Questions, Comments and Answers following the presentation

HAWK-I
Pascale Hibon

Modigliani: Who provides the new pipeline? Which data will it reduce? Is it different from ESO's one? Will it be delivered to ESO (and users)?

The new pipeline is provided by CASU and will reduce the same data than the previous one. This means that the Fast Photometry dataset won't be reduced.

It is different in some of the steps. It is a definite improvement. It will be delivered during 2017.

Osip:

1. *Your users have been doing non-sidereal tracking. Will solar system scientists be able to operate with the HAWK-I GRAAL combination?*
2. *How many fast-phot windows can be used across the array?*
3. *Instead of twilight flats, is it not superior to use night-sky flats from science dither frames?*

1. Yes. They will only to be more careful on the saturation, as we are concentrated the flux on fewer pixels.
2. To simplify and standardize the observations, and to minimize the day-time calibration time, only contiguous windows that span entirely the width of the detectors are offered, so the width of the window must always be set to 128 (~13.3 arcsec). Only three values for the window height are allowed, 32, 64 or 128 pixels (~3.3, 6.7 or 13.3 arcsecs, respectively).
3. This is a good question. We should probably investigate this.

Hainaut: What about using objects in the science field to directly get photometric calibrations? Pann-Starrs has the right density (& precision) for $\delta < 30°$.

There is absolutely no restriction about this. It is even preferred to use objects directly in the science field. However, as HAWK-I is very often used for extra-galactic and high redshift studies, there are several cases for which there is not enough (if not at all) stars in the fields. The photometric calibrations taken for the science are also used for monitoring the zero points.

Tristram:

1. *You mentioned the uniformity of the PSF with AO across the field. Could you specify in more detail what the field dependence will be, or if there will really be no dependence.*
2. *What is the validity of the sky flats?*

1. The PSF is expected to be uniform across the field of view. Simulations agreed with this statement. Of course, we will need to verify this during the future commissioning runs.
2. The validity of the sky flats is 21 days.