



ATUC Members

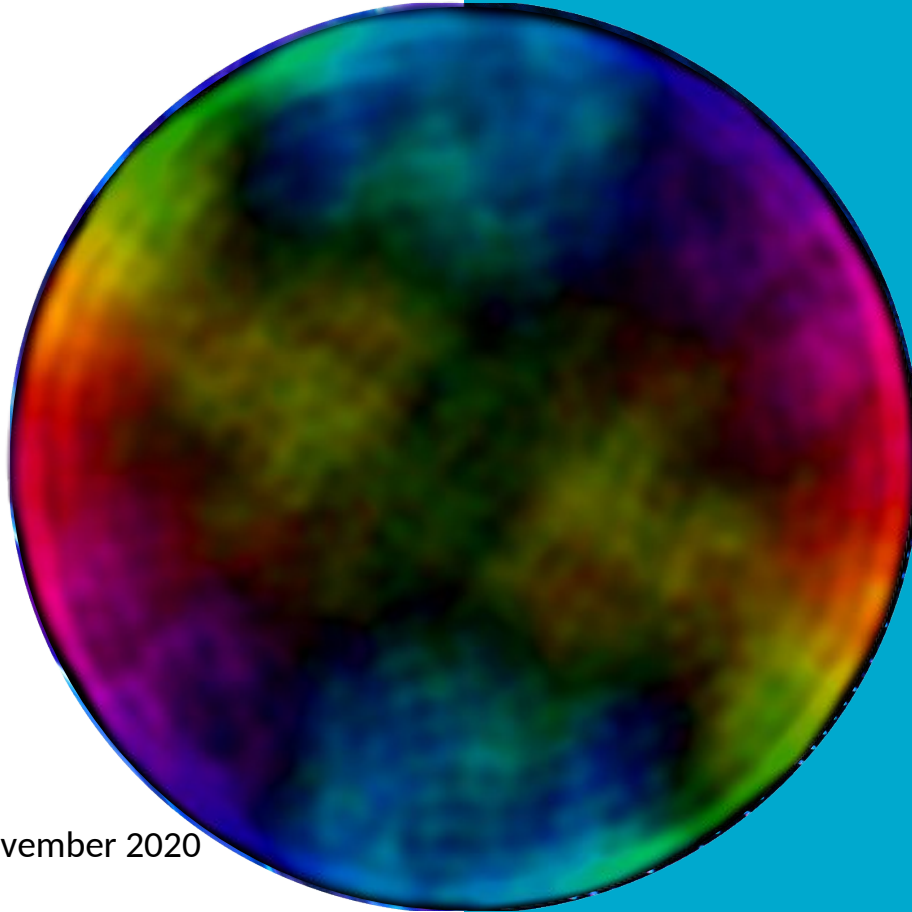
- Ramesh Bhat, Curtin (Chair)
- Miroslav Filipovic, WSU
- Ryan Shannon, Swinburne ★
- Emil Lenc, CSIRO ★
- Bi-Qing For, UWA
- Nickolas Pingel, ANU ★
- Martin Bell UTS ★
- Michelle Cluver, Swinburne
- Yuanming Wang, USyd (student) ★
- Philippa Patterson, UWA (student) ★
- Cormac Reynolds, CSIRO (secretary)



Director's update

ATUC | Douglas Bock | 18 November 2020

Australia's National Science Agency



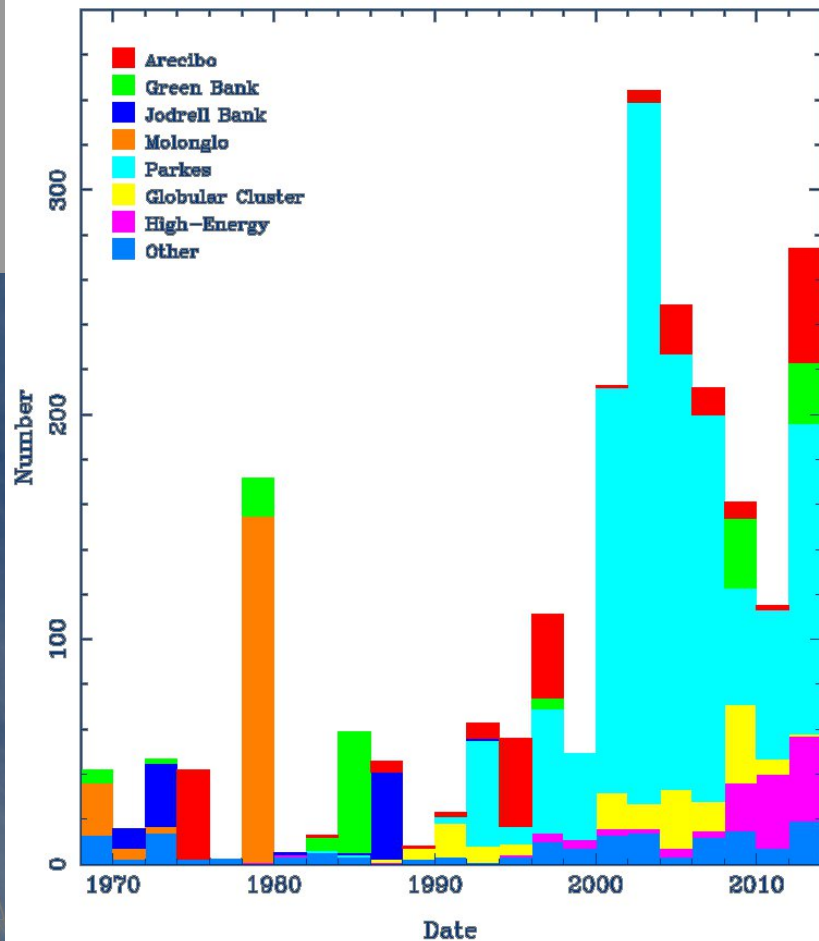
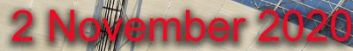


Murriyang

- National icon
- Wiradjuri name



Copyright: CSIRO/ATN





ASKAP news

- Pilot surveys complete
- Pawsey centre
 - Ingest nodes contract let
 - Supercomputer vendor announced

Meet Pawsey's new supercomputer



The new *HPE Cray EX* supercomputer will have:



50 petaFLOPs raw compute power



200,000+ AMD CPU cores



750+ AMD GPUs



548+ terabytes of memory



Ten times more energy efficient

DID YOU KNOW?

50 petaFLOPs
raw compute
power
THAT's....

30x

PAWSEY MAGNUS AND
GALAXY SUPERCOMPUTERS



OR

**150,000
LAPTOPS**

...in the space of a
regular bedroom



*"Doing this on my laptop
would take 25 years"*

Dr Chenoa Trembley, Astrophysicist - CSIRO



Astronomy decadal plan mid-term review

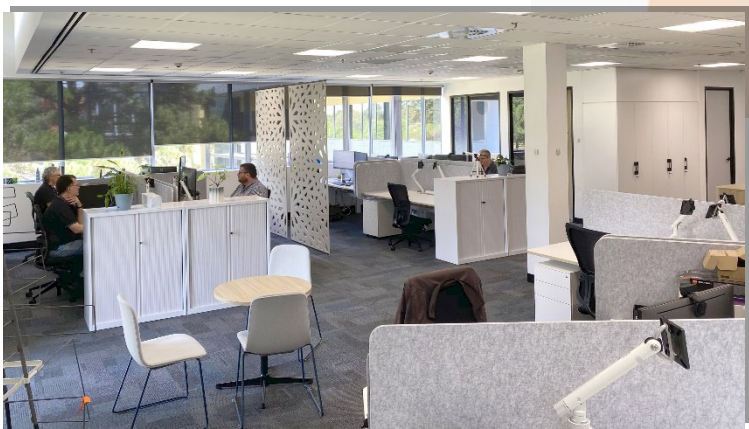
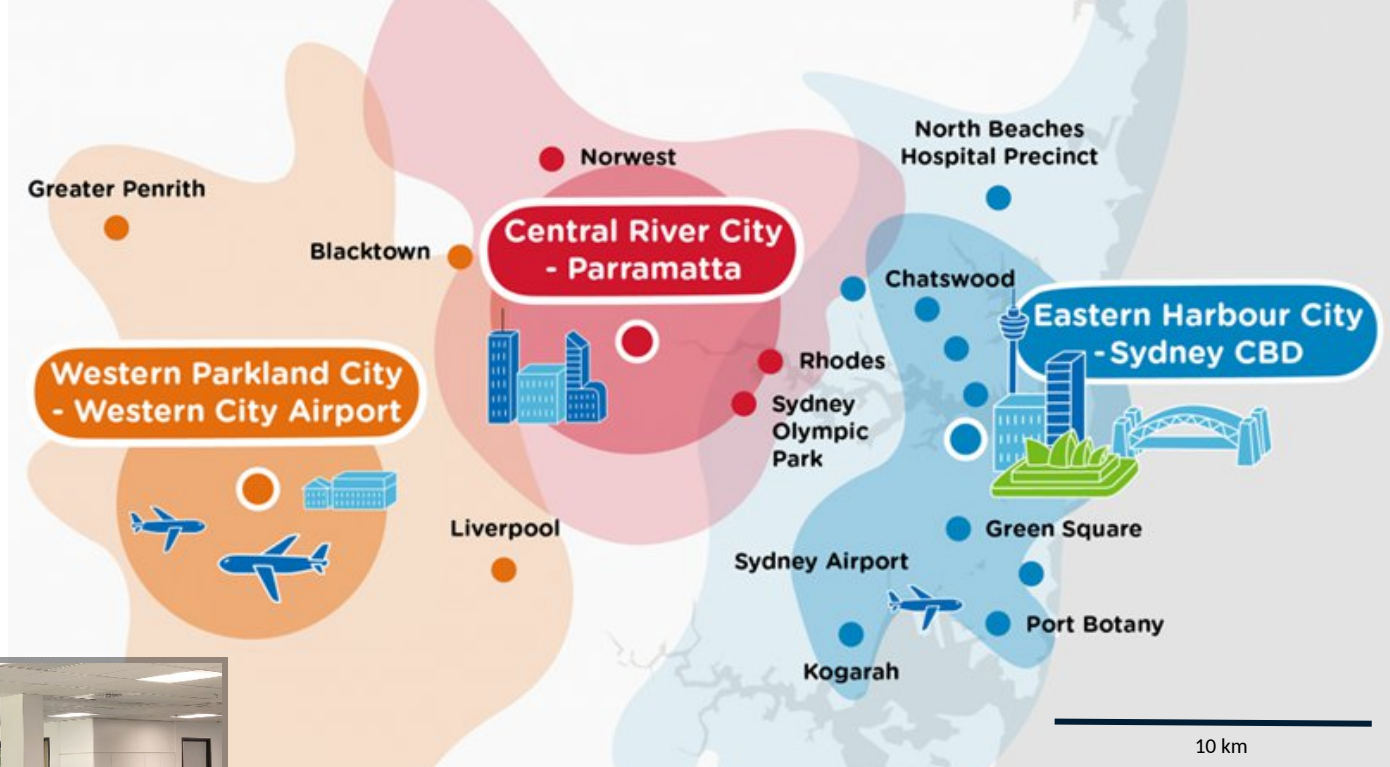
Recommendations include:

- Pursuing realisation of the SKA
- Maintaining support for instrument development
- Establishment of data centres for all of Australian astronomy
- Continue pursuing avenues to support domestic facilities

"The ATCA and Parkes will remain workhorses for the radio astronomy community over the next five years, providing an essential multi-wavelength complement to ASKAP, and supporting the growing need for radio follow-up of multi-wavelength and multi-messenger triggers from world-wide facilities. Furthermore, these facilities provide testbeds for radio astronomy instrumentation and opportunities for students to develop their skills. The availability of the ATCA and Parkes to the international community leverages access by Australian astronomers to extremely powerful international facilities such as the Jansky VLA"



Site news





Diversity and Inclusion

- Committee membership refreshed [EoI] and meeting regularly (lead Kevin Ferguson in Perth)
 - CASS Director is the sponsor
- Anonymous review of proposals
- CASS annual action plan going to the CASS Executive shortly
 - Focus areas include recruitment and measurable targets aligned with CSIRO's SAGE targets
 - Actions with owners, who have time allocated as part of their "day job"



Incidents (July 2019-June 2020) – all CASS

Categories	2019/20
1 Inappropriate language, insensitive comments, raised tone (single incident)	3
2 Repeated Cat 1 behaviour	1
3 Bullying, unwelcome sexual behaviour/comments	1
4 Repeated Cat 3 behaviour, unwelcome sexual contact	-
5 Serious misconduct, sexual assault	

Notes: CASS staff = ~285 people (ATNF + CDSCC + New Norcia + Space); two cases (cat 1, 2) still being addressed; others closed.



Missing matter found

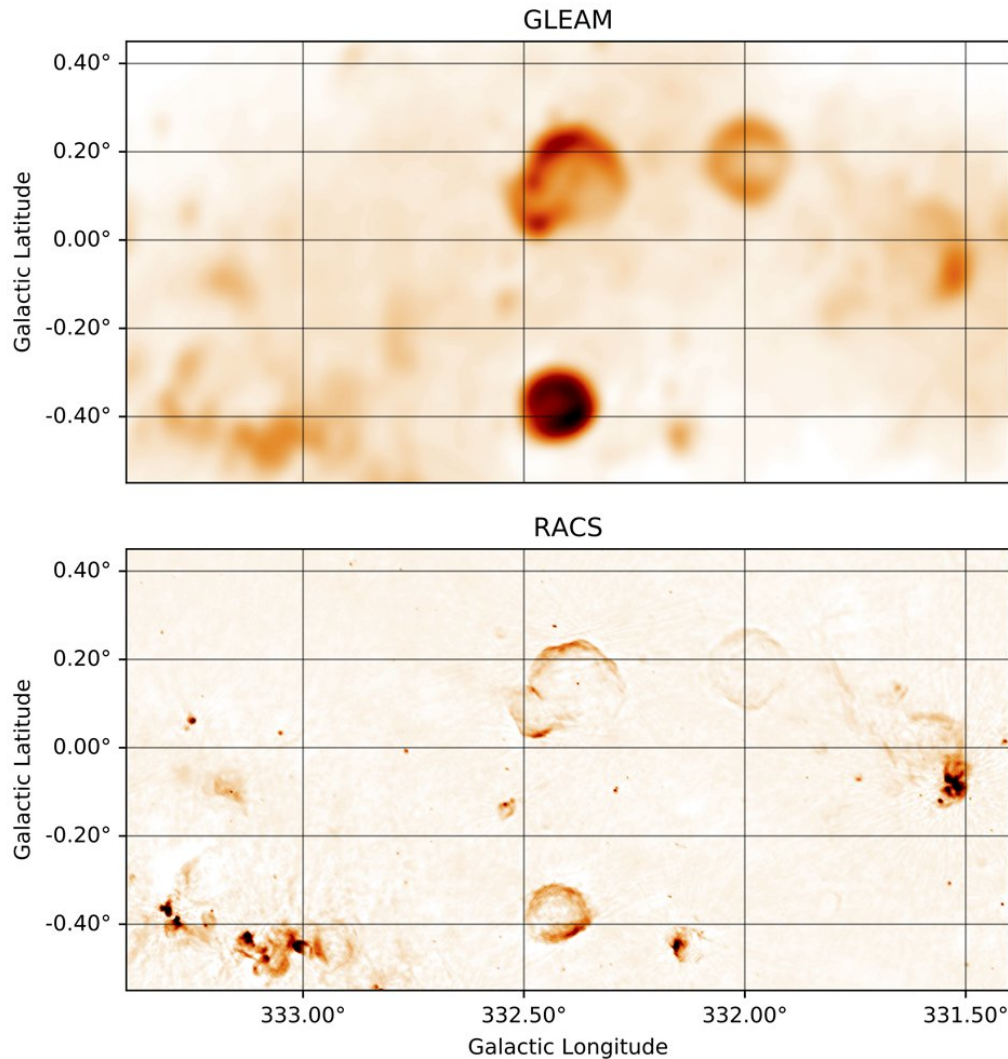


Macquart et al. *Nature*, **581**, 2020



Rapid ASKAP Continuum Survey

McConnell et al. *PASA* (accepted)





Key issues for this meeting

- **ASKAP Surveys**
- **LIEF proposals**
- **Parkes Science Case**



Thank you

Business Unit Name

Presenter Name

Presenter Title

+61 2 9123 4567

firstname.surname@csiro.au

csiro.au/lorem

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csiro.au/lorem



SKA treaty

- Sept 2020 Australia ratifies SKA Treaty
 - Dec 2020 IGO formed
- Sep 2020 Hosting Agreements endorsed by CPTF
 - By Sept 2021 Ops Collaboration contract with SKAO signed
- Sept 2020 Construction Proposal endorsed by SKA Board
 - By July 2021 construction approved by Council - funds committed
 - By early 2022 on-site construction commences
- 2023 SKA1-Low 'on sky' commissioning – 6 stations AA0.5
- 2028 'go live' for SKA1-Mid and -low





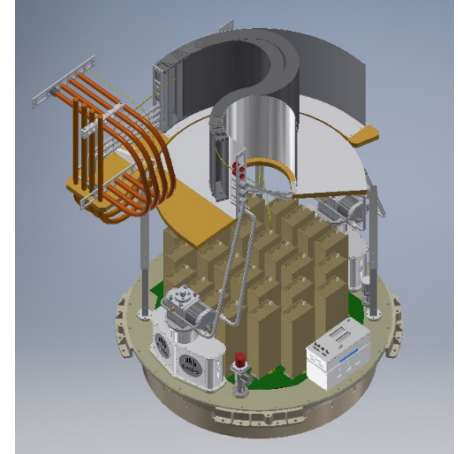
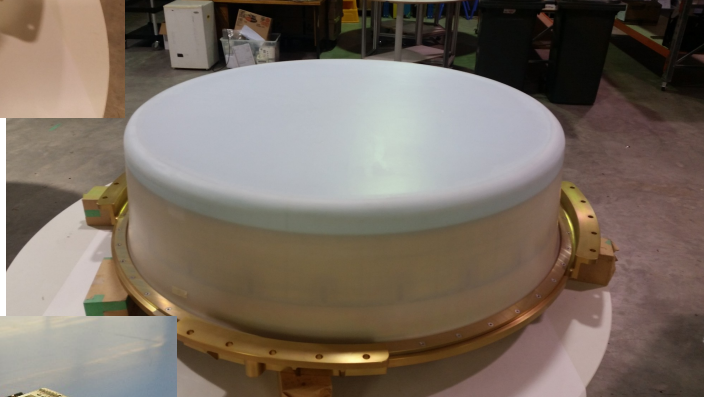
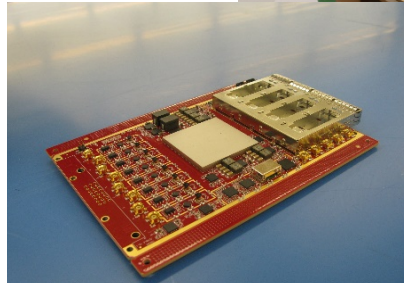
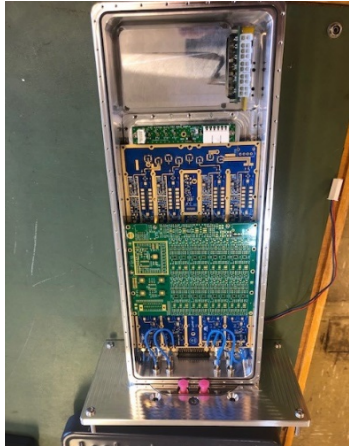
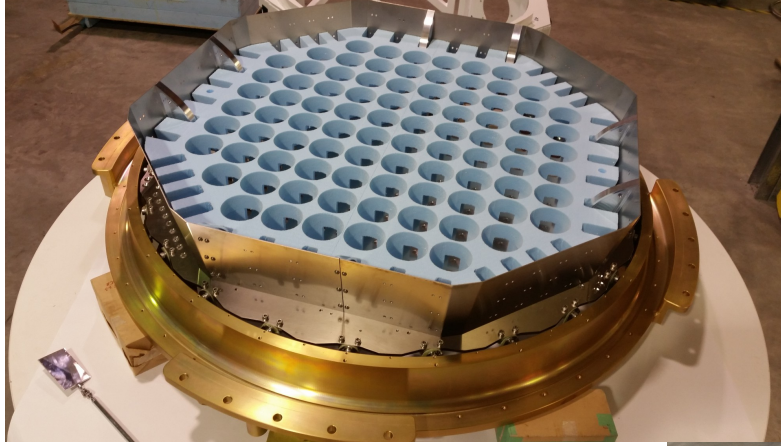
Receiver sale

- Ultra-wideband receiver for Arecibo
 - \$4.2m
 - In contract negotiation
 - Sole supplier





Parkes CryoPAF





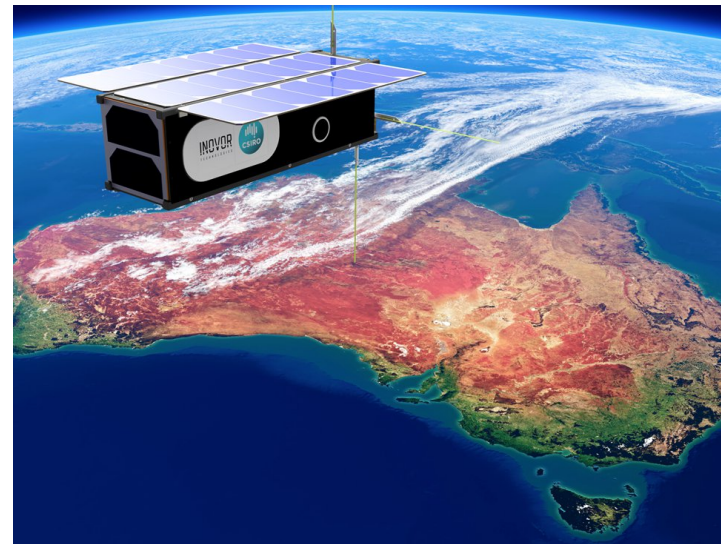
VIP visits





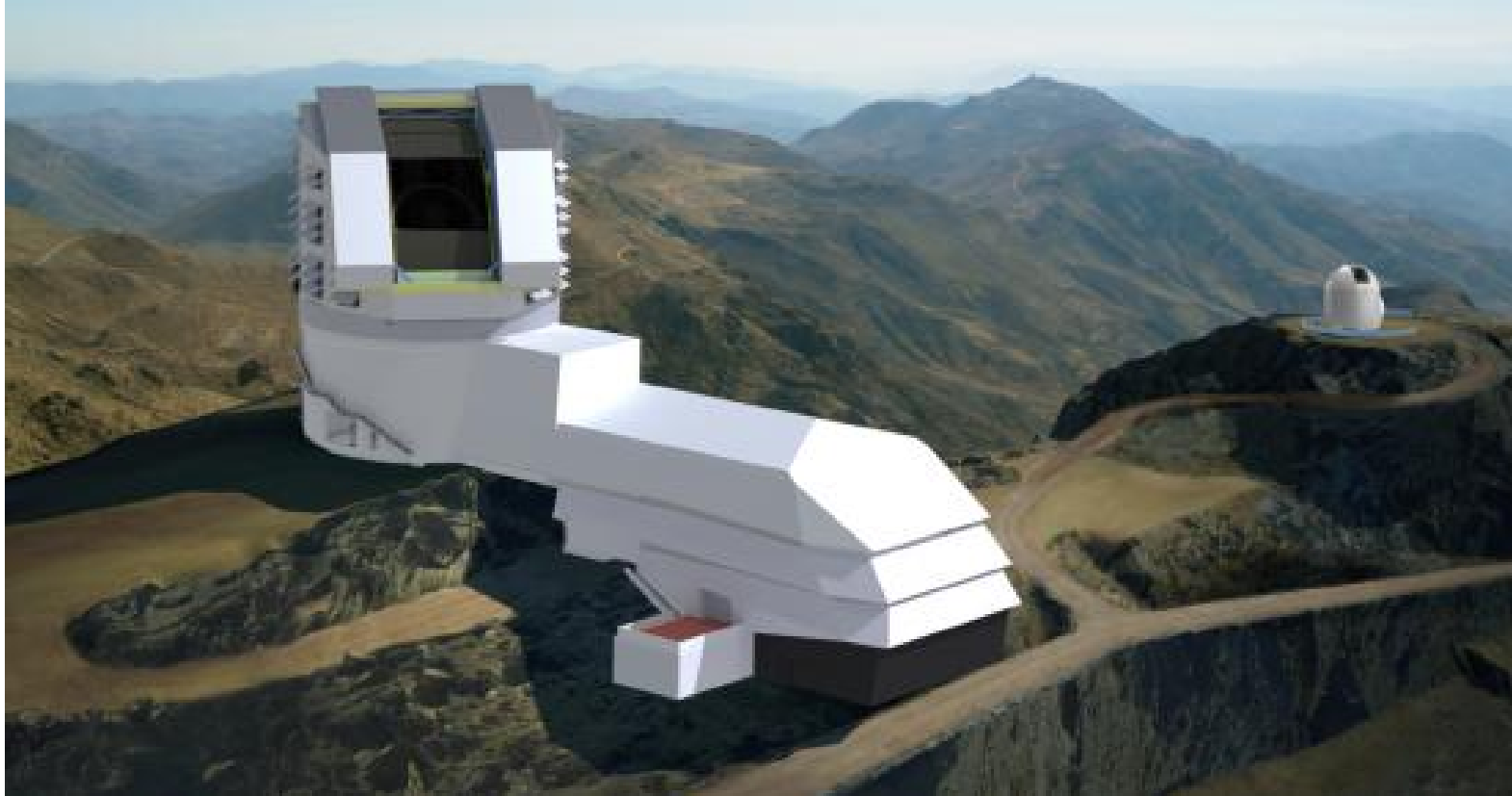
Space

- 3 space projects in ATNF funded through CSIRO Future Science Platform:
 - PAF commercialisation for satellite comms
 - CSIROSat-1 using ATNF engineering expertise
 - Planetary science payload – feasibility study
- Other space activities:
 - Space situational awareness project with Boeing
 - Asteroid radar with CDSCC





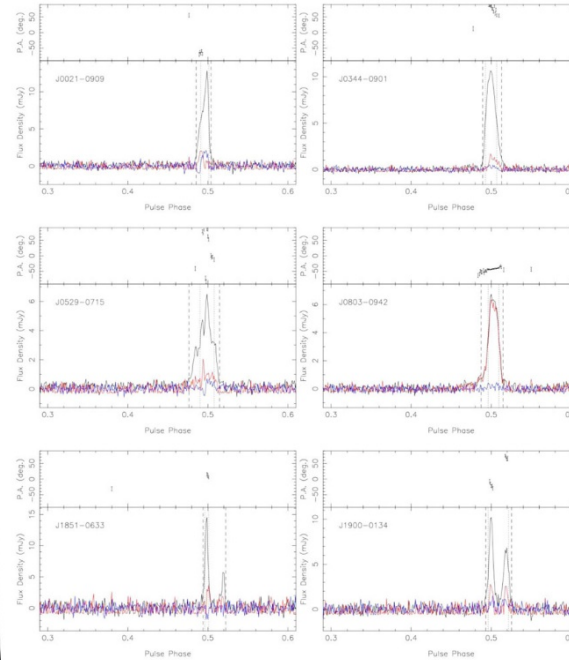
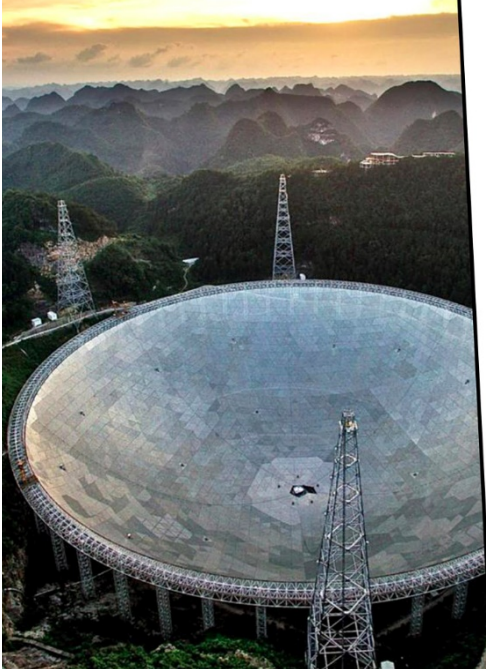
Next
big
thing





Science highlights

Parkes & FAST



Cameron et. al. *MNRAS*, **495**, 2020
 Lei et al. *ApJ*, **877**, 2019

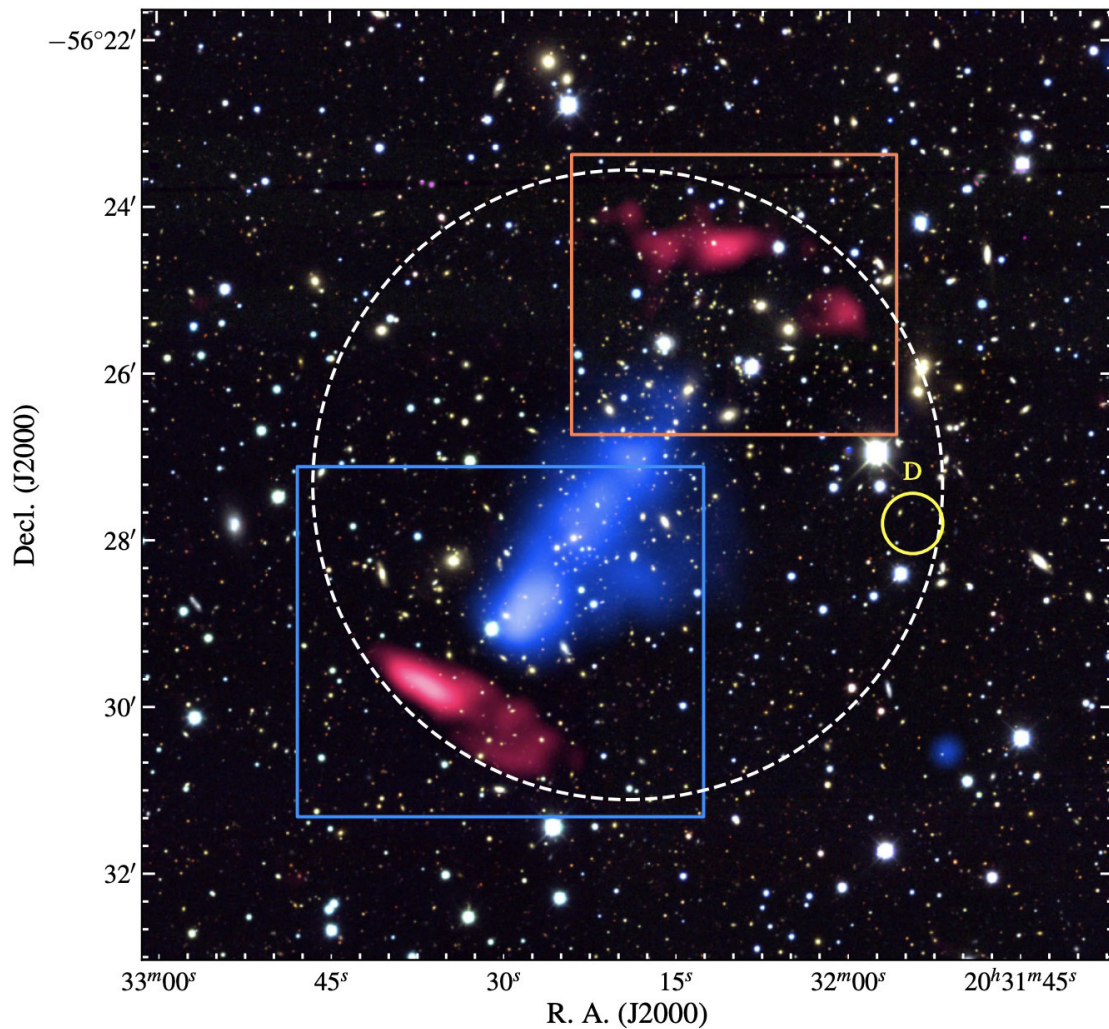


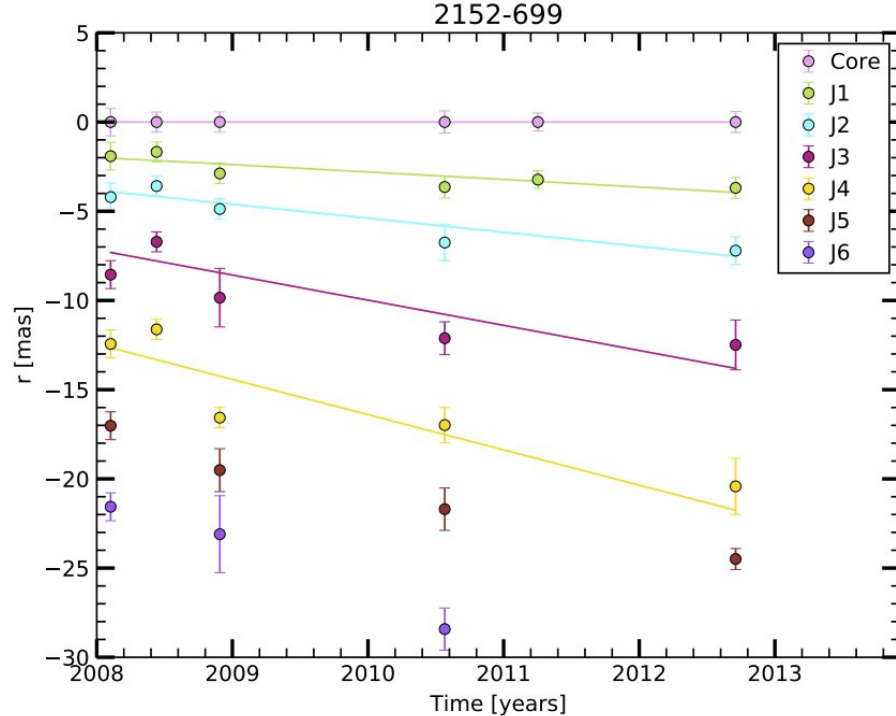
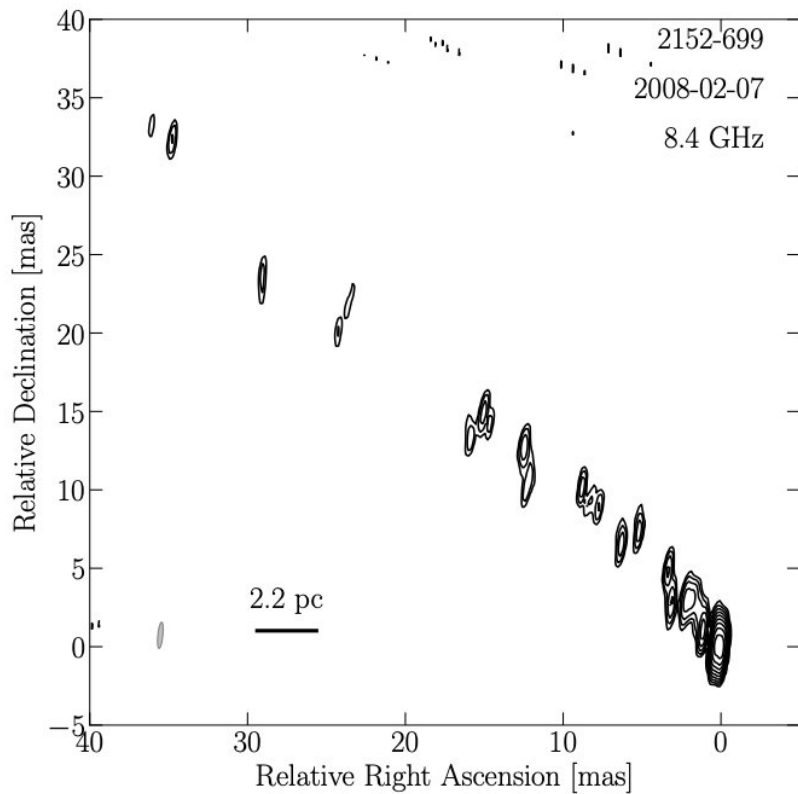
Parkes & FAST

Luo et. al. *Nature*, 2020



ATCA & ASKAP







Finance



Finance

Table 1.

		ATNF Overall Position				
		19/20	*20/21	*21/22	*22/23	*23/24
		Revenue				
	Appropriation	17,200,000	15,756,000	17,704,000	17,765,000	17,765,000
		0	0	0	0	0
	Research Plus Funding	1,465,000	1,449,280	1,349,600	1,346,240	1,400,000
	Capital Funding	1,823,000	3,100,000	2,100,000	2,100,000	2,100,000
	External Revenue	16,648,000	19,128,102	24,674,608	29,339,885	29,409,165
		0	2	8	5	5
	Total Revenue	37,136,000	39,433,382	45,828,208	50,551,125	50,674,165
		0	2	8	5	5
		Expenditure				
	Payroll Costs	24,098,123	24,173,256	26,703,390	27,747,760	28,124,884
		3	6	0	0	4
	OPEX Costs	13,246,456	13,353,938	17,688,702	21,739,018	21,909,181
		6	8	2	8	1
	Capital Labour	500,000	1,800,000	1,200,000	1,200,000	1,200,000
	Capital Materials	1,323,000	1,300,000	900,000	900,000	900,000
	Total Expenditure	39,167,579	40,627,194	46,492,092	51,586,778	52,134,065
		9	4	2	8	5
Operating Result (+) Surplus, (-) Deficit		-2,031,579	-1,193,812	-663,884	-1,035,653	-1,459,900
Approved CSIRO Operating Result		-1,885,000	-940,000	-940,000	-940,000	-940,000
Variance on Approved Operating Result		-146,579	-253,812	276,116	-95,653	-519,900



HR

