

Coordinated Parallel Observations

Program, Obs(.Exposure_Spec)	Comment
Allowed combinations of Prime and Parallel Observations	
Prime MIRI Imaging	
201 1	NIRCam Imaging
202 1	NIRISS Wide Field Slitless Spectroscopy
209 1	FGS External Calibration
Prime MIRI MRS	
209 2	FGS External Calibration
NIRCam Imaging	
203 1	MIRI Imaging
204 1	NIRISS Imaging
205 1	NIRISS Wide Field Slitless Spectroscopy
NIRCam Engineering Imaging	
209 3	FGS External Calibration
NIRSpec Imaging	
209 5	FGS External Calibration
NIRSpec Multi-Object Spectroscopy	
208 1	NIRCam Imaging
NIRISS Wide Field Slitless Spectroscopy	
206 1	MIRI Imaging
207 1	NIRCam Imaging
NIRISS External Calibration	
209 4	FGS External Calibration
General Requirements	
201 1	specify coordinated observation by checking Coordinated Parallel box
919 5	when checked error to not set Coordinated Template
201-208	prime observation will offer additional dithers
201-208	coordinated parallel template will NOT include dither parameters
919 2.02	parallel must have same number of total exposures as prime
200 1.01	first parallel exp done in parallel with first prime
200 1.02, 1.03, 1.04	second parallel done in parallel with second prime, etc.
919 1.02	for each prime/parallel pair, duration of parallel cannot exceed that of prime
201 1, 202 1	when MIRI Imaging prime number of exposures/dither=1
203 1	when MIRI Imaging parallel number of exposures/dither=1
919 7.01	NIRCam RAPID cannot be used as prime
919 1.01	NIRCam RAPID cannot be used as parallel
919 7.02	NIRCam BRIGHT1 can only be used if Module!=ALL prime
919 8.01	NIRCam BRIGHT1 can only be used if Module!=ALL parallel
208 1.06	NIRCam BRIGHT2 can't be used when NIRSpec MOS prime
NIRISS WFSS as prime	
206 1, 2 (BOTH) legal	each parallel MIRI must consist of 3 (5) exp specs for each WFSS science exposure spec
207 1, 2(BOTH) legal	each parallel NIRCam must consist of 3 (5) exp specs for each WFSS science exposure spec

207 1 2 (BOTH)	1st and 3rd (1st and 5th) WFSS must be undithered 1 total dither
919 9	if WFSS exp spec completed first APT will automatically give correct number of dithers for parallels as you create them
NIRISS WFSS as parallel with MIRI prime	
202 1	Direct Image Prime - special MIRI parameter to make exp count match
202 3	Direct Image Prime = No_Dithering
919 10	Direct Image Prime = No_Dithering (default)
202 1	Direct Image Prime = Dither_Direct_Images
202 3	No_Dithering APT will require you to select Dither NONE for those MIRI images that match the WFSS direct exposures
202 1	Direct_Dither_Images parallel NIRISS WFSS direct images will be dithered to match MIRI prime dithering
NIRISS WFSS as parallel with NIRCcam prime	
205 1	Direct Image Exposures - special NIRCcam parameter to make the exp count match
205 1	Direct Image Exposures = No_Dithering
919 11	Direct Image Exposures = No Dithering (default)
205 2	Direct Image Exposures = Dither_Direct_Images
205 1	No_Dithering NIRCcam images that match WFSS direct exps will not be dithered
205 2	Dither_Direct_Images NIRCcam images will be dithered as specified, NIRISS WFSS direct images will be dithered to match
919 6	APT should automatically add NO PARALLEL sr to coordinated obs
919 3	error if NO PARALLEL sr removed