



# ATNF Science

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*Picture credit: Alex  
Cherney*

**CSIRO ASTRONOMY & SPACE SCIENCE**

[www.csiro.au](http://www.csiro.au)



# Outline

- Arrivals and departures
- Awards
- Recent science highlights
- ATNF student program
- Web pages & ADAPs

# Arrivals and departures

ATNF Science has recently farewelled

- Juan Madrid

and has welcomed

- Chenoa Tremblay
- Katie Jameson.

Joining us in June will be

- Vanessa Moss

New ResearchPlus postdocs will be joining in the coming months.

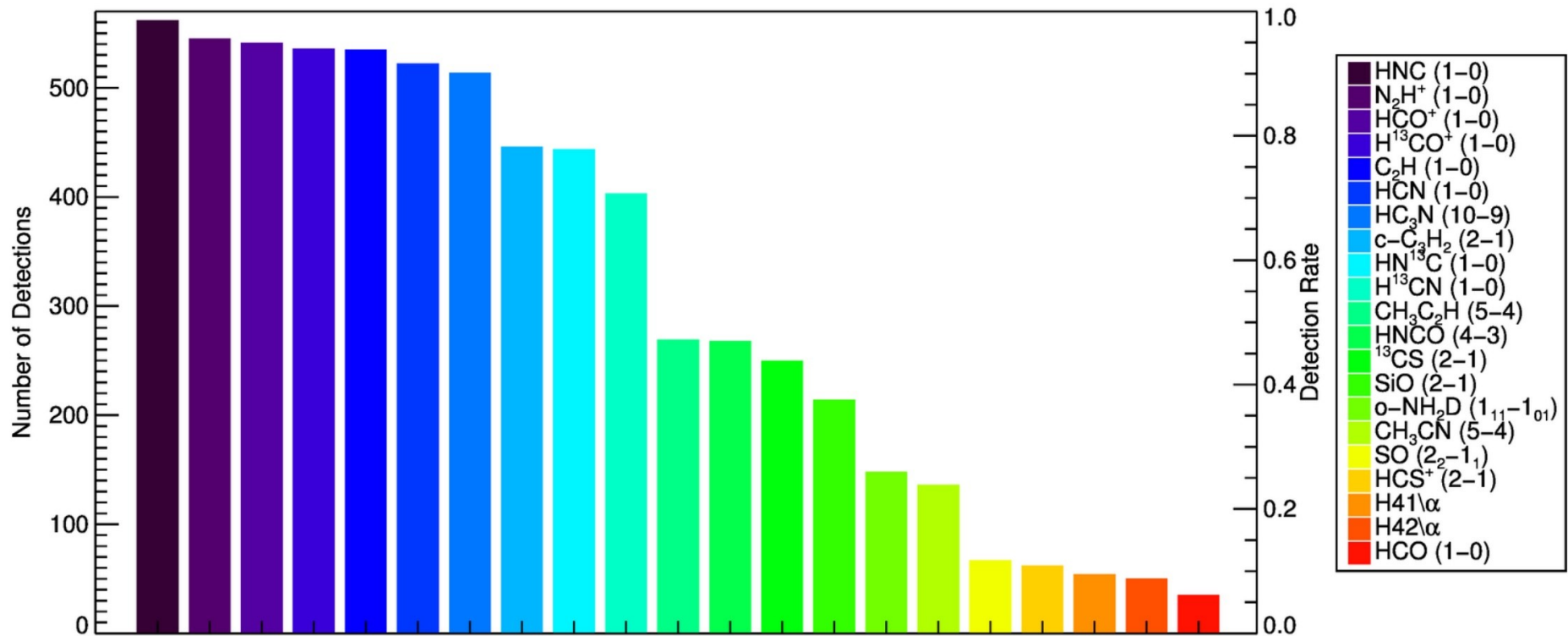
Recruitment for a Research Scientist is underway, and recruitment for a CSIRO Science Leader will begin shortly.

# Awards

Evan Keane has been awarded the European Astronomical Society's (EAS) 2019 MERAC Prize for Observational Astrophysics, in recognition of his work on Fast Radio Bursts and pulsars, conducted primarily with the Parkes radio telescope.

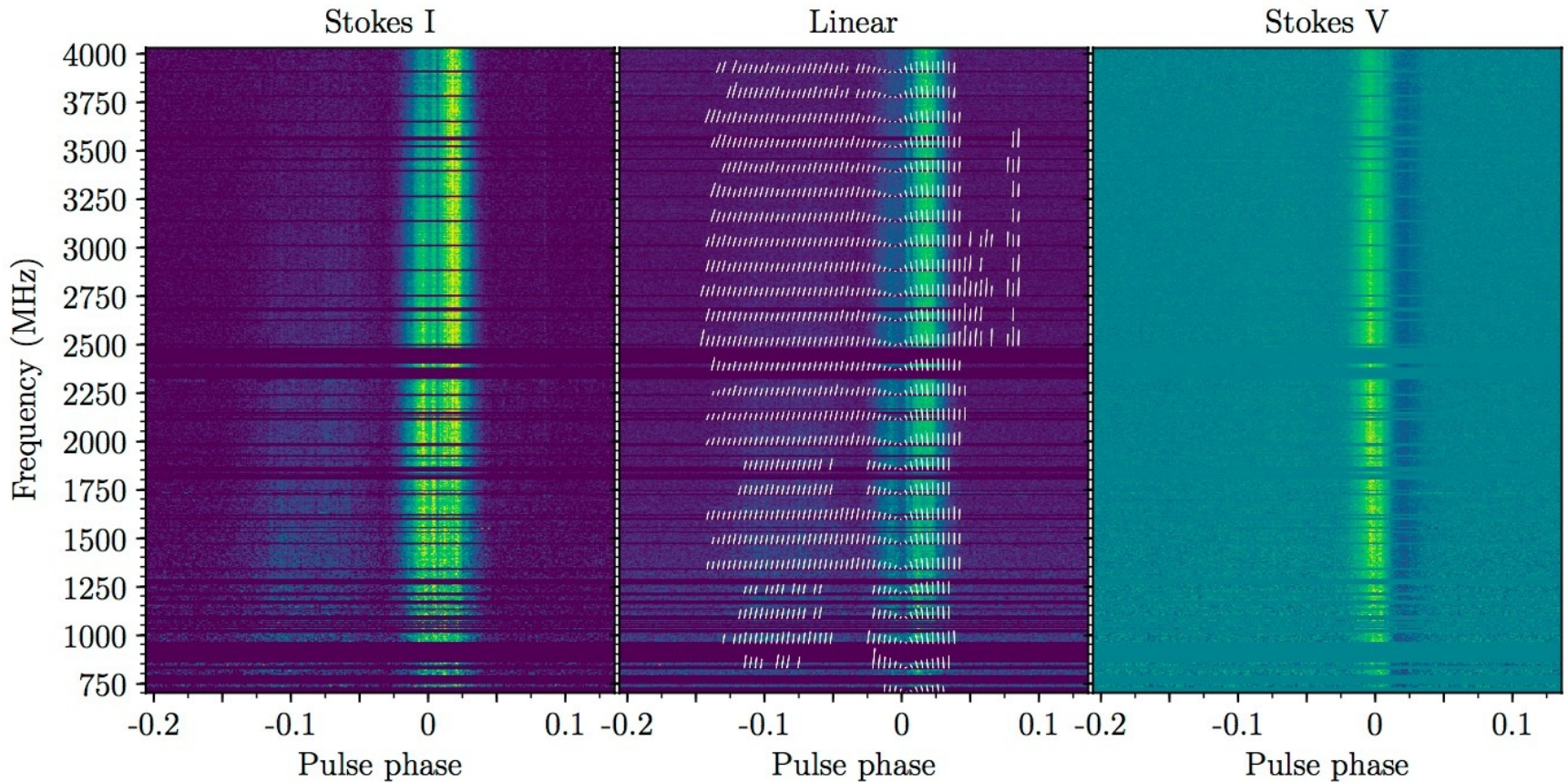


# Mopra - Urquhart et al.



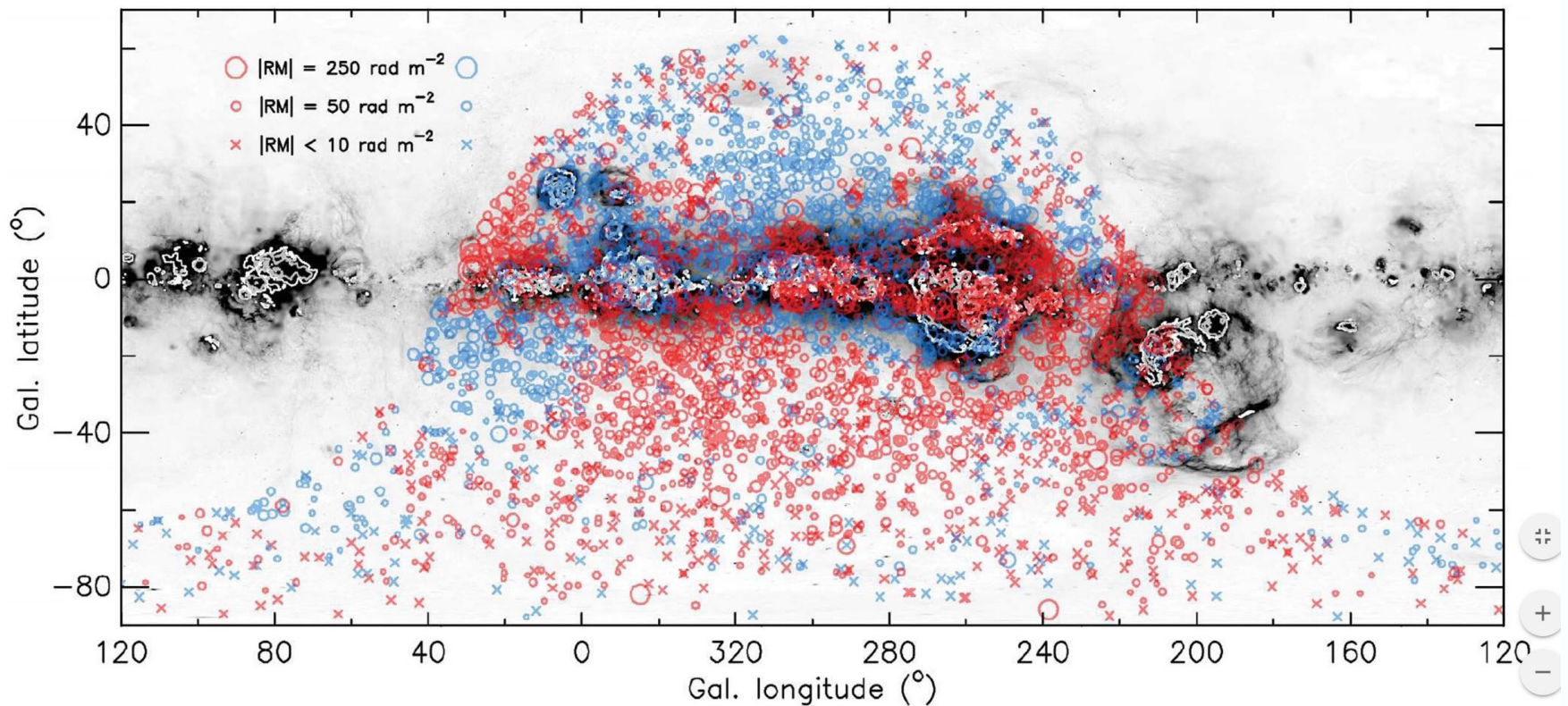
Urquhart et al. conducted a survey towards 570 high-mass star-forming clumps, selected from the ATLASGAL survey and including the key evolutionary stages associated with massive star formation. The observations were made over the frequency range 85.2 – 93.4 GHz with a velocity resolution of  $\sim 0.9$  km/s and detected emission from 26 different transitions.

# Parkes - Dai et al.



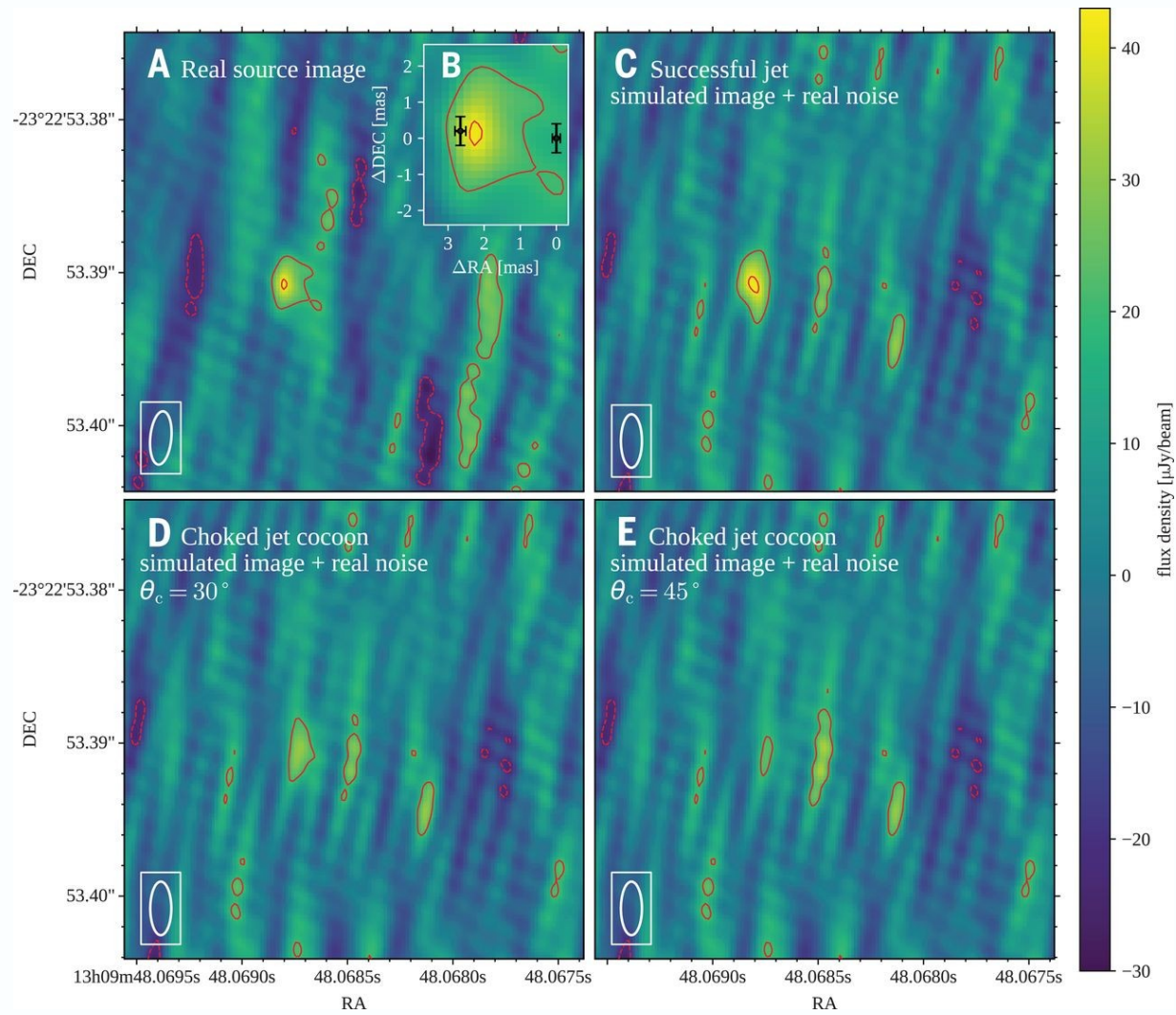
The anomalous X-ray pulsar XTE J1810-197, which spent almost a decade in a quiescent state, underwent a radio outburst in 2018 December. Dai et al. observed radio pulsations from XTE J1810-197 using the UWL receiver at Parkes.

# ATCA - Schnitzeler et al.



S-PASS/ATCA is the first wide-band radio polarimetry survey of compact sources in the Southern sky. Parkes S-PASS survey detections were followed up with 1.3 to 3.1 GHz ATCA observations. The sample contains more than 3800 sightlines, and has an angular resolution of  $\sim 1\text{--}2$  arcmin.

# LBA – Ghirlanda et al.



Observed and simulated radio images of GRB170817A.

Ghirlanda et al. Science 2019;363:968-971



# Changes to student Marsfield Lodge policy

- The total number of free-of-charge nights will change from a maximum of 90 nights per year to 60 nights per year, as of Jan 2020.
- The preference is to limit visits to a maximum a month at a time.
- The terms of student stays are that the free-of-charge allocation applies to one person (the student) and a single room only. Other arrangements for partners staying on site can be made. This change will take effect immediately.
- Where possible, no more than three long term (> 2 weeks) students at a time particularly during peak periods June - September.
- These changes are required in order to ensure that we are able to manage the priority bookings at the Lodge which are our Observers, DAs, CASS Students and

# Student program

- CASS now has 37 co-supervised students from Australian and international universities
- Rob Hollow (ATNF student co-ordinator) has contacted the students to gauge interest in a Data Reduction Workshop, as has been offered in previous years
- The 2019 Radio School will be held from 30 September to 4 October at Narrabri
- The 2018/19 Vacation Student program hosted 12 students (8 at Marsfield, 3 in Perth, one at Tid), including two from South Africa and two from New Zealand

# Vacation Students

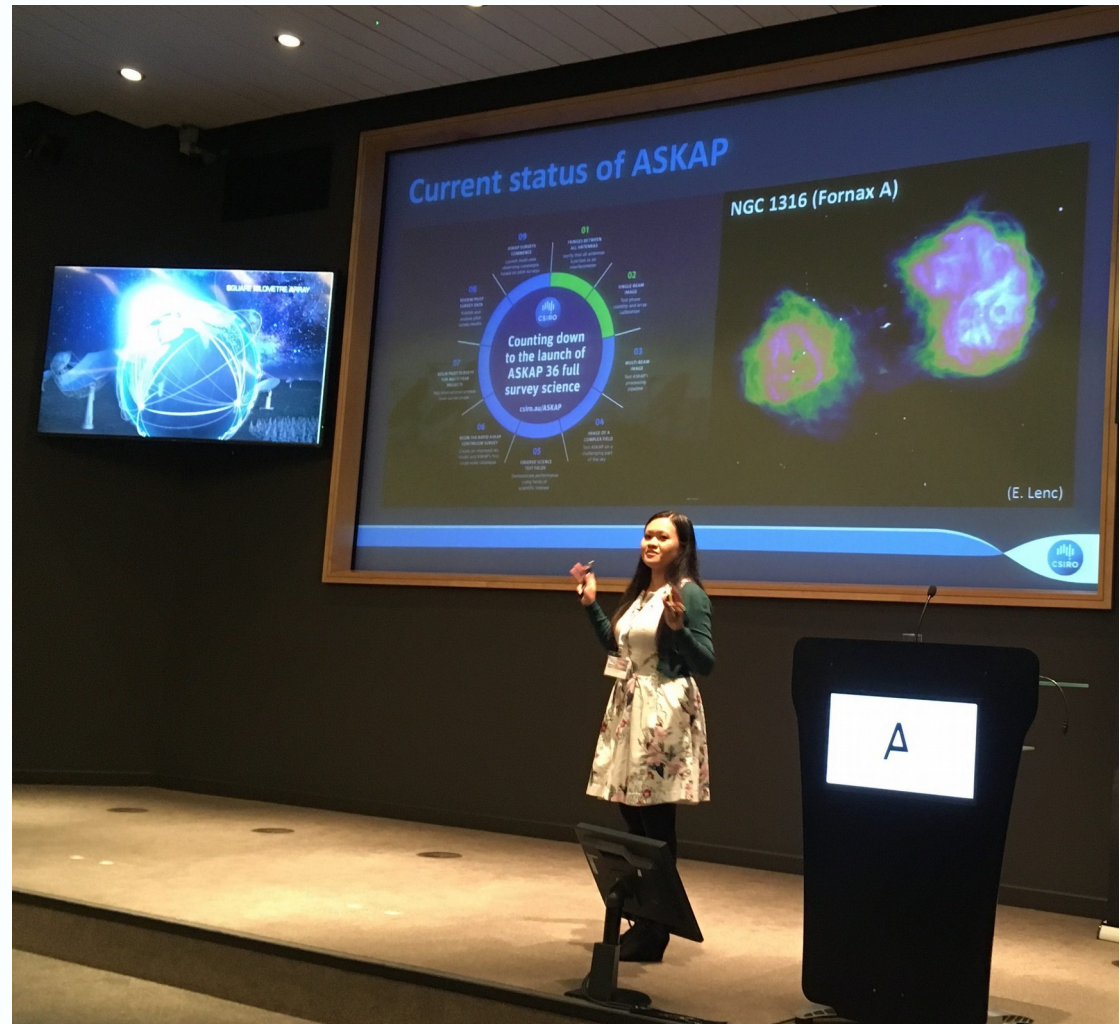


# Vacation Students



# SKA Science Meeting

Talks by Karen Lee-Waddell (WALLABY), Elaine Sadler (FLASH), Jimi Green (Parkes), Minh Huynh (Radio source classification), Shi Dai (pulsars), George Heald (magnetism), Craig Anderson (POSSUM), Tessa Vernstrom (magnetic fields) and Maria Rioja (ionospheric calibration) plus a poster presentation on PAFs.

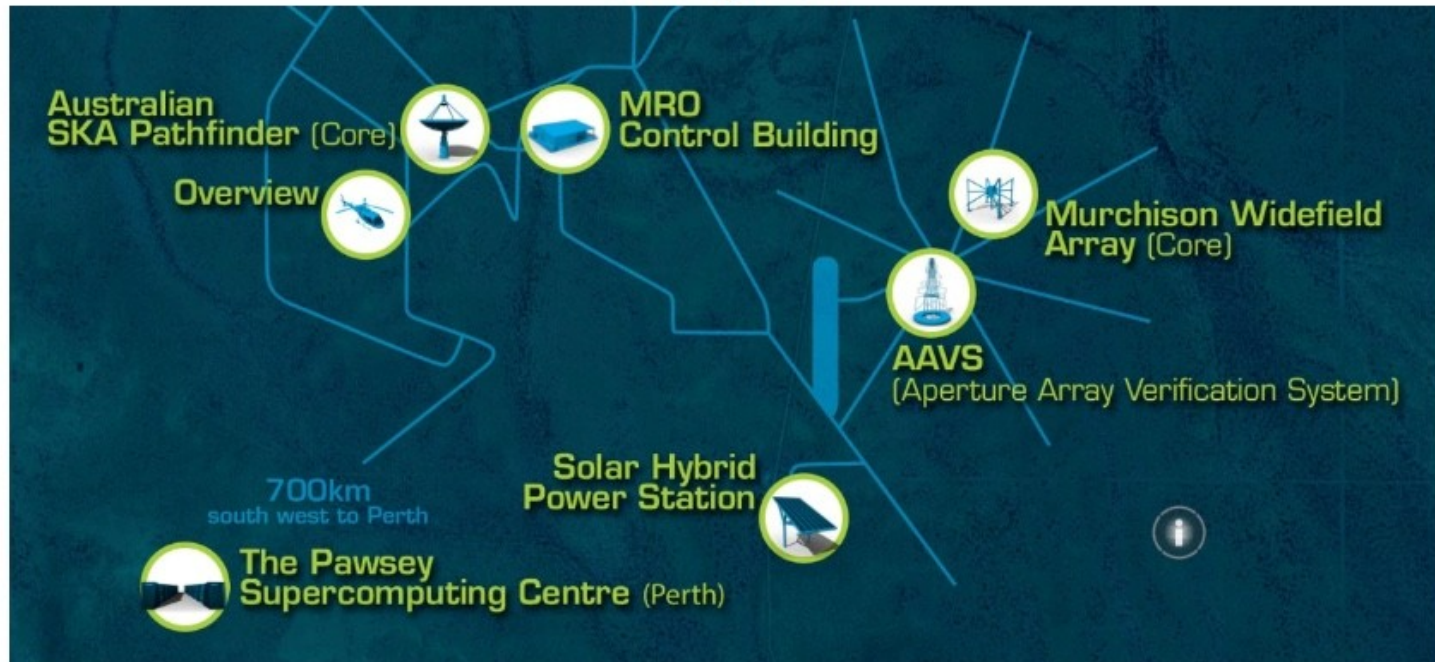


# ATNF WWW pages

- The aim is to have all pages with “Last updated” and “Page maintained by” information
- ATUC is thanked for their endorsement of this aim ... and for pointing out some out-of-date webpages
- CASS will be recruiting a Content Manager with one of the roles being oversight of the ATNF webpages
- It is hoped that the **CSIRO Radio Astronomy Image Archive** will be accessible on-line again in the near future
- Call for Proposals for 2019OCT will be released in mid-May  
<http://www.atnf.csiro.au/observers/apply/avail.html>
- Proposal deadline will be 5pm AEST Friday June 14<sup>th</sup>

# ATNF Daily Astronomy Picture

29th of April 2019



## MRO Virtual Tour

The Murchison Radio-astronomy Observatory is located on Wajarri Yamaji land about 700km north-east from Perth, in a legislated Radio Quiet Zone. It is now possible to take a [virtual tour of the site](#), with fully interactive 360-degree panoramas. Among the points of interest are the 36 radio-telescope dishes that make up ASKAP, the Murchison Widefield Array, the solar farm and lithium-ion battery, and the MRO Control Building. Data from Murchison is transmitted to the Pawsey Supercomputing Facility in Perth – also part of the virtual tour.

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<http://www.atnf.csiro.au/ATNF-DailyImage/>

*We acknowledge the Wajarri Yamatji people as the traditional owners of the Murchison Radio Observatory site.*

# Thank you

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