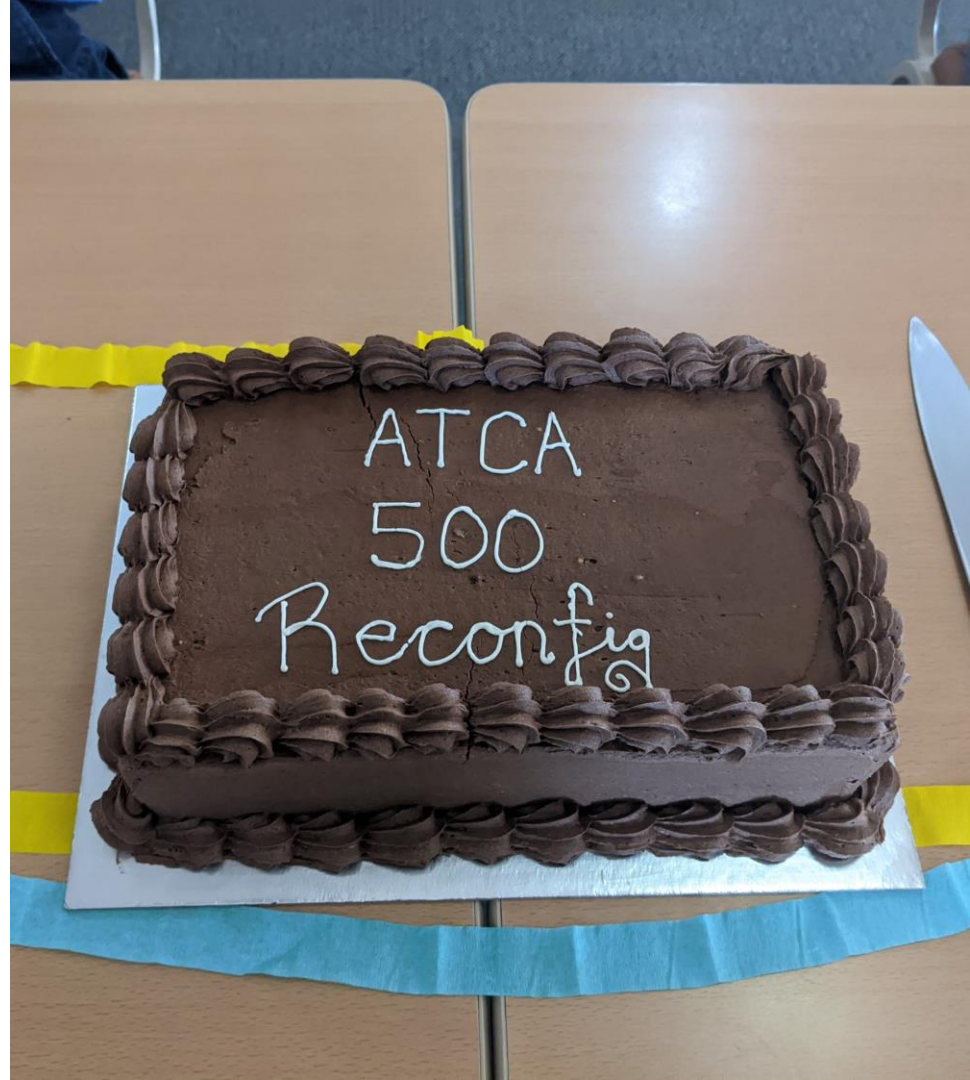




# ATCA Update

ATUC November 2020

Jamie Stevens, Vanessa Moss | 2020-November-18





# Legacy Projects

IMAGINE gets its last field in 2020OCT.

CACHMC has four fields remaining.

StarFISH gets all its time late in the semester as requested.

Time allocations for this semester and last (total semester time does not include VLBI and maintenance/reconfig time), and the amount of time remaining for each project.

	2020APR	2020OCT	Remaining
Time (hrs)	3269	3331	
GLASS (Huynh)			0
IMAGINE (Popping)	96 hrs 2.9 %	12 hrs 0.4 %	0
StarFISH (Breen)	423 hrs 12.9 %	288 hrs 8.6 %	456 hrs 16.9 %
CACHMC (Jackson)	168 hrs 5.1 %		432 hrs 28.8 %
Total	687 hrs 21.0 %	300 hrs 9.0 %	



# Statistics

Project allocations for “normal” projects (who expect to get time in a single semester, excluding NAPA).

	2019APR	2019OCT	2020APR	2020OCT
# of Proposals	37 (1833 hr)	26 (1159 hr)	48 (2878 hr)	38 (2411 hr)
Cutoff Grade	3.4	3.2	3.3	3.0
Projects 90 – 100%	18	20	21	30
Projects 40 – 90%	3	2	8	5
Projects < 40%	0	0	3	1
Projects 0%	16	4	16	2



# ASKAP-related projects

	2019APR	2019OCT	2020APR	2020OCT
# of Proposals regular	37 (1833 hr)	26 (1159 hr)	48 (2878 hr)	38 (2411 hr)
# ASKAP-related regular	3 (120 hr) [6.5%]	3 (60 hr) [5.2%]	7 (473 hr) [16.4%]	10 (565 hr) [23.4%]
# of Proposals NAPA	28 (2564 hr)	23 (940 hr)	26 (1367 hr)	30 (1461 hr)
# ASKAP-related NAPA	1 (60 hr) [2.3%]	1 (60 hr) [6.4%]	2 (173 hr) [12.7%]	3 (280 hr) [19.2%]



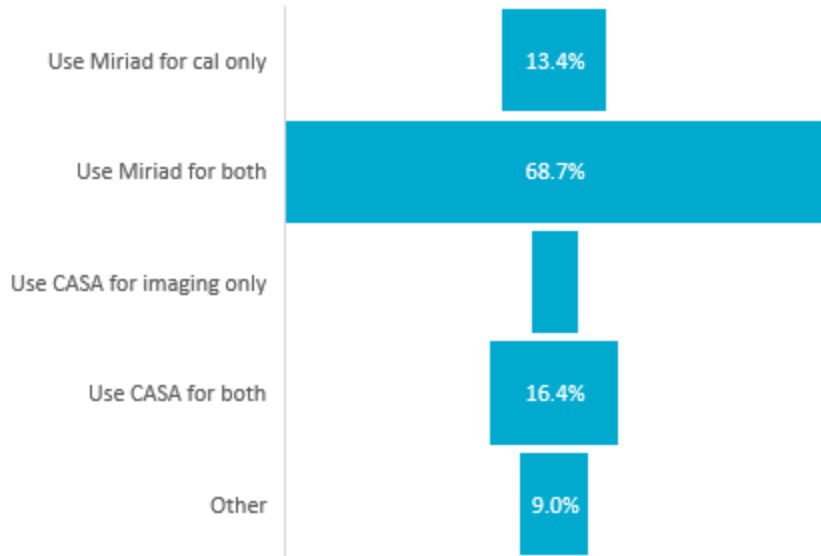
# NAPA Allocation

Semester	NAPA/ToO (hours)	NAPA %	ToO %	ASKAP %
2020APR	348	60.2	39.8	13.4
2019OCT	633	48.0	52.0	19.4
2019APR	501	57.7	42.3	7.8
2018OCT	558	25.0	75.0	

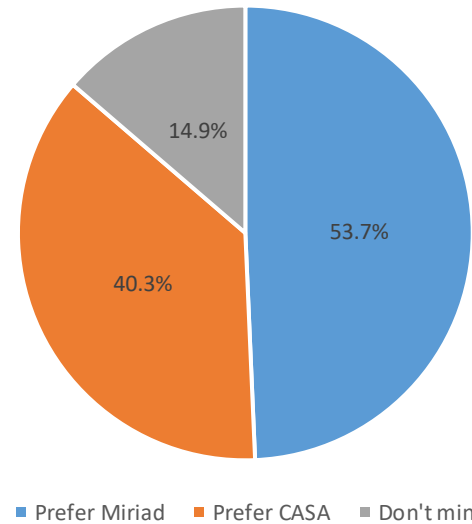


# Data Reduction Survey

Current Behaviour



BIGCAT Preference





# Data Reduction Survey - Comments

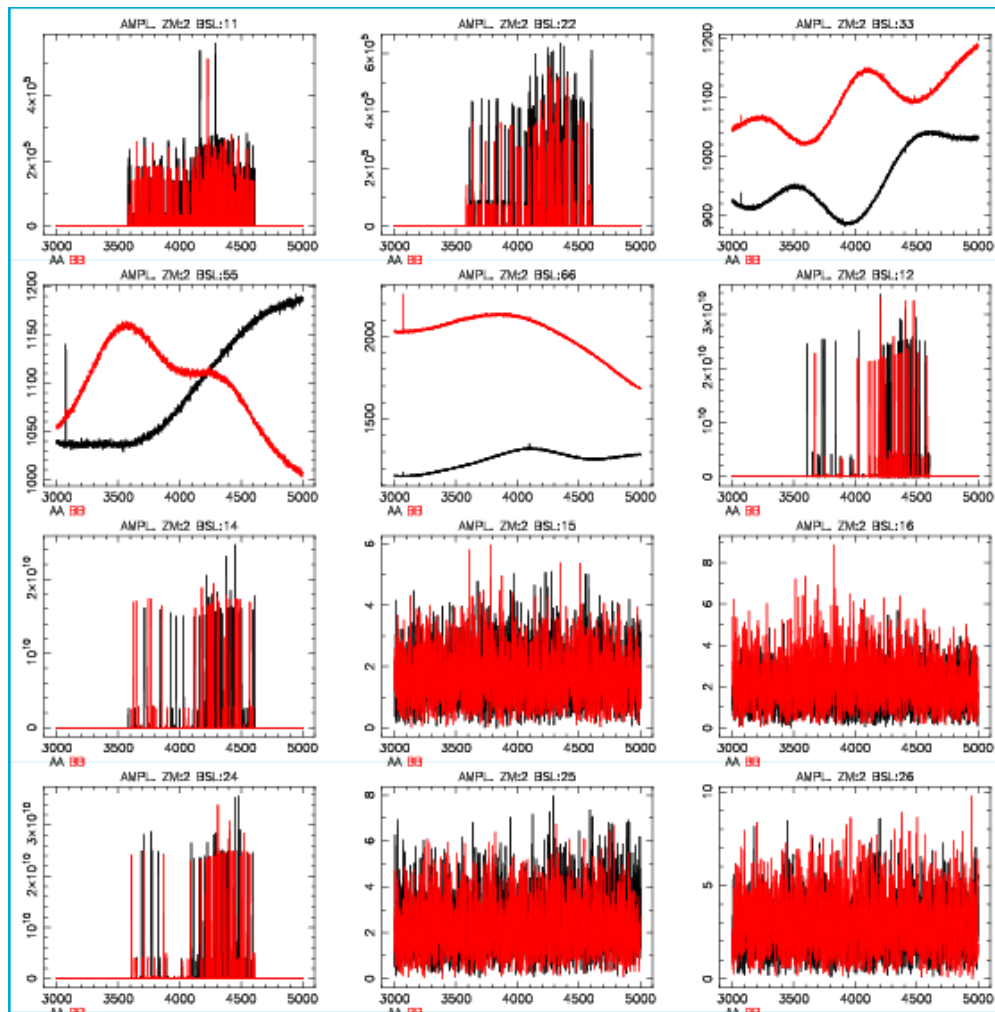
- Whichever way we go, optimisation is going to be necessary
- Algorithm development is required if Miriad will be preferred
  - But, no ability in CASA as yet for pulsar-binning imaging
- Too much flexibility is also not ideal
  - Miriad does what it needs to do, CASA does a lot more that isn't necessary for ATCA
  - Tutorials will be crucial, CASA tasks more tailored to BIGCAT data perhaps
- Either way, development costs will be incurred

[https://www.narrabri.atnf.csiro.au/observing/bigcat\\_data\\_reduction\\_survey.html](https://www.narrabri.atnf.csiro.au/observing/bigcat_data_reduction_survey.html)



# CABB

- Some problems are becoming persistent with IF2 zoom bands
  - Currently 1 board (29) will not form zooms properly in 64 MHz, and another (25) is intermittently flaky
- Continuum is unaffected, and so is IF1 for zooms

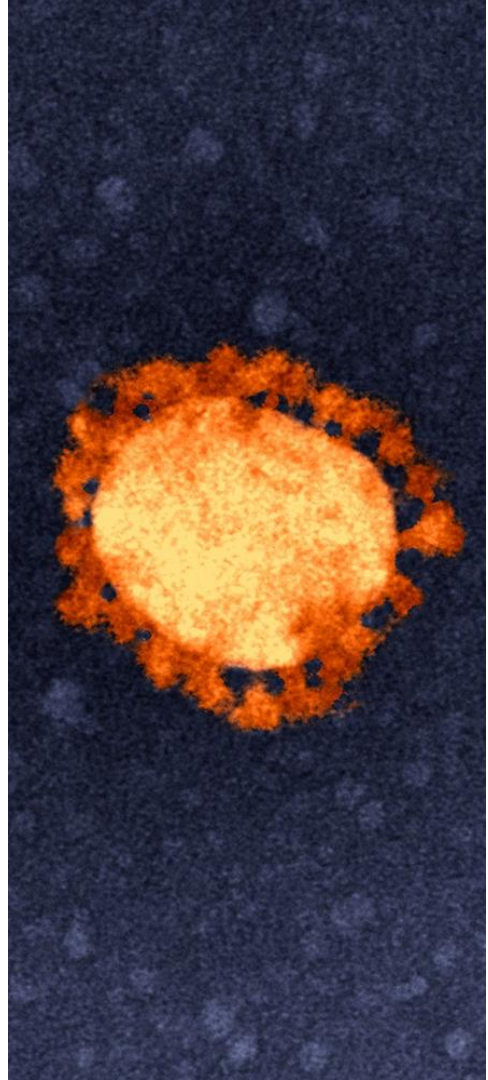






# Observing Update

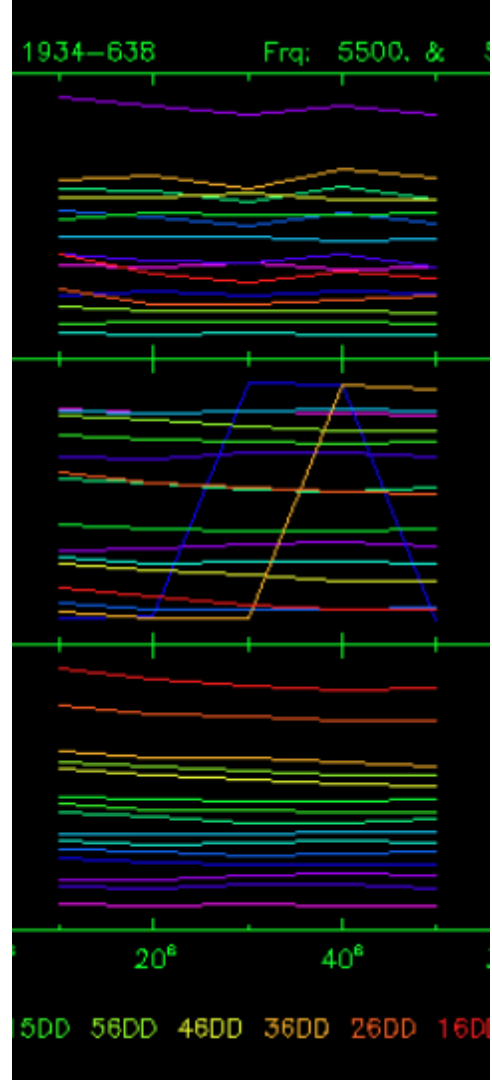
- Travel to the Marsfield SOC or Paul Wild Observatory is now permitted
  - Need permission to enter NSW
  - Need book to visit CSIRO Marsfield site
  - Coming to ATCA needs permission from the site leader, to prevent too many visitors coming at once
- This is a good opportunity to critically reassess the existing policies, in light of how observing and observing support models should evolve





# Observing training status

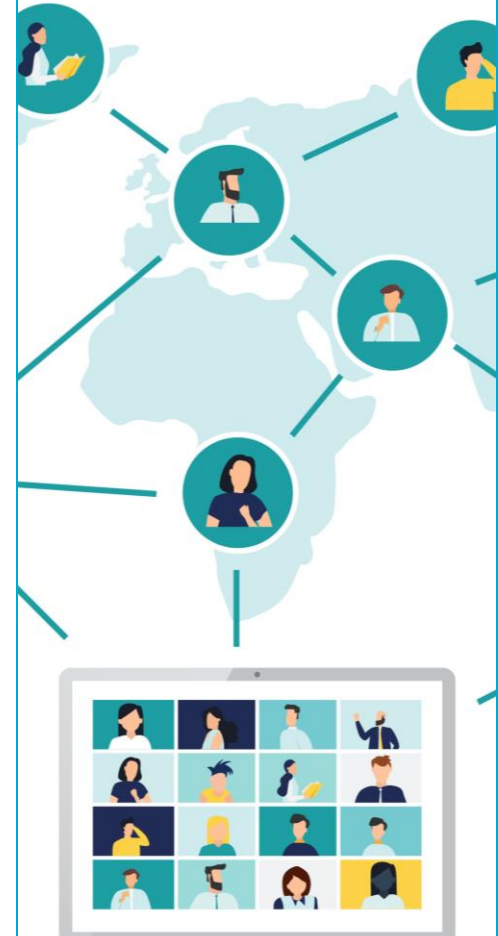
- Currently trialling remote training due to travel restrictions (also more in line with Parkes model)
- This is experimental, and will be used to inform reasonable paths going forward based on the needs and preferences of the community
- Official policy states new observers must come to Marsfield to be trained “on the job” by the DA
- Discussions within Science Operations to come





# Remote training trials

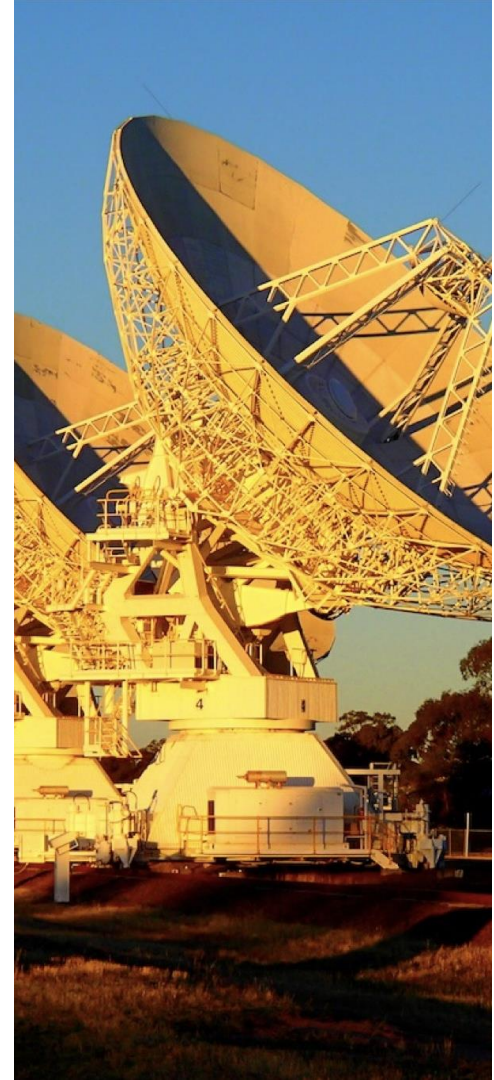
- Two online 2 hr training sessions offered so far
  - 1<sup>st</sup> October 2020, 3<sup>rd</sup> November 2020
- A total of 25 participants attended both sessions
- Training aimed to be a broad overview with some practical telescope demos (feedback in progress)
- If all attendees had travelled to Marsfield:
  - 163,053 km return, 46.5 tonnes of CO<sub>2</sub> (\$1900, ETS), 50 hr of ATCA time (\$21k), >> 100 hr of FTE





# Duty astronomer update

- DAs are now automatically notified, reminded and followed-up via email after signing up
- We are now accepting new duty astronomers for shifts (via remote training)
- The DA position plays a key role in providing hands-on experience with telescopes to the Australian radio astronomy community – how might it best meet these needs in the future?





# Thank you

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