Transiting Exoplanet WG telecon, 25 Jan 18

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APT 25.4.x (Nov, Jan releases) TSO-relevant changes

· NIRCam

- Max ngroups for TA = 65; error reported if higher
- For FULL subarray, APT aperture definition updated to avoid error on TA.
- max NINTS increased to 200 for subarray imaging

· NIRSpec

- Wide-Angle Target Acquisition (WATA) added to TA method (https://jwst-docs.stsci.edu/display/JTI/NIRSpec+Target+Acquisition)
- Option of TA = None added to BOTS template for no-TA observations
- Implementation of NEXP <= 50; > 50 exposures in a single integration returns an error for BOTS

· MIRI

• no TA option implemented for MIRI LRS template

· NIRISS

 Read mode NIS no longer allowed in SOSS template; only NISRAPID allowed for subarray readout (<u>https://jwst-docs.stsci.edu/display/JTI/NIRISS+Detector</u> <u>+Readout+Patterns</u>)

· All

- New "Time Series Observation" special requirement (expect more tweaks to the logic in the templates but errors/warnings will guide you)
- Enforced the limit of nints ≤ 65535
- Exposures of > 10,000s now return a warning, not an error

JDox pages

- Observing Techniques section on Time Series Observations (Observation Planning -> Observing Techniques -> Time Series Observations) https://jwst-docs.stsci.edu/display/JPP/JWST+Time-Series+Observations
 - What defines a "time series observation" on JWST? Special conditions regarding exposure length, dithering, target acquisition
 - Overview of available modes for time series imaging and spectroscopy
 - General discussion of noise sources, including observatory-related
 - Instrument-specific discussion of TSO modes: MIRI, NIRCam and NIRISS in good shape, NIRSpec still being written
 - Performance numbers should also be added using TSO-relevant metrics
- Instrument teams are also putting together "science use cases", including several TSO cases (<u>https://jwst-docs.stsci.edu/display/JPP/JWST+Science+Use+Cases</u>)
- Keeping instrument pages up to date with APT, ETC or operational changes

Helpdesk https://stsci.service-now.com/jwst

Please use it!

Feel free to also report any issues to Kevin (<u>kbs@stsci.edu</u>) or Sarah (<u>sarah.kendrew@esa.int</u>)