



6621 - CAL-MIRI-335 MIRI LRS wavelength calibration

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	Slit - SMP LMC 058	MIRI Low Resolution Spectroscopy	(1) SMPLMC058
	2	Slitless - HD 76534	MIRI Low Resolution Spectroscopy	(2) HD76534
	3	Slit - APM 08279	MIRI Low Resolution Spectroscopy	(3) APM08279+5255
	4	Slit - HH211 Knot F	MIRI Low Resolution Spectroscopy	(4) HH211-KnotF

ABSTRACT

We will observe wavelength standards in the LRS slit and in the LRS slitless mode in order to improve on the existing wavelength dispersion solution for the LRS. The four targets duplicate observations from Cycle 3 in order to check for possible variations in the dispersion and to build signal/noise and continue the process of improving the calibration at the short- and long-wavelength ends of the spectral range of the LRS.

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

OBSERVING DESCRIPTION

JWST Proposal 6621 (Created: Thursday, July 25, 2024 at 2:02:18 PM Eastern Standard Time) - Overview

The observations include one wavelength standard in the slitless mode and three wavelength standards in the LRS slit.

TIMING CONSTRAINTS:

None.

Proposal 6621 - Targets - CAL-MIRI-335 MIRI LRS wavelength calibration

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	SMPLMC058	RA: 05 24 20.7467 (81.0864446d) Dec: -70 05 1.60 (-70.08378d) Equinox: J2000	Proper Motion RA: 1.767 mas/yr Proper Motion Dec: 0.245 mas/yr Epoch of Position: 2000.0	
<i>Comments: Position from Gaia EDR3 Category=Star Description=[Planetary nebulae nuclei] Extended=NO</i>				
(2)	HD76534	RA: 08 55 8.7067 (133.7862779d) Dec: -43 27 59.89 (-43.46664d) Equinox: J2000	Proper Motion RA: -6.98 mas/yr Proper Motion Dec: 4.03 mas/yr Parallax: 0.00102" Epoch of Position: 2000.0	
<i>Comments: Position from Hipparcos (Leeuwen 2007) Category=Star Description=[B stars, Emission line stars] Extended=NO</i>				
(3)	APM08279+5255	RA: 08 31 41.7108 (127.9237950d) Dec: +52 45 17.62 (52.75489d) Equinox: J2000	Proper Motion RA: 0 mas/yr Proper Motion Dec: 0 mas/yr Epoch of Position: 2000.0	
<i>Comments: Position from Gaia EDR3 Category=Galaxy Description=[Emission line galaxies]</i>				
(4)	HH211-KnotF	RA: 03 43 59.6418 (55.9985075d) Dec: +32 00 34.19 (32.00950d) Equinox: J2000		
<i>Comments: Category=ISM Description=[Herbig-Haro objects]</i>				
(5)	IC348-LRL124	RA: 03 43 54.6432 (55.9776800d) Dec: +32 00 29.94 (32.00832d) Equinox: J2000	Proper Motion RA: -0.872 mas/yr Proper Motion Dec: -4.513 mas/yr Epoch of Position: 2000	
<i>Comments: Category=Star Description=[T Tauri stars] Extended=NO</i>				

Fixed Targets

Proposal 6621 - Observation 1 - CAL-MIRI-335 MIRI LRS wavelength calibration

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Observation	<p>Proposal 6621, Observation 1: Slit - SMP LMC 058 Diagnostic Status: Warning Observing Template: MIRI Low Resolution Spectroscopy</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			
	(1)	SMPLMC058	RA: 05 24 20.7467 (81.0864446d) Dec: -70 05 1.60 (-70.08378d) Equinox: J2000	Proper Motion RA: 1.767 mas/yr Proper Motion Dec: 0.245 mas/yr Epoch of Position: 2000.0						
	<p><i>Comments: Position from Gaia EDR3</i> <i>Category=Star</i> <i>Description=[Planetary nebulae nuclei]</i> <i>Extended=NO</i></p>									
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	SAME	FND	FAST	4	1	1	11.1	199271.02	
Template	Subarray				Obtain Verification Image?					
	FULL				true					
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset				
	1	ALONG SLIT NOD								
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	5	1	1	1	1	13.875		FND

Proposal 6621 - Observation 1 - CAL-MIRI-335 MIRI LRS wavelength calibration

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	FASTR1	6	8	16	1	2	305.254	199271.01

Proposal 6621 - Observation 2 - CAL-MIRI-335 MIRI LRS wavelength calibration

Thu Jul 25 19:02:18 GMT 2024

Observation	Proposal 6621, Observation 2: Slitless - HD 76534 Diagnostic Status: Warning Observing Template: MIRI Low Resolution Spectroscopy									
	(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)	HD76534	RA: 08 55 8.7067 (133.7862779d) Dec: -43 27 59.89 (-43.46664d) Equinox: J2000	Proper Motion RA: -6.98 mas/yr Proper Motion Dec: 4.03 mas/yr Parallax: 0.00102" Epoch of Position: 2000.0						
Comments: Position from Hipparcos (Leeuwen 2007) Category=Star Description=[B stars, Emission line stars] Extended=NO										
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	SAME	F1000W	FAST	4	1	1	0.636	151238.04	
Template	Subarray				Obtain Verification Image?					
	SLITLESSPRISM				true					
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset				
	1	NONE								
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	5	1	1	1	1	0.795		F1000W

Proposal 6621 - Observation 2 - CAL-MIRI-335 MIRI LRS wavelength calibration

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	16	144	144	1	1	389.171
	Time Series Observation No Parallel Attachments								

Proposal 6621 - Observation 3 - CAL-MIRI-335 MIRI LRS wavelength calibration

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Observation	<p>Proposal 6621, Observation 3: Slit - APM 08279</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			
	(3)	APM08279+5255	RA: 08 31 41.7108 (127.9237950d) Dec: +52 45 17.62 (52.75489d) Equinox: J2000	Proper Motion RA: 0 mas/yr Proper Motion Dec: 0 mas/yr Epoch of Position: 2000.0						
	<p>Comments: Position from Gaia EDR3 Category=Galaxy Description=[Emission line galaxies]</p>									
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	SAME	FND	FAST	6	1	1	16.65	151238.06	
Template	Subarray				Obtain Verification Image?					
	FULL				true					
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset				
	1	ALONG SLIT NOD								
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	6	1	1	1	1	16.65		FND

Proposal 6621 - Observation 3 - CAL-MIRI-335 MIRI LRS wavelength calibration

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	FASTR1	8	20	40	1	2	993.464	

Proposal 6621 - Observation 4 - CAL-MIRI-335 MIRI LRS wavelength calibration

Thu Jul 25 19:02:18 GMT 2024

Observation	<p>Proposal 6621, Observation 4: Slit - HH211 Knot F</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</p>									
Diagnostics	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous			
	(4)	HH211-KnotF	RA: 03 43 59.6418 (55.9985075d) Dec: +32 00 34.19 (32.00950d) Equinox: J2000							
	<p>Comments: Category=ISM Description=[Herbig-Haro objects]</p>									
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	5 IC348-LRL124	F1000W	FAST	6	1	1	16.65	165494	
Template	Subarray				Obtain Verification Image?					
	FULL				true					
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset				
	1	ALONG SLIT NOD								
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	100	1	1	1	1	277.504		F1000W

Proposal 6621 - Observation 4 - CAL-MIRI-335 MIRI LRS wavelength calibration

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
	1	FASTR1	100	4	8	1	2	2236.682	165494