



18098 - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Cycle: 33, 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) WD2105-820	COS/NUV	2	26-Feb-2026 19:00:15.0	yes
02	(2) G29-38	COS/NUV	1	26-Feb-2026 19:00:16.0	yes
03	(3) GD133	COS/NUV	2	26-Feb-2026 19:00:16.0	yes
04	(4) EC-23379-3725	COS/NUV	2	26-Feb-2026 19:00:16.0	yes
05	(4) EC-23379-3725	COS/NUV	2	26-Feb-2026 19:00:17.0	yes

Proposal 18098 (STScI Edit Number: 1, Created: Thursday, February 26, 2026, 7:00:24PM 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>
06	(5) WD1133-528	COS/NUV	3	26-Feb-2026 19:00:17.0	yes
07	(6) GD-56	COS/NUV	2	26-Feb-2026 19:00:18.0	yes
08	(7) WD0106-328	COS/NUV	2	26-Feb-2026 19:00:18.0	yes
09	(8) WD1226+110	COS/NUV	2	26-Feb-2026 19:00:19.0	yes
10	(9) WD1244+498	COS/FUV COS/NUV	2	26-Feb-2026 19:00:20.0	yes
11	(9) WD1244+498	COS/FUV COS/NUV	2	26-Feb-2026 19:00:20.0	yes
12	(10) SDSSJ173435.7+605203	COS/FUV COS/NUV	2	26-Feb-2026 19:00:21.0	yes
13	(10) SDSSJ173435.7+605203	COS/FUV COS/NUV	2	26-Feb-2026 19:00:22.0	yes
14	(11) WD1415+234	COS/NUV	3	26-Feb-2026 19:00:23.0	yes
15	(12) PG-1015+161	COS/FUV COS/NUV	2	26-Feb-2026 19:00:23.0	yes

31 Total Orbits Used

ABSTRACT

Sulfur plays a key role in geochemical cycling on the Solar System's terrestrial planets and is required by all life. It can also form important spectrally active species in exoplanet atmospheres, affecting their climates and habitability. Yet, how abundant sulfur will be in exoplanets depends critically on how it is delivered to rocky planets during their formation, a journey that remains uncertain. Most notably it is not clear whether Sulfur is stored in the refractory (dust) phase of planetary building blocks or rather the volatile (ice) phase, the latter being much more readily lost to planets forming in the warm inner disk. This proposal will determine the Sulfur abundances in the planetary material in the atmospheres of 12 white dwarfs. Alongside oxygen, the abundances will tell us whether Sulfur is in ice or dust, providing a sufficiently large sample to answer the null hypothesis that Sulfur is predominantly found in the ice phase.

OBSERVING DESCRIPTION

This program aims to measure the Sulfur abundance in a sample of polluted white dwarfs. All targets are brighter than 16.7 mag in GALEX NUV.

Our primary setup is the G185M grating with a central wavelength of 1921Å, which covers key sulfur lines S I 1807.3Å and 1820.3Å. For 4 targets (specially those with Helium-rich atmospheres) the S I 1253.8Å is the strongest sulfur line, and therefore the G130M grating with a central wavelength of 1291Å is used instead.

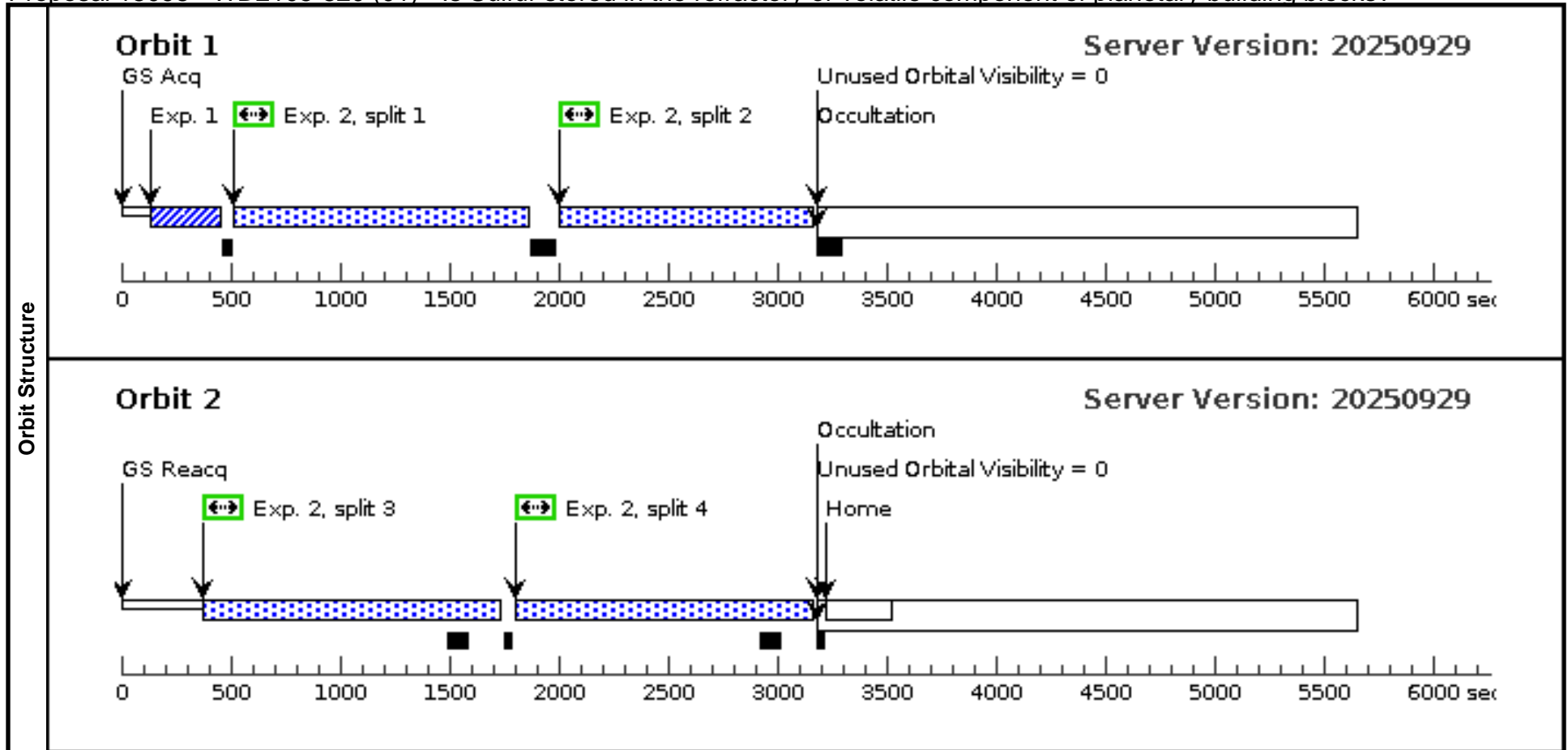
Reduced gyro observations: Our observations are not time critical, and can be scheduled any time, so reducing the possible observing windows will not affect this proposal. Using the visit planner tool, there are plenty of schedulable opportunities across the cycle for all targets. Target acquisition is required for all of our targets in order to successfully complete the proposed observations.

Scheduling: For targets which require >3 orbits, we have split the visits up to ensure maximum schedulability.

Proposal 18098 - WD2105-820 (01) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

Visit	Proposal 18098, WD2105-820 (01), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	WD2105-820	RA: 21 13 16.8549 (318.3202287d) Dec: -81 49 12.88 (-81.82024d) Equinox: J2000	Proper Motion RA: 264.139 mas/yr Proper Motion Dec: -379.9770000341596 mas/yr Parallax: 0.0618087" Epoch of Position: 2000	V=13.59 NUV=14.4	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	WD2105-820 0 (COS.ta.2025387)	(1) WD2105-820	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				5 Secs (5 Secs) [==>]	[1]
	2	(COS.sp.2025376)	(1) WD2105-820	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=11 19; FP-POS=ALL			1250 Secs (4995 Secs) [==>1150.0 Secs (Split 1)] [==>1149.0 Secs (Split 2)] [==>1348.0 Secs (Split 3)] [==>1348.0 Secs (Split 4)]	[1] [2]



Proposal 18098 - G29-38 (02) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

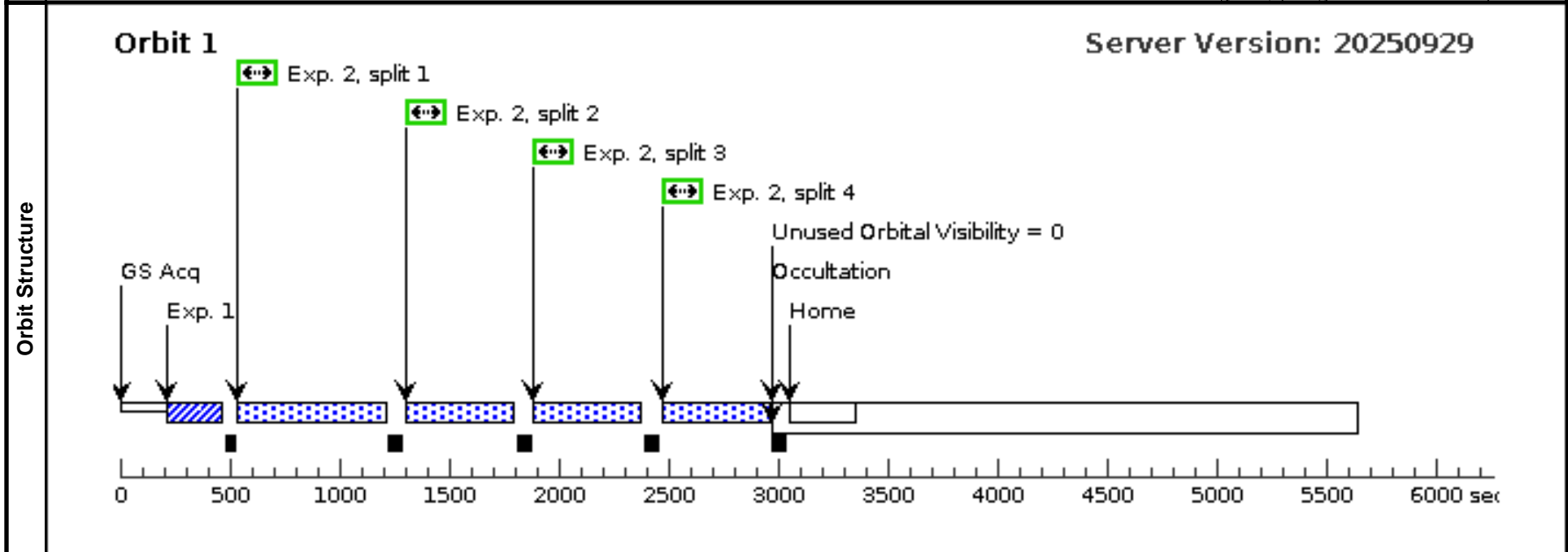
Fri Feb 27 00:00:24 GMT 2026

Visit	Proposal 18098, G29-38 (02), implementation				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: COS/NUV				
	Special Requirements: (none)				

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	G29-38	RA: 23 28 47.6365 (352.1984854d) Dec: +05 14 54.24 (5.24840d) Equinox: J2000	Proper Motion RA: -398.246 mas/yr Proper Motion Dec: -266.7439999186172 mas/yr Parallax: 0.05706199999999995" Epoch of Position: 2000	V=13.04 NUV=13.85	Reference Frame: ICRS
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					
<i>SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.</i>					

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Description=[DA, DZ]
Extended=NO

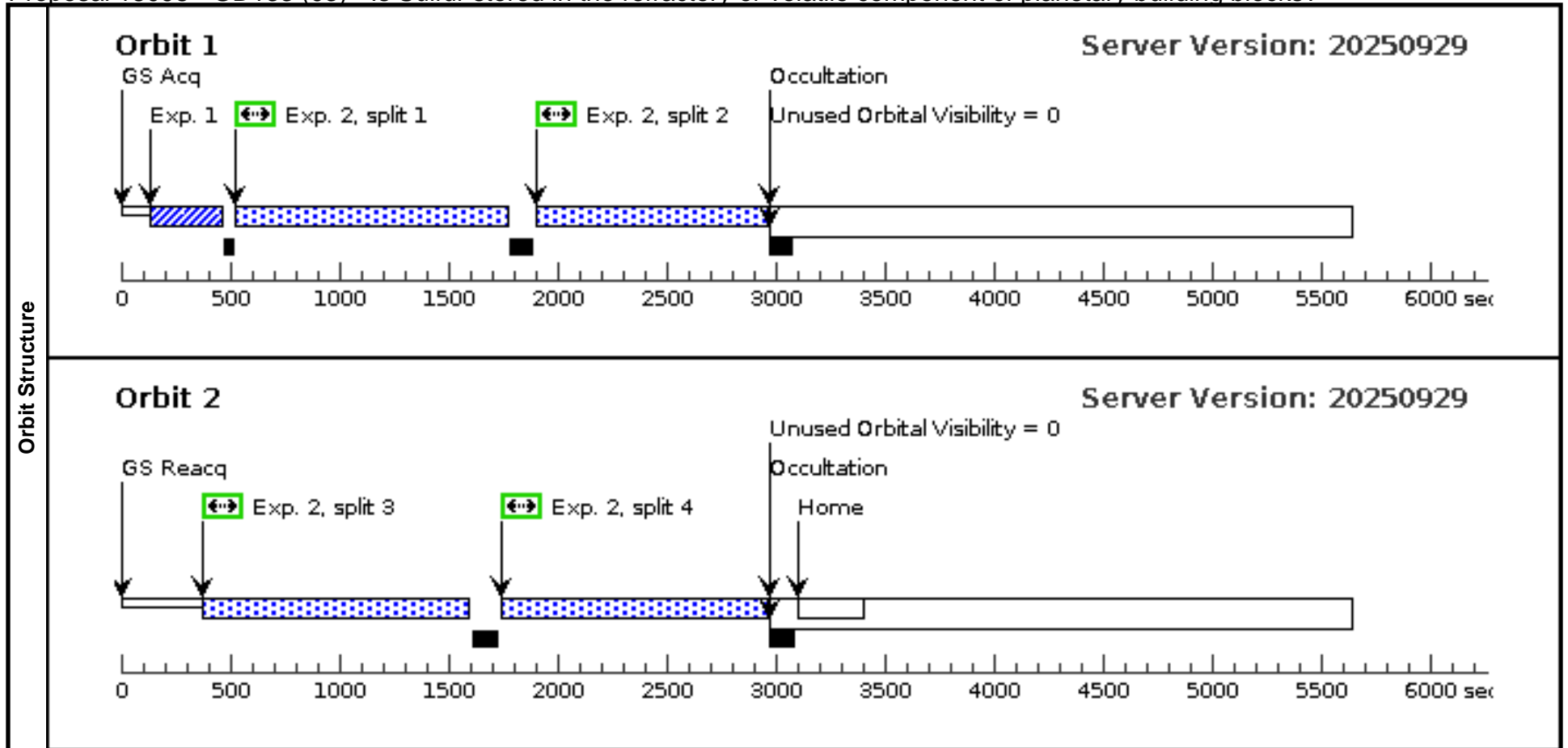
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	G29-38 (COS.ta.202 6114)	(2) G29-38	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				15 Secs (15 Secs) [==>]	[1]
2	(COS.sp.202 5377)	(2) G29-38	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=10 19; FP-POS=ALL			477 Secs (1908 Secs) [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]



Proposal 18098 - GD133 (03) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

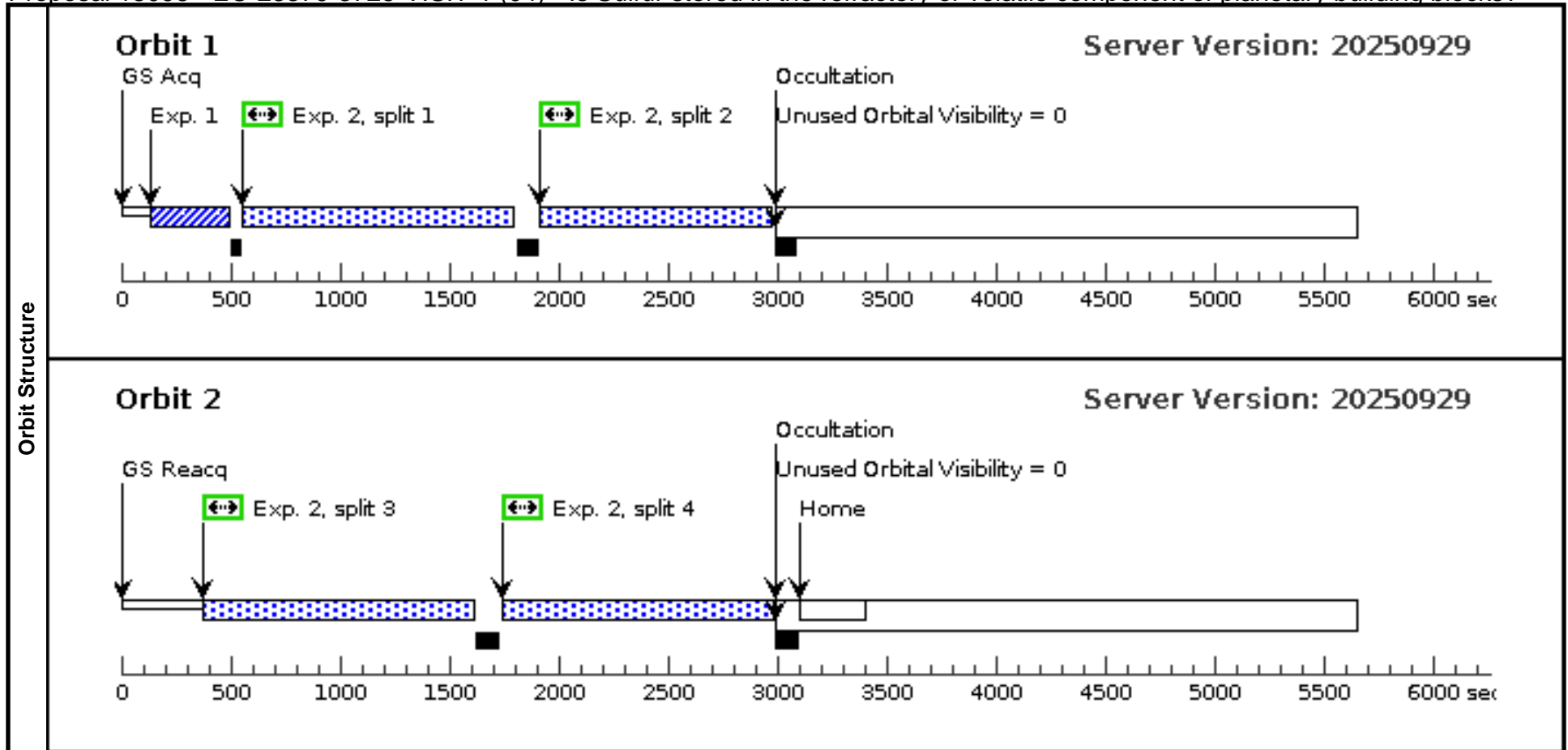
Visit	Proposal 18098, GD133 (03), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(3)	GD133	RA: 11 19 12.3989 (169.8016621d) Dec: +02 20 33.05 (2.34251d) Equinox: J2000	Proper Motion RA: -100.334 mas/yr Proper Motion Dec: 30.97799999999998 mas/yr Parallax: 0.026150800000000002" Epoch of Position: 2000	V=14.57 NUV=15.08	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	GD133 (COS.ta.202 5407)	(3) GD133	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				9 Secs (9 Secs)	
									[==>]	[1]
	2	(COS.sp.202 5378)	(3) GD133	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=11 71; FP-POS=ALL			1062 Secs (4517 Secs)	
								[==>1050.0 Secs (Split 1)]	[1]	
								[==>1049.0 Secs (Split 2)]		
								[==>1209.0 Secs (Split 3)]		
								[==>1209.0 Secs (Split 4)]	[2]	



Proposal 18098 - EC-23379-3725-VISIT-1 (04) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

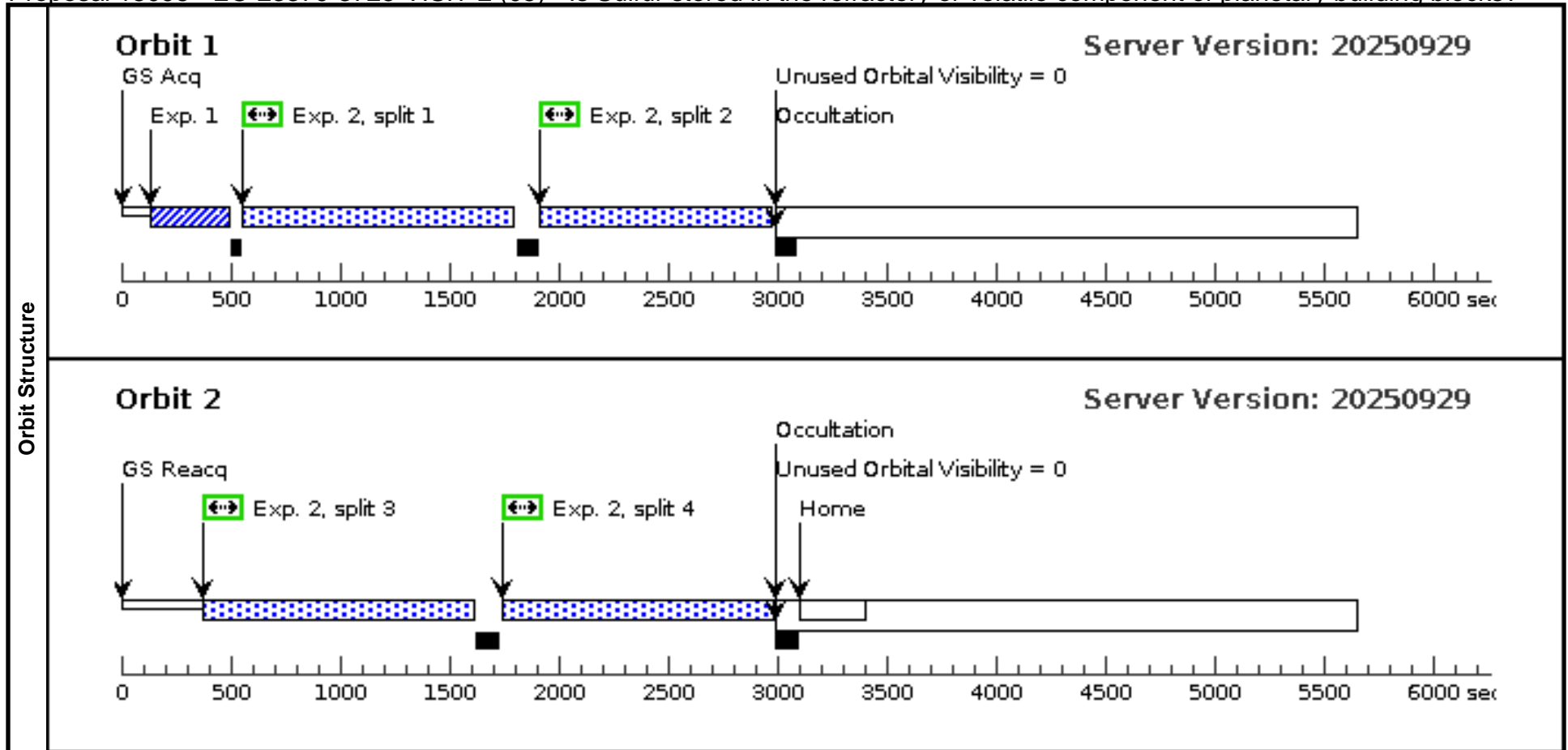
Visit	Proposal 18098, EC-23379-3725-VISIT-1 (04), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(4)	EC-23379-3725	RA: 23 40 36.6398 (355.1526658d) Dec: -37 08 44.72 (-37.14576d) Equinox: J2000	Proper Motion RA: -35.155 mas/yr Proper Motion Dec: -24.749999988671334 mas/yr Parallax: 0.010509600000000001" Epoch of Position: 2000	V=16.17 NUV=16.23	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EC-23379-3 725 (COS.ta.202 5408)	(4) EC-23379-3725	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				25 Secs (25 Secs) [==>]	[1]
2	(COS.sp.202 5379)	(4) EC-23379-3725	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=12 28; FP-POS=ALL			1068 Secs (4530 Secs) [==>1045.0 Secs (Split 1)] [==>1044.0 Secs (Split 2)] [==>1221.0 Secs (Split 3)] [==>1220.0 Secs (Split 4)]	[1] [2]	



Proposal 18098 - EC-23379-3725-VISIT-2 (05) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

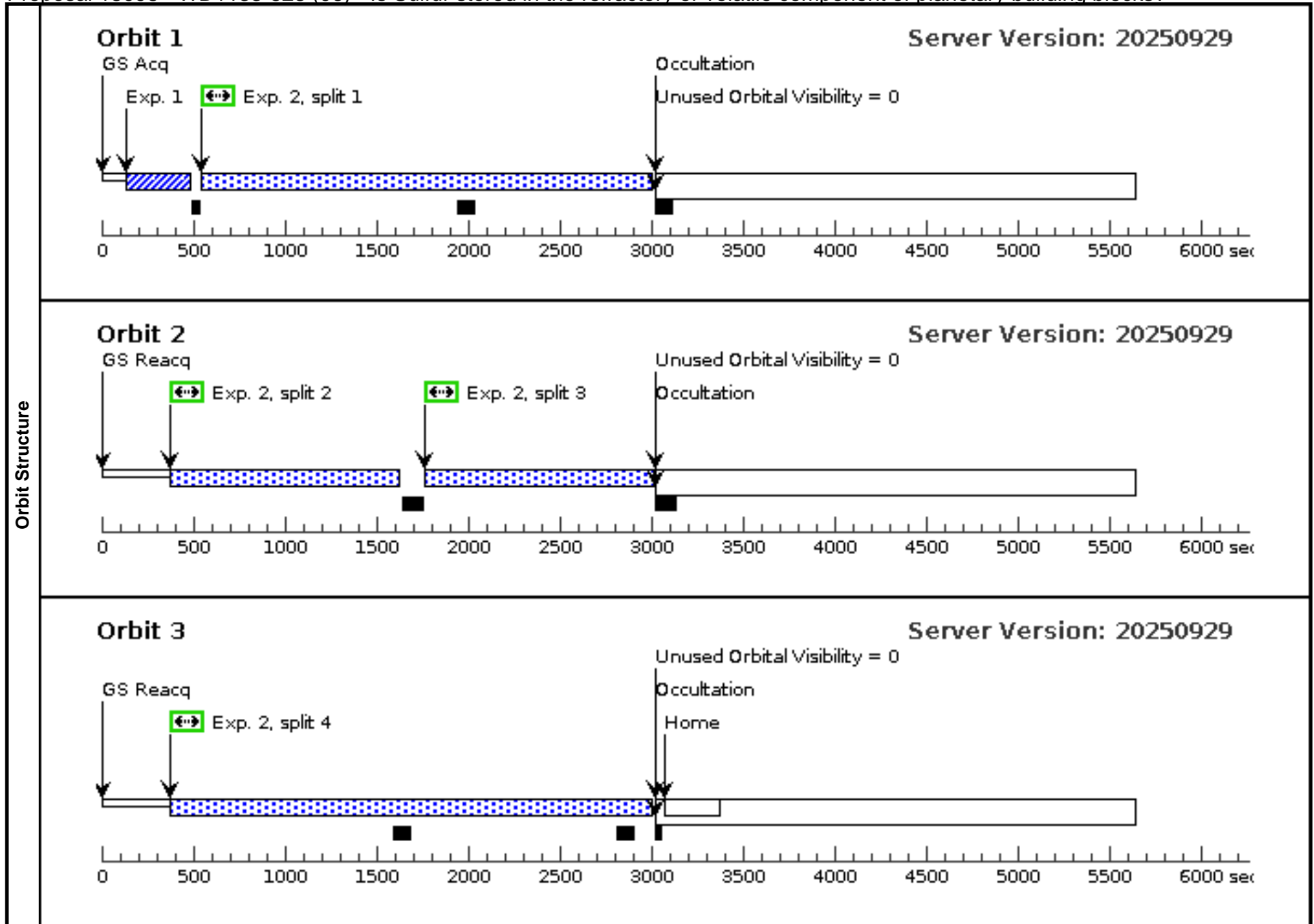
Visit	Proposal 18098, EC-23379-3725-VISIT-2 (05), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(4)	EC-23379-3725	RA: 23 40 36.6398 (355.1526658d) Dec: -37 08 44.72 (-37.14576d) Equinox: J2000	Proper Motion RA: -35.155 mas/yr Proper Motion Dec: -24.749999988671334 mas/yr Parallax: 0.010509600000000001" Epoch of Position: 2000	V=16.17 NUV=16.23	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	EC-23379-3 725 (COS.ta.202 5408)	(4) EC-23379-3725	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				25 Secs (25 Secs) [==>]	[1]
	2	(COS.sp.202 5379)	(4) EC-23379-3725	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=12 28; FP-POS=ALL			1068 Secs (4530 Secs) [==>1045 Secs (Split 1)] [==>1044 Secs (Split 2)] [==>1221 Secs (Split 3)] [==>1220.0 Secs (Split 4)]	[1] [2]



Proposal 18098 - WD1133-528 (06) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

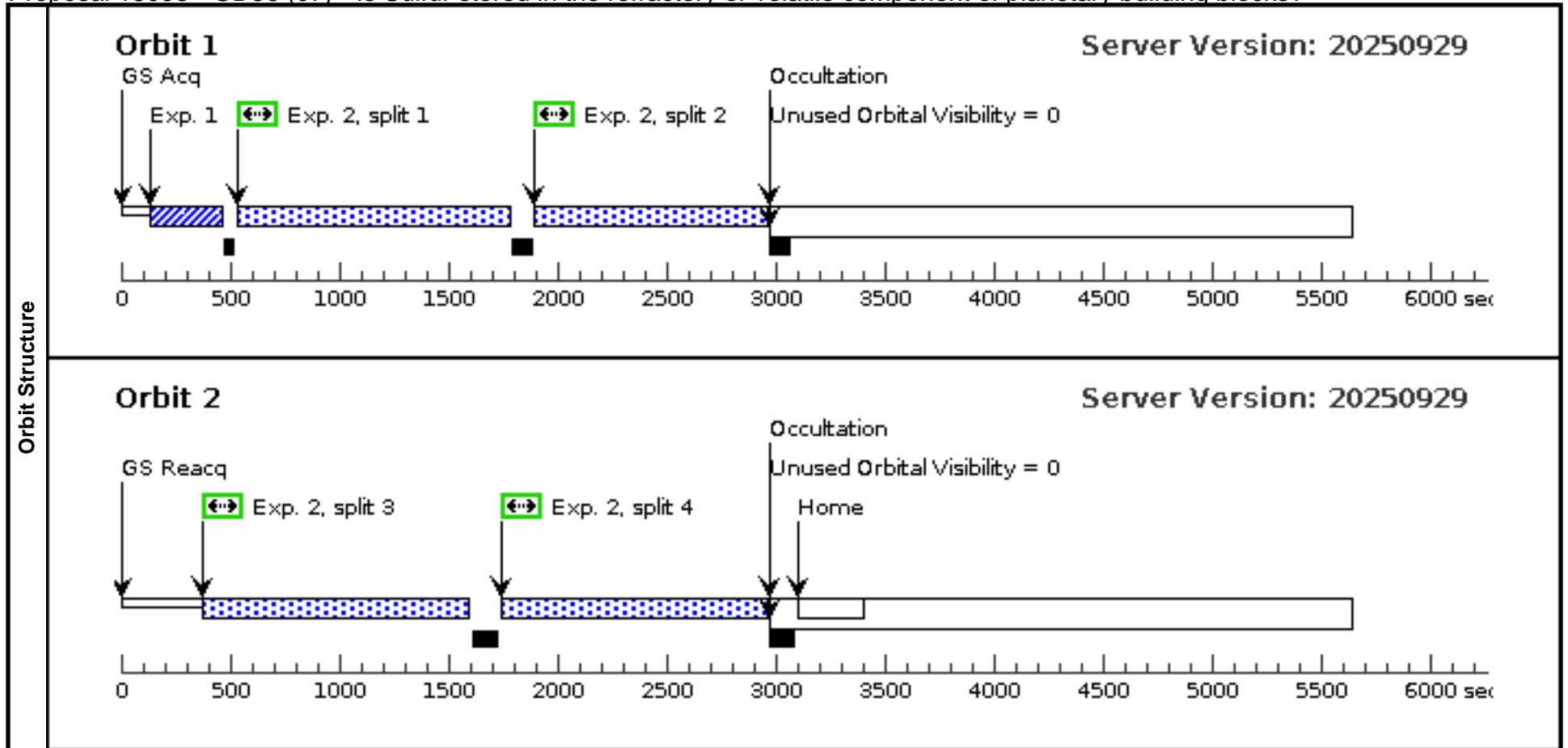
Visit	Proposal 18098, WD1133-528 (06), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(5)	WD1133-528	RA: 11 35 57.3425 (173.9889271d) Dec: -53 03 22.12 (-53.05614d) Equinox: J2000	Proper Motion RA: -204.777 mas/yr Proper Motion Dec: 128.491 mas/yr Parallax: 0.0114977" Epoch of Position: 2000	V=15.8 NUV=15.99	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	WD1133-528 8 (COS.ta.202 5412)	(5) WD1133-528	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				20 Secs (20 Secs) [==>]	[1]
	2	(COS.sp.202 5382)	(5) WD1133-528	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=12 18; FP-POS=ALL			2319 Secs (7352 Secs) [==>2268.0 Secs (Split 1)] [==>1233.0 Secs (Split 2)] [==>1232.0 Secs (Split 3)] [==>2619.0 Secs (Split 4)]	[1] [2] [3]



Proposal 18098 - GD56 (07) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

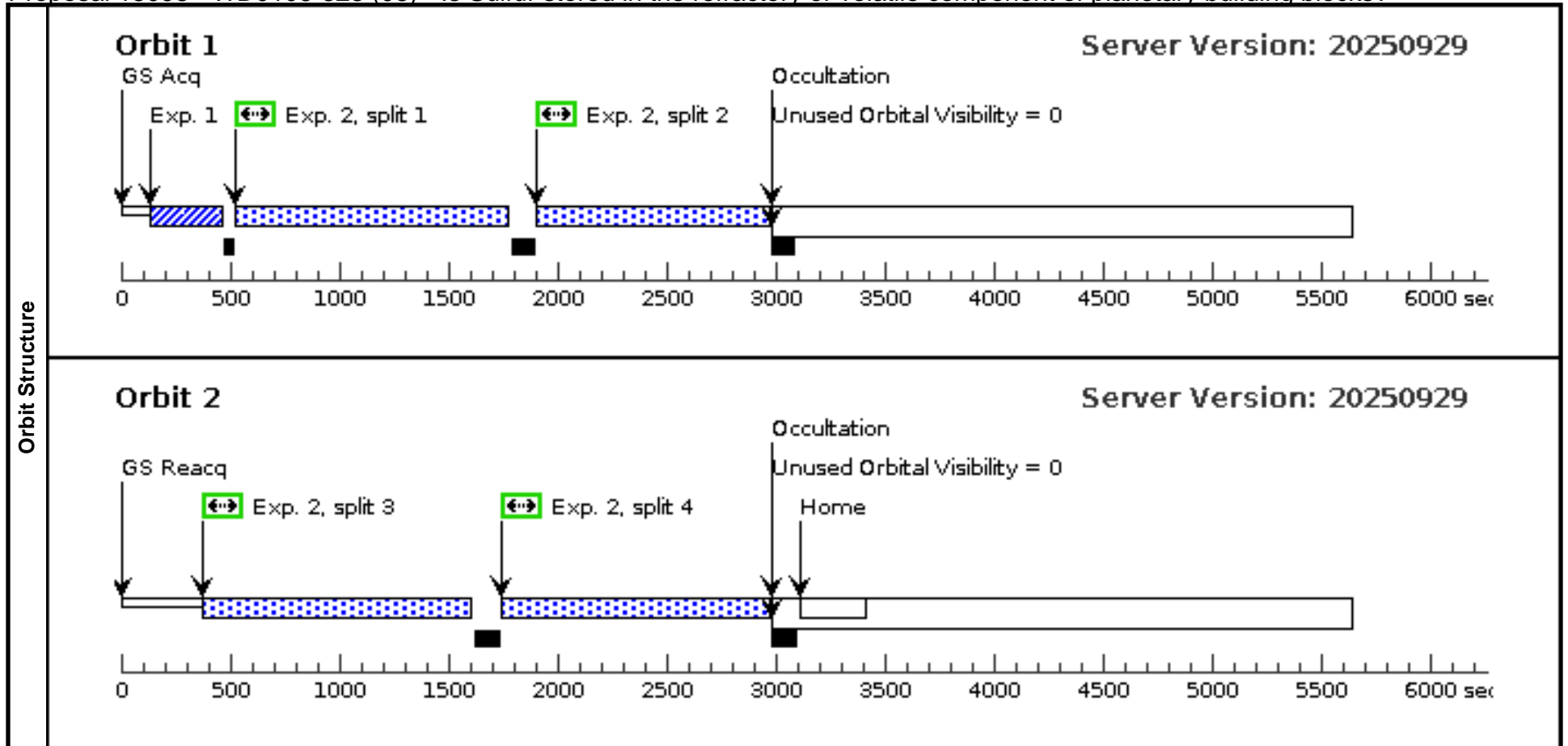
Visit	Proposal 18098, GD56 (07), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
Fixed Targets	(6)	GD-56	RA: 04 11 2.1687 (62.7590362d) Dec: -03 58 22.59 (-3.97294d) Equinox: J2000	Proper Motion RA: 3.6800000000000006 mas/yr Proper Motion Dec: -128.54999993123783 mas/yr Parallax: 0.013973000000000001" Epoch of Position: 2000	V=15.5 NUV=15.59	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	GD56 (COS.ta.202 5414)	(6) GD-56	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				13 Secs (13 Secs)	
									[==>]	[1]
	2	(COS.sp.202 5381)	(6) GD-56	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=11 95; FP-POS=ALL			1062 Secs (4518 Secs)	
								[==>1050.0 Secs (Split 1)]		
								[==>1050.0 Secs (Split 2)]		
								[==>1209.0 Secs (Split 3)]		
								[==>1209.0 Secs (Split 4)]		
									[2]	



Proposal 18098 - WD0106-328 (08) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

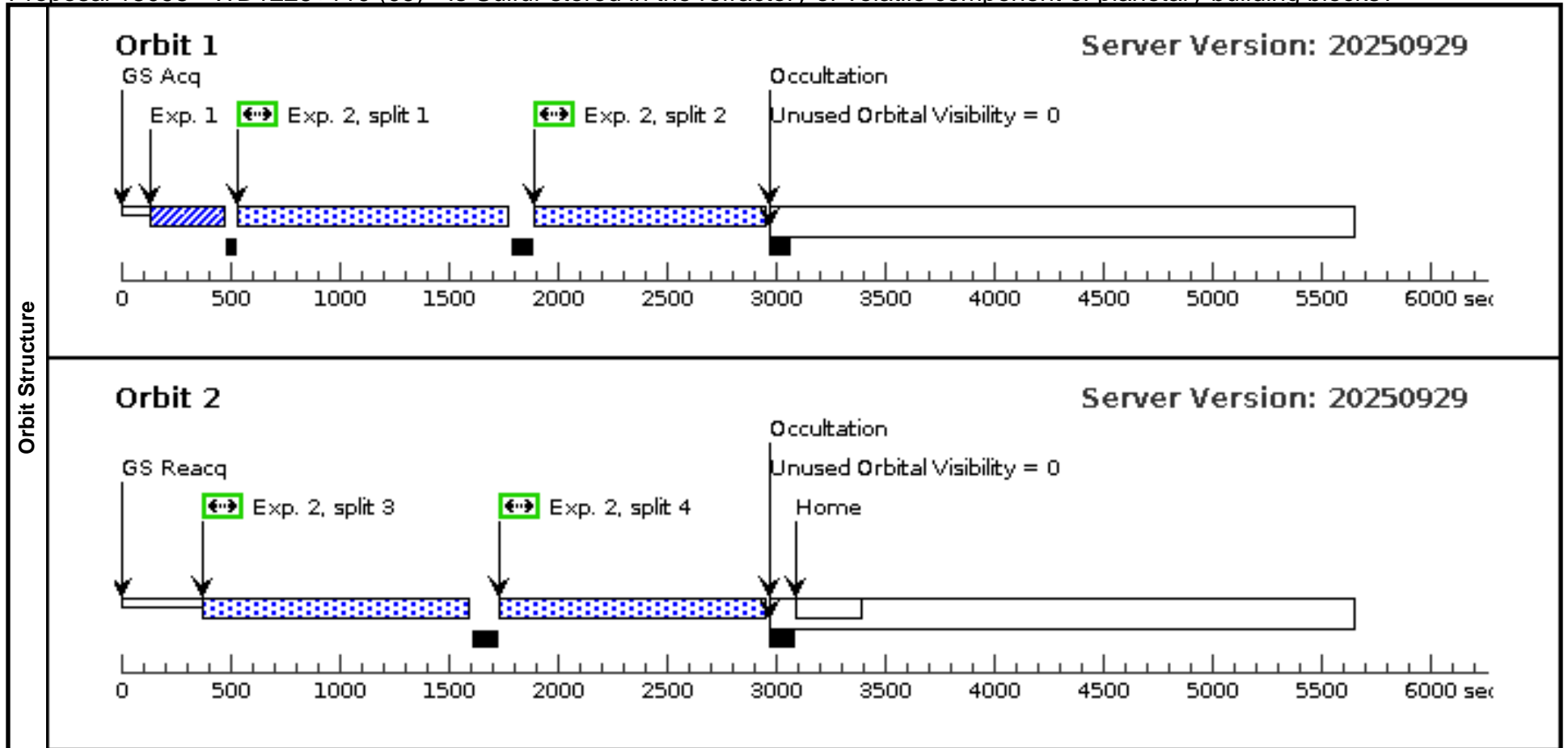
Visit	Proposal 18098, WD0106-328 (08), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)																																							
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(7)</td> <td>WD0106-328</td> <td>RA: 01 08 36.0346 (17.1501442d) Dec: -32 37 43.38 (-32.62872d) Equinox: J2000</td> <td>Proper Motion RA: 26.561 mas/yr Proper Motion Dec: -21.663999950760626 mas/yr Parallax: 0.014513199999999999" Epoch of Position: 2000</td> <td>V=15.26 NUV=15.28</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> <i>SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.</i> Category=STAR Description=[DA, DZ] Extended=NO </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(7)	WD0106-328	RA: 01 08 36.0346 (17.1501442d) Dec: -32 37 43.38 (-32.62872d) Equinox: J2000	Proper Motion RA: 26.561 mas/yr Proper Motion Dec: -21.663999950760626 mas/yr Parallax: 0.014513199999999999" Epoch of Position: 2000	V=15.26 NUV=15.28	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.</i> Category=STAR Description=[DA, DZ] Extended=NO																
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Exposures	<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>WD0106-328 (7) WD0106-328 8 (COS.ta.202 5419)</td> <td>(7) WD0106-328</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>10 Secs (10 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>(COS.sp.202 (7) WD0106-328 5383)</td> <td>(7) WD0106-328</td> <td>COS/NUV, TIME-TAG, PSA</td> <td>G185M 1921 A</td> <td>BUFFER-TIME=11 64; FP-POS=ALL</td> <td></td> <td></td> <td>1076 Secs (4531 Secs) [==>1053.0 Secs (Split 1)] [==>1052.0 Secs (Split 2)] [==>1213.0 Secs (Split 3)] [==>1213 Secs (Split 4)]</td> <td>[1] [2]</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	WD0106-328 (7) WD0106-328 8 (COS.ta.202 5419)	(7) WD0106-328	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				10 Secs (10 Secs) [==>]	[1]	2	(COS.sp.202 (7) WD0106-328 5383)	(7) WD0106-328	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=11 64; FP-POS=ALL			1076 Secs (4531 Secs) [==>1053.0 Secs (Split 1)] [==>1052.0 Secs (Split 2)] [==>1213.0 Secs (Split 3)] [==>1213 Secs (Split 4)]	[1] [2]
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																														
1	WD0106-328 (7) WD0106-328 8 (COS.ta.202 5419)	(7) WD0106-328	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				10 Secs (10 Secs) [==>]	[1]																															
2	(COS.sp.202 (7) WD0106-328 5383)	(7) WD0106-328	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=11 64; FP-POS=ALL			1076 Secs (4531 Secs) [==>1053.0 Secs (Split 1)] [==>1052.0 Secs (Split 2)] [==>1213.0 Secs (Split 3)] [==>1213 Secs (Split 4)]	[1] [2]																															



Proposal 18098 - WD1226+110 (09) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

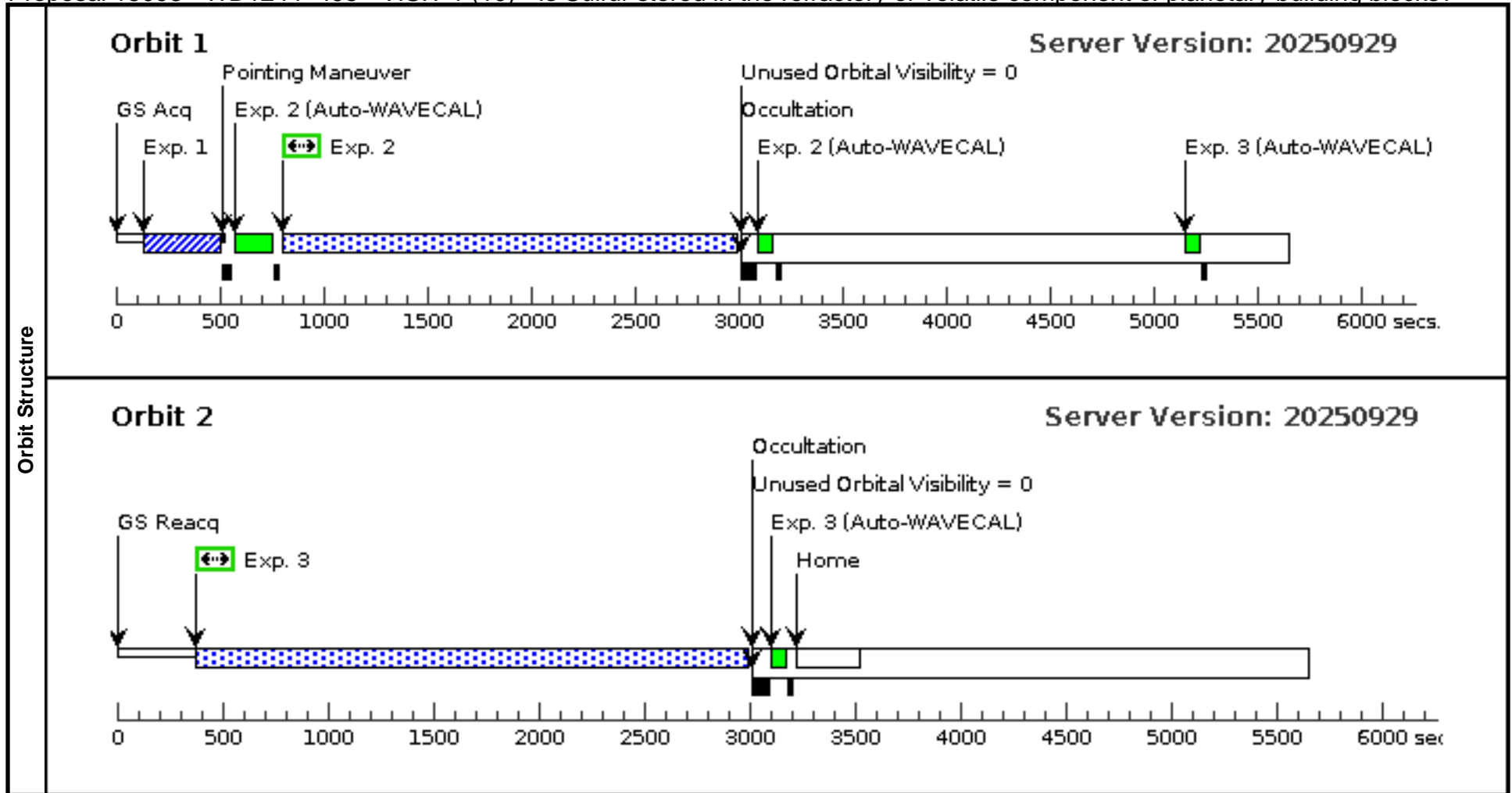
Visit	Proposal 18098, WD1226+110 (09), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(8)	WD1226+110	RA: 12 28 59.9342 (187.2497258d) Dec: +10 40 33.05 (10.67585d) Equinox: J2000	Proper Motion RA: -50.254 mas/yr Proper Motion Dec: -24.72900000611844 mas/yr Parallax: 0.0077634" Epoch of Position: 2000	V=16.46 NUV=15.75	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DA, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	WD1226+110 10 (COS.ta.202 5420)	(8) WD1226+110	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				15 Secs (15 Secs) [==>]	[1]
	2	(COS.sp.202 5384)	(8) WD1226+110	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=11 92; FP-POS=ALL		1061 Secs (4504 Secs) [==>1046.0 Secs (Split 1)] [==>1045.0 Secs (Split 2)] [==>1207.0 Secs (Split 3)] [==>1206.0 Secs (Split 4)]	[2]	



Proposal 18098 - WD1244+498 - VISIT 1 (10) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

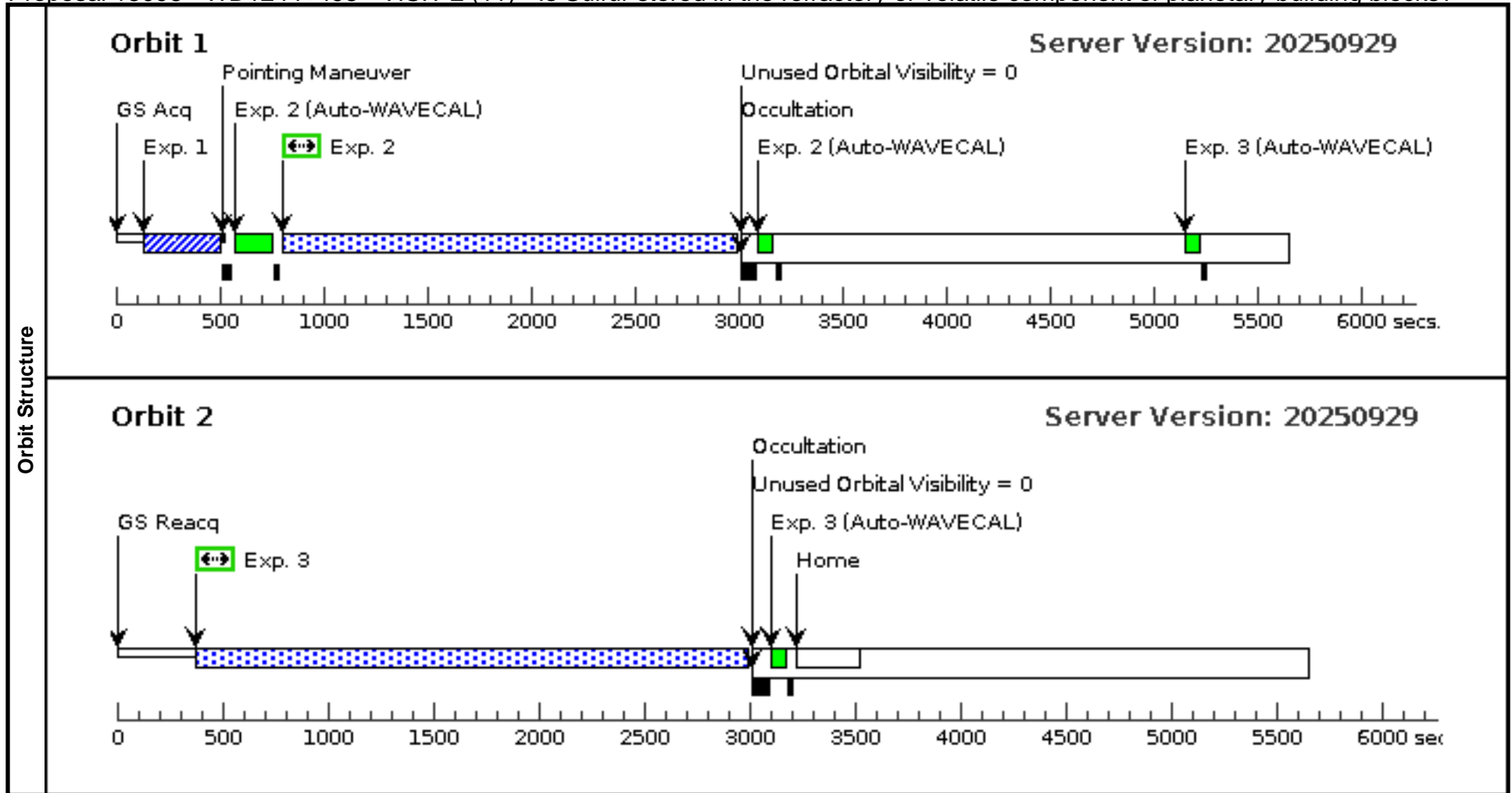
Visit	Proposal 18098, WD1244+498 - VISIT 1 (10), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																											
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(9)</td> <td>WD1244+498</td> <td>RA: 12 47 3.2755 (191.7636479d) Dec: +49 34 23.52 (49.57320d) Equinox: J2000</td> <td>Proper Motion RA: 11.272 mas/yr Proper Motion Dec: 42.187 mas/yr Parallax: 0.008308099999999999" Epoch of Position: 2000</td> <td>V=16.59 NUV=16.49</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> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DB, DZ] Extended=NO </td> </tr> </tbody> </table>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(9)	WD1244+498	RA: 12 47 3.2755 (191.7636479d) Dec: +49 34 23.52 (49.57320d) Equinox: J2000	Proper Motion RA: 11.272 mas/yr Proper Motion Dec: 42.187 mas/yr Parallax: 0.008308099999999999" Epoch of Position: 2000	V=16.59 NUV=16.49	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DB, DZ] Extended=NO				
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																						
(9)	WD1244+498	RA: 12 47 3.2755 (191.7636479d) Dec: +49 34 23.52 (49.57320d) Equinox: J2000	Proper Motion RA: 11.272 mas/yr Proper Motion Dec: 42.187 mas/yr Parallax: 0.008308099999999999" Epoch of Position: 2000	V=16.59 NUV=16.49	Reference Frame: ICRS																							
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DB, DZ] Extended=NO																												
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																		
	1	WD1244+498 (COS.ta.2025559)	(9) WD1244+498	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				31 Secs (31 Secs) [==>]	[1]																		
	2	(COS.sp.2025372)	(9) WD1244+498	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=34 86; FP-POS=3			2139 Secs (2139 Secs) [==>]	[1]																		
	3	(COS.sp.2025372)	(9) WD1244+498	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=34 86; FP-POS=4			2571 Secs (2571 Secs) [==>]	[2]																		



Proposal 18098 - WD1244+498 - VISIT 2 (11) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

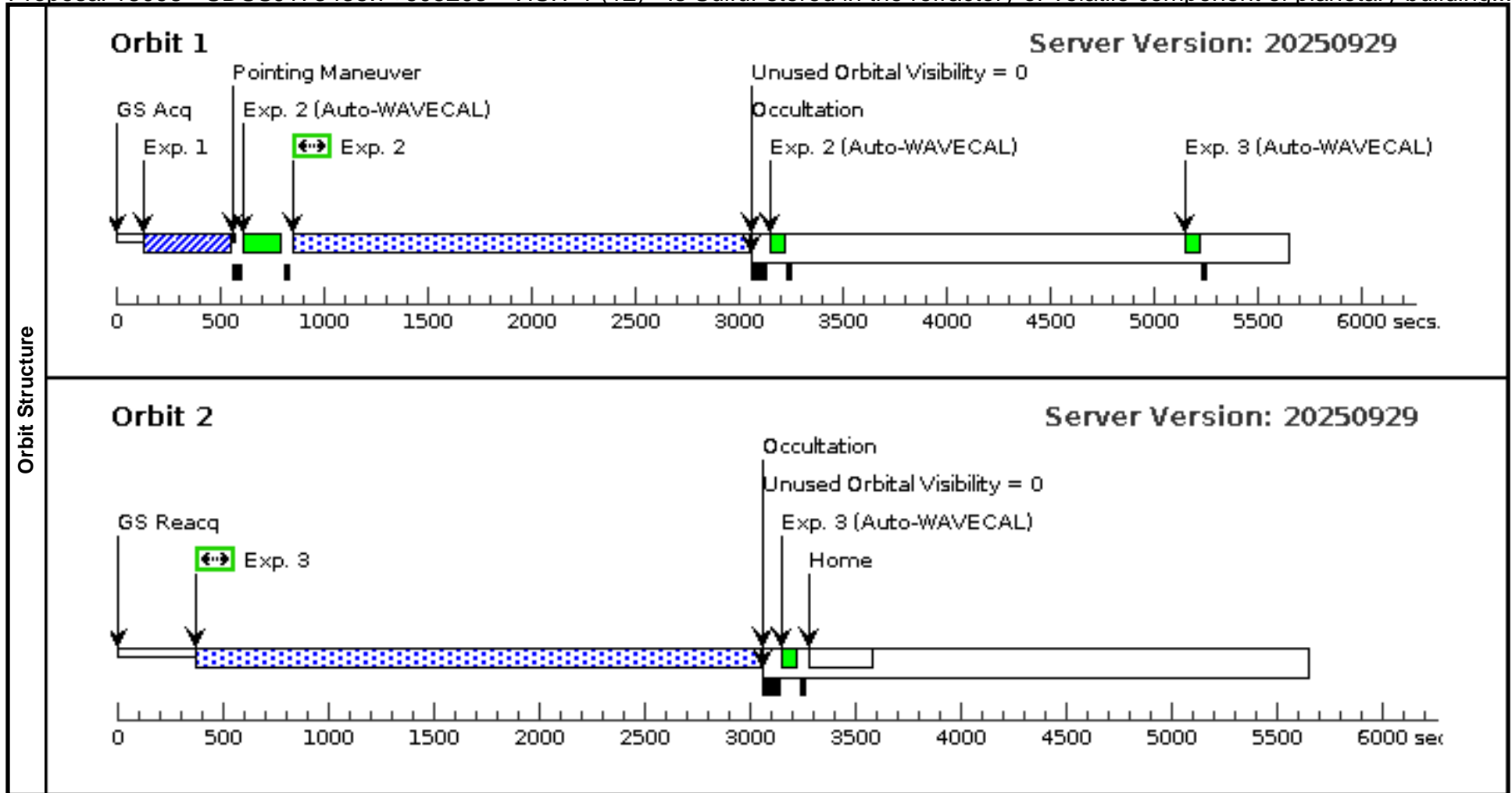
Fri Feb 27 00:00:24 GMT 2026

Visit	Proposal 18098, WD1244+498 - VISIT 2 (11), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(9)	WD1244+498	RA: 12 47 3.2755 (191.7636479d) Dec: +49 34 23.52 (49.57320d) Equinox: J2000	Proper Motion RA: 11.272 mas/yr Proper Motion Dec: 42.187 mas/yr Parallax: 0.008308099999999999" Epoch of Position: 2000	V=16.59 NUV=16.49	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DB, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	WD1244+498 (COS.ta.2025559)	(9) WD1244+498	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				31 Secs (31 Secs) [==>]	[1]
	2	(COS.sp.2025372)	(9) WD1244+498	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=34 86; FP-POS=3			2139 Secs (2139 Secs) [==>]	[1]
	3	(COS.sp.2025372)	(9) WD1244+498	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=34 86; FP-POS=4			2571 Secs (2571 Secs) [==>]	[2]



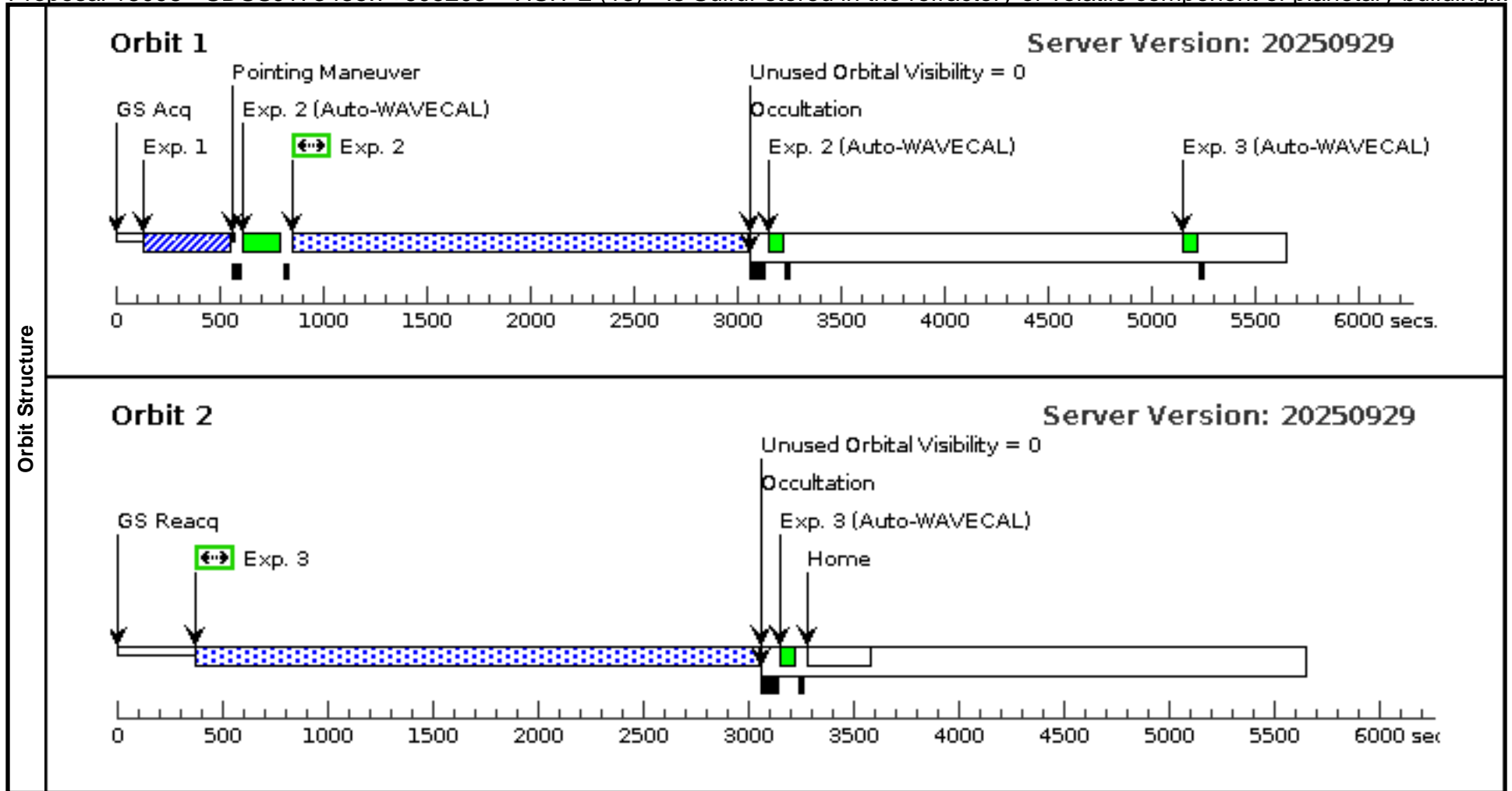
Proposal 18098 - SDSSJ173435.7+605203 - VISIT 1 (12) - Is Sulfur stored in the refractory or volatile component of planetary building...

Visit	Proposal 18098, SDSSJ173435.7+605203 - VISIT 1 (12), implementation Fri Feb 27 00:00:24 GMT 2026 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																					
	Fixed Targets	<table border="1" style="width: 100%; border-collapse: collapse;"> <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>SDSSJ173435.7+605203</td> <td>RA: 17 34 35.7473 (263.6489471d) Dec: +60 52 3.22 (60.86756d) Equinox: J2000</td> <td>Proper Motion RA: -30.196999999999996 mas/yr Proper Motion Dec: -5.580999982157664 mas/yr Parallax: 0.0066565" Epoch of Position: 2000</td> <td>V=16.98 NUV=16.69</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></p> <p><i>SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.</i></p> <p><i>Category=STAR</i> <i>Description=[DB, DZ]</i> <i>Extended=NO</i></p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(10)	SDSSJ173435.7+605203	RA: 17 34 35.7473 (263.6489471d) Dec: +60 52 3.22 (60.86756d) Equinox: J2000	Proper Motion RA: -30.196999999999996 mas/yr Proper Motion Dec: -5.580999982157664 mas/yr Parallax: 0.0066565" Epoch of Position: 2000	V=16.98 NUV=16.69
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																
(10)	SDSSJ173435.7+605203	RA: 17 34 35.7473 (263.6489471d) Dec: +60 52 3.22 (60.86756d) Equinox: J2000	Proper Motion RA: -30.196999999999996 mas/yr Proper Motion Dec: -5.580999982157664 mas/yr Parallax: 0.0066565" Epoch of Position: 2000	V=16.98 NUV=16.69	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	SDSSJ173435.7+605203 3 (COS.ta.2025572)	(10) SDSSJ173435.7+605203	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				55 Secs (55 Secs) [==>]	[1]												
	2	(COS.sp.2025373)	(10) SDSSJ173435.7+605203	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=35 21; FP-POS=3			2144 Secs (2144 Secs) [==>]	[1]												
	3	(COS.sp.2025373)	(10) SDSSJ173435.7+605203	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=35 21; FP-POS=4			2624 Secs (2624 Secs) [==>]	[2]												



Proposal 18098 - SDSSJ173435.7+605203 - VISIT 2 (13) - Is Sulfur stored in the refractory or volatile component of planetary building...

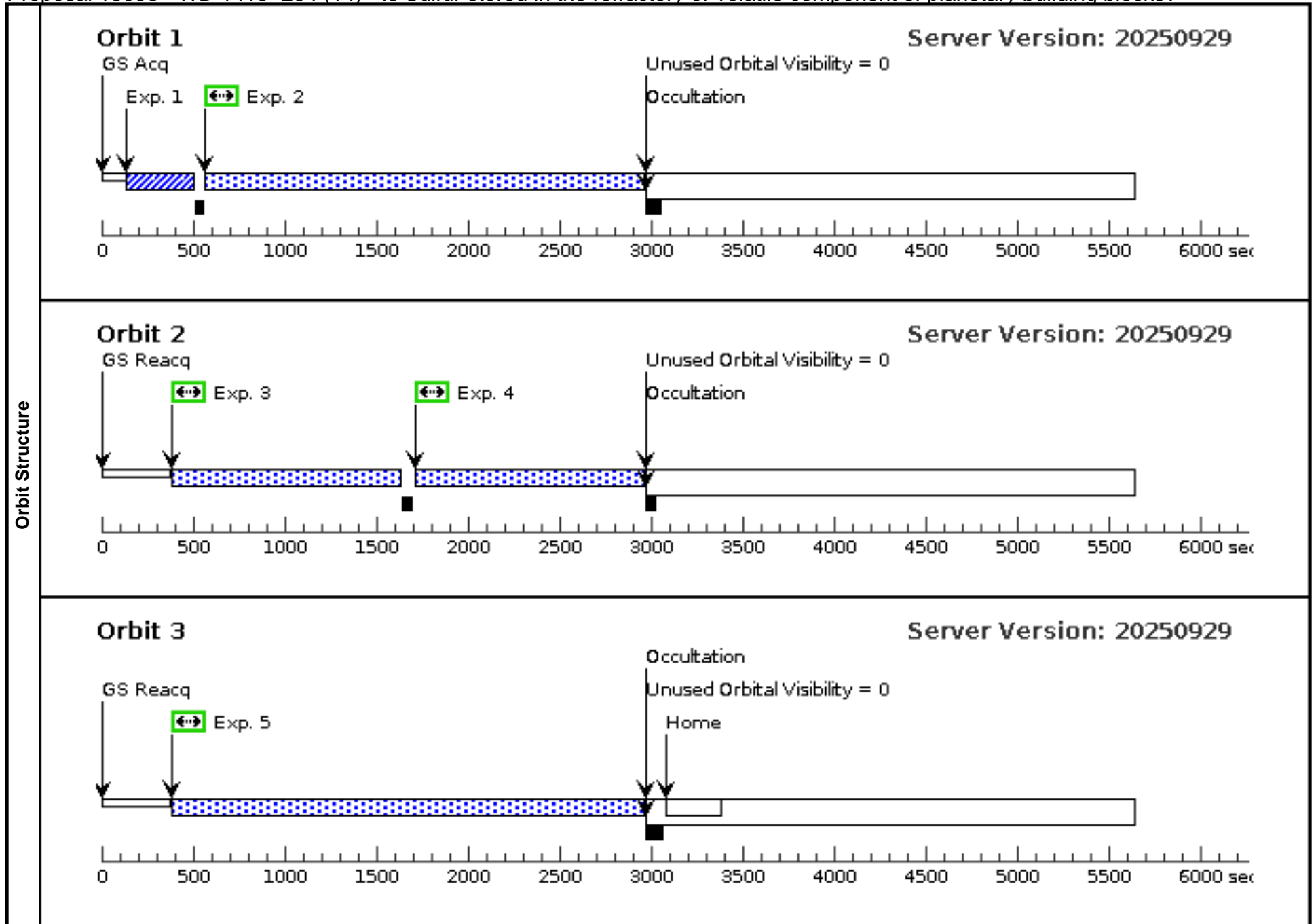
Visit	Proposal 18098, SDSSJ173435.7+605203 - VISIT 2 (13), implementation Fri Feb 27 00:00:24 GMT 2026 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																					
	Fixed Targets	<table border="1" style="width: 100%; border-collapse: collapse;"> <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>SDSSJ173435.7+605203</td> <td>RA: 17 34 35.7473 (263.6489471d) Dec: +60 52 3.22 (60.86756d) Equinox: J2000</td> <td>Proper Motion RA: -30.196999999999996 mas/yr Proper Motion Dec: -5.580999982157664 mas/yr Parallax: 0.0066565" Epoch of Position: 2000</td> <td>V=16.98 NUV=16.69</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></p> <p><i>SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.</i></p> <p><i>Category=STAR</i> <i>Description=[DB, DZ]</i> <i>Extended=NO</i></p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(10)	SDSSJ173435.7+605203	RA: 17 34 35.7473 (263.6489471d) Dec: +60 52 3.22 (60.86756d) Equinox: J2000	Proper Motion RA: -30.196999999999996 mas/yr Proper Motion Dec: -5.580999982157664 mas/yr Parallax: 0.0066565" Epoch of Position: 2000	V=16.98 NUV=16.69
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																
(10)	SDSSJ173435.7+605203	RA: 17 34 35.7473 (263.6489471d) Dec: +60 52 3.22 (60.86756d) Equinox: J2000	Proper Motion RA: -30.196999999999996 mas/yr Proper Motion Dec: -5.580999982157664 mas/yr Parallax: 0.0066565" Epoch of Position: 2000	V=16.98 NUV=16.69	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	SDSSJ173435.7+605203 3 (COS.ta.2025572)	(10) SDSSJ173435.7+605203	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				55 Secs (55 Secs) [==>]	[1]												
	2	(COS.sp.2025373)	(10) SDSSJ173435.7+605203	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=35 21; FP-POS=3			2144 Secs (2144 Secs) [==>]	[1]												
	3	(COS.sp.2025373)	(10) SDSSJ173435.7+605203	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=35 21; FP-POS=4			2624 Secs (2624 Secs) [==>]	[2]												



Proposal 18098 - WD 1415+234 (14) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

Visit	Proposal 18098, WD 1415+234 (14), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(11)	WD1415+234	RA: 14 17 55.3674 (214.4806975d) Dec: +23 11 36.71 (23.19353d) Equinox: J2000	Proper Motion RA: -60.254 mas/yr Proper Motion Dec: 37.47 mas/yr Parallax: 0.0078811" Epoch of Position: 2000	V=16.8 NUV=16.46	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DB, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	WD 1415+234 34 (COS.ta.2025575)	(11) WD1415+234	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				29 Secs (29 Secs) [==>]	[1]
	2	(COS.sp.2025374)	(11) WD1415+234	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=31 18; FP-POS=3			2203 Secs (2203 Secs) [==>]	[1]
	3	(COS.sp.2025374)	(11) WD1415+234	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=31 18; FP-POS=3			1238 Secs (1238 Secs) [==>]	[2]
	4	(COS.sp.2025374)	(11) WD1415+234	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=31 18; FP-POS=4			1237 Secs (1237 Secs) [==>]	[2]
	5	(COS.sp.2025374)	(11) WD1415+234	COS/NUV, TIME-TAG, PSA	G185M 1921 A	BUFFER-TIME=31 18; FP-POS=4			2572 Secs (2572 Secs) [==>]	[3]



Proposal 18098 - PG-1015+161 (15) - Is Sulfur stored in the refractory or volatile component of planetary building blocks?

Fri Feb 27 00:00:24 GMT 2026

Visit	Proposal 18098, PG-1015+161 (15), implementation Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
Fixed Targets	(12)	PG-1015+161	RA: 10 18 3.8273 (154.5159471d) Dec: +15 51 58.57 (15.86627d) Equinox: J2000	Proper Motion RA: -111.1629999999998 mas/yr Proper Motion Dec: -68.67899994631443 mas/yr Parallax: 0.0113617" Epoch of Position: 2000	V=15.61 NUV=15.21	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM. Category=STAR Description=[DB, DZ] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	PG-1015+16 1 (COS.ta.202 5577)	(12) PG-1015+161	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				9 Secs (9 Secs)	
									[==>]	[1]
	2	(COS.sp.202 5375)	(12) PG-1015+161	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=11 59; FP-POS=3			1550 Secs (1550 Secs)	
								[==>]	[1]	
3	(COS.sp.202 5375)	(12) PG-1015+161	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=11 59; FP-POS=4			1550 Secs (1550 Secs)		
								[==>]	[2]	

