Science Operations

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Outline

Tidbinbilla

Mopra

LBA

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ATCA

Parkes

Parkes remote observing questionnaire

Time Assignment Committee

Tidbinbilla

DSS35 nearing completion, and DSS36 starting construction. (Will this new capability free up more host country time?)

Yannet Contreras has taken over the role as Marsfield “Friend of Tid”

Shinji Horiuchi remains the CDSCC contact person

Mopra

ATUC suggests a report into the oversubscription rate of the telescope for ATNF general users would be useful after the next Time Allocation Committee meeting in February.

For 2014APR, nine proposals were received for National Facility Mopra time, with a total time request of 550 hours.

Eight proposals were allocated time, with a total of 509 hours being scheduled.

The oversubscription rate is thus 550/509 = 1.1

LBA

Currently the most highly oversubscribed ATNF facility!

Two sessions in June 2014 with observations in the 1.6 and 8.4GHz bands.

Occasional out-of-session for RadioAstron or time-critical observations with a subset of LBA antennas.

Observing time (in hrs) by year and band

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
20cm	36	37	107	142	58	65	44	20	84	64
13cm	64	44	54	91	51	11	37	70	75	0
6cm	22	60	42	14	65	95	88	72	31	117
3cm	98	192	127	99	226	168	290	247	148	201
15mm	24	0	12	21	105	57	60	54	113	84
9mm	0	0	0	0	0	0	0	0	(4)	2
total	244	333	341	366	505	396	519	463	385	474

Computing Issues

Some users have expressed a desire to use software packages on ATNF computers that are not currently installed. ATUC recommends that a formal channel for requesting such installations be set up.

Requests should be emailed to atnf-ci@atnf.csiro.au

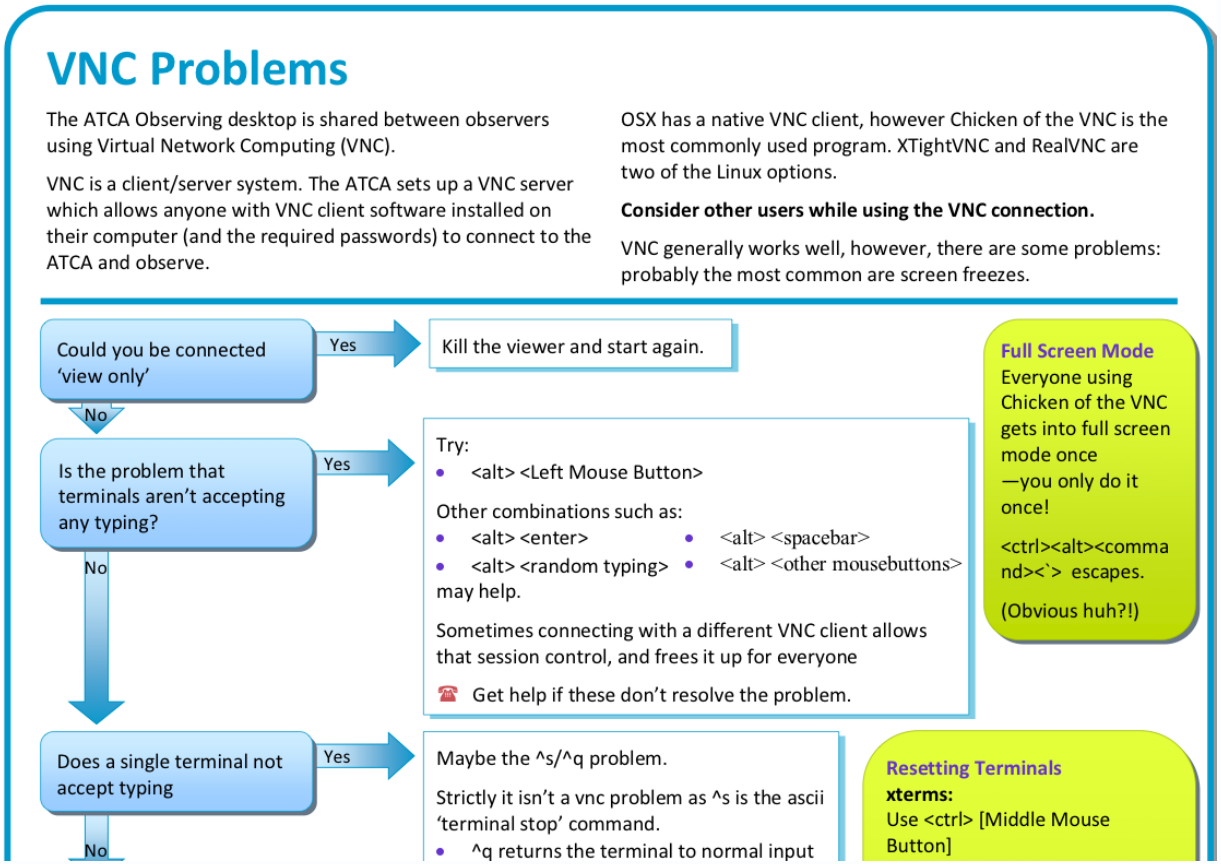
ATUC recommends that the ATOA system be updated to either allow individual files to be downloaded as a batch job or that the transfer of a single large file be easily resumed.

In the near future our network access will be by a 10Gbps link to Canberra: it is hoped this will improve ATOA downlink speeds

Go to http://www.atnf.csiro.au/observers/passwords/ to obtain the new VNC password. Password will be changed each semester

ATCA issues

Improved ATCA Duty Astronomer training documentation



VNC Problems

The ATCA Observing desktop is shared between observers using Virtual Network Computing (VNC).

VNC is a client/server system. The ATCA sets up a VNC server which allows anyone with VNC client software installed on their computer (and the required passwords) to connect to the ATCA and observe.

OSX has a native VNC client, however Chicken of the VNC is the most commonly used program. XTightVNC and RealVNC are two of the Linux options.

Consider other users while using the VNC connection.

VNC generally works well, however, there are some problems: probably the most common are screen freezes.

Could you be connected 'view only'

Yes → Kill the viewer and start again.

No

Is the problem that terminals aren't accepting any typing?

Yes → Try:

- <alt> <Left Mouse Button>

Other combinations such as:

- <alt> <enter>
- <alt> <spacebar>
- <alt> <random typing>
- <alt> <other mousebuttons>

may help.

Sometimes connecting with a different VNC client allows that session control, and frees it up for everyone

☎ Get help if these don't resolve the problem.

No

Does a single terminal not accept typing

Yes → Maybe the ^s/^q problem.

Strictly it isn't a vnc problem as ^s is the ascii 'terminal stop' command.

- ^q returns the terminal to normal input

No

Full Screen Mode

Everyone using Chicken of the VNC gets into full screen mode once —you only do it once!

<ctrl><alt><command><`> escapes.

(Obvious huh?!)

Resetting Terminals

xterms:

Use <ctrl> [Middle Mouse Button]

ATCA issues

Offset of ATCA calibrators

Fixed in new calibrator database – individual observers to be notified

ATCA/CABB fault reporting

http://www.narrabri.atnf.csiro.au/observing/CurrentIssues.html (e.g., 1MHz zooms first scan)

http://www.narrabri.atnf.csiro.au/observing/IssueArchive.html

New Fault Report system coming soon!

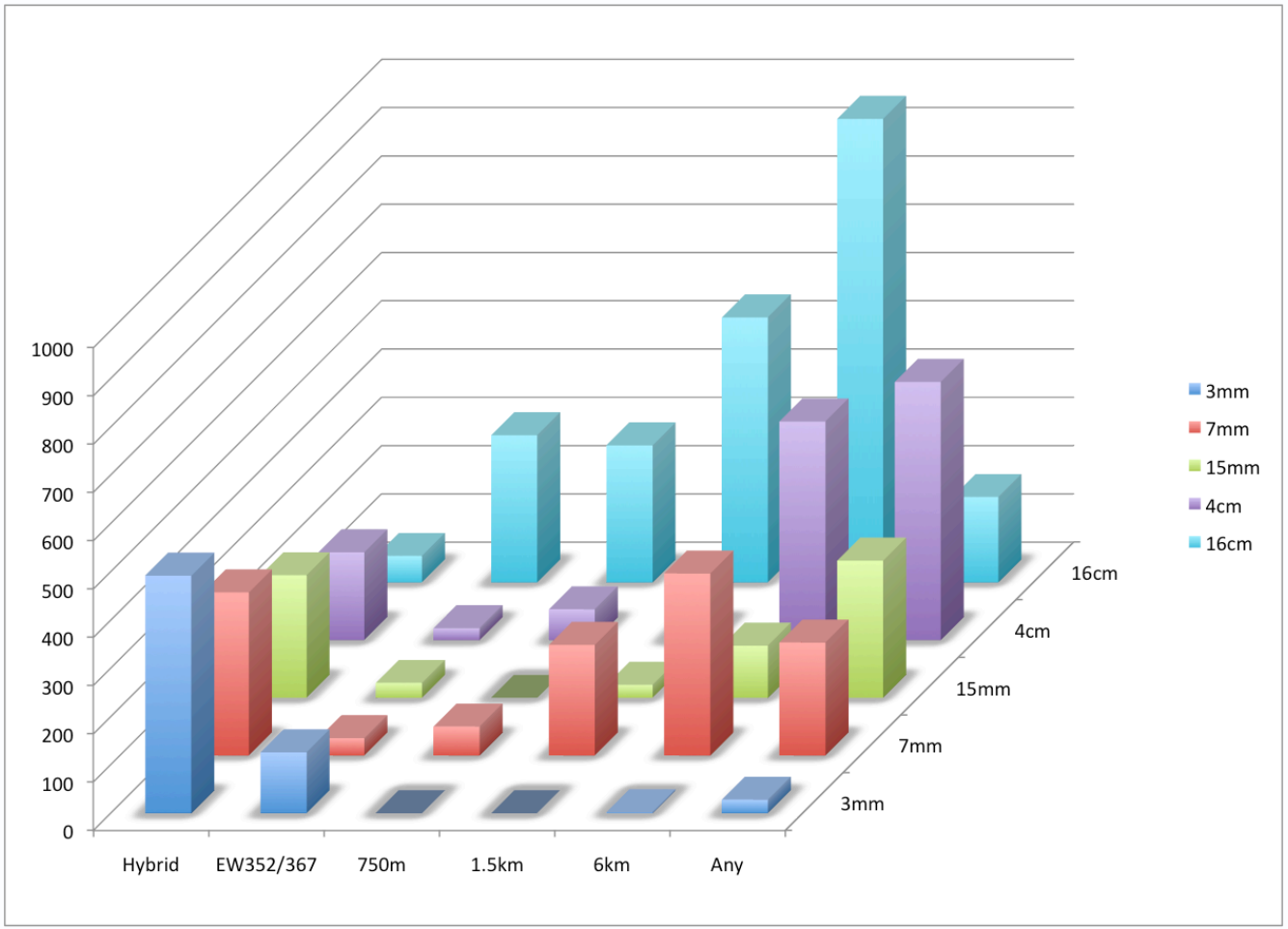
Dynamic Scheduling of mm observing with ATCA

A survey of representative 2013APR mm observers suggests that 10~15% of time is lost to poor weather.

http://www.narrabri.atnf.csiro.au/observing/schedules/2014AprSem/Swapsumm.html

Proposers may include a weather contingency in their time request

ATCA requested band/array for 2014APR



Parkes

Observers are requested to book two weeks in advance, so we

(i)can check their remote observing status and

(ii)arrange any required training sessions.

However, many users book late and on several occasions users have registered as Observer in Charge without having previously booked for the relevant slot.

We will continue to require first-time users of Parkes to travel to the SOC: we believe that first time users benefit from having the opportunity to interact with staff. Users are much more likely to ask questions, and provide feedback, in person.

For similar reasons, we believe both the ATNF and users benefit from observers visiting annually to requalify.

Parkes issues

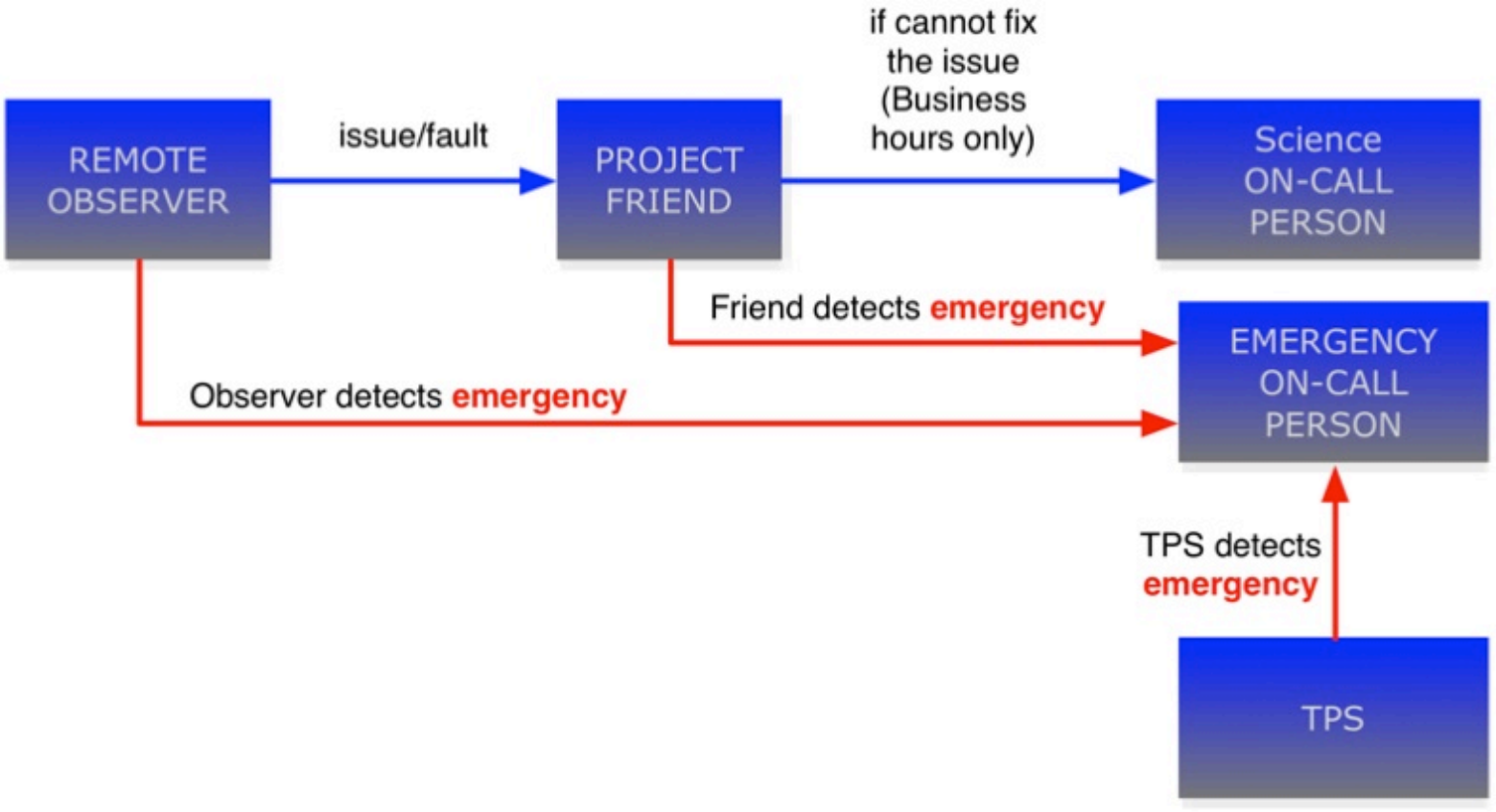
A new HIPSR spectral line mode is being commissioned, with 16k channels across 200MHz. This provides 4x improved frequency resolution (~12 kHz) over the other HIPSR mode.

Pulsar data is now being staged to Marsfield, reformatted as required, and archived in the Data Access Portal in Canberra.

The Astro group is now providing a Parkes Support Astronomer in the SOC to provide (business hours) assistance to observers

Parkes remote observing

…a flow chart describing who observers should contact (and at what hours) would be useful.



Parkes remote observing questionnaire

1. Overall, the change to Parkes remote observing has been ...(e.g., successful? welcome? overdue? a step backwards?)
2. Using the PORTAL to coordinate observing is ...
3. The FROG webpage is ...
4. Documentation about the new procedures is ...
5. Notification from ATNF to observers about the changes to Parkes operations could be improved by ...
6. The set-up of the Science Operations Centre (SOC) at Marsfield is ...
7. The one thing I would like to see changed (about Parkes remote observing!) is ...

Summary

The change to remote observing has been welcome and successful.

Use of the PORTAL to coordinate observing works well.

FROG is a useful tool (but is another page to keep an eye on).

Documentation is okay, if a little unwieldy.

Notifications from ATNF have been fine.

The SOC works well, but some issues raised with accommodation and meals.

Several comments received on training and requalification.

TAC

Proposal deadline is 5pm AEST Wednesday June 18th.

Following suggestions from the Time Assignment Committee, sections 3.2 and 3.3 of the OPAL Users Guide have recently been revised and should be read by all proposers.

A document describing TAC procedures has been drafted. It is expected it will be made publicly available after the next TAC meeting.

From a recent arXiv posting:

"We thank the time allocation committee of the Australia Telescope National Facility for two generous allocations on the ATCA to support this multiwavelength campaign."

Thank you

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Dynamic scheduling at the ATNF

Dynamic scheduling enables a telescope to be scheduled more efficiently. The GBT has a Dynamic Scheduling System, described at https://science.nrao.edu/facilities/gbt/schedules/dynamic .

Dynamic scheduling is most applicable to the ATCA, and to Parkes to a lesser degree. The ‘mm-swap’ scheme implemented by Bob Sault was an attempt to improve the lot of 3mm observers, but suitable pairs of projects are rare.

With the ATNF model of (most) observers travelling to the site or SOC to observe, dynamic scheduling is more difficult unless observers are prepared to extend their stay.

Dynamic scheduling at the ATCA is complicated by the need to reconfigure the array, reconfigure CABB, and coordinate maintenance periods between sites.