2024-01-24 TSO CT Meeting notes

Date

24 Jan 2024

Attendees

- Brian Brooks
- Loic Albert
- Michael Regan
- Nestor Espinoza

- Nikolay NikolovKnicole ColonJeroen Bouwman

Apologies

Sarah Kendrew

Meeting agenda:

- News & Announcements (all).Previous and upcoming TSO observations (Nikolov).
- TSO Coordination Team (Espinoza).
 Noise of MIRI TSO photometry (Espinoza).
 Instrument roundtable check-in (all).

Discussion items

Time, min	Item	Who	Notes
05	News & Announce ments	Nestor Espino za	 Nestor Espinoza mentions plans of the Exoplanet Strategy WG, which is now public through their presentation to the STUC: https://www.stsci.edu/files/live/sites/www/files/home/hst/about/space-telescope-users-committee/presentations-and-documentation/_documents/2023_nov/exoplanets-DDWG.pdf. The bottom line is that the recommendation is a 500 hour JWST DDT MIRI program, to be focused on 15 um eclipse photometry. This motivates some focus of this group on this instrument/mode to provide the best advices and information to the community on the data to be gathered.
15	Previous and upcoming TSO observatio ns	Nikolay Nikolov	 Nikolay Nikolov presents observations archived in the last two weeks, and upcoming observations. No failed past observations, at least from this quick look. Good to check if 2062 was (finally) successful, and also if observations of L98-59 worked out OK.
30	TSO Coordinatio n Team	Nestor Espino za	 Nestor Espinoza updates on the change of name from Working Group to Coordination Team. As it turns out, we have been working in the past mostly as a Coordination Team anyways (i.e., with heavy input from managers), so not much change. Nestor Espinoza and Nikolay Nikolov will meet with branch managers to communicate on both plans and milestones for the current FY.

Noise of MIRI TSO photometry	Nestor Espino za	 Nestor Espinoza shared some analysis on MIRI detector waveforms. He's writing a photometry notebook for MIRI; right now performing Detector1 calibration. First question he made was about firstframe, lastframe and rscd — all of which are disabled by default for TSOs. However, he finds that removing X number of groups at the beggining and Y number of groups at the end helps. Jeroen Bouwman notes this is the case for his analyses as well, and would recommend setting some of those as default. Nestor Espinoza asks: what is the optimal X and Yif any? Michael Regan notes this is group — and might be fluence — dependant. So not an easy answer. Nestor Espinoza reads the discussion in the room as that there is a need to study this in detail. Nestor Espinoza then goes on to showcase how to extract the 10 Hz signal that Michael Regan and Eddie Bergeron showcased for MIRI. Is there, but interestingly, waveform seems to oscillate a bit within groups. Michael Regan has ideas on why this might be; Nestor Espinoza notes this is nonetheless small (~10-20% of the amplitude), but will reach out offline to Eddie and Mike about it. Nestor Espinoza will investigate how variable between visits the waveform is. Michael Regan notes it shouldn't. Nestor Espinoza
05 Instrument roundtable check-in	All	 Nikolay Nikolov shares status on NIRSpec calibration plans. Still expecting data for background (Zodiacal) calibration; program 4464, scheduled to get data between February-April this year for the first observation. Next one is in June. This is NIRSpec /PRISM. Because there will not be time to look the data before next round of Calibration, they will continue the program. Plan is to look at the data to see if this will have an impact on Cycle 4. Nikolay Nikolov for NIRCam, there's 4450, same plan. That is happening between May-June. Nestor Espinoza reports on NIRISS. 3 background observations so far. Expending to MIRI: ongoing background program, but unsure on the current status on this. Nestor Espinoza and Nikolay Nikolov will check with Sarah Kendrew. Brian Brooks mentioned calibrations for DHS; there's plan for the next cycle, but need to analyze current calibration too. There was also a calibration program for background on the commissioning target (HAT-P-14) on 1442. Nikolay Nikolov also mentions there was a call to create notebooks running the pipeline for NIRCam and NIRSpec. Nestor Espinoza has not heard about this for NIRISS, but will check.

Action items