



4533 - LRS Spectroscopy of a MIRI/ALMA Galaxy

Cycle: 3, Proposal Category: GTO

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	LRS-ALMA-10-pos-0	MIRI Low Resolution Spectroscopy	(1) MDS.MIRI-DEEP-SURVEY-ALMA-10
	2	slitless MOSAIC	MIRI Low Resolution Spectroscopy	(1) MDS.MIRI-DEEP-SURVEY-ALMA-10

ABSTRACT

We will perform a LRS spectroscopy of a known ALMA source at $z=1.99$ (ALMA-10 with $F560W=21.5$ mag) and slitless LRS spectroscopy of its surroundings.

OBSERVING DESCRIPTION

In the first observation, ALMA-10 will be observed through the LRS slit, and 2 'along-slit-nod' dithered exposures will be obtained. A verification image in F560W will be obtained so that we can characterize the slit placement and slit losses. We will not do a TA based on negative experience of TA failure from other programs, and our coordinates are accurate and the target is extended. The observations would be repeated with Y-offstes of +/- 0.4 arcseconds.

JWST Proposal 4533 (Created: Tuesday, November 12, 2024, 9:00:08AM Eastern Standard Time) - Overview

For the second observation, following a pos-targ movement, we will obtain a 2 (spatial) by 2 (spectral) mosaic (with offsets 7/10 arcsec) to make a dithered slitless observation of the MIRI imager field in the surroundings of ALMA-10 (it will be included in all 4 exposures). A verification image will be obtained. We are aware the the pipeline currently does not support the calibration of such data (we will develop our own methods for this).

Proposal 4533 - Targets - LRS Spectroscopy of a MIRI/ALMA Galaxy

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(1) <i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Infrared galaxies]</i> <i>Extended=YES</i>	MDS.MIRI-DEEP-SURVEY- ALMA-10	RA: 03 32 40.0663 (53.1669429d) Dec: -27 47 55.78 (-27.79883d) Equinox: J2000		

Proposal 4533 - Observation 1 - LRS Spectroscopy of a MIRI/ALMA Galaxy

Tue Nov 12 14:00:08 GMT 2024

Observation	<p>Proposal 4533, Observation 1: LRS-ALMA-10-pos-0</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</p>									
Diagnostics	<p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(LRS-ALMA-10-pos-0 (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Miscellaneous			
	(1)	MDS.MIRI-DEEP-SURVEY-ALMA-10	RA: 03 32 40.0663 (53.1669429d) Dec: -27 47 55.78 (-27.79883d) Equinox: J2000							
	<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Infrared galaxies]</i> <i>Extended=YES</i></p>									
Acquisition	#									Target
	1									NONE
Template	AcqFilter	Subarray				Obtain Verification Image?				
	F560W	FULL				true				
Mosaic	Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order			
	3	1	20.0	10.0	0.0	0.0	DEFAULT			
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 Wbk.Calc ID	Filter
	1	FASTR1	60	1	1	1	1	166.502		F560W

Proposal 4533 - Observation 1 - LRS Spectroscopy of a MIRI/ALMA Galaxy

Spectral Elements	#	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Exposures/Dith	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
		1	FASTR1	97	4	8	1	2	2170.081
Special Requirements	<p>Aperture PA Range 30 to 45 Degrees (V3 25.24203 to 40.24203) Background Limited. Background no more than 10th percentile above minimum</p> <p>Sequence Observations 1, 2, Non-interruptible Aperture PA Offset 2 from 1 by -5 to -10 Degrees (Same offsets in V3)</p>								

Proposal 4533 - Observation 2 - LRS Spectroscopy of a MIRI/ALMA Galaxy

Tue Nov 12 14:00:08 GMT 2024

Observation	<p>Proposal 4533, Observation 2: slitless MOSAIC</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: MIRI Low Resolution Spectroscopy</p>									
Diagnostics	<p>(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(slitless MOSAIC (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.</p>									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Miscellaneous			
Fixed Targets	(1)	MDS.MIRI-DEEP-SURVEY-ALMA-10	RA: 03 32 40.0663 (53.1669429d) Dec: -27 47 55.78 (-27.79883d) Equinox: J2000							
Fixed Targets	<p>Comments: Category=Galaxy Description=[Infrared galaxies] Extended=YES</p>									
Acquisition	#	Target								
Acquisition	1	NONE								
Template	AcqFilter		Subarray			Obtain Verification Image?				
Template			FULL			true				
Dithers	#	Dither Type	No. Spectral Steps	Spectral Step Offset	No. Spatial Steps	Spatial Step Offset				
Dithers	1	MAPPING	2	10.0	2	7.0				
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
Pointing Verification	1	FASTR1	60	1	1	1	1	166.502		F560W

Proposal 4533 - Observation 2 - LRS Spectroscopy of a MIRI/ALMA Galaxy

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	97	7	28	1	4	7603.61
	<p>Offset 16.0 arcsec, 8.0 arcsec</p> <p>Sequence Observations 1, 2, Non-interruptible</p> <p>Aperture PA Offset 2 from 1 by -5 to -10 Degrees (Same offsets in V3)</p>								