

New insight into climate change in the Pacific

November 29 2011

A new report presents the most comprehensive scientific analysis to date of climate change in the Pacific region.

New research providing critical information about how climate change is affecting Australia's [Pacific](#) island neighbours and East Timor has been released today by the Australian Government's Pacific Climate Change Science Program (PCCSP).

The landmark, peer-reviewed publication, *Climate Change in the Pacific: Scientific Assessment and New Research*, presents the most comprehensive scientific analysis to date of climate change in the Pacific region.

Co-editor of the report, the Bureau of Meteorology's Dr Scott Power, said the findings would be presented at an event during the 2011 United Nations [Climate Change Conference](#) being held from next week in Durban, South Africa.

"The research provides clear evidence of how the climate has changed across this region. For example, the past decade has been the warmest on record and ocean [acidity levels](#) are continuing to increase in response to rising [atmospheric carbon dioxide](#) concentrations," Dr Power said.

According to co-editor, CSIRO's Kevin Hennessy, the research indicates future decreases in droughts in most parts of the Pacific and decreases in the frequency of [tropical cyclones](#) by the end of the century. "We also expect widespread increases in [extreme rainfall](#) events, large increases in

the incidence of hot days and warm nights, increases in the proportion of tropical cyclones in the more intense categories and continued sea-level rise during this century," Mr Hennessy said.

The PCCSP has been working with national meteorological services and other partners in the Pacific to develop this climate knowledge and build the region's capacity to undertake [climate research](#).

Salesa Kaniaha from the Vanuatu Meteorology and Geo-Hazard Department said prior to the release of this research there had only been limited country-specific climate information available.

"This report therefore addresses a crucial need for reliable information to help Pacific countries effectively plan for climate change," Mr Kaniaha said.

The report includes climate projections for Cook Islands, East Timor, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

Mr Hennessy also announced that information about the future climate of these countries would be easily accessible via a new interactive online tool called Pacific Climate Futures.

"Pacific Climate Futures allows the user to explore future changes in various aspects of the climate including temperature, rainfall, wind, sunshine and humidity for 20-year averages around 2030, 2055 and 2090 under three greenhouse gas emissions scenarios," he said.

The PCCSP is delivered by the Bureau of Meteorology and CSIRO and managed by the Australian Department of Climate Change and Energy Efficiency in collaboration with AusAID as part of Australia's five year,

\$328.2 million, International [Climate Change](#) Adaptation Initiative.

Provided by CSIRO

Citation: New insight into climate change in the Pacific (2011, November 29) retrieved 25 April 2024 from <https://phys.org/news/2011-11-insight-climate-pacific.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.