12371 - Does the brightest lensed galaxy contain an AGN?

Cycle: 18, 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) RCS0327-1326-ARC-CENTER (2) RCS0327-1326-CLUSTER-CENTER	ACS/WFC	3	01-Oct-2010 21:37:51.0	yes

3 Total Orbits Used

ABSTRACT

We have recently discovered the brightest lensed galaxy known. Its high quality spectra are revealing a wealth of spectral diagnostics, providing a unique window on the physical conditions of star formation at the epoch when most stars formed. The caveat is that at present, we do not know whether this lensed galaxy hosts an AGN, which would throw off the nebular line diagnostics. We propose a 60 ks Chandra observation to measure or strictly constrain the X-ray luminosity of an active nucleus. We also propose 3 HST orbits to search for optical signs of an AGN.

OBSERVING DESCRIPTION

Ramp Filter observation of extended target. Ist orbit centered on emission feature, 2nd orbit off feature on nearby continuum. 3rd orbit is broadband ACS to provide a second cechk of AGN activity via variability against Program 12267. We have also attempted to optimise the F814W ACS imaging to allow a weak lensing measurement of the lens - hence the relatively large dither mid-orbit.

Visit

Proposal 12371, Visit 01 Sat Oct 02 01:37:56 GMT 2010

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: ORIENT 210.0D TO 70.0 D

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RCS0327-1326-ARC-CENTER	RA: 03 27 28.1600 (51.8673333d) Dec: -13 26 12.20 (-13.43672d) Equinox: J2000		V=19.1+/-0.2	Reference Frame: ICRS
(2)	RCS0327-1326-CLUSTER-CENTER	RA: 03 27 27.2000 (51.8633333d) Dec: -13 26 24.00 (-13.44000d) Equinox: J2000		V=19.1+/-0.2	Reference Frame: ICRS

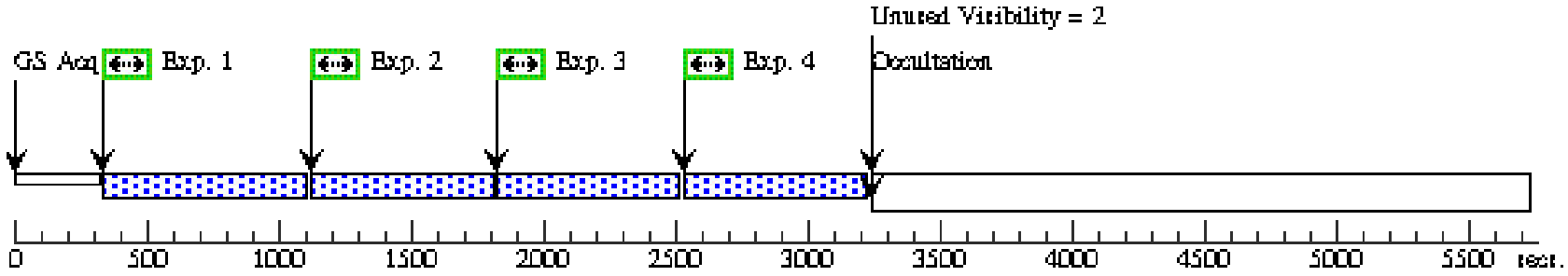
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7637 A				500 Secs *[==>519.0 Secs]*	 ***[1]***
2		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7637 A				500 Secs *[==>519.0 Secs]*	 ***[1]***
3		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7637 A				500 Secs *[==>519.0 Secs]*	 ***[1]***
4		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7637 A				500 Secs *[==>519.0 Secs]*	 ***[1]***
5		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7674 A				500 Secs *[==>564.0 Secs]*	 ***[2]***
6		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7674 A				500 Secs *[==>564.0 Secs]*	 ***[2]***
7		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7674 A				500 Secs *[==>564.0 Secs]*	 ***[2]***
8		(1) RCS0327-1326-ARC-CENTER	ACS/WFC, ACCUM, WFC2-ORAMPQ	FR782N 7674 A				500 Secs *[==>564.0 Secs]*	 ***[2]***
9		(2) RCS0327-1326-CLUSTER-CENTER	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0,-4		600 Secs *[==>540.0 Secs]*	 ***[3]***
10		(2) RCS0327-1326-CLUSTER-CENTER	ACS/WFC, ACCUM, WFC1	F814W		POS TARG 0.124,-3.916		600 Secs *[==>540.0 Secs]*	 ***[3]***
11		(2) RCS0327-1326-CLUSTER-CENTER	ACS/WFC, ACCUM, WFC2	F814W		POS TARG null,4		600 Secs *[==>540.0 Secs]*	 ***[3]***
12		(2) RCS0327-1326-CLUSTER-CENTER	ACS/WFC, ACCUM, WFC2	F814W		POS TARG 0.124,4.084		600 Secs *[==>540.0 Secs]*	 ***[3]***

Orbit Structure

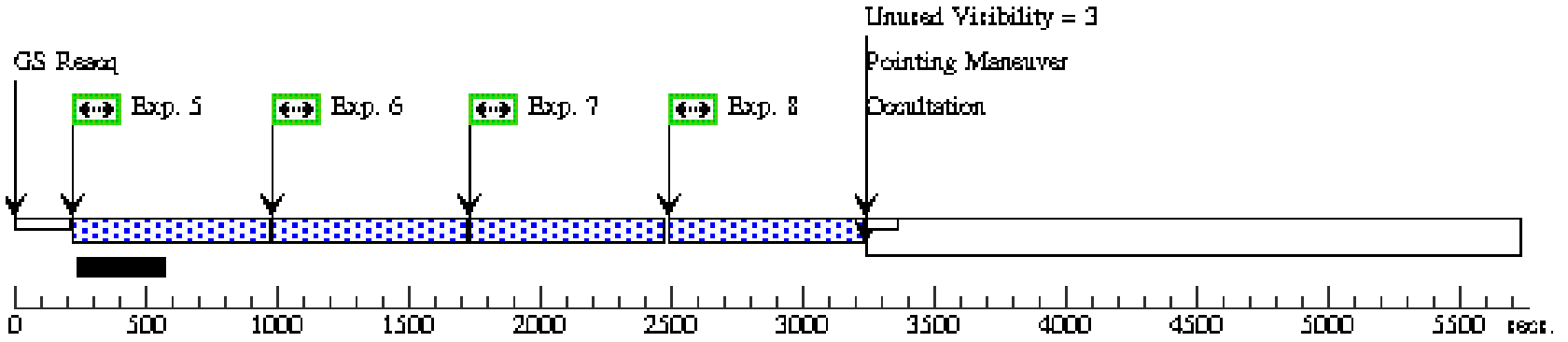
Orbit 1

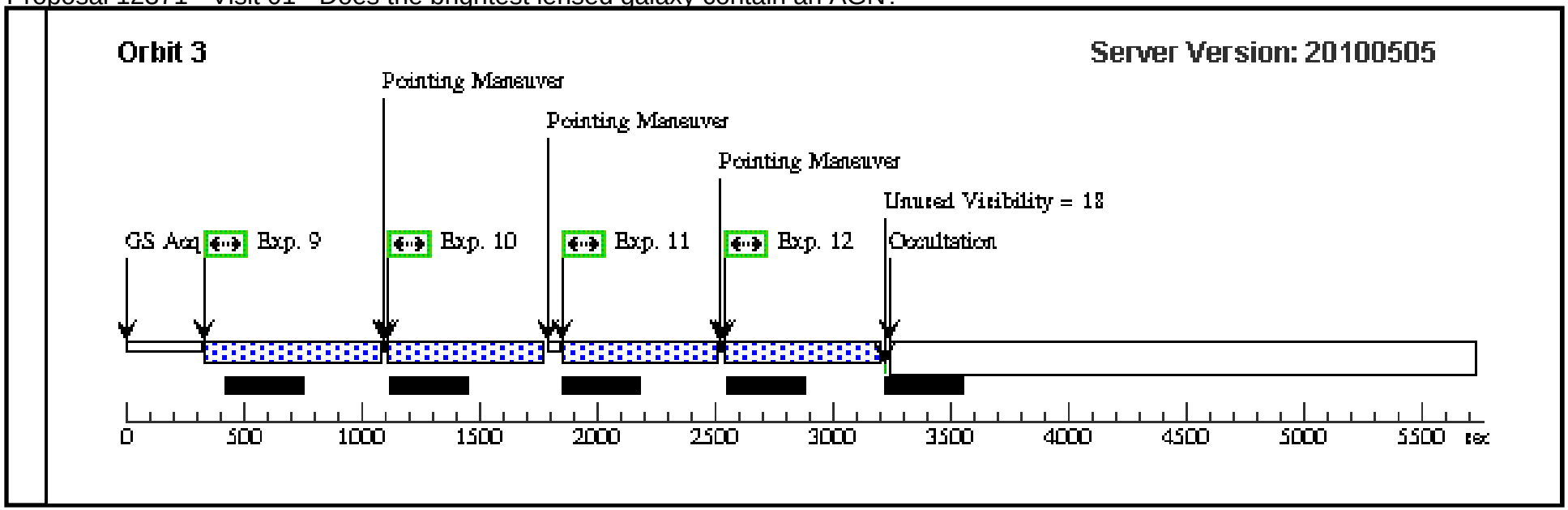
Server Version: 20100505



Orbit 2

Server Version: 20100505




Orbit 3
Server Version: 20100505
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 18
GS Acq
Exp. 9
Exp. 10
Exp. 11
Exp. 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec