

January 24, 2021

To: Ken Sembach; STScI, Director

John Mather; GSFC, JWST Senior Project Scientist

Neill Reid; STScI, Science Mission Office

After a productive all-hands meeting in December, we are pleased to provide a formal set of recommendations and updates on behalf of the committee.

Communication with ERS teams. We have received feedback that more communication to ERS teams would be valuable. We recommend that a select group within the instrument teams at STScI be named as liaisons to the Early Release Science (ERS) teams in order to facilitate communication starting soon. During commissioning, we anticipate public announcements of information relevant to telescope and instrument performance. As information becomes public, these liaisons should be charged with making sure information is delivered to relevant ERS teams (and also early-science program teams when appropriate).

Basic Technical Evaluations Prior to Announced Cycle 1 Programs. The JWST Cycle 1 call was the first experience that the community has had with proposing for this new observatory, a process that involved computing exposure times and completing its detailed APT observing files. The JSTUC recommends that STScI perform preliminary "sniff test" technical evaluations of programs before they are approved and incorporated into the announced Cycle 1 program. This should be a basic completeness check to ensure that all modes, settings, exposures and dithers presented in a proposal's Technical Justification appear in its associated APT files. We believe that it would also be prudent to check the exposure times and / or signal-to-noise of a subset of the exposures.

Communication during Commissioning. We were specifically asked about the type and frequency of communication during commissioning. We anticipate that basic reports on observatory performance are already planned. The committee was less concerned about timing than about the mode of communication. Data dumps may be hard to parse for those with imminent observations, whereas focused briefings to ERS teams with a chance for backand-forth would be useful. The liaisons mentioned above with respect to ERS teams could help with that role. Further, we identify the need to facilitate the ability of ERS teams to provide their feedback and lessons learned to the broader community. We have learned a lot about virtual meetings this past year, and it seems likely that at least some of the ERS support activities might also be made available to the general GO community

Augmented communication with the JSTUC. We were asked to provide recommendations for how the broader community can communicate more readily with the JSTUC going forward. We certainly believe that this is an issue, as we find that junior scientists appear to be less likely to reach out to members of the JSTUC directly than their senior colleagues. Virtual town halls,





broadly advertised, may be one avenue for further engagement. Another recommendation is to include reminders that the JSTUC exists as a tagline in most JWST announcements. These messages should emphasize that we are interested in hearing feedback and concerns from the broad community.

Data Analysis. We endorse the attached report from the JSTUC's Data Analysis Advisory Group, which includes four recommendations, which we enumerate here. 1) STScI should focus any new development on tools that work with JWST-specific data with the aim of producing analysis-ready products. 2) STScI should take steps to prepare for a wide-range of existing and custom tools to be applied to JWST data in order to maximize impact. 3) DRP and DAT teams should consult with Solar System ERS and GTO teams to evaluate and implement requirements for mapping Solar System objects. 4) The DRP team should strive to enhance support for the use of intermediate-level data products. These recommendations are explained in further detail in the report. We would like to thank the DAAG for their valuable efforts and request a presentation from STScI at a future JSTUC meeting on how these recommendations are being met.

Sincerely Yours,

James Bullock

Chair, James Webb Space Telescope Users Committee

Sun S Balle

University of California, Irvine

