

ATUC Report to the Director, May 2007

This meeting of the AT Users Committee was held at ATNF Headquarters, Marsfield, on 1/2 May 2007. The meeting began at 09:30 on 1 May and finished at 15:00 on 2 May. During this meeting ATUC members also visited the CABB lab where a tour was given by Graeme Carrad.

Attendance: Elaine Sadler (Chair), Michael Dahlem (Secretary), Stuart Ryder, Melanie Johnston-Hollitt, George Hobbs, Sarah Maddison, Michael Drinkwater, Cliff Senkbeil, Steven Longmore

Apologies: Rachel Webster

The Chair of ATUC welcomed the two members who were attending their first ATUC meeting, Michael Drinkwater and Steve Longmore. At the end of the meeting, the Chair also thanked the outgoing student members, Cliff Senkbeil and Steve Longmore, for their valuable contributions. Proposals for new student members have been made to the AT Steering Committee.

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 late (after 26) October 2007, probably in conjunction with a half- to one-day symposium on future science with Parkes. An additional one or two days will be devoted to AT reports and ATUC's business session. It would be useful to have an overseas member attend the next ATUC meeting, and ATUC members will suggest possible overseas members once the October observing schedule is known.

Previous actions on ATUC:

1. **Millimetre White Paper:** Release mm white paper to the public and announce its availability to the community at large.
Done. The Secretary created a link to the document from the agenda of Dec 2005 meeting; links to the mm white paper and the Miriad review article in the Feb 07 ATNF newsletter (and potentially some other documents of interest) will be added to the ATUC home page under new section "Document repository".
2. **Communication with the user community:** The ATUC Chair will prepare a short report for the next ATNF newsletter, with the aim of clarifying some issues raised in user feedback: These include parts of items 4, 8(c), 8(e), 12 and 13(a) in the list of recommendations below.
Done.

New actions on ATUC:

1. Secretary to ask the ATNF to post the mm white paper on their web pages (in an appropriate place). *See above.*

Commendations and successes

1. ATUC congratulates the ATNF on the successful installation and first light observations with the 7 mm systems at Narrabri.

2. ATUC is pleased to see the first science results from PAM(H)ELA as presented by Tasso Tzioumis.
3. ATUC is pleased with the success of the Mopra spectrometer MOPS as voiced by the user community and reflected by the science presentations during the ATNF Symposium on Monday 30 April as well as the increased number of Mopra science publications.
4. ATUC noted with pleasure the high attendance at the meeting on 'Technical challenges and science potential of SKA FPA pathfinders' held at ATNF in March, and we look forward to reading the MIRANdA science case.

Elaine Sadler (ATUC Chair)

ATUC Recommendations [ATNF response requested]

Matters arising from the Director's Response to the October 2006 ATUC report

- 4. The previously requested email distribution lists for requests for green time at the observatories are not yet advertised on the observatory web pages. Members of ATUC are not aware of an email having gone out to announce the availability of the new lists.
- 5. The availability of skype via pink cables should be mentioned to visiting astronomers.
- 6. ATUC noted that the promised information on future development projects was not available at our May 2007 meeting. ATUC would very much like to see a full list of possible future hardware developments, with ballpark manpower requirements, for discussion at our next meeting in October.
- 8(e). AT users value the availability of the lodge flat as short-term accommodation for observers with accompanying persons/family. While we would be like to see self-catering accommodation available at Narrabri for longer-term stays, we think it is important to keep the lodge flat available for short-term visitors and observers.
- 10. ATUC would be interested to know the outcome of this meeting.
- 13.d) ATUC is pleased by the progress made (Narrabri web pages and Jessica Chapman's presentation to ATUC) and would like to see this to be further pursued.

New recommendations:

AT operations

1. ATUC appreciate the opportunity to be involved in the planning of future ATNF operations and are happy to assist in consulting with the user community. ATUC would like to see more details about proposed operational models for Narrabri (including the future role of DAs) and Parkes in the near future. We are encouraged by the ATNF's commitment to continue the operation of all observatories for at least the next decade.
2. Several users have voiced concerns about Tidbinbilla support after the departure of Jim Lovell. Will the position be refilled? What is the status of current observing requests at Tidbinbilla? To what degree will the ATNF be able to support Tid observations (other than VLBI) in the future?
3. ATUC welcomes the appointment of the new mm research scientist and the opening of an operations support position at Narrabri. ATUC has received a number of specific mm-related suggestions from users which will be passed on to Kate Brooks.

Technology development

4. ATUC is pleased to note the progress made on the development of the CABB and the plans to have it available for general use by the observing community for the 2008 mm season. ATUC would

like to see a structured commissioning plan which includes hardware, real-time and data reduction software timelines.

5. Based on the assumption that there will be a spare 7 mm receiver for Narrabri, leaving enough parts for another to go onto the Mopra telescope, there is strong support from the user community to see that extra 7 mm receiver assembled and installed at Mopra in time for the 2008 millimetre observing season.
6. ATUC were pleased to hear of plans to install of a 3 mm noise injection diode on one of the ATCA antennas. This will make it possible to carry out 3 mm polarisation measurements, for which there is a strong science interest within the community.
7. ATUC is aware of some potential future projects that have been proposed (115 GHz upgrade, WVR, focal plane array at Parkes, 7 mm receiver for Mopra, Narrabri 20/13 and 6/3 cm receiver upgrade), but are not sure what it is the ATNF wants ATUC to rank against each other. More information is required to do so. Prioritising these projects is especially important in the context of the forthcoming re-organisation of ATNF operations.
8. A similar listing (for prioritisation) of software projects would also be valuable to have (e.g. on-the-fly mapping, sched, ASAP, end-to-end use of target properties/coordinates etc. from proposal to observation; unified observer interface?)

Documentation

9. ATUC requests that an announcement be sent to users (via the at-users email distribution list) when a new online issue of the ATNF Newsletter is released.
10. We would once again like to request that all ATUC members are sent a printed copy of the ATNF Newsletter (currently several members are not receiving this and would like to).

Remote observing

11. We welcome the relaxation of restrictions on remote observing with the ATCA. ATUC request that the DA checklist be updated to include DA instructions for remote-to-remote observation handovers. The goal here is to ensure that this does not impose an extra load on the DAs.
12. ATUC recommends Mopra remote observing should become available from sites other than Narrabri. As a first step, we suggest that a Mopra remote observing station be set up at Marsfield, similar to what is already available there for remote operation of the ATCA.
13. ATUC also sees a demand for 3 mm remote observing with the ATCA and recommends that a trial system be set up from Marsfield for competent observers.
14. ATUC would like to know whether it is possible to relax the two-person rule at Parkes, particularly due to the new possibility of remote observing that was recently demonstrated. The idea would be that one person is at Parkes and sets up the equipment etc. He/she could then go to bed or do their own work whilst a remote observer carries out the observations.

TAC/scheduling/archive

15. ATUC received comments from users regarding TAC feedback on pulsar projects. Users were concerned that with pulsar experts having to leave the room there was insufficient expertise to rank these proposals. The ATUC chair will discuss these comments with the TAC chair.
16. Concern was raised that the Parkes schedule is being released too late for overseas observers to make their travel arrangements in time. This is a particular problem for the April semester, with the delays caused by Christmas/New Year.
17. ATUC supports the proposed changes to procedures for new large proposals and asks that the next call for proposals makes it very clear which proposals this applies to (and what the status of currently active proposals is).

18. ATUC has identified Mopra MOPS data as the highest priority for inclusion in the AT Online Archive (ATOA) in the future. The ATOA should contain a search tool for all observations at all telescopes, even if there are no data in the database for these observations at present.

VLBI

19. With the high priority ATNF is giving to eVLBI at the moment, could some resources please be redirected to update the eVLBI web pages? This was requested by ATUC in June 2004 and a response was promised, but there has been no visible improvement.
20. Since the three new AuScope antennas will be available for some fraction of the time for science (40-50%), ATUC would welcome more information on how will they work (if at all) with respect to the current LBA?

Other business

ATNF co-supervised students

21. Some users reported their dissatisfaction with the procedure currently used to approve co-supervised ATNF students. They felt that despite having complied with the published guidelines for co-supervision, un-documented, arbitrary requirements were preventing their students from becoming ATNF co-supervised students (in some case despite having an ATNF staff member already signed up as a co-supervisor). Such requirements included (apparently) unreasonable residency requirements in Epping and a level of project oversight that was seen as unnecessary and unreasonable. This was perceived as giving students from outside NSW a significantly reduced chance of becoming involved with ATNF. Please could ATNF provide an updated and accurate policy and procedure for application for ATNF studentship?
22. Observers would like to applaud the staff at Narrabri for the provision of new low-fat meals at the lodge.

Other comments from AT users [for information]

Mopra status

What plans are there to characterise Mopra and is there a long-term monitoring plan? The tasks I am thinking of include:

- is the beam-shape being monitored?
- is the main-beam and extended beam efficiency published by Ladd et al (2004) still appropriate? do we have standard spectra of OrionKL, M17SW for the new system?
- skydip (i.e. T_{sys} vs elevation) scans - can observers do their own skydips with TCS?
- T_{sys} -Frequency scan
- cross-calibration of MPCOR and MOPS - is there a recommended method for combining data from the two backends?

What is the status of some problems from last year:

- the broadband ripple?
- the T_{sys} offset between polA and polB, and the "jitter" in polA T_{sys} ?

VLBI web pages

Particular problems with VLBI web pages include:

- references to the S2 correlator which has been (or is about to be) decommissioned,
- broken links,

- pages that have not been updated since 2000,
- contacts to website maintainers that have long since departed ATNF, and
- poor visual presentation.

ATOA/OPAL

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 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.