

Dear SA astronomical community, SALT users in particular -

What follows is a summary of the latest SALT proposal round for the 5th SALT science period, semester 2013-2, along with some news and comments to PIs. Individual PIs would have been notified of the actual time allocations by the SALT Astro Ops today.

For a general description of the mandate of SASTAC and its current membership, please see <http://salt4scientist.salt.ac.za/sastac/>. A compilation of past letters to the community and summaries of proposed time are available there as well, and other relevant information about time allocations will be posted there from time to time.

Proposed and allocated time, and a change in P1/P2/P3 fractions

We received 41 proposals for RSA time for a total of 477h, excluding P4 time. A total of 258h were available, giving an overall healthy oversubscription rate of 1.85. In particular, Dark time was oversubscribed by a factor of 2.18, while Bright time was actually undersubscribed.

In May the Board approved a change in time allocation philosophy: the effective P1 and P2 percentages increased to 25% and 35%, while P3 receives the remaining 40%. This was done to allow high-ranking programmes to be given their full allocation as P1 or P2 priority time, without having to give part of the time as P3 (which typically results in their being only partially completed). For RSA, there were approximately 67h, 90h, and 101h available for P1, P2 and P3, respectively. There is an over-allocation of 15% factored in (down from the previous 50%) to help keep the queue filled at all times. P4 filler programmes, as well as programmes having optional targets, also keep the queue filled.

Of the 41 proposals time was allocated to 32, 16 of which have all their time in P1 and/or P2. Each proposal first went through a technical feasibility review by the SALT Astro Ops team, then a scientific review by two SASTAC members, who presented it to the rest of the committee and a consensus amount of time was allocated. More details can be found in the previous "letters" to the community at the link above.

Ranking of proposals

There were a large number of good and interesting proposals, and our being forced to cut the allocation to half the total time proposed was not always easy. In addition to the general criteria to rank projects (see Appendix A in the constitution document at the link above) the SASTAC wishes to highlight three issues which will help a proposal to be in the top half of the rankings. More details based on examples found from proposals just reviewed can be found further down, but they may be summarised as follows:

- 1) Science goals need to be clear. Importance of the proposal must be placed in the wider context of the subject.
- 2) The technical justification is very important and sufficient detail must be included to allow a reviewer to verify that the instrumental setup is suitable for the observing programme.
- 3) It is crucial to quantify how much data is needed for a science result (paper), especially in the

case of ongoing multi-semester proposals.

New developments

1) There will be 10h total per semester available as "DDT (Director's Discretionary Time)", typically reserved for brief unexpected programs. Anyone can propose for this during the Semester by sending an informal application to the SALT Ops director (David Buckley).

This DDT availability, the SASTAC felt, had an effect on some proposed programs normally considered as ToO (Target of Opportunity). If there is a reasonable chance that there will be no triggers during the semester, we instructed the PIs to apply for DDT in case of an event, and gave some non-P0 time for possible followup. Larger ToO programs with more regular expectation of triggers can not be operated this way of course, but P0 time is precious and we do not want to waste it.

2) It is likely that it will be possible to submit multi-semester proposals next time - details will be posted later during the call for 2014-1.

3) Since many PIs still struggle to correctly take into account track length issues (especially with Equatorial targets) SALT Ast Ops has indicated that the next Phase-1 tool will treat track times more explicitly.

-petri vaisanen
on behalf of SASTAC

How to avoid common mistakes:

Take care in writing your proposal; don't assume you don't have to try hard to justify your programme because "it's just SALT, and not HST!".

1) Your science goals need to be clear. The importance of the proposal must be placed in the wider context of the subject. Why is what you are doing new and important? What similar work has been done before and why is yours an improvement? The fact that you have been awarded time for this project in the past is not a suitable justification. Proposals are first and foremost judged on the importance of the science relative to all other science proposed in the same semester. Cite the relevant literature, not just your own papers.

2) Be specific and careful in the technical justification. Do not just state that that you need a particular S/N for spectroscopy. What is the feature you are measuring? Are you using per-pixel or per-resolution element numbers? Where have you measured the S/N? What precision will this give you in the final result? For example, if you wish to measure the equivalent width of H β in absorption, calculate the S/N in the continuum around H β . If you know the expected EW of a feature, use this too.

Submit the RSS simulation as part of the Phase-1 proposal! We sometimes suspected simple typos

in the text, but since no simulation was submitted it was impossible to verify what was meant.

Some proposals had figures of spectra in the technical justification with no indication of whether the plot was a) a model, b) came from another telescope, c) was a SALT spectrum. This is confusing to both the technical and scientific reviewers.

Showing SALT results from previous data is weighted highly, particularly for proposals which are continuations.

Another common mistake is confusion of "time critical" and "target of opportunity" observations and what the difference is when applying for time. Astro Ops will make the definitions clear in the next Call for proposals.

3) It is very important to quantify how much data is needed for a science result. Where does the project end? When will there be enough targets observed and why?

What is the role of SALT in larger collaborations? For teams with international collaborations, it is useful for the TAC to know the roles of the co-Is, in particular whether or not they are using telescopes to which they have access. If a project is more obviously suited to one of your collaborator's telescopes, you should comment on why you are asking for SALT time instead.