

ATCA/Mopra report

Phil Edwards

ATUC meeting 1 May 2007



ATCA shutdown

- Four week shutdown 26 March to 20 April
- Replacement of 3 antenna UPSs
- Refurbishment of azimuth drives and brakes
- Installation of last 2 shielded racks
- Installation of prototype CABB racks
- Test of rapid skull and xbones changeover
- Air conditioner and cryo work
- Installation of 7mm/ka-band/Q-band receivers
- Preparations for 7mm translators



7mm receivers 15-feb-2007

7mm upgrade

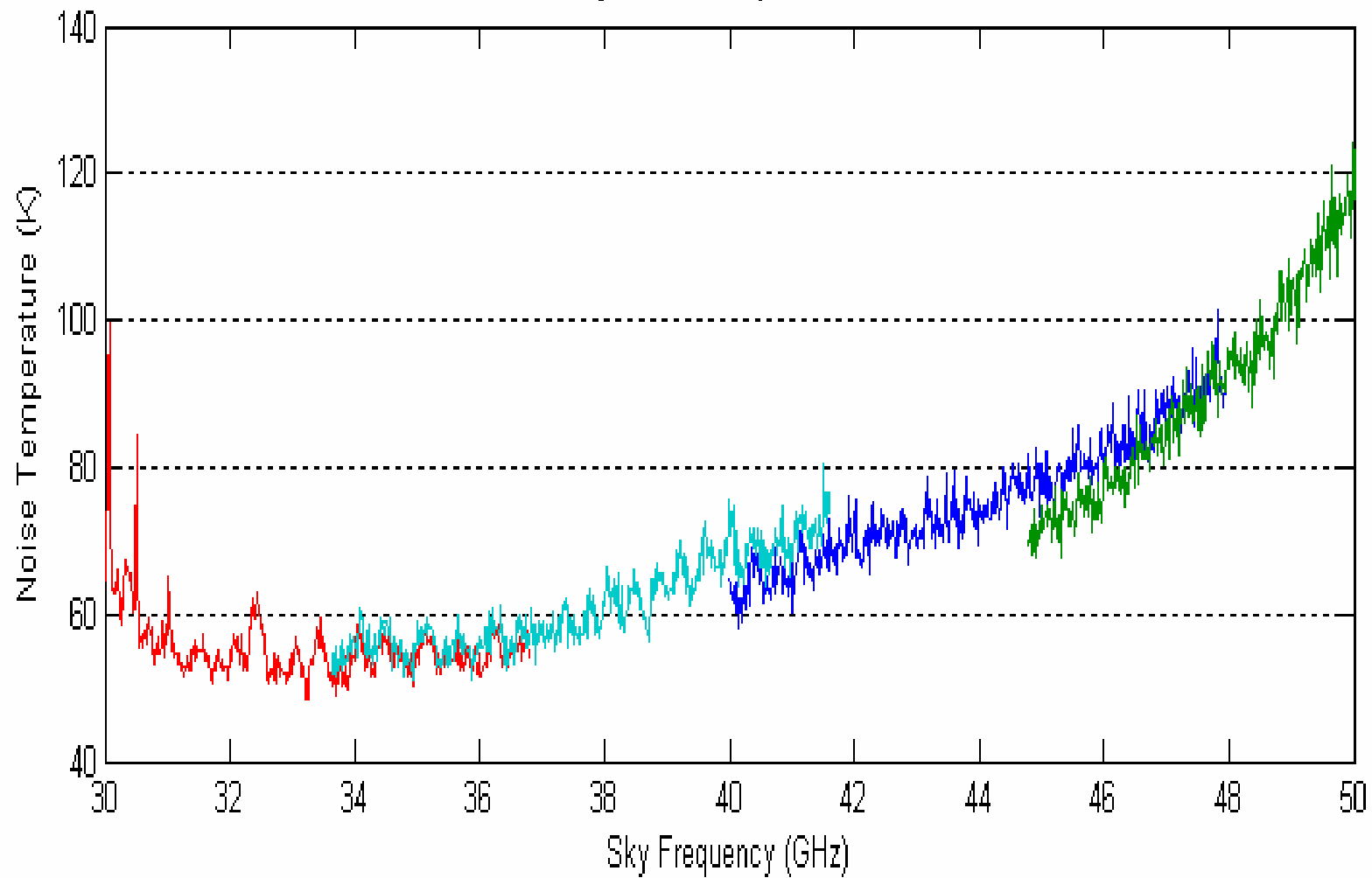
- Co-funded by ATNF and NASA/DSN
- Ka-band (32 GHz) tracking for ~10 hours per week, with allowance for emergency support
- First test NASA track on May 11th

- Work on translators for 7mm receivers continuing
- Monitoring of calibrators as part of C007
- 7mm option to be added to OPAL
- Sensitivity calculator to be updated

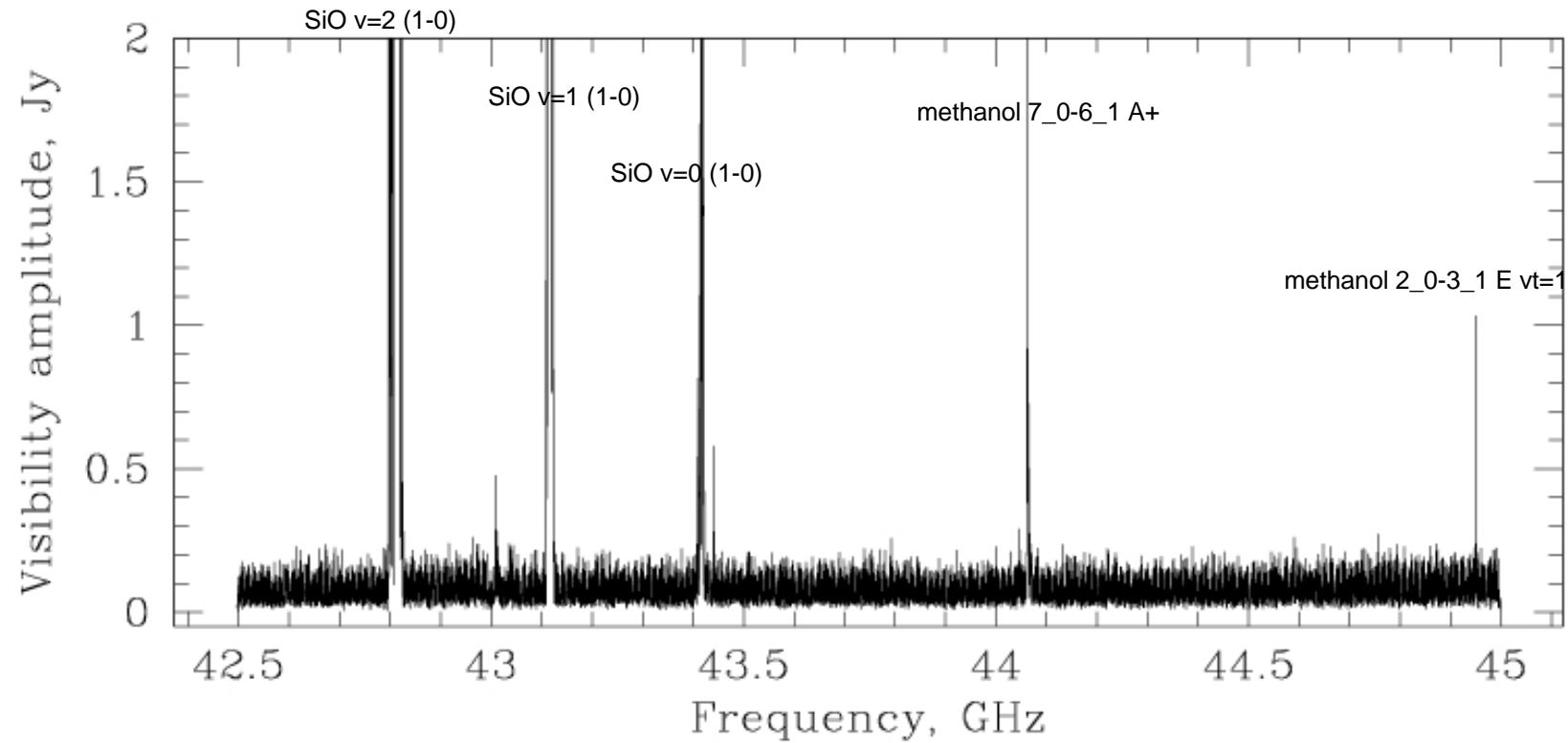
- For more information <http://www.atnf.csiro.au/observers/docs/7mm>

7mm Receiver System Performance - CA03 Rx07 A Pol

System Temperature

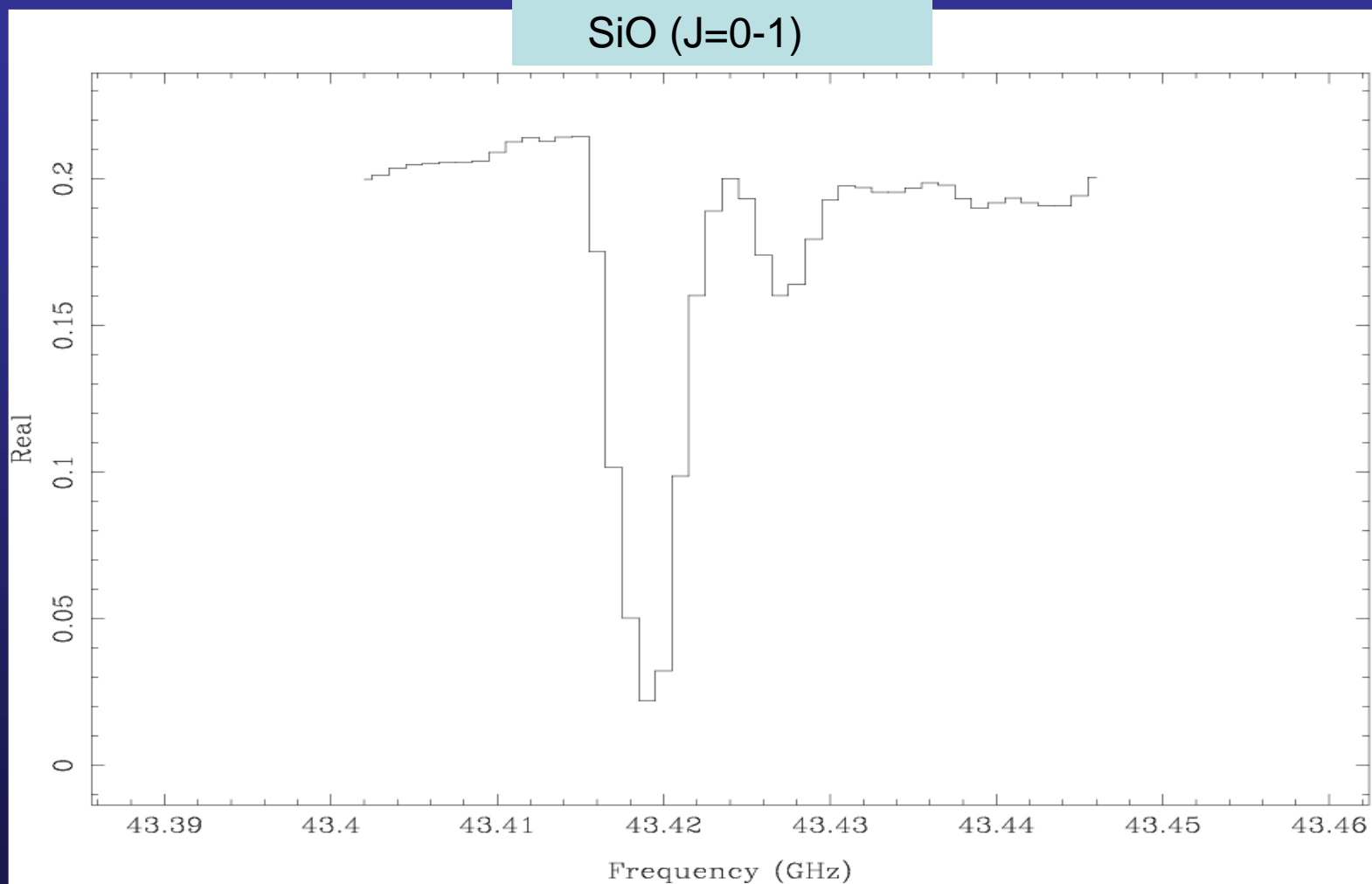


Orion's Spectral Lions



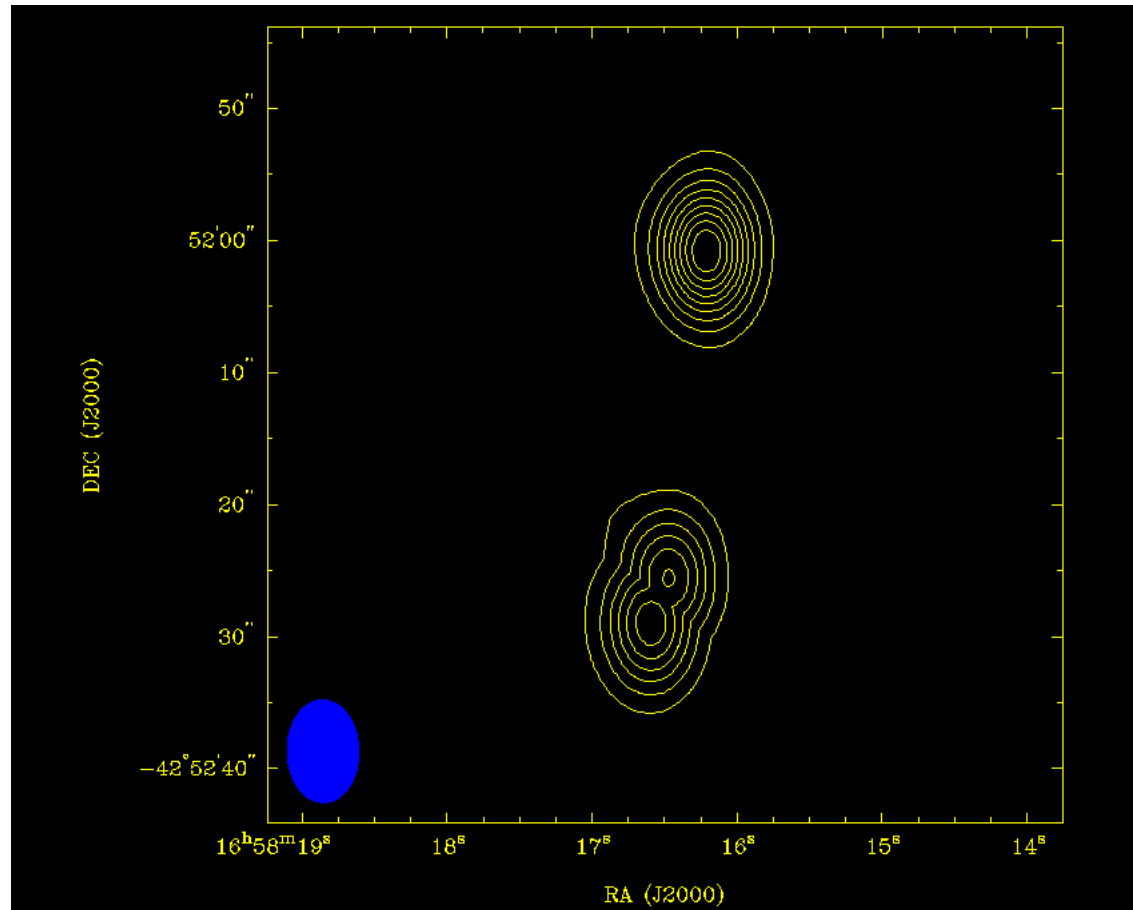
Courtesy Feain & Voronkov

SiO against Sgr B2



Courtesy Voronkov & Feain

First 7mm image!



36GHz methanol masers in G343.12-0.06 (IRAS 16547-4247)

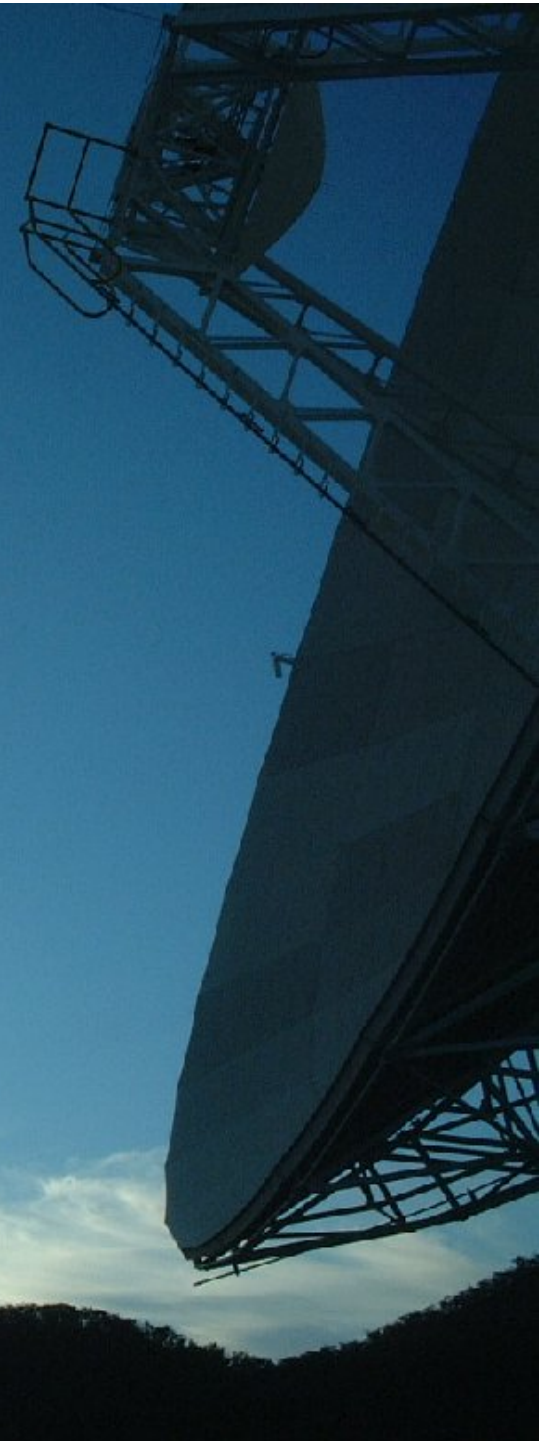
Courtesy Voronkov

ATCA remote observing

- Relaxed requirements during Oct06 term
- Remote observers, DAs, local staff, Shaun Amy, polled on the success of the trial
- General support for continuation of the relaxed requirements, but awareness of benefits of being on site, especially for students
- “Currency” requirement to remain
- Competency requirement for 3mm observing?
- Announcement to be made in near future
- (Further reading: Lockman, astro-ph/0507140)

Mopra issues

- **Observing into December 2006**
- **Power and air con issues over the summer**
- **Recent MOPS improvements**
- **mm research scientist appointed**
- **mm operations support position shortlisted**
- **Documentation being updated**
- **Ripples across band**



Mopra observing

- Observing from Narrabri the default
- Trials from Epping with experienced observers after second fibre (connecting Mopra directly to Narrabri) operational





Vacation students

James McGeachin
Neural Networks

Kate Randall
Intra Day Variables

Dilini De Silva
Antenna drive systems



Tree planting 22 April 2007

Funded by NCMA with small in-kind contribution from ATNF