Dear SA astronomical community, SALT users in particular -

On behalf of the SALT time allocation committee, SASTAC, I'd like to give you a summary of what happened during the newest proposal round for semester 2013-1. Individual PI notifications of allocated time will be sent in a few days.

For a general description of the mandate of SASTAC, as well as its current membership, please see <u>http://salt4scientist.salt.ac.za/sastac/</u>

Proposed and allocated time

We received 53 applications for SA time for a total of 714h, plus another 3 proposals for P4 time. A total of 439h were available, giving an overall oversubscription rate of 1.63. That factor is very similar to what it has been for the past 2 semesters, and we are glad the interest has remained stable. The majority of applications were re-submissions/continuations of proposals from previous semesters (more on that below).

Time was to be allocated into Priorities 0, 1, 2, 3 and 4. The split of the available time over the priority classes was 59h for P0-1 combined, 88h for P2 and 293h for P3. P4 time does not receive any specific time, it is treated as "filler time" to be observed if nothing else can be done due to very poor conditions. As before, P3 time is double what is actually available (to prevent the observing queue ever being empty) so that the expectation is that only 50 per cent of the P3 time will be executed.

Of those 53 proposals time was allocated to 37. The process, as previously, ran essentially as follows: each proposal first went through a technical feasibility review by the SALT Ops team. Then, each proposal was read and analysed by two of the SASTAC members, who thereafter presented it to the other members for discussion in a final set of meetings. If a SASTAC member was involved in any way in a given proposal, that member was not present in the room during any discussions regarding the proposal. Provisional time allocations were finally adjusted or modified to fit into the required Priority limits as well as suggested Moon condition limits. In the end, time allocations were always consensus decisions.

Attempting to get programs completed

In addition to the general philosophy of giving time to high-quality science making optimal use of current SALT characteristics (see Appendix A in the constitution document at the link above), during this round we in particular made an attempt to address the following:

1) There has been a general low rate of ***completion of projects***. This must concern the user community, and has now also become a concern for all the TACs, the SALT Science Working Group, as well as the SALT Astronomy Ops. The reasons for this are many and requires a larger discussion - indeed, all the parties will likely give recommendations to the Board to see if there are ways to modify how time is allocated and projects executed, to maximise project completion. One obvious reason is the system of over-allocating P3 time to avoid the observing queue ever to become empty: twice as much P3 time is allocated compared to what is actually available. Most of the allocatable time is P3 (67 per cent), so many/most programs receive some P3 time and therefore, by definition, most of those will not get completed. For our part within the system in place right

now, we used the following as guiding principles (though not exact rules):

- Better to allocate full required times to fewer programs rather than smaller amounts to more. If time was given, we gave the full requested time, unless there were technical reason not to (e.g. visibility of tracks).

Better to give full time in P1 or P2 to excellent (reasonably sized) programs to make sure they get finished. A total of 13 proposals received only P1-P2 time in dark or gray Moon conditions.
Give plenty of P3 time for those proposals qualifying for it scientifically *and* that can benefit

from it, such as ones with relaxed observing constraints and larger pools of optional targets. In fact, a few such proposals received more time than the total they asked for. This was achieved by increasing the amount of P3 time allocated to the program, allowed by the built-in oversubscription of P3 time, to increase their chances of getting finished.

- Promote on-going good programs which have a chance to finish now.

When time was not granted

All the additional criteria above for awarding time resulted in a larger number (16) of programs being rejected compared to last rounds. In addition to clear scientific concerns in several cases, many of them fall into one of two categories worth a more explanation:

a) Those that are deemed too challenging. This can be due to inherent limitations (need for absolute calibrations, faintness limits, available visibilities of the field during the semester) or those which push the limits of the current SALT. Regarding the latter, we do not mean that SASTAC will never take risks with potentially exciting projects, indeed some quite risky programs did receive significant high priority time. It just means that at this point we feel SALT ***must*** produce more published papers as soon as possible, and in the near term we have to make sure it happens. We ask the PIs of e.g. very faint target proposals to communicate with colleagues with experience of such data and/or the SALT Ast Ops to see how realistic the plans are, since some characteristics limiting the final data quality can not be judged purely with the instrument Simulators (e.g. mirror alignment stability, errors in mask alignment). The SASTAC would find it very useful if PIs ground their technical case on existing data, there are a lots of SALT data around already, speak to your colleagues.

b) Those that can be done with smaller telescopes. Some very poor conditions programs are needed at SALT as fillers, but in general we do not wish SALT to do 1-2m class science, and in particular we also wish to promote the use of the other SAAO telescopes. Thus, while it may seem convenient to use P4 to observe targets which could easily be done on the 1.9 m, SASTAC looks carefully at proposals which the PIs classify as a P4 proposal. The number of P4 targets observed in any semester is actually quite low; programs which therefore require large numbers of targets to obtain statistically significant samples, or programs requiring numerous visits to monitor variable targets are thus not suitable for P4. Many targets on the list of such proposals were very bright (sometimes brighter than 12th mag) and could easily be done on the 1.9 m. Appropriate P4 programs are well distributed in RA, have short and simple blocks, can be done in poor seeing, and in addition give, at the very least, incremental science value if only a small fraction of them are ever observed.

Final notes

On-going programs: Because of the low completion rate, there understandably were many re-

submissions. But SASTAC will need to see how a multi-semester program is progressing, and in particular the justification ***must*** include the ultimate goal. Where does the project end? When are there enough targets and why? No program was rejected solely on these grounds this time, but henceforth re-submissions will need to motivate why they need more data.

SASTAC time: We reserved a small amount of time to be used during 2013-1 for any sudden interesting targets, at the discretion of the SASTAC and SALT Astronomy Head. This "SASTAC time" can be proposed for informally if the need arises.

Phase-2 hint for PIs receiving time: If your science requirements can take it, remember that relaxing your seeing conditions in Phase-2 especially in the lower priority classes will generally increase the chances of your blocks being observed.

-petri vaisanen, on behalf of SASTAC