

# ATUC *Murriyang* / Parkes Update

Stacy Mader | 4th April 2022





# Summary of Latest Developments

Staggered release in observing schedule (Intuitive Machines / CryoPAF)

Parkes trials of the new support model

UWL notch filters and new noise source installed 17th March

MARS, 13MM receivers now integrated with TOS/MEDUSA

CS-Studio interfaces available to replace Glish OPERFCC/LOGUI

SDHDF definitions and spectral-line data processing software continue to be developed

"Alerta" notification system for critical alerts (i.e., MEDUSA, Euryale)







## August 2022

 Possible on-dish engineering fit out and testing of "narrowband" CryoPAF system

## **Master Equatorial**

 Loose bearing on backlash assembly, requires ~ 2 days to replace.





## Recommended use of 'Murriyang'

(action from last meeting – information added to https://www.atnf.csiro.au/research/publications/Acknowledgements.html)

Use of *Murriyang* is now present on the main Parkes website, and throughout the Parkes User's Guide.

Review of site signage and billboards on the Newell Highway to include Murriyang.

Users of the Parkes radio telescope are requested to acknowledge the ATNF by including the text:

• "The Parkes radio telescope is part of the Australia Telescope National Facility which is funded by the Australian Government for operation as a National Facility managed by CSIRO."

and may also add

• We acknowledge the Wiradjuri people as the Traditional Owners of the Observatory site.

The Parkes 64-m telescope has received the Wiradjuri name *Murriyang*, and users may recognise this in their publications. This can be done with a statement like:

- "observations were made with the Parkes 64m "Murriyang" radio-telescope"
- "observations with the Parkes 64m radio-telescope (recently given the Indigenous Wiradjuri name "Murriyang")"
- "observations with the Parkes 64m radio-telescope also known as "*Murriyang*" in Wiradjuri".





Murriyang 64m Parkes Radio Telescope

In the Wiradjuri Dreaming, Biyaami (Baiame) is a prominent creator spirit and is represented in the sky by the stars which also portray the Orion constellation. Murriyang represents the 'Skyworld' where Biyaami lives.







### Giyalung Guluman

18m decommissioned antenna

Meaning Smart Dish' this antenna had the ability to move along a railway raite while observing, and when linked to the main 64-metre antenna became pivotal in early work that determined the size and brightness of radio sources in the sky. The antenna was originally assembled at the CSIO Fleurs Radio Telescope site, Penrith NSW in 1960, was transported to Parkes in 1963 and became operational in 1965.



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#### Giyalung Miil 12m ASKAP testing antenna

Meaning 'Smart Eye' this telescope was commissioned in 2008 as a testbed for a special new type of receiver technology (hpased array feed, PAF) used on CSIRO's Australian Square Kilometre Array Pathfinder (ASKAP) antennas. The PAF is able see different parts of the sky simultaneously making it a 'smart eye'.





#### Thanks!

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