



6623 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

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	Long ramp left	MIRI Low Resolution Spectroscopy	(1) BD+60-1753
	2	Long ramp center	MIRI Low Resolution Spectroscopy	(1) BD+60-1753
	3	Long ramp right	MIRI Low Resolution Spectroscopy	(1) BD+60-1753

ABSTRACT

This activity will observe the standard star BD+60 1753 in the LRS slitless mode to characterize the behavior of the detector when an observation goes to saturation. Three pointings will be made with the source in the nominal pointing position and a non-integer number of pixels to either side. The integration will saturate the detector at the shortest wavelengths. This activity will investigate how charge migration (the brighter-fatter effect) and the non-linearity correction in the pipeline interact.

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

OBSERVING DESCRIPTION

JWST Proposal 6623 (Created: Thursday, May 16, 2024 at 1:00:09 AM Eastern Standard Time) - Overview

BD+60 1753 will be observed with an integration time long enough to saturate pixels at the blue end of the spectrum. Observations will be obtained in three positions, at the nominal pointing position in the slitless subarray, 3.5 pixels to the left, and 3.75 pixels to the right of that position.

TIMING CONSTRAINTS:

None.

Proposal 6623 - Targets - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(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	
<i>Comments: Position from Gaia EDR3. Category=Star Description=[A dwarfs] Extended=NO</i>					

Proposal 6623 - Observation 1 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

Thu May 16 06:00:09 GMT 2024

Observation	<p>Proposal 6623, Observation 1: Long ramp left</p> <p>Diagnostic Status: Warning</p> <p>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)	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						
	<p><i>Comments: Position from Gaia EDR3.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[A dwarfs]</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	1 BD+60-1753	F1000W	FAST	12	1	1	1.908	193083.03	
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	12	1	1	1	1	1.908		F1000W

Proposal 6623 - Observation 1 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

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	144	156	156	1	1	3597.326
	Offset -0.385 arcsec, 0.0 arcsec Time Series Observation No Parallel Attachments Sequence Observations 1, 2, 3, Non-interruptible								

Proposal 6623 - Observation 2 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

Thu May 16 06:00:09 GMT 2024

Observation	<p>Proposal 6623, Observation 2: Long ramp center Diagnostic Status: Warning 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		
	(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					
	<p><i>Comments: Position from Gaia EDR3. Category=Star Description=[A dwarfs] Extended=NO</i></p>									
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	1 BD+60-1753	F1000W	FAST	12	1	1	1.908	153154.03	
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	12	1	1	1	1	1.908		F1000W

Proposal 6623 - Observation 2 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

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	144	156	156	1	1	3597.326
	Time Series Observation No Parallel Attachments Sequence Observations 1, 2, 3, Non-interruptible								

Proposal 6623 - Observation 3 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

Thu May 16 06:00:10 GMT 2024

Observation	<p>Proposal 6623, Observation 3: Long ramp right</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			
	(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						
	<p><i>Comments: Position from Gaia EDR3.</i></p> <p><i>Category=Star</i></p> <p><i>Description=[A dwarfs]</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	1 BD+60-1753	F1000W	FAST	12	1	1	1.908	153154.06	
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	12	1	1	1	1	1.908		F1000W

Proposal 6623 - Observation 3 - CAL-MIRI-337 MIRI LRS Dynamic Range Characterization

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	144	156	156	1	1	3597.326
	Offset 0.4125 arcsec, 0.0 arcsec Time Series Observation No Parallel Attachments Sequence Observations 1, 2, 3, Non-interruptible								