



12760 - DIRECT CHANDRA CONSTRAINTS ON THE EVOLUTION OF FIELD LMXB POPULATIONS

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>
04	(1) NGC-3384	ACS/WFC	1	12-Oct-2011 21:49:09.0	yes
05	(1) NGC-3384	ACS/WFC	1	12-Oct-2011 21:49:17.0	yes
06	(1) NGC-3384	ACS/WFC	1	12-Oct-2011 21:49:23.0	yes

3 Total Orbits Used

ABSTRACT

We propose to study in detail the field LMXB populations in four nearby early-type galaxies that cover a broad range of mean stellar ages (3-10 Gyr). We will conduct deep Chandra observations of two galaxies with young and intermediate stellar ages (3-5 Gyr), and image with HST three of the four galaxies. These observations will allow for (1) the detection of >50-100 LMXBs per galaxy, (2) the separation of GC and field LMXBs, and (3) provide empirical constraints on how the field XLF depends on stellar age.

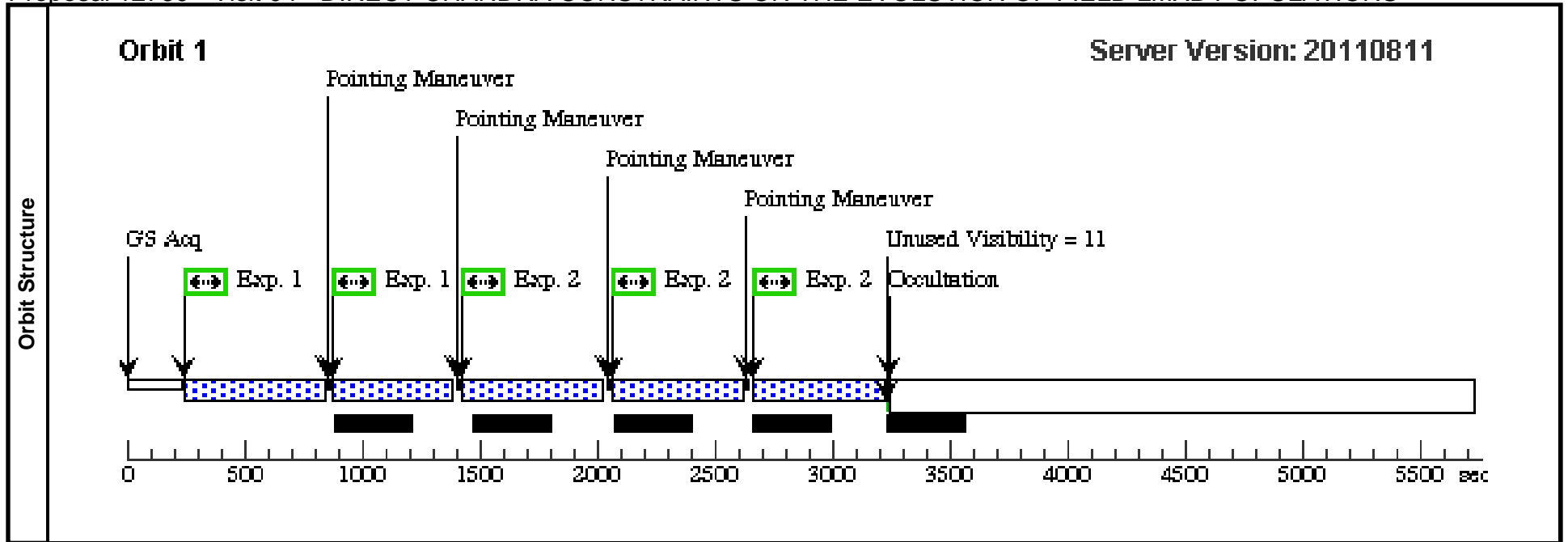
OBSERVING DESCRIPTION

We will be mapping with ACS imaging the galaxy NGC 3384 in three orbits, with each orbit observing a different region of the galaxy. For each orbit, we will take three F850LP (with one 90 s and two 575 s) and two F475W (at 355s each) exposures. We anticipate guide star acquisition for each orbit will require 6 min and filter changes, camera setups, and readouts will require a total of 15.5 min ($3 \times 2.5 + 2 \times 4$) during the orbit. The short exposure, included to guard against possible saturation of the galactic nuclei, occurs at the beginning of each orbit to avoid the buffer dump penalty. Total on source integration is then 32.5 min per orbit.

Proposal 12760 - Visit 04 - DIRECT CHANDRA CONSTRAINTS ON THE EVOLUTION OF FIELD LMXB POPULATIONS

Thu Oct 13 01:49:30 GMT 2011

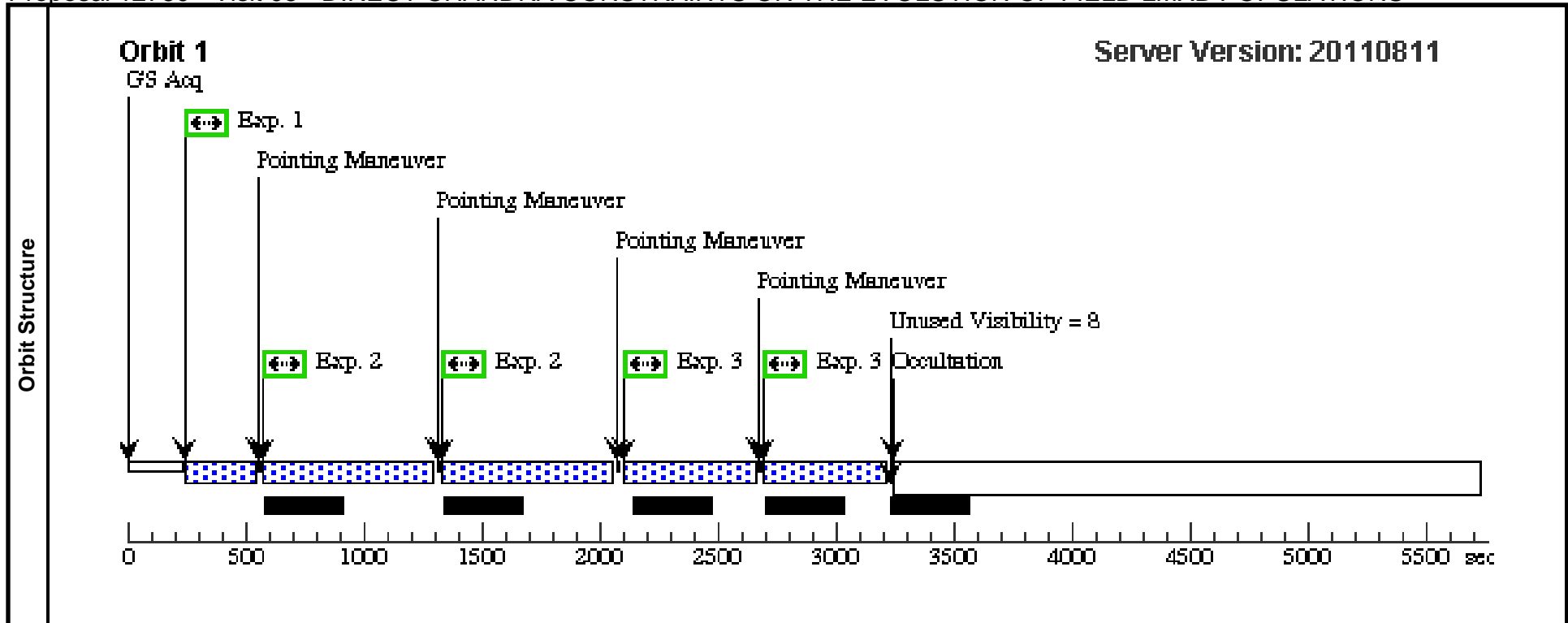
Visit	Proposal 12760, Visit 04, implementation Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: ORIENT 102.0D TO 113.0 D									
	(NGC3384_F475W_M1 (04.001) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes (NGC3384_F850LP_M1 (04.002) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=2.994 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.27 Angle Between Sides= Center Pattern=true	(1)						
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=2.994 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.27 Angle Between Sides= Center Pattern=true	(2)							
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-3384	RA: 10 48 16.9000 (162.0704167d) Dec: +12 37 45.00 (12.62917d) Equinox: J2000		V=10.65+/-0.4	Reference Frame: GSC2				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC3384_F 475W_M1	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG -98.027 63414502938,-45.71 103651264363; GS ACQ SCENARI O ONEB1B3	Pattern 1, Exps 1-1 i n Tile Visit 04 (1)	390.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
2	NGC3384_F 850LP_M1	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG -98.027 63414502938,-45.71 103651264363	Pattern 2, Exps 2-2 i n Tile Visit 04 (2)	435.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 12760 - Visit 05 - DIRECT CHANDRA CONSTRAINTS ON THE EVOLUTION OF FIELD LMXB POPULATIONS

Thu Oct 13 01:49:32 GMT 2011

Visit	Proposal 12760, Visit 05, implementation Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: SAME ORIENT AS 04									
	(NGC3384_F850LP_M2 (05.002) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes (NGC3384_F475W_M2 (05.003) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes									
Diagnosics										
Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=2.994 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=85.27 Angle Between Sides= Center Pattern=true			(2), (3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-3384	RA: 10 48 16.9000 (162.0704167d) Dec: +12 37 45.00 (12.62917d) Equinox: J2000		V=10.65+/-0.4	Reference Frame: GSC2				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC3384_F 850LP_M2	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 0.0,0.0; GS ACQ SCENARI O ONEB1B3		90 Secs [==>]	[1]
	2	NGC3384_F 850LP_M2	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 0.0,0.0	Pattern 1, Exps 2-2 i n Tile Visit 05 (1)	600.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	3	NGC3384_F 475W_M2	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 0.0,0.0	Pattern 1, Exps 3-3 i n Tile Visit 05 (1)	400.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]



Proposal 12760 - Visit 06 - DIRECT CHANDRA CONSTRAINTS ON THE EVOLUTION OF FIELD LMXB POPULATIONS

Thu Oct 13 01:49:33 GMT 2011

Visit	Proposal 12760, Visit 06, implementation Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: SAME ORIENT AS 04									
	(NGC3384_F475W_M1 (06.001) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes (NGC3384_F850LP_M1 (06.002) special requirements) Warning (Form): Be very careful mixing POS TARG and Center_Pattern = Yes									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=2.994 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.27 Angle Between Sides= Center Pattern=true		(1)					
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=2.994 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.27 Angle Between Sides= Center Pattern=true		(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-3384	RA: 10 48 16.9000 (162.0704167d) Dec: +12 37 45.00 (12.62917d) Equinox: J2000		V=10.65+/-0.4	Reference Frame: GSC2				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC3384_F 475W_M1	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F475W	CR-SPLIT=NO	POS TARG 98.0276 3414502938,45.7110 3651264363; GS ACQ SCENARI O ONEB1B3	Pattern 1, Exps 1-1 i n Tile Visit 06 (1)	390.0 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
2	NGC3384_F 850LP_M1	(1) NGC-3384	ACS/WFC, ACCUM, WFCENTER	F850LP	CR-SPLIT=NO	POS TARG 98.0276 3414502938,45.7110 3651264363	Pattern 2, Exps 2-2 i n Tile Visit 06 (2)	435.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	

