



12763 - The Impact of Brightest Cluster Galaxy Formation on the Intracluster Medium

Cycle: 19, 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) RXJ0720.8+7109	WFC3/IR	4	15-Sep-2011 21:18:11.0	yes

4 Total Orbits Used

ABSTRACT

We propose Chandra and HST observations of a unique X-ray cluster in which the Brightest Cluster Galaxy (BCG) is in the late stages of formation. The Chandra observations will be used to study how the properties of the intracluster medium are impacted by BCG formation and the HST data will be used to map out the intracluster stellar light. We will test whether the formation of the BCG has destroyed the cool core and determine the role of intracluster stars in enriching the intracluster medium. The proposed observations will be combined with our existing Chandra and HST data for clusters where the BCG is in the early stages of formation, allowing us to develop a more complete evolutionary picture of how BCG formation has

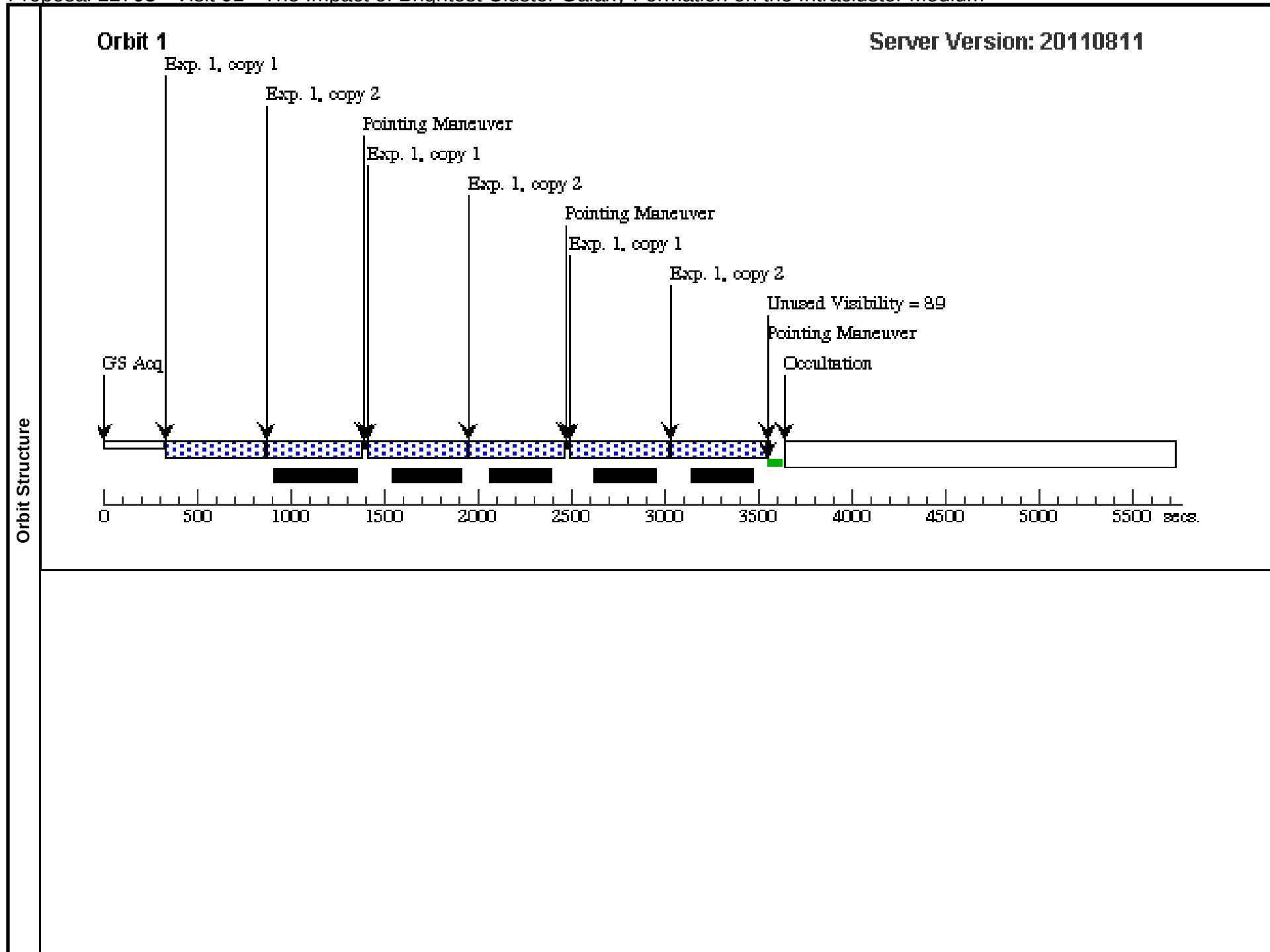
affected the intracluster medium.

OBSERVING DESCRIPTION

The center of a cluster of galaxies at moderate redshift will be observed with WFC3/IR to map out the stellar light near the center of the cluster. We will observe the cluster in the F160W and F105W filters. The approximate exposure time is 4000 seconds for F160W and 8000 seconds for F105W. To achieve these exposure times we will observe the target using the WFC3-IR-DITHER-BOX-MIN dither pattern.

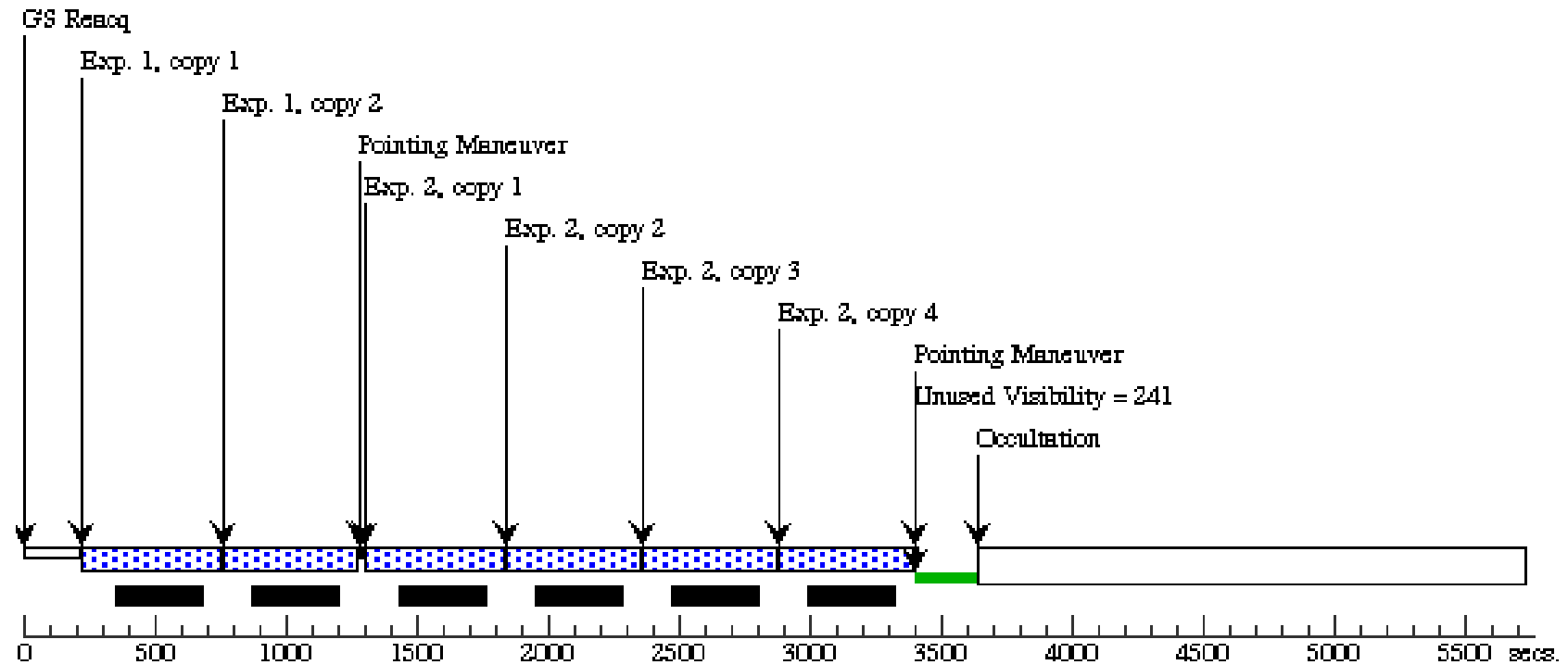
Proposal 12763 - Visit 01 - The Impact of Brightest Cluster Galaxy Formation on the Intracluster Medium

Visit	Proposal 12763, Visit 01										Fri Sep 16 01:18:20 GMT 2011	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: WFC3/IR											
	Special Requirements: (none)											
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=true						(1), (2)	
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	RXJ0720.8+7109		RA: 07 20 53.9834 (110.2249308d) Dec: +71 08 57.00 (71.14917d) Equinox: J2000				V=19.5+/-0.4		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	F160W	(1) RXJ0720.8+7109	WFC3/IR, MULTIACCUM, IR		F160W	SAMP-SEQ=STEP50; NSAMP=15		Pattern 1, Exps 1-1 i n Visit 01 (1)	[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)]		[1]
										[==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)]		[2]
	2	F105W	(1) RXJ0720.8+7109	WFC3/IR, MULTIACCUM, IR		F105W	NSAMP=15; SAMP-SEQ=STEP50		Pattern 1, Exps 2-2 i n Visit 01 (1)	[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)]		[2]
										[==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)]		[3]
										[==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]		[4]



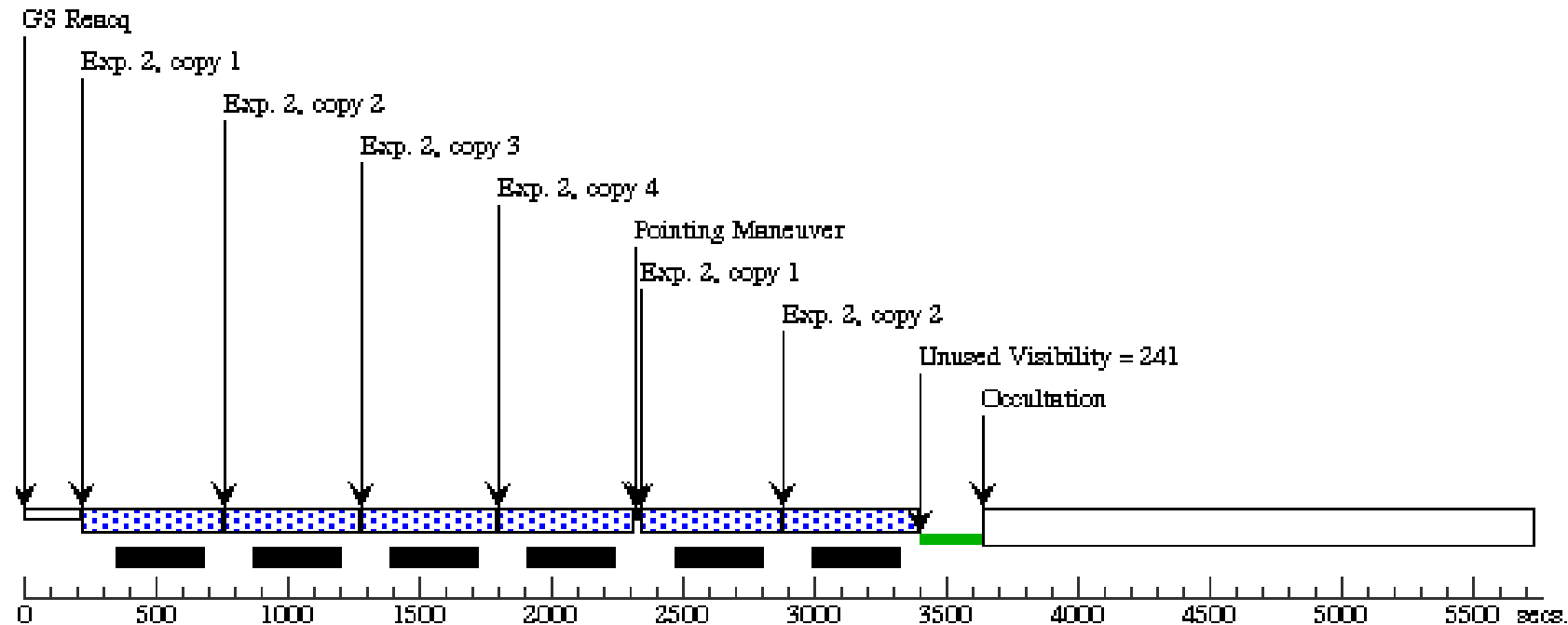
Orbit 2

Server Version: 20110811



Orbit 3

Server Version: 20110811



Orbit 4

Server Version: 20110811

