



## 11838 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Cycle: 17, 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>
02	(4) PKS-0144-522	WFC3/IR	1	05-Apr-2010 21:00:57.0	yes
04	(1) PKS-1302-82	WFC3/IR	1	05-Apr-2010 21:01:02.0	yes
03	(5) PKS-0508-22	WFC3/IR	1	05-Apr-2010 21:01:06.0	yes
05	(6) B3-0707+476	WFC3/IR	1	05-Apr-2010 21:01:10.0	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>
06	(7) PKS-1622-29	WFC3/IR	1	05-Apr-2010 21:01:13.0	yes
07	(8) HB89-1823+568	WFC3/IR	1	05-Apr-2010 21:01:17.0	yes
08	(9) HB89-0859+470	WFC3/IR	1	05-Apr-2010 21:01:20.0	yes
09	(10) HB89-2230+114	WFC3/IR	1	05-Apr-2010 21:01:23.0	yes
10	(11) HB89-1116+128	WFC3/IR	1	05-Apr-2010 21:01:27.0	yes
11	(12) HB89-0402-362	WFC3/IR	1	05-Apr-2010 21:01:30.0	yes
12	(3) PKS-0256+075	WFC3/IR	1	05-Apr-2010 21:01:33.0	yes
13	(13) FBQS-J095649.8+251515	WFC3/IR	1	05-Apr-2010 21:01:36.0	yes
14	(14) HB89-1502+106	WFC3/IR	1	05-Apr-2010 21:01:39.0	yes
15	(2) HB89-0748+126	WFC3/IR	1	05-Apr-2010 21:01:42.0	yes

14 Total Orbits Used

### **ABSTRACT**

We will measure the changing flow speeds, magnetic fields, and energy fluxes in well-resolved quasar jets found in our short-exposure Chandra survey by combining new, deep Chandra data with radio and optical imaging. We will image each jet with sufficient sensitivity to estimate beaming factors and magnetic fields in several distinct regions, and so map the variations in these parameters down the jets. HST observations will help diagnose the role of synchrotron emission in the overall SED, and may reveal condensations on scales less than 0.1 arcsec.

### **OBSERVING DESCRIPTION**

We will obtain HST observations to accompany approved Chandra observations. The optical band is sensitive to the upper cutoff of the synchrotron spectrum and the lower cutoff of the inverse Compton scattered spectral component, constraining the electron energy population. The brightest cases can be followed with Spitzer or JWST observations to assess the contribution of synchrotron emission to the optical spectra, as successfully applied to 3C 273 and PKS 0637-752. The  $< 0.1''$  resolution imaging of HST provides excellent measurements or limits to jet knot sizes, which are needed to

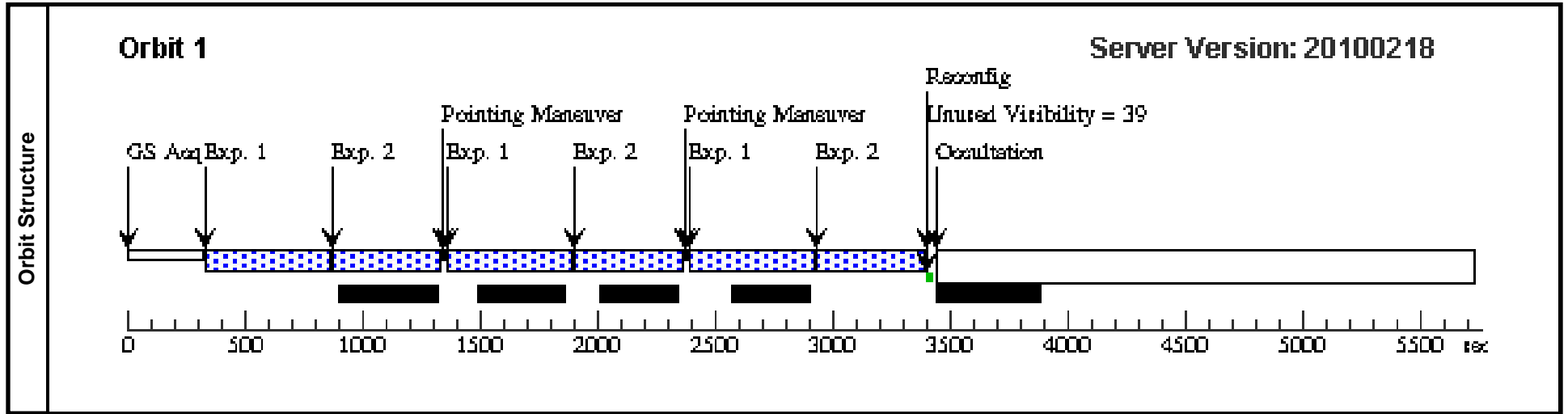
estimate the synchrotron emission volumes used in the computation of the magnetic field for the IC-CMB calculation. Furthermore, we have detected knots to within 0.5" of the core in followup HST work.

There is no coordination requirement, as the smallest structures we expect to detect are  $\sim$  kpc across, so we do not expect variability on a time scale of less than a year. Using the HST WFC3/F160W, one orbit will provide a detection at a signal/noise of 8 for a knot with  $S_{\nu} = 1$  microJy at 1.6 micron, or  $\nu S_{\nu} = 3e8$  Jy-Hz, which is smaller than the average  $\nu S_{\nu} \sim 1e9$  Jy-Hz for the extended emission. Thus, a spectral break in the IR can be inferred even with an upper limit to the 1.6 micron flux density. We request restricting the roll angle of HST such that the jets do not fall along a column, row, or diagonal in order to avoid diffraction spikes.

Proposal 11838 - Visit 02 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

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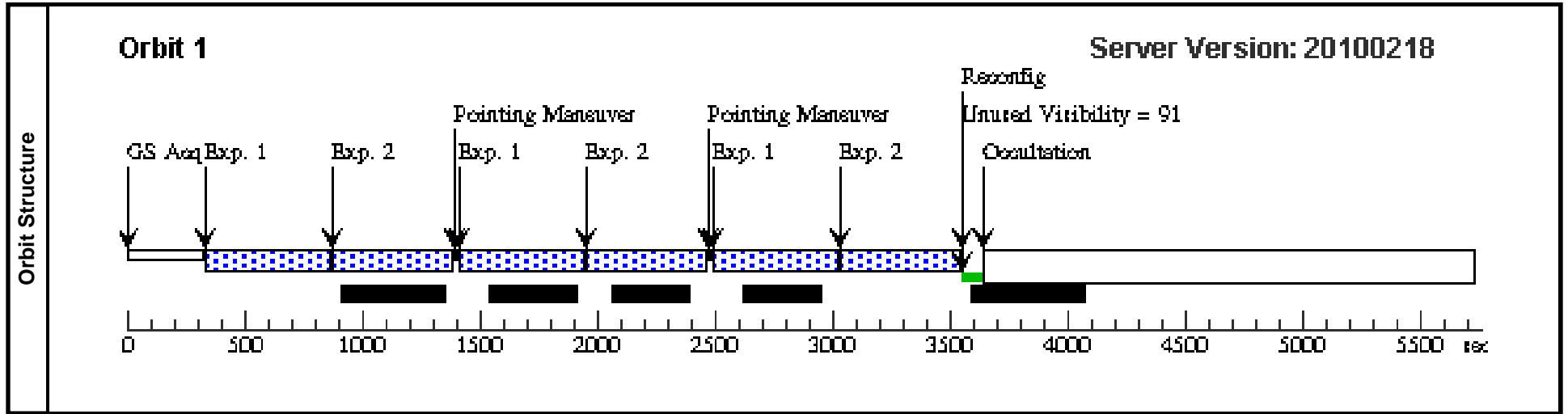
<b>Visit</b>	<b>Proposal 11838, Visit 02, scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 30D TO 100 D; ORIENT 120D TO 190 D; ORIENT 210D TO 280 D; ORIENT 300D TO 10 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(4)	PKS-0144-522	RA: 01 46 48.6000 (26.7025000d) Dec: -52 02 34.00 (-52.04278d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>			V=16.36	Reference Frame: ICRS			
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(4) PKS-0144-522	(4) PKS-0144-522	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=15	GS ACQ SCENARI O BASE1B3	Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	(4) PKS-0144-522	(4) PKS-0144-522	(4) PKS-0144-522	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 11838 - Visit 04 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

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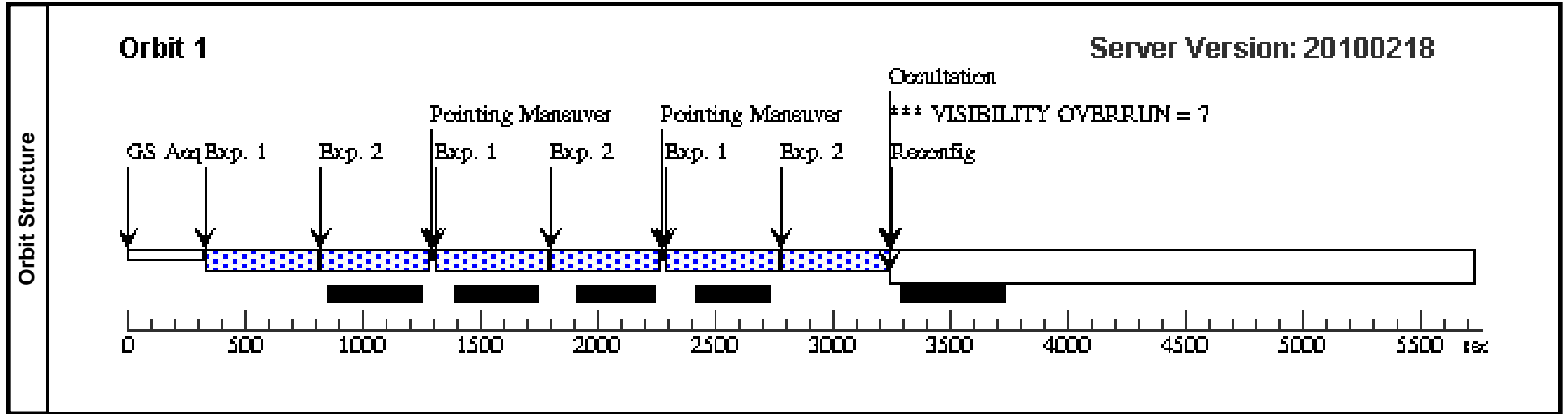
<b>Visit</b>	<b>Proposal 11838, Visit 04, scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 60D TO 130 D; ORIENT 150D TO 220 D; ORIENT 240D TO 310 D; ORIENT 330D TO 40 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>		
	(1)	PKS-1302-82	RA: 13 08 38.2000 (197.1591667d) Dec: -82 59 35.00 (-82.99306d) Equinox: J2000		Redshift: 0.87		V=17.0	Reference Frame: ICRS		
<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) PKS-1302-82	(1) PKS-1302-82	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=15		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	(1) PKS-1302-82	(1) PKS-1302-82	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=15		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 11838 - Visit 03 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

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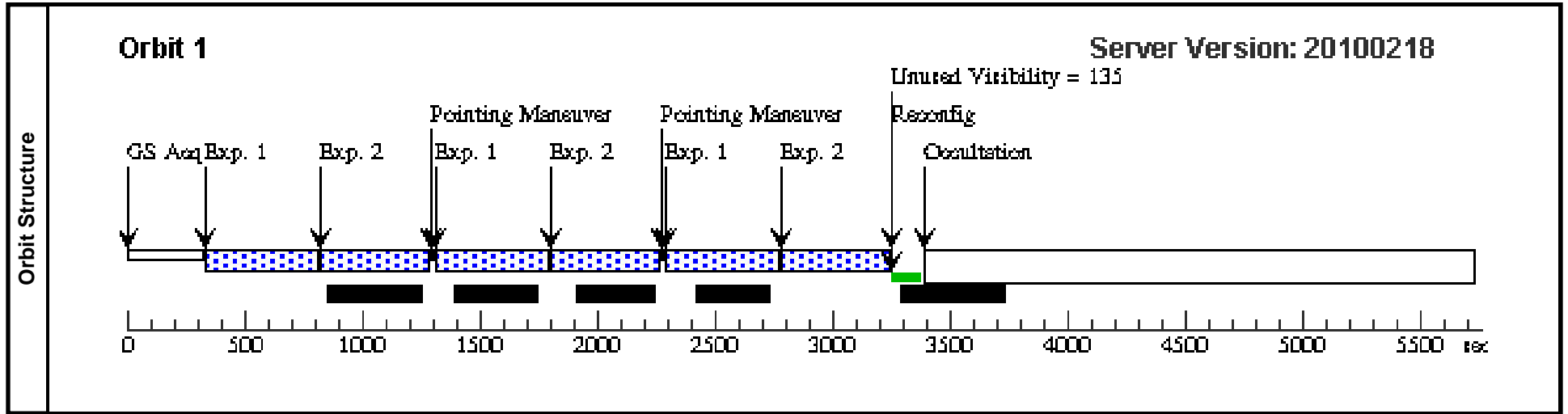
<b>Visit</b>	Proposal 11838, Visit 03, scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/IR Special Requirements: ORIENT 10.D TO 70. D; ORIENT 100D TO 160 D; ORIENT 190D TO 250. D; ORIENT 280.D TO 340. D										
	(Visit 03) Warning (Orbit Planner): VISIBILITY OVERRUN										
<b>Diagnosics</b>											
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>	
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false						(1-2)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(5)	PKS-0508-22	RA: 05 11 0.5000 (77.7520833d) Dec: -22 01 55.00 (-22.03194d) Equinox: J2000				V=18	Reference Frame: ICRS			
Comments: This object was generated by the targetselector and retrieved from the NED database.											
<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/[Actual Dur.]</b>		<b>Orbit</b>
	1		(5) PKS-0508-22	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]		[1]
	2		(5) PKS-0508-22	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]		[1]



Proposal 11838 - Visit 05 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

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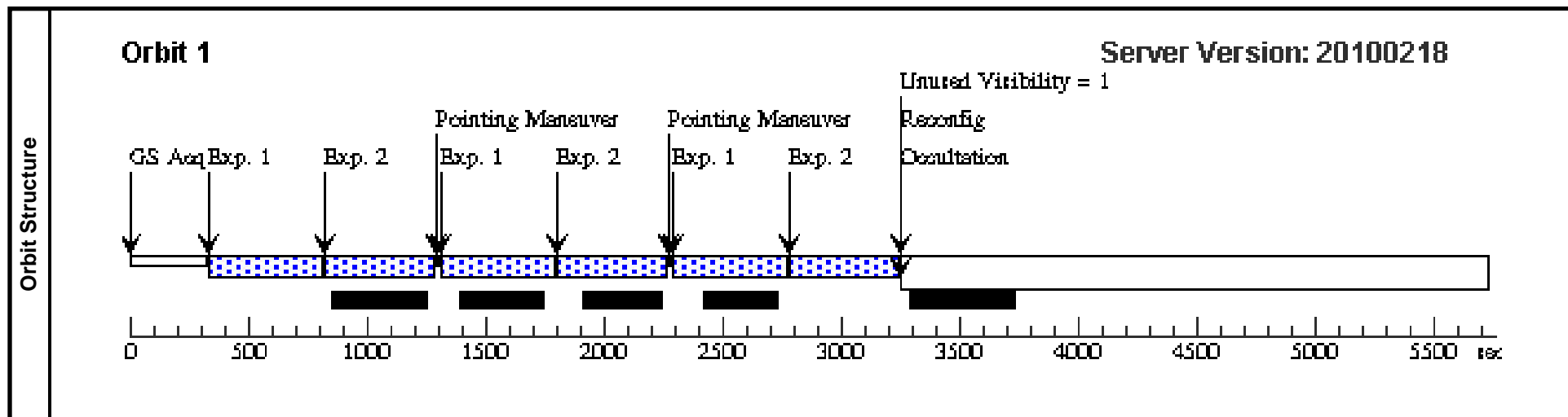
<b>Visit</b>	<b>Proposal 11838, Visit 05, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 10D TO 80 D; ORIENT 100D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 350. D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(6)	B3-0707+476	RA: 07 10 46.1000 (107.6920833d) Dec: +47 32 11.00 (47.53639d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>	Redshift: 1.292	V=18.2	Reference Frame: ICRS				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(6) B3-0707+476	(6) B3-0707+476	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	(6) B3-0707+476	(6) B3-0707+476	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 11838 - Visit 06 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:48 GMT 2010

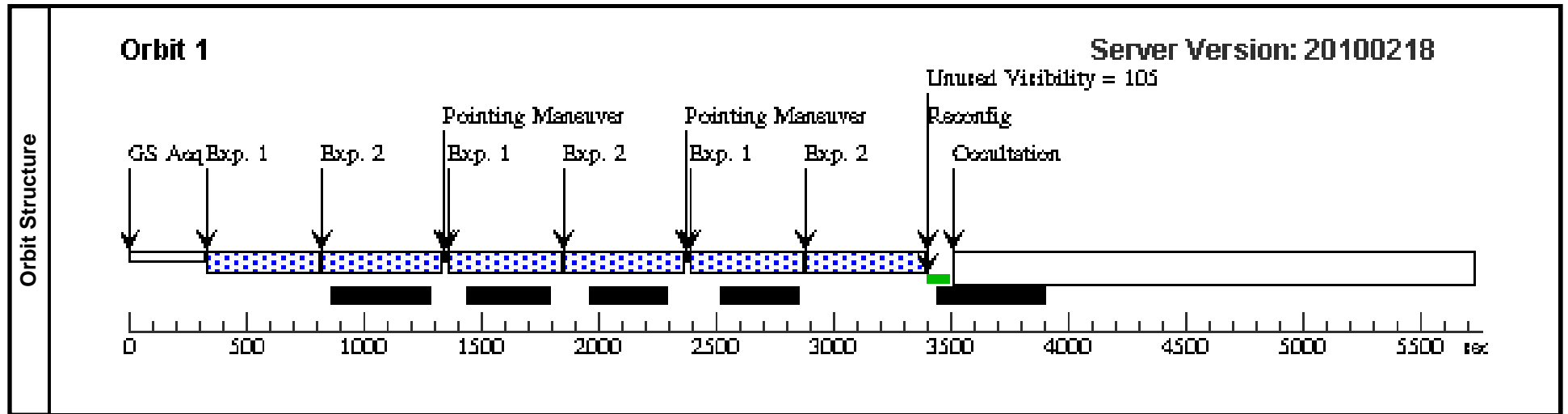
<b>Visit</b>	<b>Proposal 11838, Visit 06, scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 30D TO 100 D; ORIENT 120D TO 190 D; ORIENT 210D TO 280 D; ORIENT 300D TO 360. D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(7)	PKS-1622-29	RA: 16 26 6.0000 (246.5250000d) Dec: -29 51 27.00 (-29.85750d) Equinox: J2000 Comments: This object was generated by the targetselector and retrieved from the NED database.	Redshift: 0.815	V=20.5	Reference Frame: ICRS				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(7) PKS-1622-29	(7) PKS-1622-29	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	(7) PKS-1622-29	(7) PKS-1622-29	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 11838 - Visit 07 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

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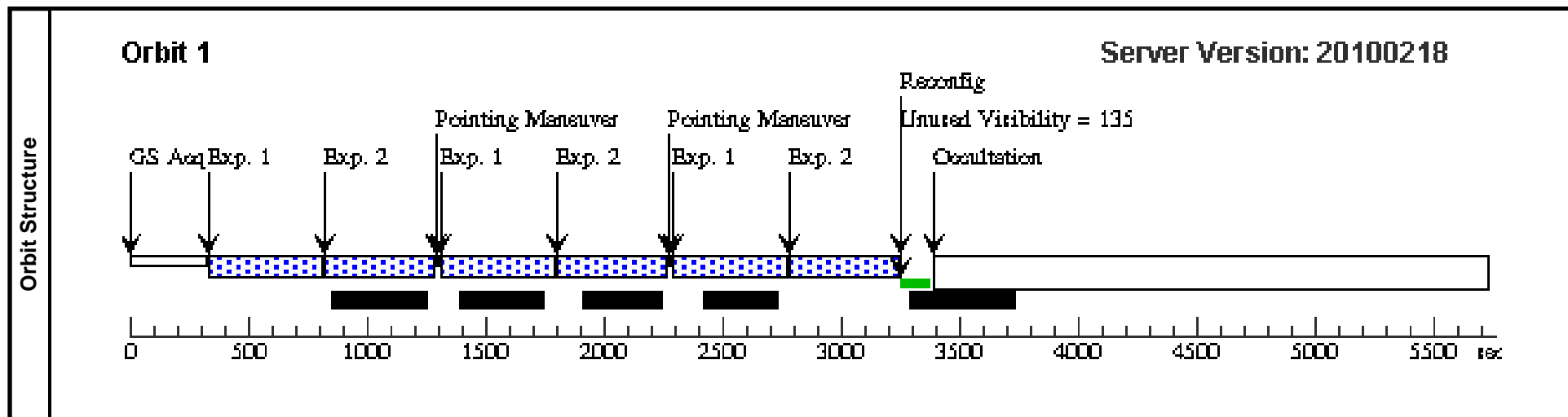
<b>Visit</b>	<b>Proposal 11838, Visit 07, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 10D TO 80 D; ORIENT 100D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 350 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(8)	HB89-1823+568	RA: 18 24 7.1000 (276.0295833d) Dec: +56 51 1.00 (56.85028d) Equinox: J2000 Comments: This object was generated by the targetselector and retrieved from the NED database.	Redshift: 0.664	V=18.4	Reference Frame: ICRS				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(8) HB89-1823+568	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	(8) HB89-1823+568	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=15			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 11838 - Visit 08 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

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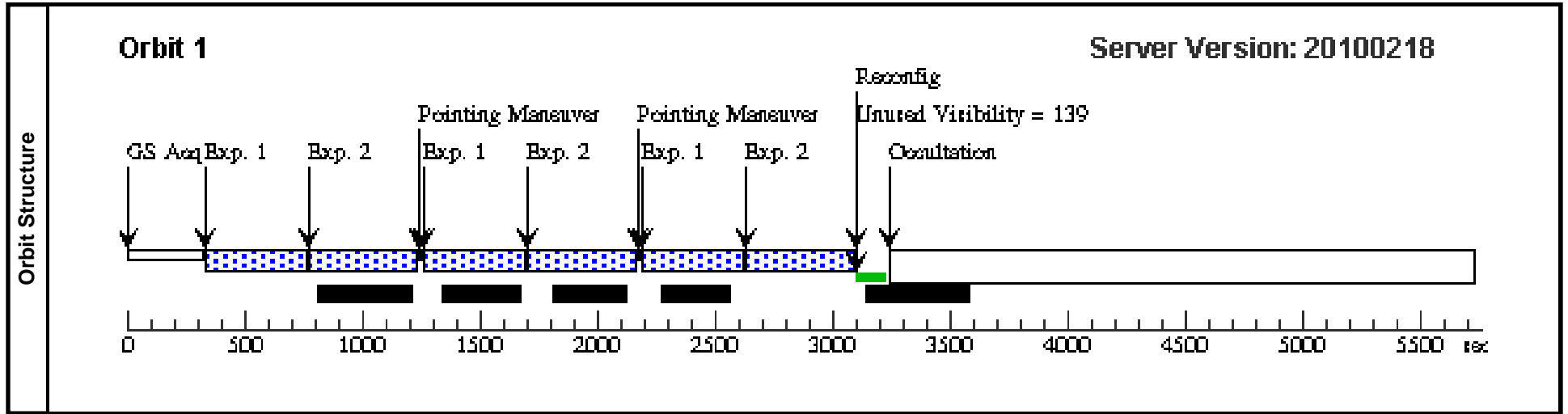
<b>Visit</b>	<b>Proposal 11838, Visit 08, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 60.D TO 130 D; ORIENT 150D TO 220 D; ORIENT 240D TO 310 D; ORIENT 330D TO 40 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(9)	HB89-0859+470	RA: 09 03 4.0000 (135.7666667d) Dec: +46 51 4.00 (46.85111d) Equinox: J2000	Redshift: 1.47	V=19.4	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(9) HB89-0859+470	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	(9) HB89-0859+470	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 11838 - Visit 09 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:49 GMT 2010

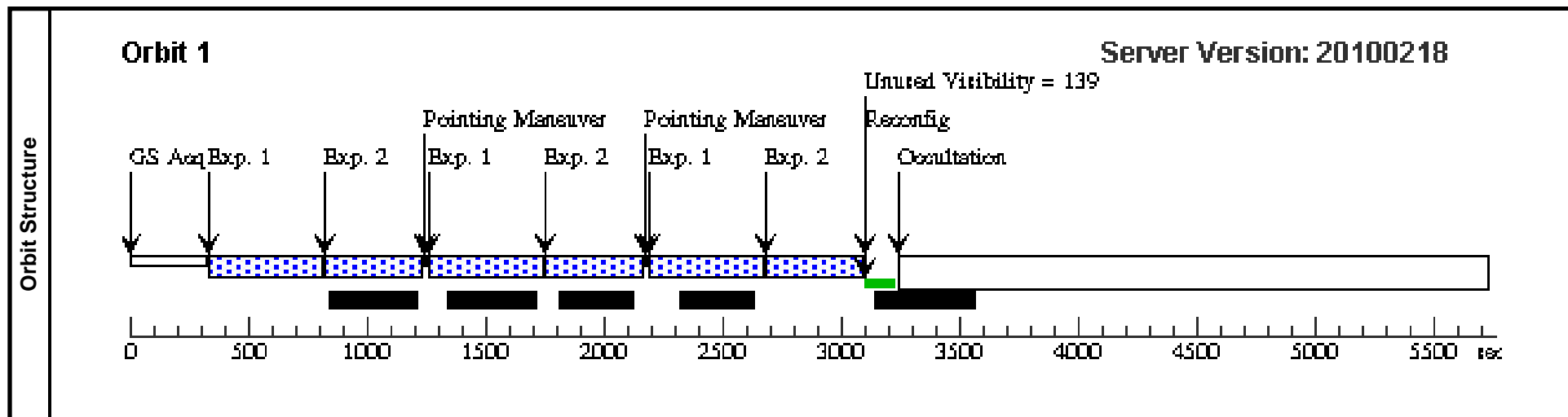
<b>Visit</b>	<b>Proposal 11838, Visit 09, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 50D TO 120 D; ORIENT 140D TO 210 D; ORIENT 230D TO 300 D; ORIENT 320D TO 30 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(10)	HB89-2230+114	RA: 22 32 36.4000 (338.1516667d) Dec: +11 43 51.00 (11.73083d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>	Redshift: 1.037	V=17.33	Reference Frame: ICRS				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(10) HB89-2230+114	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5	0;		Pattern 2, Exps 1-2 (2)	[=>(Pattern 1)]	[1]
		4				NSAMP=13			[=>(Pattern 2)] [=>(Pattern 3)]	
2	(10) HB89-2230+114	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5	0;		Pattern 2, Exps 1-2 (2)	[=>(Pattern 1)]	[1]	
	4				NSAMP=14			[=>(Pattern 2)] [=>(Pattern 3)]		



Proposal 11838 - Visit 10 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:49 GMT 2010

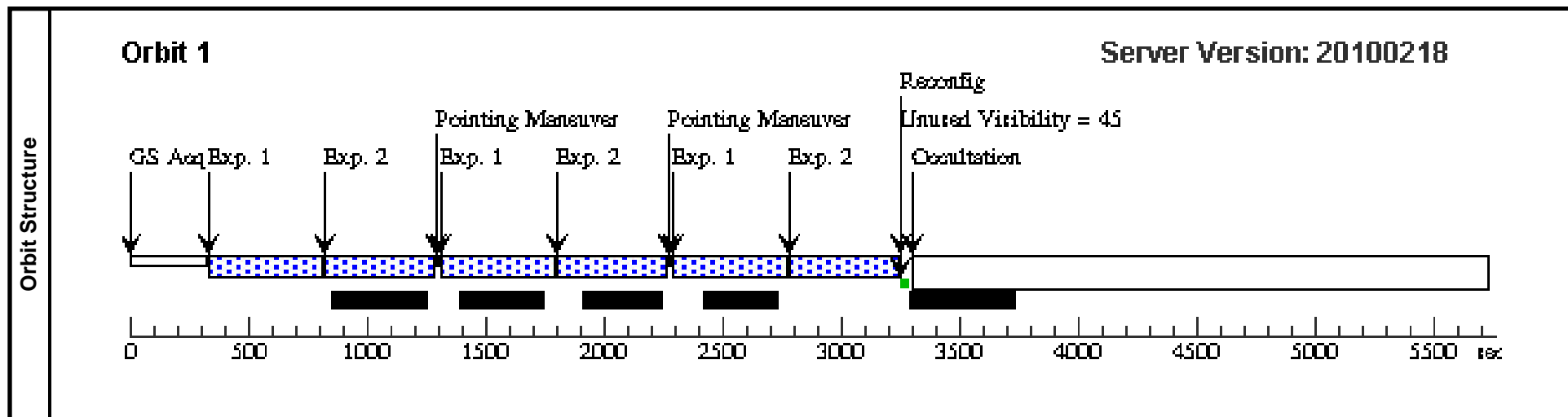
<b>Visit</b>	<b>Proposal 11838, Visit 10, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 60D TO 130 D; ORIENT 150D TO 220 D; ORIENT 240D TO 310 D; ORIENT 330D TO 40 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>		
	(11)	HB89-1116+128	RA: 11 18 57.3000 (169.7387500d) Dec: +12 34 42.00 (12.57833d) Equinox: J2000		Redshift: 2.129		V=18.5	Reference Frame: ICRS		
<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1		(11) HB89-1116+128 8	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2		(11) HB89-1116+128 8	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=13		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 11838 - Visit 11 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:49 GMT 2010

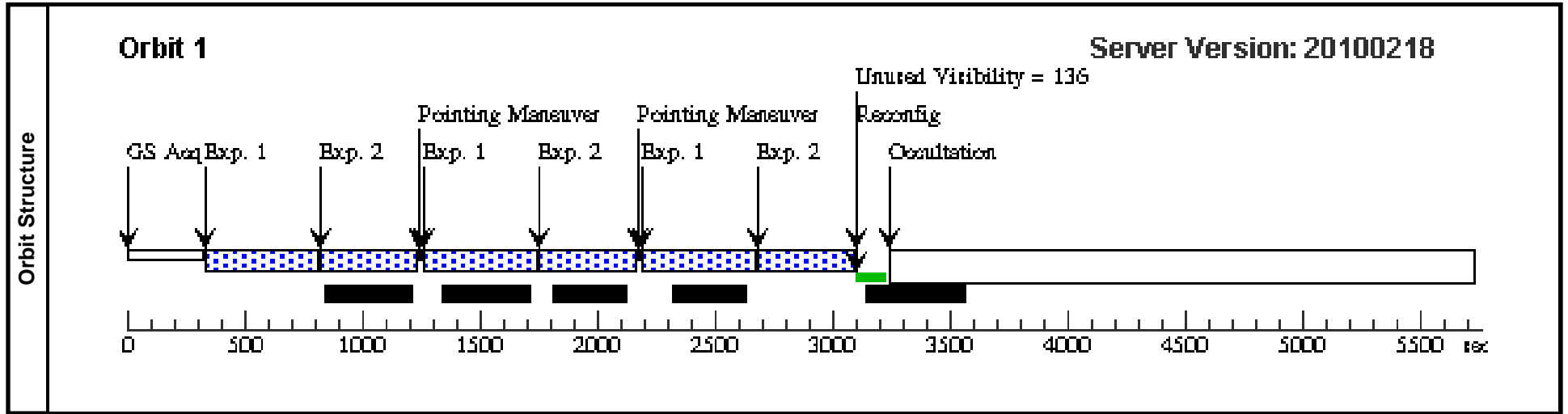
<b>Visit</b>	<b>Proposal 11838, Visit 11, scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 0.0D TO 70 D; ORIENT 90D TO 160 D; ORIENT 180D TO 250 D; ORIENT 270D TO 340 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)		
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>				
	(12)	HB89-0402-362	RA: 04 03 53.7000 (60.9737500d) Dec: -36 05 2.00 (-36.08389d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>	Redshift: 1.417	V=17.17	Reference Frame: ICRS				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(12) HB89-0402-362	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	(12) HB89-0402-362	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 11838 - Visit 12 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:50 GMT 2010

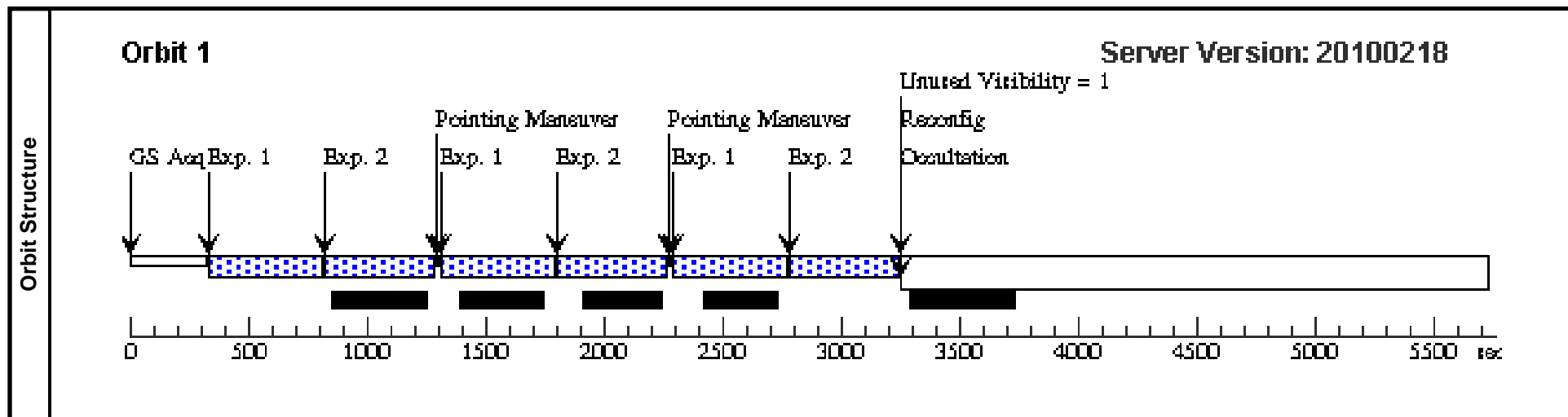
<b>Visit</b>	<b>Proposal 11838, Visit 12, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 10D TO 80 D; ORIENT 100D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 350 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(1-2)			
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(3)	PKS-0256+075	RA: 02 59 27.1000 (44.8629167d) Dec: +07 47 40.00 (7.79444d) Equinox: J2000	Redshift: 0.893		V=18.0	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(3) PKS-0256+075	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	(3) PKS-0256+075	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=13			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 11838 - Visit 13 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:50 GMT 2010

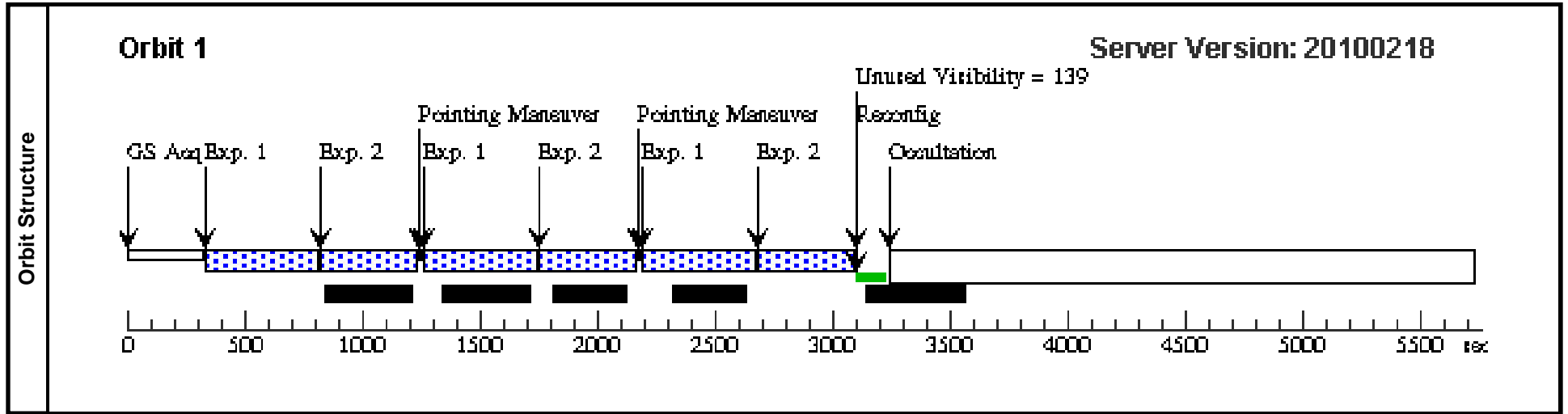
<b>Visit</b>	<b>Proposal 11838, Visit 13, scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 0.0D TO 70 D; ORIENT 90D TO 160 D; ORIENT 180D TO 250 D; ORIENT 270D TO 340 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(13)	FBQS-J095649.8+251515	RA: 09 56 49.9000 (149.2079167d) Dec: +25 15 16.00 (25.25444d) Equinox: J2000	Redshift: 0.712		V=17.46	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1		(13) FBQS-J095649.8+251515	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2		(13) FBQS-J095649.8+251515	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 11838 - Visit 14 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:50 GMT 2010

<b>Visit</b>	<b>Proposal 11838, Visit 14, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 0D TO 60 D; ORIENT 80D TO 150 D; ORIENT 170D TO 240 D; ORIENT 260D TO 330 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false					(1-2)	
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>		
	(14)	HB89-1502+106	RA: 15 04 25.0000 (226.1041667d) Dec: +10 29 39.00 (10.49417d) Equinox: J2000		Redshift: 1.839		V=18.56	Reference Frame: ICRS		
<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1		(14) HB89-1502+106	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP50;		Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2		(14) HB89-1502+106	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP50;	NSAMP=14	Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 11838 - Visit 15 - Completing a Flux-limited Survey for X-ray Emission from Radio Jets

Tue Apr 06 01:01:50 GMT 2010

<b>Visit</b>	<b>Proposal 11838, Visit 15, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR Special Requirements: ORIENT 50D TO 120 D; ORIENT 140D TO 210 D; ORIENT 230D TO 300 D; ORIENT 320D TO 30 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(2)		Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false				(1-2)			
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>			
	(2)	HB89-0748+126	RA: 07 50 52.0000 (117.7166667d) Dec: +12 31 5.00 (12.51806d) Equinox: J2000	Redshift: 0.889		V=17.8	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the NED 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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(2) HB89-0748+126	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=14			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	(2) HB89-0748+126	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=STEP5 0; NSAMP=13			Pattern 2, Exps 1-2 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]

