



13398 - A Breakaway from Incremental Science: Full Characterization of the $z < 1$ CGM and Testing Galaxy Evolution Theory

Cycle: 21, Proposal Category: GO

(Large Program)

(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) Q0122-003	COS/FUV	5	23-Oct-2013 21:11:18.0	yes
02	(1) Q0122-003	COS/FUV COS/NUV	4	23-Oct-2013 21:11:37.0	yes

Proposal 13398 (STScI Edit Number: 8, Created: Wednesday, October 23, 2013 8:18:03 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) Q0122-003	COS/FUV COS/NUV	5	23-Oct-2013 21:11:51.0	yes
04	(1) Q0122-003	COS/FUV COS/NUV	5	23-Oct-2013 21:12:03.0	yes
05	(2) Q0349-146	COS/FUV COS/NUV	3	23-Oct-2013 21:12:18.0	yes
06	(2) Q0349-146	COS/FUV COS/NUV	3	23-Oct-2013 21:12:30.0	yes
07	(3) Q0454-220	COS/FUV COS/NUV	1	23-Oct-2013 21:12:38.0	yes
08	(4) Q0850+440	COS/FUV COS/NUV	5	23-Oct-2013 21:13:01.0	yes
09	(4) Q0850+440	COS/FUV COS/NUV	5	23-Oct-2013 21:13:24.0	yes
10	(4) Q0850+440	COS/FUV COS/NUV	4	23-Oct-2013 21:13:38.0	yes
11	(4) Q0850+440	COS/FUV	4	23-Oct-2013 21:13:49.0	yes
12	(5) Q1354+195	COS/FUV COS/NUV	5	23-Oct-2013 21:14:11.0	yes
13	(5) Q1354+195	COS/FUV COS/NUV	5	23-Oct-2013 21:14:35.0	yes
15	(6) Q1545+210	COS/FUV	4	23-Oct-2013 21:14:51.0	yes
16	(6) Q1545+210	COS/FUV COS/NUV	5	23-Oct-2013 21:15:12.0	yes
17	(7) Q1641+395	COS/FUV	4	23-Oct-2013 21:15:22.0	yes
18	(7) Q1641+395	COS/FUV COS/NUV	4	23-Oct-2013 21:15:35.0	yes
19	(7) Q1641+395	COS/FUV	4	23-Oct-2013 21:15:46.0	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>
20	(7) Q1641+395	COS/FUV COS/NUV	5	23-Oct-2013 21:16:10.0	yes
21	(7) Q1641+395	COS/FUV COS/NUV	5	23-Oct-2013 21:16:25.0	yes
22	(8) Q2128-123	COS/FUV COS/NUV	3	23-Oct-2013 21:16:40.0	yes
23	(8) Q2128-123	COS/FUV	3	23-Oct-2013 21:16:50.0	yes
24	(9) Q2135-145	COS/FUV	4	23-Oct-2013 21:17:03.0	yes
25	(9) Q2135-145	COS/FUV COS/NUV	5	23-Oct-2013 21:17:14.0	yes
26	(10) Q2251+155	COS/FUV	2	23-Oct-2013 21:17:24.0	yes
28	(10) Q2251+155	COS/FUV	4	23-Oct-2013 21:17:33.0	yes
27	(10) Q2251+155	COS/FUV COS/NUV	4	23-Oct-2013 21:17:50.0	yes

110 Total Orbits Used

ABSTRACT

In the modern theory of galaxy evolution, the circumgalactic medium (CGM), the massive, metal-enriched, extended gaseous reservoir surrounding galaxies, is the environment through which the large-scale physics of galaxy formation and evolution is controlled and regulated.

Testing/confronting galaxy evolution theory requires observations characterizing the CGM kinematics, geometric distribution, metallicities, and gas phases. Expensive resources have been dedicated for $z \sim 0.1$ (look-back 0-2 Gyr) and for $z \sim 2.5$ (10-11 Gyr), but the epoch $0.3 < z < 1.0$ (2-8 Gyr) has been relegated to an incremental approach hampering breakaway progress in understanding and constraining galaxy evolution theory; this extended cosmic epoch ties together and therefore increases the value of the extensive $z \sim 0.1$ and $z \sim 2.5$ campaigns. To perform breakaway science, we must quantify the "meteorological character" of the CGM, not simply chart the "atmospheric conditions" surrounding a few galaxies, and obtain the data required to directly confront theoretical predictions.

We propose COS NUV+FUV high-resolution quasar spectra to uniformly measure OVI, CIV, and HI (and many other low and high ionization

metals, including NeVII and OIV) in the CGM of 39 $z=0.08-0.97$ spectroscopically measured galaxies with HST images. We will augment these 39 galaxies with 12 additional galaxies from our previous programs, for a total of 51 galaxies. Our analysis directly addresses and tests the current theoretical paradigm of galaxy evolution. Our program promises a Legacy for HST, providing the essential data for ground-based follow up and for testing galaxy evolution as theory/simulations progress in coming decades.

OBSERVING DESCRIPTION

We propose to obtain COS high-resolution spectra of 10 quasars to probe the CGM of 39 galaxies ($0.08 < z < 0.97$) [to which we add 12 existing COS galaxies/absorbers]. We used the online COS ETC to estimate the required exposure time to achieve signal-to-noise ratios S/N greater than 10 (as an absolute minimum) with a target minimum of 15 so prohibitively long exposure times are not required. We assume a point source with an established flux value at the observed wavelengths of the target transitions. UV fluxes for all targets were obtained from FOS G190H and G160L spectra, and/or GALEX NUV and FUV images. For all targets we have measured flux values, except for the targeted 1400-1600 Å for Q0122-003. There are no potential Lyman breaks below 1600 Å; we are confident that the flux in this region is equal to that above 1600 Å. None of the targets exceed the bright object limits.

For the exposure time estimates, we employed average Galactic extinction, standard zodiacal light normalizations, standard earth shine light normalizations, and average air glow. The estimated visibility for our targets is 50 minutes.

Justifying Signal-to-Noise: Our analysis is predicated on detailed kinematic and ionization modeling. For COS resolution and pixelization, $S/N = 15$ per resolution element yields a 5-sigma detection limit of 15 mÅ.

Target acquisition: We have obtained coordinates by converting the GS1 coordinates to GS2 (ICRS system) using the tool provided by STScI. We then used the Target Confirmation chart from APT to adjust the positions in order to center as accurately as possible. We use these coordinates as a starting point for dispersed light acquisition using either of the FUV gratings. For 9 of the 10 quasars we choose to use ACQ/SEARCH with a 2x2 search pattern, followed by ACQ/PEAKXD and ACQ/PEAKD with 5 positions. The S/N needed for the SEARCH and PEAKD exposures is 40, and we use the APT to calculate the needed exposure time (using the measured flux in the grating). We use the grating setting corresponding to the first observations in the orbit unless the exposures are all in the near-UV. If they are in the near-UV, we use G130M if we have verified there is flux at those wavelengths, and G160M otherwise.

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The choice to use a dispersed light acquisition was made because our analysis of archival HST data suggests that programs using dispersed light instead of imaging have a more accurate and consistent wavelength solution. This is important for our program. We also based this decision upon section 8.8 of the COS Instrument Handbook. Although we believe our coordinates are accurate enough that a ACQ/SEARCH should not be necessary, we are doing one as a precaution. The one exception to this is for Q0454-220 for which we have proposed only a one orbit exposure, and which has been observed before many times with COS.

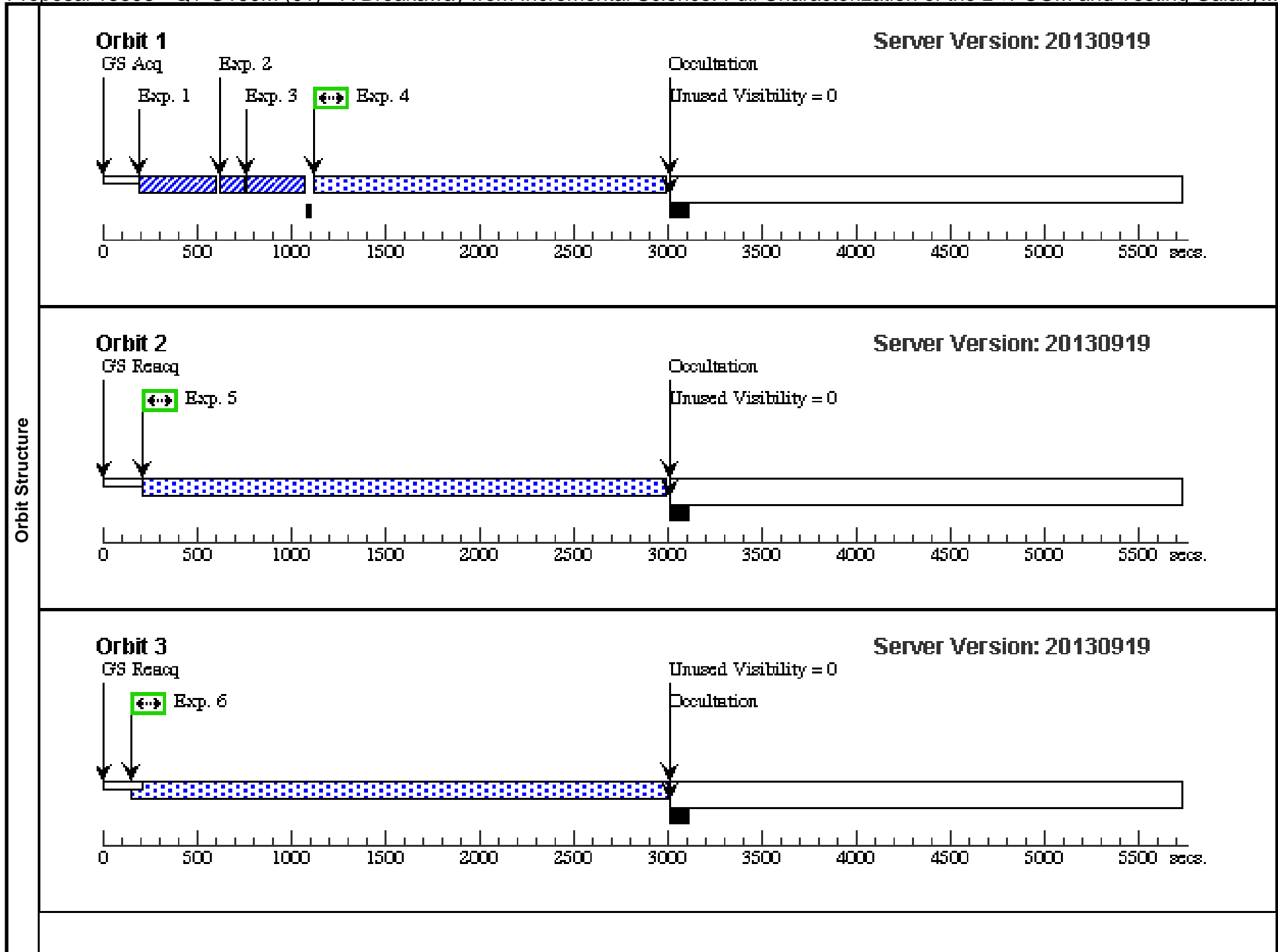
Visits were set up with the following ideas in mind:

- 1) If there is only one orbit devoted to a particular grating tilt then we use two FP-POS positions, 3 and 4 because it is difficult to fit all four exposures in one orbit. FP-POS =3 is favored because of shorter overheads.
- 2) For 2-5 orbit observations we use all four FP-POS positions, splitting them roughly equally. For two orbit observations we do FP-POS=1 and 2 in one orbit and 3 and 4 in the other. For three orbit observations we split observations between orbits to equalize time. For four orbit observations we use one FP-POS per orbit. For five orbits observations we have a couple of strategies. Sometimes we favor FP-POS=3 since it is the central one coinciding with our specified wavelength ranges for the systems of interest. We also usually begin with FP-POS=3 in G160M and NUV exposures since this default position gains us 70s in exposure time in the first orbit of the visit. In a couple of cases we choose another tilt for the fifth orbit in order to cover a gap region at least with some S/N.
- 3) Some of our visits include both some FUV and some NUV observations in order to calibrate wavelength scales, since generally the wavelength solution is more consistent between observations in the same visit.
- 4) Buffer time is set to about 90% of the exposure time for exposures ending during an orbit, to minimize the impact of readout time on the total exposure time. For exposures ending with the orbit we set the buffer time at or a couple seconds higher than the exposure time.

Proposal 13398 - Q1-G160M (01) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galaxy...

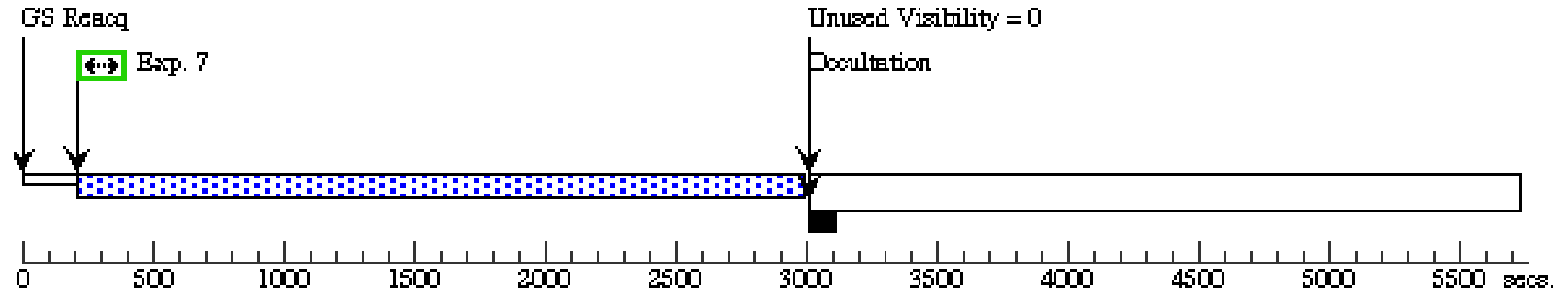
Thu Oct 24 01:18:04 GMT 2013

Visit	Proposal 13398, Q1-G160M (01), scheduling Diagnostic Status: Warning Scientific Instruments: COS/FUV Special Requirements: SCHED 100%									
	(Q1-G160M (01)) 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. (Q1-G160M (01)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	Q0122-003	RA: 01 25 28.8000 (21.3700000d) Dec: -00 05 55.80 (-.09883d) Equinox: J2000	Redshift: 1.07	V=15.8+/-0.35 f_lam=3-5E-15 from 1600-3300 A; GALEX FUV=18.86 NUV=17.58	Reference Frame: ICRS				
<i>Comments: FOS G160M and G230M provided</i>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			32 Secs (32 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.515 851)	(1) Q0122-003	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				47 Secs (47 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			32 Secs (32 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.515 852)	(1) Q0122-003	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=20 00			1825 Secs (1825 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.515 853)	(1) Q0122-003	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=4; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[2]
	6	G160M/FP-POS-1 (COS.sp.515 853)	(1) Q0122-003	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[3]
	7	G160M/FP-POS-2 (COS.sp.515 853)	(1) Q0122-003	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=2; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[4]
	8	G160M-162 3/FP-POS-3 (COS.sp.515 853)	(1) Q0122-003	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[5]



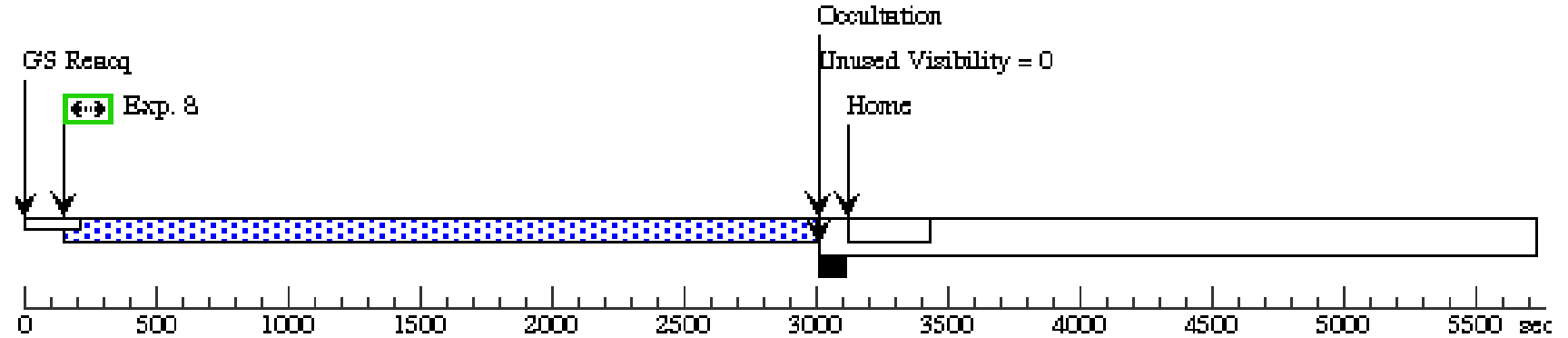
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

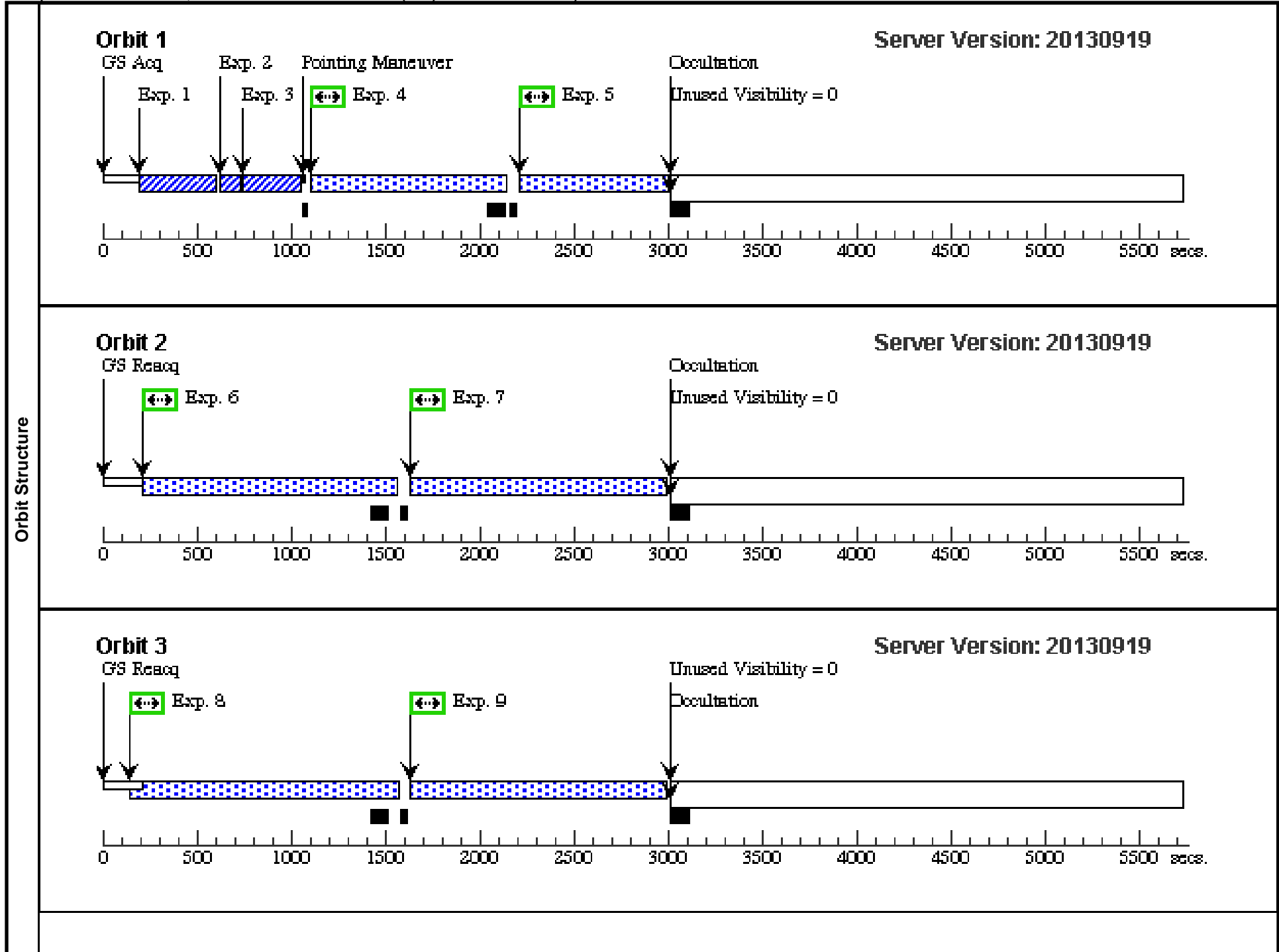


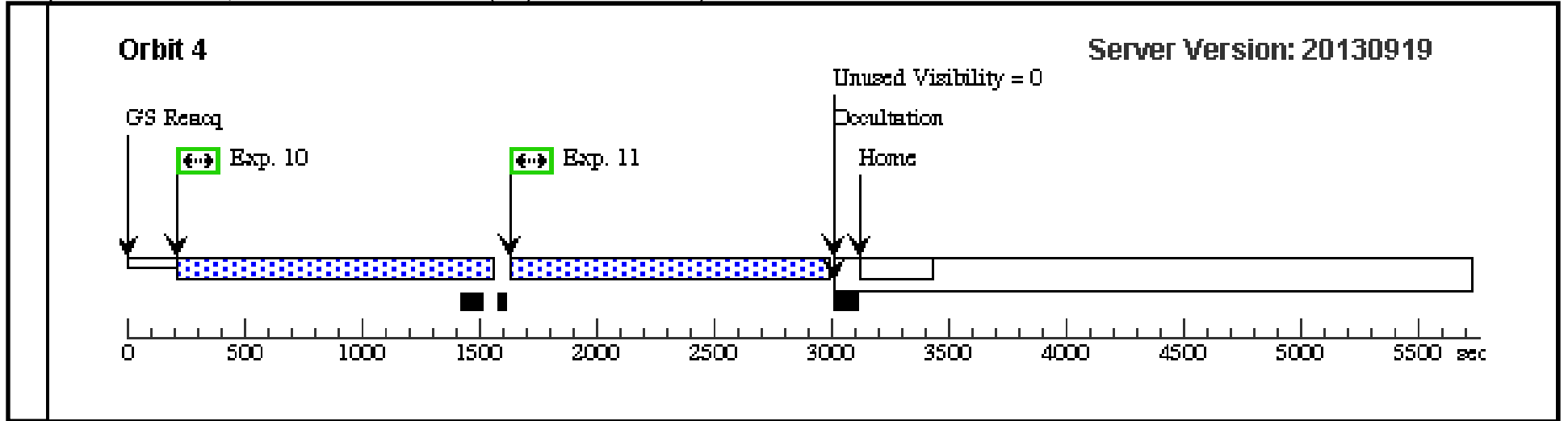
Proposal 13398 - Q1-G185M-1913&1941 (02) - A Breakaway from Incremental Science: Full Characterization of the $z < 1$ CGM and Te...

Visit	Proposal 13398, Q1-G185M-1913&1941 (02), scheduling Thu Oct 24 01:18:07 GMT 2013					
	Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	Q0122-003	RA: 01 25 28.8000 (21.3700000d) Dec: -00 05 55.80 (-.09883d) Equinox: J2000	Redshift: 1.07	V=15.8+/-0.35 f_lam=3-5E-15 from 1600-3300 A; GALEX FUV=18.86 NUV=17.58	Reference Frame: ICRS
Comments: FOS G160M and G230M provided						

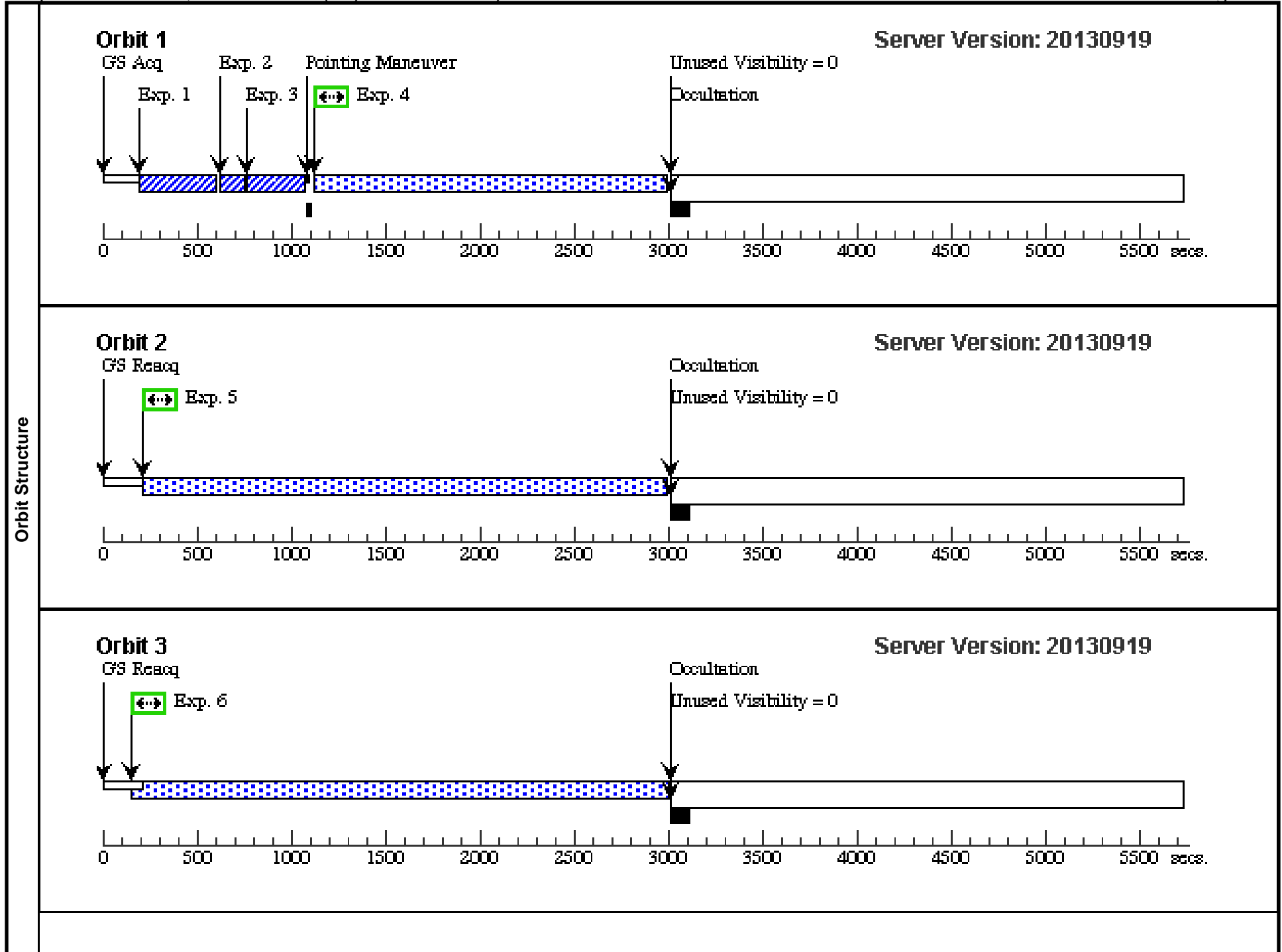
Proposal 13398 - Q1-G185M-1913&1941 (02) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Te...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			32 Secs (32 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.515 855)	(1) Q0122-003	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				26 Secs (26 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			32 Secs (32 Secs) [==>]	[1]
	4	G185M-191 3-FP-POS 1 (COS.sp.517 586)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=69 0			783 Secs (783 Secs) [==>]	[1]
	5	G185M-191 3-FP-POS 2 (COS.sp.517 590)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=2; BUFFER-TIME=77 3			773 Secs (773 Secs) [==>]	[1]
	6	G185M-191 3-FP-POS 3 (COS.sp.517 592)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=3; BUFFER-TIME=12 00			1339 Secs (1339 Secs) [==>]	[2]
	7	G185M-191 3-FP-POS 4 (COS.sp.517 593)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=4; BUFFER-TIME=13 50			1349 Secs (1349 Secs) [==>]	[2]
	8	G185M-194 1-FP-POS 1 (COS.sp.517 592)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1941 A	FP-POS=1; BUFFER-TIME=12 00			1339 Secs (1339 Secs) [==>]	[3]
	9	G185M-194 1-FP-POS 2 (COS.sp.517 593)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1941 A	FP-POS=2; BUFFER-TIME=13 50			1349 Secs (1349 Secs) [==>]	[3]
	10	G185M-194 1-FP-POS 3 (COS.sp.517 592)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1941 A	FP-POS=3; BUFFER-TIME=12 00			1339 Secs (1339 Secs) [==>]	[4]
11	G185M-194 1-FP-POS 4 (COS.sp.517 593)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G185M 1941 A	FP-POS=4; BUFFER-TIME=13 50			1349 Secs (1349 Secs) [==>]	[4]	



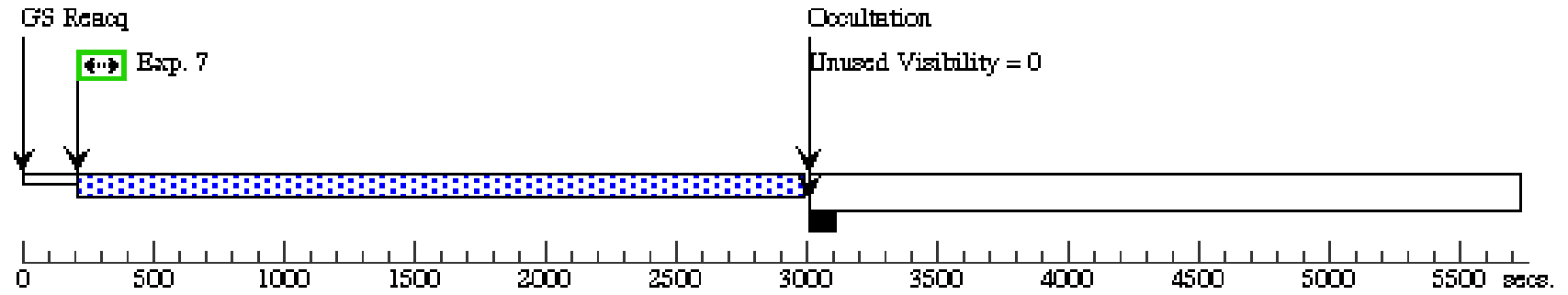


Visit	Proposal 13398, Q1-225M-2233 (03), scheduling Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%									
	(Q1-225M-2233 (03)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	Q0122-003	RA: 01 25 28.8000 (21.3700000d) Dec: -00 05 55.80 (-.09883d) Equinox: J2000	Redshift: 1.07	V=15.8+/-0.35 f_lam=3-5E-15 from 1600-3300 A; GALEX FUV=18.86 NUV=17.58	Reference Frame: ICRS				
<i>Comments: FOS G160M and G230M provided</i>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			32 Secs (32 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.515 851)	(1) Q0122-003	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				47 Secs (47 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			32 Secs (32 Secs) [==>]	[1]
	4	G225M-223 3-FP-POS-3 (COS.sp.517 607)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2233 A	FP-POS=3; BUFFER-TIME=15 52			1552 Secs (1552 Secs) [==>]	[1]
	5	G225M-223 3-FP-POS-4 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2233 A	BUFFER-TIME=27 67; FP-POS=4			2766 Secs (2766 Secs) [==>]	[2]
	6	G225M-223 3-FP-POS-1 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2233 A	FP-POS=1; BUFFER-TIME=27 67			2766 Secs (2766 Secs) [==>]	[3]
	7	G225M-223 3-FP-POS-2 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2233 A	BUFFER-TIME=27 67; FP-POS=2			2766 Secs (2766 Secs) [==>]	[4]
	8	G225M-223 3-FP-POS-3 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2233 A	FP-POS=3; BUFFER-TIME=27 67			2766 Secs (2766 Secs) [==>]	[5]



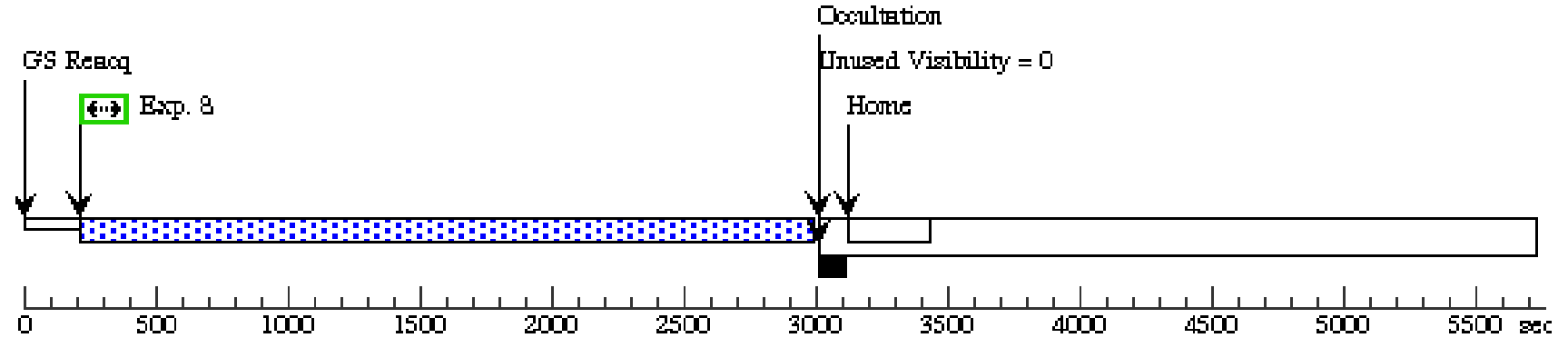
Orbit 4

Server Version: 20130919

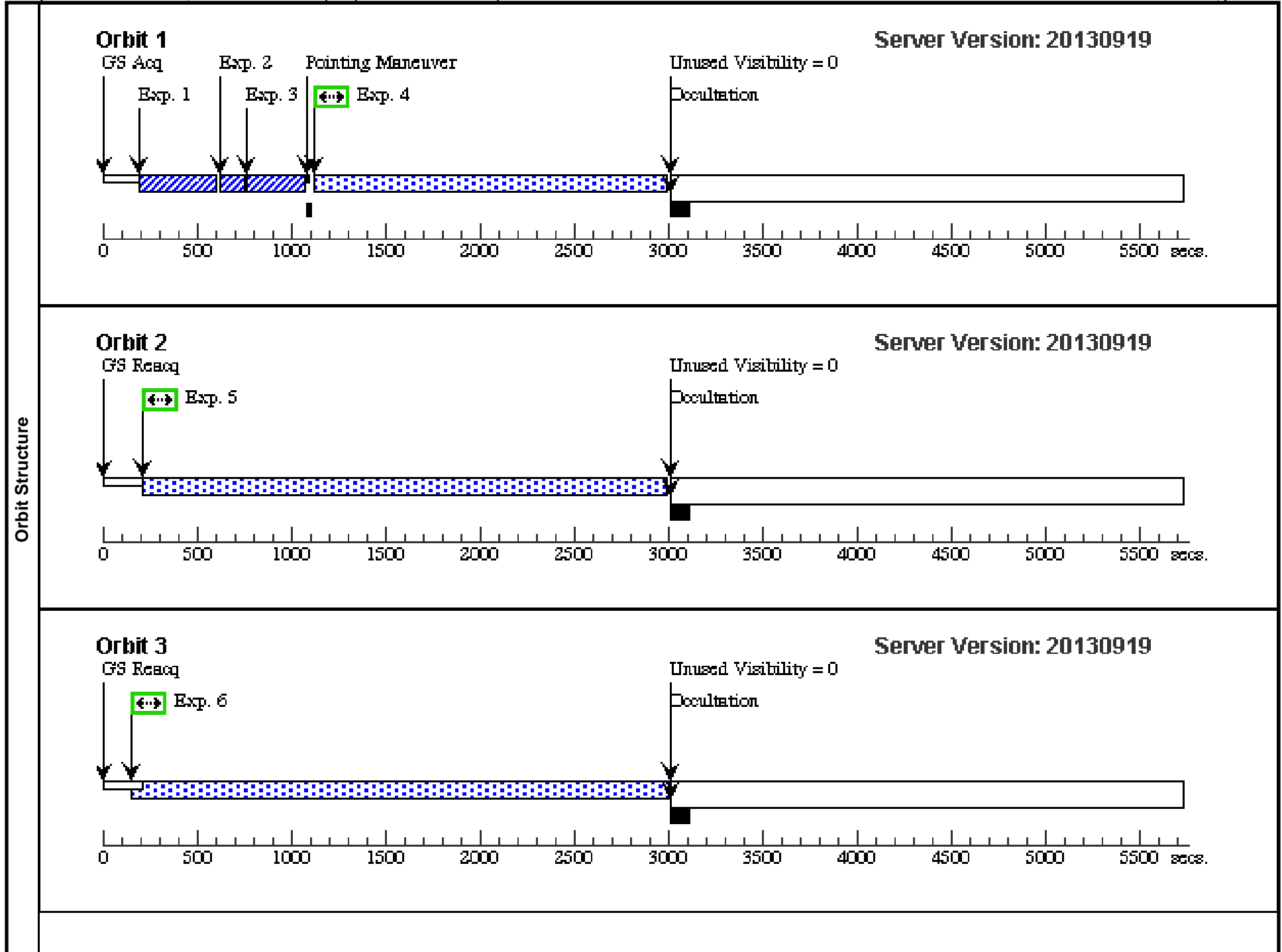


Orbit 5

Server Version: 20130919

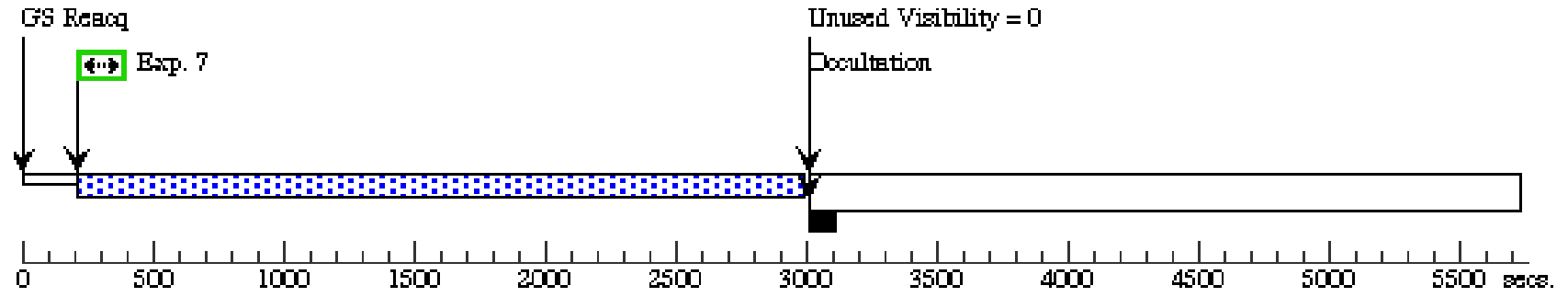


Visit	Proposal 13398, Q1-225M-2268 (04), scheduling Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%									
	(Q1-225M-2268 (04)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	Q0122-003	RA: 01 25 28.8000 (21.3700000d) Dec: -00 05 55.80 (-.09883d) Equinox: J2000	Redshift: 1.07	V=15.8+/-0.35 f_lam=3-5E-15 from 1600-3300 A; GALEX FUV=18.86 NUV=17.58	Reference Frame: ICRS				
Comments: FOS G160M and G230M provided										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			32 Secs (32 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.515 851)	(1) Q0122-003	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				47 Secs (47 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.510 424)	(1) Q0122-003	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			32 Secs (32 Secs) [==>]	[1]
	4	G225M-226 8-FP-POS-3 (COS.sp.517 607)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2268 A	FP-POS=3; BUFFER-TIME=15 53			1552 Secs (1552 Secs) [==>]	[1]
	5	G225M-226 8-FP-POS-4 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2268 A	BUFFER-TIME=27 67; FP-POS=4			2766 Secs (2766 Secs) [==>]	[2]
	6	G225M-226 8-FP-POS-1 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2268 A	FP-POS=1; BUFFER-TIME=27 67			2766 Secs (2766 Secs) [==>]	[3]
	7	G225M-226 8-FP-POS-2 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2268 A	BUFFER-TIME=27 67; FP-POS=2			2766 Secs (2766 Secs) [==>]	[4]
	8	G225M-226 8-FP-POS-3 (COS.sp.517 610)	(1) Q0122-003	COS/NUV, TIME-TAG, PSA	G225M 2268 A	FP-POS=3; BUFFER-TIME=27 67			2766 Secs (2766 Secs) [==>]	[5]



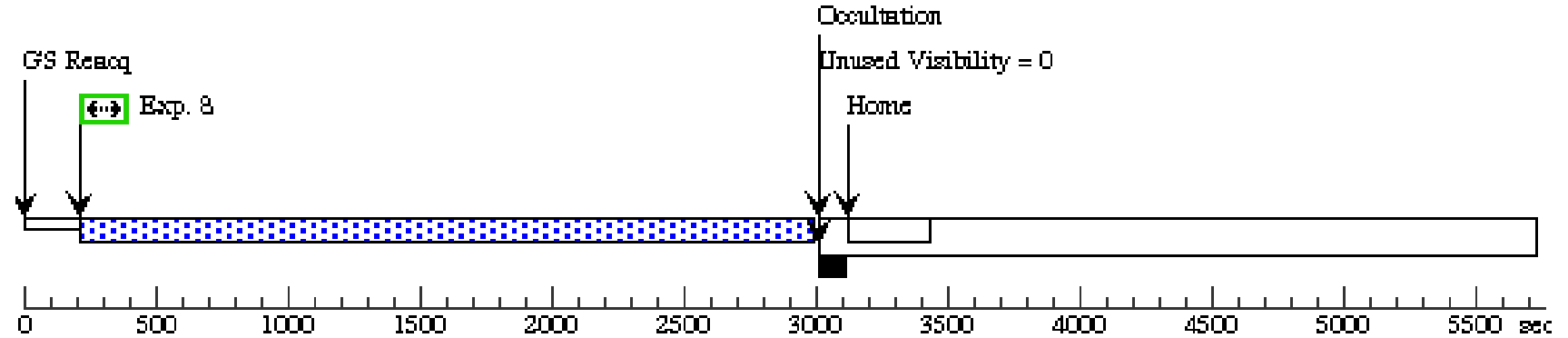
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

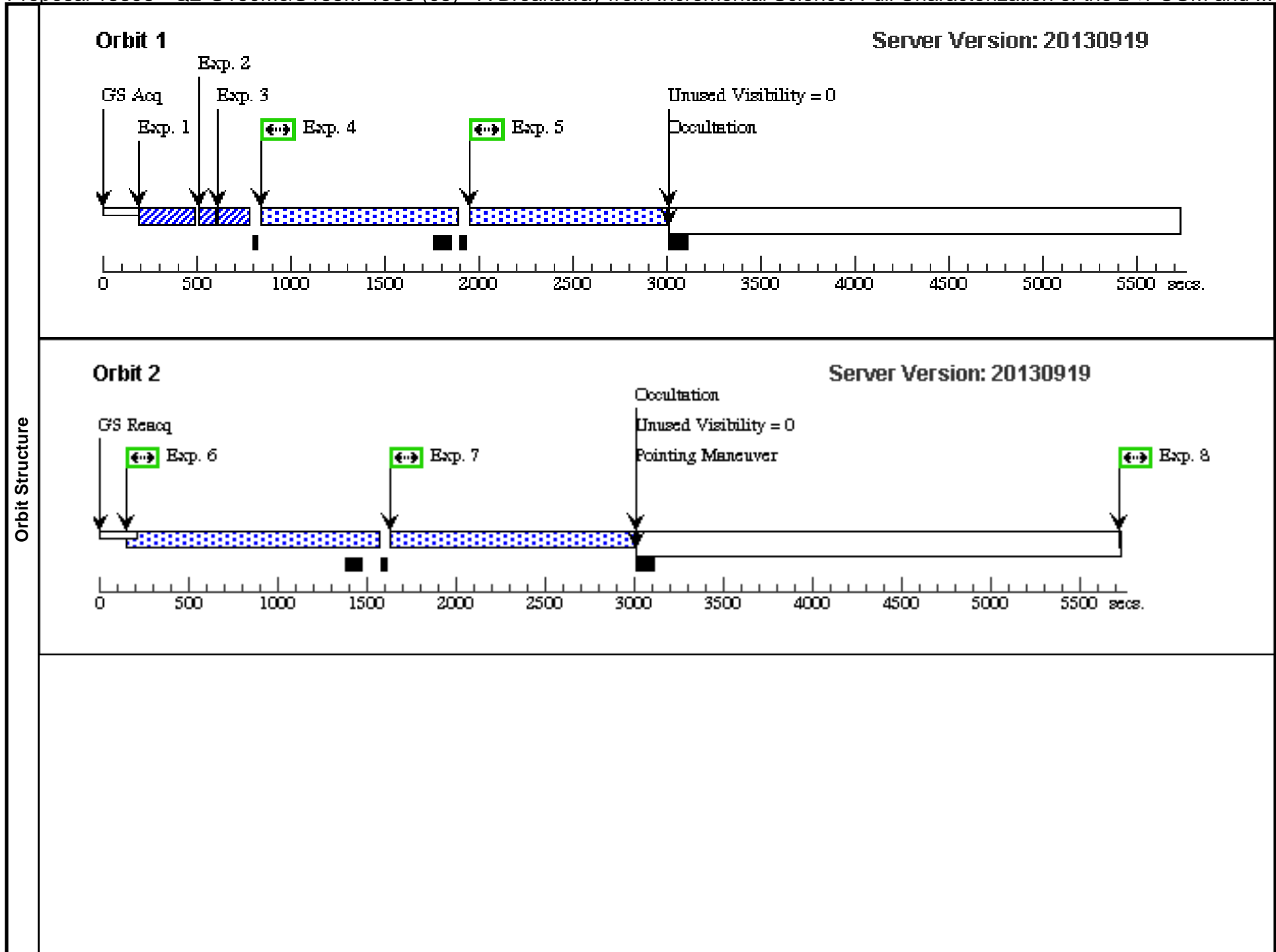


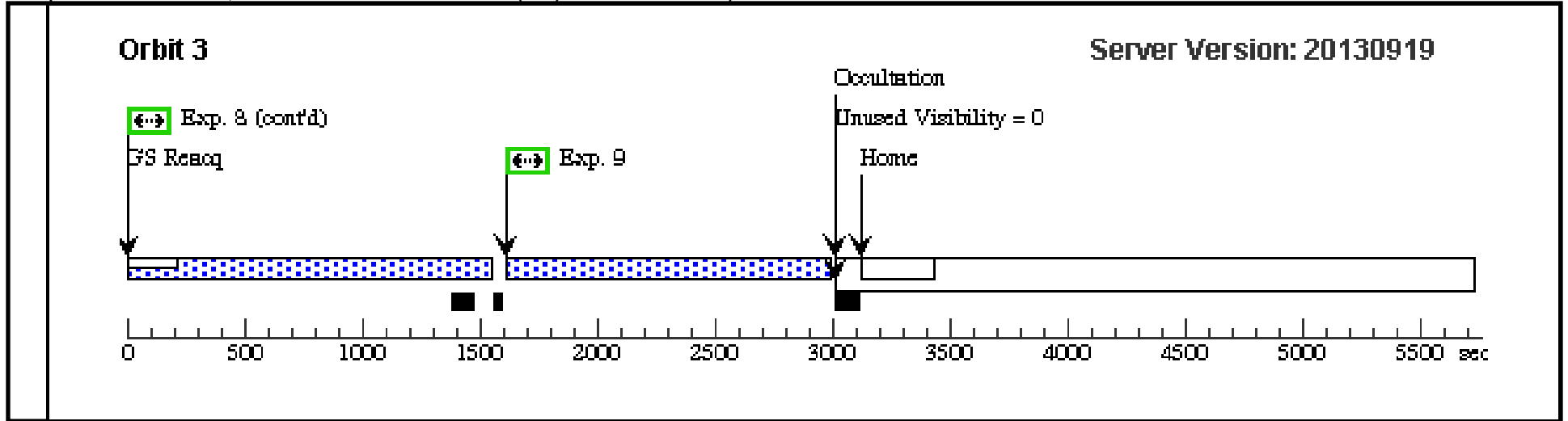
Proposal 13398 - Q2-G160M&G185M-1953 (05) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Visit	Proposal 13398, Q2-G160M&G185M-1953 (05), implementation Thu Oct 24 01:18:13 GMT 2013																
	Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
Diagnostics	(Q2-G160M&G185M-1953 (05)) 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.																
	(Q2-G160M&G185M-1953 (05)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>Q0349-146</td> <td>RA: 03 51 28.5650 (57.8690208d) Dec: -14 29 8.00 (-14.48556d) Equinox: J2000</td> <td>Redshift: 0.616</td> <td>V=16.2 f_lam=2E-14 from 1600-2300A ; GALEX FUV=17.04 NUV=16 .18</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	Q0349-146	RA: 03 51 28.5650 (57.8690208d) Dec: -14 29 8.00 (-14.48556d) Equinox: J2000	Redshift: 0.616	V=16.2 f_lam=2E-14 from 1600-2300A ; GALEX FUV=17.04 NUV=16 .18	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(2)	Q0349-146	RA: 03 51 28.5650 (57.8690208d) Dec: -14 29 8.00 (-14.48556d) Equinox: J2000	Redshift: 0.616	V=16.2 f_lam=2E-14 from 1600-2300A ; GALEX FUV=17.04 NUV=16 .18	Reference Frame: ICRS												
<i>Comments: G160M and G230M provided</i>																	

Proposal 13398 - Q2-G160M&G185M-1953 (05) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.515 941)	(2) Q0349-146	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			5 Secs (5 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.515 942)	(2) Q0349-146	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				6 Secs (6 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.515 941)	(2) Q0349-146	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			5 Secs (5 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 612)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=89 0			1000 Secs (1000 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 612)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=4; BUFFER-TIME=99 5			994 Secs (994 Secs) [==>]	[1]
	6	G160M/FP-POS-1 (COS.sp.517 613)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=11 30			1300 Secs (1300 Secs) [==>]	[2]
	7	G160M/FP-POS-2 (COS.sp.517 615)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=2; BUFFER-TIME=13 20			1314 Secs (1314 Secs) [==>]	[2]
	8	G185M-1953/FP-POS-3 (COS.sp.517 616)	(2) Q0349-146	COS/NUV, TIME-TAG, PSA	G185M 1953 A	BUFFER-TIME=11 60; FP-POS=3			1318 Secs (1318 Secs) [==>]	[2]
	9	G185M-1953/FP-POS-4 (COS.sp.517 616)	(2) Q0349-146	COS/NUV, TIME-TAG, PSA	G185M 1953 A	BUFFER-TIME=13 68; FP-POS=4			1368 Secs (1368 Secs) [==>]	[3]



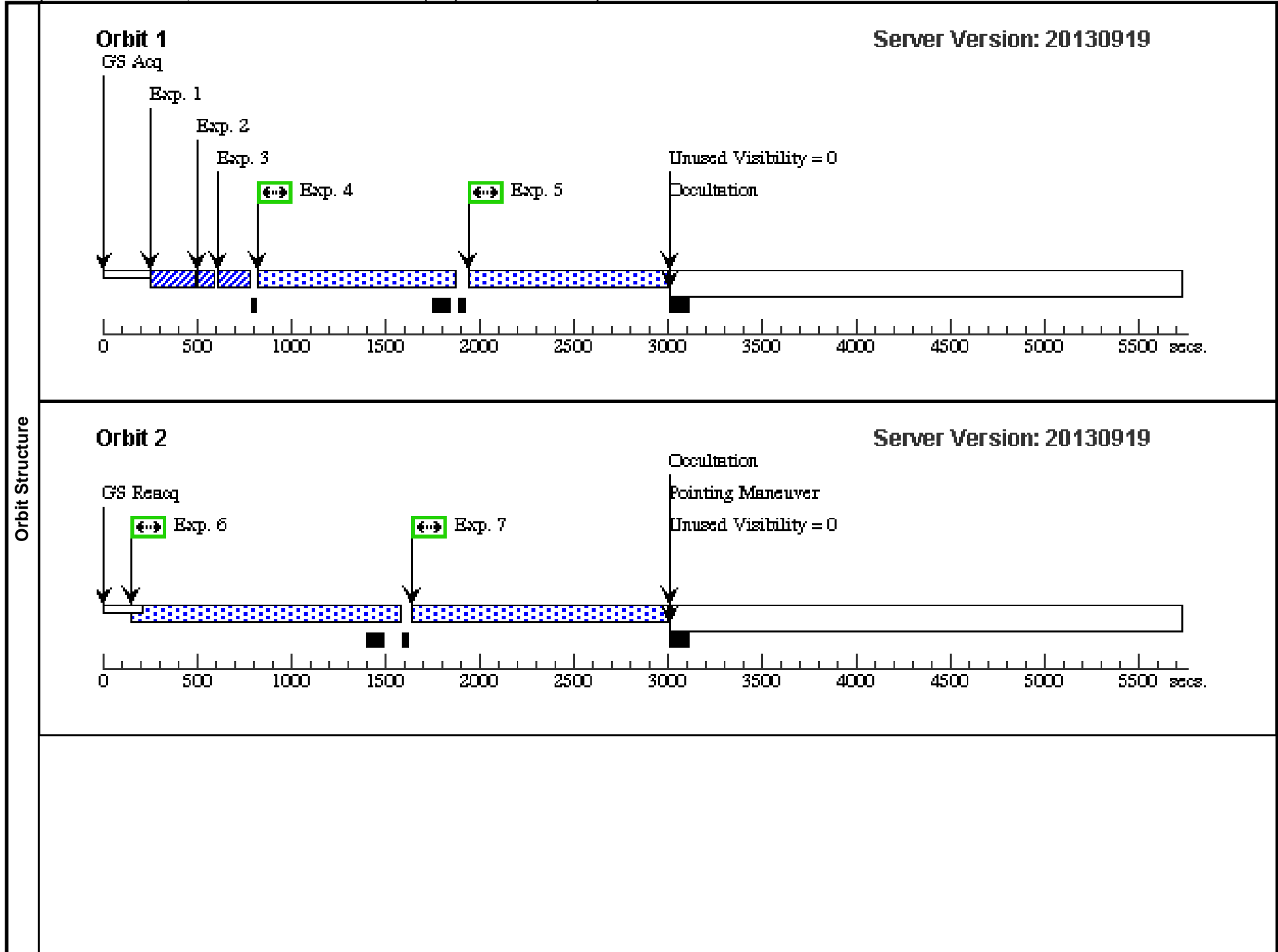


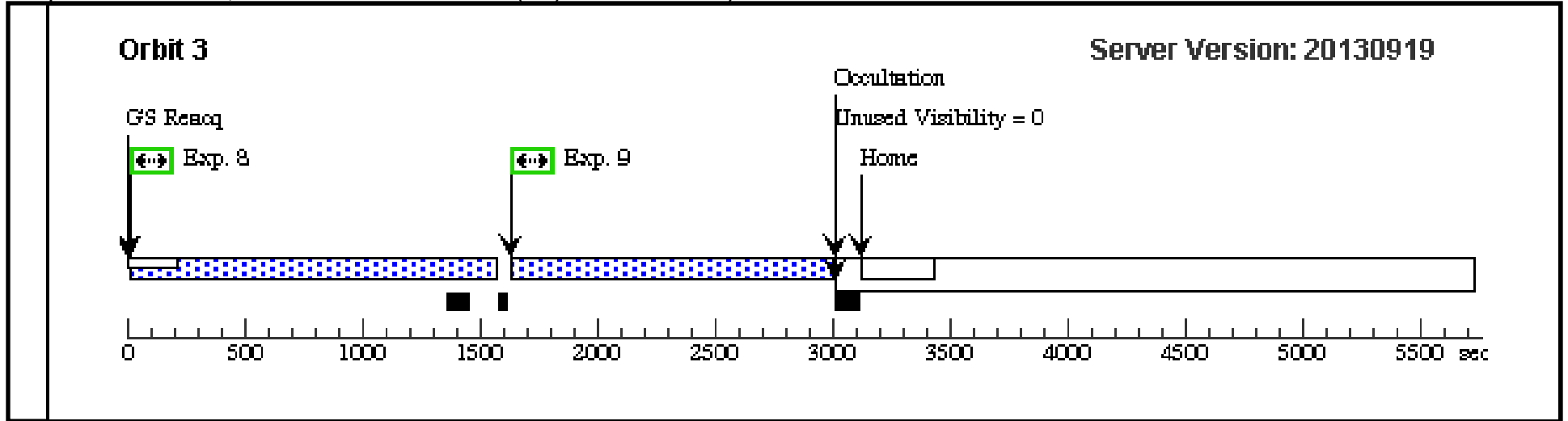
Proposal 13398 - Q2-G130M&G185M-2010 (06) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Visit	Proposal 13398, Q2-G130M&G185M-2010 (06), scheduling Thu Oct 24 01:18:14 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
	Diagnosics (Q2-G130M&G185M-2010 (06)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q2-G130M&G185M-2010 (06)) 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.																
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>Q0349-146</td> <td>RA: 03 51 28.5650 (57.8690208d) Dec: -14 29 8.00 (-14.48556d) Equinox: J2000</td> <td>Redshift: 0.616</td> <td>V=16.2 f_lam=2E-14 from 1600-2300A ; GALEX FUV=17.04 NUV=16 .18</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	Q0349-146	RA: 03 51 28.5650 (57.8690208d) Dec: -14 29 8.00 (-14.48556d) Equinox: J2000	Redshift: 0.616	V=16.2 f_lam=2E-14 from 1600-2300A ; GALEX FUV=17.04 NUV=16 .18	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(2)	Q0349-146	RA: 03 51 28.5650 (57.8690208d) Dec: -14 29 8.00 (-14.48556d) Equinox: J2000	Redshift: 0.616	V=16.2 f_lam=2E-14 from 1600-2300A ; GALEX FUV=17.04 NUV=16 .18	Reference Frame: ICRS												
Comments: G160M and G230M provided																	

Proposal 13398 - Q2-G130M&G185M-2010 (06) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 024)	(2) Q0349-146	COS/FUV, ACQ/SEARCH, PSA	G130M 1327 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			3 Secs (3 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 025)	(2) Q0349-146	COS/FUV, ACQ/PEAKXD, PSA	G130M 1327 A				3 Secs (3 Secs) [==>]	[1]
	3	G130M AC Q/PEAKD (COS.sa.516 024)	(2) Q0349-146	COS/FUV, ACQ/PEAKD, PSA	G130M 1327 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			3 Secs (3 Secs) [==>]	[1]
	4	G130M/FP-POS-3 (COS.sp.517 618)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=89 0			1000 Secs (1000 Secs) [==>]	[1]
	5	G130M/FP-POS-4 (COS.sp.517 618)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=10 08			1007 Secs (1007 Secs) [==>]	[1]
	6	G130M/FP-POS-1 (COS.sp.517 619)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=11 50			1310 Secs (1310 Secs) [==>]	[2]
	7	G130M/FP-POS-2 (COS.sp.517 619)	(2) Q0349-146	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=13 05			1304 Secs (1304 Secs) [==>]	[2]
	8	G185M-2010/FP-POS-3 (COS.sp.517 620)	(2) Q0349-146	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=11 40; FP-POS=3			1336 Secs (1336 Secs) [==>]	[3]
	9	G185M-2010/FP-POS-4 (COS.sp.517 620)	(2) Q0349-146	COS/NUV, TIME-TAG, PSA	G185M 2010 A	BUFFER-TIME=13 51; FP-POS=4			1350 Secs (1350 Secs) [==>]	[3]

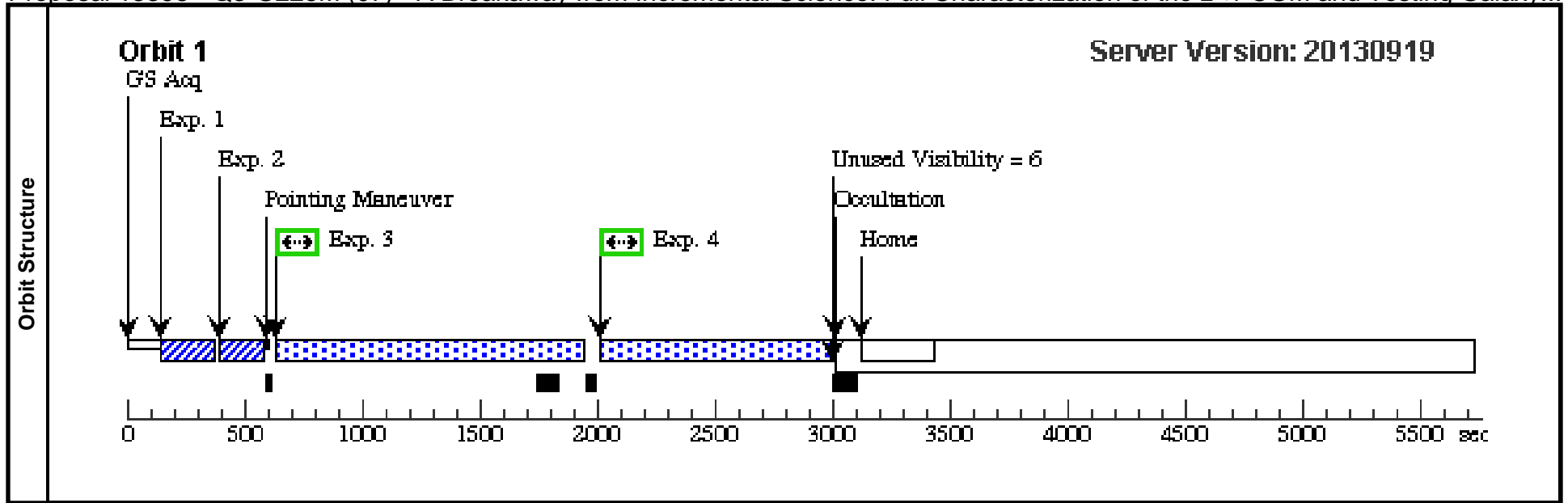




Proposal 13398 - Q3-G225M (07) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galaxy...

Thu Oct 24 01:18:15 GMT 2013

Visit	Proposal 13398, Q3-G225M (07), scheduling Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%									
	(Q3-G225M (07)) 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.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	Q0454-220	RA: 04 56 8.9200 (74.0371667d) Dec: -21 59 9.10 (-21.98586d) Equinox: J2000	Redshift: 0.534	V=16.1 f_lam=1-2E-14 from 1350-2300 A; GALEX FUV=16.39 NUV=15.74	Reference Frame: ICRS	Comments: FOS G130M, G190M, G270M provided			
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/PEAKXD (COS.sa.516 029)	(3) Q0454-220	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				13 Secs (13 Secs) [==>]	[1]
	2	G160M AC Q/PEAKD (COS.sa.516 028)	(3) Q0454-220	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			9 Secs (9 Secs) [==>]	[1]
	3	G225M-228 3/FP-POS-3 (COS.sp.517 699)	(3) Q0454-220	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=80 0; FP-POS=3			870 Secs (985 Secs) [==>985.0 Secs]	[1]
	4	G225M-228 3/FP-POS-4 (COS.sp.517 699)	(3) Q0454-220	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=97 0; FP-POS=4			850 Secs (965 Secs) [==>965.0 Secs]	[1]

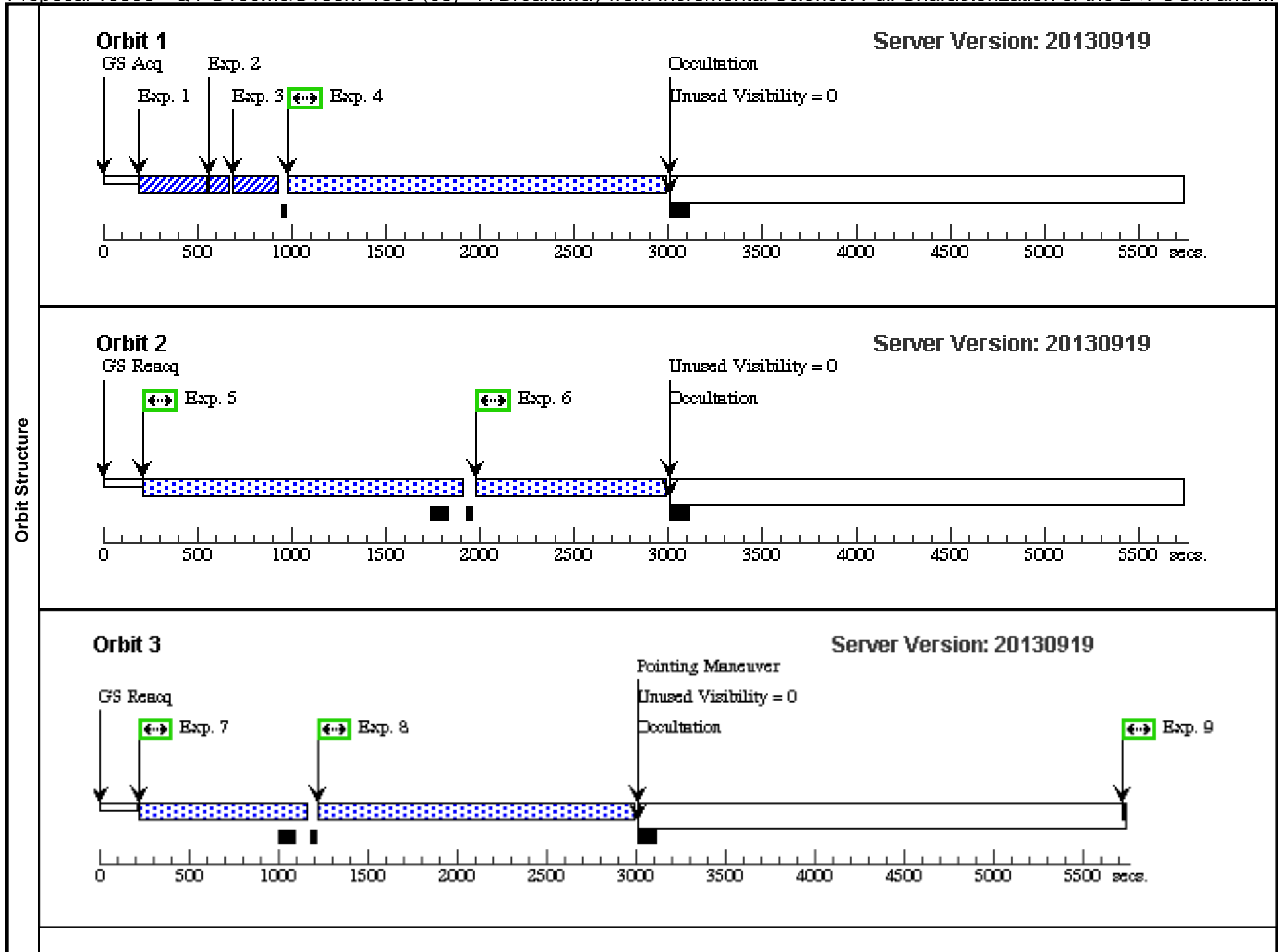


Proposal 13398 - Q4-G160M&G185M-1890 (08) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Visit	Proposal 13398, Q4-G160M&G185M-1890 (08), implementation Thu Oct 24 01:18:16 GMT 2013					
	Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%					
Diagnostics	(Q4-G160M&G185M-1890 (08)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
	(Q4-G160M&G185M-1890 (08)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS
<i>Comments: FOS G190H and G270H provided</i>						

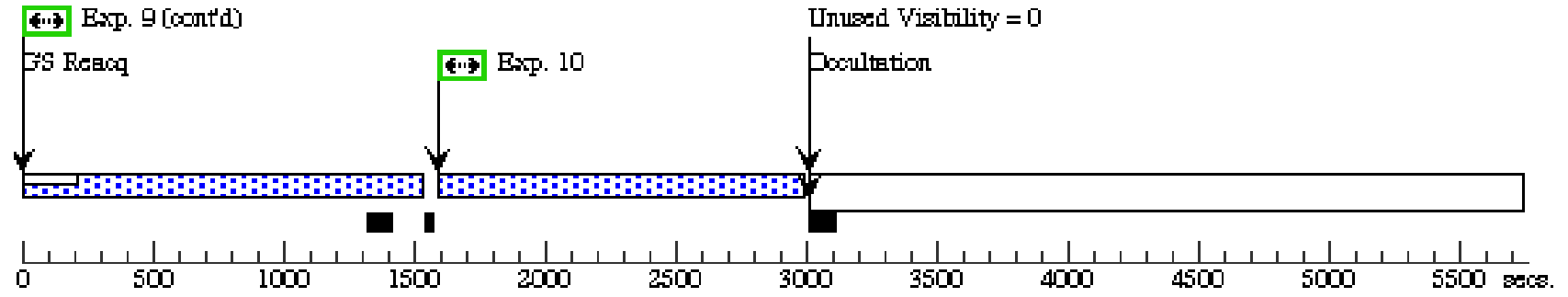
Proposal 13398 - Q4-G160M&G185M-1890 (08) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.516 032)	(4) Q0850+440	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			19 Secs (19 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 034)	(4) Q0850+440	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				26 Secs (26 Secs) [==>]	[1]
	3	G160M AC Q/SEARCH (COS.sa.516 032)	(4) Q0850+440	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			19 Secs (19 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 700)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=19 59			1958 Secs (1958 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 702)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=4; BUFFER-TIME=14 86			1652 Secs (1652 Secs) [==>]	[2]
	6	G160M/FP-POS-1 (COS.sp.517 703)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=89 1			890 Secs (890 Secs) [==>]	[2]
	7	G160M/FP-POS-1 (COS.sp.517 703)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=75 0			894 Secs (894 Secs) [==>]	[3]
	8	G160M/FP-POS-2 (COS.sp.517 704)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=2; BUFFER-TIME=17 30			1715 Secs (1715 Secs) [==>]	[3]
	9	G185M-1890/FP-POS-3 (COS.sp.517 705)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1890 A	BUFFER-TIME=11 00; FP-POS=3			1295 Secs (1295 Secs) [==>]	[3]
	10	G185M-1890/FP-POS-4 (COS.sp.517 706)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1890 A	BUFFER-TIME=13 86; FP-POS=4			1386 Secs (1386 Secs) [==>]	[4]
	11	G185M-1890/FP-POS-1 (COS.sp.517 707)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1890 A	BUFFER-TIME=11 50; FP-POS=1			1315 Secs (1315 Secs) [==>]	[5]
12	G185M-1890/FP-POS-2 (COS.sp.517 706)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1890 A	BUFFER-TIME=13 68; FP-POS=2			1368 Secs (1368 Secs) [==>]	[5]	



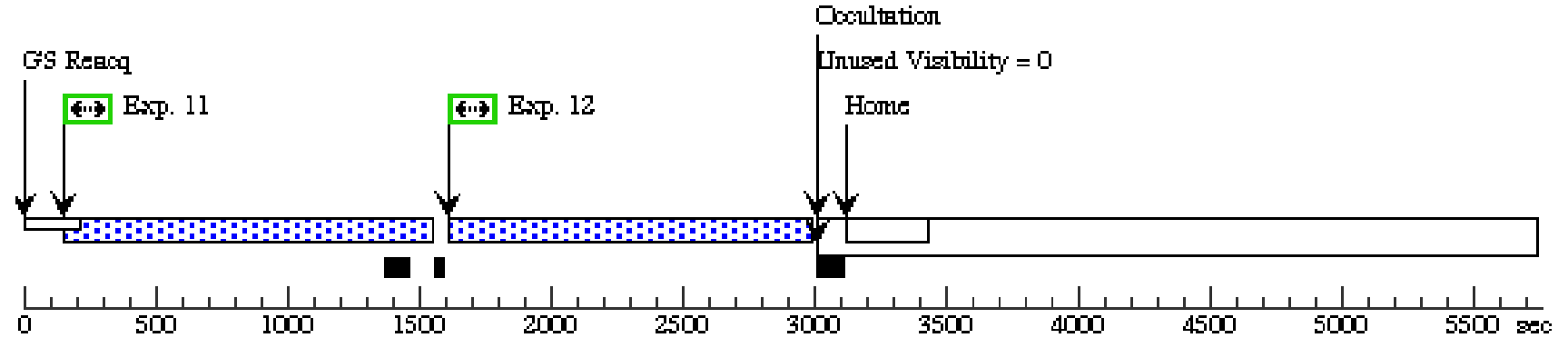
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

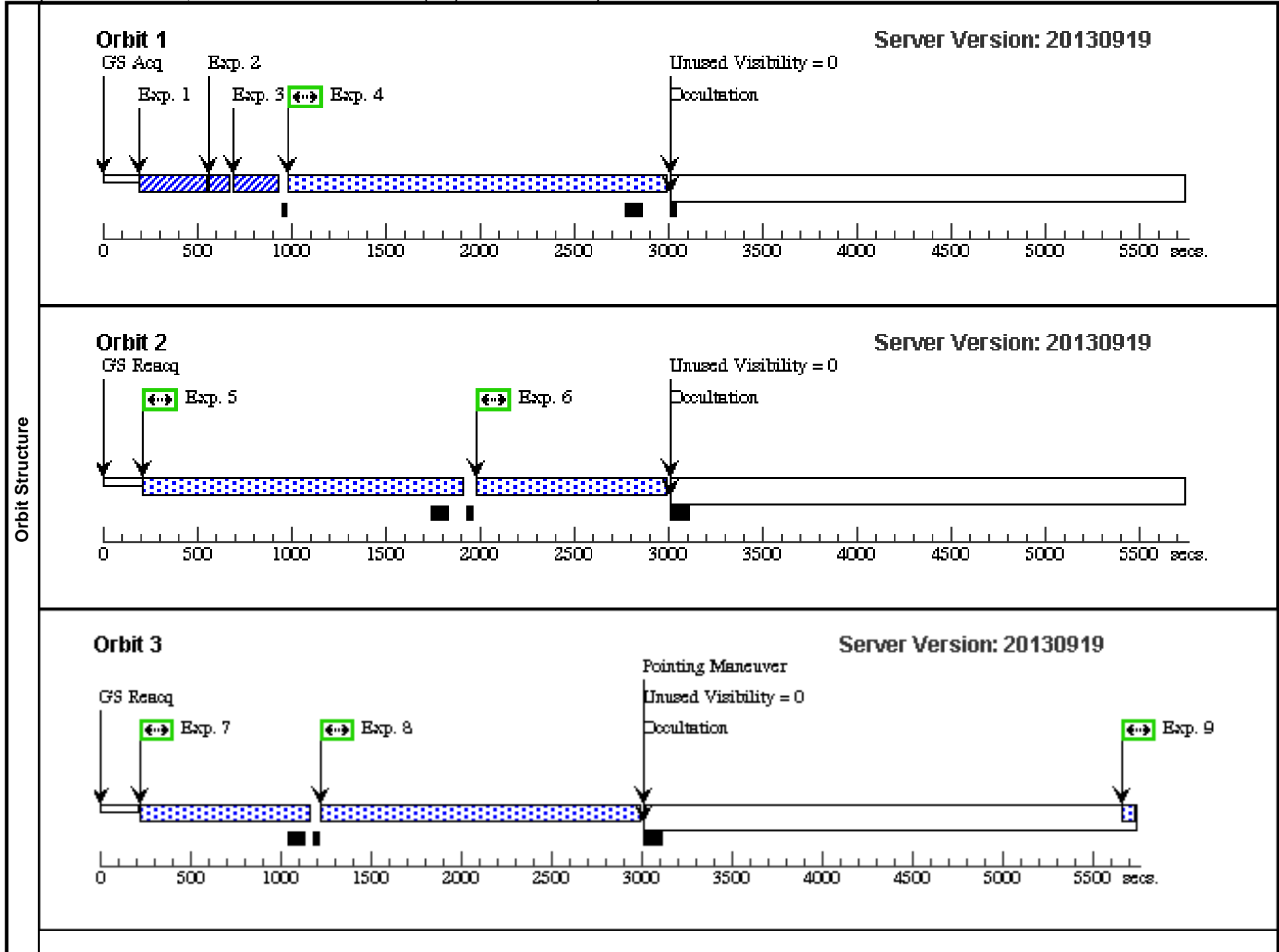


Proposal 13398 - Q4-G160M&G225M-2239 (09) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Visit	Proposal 13398, Q4-G160M&G225M-2239 (09), implementation Thu Oct 24 01:18:17 GMT 2013																
	Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
Diagnostics	(Q4-G160M&G225M-2239 (09)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
	(Q4-G160M&G225M-2239 (09)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>(4)</td> <td>Q0850+440</td> <td>RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000</td> <td>Redshift: 0.513</td> <td>V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS				
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS												
<i>Comments: FOS G190H and G270H provided</i>																	

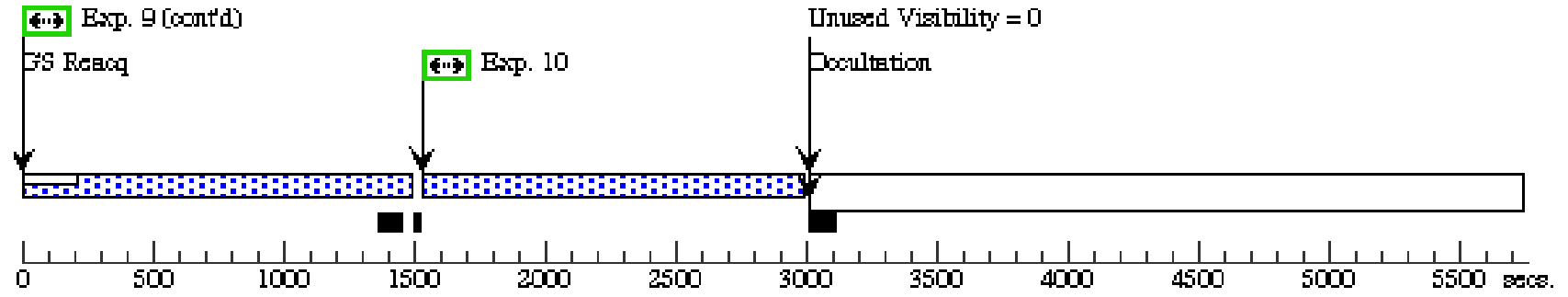
Proposal 13398 - Q4-G160M&G225M-2239 (09) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.516 032)	(4) Q0850+440	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			19 Secs (19 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 034)	(4) Q0850+440	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				26 Secs (26 Secs) [==>]	[1]
	3	G160M AC Q/SEARCH (COS.sa.516 032)	(4) Q0850+440	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			19 Secs (19 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 700)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=17 50			1958 Secs (1958 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 704)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=4; BUFFER-TIME=14 86			1652 Secs (1652 Secs) [==>]	[2]
	6	G160M/FP-POS-1 (COS.sp.517 703)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=89 1			890 Secs (890 Secs) [==>]	[2]
	7	G160M/FP-POS-1 (COS.sp.517 703)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=79 0			894 Secs (894 Secs) [==>]	[3]
	8	G160M/FP-POS-2 (COS.sp.517 704)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=2; BUFFER-TIME=17 30			1715 Secs (1715 Secs) [==>]	[3]
	9	G225M-233 9/FP-POS-3 (COS.sp.517 708)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G225M 2339 A	BUFFER-TIME=11 40; FP-POS=3			1250 Secs (1250 Secs) [==>]	[3]
	10	G225M-233 9/FP-POS-4 (COS.sp.517 709)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G225M 2339 A	BUFFER-TIME=14 41; FP-POS=4			1441 Secs (1441 Secs) [==>]	[4]
	11	G225M-233 9/FP-POS-1 (COS.sp.517 709)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G225M 2339 A	BUFFER-TIME=11 80; FP-POS=1			1318 Secs (1318 Secs) [==>]	[5]
12	G225M-233 9/FP-POS-2 (COS.sp.517 709)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G225M 2339 A	BUFFER-TIME=13 65; FP-POS=2			1365 Secs (1365 Secs) [==>]	[5]	



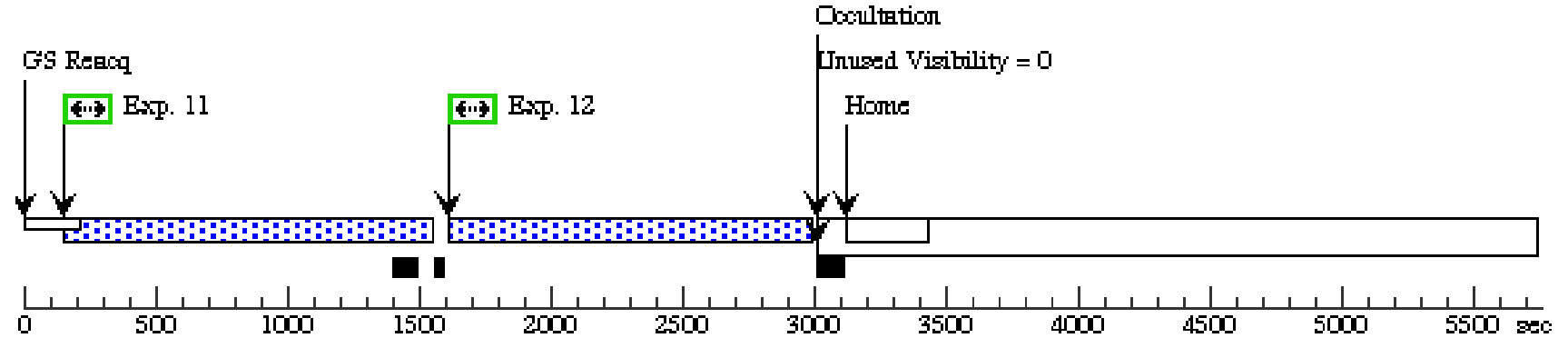
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

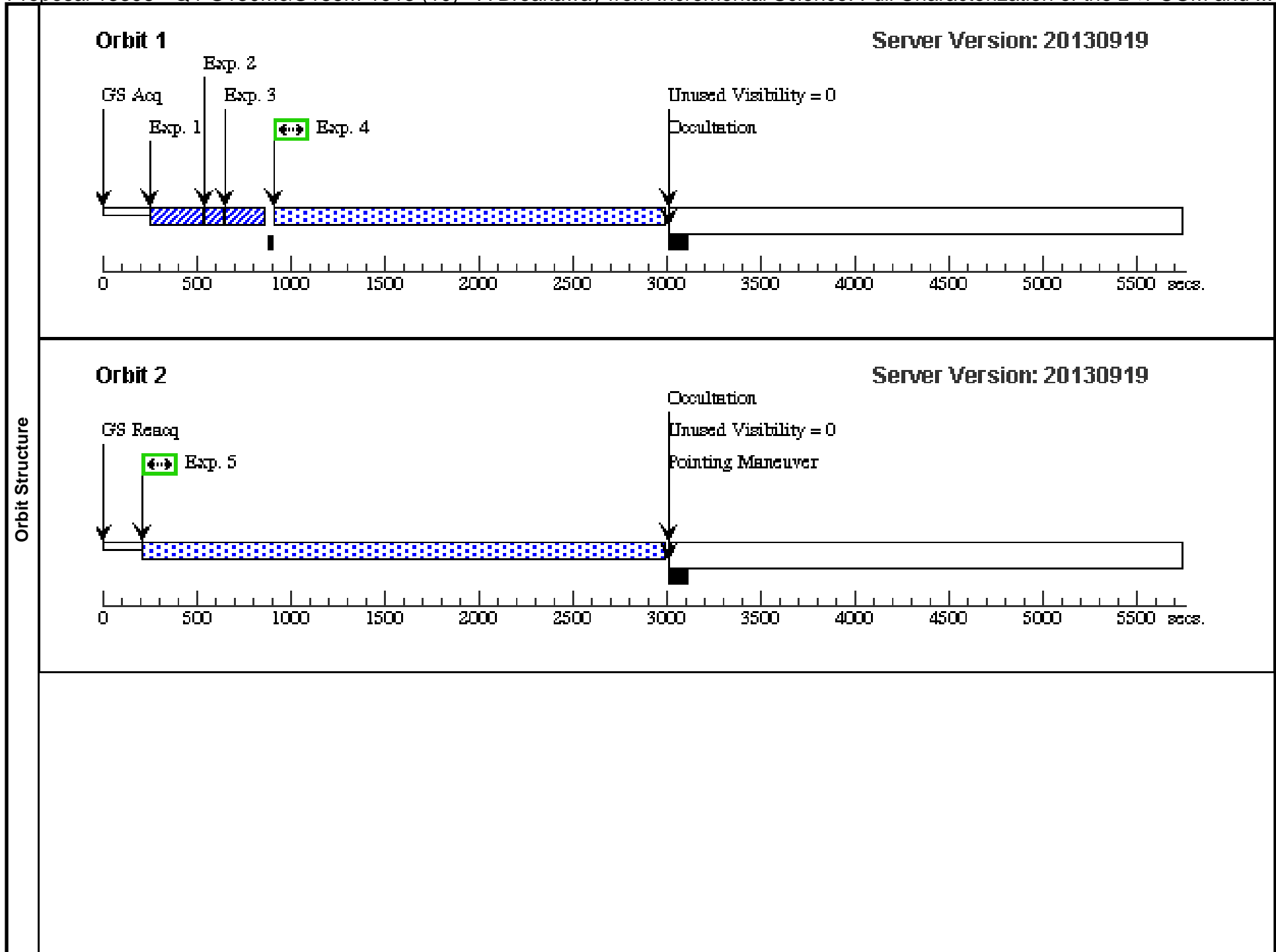


Proposal 13398 - Q4-G130M&G185M-1913 (10) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Visit	Proposal 13398, Q4-G130M&G185M-1913 (10), scheduled Thu Oct 24 01:18:19 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
	(Q4-G130M&G185M-1913 (10)) 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.																
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>(4)</td> <td>Q0850+440</td> <td>RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000</td> <td>Redshift: 0.513</td> <td>V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS												
Comments: FOS G190H and G270H provided																	

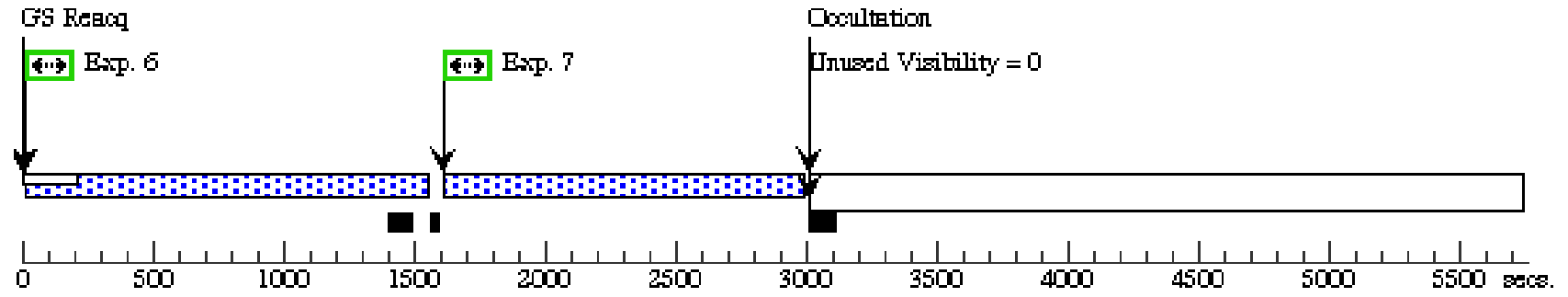
Proposal 13398 - Q4-G130M&G185M-1913 (10) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 054)	(4) Q0850+440	COS/FUV, ACQ/SEARCH, PSA	G130M 1300 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			12 Secs (12 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 055)	(4) Q0850+440	COS/FUV, ACQ/PEAKXD, PSA	G130M 1300 A				11 Secs (11 Secs) [==>]	[1]
	3	G130M AC Q/SEARCH (COS.sa.516 054)	(4) Q0850+440	COS/FUV, ACQ/PEAKD, PSA	G130M 1300 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			12 Secs (12 Secs) [==>]	[1]
	4	G130M/FP-POS-3 (COS.sp.517 710)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=19 57			1956 Secs (1956 Secs) [==>]	[1]
	5	G130M/FP-POS-4 (COS.sp.517 711)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=28 00			2700 Secs (2724 Secs) [==>2724.0 Secs]	[2]
	6	G185M-1913/FP-POS-1 (COS.sp.517 707)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=11 80; FP-POS=1			1250 Secs (1314 Secs) [==>1314.0 Secs]	[3]
	7	G185M-1913/FP-POS-2 (COS.sp.517 707)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=13 75; FP-POS=2			1300 Secs (1367 Secs) [==>1367.0 Secs]	[3]
	8	G185M-1913/FP-POS-3 (COS.sp.517 707)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=11 80; FP-POS=3			1318 Secs (1318 Secs) [==>]	[4]
	9	G185M-1913/FP-POS-4 (COS.sp.517 707)	(4) Q0850+440	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=13 65; FP-POS=4			1365 Secs (1365 Secs) [==>]	[4]



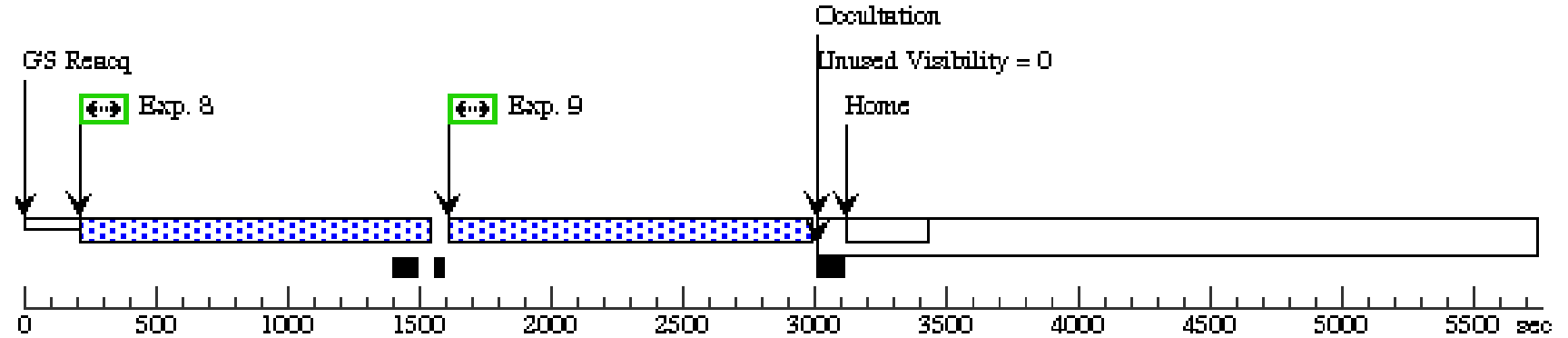
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Orbit 4

Server Version: 20130919



Proposal 13398 - Q4-G130M-1222 (11) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing ...

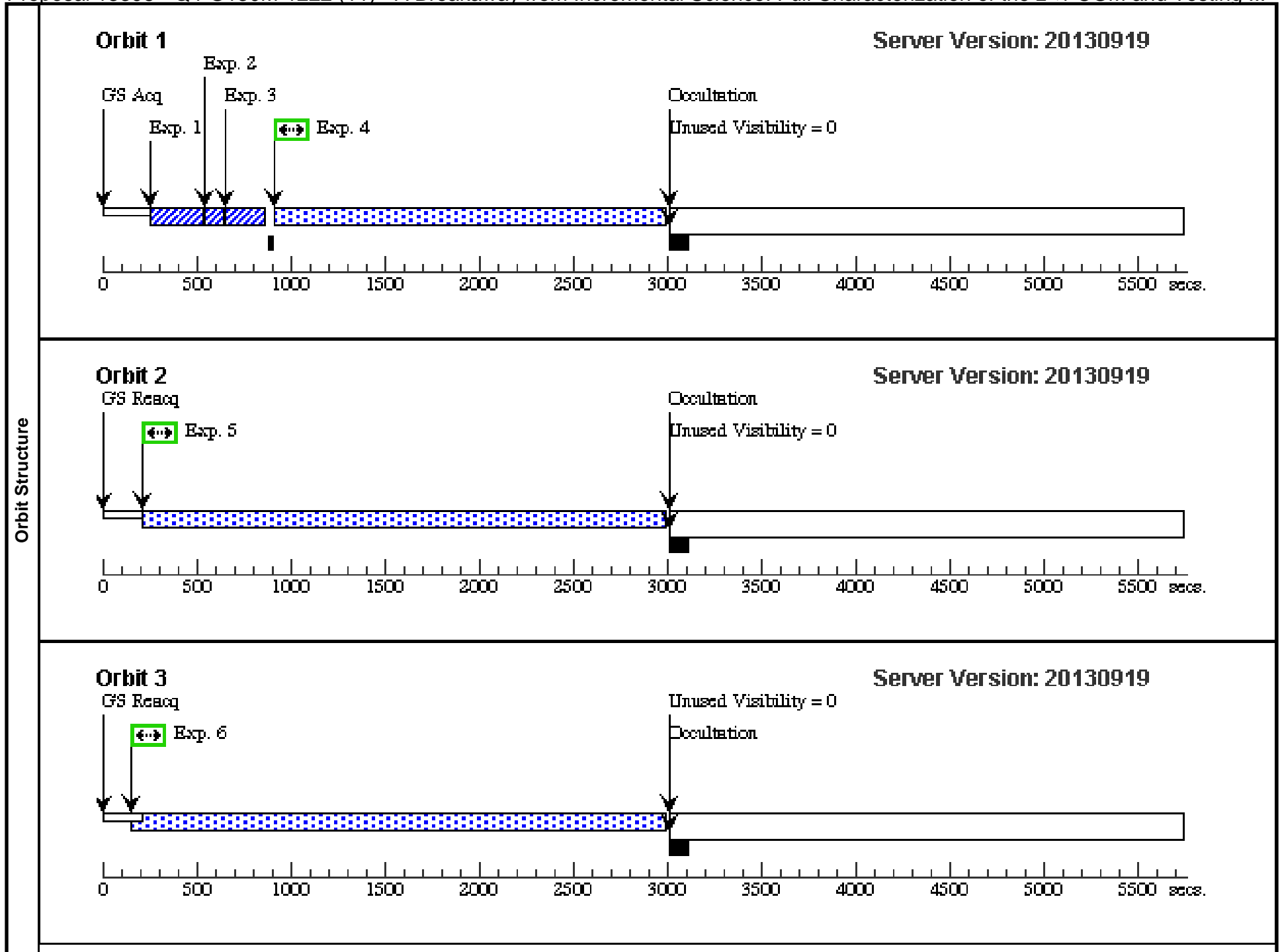
Thu Oct 24 01:18:20 GMT 2013

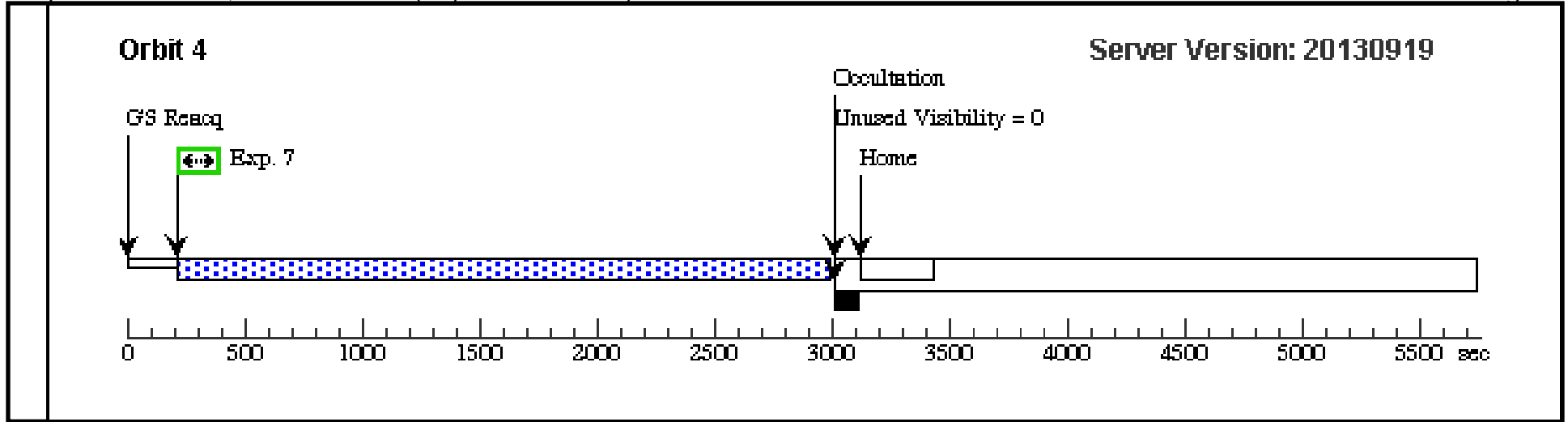
Visit	Proposal 13398, Q4-G130M-1222 (11), scheduled Diagnostic Status: Warning Scientific Instruments: COS/FUV Special Requirements: SCHED 100%
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Diagnostics	(Q4-G130M-1222 (11)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS
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Fixed 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>(4)</td> <td>Q0850+440</td> <td>RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000</td> <td>Redshift: 0.513</td> <td>V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous							
(4)	Q0850+440	RA: 08 53 34.2400 (133.3926667d) Dec: +43 49 2.27 (43.81730d) Equinox: J2000	Redshift: 0.513	V=16.6 f_lam=5E-15 from 1600-2300A; GALEX FUV=18.41 NUV=17.9 3	Reference Frame: ICRS								
Comments: FOS G190H and G270H provided													

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 054)	(4) Q0850+440	COS/FUV, ACQ/SEARCH, PSA	G130M 1300 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			12 Secs (12 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 055)	(4) Q0850+440	COS/FUV, ACQ/PEAKXD, PSA	G130M 1300 A				11 Secs (11 Secs) [==>]	[1]
	3	G130M AC Q/SEARCH (COS.sa.516 054)	(4) Q0850+440	COS/FUV, ACQ/PEAKD, PSA	G130M 1300 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			12 Secs (12 Secs) [==>]	[1]
	4	G130M/FP-POS-3 (COS.sp.517 710)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=20 00			1956 Secs (1956 Secs) [==>]	[1]
	5	G130M/FP-POS-4 (COS.sp.517 711)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=28 00			2700 Secs (2724 Secs) [==>2724.0 Secs]	[2]
	6	G130M/FP-POS-1 (COS.sp.517 711)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=28 00			2700 Secs (2724 Secs) [==>2724.0 Secs]	[3]
	7	G130M/FP-POS-2 (COS.sp.517 711)	(4) Q0850+440	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=28 00			2700 Secs (2724 Secs) [==>2724.0 Secs]	[4]

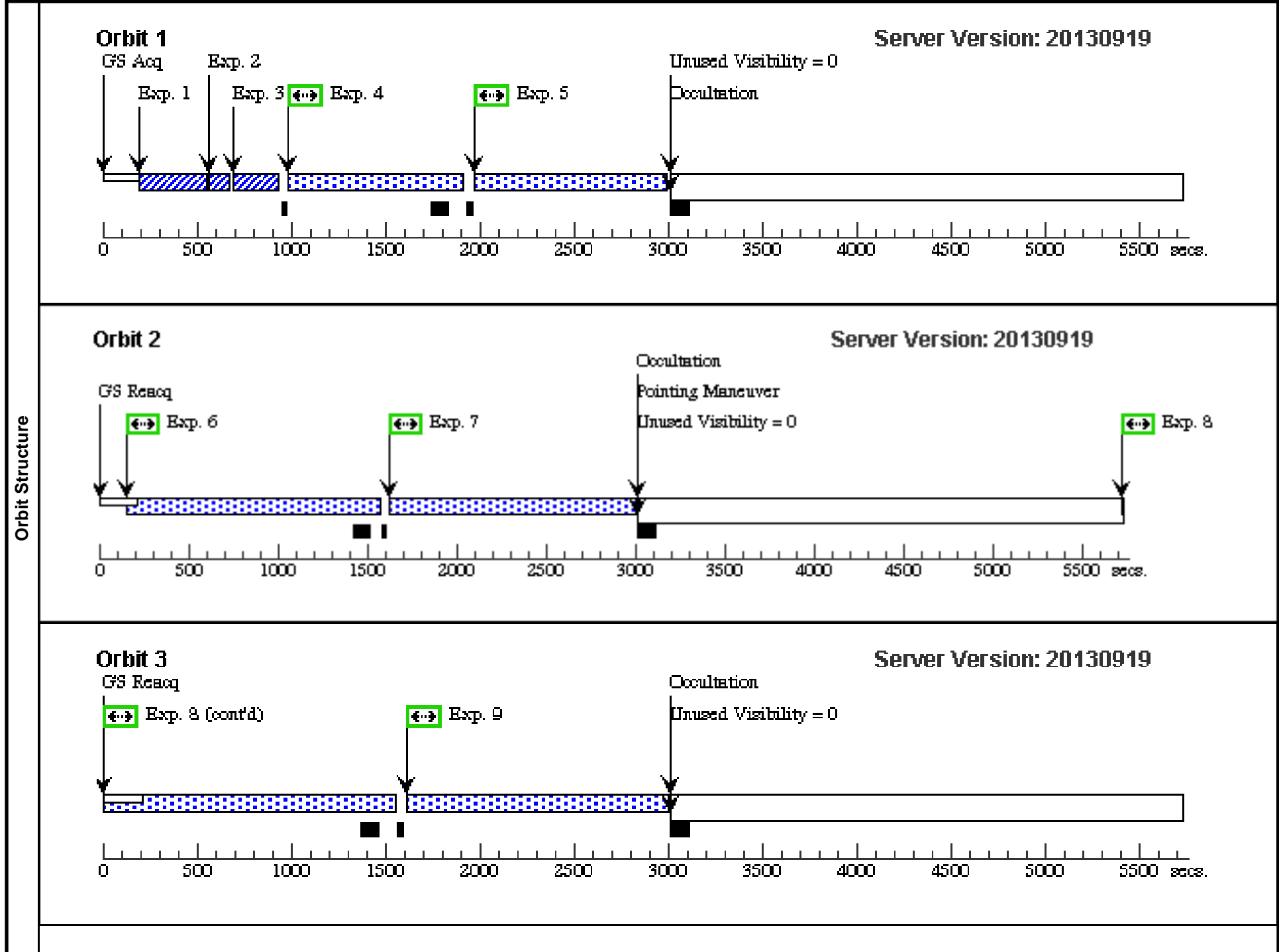




Visit	Proposal 13398, Q5-G160M&G185M-1864&G225M-2325 (12), implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
Diagnostics	(Q5-G160M&G185M-1864&G225M-2325 (12)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q5-G160M&G185M-1864&G225M-2325 (12)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q5-G160M&G185M-1864&G225M-2325 (12)) 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.																
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#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous												
(5)	Q1354+195	RA: 13 57 4.4500 (209.2685417d) Dec: +19 19 7.40 (19.31872d) Equinox: J2000	Redshift: 0.719	V=16.0 f_lam=5E-15 at 1350-2300A; G ALEX FUV=18.11 NUV 16.9	Reference Frame: ICRS												

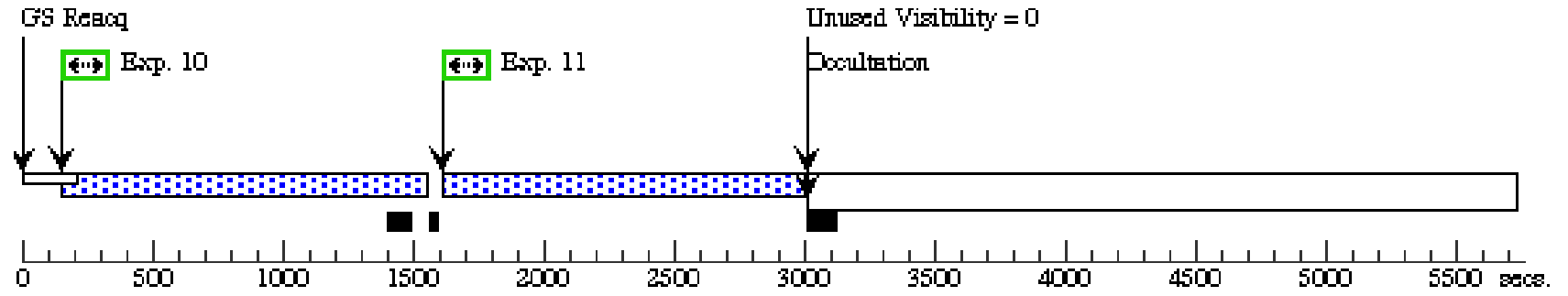
Proposal 13398 - Q5-G160M&G185M-1864&G225M-2325 (12) - A Breakaway from Incremental Science: Full Characterization of the ...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	G160M AC Q/SEARCH (COS.sa.516 032)	(5) Q1354+195	COS/FUV, ACQ/SEARCH, PSA	G160M 1577 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T		19 Secs (19 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 034)	(5) Q1354+195	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A			26 Secs (26 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.516 032)	(5) Q1354+195	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR		19 Secs (19 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 712)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=72 0		879 Secs (879 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 713)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=4; BUFFER-TIME=96 9		969 Secs (969 Secs) [==>]	[1]
	6	G160M/FP-POS-1 (COS.sp.517 714)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=1; BUFFER-TIME=11 70		1300 Secs (1300 Secs) [==>]	[2]
	7	G160M/FP-POS-2 (COS.sp.517 714)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=2; BUFFER-TIME=13 40		1324 Secs (1324 Secs) [==>]	[2]
	8	G185M-1864/FP-POS-3 (COS.sp.517 715)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G185M 1864 A	BUFFER-TIME=11 50; FP-POS=3		1314 Secs (1314 Secs) [==>]	[2]
	9	G185M-1864/FP-POS-4 (COS.sp.517 715)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G185M 1864 A	BUFFER-TIME=13 72; FP-POS=4		1372 Secs (1372 Secs) [==>]	[3]
	10	G185M-1864/FP-POS-1 (COS.sp.517 715)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G185M 1864 A	BUFFER-TIME=11 80; FP-POS=1		1318 Secs (1318 Secs) [==>]	[4]
	11	G185M-1864/FP-POS-2 (COS.sp.517 715)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G185M 1864 A	BUFFER-TIME=13 65; FP-POS=2		1370 Secs (1370 Secs) [==>]	[4]
	12	G225M-2325/FP-POS-3 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2325 A	BUFFER-TIME=11 80; FP-POS=3		1318 Secs (1318 Secs) [==>]	[5]
	13	G225M-2325/FP-POS-4 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2325 A	BUFFER-TIME=13 65; FP-POS=4		1368 Secs (1368 Secs) [==>]	[5]



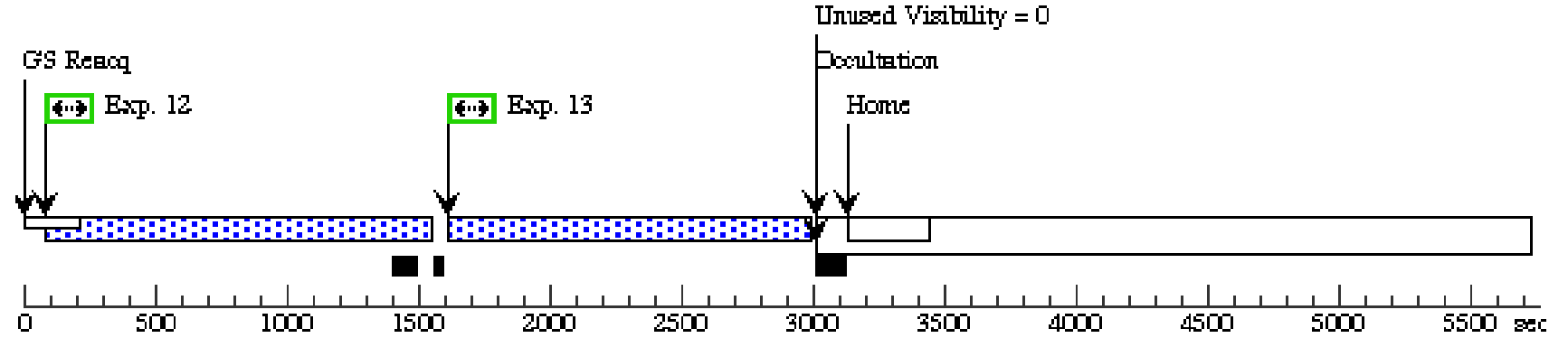
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

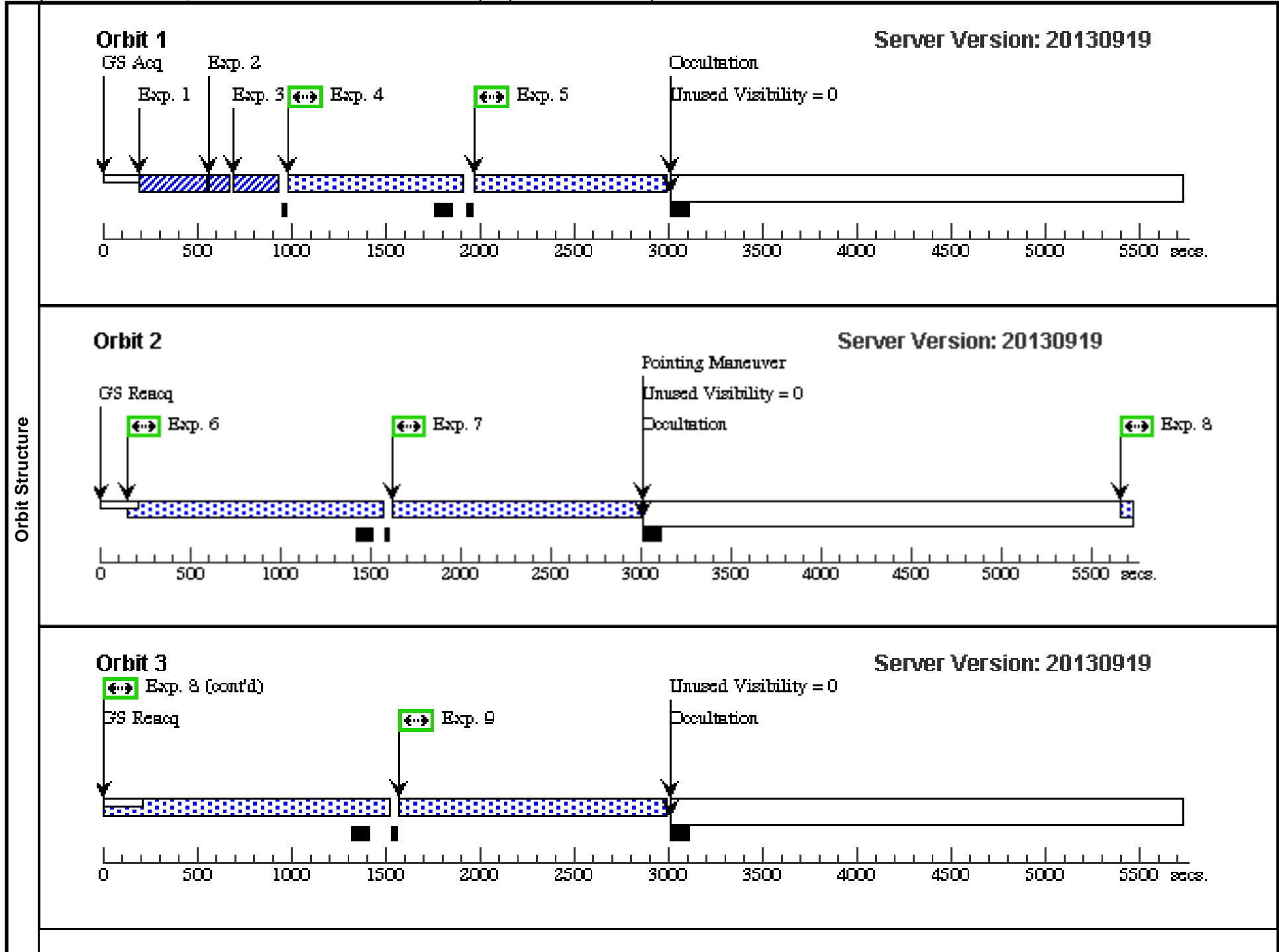


Proposal 13398 - Q5-G160M&G225M-2268-2325 (13) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM...

Visit	Proposal 13398, Q5-G160M&G225M-2268-2325 (13), implementation Thu Oct 24 01:18:23 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																						
	Diagnosics (Q5-G160M&G225M-2268-2325 (13)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q5-G160M&G225M-2268-2325 (13)) 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.																						
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>(5)</td> <td>Q1354+195</td> <td>RA: 13 57 4.4500 (209.2685417d) Dec: +19 19 7.40 (19.31872d) Equinox: J2000</td> <td>Redshift: 0.719</td> <td>V=16.0 f_lam=5E-15 at 1350-2300A; G ALEX FUV=18.11 NUV 16.9</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: FOS G190H and G270H provided</i> </td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	Q1354+195	RA: 13 57 4.4500 (209.2685417d) Dec: +19 19 7.40 (19.31872d) Equinox: J2000	Redshift: 0.719	V=16.0 f_lam=5E-15 at 1350-2300A; G ALEX FUV=18.11 NUV 16.9	Reference Frame: ICRS	<i>Comments: FOS G190H and G270H provided</i>					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(5)	Q1354+195	RA: 13 57 4.4500 (209.2685417d) Dec: +19 19 7.40 (19.31872d) Equinox: J2000	Redshift: 0.719	V=16.0 f_lam=5E-15 at 1350-2300A; G ALEX FUV=18.11 NUV 16.9	Reference Frame: ICRS																		
<i>Comments: FOS G190H and G270H provided</i>																							

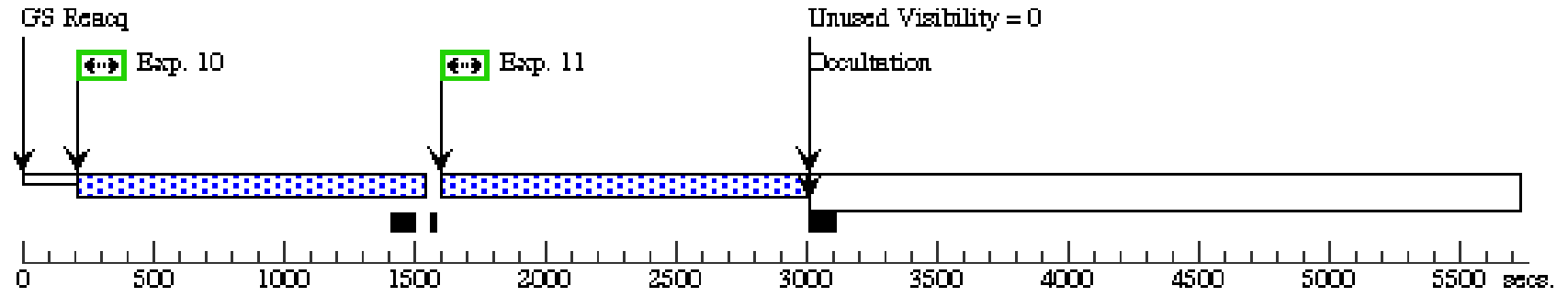
Proposal 13398 - Q5-G160M&G225M-2268-2325 (13) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.516 032)	(5) Q1354+195	COS/FUV, ACQ/SEARCH, PSA	G160M 1577 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			19 Secs (19 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 034)	(5) Q1354+195	COS/FUV, ACQ/PEAKXD, PSA	G160M 1577 A				26 Secs (26 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.516 032)	(5) Q1354+195	COS/FUV, ACQ/PEAKD, PSA	G160M 1577 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			19 Secs (19 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 712)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=3; BUFFER-TIME=74 0			879 Secs (879 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 712)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=4; BUFFER-TIME=97 0			969 Secs (969 Secs) [==>]	[1]
	6	G160M/FP-POS-1 (COS.sp.517 714)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=1; BUFFER-TIME=11 70			1300 Secs (1300 Secs) [==>]	[2]
	7	G160M/FP-POS-2 (COS.sp.517 714)	(5) Q1354+195	COS/FUV, TIME-TAG, PSA	G160M 1577 A	FP-POS=2; BUFFER-TIME=13 29			1324 Secs (1324 Secs) [==>]	[2]
	8	G225M-226 8/FP-POS-1 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2268 A	FP-POS=1; BUFFER-TIME=11 00			1280 Secs (1280 Secs) [==>]	[2]
	9	G225M-226 8/FP-POS-2 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2268 A	BUFFER-TIME=14 06; FP-POS=2			1406 Secs (1406 Secs) [==>]	[3]
	10	G225M-226 8/FP-POS-3 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2268 A	FP-POS=3; BUFFER-TIME=11 90			1318 Secs (1318 Secs) [==>]	[4]
	11	G225M-226 8/FP-POS-4 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2268 A	FP-POS=4; BUFFER-TIME=13 80			1380 Secs (1380 Secs) [==>]	[4]
	12	G225M-232 5/FP-POS-1 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2325 A	BUFFER-TIME=11 80; FP-POS=1			1318 Secs (1318 Secs) [==>]	[5]
13	G225M-23 25/FP-POS-2 (COS.sp.517 716)	(5) Q1354+195	COS/NUV, TIME-TAG, PSA	G225M 2325 A	BUFFER-TIME=13 70; FP-POS=2			1370 Secs (1370 Secs) [==>]	[5]	



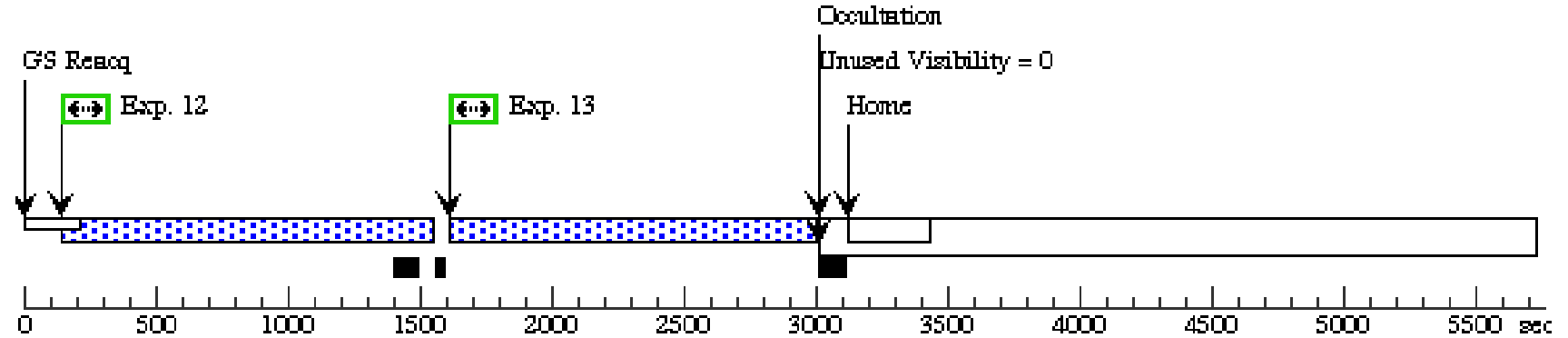
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

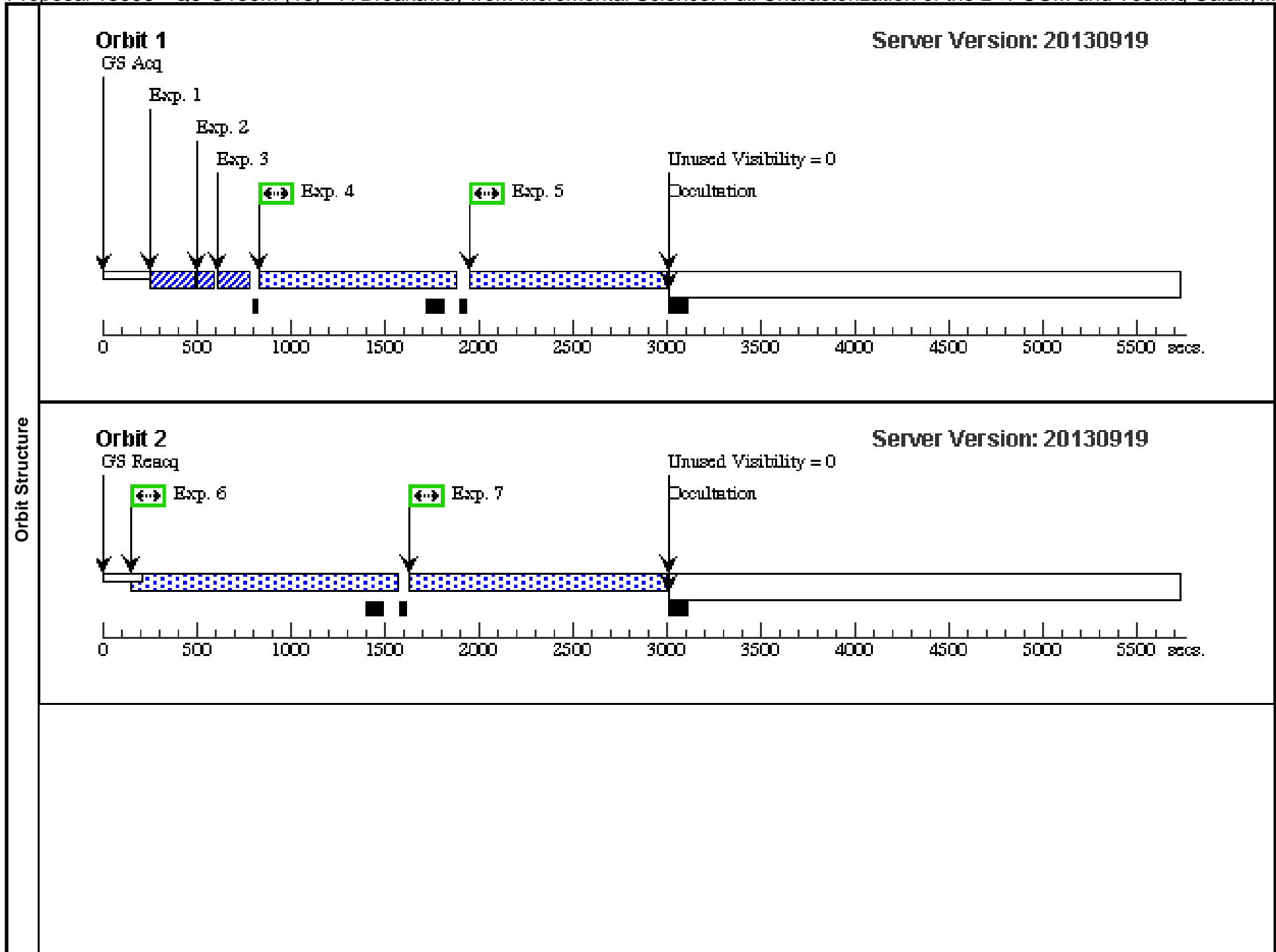


Proposal 13398 - Q6-G130M (15) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galaxy...

Visit	Proposal 13398, Q6-G130M (15), scheduling Thu Oct 24 01:18:24 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/FUV Special Requirements: SCHED 100%																
	(Q6-G130M (15)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q6-G130M (15)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>(6)</td> <td>Q1545+210</td> <td>RA: 15 47 43.5100 (236.9312917d) Dec: +20 52 16.50 (20.87125d) Equinox: J2000</td> <td>Redshift: 0.264</td> <td>V=15.07+/-0.08 f_lam=1-2E-14 at 1150-2300A; GALEX FUV=16.39 NUV=16.3 8</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(6)	Q1545+210	RA: 15 47 43.5100 (236.9312917d) Dec: +20 52 16.50 (20.87125d) Equinox: J2000	Redshift: 0.264	V=15.07+/-0.08 f_lam=1-2E-14 at 1150-2300A; GALEX FUV=16.39 NUV=16.3 8	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(6)	Q1545+210	RA: 15 47 43.5100 (236.9312917d) Dec: +20 52 16.50 (20.87125d) Equinox: J2000	Redshift: 0.264	V=15.07+/-0.08 f_lam=1-2E-14 at 1150-2300A; GALEX FUV=16.39 NUV=16.3 8	Reference Frame: ICRS												
Comments: F)S G130H, G190H, G270H provided																	

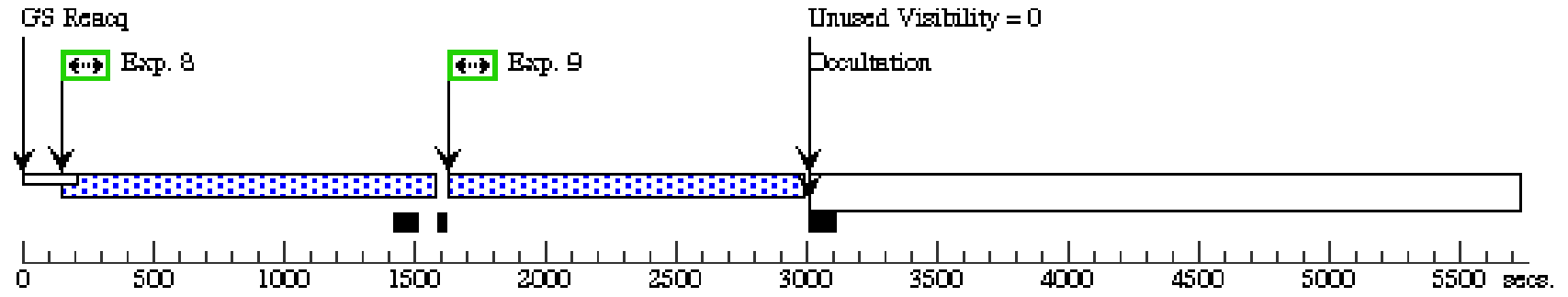
Proposal 13398 - Q6-G130M (15) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galaxy...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 218)	(6) Q1545+210	COS/FUV, ACQ/SEARCH, PSA	G130M 1327 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			4 Secs (4 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 219)	(6) Q1545+210	COS/FUV, ACQ/PEAKXD, PSA	G130M 1327 A				4 Secs (4 Secs) [==>]	[1]
	3	G130M AC Q/SEARCH (COS.sa.516 218)	(6) Q1545+210	COS/FUV, ACQ/PEAKD, PSA	G130M 1327 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			4 Secs (4 Secs) [==>]	[1]
	4	G130M-132 7/FP-POS-3 (COS.sp.517 725)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=85 0			999 Secs (999 Secs) [==>]	[1]
	5	G130M-132 7/FP-POS-4 (COS.sp.517 725)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=10 00			998 Secs (998 Secs) [==>]	[1]
	6	G130M-132 7/FP-POS-1 (COS.sp.517 727)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=11 50			1300 Secs (1300 Secs) [==>]	[2]
	7	G130M-132 7/FP-POS-2 (COS.sp.517 727)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=13 20			1314 Secs (1314 Secs) [==>]	[2]
	8	G130M-122 2/FP-POS-3 (COS.sp.517 727)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=11 70			1304 Secs (1304 Secs) [==>]	[3]
	9	G130M-122 2/FP-POS-4 (COS.sp.517 727)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=13 20			1310 Secs (1310 Secs) [==>]	[3]
	10	G130M-122 2/FP-POS-1 (COS.sp.517 727)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=11 70			1304 Secs (1304 Secs) [==>]	[4]
11	G130M-122 2/FP-POS-2 (COS.sp.517 727)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=13 20			1310 Secs (1310 Secs) [==>]	[4]	



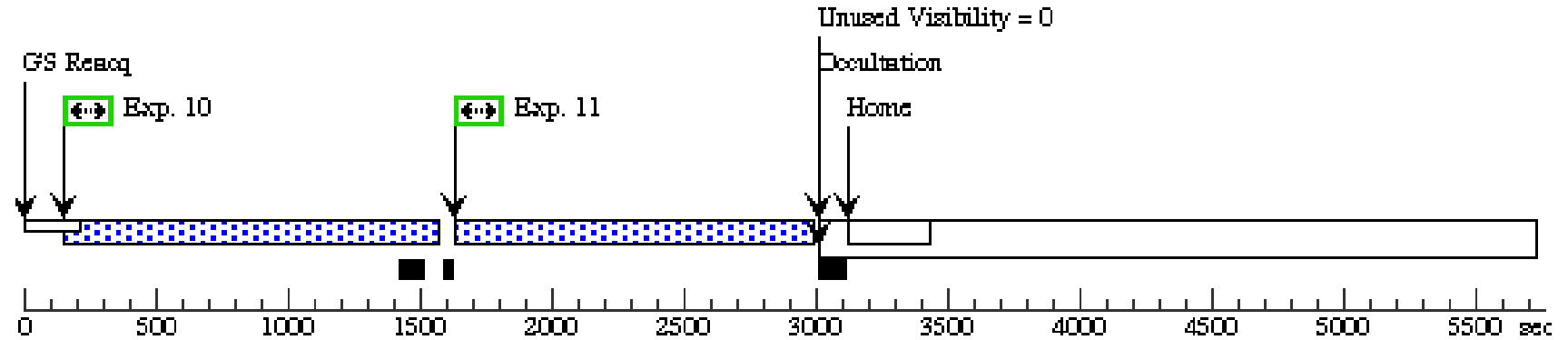
Orbit 3

Server Version: 20130919



Orbit 4

Server Version: 20130919

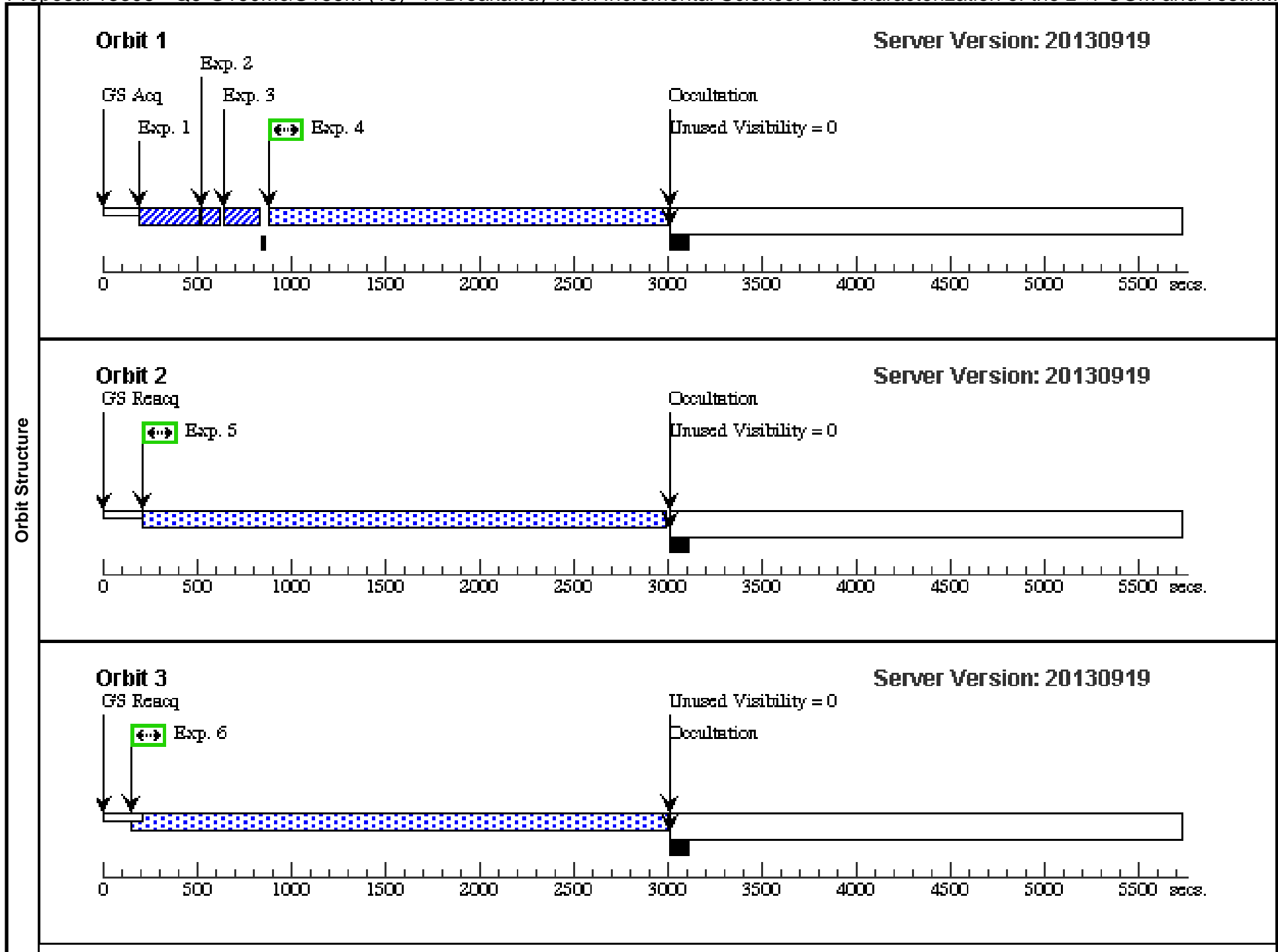


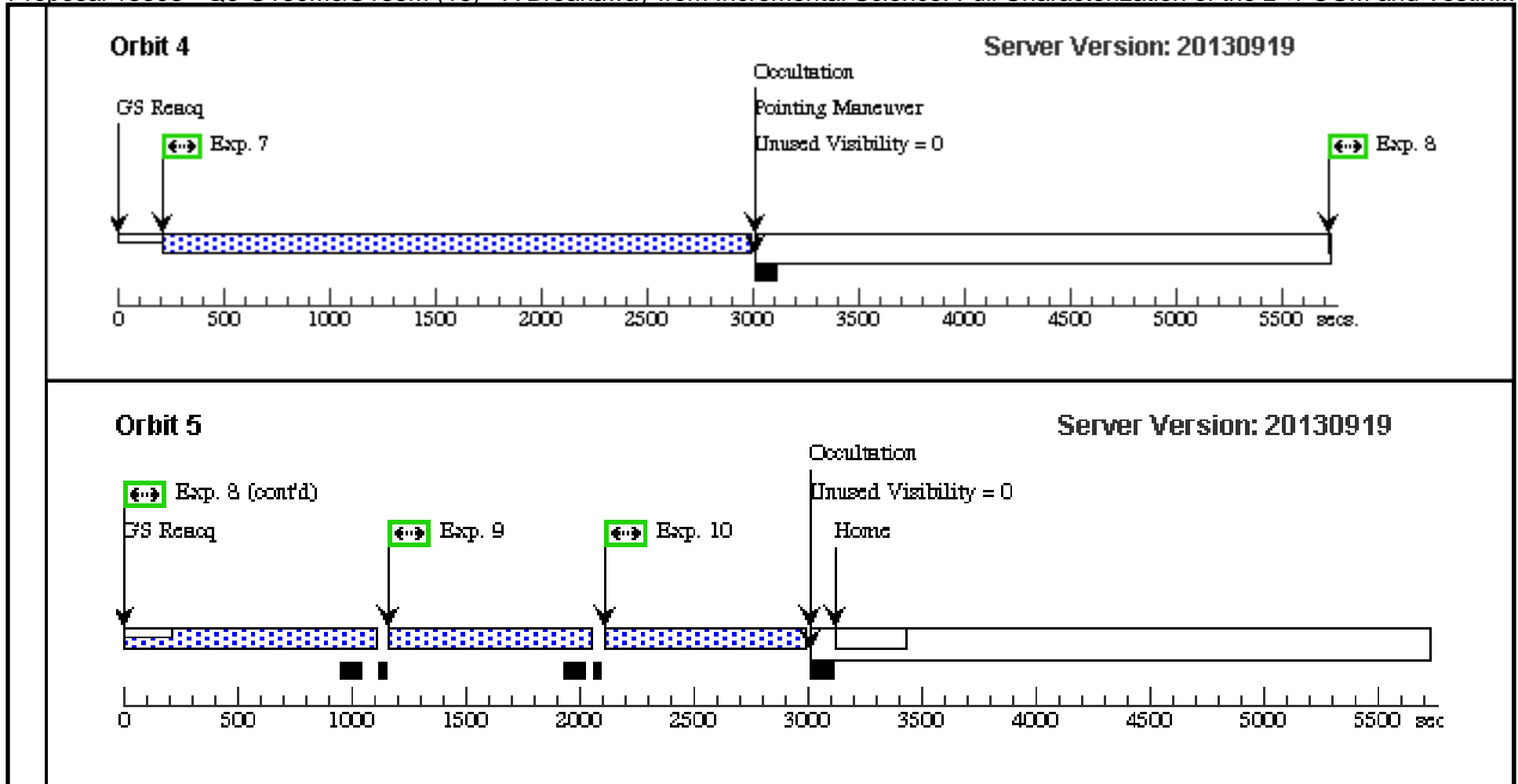
Proposal 13398 - Q6-G160M&G185M (16) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testin...

Visit	Proposal 13398, Q6-G160M&G185M (16), implementation Thu Oct 24 01:18:25 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
	(Q6-G160M&G185M (16)) 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. (Q6-G160M&G185M (16)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>(6)</td> <td>Q1545+210</td> <td>RA: 15 47 43.5100 (236.9312917d) Dec: +20 52 16.50 (20.87125d) Equinox: J2000</td> <td>Redshift: 0.264</td> <td>V=15.07+/-0.08 f_lam=1-2E-14 at 1150-2300A; GALEX FUV=16.39 NUV=16.3 8</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(6)	Q1545+210	RA: 15 47 43.5100 (236.9312917d) Dec: +20 52 16.50 (20.87125d) Equinox: J2000	Redshift: 0.264	V=15.07+/-0.08 f_lam=1-2E-14 at 1150-2300A; GALEX FUV=16.39 NUV=16.3 8	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(6)	Q1545+210	RA: 15 47 43.5100 (236.9312917d) Dec: +20 52 16.50 (20.87125d) Equinox: J2000	Redshift: 0.264	V=15.07+/-0.08 f_lam=1-2E-14 at 1150-2300A; GALEX FUV=16.39 NUV=16.3 8	Reference Frame: ICRS												
Comments: F)S G130H, G190H, G270H provided																	

Proposal 13398 - Q6-G160M&G185M (16) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testin...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.516 222)	(6) Q1545+210	COS/FUV, ACQ/SEARCH, PSA	G160M 1623 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			9 Secs (9 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 221)	(6) Q1545+210	COS/FUV, ACQ/PEAKXD, PSA	G160M 1623 A				13 Secs (13 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.516 222)	(6) Q1545+210	COS/FUV, ACQ/PEAKD, PSA	G160M 1623 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			9 Secs (9 Secs) [==>]	[1]
	4	G160M/FP- POS-3 (COS.sp.517 730)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=20 66			2066 Secs (2066 Secs) [==>]	[1]
	5	G160M/FP- POS-4 (COS.sp.517 732)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=4; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[2]
	6	G160M/FP- POS-1 (COS.sp.517 732)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=1; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[3]
	7	G160M/FP- POS-2 (COS.sp.517 732)	(6) Q1545+210	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=2; BUFFER-TIME=27 35			2729 Secs (2729 Secs) [==>]	[4]
	8	G185M/FP- POS-2 (COS.sp.517 735)	(6) Q1545+210	COS/NUV, TIME-TAG, PSA	G185M 1953 A	FP-POS=2; BUFFER-TIME=73 0			870 Secs (870 Secs) [==>]	[4]
	9	G185M/FP- POS-3 (COS.sp.517 735)	(6) Q1545+210	COS/NUV, TIME-TAG, PSA	G185M 1953 A	FP-POS=3; BUFFER-TIME=76 0			870 Secs (870 Secs) [==>]	[5]
10	G185M/FP- POS-4 (COS.sp.517 735)	(6) Q1545+210	COS/NUV, TIME-TAG, PSA	G185M 1953 A	FP-POS=4; BUFFER-TIME=87 0			868 Secs (868 Secs) [==>]	[5]	

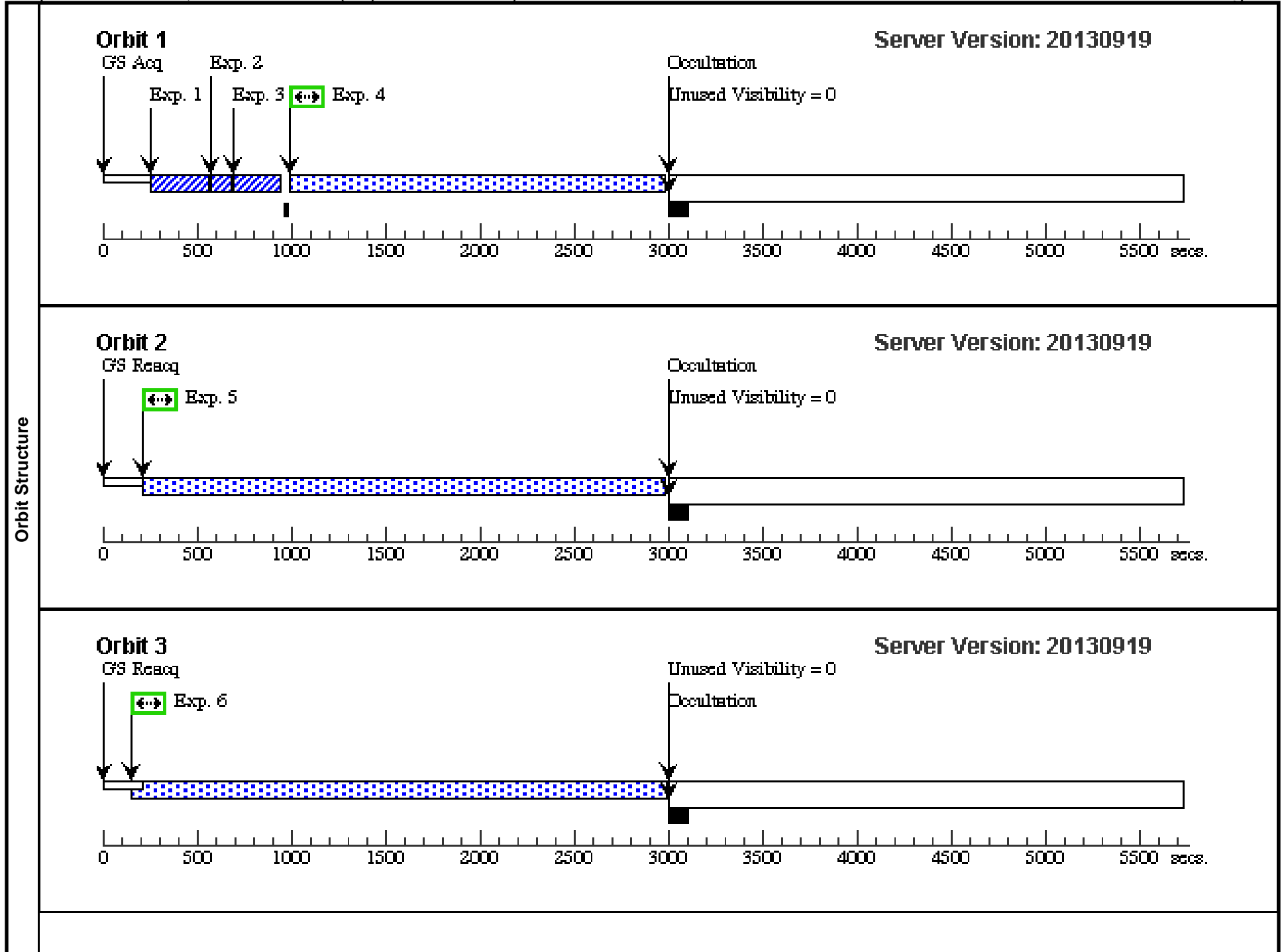


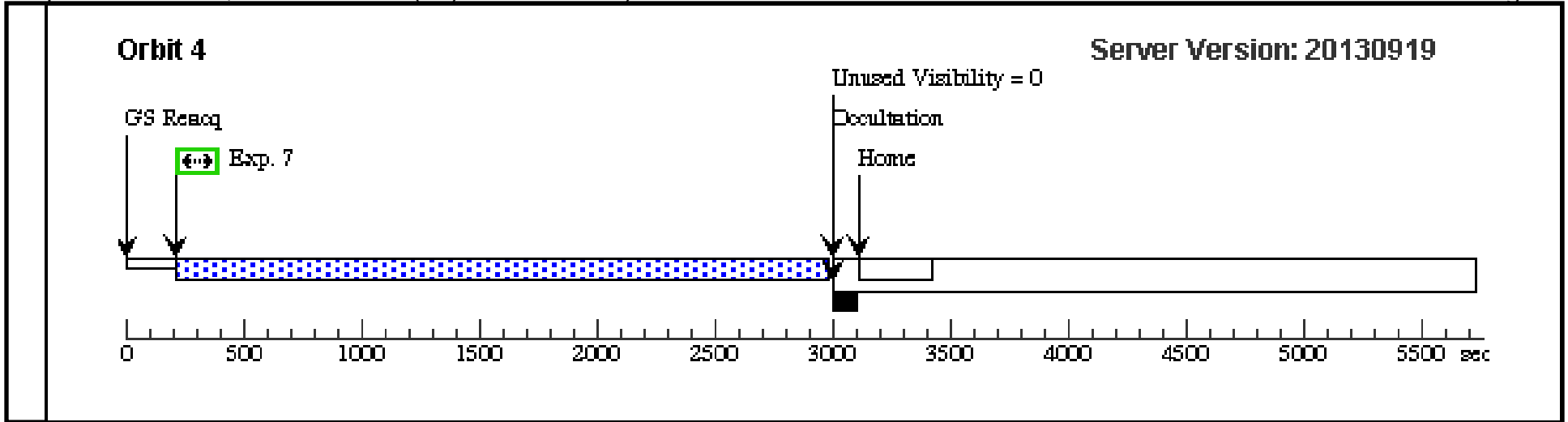


Proposal 13398 - Q7-G130M-1318 (17) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing ...

Thu Oct 24 01:18:27 GMT 2013

Visit	Proposal 13398, Q7-G130M-1318 (17), scheduling Diagnostic Status: Warning Scientific Instruments: COS/FUV Special Requirements: SCHED 100%									
	(Q7-G130M-1318 (17)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS				
<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 241)	(7) Q1641+395	COS/FUV, ACQ/SEARCH, PSA	G130M 1318 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			20 Secs (20 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 242)	(7) Q1641+395	COS/FUV, ACQ/PEAKXD, PSA	G130M 1318 A				18 Secs (18 Secs) [==>]	[1]
	3	G130M AC Q/SEARCH (COS.sa.516 241)	(7) Q1641+395	COS/FUV, ACQ/PEAKD, PSA	G130M 1318 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			20 Secs (20 Secs) [==>]	[1]
	4	G130M/FP-POS-3 (COS.sp.517 740)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=3; BUFFER-TIME=19 43			1943 Secs (1943 Secs) [==>]	[1]
	5	G130M/FP-POS-4 (COS.sp.517 742)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=4; BUFFER-TIME=28 00			2718 Secs (2718 Secs) [==>]	[2]
	6	G130M/FP-POS-1 (COS.sp.517 742)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=1; BUFFER-TIME=28 00			2718 Secs (2718 Secs) [==>]	[3]
	7	G130M/FP-POS-2 (COS.sp.517 742)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=2; BUFFER-TIME=28 00			2718 Secs (2718 Secs) [==>]	[4]



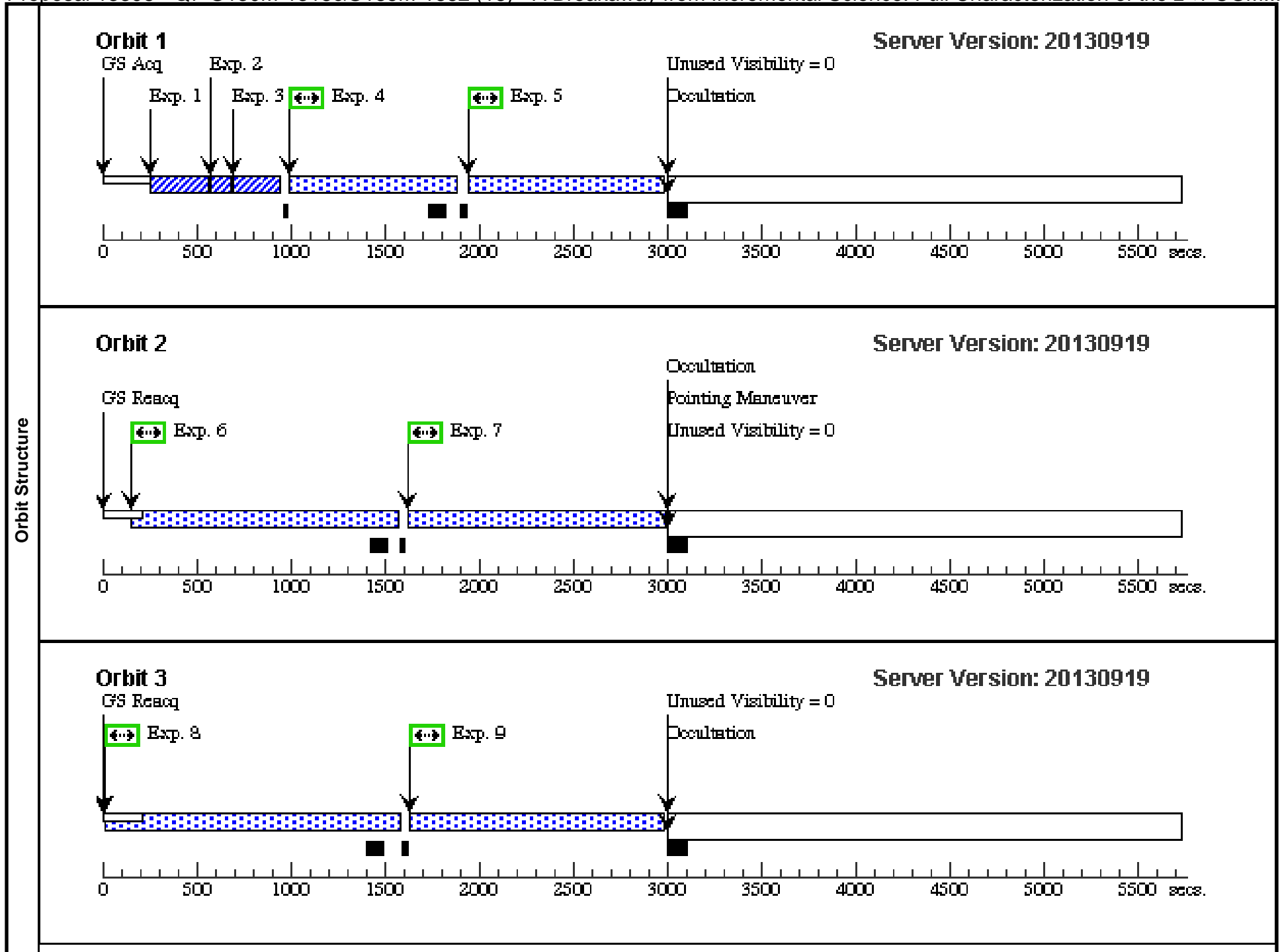


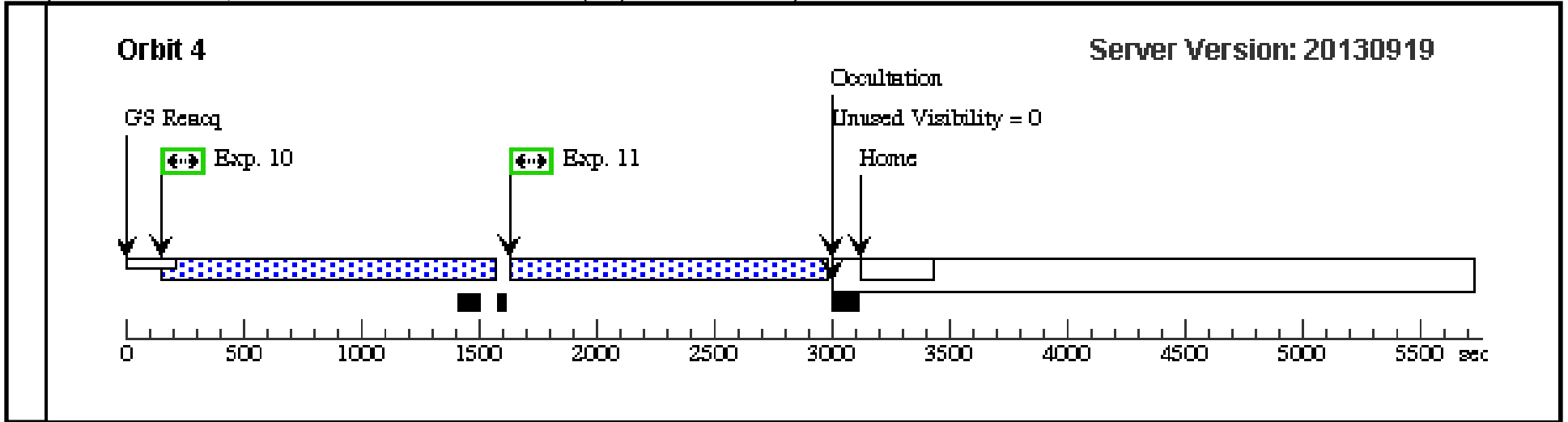
Proposal 13398 - Q7-G130M-1318&G185M-1882 (18) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM...

Visit	Proposal 13398, Q7-G130M-1318&G185M-1882 (18), scheduling Thu Oct 24 01:18:28 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																						
	(Q7-G130M-1318&G185M-1882 (18)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q7-G130M-1318&G185M-1882 (18)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																						
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>(7)</td> <td>Q1641+395</td> <td>RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000</td> <td>Redshift: 0.595</td> <td>V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i> </td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS	<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS																		
<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>																							

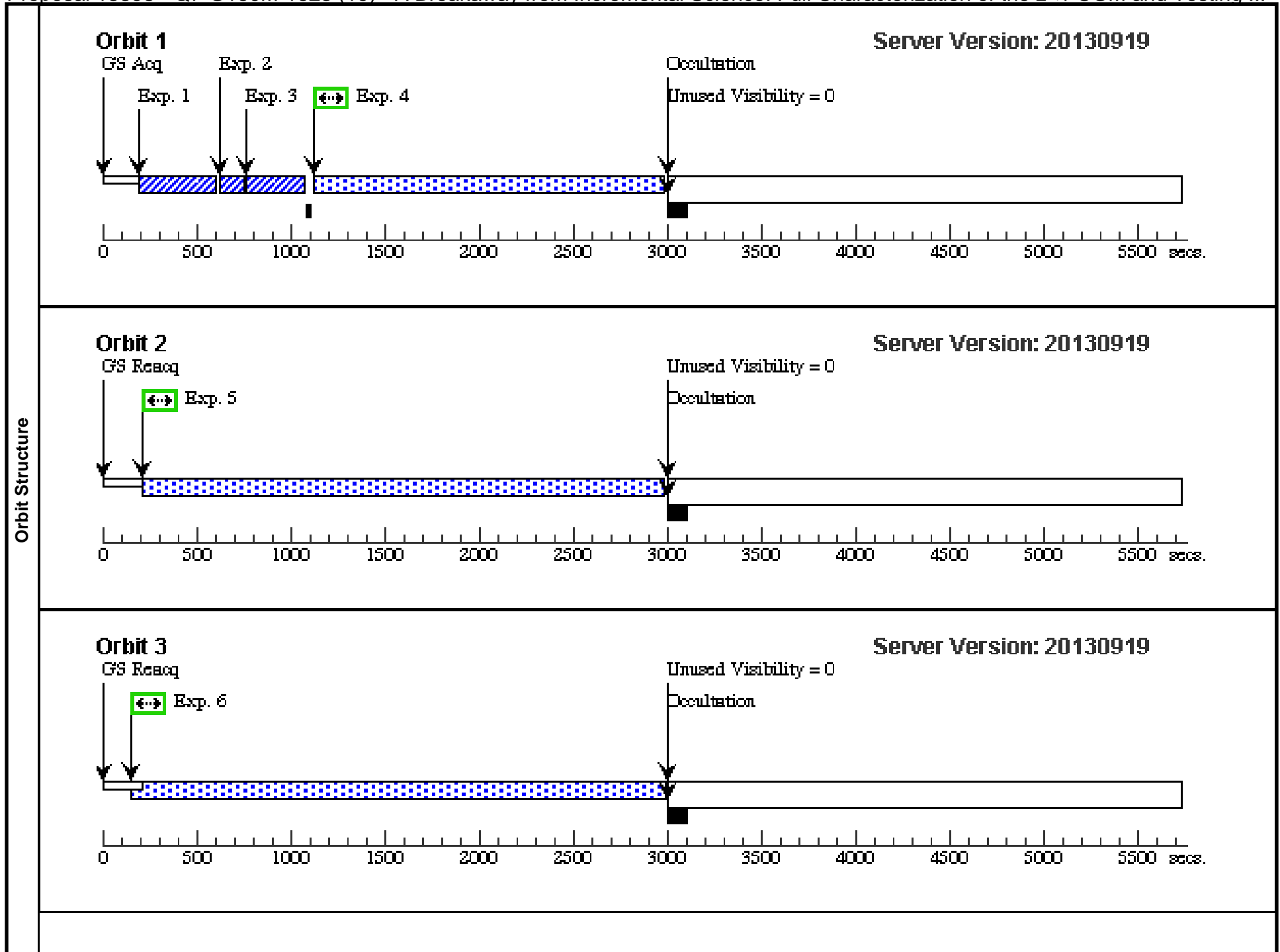
Proposal 13398 - Q7-G130M-1318&G185M-1882 (18) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM...

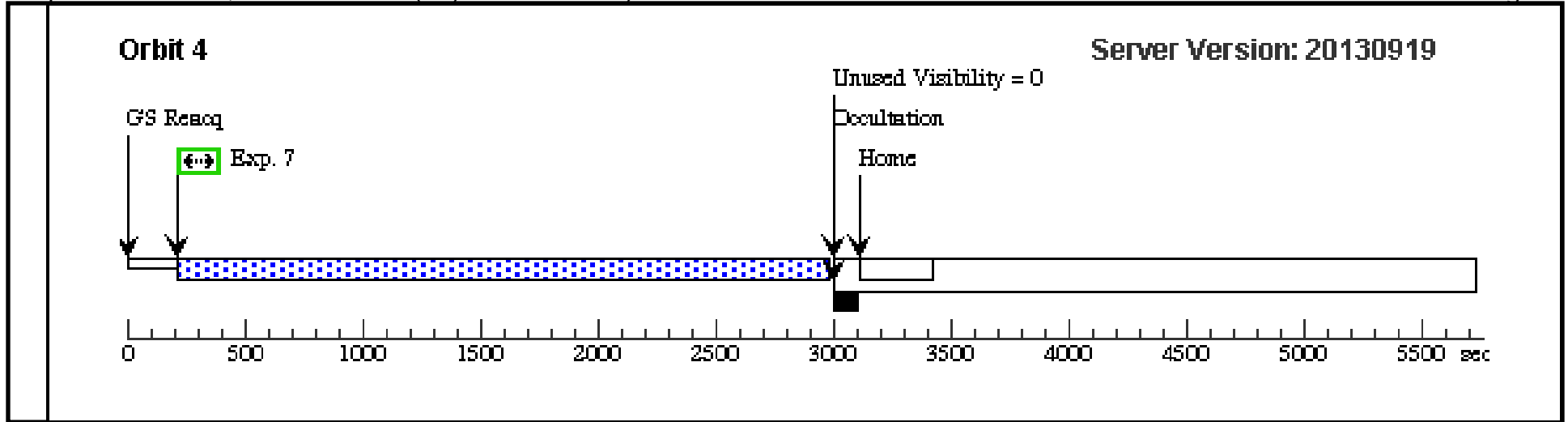
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 241)	(7) Q1641+395	COS/FUV, ACQ/SEARCH, PSA	G130M 1318 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			20 Secs (20 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 242)	(7) Q1641+395	COS/FUV, ACQ/PEAKXD, PSA	G130M 1318 A				18 Secs (18 Secs) [==>]	[1]
	3	G130M AC Q/SEARCH (COS.sa.516 241)	(7) Q1641+395	COS/FUV, ACQ/PEAKD, PSA	G130M 1318 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			20 Secs (20 Secs) [==>]	[1]
	4	G130M/FP-POS-3 (COS.sp.517 744)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=3; BUFFER-TIME=70 0			840 Secs (840 Secs) [==>]	[1]
	5	G130M/FP-POS-4 (COS.sp.517 746)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=4; BUFFER-TIME=98 8			988 Secs (988 Secs) [==>]	[1]
	6	G130M/FP-POS-1 (COS.sp.517 748)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=1; BUFFER-TIME=11 70			1300 Secs (1300 Secs) [==>]	[2]
	7	G130M/FP-POS-2 (COS.sp.517 748)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G130M 1318 A	FP-POS=2; BUFFER-TIME=13 13			1313 Secs (1313 Secs) [==>]	[2]
	8	G185M-188 2/FP-POS-3 (COS.sp.517 753)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G185M 1882 A	FP-POS=3; BUFFER-TIME=11 85			1340 Secs (1340 Secs) [==>]	[3]
	9	G185M-188 2/FP-POS-4 (COS.sp.517 753)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G185M 1882 A	FP-POS=4; BUFFER-TIME=13 35			1335 Secs (1335 Secs) [==>]	[3]
	10	G185M-188 2/FP-POS-1 (COS.sp.517 753)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G185M 1882 A	FP-POS=1; BUFFER-TIME=11 90			1340 Secs (1340 Secs) [==>]	[4]
11	G185M-188 2/FP-POS-2 (COS.sp.517 753)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G185M 1882 A	FP-POS=2; BUFFER-TIME=13 35			1337 Secs (1337 Secs) [==>]	[4]	





Visit	Proposal 13398, Q7-G160M-1623 (19), scheduling Diagnostic Status: Warning Scientific Instruments: COS/FUV Special Requirements: SCHED 100%									
	(Q7-G160M-1623 (19)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS				
<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.516 251)	(7) Q1641+395	COS/FUV, ACQ/SEARCH, PSA	G160M 1623 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			32 Secs (32 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 250)	(7) Q1641+395	COS/FUV, ACQ/PEAKXD, PSA	G160M 1623 A				47 Secs (47 Secs) [==>]	[1]
	3	G160M AC Q/SEARCH (COS.sa.516 251)	(7) Q1641+395	COS/FUV, ACQ/PEAKD, PSA	G160M 1623 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			32 Secs (32 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 757)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=18 14			1814 Secs (1814 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 758)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=4; BUFFER-TIME=28 00			2718 Secs (2718 Secs) [==>]	[2]
	6	G160M/FP-POS-1 (COS.sp.517 758)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=1; BUFFER-TIME=28 00			2718 Secs (2718 Secs) [==>]	[3]
	7	G160M/FP-POS-2 (COS.sp.517 758)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=2; BUFFER-TIME=28 00			2718 Secs (2718 Secs) [==>]	[4]



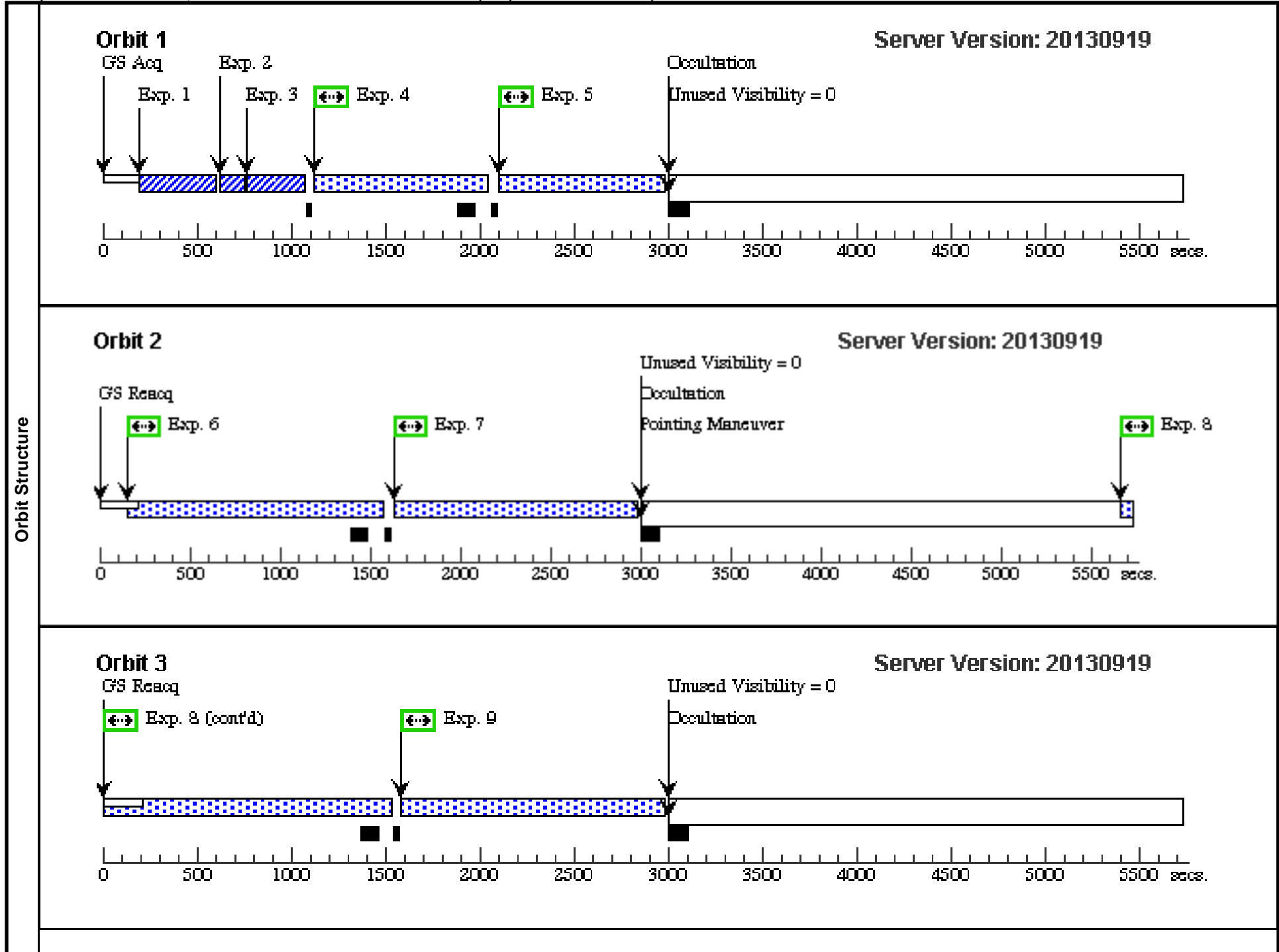


Proposal 13398 - Q7-G160M-1611&G225M-2357 (20) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM...

Visit	Proposal 13398, Q7-G160M-1611&G225M-2357 (20), implementation Thu Oct 24 01:18:30 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																						
	(Q7-G160M-1611&G225M-2357 (20)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q7-G160M-1611&G225M-2357 (20)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																						
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>(7)</td> <td>Q1641+395</td> <td>RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000</td> <td>Redshift: 0.595</td> <td>V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"><i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i></td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS	<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS																		
<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>																							

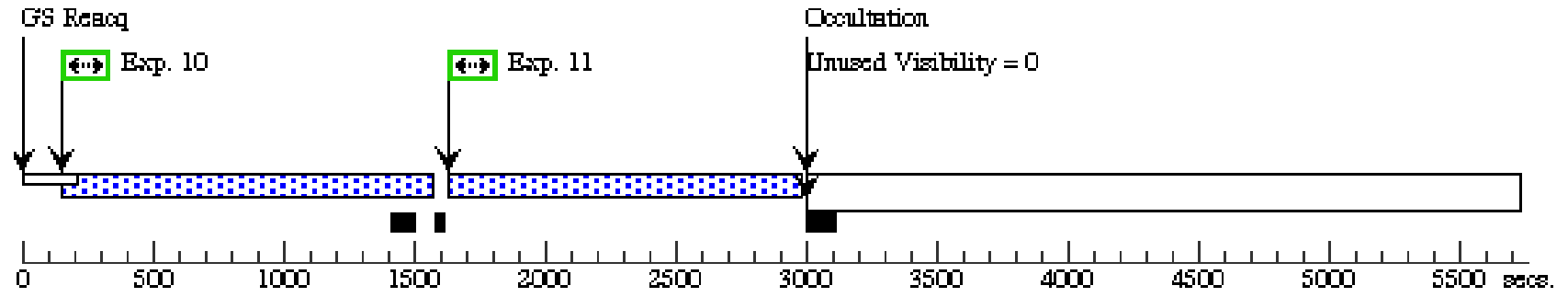
Proposal 13398 - Q7-G160M-1611&G225M-2357 (20) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	G160M AC Q/SEARCH (COS.sa.516 251)	(7) Q1641+395	COS/FUV, ACQ/SEARCH, PSA	G160M 1611 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T		32 Secs (32 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 250)	(7) Q1641+395	COS/FUV, ACQ/PEAKXD, PSA	G160M 1611 A			47 Secs (47 Secs) [==>]	[1]
	3	G160M AC Q/SEARCH (COS.sa.516 251)	(7) Q1641+395	COS/FUV, ACQ/PEAKD, PSA	G160M 1611 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR		32 Secs (32 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 759)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=3; BUFFER-TIME=73 0		870 Secs (870 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 759)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=4; BUFFER-TIME=80 0		829 Secs (829 Secs) [==>]	[1]
	6	G160M/FP-POS-1 (COS.sp.517 761)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=1; BUFFER-TIME=11 40		1303 Secs (1303 Secs) [==>]	[2]
	7	G160M/FP-POS-2 (COS.sp.517 761)	(7) Q1641+395	COS/FUV, TIME-TAG, PSA	G160M 1611 A	FP-POS=2; BUFFER-TIME=13 01		1300 Secs (1300 Secs) [==>]	[2]
	8	G225M-235 7/FP-POS-3 (COS.sp.517 762)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=3; BUFFER-TIME=11 50		1290 Secs (1290 Secs) [==>]	[2]
	9	G225M-235 7/FP-POS-4 (COS.sp.517 763)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=4; BUFFER-TIME=13 85		1385 Secs (1385 Secs) [==>]	[3]
	10	G225M-235 7/FP-POS-1 (COS.sp.517 763)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=1; BUFFER-TIME=11 90		1340 Secs (1340 Secs) [==>]	[4]
	11	G225M-235 7/FP-POS-2 (COS.sp.517 763)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=2; BUFFER-TIME=13 35		1337 Secs (1337 Secs) [==>]	[4]
	12	G225M-235 7/FP-POS-2 (COS.sp.517 765)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=2; BUFFER-TIME=70 0		850 Secs (850 Secs) [==>]	[5]
	13	G225M-235 7/FP-POS-3 (COS.sp.517 765)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=3; BUFFER-TIME=70 0		850 Secs (850 Secs) [==>]	[5]
	14	G225M-235 7/FP-POS-4 (COS.sp.517 765)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2357 A	FP-POS=4; BUFFER-TIME=89 9		899 Secs (899 Secs) [==>]	[5]



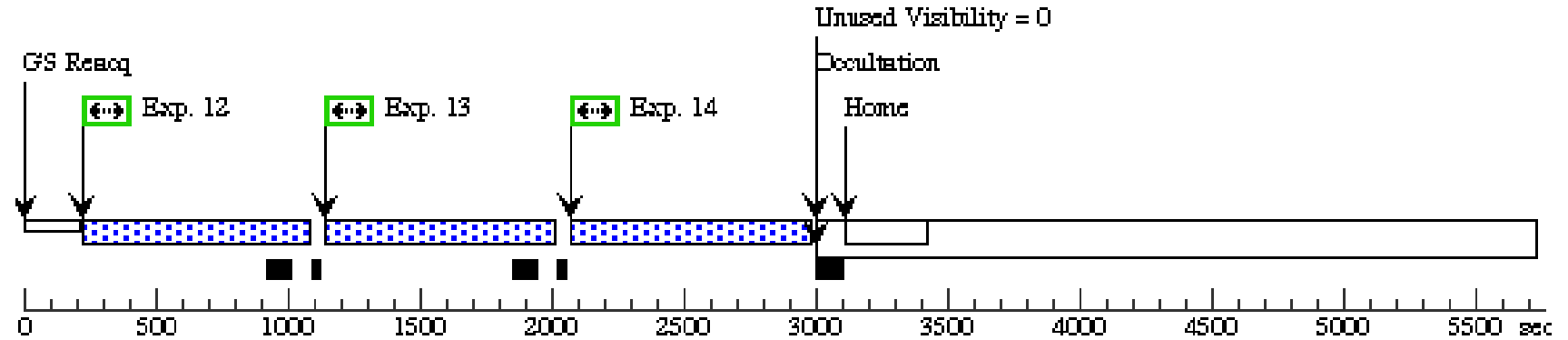
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

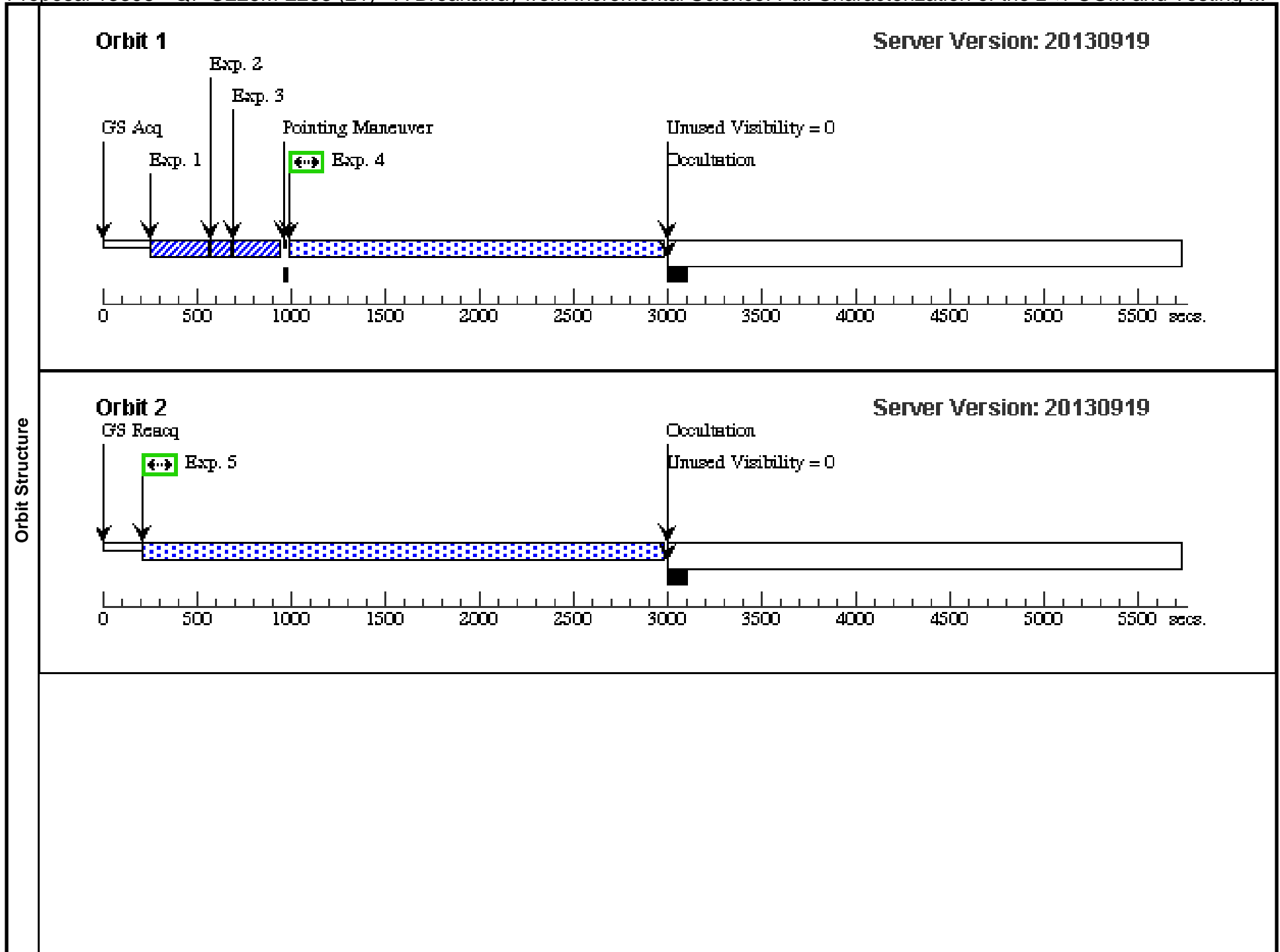


Proposal 13398 - Q7-G225M-2283 (21) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing ...

Visit	Proposal 13398, Q7-G225M-2283 (21), scheduling Thu Oct 24 01:18:31 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																						
	(Q7-G225M-2283 (21)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																						
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>(7)</td> <td>Q1641+395</td> <td>RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000</td> <td>Redshift: 0.595</td> <td>V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i> </td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS	<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																	
(7)	Q1641+395	RA: 16 42 51.0700 (250.7127917d) Dec: +39 24 9.00 (39.40250d) Equinox: J2000	Redshift: 0.595	V=16.59 f_lam=3-8E-15 at 1200-3300A; GALEX NUV=22.04	Reference Frame: ICRS																		
<i>Comments: IUE 1200-2000A; FOS G190H G270H provided</i>																							

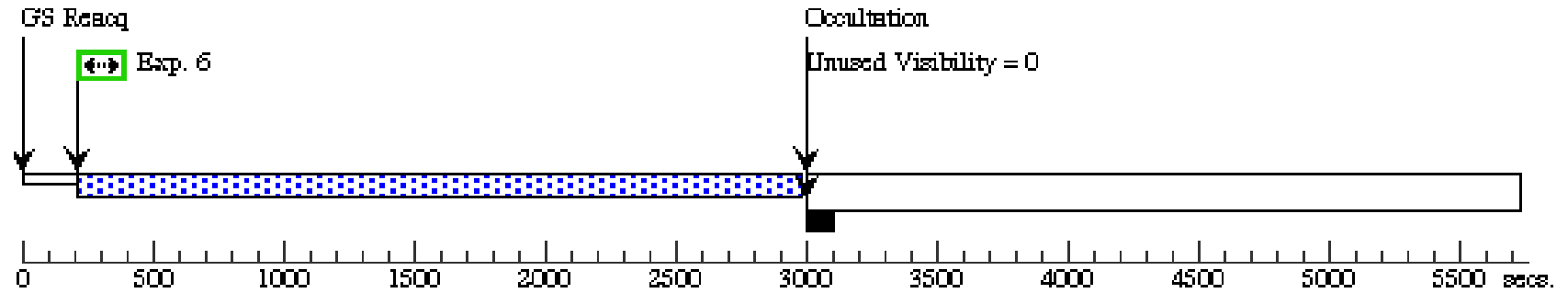
Proposal 13398 - Q7-G225M-2283 (21) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing ...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 241)	(7) Q1641+395	COS/FUV, ACQ/SEARCH, PSA	G130M 1318 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			20 Secs (20 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 242)	(7) Q1641+395	COS/FUV, ACQ/PEAKXD, PSA	G130M 1318 A				18 Secs (18 Secs) [==>]	[1]
	3	G130M AC Q/SEARCH (COS.sa.516 241)	(7) Q1641+395	COS/FUV, ACQ/PEAKD, PSA	G130M 1318 A	NUM-POS=5.0; STEP-SIZE=0.9; CENTER=FLUX-W T-FLR			20 Secs (20 Secs) [==>]	[1]
	4	G225M-228 3/FP-POS-1 (COS.sp.517 772)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=17 10; FP-POS=1			1706 Secs (1706 Secs) [==>]	[1]
	5	G225M-228 3/FP-POS-2 (COS.sp.517 773)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=27 56; FP-POS=2			2755 Secs (2755 Secs) [==>]	[2]
	6	G225M-228 3/FP-POS-3 (COS.sp.517 773)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=28 00; FP-POS=3			2755 Secs (2755 Secs) [==>]	[3]
	7	G225M-228 3/FP-POS-4 (COS.sp.517 773)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=28 00; FP-POS=4			2755 Secs (2755 Secs) [==>]	[4]
	8	G225M-228 3/FP-POS-1 (COS.sp.517 765)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=76 0; FP-POS=1			907 Secs (907 Secs) [==>]	[5]
	9	G225M-228 3/FP-POS-2 (COS.sp.517 765)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=75 0; FP-POS=2			852 Secs (852 Secs) [==>]	[5]
10	G225M-228 3/FP-POS-3 (COS.sp.517 765)	(7) Q1641+395	COS/NUV, TIME-TAG, PSA	G225M 2283 A	BUFFER-TIME=74 0; FP-POS=3			840 Secs (840 Secs) [==>]	[5]	



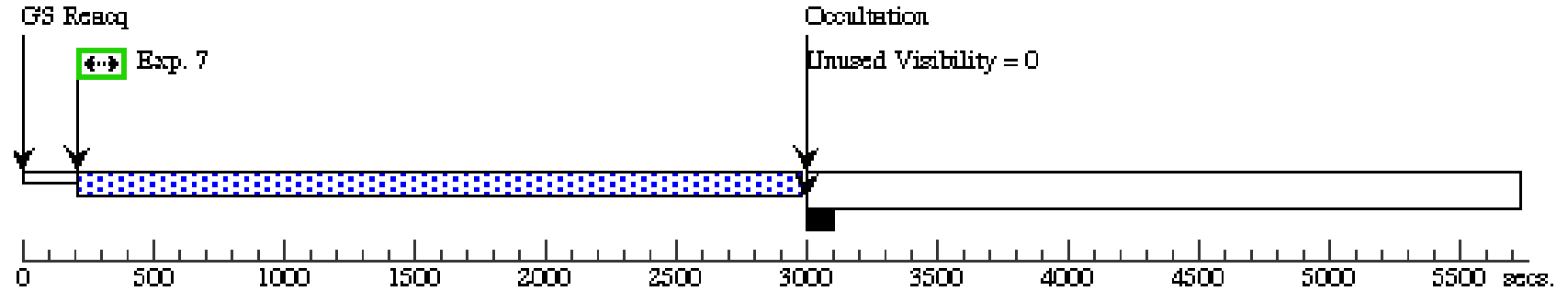
Orbit 3

Server Version: 20130919



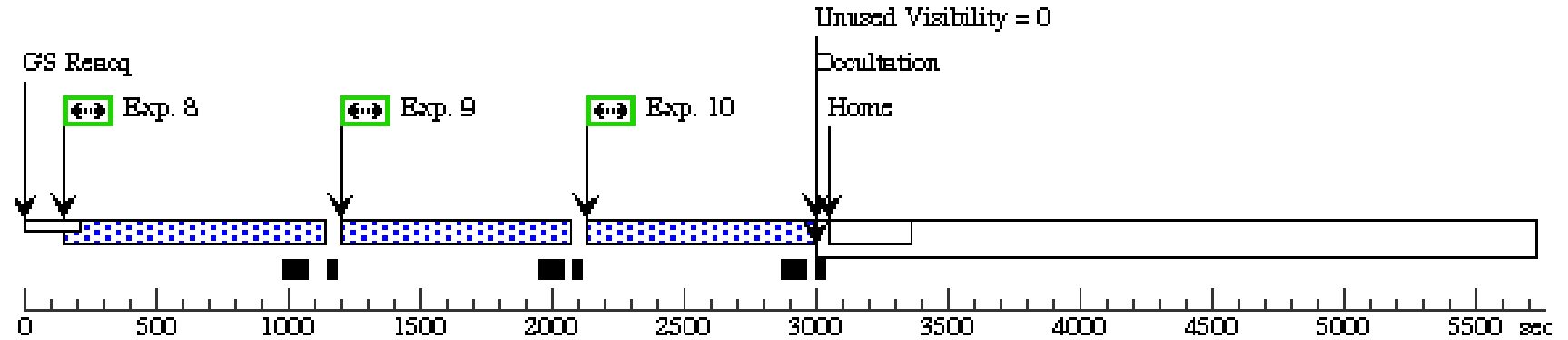
Orbit 4

Server Version: 20130919



Orbit 5

Server Version: 20130919

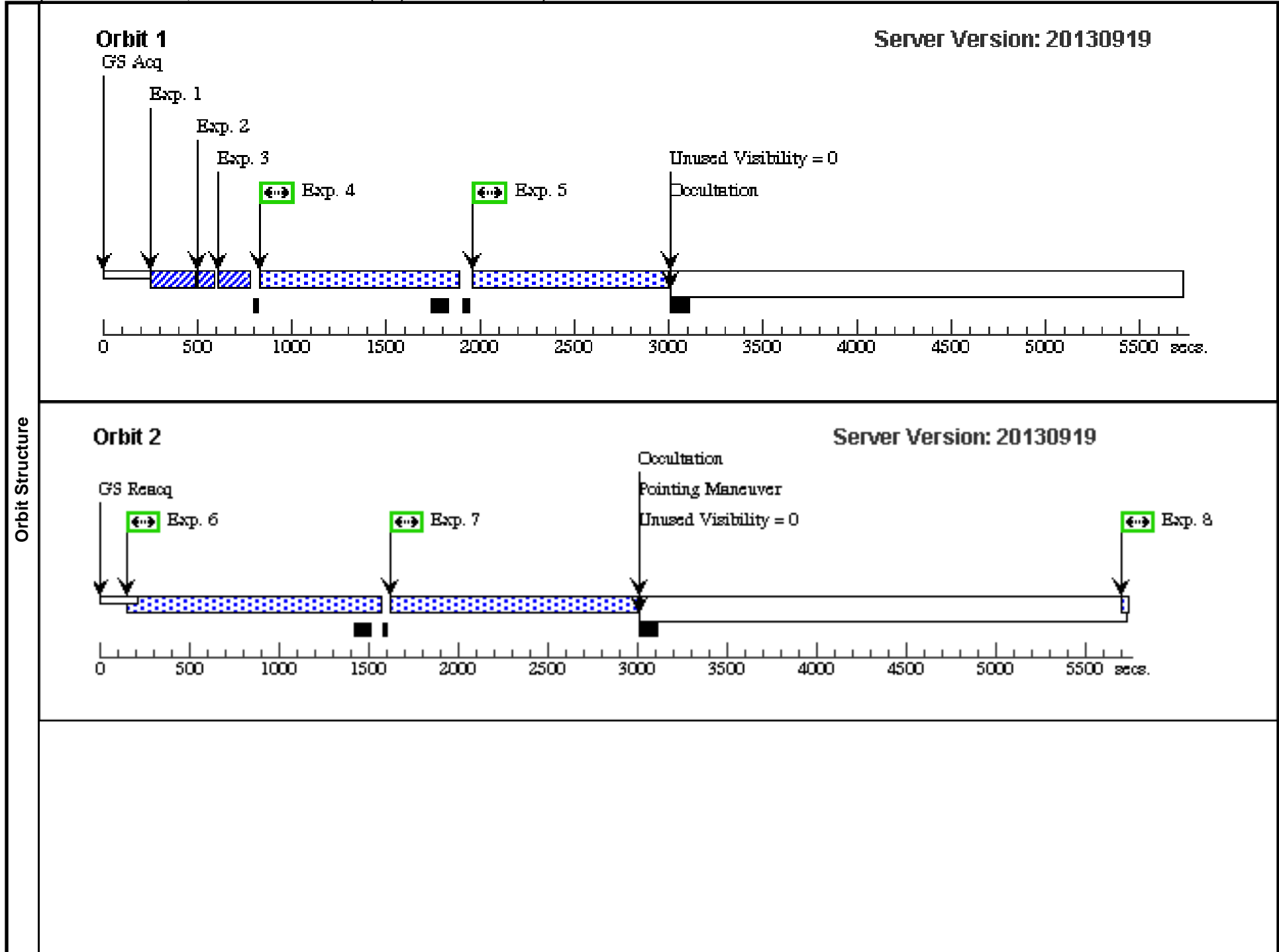


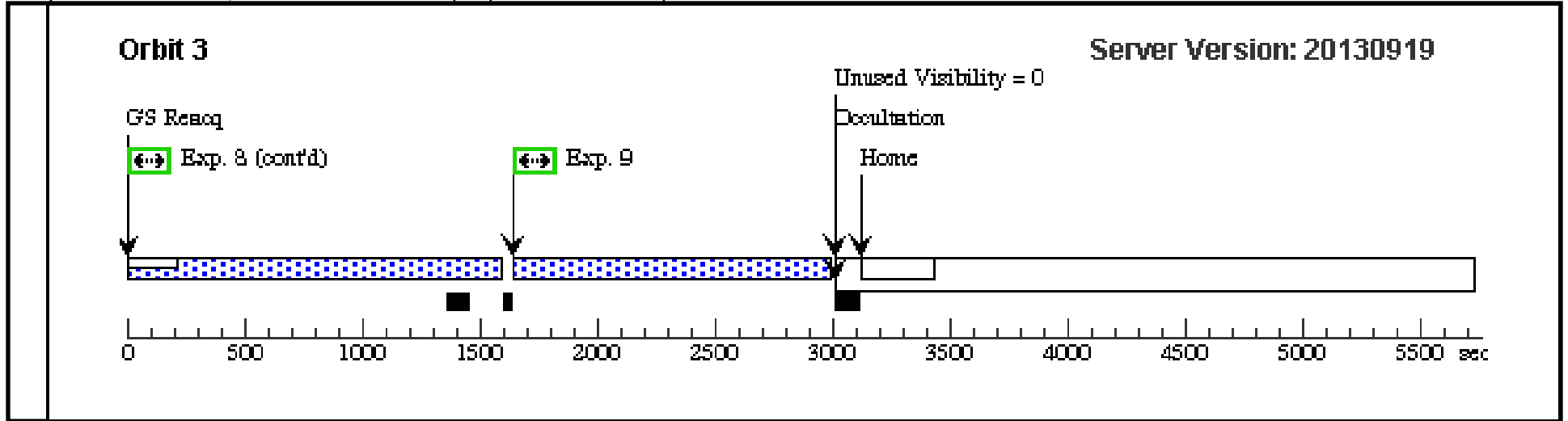
Proposal 13398 - Q8-G130M&G185M (22) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testin...

Visit	Proposal 13398, Q8-G130M&G185M (22), implementation Thu Oct 24 01:18:32 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
	Diagnosics (Q8-G130M&G185M (22)) 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. (Q8-G130M&G185M (22)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>(8)</td> <td>Q2128-123</td> <td>RA: 21 31 35.2000 (322.8966667d) Dec: -12 07 4.50 (-12.11792d) Equinox: J2000</td> <td>Redshift: 0.501</td> <td>V=16.1 f_lam=1-2E-14 at 1350-2800A; GALEX FUV=16.51 NUV=15.7 4</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(8)	Q2128-123	RA: 21 31 35.2000 (322.8966667d) Dec: -12 07 4.50 (-12.11792d) Equinox: J2000	Redshift: 0.501	V=16.1 f_lam=1-2E-14 at 1350-2800A; GALEX FUV=16.51 NUV=15.7 4	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(8)	Q2128-123	RA: 21 31 35.2000 (322.8966667d) Dec: -12 07 4.50 (-12.11792d) Equinox: J2000	Redshift: 0.501	V=16.1 f_lam=1-2E-14 at 1350-2800A; GALEX FUV=16.51 NUV=15.7 4	Reference Frame: ICRS												
<i>Comments: IUE 1200-2000A and FOS G190H and G270H provided</i>																	

Proposal 13398 - Q8-G130M&G185M (22) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testin...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 256)	(8) Q2128-123	COS/FUV, ACQ/SEARCH, PSA	G130M 1291 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			4 Secs (4 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 257)	(8) Q2128-123	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				4 Secs (4 Secs) [==>]	[1]
	3	G130M AC Q/PEAKD (COS.sa.516 256)	(8) Q2128-123	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			4 Secs (4 Secs) [==>]	[1]
	4	G130M/FP-POS-3 (COS.sp.517 775)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=87 0			1009 Secs (1009 Secs) [==>]	[1]
	5	G130M/FP-POS-4 (COS.sp.517 775)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=98 8			988 Secs (988 Secs) [==>]	[1]
	6	G130M/FP-POS-1 (COS.sp.517 778)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=11 70			1300 Secs (1300 Secs) [==>]	[2]
	7	G130M/FP-POS-2 (COS.sp.517 778)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=13 24			1324 Secs (1324 Secs) [==>]	[2]
	8	G225M/FP-POS-3 (COS.sp.517 778)	(8) Q2128-123	COS/NUV, TIME-TAG, PSA	G225M 2217 A	FP-POS=3; BUFFER-TIME=11 40			1350 Secs (1350 Secs) [==>]	[2]
	9	G225M/FP-POS-4 (COS.sp.517 778)	(8) Q2128-123	COS/NUV, TIME-TAG, PSA	G225M 2217 A	FP-POS=4; BUFFER-TIME=13 36			1336 Secs (1336 Secs) [==>]	[3]





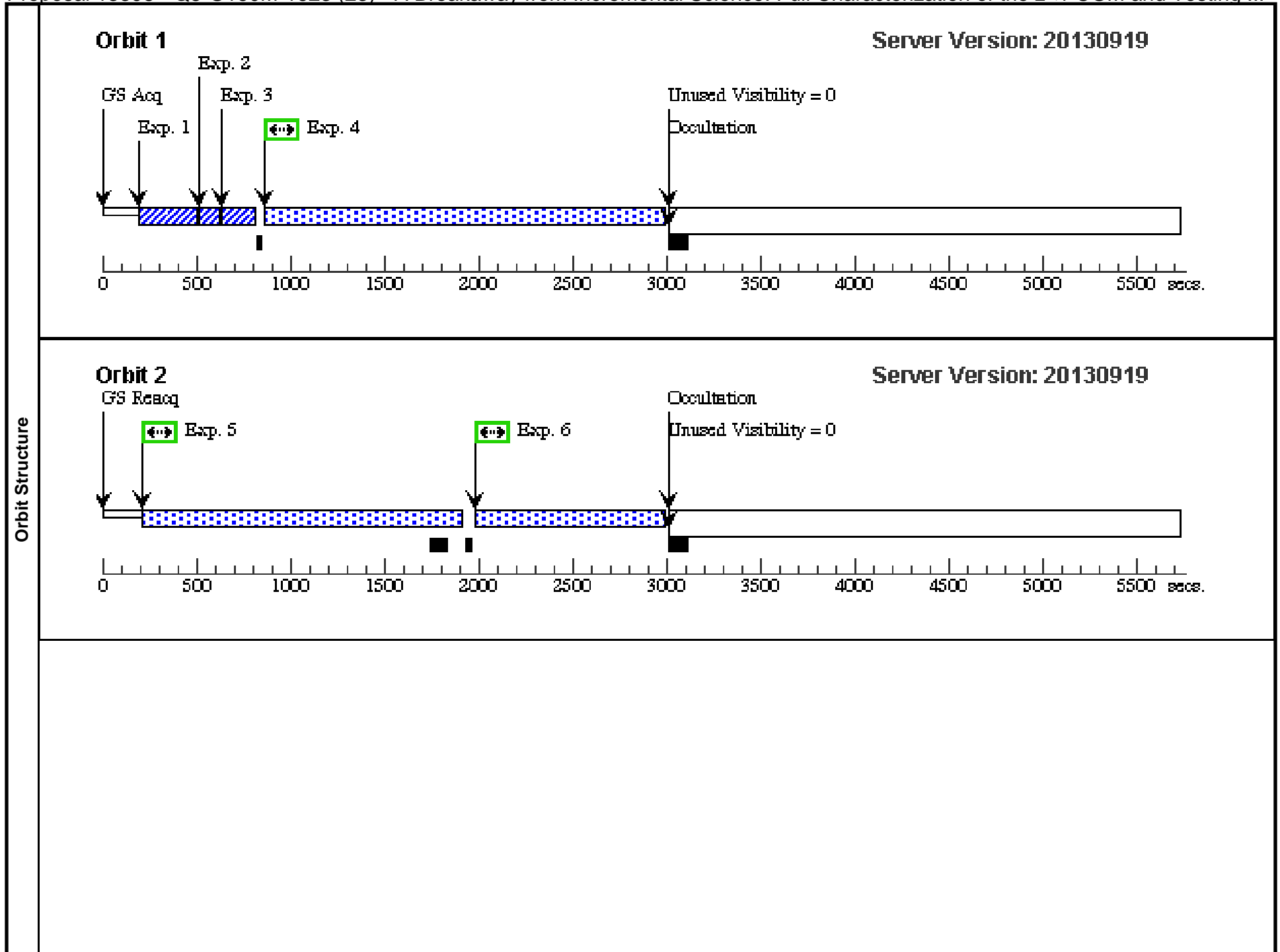
Proposal 13398 - Q8-G160M-1623 (23) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing ...

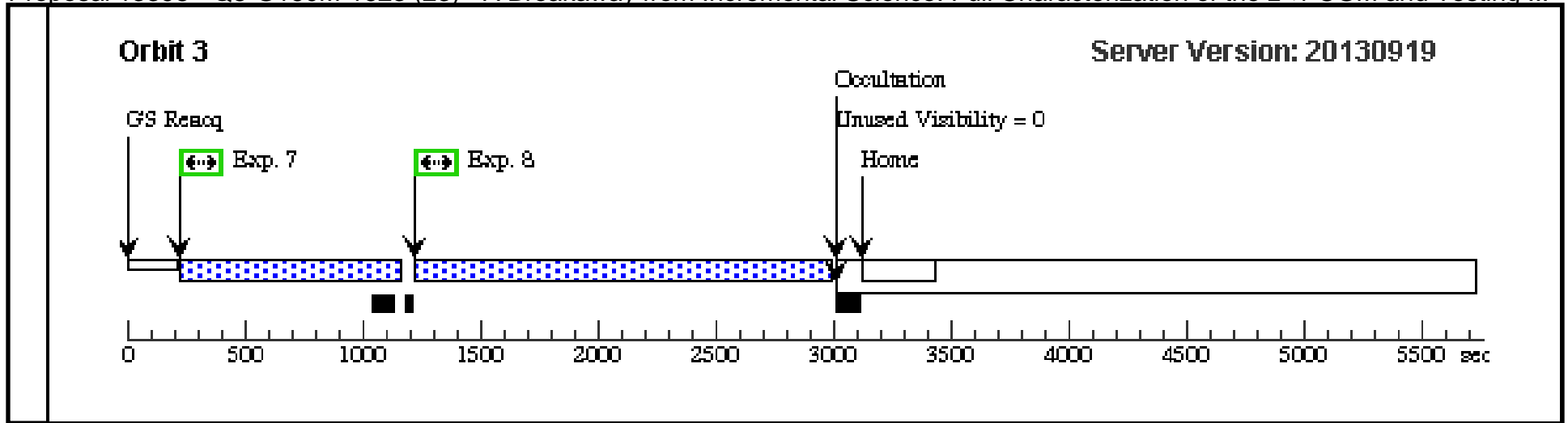
Thu Oct 24 01:18:33 GMT 2013

Visit	Proposal 13398, Q8-G160M-1623 (23), scheduling				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: COS/FUV				
	Special Requirements: SCHED 100%				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	Q2128-123	RA: 21 31 35.2000 (322.8966667d) Dec: -12 07 4.50 (-12.11792d) Equinox: J2000	Redshift: 0.501	V=16.1 f_lam=1-2E-14 at 1350-2800A; GALEX FUV=16.51 NUV=15.7 4	Reference Frame: ICRS
<i>Comments: IUE 1200-2000A and FOS G190H and G270H provided</i>						

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.517 171)	(8) Q2128-123	COS/FUV, ACQ/SEARCH, PSA	G160M 1623 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			6 Secs (6 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.517 172)	(8) Q2128-123	COS/FUV, ACQ/PEAKXD, PSA	G160M 1623 A				21 Secs (21 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.517 171)	(8) Q2128-123	COS/FUV, ACQ/PEAKD, PSA	G160M 1623 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			6 Secs (6 Secs) [==>]	[1]
	4	G160M/FP-POS-1 (COS.sp.517 780)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=1; BUFFER-TIME=20 15			2015 Secs (2015 Secs) [==>]	[1]
	5	G160M/FP-POS-2 (COS.sp.517 781)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=2; BUFFER-TIME=14 86			1652 Secs (1652 Secs) [==>]	[2]
	6	G160M/FP-POS-3 (COS.sp.517 782)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=96 3			962 Secs (962 Secs) [==>]	[2]
	7	G160M/FP-POS-3 (COS.sp.517 782)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=79 0			894 Secs (894 Secs) [==>]	[3]
	8	G160M/FP-POS-4 (COS.sp.517 781)	(8) Q2128-123	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=4; BUFFER-TIME=17 21			1720 Secs (1720 Secs) [==>]	[3]

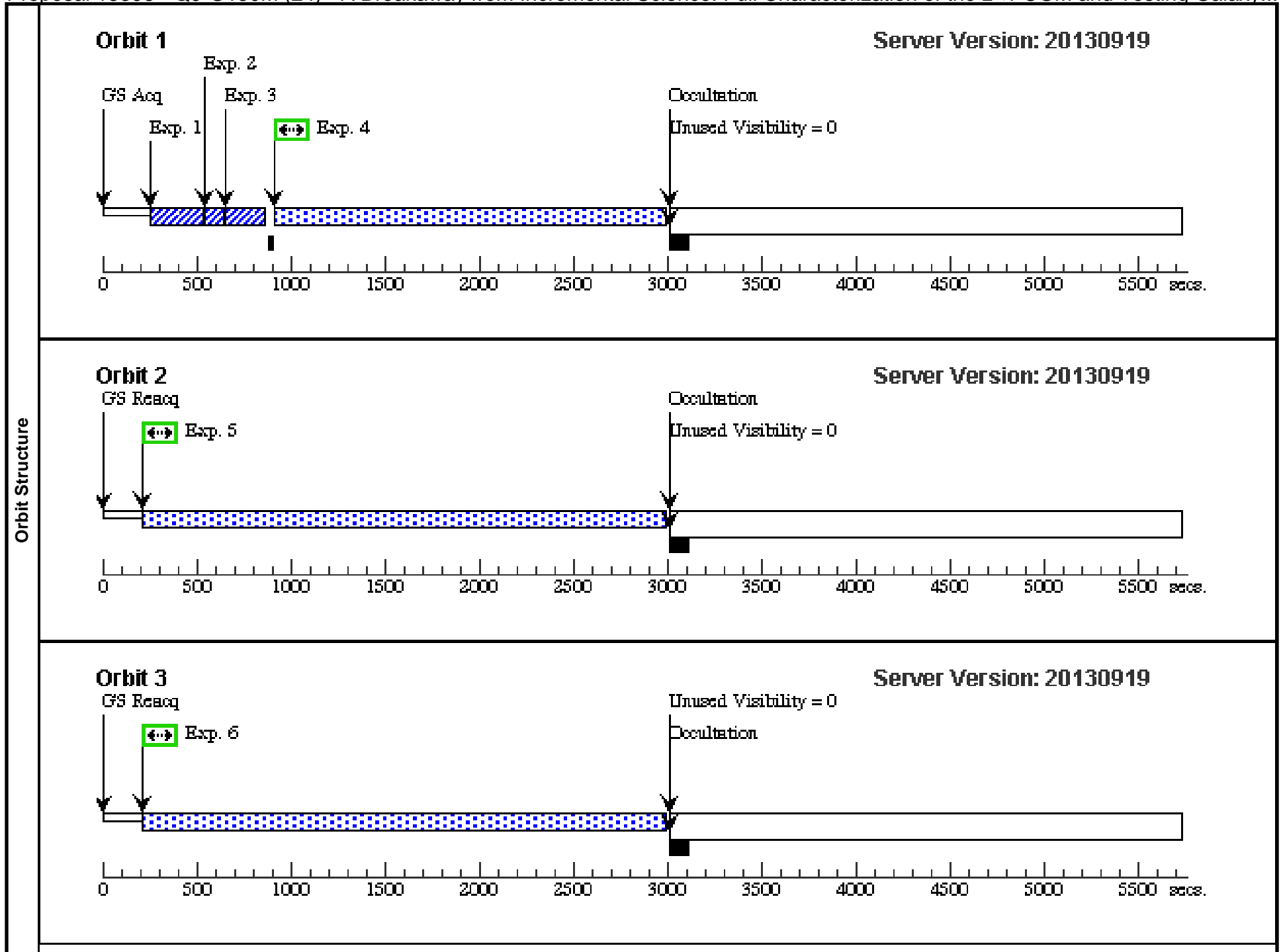


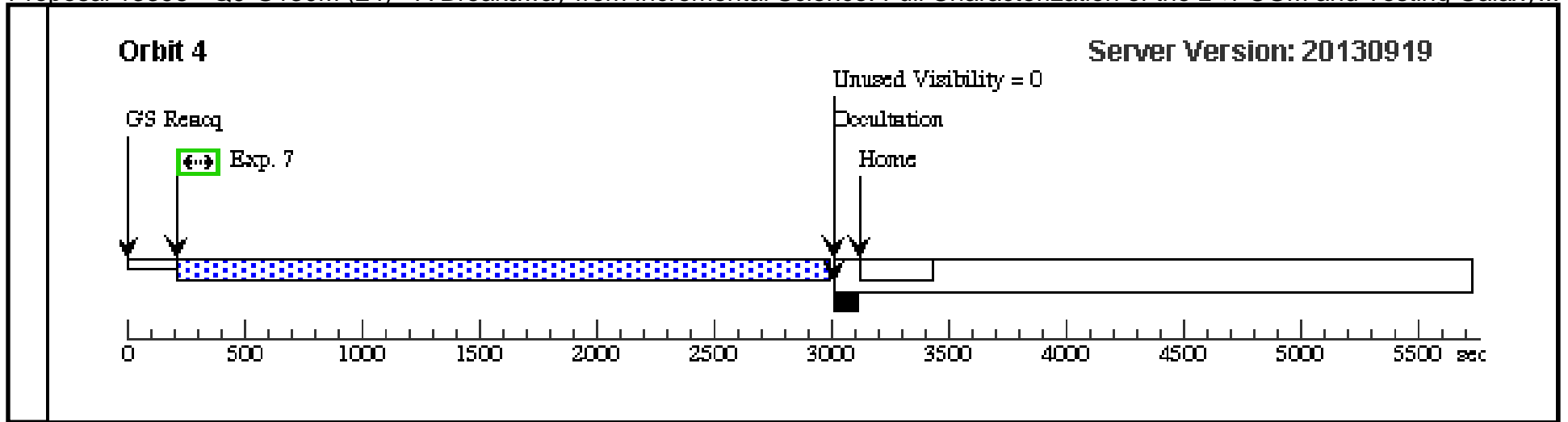


Proposal 13398 - Q9-G130M (24) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galaxy...

Thu Oct 24 01:18:34 GMT 2013

Visit	Proposal 13398, Q9-G130M (24), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV Special Requirements: SCHED 100%									
	Fixed Targets	# Name Target Coordinates Targ. Coord. Corrections Fluxes Miscellaneous (9) Q2135-145 RA: 21 37 45.2350 (324.4384792d) Redshift: 0.200 V=15.53 Reference Frame: ICRS Dec: -14 32 56.00 (-14.54889d) f_lam=3E-14 to 5E-15 at 1200-2 Equinox: J2000 300A; GALEX FUV=19.6 NUV =19.33 Comments: FOS G130H and G190H provided								
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 388)	(9) Q2135-145	COS/FUV, ACQ/SEARCH, PSA	G130M 1300 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			12 Secs (12 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 389)	(9) Q2135-145	COS/FUV, ACQ/PEAKXD, PSA	G130M 1300 A				11 Secs (11 Secs) [==>]	[1]
	3	G130M AC Q/PEAKD (COS.sa.516 388)	(9) Q2135-145	COS/FUV, ACQ/PEAKD, PSA	G130M 1300 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			12 Secs (12 Secs) [==>]	[1]
	4	G130M/FP-POS-1 (COS.sp.517 796)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=1; BUFFER-TIME=19 62			1961 Secs (1961 Secs) [==>]	[1]
	5	G130M/FP-POS-2 (COS.sp.517 794)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=2; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[2]
	6	G130M/FP-POS-3 (COS.sp.517 794)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[3]
	7	G130M/FP-POS-4 (COS.sp.517 794)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[4]



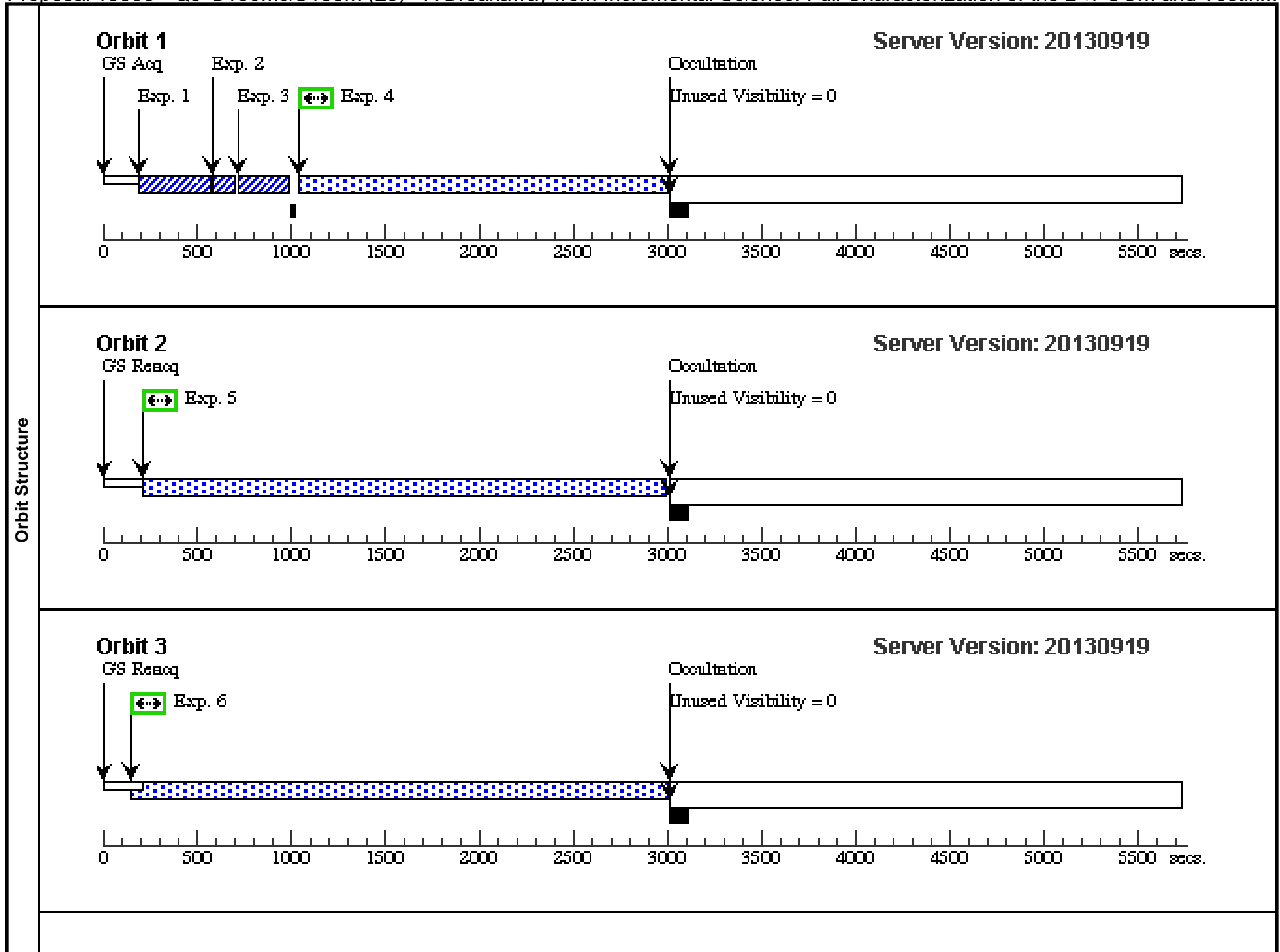


Proposal 13398 - Q9-G160M&G185M (25) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testin...

Visit	Proposal 13398, Q9-G160M&G185M (25), implementation Thu Oct 24 01:18:35 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
	Diagnosics (Q9-G160M&G185M (25)) 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. (Q9-G160M&G185M (25)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>(9)</td> <td>Q2135-145</td> <td>RA: 21 37 45.2350 (324.4384792d) Dec: -14 32 56.00 (-14.54889d) Equinox: J2000</td> <td>Redshift: 0.200</td> <td>V=15.53 f_lam=3E-14 to 5E-15 at 1200-2 300A; GALEX FUV=19.6 NUV =19.33</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(9)	Q2135-145	RA: 21 37 45.2350 (324.4384792d) Dec: -14 32 56.00 (-14.54889d) Equinox: J2000	Redshift: 0.200	V=15.53 f_lam=3E-14 to 5E-15 at 1200-2 300A; GALEX FUV=19.6 NUV =19.33	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(9)	Q2135-145	RA: 21 37 45.2350 (324.4384792d) Dec: -14 32 56.00 (-14.54889d) Equinox: J2000	Redshift: 0.200	V=15.53 f_lam=3E-14 to 5E-15 at 1200-2 300A; GALEX FUV=19.6 NUV =19.33	Reference Frame: ICRS												
<i>Comments: FOS G130H and G190H provided</i>																	

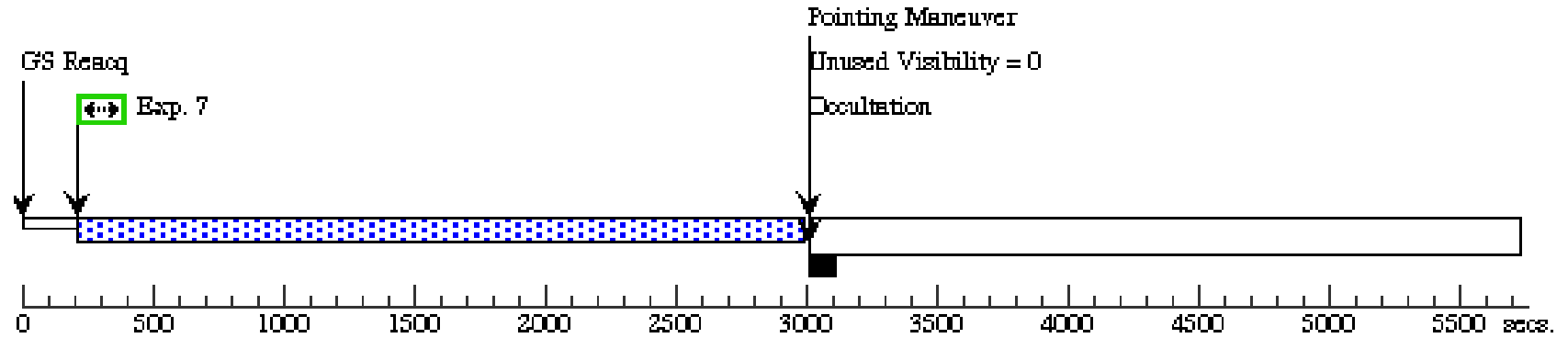
Proposal 13398 - Q9-G160M&G185M (25) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testin...

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.516 392)	(9) Q2135-145	COS/FUV, ACQ/SEARCH, PSA	G160M 1600 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			24 Secs (24 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.516 393)	(9) Q2135-145	COS/FUV, ACQ/PEAKXD, PSA	G160M 1600 A				34 Secs (34 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.516 392)	(9) Q2135-145	COS/FUV, ACQ/PEAKD, PSA	G160M 1600 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			24 Secs (24 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 797)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=19 10			1910 Secs (1910 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 799)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=4; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[2]
	6	G160M/FP-POS-1 (COS.sp.517 799)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=1; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[3]
	7	G160M/FP-POS-2 (COS.sp.517 799)	(9) Q2135-145	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=2; BUFFER-TIME=27 30			2729 Secs (2729 Secs) [==>]	[4]
	8	G185M/FP-POS-3 (COS.sp.517 808)	(9) Q2135-145	COS/NUV, TIME-TAG, PSA	G185M 1850 A	BUFFER-TIME=11 50; FP-POS=3			1340 Secs (1340 Secs) [==>]	[5]
	9	G185M/FP-POS-4 (COS.sp.517 808)	(9) Q2135-145	COS/NUV, TIME-TAG, PSA	G185M 1850 A	BUFFER-TIME=13 51; FP-POS=4			1346 Secs (1346 Secs) [==>]	[5]



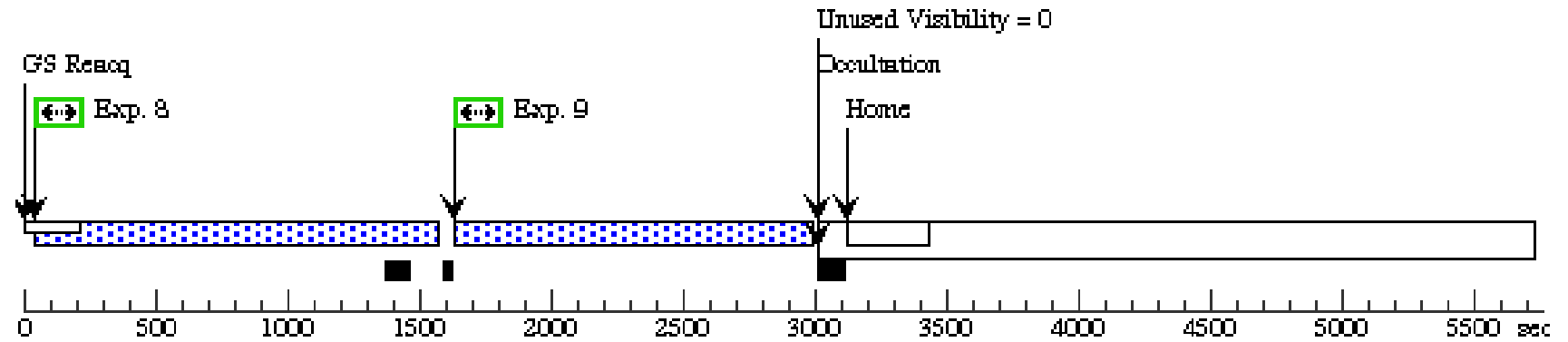
Orbit 4

Server Version: 20130919



Orbit 5

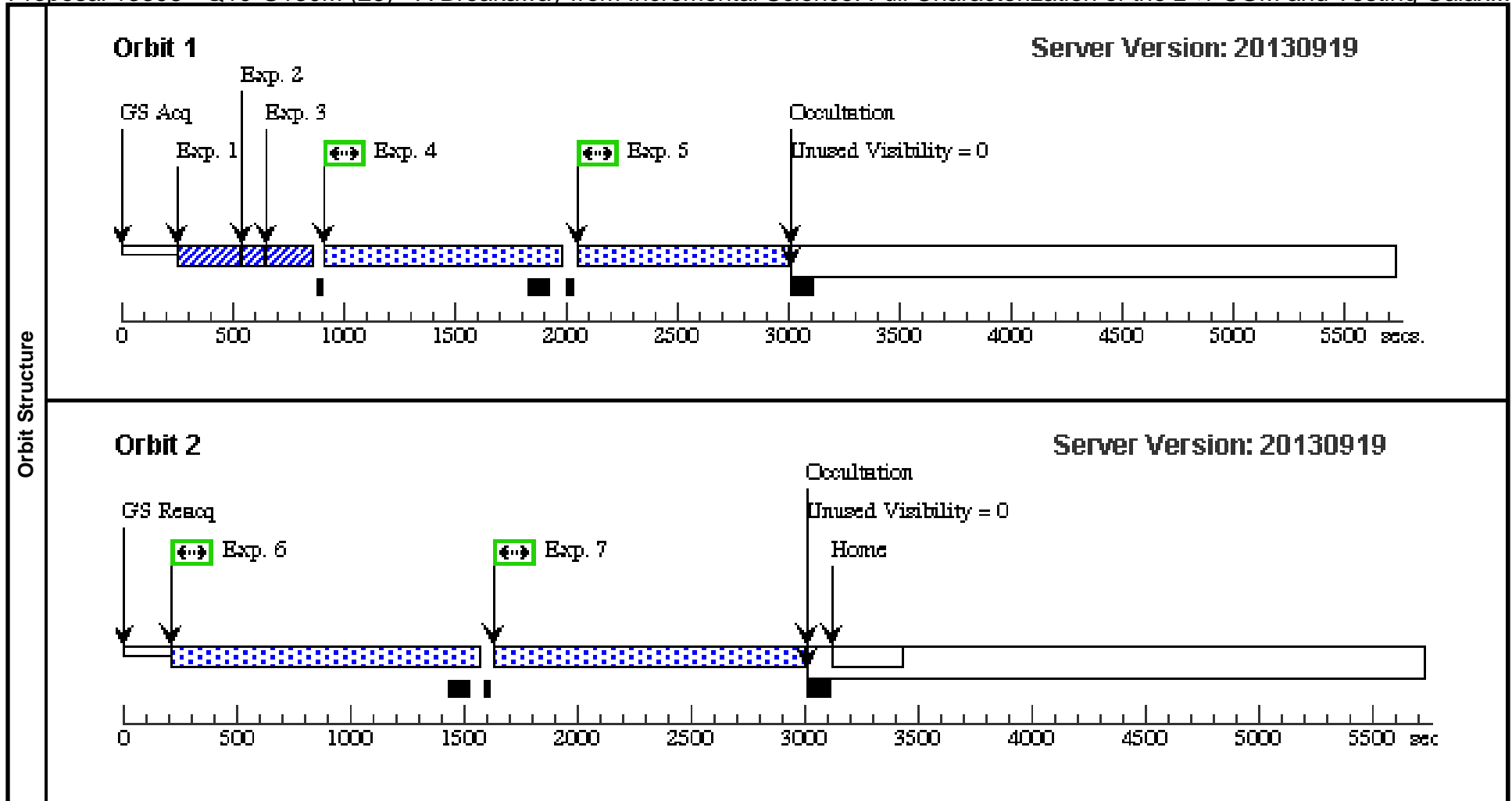
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Proposal 13398 - Q10-G130M (26) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galax...

Thu Oct 24 01:18:36 GMT 2013

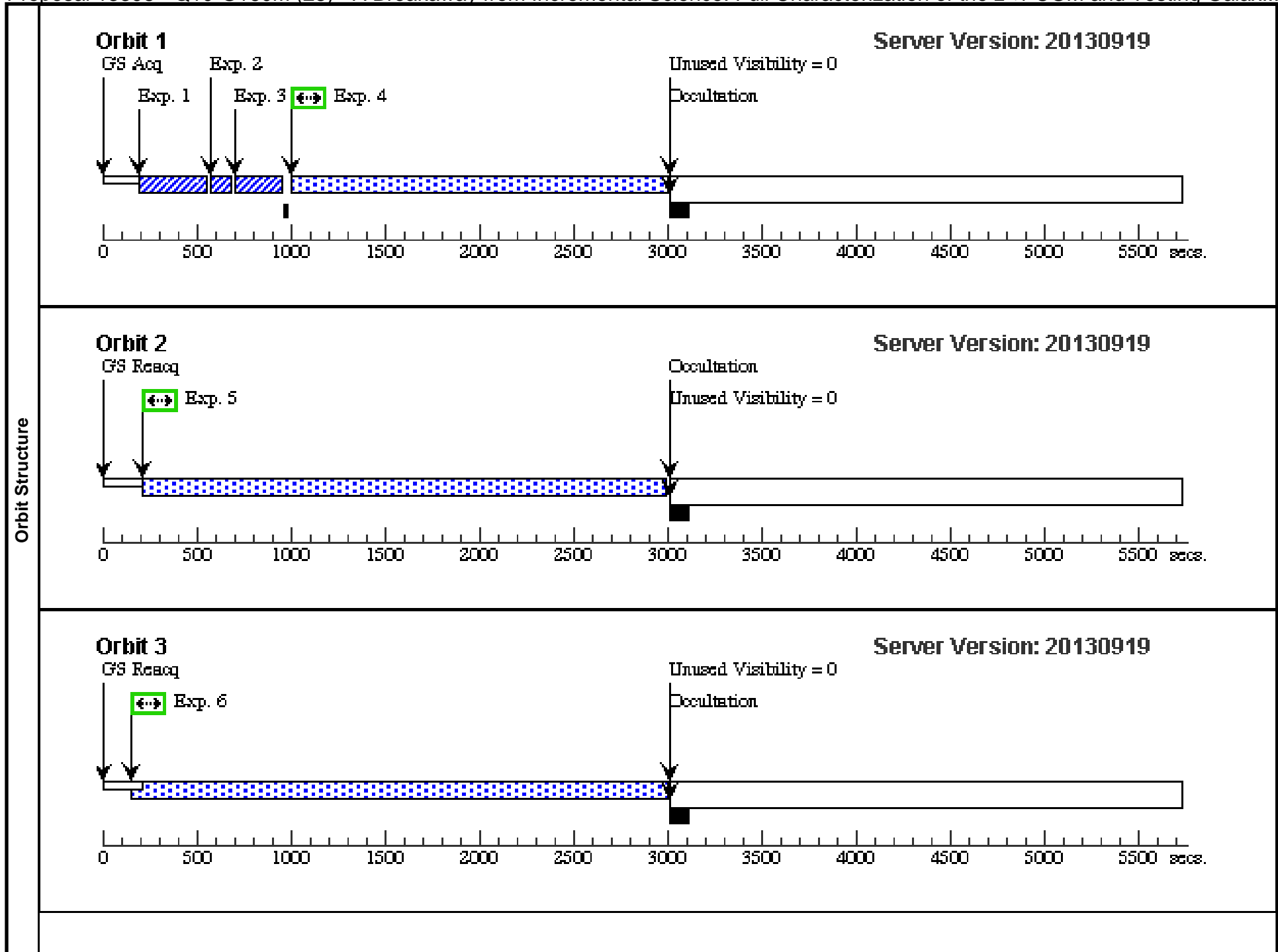
Visit	Proposal 13398, Q10-G130M (26), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV Special Requirements: SCHED 100%									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(10)	Q2251+155	RA: 22 53 57.7500 (343.4906250d) Dec: +16 08 53.20 (16.14811d) Equinox: J2000	Redshift: 0.859	V=16.1 f_lam=5-6E-15 at 1600-3200A; GALEX FUV=17.93 NUV=16.9 4	Reference Frame: ICRS				
	<i>Comments: FOS G190H and G270H provided</i>									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G130M AC Q/SEARCH (COS.sa.516 388)	(10) Q2251+155	COS/FUV, ACQ/SEARCH, PSA	G130M 1300 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			12 Secs (12 Secs) [==>]	[1]
	2	G130M AC Q/PEAKXD (COS.sa.516 389)	(10) Q2251+155	COS/FUV, ACQ/PEAKXD, PSA	G130M 1300 A				11 Secs (11 Secs) [==>]	[1]
	3	G130M AC Q/PEAKD (COS.sa.516 388)	(10) Q2251+155	COS/FUV, ACQ/PEAKD, PSA	G130M 1300 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			12 Secs (12 Secs) [==>]	[1]
	4	G130M/FP-POS-1 (COS.sp.517 811)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=1; BUFFER-TIME=81 0			950 Secs (950 Secs) [==>]	[1]
	5	G130M/FP-POS-2 (COS.sp.517 811)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=2; BUFFER-TIME=89 9			898 Secs (898 Secs) [==>]	[1]
	6	G130M/FP-POS-3 (COS.sp.517 812)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=3; BUFFER-TIME=11 80			1307 Secs (1307 Secs) [==>]	[2]
	7	G130M/FP-POS-4 (COS.sp.517 812)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G130M 1300 A	FP-POS=4; BUFFER-TIME=13 19			1317 Secs (1317 Secs) [==>]	[2]

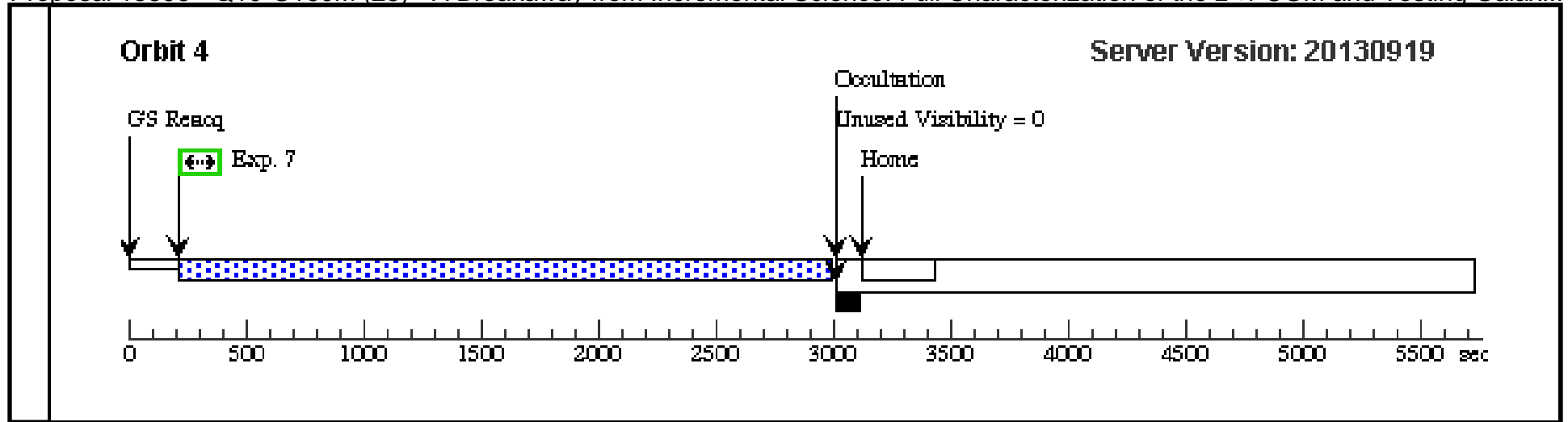


Proposal 13398 - Q10-G160M (28) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galax...

Thu Oct 24 01:18:37 GMT 2013

Visit	Proposal 13398, Q10-G160M (28), scheduling Diagnostic Status: Warning Scientific Instruments: COS/FUV Special Requirements: SCHED 100%									
	(Q10-G160M (28)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	Q2251+155	RA: 22 53 57.7500 (343.4906250d) Dec: +16 08 53.20 (16.14811d) Equinox: J2000	Redshift: 0.859	V=16.1 f_lam=5-6E-15 at 1600-3200A; GALEX FUV=17.93 NUV=16.9 4	Reference Frame: ICRS				
<i>Comments: FOS G190H and G270H provided</i>										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	G160M AC Q/SEARCH (COS.sa.527 365)	(10) Q2251+155	COS/FUV, ACQ/SEARCH, PSA	G160M 1623 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T			20 Secs (20 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.527 366)	(10) Q2251+155	COS/FUV, ACQ/PEAKXD, PSA	G160M 1623 A				29 Secs (29 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.527 365)	(10) Q2251+155	COS/FUV, ACQ/PEAKD, PSA	G160M 1623 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR			20 Secs (20 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.527 372)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=20 00			1951 Secs (1951 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.527 373)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=4; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[2]
	6	G160M/FP-POS-1 (COS.sp.527 373)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=1; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[3]
	7	G160M/FP-POS-2 (COS.sp.527 373)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=2; BUFFER-TIME=28 00			2729 Secs (2729 Secs) [==>]	[4]



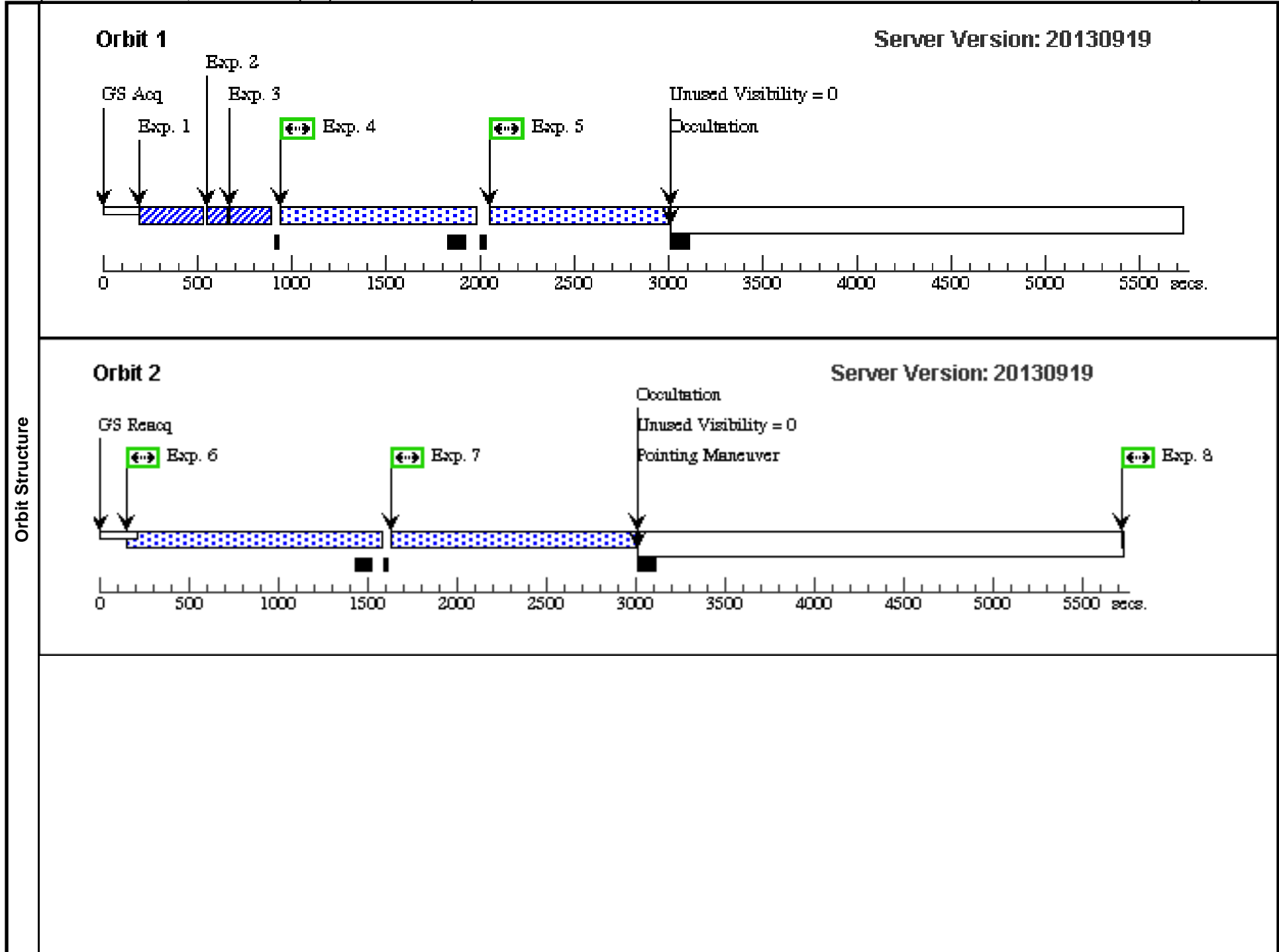


Proposal 13398 - Q10-G185M (27) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galax...

Visit	Proposal 13398, Q10-G185M (27), implementation Thu Oct 24 01:18:38 GMT 2013 Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100%																
	Diagnosics (Q10-G185M (27)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Q10-G185M (27)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS																
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>(10)</td> <td>Q2251+155</td> <td>RA: 22 53 57.7500 (343.4906250d) Dec: +16 08 53.20 (16.14811d) Equinox: J2000</td> <td>Redshift: 0.859</td> <td>V=16.1 f_lam=5-6E-15 at 1600-3200A; GALEX FUV=17.93 NUV=16.9 4</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(10)	Q2251+155	RA: 22 53 57.7500 (343.4906250d) Dec: +16 08 53.20 (16.14811d) Equinox: J2000	Redshift: 0.859	V=16.1 f_lam=5-6E-15 at 1600-3200A; GALEX FUV=17.93 NUV=16.9 4	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(10)	Q2251+155	RA: 22 53 57.7500 (343.4906250d) Dec: +16 08 53.20 (16.14811d) Equinox: J2000	Redshift: 0.859	V=16.1 f_lam=5-6E-15 at 1600-3200A; GALEX FUV=17.93 NUV=16.9 4	Reference Frame: ICRS												
<i>Comments: FOS G190H and G270H provided</i>																	

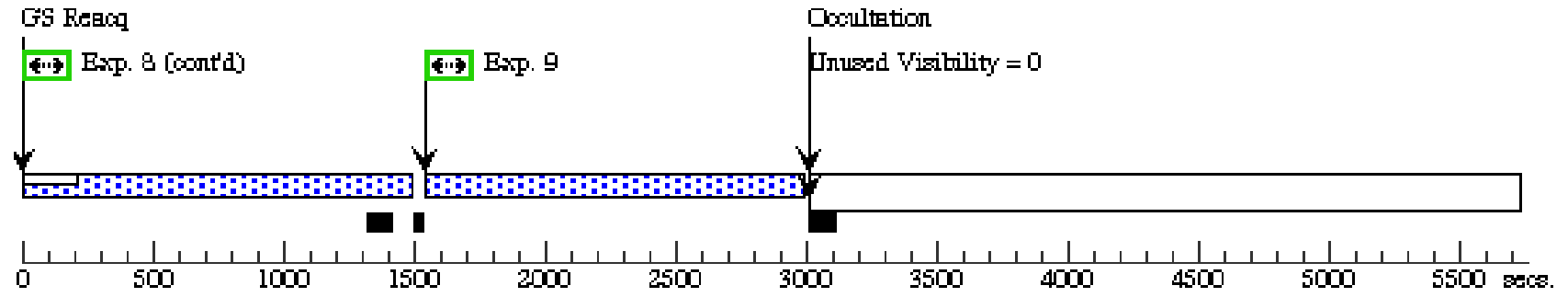
Proposal 13398 - Q10-G185M (27) - A Breakaway from Incremental Science: Full Characterization of the z<1 CGM and Testing Galax...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	G160M AC Q/SEARCH (COS.sa.517 222)	(10) Q2251+155	COS/FUV, ACQ/SEARCH, PSA	G160M 1623 A	SCAN-SIZE=2; STEP-SIZE=1.767; CENTER=FLUX-W T		15 Secs (15 Secs) [==>]	[1]
	2	G160M AC Q/PEAKXD (COS.sa.517 223)	(10) Q2251+155	COS/FUV, ACQ/PEAKXD, PSA	G160M 1623 A			21 Secs (21 Secs) [==>]	[1]
	3	G160M AC Q/PEAKD (COS.sa.517 222)	(10) Q2251+155	COS/FUV, ACQ/PEAKD, PSA	G160M 1623 A	STEP-SIZE=0.9; NUM-POS=5.0; CENTER=FLUX-W T-FLR		15 Secs (15 Secs) [==>]	[1]
	4	G160M/FP-POS-3 (COS.sp.517 816)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=3; BUFFER-TIME=85 0		991 Secs (991 Secs) [==>]	[1]
	5	G160M/FP-POS-4 (COS.sp.517 816)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=4; BUFFER-TIME=90 3		898 Secs (898 Secs) [==>]	[1]
	6	G160M/FP-POS-1 (COS.sp.517 817)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=1; BUFFER-TIME=11 80		1307 Secs (1307 Secs) [==>]	[2]
	7	G160M/FP-POS-2 (COS.sp.517 817)	(10) Q2251+155	COS/FUV, TIME-TAG, PSA	G160M 1623 A	FP-POS=2; BUFFER-TIME=13 19		1317 Secs (1317 Secs) [==>]	[2]
	8	G185M-198 6/FP-POS-3 (COS.sp.517 819)	(10) Q2251+155	COS/NUV, TIME-TAG, PSA	G185M 1986 A	FP-POS=3; BUFFER-TIME=11 00		1250 Secs (1250 Secs) [==>]	[2]
	9	G185M-198 6/FP-POS-4 (COS.sp.517 820)	(10) Q2251+155	COS/NUV, TIME-TAG, PSA	G185M 1986 A	FP-POS=4; BUFFER-TIME=14 36		1436 Secs (1436 Secs) [==>]	[3]
	10	G185M-198 6/FP-POS-1 (COS.sp.517 820)	(10) Q2251+155	COS/NUV, TIME-TAG, PSA	G185M 1986 A	FP-POS=1; BUFFER-TIME=12 00		1353 Secs (1353 Secs) [==>]	[4]
	11	G185M-198 6/FP-POS-2 (COS.sp.517 820)	(10) Q2251+155	COS/NUV, TIME-TAG, PSA	G185M 1986 A	FP-POS=2; BUFFER-TIME=13 35		1335 Secs (1335 Secs) [==>]	[4]



Orbit 3

Server Version: 20130919



Orbit 4

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