

Director's update

Douglas Bock
ATUC October 2024

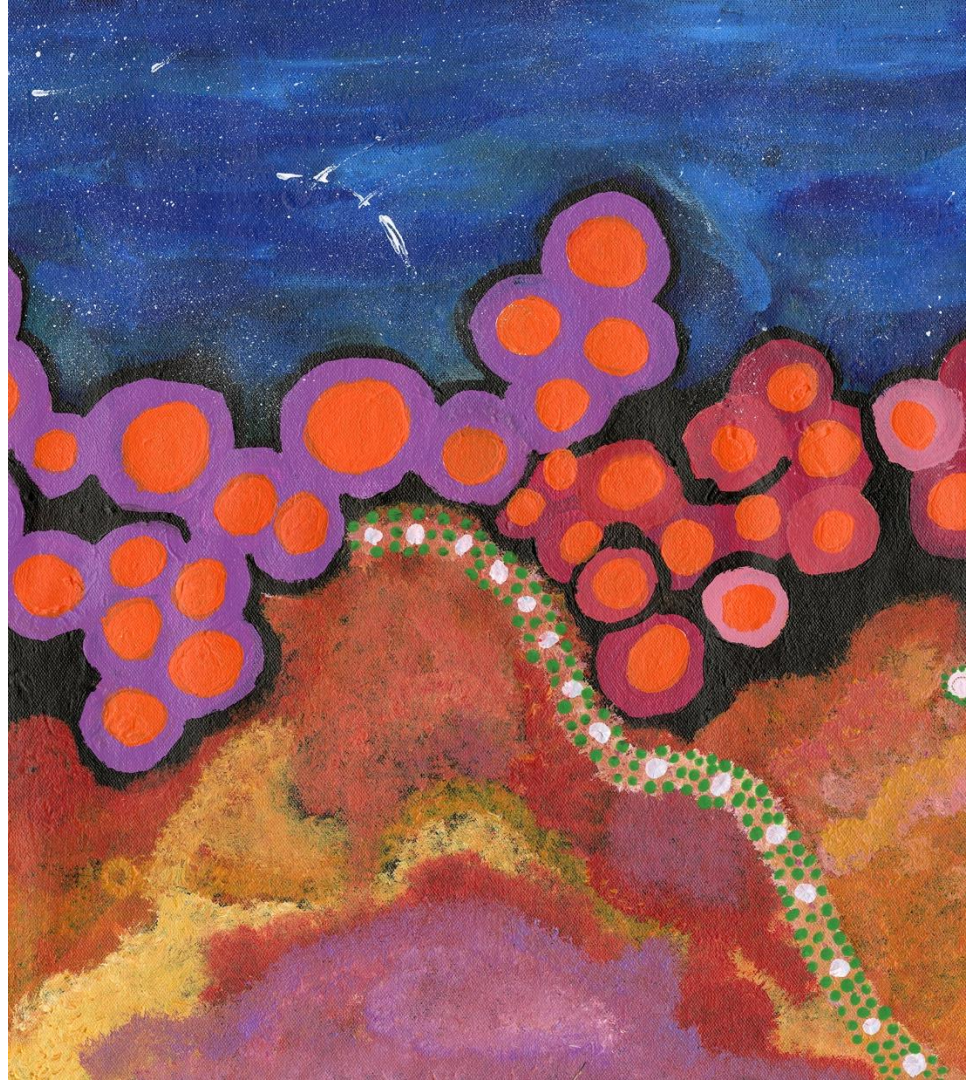
Australia's National Science Agency



I would like to begin by acknowledging the Whadjuk People of the Noongar Nation as the Traditional Owners of the land that I'm joining you from today, and pay my respect to their Elders past and present.

We acknowledge the Wajarri Yamaji as the Traditional Owners and Native Title Holders of Inyarrimanha Ilgari Bundara, our Murchison Radio-astronomy Observatory site, also here in Western Australia.

Robin Boddington
Galactic ASKAP - Neutral Hydrogen
2022, detail





Understanding the Universe

Astronomy enables humanity to better understand our Universe and contributes to building future industries.



Australia Telescope National Facility (ATNF)

ASKAP radio telescope
Wajarri Country



Inyarrimanha Ilgari Bundara,
our Murchison
Radio-astronomy
Observatory

International SKA project

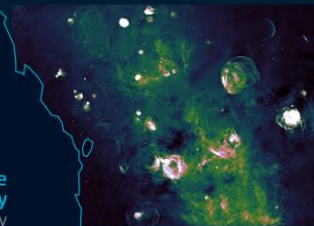
Australia Telescope
Compact Array
Gomeri Country

Mopra radio telescope
Gamilaroi Country

Murriyang,
Parkes radio
telescope
Wiradjuri
Country



Technology development



Radio
astronomy
research



Broader space applications



CryoPAF update

- Installed on Murriyang, August 2024
- Science commissioning team have demonstrated observations of pulsars and H₁.
- Details will be provided in Simon Johnston's talk





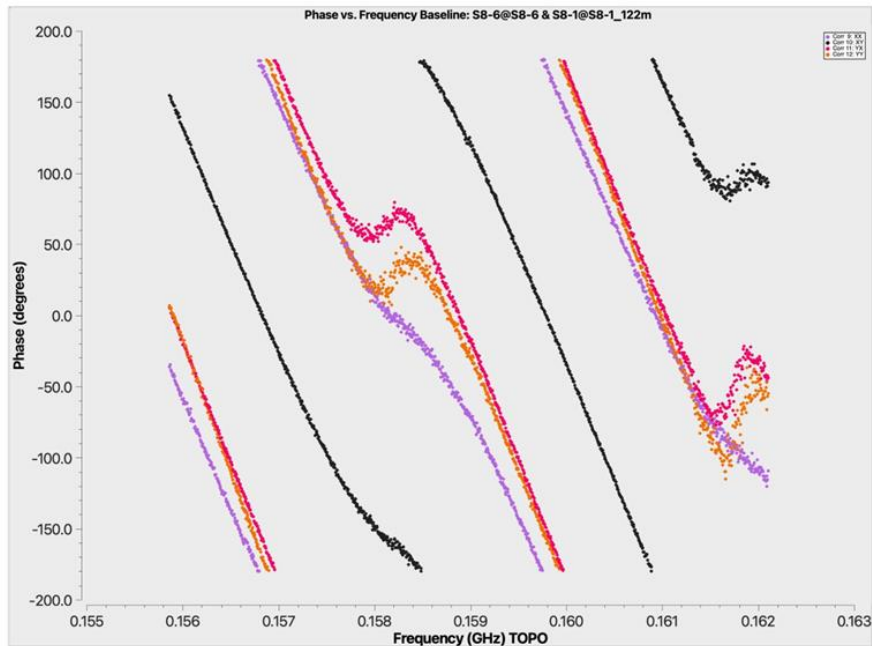
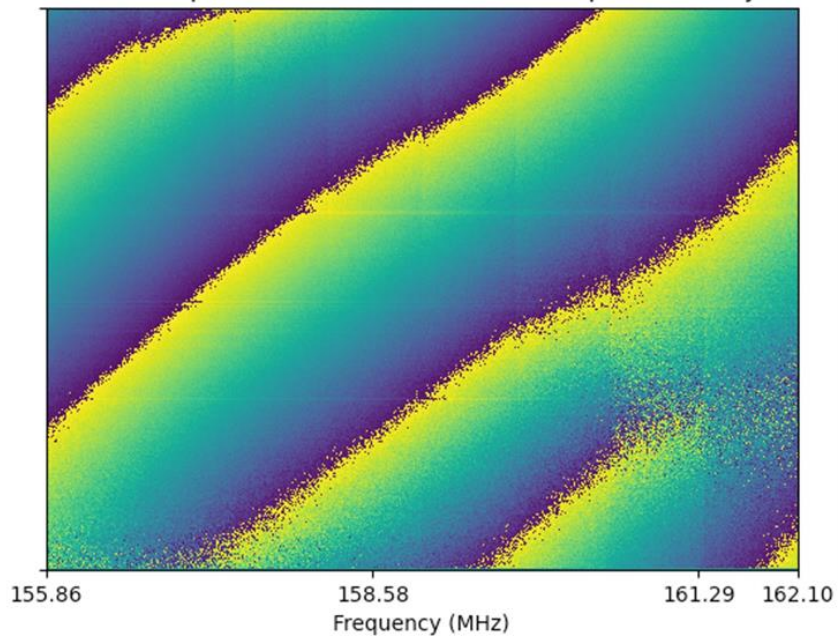
BIGCAT update

- Work progressing well
- Installation and commissioning expected early next year
- Details will be provided in Elizabeth Mahony's talk



First fringes for SKA-Low

Waterfall plot from Station 1 to Station 2 polarisation yx





2024 Prime Minister's Prize for Science

- Awarded to Prof Matthew Bailes for his role in the discovery of fast radio bursts and leadership in the field of radio astronomy.
- The first FRB was discovered by the team in archival data from Murriyang in 2007.





Community engagement

- CSIRO Radio School 2024 held in Geraldton, WA during the week of 30 September, co-hosted by CSIRO, the SKAO and ICRAR
- VLBI workshop in Perth on Wednesday, after ATUC
- ASKAP Cutting Edge Symposium to be held in April/May 2025





Our inclusive approach

- Naming guidelines for the telescopes at Parkes Observatory, including new signage.
- Updated ATNF website increases accessibility
- Key days of celebration for staff and students across our sites
 - Wear it Purple, RUOk Day



What does the ATNF restructure mean for ATUC?

Role	Responsibility
Head of Science	Engaging directly with ATUC and the TAC
Head of Operations	Operating the ATNF observatories, telescopes and LBA
Head of Instrumentation	Operating and improving instrumentation and technologies
Head of Software & Scientific Computing	Engaging with the global astronomy community on our capabilities in scientific software and computing.



What does the ATNF restructure mean for ATUC?

Role	Responsibility
Chief Scientist	Leading engagement with the global astronomy community
Chief Technologist	Setting the strategy for technology development
Chief Engineer	Ensuring delivery of our major instrumentation projects



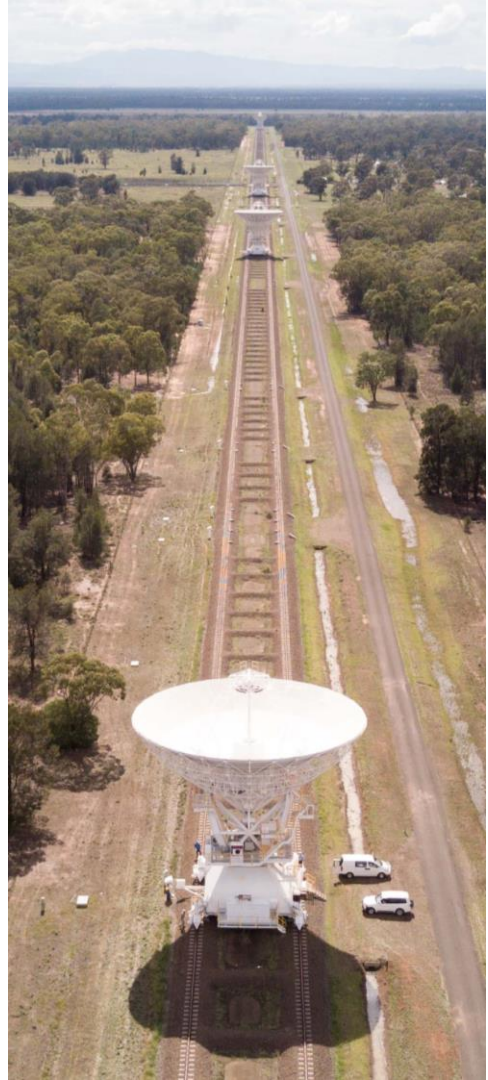
Funding our facilities into the future

ATCA

- Seeking to operate ATCA until its capacity has been substantially replaced by SKA-Mid
- Infrastructure upgrades ongoing now to maximise its current operations and future potential

However:

- From 2027-28, budget predicts gap of several million
- Plan to prioritise our technology work into the future





Funding our facilities into the future

ATCA and Mopra

External funding to support continued operations sought via:

- Externally funded, small-scale ATCA PI-driven projects
- Large-scale (LIEF-funded) grants for major science projects
- Spacecraft tracking with Mopra





Funding our facilities into the future

ATCA and Mopra

We are exploring further and request from ATUC:

- Consideration of grant funding (i.e. LIEF grants) for major ATCA projects
- Ideas around sale of telescope time, particularly for ATCA
- Understanding that we will likely require a significant sale of telescope time from ATCA and/or Mopra





Margaret Whitehurst
Rapid ASKAP Continuum Survey (RACS)
2019, detail

Thank you

CSIRO Space and Astronomy
Douglas Bock

+61 2 9123 4567
douglas.bock@csiro.au

Australia's National Science Agency

