



## 12988 - Mapping Baryons in the Halo of NGC 1097

Cycle: 20, 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>
20	(2) Q0244-303	COS/FUV COS/NUV	5	11-Jul-2012 00:20:45.0	yes
30	(3) 2DFGRSS394Z150	COS/FUV COS/NUV	4	11-Jul-2012 00:20:58.0	yes
35	(3) 2DFGRSS394Z150	COS/FUV COS/NUV	4	11-Jul-2012 00:21:08.0	yes
40	(4) 2DFGRSS393Z082	COS/FUV COS/NUV	4	11-Jul-2012 00:21:18.0	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>
45	(4) 2DFGRSS393Z082	COS/FUV COS/NUV	4	11-Jul-2012 00:21:27.0	yes
60	(6) Q0246-308	COS/FUV COS/NUV	3	11-Jul-2012 00:21:34.0	yes
65	(6) Q0246-308	COS/FUV COS/NUV	3	11-Jul-2012 00:21:41.0	yes
70	(7) HE0241-3043	COS/FUV COS/NUV	3	11-Jul-2012 00:21:51.0	yes

30 Total Orbits Used

## **ABSTRACT**

We propose observing 5 background QSOs whose sightlines pass through the halo of NGC 1097 at impact parameters of 53-183 kpc. NGC 1097 is a bright (-21.1) spiral galaxy that has the highest surface density of background, UV-bright QSOs in the nearby Universe. The galaxy hosts a low luminosity AGN at its core, surrounded by a ring of intense star-forming regions; there is also evidence from stellar tidal streams that the galaxy has recently cannibalized a number of dwarf galaxies, and a companion dwarf elliptical is still clearly merging with the outer disk. We aim to examine the physical conditions of gas that fills the halo of such an active galaxy. We will search primarily for Ly $\alpha$  and SiIV absorption lines in the spectra of the background QSOs, as well as weak NV from hot gas. At the lowest impact parameters, we may also be able to find absorption lines from low ionization species. Our goals are to test whether the halo of NGC 1097 contains the same distribution of Lyman-alpha forest clouds seen at higher redshifts out to large distances from galaxies, and determine how the HI column density, covering fraction, and temperature of the gas decline with radius in a single galaxy halo. We will examine whether the velocities of the absorbers are consistent with those expected from gas co-rotating in the dark matter halo of the galaxy, or whether there exists a distribution of velocities that might indicate outflows from the galactic disk or from the central AGN, or, alternatively, from inflows from the IGM. Our map of Ly $\alpha$  and SiIV around NGC 1097 will provide an important template for understanding the origin of higher redshift QSO absorption line systems.

## **OBSERVING DESCRIPTION**

Our aim is to use the G130M grating of COS to search for absorption lines from gas in the halo of NGC1097, towards 5 background QSO probes. Our primary goal is to search for Lyman-alpha absorption at the redshift of the galaxy,  $cz=1100-1450$  km/s (1220Å) as well as SiIV and NV.

Proposal 12988 (STScI Edit Number: 0, Created: Tuesday, July 10, 2012 11:21:59 PM EST) - Overview

Additional lower-ionization lines may also be present in some cases. Exposures towards individual sightlines are split into two halves with different central wavelengths (1291 and 1327Å) in order to cover the gap in the COS detectors. For each central wavelength, multiple FP-POS positions are used. All targets have known GALEX fluxes. We expect to obtain a S/N of at least 10 per resolution element in the data.

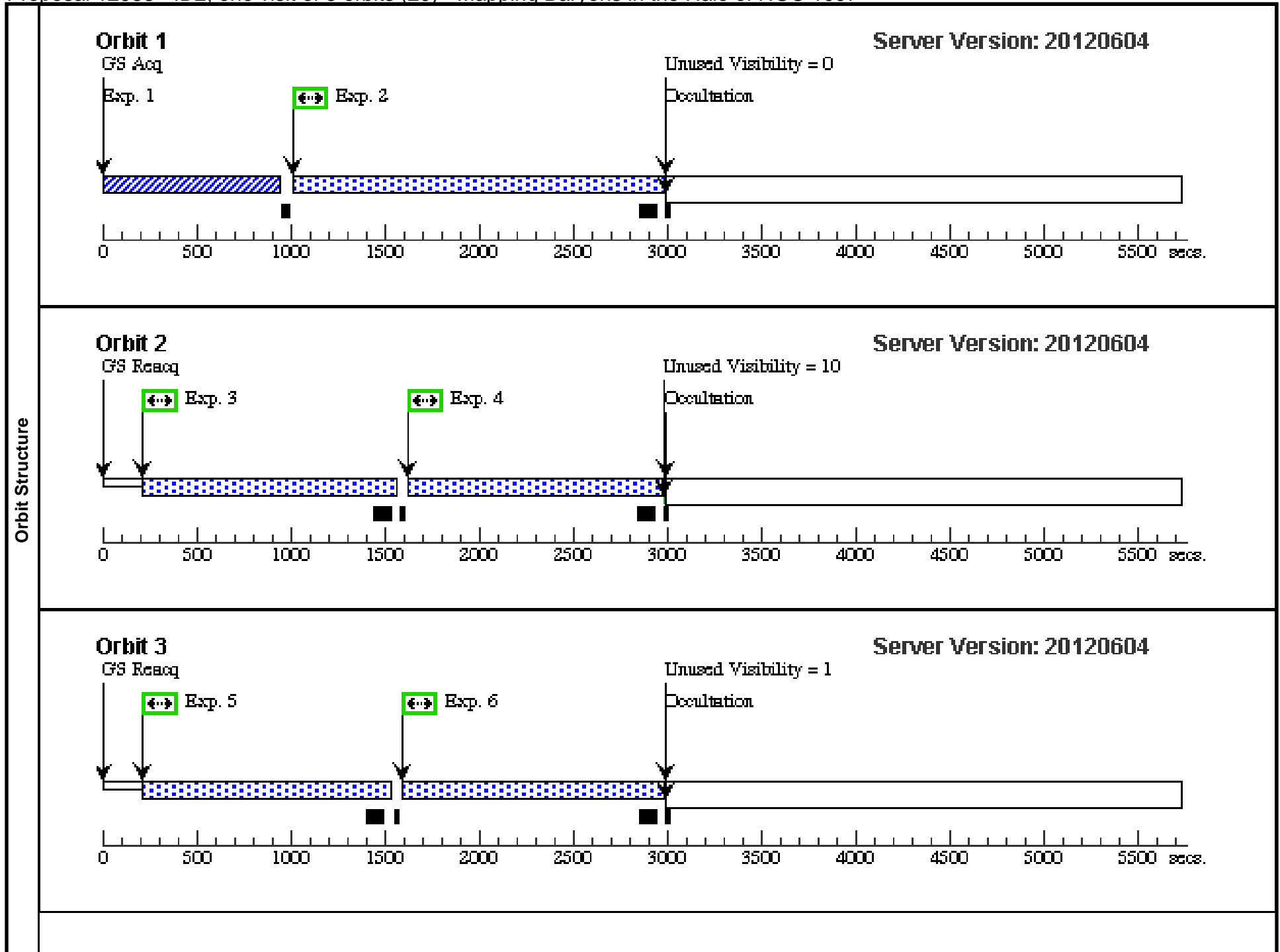
Proposal 12988 - ID2, one visit of 5 orbits (20) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:00 GMT 2012

<b>Visit</b>	<p><b>Proposal 12988, ID2, one visit of 5 orbits (20)</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: COS/NUV, COS/FUV</p> <p>Special Requirements: SCHED 100%</p>					
<b>Diagnostics</b>	<p>(ID2, one visit of 5 orbits (20)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.</p> <p>(1291 split1 (20.002)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1291 split2 (20.003)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1291 split3 (20.004)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1291 split4 (20.005)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1327 split1 (20.006)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1327 split2 (20.007)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1327 split3 (20.008)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1327 split4 (20.009)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p>					
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>
	(2)	Q0244-303 Alt Name1: 6DFJ0248220-303806	RA: 02 46 49.8700 (41.7077917d) Dec: -30 07 41.30 (-30.12814d) Equinox: J2000	Redshift: 0.528	V=18.3 GALEX FUV=126 micro-Jy	Reference Frame: ICRS

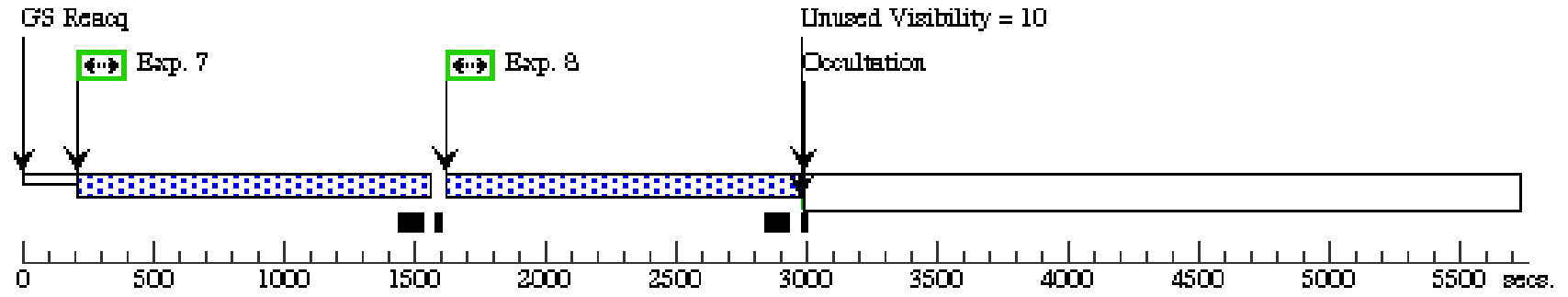
Proposal 12988 - ID2, one visit of 5 orbits (20) - Mapping Baryons in the Halo of NGC 1097

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures	1	ID2 ACQ (406664)	(2) Q0244-303	COS/NUV, ACQ/IMAGE, PSA	MIRRORB			257 Secs [==>]	[1]	
	<i>Comments: Exposure time assumes NUV flux (GALEX NUV=18.0) is half that measured by GALEX (so NUV=18.8) to account for possible variations in QSO flux.</i>									
	2	1291 split1	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=16 80			1790 Secs [==>]	[1]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>									
	3	1291 split2	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=11 88			1298 Secs [==>]	[2]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>									
	4	1291 split3	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=11 88			1298 Secs [==>]	[2]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>									
	5	1291 split4	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=11 53			1263 Secs [==>1268.0 Secs ]	[3]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>									
6	1327 split1	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=11 53			1263 Secs [==>1268.0 Secs ]	[3]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										
7	1327 split2	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=11 88			1298 Secs [==>]	[4]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										
8	1327 split3	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=11 88			1298 Secs [==>]	[4]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										
9	1327 split4	(2) Q0244-303	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=26 00			2710 Secs [==>]	[5]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										



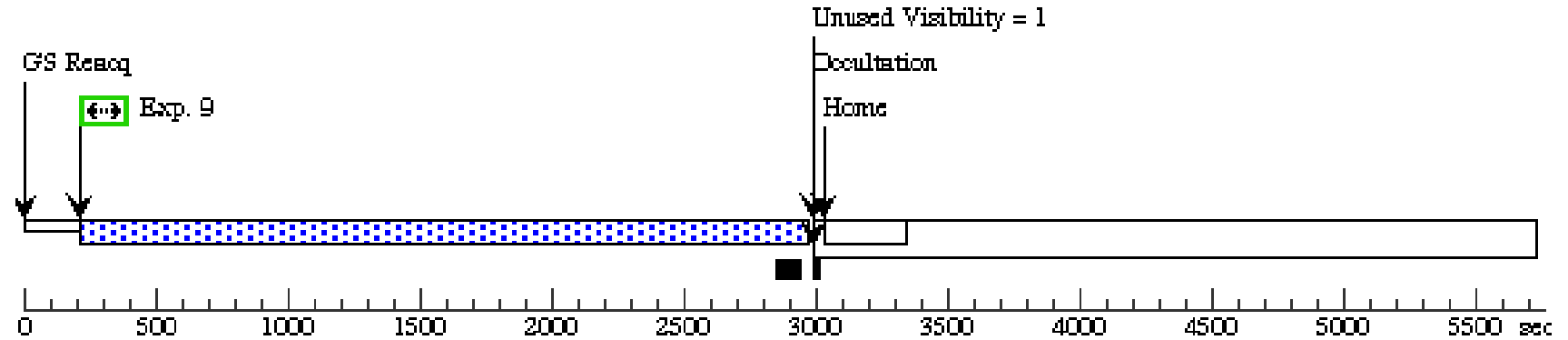
### Orbit 4

Server Version: 20120604



### Orbit 5

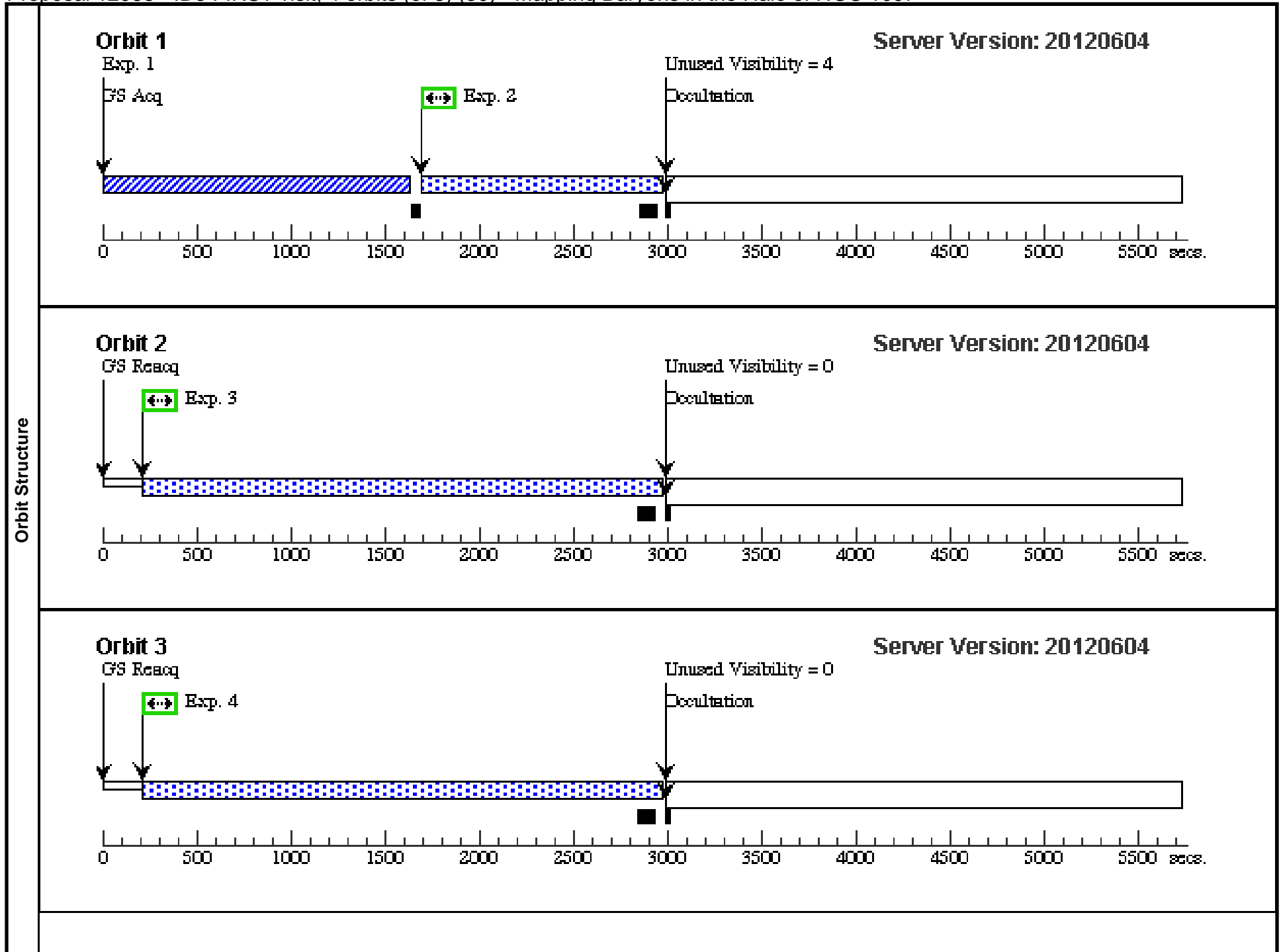
Server Version: 20120604

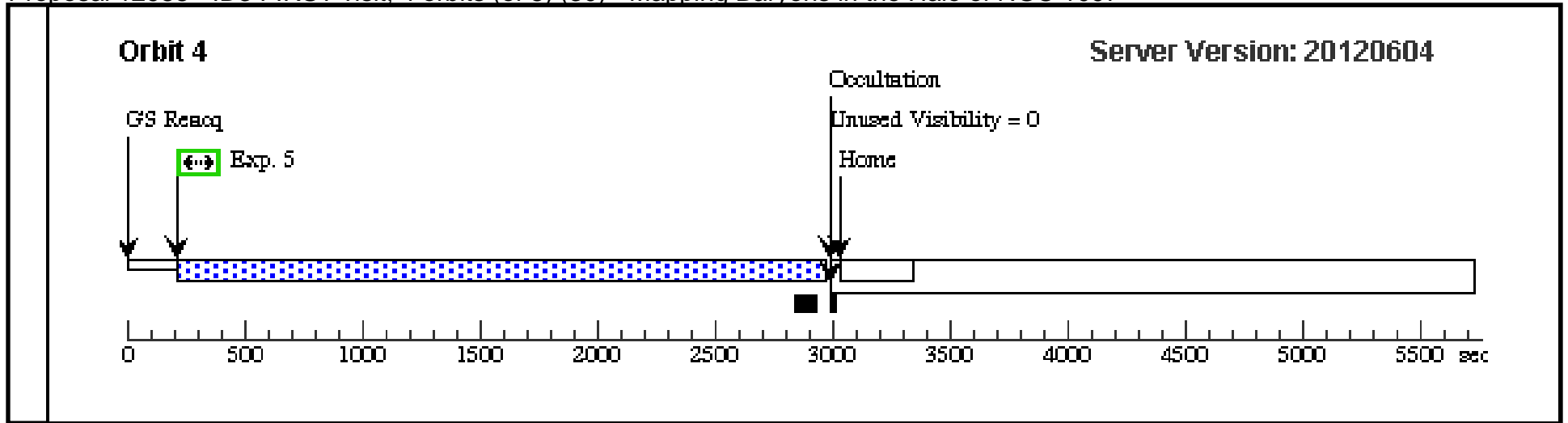


Proposal 12988 - ID3 FIRST visit, 4 orbits (of 8) (30) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:07 GMT 2012

<b>Visit</b>	<b>Proposal 12988, ID3 FIRST visit, 4 orbits (of 8) (30)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	(ID3 FIRST visit, 4 orbits (of 8) (30)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (ID3 first visit ACQ (30.001)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split 1 (30.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split 2 (30.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split 3 (30.004)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split 4 (30.005)) Warning (Form): Sensitive exposures should have an ETC run number provided.										
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(3)	2DFGRSS394Z150	RA: 02 46 13.3400 (41.5555833d) Dec: -30 29 42.20 (-30.49506d) Equinox: J2000	Redshift: 0.131	V=19.3 GALEX FUV=63 micro-Jy	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	ID3 first visit ACQ	(3) 2DFGRSS394Z150	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				600 Secs [==>]	[1]	
	<i>Comments: Assuming this is a non-varying UV source, with GALEX(NUV)=19.5</i>										
	2	1291 split 1	(3) 2DFGRSS394Z150	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=99 0				1100 Secs [==>]	[1]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										
	3	1291 split 2	(3) 2DFGRSS394Z150	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[2]
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>											
4	1291 split 3	(3) 2DFGRSS394Z150	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[3]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>											
5	1291 split 4	(3) 2DFGRSS394Z150	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[4]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>											

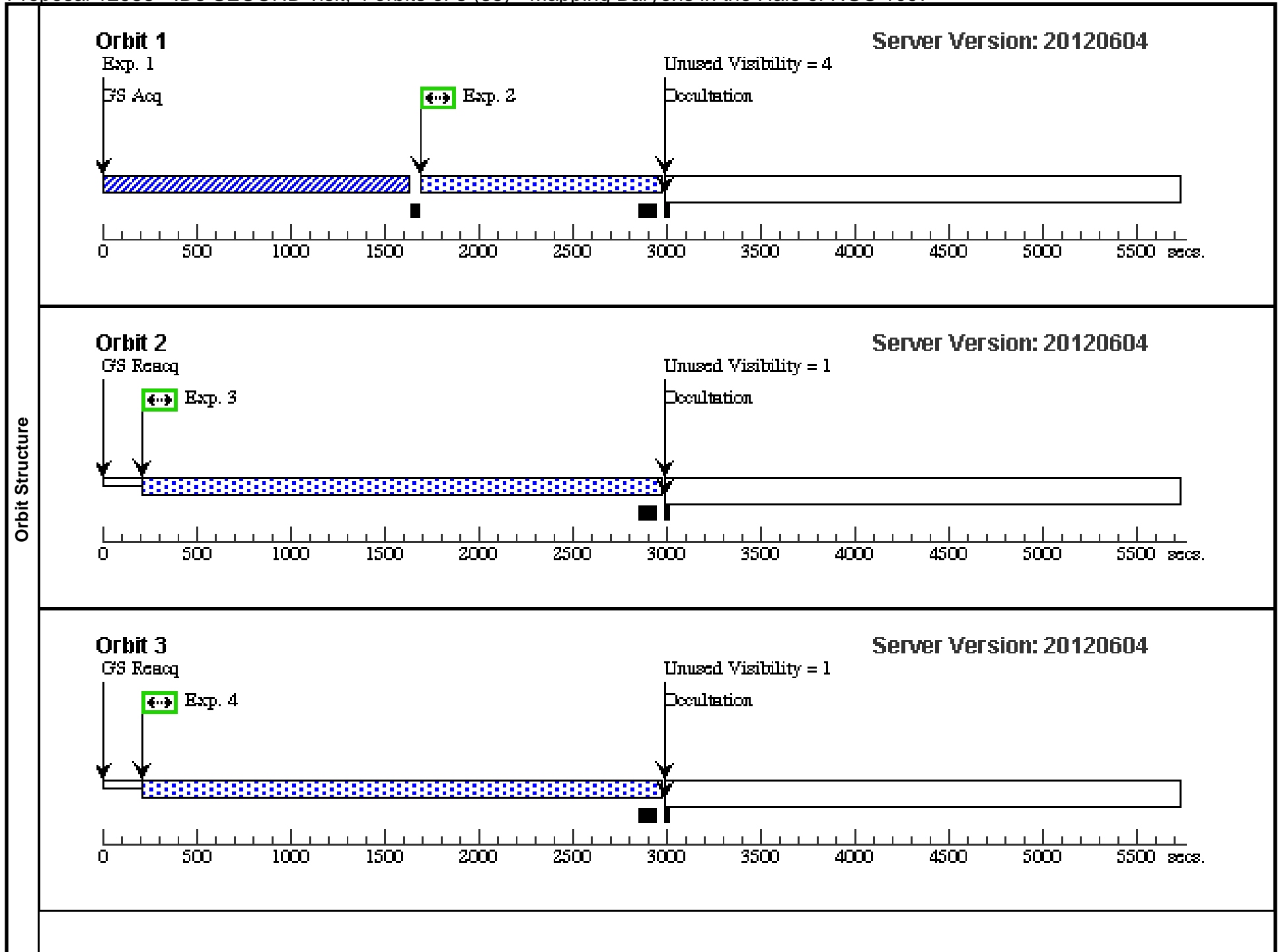


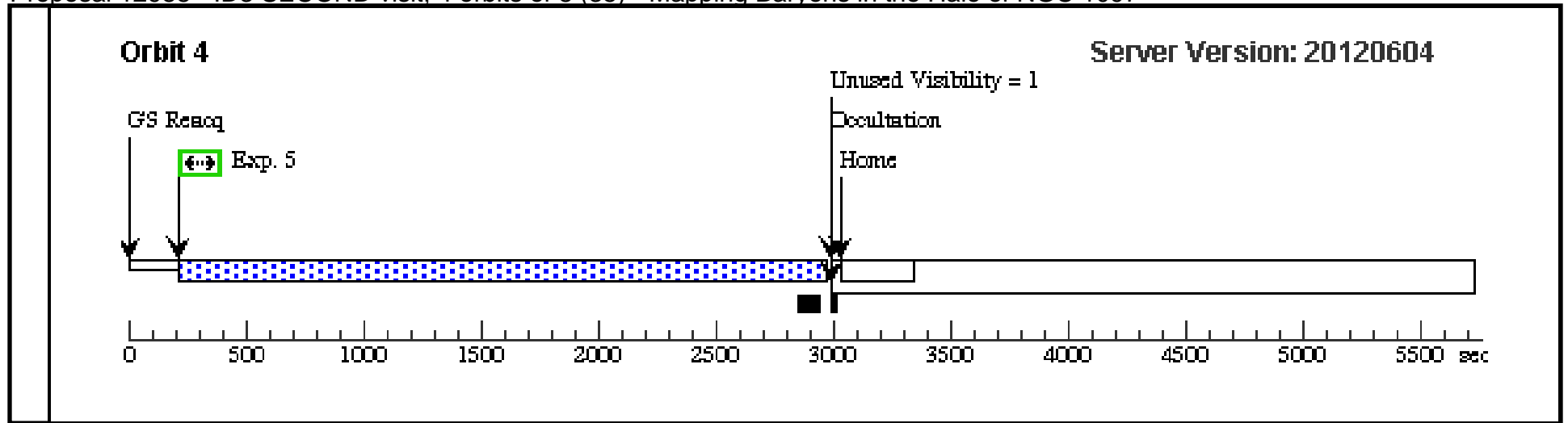


Proposal 12988 - ID3 SECOND visit, 4 orbits of 8 (35) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:10 GMT 2012

<b>Visit</b>	<b>Proposal 12988, ID3 SECOND visit, 4 orbits of 8 (35)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	(ID3 SECOND visit, 4 orbits of 8 (35)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (1327 split 1 (35.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split 2 (35.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split 3 (35.004)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split 4 (35.005)) Warning (Form): Sensitive exposures should have an ETC run number provided.										
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(3)	2DFGRSS394Z150	RA: 02 46 13.3400 (41.5555833d) Dec: -30 29 42.20 (-30.49506d) Equinox: J2000	Redshift: 0.131	V=19.3 GALEX FUV=63 micro-Jy	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	ID3 second visit ACQ (406665)	(3) 2DFGRSS394Z1 50	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				600 Secs [==>]	[1]	
	<i>Comments: Assuming this is a non-varying UV source, with GALEX(NUV)=19.5</i>										
	2	1327 split 1	(3) 2DFGRSS394Z1 50	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=99 0				1100 Secs [==>]	[1]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										
	3	1327 split 2	(3) 2DFGRSS394Z1 50	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=26 00				2710 Secs [==>]	[2]
	<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>										
4	1327 split 3	(3) 2DFGRSS394Z1 50	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=26 00				2710 Secs [==>]	[3]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>											
5	1327 split 4	(3) 2DFGRSS394Z1 50	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=26 00				2710 Secs [==>]	[4]	
<i>Comments: BUFFER-TIME is EXPTIME-110 seconds</i>											

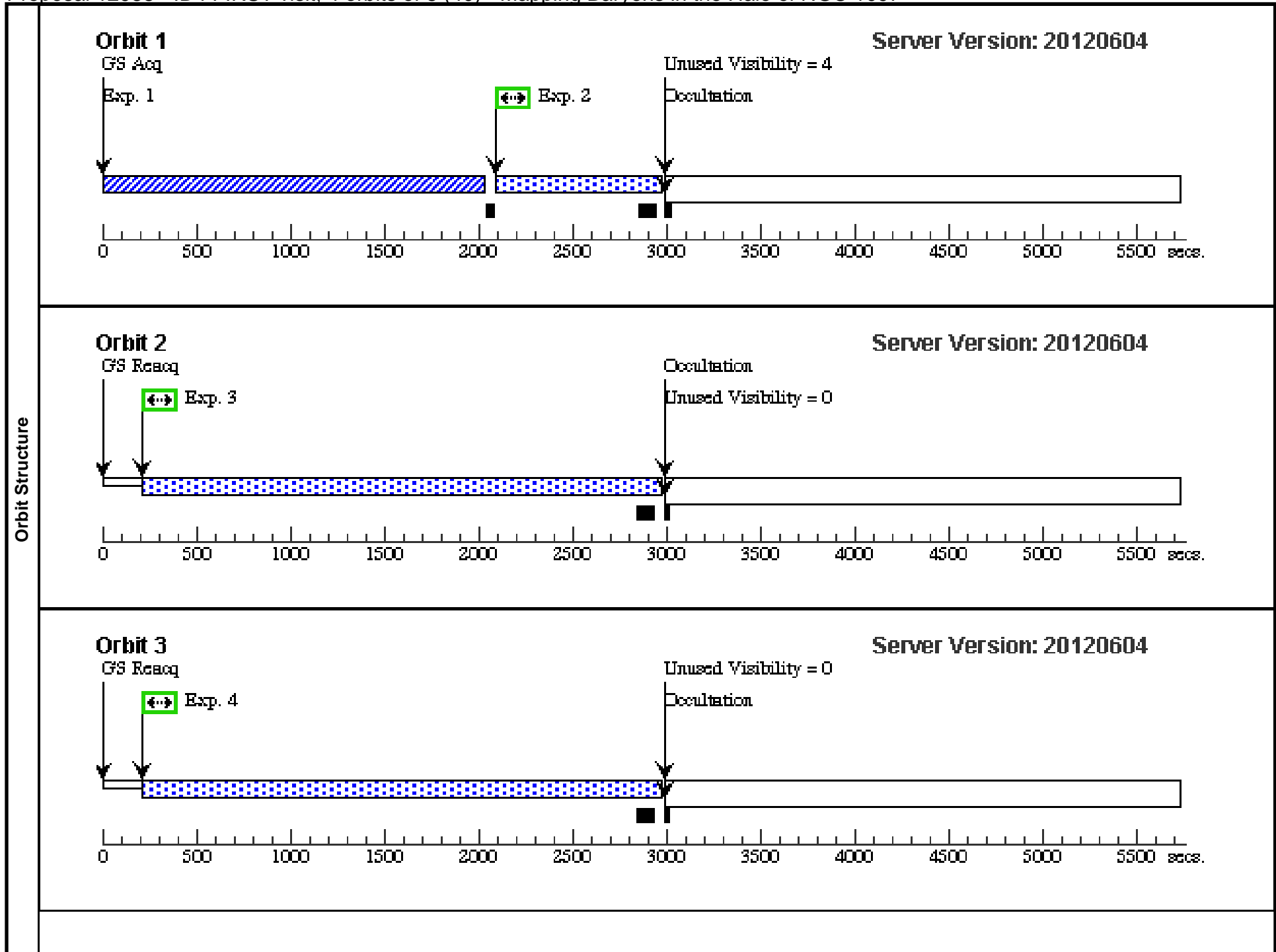


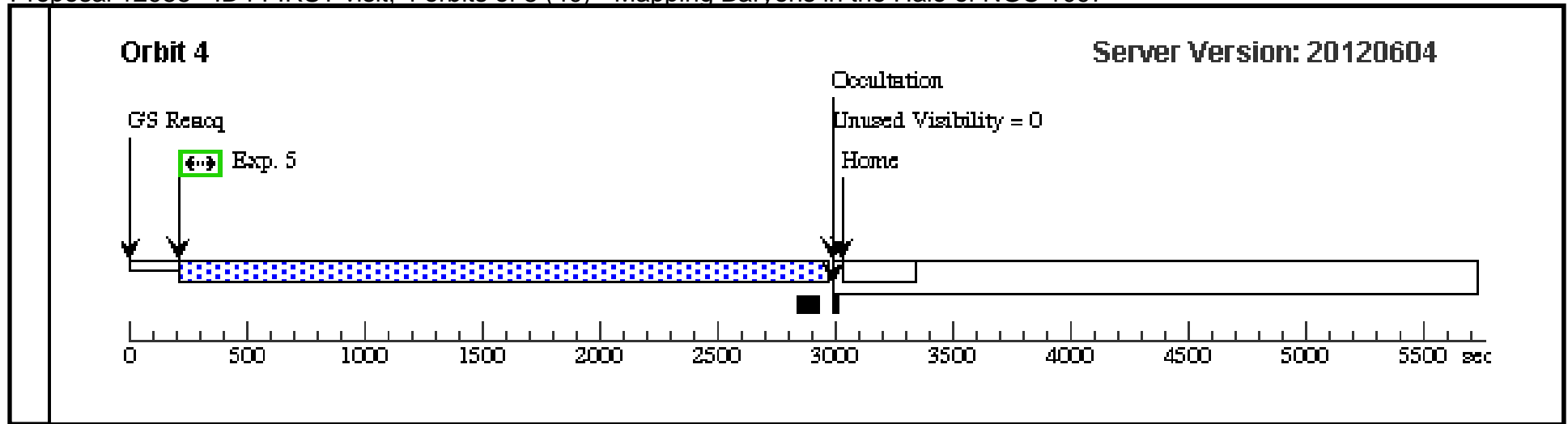


Proposal 12988 - ID4 FIRST visit, 4 orbits of 8 (40) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:13 GMT 2012

Visit	<b>Proposal 12988, ID4 FIRST visit, 4 orbits of 8 (40)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	Diagnostics	(ID4 FIRST visit, 4 orbits of 8 (40)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (1291 split1 (40.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split2 (40.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split3 (40.004)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split4 (40.005)) Warning (Form): Sensitive exposures should have an ETC run number provided.									
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	2DFGRSS393Z082	RA: 02 45 0.7700 (41.2532083d) Dec: -30 07 22.40 (-30.12289d) Equinox: J2000	Redshift: 0.339	V=19.4 GALEX FUV=57 micro-Jy	Reference Frame: ICRS					
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	ID4 first visit ACQ (406666)	(4) 2DFGRSS393Z082	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				800 Secs [==>]	[1]	
	<i>Comments: Exposure time assumes NUV flux (GALEX NUV=19.2) is half that measured by GALEX (so NUV=20.0) to account for possible variations in QSO flux.</i>										
	2	1291 split1	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M	1291 A	FP-POS=1; BUFFER-TIME=590			700 Secs [==>]	[1]
	3	1291 split2	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M	1291 A	FP-POS=2; BUFFER-TIME=2590			2700 Secs [==>2711.0 Secs ]	[2]
	4	1291 split3	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M	1291 A	FP-POS=3; BUFFER-TIME=2590			2700 Secs [==>2711.0 Secs ]	[3]
5	1291 split4	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M	1291 A	FP-POS=4; BUFFER-TIME=2590			2700 Secs [==>2711.0 Secs ]	[4]	

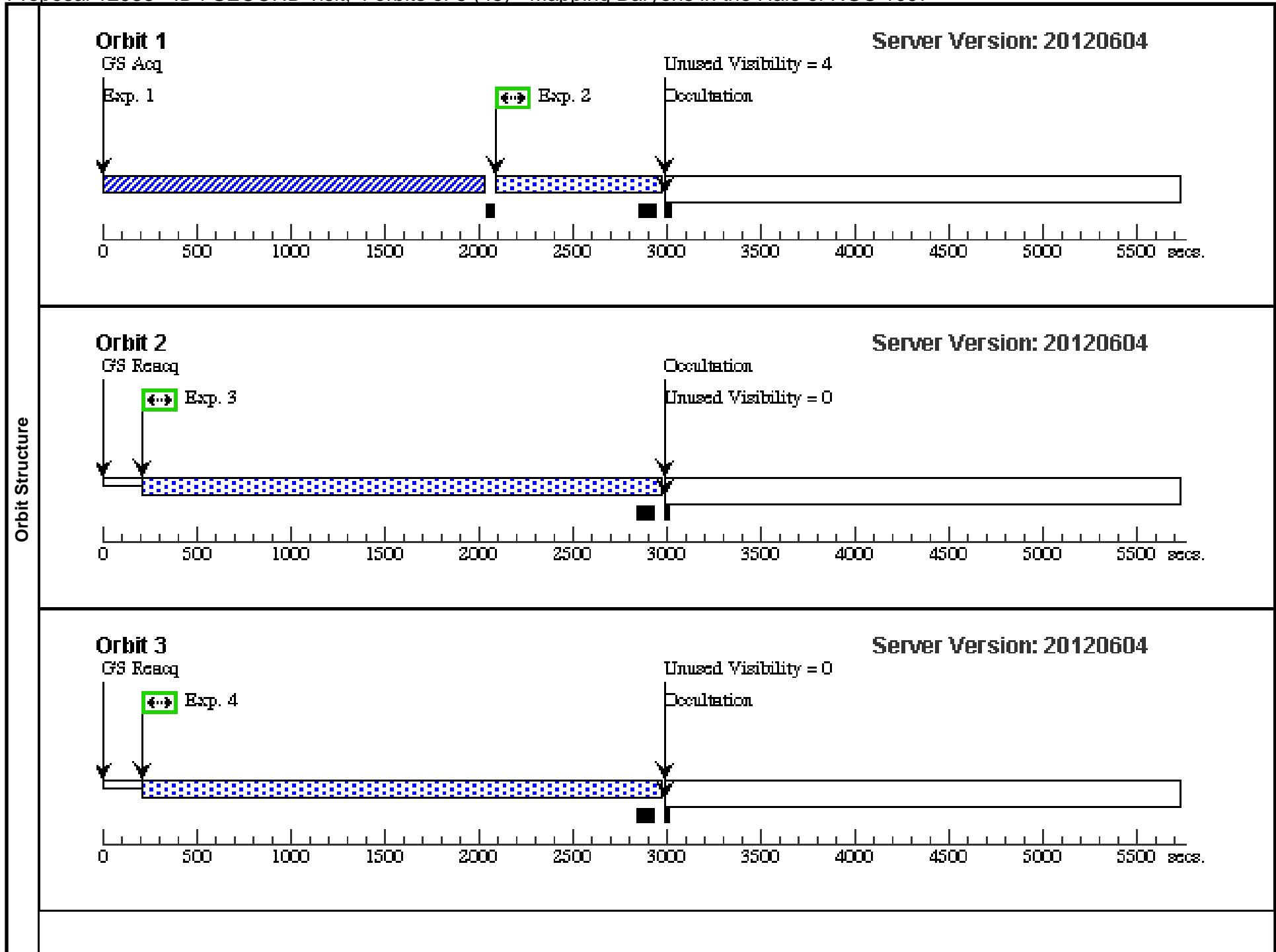


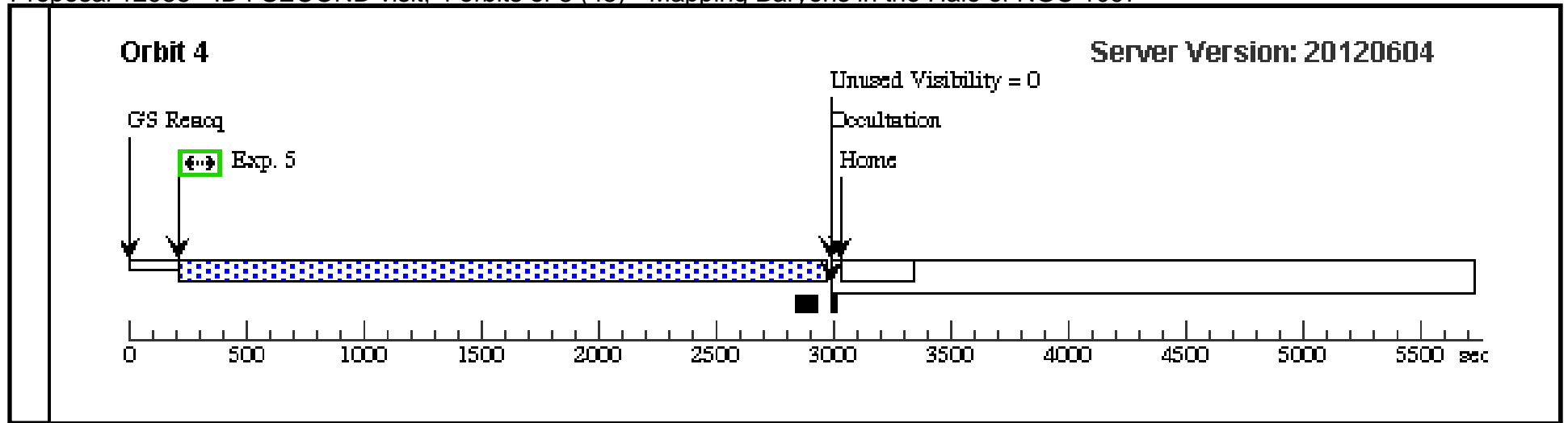


Proposal 12988 - ID4 SECOND visit, 4 orbits of 8 (45) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:16 GMT 2012

<b>Visit</b>	<b>Proposal 12988, ID4 SECOND visit, 4 orbits of 8 (45)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	(ID4 SECOND visit, 4 orbits of 8 (45)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (1327 split1 (45.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split2 (45.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split3 (45.004)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split4 (45.005)) Warning (Form): Sensitive exposures should have an ETC run number provided.										
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(4)	2DFGRSS393Z082	RA: 02 45 0.7700 (41.2532083d) Dec: -30 07 22.40 (-30.12289d) Equinox: J2000	Redshift: 0.339	V=19.4 GALEX FUV=57 micro-Jy	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	ID4 second visit ACQ (406666)	(4) 2DFGRSS393Z082	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				800 Secs [==>]	[1]	
	<i>Comments: Exposure time assumes NUV flux (GALEX NUV=19.2) is half that measured by GALEX (so NUV=20.0) to account for possible variations in QSO flux.</i>										
	2	1327 split1	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=59 0				700 Secs [==>]	[1]
	3	1327 split2	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[2]
	4	1327 split3	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[3]
	5	1327 split4	(4) 2DFGRSS393Z082	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[4]

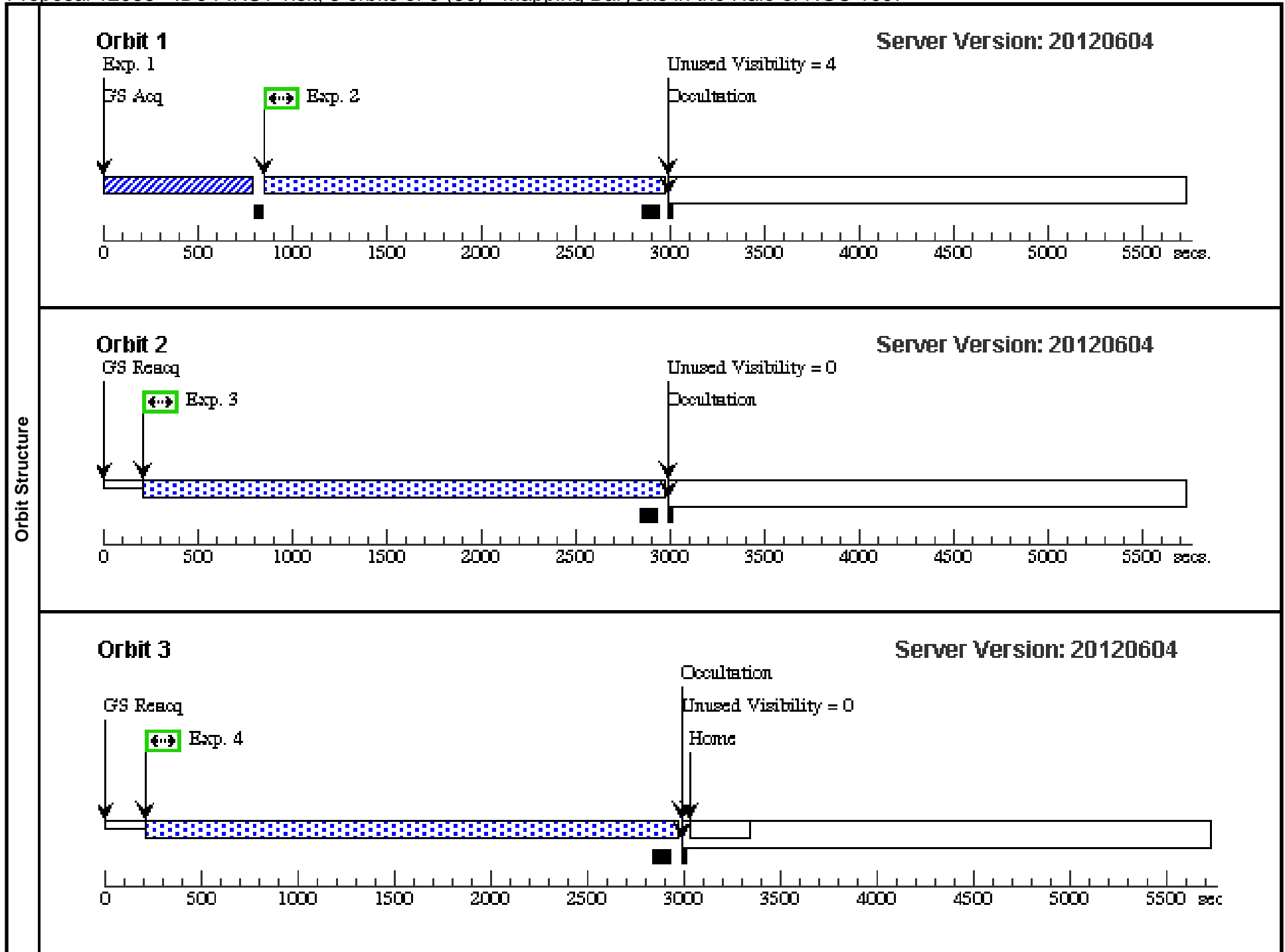




Proposal 12988 - ID6 FIRST visit, 3 orbits of 6 (60) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:19 GMT 2012

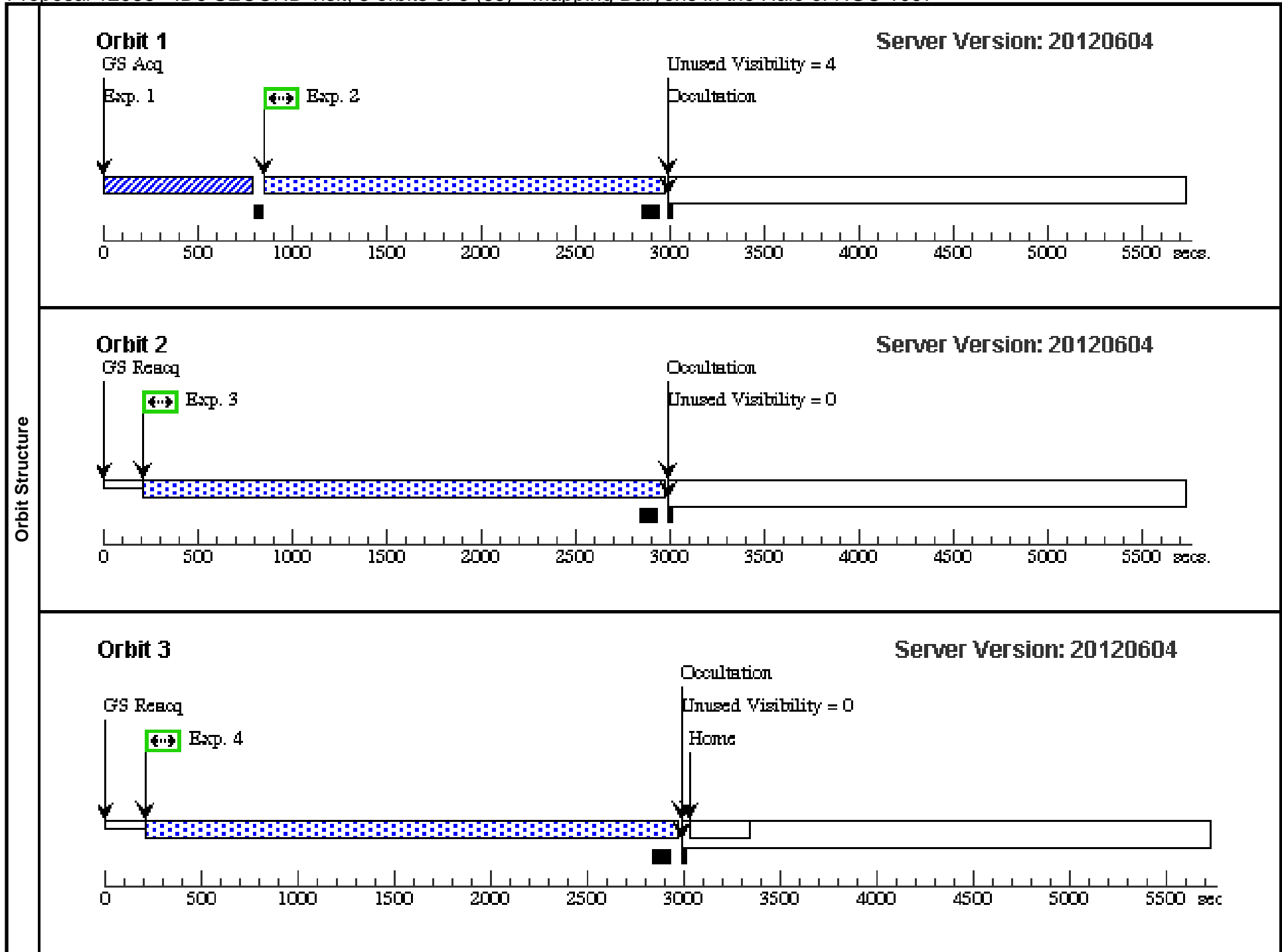
<b>Visit</b>	<b>Proposal 12988, ID6 FIRST visit, 3 orbits of 6 (60)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	(ID6 FIRST visit, 3 orbits of 6 (60)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting. (ID6 FIRST visit, 3 orbits of 6 (60)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (1291 split1 (60.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split2 (60.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split3 (60.004)) Warning (Form): Sensitive exposures should have an ETC run number provided.										
<b>Diagnosics</b>											
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(6)	Q0246-308 Alt Name1: IRXSJ024821.5-303807	RA: 02 48 22.0000 (42.0916667d) Dec: -30 38 6.80 (-30.63522d) Equinox: J2000	Redshift: 1.093	V=18.5 GALEX FUV=97 micro-Jy	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	ID6 first visit ACQ (406667)	(6) Q0246-308	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				180 Secs [==>]	[1]	
	<i>Comments: Exposure time assumes NUV flux (GALEX NUV=17.6) is half that measured by GALEX (so NUV=18.4) to account for possible variations in QSO flux.</i>										
	2	1291 split1	(6) Q0246-308	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=18 30				1940 Secs [==>]	[1]
	3	1291 split2	(6) Q0246-308	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[2]
4	1291 split3	(6) Q0246-308	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[3]	



Proposal 12988 - ID6 SECOND visit, 3 orbits of 6 (65) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:22 GMT 2012

<b>Visit</b>	<b>Proposal 12988, ID6 SECOND visit, 3 orbits of 6 (65)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	(ID6 SECOND visit, 3 orbits of 6 (65)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (ID6 SECOND visit, 3 orbits of 6 (65)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting. (1327 split1 (65.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split2 (65.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split3 (65.004)) Warning (Form): Sensitive exposures should have an ETC run number provided.										
<b>Diagnosics</b>											
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(6)	Q0246-308 Alt Name1: IRXSJ024821.5-303807	RA: 02 48 22.0000 (42.0916667d) Dec: -30 38 6.80 (-30.63522d) Equinox: J2000	Redshift: 1.093	V=18.5 GALEX FUV=97 micro-Jy	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	ID6 second visit ACQ (406667)	(6) Q0246-308	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				180 Secs [==>]	[1]	
	<i>Comments: Exposure time assumes NUV flux (GALEX NUV=17.6) is half that measured by GALEX (so NUV=18.4) to account for possible variations in QSO flux.</i>										
	2	1327 split1	(6) Q0246-308	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=18 30				1940 Secs [==>]	[1]
	3	1327 split2	(6) Q0246-308	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[2]
4	1327 split3	(6) Q0246-308	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=25 90				2700 Secs [==>2711.0 Secs ]	[3]	



Proposal 12988 - ID7 one visit of 3 orbits (70) - Mapping Baryons in the Halo of NGC 1097

Wed Jul 11 04:22:24 GMT 2012

<b>Visit</b>	<b>Proposal 12988, ID7 one visit of 3 orbits (70)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%										
	(ID7 one visit of 3 orbits (70)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting. (ID7 one visit of 3 orbits (70)) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE. (1291 split1 (70.002)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split2 (70.003)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1291 split3 (70.004)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split1 (70.005)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split2 (70.006)) Warning (Form): Sensitive exposures should have an ETC run number provided. (1327 split3 (70.007)) Warning (Form): Sensitive exposures should have an ETC run number provided.										
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>	<b>Fluxes</b>	<b>Miscellaneous</b>					
	(7)	HE0241-3043 Alt Name1: 2MASSJ0243376-303048 Alt Name2: 1RXSJ024337.8-303047	RA: 02 43 37.6600 (40.9069167d) Dec: -30 30 48.10 (-30.51336d) Equinox: J2000	Redshift: 0.669	V=17.1 GALEX FUV=155 micro-Jy	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label (ETC Run)</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	ID7 ACQ (406667)	(7) HE0241-3043	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				180 Secs [==>]	[1]	
	<i>Comments: Exposure time assumes NUV flux (GALEX NUV=17.6) is half that measured by GALEX (so NUV=18.4) to account for possible variations in QSO flux.</i>										
	2	1291 split1	(7) HE0241-3043	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=79 0				900 Secs [==>914.0 Secs ]	[1]
	3	1291 split2	(7) HE0241-3043	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=79 0				900 Secs [==>914.0 Secs ]	[1]
	4	1291 split3	(7) HE0241-3043	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=11 50				1260 Secs [==>1268.0 Secs ]	[2]
	5	1327 split1	(7) HE0241-3043	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=11 50				1260 Secs [==>1268.0 Secs ]	[2]
	6	1327 split2	(7) HE0241-3043	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=11 80				1290 Secs [==>1303.0 Secs ]	[3]
7	1327 split3	(7) HE0241-3043	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=11 80				1290 Secs [==>1303.0 Secs ]	[3]	

