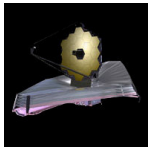

1184 - A NIRCam Coronagraphic Imaging Survey of Nearby Young M Dwarfs

Cycle: 1, Proposal Category: GTO

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. Joshua Schlieder (PI)	**NASA Goddard Space Flight Center**	**joshua.e.schlieder@nasa.gov**
Prof. Michael R. Meyer (CoI)	University of Michigan	mrmeyer@umich.edu
Dr. Charles A. Beichman (CoI)	Jet Propulsion Laboratory	charles.a.beichman@jpl.nasa.gov
Dr. Jarron Michael Leisenring (CoI)	University of Arizona	jarronl@email.arizona.edu
Dr. Marie Ygouf (CoI)	Jet Propulsion Laboratory	marie.ygouf@jpl.nasa.gov

OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Young M Dwarf Sequence 1				
	1	AU Mic roll 1	NIRCam Coronagraphic Imaging	(1) V-AU-MIC
	2	AU Mic roll 2	NIRCam Coronagraphic Imaging	(1) V-AU-MIC
	3	HIP17695 roll 1	NIRCam Coronagraphic Imaging	(2) HIP17695
	4	HIP17695 roll 2	NIRCam Coronagraphic Imaging	(2) HIP17695
	5	G 7-34 roll 1	NIRCam Coronagraphic Imaging	(3) G-7-34
	6	G 7-34 roll 2	NIRCam Coronagraphic Imaging	(3) G-7-34
	7	TYC5899 roll 1	NIRCam Coronagraphic Imaging	(4) TYC5899
	8	TYC5899 roll 2	NIRCam Coronagraphic Imaging	(4) TYC5899
	27	TYC5899 roll 1	NIRCam Coronagraphic Imaging	(4) TYC5899
	28	TYC5899 roll 2	NIRCam Coronagraphic Imaging	(4) TYC5899
Young M Dwarf Sequence 2				
	9	Fomalhaut C roll 1	NIRCam Coronagraphic Imaging	(6) FOMALHAUT-C
	10	Fomalhaut C roll 2	NIRCam Coronagraphic Imaging	(6) FOMALHAUT-C
	11	AP Col roll 1	NIRCam Coronagraphic Imaging	(7) V-AP-COL

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	12	AP Col roll 2	NIRCam Coronagraphic Imaging	(7) V-AP-COL
	13	2MJ0944 roll 1	NIRCam Coronagraphic Imaging	(5) 2MJ0944
	14	2MJ0944 roll 2	NIRCam Coronagraphic Imaging	(5) 2MJ0944
Young M Dwarf Sequence 3				
	15	LP 944-20 roll 1	NIRCam Coronagraphic Imaging	(8) LP-944-20
	16	LP 944-20 roll 2	NIRCam Coronagraphic Imaging	(8) LP-944-20
	17	2MJ0443 roll 1	NIRCam Coronagraphic Imaging	(9) 2MJ0443
	18	2MJ0443 roll 2	NIRCam Coronagraphic Imaging	(9) 2MJ0443

ABSTRACT

The population of giant planets on wide orbits around low-mass M dwarf stars is poorly understood. Current ground based imaging struggles to probe below 1 Jupiter mass at large separations. However, in the vicinity of the closest youngest M dwarfs, the unprecedented sensitivity of NIRCam coronagraphic imaging on the JWST provides direct access to lower-mass gas-giants beyond 10 AU. Contrast estimates indicate that 3-5 micron imaging is sensitive to sub-Jupiter mass planets and pushes into the ice-giant mass regime around the most favorable targets. We have designed a NIRCam GTO program to perform deep, dual-band coronagraphic imaging on a sample of the closest youngest M dwarfs. Our program will use the round M335R coronagraph with both the F444W and F356W filters and include telescope rolls for PSF subtraction. The dual-band imaging approach allows for color-based rejection of stellar and galactic background contaminants. Such observations will provide deep observational limits on the presence of sub-Jupiter mass planets in the outskirts of these stellar systems, provide constraints on the peak of the planet surface density distribution, and probe the separation of the primordial CO ice line, the hypothesized venue for ice-giant formation.

OBSERVING DESCRIPTION

The population of giant planets on wide orbits orbiting low-mass M dwarf stars (0.6 MSun, Teff 3900 K) is poorly understood. Radial velocity and microlensing surveys provide population constraints and occurrence rate estimates within 10 AU, but current ground based imaging struggles to probe below 1 Jupiter mass at larger separations. In the vicinity of these intrinsically faint stars, where the contrast requirements are less severe, estimates reveal that JWST NIRCam 3-5 m coronagraphic imaging greatly outperforms current ground based capabilities and peaks for young M dwarfs within ~25 pc. Using contrast curves that predict ~10^-5 contrast at 1" separations, NIRCam imaging is sensitive to Saturn mass planets and can push into the ice-giant mass regime (Neptune mass) around the most favorable targets.

Thus, NIRCam coronagraphic imaging can probe a new planet parameter space around M dwarfs, reaching significantly lower-mass planets at >10

AU. An attractive NIRCam program is to perform deep, dual band imaging on a sample of the closest youngest M dwarfs. Following survey simulations and individual contrast estimates, we selected 9 high priority targets from a compiled list of all known M type dwarfs younger than 500 Myr within 100 pc. Observations of these targets will provide deep limits on the presence of sub-Jupiter mass planets in the outskirts of these stellar systems. Scientific goals of these observations include placing constraints on the peak in the planet surface density distribution, providing deep direct imaging constraints on the microlensing event population, and probing the separation of the primordial CO ice line, the hypothesized venue for ice-giant formation. Our small survey will use the M335R coronagraph with both the F444W and F356W filters. We plan to integrate for a total of 1 hr in F444W and 30 min in F356W spread over 2 roll angles separated by ~10 deg. This observing strategy allows for color-based rejection of background contaminants and roll/PSF subtraction.

We also plan to use the ensemble of target stars to construct PSF references during image post processing. This option saves telescope time by avoiding observations of separate PSF reference stars for each target and provides a resource to the community by beginning to build a low-mass star PSF library for future use early in the JWST mission. To achieve this, we have organized our program into observation blocks where stars of similar spectral type are observed sequentially to preserve space craft and PSF stability. Our detector setting choices (readout pattern, groups, integrations) have also been selected to optimize a self-referenced survey.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	V-AU-MIC	RA: 20 45 9.5324 (311.2897183d) Dec: -31 20 27.24 (-31.34090d) Equinox: J2000	Proper Motion RA: 281.424 mas/yr Proper Motion Dec: -359.895 mas/yr Parallax: .1028295" Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M1
Age = 24 Myr
Group Membership = Beta Pic Moving Group
K_s, W1, W2 = 4.53, 4.45, 4.01
Category=Star
Description=[Debris disks, M dwarfs]

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	HIP17695	RA: 03 47 23.3412 (56.8472550d) Dec: -01 58 19.95 (-1.97221d) Equinox: J2000	Proper Motion RA: 180.673 mas/yr Proper Motion Dec: -274.184 mas/yr Parallax: 0.0595161" Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.93, 6.81, 6.66
Category=Star
Description=[M dwarfs]

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	G-7-34	RA: 04 17 18.5333 (64.3272221d) Dec: +08 49 22.01 (8.82278d) Equinox: J2000	Proper Motion RA: 133.967 mas/yr Proper Motion Dec: -377.252 mas/yr Parallax: 0.0685538" Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 8.18, 8.01, 7.81
Category=Star
Description=[M dwarfs]

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	TYC5899	RA: 04 52 24.4147 (73.1017279d) Dec: -16 49 21.93 (-16.82276d) Equinox: J2000	Proper Motion RA: 122.142 mas/yr Proper Motion Dec: -210.570 mas/yr Parallax: 0.0631601" Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.89, 6.78, 6.58
Category=Star
Description=[M dwarfs]

(5)	2MJ0944	RA: 09 44 54.1925 (146.2258021d)	Proper Motion RA: -331.336 mas/yr
		Dec: -12 20 54.37 (-12.34844d)	Proper Motion Dec: 40.034 mas/yr
		Equinox: J2000	Parallax: 0.0761746"
			Epoch of Position: 2000

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M5
Age = 50 Myr
Group Membership = Argus Association
K_s, W1, W2 = 7.60, 7.36, 7.19
Category=Star
Description=[M dwarfs]

(6)	FOMALHAUT-C	RA: 22 48 4.4925 (342.0187188d)	Proper Motion RA: 331.899 mas/yr
		Dec: -24 22 7.72 (-24.36881d)	Proper Motion Dec: -183.472 mas/yr
		Equinox: J2000	Parallax: 0.1303032"
			Epoch of Position: 2000

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4
Age = 440 Myr
Group Membership = Young Field Population
K_s, W1, W2 = 7.21, 6.92, 6.79
Category=Star
Description=[Debris disks, M dwarfs]

(7)	V-AP-COL	RA: 06 04 52.1487 (91.2172863d)	Proper Motion RA: 25.721 mas/yr
		Dec: -34 33 35.77 (-34.55994d)	Proper Motion Dec: 342.854 mas/yr
		Equinox: J2000	Parallax: 0.1153997"
			Epoch of Position: 2000

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4.5
Age = 50 Myr
Group Membership = Argus Association
K_s, W1, W2 = 6.87, 6.67, 6.39
Category=Star
Description=[M dwarfs]

(8)	LP-944-20	RA: 03 39 35.2525 (54.8968854d)	Proper Motion RA: 308.868 mas/yr
		Dec: -35 25 43.63 (-35.42879d)	Proper Motion Dec: 268.194 mas/yr
		Equinox: J2000	Parallax: 0.1557590"
			Epoch of Position: 2000

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M9
Age = 200 Myr
Group Membership = Young Field Population
K_s, W1, W2 = 9.55, 9.13, 8.80
Category=Star
Description=[Brown dwarfs, M dwarfs]

(9)	2MJ0443	RA: 04 43 37.6088 (70.9067033d)	Proper Motion RA: 55.112 mas/yr
		Dec: +00 02 5.11 (.03475d)	Proper Motion Dec: -107.485 mas/yr
		Equinox: J2000	Parallax: 0.0474115"
			Epoch of Position: 2000

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M9
Age = 24 Myr
Group Membership = Beta Pictoris Moving Group
K_s, W1, W2 = 11.22, 10.83, 10.48
Category=Star
Description=[Brown dwarfs, M dwarfs]

Observation

Proposal 1184, Observation 1: AU Mic roll 1 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(AU Mic roll 1 (Obs 1)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	V-AU-MIC	RA: 20 45 9.5324 (311.2897183d)	Proper Motion RA: 281.424 mas/yr	
		Dec: -31 20 27.24 (-31.34090d)	Proper Motion Dec: -359.895 mas/yr	
		Equinox: J2000	Parallax: .1028295"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M1
Age = 24 Myr
Group Membership = Beta Pic Moving Group
K_s, W1, W2 = 4.53, 4.45, 4.01
Category=Star
Description=[Debris disks, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	BRIGHT (ND Square)	BRIGHT1	65	1	1	6.523	12325.5

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	SHALLOW2	10	35	1	35	1796.704	
2	F356W	SHALLOW2	10	17	1	17	872.685	

PSF References	HIP17695 roll 1 (Obs 3) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 2 from 1 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 2: AU Mic roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(AU Mic roll 2 (Obs 2)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	V-AU-MIC	RA: 20 45 9.5324 (311.2897183d)	Proper Motion RA: 281.424 mas/yr	
		Dec: -31 20 27.24 (-31.34090d)	Proper Motion Dec: -359.895 mas/yr	
		Equinox: J2000	Parallax: .1028295"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M1
Age = 24 Myr
Group Membership = Beta Pic Moving Group
K_s, W1, W2 = 4.53, 4.45, 4.01
Category=Star
Description=[Debris disks, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	BRIGHT (ND Square)	BRIGHT1	65	1	1	6.523	12325.5

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	SHALLOW2	10	35	1	35	1796.704	
2	F356W	SHALLOW2	10	17	1	17	872.685	

PSF References	HIP17695 roll 2 (Obs 4) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 2 from 1 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 3: HIP17695 roll 1

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(HIP17695 roll 1 (Obs 3)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	HIP17695	RA: 03 47 23.3412 (56.8472550d)	Proper Motion RA: 180.673 mas/yr	
		Dec: -01 58 19.95 (-1.97221d)	Proper Motion Dec: -274.184 mas/yr	
		Equinox: J2000	Parallax: 0.0595161"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.93, 6.81, 6.66
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.6

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	G 7-34 roll 1 (Obs 5) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 4 from 3 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 4: HIP17695 roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(HIP17695 roll 2 (Obs 4)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	HIP17695	RA: 03 47 23.3412 (56.8472550d)	Proper Motion RA: 180.673 mas/yr	
		Dec: -01 58 19.95 (-1.97221d)	Proper Motion Dec: -274.184 mas/yr	
		Equinox: J2000	Parallax: 0.0595161"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.93, 6.81, 6.66
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.6

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	G 7-34 roll 2 (Obs 6) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 4 from 3 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 5: G 7-34 roll 1 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(G 7-34 roll 1 (Obs 5)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	G-7-34	RA: 04 17 18.5333 (64.3272221d)	Proper Motion RA: 133.967 mas/yr	
		Dec: +08 49 22.01 (8.82278d)	Proper Motion Dec: -377.252 mas/yr	
		Equinox: J2000	Parallax: 0.0685538"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 8.18, 8.01, 7.81
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	9	1	1	0.504	12325.7

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	HIP17695 roll 1 (Obs 3) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 6 from 5 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 6: G 7-34 roll 2 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(G 7-34 roll 2 (Obs 6)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(3)	G-7-34	RA: 04 17 18.5333 (64.3272221d)	Proper Motion RA: 133.967 mas/yr	
		Dec: +08 49 22.01 (8.82278d)	Proper Motion Dec: -377.252 mas/yr	
		Equinox: J2000	Parallax: 0.0685538"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 8.18, 8.01, 7.81
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	9	1	1	0.504	12325.7

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	HIP17695 roll 2 (Obs 4) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 6 from 5 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 7: TYC5899 roll 1

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(TYC5899 roll 1 (Obs 7)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	TYC5899	RA: 04 52 24.4147 (73.1017279d)	Proper Motion RA: 122.142 mas/yr	
		Dec: -16 49 21.93 (-16.82276d)	Proper Motion Dec: -210.570 mas/yr	
		Equinox: J2000	Parallax: 0.0631601"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.89, 6.78, 6.58
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.8

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	2	2	75.157	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	HIP17695 roll 1 (Obs 3) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 8 from 7 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 8: TYC5899 roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(TYC5899 roll 2 (Obs 8)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	TYC5899	RA: 04 52 24.4147 (73.1017279d)	Proper Motion RA: 122.142 mas/yr	
		Dec: -16 49 21.93 (-16.82276d)	Proper Motion Dec: -210.570 mas/yr	
		Equinox: J2000	Parallax: 0.0631601"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.89, 6.78, 6.58
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.8

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	HIP17695 roll 2 (Obs 4) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 1, 2, 3, 4, 5, 6, 7, 8, Non-interruptible Aperture PA Offset 8 from 7 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 27: TYC5899 roll 1 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(TYC5899 roll 1 (Obs 27)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(TYC5899 roll 1 (Obs 27)) Warning (Form): PSF Reference observations should be SEQ NON-INT.

(TYC5899 roll 1 (Obs 27)) Warning (Form): Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees

(Visit 27:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	TYC5899	RA: 04 52 24.4147 (73.1017279d)	Proper Motion RA: 122.142 mas/yr	
		Dec: -16 49 21.93 (-16.82276d)	Proper Motion Dec: -210.570 mas/yr	
		Equinox: J2000	Parallax: 0.0631601"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.89, 6.78, 6.58
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.8

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	2	2	75.157	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	HIP17695 roll 1 (Obs 3) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel

Observation

Proposal 1184, Observation 28: TYC5899 roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(TYC5899 roll 2 (Obs 28)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(TYC5899 roll 2 (Obs 28)) Warning (Form): PSF Reference observations should be SEQ NON-INT.

(TYC5899 roll 2 (Obs 28)) Warning (Form): Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees

(Visit 28:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(4)	TYC5899	RA: 04 52 24.4147 (73.1017279d)	Proper Motion RA: 122.142 mas/yr	
		Dec: -16 49 21.93 (-16.82276d)	Proper Motion Dec: -210.570 mas/yr	
		Equinox: J2000	Parallax: 0.0631601"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M3
Age = 149 Myr
Group Membership = AB Doradus Moving Group
K_s, W1, W2 = 6.89, 6.78, 6.58
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.8

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	HIP17695 roll 2 (Obs 4) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel

Observation

Proposal 1184, Observation 9: Fomalhaut C roll 1 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(Fomalhaut C roll 1 (Obs 9)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(6)	FOMALHAUT-C	RA: 22 48 4.4925 (342.0187188d)	Proper Motion RA: 331.899 mas/yr	
		Dec: -24 22 7.72 (-24.36881d)	Proper Motion Dec: -183.472 mas/yr	
		Equinox: J2000	Parallax: 0.1303032"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4
Age = 440 Myr
Group Membership = Young Field Population
K_s, W1, W2 = 7.21, 6.92, 6.79
Category=Star
Description=[Debris disks, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	5	1	1	0.304	12325.10

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	AP Col roll 1 (Obs 11) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 9, 10, 11, 12, 13, 14, Non-interruptible Aperture PA Offset 10 from 9 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 10: Fomalhaut C roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(Fomalhaut C roll 2 (Obs 10)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(6)	FOMALHAUT-C	RA: 22 48 4.4925 (342.0187188d)	Proper Motion RA: 331.899 mas/yr	
		Dec: -24 22 7.72 (-24.36881d)	Proper Motion Dec: -183.472 mas/yr	
		Equinox: J2000	Parallax: 0.1303032"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4
Age = 440 Myr
Group Membership = Young Field Population
K_s, W1, W2 = 7.21, 6.92, 6.79
Category=Star
Description=[Debris disks, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	5	1	1	0.304	12325.10

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	AP Col roll 1 (Obs 11) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 9, 10, 11, 12, 13, 14, Non-interruptible Aperture PA Offset 10 from 9 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 11: AP Col roll 1

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(AP Col roll 1 (Obs 11)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(7)	V-AP-COL	RA: 06 04 52.1487 (91.2172863d)	Proper Motion RA: 25.721 mas/yr	
		Dec: -34 33 35.77 (-34.55994d)	Proper Motion Dec: 342.854 mas/yr	
		Equinox: J2000	Parallax: 0.1153997"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4.5
Age = 50 Myr
Group Membership = Argus Association
K_s, W1, W2 = 6.87, 6.67, 6.39
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.12

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	2MJ0944 roll 1 (Obs 13) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 9, 10, 11, 12, 13, 14, Non-interruptible Aperture PA Offset 12 from 11 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 12: AP Col roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(AP Col roll 2 (Obs 12)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(7)	V-AP-COL	RA: 06 04 52.1487 (91.2172863d)	Proper Motion RA: 25.721 mas/yr	
		Dec: -34 33 35.77 (-34.55994d)	Proper Motion Dec: 342.854 mas/yr	
		Equinox: J2000	Parallax: 0.1153997"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M4.5
Age = 50 Myr
Group Membership = Argus Association
K_s, W1, W2 = 6.87, 6.67, 6.39
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	3	1	1	0.203	12325.12

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	2MJ0944 roll 2 (Obs 14) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 9, 10, 11, 12, 13, 14, Non-interruptible Aperture PA Offset 12 from 11 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 13: 2MJ0944 roll 1 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(2MJ0944 roll 1 (Obs 13)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	2MJ0944	RA: 09 44 54.1925 (146.2258021d)	Proper Motion RA: -331.336 mas/yr	
		Dec: -12 20 54.37 (-12.34844d)	Proper Motion Dec: 40.034 mas/yr	
		Equinox: J2000	Parallax: 0.0761746"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M5
Age = 50 Myr
Group Membership = Argus Association
K_s, W1, W2 = 7.60, 7.36, 7.19
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	5	1	1	0.304	12325.9

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	AP Col roll 1 (Obs 11) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 9, 10, 11, 12, 13, 14, Non-interruptible Aperture PA Offset 14 from 13 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 14: 2MJ0944 roll 2 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(2MJ0944 roll 2 (Obs 14)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(5)	2MJ0944	RA: 09 44 54.1925 (146.2258021d)	Proper Motion RA: -331.336 mas/yr	
		Dec: -12 20 54.37 (-12.34844d)	Proper Motion Dec: 40.034 mas/yr	
		Equinox: J2000	Parallax: 0.0761746"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M5
Age = 50 Myr
Group Membership = Argus Association
K_s, W1, W2 = 7.60, 7.36, 7.19
Category=Star
Description=[M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	5	1	1	0.304	12325.9

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	AP Col roll 2 (Obs 12) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 9, 10, 11, 12, 13, 14, Non-interruptible Aperture PA Offset 14 from 13 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 15: LP 944-20 roll 1

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(LP 944-20 roll 1 (Obs 15)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	LP-944-20	RA: 03 39 35.2525 (54.8968854d)	Proper Motion RA: 308.868 mas/yr	
		Dec: -35 25 43.63 (-35.42879d)	Proper Motion Dec: 268.194 mas/yr	
		Equinox: J2000	Parallax: 0.1557590"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M9
Age = 200 Myr
Group Membership = Young Field Population
K_s, W1, W2 = 9.55, 9.13, 8.80
Category=Star
Description=[Brown dwarfs, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	17	1	1	0.905	12325.13

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	2MJ0443 roll 1 (Obs 17) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 15, 16, 17, 18, Non-interruptible Aperture PA Offset 16 from 15 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 16: LP 944-20 roll 2

Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(LP 944-20 roll 2 (Obs 16)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	LP-944-20	RA: 03 39 35.2525 (54.8968854d)	Proper Motion RA: 308.868 mas/yr	
		Dec: -35 25 43.63 (-35.42879d)	Proper Motion Dec: 268.194 mas/yr	
		Equinox: J2000	Parallax: 0.1557590"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M9
Age = 200 Myr
Group Membership = Young Field Population
K_s, W1, W2 = 9.55, 9.13, 8.80
Category=Star
Description=[Brown dwarfs, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	17	1	1	0.905	12325.13

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	2MJ0443 roll 2 (Obs 18) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 15, 16, 17, 18, Non-interruptible Aperture PA Offset 16 from 15 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 17: 2MJ0443 roll 1 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(2MJ0443 roll 1 (Obs 17)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(9)	2MJ0443	RA: 04 43 37.6088 (70.9067033d)	Proper Motion RA: 55.112 mas/yr	
		Dec: +00 02 5.11 (.03475d)	Proper Motion Dec: -107.485 mas/yr	
		Equinox: J2000	Parallax: 0.0474115"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M9
Age = 24 Myr
Group Membership = Beta Pictoris Moving Group
K_s, W1, W2 = 11.22, 10.83, 10.48
Category=Star
Description=[Brown dwarfs, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	65	1	1	3.313	12325.14

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	LP 944-20 roll 1 (Obs 15) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 15, 16, 17, 18, Non-interruptible Aperture PA Offset 18 from 17 by 10 to 14 Degrees (Same offsets in V3)

Observation

Proposal 1184, Observation 18: 2MJ0443 roll 2 Thu Oct 27 23:00:30 GMT 2022

Diagnostic Status: Warning

Observing Template: NIRCam Coronagraphic Imaging

Diagnostics

(2MJ0443 roll 2 (Obs 18)) Warning (Form): By checking 'Additional justification', this observation is identified as part of a self reference survey. Remember to provide justification for this in the technical description text of your PDF attachment.

(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(9)	2MJ0443	RA: 04 43 37.6088 (70.9067033d)	Proper Motion RA: 55.112 mas/yr	
		Dec: +00 02 5.11 (.03475d)	Proper Motion Dec: -107.485 mas/yr	
		Equinox: J2000	Parallax: 0.0474115"	
			Epoch of Position: 2000	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Astrometry updated with Gaia DR2.

SpTy = M9
Age = 24 Myr
Group Membership = Beta Pictoris Moving Group
K_s, W1, W2 = 11.22, 10.83, 10.48
Category=Star
Description=[Brown dwarfs, M dwarfs]

Acquisition

#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F335M	FAINT	RAPID	65	1	1	3.313	12325.14

Template

Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern
A	MASK335R	true	SUB320A335R	NONE

Confirmation

#	Conf. Readout Pattern	Conf. Groups/Int	Conf. Integrations/Exp	Conf. Total Integrations	Conf. Total Exposure Time	Conf. Total Dithers
1	RAPID	3	1	1	32.21	1

Spectral Elements

#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	F444W	MEDIUM8	10	17	1	17	1799.542	
2	F356W	MEDIUM8	10	8	1	8	846.844	

PSF References	LP 944-20 roll 2 (Obs 16) (Filters [F356W, F444W]) Additional Justification: true
Special Requirements	No Parallel Sequence Observations 15, 16, 17, 18, Non-interruptible Aperture PA Offset 18 from 17 by 10 to 14 Degrees (Same offsets in V3)