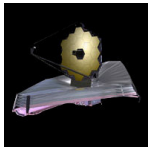

4450 - Determining the Impact of Infrared Sky Background for NIRCam Transit Spectroscopy

Cycle: 2, Proposal Category: CAL/NIRCAM

INVESTIGATORS

Name	*Institution*
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OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1		NIRCam Engineering Imaging	(1) ECLIPTIC-RA12

ABSTRACT

This program will collect spectra of the sky background in a sparsely populated star field in the ecliptic plane using both NIRCam grisms. By comparing background subtracted versus non-subtracted archival NIRCam transit spectroscopy, we will inform the exoplanet community for the limitations introduced by the sky background at NIRCam wavelengths. The data and results from this program will establish a background calibration reference file and improve the NIRCam observing strategy of future exoplanet observations.

This calibration program may change in response to system developments and the final Cycle 2 science program.

OBSERVING DESCRIPTION

Full array grism spectra in Module A will be collected for 16 dithers (using the mosaic property of APT) in a sparsely populated star field in the ecliptic plane. These observations have no timing constraints or special requirements. Observations may be obtained during any of the available

visibility windows as identified in the visit planner with a preference for the soonest in time. Given the goal of the program is to establish a median combined spectrum of the sky background that is free of stars, there is no need of target acquisition.

Proposal 4450 - Targets - Determining the Impact of Infrared Sky Background for NIRCam Transit Spectroscopy

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	ECLIPTIC-RA12	RA: 11 59 41.2100 (179.9217083d) Dec: +00 02 4.90 (.03469d) Equinox: J2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Calibration
Description=[Telescope/sky background]

Observation

Proposal 4450, Observation 1 Fri May 12 20:01:48 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRCam Engineering Imaging

Diagnostics

(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:4) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:5) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:6) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:7) Warning (Form): Overheads are provisional until the Visit Planner has been run.
(Visit 1:8) Warning (Form): Overheads are provisional until the Visit Planner has been run.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	ECLIPTIC-RA12	RA: 11 59 41.2100 (179.9217083d) Dec: +00 02 4.90 (.03469d) Equinox: J2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=Calibration
Description=[Telescope/sky background]

Template

Module	Subarray
A	FULL

Mosaic

Rows	Columns	Row Overlap %	Column Overlap %	Row shift	Column shift	Tile Order
4	4	92.0	65.0	0.0	0.0	DEFAULT

Dithers

#	Primary Dither Type	Primary Dithers	Subpixel Dither Type	Dither Size	Subpixel Positions
1	NONE		STANDARD		1

Spectral Elements

#	Short Pupil	Long Pupil	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Integrations	Total Dithers	Total Exposure Time	ETC Wkbk.Calc ID
1	CLEAR	GRISMR	F187N	F322W2	BRIGHT2	25	1	1	1	536.838	
2	CLEAR	GRISMR	F187N	F444W	BRIGHT2	25	1	1	1	536.838	

Special Requirements	Group Visits within 53.0 Days Visits Same PA