ATUC Report to the Director, November 2007

This meeting of the AT Users Committee was held at ATNF Headquarters, Marsfield, on 5 and 6 November 2007. The meeting included two business sessions, from 08:30 to 09:30 and 13:30 - 17:00 on 6 November.

Attendance: Elaine Sadler (Chair), Michael Dahlem (Secretary), Melanie Johnston-Hollitt, George Hobbs, Sarah Burke, Emma Kirby, Marijke Haverkorn, Andrew Walsh, Stuart Ryder (part-time)

Apologies: Rachel Webster, Kate Brooks, Sarah Maddison

The Chair of ATUC welcomed the new members of ATUC who were attending their first ATUC meeting, namely the new full member, Andrew Walsh, the two student members, Sarah Burke and Emma Kirby and an international member, Marijke Haverkorn (NRAO). The Chair also thanked the retiring member, Michael Drinkwater, for his valuable contributions.

The members of ATUC accepted the minutes of the last meeting.

Date and format of the next meeting:

The next ATUC meeting will be held around the last week of April 2008. It would be useful to have an overseas member attend the next ATUC meeting, and ATUC members will suggest possible overseas members once the relevant observing schedule is known.

Previous actions on ATUC:

No actions from the last meeting.

New actions on ATUC:

None.

Commendations and successes

- ATUC commends the ATNF on the installation of the new 3 mm system with noise diode and improved amplifier performance at the Compact Array.
- The ATNF is commended on the decision to install the 7 mm spare receiver from the ATCA upgrade at Mopra.
- The recent calibration efforts at Mopra are also welcomed.
- Parkes staff are commended for doing a great job on getting the PDFBs working.
- Users of the ATNF telescopes have conveyed to ATUC their appreciation of the quick turnaround on resolving fault reports.
- ATUC has been notified of Graham Moorey’s forthcoming retirement and wish him the very best.

Elaine Sadler (ATUC Chair)
ATUC Recommendations [ATNF response requested]

Matters arising from the Director’s Response to the May 2007 ATUC report

- Members of ATUC have been informed that the most recent Parkes observing schedule was again released very late.

New recommendations:

**ATNF students**
- ATUC notes that the website regarding the policy for ATNF co-supervised students has been updated as of August 2007. We are concerned about the residency requirement mentioned on the page which states that "ATNF Graduate students are expected to spend about a quarter of their time at the ATNF to interact with their co-supervisor, staff, other students and visitors." While we understand that there needs to be sufficient, sustained contact between the ATNF and the students, spending 3 months per year at ATNF in addition to observing and DA commitments seems far too high. Given that this policy seems to have developed without consultation with university supervisors, we would like to open a dialogue with ATNF regarding requirements for co-supervised students. ATUC nominate Melanie Johnston-Hollitt to discuss details with an ATNF representative.

**ATCA Duty Astronomers**
- There was some uncertainty as to the purpose and intended audience of an upcoming DA training course that is being organised at Narrabri. Could this please be clarified?
- Some issues were identified regarding DAs giving Mopra support without adequate training; if DAs are supposed to support Mopra observers, an induction to Mopra support should be given (or at least a clarification given of what kind of support they are to give for Mopra observers).

**Future ATNF operations**
- ATUC request that details of the new future operations model for the ATNF be presented at the key astronomy sites around Australia.

**Compact Array and Mopra**
- Is the paddle still needed for 3-mm calibration now that a noise diode has been installed on one of the telescopes?
- Users would like to be able to read ASAP data into CLASS to take advantage of additional functionality there or have that functionality reproduced within ASAP, e.g. multiple line-fitting. Andrew Walsh would be happy to provide a wishlist.
- ATUC recognise the strong user interest in having a wide-band correlator available at the ATCA for the next mm season. Given that the full installation is going to be delayed, ATUC urges the ATNF to make available a single-frequency CABB system on 5 antennas for the 2008 mm season. If possible, this should be announced for the next proposal deadline in December.
- At this point ATUC does not have enough information to comment on the feasibility of ATCA observations below 1200 MHz, where RFI is a serious issue. This impacts on key HI and polarisation (Faraday rotation) science and needs further investigation.
- Documentation to reduce Mopra data with ASAP to be improved and Python workshop to be held.
- ATUC encourages the ATNF to continue current attempts to set the Mopra absolute flux calibration scale.
- Mopra baseline ripple to be minimised, in coordination with efforts to minimise the same problem (“standing wave”) at Parkes.
ATCA/Mopra science review

• ATUC feel that there has been good value to the community in the on-going series of workshops held in conjunction with the user committee meetings and endorses that the theme for the next workshop be “ATCA and Mopra science”.
• ATUC would welcome an integrated 3-mm upgrade plan as part of the ATCA science plan (WVRs, $T_{\text{sys}}$, 115 GHz upgrade, paddle).

Technology development

• ATUC strongly support plans to install WVRs on the Compact Array by mid-2009. ATUC would like to have more information about this project and its likely impact on observers. Is there an ATNF project scientist for this?
• ATUC notes that a design study has been started for a 3-mm multi-beam system at Mopra. ATUC feel that it would be useful to have a more coordinated process for planning and submitting LIEF proposals with university groups for instrumentation on ATNF telescopes.

Parkes

• ATUC thinks it is important not to limit unduly the minimum time request on Parkes. Short programs with high scientific merit should still be accepted, subject to operational constraints. At our next meeting we would like to see statistics on the acceptance rate of large and small proposals and the relative scientific outcomes of such proposals at Parkes and the Compact Array. Statistics on student proposals would also be useful.
• Following the Parkes workshop, it appears that much of the key science to be done with Parkes over the next 5-10 years requires only existing or planned instrumentation and software (pulsars and pulsar timing, diffuse polarised and HI emission, eVLBI). The 22-GHz FPA is potentially interesting, but needs a more detailed science case which also explores synergies with ALMA. The case for science below 1 GHz, especially rotation measures and pulsars, needs to be evaluated along with a discussion of the effects of RFI.
• Users are generally enthusiastic about remote observing at Parkes.

ATUC support

• Could the reports for the open session please be made available to ATUC at least 2 days before the meeting please?

Other business

ATUC notes that Australian time is now available on NANTEN-2 in discussion with the universities involved. There will be announcements via the ASA exploder.

Other comments from AT users [for information]

The standard ATNF acknowledgement blurb, which currently only resides on the ATNF Publications page (http://www.atnf.csiro.au/research/publications/) lies within the "Astrophysics Research at the ATNF" section; it is not that easy to find for external visitors. It should be copied onto the top-level OPAL and ATOA web pages.

Would it be possible to have a button to click on OPAL that allows you to simply resubmit a previous (particularly NAPA) proposal unchanged to the next semester? Having to download and upload such proposals seems pointless.

Some users report that they have had no response to requests for access to their own data on the online archive.