



10808 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at $z \sim 2.5$

Cycle: 15, 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>
01	(1) SDSS1030-1813	NIC2	2	08-Jun-2007 21:00:46.0	yes
02	(2) SDSS1030-2559	NIC2	3	08-Jun-2007 21:00:51.0	yes
03	(3) 1256-151	NIC2	3	08-Jun-2007 21:00:54.0	yes
04	(4) 1256-465	NIC2	3	08-Jun-2007 21:00:58.0	yes
05	(5) 1256-2889	NIC2	2	08-Jun-2007 21:01:01.0	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>
06	(6) ECDFS-4937	NIC2	3	08-Jun-2007 21:01:04.0	yes
07	(7) ECDFS-9510	NIC2	3	08-Jun-2007 21:01:08.0	yes
08	(8) HDFS1-1849	NIC2	3	08-Jun-2007 21:01:12.0	yes
58	(8) HDFS1-1849	NIC2	3	08-Jun-2007 21:01:15.0	yes
09	(9) HDFS2-2046	NIC2	3	08-Jun-2007 21:01:22.0	yes
59	(9) HDFS2-2046	NIC2	3	08-Jun-2007 21:01:26.0	yes

31 Total Orbits Used

ABSTRACT

Using a combination of wide-field near-infrared imaging and very deep follow-up near-infrared spectroscopy we have identified a population of massive "red and dead" galaxies at $z \sim 2.5$. The galaxies lack emission lines and have strong Balmer/4000 Angstrom breaks, demonstrating directly that they have evolved stellar populations. These objects are very likely progenitors of massive ellipticals today and may be descendants of the first generation of galaxies. We propose to image 10 of these objects with the NIC2 camera to determine their morphologies. The goals are to 1) determine whether they have the sizes of present-day early-types or are more compact, as predicted by models, 2) determine the morphology, using visual classification and quantitative methods, and 3) constrain the evolution of the Kormendy relation from $z \sim 2.5$ to the present. These observations will show whether the oldest and most massive galaxies at $z \sim 2.5$ were already fully formed or still in the process of assembly.

OBSERVING DESCRIPTION

We image 9 faint near-IR selected galaxies with NIC2 in the F160W filter. The two brightest galaxies have 2 orbits each, and the remaining 7 galaxies have 3 orbits. An integer pixel dither pattern is used, with 36 pixels in x and 4 pixels in y, with two MULTIACCUM exposures per orbit. The dither pattern is a compromise between minimizing read noise and maximizing bad pixel rejection and background subtraction. Visits 1 and 5 are the 2-orbit (=4 exposures) visits. Visits 2,3,4,6,7,8,9 are 3-orbit (=6 exposures) visits. Visits 3 and 8 have ORIENT constraints, to avoid nearby

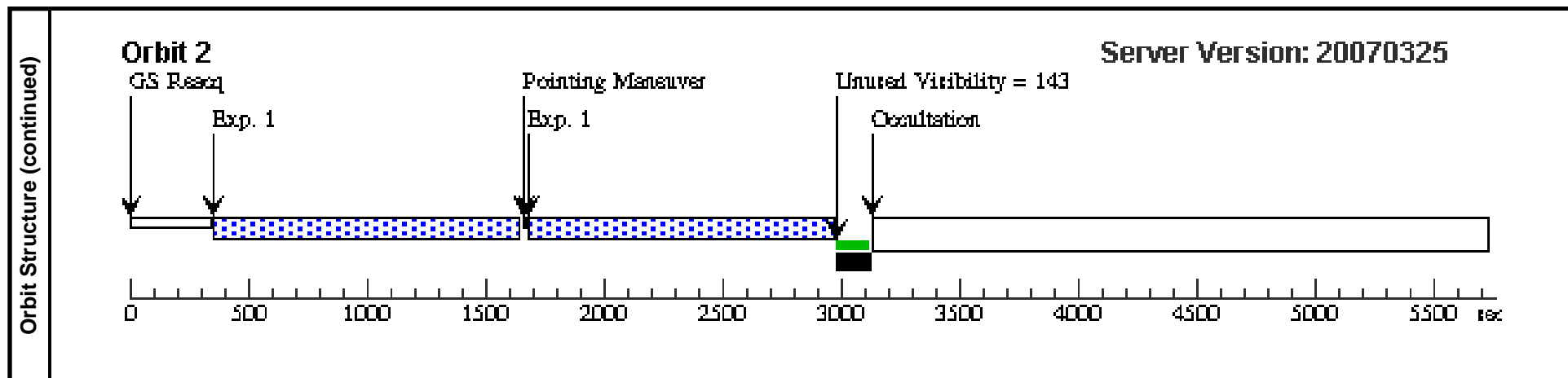
bright objects. In both cases the ORIENT is close to the value which has maximum schedulability.

PLEASE DO NOT SCHEDULE SHORTLY AFTER SAA PASSAGE: these are faint objects and the science will be compromised if the observations are scheduled right after an SAA passage.

Proposal 10808 - Visit 01 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:28 GMT 2007

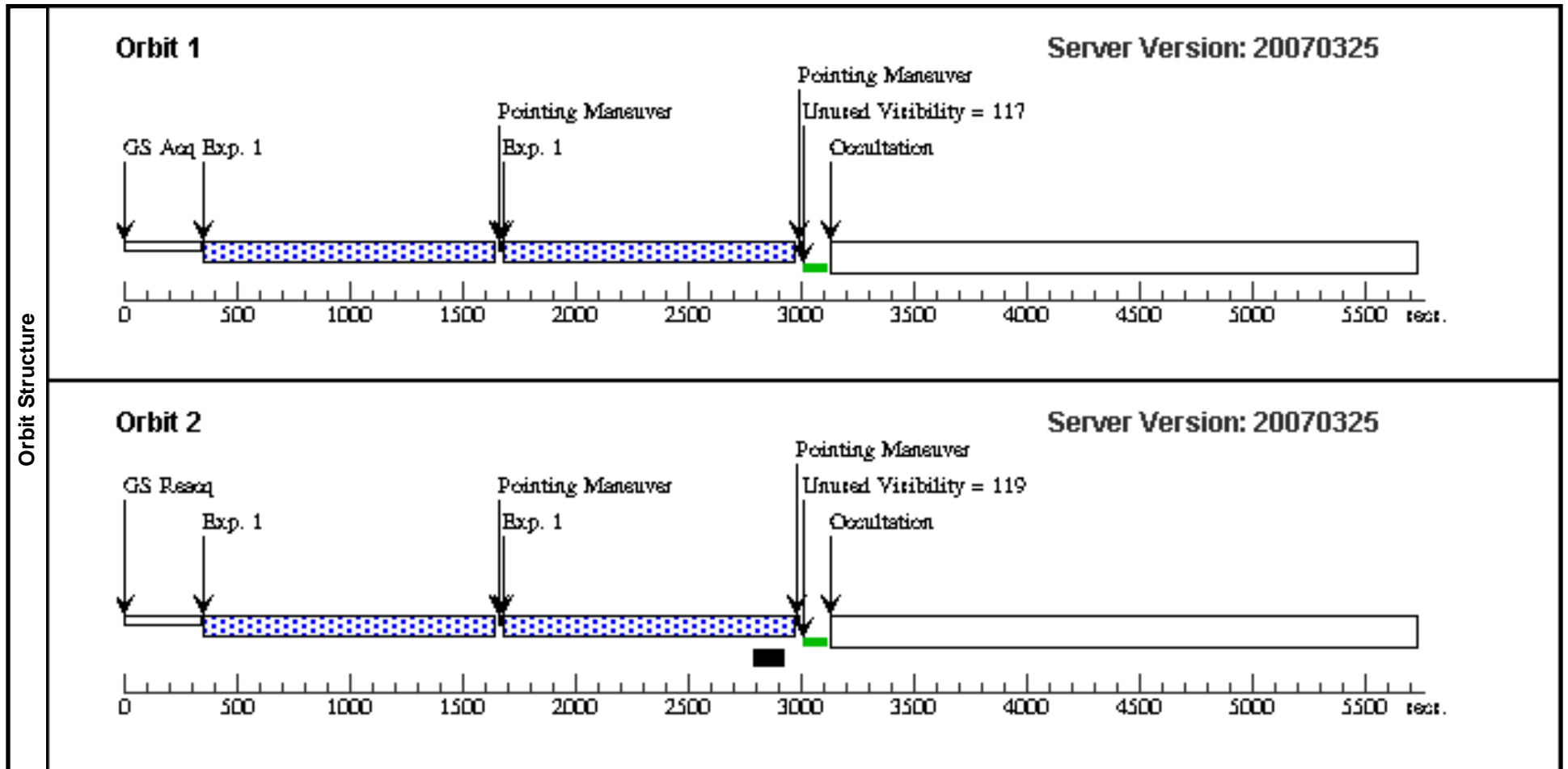
Visit	Proposal 10808, Visit 01, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						(1)	
		Purpose=DITHER	Pattern Orientation=96.34							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=3.039	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(1)	SDSS1030-1813	RA: 10 30 51.2000 (157.7133333d)	Dec: +05 25 36.30 (5.42675d)			V=(?)	K=19.01	Reference Frame: ICRS	
			Equinox: J2000							
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) SDSS1030-1813	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64;	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (1)	[==>(Pattern 1)]	[1]
						NSAMP=22			[==>(Pattern 2)]	
									[==>(Pattern 3)]	[2]
								[==>(Pattern 4)]		
Orbit Structure	<p>Orbit 1 Server Version: 20070325</p> <p>The diagram shows a horizontal timeline from 0 to 5500 seconds. A blue checkered bar represents the primary observation period from approximately 500s to 3000s. Key events are marked with arrows: 'GS Acq Exp. 1' at the start (0s), 'Pointing Maneuver Exp. 1' at ~1700s, 'Pointing Maneuver' at ~3000s, 'Unused Visibility = 117' at ~3000-3100s, and 'Occultation' at ~3100s. A green bar is visible at the start of the occultation period.</p>									

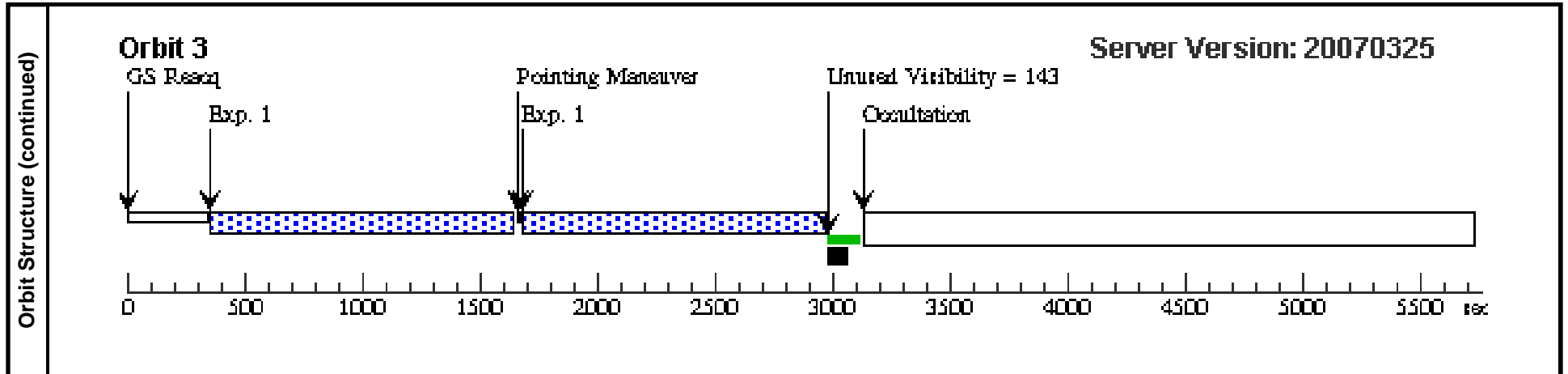


Proposal 10808 - Visit 02 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:29 GMT 2007

Visit	Proposal 10808, Visit 02, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(2)		Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						(1)		
		Purpose=DITHER	Pattern Orientation=96.34								
		Number Of Points=6	Angle Between Sides=								
		Point Spacing=3.039	Center Pattern=true								
		Line Spacing=									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(2)	SDSS1030-2559	RA: 10 30 40.1000 (157.6670833d) Dec: +05 26 34.30 (5.44286d) Equinox: J2000			V=(?) K=19.52	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	(2) SDSS1030-2559	NIC2, MULTIACCUM, NIC2-FIX	F160W		SAMP-SEQ=SPARS 64; NSAMP=22	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (2)	[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		[1]
									[=>(Pattern 3)]		[2]
									[=>(Pattern 4)]		[2]
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								[=>(Pattern 6)]		[3]	

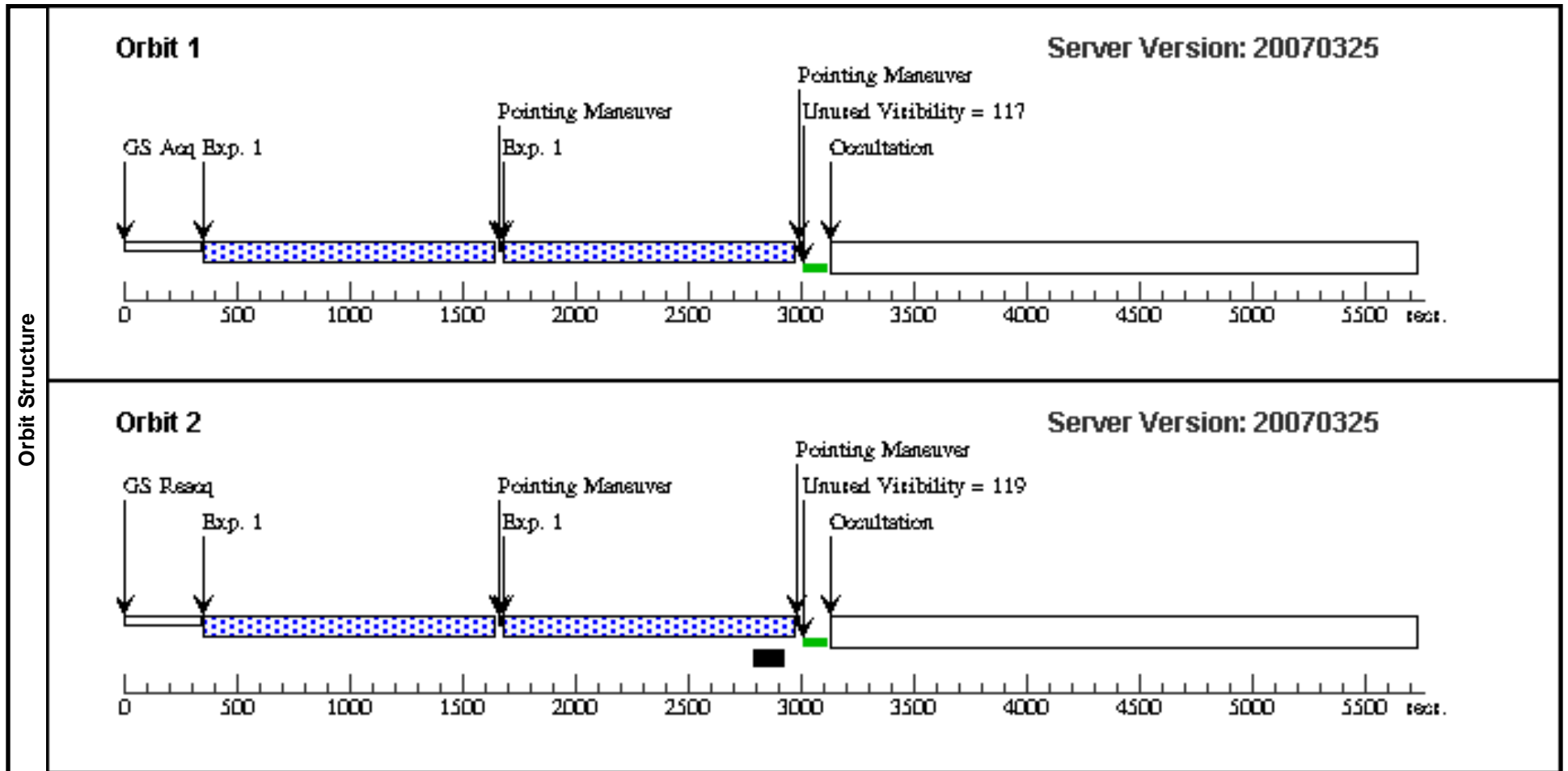


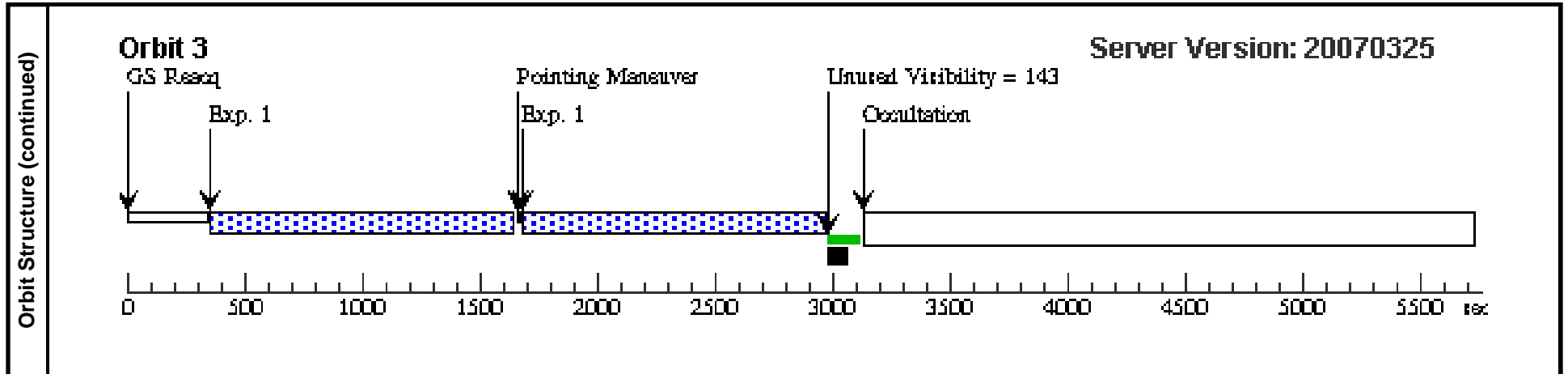


Proposal 10808 - Visit 03 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:29 GMT 2007

Visit	Proposal 10808, Visit 03, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: ORIENT 295.0D TO 295.0 D <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i> <i>ORIENT chosen to avoid nearby bright star - this orient is easily schedulable.</i>										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(2)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=96.34 Angle Between Sides= Center Pattern=true						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(3)	1256-151	RA: 12 54 59.6000 (193.7483333d) Dec: +01 11 29.90 (1.19164d) Equinox: J2000					V=(?) K=19.28	Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(3) 1256-151	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=22	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (2)	[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		[2]
									[=>(Pattern 4)]		
									[=>(Pattern 5)]		[3]
								[=>(Pattern 6)]			

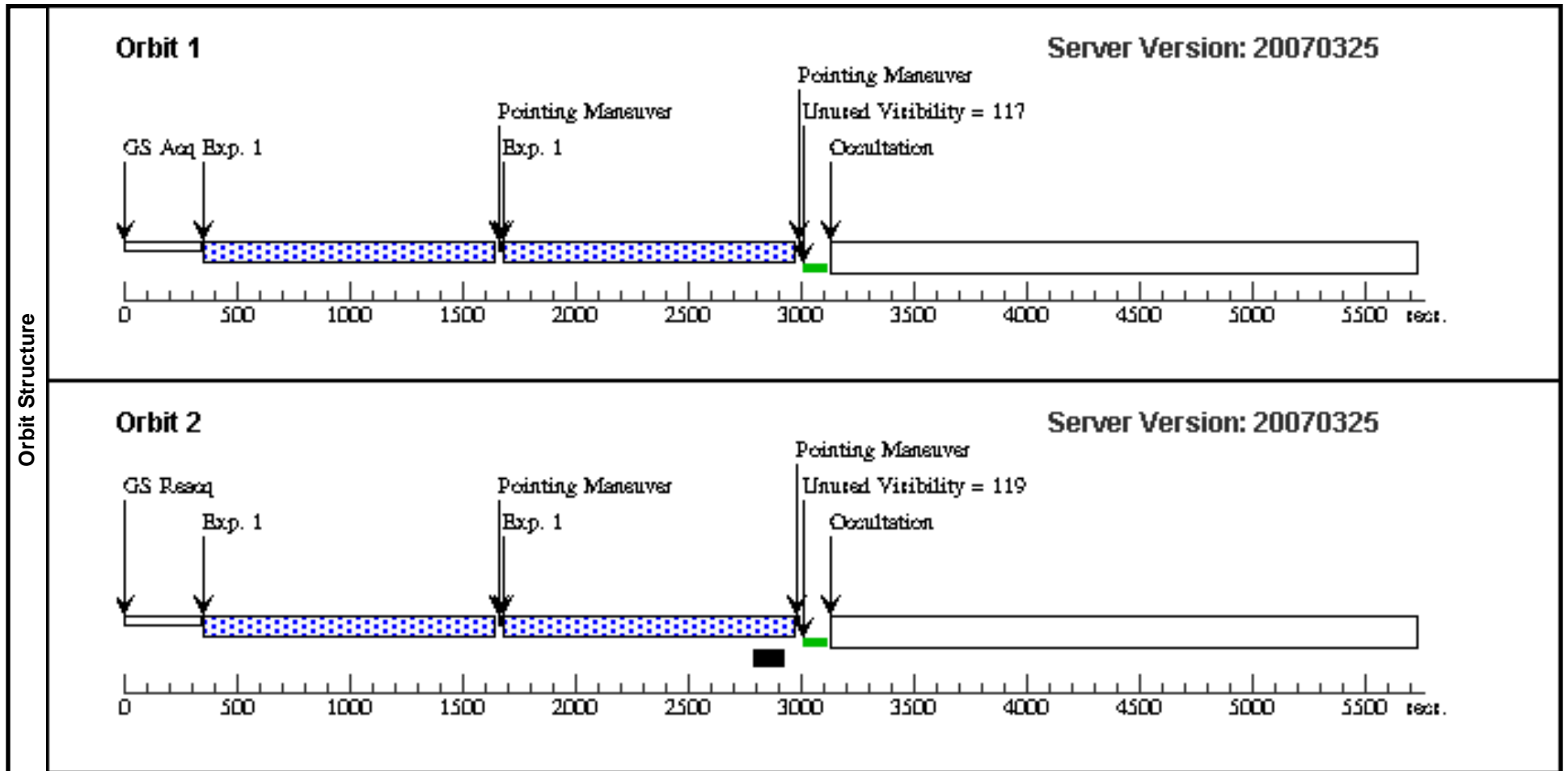


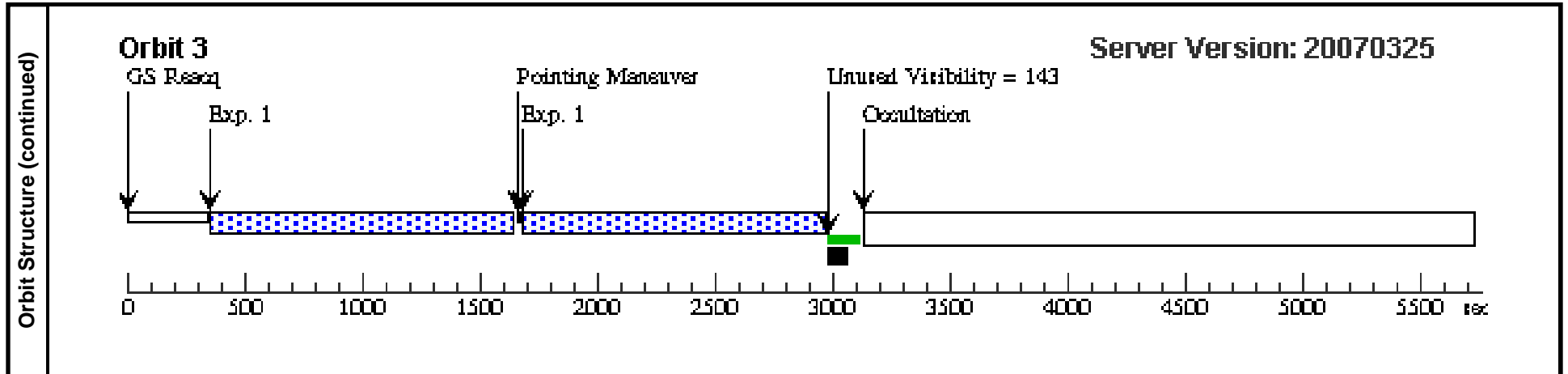


Proposal 10808 - Visit 04 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:30 GMT 2007

Visit	Proposal 10808, Visit 04, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
(2)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=96.34 Angle Between Sides= Center Pattern=true					(1)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	1256-465	RA: 12 55 2.7000 (193.7612500d) Dec: +01 07 32.20 (1.12561d) Equinox: J2000		V=(?) K=19.65	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) 1256-465	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=22	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (2)	[=>(Pattern 1)]	[1]
									[=>(Pattern 2)]	
									[=>(Pattern 3)]	[2]
									[=>(Pattern 4)]	
								[=>(Pattern 5)]	[3]	
								[=>(Pattern 6)]		

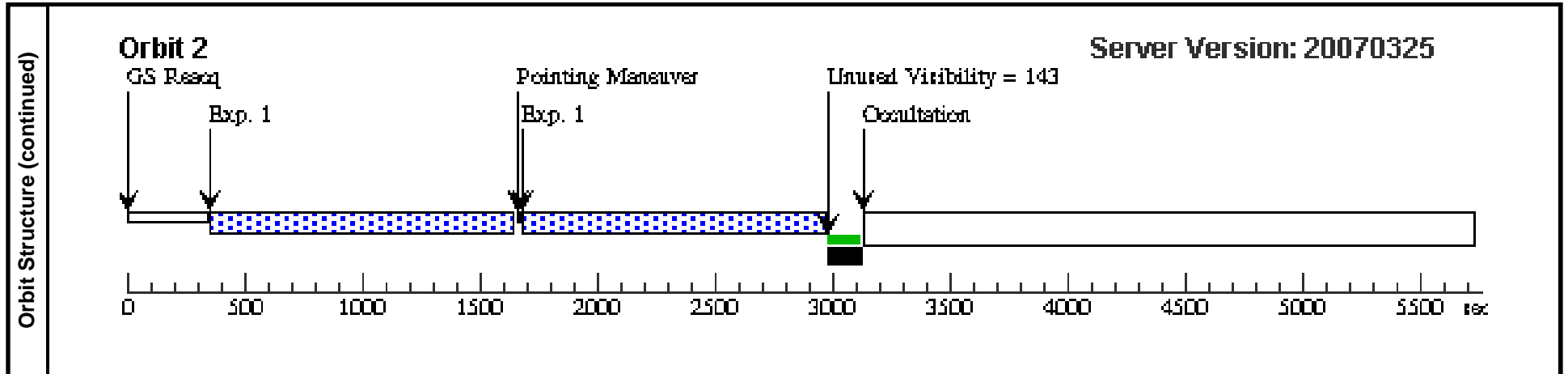




Proposal 10808 - Visit 05 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:31 GMT 2007

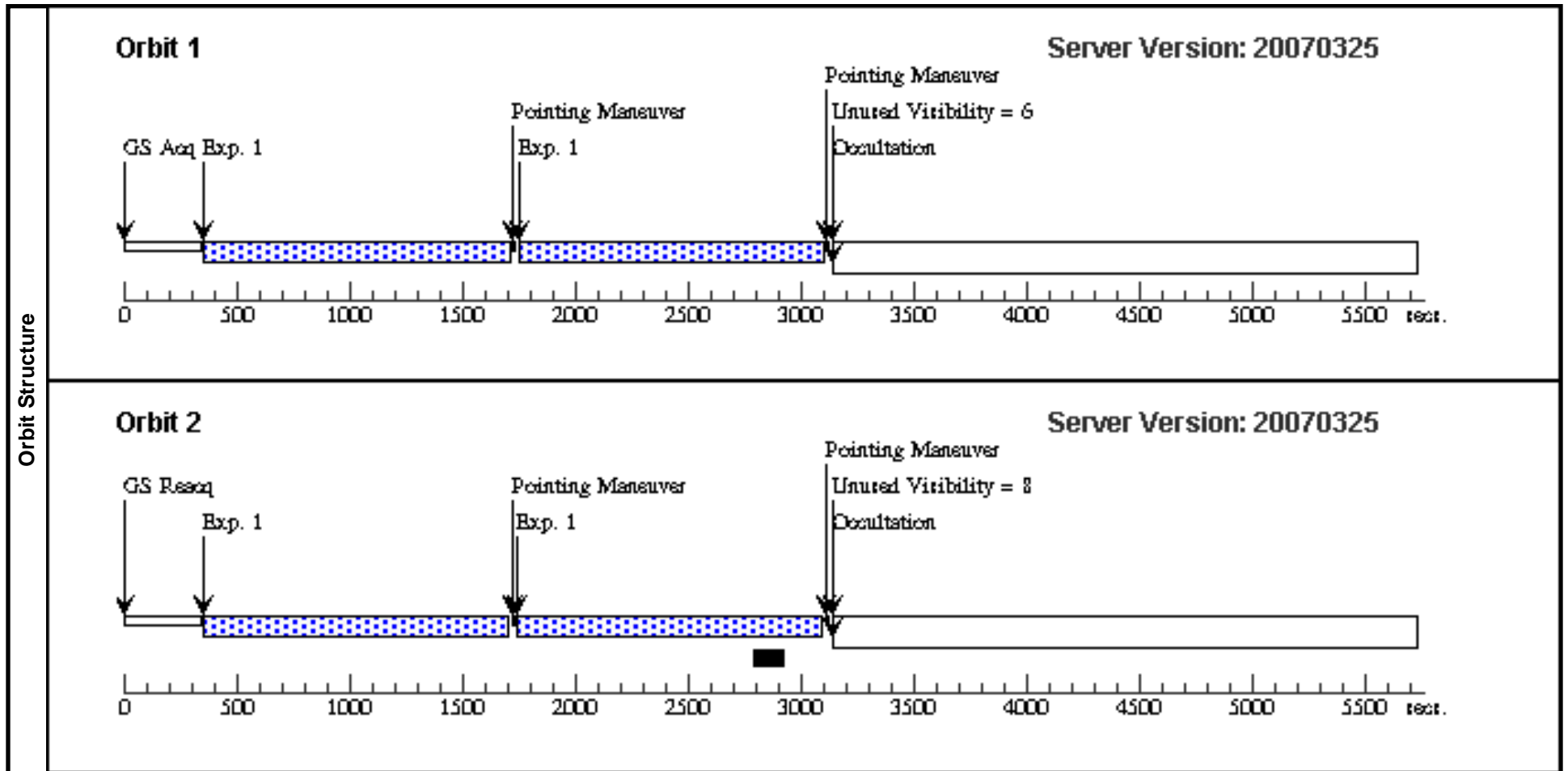
Visit	Proposal 10808, Visit 05, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=96.34 Angle Between Sides= Center Pattern=true						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(5)	1256-2889	RA: 12 55 25.8000 (193.8575000d) Dec: +01 03 25.00 (1.05694d) Equinox: J2000					V=(?) K=18.76	Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(5) 1256-2889	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=22	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
									[==>(Pattern 3)] [==>(Pattern 4)]	[2]
Orbit Structure	<p>Orbit 1 Server Version: 20070325</p> <p>The diagram shows a horizontal timeline from 0 to 5500 seconds. A blue checkered bar represents the observation period from approximately 400 to 3000 seconds. Key events are marked with arrows: 'GS Acq Exp. 1' at 0s, 'Pointing Maneuver Exp. 1' at 1600s, 'Pointing Maneuver' at 3000s, and 'Occultation' at 3000s. A green bar below the timeline indicates 'Unused Visibility = 117' seconds between 3000 and 3100 seconds.</p>									
	<p>Timeline labels: 0, 500, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500 sec.</p>									

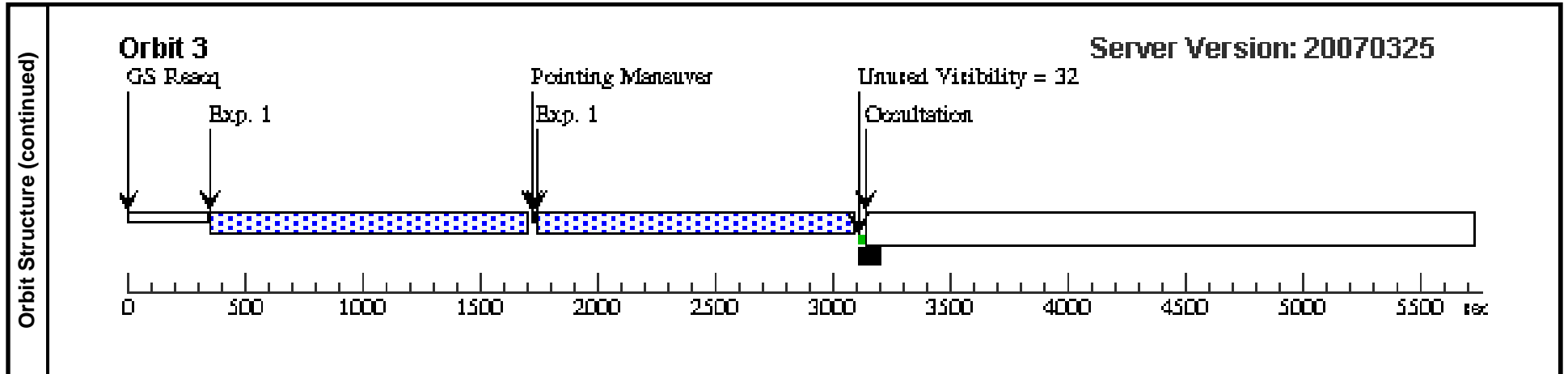


Proposal 10808 - Visit 06 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:31 GMT 2007

Visit	Proposal 10808, Visit 06, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
(2)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=96.34 Angle Between Sides= Center Pattern=true					(1)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(6)	ECDFS-4937	RA: 03 32 13.3000 (53.0554167d) Dec: -27 52 26.30 (-27.87397d) Equinox: J2000			V=(?) K=19.49	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(6) ECDFS-4937	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=23		Pattern 1-1 (2)	[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	[2]
									[==>(Pattern 3)]	[3]
									[==>(Pattern 4)]	[4]
								[==>(Pattern 5)]	[5]	
								[==>(Pattern 6)]	[6]	

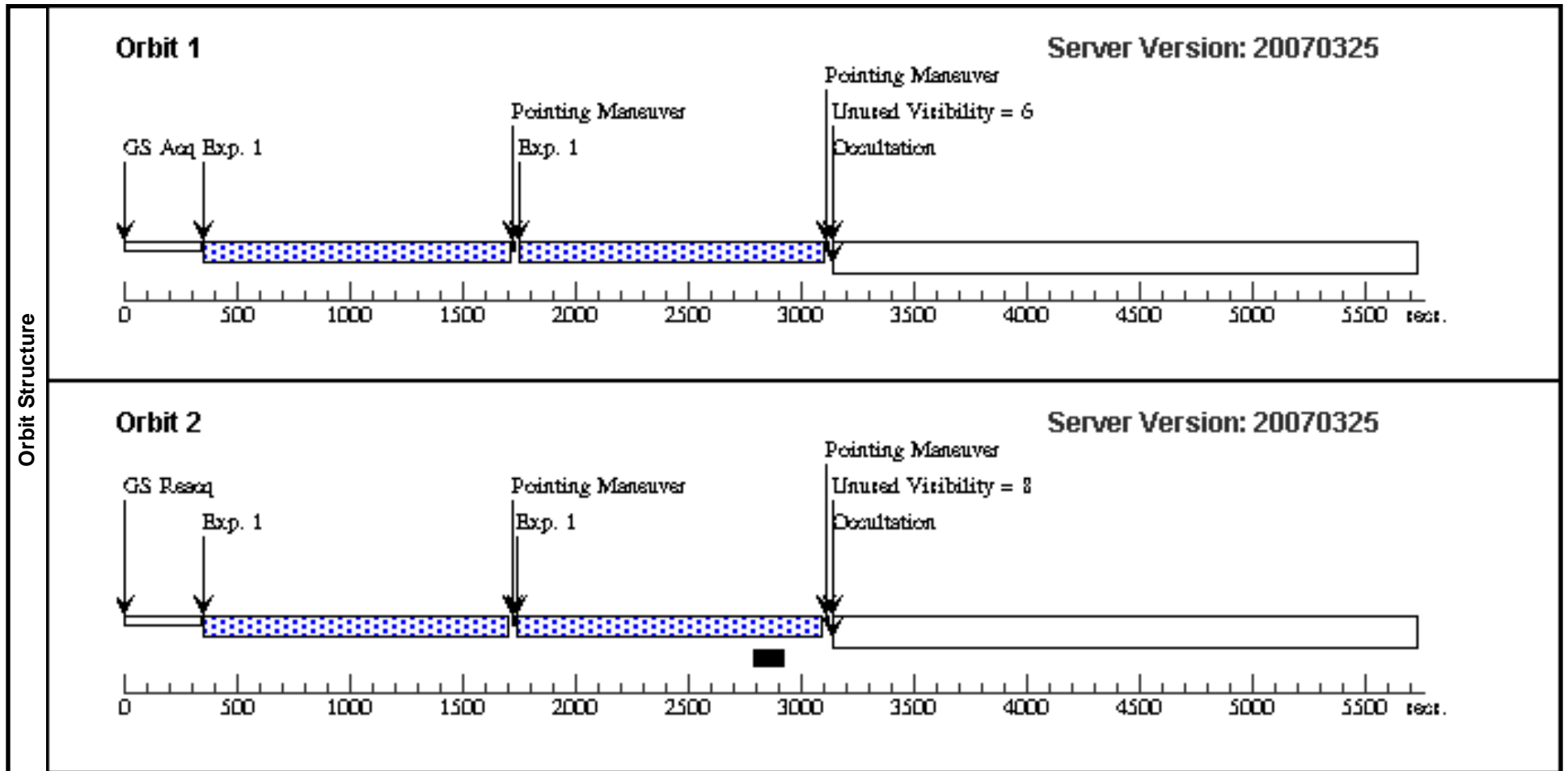


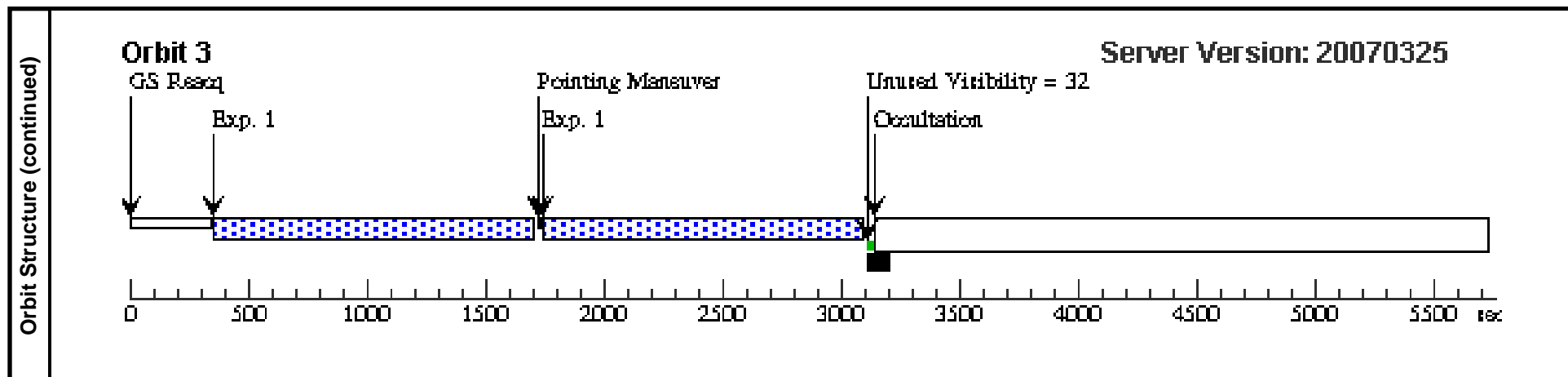


Proposal 10808 - Visit 07 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:32 GMT 2007

Visit	Proposal 10808, Visit 07, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
(2)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=96.34 Angle Between Sides= Center Pattern=true					(1)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	ECDFS-9510	RA: 03 32 45.0000 (53.1875000d) Dec: -27 43 9.20 (-27.71922d) Equinox: J2000		V=(?) K=19.37	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(7) ECDFS-9510	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=23	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (2)	[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	
									[==>(Pattern 3)]	[2]
									[==>(Pattern 4)]	
								[==>(Pattern 5)]	[3]	
								[==>(Pattern 6)]		

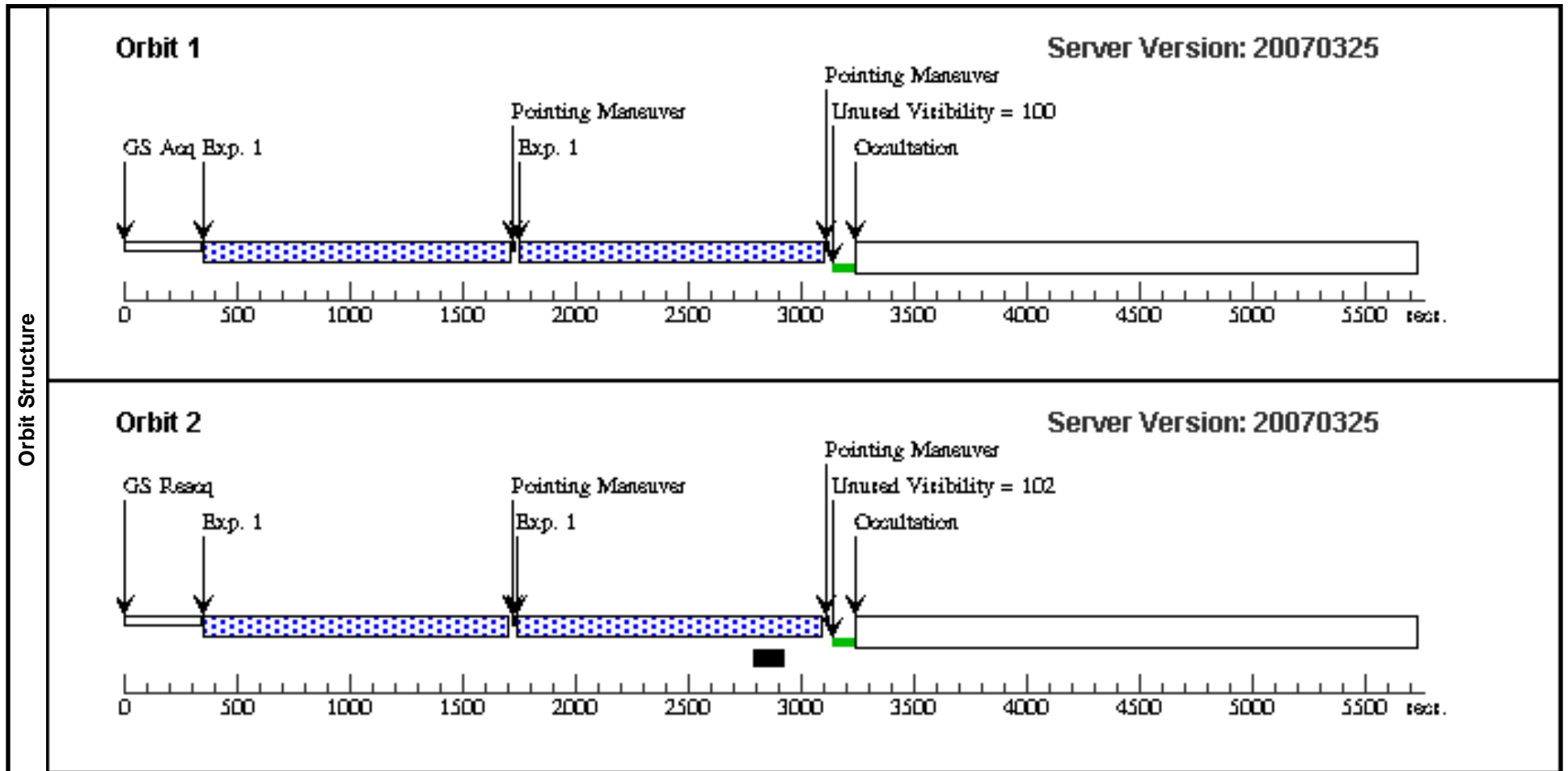


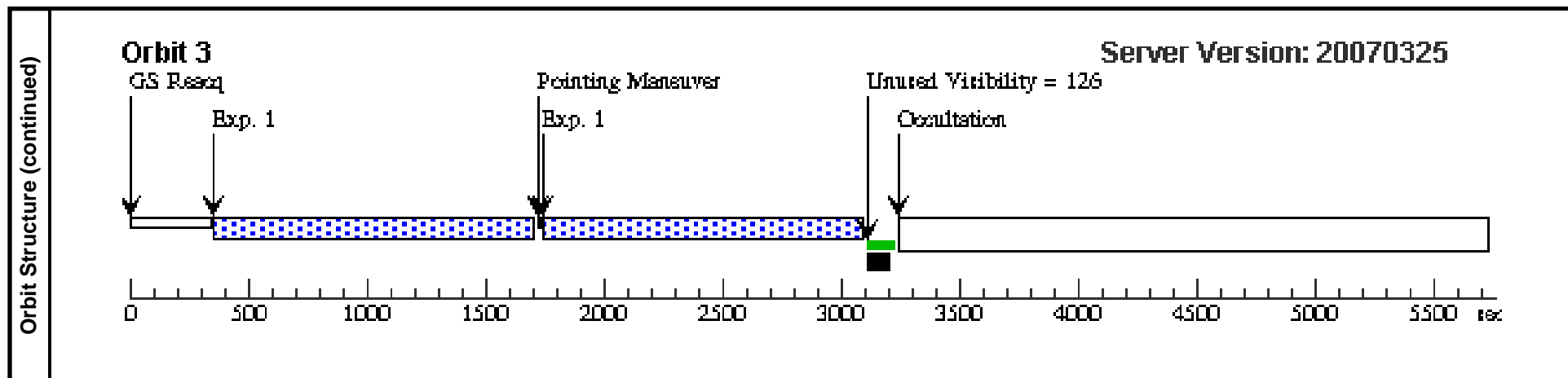


Proposal 10808 - Visit 08 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:32 GMT 2007

Visit	Proposal 10808, Visit 08, completed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: ORIENT 250.0D TO 260.0 D <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i> <i>ORIENT avoids two bright objects which are ~15" away from the target.</i>										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(3)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=6.34 Angle Between Sides= Center Pattern=true						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(8)	HDFS1-1849	RA: 22 33 37.9000 (338.4079167d) Dec: -60 33 14.60 (-60.55406d) Equinox: J2000					V=(?) K=19.30	Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	(8) HDFS1-1849	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=23	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (3)	[=>(Pattern 1)] [=>(Pattern 2)]		[1]	
									[=>(Pattern 3)] [=>(Pattern 4)]		[2]
									[=>(Pattern 5)] [=>(Pattern 6)]		[3]

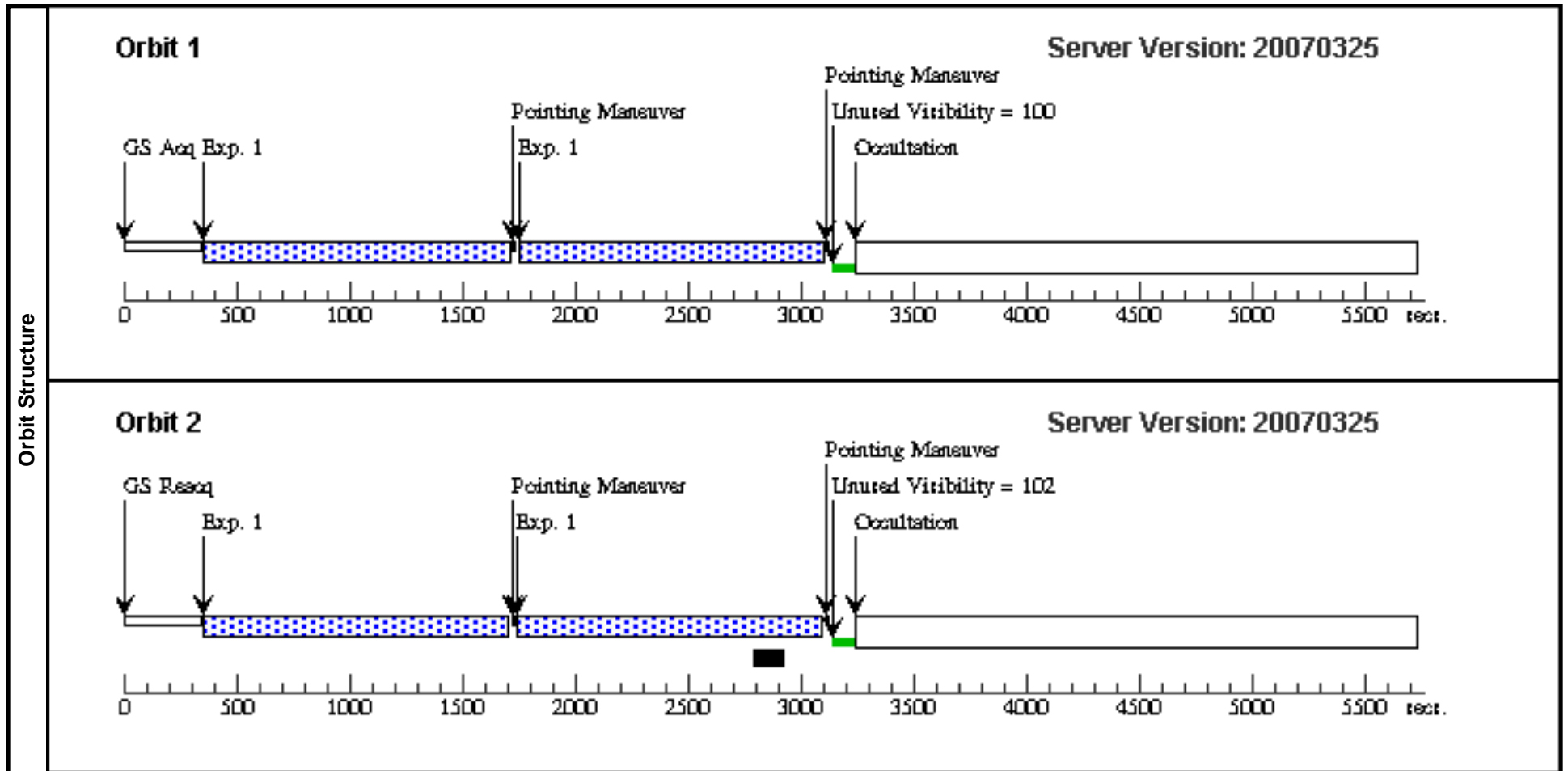


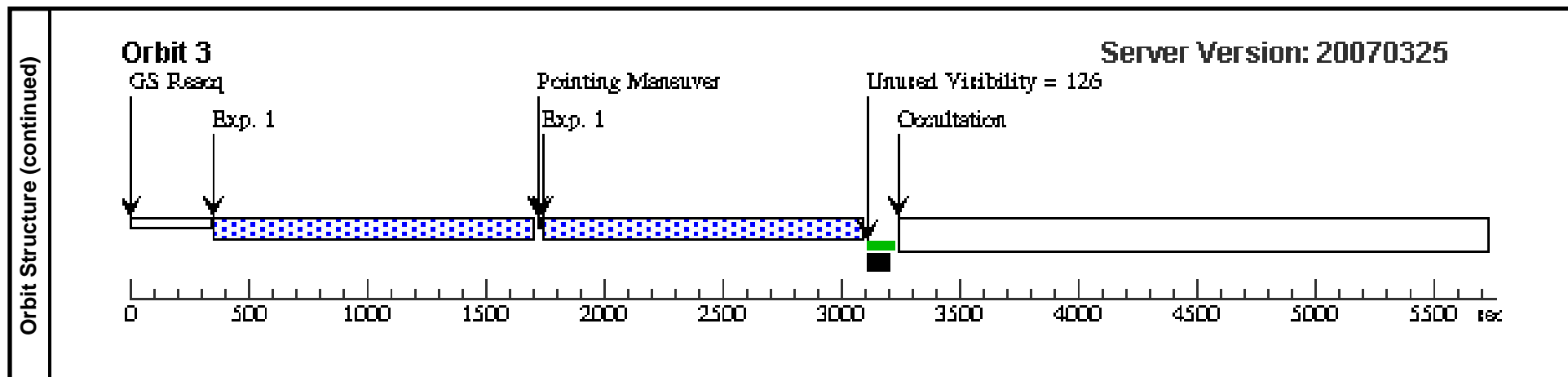


Proposal 10808 - Visit 58 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:33 GMT 2007

Visit	Proposal 10808, Visit 58 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: ORIENT 250.0D TO 260.0 D <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i> <i>ORIENT avoids two bright objects which are ~15" away from the target.</i>									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(3)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=6.34 Angle Between Sides= Center Pattern=true						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(8)	HDFS1-1849	RA: 22 33 37.9000 (338.4079167d) Dec: -60 33 14.60 (-60.55406d) Equinox: J2000					V=(?) K=19.30	Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(8) HDFS1-1849	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=23	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]	
								[==>(Pattern 3)] [==>(Pattern 4)]	[2]	
								[==>(Pattern 5)] [==>(Pattern 6)]	[3]	

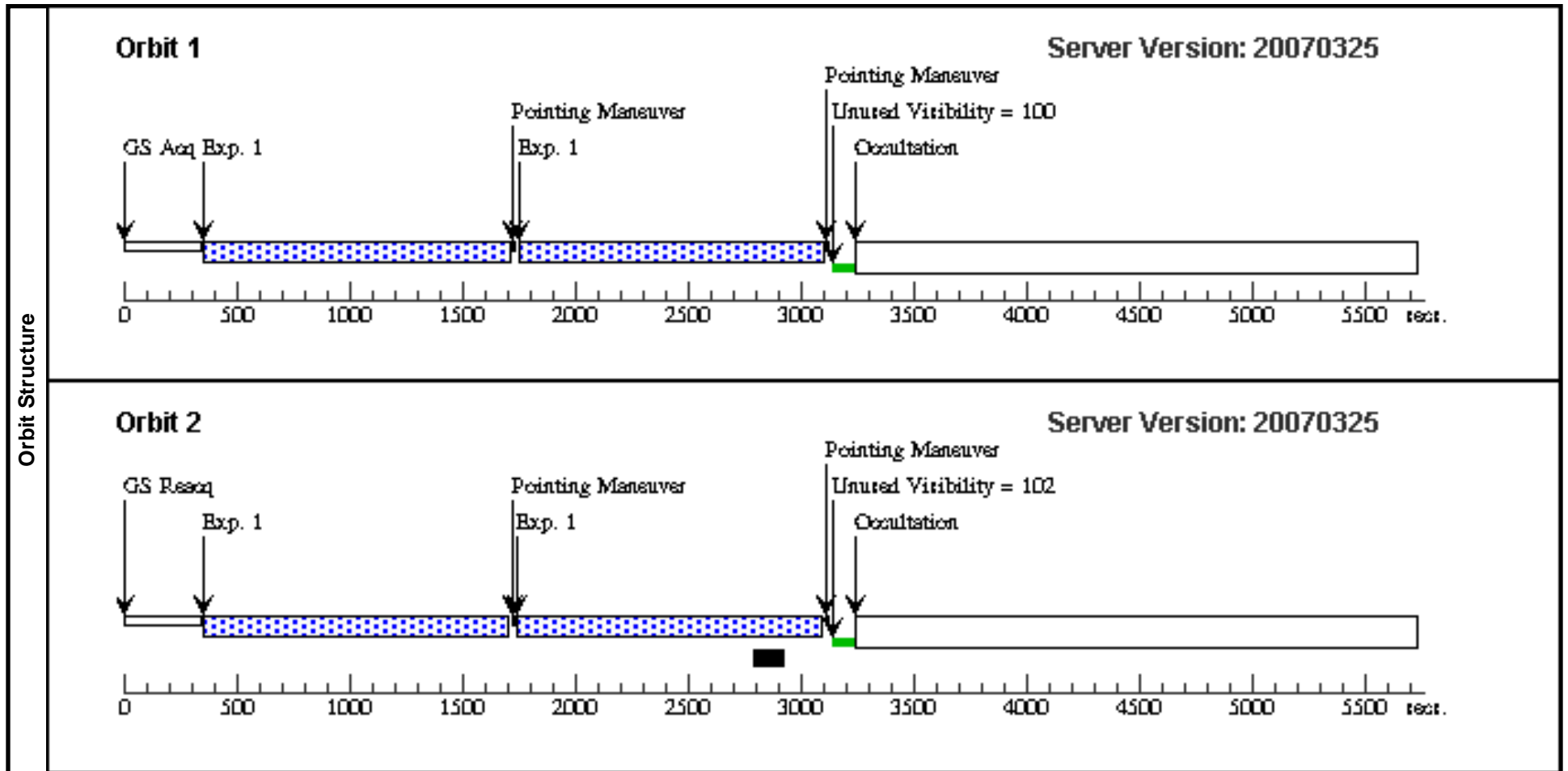


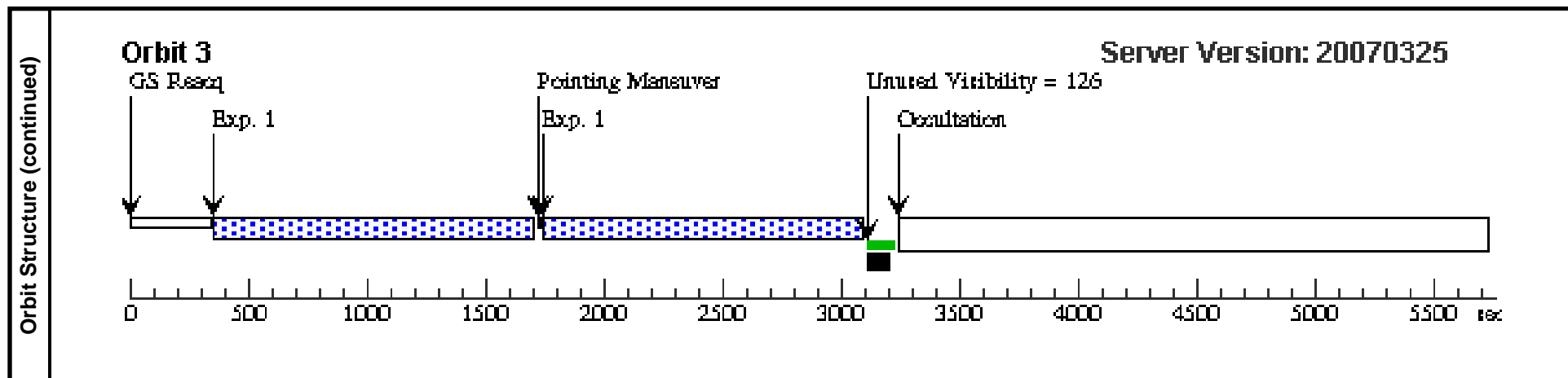


Proposal 10808 - Visit 09 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Sat Jun 09 01:01:33 GMT 2007

Visit	Proposal 10808, Visit 09, failed Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
(2)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=6 Point Spacing=3.039 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=96.34 Angle Between Sides= Center Pattern=true					(1)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	HDFS2-2046	RA: 22 32 30.8000 (338.1283333d) Dec: -60 32 44.00 (-60.54556d) Equinox: J2000		V=(?) K=19.54	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(9) HDFS2-2046	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=23		Pattern 1-1 (2)	[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	[2]
									[==>(Pattern 3)]	[3]
									[==>(Pattern 4)]	[4]
								[==>(Pattern 5)]	[5]	
								[==>(Pattern 6)]	[6]	





Proposal 10808 - Visit 59 - Morphologies of spectroscopically-confirmed "red and dead" galaxies at z~2.5

Visit	Proposal 10808, Visit 59, completed Sat Jun 09 01:01:34 GMT 2007 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none) <i>Comments: Please do NOT schedule right after passage through South Atlantic Anomaly. This produces nasty residuals in the images.</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=96.34							
		Number Of Points=6	Angle Between Sides=							
		Point Spacing=3.039	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	HDFS2-2046	RA: 22 32 30.8000 (338.1283333d) Dec: -60 32 44.00 (-60.54556d) Equinox: J2000		V=(?) K=19.54	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(9) HDFS2-2046	NIC2, MULTIACCUM, NIC2-FIX	F160W	SAMP-SEQ=SPARS 64; NSAMP=23	GS ACQ SCENARI O BASE1TNS	Pattern 1-1 (2)	[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	
									[==>(Pattern 3)]	[2]
									[==>(Pattern 4)]	
									[==>(Pattern 5)]	[3]
								[==>(Pattern 6)]		

