Commissioning update, part 2

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Public communications during commissioning:

- JWST blog, posting on a ~weekly cadence
- Where is Webb? webpage has been a smash hit
- Official social media boosts engagement
- Media briefings after key events, for example:
  - End of major deployments
  - MCC2 mid-course correction
- Tightly controlled messaging, fairly rapid announcements. Balance between giving the team space to work & troubleshoot, and informing the public. Learning as we go.
- Everything leads up to the ERO release at commissioning’s end.
- POCs are Alex Lockwood, Amber Straughn, Jon Gardner.
Characterizing science performance during commissioning (1):

- Open communication within the JWST Commissioning Team, across institutions & countries. Communicating issues and progress in the JWST Daily Briefing (JDB) and regular data analysis meetings.

- The team is working furiously to understand on-orbit science performance. We will debug issues and quantitatively evaluate science readiness (using the readiness criteria).

- The Commissioning Scientists (Friedman, Kimble, & Rigby) will track the evolving knowledge of science performance.

- Please understand that it’s not possible to fully characterize science performance in the limited time of commissioning. Our understanding will expand and deepen in Cycle 1.
Characterizing science performance during commissioning (2):

- The Commissioning Scientists will be on the lookout for any performance issues that might potentially require changes to Cycle 1 observing programs; will alert STScI Science Mission Office.

- **JDOX documentation** will be written and updated to describe the actual science performance. We will:
  
  - write high-level release notes (based on tracking science performance issues during commissioning in JDB)
  
  - update many existing pages to reflect actual performance
  
  - document issues that would affect Cycle 1 programs
  
  - document as much as we can, realistically, in <2 months
  
  - start preparing JDox to support Cycle 2 proposal preparation.
Once commissioning ends:

- The EROs are released.
- All commissioning data go public.
- Science Mission Office will notify PIs of issues that may require changes to observing programs.
- JDox updates will be published. (Some may come out earlier)
- *What sort of post-commissioning briefing does the JSTUC want/expect?*

Later in summer:

- ETC and JDox will be updated to support the Cycle 2 Call for Proposals
  - Two key unknowns are the actual amounts of stray light (near-IR) and thermal emission (mid-IR); they’re critical to deep observations (see next slide, straight out of JDox.)
JWST Background Model

JWST observations will detect infrared background emission from multiple sources: the zodiacal cloud, Milky Way Galaxy, and thermal self-emission from the JWST Observatory itself. Both in-field and scattered emission are important contributors to the JWST.
How it started:

JWST after launch vehicle separation, 12/25/2021. Credit: ESA

How it’s going:

JWST at home in orbit around L2, 1/27/2022 UTC as seen by Keck I + LRIS, ~18th mag.

(J. O’Meara, J. Hennawi, Keck Observatory)