



16243 - Determining the low-mass cutoff for star formation

Cycle: 28, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Federico Marocco (PI) (Contact)	California Institute of Technology	federico@ipac.caltech.edu
Dr. J. Davy Kirkpatrick (CoI)	California Institute of Technology	davy@ipac.caltech.edu
Dr. Jacqueline Kelly Faherty (CoI)	American Museum of Natural History	jfaherty@amnh.org
Dr. Peter Eisenhardt (CoI)	Jet Propulsion Laboratory	peter.r.eisenhardt@jpl.nasa.gov
Dr. Aaron Meisner (CoI)	NOIRLab - (AZ)	aaron.m.meisner@gmail.com
Dan Caselden (CoI)	Gigamon Applied Threat Research	dancaselden@gmail.com
Dr. Christopher R. Gelino (CoI)	California Institute of Technology	cgelino@ipac.caltech.edu
Prof. Edward L. Wright (CoI)	University of California - Los Angeles	wright@astro.ucla.edu
Dr. Michael C. Cushing (CoI)	University of Toledo	michael.cushing@utoledo.edu
Dr. Adam Schneider (CoI)	United States Naval Observatory Flagstaff Station	aschneid10@gmail.com
Dr. Marc Jason Kuchner (CoI)	NASA Goddard Space Flight Center	marc.kuchner@nasa.gov

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	(2) WISEJ0238-1332	WFC3/IR	1	24-Aug-2021 10:00:17.0	yes
02	(3) WISEJ0402-2651	WFC3/IR	1	24-Aug-2021 10:00:17.0	yes
03	(4) WISEJ0859+5349	WFC3/IR	1	24-Aug-2021 10:00:18.0	yes
04	(5) WISEJ0938+0634	WFC3/IR	1	24-Aug-2021 10:00:18.0	yes
05	(6) WISEJ0940+5233	WFC3/IR	1	24-Aug-2021 10:00:19.0	yes
06	(7) WISEJ1047+5457	WFC3/IR	1	24-Aug-2021 10:00:20.0	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>
09	(8) WISEJ1359-4352	WFC3/IR	1	24-Aug-2021 10:00:20.0	yes
11	(9) WISEJ1534-1043	WFC3/IR	1	24-Aug-2021 10:00:21.0	yes
13	(14) WISEJ2243-1458	WFC3/IR	1	24-Aug-2021 10:00:21.0	yes
14	(14) WISEJ2243-1458	WFC3/IR	1	24-Aug-2021 10:00:22.0	yes
15	(11) WISEJ2355+3804	WFC3/IR	1	24-Aug-2021 10:00:22.0	yes
16	(11) WISEJ2355+3804	WFC3/IR	1	24-Aug-2021 10:00:23.0	yes
17	(12) WISEJ2356-4814	WFC3/IR	1	24-Aug-2021 10:00:23.0	yes
18	(12) WISEJ2356-4814	WFC3/IR	1	24-Aug-2021 10:00:24.0	yes
Z6	(11) WISEJ2355+3804	WFC3/IR	1	24-Aug-2021 10:00:24.0	yes
Z8	(12) WISEJ2356-4814	WFC3/IR	1	24-Aug-2021 10:00:25.0	yes
07	(13) WISEJ1257+7153	WFC3/IR	3	24-Aug-2021 10:00:26.0	yes
08	(13) WISEJ1257+7153	WFC3/IR	3	24-Aug-2021 10:00:27.0	yes
10	(1) WISEJ1446-2317	WFC3/IR	5	24-Aug-2021 10:00:30.0	yes
12	(10) WISEJ2230+2549	WFC3/IR	4	24-Aug-2021 10:00:32.0	yes

31 Total Orbits Used

ABSTRACT

With recent advances in the discovery of very low temperature brown dwarfs, we are now able to discern the shape of the low-mass end of the field mass function and define the low-mass cutoff itself. We propose to do this with a volume-limited ($d < 20$ pc) sample of the coldest known spectral types, Y dwarfs. Our multi-telescope campaign to obtain high-quality astrometry and photometry for this sample is well underway. HST is essential to complete the trigonometric measurement of parallaxes for the 14 faintest and coldest members of our sample. These are only accessible via HST. A combination of publicly available WISE and Spitzer data together with HST WFC3 F110W data will complete the distance and temperature determination for this sample. Having distances and temperatures for all of the coldest objects in the the Solar neighborhood provides an unprecedented look at the low-mass end of the mass function, and brings us one step closer to answering some of the most important questions in all of astrophysics: how can star formation create objects of extremely low mass? With what efficiency? Is there a low-mass cutoff to star formation?

OBSERVING DESCRIPTION

We seek to obtain high signal-to-noise-ratio F110W images for 14 cold brown dwarfs within 20pc of the Sun. The images will be used to supplement our Spitzer data to measure high-accuracy parallaxes.

Our precision requirement is 3 mas, which ensures we will be able to measure parallaxes to a precision of 10% or better for all of the targets. We require either one or two visits per target, depending on the previous sampling of the parallactic ellipse provided by Spitzer. For targets with Spitzer observations at each vertex of the parallactic ellipse, one HST visit at the vertex of the parallactic ellipse that is currently poorly sampled with Spitzer is sufficient. For targets with Spitzer observations at only one vertex of the parallactic ellipse, we need one HST visit at each vertex of the parallactic ellipse.

HST visits must be scheduled within a 7-day window centered around the time of maximum parallax factor (i.e. the time when the target is at one vertex of the parallactic ellipse). While the ideal measurements would be taken at exactly maximum parallax factor, this would put excessive pressure on the scheduling. Kirkpatrick et al. (2019) found that relaxing timing constraints to within ± 3.5 days of maximum parallax factor does not impact the accuracy and precision of the measured parallax, while at the same time significantly increases the schedulability of the observations.

For 11 out of 14 targets, each visit consists of one WFC3-IR-DITHER-BOX-MIN pattern with the default parameters, to obtain a good pixel phase coverage, to compensate for the undersampling of the PSF in the F110W filter. Observations use the STEP100 sampling with NSAMP=12. The STEP100 sampling allows us to reach the desired signal-to-noise-ratio for our faint targets, while providing unsaturated reads for the brighter stars in the field which will be used for astrometric calibration.

For the remaining three targets, each visit consists of one WFC3-IR-DITHER-BLOB pattern, with the WFC3-IR-DITHER-BOX-MIN as subpattern. The number of points in the WFC3-IR-DITHER-BLOB pattern depends on the time required to reach the desired signal-to-noise-ratio. The large offset between positions in the WFC3-IR-DITHER-BLOB pattern allows us to sample different parts of the astrometric distortion solution, averaging down known errors. Observations use the STEP100 sampling with NSAMP=12.

Proposal 16243 - WISEJ0238-1332 (01) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ0238-1332 (01), completed										Tue Aug 24 14:00:32 GMT 2021		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR												
	Special Requirements: BETWEEN 17-JAN-2021:00:00:00 AND 23-JAN-2021:23:59:59												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365					Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Fluxes		Miscellaneous		
	(2)	WISEJ0238-1332	RA: 02 38 42.6000 (39.6775000d) Dec: -13 32 10.66 (-13.53629d) Equinox: J2000						V=(?) F110W ~ 23.8 mag		Reference Frame: ICRS		
	Comments: Category=STAR Description=[BROWN DWARF]												
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(2) WISEJ0238-1332	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100			Pattern 1, Exps 1-1 in WISEJ0238-1332 (01) (1)	599.232292 Secs (2396.929 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	
Orbit Structure	Orbit 1 Server Version: 20210514 Timeline details: GS Acq at 0s, Exp. 1 at 400s, Pointing Maneuver at 1000s, Exp. 1 at 1600s, Pointing Maneuver at 1700s, Exp. 1 at 2200s, Pointing Maneuver at 2400s, Exp. 1 at 2800s, Reconfig at 3000s, Occultation at 3100s. Blue checkered bar from 400s to 3000s. Green bar at 3000s. Black bars at 1200s and 3200s-3700s. Unused Orbital Visibility = 142.												

Proposal 16243 - WISEJ0402-2651 (02) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ0402-2651 (02), completed										Tue Aug 24 14:00:32 GMT 2021		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR												
	Special Requirements: BETWEEN 18-FEB-2021:00:00:00 AND 24-FEB-2021:23:59:59												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365					Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(3)	WISEJ0402-2651		RA: 04 02 35.5500 (60.6481250d) Dec: -26 51 45.44 (-26.86262d) Equinox: J2000				V=(?) F110W ~ 23.6 mag		Reference Frame: ICRS			
	Comments: Category=STAR Description=[BROWN DWARF]												
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(3) WISEJ0402-2651	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100			Pattern 1, Exps 1-1 in WISEJ0402-2651 (02) (1)	599.232292 Secs (2396.929 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]	
Orbit Structure	Orbit 1												
	Server Version: 20210514												

Proposal 16243 - WISEJ0859+5349 (03) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ0859+5349 (03), completed										Tue Aug 24 14:00:32 GMT 2021		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR												
	Special Requirements: BETWEEN 01-NOV-2020:00:00:00 AND 07-NOV-2020:23:59:59												
Patterns	#	Primary Pattern				Secondary Pattern				Exposures			
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365				Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false				(1)			
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous				
	(4)	WISEJ0859+5349	RA: 08 59 38.9600 (134.912333d) Dec: +53 49 8.80 (53.81911d) Equinox: J2000				V=(?) F110W ~ 22.6 mag		Reference Frame: ICRS				
Comments: Category=STAR Description=[BROWN DWARF]													
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(4) WISEJ0859+5349	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100		Pattern 1, Exps 1-1 in WISEJ0859+5349 (03) (1)	599.232292 Secs (2396.929 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]	
Orbit Structure	Orbit 1												
	Server Version: 20210514												

Proposal 16243 - WISEJ0938+0634 (04) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ0938+0634 (04), completed					Tue Aug 24 14:00:33 GMT 2021					
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: WFC3/IR										
	Special Requirements: BETWEEN 10-FEB-2021:00:00:00 AND 16-FEB-2021:23:59:59										
Patterns	#	Primary Pattern			Secondary Pattern		Exposures				
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365			Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(5)	WISEJ0938+0634	RA: 09 38 52.9000 (144.7204167d) Dec: +06 34 40.80 (6.57800d) Equinox: J2000		V=(?) F110W ~ 22.3 mag	Reference Frame: ICRS					
Comments: Category=STAR Description=[BROWN DWARF]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1		(5) WISEJ0938+0634	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=12; SAMP-SEQ=STEP100		Pattern 1, Exps 1-1 in WISEJ0938+0634 (04) (1)	599.232292 Secs (2396.929 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]	
Orbit Structure	Orbit 1										Server Version: 20210514

Proposal 16243 - WISEJ0940+5233 (05) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ0940+5233 (05), completed										Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics														
	Scientific Instruments: WFC3/IR														
	Special Requirements: BETWEEN 11-NOV-2020:00:00:00 AND 17-NOV-2020:23:59:59														
Patterns	#	Primary Pattern					Secondary Pattern					Exposures			
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365					Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)			
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous					
	(6)	WISEJ0940+5233		RA: 09 40 5.5000 (145.0229167d) Dec: +52 33 59.10 (52.56642d) Equinox: J2000				V=(?) F110W ~ 23.8 mag		Reference Frame: ICRS					
	Comments: Category=STAR Description=[BROWN DWARF]														
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.		Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit		
	1		(6) WISEJ0940+5233	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100			Pattern 1, Exps 1-1 in WISEJ0940+5233 (05) (1)	599.232292 Secs (2396.929 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]		[1]		
	3														
Orbit Structure	Orbit 1													Server Version: 20210514	

Proposal 16243 - WISEJ1047+5457 (06) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ1047+5457 (06), completed										Tue Aug 24 14:00:33 GMT 2021		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR												
	Special Requirements: BETWEEN 29-NOV-2020:00:00:00 AND 05-DEC-2020:23:59:59												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365					Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(7)	WISEJ1047+5457		RA: 10 47 56.8600 (161.9869167d) Dec: +54 57 41.80 (54.96161d) Equinox: J2000				V=(?) F110W ~ 22.6 mag		Reference Frame: ICRS			
	Comments: Category=STAR Description=[BROWN DWARF]												
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(7) WISEJ1047+5457	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100		Pattern 1, Exps 1-1 in WISEJ1047+5457 (06) (1)	599.232292 Secs (2396.929 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]		[1]	
Orbit Structure	Orbit 1 Server Version: 20210514 Timeline labels: GS Acq, Exp. 1, Pointing Maneuver, Exp. 1, Pointing Maneuver, Exp. 1, Pointing Maneuver, Reconfig, Unused Orbital Visibility = 326, Occultation. Timeline axis: 0 to 6000 sec.												

Proposal 16243 - WISEJ1359-4352 (09) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ1359-4352 (09), completed										Tue Aug 24 14:00:33 GMT 2021		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR												
	Special Requirements: BETWEEN 18-JAN-2021:00:00:00 AND 24-JAN-2021:23:59:59												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365					Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(8)	WISEJ1359-4352		RA: 13 59 37.6500 (209.9068750d) Dec: -43 52 26.90 (-43.87414d) Equinox: J2000				V=(?) F110W ~ 22.2 mag		Reference Frame: ICRS			
	Comments: Category=STAR Description=[BROWN DWARF]												
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(8) WISEJ1359-4352	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100			Pattern 1, Exps 1-1 in WISEJ1359-4352 (09) (1)	599.232292 Secs (2396.929 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	
Orbit Structure	Orbit 1 Server Version: 20210514												

Proposal 16243 - WISEJ1534-1043 (11) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ1534-1043 (11), completed Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 11-FEB-2021:00:00:00 AND 17-FEB-2021:23:59:59				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(9)	WISEJ1534-1043	RA: 15 34 28.8760 (233.6203167d) Dec: -10 43 28.97 (-10.72471d) Equinox: J2000		V=(?) F110W ~ 21.8 mag
Exposures	Comments: Category=STAR Description=[BROWN DWARF]				
	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(9)	WISEJ1534-1043	WFC3/IR, MULTIACCUM, IR	F110W
					Opt. Params. NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs.
					Groups
					Exp. Time (Total)/[Actual Dur.]
					Orbit
					Pattern 1, Exps 1-1 in WISEJ1534-1043 (11) (1)
					[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]
Orbit Structure	Orbit 1 Server Version: 20210514				
	Diagram illustrating the Orbit Structure for Orbit 1. The timeline shows various events and durations: - GS Acq (Green Start Acquisition) - Exp. 1 (Exposure 1) - Pointing Maneuver - Reconfig (Reconfiguration) - Occultation - Unused Orbital Visibility = 142 The timeline is marked in seconds (sec) from 0 to 6000.				

Proposal 16243 - WISEJ2243-1458 1 (13) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2243-1458_1 (13), completed Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 27-NOV-2020:00:00:00 AND 03-DEC-2020:23:59:59				
Patterns	#	Primary Pattern	Secondary Pattern		Exposures
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false			(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(14)	WISEJ2243-1458	RA: 22 43 19.6674 (340.8319475d) Dec: -14 59 0.76 (-14.98354d) Equinox: J2000		V=(?) F110W ~ 21.8 mag
	Comments: Category=STAR Description=[BROWN DWARF]				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(14) WISEJ2243-1458	WISEJ2243-1458	WFC3/IR, MULTIACCUM, IR	F110W
					Opt. Params.
					NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs.
					Groups
					Pattern 1, Exps 1-1 in WISEJ2243-1458_1 (13) (1)
					Exp. Time (Total)/[Actual Dur.]
					599.232292 Secs (2396.929 Secs)
					[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]
					Orbit
					[1]
Orbit Structure	Orbit 1 Server Version: 20210514				
	The diagram illustrates the orbit structure for Orbit 1, spanning from 0 to 6000 seconds. Key events and durations are marked along the timeline: GS Acq: Ground Station Acquisition at 0 seconds. Exp. 1: Exposure 1, starting at 400 seconds and ending at 1000 seconds. Pointing Maneuver: A maneuver occurring at 1000 seconds. Exp. 1: Exposure 1, starting at 1600 seconds and ending at 2200 seconds. Pointing Maneuver: A maneuver occurring at 2200 seconds. Exp. 1: Exposure 1, starting at 2800 seconds and ending at 3400 seconds. Pointing Maneuver: A maneuver occurring at 3400 seconds. Reconfig: Reconfiguration occurring at 3600 seconds. Occultation: Occultation occurring at 3800 seconds. Unused Orbital Visibility = 142: A period of 142 seconds of unused orbital visibility starting at 5500 seconds.				

Proposal 16243 - WISEJ2243-1458 2 (14) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2243-1458_2 (14), completed Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 27-MAY-2021:00:00:00 AND 02-JUN-2021:23:59:59				
Patterns	#	Primary Pattern	Secondary Pattern		Exposures
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false			(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(14)	WISEJ2243-1458	RA: 22 43 19.6674 (340.8319475d) Dec: -14 59 0.76 (-14.98354d) Equinox: J2000		V=(?) F110W ~ 21.8 mag
	Comments: Category=STAR Description=[BROWN DWARF]				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(14) WISEJ2243-1458	WISEJ2243-1458	WFC3/IR, MULTIACCUM, IR	F110W
					Opt. Params.
					NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs.
					Groups
					Pattern 1, Exps 1-1 in WISEJ2243-1458_2 (14) (1)
					Exp. Time (Total)/[Actual Dur.]
					599.232292 Secs (2396.929 Secs)
					[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]
					Orbit
					[1]
Orbit Structure	Orbit 1 Server Version: 20210514				

Proposal 16243 - WISEJ2355+3804 1 (15) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2355+3804_1 (15), completed Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 17-DEC-2020:00:00:00 AND 23-DEC-2020:23:59:59				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(11)	WISEJ2355+3804	RA: 23 55 48.0000 (358.9500000d) Dec: +38 04 39.10 (38.07753d) Equinox: J2000		V=(?) F110W ~ 21.3 mag
Exposures	Comments: Category=STAR Description=[BROWN DWARF]				
	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(11) WISEJ2355+3804	WISEJ2355+3804	WFC3/IR, MULTIACCUM, IR	F110W
					NSAMP=12; SAMP-SEQ=STEP100
			Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]
				Pattern 1, Exps 1-1 in WISEJ2355+3804_1 (15) (1)	599.232292 Secs (2396.929 Secs) [= > (Pattern 1)] [= > (Pattern 2)] [= > (Pattern 3)] [= > (Pattern 4)]
Orbit Structure					Orbit
					[1]
	Orbit 1 Server Version: 20210514				

Proposal 16243 - WISEJ2355+3804 2 (16) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2355+3804_2 (16), failed										Tue Aug 24 14:00:33 GMT 2021			
	Diagnostic Status: No Diagnostics													
	Scientific Instruments: WFC3/IR													
	Special Requirements: BETWEEN 16-JUN-2021:00:00:00 AND 22-JUN-2021:23:59:59													
Patterns	#	Primary Pattern					Secondary Pattern					Exposures		
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365					Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)		
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Fluxes		Miscellaneous			
	(11)	WISEJ2355+3804	RA: 23 55 48.0000 (358.9500000d) Dec: +38 04 39.10 (38.07753d) Equinox: J2000						V=(?) F110W ~ 21.3 mag		Reference Frame: ICRS			
	Comments: Category=STAR Description=[BROWN DWARF]													
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit		
	1		(11) WISEJ2355+3804	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100		Pattern 1, Exps 1-1 in WISEJ2355+3804_2 (16) (1)	599.232292 Secs (2396.929 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]		[1]		
Orbit Structure	Orbit 1												Server Version: 20210514	

Proposal 16243 - WISEJ2356-4814 1 (17) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2356-4814_1 (17), completed Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 17-DEC-2020:00:00:00 AND 23-DEC-2020:23:59:59				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(12)	WISEJ2356-4814	RA: 23 56 44.7900 (359.1866250d) Dec: -48 14 56.30 (-48.24897d) Equinox: J2000		V=(?) F110W ~ 23.9 mag
	Comments: Category=STAR Description=[BROWN DWARF]				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(12) WISEJ2356-4814	WISEJ2356-4814	WFC3/IR, MULTIACCUM, IR	F110W
					NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs. Groups Pattern 1, Exps 1-1 in WISEJ2356-4814_1 (17) (1)
					Exp. Time (Total)/[Actual Dur.] 599.232292 Secs (2396.929 Secs)
					Orbit [1]
Orbit Structure	Orbit 1 Server Version: 20210514				

Proposal 16243 - WISEJ2356-4814 2 (18) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2356-4814_2 (18), failed Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 16-JUN-2021:00:00:00 AND 22-JUN-2021:23:59:59				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(12)	WISEJ2356-4814	RA: 23 56 44.7900 (359.1866250d) Dec: -48 14 56.30 (-48.24897d) Equinox: J2000		V=(?) F110W ~ 23.9 mag
	Comments: Category=STAR Description=[BROWN DWARF]				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(12) WISEJ2356-4814	WISEJ2356-4814	WFC3/IR, MULTIACCUM, IR	F110W
					NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs. Groups Pattern 1, Exps 1-1 in WISEJ2356-4814_2 (18) (1)
					Exp. Time (Total)/[Actual Dur.] 599.232292 Secs (2396.929 Secs)
					Orbit [1]
Orbit Structure	Orbit 1 Server Version: 20210514				

Proposal 16243 - WISEJ2355+3804 2 (Z6) - Determining the low-mass cutoff for star formation

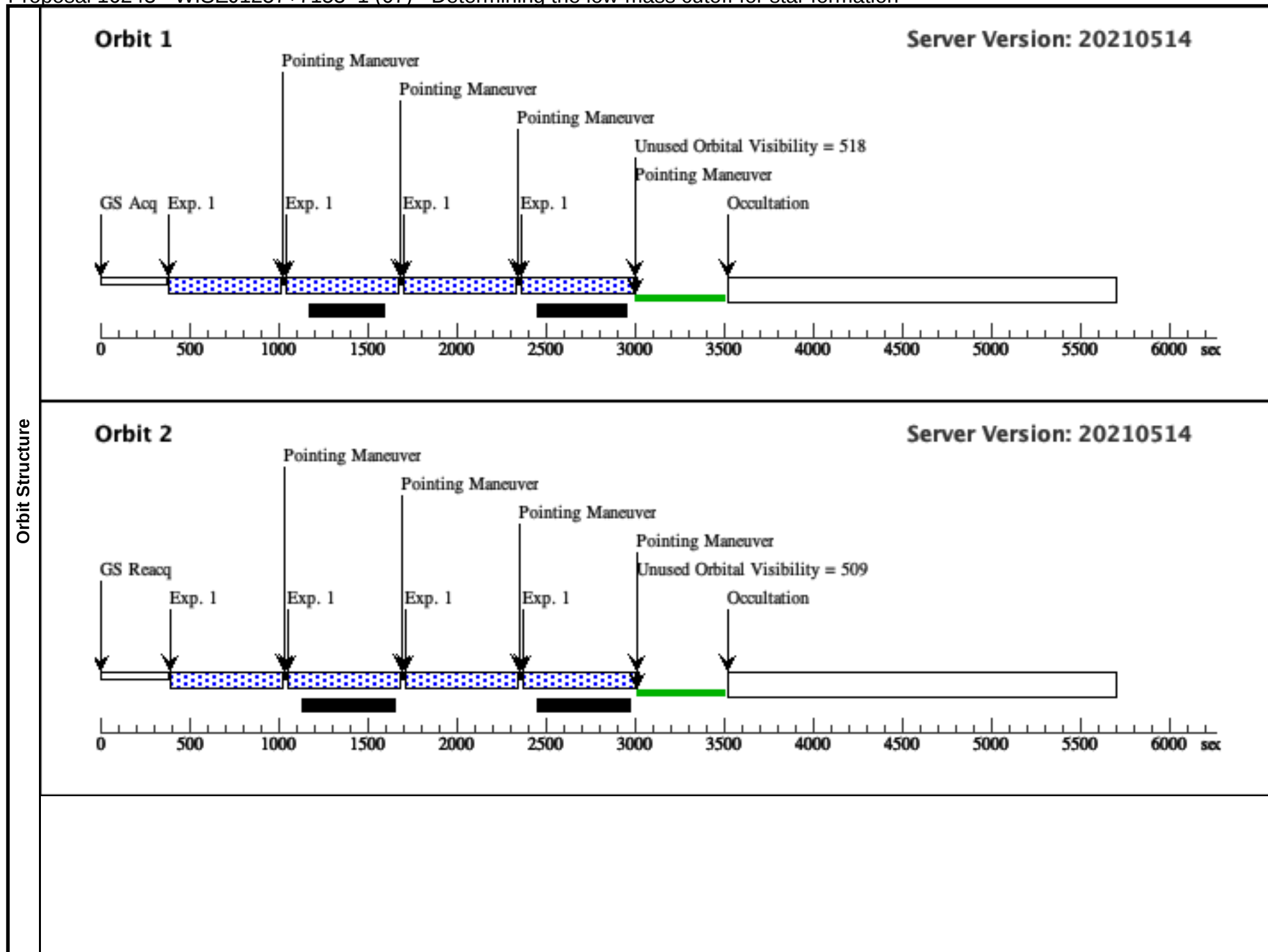
Visit	Proposal 16243, WISEJ2355+3804_2 (Z6), implementation Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 01-SEP-2021 AND 31-OCT-2021				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(11)	WISEJ2355+3804	RA: 23 55 48.0000 (358.9500000d) Dec: +38 04 39.10 (38.07753d) Equinox: J2000		V=(?) F110W ~ 21.3 mag
	Comments: Category=STAR Description=[BROWN DWARF]				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(11) WISEJ2355+3804	WISEJ2355+3804	WFC3/IR, MULTIACCUM, IR	F110W
					Opt. Params. NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs. Groups Pattern 1, Exps 1-1 in WISEJ2355+3804_2 (Z6) (1)
					Exp. Time (Total)/[Actual Dur.] 599.232292 Secs (2396.929 Secs)
					Orbit [1]
Orbit Structure	Orbit 1 Server Version: 20210514				
	The diagram illustrates the timeline for Orbit 1, spanning from 0 to 6000 seconds. Key events include: GS Acq: Ground Station Acquisition at approximately 100 seconds. Exp. 1: Four exposure periods, each lasting 193 seconds, occurring at approximately 400, 1000, 1600, and 2200 seconds. Pointing Maneuver: Three maneuvers occurring between exposure periods at approximately 1000, 1600, and 2200 seconds. Reconfig: A reconfiguration event at approximately 3000 seconds. Occultation: An occultation event occurring between 3000 and 3500 seconds. Unused Orbital Visibility: A period of 193 seconds of unused visibility following the occultation. The timeline is marked with a scale from 0 to 6000 seconds, with major ticks every 500 seconds.				

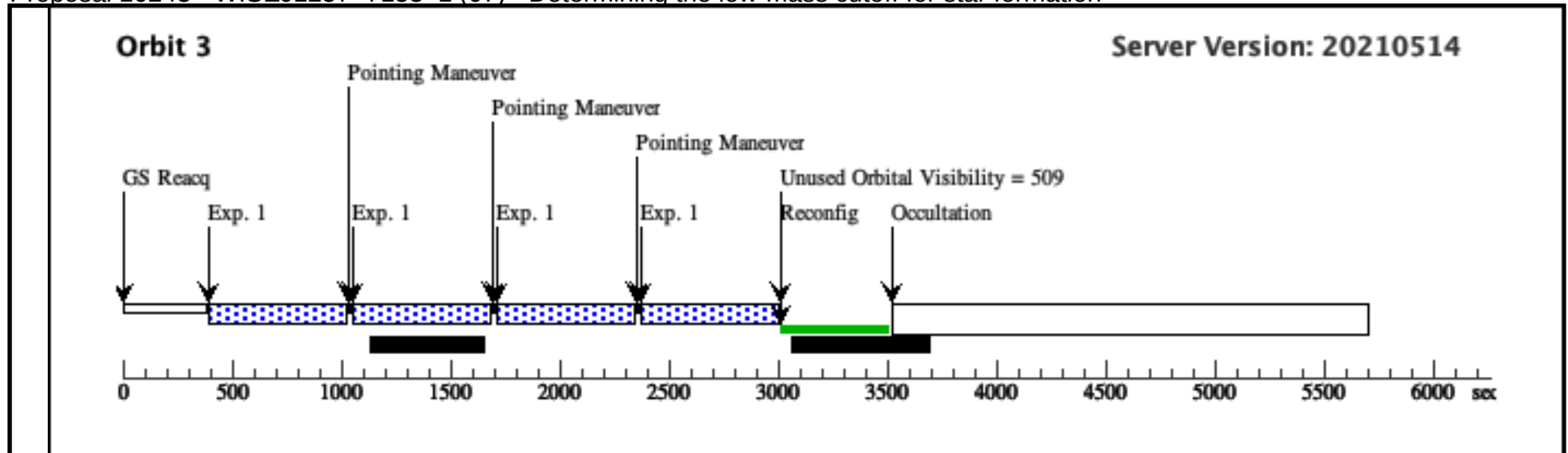
Proposal 16243 - WISEJ2356-4814 2 (Z8) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2356-4814_2 (Z8), implementation Tue Aug 24 14:00:33 GMT 2021				
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: BETWEEN 16-JUN-2022:00:00:00 AND 22-JUN-2022:23:59:59				
Patterns	#	Primary Pattern		Secondary Pattern	
	(1)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
	(12)	WISEJ2356-4814	RA: 23 56 44.7900 (359.1866250d) Dec: -48 14 56.30 (-48.24897d) Equinox: J2000		V=(?) F110W ~ 23.9 mag
	Comments: Category=STAR Description=[BROWN DWARF]				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.
	1	(12) WISEJ2356-4814	WISEJ2356-4814	WFC3/IR, MULTIACCUM, IR	F110W
					Opt. Params. NSAMP=12; SAMP-SEQ=STEP100
					Special Reqs. Groups Pattern 1, Exps 1-1 in WISEJ2356-4814_2 (Z8) (1)
					Exp. Time (Total)/[Actual Dur.] 599.232292 Secs (2396.929 Secs)
					Orbit [1]
Orbit Structure	Orbit 1 Server Version: 20210514				
	Diagram illustrating the Orbit Structure for Orbit 1. The timeline shows various events and durations: - GS Acq (Green Start Acquisition) - Exp. 1 (Exposure 1) - Pointing Maneuver - Reconfig (Reconfiguration) - Unused Orbital Visibility = 278 - Occultation The timeline is marked in seconds (0 to 6000).				

Proposal 16243 - WISEJ1257+7153 1 (07) - Determining the low-mass cutoff for star formation

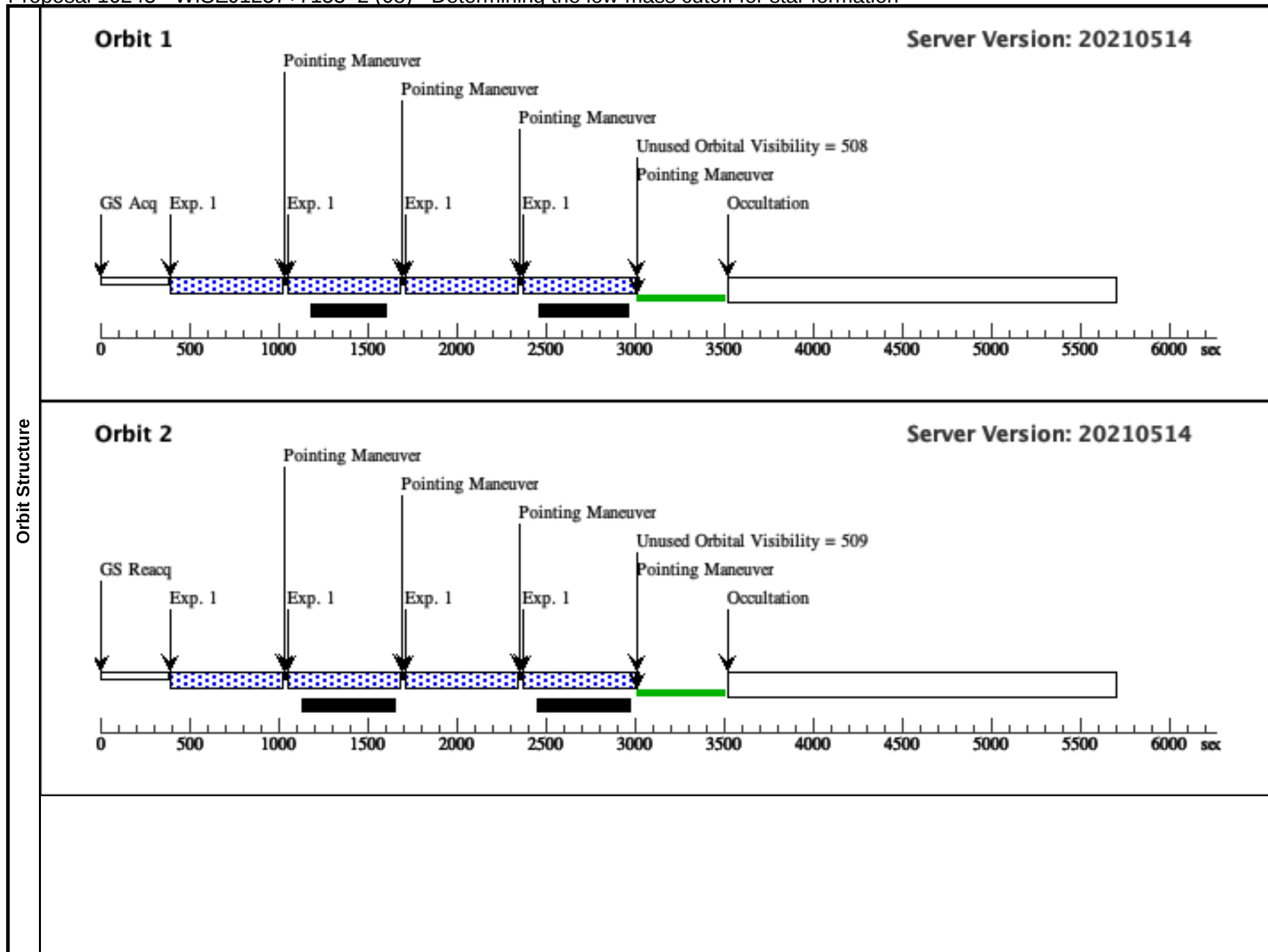
Visit	Proposal 16243, WISEJ1257+7153_1 (07), completed										Tue Aug 24 14:00:33 GMT 2021	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: WFC3/IR											
	Special Requirements: BETWEEN 02-JAN-2021:00:00:00 AND 08-JAN-2021:23:59:59											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures		
	(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=3 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(1)		
Fixed Targets	#	Name		Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(13)	WISEJ1257+7153		RA: 12 57 19.9429 (194.3330954d) Dec: +71 53 48.96 (71.89693d) Equinox: J2000				V=(?) F110W ~ 24.4 mag		Reference Frame: ICRS		
	Comments: Category=STAR Description=[BROWN DWARF]											
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1		(13) WISEJ1257+7153	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12; SAMP-SEQ=STEP100		Pattern 2, Exps 1-1 in WISEJ1257+7153_1 (07) (2)	599.232292 Secs (7190.788 Secs)		
										[==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 1,3)] [==>(Pattern 1,4)]		[1]
										[==>(Pattern 2,1)] [==>(Pattern 2,2)] [==>(Pattern 2,3)] [==>(Pattern 2,4)]		[2]
										[==>(Pattern 3,1)] [==>(Pattern 3,2)] [==>(Pattern 3,3)] [==>(Pattern 3,4)]		[3]

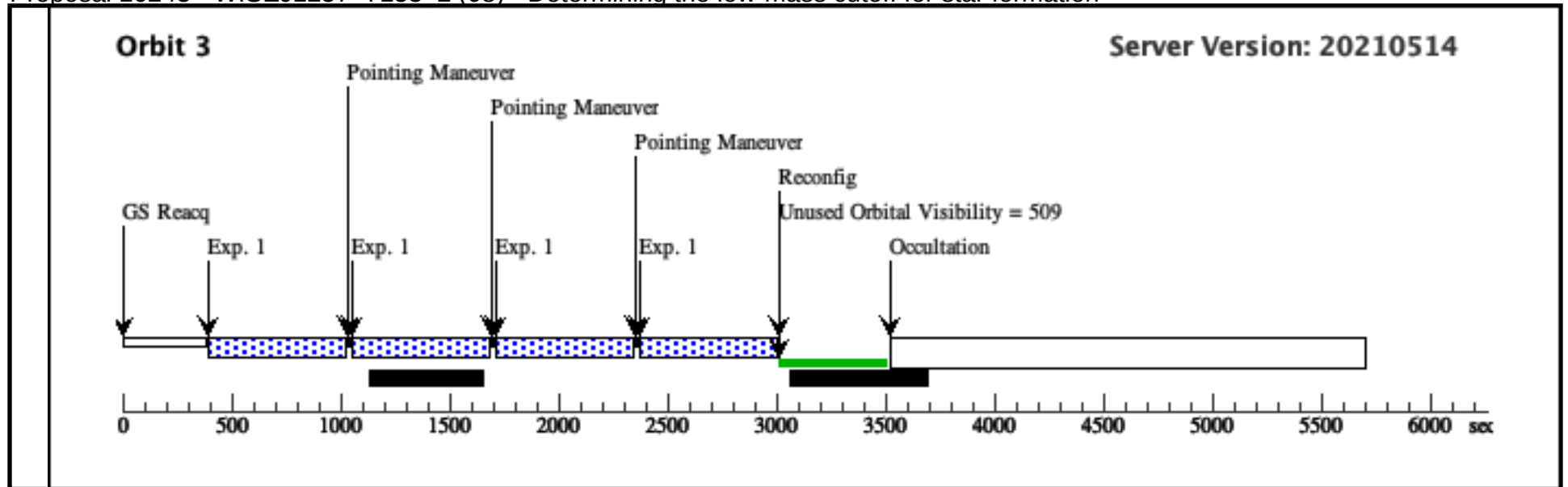




Proposal 16243 - WISEJ1257+7153 2 (08) - Determining the low-mass cutoff for star formation

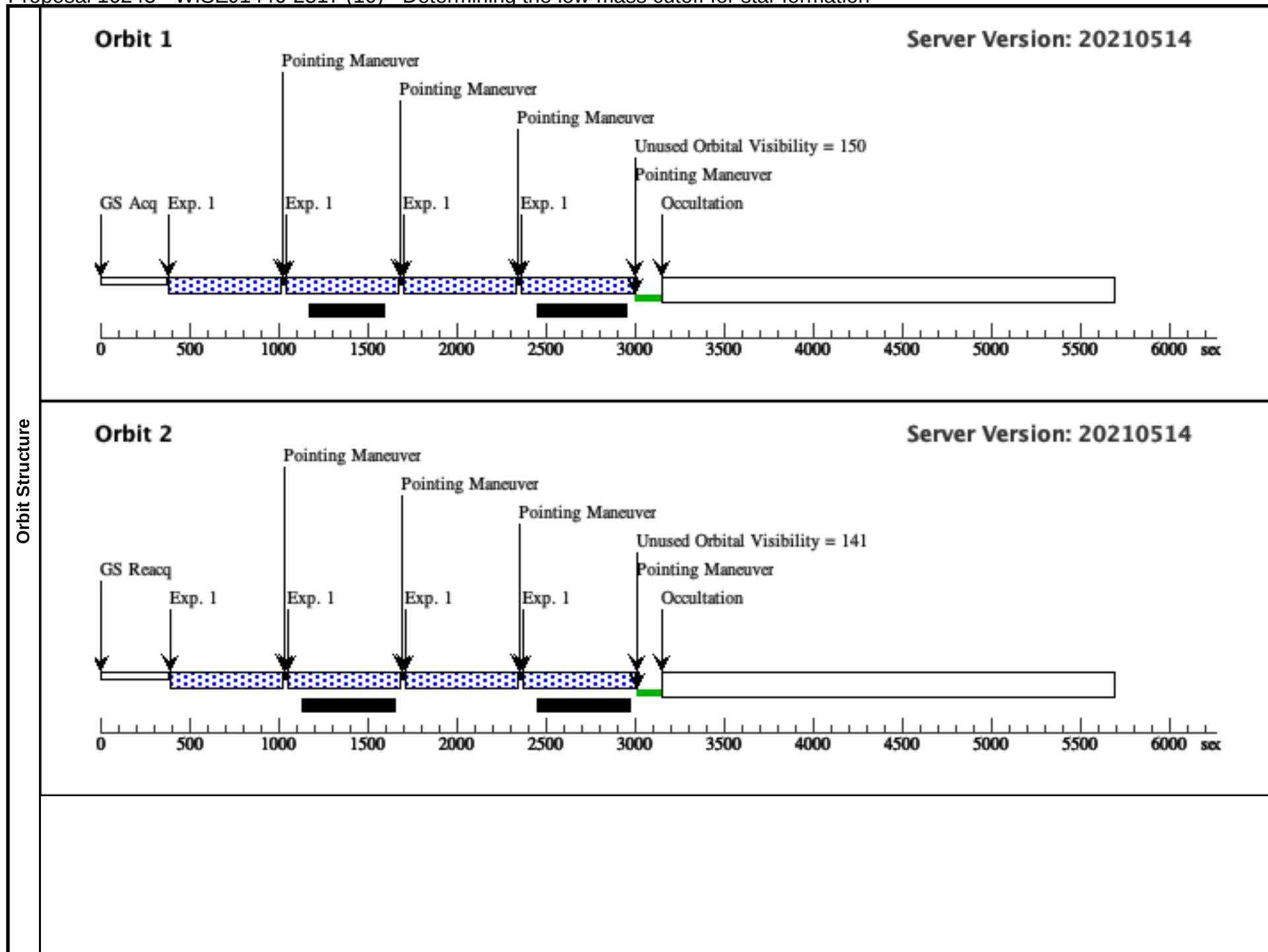
Visit	Proposal 16243, WISEJ1257+7153_2 (08), implementation										Tue Aug 24 14:00:33 GMT 2021	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: WFC3/IR											
	Special Requirements: BETWEEN 01-SEP-2021 AND 31-OCT-2021											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures		
	(2)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=3 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Fluxes		Miscellaneous		
	(13)	WISEJ1257+7153	RA: 12 57 19.9429 (194.3330954d) Dec: +71 53 48.96 (71.89693d) Equinox: J2000					V=(?) F110W ~ 24.4 mag		Reference Frame: ICRS		
	Comments: Category=STAR Description=[BROWN DWARF]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(13) WISEJ1257+7153	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=12; SAMP-SEQ=STEP100	GS ACQ SCENARIO BASE1BE	Pattern 2, Exps 1-1 in WISEJ1257+7153_2 (08) (2)	599.232292 Secs (7190.788 Secs)			
									[==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 1,3)] [==>(Pattern 1,4)]		[1]	
									[==>(Pattern 2,1)] [==>(Pattern 2,2)] [==>(Pattern 2,3)] [==>(Pattern 2,4)]		[2]	
									[==>(Pattern 3,1)] [==>(Pattern 3,2)] [==>(Pattern 3,3)] [==>(Pattern 3,4)]		[3]	





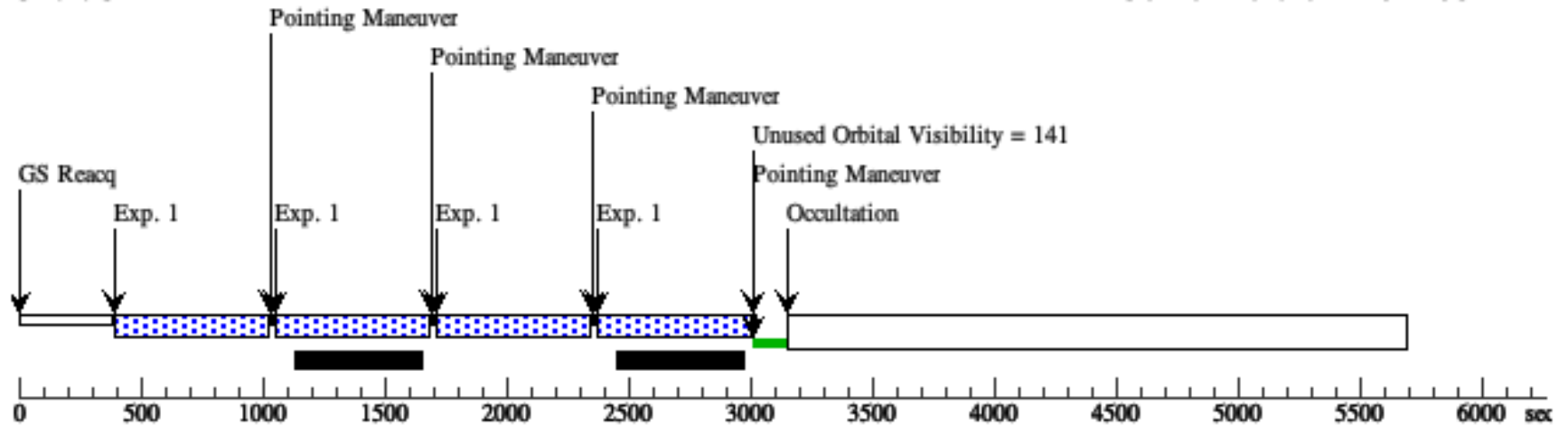
Proposal 16243 - WISEJ1446-2317 (10) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ1446-2317 (10), completed										Tue Aug 24 14:00:33 GMT 2021		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR												
	Special Requirements: BETWEEN 30-JAN-2021:00:00:00 AND 05-FEB-2021:23:59:59												
Patterns	#	Primary Pattern				Secondary Pattern				Exposures			
	(3)	Pattern Type=WFC3-IR-DITHER-BLOB		Coordinate Frame=POS-TARG		Pattern Type=WFC3-IR-DITHER-BOX-MIN		Coordinate Frame=POS-TARG		(1)			
		Purpose=DITHER		Angle Between Sides=		Purpose=DITHER		Angle Between Sides=74.653					
		Number Of Points=5		Center Pattern=true		Number Of Points=4		Center Pattern=true					
		Point Spacing=5.183				Point Spacing=0.572							
		Line Spacing=				Line Spacing=0.365							
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous				
	(1)	WISEJ1446-2317	RA: 14 46 6.6200 (221.5275833d)				V=(?)		Reference Frame: ICRS				
			Dec: -23 17 17.80 (-23.28828d)				F110W ~ 25.1 mag						
			Equinox: J2000										
	Comments: Category=STAR Description=[BROWN DWARF]												
Exposures	#	Label	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(1) WISEJ1446-2317	WFC3/IR, MULTIACCUM, IR		F110W	NSAMP=12;		Pattern 3, Exps 1-1 i	599.232292 Secs (11984.646 Secs)			
							SAMP-SEQ=STEP1		n WISEJ1446-2317 (	[==>(Pattern 1,1)]		[1]	
							00		10) (3)	[==>(Pattern 1,2)]			
										[==>(Pattern 1,3)]			
										[==>(Pattern 1,4)]			
											[==>(Pattern 2,1)]		[2]
											[==>(Pattern 2,2)]		
											[==>(Pattern 2,3)]		
											[==>(Pattern 2,4)]		
											[==>(Pattern 3,1)]		[3]
											[==>(Pattern 3,2)]		
											[==>(Pattern 3,3)]		
											[==>(Pattern 3,4)]		
											[==>(Pattern 4,1)]		[4]
											[==>(Pattern 4,2)]		
											[==>(Pattern 4,3)]		
											[==>(Pattern 4,4)]		
											[==>(Pattern 5,1)]		[5]
											[==>(Pattern 5,2)]		
											[==>(Pattern 5,3)]		
											[==>(Pattern 5,4)]		



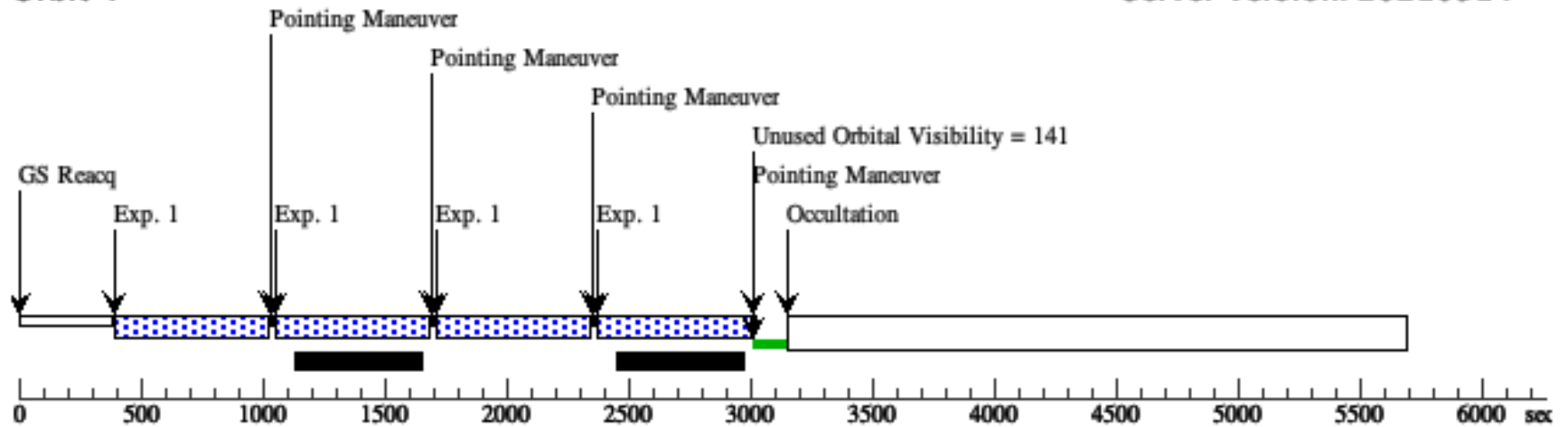
Orbit 3

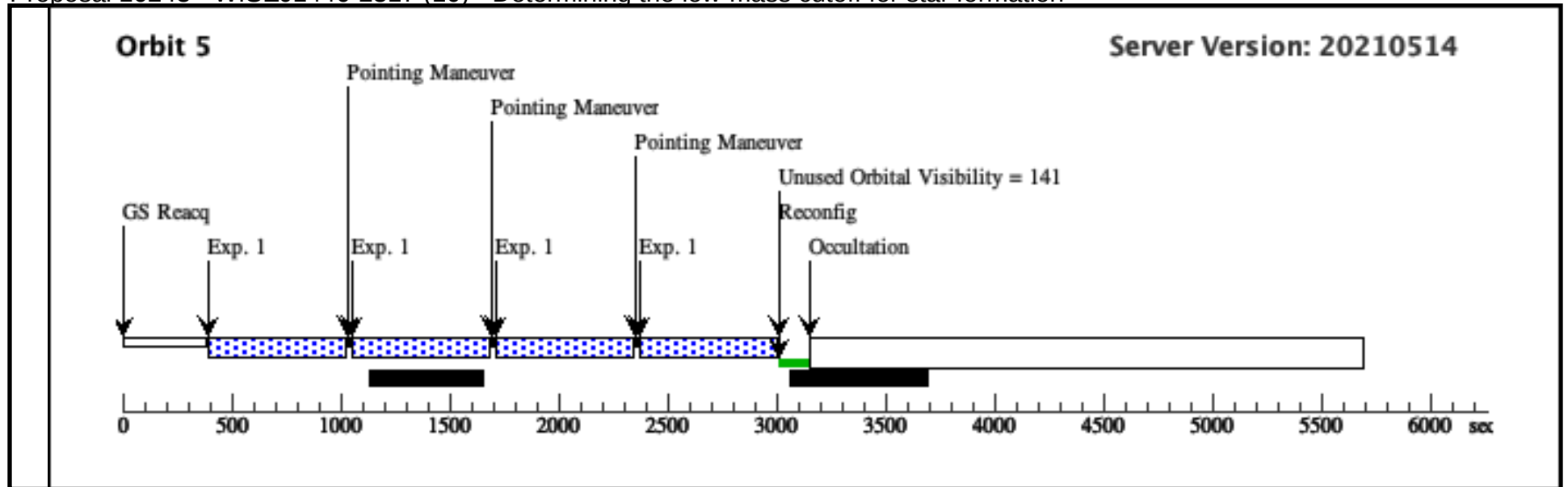
Server Version: 20210514



Orbit 4

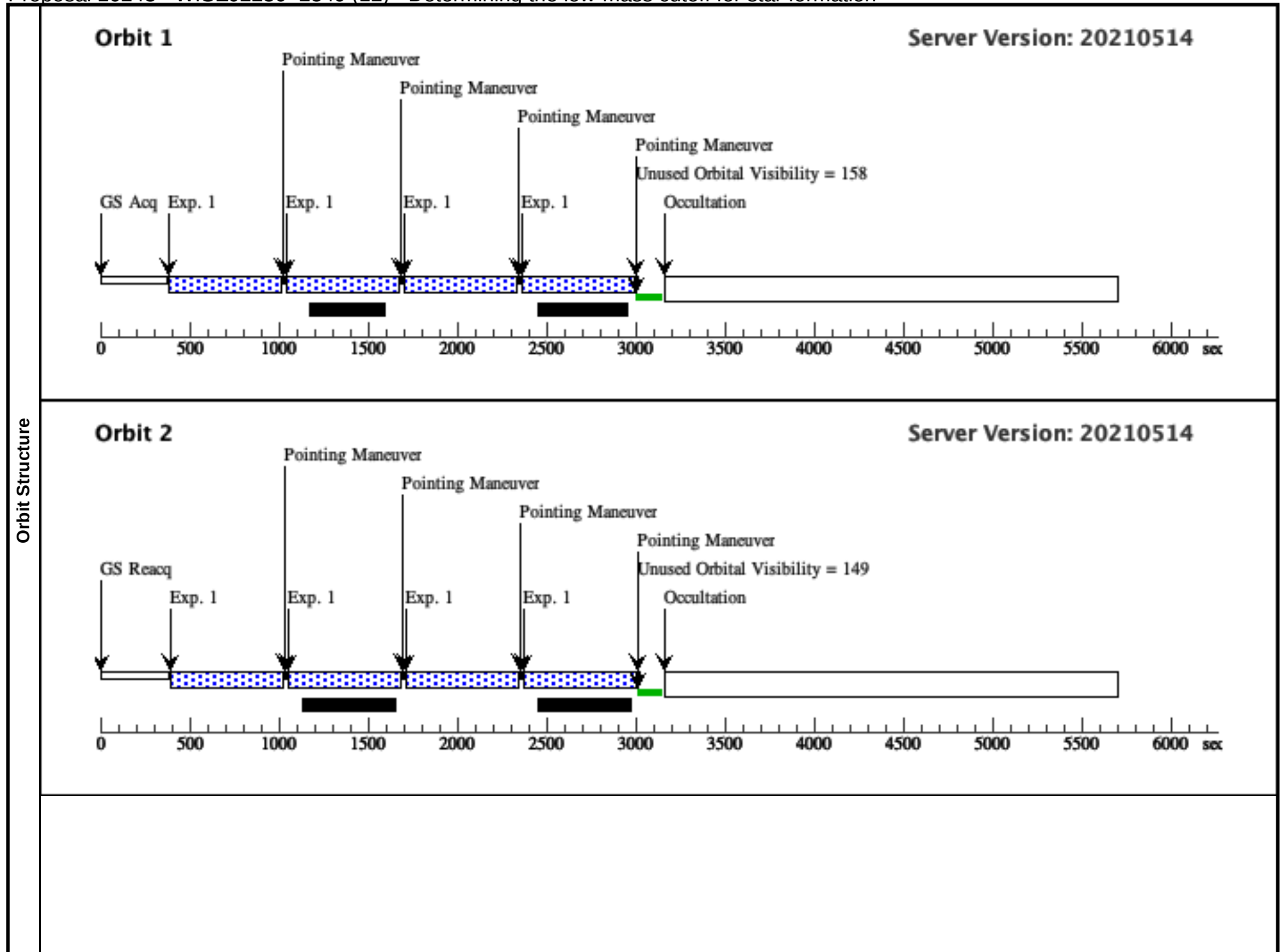
Server Version: 20210514





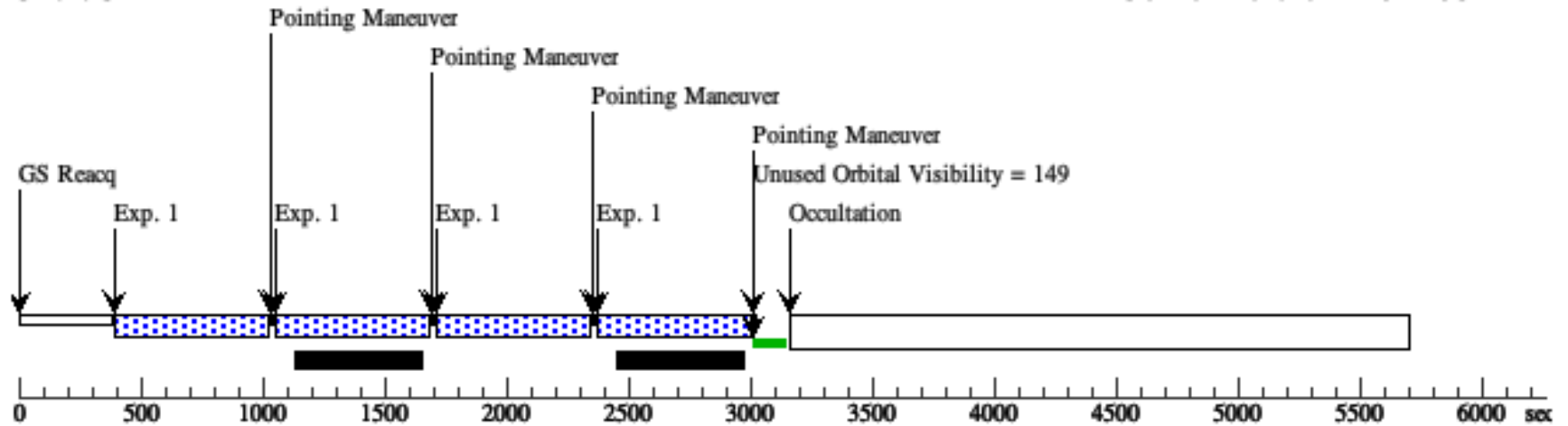
Proposal 16243 - WISEJ2230+2549 (12) - Determining the low-mass cutoff for star formation

Visit	Proposal 16243, WISEJ2230+2549 (12), completed										Tue Aug 24 14:00:33 GMT 2021	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: WFC3/IR											
	Special Requirements: BETWEEN 24-NOV-2020:00:00:00 AND 30-NOV-2020:23:59:59											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures		
	(4)	Pattern Type=WFC3-IR-DITHER-BLOB Purpose=DITHER Number Of Points=4 Point Spacing=5.183 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=41.859 Angle Between Sides= Center Pattern=true		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=true		(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(10)	WISEJ2230+2549	RA: 22 30 22.6100 (337.5942083d) Dec: +25 49 7.44 (25.81873d) Equinox: J2000				V=(?) F110W ~ 24.8 mag		Reference Frame: ICRS			
	Comments: Category=STAR Description=[BROWN DWARF]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(10) WISEJ2230+2549	WFC3/IR, MULTIACCUM, IR	F110W	NSAMP=12; SAMP-SEQ=STEP100		Pattern 4, Exps 1-1 in WISEJ2230+2549 (12) (4)	599.232292 Secs (9587.717 Secs)			
									[==>(Pattern 1,1)] [==>(Pattern 1,2)] [==>(Pattern 1,3)] [==>(Pattern 1,4)]		[1]	
									[==>(Pattern 2,1)] [==>(Pattern 2,2)] [==>(Pattern 2,3)] [==>(Pattern 2,4)]		[2]	
									[==>(Pattern 3,1)] [==>(Pattern 3,2)] [==>(Pattern 3,3)] [==>(Pattern 3,4)]		[3]	
									[==>(Pattern 4,1)] [==>(Pattern 4,2)] [==>(Pattern 4,3)] [==>(Pattern 4,4)]		[4]	



Orbit 3

Server Version: 20210514



Orbit 4

Server Version: 20210514

