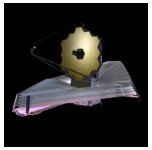

4491 - CAL-MIRI-235 MIRI LRS wavelength calibration

Cycle: 2, Proposal Category: CAL/MIRI

INVESTIGATORS

Name	*Institution*
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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
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
	5	Slit - SMP LMC 058	MIRI Low Resolution Spectroscopy	(1) SMPLMC058

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. One target for each mode duplicates a target from Commissioning or Cycle 1 in order to check for possible variations in the dispersion and to build signal/noise. The third target is a high-redshift object chosen to move strong near-infrared emission lines into the 5-7 um range in order to better constrain the dispersion solution in the slit.

This calibration program may change in response to system developments and the final Cycle 2 science program.

OBSERVING DESCRIPTION

All observations are set to occur after 1 Sep 2023.

That timing will give the MIRI/LRS team further time to assess the results of Cycle 1 cal and make modifications if necessary.

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	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Planetary nebulae nuclei]* *Extended=NO*				
(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*				
(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	
Comments: Position from Gaia EDR3 *Category=Galaxy* *Description=[Emission line galaxies]*				
(4)	HH211-KnotF	RA: 03 43 59.6418 (55.9985075d) Dec: +32 00 34.19 (32.00950d) Equinox: J2000		
Comments: *Category=ISM* *Description=[Herbig-Haro objects]*				
(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	
Comments: *Category=Star* *Description=[T Tauri stars]* *Extended=NO*				

Observation

Proposal 4491, Observation 1: Slit - SMP LMC 058

Wed May 29 19:02:05 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

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)	Proper Motion RA: 1.767 mas/yr	
		Dec: -70 05 1.60 (-70.08378d)	Proper Motion Dec: 0.245 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Planetary nebulae nuclei]
Extended=NO

Acquisition

#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	F1000W	FAST	10	1	1	27.75	151238.02

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	10	1	1	1	1	27.75		F1000W

Spectral Elements

#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
1	FASTR1	200	3	6	1	2	3341.148	

Special Requirements

After Date 01-SEP-2023

Observation

Proposal 4491, Observation 2: Slitless - HD 76534

Wed May 29 19:02:05 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

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)	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 4491 - Observation 2 - CAL-MIRI-235 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	16	144	144	1	1	389.171	

Special Requirements

After Date 01-SEP-2023
Time Series Observation
No Parallel Attachments

Observation

Proposal 4491, Observation 3: Slit - APM 08279

Wed May 29 19:02:05 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

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	

Comments: Position from Gaia EDR3
Category=Galaxy
Description=[Emission line galaxies]

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 4491 - Observation 3 - CAL-MIRI-235 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	

Special Requirements

After Date 01-SEP-2023

Observation

Proposal 4491, Observation 4: Slit - HH211 Knot F Wed May 29 19:02:05 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

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		

Comments:
Category=ISM
Description=[Herbig-Haro objects]

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 4491 - Observation 4 - CAL-MIRI-235 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

Observation

Proposal 4491, Observation 5: Slit - SMP LMC 058

Wed May 29 19:02:05 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Low Resolution Spectroscopy

Diagnostics

(Slit - SMP LMC 058 (Obs 5)) Warning (Form): Groups/Int cannot be 1, Groups/Int = 2 requires permission and Groups/Int of 3-4 is allowed but not recommended.

(Visit 5:1) 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	

Comments: Position from Gaia EDR3
Category=Star
Description=[Planetary nebulae nuclei]
Extended=NO

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	4	1	1	1	1	11.1		FND

Proposal 4491 - Observation 5 - CAL-MIRI-235 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

Special Requirements

Before Date 30-JUN-2024