



17461 - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-up campaign

Cycle: 31, Proposal Category: GO

(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) PASSAGE-PAR21	WFC3/UVIS	2	17-Jan-2025 13:00:13.0	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>
1A	(1) PASSAGE-PAR21	ACS/WFC	1	17-Jan-2025 13:00:13.0	yes
02	(2) PASSAGE-PAR16	WFC3/UVIS	2	17-Jan-2025 13:00:14.0	yes
2A	(2) PASSAGE-PAR16	ACS/WFC	1	17-Jan-2025 13:00:14.0	yes
03	(3) PASSAGE-PAR19	WFC3/UVIS	2	17-Jan-2025 13:00:15.0	yes
3A	(3) PASSAGE-PAR19	ACS/WFC	1	17-Jan-2025 13:00:15.0	yes
04	(8) PASSAGE-PAR34-WFC3	WFC3/UVIS	2	17-Jan-2025 13:00:16.0	yes
4A	(4) PASSAGE-PAR34-ACS	ACS/WFC	1	17-Jan-2025 13:00:16.0	yes
05	(5) PASSAGE-PAR40	WFC3/UVIS	2	17-Jan-2025 13:00:17.0	yes
5C	(5) PASSAGE-PAR40	WFC3/UVIS	1	17-Jan-2025 13:00:17.0	yes
5A	(5) PASSAGE-PAR40	ACS/WFC	1	17-Jan-2025 13:00:17.0	yes
5B	(5) PASSAGE-PAR40	ACS/WFC	1	17-Jan-2025 13:00:18.0	yes
06	(6) PASSAGE-PAR42	WFC3/UVIS	2	17-Jan-2025 13:00:18.0	yes
6B	(6) PASSAGE-PAR42	WFC3/UVIS	1	17-Jan-2025 13:00:19.0	yes
6A	(6) PASSAGE-PAR42	ACS/WFC	1	17-Jan-2025 13:00:19.0	yes
07	(7) PASSAGE-PAR44	WFC3/UVIS	2	17-Jan-2025 13:00:20.0	yes
7A	(7) PASSAGE-PAR44	ACS/WFC	1	17-Jan-2025 13:00:20.0	yes

24 Total Orbits Used

ABSTRACT

The first round of JWST data are already revolutionizing the field of galaxy evolution. The large amount of slitless spectroscopic data collected in Cy1 are well poised to extend our knowledge about galaxies at the cosmic high-noon ($z=1$ to 3) down to unprecedented stellar masses of $\sim 10^8$ Msol. The pure-parallel PASSAGE program is currently the largest-area survey with contiguous, deep 1-2.2 micron JWST grism data. Unfortunately, the corresponding photometric coverage is severely limited making it extremely challenging to accurately recover fundamental physical properties of galaxies such as their stellar masses and dust attenuation, which are vital for answering the majority of galaxy evolution science questions.

Here, we propose to follow-up 7 premier PASSAGE fields with 3-band grism coverage (1-2.2 micron) from JWST to obtain the crucial rest-frame

UV imaging needed to accurately measure their physical properties. We request a combination of WFC3/UVIS F475W, F625W and ACS/WFC F814W imaging (1 orbit each) for a total of 21 orbits (3 per field). These data in combination with PASSAGE will enable: (i) accurate stellar mass estimates for hundreds of galaxies over $0.5 < z < 3.5$ and constrain the low-mass end of the star-forming main sequence and mass-metallicity relation; (ii) spatially resolved comparison between UV and H α to reveal a resolved picture of star-formation burstiness in galaxies and their mass assembly; and (iii) accurate measurement of the stellar dust attenuation and the relative strengths of stellar vs. nebular dust components in star-forming galaxies at $z \sim 2$.

OBSERVING DESCRIPTION

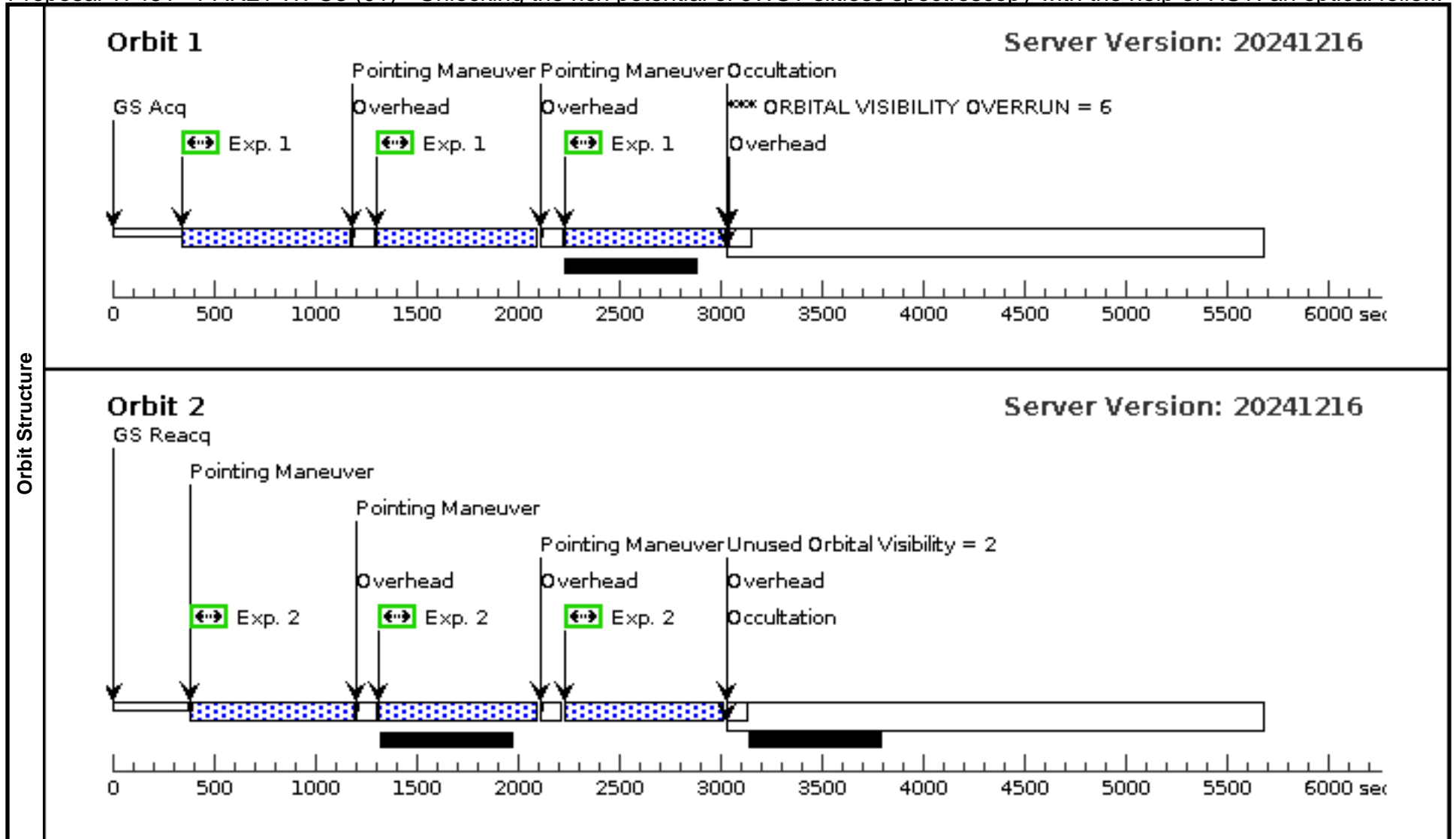
This program is designed to acquire follow-up HST optical imaging for seven fields from the JWST-PASSAGE survey, which is a pure-parallel JWST/NIRISS slitless-spectroscopy program obtaining grism data in up to 3 filters (F115W, F150W, F200W). This HST follow-up program specifically prioritizes the best PASSAGE fields that have grism data in all 3 filters to acquire complementary and crucial optical imaging.

This follow-up program aims to obtain high-resolution imaging with WFC3/UVIS in F475W, F625W filters and with ACS/WFC in F814W. With 1 orbit of imaging in each filter, these observations will reach an imaging depth of 27.3, 27.0, 27.1 AB in F475W, F625W, F814W respectively, which is comparable to the depths of PASSAGE data for the selected fields. We opt to use WFC3/UVIS for F475W and F625W for its better imaging quality and fewer hot pixels while maintaining similar throughput as ACS/WFC, whereas ACS/WFC outperforms with higher throughput for the F814W filter. The total integration time for our observations is split into 3 dithered frames for each filter. Given our exposure times, we do not need to apply post-flash. The total orbit allocation adds to 21 orbits -- 1 orbit per each of the 3 imaging filters for a total of 7 target fields.

The field-of-view for both WFC3/UVIS and ACS/WFC is large enough compared to JWST/NIRISS such that we do not require telescope orient constraints for our observations. We specifically target the field centers of the JWST observations and use the UVIS-CENTER and WFCENTER apertures for WFC3/UVIS and ACS/WFC observations, respectively, to ensure maximal overlap between the HST filters as well as with the existing JWST data.

Proposal 17461 - PAR21 WFC3 (01) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Visit	Proposal 17461, PAR21 WFC3 (01), completed Fri Jan 17 18:00:20 GMT 2025 Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	(PAR21 WFC3 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern		Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	PASSAGE-PAR21 Alt Name1: 1176-281	RA: 10 44 39.2074 (161.1633642d) Dec: +33 55 45.72 (33.92937d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) PASSAGE-PAR 21	(1) PASSAGE-PAR 21	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	FLASH=3		Pattern 1, Exps 1-1 i n PAR21 WFC3 (01) (1)	796 Secs (2388 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2	(1) PASSAGE-PAR 21	(1) PASSAGE-PAR 21	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W				Pattern 1, Exps 2-2 i n PAR21 WFC3 (01) (1)	787 Secs (2361 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]



Proposal 17461 - PAR21 ACS (1A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-...

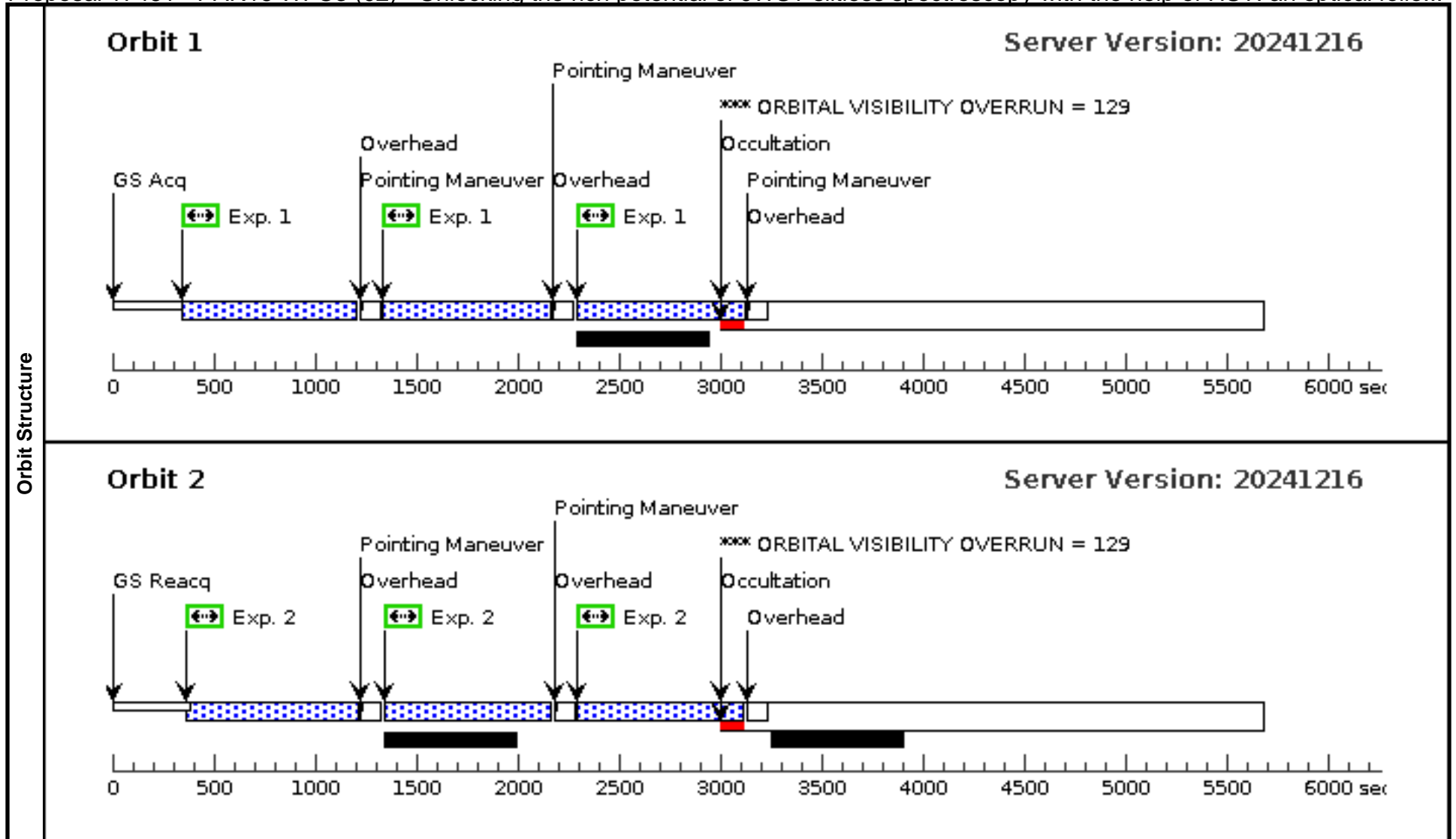
Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR21 ACS (1A), completed Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: (none)									
	(PAR21 ACS (1A)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE (PAR21 ACS (1A)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Exposure 1 (Pattern 2, Exps 1-1 in PAR21 ACS (1A)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	PASSAGE-PAR21 Alt Name1: 1176-281	RA: 10 44 39.2074 (161.1633642d) Dec: +33 55 45.72 (33.92937d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) PASSAGE-PAR21	ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ; GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in PAR21 ACS (1A) (2)	741 Secs (2223 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
Orbit Structure	Orbit 1 Server Version: 20241216									
	<p>The diagram shows a horizontal timeline from 0 to 6000 seconds. Key events are marked with arrows: GS Acq at ~400s, three exposures (Exp. 1) at ~1400s, ~2300s, and ~3100s, each preceded by a 'Pointing Maneuver'. An 'Occultation' begins at ~3100s. A red bar labeled 'ORBITAL VISIBILITY OVERRUN = 116' starts at ~3000s and ends at ~3500s. The timeline is divided into segments by vertical lines, with a blue checkered pattern under the exposure segments.</p>									

Proposal 17461 - PAR16 WFC3 (02) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR16 WFC3 (02), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 209D TO 112 D									
	Diagnosics (PAR16 WFC3 (02)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE (PAR16 WFC3 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PAR16 WFC3 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Exposure 1 (Pattern 1, Exps 1-1 in PAR16 WFC3 (02)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.									
Patterns	#	Primary Pattern	Secondary Pattern		Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PASSAGE-PAR16 Alt Name1: 1619-002	RA: 10 10 37.9699 (152.6582079d) Dec: -04 45 5.54 (-4.75154d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
<i>Comments:</i> Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) PASSAGE-PAR16	(2) PASSAGE-PAR16	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W		GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 in PAR16 WFC3 (02) (1)	829 Secs (2487 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2	(2) PASSAGE-PAR16	(2) PASSAGE-PAR16	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W			Pattern 1, Exps 2-2 in PAR16 WFC3 (02) (1)	826 Secs (2478 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]	



Proposal 17461 - PAR16 ACS (2A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-...

Fri Jan 17 18:00:21 GMT 2025

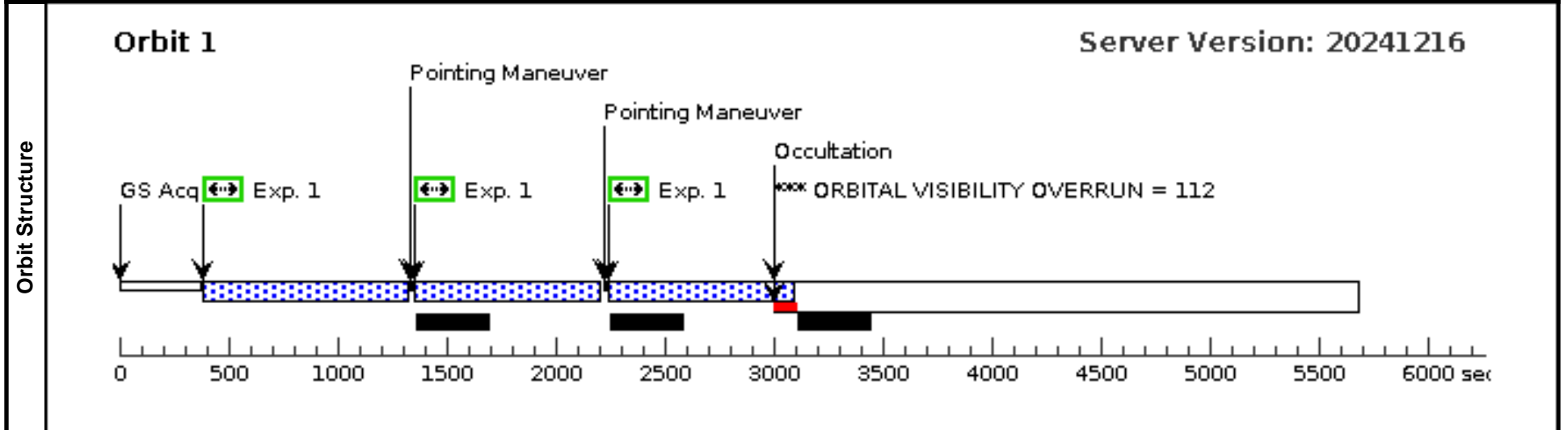
Visit	Proposal 17461, PAR16 ACS (2A), completed		
	Diagnostic Status: Warning		
	Scientific Instruments: ACS/WFC		
	Special Requirements: ORIENT 209D TO 112 D		

Diagnostics	(PAR16 ACS (2A)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE		
	(PAR16 ACS (2A)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN		
	(Exposure 1 (Pattern 2, Exps 1-1 in PAR16 ACS (2A)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

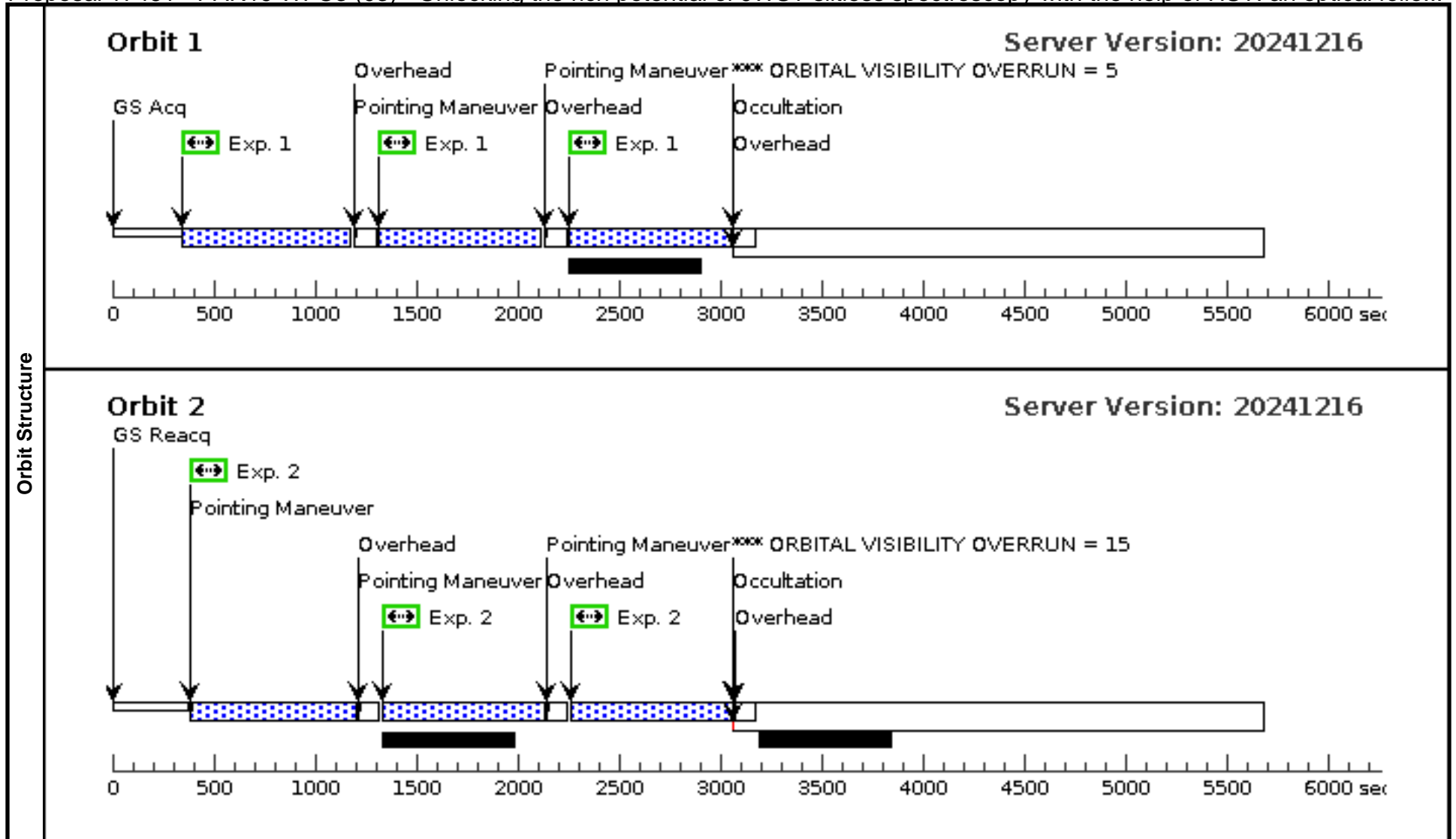
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	PASSAGE-PAR16	RA: 10 10 37.9699 (152.6582079d) Dec: -04 45 5.54 (-4.75154d) Equinox: J2000			V=27.0+/-0.3
<i>Comments:</i> Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]						

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) PASSAGE-PAR16	(2) PASSAGE-PAR16	ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ; GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in PAR16 ACS (2A) (2)	730 Secs (2190 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]



Proposal 17461 - PAR19 WFC3 (03) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Visit	Proposal 17461, PAR19 WFC3 (03), completed Fri Jan 17 18:00:21 GMT 2025 Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 238D TO 208 D									
	(PAR19 WFC3 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PAR19 WFC3 (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER- Coordinate Frame=POS-TARG LINE-3PT Pattern Orientation=46.84 Purpose=DITHER Angle Between Sides= Number Of Points=3 Center Pattern=false Point Spacing=3.025 Line Spacing=		(1), (2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	PASSAGE-PAR19 Alt Name1: 2654-001	RA: 08 41 27.5995 (130.3649979d) Dec: +48 36 11.26 (48.60313d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) PASSAGE-PAR19	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	FLASH=3		Pattern 1, Exps 1-1 in PAR19 WFC3 (03) (1)	805 Secs (2415 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2		(3) PASSAGE-PAR19	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W				Pattern 1, Exps 2-2 in PAR19 WFC3 (03) (1)	802 Secs (2406 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]



Proposal 17461 - PAR 19 ACS (3A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow...

Fri Jan 17 18:00:21 GMT 2025

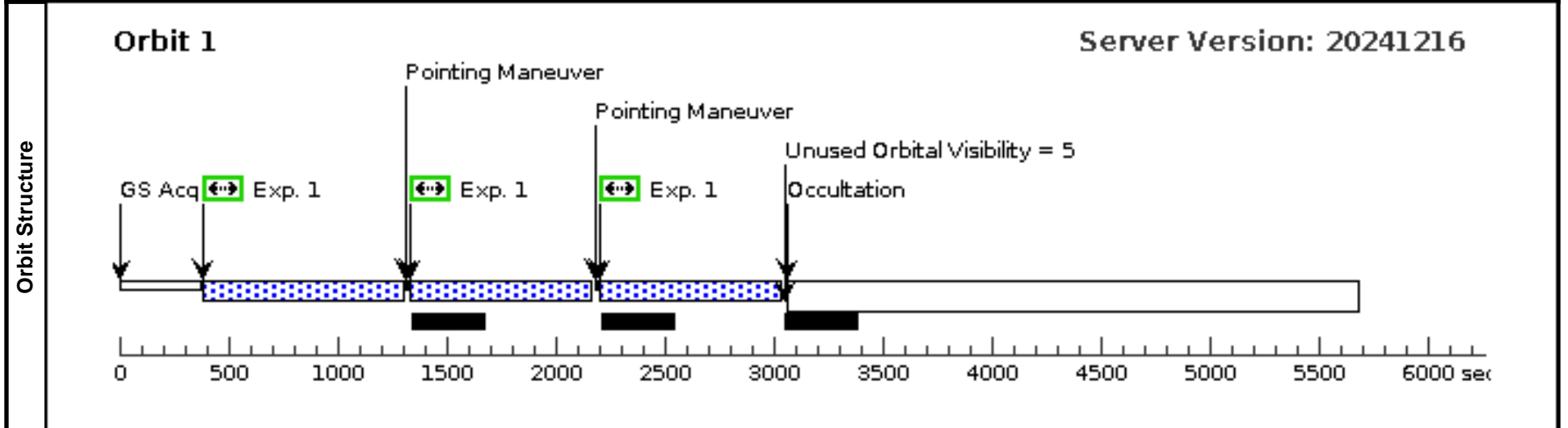
Visit	Proposal 17461, PAR 19 ACS (3A), completed		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: ORIENT 238D TO 208 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	PASSAGE-PAR19	RA: 08 41 27.5995 (130.3649979d) Alt Name1: 2654-001 Equinox: J2000	Dec: +48 36 11.26 (48.60313d)		V=27.0+/-0.3

Comments:
 Category=UNIDENTIFIED
 Description=[BLANK FIELD, PARALLEL FIELD]

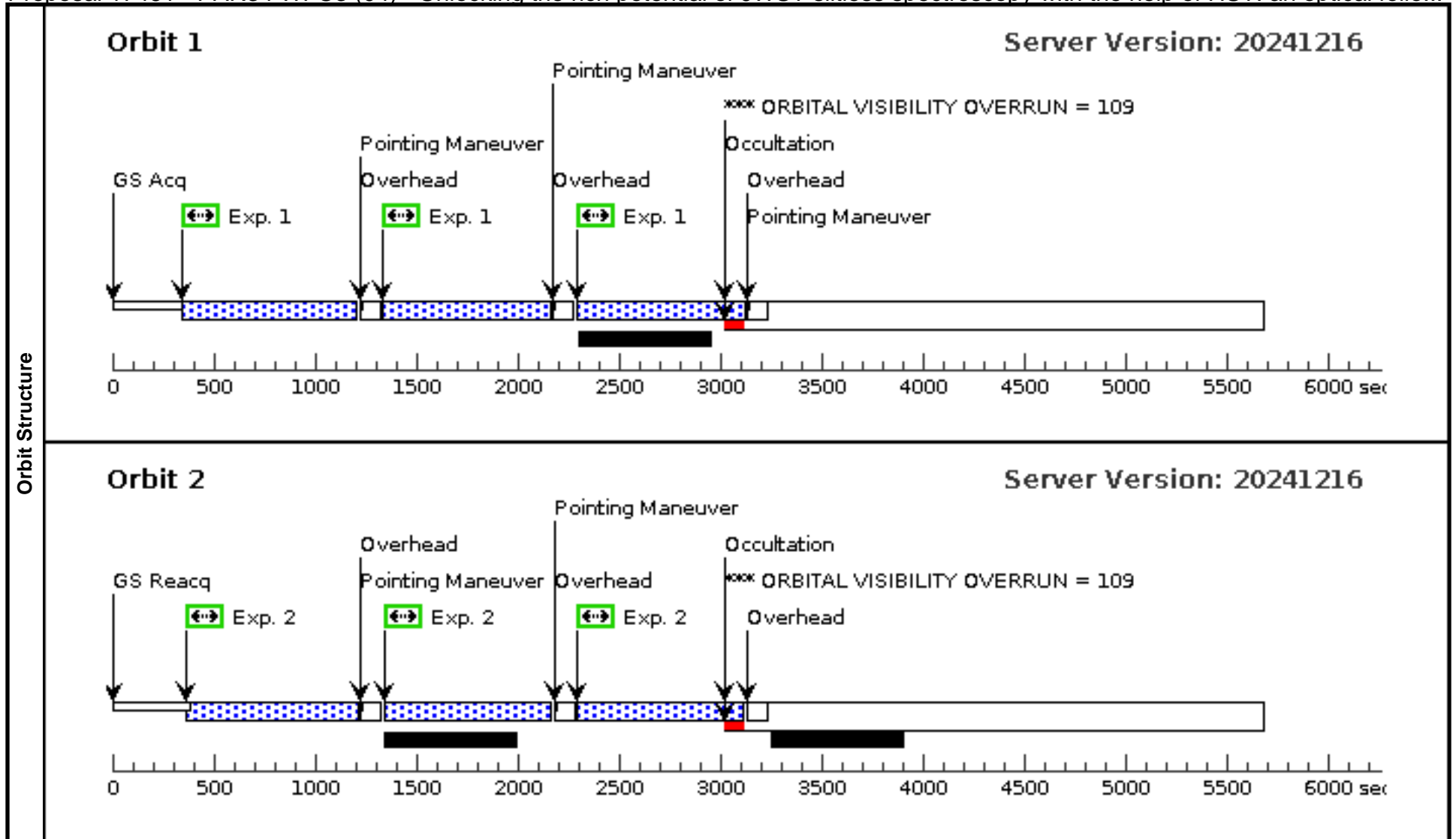
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) PASSAGE-PAR19		ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ	Pattern 2, Exps 1-1 in PAR 19 ACS (3A) (2)	711 Secs (2133 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]



Proposal 17461 - PAR34 WFC3 (04) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR34 WFC3 (04), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: ORIENT 172.1D TO 186.1 D									
	(PAR34 WFC3 (04)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE (PAR34 WFC3 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PAR34 WFC3 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Exposure 1 (Pattern 1, Exps 1-1 in PAR34 WFC3 (04)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.									
Patterns	#	Primary Pattern	Secondary Pattern		Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	PASSAGE-PAR34-WFC3 Alt Name1: 2566-001	RA: 12 41 35.5482 (190.3981175d) Dec: +22 30 13.28 (22.50369d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Target for ACS visit 4A Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(8) PASSAGE-PAR34-WFC3	(8) PASSAGE-PAR34-WFC3	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W		GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in PAR34 WFC3 (04) (1)	830 Secs (2490 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2	(8) PASSAGE-PAR34-WFC3	(8) PASSAGE-PAR34-WFC3	(8) PASSAGE-PAR34-WFC3	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W			Pattern 1, Exps 2-2 in PAR34 WFC3 (04) (1)	827 Secs (2481 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]



Proposal 17461 - PAR34 ACS (4A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-...

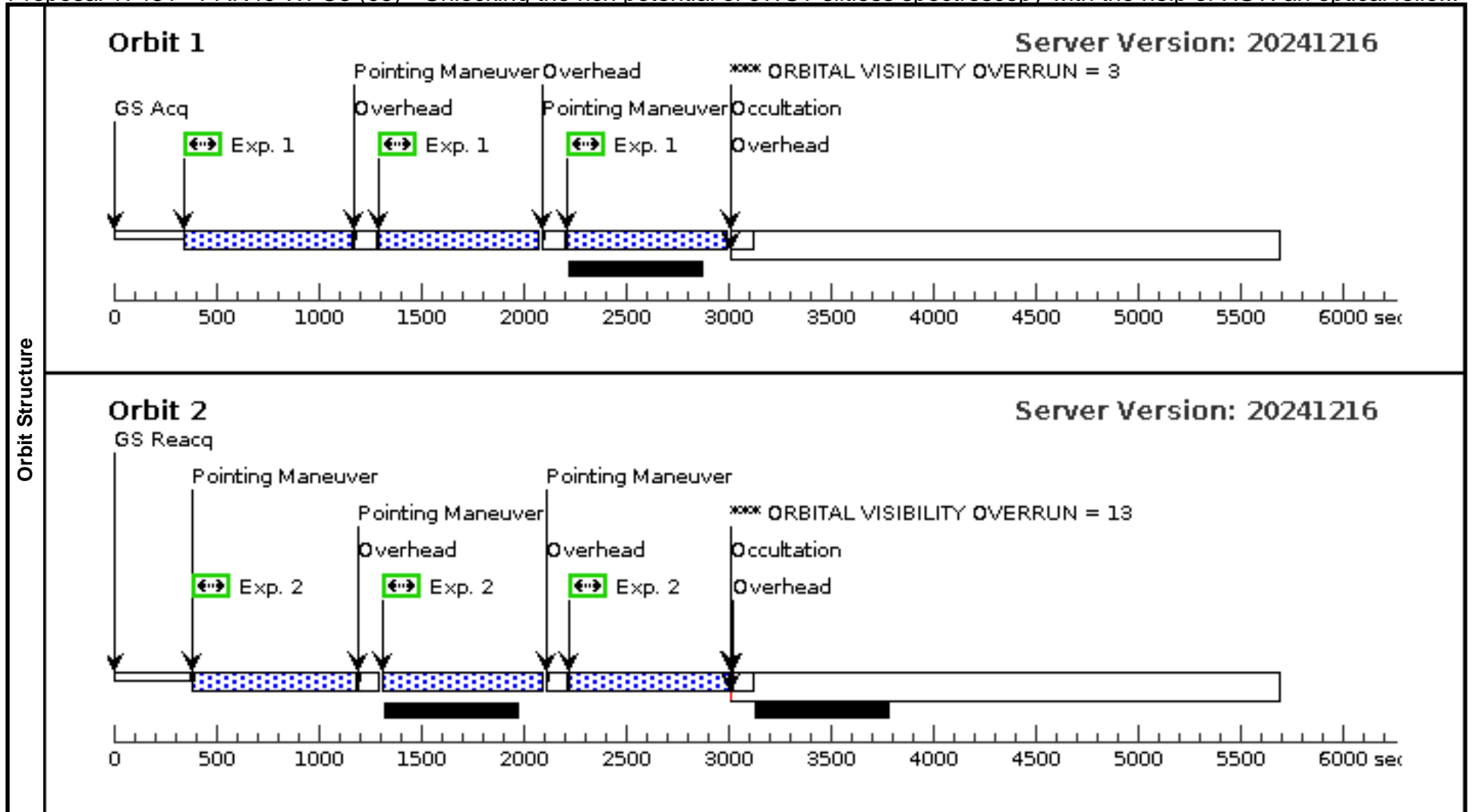
Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR34 ACS (4A), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)								
	Patterns	# (2) Primary Pattern Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	Secondary Pattern	Exposures (1)				
Fixed Targets	# (4) Name: PASSAGE-PAR34-ACS Alt Name1: 2566-001 Comments: Target for ACS visit 4A Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]	Target Coordinates RA: 12 41 36.6482 (190.4027008d) Dec: +22 29 58.28 (22.49952d) Equinox: J2000	Targ. Coord. Corrections	Fluxes V=27.0+/-0.3	Miscellaneous Reference Frame: ICRS				
Exposures	# 1 Label (4) PASSAGE-PAR34-ACS	Target ACS/WFC, ACCUM, WFCENTER	Config,Mode,Aperture F814W	Spectral Els. NEW OBSET FULL ACQ	Opt. Params. Special Reqs.	Groups Pattern 2, Exps 1-1 in PAR34 ACS (4A) (2)	Exp. Time (Total)/[Actual Dur.] 700 Secs (2100 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	Orbit [1]	
Orbit Structure	<div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20241216 </div> <p>The diagram illustrates the orbit structure for Orbit 1, showing a timeline from 0 to 6000 seconds. Key events include GS Acq, three exposures (Exp. 1), two pointing maneuvers, and an occultation period. The orbital visibility window is shown as a blue checkered bar, and the occultation period is shown as a black bar. The text 'Unused Orbital Visibility = 4' is present.</p>								

Proposal 17461 - PAR40 WFC3 (05) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR40 WFC3 (05), failed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	(PAR40 WFC3 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PAR40 WFC3 (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern		Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	PASSAGE-PAR40 Alt Name1: 1220-001	RA: 12 05 27.1351 (181.3630629d) Dec: -07 32 12.22 (-7.53673d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) PASSAGE-PAR 40	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	FLASH=3		Pattern 1, Exps 1-1 i n PAR40 WFC3 (05) (1)	787 Secs (2361 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2		(5) PASSAGE-PAR 40	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W			Pattern 1, Exps 2-2 i n PAR40 WFC3 (05) (1)	784 Secs (2352 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]

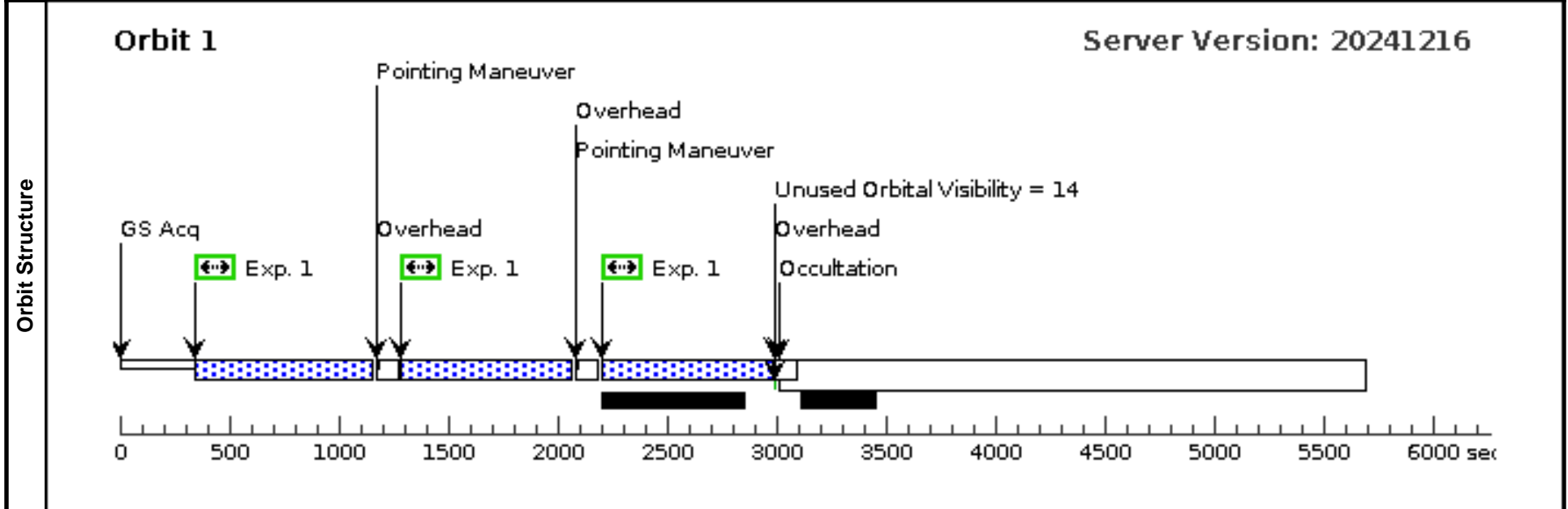


Visit	Proposal 17461, PAR40 WFC3 (5C)		
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: HOPR repeat of second orbit of visit 5.</i>		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	PASSAGE-PAR40	RA: 12 05 27.1351 (181.3630629d)		V=27.0+/-0.3	Reference Frame: ICRS
		Alt Name1: 1220-001	Dec: -07 32 12.22 (-7.53673d)			
			Equinox: J2000			
	<i>Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]</i>					

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) PASSAGE-PAR40	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W			Pattern 1, Exps 1-1 in PAR40 WFC3 (5C) (1)	784 Secs (2352 Secs)	
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]



Proposal 17461 - PAR40 ACS (5A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-...

Fri Jan 17 18:00:21 GMT 2025

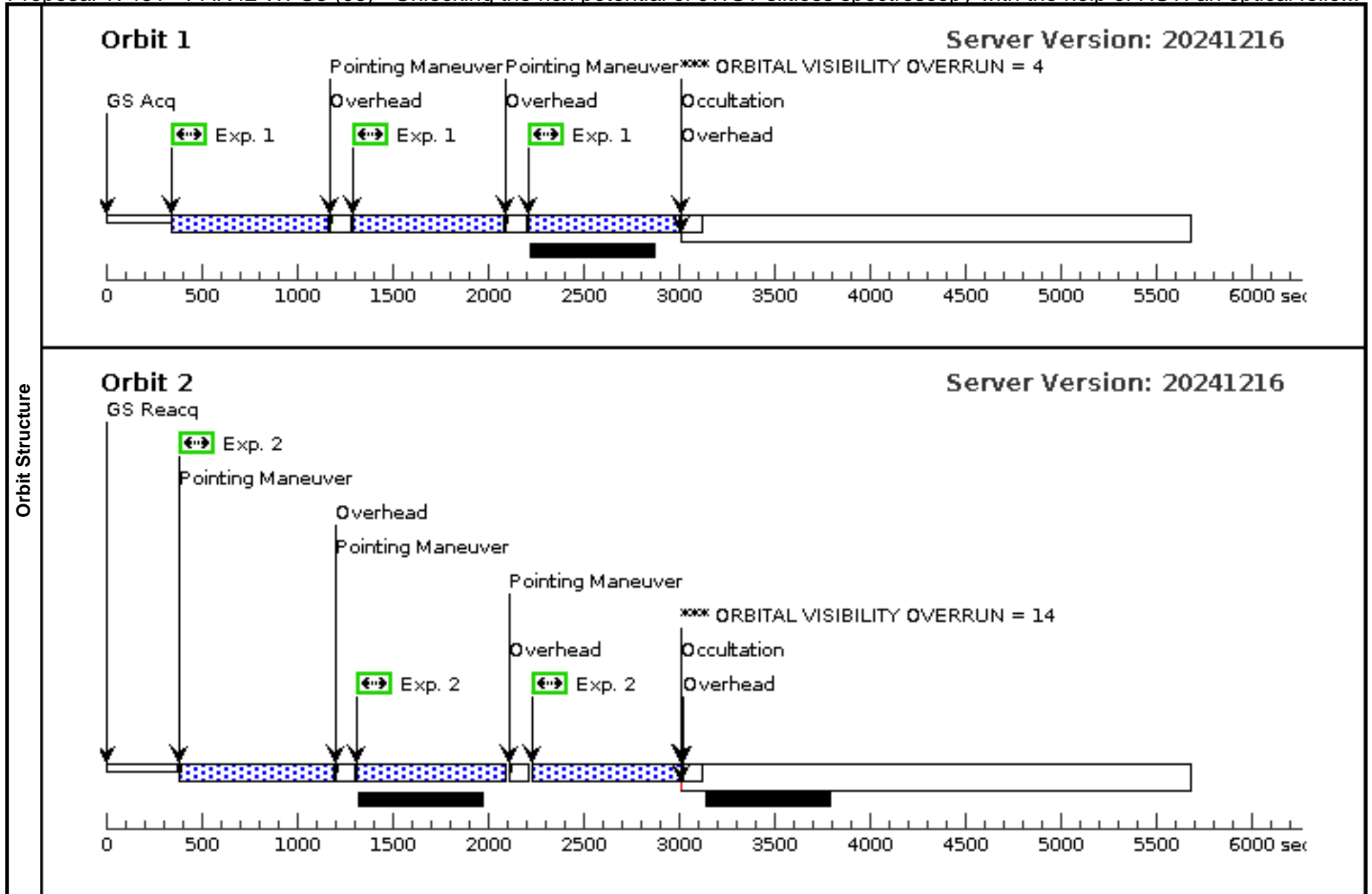
Visit	Proposal 17461, PAR40 ACS (5A), failed Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: (none)										
	(PAR40 ACS (5A)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE (PAR40 ACS (5A)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Exposure 1 (Pattern 2, Exps 1-1 in PAR40 ACS (5A)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.										
Diagnosics											
Patterns	#	Primary Pattern		Secondary Pattern	Exposures						
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(5)	PASSAGE-PAR40 Alt Name1: 1220-001	RA: 12 05 27.1351 (181.3630629d) Dec: -07 32 12.22 (-7.53673d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS					
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	(5) PASSAGE-PAR40	(5) PASSAGE-PAR40	ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ; GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in PAR40 ACS (5A) (2)	730 Secs (2190 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]	
Orbit Structure	Orbit 1 Server Version: 20241216										
	<p>The diagram shows a timeline from 0 to 6000 seconds. Key events include: GS Acq (green box) at ~400s, three Pointing Maneuvers (black bars) at ~1400s, ~2200s, and ~3000s, and an Occultation (red bar) at ~3000s. A note indicates 'ORBITAL VISIBILITY OVERRUN = 107'.</p>										

Visit	Proposal 17461, PAR40 ACS (5B), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) <i>Comments: HOPR repeat of visit 5A</i>																				
	Patterns	<table border="1"> <thead> <tr> <th>#</th> <th>Primary Pattern</th> <th>Secondary Pattern</th> <th>Exposures</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td> Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false </td> <td></td> <td>(1)</td> </tr> </tbody> </table>	#	Primary Pattern	Secondary Pattern	Exposures	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)											
#	Primary Pattern	Secondary Pattern	Exposures																		
(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)																		
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>PASSAGE-PAR40 Alt Name1: 1220-001</td> <td>RA: 12 05 27.1351 (181.3630629d) Dec: -07 32 12.22 (-7.53673d) Equinox: J2000</td> <td></td> <td>V=27.0+/-0.3</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]</i></p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	PASSAGE-PAR40 Alt Name1: 1220-001	RA: 12 05 27.1351 (181.3630629d) Dec: -07 32 12.22 (-7.53673d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS								
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																
(5)	PASSAGE-PAR40 Alt Name1: 1220-001	RA: 12 05 27.1351 (181.3630629d) Dec: -07 32 12.22 (-7.53673d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS																
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</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></td> <td>(5) PASSAGE-PAR40</td> <td>ACS/WFC, ACCUM, WFCENTER</td> <td>F814W</td> <td></td> <td>NEW OBSET FULL ACQ</td> <td>Pattern 2, Exps 1-1 in PAR40 ACS (5B) (2)</td> <td>694 Secs (2082 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]</td> <td>[1]</td> </tr> </tbody> </table>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1		(5) PASSAGE-PAR40	ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ	Pattern 2, Exps 1-1 in PAR40 ACS (5B) (2)	694 Secs (2082 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit												
1		(5) PASSAGE-PAR40	ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ	Pattern 2, Exps 1-1 in PAR40 ACS (5B) (2)	694 Secs (2082 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]												
Orbit Structure	<div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20241216 </div> <p>The diagram illustrates the orbit structure over a 6000-second period. It shows the timing of various activities: GS Acq (Green box), three exposures (Exp. 1, Green boxes), two pointing maneuvers (Pointing Maneuver), and an occultation (black bar). The observation window is shaded with a blue and white checkered pattern. The text 'Unused Orbital Visibility = 4' indicates the time remaining after the occultation.</p>																				

Proposal 17461 - PAR42 WFC3 (06) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR42 WFC3 (06), failed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	(PAR42 WFC3 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PAR42 WFC3 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	PASSAGE-PAR42 Alt Name1: 1292-001	RA: 13 00 44.3364 (195.1847350d) Dec: +12 32 3.02 (12.53417d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) PASSAGE-PAR 42	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	FLASH=3		Pattern 1, Exps 1-1 i n PAR42 WFC3 (06) (1)	789 Secs (2367 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
2		(6) PASSAGE-PAR 42	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W			Pattern 1, Exps 2-2 i n PAR42 WFC3 (06) (1)	786 Secs (2358 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]	

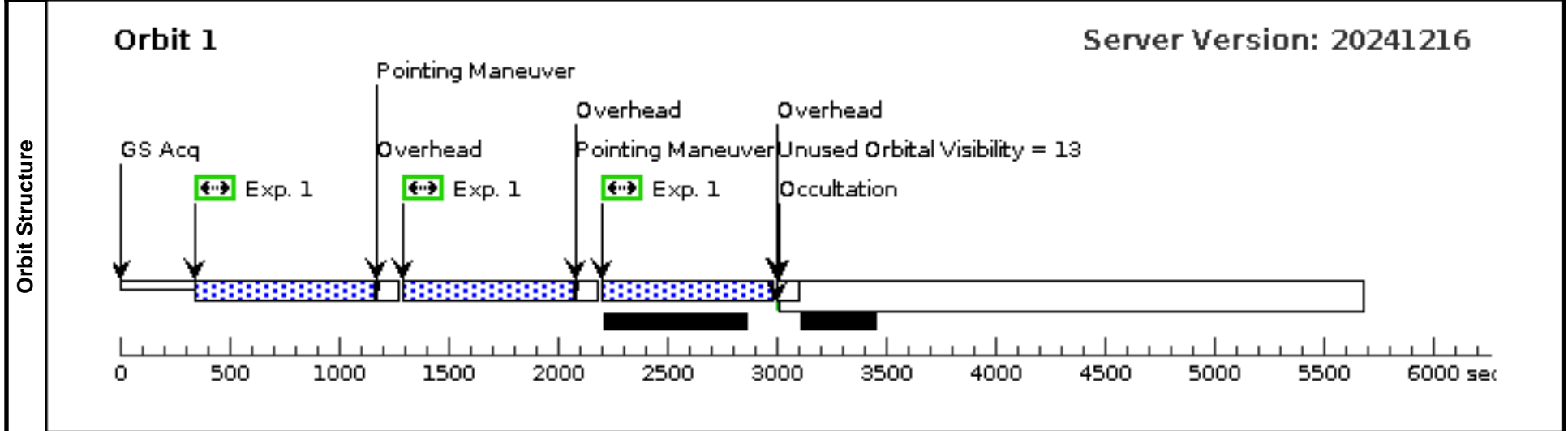


Visit	Proposal 17461, PAR42 WFC3 (6B), implementation		
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: HOPR repeat of second orbit of visit 06.</i>		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	PASSAGE-PAR42	RA: 13 00 44.3364 (195.1847350d)		V=27.0+/-0.3	Reference Frame: ICRS
		Alt Name1: 1292-001	Dec: +12 32 3.02 (12.53417d)			
			Equinox: J2000			
	<i>Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]</i>					

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) PASSAGE-PAR42	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W		GS ACQ SCENARI O BASE103	Pattern 1, Exps 1-1 in PAR42 WFC3 (6B) (1)	786 Secs (2358 Secs)	
									[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 17461 - PAR42 ACS (6A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-...

Fri Jan 17 18:00:21 GMT 2025

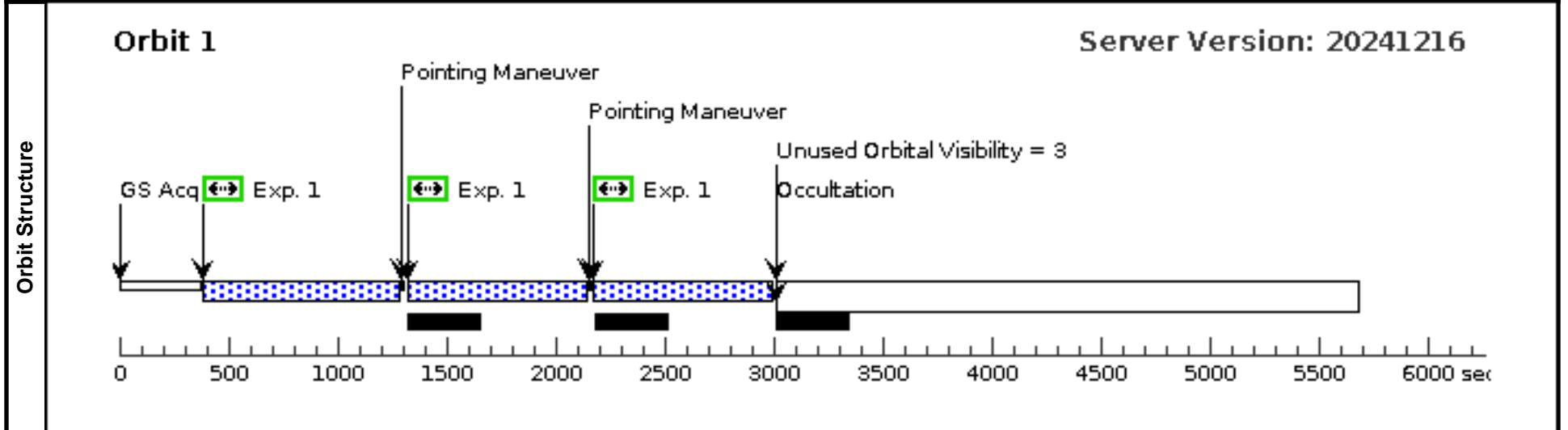
Visit	Proposal 17461, PAR42 ACS (6A), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	PASSAGE-PAR42 Alt Name1: 1292-001	RA: 13 00 44.3364 (195.1847350d) Dec: +12 32 3.02 (12.53417d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS

Comments:
Category=UNIDENTIFIED
Description=[BLANK FIELD, PARALLEL FIELD]

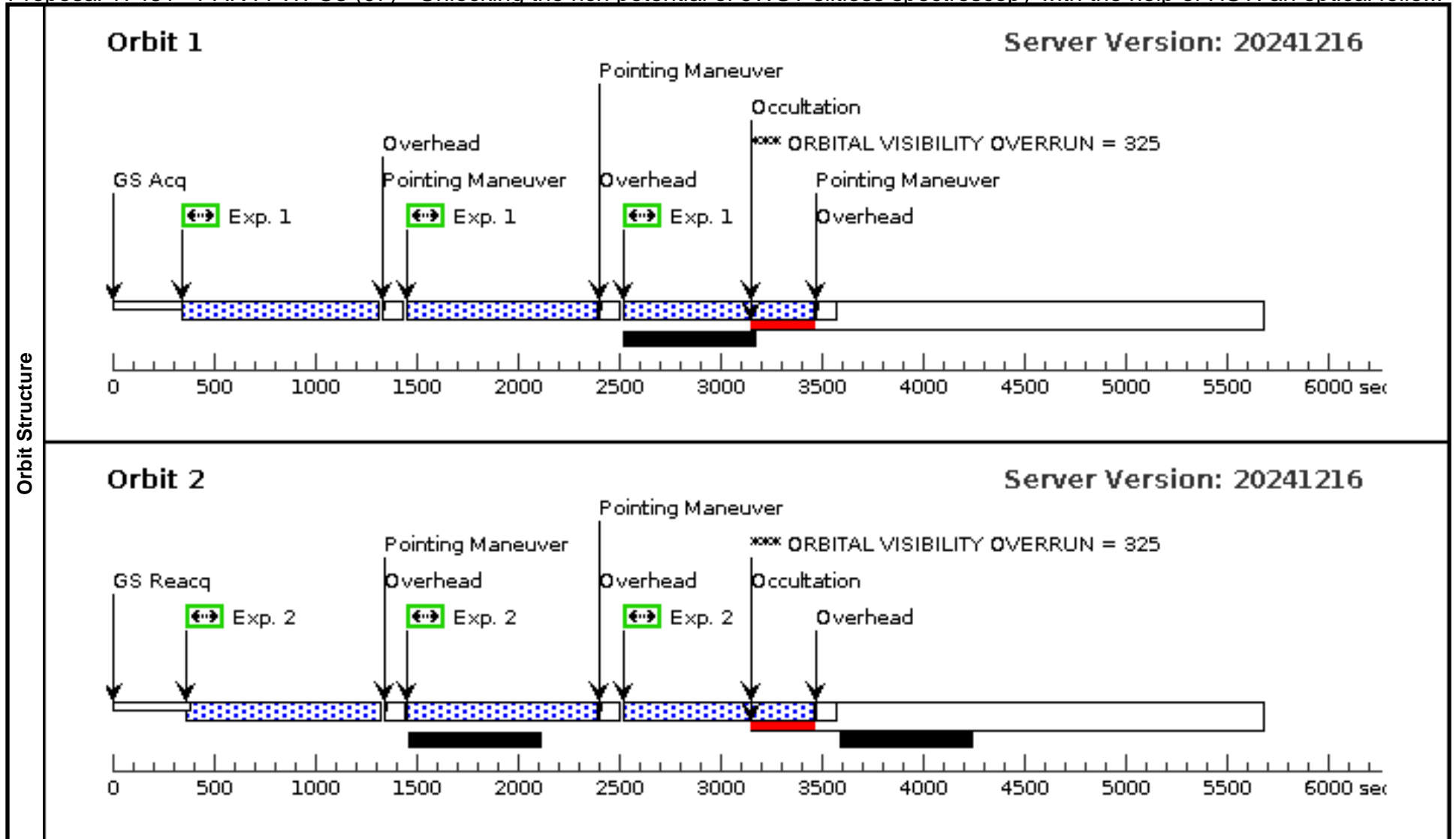
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) PASSAGE-PAR42		ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ	Pattern 2, Exps 1-1 in PAR42 ACS (6A) (2)	696 Secs (2088 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]



Proposal 17461 - PAR44 WFC3 (07) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follo...

Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR44 WFC3 (07), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Diagnosics (PAR44 WFC3 (07)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE (PAR44 WFC3 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (PAR44 WFC3 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Exposure 1 (Pattern 1, Exps 1-1 in PAR44 WFC3 (07)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.									
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=3.025 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	PASSAGE-PAR44 Alt Name1: 1536-003	RA: 17 42 58.5310 (265.7438792d) Dec: +67 05 24.10 (67.09003d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(7) PASSAGE-PAR 44	(7) PASSAGE-PAR 44	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W		GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 i n PAR44 WFC3 (07) (1)	943 Secs (2829 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
	2	(7) PASSAGE-PAR 44	(7) PASSAGE-PAR 44	WFC3/UVIS, ACCUM, UVIS-CENTER	F625W			Pattern 1, Exps 2-2 i n PAR44 WFC3 (07) (1)	940 Secs (2820 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]



Proposal 17461 - PAR44 ACS (7A) - Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-...

Fri Jan 17 18:00:21 GMT 2025

Visit	Proposal 17461, PAR44 ACS (7A), completed Diagnostic Status: Warning Scientific Instruments: ACS/WFC Special Requirements: (none)									
	(PAR44 ACS (7A)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE (PAR44 ACS (7A)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Exposure 1 (Pattern 2, Exps 1-1 in PAR44 ACS (7A)) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.									
Diagnosics										
Patterns	#	Primary Pattern		Secondary Pattern	Exposures					
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	PASSAGE-PAR44 Alt Name1: 1536-003	RA: 17 42 58.5310 (265.7438792d) Dec: +67 05 24.10 (67.09003d) Equinox: J2000		V=27.0+/-0.3	Reference Frame: ICRS				
Comments: Category=UNIDENTIFIED Description=[BLANK FIELD, PARALLEL FIELD]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(7) PASSAGE-PAR44	ACS/WFC, ACCUM, WFCENTER	F814W		NEW OBSET FULL ACQ; GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in PAR44 ACS (7A) (2)	847 Secs (2541 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]
Orbit Structure	Orbit 1 Server Version: 20241216									