



10662 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Cycle: 5, 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>
Orion BN/KL finger				
	4	NIRSPEC	NIRSpec IFU Spectroscopy	(2) Finger1_tip
	5	NIRSPEC	NIRSpec IFU Spectroscopy	(3) Finger1_2
	6	NIRSPEC	NIRSpec IFU Spectroscopy	(4) Finger1_3
	7	NIRSPEC	NIRSpec IFU Spectroscopy	(5) Finger1_4
	8	NIRSPEC	NIRSpec IFU Spectroscopy	(6) Finger1_5
	9	NIRSPEC	NIRSpec IFU Spectroscopy	(7) Finger1_6
	10	NIRSPEC	NIRSpec IFU Spectroscopy	(8) Finger1_7
	11	NIRSPEC	NIRSpec IFU Spectroscopy	(9) Finger1_8
	3	MIRI MRS	MIRI Medium Resolution Spectroscopy	(2) Finger1_tip

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	12	MIRI MRS	MIRI Medium Resolution Spectroscopy	(3) Finger1_2
	13	MIRI MRS	MIRI Medium Resolution Spectroscopy	(4) Finger1_3
	14	MIRI MRS	MIRI Medium Resolution Spectroscopy	(5) Finger1_4
	15	MIRI MRS	MIRI Medium Resolution Spectroscopy	(6) Finger1_5
	16	MIRI MRS	MIRI Medium Resolution Spectroscopy	(7) Finger1_6
	17	MIRI MRS	MIRI Medium Resolution Spectroscopy	(8) Finger1_7
	18	MIRI MRS	MIRI Medium Resolution Spectroscopy	(9) Finger1_8
Background				
	20	MIRI KL OFF	MIRI Medium Resolution Spectroscopy	(13) ORIONKL-BACKGROUND
	21	NIRSpec Orion KL OF F	NIRSpec IFU Spectroscopy	(13) ORIONKL-BACKGROUND

ABSTRACT

Protostellar mergers produce explosive events that act as transient sources of infrared line luminosity and inject mechanical energy into their natal molecular clouds. The resulting outflows drive shocks that, depending on their velocity, magnetic field, and the ambient ultraviolet radiation field, cool through molecular and atomic line emission. At low densities, H₂ is expected to dominate the cooling, while at higher densities, molecules such as H₂O, CO, and OH, become the primary coolants for shock velocities below about 25 km/s, whereas atomic species dominate at higher velocities. However, the nature and relative contributions of these shocks—including ultraviolet radiation (shock-generated or external) and grain sputtering at high velocities—remain uncertain, as observations of the main cooling species have not yet spatially resolved their key structures, and shock models have yet to capture these processes self-consistently.

We request NIRSpec and MIRI-MRS observations of the Orion BN/KL outflow—the nearest and most spectrally rich example of an explosive outflow. Our goal is to trace the line luminosity and chemical stratification of the key species above and to determine the physical conditions along a molecular jet (‘finger’), including its ‘wake’ and ‘tip’. Combined with velocity-resolved ALMA data for the gas kinematics and state-of-the-art shock models, JWST’s line-rich spectra will enable us to quantify the cooling budget, molecular abundances, and the nature of shocks propagating into both the ambient Orion cloud and the swept-up gas. These data will provide benchmark datasets for identifying shock signatures in more distant or unresolved environments.

OBSERVING DESCRIPTION

JWST Proposal 10662 (Created: Friday, March 13, 2026, 2:11:29PM Eastern Standard Time) - Overview

The unique target of this program is the explosive outflow of the iconic Orion BN/KL, situated in a star-forming region of our Galaxy. Observations in this program are conducted with NIRSPEC and MIRI. Due to constraints on the available V3PA angles for this region we use an 8-points raster instead of the standard mosaic configuration.

- NIRSPEC IFU spectroscopy

We conduct an 8-points raster using all the gratings above 1 micron. We use the H grisms. The observations will be conducted with the NRSRAPID readout, using a 4 point dither.

- MIRI IFU spectroscopy

We will conduct an 8-points raster over the entire spectral range. We use no target acquisition (extended source) and apply a 4 point dither. We use the FAST readout. We also include as recommended (as a bonus), simultaneous Imager observations, to obtain additional images of the Orion molecular cloud (OMC-1) PDR in dust and PAHs emission.

- Off observations : We include spectroscopic off observations to subtract any undesirable emission from scattered light from the Sun or the Galactic plane, telescope emission, Zodiacal light, or instrumental signal.

Proposal 10662 - Targets - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(2)	Finger1_tip	RA: 05 35 11.2768 (83.7969867d) Dec: -05 21 52.29 (-5.36453d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	
	(3)	Finger1_2	RA: 05 35 11.4119 (83.7975496d) Dec: -05 21 53.99 (-5.36500d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	
	(4)	Finger1_3	RA: 05 35 11.5483 (83.7981179d) Dec: -05 21 55.70 (-5.36547d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	
	(5)	Finger1_4	RA: 05 35 11.6846 (83.7986858d) Dec: -05 21 57.41 (-5.36595d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	
	(6)	Finger1_5	RA: 05 35 11.8203 (83.7992512d) Dec: -05 21 59.12 (-5.36642d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	
	(7)	Finger1_6	RA: 05 35 11.9541 (83.7998087d) Dec: -05 22 0.78 (-5.36688d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	
	(8)	Finger1_7	RA: 05 35 12.0864 (83.8003600d) Dec: -05 22 2.45 (-5.36735d) Equinox: J2000 <i>Comments:</i> <i>Category=ISM</i> <i>Description=[Interstellar clouds, Molecular clouds, Molecular gas]</i> <i>Extended=YES</i>	Epoch of Position: 2000	

Proposal 10662 - Targets - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

	(9)	Finger1_8	RA: 05 35 12.2223 (83.8009263d) Dec: -05 22 4.15 (-5.36782d) Equinox: J2000	Epoch of Position: 2000
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES			
	(13)	ORIONKL-BACKGROUND	RA: 05 27 19.4000 (81.8308333d) Dec: -05 32 4.40 (-5.53456d) Equinox: J2000	
	Comments: Category=ISM Description=[Interstellar absorption, Interstellar clouds, Interstellar dust] Extended=YES			

Proposal 10662 - Observation 4 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 4: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(2)	Finger1_tip	RA: 05 35 11.2768 (83.7969867d) Dec: -05 21 52.29 (-5.36453d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
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	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	5	1	true	false	NONE	1	1	64.421	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	5	1	true	false	NONE	1	1	64.421	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	5	1	true	false	NONE	1	1	64.421	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 5 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 5: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(3)	Finger1_2	RA: 05 35 11.4119 (83.7975496d) Dec: -05 21 53.99 (-5.36500d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	4-POINT-DITHER										
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 6 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 6: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(4)	Finger1_3	RA: 05 35 11.5483 (83.7981179d) Dec: -05 21 55.70 (-5.36547d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
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	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 7 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 7: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(5)	Finger1_4	RA: 05 35 11.6846 (83.7986858d) Dec: -05 21 57.41 (-5.36595d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	4-POINT-DITHER										
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 8 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 8: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(6)	Finger1_5	RA: 05 35 11.8203 (83.7992512d) Dec: -05 21 59.12 (-5.36642d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	4-POINT-DITHER										
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 9 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 9: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(7)	Finger1_6	RA: 05 35 11.9541 (83.7998087d) Dec: -05 22 0.78 (-5.36688d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	4-POINT-DITHER										
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 10 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 10: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(8)	Finger1_7	RA: 05 35 12.0864 (83.8003600d) Dec: -05 22 2.45 (-5.36735d) Equinox: J2000				Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	4-POINT-DITHER										
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Ex p	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 11 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 11: NIRSPEC											Fri Mar 13 19:11:29 GMT 2026
	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		
	(9)	Finger1_8	RA: 05 35 12.2223 (83.8009263d)				Epoch of Position: 2000					
			Dec: -05 22 4.15 (-5.36782d)									
			Equinox: J2000									
Template	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
	TA Method						HFF Readout Mode					
	NONE						false					
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	Optional ETC ID
	1	G140H/F070LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	2	G140H/F070LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	4	G235H/F170LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
	5	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	4	8	429.471	
	6	G395H/F290LP	NRSRAPID	4	1	true	false	NONE	1	1	53.684	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											

Proposal 10662 - Observation 3 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 3: MIRI MRS												Fri Mar 13 19:11:29 GMT 2026
	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		
	(2)	Finger1_tip	RA: 05 35 11.2768 (83.7969867d) Dec: -05 21 52.29 (-5.36453d) Equinox: J2000					Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray		Grating Wheel Direction		
		All MRS				YES			FULL		Allow Auto Reorder		
Dithers	#	Dither Type					Optimized For			Direction			
	1	4-Point					EXTENDED SOURCE			NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 3 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Offset -0.7094335499447598 arcsec, -0.664540421998066 arcsec
	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible

Proposal 10662 - Observation 12 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 12: MIRI MRS												Fri Mar 13 19:11:29 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution 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		
	(3)	Finger1_2	RA: 05 35 11.4119 (83.7975496d) Dec: -05 21 53.99 (-5.36500d) Equinox: J2000				Epoch of Position: 2000						
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray		Grating Wheel Direction		
	F560W	All MRS				YES			FULL		Allow Auto Reorder		
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 12 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 13 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 13: MIRI MRS												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution 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		
	(4)	Finger1_3	RA: 05 35 11.5483 (83.7981179d) Dec: -05 21 55.70 (-5.36547d) Equinox: J2000				Epoch of Position: 2000						
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging		Imager Subarray		Grating Wheel Direction			
		All MRS				YES		FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 13 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 14 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 14: MIRI MRS												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution 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		
	(5)	Finger1_4	RA: 05 35 11.6846 (83.7986858d) Dec: -05 21 57.41 (-5.36595d) Equinox: J2000					Epoch of Position: 2000					
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray		Grating Wheel Direction		
		All MRS				YES			FULL		Allow Auto Reorder		
Dithers	#	Dither Type					Optimized For			Direction			
	1	4-Point					EXTENDED SOURCE			NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 14 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 15 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 15: MIRI MRS												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution 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		
	(6)	Finger1_5	RA: 05 35 11.8203 (83.7992512d) Dec: -05 21 59.12 (-5.36642d) Equinox: J2000				Epoch of Position: 2000						
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel			Simultaneous Imaging			Imager Subarray			Grating Wheel Direction		
		All MRS			YES			FULL			Allow Auto Reorder		
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 15 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 16 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 16: MIRI MRS												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution 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		
	(7)	Finger1_6	RA: 05 35 11.9541 (83.7998087d) Dec: -05 22 0.78 (-5.36688d) Equinox: J2000				Epoch of Position: 2000						
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging		Imager Subarray		Grating Wheel Direction			
		All MRS				YES		FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 16 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 17 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 17: MIRI MRS												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution 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		
	(8)	Finger1_7	RA: 05 35 12.0864 (83.8003600d)					Epoch of Position: 2000					
			Dec: -05 22 2.45 (-5.36735d)										
			Equinox: J2000										
		Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES											
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray		Grating Wheel Direction		
		All MRS				YES			FULL		Allow Auto Reorder		
Dithers	#	Dither Type					Optimized For			Direction			
	1	4-Point					EXTENDED SOURCE			NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 17 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 18 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 18: MIRI MRS												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution Spectroscopy												
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		
	(9)	Finger1_8	RA: 05 35 12.2223 (83.8009263d) Dec: -05 22 4.15 (-5.36782d) Equinox: J2000				Epoch of Position: 2000						
	Comments: Category=ISM Description=[Interstellar clouds, Molecular clouds, Molecular gas] Extended=YES												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging		Imager Subarray		Grating Wheel Direction			
		All MRS				YES		FULL		Allow Auto Reorder			
Dithers	#	Dither Type				Optimized For				Direction			
	1	4-Point				EXTENDED SOURCE				NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	4	8	122.102	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	4	8	566.108	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	4	8	566.108	

Proposal 10662 - Observation 18 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 20 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 20: MIRI KL OFF												Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning												
	Observing Template: MIRI Medium Resolution Spectroscopy												
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		
	(13)	ORIONKL-BACKGROUND	RA: 05 27 19.4000 (81.8308333d) Dec: -05 32 4.40 (-5.53456d) Equinox: J2000										
	Comments: Category=ISM Description=[Interstellar absorption, Interstellar clouds, Interstellar dust] Extended=YES												
Acquisition	#	Target											
	1	NONE											
Template	AcqFilter	Primary Channel				Simultaneous Imaging			Imager Subarray		Grating Wheel Direction		
	F560W	All MRS				YES			FULL		Allow Auto Reorder		
Dithers	#	Dither Type					Optimized For			Direction			
	1	2-Point					EXTENDED SOURCE			NEGATIVE			
Spectral Elements	#	Wavelength Range	Detector	Filter	Readout Pattern	Groups/Int	Integrations/Exp	Exposures/Dith	Dither	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1		IMAGER	F560W	FASTR1	5	2	1	Dither 1	2	4	61.051	
	1	SHORT(A)	MRSLONG		FASTR1	25	2	1	Dither 1	2	4	283.054	
	1	SHORT(A)	MRSSHORT		FASTR1	25	2	1	Dither 1	2	4	283.054	
	2		IMAGER	F770W	FASTR1	5	2	1	Dither 1	2	4	61.051	
	2	MEDIUM(B)	MRSLONG		FASTR1	25	2	1	Dither 1	2	4	283.054	
	2	MEDIUM(B)	MRSSHORT		FASTR1	25	2	1	Dither 1	2	4	283.054	
	3		IMAGER	F1000W	FASTR1	5	2	1	Dither 1	2	4	61.051	
	3	LONG(C)	MRSLONG		FASTR1	25	2	1	Dither 1	2	4	283.054	
	3	LONG(C)	MRSSHORT		FASTR1	25	2	1	Dither 1	2	4	283.054	

Proposal 10662 - Observation 20 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Special Requirements	Sequence Observations 20, 3, 12, 13, 14, 15, 16, 17, 18 (reordered), Non-interruptible
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Proposal 10662 - Observation 21 - Dissecting the Explosive Outflow in Orion BN/KL through JWST Spectroscopy

Observation	Proposal 10662, Observation 21: NIRSpec Orion KL OFF											Fri Mar 13 19:11:30 GMT 2026
	Diagnostic Status: Warning											
	Observing Template: NIRSpec IFU Spectroscopy											
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		
	(13)	ORIONKL-BACKGROUND	RA: 05 27 19.4000 (81.8308333d) Dec: -05 32 4.40 (-5.53456d) Equinox: J2000									
	Comments: Category=ISM Description=[Interstellar absorption, Interstellar clouds, Interstellar dust] Extended=YES											
Template	TA Method						HFF Readout Mode					
	NONE						false					
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	CYCLING		SMALL		1		2				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	Optional ETC ID
	1	G395H/F290LP	NRSRAPID	4	2	false	true	NONE	2	4	214.735	
	2	G395H/F290LP	NRSRAPID	4	1	true	true	NONE	2	2	107.368	
	3	G235H/F170LP	NRSRAPID	4	2	false	true	NONE	2	4	214.735	
	4	G235H/F170LP	NRSRAPID	4	1	true	true	NONE	2	2	107.368	
	5	G140H/F100LP	NRSRAPID	4	2	false	true	NONE	2	4	214.735	
	6	G140H/F100LP	NRSRAPID	4	1	true	true	NONE	2	2	107.368	
Special Requirements	Sequence Observations 21, 4, 5, 6, 7, 8, 9, 10, 11 (reordered), Non-interruptible											