

Traceability Matrix, PPS Proposal Instructions

Chapter 21: NIRCam Coronagraphic Imaging

Requirement #	Proposal, Visit, Exposure	Comment
Introduction		
NCM0077	612 1	NIRCamCoronagraphic Imaging template exists
NCM0078	612 1	Field: Coronagraphic Mask
NCM0079	612 1	Coronagraphic Mask, choose from list
NCM0080	612 1	Field: Acquisition Target Name
NCM0081	612 1	Acquisition Target Name, choose from list
NCM0082	612 1	Field:Acquisition Readout Pattern
NCM0083	612 1	Acquisition Readout Pattern, chose from list
NCM0084	612 1	Field: Acquisition Number of Groups
NCM0085	612 1	Acquisition Number of Groups, number
NCM0086	612 1.01	Field: Science Filter(s)
NCM0087	612 1.01	Science Filters, chose from list
NCM0088	612 1.01	Field: Science Readout Pattern
NCM0089	612 1.01	Science Readout Pattern, chose from list
NCM0090	612 1.01	Field: Science Number of Groups
NCM0091	612 1.01	Science Number of Groups, number
NCM0092	612 1.01	Field: Science Number of Integrations
NCM0093	612 1.01	Science Number of Integrations, number
Coronagraphic Mask		
NCM0094	612 1	MASK210R
NCM0095	612 2	MASKSWB
NCM0096	612 3	MASK335R
NCM0097	612 4	MASK430R
NCM0098	612 5	MASKLWB
Target Acquisition Exposure		
NCM0099	612 1	Science target generally used for acquisition
NCM0100	612 7	Offset star may be used for target acquisition
Acquisition Target		
NCM0101	612 1	Select ACQUISITION TARGET NAME from list targets previously entered
NCM0104	612 1	Field: Acquisition Target Flux
NCM0105	612 1	Acq Flux populated based on Acq Target Name
NCM0103	612 1 not defaulted	ACQUISITION TARGET name should always be present and defaulted to prime target for the observation
NCM0307	PR 78546 APT 23.1	APT should produce warning if Acq and Science targets too far apart
Acquisition Readout Pattern		
NCM0932	612 4	RAPID
NCM0933	612 12	BRIGHT1
NCM0934	612 3	BRIGHT2
NCM0935	612 2	SHALLOW2
NCM0936	612 8	SHALLOW4
NCM0937	612 5	MEDIUM2
NCM0938	612 6	MEDIUM8
NCM0939	612 7	DEEP2
NCM0940	612 1	DEEP8

Acquisition Number of Groups		
NCM0115	612 2	3
NCM0116	612 1	5
NCM0117	612 3	9
NCM0118	612 4	17
NCM0119	612 1	Number of Integrations is set to 1
Science Exposures		
Science Filters		
NCM0120	612 1.01	Specify filter and exposure duration params at each dither position
Science Filter Name		
NCM0121	612 05 921 01	Maximum of 6 filters may be chosen for any observation legal: 6 filters illegal: 7 filters
MASKSWB:		
NCM0122	612 2.01	F140M
NCM0123	612 2.02	F182M
NCM0124	612 2.03	F210M
NCM0125	612 2.04	F187N
NCM0126	612 2.05	F212N
MASK210R:		
NCM0127	612 1.01	F210M
NCM0128	612 1.02	F212N
MASKLWB:		
NCM0129	612 5.01	F250M
NCM0130	612 5.02	F300M
NCM0131	612 5.03	F335M
NCM0132	612 5.04	F360M
NCM0133	612 6.01	F410M
NCM0134	612 5.05	F430M
NCM0135	612 6.02	F460M
NCM0136	612 6.03	F480M
MASK335R:		
NCM0137	612 3.01	F300M
NCM0138	612 3.02	F335M
MASK430R:		
NCM0139	612 9.01	F410M
NCM0140	612 4.01	F430M
NCM0141	612	MASK determines which camera and limits filter choice in GUI
Science Readout Pattern		
NCM0941	612 2.05	RAPID
NCM0942	612 1.02	BRIGHT1
NCM0943	612 2.02	BRIGHT2
NCM0944	612 2.03	SHALLOW2
NCM0945	612 4.02	SHALLOW4
NCM0946	612 4.01	MEDIUM2
NCM0947	612 2.04	MEDIUM8
NCM0948	612 1.01	DEEP2
NCM0949	612 2.01	DEEP8
Science Number of Groups		
NCM0434		NUMBER OF GROUPS
Science Number of Integrations		
NCM0435		NUMBER OF INTEGRATIONS
Legal Min/Max Values		
NCM0398	6815 5.09	RAPID

NCM0399	6815 5.08	BRIGHT1
NCM0400	6815 5.07	BRIGHT2
NCM0410	6815 5.06	SHALLOW2
NCM0411	6815 5.05	SHALLOW4
NCM0412	6815 5.04	MEDIUM2
NCM0413	6815 5.03	MEDIUM8
NCM0414	6815 5.02	DEEP2
NCM0415	6815 5.01	DEEP8
Illegal Min/Max Values		
NCM0416	6815 6.09	RAPID
NCM0417	6815 6.08	BRIGHT1
NCM0106	6815 6.07	BRIGHT2
NCM0107	6815 6.06	SHALLOW2
NCM0108	6815 6.05	SHALLOW4
NCM0109	6815 6.04	MEDIUM2
NCM0110	6815 6.03	MEDIUM8
NCM0111	6815 6.02	DEEP2
NCM0112	6815 6.01	DEEP8