



## 15644 - An Independent View of the $z=5$ Galaxy Population

Cycle: 26, Proposal Category: GO

(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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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) GRB131117A	WFC3/IR	2	12-Apr-2019 19:56:22.0	yes
02	(2) GRB060206	WFC3/IR	2	12-Apr-2019 19:56:24.0	yes
03	(3) GRB090516A	WFC3/IR	2	12-Apr-2019 19:56:25.0	yes
04	(4) GRB120712A	WFC3/IR	2	12-Apr-2019 19:56:26.0	yes
05	(5) GRB140614A	WFC3/IR	2	12-Apr-2019 19:56:27.0	yes
06	(6) GRB050505	WFC3/IR	2	12-Apr-2019 19:56:28.0	yes
07	(7) GRB050803	WFC3/IR	2	12-Apr-2019 19:56:29.0	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>
08	(8) GRB100219A	WFC3/IR	2	12-Apr-2019 19:56:30.0	yes
09	(9) GRB140428A	WFC3/IR	2	12-Apr-2019 19:56:31.0	yes
10	(10) GRB140518A	WFC3/IR	2	12-Apr-2019 19:56:32.0	yes
11	(11) GRB100513A	WFC3/IR	2	12-Apr-2019 19:56:33.0	yes
12	(12) GRB071025	WFC3/IR	2	12-Apr-2019 19:56:34.0	yes
13	(13) GRB050922B	WFC3/IR	3	12-Apr-2019 19:56:36.0	yes
14	(14) GRB060510B	WFC3/IR	3	12-Apr-2019 19:56:37.0	yes
15	(15) GRB140311A	WFC3/IR	3	12-Apr-2019 19:56:39.0	yes
16	(16) GRB111008A	WFC3/IR	3	12-Apr-2019 19:56:40.0	yes
17	(17) GRB050502B	WFC3/IR	3	12-Apr-2019 19:56:41.0	yes
18	(18) GRB140304A	WFC3/IR	3	12-Apr-2019 19:56:43.0	yes
19	(19) GRB050814	WFC3/IR	3	12-Apr-2019 19:56:44.0	yes
66	(16) GRB111008A	WFC3/IR	3	12-Apr-2019 19:56:45.0	yes

48 Total Orbits Used

## ABSTRACT

Even as successive generations of HST (and soon, JWST) surveys push further to the high-redshift frontiers, they remain blind to the contribution of the smallest galaxies except via extrapolation. Gamma-ray bursts offer a powerful and dust-independent means to directly measure the contribution to cosmic star-formation from these galaxies and to verify our understanding of high-redshift galaxy populations generally. We propose for moderately deep WFC3-IR observations of a population of 23 GRB host galaxies between  $4.0 < z < 5.5$  in order to independently assess the nature of the star-forming galaxy population at this epoch, resolve disagreements between earlier (shallower and smaller) campaigns, and bridge previous work on the lower-redshift and higher-redshift GRB host populations. Our observations will also shed light on the nature of metal-poor galaxies and unusual dust-extinction sightlines uniquely revealed by distant GRBs.

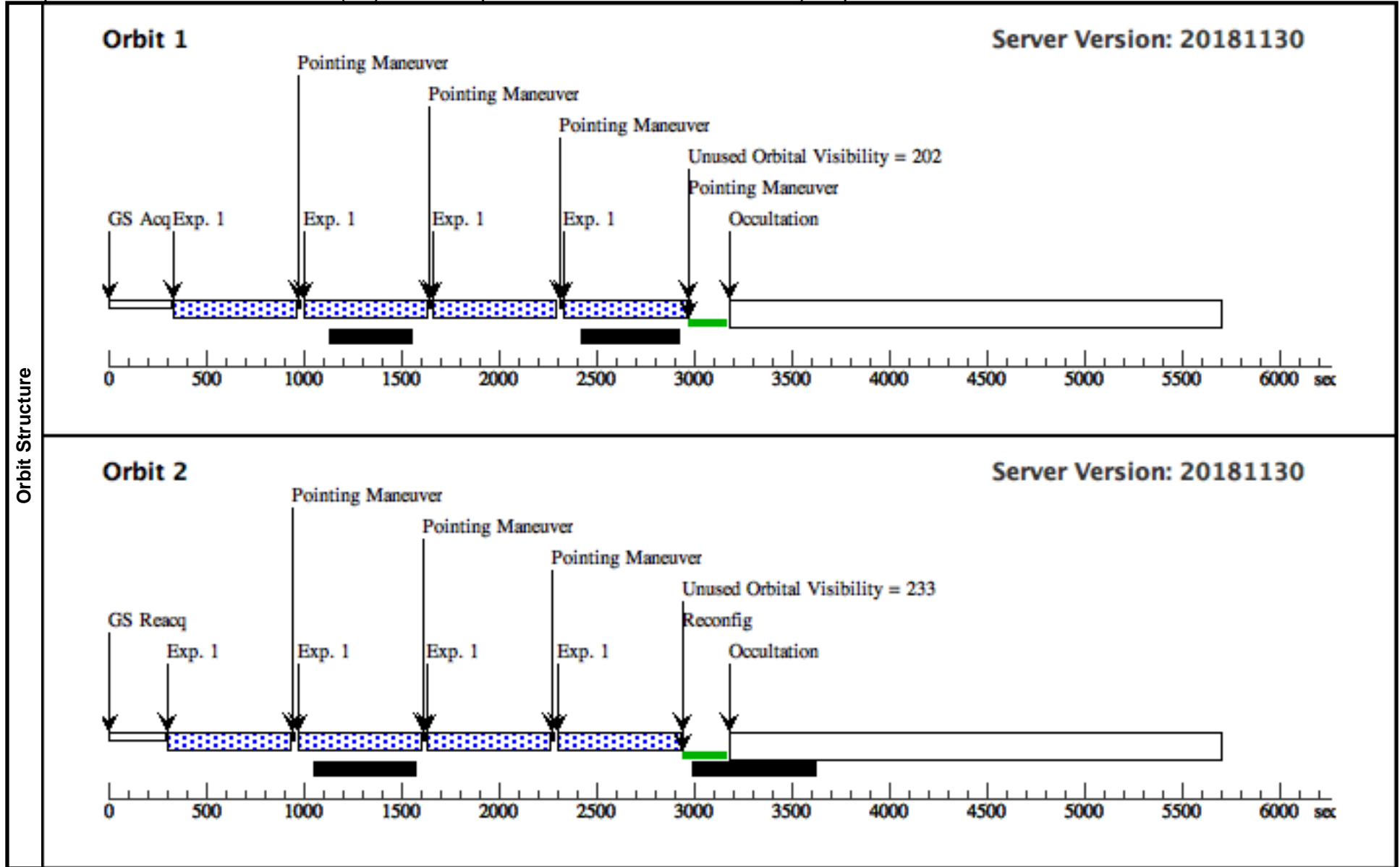
**OBSERVING DESCRIPTION**

For all targets we are conducting imaging observations in the NIR with WFC3-IR. All fields are GRB-selected and well outside the Galactic plane, and our primary science concerns only photometry of the faint host-galaxy target at the center of the field.

Proposal 15644 - GRB131117A (01) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:46 GMT 2019

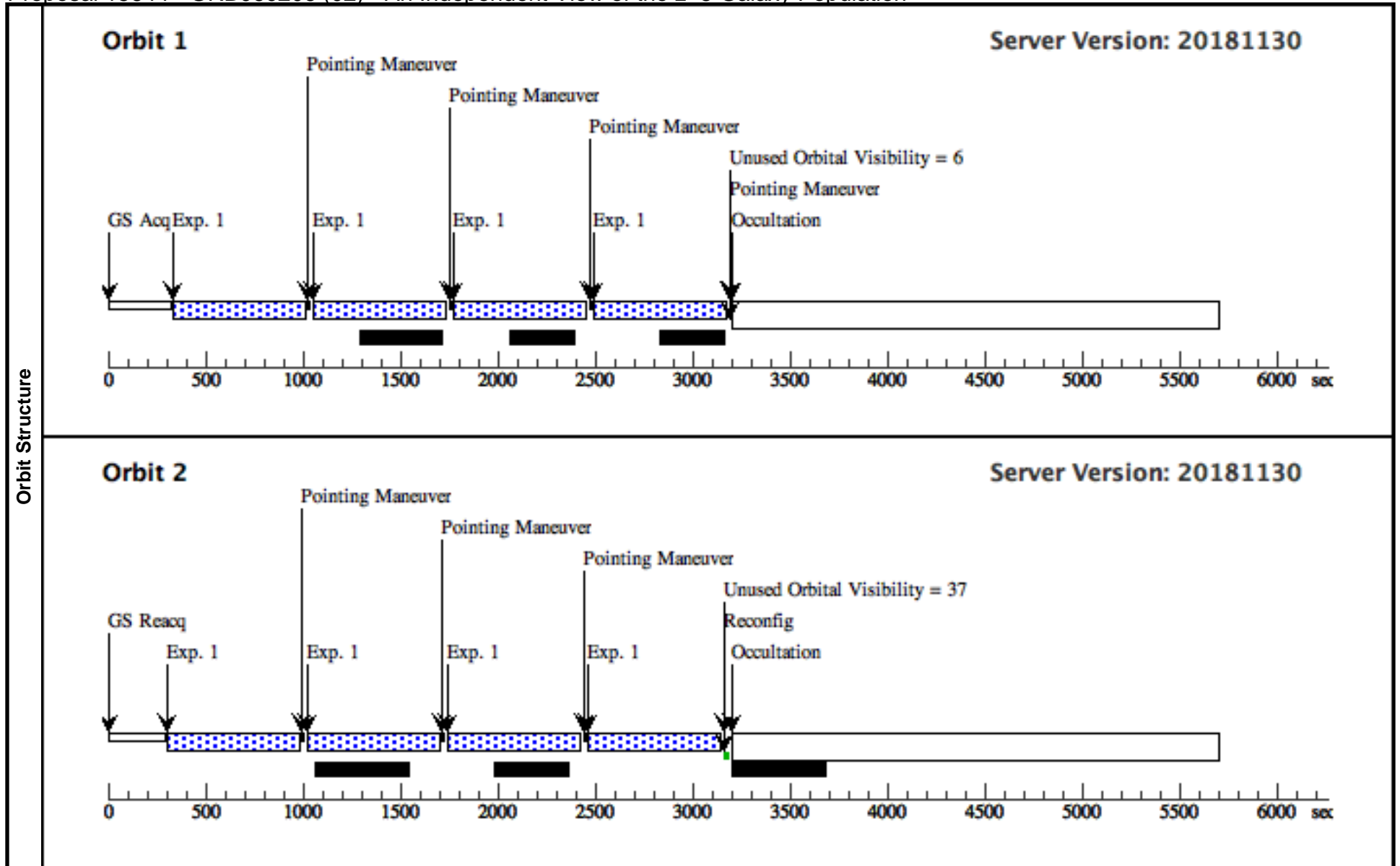
<b>Visit</b>	<b>Proposal 15644, GRB131117A (01), scheduled</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true					(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)	GRB131117A	RA: 22 09 19.3600 (332.3306667d) Dec: -31 45 44.30 (-31.76231d) Equinox: J2000				V=25	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	(1) GRB131117A	(1) GRB131117A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12		Pattern 2, Exps 1-1 in GRB131117A (01) (2)	599.232292 Secs (4793.858 Secs)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
									[=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[2]	



Proposal 15644 - GRB060206 (02) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:46 GMT 2019

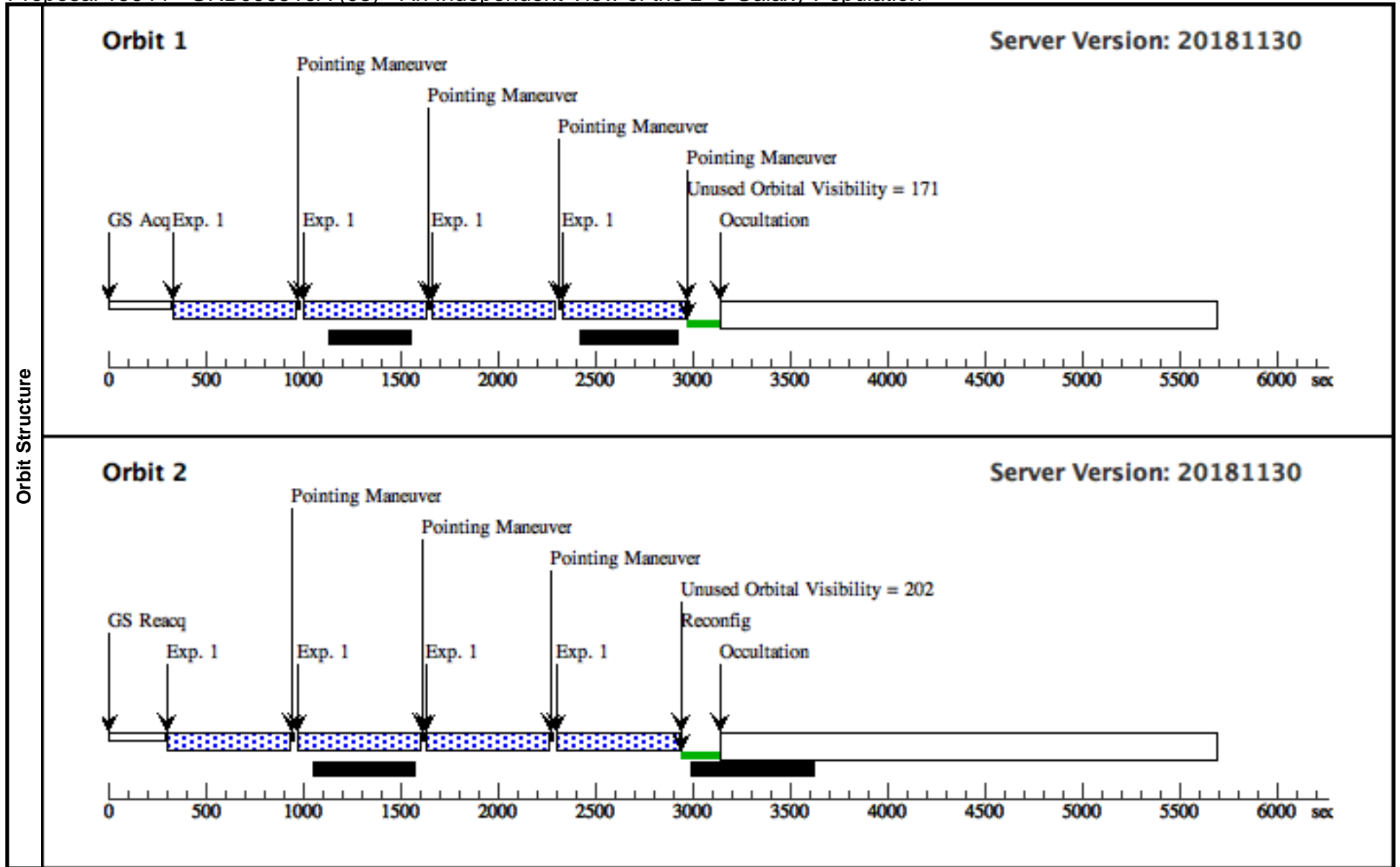
Visit	Proposal 15644, GRB060206 (02), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
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		(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true							(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(2)	GRB060206	RA: 13 31 43.4200 (202.9309167d) Dec: +35 03 3.60 (35.05100d) Equinox: J2000			V=25	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		(2) GRB060206	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=SPARS 50; NSAMP=14	GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in GRB060206 (02) (2)	652.938154 Secs (5223.505 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
									[=>(Pattern 4)]		
									[=>(Pattern 5)]		
									[=>(Pattern 6)]		
									[=>(Pattern 7)]		[2]
									[=>(Pattern 8)]		



Proposal 15644 - GRB090516A (03) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:46 GMT 2019

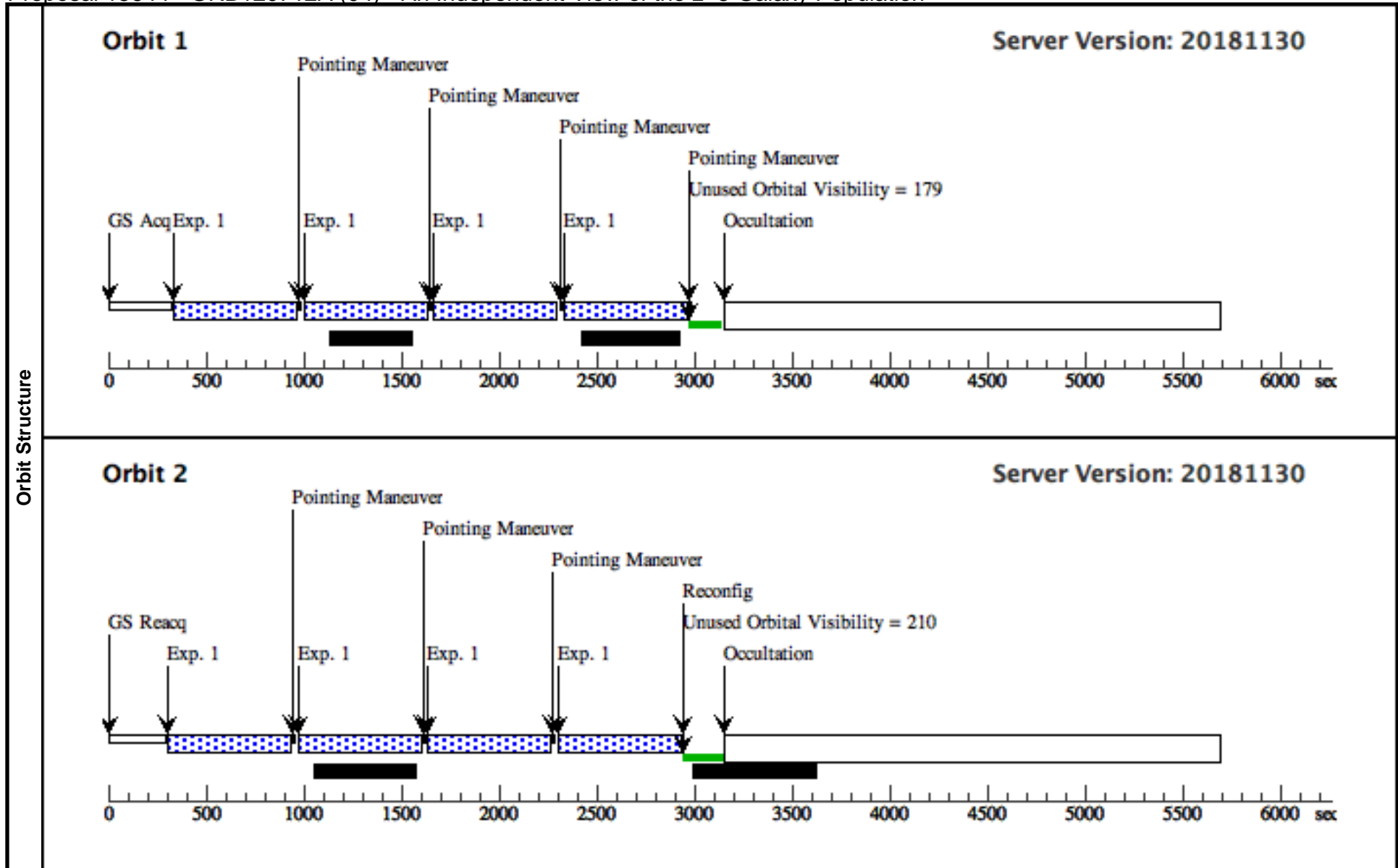
<b>Visit</b>	<b>Proposal 15644, GRB090516A (03), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(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>			
	(3)	GRB090516A	RA: 09 13 2.5200 (138.2605000d) Dec: -11 51 15.30 (-11.85425d) Equinox: J2000				V=25	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	(3) GRB090516A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12			Pattern 2, Exps 1-1 in GRB090516A (03) (2)	599.232292 Secs (4793.858 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]       [2]



Proposal 15644 - GRB120712A (04) - An Independent View of the z=5 Galaxy Population

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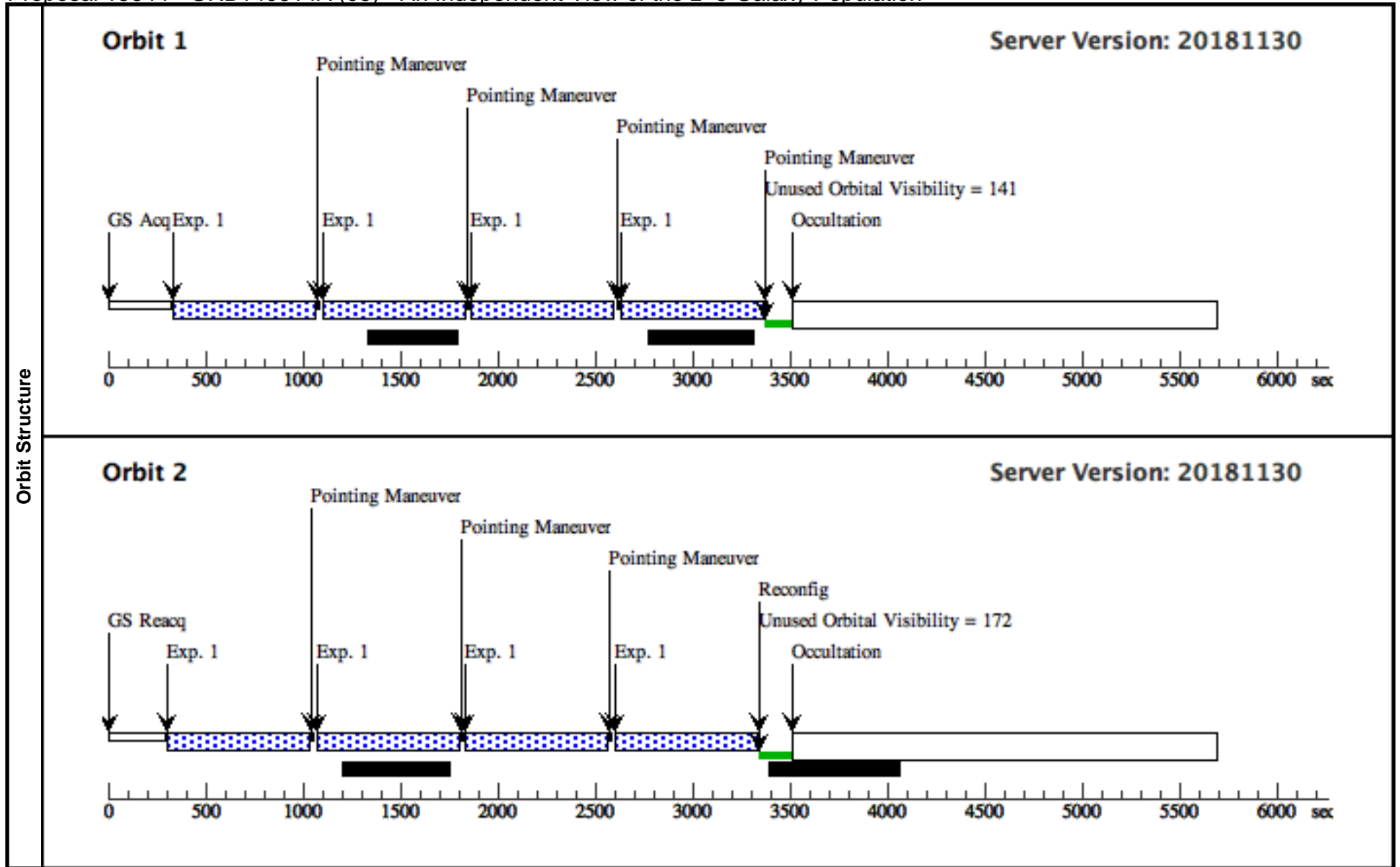
<b>Visit</b>	<b>Proposal 15644, GRB120712A (04), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true					(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)	GRB120712A	RA: 11 18 21.2300 (169.5884583d) Dec: -20 02 1.70 (-20.03381d) Equinox: J2000				V=25	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	(4) GRB120712A	(4) GRB120712A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12		Pattern 2, Exps 1-1 in GRB120712A (04) (2)	599.232292 Secs (4793.858 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]       [2]



Proposal 15644 - GRB140614A (05) - An Independent View of the z=5 Galaxy Population

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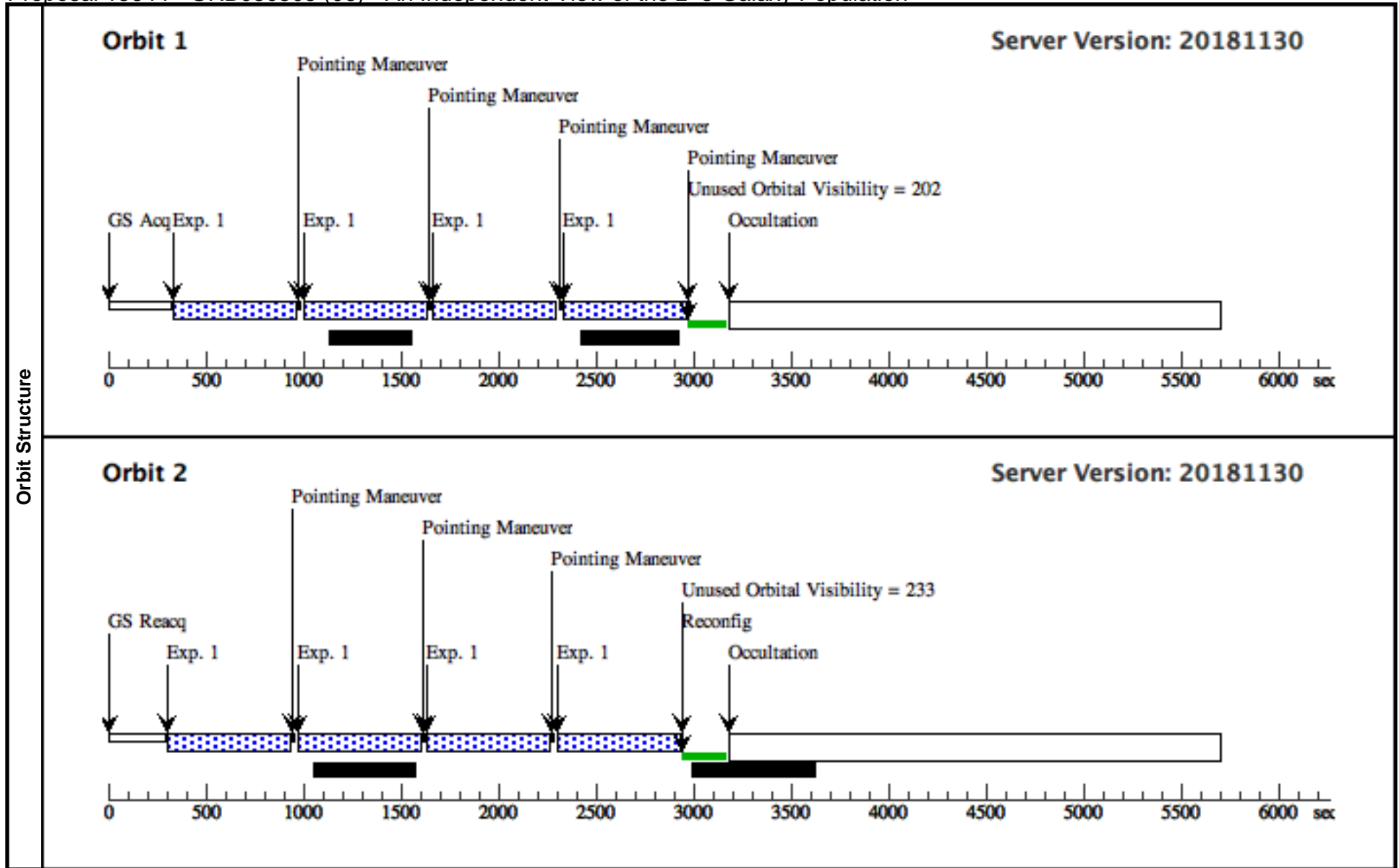
Visit	Proposal 15644, GRB140614A (05), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true					(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(5)	GRB140614A	RA: 15 24 40.6500 (231.1693750d) Dec: -79 07 43.50 (-79.12875d) Equinox: J2000				V=25	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		(5) GRB140614A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=13		Pattern 2, Exps 1-1 in GRB140614A (05) (2)	699.232615 Secs (5593.861 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]       [2]



Proposal 15644 - GRB050505 (06) - An Independent View of the z=5 Galaxy Population

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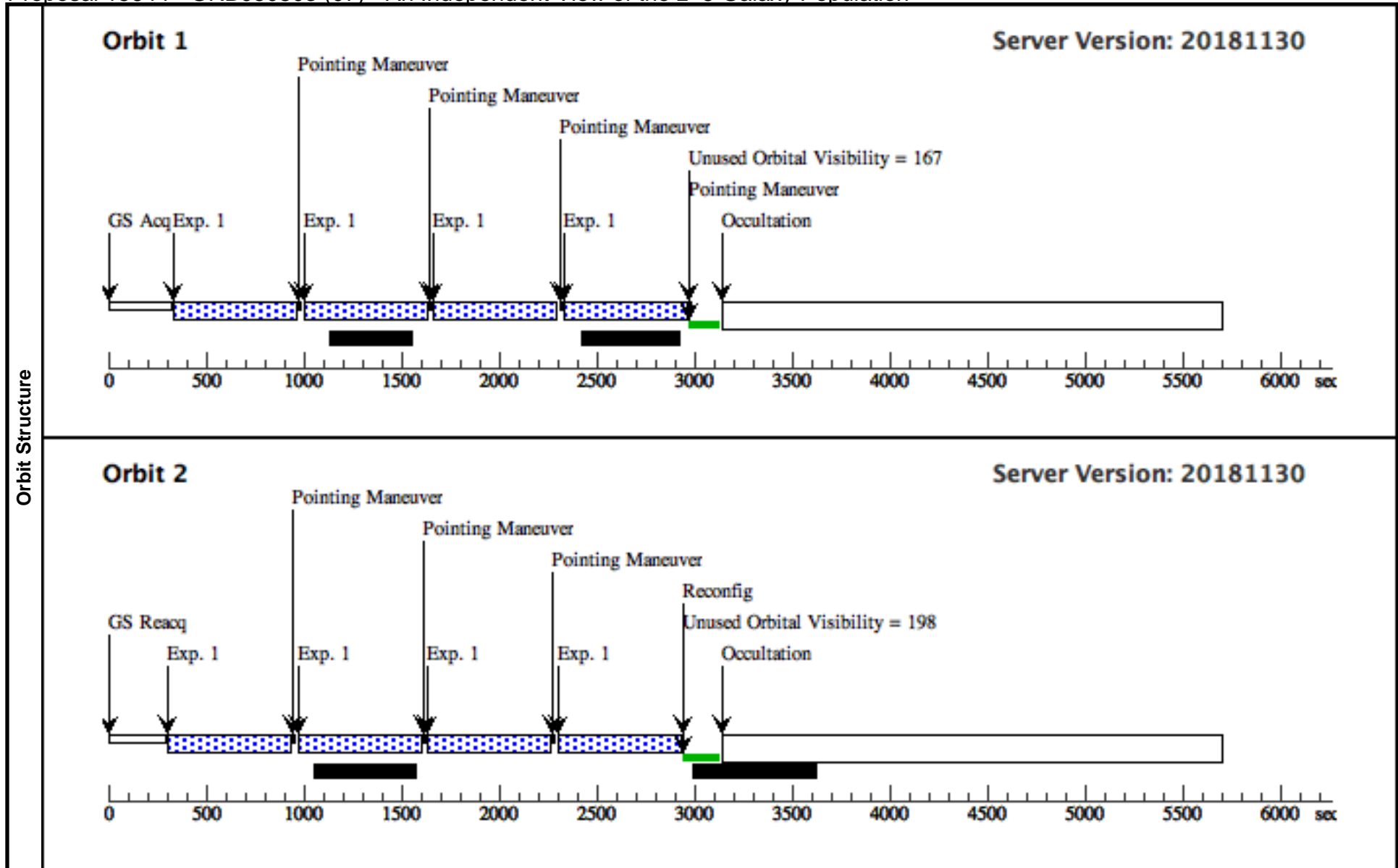
Visit	<b>Proposal 15644, GRB050505 (06), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true							(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(6)	GRB050505	RA: 09 27 3.3400 (141.7639167d) Dec: +30 16 24.60 (30.27350d) Equinox: J2000			V=25	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		(6) GRB050505	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12			Pattern 2, Exps 1-1 in GRB050505 (06) (2)	599.232292 Secs (4793.858 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] [=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[1] [2]



Proposal 15644 - GRB050803 (07) - An Independent View of the z=5 Galaxy Population

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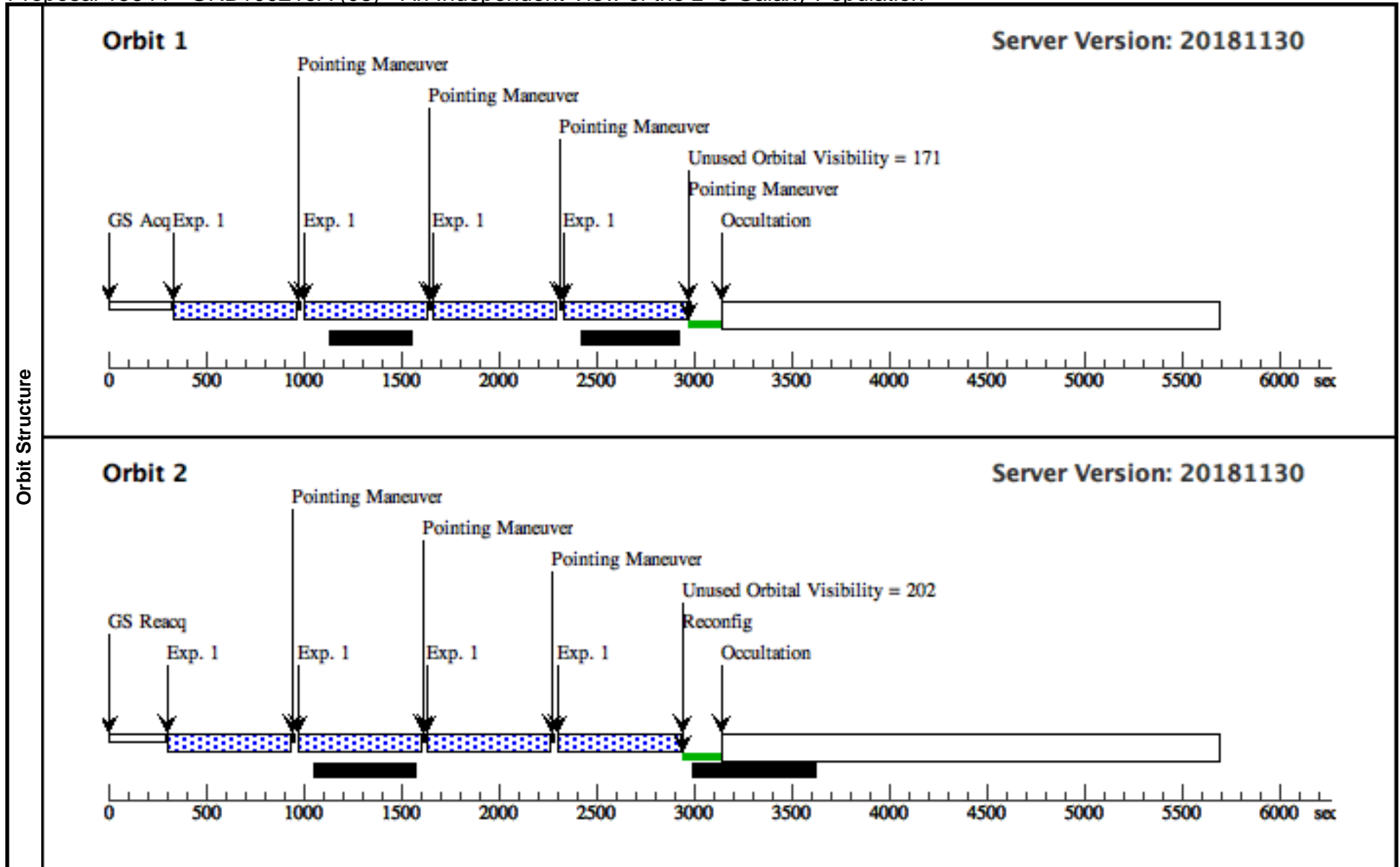
<b>Visit</b>	<b>Proposal 15644, GRB050803 (07), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true					(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>			
	(7)	GRB050803	RA: 23 22 37.8500 (350.6577083d) Dec: +05 47 8.20 (5.78561d) Equinox: J2000				V=25	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	(7) GRB050803	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12			Pattern 2, Exps 1-1 in GRB050803 (07) (2)	599.232292 Secs (4793.858 Secs)		
									[==>(Pattern 1)]	[1]	
									[==>(Pattern 2)]		
									[==>(Pattern 3)]		
									[==>(Pattern 4)]		
									[==>(Pattern 5)]	[2]	
									[==>(Pattern 6)]		
									[==>(Pattern 7)]		
									[==>(Pattern 8)]		



Proposal 15644 - GRB100219A (08) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

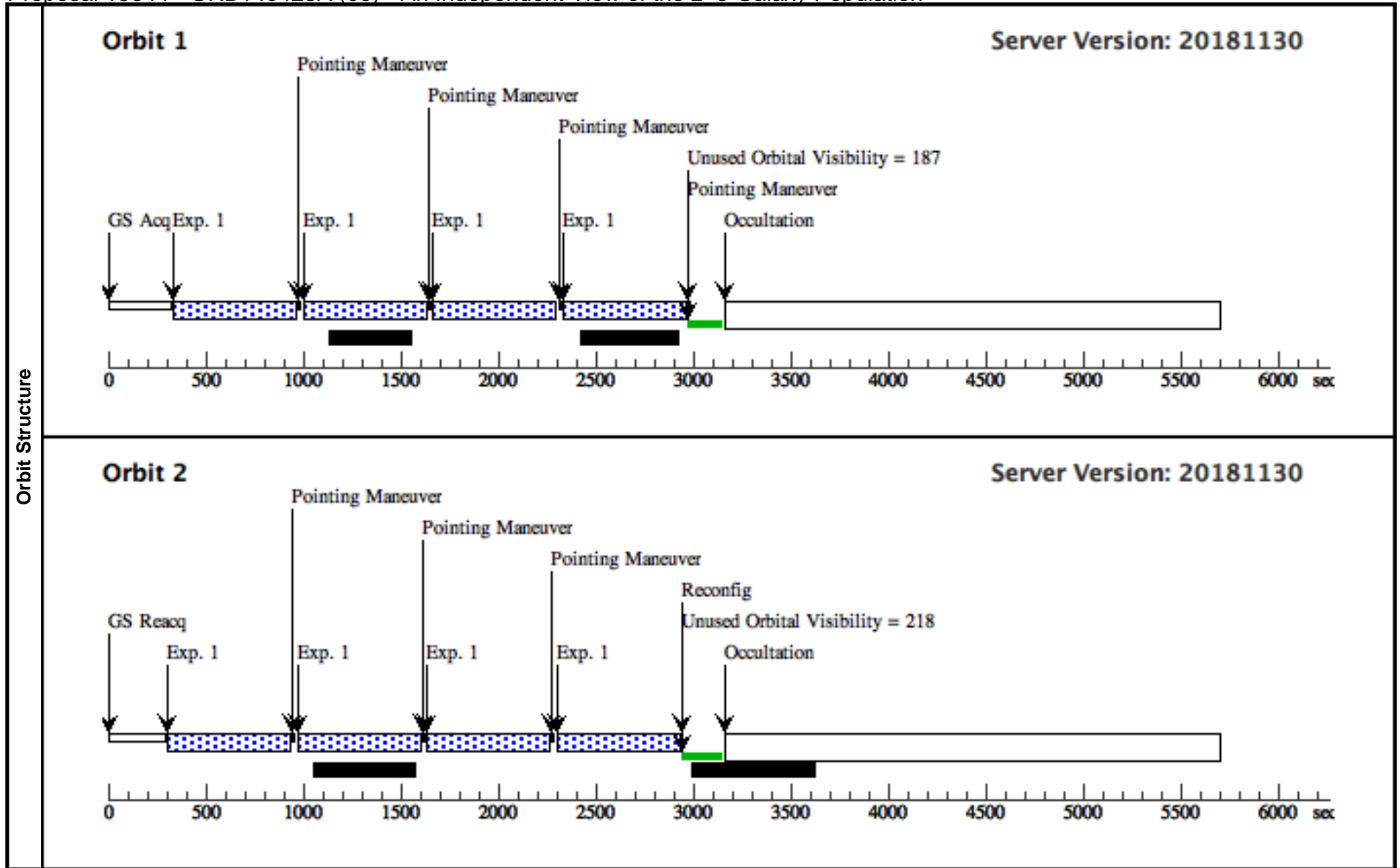
Visit	<b>Proposal 15644, GRB100219A (08), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(8)	GRB100219A	RA: 10 16 48.4800 (154.2020000d) Dec: -12 34 0.40 (-12.56678d) Equinox: J2000				V=25	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		(8) GRB100219A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12		Pattern 2, Exps 1-1 in GRB100219A (08) (2)	599.232292 Secs (4793.858 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]       [2]



Proposal 15644 - GRB140428A (09) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

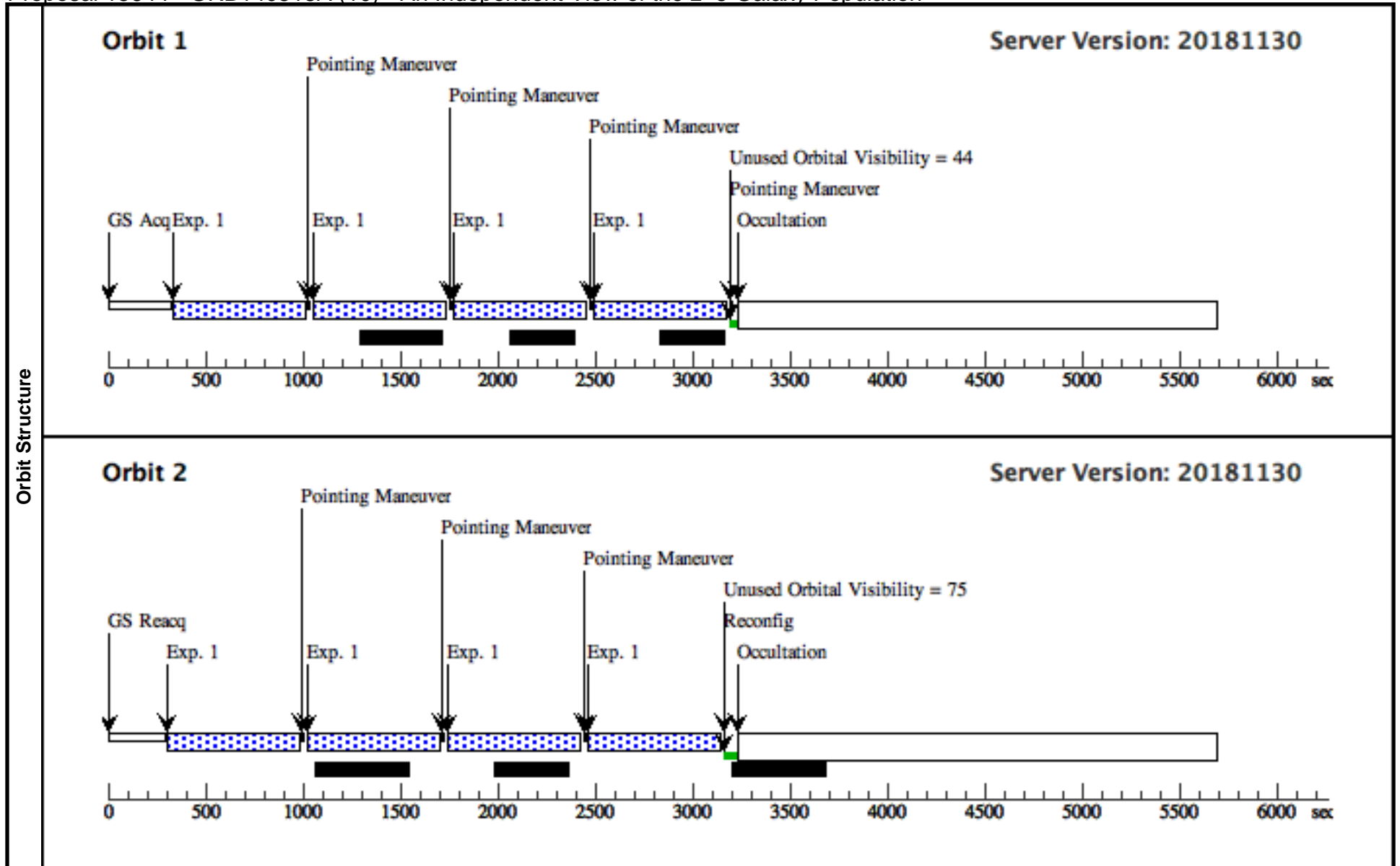
Visit	Proposal 15644, GRB140428A (09), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true							(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(9)	GRB140428A	RA: 12 57 28.3000 (194.3679167d) Dec: +28 23 6.00 (28.38500d) Equinox: J2000			V=25	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		(9) GRB140428A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12		Pattern 2, Exps 1-1 in GRB140428A (09) (2)	599.232292 Secs (4793.858 Secs)		
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]	
									[=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[2]	



Proposal 15644 - GRB140518A (10) - An Independent View of the z=5 Galaxy Population

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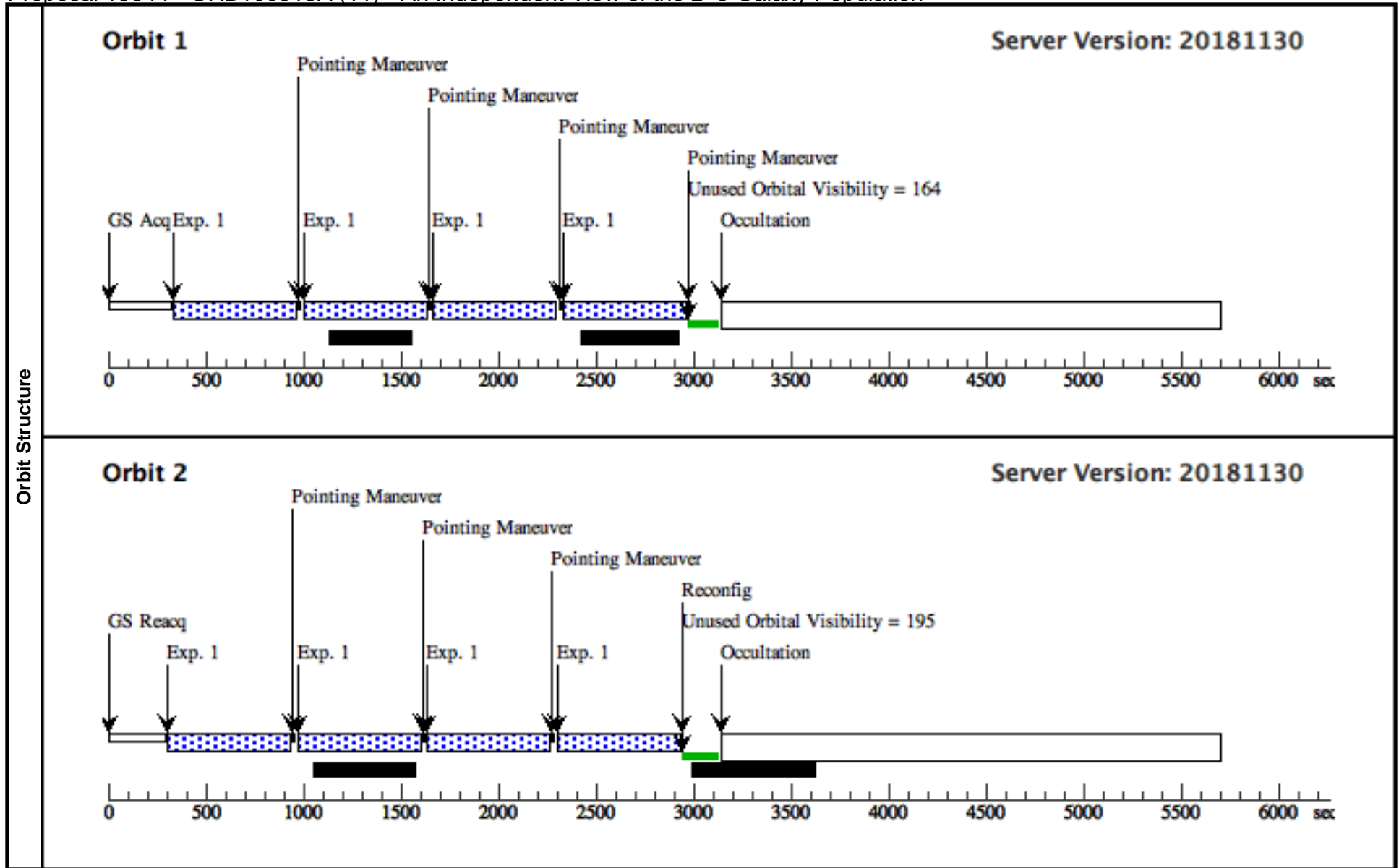
Visit	<b>Proposal 15644, GRB140518A (10), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true							(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(10)	GRB140518A	RA: 15 09 0.6200 (227.2525833d) Dec: +42 25 5.90 (42.41831d) Equinox: J2000		V=25	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		(10) GRB140518A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=SPARS 50; NSAMP=14		Pattern 2, Exps 1-1 i n GRB140518A (10) (2)	652.938154 Secs (5223.505 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
									[=>(Pattern 4)]		
									[=>(Pattern 5)]		
									[=>(Pattern 6)]		
									[=>(Pattern 7)]		[2]
									[=>(Pattern 8)]		



Proposal 15644 - GRB100513A (11) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

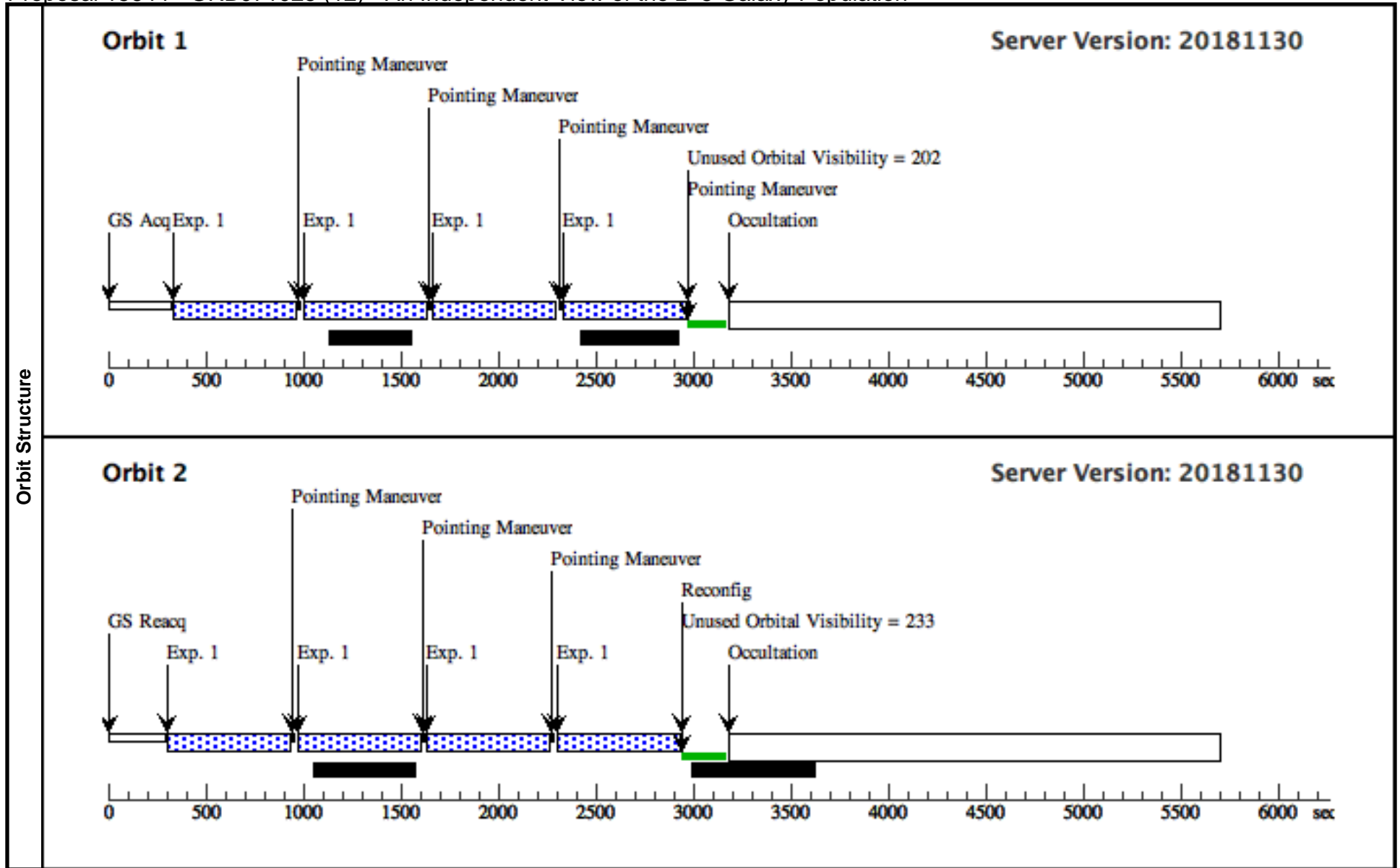
<b>Visit</b>	<b>Proposal 15644, GRB100513A (11), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true					(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>				
	(11)	GRB100513A	RA: 11 18 26.7100 (169.6112917d) Dec: +03 37 40.40 (3.62789d) Equinox: J2000			V=25	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		(11) GRB100513A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12		Pattern 2, Exps 1-1 in GRB100513A (11) (2)	599.232292 Secs (4793.858 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] [=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[1] [2]	



Proposal 15644 - GRB071025 (12) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

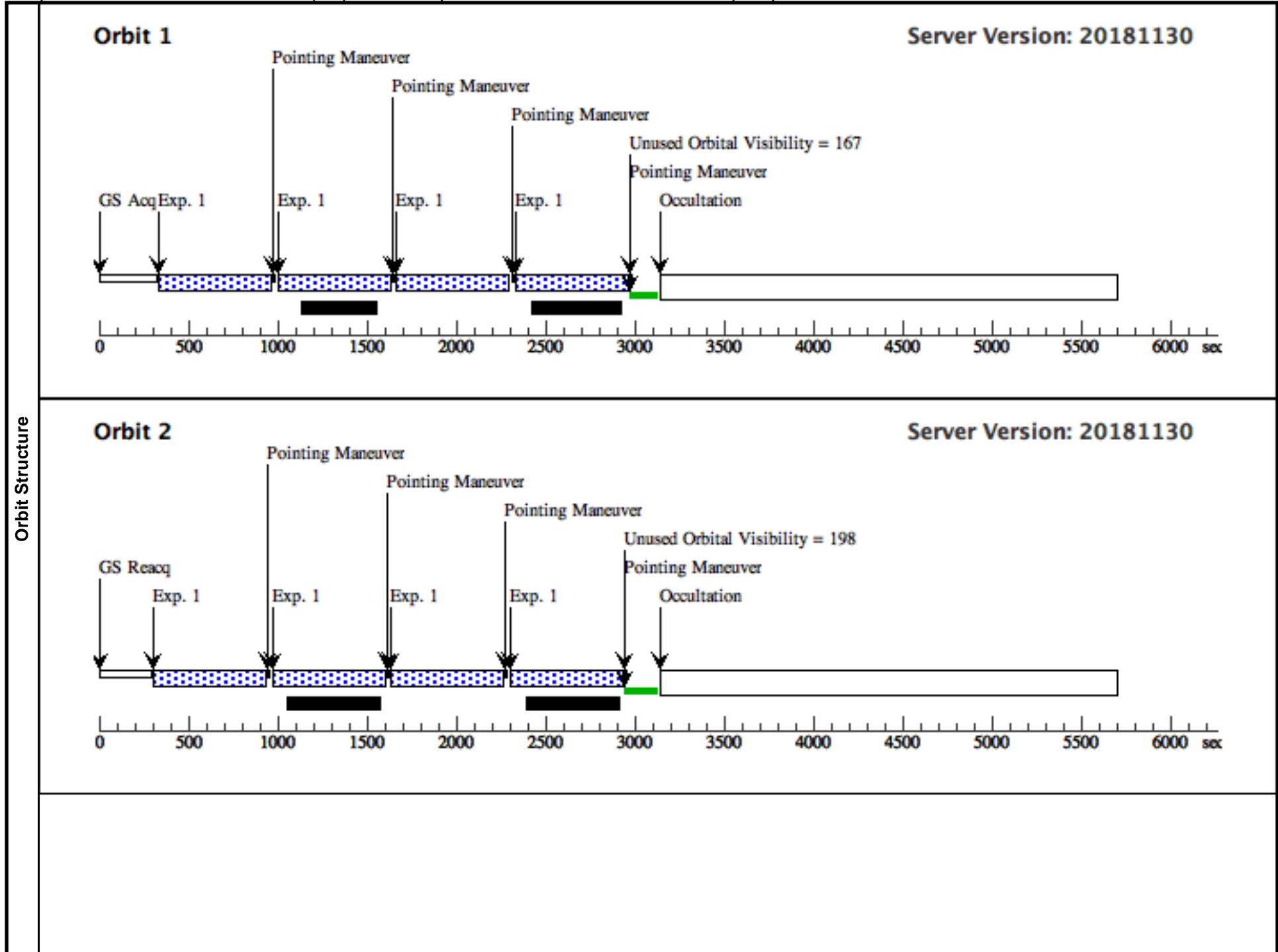
Visit	<b>Proposal 15644, GRB071025 (12), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: (none)										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=8 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true							(1)
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(12)	GRB071025	RA: 23 40 17.0700 (355.0711250d) Dec: +31 46 42.80 (31.77856d) Equinox: J2000				V=25	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		(12) GRB071025	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12		Pattern 2, Exps 1-1 in GRB071025 (12) (2)	599.232292 Secs (4793.858 Secs)		
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]	
									[=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[2]	

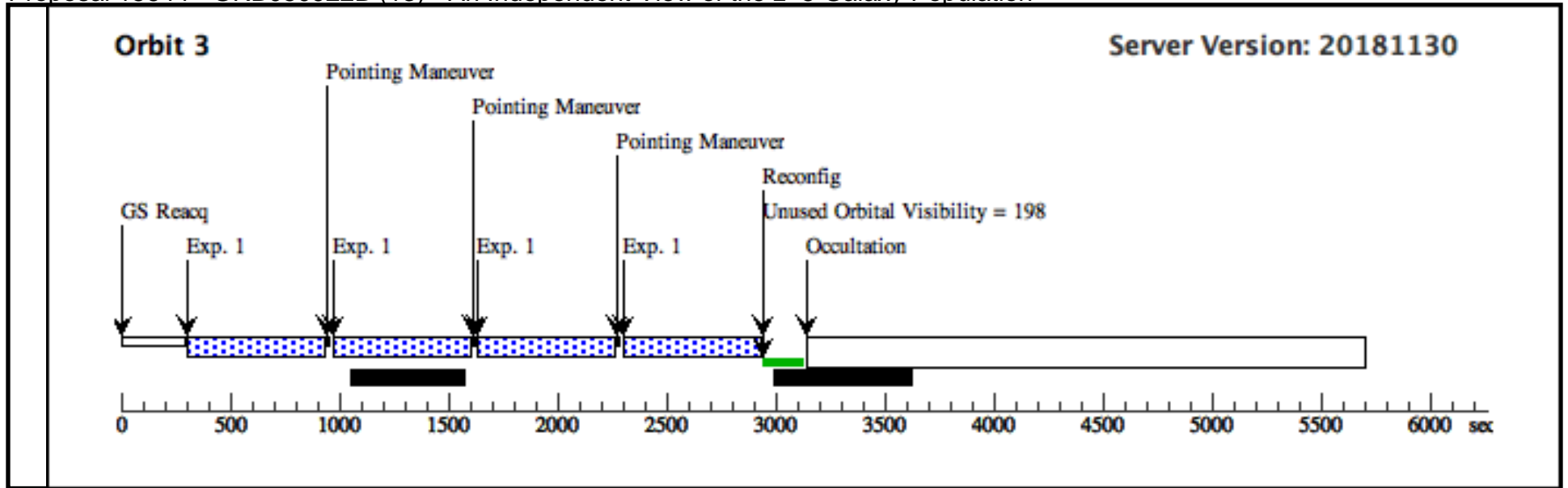


Proposal 15644 - GRB050922B (13) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

<b>Visit</b>	Proposal 15644, GRB050922B (13), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	#	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(1)	
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(13)	GRB050922B	RA: 00 23 13.3700 (5.8057083d) Dec: -05 36 16.70 (-5.60464d) Equinox: J2000				V=25	Reference Frame: ICRS			
Comments: Category=GALAXY Description=[HIGH REDSHIFT GALAXY]											
<b>Exposures</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		(13) GRB050922B	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100;		Pattern 3, Exps 1-1 in GRB050922B (13) (3)	599.232292 Secs (7190.788 Secs)		
							NSAMP=12		[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
								[=>(Pattern 3)]			
								[=>(Pattern 4)]			
								[=>(Pattern 5)]			
								[=>(Pattern 6)]		[2]	
								[=>(Pattern 7)]			
								[=>(Pattern 8)]			
								[=>(Pattern 9)]			
								[=>(Pattern 10)]			
								[=>(Pattern 11)]		[3]	
								[=>(Pattern 12)]			

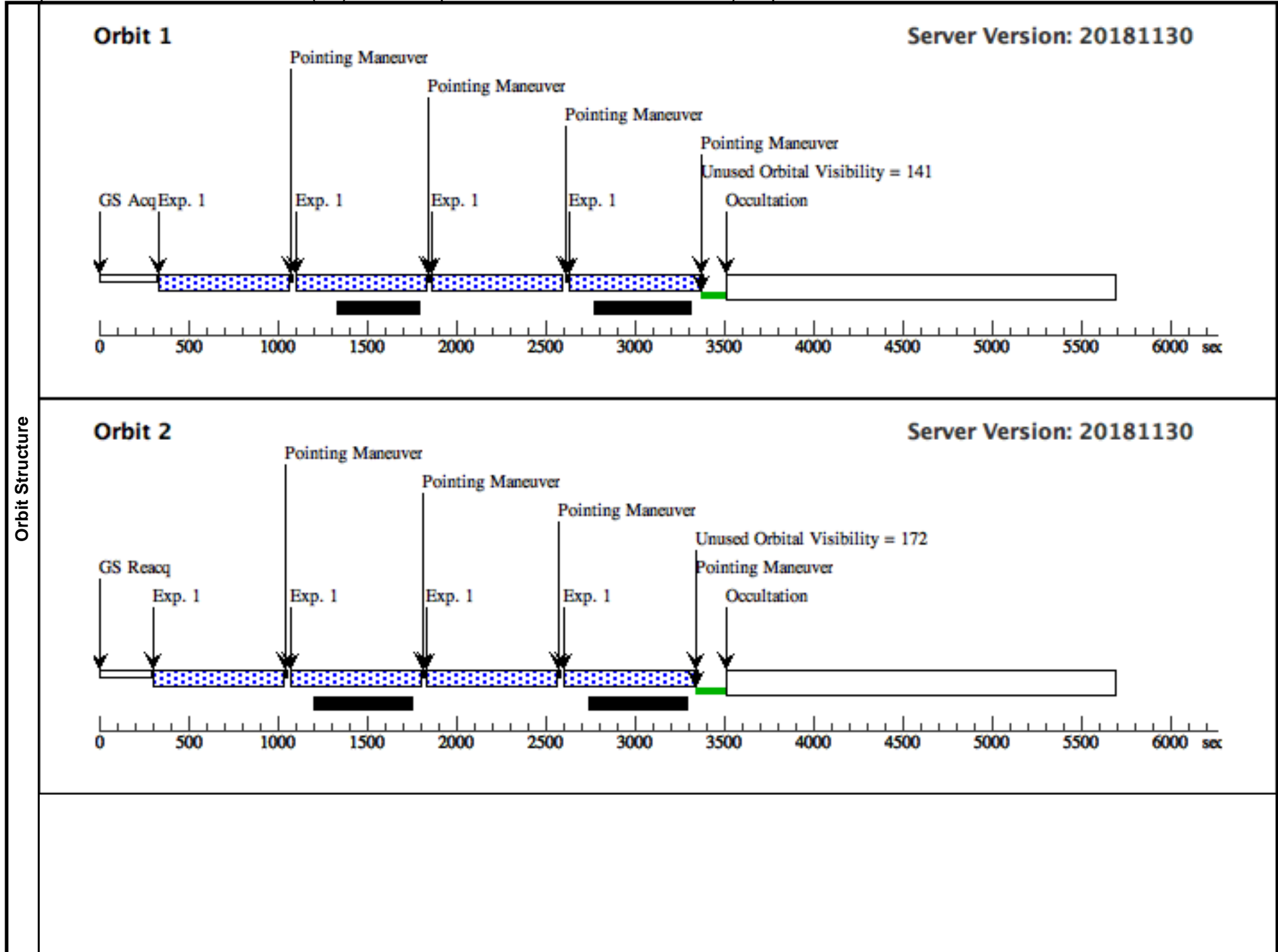


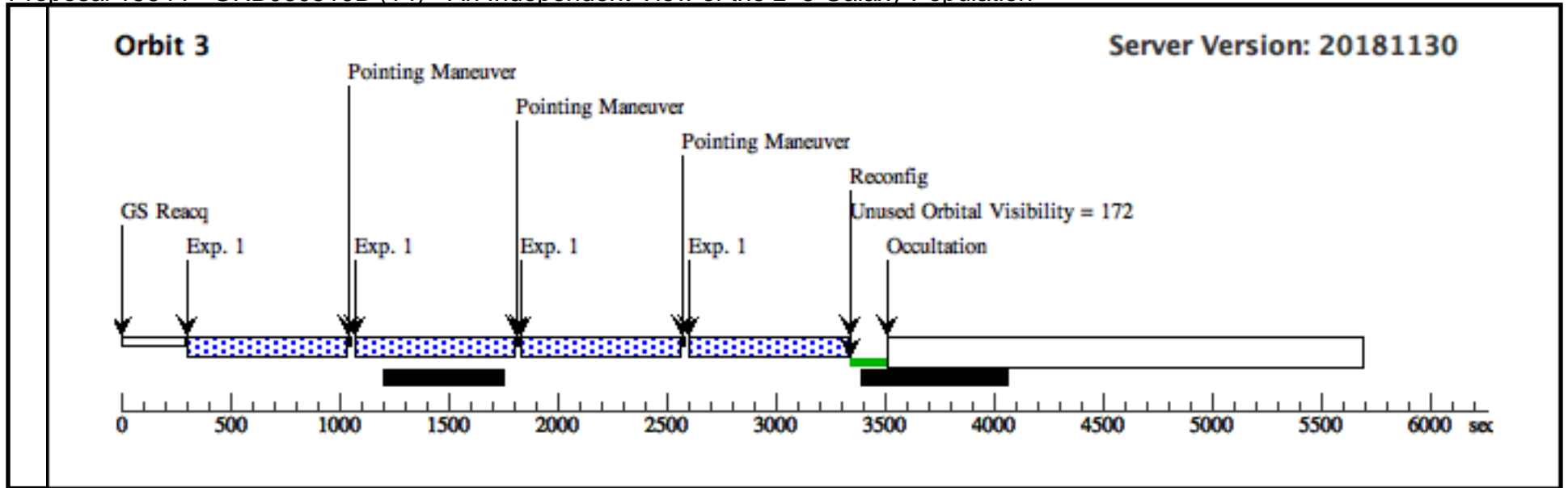


Proposal 15644 - GRB060510B (14) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

<b>Visit</b>	<b>Proposal 15644, GRB060510B (14), scheduling</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>	<b>Exposures</b>					
	(3)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true		(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>				
	(14)	GRB060510B	RA: 15 56 29.2000 (239.1216667d) Dec: +78 34 12.00 (78.57000d) Equinox: J2000		V=25	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	(14) GRB060510B	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=13			Pattern 3, Exps 1-1 i n GRB060510B (14) (3)	699.232615 Secs (8390.791 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)] [==>(Pattern 9)] [==>(Pattern 10)] [==>(Pattern 11)] [==>(Pattern 12)]	[1] [2] [3]

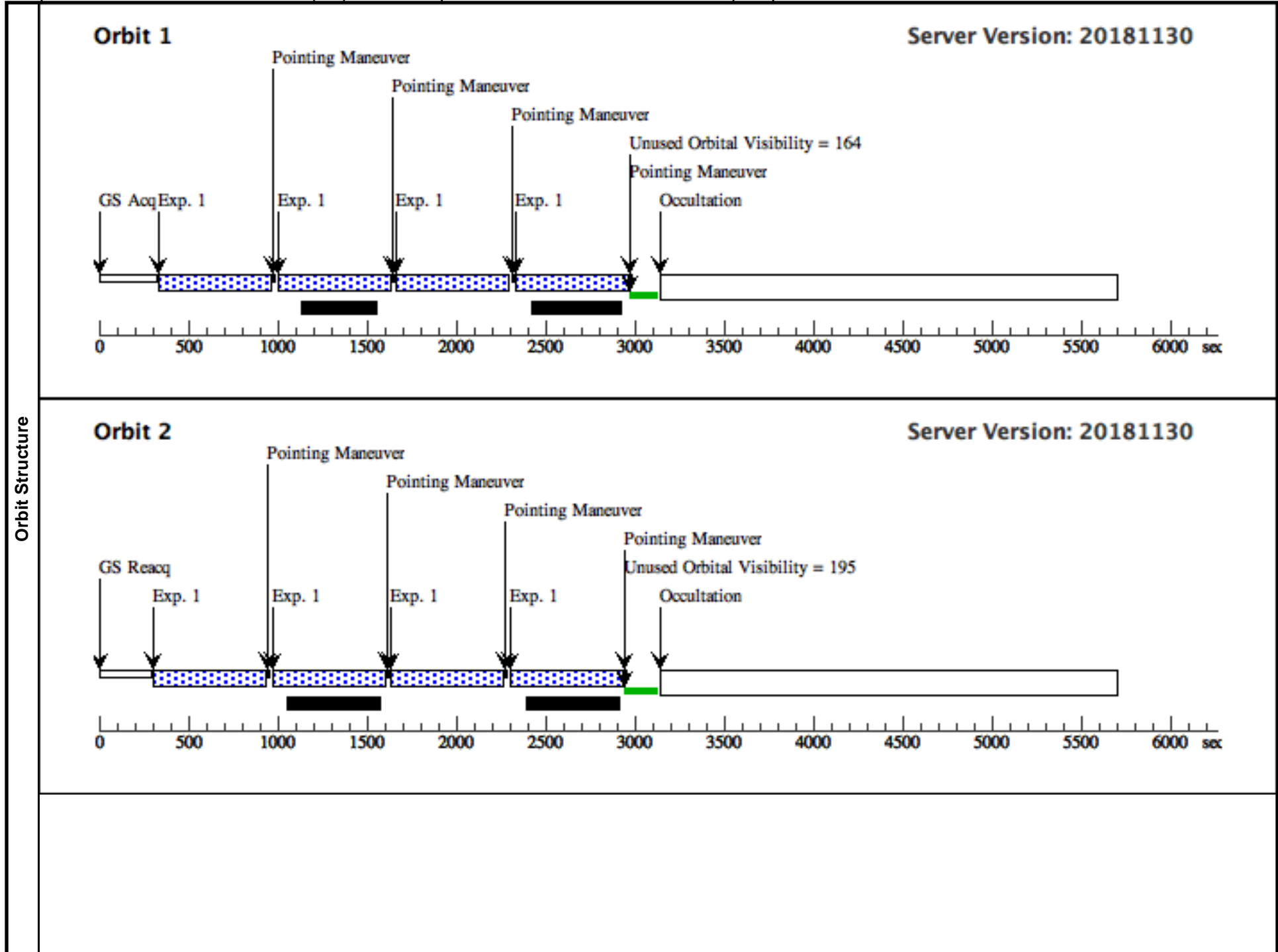


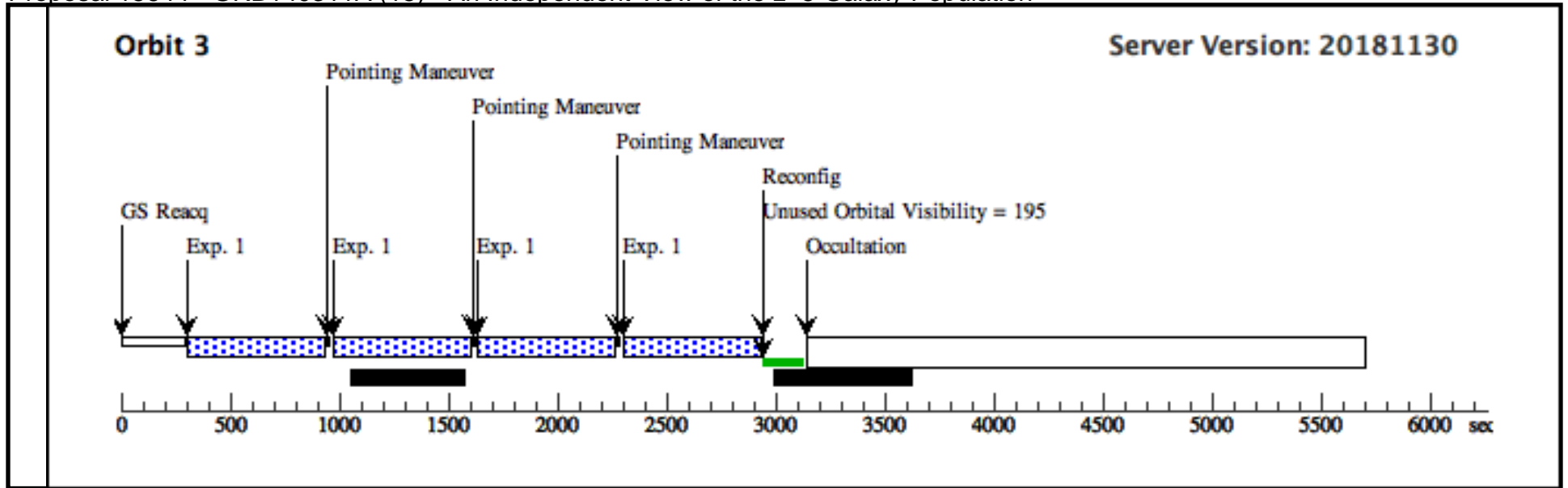


Proposal 15644 - GRB140311A (15) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:47 GMT 2019

<b>Visit</b>	Proposal 15644, GRB140311A (15), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	#	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(1)	
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(15)	GRB140311A	RA: 13 57 13.2900 (209.3053750d) Dec: +00 38 31.70 (.64214d) Equinox: J2000				V=25	Reference Frame: ICRS			
Comments: Category=GALAXY Description=[HIGH REDSHIFT GALAXY]											
<b>Exposures</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		(15) GRB140311A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100;		Pattern 3, Exps 1-1 in GRB140311A (15) (3)	599.232292 Secs (7190.788 Secs)		
						NSAMP=12			[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
									[=>(Pattern 4)]		
									[=>(Pattern 5)]		
									[=>(Pattern 6)]		[2]
									[=>(Pattern 7)]		
									[=>(Pattern 8)]		
									[=>(Pattern 9)]		
									[=>(Pattern 10)]		
									[=>(Pattern 11)]		[3]
									[=>(Pattern 12)]		

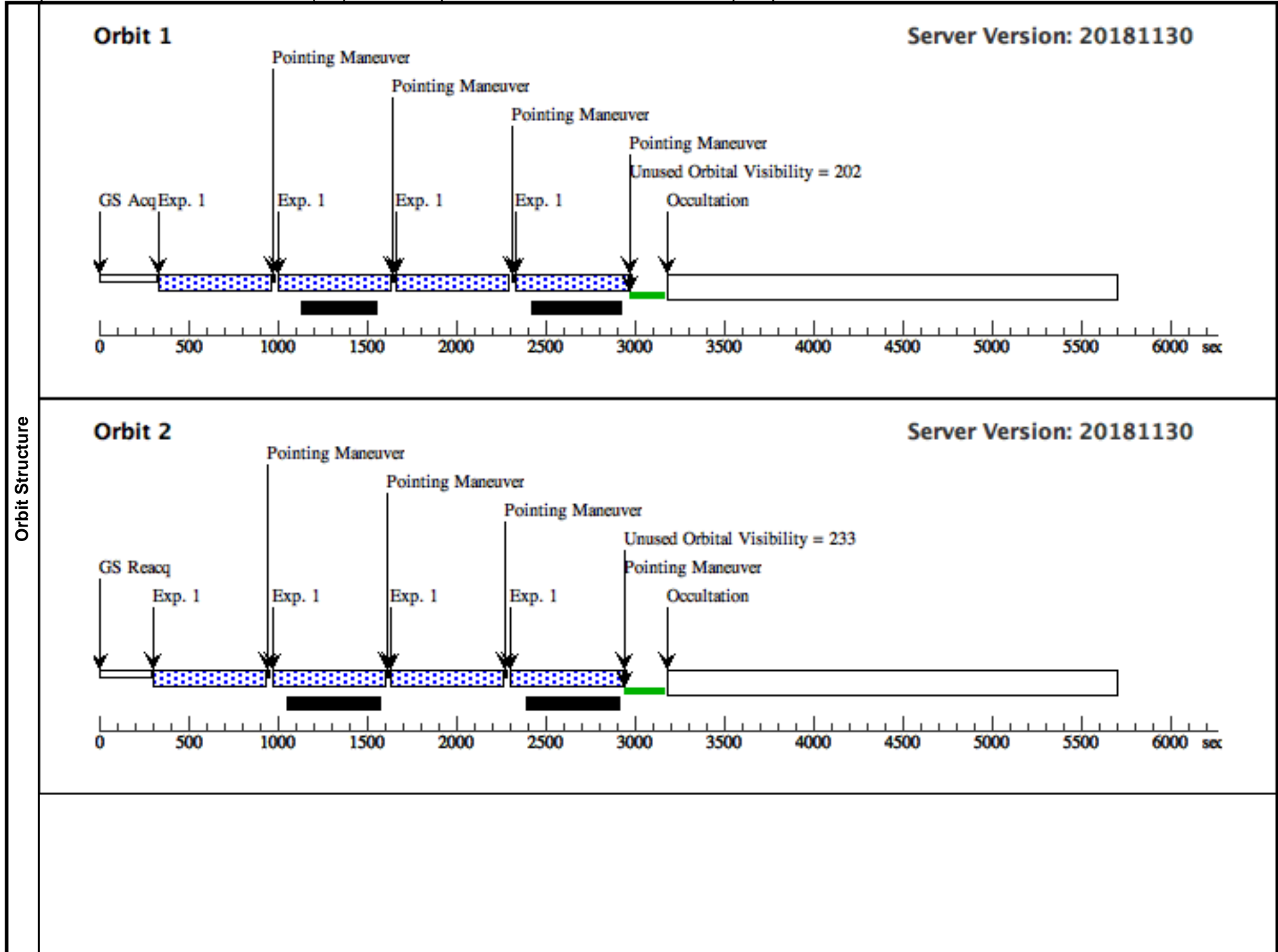


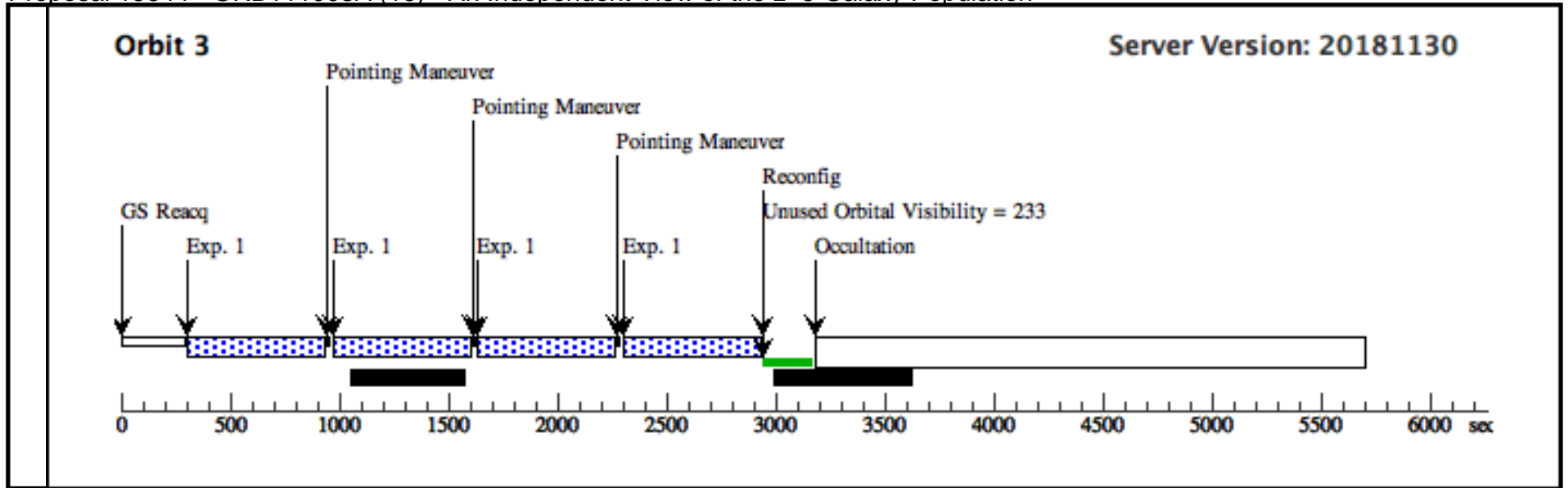


Proposal 15644 - GRB111008A (16) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:48 GMT 2019

<b>Visit</b>	<b>Proposal 15644, GRB111008A (16), failed</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>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(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>		
	(16)	GRB111008A	RA: 04 01 48.2400 (60.4510000d) Dec: -32 42 33.40 (-32.70928d) Equinox: J2000				V=25		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	(16) GRB111008A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12			Pattern 3, Exps 1-1 in GRB111008A (16) (3)	599.232292 Secs (7190.788 Secs)		
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]		[1]
									[=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]		[2]
								[=>(Pattern 9)] [=>(Pattern 10)] [=>(Pattern 11)] [=>(Pattern 12)]		[3]	

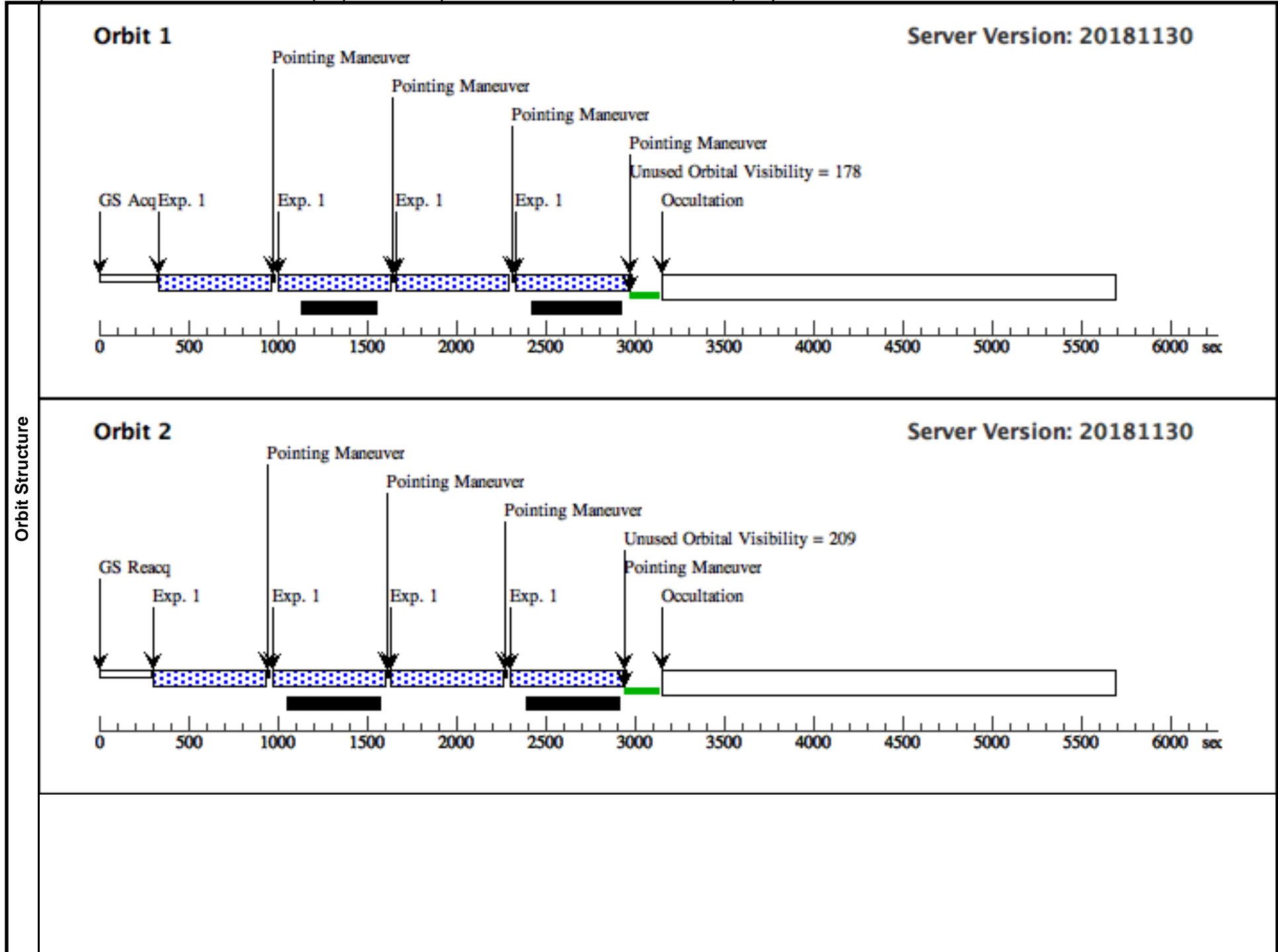


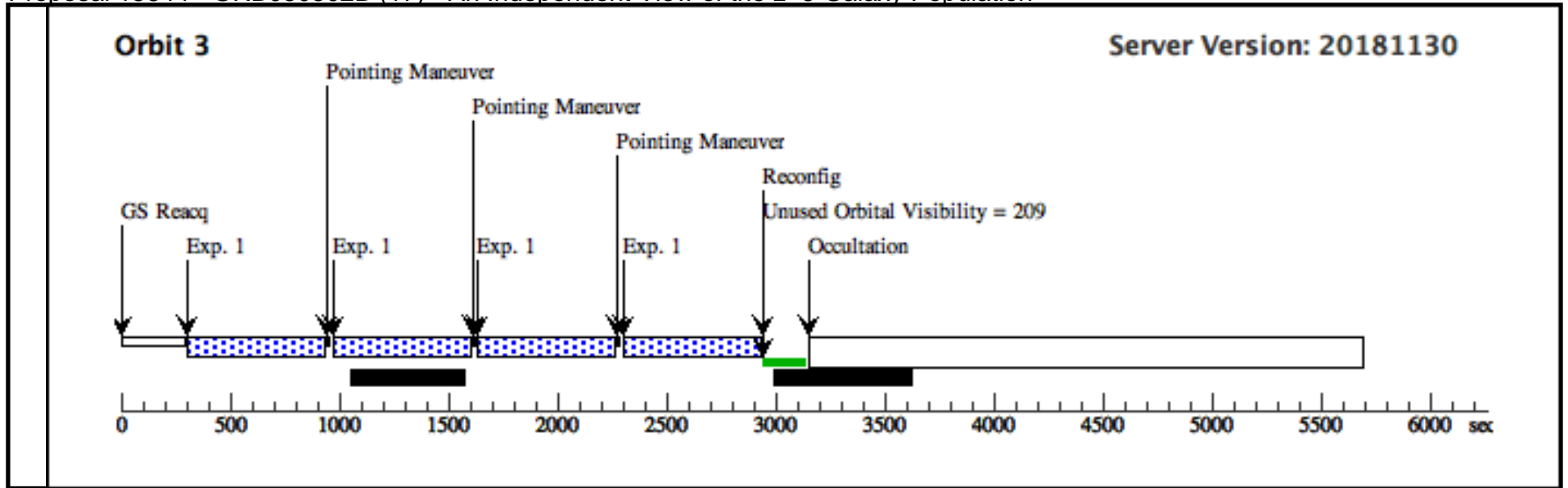


Proposal 15644 - GRB050502B (17) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:48 GMT 2019

<b>Visit</b>	Proposal 15644, GRB050502B (17), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	#	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(1)	
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(17)	GRB050502B	RA: 09 30 10.0600 (142.5419167d) Dec: +16 59 46.50 (16.99625d) Equinox: J2000				V=25	Reference Frame: ICRS			
Comments: Category=GALAXY Description=[HIGH REDSHIFT GALAXY]											
<b>Exposures</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	(17) GRB050502B	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100; NSAMP=12			Pattern 3, Exps 1-1 in GRB050502B (17) (3)	599.232292 Secs (7190.788 Secs)		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
								[=>(Pattern 4)]			
								[=>(Pattern 5)]			
								[=>(Pattern 6)]		[2]	
								[=>(Pattern 7)]			
								[=>(Pattern 8)]			
								[=>(Pattern 9)]			
								[=>(Pattern 10)]			
								[=>(Pattern 11)]		[3]	
								[=>(Pattern 12)]			

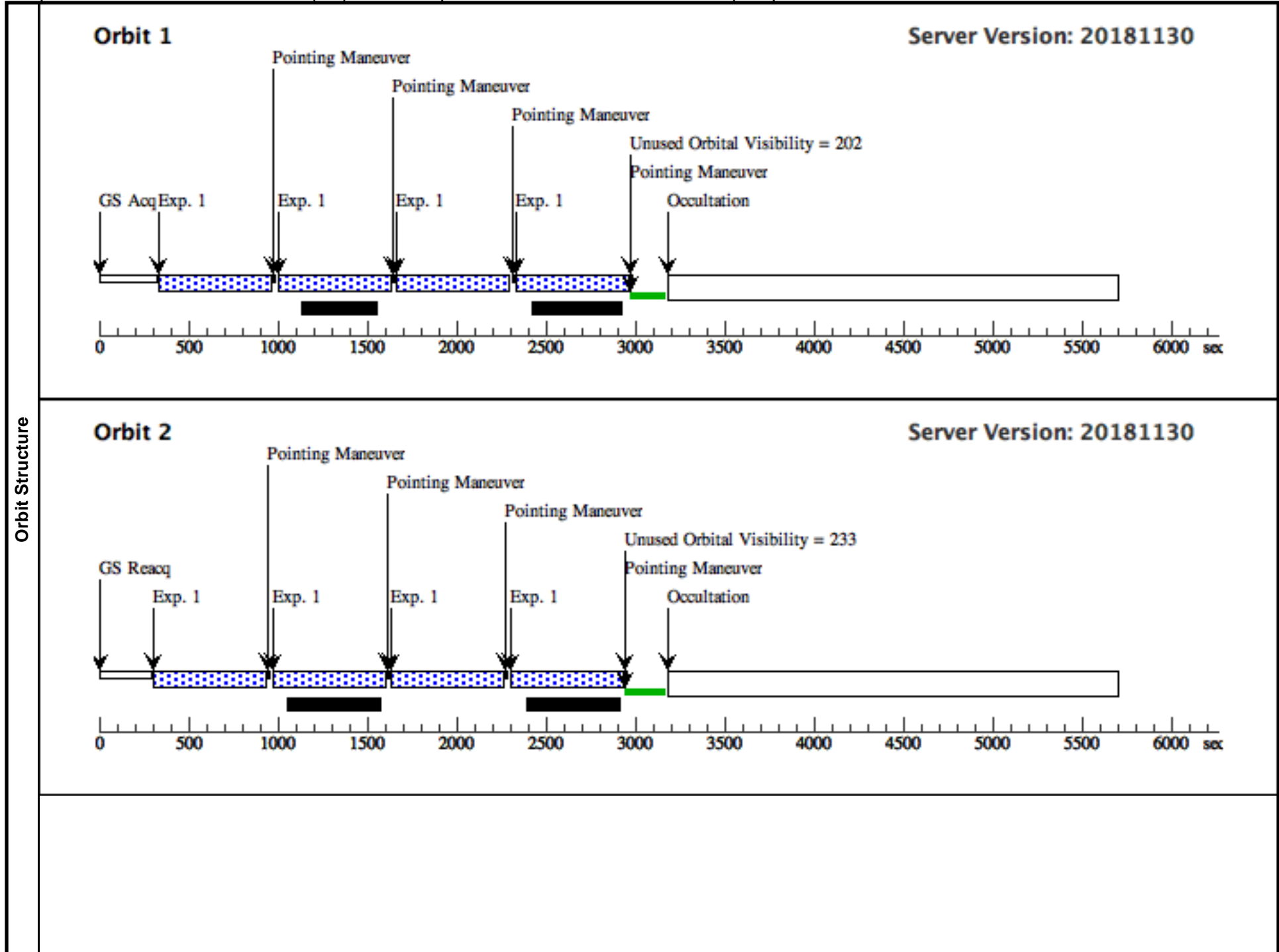


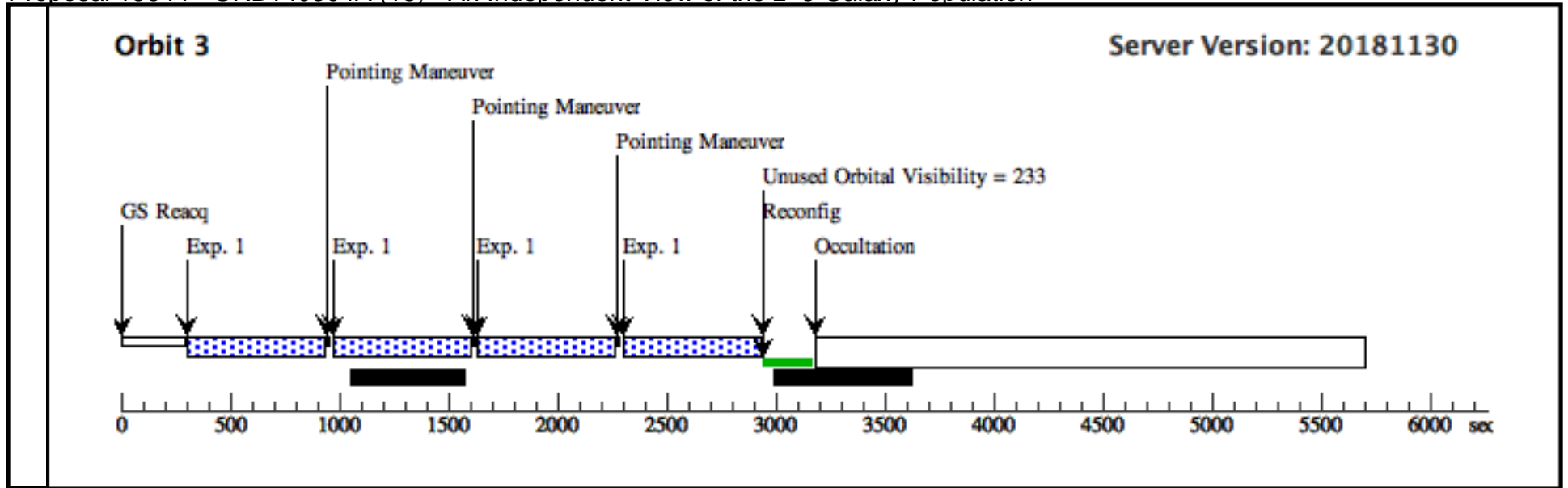


Proposal 15644 - GRB140304A (18) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:48 GMT 2019

<b>Visit</b>	<b>Proposal 15644, GRB140304A (18), scheduling</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>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(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>		
	(18)	GRB140304A	RA: 02 02 34.2600 (30.6427500d) Dec: +33 28 25.70 (33.47381d) Equinox: J2000				V=25		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		(18) GRB140304A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100;		Pattern 3, Exps 1-1 in GRB140304A (18) (3)	599.232292 Secs (7190.788 Secs)		
							NSAMP=12		[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
								[=>(Pattern 4)]			
								[=>(Pattern 5)]			
								[=>(Pattern 6)]			
								[=>(Pattern 7)]		[2]	
								[=>(Pattern 8)]			
								[=>(Pattern 9)]			
								[=>(Pattern 10)]			
								[=>(Pattern 11)]		[3]	
								[=>(Pattern 12)]			

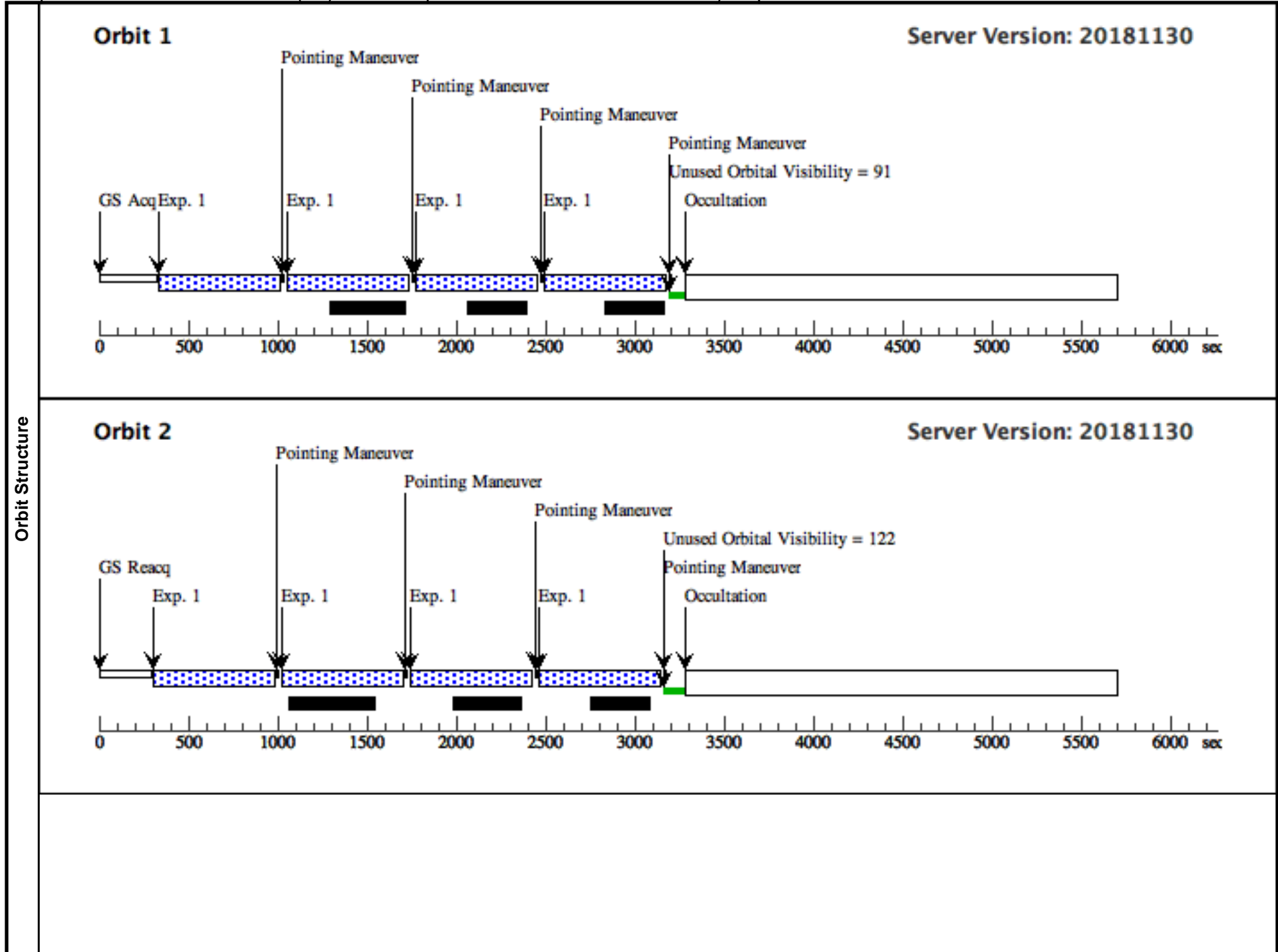


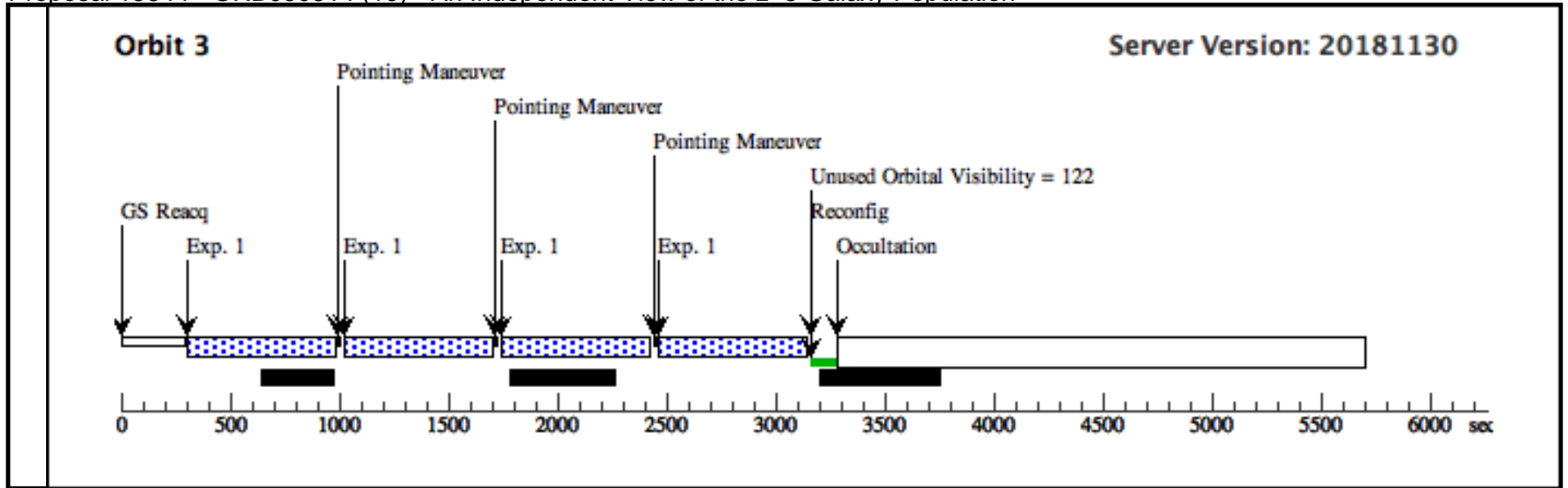


Proposal 15644 - GRB050814 (19) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:48 GMT 2019

<b>Visit</b>	Proposal 15644, GRB050814 (19), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(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>		
	(19)	GRB050814	RA: 17 36 45.3900 (264.1891250d) Dec: +46 20 21.60 (46.33933d) Equinox: J2000				V=25		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		(19) GRB050814	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=SPARS 50; NSAMP=14		Pattern 3, Exps 1-1 i n GRB050814 (19) (3)	652.938154 Secs (7835.258 Secs)		
										[==>(Pattern 1)]	[1]
										[==>(Pattern 2)]	
										[==>(Pattern 3)]	
										[==>(Pattern 4)]	
										[==>(Pattern 5)]	[2]
										[==>(Pattern 6)]	
										[==>(Pattern 7)]	
										[==>(Pattern 8)]	
										[==>(Pattern 9)]	[3]
										[==>(Pattern 10)]	
									[==>(Pattern 11)]		
									[==>(Pattern 12)]		





Proposal 15644 - GRB111008A (66) - An Independent View of the z=5 Galaxy Population

Fri Apr 12 23:56:48 GMT 2019

<b>Visit</b>	<b>Proposal 15644, GRB111008A (66)</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>				<b>Exposures</b>
(3)		Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=12 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true						(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>			
	(16)	GRB111008A	RA: 04 01 48.2400 (60.4510000d) Dec: -32 42 33.40 (-32.70928d) Equinox: J2000				V=25	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		(16) GRB111008A	WFC3/IR, MULTIACCUM, IR	F110W	SAMP-SEQ=STEP100;		Pattern 3, Exps 1-1 in GRB111008A (66) (3)	599.232292 Secs (7190.788 Secs)		
							NSAMP=12		[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
								[=>(Pattern 4)]			
								[=>(Pattern 5)]			
								[=>(Pattern 6)]		[2]	
								[=>(Pattern 7)]			
								[=>(Pattern 8)]			
								[=>(Pattern 9)]			
								[=>(Pattern 10)]			
								[=>(Pattern 11)]		[3]	
								[=>(Pattern 12)]			

