Monitoring ATNF VLBI experiments

The following notes assume all 4 ATNF telescopes (Parkes, ATCA, Mopra and ASKAP) are being monitored. Ignore the parts of the notes which refer to telescopes not being used for the current experiment. These notes also do *not* explain how to setup an experiment - refer to the telescope specific notes elsewhere in this wiki.

Remote observing qualification

You must be appropriately qualified for remote observing with Parkes and ATCA, even if observing from the SOC. Refer to the specific observing documentation beforehand, or discuss with CASS staff.

VLBI observing Quiz

Please ensure you know the answer to ALL of the questions on this quiz page. If you cannot answer them, then please re-watch the videocasts and re-read this documentation.

If you feel the documentation is not clear about any of this, then please send feedback to Chris.

Observing Quiz

Setup

Antenna Monitoring

Run the following standard telescope monitoring pages:

Parkes	https://parkes-ops.atnf.csiro.au/jPORTAL/login.jsp	Parkes Portal
Parkes	https://parkes-ops.atnf.csiro.au/jFROG/login.jsp	Parkes Monitoring
ATCA	https://ca-ops.atnf.csiro.au/jPORTAL/	ATCA Portal

Make sure you register as as OIC at Parkes and ATCA and you "book" the observing beforehand

VLBI Monitoring

Run the following VLBI specific monitors

https://www.narrabri.atnf.csiro.au/vlbi/lba_monitor.html

http://www.evlbi.atnf.csiro.au/recmon/index.php

recmon must be run on a machine with working sound turned on. Test this "Alarm Test" button.

Make sure all appropriate telescopes/recorders are enabled (or disabled).

VNC

Connect your local VNC client to the following VNC sessions. Refer to these notes for notes on setting up ssh tunneling if observing remotely. If you do not know the current VNC password, refer to these notes

Parkes	joffrey:1	All control
Parkes	joffrey:2	Not used
ATCA	xbones:1	ATCA antenna control
ATCA	xbones:2	VLBI control
ATCA	caccc1:1	CABB control and monitoring
Mopra	bigrock:1	Antenna and VLBI control
ASKAP	cira10:1	Antenna and VLBI control

Antenna notes

- ATCA
- Parkes
- Mopra
- ASKAP

Video Screencasts

Video tutorials for observing

- Parkes
- ATCA
- Mopra
- ASKAP
- Cdisko

Monitoring Summary

Regular Monitoring

Check the following every ~10min on lba_monitor and recmon web monitors.

- Pages are updating (check UTC time)
- No telescopes idle (see below)
- All telescopes on the same source (see below)
- Wind speed
- Recorder is running
- Data sampler statistics are OK
- PPS errors are low

Note that when ATCA or Mopra are hardware wind stowed, they may report to be "idle" or "drive error". Look at the wind monitor to decide if that is what has happened.

Because of the elevation limit, Parkes often misses out some sources. It will then just go to the next source it can reach. If the ATCA/Mopra elevation is < 30deg, this is most likely what has happened. You can verify this if you want by looking at the experiment ".sum" file in the ftp area. ASKAP has a similar issues because sources rise at ASKAP much later than on the East coast.

Full check (every ~30min)

Check the following in the specific telescope VNC windows

ATCA, Mopra, Parkes

- DAS levels OK
- Recmon running

ATCA

- caobs running OK
- phases look OK on strong compact sources (see below)

The PI should have scheduled automatic phasecal commands within the schedule. If not you should run "corr pcal" in caobs if the phases drift too far apart, or consider dropping antenna from the tie array output if the phase stability is too poor on the longer baselines.

Parkes

- atsnap running

Mopra

- vlobs running

- Tsys values look reasonable (not ~0)
- GTP/SDO values OK

ASKAP

- px14_record running
- Stack counting down while tracking
- Antenna tracking
- No drive failures (red light on ASKAP GUI)
- ASKAP GUI not frozen
- VLBI drive not frozen

From:
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Permanent link:
http://www.atnf.csiro.au/vlbi/dokuwiki/doku.php/lbaops/atnfmonitoring

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