



16288 - What governs the physics of the warm-hot circumgalactic medium?

Cycle: 28, 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) 2MASSI-J1356327+210352	COS/FUV COS/NUV	3	28-Oct-2021 09:00:15.0	yes
02	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	3	28-Oct-2021 09:00:16.0	yes
03	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	3	28-Oct-2021 09:00:17.0	yes
04	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	2	28-Oct-2021 09:00:17.0	yes

Proposal 16288 (STScI Edit Number: 8, Created: Thursday, October 28, 2021 at 8:00:25 AM Eastern Standard Time) - 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>
05	(2) VV2006-J003340.2-005525	COS/FUV COS/NUV	3	28-Oct-2021 09:00:18.0	yes
06	(2) VV2006-J003340.2-005525	COS/FUV COS/NUV	3	28-Oct-2021 09:00:19.0	yes
07	(3) SBSG-0839+541	COS/FUV COS/NUV	3	28-Oct-2021 09:00:20.0	yes
08	(3) SBSG-0839+541	COS/FUV COS/NUV	3	28-Oct-2021 09:00:20.0	yes
09	(4) VV2006-J103440.9+443104	COS/FUV COS/NUV	2	28-Oct-2021 09:00:21.0	yes
10	(5) 2MASX-J08045271+2120504	COS/FUV COS/NUV	1	28-Oct-2021 09:00:22.0	yes
11	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	2	28-Oct-2021 09:00:22.0	yes
12	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	3	28-Oct-2021 09:00:23.0	yes
13	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	3	28-Oct-2021 09:00:24.0	yes
14	(1) 2MASSI-J1356327+210352	COS/FUV COS/NUV	3	28-Oct-2021 09:00:24.0	yes
15	(2) VV2006-J003340.2-005525	COS/FUV COS/NUV	3	28-Oct-2021 09:00:25.0	yes

40 Total Orbits Used

ABSTRACT

The properties of the circumgalactic medium (CGM) are governed by the details of galaxy formation, evolution and feedback. The high ionization lines of OVI are the most effective probes of the

warm-hot CGM of L^* galaxies, because the ionization fraction of OVI peaks at the virial temperature of these galaxies. An important observational result in this field was published in Science; it showed that the prevalence and strength of the OVI lines depend on the specific star-formation rate (sSFR) of galaxies. However, there is a clear correlation between sSFR and stellar mass in the observed sample, so the governing parameter may be mass instead. Theoretical simulations are also providing conflicting results, therefore new observations are needed to inform the theory. We propose to probe the CGM of L^* galaxies at a range of sSFR, but at fixed mass. We will thus determine whether mass or sSFR is the driving factor of CGM properties, or there is additional physics. This will be a major step forward in our understanding of the physics of gas inflows and outflows, star-formation and feedback, and their relation to halo mass. This small program will greatly enhance the scientific return on previous investments of hundreds of orbits by clearly distinguishing between the possible scenarios.

OBSERVING DESCRIPTION

We will observe all our targets with COS/FUV G130M.

Our main goal is to detect OVI 1032,1038 absorption doublet at the redshifts of intervening galaxies. The G130M central wavelength has been determined accordingly. We will use recommended parameters FLASH=YES, and use the allowed Cycle 28 values for FP-POS. As recommended, we have split our total number of orbits per target into multiple visits of at most 3 orbits each.

Target acquisition: From SIMBAD, we found precise coordinates of our targets. As per SIMBAD, the coordinate uncertainties are of the order of 0.1mas for all targets. Therefore will only use ACQ/IMAGE with NUV/MIRRORB

Target 1: 2MASSI-J1356327+210352:

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The observed wavelength of OVI1032 is 1101.945A. Therefore we choose central wavelength=1222. We will use FP-POS=1, followed by FP-POS=2, followed by FP-POS=3 in visit 1. In visit 2 we will use FP-POS= 2, followed by FP-POS=3, followed by FP-POS=4. For visit 3 we will use FP-POS= 1, followed by FP-POS=3, followed by FP-POS=4. And for visit 4 we will use FP-POS= 1, followed by FP-POS=2.

Target2: VV2006-J003340.2-005525.

The observed wavelength of OVI1032 is 1213.4481A. Therefore we choose central wavelength=1291. In visit 1 we will use FP-POS=3, 3, and 4 in the three orbits and will use FP-POS=3, 4, and 4 in the three orbits in visit 2.

Target3: SBSG-0839+541.

The observed wavelength of OVI1032 is 1118.5107A. Therefore we choose central wavelength=1222. In visit 1, we will use FP-POS=1, followed by orbit 2 split in FP-POS=1, and =2, followed by orbit 3 with FP-POS=2. In visit 2, we will use FP-POS=3, followed by orbit 2 split in FP-POS=3 and FP-POS=4, followed by orbit 3 with FP-POS=4.

Target4: VV2006-J103440.9+443104

The observed wavelength of OVI1032 is 1262.1173A. Therefore we choose central wavelength=1291. We will use FP-POS=3 in orbit 1 and FP-POS=4 in orbit 2.

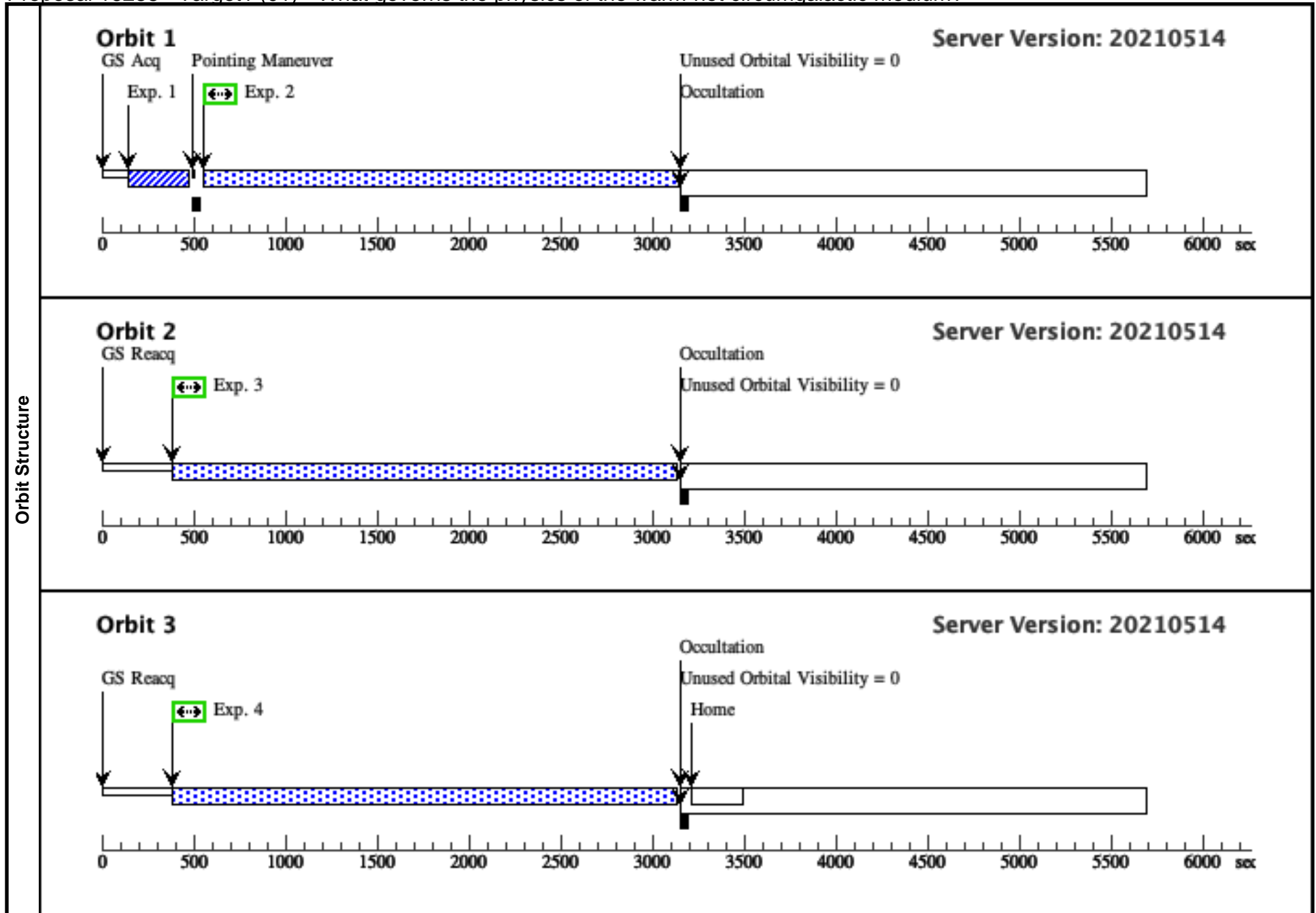
Target5: 2MASX-J08045271+2120504

The observed wavelength of OVI1032 is 1158.73398A. Therefore we choose central wavelength=1291. Both FP-POS=3 and FP-POS=4 are used in orbit 1.

Proposal 16288 - Target1 (01) - What governs the physics of the warm-hot circumgalactic medium?

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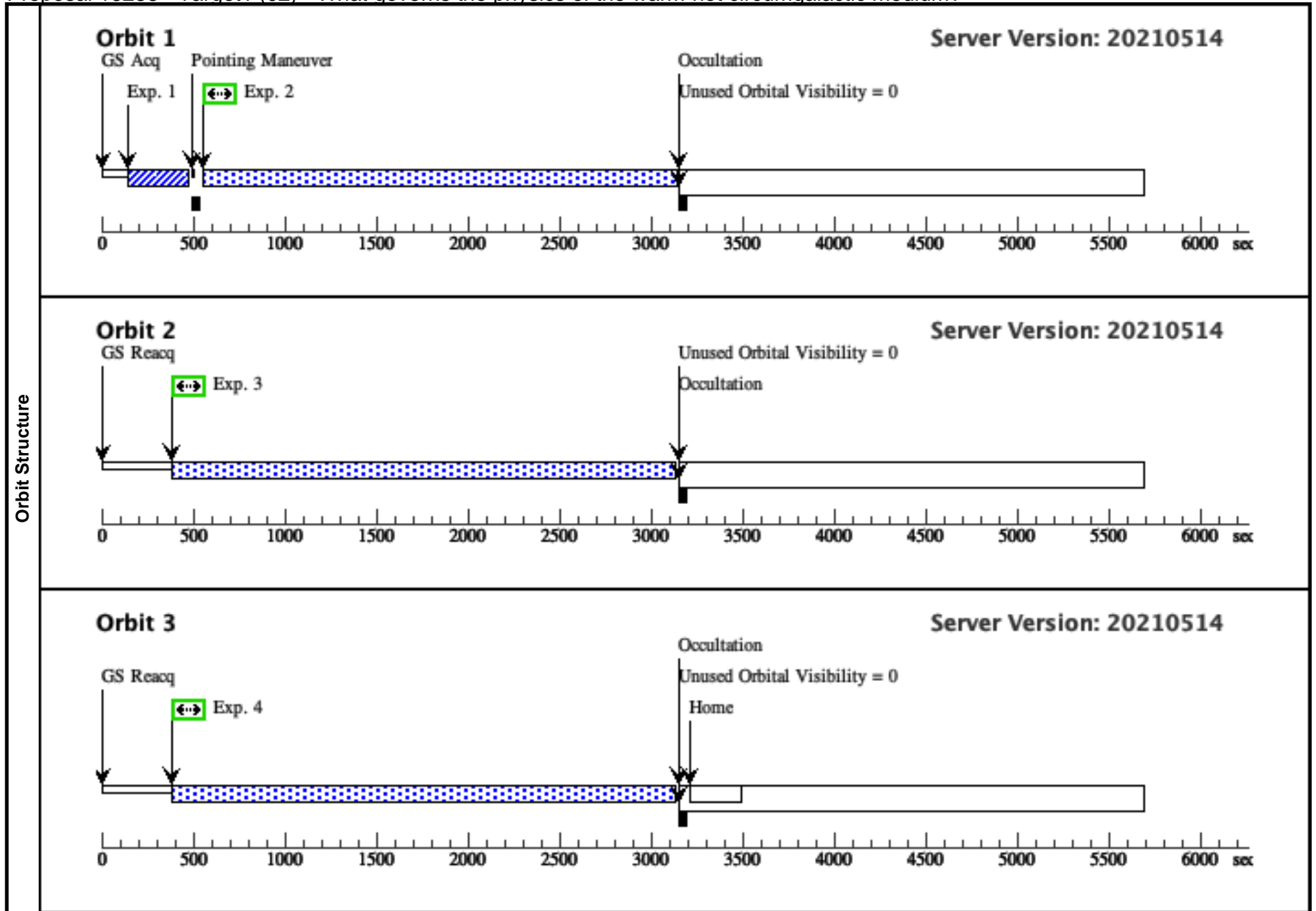
Visit	Proposal 16288, Target1 (01), failed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs)	
									[==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs)	
									[==>]	[1]
3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=2			2701 Secs (2701 Secs)		
								[==>]	[2]	
4	science exposure 3 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=3			2701 Secs (2701 Secs)		
								[==>]	[3]	



Proposal 16288 - Target1 (02) - What governs the physics of the warm-hot circumgalactic medium?

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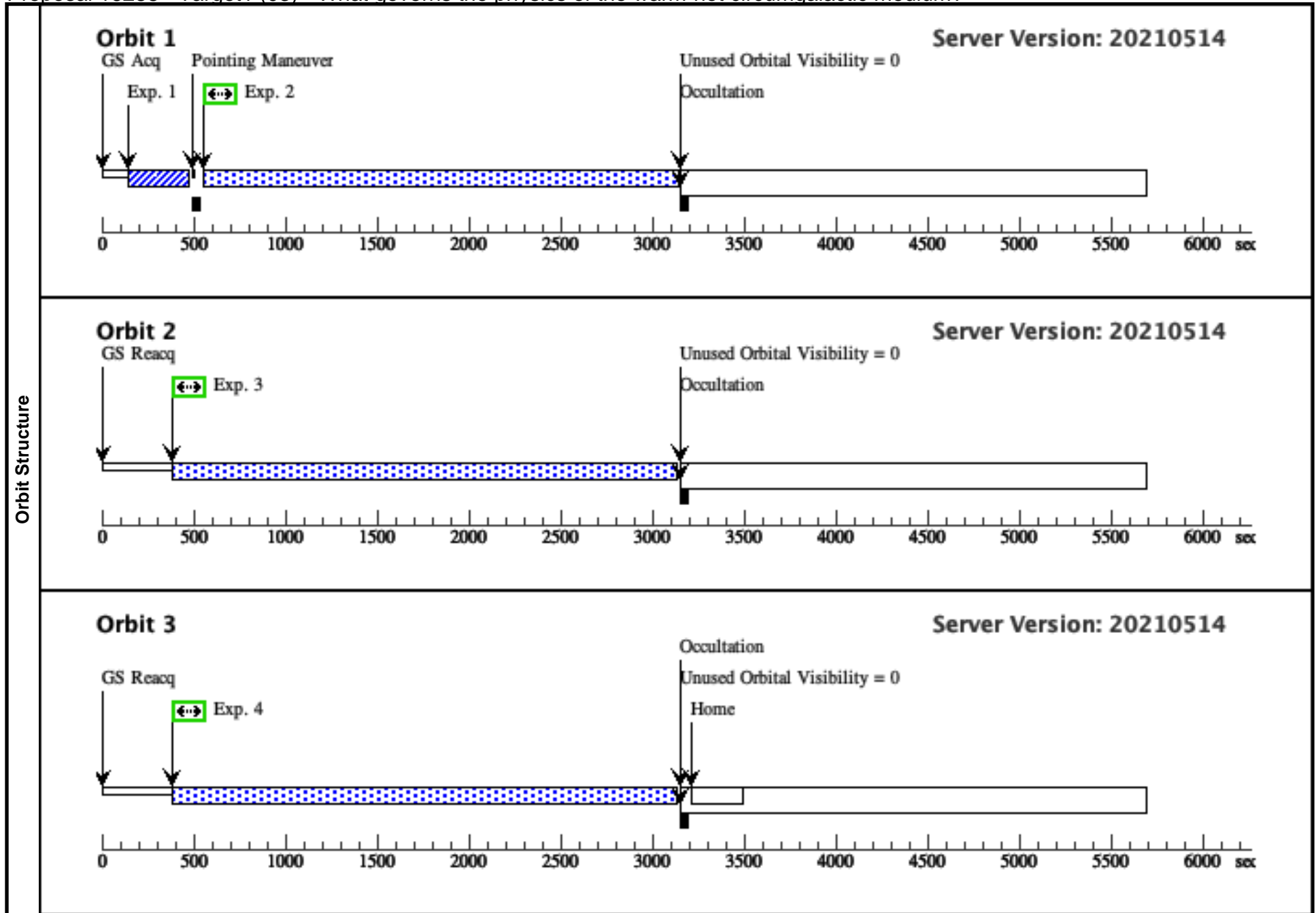
Visit	Proposal 16288, Target1 (02), completed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs)	
									[==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=2			2409 Secs (2409 Secs)	
									[==>]	[1]
3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=3			2701 Secs (2701 Secs)		
								[==>]	[2]	
4	science exposure 3 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=4			2701 Secs (2701 Secs)		
								[==>]	[3]	



Proposal 16288 - Target1 (03) - What governs the physics of the warm-hot circumgalactic medium?

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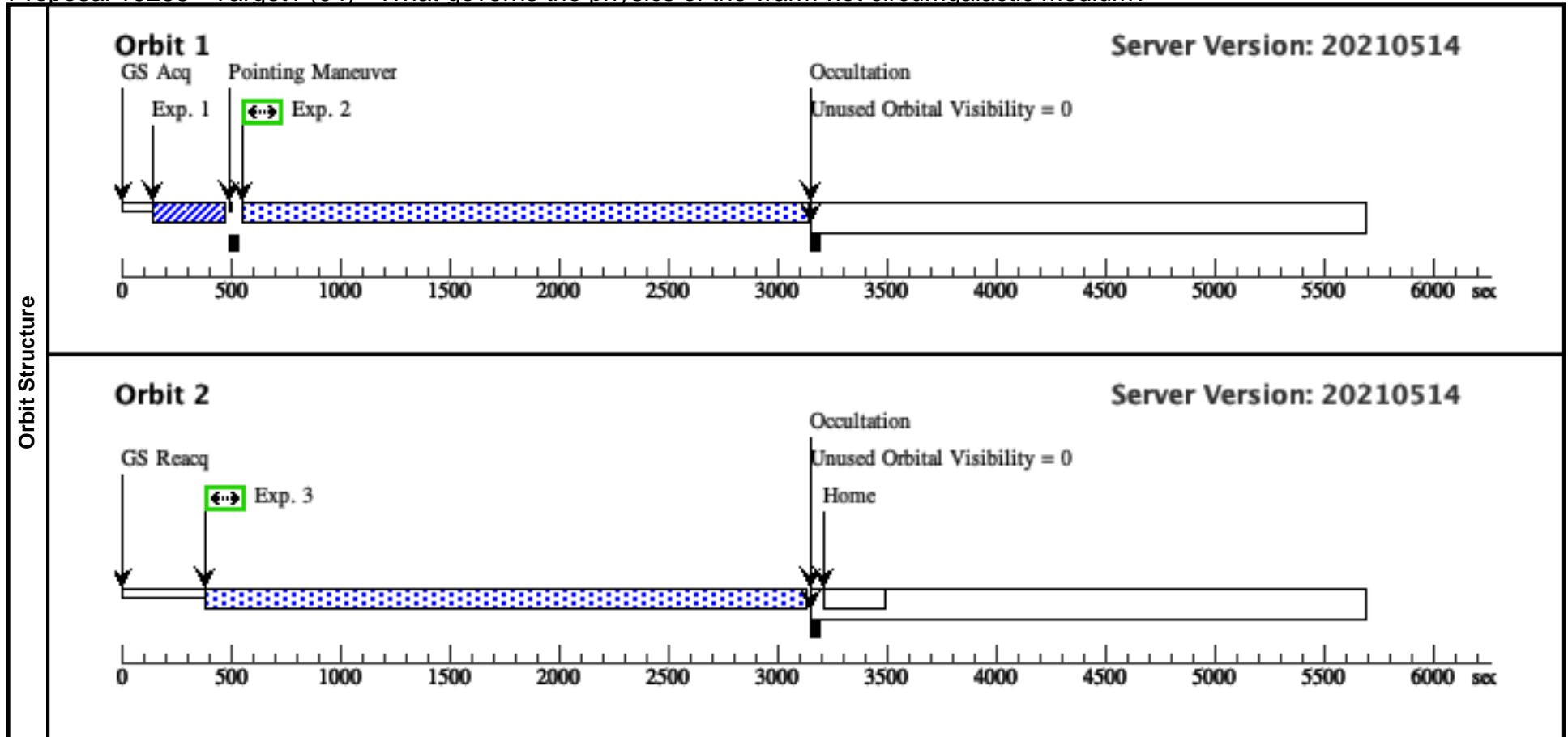
Visit	Proposal 16288, Target1 (03), failed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs)	
									[==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs)	
									[==>]	[1]
3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=3			2701 Secs (2701 Secs)		
								[==>]	[2]	
4	science exposure 3 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=4			2701 Secs (2701 Secs)		
								[==>]	[3]	



Proposal 16288 - Target1 (04) - What governs the physics of the warm-hot circumgalactic medium?

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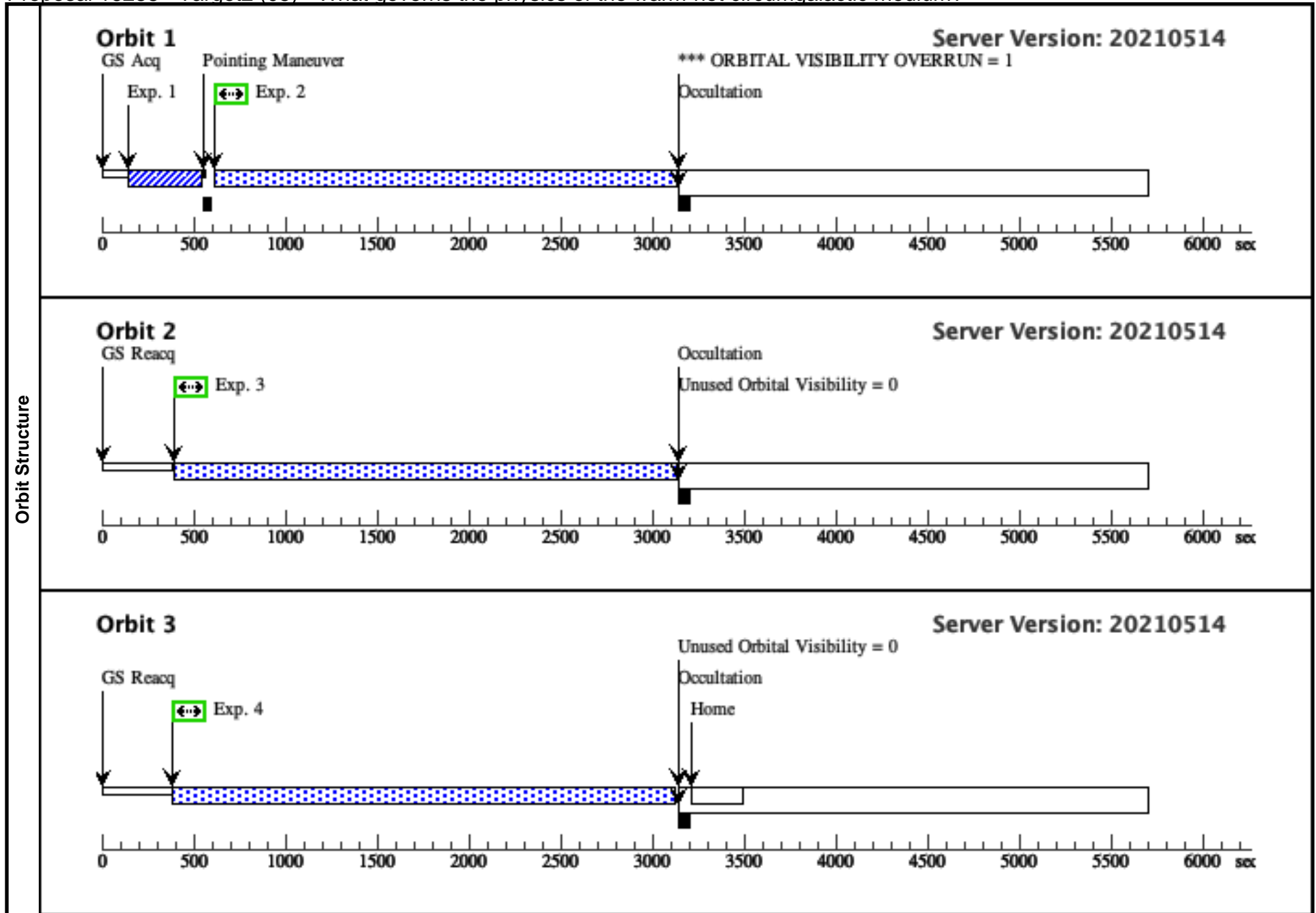
Visit	Proposal 16288, Target1 (04), failed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																											
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>2MASSI-J1356327+210352</td> <td>RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000</td> <td>Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300</td> <td>V=17.07 FUV mag=17.38; NUV mag=17.25</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO				
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																							
(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS																							
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO																												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																		
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs) [==>]	[1]																		
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs) [==>]	[1]																		
	3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=2			2701 Secs (2701 Secs) [==>]	[2]																		



Proposal 16288 - Target2 (05) - What governs the physics of the warm-hot circumgalactic medium?

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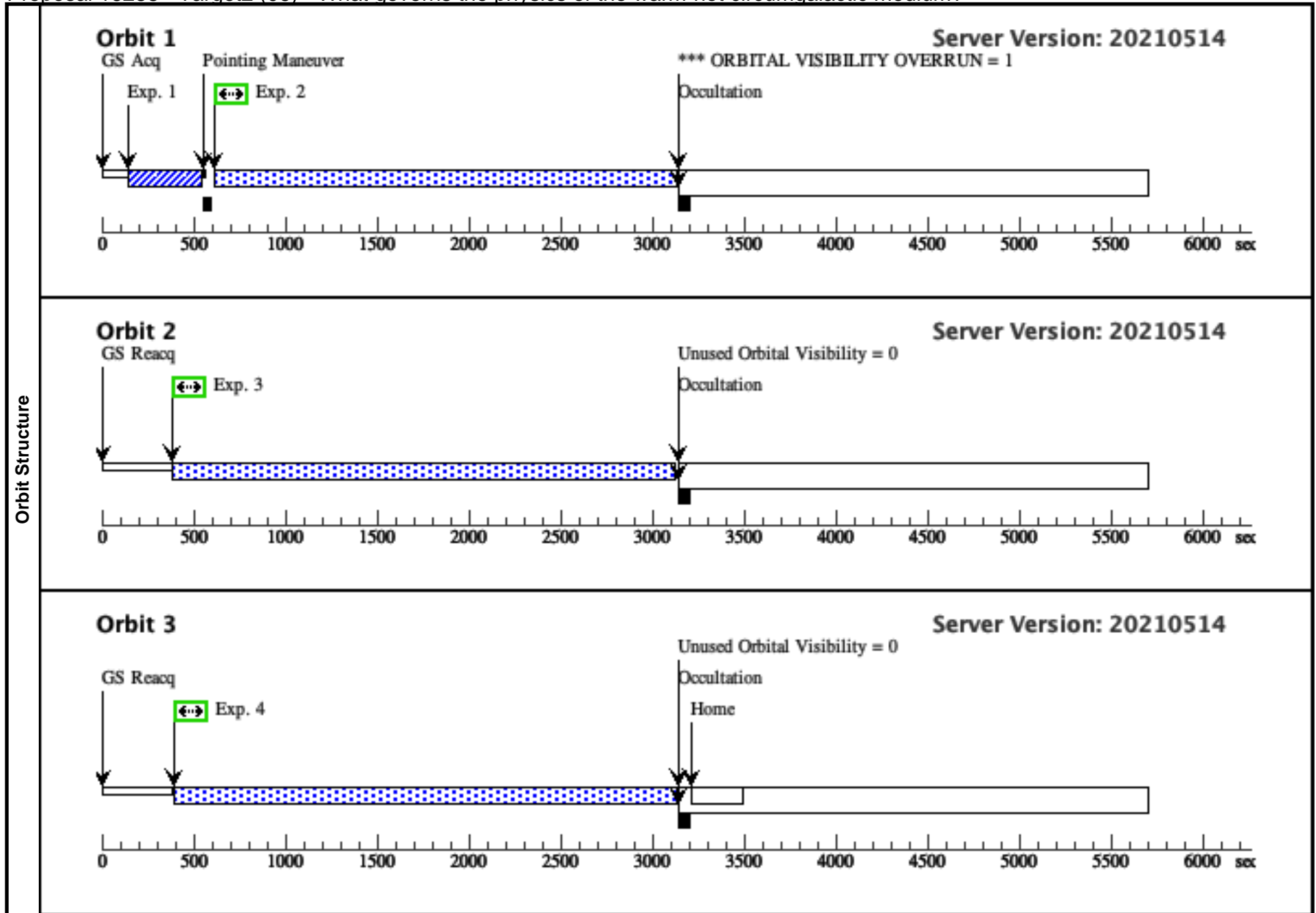
Visit	Proposal 16288, Target2 (05), failed Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	(Target2 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	VV2006-J003340.2-005525	RA: 00 33 40.2155 (8.4175646d) Dec: -00 55 25.58 (-.92377d) Equinox: J2000	Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.185 mas/yr Epoch of Position: 2000 Redshift: 0.93791	V=17.82 FUV mag=19.2294; NUV mag.=17.95	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 432)	(2) VV2006-J003340.2-005525	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				45 Secs (45 Secs) [==>]	[1]
	2	science exposure 1 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2347 Secs (2347 Secs) [==>]	[1]
	3	science exposure 2 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2686 Secs (2686 Secs) [==>]	[2]
	4	science exposure 3 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=4			2686 Secs (2686 Secs) [==>]	[3]



Proposal 16288 - Target2 (06) - What governs the physics of the warm-hot circumgalactic medium?

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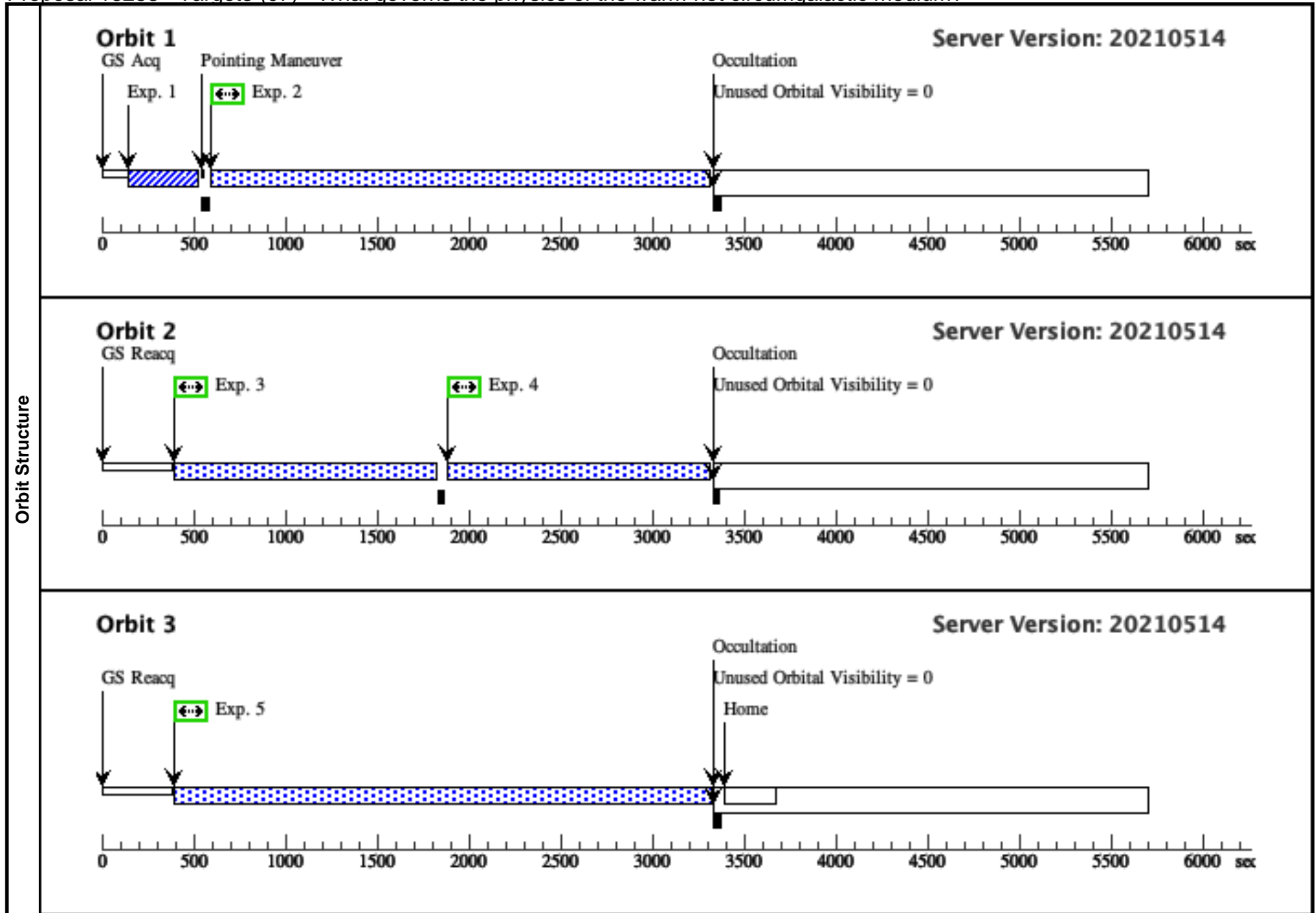
Visit	Proposal 16288, Target2 (06), completed Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	(Target2 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	VV2006-J003340.2-005525	RA: 00 33 40.2155 (8.4175646d) Dec: -00 55 25.58 (-.92377d) Equinox: J2000	Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.185 mas/yr Epoch of Position: 2000 Redshift: 0.93791	V=17.82 FUV mag=19.2294; NUV mag.=17.95	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 432)	(2) VV2006-J003340.2-005525	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				45 Secs (45 Secs) [==>]	[1]
	2	science exposure 1 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2347 Secs (2347 Secs) [==>]	[1]
	3	science exposure 2 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=4			2686 Secs (2686 Secs) [==>]	[2]
	4	science exposure 3 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=4			2686 Secs (2686 Secs) [==>]	[3]



Proposal 16288 - Target3 (07) - What governs the physics of the warm-hot circumgalactic medium?

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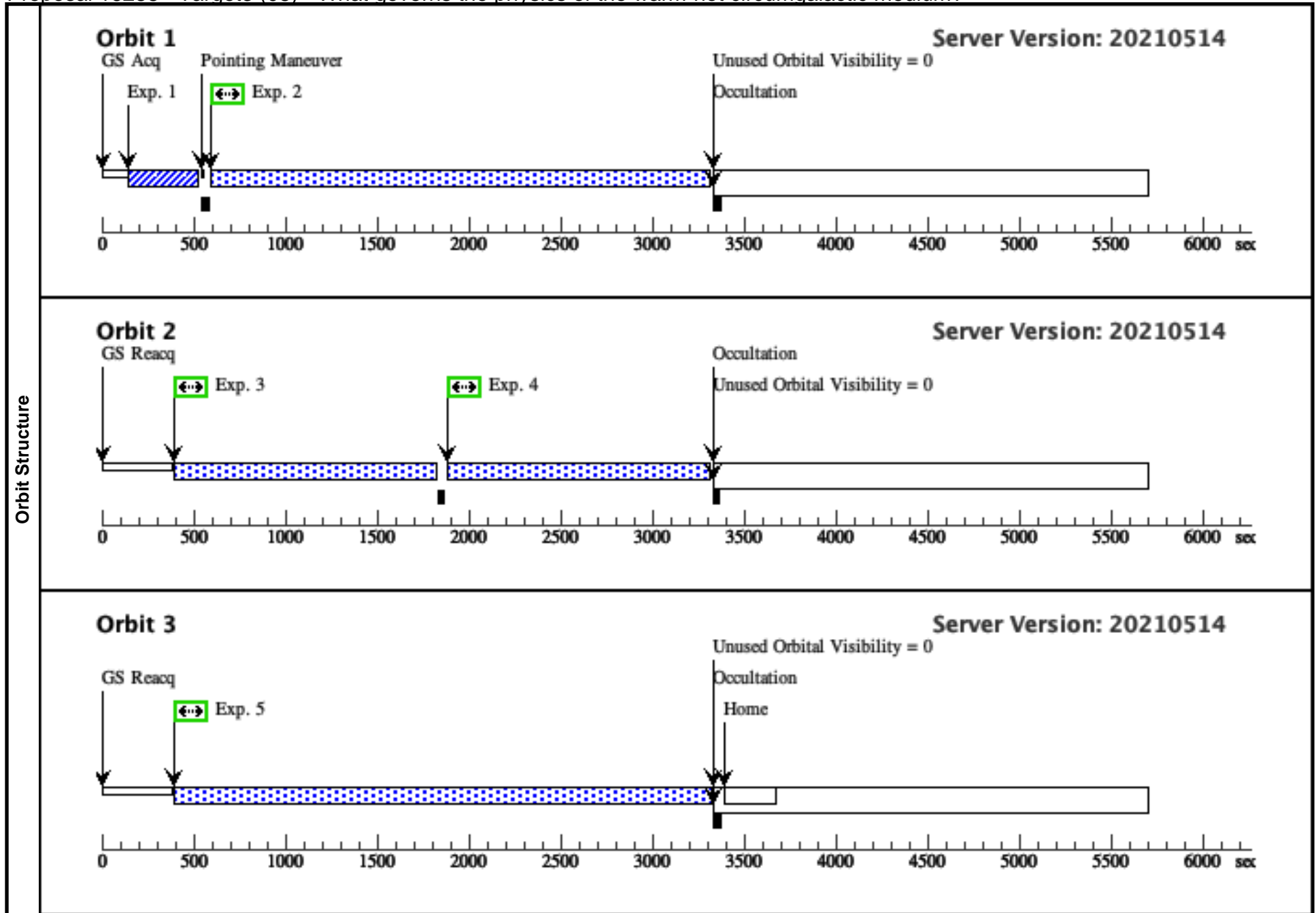
Visit	Proposal 16288, Target3 (07), completed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(3)	SBSG-0839+541	RA: 08 43 13.4071 (130.8058629d) Dec: +53 57 18.89 (53.95525d) Equinox: J2000	Proper Motion RA: -0.205 mas/yr Proper Motion Dec: -0.290 mas/yr Epoch of Position: 2000 Redshift: 0.2176	V=17.29 FUV mag=17.73; NUV mag=17.76	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(COS.ta.144 7829)	(3) SBSG-0839+541	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				38 Secs (38 Secs) [==>]	[1]
	2	science expo sure 1 (COS.sp.144 7827)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=1			2537 Secs (2537 Secs) [==>]	[1]
	3	science expo sure 2 (COS.sp.144 8727)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=1			1381 Secs (1381 Secs) [==>]	[2]
	4	science expo sure 3 (COS.sp.144 8727)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=2			1381 Secs (1381 Secs) [==>]	[2]
	5	science expo sure 4 (COS.sp.144 8727)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=2			2877 Secs (2877 Secs) [==>]	[3]



Proposal 16288 - Target3 (08) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

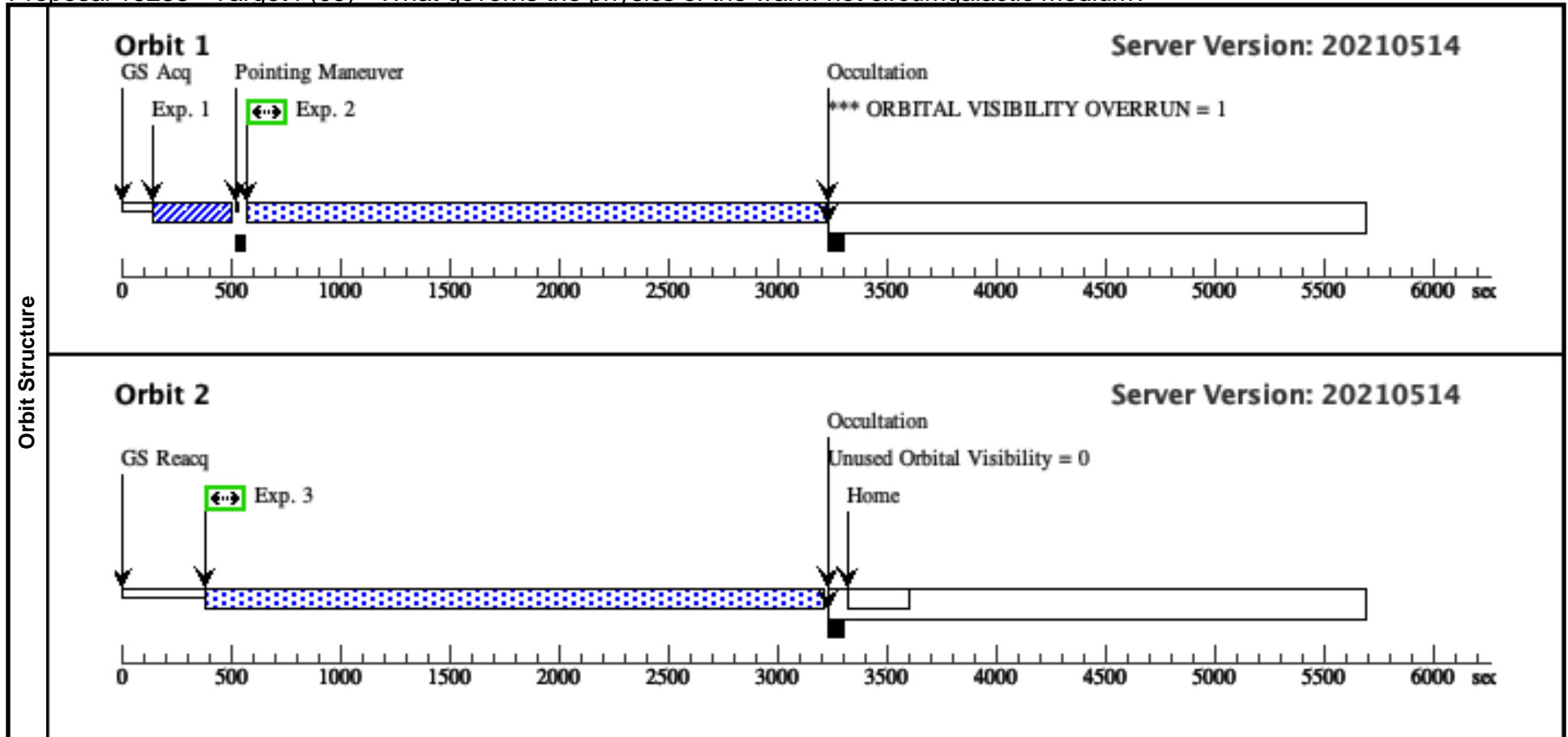
Visit	Proposal 16288, Target3 (08), completed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(3)	SBSG-0839+541	RA: 08 43 13.4071 (130.8058629d) Dec: +53 57 18.89 (53.95525d) Equinox: J2000	Proper Motion RA: -0.205 mas/yr Proper Motion Dec: -0.290 mas/yr Epoch of Position: 2000 Redshift: 0.2176	V=17.29 FUV mag=17.73; NUV mag=17.76	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(COS.ta.144 7829)	(3) SBSG-0839+541	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				38 Secs (38 Secs) [==>]	[1]
	2	science expo sure 1 (COS.sp.144 7827)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=3			2537 Secs (2537 Secs) [==>]	[1]
	3	science expo sure 2 (COS.sp.144 8727)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=3			1381 Secs (1381 Secs) [==>]	[2]
	4	science expo sure 3 (COS.sp.144 8727)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=4			1381 Secs (1381 Secs) [==>]	[2]
	5	science expo sure 4 (COS.sp.144 8727)	(3) SBSG-0839+541	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=91 27; FLASH=YES; FP-POS=4			2877 Secs (2877 Secs) [==>]	[3]



Proposal 16288 - Target4 (09) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

Visit	Proposal 16288, Target4 (09), completed Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	(Target4 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(4)	VV2006-J103440.9+443104	RA: 10 34 40.9086 (158.6704525d) Dec: +44 31 5.11 (44.51809d) Equinox: J2000	Proper Motion RA: -0.030 mas/yr Proper Motion Dec: 0.231 mas/yr Epoch of Position: 2000 Redshift: 0.533		V=17.55 FUV mag=18.05; NUV mag=17.5394	Reference Frame: ICRS			
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[QSO, QUASAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(COS.ta.144 7789)	(4) VV2006-J103440.9+443104	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				27.1 Secs (27.1 Secs)	
									[==>]	[1]
	2	science exposure 1 (COS.sp.144 7784)	(4) VV2006-J103440.9+443104	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=43 25; FLASH=YES; FP-POS=3			2477 Secs (2477 Secs)	
								[==>]	[1]	
3	science exposure 2 (COS.sp.144 7784)	(4) VV2006-J103440.9+443104	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=43 25; FLASH=YES; FP-POS=4			2782 Secs (2782 Secs)		
								[==>]	[2]	



Proposal 16288 - Target5 (10) - What governs the physics of the warm-hot circumgalactic medium?

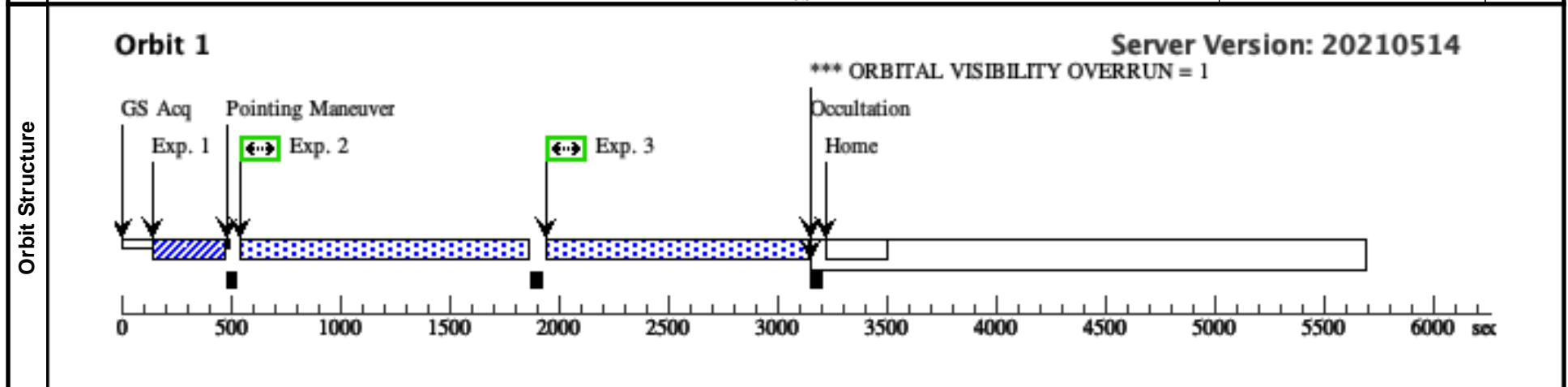
Thu Oct 28 13:00:26 GMT 2021

Visit	Proposal 16288, Target5 (10), completed Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)
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Diagnostics	(Target5 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
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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>(5)</td> <td>2MASX-J08045271+2120504</td> <td> RA: 08 04 52.7355 (121.2197312d) Dec: +21 20 50.22 (21.34728d) Equinox: J2000 </td> <td> Proper Motion RA: 0.252 mas/yr Proper Motion Dec: -0.212 mas/yr Epoch of Position: 2000 Redshift: 0.12445 </td> <td> V=16.99 FUNV mag=17.08; NUV mag=16.86 </td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO</p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	2MASX-J08045271+2120504	RA: 08 04 52.7355 (121.2197312d) Dec: +21 20 50.22 (21.34728d) Equinox: J2000	Proper Motion RA: 0.252 mas/yr Proper Motion Dec: -0.212 mas/yr Epoch of Position: 2000 Redshift: 0.12445	V=16.99 FUNV mag=17.08; NUV mag=16.86	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous							
(5)	2MASX-J08045271+2120504	RA: 08 04 52.7355 (121.2197312d) Dec: +21 20 50.22 (21.34728d) Equinox: J2000	Proper Motion RA: 0.252 mas/yr Proper Motion Dec: -0.212 mas/yr Epoch of Position: 2000 Redshift: 0.12445	V=16.99 FUNV mag=17.08; NUV mag=16.86	Reference Frame: ICRS								

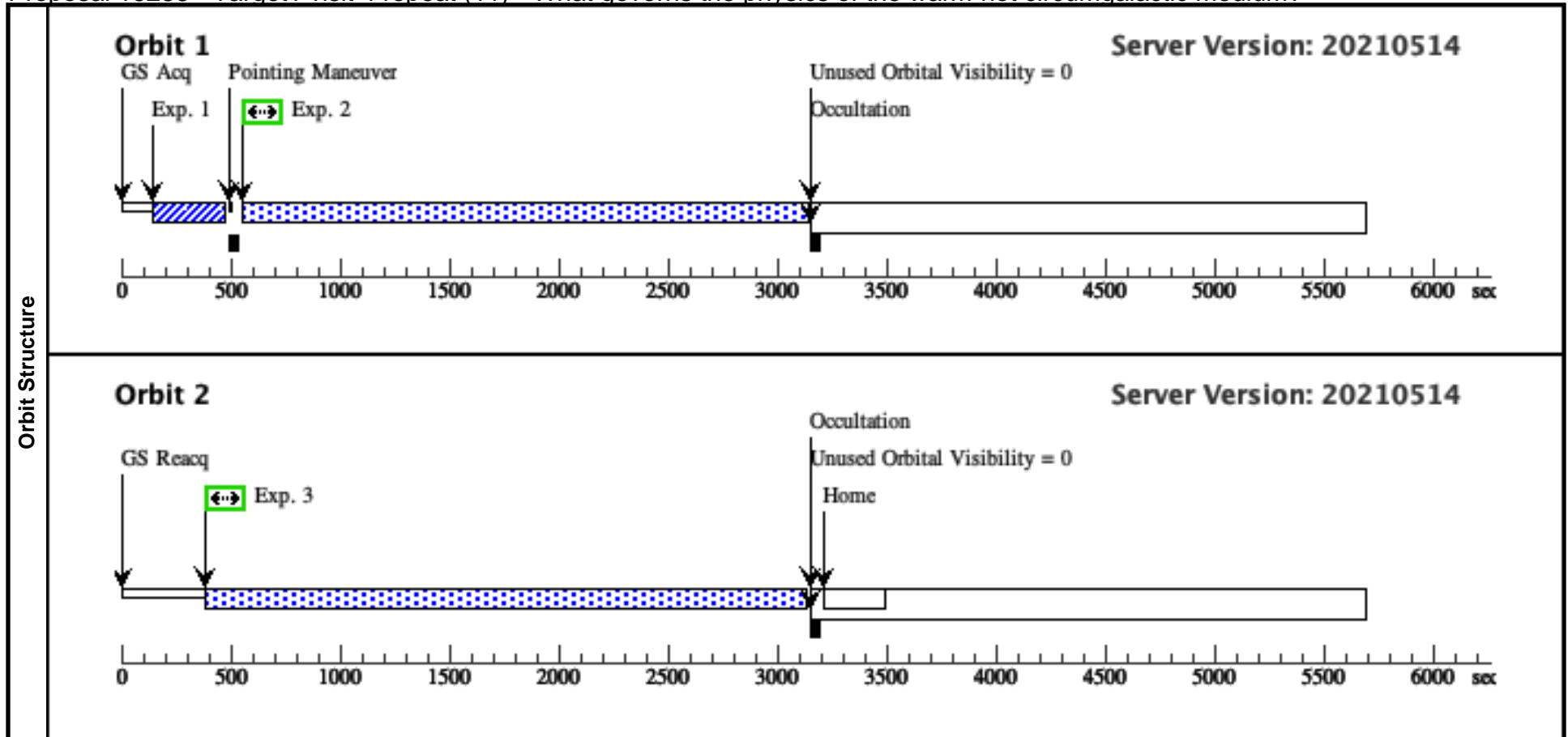
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 475)	(5) 2MASX-J080452 71+2120504	COS/NUV, ACQ/IMAGE, PSA	MIRRORB					10 Secs (10 Secs) [==>]
2	science exposure 1 (cos.sp.1448 473)	(5) 2MASX-J080452 71+2120504	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 59; FLASH=YES; FP-POS=3				1150 Secs (1150 Secs) [==>]	[1]
3	science exposure 2 (cos.sp.1448 473)	(5) 2MASX-J080452 71+2120504	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=29 59; FLASH=YES; FP-POS=4				1148 Secs (1148 Secs) [==>]	[1]



Proposal 16288 - Target1 visit 4 repeat (11) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

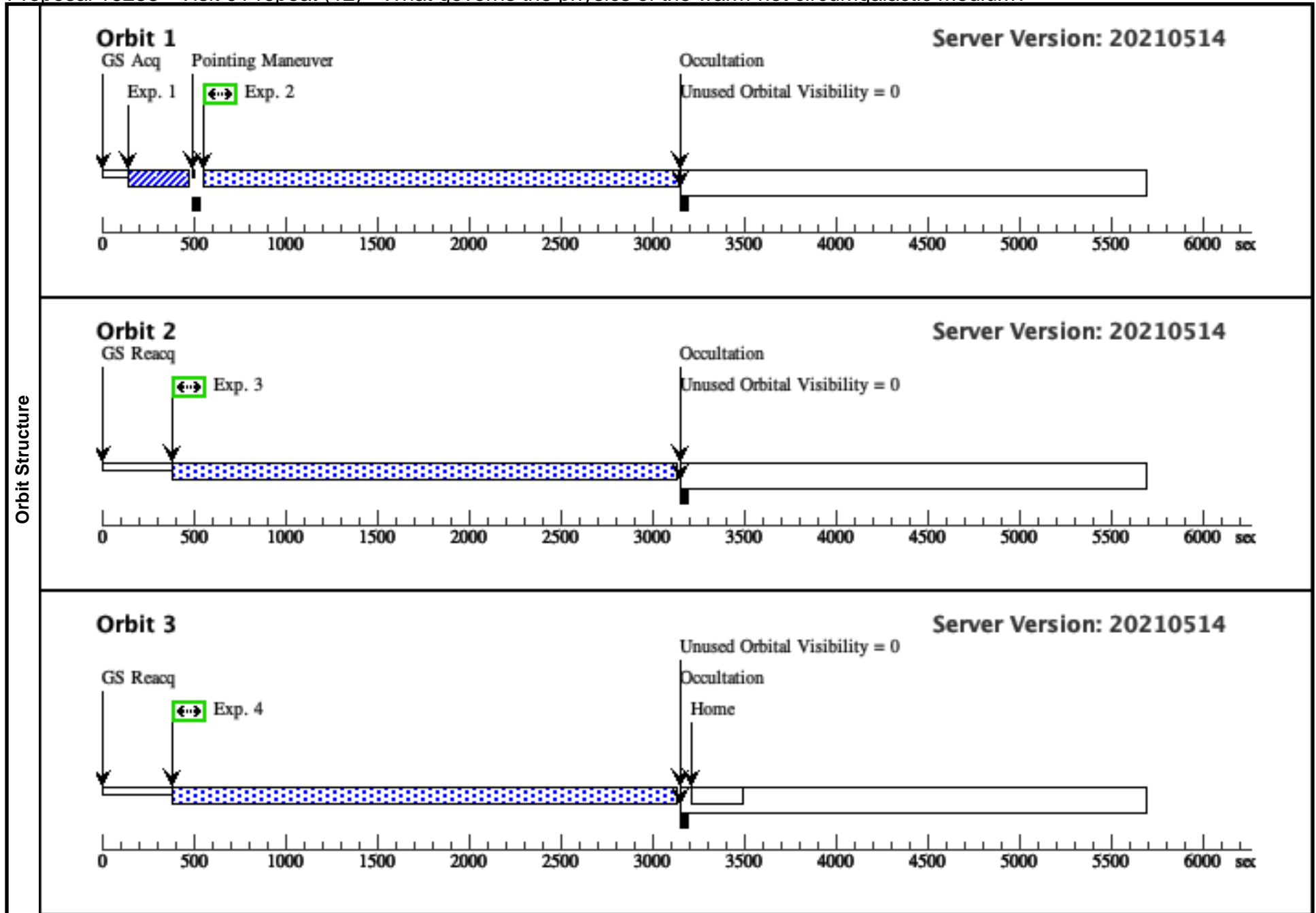
Visit	Proposal 16288, Target1 visit 4 repeat (11), completed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs)	
									[==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs)	
								[==>]	[1]	
3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=8193; FLASH=YES; FP-POS=2			2701 Secs (2701 Secs)		
								[==>]	[2]	



Proposal 16288 - Visit 01 repeat (12) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

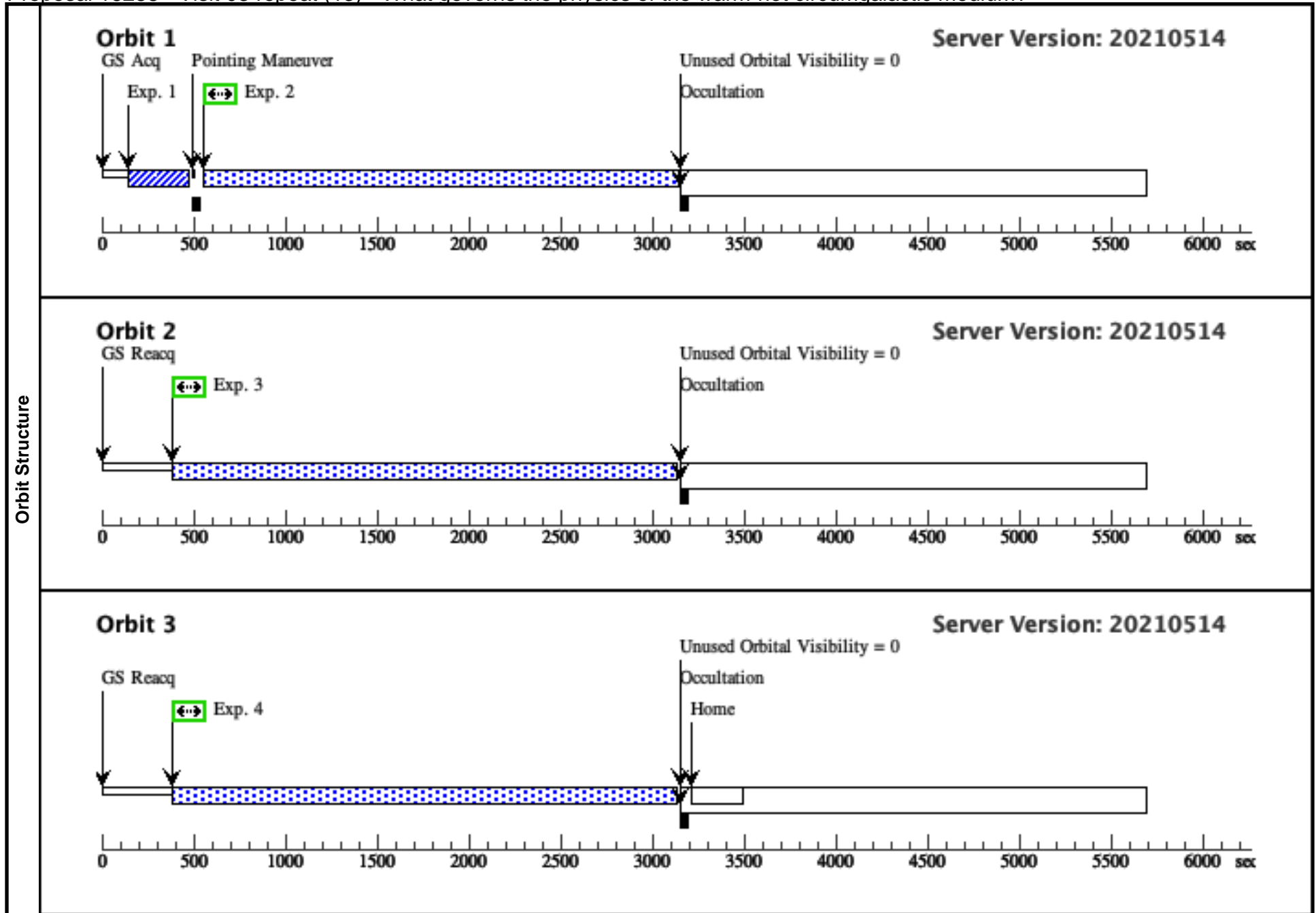
Visit	Proposal 16288, Visit 01 repeat (12), failed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs) [==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs) [==>]	[1]
	3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=2			2701 Secs (2701 Secs) [==>]	[2]
	4	science exposure 3 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=3			2701 Secs (2701 Secs) [==>]	[3]



Proposal 16288 - Visit 03 repeat (13) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

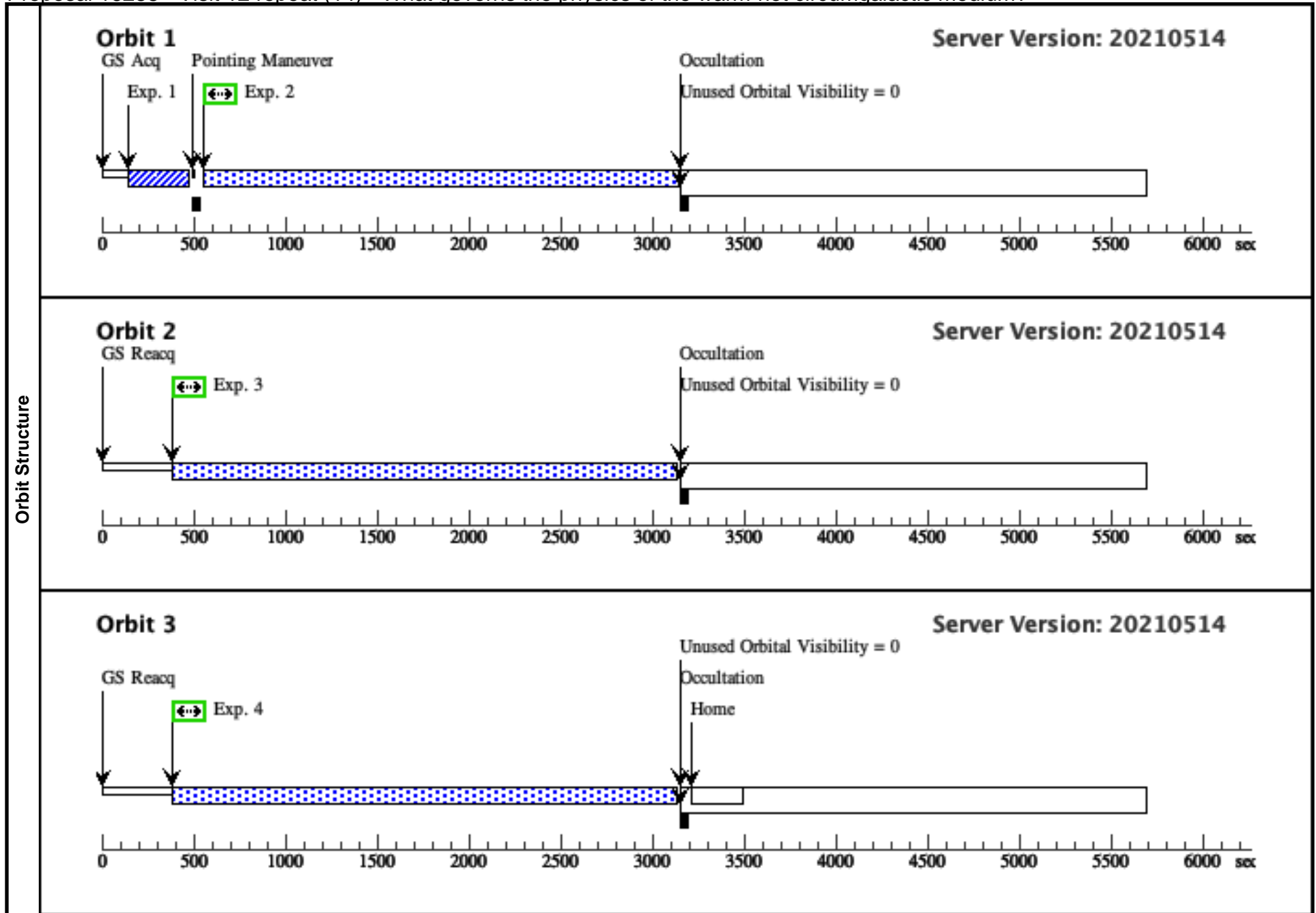
Visit	Proposal 16288, Visit 03 repeat (13), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs)	
									[==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs)	
									[==>]	[1]
3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=3			2701 Secs (2701 Secs)		
								[==>]	[2]	
4	science exposure 3 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=4			2701 Secs (2701 Secs)		
								[==>]	[3]	



Proposal 16288 - Visit 12 repeat (14) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

Visit	Proposal 16288, Visit 12 repeat (14), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	2MASSI-J1356327+210352	RA: 13 56 32.7989 (209.1366621d) Dec: +21 03 52.36 (21.06454d) Equinox: J2000	Proper Motion RA: -0.796 mas/yr Proper Motion Dec: 1.025 mas/yr Epoch of Position: 2000 Redshift: 0.300	V=17.07 FUV mag=17.38; NUV mag=17.25	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(cos.ta.1448 510)	(1) 2MASSI-J1356327+210352	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				14 Secs (14 Secs)	
									[==>]	[1]
	2	science exposure 1 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=1			2409 Secs (2409 Secs)	
									[==>]	[1]
3	science exposure 2 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=2			2701 Secs (2701 Secs)		
								[==>]	[2]	
4	science exposure 3 (cos.sp.1448 503)	(1) 2MASSI-J1356327+210352	COS/FUV, TIME-TAG, PSA	G130M 1222 A	BUFFER-TIME=81 93; FLASH=YES; FP-POS=3			2701 Secs (2701 Secs)		
								[==>]	[3]	



Proposal 16288 - Visit 05 Repeat (15) - What governs the physics of the warm-hot circumgalactic medium?

Thu Oct 28 13:00:26 GMT 2021

Visit	Proposal 16288, Visit 05 Repeat (15) Diagnostic Status: Warning Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																																																						
	Diagnosics (Visit 05 Repeat (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN																																																						
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>VV2006-J003340.2-005525</td> <td>RA: 00 33 40.2155 (8.4175646d) Dec: -00 55 25.58 (-.92377d) Equinox: J2000</td> <td>Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.185 mas/yr Epoch of Position: 2000 Redshift: 0.93791</td> <td>V=17.82 FUV mag=19.2294; NUV mag.=17.95</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO</p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	VV2006-J003340.2-005525	RA: 00 33 40.2155 (8.4175646d) Dec: -00 55 25.58 (-.92377d) Equinox: J2000	Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.185 mas/yr Epoch of Position: 2000 Redshift: 0.93791	V=17.82 FUV mag=19.2294; NUV mag.=17.95	Reference Frame: ICRS																																					
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																	
(2)	VV2006-J003340.2-005525	RA: 00 33 40.2155 (8.4175646d) Dec: -00 55 25.58 (-.92377d) Equinox: J2000	Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.185 mas/yr Epoch of Position: 2000 Redshift: 0.93791	V=17.82 FUV mag=19.2294; NUV mag.=17.95	Reference Frame: ICRS																																																		
<table border="1"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(cos.ta.1448 432)</td> <td>(2) VV2006-J003340.2-005525</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>45 Secs (45 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>science exposure 1 (cos.sp.1447 864)</td> <td>(2) VV2006-J003340.2-005525</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=50 52; FLASH=YES; FP-POS=3</td> <td></td> <td></td> <td>2347 Secs (2347 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td>science exposure 2 (cos.sp.1447 864)</td> <td>(2) VV2006-J003340.2-005525</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=50 52; FLASH=YES; FP-POS=3</td> <td></td> <td></td> <td>2686 Secs (2686 Secs) [==>]</td> <td>[2]</td> </tr> <tr> <td>4</td> <td>science exposure 3 (cos.sp.1447 864)</td> <td>(2) VV2006-J003340.2-005525</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G130M 1291 A</td> <td>BUFFER-TIME=50 52; FLASH=YES; FP-POS=4</td> <td></td> <td></td> <td>2686 Secs (2686 Secs) [==>]</td> <td>[3]</td> </tr> </tbody> </table>						#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	(cos.ta.1448 432)	(2) VV2006-J003340.2-005525	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				45 Secs (45 Secs) [==>]	[1]	2	science exposure 1 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2347 Secs (2347 Secs) [==>]	[1]	3	science exposure 2 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2686 Secs (2686 Secs) [==>]	[2]	4	science exposure 3 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=4			2686 Secs (2686 Secs) [==>]	[3]
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																														
1	(cos.ta.1448 432)	(2) VV2006-J003340.2-005525	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				45 Secs (45 Secs) [==>]	[1]																																														
2	science exposure 1 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2347 Secs (2347 Secs) [==>]	[1]																																														
3	science exposure 2 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=3			2686 Secs (2686 Secs) [==>]	[2]																																														
4	science exposure 3 (cos.sp.1447 864)	(2) VV2006-J003340.2-005525	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 52; FLASH=YES; FP-POS=4			2686 Secs (2686 Secs) [==>]	[3]																																														

