VLBI Disks

The disks we use for VLBI in Australia are Apple (R) XRAIDs. They are sets of 7 hard drives in a proprietary mounting with some Apple firmware attached. For VLBI we use **RAID5** data distribution, which effectively makes any one disk redundant (see here for more information). We do this to minimise potential data loss (as much as astronomers love our disk space we love our data more).

There are a number of different sized disk sets used in VLBI, the most common is sets of 500GB disks (total RAID size 2.8TB in 2x 1.4TB slices). Swinburne has some smaller disk sets, and Curtin has some 750GB disk sets (3x 1.4TB slices). Under new kernels (as of October 2008) we are able to create and record to devices larger than 2TB, so disk sets will now typically be either 3.0TB or 4.5TB, with no slices.

Typical recording times for a disk set are 12 hours/slice = 24hrs per set for normal speed recording (Cd, Ho etc), but some experiments at ATCA and Pks (and sometimes Mp) use 1 slice every 6 hours. For information on the data rates, bandwidths, frequencies and so on, see the VLBI wiki for the session and experiment you are interested in.

We *track the disks* used in VLBI, as there are many sets, and it's important to know where they are at any given time. This is done centrally through the VLBI wiki so an observer at each telescope, and the operators at Swinburne, ATNF and Curtin can track the disks and modify their status as required. Whenever disks are received or shipped, or put on/taken off line, this should be recorded on the wiki: http://www.atnf.csiro.au/vlbi/wiki/index.php?n=Main.DiskSummary. If you need to modify anything on the VLBI wiki you'll need an account, which you can apply for on the VLBI wiki home page.

At present the CIRA correlator operator (disk logistics) is **Claire Hotan**, so if you're doing something with disks, you need to notify her of any changes you make to the disks mounted on cuppa, or their whereabouts if any are shipped/received.

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