



# Science Operations

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CSIRO ASTRONOMY & SPACE SCIENCE  
[www.csiro.au](http://www.csiro.au)



# Outline

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# ATCA observing from the SOC

From 2014OCT, the default location for ATCA observing is the SOC. First-time observers must observe from the SOC, and those wishing to re-qualify for remote observing.

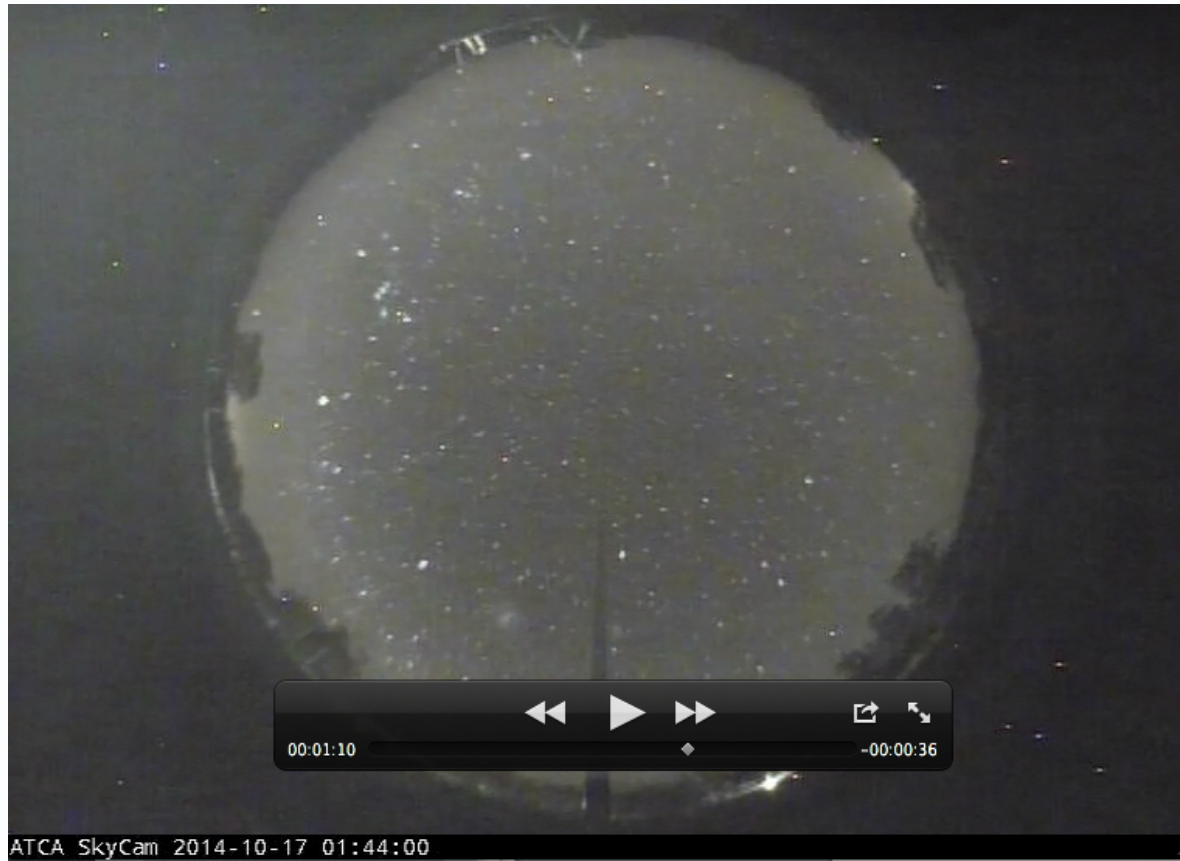
(For Parkes, the transition was September 2013.)

Robin Wark has moved from Narrabri to Sydney, and the DA role has been moved to the SOC. Sydney-based DAs must be on-site for the duration of a first-time observer's run, and must be contactable at all times, but can return home during off-site observing/maintenance etc.

SOC requires CSIRO/visitor card to access after hours.

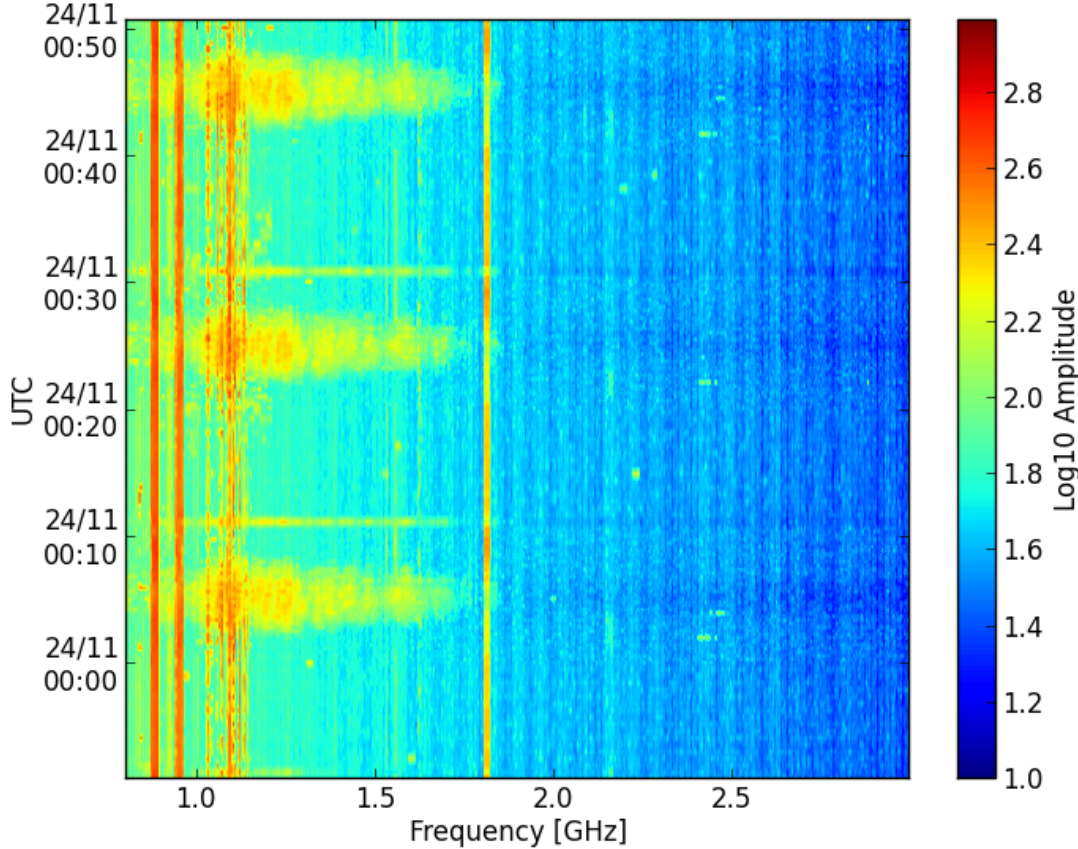
Working alone authorisation form to be completed by observers (included in site induction webpages).

# ATCA sky cam



<http://www.narrabri.atnf.csiro.au/ATCACam/>

# ATCA RFI weathermap



# ATCA RFI weathermap



# ATCA & Parkes

**ATCA:** Good progress with MIRIAD tasks to estimate off-axis polarisation leakage (OFFPOL), and apply a correction for it (OFFAXIS).

**Parkes:** The ageing APSR system has been replaced by CASPSR, a coherent de-dispersion pulsar backend developed by Swinburne University of Technology, and made available on a shared-risk basis (<http://astronomy.swin.edu.au/pulsar/?topic=caspsr>)

MBCORR functionality is increasingly being replaced by HIPSR: new mode has a bandwidth of 200 MHz on all 13 beams, with 16384 spectral channels per product.

DFB3 failure for dual-board configurations (pulsar folding mode, APSR, RFI mitigation): currently back at Marsfield while repairs investigated.

# Computing issues

- Observers require a CSIRO account to observe.
- All users have a unique ident used for both the CSIRO NEXUS domain and the ATNF UNIX domain. The two domains can have different passwords.
- NEXUS passwords must be changed every three months, however most users don't use their NEXUS account. This may change:
  - For visitors wishing to use the new “follow-me” print facility in CSIRO
  - For observers wishing to examine Fault Reports in the new FR system
- UNIX password aging is now enabled. Passwords will start to expire after 15 Jan 2015. Reminder emails will be sent, starting from 14 days before expiration. Passwords only need to be changed once per year. If your password expires, your SSH key will stop working also.



# Computing issues

- Passwords for the VNC observing sessions are now changed each semester. The same password is used for ATCA (xbones and caccc1), Parkes and Mopra. To obtain new password: <http://www.atnf.csiro.au/observers/passwords/>
- A new Fault Report and Tracking System will be introduced next week. Observers can submit reports by email, or after authenticating with their ident and NEXUS password.
- A web-based Portal will be introduced for the ATCA in the near future, requiring observers to register for their observing blocks, providing contact details, and an improved “chat” facility.
- Parkes observers polled on livedata/gridzilla usage.
- CSIRO Data Access Portal now has data from 97 pulsar projects.
- SOC feature wall in operation!

# Proposal statistics

	ATCA	Parkes	Mopra	Tidbinbilla	LBA
<b>2014APR</b>	118	41	9	5	20
New	55%	46%			
NAPA	18	3	0	0	2
Scheduled	56/100	33/38	8/9		
<b>2014OCT</b>	74	25	---	2	11
New	32%	24%	---		
NAPA	18	2	---	0	2
Scheduled	40/56	22/23	---		

- 5 weeks of Mopra National Facility time in 2014APR (3 weeks single dish, 2 LBA)
- In both semesters, a Parkes 22GHz proposal has been transferred to Tid

# Tidbinbilla

- New dual beam 22 GHz receiver on 70m (DSS-43).
- As mentioned previously, Tid has taken on two Parkes 22GHz proposals
- Increased 20cm band coverage on 70m: 1.4--1.9 GHz
- New 34m antenna (DSS-35) in operation
- DSS-36 construction continuing (completion late 2016)



# Long Baseline Array

LBA session on at present. No receiver changes at Parkes, so observations at 1.4 GHz with Parkes, or higher frequencies without Parkes.

First LBA use of Warkworth 30m antenna, and new Tidbinbilla 34m antenna!

Second LBA session this semester at the end of March.

Successful VLBI on international baselines between ATCA and Korean VLBI Network at 7mm and 3mm!

LBA proposers are reminded of their responsibility to contribute to LBA observing support.

# Time Assignment Committee

Proposal deadline is 5pm AEDT Friday December 12<sup>th</sup>.

There is a count-down clock in OPAL for this deadline!

A document outlining TAC procedures is available from the TAC webpage: <http://www.atnf.csiro.au/management/tac/>

Michael Drinkwater is thanked for his chairmanship of the TAC for the last three years.

We will be asking users to include their proposal codes in their publications in the future.

# Thank you

**CASS/ATNF**

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