



3254 - Direct detection of kinematically-detected protoplanet candidates

Cycle: 2, Proposal Category: GO

INVESTIGATORS

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JWST Proposal 3254 (Created: Monday, June 10, 2024 at 2:00:14 PM Eastern Standard Time) - Overview

<i>Name</i>	<i>Institution</i>
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Dr. Laurent Pueyo (CoI)	Space Telescope Science Institute
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Dr. Giovanni Rosotti (CoI) (ESA Member)	Universita di Milano
Mr. Jochen Stadler (CoI) (ESA Member)	Observatoire de la Cote d'Azur
Dr. Leonardo Testi (CoI) (ESA Member)	Universita di Bologna
Dr. David Wilner (CoI)	Smithsonian Institution Astrophysical Observatory
Dr. Andrew Winter (CoI) (ESA Member)	Observatoire de la Cote d'Azur
Hsi-Wei Yen (CoI)	Academia Sinica, Institute of Astronomy and Astrophysics
Dr. Valentin Christiaens (CoI) (ESA Member)	University of Liège

OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
LkCA-MIRI				
	1	LkCa 15 - 1140C	MIRI Coronagraphic Imaging	(1) LKCA15
	2	LkCa 15 - 1140C - Background	MIRI Coronagraphic Imaging	(2) LKCA15-SCI-BACKGROUND
	3	LkCa 15 - 1140C - Background for Reference	MIRI Coronagraphic Imaging	(2) LKCA15-SCI-BACKGROUND
	4	LkCa 15 - 1140C - Reference	MIRI Coronagraphic Imaging	(3) LKCA15-REFERENCE
LkCA-MIRI				
	17	LkCa 15 - 1140C	MIRI Coronagraphic Imaging	(1) LKCA15
	18	LkCa 15 - 1140C - Background	MIRI Coronagraphic Imaging	(2) LKCA15-SCI-BACKGROUND
	19	LkCa 15 - 1140C - Background for Reference	MIRI Coronagraphic Imaging	(2) LKCA15-SCI-BACKGROUND
	20	LkCa 15 - 1140C - Reference	MIRI Coronagraphic Imaging	(3) LKCA15-REFERENCE
J1842-MIRI				
	5	J1842 - 1140C	MIRI Coronagraphic Imaging	(4) J1842
	6	J1842 - 1140C - Background	MIRI Coronagraphic Imaging	(5) J1842-SCI-BACKGROUND

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	7	J1842 - 1140C - Backgr ound for Reference	MIRI Coronagraphic Imaging	(5) J1842-SCI-BACKGROUND
	8	J1842 - 1140C - Refere nce	MIRI Coronagraphic Imaging	(6) J1842-REFERENCE
J1615-MIRI				
	9	J1615 - 1140C	MIRI Coronagraphic Imaging	(7) J1615
	10	J1615 - 1140C - Backgr ound	MIRI Coronagraphic Imaging	(8) J1615-SCI-BACKGROUND
	11	J1615 - 1140C - Backgr ound for Reference	MIRI Coronagraphic Imaging	(8) J1615-SCI-BACKGROUND
	12	J1615 - 1140C - Refere nce	MIRI Coronagraphic Imaging	(9) J1615-REFERENCE
SY Cha-MIRI				
	13	SY Cha- 1140C	MIRI Coronagraphic Imaging	(10) SYCHA
	14	SY Cha - 1140C - Back ground	MIRI Coronagraphic Imaging	(11) SYCHA-BACKGROUND
	15	SY Cha - 1140C - Back ground for Reference	MIRI Coronagraphic Imaging	(11) SYCHA-BACKGROUND
	16	SY Cha - 1140C - Refe rence	MIRI Coronagraphic Imaging	(12) SYCHA-REFERENCE

ABSTRACT

To understand how a planet forms and accretes its atmosphere, we must first detect a sample of protoplanets which are in this late stage of their formation. The presence of such protoplanets is readily inferred with high spatial and spectral resolution observations from the Atacama Large Millimeter Array, revealing the characteristic kinematic signatures associated with embedded, giant protoplanets. Forward modeling of these hydrodynamic features yields robust constraints on the locations and masses of the perturbing protoplanets, providing a sample which represents the best opportunity to study the process of atmospheric accretion. We have selected the four most promising sources to observe with MIRI to: (1) confirm the planetary nature of the kinematic features observed at sub-mm wavelengths, and (2) place initial constraints on the luminosity of the protoplanets. These goals are the critical first steps in developing comprehensive multi-wavelength follow-up observations of these protoplanets. Extensive modeling has demonstrated that coronagraphic observations at 11.4 um with JWST/MIRI allow for the most sensitive searches for such objects, balancing the intrinsic wavelength-dependent brightness of the young protoplanets with the expected extinction from surrounding disk material. At these mid infrared wavelengths, space-based observations are essential for these goals owing to the stability and sensitivity unachievable by ground-based facilities.

OBSERVING DESCRIPTION

In this program we aim to directly image 4 protoplanet candidates embedded in protoplanetary disks (RXJ1615.3-3255, RXJ1842.9-3532, LkCa 15, SY Cha) that show clear evidence for planet-disk interactions, both in the disk structure and gas kinematics. Thanks to clear deviations observed in the kinematics of the ^{12}CO emission line observed with ALMA, these planets are identified at locations between 0.8" and 1.8", well within reach of JWST. To observe these planets, we will use JWST/MIRI in the F1140C filter with the 4QPM coronagraph, and will observe a reference star to perform reference differential imaging (RDI). The reference star will be dithered using a 9-point-dither to increase the diversity of our PSF library at close separations. A background observation will be taken for each source to mitigate the effect referred to as 'glowing stick'.

We will reduce our data using the JWST pipeline and perform starlight subtraction using pyKLIP following the Direct Imaging ERS program. We will assess the statistical significance of our detections using the FMMF routines built in pyKLIP. Astrometry and photometry of our detected protoplanets will be estimated using the BKA module of pyKLIP.

The photometric detection of the protoplanets will be combined to constraints from ALMA gas observations, to provide the first fundamental step in assessing the mass-luminosity relationship of protoplanets, and thus set urgently needed constraints to the theories of planet formation

Proposal 3254 - Targets - Direct detection of kinematically-detected protoplanet candidates

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	LKCA15	RA: 04 39 17.8030 (69.8241792d) Dec: +22 21 3.12 (22.35087d) Equinox: J2000	Proper Motion RA: 7.621230846913799E-4 sec of time/yr Proper Motion Dec: -0.01752699990902329 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=Star Description=[T Tauri stars]</p>				
(2)	LKCA15-SCI-BACKGROUND	RA: 04 39 56.3600 (69.9848333d) Dec: +22 25 38.30 (22.42731d) Equinox: J2000		
<p><i>Comments:</i> Category=Calibration Description=[Telescope/sky background]</p>				
(3)	LKCA15-REFERENCE	RA: 04 52 22.5707 (73.0940446d) Dec: +23 45 5.77 (23.75160d) Equinox: J2000	Proper Motion RA: -3.428383348971164E-4 sec of time/yr Proper Motion Dec: -0.008267999942290771 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=Star Description=[K stars]</p>				
(4)	J1842	RA: 18 42 57.9830 (280.7415958d) Dec: -35 32 43.24 (-35.54534d) Equinox: J2000	Proper Motion RA: 1.0618742376018584E-4 sec of time/yr Proper Motion Dec: -0.026981000064552063 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=Star Description=[T Tauri stars]</p>				
(5)	J1842-SCI-BACKGROUND	RA: 18 42 47.7900 (280.6991250d) Dec: -35 39 44.10 (-35.66225d) Equinox: J2000	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=[Telescope/sky background]</p>				
(6)	J1842-REFERENCE	RA: 18 39 39.9581 (279.9164921d) Dec: -35 17 29.72 (-35.29159d) Equinox: J2000	Proper Motion RA: -2.0337593799110995E-5 sec of time/yr Proper Motion Dec: 0.012602 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=Star Description=[K stars]</p>				
(7)	J1615	RA: 16 15 20.2241 (243.8342671d) Dec: -32 55 5.46 (-32.91818d) Equinox: J2000	Proper Motion RA: -6.516191177211129E-4 sec of time/yr Proper Motion Dec: -0.023409999903378775 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=Star Description=[T Tauri stars]</p>				

Fixed Targets

Proposal 3254 - Targets - Direct detection of kinematically-detected protoplanet candidates

(8)	J1615-SCI-BACKGROUND	RA: 16 15 0.5200 (243.7521667d) Dec: -32 55 10.30 (-32.91953d) Equinox: J2000	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=[Telescope/sky background]</p>			
(9)	J1615-REFERENCE	RA: 16 13 45.0326 (243.4376358d) Dec: -32 54 43.22 (-32.91201d) Equinox: J2000	Proper Motion RA: -6.869118781168409E-4 sec of time/yr Proper Motion Dec: -0.005799999917144305 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=Star Description=[K stars]</p>			
(10)	SYCHA	RA: 10 56 30.2776 (164.1261567d) Dec: -77 11 39.36 (-77.19427d) Equinox: J2000	Proper Motion RA: -0.007139911142606831 sec of time/yr Proper Motion Dec: 0.002803999999999996 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=Star Description=[T Tauri stars]</p>			
(11)	SYCHA-BACKGROUND	RA: 10 56 42.8200 (164.1784167d) Dec: -77 07 15.30 (-77.12092d) Equinox: J2000	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=[Telescope/sky background]</p>			
(12)	SYCHA-REFERENCE	RA: 10 58 25.8664 (164.6077767d) Dec: -74 45 9.03 (-74.75251d) Equinox: J2000	Proper Motion RA: -0.009450332455718762 sec of time/yr Proper Motion Dec: 0.011809 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=Star Description=[K stars]</p>			

Proposal 3254 - Observation 1 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 1: LkCa 15 - 1140C</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[LkCa 15 - 1140C - Background (Obs 2), LkCa 15 - 1140C - Background for Reference (Obs 3)]</p>																																					
Diagnostics	<p>(LkCa 15 - 1140C (Obs 1)) Warning (Form): Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees</p> <p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(LkCa 15 - 1140C (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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>LKCA15</td> <td>RA: 04 39 17.8030 (69.8241792d) Dec: +22 21 3.12 (22.35087d) Equinox: J2000</td> <td>Proper Motion RA: 7.621230846913799E-4 sec of time/yr Proper Motion Dec: -0.01752699990902329 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><i>Category=Star</i></p> <p><i>Description=[T Tauri stars]</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(1)	LKCA15	RA: 04 39 17.8030 (69.8241792d) Dec: +22 21 3.12 (22.35087d) Equinox: J2000	Proper Motion RA: 7.621230846913799E-4 sec of time/yr Proper Motion Dec: -0.01752699990902329 arcsec/yr Epoch of Position: 2015.5																	
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Acquisition	<table border="1"> <thead> <tr> <th>#</th> <th>Target</th> <th>Filter</th> <th>Quadrant</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SAME</td> <td>FND</td> <td>1</td> <td>FAST</td> <td>86</td> <td>1</td> <td>1</td> <td>20.612</td> <td>12727</td> </tr> </tbody> </table>												#	Target	Filter	Quadrant	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	SAME	FND	1	FAST	86	1	1	20.612	12727						
#	Target	Filter	Quadrant	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																													
1	SAME	FND	1	FAST	86	1	1	20.612	12727																													
Template	<p>Repeat observation</p> <p>NO</p>																																					
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>												#	Dither Type	1	NONE																						
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1	NONE																																					
Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</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>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>500</td> <td>26</td> <td>1</td> <td>1</td> <td>26</td> <td>3121.832</td> <td>12727</td> </tr> </tbody> </table>												#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	26	1	1	26	3121.832	12727
#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																										
1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	26	1	1	26	3121.832	12727																										
PSF References	<p>LkCa 15 - 1140C - Reference (Obs 4) (PSF Reference; Filters [F1140C])</p> <p>Additional Justification: false</p>																																					

Proposal 3254 - Observation 1 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, Non-interruptible

Same Aperture PA 1, 2, 3, 4

Proposal 3254 - Observation 2 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 2: LkCa 15 - 1140C - Background Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [LkCa 15 - 1140C (Obs 1), LkCa 15 - 1140C - Reference (Obs 4)]												
	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (LkCa 15 - 1140C - Background (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(2)	LKCA15-SCI-BACKGROUND	RA: 04 39 56.3600 (69.9848333d) Dec: +22 25 38.30 (22.42731d) Equinox: J2000										
<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>													
Acquisition	#											Target	
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Template	AcqFilter	Repeat observation				Background Quadrant							
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Dithers	#	Dither Type											
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Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	26	1	2	52	6243.664	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 2 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, Non-interruptible

Same Aperture PA 1, 2, 3, 4

Proposal 3254 - Observation 3 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 3: LkCa 15 - 1140C - Background for Reference Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [LkCa 15 - 1140C (Obs 1), LkCa 15 - 1140C - Reference (Obs 4)]												
	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (LkCa 15 - 1140C - Background for Reference (Obs 3)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(2)	LKCA15-SCI-BACKGROUND	RA: 04 39 56.3600 (69.9848333d) Dec: +22 25 38.30 (22.42731d) Equinox: J2000										
<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>													
Acquisition	#											Target	
	1											NONE	
Template	AcqFilter	Repeat observation				Background Quadrant							
	FND	YES				1							
Dithers	#	Dither Type											
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Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
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PSF References	Additional Justification: false												

Proposal 3254 - Observation 3 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, Non-interruptible

Same Aperture PA 1, 2, 3, 4

Proposal 3254 - Observation 4 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 4: LkCa 15 - 1140C - Reference</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[LkCa 15 - 1140C - Background (Obs 2), LkCa 15 - 1140C - Background for Reference (Obs 3)]</p>																																					
Diagnostics	<p>(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(LkCa 15 - 1140C - Reference (Obs 4)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</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>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>100</td> <td>6</td> <td>1</td> <td>9</td> <td>54</td> <td>1305.058</td> <td></td> </tr> </tbody> </table>												#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	9	54	1305.058	
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1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	9	54	1305.058																											
PSF References	<p>PSF Reference: true</p>																																					

Proposal 3254 - Observation 4 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 1, 2, 3, 4, Non-interruptible

Same Aperture PA 1, 2, 3, 4

Proposal 3254 - Observation 17 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 17: LkCa 15 - 1140C</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[LkCa 15 - 1140C - Background (Obs 18), LkCa 15 - 1140C - Background for Reference (Obs 19)]</p>																																					
Diagnostics	<p>(LkCa 15 - 1140C (Obs 17)) Warning (Form): Coronagraphic Science and PSF Reference observations should be executed contiguously via a Group/Sequence Observations Link.</p> <p>(LkCa 15 - 1140C (Obs 17)) Warning (Form): Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees</p> <p>(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(LkCa 15 - 1140C (Obs 17)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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>LKCA15</td> <td>RA: 04 39 17.8030 (69.8241792d) Dec: +22 21 3.12 (22.35087d) Equinox: J2000</td> <td>Proper Motion RA: 7.621230846913799E-4 sec of time/yr Proper Motion Dec: -0.01752699990902329 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><i>Category=Star</i></p> <p><i>Description=[T Tauri stars]</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(1)	LKCA15	RA: 04 39 17.8030 (69.8241792d) Dec: +22 21 3.12 (22.35087d) Equinox: J2000	Proper Motion RA: 7.621230846913799E-4 sec of time/yr Proper Motion Dec: -0.01752699990902329 arcsec/yr Epoch of Position: 2015.5																	
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#	Target	Filter	Quadrant	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																													
1	SAME	FND	1	FAST	86	1	1	20.612	12727																													
Template	<p>Repeat observation</p> <p>NO</p>																																					
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>												#	Dither Type	1	NONE																						
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#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																										
1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	26	1	1	26	3121.832	12727																										
PSF References	<p>LkCa 15 - 1140C - Reference (Obs 4) (PSF Reference; Filters [F1140C])</p> <p>Additional Justification: false</p>																																					

Proposal 3254 - Observation 17 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 17, 18, 19, 20, Non-interruptible

Same Aperture PA 17, 18, 19, 20

Proposal 3254 - Observation 18 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 18: LkCa 15 - 1140C - Background Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [LkCa 15 - 1140C (Obs 17), LkCa 15 - 1140C - Reference (Obs 20)]												
	(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (LkCa 15 - 1140C - Background (Obs 18)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(2)	LKCA15-SCI-BACKGROUND	RA: 04 39 56.3600 (69.9848333d) Dec: +22 25 38.30 (22.42731d) Equinox: J2000										
<i>Comments:</i> Category=Calibration Description=[Telescope/sky background]													
Acquisition	#											Target	
	1											NONE	
Template	AcqFilter	Repeat observation				Background Quadrant							
	FND	YES				1							
Dithers	#	Dither Type											
	1	BACKGROUND											
Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	26	1	2	52	6243.664	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 18 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 17, 18, 19, 20, Non-interruptible

Same Aperture PA 17, 18, 19, 20

Proposal 3254 - Observation 19 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 19: LkCa 15 - 1140C - Background for Reference</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observation For: [LkCa 15 - 1140C (Obs 17), LkCa 15 - 1140C - Reference (Obs 20)]</p>												
Diagnostics	<p>(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(LkCa 15 - 1140C - Background for Reference (Obs 19)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(2)	LKCA15-SCI-BACKGROUND	RA: 04 39 56.3600 (69.9848333d) Dec: +22 25 38.30 (22.42731d) Equinox: J2000										
	<i>Comments:</i> Category=Calibration Description=[Telescope/sky background]												
Acquisition	#											Target	
	1											NONE	
Template	AcqFilter		Repeat observation					Background Quadrant					
	FND		YES					1					
Dithers	#											Dither Type	
	1											BACKGROUND	
Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	2	12	290.013	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 19 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 17, 18, 19, 20, Non-interruptible

Same Aperture PA 17, 18, 19, 20

Proposal 3254 - Observation 20 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 20: LkCa 15 - 1140C - Reference</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[LkCa 15 - 1140C - Background (Obs 18), LkCa 15 - 1140C - Background for Reference (Obs 19)]</p>																																					
Diagnostics	<p>(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(LkCa 15 - 1140C - Reference (Obs 20)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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>(3)</td> <td>LKCA15-REFERENCE</td> <td>RA: 04 52 22.5707 (73.0940446d) Dec: +23 45 5.77 (23.75160d) Equinox: J2000</td> <td>Proper Motion RA: -3.428383348971164E-4 sec of time/yr Proper Motion Dec: -0.008267999942290771 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>Category=Star Description=[K stars]</p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(3)	LKCA15-REFERENCE	RA: 04 52 22.5707 (73.0940446d) Dec: +23 45 5.77 (23.75160d) Equinox: J2000	Proper Motion RA: -3.428383348971164E-4 sec of time/yr Proper Motion Dec: -0.008267999942290771 arcsec/yr Epoch of Position: 2015.5																	
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Template	<p>Repeat observation</p> <p>NO</p>																																					
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1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	9	54	1305.058																											
PSF References	<p>PSF Reference: true</p>																																					

Proposal 3254 - Observation 20 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 17, 18, 19, 20, Non-interruptible

Same Aperture PA 17, 18, 19, 20

Proposal 3254 - Observation 5 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 5: J1842 - 1140C</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[J1842 - 1140C - Background (Obs 6), J1842 - 1140C - Background for Reference (Obs 7)]</p>																																					
	<p>(J1842 - 1140C (Obs 5)) Warning (Form): Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees</p> <p>(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1842 - 1140C (Obs 5)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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>(4)</td> <td>J1842</td> <td>RA: 18 42 57.9830 (280.7415958d) Dec: -35 32 43.24 (-35.54534d) Equinox: J2000</td> <td>Proper Motion RA: 1.0618742376018584E-4 sec of time/yr Proper Motion Dec: -0.026981000064552063 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><i>Category=Star</i></p> <p><i>Description=[T Tauri stars]</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(4)	J1842	RA: 18 42 57.9830 (280.7415958d) Dec: -35 32 43.24 (-35.54534d) Equinox: J2000	Proper Motion RA: 1.0618742376018584E-4 sec of time/yr Proper Motion Dec: -0.026981000064552063 arcsec/yr Epoch of Position: 2015.5																	
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	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																									
1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	40	1	1	40	4802.948	12727																										
PSF References	<p>J1842 - 1140C - Reference (Obs 8) (PSF Reference; Filters [F1140C])</p> <p>Additional Justification: false</p>																																					

Proposal 3254 - Observation 5 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

Aperture PA Range 93 to 97 Degrees (V3 88.16455103 to 92.16455103)
No Parallel Attachments

Sequence Observations 5, 6, 7, 8, Non-interruptible
Same Aperture PA 5, 6, 7, 8

Proposal 3254 - Observation 6 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 6: J1842 - 1140C - Background Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [J1842 - 1140C (Obs 5), J1842 - 1140C - Reference (Obs 8)]												
	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1842 - 1140C - Background (Obs 6)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(5)	J1842-SCI-BACKGROUND	RA: 18 42 47.7900 (280.6991250d) Dec: -35 39 44.10 (-35.66225d) Equinox: J2000				Epoch of Position: 2015.5						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Repeat observation							Background Quadrant				
	FND	YES							1				
Dithers	#	Dither Type											
	1	BACKGROUND											
Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	40	1	2	80	9605.895	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 6 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 5, 6, 7, 8, Non-interruptible

Same Aperture PA 5, 6, 7, 8

Proposal 3254 - Observation 7 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 7: J1842 - 1140C - Background for Reference Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [J1842 - 1140C (Obs 5), J1842 - 1140C - Reference (Obs 8)]												
	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1842 - 1140C - Background for Reference (Obs 7)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(5)	J1842-SCI-BACKGROUND	RA: 18 42 47.7900 (280.6991250d) Dec: -35 39 44.10 (-35.66225d) Equinox: J2000				Epoch of Position: 2015.5						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Repeat observation							Background Quadrant				
	FND	YES							1				
Dithers	#	Dither Type											
	1	BACKGROUND											
Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	2	12	290.013	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 7 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 5, 6, 7, 8, Non-interruptible

Same Aperture PA 5, 6, 7, 8

Proposal 3254 - Observation 8 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 8: J1842 - 1140C - Reference</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[J1842 - 1140C - Background (Obs 6), J1842 - 1140C - Background for Reference (Obs 7)]</p>																																					
	<p>(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1842 - 1140C - Reference (Obs 8)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th colspan="4">Targ. Coord. Corrections</th> <th colspan="5">Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(6)</td> <td>J1842-REFERENCE</td> <td>RA: 18 39 39.9581 (279.9164921d) Dec: -35 17 29.72 (-35.29159d) Equinox: J2000</td> <td colspan="4">Proper Motion RA: -2.0337593799110995E-5 sec of time/yr Proper Motion Dec: 0.012602 arcsec/yr Epoch of Position: 2015.5</td> <td colspan="5"></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p>Category=Star Description=[K stars]</p>												#	Name	Target Coordinates	Targ. Coord. Corrections				Miscellaneous					(6)	J1842-REFERENCE	RA: 18 39 39.9581 (279.9164921d) Dec: -35 17 29.72 (-35.29159d) Equinox: J2000	Proper Motion RA: -2.0337593799110995E-5 sec of time/yr Proper Motion Dec: 0.012602 arcsec/yr Epoch of Position: 2015.5										
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1	SAME	FND	1	FAST	4	1	1	0.959	12727																													
Template	Repeat observation																																					
	NO																																					
Dithers	#																																					
	1 9-POINT-SMALL-GRID																																					
Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Exposures/Dith</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>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>100</td> <td>6</td> <td>1</td> <td>9</td> <td>54</td> <td>1305.058</td> <td></td> </tr> </tbody> </table>												#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	9	54	1305.058	
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PSF References	PSF Reference: true																																					

Proposal 3254 - Observation 8 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 5, 6, 7, 8, Non-interruptible

Same Aperture PA 5, 6, 7, 8

Proposal 3254 - Observation 9 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 9: J1615 - 1140C Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observations:[J1615 - 1140C - Background (Obs 10), J1615 - 1140C - Background for Reference (Obs 11)]																																					
	(J1615 - 1140C (Obs 9)) 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 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1615 - 1140C (Obs 9)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.																																					
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>(7)</td> <td>J1615</td> <td>RA: 16 15 20.2241 (243.8342671d) Dec: -32 55 5.46 (-32.91818d) Equinox: J2000</td> <td>Proper Motion RA: -6.516191177211129E-4 sec of time/yr Proper Motion Dec: -0.023409999903378775 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> <i>Category=Star</i> <i>Description=[T Tauri stars]</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(7)	J1615	RA: 16 15 20.2241 (243.8342671d) Dec: -32 55 5.46 (-32.91818d) Equinox: J2000	Proper Motion RA: -6.516191177211129E-4 sec of time/yr Proper Motion Dec: -0.023409999903378775 arcsec/yr Epoch of Position: 2015.5																	
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Template	Repeat observation																																					
	NO																																					
Dithers	#																																					
	1 NONE																																					
Spectral Elements	<table border="1"> <thead> <tr> <th>#</th> <th>Coron Mask/Filter</th> <th>Subarray</th> <th>Mask</th> <th>Filter</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/E xp</th> <th>Exposures/Dit h</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>4QPM/F1140C</td> <td>MASK1140</td> <td>4QPM</td> <td>F1140C</td> <td>FASTR1</td> <td>500</td> <td>30</td> <td>1</td> <td>1</td> <td>30</td> <td>3602.151</td> <td>12727</td> </tr> </tbody> </table>												#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	30	1	1	30	3602.151	12727
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PSF References	J1615 - 1140C - Reference (Obs 12) (PSF Reference; Filters [F1140C])																																					
	Additional Justification: false																																					

Proposal 3254 - Observation 9 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

Aperture PA Range 95 to 110 Degrees (V3 90.16455103 to 105.16455103)
No Parallel Attachments

Sequence Observations 9, 10, 11, 12, Non-interruptible
Same Aperture PA 9, 10, 11, 12

Proposal 3254 - Observation 10 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 10: J1615 - 1140C - Background Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [J1615 - 1140C (Obs 9), J1615 - 1140C - Reference (Obs 12)]																																					
	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1615 - 1140C - Background (Obs 10)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.																																					
Diagnosics																																						
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	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous																																	
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Acquisition	<table border="1"> <thead> <tr> <th>#</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>	#	Target	1	NONE																																	
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1	NONE																																					
Template	<table border="1"> <thead> <tr> <th>AcqFilter</th> <th>Repeat observation</th> <th>Background Quadrant</th> </tr> </thead> <tbody> <tr> <td>FND</td> <td>YES</td> <td>1</td> </tr> </tbody> </table>	AcqFilter	Repeat observation	Background Quadrant	FND	YES	1																															
	AcqFilter	Repeat observation	Background Quadrant																																			
FND	YES	1																																				
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PSF References	Additional Justification: false																																					

Proposal 3254 - Observation 10 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

Offset 0.2185 arcsec, 0.1273 arcsec
No Parallel Attachments

Sequence Observations 9, 10, 11, 12, Non-interruptible
Same Aperture PA 9, 10, 11, 12

Proposal 3254 - Observation 11 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 11: J1615 - 1140C - Background for Reference Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [J1615 - 1140C (Obs 9), J1615 - 1140C - Reference (Obs 12)]																																					
	(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (J1615 - 1140C - Background for Reference (Obs 11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.																																					
Diagnosics																																						
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PSF References	Additional Justification: false																																					

Proposal 3254 - Observation 11 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

Offset 0.2185 arcsec, 0.1273 arcsec
No Parallel Attachments

Sequence Observations 9, 10, 11, 12, Non-interruptible
Same Aperture PA 9, 10, 11, 12

Proposal 3254 - Observation 12 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 12: J1615 - 1140C - Reference</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[J1615 - 1140C - Background (Obs 10), J1615 - 1140C - Background for Reference (Obs 11)]</p>																																					
Diagnostics	<p>(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(J1615 - 1140C - Reference (Obs 12)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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Template	<p>Repeat observation</p> <p>NO</p>																																					
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1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	9	54	1305.058																											
PSF References	<p>PSF Reference: true</p>																																					

Proposal 3254 - Observation 12 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 9, 10, 11, 12, Non-interruptible

Same Aperture PA 9, 10, 11, 12

Proposal 3254 - Observation 13 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 13: SY Cha- 1140C</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[SY Cha - 1140C - Background (Obs 14), SY Cha - 1140C - Background for Reference (Obs 15)]</p>																																					
Diagnostics	<p>(SY Cha- 1140C (Obs 13)) Warning (Form): Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees</p> <p>(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(SY Cha- 1140C (Obs 13)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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>(10)</td> <td>SYCHA</td> <td>RA: 10 56 30.2776 (164.1261567d) Dec: -77 11 39.36 (-77.19427d) Equinox: J2000</td> <td>Proper Motion RA: -0.007139911142606831 sec of time/yr Proper Motion Dec: 0.002803999999999996 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><i>Category=Star</i></p> <p><i>Description=[T Tauri stars]</i></p>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(10)	SYCHA	RA: 10 56 30.2776 (164.1261567d) Dec: -77 11 39.36 (-77.19427d) Equinox: J2000	Proper Motion RA: -0.007139911142606831 sec of time/yr Proper Motion Dec: 0.002803999999999996 arcsec/yr Epoch of Position: 2015.5																	
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#	Target	Filter	Quadrant	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID																													
1	SAME	FND	1	FAST	98	1	1	23.489	12727																													
Template	<p>Repeat observation</p> <p>NO</p>																																					
Dithers	<table border="1"> <thead> <tr> <th>#</th> <th>Dither Type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>												#	Dither Type	1	NONE																						
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1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	40	1	1	40	4802.948	12727																										
PSF References	<p>SY Cha - 1140C - Reference (Obs 16) (PSF Reference; Filters [F1140C])</p> <p>Additional Justification: false</p>																																					

Proposal 3254 - Observation 13 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

Aperture PA Range 152 to 182 Degrees (V3 147.16455103 to 177.16455103)
No Parallel Attachments

Sequence Observations 13, 14, 15, 16, Non-interruptible
Same Aperture PA 13, 14, 15, 16

Proposal 3254 - Observation 14 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 14: SY Cha - 1140C - Background Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [SY Cha - 1140C (Obs 13), SY Cha - 1140C - Reference (Obs 16)]												
	(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (SY Cha - 1140C - Background (Obs 14)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(11)	SYCHA-BACKGROUND	RA: 10 56 42.8200 (164.1784167d) Dec: -77 07 15.30 (-77.12092d) Equinox: J2000				Epoch of Position: 2015.5						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Repeat observation							Background Quadrant				
	FND	YES							1				
Dithers	#	Dither Type											
	1	BACKGROUND											
Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	500	40	1	2	80	9605.895	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 14 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 13, 14, 15, 16, Non-interruptible

Same Aperture PA 13, 14, 15, 16

Proposal 3254 - Observation 15 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	Proposal 3254, Observation 15: SY Cha - 1140C - Background for Reference Diagnostic Status: Warning Observing Template: MIRI Coronagraphic Imaging Background Observation For: [SY Cha- 1140C (Obs 13), SY Cha - 1140C - Reference (Obs 16)]												
	(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (SY Cha - 1140C - Background for Reference (Obs 15)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(11)	SYCHA-BACKGROUND	RA: 10 56 42.8200 (164.1784167d) Dec: -77 07 15.30 (-77.12092d) Equinox: J2000				Epoch of Position: 2015.5						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i>													
Acquisition	#											Target	
	1											NONE	
Template	AcqFilter	Repeat observation						Background Quadrant					
	FND	YES						1					
Dithers	#	Dither Type											
	1	BACKGROUND											
Spectral Elements	#	Coron Mask/Filter	Subarray	Mask	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	2	12	290.013	12727
PSF References	Additional Justification: false												

Proposal 3254 - Observation 15 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 13, 14, 15, 16, Non-interruptible

Same Aperture PA 13, 14, 15, 16

Proposal 3254 - Observation 16 - Direct detection of kinematically-detected protoplanet candidates

Mon Jun 10 19:00:15 GMT 2024

Observation	<p>Proposal 3254, Observation 16: SY Cha - 1140C - Reference</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Coronagraphic Imaging</p> <p>Background Observations:[SY Cha - 1140C - Background (Obs 14), SY Cha - 1140C - Background for Reference (Obs 15)]</p>																																					
Diagnostics	<p>(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(SY Cha - 1140C - Reference (Obs 16)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>																																					
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Template	<p>Repeat observation</p> <p>NO</p>																																					
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1	4QPM/F1140C	MASK1140	4QPM	F1140C	FASTR1	100	6	1	9	54	1305.058																											
PSF References	<p>PSF Reference: true</p>																																					

Proposal 3254 - Observation 16 - Direct detection of kinematically-detected protoplanet candidates

Special Requirements

No Parallel Attachments

Sequence Observations 13, 14, 15, 16, Non-interruptible

Same Aperture PA 13, 14, 15, 16