

Traceability Matrix, PPS Proposal Instructions

Chapter 43 NIRISS Aperture Masking Interferometry (AMI)

Requirement #	Proposal, Visit, Exposure	Comment
Introduction		
NSS0101	656 1	NIRISS Aperture Masking Interferometry Template exists
Target Acquisition Exposure		
NSS0102	656 2	Target Acquisition section exists
NSS0249	656 2	Field Acquisition Target
NSS0250	656 2	Acquisition Target, choose from list
NSS0251	656 2	Field Acquisition Mode
NSS0252	656 2	Acquisition Mode, choose AMIBRIGHT or AMIFAINT
NSS0253	656 2	Field Acquisition Readout Pattern
NSS0254	656 2	Acquisition Readout Pattern, NISRAPID
NSS0255	656 2	Field Acquisition Number of Groups
NSS0256	656 2	Acquisition Number of Groups, choose from list
Science Imaging Exposures		
NSS0103	656 1	Imaging section exists
NSS0104	656 1	Field: Subarray
NSS0105	656 1	Subarray, choose from list
NSS0257	656 1	Field: Primary Dither
NSS0258	656 1	Primary Dither, choose from list
NSS0259	656 1	Field: Subpixel Positions
NSS0260	656 1	Subpixel Positions, choose from list
NSS0106	656 1.01	Field: Filter
NSS0107	656 1.01	Filter, choose from list
NSS0108	656 1.01	Field: Readout Pattern
NSS0109	656 1.01	Readout Pattern, choose from list
NSS0110	656 1.01	Field: Number of Groups
NSS0112	656 1.01	Number of Groups, specify number
NSS0113	656 1.01	Field: Number of Integrations
NSS0115	656 1.01	Number of Integrations, specify number
Direct Imaging Exposures (optional)		
NSS0116	656 2	Direct Imaging section exists
NSS0117	656 2	Field: Direct Image
NSS0118	656 2	Direct Image, TRUE or FALSE
NSS0261	656 2	Field: Image Dithers
NSS0262	656 2	Image Dithers, choose from list
NSS0119	656 DI 2.01	Field: Readout Pattern
NSS0120	656 DI 2.01	Readout Pattern, choose from list
NSS0121	656 DI 2.01	Field: Number of Groups
NSS0122	656 DI 2.01	Number of Groups, specify number
NSS0123	656 DI 2.01	Field: Number of Integrations
NSS0124	656 DI 2.01	Number of Integrations, specify number
Target Acquisition Exposures		
Acquisition Target		
NSS0263	656 4	select acquisition target if offset star to be used
NSS0264	656 1	if no target acq needed select NONE
NSS0265	656 1	NONE only allows Subarray FULL

NSS0266	656 4	acquisition flux will be populated by value entered for acq target
NSS0267	902 14	Target ACQ field always present, defaults to SAME TARGET AS OBSERVATION
NSS0268	656 11	Error if distance between acq and sci targets > splitting distance
Acquisition Mode		
NSS0269	656 2	AMIBRIGHT
NSS0270	656 3	AMIFAIN
Acquisition Readout Pattern		
NSS0271	656 2	NISRAPID
Acquisition Number of Groups		
NSS0272	656 3	3
NSS0273	656 5	5
NSS0274	656 9	7
NSS0275	656 7	9
NSS0276	656 6	11
NSS0277	656 10	13
NSS0278	656 2	15
NSS0279	656 8	17
NSS0280	656 4	19
NSS0281	656 2	NUMBER OF INTEGRATIONS set to 1
Science Exposures		
Subarray		
NSS0125	656 2	SUBARRAY: SU80
NSS0126	902 18	SUBARRAY: SUB80 default
NSS0127	656 1	SUBARRAY: FULL
Dither Pattern		
Primary Dithers		
NSS0282	659 1	NONE
NSS0283	659 3	2
NSS0284	659 4	3
NSS0285	659 2	4
NSS0286	902 18	default=4
Subpixel Positions		
NSS0287	659 2	NONE
NSS0288	659 4	4
NSS0289	902 18	default=4
NSS0290	659 3	9
Filter(s)		
NSS0111	656 1.01	for each filter specify exposure duration parameters
Filter Names		
NSS0128	656 1.01	F277W
NSS0129	656 1.03	F380M
NSS0130	656 1.02	F430M
NSS0131	656 1.04	F480M
Readout Pattern		
NSS0132	656 1.01	NISRAPID
NSS0133	902 19.01	NISRAPID is default
NSS0134	656 1.02	NIS
NSS0291	656 2 & 6	NIS option only available when SUBARRAY=FULL
Number of Groups		
NSS0135	656 1.01	NUMBER OF GROUPS

NSS0136	656 1.02 656 1.03 902 14.04 902 14.03	NIS 1-200 1 200 0 201
NSS0137	656 1.01 656 1.04 902 14.05 902 14.01	NISRAPID 1-800 1 800 0 801
Number of Integrations		
NSS0138	656 1.01	NUMBER OF ITERATIONS: range 1-10000
NSS0207	656 1.03 656 1.02 902 14.06 902 14.02	1-10 1 10000 0 10001
Direct Imaging Exposures		
Direct Image		
NSS0139	656 1	FALSE
NSS0140	902 18	FALSE is default
NSS0141	656 2	TRUE
NSS0142	656 2	following parameters should be specified if DIRECT IMAGE=YES
Image Dithers		
NSS0292	659 6	NONE
NSS0293	659 8	2
NSS0294	659 7	
NSS0295	659 14	4
NSS0296	902 20	default=4
Readout Pattern		
NSS0143	656 DI 2.01	NISRAPID
NSS0144	902 DI 20.01	NISRAPID is default
NSS0145	656 DI 2.02	NIS
NSS0297	656 5 & 659 14	NIS option only available when SUBARRAY=FULL
Number of Groups		
NSS0146	656 DI 2.01	NUMBER OF GROUPS
NSS0208	902 DI 14.05 902 DI 14.06 902 DI 14.11 902 DI 14.13	NIS 1-200 1 200 0 201
NSS0209	902 DI 14.04 902 DI 14.01 902 DI 14.12 902 DI 14.08	NISRAPID 1-120 1 120 0 121
Number of Integrations		
NSS0147	656 DI 2.01	NUMBER OF ITERATIONS
NSS0210	656 DI 2.01 656 DI 2.04 902 DI 14.12 902 DI 14.09	1-10 1 10 0 11
NSS0298	656 2	direct image flag YES in DB for each Direct Image exp spec

NSS0148	656 2	order all AMI executed followed by all Direct Images
NSS0149	656 2	APT needs to populate DB in above order