

Work begins on Australia's best yet climate projections

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Australian scientists have begun the process of delivering the most detailed national climate change projections yet.

CSIRO produced national climate projections in 1990, 1992, 1996 and 2001 and, jointly with the Bureau of Meteorology (BoM), in 2007. The next set of national climate projections are planned for release in 2014, representing a significant [climate science](#) milestone timed to follow the next official, global assessment by the Intergovernmental Panel on Climate Change (IPCC).

“In three years, Australians will have the latest climate projections for the 21st Century for a range of factors including; sea levels, seasonal-average temperatures, rainfall, as well as extreme weather events such as heatwaves, fires, droughts, floods, and cyclones,” says a senior scientist with the Centre for Australian Weather and Climate Research, CSIRO’s Dr Penny Whetton.

In an address today to the Greenhouse 2011 climate change conference in Cairns, Dr Whetton said that information will only be of value if it is clearly communicated and then rigorously applied in formulating adaptation strategies.

“There is a massive demand for climate change information, so we need to generate projections based on the latest science, delivered in ways that are relevant to the general public, government, industry, consultants and NGOs.”

Dr Whetton said scientists working on the post-2014 projections will have access to twice the number of climate models available to them in 2007, as well a new set of emission scenarios.

The research phase will last until mid-2012 followed by the development of information packages for Australian regions and communities.

The challenges involved in providing detailed, publicly-accessible climate projections include:

- Tailoring projections to the needs of different audiences, such as basic projection information for the general public and more technical projections for use in risk assessments
- Rationalising the rapidly growing body of research relevant to future climate change in Australia
- Clearly communicating levels of confidence in each aspect of the projections
- Integrating model-based climate projections with emerging trends in the observations and theoretical perspectives
- Developing more relevant localised projections for regions and cities.

“I am confident that Australian climate change scientists are developing new methods which will ensure these challenges are met,” Dr Whetton said.

For example, researchers will be working with social scientists who have evaluated attitudes to climate change to target the climate messages for specific audiences. A CSIRO report on such attitudes was prepared this year for the Garnaut Climate Change Review – Update 2011.

An example of regionally relevant research is the Climate Futures

Tasmania project, the most detailed study yet in Australia of the regional impacts of climate change.

Provided by CSIRO

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