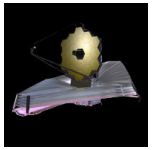

1960 - The JWST Protostellar Ice Legacy Survey

Cycle: 1, Proposal Category: GO

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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1	B1-a	NIRSpec IFU Spectroscopy	(1) B1A
	2	B1-b	NIRSpec IFU Spectroscopy	(2) B1B
	3	L1448-mm	NIRSpec IFU Spectroscopy	(3) L1448MM
	4	Per-emb-8	NIRSpec IFU Spectroscopy	(4) PER-EMB-8
	5	L1448-IRS1	NIRSpec IFU Spectroscopy	(5) L1448IRS1
	6	Per-emb-22	NIRSpec IFU Spectroscopy	(6) PER-EMB-22

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	7	Per-emb-33	NIRSpec IFU Spectroscopy	(7) PER-EMB-33
	8	Per-emb-35	NIRSpec IFU Spectroscopy	(8) PER-EMB-35
	9	EDJ2009-183	NIRSpec IFU Spectroscopy	(9) EDJ2009-183
	10	Per-emb-27	NIRSpec IFU Spectroscopy	(10) PER-EMB-27
	11	Per-emb-55	NIRSpec IFU Spectroscopy	(11) PER-EMB-55
	12	Per-emb-12	NIRSpec IFU Spectroscopy	(12) PER-EMB-12
	13	TMC1	NIRSpec IFU Spectroscopy	(13) TMC1
	15	L1527	NIRSpec IFU Spectroscopy	(15) L1527

ABSTRACT

This proposal requests NIRSpec-IFU G395H R=2700 observations at 2.87-5.27 micron of 15 low-mass protostellar targets (23 sources) that will be observed with MIRI-MRS in GTO time. Short integration PRISM or G235H integrations are added to cover the shortest wavelengths. Together, the data provide full 2-28 micron spectra that will allow a complete inventory of interstellar ices in the material that feeds young disks in their planet-building phase. The NIRSpec range contains unique features of CN- and S-containing molecules, as well as the prominent solid and gaseous (13)CO2 and (13)CO bands that constrain the chemistry and thermal history of the sources. By observing a significant sample of protostars at high S/N in different evolutionary stages with both NIRSpec and MIRI, we provide a JWST legacy that can be used to investigate trends in abundances and abundance ratios of major and minor C, O, N and S species on spatial scales from >1 pc down to <100 au. Moreover, the high spatial resolution of NIRSpec allows spectral maps of the stronger ice features on ~20 au scales. By matching abundances with what ALMA observes in their hot cores we can address directly the debate whether gas-phase abundances reflect thermal sublimation of ices or whether additional gas-phase chemistry plays a role. Ultimately our protostellar ice inventory can be compared with ices observed in mature edge-on disks to assess chemical inheritance versus evolution and reset of the planet-building material.

OBSERVING DESCRIPTION

We propose to target 15 protostellar systems (23 protostars in total including binary systems) with NIRSpec IFU single pointing, as a complement to MIRI GTO observations. Each observation consists of: 1) G395H/F290LP R=2700 grating/filter combination which covers the 2.87-5.27 micron range that contains essential ice features such as H2O, CO2, OCN-, H2S and OCS as well as CO gas and ice; 2) PRISM/CLEAR setting that spans the entire 0.6-5.3 micron bandwidth of NIRSpec to determine the source continuum at short wavelengths and contribute to the legacy value of the observations. For bright sources, setting 2 is replaced by G235H.

For both settings we select the readout pattern NRSIRS2RAPID for optimal S/N output. Integration times are designed to achieve typically S/N=300

at 4 micron, with a minimum S/N~100 when spatially or spectrally binned. A subset of the brightest sources have shorter integration times to avoid saturation. A 4-point dither is used for each of the grating/filter settings to optimize spatial and spectral sampling. Leakcal is performed only for those sources in the vicinity of the bright infrared molecular clouds NGC1333 and IC348, and without any dithering. Background will be assessed with MSA shutters and fixed slits of NIRSpec instrument.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	B1A	RA: 03 33 16.6690 (53.3194542d) Dec: +31 07 54.90 (31.13192d) Equinox: J2000		
Comments: *Category=ISM* *Description=[Protostars]* *Extended=YES*				
(2)	B1B	RA: 03 33 20.3410 (53.3347542d) Dec: +31 07 21.36 (31.12260d) Equinox: J2000		
Comments: *Category=ISM* *Description=[Protostars]* *Extended=YES*				
(3)	L1448MM	RA: 03 25 38.8750 (51.4119792d) Dec: +30 44 5.28 (30.73480d) Equinox: J2000		
Comments: *Category=ISM* *Description=[Protostars]* *Extended=YES*				
(4)	PER-EMB-8	RA: 03 44 43.9820 (56.1832583d) Dec: +32 01 35.21 (32.02645d) Equinox: J2000		
Comments: *Category=ISM* *Description=[Protostars]* *Extended=YES*				
(5)	L1448IRS1	RA: 03 25 9.4310 (51.2892958d) Dec: +30 46 21.27 (30.77257d) Equinox: J2000		
Comments: 1.424 arcsec, Class 1 *Category=ISM* *Description=[Protostars]* *Extended=YES*				
(6)	PER-EMB-22	RA: 03 25 22.3810 (51.3432542d) Dec: +30 45 13.20 (30.75367d) Equinox: J2000		
Comments: 0.751 arcsec, L1448-IRS2, Class 0 *Category=ISM* *Description=[Protostars]* *Extended=YES*				
(7)	PER-EMB-33	RA: 03 25 36.3460 (51.4014417d) Dec: +30 45 14.94 (30.75415d) Equinox: J2000		
Comments: 0.795 arcsec, L1448IRS3B L1448N, Class 0 *Category=ISM* *Description=[Protostars]* *Extended=YES*				

(8)	PER-EMB-35	RA: 03 28 37.1550 (52.1548125d) Dec: +31 13 31.27 (31.22535d) Equinox: J2000
Comments: 1.908 arcsec, NGC 1333 IRAS1, Class 1 *Category=ISM* *Description=[Protostars]* *Extended=YES*		
(9)	EDJ2009-183	RA: 03 28 59.3350 (52.2472292d) Dec: +31 15 48.40 (31.26344d) Equinox: J2000
Comments: 1.025 arcsec, ASR 106, Class 1 *Category=ISM* *Description=[Protostars]* *Extended=YES*		
(10)	PER-EMB-27	RA: 03 28 55.5660 (52.2315250d) Dec: +31 14 36.72 (31.24353d) Equinox: J2000
Comments: 0.620 arcsec, NGC 1333 IRAS2A, Class 0 *Category=ISM* *Description=[Protostars]* *Extended=YES*		
(11)	PER-EMB-55	RA: 03 44 43.3160 (56.1804833d) Dec: +32 01 31.43 (32.02540d) Equinox: J2000
Comments: 0.618 arcsec, IRAS 03415+3152, Class 1 *Category=ISM* *Description=[Protostars]* *Extended=YES*		
(12)	PER-EMB-12	RA: 03 29 10.4820 (52.2936750d) Dec: +31 13 31.51 (31.22542d) Equinox: J2000
Comments: 1.830 arcsec, NGC 1333 IRAS4A, Class 0 *Category=ISM* *Description=[Protostars]* *Extended=YES*		
(13)	TMC1	RA: 04 41 12.7000 (70.3029167d) Dec: +25 46 34.80 (25.77633d) Equinox: J2000
Comments: *Category=ISM* *Description=[Protostars]* *Extended=YES*		
(15)	L1527	RA: 04 39 53.8753 (69.9744804d) Dec: +26 03 9.51 (26.05264d) Equinox: J2000
Comments: *Category=ISM* *Description=[Protostars]* *Extended=YES*		

Observation

Proposal 1960, Observation 1: B1-a

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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)	B1A	RA: 03 33 16.6690 (53.3194542d) Dec: +31 07 54.90 (31.13192d) Equinox: J2000		

Comments:
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 2: B1-b

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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)	B1B	RA: 03 33 20.3410 (53.3347542d) Dec: +31 07 21.36 (31.12260d) Equinox: J2000		

Comments:
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 3: L1448-mm

Fri May 21 21:00:17 GMT 2021

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
(3)	L1448MM	RA: 03 25 38.8750 (51.4119792d) Dec: +30 44 5.28 (30.73480d) Equinox: J2000		

Comments:
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 4: Per-emb-8

Fri May 21 21:00:17 GMT 2021

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
(4)	PER-EMB-8	RA: 03 44 43.9820 (56.1832583d) Dec: +32 01 35.21 (32.02645d) Equinox: J2000		

Comments:
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 5: L1448-IRS1

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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)	L1448IRS1	RA: 03 25 9.4310 (51.2892958d) Dec: +30 46 21.27 (30.77257d) Equinox: J2000		

Comments: 1.424 arcsec, Class 1
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	5	2	false	true	NONE	4	8	700.267	
2	G235H/F170LP	NRSIRS2RAPID	5	2	false	true	NONE	4	8	700.267	

Observation

Proposal 1960, Observation 6: Per-emb-22

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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)	PER-EMB-22	RA: 03 25 22.3810 (51.3432542d) Dec: +30 45 13.20 (30.75367d) Equinox: J2000		

Comments: 0.751 arcsec, L1448-IRS2, Class 0
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 7: Per-emb-33

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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)	PER-EMB-33	RA: 03 25 36.3460 (51.4014417d) Dec: +30 45 14.94 (30.75415d) Equinox: J2000		

Comments: 0.795 arcsec, L1448IRS3B L1448N, Class 0
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 8: Per-emb-35

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(8)	PER-EMB-35	RA: 03 28 37.1550 (52.1548125d) Dec: +31 13 31.27 (31.22535d) Equinox: J2000		

Comments: 1.908 arcsec, NGC 1333 IRAS1, Class 1
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	5	2	false	true	NONE	4	8	700.267	
2	G235H/F170LP	NRSIRS2RAPID	5	2	false	true	NONE	4	8	700.267	

Observation

Proposal 1960, Observation 9: EDJ2009-183

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(9)	EDJ2009-183	RA: 03 28 59.3350 (52.2472292d) Dec: +31 15 48.40 (31.26344d) Equinox: J2000		

Comments: 1.025 arcsec, ASR 106, Class 1
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	5	2	false	true	NONE	4	8	700.267	
2	G395H/F290LP	NRSIRS2RAPID	5	1	true	false	NONE	1	1	87.533	
3	G235H/F170LP	NRSIRS2RAPID	5	2	false	true	NONE	4	8	700.267	

Observation

Proposal 1960, Observation 10: Per-emb-27

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

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
(10)	PER-EMB-27	RA: 03 28 55.5660 (52.2315250d) Dec: +31 14 36.72 (31.24353d) Equinox: J2000		

Comments: 0.620 arcsec, NGC 1333 IRAS2A, Class 0
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	1	false	true	NONE	4	4	1225.467	
2	G395H/F290LP	NRSIRS2RAPID	20	1	true	false	NONE	1	1	306.367	
3	PRISM/CLEAR	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Observation

Proposal 1960, Observation 11: Per-emb-55

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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
(11)	PER-EMB-55	RA: 03 44 43.3160 (56.1804833d) Dec: +32 01 31.43 (32.02540d) Equinox: J2000		

Comments: 0.618 arcsec, IRAS 03415+3152, Class 1
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	5	2	false	true	NONE	4	8	700.267	
2	G395H/F290LP	NRSIRS2RAPID	5	1	true	false	NONE	1	1	87.533	
3	G235H/F170LP	NRSIRS2RAPID	5	2	false	true	NONE	4	8	700.267	

Observation

Proposal 1960, Observation 12: Per-emb-12

Fri May 21 21:00:17 GMT 2021

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
(12)	PER-EMB-12	RA: 03 29 10.4820 (52.2936750d) Dec: +31 13 31.51 (31.22542d) Equinox: J2000		

Comments: 1.830 arcsec, NGC 1333 IRAS4A, Class 0
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	120	1	false	true	NONE	4	4	7061.023	
2	G395H/F290LP	NRSIRS2RAPID	120	1	true	false	NONE	1	1	1765.256	
3	PRISM/CLEAR	NRSIRS2RAPID	60	1	false	true	NONE	4	4	3559.689	

Observation

Proposal 1960, Observation 13: TMC1

Fri May 21 21:00:17 GMT 2021

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
(13)	TMC1	RA: 04 41 12.7000 (70.3029167d) Dec: +25 46 34.80 (25.77633d) Equinox: J2000		

Comments:
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	5	2	false	true	NONE	4	8	700.267	
2	G235H/F170LP	NRSIRS2RAPID	5	2	false	true	NONE	4	8	700.267	

Observation

Proposal 1960, Observation 15: L1527

Fri May 21 21:00:17 GMT 2021

Diagnostic Status: Warning

Observing Template: NIRSpec IFU 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
(15)	L1527	RA: 04 39 53.8753 (69.9744804d) Dec: +26 03 9.51 (26.05264d) Equinox: J2000		

Comments:
Category=ISM
Description=[Protostars]
Extended=YES

Template

TA Method
NONE

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	4-POINT-DITHER				

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	20	2	false	true	NONE	4	8	2450.934	
2	PRISM/CLEAR	NRSIRS2RAPID	5	2	false	true	NONE	4	8	700.267	