Director's Response to ATUC Report – April 2025

We thank ATUC for their report, which is available from this link.

Future of ATCA

ID	3 (a)
Owner	George Hobbs
Summary of request	ATNF to urgently engage closely and proactively with community members as they actively seek funding avenues for ATCA on the indicated tight timeline, leveraging ATCA's unique capabilities.
Response	We continue to search for funding avenues for ATCA (and for all our facilities). Specifically, for ATCA we have • Organized an ATCA science day that took place adjacent to the last ATUC meeting. During that science day we reminded the community of the budgetary challenges facing the ATNF and discussed the exciting scientific opportunities for ATCA in the BIGCAT era. • Supported the development of one or more LIEF grants in the Australian community for purchase of telescope time. • Successfully sold a small amount of ATCA telescope time to a research group interesting in transient follow-up. • We have also initiated conversations with other major astronomical facilities worldwide to explore potential funding opportunities. We continue to search for further funding avenues and will continue to engage with the community during events such as the ASA meeting and through our national and international collaborations. An update on our search for external funding opportunities (for all our facilities) will be provided verbally during the ATUC meeting.

ID	3 (b)
Owner	George Hobbs
Summary of request	ATNF to prioritise BIGCAT operations, ensuring that LIEF partners can deliver on the science goals stated in the funded proposal.
Response	The LIEF partners included members from all the primary Australian universities (WSU, Curtin, Swinburne, UTS, UNSW, UTas, UWA, USyd) involved in radio astronomy and was led by Western Sydney University. The key science goals mentioned included studying radio counterparts to gravitational wave sources and detailed observations of discoveries made with ASKAP and other Australian telescopes (such as looking for persistent radio emission

	from localized FRB events and higher-frequency observations of EMU sources). The LIEF grant also pointed out that ATCA arguably has the highest polarization purity of any major synthesis telescope and highlighted how BIGCAT would enable broadband polarimetry for the first time. All these science modes are currently being commissioned, and we currently have no concern in our ability to deliver these modes to the community (and many of the LIEF partners are already involved in the commissioning process). As of August 2025 science commissioning has commenced and some science results will be shown at the upcoming ATUC meeting. Our primary challenge is budgetary. As reported in the ATUC meeting, we may have to reduce the merit-based fraction of available observing time, without further funding, but BIGCAT provides the opportunity for further sale-of-telescope time with ATCA/Mopra. However, it is our intention to ensure significant merit-based access time is available to the LIEF partners and wider community. We will continue to keep the community updated with our future planning.

Facilities

ID	**4.1**
Owner	Aidan Hotan/Steve Ord
Summary of request	ATNF to continue target resourcing to address the most significant blockers to efficient scheduling and execution of the SSPs. Community feedback to ATUC by the SSPs highlights the following areas as high-priority development paths, in priority order: ● Exploiting sky-model calibration to reduce overheads associated with band switching, which currently limit day-to-day scheduling flexibility and reduce observing efficiency. ● Achieve operational readiness of ASKAPsoft for diffuse emission imaging workflows, enabling timely science delivery for several high-allocation RASSP teams, such as the GASKAP surveys. ● Delivery of tools for observing near bright sources, such as peeling algorithms, to expand usable sky coverage for affected surveys. ● Visibility-level excision and stitching tools to mitigate effects of solar activity and, potentially, allow multiple shorter-track observations to be combined for imaging—improving prospects to maximally utilise each 24-hour period for SSP observations under dynamic scheduling. ● Consistent application of pipeline and firmware validation frameworks, with clear Observatory-side responsibility for identifying and diagnosing issues in calibrated data. Where the complexity prevents this, post-deployment observations should be flagged and prioritized for review in coordination with SSPs.
Response	We have two big-picture challenges that the ASKAP team are actively working on: • Progressing the observations of the survey science projects • Improving the data quality We are currently developing timelines for when each of the SSPs are likely to receive data

	and are in discussion with the SSP PIs on these timelines. Those timelines also provide us with dates for which technical solutions need to be found for e.g., firmware issues, online processing updates and for minimizing the artefacts caused by solar activity. Some of the data quality issues are not formally "blockers" in that the data (for e.g., the EMU project) can be reprocessed using updated pipelines as they become available. However, some are "blockers" in that the processing is carried out in real-time; the spectral line teams are not provided with all the raw data that would be required to reprocess observations in future. With regards to the specific items listed: • Sky model calibration is currently our highest priority as part of the ASKAP Key Capabilities Project. We have an operational implementation of this system and are currently verifying that it can produce equivalent science-ready data products to the existing scheme. • Diffuse emission processing (specifically joint deconvolution across multiple beams) has been available for some time and has been tested on data for GASKAP-HI. While some low-level data quality concerns around spectral discontinuities remain, the core capability is in place. • We have deployed an offset source subtraction system as a first step in addressing this problem. It is currently being used operationally for EMU/POSSUM processing. While not a full implementation of peeling, the chosen scheme should be robust and applicable to any region ASKAP may observe. If this proves insufficient to meet data quality expectations, we will need to investigate other possibilities. • The combination of multiple scheduling blocks is out of scope for ASKAP with its current operations model and will not be implemented while we focus on the higher-priority items listed above. • The ASKAP Operations team makes reasonable efforts to verify any change before deploying it. Automated testing of firmware and pipeline changes is challenging and comes at a significant computational cost. This means that some degree of testing in operations is unavoidable. The Operations team will ensure that any changes are logged for reference and will work with the science teams to track down any reported issues that arise, as we have done in the past.

ID	**4.1.2 (a)**
Owner	Matthew Whiting
Summary of request	ATNF to communicate to spectral line SSTs the timeline on which sky model-based calibration and peeling of bright continuum sources will become available in ASKAPsoft.
Response	The "offset-field" imaging mode has been released as an option in the processing pipeline. It is not turned on by default, but can be switched on for individual processing templates – for instance the EMU/POSSUM template is now making use of it, as it works very well for continuum imaging. Its use for WALLABY (and similar spectral-line) processing is being assessed currently (to establish its accuracy particularly in continuum-subtraction), and will be utilised following consultation with the science teams.

ID	**4.1.2 (b)**
Owner	George Hobbs
Summary of request	ATNF to develop a process for making decisions on relative prioritisation of continuum and spectral line ASKAP SSP observations.

Response	The process for making decisions must be based on (1) the constraints of the surveys themselves (daytime versus nighttime, LST ranges, required observing cadence) as defined by the time allocated during the review of ASKAP Science projects (RASSP) process and (2) the time taken to switch between surveys and/or observing bands. We can also make use of the relative prioritization of the surveys provided by the RASSP, our wish to progress all surveys at a similar rate, the likely RFI environment for individual observations and also predictions of worsening RFI in some bands in the future, as well as expectations for when the ASKAP sub-systems may require major refurbishment and our requirement to complete the surveys within a 5-year window (prior to 2030).
	
	Our process for making such decisions is as follows:
	
	• We will first obtain advice on the current state of the survey projects and current constraints relating to the scheduling of their observations. For instance:
	  ○ Advice has already been obtained from the ATNF Steering Committee in May 2025. In brief, they highlighted the importance of the ASKAP surveys, advised on potential risks in terms of major issues that may significantly affect survey completion dates, noted that CSIRO may wish to ensure that at least one highly ranked survey was completed as soon as possible instead of attempting to complete all surveys at a similar rate.
	  ○ The time scale for ASKAP survey completion was, and remains a 5-year window starting in mid 2023. However, it is clear that some of the surveys cannot be completed in full on such a time-scale because of (1) delays in getting started, (2) solar activity and (3) constraints applied to the scheduling (e.g., only night-time observations for specific LST ranges).
	  ○ Some of the surveys are progressing relatively well (in particular FLASH, EMU, POSSUM, VAST). However, some of the teams (such as GASKAP-OH) are not yet ready to receive a significant volume of data as the pipeline processing methods are still being actively developed.
	  ○ The Head of Science and Chief Scientist have spoken with all the ASKAP survey team PIs to understand their current survey status, constraints on scheduling (and when, if at all, those constraints could be lifted) and status of the pipeline processing algorithms.
	• Prior to the next ATUC meeting, we will have produced a draft timeline for the completion fraction of each survey as a function of date. We are in discussion with the science teams and our operations team to finalise that timeline and will present our proposed timeline to the ATNF Steering Committee later this year. At the next ATUC meeting, we will present our timeline.

ID	**4.1.2 (c)**
Owner	Cath Trott
Summary of request	ATNF to communicate updated predictions for progress and completion timelines of all surveys to the SSTs.
Response	As described in the response to 4.1.2(b). George Hobbs and Cathryn Trott had meetings with the PIs of each survey team during June, with a view to understanding survey constraints and needs (based on constraints from the review of ASKAP Science projects (RASSP)

	process), and to provide some scaffolding to our future decision making. Input from teams will be used to shape the forecast for each survey to help them understand the timing and completion rate expected for each year. George Hobbs and Cathryn Trott have since provided a 4-weekly schedule plan to all teams, including review of survey progress compared to this plan at the end of each period. ATNF leadership provided an update to the whole community at the July ASA Annual Scientific Meeting, where plans for ASKAP formed a key component of the ATNF Town Hall. There were ~100 people in attendance in-person for the Town Hall at the ASM. The presentation was well-received, and there was general feedback that the improved communications and structure was positive. There were five audience questions, ranging from queries about CASDA access, forward risks and their mitigation for ASKAP, engaging with SSPs for assistance, planning for ASKAP futures, and the future of ATNF postdocs. These were all responded to in the room and did not generate additional discussion.

ID	**4.1.3**
Owner	Andrew Zic
Summary of request	ATNF to continue work on making the wider capabilities of CRACO available to the community through GSPs, as part of its transition to a National Facility instrument. For instance, the upload of high-time resolution snippets of data around transient candidates to CASDA and making the voltage dump capability available to GSPs.
Response	The ASKAP-CRACO Low Time Resolution Universe Survey (LOTRUN) is an approved Observatory Project that will demonstrate and finalise making the capabilities of CRACO available to the community. Details of the LOTRUN survey will be made publicly available prior to the ATUC meeting. The output data products will be 110ms visibilities and higher-level data products (e.g. candidate lists).

ID	**4.2 (a)**
Owner	Elizabeth Mahony
Summary of request	Prioritise usability and automation in BIGCAT-era operations, including streamlined observing interfaces and simplified calibration workflows. CSIRO should actively support and coordinate community-led efforts to develop publicly available, `science-ready' data processing pipelines.
Response	BIGCAT operations have been designed with usability and automation in mind. This will be tested and streamlined during commissioning which is on-going. The commissioning team will also provide updated documentation and processing pipelines/templates, but this will be an ongoing process over the next 6-12 months. We note that (at least some members of) the community would be keen for ASKAP-style processing pipelines for BIGCAT data. This is not part of the BIGCAT project. However, we do support community-led efforts to develop processing pipelines and would value advice from ATUC on how best to provide such support. For instance, we run data processing workshops and can make external software packages available on our systems etc.

ID	**4.2 (b)**
Owner	Phil Edwards / Steve Ord
Summary of request	Revive the ATCA Forum in a modern platform as a moderated, community-driven platform for sharing knowledge, troubleshooting, and supporting user engagement in the BIGCAT era.

Response	The ATCA forum was originally instituted early in the CABB era and was successful in engaging with the ATCA user community. Over time there was less use of the forum. We now have an ATCA Mattermost channel, but also now has relatively little usage. Our current proposal is to commission BIGCAT and then see whether the users will require more support than what is provided through the Observing Expert system and, if so, whether a Forum, would be the best means.

ID	**4.3 (a)**
Owner	Simon Johnston / Shi Dai
Summary of request	ATNF to add implementing radio-frequency interference mitigation techniques as a key part of continued CryoPAF development and deployment activities.
Response	The CryoPAF technology allows for various radio-frequency interference mitigation techniques to be developed, trialed and implemented. For now, we are concentrating on ensuring the standard observing modes have been commissioned and are available to our user community. RFI mitigation in hardware is currently not in scope for the cryoPAF project, but we are already developing software/post-processing RFI methods that can be applied both the Parkes UWL receiver as well as the cryoPAF. This includes, for instance, flagging RFI based on the Kurtosis of the incoming voltages. We also have a PhD student working with our team on PAF-based RFI mitigation implemented within a GPU beamformer. The techniques developed as part of that project potentially could be implemented, at some later stage, as part of the cryoPAF system. We are open to community-led efforts in this research area.

ID	**4.3 (b)**
Owner	John Sarkissian
Summary of request	ATNF to make existing polarimetric response models for Murriyang receivers available to users via the 'Parkes Clock and CAL files' webpage.
Response	This has been completed.

ID	**4.4**
Owner	Kelly Gourdji
Summary of request	ATUC would like to see a paper on the science case for, and feasibility of, including ASKAP in VLBI observations circulated to the broader community for further discussion at the next ATUC meeting.
Response	We are developing a paper describing the science case for (and mentioning the likely feasibility of), including ASKAP in VLBI observations. We will summarise this paper in the upcoming ATUC meeting.

ID	**4.5 (a)**
Owner	Minh Huynh
Summary of request	ATNF to continue pursuing opportunities to acquire more data storage, increasing available storage at a rate that is proportional to projected CASDA requirements.
Response	We have a three staged approach as follows: 1) To develop timelines for the completion of ASKAP surveys allowing us to predict how the data volume in CASDA will grow over time. We now have those timelines and the indication that we require ~20PB of data storage for the completed survey.

	2) To delete data products from CASDA that have not been verified as sufficient quality by the science teams. 3) To explore data compression methods on archived data and whether all data products do need archiving. 4) To search for new funding and collaboration opportunities to obtain more storage for CASDA. To date we have: a. Worked with the AusSRC to make short-to-mid-term use of some storage already available in Pawsey b. To search for more data storage through new contracts, cloud-providers etc. We will provide an update on the state-of-play during the upcoming ATUC meeting.

ID	4.5 (b)
Owner	Lawrence Toomey
Summary of request	ATNF to explore opportunities for innovations in data compression and storage techniques.
Response	We currently do not have any formal resourcing for this project. However, to start some initial exploration in this area, we are advertising for a summer vacation student to work with Lawrence Toomey on this topic over the 2025-2026 summer vacation and separately we are planning to determine whether we can implement any compression methods useful for ASKAP data storage. We are open to community-led efforts in this research area.

Future technologies

ID	5
Owner	Cath Trott
Summary of request	ATNF to continue community consultation and communication to determine relative priorities regarding upgrades to existing facilities and proposed new instruments, at forums such as the 2025 ASA Annual Scientific Meeting.
Response	An update to existing facilities, and plans for future facilities (e.g., CASATTA and LAMBDA) was presented at the ATNF Town Hall at the ASA ASM 2025. There were ~100 people in attendance in-person for the Town Hall at the ASM. The presentation was well-received, and there was general feedback that the improved communications and structure was positive. There were five audience questions, ranging from queries about CASDA access, forward risks and their mitigation for ASKAP, engaging with SSPs for assistance, planning for ASKAP futures, and the future of ATNF postdocs. These were all responded to in the room and did not generate additional discussion. In addition, Josh Preston-Pritchard ran a successful workshop to canvas interest in a CASATTA-like large-N mid-frequency array in early August. The ASKAP Futures workshop will be run in February 2026.

Policies

ID	6.1 (a)

Owner	George Hobbs
Summary of request	ATUC recommends that the ASKAP policy be updated to explicitly indicate the relative priority of SSPs and GSPs, and this policy is included in the next call for proposals.
Response	Overall, and in general, the SSPs take priority over the GSPs, as: • The ATNF Steering Committee and ATNF Leadership teams note that progressing the ASKAP surveys is one of our top priorities. • In the recent call for proposals we stated "*We reserve the right not to schedule a scientifically well-ranked GSP if it is not technically feasible or would cause disruption to the SSPs.*" and hence, in general, we prioritise the SSPs over the guest science projects. • We limit the time allocated to GSPs to be < 150 hours per semester. • We are currently developing a timeline for SSP completion and in early versions of that timeline we are not considering the GSPs (i.e., the timeline is developed purely in terms of the SSPs). • We are prioritizing technical developments that are required for upcoming SSP observations (over developments required for observatory projects and GSPs). However, we understand the importance of driving new science cases, enlarging our user base etc. and hence even though the SSPs are our top priority overall, we want to maximise the quality of the GSPs being observed in the allocated slots. The current ASKAP leadership team plans to review and update the ASKAP policies over the next six months with input from the upcoming ATNF Steering Committee meeting as required.

ID	**6.1 (b)**
Owner	Aidan Hotan
Summary of request	ATUC recommends that a technical assessment of all ASKAP GSPs is carried out by relevant ATNF staff prior to or as part of the TAC review period. ATUC recommends that a technical feasibility statement is included with the final TAC scores and comments, to ensure appropriate scheduling expectations for PIs of proposals with low technical feasibility.
Response	The ASKAP Operations team discussed technical feasibility with the TAC during the first semester of ASKAP GSPs, but this step was skipped in the TAC for the current semester to streamline the review process, since the role of the TAC is primarily to comment on scientific merit. However, prior to the last TAC meeting we again carried out a technical feasibility assessment. In future, the ASKAP Operations team will work with the TAC Executive Officer to ensure that comments on technical feasibility can be included in the initial response as requested but kept independent from the TAC's ranking score.

ID	**6.2**
Owner	Shi Dai
Summary of request	ATNF takes into account community concerns regarding loss of time-critical observations during the development of spacecraft tracking policies. ATUC recommends directly engaging

	with leads of affected projects to coordinate re-scheduling of observations where possible, and working with commercial spacecraft operators to ensure minimal impact to time-critical science observations.
Response	We understand the community concerns regarding loss of time because of spacecraft tracking. During the current semester we have (to date) allocated 97 hours for spacecraft tracking. This is a relatively small amount of time (but we agree can be disruptive). The science teams have had make-up time for all apart from 24 hours (which was because that particular project chose not to observe during the available replacement time). With our new Parkes Lead Scientist (Shi Dai) and Parkes site leader (Tim Ruckley) now in place we will continue to work with them to ensure we have procedures in place to minimize future disruption.

ID	**6.3**
Owner	George Hobbs
Summary of request	ATUC recommends that transparency regarding the reasoning behind the allocation of time to DDT/NAPA requests is given to observers where possible.
Response	We have currently not progressed this item due to time constraints, but agree it is important. A clear policy is required for all the ATNF telescopes, but the majority of the current DDT/NAPA requests are related to observations with the ATCA. Hence, we will endeavour to make progress on this prior to the commencement of mainstream observations with BIGCAT.

ID	**6.4**
Owner	Chris Phillips
Summary of request	ATNF to explore re-purposing ATCA CA06 for independent use when the array is in compact configurations, to aid in generating alternative funding streams for the telescope. ATUC recommends that a feasibility study be carried out.
Response	An informal investigation will be carried out over the next 6-12 months while we finalise BIGCAT commissioning. Independent CA06 usage depends on subarraying (not yet started) and "single dish" versions of BIGCAT GPU code.

ID	**7.1**
Owner	George Hobbs
Summary of request	Create a single, centralised ticketing system for all ATNF facilities that is easily accessible for users to report minor issues and track the progress of such reports. This system should include a user-searchable database/library to search for historical queries and issues, and possibly utilize AI to alleviate some of the workload.
Response	We have spent considerable effort into exploring the possibility for a single, centralized ticketing system. We first investigated the reporting system used by MeerKAT and found that we (CSIRO) are unable to use a similar system because of JIRA versions. We also listed the various contact methods being used and we agree with ATUC that there are a lot, from web-forms, to email exploders, to contacts for individual people etc. Our proposal is as follows: • We wish to ensure that we have individuals within ATNF Science who can act as a

direct interface with the community for many of the issues being discussed. These include the Senior Systems Scientists and Lead Scientists linked to the observatories, the ATNF Head of Science and the Chief Scientist. We will continue to advertise in, e.g., the call for proposals, that the Senior Systems Scientist at an observatory is able to be contacted for scientific discussions around the use of that specific telescope.

- We will also enable a single ticketing system where our users can email ATNF.feedback@csiro.au. This ticketing system will be monitored and will be used to ensure the queries reach the relevant people and that the users get notified when their requests are acted upon. This will be advertised on our webpage and in communications with the community.
- For now we will not stop any of the existing systems and hence, for now, Parkes users will still be able to use the Parkes portal ticketing system to submit their requests, if they prefer to do so. Over the next few months we will monitor usage of the specific-to-observatory systems versus the ATNF.feedback@csiro.au system.

We note that there was an issue in the ATCA Jira system causing email submission to fail silently, which explains, in part, the apparent underutilisation by external users and we understand that this could have led to user frustration. This has now been resolved and linked from the observing portal.

ID	**7.2 (a)**
Owner	Robert Hollow
Summary of request	ATUC recommends that the ATNF take concrete steps to improve student community cohesion and two-way communication between the student cohort, the Student Coordinator, and ATNF staff. Our suggestion is to restructure the management of the student program into the following components: Community (managed by the students), Advice (an appropriately workload-allocated ATNF ECR), and Support (a continuing ATNF staff person). We note that ATNF would retain responsibility for the specific implementation and accountability for this structure. This structure will enable students to identify and respond to their own needs, leaning on the ATNF ECR for academic advice and liaising on technical issues. The role of the continuing ATNF staff member will be primarily to provide support for logistical and administrative matters.
Response	We have chosen to combine our responses to 7.2(a) and 7.2(b). We have already attempted to increase the student community cohesion via: 1) Including our student cohort on weekly messages from ATNF Science and welcoming and introducing our students personally in those messages. 2) Including our student cohort on the announcements for monthly all-hands ATNF Science meetings. 3) Setting up an externally-hosted student Slack channel. We trialled an ASA-hosted Slack channel, but noted that not all of our students had access to that channel. The new channel is active and we will track usage over time. 4) Identified an early-career-researcher at CSIRO (Dr Kelly Gourdji) to take a more active role in the organization of the student program, to be active on the Slack channel, communicate with the students and be a member of the relevant

commitees.

5) Requesting (and likely obtaining) funding for this Financial Year (with the hope for continuation into the future) to support student travel to our observatory sites.
6) Requesting (and likely obtaining) funding to continue to support a student symposium.

Our current plans for the communication methodology moving forward is

1) Rob Hollow and Leanne Edwards will continue to provide the overall management of the program.
2) Kelly will meet every few months (with the expectation that the first such meeting will have been held prior to the ATUC meeting) with the students and bring any concerns to management.
3) The students will be supported in organizing meetings and symposia with meetings agendas, organizing committees being planned during the student meeting held with Kelly.

One major concern is that CSIRO's rules have changed around access to computing. We are in the progress of determining which students require access to CSIRO email addresses, high-performance-computing and/or spend significant time on site (which now requires significant extra funding from us) and which students do not (those students will subsequently not be required to carry out the in-depth CSIRO training courses etc.).

ID	**7.2 (b)**
Owner	Robert Hollow
Summary of request	ATUC recommends the establishment of an ATNF student committee that consists of at least two student representatives, along with key ATNF personnel. The role of this committee would be to facilitate ongoing feedback between ATNF Co-Supervised Students and the ATNF, along with coordinating student activities. ATUC Student representatives would also be involved to ensure that feedback from the broader student-user community (which may include non-ATNF co-supervised students who use ATNF facilities) is represented.
Response	*As above.*

ID	**7.2 (c)**
Owner	Robert Hollow
Summary of request	ATUC recommends the addition of a supervisor survey for CSIRO and university supervisors, to be developed in consultation with student, university and ATNF supervisor representatives. ATUC also recommends decreasing the frequency of student progress reports to once a year.
Response	We planned to run two surveys for the CSIRO co-supervisors and the university supervisors. However, because of time constraints we are currently expecting only to complete a basic CSIRO co-supervisor survey by the time of the next ATUC meeting.

ATUC supplementary information: ATNF status

25 August 2025

Here we provide:

- Updates on the status of our facilities and expected use/upgrades/down-time over the next 6 months
- Statistics relating to the use of our facilities.

The information contained here has been obtained from: information provided to the Time Allocation Committee; from observatory staff; and from input to the ATNF annual report. Some historical information has been obtained from previous ATUC presentations.

ATCA and BIGCAT

The proposed upcoming timeline is as follows:

- **1 – 31 August 2025:** BIGCAT Science commissioning
- **1 September – 10 October 2025:** Infrastructure upgrade / array shutdown
- **13 – 17 October 2025:** Maintenance week for verification and testing
- **20 October 2025 onwards:** Scheduled observations resume, using BIGCAT with 2x2 GHz IFs in shared-risk mode.

Planned future upgrades/downtime:

- **Mid to late November 2025 (around 3 weeks):** BIGCAT RF upgrade to provide 8 GHz bandwidth.
- **May – June 2026:** 6 – 8-week shutdown for infrastructure upgrade (phase 2: final stage).

Murriyang and cryoPAF

Observations are ongoing throughout this semester and are primarily using the Parkes UWL receiver.

We hope that the cryoPAF will be ready for user-driven science for the October semester, but there are still cryogenic-related issues to be addressed. We are currently trialling a method to fix this issue, but the exact timing of when this can be implemented and whether it will resolve the issue is still to be determined. We will keep the community up to date with the current status of the cryoPAF project. In particular an update will be provided during the ATUC meeting.

ASKAP

We are developing a timeline for ASKAP observations. The first formal version of that timeline will be made available to the community by the end of the year (after we have updated the timeline based on input from our operations team, the science teams and the ATNF steering committee). A summary of our current draft version is available from this webpage, which includes:

Survey	**Next data**	**(+1/4 of survey) more data from 01/06/25**	**Complete**
Timeline Version	V0.4	V0.4	V0.4
EMU	Sept 2025	mid 2026	mid 2027
WALLABY	Aug 2025	early 2028	late 2029
FLASH	Aug 2025	late 2025	early 2026
VAST_EXGAL	July 2025	late 2025	early 2027
VAST_GAL	Sept 2025	late 2026	mid 2027
HI_MAG	Oct 2025	late 2026	early 2029
HI_GAL_PLANE	Apr 2026	late 2027	early 2029
HI_MAG_STREAM	Oct 2026	late 2027	mid 2029
HI_GC	June 2027	mid 2028	late 2029
DINGO_LOW_Z	Aug 2025	mid 2026	late 2028
DINGO_HIGH_Z	Dec 2027	early 2029	early 2030
OH_GAL_PLANE	Mar 2027	early 2027	mid 2027
OH_GAL_CENTRE	June 2026	mid 2027	mid 2029
OH_LMC	Oct 2026	late 2026	early 2028
OH_BULGE	July 2026	mid 2026	mid 2028

Weekly progress-checking against our draft timeline is helping us assess the feasibility of the formal timeline.

LBA

Due to the BIGCAT upgrade on ATCA and cryoPAF commissioning on Murriyang, there have been limited opportunities for LBA observing blocks over the last year.

However, a number of out-of-session observations have been conducted, often with elements of the LBA co-observing with other VLBI arrays, including the European VLBI Network and the Global Millimetre VLBI Array.

Ongoing tests are being carried out with the GMRT, and recently a first test was conducted with MeerKAT and the Thailand National Radio Telescope, paving the way for these facilities participating in LBA observations in the future.

Summary of proposals

ATCA

Semester	Number of new proposals	Number of resubmitted proposals	Number of NAPA proposals	Requested hours	Oversubscription factor
2025OCT	39	63	42	6502	3.3
2025APR	36	48	40	6049	3.1
2024OCT	35	37	31	4362	2.3
2024APR	31	34	26	3888	1.3
2023OCT	25	28	22	4054	2.3

Murriyang

Semester	Number of new proposals	Number of resubmitted proposals	Number of NAPA proposals	Requested hours	Oversubscription factor
2025OCT	18	49	9	4252	1.8
2025APR	12	44	9	3460	1.7
2024OCT	14	38	8	3533	1.9
2024APR	17	45	6	3597	2.1
2023OCT	30	35	6	4423	1.9

LBA

Semester	Number of new proposals	Number of resubmitted proposals	Number of NAPA proposals	Requested hours	Oversubscription factor
2025OCT	14	10	3	713	2.8
2025APR	10	9	4	481	1.9
2024OCT	7	6	4	379	1.5
2024APR	13	7	4	528	2.0
2023OCT	8	6	2	484	1.9

ASKAP Guest Science

Semester	Number of new proposals	Number of resubmitted proposals	Number of NAPA proposals	Requested hours	Oversubscription factor
2025OCT	1	5	1	469	3.1
2025APR	7	4	2	430	2.9
2024OCT	7	4	2	430	2.9
2024APR	-	-	-	-	-
2023OCT	-	-	-	-	-

Data archiving statistics

These numbers were obtained from previous ATUC presentations. We are currently determining how we can make a consistent set of statistics across the various archives. We also note that the ATOA data sets are being transferred into CASDA.

Year	ATOA total volume	DAP total volume	CASDA total volume	ATOA usage (TB/month)	DAP usage (TB/month)	CASDA usage (TB/month)
2025 (Apr)	0.6 PB	4.7 PB	8.8 PB	9.7	TBD	220
2024 (Oct)	0.6 PB	4.4 PB	7.6 PB	2.7	TBD	150
2023 (June)	0.5 PB	3.9 PB	3.6 PB	1.5	20	90
2022 (Nov)	0.5 PB	3.4 PB	2.7 PB	4.3	13	61

Publication statistics

These statistics were published in the ATNF annual reports. They correspond to papers directly coming from observations from the facility. For instance, papers referring to a previously published data set, or catalogue, are not included.

Year	Murriyang related papers	ATCA related papers	LBA related papers	ASKAP related papers
2025				
2024	40	53	7	46
2023	45	51	9	42
2022	40	52	3	41
2021	43	55	3	41
2020	41	45	6	22
2019	44	41	7	28

Using ADS to obtain the highest cited papers that mention our facilities published recently we obtain:

Facility	Year published	Paper	Number of citations to date
Murriyang	2024	A NICER View of the Nearest and Brightest Millisecond Pulsar: PSR J0437–4715	148
	2023	Search for an Isotropic Gravitational-wave Background with the Parkes Pulsar Timing Array	962
	2022	The International Pulsar Timing Array second data release: Search for an isotropic gravitational wave background	289
ATCA	2024	The more the merrier: SRG/eROSITA discovers two further galaxies showing X-ray quasi-periodic eruptions	67
	2023	Star Formation Laws and Efficiencies across 80 Nearby Galaxies	85
	2022	Characterizing the Fast Radio Burst Host Galaxy Population and its Connection to Transients in the Local and Extragalactic Universe	189

ASKAP	2024	Measuring the Variance of the Macquart Relation in Redshift–Extragalactic Dispersion Measure Modeling	46
	2023	A Search for Extragalactic Fast Blue Optical Transients in ZTF and the Rate of AT2018cow-like Transients	133
	2022	Characterizing the Fast Radio Burst Host Galaxy Population and its Connection to Transients in the Local and Extragalactic Universe	189
LBA	2024	Swift J1727.8–1613 Has the Largest Resolved Continuous Jet Ever Seen in an X-Ray Binary	29
	2023	A Keplerian disk with a four-arm spiral birthing an episodically accreting high-mass protostar	30
	2022	Ambilateral collimation study of the twin-jets in NGC 1052	21

Co-supervised students

Our co-supervised ATNF students are listed on this webpage and summarised in the tables below. Note that some students are supervised by more than a single ATNF or university supervisor.

Date	Number of students	Number of different universities	Number of different ATNF supervisors	Number of different university supervisors
August 2025	37	15	25	37

Date	August 2025	
	Number of students	Number of unique university supervisors
Western Sydney University	3	4
UNSW Canberra	1	1
Australian National University	2	4
Macquarie University	5	5
University of Technology, Sydney	1	1
James Cook University	1	2
Swinburne University of Technology	5	6
Monash University	1	1
University of Tasmania	4	3
Griffith University	1	1
University of Sydney	7	4
Texas A&M University	1	1

Curtin University	3	2
Ruhr-Universitat Bochum	1	1
University of Western Australia	1	1