SAAO Director's Report
SALT BEC #60 October 6, 2015

IAU

There was a significant South African presence at the IAU General Assembly in Honolulu in August, but no formal SALT booth or presentation. Since SALT is suffering from reputational dysfunction, the Board should consider a more active public face for the telescope at future major meetings. The South African proposal to host the 2021 IAU-GA in Cape Town was not accepted (the meeting will be held in Korea that year). South Africa had put together a strong bid package, with key support from the Minister of DST, and this outcome was a big disappointment. The IAU Office of Astronomy for Development, hosted at SAAO, was warmly supported by the GA. The office received a very positive recent independent review, and the IAU renewed the OAD contract for 6 more years.

SALT Operations and Instruments

The telescope remains highly productive and operations have settled into a routine, but winter weather has precluded observations on many nights. In spite of the poor weather, a new record has been set for number of blocks observed in a semester, and 3 weeks remain!

The HRS acceptance committee completed its review and recommended to the Board that the instrument be accepted, which was approved. This is a major milestone, and the SALT operations group is now free to implement software upgrades that should improve the operation of the instrument. There is still no formal pipeline for reducing HRS data, and this continues to hamper productivity of scientific results. Anja Schroder has been contracted for three months of work to apply the ad-hoc code that Steve Crawford has produced to all the HRS data in the archive and deliver the processed data to the PIs. We have recently received a proposal from Heriot-Watt University in Edinburgh to provide a demonstration of a laser comb for HRS calibrations. The equipment would be installed by H-W in January-March of the coming year, and then used for three months of shared-risk science observations.

The project to design and implement a new guider for RSS has been started, with Janus Brink leading. This would provide two guide probes, to stabilize rho guiding and greatly improve MOS performance. The guiders are based on the HRS guider, and should be much more sensitive than the current guider. The RSS medium resolution Fabry-Perot etalon has significantly degraded in spectral resolution, and has been removed from the telescope for more evaluation in the lab. It may well need major repair by the vendor with new coatings and other upgrades. There is no cost estimate yet, but it will likely be in the range of $30K or more. RSS polarimetry commissioning is proceeding well under the direction of Steve Potter, and will begin on-sky testing soon.

Safety
The auto accident reported on at BEC 59 had a more serious injury that previously known. One of the (non-SALT) SAAO personnel had arthroscopic surgery at the Worcester hospital for a torn knee meniscus. The surgery was successful, and the employee has returned to work after full recovery. The vehicle has been written off and will be replaced under insurance coverage.

SAAO anticipates receiving additional NRF funding to equip one of its vehicles as an ambulance and to provide advanced first aid training for several Sutherland staff. This should address the long-standing problem of emergency medical care and evacuation from the observatory.

South African Astronomy
The South African Strategic Plan for Astronomy has (still) not been released by the DST Minister, but this is anticipated soon. The NRF Astronomy sub-agency is preparing an implementation plan that will specify the funding needed to put the strategy into effect. SALT should see benefit from the strategy, when it is accepted and funded.

The NRF has named Lisa Crause of the SAAO to the open South African position on the SALT Board of Directors. Her extensive experience with SALT will be a strong asset for the Board.

The NRF has just completed a major external review. The astronomy review panel was strongly supportive of the optical and radio activities of the NRF, but noted that SALT is suffering from a poor international reputation that needs to be addressed. The appointment of a new CEO for the NRF has been announced: Molapo Qhobela, a biologist with significant government experience. We anticipate positive relations with the new CEO.

The Parliamentary Portfolio Committee visited SAAO in September. The meeting was very positive. After the visit, the committee posed two formal questions, one of which concerned SALT. The question, and our response, was:

> Parliamentary Question 3424
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> Whether any measures have been put in place to ensure that there is further growth of the Southern African Large Telescope and its instruments; if not, why not; if so, what are the relevant details?
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> The Southern African Large Telescope (SALT) is an international facility with South Africa having a 33% share, all decisions on Strategy, operations etc. is therefore made by the Board of Directors of SALT. SALT has a Development Fund for the purpose of providing the resources necessary for continued development of the telescope and its instruments. In 2012, the Board resolved to seek contributions from the partners to a total of R75m after South Africa took the lead and contributed R25m. Each of the partners in the

telescope consortium had committed to pay a pro-rata share of the fund in proportion to its shareholding in the telescope and a deadline for contributions of May 2016 has been set. IUCAA (India) had paid half of its share of R4m in 2014 whilst the once-off VAT refund of R1,3m to non-South African partners has also been transferred to this fund. The University of Wisconsin is developing the Near-Infrared Arm (NIR) of the prime focus spectrograph as an in-kind contribution to the fund; this instrument is scheduled for delivery within the next 2 years and will satisfy Wisconsin's share of the development fund. The National Science Foundation of the USA has contributed some $2m to the development of the NIR arm, the other US partners in SALT propose use this as partial fulfillment of their contribution to the fund. The NRF has requested the DST, through its country bilateral meetings, to encourage the other partners to contribute their share to the development fund to ensure that the current upgrade projects such as the Mirror Alignment System and the Tracker upgrade, are not prejudiced.

SAAO and SALT staff with management responsibilities underwent a 2-day training session in diversity and cultural sensitivity issues. The session was very productive and will help us address the transformation goals that are highly important for both organizations. The full staff will be trained in several more sessions by the end of the year. We anticipate that transformation and diversity considerations will play a leading role in all future SAAO and SALT appointments.

A group of Mexican astronomers visited SAAO, SALT, and the SKA during the last week of September. They had strong interest in SALT, and we discussed opportunities for them to purchase observing time and/or partnership shares in the telescope.

The SALT staff held discussion in September to develop a strategic plan for the telescope and to review and update the priority plan for projects to be undertaken. Both meetings were very productive, and will inform the Board meeting in November.

Plans for the November Board meeting at the University of the Witwatersrand in Johannesburg are being finalized. Board members and SALT staff are receiving information as it is confirmed.

The lack of response by Directors to the repeated requests for input to the 2014 annual report is very disturbing. The DST and NRF view this report as an important tool for SALT self-publicity, and will raise serious concerns if a full report is not produced in a timely manner.