WCRP OPEN SCIENCE CONFERENCE
CLIMATE RESEARCH IN SERVICE TO SOCIETY

24–28 October 2011, Denver, Colorado, USA
conference2011.wcrp-climate.org
The World Climate Research Programme (WCRP) will hold an Open Science Conference (OSC) with the theme of "Climate Research in Service to Society" and will commemorate the 30th anniversary of WCRP. This large and unique assembly of the international scientific community will identify key scientific challenges and opportunities to advance understanding and prediction of variability and change of Earth’s climate system on all space and time scales. It will also stimulate new projects and initiatives to help WCRP coordinate national efforts and advance its scientific objectives. Under the theme “Climate Research in Service to Society”, the OSC will assist WCRP and its partners to identify and develop the climate information required to address climate-related challenges facing all citizens of the planet.

Specifically, the OSC will:

- Identify key opportunities and challenges in observations, modeling, analysis and research required to understand and predict responses of the Earth system to climate variability and change;

- Provide an internationally-based “state of knowledge” for the upcoming fifth assessment report of Intergovernmental Panel on Climate Change (IPCC);

- Facilitate cross-coordination among scientific disciplines involved in the WCRP, as well as with other international research programmes, including the Earth System Science Partnership (ESSP); the World Weather Research Programme (WWRP) and other global changes research programs; and

- Help WCRP identify the information needs required to reduce vulnerability of people, ecosystems and infrastructure to high impact weather and climate events and to build more sustainable systems.

**CONFERENCE PROGRAM**

The WCRP OSC is organized around daily themes that reflect integrative aspects of the WCRP programme, as well as connections to other international research programmes. Each day will consist of plenary presentations and discussions by leading scientists and conference participants who are informed by community-based position papers. The plenary sessions will be followed by parallel and poster sessions, which will be the primary means for conference participants to present their research findings. The poster sessions will have their own dedicated time for viewing and one-on-one discussions with authors, thus avoiding overlap with the plenary and parallel sessions. Moreover, groups are encouraged to self-organize and submit cluster of posters addressing a specific topic, preferably as part of one of the planned sessions. All sessions are structured to foster discussion and dialogue.

**DAILY THEMES, POSTER AND PARALLEL SESSIONS:**

- **The Climate System Components and Their Interactions**
  
  Sessions include:
  - Predictability, initialization, and prediction: sub-seasonal to multi-decadal
  - Detecting, understanding and predicting extreme climate events
  - Oceans and sea level: dynamics, variability and change

- **Observation and Analysis of the Climate System**
  
  Sessions include:
  - Climate system observations, reprocessing, reanalysis, and climate data records
  - Variability and predictability of regional climate and monsoons
• Understanding atmospheric processes, aerosols, clouds and dynamics in climate

• Assessing and Improving Model and Predictive Capabilities

  Sessions include:
  • Assessing the reliability of climate models: CMIP5
  • Climate variability and change: diagnostic and empirical studies
  • Radiative forcing and chemistry-climate coupling

• Climate Assessments and Future Challenges

  Sessions include:
  • Land cover and land use changes and their impacts on regional hydroclimate, ecosystems and society
  • Cryosphere and climate
  • Understanding anthropogenic climate change

• Translating Scientific Understanding of Climate System into Climate Information for Decision Makers

  Sessions include:
  • Linking climate research to adaptation measures
  • Research for mitigation including climate engineering options
  • Regional integrated climate challenges and ESSP partnership

OPPORTUNITIES AND SUPPORT FOR STUDENTS, EARLY CAREER SCIENTISTS AND SCIENTISTS FROM DEVELOPING COUNTRIES

As part of WCRP’s ongoing commitment to education and capacity development and to train the next generation of climate experts, grants are available to enable and support participation of students, early career scientists and scientists from developing countries to attend the conference. Please consult the OSC web site for further information.

The deadline for submitting a request for support to attend the OSC is 31 March, 2011.

IMPORTANT DATES

December 1, 2010
• Abstract submission and registration begins

March 31, 2011
• Last day to submit request for travel support
• Last day to submit abstract for those requesting travel support
• Last day to submit abstract for those needing US Visas

April 30, 2011
• Last day to submit abstracts (everyone!)

June 30, 2011
• Early registration deadline

SCIENTIFIC ORGANIZING COMMITTEE

Jim Hurrell, NCAR, USA - CHAIR
Ghassem Asrar, WCRP, Switzerland
Sandrine Bony, LMD/IPSL, Paris, France
Antonio Busalacchi, University of Maryland, USA
Christian Jakob, Monash University, Australia
Rik Leemans, ESSP Chair, The Netherlands
Jerry Meehl, NCAR, USA
Terry Nakajima, University of Tokyo, Japan
Carlos Nobre, IGBP SC Chair, Brazil
Ted Shepherd, University of Toronto, Canada
Julia Slingo, MetOffice, UK
Koni Steffen, University of Colorado, USA
Kevin Trenberth, NCAR, USA
Carolina Vera, University of Buenos Aires, Argentina
Martin Visbeck, IfM-GEOMAR, Germany
THE VENUE

Denver, Colorado, is the scenic gateway between the foothills of the Rocky Mountains and the Great Plains to the east of the city. It is home to numerous universities and colleges and many nationally recognized museums. A pedestrian mall in the downtown region provides convenient access to shopping, restaurants, pubs, performance halls, museums, and sporting arenas. The Foothills region of Colorado is home to numerous high-tech companies, businesses, and laboratories (including NCAR) and provides a wide range of outdoor activities for the adventurous Conference participant.

THE CURRENT WCRP INTERNATIONAL CORE PROJECTS ARE:

- Climate and Cryosphere ( CliC ), co-sponsored by the Scientific Committee on Antarctic Research ( SCAR ) and the International Arctic Science Committee ( IASC ). The Norwegian Research Council sponsors the International Project Office hosted by the Norwegian Polar Institute, Norway; http://www.climate-cryosphere.org/

- Climate Variability and Predictability ( CLIVAR ), International Project Office sponsored by the UK Natural Environment Research Council and hosted by the National Oceanography Centre, Southampton, United Kingdom; http://www.clivar.org/

- Global Energy and Water Cycle Experiment ( GEWEX ), International Project Office sponsored by the US National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration and hosted by the University of Maryland-Baltimore County, USA; http://www.gewex.org/

- Stratospheric Processes And their Role in Climate ( SPARC ), International Project Office sponsored by the Canadian Climate Research Foundation and Canadian Space Agency and hosted at the University of Toronto, Canada; http://www.atmosp.physics.utoronto.ca/SPARC/index.html

FOR MORE INFORMATION

Please visit the conference webpage: conference2011.wcrp-climate.org or contact the Conference Secretariat: info.conf2011@wcrp-climate.org

GREEN EVENT

The WCRP Open Science Conference is committed to reducing the environmental impacts of such a large international event. Sponsors, attendees and contributors will be asked to follow a set of best practices in order to conserve natural resources as well as promote environmental sustainability.
WCRP OPEN SCIENCE CONFERENCE
CLIMATE RESEARCH IN SERVICE TO SOCIETY

IMPORTANT DATES

DECEMBER 1, 2010
Abstract submission and registration begins

MARCH 31, 2011
Last day to submit request for travel support
Last day to submit abstract for those requesting travel support
Last day to submit abstract for those needing US Visas

APRIL 30, 2011
Last day to submit abstracts (everyone!)

JUNE 30, 2011
Early registration deadline

24–28 October 2011, Denver, Colorado, USA
collection2011.wcrp-climate.org