



3947 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Cycle: 2, Proposal Category: GO

INVESTIGATORS

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Dr. Caroline Morley (CoI)	University of Texas at Austin
Kyle Franson (CoI)	University of Texas at Austin
Dr. Adam L. Kraus (CoI)	University of Texas at Austin
Raquel Martinez (CoI)	University of San Diego

OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Elias 2-27 sequence				
	1	Elias 2-27 coron (roll angle 1)	NIRCam Coronagraphic Imaging	(1) ELIAS2-27
	2	Elias 2-27 coron (roll angle 2)	NIRCam Coronagraphic Imaging	(1) ELIAS2-27
	3	PSF calibrator for Elias 2-27	NIRCam Coronagraphic Imaging	(11) HD-150178
IM Lup sequence				

JWST Proposal 3947 (Created: Friday, August 9, 2024 at 12:01:49 PM Eastern Standard Time) - Overview

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	4	IM Lup coron (roll angle 1)	NIRCam Coronagraphic Imaging	(3) IM-LUP
	5	IM Lup coron (roll angle 2)	NIRCam Coronagraphic Imaging	(3) IM-LUP
	6	PSF calibrator for IM Lup	NIRCam Coronagraphic Imaging	(4) HD-137749
AB Aur sequence				
	7	AB Aur coron (roll angle 1)	NIRCam Coronagraphic Imaging	(5) AB-AUR
	8	AB Aur coron (roll angle 2)	NIRCam Coronagraphic Imaging	(5) AB-AUR
	9	PSF calibrator for AB Aur	NIRCam Coronagraphic Imaging	(12) HD-35600
AB Aur sequence - repeat				
	57	AB Aur coron (roll angle 1)	NIRCam Coronagraphic Imaging	(5) AB-AUR
	58	AB Aur coron (roll angle 2)	NIRCam Coronagraphic Imaging	(5) AB-AUR
	59	PSF calibrator for AB Aur	NIRCam Coronagraphic Imaging	(12) HD-35600
Wa Oph 6 sequence				
	10	Wa Oph 6 coron (roll angle 1)	NIRCam Coronagraphic Imaging	(7) WAOPH6
	11	Wa Oph 6 coron (roll angle 2)	NIRCam Coronagraphic Imaging	(7) WAOPH6
	12	PSF calibrator for Wa Oph 6	NIRCam Coronagraphic Imaging	(13) HD-153135
RU Lup sequence				
	13	RU Lup coron (roll angle 1)	NIRCam Coronagraphic Imaging	(9) RU-LUP
	14	RU Lup coron (roll angle 2)	NIRCam Coronagraphic Imaging	(9) RU-LUP
	15	PSF calibrator for RU Lup	NIRCam Coronagraphic Imaging	(10) TYC-7320-262-1

ABSTRACT

High-resolution imaging of protoplanetary disks at near-infrared and mm wavelengths has shown that disk substructure is ubiquitous, but the connection to ongoing planet formation remains unclear and actively debated. Spiral features in particular offer unique clues about disk physics and the dynamical interaction between planets and disks. The two leading hypotheses for the origin of spiral structure are gravitational instabilities and dynamical interactions with a giant planet orbiting immediately outside of the disk. We propose to test whether spiral arm structure in protoplanetary disks predominantly originates from long-period giant planets on external orbits using deep JWST/NIRCam coronagraphic imaging. The goals of this program are to (1) establish whether giant planets on external orbits are the primary drivers of spiral arm structure, and (2) identify new giant planets amenable to follow-up atmospheric characterization. This program will take advantage of JWST's extraordinary sensitivity at thermal wavelengths to consistently reach sub-Jovian masses beyond the outer disk radius of each system, regardless of assumptions about the planetary cooling history (hot, warm, or cold initial conditions). Deep observations of this "dynamically informed" sample of protoplanetary disks with spiral-driven arms may represent one of the best opportunities to discover planets with JWST early in its primary mission.

OBSERVING DESCRIPTION

The goal of this NIRCam high-contrast imaging program is to search for Jovian-mass planets (1-15 M_{Jup}) orbiting outside of five protoplanetary disks that show spiral-driven arms in dust emission or scattered light: AB Aur, Elias 2-27, IM Lup, Wa Oph 6, and RU Lup. The F444W filter is used to optimize sensitivity to low-temperature (~500-700 K) planets to fully explore the entire giant planet mass range, even in the case of cold start thermal evolution. Following guidelines for NIRCam coronagraphic imaging, each observing sequence with the MASK335R circular mask consists of deep imaging of the science target at two roll angles, followed by a small dither pattern of a nearby PSF reference star with a similar spectral type as the science target. These three observations for each system are scheduled as a non-interruptible sequences to avoid wavefront drifts and thermal changes, which can influence the PSF shape and PSF subtraction performance.

Proposal 3947 - Targets - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	ELIAS2-27	RA: 16 26 45.0228 (246.6875950d) Dec: -24 23 8.23 (-24.38562d) Equinox: J2000	Proper Motion RA: -6.00798882695128E-4 sec of time/yr Proper Motion Dec: -0.027286000045023684 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>MO</i> <i>K=8.95</i> <i>Category=Star</i> <i>Description=[Protoplanetary disks, Young stellar objects]</i> <i>Extended=NO</i></p>				
(3)	IM-LUP	RA: 15 56 9.1909 (239.0382954d) Dec: -37 56 6.49 (-37.93514d) Equinox: J2000	Proper Motion RA: -0.0010220100003978793 sec of time/yr Proper Motion Dec: -0.023718000056760502 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[Protoplanetary disks, Young stellar objects]</i> <i>Extended=NO</i></p>				
(4)	HD-137749	RA: 15 28 59.9389 (232.2497454d) Dec: -36 31 21.90 (-36.52275d) Equinox: J2000	Proper Motion RA: 1.835858008735483E-4 sec of time/yr Proper Motion Dec: -0.004020999904241762 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Point spread function]</i> <i>Extended=NO</i></p>				
(5)	AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000	Proper Motion RA: 3.0392539212779906E-4 sec of time/yr Proper Motion Dec: -0.0241120000509909 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[Protoplanetary disks, Young stellar objects]</i> <i>Extended=NO</i></p>				
(7)	WAOPH6	RA: 16 48 45.6234 (252.1900975d) Dec: -14 16 36.21 (-14.27672d) Equinox: J2000	Proper Motion RA: -5.787404933759571E-4 sec of time/yr Proper Motion Dec: -0.023115999943001952 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[Protoplanetary disks, Young stellar objects]</i> <i>Extended=NO</i></p>				
(9)	RU-LUP	RA: 15 56 42.2959 (239.1762329d) Dec: -37 49 15.83 (-37.82106d) Equinox: J2000	Proper Motion RA: -9.744327991037346E-4 sec of time/yr Proper Motion Dec: -0.023233999991134624 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Star</i> <i>Description=[Protoplanetary disks, Young stellar objects]</i> <i>Extended=NO</i></p>				

Fixed Targets

Proposal 3947 - Targets - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

(10)	TYC-7320-262-1	RA: 15 17 27.7445 (229.3656021d) Dec: -34 02 39.50 (-34.04431d) Equinox: J2000	Proper Motion RA: -5.081633698777965E-4 sec of time/yr Proper Motion Dec: -0.024847999907251506 arcsec/yr Epoch of Position: 2015.5
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Calibration Description=[Point spread function] Extended=NO</p>			
(11)	HD-150178	RA: 16 40 19.9849 (250.0832704d) Dec: -25 16 14.04 (-25.27057d) Equinox: J2000	Proper Motion RA: -21.281 mas/yr Proper Motion Dec: -1.5810000604687957 mas/yr Parallax: 0.0017009" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> MOIII K=4.26 Category=Calibration Description=[Point spread function]</p>			
(12)	HD-35600	RA: 05 27 8.2724 (81.7844683d) Dec: +30 12 30.97 (30.20860d) Equinox: J2000	Proper Motion RA: -0.751 mas/yr Proper Motion Dec: -4.653999963011302 mas/yr Parallax: 0.0011026" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Calibration Description=[Point spread function]</p>			
(13)	HD-153135	RA: 16 58 9.5093 (254.5396221d) Dec: -14 22 20.88 (-14.37247d) Equinox: J2000	Proper Motion RA: -5.266 mas/yr Proper Motion Dec: -1.3519999583877507 mas/yr Parallax: 0.0058196" Epoch of Position: 2000
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Calibration Description=[Point spread function]</p>			

Proposal 3947 - Observation 1 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 1: Elias 2-27 coron (roll angle 1)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>																													
	<p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Elias 2-27 coron (roll angle 1) (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																													
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Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>ELIAS2-27</td> <td>RA: 16 26 45.0228 (246.6875950d) Dec: -24 23 8.23 (-24.38562d) Equinox: J2000</td> <td>Proper Motion RA: -6.00798882695128E-4 sec of time/yr Proper Motion Dec: -0.027286000045023684 arcsec/yr Epoch of Position: 2015.5</td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p>MO K=8.95 Category=Star Description=[Protoplanetary disks, Young stellar objects] Extended=NO</p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(1)	ELIAS2-27	RA: 16 26 45.0228 (246.6875950d) Dec: -24 23 8.23 (-24.38562d) Equinox: J2000	Proper Motion RA: -6.00798882695128E-4 sec of time/yr Proper Motion Dec: -0.027286000045023684 arcsec/yr Epoch of Position: 2015.5																				
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Template	<table border="1"> <thead> <tr> <th>Module</th> <th>Coronagraphic Mask</th> <th>Obtain Astrometric Confirmation Images?</th> <th>Subarray</th> <th>Dither Pattern</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>MASK335R</td> <td>true</td> <td>SUB320A335R</td> <td>NONE</td> </tr> </tbody> </table>	Module	Coronagraphic Mask	Obtain Astrometric Confirmation Images?	Subarray	Dither Pattern	A	MASK335R	true	SUB320A335R	NONE																			
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Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Short Filter</th> <th>Long Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Dithers</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>F200W</td> <td>F444W</td> <td>DEEP8</td> <td>15</td> <td>4</td> <td>1</td> <td>4</td> <td>1235.892</td> <td>61138</td> </tr> </tbody> </table>	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	61138									
	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																				
1	F200W	F444W	DEEP8	15	4	1	4	1235.892	61138																					

Proposal 3947 - Observation 1 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for Elias 2-27 (Obs 3) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	No Parallel Attachments Sequence Observations 1, 2, 3, Non-interruptible Aperture PA Offset 2 from 1 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 2 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 2: Elias 2-27 coron (roll angle 2)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
	<p>(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Elias 2-27 coron (roll angle 2) (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous	
	(1)	ELIAS2-27	RA: 16 26 45.0228 (246.6875950d) Dec: -24 23 8.23 (-24.38562d) Equinox: J2000			Proper Motion RA: -6.00798882695128E-4 sec of time/yr Proper Motion Dec: -0.027286000045023684 arcsec/yr Epoch of Position: 2015.5				
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>MO</i></p> <p><i>K=8.95</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>										
Acquisition	#	Target	Filter	Target Brightness	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	SAME	F335M	FAINT	BRIGHT2	33	1	1	3.363	62184
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	61138

Proposal 3947 - Observation 2 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for Elias 2-27 (Obs 3) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	No Parallel Attachments Sequence Observations 1, 2, 3, Non-interruptible Aperture PA Offset 2 from 1 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 3 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 3: PSF calibrator for Elias 2-27</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(11)	HD-150178	RA: 16 40 19.9849 (250.0832704d) Dec: -25 16 14.04 (-25.27057d) Equinox: J2000		Proper Motion RA: -21.281 mas/yr Proper Motion Dec: -1.5810000604687957 mas/yr Parallax: 0.0017009" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>M0III</i> <i>K=4.26</i> <i>Category=Calibration</i> <i>Description=[Point spread function]</i></p>									
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)	SHALLOW4	65	1	1	16.305	62449
Template	Module		Coronagraphic Mask		Obtain Astrometric Confirmation Images?		Subarray		Dither Pattern	
	A		MASK335R		false		SUB320A335R		5-POINT-BOX	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	RAPID	5	3	5	15	96.521	62348
PSF References	PSF Reference: true									

Proposal 3947 - Observation 3 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Special Requirements

Sequence Observations 1, 2, 3, Non-interruptible

Proposal 3947 - Observation 4 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 4: IM Lup coron (roll angle 1)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(IM Lup coron (roll angle 1) (Obs 4)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(3)	IM-LUP	RA: 15 56 9.1909 (239.0382954d) Dec: -37 56 6.49 (-37.93514d) Equinox: J2000		Proper Motion RA: -0.0010220100003978793 sec of time/yr Proper Motion Dec: -0.023718000056760502 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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	62829
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	62833

Proposal 3947 - Observation 4 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for IM Lup (Obs 6) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 4, 5, 6, Non-interruptible Aperture PA Offset 5 from 4 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 5 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	Proposal 3947, Observation 5: IM Lup coron (roll angle 2) Diagnostic Status: Warning Observing Template: NIRCam Coronagraphic Imaging									
	(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (IM Lup coron (roll angle 2) (Obs 5)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous	
	(3)	IM-LUP	RA: 15 56 9.1909 (239.0382954d) Dec: -37 56 6.49 (-37.93514d) Equinox: J2000			Proper Motion RA: -0.0010220100003978793 sec of time/yr Proper Motion Dec: -0.023718000056760502 arcsec/yr Epoch of Position: 2015.5				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Star Description=[Protoplanetary disks, Young stellar objects] Extended=NO										
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	62829
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	62833

Proposal 3947 - Observation 5 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for IM Lup (Obs 6) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 4, 5, 6, Non-interruptible Aperture PA Offset 5 from 4 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 6 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 6: PSF calibrator for IM Lup</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
Diagnostics	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(4)	HD-137749	RA: 15 28 59.9389 (232.2497454d) Dec: -36 31 21.90 (-36.52275d) Equinox: J2000		Proper Motion RA: 1.835858008735483E-4 sec of time/yr Proper Motion Dec: -0.004020999904241762 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Point spread function]</i></p> <p><i>Extended=NO</i></p>									
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	63063
Template	Module		Coronagraphic Mask		Obtain Astrometric Confirmation Images?		Subarray		Dither Pattern	
	A		MASK335R		false		SUB320A335R		5-POINT-BOX	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	SHALLOW4	4	4	5	20	428.026	62850
PSF References	PSF Reference: true									

Proposal 3947 - Observation 6 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Special Requirements

Offset -0.006 arcsec, -0.012 arcsec

Sequence Observations 4, 5, 6, Non-interruptible

Proposal 3947 - Observation 7 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	Proposal 3947, Observation 7: AB Aur coron (roll angle 1) Diagnostic Status: Warning Observing Template: NIRCam Coronagraphic Imaging									
	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (AB Aur coron (roll angle 1) (Obs 7)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(5)	AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000		Proper Motion RA: 3.0392539212779906E-4 sec of time/yr Proper Motion Dec: -0.0241120000509909 arcsec/yr Epoch of Position: 2015.5					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Star Description=[Protoplanetary disks, Young stellar objects] Extended=NO										
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)	RAPID	65	1	1	3.313	62857
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	8	15	1	15	2389.612	62859

Proposal 3947 - Observation 7 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for AB Aur (Obs 9) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.01 arcsec, 0.005 arcsec No Parallel Attachments Sequence Observations 7, 8, 9, Non-interruptible Aperture PA Offset 7 from 8 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 8 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	Proposal 3947, Observation 8: AB Aur coron (roll angle 2) Diagnostic Status: Warning Observing Template: NIRCcam Coronagraphic Imaging									
	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (AB Aur coron (roll angle 2) (Obs 8)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(5)	AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000		Proper Motion RA: 3.0392539212779906E-4 sec of time/yr Proper Motion Dec: -0.0241120000509909 arcsec/yr Epoch of Position: 2015.5					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=Star Description=[Protoplanetary disks, Young stellar objects] Extended=NO										
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)	RAPID	65	1	1	3.313	62857
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	8	15	1	15	2389.612	62859

Proposal 3947 - Observation 8 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for AB Aur (Obs 9) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.01 arcsec, 0.005 arcsec No Parallel Attachments Sequence Observations 7, 8, 9, Non-interruptible Aperture PA Offset 7 from 8 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 9 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 9: PSF calibrator for AB Aur</p> <p>Diagnostic Status: Error</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	<p>(PSF calibrator for AB Aur (Obs 9)) Error (Form): Permission has not been granted for this program to use Special Requirement 'No Parallel Attachments'.</p> <p>(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(12)	HD-35600	RA: 05 27 8.2724 (81.7844683d) Dec: +30 12 30.97 (30.20860d) Equinox: J2000		Proper Motion RA: -0.751 mas/yr Proper Motion Dec: -4.653999963011302 mas/yr Parallax: 0.0011026" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description= Point spread function </i></p>									
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)	SHALLOW4	65	1	1	16.305	62969
Template	Module		Coronagraphic Mask		Obtain Astrometric Confirmation Images?		Subarray		Dither Pattern	
	A		MASK335R		false		SUB320A335R		5-POINT-BOX	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	6	3	5	15	1748.188	62980
PSF References	<p>PSF Reference: true</p>									

Proposal 3947 - Observation 9 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Special Requirements

Offset -0.01 arcsec, 0.005 arcsec
No Parallel Attachments

Sequence Observations 7, 8, 9, Non-interruptible

Proposal 3947 - Observation 57 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 57: AB Aur coron (roll angle 1)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 57:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(AB Aur coron (roll angle 1) (Obs 57)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(5)	AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000		Proper Motion RA: 3.0392539212779906E-4 sec of time/yr Proper Motion Dec: -0.0241120000509909 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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)	RAPID	65	1	1	3.313	62857
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	RAPID	5	650	1	650	4182.568	62859

Proposal 3947 - Observation 57 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for AB Aur (Obs 59) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 57, 58, 59, Non-interruptible Aperture PA Offset 57 from 58 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 58 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 58: AB Aur coron (roll angle 2)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 58:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(AB Aur coron (roll angle 2) (Obs 58)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(5)	AB-AUR	RA: 04 55 45.8507 (73.9410446d) Dec: +30 33 3.92 (30.55109d) Equinox: J2000		Proper Motion RA: 3.0392539212779906E-4 sec of time/yr Proper Motion Dec: -0.0241120000509909 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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)	RAPID	65	1	1	3.313	62857
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	RAPID	5	650	1	650	4182.568	62859

Proposal 3947 - Observation 58 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for AB Aur (Obs 59) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 57, 58, 59, Non-interruptible Aperture PA Offset 57 from 58 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 59 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 59: PSF calibrator for AB Aur</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	(Visit 59:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(12)	HD-35600	RA: 05 27 8.2724 (81.7844683d) Dec: +30 12 30.97 (30.20860d) Equinox: J2000		Proper Motion RA: -0.751 mas/yr Proper Motion Dec: -4.653999963011302 mas/yr Parallax: 0.0011026" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Point spread function]</i></p>									
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)	SHALLOW4	65	1	1	16.305	62969
Template	Module		Coronagraphic Mask		Obtain Astrometric Confirmation Images?		Subarray		Dither Pattern	
	A		MASK335R		false		SUB320A335R		5-POINT-BOX	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	MEDIUM8	6	12	5	60	3785.63	62980
PSF References	PSF Reference: true									

Proposal 3947 - Observation 59 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Special Requirements

Offset -0.006 arcsec, -0.012 arcsec

Sequence Observations 57, 58, 59, Non-interruptible

Proposal 3947 - Observation 10 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 10: Wa Oph 6 coron (roll angle 1)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Wa Oph 6 coron (roll angle 1) (Obs 10)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(7)	WAOPH6	RA: 16 48 45.6234 (252.1900975d) Dec: -14 16 36.21 (-14.27672d) Equinox: J2000		Proper Motion RA: -5.787404933759571E-4 sec of time/yr Proper Motion Dec: -0.023115999943001952 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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	63053
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	63057

Proposal 3947 - Observation 10 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for Wa Oph 6 (Obs 12) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 10, 11, 12, Non-interruptible Aperture PA Offset 10 from 11 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 11 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 11: Wa Oph 6 coron (roll angle 2)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Wa Oph 6 coron (roll angle 2) (Obs 11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(7)	WAOPH6	RA: 16 48 45.6234 (252.1900975d) Dec: -14 16 36.21 (-14.27672d) Equinox: J2000		Proper Motion RA: -5.787404933759571E-4 sec of time/yr Proper Motion Dec: -0.023115999943001952 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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	63053
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	63057

Proposal 3947 - Observation 11 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for Wa Oph 6 (Obs 12) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 10, 11, 12, Non-interruptible Aperture PA Offset 10 from 11 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 12 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 12: PSF calibrator for Wa Oph 6</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(13)	HD-153135	RA: 16 58 9.5093 (254.5396221d) Dec: -14 22 20.88 (-14.37247d) Equinox: J2000		Proper Motion RA: -5.266 mas/yr Proper Motion Dec: -1.3519999583877507 mas/yr Parallax: 0.0058196" Epoch of Position: 2000					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Point spread function]</i></p>									
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)	RAPID	3	1	1	0.203	63063
Template	Module		Coronagraphic Mask		Obtain Astrometric Confirmation Images?		Subarray		Dither Pattern	
	A		MASK335R		false		SUB320A335R		5-POINT-BOX	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	BRIGHT2	7	3	5	15	240.841	63066
PSF References	PSF Reference: true									

Proposal 3947 - Observation 12 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Special Requirements

Offset -0.006 arcsec, -0.012 arcsec

Sequence Observations 10, 11, 12, Non-interruptible

Proposal 3947 - Observation 13 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 13: RU Lup coron (roll angle 1)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(RU Lup coron (roll angle 1) (Obs 13)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous			
	(9)	RU-LUP	RA: 15 56 42.2959 (239.1762329d) Dec: -37 49 15.83 (-37.82106d) Equinox: J2000	Proper Motion RA: -9.744327991037346E-4 sec of time/yr Proper Motion Dec: -0.023233999991134624 arcsec/yr Epoch of Position: 2015.5						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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	63072
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	63078

Proposal 3947 - Observation 13 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for RU Lup (Obs 15) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 13, 14, 15, Non-interruptible Aperture PA Offset 14 from 13 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 14 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 14: RU Lup coron (roll angle 2)</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Coronagraphic Imaging</p>									
Diagnostics	<p>(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(RU Lup coron (roll angle 2) (Obs 14)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous			
	(9)	RU-LUP	RA: 15 56 42.2959 (239.1762329d) Dec: -37 49 15.83 (-37.82106d) Equinox: J2000	Proper Motion RA: -9.744327991037346E-4 sec of time/yr Proper Motion Dec: -0.023233999991134624 arcsec/yr Epoch of Position: 2015.5						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[Protoplanetary disks, Young stellar objects]</i></p> <p><i>Extended=NO</i></p>									
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	63072
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	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	DEEP8	15	4	1	4	1235.892	63078

Proposal 3947 - Observation 14 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

PSF References	PSF calibrator for RU Lup (Obs 15) (PSF Reference; Filters [F200W/F444W]) Additional Justification: false
Special Requirements	Offset -0.006 arcsec, -0.012 arcsec No Parallel Attachments Sequence Observations 13, 14, 15, Non-interruptible Aperture PA Offset 14 from 13 by 7 to 14 Degrees (Same offsets in V3)

Proposal 3947 - Observation 15 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Fri Aug 09 17:01:49 GMT 2024

Observation	<p>Proposal 3947, Observation 15: PSF calibrator for RU Lup</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Coronagraphic Imaging</p>									
Diagnostics	(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous		
	(10)	TYC-7320-262-1	RA: 15 17 27.7445 (229.3656021d) Dec: -34 02 39.50 (-34.04431d) Equinox: J2000		Proper Motion RA: -5.081633698777965E-4 sec of time/yr Proper Motion Dec: -0.024847999907251506 arcsec/yr Epoch of Position: 2015.5					
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Point spread function]</i></p> <p><i>Extended=NO</i></p>									
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	63085
Template	Module		Coronagraphic Mask		Obtain Astrometric Confirmation Images?		Subarray		Dither Pattern	
	A		MASK335R		false		SUB320A335R		5-POINT-BOX	
Spectral Elements	#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F200W	F444W	MEDIUM8	4	4	5	20	834.261	63086
PSF References	PSF Reference: true									

Proposal 3947 - Observation 15 - Testing the Giant Planet Hypothesis for Spiral-driven Arms in Protoplanetary Disks

Special Requirements

Offset -0.006 arcsec, -0.012 arcsec

Sequence Observations 13, 14, 15, Non-interruptible