



# 11585 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Cycle: 17, Proposal Category: GO  
(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
<b>Dr. Neil H. Crighton (PI)</b>	<b>University of Durham</b>	
Prof. Simon L. Morris (CoI) (Contact)	University of Durham	
Dr. Buell T. Jannuzi (CoI)	National Optical Astronomy Observatories, AURA	
Prof. Jill Bechtold (CoI)	University of Arizona	
Dr. Tom Theuns (CoI)	University of Durham	
Dr. Joop Schaye (CoI)	Universiteit Leiden	
Prof. Romeel Dave (CoI)	University of Arizona	
Dr. Craig B. Foltz (CoI)	National Science Foundation	
Mr. Allen Shone (CoI)	University of Durham	
Prof. Robert F. Carswell (CoI)	University of Cambridge	

## 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) LBQS-0107-0235	COS/FUV COS/NUV	5	25-Jan-2010 21:03:58.0	yes
02	(1) LBQS-0107-0235	COS/FUV COS/NUV	5	25-Jan-2010 21:04:06.0	yes

Proposal 11585 (STScI Edit Number: 3, Created: Monday, January 25, 2010 9:05:22 PM EST) - Overview

<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>
03	(1) LBQS-0107-0235	COS/FUV COS/NUV	4	25-Jan-2010 21:04:12.0	yes
04	(1) LBQS-0107-0235	COS/FUV COS/NUV	4	25-Jan-2010 21:04:18.0	yes
05	(1) LBQS-0107-0235	COS/FUV COS/NUV	4	25-Jan-2010 21:04:23.0	yes
06	(1) LBQS-0107-0235	COS/FUV COS/NUV	4	25-Jan-2010 21:04:27.0	yes
07	(2) HB89-0107-025-NED05	COS/FUV COS/NUV	4	25-Jan-2010 21:04:33.0	yes
08	(2) HB89-0107-025-NED05	COS/FUV COS/NUV	4	25-Jan-2010 21:04:37.0	yes
09	(2) HB89-0107-025-NED05	COS/FUV COS/NUV	4	25-Jan-2010 21:04:41.0	yes
10	(2) HB89-0107-025-NED05	COS/FUV COS/NUV	4	25-Jan-2010 21:04:46.0	yes
11	(3) LBQS-0107-0232	COS/FUV COS/NUV	5	25-Jan-2010 21:04:50.0	yes
12	(3) LBQS-0107-0232	COS/FUV COS/NUV	5	25-Jan-2010 21:04:55.0	yes
13	(3) LBQS-0107-0232	COS/FUV COS/NUV	5	25-Jan-2010 21:05:03.0	yes
14	(3) LBQS-0107-0232	COS/FUV COS/NUV	5	25-Jan-2010 21:05:09.0	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>
15	(3) LBQS-0107-0232	COS/FUV COS/NUV	5	25-Jan-2010 21:05:14.0	yes
16	(3) LBQS-0107-0232	COS/FUV COS/NUV	5	25-Jan-2010 21:05:19.0	yes

72 Total Orbits Used

### **ABSTRACT**

The distribution of the gaseous intergalactic medium (IGM) around galaxies is fundamentally important to our understanding of galaxy evolution. Simulations suggest that 'feedback' - the return of gas and radiation to the IGM via active galactic nuclei or star-formation-driven winds - is an important part of galaxy formation and a possible way to enrich the IGM with metals. We propose to use COS to observe the IGM towards the brightest known group of three QSOs ( $z=0.96$ ,  $0.96$  and  $0.73$ ) separated by a few arcminutes on the sky. Using far-UV spectra of the Lyman-alpha forest region at resolutions  $> 20000$ , we will detect both the cooler photo-ionized IGM at  $\sim 10,000\text{K}$  using narrow HI absorbers, and the warm-hot intergalactic medium (WHIM) at  $\sim 100,000\text{ K}$  using OVI and broad HI absorbers over a redshift range of  $0 < z < 0.48$  (HI) and  $0.17 < z < 0.73$  (OVI). The immediate objective is to compare the distribution of the WHIM and cooler IGM to the distribution of galaxies in the same field over redshifts from 0 to 0.6, and scales from  $\sim 100\text{ kpc}$  to  $\sim 1\text{ Mpc}$ . In particular we will look for signs of feedback, such as metal-enriched WHIM gas close to galaxies. The three sight-lines with separations of  $\sim 400\text{ kpc}$  to  $\sim 1\text{ Mpc}$  will allow us to constrain the size and geometry of gas overdensities in the IGM, which is not possible with only one or two QSO sight-lines. The QSO separations are ideally suited for this purpose, as they are comparable to the expected size of IGM gas clouds. Using state-of-the-art hydrodynamical simulations, which include gas cooling inflows, outflows, feedback, and the introduction of gas and metals in the IGM, we will construct mock spectra and galaxy distributions to compare with the observations. Taken together, our new HST observations, ground-based galaxy redshift survey, and simulations will enable us to investigate the nature and extent of the connection between the IGM and galaxies.

### **OBSERVING DESCRIPTION**

We will observe the brightest known triplet of QSOs of order  $\sim 1$  arcminute separations. The three QSOs are:

Name	RA J2000	Dec J2000	Mag	zqso	fluxUV (erg/s/cm <sup>2</sup> /?)
A Q0107-025A	01:10:13.1	-02:19:52.0	B=18.1	0.960	0.7 ? 10-15 @ 1400 ?
B Q0107-025B	01:10:16.2	-02:18:50.0	B=17.4	0.956	1.2 ? 10-15 @ 1400 ?
C Q0107-0232	01:10:14.5	-02:16:57.5	V=18.4	0.726	0.3 ? 10-15 @ 1700 ?

Using four wavelength settings for each QSO (two for each grating), we will obtain complete wavelength coverage over the range 1175 - 1795?, corresponding to  $z < 0.48$  for HI Ly-, and  $0.14 < z < 0.73$  for the OVI doublet.

We will observe each QSO to a S/N of  $\sim 10$  per 0.06 ? resolution element. S/N  $\sim 10$  is desirable as our experience analysing existing STIS echelle spectra suggests that at  $S/N < \sim 5$  it becomes difficult to independently constrain the line width and column density. We have generated a set of Voigt profiles with known column density (N) and b parameter, degraded them to the same resolution as real COS spectra for a range of S/N, and fitted them with the Voigt-profile fitting program VPFIT to see if we can recover the input b and N. This process confirmed that  $S/N = 5$  per resolution element is too low to reliably recover the input parameters, and that  $S/N = 10$  is adequate for recovering line parameters for a range of input values. We note the analyses of the low-redshift forest described in Lehner et al. (2007) were performed on high-resolution STIS spectra with  $S/N \sim 10$ , also showing this value is high enough to separately constrain b and N.

We use the following formula to determine the 4 equivalent width (EW) detection limit as a function of the S/N per resolution element and resolution element width in ?:

$$4 \text{ limiting EW ( ? )} = 4 * (\text{res. element width ( ? )}) / (\text{S/N per res. element})$$

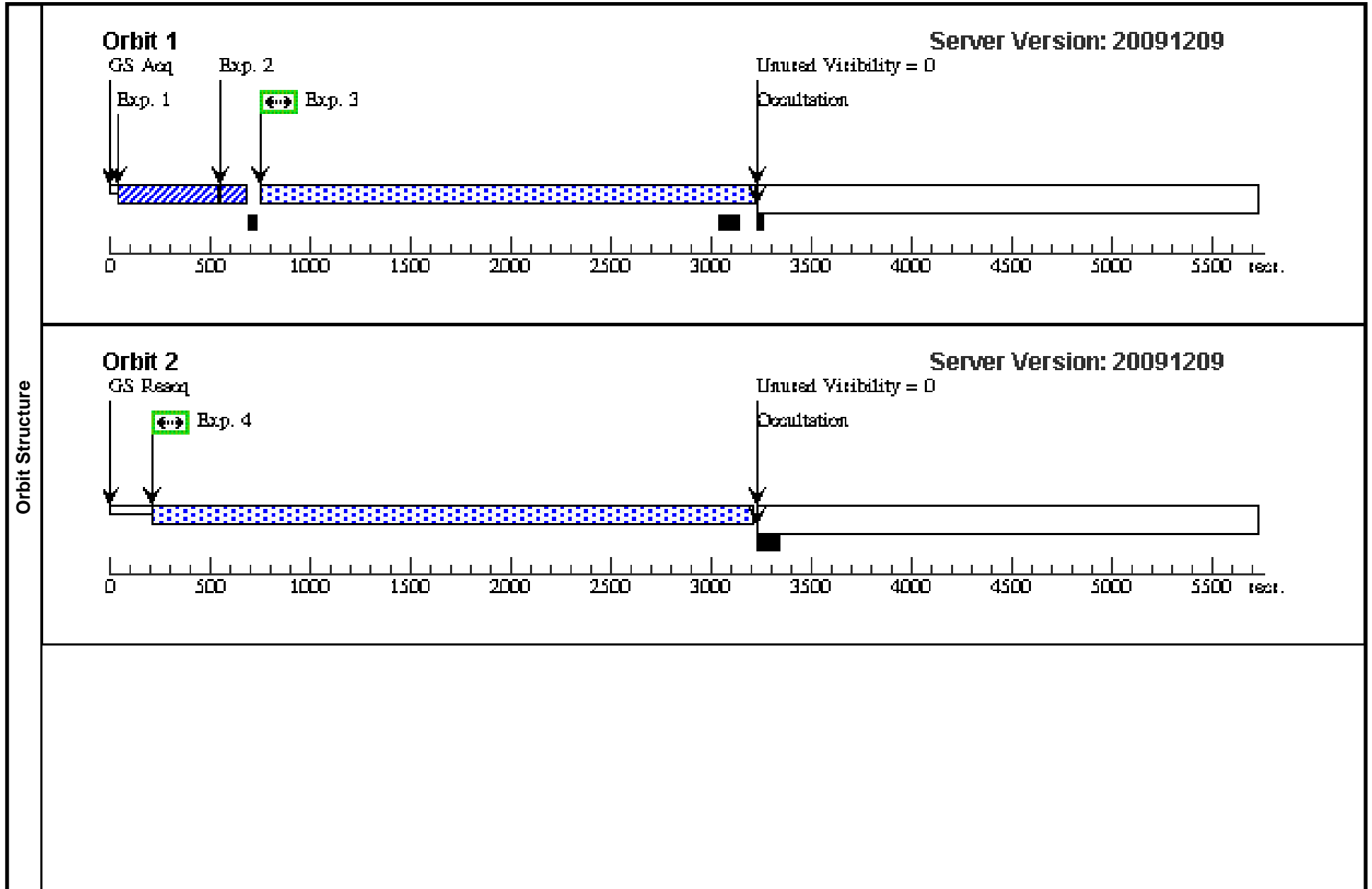
This gives a 4 limiting rest EW of 24 m? at  $S/N=10$  for our observations. We note that there is a strong Ly-a at  $z=0.577$  in the near-UV C spectrum that also shows strong associated SiII, SiIII, CII and OI. Thus is it likely this is a high-column density Lyman limit system. The Lyman limit from this system will fall at  $\sim 1420$  Angstroms, and will only affect Ly- lines at  $z < 0.17$  in this sight-line. Due to the presence of this LLS, we have chosen not to observe QSO C with any G130M grating wavelength settings, which mostly cover wavelengths  $< 1400$  Angstroms.

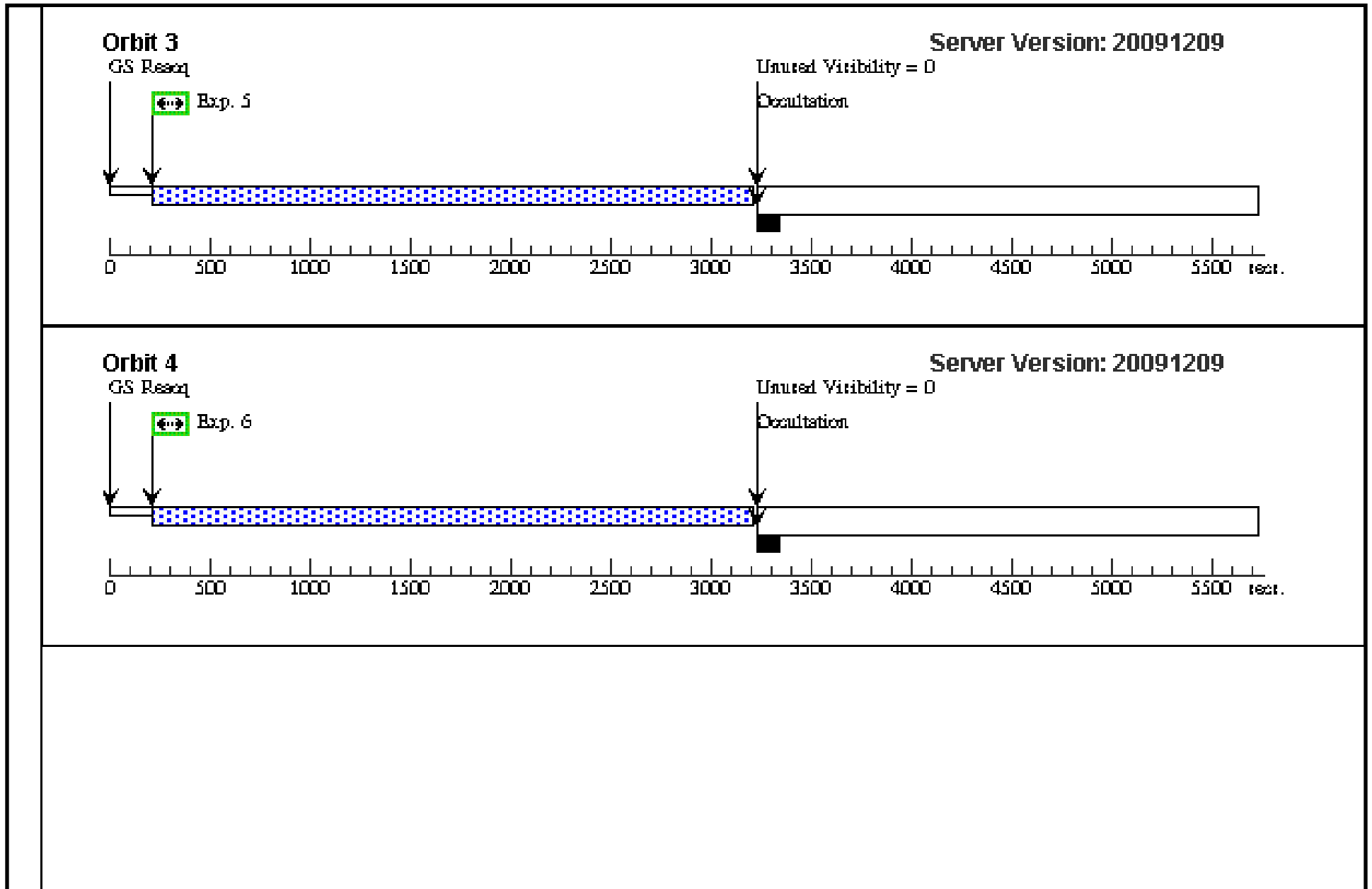
For each grating we will use two central wavelengths settings: 1291 & 1318 for G130M, and 1589 & 1623 for G160M with 4 FP-POS settings. These provide complete wavelength coverage from 1140? to 1799?, with overlap from at least two gratings between 1175? and 1760? (apart from four ~20? gaps, corresponding to the midpoints of each wavelength setting, where only one grating covers the region).

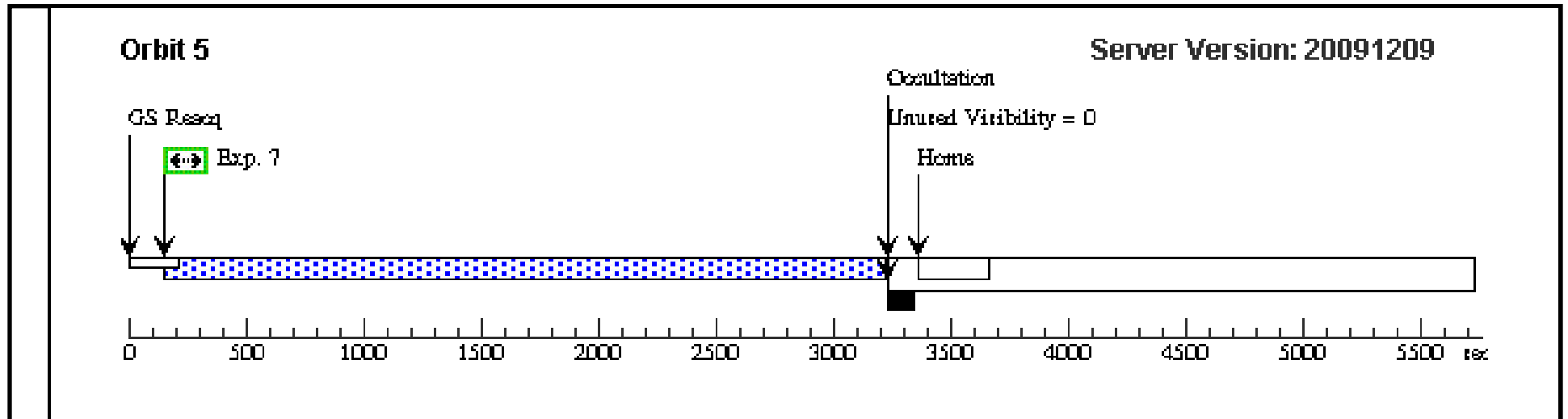
Proposal 11585 - Visit 01 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:23 GMT 2010

Visit	<b>Proposal 11585, Visit 01, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: A G130M 1291 5orbit									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm2/Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans skies in NUV/FUV	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates are from GSC2.3.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	A G130M-1 291 search	(1) LBQS-0107-023 5	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			15.0 Secs [==>]	[1]
	2	A G130M-1 291 image	(1) LBQS-0107-023 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				15.0 Secs [==>]	[1]
	3	A G130M-1 291 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=21 50; FP-POS=1			1800.0 Secs [==>2308.0 Secs ]	[1]
	4	A G130M-1 291 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	A G130M-1 291 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	A G130M-1 291 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
	7	A G130M-1 291 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]



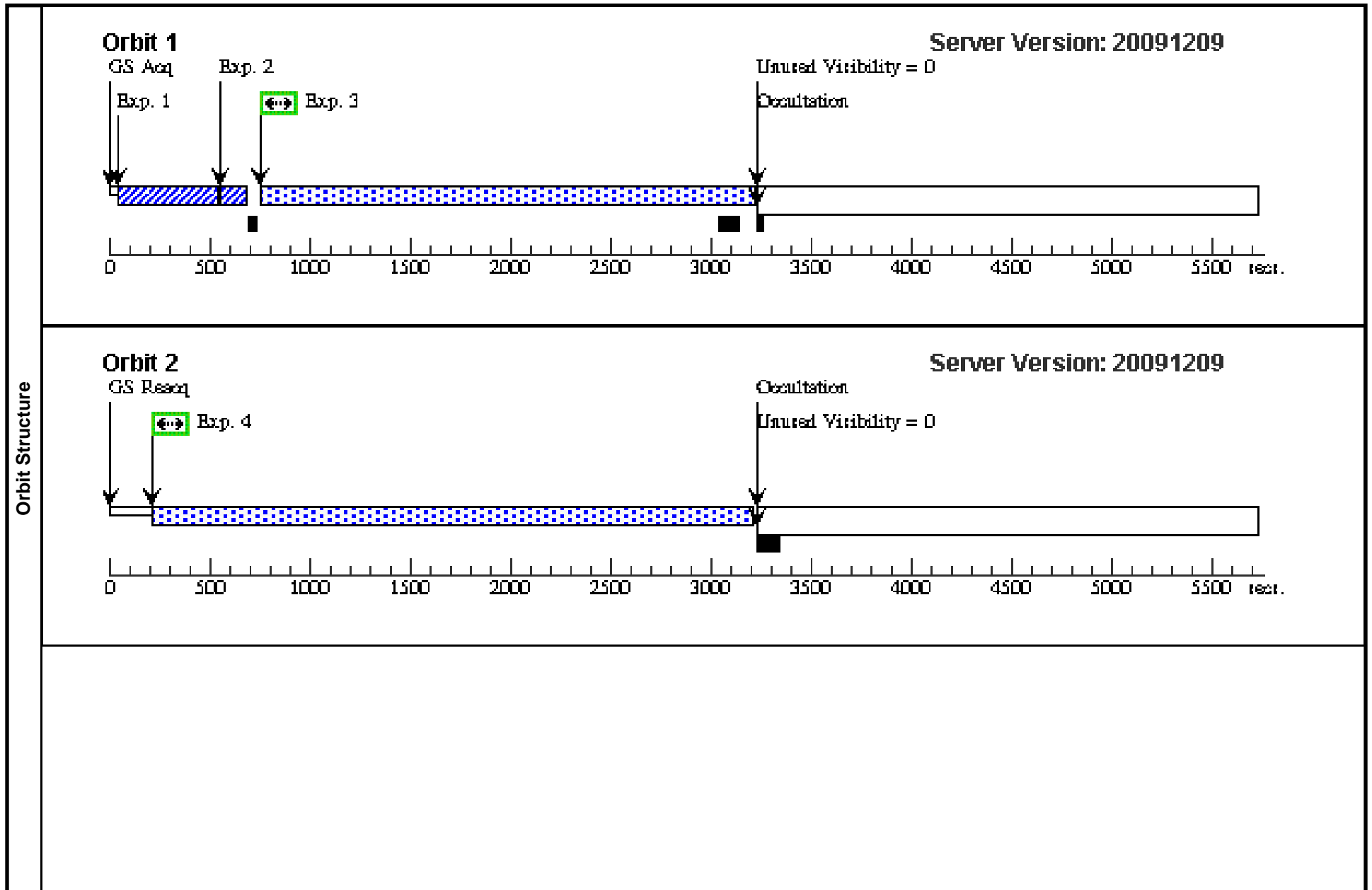


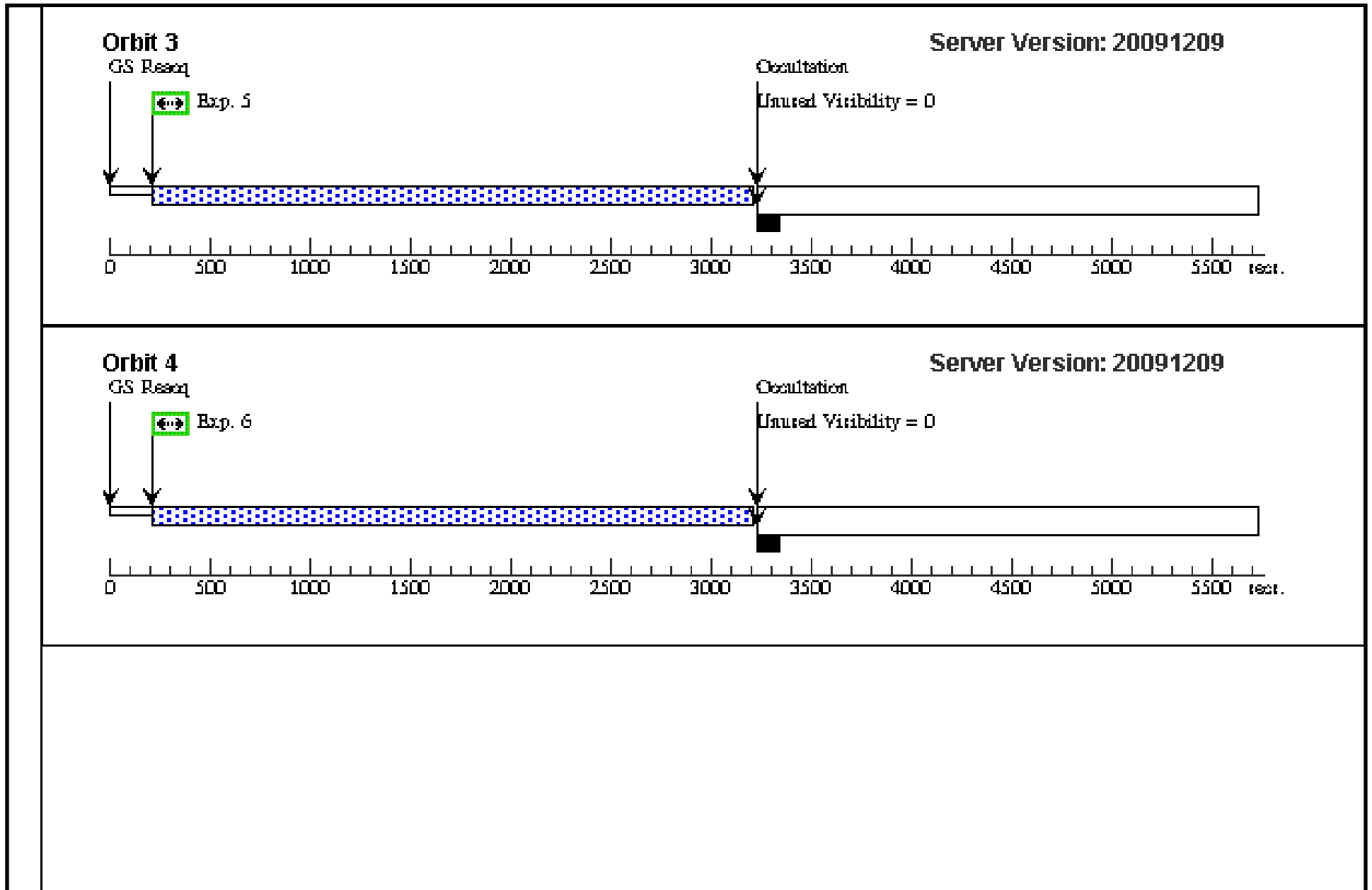


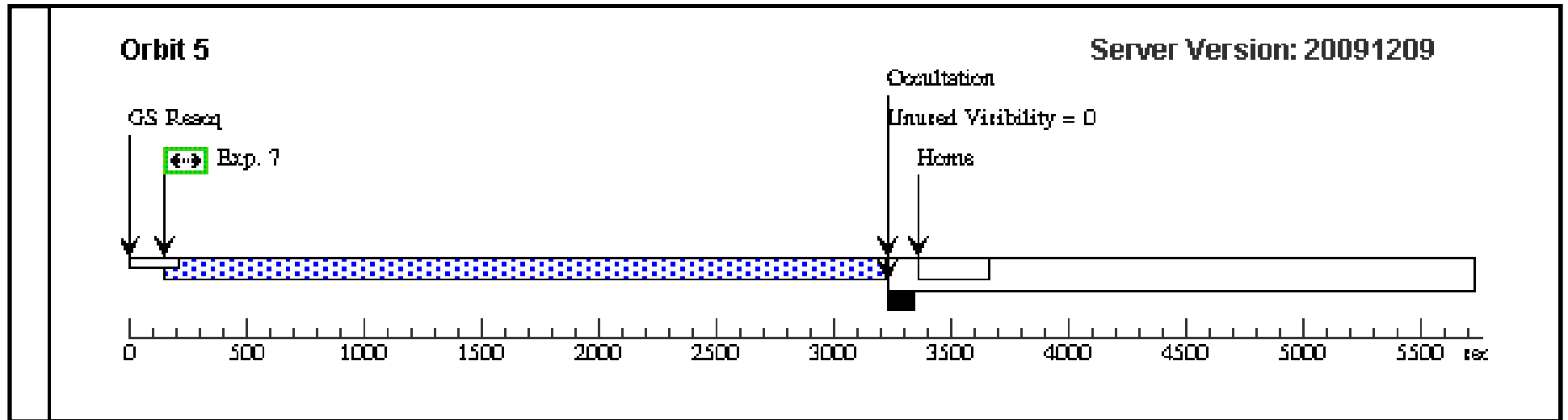
Proposal 11585 - Visit 02 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:24 GMT 2010

Visit	<b>Proposal 11585, Visit 02, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: A G130M 1318 5orbit									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm2/Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates are from GSC2.3.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	A G130M-1 318 search	(1) LBQS-0107-023 5	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			15.0 Secs [==>]	[1]
	2	A G130M-1 318 image	(1) LBQS-0107-023 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				15.0 Secs [==>]	[1]
	3	A G130M-1 318 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=21 50; FP-POS=1			1800.0 Secs [==>2308.0 Secs ]	[1]
	4	A G130M-1 318 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	A G130M-1 318 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	A G130M-1 318 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
	7	A G130M-1 318 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]



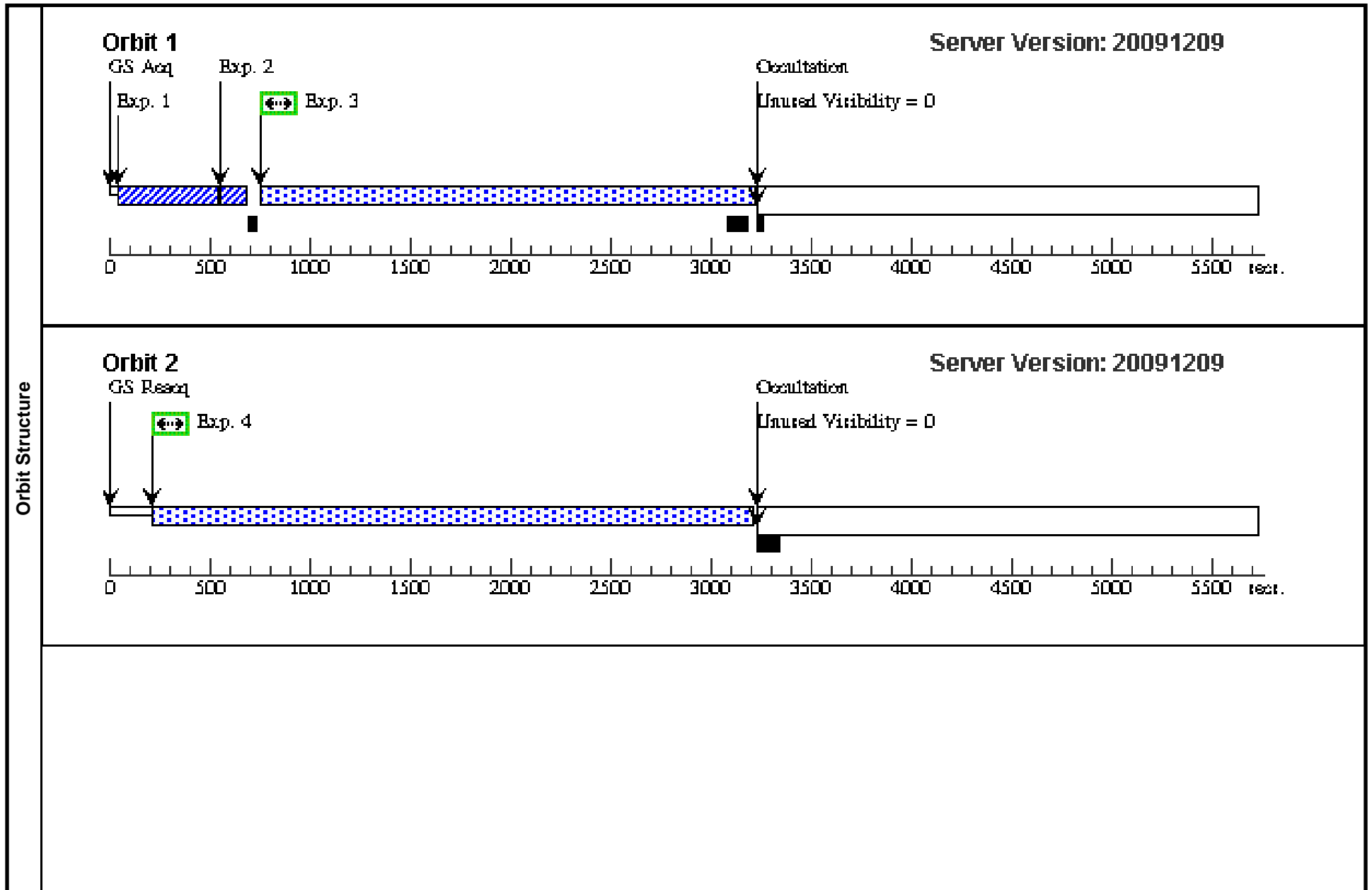




Proposal 11585 - Visit 03 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:25 GMT 2010

Visit	<b>Proposal 11585, Visit 03, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) <i>Comments: A G160M 1589 4orbit 1</i>																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206</td> <td>RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000</td> <td></td> <td>V=17.6+/-0.5 0.7 * 10<sup>(-15)</sup> erg/s/cm<sup>2</sup>/Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates are from GSC2.3.</i>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV	Reference Frame: ICRS																	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit												
	1	A G160M-1 589 search	(1) LBQS-0107-023 5	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			15.0 Secs [==>]	[1]												
	2	A G160M-1 589 image	(1) LBQS-0107-023 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				15.0 Secs [==>]	[1]												
	3	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=21 50; FP-POS=1			1800.0 Secs [==>2263.0 Secs ]	[1]												
	4	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]												
	5	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]												
	6	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]												

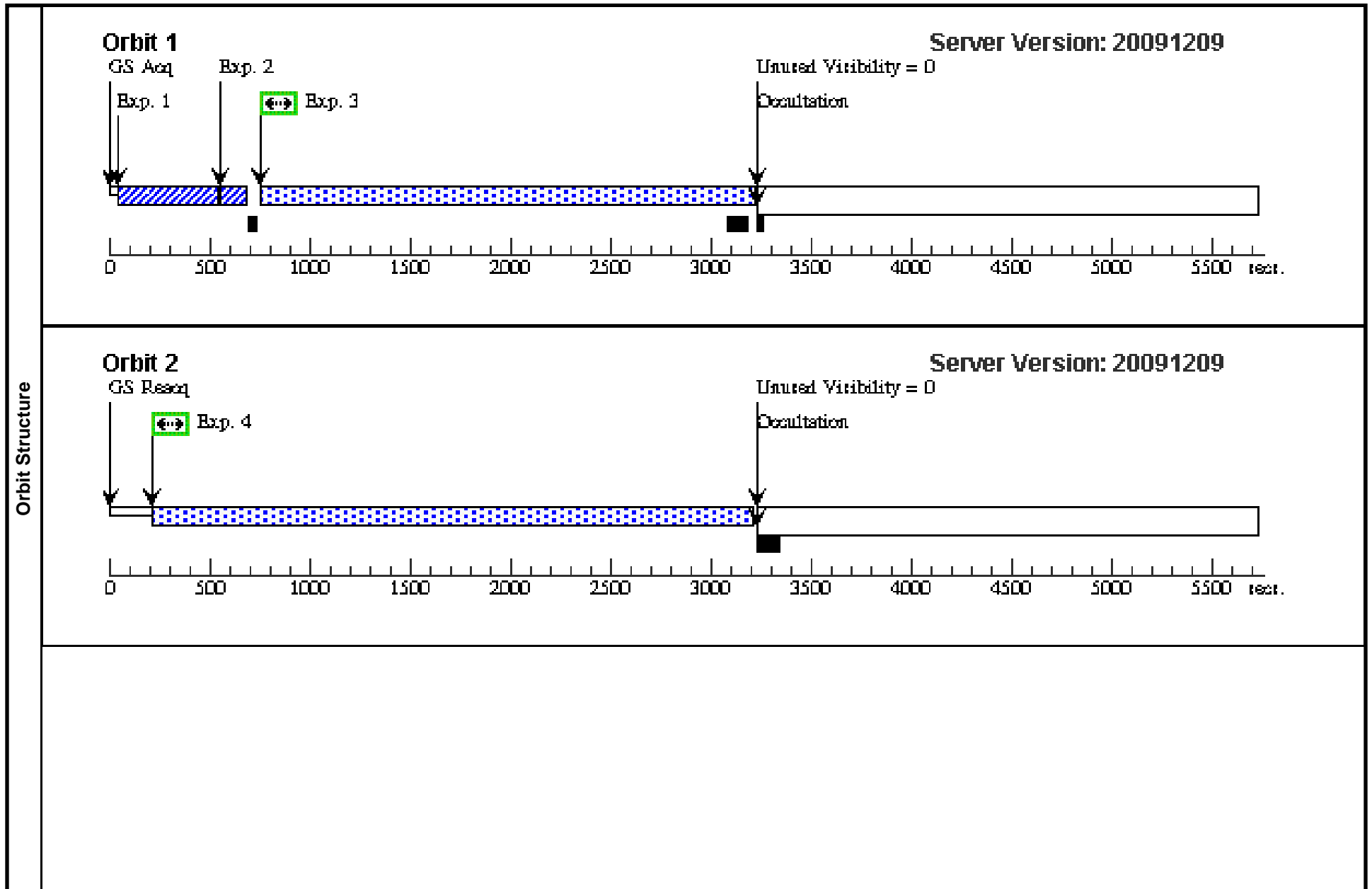


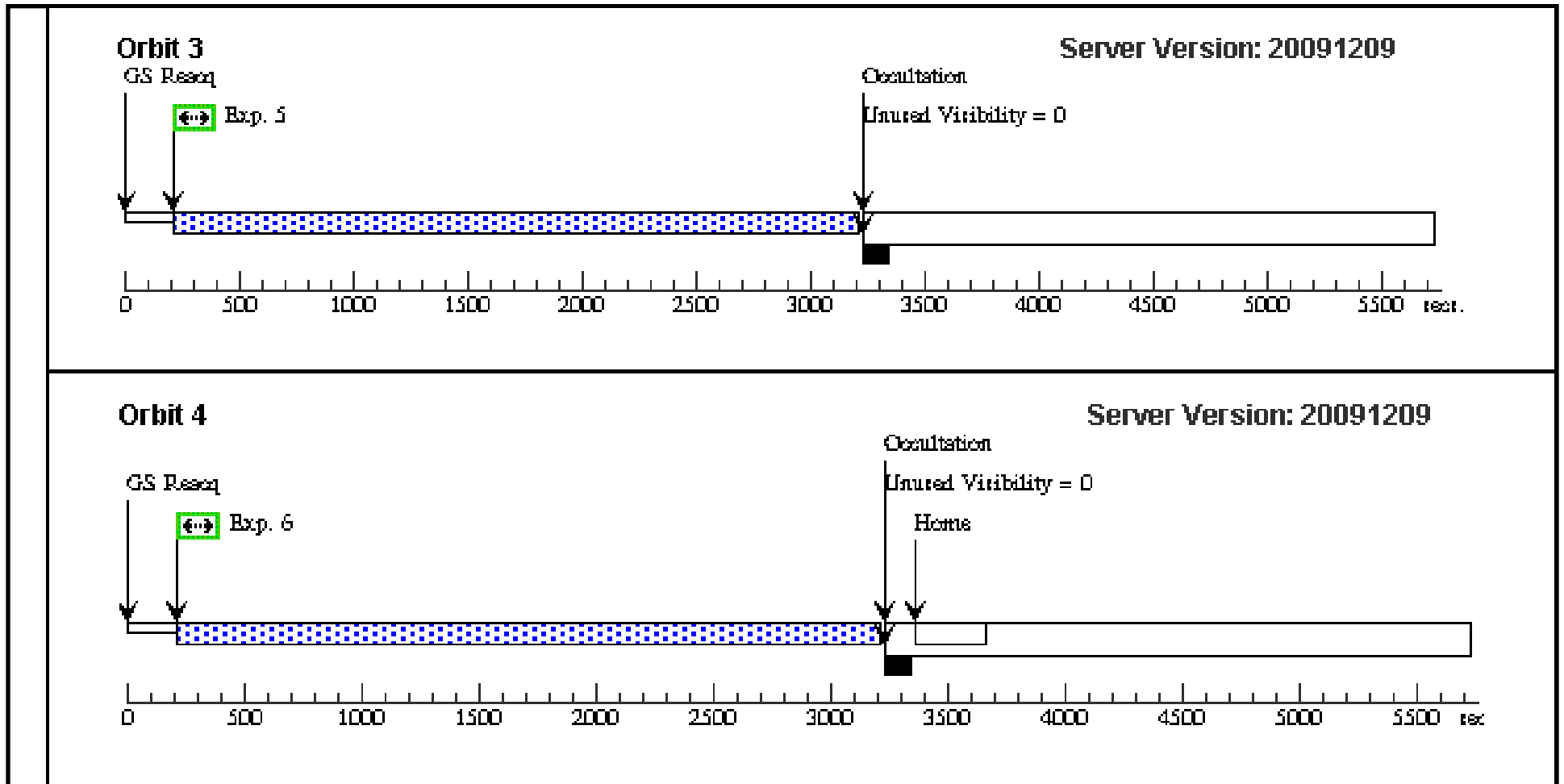


Proposal 11585 - Visit 04 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:26 GMT 2010

Visit	<b>Proposal 11585, Visit 04, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) <i>Comments: A G160M 1589 4orbit II</i>																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206</td> <td>RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000</td> <td></td> <td>V=17.6+/-0.5 0.7 * 10<sup>(-15)</sup> erg/s/cm<sup>2</sup>/Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates are from GSC2.3.</i>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV	Reference Frame: ICRS																	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit												
	1	A G160M-1 589 search	(1) LBQS-0107-023 5	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			15.0 Secs [==>]	[1]												
	2	A G160M-1 589 image	(1) LBQS-0107-023 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				15.0 Secs [==>]	[1]												
	3	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=21 50; FP-POS=1			1800.0 Secs [==>2263.0 Secs ]	[1]												
	4	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]												
	5	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]												
	6	A G160M-1 589 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]												

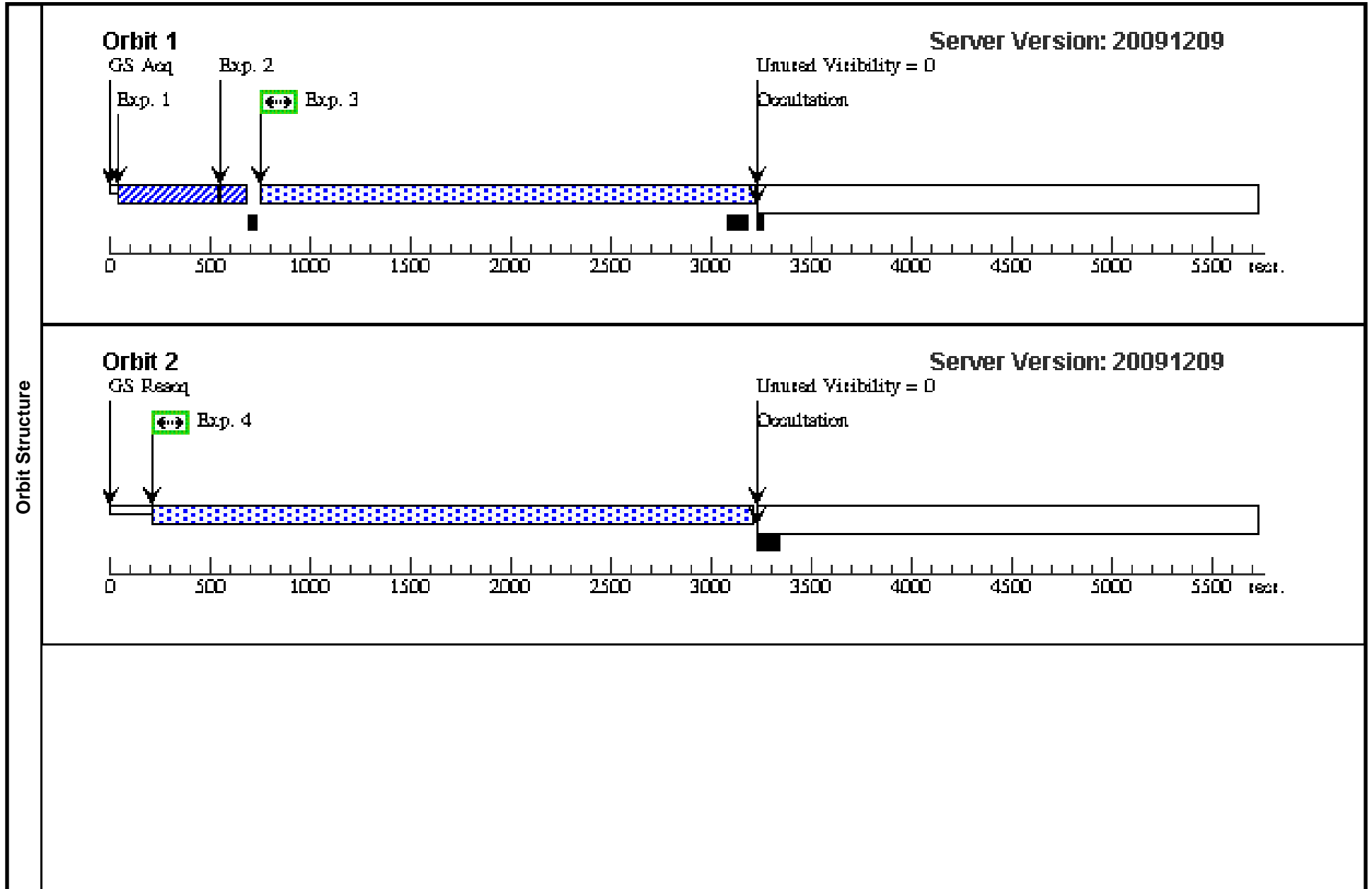


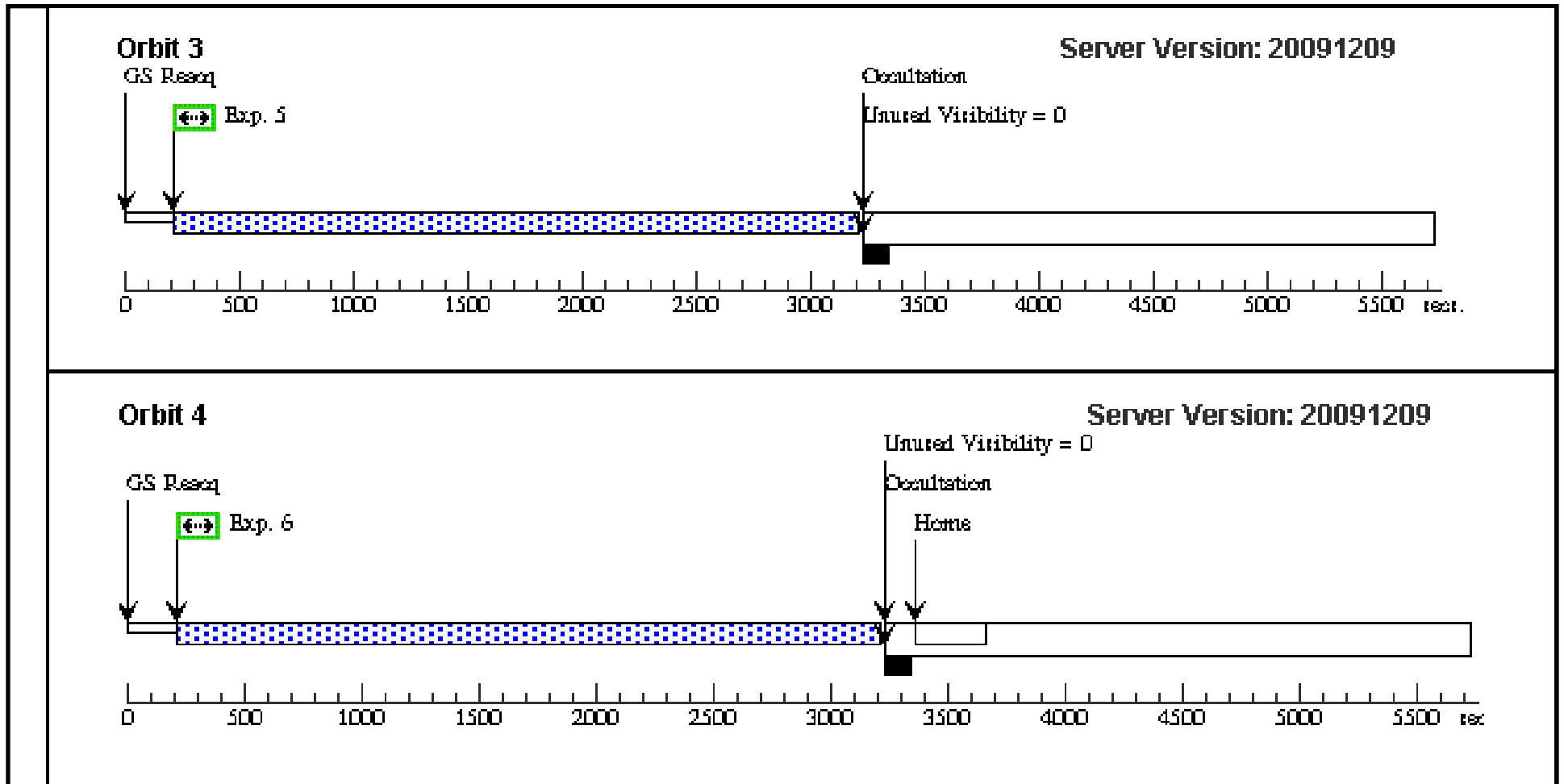


Proposal 11585 - Visit 05 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:27 GMT 2010

Visit	<b>Proposal 11585, Visit 05, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: A G160M 1623 4orbit 1									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates are from GSC2.3.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	A G160M-1 623 search	(1) LBQS-0107-023 5	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			15.0 Secs [==>]	[1]
	2	A G160M-1 623 image	(1) LBQS-0107-023 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				15.0 Secs [==>]	[1]
	3	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21 50; FP-POS=1			1800.0 Secs [==>2263.0 Secs ]	[1]
	4	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]

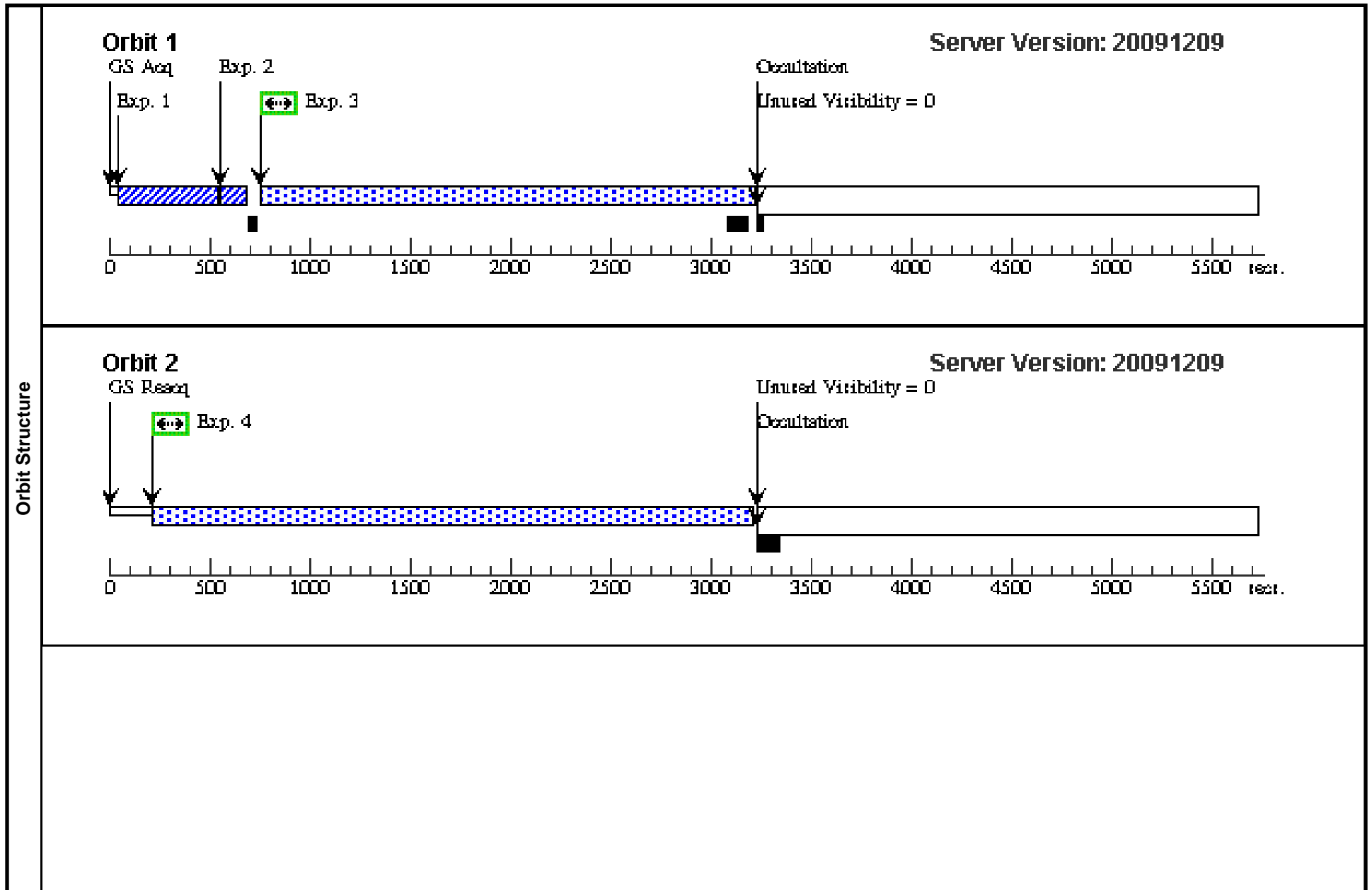


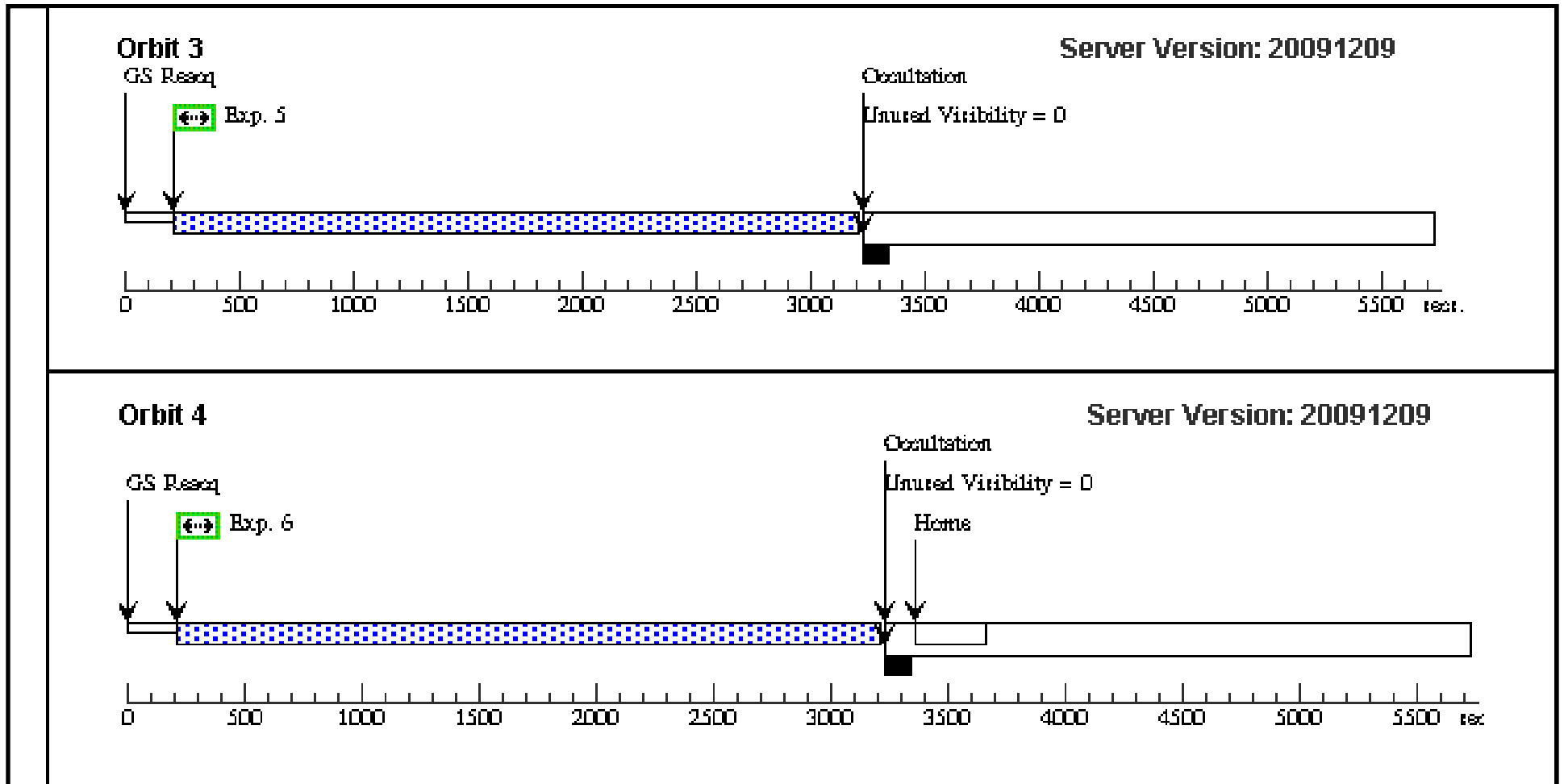


Proposal 11585 - Visit 06 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:27 GMT 2010

Visit	<b>Proposal 11585, Visit 06, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) <i>Comments: A G160M 1623 4orbit II</i>									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	LBQS-0107-0235 Alt Name1: LBQS-0107-025A Alt Name2: S03W004206	RA: 01 10 13.1400 (17.5547500d) Dec: -02 19 52.90 (-2.33136d) Equinox: J2000		V=17.6+/-0.5 0.7 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 210/64 microjans in NUV/FUV	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates are from GSC2.3.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	A G160M-1 623 search	(1) LBQS-0107-023 5	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			15.0 Secs [==>]	[1]
	2	A G160M-1 623 image	(1) LBQS-0107-023 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				15.0 Secs [==>]	[1]
	3	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21 50; FP-POS=1			1800.0 Secs [==>2263.0 Secs ]	[1]
	4	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	A G160M-1 623 science	(1) LBQS-0107-023 5	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]

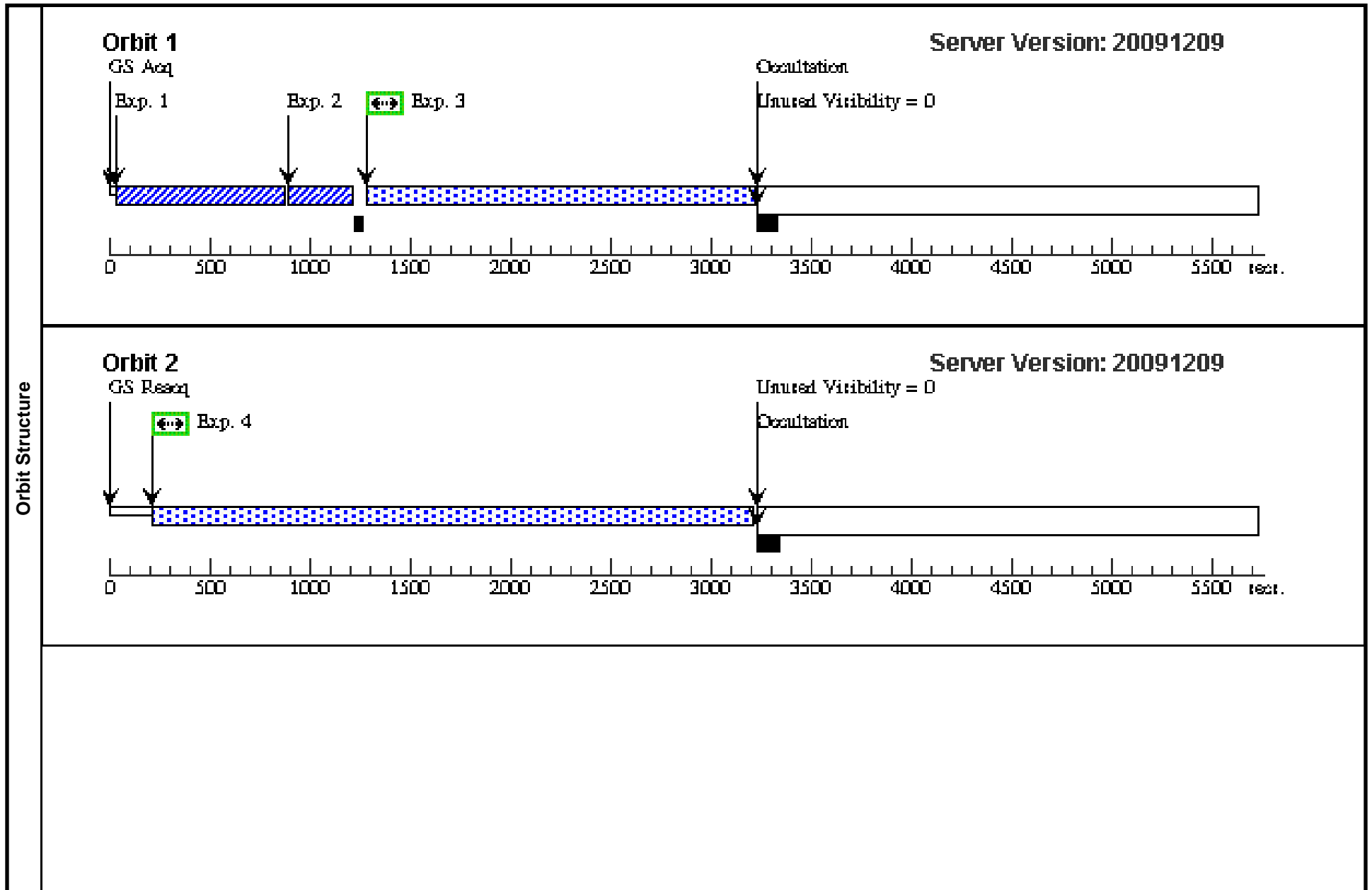


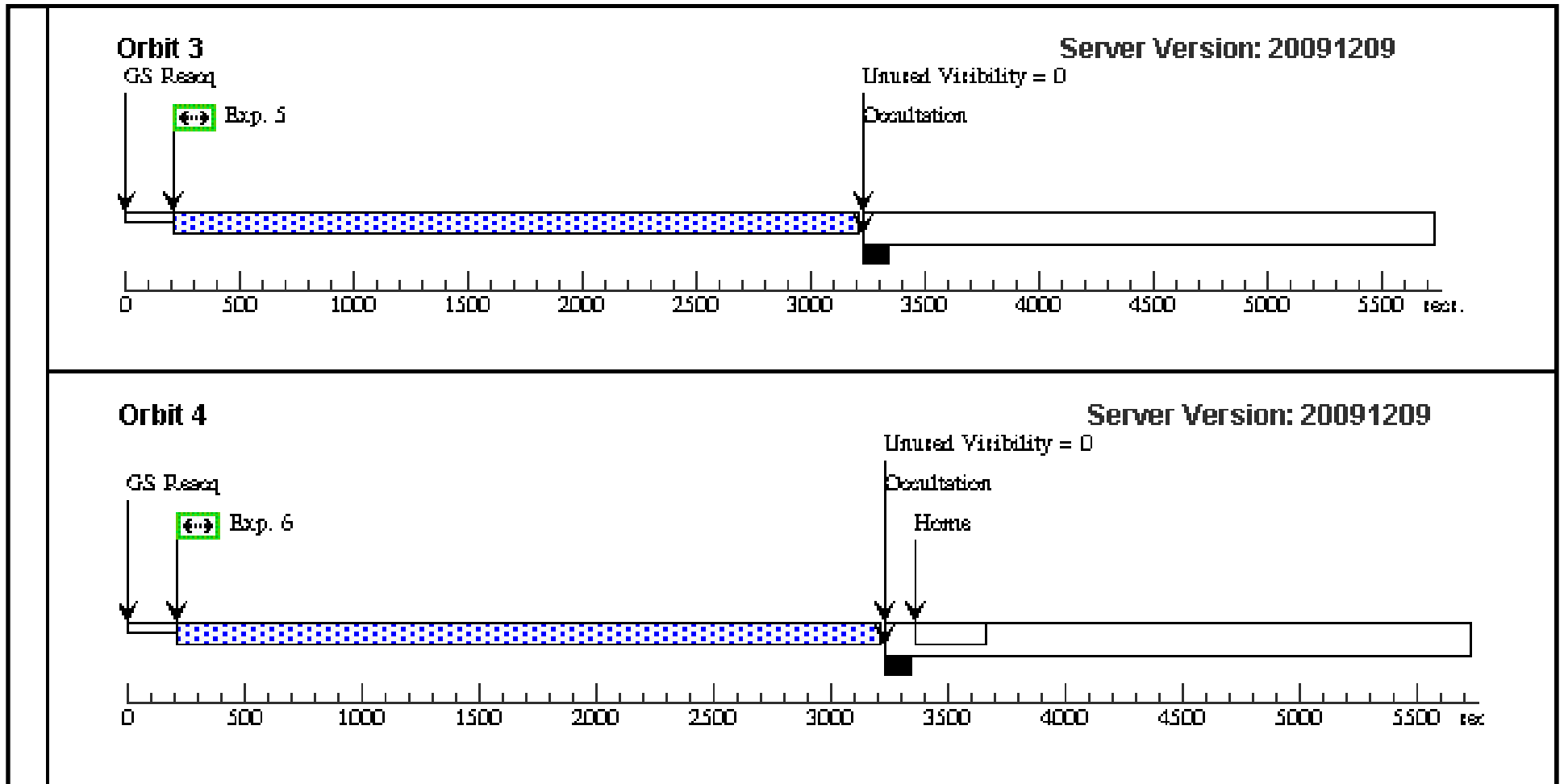


Proposal 11585 - Visit 07 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:28 GMT 2010

Visit	<b>Proposal 11585, Visit 07, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: <i>B G130M 1291 4orbit</i>																																																																															
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295</td> <td>RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000</td> <td></td> <td>V=17.4+/-0.5 1.0 * 10<sup>(-15)</sup> erg/s/cm<sup>2</sup>/Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: <i>This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3</i>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS																																																									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																																											
(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS																																																																											
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B G130M-1 291 search</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/NUV, ACQ/SEARCH, PSA</td> <td>MIRRORB</td> <td>SCAN-SIZE=2</td> <td></td> <td></td> <td>100.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>B G130M-1 291 image</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>100.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>B G130M-1 291 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=1800; FP-POS=1</td> <td></td> <td></td> <td>1775.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td>B G130M-1 291 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=2900; FP-POS=2</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[2]</td> </tr> <tr> <td>5</td> <td>B G130M-1 291 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=2900; FP-POS=3</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[3]</td> </tr> <tr> <td>6</td> <td>B G130M-1 291 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=2900; FP-POS=4</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[4]</td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1	B G130M-1 291 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]	2	B G130M-1 291 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]	3	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=1800; FP-POS=1			1775.0 Secs [==>]	[1]	4	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]	5	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]	6	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit																																																																							
1	B G130M-1 291 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]																																																																							
2	B G130M-1 291 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]																																																																							
3	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=1800; FP-POS=1			1775.0 Secs [==>]	[1]																																																																							
4	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]																																																																							
5	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]																																																																							
6	B G130M-1 291 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]																																																																							

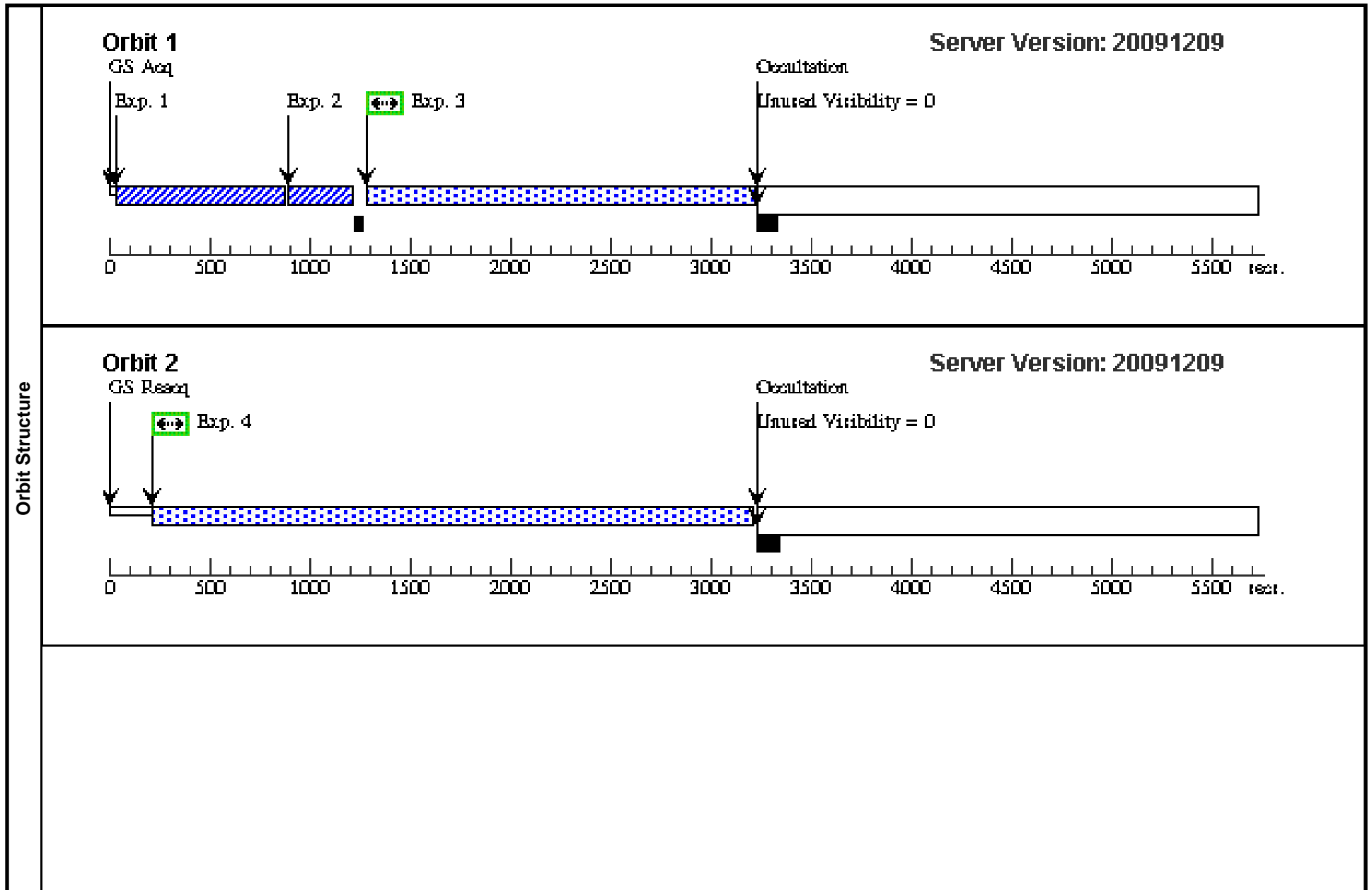


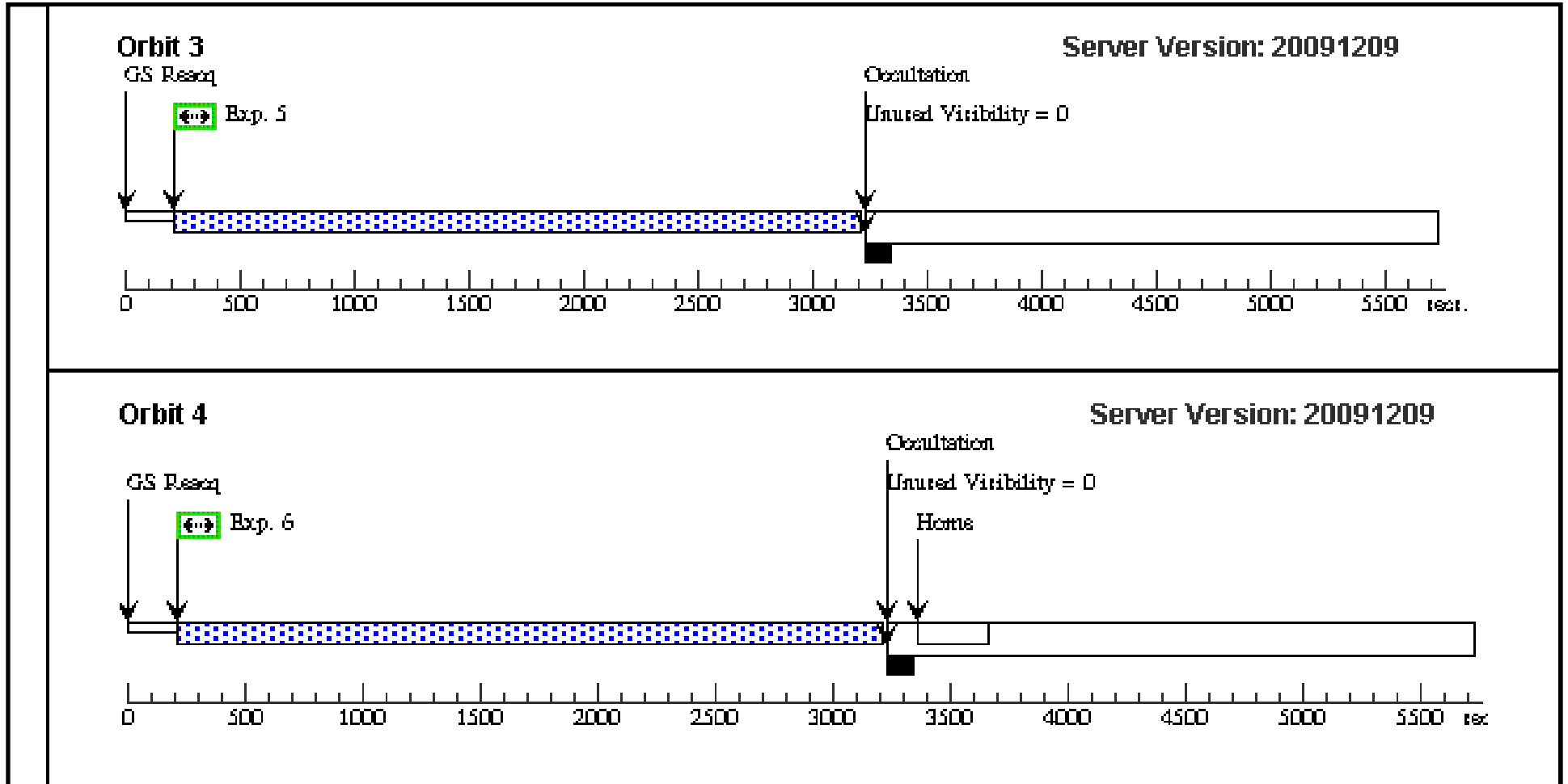


Proposal 11585 - Visit 08 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:28 GMT 2010

Visit	<b>Proposal 11585, Visit 08, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: <i>B G130M 1318 4orbit</i>																																																																															
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295</td> <td>RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000</td> <td></td> <td>V=17.4+/-0.5 1.0 * 10<sup>(-15)</sup> erg/s/cm<sup>2</sup>/Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: <i>This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3</i>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS																																																									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																																											
(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS																																																																											
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B G130M-1 318 search</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/NUV, ACQ/SEARCH, PSA</td> <td>MIRRORB</td> <td>SCAN-SIZE=2</td> <td></td> <td></td> <td>100.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>B G130M-1 318 image</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>100.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>B G130M-1 318 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1318 A</td> <td>BUFFER-TIME=1800; FP-POS=1</td> <td></td> <td></td> <td>1775.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td>B G130M-1 318 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1318 A</td> <td>BUFFER-TIME=2900; FP-POS=2</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[2]</td> </tr> <tr> <td>5</td> <td>B G130M-1 318 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1318 A</td> <td>BUFFER-TIME=2900; FP-POS=3</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[3]</td> </tr> <tr> <td>6</td> <td>B G130M-1 318 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1318 A</td> <td>BUFFER-TIME=2900; FP-POS=4</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[4]</td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1	B G130M-1 318 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]	2	B G130M-1 318 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]	3	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=1800; FP-POS=1			1775.0 Secs [==>]	[1]	4	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]	5	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]	6	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit																																																																							
1	B G130M-1 318 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]																																																																							
2	B G130M-1 318 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]																																																																							
3	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=1800; FP-POS=1			1775.0 Secs [==>]	[1]																																																																							
4	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]																																																																							
5	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]																																																																							
6	B G130M-1 318 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]																																																																							

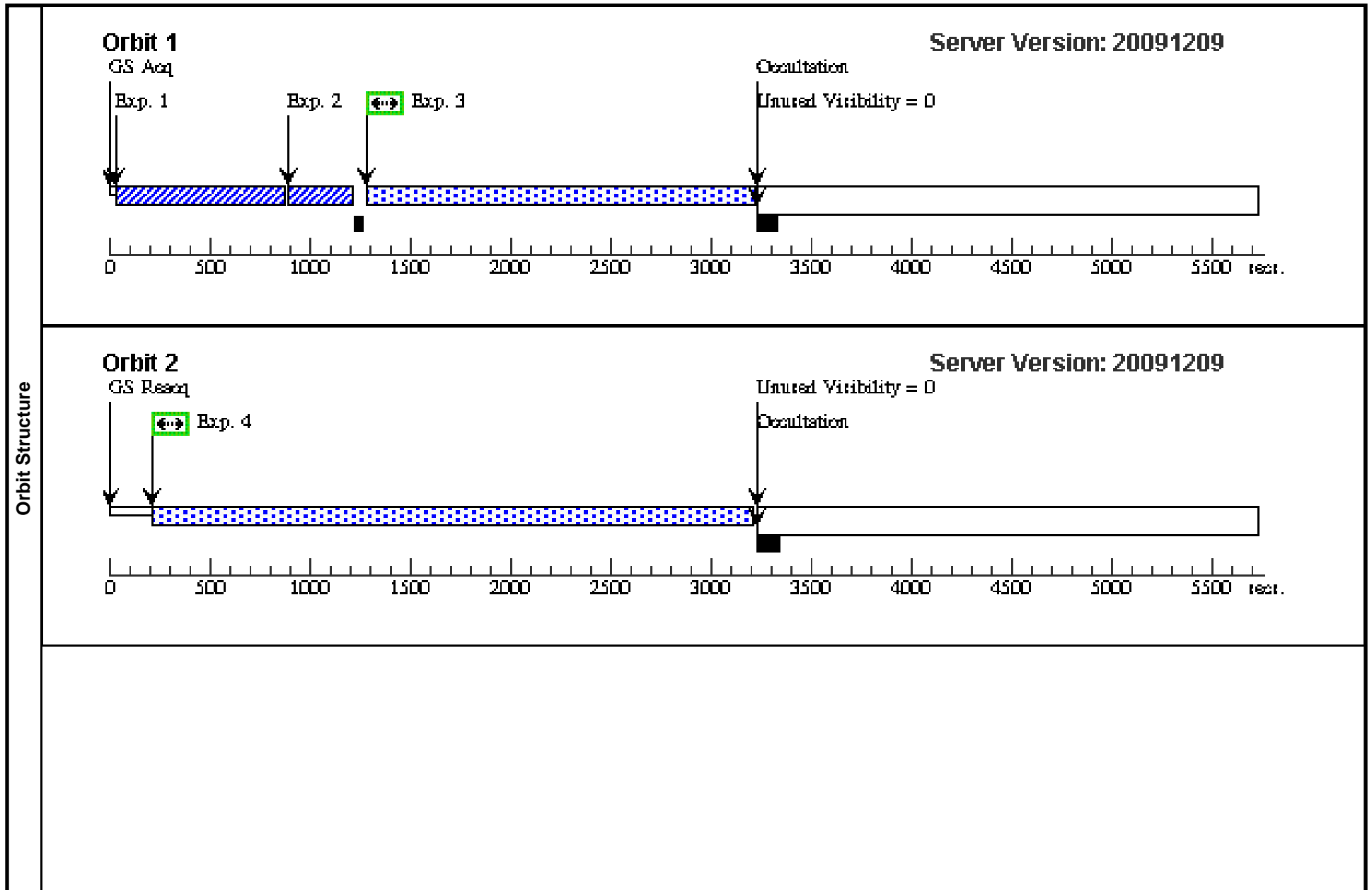


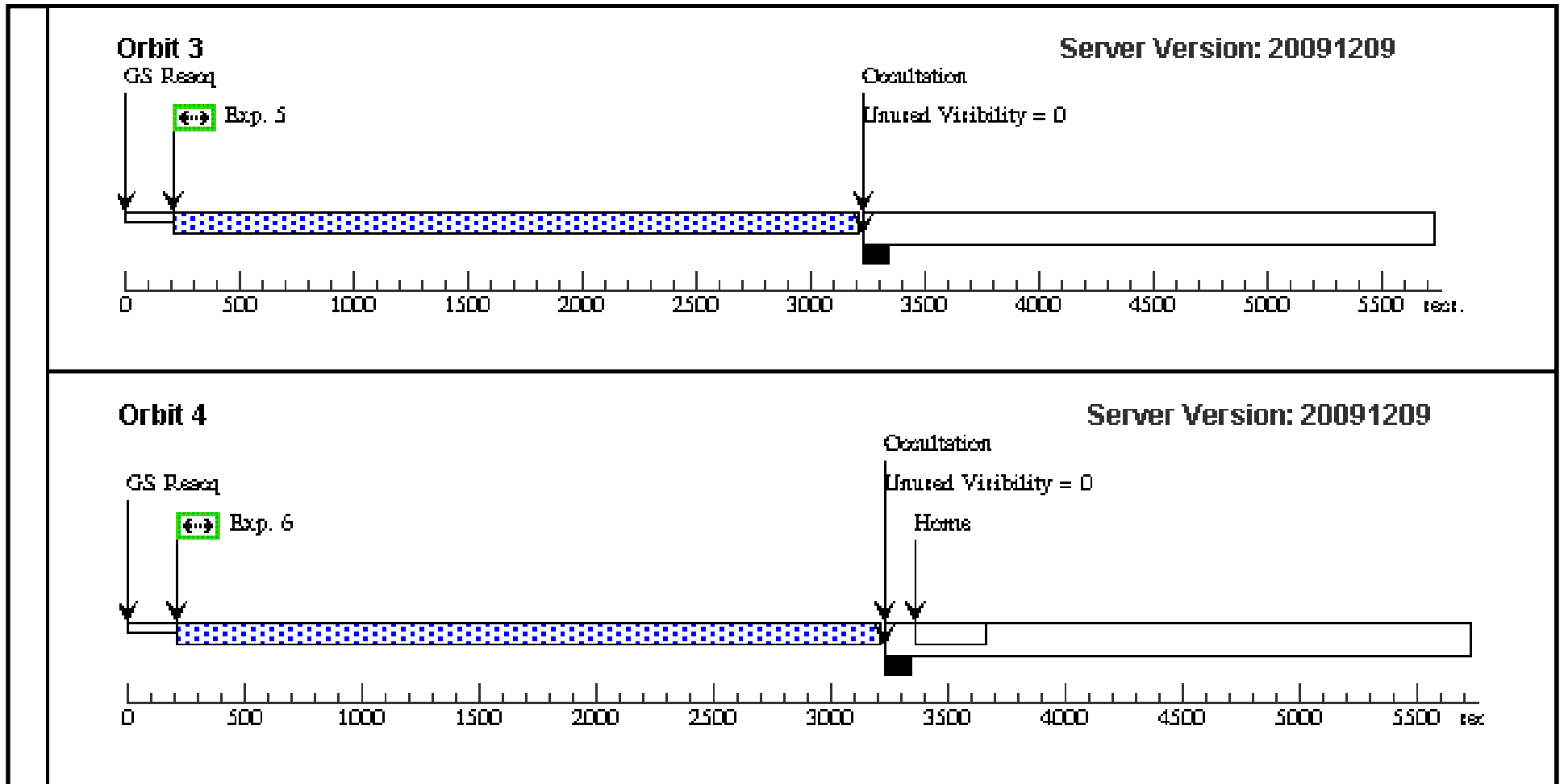


Proposal 11585 - Visit 09 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:29 GMT 2010

Visit	<b>Proposal 11585, Visit 09, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) <i>Comments: B G160M 1589 4orbit</i>																																																																															
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295</td> <td>RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000</td> <td></td> <td>V=17.4+/-0.5 1.0 * 10<sup>(-15)</sup> erg/s/cm<sup>2</sup>/Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"><i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3</i></td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3</i>																																																								
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																																											
(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS																																																																											
<i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3</i>																																																																																
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B G160M-1 589 search</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/NUV, ACQ/SEARCH, PSA</td> <td>MIRRORB</td> <td>SCAN-SIZE=2</td> <td></td> <td></td> <td>100.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>B G160M-1 589 image</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>100.0 Secs [==&gt;]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>B G160M-1 589 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G160M 1589 A</td> <td>BUFFER-TIME=1755; FP-POS=1</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;1730.0 Secs ]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td>B G160M-1 589 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G160M 1589 A</td> <td>BUFFER-TIME=2900; FP-POS=2</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[2]</td> </tr> <tr> <td>5</td> <td>B G160M-1 589 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G160M 1589 A</td> <td>BUFFER-TIME=2900; FP-POS=3</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[3]</td> </tr> <tr> <td>6</td> <td>B G160M-1 589 science</td> <td>(2) HB89-0107-025-NED05</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G160M 1589 A</td> <td>BUFFER-TIME=2900; FP-POS=4</td> <td></td> <td></td> <td>1800.0 Secs [==&gt;2948.0 Secs ]</td> <td>[4]</td> </tr> </tbody> </table>										#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	1	B G160M-1 589 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]	2	B G160M-1 589 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]	3	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=1755; FP-POS=1			1800.0 Secs [==>1730.0 Secs ]	[1]	4	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]	5	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]	6	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit																																																																							
1	B G160M-1 589 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]																																																																							
2	B G160M-1 589 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]																																																																							
3	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=1755; FP-POS=1			1800.0 Secs [==>1730.0 Secs ]	[1]																																																																							
4	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]																																																																							
5	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]																																																																							
6	B G160M-1 589 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]																																																																							

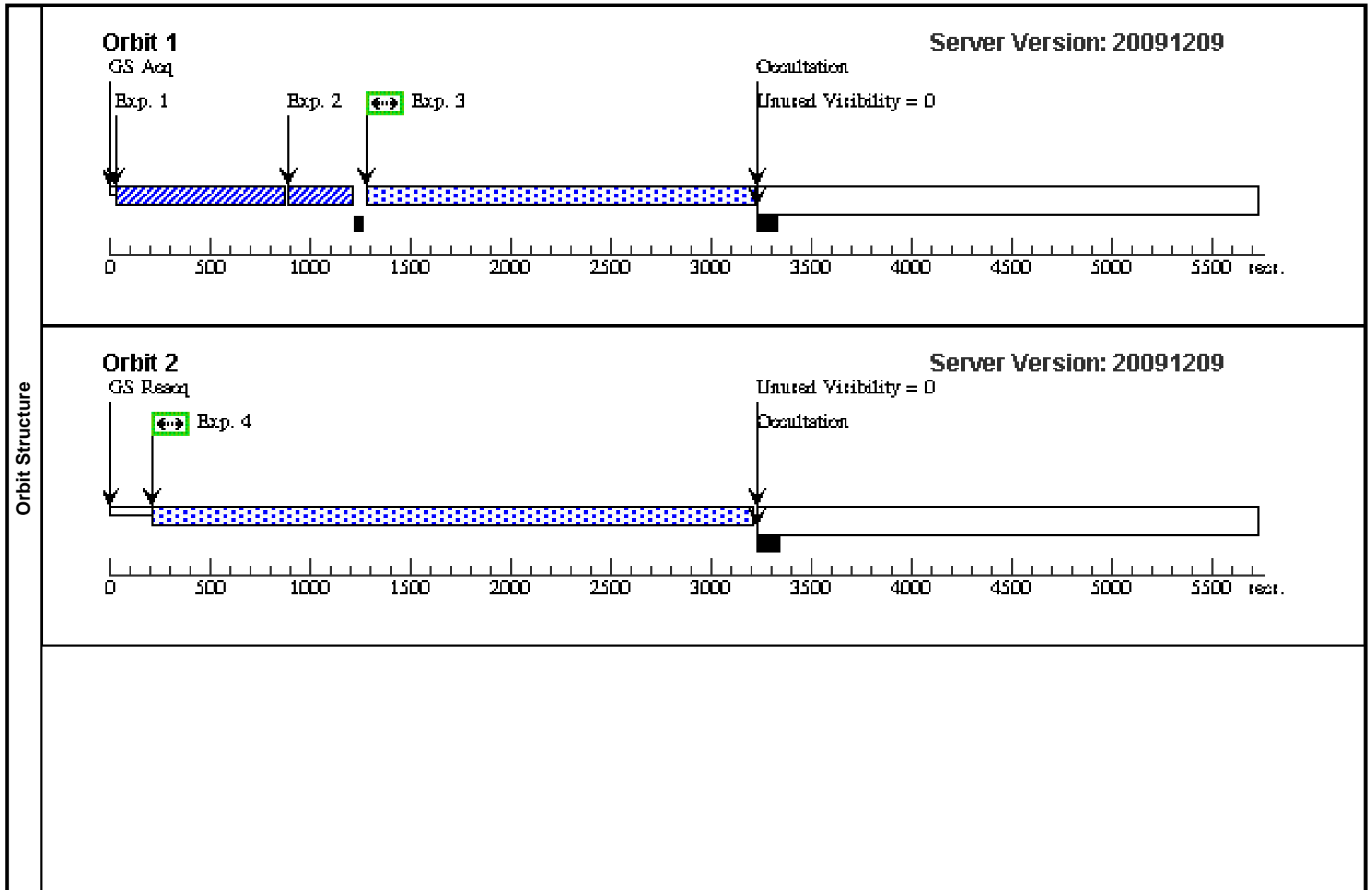


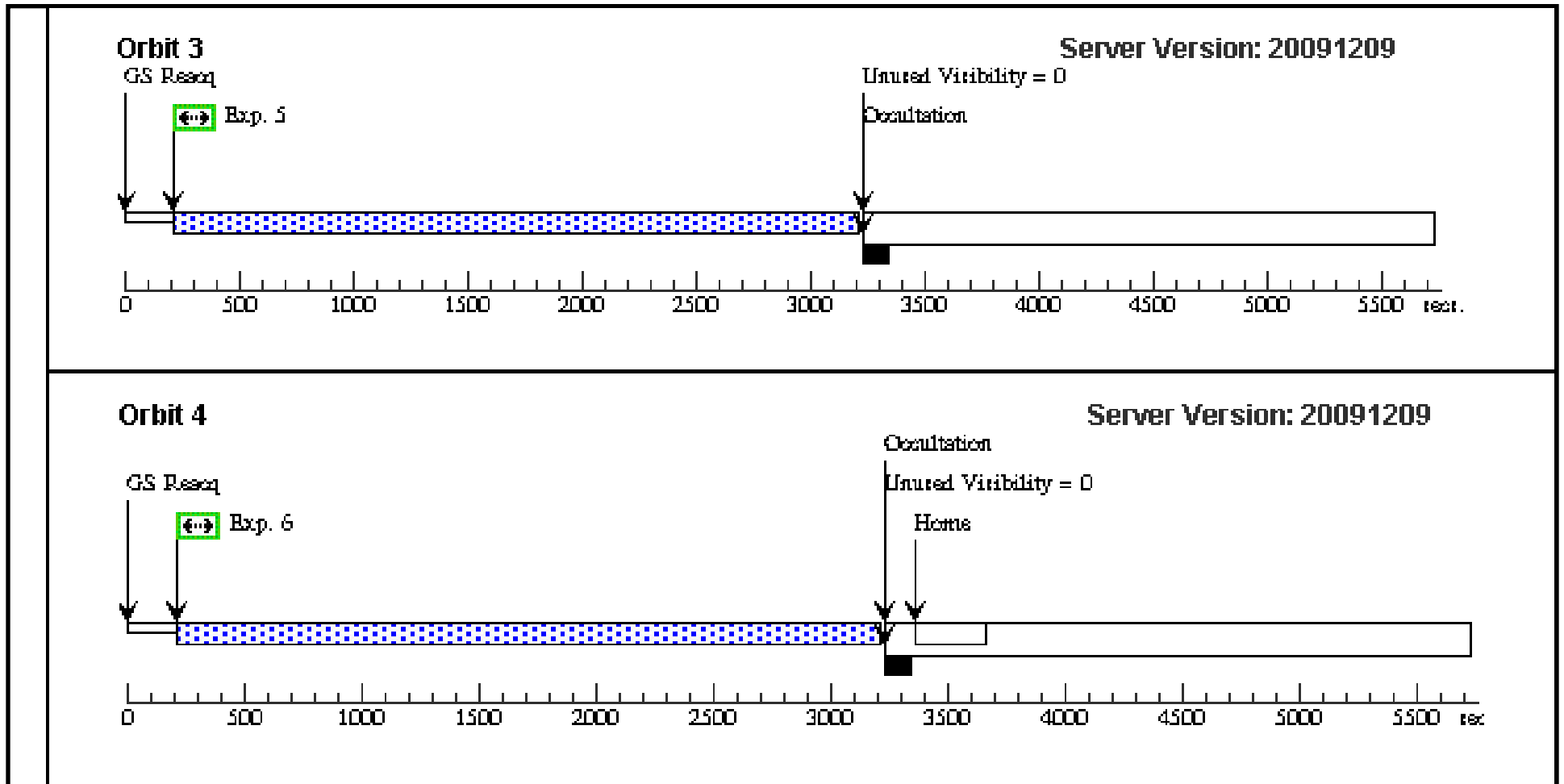


Proposal 11585 - Visit 10 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:30 GMT 2010

Visit	<b>Proposal 11585, Visit 10, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: <i>B G160M 1623 4orbit</i>									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	HB89-0107-025-NED05 Alt Name1: LBQS-0107-025B Alt Name2: S03W004295	RA: 01 10 16.2500 (17.5677083d) Dec: -02 18 51.00 (-2.31417d) Equinox: J2000		V=17.4+/-0.5 1.0 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1400 Angstroms, GALEX fluxes: 357/148 microjanskies in NUV/FUV	Reference Frame: ICRS				
	Comments: <i>This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	B G160M-1 623 search	(2) HB89-0107-025-NED05	COS/NUV, ACQ/SEARCH, PSA	MIRRORB	SCAN-SIZE=2			100.0 Secs [==>]	[1]
	2	B G160M-1 623 image	(2) HB89-0107-025-NED05	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				100.0 Secs [==>]	[1]
	3	B G160M-1 623 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=1755; FP-POS=1			1800.0 Secs [==>1730.0 Secs ]	[1]
	4	B G160M-1 623 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=2900; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	B G160M-1 623 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=2900; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	B G160M-1 623 science	(2) HB89-0107-025-NED05	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=2900; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]

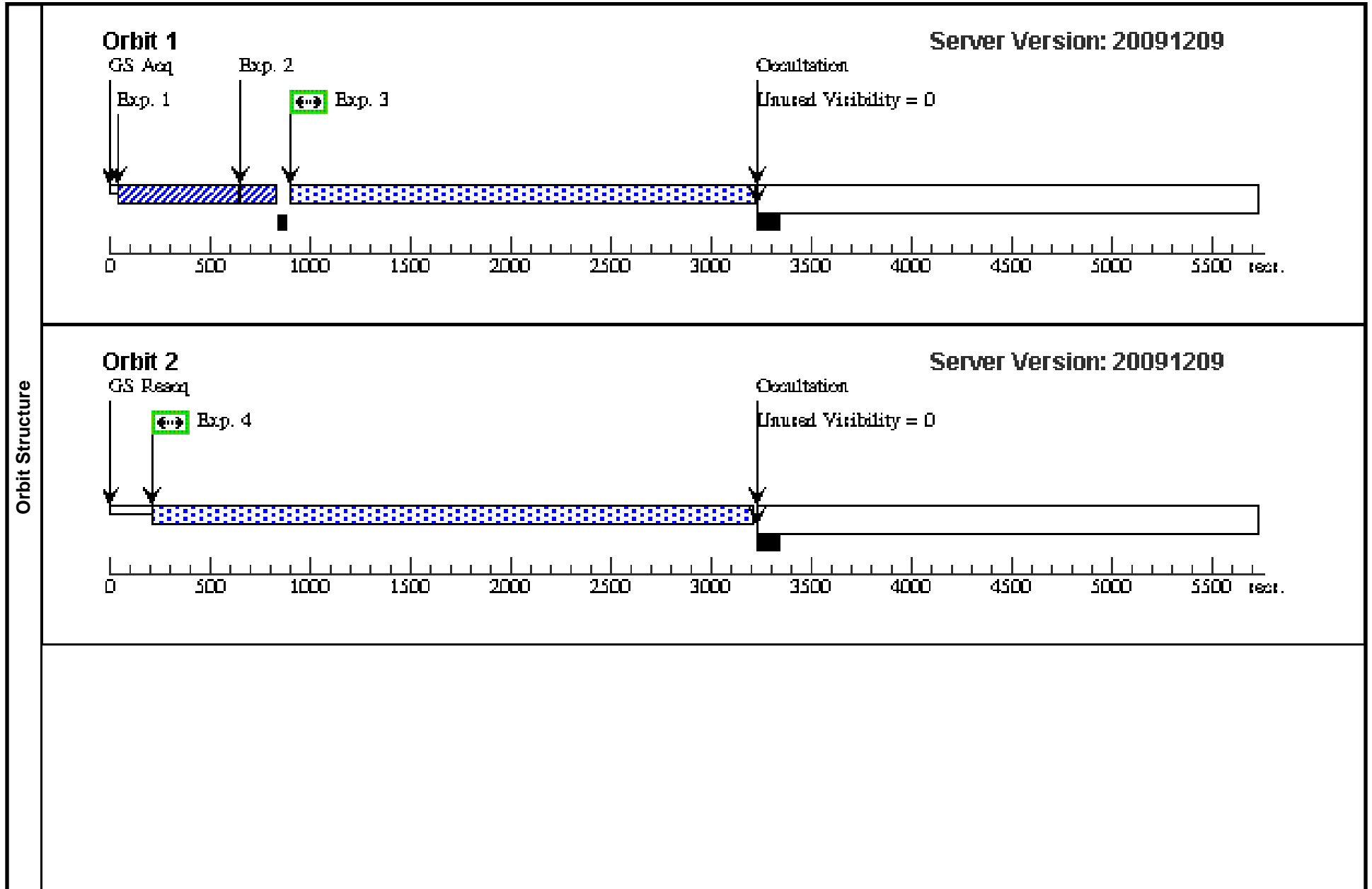


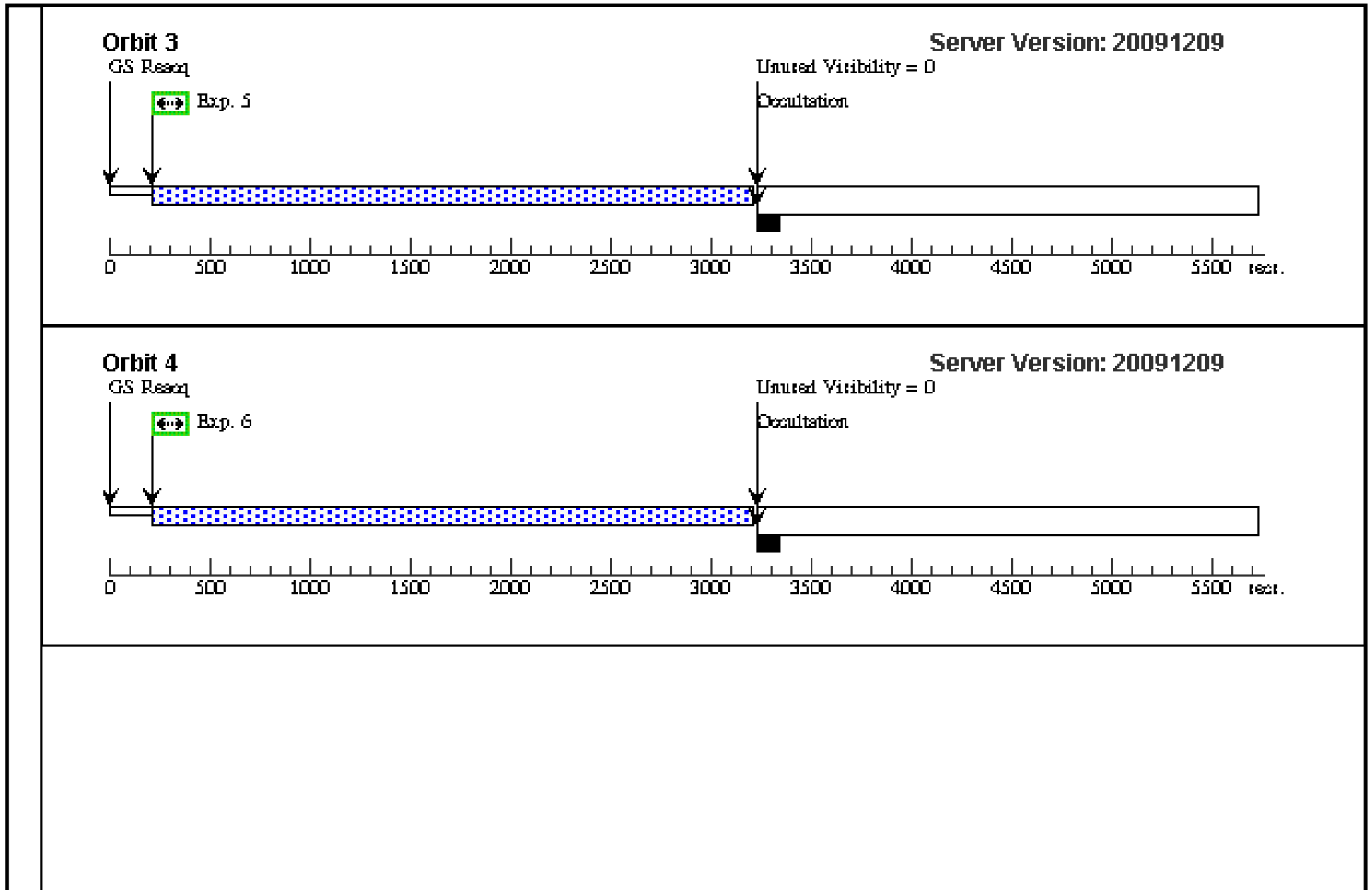


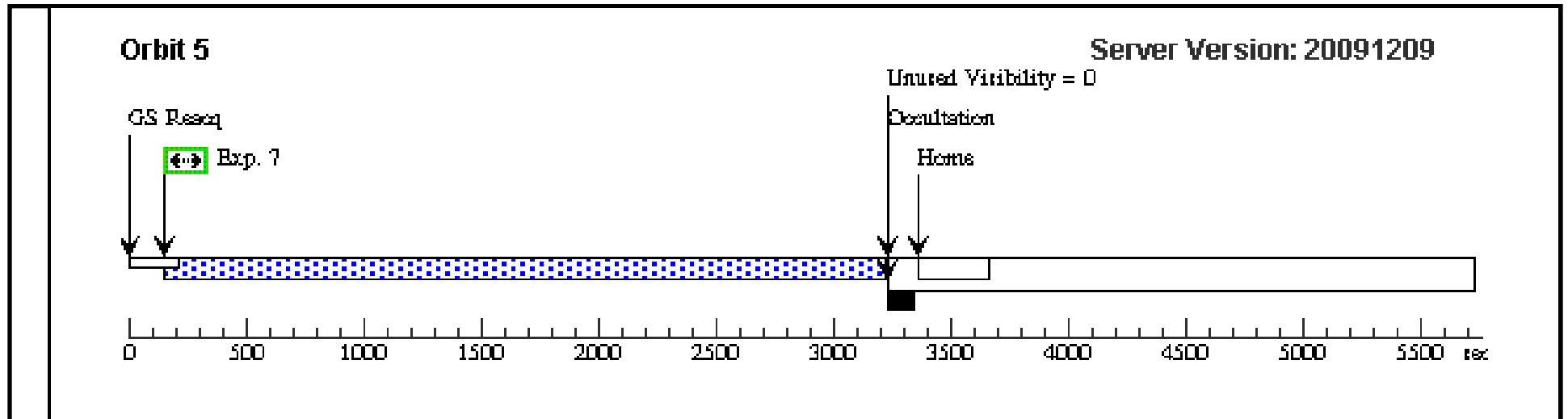
Proposal 11585 - Visit 11 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:30 GMT 2010

Visit	Proposal 11585, Visit 11, implementation									
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV, COS/FUV									
	Special Requirements: (none)									
	<i>Comments: C G160M 1589 5orbit 1</i>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	LBQS-0107-0232 Alt Name1: S03P002795	RA: 01 10 14.4300 (17.5601250d) Dec: -02 16 57.60 (-2.28267d) Equinox: J2000		V=18.4+/-0.5 0.3 * 10 <sup>(-15)</sup> erg/s/cm2/Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C G160M-1 589 search	(3) LBQS-0107-023 2	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			40.0 Secs [==>]	[1]
	2	C G160M-1 589 image	(3) LBQS-0107-023 2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				40.0 Secs [==>]	[1]
	3	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=21 10; FP-POS=1			1800.0 Secs [==>2113.0 Secs ]	[1]
	4	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
	7	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]



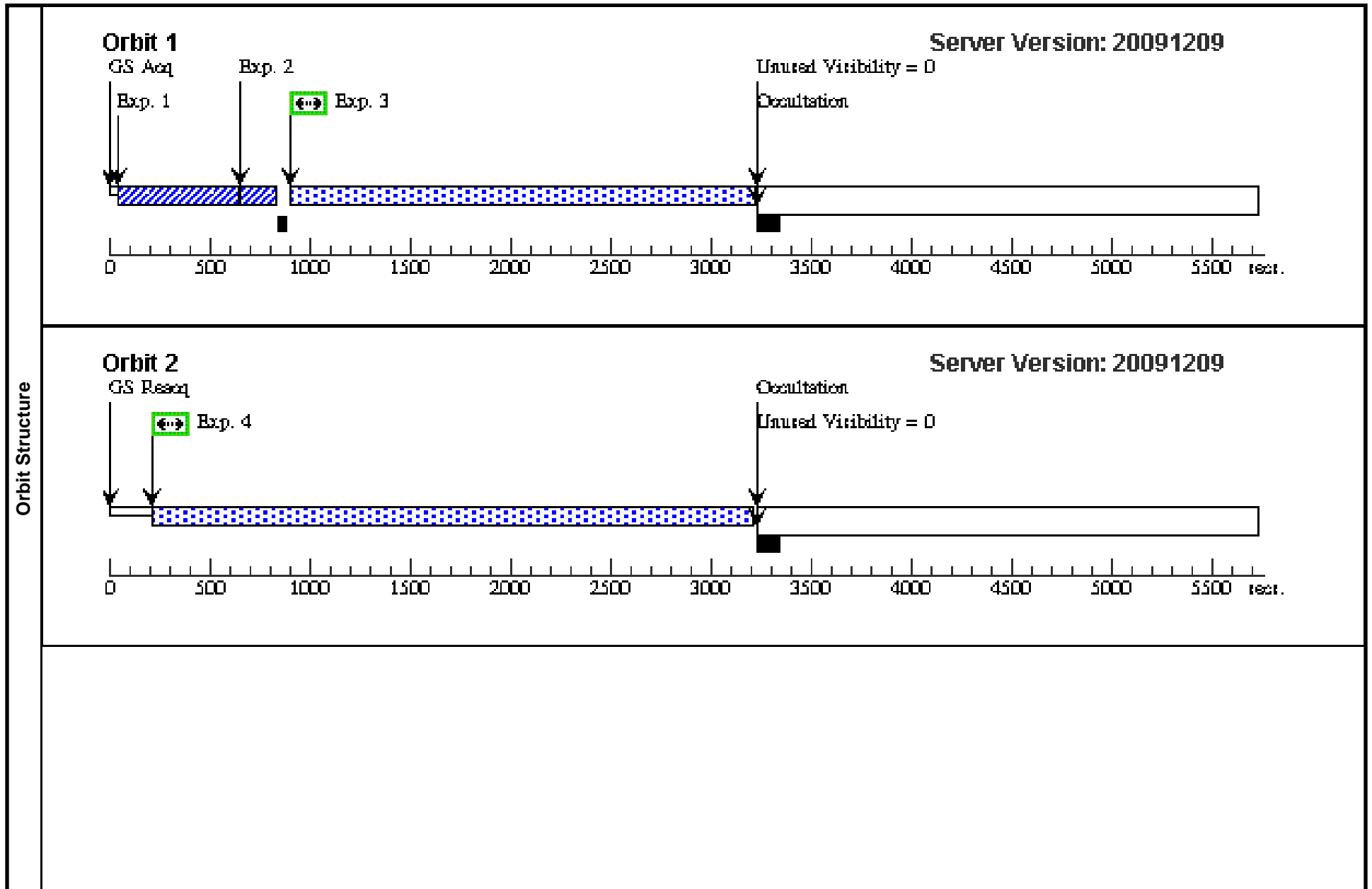


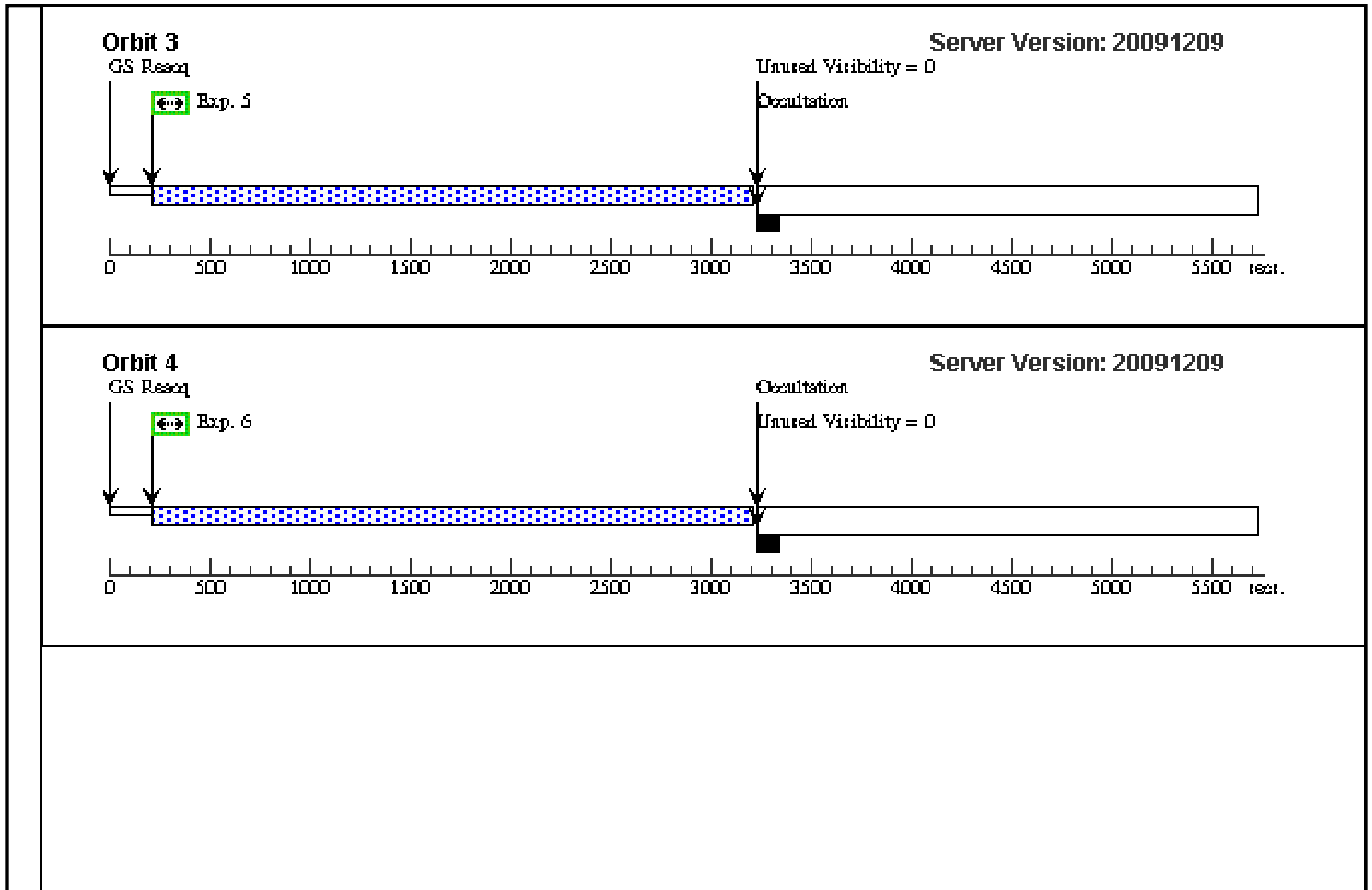


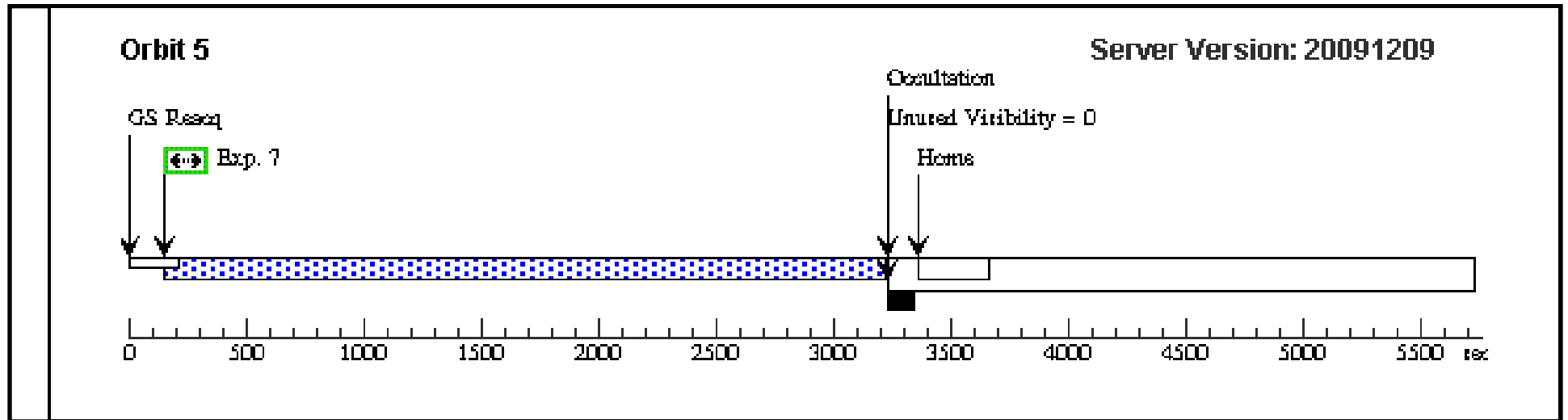
Proposal 11585 - Visit 12 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:31 GMT 2010

Visit	Proposal 11585, Visit 12, implementation									
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV, COS/FUV									
	Special Requirements: (none)									
	<i>Comments: C G160M 1589 5orbit II</i>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	LBQS-0107-0232 Alt Name1: S03P002795	RA: 01 10 14.4300 (17.5601250d) Dec: -02 16 57.60 (-2.28267d) Equinox: J2000		V=18.4+/-0.5 0.3 * 10 <sup>-15</sup> erg/s/cm <sup>2</sup> /Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C G160M-1 589 search	(3) LBQS-0107-023 2	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			40.0 Secs [==>]	[1]
	2	C G160M-1 589 image	(3) LBQS-0107-023 2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				40.0 Secs [==>]	[1]
	3	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=21 10; FP-POS=1			1800.0 Secs [==>2113.0 Secs ]	[1]
	4	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
	7	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]



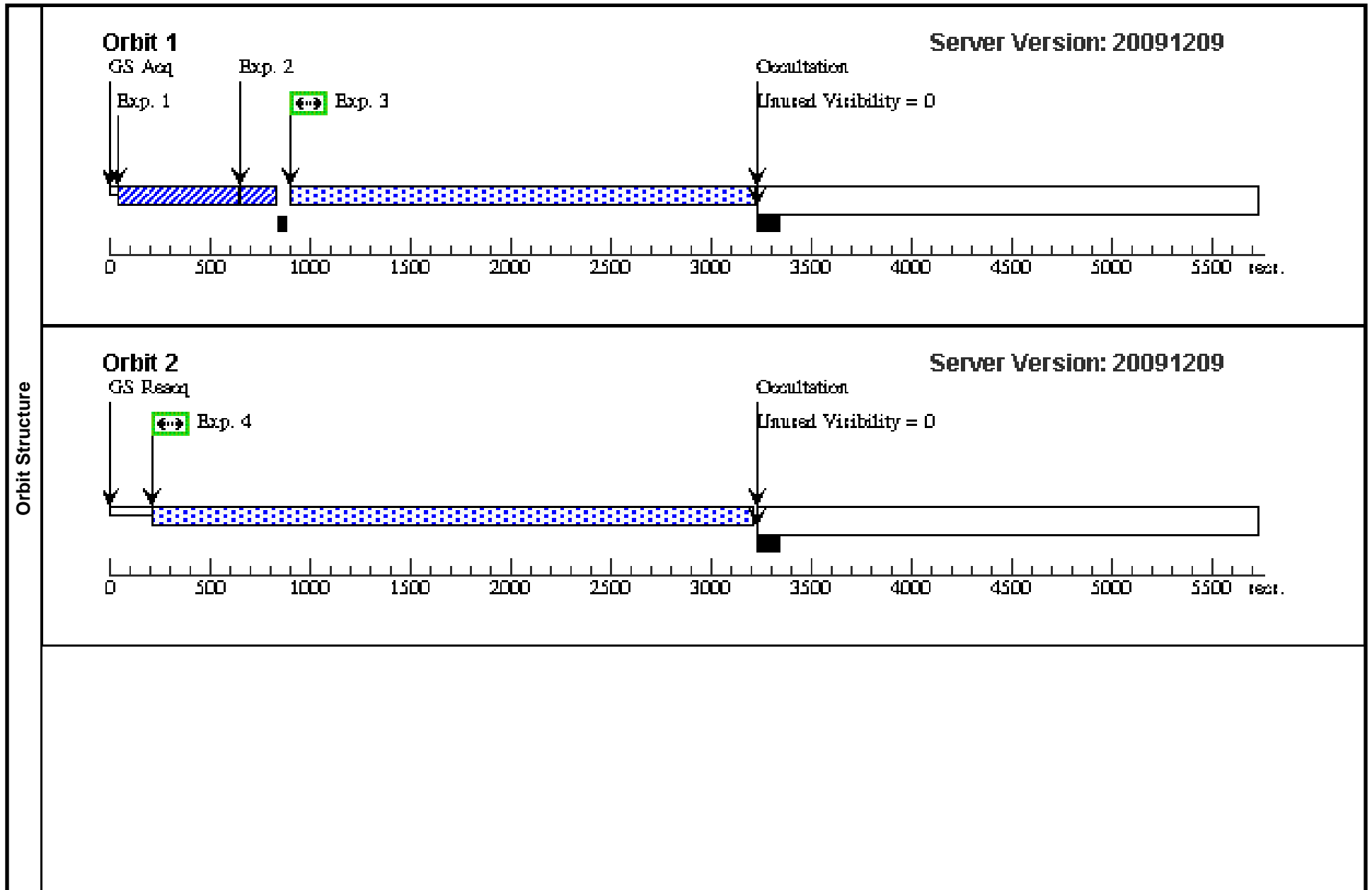


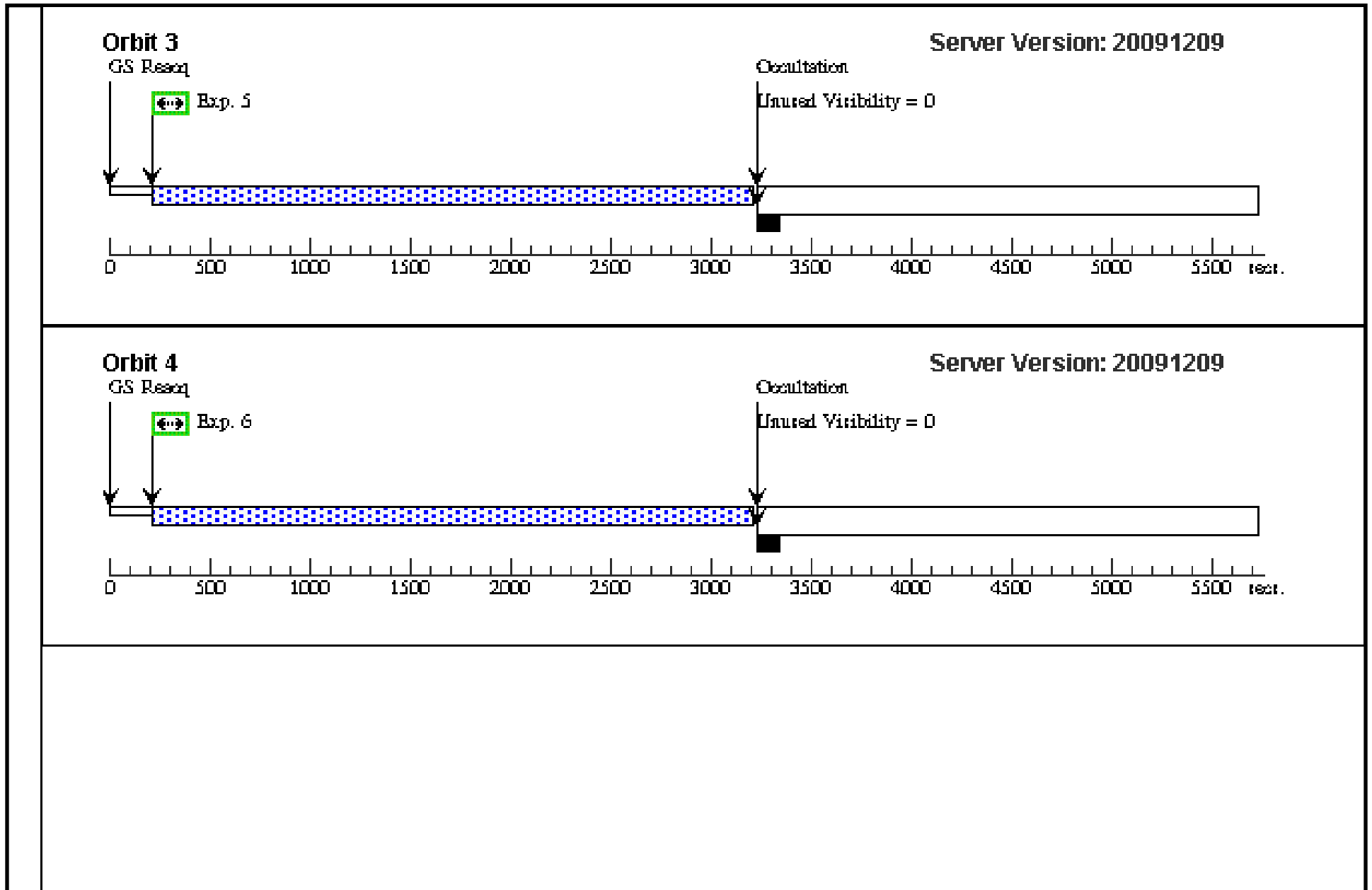


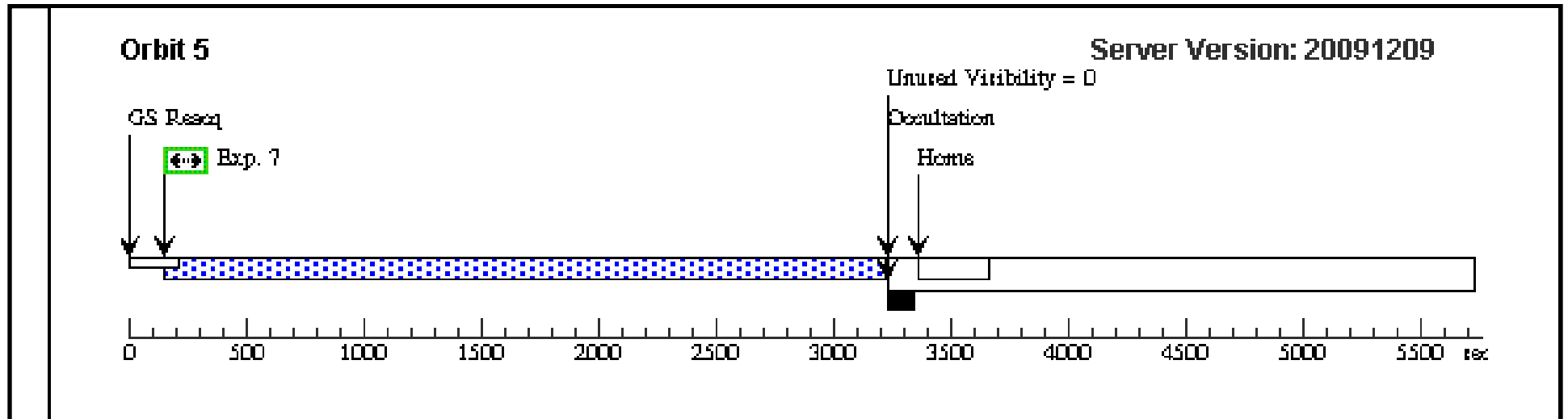
Proposal 11585 - Visit 13 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:31 GMT 2010

Visit	<b>Proposal 11585, Visit 13, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: C G160M 1589 5orbit III																								
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(3)</td> <td>LBQS-0107-0232</td> <td>RA: 01 10 14.4300 (17.5601250d)</td> <td></td> <td>V=18.4+/-0.5</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: S03P002795</td> <td>Dec: -02 16 57.60 (-2.28267d)</td> <td></td> <td>0.3 * 10<sup>(-15)</sup> erg/s/cm2/Ang at 1700 Angstroms,</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td></td> <td>GALEX fluxes: 74/27 microjanskies in NUV/FUV</td> <td></td> </tr> </tbody> </table> Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3.	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(3)	LBQS-0107-0232	RA: 01 10 14.4300 (17.5601250d)		V=18.4+/-0.5	Reference Frame: ICRS		Alt Name1: S03P002795	Dec: -02 16 57.60 (-2.28267d)		0.3 * 10 <sup>(-15)</sup> erg/s/cm2/Ang at 1700 Angstroms,				Equinox: J2000		GALEX fluxes: 74/27 microjanskies in NUV/FUV
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																				
(3)	LBQS-0107-0232	RA: 01 10 14.4300 (17.5601250d)		V=18.4+/-0.5	Reference Frame: ICRS																				
	Alt Name1: S03P002795	Dec: -02 16 57.60 (-2.28267d)		0.3 * 10 <sup>(-15)</sup> erg/s/cm2/Ang at 1700 Angstroms,																					
		Equinox: J2000		GALEX fluxes: 74/27 microjanskies in NUV/FUV																					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit															
	1	C G160M-1 589 search	(3) LBQS-0107-023 2	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			40.0 Secs [==>]	[1]															
	2	C G160M-1 589 image	(3) LBQS-0107-023 2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				40.0 Secs [==>]	[1]															
	3	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=21 10; FP-POS=1			1800.0 Secs [==>2113.0 Secs ]	[1]															
	4	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]															
	5	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]															
	6	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]															
	7	C G160M-1 589 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]															



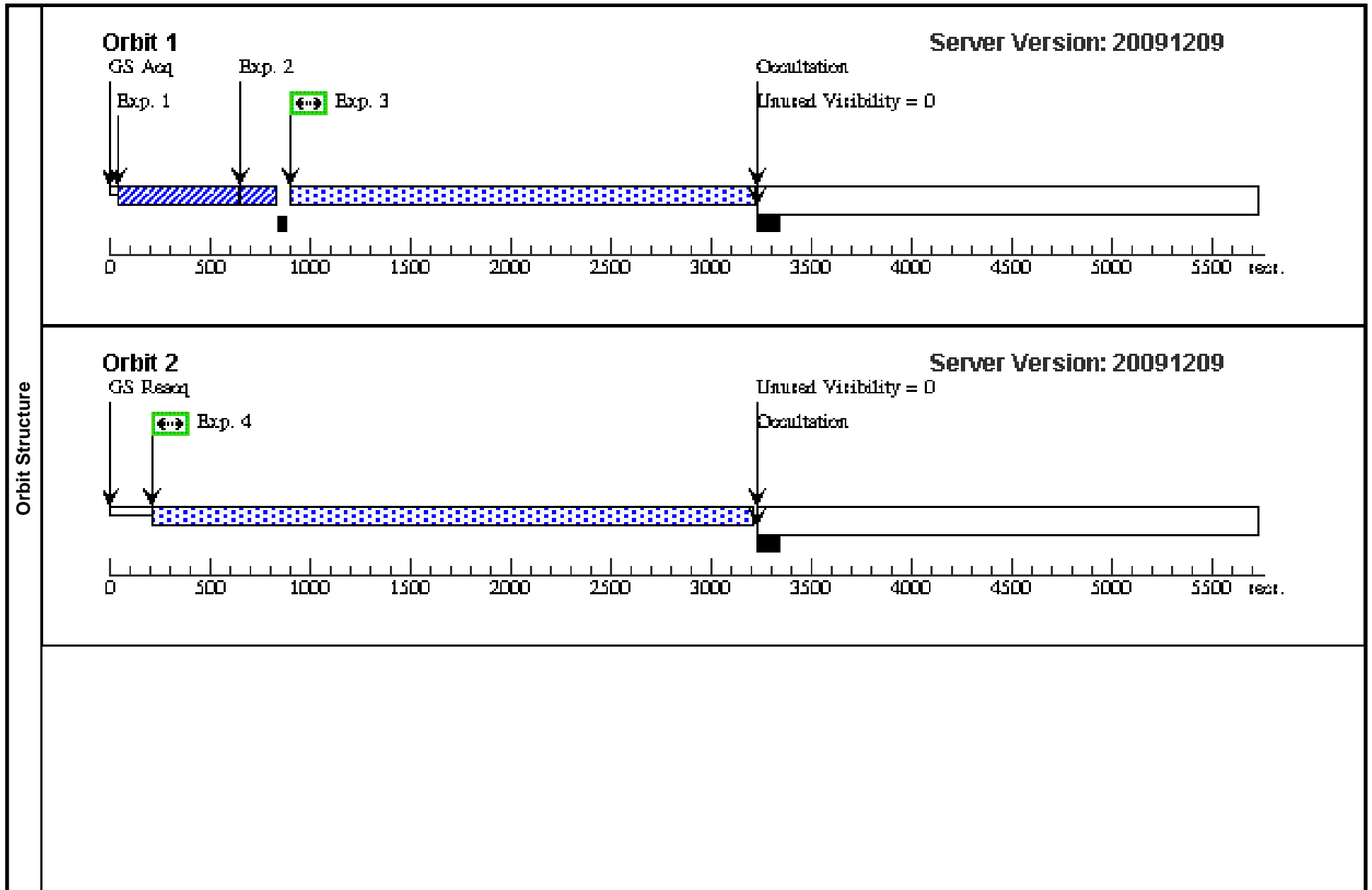


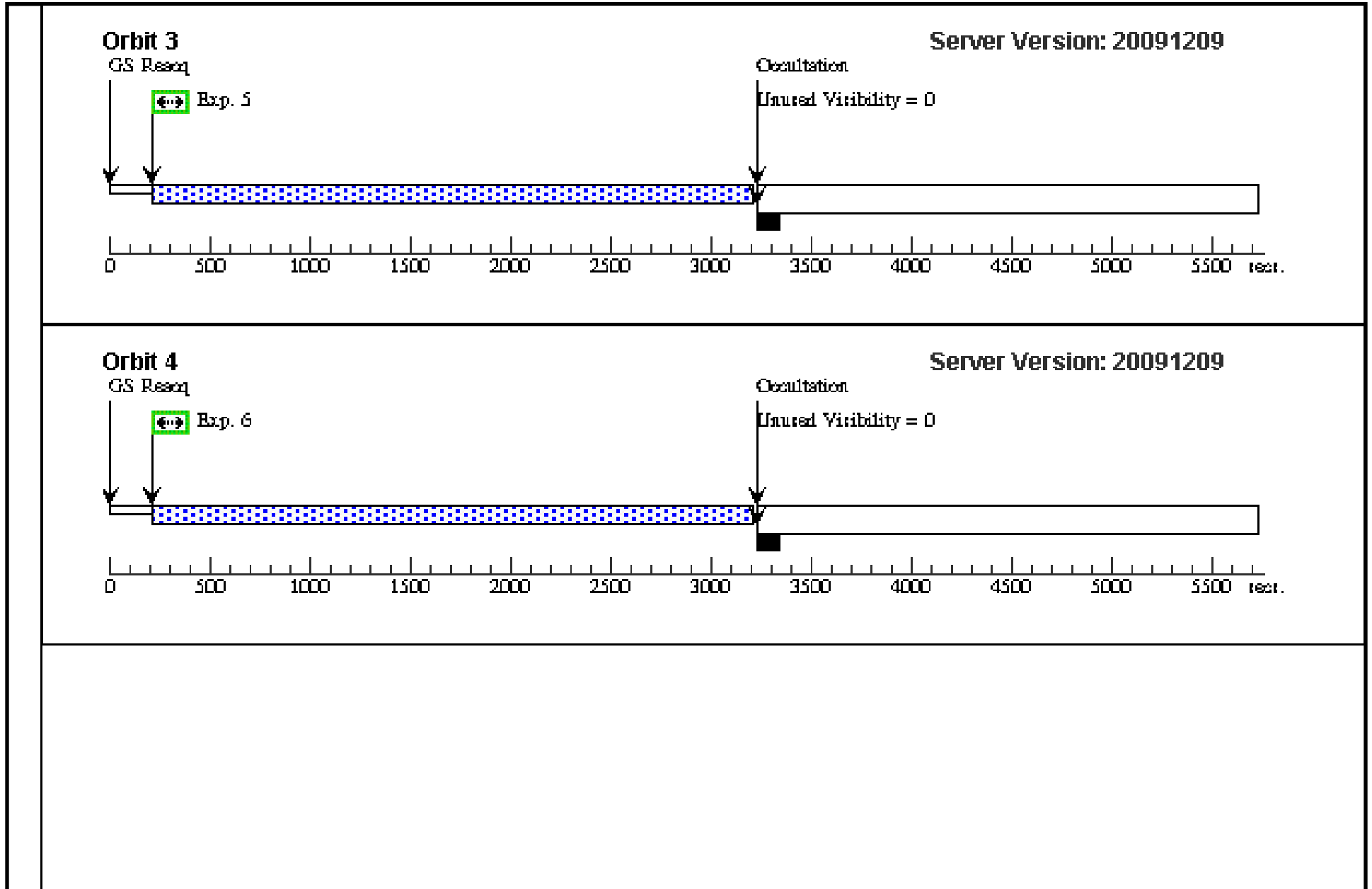


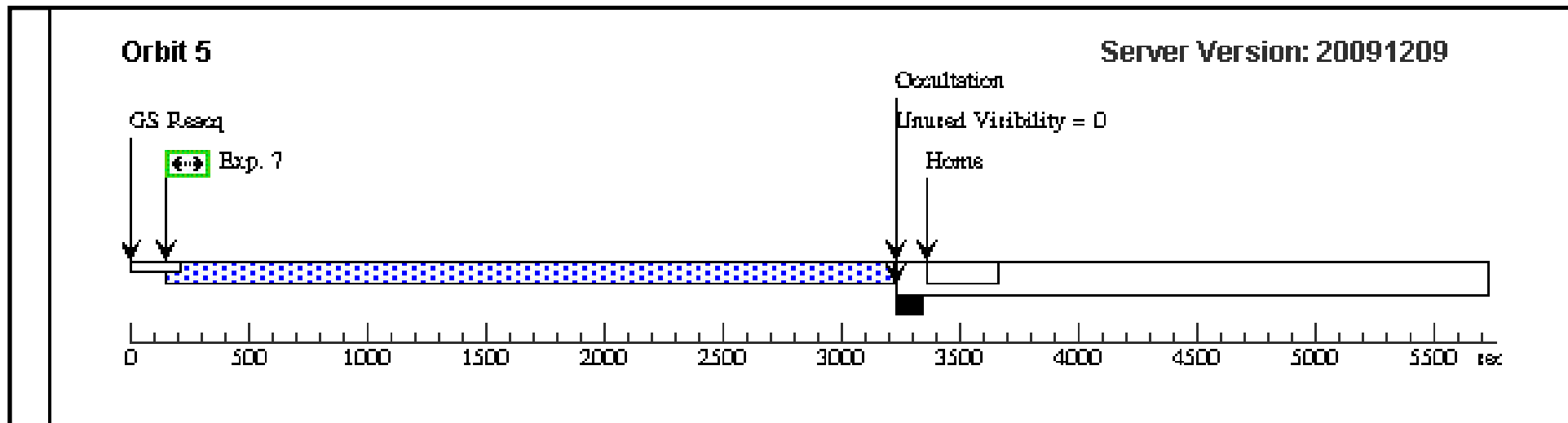
Proposal 11585 - Visit 14 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:32 GMT 2010

Visit	<b>Proposal 11585, Visit 14, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: C G160M 1623 5orbit 1																					
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(3)</td> <td>LBQS-0107-0232</td> <td>RA: 01 10 14.4300 (17.5601250d) Alt Name1: S03P002795 Dec: -02 16 57.60 (-2.28267d) Equinox: J2000</td> <td></td> <td>V=18.4+/-0.5 0.3 * 10<sup>(-15)</sup> erg/s/cm<sup>2</sup>/Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3.										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(3)	LBQS-0107-0232	RA: 01 10 14.4300 (17.5601250d) Alt Name1: S03P002795 Dec: -02 16 57.60 (-2.28267d) Equinox: J2000		V=18.4+/-0.5 0.3 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(3)	LBQS-0107-0232	RA: 01 10 14.4300 (17.5601250d) Alt Name1: S03P002795 Dec: -02 16 57.60 (-2.28267d) Equinox: J2000		V=18.4+/-0.5 0.3 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV	Reference Frame: ICRS																	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit												
	1	C G160M-1 623 search	(3) LBQS-0107-023 2	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			40.0 Secs [==>]	[1]												
	2	C G160M-1 623 image	(3) LBQS-0107-023 2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				40.0 Secs [==>]	[1]												
	3	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21 10; FP-POS=1			1800.0 Secs [==>2113.0 Secs ]	[1]												
	4	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]												
	5	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]												
	6	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]												
	7	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]												



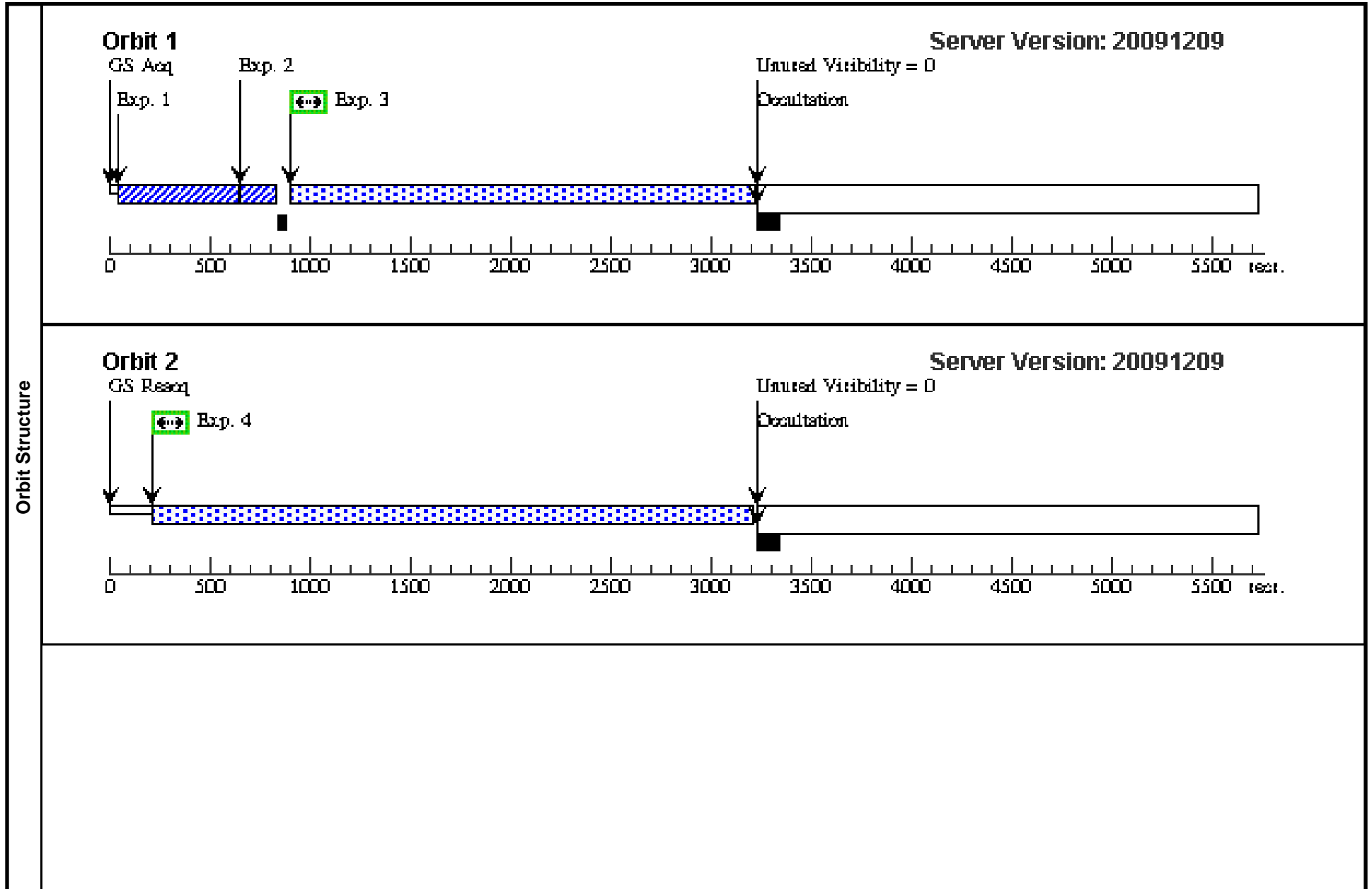


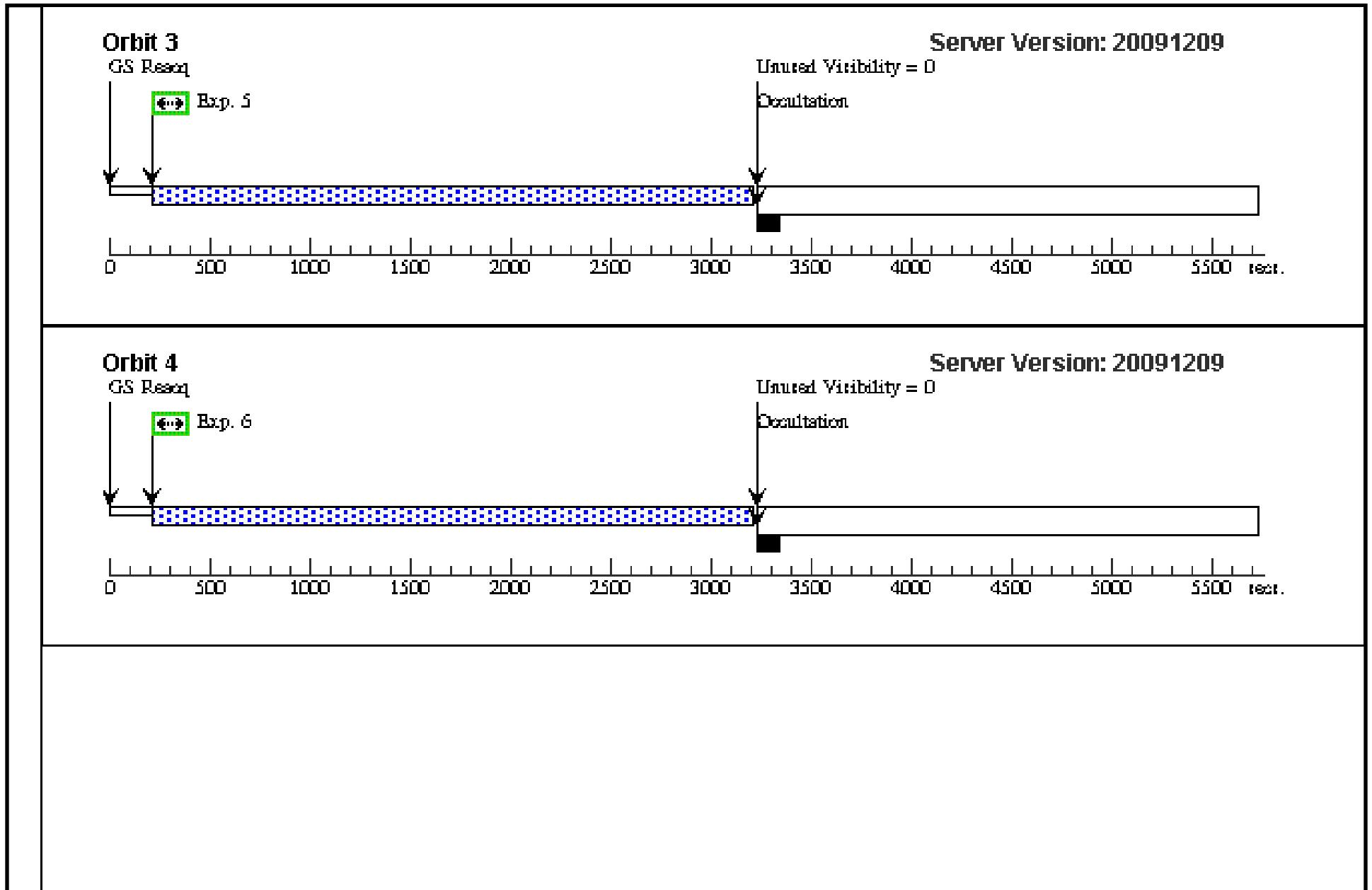


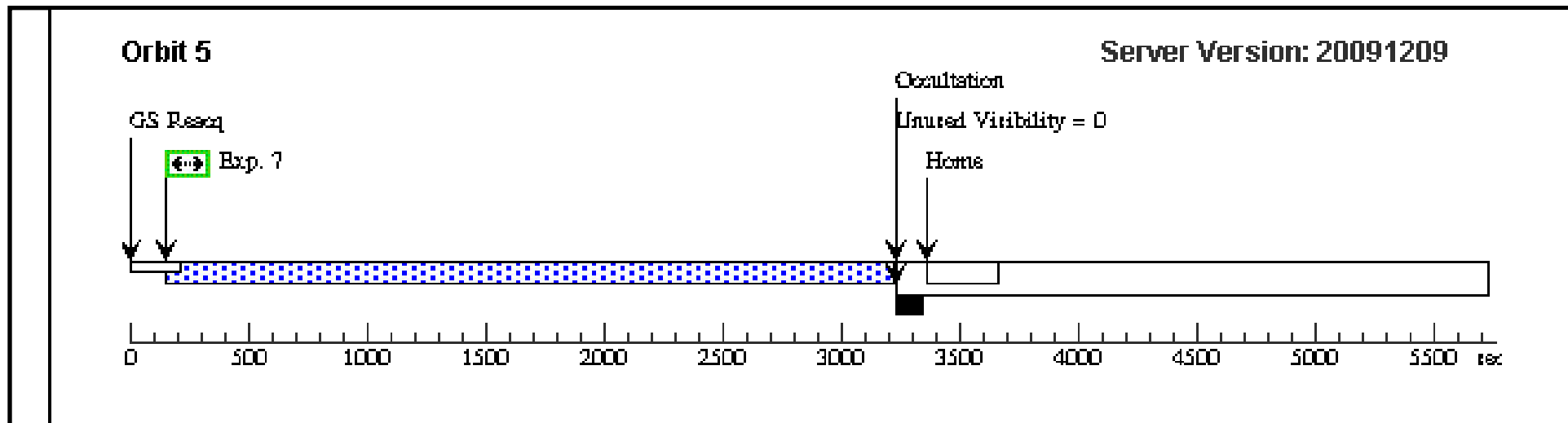
Proposal 11585 - Visit 15 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:32 GMT 2010

Visit	<b>Proposal 11585, Visit 15, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none) Comments: C G160M 1623 Sorbit II									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	LBQS-0107-0232 Alt Name1: S03P002795	RA: 01 10 14.4300 (17.5601250d) Dec: -02 16 57.60 (-2.28267d) Equinox: J2000		V=18.4+/-0.5 0.3 * 10 <sup>(-15)</sup> erg/s/cm2/Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C G160M-1 623 search	(3) LBQS-0107-023 2	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			40.0 Secs [==>]	[1]
	2	C G160M-1 623 image	(3) LBQS-0107-023 2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				40.0 Secs [==>]	[1]
	3	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21 10; FP-POS=1			1800.0 Secs [==>2113.0 Secs ]	[1]
	4	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
	7	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]







Proposal 11585 - Visit 16 - Tracing the distribution of gas and galaxies using three closely-spaced background QSOs

Tue Jan 26 02:05:33 GMT 2010

Visit	Proposal 11585, Visit 16, implementation									
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: COS/NUV, COS/FUV									
	Special Requirements: (none)									
	<i>Comments: C G160M 1623 Sorbit III</i>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	LBQS-0107-0232 Alt Name1: S03P002795	RA: 01 10 14.4300 (17.5601250d) Dec: -02 16 57.60 (-2.28267d) Equinox: J2000		V=18.4+/-0.5 0.3 * 10 <sup>(-15)</sup> erg/s/cm <sup>2</sup> /Ang at 1700 Angstroms, GALEX fluxes: 74/27 microjanskies in NUV/FUV	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the NED database. Coordinates from GSC2.3.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C G160M-1 623 search	(3) LBQS-0107-023 2	COS/NUV, ACQ/SEARCH, PSA	MIRRORA	SCAN-SIZE=2			40.0 Secs [==>]	[1]
	2	C G160M-1 623 image	(3) LBQS-0107-023 2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				40.0 Secs [==>]	[1]
	3	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21 10; FP-POS=1			1800.0 Secs [==>2113.0 Secs ]	[1]
	4	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=2			1800.0 Secs [==>2948.0 Secs ]	[2]
	5	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=3			1800.0 Secs [==>2948.0 Secs ]	[3]
	6	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=4			1800.0 Secs [==>2948.0 Secs ]	[4]
	7	C G160M-1 623 science	(3) LBQS-0107-023 2	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=29 00; FP-POS=1			1800.0 Secs [==>2948.0 Secs ]	[5]

