



12264 - The Relationship between Gas and Galaxies for $0 < z < 1.2$

Cycle: 18, 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) SDSS-J100535.24+013445.7	COS/FUV COS/NUV	4	22-Dec-2010 22:02:11.0	yes
02	(1) SDSS-J100535.24+013445.7	COS/FUV COS/NUV	4	22-Dec-2010 22:02:21.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
03	(1) SDSS-J100535.24+013445.7	COS/FUV COS/NUV	4	22-Dec-2010 22:02:30.0	yes
04	(1) SDSS-J100535.24+013445.7	COS/NUV	5	22-Dec-2010 22:02:40.0	yes
05	(2) SDSS-J135726.27+043541.4	COS/FUV COS/NUV	5	22-Dec-2010 22:02:55.0	yes
06	(2) SDSS-J135726.27+043541.4	COS/FUV COS/NUV	5	22-Dec-2010 22:03:06.0	yes
07	(2) SDSS-J135726.27+043541.4	COS/FUV COS/NUV	5	22-Dec-2010 22:03:15.0	yes
08	(2) SDSS-J135726.27+043541.4	COS/NUV	5	22-Dec-2010 22:03:24.0	yes
09	(3) SDSS-J221806.67+005223.6	COS/NUV	4	22-Dec-2010 22:03:32.0	yes
10	(3) SDSS-J221806.67+005223.6	COS/NUV	5	22-Dec-2010 22:03:41.0	yes
11	(4) FIRST-J020930.7-043826	COS/FUV COS/NUV	5	22-Dec-2010 22:03:55.0	yes
12	(4) FIRST-J020930.7-043826	COS/FUV COS/NUV	5	22-Dec-2010 22:04:05.0	yes
13	(4) FIRST-J020930.7-043826	COS/FUV COS/NUV	5	22-Dec-2010 22:04:16.0	yes
14	(4) FIRST-J020930.7-043826	COS/NUV	5	22-Dec-2010 22:04:25.0	yes
59	(3) SDSS-J221806.67+005223.6	COS/NUV	3	22-Dec-2010 22:04:32.0	yes
60	(3) SDSS-J221806.67+005223.6	COS/NUV	4	22-Dec-2010 22:04:41.0	yes

73 Total Orbits Used

ABSTRACT

The way in which gas cools and contracts into gravitational potentials dominated by dark matter to form stars (and hence galaxies), and the way in which these stars and their deaths then affect the incoming gas, is a topic of great importance and high current interest. It was also recognised as a key science goal for HST by some of its original builders such as Bahcall, Spitzer and Salpeter.

We propose to use COS to complement and extend the planned COS GTO and GO surveys by extending to higher redshifts ($z < 1.2$), and also by substantially increasing the redshift pathlength within which both the gas and the galaxy distributions are known. We will do this by observing the lines-of-sight to four carefully selected QSOs in regions of the sky with extensive deep galaxy redshift surveys (VVDS and GDDS) already in place. This will allow us to study the evolution in the relationship between gas and galaxies over the second half of the history of the Universe and over a large range of physical scales.

By comparing with independent, state-of-the-art hydrodynamic cosmological models, we will test our understanding of the formation of galaxies, and determine whether the AGN and supernova feedback prescriptions currently used in these simulations are correct. It is likely that only by using the combination of absorption line information from hydrogen and metals, with large galaxy samples, that the complexities of the feedback process can be unscrambled. We have assembled a strong consortium of experts in HST absorption line analysis, deep galaxy redshift surveys, and cosmological simulations including baryons. With this team, and the proposed observations, we are confident that our understanding of galaxy formation and evolution can be significantly improved.

OBSERVING DESCRIPTION

We have chosen to observe with a mixed strategy, using the medium resolution COS gratings for the FUV, and the lower dispersion COS grating in the NUV, this allows us to meet our primary science goal which is focused on the locations of moderate column density Hydrogen Lyman alpha lines, while also producing a good sensitivity to metal lines such as OVI for a fair range of redshifts.

In order to cover the entire wavelength range of interest without gaps, we need two settings with the G130M, 2 settings with G160M, and three settings with the G230L. For one of the targets, a known Lyman limit system means there is no need to obtain the G130M or G160M data.

In an effort to make efficient use of HST time, we have grouped our exposures into visits of 5 orbits or less, kept to one grating per visit, and minimized the number of grating moves per visit. All of the objects are at low declination, giving an orbital visibility of ~ 54 minutes.

Exposure times were calculated to obtain a S/N of at least 10 per spectral resolution element for the medium resolution gratings and 20 per spectral resolution element for the low resolution grating, using the GALEX fluxes and the COS ETC. This S/N, combined with the resolution of the various gratings leads to 5-sigma observed frame EW limits of $\sim 0.03\text{\AA}$ for G130M/G160M and $\sim 0.15\text{\AA}$ for G230L. For a b-value of ~ 30 km/s, the latter value corresponds to a column density of $\sim 10^{13.5} \text{ cm}^{-2}$ for hydrogen. This probes well into the range normally defined as the Lyman alpha forest, and provides a sufficient line density for a robust analysis of the relative distributions of the gas and galaxies, as demonstrated by Morris and Jannuzi

2006, MNRAS, 367, 1261 and Wilman et al. 2007, MNRAS, 375, 735. The former value will allow detection of relatively weak metal lines.

Using the redshift densities from Danforth and Shull 2008 ApJ, 679, 194, we estimate that we will obtain ~260 Lyman alpha line detections (4), ~30 OVI detections and ~15 detections each for CIII and CIV. We emphasize that these detections are all in locations on the sky and redshift ranges where we already have large reliable spectroscopic redshift surveys for galaxies with 4590 reliable redshifts out to the QSO redshift at $z=1$.

ADDITIONAL COMMENTS

ETC calculations (generally done with FAINTTEST recorded Galex magnitude, other magnitudes tested for TA)

Object TA G130M G160M G230L

1005 COS.A328464 COS.A329035 COS.A329012 COS.A329017

1357 COS.A330160 COS.A329061 COS.A329038 COS.A329057

2218 COS.A329021 COS.A329056

0209 COS.A330165 COS.A329045 COS.A329051 COS.A329055

Redshifts and galex mags used, combined with FOS QSO template

Object z FUV NUV

1005 1.08 18.53 17.37

1357 1.23 19.12 17.75

2218 1.27 18.7

0209 1.13 18.99 17.86

Note that BOT flags 3 of the 4 QSOs as too bright for MIRRORA acquisition using the inbuilt GALEX magnitudes.

These were checked using the QSO template, and the switch to MIRRORB made.

The fourth QSO is safe for its entire range of GALEX measured magnitudes with MIRRORA, although it does get flagged by the GSC2 BOT search.

Proposal 12264 - Visit 01The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 01, scheduling								Thu Dec 23 03:04:49 GMT 2010	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV, COS/FUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(1)	SDSS-J100535.24+013445.7	RA: 10 05 35.2570 (151.3969042d)		Proper Motion RA: null		V=16.8+/-0.1	Reference Frame: ICRS		
		Alt Name1: N2021211643	Dec: +01 34 45.60 (1.57933d)		Proper Motion Dec: null		Galex (microJy) NUV=435,			
			Equinox: J2000		Epoch of Position:		FUV=143			
	Comments: This object was generated by the targetselector and retrieved from the NED database.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) SDSS-J100535.24+013445.7	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		GS ACQ SCENARI O BASE1B3		75 Secs	
									[==>]	[1]
	2		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=24 07.0; FP-POS=3			2400 Secs	
									[==>2407.0 Secs]	[1]
	3		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs	
									[==>2948.0 Secs]	[2]
	4		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs	
									[==>2948.0 Secs]	[3]
	5		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs	
								[==>2948.0 Secs]	[4]	

Orbit 1

Exp. 1

GS Acq

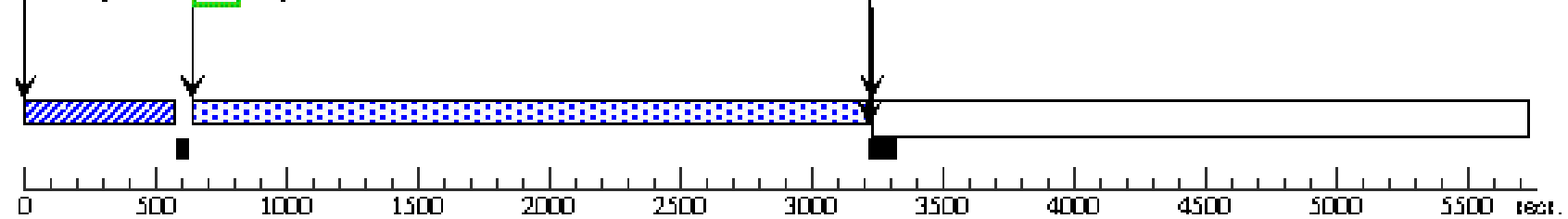


Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

GS Reseq

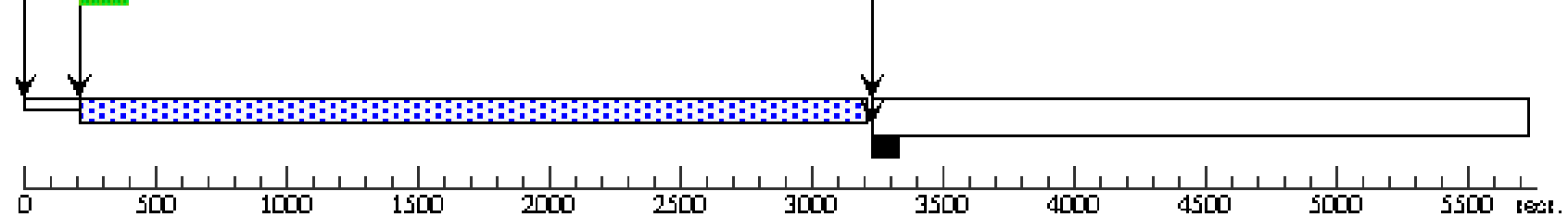


Exp. 3

Server Version: 20100902

Unused Visibility = 0

Occultation



Orbit 3

GS Reseq

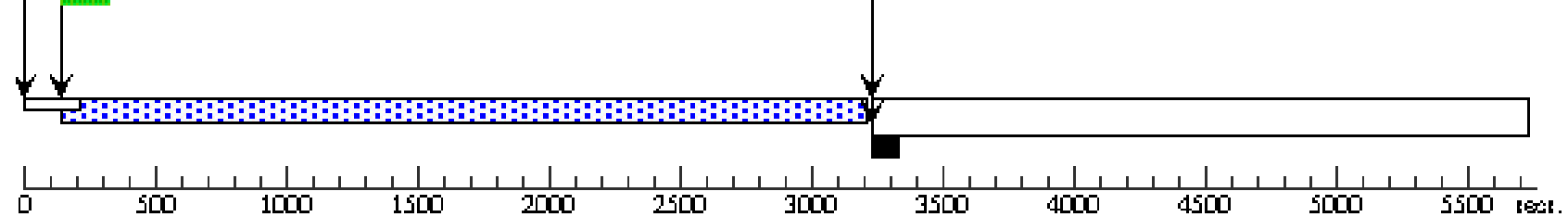


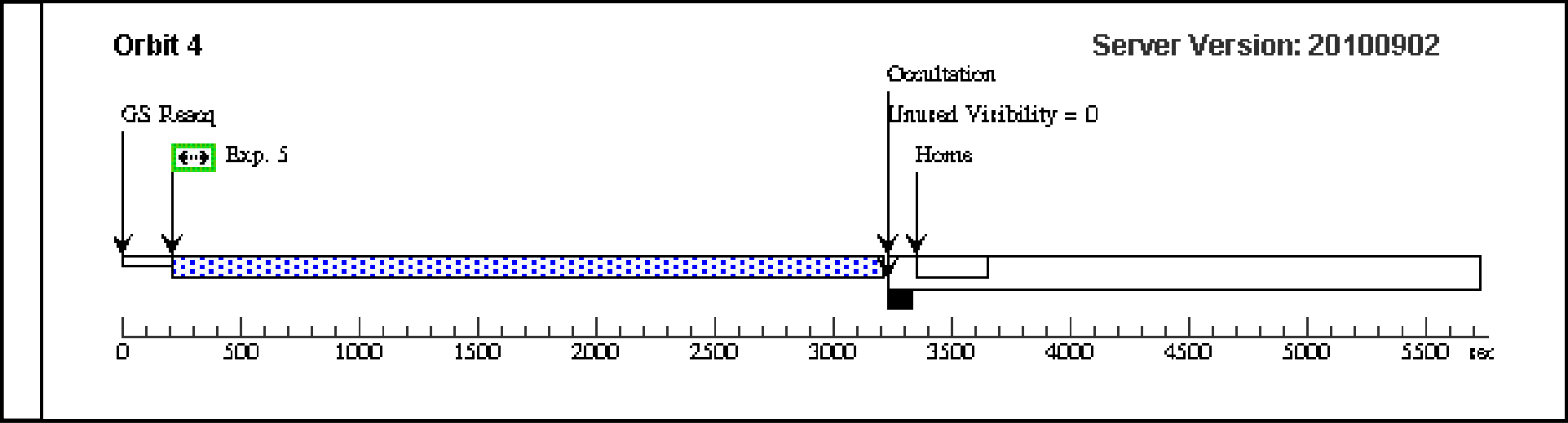
Exp. 4

Server Version: 20100902

Occultation

Unused Visibility = 0





Proposal 12264 - Visit 02The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 02, scheduling								Thu Dec 23 03:04:51 GMT 2010		
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: COS/NUV, COS/FUV										
	Special Requirements: (none)										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	SDSS-J100535.24+013445.7	RA: 10 05 35.2570 (151.3969042d)		Proper Motion RA: null		V=16.8+/-0.1		Reference Frame: ICRS		
		Alt Name1: N2021211643	Dec: +01 34 45.60 (1.57933d)		Proper Motion Dec: null		Galex (microJy) NUV=435,				
			Equinox: J2000		Epoch of Position:		FUV=143				
	Comments: This object was generated by the targetselector and retrieved from the NED database.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(1) SDSS-J100535.24+013445.7	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		GS ACQ SCENARI O BASE1B3		75 Secs		
									[==>]		[1]
	2		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=23 62.0; FP-POS=1			2400 Secs		
									[==>2362.0 Secs]		[1]
	3		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=2			2400 Secs		
									[==>2948.0 Secs]		[2]
	4		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
									[==>2948.0 Secs]		[3]
	5		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs		
								[==>2948.0 Secs]		[4]	

Orbit 1

Exp. 1

GS Acq



Exp. 2

Unused Visibility = 9

Occultation



Server Version: 20100902

Orbit 2

GS Reseq



Exp. 3

Unused Visibility = 0

Occultation



Server Version: 20100902

Orbit 3

GS Reseq



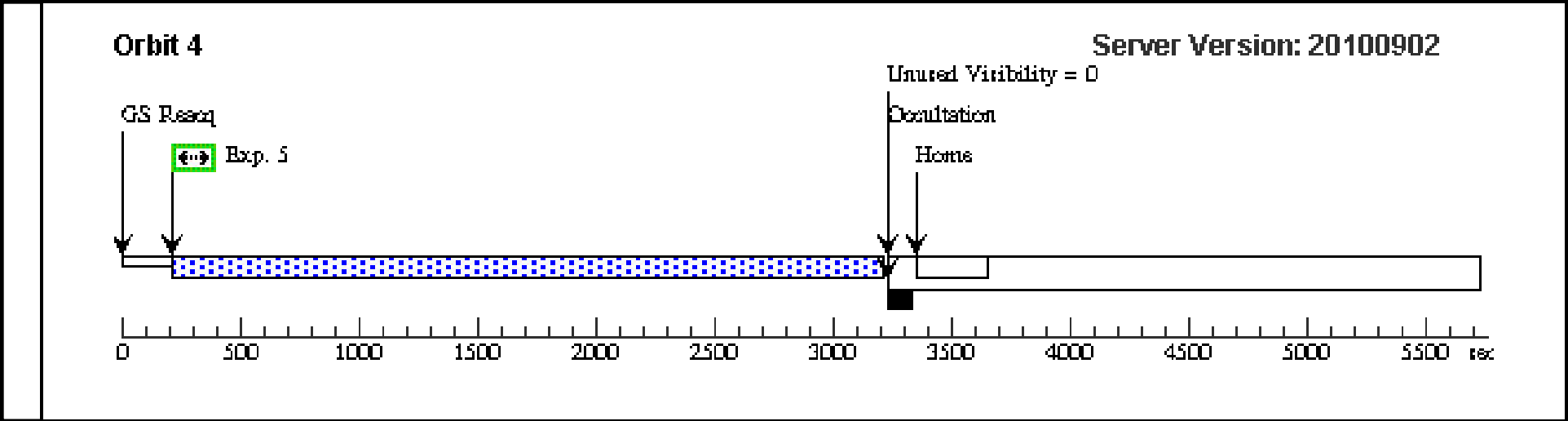
Exp. 4

Unused Visibility = 0

Occultation



Server Version: 20100902



Proposal 12264 - Visit 03The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 03, scheduling								Thu Dec 23 03:04:52 GMT 2010	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV, COS/FUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	SDSS-J100535.24+013445.7	RA: 10 05 35.2570 (151.3969042d)	Proper Motion RA: null	V=16.8+/-0.1	Reference Frame: ICRS				
		Alt Name1: N2021211643	Dec: +01 34 45.60 (1.57933d)	Proper Motion Dec: null	Galex (microJy) NUV=435,					
			Equinox: J2000	Epoch of Position:	FUV=143					
	Comments: This object was generated by the targetselector and retrieved from the NED database.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) SDSS-J100535.24+013445.7	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		GS ACQ SCENARI O BASE1B3		75 Secs	
									[==>]	[1]
	2		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=23 62.0; FP-POS=1			2400 Secs	
									[==>2362.0 Secs]	[1]
	3		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=2			2400 Secs	
									[==>2948.0 Secs]	[2]
	4		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs	
									[==>2948.0 Secs]	[3]
	5		(1) SDSS-J100535.24+013445.7	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs	
									[==>2948.0 Secs]	[4]

Orbit 1

Exp. 1

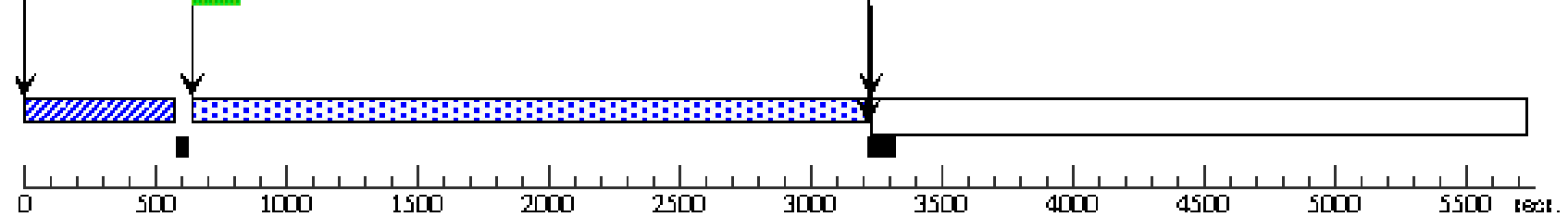
GS Acq



Exp. 2

Unused Visibility = 9

Occultation



Server Version: 20100902

Orbit 2

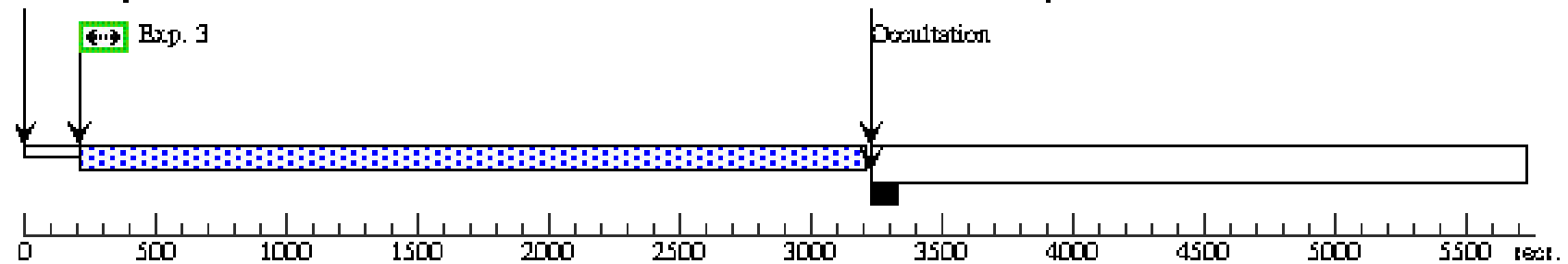
GS Reseq



Exp. 3

Unused Visibility = 0

Occultation



Server Version: 20100902

Orbit 3

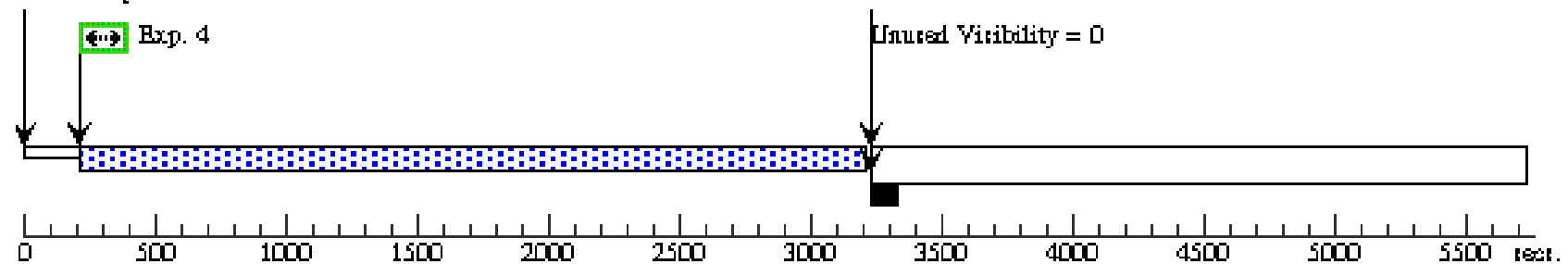
GS Reseq



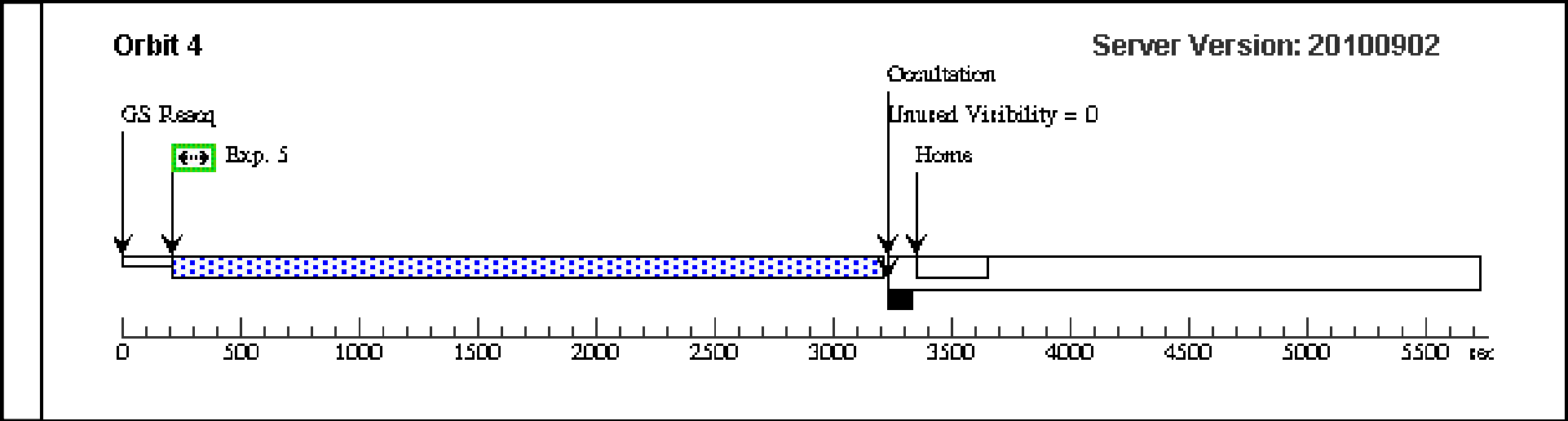
Exp. 4

Occultation

Unused Visibility = 0



Server Version: 20100902



Proposal 12264 - Visit 04The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 04, scheduling									Thu Dec 23 03:04:54 GMT 2010
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	SDSS-J100535.24+013445.7	RA: 10 05 35.2570 (151.3969042d)	Proper Motion RA: null		V=16.8+/-0.1		Reference Frame: ICRS		
		Alt Name1: N2021211643	Dec: +01 34 45.60 (1.57933d)	Proper Motion Dec: null		Galex (microJy) NUV=435,				
			Equinox: J2000	Epoch of Position:		FUV=143				
	Comments: This object was generated by the targetselector and retrieved from the NED database.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) SDSS-J100535.24+013445.7	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		GS ACQ SCENARI O BASE1B3		75 Secs	
									[==>]	[1]
	2		(1) SDSS-J100535.24+013445.7	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=24 59.0; FP-POS=3			2400 Secs	
									[==>2459.0 Secs]	[1]
	3		(1) SDSS-J100535.24+013445.7	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs	
									[==>2985.0 Secs]	[2]
	4		(1) SDSS-J100535.24+013445.7	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[3]
	5		(1) SDSS-J100535.24+013445.7	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs	
								[==>2985.0 Secs]	[4]	
6		(1) SDSS-J100535.24+013445.7	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs		
								[==>2985.0 Secs]	[5]	

Orbit 1

GS Acq

Exp. 1

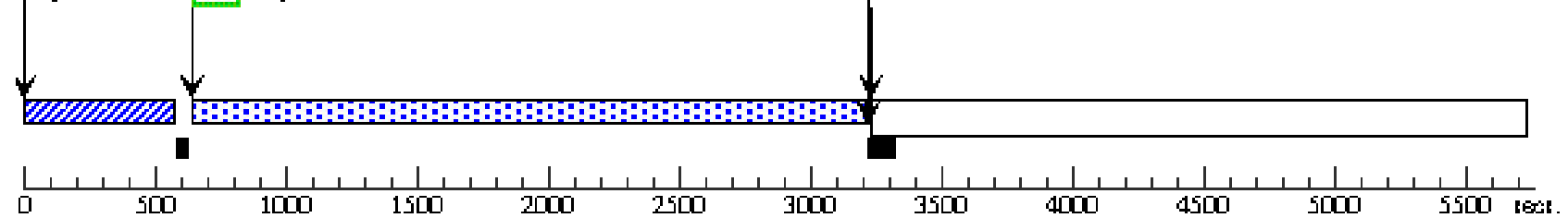


Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

GS Reseq

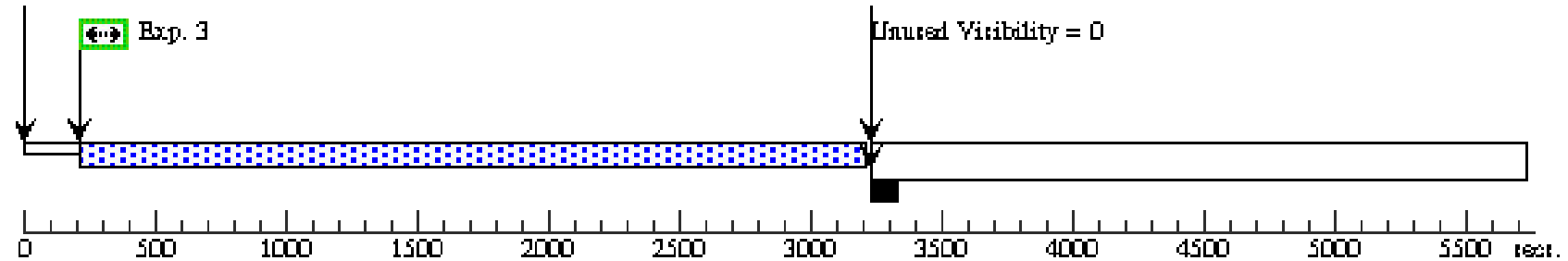


Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

GS Reseq

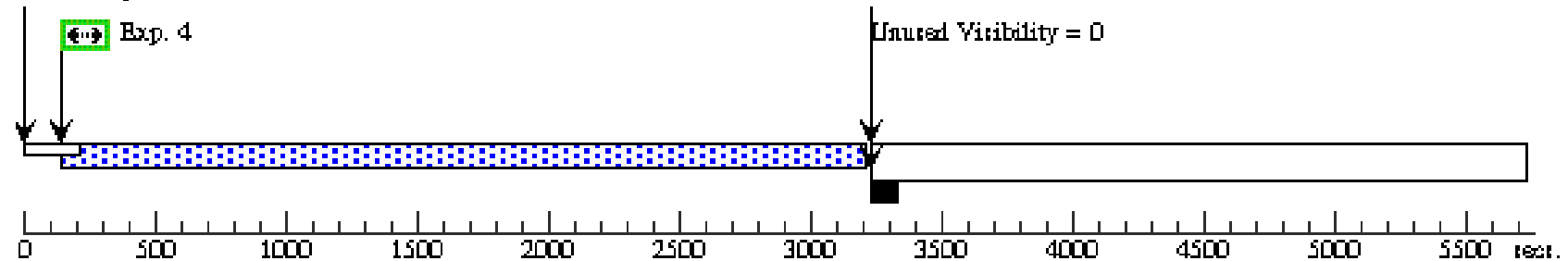


Exp. 4

Server Version: 20100902

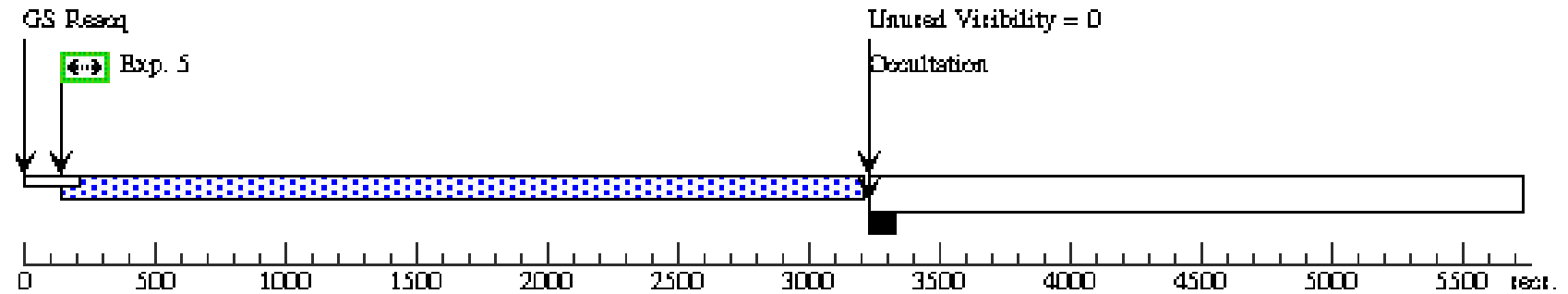
Occultation

Unused Visibility = 0



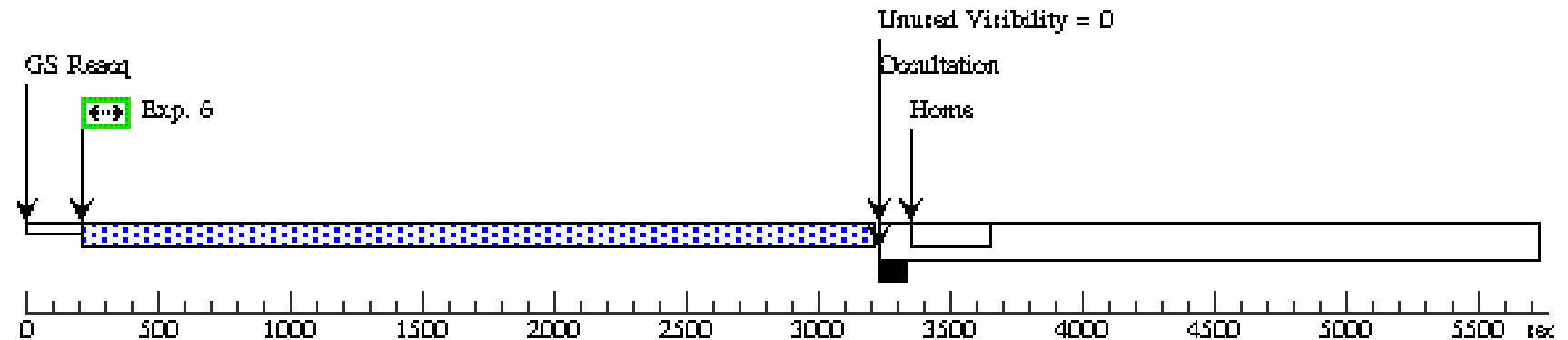
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 05The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 05, scheduling									Thu Dec 23 03:04:55 GMT 2010	
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: COS/NUV, COS/FUV										
	Special Requirements: (none)										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	SDSS-J135726.27+043541.4 Alt Name1: N1212110871	RA: 13 57 26.2700 (209.3594583d) Dec: +04 35 41.40 (4.59483d) Equinox: J2000		Proper Motion RA: null Proper Motion Dec: null Epoch of Position:		V=17.2+/-0.1 Galex (microJy) NUV=370, FUV=115		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(2) SDSS-J135726.27+043541.4	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				101 Secs		
									[==>]		[1]
	2		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=23 55.0; FP-POS=2			2400 Secs		
									[==>2355.0 Secs]		[1]
	3		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
									[==>2948.0 Secs]		[2]
	4		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs		
									[==>2948.0 Secs]		[3]
	5		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
									[==>2948.0 Secs]		[4]
	6		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs		
									[==>2948.0 Secs]		[5]

Orbit 1

Exp. 1

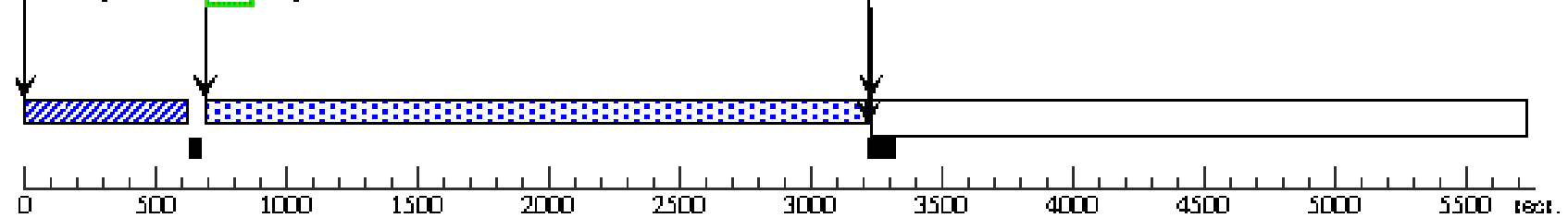
GS Acq

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

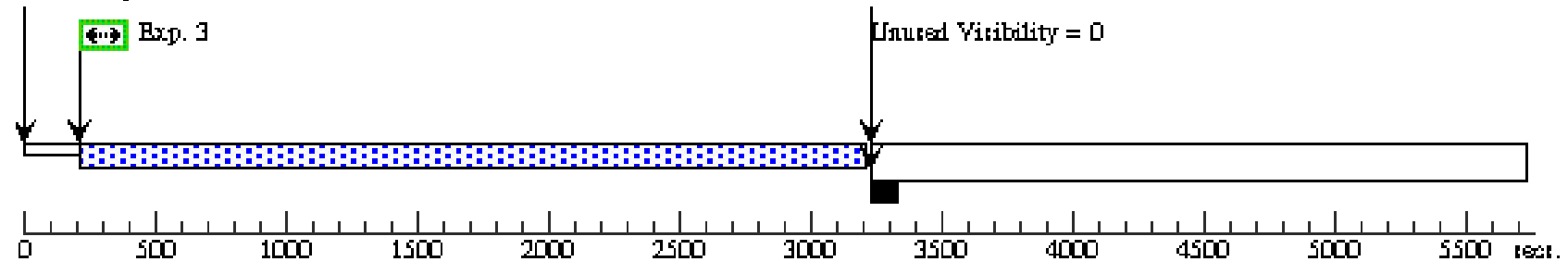
GS Reseq

Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

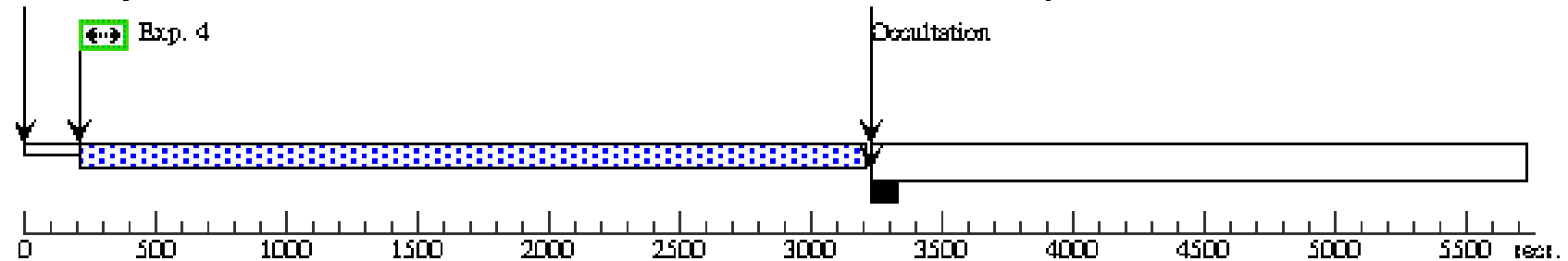
GS Reseq

Exp. 4

Server Version: 20100902

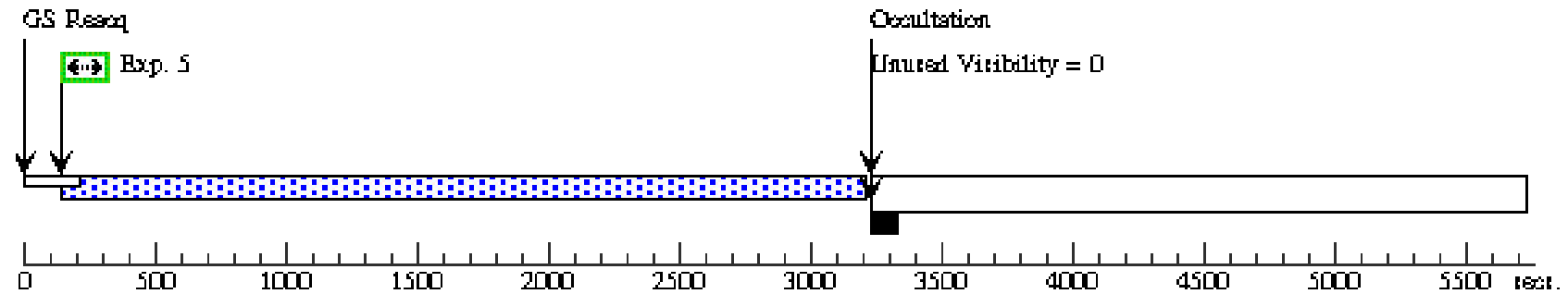
Unused Visibility = 0

Occultation



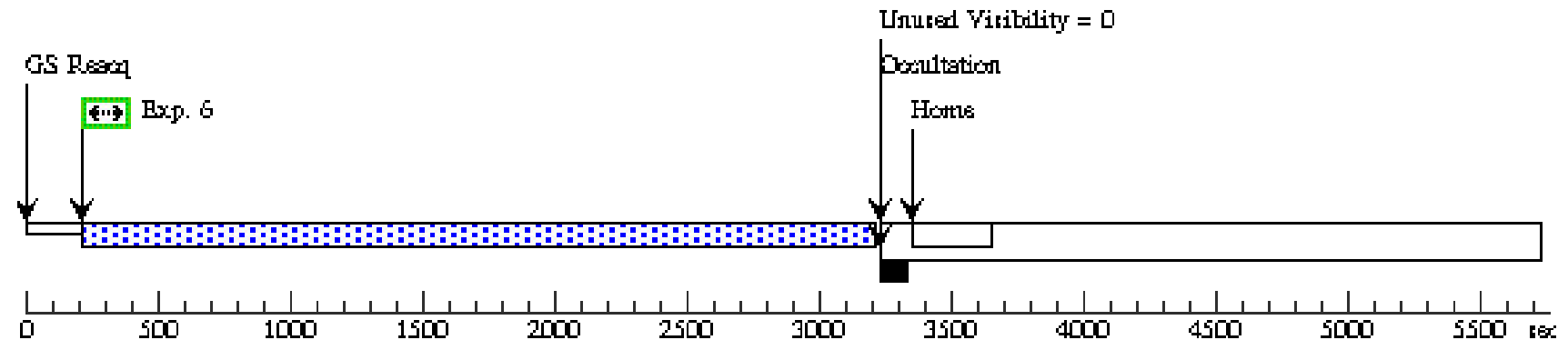
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 06The Relationship between Gas and Galaxies for 0<z<1.2

Visit	Proposal 12264, Visit 06, scheduling									Thu Dec 23 03:04:57 GMT 2010	
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: COS/NUV, COS/FUV										
	Special Requirements: (none)										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	SDSS-J135726.27+043541.4 Alt Name1: N1212110871	RA: 13 57 26.2700 (209.3594583d) Dec: +04 35 41.40 (4.59483d) Equinox: J2000		Proper Motion RA: null Proper Motion Dec: null Epoch of Position:		V=17.2+/-0.1 Galax (microJy) NUV=370, FUV=115		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(2) SDSS-J135726.27+043541.4	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				101 Secs		
									[==>]	[1]	
	2		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=23 10.0; FP-POS=1			2400 Secs		
									[==>2310.0 Secs]	[1]	
	3		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=2			2400 Secs		
									[==>2948.0 Secs]	[2]	
	4		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
									[==>2948.0 Secs]	[3]	
	5		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
								[==>2948.0 Secs]	[4]		
6		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs			
								[==>2948.0 Secs]	[5]		

Orbit 1

GS Acq

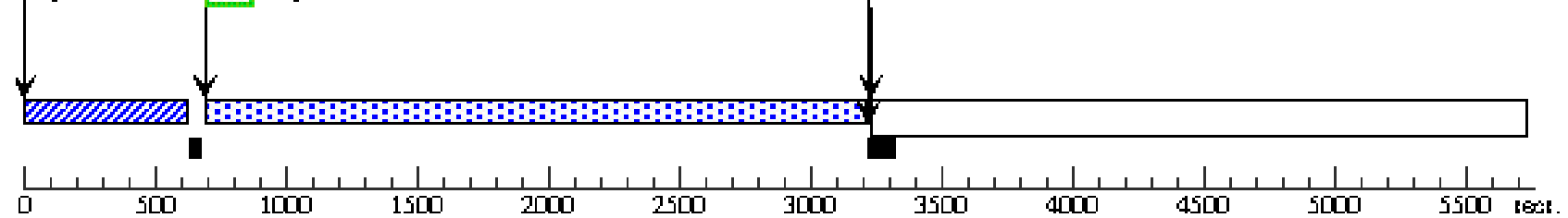
Exp. 1

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

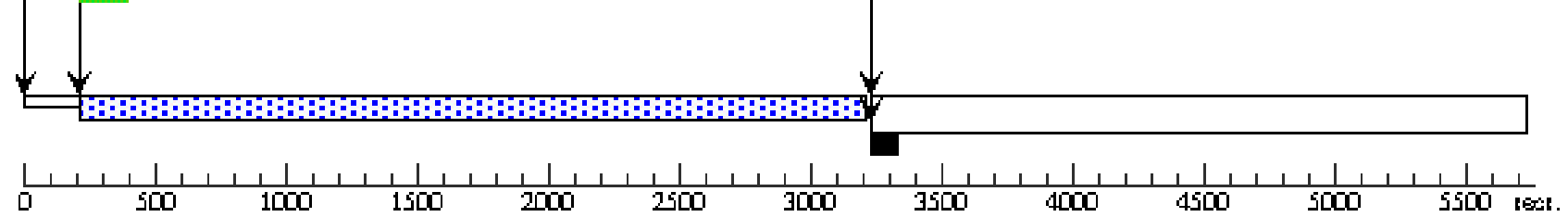
GS Req

Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

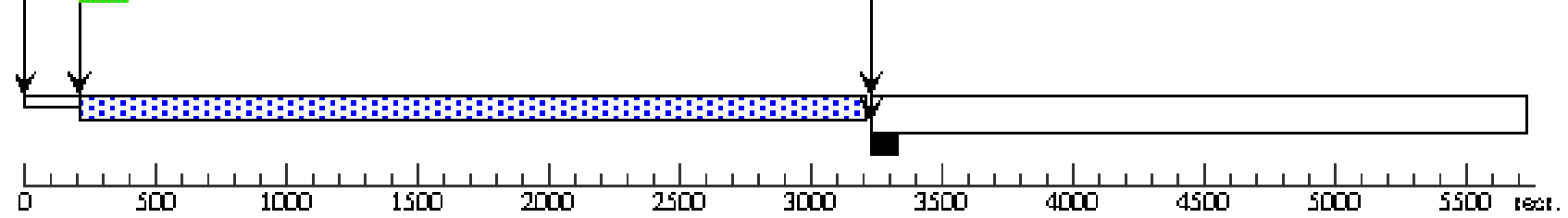
GS Req

Exp. 4

Server Version: 20100902

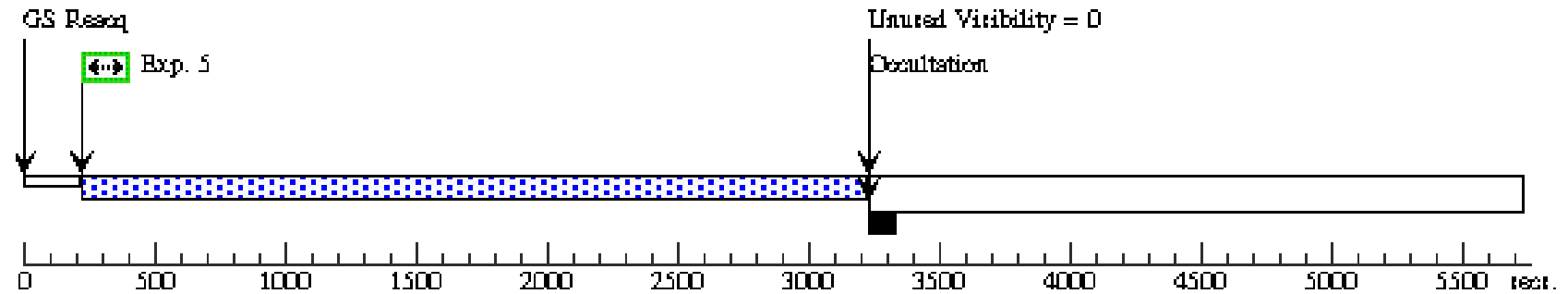
Unused Visibility = 0

Occultation



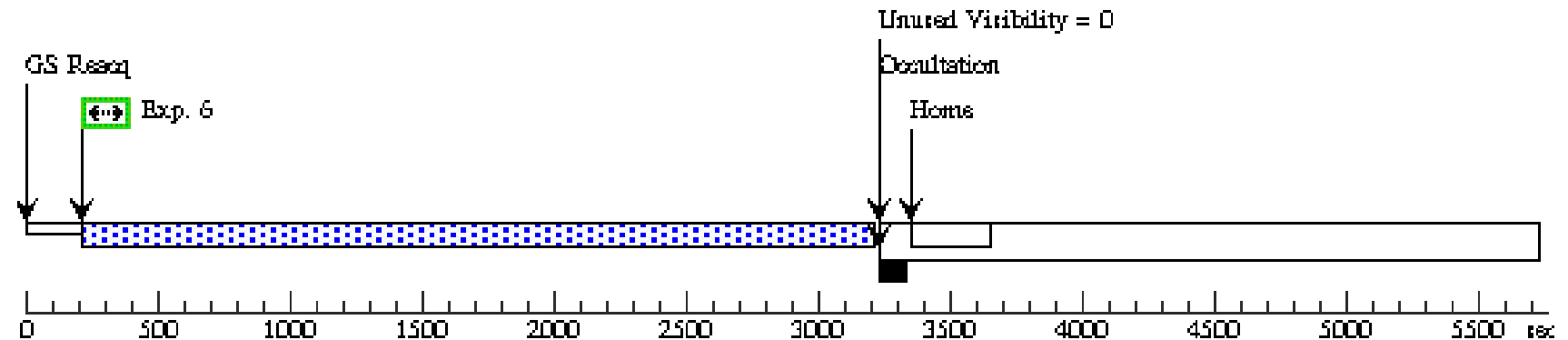
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 07The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 07, scheduling									Thu Dec 23 03:04:58 GMT 2010
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV, COS/FUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(2)	SDSS-J135726.27+043541.4	RA: 13 57 26.2700 (209.3594583d)		Proper Motion RA: null		V=17.2+/-0.1		Reference Frame: ICRS	
		Alt Name1: N1212110871	Dec: +04 35 41.40 (4.59483d)		Proper Motion Dec: null		Galex (microJy) NUV=370,			
			Equinox: J2000		Epoch of Position:		FUV=115			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) SDSS-J135726.27+043541.4	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				101 Secs	
									[==>]	[1]
	2		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=23 10.0; FP-POS=1			2400 Secs	
									[==>2310.0 Secs]	[1]
	3		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=2			2400 Secs	
									[==>2948.0 Secs]	[2]
	4		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs	
									[==>2948.0 Secs]	[3]
	5		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs	
									[==>2948.0 Secs]	[4]
	6		(2) SDSS-J135726.27+043541.4	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs	
									[==>2948.0 Secs]	[5]

Orbit 1

GS Acq

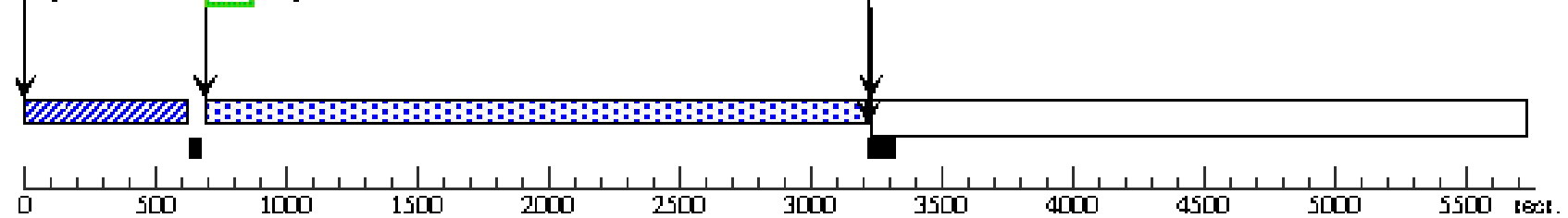
Exp. 1

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

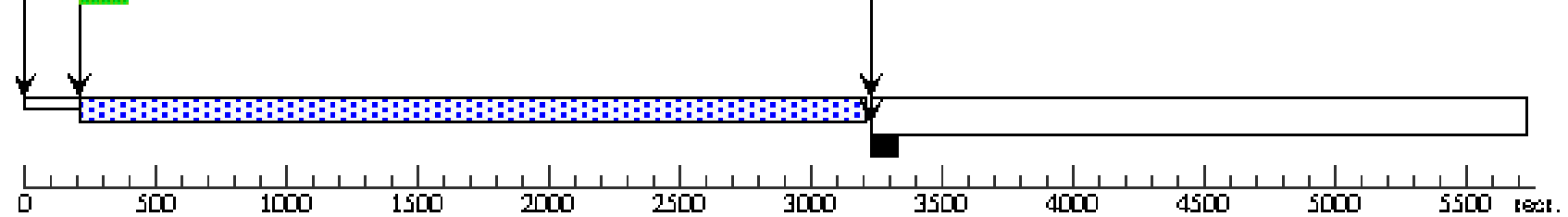
GS Reseq

Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

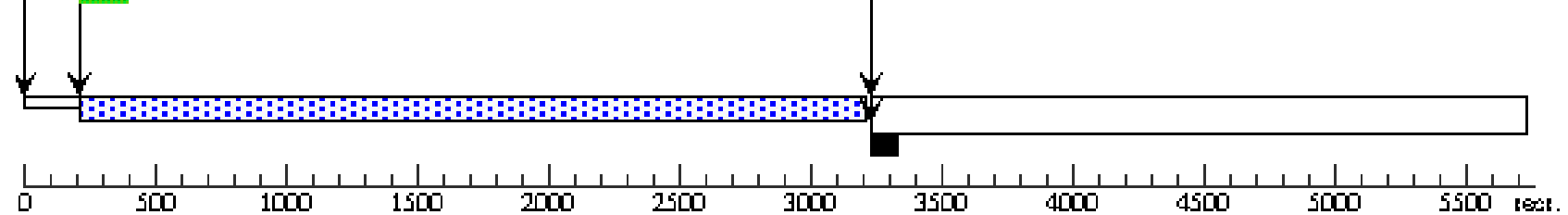
GS Reseq

Exp. 4

Server Version: 20100902

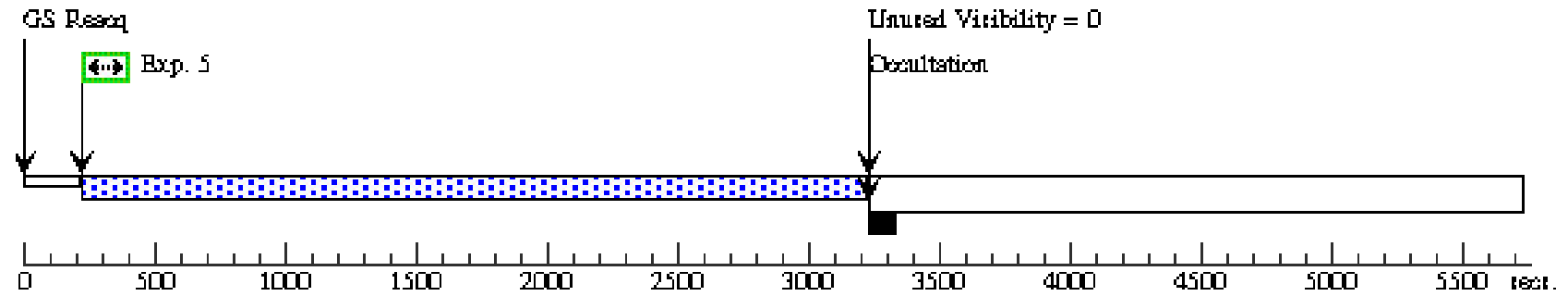
Unused Visibility = 0

Occultation



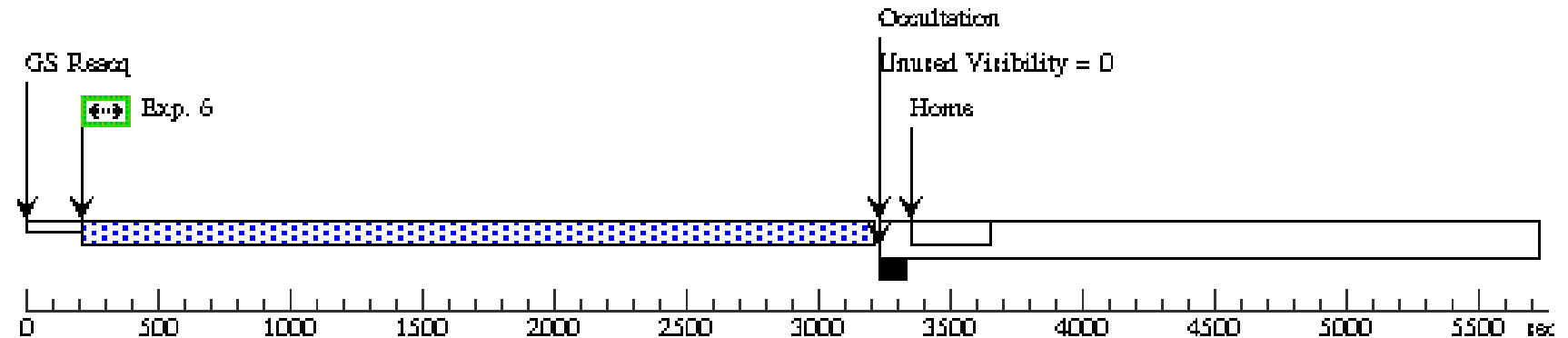
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 08The Relationship between Gas and Galaxies for 0<z<1.2

Visit	Proposal 12264, Visit 08, scheduling									Thu Dec 23 03:05:00 GMT 2010
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(2)	SDSS-J135726.27+043541.4 Alt Name1: N1212110871	RA: 13 57 26.2700 (209.3594583d) Dec: +04 35 41.40 (4.59483d) Equinox: J2000		Proper Motion RA: null Proper Motion Dec: null Epoch of Position:		V=17.2+/-0.1 Galex (microJy) NUV=370, FUV=115		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) SDSS-J135726.27+043541.4	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				101 Secs	
									[==>]	[1]
	2		(2) SDSS-J135726.27+043541.4	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=24 07.0; FP-POS=3			2400 Secs	
									[==>2407.0 Secs]	[1]
	3		(2) SDSS-J135726.27+043541.4	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs	
									[==>2985.0 Secs]	[2]
	4		(2) SDSS-J135726.27+043541.4	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[3]
	5		(2) SDSS-J135726.27+043541.4	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[4]
	6		(2) SDSS-J135726.27+043541.4	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs	
									[==>2985.0 Secs]	[5]

Orbit 1

GS Acq

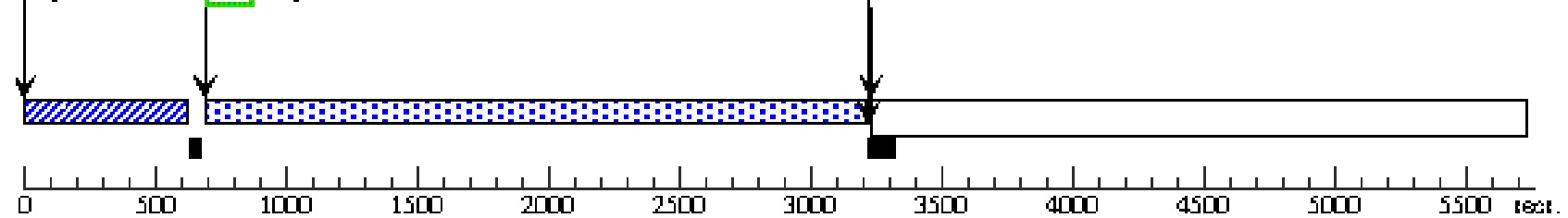
Exp. 1

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

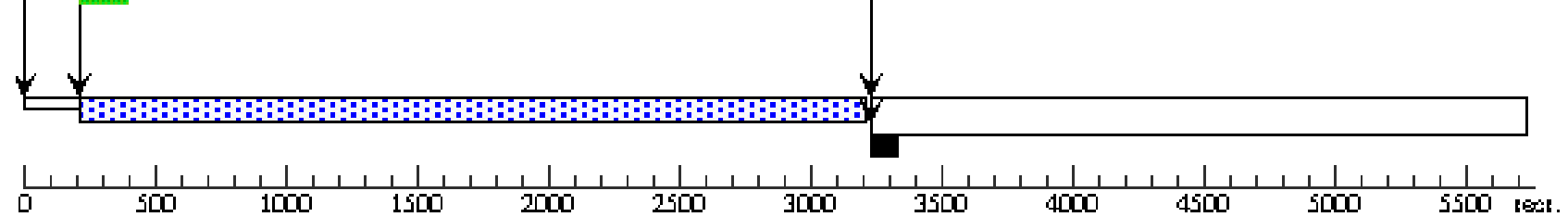
GS Reseq

Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

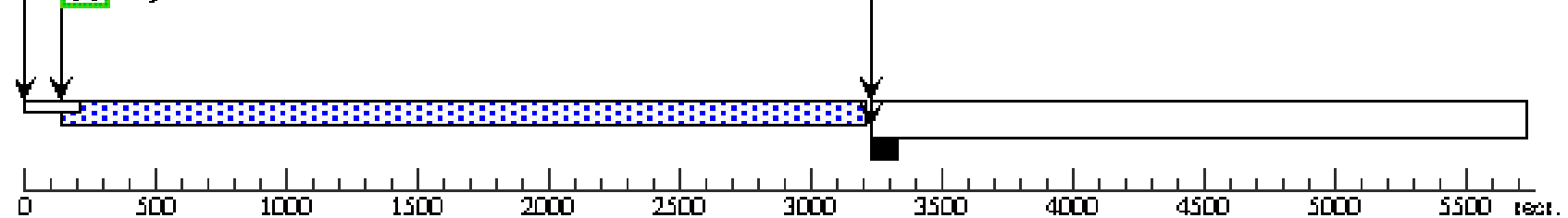
GS Reseq

Exp. 4

Server Version: 20100902

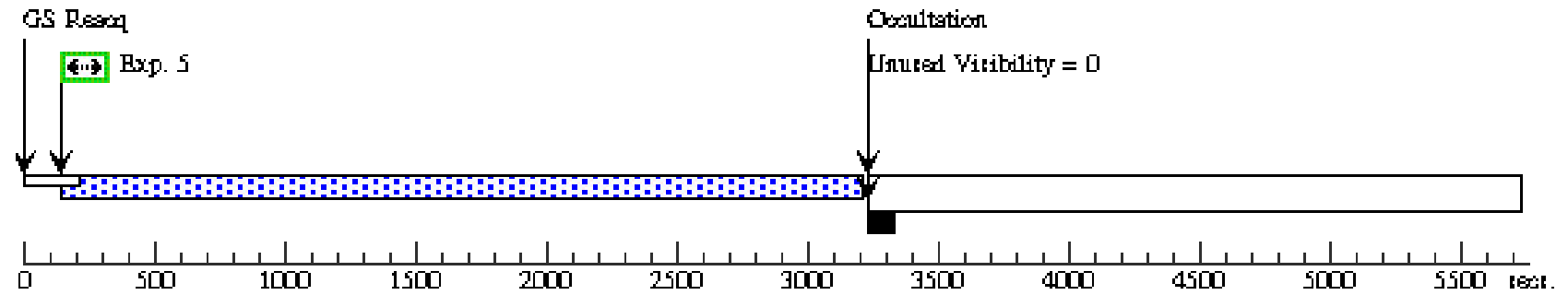
Unused Visibility = 0

Occultation



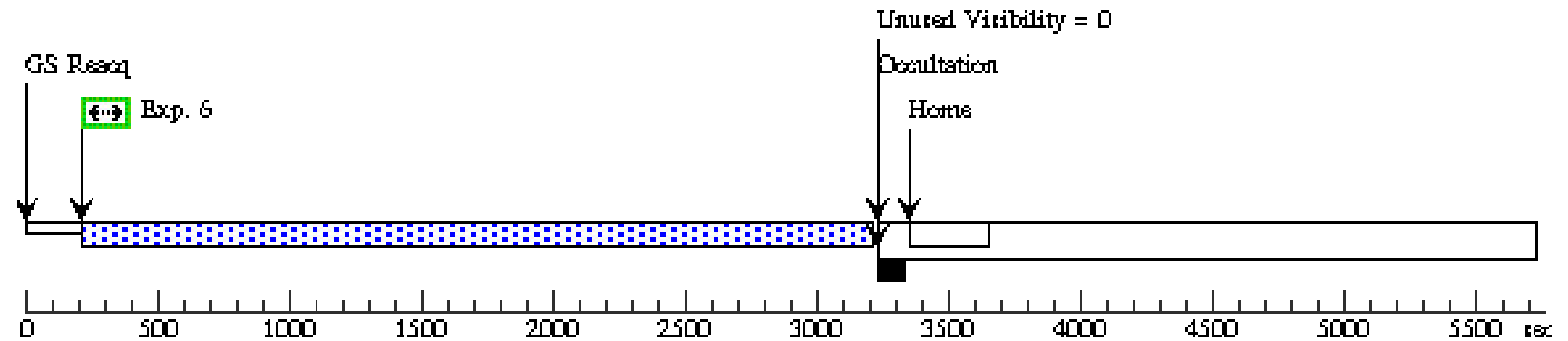
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 09The Relationship between Gas and Galaxies for 0<z<1.2

Visit	Proposal 12264, Visit 09, failed								Thu Dec 23 03:05:02 GMT 2010	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(3)	SDSS-J221806.67+005223.6 Alt Name1: N00210215088	RA: 22 18 6.6880 (334.5278667d) Dec: +00 52 23.73 (.87326d) Equinox: J2000		Proper Motion RA: null Proper Motion Dec: null Epoch of Position:		V=17.8+/-0.1 Galex (microJy) NUV=146, FUV=1 (Lyman limit affecting FUV)	Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) SDSS-J221806.67+005223.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				12 Secs	
									[==>]	[1]
	2		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=2608.0; FP-POS=2			2400 Secs	
									[==>2608.0 Secs]	[1]
	3		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=2985.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[2]
	4		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=2985.0; FP-POS=4			2400 Secs	
								[==>2985.0 Secs]	[3]	
	5		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=2985.0; FP-POS=2			2400 Secs	
									[==>2985.0 Secs]	[4]

Orbit 1

Exp. 1

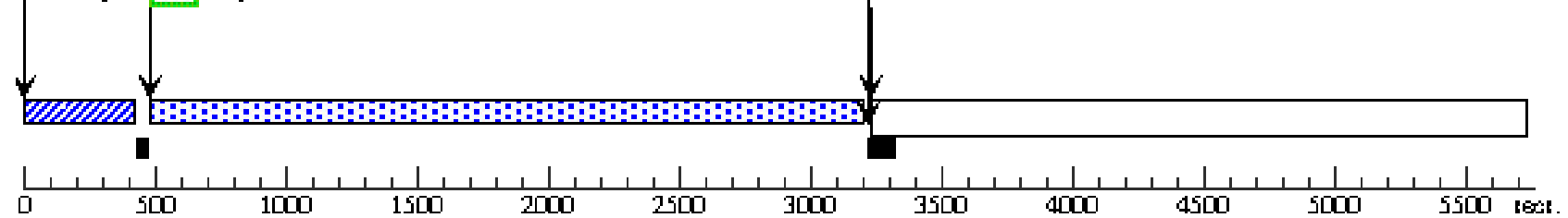
GS Acq

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

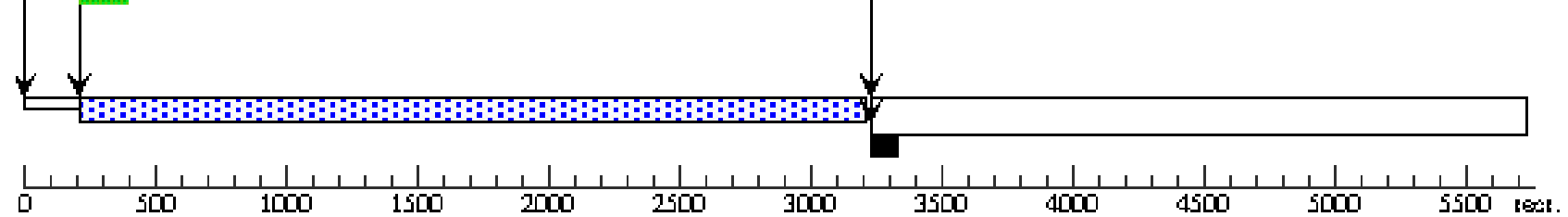
GS Reseq

Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

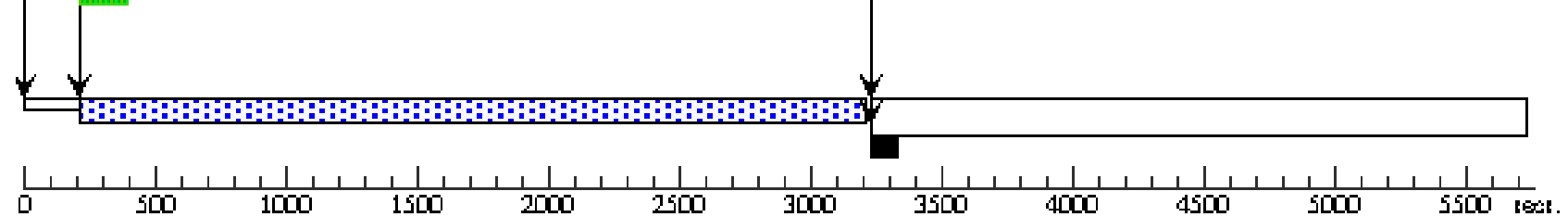
GS Reseq

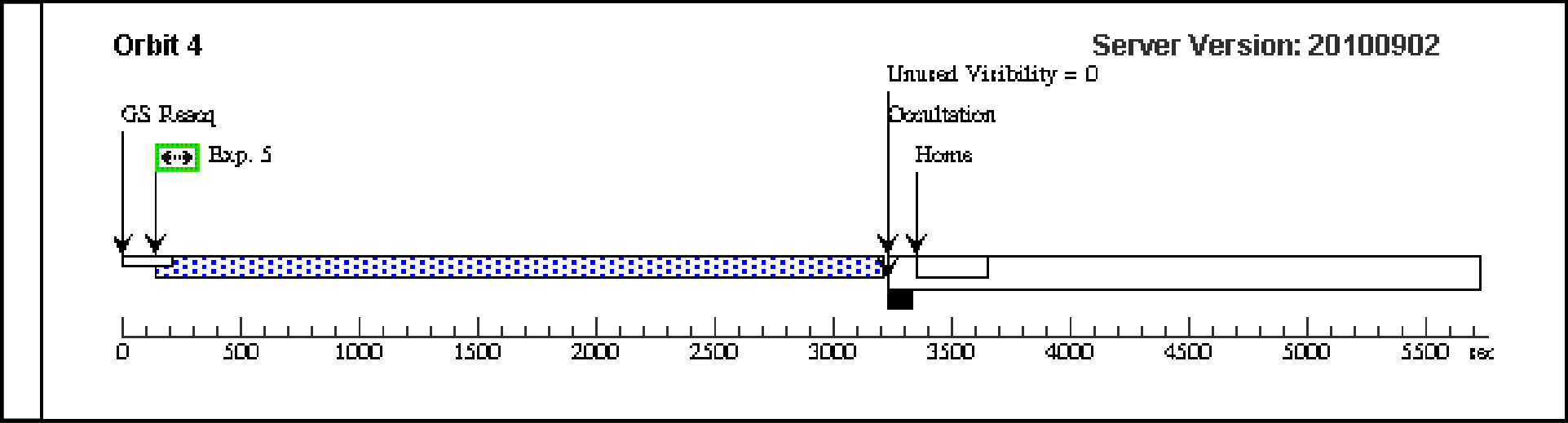
Exp. 4

Server Version: 20100902

Occultation

Unused Visibility = 0





Proposal 12264 - Visit 10The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 10, failed									Thu Dec 23 03:05:03 GMT 2010	
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: COS/NUV										
	Special Requirements: (none)										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(3)	SDSS-J221806.67+005223.6 Alt Name1: N00210215088	RA: 22 18 6.6880 (334.5278667d) Dec: +00 52 23.73 (.87326d) Equinox: J2000		Proper Motion RA: null Proper Motion Dec: null Epoch of Position:		V=17.8+/-0.1 Galex (microJy) NUV=146, FUV=1 (Lyman limit affecting F UV)		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(3) SDSS-J221806.67+005223.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				12 Secs		
									[==>]		[1]
	2		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=26 08.0; FP-POS=3			2400 Secs		
									[==>2608.0 Secs]		[1]
	3		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs		
									[==>2985.0 Secs]		[2]
	4		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=2			2400 Secs		
									[==>2985.0 Secs]		[3]
	5		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs		
								[==>2985.0 Secs]		[4]	
6		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs			
								[==>2985.0 Secs]		[5]	

Orbit 1

GS Acq

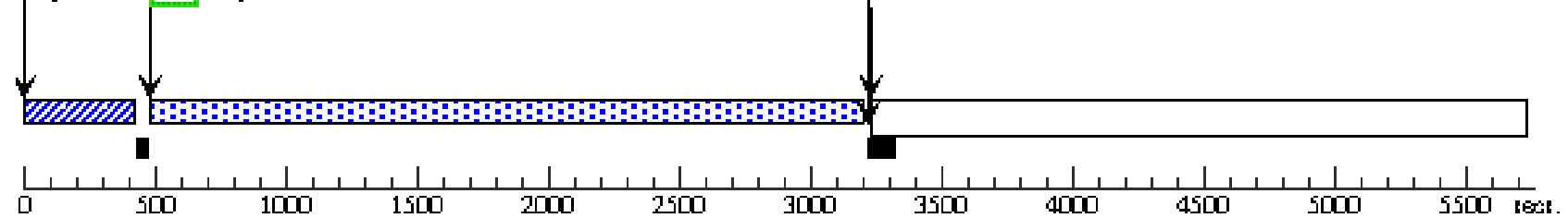
Exp. 1

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

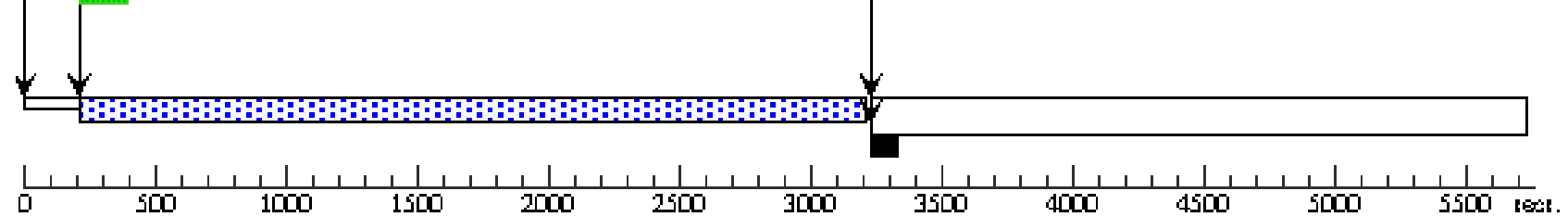
GS Reseq

Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

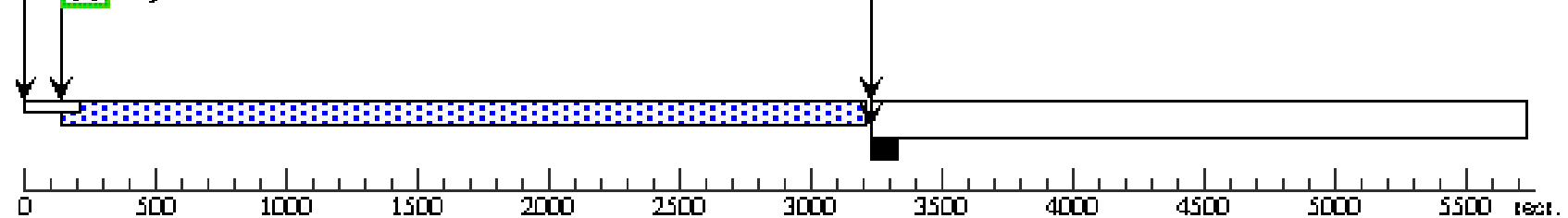
GS Reseq

Exp. 4

Server Version: 20100902

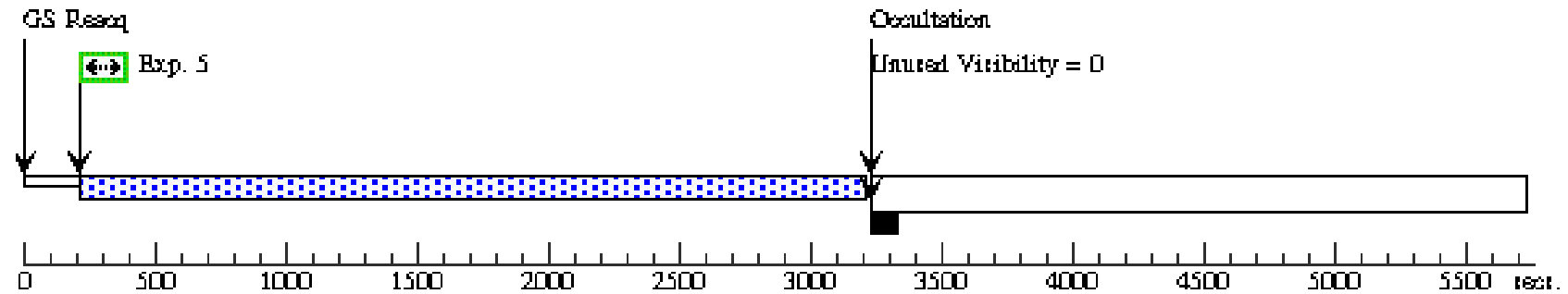
Unused Visibility = 0

Occultation



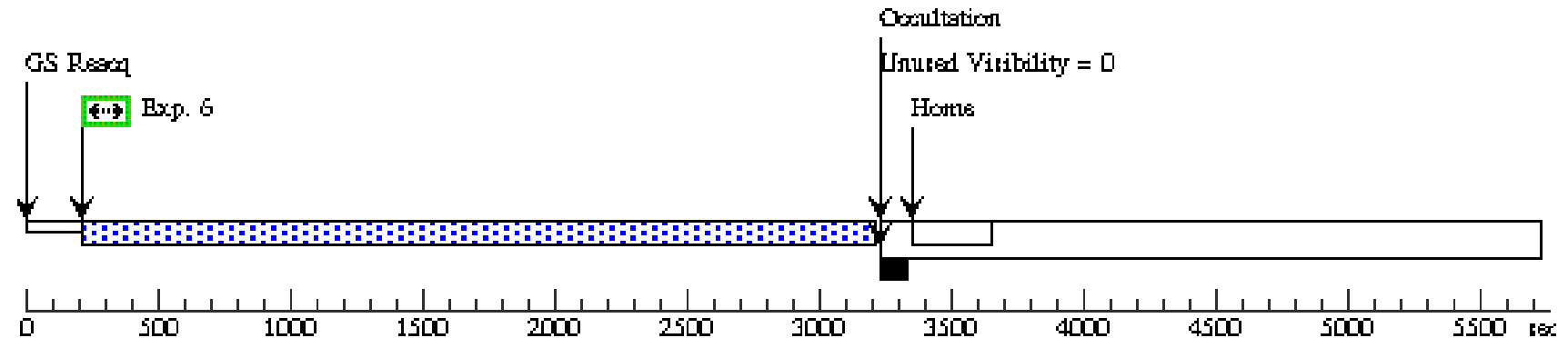
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 11The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 11, completed Thu Dec 23 03:05:04 GMT 2010									
	Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	FIRST-J020930.7-043826 Alt Name1: S00232303167	RA: 02 09 30.7430 (32.3780958d) Dec: -04 38 26.27 (-4.64063d) Equinox: J2000	Proper Motion RA: null Proper Motion Dec: null Epoch of Position:	V=17.2+/-0.1 Galex (microJy) NUV=372, FUV=160	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) FIRST-J020930.7-043826	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				118 Secs	
									[==>]	[1]
	2		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=23 21.0; FP-POS=2			2400 Secs	
									[==>2321.0 Secs]	[1]
	3		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs	
									[==>2948.0 Secs]	[2]
	4		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs	
									[==>2948.0 Secs]	[3]
	5		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs	
									[==>2948.0 Secs]	[4]
	6		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs	
									[==>2948.0 Secs]	[5]

Orbit 1

Exp. 1

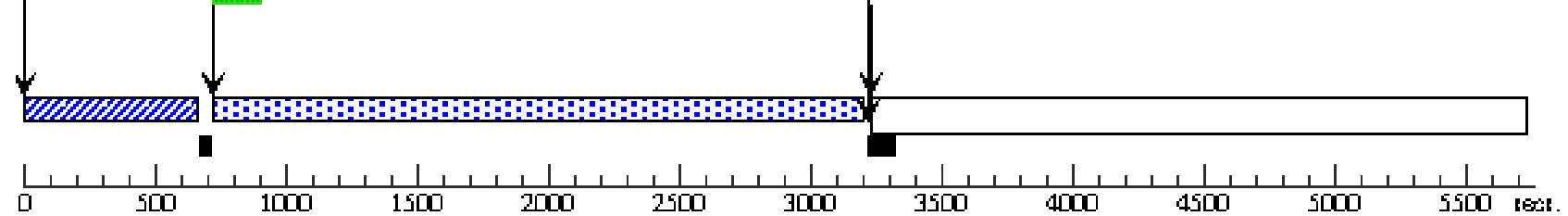
GS Acq



Exp. 2

Unused Visibility = 9

Occultation



Server Version: 20100902

Orbit 2

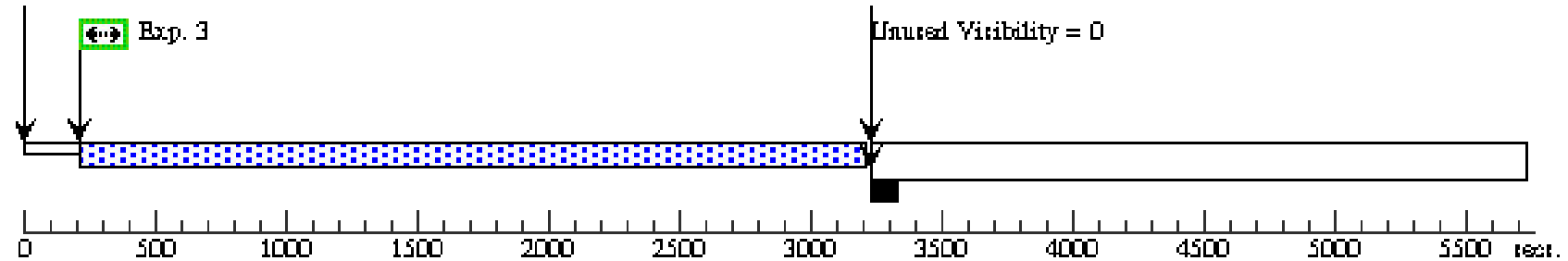
GS Reseq



Exp. 3

Occultation

Unused Visibility = 0



Server Version: 20100902

Orbit 3

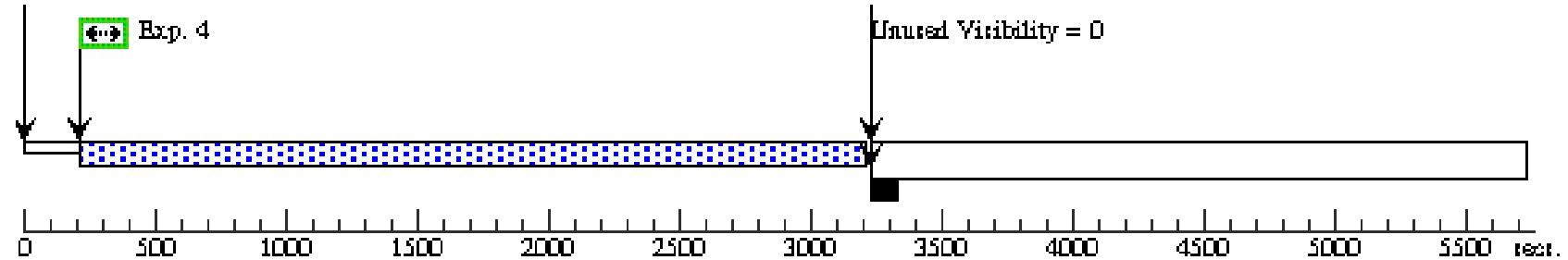
GS Reseq



Exp. 4

Occultation

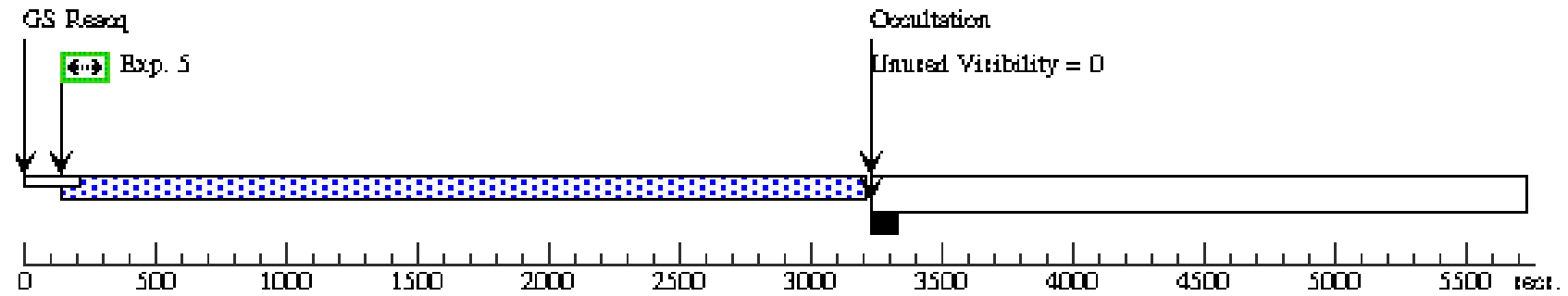
Unused Visibility = 0



Server Version: 20100902

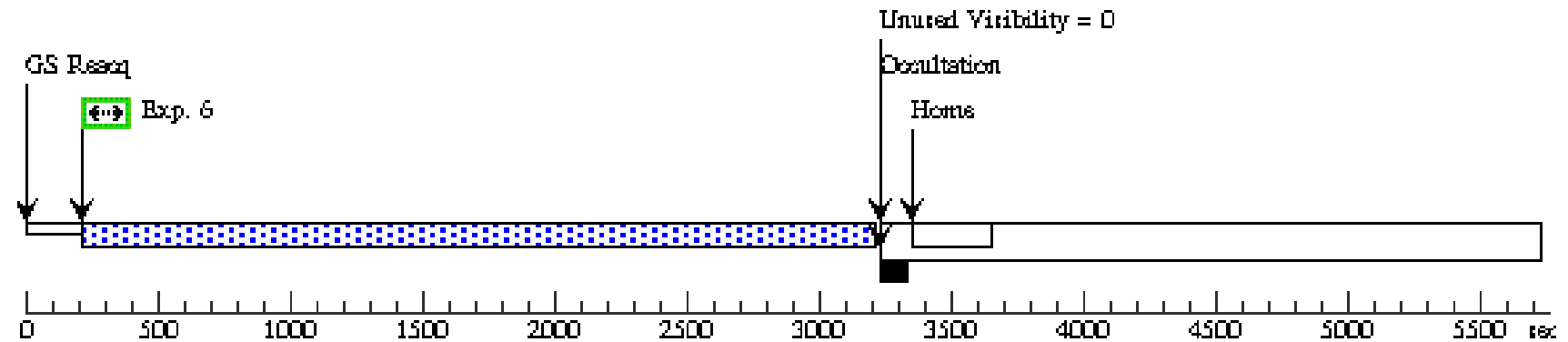
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 12The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 12, scheduling										Thu Dec 23 03:05:06 GMT 2010	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/NUV, COS/FUV											
	Special Requirements: (none)											
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(4)	FIRST-J020930.7-043826		RA: 02 09 30.7430 (32.3780958d)		Proper Motion RA: null		V=17.2+/-0.1		Reference Frame: ICRS		
		Alt Name1: S00232303167		Dec: -04 38 26.27 (-4.64063d)		Proper Motion Dec: null		Galex (microJy) NUV=372,				
				Equinox: J2000		Epoch of Position:		FUV=160				
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(4) FIRST-J020930.7-043826	COS/NUV, ACQ/IMAGE, PSA		MIRRORB				118 Secs		
										[==>]		[1]
	2		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1600 A	BUFFER-TIME=22 76.0; FP-POS=1			2400 Secs		
										[==>2276.0 Secs]		[1]
	3		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=2			2400 Secs		
										[==>2948.0 Secs]		[2]
	4		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
										[==>2948.0 Secs]		[3]
	5		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
										[==>2948.0 Secs]		[4]
	6		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1600 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs		
										[==>2948.0 Secs]		[5]

Orbit 1

GS Acq

Exp. 1

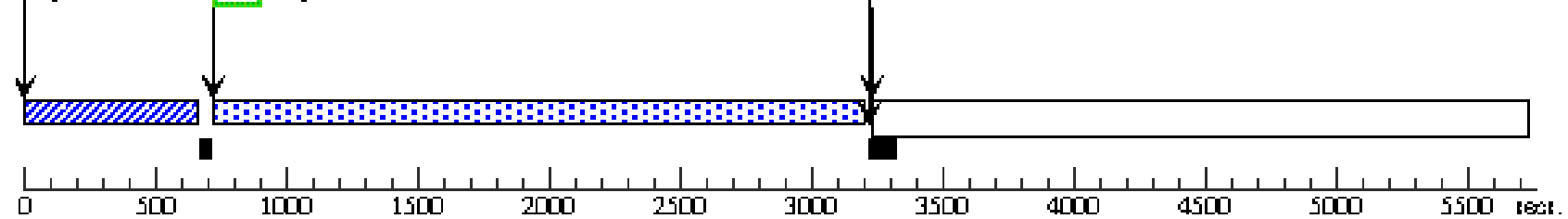


Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

GS Reseq

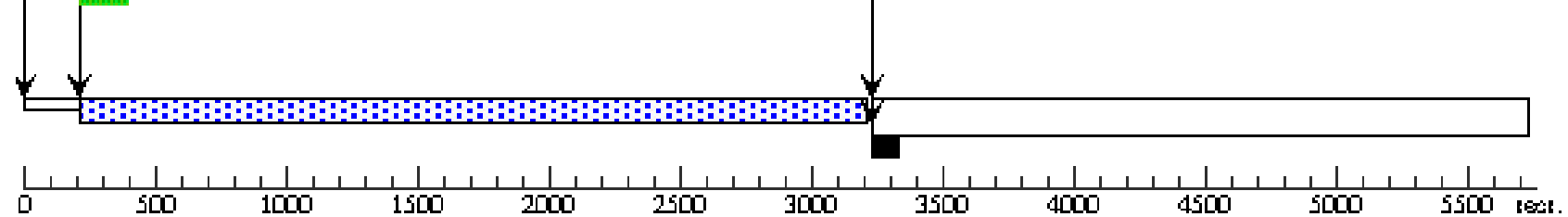


Exp. 3

Server Version: 20100902

Unused Visibility = 0

Occultation



Orbit 3

GS Reseq

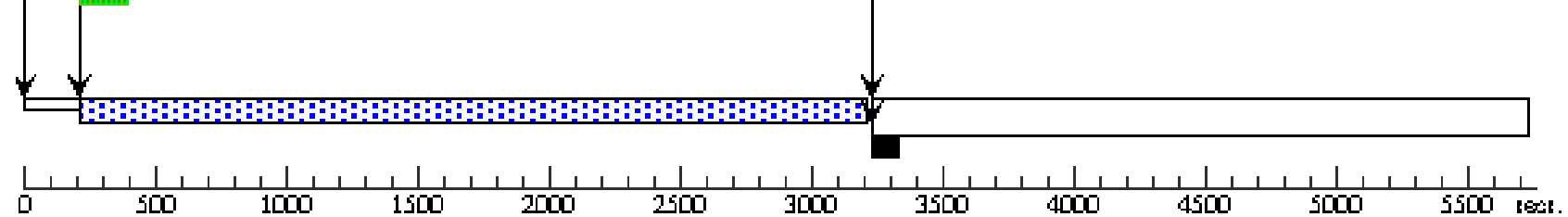


Exp. 4

Server Version: 20100902

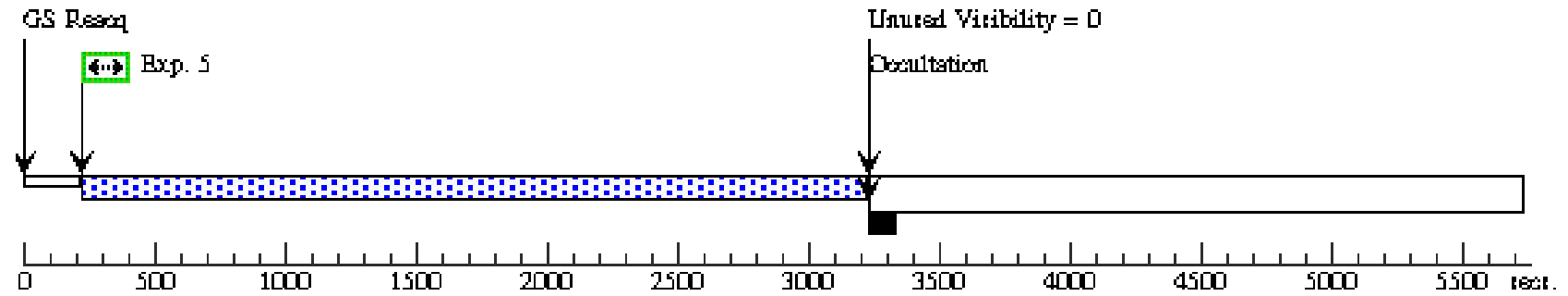
Occultation

Unused Visibility = 0



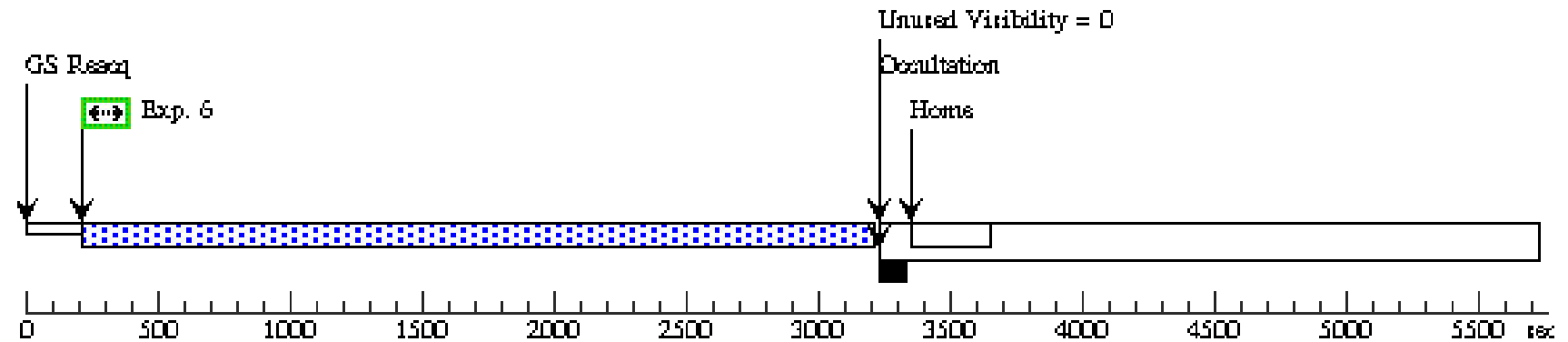
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 13The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 13, scheduling										Thu Dec 23 03:05:08 GMT 2010	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: COS/NUV, COS/FUV											
	Special Requirements: (none)											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(4)	FIRST-J020930.7-043826	RA: 02 09 30.7430 (32.3780958d)			Proper Motion RA: null		V=17.2+/-0.1		Reference Frame: ICRS		
				Dec: -04 38 26.27 (-4.64063d)			Proper Motion Dec: null		Galex (microJy) NUV=372,			
		Alt Name1: S00232303167	Equinox: J2000			Epoch of Position:		FUV=160				
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(4) FIRST-J020930.7-043826	COS/NUV, ACQ/IMAGE, PSA		MIRRORB				118 Secs		
										[==>]	[1]	
	2		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1623 A	BUFFER-TIME=22 76.0; FP-POS=1			2400 Secs		
										[==>2276.0 Secs]	[1]	
	3		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=2			2400 Secs		
										[==>2948.0 Secs]	[2]	
	4		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
										[==>2948.0 Secs]	[3]	
	5		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=3			2400 Secs		
										[==>2948.0 Secs]	[4]	
	6		(4) FIRST-J020930.7-043826	COS/FUV, TIME-TAG, PSA		G160M 1623 A	BUFFER-TIME=29 48.0; FP-POS=4			2400 Secs		
										[==>2948.0 Secs]	[5]	

Orbit 1

GS Acq

Exp. 1

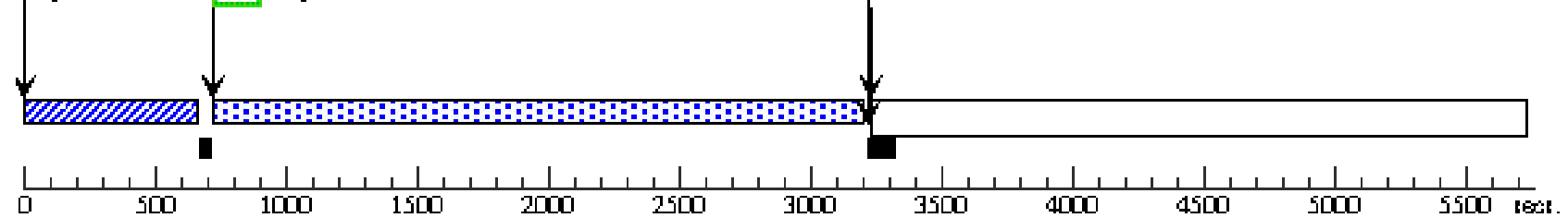


Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

GS Reseq

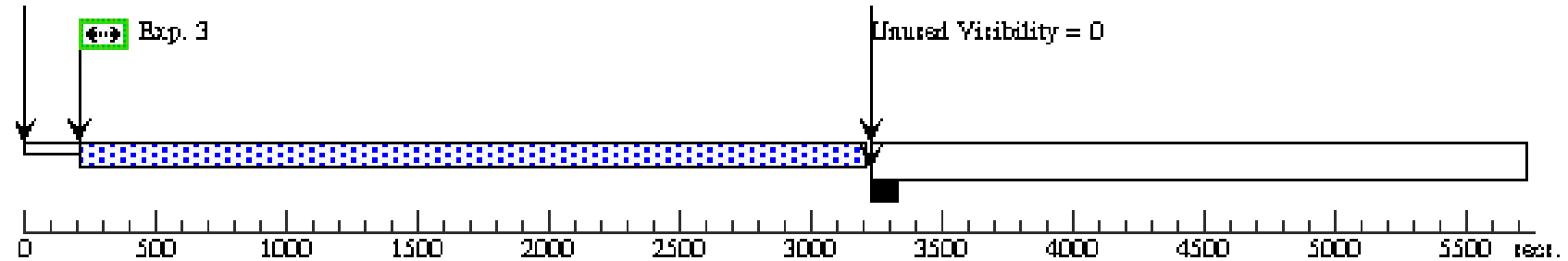


Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

GS Reseq

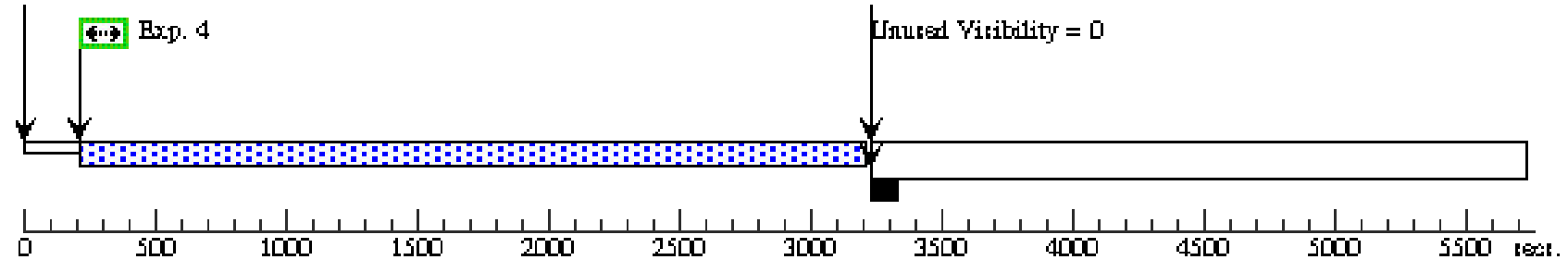


Exp. 4

Server Version: 20100902

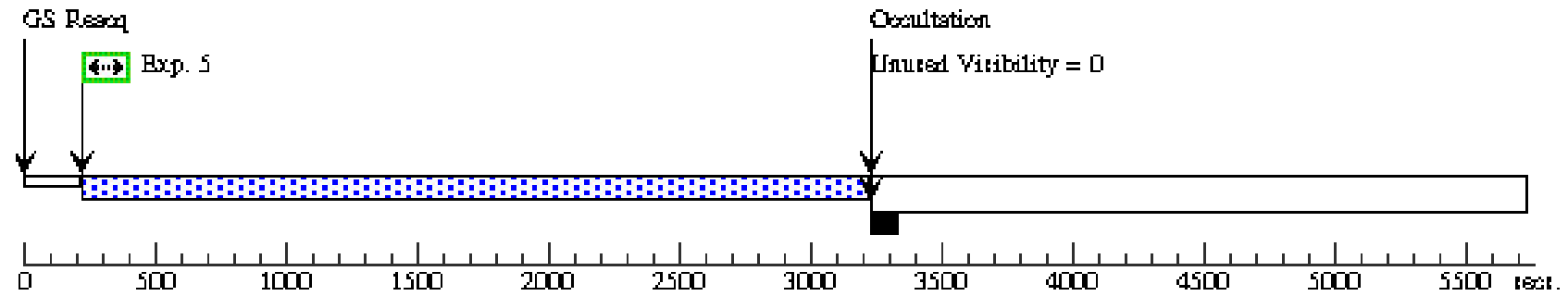
Occultation

Unused Visibility = 0



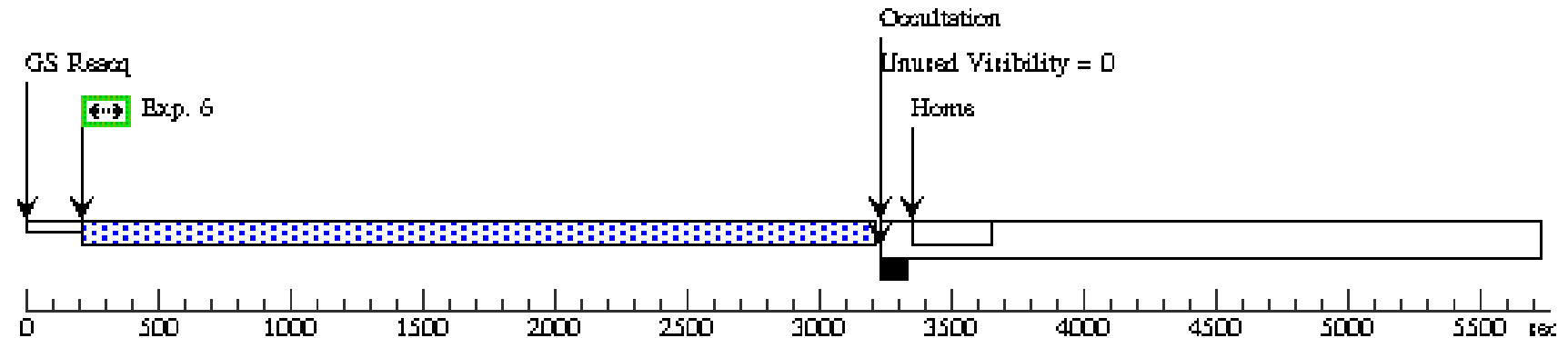
Orbit 4

Server Version: 20100902



Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 14The Relationship between Gas and Galaxies for 0<z<1.2

Visit	Proposal 12264, Visit 14, scheduling									Thu Dec 23 03:05:11 GMT 2010
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(4)	FIRST-J020930.7-043826	RA: 02 09 30.7430 (32.3780958d)		Proper Motion RA: null		V=17.2+/-0.1		Reference Frame: ICRS	
		Alt Name1: S00232303167	Dec: -04 38 26.27 (-4.64063d)		Proper Motion Dec: null		Galex (microJy) NUV=372,			
			Equinox: J2000		Epoch of Position:		FUV=160			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(4) FIRST-J020930.7-043826	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				118 Secs	
									[==>]	[1]
	2		(4) FIRST-J020930.7-043826	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=23 73.0; FP-POS=3			2400 Secs	
									[==>2373.0 Secs]	[1]
	3		(4) FIRST-J020930.7-043826	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs	
									[==>2985.0 Secs]	[2]
	4		(4) FIRST-J020930.7-043826	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[3]
	5		(4) FIRST-J020930.7-043826	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[4]
	6		(4) FIRST-J020930.7-043826	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=29 85.0; FP-POS=4			2400 Secs	
									[==>2985.0 Secs]	[5]

Orbit 1

GS Acq

Exp. 1

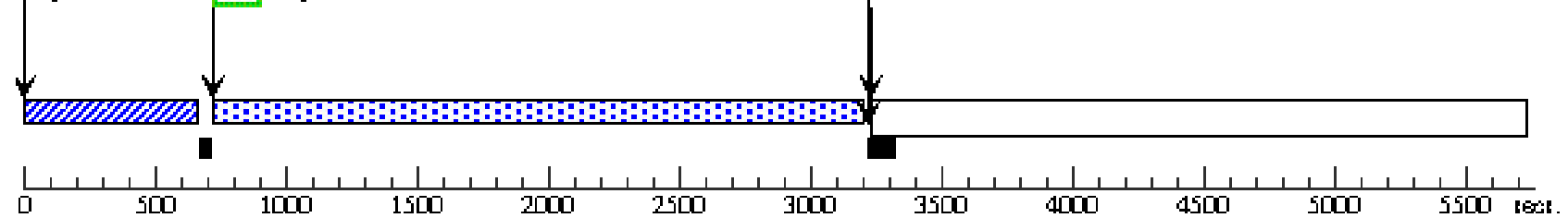


Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

GS Reseq

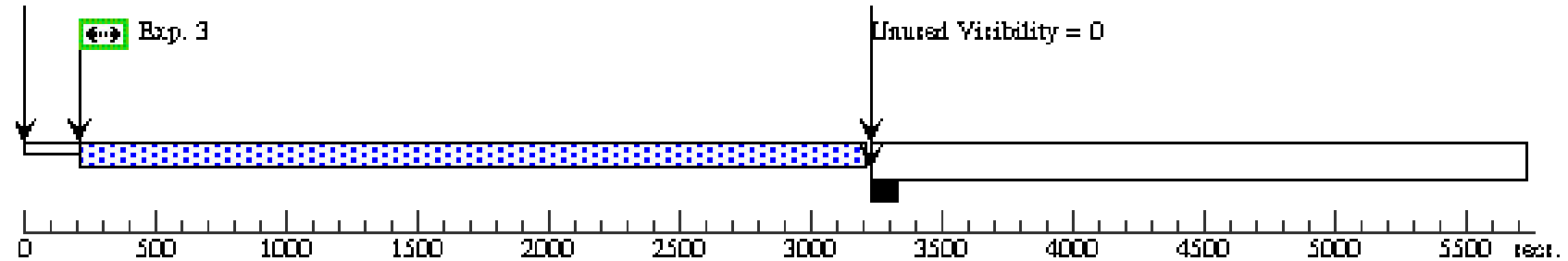


Exp. 3

Server Version: 20100902

Occultation

Unused Visibility = 0



Orbit 3

GS Reseq

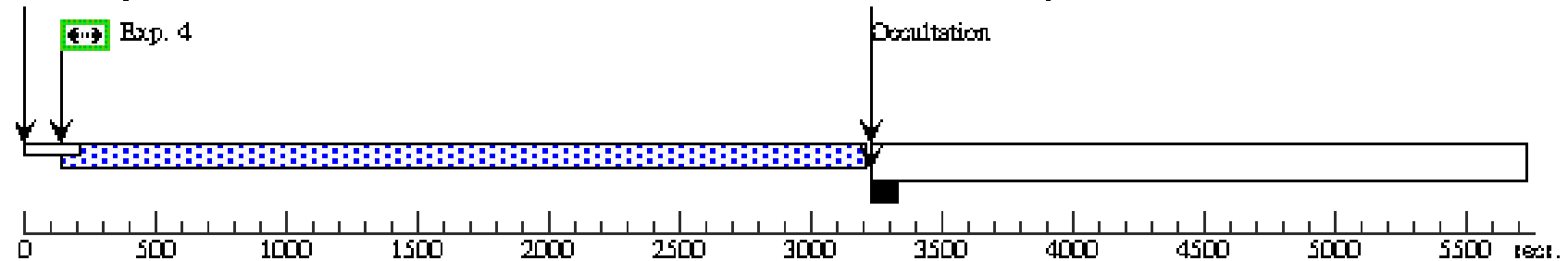


Exp. 4

Server Version: 20100902

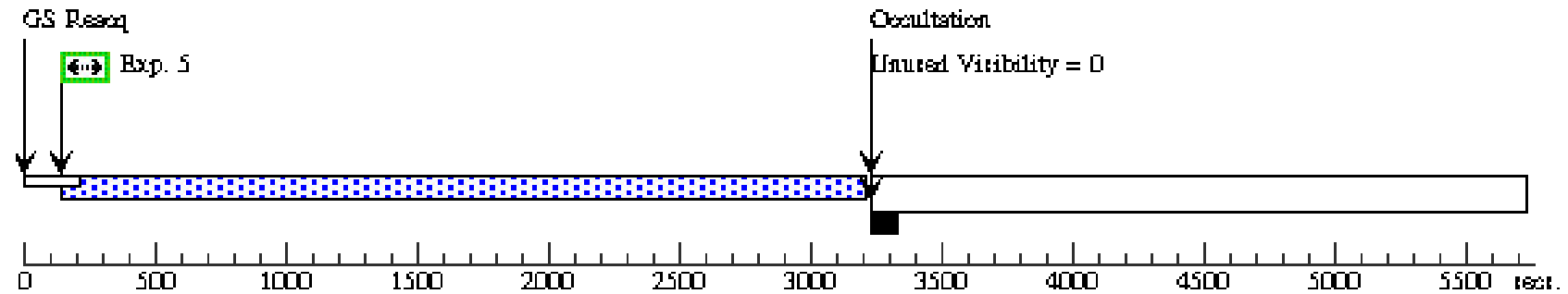
Unused Visibility = 0

Occultation



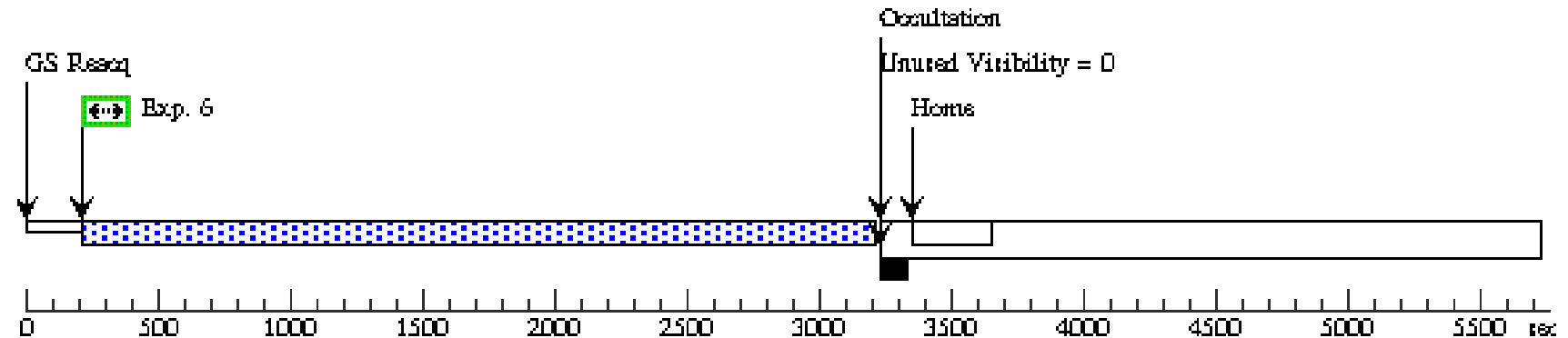
Orbit 4

Server Version: 20100902



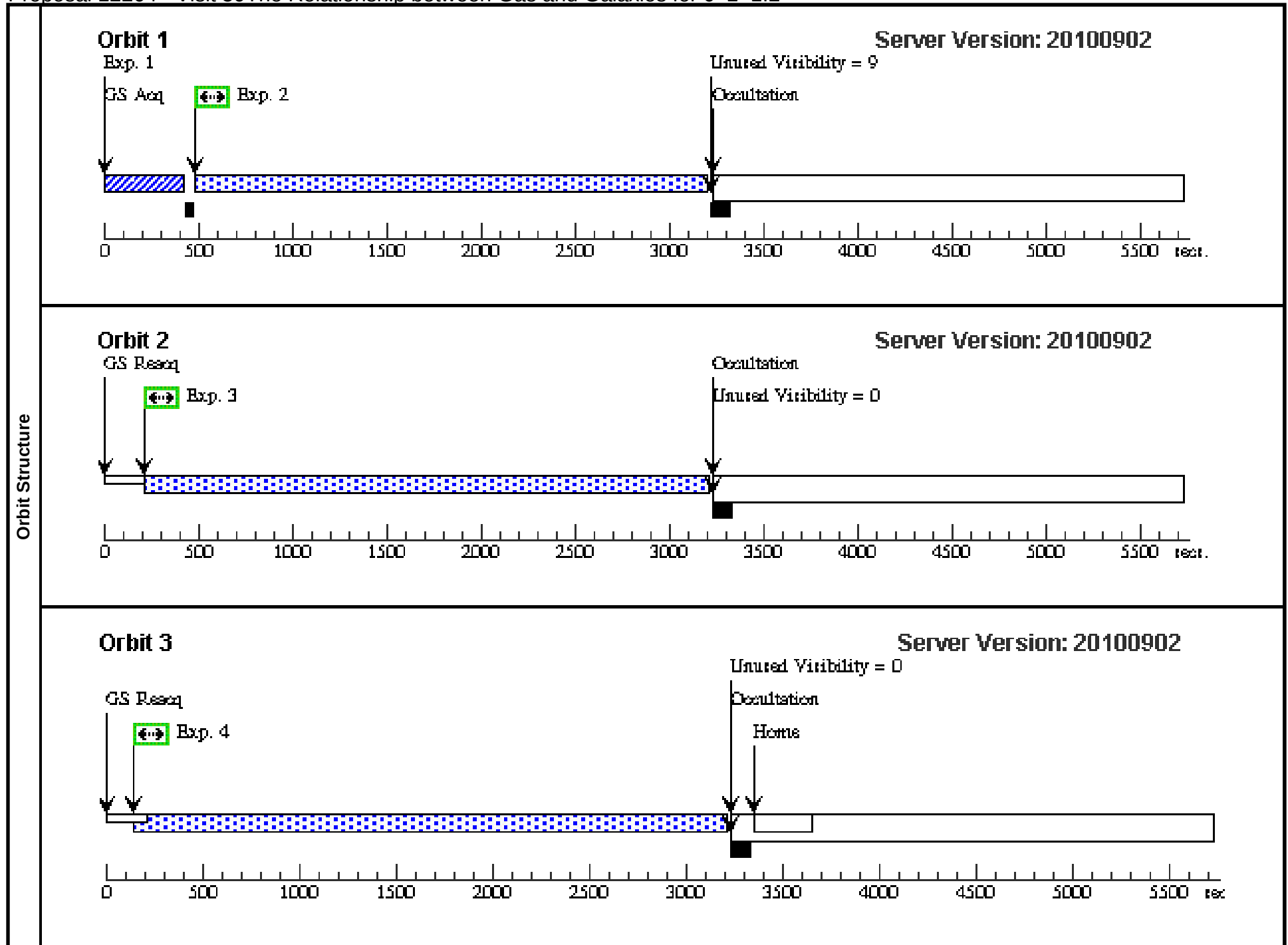
Orbit 5

Server Version: 20100902



Proposal 12264 - Visit 59The Relationship between Gas and Galaxies for $0 < z < 1.2$

Visit	Proposal 12264, Visit 59								Thu Dec 23 03:05:14 GMT 2010	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	SDSS-J221806.67+005223.6 Alt Name1: N00210215088	RA: 22 18 6.6880 (334.5278667d) Dec: +00 52 23.73 (.87326d) Equinox: J2000	Proper Motion RA: null Proper Motion Dec: null Epoch of Position:	V=17.8+/-0.1 Galex (microJy) NUV=146, FUV=1 (Lyman limit affecting FUV)	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) SDSS-J221806.67+005223.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				12 Secs	
									[==>]	[1]
	2		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=2608.0; FP-POS=3			2400 Secs	
									[==>2608.0 Secs]	[1]
	3		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2635 A	BUFFER-TIME=2985.0; FP-POS=4			2400 Secs	
									[==>2985.0 Secs]	[2]
4		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=2985.0; FP-POS=2			2400 Secs		
									[==>2985.0 Secs]	[3]



Proposal 12264 - Visit 60The Relationship between Gas and Galaxies for 0<z<1.2

Visit	Proposal 12264, Visit 60								Thu Dec 23 03:05:14 GMT 2010	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV									
	Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	SDSS-J221806.67+005223.6 Alt Name1: N00210215088	RA: 22 18 6.6880 (334.5278667d) Dec: +00 52 23.73 (.87326d) Equinox: J2000	Proper Motion RA: null Proper Motion Dec: null Epoch of Position:	V=17.8+/-0.1 Galex (microJy) NUV=146, FUV=1 (Lyman limit affecting FUV)	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(3) SDSS-J221806.67+005223.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				12 Secs	
									[==>]	[1]
	2		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 2950 A	BUFFER-TIME=2608.0; FP-POS=4			2400 Secs	
									[==>2608.0 Secs]	[1]
	3		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=2985.0; FP-POS=2			2400 Secs	
									[==>2985.0 Secs]	[2]
	4		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=2985.0; FP-POS=3			2400 Secs	
									[==>2985.0 Secs]	[3]
	5		(3) SDSS-J221806.67+005223.6	COS/NUV, TIME-TAG, PSA	G230L 3360 A	BUFFER-TIME=2985.0; FP-POS=4			2400 Secs	
								[==>2985.0 Secs]	[4]	

Orbit 1

Exp. 1

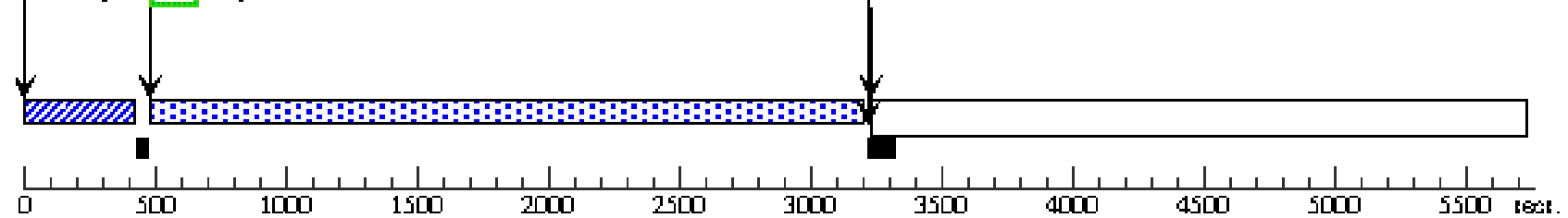
GS Acq

Exp. 2

Server Version: 20100902

Unused Visibility = 9

Occultation



Orbit 2

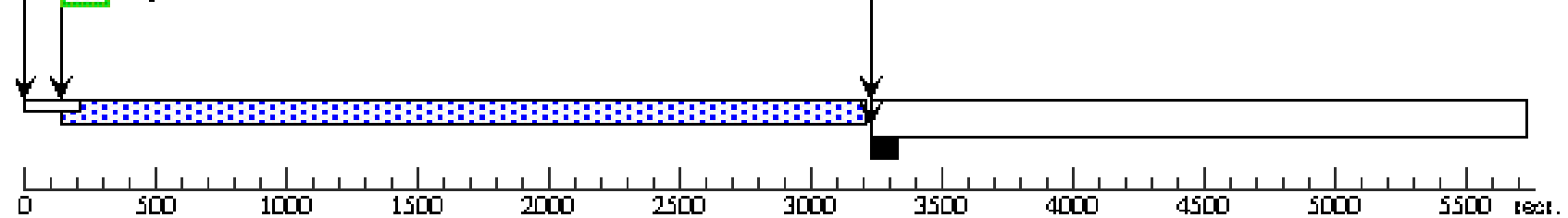
GS Reseq

Exp. 3

Server Version: 20100902

Unused Visibility = 0

Occultation



Orbit 3

GS Reseq

Exp. 4

Server Version: 20100902

Unused Visibility = 0

Occultation

