



# Director's Update

Douglas Bock  
ATUC April 2024

Australia's National Science Agency



# 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

Australia Telescope Compact Array  
Gomeri Country

Mopra radio telescope  
Gamilaroi Country

Parkes radio telescope, Murrumbidgee  
Wiradjuri Country

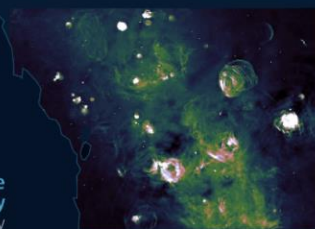


International SKA project

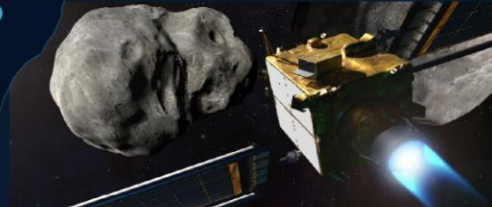
Inyarrimanha Ilgari Bundara,  
our Murchison Radio-astronomy Observatory



Technology development



Radio astronomy research



Broader space applications

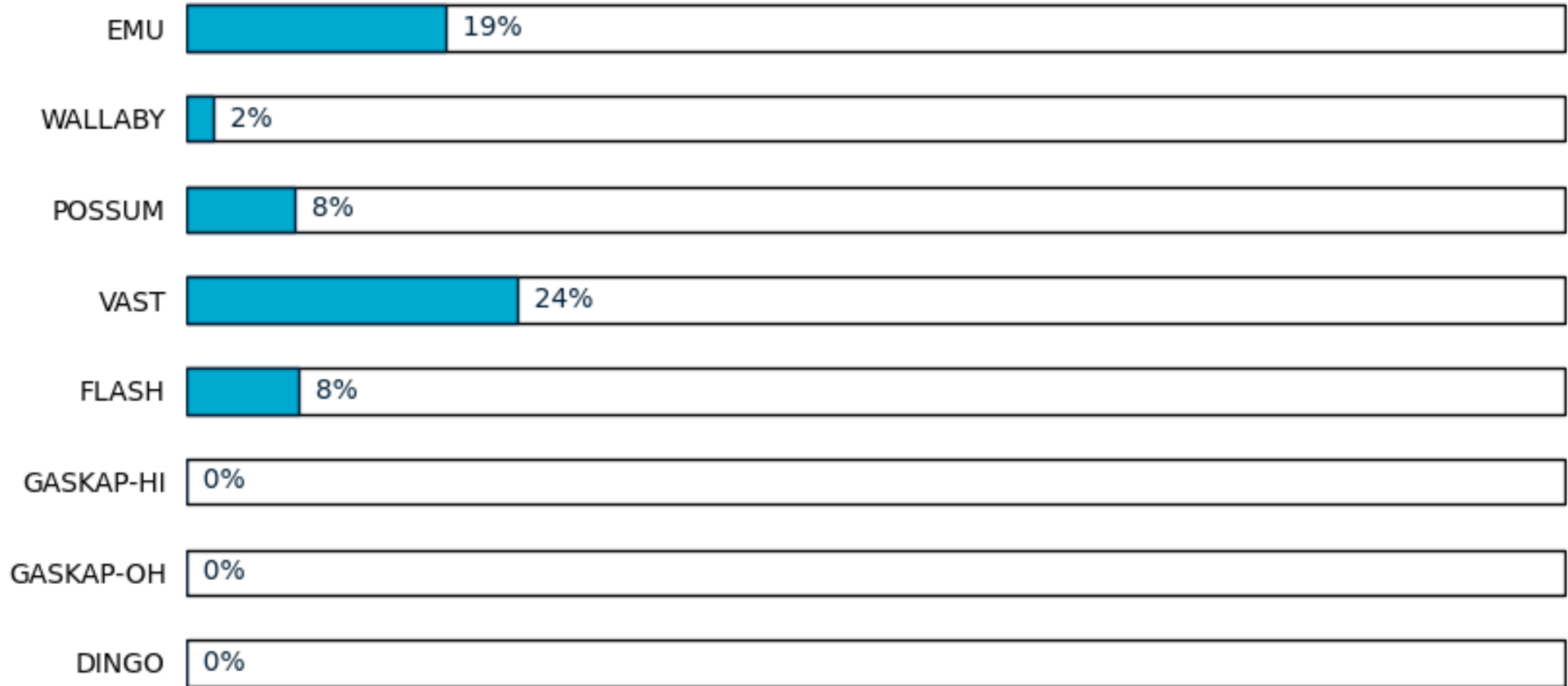


# Director's Report

- Highlights, status, updates
- Management goals for 2024
- Strategy



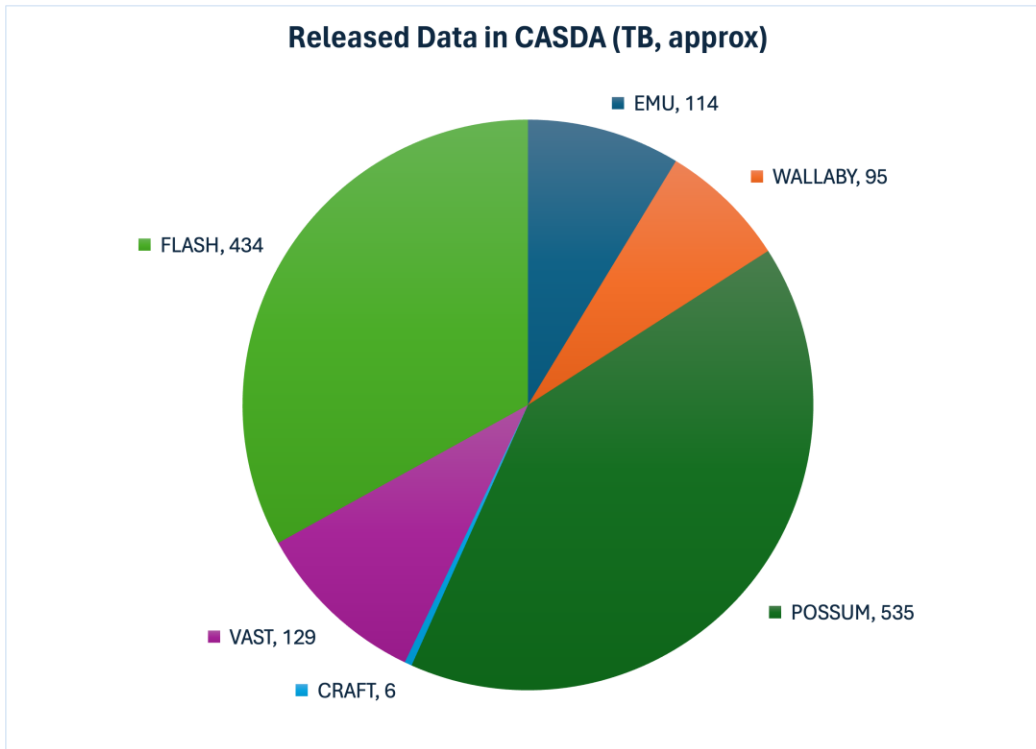
# ASKAP Surveys – completion fractions



*Approximate completion fraction, based on released observations as of 8 April 2024*



# ASKAP Surveys – released data



*Approximate volume released by SSPs as of 8 April 2024  
Small fraction of total CASDA data volume (~5.4 PB)*

# Murriyang tracking Odysseus

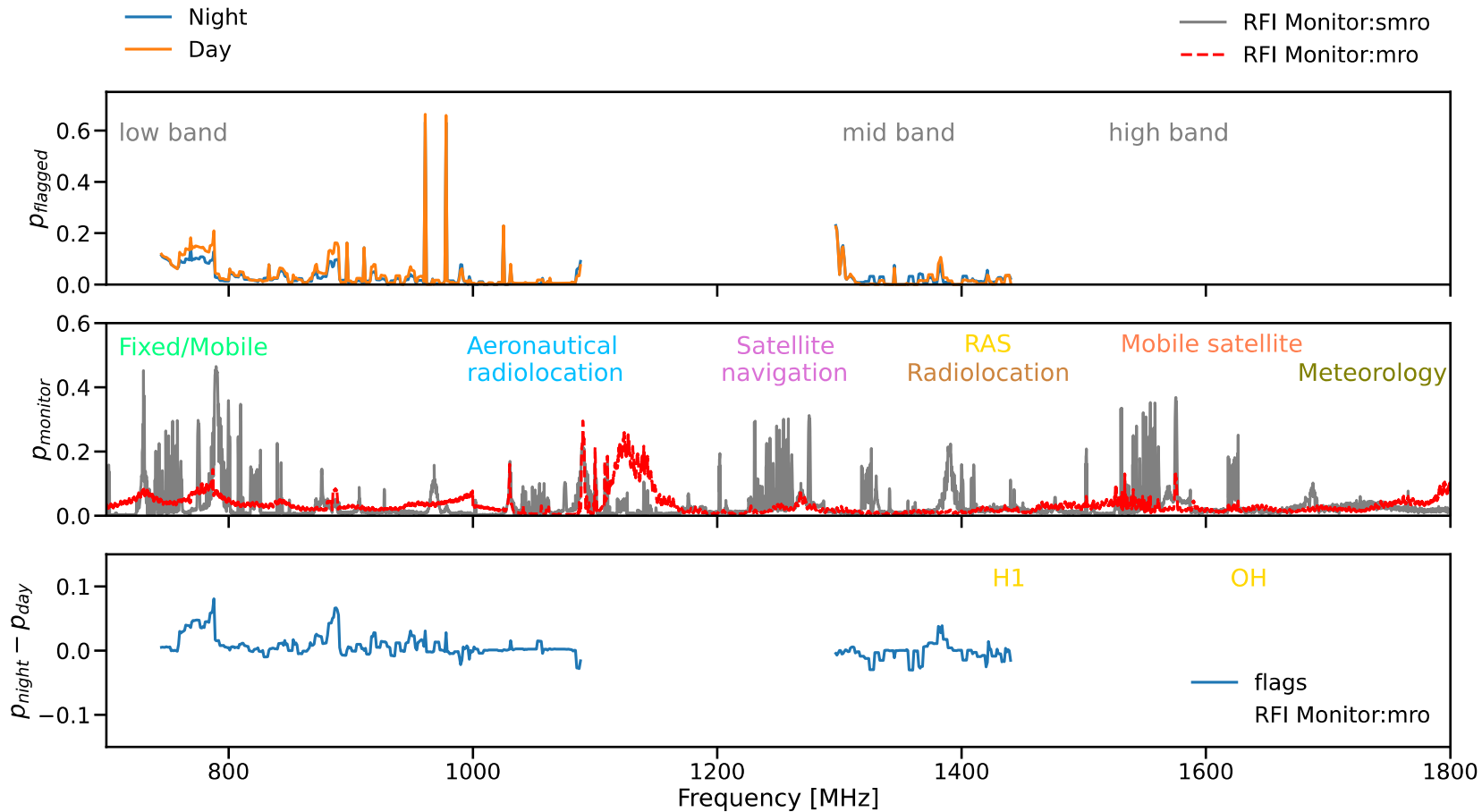






# Spectrum updates

Lourenço et al. 2023



RAS Awards 2024



Royal  
Astronomical  
Society



**Jackson-Gwilt  
Medal  
(Astronomy)**



Dr Keith Bannister & Professor Ryan Shannon





The first antennas of the SKA-Low telescope were deployed on 7 March





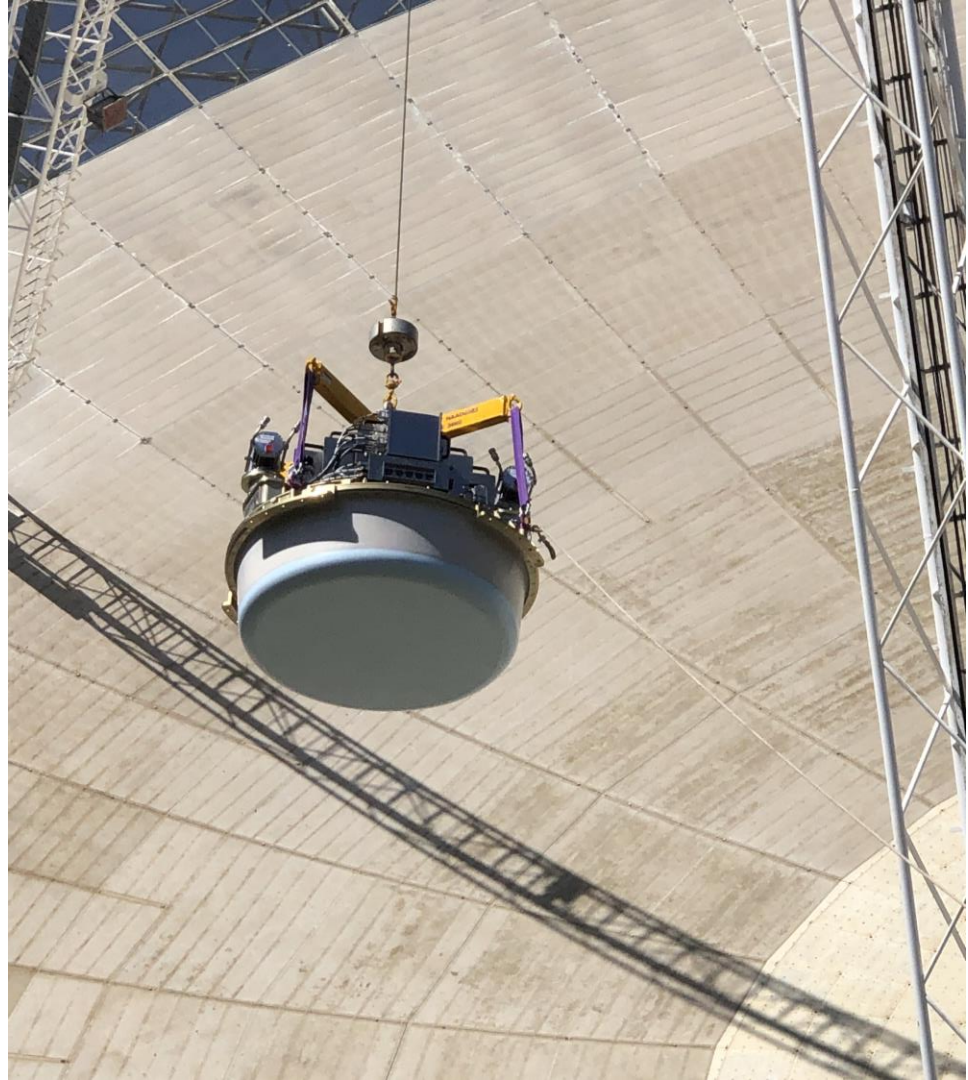
# Instrumentation

## **Current Projects** – Talks & discussion

- CRACO (FRBs at ASKAP) - complete
- CryoPAF for Parkes – teething problems
  - Cryogenic issues identified.
- BIGCAT – on telescope testing this week.
  - Installation later in 2024.

## **Proposed New Projects** – Talks & discussion

- ASKAP upgrade
- LAMBDA – VLBI Demonstrator
  - Low frequency VLBI with SKA1-Low
- UWB mid & High for Parkes







# Operations

- Overhaul of ATNF Website coming soon
- Accessibility Upgrade at Parkes VC completed
- Dish Café currently closed
- ASKAP on-site staffing: progress with recruitments





# Long term projects

Introduced in the last semester. Projects requiring 3+ semesters of allocated time.

- Seven submitted and accepted – all converted from previous programs
- Four have CSIRO PIs
- For ATCA, 3 projects are NAPAs

Long term proposals received included:

- Two pulsar timing projects with Parkes
- Follow-up of ASKAP surveys and transient events with ATCA
- Asteroid radar programme with ATCA
- Monitoring of high energy sources with ATCA

Project teams expected to submit annual progress reports at December deadline

- Template to be provided (TAC considering draft in their July meeting)
- Contact person for Long Term Projects is Ivy Wong



# Community Engagement

- CSIRO Radio School 2024 will be held in Geraldton, WA during the week of **30 September – 4 October**, co-hosted by ICRAR and SKAO
- **Save the Date:** ASKAP Cutting Edge Symposium will be held online during the week of **18-22 November 2024**







# ATNF goals in 2024

Proactively engage in the Astronomy Decadal Plan process

Review engagement with users and stakeholders

Determine our position on international issues (ESO, VLBI)

Reliably deliver high quality science data to ASKAP survey teams and users

New technology (BIGCAT and CryoPAF) installed and commissioned

Decision on next instrumentation projects

Develop a strategy for education and outreach

Identify strategies to support our activities post-2028





# SKA goals

Site Entity Deed negotiations concluded

Hire ~30 diverse and talented people to join the SKA Low team

Assure a safe construction site

Boolardy airstrip upgrade

AusSRC international network aligned and productive

Strengthen relationships between the many stakeholders involved





# Strategic positioning

- ASKAP – maximise impact of surveys
  - (test for upgrade path) to align with SKA-Mid capability
- ATCA – transition (largely superseded by SKA-mid ~2028)
- Parkes – Enhance; continue space tracking
- cm-VLBI – transition
- m-VLBI – develop
- Technology – maintain to support SKA and global RA