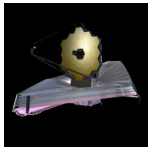

3716 - The Saturnian satellites as a laboratory for CO2 in the outer solar system

Cycle: 2, Proposal Category: GO

INVESTIGATORS

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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
MIMAS				
	1	MIMAS (leading)	NIRSpec IFU Spectroscopy	(1) MIMAS
	15	MIMAS (trailing)	NIRSpec IFU Spectroscopy	(1) MIMAS
TETHYS				
	16	tethys (leading)	NIRSpec IFU Spectroscopy	(2) TETHYS
	17	TETHYS (trailing)	NIRSpec IFU Spectroscopy	(2) TETHYS
DIONE				
	18	DIONE (leading)	NIRSpec IFU Spectroscopy	(3) DIONE
	19	DIONE (trailing)	NIRSpec IFU Spectroscopy	(3) DIONE
RHEA				
	20	RHEA (leading)	NIRSpec IFU Spectroscopy	(4) RHEA
	21	RHEA (trailing)	NIRSpec IFU Spectroscopy	(4) RHEA
HYPERION				
	22	HYPERION	NIRSpec IFU Spectroscopy	(5) HYPERION
IAPETUS				
	24	IAPETUS (leading)	NIRSpec IFU Spectroscopy	(6) IAPETUS
	25	IAPETUS(trailing)	NIRSpec IFU Spectroscopy	(6) IAPETUS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
	125	IAPETUS(trailing)	NIRSpec IFU Spectroscopy	(6) IAPETUS
Phoebe				
	26	PHOEBE	NIRSpec IFU Spectroscopy	(7) PHOEBE
ALBIORIX				
	32	ALBIORIX	NIRSpec IFU Spectroscopy	(8) ALBIORIX
SIONARQ				
	33	SIONARQ	NIRSpec IFU Spectroscopy	(9) SIONARQ

ABSTRACT

One of the clearest unifying themes of nearly all Cycle 1 JWST near IR spectra of small bodies from Jupiter outward is the ubiquitous presence of CO2. While CO2 seems to be everywhere, its presence is fundamentally a mystery on almost every object. It is found where it is too hot, it is subliming where it is too cold, and it is mixed and trapped in unknown ways. Though we know little, understanding this poorly studied but incredibly common ice is critical to our understanding of volatiles, clathrates, irradiation, organics, and more throughout the outer solar system. Determining the fundamental parameters that control the presence and state of CO2 through the disparate environments sampled by the Cycle 1 observations is difficult, as it is nearly impossible to separate out the effects of temperature, body size and activity, radiation environment, and formation location. The Saturnian satellite system, including both regular and irregular satellites, however, provides an ideal laboratory for the study of CO2 in the solar system. These objects allow us to study a group of objects with identical insolation, but with a range of diameters (~30 km - 1527 km), environments (in the electron sheet, in the magnetosphere, beyond the magnetosphere), ice exposure (from modest to complete), organic abundance (from insubstantial to substantial) and formation locations (solar vs. planetary disk). Understanding of the distribution and state of CO2 on these satellites will provide the critical parameter space exploration that should allow us to understand the variables controlling CO2 on surfaces throughout the outer solar system.

OBSERVING DESCRIPTION

We propose to obtain NIRSpec IFU G235H and G395M spectra of the leading and trailing hemisphere of the large icy moons of Saturn, as well as single phases of Hyperion and Phoebe and PRISM mode observations of the small irregular satellites Albiorix and Sionarq. The observations will give high S/N measurement of the CO2 lines at 2.7 microns and 4.26 microns which will allow us to measure the position, depth, and shape of the CO2 lines as a probe of the sources and states of CO2 on these objects. Nearly all targets have been observed at low spectral resolution and poorer S/N by VIMS on board the Cassini, so the S/N requirements for each moon are set by known line strengths.

All of the observations which target leading and trailing hemispheres of these bodies are constrained to occur within +/-20 degrees of elongation of the satellite with the exception of Iapetus, which is constainted to occur within +/- 10 degrees owing to the extreme hemispheric constrast on this satellite.

We use 4 position dither mode for accurate background subtraction in this region of space where scattered light can be present, and we do all observations in the NRSIRS2RAPID mode for best noise performance.

Proposal 3716 - Targets - The Saturnian satellites as a laboratory for CO2 in the outer solar system

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	MIMAS	STD=SATURN	STD=MIMAS	
Comments: Extended=NO				
(2)	TETHYS	STD=SATURN	STD=TETHYS	
Comments: Extended=Unknown				
(3)	DIONE	STD=SATURN	STD=DIONE	
Comments: Extended=Unknown				
(4)	RHEA	STD=SATURN	STD=RHEA	
Comments: Extended=Unknown				
(5)	HYPERION	STD=SATURN	STD=HYPERION	
Comments: Extended=Unknown				
(6)	IAPETUS	STD=SATURN	STD=IAPETUS	
Comments: Extended=NO				
(7)	PHOEBE	STD=SATURN	STD=PHOEBE	
Comments: Extended=Unknown				
(8)	ALBIORIX	STD=SATURN	STD=ALBIORIX	
Comments: Extended=NO				
(9)	SIONARQ	STD=SATURN	STD=SIARNAQ	
Comments: Extended=NO				

Observation

Proposal 3716, Observation 1: MIMAS (leading) Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

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

(MIMAS (leading) (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)	MIMAS	STD=SATURN	STD=MIMAS	

Comments: Extended=NO

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	G235H/F170LP	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	
2	G395M/F290LP	NRSIRS2RAPID	21	1	false	true	NONE	4	4	1283.822	

Special Requirements

Between Dates 10-OCT-2023:00:00:00 and 28-NOV-2023:00:00:00

DEFAULT WINDOW: NOT OCCULTATION OF MIMAS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF MIMAS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF MIMAS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE MIMAS FROM JWST LESS THAN 0.075
ORBITAL LONGITUDE OF MIMAS BETWEEN 70 110

Observation

Proposal 3716, Observation 15: MIMAS (trailing) Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 15:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(MIMAS (trailing) (Obs 15)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(1)	MIMAS	STD=SATURN	STD=MIMAS	

Comments: Extended=NO

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	G235H/F170LP	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	
2	G395M/F290LP	NRSIRS2RAPID	21	1	false	true	NONE	4	4	1283.822	

Special Requirements

Between Dates 04-JUN-2024:00:00:00 and 26-JUL-2026:00:00:00

DEFAULT WINDOW: NOT OCCULTATION OF MIMAS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF MIMAS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF MIMAS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE MIMAS FROM JWST LESS THAN 0.075
ORBITAL LONGITUDE OF MIMAS BETWEEN 250 290

Observation

Proposal 3716, Observation 16: tethys (leading)

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 16:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(tethys (leading) (Obs 16)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(2)	TETHYS	STD=SATURN	STD=TETHYS	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	4	1	false	true	NONE	4	4	291.778	

Special Requirements

Between Dates 10-OCT-2023:00:00:00 and 28-NOV-2023:00:00:00

ORBITAL LONGITUDE OF TETHYS BETWEEN 70 110
DEFAULT WINDOW: NOT OCCULTATION OF TETHYS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF TETHYS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF TETHYS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE TETHYS FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 17: TETHYS (trailing)

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 17:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(TETHYS (trailing) (Obs 17)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

(Visit 17:1) Informational (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(2)	TETHYS	STD=SATURN	STD=TETHYS	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	4	1	false	true	NONE	4	4	291.778	

Special Requirements

Between Dates 04-JUN-2024:00:00:00 and 26-JUL-2024:00:00:00

ORBITAL LONGITUDE OF TETHYS BETWEEN 250 290
DEFAULT WINDOW: NOT OCCULTATION OF TETHYS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF TETHYS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF TETHYS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE TETHYS FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 18: DIONE (leading)

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 18:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(DIONE (leading) (Obs 18)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(3)	DIONE	STD=SATURN	STD=DIONE	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	

Special Requirements

Between Dates 10-OCT-2023:00:00:00 and 28-NOV-2023:00:00:00

ORBITAL LONGITUDE OF DIONE BETWEEN 70 110
DEFAULT WINDOW: NOT OCCULTATION OF DIONE BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF DIONE RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF DIONE TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE DIONE FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 19: DIONE (trailing) Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 19:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(DIONE (trailing) (Obs 19)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

(Visit 19:1) Informational (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(3)	DIONE	STD=SATURN	STD=DIONE	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	

Special Requirements

Between Dates 04-JUN-2024:00:00:00 and 26-JUL-2024:00:00:00

ORBITAL LONGITUDE OF DIONE BETWEEN 250 290
DEFAULT WINDOW: NOT OCCULTATION OF DIONE BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF DIONE RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF DIONE TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE DIONE FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 20: RHEA (leading)

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 20:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(RHEA (leading) (Obs 20)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(4)	RHEA	STD=SATURN	STD=RHEA	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	

Special Requirements

Between Dates 10-OCT-2023:00:00:00 and 28-NOV-2023:00:00:00

ORBITAL LONGITUDE OF RHEA BETWEEN 70 110
DEFAULT WINDOW: NOT OCCULTATION OF RHEA BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF RHEA TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE RHEA FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 21: RHEA (trailing) Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 21:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(RHEA (trailing) (Obs 21)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

(Visit 21:1) Informational (Form): Visit schedulable, but most scheduling windows are when JWST is pointed in direction of greatest micrometeoroid impact risk. This is likely due to scheduling special requirements.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(4)	RHEA	STD=SATURN	STD=RHEA	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	

Special Requirements

Between Dates 04-JUN-2024:00:00:00 and 26-JUL-2024:00:00:00

ORBITAL LONGITUDE OF RHEA BETWEEN 250 290
DEFAULT WINDOW: NOT OCCULTATION OF RHEA BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF RHEA TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE RHEA FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 22: HYPERION

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 22:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(HYPERION (Obs 22)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(5)	HYPERION	STD=SATURN	STD=HYPERION	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	6	1	false	true	NONE	4	4	408.489	
2	G395M/F290LP	NRSIRS2RAPID	20	1	false	true	NONE	4	4	1225.467	

Special Requirements

Between Dates 10-OCT-2023:00:00:00 and 28-NOV-2023:00:00:00

DEFAULT WINDOW: NOT OCCULTATION OF HYPERION BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF HYPERION RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF HYPERION TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE HYPERION FROM JWST LESS THAN 0.075
ORBITAL LONGITUDE OF HYPERION BETWEEN 60 120

Observation

Proposal 3716, Observation 24: IAPETUS (leading)

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 24:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(IAPETUS (leading) (Obs 24)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(6)	IAPETUS	STD=SATURN	STD=IAPETUS	

Comments: Extended=NO

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	5	1	false	true	NONE	4	4	350.133	

Special Requirements

ORBITAL LONGITUDE OF IAPETUS BETWEEN 80 110
DEFAULT WINDOW: NOT OCCULTATION OF IAPETUS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF IAPETUS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF IAPETUS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE IAPETUS FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 25: IAPETUS(trailing) Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 25:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(IAPETUS(trailing) (Obs 25)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(6)	IAPETUS	STD=SATURN	STD=IAPETUS	

Comments: Extended=NO

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	

Special Requirements

ORBITAL LONGITUDE OF IAPETUS BETWEEN 260 280
DEFAULT WINDOW: NOT OCCULTATION OF IAPETUS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF IAPETUS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF IAPETUS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE IAPETUS FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 125: IAPETUS(trailing) Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Comments: Repeat of failed observation 25

Diagnostics

(Visit 125:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(IAPETUS(trailing) (Obs 125)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(6)	IAPETUS	STD=SATURN	STD=IAPETUS	

Comments: Extended=NO

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	G235H/F170LP	NRSIRS2RAPID	2	1	false	true	NONE	4	4	175.067	
2	G395M/F290LP	NRSIRS2RAPID	3	1	false	true	NONE	4	4	233.422	

Special Requirements

ORBITAL LONGITUDE OF IAPETUS BETWEEN 260 280
DEFAULT WINDOW: NOT OCCULTATION OF IAPETUS BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF IAPETUS RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF IAPETUS TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE IAPETUS FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 26: PHOEBE

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 26:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(PHOEBE (Obs 26)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(7)	PHOEBE	STD=SATURN	STD=PHOEBE	

Comments: Extended=Unknown

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	G235H/F170LP	NRSIRS2RAPID	18	1	false	true	NONE	4	4	1108.756	
2	G395M/F290LP	NRSIRS2RAPID	18	1	false	true	NONE	4	4	1108.756	

Special Requirements

DEFAULT WINDOW: NOT OCCULTATION OF PHOEBE BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF PHOEBE RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF PHOEBE TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE PHOEBE FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 32: ALBIORIX

Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 32:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(ALBIORIX (Obs 32)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(8)	ALBIORIX	STD=SATURN	STD=ALBIORIX	

Comments: Extended=NO

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	PRISM/CLEAR	NRSIRS2RAPID	40	1	false	true	NONE	4	4	2392.578	

Special Requirements

DEFAULT WINDOW: NOT OCCULTATION OF ALBIORIX BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF ALBIORIX RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF ALBIORIX TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE ALBIORIX FROM JWST LESS THAN 0.075

Observation

Proposal 3716, Observation 33: SIONARQ Thu Dec 28 23:00:25 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRSpec IFU Spectroscopy

Diagnostics

(Visit 33:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.

(SIONARQ (Obs 33)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.

Solar System Targets

#	Name	Level 1	Level 2	Level 3
(9)	SIONARQ	STD=SATURN	STD=SIARNAQ	

Comments: Extended=NO

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	PRISM/CLEAR	NRSIRS2RAPID	25	1	false	true	NONE	4	4	1517.245	

Special Requirements

DEFAULT WINDOW: NOT OCCULTATION OF SIONARQ BY SATURN FROM JWST
DEFAULT WINDOW: SEPARATION OF SIONARQ RHEA FROM JWST GREATER THAN 10"
DEFAULT WINDOW: SEPARATION OF SIONARQ TITAN FROM JWST GREATER THAN 10"
DEFAULT WINDOW: ANGULAR RATE SIONARQ FROM JWST LESS THAN 0.075