

■ Image credit: Ettore Carretti

Remote Access to the Parkes Telescope ATUC

David McConnell 30 October 2012



The Parkes Telescope

To make remote observing possible:

- provide computer control and monitor for all instrumentation
- provide a user interface to the system that works well remotely (ATCA, Mopra)
- make the telescope safe to be operated with no operator present (no other radio telescope of comparable size operates in this way)



Observing support

Self-supporting teams

- Parkes Observing teams will be encouraged to be self-supporting as much as possible.
- Observers will be expected to learn about the telescope's instrumentation and modes of operation by reading the Users Manual.
 - CASS will ensure the observing manuals are adequate
- Observers will be expected to prepare their observing schedules in advance (days - weeks) of their observing session.
 - A schedule preparation tool will be provided, and possibly schedule checking software.

Project Experts

- Each project will have a "Project Expert" (PE) scientist with expertise in observing with Parkes (already the case for a majority of projects)
- Inexperienced teams will get advice from CASS staff (Operations or Astro), and will be encouraged to develop their own expertise.



Observing support

Kinds of support

- Scientific advice well in advance of the observations; how to use the instrument to achieve the scientific goal.
- Technical advice shortly before the observations; how to observe given the current condition of the observatory.
- Support during the observations

Business hours 8:00 - 16:00 Mon - Fri	Project expert by phone, or in person if co-located. SO staff if problem is beyond PE. EO staff if repairs are needed.
After hours 16:00 - 23:00 Mon - Fri 8:00 - 18:00 Sat, Sun, Pub Hols	Project expert by phone, or in person if co-located.
Other	By arrangement with Project expert.



Observing support

Learning the new system

- Observers inexperienced with the Remote Observing procedures will need to be introduced to it at the Marsfield SOC. When Remote Observing is adopted (end 2012/start 2013), all observers will be deemed inexperienced and will need at least one introductory session at the SOC.
- Thereafter, if they have access to appropriate facilities, they can conduct remote observations from elsewhere.



Schedule for commissioning

Stage 1 - 4 December

- Installation of Telescope Protection System (TPS); including Vibration/Sweo monitor.
- System testing

Stage 2 - 6 December

- Live tests of TPS
- Remote observing from Marsfield SOC and Parkes
- Retain one person in the tower

Stage 3 - January 2013

- Trust the TPS
- Remote observing from SOC, and (eventually) elsewhere.



