2020-10-07 TSO WG Meeting notes

Date

07 Oct 2020

Attendees

- Nestor Espinoza
- Brian Brooks
- Nikolay Nikolov
- Tony Keyes
- Sarah Kendrew
- Unknown User (birkmann)
- Unknown User (aroy)

Meeting agenda:

1. News & announcements.
2. Activities on each instrument branch.
3. FY2021 planning feedback.
4. Closing remarks.

Discussion items

Time	Item	Who	Notes
	1. News & announcements	Everyone	▪ First, we welcome Unknown User (aroy) to the TSO WG! She is an expert on exoplanet detection; she has focused a lot on actual instrument building and pipeline development. Very interested in exoplanet characterization, glad to be joining the TSO WG. ▪ Sarah Kendrew and Nestor Espinoza joining a meeting tomorrow about ground/detector testing. Objective is to understand all of the MIRI effects that will be paying attention to FY2021. 1 PM tomorrow, TSO WG members welcome to join!
20min	**2. Activities on each instrument branch**		
		Nestor Espinoza	• **NIRISS branch activities**. Currently work being focused on commissioning activities.
		Tony Keyes Unknown User (birkmann)	• **NIRSpec branch activities**. Tony Keyes worked on updating the TSO Pipeline Testing Sheet. Some work done after the nominal deadline.
		Sarah Kendrew	• **MIRI branch activities**. Main activities related to pipeline testing. Currently post-deadline work, but still important to get done to identify bugs/optimize routines. Sarah Kendrew has also been taking a look at the NormalOPS data; this uses the OTB (the telescope simulator) to run realistic proposals, to check the entire system. Few TSO cases ran on the NormalOPS 9 run. Various problems: pointing information is frequently incorrect (not TSO-specific)l imaging TSOs didn't get processed; various header keyword issues for the first MRS TSO test case & didn't follow the correct detector1 configuration file (JWSTDMS-436 - Jira project doesn't exist or you don't have permission to view it. JSOCINT-421 - Jira project doesn't exist or you don't have permission to view it. ,). Sarah Kendrew encourages folks to check header keywords (at least for TSOs).

		Nikolay Nikolov Brian Brooks	• **NIRCam branch activities**. Brian Brooks also took a look at NormalOPS 9 data (thanks Sarah Kendrew for the background info on getting the data for this!). Grism template TSO was successful; closely related to commissioning proposal (different target, smaller number of integrations). Were able to pull that; on a very quick review of the header keywords looked appropiate, but Nikolay Nikolov will have a deeper look. As for the comissioning analysis plans for TSO (CAP-33), the NIRCam team defined how to perform the analysis for the TSO target (an EB). Divided in two parts: (a) lower fidelity and (b) higher fidelity. Nikolay Nikolov mentioned that the idea is to run simulations through MIRAGE, and then run it through different pipelines (CalWebb, Nikolay's own pipeline, and the U. Arizona one). • In addition to the above, there is lab data with a mask in order to do analyses of GRISMR v/s GRISMC. • Also, Nikolay Nikolov currently looking at MIRAGE simulations and how do they change when you add more dark frames (currently 5, increased to 20). When re-running pipelines, same results on lightcurve scatter both from CalWebb and Nikolay's own pipeline. • Finally, Nikolay Nikolov also mentions trying to look back at the ramps-to-slopes (motivated by ⚠ JP-1667 - Jira project doesn't exist or you don't have permission to view it.). Would like to have an independent check with the Arizona pipeline.
			Tony Keyes mentions that apparently, there might be an issue with long TSO exposures, as they are not reported correctly by OSS (on the duration keyword). Apparently, the background resets not being included properly in the calculation. This is not an APT or ETC problem; the formula is correct, data being grabbed is OK. So probably an OSS issue. (https://jira.stsci.edu/browse/APT-87848), (meeting note Brian Brooks).
30min	**3. FY2021 planning feedback**		
		Everyone	▪ Nestor Espinoza shares the FY2021 live planning document. Presentation on FY2021 timeline: https://docs.google.com/presentation/d/194GvCOzvdOnt6IqO1g5ePhGspDJhsSYS_FaSTyN6AHk/edit?usp=sharing
5min	**5. Closing remarks of the meeting**		