



18093 - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Cycle: 33, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Dra. Karina Mauco (PI) (Contact)	Instituto de Astronomia - UNAM
Mari Liis Aru (CoI) (ESA Member)	European Southern Observatory - Germany
Dra. Silvia M. H. Vicente (CoI) (ESA Member)	Institute of Astrophysics and Space Sciences (IA) - Lisbon
Dr. Massimo Robberto (CoI) (AdminUSPI)	Space Telescope Science Institute
Dr. Thomas Haworth (CoI) (ESA Member)	Queen Mary University of London
Prof. Stefano Facchini (CoI) (ESA Member)	Universita di Milano
Dr. Anna Miotello (CoI) (ESA Member)	European Southern Observatory - Germany
Dr. Carlo F. Manara (CoI) (ESA Member)	European Southern Observatory - Germany
Dr. Giovanni Rosotti (CoI) (ESA Member)	Universita di Milano
Dr. Andrew Winter (CoI) (ESA Member)	Queen Mary University of London
Dr. Megan Ansdell (CoI)	NASA Headquarters
Dr. Juan M. Alcala (CoI) (ESA Member)	INAF - Osservatorio Astronomico di Capodimonte
Dr. Giulia Ballabio (CoI) (ESA Member)	Imperial College London

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	(8) -SIG-ORI	WFC3/UVIS	1	02-Jul-2026 09:00:13.0	yes
02	(8) -SIG-ORI	WFC3/UVIS	1	02-Jul-2026 09:00:14.0	yes
03	(8) -SIG-ORI	WFC3/UVIS	1	02-Jul-2026 09:00:15.0	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>
04	(1) W96-RJ053833-0236	WFC3/UVIS	1	02-Jul-2026 09:00:15.0	yes
05	(1) W96-RJ053833-0236	WFC3/UVIS	1	02-Jul-2026 09:00:16.0	yes
06	(1) W96-RJ053833-0236	WFC3/UVIS	1	02-Jul-2026 09:00:16.0	yes
07	(6) HARO-5-13	WFC3/UVIS	1	02-Jul-2026 09:00:16.0	yes
08	(6) HARO-5-13	WFC3/UVIS	1	02-Jul-2026 09:00:17.0	yes
09	(6) HARO-5-13	WFC3/UVIS	1	02-Jul-2026 09:00:17.0	yes
10	(5) BG-ORI	WFC3/UVIS	1	02-Jul-2026 09:00:17.0	yes
11	(5) BG-ORI	WFC3/UVIS	1	02-Jul-2026 09:00:18.0	yes
12	(5) BG-ORI	WFC3/UVIS	1	02-Jul-2026 09:00:18.0	yes

12 Total Orbits Used

ABSTRACT

The evolutionary pathways of protoplanetary disks differ depending on the surrounding environment. Theoretical models and observational evidence point to external photoevaporation by OB stars playing a significant role in the evolution of planet-forming disks in clusters. As the majority of exoplanets we know did form in such environments, it is mandatory to better understand this process. The effect of external photoevaporation is a depletion of the disk outside-in, severely shortening disk lifetimes. Previous studies have focused on analysing externally-induced disk winds in young ($<1\text{-}2$ Myr) star-forming regions and in high radiation fields. Here we aim to target the intermediate age (3-5 Myr) and milder radiation field Sigma Orionis cluster, a region with disks that have never been imaged in visible light with HST or other high spatial resolution instruments before. We propose, for the first time, to resolve the final stages of disk dissipation caused by photoevaporation with the UVIS camera of HST/WFC3 in three narrow-band filters, tuned to reveal the cocoon around the targets, tell-tale proxy of ongoing external photoevaporation from the massive stars at the center of the cluster. We will thus measure the size of the ionization fronts, and infer the mass loss rates in the winds. These observations will allow us to determine key diagnostics necessary to constrain external photoevaporation models at a later stage of disk evolution and at lower incident radiation than previously observed.

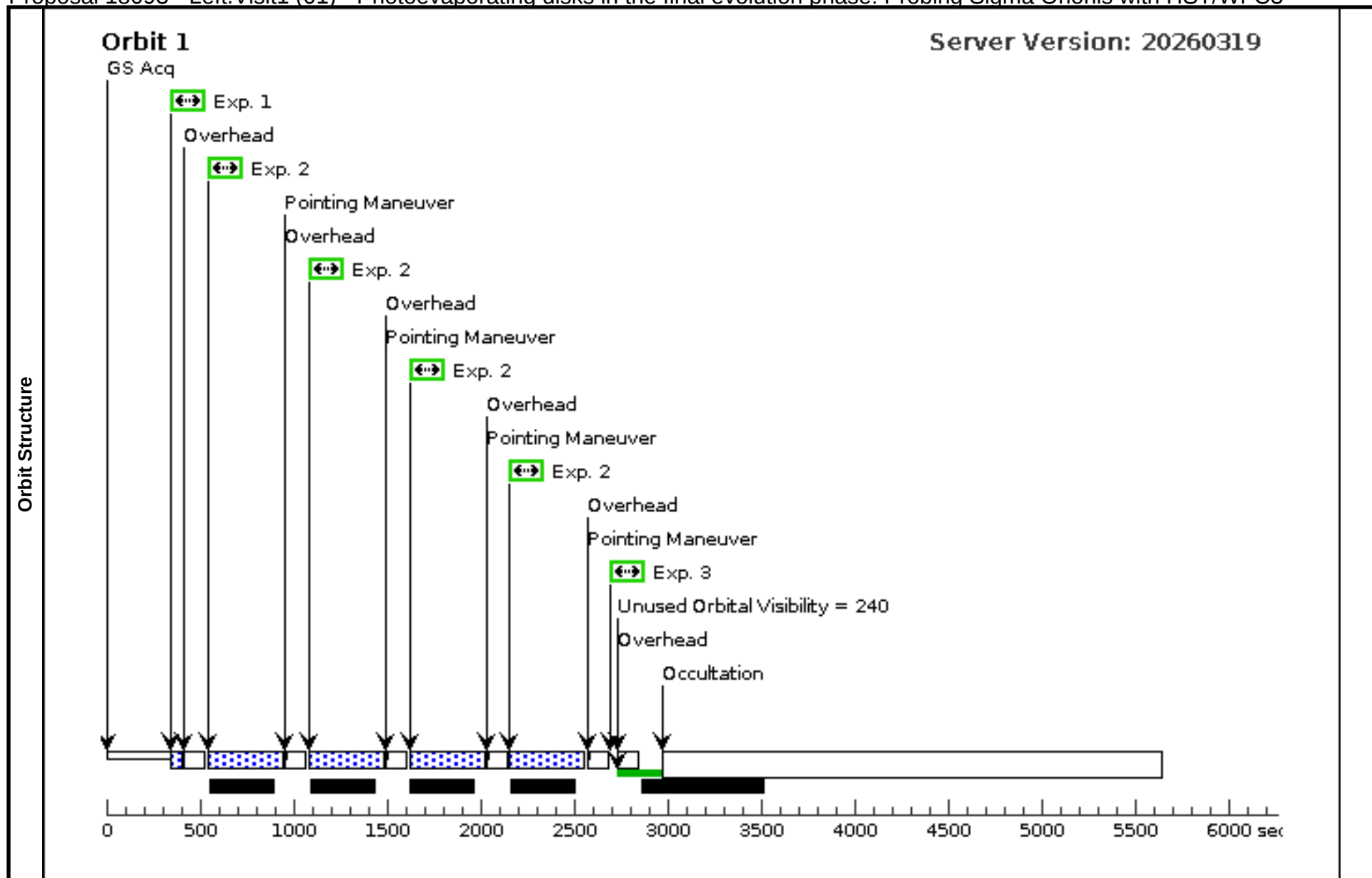
OBSERVING DESCRIPTION

We plan to observe with HST four fields which include the best ten candidates for detecting a protoplanetary disk structure based on their optical emission lines. In the same fields, several other targets known to have disks through ALMA detections (Ansdell et al. 2017) are included. Therefore, we will be able

to detect additional proplyds, if any. This sample will cover a range of $G_0 \sim 10^3 - 10^5$, allowing us to test external photoevaporation models in a wide range of (relatively low) G_0 , at ages older than previously studied. Each field will be observed with WFC3/UVIS using three narrow-band filters, F656N (H α), F631N ([OI]), and F658N ([NII]). These are chosen to spatially resolve ionization fronts and proplyd tails. WFC3/UVIS provides the best sampling, largest FoV, and has the required narrow-band filters. Using WFC3 instead of ACS leads to a better spatial resolution, thanks to the better pixel size, to higher sensitivity, and gives the possibility to use the best narrow band filters for our observations. The HST diffraction limit in H α is ~ 70 mas, which means we will be able to spatially resolve structures as small as ~ 30 AU for a distance of ~ 400 pc to sigma-Orionis. Each observation in each filter will be done using one orbit to account for ~ 1600 s on target plus overheads (6.5 minutes acquisition plus dithering overheads). Indeed, the targets are visible for 52 minutes during the orbit, which are then covered by the exposure and the overheads. The exposure time estimate is based on the observations by Bally et al. (2012), which are reported by Kim et al. (2016) to be appropriate to detect proplyds. We will use short sub-exposures of length between ~ 400 s and then combine the various subexposures to get to the final deep image. Between exposures, we will perform a dither pattern. This will be planned with particular attention to recovering the spatial resolution, accounting for the fact that the PSF is slightly undersampled. This will also be important for the mitigation of image defects. The short exposures are needed to avoid saturation, which happens after 3600 s on our targets but could happen on shorter exposures for other stars in the field of view. In particular, the field including the massive sigma-Ori star will be observed adding two shorter exposures (30s), one at the beginning and one at the end of the 4 dithers, and positioning the massive star in the region between the two CCDs to avoid saturation. For the rest of the fields (without the massive star S Ori) we choose dithering pattern parameters such that they fill the chip gap. The observations will not have to be scheduled in consecutive orbits, we will be able to combine data in the different filters also taken with time separation between them. However, consecutive observations in the three filters allow for minimizing the telescope overheads.

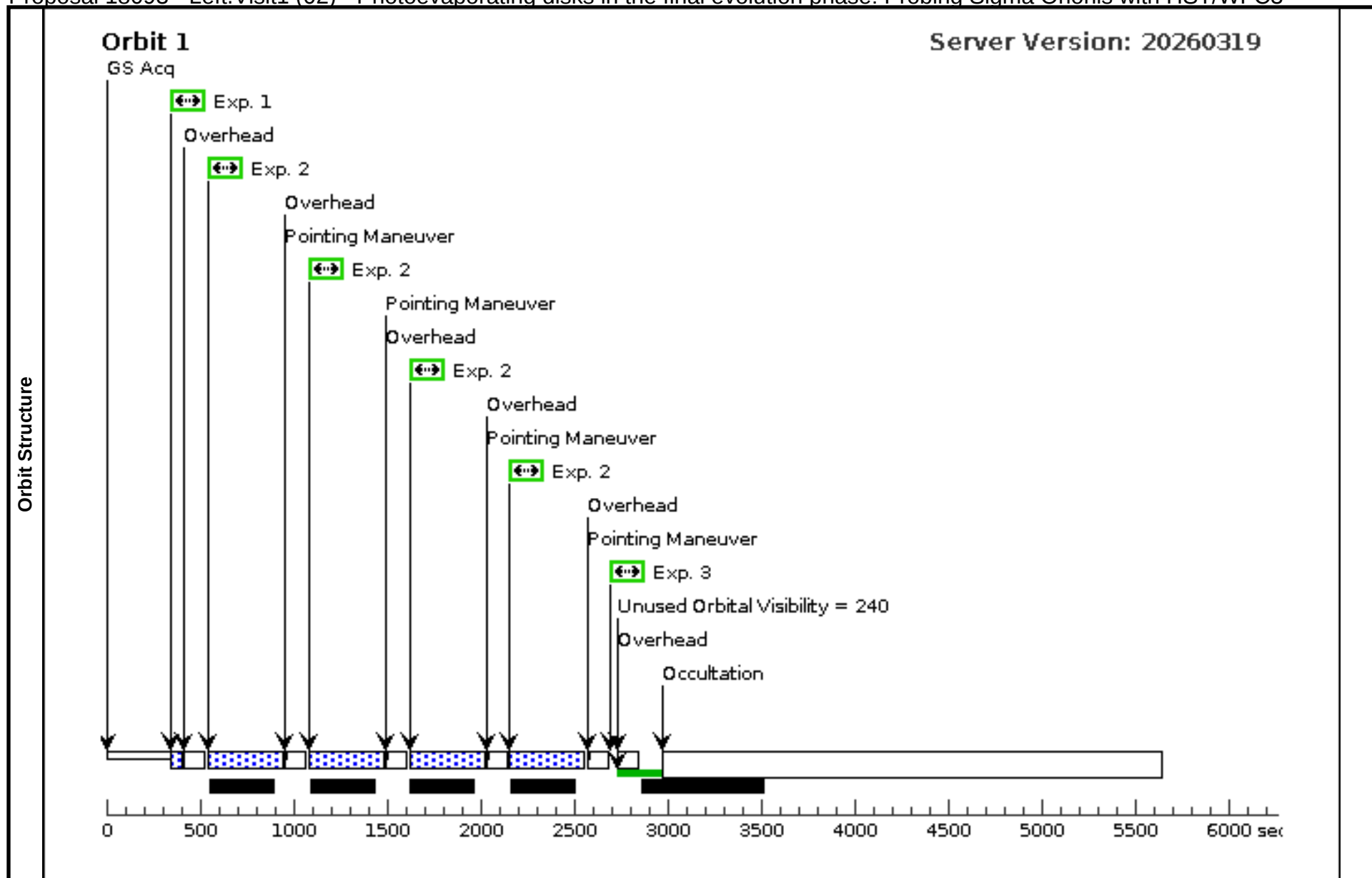
Proposal 18093 - Left.Visit1 (01) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, Left.Visit1 (01), implementation										Thu Jul 02 13:00:18 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false						(2)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(8)	-SIG-ORI	RA: 05 38 44.7654 (84.6865225d) Dec: -02 36 0.28 (-2.60008d) Equinox: J2000		Proper Motion RA: 4.6 mas/yr Proper Motion Dec: -0.39999993077799445 mas/yr Parallax: 0.00304" Epoch of Position: 2000		V=3.79		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	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=[PRE-MAIN SEQUENCE STAR]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=20	POS TARG -20,null		30 Secs (30 Secs)		
									[==>]		[1]
	2		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=16	POS TARG -20,null	Pattern 2, Exps 2-2 in Left.Visit1 (01) (2)	400 Secs (1600 Secs)		
									[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]
	3		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=20	POS TARG -20,null		30 Secs (30 Secs)		
									[==>]		[1]



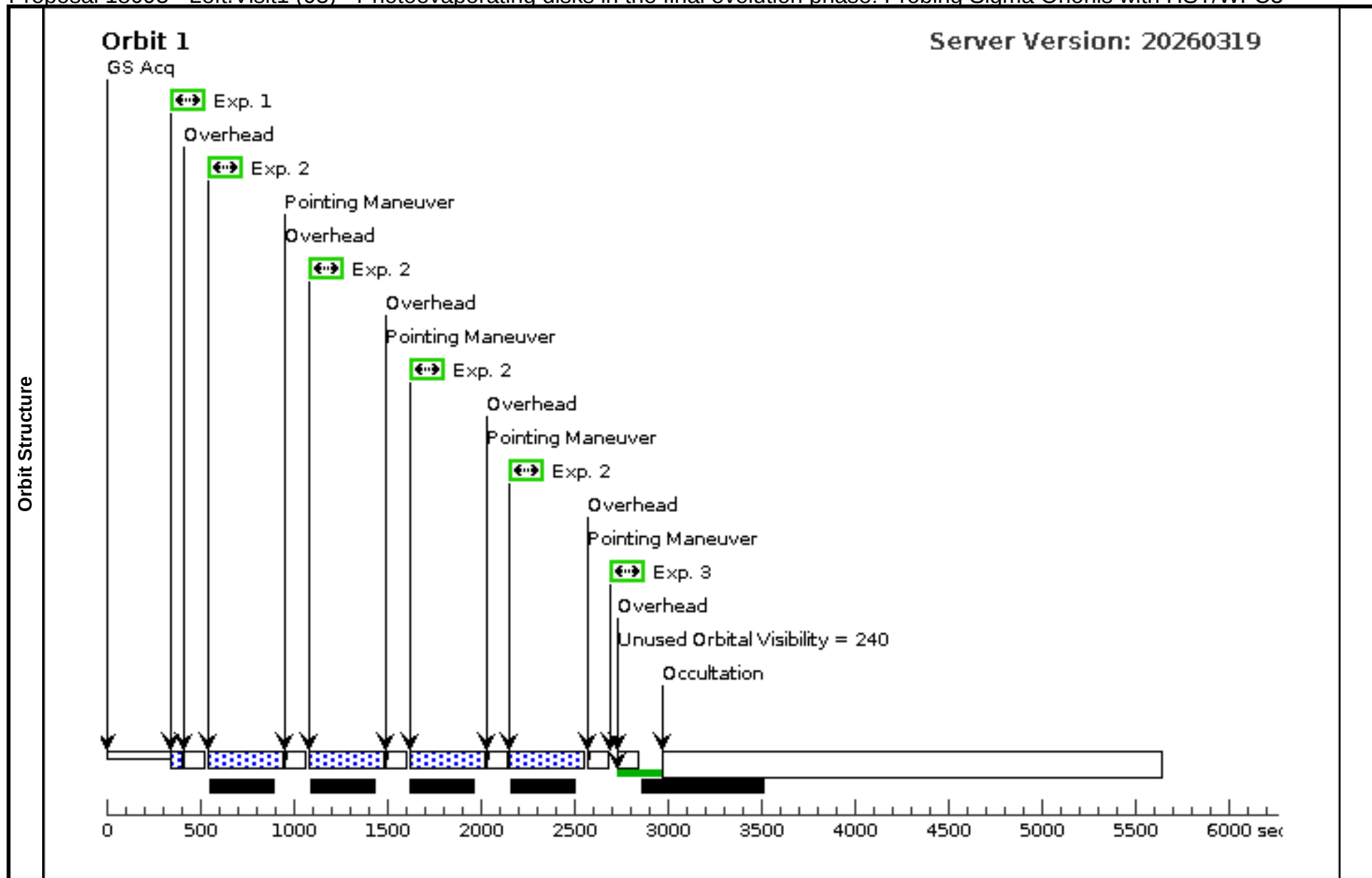
Proposal 18093 - Left.Visit1 (02) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

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	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Coordinate Frame=POS-TARG Pattern Orientation=23.884 Purpose=DITHER Angle Between Sides=81.785 Number Of Points=4 Center Pattern=false Point Spacing=0.173 Line Spacing=0.112								(2)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(8)	-SIG-ORI	RA: 05 38 44.7654 (84.6865225d) Dec: -02 36 0.28 (-2.60008d) Equinox: J2000		Proper Motion RA: 4.6 mas/yr Proper Motion Dec: -0.39999993077799445 mas/yr Parallax: 0.00304" Epoch of Position: 2000		V=3.79		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	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=[PRE-MAIN SEQUENCE STAR]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F631N	FLASH=20	POS TARG -20,null		30 Secs (30 Secs)		
									[==>]		[1]
	2		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F631N	FLASH=16	POS TARG -20,null	Pattern 2, Exps 2-2 in Left.Visit1 (02) (2)	400 Secs (1600 Secs)		
									[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]
	3		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F631N	FLASH=20	POS TARG -20,null		30 Secs (30 Secs)		
									[==>]		[1]



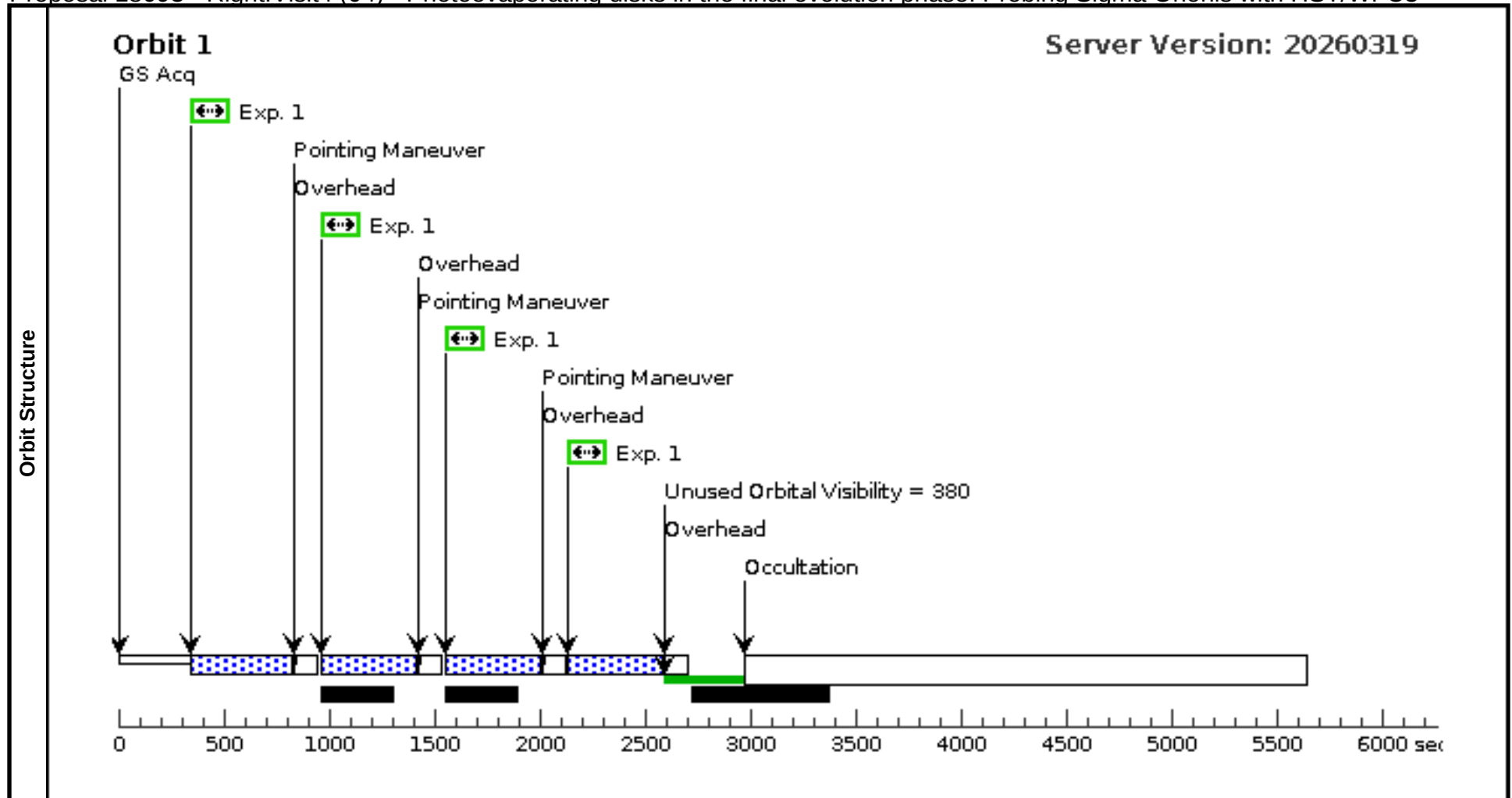
Proposal 18093 - Left.Visit1 (03) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, Left.Visit1 (03), implementation										Thu Jul 02 13:00:18 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Coordinate Frame=POS-TARG Pattern Orientation=23.884 Purpose=DITHER Angle Between Sides=81.785 Number Of Points=4 Center Pattern=false Point Spacing=0.173 Line Spacing=0.112								(2)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(8)	-SIG-ORI	RA: 05 38 44.7654 (84.6865225d) Dec: -02 36 0.28 (-2.60008d) Equinox: J2000		Proper Motion RA: 4.6 mas/yr Proper Motion Dec: -0.39999993077799445 mas/yr Parallax: 0.00304" Epoch of Position: 2000		V=3.79		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	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=[PRE-MAIN SEQUENCE STAR]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=20	POS TARG -20,null		30 Secs (30 Secs)		
									[==>]		[1]
	2		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=16	POS TARG -20,null	Pattern 2, Exps 2-2 in Left.Visit1 (03) (2)	400 Secs (1600 Secs)		
									[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]
	3		(8) -SIG-ORI	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=20	POS TARG -20,null		30 Secs (30 Secs)		
									[==>]		[1]



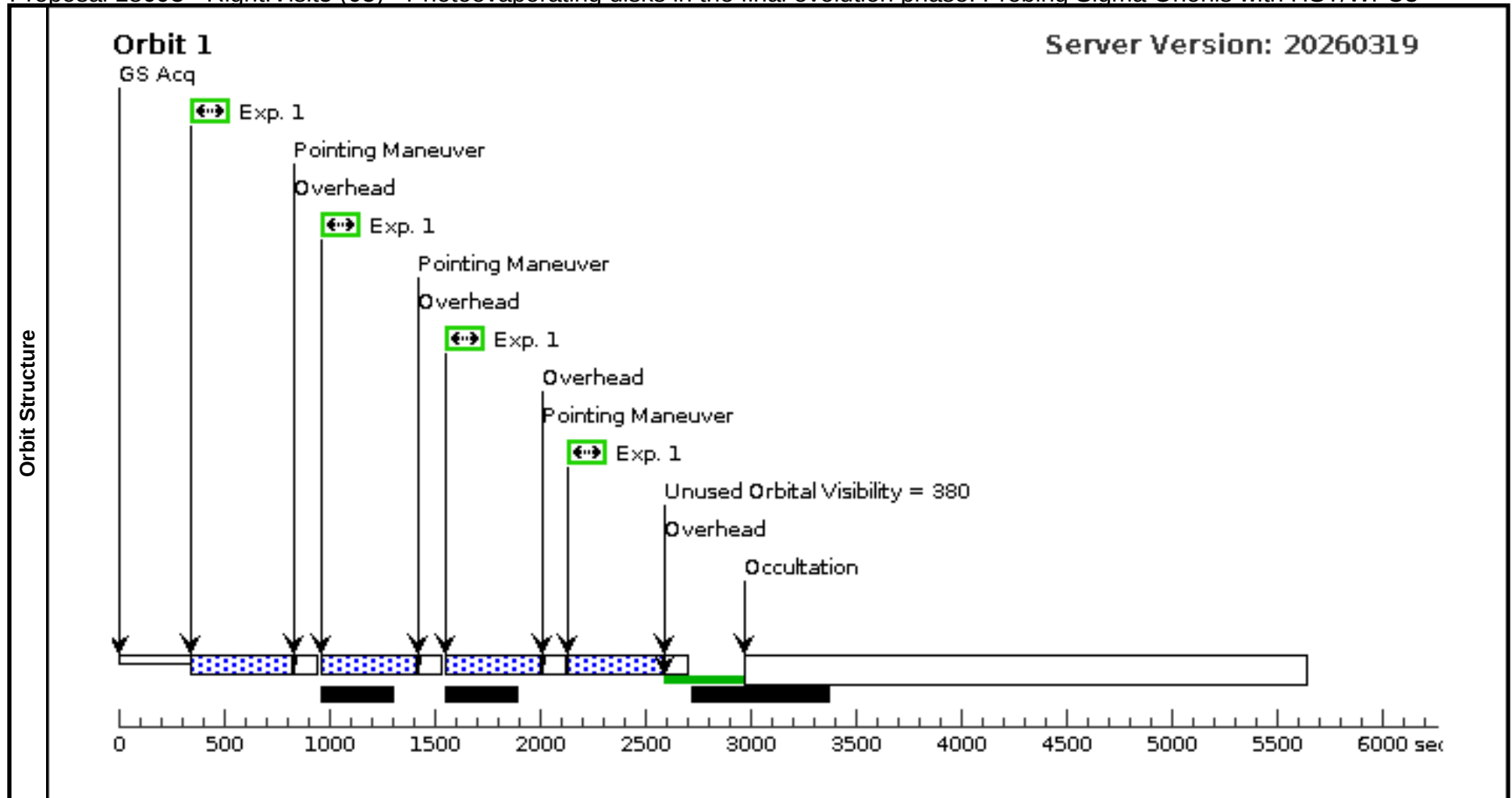
Proposal 18093 - Right.Visit4 (04) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, Right.Visit4 (04), implementation										Thu Jul 02 13:00:18 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: (none)											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures		
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=2 Line Spacing=0.8		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(1)	W96-RJ053833-0236	RA: 05 38 33.5400 (84.6397500d) Dec: -02 35 56.30 (-2.59897d) Equinox: J2000		Proper Motion RA: 1.988730393638058E-5 sec of time/yr Proper Motion Dec: 8.55E-4 arcsec/yr Epoch of Position: 2015.5		V=16.39		Reference Frame: SIMBAD			
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
	Category=STAR Description=[PRE-MAIN SEQUENCE STAR] Extended=NO											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(1) W96-RJ053833-0236	WFC3/UVIS, ACCUM, UVIS-CENTER	F656N	FLASH=16		Pattern 3, Exps 1-1 in Right.Visit4 (04) (3)	450 Secs (1800 Secs)			
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]		[1]	



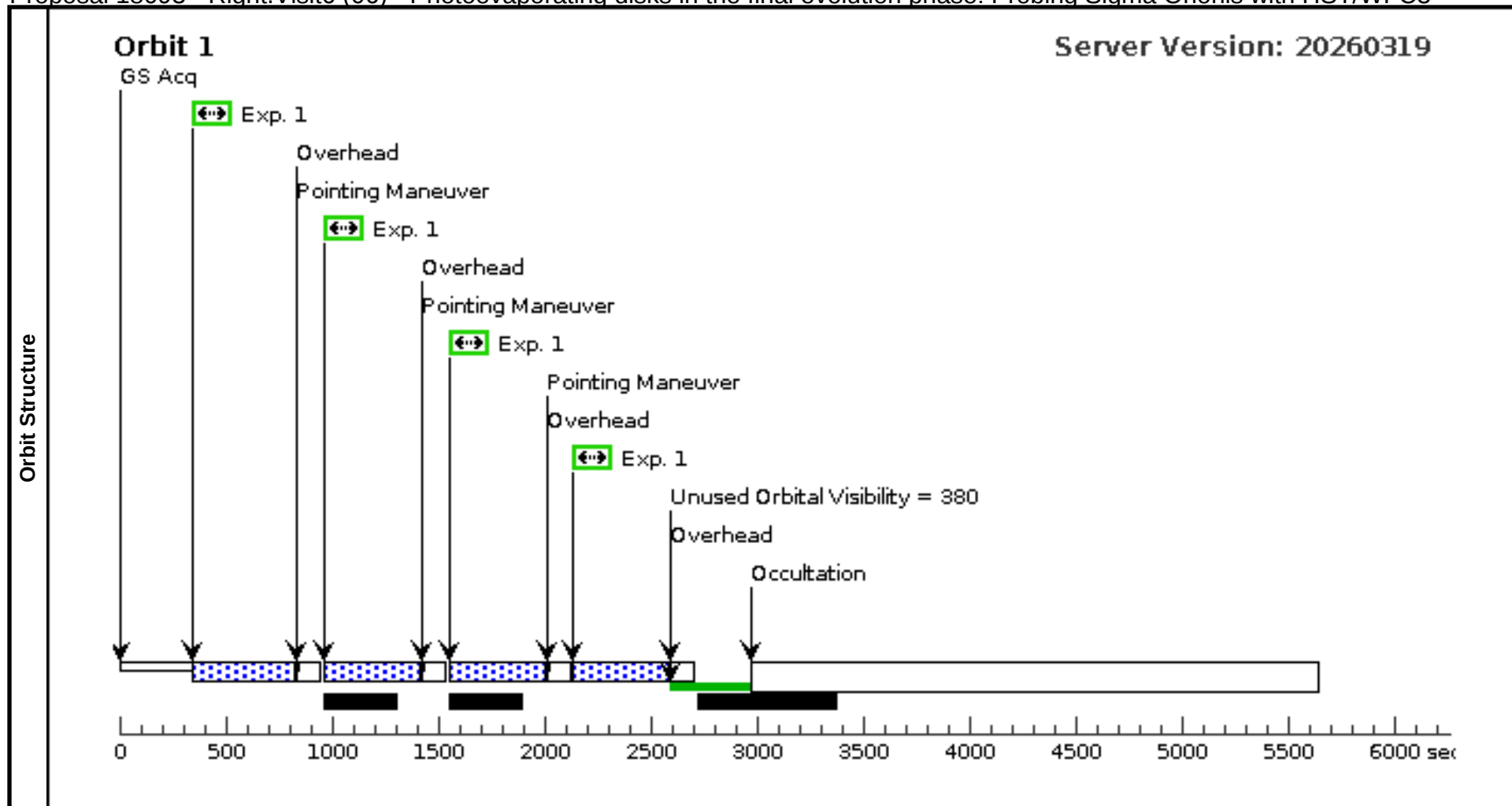
Proposal 18093 - Right.Visit5 (05) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, Right.Visit5 (05), implementation										Thu Jul 02 13:00:18 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=2 Line Spacing=0.8		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	W96-RJ053833-0236	RA: 05 38 33.5400 (84.6397500d) Dec: -02 35 56.30 (-2.59897d) Equinox: J2000		Proper Motion RA: 1.988730393638058E-5 sec of time/yr Proper Motion Dec: 8.55E-4 arcsec/yr Epoch of Position: 2015.5		V=16.39		Reference Frame: SIMBAD		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[PRE-MAIN SEQUENCE STAR] Extended=NO										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(1) W96-RJ053833-0236	WFC3/UVIS, ACCUM, UVIS-CENTER	F631N	FLASH=16		Pattern 3, Exps 1-1 in Right.Visit5 (05) (3)	450 Secs (1800 Secs)		[1]
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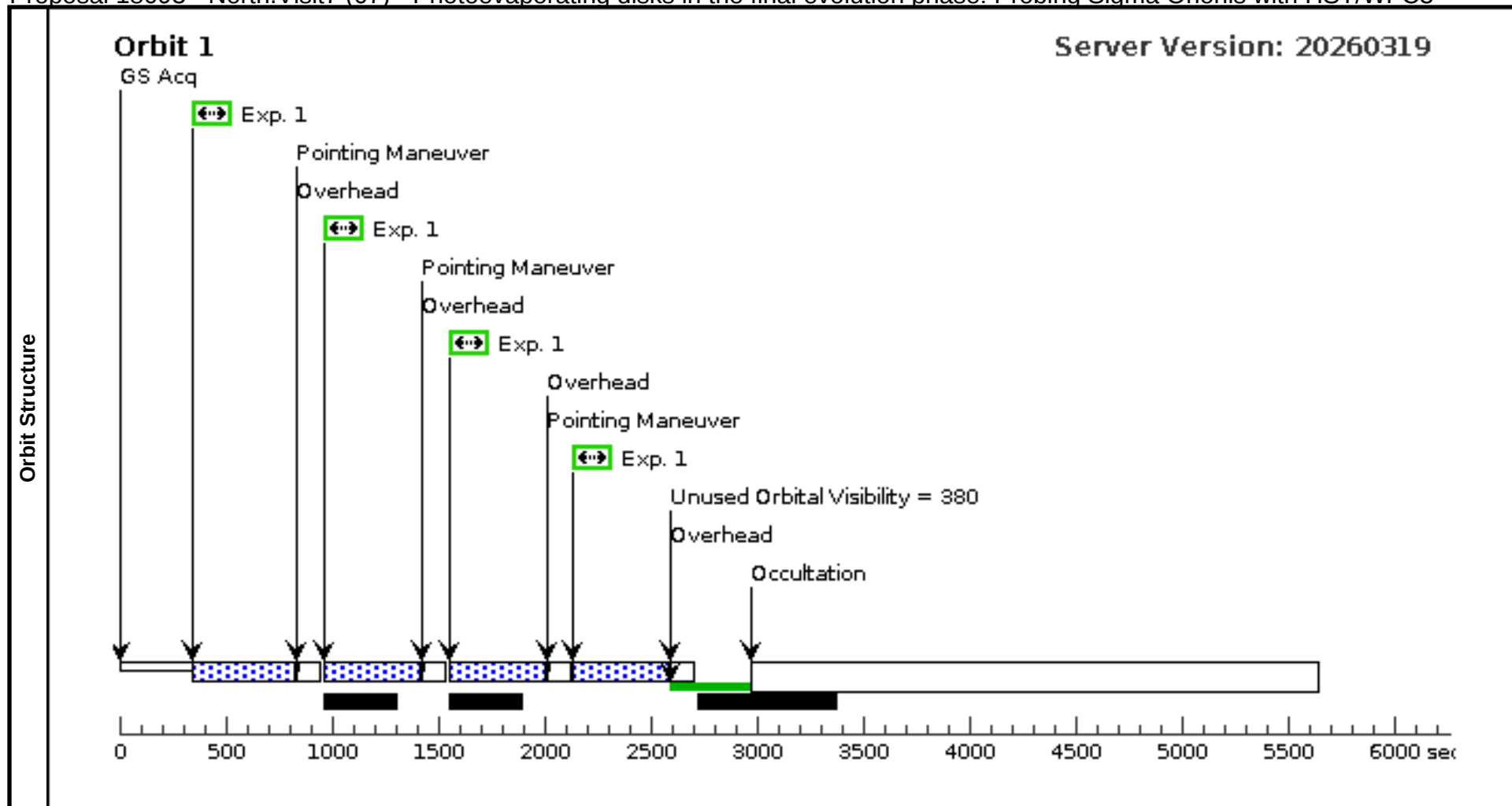
Proposal 18093 - Right.Visit6 (06) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, Right.Visit6 (06), implementation										Thu Jul 02 13:00:19 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
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Purpose=DITHER		Pattern Orientation=23.884									
Number Of Points=4		Angle Between Sides=81.785									
Point Spacing=2		Center Pattern=false									
Line Spacing=0.8											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	W96-RJ053833-0236	RA: 05 38 33.5400 (84.6397500d)		Proper Motion RA: 1.988730393638058E-5		V=16.39		Reference Frame: SIMBAD		
			Dec: -02 35 56.30 (-2.59897d)		sec of time/yr						
			Equinox: J2000		Proper Motion Dec: 8.55E-4 arcsec/yr						
			Epoch of Position: 2015.5								
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[PRE-MAIN SEQUENCE STAR]											
Extended=NO											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(1) W96-RJ053833-0236	WFC3/UVIS, ACCUM, UVIS-CENTER	F658N	FLASH=16		Pattern 3, Exps 1-1 in Right.Visit6 (06) (3)	450 Secs (1800 Secs)		[1]
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[>=>(Pattern 4)]											



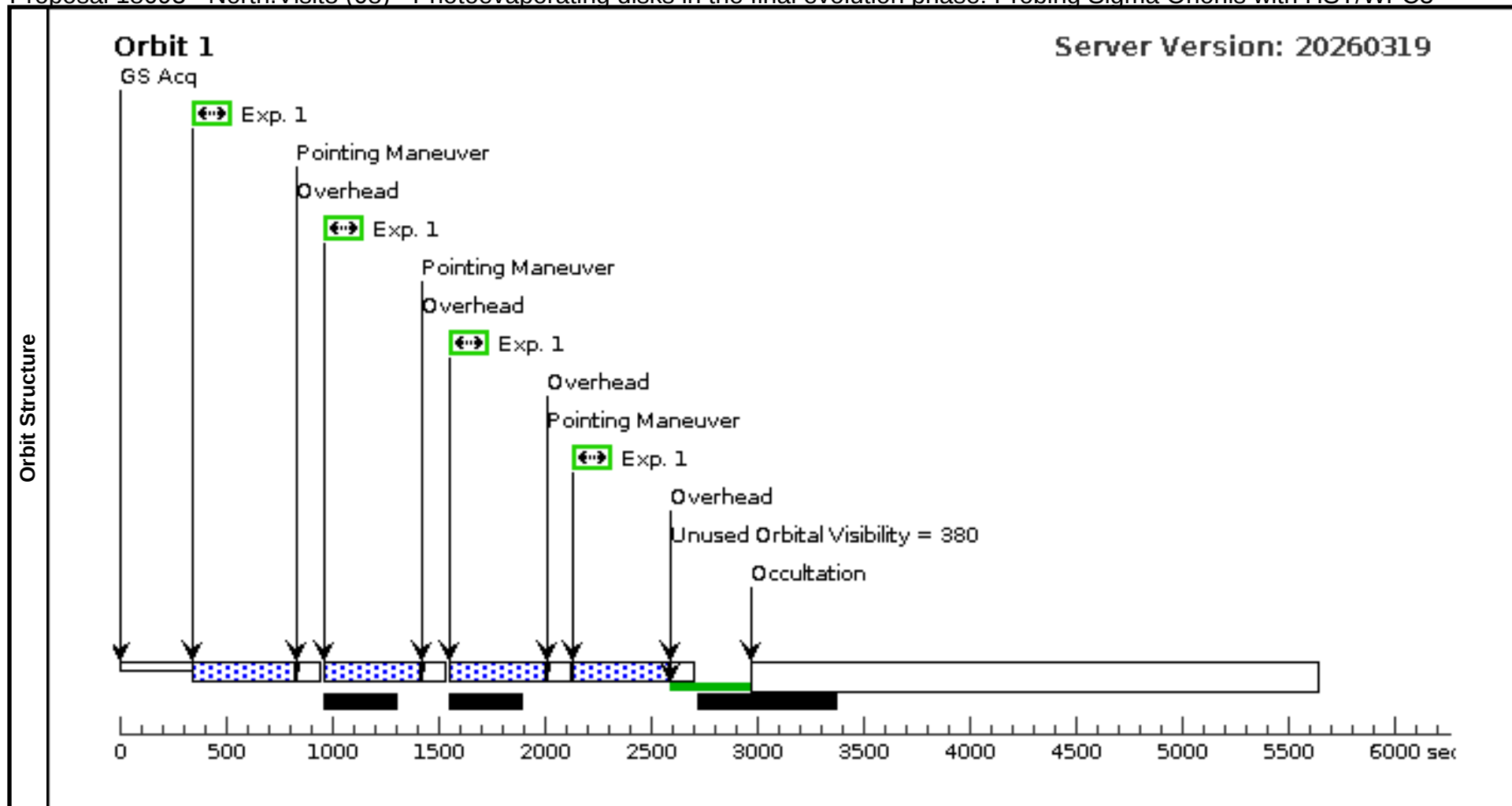
Proposal 18093 - North.Visit7 (07) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, North.Visit7 (07), implementation										Thu Jul 02 13:00:19 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX		Coordinate Frame=POS-TARG						(1)	
Purpose=DITHER		Pattern Orientation=23.884									
Number Of Points=4		Angle Between Sides=81.785									
Point Spacing=2		Center Pattern=false									
Line Spacing=0.8											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(6)	HARO-5-13	RA: 05 38 40.2744 (84.6678100d)		Proper Motion RA: 5.8122214595734707E-5		V=15.49		Reference Frame: SIMBAD		
			Dec: -02 30 18.57 (-2.50516d)		sec of time/yr						
			Equinox: J2000		Proper Motion Dec: -6.099999609432416E-4						
					arcsec/yr						
		Epoch of Position: 2015.5									
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[PRE-MAIN SEQUENCE STAR]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(6) HARO-5-13	WFC3/UVIS, ACCUM, UVIS2-FIX	F656N	FLASH=16		Pattern 3, Exps 1-1 in North.Visit7 (07) (3)	450 Secs (1800 Secs)		[1]
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									[=>(Pattern 3)]		
		[=>(Pattern 4)]									



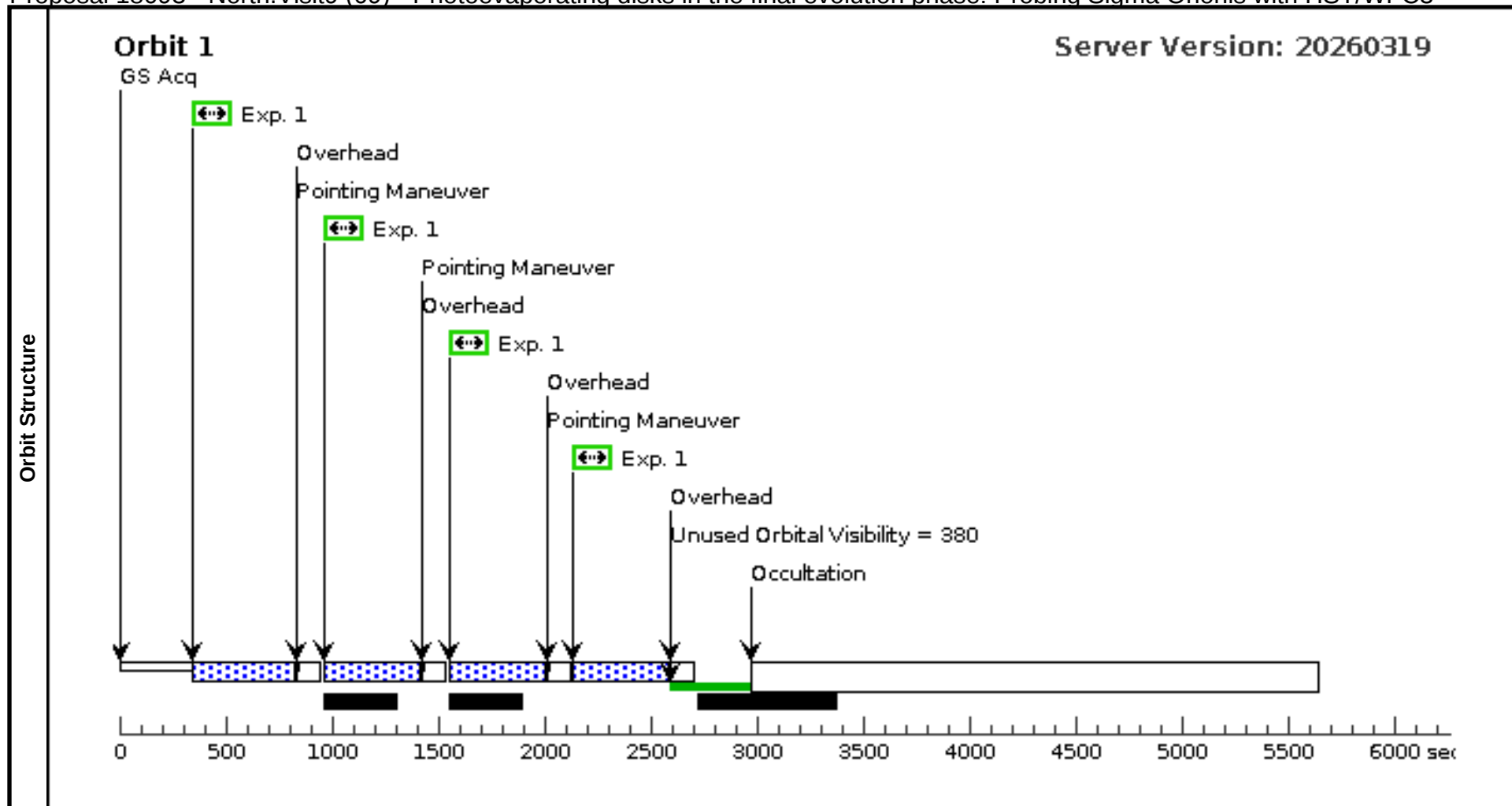
Proposal 18093 - North.Visit8 (08) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, North.Visit8 (08), implementation										Thu Jul 02 13:00:19 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX		Coordinate Frame=POS-TARG						(1)	
Purpose=DITHER		Pattern Orientation=23.884									
Number Of Points=4		Angle Between Sides=81.785									
Point Spacing=2		Center Pattern=false									
Line Spacing=0.8											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(6)	HARO-5-13	RA: 05 38 40.2744 (84.6678100d)		Proper Motion RA: 5.8122214595734707E-5		V=15.49		Reference Frame: SIMBAD		
			Dec: -02 30 18.57 (-2.50516d)		sec of time/yr						
			Equinox: J2000		Proper Motion Dec: -6.099999609432416E-4						
					arcsec/yr						
		Epoch of Position: 2015.5									
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[PRE-MAIN SEQUENCE STAR]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(6) HARO-5-13	WFC3/UVIS, ACCUM, UVIS2-FIX	F631N	FLASH=16		Pattern 3, Exps 1-1 in North.Visit8 (08) (3)	450 Secs (1800 Secs)		[1]
									[=>(Pattern 1)]		
									[=>(Pattern 2)]		
									[=>(Pattern 3)]		
		[=>(Pattern 4)]									



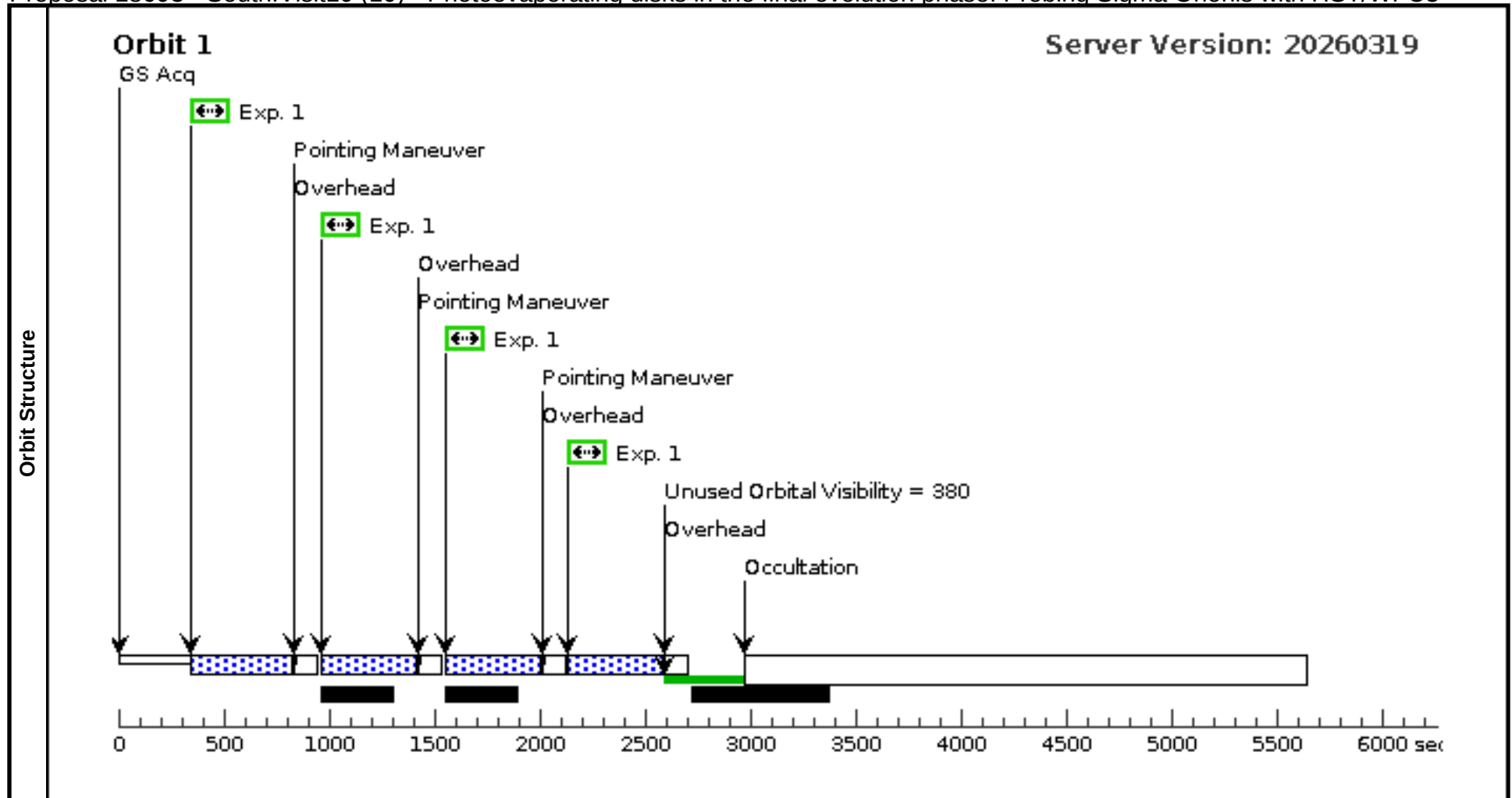
Proposal 18093 - North.Visit9 (09) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, North.Visit9 (09), implementation										Thu Jul 02 13:00:19 GMT 2026	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: (none)											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures		
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=2 Line Spacing=0.8		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(6)	HARO-5-13	RA: 05 38 40.2744 (84.6678100d) Dec: -02 30 18.57 (-2.50516d) Equinox: J2000		Proper Motion RA: 5.8122214595734707E-5 sec of time/yr Proper Motion Dec: -6.099999609432416E-4 arcsec/yr Epoch of Position: 2015.5		V=15.49		Reference Frame: SIMBAD			
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
	Category=STAR Description=[PRE-MAIN SEQUENCE STAR]											
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(6) HARO-5-13	WFC3/UVIS, ACCUM, UVIS2-FIX		F658N	FLASH=16		Pattern 3, Exps 1-1 in North.Visit9 (09) (3)	450 Secs (1800 Secs)		
										[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]



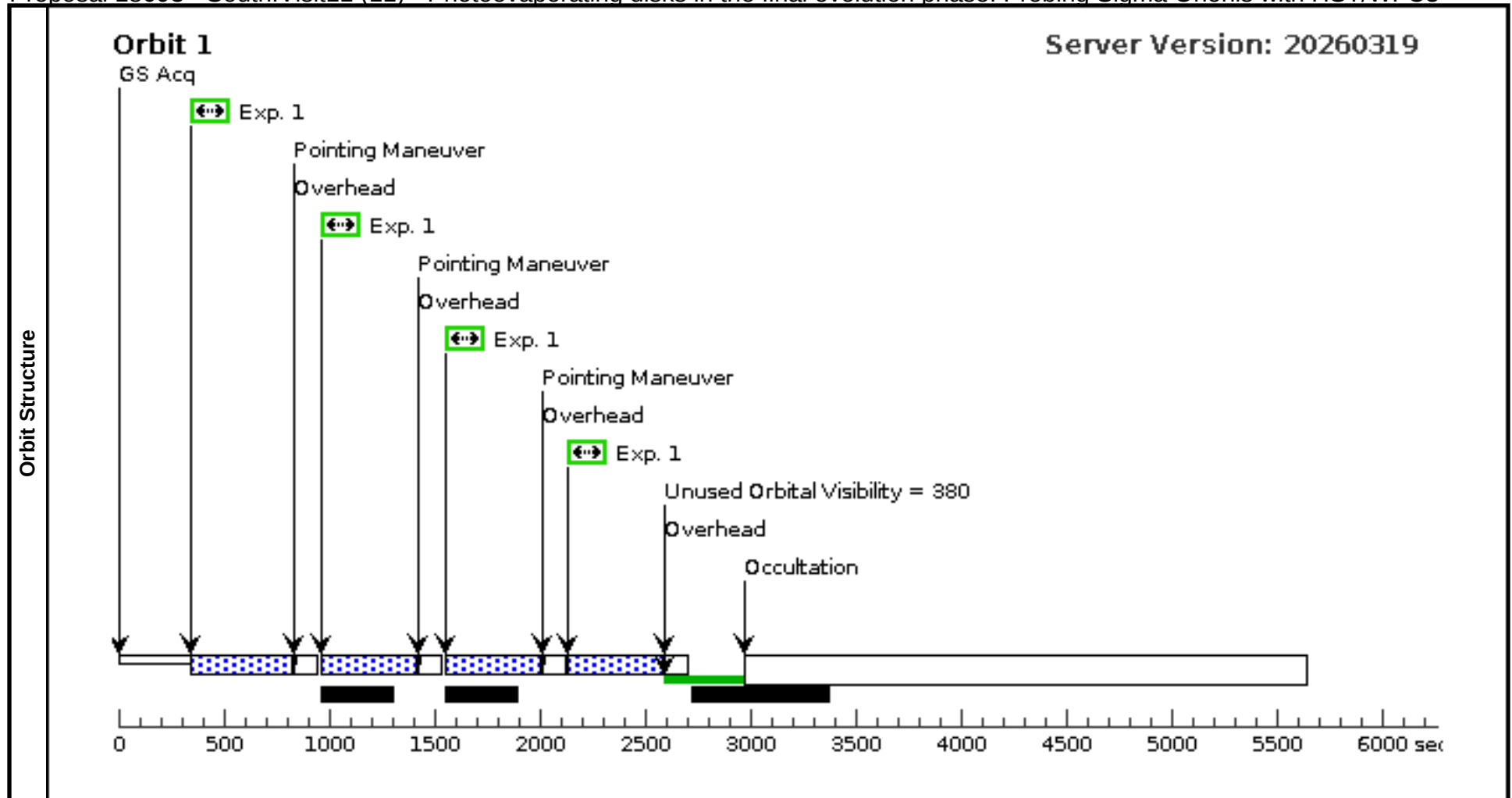
Proposal 18093 - South.Visit10 (10) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, South.Visit10 (10), implementation										Thu Jul 02 13:00:19 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX		Coordinate Frame=POS-TARG BOX						(1)	
Purpose=DITHER		Pattern Orientation=23.884									
Number Of Points=4		Angle Between Sides=81.785									
Point Spacing=2		Center Pattern=false									
Line Spacing=0.8											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	BG-ORI	RA: 05 39 25.2031 (84.8550129d)		Proper Motion RA: 9.737254533676857E-5		V=14.02		Reference Frame: SIMBAD		
			Dec: -02 38 22.06 (-2.63946d)		sec of time/yr						
			Equinox: J2000		Proper Motion Dec: -0.001009000038720842						
					arcsec/yr						
Epoch of Position: 2015.5											
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.											
Category=STAR											
Description=[PRE-MAIN SEQUENCE STAR]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(5) BG-ORI	WFC3/UVIS, ACCUM, UVIS1-FIX	F656N	FLASH=16		Pattern 3, Exps 1-1 in South.Visit10 (10) (3)	450 Secs (1800 Secs)		[1]
									[==>(Pattern 1)]		
									[==>(Pattern 2)]		
									[==>(Pattern 3)]		
[==>(Pattern 4)]											



Proposal 18093 - South.Visit11 (11) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, South.Visit11 (11), implementation										Thu Jul 02 13:00:19 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=2 Line Spacing=0.8		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	BG-ORI	RA: 05 39 25.2031 (84.8550129d) Dec: -02 38 22.06 (-2.63946d) Equinox: J2000		Proper Motion RA: 9.737254533676857E-5 sec of time/yr Proper Motion Dec: -0.001009000038720842 arcsec/yr Epoch of Position: 2015.5		V=14.02		Reference Frame: SIMBAD		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[PRE-MAIN SEQUENCE STAR]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(5) BG-ORI	WFC3/UVIS, ACCUM, UVIS1-FIX	F631N	FLASH=16		Pattern 3, Exps 1-1 in South.Visit11 (11) (3)	450 Secs (1800 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	



Proposal 18093 - South.Visit12 (12) - Photoevaporating disks in the final evolution phase: Probing Sigma Orionis with HST/WFC3

Visit	Proposal 18093, South.Visit12 (12), implementation										Thu Jul 02 13:00:19 GMT 2026
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: (none)										
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=2 Line Spacing=0.8		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	BG-ORI	RA: 05 39 25.2031 (84.8550129d) Dec: -02 38 22.06 (-2.63946d) Equinox: J2000		Proper Motion RA: 9.737254533676857E-5 sec of time/yr Proper Motion Dec: -0.001009000038720842 arcsec/yr Epoch of Position: 2015.5		V=14.02		Reference Frame: SIMBAD		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Category=STAR Description=[PRE-MAIN SEQUENCE STAR]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(5) BG-ORI	WFC3/UVIS, ACCUM, UVIS1-FIX	F658N	FLASH=16		Pattern 3, Exps 1-1 in South.Visit12 (12) (3)	450 Secs (1800 Secs)		
									[==>(Pattern 1)]		[1]
									[==>(Pattern 2)]		
									[==>(Pattern 3)]		
								[==>(Pattern 4)]			

