

NIRSpec Fixed Slit Spectroscopy

Program, Obs(.Exposure_Spec)	Comment
Template Specific Information	
661 1	NIRSpec Fixed Slit Spectroscopy template exists
MA Target Acquisition Parameters Visit Level	
11127 1	Field: Target Acquisition Method choose from list
11127 1	Field: Reference Star Bin choose from list
11127 1	Field: Acquisition Filter set based on Reference star bin
11127 1	Field: Acquisition MSA Configuration Filename choose from list
11127 1	Acquisition Readout Pattern set based on Reference star bin
WATA Target Acquisition Parameters	
632 1	Field: Acquisition Target choose from list
632 1	Field: Acquisition Subarray choose from list
632 1	Field: Acquisition Filter choose from list
632 1	Field: Acquisition Readout Pattern choose from list
632 1	Field: Slit choose from list
632 1	Field: Subarray choose FULL or SUBPRISM
632 1	Field: Primary Dither Position choose from list
632 1	Field: Sub-Pixel Dither Position choose from list
632 1	Field: Grating/Filter choose from list
632 1	Field: Readout Pattern choose from list
632 1	Field: Number of Groups/Integration number
632 1	Field: Number of Integrations/Exposure number
632 1	Field: Autocal NONE, WAVECAL
Target Acquisition Parameters	
Target Acquisition Method	
661 26	NONE
661 1	MSATA
632 1	WATA (default)
632 13	MSATA not allowed for moving targets
632 13	WATA moving targets allowed acq target must be science target
MSA Target Acquisition Exposure Visit Level	
Reference Star Bin	
11127 1	MSA Planning tool generate multiple options
341 1 F140X 5 stars	only 5 or more reference star bins shown
341 2 F110W 6 stars	bin with 5-7 reference stars warning
341 3 F110W 8 stars	no warning for 8 or more
Acquisition Filter	
11127 1	automatically set based on Ref Star Bin CLEAR, F140X, F110W
Acquisition MSA Configuration Filename	
11127 1	select previously config defined in MPT
11127 1	or select ALLOPEN
Acquisition Readout Pattern	
11127 1	automatically set based on Ref Star Bin CLEAR, F140X, F110W
Acquisition Number of Groups/Integration	
11127 1	automatically set to 3 uneditable
Acquisition Number of Integrations/Exposure	

11127 1	automatically set to 1 uneditable
11127 1	SUBARRAY not given, FULL for purposes of exposure time
WATA Target Acquisition Exposure	
632 1	if offset select from list
904 25	ACQUISITION TARGET name should always be present and defaulted to SAME TARGET AS OBSERVATION
904 24	Error if Acq and Science target too far apart
Acquisition Subarray	
632 3	SUB32
632 2	SUB2048
632 1	FULL
Acquisition Filter	
632 1	F140X
632 2	F110W
632 3	CLEAR
Acquisition Readout Pattern	
632 1	NRS
632 2	NRSRAPID
Acquisition Number of Groups/Integration	
632 1	automatically set to 3 uneditable
Acquisition Number of Integrations/Exposure	
632 1	automatically set to 1 uneditable
Science Parameters	
Slit	
661 1	S200A1
661 2	S200A2
661 3	S200B1
661 5	S400A1
661 23	S1600A1
Subarray	
661 1	S200A1 SUBS200A1 (default)
632 13	S200A1 ALLSLITS
661 13	S200A1 FULL
661 4	S200A2 SUBS200A2 (default)
661 2	S200A2 ALLSLITS
661 18	S200A2 FULL
661 3	S200B1 SUBS200B1 (default)
661 9	S200B1 ALLSLITS
661 19	S200B1 FULL
661 5	S400A1 SUBS400A1 (default)
661 7	S400A1 ALLSLITS
661 15	S400A1 FULL
661 23	S1600A1 SUB2048 (default)
661 25	S1600A1 ALLSLITS
661 24	S1600A1 FULL
661 20	S1600A1 SUB512
661 21	S1600A1 SUB1024A
661 22	S1600A1 SUB1024B
661 8	S200A1 and S200A2 ALLSLITS (default)

661 27	S200A1 and S200A2 FULL
904 10	NRSIRS2 must be FULL
904 11	NRSIRS2RAPID must be FULL
Dither Pattern	
Primary Dither Positions	
632 3	NONE
661 1	2
632 1	3
632 2	5
904 1	required no default (don't make NONE default)
Sub-Pixel Dither Pattern	
632 1	NONE
661 8	SPECTRAL
661 1	SPATIAL
661 5	BOTH
904 1	required no default (don't make NONE default)
Science Exposure Specification	
661 1	one or more combos
Grating/Filter Name	
661 2.02	G140M/F070LP
661 1.01	G140M/F100LP
661 2.03	G235M/F170LP
661 5.01	G395M/F290LP
661 4.01	G140H/F070LP
661 2.01	G140H/F100LP
661 3.01	G235H/F170LP
661 1.02	G395H/F290LP
661 1.03	PRISM/CLEAR
661 27	for S200A1 AND S200A2 only high resolution gratings available
661 8	For multiple gratings and S200A1 AND S200A2, for each grating observe two slits then move to next grating
661 8	For next grating ensure slits are observed in opposite order as previous grating
Readout Pattern	
632 1.02 (904 25.01)	NRS (default)
632 1.01	NRSRAPID
	NRSIRS2
661 15.02	NRIRS2RAPID
661 16	100 second overhead switching between IRS2 and non-IRS2 in an observation
904 10.01	GROUPS x INTS must be less than 256 for NRSIRS2
904 11.01	GROUPS x INTS must be less than 1024 for NRSIRS2RAPID
904 10&11	if IRS2 or NRSIRS2 must be FULL
661 16	warn if 100 second overhead added
Number of Groups/Integration	
661 1.01	number
904 23.01	maximum 65535
904 23.03,04	illegal 0,65536
Number of Integrations/Exposure	

661 1.01	number
904 23.02	maximum 65535
904 23.04,03	illegal 0,65536
Auto Calibration Exposure	
662 1.01 (904 25.01)	NONE (default)
662 9.03	WAVECAL
904 32.01	if Autocal not NONE then error if NO PARALLEL sr not specified