

# 2023-05-17 TSO WG Meeting notes

## Date

17 May 2023

## Attendees

- [Nestor Espinoza](#)
- [Nikolay Nikolov](#)
- [Brian Brooks](#)
- [Everett Schlawin](#)
- [Leonardo Ubeda](#)
- [Michael Regan](#)
- [Rosa Diaz](#)
- [Sarah Kendrew](#)
- [Unknown User \(birkmann\)](#)
- [Loic Albert](#)

## Meeting agenda:

1. News & Announcements (all).
2. Cycle 2 statistics (Espinoza, all).
3. [TSO Upcoming Observations](#) (Nikolov)
4. JWST Cycle 3 preparation (all).
5. Instrument Roundtable check-in.

## Discussion items

Time	Item	Who	Notes
5 mins	<b>1. News &amp; announcements</b>		<ul style="list-style-type: none"><li>▪ <a href="#">Nikolay Nikolov</a> new TSO Deputy Lead.</li><li>▪ <a href="#">Nikolay Nikolov</a> will be comparing 1/f noise cleaning on NIRCcam data with a SASP student; not only TSO observations, but also imaging, grism, etc. If you folks want to be part of that, contact <a href="#">Nikolay Nikolov</a>.</li><li>▪ <a href="#">Everett Schlawin</a> notes some datasets on which the BJD's are all zeros. <a href="#">Nestor Espinoza</a> asks for Helpdesk ticket number and PIDs of the programs that have problems to take a look. He and <a href="#">Leonardo Ubeda</a> saw the same with a recent dataset.</li></ul>
	<b>2. Cycle 2 statistics</b>	<a href="#">Nestor Espinoza</a>	<ul style="list-style-type: none"><li>▪ Bars swapped in requested between MIRI Coron &amp; MIRI Imaging.</li><li>▪ <a href="#">Nikolay Nikolov</a>: not surprisingly, not many NIRCcam TSO/bright targets. Is this something important to be brought to the division?</li><li>▪ <a href="#">Nestor Espinoza</a> asks if DHS will be a thing in TSOs for Cycle 3? <a href="#">Brian Brooks</a> points that there are some tickets on which there's ongoing work on OSS. <a href="#">Rosa Diaz</a> mentions there was discussion on this, <a href="#">Nestor Espinoza</a> will talk with the MO about this. Probably the only way this will work for Cycle 3 is without the SIDECAR planned efficiency/changes.</li><li>▪ <a href="#">Nestor Espinoza</a> suggests to write a technical report on the science gain in order to make it easier for the JWST MO to prioritize this task. He'll talk with Jeff Valenti about this.</li></ul>
	<b>3. TSO Upcoming Observations</b>	<a href="#">Nikolay Nikolov</a>	<ul style="list-style-type: none"><li>▪ Updates by <a href="#">Nikolay Nikolov</a> point out that all TSOs from past two weeks were successful. Next two weeks show both exoplanets and non-exoplanet science.</li><li>▪ <a href="#">Sarah Kendrew</a> notes that the X-ray binary program aims to get signals less than ~a second; <a href="#">Nestor Espinoza</a> mentions that this would be good for calibration.</li><li>▪ On this end <a href="#">Nestor Espinoza</a> asks about the calibration NIRCcam program on checking time-stamps. <a href="#">Nikolay Nikolov</a> reports that coordination happened at the feasibility level, but so far not a lot on the analysis. Team is working on the</li></ul>

<p><b>5. JWST Cycle 3 preparation</b></p>	<p><a href="#">Nestor Espinoza</a></p>	<ul style="list-style-type: none"> <li>▪ <a href="#">Sarah Kendrew</a> mentions for MIRI: some info on strange persistence issues. Perhaps this would mean not using certain TA filters, but not there yet. This might be an issue in particular for phase-curves; still under investigation (see: shadow region).</li> <li>▪ <a href="#">Brian Brooks</a>: <ul style="list-style-type: none"> <li>- Information about timing (timing offset between detectors, timestamps on headers versus timestamps on the data, etc.) — probably this should be its own page.</li> <li>- Another thing: example science programs. Might be good to update? This is coming, he has a meeting next week on this.</li> </ul> </li> <li>▪ <a href="#">Everett Schlawin</a>: some systematics. Offsets between overall transit depths on different instruments?</li> <li>▪ <a href="#">Nikolay Nikolov</a> : we might want to put a JDOx article to outline this? No solution right now. <a href="#">Nestor Espinoza</a> thinks this might also be an analysis detail (e.g., limb darkening, stellar activity, say). <a href="#">Nikolay Nikolov</a> mentions he can identify targets for which there's many</li> <li>▪ <a href="#">Brian Brooks</a> mentions on how to mitigate a guide star failure from FGS. <a href="#">Michael Regan</a> mentions there's nothing to do this — <a href="#">Brian Brooks</a> mentions this might be something to discuss in JDOx too? <a href="#">Sarah Kendrew</a>: nothing you can do, but most common reason visits can be skipped. Perhaps then explain the algorithm for FGS guide star acquisition describing the process (and what might fail, based on Cycle 1).</li> </ul> <p><a href="#">Nestor Espinoza</a>'s summary (above, plus points in meeting slides):</p> <ul style="list-style-type: none"> <li>▪ JDOx TSO timing (time-stamps) page.</li> <li>▪ Update JDOx to have information on instrument systematics: (a) ramps, (b) persistence (e.g., MIRI's shadow region), (c) 1/f noise, (d) perhaps some word on transit depth updates.</li> <li>▪ Contact MO/FGS folks so guide star acquisition process is explained (instead of having to explain it via e-mails), as well as possible ways in which a visit might fail or be skipped.</li> <li>▪ Have a look at example TSO programs (pending on <a href="#">Brian Brooks</a>' meeting next week).</li> <li>▪ NIRCам: information about DHS &amp; TSO's (no timescales, but general information for observers).</li> <li>▪ NIRISS/SOSS: information about trace/wavelength solution changes and how to solve it.</li> <li>▪ NIRSpec: backgrounds? 1/f noise (e.g., NSClean)?</li> <li>▪ MIRI: backgrounds?</li> </ul>
<p><b>6. Instrument roundtable</b></p>		<ul style="list-style-type: none"> <li>▪ No critical updates.</li> </ul>