

APT, the Astronomer's Proposal Tool Introduction

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European Space Agency

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The Astronomer's Proposal Tool



- The Astronomer's Proposal Tool (APT) is STScI's GUI-based software package proposers use to write, validate, and submit proposals for the James Webb Space Telescope.
- Familiar for HST users, but there are significant differences between the two of them.
- In general JWST proposals have only a Phase 1. By the proposal deadline all instrument modes strategies have to be defined and in principle should not change. Of course there will be revisions and iterations with the PC and contact scientist.
- The NIRSpec MSA is an exception. Only after the observing data/PA has been fixed the final MSA configuration can be delivered.
- https://jwst-docs.stsci.edu/display/JPP/JWST+Astronomers+Proposal+Tool%2C+APT

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APT Terminology



Your JWST Program can contain different observations.

- Each observation can have different visits (e.g. imaging mosaic tiles).
- Each visit contains one or more exposures that can be obtained using a single Guide Star (there are some exceptions to this). Also, a visit can only be 24 hours long.
- One visit can contain different activities (invoked one script, e.g. TA, dithers in one filter...)
- We don't have control on how the visits get split.



















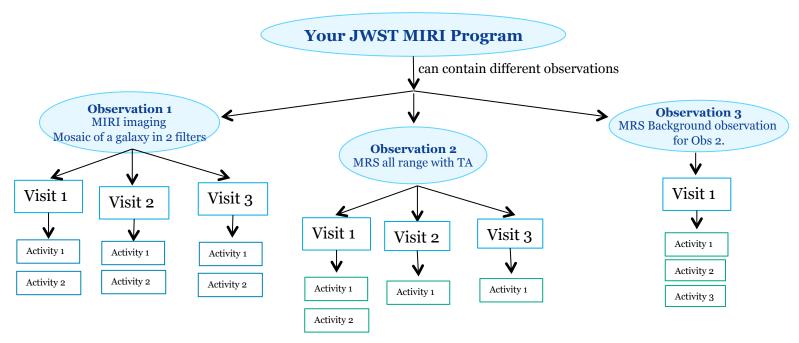






APT Terminology

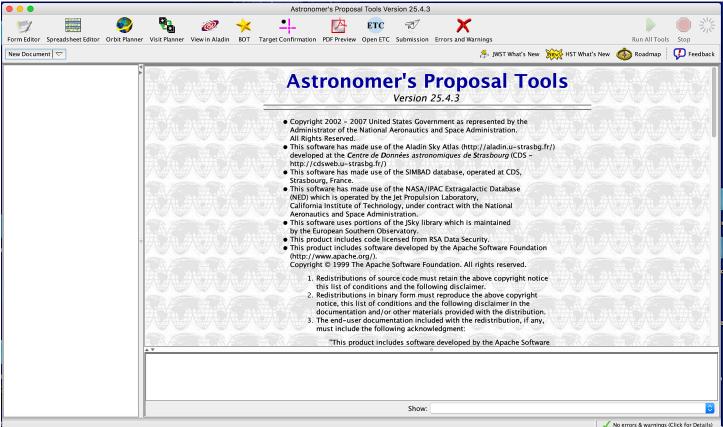




The time limit for one exposure if 10000 s, except for TSOs. There are also limits in the data volume (APT gives warnings)

APT 25.4.3 (please always use the last version, APT will about uddates)

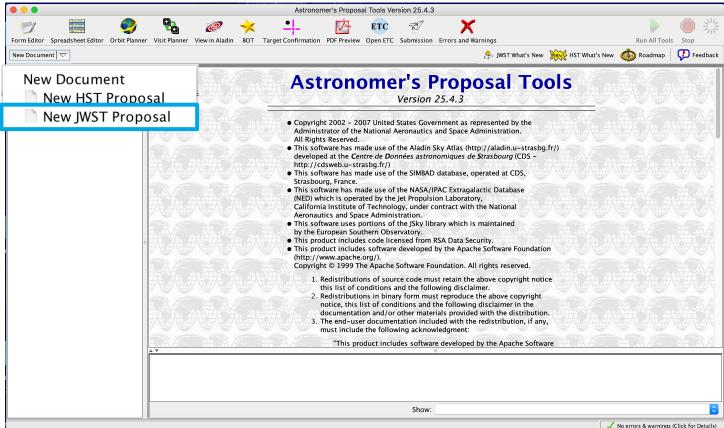




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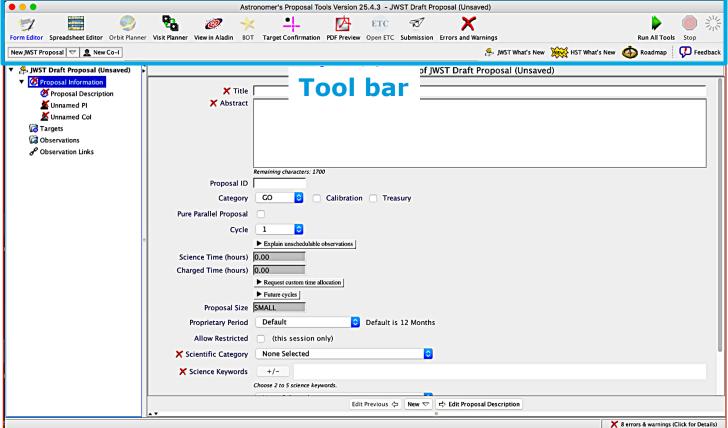




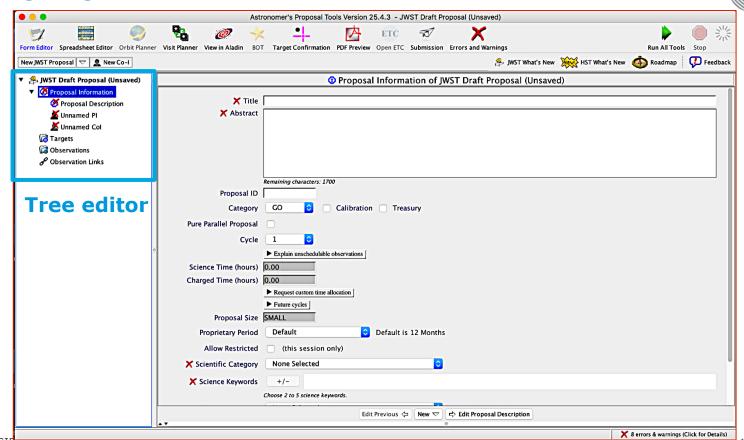
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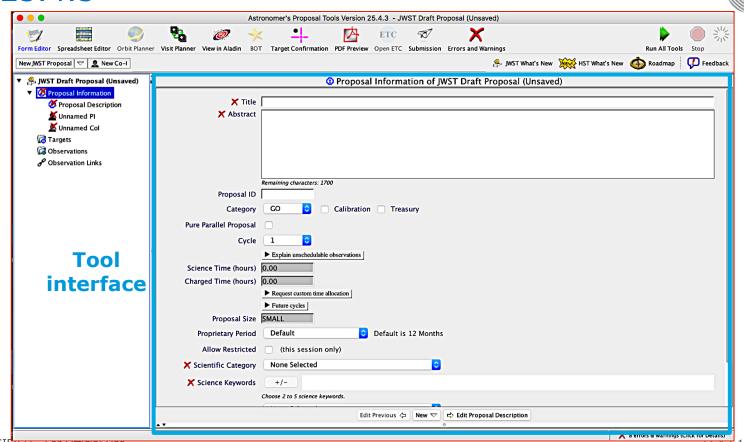




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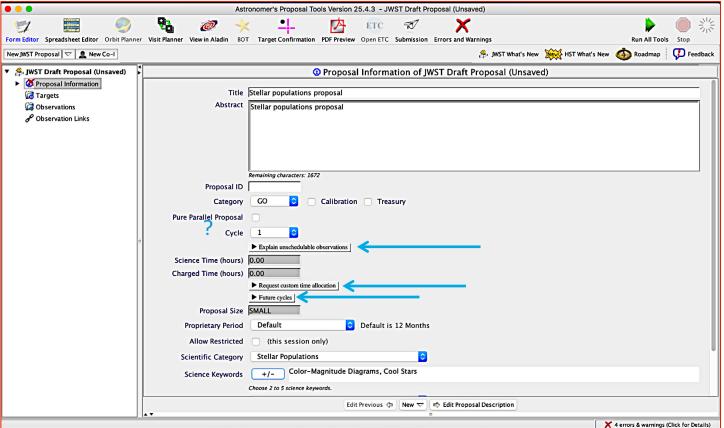
... / James Webb Space Telescope Call for Proposals for Cycle 1

JWST Cycle 1 Proposal Checklist and Resources

[Know the deadlines] [Know where to find the JWST User Documentation] [Learn the JWST observation planning tools.] [Design a JWST observing program in APT] [Write your science proposal] [Submit your JWST proposal.] [Wait.] [Next steps for approved programs] [Related Links]





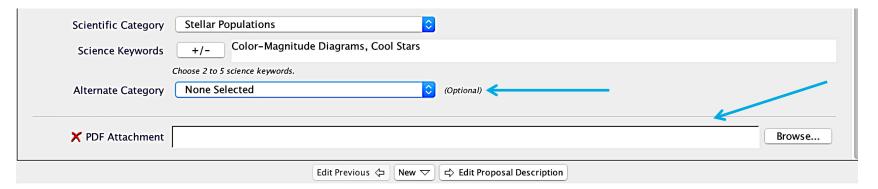


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Charged Time (hours)	0.00
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Time Req Explanation	
Future Cycles	
Next Cycle	Days 😊 or % of Cycle 1
	Next Cycle will include Coordinated Parallels
Third Cycle	Days or % of Cycle 1
	Third Cycle will include Coordinated Parallels



























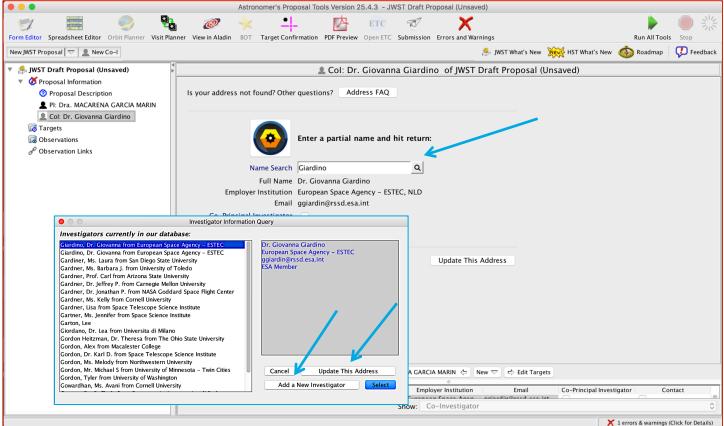




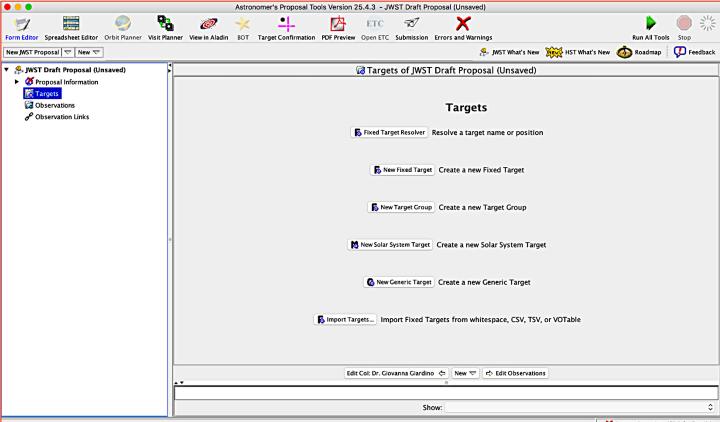










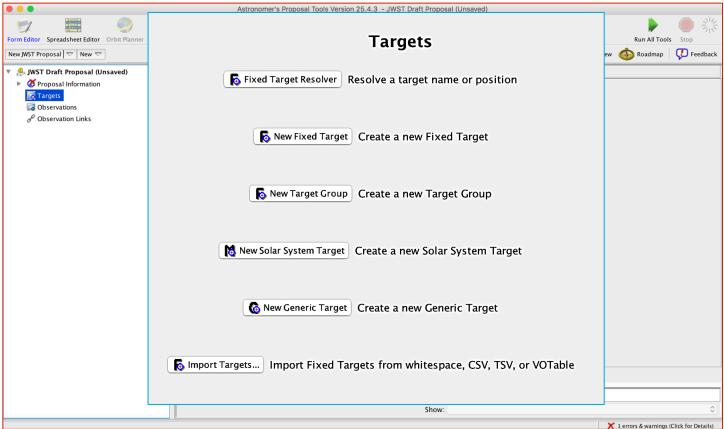


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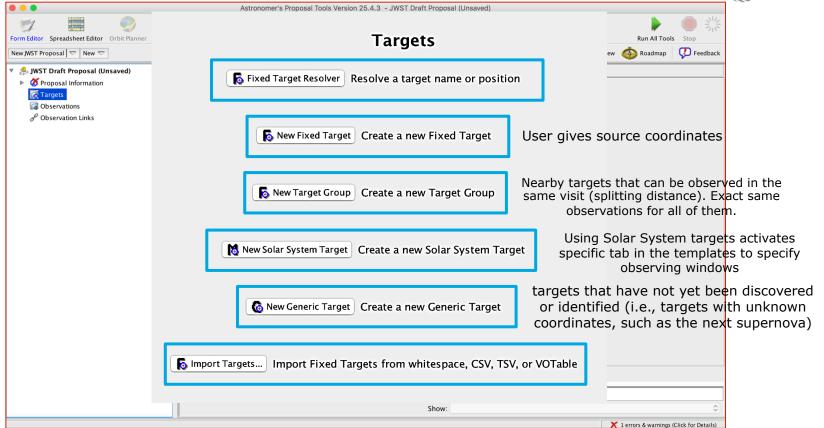
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Number								
Name in the Proposal	M-31	(unique within proposal)						
Name for the Archive	M 31	(standard resolvable name)						
Category	Galaxy							
Description	+/- Galaxy disks, Galaxy nuclei							
	Choose 1 to 5 items after selecting a category.							
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Description	+/- Galaxy disks, Galaxy nuclei							
	Choose 1 to 5 items after selecting a category.							
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Epoch								
Annual Parallax (arcsec)								
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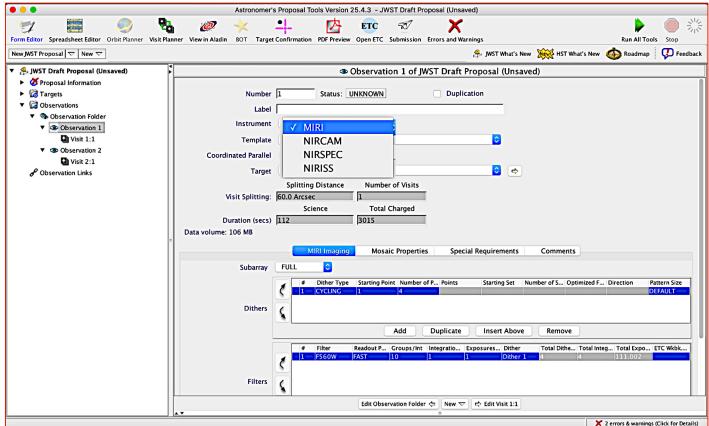


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✓ MIRI Imaging	✓ NIRSpec Fixed Slit Spectroscopy
MIRI Low Resolution Spectroscopy	NIRSpec IFU Spectroscopy
MIRI Medium Resolution Spectroscopy	NIRSpec MultiObject Spectroscopy
MIRI Coronagraphic Imaging	NIRSpec Bright Object Time Series

✓ NIRISS Imaging ✓ NIRCam Imaging NIRISS Wide Field Slitless Spectroscopy NIRCam Coronagraphic Imaging NIRISS Single-Object Slitless Spectroscopy NIRCam Time Series NIRCam Grism Time Series NIRCam Grism Time Series NIRCam Wide Field Slitless Spectroscopy

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√ NIRISS WFSS-MIRI Imaging

NIRISS WFSS-NIRCam Imaging

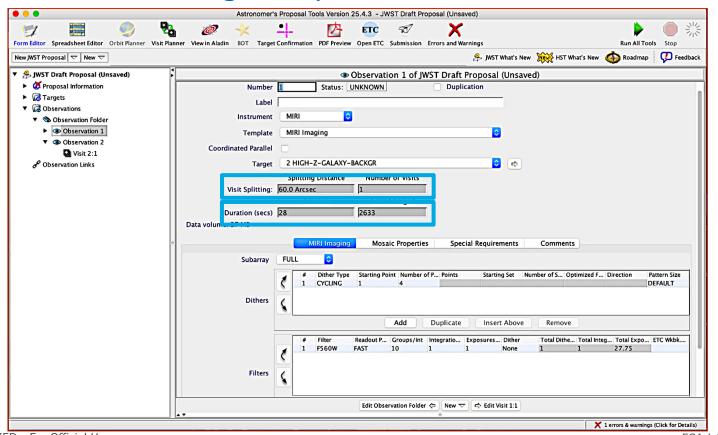
NIRSpec MOS-NIRCam Imaging

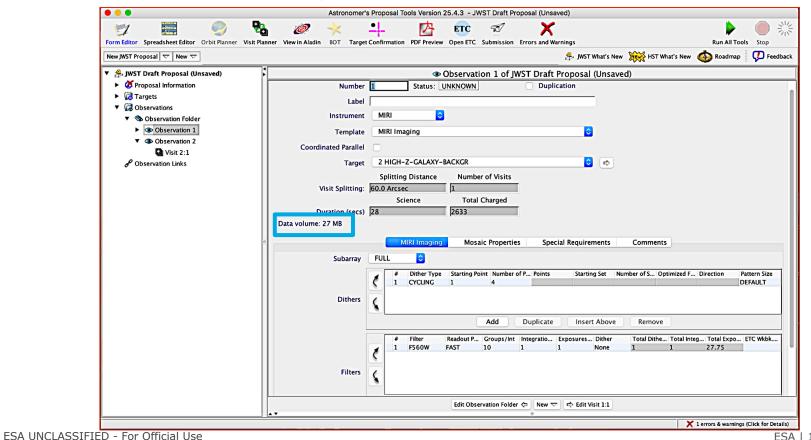
√ NIRCam-MIRI Imaging

NIRCam-NIRISS Imaging
NIRCam Imaging-NIRISS WFSS

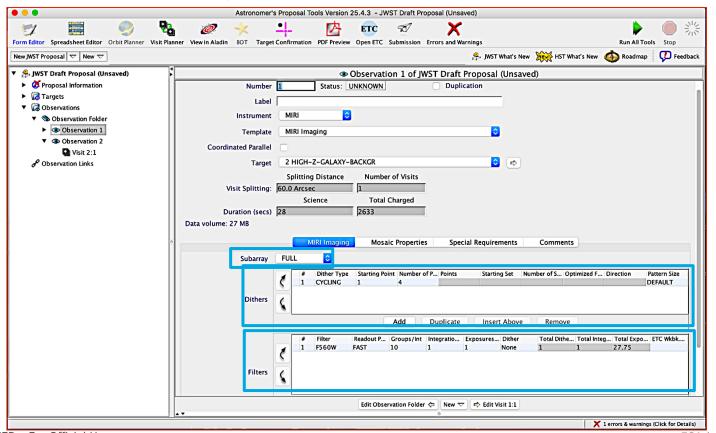
✓ MIRI-NIRCam Imaging MIRI Imaging-NIRISS WFSS NIRISS imaging only available in parallel with NIRCam.

In general dither options designed to suit both instruments.







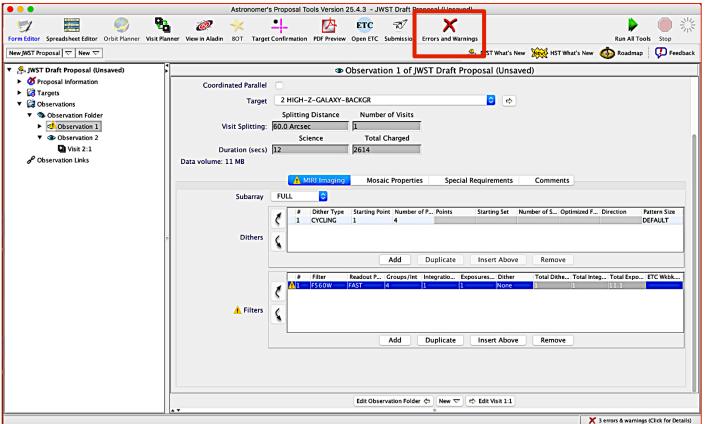




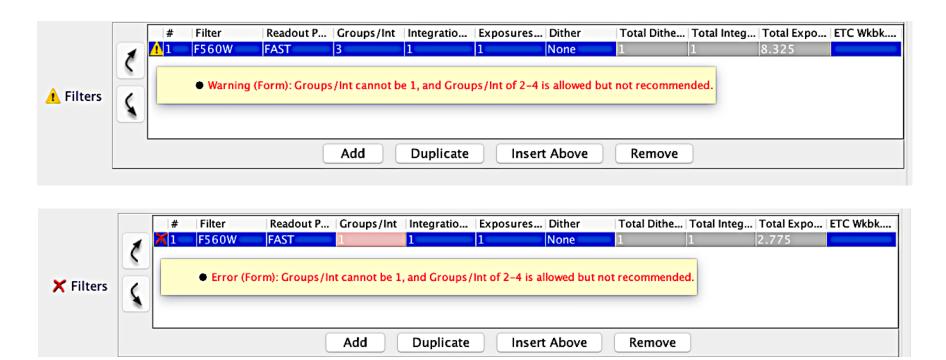
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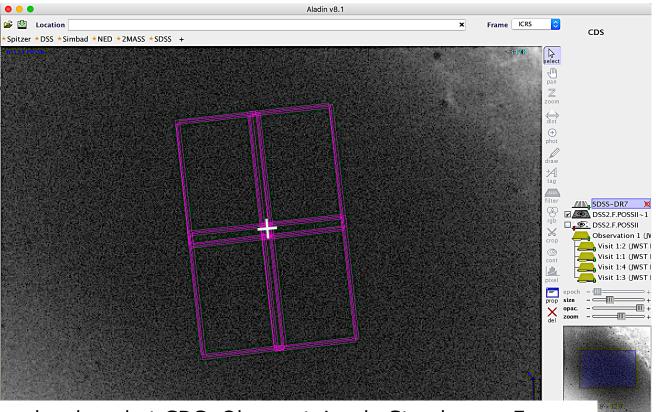




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APT 25.4.3 Aladin Visualization





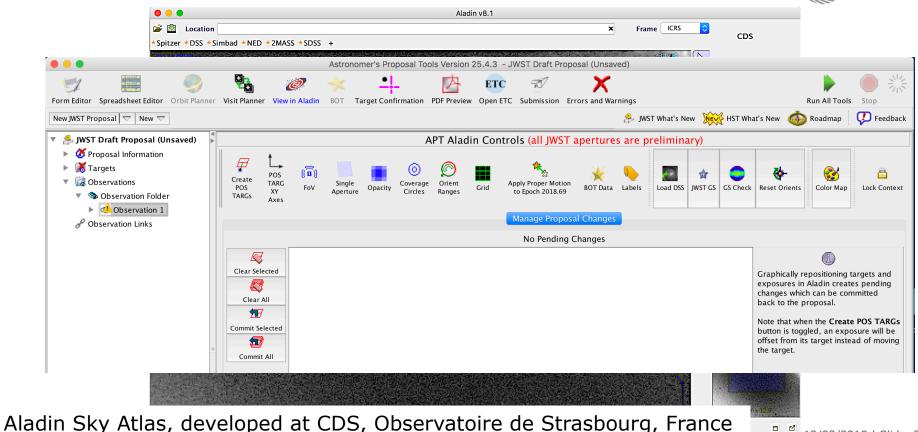
Aladin Sky Atlas, developed at CDS, Observatoire de Strasbourg, France

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APT 25.4.3 Aladin Visualization



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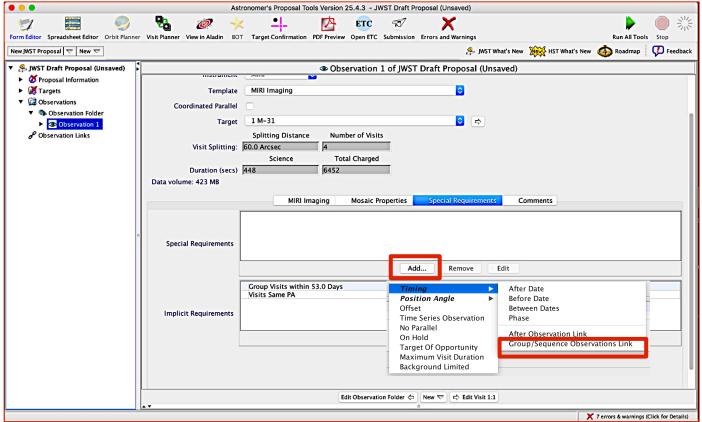
(c) 2015 UDS/CNRS - by CDS - Distributed under GNU GPL v3

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APT 25.4.3 Special Requirements





APT 25.4.3 Special Requirements



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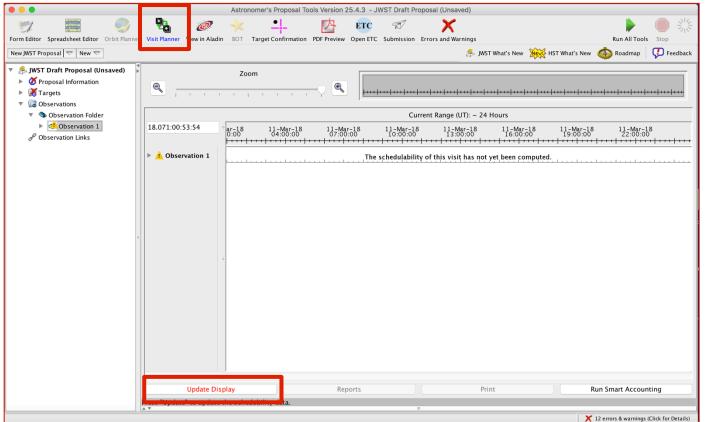
APT 25.4.3 Special Requirements



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APT 25.4.3 Visit Planner





























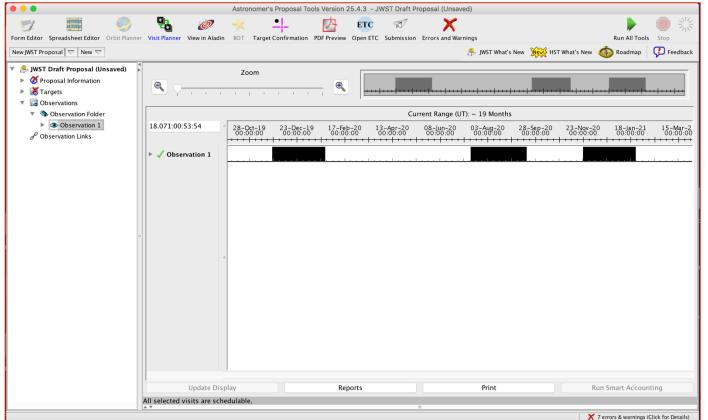






APT 25.4.3 Visit Planner































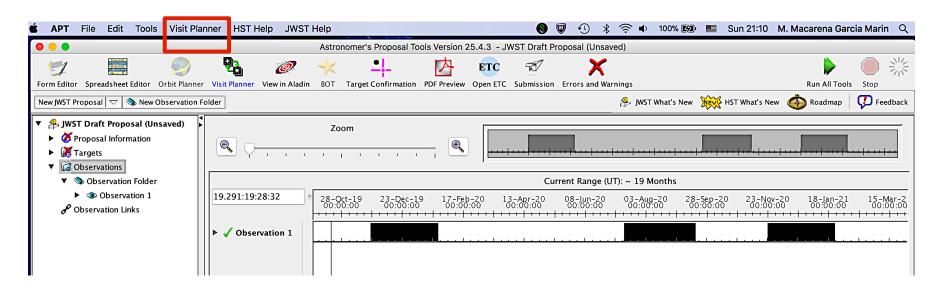




APT 25.4.3 Smart Accounting



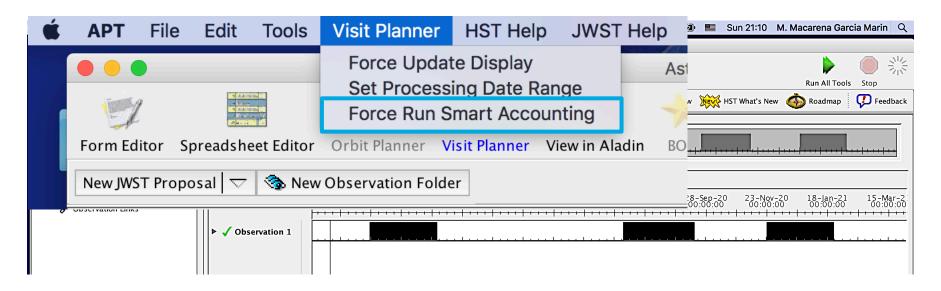
Run the smart accounting: This is specially important if you have a program with two instruments, dithers, mosaics etc. It will optimize the slew times and have a better account of the dithers, movements to do mosaics etc. After running the Visit Planner choose the option.



APT 25.4.3 Smart Accounting

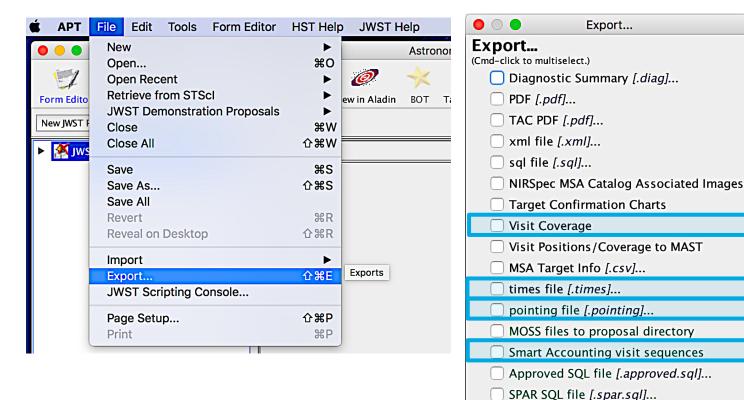


Run the smart accounting: This is specially important if you have a program with two instruments, dithers, mosaics etc. It will optimize the slew times and have a better account of the dithers, movements to do mosaics etc. After running the Visit Planner choose the option.



APT 25.4.3 Export Files





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Cancel

OK

APT 25.4.3 Submission and more info





Any questions? Please ask!

Jdocs APT information:

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https://jwst-docs.stsci.edu/display/JPP/JWST+Astronomers+Proposal+Tool+Overview

https://jwst-docs.stsci.edu/display/JPP/JWST+Astronomers+Proposal+Tool+Overview

Successful proposals will be reviewed by the assigned instrument scientist.

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