

## WCRP OPEN SCIENCE CONFERENCE

CLIMATE RESEARCH IN SERVICE TO SOCIETY

24–28 October 2011, Denver, Colorado, USA

[conference2011.wcrp-climate.org](http://conference2011.wcrp-climate.org)



### Interview with Wendy Watson-Wright, Executive Secretary of the Intergovernmental Oceanographic Commission



#### **How the WCRP Open Science Conference will contribute to better provide ocean information to society?**

Improving the scientific culture of society must be promoted as a prime objective of modern science. This is particularly important in the environmental sciences; and in fact, the recent review of the WCRP (published by the sponsoring agencies ICSU, WMO and IOC in 2009) recommended that WCRP expand its strategic outreach activities to target greater visibility and better utilization of WCRP outputs by the climate research community, the policy world and private sector, and more broadly by the general public. This review specifically suggested enhancing WCRP visibility by organizing conferences and symposia like this WCRP Open Science Conference.

The scientific community has a responsibility to provide the knowledge needed to move society towards effective management of our earth environment for sustainability. The ocean plays a key role in the climate system, and we expect that the WCRP OSC will deliver the most recent and accurate information to society, and guide the policy makers and the public in general with information on how to address issues related to climate change. We hope the OSC will explore how best to address the remaining uncertainties in the interchanges and feedbacks of energy and carbon between the ocean and the atmosphere, and so increasing our understanding of decadal climate variability, the melting of ice caps, and changes in ocean circulation patterns that affect climate.

## **What scientific advances IOC expect from the research community at the Open Science Conference to enable IOC's Ocean Information for Society?**

Along with assessments, the scientific congress and symposia constitute a very effective and practical manner for the scientific community to communicate scientific advances in their research field, discuss practical applications of new technological developments, and to find new research directions and ideas.

We expect the OSC will provide a comprehensive update of our knowledge on the role of the oceans in the earth's climate, and will share ocean information with other earth system communities for use by decision makers and resources managers. The WCRP Open Science Conference is an excellent opportunity to focus on the role of the ocean in climate, the need for ocean observing systems, ocean dynamics and sea-ice, sea-level variability and change, ocean circulation and ventilation.

The advances will be in the areas of both: (i) conceptual discussions on the limits for earth sustainability if the emissions of Greenhouse Gases continue at the current levels and (ii) technological improvements from new ocean observation tools such as the recent satellites to monitor the surface salinity (SMOS) and the dynamics of ice caps (CryoSat). These new satellites were launched just one year ago and the scientific community is excited to know about the results.

## **Which role the Open Science Conference does play in support of the IOC's action plans?**

As IOC is further developing its Global Ocean Observing System (GOOS) and a framework for sustained ocean observations and information for society, the WCRP Open Science Conference represents an excellent opportunity to support IOC plans. WCRP is fully engaged with IOC priorities and we are working together with common objectives and goals. We expect that the OSC could highlight the importance of ocean observations in underpinning the development of climate services and by developing effective government advocacy for climate research and observations.

## **What are the expected outcomes required for the Open Science Conference to be successful?**

Things have changed since WMO, ICSU and IOC initiated WCRP. Today, society has a greater need than ever for better understanding of climate and how to mitigate and adapt to a changing climate. WCRP has played a central role in providing basic information for societal needs, and the OSC is a great opportunity to play an expanded role guiding the society and policy makers towards the right solutions.

The need for local information on climate has grown in tandem with the need for global information. In order to adapt to climate change and work on effective mitigation strategies, information on the local impact of climate change is needed, and climate projections need to be downscaled to finer resolutions. This is particularly important to developing countries that are projected to face the greatest human impact from climate change.

We need accurate regional estimations of the changing sea levels with the consequent impact on coastal regions; as well as potential changes in the frequency or intensity of extreme events such as tropical cyclones and their coastal impacts.

Society will welcome a shift in the scientific community, widening ocean and climate research with inclusion of more activities aimed at adaptation and mitigation of climate change on the oceans.

I would like to use this opportunity to encourage the research community to take part in this conference. During five days they (and we) will have the opportunity to exchange experiences, share new ideas, identify synergies, and build new bridges, and I am sure that the result of the discussions will be successful and the conclusions important.

I look forward to meeting all of you in Denver next October.