

## International climate experts to meet this month in Denver; Agenda includes extreme weather, water availability, observing systems

GENEVA/DENVER (10 October 2011) – Climate scientists from more than 70 countries will converge in Denver October 24-28 to discuss the latest findings on climate and identify pressing scientific questions and challenges. They will focus on how science can best serve society, particularly in minimizing the adverse effects of variations in climate and human-influenced climate change.

Reporters interested in covering the World Climate Research Programme's Open Science Conference can register at no charge on the conference website (URL below). Members of the media will have access to the latest results being presented at the conference and the opportunity to follow up with experts.

Some key topics that scientists from numerous organizations will discuss include:

- *Water*. By the year 2050, managers of drinking water and wastewater/stormwater systems in the United States will need to spend up to \$2 trillion to keep their systems working properly and respond to the effects of climate change, according to studies by the U.S. Environmental Protection Agency and industry associations. The meeting will address the need for researchers and decision makers to work together as society begins to adapt to the effects of climate variability and change.

- *Extreme weather*. To better understand possible links between climate change and extreme weather events, scientists will discuss the development of a regular service that would respond soon after an extreme event with reliable information on the factors contributing to the event and the extent to which human influence has altered the odds of occurrence. Research is under way, coordinated as part of the international Attribution of Climate-related Events (ACE) initiative, to develop the science needed to underpin such a service.

- **Observing systems**. As the climate changes, it is becoming increasingly important to observe the details of these changes, distinguish between the human contribution and natural variability, and make projections for future weather and climate conditions and their impacts on society. However, several U.S. satellites that monitor weather and climate are nearing the end of their useful lives, and some replacements have been delayed by funding shortfalls. This has increased the risk that critical observations of Earth's atmosphere will be lost and guidance on weather and climate for decision makers and the public will be compromised.

- *Policy*. Carbon trading and related policy approaches to climate change may fail to capture the differing climate impacts of gases and particles emitted by human activities. Recent research has shown that reducing certain short-lived gases and particles can have positive and effective short-term climate influences, whereas long-lived agents, especially carbon dioxide, will be responsible for at least a millennium of altered climate. These vastly differing characteristics imply that a single basket for trading among gases and particles is incompatible with current scientific understanding, and thus require additional careful consideration based on sound climate science.

Scientists will also discuss a range of additional topics, such as improvements in computer modeling of weather and climate, the continuing need to focus on hydrological science and water resources management, the vulnerability of developing nations and regions to climate change, and the urgent need for effective and timely transfer of climate information to policymakers and other stakeholders.

## -----A unique gathering-----

The Open Science Conference provides a unique opportunity for leading scientists from across a large number of disciplines from the physical (e.g. atmospheric, oceanic, polar regions, ecosystems), social, and information sciences to discuss how to work together to advance understanding and prediction of variability and change in the Earth's climate system, from seasons to centuries and from regions to the entire globe. The key goals of the conference include:

- Appraising the current state of climate science in preparation for the next assessment of the Intergovernmental Panel on Climate Change (IPCC) as well as upcoming assessments of freshwater resources, ecosystems, and biodiversity;

- Identifying key opportunities and challenges in observations, computer modeling, and analysis to advance understanding and prediction of Earth's climate system, and provide the scientific knowledge in a useful way to decision makers;

- Discussing the interdisciplinary research that is required to understand and predict the planet's response to climate variability and change, including the socioeconomic implications of such responses.

WCRP is sponsored by the World Meteorological Organization, the International Council for Science, and the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). These organizations serve more than 180 countries worldwide and are committed to providing the best available scientific knowledge as a solid foundation for sustainable development.

On the Web:

WCRP conference program, registration, and press information http://conference2011.wcrp-climate.org

Open Science Conference Newsroom http://conference2011.wcrp-climate.org/documents.html

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