

The World Climate Research Programme (http://wcrp.wmo.int) will host a major international Open Science Conference (OSC) on 24-28 October 2011 in Denver, Colorado, USA.

WCRP is sponsored by the World Meteorological Organization (WMO), the International Council for Science (ICSU) and the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

A better understanding of the behaviour of the climate system and its interactions with other Earth system components is critical to predict its future evolution, reduce vulnerability to high impact weather and climate events, and sustain life. To prepare for meeting these challenges, the WCRP Open Science Conference provides a unique opportunity to bring together major disciplines and leaders of the Earth system research community to help identify opportunities to advance further understanding and prediction of variability and change in the Earth's climate system from seasons to centuries, and from regions to the entire globe.

Through active dialogue among the international environmental change research experts, the OSC will:

- Appraise the current state of climate science, thereby making a measurable scientific contribution to the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC);
- Identify key opportunities and challenges in observations, modelling and analysis towards understanding and predicting the Earth's climate system;
- Facilitate discussion on interdisciplinary research required to understand and predict responses of the Earth as a system to climate variability and change, thus helping chart the path forward over the ensuing decades
- Highlight priority research in support of the Global Framework for Climate Services initiated at the World Climate Conference -3.

By entraining early career scientists and students from across the world, especially less-developed and developing nations and regions, the OSC will facilitate growth of the diverse future workforce needed to meet the increasingly complex scientific challenges of the future.

The conference aims to attract the world's experts to provide a unique synthesis of current research findings on climate variability and change, to identify the most urgent scientific issues and research challenges, and to ascertain how the WCRP can best facilitate research and develop partnerships critical for progress in the future.

