



11176 - Location and the Origin of Short Gamma-Ray Bursts

Cycle: 16, Proposal Category: GO

(Availability Mode: SUPPORTED)

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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) GRB-050709	WFPC2	2	18-Jan-2008 02:05:38.0	yes
11	(2) GRB-050724	WFPC2	2	18-Jan-2008 02:05:44.0	yes
12	(2) GRB-050724	WFPC2	2	18-Jan-2008 02:05:49.0	yes
21	(3) GRB-051221A	WFPC2	2	18-Jan-2008 02:05:53.0	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>
22	(3) GRB-051221A	WFPC2	2	18-Jan-2008 02:05:57.0	yes
31	(4) GRB-051227	WFPC2	2	18-Jan-2008 02:06:02.0	yes
32	(4) GRB-051227	NIC3	2	18-Jan-2008 02:06:09.0	yes
41	(5) GRB-060313	NIC3	2	18-Jan-2008 02:06:12.0	yes
51	(6) GRB-061006	WFPC2	2	18-Jan-2008 02:06:16.0	yes
52	(6) GRB-061006	NIC3	1	18-Jan-2008 02:06:20.0	yes
61	(7) GRB-061201	WFPC2	2	18-Jan-2008 02:06:23.0	yes

21 Total Orbits Used

ABSTRACT

During the past decade extraordinary progress has been made in determining the origin of long-duration gamma-ray bursts. It has been conclusively shown that these objects derive from the deaths of massive stars. Nonetheless, the origin of their observational cousins, short-duration gamma-ray bursts (SGRBs) remains a mystery. While SGRBs are widely thought to result from the inspiral of compact binaries, this is a conjecture. A number of hosts of SGRBs have been identified, and have been used by some to argue that SGRBs derive primarily from an ancient population (~ 5 Gyr); however, it is not known whether this conclusion more accurately reflects selection biases or astrophysics.

Here we propose to employ a variant of a technique that we pioneered and used to great effect in elucidating the origins of long-duration bursts. We will examine the degree to which SGRB locations trace the red or blue light of their hosts, and thus old or young stellar populations. This approach will allow us to study the demographics of the SGRB population in a manner largely free of the distance dependent selection effects which have so far bedeviled this field, and should give direct insight into the age of the SGRB progenitor population.

OBSERVING DESCRIPTION

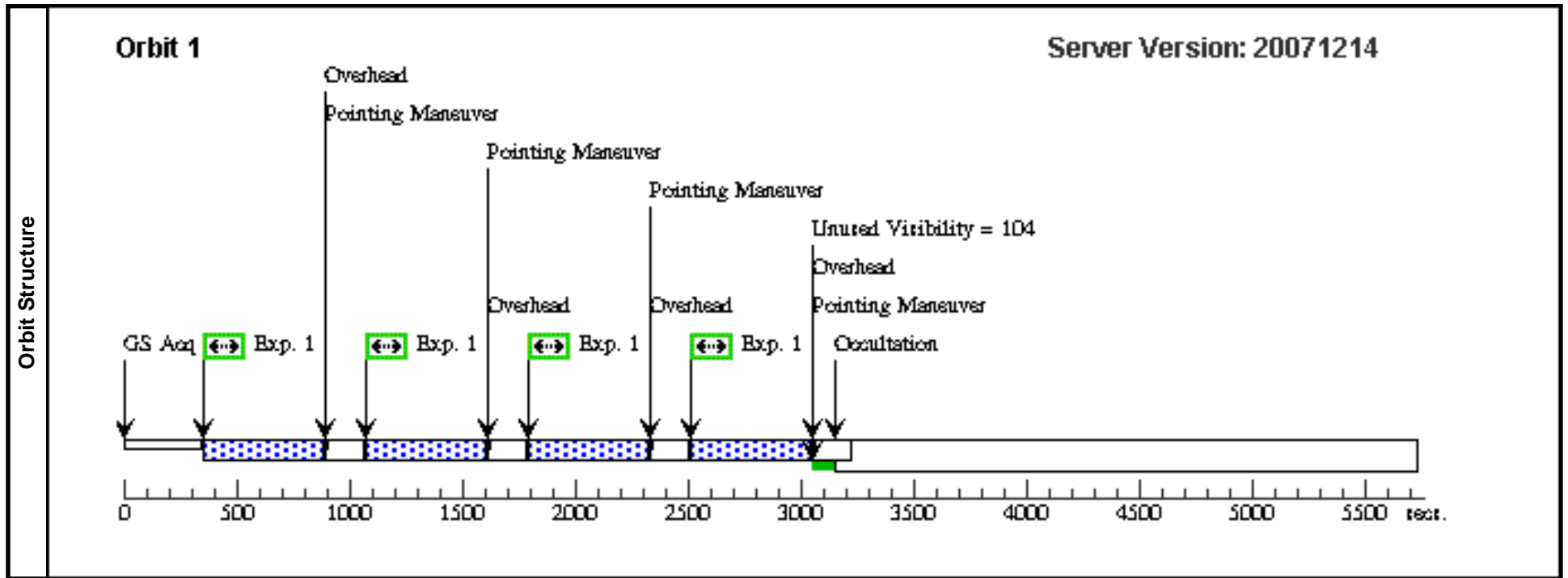
We propose to observe SGRB hosts where the location of the GRB is known to $\sim 0''.1$. In practice, these are GRBs with optical transients (OTs). A number of these objects have already been observed with HST, primarily in F814W, and in cases where some of these images were taken short after the burst, the HST image will give a precise position. In other cases, early Gemini and/or VLT images will be available from their archives during Cycle 16. We expect these images to provide locations with a one sigma error of $\sim 0''.05$. In cases where a redshift is known, we have chosen filters that will straddle the 4000 Å break. In other cases (primarily cases where the host magnitude is greater than 25), we have assumed that the redshift is comparable to or greater than one, and have chosen filters which should assure that we see the 4000 Å break. Our observations will reach a signal-to-noise ratio of greater than 1 per WFPC2 pixel at a surface brightness between 25 and 25.5 mag AB per square arcsecond. This is true in all filters, on the WFPC2, and in the equivalent drizzled area in NIC3 images. We used a SNR of 1 as the definition of the edge of the host in the HST images analyzed in our Nature paper on burst locations. Most of these images reached this limit in either the STIS (open) or ACS F606W in native pixels around a surface brightness of 25 AB mag per square arcsecond. Thus we would reach a similar depth though with slightly reduced resolution. We plan to use the NIC3 rather than the more finely sampled NIC2 in order to assure that we can perform the astrometry required to accurately place a GRB on its host.

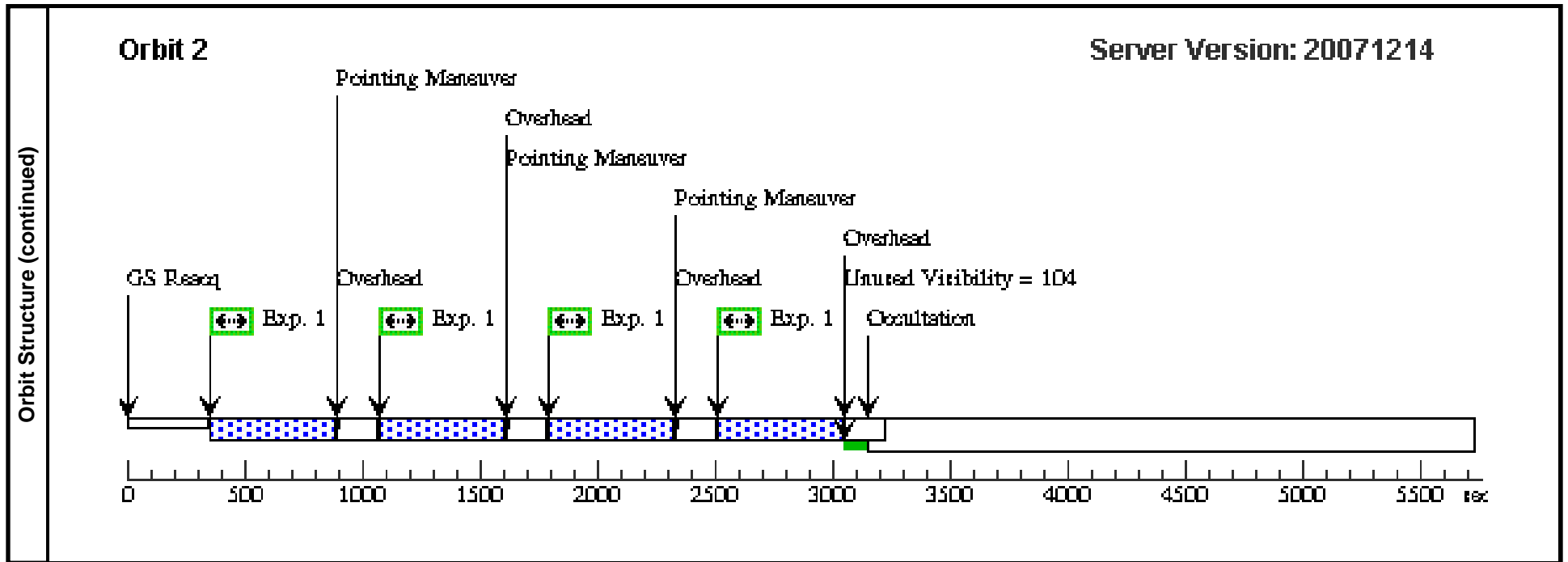
One object in our sample, GRB 061201, is offset from the center of Abell Cluster S0995 at $z = 0.0835$ by about 1 Mpc, assuming the object is at the distance of the cluster; however, no host has been identified from ground. HST observations were taken by Fox et al. as a ToO, but they have yet to release a circular. Depending on the results of these observations our choice of filter (and potentially camera) for this object could change. The HST observations could also potentially provide a highly accurate position, though a position to better than a single WFPC2 could be obtained from the archival Gemini image. If no host is found in the existing HST images, a deep NIR search with F160W would be valuable to determine if the location of the object might be due to a chance superposition. In this case, a distant red host might exist. If no host is found in the NIR, it would suggest this object was formed from either a star or globular cluster in the "intracluster light".

Proposal 11176 - Visit 01 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:26 GMT 2008

Visit	Proposal 11176, Visit 01, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SCHED 70%									
	Patterns	#	Primary Pattern		Secondary Pattern		Exposures			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	GRB-050709	RA: 23 01 26.9600 (345.3623333d) Dec: -38 58 39.50 (-38.97764d) Equinox: J2000		V=21.1	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) GRB-050709	WFPC2, IMAGE, WFALL	F450W			Pattern 1-1 (1)	400.0 Secs	
									[=>(Pattern 1,1)]	
									[=>(Pattern 1,2)]	
									[=>(Pattern 2,1)]	[1]
								[=>(Pattern 2,2)]		
								[=>(Pattern 3,1)]		
								[=>(Pattern 3,2)]		
								[=>(Pattern 4,1)]	[2]	
								[=>(Pattern 4,2)]		

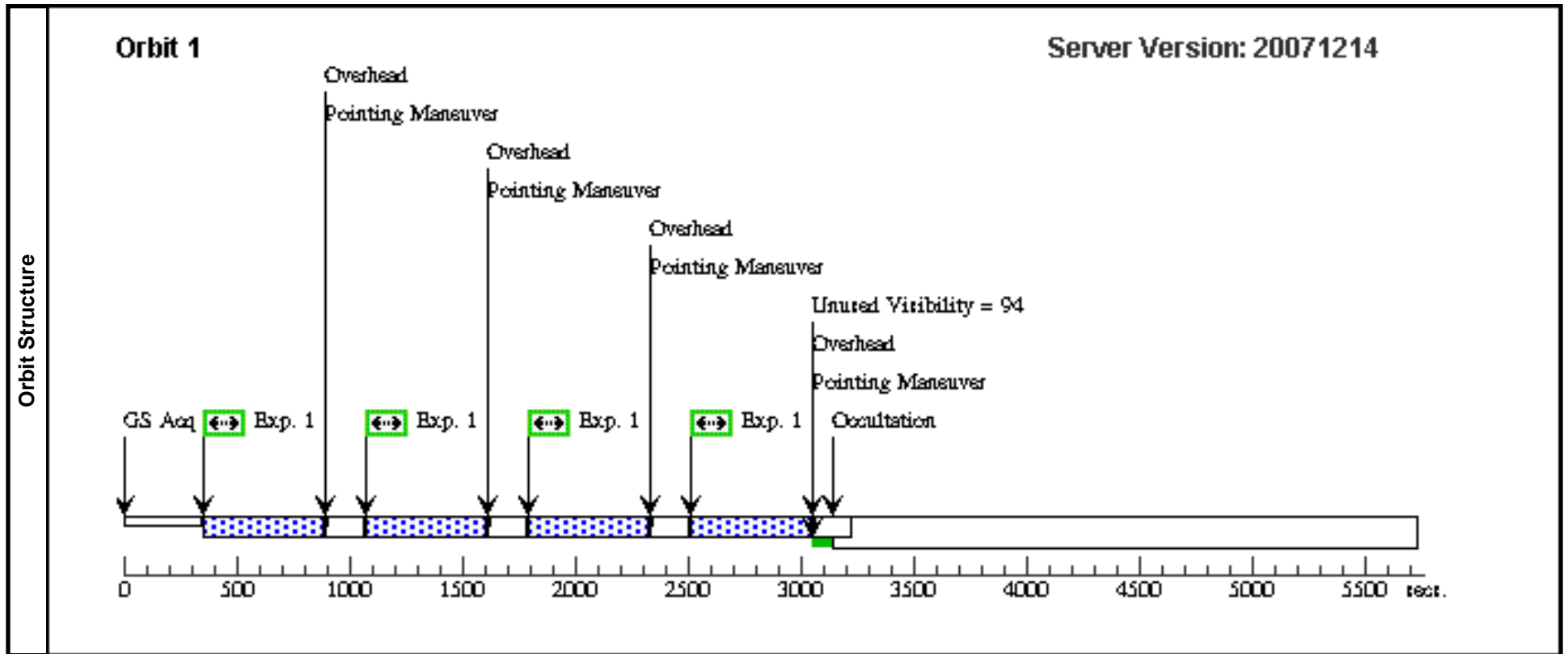


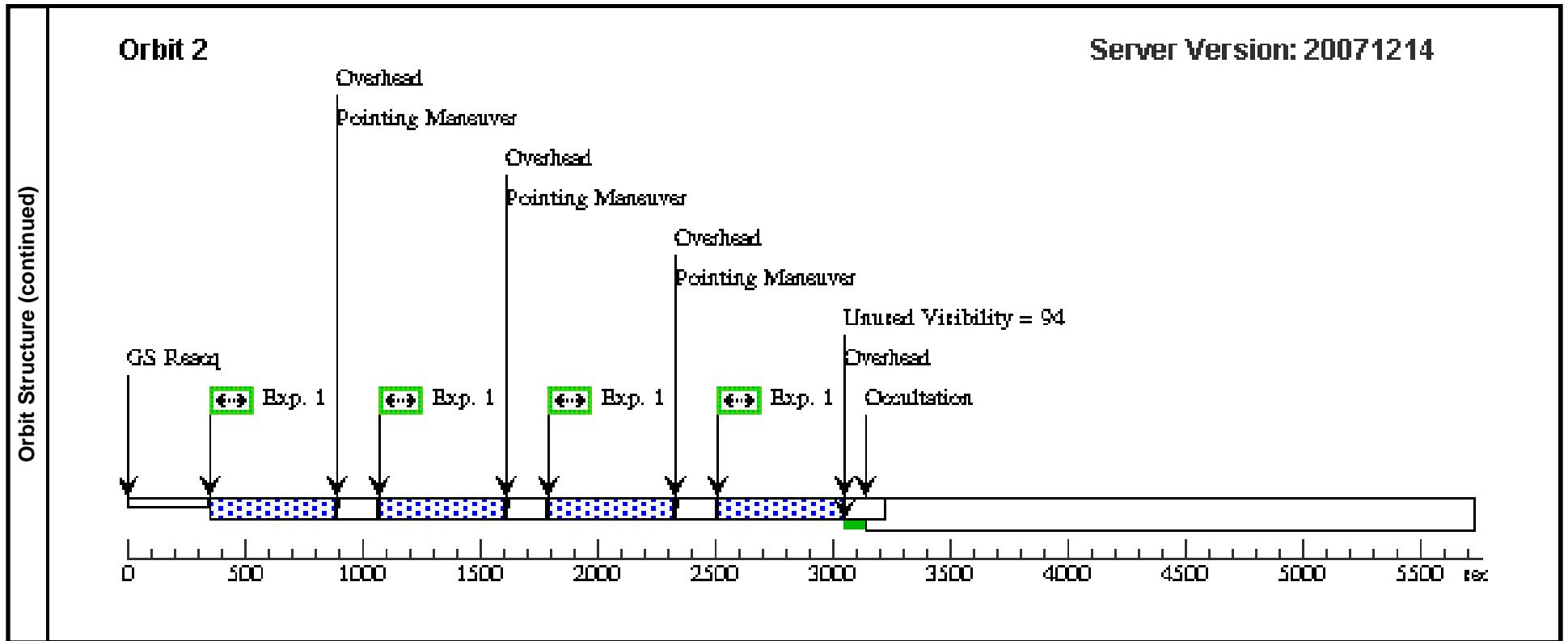


Proposal 11176 - Visit 11 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:27 GMT 2008

Visit	Proposal 11176, Visit 11, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern		Secondary Pattern		Exposures			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	GRB-050724	RA: 16 24 44.3800 (246.1849167d) Dec: -27 32 27.50 (-27.54097d) Equinox: J2000		V=20.6	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) GRB-050724	WFPC2, IMAGE, WFALL	F450W			Pattern 1-1 (1)	400.0 Secs [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 2,1)] [=>(Pattern 2,2)]	[1]
								[=>(Pattern 3,1)] [=>(Pattern 3,2)] [=>(Pattern 4,1)] [=>(Pattern 4,2)]	[2]	

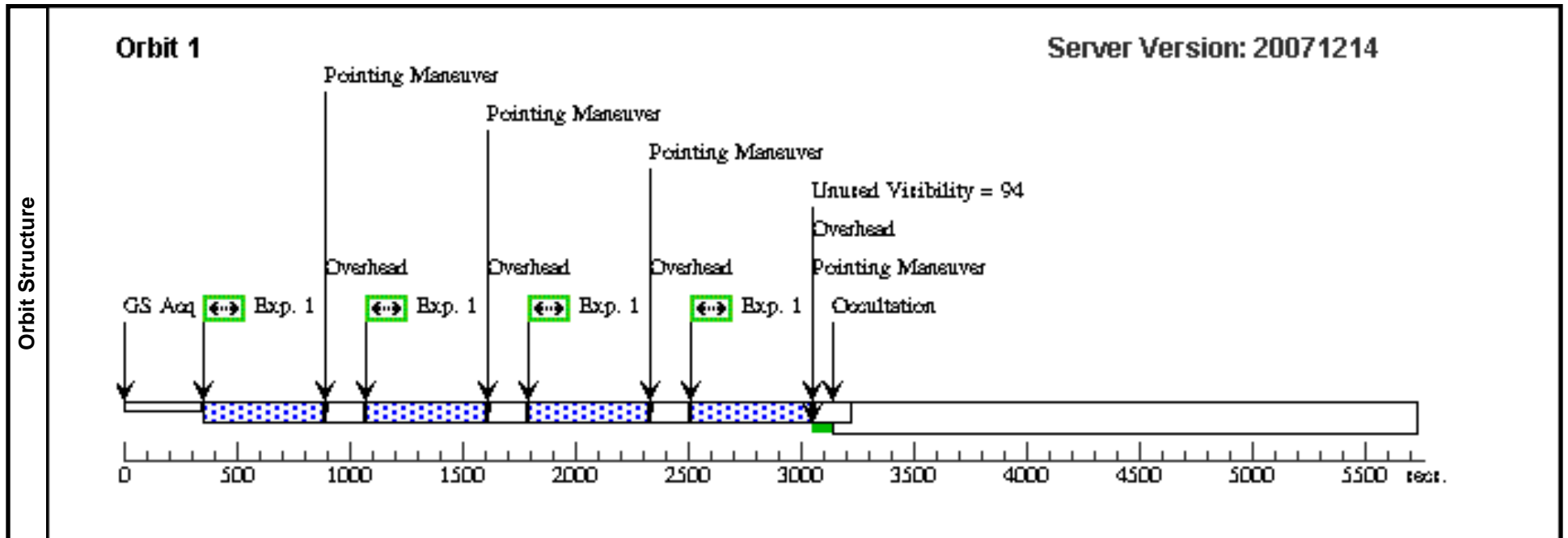


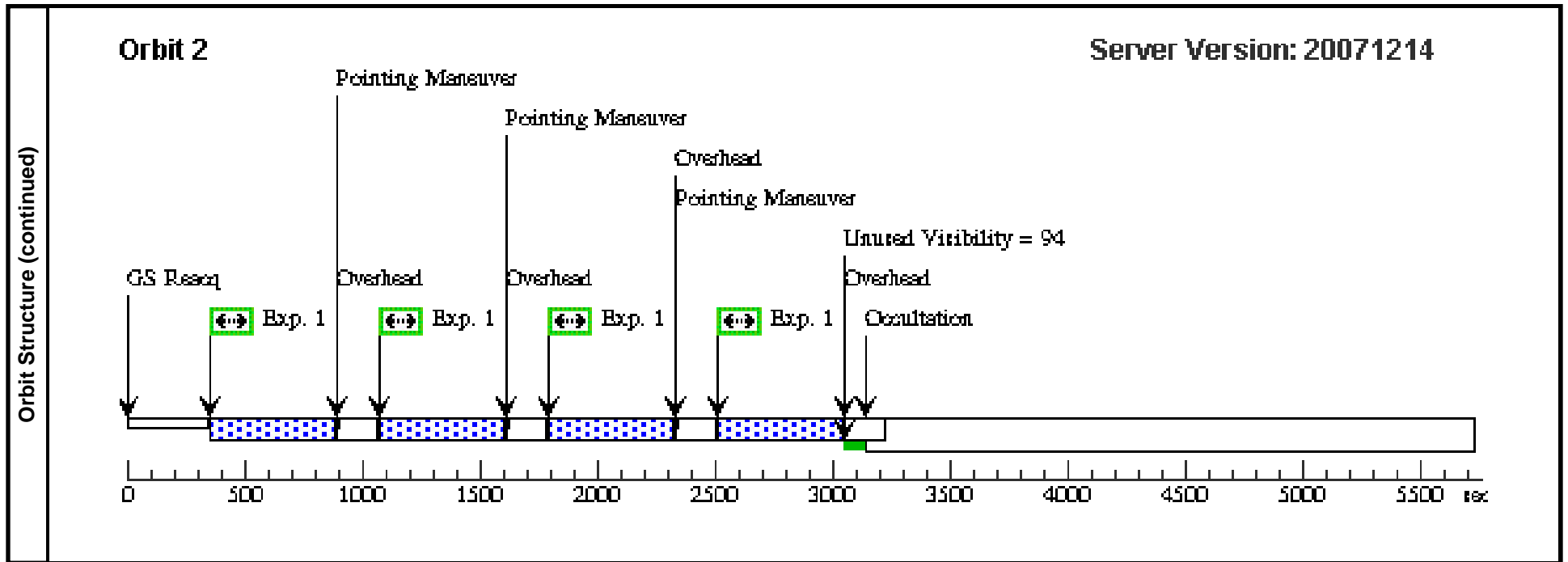


Proposal 11176 - Visit 12 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:28 GMT 2008

Visit	Proposal 11176, Visit 12, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	GRB-050724	RA: 16 24 44.3800 (246.1849167d) Dec: -27 32 27.50 (-27.54097d) Equinox: J2000		V=20.6	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) GRB-050724	WFPC2, IMAGE, WFALL	F814W			Pattern 1-1 (1)	400.0 Secs [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 2,1)] [=>(Pattern 2,2)]	[1]
								[=>(Pattern 3,1)] [=>(Pattern 3,2)] [=>(Pattern 4,1)] [=>(Pattern 4,2)]	[2]	

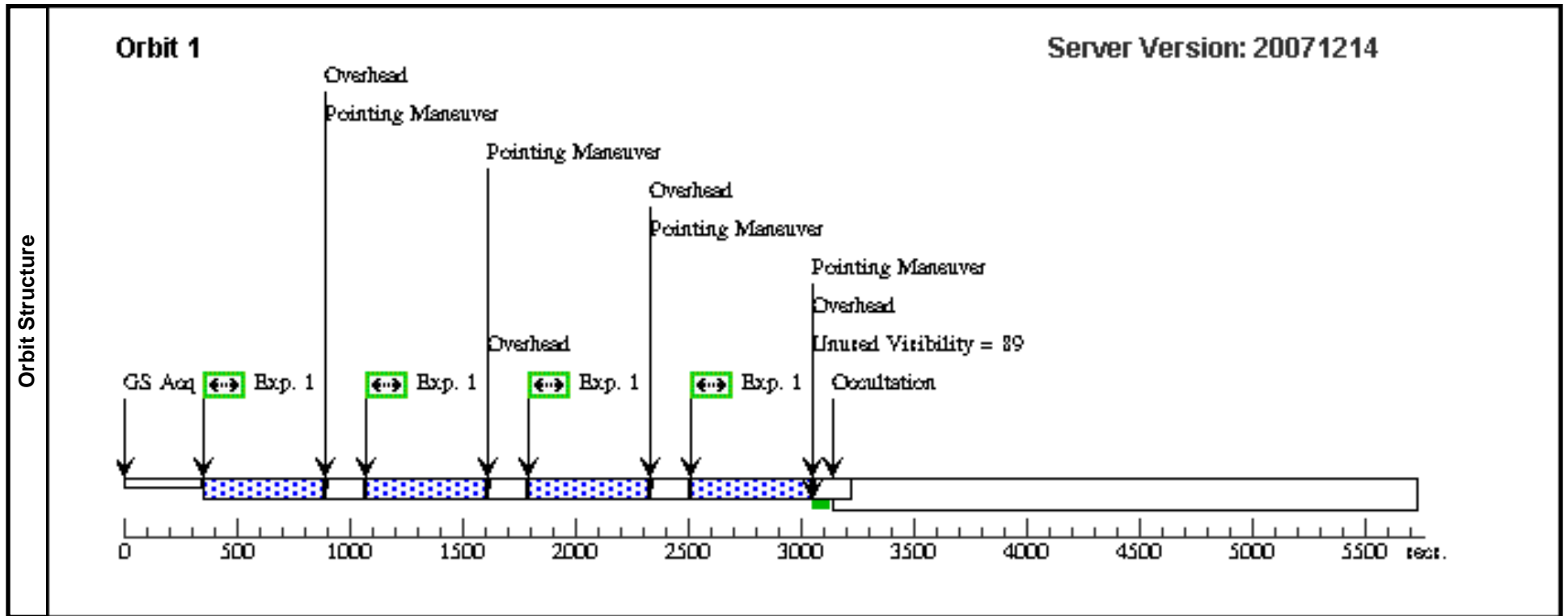


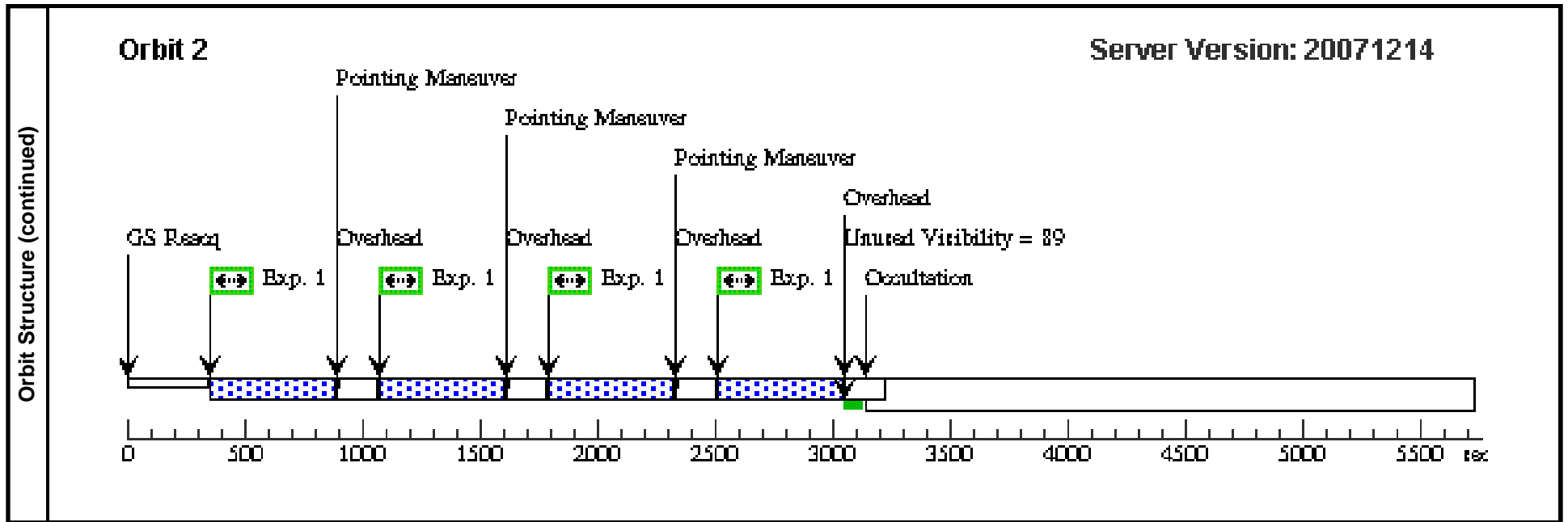


Proposal 11176 - Visit 21 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:29 GMT 2008

Visit	Proposal 11176, Visit 21, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern		Secondary Pattern		Exposures			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	GRB-051221A	RA: 21 54 48.6300 (328.7026250d) Dec: +16 53 27.40 (16.89094d) Equinox: J2000		V=22.1	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) GRB-051221A	WFPC2, IMAGE, WFALL	F555W			Pattern 1-1 (1)	400.0 Secs [=>(Pattern 1,1)] [=>(Pattern 1,2)] [=>(Pattern 2,1)] [=>(Pattern 2,2)]	[1]
								[=>(Pattern 3,1)] [=>(Pattern 3,2)] [=>(Pattern 4,1)] [=>(Pattern 4,2)]	[2]	

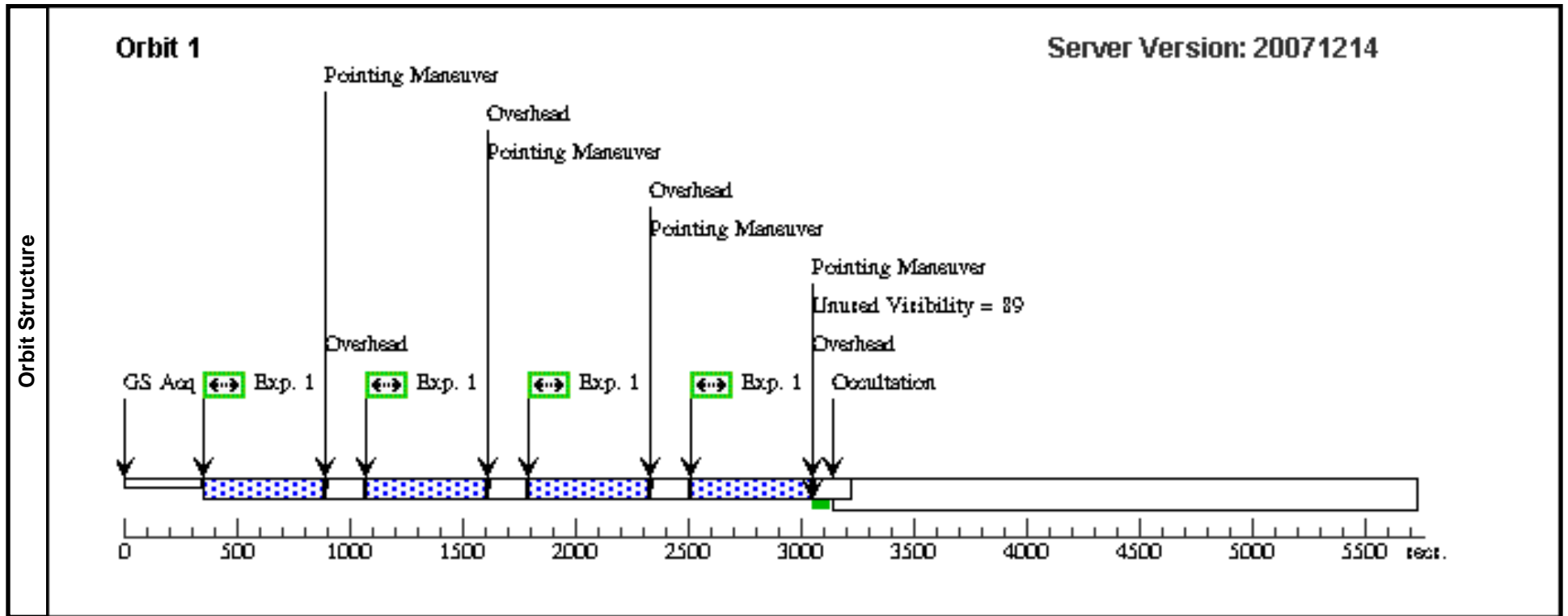


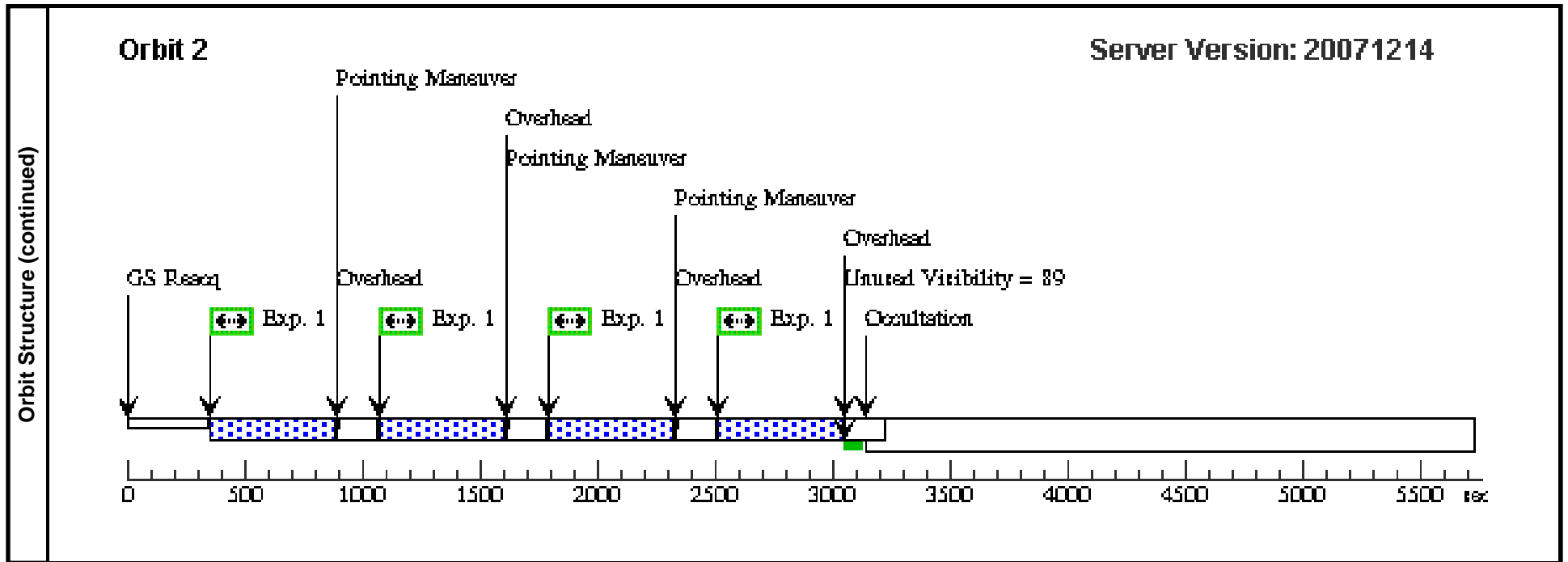


Proposal 11176 - Visit 22 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:29 GMT 2008

Visit	Proposal 11176, Visit 22, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SAME ORIENT AS 21									
	Patterns	#	Primary Pattern		Secondary Pattern		Exposures			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	GRB-051221A	RA: 21 54 48.6300 (328.7026250d) Dec: +16 53 27.40 (16.89094d) Equinox: J2000		V=22.1	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) GRB-051221A	WFPC2, IMAGE, WFALL	F814W			Pattern 1-1 (1)	400.0 Secs	
									[=>(Pattern 1,1)]	
									[=>(Pattern 1,2)]	
									[=>(Pattern 2,1)]	[1]
								[=>(Pattern 2,2)]		
								[=>(Pattern 3,1)]		
								[=>(Pattern 3,2)]		
								[=>(Pattern 4,1)]	[2]	
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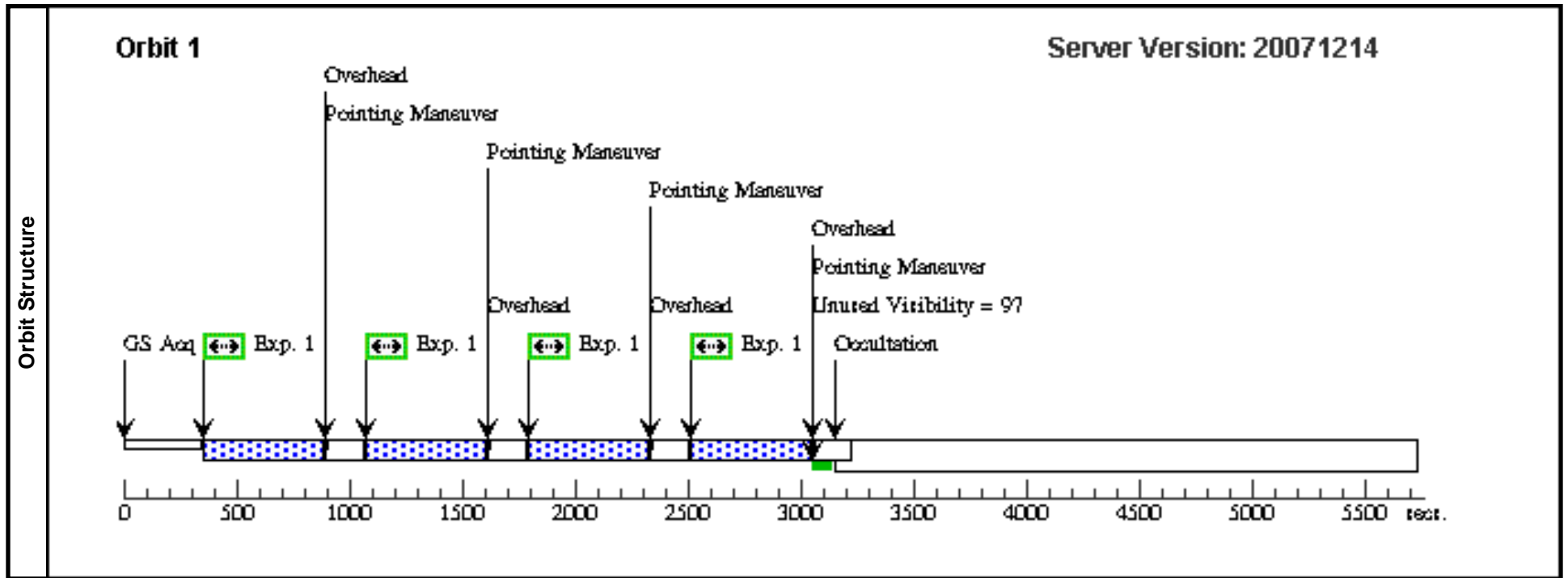


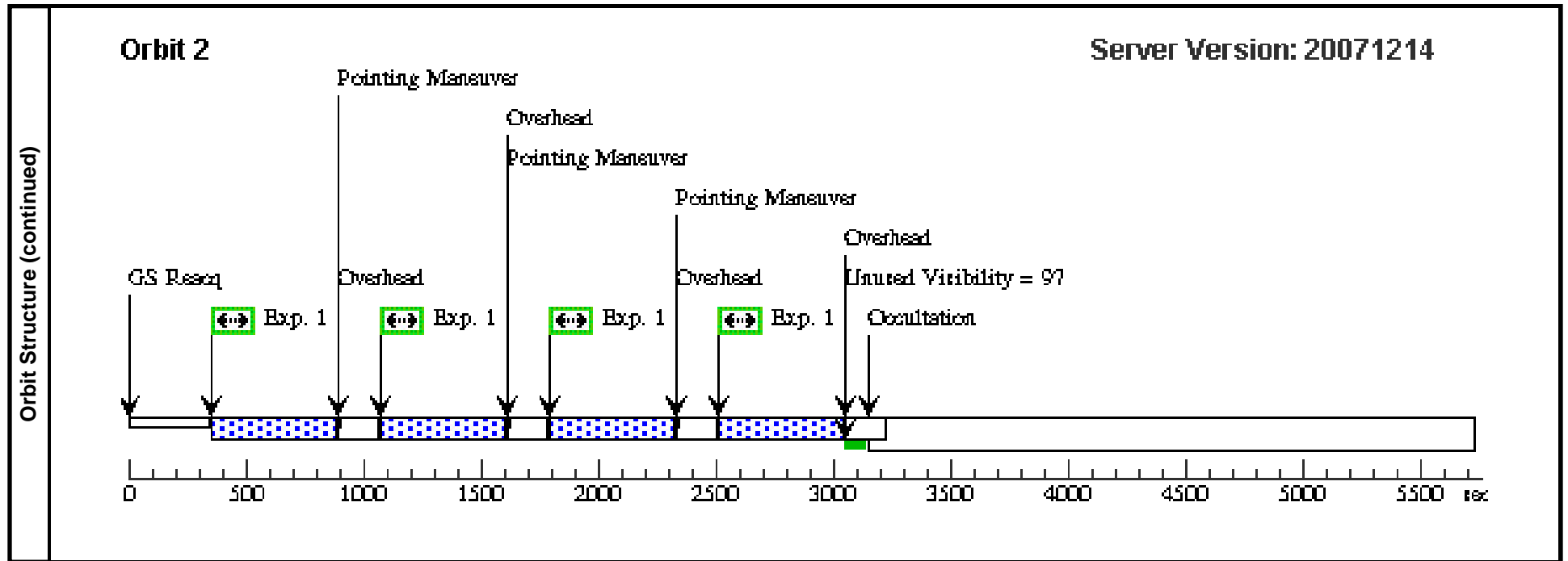


Proposal 11176 - Visit 31 - Location and the Origin of Short Gamma-Ray Bursts

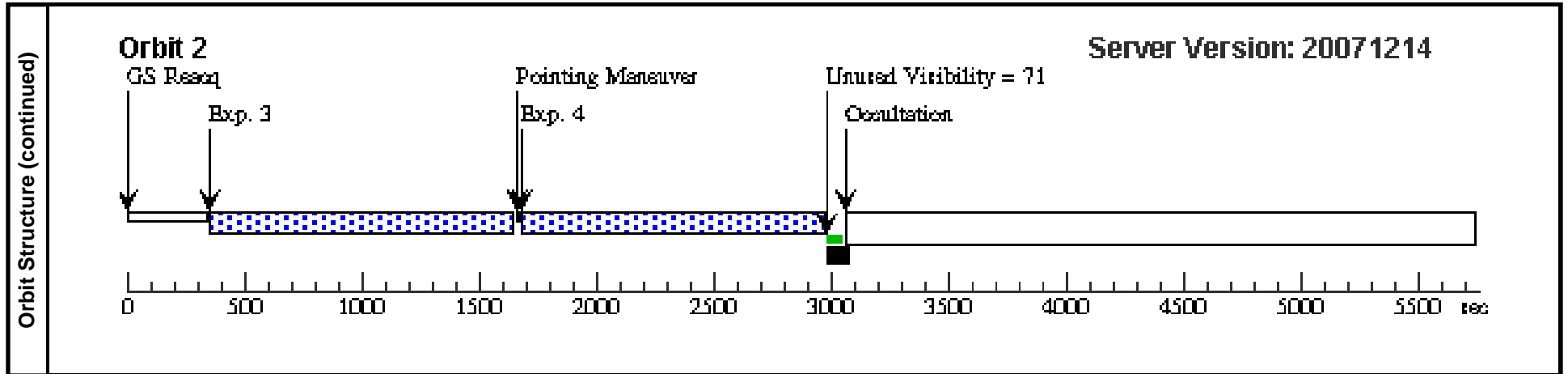
Fri Jan 18 07:06:30 GMT 2008

Visit	Proposal 11176, Visit 31, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	GRB-051227	RA: 08 20 58.1100 (125.2421250d) Dec: +31 55 31.89 (31.92552d) Equinox: J2000		V=25.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) GRB-051227	WFPC2, IMAGE, WFALL	F555W			Pattern 1-1 (1)	400.0 Secs	
									[=>(Pattern 1,1)]	
									[=>(Pattern 1,2)]	[1]
									[=>(Pattern 2,1)]	
								[=>(Pattern 2,2)]		
								[=>(Pattern 3,1)]		
								[=>(Pattern 3,2)]		
								[=>(Pattern 4,1)]	[2]	
								[=>(Pattern 4,2)]		

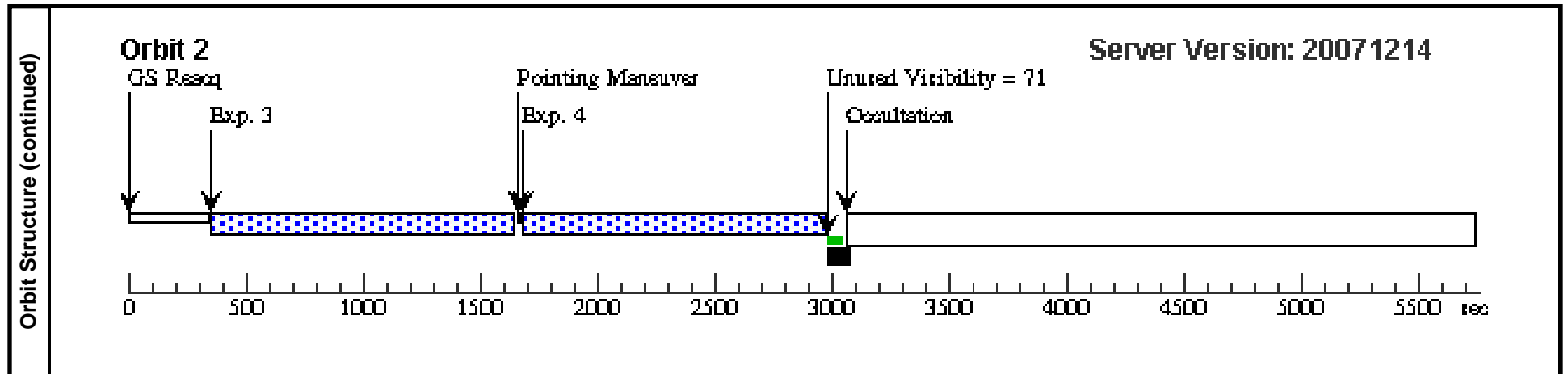




Visit	Proposal 11176, Visit 32, implementation Diagnostic Status: No Diagnostics Scientific Instruments: NIC3 Special Requirements: VISIBILITY INTERVAL 3060.0 S									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	GRB-051227	RA: 08 20 58.1100 (125.2421250d) Dec: +31 55 31.89 (31.92552d) Equinox: J2000		V=25.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(4) GRB-051227	(4) GRB-051227	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG -1.426,- 1.421		[==>]	[1]
	2	(4) GRB-051227	(4) GRB-051227	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG -1.426,1 .523		[==>]	[1]
	3	(4) GRB-051227	(4) GRB-051227	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG 1.528,-1 .421		[==>]	[2]
	4	(4) GRB-051227	(4) GRB-051227	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG 1.528,1. 523		[==>]	[2]
Orbit Structure	<p>Orbit 1 Server Version: 20071214</p> <p>The diagram illustrates the timeline of Orbit 1. It starts at 0 seconds with 'GS Acq Exp. 1' (0-500s). A 'Pointing Maneuver' occurs at 1600s, followed by 'Exp. 2' (1600-3000s). Another 'Pointing Maneuver' occurs at 3000s, leading to 'Unused Visibility = 44' (3000-3100s) and 'Occultation' (3100-5500s). The x-axis is labeled 'sec.' and ranges from 0 to 5500.</p>									



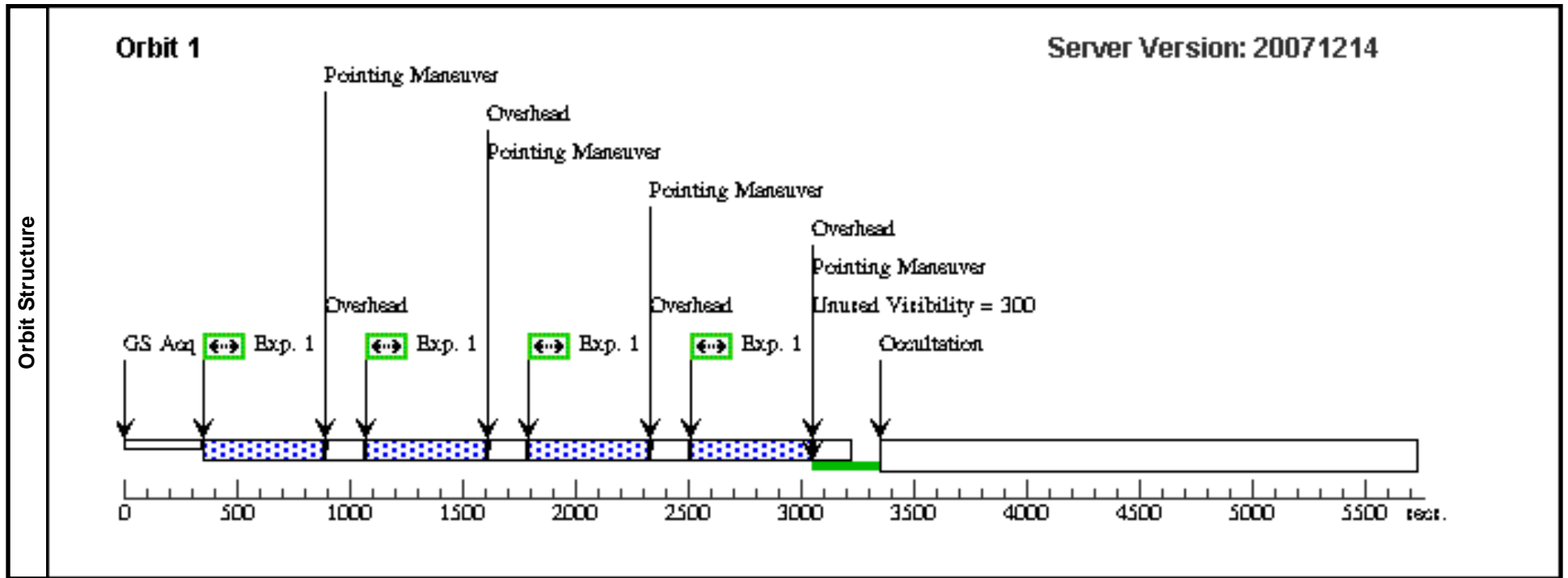
Visit	Proposal 11176, Visit 41, implementation Diagnostic Status: No Diagnostics Scientific Instruments: NIC3 Special Requirements: VISIBILITY INTERVAL 3060.0 S									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(5)		GRB-060313	RA: 04 26 28.4200 (66.6184167d) Dec: -10 50 39.84 (-10.84440d) Equinox: J2000		V=25	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(5) GRB-060313	(5) GRB-060313	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG -1.426,- 1.421		[==>]	[1]
	2	(5) GRB-060313	(5) GRB-060313	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG -1.426,1 .523		[==>]	[1]
	3	(5) GRB-060313	(5) GRB-060313	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG 1.528,-1 .421		[==>]	[2]
	4	(5) GRB-060313	(5) GRB-060313	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=12; SAMP-SEQ=SPAR S128	POS TARG 1.528,1 523		[==>]	[2]
Orbit Structure	<p>Orbit 1 Server Version: 20071214</p> <p>The diagram illustrates the timeline of Orbit 1. It starts at 0 seconds with 'GS Acq Exp. 1' (0-500s). A 'Pointing Maneuver' occurs at 1600s, followed by 'Exp. 2' (1600-3000s). Another 'Pointing Maneuver' occurs at 3000s, leading to 'Unused Visibility = 44' (3000-3100s) and 'Occultation' (3100-5500s). The x-axis is labeled 'sec.' and ranges from 0 to 5500.</p>									

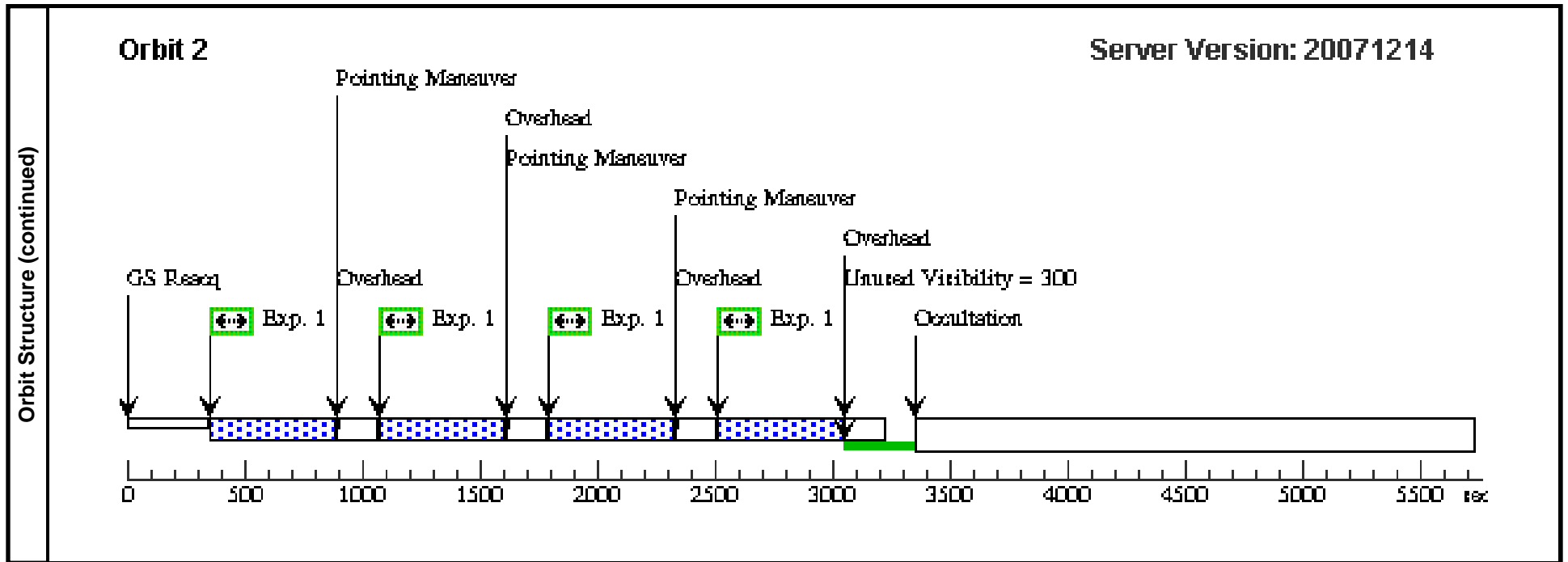


Proposal 11176 - Visit 51 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:31 GMT 2008

Visit	Proposal 11176, Visit 51, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	GRB-061006	RA: 07 24 7.6600 (111.0319167d) Dec: -79 11 55.10 (-79.19864d) Equinox: J2000		V=23.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(6) GRB-061006	WFPC2, IMAGE, WFALL	F555W			Pattern 1-1 (1)	400.0 Secs	
									[=>(Pattern 1,1)]	
									[=>(Pattern 1,2)]	[1]
									[=>(Pattern 2,1)]	
								[=>(Pattern 2,2)]		
								[=>(Pattern 3,1)]		
								[=>(Pattern 3,2)]		
								[=>(Pattern 4,1)]	[2]	
								[=>(Pattern 4,2)]		

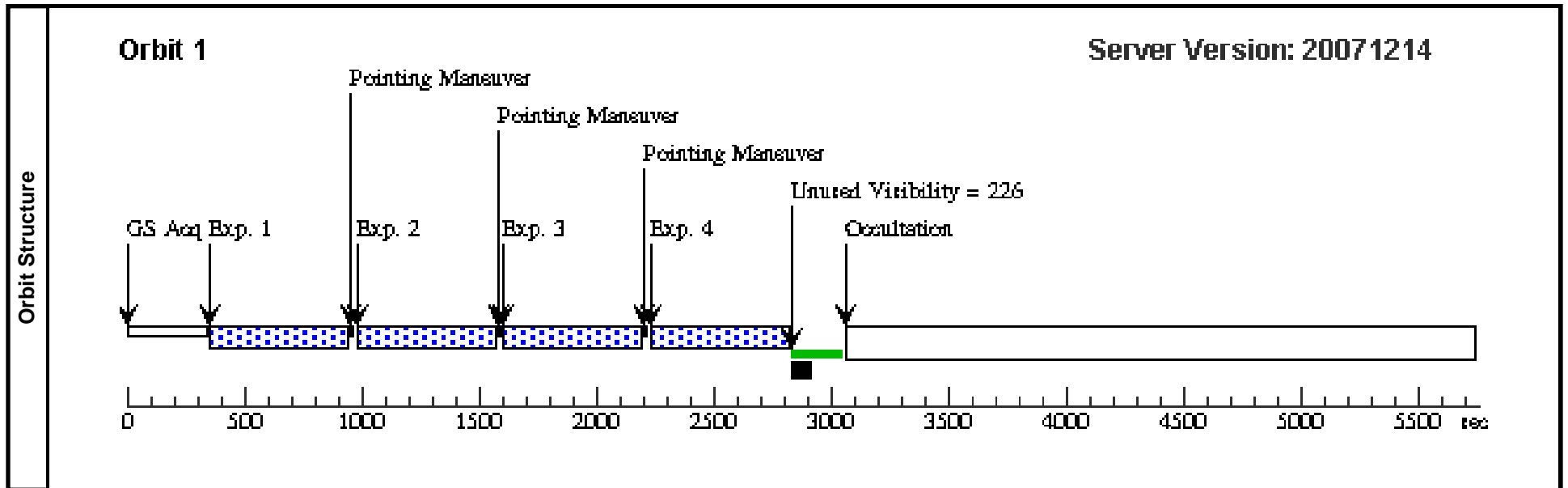




Proposal 11176 - Visit 52 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:32 GMT 2008

Visit	Proposal 11176, Visit 52, implementation Diagnostic Status: No Diagnostics Scientific Instruments: NIC3 Special Requirements: VISIBILITY INTERVAL 3060.0 S									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	GRB-061006	RA: 07 24 7.6600 (111.0319167d) Dec: -79 11 55.10 (-79.19864d) Equinox: J2000			V=23.6	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(6) GRB-061006	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=11; SAMP-SEQ=SPAR S64	POS TARG -1.426,- 1.421	[==>]	[1]		
	2	(6) GRB-061006	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=11; SAMP-SEQ=SPAR S64	POS TARG -1.426,1 .523	[==>]	[1]		
	3	(6) GRB-061006	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=11; SAMP-SEQ=SPAR S64	POS TARG 1.528,-1 .421	[==>]	[1]		
	4	(6) GRB-061006	NIC3, MULTIACCUM, NIC3	F160W	NSAMP=11; SAMP-SEQ=SPAR S64	POS TARG 1.528,1. 523	[==>]	[1]		



Proposal 11176 - Visit 61 - Location and the Origin of Short Gamma-Ray Bursts

Fri Jan 18 07:06:32 GMT 2008

Visit	Proposal 11176, Visit 61, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: SCHED 70%									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.32825 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45.0 Angle Between Sides= Center Pattern=false	(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	GRB-061201	RA: 22 08 32.0900 (332.1337083d) Dec: -74 34 47.08 (-74.57974d) Equinox: J2000		V=25	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(7) GRB-061201	WFPC2, IMAGE, WFALL	F450W			Pattern 1-1 (1)	400.0 Secs	
									[==>(Pattern 1,1)]	[1]
									[==>(Pattern 1,2)]	
									[==>(Pattern 2,1)]	
								[==>(Pattern 2,2)]	[2]	
								[==>(Pattern 3,1)]		
								[==>(Pattern 3,2)]		
								[==>(Pattern 4,1)]		
								[==>(Pattern 4,2)]		

