

## Australia Gears Up For Square Kilometer Array Telescope With New Supercomputer

February 20, 2012

<http://www.asianscientist.com/2012/02/topnews/uwa-icrar-super-computer-for-square-kilometer-array-telescope-2012/>

*AsianScientist (Feb. 20, 2012)* - In preparation for the April announcement on the [Australia-New Zealand Square Kilometer Array \(SKA\) bid](#), a new supercomputer that is 10,000 times faster than an average office desktop computer has been installed at the University of Western Australia (UWA).

But with a supercomputer also comes the need for a 'super' data storage facility.

Scientists at the International Center for Radio Astronomy Research (ICRAR) say the AU\$2 billion SKA will also generate one exabyte of data ? a billion terabytes – every day while it searches the sky with the power to detect airport radars in other solar systems 50 light years away.

Basically, the amount of computer data generated by the entire world in a whole year will need to be stored in a single day for the telescope.

To meet that unprecedented need for data storage, the ICRAR, a joint venture between Curtin University and The University of Western Australia, has signed an agreement with DataDirect Networks to develop new data storage capability for the telescope.

“Combining DataDirect Networks' expertise in providing ultra high-speed access to large amounts of data with our experience in how astronomers need to access their material gives us the opportunity to develop the best solution,” he said.

ICRAR is also preparing to develop a low-frequency component of the SKA ? dubbed “SKA-low” ? which, unlike the SKA’s high-frequency collecting “dish” antenna array, consists of new electronic antennas with no moving parts.

The SKA is a continent-wide Australasian project with radio telescope sites that that extend to New Zealand. Results on the SKA bid is expected to be made by the international SKA Board in London in April. The other bid comes from South Africa.

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Source: [ICRAR](#).

Photo: Swinburne Astronomy Productions for SKA Project Development Office.

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