12746 - Close binary populations in metal-rich globular clusters

Cycle: 19, 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	(2) NGC-6760	WFC3/UVIS	1	05-Oct-2011 21:15:11.0	yes
02	(2) NGC-6760	ACS/WFC	1	05-Oct-2011 21:15:15.0	yes
03	(4) NGC-6352	WFC3/UVIS	1	05-Oct-2011 21:15:19.0	yes
04	(4) NGC-6352	ACS/WFC	1	05-Oct-2011 21:15:23.0	yes

4 Total Orbits Used

ABSTRACT

Recent observations of Galactic and extragalactic globular clusters have suggested that bright X-ray sources preferentially reside in metal-rich clusters. The same scenario may also happen for low-luminosity globular cluster X-ray sources. Although Chandra has observed many Galactic globular clusters, majority of them are metal-poor with [Fe/H]<-1 and there is no observational evidence for metal dependence. We propose to use Chandra/HST to study a sample of metal-rich ([Fe/H]>-0.5) globular clusters and to test the prediction that metallicity can affect the population of low-luminosity globular cluster X-ray sources.

OBSERVING DESCRIPTION

We make use the high resolution images provided by HST to identify the nature of X-ray sources in globular cluster. We will cross-register the HST images, ground-based wide-field images, and Chandra images together for comparison.

Visit

Proposal 12746, Visit 01 Thu Oct 06 01:15:27 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern		Exposures
(1)	Pattern Type=WFC3-UVIS-MOS-DITH-LINE Purpose=MOSAIC Number Of Points=3 Point Spacing=2.4 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.754 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-UVIS-MOS-DITH-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.119 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=33.606 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets

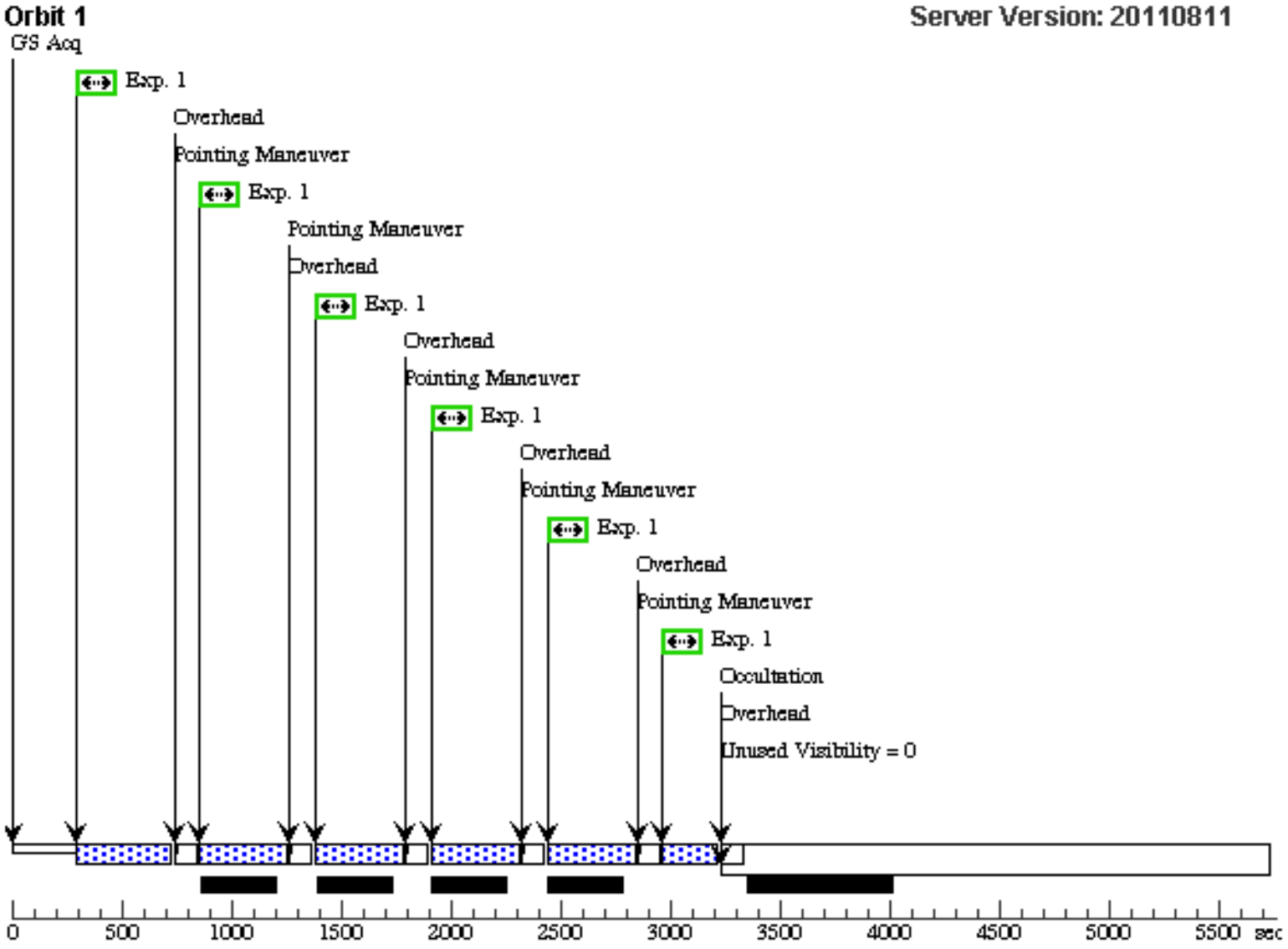
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC-6760	RA: 19 11 12.0600 (287.8002500d) Dec: +01 01 49.70 (1.03047d) Equinox: J2000		V=9.78	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) NGC-6760	WFC3/UVIS, ACCUM, UVIS	F336W	CR-SPLIT=NO		Pattern 1, Exps 1-1 in Visit 01 (1)	3145 Secs *[==>400.0 Secs (Pattern 1,1)]* *[==>400 Secs (Pattern 1,2)]* *[==>400.0 Secs (Pattern 2,1)]* *[==>400.0 Secs (Pattern 2,2)]* *[==>400.0 Secs (Pattern 3,1)]* *[==>253.0 Secs (Pattern 3,2)]*	***[1]***

Orbit Structure



Visit

Proposal 12746, Visit 02 Thu Oct 06 01:15:28 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false		(1-2)

Fixed Targets

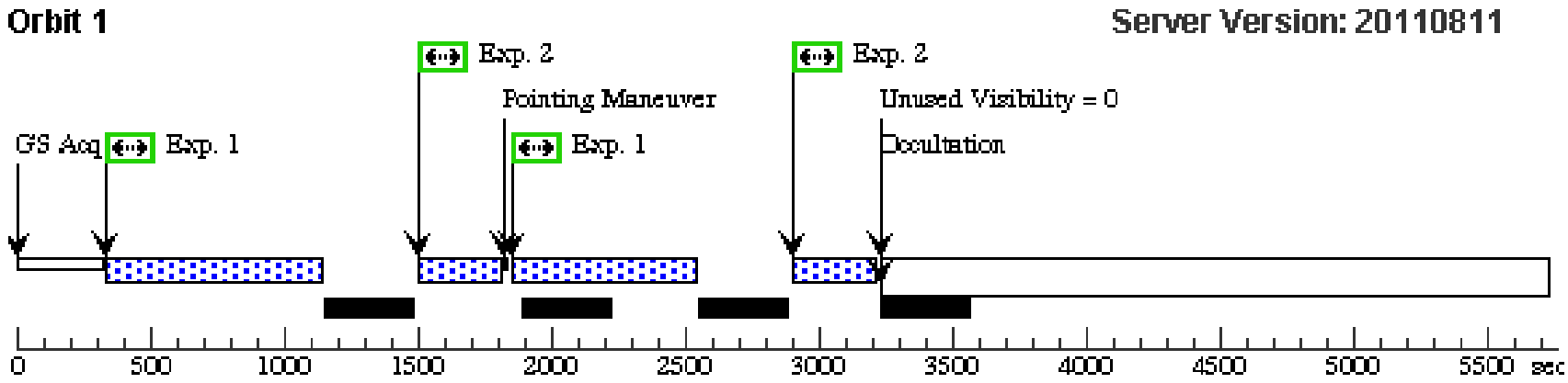
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC-6760	RA: 19 11 12.0600 (287.8002500d) Dec: +01 01 49.70 (1.03047d) Equinox: J2000		V=9.78	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(2) NGC-6760	ACS/WFC, ACCUM, WFC	F658N	CR-SPLIT=NO		Pattern 2, Exps 1-2 in Visit 02 (2)	1516 Secs *[==>600.0 Secs (Pattern 1)]* *[==>536.0 Secs (Pattern 2)]*	*[1]*
2		(2) NGC-6760	ACS/WFC, ACCUM, WFC	F625W	CR-SPLIT=NO		Pattern 2, Exps 1-2 in Visit 02 (2)	300 Secs *[==>150 Secs (Pattern 1)]* *[==>150 Secs (Pattern 2)]*	*[1]*

Orbit Structure



Visit

Proposal 12746, Visit 03 Thu Oct 06 01:15:28 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern		Exposures
(1)	Pattern Type=WFC3-UVIS-MOS-DITH-LINE Purpose=MOSAIC Number Of Points=3 Point Spacing=2.4 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.754 Angle Between Sides= Center Pattern=true	Pattern Type=WFC3-UVIS-MOS-DITH-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.119 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=33.606 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets

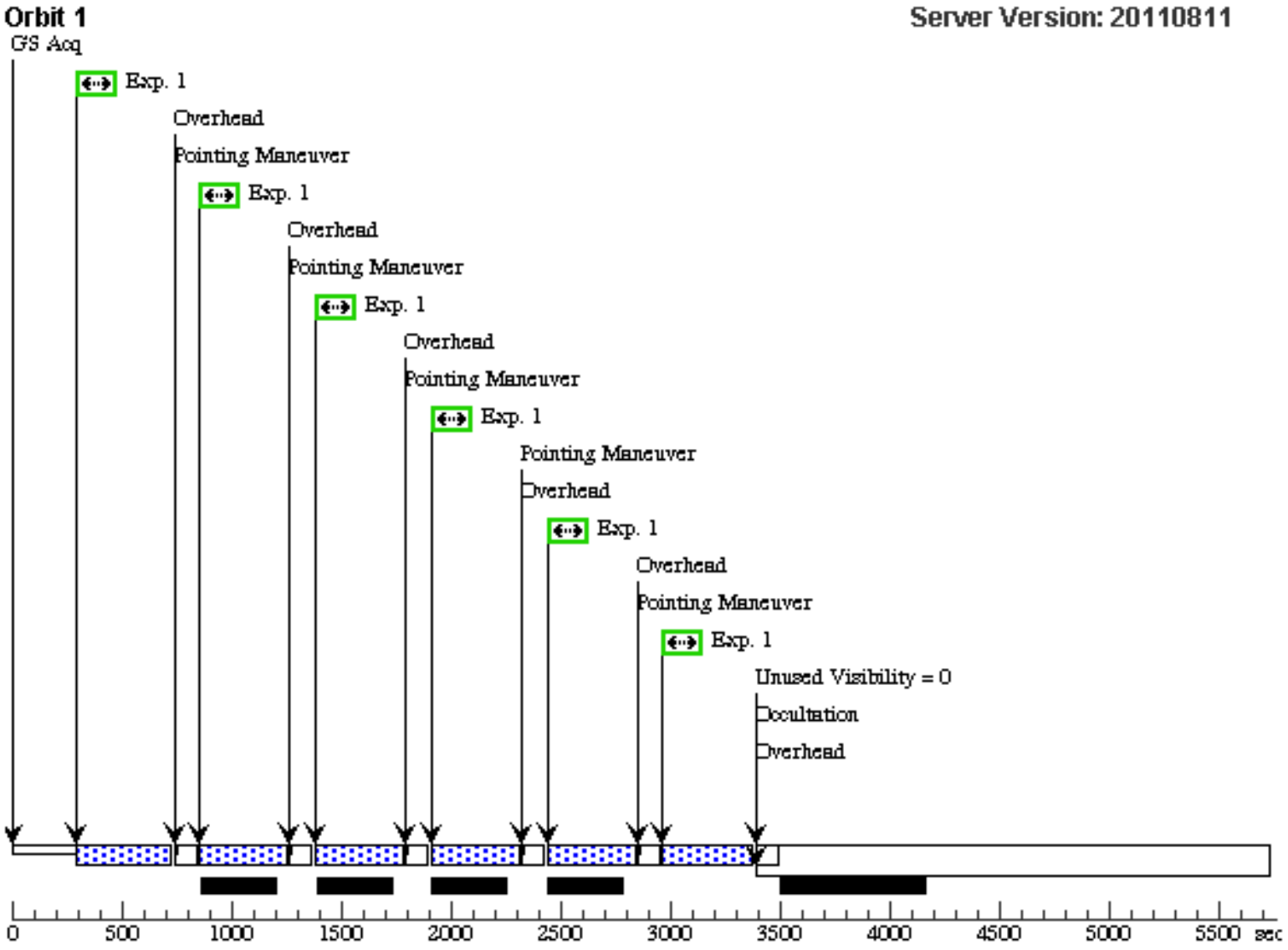
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	NGC-6352	RA: 17 25 29.1100 (261.3712917d) Dec: -48 25 19.80 (-48.42217d) Equinox: J2000		V=8.87	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(4) NGC-6352	WFC3/UVIS, ACCUM, UVIS	F336W	CR-SPLIT=NO		Pattern 1, Exps 1-1 in Visit 03 (1)	2769 Secs *[==>400.0 Secs (Pattern 1,1)]* *[==>400 Secs (Pattern 1,2)]* *[==>400 Secs (Pattern 2,1)]* *[==>400 Secs (Pattern 2,2)]* *[==>400 Secs (Pattern 3,1)]* *[==>410.0 Secs (Pattern 3,2)]*	***[1]***

Orbit Structure



Visit

Proposal 12746, Visit 04 Thu Oct 06 01:15:29 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false		(1-2)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	NGC-6352	RA: 17 25 29.1100 (261.3712917d) Dec: -48 25 19.80 (-48.42217d) Equinox: J2000		V=8.87	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(4) NGC-6352	ACS/WFC, ACCUM, WFC	F658N	CR-SPLIT=NO		Pattern 2, Exps 1-2 in Visit 04 (2)	1188 Secs *[==>650.0 Secs (Pattern 1)]* *[==>643.0 Secs (Pattern 2)]*	*[1]*
2		(4) NGC-6352	ACS/WFC, ACCUM, WFC	F625W	CR-SPLIT=NO		Pattern 2, Exps 1-2 in Visit 04 (2)	250 Secs *[==>150 Secs (Pattern 1)]* *[==>150 Secs (Pattern 2)]*	*[1]*

Orbit Structure