

# Traceability Matrix, PPS Proposal Instructions

## Chapter 20: NIRCam Imaging

Requirement #	Proposal, Visit, Exposure	Comment
Introduction		
NCM0001	502 1	NIRCam Imaging template exists
Science Exposures		
NCM0004	502 1	Field: Module
NCM0005	502 1	Module, choose A , B, or ALL
NCM0006	502 1	Field: Subarray
NCM0007	502 1	Subarray, chose from list
NCM0349	6582 7	Field: Primary Dither Type
NCM0350	6582 7	Primary Dither Type choose from list
NCM0351	6582 6	Field: Primary Dithers, FULL
NCM0352	6582 6	Primary Dithers, choose from list
NCM0926	6582 7	Field: Primary Dithers, INTRAMODULE
NCM0927	6582 7	Primary Dithers, choose from list
NCM0353	6582 8	Field: Camera, INTRASCA
NCM0354	6582 8	Camera, choose SHORT or LONG
NCM0355	6582 8	Field: Dither Size, INTRASCA
NCM0356	6582 8	Dither Size, choose SMALL, MEDIUM, or LARGE
NCM0928	6582 8	Field: Primary Dithers, INTRASCA
NCM0929	6582 8	Primary Dithers, choose from list
NCM0359	6582 8	Field: Subpixel Positions
NCM0360	6582 8	Subpixel Positions, enter number
NCM0008	502 1	Field: Filter(s)
NCM0009	502 1	Filter(s), choose from list
NCM0010	502 1	Field: Readout Pattern
NCM0011	502 1	Readout Pattern, chose from list
NCM0012	502 1	Field: Number of Groups
NCM0013	502 1	Number of Groups, chose from list
NCM0014	502 1	Field: Number of Integrations
NCM0015	502 1	Number of Integrations, chose from list
Science Exposures		
Module		
NCM0019	502 1	MODULE: A
NCM0020	502 2	MODULE: B
NCM0310	502 3	MODULE: ALL
Subarray		
NCM0021	502 4	SUBARRAY: FULL
NCM0920	611 8	SUBARRAY: SUB64P
NCM0338	502 6	SUBARRAY: SUB160
NCM0921	611 9	SUBARRAY: SUB160P
NCM0025	502 8	SUBARRAY: SUB320
NCM0922	611 10	SUBARRAY: SUB400P
NCM0026	502 9	SUBARRAY: SUB640
NCM0337	ALL: 6582 6 A: 6582 32 B: 6582 5	Subarrays other than FULL can only be specified for Module B
Dither Patterns		

Primary Dither Type		
NCM0361	6582 5	PRIMARY DITHER TYPE: NONE
NCM0362	6582 6	PRIMARY DITHER TYPE: FULL
NCM0363	6582 7	PRIMARY DITHER TYPE: INTRAMODULE
NCM0364	6582 8	PRIMARY DITHER TYPE: INTRASCA
NCM0923		PRIMARY DITHER TYPE required field
NCM0924		PRIMARY DITHER TYPE no default value - NONE not default
None		
Full		
Primary Dithers		
NCM0365	6583 1	PRIMARY DITHERS: 2
NCM0366	6583 2	PRIMARY DITHERS: 3
NCM0367	6583 3	PRIMARY DITHERS: 6
NCM0368	6583 4	PRIMARY DITHERS: 9
NCM0369	6582 6	PRIMARY DITHERS: 3TIGHT
NCM0370	6583 5	PRIMARY DITHERS: 15
NCM0371	6583 6	PRIMARY DITHERS: 21
NCM0372	6583 7	PRIMARY DITHERS: 27
NCM0373	6583 8	PRIMARY DITHERS: 36
NCM0374	6582 31	PRIMARY DITHERS: 45
Intramodule		
Primary Dithers		
NCM0375	6582 32	PRIMARY DITHERS: 2
NCM0376	6582 7	PRIMARY DITHERS: 3
NCM0377	6583 10	PRIMARY DITHERS: 4
NCM0378	6583 11	PRIMARY DITHERS: 5
NCM0379	6583 12	PRIMARY DITHERS: 6
NCM0380	6583 13	PRIMARY DITHERS: 7
NCM0381	6583 14	PRIMARY DITHERS: 8
NCM0382	6583 15	PRIMARY DITHERS: 9
NCM0383	6583 16	PRIMARY DITHERS: 10
NCM0384	6583 17	PRIMARY DITHERS: 11
NCM0385	6583 18	PRIMARY DITHERS: 12
NCM0386	6583 19	PRIMARY DITHERS: 13
NCM0387	6583 20	PRIMARY DITHERS: 14
NCM0388	6583 21	PRIMARY DITHERS: 15
NCM0389	6583 22	PRIMARY DITHERS: 16
Intrasca		
Camera		
NCM0390	6582 8	CAMERA: SHORT
NCM0391	6582 33	CAMERA: LONG
Dither Size		
NCM0392	6582 34	DITHER SIZE: SMALL
NCM0393	6582 8	DITHER SIZE: MEDIUM
NCM0394	6582 33	DITHER SIZE: LARGE
Primary Dithers		
NCM0395	6582 8	PRIMARY DITHERS: 2
NCM0396	6582 34	PRIMARY DITHERS: 3
NCM0418	6583 23	PRIMARY DITHERS: 25
Subpixel Positions		
NCM0925		PRIMARY DITHERS: 1
NCM0422	6583 1	SUBPIXEL POSITIONS: 2
NCM0423	6582 3	SUBPIXEL POSITIONS: 3
NCM0424	6583 23	SUBPIXEL POSITIONS: 4

NCM0425	6582 34	SUBPIXEL POSITIONS: 8
NCM0426	6582 8	SUBPIXEL POSITIONS: 6
NCM0427	6583 24	SUBPIXEL POSITIONS: 25
NCM0429	6583 25	SUBPIXEL POSITIONS: 64
NCM0428	6583 25	SUBPIXEL POSITIONS can be used for all dither types including NONE
Filters		
Filter Name		
NCM0027	502 1	Select name of each filter pair
NCM0028	how to test?	MODULE=ALL, the same filter pair will be used in both modules
NCM0029	502 1	F070W
NCM0030	502 11	F090W
NCM0031	502 12	F115W
NCM0032	502 13	F150W
NCM0033	502 14	F150W2
NCM0034	502 15	F200W
NCM0035	502 16	F140M
NCM0036	502 17	F182M
NCM0037	502 18	F210M
NCM0038	502 19	F187N
NCM0039	502 2	F212N
NCM0040	502 21	F162M+F150W2
NCM0042	502 23	F164N+F150W2
NCM0044	502 1	F277W
NCM0045	502 11	F322W2
NCM0046	502 12	F356W
NCM0047	502 13	F444W
NCM0048	502 14	F250M
NCM0049	502 15	F300M
NCM0050	502 16	F335M
NCM0051	502 17	F360M
NCM0052	502 18	F410M
NCM0053	502 19	F430M
NCM0054	502 1	F460M
NCM0055	502 21	F480M
NCM0057	502 23	F323N+F322W2
NCM0058	502 24	F405N+F444W
NCM0062	502 28	F466N+F444W
NCM0064	502 3	F470N+F444W
Readout Pattern		
NCM0074	502 39	RAPID
NCM0073	502 38	BRIGHT1
NCM0072	502 37	BRIGHT2
NCM0071	502 36	SHALLOW2
NCM0070	502 35	SHALLOW4
NCM0069	502 34	MEDIUM2
NCM0068	502 33	MEDIUM8
NCM0067	502 32	DEEP2
NCM0066	502 31	DEEP8
Number of Groups		
NCM0432	611 1.01	NUMBER OF GROUPS
Number of Integrations		
NCM0433	611 1.01	NUMBER OF INTEGRATIONS
Legal Min/Max Values		
NCM0357	6815 1.09	RAPID

NCM0358	6815 2.09	RAPID ALL
NCM0419	6815 1.08	BRIGHT1
NCM0420	6815 1.07	BRIGHT2
NCM0421	6815 2.07	BRIGHT2 ALL
NCM0428	6815 1.06	SHALLOW2
NCM0430	6815 1.05	SHALLOW4
NCM0431	6815 1.04	MEDIUM2
NCM0432	6815 1.03	MEDIUM8
NCM0043	6815 1.02	DEEP2
NCM0060	6815 1.01	DEEP8
Illegal Min/Max Values		
NCM0061	6815 3.09	RAPID
NCM0065	6815 4.09	RAPID ALL
NCM0401	6815 3.08	BRIGHT1
NCM0402	6815 3.07	BRIGHT2
NCM0403	6815 4.07	BRIGHT2 ALL
NCM0404	6815 3.06	SHALLOW2
NCM0405	6815 3.05	SHALLOW4
NCM0406	6815 3.04	MEDIUM2
NCM0407	6815 3.03	MEDIUM8
NCM0408	6815 3.02	DEEP2
NCM0409	6815 3.01	DEEP8