



6631 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity

Characterization

Cycle: 3, Proposal Category: CAL/NIRCAM

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Dr. Anton M. Koekemoer (PI)	Space Telescope Science Institute
Dr. Adam Riess (CoI)	The Johns Hopkins University
Dr. Martha L. Boyer (CoI)	Space Telescope Science Institute
Dr. Armin Rest (CoI)	Space Telescope Science Institute

OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Observation Folder				
	1	Module A FULL	NIRCcam Engineering Imaging	(1) NGC104-6W
	2	Module B FULL	NIRCcam Engineering Imaging	(1) NGC104-6W
	3	ModB SUB64P	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	4	ModB SUB160P	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	5	ModB SUB400P	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	61	ModB SUB160	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	62	ModB SUB160	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	63	ModB SUB160	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	64	ModB SUB160	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	7	ModB SUB320	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	8	ModB SUB640	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	9	ModA SUB64P	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091
	10	ModA SUB160	NIRCcam Engineering Imaging	(2) 2MASS-J00223695-7204091

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
	11	ModA SUBGRISM64	NIRCam Engineering Imaging	(2) 2MASS-J00223695-7204091
	12	ModA SUBGRISM128	NIRCam Engineering Imaging	(2) 2MASS-J00223695-7204091
	13	ModA SUBGRISM256	NIRCam Engineering Imaging	(2) 2MASS-J00223695-7204091
	14	ModA FULL MASKS	NIRCam Engineering Imaging	(2) 2MASS-J00223695-7204091

ABSTRACT

The purpose of this activity is to verify that the linearity behavior has not changed. The program requires observations of a rich stellar field that is bright and dense down to the confusion limit. To spread the flux more evenly, we may use a weak lens to introduce defocusing. The goal is to probe the linearity of a large sample of pixels across the detector. This program targets the cluster 47 Tuc (NGC 104), centered on a field 6' to the west, which has been predominantly used for previous HST ACS/WFC and WFC3/IR non-linearity studies.

This calibration program may change in response to system developments and the final Cycle 3 science program.

OBSERVING DESCRIPTION

 Nov 2019 MBoyer

The data will be taken in RAPID readout mode, saving every frame. The number of groups should be adjusted to allow the majority of pixels to reach hard saturation by the end of the ramp. A large number (>150) of groups is needed to finely sample the nonlinearity over a wide range of flux levels and unveil possible differences with ground-based data. Since we are operating only one module at a time, this should not cause data-ingest issues. The exposures can be executed with a broad (R~4) and a narrow-band filter (R~80) to further expand the range of flux levels probed. We will perform dithers (2 large INTRASCA, or 24") since several pixels will be impacted by CRs in each exposures. This set of observations will allow us to assess how detector linearity varies with flux (electrons/s) and fluence (total electrons).

Using ETC v1.1.1, we compute that with 150 groups in RAPID readout, at least 200(900) stars in the LMC calibration field will saturate in a SW(LW) detector using the F150W(F277W) filter (stars with K < 18.6 mag). With 200 groups in RAPID readout, we find at least 30(140) saturated stars in each SW(LW) detectors with the F164N(F332N) filter. By dithering, we will correct for CRs and increase the number of saturated pixels.

JWST Proposal 6631 (Created: Monday, June 24, 2024 at 2:00:11 PM Eastern Standard Time) - Overview

Subarrays are also included to check the impact of subarray timing and detector glow on linearity. SUB160 and SUB64P will be included -- glow is strongest in the smallest subarrays. Only 1 wide filter pair will be used (F150W/F277W). The target is a bright ($K_{\text{mag}}=13$) star near the center of the LMC field (2MASS J05220360-6930068) if the LMC field is used for the FULL frame observations. With 5000 groups in SUB64P, this star will saturate > 20 pixels by the end of the ramp. Four SUBARRAY_DITHERS will put the star at 4 locations across the subarray to increase the number of saturated pixels. With 1000 groups in SUB160, stars as faint as $K_{\text{mag}}=16$ will saturate. A 4-pt INTRAMODULEBOX dither places the 2MASS star on each SW detector, and each SW detector should also capture at least one additional saturated star (THIS NEEDS TO BE VERIFIED).

--- July 2019 MBoyer

Including SUB160 and SUB64P on both modules to assess the effect of detector glow. Only doing 1 filter pair for these (wide filters). Centering both on a bright ($K_{\text{mag}}=13$) star near the center of the LMC calibration field. Dithering so that every detector/subarray touches the bright star. SUB160 with 1000 groups will saturate as faint as $K_{\text{mag}}=16$. A quick check indicates that at this location, each SW detector will saturate at least one additional star. This needs to be verified.

--- April 2018 MBoyer

Observing LMC calibration field

2 filters in each (SW/LW) channel: one wide and one narrow

Dithers to correct for cosmic rays

Observe each module separately to limit data volume

Proposal 6631 - Targets - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(1)	NGC104-6W	RA: 00 22 38.5000 (5.6604167d) Dec: -72 04 4.00 (-72.06778d) Equinox: J2000		
<i>Comments:</i> <i>Category=Stellar Cluster</i> <i>Description=[Globular star clusters]</i>					
(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000	Epoch of Position: 2000		
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					
<i>Kmag = 12.038</i> <i>Category=Calibration</i> <i>Description=[Detector linearity test]</i>					

Proposal 6631 - Observation 1 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 1: Module A FULL</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	<p>(Visit 1:1) Warning (Form): Data Excess over middle threshold</p> <p>(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	NGC104-6W	RA: 00 22 38.5000 (5.6604167d) Dec: -72 04 4.00 (-72.06778d) Equinox: J2000									
	<p><i>Comments:</i> Category=Stellar Cluster Description=[Globular star clusters]</p>											
Template	Module		Subarray				No. of Output Channels					
	A		FULL				4					
Dithers	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type		Dither Size		Subpixel Positions		
	1	INTRASCA		2		STANDARD		24" (LARGE)		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	CLEAR	F070W	F277W	RAPID	150	1	2	2	3221.031	
	2	CLEAR	CLEAR	F090W	F356W	RAPID	150	1	2	2	3221.031	
	3	CLEAR	CLEAR	F150W	F444W	RAPID	100	1	2	2	2147.354	
Special Requirements	2 After 1 by 8 Days to 15 Days											

Proposal 6631 - Observation 2 - CAL-NRC-321: NIRCam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	Proposal 6631, Observation 2: Module B FULL Diagnostic Status: Warning Observing Template: NIRCam Engineering Imaging											
	(Visit 2:1) Warning (Form): Data Excess over middle threshold (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)	NGC104-6W	RA: 00 22 38.5000 (5.6604167d) Dec: -72 04 4.00 (-72.06778d) Equinox: J2000									
<i>Comments:</i> Category=Stellar Cluster Description=[Globular star clusters]												
Template	Module		Subarray				No. of Output Channels					
	B		FULL				4					
Dithers	#	Primary Dither Type		Primary Dithers		Subpixel Dither Type		Dither Size		Subpixel Positions		
	1	INTRASCA		2		STANDARD		24" (LARGE)		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	CLEAR	F070W	F277W	RAPID	150	1	2	2	3221.031	
	2	CLEAR	CLEAR	F090W	F356W	RAPID	150	1	2	2	3221.031	
	3	CLEAR	CLEAR	F150W	F444W	RAPID	100	1	2	2	2147.354	
Special Requirements	2 After 1 by 8 Days to 15 Days											

Proposal 6631 - Observation 3 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 3: ModB SUB64P</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	<p>(ModB SUB64P (Obs 3)) Warning (Form): The selected fiducial point is not a standard option for the instrument.</p> <p>(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module				Subarray				No. of Output Channels			
	B				SUB64P				1			
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	CLEAR	F212N	F277W	RAPID	5000	1	1	1	250.853	
Special Requirements	<p>Fiducial Point Override NRCB1_SUB64P</p>											

Proposal 6631 - Observation 4 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	Proposal 6631, Observation 4: ModB SUB160P Diagnostic Status: Warning Observing Template: NIRCcam Engineering Imaging											
	(ModB SUB160P (Obs 4)) Warning (Form): The selected fiducial point is not a standard option for the instrument. (Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Kmag = 12.038</i> <i>Category=Calibration</i> <i>Description=[Detector linearity test]</i>												
Template	Module				Subarray				No. of Output Channels			
	B				SUB160P				1			
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	CLEAR	F212N	F277W	RAPID	3000	1	1	1	836.204	
Special Requirements	Fiducial Point Override NRCB1_SUB64P											

Proposal 6631 - Observation 5 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 5: ModB SUB400P</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	<p>(ModB SUB400P (Obs 5)) Warning (Form): The selected fiducial point is not a standard option for the instrument.</p> <p>(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray				No. of Output Channels					
	B		SUB400P				1					
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	CLEAR	F212N	F277W	RAPID	400	1	1	1	664.173	
Special Requirements	<p>Fiducial Point Override NRCB1_SUB64P</p>											

Proposal 6631 - Observation 61 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 61: ModB SUB160</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 61:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	B		SUB160					1				
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	CLEAR	F212N	F277W	RAPID	3000	1	1	1	836.204	
Special Requirements	Offset 4.0 arcsec, 4.0 arcsec											

Proposal 6631 - Observation 62 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 62: ModB SUB160</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 62:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	B		SUB160					1				
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	CLEAR	F212N	F277W	RAPID	3000	1	1	1	836.204	
Special Requirements	Offset 4.0 arcsec, -4.0 arcsec											

Proposal 6631 - Observation 63 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 63: ModB SUB160</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 63:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	B		SUB160					1				
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	CLEAR	F212N	F277W	RAPID	3000	1	1	1	836.204	
Special Requirements	Offset -4.0 arcsec, 4.0 arcsec											

Proposal 6631 - Observation 64 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 64: ModB SUB160</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 64:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray				No. of Output Channels					
	B		SUB160				1					
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	CLEAR	F212N	F277W	RAPID	3000	1	1	1	836.204	
Special Requirements	Offset -4.0 arcsec, -4.0 arcsec											

Proposal 6631 - Observation 7 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 7: ModB SUB320</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 7:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray				No. of Output Channels					
	B		SUB320				1					
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	CLEAR	F212N	F277W	RAPID	600	1	1	1	642.514	
Special Requirements	Offset 6.0 arcsec, 6.0 arcsec											

Proposal 6631 - Observation 8 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 8: ModB SUB640</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 8:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	B		SUB640					1				
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	CLEAR	F212N	F277W	RAPID	150	1	1	1	632.082	
Special Requirements	Offset 12.0 arcsec, 12.0 arcsec											

Proposal 6631 - Observation 9 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	Proposal 6631, Observation 9: ModA SUB64P Diagnostic Status: Warning Observing Template: NIRCcam Engineering Imaging											
	(Visit 9:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Kmag = 12.038</i> <i>Category=Calibration</i> <i>Description=[Detector linearity test]</i>												
Template	Module		Subarray				No. of Output Channels					
	A		SUB64P				1					
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	CLEAR	F212N	F277W	RAPID	5000	1	1	1	250.853	

Proposal 6631 - Observation 10 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 10: ModA SUB160</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	(Visit 10:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	A		SUB160					1				
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	CLEAR	F212N	F277W	RAPID	3000	1	1	1	836.204	
Special Requirements	Offset 4.0 arcsec, 4.0 arcsec											

Proposal 6631 - Observation 11 - CAL-NRC-321: NIRCam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	Proposal 6631, Observation 11: ModA SUBGRISM64 Diagnostic Status: Warning Observing Template: NIRCam Engineering Imaging											
	(ModA SUBGRISM64 (Obs 11)) Warning (Form): The selected fiducial point is not a standard option for the instrument. (Visit 11:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> <i>Kmag = 12.038</i> <i>Category=Calibration</i> <i>Description=[Detector linearity test]</i>												
Template	Module				Subarray				No. of Output Channels			
	A				SUBGRISM64				4			
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	CLEAR	F212N	F277W	RAPID	500	1	1	1	170.651	
Special Requirements	Fiducial Point Override NRCA3_SUB64P											

Proposal 6631 - Observation 12 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 12: ModA SUBGRISM128</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	<p>(ModA SUBGRISM128 (Obs 12)) Warning (Form): The selected fiducial point is not a standard option for the instrument.</p> <p>(Visit 12:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	A		SUBGRISM128					4				
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	CLEAR	F212N	F277W	RAPID	250	1	1	1	169.674	
Special Requirements	<p>Fiducial Point Override NRCA3_SUB64P</p>											

Proposal 6631 - Observation 13 - CAL-NRC-321: NIRCcam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 13: ModA SUBGRISM256</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCcam Engineering Imaging</p>											
Diagnostics	<p>(ModA SUBGRISM256 (Obs 13)) Warning (Form): The selected fiducial point is not a standard option for the instrument.</p> <p>(Visit 13:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray					No. of Output Channels				
	A		SUBGRISM256					4				
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	CLEAR	F212N	F277W	RAPID	120	1	1	1	162.97	
Special Requirements	<p>Fiducial Point Override NRCA3_SUB64P</p>											

Proposal 6631 - Observation 14 - CAL-NRC-321: NIRCam Total-count and Count-rate Linearity Characterization

Mon Jun 24 19:00:11 GMT 2024

Observation	<p>Proposal 6631, Observation 14: ModA FULL MASKS</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRCam Engineering Imaging</p>											
Diagnostics	<p>(ModA FULL MASKS (Obs 14)) Warning (Form): The selected fiducial point is not a standard option for the instrument.</p> <p>(Visit 14:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.</p>											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(2)	2MASS-J00223695-7204091	RA: 00 22 36.9538 (5.6539742d) Dec: -72 04 9.12 (-72.06920d) Equinox: J2000			Epoch of Position: 2000						
	<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p> <p><i>Kmag = 12.038</i></p> <p><i>Category=Calibration</i></p> <p><i>Description=[Detector linearity test]</i></p>											
Template	Module		Subarray				No. of Output Channels					
	A		FULL				4					
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	MASKRND	MASKRND	F212N	F277W	RAPID	200	1	1	1	2147.354	
Special Requirements	<p>Fiducial Point Override NRCA3_SUB64P</p>											