

Questions, Comments and Answers following the presentation

ESO Data Reduction and Archive Wolfram Freudling

Lupton: How does your reflex workflow handle parallelization, mapping computer to data location, ...?

Reflex workflows themselves are currently not parallelized, although Kepler itself has some limited support for parallelization. So it might be possible to support parallelization of workflows in the future. We do use parallelization at the level of recipes. For example, the MUSE recipes are highly parallelized. On a computer with 12 cores, the reduction of MUSE data is about twice as fast as on a computer with 4 cores.

Answer from Hanuschik:

We use multi-core blades for efficient mass production of data products. The scheduling is done with "CONDOR". In the case of MUSE, we make use of internal parallelization (24).

Deustua: What are the challenges and opportunities going forward?

Our goal is to provide science grade reduced data for all active instruments. The main challenge for us is simply to keep up with the steady stream of new instruments, that tend to be more sophisticated than the previous generation of instruments. Providing quality pipelines and science grade archival data is most important to us. One of the big challenges is to speed up the time between offering a new instrument to the community, and releasing a pipeline that we consider to be science grade. This is important as new instruments become ever more complicated, and data reduction without a specialized pipeline is next to impossible for the average user. So a large time lag significantly hurts the productivity of an instrument.