

GO1 Proposal Preparation Workflow

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JWST Cycle 1 GO Proposal Deadline....is less than 4 weeks away!

JWST Tools and Resources



- JDOX – JWST User Documentation
- ESASky
- TVT – Target Visibility Tools
- ETC – Exposure Time Calculator (dedicated Session)
- APT – Astronomer’s Proposal Tool (dedicated Session)
- Helpdesk

- Collection of web articles <https://jwst-docs.stsci.edu>
 - Agile process/infrastructure, easy to update.
 - Content currently “frozen” until Cycle 1 GO Proposal deadline.
 - Searchable via Google and internal search engine
 - Heavily cross-linked across topics
 - Integrated with software tools (ETC, APT, TVTs...)

James Webb Space Telescope User Documentation

HOME

INSTRUMENTS ▾

PLANNING ▾

CALL FOR PROPOSALS ▾

DATA ▾

QUICK LINKS ▾

Search



Observation planning quick links

Roadmap

Exposure Time Calculator (ETC)

Astronomer's Proposal Tool (APT)

APT Observation Templates

Science Use Cases

Observing Strategies

JWST Proposal Planning

Proposing Considerations

- Deadlines
- Call for proposals
- Proposal checklist
- Duplication Checking

Observatory considerations

- Guide stars
- Target acquisition
- Specifying JWST position angles, ranges, and offsets
- Mosaics
- Dithering
- Overheads

JWST Proposing Tools

- Exposure Time Calculator (ETC)
- Astronomer's Proposal Tool (APT)
- Target Visibility Tools
 - General Target Visibility Tool
 - Coronagraphic Visibility Tool
 - Moving Target Visibility Tool
- JWST Backgrounds Tool
- Space Telescope Image Product Simulator (STIPS)
- PSF Simulation Tool (WebbPSF)

JWST Observing Methods

- Imaging
- Slit spectroscopy
- Slitless spectroscopy
- High-contrast imaging (HCI)
- Time-series observations
- Moving targets
- Integral field spectroscopy (IFU)
- NIRSpec multi-object spectroscopy
- Parallels
- Target of opportunity

JWST Observing Guidance

Recommended Strategies

- MIRI Recommended Strategies
- NIRCam Recommended Strategies
- NIRISS Recommended Strategies
- NIRSpec Recommended Strategies

MIRI Science Use Cases

- MIRI Coronagraphy of GJ 758 b

NIRCam Science Use Cases

JWST Observation Planning Documentation

- Planning Documentation Section
 - NEW** Observing Methods
 - NEW** Science Use Cases
 - NEW** Recommended Strategies
 - Published early 2018

- ESASky v2.1: <http://sky.esa.int>
- Science-driven discovery web portal to access the entire sky as observed with Space Astronomy Missions. Created by ESAC Science Data Centre
- Tool to contextualize your science case (imaging, catalogue, spectra and publications)
- Includes JWST Instrument footprints
- Demo by Bruno Merin: <https://www.youtube.com/watch?v=v5kC2X-btcc>
- <https://www.cosmos.esa.int/web/esdc/esasky-how-to>



Target Visibility Tools



- General Target Visibility Tool (GTVT)
 - Standalone, command line python tool (Astroconda package)
 - **NEW** Includes Moving Target Visibility Tool (MTVT)
- Coronagraphic Visibility Tool (CVT)
 - Standalone, gui-based python tool (Astroconda package)
- JWST Background Tool (JBT)
 - Integrated into ETC web application
 - Standalone python package (installed via pip)
https://github.com/spacetelescope/jwst_backgrounds



Target Visibility Tools



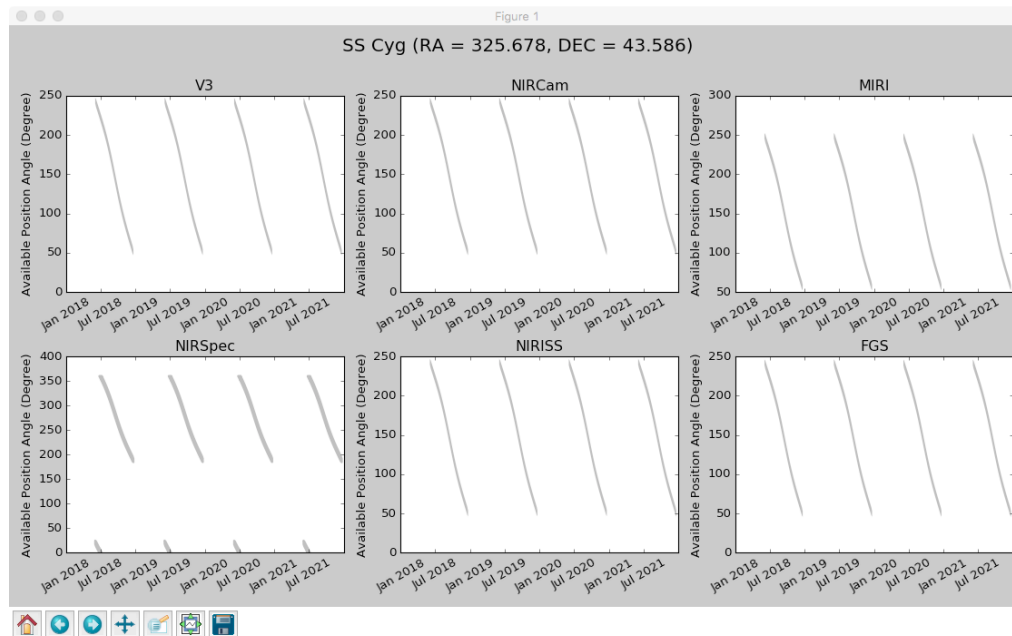
- General Target Visibility Tool (GTVT)
 - Visibility windows and position angles

Using Equatorial Coordinates

Target ecliptic
RA Dec latitude
325.678 43.586 52.656

Checked interval [2019-06-01, 2019-12-30]

Start	Window [days]		Duration		Normal V3 PA [deg]		RA	Dec						
	Start	End	Start	End	Start	End			V3PA	NIRCam	NIRSpec	NIRISS	MIRI	FGS
Date	min	max	min	max	min	max	min	max	min	max	min	max	min	max
2019-06-02	2019-12-21	201.93	244.06	365.50	50.05444	325.67800	43.58600							
2019-06-03	240.63	247.46	240.60	247.44	18.11	24.95	240.06	246.89	245.64	252.48	239.38	246.21		
2019-06-04	239.50	247.06	239.47	247.03	16.99	24.54	238.93	246.49	244.51	252.07	238.25	245.80		
2019-06-05	238.37	246.65	238.34	246.63	15.86	24.14	237.80	246.08	243.39	251.67	237.12	245.40		
2019-06-06	237.24	246.25	237.22	246.22	14.73	23.74	236.67	245.68	242.26	251.26	235.99	245.00		
2019-06-07	236.12	245.85	236.09	245.82	13.61	23.34	235.55	245.28	241.13	250.86	234.87	244.60		
2019-06-08	235.12	245.33	235.09	245.30	12.61	22.81	234.55	244.76	240.13	250.34	233.87	244.08		
2019-06-09	234.36	244.56	234.33	244.54	11.85	22.05	233.79	243.99	239.37	249.58	233.11	243.31		
2019-06-10	233.60	243.80	233.57	243.77	11.09	21.29	233.03	243.23	238.61	248.82	232.35	242.55		
2019-06-11	232.84	243.04	232.81	243.01	10.33	20.53	232.27	242.47	237.85	248.05	231.59	241.79		



ESA UNCLASSIFIED - For Official Use

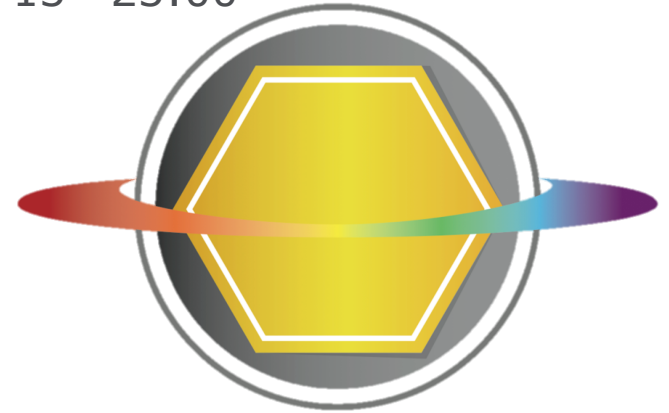


just European Space Agency

Exposure Time Calculator – ETC



- Calculates the detailed performance of the observatory by modeling astronomical scenes consisting of
 - single or multiple point sources
 - extended sourcesin three dimensions.
- **See presentation by Tim Rawle.**
- Web downtime for update v1.2.2 starting March 13th 23:00



Astronomer's Proposal Tool – APT

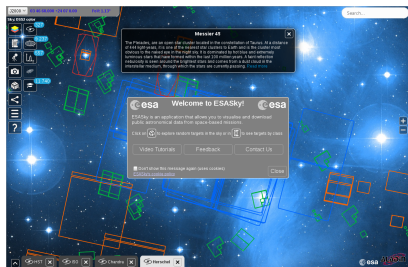


- Tool created to write, validate and submit proposals. Initially created for the HST, it is the proposal tool for JWST as well.
- **See presentation by Macarena Garcia Marin**



Suggested Work Path

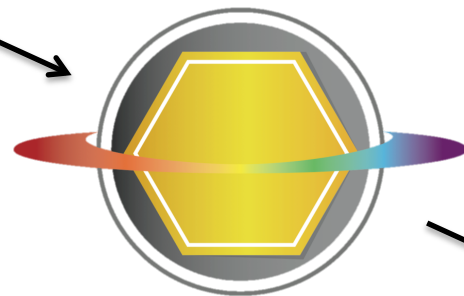
ESASky



Target Visibility Tool



ETC

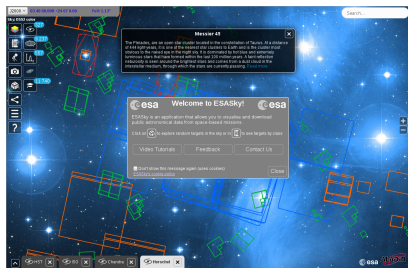


APT



Suggested Work Path

ESASky



Target Visibility Tool



ETC

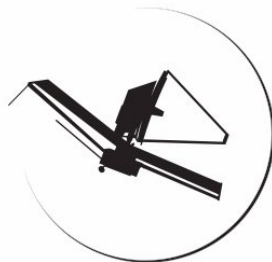


APT

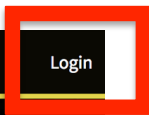


JWST Helpdesk

- <https://stsci.service-now.com/jwst>
- Access to knowledge base articles



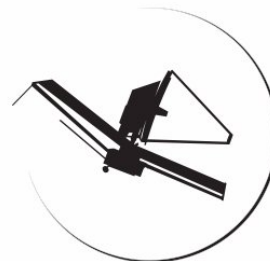
MyST credentials



A screenshot of the JWST Help Desk website. The header features the STScI logo and the text "JWST Help Desk". A "Login" button is highlighted with a red box. The main content area has a dark background with a hexagonal pattern and the text "Welcome to the James Webb Space Telescope Help Desk". Below this is a section titled "Request a MyST Account" with a yellow icon of three people. The text below the icon reads: "Please register to gain full access to the James Webb Space Telescope Help Desk. Without an account you may still search the knowledge base but you will not be able to submit requests or questions." A search bar is present with the placeholder text "Search Knowledge Base and JDOX". At the bottom, there is a "Popular Articles" section with a link to "General Support FAQ" and a five-star rating.

JWST Helpdesk

- <https://stsci.service-now.com/jwst>
- Access to knowledge base articles





STScI | JWST Help Desk Knowledge EP Elena Puga

How can we help?

Search JWST Knowledge Base and Documentation System (JDOX)

How can we help?

 Knowledge Base
Browse and search JWST Knowledge Base and Documentation (JDOX)

 Get Help
Contact support to make a request, or report a problem

Announcements

Upcoming JWST ETC Upgrade and Downtime

3d

JDOx documentation updates

13d

Helpful Links

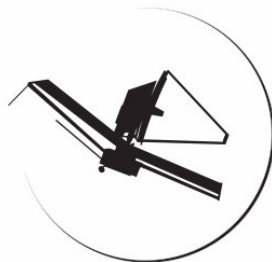
[James Webb Space Telescope](#)

[James Webb Space Telescope Documentation](#)

[Space Telescope Science Institute](#)

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KB Categories

- JWST Science Policies 4
- News 9
- ETC Known Issues 6
- ETC FAQs 7
- APT 10
- General Questions about Webb 6
- ETC 1
- ETC release notes 2

APT

APT Demonstration/Practice proposals

Proposers may find it useful to access example APT proposals for JWST instruments and observing modes that are already filled in with information. These proposals can be used for training and practice with APT, or as examples of various observing modes.

Author: William Blair • 7 Views • 25d

APT - Background Target Questions

APT - Background Target Questions 1. How do I link my background and science observations? Go to the science target and check the box "Observations of this target require companion background observation(s)". You will be prompted to select the target in

Author: Karla Peterson • 12 Views • 7mo • ★★★★★

APT - Accounting

APT - Accounting 1. Why am I charged 1800s major slews for two observations which can be done back to back? If two observations can be done at the same time, APT Visit Planner will notice this and only assign one major slew. The part that isn't obvious is that

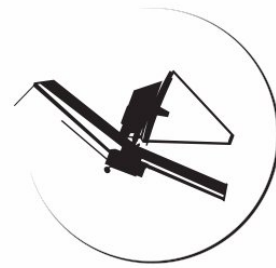
Author: Karla Peterson • 6 Views • 12mo

APT version 25.4.3 release clarification

A new version of Thunderbird 1.3, was released on February 20, 2018. All JWST Cycle 1 proposers are strongly encouraged to upgrade to this version. APT version 25.4.2, and in particular the timing and overhead model used in that version, has been

JWST Helpdesk

- JWST Media Accounts @JWSTObserver



- News, tools update notifications
- Twitter Live helpdesk sessions [#AskJWSTObserver](#)
 - Missed our [#JWST](#) Q&A session on February 26th? Here's a recap of the questions we answered: <https://tinyurl.com/y95dqx4u>
 - Missed our [#JWST](#) Q&A session on March 5th? Here's a recap of the questions we answered: <https://tinyurl.com/yclhfd45>
 - **Upcoming Q&A session TBD (before GO1 deadline)**

JWST

CYCLE 1 PROPOSAL
Q&A SESSION

Monday, March 5, 2018
12:00 pm – 1:00 pm (PT)

#AskJWSTObserver

Timeline Photos 7 of 82