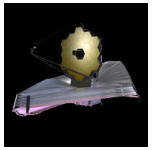

8147 - Chasing the Great Red Spot: Exploring Coupling Between Jupiter's Atmospheric Layers

Cycle: 4, Proposal Category: GO

INVESTIGATORS

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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Jupiter-GRS-observations				
	1	Jupiter-GRS-1-1	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	2	Jupiter-GRS-1-2	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	3	Jupiter-GRS-1-3	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	4	Jupiter-GRS-1-4	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	5	Jupiter-GRS-2-1	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	6	Jupiter-GRS-2-2	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	7	Jupiter-GRS-2-3	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	8	Jupiter-GRS-2-4	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	9	Jupiter-GRS-3-1	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	10	Jupiter-GRS-3-2	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	11	Jupiter-GRS-3-3	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS
	12	Jupiter-GRS-3-4	NIRSpec IFU Spectroscopy	(1) Jupiter-GRS

ABSTRACT

The upper atmospheric global energy budget of gas and ice giants remains a mystery. This is because ground-based and space instrumentation campaigns have been unable to characterize coupling between different atmospheric layers. Understanding coupling mechanisms, and how depositions of gravity waves generated in the deep troposhere dissipate through upper layers, is the key to understand the global energy balance.

During JWST ERS #1373 Jupiter's Great Red Spot (GRS) observations revealed for the first time small-scale upper-atmospheric features in the planet's ionosphere. These appeared to be a result of upward propagating waves generated in the lower atmosphere. Being just one snap-shot observation, there were no additional means to constrain to what extent does wave dynamics affect the upper atmosphere.

We propose to track the GRS across the planet with NIRspec-IFU for 3 rotations, which allows to to distinguish between stochastic and secular trends in wave activity, and therefore how waves affect the upper atmosphere above the most famous storm in the Solar System. JWST acquires high spectral resolution spectra of ionospheric H3+, enabling to study changes in temperature and density, and how these vary as waves propagate in the upper atmosphere.

Exploring dynamics of energy transport at Jupiter will enable us to further our understanding of the other giant planets, as little is known about these. Furthermore, output from this program will enable calculations of important wave parameters for exoplanetary atmospheric models and therefore contribute to the detection and characterization of exo-ionospheres.

OBSERVING DESCRIPTION

We propose to track Jupiter's Great Red Spot across the planet for three consecutive rotations in order to capture the evolution of the expected long-period waves in the upper atmosphere. By using NIRSpec IFU G395H/L290P we will be able to extract ionospheric H3+, an abundant ion used to probe this region. Spectral modelling will be used to derive ionospheric temperatures and chemical processes, which will help in the characterisation of how exactly does wave activity from the troposphere model and shape the upper atmosphere. These observations provide the only direct way to

test model predictions and a way to understand how upper atmospheric heating is transported across giant planets.

Proposal 8147 - Targets - Chasing the Great Red Spot: Exploring Coupling Between Jupiter's Atmospheric Layers

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Observation

Proposal 8147, Observation 1: Jupiter-GRS-1-1 Thu Feb 12 16:00:27 GMT 2026

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: The row shift will be determined once the roll angle of the spacecraft is known.

Diagnostics

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

(Jupiter-GRS-1-1 (Obs 1)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	5 After 1 by 8 Hours to 14 Hours Sequence Observations 1, 2, 3, 4, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 2: Jupiter-GRS-1-2

Thu Feb 12 16:00:27 GMT 2026

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(Jupiter-GRS-1-2 (Obs 2)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 1, 2, 3, 4, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 3: Jupiter-GRS-1-3 Thu Feb 12 16:00:27 GMT 2026

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(Jupiter-GRS-1-3 (Obs 3)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 1, 2, 3, 4, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 4: Jupiter-GRS-1-4 Thu Feb 12 16:00:27 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.

(Jupiter-GRS-1-4 (Obs 4)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 1, 2, 3, 4, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 5: Jupiter-GRS-2-1

Thu Feb 12 16:00:27 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.

(Jupiter-GRS-2-1 (Obs 5)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	5 After 1 by 8 Hours to 14 Hours 9 After 5 by 8 Hours to 14 Hours Sequence Observations 5, 6, 7, 8, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 6: Jupiter-GRS-2-2

Thu Feb 12 16:00:27 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.

(Jupiter-GRS-2-2 (Obs 6)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 5, 6, 7, 8, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 7: Jupiter-GRS-2-3

Thu Feb 12 16:00:27 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.

(Jupiter-GRS-2-3 (Obs 7)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 5, 6, 7, 8, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 8: Jupiter-GRS-2-4

Thu Feb 12 16:00:27 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.

(Jupiter-GRS-2-4 (Obs 8)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 5, 6, 7, 8, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 9: Jupiter-GRS-3-1

Thu Feb 12 16:00:27 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.

(Jupiter-GRS-3-1 (Obs 9)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	9 After 5 by 8 Hours to 14 Hours Sequence Observations 9, 10, 11, 12, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 10: Jupiter-GRS-3-2

Thu Feb 12 16:00:27 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.

(Jupiter-GRS-3-2 (Obs 10)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 9, 10, 11, 12, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 11: Jupiter-GRS-3-3 Thu Feb 12 16:00:27 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.

(Jupiter-GRS-3-3 (Obs 11)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 9, 10, 11, 12, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075

Observation

Proposal 8147, Observation 12: Jupiter-GRS-3-4 Thu Feb 12 16:00:27 GMT 2026

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(Jupiter-GRS-3-4 (Obs 12)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	Jupiter-GRS	STD=JUPITER	TYPE=PGRAPHIC,LONG=358.3,LAT=-20.7,ALT=600,R_LONG=0.32495,R_LAT=0,R_ALT=0,EPOCH=15-MAR-2026:00:00:00,EpochTimeScale=UTC	

Comments: Extended=YES

Template

TA Method	HFF Readout Mode
NONE	false

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order
3	2	10.0	10.0	42.8	0.0	DEFAULT

Dithers

#	Dither Type	Size	Starting Point	Number of Points	Points
1	NONE				

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	NRSIRS2RAPID	10	1	false	false	NONE	1	1	160.478	

Special Requirements	
	Sequence Observations 9, 10, 11, 12, Non-interruptible DEFAULT WINDOW: NOT OCCULTATION OF Jupiter-GRS BY JUPITER FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY IO FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY EUROPA FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY GANYMEDE FROM JWST DEFAULT WINDOW: NOT ECLIPSE PENUMBRAL PARTIAL OF Jupiter-GRS BY CALLISTO FROM JWST DEFAULT WINDOW: SEPARATION OF Jupiter-GRS IO FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS EUROPA FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS GANYMEDE FROM JWST GREATER THAN 10" DEFAULT WINDOW: SEPARATION OF Jupiter-GRS CALLISTO FROM JWST GREATER THAN 10" DEFAULT WINDOW: ANGULAR RATE Jupiter-GRS FROM JWST LESS THAN 0.075