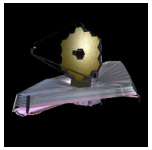

4471 - NIRISS Astrometric Calibration

Cycle: 2, Proposal Category: CAL/NIRISS

INVESTIGATORS

Name	*Institution*
Dr. Sangmo Tony Sohn (PI)	**Space Telescope Science Institute**
Dr. Kevin Volk (CoI) (CSA Member)	Space Telescope Science Institute - CSA - JWST
Dr. Andre Martel (CoI)	Space Telescope Science Institute

OBSERVATIONS

Folder	*Observation*	*Label*	*Observing Template*	*Science Target*
Observation Folder				
	1	Filter Sequence	NIRISS External Calibration	(1) LMC-NIRISS-FGS-ALIGNMENT

ABSTRACT

A re-measurement of the NIRISS distortion and offset from the Guider is requested for trending of any possible changes in the astrometric distortion with time. A single epoch observation will be made in all the NIRISS imaging filters using the same pointing in the Large Magelanic Cloud astrometric field as was used for this purpose in commissioning and in cycle 1 calibration.

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

OBSERVING DESCRIPTION

The program carries out an astrometric calibration of NIRISS using the same method as what is to be done during commissioning. It is a continuation of cycle 1 program 1501.

There are two duplicate sets of observations with a minimum gap of about 150 days between the first set and the second set to produce two measurements well separated in cycle 1. The first set is scheduled sometime in the first three months of cycle 2 assuming a start date of 1 July 2023.

The program here is based on CAR 1087, the initial NIRISS astrometric calibration.

Proposal 4471 - Targets - NIRISS Astrometric Calibration

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	LMC-NIRISS-FGS-ALIGNMENT	RA: 05 21 57.3030 (80.4887625d) Dec: -69 29 57.90 (-69.49942d) Equinox: J2000		

Comments:
Category=Calibration
Description=[Astrometric]
Extended=NO

Observation

Proposal 4471, Observation 1: Filter Sequence Thu Jun 01 13:00:32 GMT 2023

Diagnostic Status: Warning

Observing Template: NIRISS External Calibration

Coordinated Parallel Template(s): FGS External Calibration

Diagnostics

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

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
(1)	LMC-NIRISS-FGS-ALIGNMENT	RA: 05 21 57.3030 (80.4887625d) Dec: -69 29 57.90 (-69.49942d) Equinox: J2000		

Comments:
Category=Calibration
Description=[Astrometric]
Extended=NO

Acquisition

NIRISS External Calibration	Target
1	NONE

Template

NIRISS External Calibration	FGS External Calibration
Pointing Type: PRIME	Target type: IMAGE
AcqTarget: NONE	Detector: GUIDER2
Acquisition Mode: null	
AcqFilter: F480M	

Dithers

#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size
1	IMAGING	4			

Spectral Elements

NIRISS External Calibration	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	F277W	CLEARP	NISRAPID	10	3	4	12	1417.254	
2	FULL	DEFAULT APERTURE	F444W	CLEARP	NISRAPID	10	3	4	12	1417.254	
3	FULL	DEFAULT APERTURE	F356W	CLEARP	NISRAPID	10	3	4	12	1417.254	
4	FULL	DEFAULT APERTURE	F430M	CLEARP	NISRAPID	15	3	4	12	2061.46	
5	FULL	DEFAULT APERTURE	F380M	CLEARP	NISRAPID	15	3	4	12	2061.46	
6	FULL	DEFAULT APERTURE	F480M	CLEARP	NISRAPID	10	3	4	12	1417.254	
7	FULL	DEFAULT APERTURE	F480M	NRM	NISRAPID	25	3	4	12	3349.872	
8	FULL	DEFAULT APERTURE	CLEAR	F090W	NISRAPID	5	3	4	12	773.047	
9	FULL	DEFAULT APERTURE	CLEAR	F115W	NISRAPID	5	3	4	12	773.047	
10	FULL	DEFAULT APERTURE	CLEAR	F158M	NISRAPID	5	6	4	24	1546.095	
11	FULL	DEFAULT APERTURE	CLEAR	F140M	NISRAPID	5	6	4	24	1546.095	
12	FULL	DEFAULT APERTURE	CLEAR	F150W	NISRAPID	5	3	4	12	773.047	
13	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	5	3	4	12	773.047	

Spectral Elements

FGS External Calibration	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	FGSRAPID	4	6	4	24	1288.412	
2	FGSRAPID	4	6	4	24	1288.412	
3	FGSRAPID	4	6	4	24	1288.412	
4	FGSRAPID	6	6	4	24	1803.777	
5	FGSRAPID	6	6	4	24	1803.777	
6	FGSRAPID	4	6	4	24	1288.412	
7	FGSRAPID	11	6	4	24	3092.19	
8	FGSRAPID	3	3	4	12	515.365	
9	FGSRAPID	3	3	4	12	515.365	
10	FGSRAPID	4	3	4	12	644.206	
11	FGSRAPID	4	3	4	12	644.206	
12	FGSRAPID	3	3	4	12	515.365	
13	FGSRAPID	3	3	4	12	515.365	

Special Requirements	
	No Parallel Attachments Guide Star in Guider 1