

SUTHERLAND TELESCOPE USER'S COMMITTEE (STUC)

MINUTES OF THE MEETING ON 19 JUNE 2017 [HELD VIA SKYPE]

PRESENT:

Ted Williams (TW) (SAAO Director)
Ramotholo Sefako (RS)
Matt Burleigh (MB)
Chris Engelbrecht (CE)
Dave Kilkenny (DK)
Quentin Parker (QP)
Brian van Soelen (BvS)
Hannah Worters (HW)

APOLOGY:

Lisa Crause (LC)

CHAIR:

Chris Engelbrecht

Action items (for next meeting) in red
Continuing items in blue

1. Welcome

New STUC members (Matt Burleigh, Lisa Crause and Hannah Worters) are warmly welcomed.

2. Matters arising from the previous minutes

Minutes were circulated and approved.

2.2 Website developments:

CE: Access to SAAO publications via SAAO network is only possible for SAAO staff. CE will explore if there is another way these papers can be made available to users of the telescopes. Alternatively, a list of at least the titles/authors of SAAO-generated papers could be manually updated on the STUC website every 3 months.

Action: CE

CE: A link to policy/guidelines re observing Targets of Opportunity also still needs to be finalised and then it can be placed on the website. CE to liaise with RS. Further discussion under agenda point 7 today.

Action: CE/RS

2.5 ToO (target of opportunity) requests on SAAO telescopes:

Committee has previously resolved to revisit this topic at every meeting. As this topic is entwined with the automation of the Sutherland user telescopes, further discussion will go under agenda point 7 today.

2.6 Availability of pipelines for data reduction to SAAO telescope users:

Carried over for further attention at the next meeting (late 2017). CE to set up a subcommittee to work on this, with QP/MB/CE as members. **Action: CE**

3.1 Inputs from user community based on last minutes

Carried over from previous meeting: QP notes that a SNR calculator for SpUpNIC is not yet available on the instrument webpage. TW points out that there are a number of practical examples of exposures taken with SpUpNIC on the website though, which could provide a guide for planning observations. The actual link is here:

https://topswiki.sao.ac.za/index.php/Sample_Spectra_of_Spectrophotometric_Standard_Stars

LC to report back on possible improvements that could be made in this respect. **Action: LC**

Support community of SpUpNIC users: carried over for attention at next meeting. **Action: CE**

3. Inputs from user community based on last minutes

No inputs received this time round.

4. Telescope status/developments

RS: The new 1.0 m telescope (named "Lesedi") was commissioned in September 2016. HW has been pushing to get the instrumentation ready for outside users. Two applications to use Lesedi were received for trimester 3 of 2017.

RS: The water leakage problem on the 1.9 m telescope has been resolved. The problem with the X/Y slides is receiving attention.

RS: The old 1.0 m telescope has been successfully operated from Cape Town in remote observing mode (as a test). Steve Potter also carried out spectroscopy with the 1.9 m tel. remotely from Cape Town.

RS: An accident occurred on the IRSF telescope in February 2017, when a cooling hose got caught and damaged.

The Las Cumbres Observatory (LCO) has confirmed that two 0.4 m-aperture telescopes will be added to the current 3-telescope configuration of the LCO on the Sutherland site.

TW informs members that the budget for the proposed new 4 m-class telescope on the site has been cancelled by the Department of Science and Technology, due to funding constraints. The (previously-allocated) design funds will be used for work on the 1.8 m PRIME wide-FoV telescope coming to the site. This project is a collaboration with institutions from Japan and has been fully approved for go-ahead. It will feature a near-infrared spectrograph.

MB asks if this is intended to replace the IRSF.

TW clarifies that it will be an additional instrument; the IRSF is set to continue operations. The agreement with SAAO will be on similar terms as the IRSF agreement and operations are expected to commence in 2019.

5. Instrumentation status/developments

CE reads out the submitted report (attached as an appendix to these Minutes). Main points:

- i) The old 1.0 m tel. and the 1.9 m tel. are being brought onto a uniform system for fully remote operation.
- ii) Testing is underway on the Widefield Nasmyth Camera (WiNCam) for Lesedi.
- iii) The WALOP polarimeter destined for the old 1.0 m tel. is expected in 2018.

- iv) A low-resolution spectrograph is planned as a third instrument (after SHOC and WiNCam) on Lesedi. Note especially the following comment from SAAO: “We worked hard to get community input on this decision, but it was a difficult task because there was not a significant response.”

BvS asks about the responses: most came from inside SAAO, but there were only a handful of responses in total.

“Suggestions from the STUC on how to better include the community in instrumentation decisions are most welcome.”

Out of three possibilities presented to the community, the SPRAT-based proposal was selected. MB endorses this as probably the best option of the three.

TW clarifies that the choice to go with the SPRAT-based design does not exclude further instruments being added to the Lesedi portfolio in future.

- v) A new grating lock on the SPUpNIC spectrograph seems to have solved the stability and flexure issues.
- vi) Still with SpUpNIC: “An investigation was made into a faint tail that is seen on lines in arc frames: the feature is due to ghosting and was not detectable in the lab when the instrument was built. As it is a low-level effect and would be difficult to do any additional troubleshooting, the plan is to ensure that users are aware.”

QP responds by stating a massive loss of flux occurring with SpUpNIC – as much as 50%. In addition, serious line blending is seen to occur. TW and RS request that as much detail as possible about the problem be emailed to LC so that the problem can be investigated.

- vii) The ATLAS (Asteroid Terrestrial-impact Last Resort Alert System) telescope might arrive at Sutherland in 2019. A solar-power system to support it is already funded, but an approved permit from Eskom is awaited before it can be installed.

6. Software developments

No new developments since the previous meeting were reported.

7. Service Observing (including ToO requests)

CE asks about the frequency of formal requests for service observing. RS replies that the demand has been slight thus far – perhaps because there is no guarantee that a requested observation will actually be carried out.

TW suggests that SAAO PDFs and PhD students should be assigned to some service observing requests, in return for the generous financial support they are receiving. RS notes that Lesedi is purpose-designed for service observing.

HW notes that service observing proposals have not yet been explicitly solicited for Lesedi as yet. CE asks HW to notify him (on behalf of STUC) when this does get initiated. **Action: HW**

QP relates good experience with the AAT to suggest that SAAO should also experiment with offering full (week-long??) observing runs with Lesedi, given that service observing requests have been few in general. TW notes that service observing will be easier with Lesedi as all instruments will be mounted all of the time.

MB notes that he gets private requests for service observing on frequent occasions. CE has had the same experience (almost one for every observing week spent at Sutherland). QP also reports frequent

requests when observing. RS requests that TOPS (i.e. RS) be informed when observers get private requests. **Action: all members who observe at Sutherland**

BvS asks how the rate of applications for time on Lesedi correlates with the rate for the old 1.0 m telescope. RS replies that the usual rate for time on the latter has not changed: about 5 requests per trimester.

QP suggests that STUC makes a quantitative survey of the observing community's requests related to Lesedi and the old 1.0-m (once Lesedi's experimental period is over), to establish what is needed going forward.

RS is requested to log user requests accordingly. RS asks that private requests (see 3 paras. above) be communicated to him, so that he can include those. **Action: RS**

8. Additional items

8.1 QP: The sky access of the 1.9 m tel. (i.e. the RA/Dec domain) with SpUpNIC mounted is restricted, due to the design of the instrument housing. Steve Potter (SAAO) has incorporated these restrictions into the telescope control software, but these restrictions are too conservative.

DK points out that a similar situation applies to the SHOC instrument mounted on the 1.9 m tel.

Responding to this, RS voices safety considerations as paramount. Dangerous configurations have been identified with the telescope moving from certain sky positions to others. RS undertakes to email QP and DK to address their concerns.

Next meeting should be held around October.

Meeting closed.