



1515 - Stability Monitoring

Cycle: 1, 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		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	2		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	3		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	4		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	5		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	6		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	7		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	8		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	9		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	10		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	11		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	12		NIRISS External Calibration	(1) ASTROMETRIC-FIELD

ABSTRACT

We propose to make a short observation of a star field in a single NIRISS filter at 1 month intervals to assess the stability of the instrument with time.

This calibration program is provisional and may change in response to system developments and the final science program.

OBSERVING DESCRIPTION

We will observe the same position near the south ecliptic pole at one month intervals to assess the stability of the NIRISS detector over time. Inter-comparison of the stellar brightness values over time should show any long term changes in the NIRISS detector response or the overall system response. While some of the stars in the field will be variable, we should be able to eliminate these and make measurements on other stars within the field of view.

The preferred target for this observation is the LMC astrometric field. If it turns out that that field is too crowded, a backup target is provided in the LMC which will be used for the NIRISS focus measurements. A decision about which field is to be used for this program will be made after the commissioning observations allow a better idea of how well the photometry can actually be done in these two fields.

TIMING CONSTRAINTS

Assuming a launch of JWST on 22 December 2021 and a start of cycle 1 observations the initial observation is requested within the first month of cycle 1. The subsequent observations are given 10 day windows at 1 month intervals after the first observation. These windows can be expanded if required as long as the individual observations are not bunched up too much over the year. The current request of 25 to 35 days delay between the individual exposures is intended to avoid having bad coverage over the year. Small deviations from the plan in one or two instances would not affect the calibration goals. One should also avoid a situation where all of the observations have either the minimum or maximum interval between them rather than a more random distribution.

Proposal 1515 - Targets - Stability Monitoring

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000 <i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO		
(2)	NIRISS-FOCUS-FIELD	RA: 05 31 11.8800 (82.7995000d) Dec: -68 46 42.00 (-68.77833d) Equinox: J2000 <i>Comments:</i> Category=Calibration Description=[Focus test]			

Proposal 1515 - Observation 1 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	<p>Proposal 1515, Observation 1</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRISS External Calibration</p>											
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)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d)		Dec: -69 29 54.10 (-69.49836d)			Equinox: J2000				
	<p><i>Comments:</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Astrometric]</i></p> <p><i>Extended=NO</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type		Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size			
	1	IMAGING		4								
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 1 - Stability Monitoring

Special Requirements

Between Dates 20-JUN-2022 and 20-AUG-2022

Proposal 1515 - Observation 2 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	<p>Proposal 1515, Observation 2</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)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d)		Dec: -69 29 54.10 (-69.49836d)			Equinox: J2000				
	<p><i>Comments:</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Astrometric]</i></p> <p><i>Extended=NO</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type		Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size			
	1	IMAGING		4								
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 2 - Stability Monitoring

Special Requirements

Between Dates 11-NOV-2022:00:00:00 and 19-NOV-2022:00:00:00

Proposal 1515 - Observation 3 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 3 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous		
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
<i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Astrometric]</i> <i>Extended=NO</i>												
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type		Image Dithers		Primary Dithers		Subpixel Positions		Pattern Size		
	1	IMAGING		4								
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 3 - Stability Monitoring

Special Requirements

Between Dates 11-JAN-2023:00:00:00 and 19-JAN-2023:00:00:00

Proposal 1515 - Observation 4 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 4 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
Diagnostics	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
	Comments: Category=Calibration Description=[Astrometric] Extended=NO											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size						
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 4 - Stability Monitoring

Special Requirements

Between Dates 20-OCT-2022 and 10-NOV-2022

Proposal 1515 - Observation 5 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 5 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
Comments: Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type		Image Dithers		Primary Dithers		Subpixel Positions		Pattern Size		
	1	IMAGING		4								
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 5 - Stability Monitoring

Special Requirements

Between Dates 20-NOV-2022 and 10-DEC-2022

Proposal 1515 - Observation 6 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 6 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
Diagnostics	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
	<i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type		Image Dithers		Primary Dithers		Subpixel Positions		Pattern Size		
	1	IMAGING		4								
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 6 - Stability Monitoring

Special Requirements

Between Dates 20-DEC-2022 and 10-JAN-2023

Proposal 1515 - Observation 7 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 7 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
Comments: Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size						
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 7 - Stability Monitoring

Special Requirements

Between Dates 20-JAN-2023 and 10-FEB-2023

Proposal 1515 - Observation 8 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 8 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
Comments: Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size				
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 8 - Stability Monitoring

Special Requirements

Between Dates 20-FEB-2023 and 10-MAR-2023

Proposal 1515 - Observation 9 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	<p>Proposal 1515, Observation 9</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRISS External Calibration</p>											
Diagnostics	(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d)		Dec: -69 29 54.10 (-69.49836d)			Equinox: J2000				
	<p><i>Comments:</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Astrometric]</i></p> <p><i>Extended=NO</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size				
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 9 - Stability Monitoring

Special Requirements

Between Dates 20-MAR-2023 and 10-APR-2023

Proposal 1515 - Observation 10 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 10 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
<i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size						
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 10 - Stability Monitoring

Special Requirements

Between Dates 20-APR-2023 and 10-MAY-2023

Proposal 1515 - Observation 11 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 11 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
<i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size						
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 11 - Stability Monitoring

Special Requirements

Between Dates 20-MAY-2023 and 10-JUN-2023

Proposal 1515 - Observation 12 - Stability Monitoring

Tue Dec 20 20:00:56 GMT 2022

Observation	Proposal 1515, Observation 12 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
Comments: Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size				
	1	IMAGING	4									
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		CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 1515 - Observation 12 - Stability Monitoring

Special Requirements

Between Dates 20-JUN-2023 and 10-JUL-2023