



13382 - Warm Gas Flows in the Coma Cluster

Cycle: 21, Proposal Category: GO

(UV Initiative)

(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) HB89.1259+281	COS/FUV COS/NUV	5	11-Jul-2013 18:17:06.0	yes
02	(2) HB89.1258+285	COS/FUV COS/NUV	2	11-Jul-2013 18:17:19.0	yes
03	(3) TON0694	COS/FUV COS/NUV	2	11-Jul-2013 18:17:26.0	yes
04	(4) RX.J1303.7+2633	COS/FUV COS/NUV	3	11-Jul-2013 18:17:36.0	yes
05	(5) FBQS.J1252+2913	COS/FUV COS/NUV	3	11-Jul-2013 18:17:47.0	yes
06	(6) TON0133	COS/FUV COS/NUV	3	11-Jul-2013 18:17:57.0	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>
07	(7) FBQS.J130451.4+245445	COS/FUV COS/NUV	2	11-Jul-2013 18:18:05.0	yes
08	(8) SDSS.J130429.04+311308.2	COS/FUV COS/NUV	4	11-Jul-2013 18:18:16.0	yes
09	(9) SDSS.J125846.67+242739.1	COS/FUV COS/NUV	3	11-Jul-2013 18:18:27.0	yes

27 Total Orbits Used

ABSTRACT

The flow of baryons into dark matter halos varies by halo mass, but is predicted to be filamentary in all cases. We propose to observe the flow of baryons relative to the most massive structures in the universe by creating the first map of the distribution of warm gas (Ly-alpha absorbers) in and around the Coma Cluster. The total amount of warm gas, covering fraction and structure will be compared to the less massive, irregular Virgo Cluster, the field, and simulation predictions. These absorbers are our only method of directly measuring the kinematics of Coma's diffuse gas. Coma is the benchmark cluster for models of cluster formation, and the data will be combined with the rich multi-wavelength data available and used to constrain these models.

OBSERVING DESCRIPTION

This survey of the Coma cluster's warm ICM will use the Cosmic Origins Spectrograph in medium resolution mode with the G130M grating. We will observe 9 QSOs distributed over a range of distances, from the cluster center to ~2 times the virial radius. With the G130M grating, we will cover 1150 - 1450 AA, and our primary goal is to observe Ly-alpha absorbers.

The proposed observations will yield high S/N ($S/N > 10$), high resolution (~15 km/s) spectra. The combination of resolution and signal-to-noise is designed to allow us to detect weak Ly-alpha absorption features, $W > 50$ AA, at 5-sigma. This is consistent with our Virgo survey findings where we detected 25 absorbers toward 9 sightlines in the Virgo velocity range with $W=50-500$ AA. Our observations will be sensitive to Ly-alpha absorbers over the entire velocity range of Coma (4000-10000 km/s), as well as obtain information on the number of absorbers at a range of foreground and background velocities.

Proposal 13382 (STScI Edit Number: 2, Created: Thursday, July 11, 2013 5:18:35 PM EST) - Overview

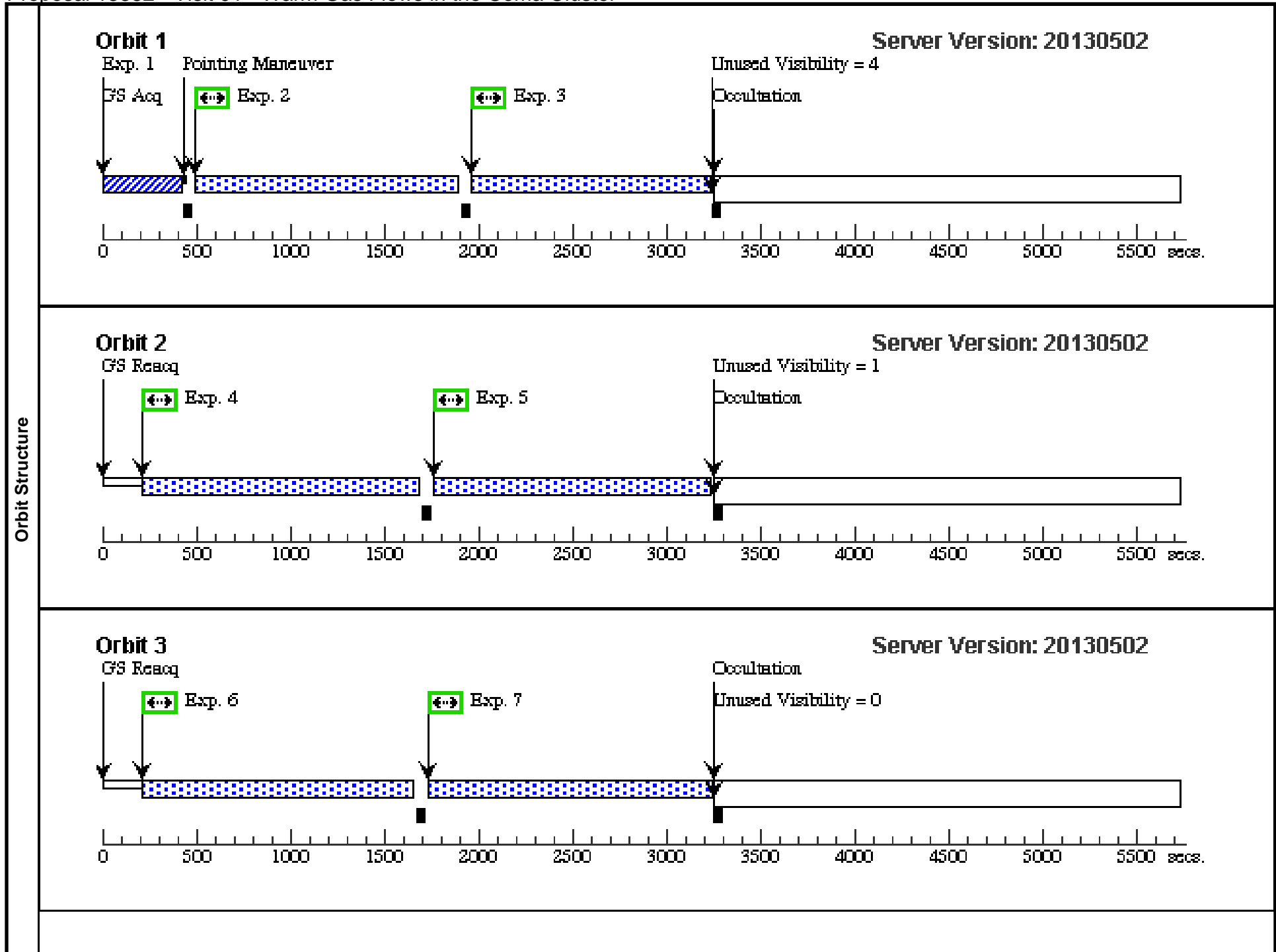
All sightlines were chosen by cross-matching the Veron-Cetty QSO catalog 13th ed. with the GALEX database. The GALEX data provide an estimate of the UV flux level, with the FUV imaging band covering the range 1344 - 1786 AA (effective wavelength 1516 AA). The SDSS images were checked to ensure there were no obvious stars or galaxies interfering with the GALEX flux. All our targets are selected to be brighter than 18.7 AB mag and the desired S/N level can be reached in 5 orbits or less.

The acquisition strategy (mirror A vs B) has been chosen using the COS Imaging Acquisition ETC and the measured GALEX fluxes to normalize a variety of input spectra (flat and redshifted QSO spectra). To be conservative, we chose the longest suggested exposure time among the various results, while ensuring count-rate limits are not exceeded. Science exposure times were estimated with the COS spectroscopy ETC and extended to fully pack the orbits. The BOT found all fields safe with two unknown objects that appear to be our actual targets.

Proposal 13382 - Visit 01 - Warm Gas Flows in the Coma Cluster

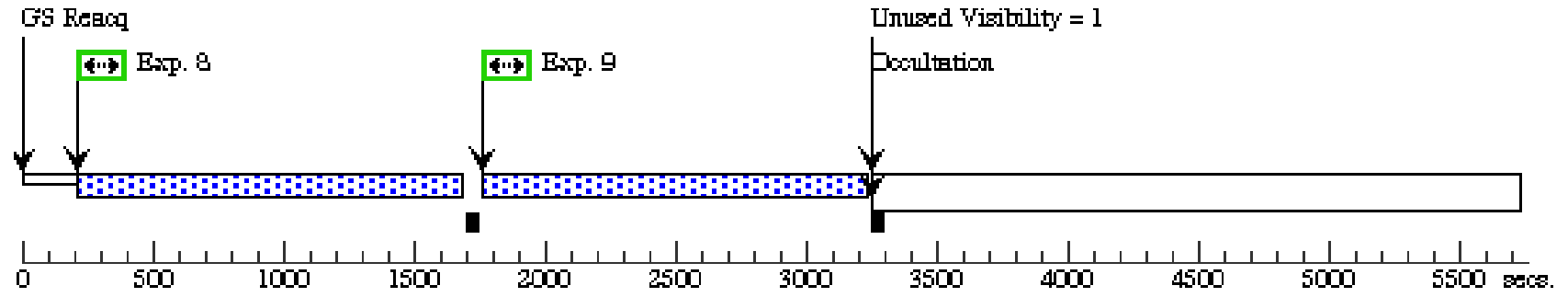
Thu Jul 11 22:18:36 GMT 2013

Visit	Proposal 13382, Visit 01, implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	HB89.1259+281	RA: 13 01 28.1400 (195.3672500d) Dec: +27 51 6.57 (27.85182d) Equinox: J2000		V=18.07 m_FUV=18.75	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(515062)	(1) HB89.1259+281	COS/NUV, ACQ/IMAGE, PSA	MIRRORA		GS ACQ SCENARI O BASE1B3		10.6 Secs (10.6 Secs) [==>]	[1]
	2	(515019)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=48 58			1200 Secs (1218 Secs) [==>1218.0 Secs]	[1]
	3	(515019)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=48 58			1200 Secs (1218 Secs) [==>1218.0 Secs]	[1]
	4	(515019)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=48 58			1400 Secs (1421 Secs) [==>1421.0 Secs]	[2]
	5	(515019)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=48 58			1400 Secs (1421 Secs) [==>1421.0 Secs]	[2]
	6	(515019)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=48 58			1350 Secs (1387 Secs) [==>1387.0 Secs]	[3]
	7	(516998)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=1; BUFFER-TIME=50 75			1350 Secs (1387 Secs) [==>1387.0 Secs]	[3]
	8	(516998)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=2; BUFFER-TIME=50 75			1400 Secs (1421 Secs) [==>1421.0 Secs]	[4]
	9	(516998)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=50 75			1400 Secs (1421 Secs) [==>1421.0 Secs]	[4]
	10	(516998)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=50 75			1400 Secs (1421 Secs) [==>1421.0 Secs]	[5]
11	(516998)	(1) HB89.1259+281	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=50 75			1400 Secs (1421 Secs) [==>1421.0 Secs]	[5]	



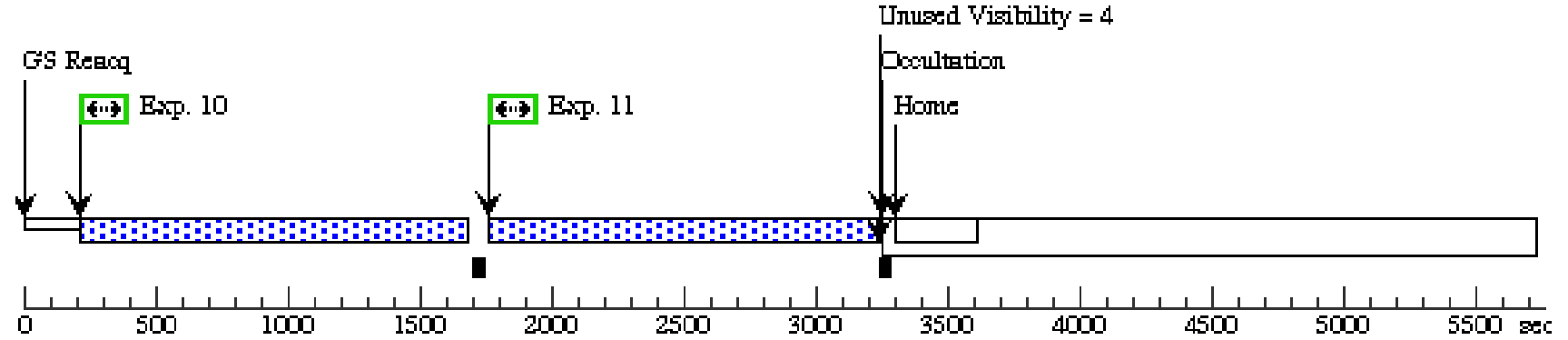
Orbit 4

Server Version: 20130502



Orbit 5

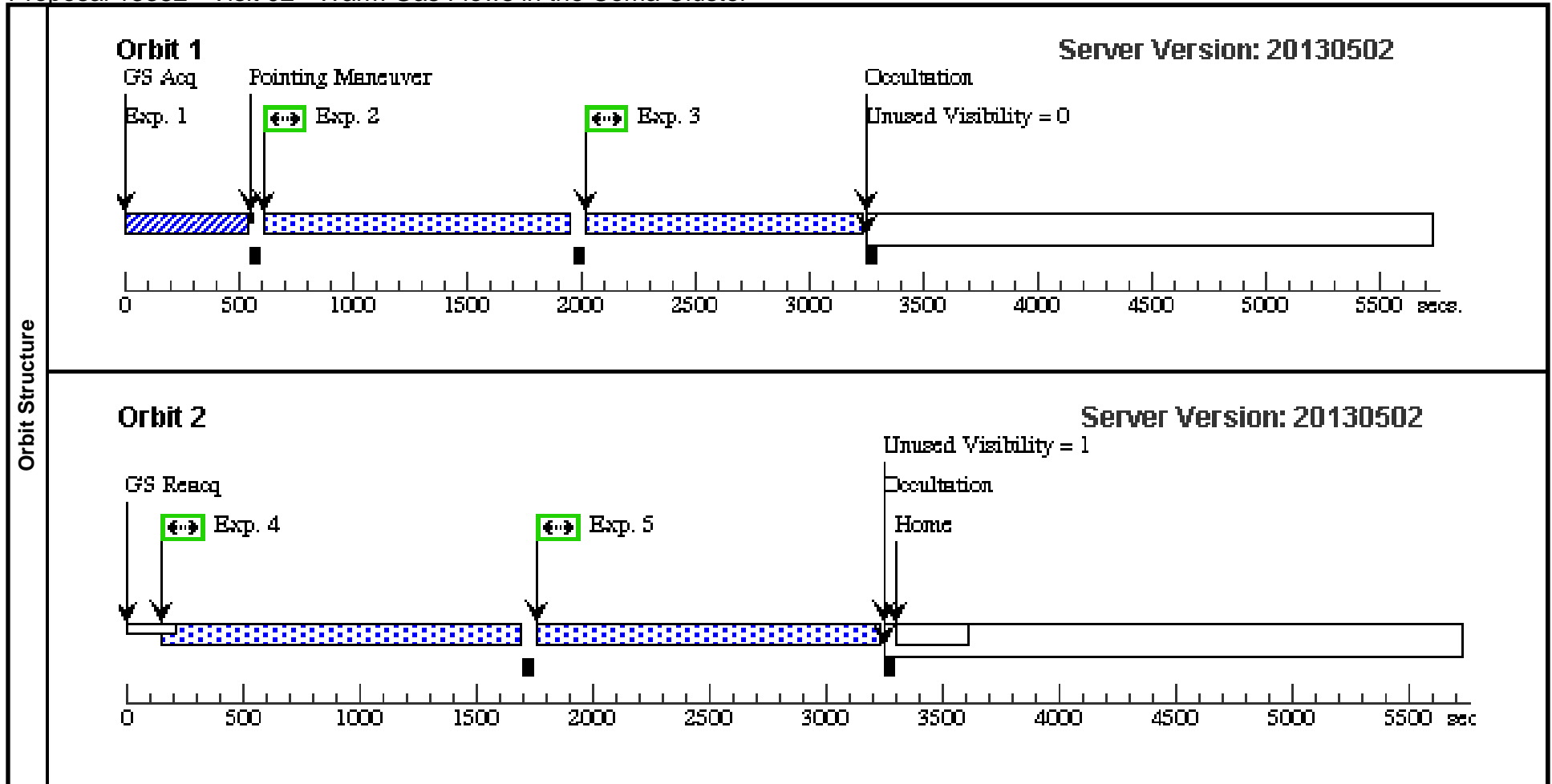
Server Version: 20130502



Proposal 13382 - Visit 02 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:39 GMT 2013

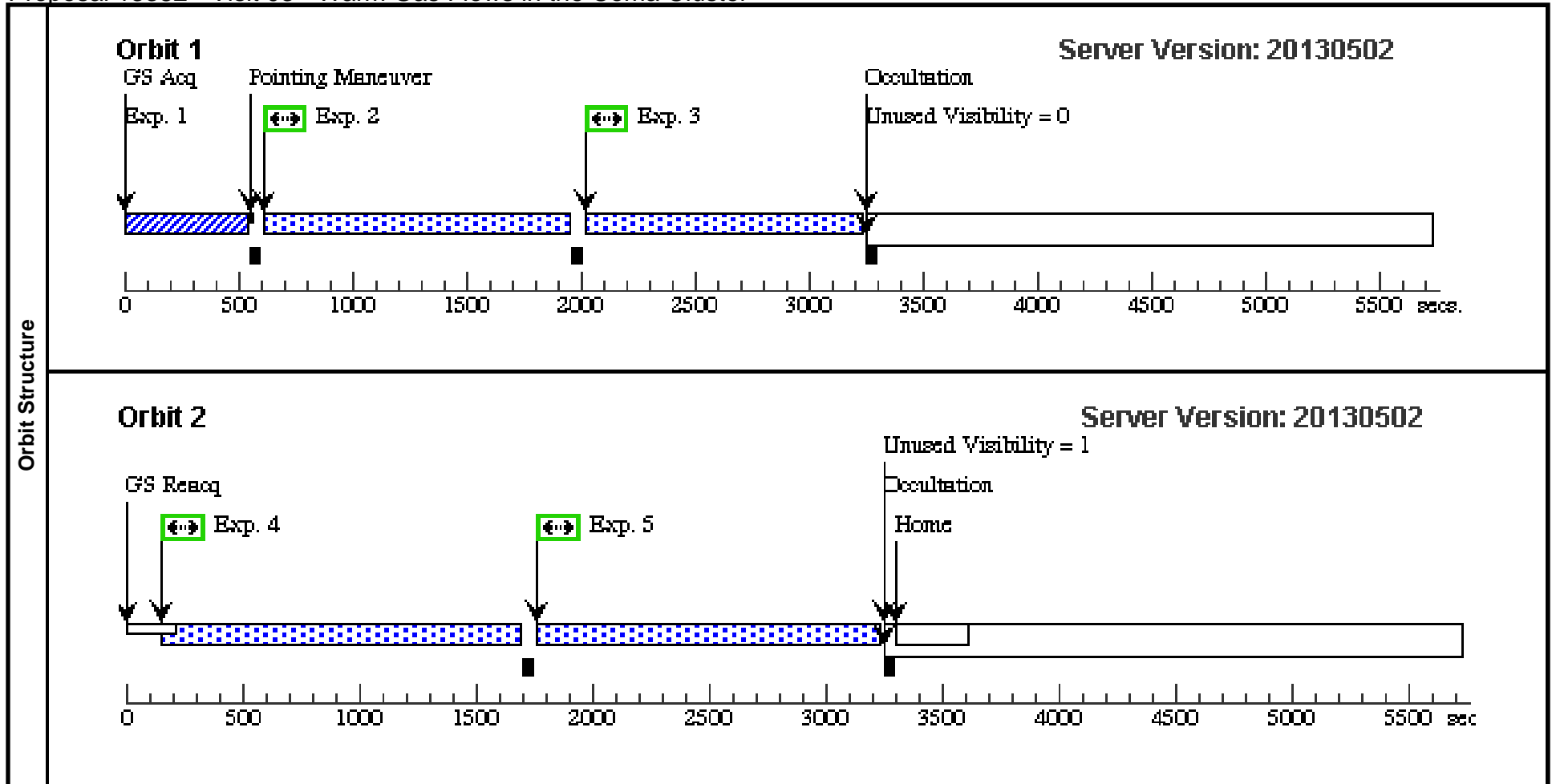
Visit	Proposal 13382, Visit 02, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
	(Visit 02) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	HB89.1258+285	RA: 13 01 0.8600 (195.2535833d) Dec: +28 19 44.72 (28.32909d) Equinox: J2000		V=17.18 m_VUF=18.04	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(517005)	(2) HB89.1258+285	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				55.5 Secs (55.5 Secs) [==>]	[1]
	2	(515021)	(2) HB89.1258+285	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=41 79			1150 Secs (1159 Secs) [==>1159.0 Secs]	[1]
	3	(515021)	(2) HB89.1258+285	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=41 79			1150 Secs (1159 Secs) [==>1159.0 Secs]	[1]
	4	(517028)	(2) HB89.1258+285	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=43 39			1410 Secs (1421 Secs) [==>1421.0 Secs]	[2]
	5	(517028)	(2) HB89.1258+285	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=43 39			1410 Secs (1421 Secs) [==>1421.0 Secs]	[2]



Proposal 13382 - Visit 03 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:40 GMT 2013

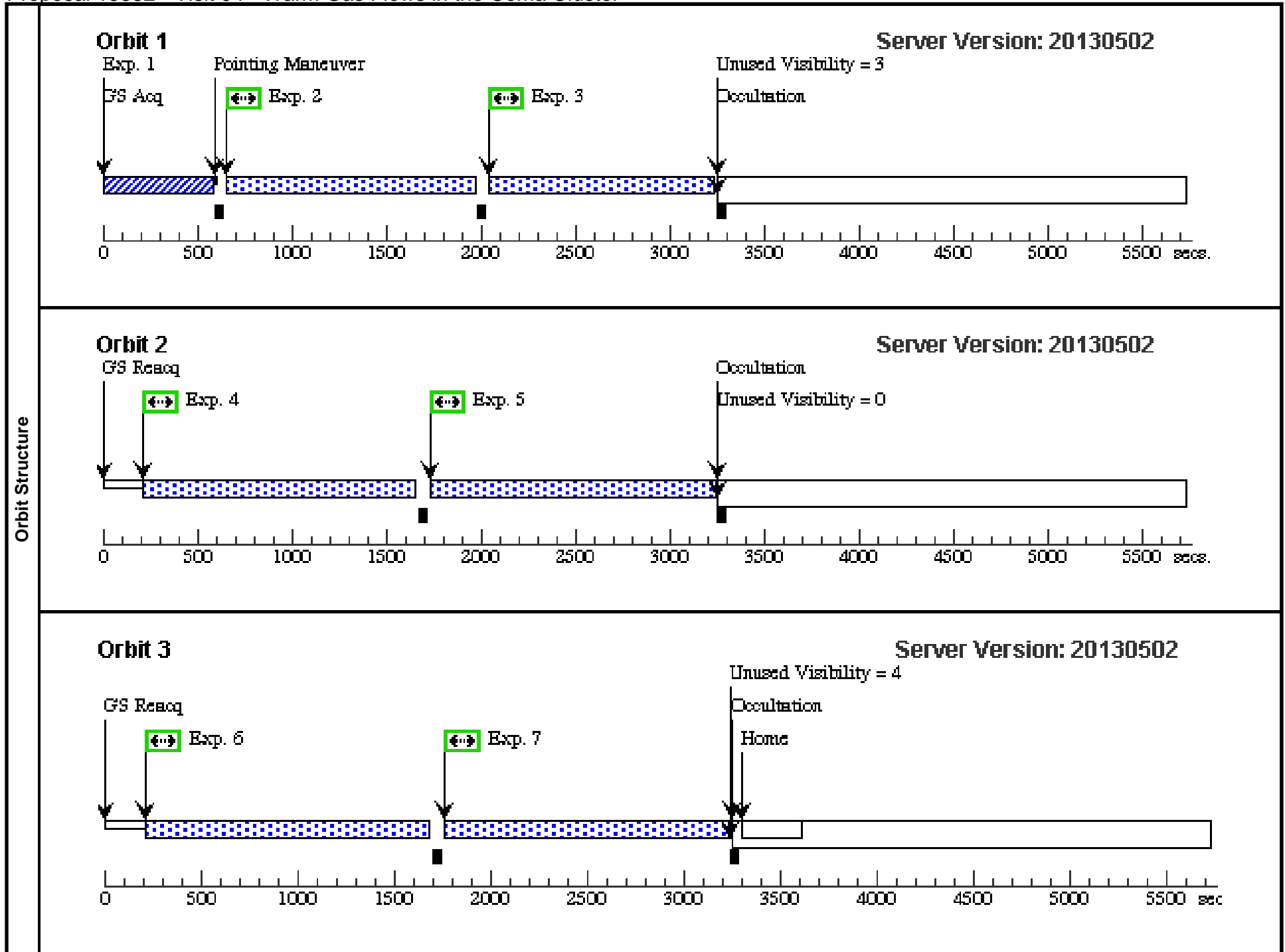
Visit	Proposal 13382, Visit 03, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)											
	(Visit 03) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(3)	TON0694	RA: 13 03 13.0200 (195.8042500d) Dec: +28 11 7.79 (28.18550d) Equinox: J2000				V=16.73 m_FUV=18.00	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	(517050)	(3) TON0694	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				53.5 Secs (53.5 Secs)			
									[==>]		[1]	
	2	(515022)	(3) TON0694	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=41 42				1150 Secs (1161 Secs)		
									[==>1161.0 Secs]		[1]	
	3	(515022)	(3) TON0694	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=41 42				1150 Secs (1161 Secs)		
								[==>1161.0 Secs]		[1]		
4	(517056)	(3) TON0694	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=42 97				1410 Secs (1421 Secs)			
								[==>1421.0 Secs]		[2]		
5	(517056)	(3) TON0694	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=42 97				1410 Secs (1421 Secs)			
								[==>1421.0 Secs]		[2]		



Proposal 13382 - Visit 04 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:41 GMT 2013

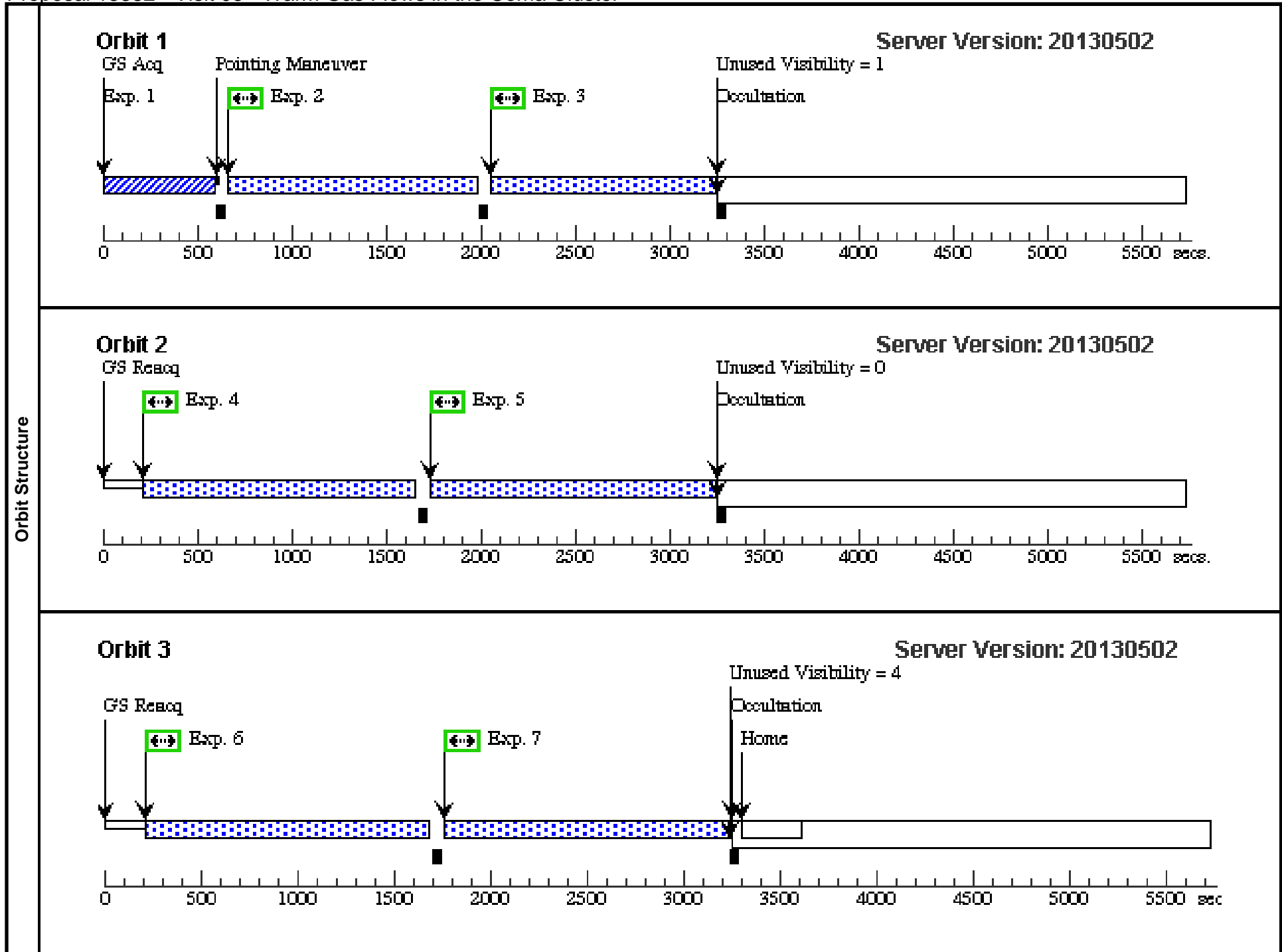
Visit	Proposal 13382, Visit 04, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
	(Visit 04) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(4)	RX.J1303.7+2633	RA: 13 03 45.9800 (195.9415833d) Dec: +26 33 14.16 (26.55393d) Equinox: J2000				V=17.78 m_FUV=18.00		Reference Frame: ICRS	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(517074)	(4) RX.J1303.7+263 3	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				74.2 Secs (74.2 Secs) [==>]	[1]
	2	(515024)	(4) RX.J1303.7+263 3	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=43 11			1140 Secs (1140 Secs) [==>]	[1]
	3	(515024)	(4) RX.J1303.7+263 3	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=43 11			1140 Secs (1140 Secs) [==>]	[1]
	4	(515024)	(4) RX.J1303.7+263 3	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=43 11			1380 Secs (1387 Secs) [==>1387.0 Secs]	[2]
	5	(517078)	(4) RX.J1303.7+263 3	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=44 86			1380 Secs (1387 Secs) [==>1387.0 Secs]	[2]
	6	(517078)	(4) RX.J1303.7+263 3	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=44 86			1410 Secs (1421 Secs) [==>1421.0 Secs]	[3]
	7	(517078)	(4) RX.J1303.7+263 3	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=44 86			1410 Secs (1421 Secs) [==>1421.0 Secs]	[3]



Proposal 13382 - Visit 05 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:43 GMT 2013

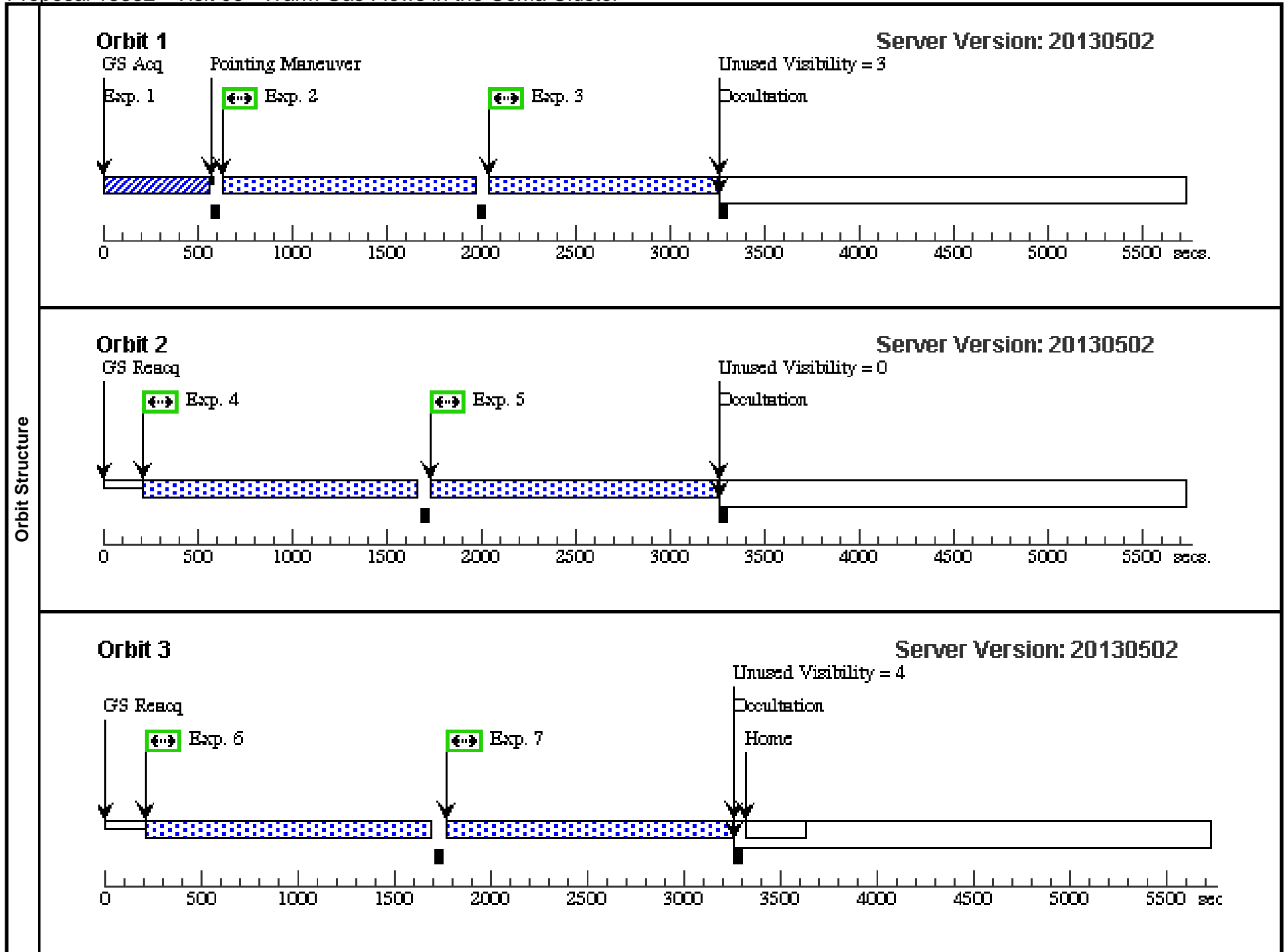
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(5)	FBQS.J1252+2913	RA: 12 52 24.9900 (193.1041250d) Dec: +29 13 21.19 (29.22255d) Equinox: J2000				V=17.24 m_FUV=18.43		Reference Frame: ICRS	
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(517361)	(5) FBQS.J1252+2913	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				79.9 Secs (79.9 Secs) [==>]	[1]
	2	(515026)	(5) FBQS.J1252+2913	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=45 10			1130 Secs (1136 Secs) [==>1136.0 Secs]	[1]
	3	(515026)	(5) FBQS.J1252+2913	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=45 10			1130 Secs (1136 Secs) [==>1136.0 Secs]	[1]
	4	(515026)	(5) FBQS.J1252+2913	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=45 10			1380 Secs (1387 Secs) [==>1387.0 Secs]	[2]
	5	(517380)	(5) FBQS.J1252+2913	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=47 01			1380 Secs (1387 Secs) [==>1387.0 Secs]	[2]
	6	(517380)	(5) FBQS.J1252+2913	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=47 01			1410 Secs (1421 Secs) [==>1421.0 Secs]	[3]
	7	(517380)	(5) FBQS.J1252+2913	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=47 01			1410 Secs (1421 Secs) [==>1421.0 Secs]	[3]



Proposal 13382 - Visit 06 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:44 GMT 2013

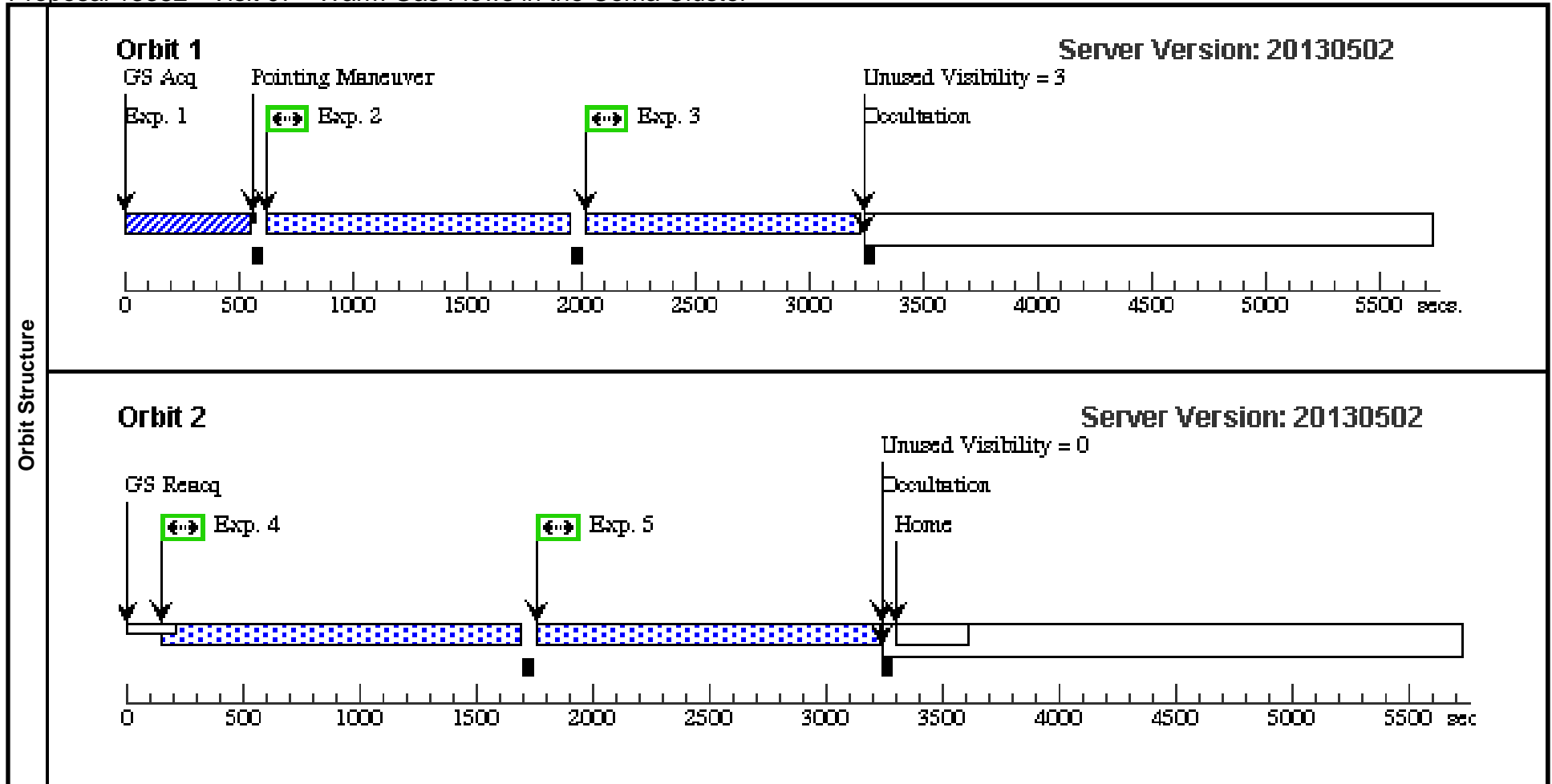
Visit	Proposal 13382, Visit 06, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)										
	(Visit 06) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(6)	TON0133	RA: 12 51 0.3100 (192.7512917d) Dec: +30 25 41.84 (30.42829d) Equinox: J2000				V=17.67 m_FUV=18.21		Reference Frame: ICRS		
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	(517444)	(6) TON0133	COS/NUV, ACQ/IMAGE, PSA	MIRRORB		GS ACQ SCENARI O BASE1B3		65.2 Secs (65.2 Secs)		
									[==>]		[1]
	2	(515028)	(6) TON0133	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=43 33			1130 Secs (1156 Secs)		
									[==>1156.0 Secs]		[1]
	3	(515028)	(6) TON0133	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=43 33			1130 Secs (1156 Secs)		
									[==>1156.0 Secs]		[1]
	4	(515028)	(6) TON0133	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=43 33			1380 Secs (1394 Secs)		
								[==>1394.0 Secs]		[2]	
5	(517451)	(6) TON0133	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=45 10			1380 Secs (1394 Secs)			
								[==>1394.0 Secs]		[2]	
6	(517451)	(6) TON0133	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=45 10			1380 Secs (1428 Secs)			
								[==>1428.0 Secs]		[3]	
7	(517451)	(6) TON0133	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=45 10			1380 Secs (1428 Secs)			
								[==>1428.0 Secs]		[3]	



Proposal 13382 - Visit 07 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:45 GMT 2013

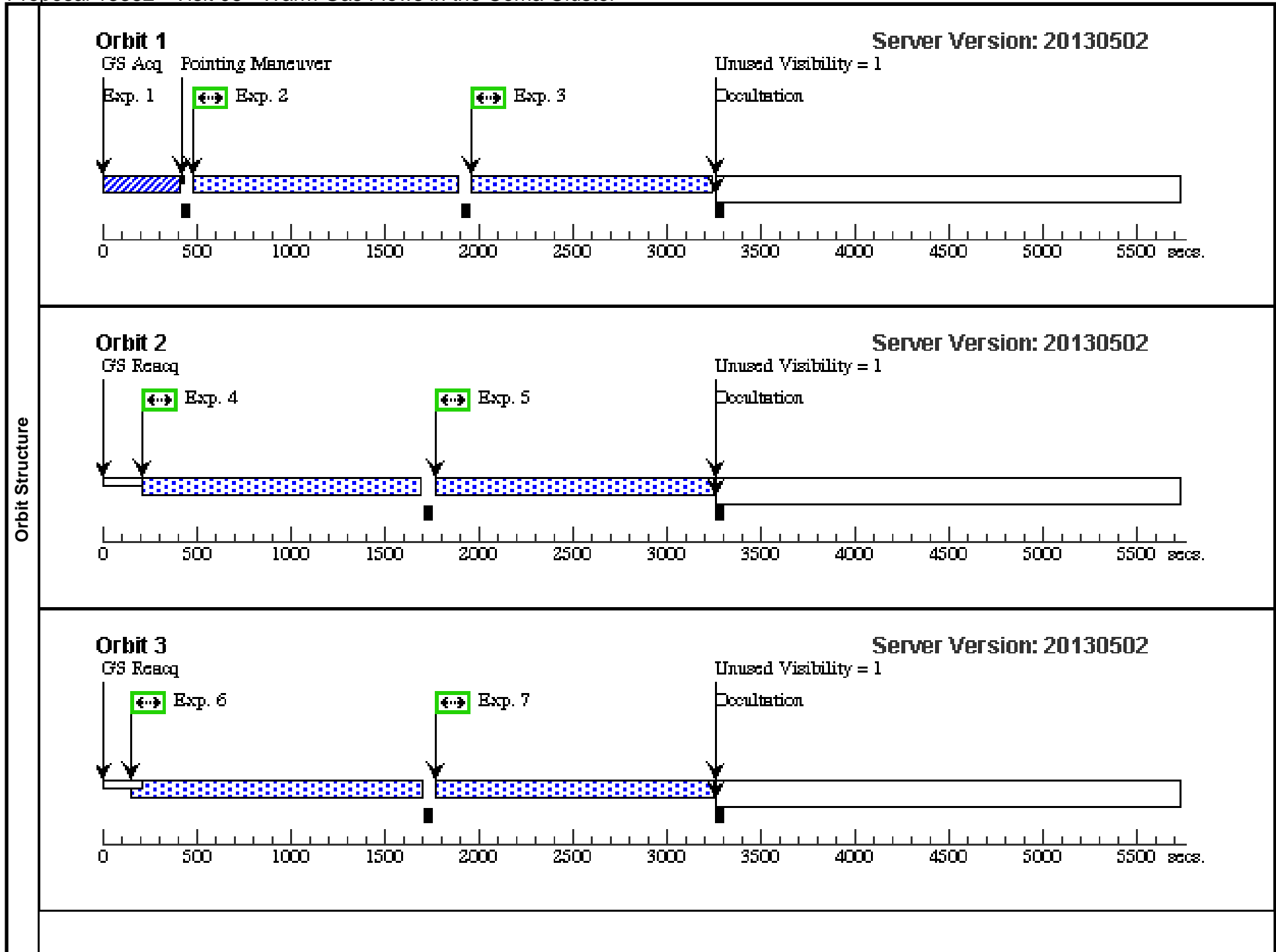
Visit	Proposal 13382, Visit 07, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
	(Visit 07) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Fluxes	Miscellaneous		
	(7)	FBQS.J130451.4+245445	RA: 13 04 51.4100 (196.2142083d) Dec: +24 54 45.91 (24.91275d) Equinox: J2000				V=17.35 m_FUV=18.09	Reference Frame: ICRS		
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(517454)	(7) FBQS.J130451.4+245445	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				58.4 Secs (58.4 Secs) [==>]	[1]
	2	(515030)	(7) FBQS.J130451.4+245445	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=42 25			1150 Secs (1150 Secs) [==>]	[1]
	3	(515030)	(7) FBQS.J130451.4+245445	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=42 25			1150 Secs (1150 Secs) [==>]	[1]
	4	(515030)	(7) FBQS.J130451.4+245445	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=43 93			1410 Secs (1417 Secs) [==>1417.0 Secs]	[2]
	5	(515030)	(7) FBQS.J130451.4+245445	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=43 93			1410 Secs (1417 Secs) [==>1417.0 Secs]	[2]

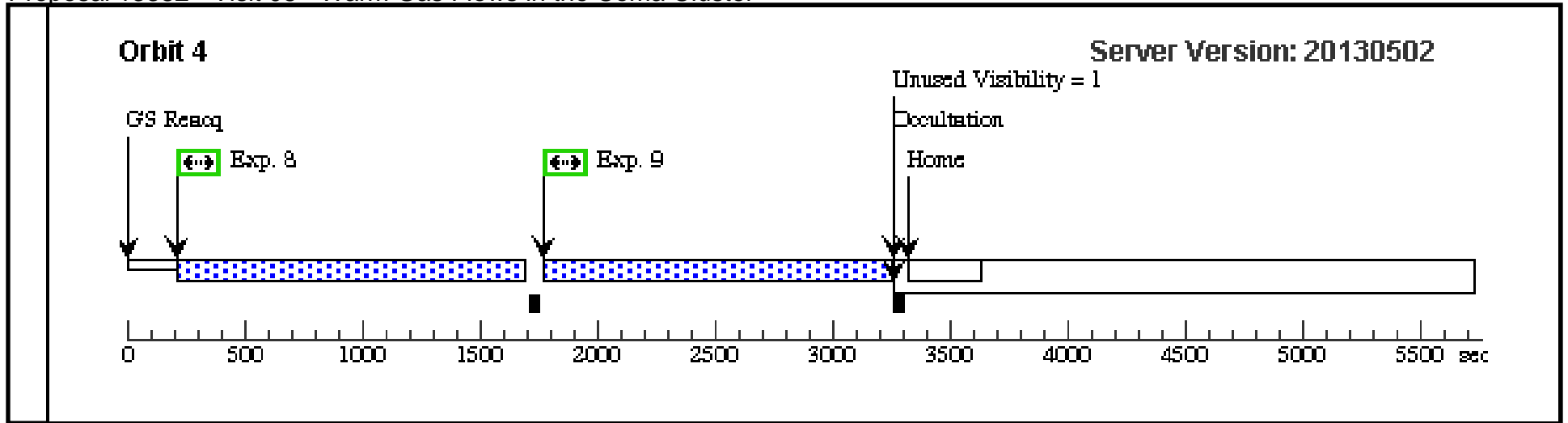


Proposal 13382 - Visit 08 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:46 GMT 2013

Visit	Proposal 13382, Visit 08, implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(8)	SDSS.J130429.04+311308.2	RA: 13 04 29.0300 (196.1209583d) Dec: +31 13 8.23 (31.21895d) Equinox: J2000		V=17.77 m_FUV=18.68	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(515077)	(8) SDSS.J130429.04+311308.2	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				5 Secs (5 Secs) [==>]	[1]
	2	(515033)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=46 81			1150 Secs (1231 Secs) [==>1231.0 Secs]	[1]
	3	(515033)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=46 81			1150 Secs (1231 Secs) [==>1231.0 Secs]	[1]
	4	(515033)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=46 81			1410 Secs (1428 Secs) [==>1428.0 Secs]	[2]
	5	(515033)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=46 81			1410 Secs (1428 Secs) [==>1428.0 Secs]	[2]
	6	(517458)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=1; BUFFER-TIME=48 92			1410 Secs (1428 Secs) [==>1428.0 Secs]	[3]
	7	(517458)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=2; BUFFER-TIME=48 92			1410 Secs (1428 Secs) [==>1428.0 Secs]	[3]
	8	(517458)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=48 92			1410 Secs (1428 Secs) [==>1428.0 Secs]	[4]
	9	(517458)	(8) SDSS.J130429.04+311308.2	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=48 92			1410 Secs (1428 Secs) [==>1428.0 Secs]	[4]





Proposal 13382 - Visit 09 - Warm Gas Flows in the Coma Cluster

Thu Jul 11 22:18:47 GMT 2013

Visit	Proposal 13382, Visit 09, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: (none)									
	Diagnostics	(Visit 09) 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			
	(9)	SDSS.J125846.67+242739.1	RA: 12 58 46.6600 (194.6944167d) Dec: +24 27 39.18 (24.46088d) Equinox: J2000		V=17.43 m_FUV=18.08	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(517460)	(9) SDSS.J125846.67+242739.1	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				85.9 Secs (85.9 Secs) [==>]	[1]
	2	(515035)	(9) SDSS.J125846.67+242739.1	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=43 47			1050 Secs (1124 Secs) [==>1124.0 Secs]	[1]
	3	(515035)	(9) SDSS.J125846.67+242739.1	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=43 47			1050 Secs (1124 Secs) [==>1124.0 Secs]	[1]
	4	(515035)	(9) SDSS.J125846.67+242739.1	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=43 47			1380 Secs (1380 Secs) [==>]	[2]
	5	(517463)	(9) SDSS.J125846.67+242739.1	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; BUFFER-TIME=45 23			1380 Secs (1380 Secs) [==>]	[2]
	6	(517463)	(9) SDSS.J125846.67+242739.1	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=45 23			1380 Secs (1417 Secs) [==>1417.0 Secs]	[3]
	7	(517463)	(9) SDSS.J125846.67+242739.1	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=4; BUFFER-TIME=45 23			1380 Secs (1417 Secs) [==>1417.0 Secs]	[3]

