



1854 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular clouds to comets.

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>
MIRI				
	1	HOPS68	MIRI Medium Resolution Spectroscopy	(1) HOPS68-THERM
	14	HOPS68-SKY	MIRI Medium Resolution Spectroscopy	(8) HOPS68-THERM-SKY
	2	HH26IRS	MIRI Medium Resolution Spectroscopy	(2) HH26IRS-THERM
	15	HH26IRS-SKY	MIRI Medium Resolution Spectroscopy	(9) HH26IRS-THERM-SKY
	10	2MASSJ17112317-pstar-COMS	MIRI Medium Resolution Spectroscopy	(6) 2MASSJ17112317-COMS
	16	2MASSJ17112317-pstar-COMS-SKY	MIRI Medium Resolution Spectroscopy	(10) 2MASSJ17112317-COMS-SKY
	11	IRAS15398-pstar-COMS	MIRI Medium Resolution Spectroscopy	(7) IRAS-15398-3359-COMS
	17	IRAS15398-pstar-COMS-SKY	MIRI Medium Resolution Spectroscopy	(11) IRAS-15398-3359-COMS-SKY
	18	CK2-BG	MIRI Medium Resolution Spectroscopy	(3) CK-2-BG
	19	CK2-BG-SKY	MIRI Medium Resolution Spectroscopy	(13) CK-2-BG-SKY
	20	2MASS-J18285266-BG	MIRI Medium Resolution Spectroscopy	(12) 2MASS-J18285266-BG
	21	2MASS-J18285266-BG-SKY	MIRI Medium Resolution Spectroscopy	(14) 2MASS-J18285266-BG-SKY
NIRSpec				
	3	HH26IRS	NIRSpec IFU Spectroscopy	(16) HH26IRS-THERM-NS
	4	HOPS68	NIRSpec IFU Spectroscopy	(15) HOPS68-THERM-NS
	12	2MASSJ17112317-pstar-COMS	NIRSpec IFU Spectroscopy	(18) 2MASSJ17112317-COMS-NS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	13	IRAS15398-pstar-COM S	NIRSpec IFU Spectroscopy	(19) IRAS-15398-3359-COMS-NS
	22	2MASS-J18285266-B G	NIRSpec IFU Spectroscopy	(20) 2MASS-J18285266-BG-NS

ABSTRACT

Complex organic molecules (COMs), the chemical building blocks from which pre-biotic molecules can arise, must form on icy dust grains within cold molecular clouds, where their gas-phase sublimation products have been extensively studied with millimeter telescopes. "Non-energetically" processed cloud COMs may be thermally and energetically reprocessed within protostellar envelopes, either further increasing their complexity or potentially destroying them before they enter the comet-forming regions of protoplanetary disks. However, to date no COMs more complex than methanol have been conclusively detected in the solid state.

We propose to test whether energetic reprocessing COMs during the protostellar stage of star formation substantially enhances the ice chemical complexity over that of cold molecular cores by obtaining R~2700-3200 spectra from 3-15 μ m along six lines of sight to ice-rich regions characterized by non-energetic, thermal, and energetic ice processing. These spectra will reveal and disentangle overlapping signatures of >4 specific COM species (acetaldehyde, ethanol, dimethyl ether, and methyl formate), which are suggested by previous 5-sigma absorption features at 3-7% of the continuum near 7.2 μ m with Spitzer, guaranteeing a robust detection of the separate features. If the complexity of COMs is already high enough within our non-energetic targets, then it means that every star system formed from those clouds could come pre-seeded with the partially assembled ingredients for life. If we still detect COMs in the highly energetically processed targets, then we can gauge how much and what variety of species survive the journey from cloud to comet-forming disk.

OBSERVING DESCRIPTION

In order to detect and disentangle the signatures of COMs at 1-3% of the local continuum in these sources, we need the spectral resolution of the NIRSpec IFU (G395H, R~2700) and MIRI MRS (R~2700-3300) modes at high S/N. In order to obtain the correct baseline over the 3.4 μ m COMs region, we need to cover the blue wing of the 3 μ m water ice feature using NIRSpec IFU G235H. Since these are point sources and we are using the IFUs, JWST's blind pointing accuracy is sufficient, and we do not need target acquisition for either mode. The groups/integrations of both modes are chosen to obtain a S/N of 300 per spaxel in order to detect COMs down to 1% of the local continuum at 3sigma.

NIRSpec IFU

We dither with a 4-position cycling pattern, in case there is any extended emission from an outflow to keep as bonus science. There will be sufficient blank sky around the targets for sky subtraction, and we can also use the background simultaneously observed through the fixed slits during the IFU observation. In Aladdin, the regions surrounding the two protostars in Orion have bright stars in the field that could leak through the MSA failed open shutters, so we obtain a leakcal at each dither for those NIRSpec observations.

MIRI

We use a 4-position dither pattern and use a FAST readout to minimize overheads. We will also obtain a dedicated sky background for each MIRI observation. We take off-source simultaneous imaging in three filters to confirm the pointing of these observations and maximize bonus-science from any serendipitously observed sources.

Proposal 1854 - Targets - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular cloud...

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(1)	HOPS68-THERM	RA: 05 35 24.2999 (83.8512496d) Dec: -05 08 30.69 (-5.14186d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	
	(2)	HH26IRS-THERM	RA: 05 46 3.6300 (86.5151250d) Dec: -00 14 49.30 (-.24703d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	
	(3)	CK-2-BG	RA: 18 30 0.6180 (277.5025750d) Dec: +01 15 20.12 (1.25559d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Dark interstellar clouds, Dense interstellar clouds]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	
	(6)	2MASSJ17112317-COMS	RA: 17 11 23.1800 (257.8465833d) Dec: -27 24 31.50 (-27.40875d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	
	(7)	IRAS-15398-3359-COMS	RA: 15 43 2.2102 (235.7592092d) Dec: -34 09 7.71 (-34.15214d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	
	(8)	HOPS68-THERM-SKY	RA: 05 35 18.9835 (83.8290979d) Dec: -05 08 46.21 (-5.14617d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	
	(9)	HH26IRS-THERM-SKY	RA: 05 45 58.0065 (86.4916937d) Dec: -00 13 43.48 (-.22874d) Equinox: J2000 <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>	Epoch of Position: 2015.5	

Proposal 1854 - Targets - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular cloud...

(10)	2MASSJ17112317-COMS-SKY	RA: 17 11 24.8265 (257.8534437d) Dec: -27 22 23.75 (-27.37326d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO			
(11)	IRAS-15398-3359-COMS-SKY	RA: 15 42 56.5781 (235.7357421d) Dec: -34 07 44.64 (-34.12907d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO			
(12)	2MASS-J18285266-BG	RA: 18 28 52.6670 (277.2194458d) Dec: +00 28 24.21 (.47339d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Dark interstellar clouds, Dense interstellar clouds] Extended=NO			
(13)	CK-2-BG-SKY	RA: 18 30 5.3821 (277.5224254d) Dec: +01 15 27.57 (1.25766d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Dark interstellar clouds, Dense interstellar clouds] Extended=NO			
(14)	2MASS-J18285266-BG-SKY	RA: 18 28 52.9605 (277.2206688d) Dec: +00 27 26.65 (.45740d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Dark interstellar clouds, Dense interstellar clouds] Extended=NO			
(15)	HOPS68-THERM-NS	RA: 05 35 24.2999 (83.8512496d) Dec: -05 08 30.69 (-5.14186d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO			
(16)	HH261RS-THERM-NS	RA: 05 46 3.6300 (86.5151250d) Dec: -00 14 49.30 (-.24703d) Equinox: J2000	Epoch of Position: 2015.5
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO			

Proposal 1854 - Targets - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular cloud...

(18)	2MASSJ17112317-COMS-NS	RA: 17 11 23.1800 (257.8465833d) Dec: -27 24 31.50 (-27.40875d) Equinox: J2000	Epoch of Position: 2015.5
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>			
(19)	IRAS-15398-3359-COMS-NS	RA: 15 43 2.2102 (235.7592092d) Dec: -34 09 7.71 (-34.15214d) Equinox: J2000	Epoch of Position: 2015.5
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Protostars]</i> <i>Extended=NO</i>			
(20)	2MASS-J18285266-BG-NS	RA: 18 28 52.6670 (277.2194458d) Dec: +00 28 24.21 (.47339d) Equinox: J2000	Epoch of Position: 2015.5
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Category=ISM</i> <i>Description=[Dark interstellar clouds, Dense interstellar clouds]</i> <i>Extended=NO</i>			

Proposal 1854 - Observation 1 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular...

Observation	Proposal 1854, Observation 1: HOPS68												Tue Sep 05 18:01:12 GMT 2023
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution Spectroscopy												
	Background Observations:[HOPS68-SKY (Obs 14)]												
Diagnostics	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(1)	HOPS68-THERM	RA: 05 35 24.2999 (83.8512496d) Dec: -05 08 30.69 (-5.14186d) Equinox: J2000				Epoch of Position: 2015.5						
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.												
	Category=ISM												
	Description=[Protostars] 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	57619			
Template	Primary Channel		Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	All MRS		YES			FULL			NEUTRAL				
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				POINT SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	57619
	1	SHORT(A)	MRSLONG		FASTR1	20	1	1	Dither 1	4	4	222.003	57619
	1	SHORT(A)	MRSSHORT		FASTR1	20	1	1	Dither 1	4	4	222.003	57619
	2		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	2	MEDIUM(B)	MRSLONG		FASTR1	20	1	1	Dither 1	4	4	222.003	
	2	MEDIUM(B)	MRSSHORT		FASTR1	20	1	1	Dither 1	4	4	222.003	
	3		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	
	3	LONG(C)	MRSLONG		FASTR1	20	1	1	Dither 1	4	4	222.003	
	3	LONG(C)	MRSSHORT		FASTR1	20	1	1	Dither 1	4	4	222.003	

Special Requirements

Sequence Observations 1, 14, Non-interruptible

Proposal 1854 - Observation 14 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 14: HOPS68-SKY												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observation For: [HOPS68 (Obs 1)]													
Diagnostics	(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name		Target Coordinates			Targ. Coord. Corrections				Miscellaneous			
	(8)	HOPS68-THERM-SKY		RA: 05 35 18.9835 (83.8290979d) Dec: -05 08 46.21 (-5.14617d) Equinox: J2000			Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM													
	Description=[Protostars]													
Extended=NO														
Acquisition	#	Target												
	1	NONE												
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction			
	FND	All MRS			YES			FULL			NEUTRAL			
Dithers	#	Dither Type					Optimized For				Direction			
	1	4-Point					POINT SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	1	SHORT(A)	MRSLONG		FASTR1	20	1	1	None	1	1	55.501	57619	
	1	SHORT(A)	MRSSHORT		FASTR1	20	1	1	None	1	1	55.501	57619	
	2		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	2	MEDIUM(B)	MRSLONG		FASTR1	20	1	1	None	1	1	55.501		
	2	MEDIUM(B)	MRSSHORT		FASTR1	20	1	1	None	1	1	55.501		
	3		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	3	LONG(C)	MRSLONG		FASTR1	20	1	1	None	1	1	55.501		
	3	LONG(C)	MRSSHORT		FASTR1	20	1	1	None	1	1	55.501		

Special Requirements

Sequence Observations 1, 14, Non-interruptible

Proposal 1854 - Observation 2 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular...

Observation	Proposal 1854, Observation 2: HH26IRS												Tue Sep 05 18:01:12 GMT 2023			
	Diagnostic Status: Warning															
	Observing Template: MIRI Medium Resolution Spectroscopy															
	Background Observations:[HH26IRS-SKY (Obs 15)]															
Diagnostics	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.															
Fixed Targets	#	Name			Target Coordinates			Targ. Coord. Corrections			Miscellaneous					
	(2)	HH26IRS-THERM			RA: 05 46 3.6300 (86.5151250d) Dec: -00 14 49.30 (-.24703d) Equinox: J2000			Epoch of Position: 2015.5								
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.															
	Category=ISM															
	Description=[Protostars] 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		57619	
Template	Primary Channel			Simultaneous Imaging				Imager Subarray				Grating Wheel Direction				
	All MRS			YES				FULL				NEUTRAL				
Dithers	#	Dither Type						Optimized For				Direction				
	1	4-Point						POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID			
	1		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	57619			
	1	SHORT(A)	MRSLONG		FASTR1	11	1	1	Dither 1	4	4	122.102	57619			
	1	SHORT(A)	MRSSHORT		FASTR1	11	1	1	Dither 1	4	4	122.102	57619			
	2		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501				
	2	MEDIUM(B)	MRSLONG		FASTR1	11	1	1	Dither 1	4	4	122.102				
	2	MEDIUM(B)	MRSSHORT		FASTR1	11	1	1	Dither 1	4	4	122.102				
	3		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501				
	3	LONG(C)	MRSLONG		FASTR1	11	1	1	Dither 1	4	4	122.102				
	3	LONG(C)	MRSSHORT		FASTR1	11	1	1	Dither 1	4	4	122.102				

Special Requirements

Sequence Observations 2, 15, Non-interruptible

Proposal 1854 - Observation 15 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 15: HH26IRS-SKY												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observation For: [HH26IRS (Obs 2)]													
Diagnostics	(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)	HH26IRS-THERM-SKY		RA: 05 45 58.0065 (86.4916937d)			Epoch of Position: 2015.5							
				Dec: -00 13 43.48 (-.22874d)										
				Equinox: J2000										
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO												
Acquisition	#	Target												
	1	NONE												
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction			
	FND	All MRS			YES			FULL			NEUTRAL			
Dithers	#	Dither Type					Optimized For				Direction			
	1	4-Point					POINT SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	1	SHORT(A)	MRSLONG		FASTR1	11	1	1	None	1	1	30.525	57619	
	1	SHORT(A)	MRSSHORT		FASTR1	11	1	1	None	1	1	30.525	57619	
	2		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	2	MEDIUM(B)	MRSLONG		FASTR1	11	1	1	None	1	1	30.525		
	2	MEDIUM(B)	MRSSHORT		FASTR1	11	1	1	None	1	1	30.525		
	3		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	3	LONG(C)	MRSLONG		FASTR1	11	1	1	None	1	1	30.525		
	3	LONG(C)	MRSSHORT		FASTR1	11	1	1	None	1	1	30.525		

Special Requirements

Sequence Observations 2, 15, Non-interruptible

Proposal 1854 - Observation 10 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 10: 2MASSJ17112317-pstar-COMS												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observations:[2MASSJ17112317-pstar-COMS-SKY (Obs 16)]													
Diagnostics	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous			
	(6)	2MASSJ17112317-COMS	RA: 17 11 23.1800 (257.8465833d) Dec: -27 24 31.50 (-27.40875d) Equinox: J2000				Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM Description=[Protostars] 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		57619		
Template	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	All MRS			YES			FULL			NEUTRAL				
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	1	LONG(C)	MRSLONG		FASTR1	12	1	1	Dither 1	4	4	133.202		
	1	LONG(C)	MRSSHORT		FASTR1	12	1	1	Dither 1	4	4	133.202		
	2		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	2	MEDIUM(B)	MRSLONG		FASTR1	12	1	1	Dither 1	4	4	133.202		
	2	MEDIUM(B)	MRSSHORT		FASTR1	12	1	1	Dither 1	4	4	133.202		
	3		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	57619	
	3	SHORT(A)	MRSLONG		FASTR1	12	1	1	Dither 1	4	4	133.202	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	12	1	1	Dither 1	4	4	133.202	57619	

Special Requirements

Sequence Observations 10, 16, Non-interruptible

Proposal 1854 - Observation 16 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 16: 2MASSJ17112317-pstar-COMS-SKY												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observation For: [2MASSJ17112317-pstar-COMS (Obs 10)]													
Diagnostics	(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous			
	(10)	2MASSJ17112317-COMS-SKY	RA: 17 11 24.8265 (257.8534437d) Dec: -27 22 23.75 (-27.37326d) Equinox: J2000				Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM Description=[Protostars] Extended=NO													
Acquisition	#	Target												
	1	NONE												
Template	AcqFilter	Primary Channel				Simultaneous Imaging				Imager Subarray		Grating Wheel Direction		
	FND	All MRS				YES				FULL		NEUTRAL		
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	1	LONG(C)	MRSLONG		FASTR1	12	1	1	None	1	1	33.3		
	1	LONG(C)	MRSSHORT		FASTR1	12	1	1	None	1	1	33.3		
	2		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	2	MEDIUM(B)	MRSLONG		FASTR1	12	1	1	None	1	1	33.3		
	2	MEDIUM(B)	MRSSHORT		FASTR1	12	1	1	None	1	1	33.3		
	3		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	3	SHORT(A)	MRSLONG		FASTR1	12	1	1	None	1	1	33.3	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	12	1	1	None	1	1	33.3	57619	

Special Requirements

Sequence Observations 10, 16, Non-interruptible

Proposal 1854 - Observation 11 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 11: IRAS15398-pstar-COMS												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observations:[IRAS15398-pstar-COMS-SKY (Obs 17)]													
Diagnostics	(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)	IRAS-15398-3359-COMS	RA: 15 43 2.2102 (235.7592092d) Dec: -34 09 7.71 (-34.15214d) Equinox: J2000				Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM Description=[Protostars] 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		57619		
Template	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	All MRS			YES			FULL			NEUTRAL				
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	1	LONG(C)	MRSLONG		FASTR1	13	1	1	Dither 1	4	4	144.302		
	1	LONG(C)	MRSSHORT		FASTR1	13	1	1	Dither 1	4	4	144.302		
	2		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	2	MEDIUM(B)	MRSLONG		FASTR1	13	1	1	Dither 1	4	4	144.302		
	2	MEDIUM(B)	MRSSHORT		FASTR1	13	1	1	Dither 1	4	4	144.302		
	3		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	57619	
	3	SHORT(A)	MRSLONG		FASTR1	13	1	1	Dither 1	4	4	144.302	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	13	1	1	Dither 1	4	4	144.302	57619	

Special Requirements

Sequence Observations 11, 17, Non-interruptible

Proposal 1854 - Observation 17 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 17: IRAS15398-pstar-COMS-SKY												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observation For: [IRAS15398-pstar-COMS (Obs 11)]													
Diagnostics	(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous			
	(11)	IRAS-15398-3359-COMS-SKY	RA: 15 42 56.5781 (235.7357421d) Dec: -34 07 44.64 (-34.12907d) Equinox: J2000				Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM Description=[Protostars] Extended=NO													
Acquisition	#	Target												
	1	NONE												
Template	AcqFilter	Primary Channel				Simultaneous Imaging				Imager Subarray		Grating Wheel Direction		
	FND	All MRS				YES				FULL		NEUTRAL		
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	1	LONG(C)	MRSLONG		FASTR1	13	1	1	None	1	1	36.076		
	1	LONG(C)	MRSSHORT		FASTR1	13	1	1	None	1	1	36.076		
	2		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	2	MEDIUM(B)	MRSLONG		FASTR1	13	1	1	None	1	1	36.076		
	2	MEDIUM(B)	MRSSHORT		FASTR1	13	1	1	None	1	1	36.076		
	3		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	3	SHORT(A)	MRSLONG		FASTR1	13	1	1	None	1	1	36.076	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	13	1	1	None	1	1	36.076	57619	

Special Requirements

Sequence Observations 11, 17, Non-interruptible

Proposal 1854 - Observation 18 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 18: CK2-BG												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observations:[CK2-BG-SKY (Obs 19)]													
Diagnostics	(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous			
	(3)	CK-2-BG	RA: 18 30 0.6180 (277.5025750d) Dec: +01 15 20.12 (1.25559d) Equinox: J2000				Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM													
	Description=[Dark interstellar clouds, Dense interstellar clouds] 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	57619				
Template	Primary Channel		Simultaneous Imaging				Imager Subarray				Grating Wheel Direction			
	All MRS		YES				FULL				NEUTRAL			
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	1	LONG(C)	MRSLONG		FASTR1	18	1	1	Dither 1	4	4	199.803		
	1	LONG(C)	MRSSHORT		FASTR1	18	1	1	Dither 1	4	4	199.803		
	2		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	2	MEDIUM(B)	MRSLONG		FASTR1	18	1	1	Dither 1	4	4	199.803		
	2	MEDIUM(B)	MRSSHORT		FASTR1	18	1	1	Dither 1	4	4	199.803		
	3		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	57619	
	3	SHORT(A)	MRSLONG		FASTR1	18	1	1	Dither 1	4	4	199.803	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	18	1	1	Dither 1	4	4	199.803	57619	

Special Requirements

Sequence Observations 18, 19, Non-interruptible

Proposal 1854 - Observation 19 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 19: CK2-BG-SKY												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observation For: [CK2-BG (Obs 18)]													
Diagnostics	(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name		Target Coordinates			Targ. Coord. Corrections				Miscellaneous			
	(13)	CK-2-BG-SKY		RA: 18 30 5.3821 (277.5224254d)			Epoch of Position: 2015.5							
				Dec: +01 15 27.57 (1.25766d)										
				Equinox: J2000										
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Dark interstellar clouds, Dense interstellar clouds] Extended=NO												
Acquisition	#	Target												
	1	NONE												
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction			
	FND	All MRS			YES			FULL			NEUTRAL			
Dithers	#	Dither Type					Optimized For				Direction			
	1	4-Point					POINT SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	1	LONG(C)	MRSLONG		FASTR1	18	1	1	None	1	1	49.951		
	1	LONG(C)	MRSSHORT		FASTR1	18	1	1	None	1	1	49.951		
	2		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	2	MEDIUM(B)	MRSLONG		FASTR1	18	1	1	None	1	1	49.951		
	2	MEDIUM(B)	MRSSHORT		FASTR1	18	1	1	None	1	1	49.951		
	3		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	3	SHORT(A)	MRSLONG		FASTR1	18	1	1	None	1	1	49.951	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	18	1	1	None	1	1	49.951	57619	

Special Requirements

Sequence Observations 18, 19, Non-interruptible

Proposal 1854 - Observation 20 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 20: 2MASS-J18285266-BG												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observations:[2MASS-J18285266-BG-SKY (Obs 21)]													
Diagnostics	(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous			
	(12)	2MASS-J18285266-BG	RA: 18 28 52.6670 (277.2194458d)				Epoch of Position: 2015.5							
			Dec: +00 28 24.21 (.47339d)											
			Equinox: J2000											
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM													
	Description=[Dark interstellar clouds, Dense interstellar clouds]													
	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	57619					
Template	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction				
	All MRS			YES			FULL			NEUTRAL				
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	1	LONG(C)	MRSLONG		FASTR1	45	1	1	Dither 1	4	4	499.507		
	1	LONG(C)	MRSSHORT		FASTR1	45	1	1	Dither 1	4	4	499.507		
	2		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501		
	2	MEDIUM(B)	MRSLONG		FASTR1	45	1	1	Dither 1	4	4	499.507		
	2	MEDIUM(B)	MRSSHORT		FASTR1	45	1	1	Dither 1	4	4	499.507		
	3		IMAGER	F560W	FASTR1	5	1	1	Dither 1	4	4	55.501	57619	
	3	SHORT(A)	MRSLONG		FASTR1	45	1	1	Dither 1	4	4	499.507	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	45	1	1	Dither 1	4	4	499.507	57619	

Special Requirements

Sequence Observations 20, 21, Non-interruptible

Proposal 1854 - Observation 21 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 21: 2MASS-J18285266-BG-SKY												Tue Sep 05 18:01:12 GMT 2023	
	Diagnostic Status: Warning													
	Observing Template: MIRI Medium Resolution Spectroscopy													
	Background Observation For: [2MASS-J18285266-BG (Obs 20)]													
Diagnostics	(Visit 21:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.													
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous			
	(14)	2MASS-J18285266-BG-SKY	RA: 18 28 52.9605 (277.2206688d) Dec: +00 27 26.65 (.45740d) Equinox: J2000				Epoch of Position: 2015.5							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.													
	Category=ISM													
	Description=[Dark interstellar clouds, Dense interstellar clouds]													
Extended=NO														
Acquisition	#	Target												
	1	NONE												
Template	AcqFilter	Primary Channel				Simultaneous Imaging				Imager Subarray		Grating Wheel Direction		
	FND	All MRS				YES				FULL		NEUTRAL		
Dithers	#	Dither Type				Optimized For				Direction				
	1	4-Point				POINT SOURCE				NEGATIVE				
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	1	LONG(C)	MRSLONG		FASTR1	45	1	1	None	1	1	124.877		
	1	LONG(C)	MRSSHORT		FASTR1	45	1	1	None	1	1	124.877		
	2		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	2	MEDIUM(B)	MRSLONG		FASTR1	45	1	1	None	1	1	124.877		
	2	MEDIUM(B)	MRSSHORT		FASTR1	45	1	1	None	1	1	124.877		
	3		IMAGER	F560W	FASTR1	5	1	1	None	1	1	13.875		
	3	SHORT(A)	MRSLONG		FASTR1	45	1	1	None	1	1	124.877	57619	
	3	SHORT(A)	MRSSHORT		FASTR1	45	1	1	None	1	1	124.877	57619	

Special Requirements

Sequence Observations 20, 21, Non-interruptible

Proposal 1854 - Observation 3 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular...

Observation	Proposal 1854, Observation 3: HH26IRS												Tue Sep 05 18:01:12 GMT 2023
	Diagnostic Status: Warning												
	Observing Template: NIRSpec IFU Spectroscopy												
Diagnostics	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(16)	HH26IRS-THERM-NS	RA: 05 46 3.6300 (86.5151250d)				Epoch of Position: 2015.5						
			Dec: -00 14 49.30 (-.24703d)										
			Equinox: J2000										
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO											
Template	TA Method												
	NONE												
Dithers	#	Dither Type			Size		Starting Point		Number of Points		Points		
	1	CYCLING			SMALL		6		4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wbkbk.Calc ID	
	1	G395H/F290LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	83085	
	2	G395H/F290LP	NRSIRS2RAPID	3	1	true	true	NONE	4	4	233.422		
	3	G235H/F170LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	83085	
	4	G235H/F170LP	NRSIRS2RAPID	3	1	true	true	NONE	4	4	233.422		

Proposal 1854 - Observation 4 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecular...

Observation	Proposal 1854, Observation 4: HOPS68												Tue Sep 05 18:01:12 GMT 2023
	Diagnostic Status: Warning												
	Observing Template: NIRSpec IFU Spectroscopy												
Diagnostics	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(15)	HOPS68-THERM-NS	RA: 05 35 24.2999 (83.8512496d)				Epoch of Position: 2015.5						
			Dec: -05 08 30.69 (-5.14186d)										
			Equinox: J2000										
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO											
Template	TA Method												
	NONE												
Dithers	#	Dither Type			Size		Starting Point		Number of Points		Points		
	1	CYCLING			SMALL		6		4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wbkk.Calc ID	
	1	G395H/F290LP	NRSIRS2RAPID	12	1	false	true	NONE	4	4	758.622	83085	
	2	G395H/F290LP	NRSIRS2RAPID	12	1	true	true	NONE	4	4	758.622		
	3	G235H/F170LP	NRSIRS2RAPID	15	1	false	true	NONE	4	4	933.689	83085	
	4	G235H/F170LP	NRSIRS2RAPID	15	1	true	true	NONE	4	4	933.689		

Proposal 1854 - Observation 12 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 12: 2MASSJ17112317-pstar-COMS												Tue Sep 05 18:01:12 GMT 2023
	Diagnostic Status: Warning												
Observing Template: NIRSpec IFU Spectroscopy													
Diagnostics	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous			
	(18)	2MASSJ17112317-COMS-NS	RA: 17 11 23.1800 (257.8465833d)				Epoch of Position: 2015.5						
			Dec: -27 24 31.50 (-27.40875d)										
			Equinox: J2000										
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO												
Template	TA Method												
	NONE												
Dithers	#	Dither Type			Size		Starting Point		Number of Points		Points		
	1	CYCLING			SMALL		6		4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wbkk.Calc ID	
	1	G395H/F290LP	NRSIRS2RAPID	12	1	false	true	NONE	4	4	758.622	57619	
	2	G235H/F170LP	NRSIRS2RAPID	15	1	false	true	NONE	4	4	933.689		

Proposal 1854 - Observation 13 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 13: IRAS15398-pstar-COMS												Tue Sep 05 18:01:12 GMT 2023
	Diagnostic Status: Warning												
Observing Template: NIRSpec IFU Spectroscopy													
Diagnostics	(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous		
	(19)	IRAS-15398-3359-COMS-NS	RA: 15 43 2.2102 (235.7592092d) Dec: -34 09 7.71 (-34.15214d) Equinox: J2000				Epoch of Position: 2015.5						
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Protostars] Extended=NO												
Template	TA Method												
	NONE												
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points			
	1	CYCLING		SMALL		6		4					
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wbkk.Calc ID	
	1	G395H/F290LP	NRSIRS2RAPID	25	1	false	true	NONE	4	4	1517.245	57619	
	2	G235H/F170LP	NRSIRS2RAPID	25	1	false	true	NONE	4	4	1517.245		

Proposal 1854 - Observation 22 - It's COMplicated: Disentangling the formation pathways of complex organic molecules from molecu...

Observation	Proposal 1854, Observation 22: 2MASS-J18285266-BG												Tue Sep 05 18:01:12 GMT 2023
	Diagnostic Status: Warning												
	Observing Template: NIRSspec IFU Spectroscopy												
Diagnostics	(Visit 22:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.												
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections				Miscellaneous		
	(20)	2MASS-J18285266-BG-NS	RA: 18 28 52.6670 (277.2194458d) Dec: +00 28 24.21 (.47339d) Equinox: J2000				Epoch of Position: 2015.5						
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=ISM Description=[Dark interstellar clouds, Dense interstellar clouds] Extended=NO												
Template	TA Method												
	NONE												
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points			
	1	CYCLING		SMALL		6		4					
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	
	1	G395H/F290LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	83085	
	2	G235H/F170LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	83085	