13112 - The Hierarchical Assembly of Massive Black Holes: Identifying Kpc-Scale Triple AGNs with Chandra, HST, and EVLA

Cycle: 20, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) SDSSJ0849+1114	WFC3/IR WFC3/UVIS	1	05-Feb-2013 14:25:30.0	yes
02	(2) SDSSJ0858+1822	WFC3/IR WFC3/UVIS	1	05-Feb-2013 14:25:31.0	yes
03	(3) SDSSJ1027+1749	WFC3/IR WFC3/UVIS	1	05-Feb-2013 14:25:32.0	yes

3 Total Orbits Used

ABSTRACT

We propose to image three optically selected kpc-scale triple-AGN candidates with Chandra, HST, and EVLA. The detection of three luminous hard X-ray point sources in each system would confirm their triple AGN nature unambiguously, enabling the first direct evidence for galaxies containing triple massive black holes. The joint HST and EVLA imaging will help characterize the excitation mechanism of the observed emission (AGN,

starburst, and/or shocks), and will explore host galaxy morphologies and spatially resolved star formation activity in these unique mergers.

OBSERVING DESCRIPTION

WFC3 (F336W and F105W) imaging of optically selected kpc-scale triple AGN candidates.
F105W imaging for host galaxy morphology. F336W imaging for small-scale star formation.

Visit

Proposal 13112, Visit 01, implementation Tue Feb 05 14:25:34 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: (none)

Comments: SDSSJ0849+1114

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(1)
(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2)

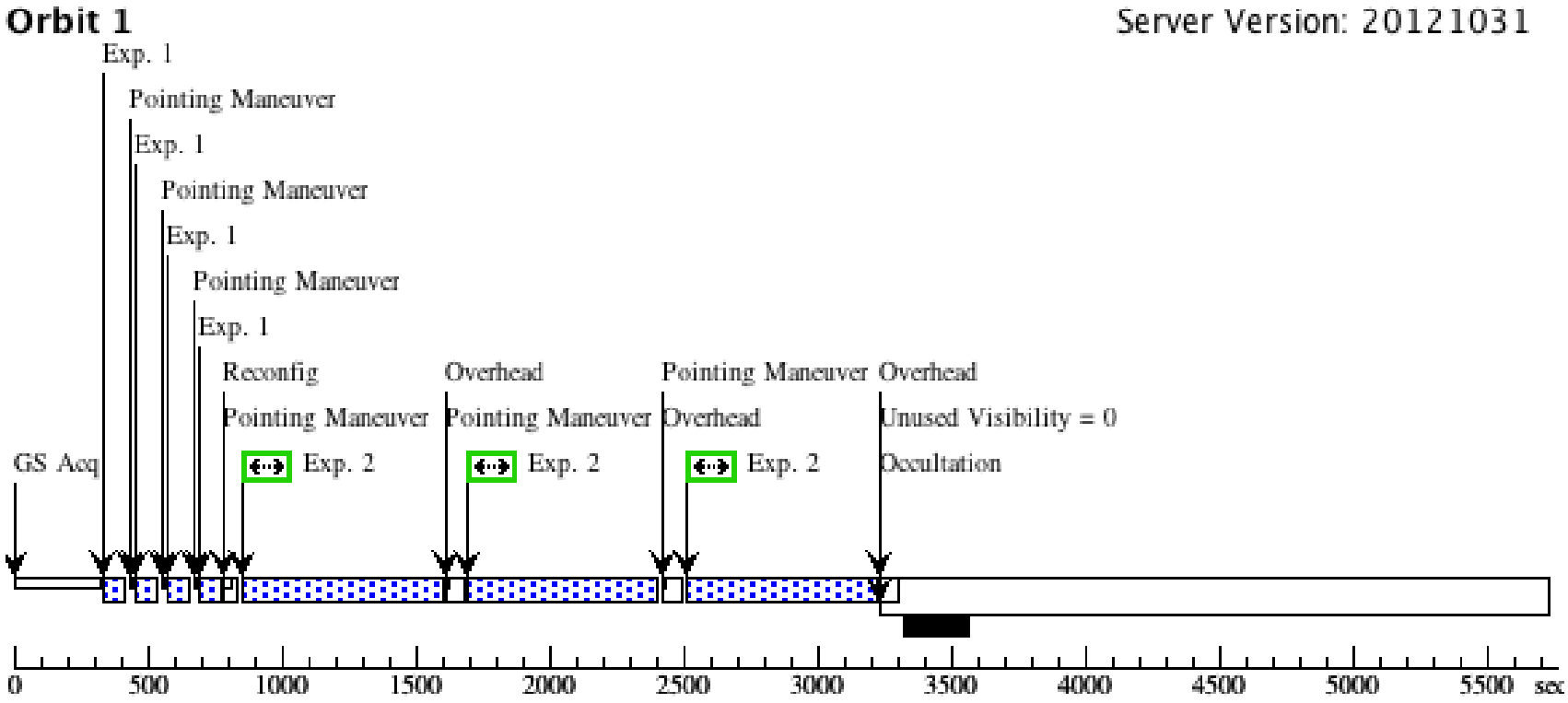
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SDSSJ0849+1114	RA: 08 49 5.4000 (132.2725000d) Dec: +11 14 45.90 (11.24608d) Equinox: J2000		V=(?) sdss r 15.90	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	IR	(1) SDSSJ0849+1114	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-1 in Visit 01 (1)	*[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***
2	UVIS	(1) SDSSJ0849+1114	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F336W	FLASH=10		Pattern 2, Exps 2-2 in Visit 01 (2)	722 Secs *[==>717.0 Secs (Pattern 1)]* *[==>717.0 Secs (Pattern 2)]* *[==>717.0 Secs (Pattern 3)]*	***[1]***

Orbit Structure



Visit

Proposal 13112, Visit 02, implementation Tue Feb 05 14:25:34 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: (none)

Comments: SDSSJ0858+1822

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(1)
(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2)

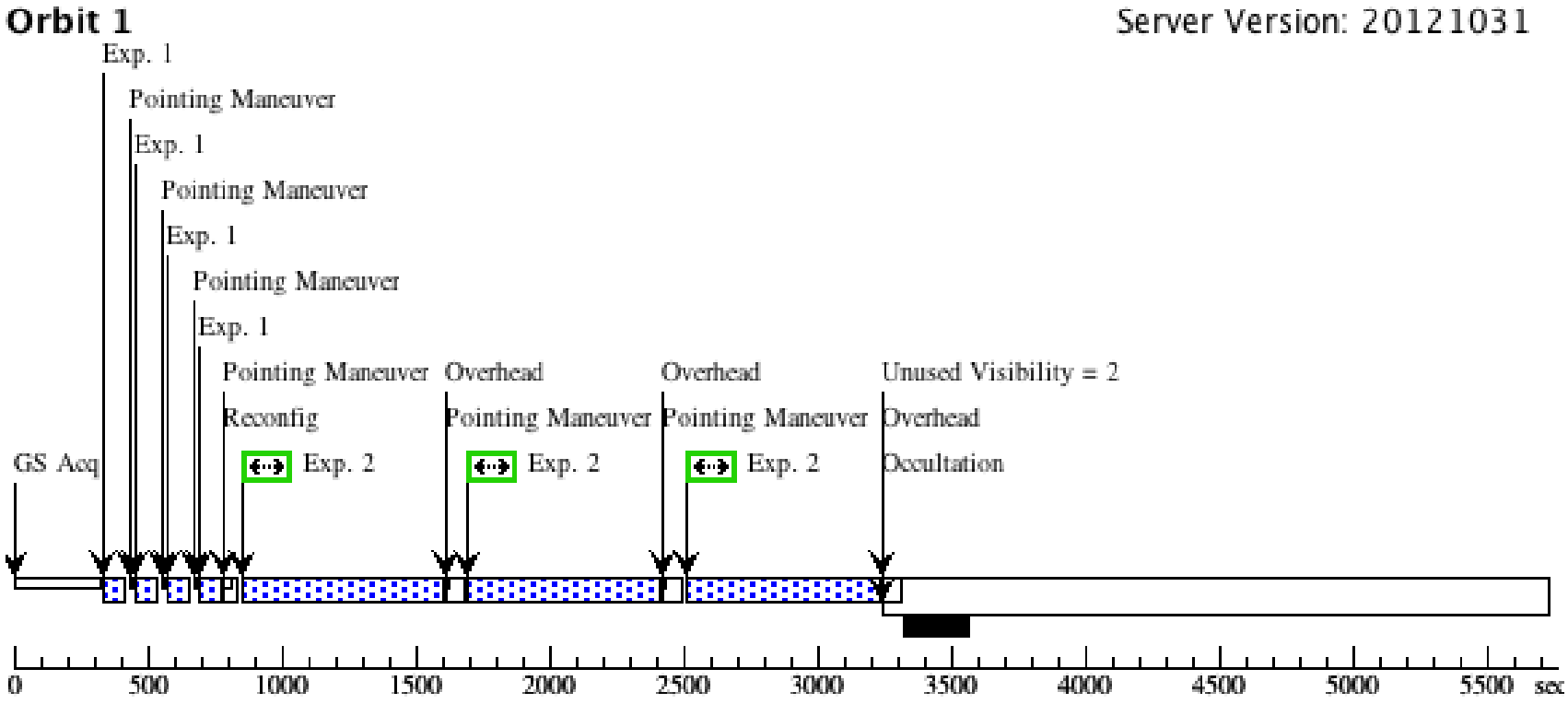
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SDSSJ0858+1822	RA: 08 58 37.7000 (134.6570833d) Dec: +18 22 23.40 (18.37317d) Equinox: J2000		V=(?) sdss r 15.70	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	IR	(2) SDSSJ0858+1822	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-1 in Visit 02 (1)	*[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***
2	UVIS	(2) SDSSJ0858+1822	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F336W	FLASH=10		Pattern 2, Exps 2-2 in Visit 02 (2)	722 Secs *[==>718.0 Secs (Pattern 1)]* *[==>718.0 Secs (Pattern 2)]* *[==>718.0 Secs (Pattern 3)]*	***[1]***

Orbit Structure



Visit

Proposal 13112, Visit 03, implementation Tue Feb 05 14:25:34 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: (none)

Comments: SDSSJ1027+1749

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(1)
(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSSJ1027+1749	RA: 10 27 0.5500 (156.7522917d) Dec: +17 49 0.20 (17.81672d) Equinox: J2000		V=(?) sdss r 15.18	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	IR	(3) SDSSJ1027+1749	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=7; SAMP-SEQ=STEP25	GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in Visit 03 (1)	*[==>(Pattern 1)]* *[==>(Pattern 2)]* *[==>(Pattern 3)]* *[==>(Pattern 4)]*	***[1]***
2	UVIS	(3) SDSSJ1027+1749	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F336W	FLASH=10		Pattern 2, Exps 2-2 in Visit 03 (2)	722 Secs *[==>718.0 Secs (Pattern 1)]* *[==>718.0 Secs (Pattern 2)]* *[==>718.0 Secs (Pattern 3)]*	***[1]***

Orbit Structure