



2155 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Quasars with Foreground 2175 A Absorbers

Cycle: 1, Proposal Category: GO

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	MIRI MRS AO 0235+164	MIRI Medium Resolution Spectroscopy	(1) AO0235+164
	9	MIRI MRS Background for AO 0235+164	MIRI Medium Resolution Spectroscopy	(9) BACKGROUND-AO0235+164
	2	MIRI MRS J0900+0214	MIRI Medium Resolution Spectroscopy	(2) J0900+0214
	10	MIRI MRS Background for J0900+0214	MIRI Medium Resolution Spectroscopy	(10) BACKGROUND-J0900+0214
	3	MIRI MRS J0901+2044	MIRI Medium Resolution Spectroscopy	(3) J0901+2044
	11	MIRI MRS Background for J0901+2044	MIRI Medium Resolution Spectroscopy	(11) BACKGROUND-J0901+2044
	4	MIRI MRS J1007+2853	MIRI Medium Resolution Spectroscopy	(4) J1007+2853
	12	MIRI MRS Background for J1007+2853	MIRI Medium Resolution Spectroscopy	(12) BACKGROUND-J1007+2853

JWST Proposal 2155 (Created: Tuesday, March 14, 2023 at 4:02:16 PM Eastern Standard Time) - Overview

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	5	MIRI MRS J1017+4749	MIRI Medium Resolution Spectroscopy	(5) J1017+4749
	13	MIRI MRS Background for J1017+4749	MIRI Medium Resolution Spectroscopy	(13) BACKGROUND-J1017+4749
	6	MIRI MRS J1037+0144	MIRI Medium Resolution Spectroscopy	(6) J1037+0144
	14	MIRI MRS Background for J1037+0144	MIRI Medium Resolution Spectroscopy	(14) BACKGROUND-J1037+0144
	7	MIRI MRS J1138+5245	MIRI Medium Resolution Spectroscopy	(7) J1138+5245
	15	MIRI MRS Background for J1138+5245	MIRI Medium Resolution Spectroscopy	(15) BACKGROUND-J1138+5245
	8	MIRI MRS J1431+0007	MIRI Medium Resolution Spectroscopy	(8) J1431+0007
	16	MIRI MRS Background for J1431+0007	MIRI Medium Resolution Spectroscopy	(16) BACKGROUND-J1431+0007

ABSTRACT

Interstellar dust influences the physics of the gas in galaxies because it affects cooling and molecule formation. Understanding the nature of interstellar dust in galaxies is thus crucial for understanding the evolution of gas and stars in galaxies. Unfortunately, the composition and structure of dust grains in distant galaxies is not well understood. Recently a number of gas-rich galaxies with strong 2175 Å bumps have been discovered in absorption along the lines of sight to distant quasars. Here we propose a JWST MIRI spectroscopic study of 8 such gas-rich and dusty galaxies at redshifts $0.5 < z < 1.2$ for the first comprehensive study of dust composition in these distant galaxies. The proposed MRS spectra will target the 10 micron silicate absorption feature, the 3.4 micron hydrocarbon absorption feature, and the 3.1 micron water ice absorption feature. Our scientific goals are: (1) to examine whether the presence of the 2175 Å bump is correlated with the presence of 10 micron silicate absorption, and whether any trends exist between the abundances of silicate and carbonaceous grains; (2) to determine the composition of silicate grains; (3) to investigate whether the carrier for the 2175 Å bump is related to that for the 3.4 micron feature; and (4) to examine whether enough O can be locked up in H₂O ice in these galaxies to address the "missing oxygen problem" for dust grains. JWST MIRI alone can provide the necessary combination of mid-IR wavelength coverage, exquisite sensitivity, and spectral resolution essential for efficiently observing the desired mid-IR dust features in the proposed sample of distant galaxies located along the sight lines to quasars.

OBSERVING DESCRIPTION

We wil obtain MRS spectra in the short, medium, and long settings for all four channels, covering the full wavelength range. Further details are provided in the technical justification section of the pdf attachment.

Proposal 2155 - Targets - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Quasars ...

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	AO0235+164	RA: 02 38 38.9301 (39.6622087d) Dec: +16 36 59.28 (16.61647d) Equinox: J2000	Proper Motion RA: -0.001 mas/yr Proper Motion Dec: -0.093 mas/yr Epoch of Position: 2000	
<i>Comments:</i> Category=Galaxy Description=[Blazars] Extended=NO				
(2)	J0900+0214	RA: 09 00 16.6775 (135.0694896d) Dec: +02 14 45.85 (2.24607d) Equinox: J2000	Proper Motion RA: -0.067 mas/yr Proper Motion Dec: 0.105 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO				
(3)	J0901+2044	RA: 09 01 22.6797 (135.3444988d) Dec: +20 44 46.55 (20.74626d) Equinox: J2000	Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.02 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO				
(4)	J1007+2853	RA: 10 07 13.6744 (151.8069767d) Dec: +28 53 48.40 (28.89678d) Equinox: J2000	Proper Motion RA: 0.127 mas/yr Proper Motion Dec: 0.137 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO				
(5)	J1017+4749	RA: 10 17 51.1503 (154.4631263d) Dec: +47 49 40.04 (47.82779d) Equinox: J2000	Proper Motion RA: -0.046 mas/yr Proper Motion Dec: 0.022 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO				
(6)	J1037+0144	RA: 10 37 18.7770 (159.3282375d) Dec: +01 44 30.76 (1.74188d) Equinox: J2000	Proper Motion RA: 0.233 mas/yr Proper Motion Dec: -0.175 mas/yr Epoch of Position: 2000.0	
<i>Comments: This target requires a background observation (observation 14 BACKGROUND-J1037+0144), but this background observation has been put in with a time-separation from the science observation (observation 6) for data volume/capacity reasons. We request observations 6 and 14 to be grouped together within 2 days.</i> Category=Galaxy Description=[Quasars] Extended=NO				
(7)	J1138+5245	RA: 11 38 36.9320 (174.6538833d) Dec: +52 45 11.33 (52.75315d) Equinox: J2000	Proper Motion RA: -0.037 mas/yr Proper Motion Dec: -0.019 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO				

Fixed Targets

Proposal 2155 - Targets - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Quasars ...

(8)	J1431+0007	RA: 14 31 8.9889 (217.7874538d) Dec: +00 07 25.15 (.12365d) Equinox: J2000	Proper Motion RA: -0.339 mas/yr Proper Motion Dec: 0.154 mas/yr Epoch of Position: 2000.0
<p><i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i></p>			
(9)	BACKGROUND-AO0235+164	RA: 02 38 38.9301 (39.6622087d) Dec: +16 36 49.28 (16.61369d) Equinox: J2000	Epoch of Position: 2000
<p><i>Comments: This is the background target for AO 0235+164.</i> <i>Category=Galaxy</i> <i>Description=[Blazars]</i> <i>Extended=NO</i></p>			
(10)	BACKGROUND-J0900+0214	RA: 09 00 16.6775 (135.0694896d) Dec: +02 14 35.85 (2.24329d) Equinox: J2000	Epoch of Position: 2000.0
<p><i>Comments: This is the background target for J0900+0214.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i></p>			
(11)	BACKGROUND-J0901+2044	RA: 09 01 22.6797 (135.3444988d) Dec: +20 44 36.55 (20.74349d) Equinox: J2000	Epoch of Position: 2000.0
<p><i>Comments: This is the background target for J0901+2044.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i></p>			
(12)	BACKGROUND-J1007+2853	RA: 10 07 12.9130 (151.8038042d) Dec: +28 53 38.40 (28.89400d) Equinox: J2000	Epoch of Position: 2000.0
<p><i>Comments: This is the background target for J1007+2853.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i></p>			
(13)	BACKGROUND-J1017+4749	RA: 10 17 52.1434 (154.4672642d) Dec: +47 49 40.04 (47.82779d) Equinox: J2000	Epoch of Position: 2000.0
<p><i>Comments: This is the background target for J1017+4749.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i></p>			
(14)	BACKGROUND-J1037+0144	RA: 10 37 18.7770 (159.3282375d) Dec: +01 44 20.76 (1.73910d) Equinox: J2000	Epoch of Position: 2000.0
<p><i>Comments: This is the background target for J1037+0144. We have not linked this as a non-interruptable sequenced background observation to prevent a severe data excess.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i></p>			

Proposal 2155 - Targets - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Quasars ...

(15)	BACKGROUND-J1138+5245	RA: 11 38 36.9320 (174.6538833d) Dec: +52 45 21.33 (52.75592d) Equinox: J2000	Epoch of Position: 2000.0
<i>Comments: This is the background target for J1138+5245.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>			
(16)	BACKGROUND-J1431+0007	RA: 14 31 8.3222 (217.7846758d) Dec: +00 07 15.15 (.12087d) Equinox: J2000	Epoch of Position: 2000.0
<i>Comments: This is the background target for J1431+0007.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>			

Proposal 2155 - Observation 1 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 1: MIRI MRS AO 0235+164 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for AO 0235+164 (Obs 9)]												
	(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)	AO0235+164	RA: 02 38 38.9301 (39.6622087d) Dec: +16 36 59.28 (16.61647d) Equinox: J2000			Proper Motion RA: -0.001 mas/yr Proper Motion Dec: -0.093 mas/yr Epoch of Position: 2000							
<i>Comments:</i> Category=Galaxy Description=[Blazars] 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	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	SHORT(A)	MRSLONG		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	1	SHORT(A)	MRSSHORT		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	3	LONG(C)	MRSLONG		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	3	LONG(C)	MRSSHORT		FASTR1	15	1	1	Dither 1	4	4	166.502	63341

Special Requirements

Sequence Observations 1, 9, Non-interruptible

Proposal 2155 - Observation 9 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 9: MIRI MRS Background for AO 0235+164 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS AO 0235+164 (Obs 1)]												
	(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(9)	BACKGROUND-AO0235+164	RA: 02 38 38.9301 (39.6622087d) Dec: +16 36 49.28 (16.61369d) Equinox: J2000				Epoch of Position: 2000						
<i>Comments: This is the background target for AO 0235+164. Category=Galaxy Description=[Blazars] Extended=NO</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging				Imager Subarray			
	FND	ALL				NO				FULL			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED 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	SHORT(A)	MRSLONG		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	1	SHORT(A)	MRSSHORT		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	3	LONG(C)	MRSLONG		FASTR1	15	1	1	Dither 1	4	4	166.502	63341
	3	LONG(C)	MRSSHORT		FASTR1	15	1	1	Dither 1	4	4	166.502	63341

Special Requirements

Sequence Observations 1, 9, Non-interruptible

Proposal 2155 - Observation 2 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 2: MIRI MRS J0900+0214 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for J0900+0214 (Obs 10)]												
	(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)	J0900+0214	RA: 09 00 16.6775 (135.0694896d) Dec: +02 14 45.85 (2.24607d) Equinox: J2000			Proper Motion RA: -0.067 mas/yr Proper Motion Dec: 0.105 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	F560W	FAST	4	1	1	11.1	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	74	2	1	Dither 1	4	8	1653.924	63341
	1	LONG(C)	MRSSHORT		FASTR1	74	2	1	Dither 1	4	8	1653.924	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	56	2	1	Dither 1	4	8	1254.318	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	56	2	1	Dither 1	4	8	1254.318	63341
	3	SHORT(A)	MRSLONG		FASTR1	46	2	1	Dither 1	4	8	1032.315	63341
	3	SHORT(A)	MRSSHORT		FASTR1	46	2	1	Dither 1	4	8	1032.315	63341

Proposal 2155 - Observation 2 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Special Requirements

Background Limited. Background no more than 20th percentile above minimum

Sequence Observations 2, 10, Non-interruptible

Proposal 2155 - Observation 10 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 10: MIRI MRS Background for J0900+0214 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J0900+0214 (Obs 2)]												
	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(10)	BACKGROUND-J0900+0214	RA: 09 00 16.6775 (135.0694896d) Dec: +02 14 35.85 (2.24329d) Equinox: J2000				Epoch of Position: 2000.0						
<i>Comments: This is the background target for J0900+0214.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray				
	F560W	ALL				NO			FULL				
Dithers	#	Dither Type				Optimized For			Direction				
	1	2-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	LONG(C)	MRSLONG		FASTR1	74	1	1	Dither 1	2	2	410.706	63341
	1	LONG(C)	MRSSHORT		FASTR1	74	1	1	Dither 1	2	2	410.706	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	56	1	1	Dither 1	2	2	310.804	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	56	1	1	Dither 1	2	2	310.804	63341
	3	SHORT(A)	MRSLONG		FASTR1	46	1	1	Dither 1	2	2	255.304	63341
	3	SHORT(A)	MRSSHORT		FASTR1	46	1	1	Dither 1	2	2	255.304	63341

Proposal 2155 - Observation 10 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Special Requirements

Background Limited. Background no more than 20th percentile above minimum

Sequence Observations 2, 10, Non-interruptible

Proposal 2155 - Observation 3 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 3: MIRI MRS J0901+2044 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for J0901+2044 (Obs 11)]												
	(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)	J0901+2044	RA: 09 01 22.6797 (135.3444988d) Dec: +20 44 46.55 (20.74626d) Equinox: J2000			Proper Motion RA: -0.163 mas/yr Proper Motion Dec: 0.02 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	F560W	FAST	4	1	1	11.1	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	30	1	1	Dither 1	4	4	333.005	63341
	1	LONG(C)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	30	1	1	Dither 1	4	4	333.005	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	63341
	3	SHORT(A)	MRSLONG		FASTR1	30	1	1	Dither 1	4	4	333.005	63341
	3	SHORT(A)	MRSSHORT		FASTR1	30	1	1	Dither 1	4	4	333.005	63341

Special Requirements

Sequence Observations 3, 11, Non-interruptible

Proposal 2155 - Observation 11 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 11: MIRI MRS Background for J0901+2044 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J0901+2044 (Obs 3)]												
	(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(11)	BACKGROUND-J0901+2044	RA: 09 01 22.6797 (135.3444988d) Dec: +20 44 36.55 (20.74349d) Equinox: J2000				Epoch of Position: 2000.0						
<i>Comments: This is the background target for J0901+2044.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray				
	F560W	ALL				NO			FULL				
Dithers	#	Dither Type				Optimized For			Direction				
	1	2-Point				EXTENDED 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	30	1	1	Dither 1	2	2	166.502	63341
	1	LONG(C)	MRSSHORT		FASTR1	30	1	1	Dither 1	2	2	166.502	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	30	1	1	Dither 1	2	2	166.502	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	1	1	Dither 1	2	2	166.502	63341
	3	SHORT(A)	MRSLONG		FASTR1	30	1	1	Dither 1	2	2	166.502	63341
	3	SHORT(A)	MRSSHORT		FASTR1	30	1	1	Dither 1	2	2	166.502	63341

Special Requirements

Sequence Observations 3, 11, Non-interruptible

Proposal 2155 - Observation 4 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 4: MIRI MRS J1007+2853 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for J1007+2853 (Obs 12)]												
	(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)	J1007+2853	RA: 10 07 13.6744 (151.8069767d) Dec: +28 53 48.40 (28.89678d) Equinox: J2000			Proper Motion RA: 0.127 mas/yr Proper Motion Dec: 0.137 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] 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	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	20	1	1	Dither 1	4	4	222.003	63341
	1	LONG(C)	MRSSHORT		FASTR1	20	1	1	Dither 1	4	4	222.003	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	20	1	1	Dither 1	4	4	222.003	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	20	1	1	Dither 1	4	4	222.003	63341
	3	SHORT(A)	MRSLONG		FASTR1	20	1	1	Dither 1	4	4	222.003	63341
	3	SHORT(A)	MRSSHORT		FASTR1	20	1	1	Dither 1	4	4	222.003	63341

Special Requirements

Sequence Observations 4, 12, Non-interruptible

Proposal 2155 - Observation 12 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 12: MIRI MRS Background for J1007+2853 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1007+2853 (Obs 4)]												
	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(12)	BACKGROUND-J1007+2853	RA: 10 07 12.9130 (151.8038042d) Dec: +28 53 38.40 (28.89400d) Equinox: J2000			Epoch of Position: 2000.0							
Comments: This is the background target for J1007+2853. Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray					
	FND	ALL			NO			FULL					
Dithers	#	Dither Type			Optimized For			Direction					
	1	2-Point			EXTENDED 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	20	1	1	Dither 1	2	2	111.002	63341
	1	LONG(C)	MRSSHORT		FASTR1	20	1	1	Dither 1	2	2	111.002	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	20	1	1	Dither 1	2	2	111.002	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	20	1	1	Dither 1	2	2	111.002	63341
	3	SHORT(A)	MRSLONG		FASTR1	20	1	1	Dither 1	2	2	111.002	63341
	3	SHORT(A)	MRSSHORT		FASTR1	20	1	1	Dither 1	2	2	111.002	63341

Special Requirements

Sequence Observations 4, 12, Non-interruptible

Proposal 2155 - Observation 5 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 5: MIRI MRS J1017+4749 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for J1017+4749 (Obs 13)]												
	(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(5)	J1017+4749	RA: 10 17 51.1503 (154.4631263d) Dec: +47 49 40.04 (47.82779d) Equinox: J2000			Proper Motion RA: -0.046 mas/yr Proper Motion Dec: 0.022 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	F560W	FAST	4	1	1	11.1	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	60	1	1	Dither 1	4	4	666.01	63341
	1	LONG(C)	MRSSHORT		FASTR1	60	1	1	Dither 1	4	4	666.01	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	60	1	1	Dither 1	4	4	666.01	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	60	1	1	Dither 1	4	4	666.01	63341
	3	SHORT(A)	MRSLONG		FASTR1	60	1	1	Dither 1	4	4	666.01	63341
	3	SHORT(A)	MRSSHORT		FASTR1	60	1	1	Dither 1	4	4	666.01	63341

Special Requirements

Sequence Observations 5, 13, Non-interruptible

Proposal 2155 - Observation 13 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 13: MIRI MRS Background for J1017+4749 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1017+4749 (Obs 5)]												
	(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Diagnosics													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(13)	BACKGROUND-J1017+4749	RA: 10 17 52.1434 (154.4672642d) Dec: +47 49 40.04 (47.82779d) Equinox: J2000				Epoch of Position: 2000.0						
<i>Comments: This is the background target for J1017+4749.</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray				
	F560W	ALL				NO			FULL				
Dithers	#	Dither Type				Optimized For			Direction				
	1	2-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	LONG(C)	MRSLONG		FASTR1	60	1	1	Dither 1	2	2	333.005	63341
	1	LONG(C)	MRSSHORT		FASTR1	60	1	1	Dither 1	2	2	333.005	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	60	1	1	Dither 1	2	2	333.005	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	60	1	1	Dither 1	2	2	333.005	63341
	3	SHORT(A)	MRSLONG		FASTR1	60	1	1	Dither 1	2	2	333.005	63341
	3	SHORT(A)	MRSSHORT		FASTR1	60	1	1	Dither 1	2	2	333.005	63341

Special Requirements

Sequence Observations 5, 13, Non-interruptible

Proposal 2155 - Observation 6 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 6: MIRI MRS J1037+0144 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy																																																																																																							
	(Visit 6:1) Warning (Form): Data Excess over lower threshold (Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																																																																							
Diagnosics																																																																																																								
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(6)</td> <td>J1037+0144</td> <td>RA: 10 37 18.7770 (159.3282375d) Dec: +01 44 30.76 (1.74188d) Equinox: J2000</td> <td>Proper Motion RA: 0.233 mas/yr Proper Motion Dec: -0.175 mas/yr Epoch of Position: 2000.0</td> <td></td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(6)	J1037+0144	RA: 10 37 18.7770 (159.3282375d) Dec: +01 44 30.76 (1.74188d) Equinox: J2000	Proper Motion RA: 0.233 mas/yr Proper Motion Dec: -0.175 mas/yr Epoch of Position: 2000.0		<i>Comments: This target requires a background observation (observation 14 BACKGROUND-J1037+0144), but this background observation has been put in with a time-separation from the science observation (observation 6) for data volume/capacity reasons. We request observations 6 and 14 to be grouped together within 2 days.</i> Category=Galaxy Description=[Quasars] Extended=NO																																																																																												
	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous																																																																																																			
(6)	J1037+0144	RA: 10 37 18.7770 (159.3282375d) Dec: +01 44 30.76 (1.74188d) Equinox: J2000	Proper Motion RA: 0.233 mas/yr Proper Motion Dec: -0.175 mas/yr Epoch of Position: 2000.0																																																																																																					
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	#	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	73	5	1	Dither 1	4	20	4095.959	63341																																																																																											
	1	LONG(C)	MRSSHORT		FASTR1	73	5	1	Dither 1	4	20	4095.959	63341																																																																																											
	2	MEDIUM(B)	MRSLONG		FASTR1	73	5	1	Dither 1	4	20	4095.959	63341																																																																																											
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Proposal 2155 - Observation 6 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Special Requirements

Background Limited. Background no more than 20th percentile above minimum

Group Observations 6, 14 within 2 Days

Proposal 2155 - Observation 14 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 14: MIRI MRS Background for J1037+0144 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy												
	(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(14)	BACKGROUND-J1037+0144	RA: 10 37 18.7770 (159.3282375d) Dec: +01 44 20.76 (1.73910d) Equinox: J2000				Epoch of Position: 2000.0						
Comments: This is the background target for J1037+0144. We have not linked this as a non-interruptable sequenced background observation to prevent a severe data excess. Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray				
	F560W	ALL				NO			FULL				
Dithers	#	Dither Type				Optimized For			Direction				
	1	2-Point				EXTENDED 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	73	1	1	None	1	1	202.578	63341
	1	LONG(C)	MRSSHORT		FASTR1	73	1	1	None	1	1	202.578	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	73	1	1	None	1	1	202.578	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	73	1	1	None	1	1	202.578	63341
	3	SHORT(A)	MRSLONG		FASTR1	72	1	1	None	1	1	199.803	63341
	3	SHORT(A)	MRSSHORT		FASTR1	72	1	1	None	1	1	199.803	63341

Proposal 2155 - Observation 14 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Special Requirements

Background Limited. Background no more than 20th percentile above minimum

Group Observations 6, 14 within 2 Days

Proposal 2155 - Observation 7 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 7: MIRI MRS J1138+5245 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for J1138+5245 (Obs 15)]												
	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(7)	J1138+5245	RA: 11 38 36.9320 (174.6538833d) Dec: +52 45 11.33 (52.75315d) Equinox: J2000			Proper Motion RA: -0.037 mas/yr Proper Motion Dec: -0.019 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	F560W	FAST	4	1	1	11.1	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	SHORT(A)	MRSLONG		FASTR1	70	1	1	Dither 1	4	4	777.011	63341
	1	SHORT(A)	MRSSHORT		FASTR1	70	1	1	Dither 1	4	4	777.011	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	69	3	1	Dither 1	4	12	2319.933	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	69	3	1	Dither 1	4	12	2319.933	63341
	3	LONG(C)	MRSLONG		FASTR1	71	2	1	Dither 1	4	8	1587.323	63341
	3	LONG(C)	MRSSHORT		FASTR1	71	2	1	Dither 1	4	8	1587.323	63341

Special Requirements

Sequence Observations 7, 15, Non-interruptible

Proposal 2155 - Observation 15 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 15: MIRI MRS Background for J1138+5245 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1138+5245 (Obs 7)]																																																																																																						
	(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																																																																						
Diagnosics																																																																																																							
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(15)</td> <td>BACKGROUND-J1138+5245</td> <td>RA: 11 38 36.9320 (174.6538833d) Dec: +52 45 21.33 (52.75592d) Equinox: J2000</td> <td>Epoch of Position: 2000.0</td> <td></td> </tr> </tbody> </table>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(15)	BACKGROUND-J1138+5245	RA: 11 38 36.9320 (174.6538833d) Dec: +52 45 21.33 (52.75592d) Equinox: J2000	Epoch of Position: 2000.0																																																																																		
	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous																																																																																																		
(15)	BACKGROUND-J1138+5245	RA: 11 38 36.9320 (174.6538833d) Dec: +52 45 21.33 (52.75592d) Equinox: J2000	Epoch of Position: 2000.0																																																																																																				
Comments: This is the background target for J1138+5245. Category=Galaxy Description=[Quasars] Extended=NO																																																																																																							
Acquisition	<table border="1"> <thead> <tr> <th>#</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>												#	Target	1	NONE																																																																																							
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Special Requirements

Sequence Observations 7, 15, Non-interruptible

Proposal 2155 - Observation 8 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Qu...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 8: MIRI MRS J1431+0007 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS Background for J1431+0007 (Obs 16)]												
	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous				
	(8)	J1431+0007	RA: 14 31 8.9889 (217.7874538d) Dec: +00 07 25.15 (.12365d) Equinox: J2000			Proper Motion RA: -0.339 mas/yr Proper Motion Dec: 0.154 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
Acquisition	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	F560W	FAST	4	1	1	11.1	63341				
Template	Primary Channel				Simultaneous Imaging				Imager Subarray				
	ALL				NO				FULL				
Dithers	#	Dither Type			Optimized For			Direction					
	1	4-Point			EXTENDED 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	60	1	1	Dither 1	4	4	666.01	63341
	1	LONG(C)	MRSSHORT		FASTR1	60	1	1	Dither 1	4	4	666.01	63341
	2	MEDIUM(B)	MRSLONG		FASTR1	68	1	1	Dither 1	4	4	754.811	63341
	2	MEDIUM(B)	MRSSHORT		FASTR1	68	1	1	Dither 1	4	4	754.811	63341
	3	SHORT(A)	MRSLONG		FASTR1	60	1	1	Dither 1	4	4	666.01	63341
	3	SHORT(A)	MRSSHORT		FASTR1	60	1	1	Dither 1	4	4	666.01	63341

Special Requirements

Sequence Observations 8, 16, Non-interruptible

Proposal 2155 - Observation 16 - Probing Silicate and Carbonaceous Dust and Ice in Distant Galaxies with Mid-IR Spectroscopy of Q...

Tue Mar 14 21:02:16 GMT 2023

Observation	Proposal 2155, Observation 16: MIRI MRS Background for J1431+0007 Diagnostic Status: Warning Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1431+0007 (Obs 8)]																																																																																																						
	(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																																																																						
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Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(16)</td> <td>BACKGROUND-J1431+0007</td> <td>RA: 14 31 8.3222 (217.7846758d) Dec: +00 07 15.15 (.12087d) Equinox: J2000</td> <td>Epoch of Position: 2000.0</td> <td></td> </tr> </tbody> </table>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(16)	BACKGROUND-J1431+0007	RA: 14 31 8.3222 (217.7846758d) Dec: +00 07 15.15 (.12087d) Equinox: J2000	Epoch of Position: 2000.0																																																																																		
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<i>Comments: This is the background target for J1431+0007.</i> Category=Galaxy Description=[Quasars] Extended=NO																																																																																																							
Acquisition	<table border="1"> <thead> <tr> <th>#</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NONE</td> </tr> </tbody> </table>												#	Target	1	NONE																																																																																							
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Template	<table border="1"> <thead> <tr> <th>AcqFilter</th> <th>Primary Channel</th> <th>Simultaneous Imaging</th> <th>Imager Subarray</th> </tr> </thead> <tbody> <tr> <td>F560W</td> <td>ALL</td> <td>NO</td> <td>FULL</td> </tr> </tbody> </table>												AcqFilter	Primary Channel	Simultaneous Imaging	Imager Subarray	F560W	ALL	NO	FULL																																																																																			
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Special Requirements

Sequence Observations 8, 16, Non-interruptible