August 19, 2020

The NuSTAR Users Committee (NUC) met by zoom on August 19, 2020. The following includes a list of attendees from the NUC, a list of ex-officio attendees, and minutes of the discussion.

NUC attendees:
John Tomsick (chair)
Marco Ajello
Anne Lohfink
Jack Steiner
Slavko Bogdanov
Enrico Bozzo
Andreas Zezas
Rafaella Margutti
Stephanie La Massa

Ex-Officio attendees:
Fiona Harrison (NuSTAR PI)
Karl Forster (SOC manager)
Hashima Hasan (NASA HQ Program Scientist)
Rich Terrile (Project Manager)
Kristin Madsen
Brian Grefenstette
Tod Strohmayer (NuSTAR Mission Scientist)
Katja Pottschmidt (NuSTAR GOF)
Daniel Stern (NuSTAR Project Scientist)
Murray Brightman

Meeting agenda:
1. Outcomes of cycle 6 and discussion about cycle 7
2. Optimizing communication between the NuSTAR project and the astrophysics community
3. Calibration activities and discussion of priorities
4. Plan for rotating NUC membership

Action item:

As described in the minutes, the NUC was asked to write a recommendation about whether the total TOO allocation time should be increased for cycle 7 (from 500 ks in cycle 6).

Meeting minutes:

1. Outcomes of cycle 6 and discussion about cycle 7

Katja presented on the outcomes of cycle 6, including statistics of proposal acceptance and reviewer responses to surveys. There were two new things for the cycle 6 review: dual anonymous (DA) reviewing and conducting the review remotely due to COVID (although remote reviewing may continue for some time). In general, the NUC was shown information indicating that the review went well. The following topics were discussed in some detail.

Related to the DA reviewing, at least some reviewers questioned the need for the panels to be required to review the team expertise documents. It was pointed out that this is different from Hubble, where the documents are available, but no review is required. The main problem mentioned was that there was no added value in requiring this. It was pointed out that it was probably reviewed because the evaluation form asks for an evaluation of the team's expertise. However, it was also pointed out that there is a box to check for "not assessed." During the discussion, no one on the NUC made an argument for mandatory review. Katja plans to bring this up to the GOF for discussion about whether a change is necessary for cycle 7.

Time allocation policies related to the minimum exposure time (currently 20 ks per observation) and the total allocation time for TOOs (currently 500 ks per cycle) were discussed. Some NUC members see benefits to reducing the minimum exposure time (to 5 ks or 10 ks) and even more see benefits to increasing the total TOO time. However, it was pointed out that there are costs: observing inefficiency and operations costs for decreasing the minimum exposure and operations costs for additional TOOs. After the discussion, the NUC was asked to provide a written recommendation, especially on the question of whether the total allocation time for TOOs should be increased above 500 ks.

2. Optimizing communication between the NuSTAR project and the astrophysics community

Karl said that the SOC has not been getting a lot of questions from the community, and he was just wondering if this was related to some sort of communication roadblock. The NUC discussion indicated that some of the reasons why questions might be necessary (calibration, documentation, changes in observing mode) do not seem to be issues, so probably lack of questions means that people are not having problems.

3. Calibration activities and discussion of priorities

Brian gave a presentation on calibration and software updates, primarily on the changes to improve the longevity of the metrology lasers, the MLI correction, and the clockfile update. All three efforts have been quite successful, and the NUC was especially impressed by improvements in the absolute timing. Future efforts will include improvements to the low energy response and studies of techniques to operate with one laser if that becomes necessary. One more topic mentioned by the NUC was to continue supporting cross calibration work, especially with Swift and XMM.

4. Plan for rotating NUC membership

A new call for NUC members will be released soon. John asked the NUC to encourage their colleagues to apply. Our current membership represents a broad range of NuSTAR science topics, and we plan to choose the people to rotate off based on replacement of scientific expertise by the new members.