



## 1523 - MRS External Flatfield

Cycle: 1, Proposal Category: CAL/MIRI

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>
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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	NGC 7027 raster	MIRI Medium Resolution Spectroscopy	(2) NGC-7027
	2	NGC 7027 Background	MIRI Medium Resolution Spectroscopy	(3) NGC-7027-BACKGROUND
	3	SMP LMC 058	MIRI Medium Resolution Spectroscopy	(8) SMP-LMC-058
	4	SMP LMC 058 BG	MIRI Medium Resolution Spectroscopy	(9) SMP-LMC-058-BKG
	5	MRS Dark.	MIRI Dark	NONE
	6	MRS Cal lamp ON exposures	MIRI External Flat	NONE
	7	MRS Dark.	MIRI Dark	NONE
	8	Imager: Com-like CCC open lamps	MIRI External Flat	(11) NAME-LMC
	9	MRS: Com-like CCC open lamps	MIRI External Flat	(11) NAME-LMC
	10	Imager: HD2811 repeat	MIRI Imaging	(10) HD2811
	11	HR6514 XDGA Repeat	MIRI External Flat	(12) HR6514

## **ABSTRACT**

This activity performs external flatfields (illumination flats) to provide low-spatial-frequency flatfields (L-flats) for the MIRI MRS. The data provided will probe the overall system transmission and illumination of the detectors, as a function of position in the focal plane, wavelength, and the resulting map onto position on the detectors. Repeating the similar observations obtained in commissioning (CAR-MIRI-061) will provide a valuable check on the stability of system transmission and pixel responsivity and, with the added integration time, improve the signal-noise-ratio (SNR) of the resultant L-flat. The first choice for a target is a nearby extended planetary nebula NGC 7027.

Additional observations include SMP LMC 058 and an MRS calibration lamp exposure to test photometric repeatability compared to commissioning, along with a reobservation of HR6514 in a crossed-dichroic configuration.

This calibration program is provisional and may change in response to system developments and the final science program.

## **OBSERVING DESCRIPTION**

Observe a bright planetary nebula in a 3x3 mosaic to measure the MRS flatfield.

## **TIMING CONSTRAINTS**

The specified dates assume a launch on 25 Dec 2021 and the start of Cycle 1 on 23 Jun 2022.

The target should be observed in Months 4-5 of Cycle 1.

Missed or failed observations should be obtained within the scheduled window. The primary target, NGC 7027, is visible 23 May -10 Dec 2022, so if we are unable to observe it by 10 Dec 2022, it may be necessary to replace it with an optional target.

## **TARGETS**

The APT file contains three unobserved optional targets.

Proposal 1523 - Targets - MRS External Flatfield

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(2)	NGC-7027	RA: 21 07 1.8000 (316.7575000d) Dec: +42 14 10.00 (42.23611d) Equinox: J2000		
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>            Category=ISM            Description=[Planetary nebulae]            Extended=YES</p>				
(3)	NGC-7027-BACKGROUND	RA: 21 07 0.0000 (316.7500000d) Dec: +42 14 41.00 (42.24472d) Equinox: J2000		
<p><i>Comments:</i>            Category=Calibration            Description=[Planetary nebulae]            Extended=YES</p>				
(4)	BD+30.3639	RA: 19 34 45.2336 (293.6884733d) Dec: +30 30 58.95 (30.51638d) Equinox: J2000		
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>            Category=ISM            Description=[Planetary nebulae]            Extended=YES</p>				
(5)	IRAS21282+5050	RA: 21 29 58.4700 (322.4936250d) Dec: +51 04 0.30 (51.06675d) Equinox: J2000		
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>            Category=ISM            Description=[Planetary nebulae]            Extended=YES</p>				
(7)	IC-418	RA: 05 27 28.2082 (81.8675342d) Dec: -12 41 50.26 (-12.69729d) Equinox: J2000	Proper Motion RA: 1.3667574914287705E-4 sec of time/yr Proper Motion Dec: 0.001461 arcsec/yr Epoch of Position: 2015.5	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>            Category=ISM            Description=[Planetary nebulae]</p>				
(8)	SMP-LMC-058	RA: 05 24 20.7523 (81.0864679d) 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: 2016.0	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Coordinates updated to Gaia EDR3</i></p> <p><i>Planetary nebula with nice red spectrum to match the MRS sensitivity curve (decent SNR everywhere!).            Angular diameter ~80 mas (quoted after <a href="https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration">https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration</a>; also, neither HST nor IRAC saw any spatial extent).            This may somewhat limit our PSF resolution at the shortest wavelengths (accepted pre-launch value: 310 mas FWHM) but should be fine everywhere else.</i>            Category=Calibration            Description=[Planetary nebulae, Point spread function]</p>				

Fixed Targets

## Proposal 1523 - Targets - MRS External Flatfield

(9)	SMP-LMC-058-BKG	RA: 05 24 7.5200 (81.0313333d) Dec: -70 04 38.60 (-70.07739d) Equinox: J2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Planetary nebula with nice red spectrum to match the MRS sensitivity curve (decent SNR everywhere!).</i></p> <p><i>Angular diameter ~80 mas (quoted after <a href="https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration">https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration</a>; also, neither HST nor IRAC saw any spatial extent).</i></p> <p><i>This may somewhat limit our PSF resolution at the shortest wavelengths (accepted pre-launch value: 310 mas FWHM) but should be fine everywhere else.</i></p> <p>Category=Calibration Description=[Telescope/sky background]</p>			
(10)	HD2811	RA: 00 31 18.4899 (7.8270413d) Dec: -43 36 23.00 (-43.60639d) Equinox: J2000	Proper Motion RA: -6.020 mas/yr Proper Motion Dec: -4.176 mas/yr Parallax: 0.0036174" Epoch of Position: 2015.5
<p><i>Comments: Coordinates from Gaia DR2</i></p> <p><i>The star has spectral type A3V. Simbad photometry:</i></p> <p><i>B 7.67 [0.01] D 2000A&amp;A...355L..27H</i></p> <p><i>V 7.50 [-] C 2002yCat.2237....0D</i></p> <p><i>G 7.4844 [0.0004] C 2018yCat.1345....0G</i></p> <p><i>J 7.144 [0.026] C 2003yCat.2246....0C</i></p> <p><i>H 7.129 [0.024] C 2003yCat.2246....0C</i></p> <p><i>K 7.057 [0.024] C 2003yCat.2246....0C</i></p> <p><i>Other photometry: WISE W1 = 6.929, W2 = 7.020</i></p> <p>Category=Star Description=[A dwarfs] Extended=NO</p>			
(11)	NAME-LMC	RA: 05 23 34.6000 (80.8941667d) Dec: -69 45 22.00 (-69.75611d) Equinox: J2000	
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p>Category=Calibration Description=[External flat field]</p>			
(12)	HR6514	RA: 17 26 4.8368 (261.5201533d) Dec: +58 39 6.83 (58.65190d) Equinox: J2000	Proper Motion RA: -8.979 mas/yr Proper Motion Dec: 14.626 mas/yr Parallax: 0.0082" Epoch of Position: 2000
<p><i>Comments: GAIA DR1 coordinates and proper motion</i></p> <p>Category=Star Description=[A dwarfs] Extended=NO</p>			

Proposal 1523 - Observation 1 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<p><b>Proposal 1523, Observation 1: NGC 7027 raster</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Observing Template: MIRI Medium Resolution Spectroscopy</p> <p>Background Observations:[NGC 7027 Background (Obs 2)]</p>												
<b>Diagnostics</b>	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Fixed Targets</b>	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(2)	NGC-7027	RA: 21 07 1.8000 (316.7575000d) Dec: +42 14 10.00 (42.23611d) Equinox: J2000										
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Category=ISM</i></p> <p><i>Description=[Planetary nebulae]</i></p> <p><i>Extended=YES</i></p>												
<b>Acquisition</b>	#	Target											
	1	NONE											
<b>Template</b>	AcqFilter	Primary Channel			Simultaneous Imaging		Imager Subarray		Grating Wheel Direction				
	F560W	All MRS			NO		FULL		NEUTRAL				
<b>Mosaic</b>	Rows	Columns	Row Overlap %		Column Overlap %		Row shift (deg)		Column shift (deg)		Tile Order		
	3	3	67.0		67.0		0.0		0.0		DEFAULT		
<b>Dithers</b>	#	Dither Type			Optimized For			Direction					
	1	2-Point			EXTENDED SOURCE			NEGATIVE					
<b>Spectral Elements</b>	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	LONG(C)	MRSLONG		FASTR1	5	10	1	Dither 1	2	20	327.455	
	1	LONG(C)	MRSSHORT		FASTR1	5	10	1	Dither 1	2	20	327.455	
	2	MEDIUM(B)	MRSLONG		FASTR1	5	10	1	Dither 1	2	20	327.455	
	2	MEDIUM(B)	MRSSHORT		FASTR1	5	10	1	Dither 1	2	20	327.455	
	3	SHORT(A)	MRSLONG		FASTR1	5	10	1	Dither 1	2	20	327.455	
	3	SHORT(A)	MRSSHORT		FASTR1	5	10	1	Dither 1	2	20	327.455	

## Proposal 1523 - Observation 1 - MRS External Flatfield

### Special Requirements

Between Dates 22-SEP-2022 and 22-NOV-2022

Sequence Observations 1, 2, Non-interruptible

Proposal 1523 - Observation 2 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<b>Proposal 1523, Observation 2: NGC 7027 Background</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [NGC 7027 raster (Obs 1)]												
<b>Diagnostics</b>	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Fixed Targets</b>	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(3)	NGC-7027-BACKGROUND	RA: 21 07 0.0000 (316.7500000d) Dec: +42 14 41.00 (42.24472d) Equinox: J2000										
	<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Planetary nebulae]</i> <i>Extended=YES</i>												
<b>Acquisition</b>	#	Target											
	1	NONE											
<b>Template</b>	AcqFilter	Primary Channel		Simultaneous Imaging		Imager Subarray		Grating Wheel Direction					
	F560W	All MRS		NO		FULL		NEUTRAL					
<b>Dithers</b>	#	Dither Type			Optimized For				Direction				
	1	2-Point			EXTENDED SOURCE				NEGATIVE				
<b>Spectral Elements</b>	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int xp	Integrations/E xp	Exposures/Dith h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	LONG(C)	MRSLONG		FASTR1	5	10	1	Dither 1	2	20	327.455	
	1	LONG(C)	MRSSHORT		FASTR1	5	10	1	Dither 1	2	20	327.455	
	2	MEDIUM(B)	MRSLONG		FASTR1	5	10	1	Dither 1	2	20	327.455	
	2	MEDIUM(B)	MRSSHORT		FASTR1	5	10	1	Dither 1	2	20	327.455	
	3	SHORT(A)	MRSLONG		FASTR1	5	10	1	Dither 1	2	20	327.455	
	3	SHORT(A)	MRSSHORT		FASTR1	5	10	1	Dither 1	2	20	327.455	

Proposal 1523 - Observation 2 - MRS External Flatfield

Special Requirements

Sequence Observations 1, 2, Non-interruptible

Proposal 1523 - Observation 3 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

Observation	<b>Proposal 1523, Observation 3: SMP LMC 058</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy												
	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(8)	SMP-LMC-058	RA: 05 24 20.7523 (81.0864679d) 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: 2016.0							
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Coordinates updated to Gaia EDR3</i> <i>Planetary nebula with nice red spectrum to match the MRS sensitivity curve (decent SNR everywhere!).</i> <i>Angular diamter ~80 mas (quoted after <a href="https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration">https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration</a>; also, neither HST nor IRAC saw any spatial extent).</i> <i>This may somewhat limit our PSF resolution at the shortest wavelengths (accepted pre-launch value: 310 mas FWHM) but should be fine everywhere else.</i> Category=Calibration Description=[Planetary nebulae, Point spread function]													
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	39236				
Template	Primary Channel		Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	Channel 2		YES			FULL			NEUTRAL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			POINT SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F770W	FASTR1	20	1	1	Dither 1	4	4	222.003	
	1	LONG(C)	MRSLONG		FASTR1	45	1	1	Dither 1	4	4	499.507	
	1	LONG(C)	MRSSHORT		FASTR1	45	1	1	Dither 1	4	4	499.507	
	2		IMAGER	F770W	FASTR1	20	1	1	Dither 1	4	4	222.003	
	2	MEDIUM(B)	MRSLONG		FASTR1	45	1	1	Dither 1	4	4	499.507	
	2	MEDIUM(B)	MRSSHORT		FASTR1	45	1	1	Dither 1	4	4	499.507	
	3		IMAGER	F770W	FASTR1	20	1	1	Dither 1	4	4	222.003	
	3	SHORT(A)	MRSLONG		FASTR1	45	1	1	Dither 1	4	4	499.507	
	3	SHORT(A)	MRSSHORT		FASTR1	45	1	1	Dither 1	4	4	499.507	

Proposal 1523 - Observation 3 - MRS External Flatfield

Special Requirements

Sequence Observations 3, 4, Non-interruptible

Proposal 1523 - Observation 4 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

Observation	<p><b>Proposal 1523, Observation 4: SMP LMC 058 BG</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Observing Template: MIRI Medium Resolution Spectroscopy</p>												
	<p>(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>												
Diagnostics													
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(9)	SMP-LMC-058-BKG	RA: 05 24 7.5200 (81.0313333d) Dec: -70 04 38.60 (-70.07739d) Equinox: J2000										
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Planetary nebula with nice red spectrum to match the MRS sensitivity curve (decent SNR everywhere!).</i></p> <p><i>Angular diamter ~80 mas (quoted after <a href="https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration">https://jwst-docs.stsci.edu/display/JDAT/Absolute+Wavelength+Calibration</a>; also, neither HST nor IRAC saw any spatial extent).</i></p> <p><i>This may somewhat limit our PSF resolution at the shortest wavelengths (accepted pre-launch value: 310 mas FWHM) but should be fine everywhere else.</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Telescope/sky background]</i></p>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
	FND	All MRS			NO			FULL		NEUTRAL			
Dithers	#	Dither Type			Optimized For				Direction				
	1	2-Point			POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	LONG(C)	MRSLONG		FASTR1	45	1	1	Dither 1	2	2	249.754	
	1	LONG(C)	MRSSHORT		FASTR1	45	1	1	Dither 1	2	2	249.754	
	2	MEDIUM(B)	MRSLONG		FASTR1	45	1	1	Dither 1	2	2	249.754	
	2	MEDIUM(B)	MRSSHORT		FASTR1	45	1	1	Dither 1	2	2	249.754	
	3	SHORT(A)	MRSLONG		FASTR1	45	1	1	Dither 1	2	2	249.754	
	3	SHORT(A)	MRSSHORT		FASTR1	45	1	1	Dither 1	2	2	249.754	

Proposal 1523 - Observation 4 - MRS External Flatfield

Special Requirements

Sequence Observations 3, 4, Non-interruptible

Proposal 1523 - Observation 5 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<p><b>Proposal 1523, Observation 5: MRS Dark.</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Observing Template: MIRI Dark</p>								
<b>Diagnostics</b>	<p>(MRS Dark. (Obs 5)) Warning (Form): PARALLEL requirement expected.</p> <p>(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>								
<b>Template</b>	<p><b>Detector</b></p> <p>MRS</p>			<p><b>Test Pattern</b></p> <p>NONE</p>			<p><b>Imager Subarray</b></p>		
<b>Spectral Elements</b>	<b>#</b>	<b>Detector</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Exposures/Dith</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	MRSLONG	FASTR1	20	2	1	2	113.777	
	1	MRSSHORT	FASTR1	20	2	1	2	113.777	
<b>Special Requirements</b>	<p>Sequence Observations 5, 6, 7, Non-interruptible, Exclusive Use Of Instrument</p>								

Proposal 1523 - Observation 6 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<p>Proposal 1523, Observation 6: MRS Cal lamp ON exposures</p> <p><b>Diagnostic Status: Warning</b></p> <p>Observing Template: MIRI External Flat</p>												
	<p>(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>												
<b>Template</b>	<b>Pointing Type</b>	<b>Detector</b>	<b>Dither</b>	<b>Lamp Use</b>	<b>Lamp On Time</b>	<b>Imager Subarray</b>	<b>Grating Wheel Direction</b>						
	PRIME	MRS	false	ON ONLY	1704		NEUTRAL						
<b>Spectral Elements</b>	<b>#</b>	<b>Detector</b>	<b>Filter</b>	<b>Wavelength 1 &amp; 4</b>	<b>Wavelength 2 &amp; 3</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Exposures/Dith</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	MRSLONG		SHORT(A)	SHORT(A)	FASTR1	20	2	3	1	6	341.33	
	1	MRSSHORT		SHORT(A)	SHORT(A)	FASTR1	20	2	3	1	6	341.33	
	2	MRSLONG		MEDIUM(B)	MEDIUM(B)	FASTR1	20	2	3	1	6	341.33	
	2	MRSSHORT		MEDIUM(B)	MEDIUM(B)	FASTR1	20	2	3	1	6	341.33	
	3	MRSLONG		LONG(C)	LONG(C)	FASTR1	20	2	3	1	6	341.33	
	3	MRSSHORT		LONG(C)	LONG(C)	FASTR1	20	2	3	1	6	341.33	
<b>Special Requirements</b>	<p>No Parallel Attachments</p> <p>Sequence Observations 5, 6, 7, Non-interruptible, Exclusive Use Of Instrument</p>												

Proposal 1523 - Observation 7 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<p><b>Proposal 1523, Observation 7: MRS Dark.</b>  <b>Diagnostic Status: Warning</b>                  Observing Template: MIRI Dark</p>								
<b>Diagnostics</b>	<p>(MRS Dark. (Obs 7)) Warning (Form): PARALLEL requirement expected.                  (Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>								
<b>Template</b>	<p><b>Detector</b></p>			<p><b>Test Pattern</b></p>			<p><b>Imager Subarray</b></p>		
	MRS			NONE					
<b>Spectral Elements</b>	<b>#</b>	<b>Detector</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Exposures/Dith</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	MRSLONG	FASTR1	20	2	1	2	113.777	
	1	MRSSHORT	FASTR1	20	2	1	2	113.777	
<b>Special Requirements</b>	<p>Sequene Observations 5, 6, 7, Non-interruptible, Exclusive Use Of Instrument</p>								

Proposal 1523 - Observation 8 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	Proposal 1523, Observation 8: Imager: Com-like CCC open lamps Diagnostic Status: Warning Observing Template: MIRI External Flat												
	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Fixed Targets</b>	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(11)	NAME-LMC	RA: 05 23 34.6000 (80.8941667d) Dec: -69 45 22.00 (-69.75611d) Equinox: J2000  <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=Calibration</i> <i>Description=External flat field</i>										
<b>Template</b>	Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction						
	PRIME	IMAGER	false	OFF THEN ON	2164	FULL	NEUTRAL						
<b>Spectral Elements</b>	#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	IMAGER	P750L			FASTR1	10	5	1	1	5	149.852	
	2	IMAGER	F1800W			FAST	10	5	1	1	5	138.752	
	3	IMAGER	F2100W			FAST	10	5	1	1	5	138.752	
	4	IMAGER	F2300C			FAST	10	5	1	1	5	138.752	
	5	IMAGER	F770W			FAST	10	5	1	1	5	138.752	
	6	IMAGER	F1550C			FAST	10	5	1	1	5	138.752	
	7	IMAGER	F2550W			FAST	10	5	1	1	5	138.752	
	8	IMAGER	F2550WR			FAST	10	5	1	1	5	138.752	
	9	IMAGER	P750L			FASTR1	10	5	1	1	5	149.852	
	10	IMAGER	F1800W			FAST	10	5	1	1	5	138.752	
	11	IMAGER	F2100W			FAST	10	5	1	1	5	138.752	
	12	IMAGER	F2300C			FAST	10	5	1	1	5	138.752	
	13	IMAGER	F770W			FAST	10	5	1	1	5	138.752	
	14	IMAGER	F1550C			FAST	10	5	1	1	5	138.752	
	15	IMAGER	F2550W			FAST	10	5	1	1	5	138.752	
	16	IMAGER	F2550WR			FAST	10	5	1	1	5	138.752	

Proposal 1523 - Observation 8 - MRS External Flatfield

Special Requirements

Before Date 14-JUN-2023:00:00:00  
No Parallel Attachments

Proposal 1523 - Observation 9 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	Proposal 1523, Observation 9: MRS: Com-like CCC open lamps Diagnostic Status: Warning Observing Template: MIRI External Flat												
	(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Fixed Targets</b>	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(11)	NAME-LMC	RA: 05 23 34.6000 (80.8941667d) Dec: -69 45 22.00 (-69.75611d) Equinox: J2000			Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=Calibration Description=[External flat field]							
<b>Template</b>	Pointing Type	Detector	Dither	Lamp Use	Lamp On Time	Imager Subarray	Grating Wheel Direction						
	PRIME	MRS	false	OFF THEN ON	1704		NEUTRAL						
<b>Spectral Elements</b>	#	Detector	Filter	Wavelength 1 & 4	Wavelength 2 & 3	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	MRSLONG		SHORT(A)	SHORT(A)	FASTR1	20	2	3	1	6	341.33	
	1	MRSSHORT		SHORT(A)	SHORT(A)	FASTR1	20	2	3	1	6	341.33	
	2	MRSLONG		MEDIUM(B)	MEDIUM(B)	FASTR1	20	2	3	1	6	341.33	
	2	MRSSHORT		MEDIUM(B)	MEDIUM(B)	FASTR1	20	2	3	1	6	341.33	
	3	MRSLONG		LONG(C)	LONG(C)	FASTR1	20	2	3	1	6	341.33	
	3	MRSSHORT		LONG(C)	LONG(C)	FASTR1	20	2	3	1	6	341.33	
	4	MRSLONG		SHORT(A)	SHORT(A)	FASTR1	20	2	3	1	6	341.33	
	4	MRSSHORT		SHORT(A)	SHORT(A)	FASTR1	20	2	3	1	6	341.33	
	5	MRSLONG		MEDIUM(B)	MEDIUM(B)	FASTR1	20	2	3	1	6	341.33	
	5	MRSSHORT		MEDIUM(B)	MEDIUM(B)	FASTR1	20	2	3	1	6	341.33	
	6	MRSLONG		LONG(C)	LONG(C)	FASTR1	20	2	3	1	6	341.33	
	6	MRSSHORT		LONG(C)	LONG(C)	FASTR1	20	2	3	1	6	341.33	
<b>Special Requirements</b>	Before Date 14-JUN-2023:00:00 No Parallel Attachments												

Proposal 1523 - Observation 10 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<p><b>Proposal 1523, Observation 10: Imager: HD2811 repeat</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Observing Template: MIRI Imaging</p>										
	<p>(Imager: HD2811 repeat (Obs 10)) Warning (Form): Mosaic-overlap value less than 20% using SUB128 or SUB64 could result in poor quality data at the adjacent regions</p> <p>(Imager: HD2811 repeat (Obs 10)) Warning (Form): Mosaic-overlap value less than 20% using SUB128 or SUB64 could result in poor quality data at the adjacent regions</p> <p>(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>										
<b>Diagnostics</b>											
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>			<b>Targ. Coord. Corrections</b>			<b>Miscellaneous</b>		
	(10)	HD2811	RA: 00 31 18.4899 (7.8270413d) Dec: -43 36 23.00 (-43.60639d) Equinox: J2000			Proper Motion RA: -6.020 mas/yr Proper Motion Dec: -4.176 mas/yr Parallax: 0.0036174" Epoch of Position: 2015.5					
<p><i>Comments: Coordinates from Gaia DR2</i></p> <p><i>The star has spectral type A3V. Simbad photometry:</i></p> <p><i>B 7.67 [0.01] D 2000A&amp;A...355L..27H</i></p> <p><i>V 7.50 [-] C 2002yCat.2237....0D</i></p> <p><i>G 7.4844 [0.0004] C 2018yCat.1345....0G</i></p> <p><i>J 7.144 [0.026] C 2003yCat.2246....0C</i></p> <p><i>H 7.129 [0.024] C 2003yCat.2246....0C</i></p> <p><i>K 7.057 [0.024] C 2003yCat.2246....0C</i></p> <p><i>Other photometry: WISE W1 = 6.929, W2 = 7.020</i></p> <p><i>Category=Star</i></p> <p><i>Description=[A dwarfs]</i></p> <p><i>Extended=NO</i></p>											
<b>Template</b>	<b>Subarray</b>										
	SUB64										
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>	<b>Starting Point</b>	<b>Number of Points</b>	<b>Points</b>	<b>Starting Set</b>	<b>Number of Sets</b>	<b>Optimized For</b>	<b>Direction</b>	<b>Pattern Size</b>	
	1	4-Point-Sets				1	1	POINT SOURCE	POSITIVE	DEFAULT	
<b>Spectral Elements</b>	<b>#</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Exposures/Dith</b>	<b>Dither</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	F770W	FASTR1	5	1	1	Dither 1	4	4	1.702	
	2	F1000W	FASTR1	10	1	1	Dither 1	4	4	3.405	
	3	F1130W	FASTR1	32	1	1	Dither 1	4	4	10.895	
	4	F1280W	FASTR1	14	1	1	Dither 1	4	4	4.767	
	5	F1500W	FASTR1	20	1	1	Dither 1	4	4	6.81	
	6	F1800W	FASTR1	48	1	1	Dither 1	4	4	16.343	
	7	F2100W	FASTR1	100	1	1	Dither 1	4	4	34.048	
	8	F2550W	FASTR1	360	1	1	Dither 1	4	4	122.573	

Special Requirements

Before Date 14-JUN-2023:00:00:00

Proposal 1523 - Observation 11 - MRS External Flatfield

Thu Dec 21 22:00:12 GMT 2023

<b>Observation</b>	<b>Proposal 1523, Observation 11: HR6514 XDGA Repeat</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI External Flat												
	(Visit 11:1) Warning (Form): Data Excess over lower threshold (Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>			<b>Targ. Coord. Corrections</b>			<b>Miscellaneous</b>				
	(12)	HR6514	RA: 17 26 4.8368 (261.5201533d) Dec: +58 39 6.83 (58.65190d) Equinox: J2000			Proper Motion RA: -8.979 mas/yr Proper Motion Dec: 14.626 mas/yr Parallax: 0.0082" Epoch of Position: 2000							
<i>Comments: GAIA DR1 coordinates and proper motion</i> <i>Category=Star</i> <i>Description=[A dwarfs]</i> <i>Extended=NO</i>													
<b>Template</b>	<b>Pointing Type</b>	<b>Detector</b>	<b>Dither</b>	<b>Lamp Use</b>	<b>Lamp On Time</b>	<b>Imager Subarray</b>	<b>Grating Wheel Direction</b>						
	PRIME	MRS	true	OFF ONLY	0		NEUTRAL						
<b>Mosaic</b>	<b>Rows</b>	<b>Columns</b>	<b>Row Overlap %</b>	<b>Column Overlap %</b>	<b>Row shift (deg)</b>	<b>Column shift (deg)</b>	<b>Tile Order</b>						
	1	2	0.0	98.0	0.0	40.0	DEFAULT						
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>	<b>Optimized For</b>	<b>Direction</b>	<b>Primary Channel</b>								
	1	MRS 4-Point	POINT SOURCE	NEGATIVE	All MRS								
<b>Spectral Elements</b>	<b>#</b>	<b>Detector</b>	<b>Filter</b>	<b>Wavelength 1 &amp; 4</b>	<b>Wavelength 2 &amp; 3</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/E xp</b>	<b>Exposures/Dit h</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	MRSLONG		SHORT(A)	SHORT(A)	FASTR1	50	2	1	4	8	1121.116	
	1	MRSSHORT		SHORT(A)	SHORT(A)	FASTR1	50	2	1	4	8	1121.116	
	2	MRSLONG		MEDIUM(B)	SHORT(A)	FASTR1	50	2	1	4	8	1121.116	
	2	MRSSHORT		MEDIUM(B)	SHORT(A)	FASTR1	50	2	1	4	8	1121.116	
	3	MRSLONG		LONG(C)	SHORT(A)	FASTR1	50	2	1	4	8	1121.116	
	3	MRSSHORT		LONG(C)	SHORT(A)	FASTR1	50	2	1	4	8	1121.116	
	4	MRSLONG		LONG(C)	LONG(C)	FASTR1	50	2	1	4	8	1121.116	
	4	MRSSHORT		LONG(C)	LONG(C)	FASTR1	50	2	1	4	8	1121.116	
	5	MRSLONG		MEDIUM(B)	MEDIUM(B)	FASTR1	50	2	1	4	8	1121.116	
5	MRSSHORT		MEDIUM(B)	MEDIUM(B)	FASTR1	50	2	1	4	8	1121.116		

Proposal 1523 - Observation 11 - MRS External Flatfield

Special Requirements

Between Dates 18-JAN-2024:00:00:00 and 29-FEB-2024:00:00:00  
No Parallel Attachments