



17280 - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical Photometry

Cycle: 30, 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>
A1	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:28.0	yes
A2	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:32.0	yes
B1	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:37.0	yes
B2	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:41.0	yes
C1	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:45.0	yes
C2	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:50.0	yes
D1	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:54.0	yes
D2	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:01:58.0	yes
D3	(1) V-AB-AUR	WFC3/UVIS	1	22-Dec-2022 15:02:03.0	yes

9 Total Orbits Used

ABSTRACT

Directly imaged protoplanets are excellent laboratories for testing planet formation models. So far, uncontested protoplanet detections are limited to PDS 70 b and c, restricting the direct probes of planet formation within a single system at a single evolutionary stage. Recent IR and optical images of the Herbig Ae/Be star AB Aur revealed a point-like source, suggesting a protoplanet candidate embedded in its natal disk. However, the nature of the source is uncertain, as a self-luminous protoplanet and a disk feature scattering stellar emission are both consistent with currently available observations.

Although the predicted spectral energy distributions (SEDs) of various interpretations of AB Aur b are degenerate at the infrared wavelengths, they have distinct shapes in the optical and UV. We propose nine orbits of WFC3/UVIS direct-imaging observations to obtain the 0.3 to 0.6 micron SED of AB Aur b and determine the nature of the point-like source. If AB Aur b is confirmed as a protoplanet, we will precisely determine its extinction, accretion rate, and fundamental properties with SED fitting. The proposal is urgent because validating AB Aur b as a protoplanet is critical for planning ongoing and follow-up studies.

OBSERVING DESCRIPTION

We observe the protoplanet candidate AB Aur b in F336W, F410M, and F645N filters to obtain its near UV and optical SED. In each orbit, exposures are taken at four dithering positions that offset by 0.5 pixels from each other. The dithered frames will be reconstructed to form Nyquist sampled images. At each position, we sequentially take three 2.0-second F645N exposures, three 0.5-second F410M exposures, and four 0.5-second F336W exposures. At the end of each orbit, we include two 2-second F645N exposures to use up the available visibility. The central pixel of the host star PSF is saturated by a factor of five.

To improve scheduling flexibility, we split the nine orbits into four visit-sets. The first three sets contain two consecutive orbits and the last set contains three consecutive orbits.

To facilitate angular differential imaging for background subtraction, we request the second orbits (A2, B2, C2, and D2) in each visit set to differ from their respective first orbits (A1, B1, C1, D1) by 25 to 35 degrees in telescope rolls. We also request the telescope orientation of visit D3 to be identical to that of visit D1. We constrain the roll angles of visits A1, B1, C1, D1 to ensure that the companion does not overlap with the PSF

Proposal 17280 (STScI Edit Number: 0, Created: Thursday, December 22, 2022 at 3:02:04 PM Eastern Standard Time) - Overview
diffraction spikes or the saturation bleed tails.

The host star has significant contribution to the companion's background. Based on previous F656N observations, the background near the companion is approximately 30 electron. At this level, the recommended FLASH=20 setting is redundant. Therefore, we ignore the warnings of low background levels and eliminate post-exposure FLASH.

Proposal 17280 - AB Aur (A1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:04 GMT 2022

Visit	Proposal 17280, AB Aur (A1), implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 10D TO 80 D; ORIENT 100D TO 125 D; ORIENT 145D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 305 D; ORIENT 325D TO 350 D				
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (A1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (A1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (A1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (A1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser				
Diagnosics					
Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false		(1-3)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05 Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]					

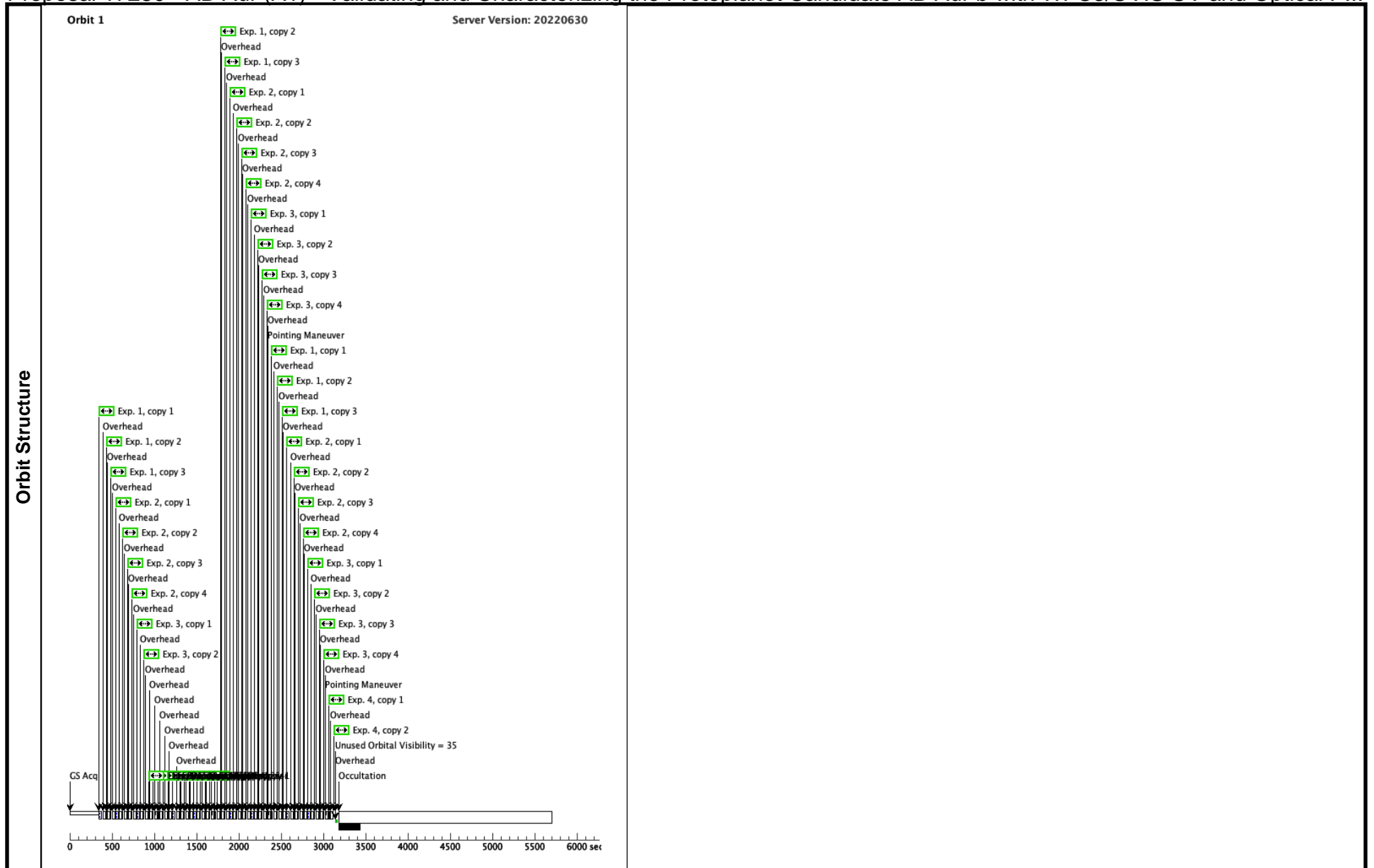
Proposal 17280 - AB Aur (A1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (A1) (1)	2 Secs X 3 (24 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (A1) (1)	0.5 Secs X 4 (8 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (A1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (A1) (1)	0.5 Secs X 4 (8 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]



Proposal 17280 - AB Aur (A2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:04 GMT 2022

Visit	Proposal 17280, AB Aur (A2) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 25D TO 35D FROM A1; AFTER A1 BY 0.5 Orbits TO 1.5 Orbits					
	Diagnosics (Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (A2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (A2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (A2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (A2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false		(1-3)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

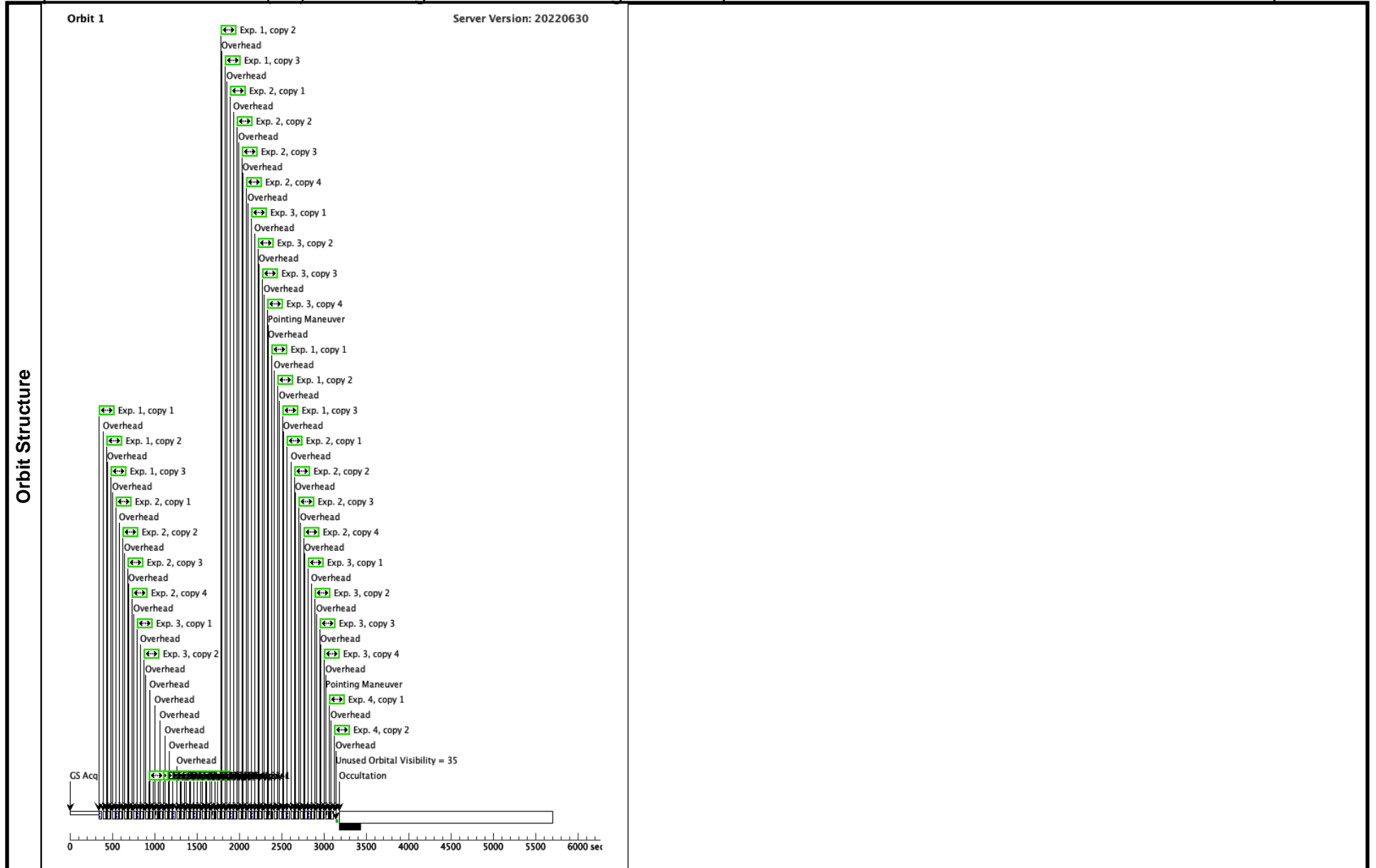
Proposal 17280 - AB Aur (A2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (A2) (1)	2 Secs X 3 (24 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (A2) (1)	0.5 Secs X 4 (8 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (A2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (A2) (1)	0.5 Secs X 4 (8 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]



Proposal 17280 - AB Aur (B1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:04 GMT 2022

Visit	Proposal 17280, AB Aur (B1) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 10D TO 80 D; ORIENT 100D TO 125 D; ORIENT 145D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 305 D; ORIENT 325D TO 350 D					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (B1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (B1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (B1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (B1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

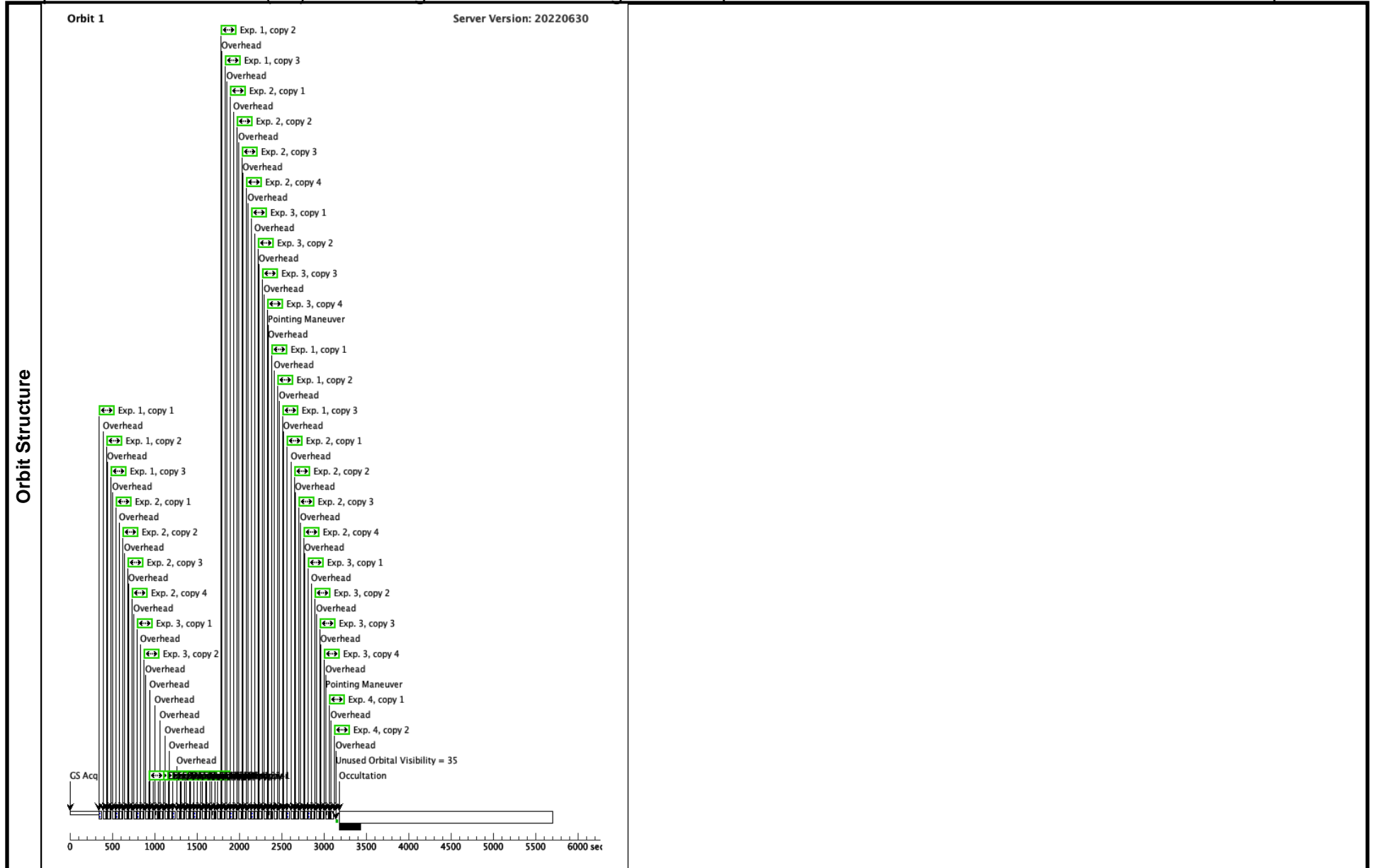
Proposal 17280 - AB Aur (B1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (B1) (1)	2 Secs X 3 (24 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (B1) (1)	0.5 Secs X 4 (8 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (B1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (B1) (1)	0.5 Secs X 4 (8 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]



Proposal 17280 - AB Aur (B2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:04 GMT 2022

Visit	Proposal 17280, AB Aur (B2) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 25D TO 35D FROM B1; AFTER B1 BY 0.5 Orbits TO 1.5 Orbits					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (B2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (B2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (B2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (B2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

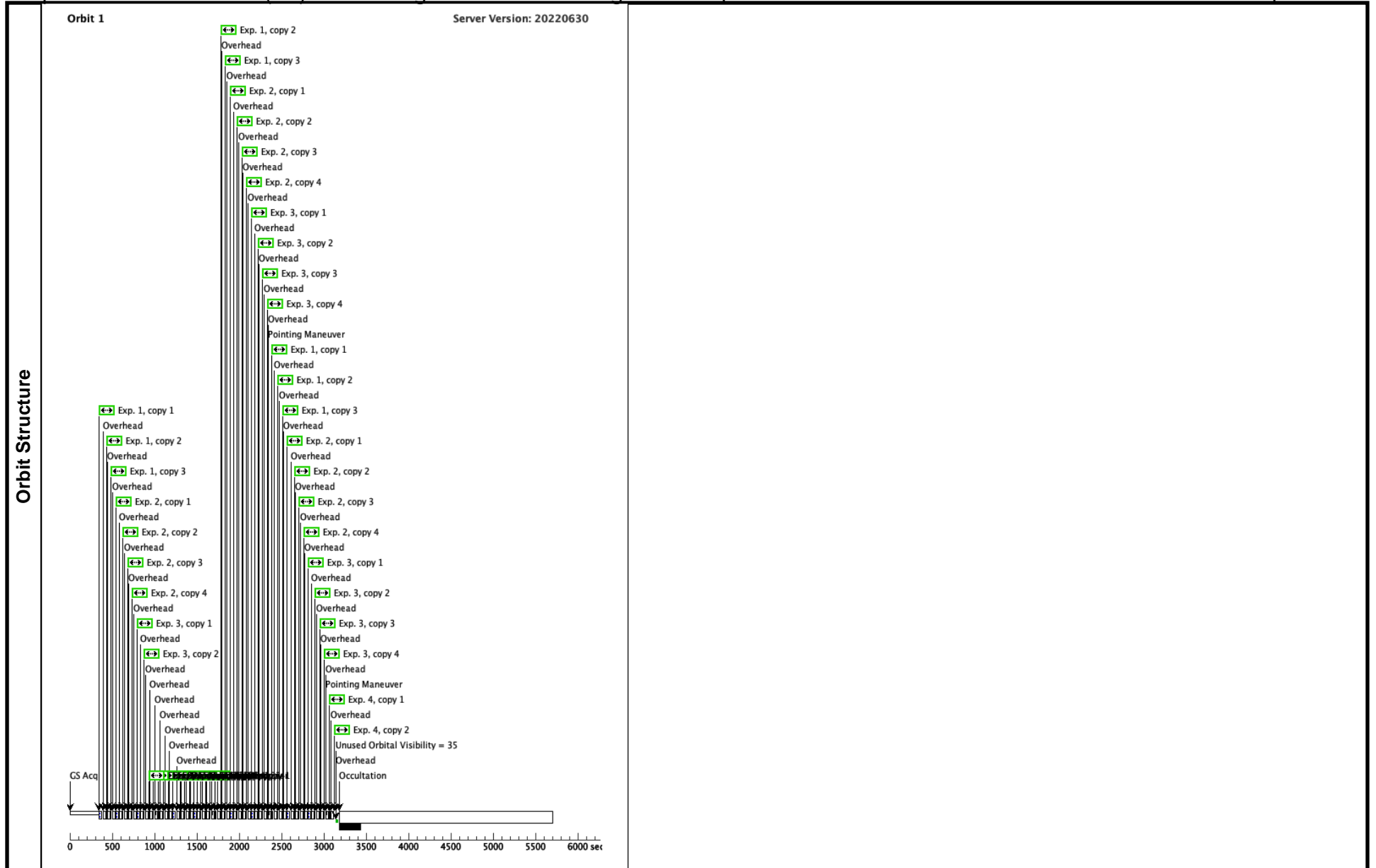
Proposal 17280 - AB Aur (B2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (B2) (1)	2 Secs X 3 (24 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (B2) (1)	0.5 Secs X 4 (8 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (B2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (B2) (1)	0.5 Secs X 4 (8 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]



Proposal 17280 - AB Aur (C1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:05 GMT 2022

Visit	Proposal 17280, AB Aur (C1) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 10D TO 80 D; ORIENT 100D TO 125 D; ORIENT 145D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 305 D; ORIENT 325D TO 350 D					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (C1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (C1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (C1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (C1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

Proposal 17280 - AB Aur (C1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (C1) (1)	2 Secs X 3 (24 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (C1) (1)	0.5 Secs X 4 (8 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	

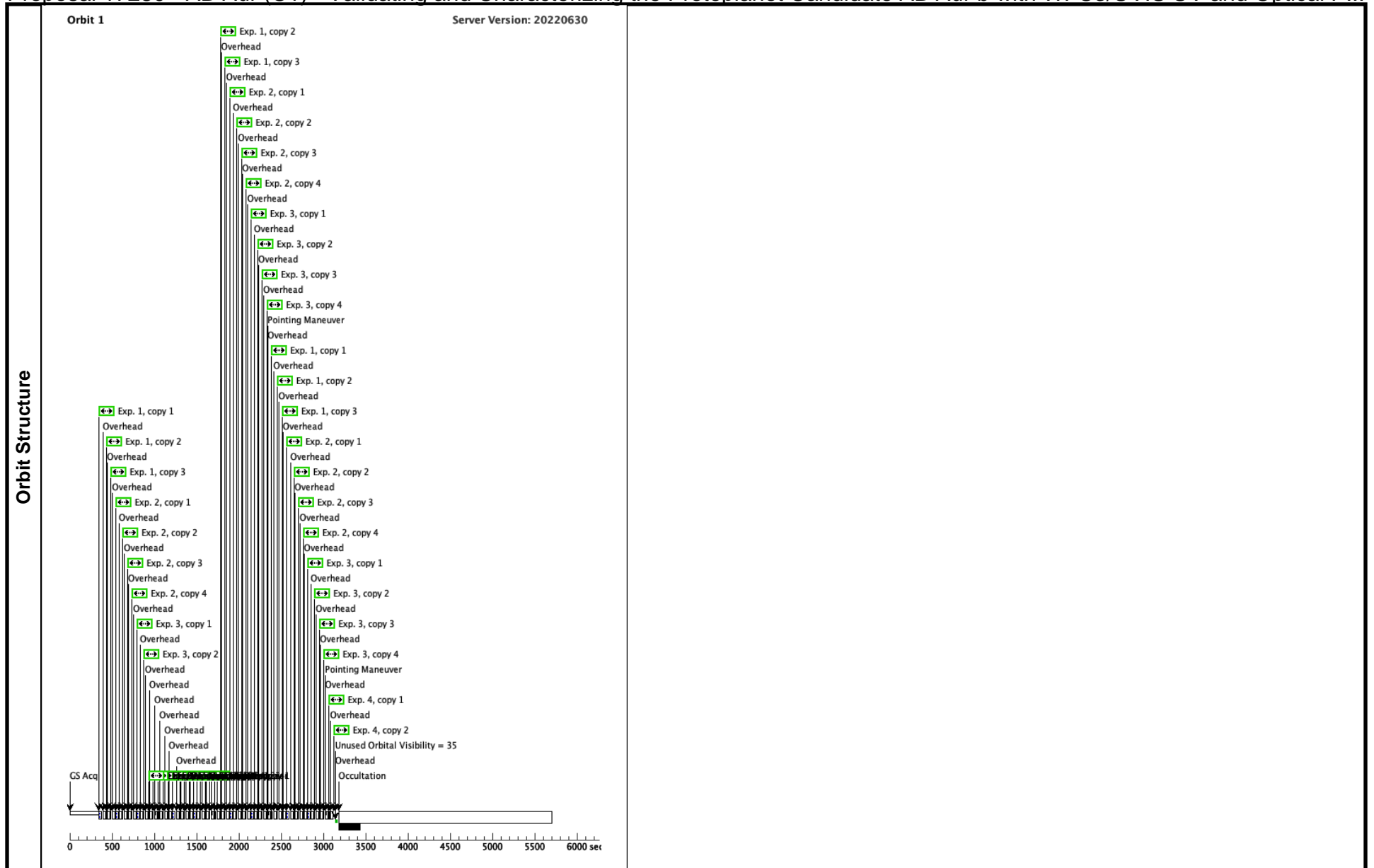
Exposures

[1]

[1]

Proposal 17280 - AB Aur (C1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVIS (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (C1) (1)	0.5 Secs X 4 (8 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]



Proposal 17280 - AB Aur (C2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:05 GMT 2022

Visit	Proposal 17280, AB Aur (C2) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 25D TO 35D FROM C1; AFTER C1 BY 0.5 Orbits TO 1.5 Orbits					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (C2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (C2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (C2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (C2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

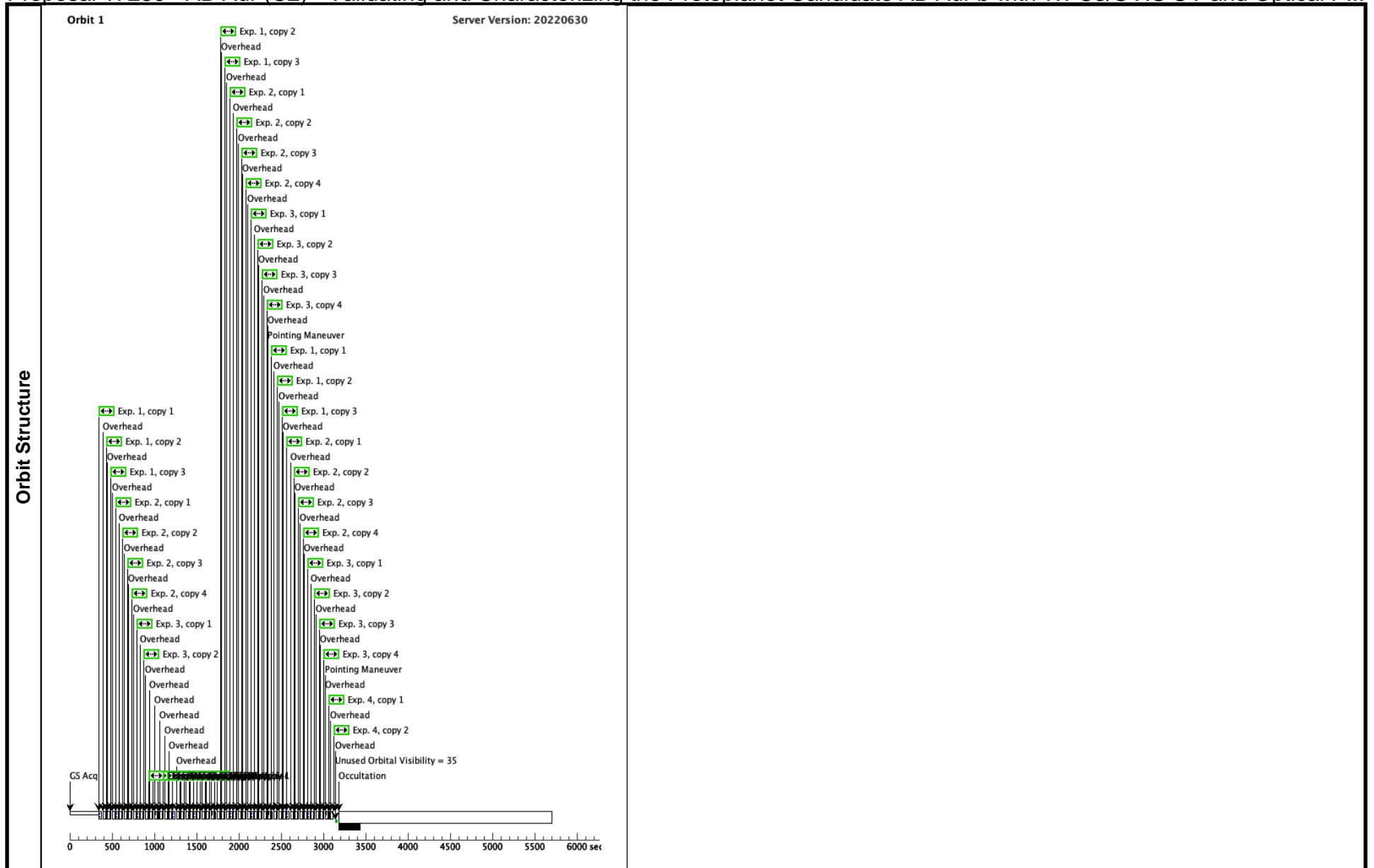
Proposal 17280 - AB Aur (C2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (C2) (1)	2 Secs X 3 (24 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (C2) (1)	0.5 Secs X 4 (8 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (C2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (C2) (1)	0.5 Secs X 4 (8 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]



Proposal 17280 - AB Aur (D1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:05 GMT 2022

Visit	Proposal 17280, AB Aur (D1) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 10D TO 80 D; ORIENT 100D TO 125 D; ORIENT 145D TO 170 D; ORIENT 190D TO 260 D; ORIENT 280D TO 305 D; ORIENT 325D TO 350 D					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (D1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (D1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (D1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (D1))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

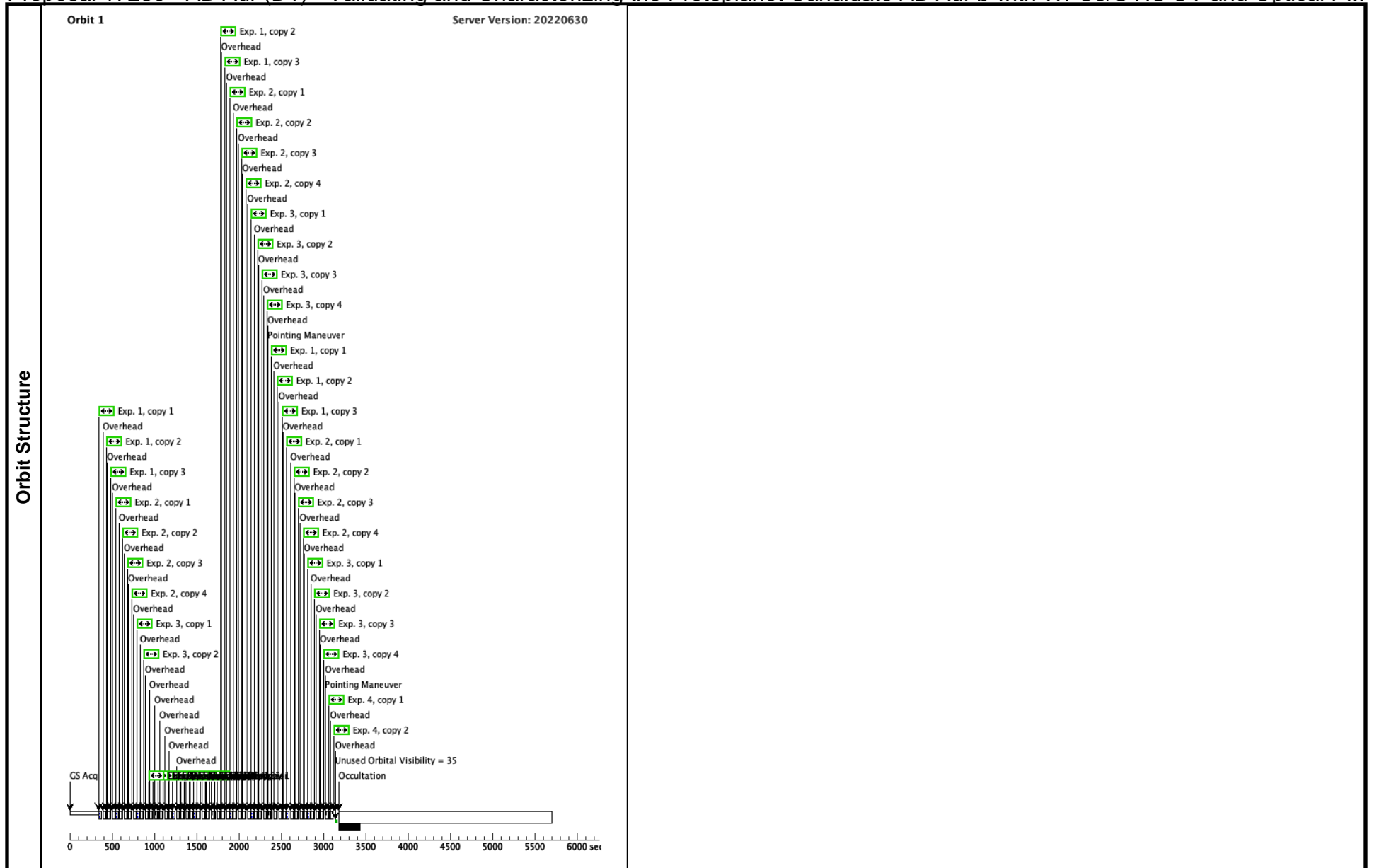
Proposal 17280 - AB Aur (D1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (D1) (1)	2 Secs X 3 (24 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (D1) (1)	0.5 Secs X 4 (8 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (D1) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (D1) (1)	0.5 Secs X 4 (8 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]



Proposal 17280 - AB Aur (D2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:05 GMT 2022

Visit	Proposal 17280, AB Aur (D2) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; ORIENT 25D TO 35D FROM D1; AFTER D1 BY 0.5 Orbits TO 1.5 Orbits					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (D2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (D2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (D2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (D2))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

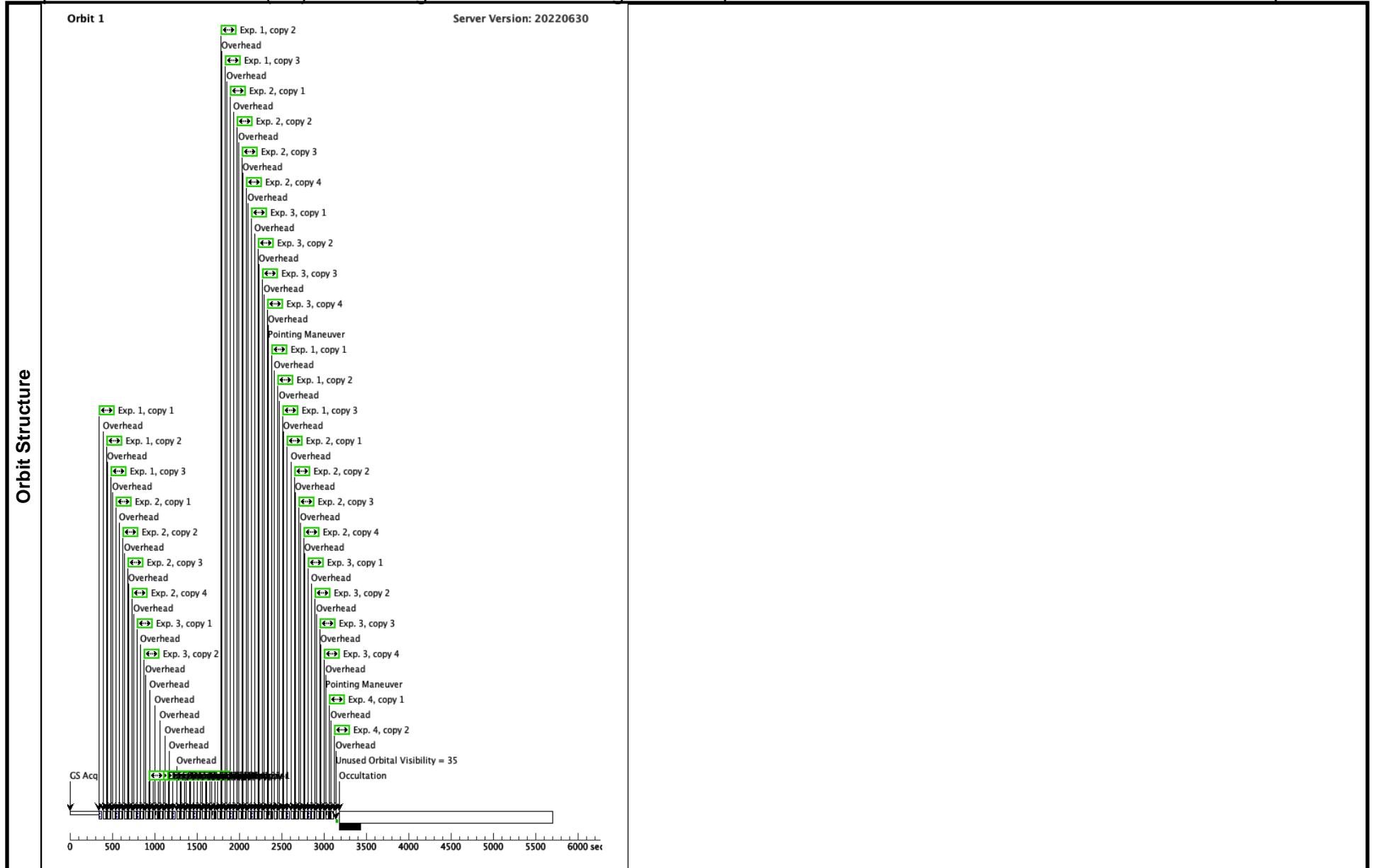
Proposal 17280 - AB Aur (D2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (D2) (1)	2 Secs X 3 (24 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (D2) (1)	0.5 Secs X 4 (8 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (D2) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (D2) (1)	0.5 Secs X 4 (8 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]



Proposal 17280 - AB Aur (D3) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

Thu Dec 22 20:02:05 GMT 2022

Visit	Proposal 17280, AB Aur (D3) Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: PCS MODE FINE; SAME ORIENT AS D1; AFTER D2 BY 0.5 Orbits TO 1.5 Orbits					
	(Exposure 1 (Pattern 1, Exps 1-3 in AB Aur (D3))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 2 (Pattern 1, Exps 1-3 in AB Aur (D3))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 3 (Pattern 1, Exps 1-3 in AB Aur (D3))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (Exposure 4 (AB Aur (D3))) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Diagnosics						
Patterns	#	Primary Pattern	Secondary Pattern	Exposures		
	(1)	Pattern Type=BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.02 Line Spacing=0.02	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides=90 Center Pattern=false	(1-3)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.1104743402068534E-4 sec of time/yr Proper Motion Dec: -0.024027000063142623 arcsec/yr Epoch of Position: 2015.5	V=7.05	Reference Frame: SIMBAD
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=EXT-STAR Description=[ACCRETION DISK, EXTRA-SOLAR PLANETARY SYSTEM, HERBIG AE/BE, PROTOPLANETARY DISK]						

Proposal 17280 - AB Aur (D3) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVI S.im.183658 7)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N			Pattern 1, Exps 1-3 i n AB Aur (D3) (1)	2 Secs X 3 (24 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)]	
2	(WFC3UVI S.im.183658 5)	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F410M			Pattern 1, Exps 1-3 i n AB Aur (D3) (1)	0.5 Secs X 4 (8 Secs)	
								[=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 1, Copy 3)] [=>(Pattern 1, Copy 4)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 2, Copy 3)] [=>(Pattern 2, Copy 4)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)] [=>(Pattern 3, Copy 3)] [=>(Pattern 3, Copy 4)] [=>(Pattern 4, Copy 1)] [=>(Pattern 4, Copy 2)] [=>(Pattern 4, Copy 3)] [=>(Pattern 4, Copy 4)]	

Exposures

Proposal 17280 - AB Aur (D3) - Validating and Characterizing the Protoplanet Candidate AB Aur b with WFC3/UVIS UV and Optical P...

3	(WFC3UVI (1) V-AB-AUR S.im.183657 7)	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	Pattern 1, Exps 1-3 i n AB Aur (D3) (1)	0.5 Secs X 4 (8 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 1, Copy 3)] [==>(Pattern 1, Copy 4)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 2, Copy 3)] [==>(Pattern 2, Copy 4)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)] [==>(Pattern 3, Copy 3)] [==>(Pattern 3, Copy 4)] [==>(Pattern 4, Copy 1)] [==>(Pattern 4, Copy 2)] [==>(Pattern 4, Copy 3)] [==>(Pattern 4, Copy 4)]	[1]
4	(1) V-AB-AUR	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F645N		2 Secs X 2 (4 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]

