



12224 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of Peak Star Formation

Cycle: 18, 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) BOOTES-LAE1-1	WFC3/IR	1	09-Jul-2010 00:01:09.0	yes
02	(2) BOOTES-LAE1-2	WFC3/IR	1	09-Jul-2010 00:01:15.0	yes
03	(3) BOOTES-LAE1-3	WFC3/IR	1	09-Jul-2010 00:01:20.0	yes
04	(4) BOOTES-LAE1-4	WFC3/IR	1	09-Jul-2010 00:01:26.0	yes
05	(5) BOOTES-LAE1-5	WFC3/IR	1	09-Jul-2010 00:01:31.0	yes
06	(6) BOOTES-LAE3-1	WFC3/IR	1	09-Jul-2010 00:01:36.0	yes
07	(7) BOOTES-LAE3-2	WFC3/IR	1	09-Jul-2010 00:01:40.0	yes
08	(8) BOOTES-LAE3-3	WFC3/IR	1	09-Jul-2010 00:01:44.0	yes
09	(9) HS1700-1	WFC3/IR	1	09-Jul-2010 00:01:49.0	yes
10	(10) HS1700-2	WFC3/IR	1	09-Jul-2010 00:01:53.0	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>
11	(11) HS1700-3	WFC3/IR	1	09-Jul-2010 00:01:58.0	yes
12	(12) HS1700-4	WFC3/IR	1	09-Jul-2010 00:02:02.0	yes

12 Total Orbits Used

ABSTRACT

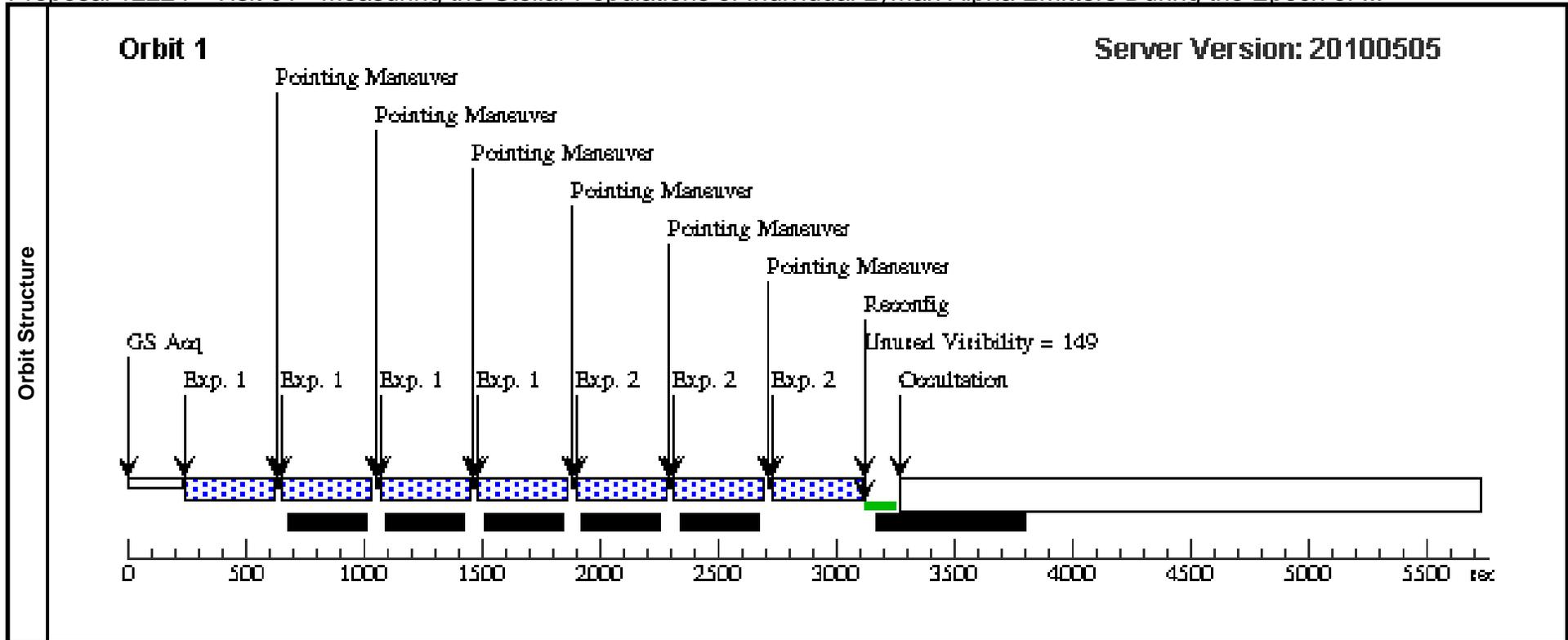
Selecting galaxies by their strong Lyman-alpha emission provides a powerful means of probing the reionization epoch and the faint/low-mass galaxies that dominate star formation at high redshift. Yet, our understanding of high-redshift Lyman-alpha emitters (LAEs) has lagged behind that of other well-studied populations (e.g., Lyman break galaxies) due to their continuum faintness and the shifting of age/mass-sensitive features into the near-IR where the high terrestrial background inhibits deep observations. All existing studies of LAEs at $z > 2$ have used stacked optical and/or Spitzer infrared data to discern their median properties, but the actual distributions of ages, reddenings, and stellar masses for these populations are poorly characterized. To fill this glaring gap in the observations and advance our understanding of this important population, we propose WFC3/IR+F160W imaging of fields where we have conducted a survey of low redshift ($z \sim 1.9$) Lyman-alpha emitters (LAEs), in order to measure their ages and stellar masses at an epoch where such observations directly probe the age-sensitive Balmer/4000 AA breaks. The targeted sample will include 45-50 spectroscopically confirmed LAEs at $z = 1.7-2.1$ and roughly twice as many candidates, making it the largest sample of homogeneously selected LAEs with individual measurements of the ages, masses, and dust extinction. With these data we will (1) carefully take into account the age-dependence of the extinction curve to make robust comparisons between LAEs and continuum-selected galaxies at the same redshifts; (2) combine clustering and stellar mass measurements to infer the duty cycles of LAEs and determine if they are triggered in the presence of large-scale structures; and (3) quantify the importance of the LAE phase at different galaxy luminosity and mass scales, over a large dynamic range in these properties. An economical investment of just 12 orbits will allow us to accomplish these goals, and remains the only hope of efficiently studying such low luminosity high-redshift galaxies in the near-IR prior to the JWST-era.

OBSERVING DESCRIPTION

Obtain WFC3/IR+F160W imaging in 12 separate pointings in the Bootes and Q1700 fields to study the stellar populations and stellar masses of strong Lyman-alpha emitters at redshift $z \sim 1.9$

Proposal 12224 (STScI Edit Number: 2, Created: Thursday, July 8, 2010 11:02:06 PM EST) - Overview

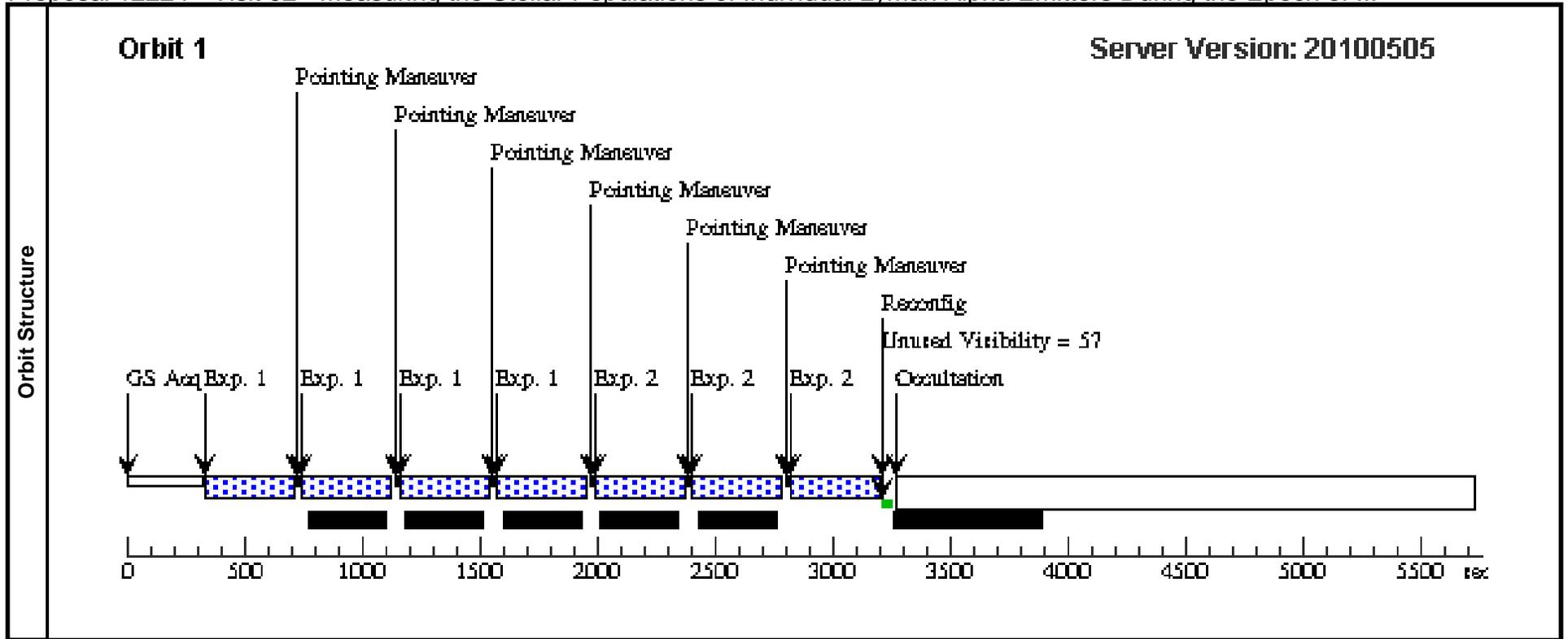
Visit		Proposal 12224, Visit 01, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)						Fri Jul 09 04:02:06 GMT 2010		
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	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 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)	Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false			(2)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	BOOTES-LAE1-1	RA: 14 35 3.9900 (218.7666250d) Dec: +33 25 15.55 (33.42099d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-LAE1-1	(1) BOOTES-LAE1-1	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15	GS ACQ SCENARI O SINGLE	Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	BOOTES-LAE1-1	(1) BOOTES-LAE1-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 01 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:07 GMT 2010

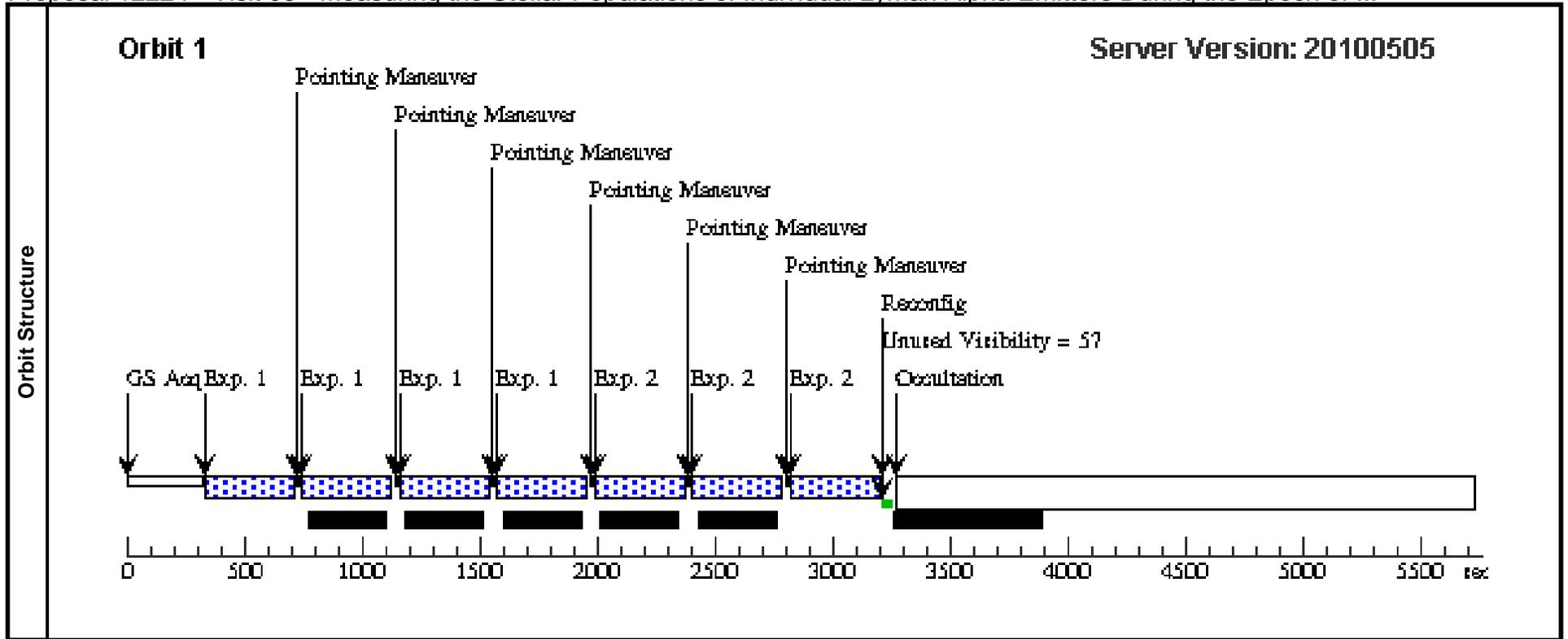
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(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	BOOTES-LAE1-2	RA: 14 34 45.9700 (218.6915417d) Dec: +33 26 23.47 (33.43985d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-L AE1-2	(2) BOOTES-LAE1- 2	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	BOOTES-L AE1-2	(2) BOOTES-LAE1- 2	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 02 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:08 GMT 2010

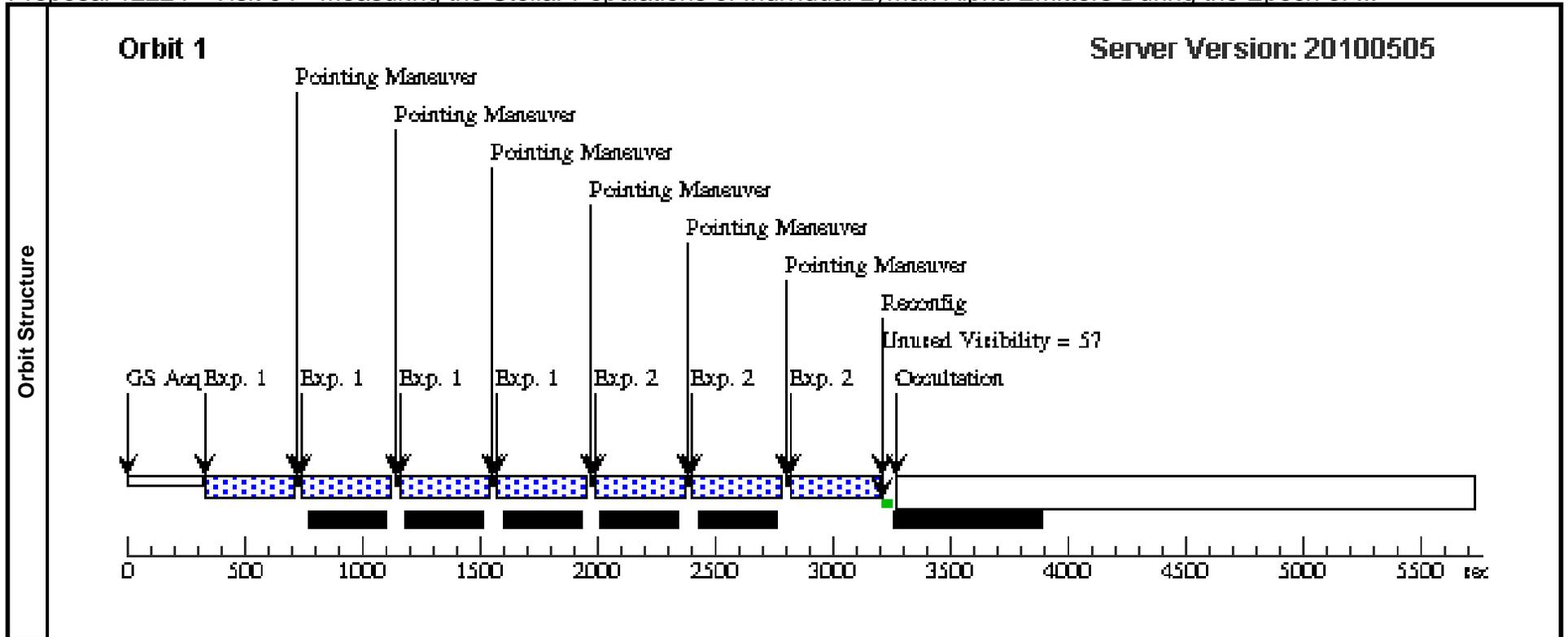
Visit	Proposal 12224, Visit 03, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
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Patterns	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	BOOTES-LAE1-3	RA: 14 34 37.8800 (218.6578333d) Dec: +33 24 18.00 (33.40500d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-L AE1-3	(3) BOOTES-LAE1-3	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15			Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]
2	BOOTES-L AE1-3	(3) BOOTES-LAE1-3	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S25			Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 03 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:08 GMT 2010

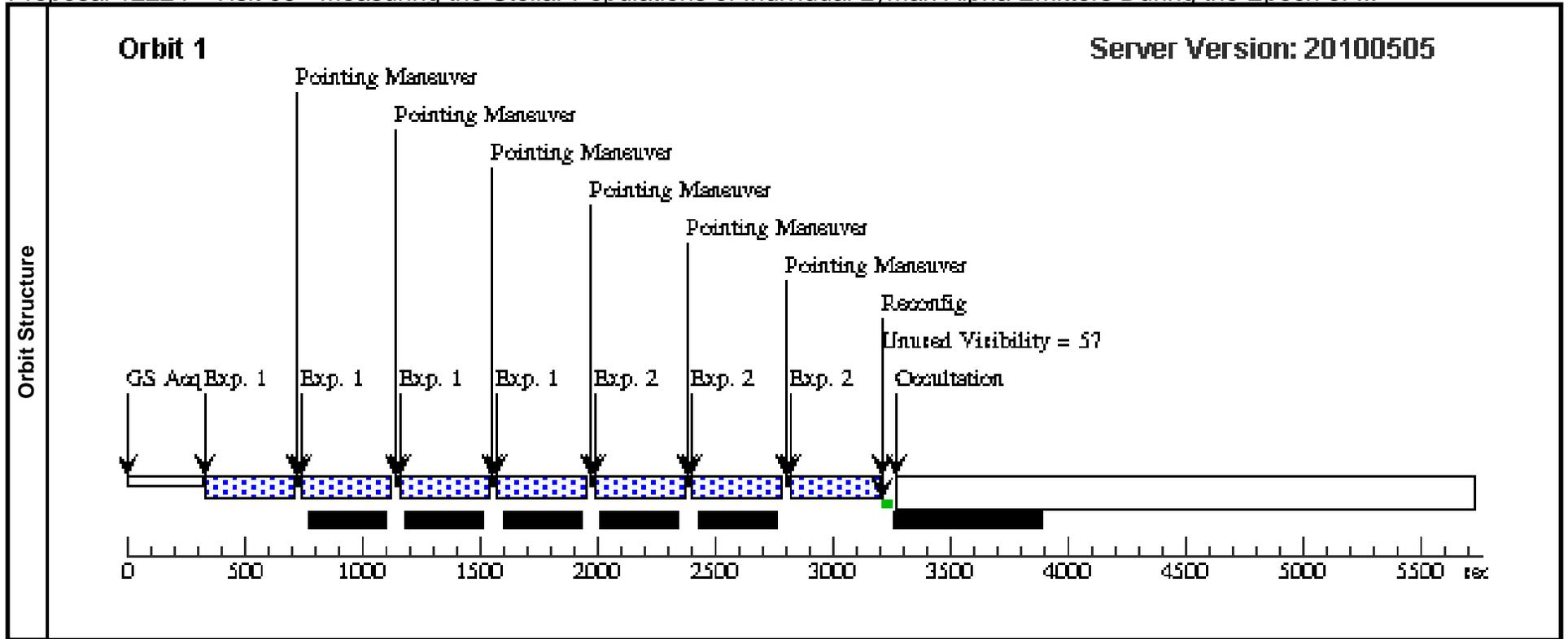
Visit	Proposal 12224, Visit 04, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
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(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	BOOTES-LAE1-4	RA: 14 35 2.7900 (218.7616250d) Dec: +33 22 46.45 (33.37957d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-LAE1-4	(4) BOOTES-LAE1-4	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15	GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	BOOTES-LAE1-4	(4) BOOTES-LAE1-4	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPARS25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 04 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

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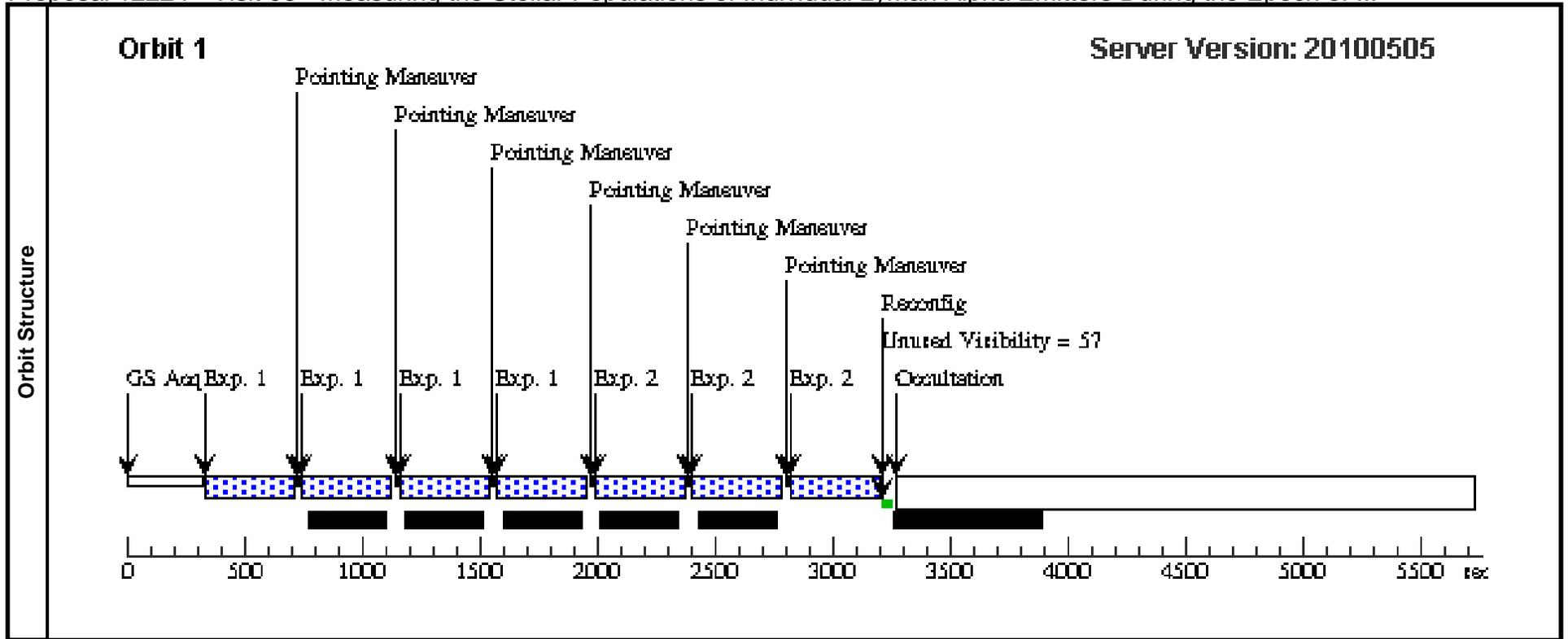
Visit	Proposal 12224, Visit 05, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	BOOTES-LAE1-5	RA: 14 34 38.5500 (218.6606250d) Dec: +33 27 52.27 (33.46452d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-LAE1-5	(5) BOOTES-LAE1-5	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	BOOTES-LAE1-5	(5) BOOTES-LAE1-5	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 05 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

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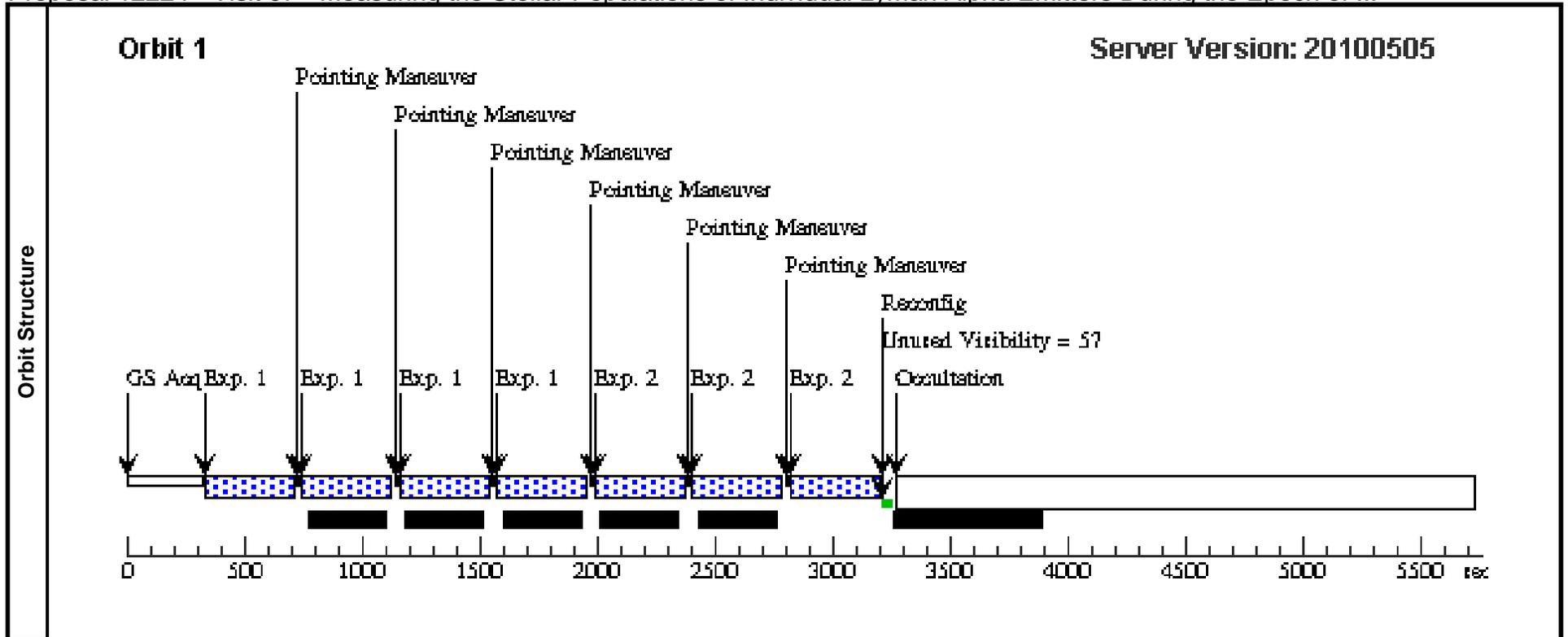
Visit	Proposal 12224, Visit 06, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	BOOTES-LAE3-1	RA: 14 29 24.6400 (217.3526667d) Dec: +32 46 0.78 (32.76688d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-L AE3-1	(6) BOOTES-LAE3-1	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
2	BOOTES-L AE3-1	(6) BOOTES-LAE3-1	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 12224 - Visit 06 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:10 GMT 2010

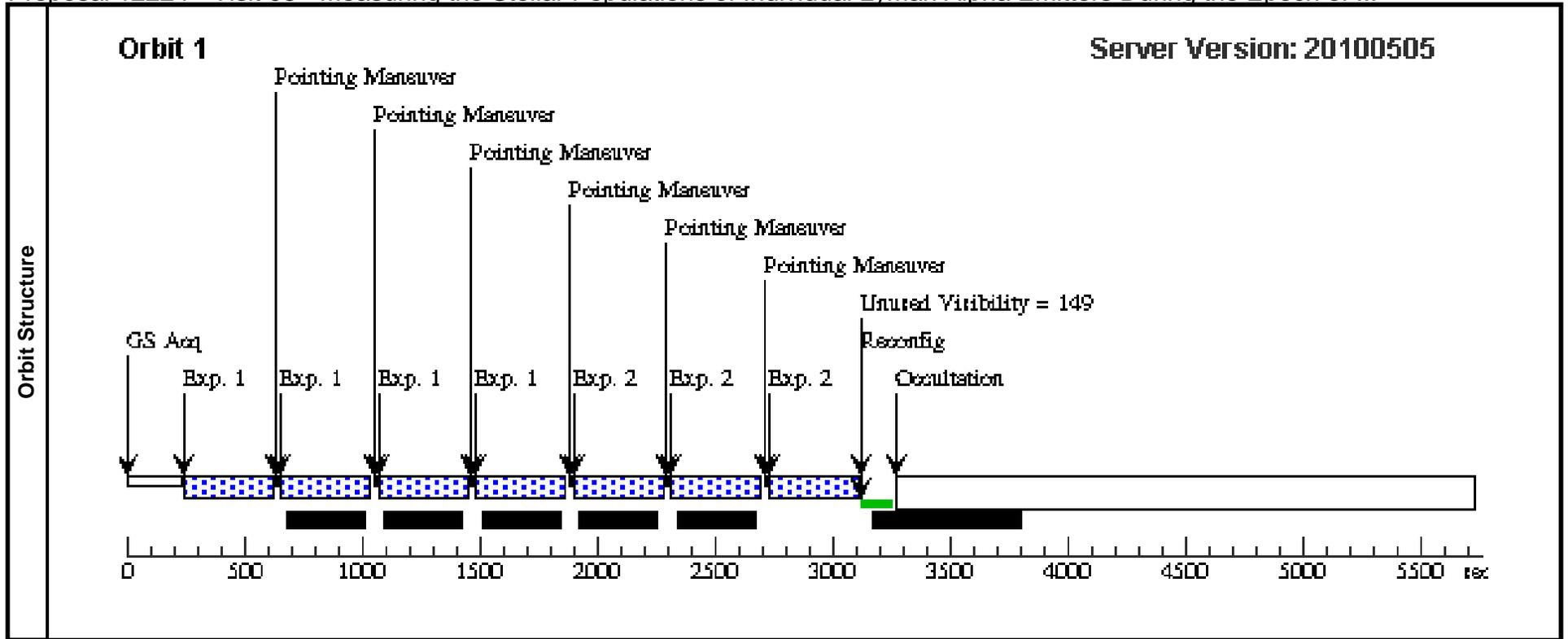
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(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	BOOTES-LAE3-2	RA: 14 29 13.9200 (217.3080000d) Dec: +32 43 53.19 (32.73144d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-LAE3-2	(7) BOOTES-LAE3-2	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	BOOTES-LAE3-2	(7) BOOTES-LAE3-2	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPARS25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 07 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:10 GMT 2010

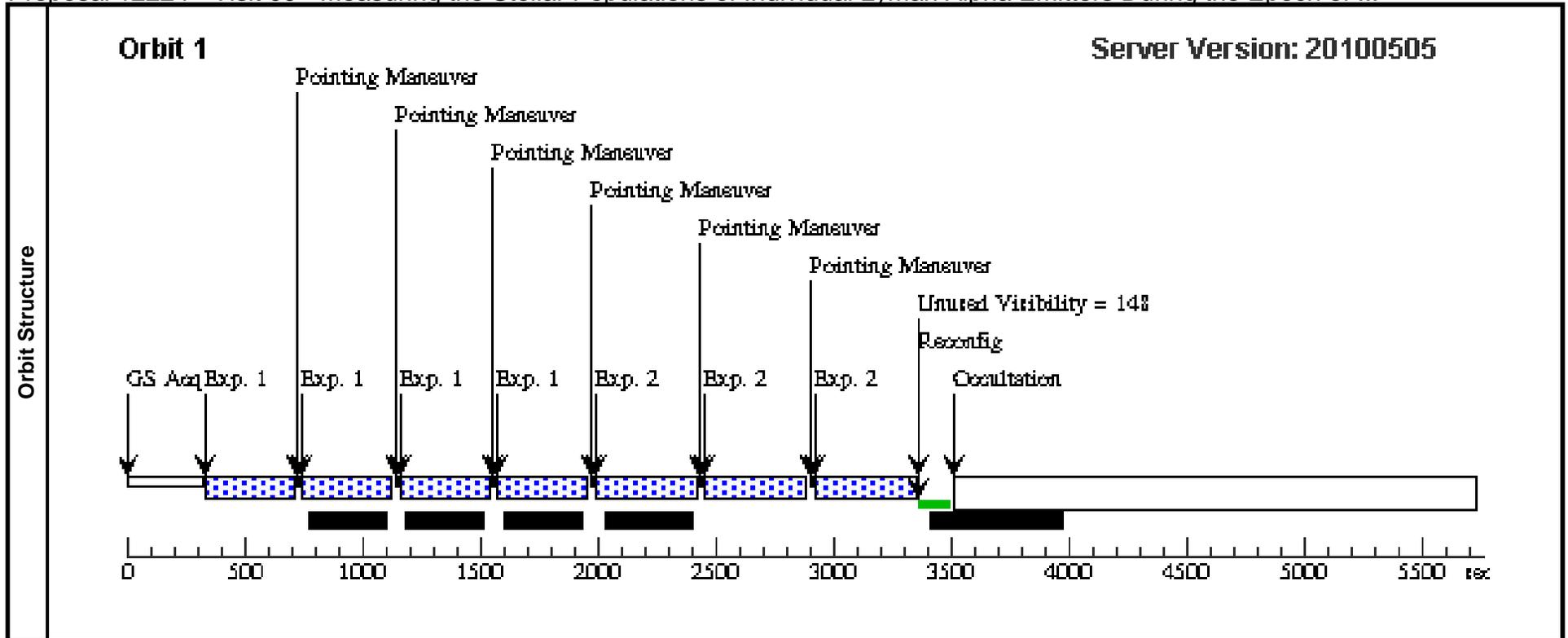
Visit	Proposal 12224, Visit 08, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	BOOTES-LAE3-3	RA: 14 29 9.9200 (217.2913333d) Dec: +32 49 42.17 (32.82838d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BOOTES-LAE3-3	(8) BOOTES-LAE3-3	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15	GS ACQ SCENARIO SINGLE	Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	BOOTES-LAE3-3	(8) BOOTES-LAE3-3	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPARS25		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 08 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:11 GMT 2010

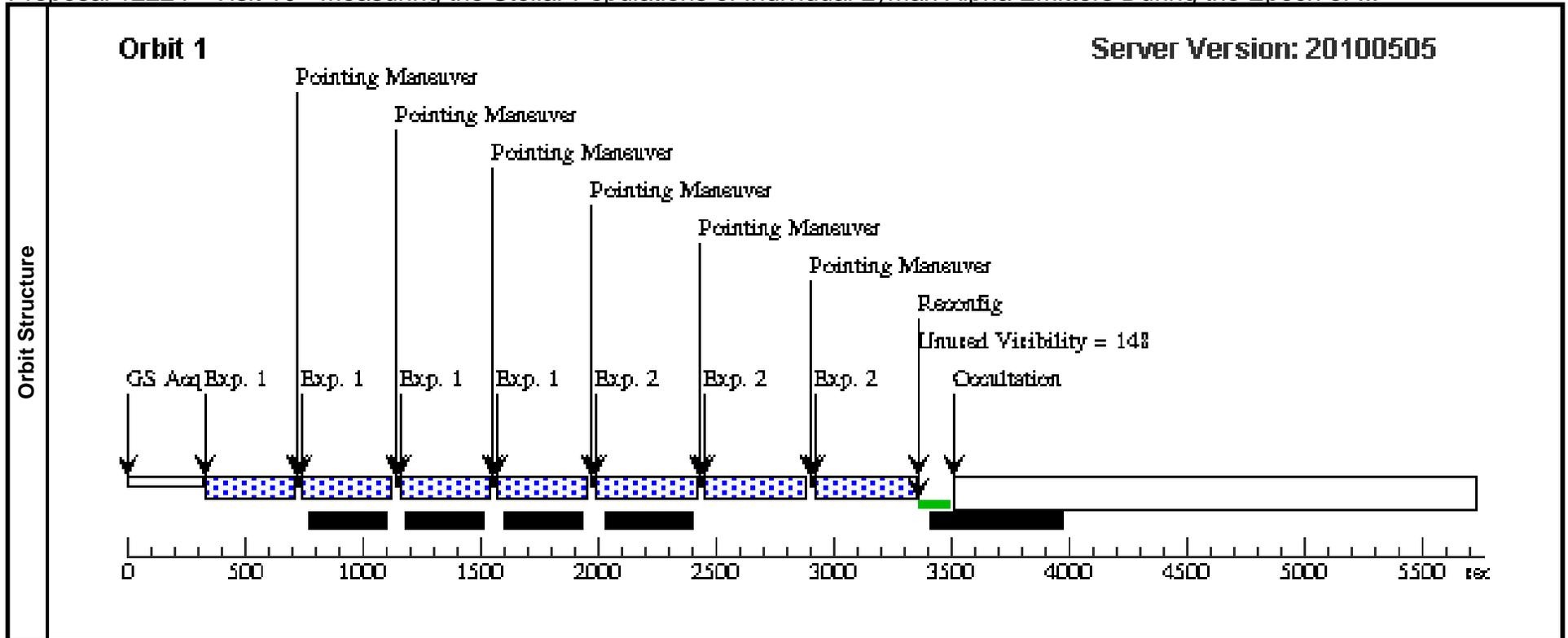
Visit	Proposal 12224, Visit 09, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
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(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	HS1700-1	RA: 17 00 19.5600 (255.0815000d) Dec: +64 05 16.02 (64.08778d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HS1700-1	(9) HS1700-1	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	HS1700-1	(9) HS1700-1	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 50; NSAMP=9		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 09 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:11 GMT 2010

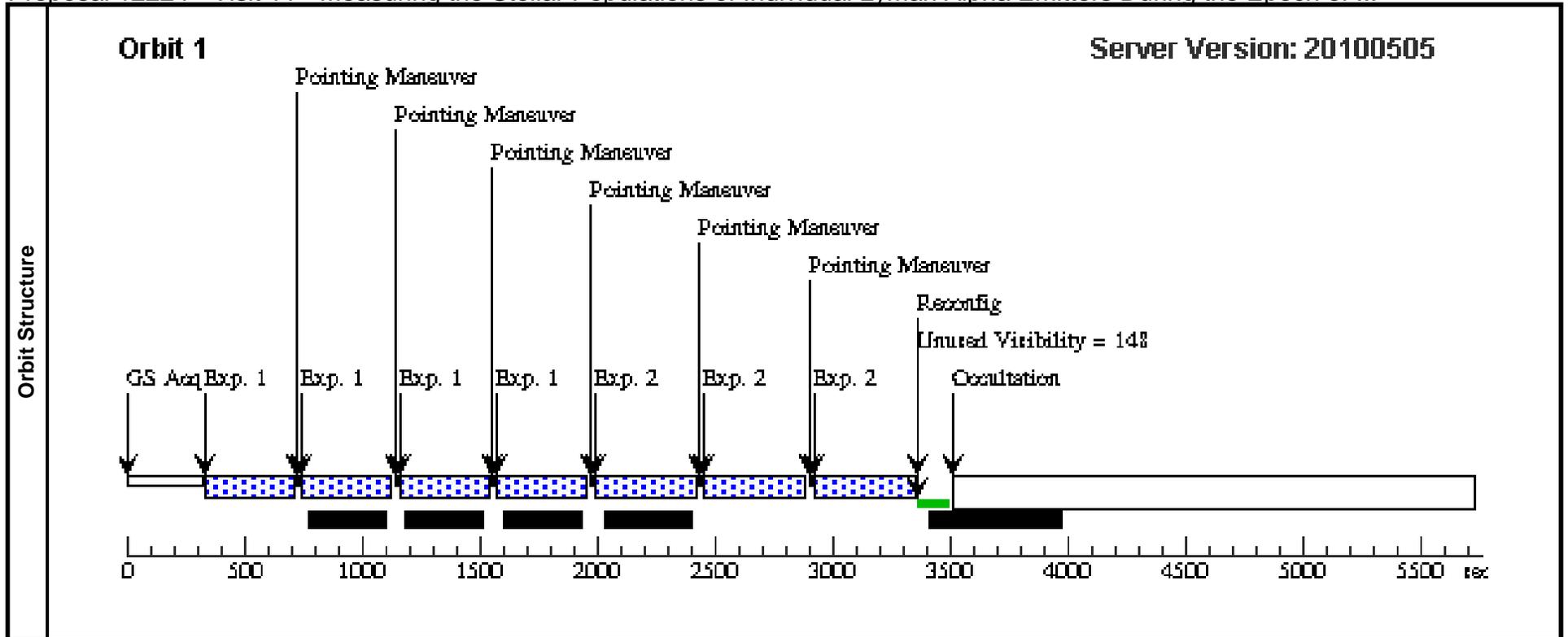
Visit	Proposal 12224, Visit 10, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
(2)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	HS1700-2	RA: 17 00 12.6800 (255.0528333d) Dec: +64 07 58.32 (64.13287d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HS1700-2	(10) HS1700-2	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	HS1700-2	(10) HS1700-2	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 50; NSAMP=9		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 10 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:11 GMT 2010

Visit	Proposal 12224, Visit 11, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		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)		Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(11)	HS1700-3	RA: 17 00 21.2400 (255.0885000d) Dec: +64 13 7.99 (64.21889d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HS1700-3	(11) HS1700-3	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15		Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	HS1700-3	(11) HS1700-3	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 50; NSAMP=9		Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 12224 - Visit 11 - Measuring the Stellar Populations of Individual Lyman Alpha Emitters During the Epoch of ...

Fri Jul 09 04:02:12 GMT 2010

Visit	Proposal 12224, Visit 12, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	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)	Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.605 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(12)	HS1700-4	RA: 17 00 36.3800 (255.1515833d) Dec: +64 15 32.77 (64.25910d) Equinox: J2000		V=26.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HS1700-4	(12) HS1700-4	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 25; NSAMP=15			Pattern 1, Exps 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]
2	HS1700-4	(12) HS1700-4	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 50; NSAMP=9			Pattern 2, Exps 2-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]

