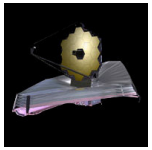

4678 - The chemistry of complex hydrocarbons in ejecta from evolved objects

Cycle: 3, Proposal Category: GO

INVESTIGATORS

Name	*Institution*
Dr. Greg Sloan (PI)	**Space Telescope Science Institute**
Dr. Jeronimo Bernard-Salas (CoI) (ESA Member)	ACRI-ST
Charmi Bhatt (CoI) (CSA Member)	The University of Western Ontario
Prof. Jan Cami (CoI) (CSA Member)	The University of Western Ontario
Dr. Harriet L. Dinerstein (CoI)	University of Texas at Austin
Dr. Anibal Garcia-Hernandez (CoI) (ESA Member)	Instituto de Astrofisica de Canarias
Dr. Marco Antonio Gomez-Munoz (CoI) (ESA Member)	Instituto de Astrofisica de Canarias
Dr. Kathleen E. Kraemer (CoI)	Boston College
Dr. Mikako Matsuura (CoI) (ESA Member)	Cardiff University
Dr. Els Peeters (CoI) (CSA Member)	The University of Western Ontario
Dr. Raghvendra Sahai (CoI)	Jet Propulsion Laboratory
Dr. Nicholas C. Sterling (CoI)	University of West Georgia
Dr. Kevin Volk (CoI) (CSA Member)	Space Telescope Science Institute - CSA - JWST
Dr. Glenn M. Wahlgren (CoI)	Space Telescope Science Institute
Prof. Albert Zijlstra (CoI) (ESA Member)	University of Manchester

OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1	MSX SMC 029 MRS	MIRI Medium Resolution Spectroscopy	(1) MSXSMC029
	2	SMP LMC 011 MRS	MIRI Medium Resolution Spectroscopy	(2) SMPLMC011
	3	IRAS 05073 MRS	MIRI Medium Resolution Spectroscopy	(3) IRAS05073-6752
	4	IRAS 06111 MRS	MIRI Medium Resolution Spectroscopy	(4) IRAS06111-7023

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	5	J004441 MRS	MIRI Medium Resolution Spectroscopy	(5) 2MASSJ004441-7321
	6	IRAS 05110 MRS	MIRI Medium Resolution Spectroscopy	(6) IRAS05110-6616
	7	IRAS 05360 MRS	MIRI Medium Resolution Spectroscopy	(7) IRAS05360-7121
	11	MSX SMC 029 NRS	NIRSpec Fixed Slit Spectroscopy	(1) MSXSMC029
	12	SMP LMC 011 NRS	NIRSpec Fixed Slit Spectroscopy	(2) SMPLMC011
	13	IRAS 05073 NRS	NIRSpec Fixed Slit Spectroscopy	(3) IRAS05073-6752
	14	IRAS 06111 NRS	NIRSpec Fixed Slit Spectroscopy	(4) IRAS06111-7023
	15	J004441 NRS	NIRSpec Fixed Slit Spectroscopy	(5) 2MASSJ004441-7321
	16	IRAS 05110 NRS	NIRSpec Fixed Slit Spectroscopy	(6) IRAS05110-6616
	17	IRAS 05360 NRS	NIRSpec Fixed Slit Spectroscopy	(7) IRAS05360-7121

ABSTRACT

We will obtain infrared spectra of seven evolved objects in the Large and Small Magellanic Clouds that exhibit spectral features from complex hydrocarbons using both the Fixed Slit on NIRSpec and the Medium-Resolution Spectrometer (MRS) on MIRI. These sources have departed from the asymptotic giant branch and are evolving into planetary nebulae. They display a range of carbon-rich spectral characteristics, including the classic spectrum attributed to polycyclic aromatic hydrocarbons seen in many planetary nebulae, mixtures of aromatic and aliphatic hydrocarbons, the still-unidentified 21 um emission feature, and recently discovered but still unidentified emission features apparently associated with hydrocarbons. This project will exploit the unprecedented combination of spectral resolution, wavelength coverage, and sensitivity offered by NIRSpec and the MRS to explore the chemistry of complex hydrocarbons as carbon stars evolve into planetary nebulae. The resulting spectra will sample the gas and dust at different stages of evolution as carbon-rich objects seed their host galaxies with fresh dust.

OBSERVING DESCRIPTION

Observations of each target include spectra with the NIRSpec 0.2" Fixed Slit with the G395H grating and the F290LP filter and the MRS on MIRI in all three grating settings. NIRSpec observations use a self-TA (WATA) and a three-point dither pattern. MRS observations are all self-TA and use a 4-point dither pattern.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	MSXSMC029	RA: 00 36 46.3319 (9.1930496d) Dec: -73 31 35.42 (-73.52651d) Equinox: J2000	Proper Motion RA: -2.078 mas/yr Proper Motion Dec: -0.457 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				
(2)	SMPLMC011	RA: 04 51 37.8281 (72.9076171d) Dec: -67 05 16.88 (-67.08802d) Equinox: J2000	Proper Motion RA: 0.833 mas/yr Proper Motion Dec: 0.241 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				
(3)	IRAS05073-6752	RA: 05 07 13.9165 (76.8079854d) Dec: -67 48 46.72 (-67.81298d) Equinox: J2000	Proper Motion RA: 2.169 mas/yr Proper Motion Dec: -0.787 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				
(4)	IRAS06111-7023	RA: 06 10 32.0148 (92.6333950d) Dec: -70 24 40.79 (-70.41133d) Equinox: J2000	Proper Motion RA: -1.566 mas/yr Proper Motion Dec: 0.510 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				
(5)	2MASSJ004441-7321	RA: 00 44 41.1035 (11.1712646d) Dec: -73 21 36.12 (-73.36003d) Equinox: J2000	Proper Motion RA: 0.632 mas/yr Proper Motion Dec: -1.230 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				
(6)	IRAS05110-6616	RA: 05 11 10.6392 (77.7943300d) Dec: -66 12 53.63 (-66.21490d) Equinox: J2000	Proper Motion RA: 1.840 mas/yr Proper Motion Dec: 0.103 mas/yr Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				
(7)	IRAS05360-7121	RA: 05 35 25.8456 (83.8576900d) Dec: -71 19 56.65 (-71.33240d) Equinox: J2000	Proper Motion RA: 2.631 mas/yr Proper Motion Dec: 0.730 mas/yr Parallax: 0" Epoch of Position: 2000.0	
Comments: Position from Gaia EDR3 *Category=Star* *Description=[Carbon stars, Post-asymptotic giant branch]* *Extended=NO*				

Observation

Proposal 4678, Observation 1: MSX SMC 029 MRS Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution Spectroscopy

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)	MSXSMC029	RA: 00 36 46.3319 (9.1930496d)	Proper Motion RA: -2.078 mas/yr	
		Dec: -73 31 35.42 (-73.52651d)	Proper Motion Dec: -0.457 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	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	139566.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	50	1	1	Dither 1	4	4	555.008	
1	SHORT(A)	MRSSHORT		FASTR1	50	1	1	Dither 1	4	4	555.008	
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	LONG(C)	MRSLONG		FASTR1	16	1	1	Dither 1	4	4	177.603	
3	LONG(C)	MRSSHORT		FASTR1	16	1	1	Dither 1	4	4	177.603	

Observation

Proposal 4678, Observation 2: SMP LMC 011 MRS Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution Spectroscopy

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)	SMPLMC011	RA: 04 51 37.8281 (72.9076171d)	Proper Motion RA: 0.833 mas/yr	
		Dec: -67 05 16.88 (-67.08802d)	Proper Motion Dec: 0.241 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
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	139567.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	16	1	1	Dither 1	4	4	177.603	
1	SHORT(A)	MRSSHORT		FASTR1	16	1	1	Dither 1	4	4	177.603	
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	LONG(C)	MRSLONG		FASTR1	12	1	1	Dither 1	4	4	133.202	
3	LONG(C)	MRSSHORT		FASTR1	12	1	1	Dither 1	4	4	133.202	

Observation

Proposal 4678, Observation 3: IRAS 05073 MRS Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution 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
(3)	IRAS05073-6752	RA: 05 07 13.9165 (76.8079854d)	Proper Motion RA: 2.169 mas/yr	
		Dec: -67 48 46.72 (-67.81298d)	Proper Motion Dec: -0.787 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	FND	FAST	6	1	1	16.65	139568.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	100	1	1	Dither 1	4	4	1110.016	
1	SHORT(A)	MRSSHORT		FASTR1	100	1	1	Dither 1	4	4	1110.016	
2	MEDIUM(B)	MRSLONG		FASTR1	50	1	1	Dither 1	4	4	555.008	
2	MEDIUM(B)	MRSSHORT		FASTR1	50	1	1	Dither 1	4	4	555.008	
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	

Observation

Proposal 4678, Observation 4: IRAS 06111 MRS Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution 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
(4)	IRAS06111-7023	RA: 06 10 32.0148 (92.6333950d)	Proper Motion RA: -1.566 mas/yr	
		Dec: -70 24 40.79 (-70.41133d)	Proper Motion Dec: 0.510 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	FND	FAST	6	1	1	16.65	139569.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	80	1	1	Dither 1	4	4	888.013	
1	SHORT(A)	MRSSHORT		FASTR1	39	2	1	Dither 1	4	8	876.913	
2	MEDIUM(B)	MRSLONG		FASTR1	40	1	1	Dither 1	4	4	444.006	
2	MEDIUM(B)	MRSSHORT		FASTR1	40	1	1	Dither 1	4	4	444.006	
3	LONG(C)	MRSLONG		FASTR1	16	1	1	Dither 1	4	4	177.603	
3	LONG(C)	MRSSHORT		FASTR1	16	1	1	Dither 1	4	4	177.603	

Observation

Proposal 4678, Observation 5: J004441 MRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution Spectroscopy

Diagnostics

(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)	2MASSJ004441-7321	RA: 00 44 41.1035 (11.1712646d)	Proper Motion RA: 0.632 mas/yr	
		Dec: -73 21 36.12 (-73.36003d)	Proper Motion Dec: -1.230 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	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	139570.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	220	1	1	Dither 1	4	4	2442.035	
1	SHORT(A)	MRSSHORT		FASTR1	220	1	1	Dither 1	4	4	2442.035	
2	MEDIUM(B)	MRSLONG		FASTR1	120	1	1	Dither 1	4	4	1332.019	
2	MEDIUM(B)	MRSSHORT		FASTR1	120	1	1	Dither 1	4	4	1332.019	
3	LONG(C)	MRSLONG		FASTR1	40	1	1	Dither 1	4	4	444.006	
3	LONG(C)	MRSSHORT		FASTR1	40	1	1	Dither 1	4	4	444.006	

Observation

Proposal 4678, Observation 6: IRAS 05110 MRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution Spectroscopy

Diagnostics

(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(6)	IRAS05110-6616	RA: 05 11 10.6392 (77.7943300d)	Proper Motion RA: 1.840 mas/yr	
		Dec: -66 12 53.63 (-66.21490d)	Proper Motion Dec: 0.103 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	FND	FAST	6	1	1	16.65	139571.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	128	1	1	Dither 1	4	4	1420.82	
1	SHORT(A)	MRSSHORT		FASTR1	62	2	1	Dither 1	4	8	1387.52	
2	MEDIUM(B)	MRSLONG		FASTR1	90	1	1	Dither 1	4	4	999.014	
2	MEDIUM(B)	MRSSHORT		FASTR1	90	1	1	Dither 1	4	4	999.014	
3	LONG(C)	MRSLONG		FASTR1	24	1	1	Dither 1	4	4	266.404	
3	LONG(C)	MRSSHORT		FASTR1	24	1	1	Dither 1	4	4	266.404	

Observation

Proposal 4678, Observation 7: IRAS 05360 MRS Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: MIRI Medium Resolution Spectroscopy

Diagnostics

(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)	IRAS05360-7121	RA: 05 35 25.8456 (83.8576900d) Dec: -71 19 56.65 (-71.33240d) Equinox: J2000	Proper Motion RA: 2.631 mas/yr Proper Motion Dec: 0.730 mas/yr Parallax: 0" Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
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	54682.13

Template

Primary Channel	Simultaneous Imaging	Imager Subarray	Grating Wheel Direction
All MRS	NO	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	SHORT(A)	MRSLONG		FASTR1	50	1	1	Dither 1	4	4	555.008	
1	SHORT(A)	MRSSHORT		FASTR1	50	1	1	Dither 1	4	4	555.008	
2	MEDIUM(B)	MRSLONG		FASTR1	24	1	1	Dither 1	4	4	266.404	
2	MEDIUM(B)	MRSSHORT		FASTR1	24	1	1	Dither 1	4	4	266.404	
3	LONG(C)	MRSLONG		FASTR1	12	1	1	Dither 1	4	4	133.202	
3	LONG(C)	MRSSHORT		FASTR1	12	1	1	Dither 1	4	4	133.202	

Observation

Proposal 4678, Observation 11: MSX SMC 029 NRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit Spectroscopy

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
(1)	MSXSMC029	RA: 00 36 46.3319 (9.1930496d)	Proper Motion RA: -2.078 mas/yr	
		Dec: -73 31 35.42 (-73.52651d)	Proper Motion Dec: -0.457 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB2048	F110W	NRSRAPID	3	1	1	3.628	139566.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRSRAPID	18	1	1	NONE	3	3	88.867	139566.14

Observation

Proposal 4678, Observation 12: SMP LMC 011 NRS Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit 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
(2)	SMPLMC011	RA: 04 51 37.8281 (72.9076171d)	Proper Motion RA: 0.833 mas/yr	
		Dec: -67 05 16.88 (-67.08802d)	Proper Motion Dec: 0.241 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB2048	F110W	NRSRAPID	3	1	1	3.628	139567.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRSRAPID	20	1	1	NONE	3	3	98.215	139567.14

Observation

Proposal 4678, Observation 13: IRAS 05073 NRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit 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
(3)	IRAS05073-6752	RA: 05 07 13.9165 (76.8079854d)	Proper Motion RA: 2.169 mas/yr	
		Dec: -67 48 46.72 (-67.81298d)	Proper Motion Dec: -0.787 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB2048	F110W	NRSRAPID	3	1	1	3.628	139568.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRS	14	1	1	NONE	3	3	266.479	139568.14

Observation

Proposal 4678, Observation 14: IRAS 06111 NRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit Spectroscopy

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
(4)	IRAS06111-7023	RA: 06 10 32.0148 (92.6333950d)	Proper Motion RA: -1.566 mas/yr	
		Dec: -70 24 40.79 (-70.41133d)	Proper Motion Dec: 0.510 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB2048	F110W	NRSRAPID	3	1	1	3.628	139569.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRS	14	1	1	NONE	3	3	266.479	139569.14

Observation

Proposal 4678, Observation 15: J004441 NRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit Spectroscopy

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
(5)	2MASSJ004441-7321	RA: 00 44 41.1035 (11.1712646d)	Proper Motion RA: 0.632 mas/yr	
		Dec: -73 21 36.12 (-73.36003d)	Proper Motion Dec: -1.230 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	139570.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRS	12	1	1	NONE	3	3	229.087	139570.14

Observation

Proposal 4678, Observation 16: IRAS 05110 NRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit Spectroscopy

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
(6)	IRAS05110-6616	RA: 05 11 10.6392 (77.7943300d)	Proper Motion RA: 1.840 mas/yr	
		Dec: -66 12 53.63 (-66.21490d)	Proper Motion Dec: 0.103 mas/yr	
		Equinox: J2000	Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB32	F110W	NRSRAPID	3	1	1	0.08	139571.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRS	10	1	1	NONE	3	3	191.695	139571.14

Observation

Proposal 4678, Observation 17: IRAS 05360 NRS

Mon Jul 15 16:00:22 GMT 2024

Diagnostic Status: Warning

Observing Template: NIRSpec Fixed Slit Spectroscopy

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
(7)	IRAS05360-7121	RA: 05 35 25.8456 (83.8576900d) Dec: -71 19 56.65 (-71.33240d) Equinox: J2000	Proper Motion RA: 2.631 mas/yr Proper Motion Dec: 0.730 mas/yr Parallax: 0" Epoch of Position: 2000.0	

Comments: Position from Gaia EDR3
Category=Star
Description=[Carbon stars, Post-asymptotic giant branch]
Extended=NO

Acquisition

#	Target	TA Method	Subarray	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	SAME	WATA	SUB2048	F110W	NRSRAPID	3	1	1	3.628	139573.15

Template

Slit	Subarray
S200A1	SUBS200A1

Dithers

#	Primary Dither Positions	Sub-Pixel Pattern
1	3	NONE

Spectral Elements

#	Grating/Filter	Slit	Readout Pattern	Groups/Int	Integrations/Exp	#	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	G395H/F290LP	S200A1	NRS	10	1	1	NONE	3	3	191.695	139573.14