HET Users Committee
Meeting Minutes 2020 December 15

Members Present: W. Cochran. D. Fox, W. Kollatschny, G. Zeimann, S. Janowiecki, C. Morley, M. Fabricius, G. Hill, S. Mahadevan, N. Drory (guest)

This meeting of the HET Users Committee occurred shortly after the December 2020 meeting of the HET Board. With the approval of the HET Director, the HET Users Committee will make several of the presentations from the HET Board meeeting available to the HET Users on the HET UC web site. These presentations will be those discussing HET instruments, as well as the Science Operations report, the Data Scientist report, and the report on the HET Austoscheduler project. At the request of several of the presenters, these reports will be placed behind the "login wall" on the HET website. Since all HET users have a login account, this should present no access problems.

The majority of the UC meeting was devoted to discussions with Dr. Niv Drory, who is leading an effort to expand the HETDEX autoscheduling software OCD to all user programs. This would then replace the current HTOPX software. Drory gave an abbreviated version of the presentation that he had given to the HET Board last week, explaining the rationale for the project and the approach being taken. He discussed the requirements document and the project timeline. The Users Committee was invited to read the on-line requirements document in detail, and to make appropriate comments. The UC delegated Caroline Morley, Suvrath Mahadevan and Gary Hill to work with the software development group to represent HET User interests for the project. In the detailed discussions of the project, the UC identified the following items as being of significant interest to the Users:

- how to maximize the overall scientific output of the HET
- modification of TAC assigned priority to account for:
  - program completions
  - limited target availability
  - special target constraints
- scheduling of synoptic targets
- targeting particular phases of periodic phenomena
- charging of observing time

The last item above, charging of observing time, is a topic that the UC plans to look at in detail in the future. The basic problem is that the partner TACs give each program a fixed number of open-shutter hours. However, not all observing time is really equal. In particular, the aperture filling factor can change significantly over a track, and variable weather and seeing can affect the optimal exposure time. The user wants to obtain a given signal/noise in the data, and it is often extremely difficult to know what exposure time will give that optimal result. As the HET autoscheduler software project advances, the HET Users Committee will revisit this topic to explore whether there might be a better way for the users to specify their observational needs and achieve their desired scientific results.