



9286 - CAL-NIS-408: WFSS background

Cycle: 4, Proposal Category: CAL/NIRISS

INVESTIGATORS

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OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Observation Folder				
	1	WFSS F090W backgro und observation	NIRISS External Calibration	(1) ECLIPTIC-RA00
	2	WFSS F090W backgro und observation	NIRISS External Calibration	(1) ECLIPTIC-RA00

ABSTRACT

We request time to observe a sparse field to measure the WFSS background in the F090W filter. There are relatively few science observations in this filter for the WFSS mode, and those that are in the archive are of crowded fields not well suited to background measurements. The observation will allow a significant improvement in the WFSS F090W background reference files in the JWST pipeline.

This calibration program may change in response to system developments and the final Cycle 4 science program.

OBSERVING DESCRIPTION

The observation uses a field which has been observed by NIRISS in the imaging background programs 1475, 4443, and 6657. The point matches that of program 6657 observation 1, so we know that the field is clear of bright NIRISS sources that would pose a problem for the observation. To allow the removal of source spectra we use a 4x4 mosaic with 90% overlap in both directions. The offsets of about 200 pixels between the positions will allow removal of the source spectra when the rate images are combined to make the background template image. The exposure time is similar to that in the imaging zodiacal background programs, since the signal level for the grisms should be similar to what is observed in the imaging case. For the F090W filter we expect of order 1.5 ADU/s signal in the ramps.

Proposal 9286 - Targets - CAL-NIS-408: WFSS background

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(1) <i>Comments:</i> <i>Category=Calibration</i> <i>Description=[External flat field]</i>	ECLIPTIC-RA00	RA: 00 38 3.1900 (9.5132917d) Dec: +01 24 4.10 (1.40114d) Equinox: J2000		

Proposal 9286 - Observation 1 - CAL-NIS-408: WFSS background

Fri Mar 14 13:01:09 GMT 2025

Observation	<p>Proposal 9286, Observation 1: WFSS F090W background observation</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRISS External Calibration</p>											
Diagnostics	<p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 1:2) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 1:3) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p> <p>(Visit 1:4) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ECLIPTIC-RA00	RA: 00 38 3.1900 (9.5132917d) Dec: +01 24 4.10 (1.40114d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Calibration</i> <i>Description=External flat field</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Mosaic	Rows	Columns	Row Overlap %	Column Overlap %	Row shift (deg)	Column shift (deg)	Tile Order					
	4	4	90.0	90.0	0.0	0.0	DEFAULT					
Dithers	#	Pattern Type		Image Dithers		Primary Dithers		Subpixel Positions		Pattern Size		
	1	NONE										
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	GR150R	F090W	NISRAPID	68	1	1	1	740.837	
	2	FULL	DEFAULT APERTURE	GR150C	F090W	NISRAPID	68	1	1	1	740.837	

Proposal 9286 - Observation 1 - CAL-NIS-408: WFSS background

Special Requirements

Group Visits within 53.0 Days
Visits Same PA
Sequence Observations 1, 2, Non-interruptible

Proposal 9286 - Observation 2 - CAL-NIS-408: WFSS background

Fri Mar 14 13:01:09 GMT 2025

Observation	<p>Proposal 9286, Observation 2: WFSS F090W background observation</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRISS External Calibration</p>											
Diagnostics	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ECLIPTIC-RA00	RA: 00 38 3.1900 (9.5132917d) Dec: +01 24 4.10 (1.40114d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Calibration</i> <i>Description=External flat field</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type		Image Dithers		Primary Dithers		Subpixel Positions		Pattern Size		
	1	IMAGING		2								
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F090W	NISRAPID	5	1	2	2	128.841	

Proposal 9286 - Observation 2 - CAL-NIS-408: WFSS background

Special Requirements

Sequence Observations 1, 2, Non-interruptible