

Traceability Matrix, PPS Proposal Instructions

Chapter 10: MIRI Imaging

Requirement #	Proposal, Visit, Exposure	Comment
Introduction		
Science Exposures		
MIR0001	6582 1	MIRI Imaging Template exists
MIR0212	6582 1	Field: Subarray
MIR0004	6582 1	Subarray, chose from list
MIR0345	6582 1	Field: Pattern Type
MIR0346	6582 1	Pattern Type, choose from list
MIR0347	6582 1	Field: Starting Point
MIR0348	6582 1	Starting Point, 1,2,3..310,311
MIR0349	6582 1	Field: Number of Points
MIR0350	6582 1	Number of Points, 3,4,5...
MIR0351	6582 1	Field: Pattern Size
MIR0352	6582 1	Pattern Size, choose from list
MIR0353	6582 1	Field: Subpixel Sampling
MIR0354	6582 1	Subpixel Sampling, YES or NO
MIR0213	6582 1.01	Field: Filter
MIR0005	6582 1.01	Filter, choose from list
MIR0410	6582 1.01	Field: Readout Pattern
MIR0411	6582 1.01	Readout Pattern, choose from list
MIR0412	6582 1.01	Field: Number of Groups
MIR0413	6582 1.01	Number of Groups, number
MIR0414	6582 1.01	Field: Number of Integrations
MIR0415	6582 1.01	Number of Integrations, number
Science Exposures		
Subarray		
MIR0014	601 1.01	SUBARRAY: FULL
MIR0015	601 2.01	SUBARRAY: BRIGHTSKY
MIR0534	301 3.01	SUBARRAY: SUB256
MIR0535	301 5.01	SUBARRAY: SUB128
MIR0536	301 6.01	SUBARRAY: SUB64
Dither Patterns		
Pattern Type		
MIR0355	6582 1.01	PATTERN TYPE: None
MIR0356	6582 1.02 (#1)	PATTERN TYPE: Cycling
MIR0357	6582 1.03 (#2)	PATTERN TYPE: Reuleaux
MIR0500	6582 35.01 (#1)	PATTERN TYPE: Gaussian
MIR0003	903 25 1.01	PATTERN TYPE: No default, required
None		
Cycling		
MIR0065	903 25.01	PATTERN SIZE: required (Note size is Default by default)
Starting Point		
MIR0358	6582 37 #1 (1) 37 #2 (311)	STARTING POINT: 1, 2, 3, ... 310, 311

MIR0358	903 26 #1 (0) 26 #3 (312)	illegal cases 0 and 312
Number of Points		
MIR0359	6582 37 #1 (3)	NUMBER OF POINTS: 3, 4, 5, ...
MIR0359	903 26 #3 (0) 26 #1 (1) 26 #2 (2)	illegal cases 0,1,2
MIR0389	37 1.02 (#2)	If STARTING POINT + NUMBER OF POINTS > 311 pattern cycles back to 1, 2, 3, etc
MIR0360	903 #4 (2222)	no explicit maximum for number of points
Gaussian		
MIR0501	903 25 #1	PATTERN SIZE: required (Note size is Default by default)
MIR0502	903 27 #2,#3	SUB128 only can use Gaussian
MIR0503	903 28 #2,#3	SUB64 only can use Gaussian
Reuleaux		
MIR0361	903 25 #1	PATTERN SIZE: required (Note size is Default by default)
Pattern Size		
MIR0365	6582 1.05 (#4)	PATTERN SIZE: DEFAULT
MIR0362	6582 1.02 (#1)	PATTERN SIZE: SMALL
MIR0363	6582 1.03 (#2)	PATTERN SIZE: MEDIUM
MIR0364	6582 1.04 (#3)	PATTERN SIZE: LARGE
MIR0504	301 1.05, 1.01	FULL SMALL: Reuleaux, Cycling
MIR0505	301 1.06, 1.02	FULL MEDIUM: Reuleaux, Cycling
MIR0506	301 1.07, 1.03	FULL LARGE: Reuleaux, Cycling
MIR0507	301 2.05, 2.01	BRIGHTSKY SMALL: REAULEAUX, CYCLING
MIR0508	301 2.06, 2.02	BRIGHTSKY MEDIUM: Reuleaux, Cycling
MIR0509	301 2.07, 2.03	BRIGHTSKY LARGE: Reuleaux, Cycling
MIR0510	301 3.05, 3.01	SUB256 SMALL: REAULEAUX, CYCLING
MIR0511	301 3.06, 3.02	SUB256 MEDIUM: Reuleaux, Cycling
MIR0512	301 3.07, 3.03	SUB256 LARGE: Reuleaux, Cycling
MIR0513	301 5.03	SUB128 SMALL: Gaussian
MIR0514	301 5.02	SUB128 MEDIUM: Gaussian
MIR0515	301 6.01	SUB64 SMALL Gaussian
Default Dither Patterns for Reuleaux (FULL, BRIGHTSKY, or SUB256) 19 (FULL) 20 (BRIGHTSKY) 21 (SUB256)		
MIR0366	301 19.01	F560W: DEFAULT -> SMALL
MIR0367	301 19.02	F770W: DEFAULT -> SMALL
MIR0368	301 19.03	F1000W: DEFAULT -> MEDIUM
MIR0369	301 19.04	F1130W: DEFAULT -> MEDIUM
MIR0370	301 19.05	F1280W: DEFAULT -> MEDIUM
MIR0371	301 19.06	F1500W: DEFAULT -> MEDIUM
MIR0372	301 19.07	F1800W: DEFAULT -> LARGE
MIR0373	301 19.08	F2100W: DEFAULT -> LARGE
MIR0374	301 19.09	F2550W: DEFAULT -> LARGE
Default Dither Patterns for Cycling (FULL, BRIGHTSKY, or SUB256) 24 (FULL) 23 (BRIGHTSKY) 22 (SUB256)		
MIR0375	301 22.09	F560W: DEFAULT -> SMALL
MIR0376	301 22.02	F770W: DEFAULT -> MEDIUM
MIR0377	301 22.03	F1000W: DEFAULT -> MEDIUM
MIR0378	301 22.04	F1130W: DEFAULT -> MEDIUM
MIR0379	301 22.05	F1280W: DEFAULT -> MEDIUM
MIR0380	301 22.06	F1500W: DEFAULT -> MEDIUM

MIR0381	301 22.07	F1500W: DEFAULT -> MEDIUM
MIR0382	301 22.08	F2100W: DEFAULT -> MEDIUM
MIR0383	301 22.09	F2550W: DEFAULT -> MEDIUM
MIR0384		multiple filters & DEFAULT: list filters by default pattern size
Default Dither Patterns for Gaussian (SUB128)		
MIR0516	301 25.01	F560W: DEFAULT -> SMALL
MIR0517	301 25.02	F770W: DEFAULT -> SMALL
MIR0518	301 25.03	F1000W: DEFAULT -> MEDIUM
MIR0519	301 25.04	F1130W: DEFAULT -> MEDIUM
MIR0520	301 25.05	F1280W: DEFAULT -> MEDIUM
MIR0521	301 25.06	F1500W: DEFAULT -> MEDIUM
MIR0522	301 25.07	F1800W: DEFAULT -> MEDIUM
MIR0523	301 25.08	F2100W: DEFAULT -> MEDIUM
MIR0524	301 25.09	F2550W: DEFAULT -> MEDIUM
Default Dither Patterns for Gaussian (SUB64) *Does not allow option DEFAULT.. Must choose SMALL*		
MIR0525	301 26.01	F560W: SMALL
MIR0526	301 26.02	F770W: SMALL
MIR0527	301 26.03	F1000W: SMALL
MIR0528	301 26.04	F1130W: SMALL
MIR0529	301 26.05	F1280W: SMALL
MIR0530	301 26.06	F1500W: SMALL
MIR0531	301 26.07	F1800W: SMALL
MIR0532	301 26.08	F2100W: SMALL
MIR0533	301 26.09	F2550W: SMALL
Subpixel Sampling		
MIR0387	301 1.01	SUBPIXEL SAMPLING: YES
MIR0388	301 1.02	SUBPIXEL SAMPLING: NO
Filters		
Filter Name		
MIR0016	601 1.01	F560W
MIR0017	601 1.02	F770W
MIR0018	601 1.03	F1000W
MIR0019	601 1.04	F1130W
MIR0020	601 1.05	F1280W
MIR0021	601 1.06	F1500W
MIR0022	601 1.07	F1800W
MIR0023	601 1.08	F2100W
MIR0024	601 1.09	F2550W
Readout Pattern		
MIR0417	301 27.01	FAST
MIR0418	301 27.02	SLOW
MIR0419	301 27.03	FASTGRPAVG
Number of Groups		
MIR0421	601 1.01	NUMBER OF GROUPS
MIR0214	903 1.02	FASTGRPAVG, NUMBER OF GROUPS multiple of 4
MIR0416	903 1.01	FASTGRPAVG, NUMBER OF GROUPS > 16
MIR0006		FASTGRPAVG, NUMBER OF GROUPS >= 8
Number of Integrations		
MIR0422	601 1.01	NUMBER OF INTEGRATIONS