



6622 - CAL-MIRI-336 MIRI LRS slit throughput

Cycle: 3, Proposal Category: CAL/MIRI

INVESTIGATORS

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Observation Folder				
	1	F770W imaging	MIRI Imaging	(2) WISE_J040937
	2	Nod 1 scan	MIRI Low Resolution Spectroscopy	(2) WISE_J040937
	3	Nod 2 scan	MIRI Low Resolution Spectroscopy	(2) WISE_J040937

ABSTRACT

This activity will improve our understanding of the MIRI LRS slit throughput as a function of wavelength and position in the slit by scanning a point source across the slit at the two nominal nod positions. These scans will be the same scans used in Cycles 1 and 2. The data will also check the slit throughput far from the slit center and improve our calibration for extended sources. These observations will improve the signal/noise ratio from similar work in previous cycles.

This calibration program may change in response to system developments and the final Cycle 3 science program.

OBSERVING DESCRIPTION

JWST Proposal 6622 (Created: Thursday, July 25, 2024 at 2:02:24 PM Eastern Standard Time) - Overview

This activity images the AGN WISE J040937 in the F770W filter and scans it across the LRS slit in the two nod positions.

The two scans across the slit are linked as a non-interruptible sequence.

TIMING CONSTRAINTS:

Imaging observation: Needs to be during the visibility window that ends on 22 Oct 2024.

Scan observations: Needs to be during the visibility window that begins on 13 Dec 2024.

That pause will allow us to confirm that the AGN is a true point source. If the target fails that test, we will replan using the backup target.

BACKUP TARGETS:

BD+60 1753, a A0 dwarf used as a standard in multiple MIRI modes.

Proposal 6622 - Targets - CAL-MIRI-336 MIRI LRS slit throughput

	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
Fixed Targets	(1)	BD+60_1753	RA: 17 24 52.2754 (261.2178142d) Dec: +60 25 50.75 (60.43076d) Equinox: J2000	Proper Motion RA: 4.892 mas/yr Proper Motion Dec: 3.759 mas/yr Parallax: 0.0017825" Epoch of Position: 2000.0	
	<i>Comments:</i> Category=Star Description=[A dwarfs] Extended=NO				
Fixed Targets	(2)	WISE_J040937	RA: 04 09 37.6750 (62.4069792d) Dec: -18 37 57.71 (-18.63270d) Equinox: J2000		
	<i>Comments: Coordinates from WISE Allsky release, so not that precise.</i> Target extension is not certain. Category=Galaxy Description=[Active galactic nuclei] Extended=NO				

Proposal 6622 - Observation 1 - CAL-MIRI-336 MIRI LRS slit throughput

Thu Jul 25 19:02:24 GMT 2024

Observation	<p>Proposal 6622, Observation 1: F770W imaging</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Imaging</p>										
Diagnostics	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.										
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous		
	(2)	WISE_J040937	RA: 04 09 37.6750 (62.4069792d) Dec: -18 37 57.71 (-18.63270d) Equinox: J2000								
	<p><i>Comments: Coordinates from WISE Allsky release, so not that precise. Target extension is not certain. Category=Galaxy Description=[Active galactic nuclei] Extended=NO</i></p>										
Template	<p>Subarray</p> <p>SUB256</p>										
Dithers	#	Dither Type	Starting Point	Number of Points	Points	Starting Set	Number of Sets	Optimized For	Direction	Pattern Size	
	1	CYCLING	1	4						LARGE	
Spectral Elements	#	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	5.99	
Special Requirements	Before Date 25-OCT-2024										

Proposal 6622 - Observation 2 - CAL-MIRI-336 MIRI LRS slit throughput

Thu Jul 25 19:02:24 GMT 2024

Observation	<p>Proposal 6622, Observation 2: Nod 1 scan</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</p>									
Diagnostics	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Miscellaneous		
	(2)	WISE_J040937	RA: 04 09 37.6750 (62.4069792d) Dec: -18 37 57.71 (-18.63270d) Equinox: J2000							
	<p><i>Comments: Coordinates from WISE Allsky release, so not that precise.</i></p> <p><i>Target extension is not certain.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei]</i></p> <p><i>Extended=NO</i></p>									
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	2 WISE_J040937	FND	FAST	10	1	1	27.75	188474.04	
Template	Subarray					Obtain Verification Image?				
	FULL					true				
Dithers	#	Dither Type			No. Spectral Steps	Spectral Step Offset	No. Spatial Steps		Spatial Step Offset	
	1	LONG CROSS SCAN NOD1								
Pointing Verification	#	PV Readout Pattern	PV Groups/Int	PV Integrations/Exp	PV Total Integrations	PV Exposures/Dith	PV Total Dithers	PV Total Exposure Time	PV ETC Wkbk.Calc ID	Filter
	1	FASTR1	10	1	1	1	1	27.75		FND

Proposal 6622 - Observation 2 - CAL-MIRI-336 MIRI LRS slit throughput

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	Special Requirements	1	FASTR1	12	3	51	1	17	1792.676
	Between Dates 12-DEC-2024 and 21-FEB-2025 Sequence Observations 2, 3, Non-interruptible								

Proposal 6622 - Observation 3 - CAL-MIRI-336 MIRI LRS slit throughput

Thu Jul 25 19:02:24 GMT 2024

Observation	<p>Proposal 6622, Observation 3: Nod 2 scan</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</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			
	(2)	WISE_J040937	RA: 04 09 37.6750 (62.4069792d) Dec: -18 37 57.71 (-18.63270d) Equinox: J2000							
	<p><i>Comments: Coordinates from WISE Allsky release, so not that precise.</i></p> <p><i>Target extension is not certain.</i></p> <p><i>Category=Galaxy</i></p> <p><i>Description=[Active galactic nuclei]</i></p> <p><i>Extended=NO</i></p>									
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	2 WISE_J040937	FND	FAST	10	1	1	27.75	188474.04	
Template	Subarray			Obtain Verification Image?						
	FULL			true						
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset				
	1	LONG CROSS SCAN NOD2								
Pointing Verification	#	PV Readout Pattern	PV Groups/Int	PV Integrations/Exp	PV Total Integrations	PV Exposures/Dith	PV Total Dithers	PV Total Exposure Time	PV ETC Wkbk.Calc ID	Filter
	1	FASTR1	10	1	1	1	1	27.75		FND

Proposal 6622 - Observation 3 - CAL-MIRI-336 MIRI LRS slit throughput

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time ETC Wkbk.Calc ID
	Special Requirements	1	FASTR1	12	3	51	1	17
	Sequence Observations 2, 3, Non-interruptible							