



10817 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Cycle: 15, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Hsiao-Wen Chen (PI)	University of Chicago	hchen@odjob.uchicago.edu
Dr. Joshua S. Bloom (CoI)	University of California - Berkeley	jbloom@astron.berkeley.edu
Dr. Jason X. Prochaska (CoI)	University of California - Santa Cruz	xavier@ucolick.org
Dr. M. Dessauges-Zavadsky (CoI) (ESA Member)	Observatoire de Geneve	Miroslava.Dessauges@obs.unige.ch
Prof. Max Pettini (CoI) (ESA Member)	University of Cambridge	pettini@ast.cam.ac.uk
Dr. Andrew Bunker (CoI) (ESA Member)	University of Exeter	bunker@astro.ex.ac.uk

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	(1) GRB060607	ACS/WFC	5	18-Jul-2006 21:58:22.0	yes
02	(2) GRB050401	ACS/WFC	5	18-Jul-2006 21:58:33.0	yes
03	(3) GRB051111	ACS/WFC	5	18-Jul-2006 21:58:44.0	yes
04	(4) GRB050505	ACS/WFC	5	18-Jul-2006 21:58:52.0	yes
05	(5) GRB060206	ACS/WFC	5	18-Jul-2006 21:59:00.0	yes
06	(6) GRB050730	ACS/WFC	5	18-Jul-2006 21:59:11.0	yes
07	(7) GRB050820	ACS/WFC	5	18-Jul-2006 21:59:19.0	yes

Proposal 10817 - 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>
08	(8) GRB050922C	ACS/WFC	5	18-Jul-2006 21:59:27.0	yes
09	(9) GRB060418	ACS/WFC	5	18-Jul-2006 21:59:35.0	yes

45 Total Orbits Used

ABSTRACT

The damped Ly α systems (DLAs), 'clouds' with high columns of neutral hydrogen, dominate the neutral gas mass at $z > 2$ and are believed to be the building blocks of galaxies like the Milky Way. At present, high resolution spectroscopy of the DLAs provide the only detailed study of the ISM of young galaxies during early epochs. Yet by the very nature of their discovery - along bright quasar sightlines - direct imaging of the stellar counterparts presents a major obstacle. The use of gamma-ray bursts (GRBs) presents a novel new alternative: GRB afterglows are temporarily as bright as quasars, allowing for high-quality spectroscopy to identify and study new DLAs out to redshifts comparable to those probed by quasars. Afterglows then disappear after a few weeks, affording a direct and unimpeded view of the faint DLAs free from a glaring background source. Through an extensive ground-based program in 2005, we have now obtained early-time high-resolution echelle spectra of several NASA/Swift GRB afterglows. These data reveal that nearly all GRB host galaxies produce a DLA feature. Furthermore, the associated metal absorption lines indicate an ISM environment around the GRB progenitors --- extremely dense gas and warm temperature --- that has never been seen beyond the local universe. We request ACS late-time imaging of fields surrounding nine GRBs, all of which exhibit a strong DLA signature or strong metal absorption lines that indicate a DLA at the redshift of the host. In concert with our afterglow absorption line studies and stellar properties of both the GRB host galaxies and galaxies that give rise to strong intervening absorbers, these proposed observations will provide an unprecedented glimpse into the nature of DLAs beyond redshift of unity. As a complete sample, this study will provide robust measurements of the morphology and luminosity of DLA galaxies in a manner inaccessible to QSO lines of sight.

OBSERVING DESCRIPTION

We propose to obtain deep optical images of the fields surrounding nine Swift-GRBs discovered at $z_{\text{GRB}} > 2$. The GRBs are selected to exhibit either a strong DLA signature or metal absorption features that are indicative of a DLA in their afterglow spectra. We

Proposal 10817 - Overview

note that by the time when Cycle15 starts these bursts will be more than 10 months old and that the optical afterglows will not interfere the imaging search of the DLA galaxies.

The imaging program is optimized to reach the required depths for finding the galaxies that give rise to the classical-DLA and host-DLA at different redshift range. Our assessments for the required imaging depths are guided by prior knowledge of $z > 2$ DLA galaxies and expectations from simple spectral modeling of the observed optical photometry. The majority of the known DLA galaxies have $AB(F160W) \sim 25.6$ at $z \sim 3$ (Moller et al. 2002). To reach the same depth in the NICMOS/F(160W) band would require more than 10 orbits to achieve our goal.

We compare predicted redshift evolution of observed $AB(F814W) - AB(F160W)$ color for galaxies of different spectral type. Starforming galaxies exhibit observed optical and near-infrared color $F814W - F160W > 0.8$ at $2 \leq z \leq 3$, suggesting that these DLA galaxies would be no brighter than $AB(F814W) = 26.4$ at $z = 3$. Given that these previously known DLA galaxies are likely among the brightest, we target our imaging goal at a 5-sigma limit of $AB(F814W) = 27.5$ for the GRB fields. These brightness limits will allow us to uncover galaxies as faint as $0.1 L_*$ at $z = 3$.

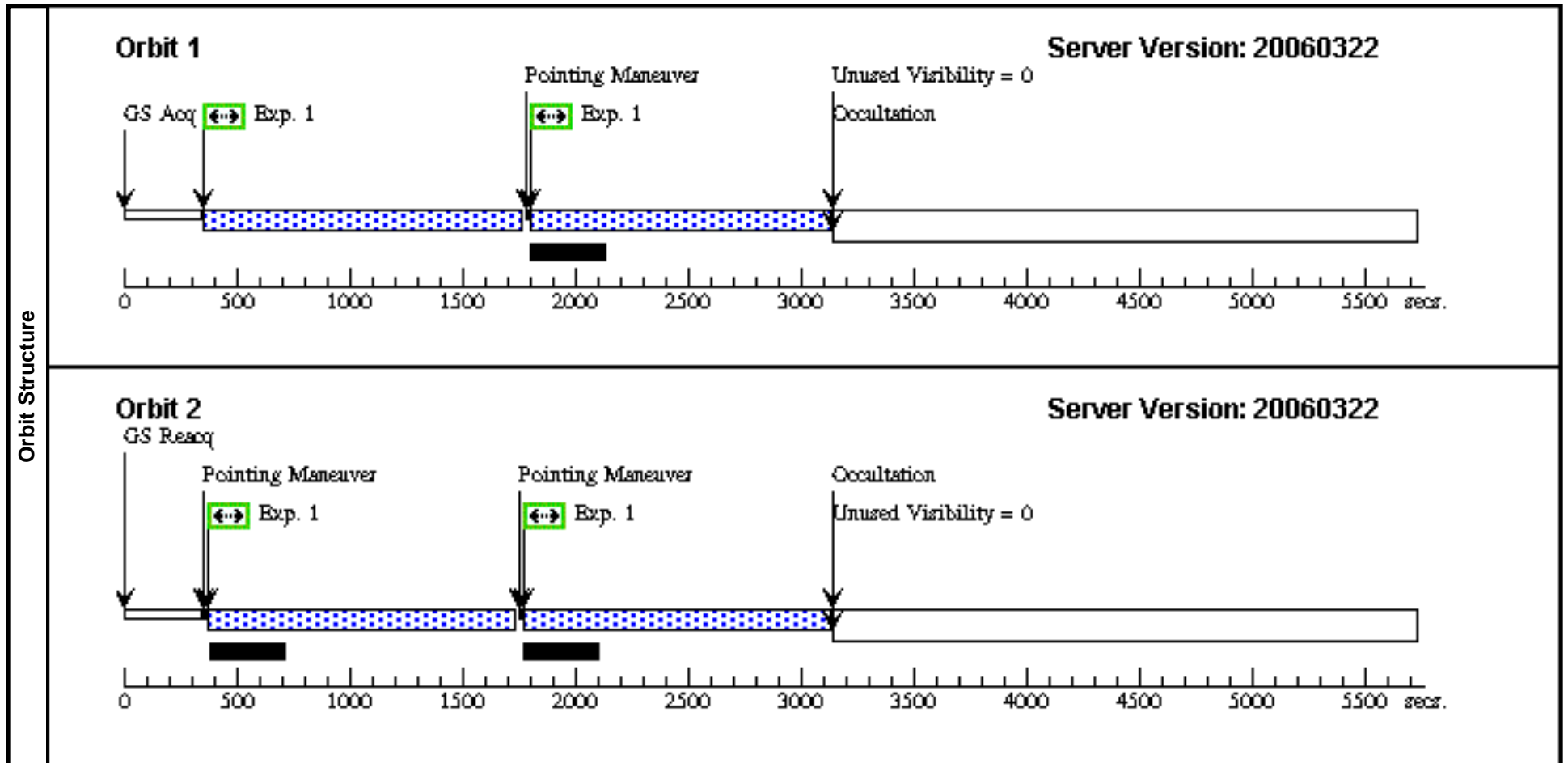
The exposure times necessary to reach the goals are estimated according to previous experiences (Warren et al. 2001) and the Exposure Time Calculator at the ACS instrument webpage. For the $z_{DLA} \sim 2.5$ fields, we find that 12,000 seconds would be required for ACS/WFC to reach $AB(F814W) = 27.5$ at the 5-sigma level of significance over a 0.5-arcsecond diameter aperture. We therefore request five orbits of imaging in ACS/WFC with the F814W filter to complete one field, and 45 orbits total to complete the proposed imaging program.

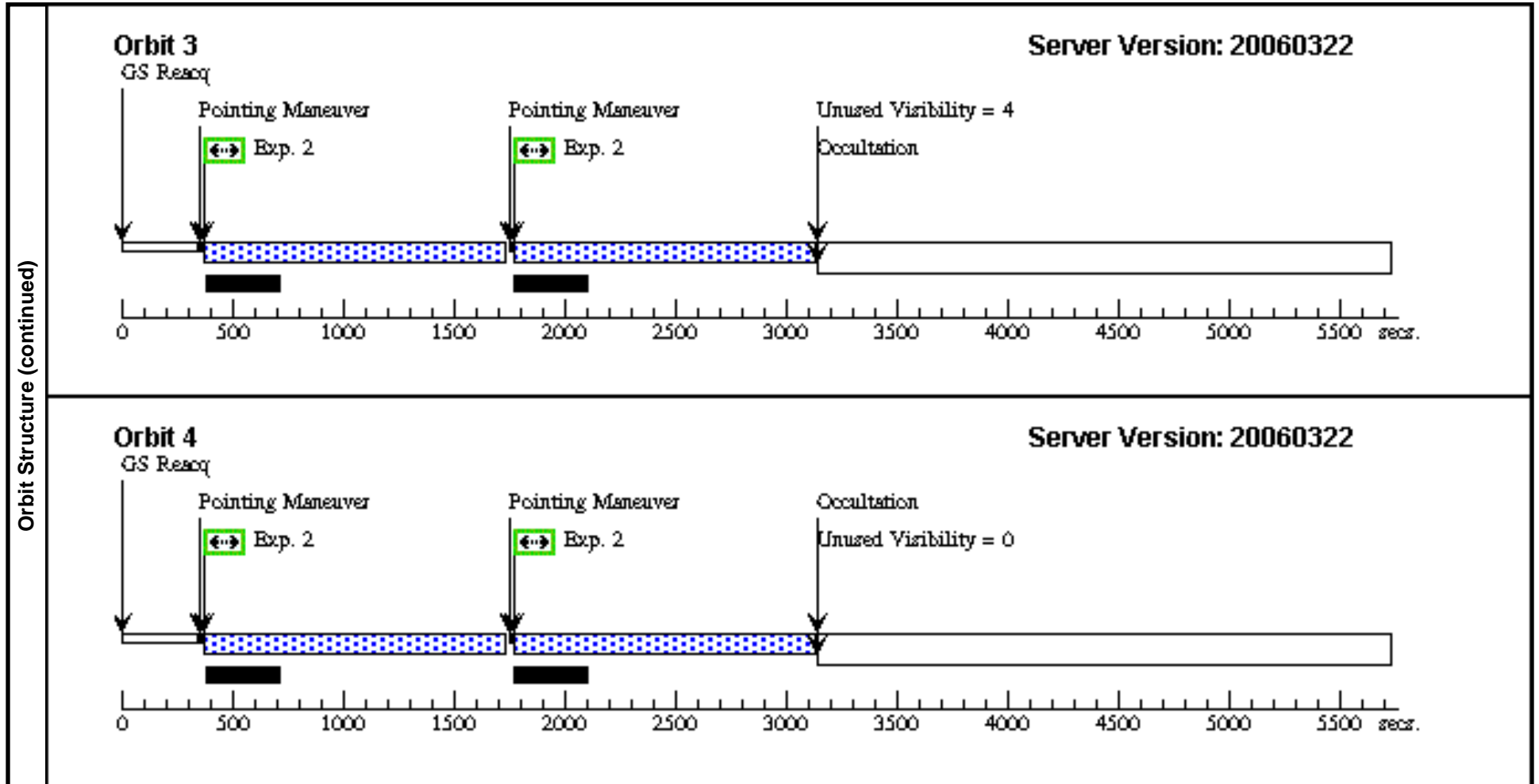
For each visit with the ACS, a four-point "expanded" ACS-WFC-DITHER-BOX pattern will be used. With linearly spaced sampling, it will help cosmic-ray removal and improve the final point spread function in the stacked images

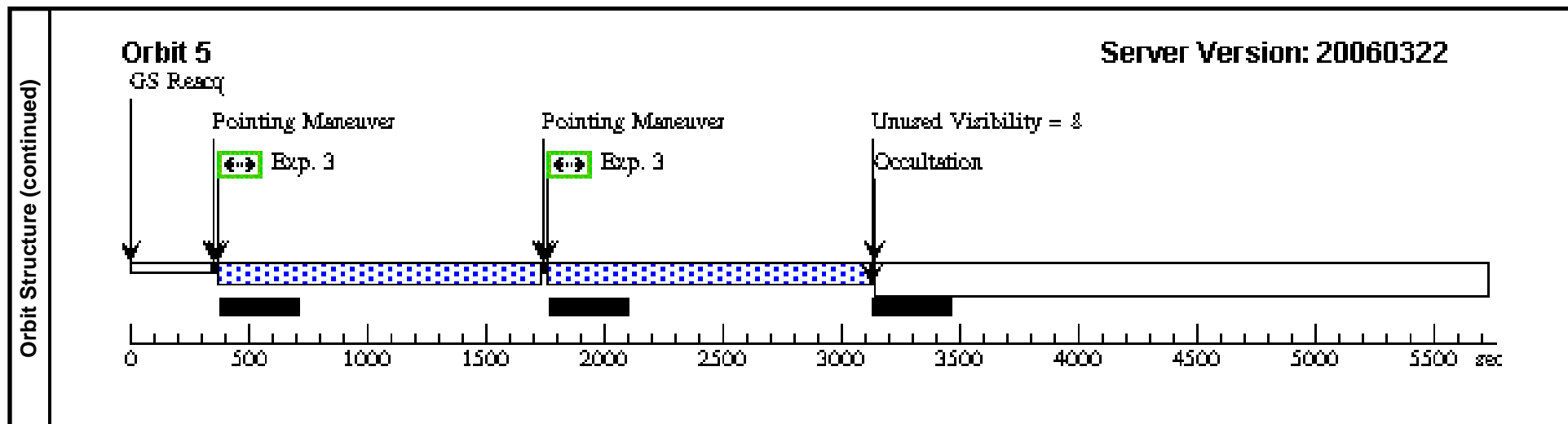
Proposal 10817 - Visit 01 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:38 GMT 2006

Visit	Proposal 10817, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)				
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	GRB060607	RA: 21 58 50.4000 (329.7100000d) Dec: -22 29 46.70 (-22.49631d) Equinox: J2000	Redshift: 3.082	V=(?) z_GRB = 3.082	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) GRB060607	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1350.0 Secs [==>1209.0 Secs (Pattern 1)] [==>1209.0 Secs (Pattern 2)] [==>1240.0 Secs (Pattern 3)] [==>1240.0 Secs (Pattern 4)]	[1] [2]
2		(1) GRB060607	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2. 984	Pattern 2-2 (1)	1350.0 Secs [==>1236.0 Secs (Pattern 1)] [==>1236.0 Secs (Pattern 2)] [==>1240.0 Secs (Pattern 3)] [==>1240.0 Secs (Pattern 4)]	[3] [4]	
3		(1) GRB060607	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5. 968	Pattern 3-3 (2)	1350.0 Secs [==>1234.0 Secs (Pattern 1)] [==>1234.0 Secs (Pattern 2)]	[5]	



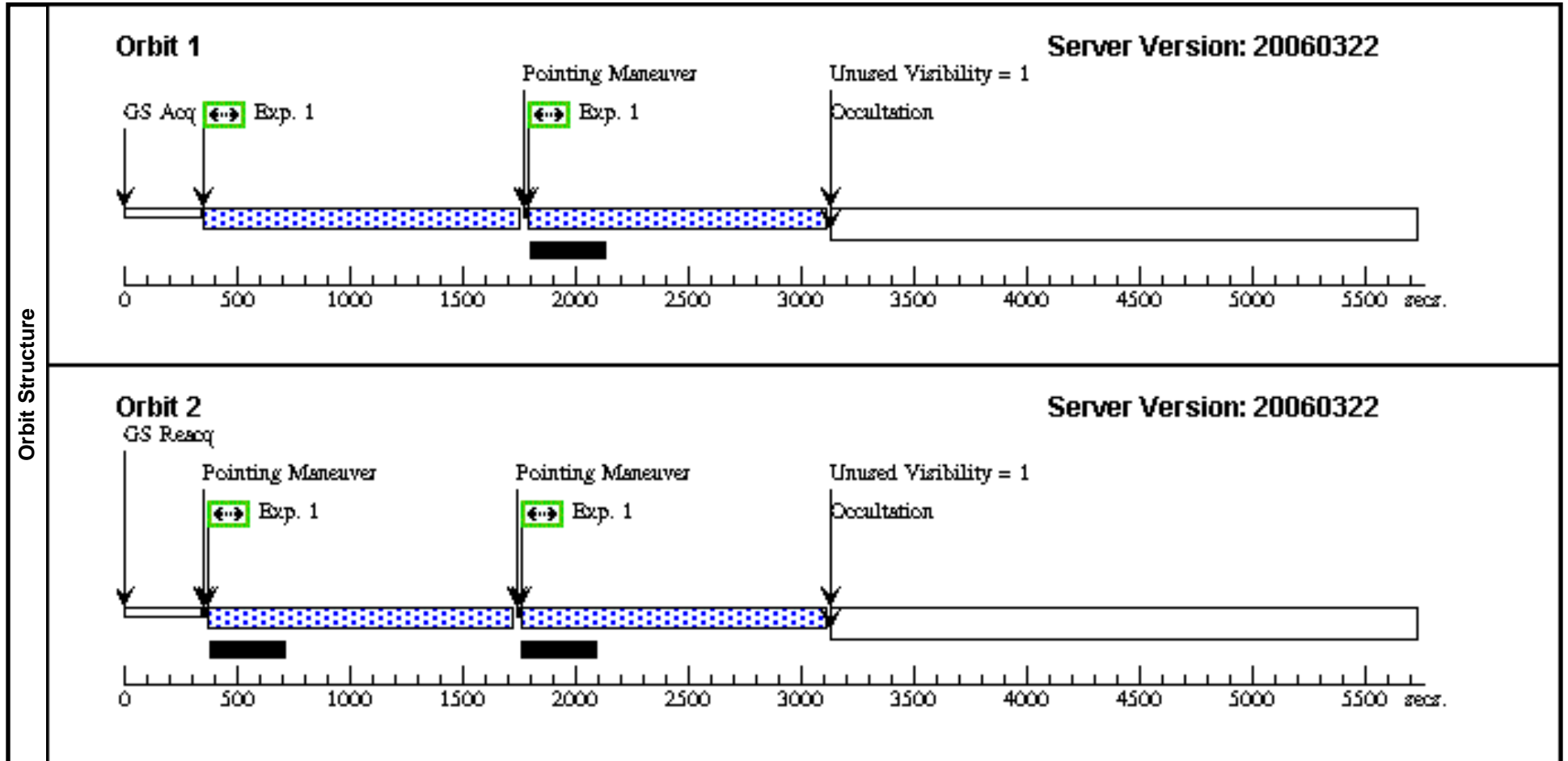


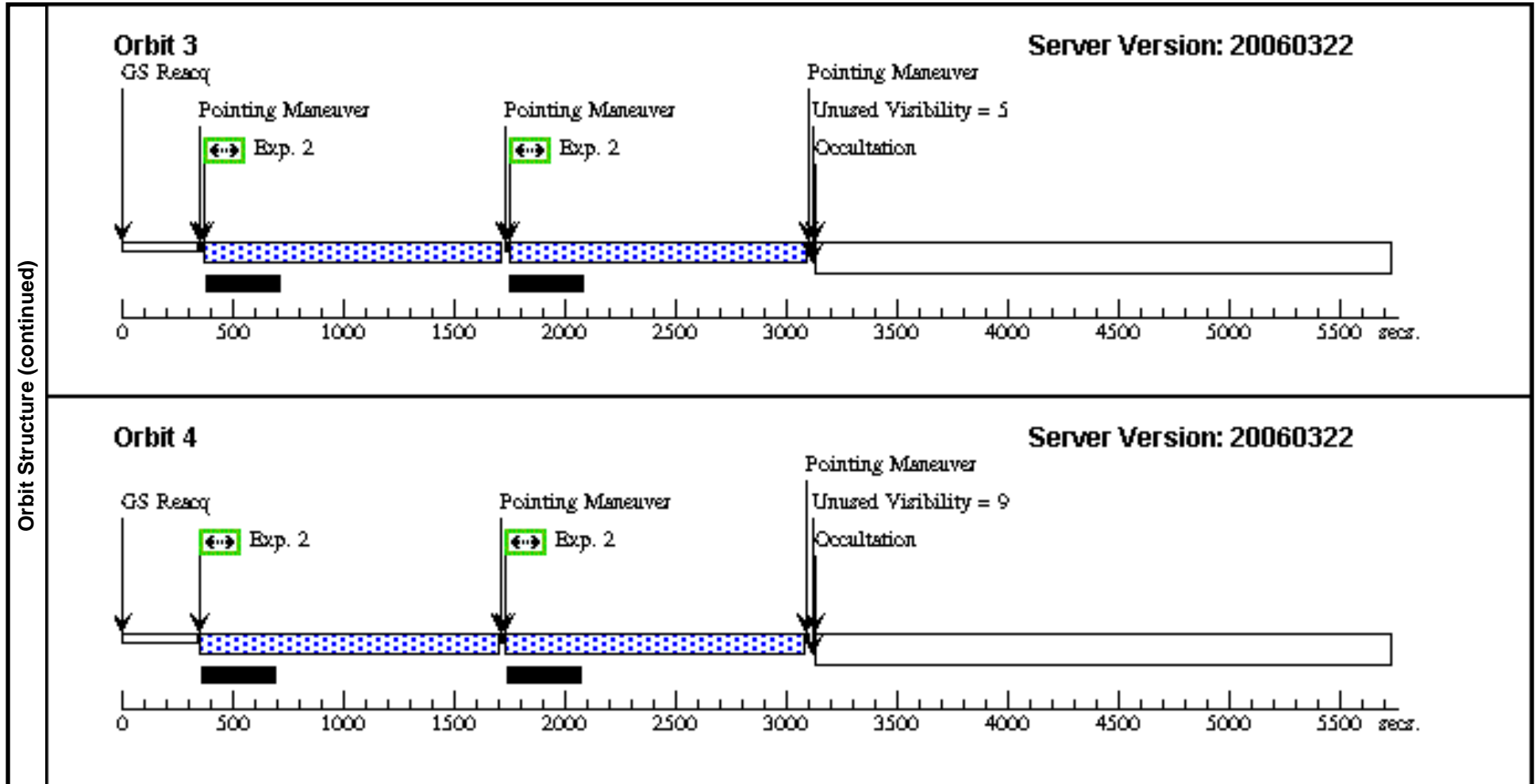


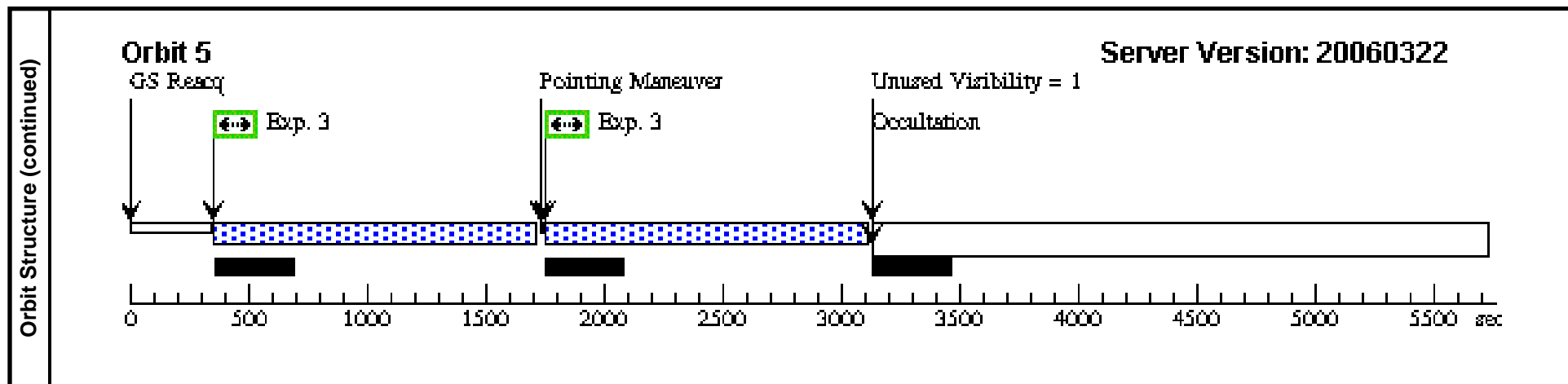
Proposal 10817 - Visit 02 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:40 GMT 2006

Visit		Proposal 10817, Visit 02 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)								
Patterns	#	Primary Pattern	Secondary Pattern		Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)					
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	GRB050401	RA: 16 31 28.8200 (247.8700833d) Dec: +02 11 14.83 (2.18745d) Equinox: J2000	Redshift: 2.9	V=(?) z_GRB = 2.90	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) GRB050401	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1250.0 Secs	
									[==>1201.0 Secs (Pattern 1)]	[1]
									[==>1201.0 Secs (Pattern 2)]	
									[==>1232.0 Secs (Pattern 3)]	[2]
									[==>1232.0 Secs (Pattern 4)]	
	2		(2) GRB050401	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.	984	Pattern 2-2 (1)	1350.0 Secs
								[==>1218.0 Secs (Pattern 1)]	[3]	
								[==>1218.0 Secs (Pattern 2)]		
								[==>1226.0 Secs (Pattern 3)]	[4]	
								[==>1226.0 Secs (Pattern 4)]		
3		(2) GRB050401	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.	968	Pattern 3-3 (2)	1250.0 Secs	
								[==>1242.0 Secs (Pattern 1)]	[5]	
								[==>1242.0 Secs (Pattern 2)]		



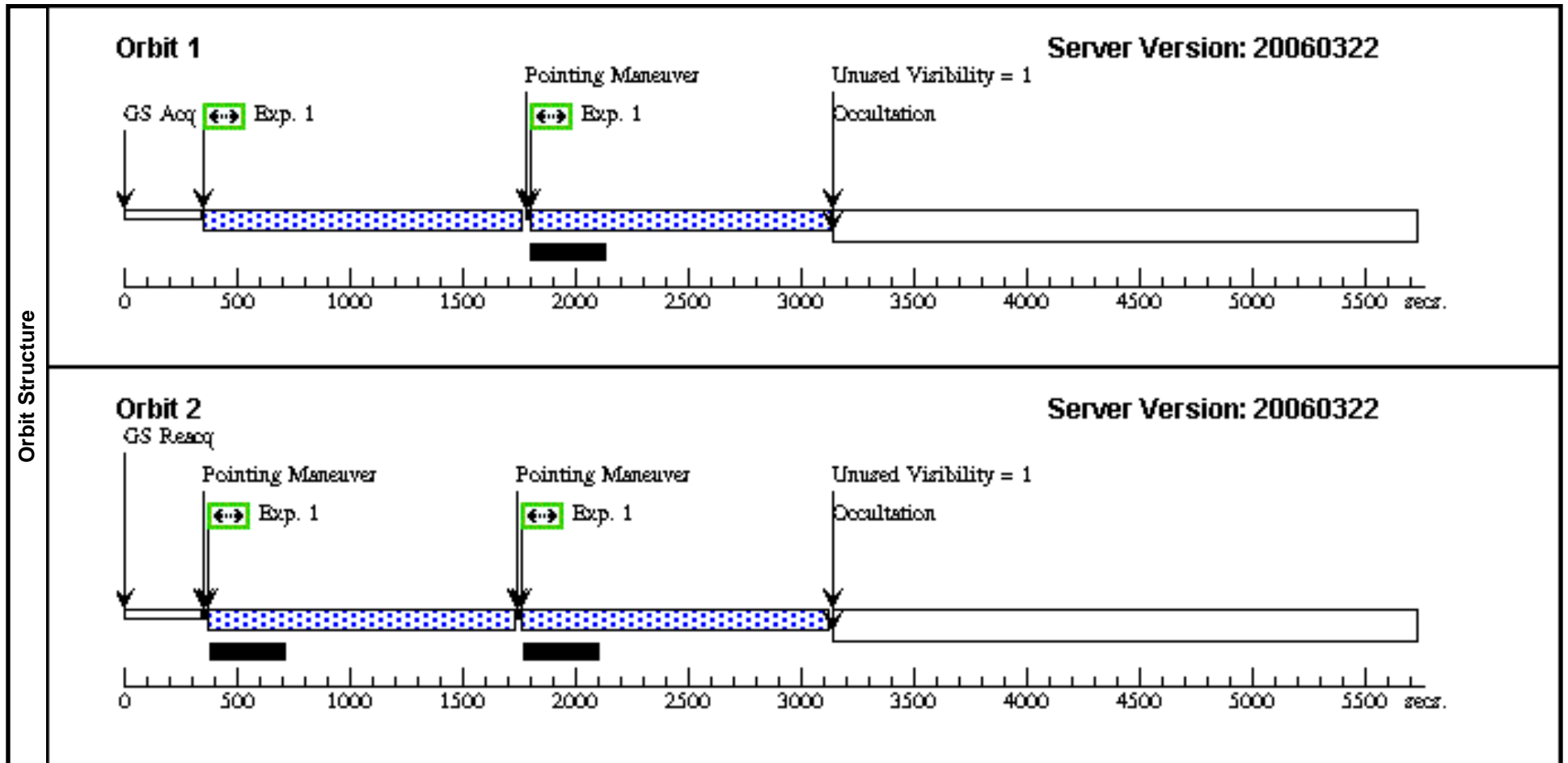


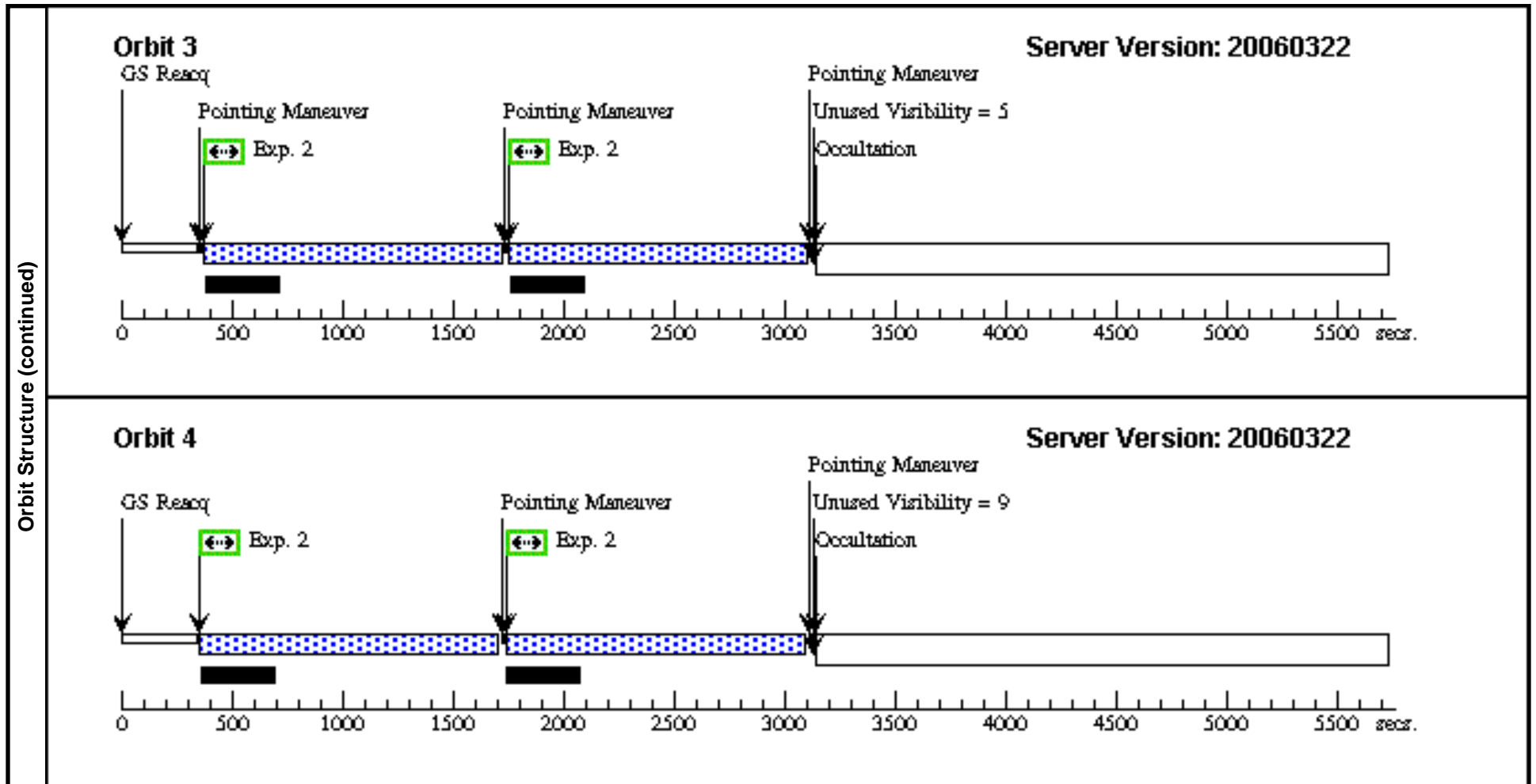


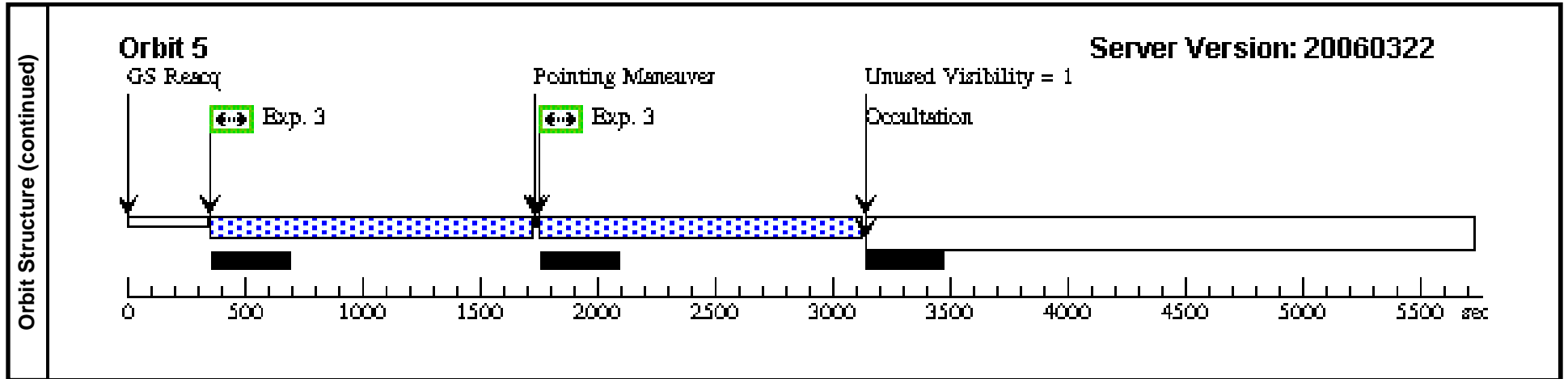
Proposal 10817 - Visit 03 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:41 GMT 2006

Visit	Proposal 10817, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)				
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	GRB051111	RA: 23 12 33.1700 (348.1382083d) Dec: +18 22 28.80 (18.37467d) Equinox: J2000	Redshift: 1.55	V=(?) z_GRB = 1.55	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) GRB051111	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1250.0 Secs	
									[==>1207.0 Secs (Pattern 1)]	[1]
									[==>1207.0 Secs (Pattern 2)]	
									[==>1238.0 Secs (Pattern 3)]	[2]
									[==>1238.0 Secs (Pattern 4)]	
	2		(3) GRB051111	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.	984	Pattern 2-2 (1)	1350.0 Secs
								[==>1224.0 Secs (Pattern 1)]	[3]	
								[==>1224.0 Secs (Pattern 2)]		
								[==>1232.0 Secs (Pattern 3)]	[4]	
								[==>1232.0 Secs (Pattern 4)]		
3		(3) GRB051111	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.	968	Pattern 3-3 (2)	1250.0 Secs	
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								[==>1248.0 Secs (Pattern 2)]		



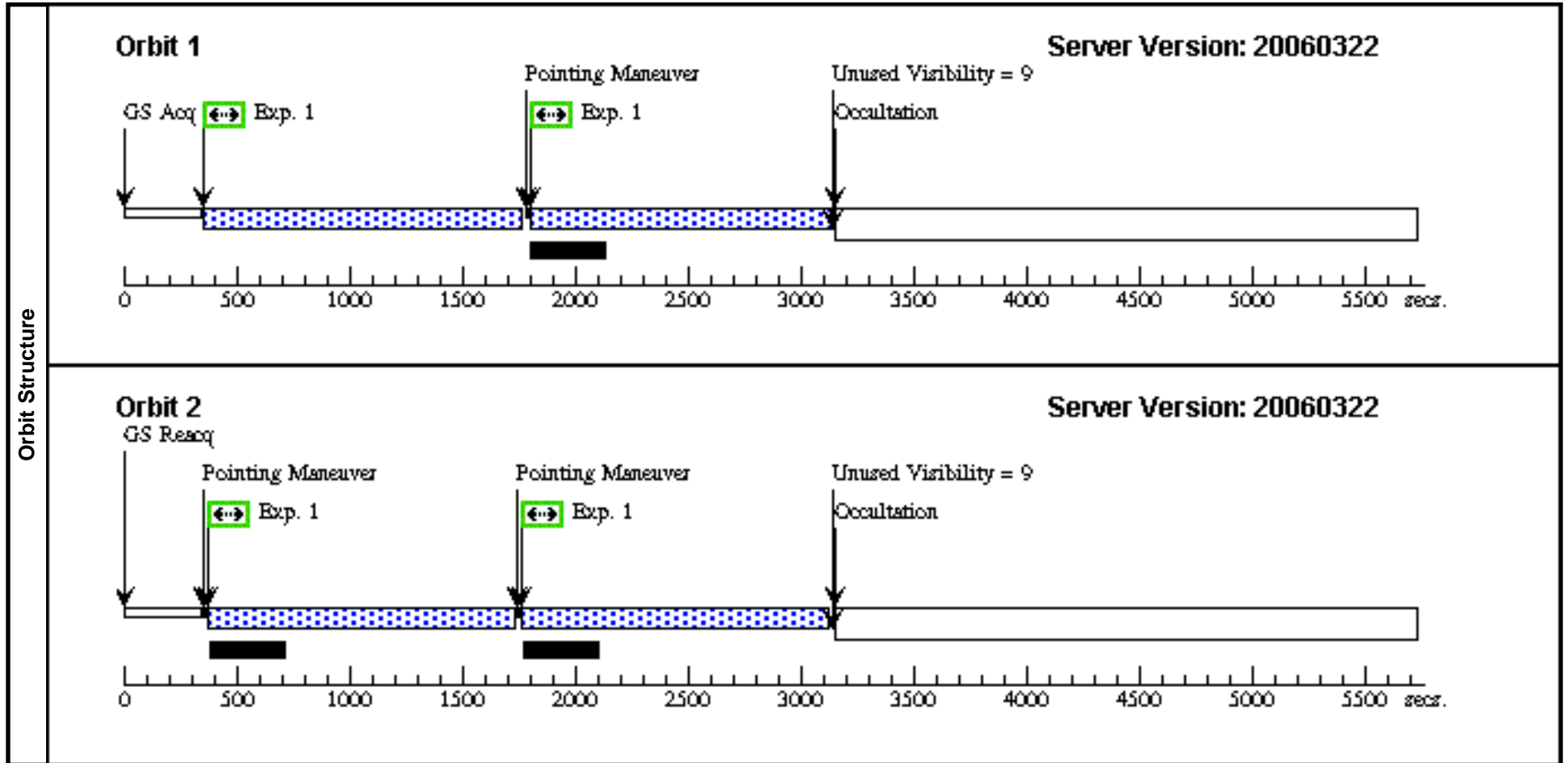


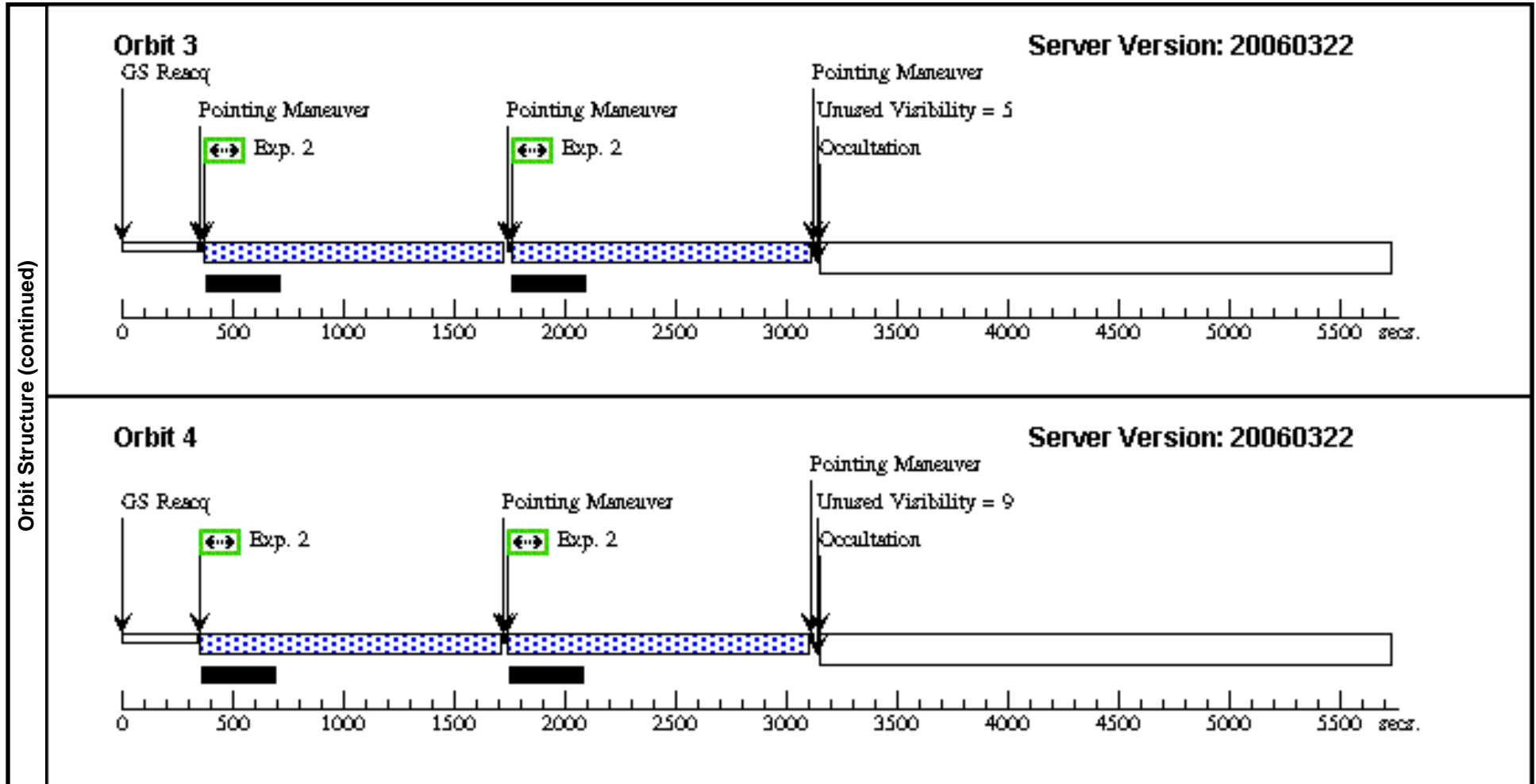


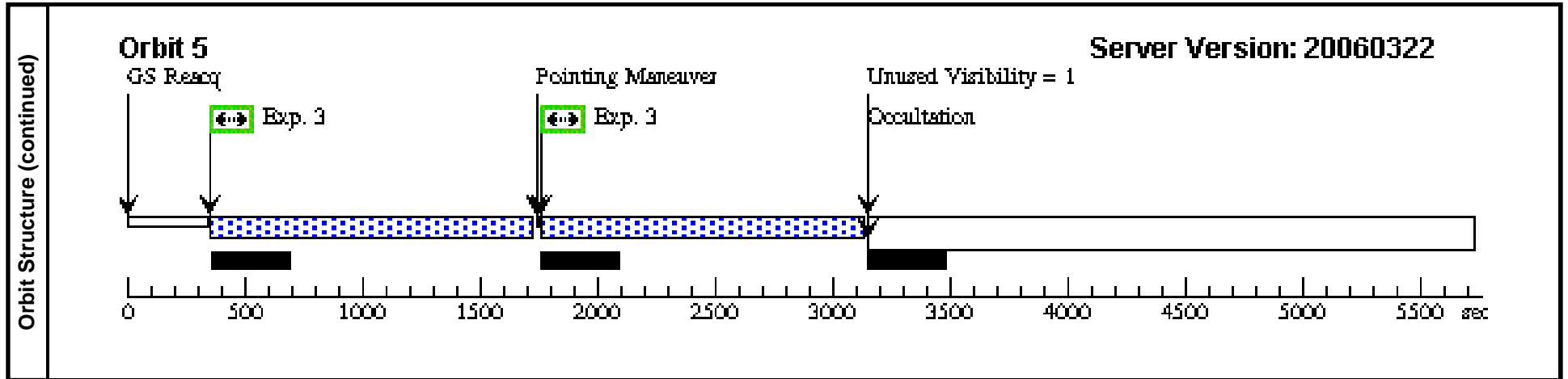
Proposal 10817 - Visit 04 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:42 GMT 2006

Visit	Proposal 10817, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)										
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		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)					
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(4)	GRB050505	RA: 09 27 3.3000 (141.7637500d) Dec: +30 16 23.70 (30.27325d) Equinox: J2000	Redshift: 4.27	V=(?) z_GRB = 4.27	Reference Frame: ICRS					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1		(4) GRB050505	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1250.0 Secs [==>1207.0 Secs (Pattern 1)] [==>1207.0 Secs (Pattern 2)]	[1]	
									[==>1238.0 Secs (Pattern 3)] [==>1238.0 Secs (Pattern 4)]	[2]	
	2		(4) GRB050505	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.		Pattern 2-2 (1)	1350.0 Secs [==>1228.0 Secs (Pattern 1)] [==>1228.0 Secs (Pattern 2)]	[3]
									[==>1236.0 Secs (Pattern 3)] [==>1236.0 Secs (Pattern 4)]	[4]	
	3		(4) GRB050505	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.		Pattern 3-3 (2)	1250.0 Secs [==>1252.0 Secs (Pattern 1)] [==>1252.0 Secs (Pattern 2)]	[5]



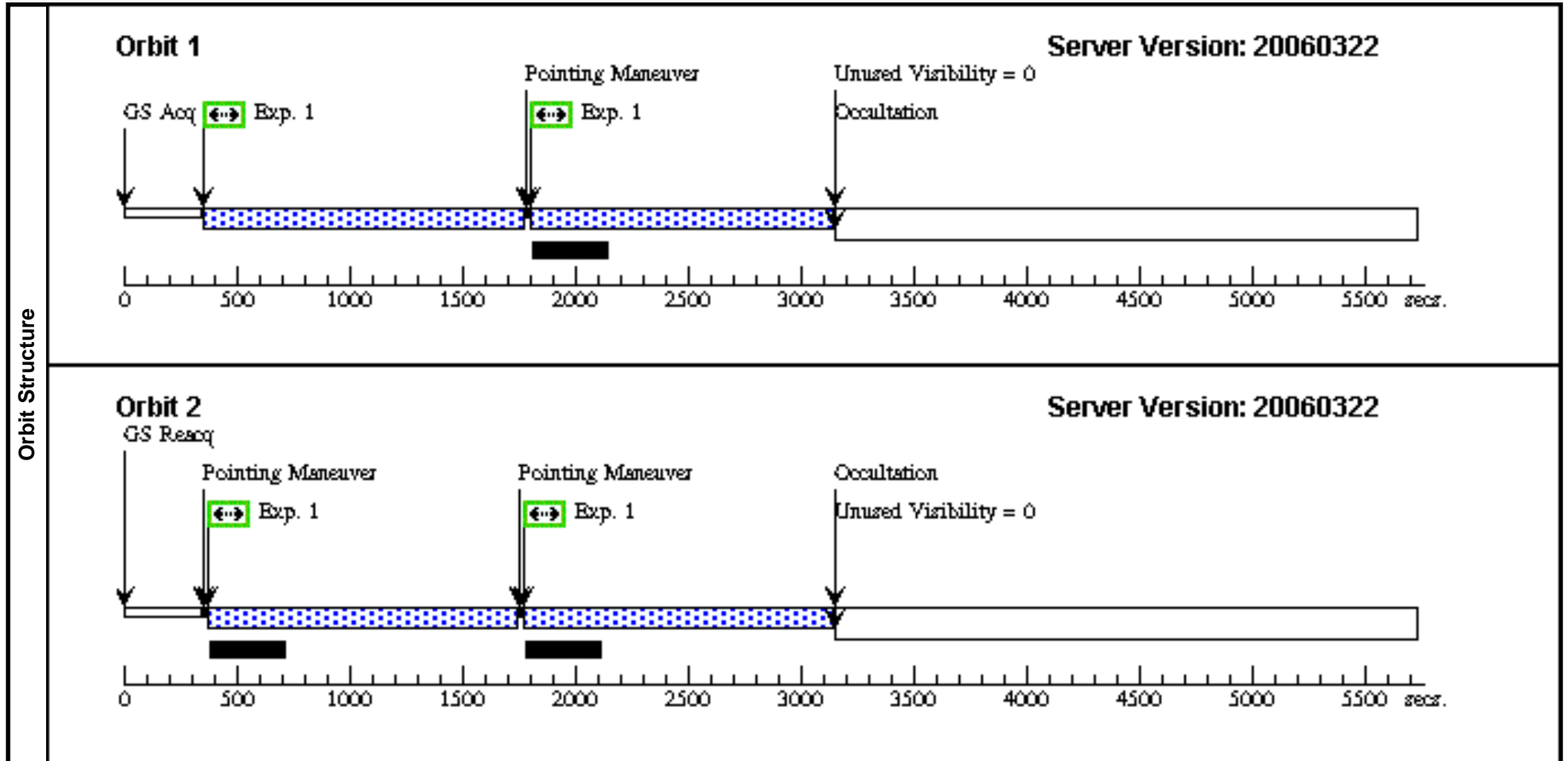


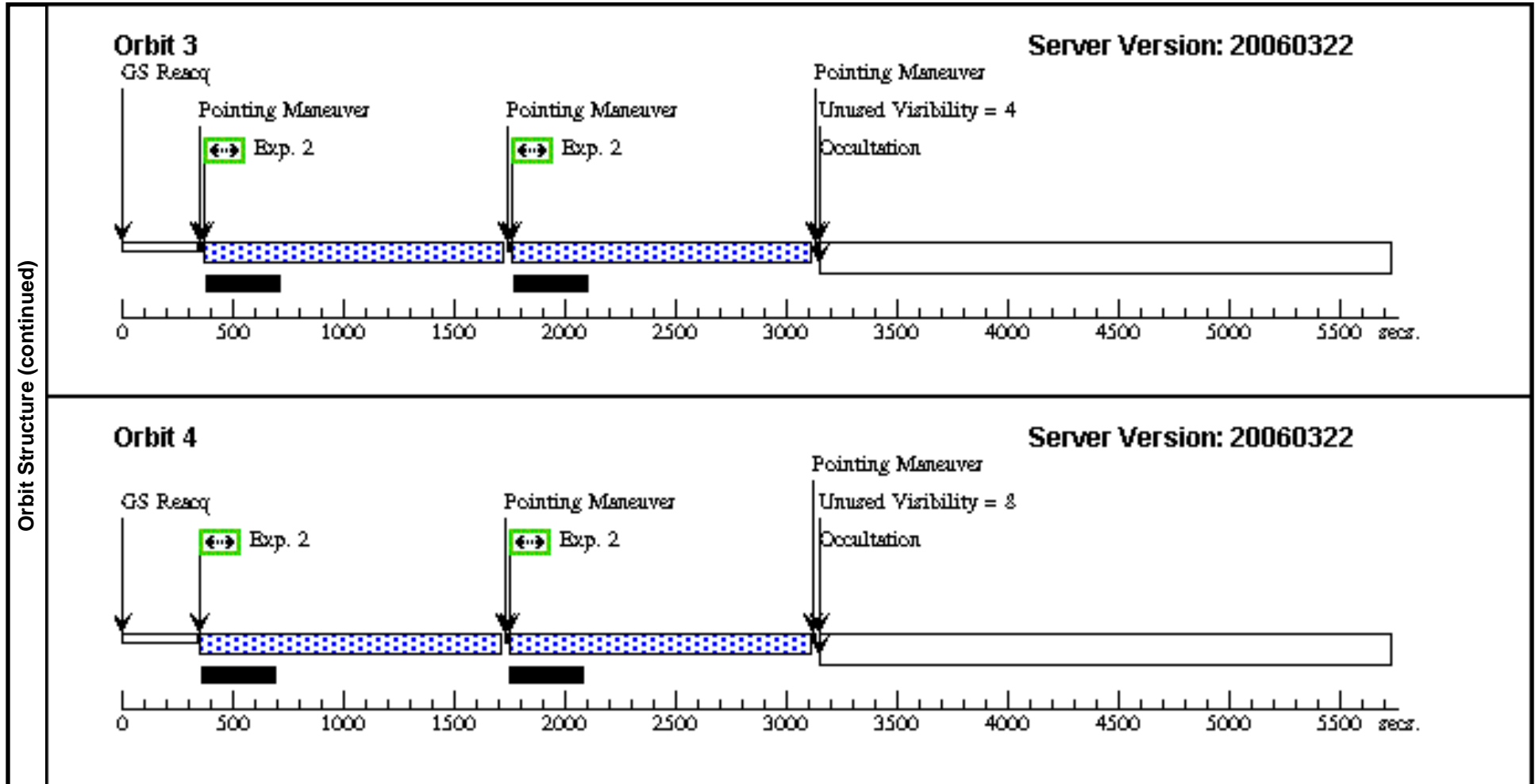


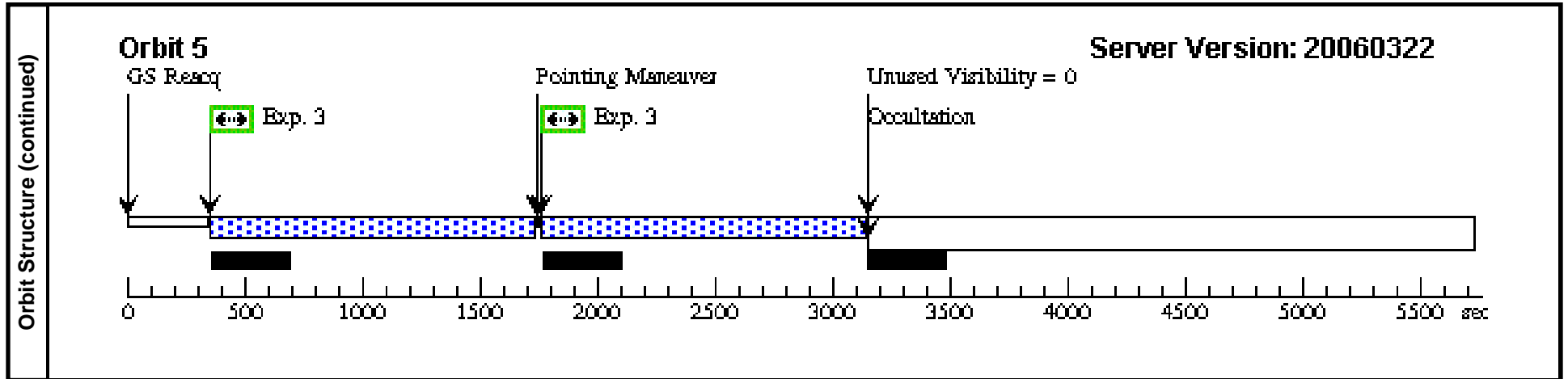
Proposal 10817 - Visit 05 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:42 GMT 2006

Visit	Proposal 10817, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
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	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	GRB060206	RA: 13 31 43.4200 (202.9309167d) Dec: +35 03 3.60 (35.05100d) Equinox: J2000	Redshift: 2.82	V=(?) z_GRB = 2.821	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(5) GRB060206	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1250.0 Secs	
									[==>1215.0 Secs (Pattern 1)]	[1]
									[==>1215.0 Secs (Pattern 2)]	
									[==>1246.0 Secs (Pattern 3)]	[2]
									[==>1246.0 Secs (Pattern 4)]	
	2		(5) GRB060206	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.	984	Pattern 2-2 (1)	1250.0 Secs
								[==>1232.0 Secs (Pattern 1)]	[3]	
								[==>1232.0 Secs (Pattern 2)]		
								[==>1240.0 Secs (Pattern 3)]	[4]	
								[==>1240.0 Secs (Pattern 4)]		
3		(5) GRB060206	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.	968	Pattern 3-3 (2)	1250.0 Secs	
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								[==>1256.0 Secs (Pattern 2)]		



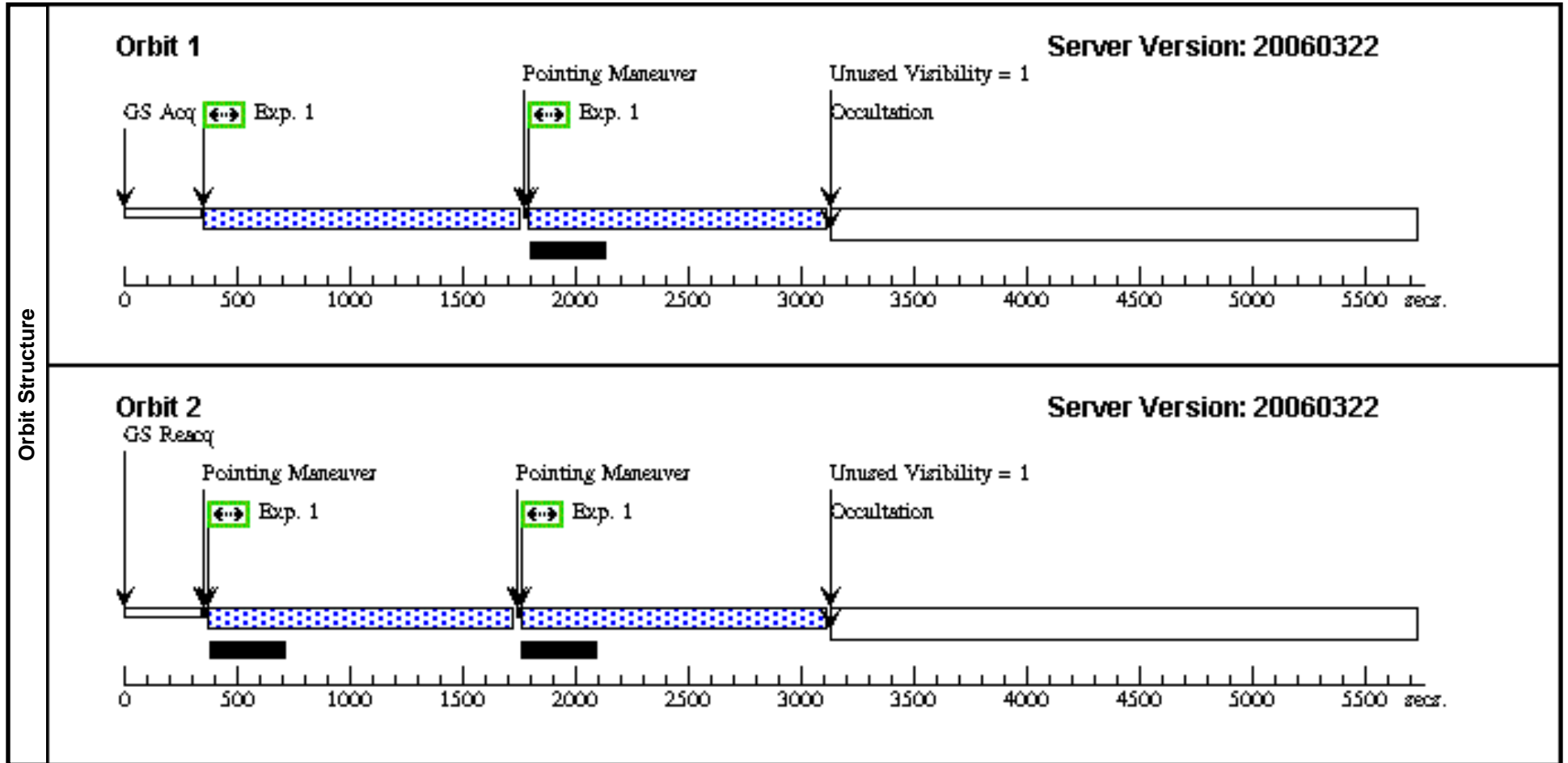


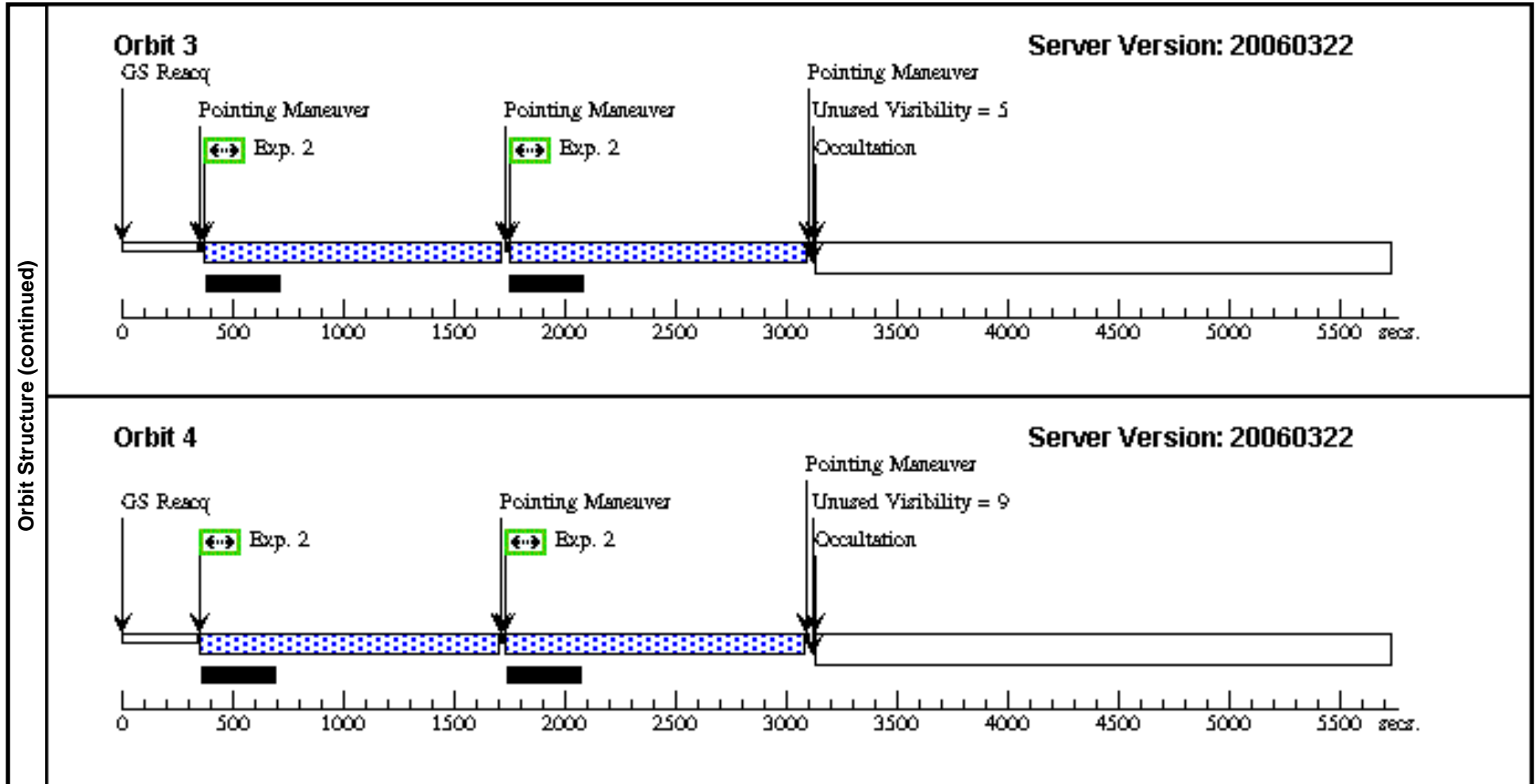


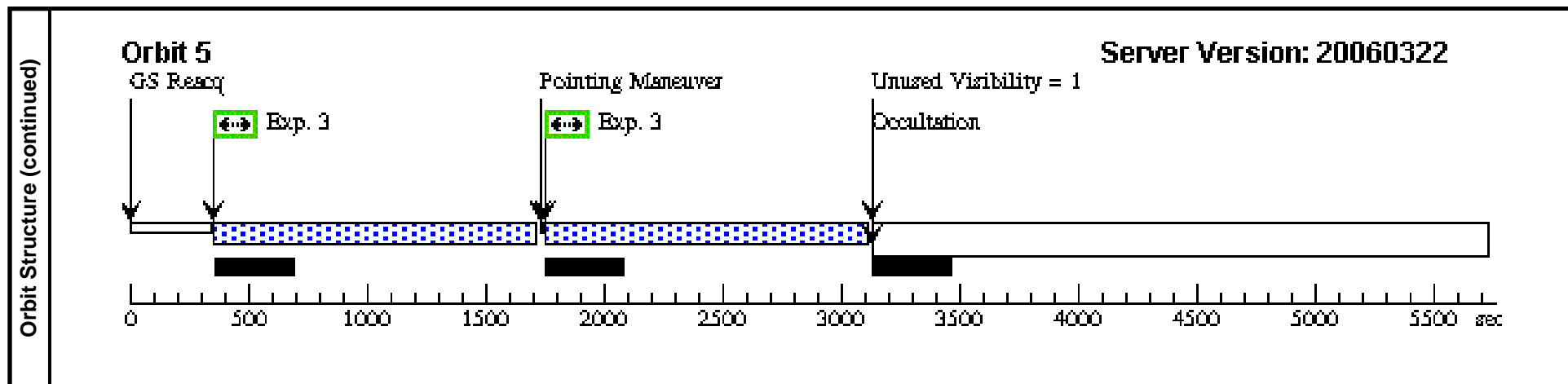
Proposal 10817 - Visit 06 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:44 GMT 2006

Visit	Proposal 10817, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
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	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	GRB050730	RA: 14 08 17.1300 (212.0713750d) Dec: -03 46 16.70 (-3.77131d) Equinox: J2000	Redshift: 3.97	V=(?) z_GRB = 3.968	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(6) GRB050730	(6) GRB050730	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2			Pattern 1-1 (1)	1250.0 Secs [==>1201.0 Secs (Pattern 1)] [==>1201.0 Secs (Pattern 2)]
									[==>1232.0 Secs (Pattern 3)] [==>1232.0 Secs (Pattern 4)]	[2]
	2	(6) GRB050730	(6) GRB050730	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.	Pattern 2-2 (1)	1250.0 Secs [==>1218.0 Secs (Pattern 1)] [==>1218.0 Secs (Pattern 2)]	[3]
									[==>1226.0 Secs (Pattern 3)] [==>1226.0 Secs (Pattern 4)]	[4]
	3	(6) GRB050730	(6) GRB050730	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.	Pattern 3-3 (2)	1250.0 Secs [==>1242.0 Secs (Pattern 1)] [==>1242.0 Secs (Pattern 2)]	[5]



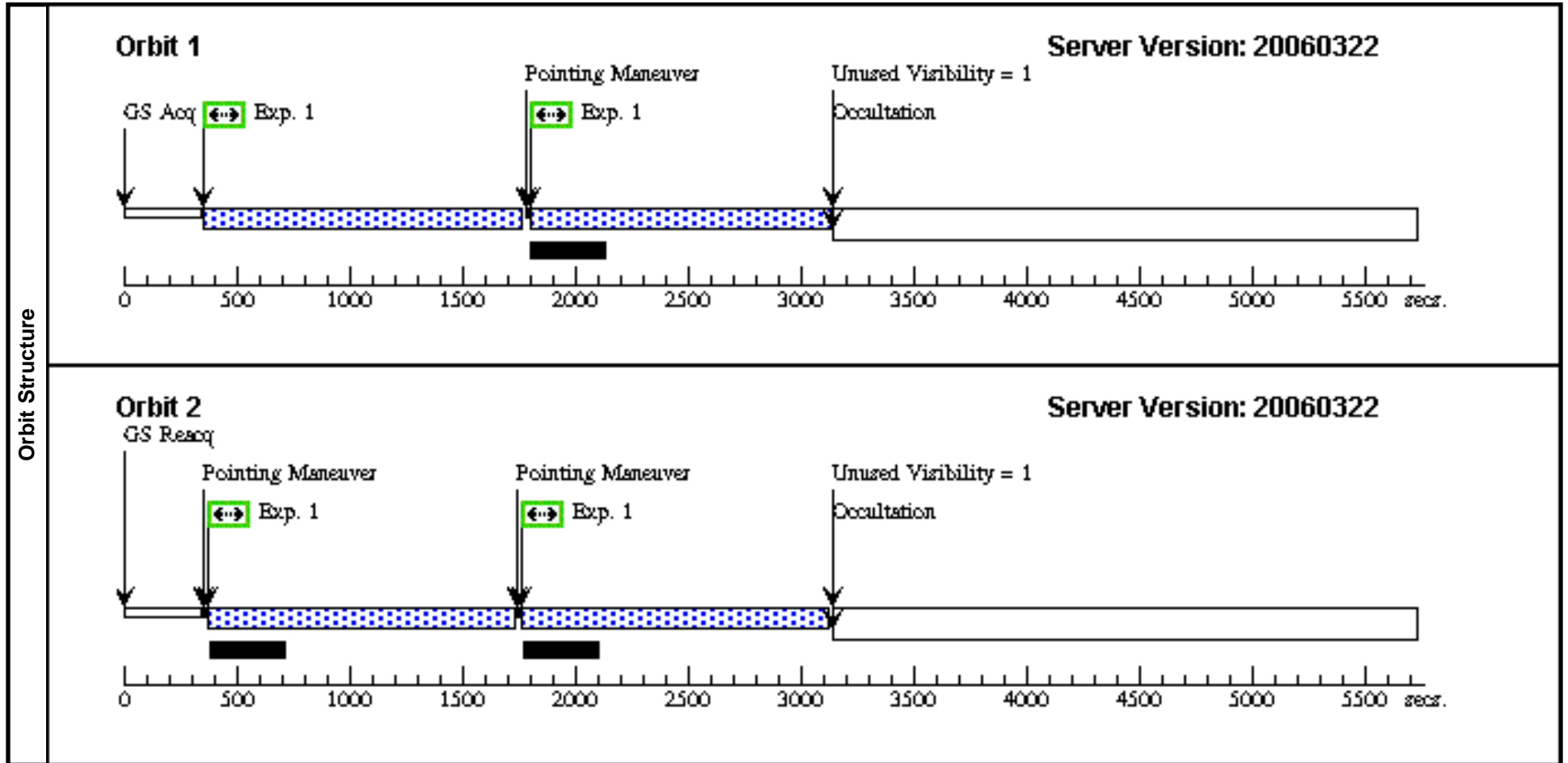


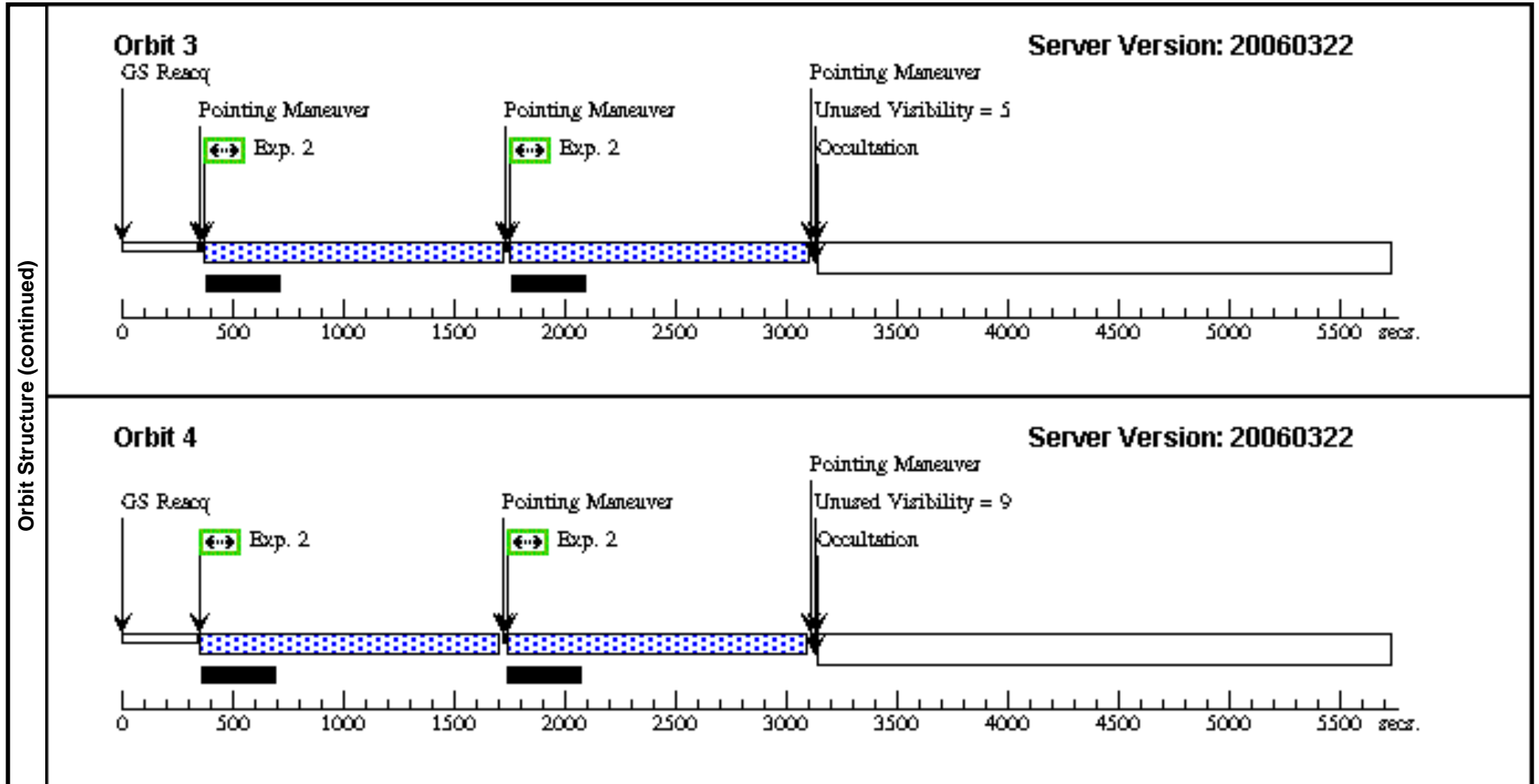


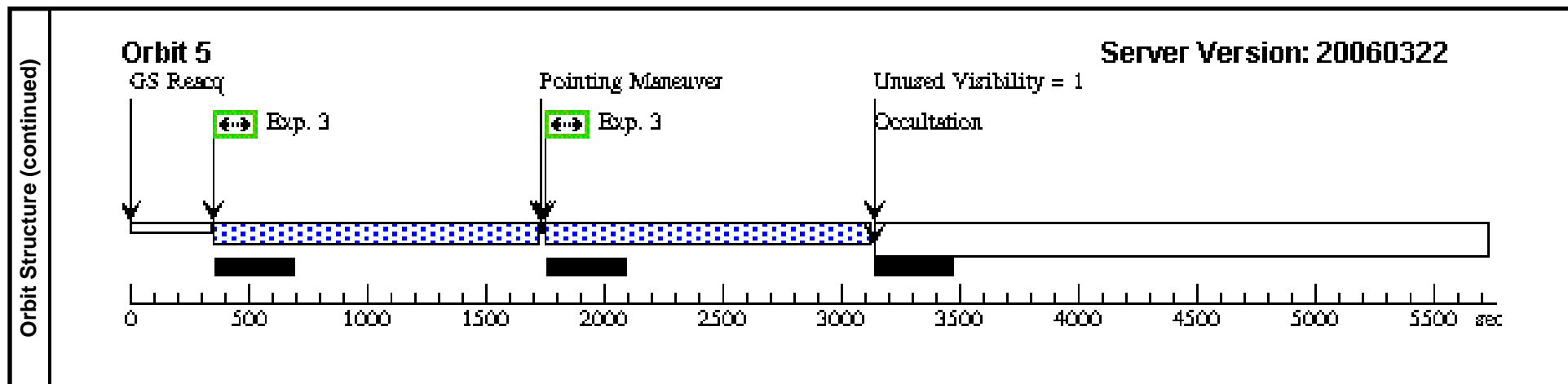
Proposal 10817 - Visit 07 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:45 GMT 2006

Visit	Proposal 10817, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)				
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	GRB050820	RA: 22 29 38.1100 (337.4087917d) Dec: +19 33 37.10 (19.56031d) Equinox: J2000	Redshift: 2.62	V=(?) z_GRB = 2.615	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(7) GRB050820	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2			Pattern 1-1 (1)	1250.0 Secs [==>1207.0 Secs (Pattern 1)] [==>1207.0 Secs (Pattern 2)]	[1]
2	(7) GRB050820	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		POS TARG 0.247,2.984	Pattern 2-2 (1)	1250.0 Secs [==>1224.0 Secs (Pattern 1)] [==>1224.0 Secs (Pattern 2)] [==>1232.0 Secs (Pattern 3)] [==>1232.0 Secs (Pattern 4)]	[3] [4]	
3	(7) GRB050820	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		POS TARG 0.494,5.968	Pattern 3-3 (2)	1250.0 Secs [==>1248.0 Secs (Pattern 1)] [==>1248.0 Secs (Pattern 2)]	[5]	



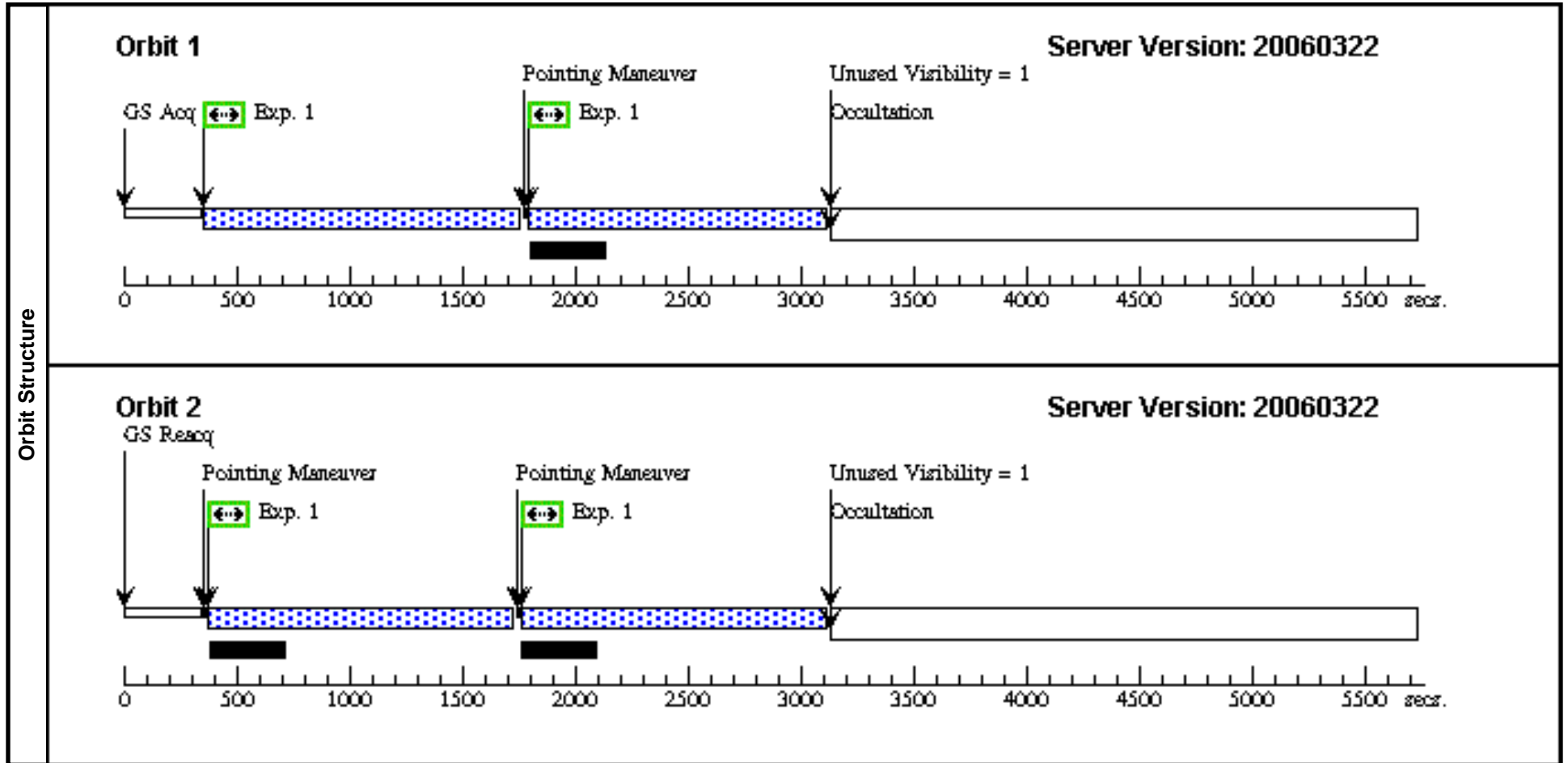


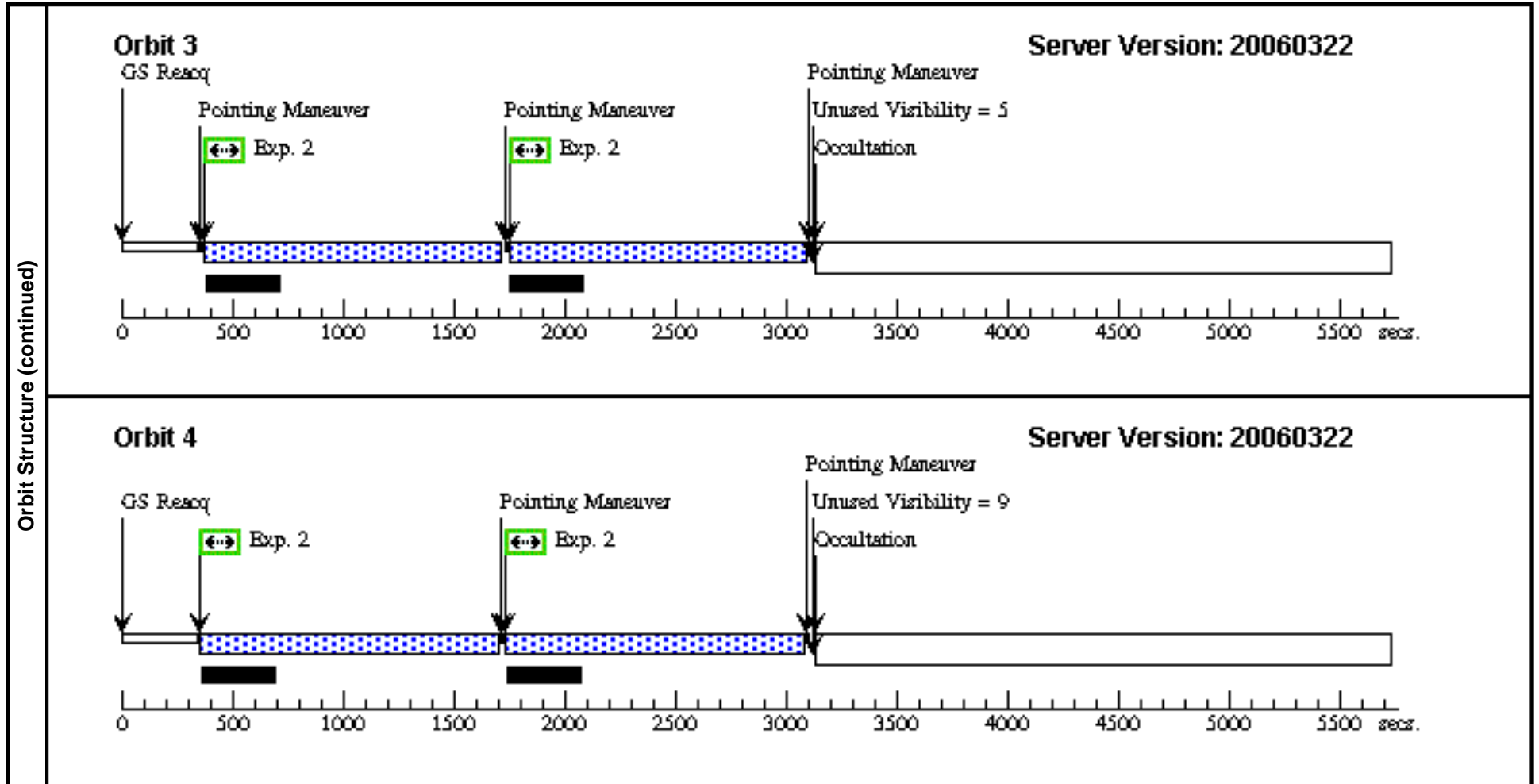


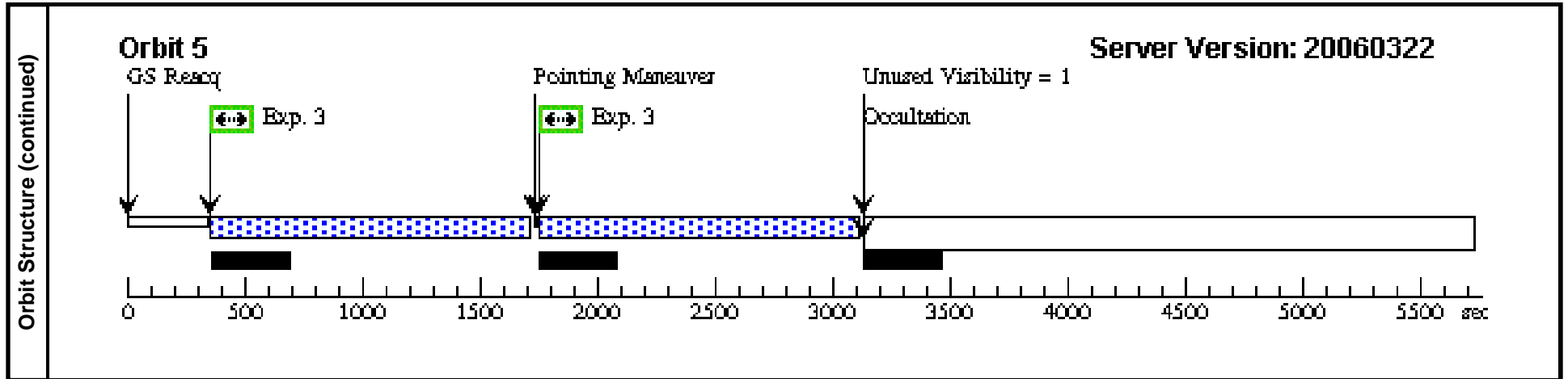
Proposal 10817 - Visit 08 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:46 GMT 2006

Visit	Proposal 10817, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)				
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	GRB050922C	RA: 21 09 33.1000 (317.3879167d) Dec: -08 45 29.80 (-8.75828d) Equinox: J2000	Redshift: 2.17	V=(?) z_GRB = 2.17	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(8) GRB050922C	(8) GRB050922C	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1250.0 Secs	
									[==>1201.0 Secs (Pattern 1)]	[1]
									[==>1201.0 Secs (Pattern 2)]	
									[==>1232.0 Secs (Pattern 3)]	[2]
									[==>1232.0 Secs (Pattern 4)]	
	2	(8) GRB050922C	(8) GRB050922C	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.	Pattern 2-2 (1)	1250.0 Secs	
								[==>1218.0 Secs (Pattern 1)]	[3]	
								[==>1218.0 Secs (Pattern 2)]		
								[==>1226.0 Secs (Pattern 3)]	[4]	
								[==>1226.0 Secs (Pattern 4)]		
3	(8) GRB050922C	(8) GRB050922C	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.	Pattern 3-3 (2)	1250.0 Secs		
								[==>1242.0 Secs (Pattern 1)]	[5]	
								[==>1242.0 Secs (Pattern 2)]		







Proposal 10817 - Visit 09 - Unveiling Starburst Morphology of Distant Damped Ly-alpha Galaxies Hosting Gamma-Ray Bursts

Wed Jul 19 01:59:46 GMT 2006

Visit	Proposal 10817, Visit 09 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.9 Angle Between Sides=69.1 Center Pattern=false		(1), (2)				
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=BACKGROUND Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false		(3)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	GRB060418	RA: 15 45 42.6000 (236.4275000d) Dec: -03 38 20.00 (-3.63889d) Equinox: J2000	Redshift: 1.5	V=(?) Z_GRB = 1.49	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(9) GRB060418	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Pattern 1-1 (1)	1250.0 Secs	
									[==>1201.0 Secs (Pattern 1)]	[1]
									[==>1201.0 Secs (Pattern 2)]	
									[==>1232.0 Secs (Pattern 3)]	[2]
									[==>1232.0 Secs (Pattern 4)]	
	2		(9) GRB060418	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.247,2.	984	Pattern 2-2 (1)	1250.0 Secs
								[==>1218.0 Secs (Pattern 1)]	[3]	
								[==>1218.0 Secs (Pattern 2)]		
								[==>1226.0 Secs (Pattern 3)]	[4]	
								[==>1226.0 Secs (Pattern 4)]		
3		(9) GRB060418	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2	POS TARG 0.494,5.	968	Pattern 3-3 (2)	1250.0 Secs	
								[==>1242.0 Secs (Pattern 1)]	[5]	
								[==>1242.0 Secs (Pattern 2)]		

