



# 13816 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass

## Measurements

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) MRK-1501	WFC3/UVIS	1	24-Jul-2014 21:57:04.0	yes
02	(2) NGC-1566	WFC3/UVIS	1	24-Jul-2014 21:57:05.0	yes
03	(3) IC-450	WFC3/UVIS	1	24-Jul-2014 21:57:06.0	yes
04	(4) MRK-374	WFC3/UVIS	1	24-Jul-2014 21:57:06.0	yes
05	(5) MRK-704	WFC3/UVIS	1	24-Jul-2014 21:57:07.0	yes
06	(6) MRK-50	WFC3/UVIS	1	24-Jul-2014 21:57:08.0	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>
07	(7) MRK-478	WFC3/UVIS	1	24-Jul-2014 21:57:09.0	yes
08	(8) KIC-006932990	WFC3/UVIS	1	24-Jul-2014 21:57:10.0	yes
09	(9) 2MASX-J19373299-0613046	WFC3/UVIS	1	24-Jul-2014 21:57:11.0	yes
10	(10) ESO-362-18	WFC3/UVIS	1	24-Jul-2014 21:57:11.0	yes
11	(11) NGC-5940	WFC3/UVIS	1	24-Jul-2014 21:57:12.0	yes
12	(12) 1RXS-J185800.9+485020	WFC3/UVIS	1	24-Jul-2014 21:57:13.0	yes
13	(13) NGC-2617	WFC3/UVIS	1	24-Jul-2014 21:57:13.0	yes
14	(14) UGC-3374	WFC3/UVIS	1	24-Jul-2014 21:57:14.0	yes

14 Total Orbits Used

## ABSTRACT

We propose to obtain WFC3 optical images of the host galaxies of 14 AGNs that have broad-line region radius measurements from ground-based monitoring campaigns and direct black hole mass determinations from reverberation mapping. The proposed images are essential for correcting the host-galaxy starlight contributions to the spectroscopically-measured luminosities of these AGNs and will allow us to place them on the radius-luminosity relationship. Furthermore, the high-resolution and stable PSFs of these images will allow us to accurately measure the (pseudo)bulge luminosities of the galaxies and include them in the black hole mass-bulge luminosity relationship.

The radius-luminosity relationship is the basis for all estimates of black hole mass in active galaxies at cosmological distances, and so informs our knowledge of the growth and evolution of black holes and their host galaxies throughout cosmic time. And the black hole mass-bulge luminosity relationship is an important alternative to the widely-used M-sigma relationship, especially given the recent intense scrutiny of the M-sigma relationship and its possible biases relating to galaxy morphology, and because of upcoming photometric surveys like LSST. These 14 AGNs represent an increase of 50% to the existing AGN sample at the low ends of these black hole scaling relationships, in the critical  $L^*$  and sub- $L^*$  regimes that include the majority of galaxies in the universe. As such, these 14 objects are crucial additions that will increase our ability to accurately determine the slope and scatter of the relationships at the low-luminosity ends where the signatures of black hole seeds are expected to be found.

## **OBSERVING DESCRIPTION**

The goal of this program is to obtain high spatial resolution, high dynamic range images of the host galaxies of 14 AGNs. The images will be modeled with a two-dimensional surface brightness fitting code (Galfit) to separate the faint and extended photometric components of the galaxy from the bright, compact AGN point source and the underlying background sky.

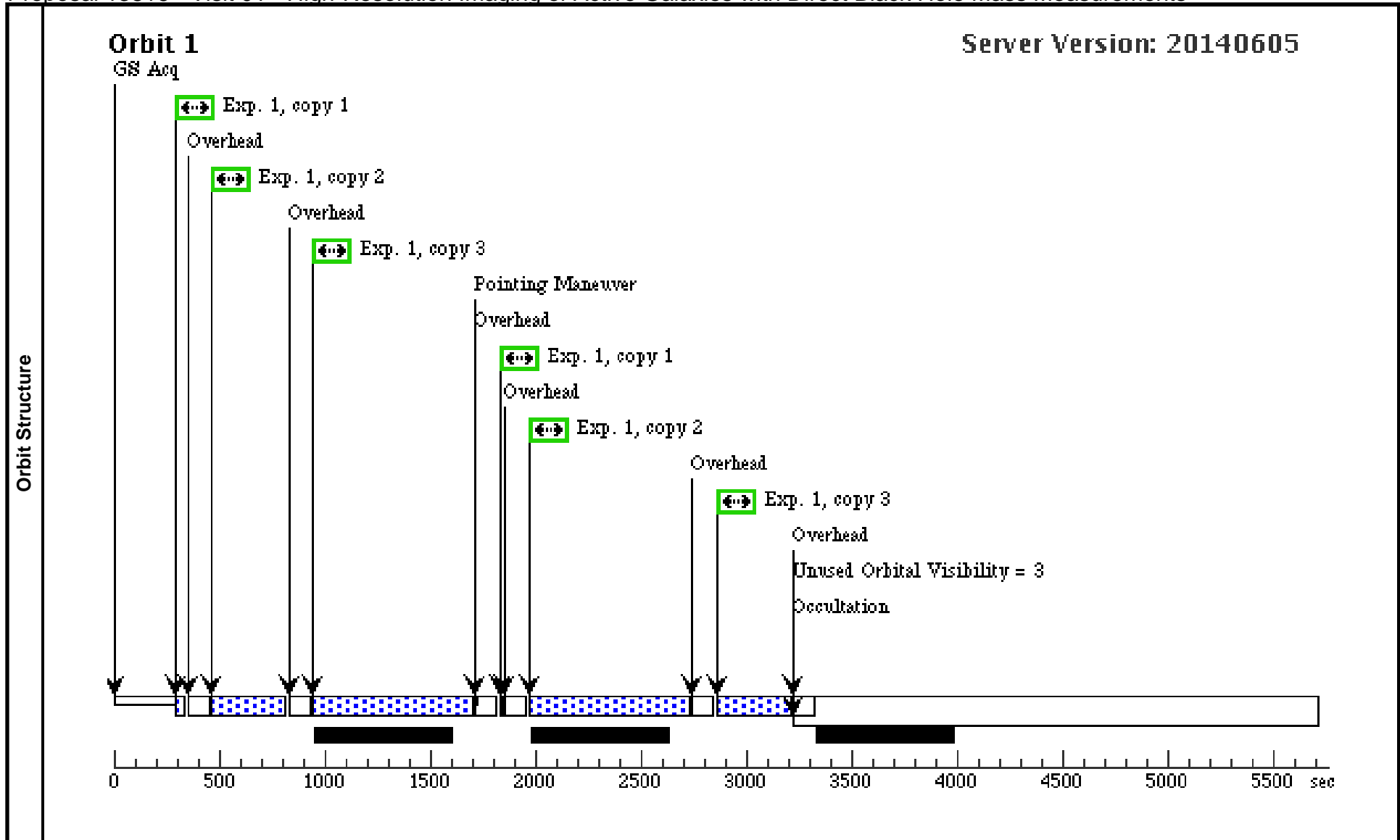
Observations will be obtained with the WFC3 UVIS channel and the F547M filter, allowing us to probe the continuum of the AGNs and host galaxies while avoiding the contaminating effects of spatially-extended line emitting regions. The F547M filter Each AGN host galaxy will be observed with two pointings in a single orbit to help with the removal of detector artifacts and cosmic rays, and to bridge the gap between the WFC3 UVIS detectors for the more extended objects. 12 of the targets are fairly compact, so they will be centered on the UVIS1 chip and employ the standard 2-point line pattern. One of the compact objects (Mrk704) is extended in the E-W direction, so a slight orientation constraint has been employed to avoid observing this target while the detector is oriented N-S. The 2 more extended objects will be centered at the UVIS-FIX aperture and employ the standard 2-point UVIS-GAP pattern.

At each pointing for a single target, we will obtain a sequence of 3 exposures with graduated exposure times. The graduated exposure times (short + medium + long) will ensure that we obtain unsaturated images of the AGN as well as deep images of the faint host galaxy. Exposure times have been chosen to allow buffer dumps with no additional overheads. The unsaturated images will be used to correct the saturated pixels in the longer exposures at the same pointing. All of the images will then be combined, providing a final drizzled image with a very high dynamic range for each target and no loss of information in the center of the AGN.

Proposal 13816 - Visit 01 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:15 GMT 2014

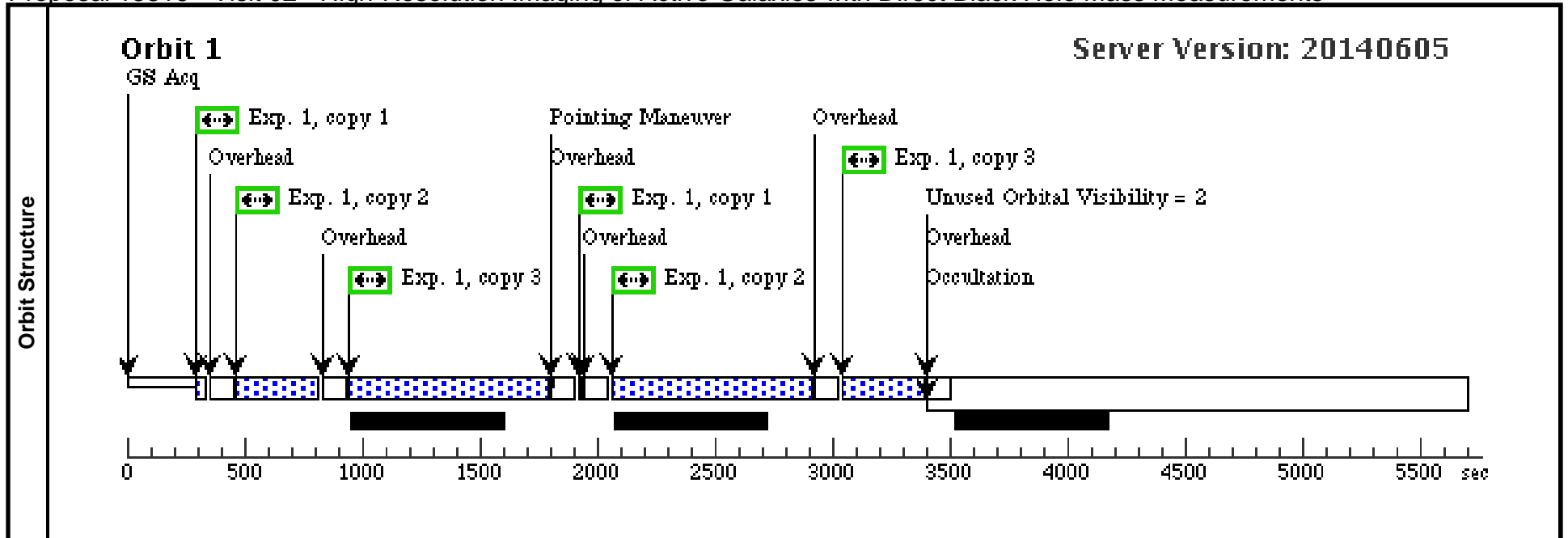
Visit	<b>Proposal 13816, Visit 01</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	MRK-1501	RA: 00 10 31.0059 (2.6291912d) Dec: +10 58 29.51 (10.97486d) Equinox: J2000		V=15.4	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) MRK-1501	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 01 (1)	350 Secs X 3 (2236 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>758.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>758.0 Secs (Pattern 2, Copy 2)] [==>350 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 02 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

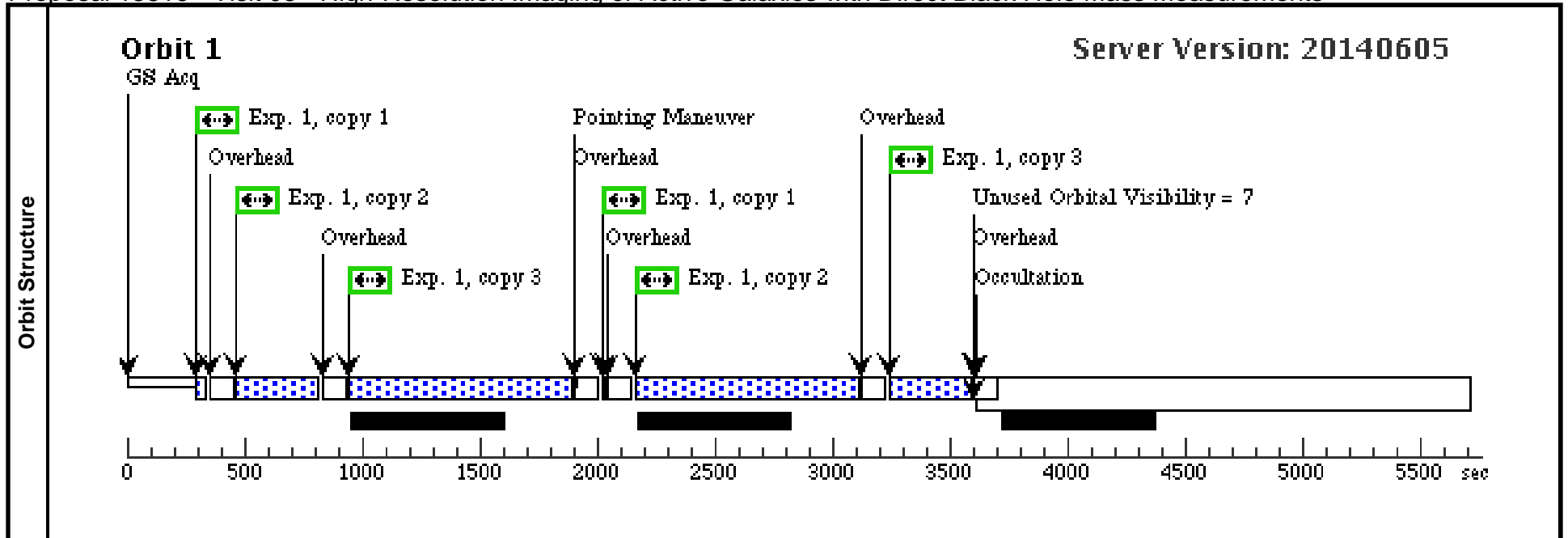
<b>Visit</b>	<b>Proposal 13816, Visit 02</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-UVIS-GAP-LINE    Coordinate Frame=POS-TARG Purpose=MOSAIC                            Pattern Orientation=85.759 Number Of Points=2                        Angle Between Sides= Point Spacing=2.414                        Center Pattern=true Line Spacing=							(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>			
	(2)	NGC-1566	RA: 04 20 0.4190 (65.0017458d) Dec: -54 56 16.11 (-54.93781d) Equinox: J2000				V=9.73	Reference Frame: SIMBAD			
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>											
<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	(2) NGC-1566	(2) NGC-1566	WFC3/UVIS, ACCUM, UVIS-FIX	F547M			Pattern 2, Exps 1-1 i n Visit 02 (2)	350 Secs X 3 (2420 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>850.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>850.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]		[1]



Proposal 13816 - Visit 03 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

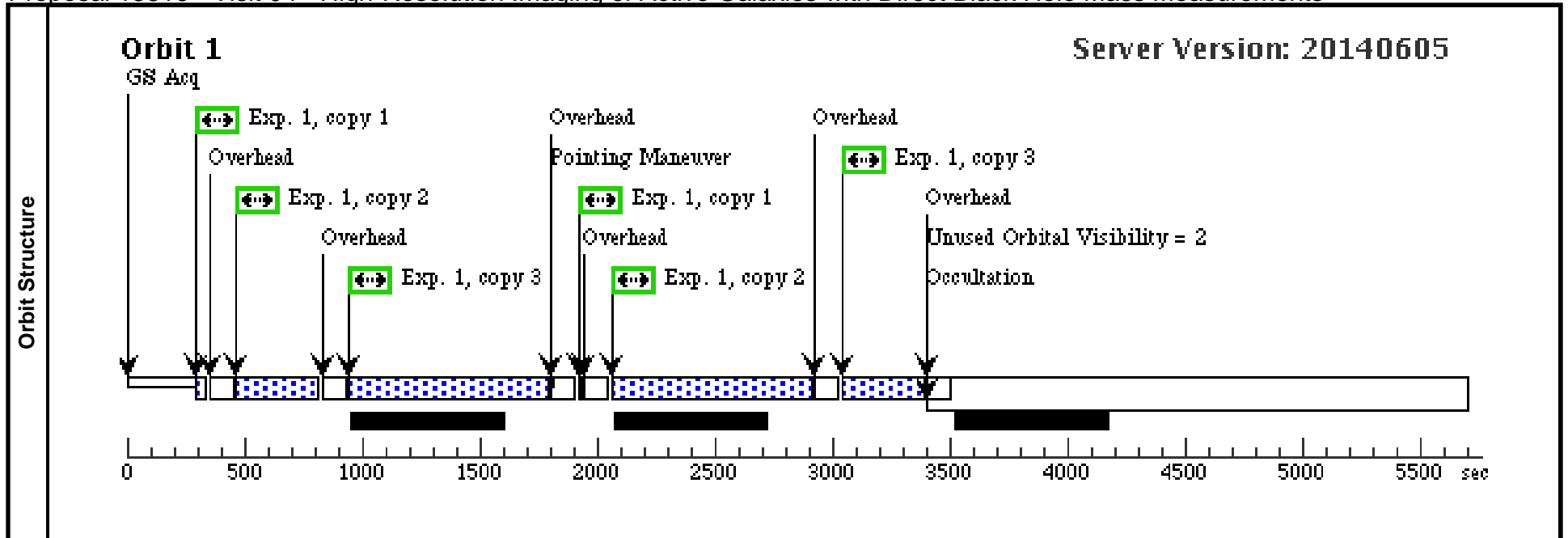
Visit	<b>Proposal 13816, Visit 03</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	IC-450 Alt Name1: MRK-6	RA: 06 52 12.3610 (103.0515042d) Dec: +74 25 37.24 (74.42701d) Equinox: J2000		V=14.19	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) IC-450	WFC3/UVIS, ACCUM, UVIS1	F547M			Pattern 1, Exps 1-1 i n Visit 03 (1)	350 Secs X 3 (2620 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>950.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>950.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]	[1]



Proposal 13816 - Visit 04 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

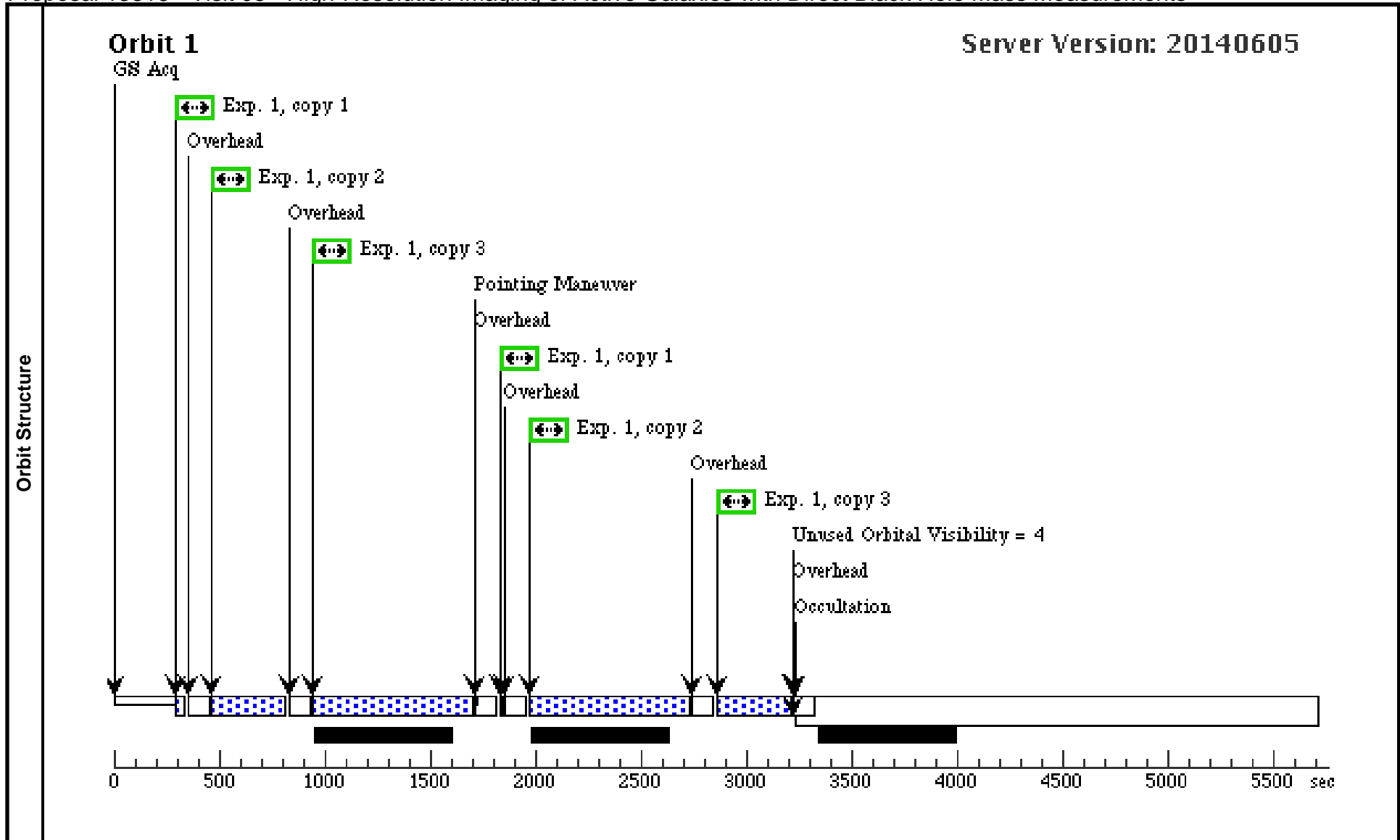
Visit	<b>Proposal 13816, Visit 04</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	MRK-374	RA: 06 59 38.1300 (104.9088750d) Dec: +54 11 47.34 (54.19648d) Equinox: J2000		V=14.61	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) MRK-374	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 04 (1)	350 Secs X 3 (2420 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>850.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>850.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 05 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

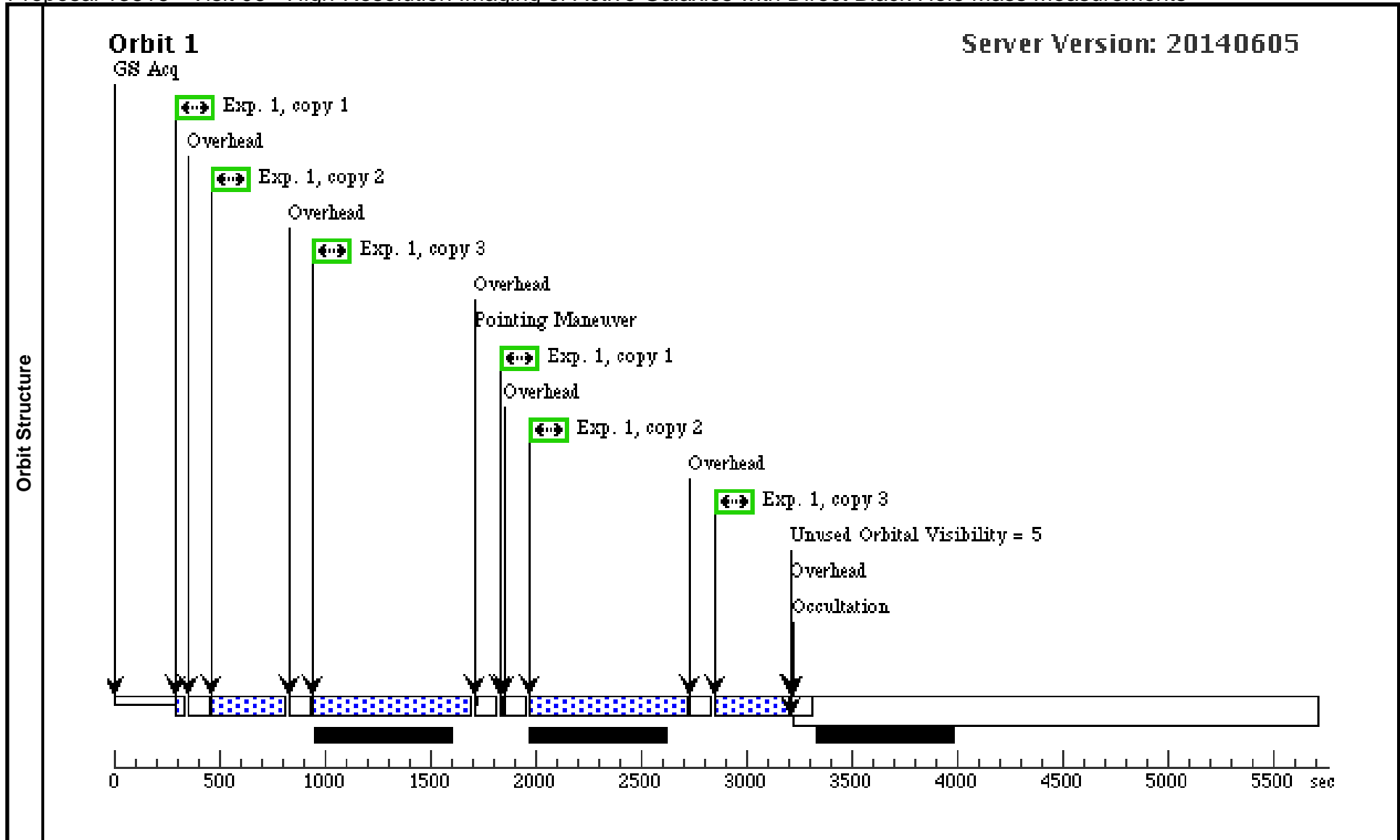
Visit	<b>Proposal 13816, Visit 05</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 0D TO 15 D; ORIENT 285D TO 359 D; ORIENT 105D TO 195 D									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	MRK-704	RA: 09 18 25.9790 (139.6082458d) Dec: +16 18 19.67 (16.30546d) Equinox: J2000		V=14.2	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) MRK-704	WFC3/UVIS, ACCUM, UVIS1	F547M			Pattern 1, Exps 1-1 in Visit 05 (1)	350 Secs X 3 (2240 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>760.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>760.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]	[1]



Proposal 13816 - Visit 06 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

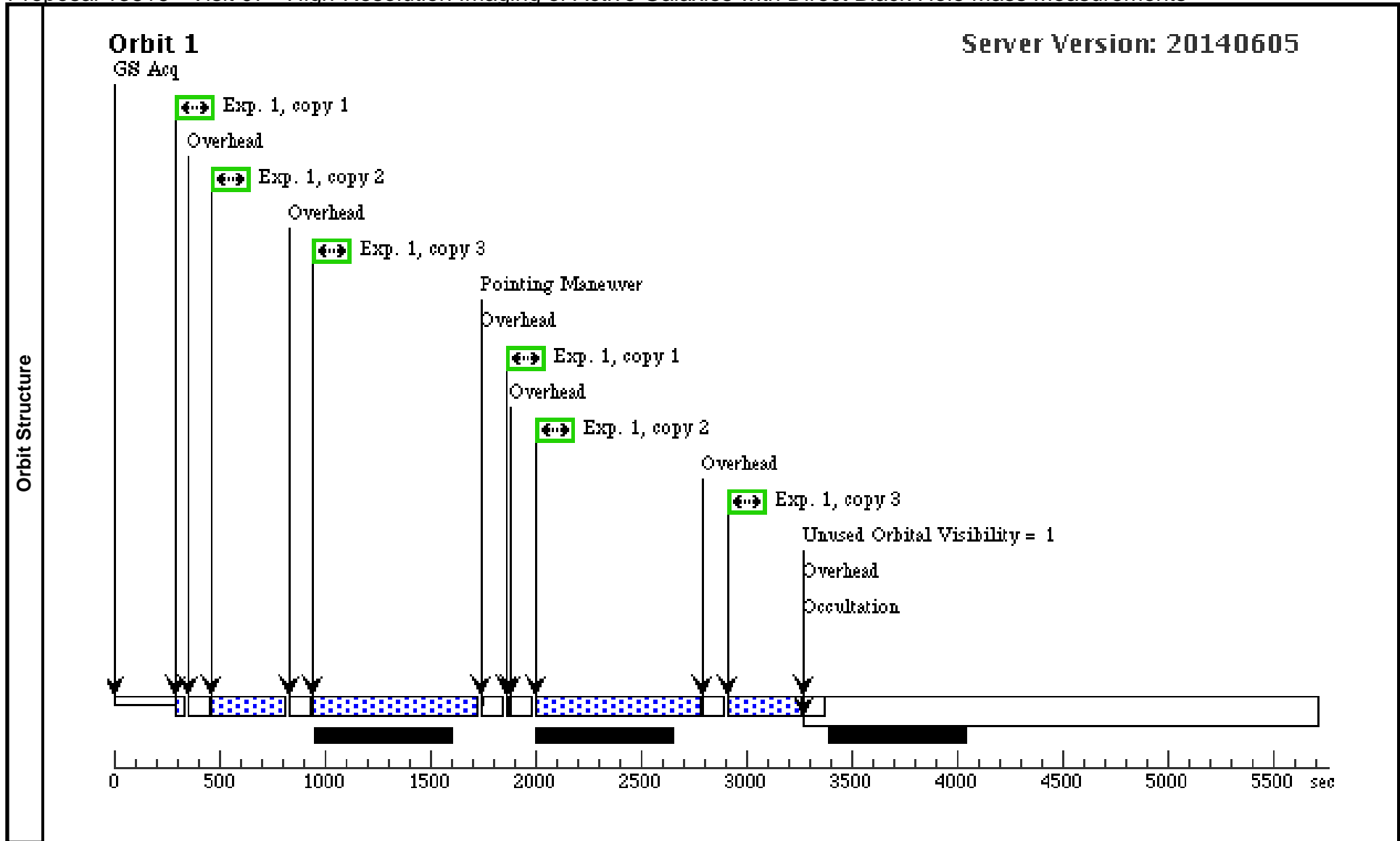
Visit	<b>Proposal 13816, Visit 06</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	MRK-50	RA: 12 23 24.1414 (185.8505892d) Dec: +02 40 44.40 (2.67900d) Equinox: J2000		V=16.63	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) MRK-50	WFC3/UVIS, ACCUM, UVIS1	F547M			Pattern 1, Exps 1-1 in Visit 06 (1)	350 Secs X 3 (2230 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>755.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>755.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]	[1]



Proposal 13816 - Visit 07 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

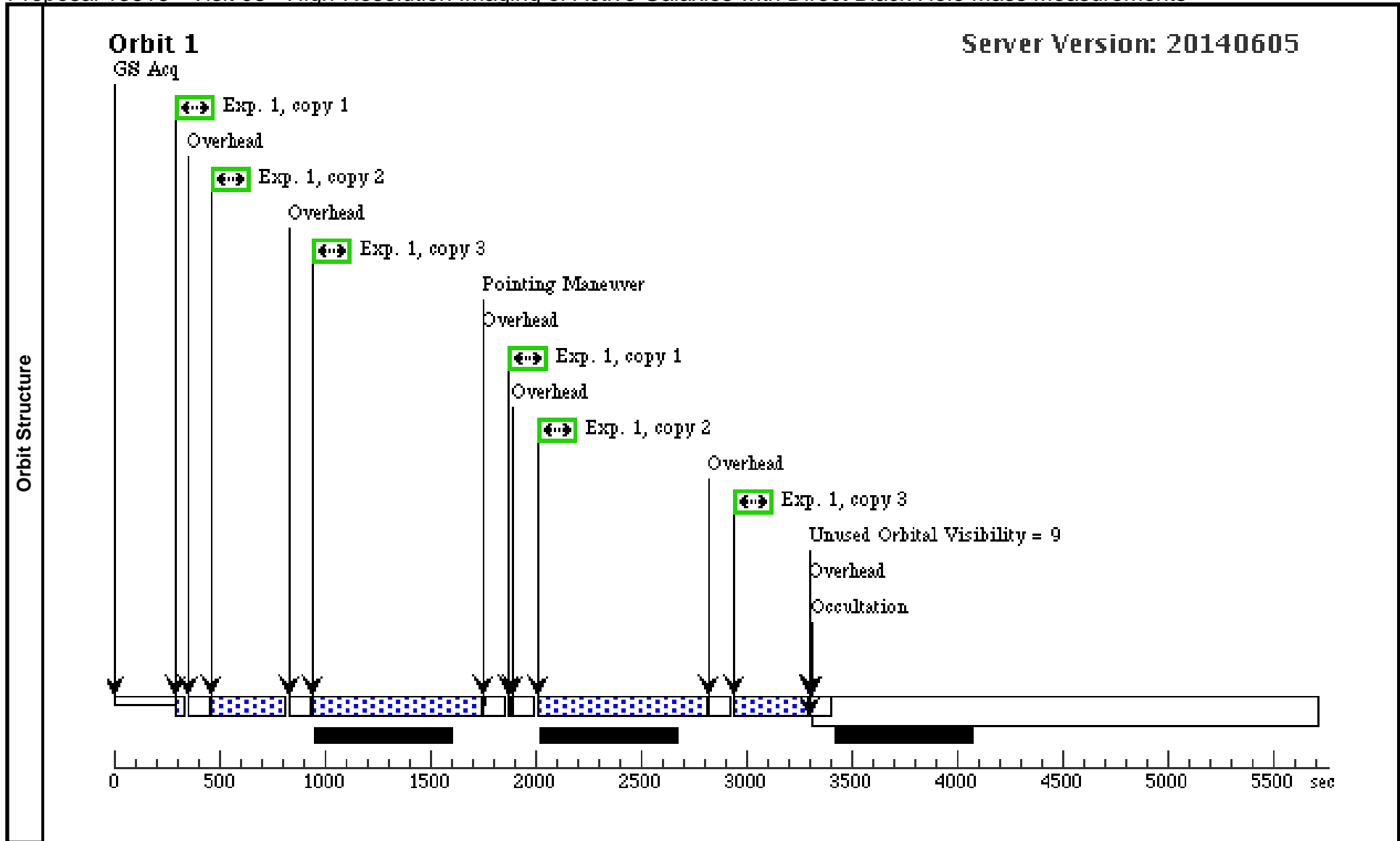
Visit	<b>Proposal 13816, Visit 07</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	MRK-478	RA: 14 42 7.4578 (220.5310742d) Dec: +35 26 23.07 (35.43974d) Equinox: J2000		V=14.58	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(7) MRK-478	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 07 (1)	350 Secs X 3 (2290 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>785.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>785.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 08 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

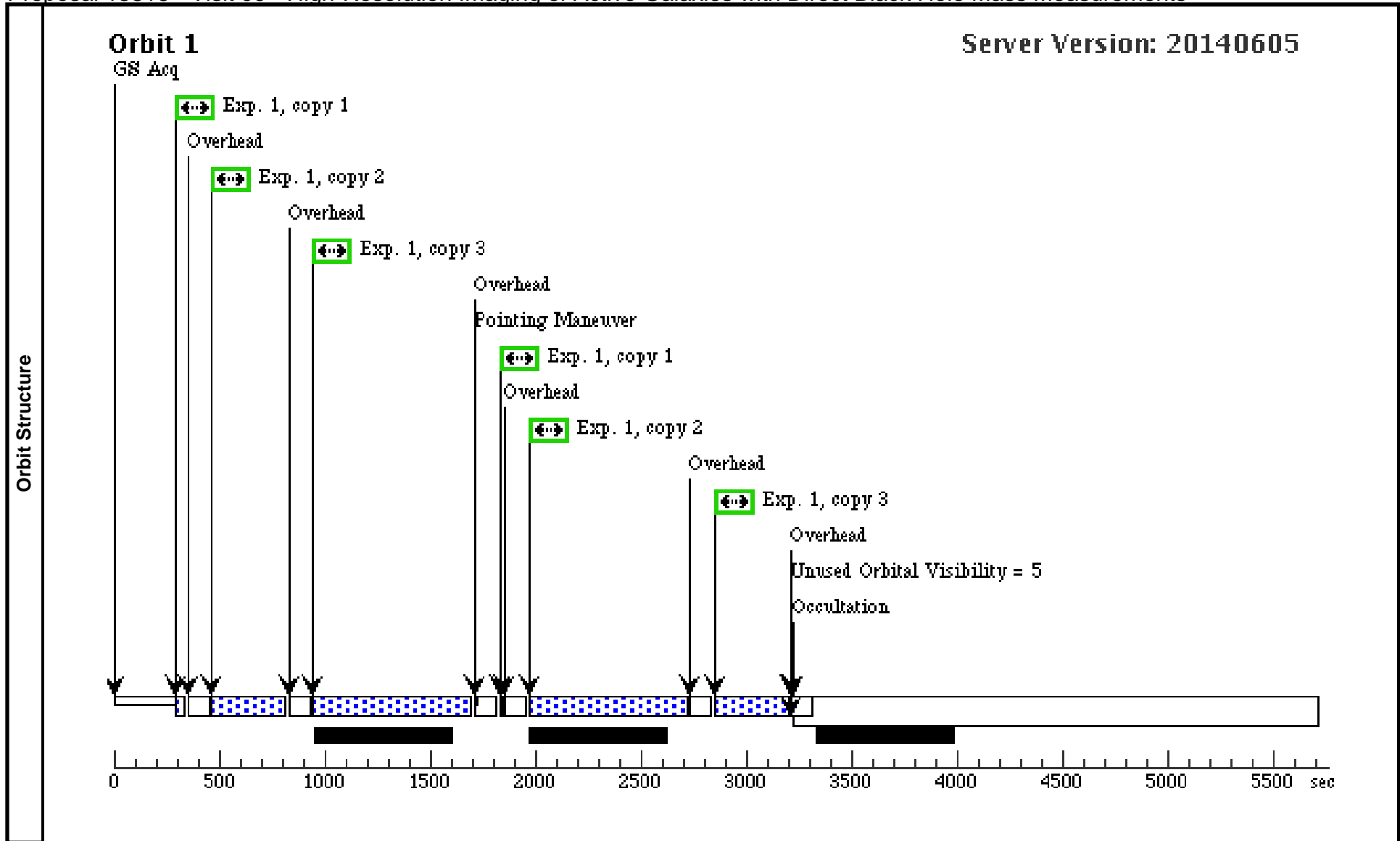
Visit	<b>Proposal 13816, Visit 08</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	KIC-006932990	RA: 19 05 25.9392 (286.3580800d)		V=15.4	Reference Frame: SIMBAD				
		Alt Name1: CGCG-229-015	Dec: +42 27 39.64 (42.46101d)							
			Equinox: J2000							
		<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>								
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) KIC-006932990	WFC3/UVIS, ACCUM, UVIS1	F547M			Pattern 1, Exps 1-1 i n Visit 08 (1)	350 Secs X 3 (2320 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>800.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>800.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]	[1]



Proposal 13816 - Visit 09 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:16 GMT 2014

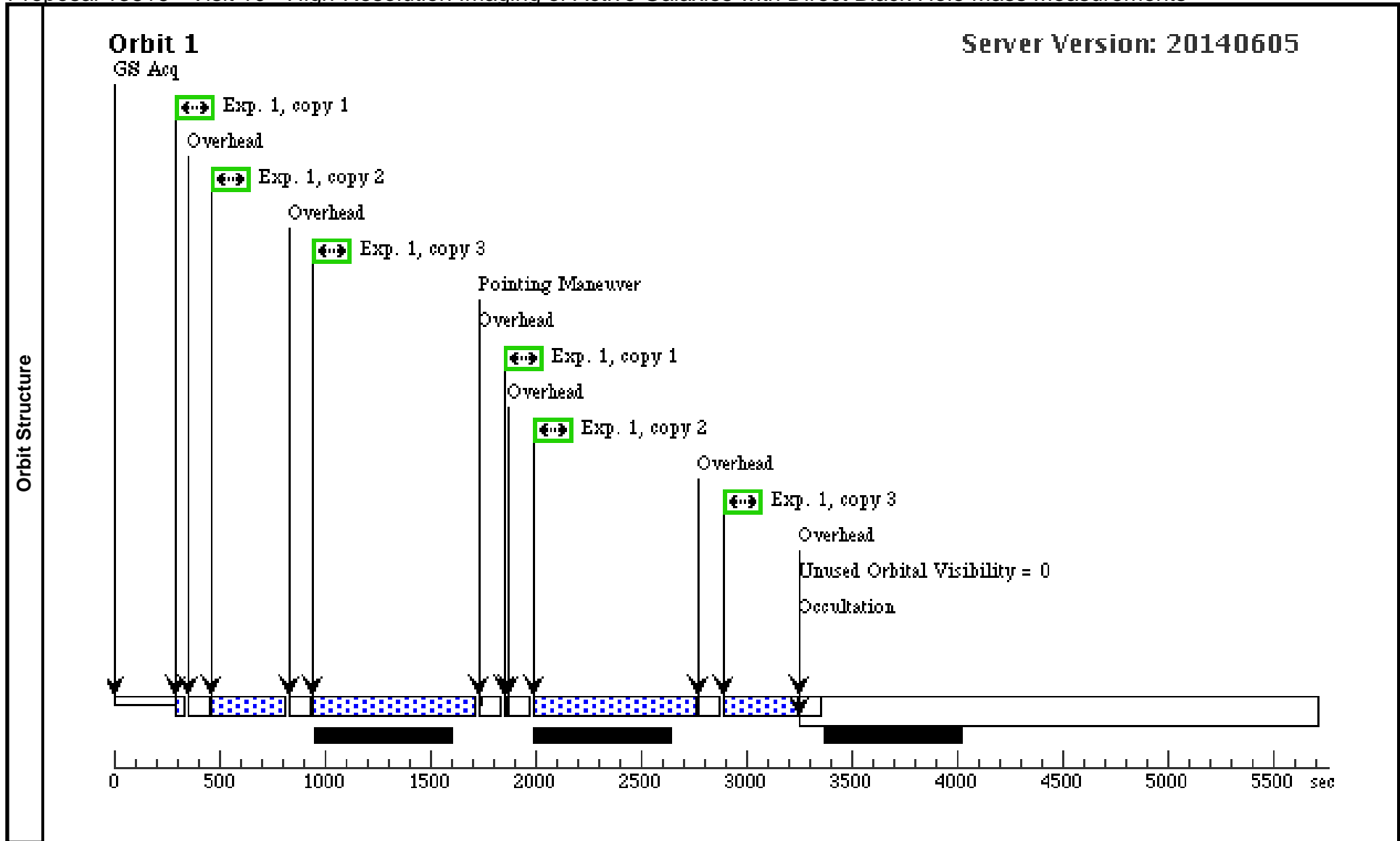
Visit	<b>Proposal 13816, Visit 09</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	2MASX-J19373299- 0613046 Alt Name1: 1H1934-063	RA: 19 37 33.0096 (294.3875400d) Dec: -06 13 4.80 (-6.21800d) Equinox: J2000		V=15.35	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(9) 2MASX-J19373299-0613046	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 09 (1)	350 Secs X 3 (2230 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>755.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>755.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 10 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:17 GMT 2014

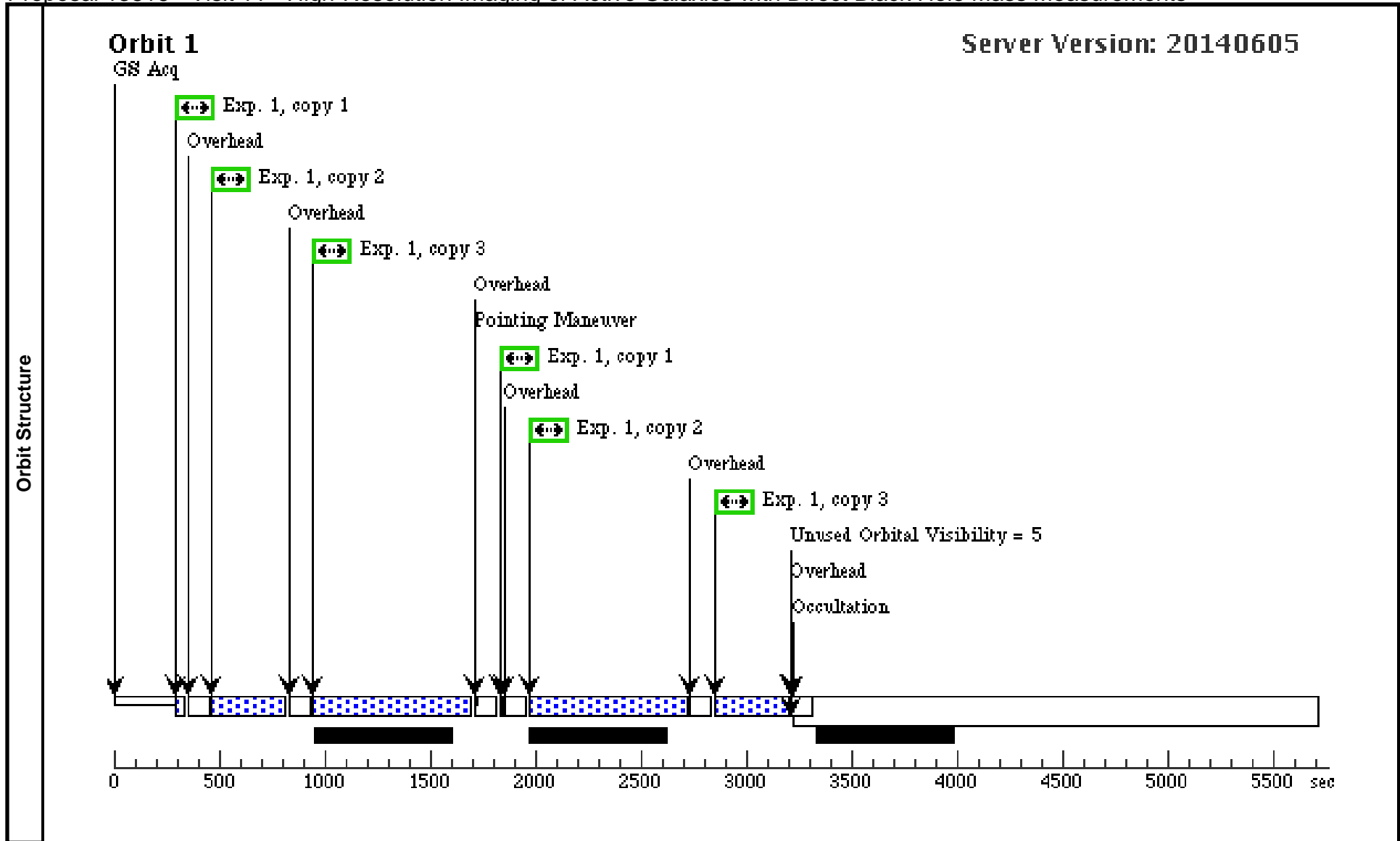
Visit	<b>Proposal 13816, Visit 10</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	ESO-362-18	RA: 05 19 35.8100 (79.8992083d) Dec: -32 39 28.02 (-32.65778d) Equinox: J2000		V=13.37	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) ESO-362-18	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 10 (1)	350 Secs X 3 (2270 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>775.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>775.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 11 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:17 GMT 2014

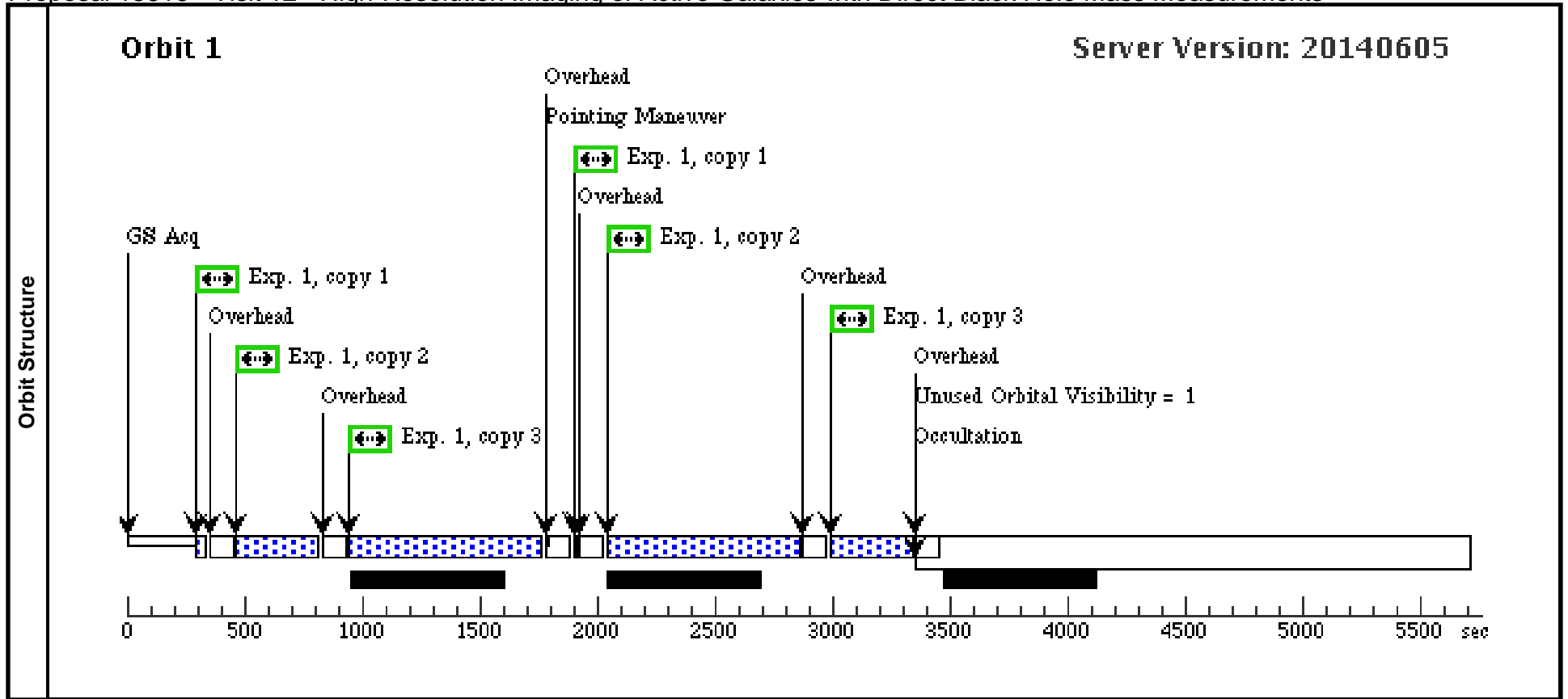
Visit	<b>Proposal 13816, Visit 11</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(11)	NGC-5940	RA: 15 31 18.1090 (232.8254542d) Dec: +07 27 27.69 (7.45769d) Equinox: J2000		V=14.9	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(11) NGC-5940	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 11 (1)	350 Secs X 3 (2230 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>755.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>755.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 12 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

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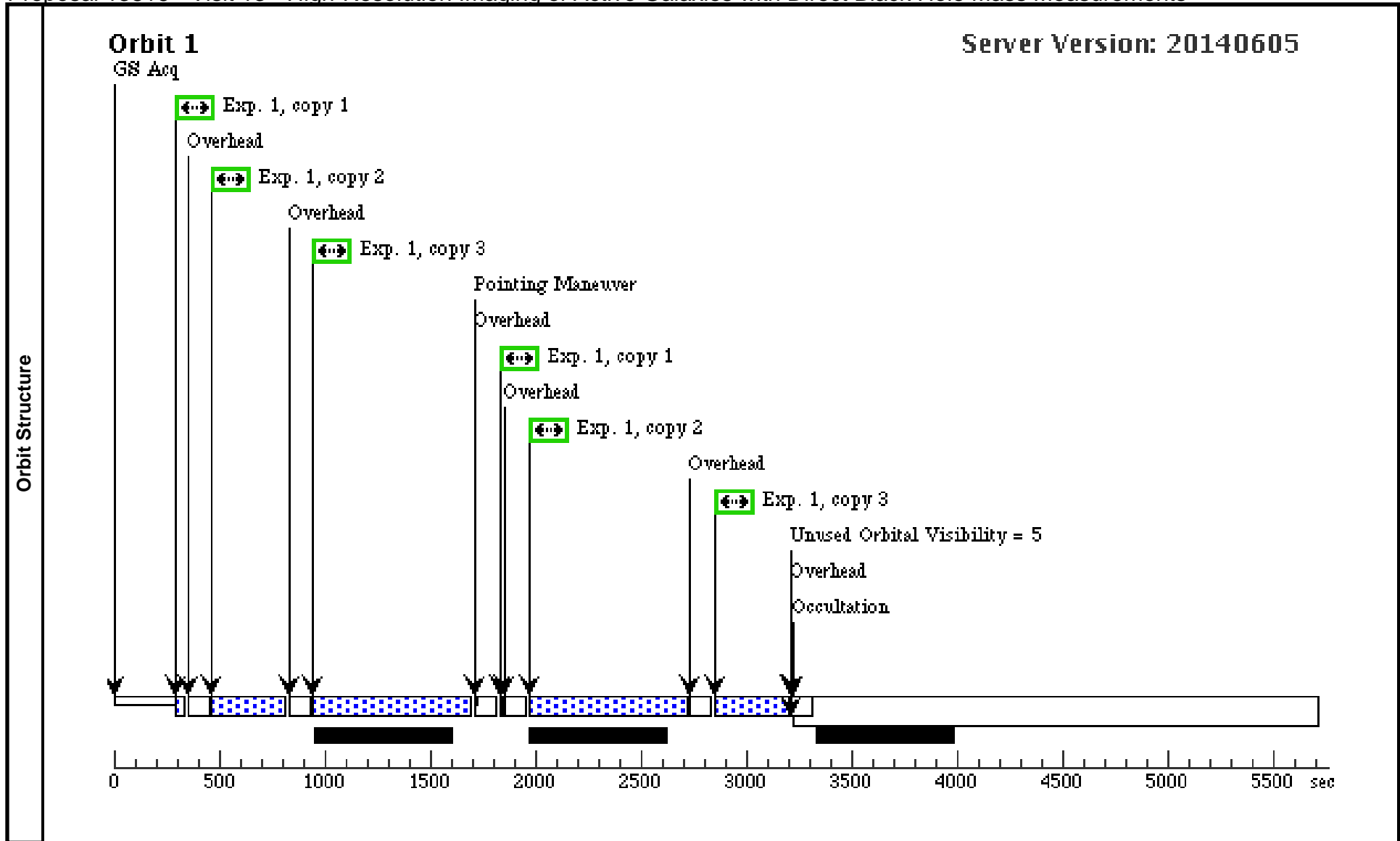
Visit	<b>Proposal 13816, Visit 12</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(1)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(12)	IRXS-J185800.9+485020 Alt Name1: KIC-011178007	RA: 18 58 1.0000 (284.5041667d) Dec: +48 50 23.00 (48.83972d) Equinox: J2000		V=15	Reference Frame: SIMBAD				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(12) IRXS-J185800.9+485020	WFC3/UVIS, ACCUM, UVIS1	F547M			Pattern 1, Exps 1-1 in Visit 12 (1)	350 Secs X 3 (2370 Secs) [=>10.0 Secs (Pattern 1, Copy 1)] [=>350.0 Secs (Pattern 1, Copy 2)] [=>825.0 Secs (Pattern 1, Copy 3)] [=>10.0 Secs (Pattern 2, Copy 1)] [=>825.0 Secs (Pattern 2, Copy 2)] [=>350.0 Secs (Pattern 2, Copy 3)]	[1]



Proposal 13816 - Visit 13 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:17 GMT 2014

Visit	<b>Proposal 13816, Visit 13</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(13)	NGC-2617	RA: 08 35 38.7780 (128.9115750d) Dec: -04 05 17.30 (-4.08814d) Equinox: J2000		V=13.5	Reference Frame: SIMBAD				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(13) NGC-2617	WFC3/UVIS, ACCUM, UVIS1	F547M				Pattern 1, Exps 1-1 i n Visit 13 (1)	350 Secs X 3 (2230 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>755.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>755.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]



Proposal 13816 - Visit 14 - High-Resolution Imaging of Active Galaxies with Direct Black Hole Mass Measurements

Fri Jul 25 01:57:17 GMT 2014

<b>Visit</b>	<b>Proposal 13816, Visit 14</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-UVIS-GAP-LINE    Coordinate Frame=POS-TARG Purpose=MOSAIC                            Pattern Orientation=85.759 Number Of Points=2                        Angle Between Sides= Point Spacing=2.414                        Center Pattern=true Line Spacing=							(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)	UGC-3374	RA: 05 54 53.5890 (88.7232875d) Dec: +46 26 21.76 (46.43938d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>				V=14.62	Reference Frame: SIMBAD		
<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) UGC-3374	WFC3/UVIS, ACCUM, UVIS-FIX	F547M			Pattern 2, Exps 1-1 in Visit 14 (2)	350 Secs X 3 (2370 Secs) [==>10.0 Secs (Pattern 1, Copy 1)] [==>350.0 Secs (Pattern 1, Copy 2)] [==>825.0 Secs (Pattern 1, Copy 3)] [==>10.0 Secs (Pattern 2, Copy 1)] [==>825.0 Secs (Pattern 2, Copy 2)] [==>350.0 Secs (Pattern 2, Copy 3)]	[1]

