HET Users Committee

Meeting Minutes 2020 February 6

Members Present: W. Cochran. G. Zeimann, W. Kollatschny, S. Janowiecki, C. Morley, H. Lee, M. Fabricius, P. MacQueen, S. Mahadevan

The Users Committee welcomed new members Caroline Morley (U. T. Austin) and Max Fabricius (Munich), and congratulated Steven Janowiecki on his appointment as HET Science Operations Manager.

The major topic for the meeting was an extended discussion on the status of data reduction pipeline software, especially for **HPF**. S. Mahadevan stressed that the current HPF science team pipeline was “not a requirement” for the HPF instrument. They have been processing all HPF data at infrequent intervals as a favor to the HET/HPF science community. G. Zeimann has been building a “quick look” HPF pipeline. At the moment, this includes and extracted spectrum, extracted error signal, a first automated attempt at sky subtraction, and a first level flux calibration. This is hoped to be ready for release at the end of March, but there is no guarantee that these data products will be “ready for science.” The goal is for this quick-look pipeline to evolve in a full pipeline as users provide feedback to Zeimann. Both Mahadevan and Zeimann stressed that while the final pipeline should produce “exquisitely calibrated” spectra, the reduction pipeline should *not* be counted on to produce the ultimate precision in stellar radial velocities. That is a process that requires continual attention from the user. These pipeline products, however, should be more than adequate for such tasks as measuring stellar line equivalent widths or emission line fluxes. After the preliminary version of the pipeline is released, Zeimann will coach users on its use, and will welcome feedback from them.

The **LRS2** data reduction pipeline has been in routine use since January 2019. There were some ‘hiccups’ in December 2019 due to data transfer issues. A paper discussing the full pipeline is in preparation and will be released soon.

The **VIRUS** pipeline (remedy) is seeing some use. This should not be confused with the HETDEX pipeline, which is receiving extensive use.

The UC then discussed the need for better planning tools for synoptic observations. In particular, there is a need to try to mesh the competing needs of synoptic programs with HETDEX. At the moment, the current web interface does not produce a machine-readable table that can then be incorporated into user planning software. An additional problem is that the HETDEX queue is very dynamic – changing on a daily basis.

A minor issue is that the HET Users Committee needs a web site where it can post information (e.g. membership lists, meeting minutes, etc.) that should be available to the HET user community. The best location would probably be in the HET Observing Support pages on hydra.

Two new issues were brought up:

* The HET RAs do not have access to the actual telescope proposals. Sometimes looking at the proposal will help to clarify the needs for a particular observation. This is especially true for synoptic and time-critical observations when the TSL does not necessarily convey all of the essential information. Access to the proposal text could avoid a series of emails between the RA and the PI which might delay a critical observation. The Users Committee should work with the HET partner TACs to make these proposals available each scheduling period.
* The question arose of how best to transfer knowledge on HPF (and any other new HET instrument) to the HET staff after commissioning is complete. The HPF team was funded to build and commission the instrument, not to maintain it after its release as a HET facility instrument. This is an issue for the HET Board to discuss.

**Action items:**

* **Institutional representatives need to work with their TACs to transmit the text of all successful proposals to the HET RAs every trimester.**
* **HET Science Operations Manager should work with HET webmaster to implement a web page for the HET Users Committee.**