NIRCam Coronagraphic Imaging

Program, Obs(.Exposure_Spec)	Comment
Template Specific Information	
612 1	Field: Module A
612 1	Field: Coronagraphic Mask choose from list
612 1	NIRCam Coronagraphic Imaging template exists
Target Acquisition Exposures	
612 1	Field: Acquisition Target choose from list
612 1	Field: Acquisition Target Brightness BRIGHT, FAINT
612 1	Field: Acquisition Readout Pattern chose from list
612 1	Field: Acquisition Number of Groups/Integration number
Confirmation Images	
612 1	Field: Obtain Astrometric Confirmation Images YES, NO
612 1	Field: Confirmation Readout Pattern choose from list
612 1	Field: Confirmation Number of Groups/Integrations number
612 1	Field: Confirmation Number of Integrations/Exposure number
Science Exposures	
612 1	Field: Subarray choose from list
612 1	Field: Dither Pattern choose from list
612 1.01	Field: Filter Name choose from list
612 1.01	Field: Readout Pattern choose from list
612 1.01	Field: Number of Groups/Integration number
612 1.01	Field: Number of Integrations/Exposure number
PSF Reference Observations	
612 1	Field: This is a PSF Reference Observation checkbox
612 1	Field: PSF Reference Observation choose from list
612 1	Field: Additional Justification checkbox
Module	
612 1	A not user selectable; pass to DB
Coronagraphic Mask	
612 1	MASK210R TA Filter F210M
612 2	MASKSWB TA Filter F210M
612 3	MASK335R TA Filter F335M
612 4	MASK430R TA Filter F335M
612 5	MASKLWB TA Filter F335M
Target Acquisition Exposure	
612 1	Science target generally used for acquisition
612 87	Offset star may be used for target acquisition
Acquisition Target	
612 87	if offset star select ACQUISITION TARGET NAME from list targets previously entered
612 88	if Solar System Target acq target musn't be other SS target
921 9	ACQUISITION TARGET field should always be present and defaulted to SAME TARGET AS OBSERVATION
921 10	Error if Acq and Science target too far apart
Acquisition Target Brightness	
612 2	BRIGHT

612 1	FAINT
Acquisition Readout Pattern	
612 4	RAPID
612 12	BRIGHT1
612 3	BRIGHT2
612 2	SHALLOW2
612 8	SHALLOW4
612 5	MEDIUM2
612 6	MEDIUM8
612 7	DEEP2
612 1	DEEP8
Acquisition Number of Groups/Integration	
612 2	3
612 1	5
612 3	9
612 4	17
612 7	33
612 8	65
Acquisition Number of Integrations/Exposure	
612 1	automatically set to 1 uneditable
Confirmation Images	
612 1	filter same as target acquisition filter
Astrometric Confirmation Image	
612 1 (921 2)	YES (default)
612 8	NO
612 8	if NO don't display next 3 fields
Confirmation Image Readout Pattern	
612 1	RAPID
612 2	BRIGHT1
612 4	BRIGHT2
612 3	SHALLOW2
612 5	SHALLOW4
612 6	MEDIUM2
612 7	MEDIUM8
612 77	DEEP2
612 76	DEEP8
Confirmation Image Number of Groups/Integration	
612 1-4	number 1-10 inclusive
	illegal
Confirmation Image Number of Integrations/Exposure	
612 1-4	number 1-10 inclusive
	illegal
Science Exposures	
Subarray	
612 4	SUB320
612 2	SUB640
612 1	FULL
612 2	MASKSWB choices SUB40 or FULL
612 1	MASK210R choices SUB40 or FULL

612 5	MASKLWB choices SUB320 or FULL
612 3	MASK335R choices SUB320 or FULL
612 4	MASK430R choices SUB320 or FULL
Small Grid Dithers	
612 6 (921 2)	NONE (default)
612 1	5-POINT-BOX
612 4	5-POINT-DIAMOND
612 3	9-POINT-CIRCLE
612 2	3-POINT-BAR
612 5	5-POINT-BAR
612 1	MASK210R 5-POINT-BOX,5-POINT-DIAMOND,9-POINT-CIRCLE
612 3	MASK335R 5-POINT-BOX,5-POINT-DIAMOND,9-POINT-CIRCLE
612 4	MASK430R 5-POINT-BOX,5-POINT-DIAMOND,9-POINT-CIRCLE
612 6	MASKSWB 3-POINT-BAR,5-POINT-BAR
612 5	MASKLWB 3-POINT-BAR,5-POINT-BAR
612 1-6	NONE available for all MASKs
Science Filters	
612 1.01	Specify filter and exposure duration params at each dither position
612 05 921 01 NOT IN APT	Maximum of 6 filters may be chosen for any observation legal: 6 filters illegal: 7 filters
Science Filter Name	
MASKSWB	
612 19.01	F182M
612 21.01	F210M
612 20.01	F187N
612 17.01	F212N
612 2.01	F200W
MASK210R	
612 57.01	F182M
612 89.01	F210M
612 11.01	F187N
612 1.01	F212N
612 1.02	F200W
MASKLWB	
612 22.01	F250M
612 24.01	F300M
612 25.01	F335M
612 27.01	F360M
612 5.01	F410M
612 29.01	F430M
612 6.02	F460M
612 6.03	F480M
612 6.01	F277W
612 6.04	F356W
612 6.05	F444W
MASK335R	
612 15.01	F250M

612 39.01	F300M
612 58.01	F335M
612 3.01	F360M
612 8.02	F410M
612 85.01	F430M
612 85.02	F460M
612 85.03	F480M
612 3.01	F356W
612 90.01	F444W
612 8.01	F322W2
MASK430R	
612 4.01	F250M
612 91.01	F300M
612 91.02	F335M
612 91.03	F360M
612 12.01	F410M
612 4.02	F430M
612 4.03	F460M
612 86.01	F480M
612 91.04	F356W
612 40.01	F444W
612 59.01	F322W2
Readout Pattern	
612 91.01	RAPID
612 1.01	BRIGHT1
612 3.01	BRIGHT2
612 4.01	SHALLOW2
612 6.02	SHALLOW4
612 6.03	MEDIUM2
612 91.02	MEDIUM8
612 91.03	DEEP2
612 2.01	DEEP8
Number of Groups/Integration	
6815 5.01-09	max 1-10 except DEEPs max 20
941 6.01-09	illegal
941 6.01	if integration time > 1000s warning issued
Number of Integrations/Exposure	
612 1	number
941 6.01-09	maximum 1000
PSF Reference Observations	
888 1,3	generally two observations with PA OFFSET and SEQ NON-INT
612 1	warning Science observations should be linked to at least one other compatible science observation by an Aperture PA Offset of 1-14 degrees
612 85	This is a PSF Reference Observation
612 85	display in GUI "proprietary period will be 0 months"
612 1	PSF Reference Observations, select for science obs
612 2	exception self reference survey

612 1	only list obs which use same instrument, coron mask, and filter ordered so PSF Ref Obs checked come first
612 2	Additional Justification, will not have separate PSF obs as part of a self reference survey
612 3	error to have nothing checked in PSF Reference Obs
612 88	error to choose other science obs that aren't designated PSF