



10906 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Cycle: 15, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

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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) PG0026+129	NIC2	1	11-May-2006 21:14:29.0	yes
02	(2) PG0838+770	NIC2	1	11-May-2006 21:14:35.0	yes
03	(3) PG0844+349	NIC2	1	11-May-2006 21:14:39.0	yes

Proposal 10906 - 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>
04	(4) PG0923+201	NIC2	1	11-May-2006 21:14:43.0	yes
05	(5) PG0953+414	NIC2	1	11-May-2006 21:14:46.0	yes
06	(6) PG1001+054	NIC2	1	11-May-2006 21:14:50.0	yes
07	(7) PG1004+130	NIC2	1	11-May-2006 21:14:53.0	yes
08	(8) PG1116+215	NIC2	1	11-May-2006 21:14:56.0	yes
09	(9) PG1302-102	NIC2	1	11-May-2006 21:14:59.0	yes
10	(10) PG1307+085	NIC2	1	11-May-2006 21:15:03.0	yes
11	(11) PG1309+355	NIC2	1	11-May-2006 21:15:06.0	yes
12	(12) PG1411+442	NIC2	1	11-May-2006 21:15:09.0	yes
13	(13) PG1426+015	NIC2	1	11-May-2006 21:15:13.0	yes
14	(14) PG1435-067	NIC2	1	11-May-2006 21:15:16.0	yes
15	(15) PG1440+356	NIC2	1	11-May-2006 21:15:19.0	yes
16	(16) PG1613+658	NIC2	1	11-May-2006 21:15:22.0	yes
17	(17) PG1617+175	NIC2	1	11-May-2006 21:15:26.0	yes
18	(18) PG1626+554	NIC2	1	11-May-2006 21:15:29.0	yes
19	(19) PG1700+518	NIC2	1	11-May-2006 21:15:32.0	yes
20	(20) B2-2201+31A	NIC2	1	11-May-2006 21:15:36.0	yes
21	(21) PG2214+139	NIC2	1	11-May-2006 21:15:39.0	yes
22	(22) PG2251+113	NIC2	1	11-May-2006 21:15:42.0	yes
23	(23) PG2349-014	NIC2	1	11-May-2006 21:15:45.0	yes
24	(24) SAO107-626	NIC2	1	11-May-2006 21:15:49.0	yes

24 Total Orbits Used

ABSTRACT

We propose deep NICMOS H-band imaging of a carefully selected sample of 23 local QSOs. This program is the last critical element of a comprehensive investigation of the most luminous mergers in the nearby universe, the ultraluminous infrared galaxies (ULIRGs) and the quasars. This effort is called QUEST: Quasar / ULIRG Evolutionary STudy. The high-resolution HST images of the QUEST QSOs will complement an identical set of images on the ULIRG sample obtained during Cycle 12, an extensive set of ground-based data that include long-slit NIR spectra from a Large VLT Program, and a large set of mid-infrared spectra from a Cycle 1 medium-size program with Spitzer. This unique dataset will allow us to derive with unprecedented precision structural, kinematic, and activity parameters for a large unbiased sample of objects spanning the entire ULIRG/QSO luminosity function. These data will refine the fundamental plane of massive gas-rich mergers and enable us to answer the following questions: (1) Do ultraluminous mergers form elliptical galaxies, and in particular, giant ellipticals? (2) Do ULIRGs evolve into optical bright QSOs? The results from this detailed study of massive mergers in the local universe will be relevant to understanding the basic physical processes involved in creating massive early-type host on the one hand, and growing/feeding embedded massive black holes on the other, in major galaxy mergers. This is an important question since 50% of cosmic star formation at high- z and most of the big BHs appear to be formed in this process.

OBSERVING DESCRIPTION

The NIC2 camera is used with filter F160W to obtain deep H-band images of 23 local QSOs. The coordinates of the targets are accurate to better than ± 0.5 arcsecond. Most of the 'V' magnitudes listed for the QSOs are quoted from the NED. Each of the 23 targets is observed for a full orbit. One more orbit is used to characterize the PSF. For each orbit, 5 multiaccum step64 sequences are obtained. The first of these sequences is obtained at the RA and DEC of the target and lasts for 2 to 256 seconds ($nsamp=4-12$) depending on the length of the orbit. The other four sequences are obtained using a 4-point spiral dither pattern (`nic_spiral_dither`) with $offset = 25.5$ pixels = 1.92 arcseconds centered on the RA and DEC of the target. Each of these four multiaccum sequences last 640 seconds ($nsamp=18$). This dither pattern is used to better sample the instrumental PSF and to aid with the recognition and elimination of data artifacts. A similar procedure is used for the PSF orbit. A series of deep multiaccum step64 sequences is obtained of GSC 05017-00212 (= SA107-626). These data will be used to remove the PSF from our sources (the surface brightness fits to our objects will most likely be dominated by systematic errors from dust features and star formation rather than from the PSF subtraction).

REAL TIME JUSTIFICATION

N/A

CALIBRATION JUSTIFICATION

N/A

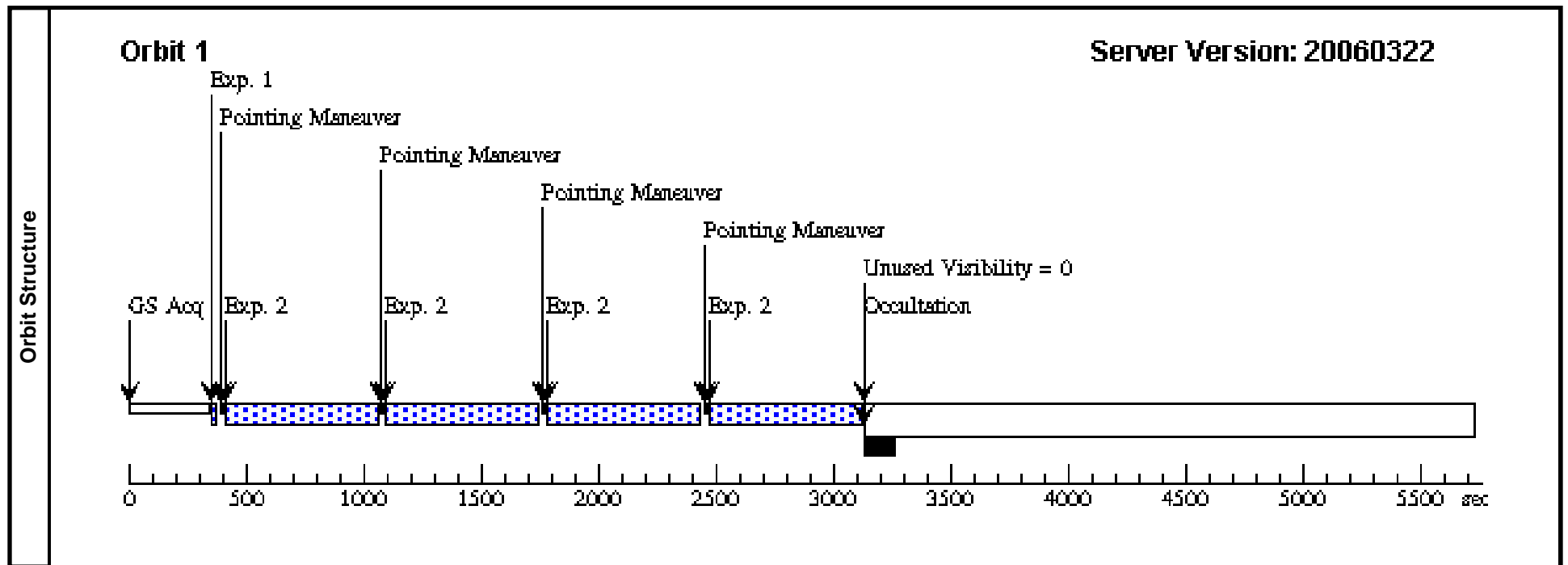
ADDITIONAL COMMENTS

N/A

Proposal 10906 - Visit 01 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:51 GMT 2006

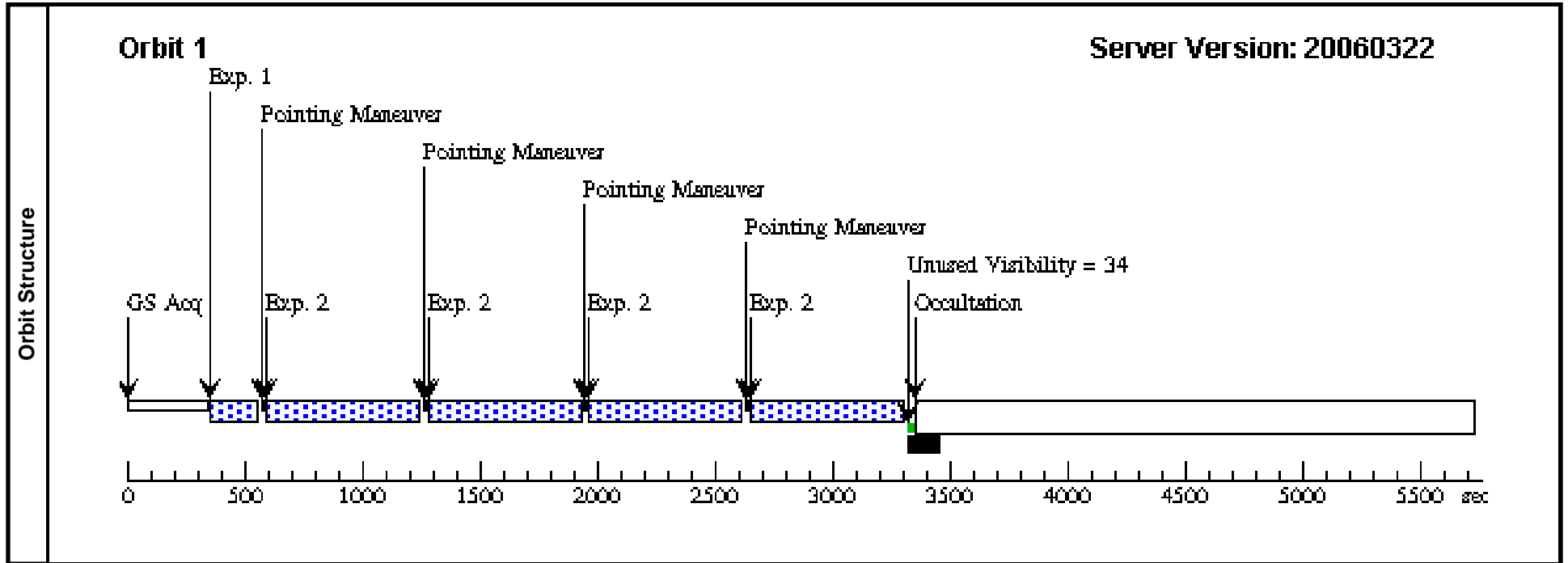
Visit	Proposal 10906, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
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		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(1)	PG0026+129	RA: 00 29 13.6900 (7.3070417d) Dec: +13 16 3.80 (13.26772d) Equinox: J2000			V=15.41	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	(1) PG0026+129	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int	[==>]	[1]			
2	(1) PG0026+129	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]				



Proposal 10906 - Visit 02 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:51 GMT 2006

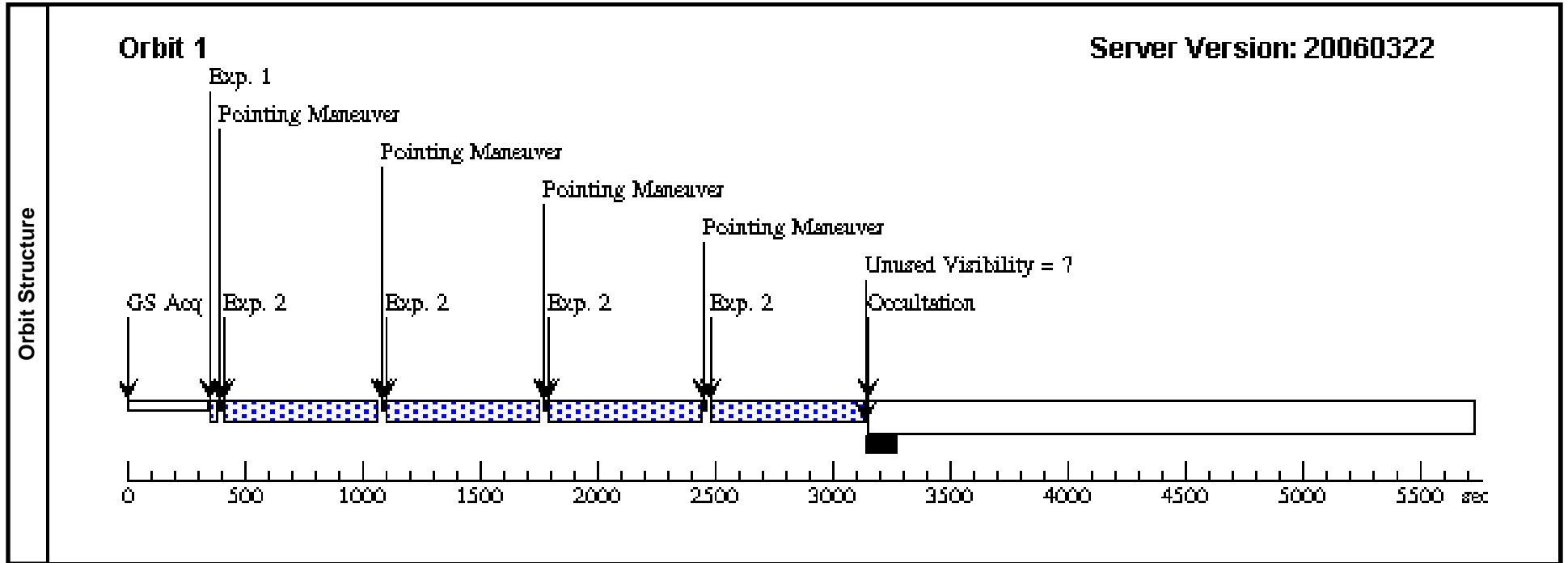
Visit	Proposal 10906, Visit 02 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	PG0838+770	RA: 08 44 45.3000 (131.1887500d) Dec: +76 53 9.50 (76.88597d) Equinox: J2000			V=16.3	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) PG0838+770	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=11; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(2) PG0838+770	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 03 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

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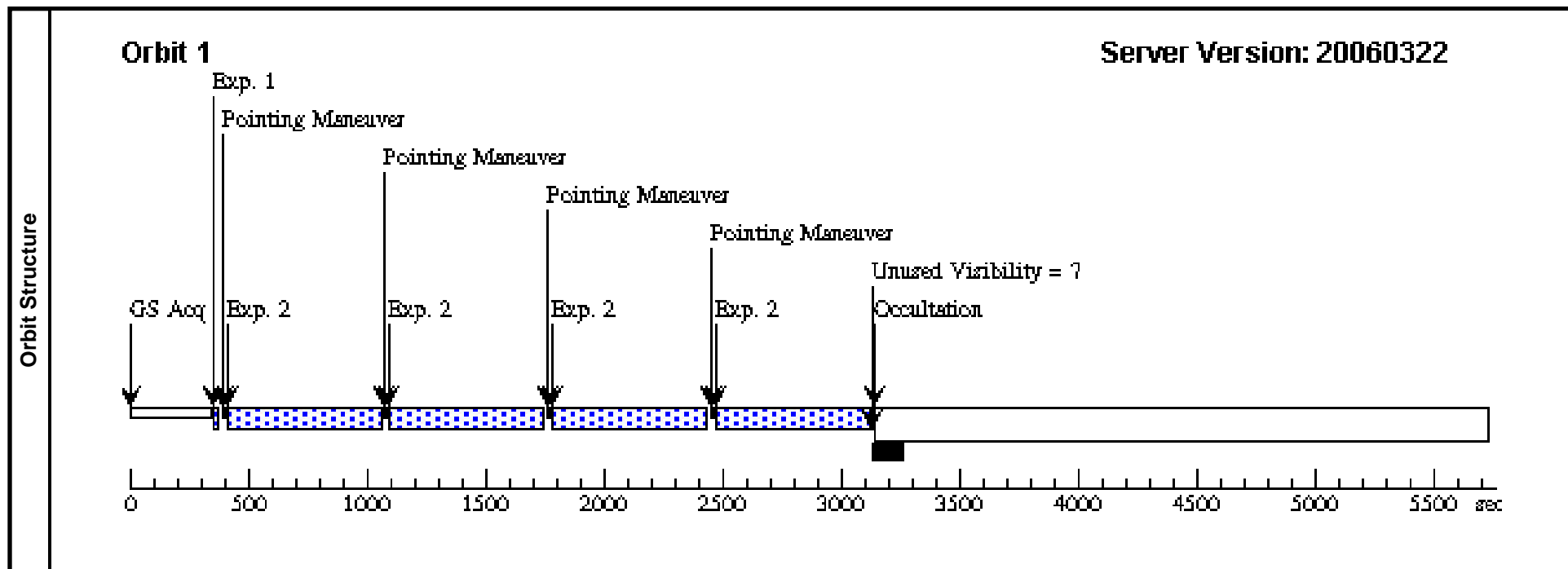
Visit	Proposal 10906, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
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		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	PG0844+349	RA: 08 47 42.4400 (131.9268333d) Dec: +34 45 4.40 (34.75122d) Equinox: J2000	Redshift: 0.064	V=14.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) PG0844+349	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=7; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(3) PG0844+349	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 04 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:52 GMT 2006

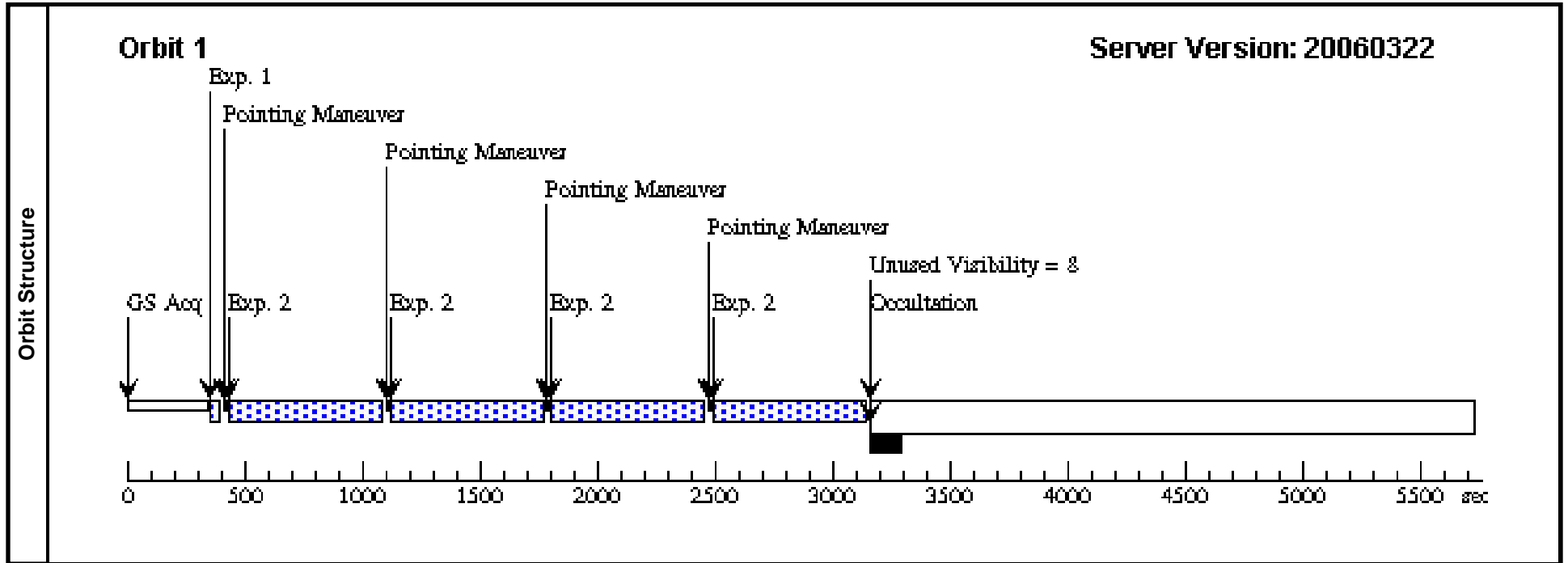
Visit	Proposal 10906, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	PG0923+201	RA: 09 25 54.7100 (141.4779583d) Dec: +19 54 5.00 (19.90139d) Equinox: J2000		V=16.04	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) PG0923+201	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(4) PG0923+201	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 05 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:52 GMT 2006

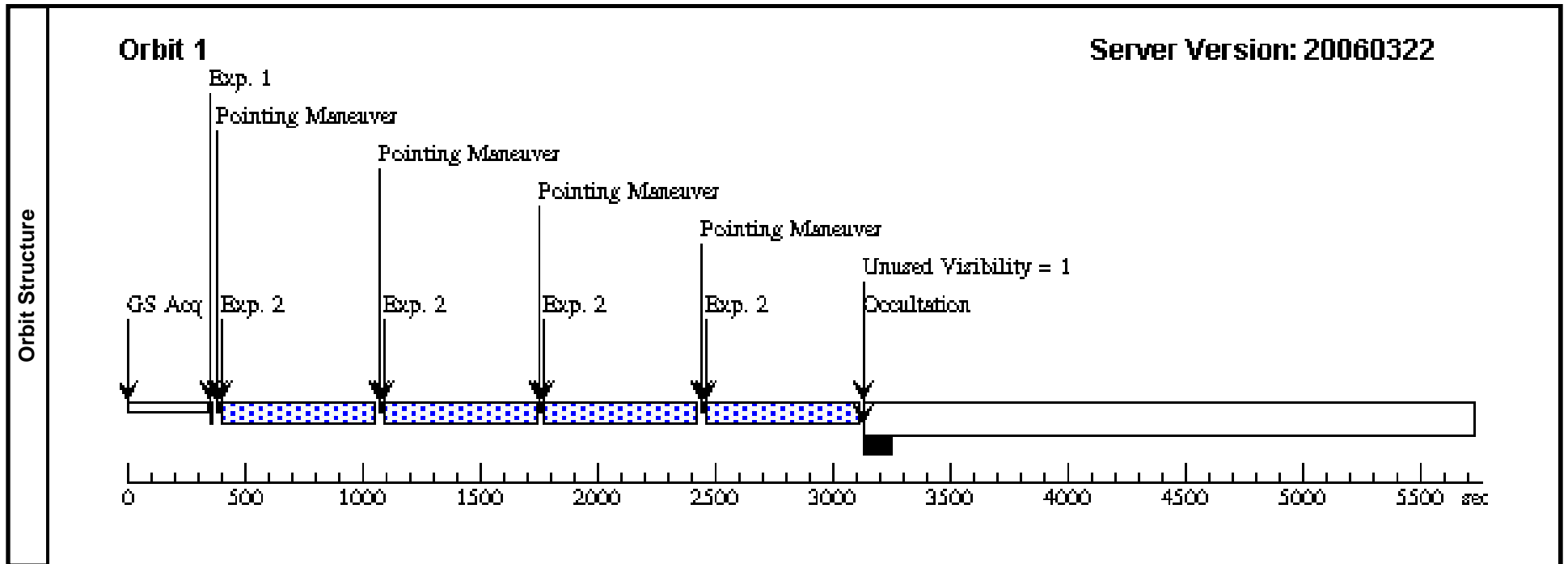
Visit	Proposal 10906, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	PG0953+414	RA: 09 56 52.4000 (149.2183333d) Dec: +41 15 22.10 (41.25614d) Equinox: J2000		V=14.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(5) PG0953+414	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=8; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(5) PG0953+414	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 06 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

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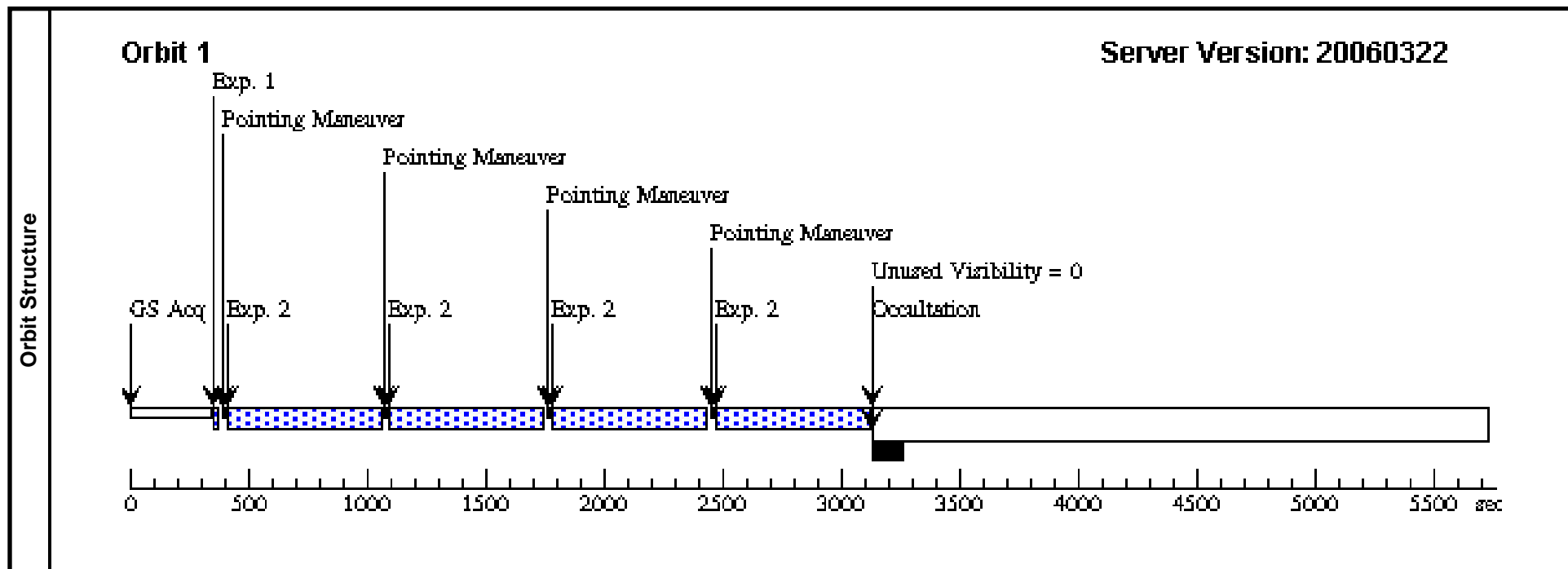
Visit	Proposal 10906, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						(2)
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(6)	PG1001+054	RA: 10 04 20.1200 (151.0838333d) Dec: +05 13 0.50 (5.21681d) Equinox: J2000			V=16.38	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(6) PG1001+054	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=4; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(6) PG1001+054	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 07 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

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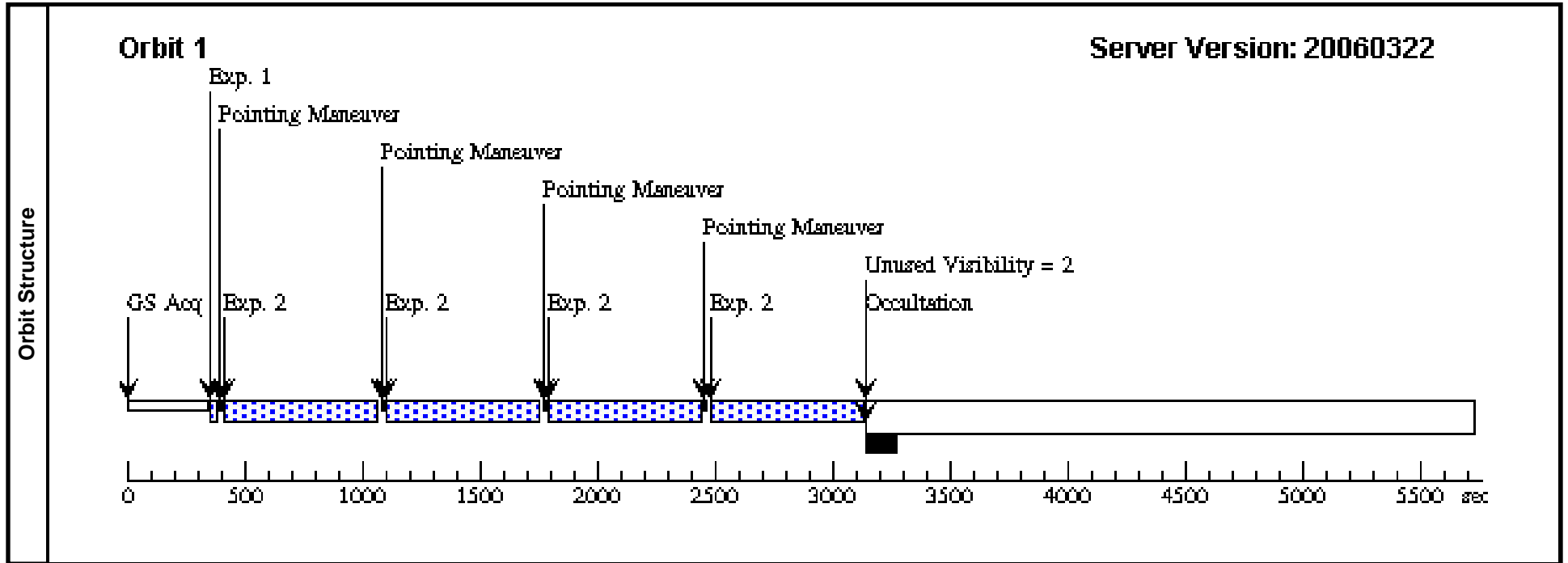
Visit	Proposal 10906, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	PG1004+130	RA: 10 07 26.0900 (151.8587083d) Dec: +12 48 56.20 (12.81561d) Equinox: J2000		V=15.15	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(7) PG1004+130	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(7) PG1004+130	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 08 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

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Visit	Proposal 10906, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	PG1116+215	RA: 11 19 8.6800 (169.7861667d) Dec: +21 19 17.90 (21.32164d) Equinox: J2000		V=15.17	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(8) PG1116+215	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=7; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]	
	2	(8) PG1116+215	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	



Proposal 10906 - Visit 09 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

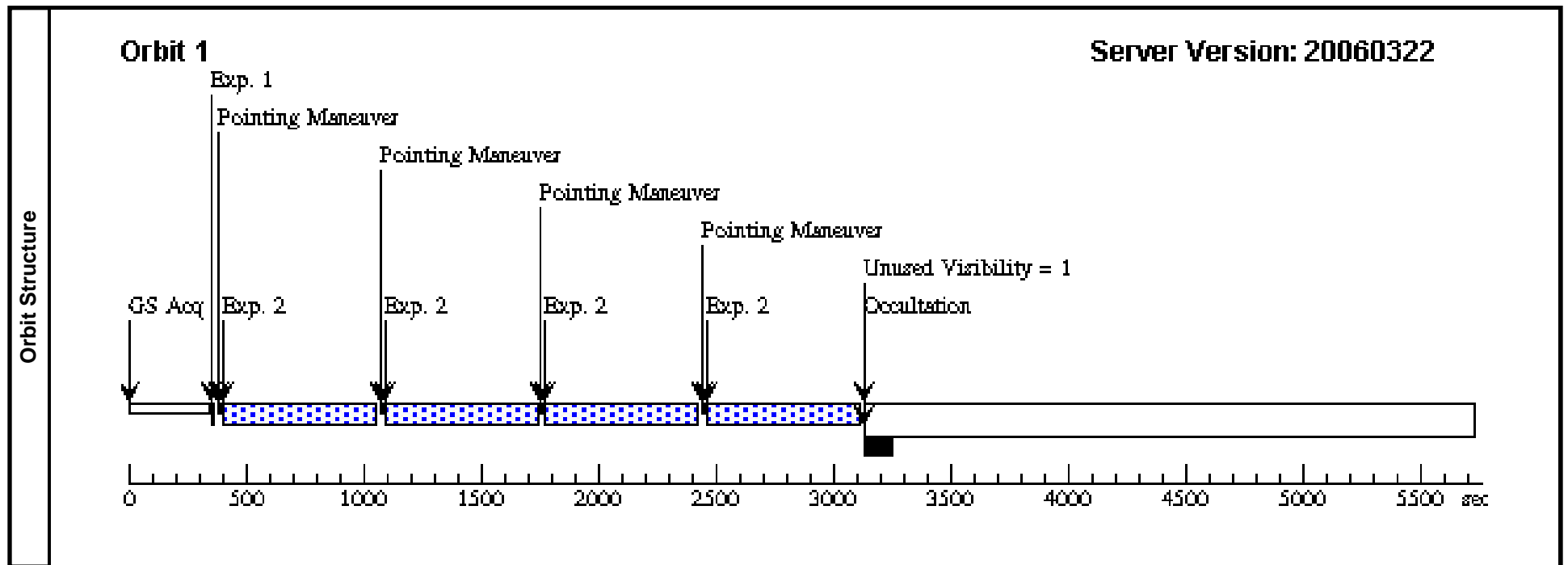
Fri May 12 01:15:55 GMT 2006

Visit	Proposal 10906, Visit 09 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(9)	PG1302-102	RA: 13 05 33.0100 (196.3875417d) Dec: -10 33 19.30 (-10.55536d) Equinox: J2000			V=14.92	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(9) PG1302-102	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int	[==>]	[1]		
2	(9) PG1302-102	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]			

Proposal 10906 - Visit 10 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:55 GMT 2006

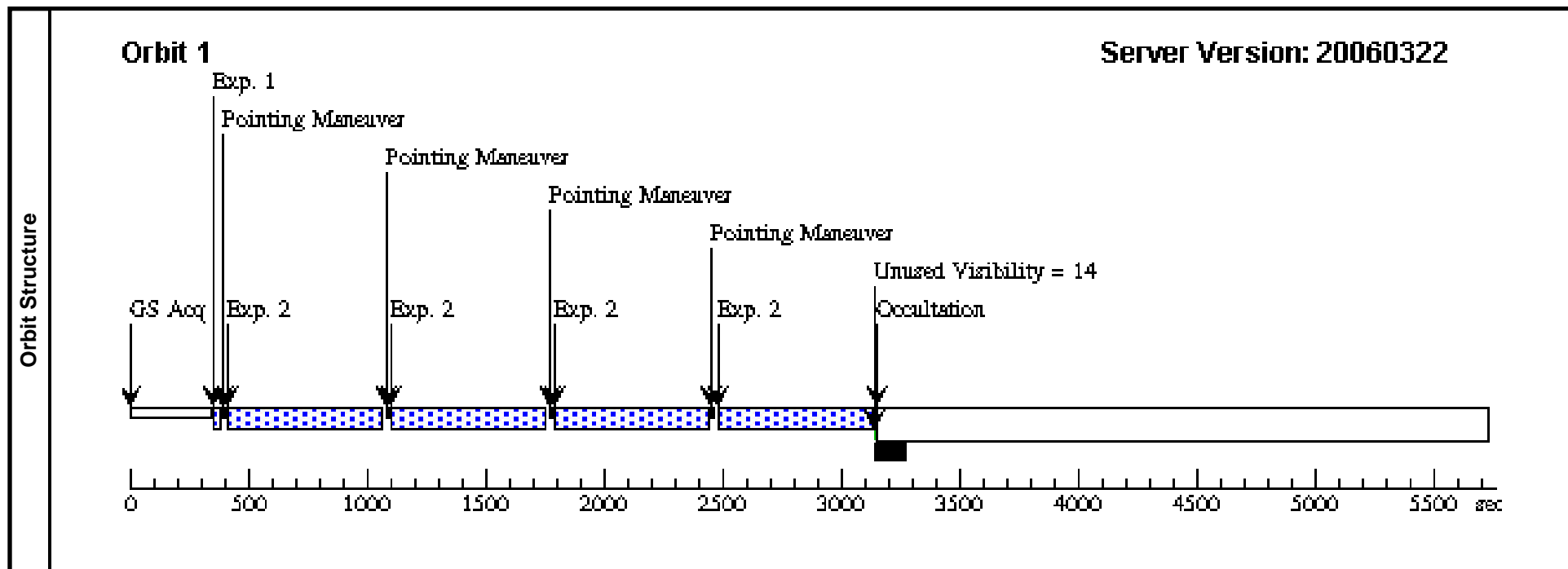
Visit	Proposal 10906, Visit 10 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
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		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	PG1307+085	RA: 13 09 47.0000 (197.4458333d) Dec: +08 19 48.20 (8.33006d) Equinox: J2000		V=15.28	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(10) PG1307+085	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=4; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]	
	2	(10) PG1307+085	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	



Proposal 10906 - Visit 11 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:55 GMT 2006

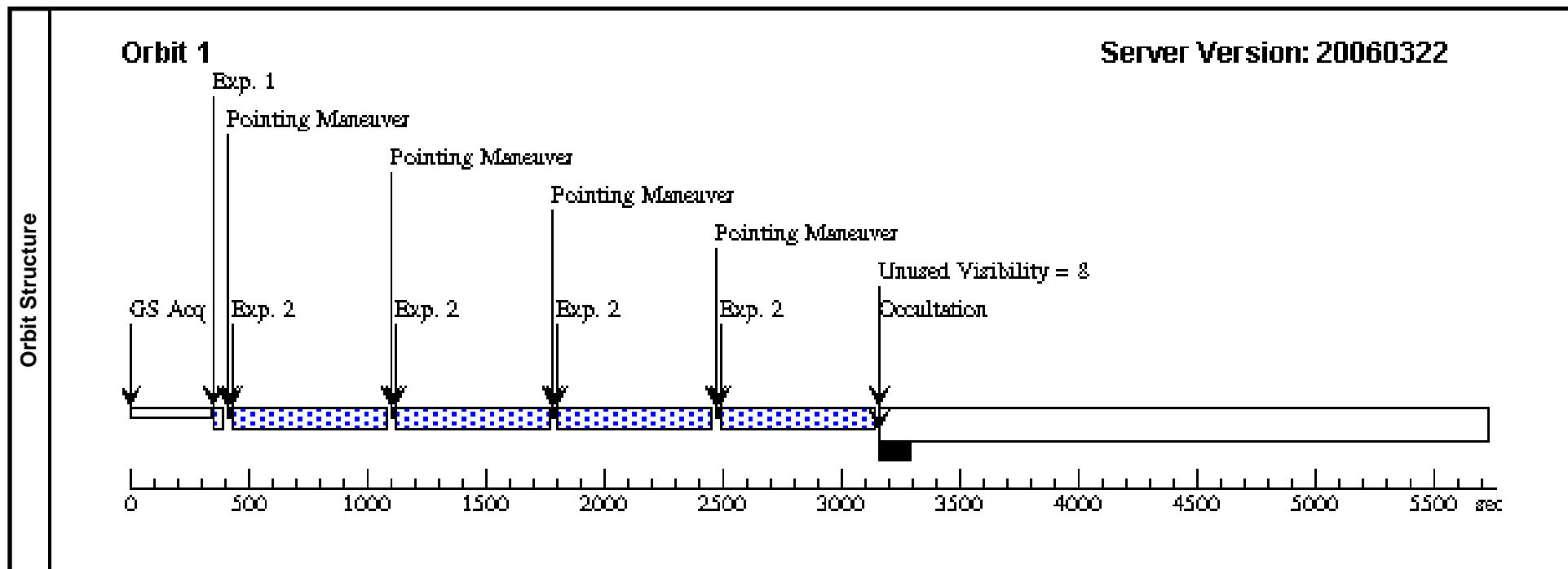
Visit	Proposal 10906, Visit 11 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(11)	PG1309+355	RA: 13 12 17.7500 (198.0739583d) Dec: +35 15 21.00 (35.25583d) Equinox: J2000			V=15.45	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(11) PG1309+355	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=7; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]		[1]
2		(11) PG1309+355	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]	



Proposal 10906 - Visit 12 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:55 GMT 2006

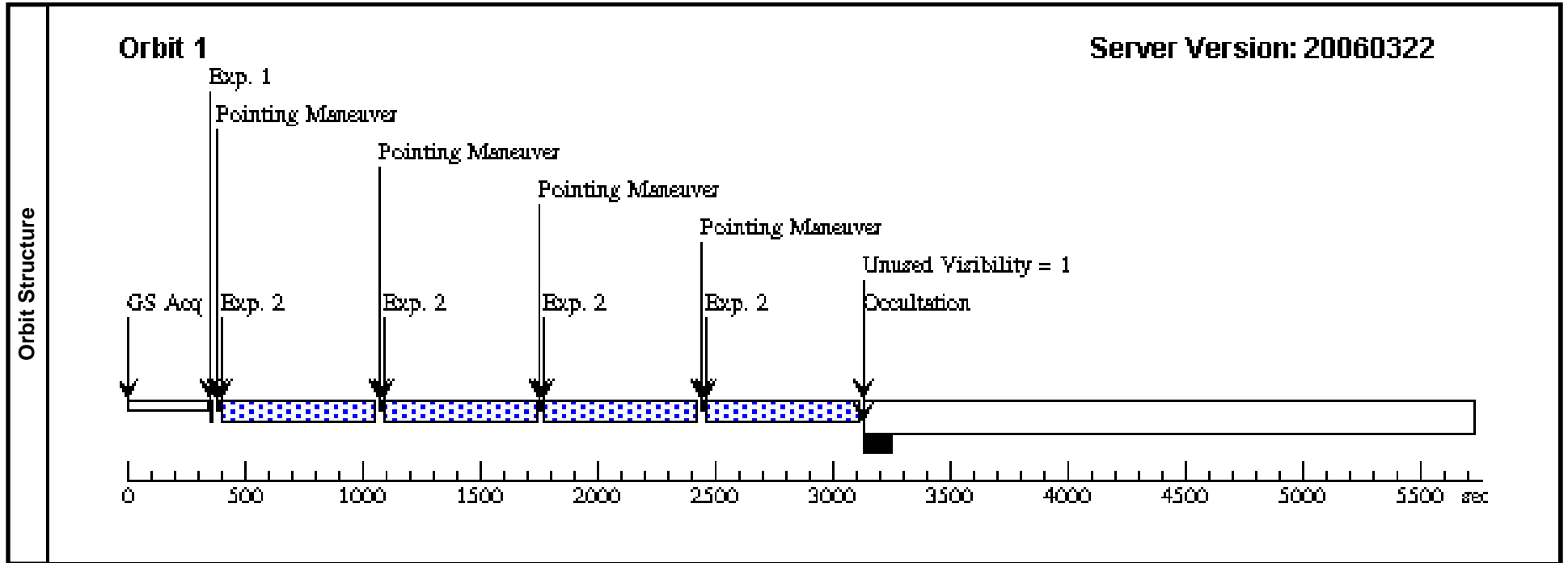
Visit	Proposal 10906, Visit 12 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true				(2)			
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(12)	PG1411+442	RA: 14 13 48.3400 (213.4514167d) Dec: +44 00 14.10 (44.00392d) Equinox: J2000			V=14.99	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(12) PG1411+442	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=8; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int	[==>]	[1]		
2	(12) PG1411+442	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]			



Proposal 10906 - Visit 13 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:56 GMT 2006

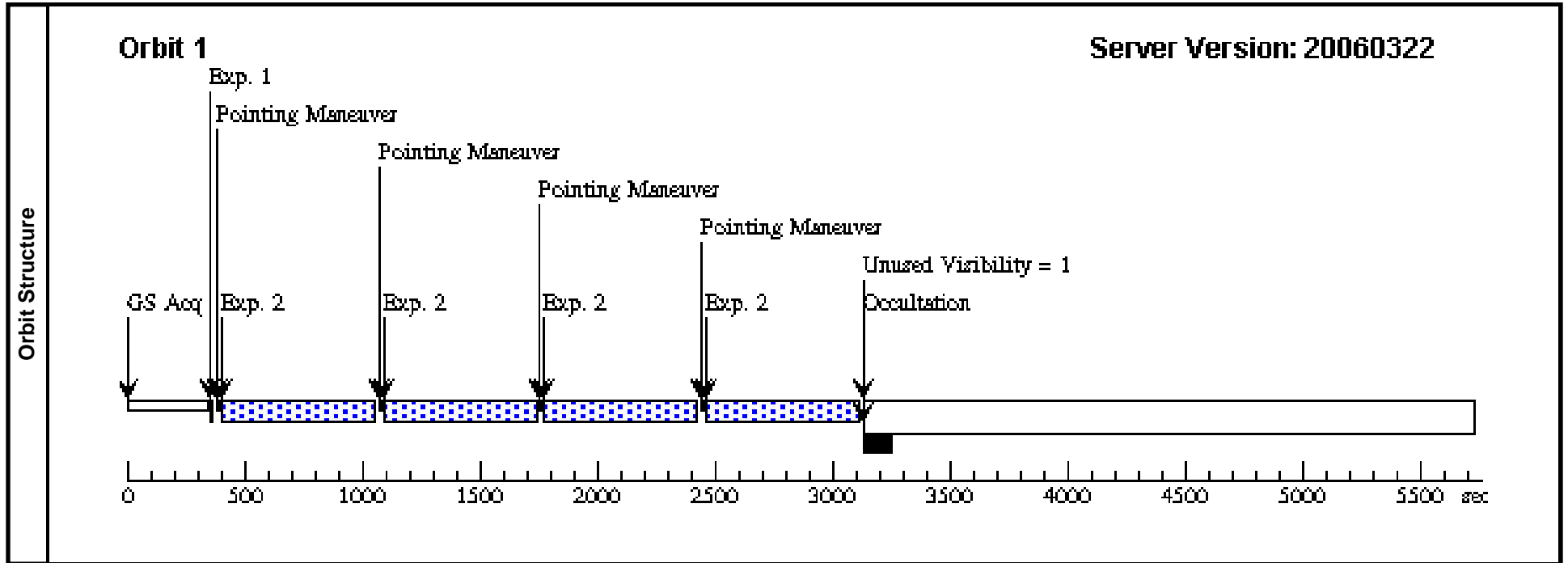
Visit	Proposal 10906, Visit 13 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true						(2)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(13)	PG1426+015	RA: 14 29 6.5700 (217.2773750d) Dec: +01 17 6.20 (1.28506d) Equinox: J2000		V=17.47	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(13) PG1426+015	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=4; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]	
2	(13) PG1426+015	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]		



Proposal 10906 - Visit 14 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:56 GMT 2006

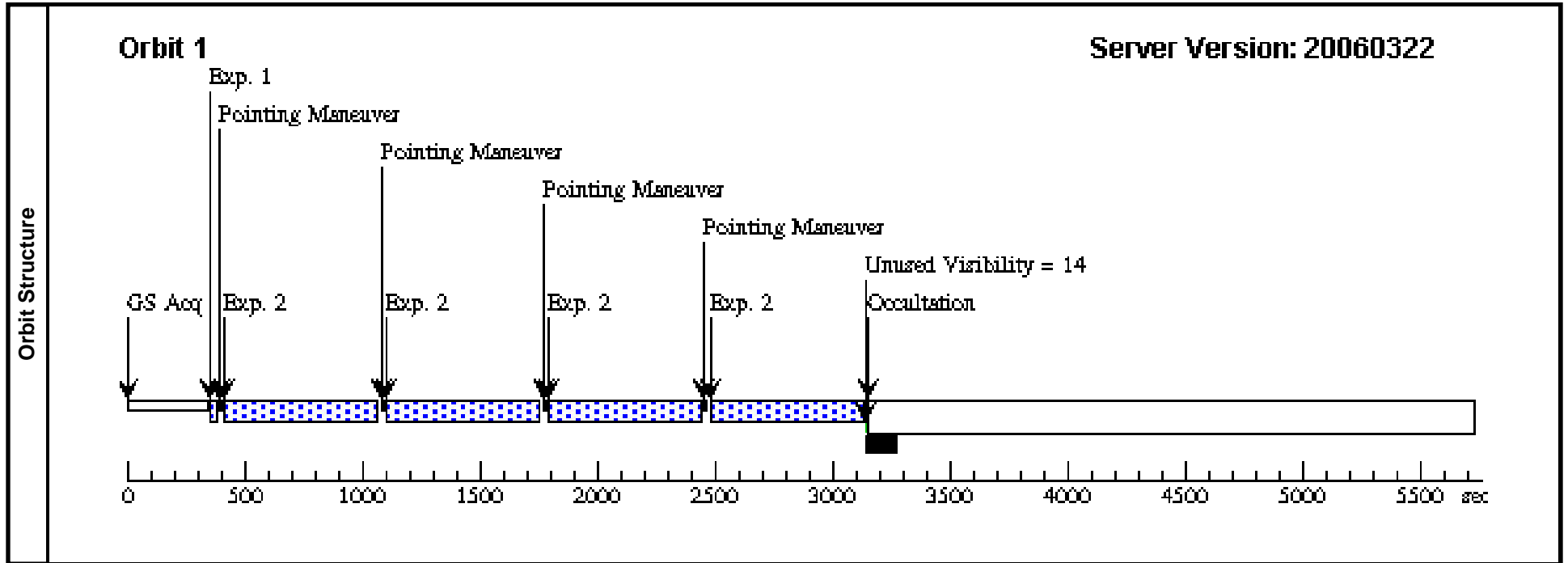
Visit	Proposal 10906, Visit 14 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true						(2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(14)	PG1435-067	RA: 14 38 16.1600 (219.5673333d) Dec: -06 58 20.60 (-6.97239d) Equinox: J2000			V=15.54	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	(14) PG1435-067	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=4; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int		[==>]	[1]	
2	(14) PG1435-067	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)		[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]		



Proposal 10906 - Visit 15 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:56 GMT 2006

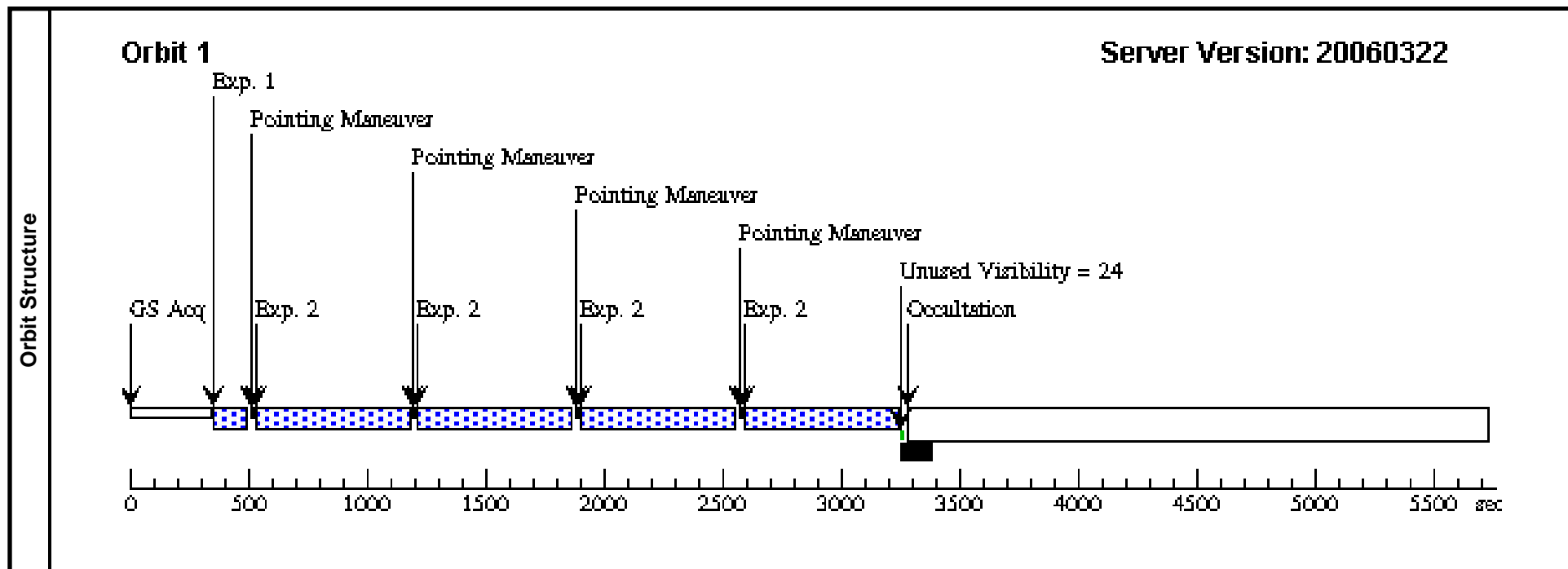
Visit	Proposal 10906, Visit 15 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(15)	PG1440+356	RA: 14 42 7.4700 (220.5311250d) Dec: +35 26 22.90 (35.43969d) Equinox: J2000			V=14.95	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(15) PG1440+356	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=7; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]	
	2	(15) PG1440+356	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	



Proposal 10906 - Visit 16 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:57 GMT 2006

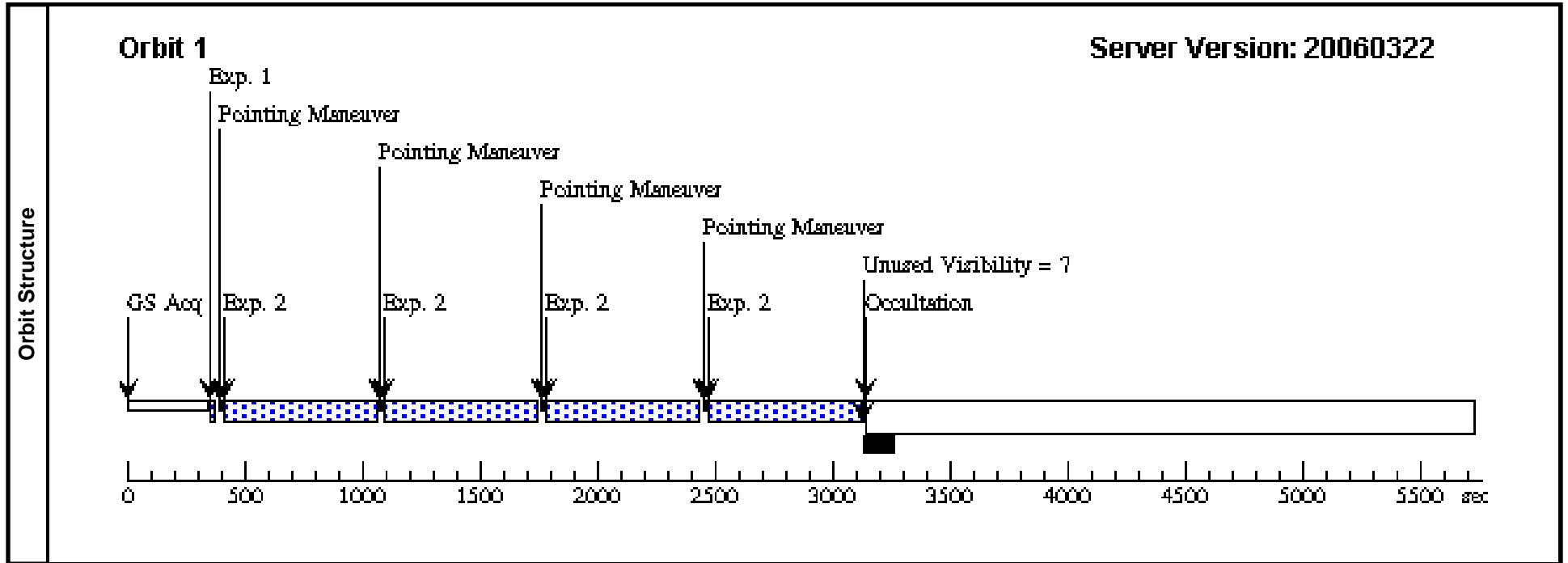
Visit	Proposal 10906, Visit 16 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true					(2)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(16)	PG1613+658	RA: 16 13 57.1700 (243.4882083d) Dec: +65 43 9.90 (65.71942d) Equinox: J2000				V=15.23	Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(16) PG1613+658	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=10; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]	
2	(16) PG1613+658	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]		



Proposal 10906 - Visit 17 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:57 GMT 2006

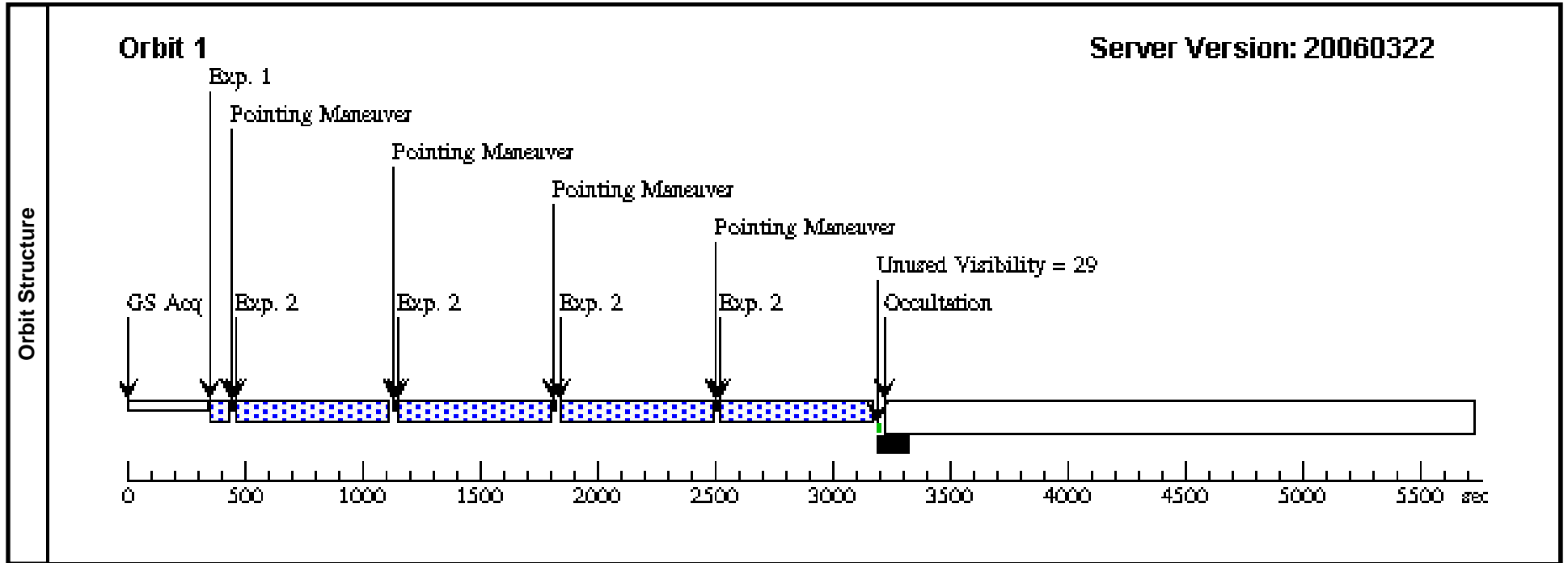
Visit	Proposal 10906, Visit 17 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true						(2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(17)	PG1617+175	RA: 16 20 11.2700 (245.0469583d) Dec: +17 24 27.60 (17.40767d) Equinox: J2000			V=15.46	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(17) PG1617+175	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]		[1]
2		(17) PG1617+175	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]	



Proposal 10906 - Visit 18 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:57 GMT 2006

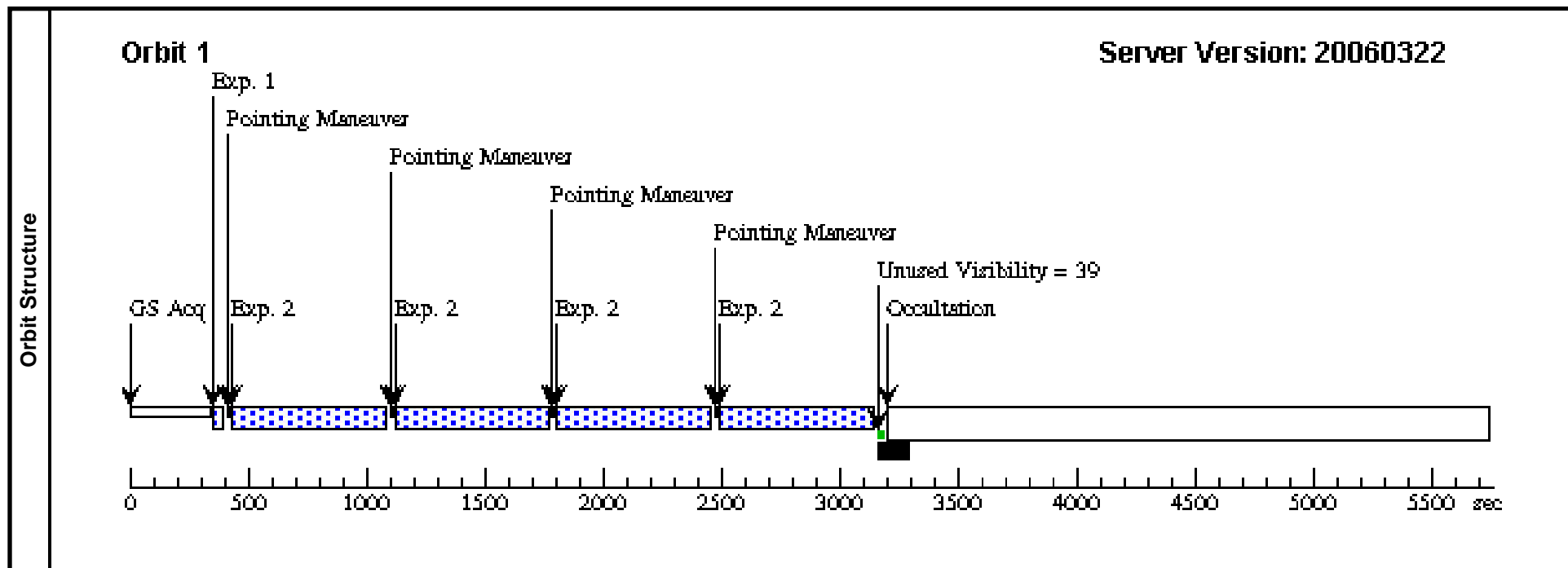
Visit	Proposal 10906, Visit 18 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true						(2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(18)	PG1626+554	RA: 16 27 56.1000 (246.9837500d) Dec: +55 22 31.50 (55.37542d) Equinox: J2000			V=16.17	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	(18) PG1626+554	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=9; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int	[==>]	[1]			
2	(18) PG1626+554	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4	Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]				



Proposal 10906 - Visit 19 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:57 GMT 2006

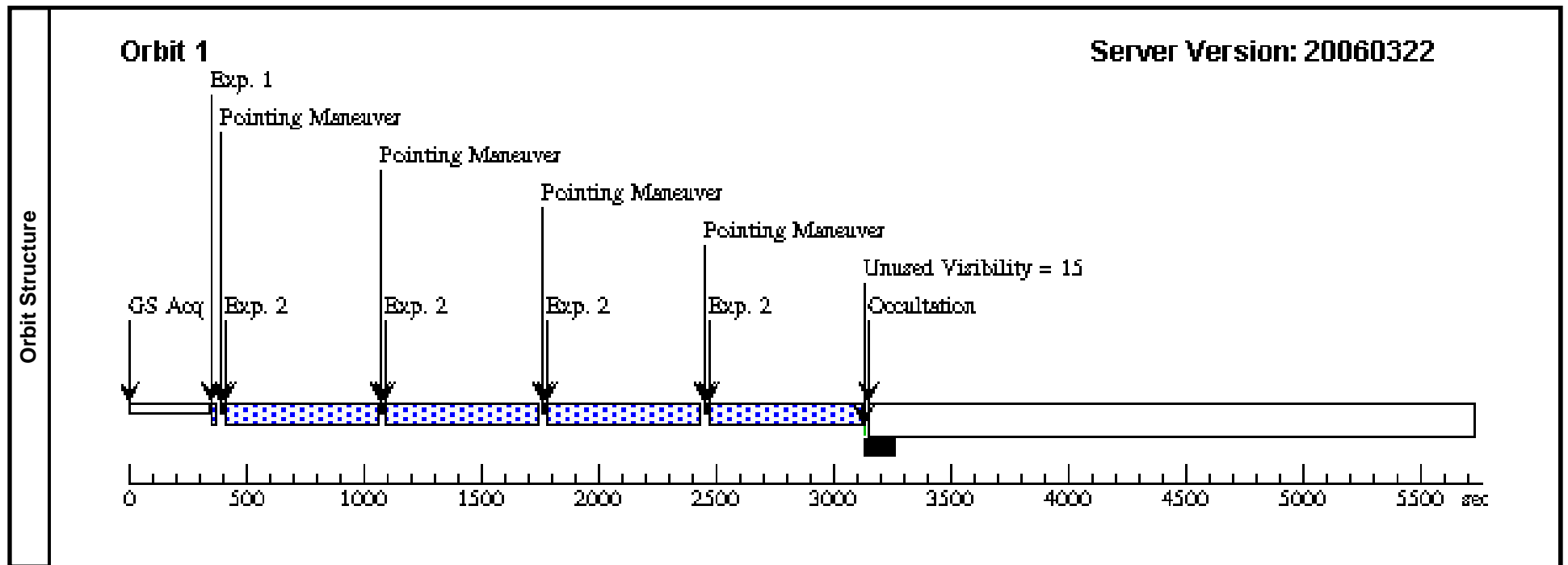
Visit	Proposal 10906, Visit 19 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true				(2)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(19)	PG1700+518	RA: 17 01 24.8200 (255.3534167d) Dec: +51 49 20.40 (51.82233d) Equinox: J2000		V=15.43	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(19) PG1700+518	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=8; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
2		(19) PG1700+518	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	



Proposal 10906 - Visit 20 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:58 GMT 2006

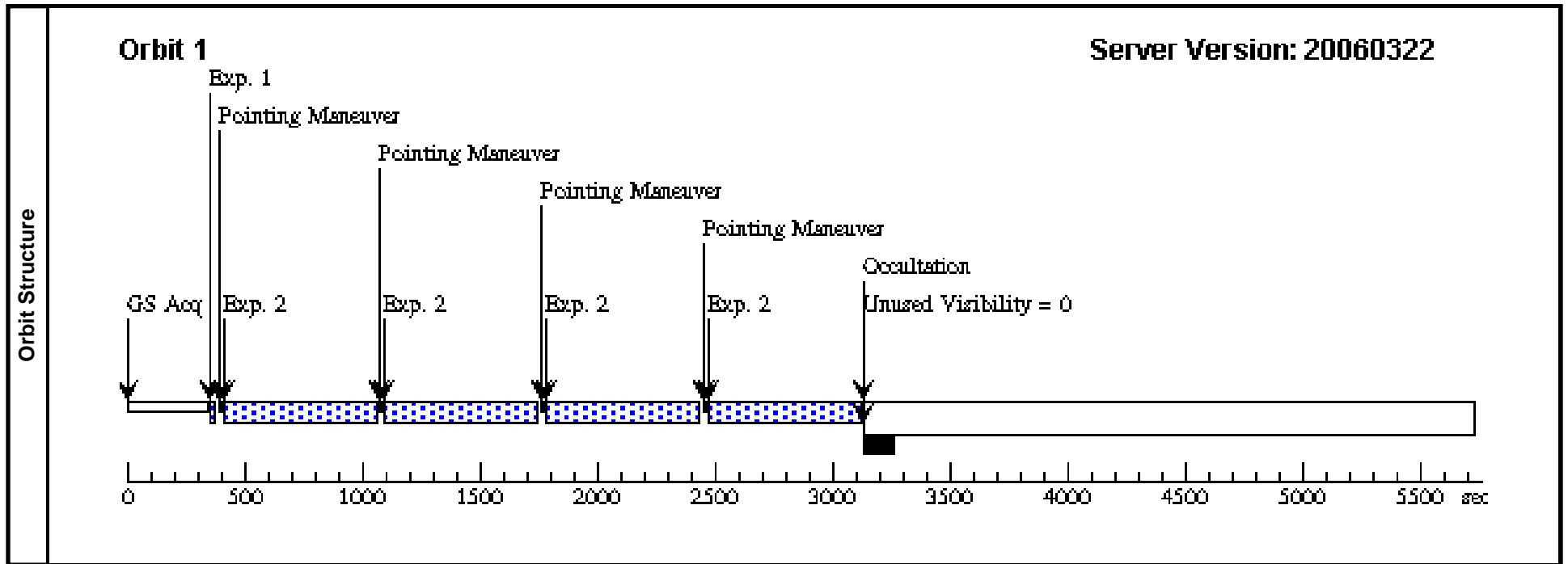
Visit	Proposal 10906, Visit 20 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(20)	B2-2201+31A	RA: 22 03 14.9800 (330.8124167d) Dec: +31 45 38.20 (31.76061d) Equinox: J2000			V=15.47	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(20) B2-2201+31A	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(20) B2-2201+31A	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 21 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:58 GMT 2006

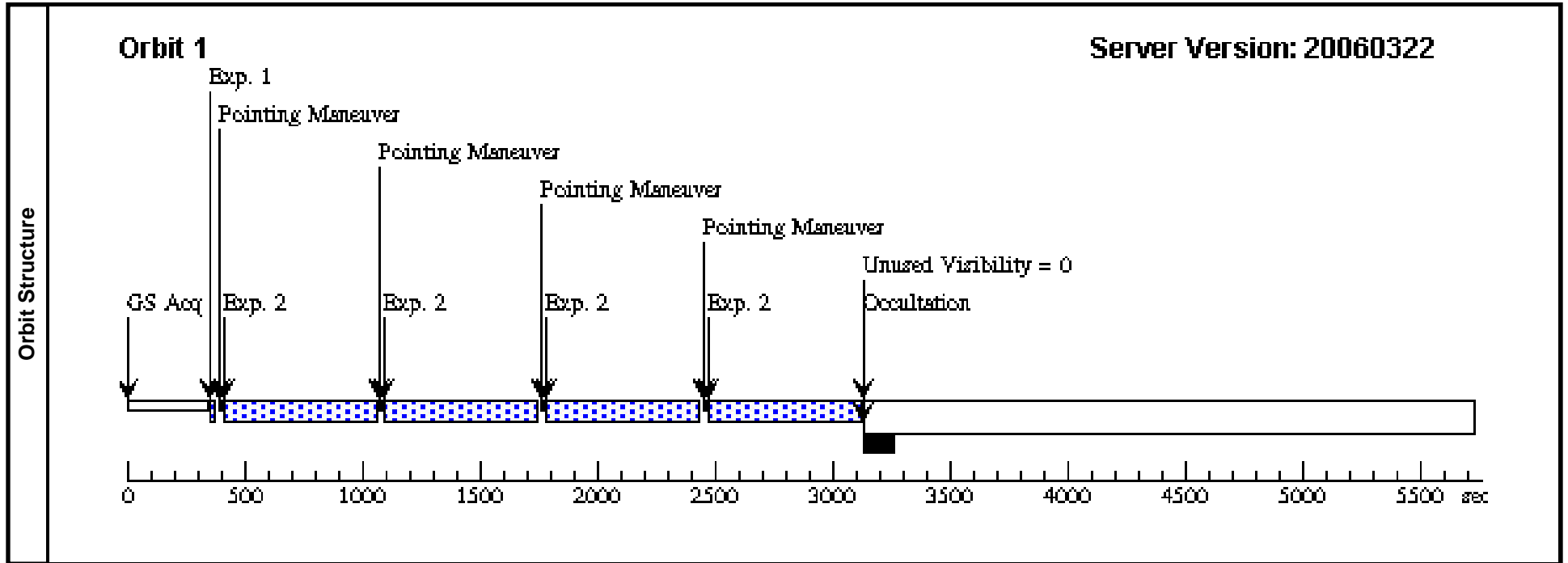
Visit	Proposal 10906, Visit 21 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(21)	PG2214+139	RA: 22 17 12.2600 (334.3010833d) Dec: +14 14 20.80 (14.23911d) Equinox: J2000		V=12.7	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(21) PG2214+139	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(21) PG2214+139	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 22 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:58 GMT 2006

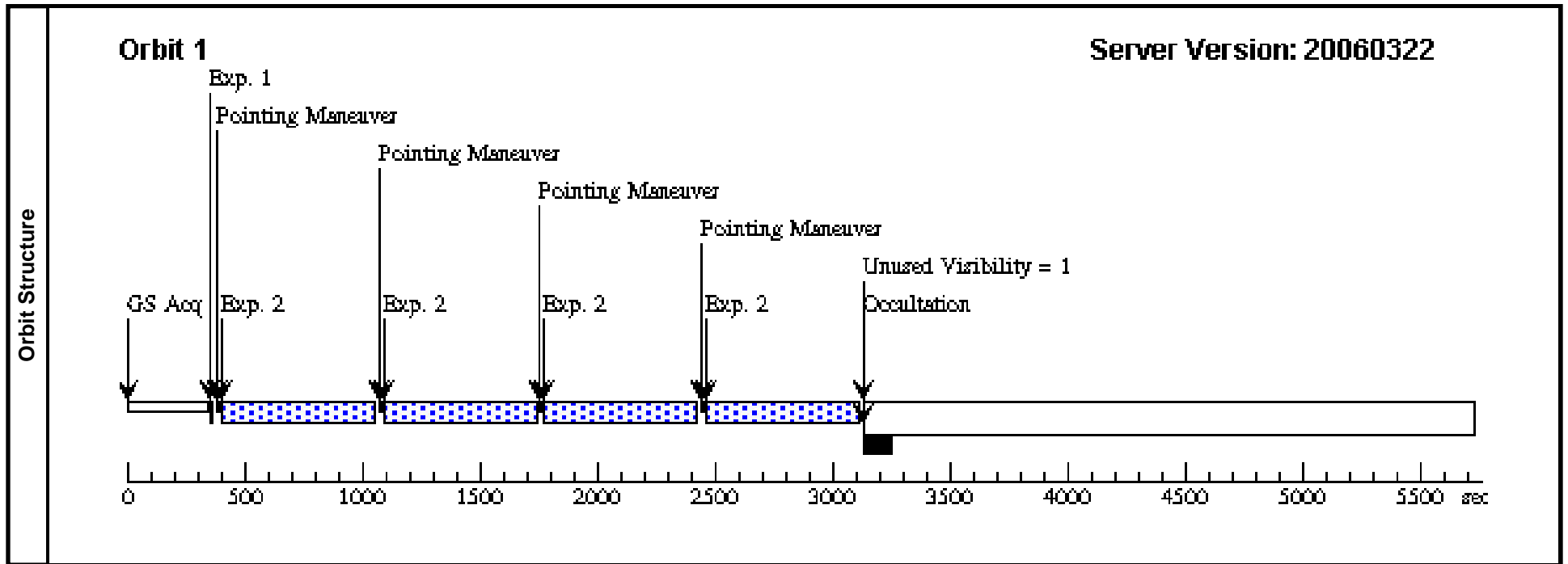
Visit	Proposal 10906, Visit 22 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true						(2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(22)	PG2251+113	RA: 22 54 10.4200 (343.5434167d) Dec: +11 36 38.70 (11.61075d) Equinox: J2000			V=15.77	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(22) PG2251+113	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=6; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]		[1]
2		(22) PG2251+113	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]	



Proposal 10906 - Visit 23 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:58 GMT 2006

Visit	Proposal 10906, Visit 23 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
		(1)	Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=0							
		Number Of Points=4	Angle Between Sides=							
		Point Spacing=1.92	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(23)	PG2349-014	RA: 23 51 56.1200 (357.9838333d) Dec: -01 09 13.20 (-1.15367d) Equinox: J2000		V=15.7	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(23) PG2349-014	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=4; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]	[1]
	2		(23) PG2349-014	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 10906 - Visit 24 - The Fundamental Plane of Massive Gas-Rich Mergers: II. The QUEST QSOs

Fri May 12 01:15:59 GMT 2006

Visit	Proposal 10906, Visit 24 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=4 Point Spacing=1.92 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=true						(2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(24)	SAO107-626	RA: 15 40 7.4600 (235.0310833d) Dec: -00 17 22.50 (-.28958d) Equinox: J2000			V=13.47	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(24) SAO107-626	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=4; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int	[==>]		[1]
2		(24) SAO107-626	NIC2, MULTIACCUM, NIC2	F160W	NSAMP=18; SAMP-SEQ=STEP6 4		Sequence 1-2 Non-Int Pattern 2-2 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]	

