Welcome   Work   **About Me**

/data /documentation   2011

My Research Blog

Here you'll find data, documentation and other tips/tricks/links to stuff relating to astrophysics and radio astronomy. Please email me if you need any information about what's contained here, and remember to contact me if you want to use any of it for your presentations/publications. As always, you use all scripts and data here at your own risk.

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SKA-SA 2011 PRESENTATION   2011/12/02

This year I presented a few results from the Beamsims collaboration. You can get a copy of the presentation off the following link:
http://www.ast.uct.ac.za/~bradley/data/skasa_2011/frank_ska2011.pdf

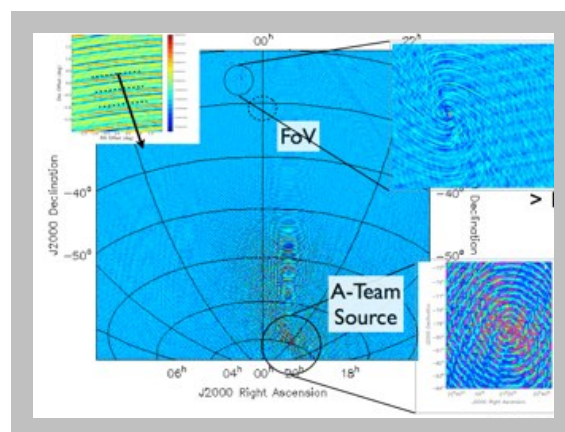The Beamsims team comprises the following members:
Oleg Smirnov (ASTRON)
Isak Theron (EMSS)
Ian Heywood (Oxford)
Ludwig Schwardt (SKA-SA)
Jasper Horrell (SKA-SA)
and, of course, myself as the official crank turner.

The purpose of this collaboration is to investigate the performance of different primary...

Read more...

MY CASA TUTORIAL   2011/09/13

On 13 September I did a hands-on tutorial of a CASA reduction of a KAT-7 observation of 3C 273.

A pdf of the presentation may be downloaded from the following link:
frank_casatutorial_UCT.pdf

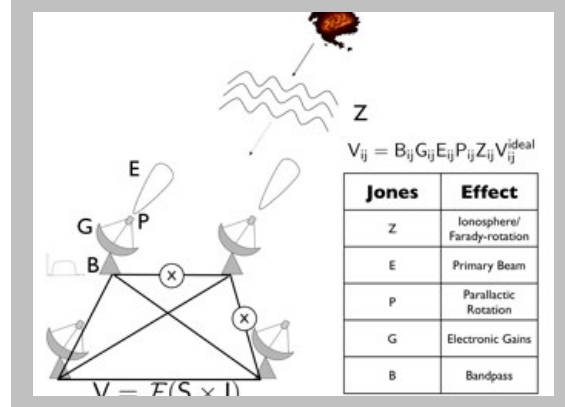You can download the script I used to do the tutorial from the following link:
3c273_redux.py

Finally, if you want access to the data, please email me directly at:
bradley@ast.uct.ac.za
I'll send you a download link for the file.

To untar it, do a tar xjvf 3C273.tar.bz2. The unzipped MS will have a weird prefix...

Read more...

IF YOUR AIRPORT STOPS WORKING....   2011/09/07

After trying to connect to two different wireless networks (one at SKA-SA and the other at UCT), I found that the network settings weren't getting the correct IP from the network.

I've found a very effective fix to this on the following forum:
http://macosx.com/forums/mac-os-x-system-mac-software/304603-airport-imac-intel-problem.html

The fix is as follows:
1. Switch off your airport.
2. Navigate to: /Library/Preferences/SystemConfiguration
3. Remove the following files:
...

Read more...

MY CASA CORNER   2011/06/30

I've recently had quite a few people asking for references in radio astronomy data reduction.

CASA (Common Astronomy Software Applications) is the most useful radio astronomy data handling software package, and is distributed and maintained by the NRAO. For more information, visit their website:
http://casa.nrao.edu/

If you're interested in simulations, have a look at the following page:
http://casaguides.nrao.edu/index.php?title=Simulating_Observations_in_CASA_3.2
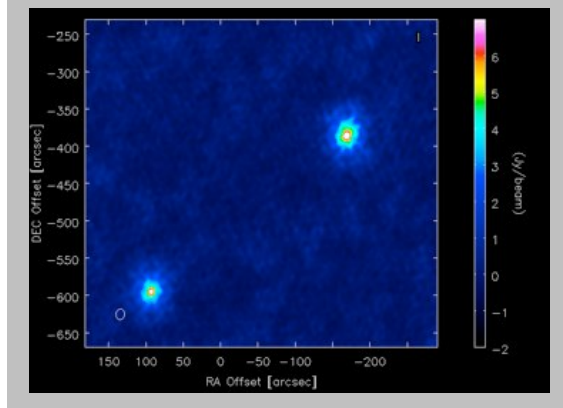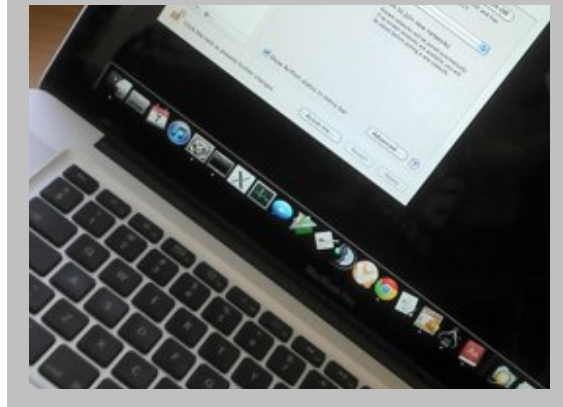
CASA has an excellent training...

Read more...

MY KAT-7 OPERATIONS GUIDE   2011/06/27

The html version is available on the following link: operations_guide_bf

This is based on my on-site and remote- observations experienced. Its been converted from the latex source, so its pretty messy and is constantly changing.

Read more...

2011/06/27

I'm always doing MeerKAT simulations as part of my studies. Using CASA's simdata task (in conjunction with clean, of course), I've produced processed images as well as PSF models for various integrations.
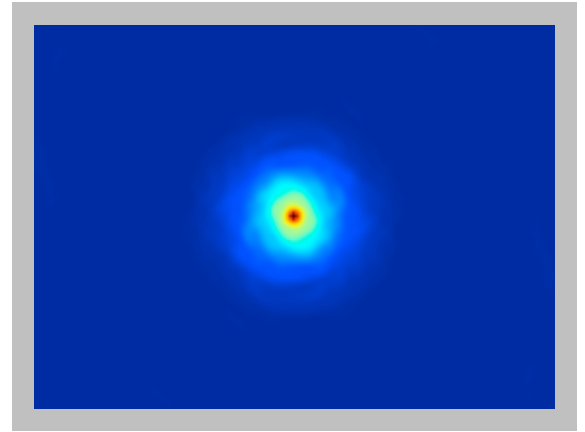
MEERKAT PSFS

The fits files are available here. Just (right-click) -> (save-as) to download.

SIM.N628.1024.M64.28800s.dirty.psf.FITS
SIM.N628.1024.M64.7200s.dirty.psf.FITS

Don't worry about the N628 tag - that's just the source identifier.
Both fits files are 1024x1024 pixels, corresponding to observations of...

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Made on a Mac