



# 10835 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Cycle: 15, Proposal Category: GO

(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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## VISITS

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(2) NGC-3379-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:10.0	yes
02	(2) NGC-3379-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:16.0	yes
03	(2) NGC-3379-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:20.0	yes
04	(2) NGC-3379-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:23.0	yes
05	(2) NGC-3379-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:27.0	yes
06	(1) NGC-4278-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:31.0	yes
07	(1) NGC-4278-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:34.0	yes
08	(1) NGC-4278-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:38.0	yes

## Proposal 10835 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
09	(1) NGC-4278-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:41.0	yes
10	(1) NGC-4278-CENTER-FIELD	ACS/WFC	1	08-Aug-2006 21:55:45.0	yes

10 Total Orbits Used

### **ABSTRACT**

Combined high-resolution imaging from Hubble and Chandra (CXO) has revolutionized our understanding of extragalactic low-mass X-ray binaries (LMXBs) and globular clusters (GCs), yet their connection in early-type galaxies has remained unstudied at the luminosities of the Galactic LMXBs in GCs. NGC 4278 and 3379 will be the first two prototypical elliptical galaxies with deep CXO observations enabling the study of LMXBs at lower luminosities. We propose mosaic ACS observations of both galaxies (5 fields per galaxy) that will provide the most comprehensive view into the connection between GCs and LMXBs in early-type galaxies. We will detect ~860 and ~270 GCs in all of NGC 4278 and NGC 3379, respectively. These two galaxies will have among the greatest number of detected GC-LMXBs to date (~130 & 50) and will include the faintest GC-LMXBs in a normal early-type galaxy. We will measure the fraction of GCs which contain LMXBs, as a function of X-ray luminosity, galactocentric distance, color, and GC half-light radius. Using the radial profiles of optical light, GCs, and LMXBs, we will determine the percentage of field LMXBs which may have originated in GCs. We will use the measured GC properties over the entire extent of both galaxies to constrain theories of GC formation and evolution.

### **OBSERVING DESCRIPTION**

Our science goal is to obtain a nearly complete census of globular clusters in NGC 3379 and NGC 4278, and make comparisons to the low-mass X-ray binary population using the ACS/WFC. For each galaxy, we will perform a 2x2 mosaic plus an additional central field to cover beyond the isophotal 25 mag arcsec<sup>-2</sup> surface. We will observe the central fields in F475W for 676s total exposure and in F850LP for 1150s total exposure using 2-point hot-pixel dither patterns plus a 90s exposure to avoid saturation at the galaxy center. For the 2x2 mosaic fields (accomplished by POS\_TARG offsets from the central fields), we will observe in F475W for 702s total exposure using a 2-point hot-pixel dither pattern and in F850LP for 1200s total exposure using a 3-point hot-pixel dither pattern. Our chosen dither patterns optimize the rejection of hot pixels and cosmic rays while

## Proposal 10835 - Overview

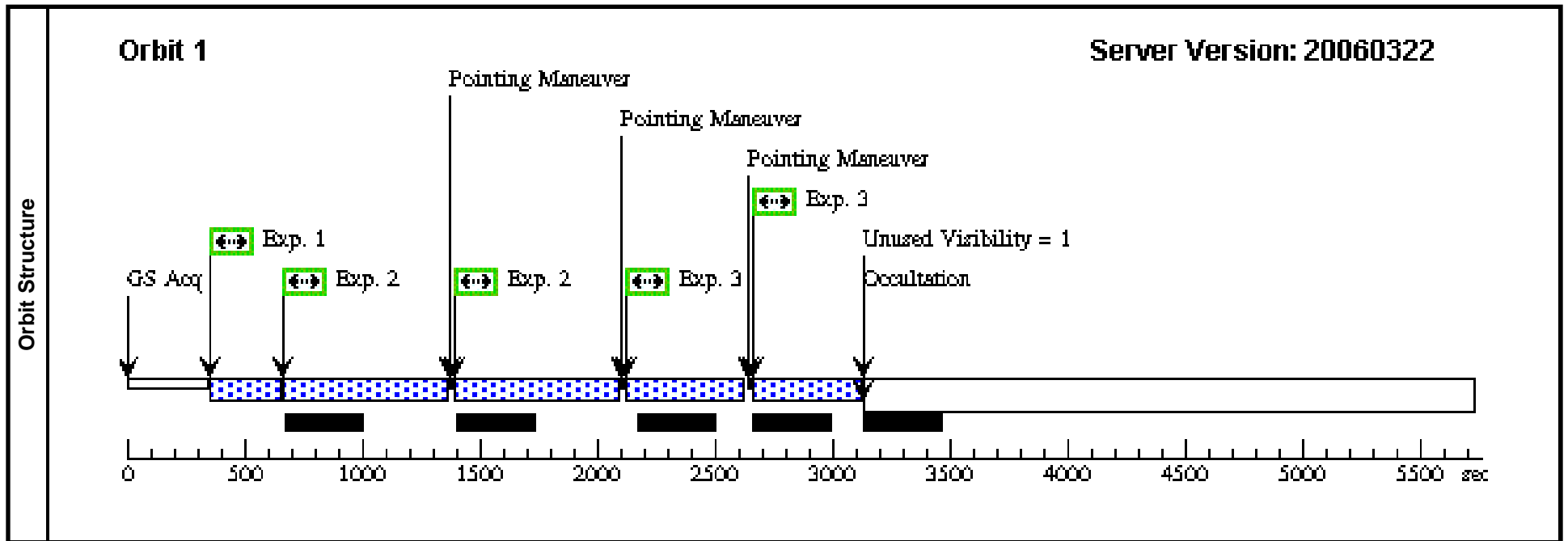
maximizing total exposure time. NGC 3379 is schedulable for 113 days, while NGC 4278 is schedulable for 122 days.

### **ADDITIONAL COMMENTS**

The 2x2 mosaic fields are currently constrained to have the same orientation as the central field. This requirement could be relaxed if scheduling difficulties arise.

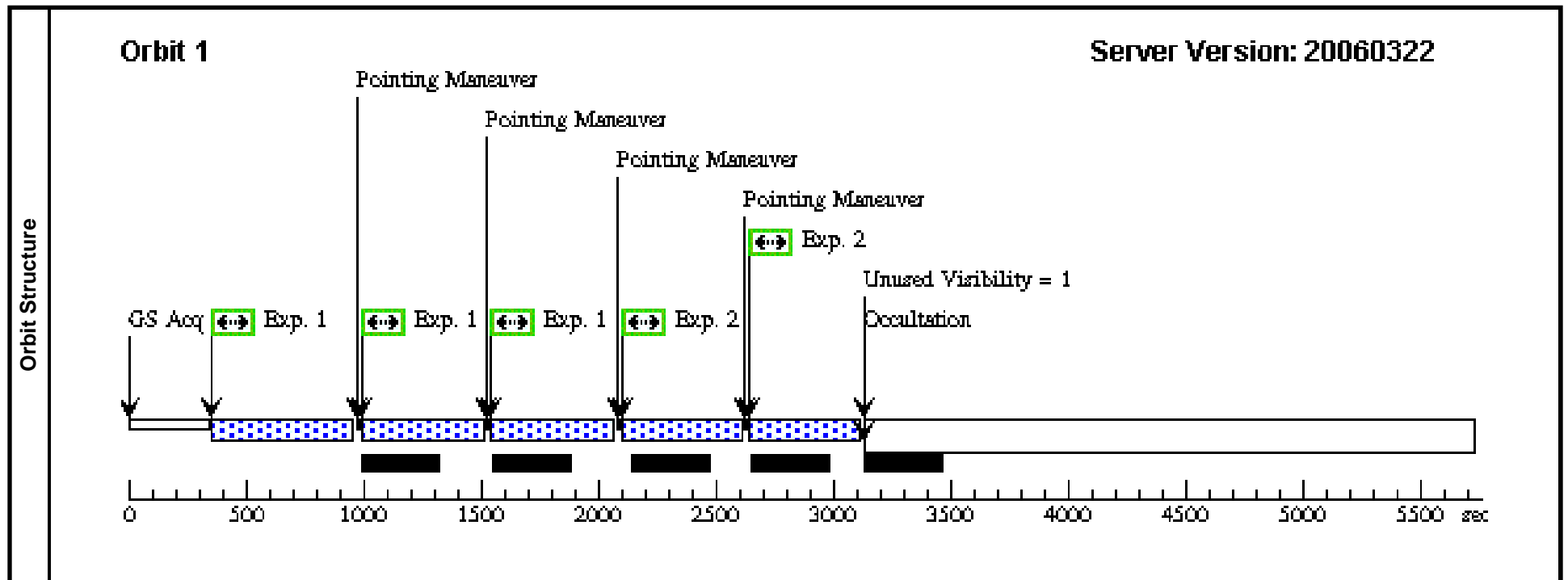
Proposal 10835 - Visit 01 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		<b>Proposal 10835, Visit 01</b> <span style="float: right;">Wed Aug 09 01:55:47 GMT 2006</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/WFC Special Requirements: (none)								
Patterns	#	Primary Pattern		Secondary Pattern			Exposures			
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(2), (3)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC-3379-CENTER-FIELD	RA: 10 47 49.6000 (161.9566667d) Dec: +12 34 53.90 (12.58164d) Equinox: J2000		V=(?) V=22.9, magnitude is that of a typical globular cluster in NGC 3379	Reference Frame: ICRS				
<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/[Actual Dur.]	Orbit
	1	NGC3379_F 850LP-Cs	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO			90.0 Secs	
									[=>]	[1]
	2	NGC3379_F 850LP_C	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO		Pattern 2-2 (1)	575.0 Secs	
								[=>(Pattern 1)]		
								[=>(Pattern 2)]	[1]	
3	NGC3379_F 475W_C	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO			Pattern 3-3 (1)	338.1 Secs	
								[=>(Pattern 1)]		
								[=>(Pattern 2)]	[1]	



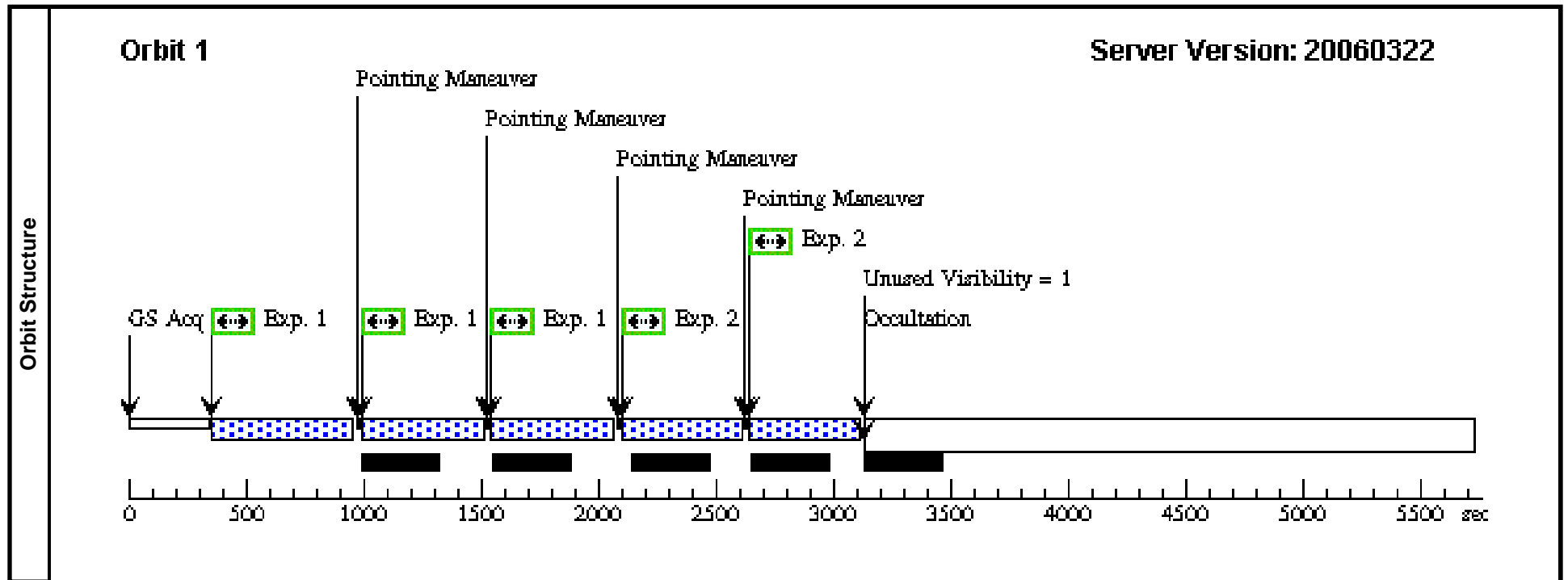
Proposal 10835 - Visit 02 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		Wed Aug 09 01:55:47 GMT 2006									
<b>Patterns</b>		<b>#</b>		<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>			
		(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(2)					
		(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(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-3379-CENTER-FIELD	RA: 10 47 49.6000 (161.9566667d) Dec: +12 34 53.90 (12.58164d) Equinox: J2000		V=(?) V=22.9, magnitude is that of a typical globular cluster in NGC 3379	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	NGC3379_F 850LP_M1	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG -96.497, -104.084	Pattern 1-1 (2)	400.0 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
		2	NGC3379_F 475W_M1	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG -96.497, -104.084	Pattern 2-2 (1)	351.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



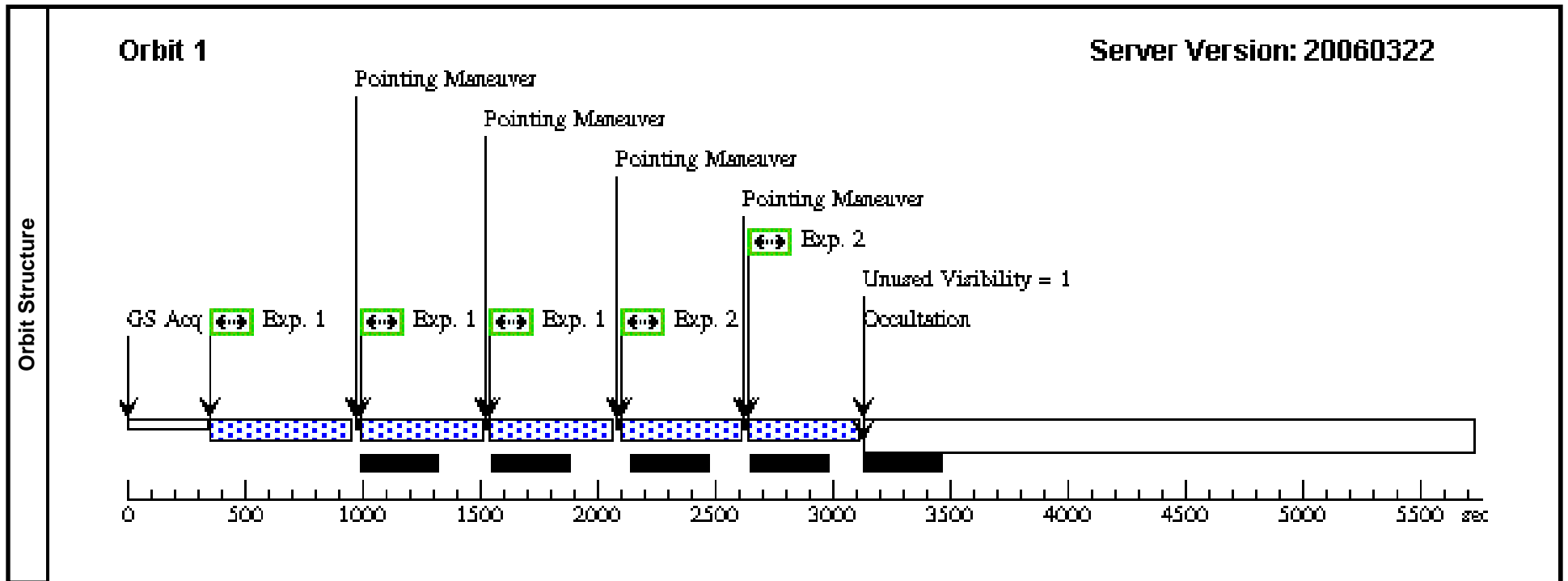
Proposal 10835 - Visit 03 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		Wed Aug 09 01:55:48 GMT 2006									
<b>Patterns</b>		<b>#</b>		<b>Primary Pattern</b>			<b>Secondary Pattern</b>		<b>Exposures</b>		
		(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(2)				
		(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(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-3379-CENTER-FIELD	RA: 10 47 49.6000 (161.9566667d) Dec: +12 34 53.90 (12.58164d) Equinox: J2000		V=(?) V=22.9, magnitude is that of a typical globular cluster in NGC 3379	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	NGC3379_F 850LP_M2	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG -96.497, 89.298	Pattern 1-1 (2)	400.0 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
		2	NGC3379_F 475W_M2	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG -96.497, 89.298	Pattern 2-2 (1)	351.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



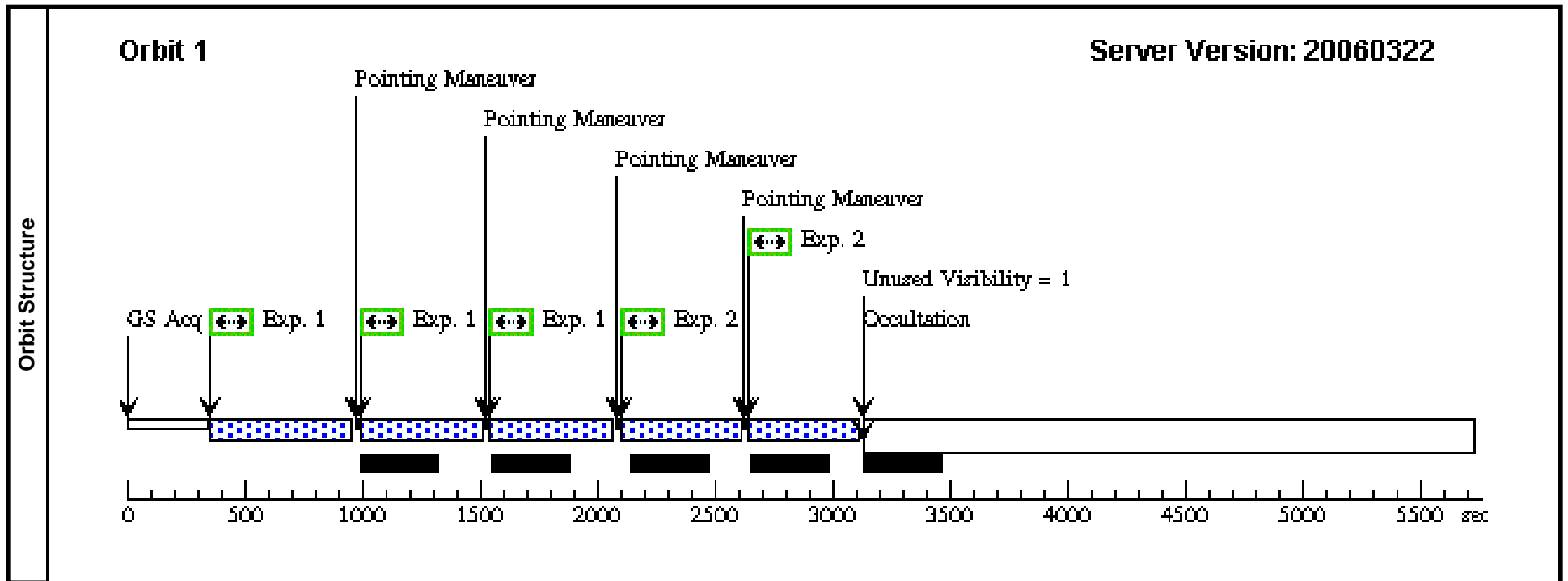
Proposal 10835 - Visit 04 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		<b>Proposal 10835, Visit 04</b> <span style="float: right;">Wed Aug 09 01:55:48 GMT 2006</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/WFC Special Requirements: SAME ORIENT AS 02								
Patterns	#	Primary Pattern		Secondary Pattern			Exposures			
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(2)			
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC-3379-CENTER-FIELD	RA: 10 47 49.6000 (161.9566667d) Dec: +12 34 53.90 (12.58164d) Equinox: J2000		V=(?) V=22.9, magnitude is that of a typical globular cluster in NGC 3379	Reference Frame: ICRS				
<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/[Actual Dur.]	Orbit
	1	NGC3379_F 850LP_M3	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 96.497,1 04.084	Pattern 1-1 (2)	400.0 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2	NGC3379_F 475W_M3	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 96.497,1 04.084	Pattern 2-2 (1)	351.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	



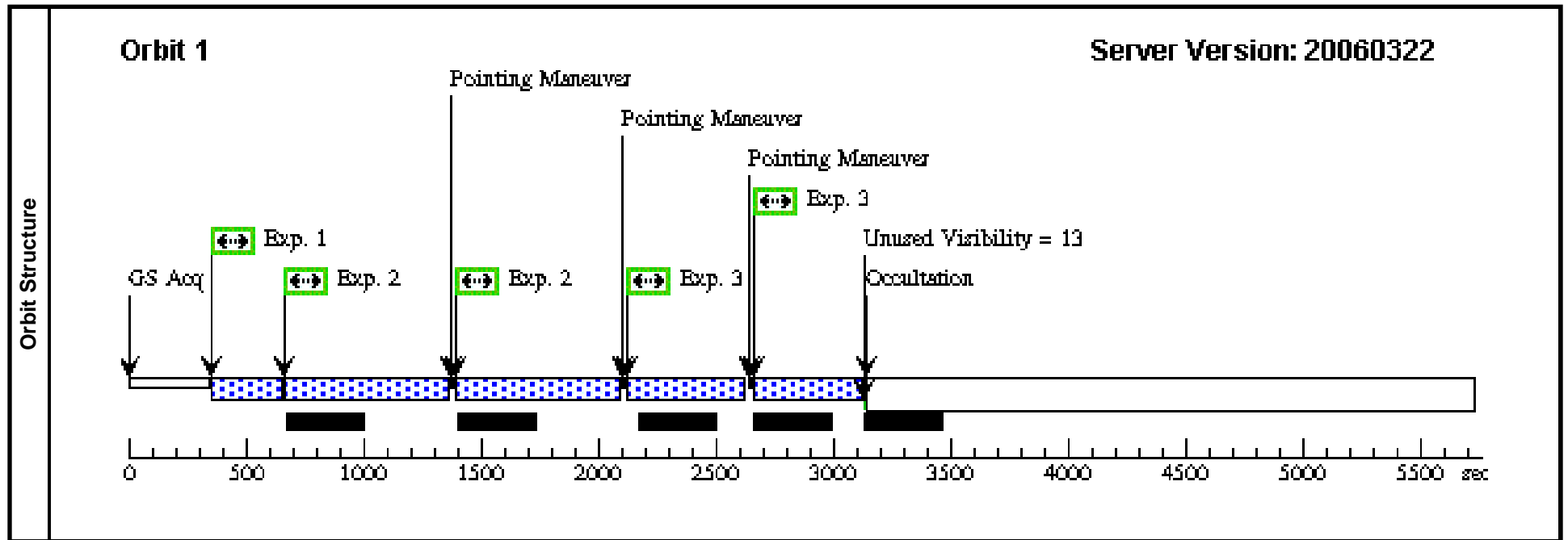
Proposal 10835 - Visit 05 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		Proposal 10835, Visit 05 <span style="float: right;">Wed Aug 09 01:55:49 GMT 2006</span> Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: SAME ORIENT AS 02								
Patterns	#	Primary Pattern		Secondary Pattern			Exposures			
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(2)			
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC-3379-CENTER-FIELD	RA: 10 47 49.6000 (161.9566667d) Dec: +12 34 53.90 (12.58164d) Equinox: J2000		V=(?) V=22.9, magnitude is that of a typical globular cluster in NGC 3379	Reference Frame: ICRS				
<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/[Actual Dur.]	Orbit
	1	NGC3379_F 850LP_M4	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 96.497,- 89.298	Pattern 1-1 (2)	400.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	NGC3379_F 475W_M4	(2) NGC-3379-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 96.497,- 89.298	Pattern 2-2 (1)	351.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]	



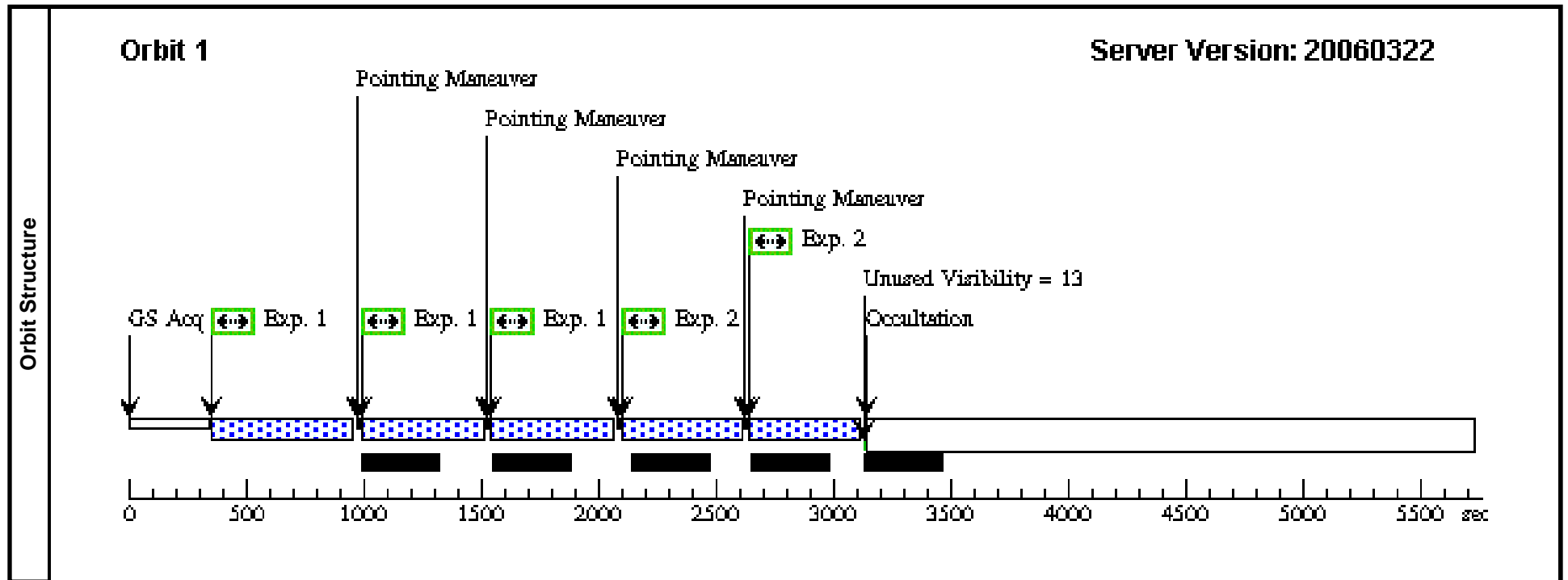
Proposal 10835 - Visit 06 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

<b>Visit</b>	Proposal 10835, Visit 06 <span style="float: right;">Wed Aug 09 01:55:49 GMT 2006</span> Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)										
	<b>Patterns</b>	#	<b>Primary Pattern</b>				<b>Secondary Pattern</b>				<b>Exposures</b>
(1)		Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false						(2), (3)	
<b>Fixed Targets</b>	#	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>		<b>Miscellaneous</b>		
	(1)	NGC-4278-CENTER-FIELD	RA: 12 20 7.7410 (185.0322542d) Dec: +29 16 51.33 (29.28092d) Equinox: J2000				V=(?) V=23.6, magnitude is that of a typical globular cluster in NGC 4278		Reference Frame: ICRS		
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>											
<b>Exposures</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	NGC4278_F 850LP_Cs	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 0,20		90.0 Secs		
									[=>]		[1]
	2	NGC4278_F 850LP_C	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 0,20	Pattern 2-2 (1)	575.0 Secs		
								[=>(Pattern 1)]		[1]	
								[=>(Pattern 2)]			
3	NGC4278_F 475W_C	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 0,20	Pattern 3-3 (1)	338.1 Secs			
								[=>(Pattern 1)]		[1]	
								[=>(Pattern 2)]			



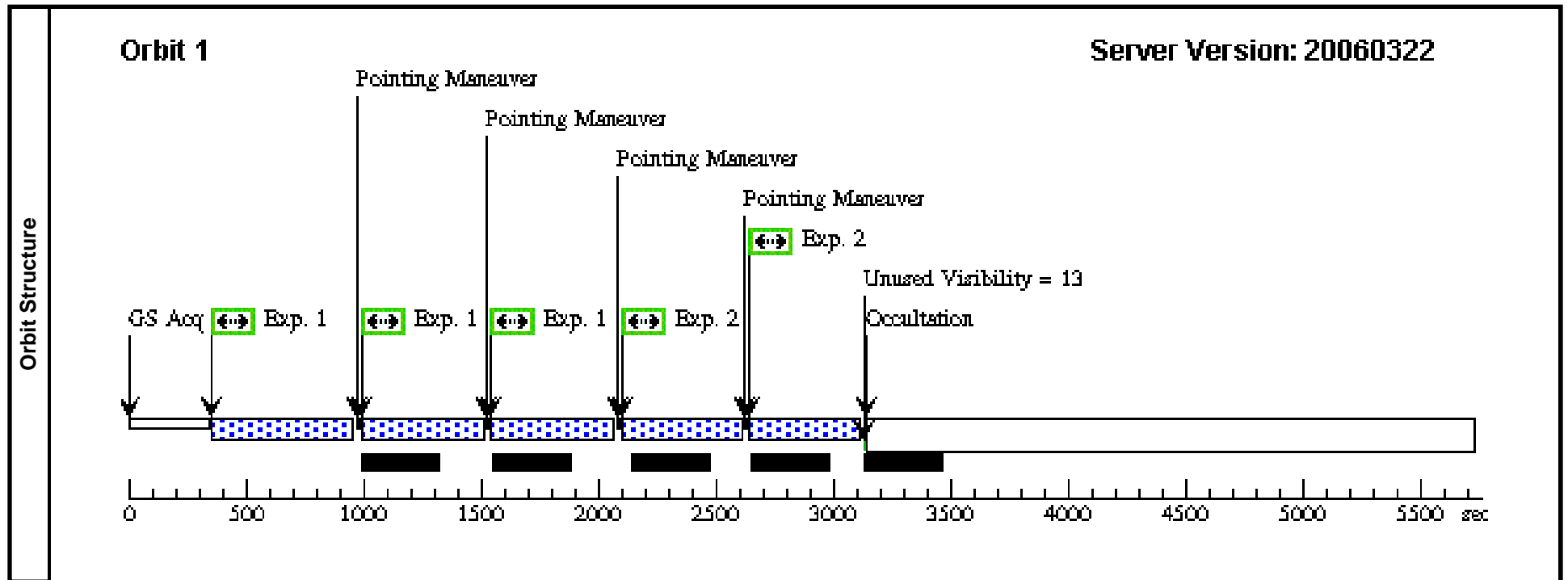
Proposal 10835 - Visit 07 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		Proposal 10835, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)						Wed Aug 09 01:55:49 GMT 2006		
Patterns	#	Primary Pattern		Secondary Pattern		Exposures				
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(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-4278-CENTER-FIELD	RA: 12 20 7.7410 (185.0322542d) Dec: +29 16 51.33 (29.28092d) Equinox: J2000		V=(?) V=23.6, magnitude is that of a typical globular cluster in NGC 4278	Reference Frame: ICRS				
<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/[Actual Dur.]	Orbit
	1	NGC4278_F 850LP_M1	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG -47.5,-8 2.27	Pattern 1-1 (2)	400.0 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2	NGC4278_F 475W_M1	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG -47.5,-8 2.27	Pattern 2-2 (1)	351.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	



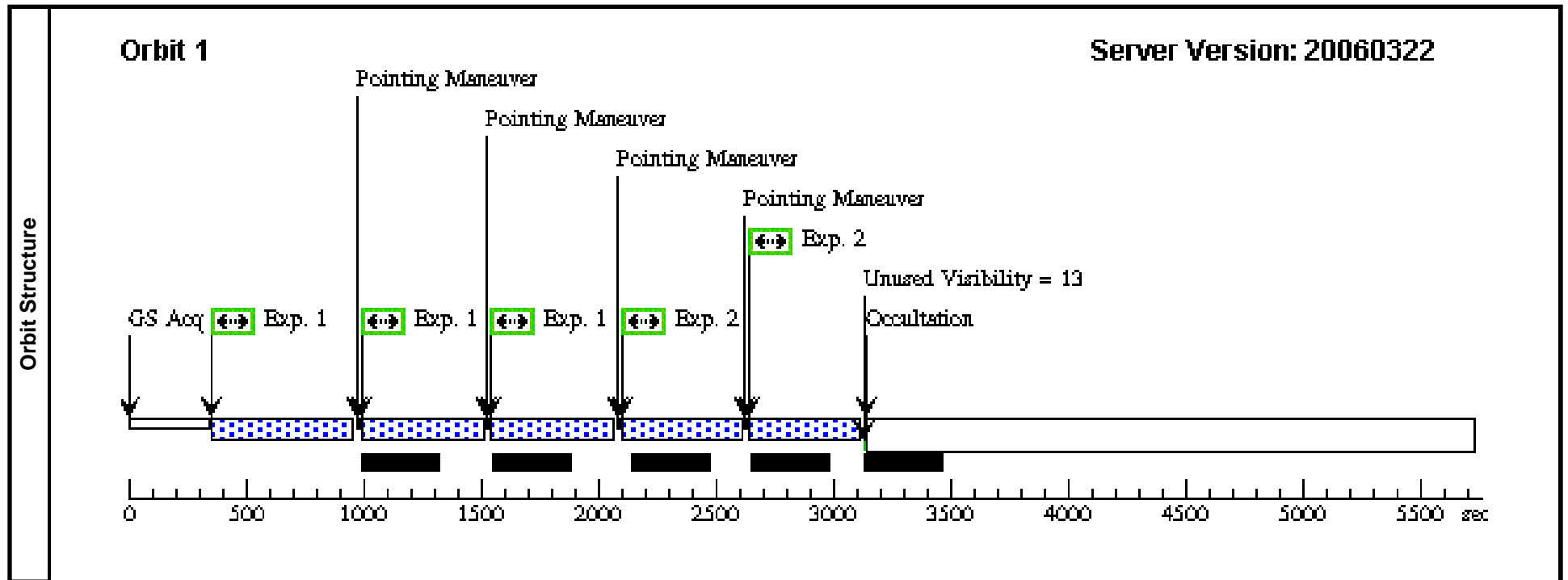
Proposal 10835 - Visit 08 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		<b>Proposal 10835, Visit 08</b> <span style="float: right;">Wed Aug 09 01:55:51 GMT 2006</span> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/WFC Special Requirements: (none)								
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
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(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(1)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-4278-CENTER-FIELD	RA: 12 20 7.7410 (185.0322542d) Dec: +29 16 51.33 (29.28092d) Equinox: J2000		V=(?) V=23.6, magnitude is that of a typical globular cluster in NGC 4278	Reference Frame: ICRS				
<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/[Actual Dur.]	Orbit
	1	NGC4278_F 850LP_M2	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG -47.5,82 .27	Pattern 1-1 (2)	400.0 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2	NGC4278_F 475W_M2	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG -47.5,82 .27	Pattern 2-2 (1)	351.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 10835 - Visit 09 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

Visit		<b>Proposal 10835, Visit 09</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/WFC Special Requirements: (none)						Wed Aug 09 01:55:51 GMT 2006		
Patterns	#	Primary Pattern		Secondary Pattern		Exposures				
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(2)				
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-4278-CENTER-FIELD	RA: 12 20 7.7410 (185.0322542d) Dec: +29 16 51.33 (29.28092d) Equinox: J2000		V=(?) V=23.6, magnitude is that of a typical globular cluster in NGC 4278	Reference Frame: ICRS				
<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/[Actual Dur.]	Orbit
	1	NGC4278_F 850LP_M3	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 47.5,82.27	Pattern 1-1 (2)	400.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	NGC4278_F 475W_M3	(1) NGC-4278-CENTER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 47.5,82.27	Pattern 2-2 (1)	351.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]	



Proposal 10835 - Visit 10 - Probing The Globular Cluster / Low Mass X-ray Binary Connection in Early-type Galaxies At Low X-ray Luminosities

<b>Visit</b>	<b>Proposal 10835, Visit 10</b> <span style="float: right;">Wed Aug 09 01:55:51 GMT 2006</span> <b>Diagnostic Status: Warning</b> Scientific Instruments: ACS/WFC Special Requirements: (none)									
	(Visit 10) Warning: PATTERN POSITION OUTSIDE APERTURE (Visit 10) Warning: PATTERN POSITION OUTSIDE APERTURE									
<b>Diagnosics</b>										
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>						
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(2)						
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.145 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(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>				
	(1)	NGC-4278-CENTER-FIELD	RA: 12 20 7.7410 (185.0322542d) Dec: +29 16 51.33 (29.28092d) Equinox: J2000		V=(?) V=23.6, magnitude is that of a typical globular cluster in NGC 4278	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	NGC4278_F 850LP_M4	(1) NGC-4278-CEN TER-FIELD	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 107.5,-8 2.27	Pattern 1-1 (2)	400.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
2	NGC4278_F 475W_M4	(1) NGC-4278-CEN TER-FIELD	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 107.5,-8 2.27	Pattern 2-2 (1)	351.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]	

