



# 6350 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of Background Quasars

Cycle: 3, 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>
MIRI MRS				
	1	MIRI MRS J0741+3112	MIRI Medium Resolution Spectroscopy	(1) J0741+3112
	2	MIRI MRS BACKGROUN D-J0741+3112	MIRI Medium Resolution Spectroscopy	(2) BACKGROUND-J0741+3112
	3	MIRI MRS J0937+5628	MIRI Medium Resolution Spectroscopy	(3) J0937+5628
	4	MIRI MRS BACKGROUN D-J0937+5628	MIRI Medium Resolution Spectroscopy	(4) BACKGROUND-J0937+5628
	5	MIRI MRS J1619+3342	MIRI Medium Resolution Spectroscopy	(5) J1619+3342
	6	MIRI MRS BACKGROUN D-J1619+3342	MIRI Medium Resolution Spectroscopy	(6) BACKGROUND-J1619+3342
	7	MIRI MRS J1124-1705	MIRI Medium Resolution Spectroscopy	(7) J1124-1705
	8	MIRI MRS BACKGROUN D-J1124-1705	MIRI Medium Resolution Spectroscopy	(8) BACKGROUND-J1124-1705

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	9	MIRI MRS J0913+5259	MIRI Medium Resolution Spectroscopy	(9) J0913+5259
	10	MIRI MRS BACKGROUN D-J0913+5259	MIRI Medium Resolution Spectroscopy	(10) BACKGROUND-J0913+5259
	11	MIRI MRS J1418+1541	MIRI Medium Resolution Spectroscopy	(11) J1418+1541
	12	MIRI MRS BACKGROUN D-J1418+1541	MIRI Medium Resolution Spectroscopy	(12) BACKGROUND-J1418+1541
	13	MIRI MRS J1351+4747	MIRI Medium Resolution Spectroscopy	(13) J1351+4747
	14	MIRI MRS BACKGROUN D-J1351+4747	MIRI Medium Resolution Spectroscopy	(14) BACKGROUND-J1351+4747

## **ABSTRACT**

Interstellar dust grains vitally affect the cooling and heating of the ISM and molecule formation. Understanding grain composition and structure in distant galaxies is therefore crucial for understanding the cosmic star formation history. A robust understanding of dust in distant galaxies is also needed to accurately correct for dust extinction effects on background objects. Unfortunately, grain properties in distant galaxies are poorly constrained. We propose to measure grain composition and structure in the diffuse ISM of galaxies at  $0.1 < z < 1.1$  with MIRI MRS spectroscopy of background quasars whose UV/optical spectra show signs of significant dust in the intervening galaxies: strong 2175 Å bumps, reddening, and/or element depletion. The proposed MRS spectra will target redshifted features of silicates (10, 18 micron), hydrocarbons (3.4 micron), and PAHs (3.3-11.3 micron). Our main science goals are to investigate: (1) the silicate mineralogy and grain structure; (2) how Si, Fe depletions in the gas phase relate to silicate dust abundance; (3) whether carriers of various carbonaceous dust features are related; and (4) how dust properties are related to other galaxy properties. Only JWST MIRI has the powerful combination of the wavelength coverage, high sensitivity, and high spectral resolution crucial for measuring the mid-IR features of interest in the distant galaxies.

## **OBSERVING DESCRIPTION**

We will obtain MIRI MRS spectra spanning 4.9-27.9 microns for our targets. We will also obtain dedicated background observations for each field. Further details are provided in the technical justification in the pdf attachment.

Proposal 6350 - Targets - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of Backgro...

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	J0741+3112	RA: 07 41 10.7033 (115.2945971d) Dec: +31 12 0.23 (31.20006d) Equinox: J2000	Proper Motion RA: -0.022 mas/yr Proper Motion Dec: 0.046 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>				
(2)	BACKGROUND-J0741+3112	RA: 07 41 11.7033 (115.2987638d) Dec: +31 12 10.23 (31.20284d) Equinox: J2000	Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i> <i>Extended=NO</i>				
(3)	J0937+5628	RA: 09 37 38.0501 (144.4085421d) Dec: +56 28 38.87 (56.47746d) Equinox: J2000	Proper Motion RA: 0.293 mas/yr Proper Motion Dec: -0.393 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>				
(4)	BACKGROUND-J0937+5628	RA: 09 37 39.0501 (144.4127088d) Dec: +56 28 28.87 (56.47469d) Equinox: J2000	Epoch of Position: 2000.0	
<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i> <i>Extended=NO</i>				
(5)	J1619+3342	RA: 16 19 16.5427 (244.8189279d) Dec: +33 42 38.38 (33.71066d) Equinox: J2000	Proper Motion RA: 0.015 mas/yr Proper Motion Dec: -0.126 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>				
(6)	BACKGROUND-J1619+3342	RA: 16 19 17.5427 (244.8230946d) Dec: +33 42 18.38 (33.70511d) Equinox: J2000	Epoch of Position: 2000	
<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Telescope/sky background]</i> <i>Extended=NO</i>				
(7)	J1124-1705	RA: 11 24 42.8659 (171.1786079d) Dec: -17 05 17.39 (-17.08816d) Equinox: J2000	Proper Motion RA: 0.101 mas/yr Proper Motion Dec: -0.056 mas/yr Epoch of Position: 2000.0	
<i>Comments:</i> <i>Category=Galaxy</i> <i>Description=[Quasars]</i> <i>Extended=NO</i>				

Fixed Targets

Proposal 6350 - Targets - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of Backgro...

(8)	BACKGROUND-J1124-1705	RA: 11 24 43.8659 (171.1827746d) Dec: -17 05 27.39 (-17.09094d) Equinox: J2000	Epoch of Position: 2000
<p><i>Comments:</i>  <i>Category=Calibration</i>  <i>Description=[Telescope/sky background]</i>  <i>Extended=NO</i></p>			
(9)	J0913+5259	RA: 09 13 1.0024 (138.2541767d) Dec: +52 59 28.99 (52.99139d) Equinox: J2000	Proper Motion RA: -0.034 mas/yr Proper Motion Dec: -3.417 mas/yr Epoch of Position: 2015.5
<p><i>Comments:</i>  <i>Category=Galaxy</i>  <i>Description=[Quasars]</i>  <i>Extended=NO</i></p>			
(10)	BACKGROUND-J0913+5259	RA: 09 13 0.0024 (138.2500100d) Dec: +52 59 18.99 (52.98861d) Equinox: J2000	Epoch of Position: 2015.5
<p><i>Comments:</i>  <i>Category=Calibration</i>  <i>Description=[Telescope/sky background]</i>  <i>Extended=YES</i></p>			
(11)	J1418+1541	RA: 14 18 50.7213 (214.7113388d) Dec: +15 41 6.34 (15.68509d) Equinox: J2000	Proper Motion RA: -0.07 mas/yr Proper Motion Dec: 0.029 mas/yr Epoch of Position: 2000.0
<p><i>Comments:</i>  <i>Category=Galaxy</i>  <i>Description=[Quasars]</i>  <i>Extended=NO</i></p>			
(12)	BACKGROUND-J1418+1541	RA: 14 18 49.7213 (214.7071721d) Dec: +15 40 56.34 (15.68232d) Equinox: J2000	Epoch of Position: 2000
<p><i>Comments:</i>  <i>Category=Calibration</i>  <i>Description=[Telescope/sky background]</i>  <i>Extended=NO</i></p>			
(13)	J1351+4747	RA: 13 51 23.4834 (207.8478475d) Dec: +47 47 12.12 (47.78670d) Equinox: J2000	Proper Motion RA: 0.005 mas/yr Proper Motion Dec: -0.022 mas/yr Epoch of Position: 2000
<p><i>Comments:</i>  <i>Category=Galaxy</i>  <i>Description=[Quasars]</i>  <i>Extended=NO</i></p>			
(14)	BACKGROUND-J1351+4747	RA: 13 51 24.4834 (207.8520142d) Dec: +47 47 2.12 (47.78392d) Equinox: J2000	Epoch of Position: 2000
<p><i>Comments:</i>  <i>Category=Calibration</i>  <i>Description=[Telescope/sky background]</i>  <i>Extended=NO</i></p>			

Proposal 6350 - Observation 1 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 1: MIRI MRS J0741+3112</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J0741+3112 (Obs 2)]												
<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				
	(1)	J0741+3112	RA: 07 41 10.7033 (115.2945971d) Dec: +31 12 0.23 (31.20006d) Equinox: J2000			Proper Motion RA: -0.022 mas/yr Proper Motion Dec: 0.046 mas/yr Epoch of Position: 2000.0							
	Comments: Category=Galaxy Description=[Quasars] Extended=NO												
<b>Acquisition</b>	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	F1500W	FAST	4	1	1	11.1	146197				
<b>Template</b>	Primary Channel		Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	#	Dither Type			Optimized For			Direction					
	1	4-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	30	2	1	Dither 1	4	8	677.11	177013
	1	LONG(C)	MRSSHORT		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	3	SHORT(A)	MRSLONG		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	3	SHORT(A)	MRSSHORT		FASTR1	30	2	1	Dither 1	4	8	677.11	177013

Special Requirements

Sequence Observations 1, 2, Non-interruptible

Proposal 6350 - Observation 2 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 2: MIRI MRS BACKGROUND-J0741+3112</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J0741+3112 (Obs 1)]												
	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Diagnosics</b>													
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>				<b>Miscellaneous</b>				
	(2)	BACKGROUND-J0741+3112	RA: 07 41 11.7033 (115.2987638d) Dec: +31 12 10.23 (31.20284d) Equinox: J2000		Epoch of Position: 2000								
Comments: Category=Calibration Description=[Telescope/sky background] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>											
	1	NONE											
<b>Template</b>	<b>AcqFilter</b>	<b>Primary Channel</b>		<b>Simultaneous Imaging</b>		<b>Imager Subarray</b>		<b>Grating Wheel Direction</b>					
	FND	All MRS		NO		FULL		Allow Auto Reorder					
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>				<b>Direction</b>				
	1	2-Point			EXTENDED SOURCE				NEGATIVE				
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/E xp</b>	<b>Exposures/Dit h</b>	<b>Dither</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	LONG(C)	MRSLONG		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	1	LONG(C)	MRSSHORT		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	3	SHORT(A)	MRSLONG		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	3	SHORT(A)	MRSSHORT		FASTR1	30	2	1	Dither 1	2	4	338.555	177013

Special Requirements

Sequence Observations 1, 2, Non-interruptible

Proposal 6350 - Observation 3 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

<b>Observation</b>	<b>Proposal 6350, Observation 3: MIRI MRS J0937+5628</b> <span style="float: right;">Tue Oct 08 17:01:05 GMT 2024</span> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J0937+5628 (Obs 4)]												
	(Visit 3:1) 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>				
	(3)	J0937+5628	RA: 09 37 38.0501 (144.4085421d) Dec: +56 28 38.87 (56.47746d) Equinox: J2000			Proper Motion RA: 0.293 mas/yr Proper Motion Dec: -0.393 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>				
	1	SAME	F1000W	FAST	4	1	1	11.1	146197				
<b>Template</b>	<b>Primary Channel</b>		<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>			<b>Grating Wheel Direction</b>				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>			<b>Direction</b>					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</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	LONG(C)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	1	LONG(C)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	3	SHORT(A)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013

Special Requirements

Sequence Observations 3, 4, Non-interruptible

Proposal 6350 - Observation 4 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 4: MIRI MRS BACKGROUND-J0937+5628</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J0937+5628 (Obs 3)]												
	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Diagnosics</b>													
<b>Fixed Targets</b>	#	Name	Target Coordinates		Targ. Coord. Corrections				Miscellaneous				
	(4)	BACKGROUND-J0937+5628	RA: 09 37 39.0501 (144.4127088d) Dec: +56 28 28.87 (56.47469d) Equinox: J2000		Epoch of Position: 2000.0								
Comments: Category=Calibration Description=[Telescope/sky background] Extended=NO													
<b>Acquisition</b>	#	Target											
	1	NONE											
<b>Template</b>	AcqFilter	Primary Channel			Simultaneous Imaging		Imager Subarray		Grating Wheel Direction				
	FND	All MRS			NO		FULL		Allow Auto Reorder				
<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	100	2	1	Dither 1	2	4	1115.566	177013
	1	LONG(C)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	3	SHORT(A)	MRSLONG		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013

Special Requirements

Sequence Observations 3, 4, Non-interruptible

Proposal 6350 - Observation 5 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 5: MIRI MRS J1619+3342</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J1619+3342 (Obs 6)]												
	(Visit 5:1) 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>				
	(5)	J1619+3342	RA: 16 19 16.5427 (244.8189279d) Dec: +33 42 38.38 (33.71066d) Equinox: J2000			Proper Motion RA: 0.015 mas/yr Proper Motion Dec: -0.126 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>				
	1	SAME	F1500W	FAST	4	1	1	11.1	146197				
<b>Template</b>	<b>Primary Channel</b>		<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>			<b>Grating Wheel Direction</b>				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>			<b>Direction</b>					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</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	LONG(C)	MRSLONG		FASTR1	40	2	1	Dither 1	4	8	899.113	177013
	1	LONG(C)	MRSSHORT		FASTR1	40	2	1	Dither 1	4	8	899.113	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	40	2	1	Dither 1	4	8	899.113	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	40	2	1	Dither 1	4	8	899.113	177013
	3	SHORT(A)	MRSLONG		FASTR1	40	2	1	Dither 1	4	8	899.113	177013
	3	SHORT(A)	MRSSHORT		FASTR1	40	2	1	Dither 1	4	8	899.113	177013

Special Requirements

Sequence Observations 5, 6, Non-interruptible

Proposal 6350 - Observation 6 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 6: MIRI MRS BACKGROUND-J1619+3342</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1619+3342 (Obs 5)]												
	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Diagnosics</b>													
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>				<b>Targ. Coord. Corrections</b>			<b>Miscellaneous</b>			
	(6)	BACKGROUND-J1619+3342	RA: 16 19 17.5427 (244.8230946d) Dec: +33 42 18.38 (33.70511d) Equinox: J2000				Epoch of Position: 2000						
<i>Comments:</i> Category=Calibration Description=[Telescope/sky background] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>											
	1	NONE											
<b>Template</b>	<b>AcqFilter</b>	<b>Primary Channel</b>			<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>		<b>Grating Wheel Direction</b>			
	FND	All MRS			NO			FULL		Allow Auto Reorder			
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>				<b>Optimized For</b>				<b>Direction</b>			
	1	2-Point				EXTENDED SOURCE				NEGATIVE			
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/E xp</b>	<b>Exposures/Dit h</b>	<b>Dither</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	LONG(C)	MRSLONG		FASTR1	40	2	1	Dither 1	2	4	449.556	177013
	1	LONG(C)	MRSSHORT		FASTR1	40	2	1	Dither 1	2	4	449.556	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	40	2	1	Dither 1	2	4	449.556	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	40	2	1	Dither 1	2	4	449.556	177013
	3	SHORT(A)	MRSLONG		FASTR1	40	2	1	Dither 1	2	4	449.556	177013
	3	SHORT(A)	MRSSHORT		FASTR1	40	2	1	Dither 1	2	4	449.556	177013
	3	SHORT(A)	MRSSHORT		FASTR1	40	2	1	Dither 1	2	4	449.556	177013

Special Requirements

Sequence Observations 5, 6, Non-interruptible

Proposal 6350 - Observation 7 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 7: MIRI MRS J1124-1705</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J1124-1705 (Obs 8)]												
	(Visit 7:1) 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>				
	(7)	J1124-1705	RA: 11 24 42.8659 (171.1786079d) Dec: -17 05 17.39 (-17.08816d) Equinox: J2000			Proper Motion RA: 0.101 mas/yr Proper Motion Dec: -0.056 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>				
	1	SAME	F1000W	FAST	4	1	1	11.1	146197				
<b>Template</b>	<b>Primary Channel</b>		<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>			<b>Grating Wheel Direction</b>				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>			<b>Direction</b>					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</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	LONG(C)	MRSLONG		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	1	LONG(C)	MRSSHORT		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	3	SHORT(A)	MRSLONG		FASTR1	30	2	1	Dither 1	4	8	677.11	177013
	3	SHORT(A)	MRSSHORT		FASTR1	30	2	1	Dither 1	4	8	677.11	177013

Special Requirements

Sequence Observations 7, 8, Non-interruptible

Proposal 6350 - Observation 8 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 8: MIRI MRS BACKGROUND-J1124-1705</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1124-1705 (Obs 7)]												
	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Diagnosics</b>													
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>		<b>Targ. Coord. Corrections</b>				<b>Miscellaneous</b>				
	(8)	BACKGROUND-J1124-1705	RA: 11 24 43.8659 (171.1827746d) Dec: -17 05 27.39 (-17.09094d) Equinox: J2000		Epoch of Position: 2000								
<i>Comments:</i> Category=Calibration Description=[Telescope/sky background] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>											
	1	NONE											
<b>Template</b>	<b>AcqFilter</b>	<b>Primary Channel</b>			<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>		<b>Grating Wheel Direction</b>			
	FND	All MRS			NO			FULL		Allow Auto Reorder			
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>				<b>Direction</b>				
	1	2-Point			EXTENDED SOURCE				NEGATIVE				
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/E xp</b>	<b>Exposures/Dit h</b>	<b>Dither</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	LONG(C)	MRSLONG		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	1	LONG(C)	MRSSHORT		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	3	SHORT(A)	MRSLONG		FASTR1	30	2	1	Dither 1	2	4	338.555	177013
	3	SHORT(A)	MRSSHORT		FASTR1	30	2	1	Dither 1	2	4	338.555	177013

Special Requirements

Sequence Observations 7, 8, Non-interruptible

Proposal 6350 - Observation 9 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of B...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 9: MIRI MRS J0913+5259</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J0913+5259 (Obs 10)]												
<b>Diagnostics</b>	(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				
	(9)	J0913+5259	RA: 09 13 1.0024 (138.2541767d) Dec: +52 59 28.99 (52.99139d) Equinox: J2000			Proper Motion RA: -0.034 mas/yr Proper Motion Dec: -3.417 mas/yr Epoch of Position: 2015.5							
	Comments: Category=Galaxy Description=[Quasars] Extended=NO												
<b>Acquisition</b>	#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID				
	1	SAME	FND	FAST	10	1	1	27.75	146197				
<b>Template</b>	Primary Channel		Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	#	Dither Type			Optimized For			Direction					
	1	4-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	100	2	1	Dither 1	4	8	2231.132	177013
	1	LONG(C)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	3	SHORT(A)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013

Special Requirements

Sequence Observations 9, 10, Non-interruptible

Proposal 6350 - Observation 10 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of ...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 10: MIRI MRS BACKGROUND-J0913+5259</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J0913+5259 (Obs 9)]												
	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Diagnosics</b>													
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>				<b>Targ. Coord. Corrections</b>			<b>Miscellaneous</b>			
	(10)	BACKGROUND-J0913+5259	RA: 09 13 0.0024 (138.2500100d) Dec: +52 59 18.99 (52.98861d) Equinox: J2000				Epoch of Position: 2015.5						
<b>Acquisition</b>	<i>Comments:</i> Category=Calibration Description=[Telescope/sky background] Extended=YES												
	<b>#</b>	<b>Target</b>											
	1	NONE											
<b>Template</b>	<b>AcqFilter</b>	<b>Primary Channel</b>			<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>		<b>Grating Wheel Direction</b>			
	FND	All MRS			NO			FULL		Allow Auto Reorder			
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>				<b>Optimized For</b>				<b>Direction</b>			
	1	2-Point				EXTENDED SOURCE				NEGATIVE			
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/E xp</b>	<b>Exposures/Dit h</b>	<b>Dither</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	LONG(C)	MRSLONG		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	1	LONG(C)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	3	SHORT(A)	MRSLONG		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	2	4	1115.566	177013

Special Requirements

Sequence Observations 9, 10, Non-interruptible

Proposal 6350 - Observation 11 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of ...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 11: MIRI MRS J1418+1541</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J1418+1541 (Obs 12)]												
	(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>				
	(11)	J1418+1541	RA: 14 18 50.7213 (214.7113388d) Dec: +15 41 6.34 (15.68509d) Equinox: J2000			Proper Motion RA: -0.07 mas/yr Proper Motion Dec: 0.029 mas/yr Epoch of Position: 2000.0							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>				
	1	SAME	F1000W	FAST	4	1	1	11.1	146197				
<b>Template</b>	<b>Primary Channel</b>		<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>			<b>Grating Wheel Direction</b>				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>			<b>Direction</b>					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</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	LONG(C)	MRSLONG		FASTR1	90	2	1	Dither 1	4	8	2009.129	177013
	1	LONG(C)	MRSSHORT		FASTR1	90	2	1	Dither 1	4	8	2009.129	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	90	2	1	Dither 1	4	8	2009.129	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	90	2	1	Dither 1	4	8	2009.129	177013
	3	SHORT(A)	MRSLONG		FASTR1	90	2	1	Dither 1	4	8	2009.129	177013
	3	SHORT(A)	MRSSHORT		FASTR1	90	2	1	Dither 1	4	8	2009.129	177013

Special Requirements

Sequence Observations 11, 12, Non-interruptible

Proposal 6350 - Observation 12 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of ...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 12: MIRI MRS BACKGROUND-J1418+1541</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1418+1541 (Obs 11)]												
	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
<b>Diagnosics</b>													
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>				<b>Targ. Coord. Corrections</b>			<b>Miscellaneous</b>			
	(12)	BACKGROUND-J1418+1541	RA: 14 18 49.7213 (214.7071721d) Dec: +15 40 56.34 (15.68232d) Equinox: J2000				Epoch of Position: 2000						
<b>Acquisition</b>	<i>Comments:</i> Category=Calibration Description=[Telescope/sky background] Extended=NO												
	<b>#</b>	<b>Target</b>											
	1	NONE											
<b>Template</b>	<b>AcqFilter</b>	<b>Primary Channel</b>				<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>		<b>Grating Wheel Direction</b>		
	FND	All MRS				NO			FULL		Allow Auto Reorder		
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>				<b>Optimized For</b>				<b>Direction</b>			
	1	2-Point				EXTENDED SOURCE				NEGATIVE			
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/E xp</b>	<b>Exposures/Dit h</b>	<b>Dither</b>	<b>Total Dithers</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>
	1	LONG(C)	MRSLONG		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013
	1	LONG(C)	MRSSHORT		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013
	3	SHORT(A)	MRSLONG		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013
	3	SHORT(A)	MRSSHORT		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013
	3	SHORT(A)	MRSSHORT		FASTR1	90	2	1	Dither 1	2	4	1004.564	177013

Special Requirements

Sequence Observations 11, 12, Non-interruptible

Proposal 6350 - Observation 13 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of ...

Tue Oct 08 17:01:05 GMT 2024

<b>Observation</b>	<b>Proposal 6350, Observation 13: MIRI MRS J1351+4747</b> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observations:[MIRI MRS BACKGROUND-J1351+4747 (Obs 14)]												
	(Visit 13:1) 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>				
	(13)	J1351+4747	RA: 13 51 23.4834 (207.8478475d) Dec: +47 47 12.12 (47.78670d) Equinox: J2000			Proper Motion RA: 0.005 mas/yr Proper Motion Dec: -0.022 mas/yr Epoch of Position: 2000							
<i>Comments:</i> Category=Galaxy Description=[Quasars] Extended=NO													
<b>Acquisition</b>	<b>#</b>	<b>Target</b>	<b>Filter</b>	<b>Readout Pattern</b>	<b>Groups/Int</b>	<b>Integrations/Exp</b>	<b>Total Integrations</b>	<b>Total Exposure Time</b>	<b>ETC Wkbk.Calc ID</b>				
	1	SAME	F1000W	FAST	4	1	1	11.1	146197				
<b>Template</b>	<b>Primary Channel</b>		<b>Simultaneous Imaging</b>			<b>Imager Subarray</b>			<b>Grating Wheel Direction</b>				
	All MRS		NO			FULL			Allow Auto Reorder				
<b>Dithers</b>	<b>#</b>	<b>Dither Type</b>			<b>Optimized For</b>			<b>Direction</b>					
	1	4-Point			EXTENDED SOURCE			NEGATIVE					
<b>Spectral Elements</b>	<b>#</b>	<b>Wavelength Range</b>	<b>Detector</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	LONG(C)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	1	LONG(C)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	2	MEDIUM(B)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	2	MEDIUM(B)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	3	SHORT(A)	MRSLONG		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013
	3	SHORT(A)	MRSSHORT		FASTR1	100	2	1	Dither 1	4	8	2231.132	177013

Special Requirements

Sequence Observations 13, 14, Non-interruptible

Proposal 6350 - Observation 14 - Probing the Dust in the Diffuse ISM in Galaxies over the Past ~8 Billion Years with Spectroscopy of ...

<b>Observation</b>	Proposal 6350, Observation 14: MIRI MRS BACKGROUND-J1351+4747 <span style="float: right;">Tue Oct 08 17:01:05 GMT 2024</span> <b>Diagnostic Status: Warning</b> Observing Template: MIRI Medium Resolution Spectroscopy Background Observation For: [MIRI MRS J1351+4747 (Obs 13)]																																																																																																						
	(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.																																																																																																						
<b>Diagnosics</b>																																																																																																							
<b>Fixed Targets</b>	<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>(14)</td> <td>BACKGROUND-J1351+4747</td> <td>RA: 13 51 24.4834 (207.8520142d) Dec: +47 47 2.12 (47.78392d) Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td></td> </tr> </tbody> </table>												#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous	(14)	BACKGROUND-J1351+4747	RA: 13 51 24.4834 (207.8520142d) Dec: +47 47 2.12 (47.78392d) Equinox: J2000	Epoch of Position: 2000																																																																																		
	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous																																																																																																		
(14)	BACKGROUND-J1351+4747	RA: 13 51 24.4834 (207.8520142d) Dec: +47 47 2.12 (47.78392d) Equinox: J2000	Epoch of Position: 2000																																																																																																				
Comments: Category=Calibration Description=[Telescope/sky background] Extended=NO																																																																																																							
<b>Acquisition</b>	<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 13, 14, Non-interruptible