



11227 - The orbital period for an ultraluminous X-ray source in NGC1313

Cycle: 16, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Jifeng Liu (PI)	Smithsonian Institution Astrophysical Observatory	jfliu@cfa.harvard.edu
Prof. Joel N. Bregman (CoI)	University of Michigan	jbregman@umich.edu
Dr. Jeffrey E. McClintock (CoI)	Smithsonian Institution Astrophysical Observatory	jem@cfa.harvard.edu
Dr. Rosanne Di Stefano (CoI)	Smithsonian Institution Astrophysical Observatory	rd@cfa.harvard.edu

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) NGC1313-X2	WFPC2	1	15-Apr-2008 21:00:56.0	yes
02	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:00:59.0	yes
03	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:01.0	yes
04	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:03.0	yes
05	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:05.0	yes
06	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:07.0	yes
07	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:09.0	yes
08	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:11.0	yes
09	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:12.0	yes

<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>
10	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:14.0	yes
11	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:16.0	yes
12	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:18.0	yes
13	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:20.0	yes
14	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:21.0	yes
15	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:23.0	yes
16	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:25.0	yes
17	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:27.0	yes
18	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:28.0	yes
19	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:30.0	yes
20	(1) NGC1313-X2	WFPC2	1	15-Apr-2008 21:01:32.0	yes
21	(2) NGC5204-ULX	WFPC2	1	15-Apr-2008 21:01:33.0	yes
22	(2) NGC5204-ULX	WFPC2	1	15-Apr-2008 21:01:35.0	yes
23	(2) NGC5204-ULX	WFPC2	1	15-Apr-2008 21:01:37.0	yes
24	(3) HOLMII-ULX	WFPC2	1	15-Apr-2008 21:01:38.0	yes
25	(3) HOLMII-ULX	WFPC2	1	15-Apr-2008 21:01:40.0	yes
26	(3) HOLMII-ULX	WFPC2	1	15-Apr-2008 21:01:42.0	yes

26 Total Orbits Used

ABSTRACT

The ultraluminous X-ray sources (ULXs) are extragalactic point sources with luminosities that exceed the Eddington luminosity for conventional stellar-mass black holes by factors of 10 - 100. It has been hotly debated whether the ULXs are just common stellar-mass black hole sources with

beamed emission or whether they are sub-Eddington sources that are powered by the long-sought intermediate mass black holes (IMBH). To firmly decide this question, one must obtain dynamical mass measurements through photometric and spectroscopic monitoring of the secondaries of these system. The crucial first step is to establish the orbital period of a ULX, and arguably the best way to achieve this goal is by monitoring its ellipsoidal light curve. The extreme ULX NGC1313 X-2 provides an outstanding target for an orbital period determination because its relatively bright optical counterpart ($V = 23.5$) showed a 15% variation between two HST observations separated by three months. This level of variability is consistent with that expected for a tidally distorted secondary star. Here we propose a set of 20 imaging observations with HST/WFPC2 to define the orbital period. This would be the first photometric measurement of the orbital period of a ULX binary. Subsequently, we will propose to obtain spectroscopic observations to obtain its radial velocity amplitude and thereby a dynamical estimate of its mass.

OBSERVING DESCRIPTION

For the primary target NGC1313 X-2, the 20 orbits will be spread randomly over 30 days. The target is placed at the center of the Planetary Chip. Each orbit is split into three 1200sec exposures in F450W, F555W and F606W to get the broad-band spectral energy distribution.

For the target NGC5204-ULX, the 3 orbits are placed randomly over a week. Each orbit is split into three 1200sec exposures in F450W, F555W and F606W respectively. The target is placed at the center of the Planetary Chip.

For the target HolmII-ULX, the 3 orbits are placed randomly over a week. Each orbit is split into three 1200sec exposures in F450W, F555W and F606W respectively. The target is placed at the center of the Planetary Chip.

Proposal 11227 - Visit 01 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:44 GMT 2008

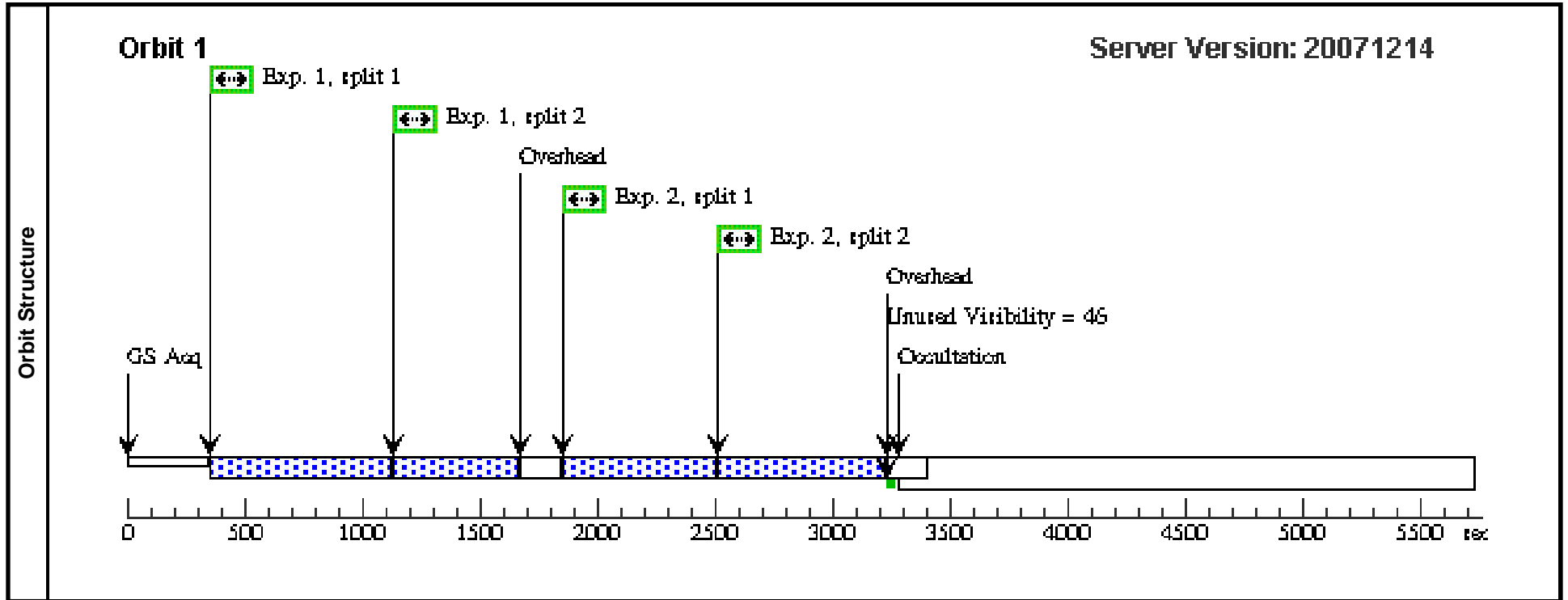
Visit	Proposal 11227, Visit 01, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: BETWEEN 21-MAY-2008:00:00:00 AND 22-MAY-2008:00:00:00 Comments: orbit 01 for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.601111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb01f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb01f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W			1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 02 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:45 GMT 2008

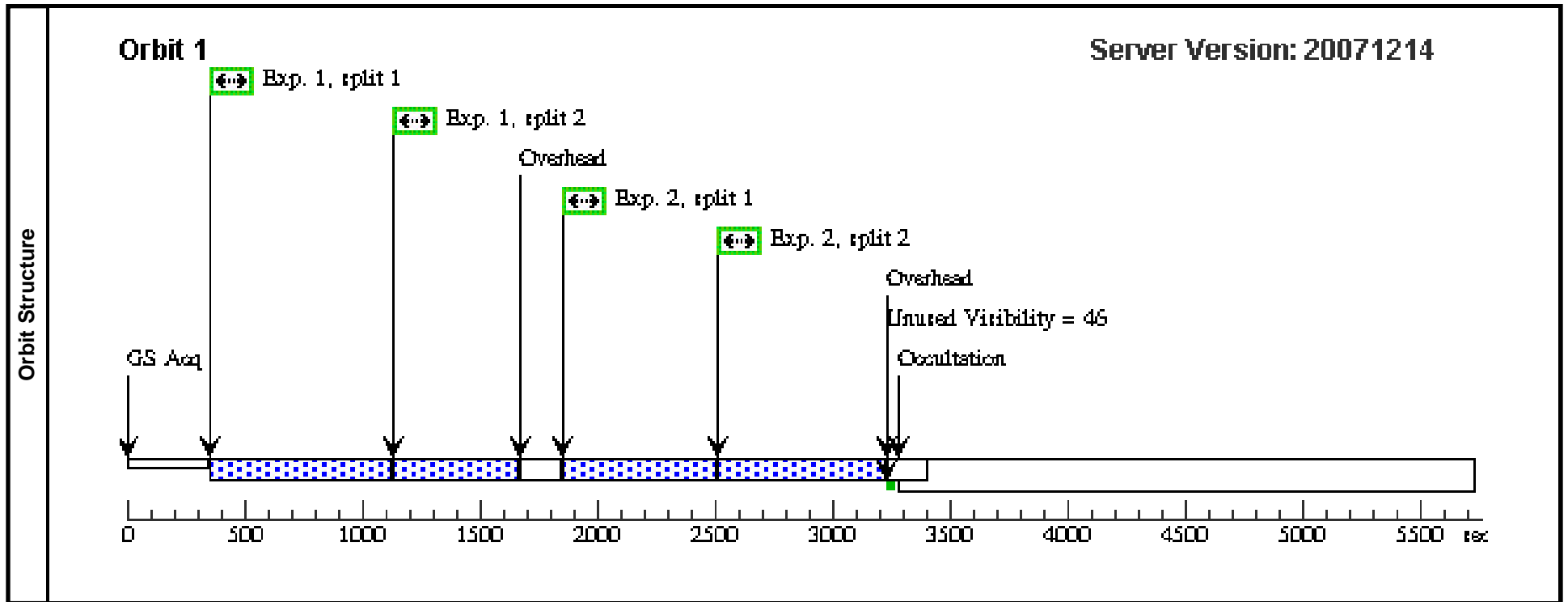
Visit	Proposal 11227, Visit 02, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 22-MAY-2008:00:00:00 AND 23-MAY-2008:00:00:00 Comments: orbit 02 for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb02f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb02f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 03 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:45 GMT 2008

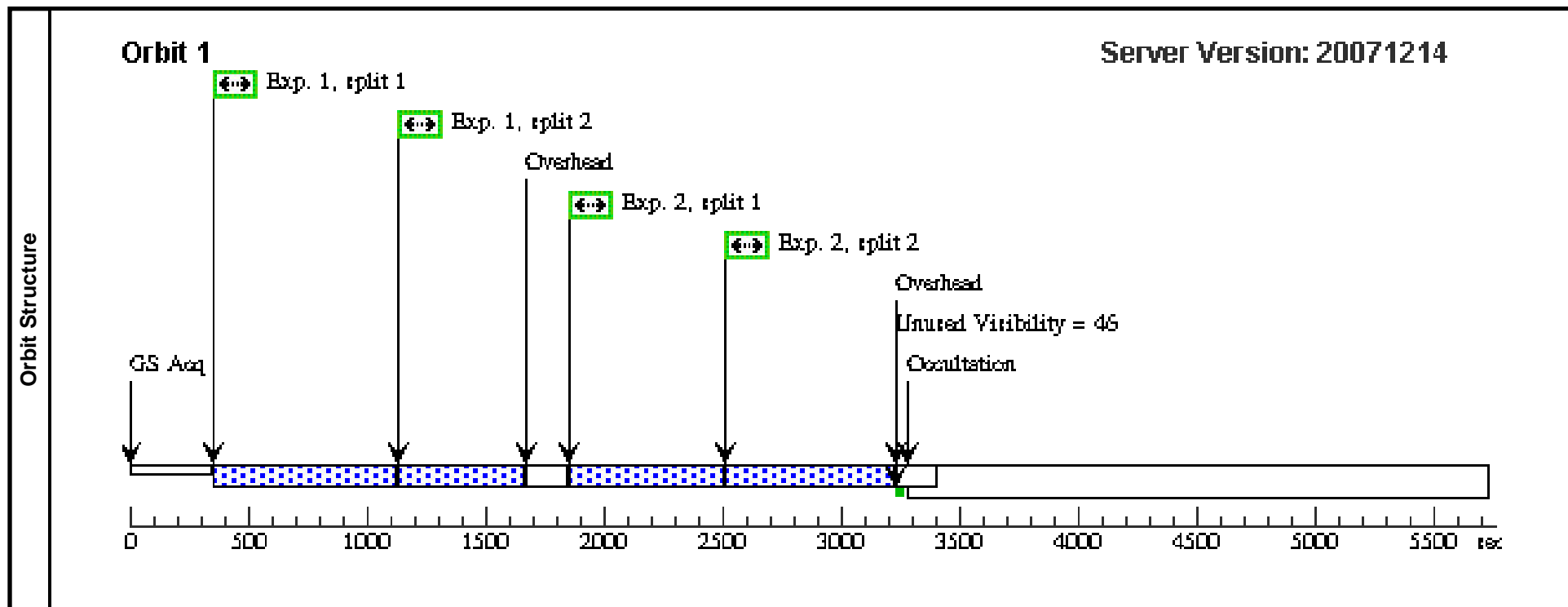
Visit	Proposal 11227, Visit 03, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 23-MAY-2008:00:00:00 AND 24-MAY-2008:00:00:00 Comments: orbit 03 for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb03f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb03f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 04 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:46 GMT 2008

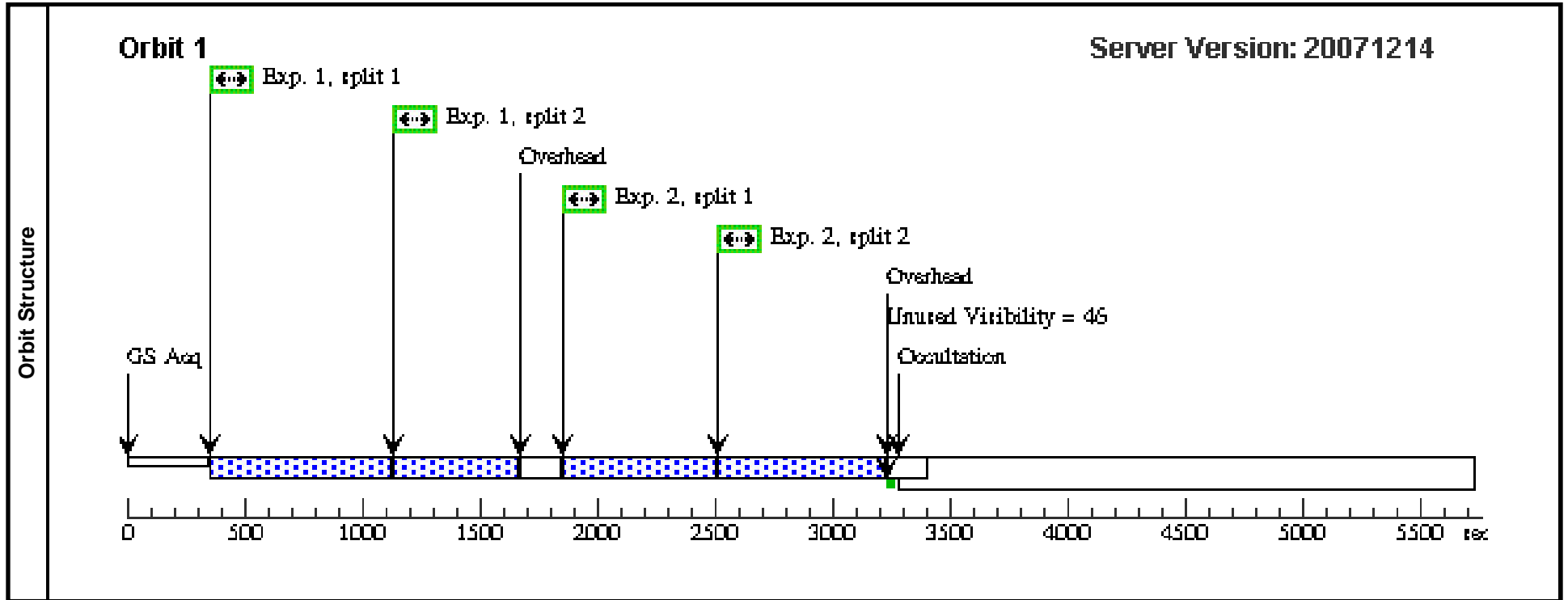
Visit	Proposal 11227, Visit 04, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 24-MAY-2008:00:00:00 AND 25-MAY-2008:00:00:00 Comments: orbit 04 for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb04f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb04f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 05 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:46 GMT 2008

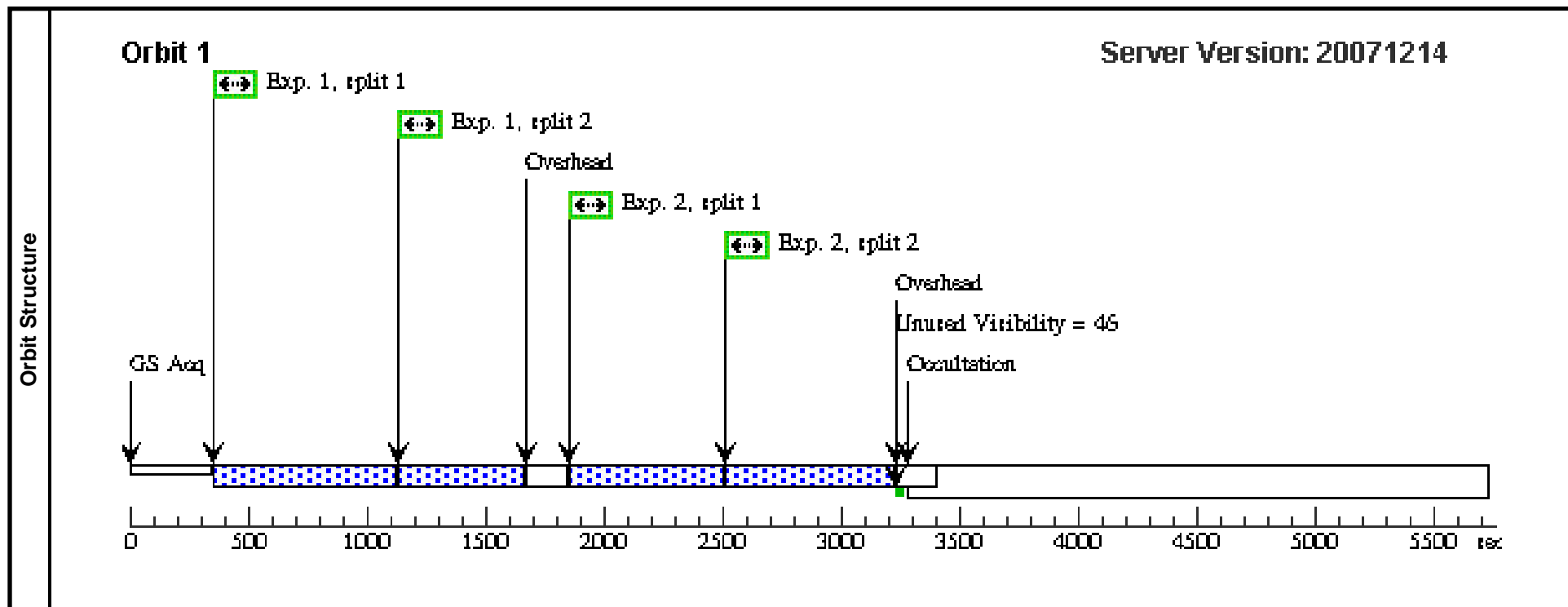
Visit	Proposal 11227, Visit 05, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 25-MAY-2008:00:00:00 AND 26-MAY-2008:00:00:00 Comments: orbit 05 for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb05f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb05f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 06 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:46 GMT 2008

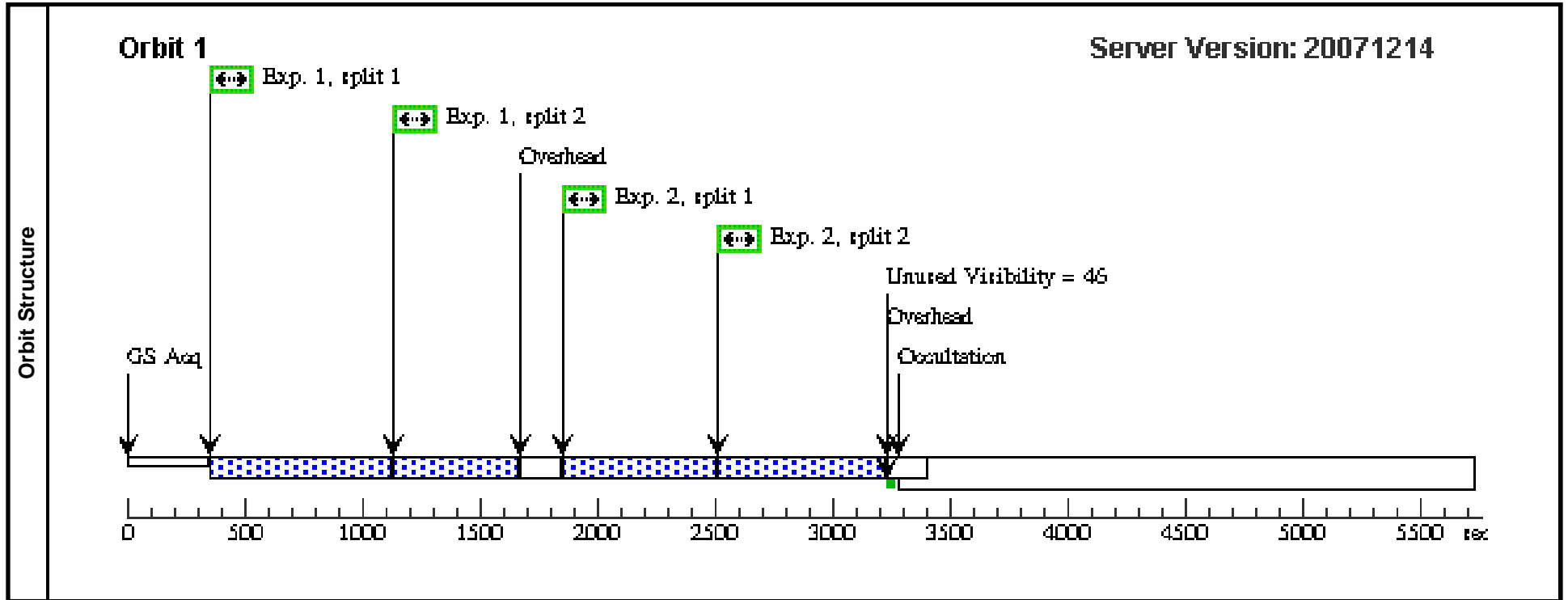
Visit	Proposal 11227, Visit 06, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 26-MAY-2008:00:00:00 AND 27-MAY-2008:00:00:00 Comments: orbit 06 for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb06f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb06f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 07 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:47 GMT 2008

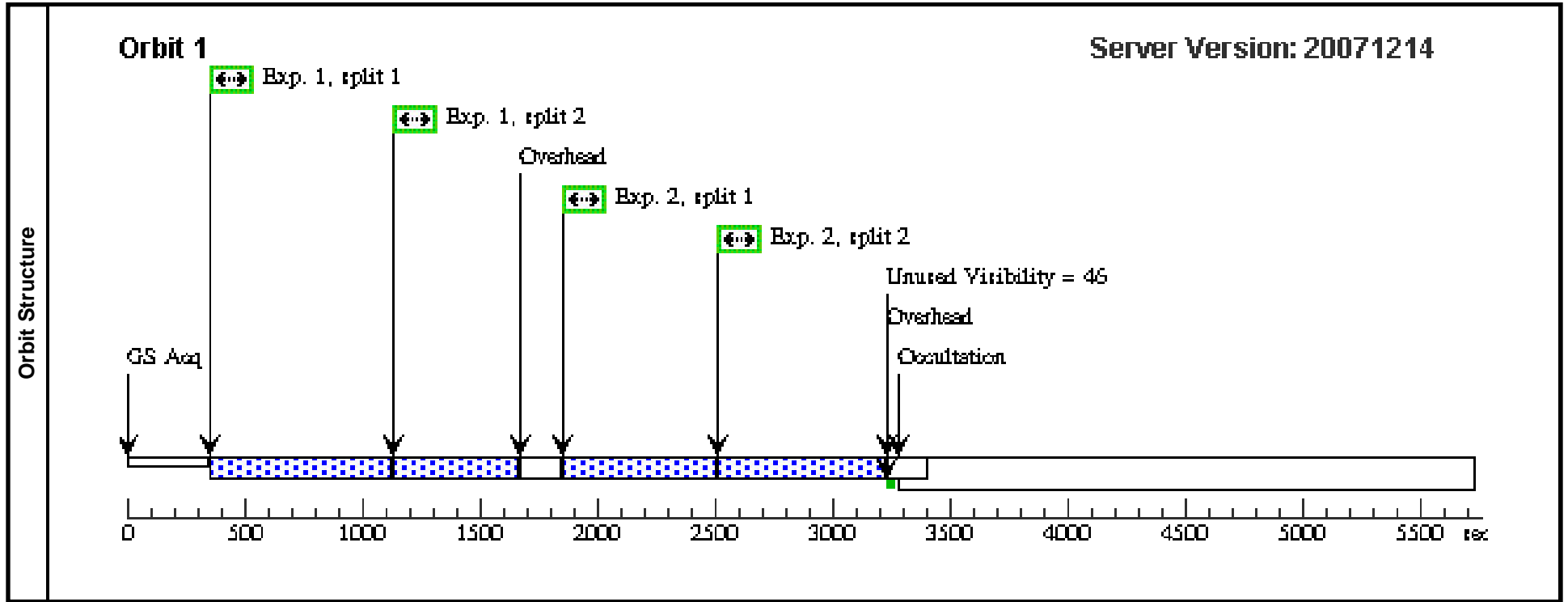
Visit	Proposal 11227, Visit 07, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 27-MAY-2008:00:00:00 AND 28-MAY-2008:00:00:00 Comments: orbit 07 for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb07f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb07f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 08 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:47 GMT 2008

Visit	Proposal 11227, Visit 08, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 28-MAY-2008:00:00:00 AND 29-MAY-2008:00:00:00 Comments: orbit 08 for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb08f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb08f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 09 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:47 GMT 2008

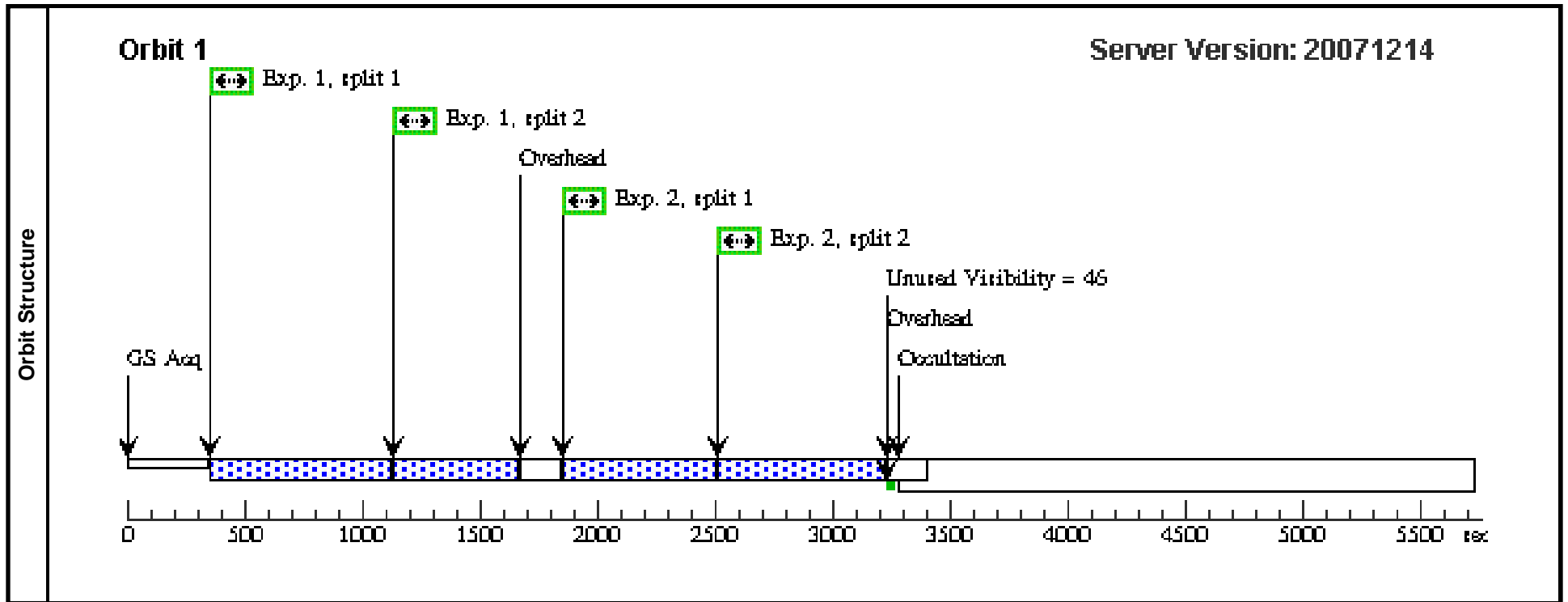
Visit	Proposal 11227, Visit 09, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 29-MAY-2008:00:00:00 AND 30-MAY-2008:00:00:00 Comments: orbit 09 for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb09f450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb09f555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 10 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:48 GMT 2008

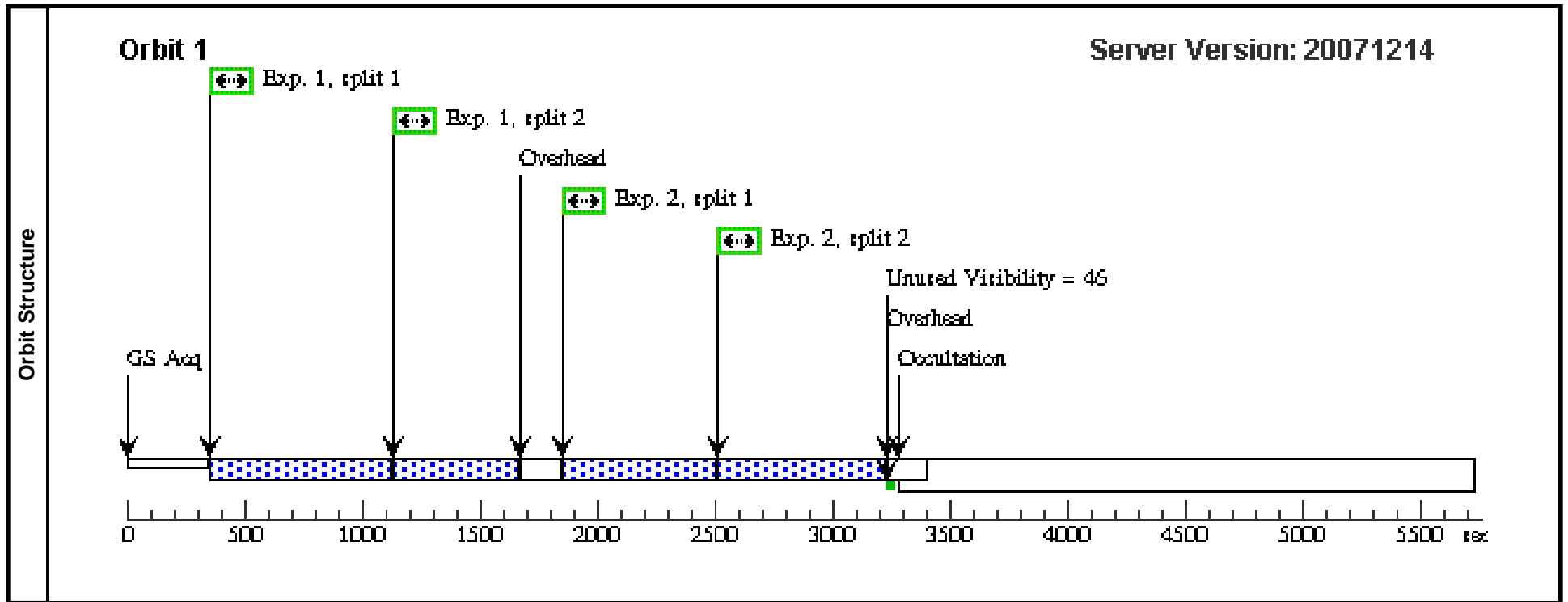
Visit	Proposal 11227, Visit 10, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 30-MAY-2008:00:00:00 AND 31-MAY-2008:00:00:00 Comments: orbit 0a for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0af450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb0af555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 11 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:48 GMT 2008

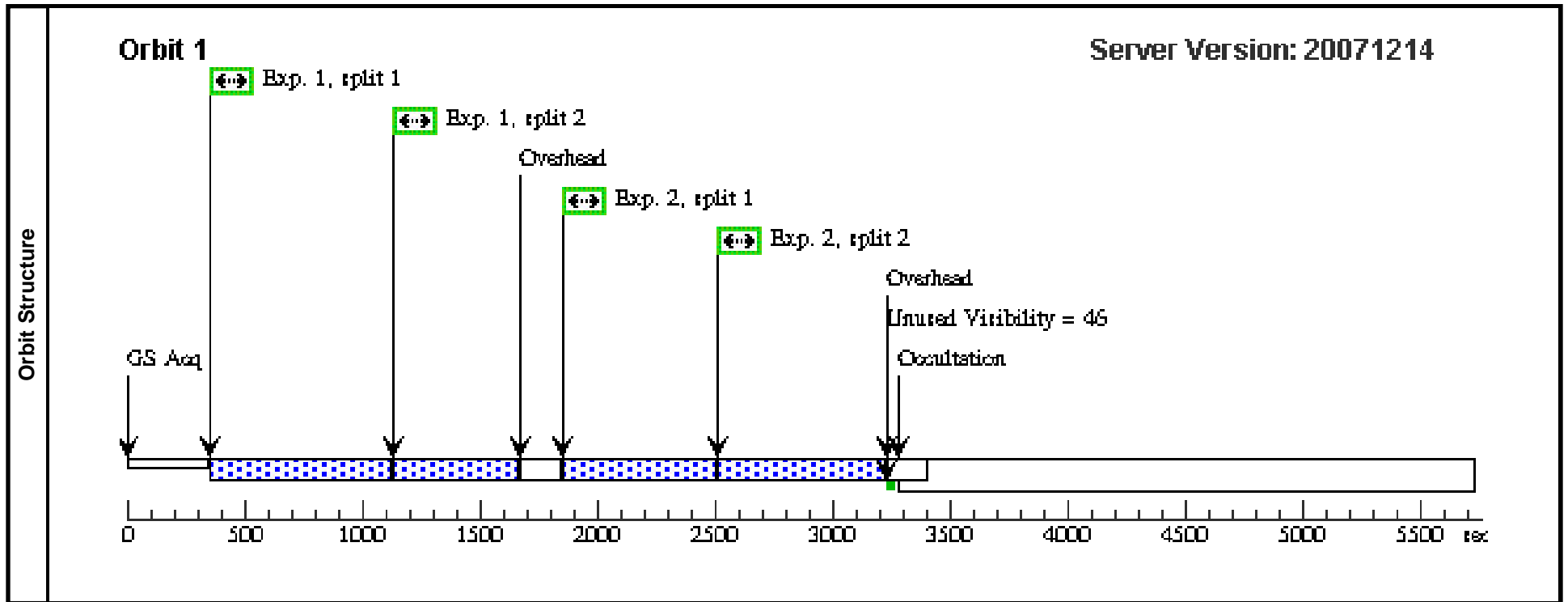
Visit	Proposal 11227, Visit 11, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 31-MAY-2008:00:00:00 AND 01-JUN-2008:00:00:00 Comments: orbit 0b for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0bf450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb0bf555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 12 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:48 GMT 2008

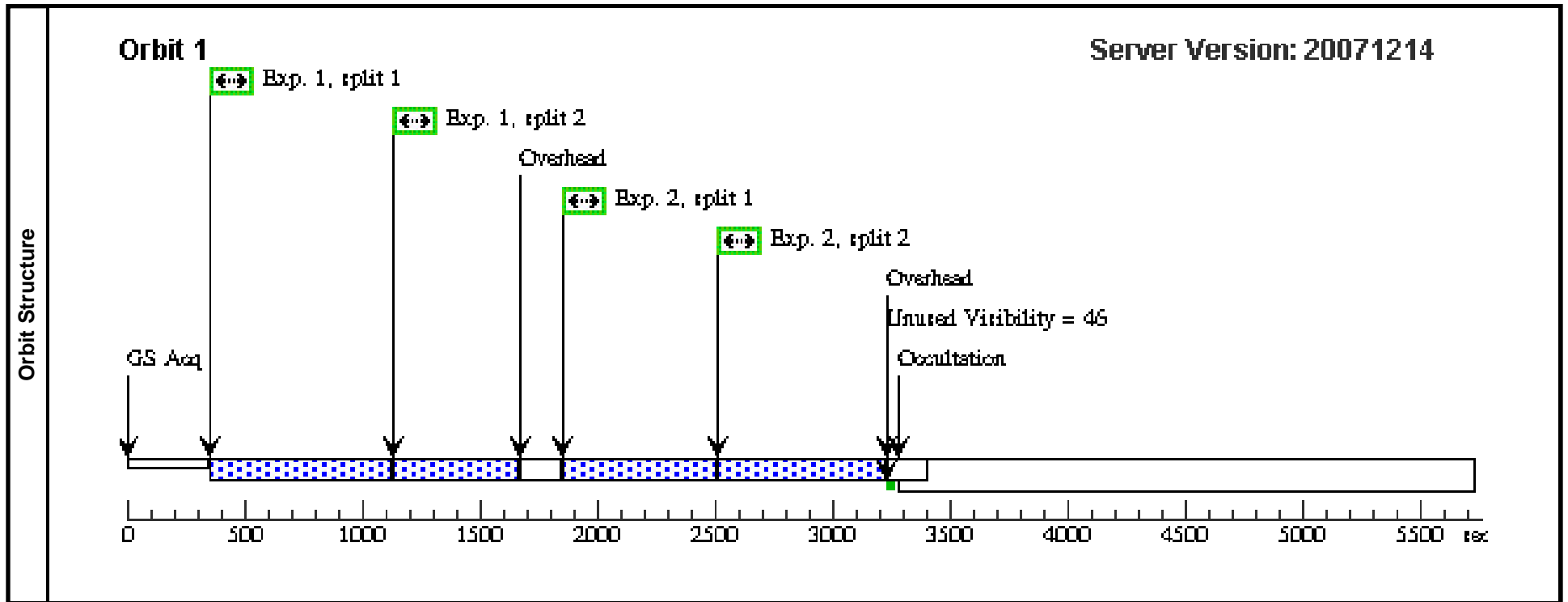
Visit	Proposal 11227, Visit 12, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 01-JUN-2008:00:00:00 AND 02-JUN-2008:00:00:00 Comments: orbit 0c for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0cf450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb0cf555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 13 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:49 GMT 2008

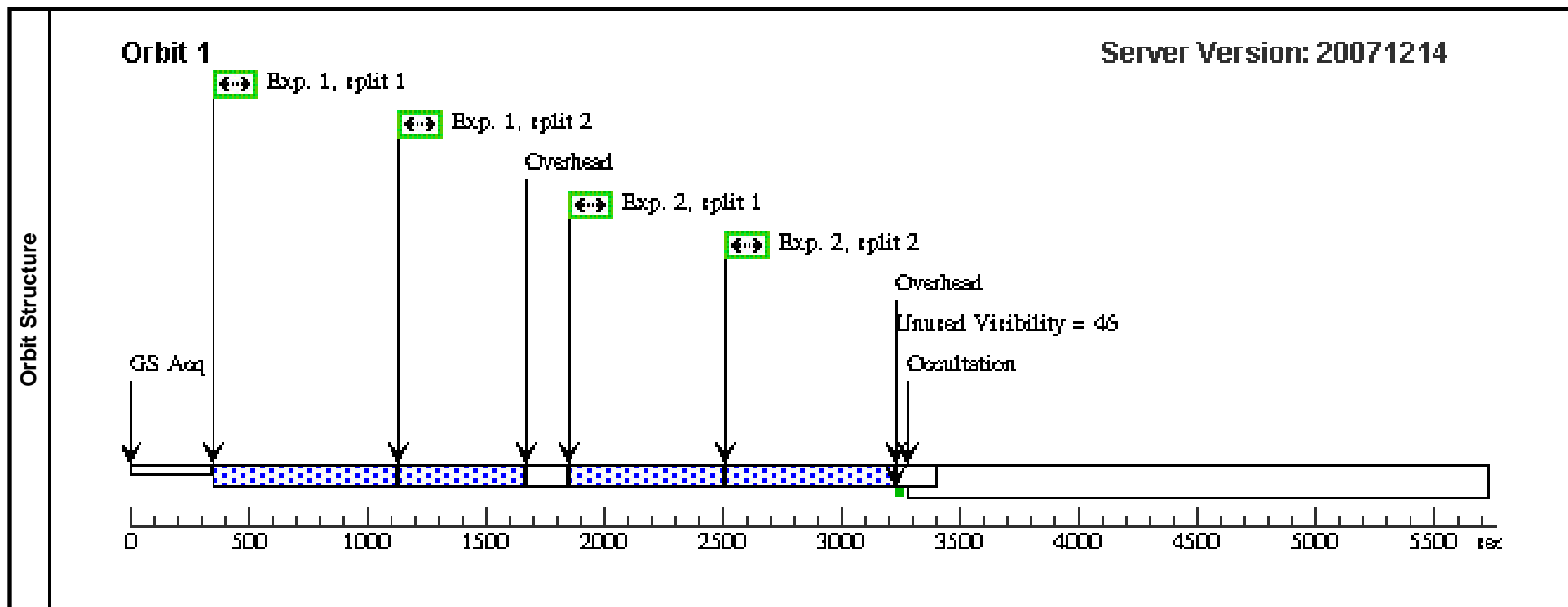
Visit	Proposal 11227, Visit 13, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 02-JUN-2008:00:00:00 AND 03-JUN-2008:00:00:00 Comments: orbit 0d for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0df450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb0df555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 14 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:49 GMT 2008

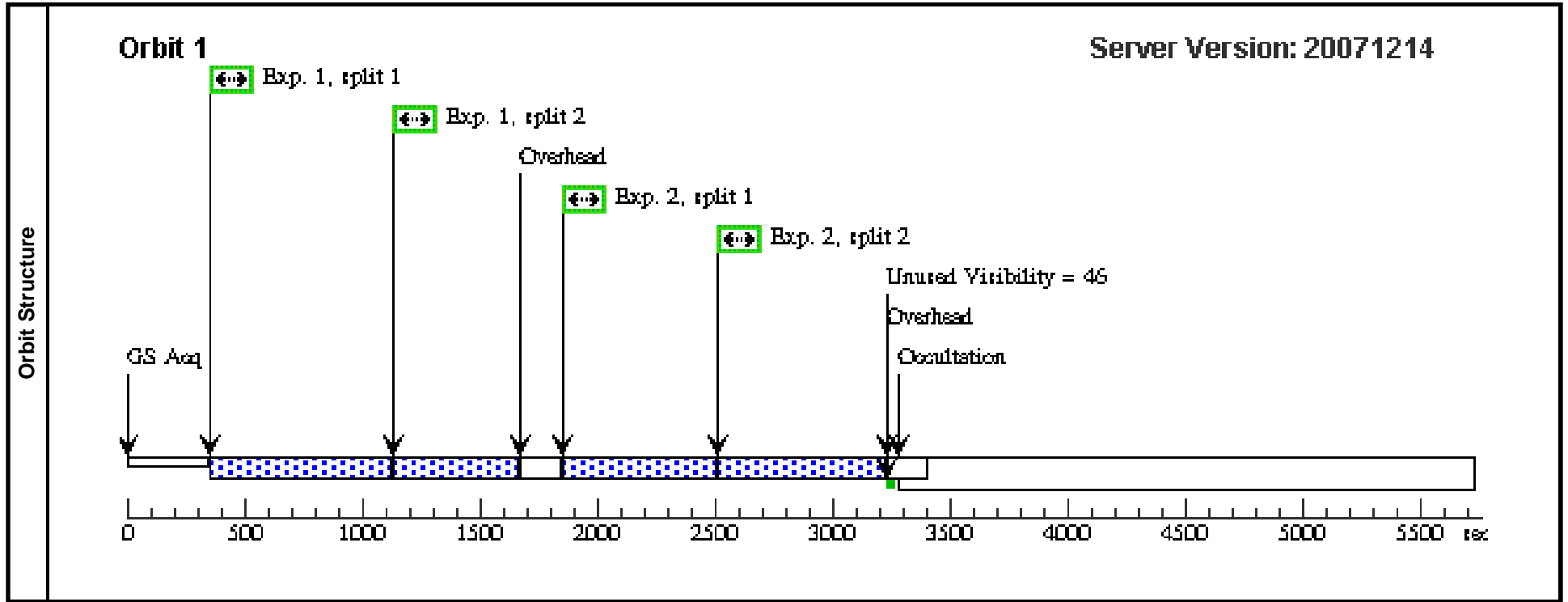
Visit	Proposal 11227, Visit 14, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 03-JUN-2008:00:00:00 AND 04-JUN-2008:00:00:00 Comments: orbit 0e for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0ef450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb0ef555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 15 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:49 GMT 2008

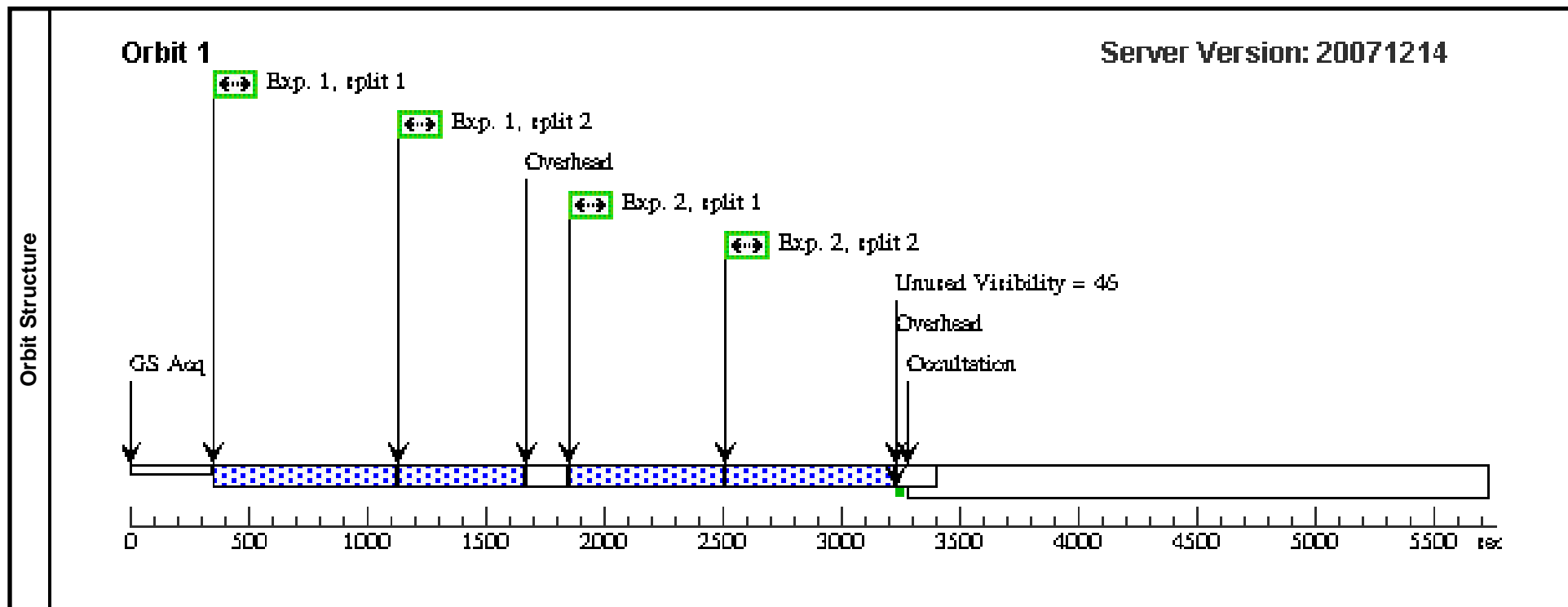
Visit	Proposal 11227, Visit 15, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 04-JUN-2008:00:00:00 AND 05-JUN-2008:00:00:00 Comments: orbit Off for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0ff450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb0ff555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 16 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:50 GMT 2008

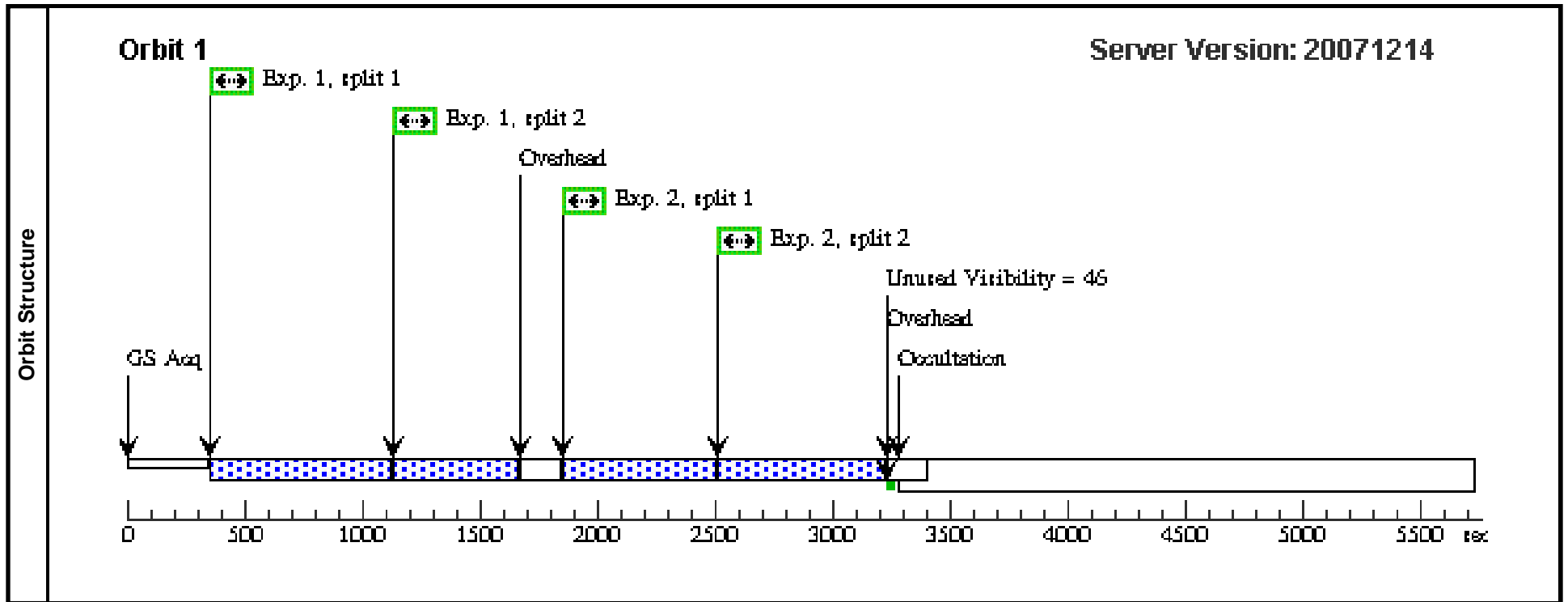
Visit	Proposal 11227, Visit 16, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 05-JUN-2008:00:00:00 AND 06-JUN-2008:00:00:00 Comments: orbit 0g for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0gf450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb0gf555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 17 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:50 GMT 2008

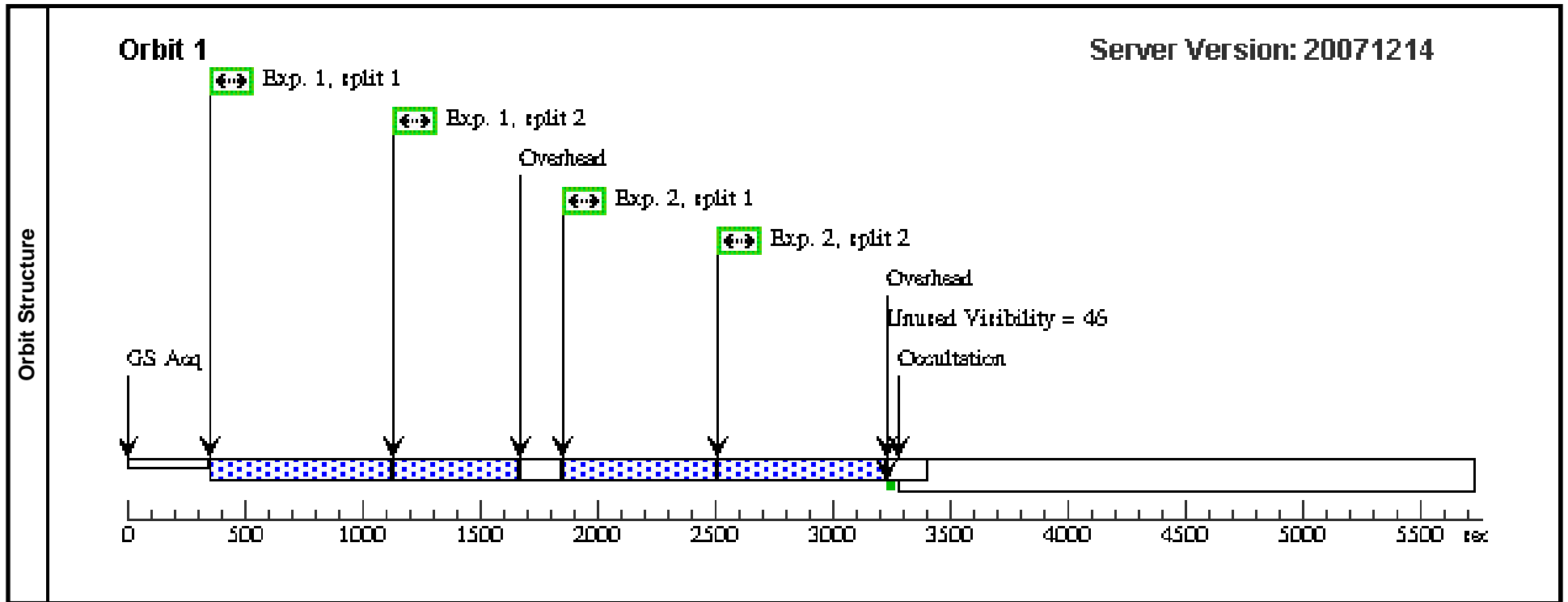
Visit	Proposal 11227, Visit 17, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 06-JUN-2008:00:00:00 AND 07-JUN-2008:00:00:00 Comments: orbit 0h for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0hf450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb0hf555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 18 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:50 GMT 2008

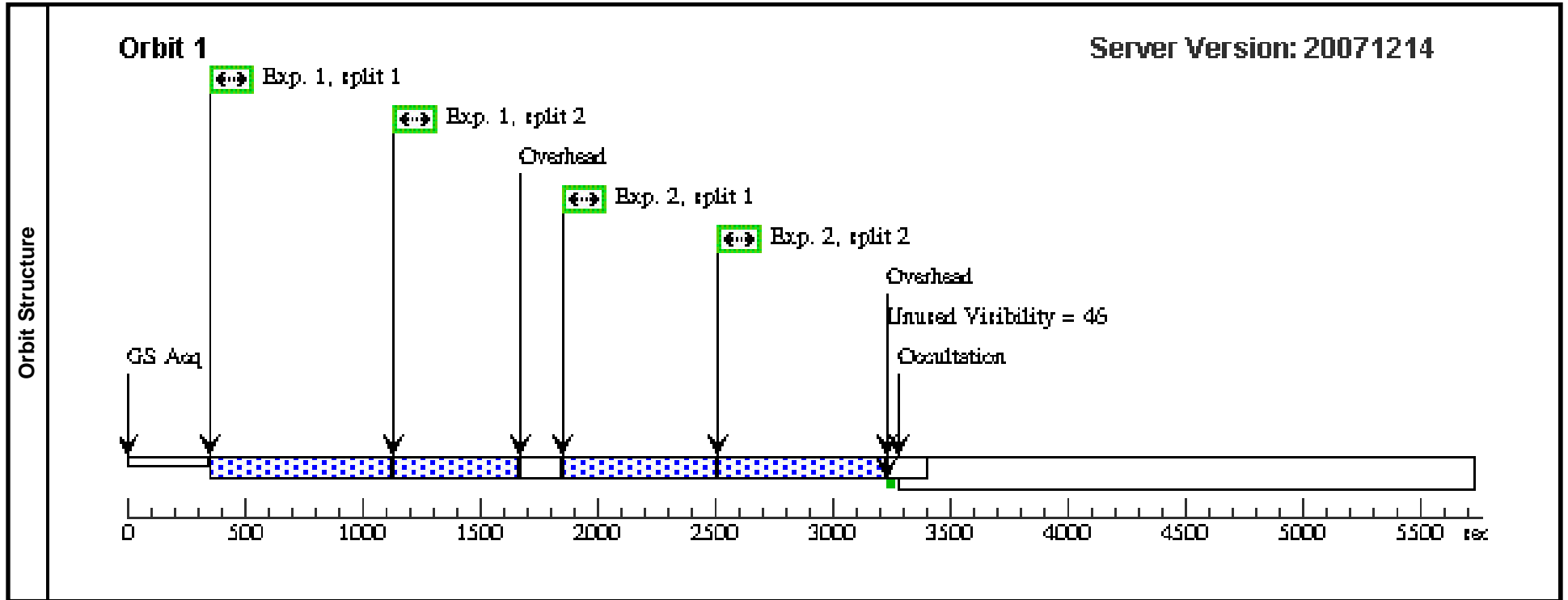
Visit	Proposal 11227, Visit 18, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 07-JUN-2008:00:00:00 AND 08-JUN-2008:00:00:00 Comments: orbit 0i for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0if450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb0if555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 19 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:51 GMT 2008

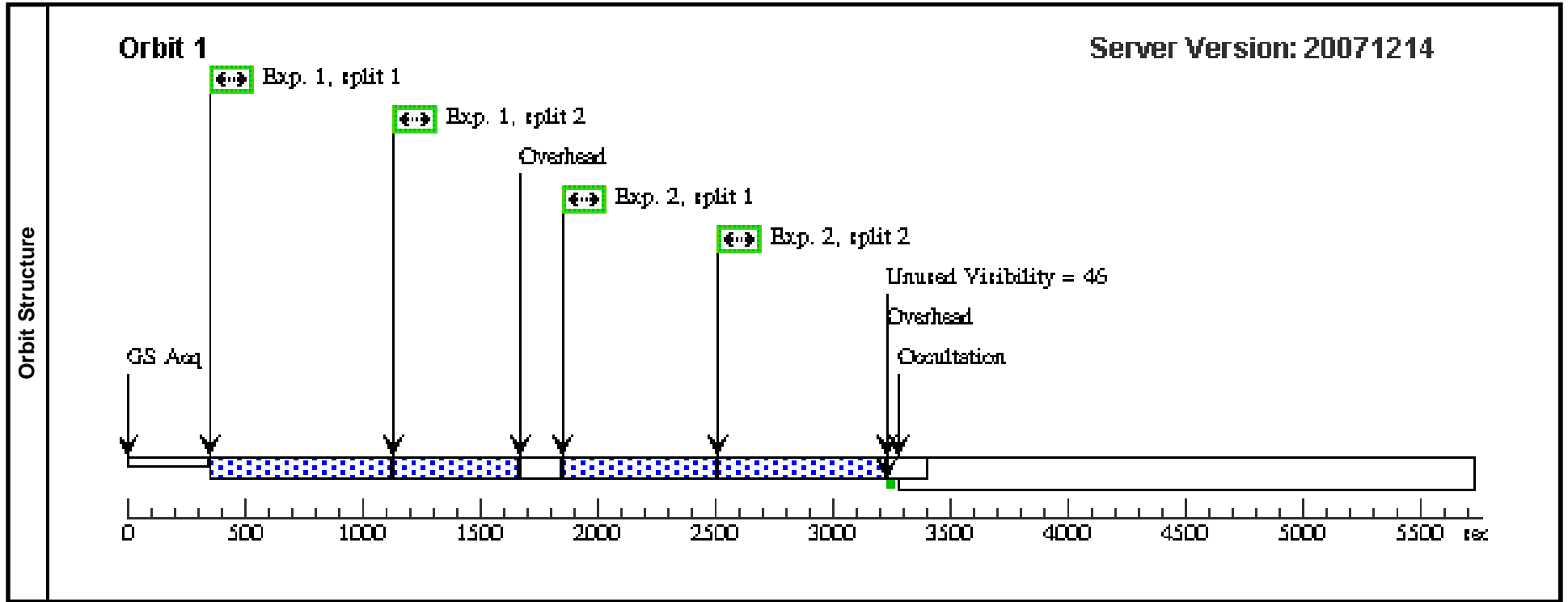
Visit	Proposal 11227, Visit 19, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 08-JUN-2008:00:00:00 AND 09-JUN-2008:00:00:00 Comments: orbit 0j for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0jf450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb0jf555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 20 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:51 GMT 2008

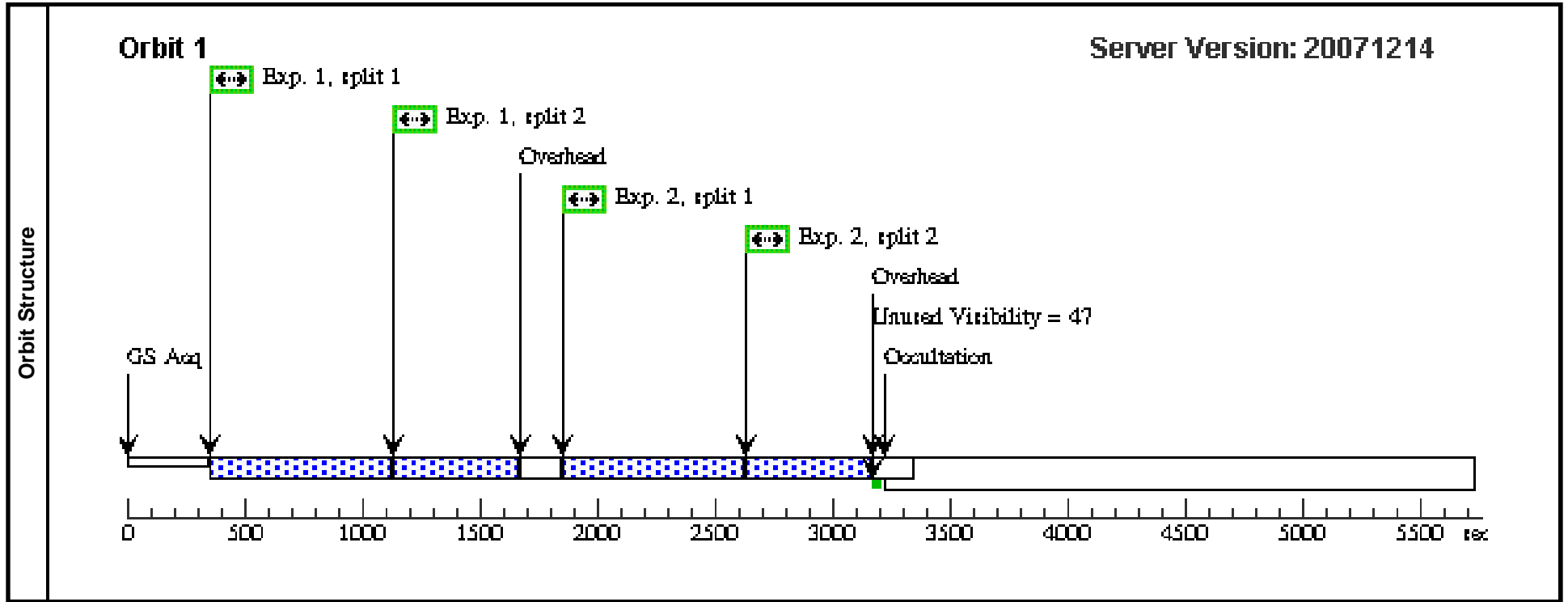
Visit	Proposal 11227, Visit 20, pi Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 01; BETWEEN 09-JUN-2008:00:00:00 AND 10-JUN-2008:00:00:00 Comments: orbit Ok for NGC1313-X2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC1313-X2	RA: 03 18 22.0000 (49.5916667d) Dec: -66 36 4.00 (-66.60111d) Equinox: J2000		V=23.5+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0kf450w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
	2	orb0kf555w	(1) NGC1313-X2	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>400.0 Secs (Split 1)] [=>700.0 Secs (Split 2)]	[1]



Proposal 11227 - Visit 21 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:51 GMT 2008

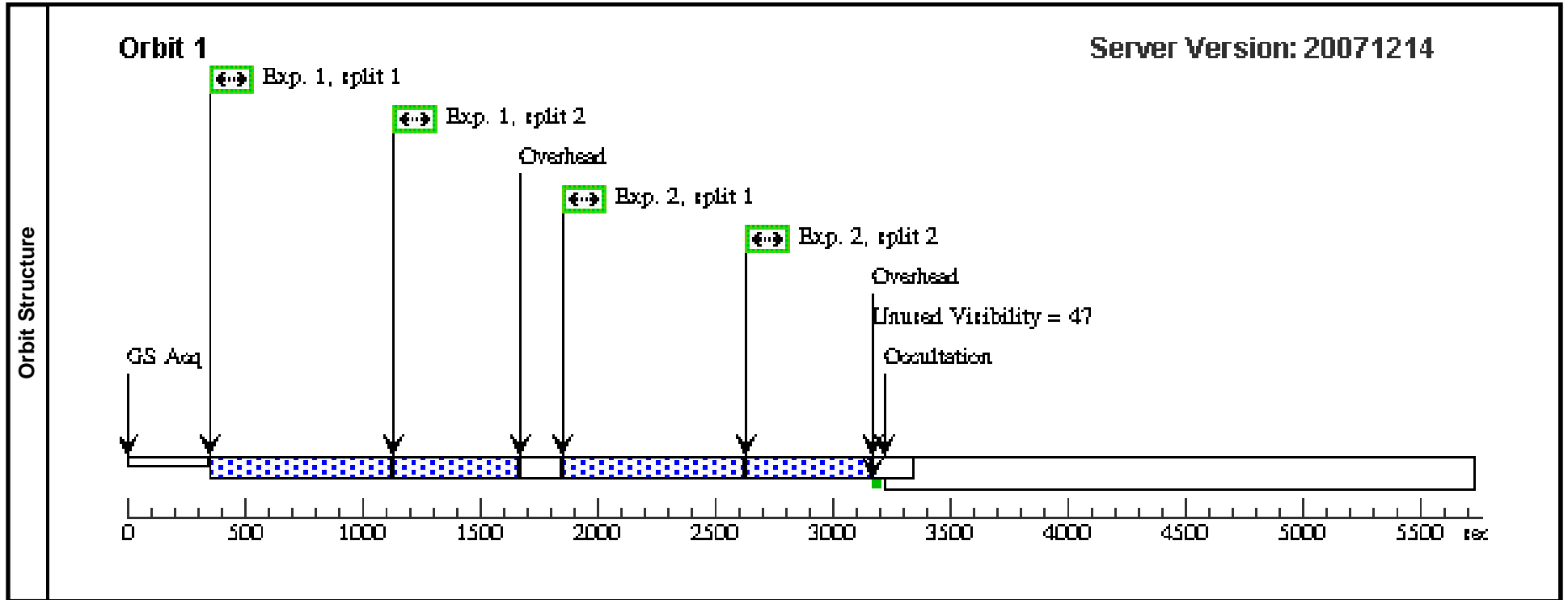
Visit	Proposal 11227, Visit 21, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none) Comments: orbit 01 for ngc5204-ULX									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC5204-ULX	RA: 13 29 39.0000 (202.4125000d) Dec: +58 25 6.00 (58.41833d) Equinox: J2000		V=21.9+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb01f450w	(2) NGC5204-ULX	WFPC2, IMAGE, PC1	F450W				1000.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]
2	orb01f555w	(2) NGC5204-ULX	WFPC2, IMAGE, PC1	F555W				1100.0 Secs [=>500.0 Secs (Split 1)] [=>500.0 Secs (Split 2)]	[1]	



Proposal 11227 - Visit 22 - The orbital period for an ultraluminous X-ray source in NGC1313

Wed Apr 16 01:01:51 GMT 2008

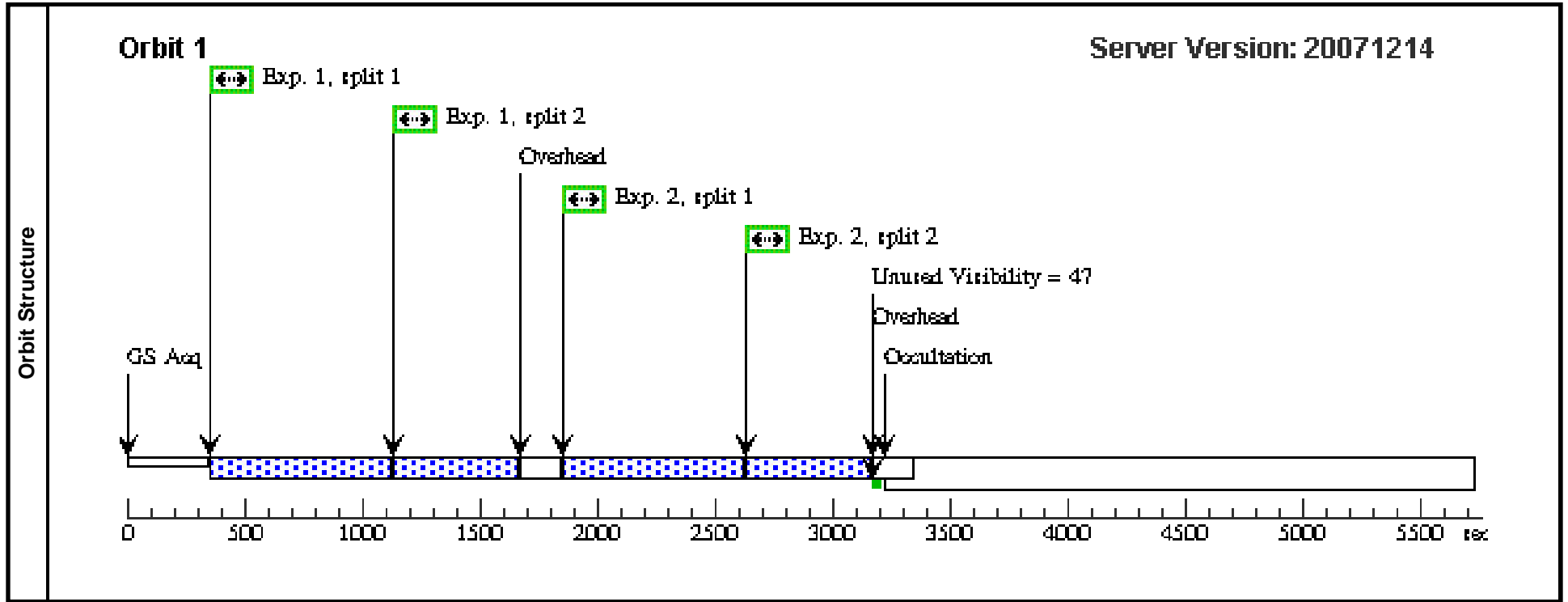
Visit	Proposal 11227, Visit 22, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 21; AFTER 21 BY 36.0 H TO 49.0 H Comments: orbit 0m for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(2)		NGC5204-ULX	RA: 13 29 39.0000 (202.4125000d) Dec: +58 25 6.00 (58.41833d) Equinox: J2000		V=21.9+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0mf450w	(2) NGC5204-ULX	WFPC2, IMAGE, PC1	F450W				1000.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	
	2	orb0mf555w	(2) NGC5204-ULX	WFPC2, IMAGE, PC1	F555W				1100.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	



Proposal 11227 - Visit 23 - The orbital period for an ultraluminous X-ray source in NGC1313

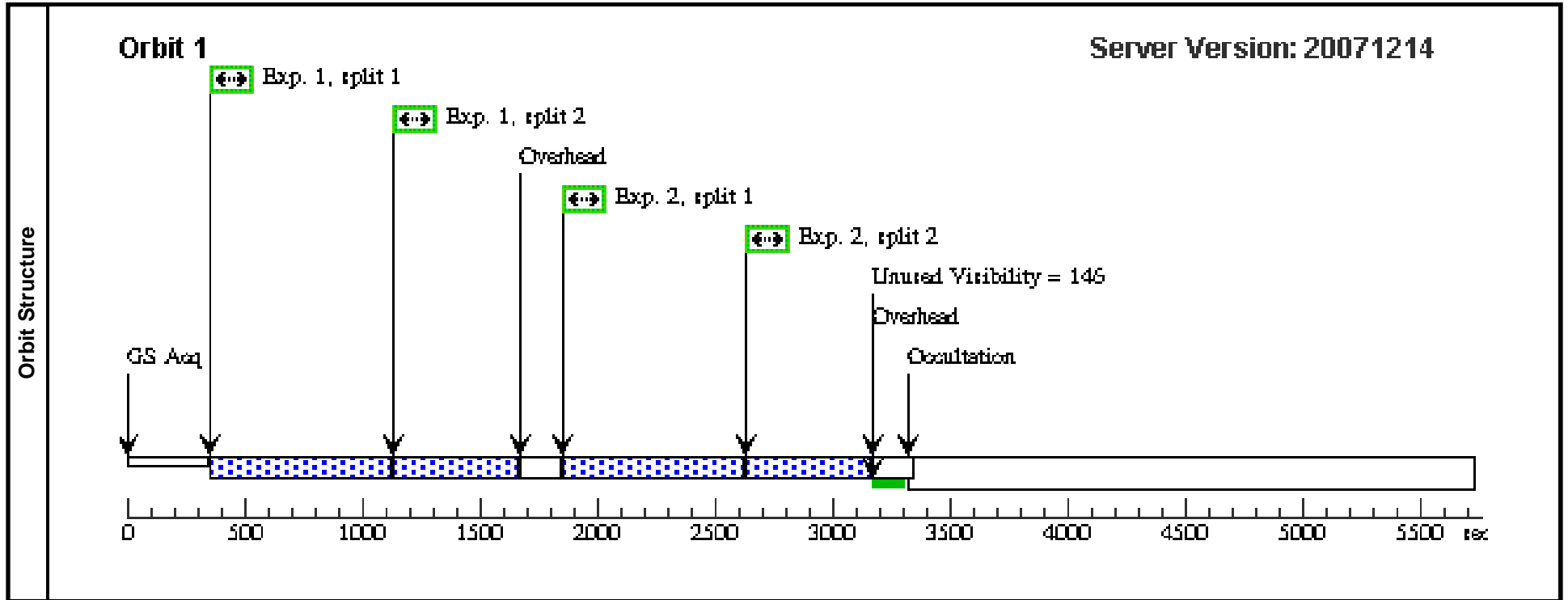
Wed Apr 16 01:01:52 GMT 2008

Visit	Proposal 11227, Visit 23, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 21; AFTER 22 BY 64.0 H TO 121.0 H Comments: orbit On for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(2)		NGC5204-ULX	RA: 13 29 39.0000 (202.4125000d) Dec: +58 25 6.00 (58.41833d) Equinox: J2000		V=21.9+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0nf450w	(2) NGC5204-ULX	WFPC2, IMAGE, PC1	F450W				1000.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	
	2	orb0nf555w	(2) NGC5204-ULX	WFPC2, IMAGE, PC1	F555W				1100.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	



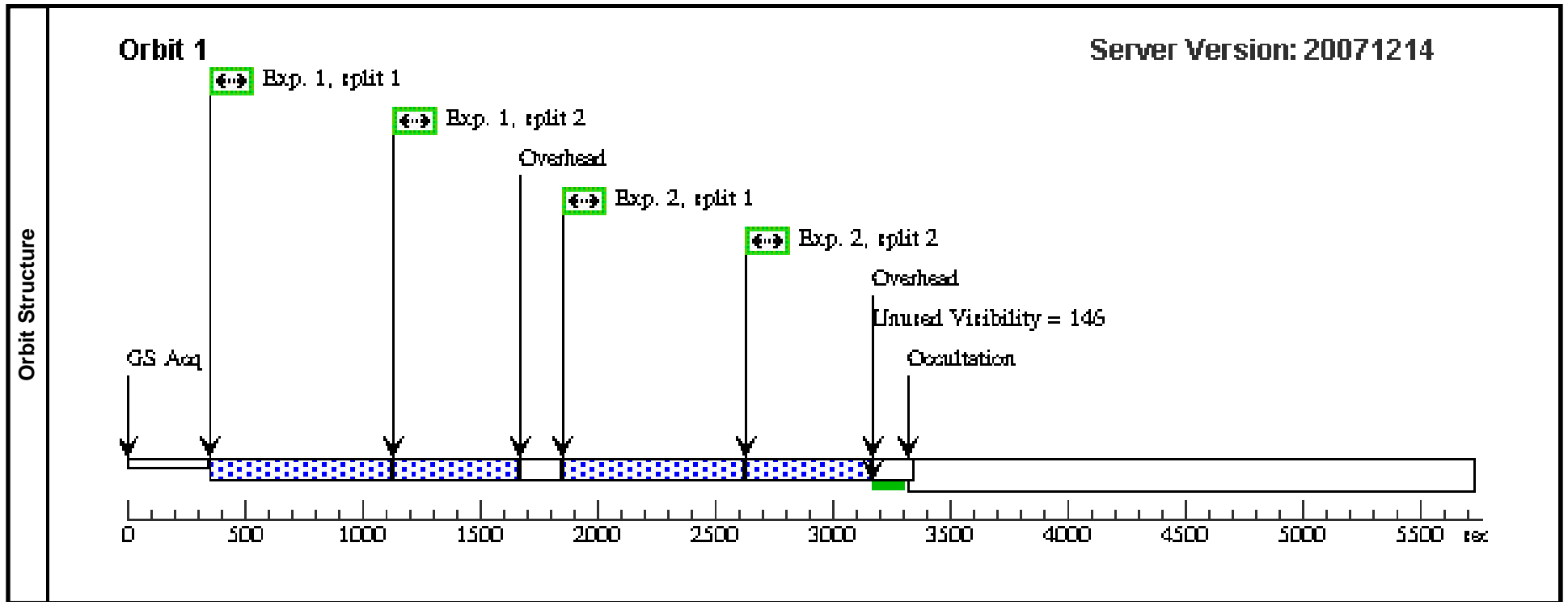
Proposal 11227 - Visit 24 - The orbital period for an ultraluminous X-ray source in NGC1313

Visit	Proposal 11227, Visit 24, completed Wed Apr 16 01:01:52 GMT 2008 Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none) <i>Comments: orbit 0o for NGC1313-X2</i>									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(3)		HOLMII-ULX	RA: 08 19 30.0000 (124.8750000d) Dec: +70 42 19.00 (70.70528d) Equinox: J2000		V=21.9+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0of450w	(3) HOLMII-ULX	WFPC2, IMAGE, PC1	F450W				1000.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	
	2	orb0of555w	(3) HOLMII-ULX	WFPC2, IMAGE, PC1	F555W				1100.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	



Proposal 11227 - Visit 25 - The orbital period for an ultraluminous X-ray source in NGC1313

Visit	Proposal 11227, Visit 25, completed Wed Apr 16 01:01:52 GMT 2008 Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 24; AFTER 24 BY 36.0 H TO 49.0 H Comments: orbit Op for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(3)		HOLMII-ULX	RA: 08 19 30.0000 (124.8750000d) Dec: +70 42 19.00 (70.70528d) Equinox: J2000		V=21.9+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0pf450w	(3) HOLMII-ULX	WFPC2, IMAGE, PC1	F450W				1000.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	
	2	orb0pf555w	(3) HOLMII-ULX	WFPC2, IMAGE, PC1	F555W				1100.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	



Proposal 11227 - Visit 26 - The orbital period for an ultraluminous X-ray source in NGC1313

Visit	Proposal 11227, Visit 26, completed Wed Apr 16 01:01:52 GMT 2008 Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 24; AFTER 25 BY 64.0 H TO 121.0 H Comments: orbit 0q for NGC1313-X2									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(3)		HOLMII-ULX	RA: 08 19 30.0000 (124.8750000d) Dec: +70 42 19.00 (70.70528d) Equinox: J2000		V=21.9+/-0.1	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	orb0qf450w	(3) HOLMII-ULX	WFPC2, IMAGE, PC1	F450W				1000.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	
	2	orb0qf555w	(3) HOLMII-ULX	WFPC2, IMAGE, PC1	F555W				1100.0 Secs	
									[=>500.0 Secs (Split 1)]	[1]
									[=>500.0 Secs (Split 2)]	

