



The JWST Astronomer's Proposal Tools. Q&A

Macarena Garcia Marin

ESA UNCLASSIFIED - For Official Use



European Space Agency

Summary

- The Astronomer's Proposal Tool (APT) allows users to construct, validate, and submit proposals for both HST and JWST.
- Single stream (phase 1 only) approach to proposals for most cases.
- Visits are single schedulable units. You can link them so they are taken back to back, but it has to be scientifically justified.
- Proposals require careful planification: instrument modes, observability, mosaics planning, parallels etc.
 - Get APT here: <http://apt.stsci.edu/>
 - Help Desk: jwsthhelp.stsci.edu
 - Documentation: <https://jwst-docs.stsci.edu>
 - Target visibility tools information:

<https://jwst-docs.stsci.edu/display/JPP/JWST+General+Target+Visibility+Tool+Help>

<https://jwst-docs.stsci.edu/display/JPP/JWST+Coronagraphic+Visibility+Tool+Help>

<https://www.cosmos.esa.int/web/jwst-2016-esac/home>

Beyond the tools...

- ❖ Of course, plan the observations around your science case and goals.
- ❖ All instruments have particular aspects you should consider:
 - MSA leak in NIRSpec IFU data.
 - Mitigating contamination by adequately selecting the PA in NIRISS single object spectroscopy.
 - For background-limited observations for MIRI. For deep faint observations scheduling at low backgrounds is an additional constraint that can impact observing windows.
 - Out of field sources will affect NIRCам wide field slitless spectroscopy. Some sources will produce spectral streaks on the detector.
- ❖ Do you need TA?

Beyond the tools...

- ❖ Point vs. extended source.
- ❖ Do you need to take background data?
 - NIR instruments: Zodi
 - MIR: Zodi @ short wavelengths. From 12 microns telescope thermal emission
- ❖ What should be the dither pattern of choice? And how will it impact the result of your ETC calculations?
- ❖ How precise do you want your relative flux calibration to be? Do you need extra calibrators to refine it?
- ❖ Carefully plan mosaics

Watch the online documentation for Best Practises information.