Astro Ops Board Report - updates

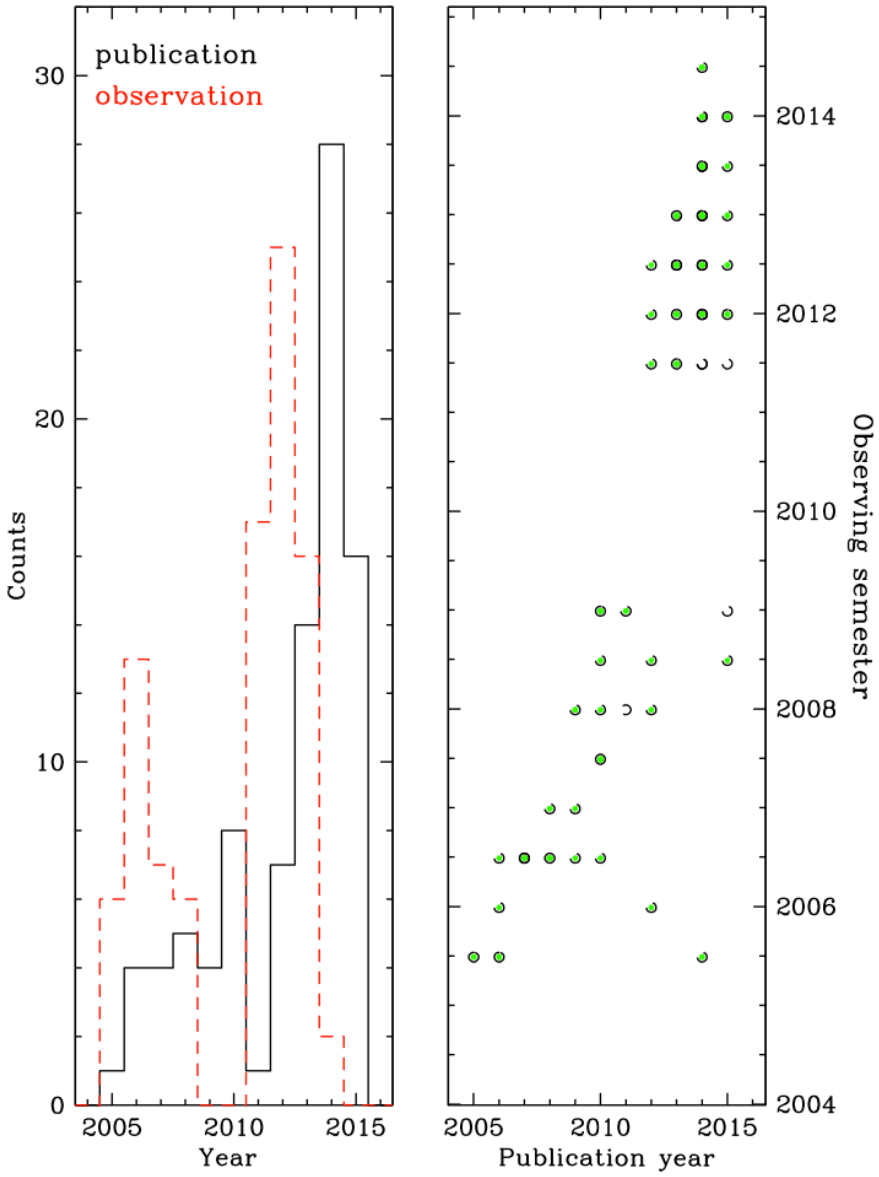
May 27, 2015

SALT Papers:

Please go see poster of Anja Schroeder next week during SALT conference for a detailed analysis of the 100+ SALT papers in the literature.

Fig at right shows the histograms of published papers per semester (black) and the semesters when their data were taken (red).

It appears there is a time lag of about 2 years from data to paper coming out, on average. It has become a bit shorter recently.



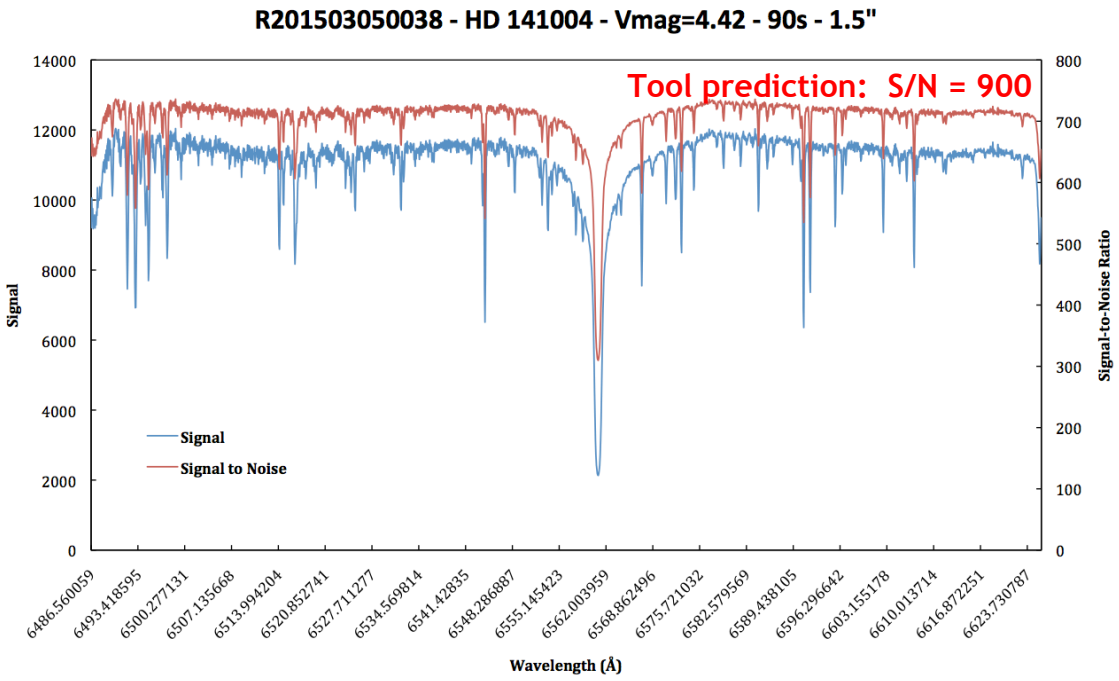
RSS Polarimetry

The beamsplitter has arrived and has been installed. Both beamsplitter and waveplate mechanism are being tested. The full sequence of polarmetric observations from PIPT to SDB, PCON, TCS, and FITS files has been tested and necessary software and hardware (e.g. sensors) updated. Closed dome and on-sky tests have been planned but not started yet. Polarimetric data reduction plans are pending. Steve Potter is leading the commissioning, with help from SALT Ops.

HRS sensitivity and stability

Luke, Steve & Éric recently reduced and analysed 20 RV-standards taken in MR-mode in between Aug 2014 and Apr 2015. Prototype MR pipeline used. Signal-to-noise ratio was compared with the HRS simulator tool. **Median ratio of measured vs. predicted S/N is close to one, with a factor of two scatter (**which is expected with the cloud and seeing uncertainties). Result has been consistency checked with MIDAS reductions by Alexei as well.

Similar comparisons in blue wavelengths and other modes are still pending. We would also like to check faint target feasibility.



HRS Stability update (tests performed and analysed by Luke – more details by request)

- Hour long Arc sequences: Both CCDs show stability to +/-0.002-0.003 pixels. Of the order of the specification of 1/1000th of a pixel.

- There are no obvious long-term trends emerging with stability. Pixel shifts are of the order of ±0.2 pixels over a period of 180 days.

- There are no clear trends in stability as a function of CCD temperatures. The red shows larger temperature deviations than the blue.

- HRS data quality website going live in a week or two, including daily automatics bias/overscan/stability and many other checks.

