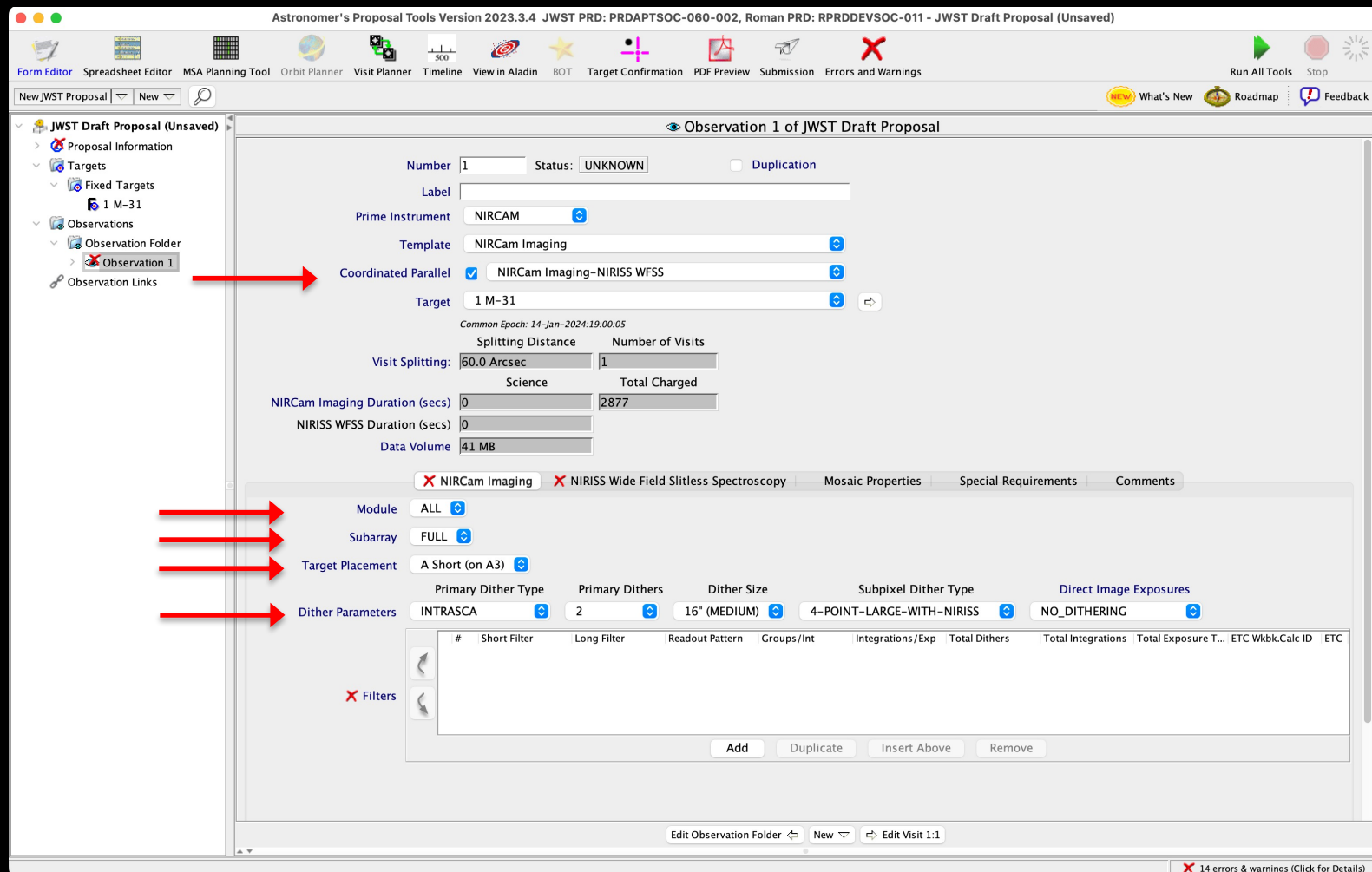


Goal: NIRCam Imaging + NIRISS WFSS combination

- ~1100 s “long” NIRCam exposures (say F070W / F277W) w/parallel WFSS grism exposures
- ~180 s “short” NIRCam exposures (say F070W / F277W) w/parallel WFSS direct images

A) First set up NIRCam template: **Coordinated Parallel, Module, Subarray, Target Placement, Dither parameters**



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What's New Roadmap Feedback

Observation 1 of JWST Draft Proposal

Number 1 Status: UNKNOWN Duplication

Label

Prime Instrument NIRCAM

Template NIRCam Imaging

Coordinated Parallel ☒ NIRCam Imaging-NIRISS WFSS

Target 1 M-31

Common Epoch: 14-Jan-2024:19:00:05

Splitting Distance Number of Visits

Visit Splitting: 60.0 Arcsec 1

Science Total Charged

NIRCam Imaging Duration (secs) 0 2877

NIRISS WFSS Duration (secs) 0

Data Volume 41 MB

NIRCam Imaging NIRISS Wide Field Slitless Spectroscopy Mosaic Properties Special Requirements Comments

Module ALL

Subarray FULL

Target Placement A Short (on A3)

Dither Parameters

Primary Dither Type Primary Dithers Dither Size Subpixel Dither Type Direct Image Exposures

INTRASCA 2 16" (MEDIUM) 4-POINT-LARGE-WITH-NIRISS NO_DITHERING

Filters

Add Duplicate Insert Above Remove

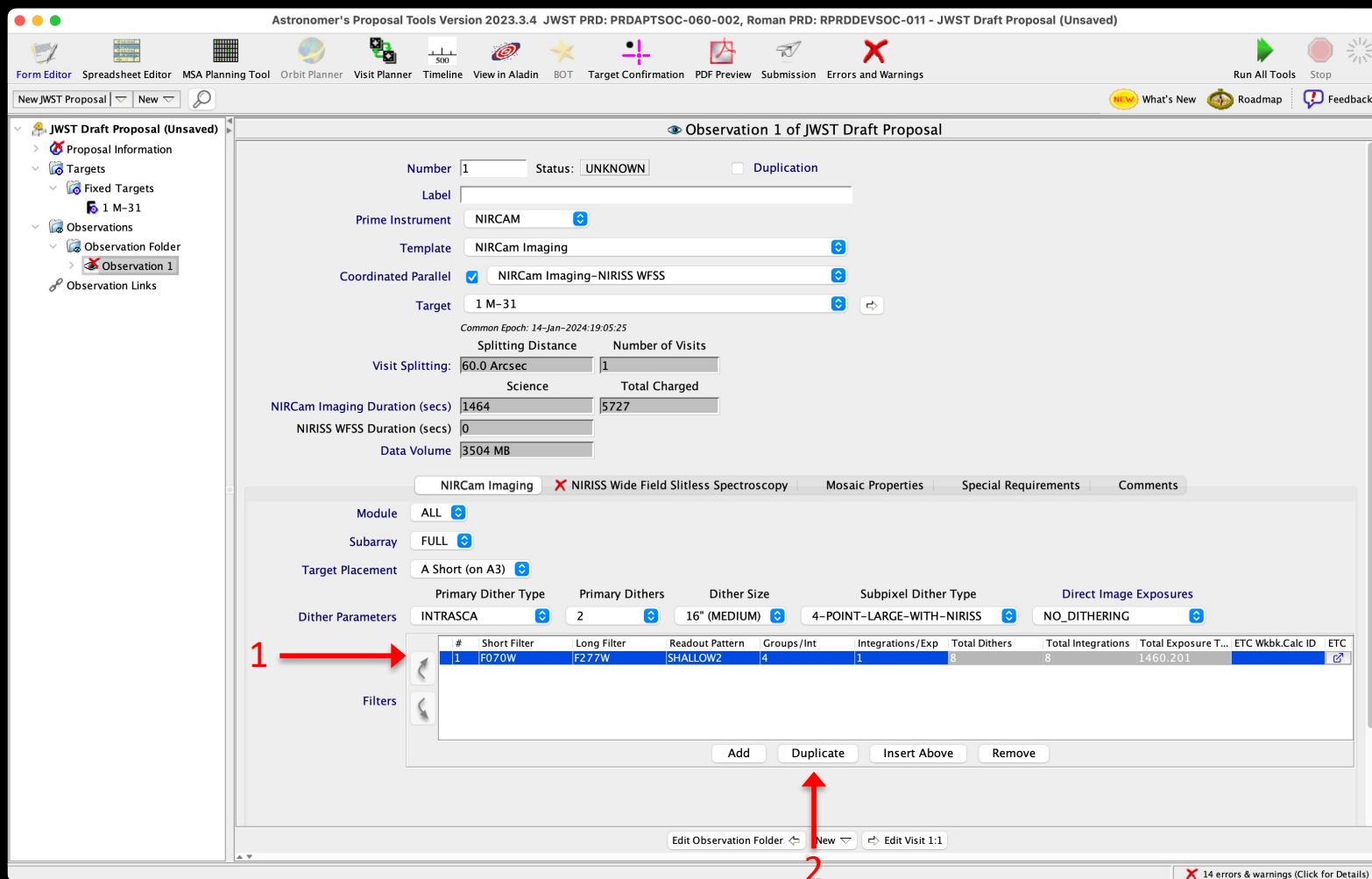
Edit Observation Folder New Edit Visit 1:1

14 errors & warnings (Click for Details)

Goal: NIRCam Imaging + NIRISS WFSS combination

- ~1100 s “long” NIRCam exposures (say F070W / F277W) w/parallel WFSS grism exposures
- ~180 s “short” NIRCam exposures (say F070W / F277W) w/parallel WFSS direct images

B) Set Exposure Parameters for “short” NIRCam exposure (and don’t worry that it says 8 total dithers, that will change), then click “Duplicate”



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New JWST Proposal New

What's New Roadmap Feedback

Observation 1 of JWST Draft Proposal

Number: 1 Status: UNKNOWN Duplication

Label

Prime Instrument: NIRCAM

Template: NIRCam Imaging

Coordinated Parallel: ☒ NIRCam Imaging-NIRISS WFSS

Target: 1 M-31

Common Epoch: 14-Jan-2024:19:05:25

Visit Splitting: 60.0 Arcsec Number of Visits: 1

Science Total Charged

NIRCam Imaging Duration (secs): 1464 5727

NIRISS WFSS Duration (secs): 0

Data Volume: 3504 MB

NIRCam Imaging NIRISS Wide Field Slitless Spectroscopy Mosaic Properties Special Requirements Comments

Module: ALL

Subarray: FULL

Target Placement: A Short (on A3)

Dither Parameters: INTRASCA 2 16" (MEDIUM) 4-POINT-LARGE-WITH-NIRISS NO_DITHERING

Filters

#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure T...	ETC Wbk.Calc ID	ETC
1	F070W	F277W	SHALLOW2	4	1	8	8	1460.201		

Add Duplicate Insert Above Remove

Edit Observation Folder New Edit Visit 1:1

14 errors & warnings (Click for Details)

Goal: NIRCam Imaging + NIRISS WFSS combination

- ~1100 s “long” NIRCam exposures (say F070W / F277W) w/parallel WFSS grism exposures
- ~180 s “short” NIRCam exposures (say F070W / F277W) w/parallel WFSS direct images

C) then click “Insert Above”

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Observation 1 of JWST Draft Proposal

Number: 1 Status: UNKNOWN Duplication: ☐

Label:

Prime Instrument: NIRCAM

Template: NIRCam Imaging

Coordinated Parallel: ☒ NIRCam Imaging-NIRISS WFSS

Target: 1 M-31

Common Epoch: 14-Jan-2024 19:20:38

Splitting Distance: 60.0 Arcsec Number of Visits: 1

Visit Splitting: Science Total Charged

NIRCam Imaging Duration (secs): 2928 8539

NIRISS WFSS Duration (secs): 0

Data Volume: 6966 MB

NIRCam Imaging ☒ NIRISS Wide Field Slitless Spectroscopy Mosaic Properties Special Requirements Comments

Module: ALL

Subarray: FULL

Target Placement: A Short (on A3)

Dither Parameters: Primary Dither Type: INTRASCA Primary Dithers: 2 Dither Size: 16" (MEDIUM) Subpixel Dither Type: 4-POINT-LARGE-WITH-NIRISS Direct Image Exposures: NO_DITHERING

#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure T...	ETC Wkbk.Calc ID	ETC
1	F070W	F277W	SHALLOW2	4	1	8	8	1460.201		
2	F070W	F277W	SHALLOW2	4	1	8	8	1460.201		

Filters:

Add Duplicate **Insert Above** Remove

Edit Observation Folder New Edit Visit 1:1

14 errors & warnings (Click for Details)

Goal: NIRCam Imaging + NIRISS WFSS combination

- ~1100 s “long” NIRCam exposures (say F070W / F277W) w/parallel WFSS grism exposures
- ~180 s “short” NIRCam exposures (say F070W / F277W) w/parallel WFSS direct images

D) Set Exposure Parameters for “long” NIRCam exposure, then switch to NIRISS WFSS

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New JWST Proposal New

What's New Roadmap Feedback

Observation 1 of JWST Draft Proposal

Number: 1 Status: UNKNOWN Duplication

Label:

Prime Instrument: NIRCAM

Template: NIRCam Imaging

Coordinated Parallel: ☒ NIRCam Imaging-NIRISS WFSS

Target: 1 M-31

Common Epoch: 14-Jan-2024:19:25:48

Visit Splitting: 60.0 Arcsec Number of Visits: 1

Science Total Charged

NIRCam Imaging Duration (secs): 12208 20418

NIRISS WFSS Duration (secs): 0

Data Volume: 11924 MB

NIRCam Imaging ☒ NIRISS Wide Field Slitless Spectroscopy Mosaic Properties Special Requirements Comments

Module: ALL

Subarray: FULL

Target Placement: A Short (on A3)

Dither Parameters: INTRASCA 2 16" (MEDIUM) 4-POINT-LARGE-WITH-NIRISS NO_DITHERING

Filters

#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure T...	ETC Wkbk.Calc ID
1	F070W	F277W	SHALLOW2	4	1	8	8	1460.201	
2	F070W	F277W	DEEP8	6	1	8	8	9276.569	
3	F070W	F277W	SHALLOW2	4	1	8	8	1460.201	

Add Duplicate Insert Above Remove

Edit Observation Folder New Edit Visit 1:1

14 errors & warnings (Click for Details)

Goal: NIRCam Imaging + NIRISS WFSS combination

- ~1100 s “long” NIRCam exposures (say F070W / F277W) w/parallel WFSS grism exposures
- ~180 s “short” NIRCam exposures (say F070W / F277W) w/parallel WFSS direct images

E) Set Exposure Parameters for “long” WFSS Grism exposure and “short” WFSS Direct Image; make sure no errors come up for those exposure parameters

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What's New Roadmap Feedback

Observation 1 of JWST Draft Proposal

Coordinated Parallel ☒ NIRCam Imaging-NIRISS WFSS

Target 1 M-31

Common Epoch: 14-Jan-2024:19:29:23

Splitting Distance Number of Visits

Visit Splitting: 60.0 Arcsec 1

Science Total Charged

NIRCam Imaging Duration (secs) 9646 15760

NIRISS WFSS Duration (secs) 8936

Data Volume 7649 MB

NIRCam Imaging NIRISS Wide Field Slitless Spectroscopy Mosaic Properties Special Requirements Comments

Science Observation

Sequences

#	Grism	Filter	Readout Pattern	Groups/Int	Integrations/Exp	ETC Wkbk.Calc ID	ETC
1	GR150R	F115W	NIS	25	1		

Add Duplicate Insert Above Remove

Direct Image Exposure Parameters

Direct Images

#	Readout Pattern	Groups/Int	Integrations/Exp	ETC Wkbk.Calc ID	ETC
1	NIS	4	1		

Use NIRISS Imaging mode in the JWST ETC to calculate exposure parameters for Direct Imaging.

All Exposures Display

Exposures

#	Exposure Type	Filter	Grism	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
1	DIRECT	F115W		NIS	4	1	1	1	182.525	
1	GRISM	F115W	GR150R	NIS	25	1	8	8	8675.31	
1	DIRECT	F115W		NIS	4	1	1	1	182.525	

Edit Observation Folder New Edit Visit 1:1

12 errors & warnings (Click for Details)

Goal: NIRCam Imaging + NIRISS WFSS combination

- ~1100 s “long” NIRCam exposures (say F070W / F277W) w/parallel WFSS grism exposures
- ~180 s “short” NIRCam exposures (say F070W / F277W) w/parallel WFSS direct images

E) Now note that the NIRCam exposure specifications got the correct number of dithers (1 for the short exposures, 8 for the long one)

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Observation 1 of JWST Draft Proposal

Number: 1 Status: UNKNOWN Duplication: ☐

Label:

Prime Instrument: NIRCAM

Template: NIRCam Imaging

Coordinated Parallel: ☒ NIRCam Imaging-NIRISS WFSS

Target: 1 M-31

Common Epoch: 14-Jan-2024:19:29:23

Visit Splitting: Splitting Distance: 60.0 Arcsec Number of Visits: 1

Science Total Charged

NIRCam Imaging Duration (secs): 9646 15760

NIRISS WFSS Duration (secs): 8936

Data Volume: 7649 MB

NIRCam Imaging | **NIRISS Wide Field Slitless Spectroscopy** | Mosaic Properties | Special Requirements | Comments

Module: ALL

Subarray: FULL

Target Placement: A Short (on A3)

Dither Parameters: Primary Dither Type: INTRASCA Primary Dithers: 2 Dither Size: 16" (MEDIUM) Subpixel Dither Type: 4-POINT-LARGE-WITH-NIRISS Direct Image Exposures: NO_DITHERING

#	Short Filter	Long Filter	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID	ETC
1	F070W	F277W	SHALLOW2	4	1	1	1	182.525		
2	F070W	F277W	DEEP8	6	1	8	8	9276.569		
3	F070W	F277W	SHALLOW2	4	1	1	1	182.525		

Filters:

Add Duplicate Insert Above Remove

Edit Observation Folder New Edit Visit 1:1

12 errors & warnings (Click for Details)