 (34.2556250d) Dec: -05 09 59.78 (-5.16661d) Equinox: J2000		V=25.8	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	UDS18697_J	(11) UDS18697	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=SPARS 25; NSAMP=12	POS TARG 0.0,30.0	Pattern 1, Exps 1-1 in UDS18697 (10) (1)	277.937956 Secs (2223.504 Secs)	[1]
2	UDS18697_J2	(11) UDS18697	WFC3/IR, MULTIACCUM, IR	F125W	SAMP-SEQ=SPARS 25; NSAMP=12	POS TARG 2.0,32.0	Pattern 1, Exps 2-2 in UDS18697 (10) (1)	277.937956 Secs (2223.504 Secs)	[2]	

