



13868 - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

Cycle: 22, 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) GDS401	WFC3/IR	1	29-Aug-2014 21:07:44.0	yes
02	(2) GDS570	WFC3/IR	1	29-Aug-2014 21:07:45.0	yes
03	(3) GDS435	WFC3/IR	1	29-Aug-2014 21:07:46.0	yes
04	(4) GDS467	WFC3/IR	1	29-Aug-2014 21:07:47.0	yes
05	(5) EGS75	WFC3/IR	1	29-Aug-2014 21:07:47.0	yes
06	(6) EGS174	WFC3/IR	1	29-Aug-2014 21:07:48.0	yes
07	(7) EGS210	WFC3/IR	1	29-Aug-2014 21:07:49.0	yes
08	(8) EGS732	WFC3/IR	1	29-Aug-2014 21:07:50.0	yes
09	(9) EGS875	WFC3/IR	1	29-Aug-2014 21:07:50.0	yes
10	(10) EGS442	WFC3/IR	1	29-Aug-2014 21:07:51.0	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) EGS100	WFC3/IR	1	29-Aug-2014 21:07:52.0	yes
12	(12) EGS734	WFC3/IR	1	29-Aug-2014 21:07:52.0	yes
13	(13) EGS883	WFC3/IR	1	29-Aug-2014 21:07:53.0	yes
14	(14) EGS252	WFC3/IR	1	29-Aug-2014 21:07:53.0	yes
15	(15) COS3335	WFC3/IR	1	29-Aug-2014 21:07:54.0	yes
16	(16) COS1506	WFC3/IR	1	29-Aug-2014 21:07:55.0	yes
17	(17) COS645	WFC3/IR	1	29-Aug-2014 21:07:55.0	yes
18	(18) COS591	WFC3/IR	1	29-Aug-2014 21:07:56.0	yes
19	(19) COS370	WFC3/IR	1	29-Aug-2014 21:07:57.0	yes
20	(20) COS807	WFC3/IR	1	29-Aug-2014 21:07:57.0	yes
21	(21) COS1551	WFC3/IR	1	29-Aug-2014 21:07:58.0	yes
22	(22) COS1210	WFC3/IR	1	29-Aug-2014 21:07:58.0	yes
23	(23) COS1299	WFC3/IR	1	29-Aug-2014 21:07:59.0	yes
24	(24) COS862	WFC3/IR	1	29-Aug-2014 21:08:00.0	yes
25	(25) COS1086	WFC3/IR	1	29-Aug-2014 21:08:00.0	yes

25 Total Orbits Used

ABSTRACT

Galaxy mergers have long been proposed as a possible triggering mechanism for AGN activity, but surveys of AGN out to $z \sim 2$ have consistently failed to find morphological signatures of recent merger activity. A major caveat to these results is that past studies have not been sensitive to heavily obscured, Compton-thick AGN. Hydrodynamical merger simulations predict that this obscured phase should coincide with the most morphologically disturbed phase of a galaxy interaction. To address this potential bias, we propose WFC3 F160W observations of 25 Compton-thick AGN at $z \sim 2$. The majority of these AGN are newly discovered and have been found by their reflection dominated X-ray spectra and Fe K α emission. We will use the F160W imaging to examine the rest-frame optical morphologies of their host galaxies to determine if obscured SMBH growth is preferentially associated with merger activity at $z \sim 2$. The F160W imaging is vital as it provides high-resolution imaging beyond the 4000Å break at $z \sim 2$, revealing bulges, disks, and even interaction signatures for the first time. Our proposed observations will increase by a factor of three

our current sample of Compton-thick AGN with rest-frame optical imaging at $z > 1.5$. X-ray spectroscopy is arguably the most reliable technique for identifying Compton-thick AGN and our current sample is the largest ever compiled with this method at $z \sim 2$. As such, the observations requested here will enable the first large-scale study of the host morphologies of bona fide Compton-thick AGN at this redshift and will help reveal if the long predicted AGN-merger connection has been missed in the past due to the effects of obscuration.

OBSERVING DESCRIPTION

We propose to image 25 newly identified Compton-thick AGN (CT-AGN) at $z \sim 2$ with WFC3/IR in F160W. These AGN are located in the COSMOS, EGS and CDFS fields, although they fall outside the existing CANDELS F160W imaging in these regions. We request the F160W filter as it samples redward of the Balmer/4000Å break at $z \sim 2$. We anticipate that 1-orbit per target is sufficient to assess the morphologies of the CT-AGN host galaxies, based on extensive testing done by the CANDELS collaboration. Our targets are sufficiently spaced on the sky that we require a unique WFC3/IR observation for each source, necessitating a total of 25 orbits to image the complete sample. We will split our total exposure into four sub-exposures using the default WFC3/IR 4-point box dither pattern in order to sufficiently characterize the PSF. Taking into account WFC3 overheads (guide-star acquisition and exposure overheads), we expect 43-46 min of on-source exposure, split into 4 sub-exposures of 650-700 sec each. Most (20/25) visits will be centered on the target CT-AGN, however a handful (5/25) have offsets in place to image multiple CT-AGN. In order to maximize schedulability, we do not place any a priori restrictions on the orientation of the detector for 24/25 of the visits. The only visit which has an orient constraint has plenty of visibility in the specified orient range.

Proposal 13868 - GDS401 (01) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

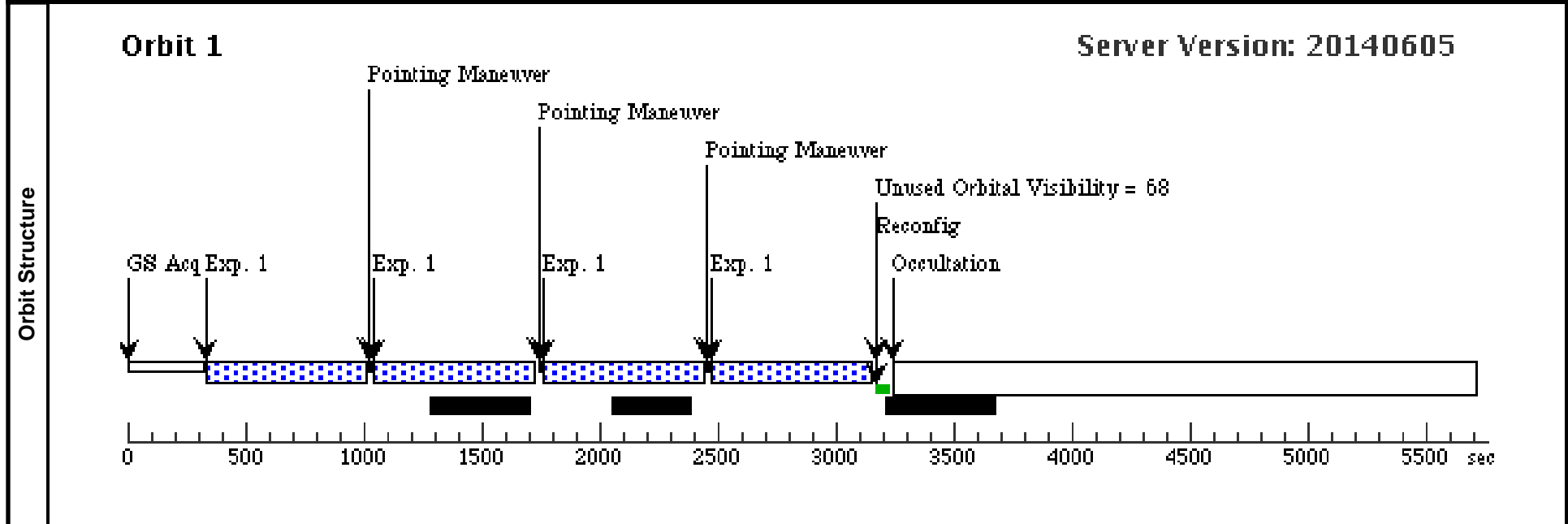
Sat Aug 30 01:08:02 GMT 2014

Visit	Proposal 13868, GDS401 (01), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	GDS401	RA: 03 31 50.4000 (52.9600000d) Dec: -27 52 12.00 (-27.87000d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	GDS401 F1 60W	(1) GDS401	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in GDS401 (01) (1)	652.938154 Secs (2611.753 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - GDS570 (02) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

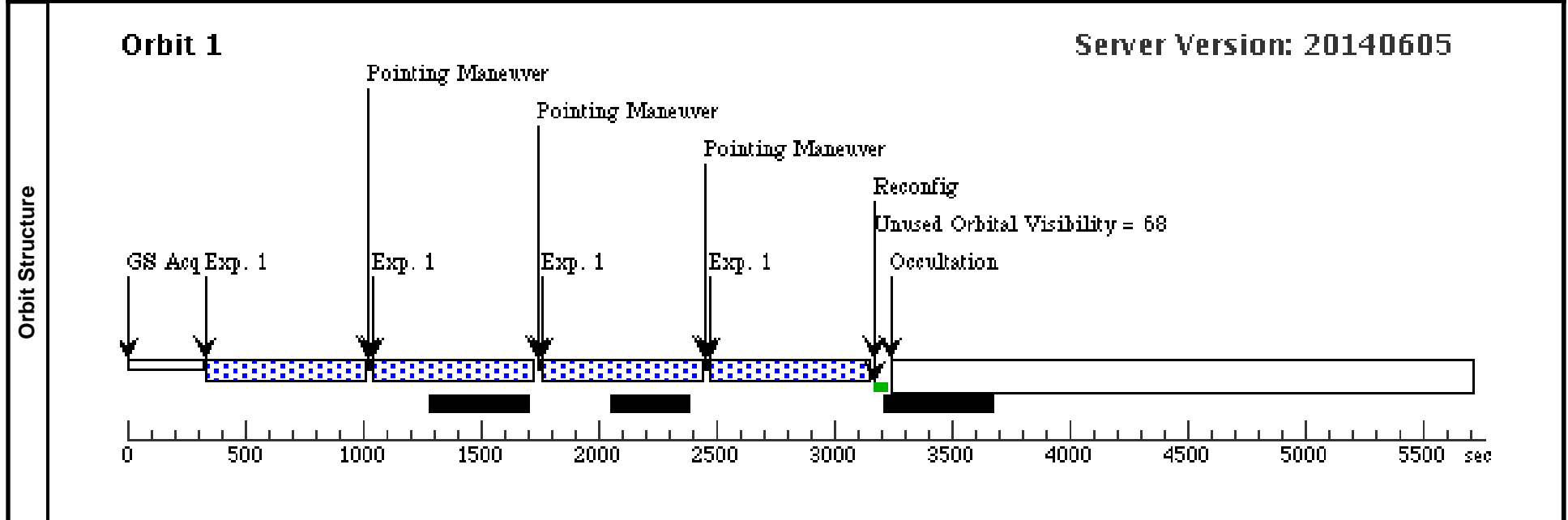
Sat Aug 30 01:08:02 GMT 2014

Visit	Proposal 13868, GDS570 (02), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	GDS570	RA: 03 33 0.7920 (53.2533000d) Dec: -27 48 57.60 (-27.81600d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	GDS570 F1 60W	(2) GDS570	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in GDS570 (02) (1)	652.938154 Secs (2611.753 Secs)
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	



Proposal 13868 - GDS 435 (03) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

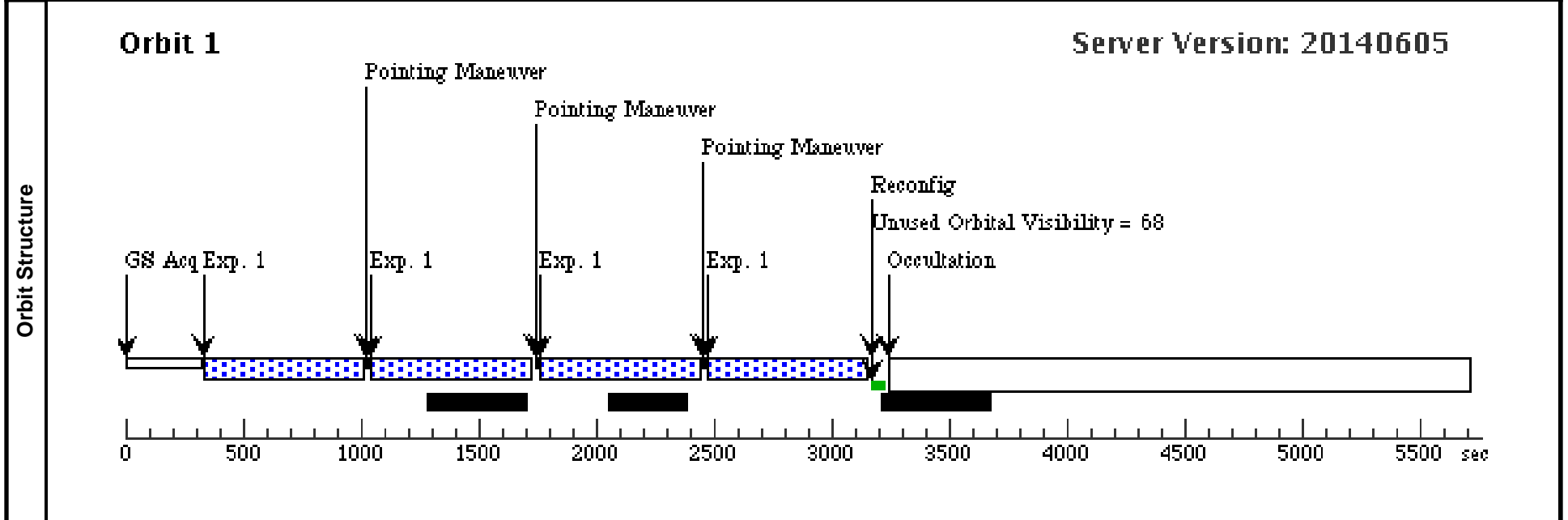
Sat Aug 30 01:08:02 GMT 2014

Visit	Proposal 13868, GDS 435 (03), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	GDS435	RA: 03 31 58.5122 (52.9938008d) Dec: -27 50 43.42 (-27.84539d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	GDS435 F1 60W	(3) GDS435	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in GDS 435 (03) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - GDS 467 (04) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

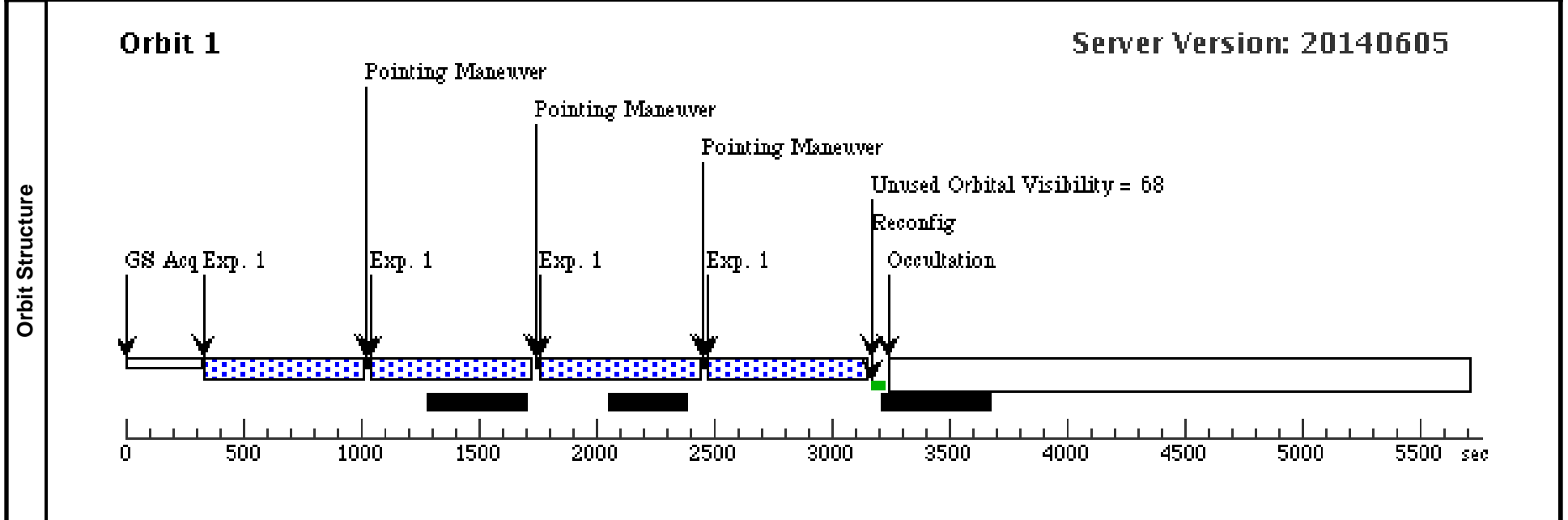
Sat Aug 30 01:08:02 GMT 2014

Visit	Proposal 13868, GDS 467 (04), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	GDS467	RA: 03 32 0.8400 (53.0035000d) Dec: -27 53 34.44 (-27.89290d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	GDS467 F1 60W	(4) GDS467	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in GDS 467 (04) (1)	652.938154 Secs (2611.753 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - EGS75 (05) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

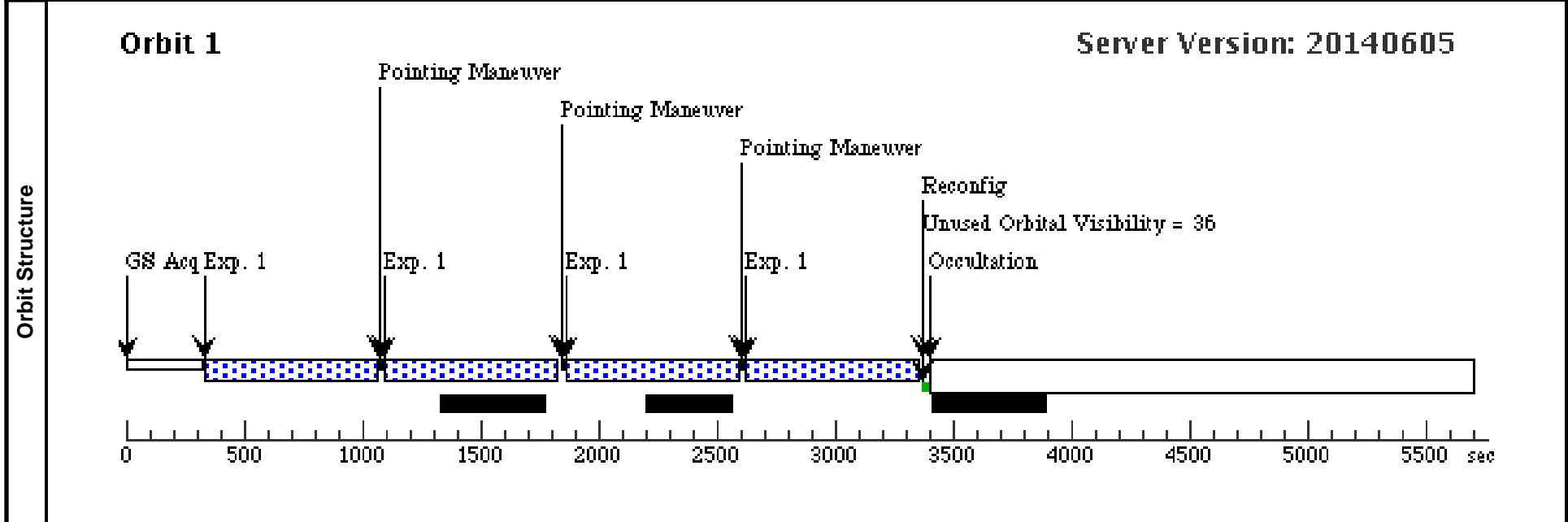
Sat Aug 30 01:08:02 GMT 2014

Visit	Proposal 13868, EGS75 (05), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%; ORIENT 225D TO 315 D		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	EGS75	RA: 14 18 12.6083 (214.5525346d) Dec: +52 32 19.17 (52.53866d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS75 F160 W	(5) EGS75	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in EGS75 (05) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS174 (06) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

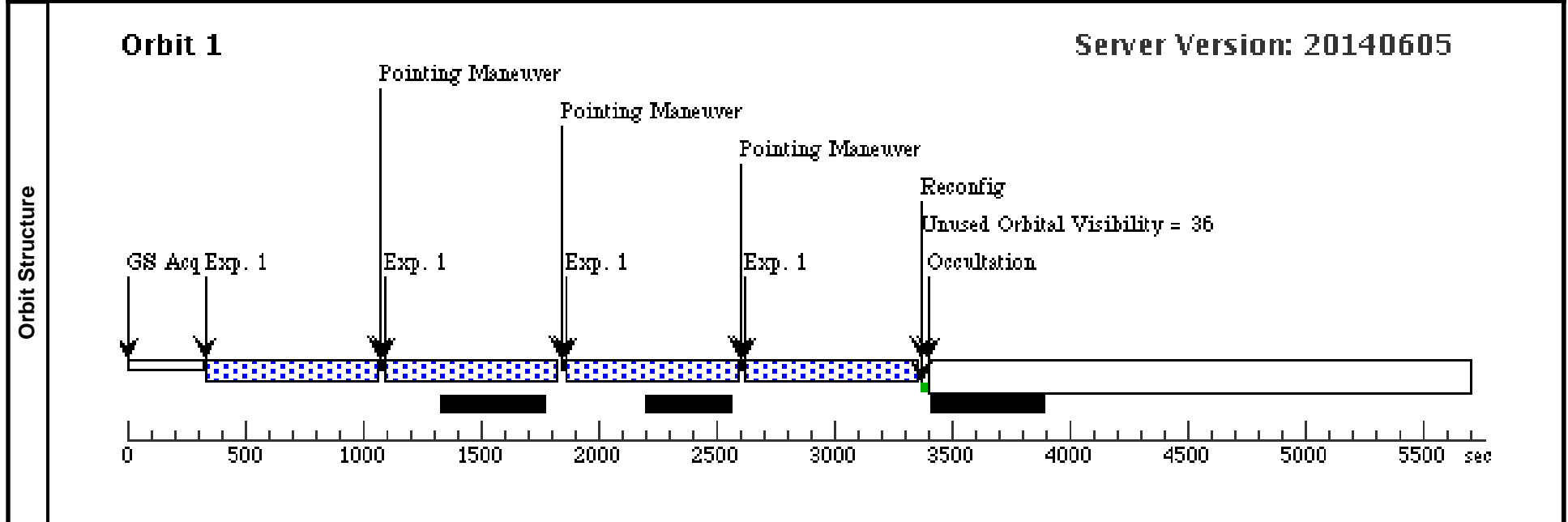
Sat Aug 30 01:08:02 GMT 2014

Visit	Proposal 13868, EGS174 (06), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	EGS174	RA: 14 18 29.0851 (214.6211879d) Dec: +52 36 46.19 (52.61283d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS174 F16 0W	(6) EGS174	EGS174	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50		Pattern 1, Exps 1-1 in EGS174 (06) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS210 (07) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

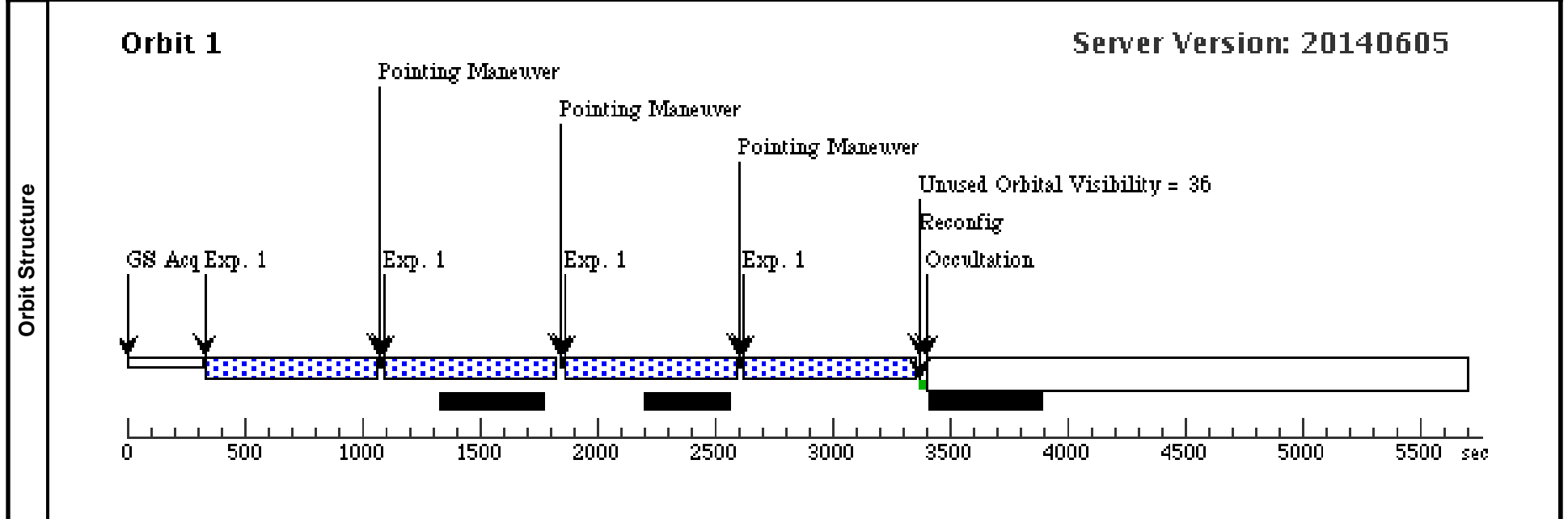
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, EGS210 (07), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	EGS210	RA: 14 18 46.7424 (214.6947600d) Dec: +52 38 16.58 (52.63794d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS210 F16 0W	(7) EGS210	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in EGS210 (07) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS732 (08) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

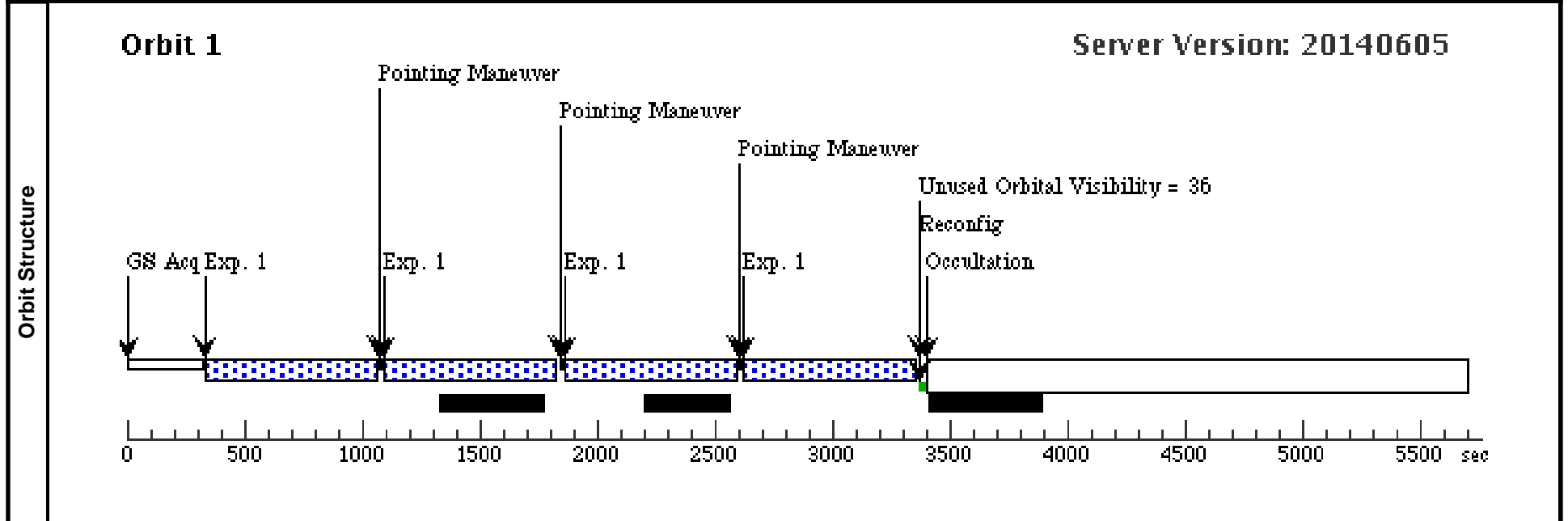
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Visit	Proposal 13868, EGS732 (08), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	EGS732	RA: 14 20 56.3016 (215.2345900d) Dec: +53 00 18.00 (53.00500d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS732 F16 0W	(8) EGS732	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in EGS732 (08) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS875 (09) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

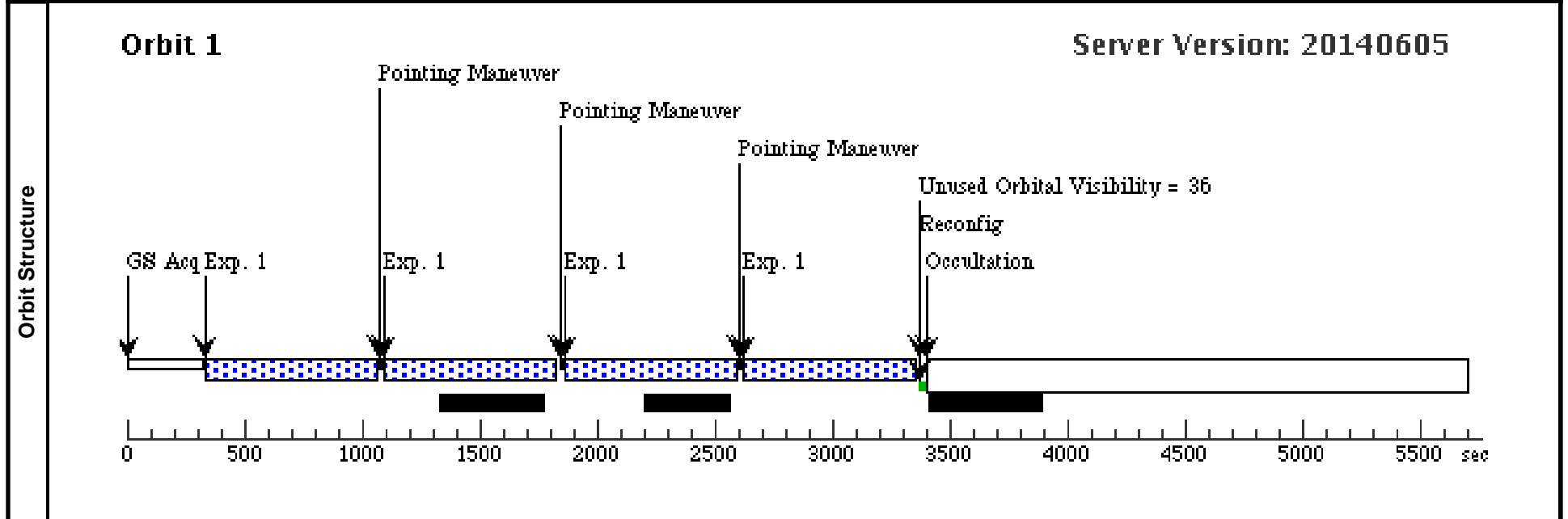
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Visit	Proposal 13868, EGS875 (09), implementation		
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	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	EGS875	RA: 14 20 10.9008 (215.0454200d) Dec: +53 05 36.17 (53.09338d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS875 F16 0W	(9) EGS875	EGS875	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50		Pattern 1, Exps 1-1 i n EGS875 (09) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS442 (10) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

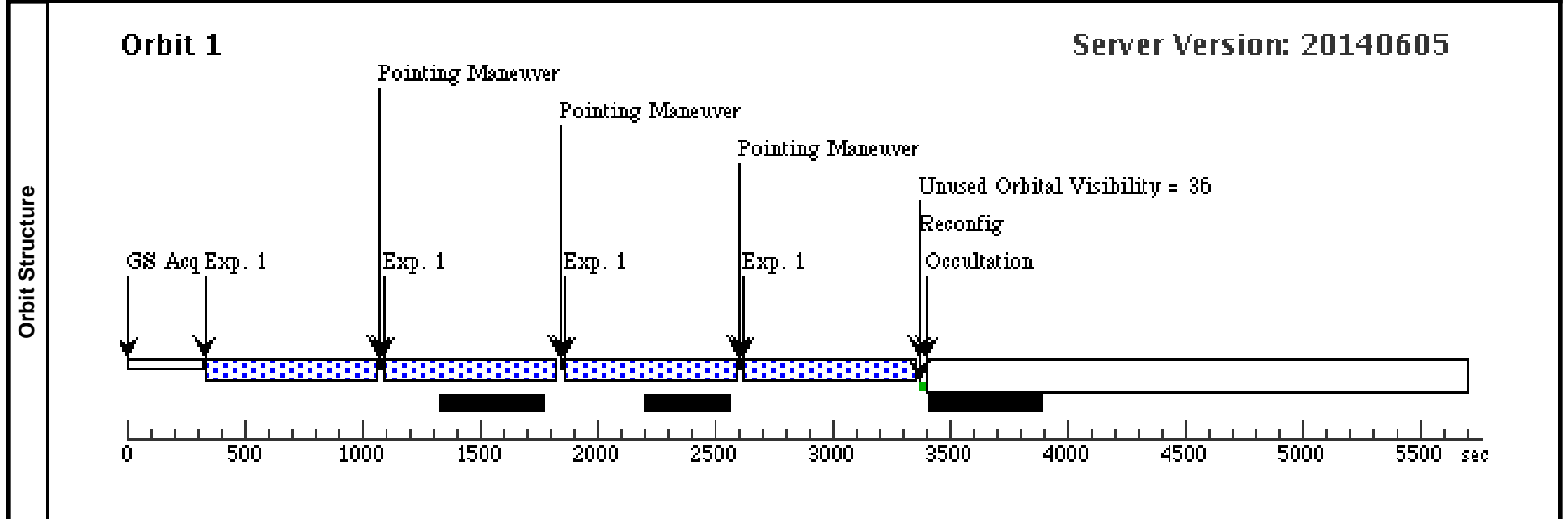
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Visit	Proposal 13868, EGS442 (10), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	EGS442	RA: 14 19 48.0561 (214.9502338d) Dec: +52 47 45.87 (52.79607d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS442 F16 0W	(10) EGS442	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in EGS442 (10) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS100 (11) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

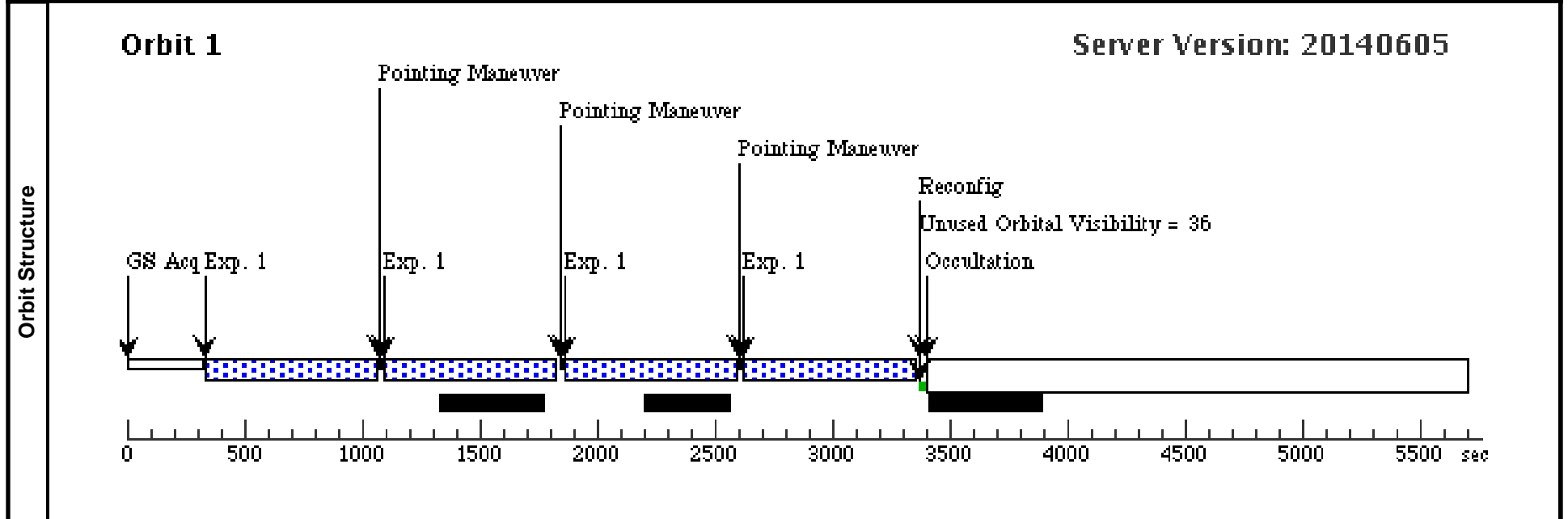
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Visit	Proposal 13868, EGS100 (11), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(11)	EGS100	RA: 14 18 3.1392 (214.5130800d) Dec: +52 34 26.12 (52.57392d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS100 F16 0W	(11) EGS100	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 i n EGS100 (11) (1)	702.938605 Secs (2811.754 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - EGS734 (12) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

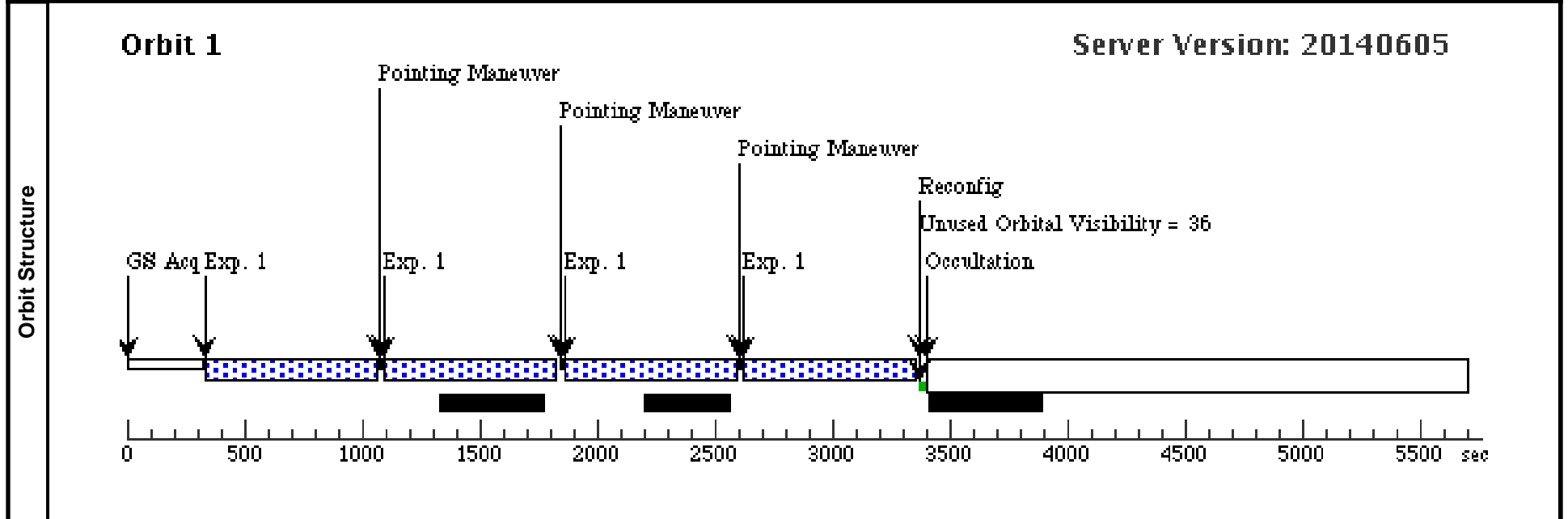
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, EGS734 (12), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(12)	EGS734	RA: 14 19 52.0726 (214.9669692d) Dec: +53 00 4.00 (53.00111d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS734 F16 0W	(12) EGS734	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in EGS734 (12) (1)	702.938605 Secs (2811.754 Secs)



Proposal 13868 - EGS883 (13) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

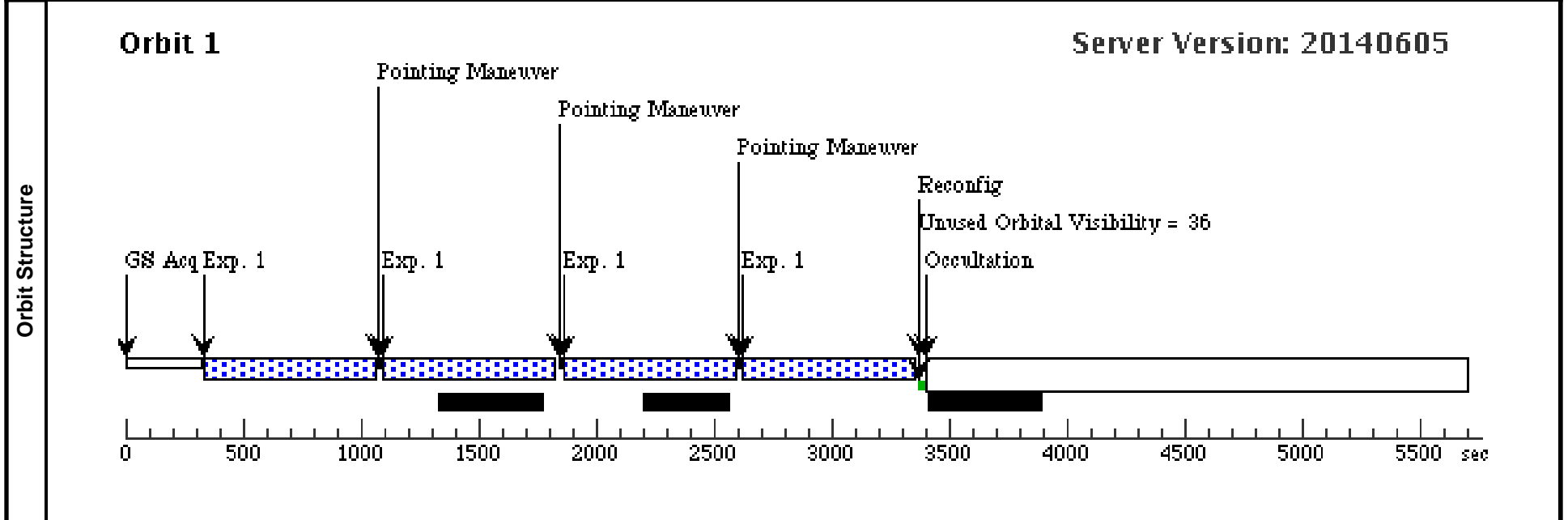
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, EGS883 (13), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: SCHED 30%		
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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)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	EGS883	RA: 14 20 41.7312 (215.1738800d) Dec: +53 06 6.54 (53.10182d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS883 F16 0W	(13) EGS883	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50		Pattern 1, Exps 1-1 i n EGS883 (13) (1)	702.938605 Secs (2811.754 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 13868 - EGS252 (14) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

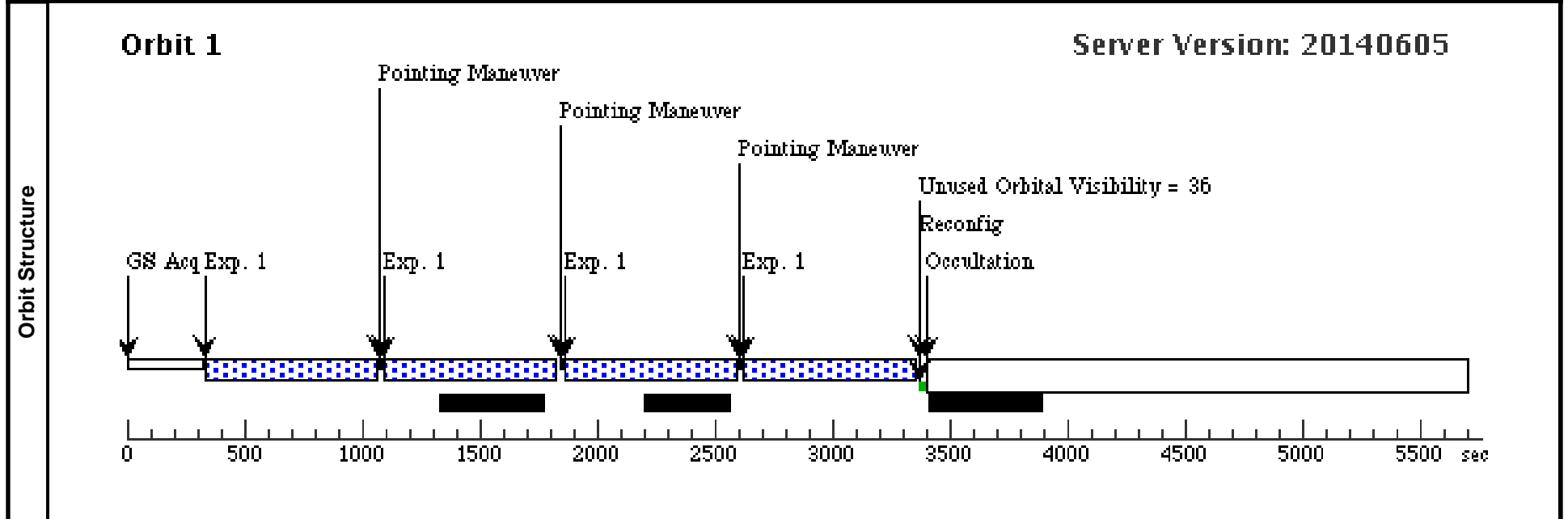
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, EGS252 (14), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(14)	EGS252	RA: 14 18 51.2544 (214.7135600d) Dec: +52 40 4.62 (52.66795d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EGS252 F16 0W	(14) EGS252	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 i n EGS252 (14) (1)	702.938605 Secs (2811.754 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - COS3335 (15) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

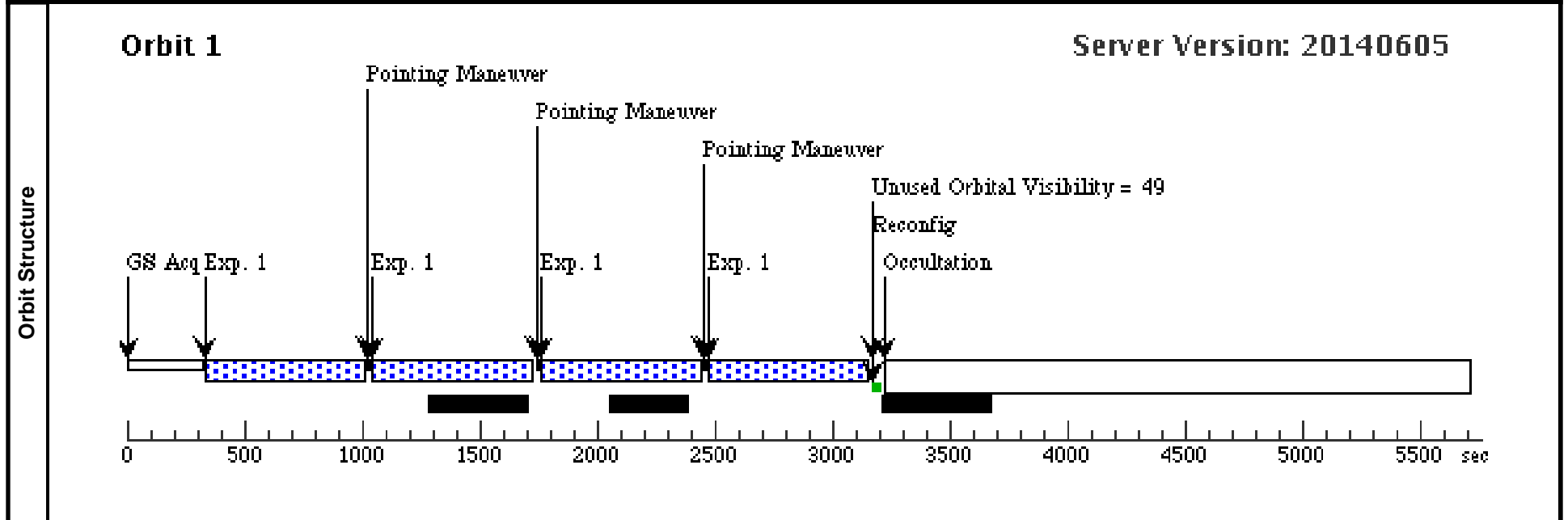
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS3335 (15), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(15)	COS3335	RA: 10 00 32.2608 (150.1344200d) Dec: +01 43 25.21 (1.72367d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS3335 F 160W	(15) COS3335	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS3335 (15) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - COS1506 (16) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

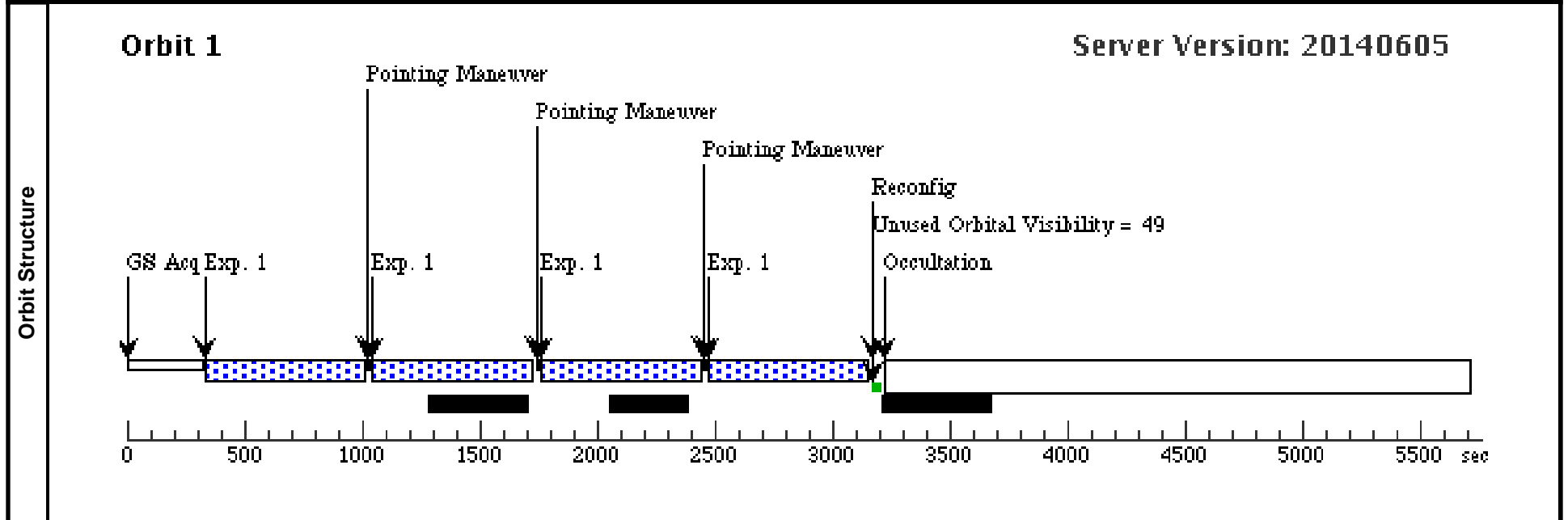
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS1506 (16), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(16)	COS1506	RA: 10 00 52.2600 (150.2177500d) Dec: +02 00 18.61 (2.00517d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS1506 F 160W	(16) COS1506	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS1506 (16) (1)	652.938154 Secs (2611.753 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - COS645 (17) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

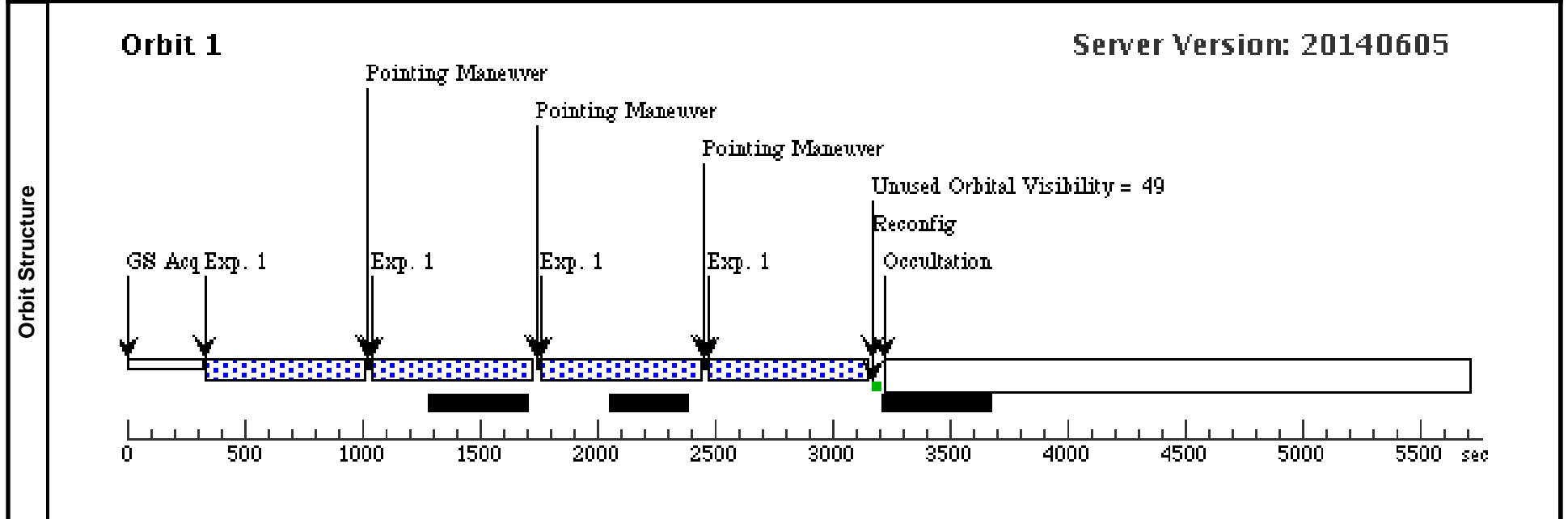
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS645 (17), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(17)	COS645	RA: 10 02 4.8480 (150.5202000d) Dec: +02 25 31.58 (2.42544d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS645 F1 60W	(17) COS645	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS645 (17) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - COS591 (18) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

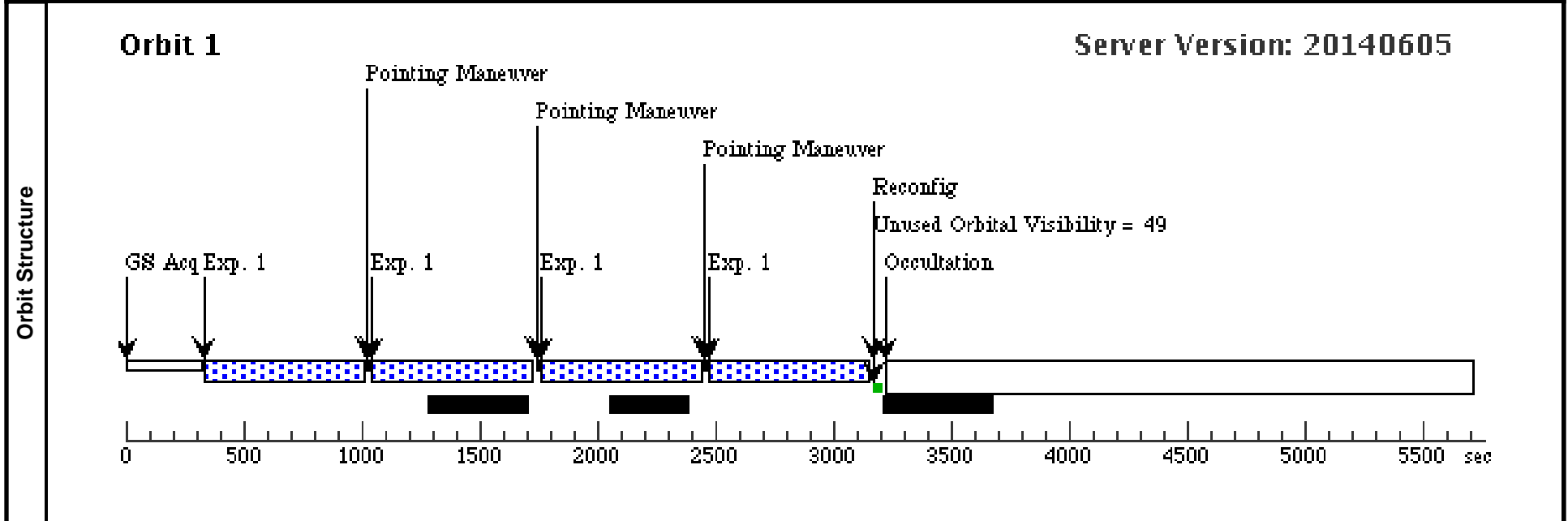
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS591 (18), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(18)	COS591	RA: 10 01 46.2408 (150.4426700d) Dec: +02 19 21.79 (2.32272d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS591 F1 60W	(18) COS591	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS591 (18) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - COS370 (19) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

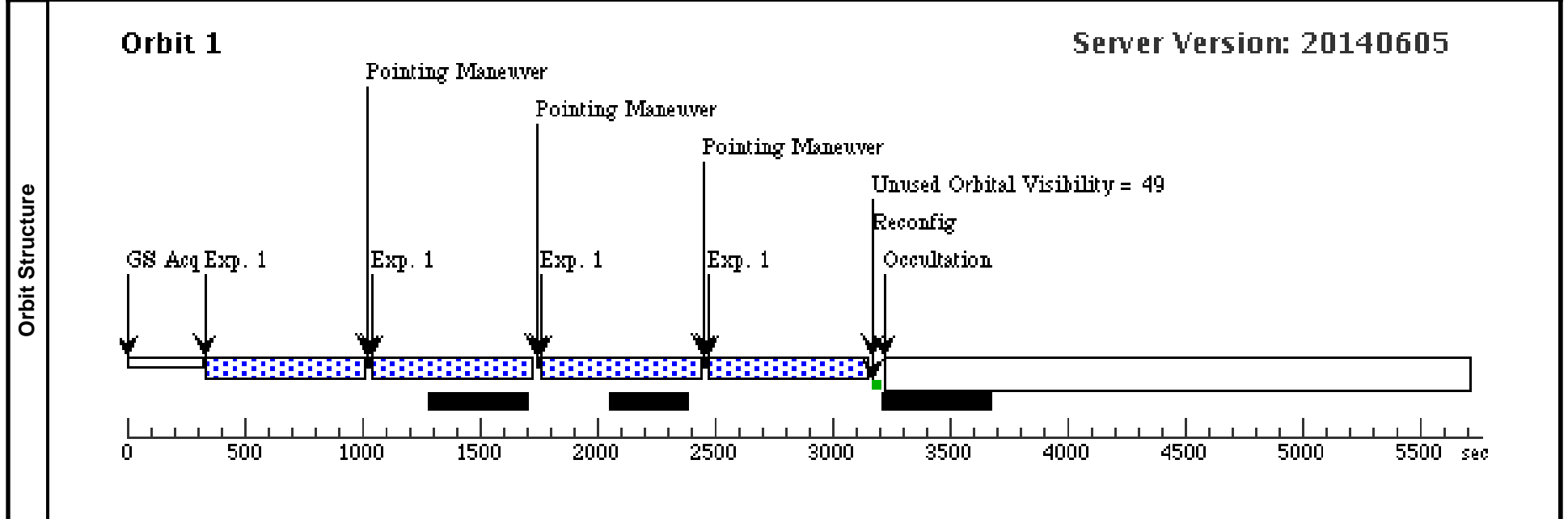
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS370 (19), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(19)	COS370	RA: 10 01 1.8744 (150.2578100d) Dec: +01 59 57.00 (1.99917d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS370 F1 60W	(19) COS370	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50	GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 i n COS370 (19) (1)	652.938154 Secs (2611.753 Secs)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]



Proposal 13868 - COS807 (20) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

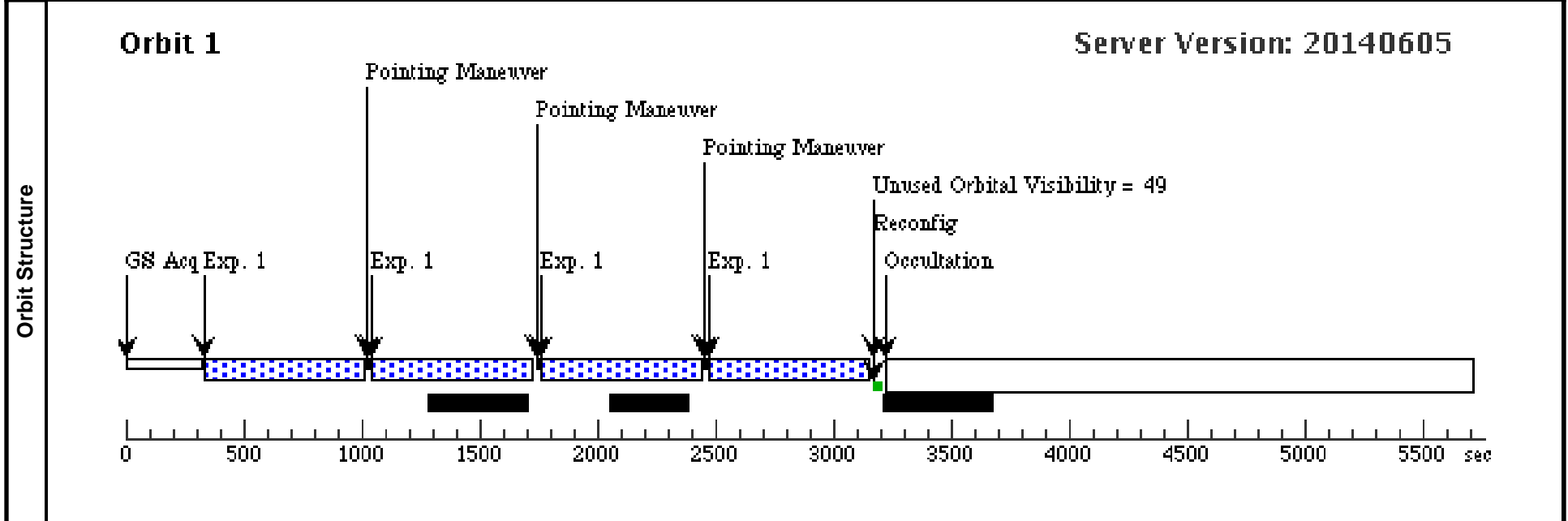
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS807 (20), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(20)	COS807	RA: 10 00 6.1104 (150.0254600d) Dec: +01 52 39.65 (1.87768d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS807 F1 60W	(20) COS807	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS807 (20) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - COS1551 (21) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

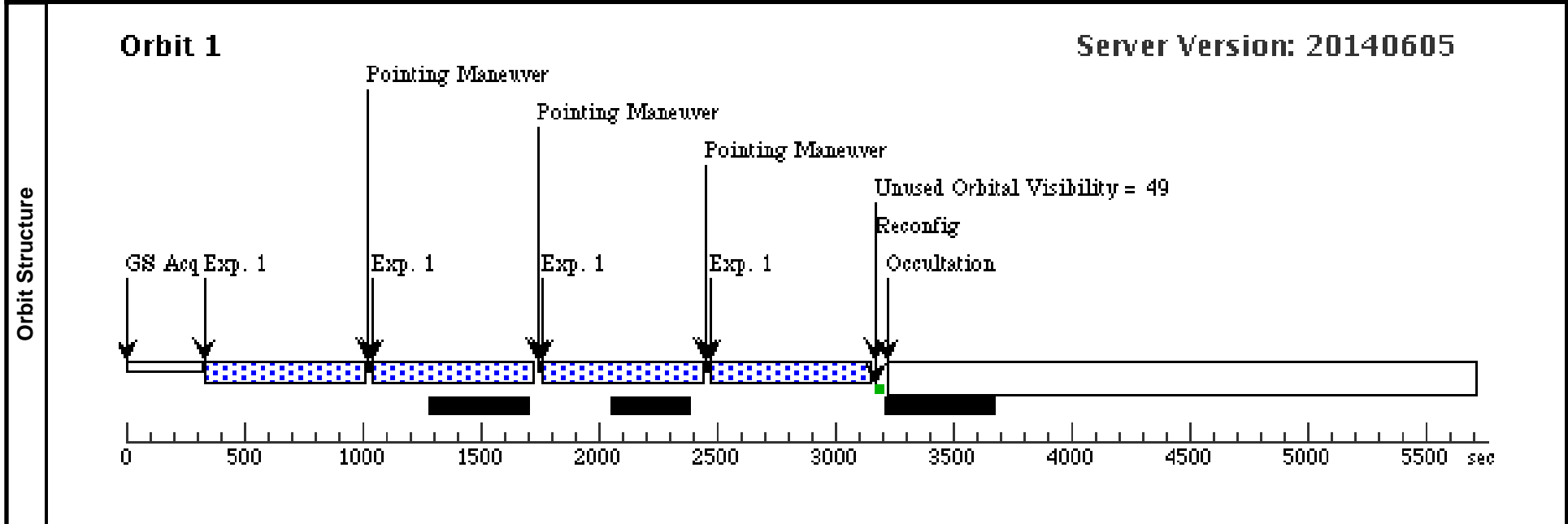
Sat Aug 30 01:08:03 GMT 2014

Visit	Proposal 13868, COS1551 (21), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(21)	COS1551	RA: 09 59 36.5280 (149.9022000d) Dec: +02 19 37.70 (2.32714d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS1551 F 160W	(21) COS1551	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS1551 (21) (1)	652.938154 Secs (2611.753 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - COS1210 (22) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

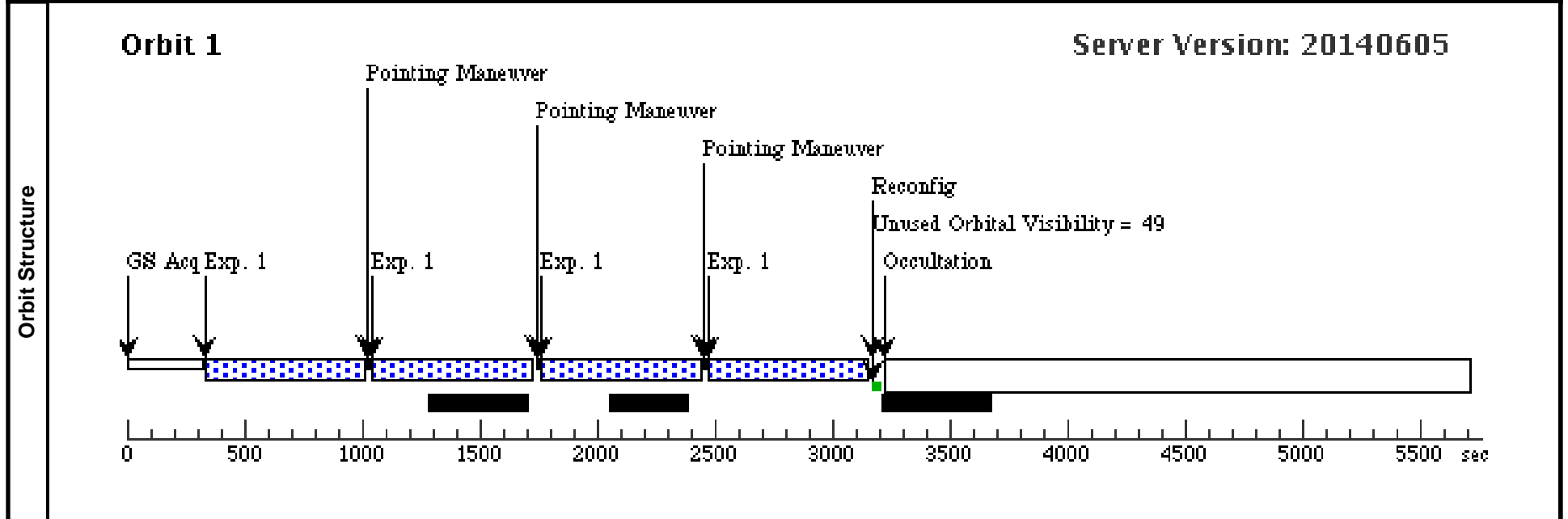
Sat Aug 30 01:08:04 GMT 2014

Visit	Proposal 13868, COS1210 (22), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(22)	COS1210	RA: 09 59 48.8448 (149.9535200d) Dec: +02 22 59.09 (2.38308d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS1210 F 160W	(22) COS1210	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS1210 (22) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - COS1299 (23) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

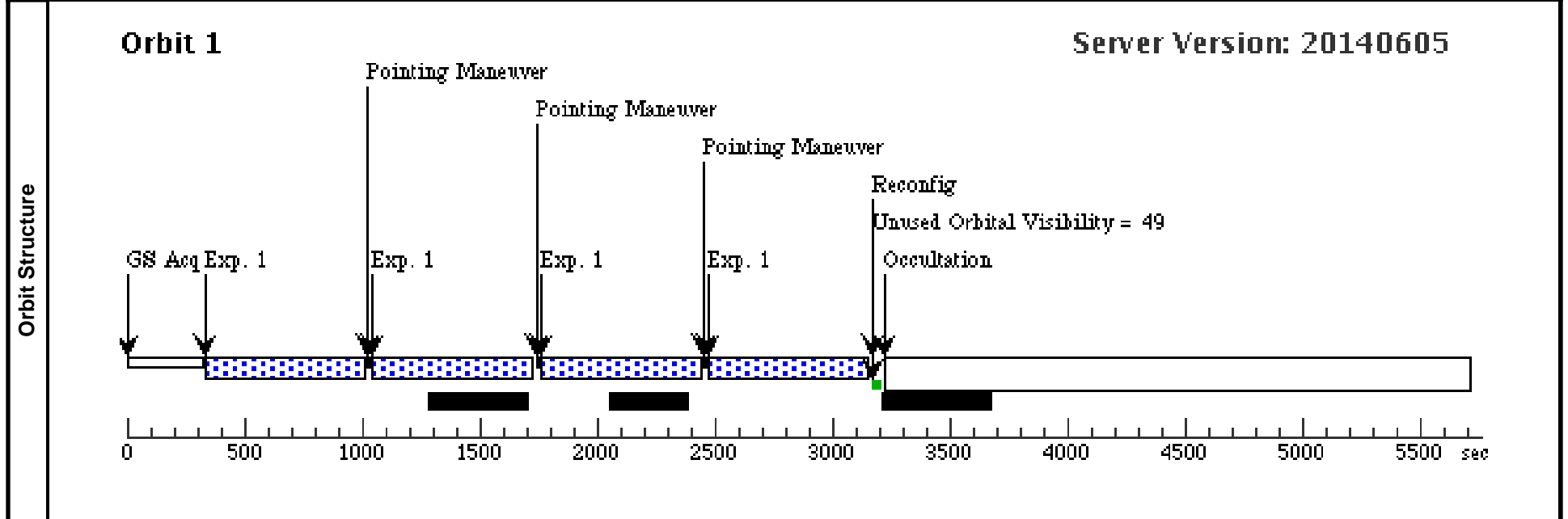
Sat Aug 30 01:08:04 GMT 2014

Visit	Proposal 13868, COS1299 (23), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(23)	COS1299	RA: 10 00 6.1152 (150.0254800d) Dec: +02 05 16.01 (2.08778d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS1299 F 160W	(23) COS1299	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS1299 (23) (1)	652.938154 Secs (2611.753 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]



Proposal 13868 - COS862 (24) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

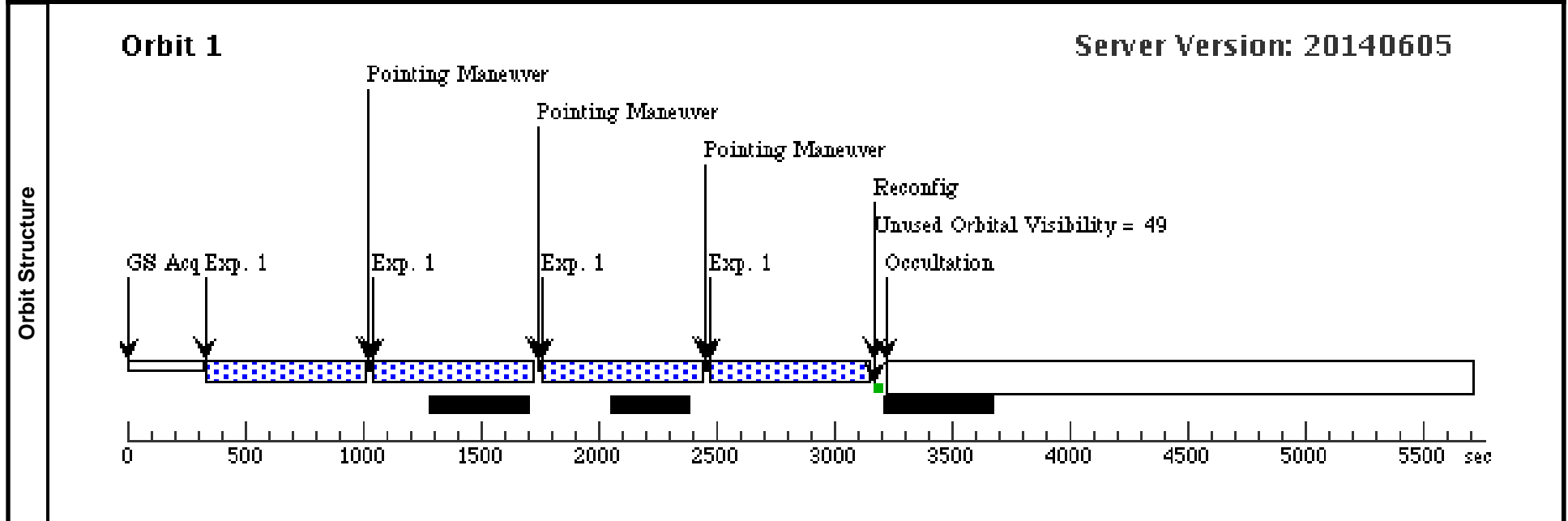
Sat Aug 30 01:08:04 GMT 2014

Visit	Proposal 13868, COS862 (24), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(24)	COS862	RA: 09 59 45.6744 (149.9403100d) Dec: +02 16 9.80 (2.26939d) Equinox: J2000			V=25

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS862 F1 60W	(24) COS862	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS862 (24) (1)	652.938154 Secs (2611.753 Secs)



Proposal 13868 - COS1086 (25) - Are Compton-Thick AGN the Missing Link Between Mergers and Black Hole Growth?

Sat Aug 30 01:08:04 GMT 2014

Visit	Proposal 13868, COS1086 (25), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/IR		
	Special Requirements: SCHED 30%		

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	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(25)	COS1086	RA: 10 00 26.6376 (150.1109900d) Dec: +01 58 23.12 (1.97309d) Equinox: J2000		V=25	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	COS1086 F 160W	(25) COS1086	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50			Pattern 1, Exps 1-1 in COS1086 (25) (1)	652.938154 Secs (2611.753 Secs)
									[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	

