











e-zine N° 17 - March 2010

News

#### **WCRP Focus on Research for Climate Services**

WCRP convened its annual Joint Scientific Committee (JSC) on 15-19 February 2010 in Antalya, Turkey. The meeting had two main foci: the programme's long-term strategy and the role of WCRP research in the Global Framework for Climate Services (GFCS). Documents and Presentations are available.

#### WCRP Leadership Expresses support for IPCC

The members of the WMO/ICSU/IOC Joint Scientific Committee for WCRP issued a letter of support for the IPCC Fourth Assessment Report. WCRP is confident that the IPCC process will continue to provide accurate and unbiased assessment of climate change for decision makers. Read the letter

#### **WCRP Open Science Conference**

WCRP will host a major international Science Conference on "Climate Research in Service to Society" on 24-28 October 2011 in Denver, Colorado, USA. This represents an exclusive opportunity to assemble the international scientific community to advance understanding and prediction of variability and change of the Earth's physical climate system on all space and time scales. Download the first announcement.

#### **Meeting the Climate Information Needs of Decision Makers**

WCRP and the WMO Commission for Climatology (CCl) have adopted a plan to use climate information for emerging social needs relating to adaptation and risk management. At their joint meeting on 18 February 2010 in Antalya, Turkey, they agreed on a statement in line with establishing the Global Framework for Climate Services that was decided at the World Climate Conference-3. Read the joint statement.

## **CliC Scientific Steering Group Focuses on Future Directions**

Rapid developments in the WCRP, new requirements for climate science, such as the need to provide a foundation for the development of climate services, require that CliC moves ahead on several new directions. They were discussed at the 6<sup>th</sup> meeting of the CliC SSG on 6-9 February 2010 in Valdivia, Chile. More...

#### **World Meteorological Day 2010**

Each year on 23 March, the World Meteorological Organization, its 189 Members and the worldwide meteorological community celebrate World Meteorological Day around a chosen theme. This year, the theme is "60 years of service for your safety and well-being". For more information visit the webpage.

#### **IOC Celebrates its 50th anniversary**

Beginning with the International Indian Ocean Expedition in 1960, the IOC has worked tirelessly for fifty years to promote international cooperation in researching and protecting the ocean. IOC has been WCRP Sponsor since 1993. Learn more about fifty years of IOC history and the many IOC 50th Anniversary events which will be held around the world on the anniversary webpage.

### **Global Sea-Level Change Update**

WCRP and WMO jointly issued an update on Global sea-level variability and change on the occasion of the COP-15 meeting, December 2009 in Copenhagen Denmark. The short document presents some recent observations and analysis suggesting that the IPCC AR4 conclusions concerning the rate of future change in the global mean sea level may be on the conservative side. Read the document.

## **ESSP Participates in the Global Media Forum**

The Deutsche Welle Global Media Forum 2010 will take place in Bonn, Germany, under the banner: The Heat is On – Climate Change and the Media. The forum's programme will feature a workshop hosted by WCRP, IHDP, IGBP, DIVERSITAS that will debate the effective use of media to creating societal awareness of climate change. Read more.

#### **EUMETSAT Board approves the Jason 3 Altimetry Programme**

EUMETSAT Member States approved the European part of the Optional Jason-3 Altimetry Programme. Developed in close partnership with CNES, NOAA and NASA, Jason-3 will ensure continuation of the series of measurements made by TOPEX-POSEIDON, Jason-1 and 2 satellites in support of meteorology, oceanography and in particular the monitoring of the sea level trend. Jason-3 is a major contribution to the Ocean Topography OST Constellation of CEOS. Read the Press Release.

## Science Highlights

## SCIENCE: Decadal Climate Change Caused by Stratospheric Water Vapor

This study led by S. Solomon, IPCC WG1 co-chair for AR4, highlights the role of stratospheric water vapour concentrations in driving decadal variability in the global surface temperature. Read the article

#### SCIENCE: Hurricanes intensify Under Global Warming, Models Suggest

A model study, led by US scientists (some of them members of the WCRP/CLIVAR panels) suggests that less, but more-destructive, hurricanes will cross the Atlantic Ocean in this century under greenhouse gas emissions as usual. Read the article.

This is in line with WMO experts update on the impacts of climate change on tropical cyclones. Read the WMO info note

#### **NATURE Geosciences: Indian Ocean Dipole and ENSO Linkages**

The article, co-authored by members of the WCRP/CLIVAR Pacific and Indian Oceans Panels, suggests an influence of the State of the Indian Ocean Dipole on the following year's El Niño. Read the article.

#### **BAMS: A Unified Modeling Approach to Climate System Prediction**

In a recent BAMS article, J. Hurrell (WCRP CLIVAR SSG Co-chair) and colleagues discuss different strategies for a more unified approach to climate system prediction. Read the article

## **GLOBAL & PLANETARY Change: Sea Level Budget Revisited**

In a recent article, Anny Cazenave of the Laboratory for Studies in Space Geophysics and Oceanography (LEGOS) in Toulouse, France, and her colleagues quantified the contributions of melting land ice and thermal expansion to sea-level rise. Read more

#### NATURE Reports on Climate Change: More Knowledge, Less Certainty

Kevin Trenberth, WOAP Chair, anticipates that the uncertainty in AR5's climate predictions and projections will be much greater than in previous IPCC reports, primarily because models will attempt new and better representations of important climate processes and their feedbacks. Read the article.

#### Journal of Climate: Application of MJO Simulation Diagnostics to Climate Models

The ability of eight climate models to simulate the Madden–Julian oscillation (MJO) is examined using diagnostics developed by the U.S. Climate Variability and Predictability (CLIVAR) MJO Working Group. Read more

# NATURE: The Agulhas leakage contributing to the stability of the Atlantic Meridional Overturning Circulation (AMOC)

A new high-resolution ocean model study shows that the transport of warm, salty Indian Ocean water into the South Atlantic has increased during the past decades. This might have potential implications for the future evolution of the AMOC. Read the article. WCRP together with SCOR and IAPSO is co-sponsoring an ad hoc working group on the climatic Importance of the Greater Agulhas System.

## **BAMS: Measuring Decadal prediction skills**

A recent article published by G. Meehl, WGCM co-chair, and colleagues explores the factors that contribute to increasing predictive skills on decadal timescale. Read the article.

#### **Publications**

## **Book: Field Techniques for Sea-Ice Research**

Co-sponsored and supported by WCRP/CliC, the book is a global look at the changes in sea ice and the tools and techniques used to measure and record those changes. It can be ordered at The University of Chicago Press

#### **Climate Science Report: The Copenhagen Diagnosis**

This report is the synthesis of the most policy-relevant climate science published since the close-off of material for the last Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR4). Read more

## **SCAR REPORT: Antarctic Climate Change and the Environment**

First comprehensive review of the state of Antarctica's climate and its relationship to the global climate system published by the Scientific Committee on Antarctic Research (SCAR). More on the report

## Meeting Report: WGCM 13th Session:

The report of the 13<sup>th</sup> Session of the WCRP/CLIVAR Working Group on Coupled Modelling that was held in S. Francisco, USA, in September 2009, is now available on-line

## **Positions Open**

## **CLIVAR International Project Office Director**

WCRP and the UK's National Oceanography Centre in Southampton invite applications for the position of Director of the International Project Office for CLIVAR. The closing date for completed applications is 29th March 2010. For more information please read the announcement.

### **SOLAS Project Officer**

The SOLAS IPO is seeking to fill the post of Project Officer. The post is located at the School of Environmental Sciences, University of East Anglia in Norwich, UK. The closing date for completed application is 26th March 2010. Read more information

## **Upcoming Events**

## WCRP Observations and Assimilation Panel (WOAP) - 4th Session

The 4<sup>th</sup> session of WOAP will take place on 29-31 March 2010 in Hamburg, Germany. More

#### Baseline Surface Radiation Network (BSRN) - 11th Session

The 11th Science and Review Workshop of the WCRP GEWEX/GCOS BSRN will take place on 13-16 April 2010 in Queenstown, New Zealand. More

## Climate of the 20th Century Project - 5th Session

The 5th session of the CLIVAR International Climate of the 20th Century Project will take place on 19-23 April 2010 in Beijing, China. More

## **WCRP Capacity Building - 1st Workshop**

In collaboration with WMO and the World Bank, the 1<sup>st</sup> Workshop on Exploring Changes in Temperature and Precipitation Extreme Indices for the Greater Horn of Africa Region will take place on 19-23 April 2010 in Nairobi, Kenya

## CLIVAR Sientific Steering Group (SSG) - 17th Session

The 17th session of the CLIVAR SSG will take place on 19-21 May 2010 in Boulder, CO, USA.

## **Regional Climate Modelling - Workshop**

The WCRP Workshop on Regional Climate: Impacts, Adaptation and Vulnerabilities will take place on 14-16 June 2010 in Lille, France. More