



4761 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in $z=1$ Main-Sequence Galaxies

Cycle: 3, Proposal Category: GO

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JWST Proposal 4761 (Created: Thursday, February 27, 2025, 5:00:10PM Eastern Standard Time) - Overview

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
COSMOS_1018				
	1	1018_Science	MIRI Medium Resolution Spectroscopy	(1) COSMOS_1018
	2	1018_BG	MIRI Medium Resolution Spectroscopy	(2) COSMOS_1018_BG
COSMOS_996				
	3	996_Science	MIRI Medium Resolution Spectroscopy	(3) COSMOS_996
	4	996_BG	MIRI Medium Resolution Spectroscopy	(10) COSMOS_996_BG
COSMOS_1148				
	5	1148_Science	MIRI Medium Resolution Spectroscopy	(4) COSMOS_1148
	6	1148_BG	MIRI Medium Resolution Spectroscopy	(11) COSMOS_1148_BG
COSMOS_1025				
	7	1025_Science	MIRI Medium Resolution Spectroscopy	(5) COSMOS_1025
	8	1025_BG	MIRI Medium Resolution Spectroscopy	(12) COSMOS_1025_BG
COSMOS_1757				
	9	1757_Science	MIRI Medium Resolution Spectroscopy	(6) COSMOS_1757
	10	1757_BG	MIRI Medium Resolution Spectroscopy	(13) COSMOS_1757_BG
COSMOS_844				
	11	844_Science	MIRI Medium Resolution Spectroscopy	(7) COSMOS_844
	12	844_BG	MIRI Medium Resolution Spectroscopy	(14) COSMOS_844_BG
COSMOS_1295				
	13	1295_Science	MIRI Medium Resolution Spectroscopy	(8) COSMOS_1295
	14	1295_BG	MIRI Medium Resolution Spectroscopy	(15) COSMOS_1295_BG
COSMOS_1346				
	15	1346_Science	MIRI Medium Resolution Spectroscopy	(9) COSMOS_1346
	16	1346_BG	MIRI Medium Resolution Spectroscopy	(16) COSMOS_1346_BG

ABSTRACT

Dust is an essential part of galaxy evolution. Dust properties are altered by the radiation field of stars and AGN, shocks, and winds. Thus the study of dust provides important clues on physical processes at work in galaxies. Polycyclic aromatic hydrocarbons (PAHs), aliphatic variations, and fine-structure lines at 3-20 μ m are the most prominent and sensitive probes of neutral and ionized dust and the ionization field in galaxies. These features have been probed on unresolved scales with Spitzer and only recently with MIRI/MRS on resolved scales in local galaxies.

Here we exploit the capabilities of MIRI/MRS at full and propose the highest redshift observations of resolved PAHs (3.3, 6.2, 7.7, 11.3 μ m) and Ar/Ne fine-structure lines in 8 carefully selected typical main-sequence galaxies at $z=1$. With this unique sample (which already has JWST/NIRCam and some MIRI imaging) we will

- (i) pursue the first comprehensive modeling of the resolved dust grain distribution in the nucleus, disk, and diffuse ISM in $z=1$ disk galaxies and mergers;
- (ii) study the correlation between grain properties and stellar ionization field via cross-correlation to NIRCam imaging and assess the use of PAH 3.3 μ m as SFR indicator; and
- (iii) characterize the fraction of dust-obscured AGN in typical $z=1$ main-sequence galaxies from a joint modeling of mid-IR continuum and PAH band ratios.

These unique observations enable for the first time the detailed understanding of resolved dust production and destruction mechanisms in the highly star forming environments of typical $z=1$ galaxies. It will also be a valuable comparison sample to local galaxies and studies of bright sub-mm galaxies at higher redshifts.

OBSERVING DESCRIPTION

This program uses MIRI/MRS (all 3 sub-channels) to perform resolved observations of the broad PAH bands (3.3, 6.2, 7.7, 11.3 μ m), the aliphatic feature at 3.4 μ m, as well as a series of fine-structure lines ([Ar II], [Ar III], [Ne II], [Ne VI]) for 8 star-forming main-sequence galaxies at $z=1$. The galaxies are chosen to have spectroscopic redshifts at $0.92 < z < 0.98$ to ensure the optimal placement of the above spectral features. Furthermore, the galaxies are extended and close to face-on for an optimal resolved structural study at the MIRI/MRS resolution. The galaxies are drawn from the COSMOS field and have existing JWST/NIRCam (F115W, F150W, F277W, F444W) and MIRI (F770W) observations from the COSMOS-Web JWST cycle 1 program as well as a wealth of other ancillary data. In addition, we will obtain, for free, MIRI imaging in F1000W, F1280W, and F1800W for our targets as part of the dedicated background observations. These are crucial for modeling the continuum part of the spectrum.

The exposure times are set by the faintest PAH at 3.3 μ m (in MRS Ch. 1 MEDIUM), to achieve a line peak S/N of 3. This results in a peak S/N>3 for the 6.2 and 7.7 μ m PAH and a peak S/N>2 for the 11.3 PAH. Other fine-structure lines will be measured at peak S/N>5. An extensive simulation with the online JWST ETC and realistic source structures is performed to show that this setup is optimal to obtain spatially resolved spectra in the core, spiral structure, and diffuse interstellar medium of the target galaxies. This results in exposure times between 2000s and 5000s (depending on the brightness of the target) in one MIRI/MRS sub-channel (i.e., multiplied by 3 for total time). For all three MRS sub-channels, we use the SLOWR1 readout to reduce the data volume and optimize the S/N. In all cases, we maximize n_group and set n_int=1 as recommended. A 4-point dither optimized for extended sources is used for the science observations.

We use dedicated sky background observations with the same setup. However, to reduce the overall time request, we only use a 2-point dither for the sky background observations. In addition, we add F1000W, F1280W, and F1800W observations (one for each sub-channel) for our targets, taken simultaneously with the background observations. To observe a clean background, we implement special requirements on the V3 PA of the background observations. To avoid the meteoroid zone, we use V3 PAs around 110 degrees (we therefore avoid the 290-degree option). In two cases, we also introduce an offset, as the V3 PA range would put the background observations too close to a bright low-redshift galaxy or a star.

Proposal 4761 - Targets - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	COSMOS_1018	RA: 10 00 31.1614 (150.1298392d) Dec: +02 06 39.11 (2.11086d) Equinox: J2000		
<i>Comments:</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				
(2)	COSMOS_1018_BG	RA: 10 00 31.1614 (150.1298392d) Dec: +02 06 39.11 (2.11086d) Equinox: J2000		
<i>Comments: Background Observations</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				
(3)	COSMOS_996	RA: 10 00 48.9381 (150.2039087d) Dec: +02 06 3.36 (2.10093d) Equinox: J2000		
<i>Comments:</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				
(4)	COSMOS_1148	RA: 10 00 4.5190 (150.0188292d) Dec: +02 08 52.03 (2.14779d) Equinox: J2000		
<i>Comments:</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				
(5)	COSMOS_1025	RA: 10 00 27.5617 (150.1148404d) Dec: +02 06 50.10 (2.11392d) Equinox: J2000		
<i>Comments:</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				
(6)	COSMOS_1757	RA: 10 00 22.7009 (150.0945871d) Dec: +02 20 10.84 (2.33634d) Equinox: J2000		
<i>Comments:</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				
(7)	COSMOS_844	RA: 09 59 45.3125 (149.9388021d) Dec: +02 02 7.75 (2.03549d) Equinox: J2000		
<i>Comments:</i>				
<i>Category=Galaxy</i>				
<i>Description=[Disk galaxies]</i>				
<i>Extended=YES</i>				

Fixed Targets

Proposal 4761 - Targets - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

(8)	COSMOS_1295	RA: 09 59 26.4409 (149.8601704d) Dec: +02 11 25.34 (2.19037d) Equinox: J2000
<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		
(9)	COSMOS_1346	RA: 10 00 35.5620 (150.1481750d) Dec: +02 11 50.98 (2.19749d) Equinox: J2000
<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		
(10)	COSMOS_996_BG	RA: 10 00 48.9381 (150.2039087d) Dec: +02 06 3.36 (2.10093d) Equinox: J2000
<p><i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		
(11)	COSMOS_1148_BG	RA: 10 00 4.5190 (150.0188292d) Dec: +02 08 52.03 (2.14779d) Equinox: J2000
<p><i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		
(12)	COSMOS_1025_BG	RA: 10 00 27.5617 (150.1148404d) Dec: +02 06 50.10 (2.11392d) Equinox: J2000
<p><i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		
(13)	COSMOS_1757_BG	RA: 10 00 22.7009 (150.0945871d) Dec: +02 20 10.84 (2.33634d) Equinox: J2000
<p><i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		
(14)	COSMOS_844_BG	RA: 09 59 45.3125 (149.9388021d) Dec: +02 02 7.75 (2.03549d) Equinox: J2000
<p><i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i></p>		

Proposal 4761 - Targets - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

(15)	COSMOS_1295_BG	RA: 09 59 26.4409 (149.8601704d) Dec: +02 11 25.34 (2.19037d) Equinox: J2000
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>		
(16)	COSMOS_1346_BG	RA: 10 00 35.5620 (150.1481750d) Dec: +02 11 50.98 (2.19749d) Equinox: J2000
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>		

Proposal 4761 - Observation 1 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 1: 1018_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[1018_BG (Obs 2)]												
	(1018_Science (Obs 1)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (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)	COSMOS_1018	RA: 10 00 31.1614 (150.1298392d) Dec: +02 06 39.11 (2.11086d) Equinox: J2000										
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674

Proposal 4761 - Observation 1 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in $z=1$ Main-Sequence Galaxies

Special Requirements

Sequence Observations 1, 2, Non-interruptible

Proposal 4761 - Observation 2 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 2: 1018_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [1018_Science (Obs 1)]												
	(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)	COSMOS_1018_BG	RA: 10 00 31.1614 (150.1298392d) Dec: +02 06 39.11 (2.11086d) Equinox: J2000										
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		Imager			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type			Optimized For			Direction					
	1	2-Point			BACKGROUND			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2		IMAGER	F1280W	SLOWR1	10	2	1	Dither 1	2	4	1003.377	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3		IMAGER	F1800W	FASTR1	59	3	1	Dither 1	2	6	993.464	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674

Proposal 4761 - Observation 2 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 100.83544897 to 101.83544897 Degrees (V3 96.0 to 97.0)

Sequence Observations 1, 2, Non-interruptible

Proposal 4761 - Observation 3 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 3: 996_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[996_BG (Obs 4)]												
	(996_Science (Obs 3)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (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)	COSMOS_996	RA: 10 00 48.9381 (150.2039087d) Dec: +02 06 3.36 (2.10093d) Equinox: J2000										
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674

Proposal 4761 - Observation 3 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Sequence Observations 3, 4, Non-interruptible

Proposal 4761 - Observation 4 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 4: 996_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [996_Science (Obs 3)]												
	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(10)	COSMOS_996_BG	RA: 10 00 48.9381 (150.2039087d) Dec: +02 06 3.36 (2.10093d) Equinox: J2000										
Comments: Background Observations Category=Galaxy Description=[Disk galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel		Simultaneous Imaging		Imager Subarray		Grating Wheel Direction					
		Imager		YES		FULL		Allow Auto Reorder					
Dithers	#	Dither Type			Optimized For				Direction				
	1	2-Point			BACKGROUND				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	F1000W	SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2		IMAGER	F1280W	SLOWR1	10	2	1	Dither 1	2	4	1003.377	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3		IMAGER	F1800W	FASTR1	59	3	1	Dither 1	2	6	993.464	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674

Proposal 4761 - Observation 4 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 103.83544897 to 104.83544897 Degrees (V3 99.0 to 100.0)

Sequence Observations 3, 4, Non-interruptible

Proposal 4761 - Observation 5 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 5: 1148_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[1148_BG (Obs 6)]												
	(1148_Science (Obs 5)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(4)	COSMOS_1148	RA: 10 00 4.5190 (150.0188292d) Dec: +02 08 52.03 (2.14779d) Equinox: J2000										
Comments: Category=Galaxy Description=[Disk galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	4	4	2006.753	174674

Proposal 4761 - Observation 5 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in $z=1$ Main-Sequence Galaxies

Special Requirements

Sequence Observations 5, 6, Non-interruptible

Proposal 4761 - Observation 6 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 6: 1148_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [1148_Science (Obs 5)]												
	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(11)	COSMOS_1148_BG	RA: 10 00 4.5190 (150.0188292d) Dec: +02 08 52.03 (2.14779d) Equinox: J2000										
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		Imager			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	2-Point				BACKGROUND				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2		IMAGER	F1280W	SLOWR1	10	2	1	Dither 1	2	4	1003.377	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3		IMAGER	F1800W	FASTR1	59	3	1	Dither 1	2	6	993.464	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674

Proposal 4761 - Observation 6 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 107.83544897 to 109.83544897 Degrees (V3 103.0 to 105.0)

Offset 5.0 arcsec, 25.0 arcsec

Sequence Observations 5, 6, Non-interruptible

Proposal 4761 - Observation 7 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 7: 1025_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[1025_BG (Obs 8)]												
	(1025_Science (Obs 7)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(5)	COSMOS_1025	RA: 10 00 27.5617 (150.1148404d) Dec: +02 06 50.10 (2.11392d) Equinox: J2000										
Comments: Category=Galaxy Description=[Disk galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	1	SHORT(A)	MRSLONG		SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	2		IMAGER	F1000W	SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	3		IMAGER	F1000W	SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	3	LONG(C)	MRSLONG		SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674
	3	LONG(C)	MRSSHORT		SLOWR1	26	2	1	Dither 1	4	8	5064.663	174674

Proposal 4761 - Observation 7 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Sequence Observations 7, 8, Non-interruptible

Proposal 4761 - Observation 8 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 8: 1025_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [1025_Science (Obs 7)]												
	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(12)	COSMOS_1025_BG	RA: 10 00 27.5617 (150.1148404d) Dec: +02 06 50.10 (2.11392d) Equinox: J2000										
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		Imager			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	2-Point				BACKGROUND				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	26	2	1	Dither 1	2	4	2532.332	174674
	1	SHORT(A)	MRSLONG		SLOWR1	53	1	1	Dither 1	2	2	2532.332	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	53	1	1	Dither 1	2	2	2532.332	174674
	2		IMAGER	F1280W	SLOWR1	17	3	1	Dither 1	2	6	2532.332	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	53	1	1	Dither 1	2	2	2532.332	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	53	1	1	Dither 1	2	2	2532.332	174674
	3		IMAGER	F1800W	FASTR1	56	8	1	Dither 1	2	16	2525.286	174674
	3	LONG(C)	MRSLONG		SLOWR1	53	1	1	Dither 1	2	2	2532.332	174674
	3	LONG(C)	MRSSHORT		SLOWR1	53	1	1	Dither 1	2	2	2532.332	174674

Proposal 4761 - Observation 8 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 105.33544897 to 106.93544897 Degrees (V3 100.5 to 102.1)

Sequence Observations 7, 8, Non-interruptible

Proposal 4761 - Observation 9 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 9: 1757_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[1757_BG (Obs 10)]												
	(1757_Science (Obs 9)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(6)	COSMOS_1757	RA: 10 00 22.7009 (150.0945871d) Dec: +02 20 10.84 (2.33634d) Equinox: J2000										
Comments: Category=Galaxy Description=[Disk galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674

Proposal 4761 - Observation 9 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in $z=1$ Main-Sequence Galaxies

Special Requirements

Sequence Observations 9, 10, Non-interruptible

Proposal 4761 - Observation 10 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 10: 1757_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [1757_Science (Obs 9)]												
	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(13)	COSMOS_1757_BG	RA: 10 00 22.7009 (150.0945871d) Dec: +02 20 10.84 (2.33634d) Equinox: J2000										
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		Imager			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type			Optimized For			Direction					
	1	2-Point			BACKGROUND			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	17	2	1	Dither 1	2	4	1672.294	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	2		IMAGER	F1280W	SLOWR1	17	2	1	Dither 1	2	4	1672.294	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	3		IMAGER	F1500W	FASTR1	49	6	1	Dither 1	2	12	1659.474	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674

Proposal 4761 - Observation 10 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 105.83544897 to 108.83544897 Degrees (V3 101.0 to 104.0)

Sequence Observations 9, 10, Non-interruptible

Proposal 4761 - Observation 11 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 11: 844_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[844_BG (Obs 12)]												
	(844_Science (Obs 11)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(7)	COSMOS_844	RA: 09 59 45.3125 (149.9388021d) Dec: +02 02 7.75 (2.03549d) Equinox: J2000										
Comments: Category=Galaxy Description=[Disk galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674

Proposal 4761 - Observation 11 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Sequence Observations 11, 12, Non-interruptible

Proposal 4761 - Observation 12 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 12: 844_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [844_Science (Obs 11)]												
	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(14)	COSMOS_844_BG	RA: 09 59 45.3125 (149.9388021d) Dec: +02 02 7.75 (2.03549d) Equinox: J2000										
Comments: Background Observations Category=Galaxy Description=[Disk galaxies] Extended=YES													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel		Simultaneous Imaging		Imager Subarray		Grating Wheel Direction					
		Imager		YES		FULL		Allow Auto Reorder					
Dithers	#	Dither Type			Optimized For				Direction				
	1	2-Point			BACKGROUND				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	17	2	1	Dither 1	2	4	1672.294	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	2		IMAGER	F1280W	SLOWR1	17	2	1	Dither 1	2	4	1672.294	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	3		IMAGER	F1800W	FASTR1	49	6	1	Dither 1	2	12	1659.474	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674

Proposal 4761 - Observation 12 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 115.13544897 to 115.93544897 Degrees (V3 110.3 to 111.1)
Offset 10.0 arcsec, -1.0 arcsec
Sequence Observations 11, 12, Non-interruptible

Proposal 4761 - Observation 13 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 13: 1295_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[1295_BG (Obs 14)]												
	(1295_Science (Obs 13)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(8)	COSMOS_1295	RA: 09 59 26.4409 (149.8601704d) Dec: +02 11 25.34 (2.19037d) Equinox: J2000										
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674

Proposal 4761 - Observation 13 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Sequence Observations 13, 14, Non-interruptible

Proposal 4761 - Observation 14 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 14: 1295_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [1295_Science (Obs 13)]												
	(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(15)	COSMOS_1295_BG	RA: 09 59 26.4409 (149.8601704d) Dec: +02 11 25.34 (2.19037d) Equinox: J2000										
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		Imager			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type			Optimized For			Direction					
	1	2-Point			BACKGROUND			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	17	2	1	Dither 1	2	4	1672.294	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	2		IMAGER	F1280W	SLOWR1	17	2	1	Dither 1	2	4	1672.294	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	3		IMAGER	F1800W	FASTR1	49	6	1	Dither 1	2	12	1659.474	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	2	2	1672.294	174674

Proposal 4761 - Observation 14 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 101.83544897 to 102.83544897 Degrees (V3 97.0 to 98.0)

Sequence Observations 13, 14, Non-interruptible

Proposal 4761 - Observation 15 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 15: 1346_Science Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[1346_BG (Obs 16)]												
	(1346_Science (Obs 15)) Warning (Form): Filter mismatch between science and background observations may result in incorrect background subtraction. (Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(9)	COSMOS_1346	RA: 10 00 35.5620 (150.1481750d) Dec: +02 11 50.98 (2.19749d) Equinox: J2000										
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray		Grating Wheel Direction			
		All MRS			YES			FULL		Allow Auto Reorder			
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3		IMAGER	F1000W	SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSLONG		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674
	3	LONG(C)	MRSSHORT		SLOWR1	35	1	1	Dither 1	4	4	3344.589	174674

Proposal 4761 - Observation 15 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Sequence Observations 15, 16, Non-interruptible

Proposal 4761 - Observation 16 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Thu Feb 27 22:00:10 GMT 2025

Observation	Proposal 4761, Observation 16: 1346_BG Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [1346_Science (Obs 15)]												
	(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(16)	COSMOS_1346_BG	RA: 10 00 35.5620 (150.1481750d) Dec: +02 11 50.98 (2.19749d) Equinox: J2000										
<i>Comments: Background Observations</i> <i>Category=Galaxy</i> <i>Description=[Disk galaxies]</i> <i>Extended=YES</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel		Simultaneous Imaging			Imager Subarray		Grating Wheel Direction				
		Imager		YES			FULL		Allow Auto Reorder				
Dithers	#	Dither Type			Optimized For				Direction				
	1	2-Point			BACKGROUND				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/E xp	Exposures/Dit h	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F1000W	SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	1	SHORT(A)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2		IMAGER	F1280W	SLOWR1	10	2	1	Dither 1	2	4	1003.377	174674
	2	MEDIUM(B)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	2	MEDIUM(B)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3		IMAGER	F1800W	FASTR1	59	3	1	Dither 1	2	6	993.464	174674
	3	LONG(C)	MRSLONG		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674
	3	LONG(C)	MRSSHORT		SLOWR1	21	1	1	Dither 1	2	2	1003.377	174674

Proposal 4761 - Observation 16 - A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies

Special Requirements

Aperture PA Range 111.83544897 to 113.83544897 Degrees (V3 107.0 to 109.0)

Sequence Observations 15, 16, Non-interruptible