

New Faces

Welcome to the new director of the WCRP

From the beginning of January 2006, Ann Henderson-Sellers has been the new Director of the World Climate Research Programme. Being a mathematician with a Ph.D. and D.Sc. in atmospheric science, Prof. Henderson-Sellers has had a long history with WCRP especially in GEWEX as the lead investigator for the Project for Intercomparison of Land-surface Parameterisation Schemes (PILPS) and more recently Isotopes (iPILPS). www.wmo.int/web/wcrp/contact_us.htm

We have a science communicator at the WCRP

The WCRP has recently gained the temporary services of Carolin Arndt, an arctic marine researcher. Dr Arndt's role is to develop wide-interest articles and "stories" based on WCRP activity outcomes for the WCRP website and the e-zine. She is looking forward to receiving "hot news" to be put on the WCRP website or the next e-zine (carndt@wmo.int).

Welcome to the new director at the CliC office in Tromsø

Having started in September 2005, Victoria Lytle is the new project office director in the northern WCRP outpost. With a Ph.D. in engineering, Dr Lytle has studied the role of the sea-ice zone in global climate at the Australian Antarctic Division in Hobart, Tasmania. <http://ipo.npolar.no/org/staff.php>

News

Award-Winning Research: Predicting the predictability of climate

This year, the WMO Norbert Gerbier-Mumm International Award 2006 goes to Dr Tim Palmer and his DEMETER team of European scientists for their progress in the field of seasonal climate prediction and the prediction of uncertainties involved in climate evolution. The user value of the ensemble forecast approach is that it produces a probabilistic skill for climate prediction, which can then be applied in health (e.g. malaria), agriculture (e.g. crop yield) and natural risk (e.g. floods) applications. www.wmo.int/web/wcrp/news.htm

Palmer T.N. et al. (2004) Bulletin of the American Meteorological Society 85(6): 853-872.

Palmer T.N. (2005) GEWEX newsletter 15(4): www.gewex.org/Nov2005.pdf

Thomson M.C. et al. (2006) Nature Letters 439, doi 10.1038/nature04503.

Home computers do climate research world-wide

Since the world's largest climate prediction experiment was launched in Oxford in September 2003 more than 40,000 home computers in 150 countries have participated in exploring the evolution of climate in the 21st century. Now, two years later, a new state-of-the-art climate model has been put into place ready to be downloaded from the BBC promoted *climateprediction.net*. From Albania to Vietnam, everybody who downloads an individual, unique version of the Hadley Centre climate model to their personal computer contributes to the generation of the most comprehensive probability-based forecast. Welcome and join in! www.bbc.co.uk/climatechange/

WMO releases first annual Bulletin on Greenhouse Gases

The detailed review will be available on www.wmo.ch/web/arep/gaw/gaw_home.html from mid March.

Send news for the e-zine No. 2 to wcrp@wmo.int

The moving giant: changes in the movement of the Greenland Ice Sheet

The Greenland Ice Sheet covers 1.7 million km² and is up to 3 km thick. Recent satellite radar interferometry observations show that the glacier's movement has accelerated during the last decade due to greater areas of surface melting. The rise in air temperature during the last 20 years in south-east Greenland by 3°C caused more melt water run-off to accumulate below the glacier, where it serves as a lubricant, easing the glacier's march to the sea.

Rignot E. and Kanagaratnam P. (2006) *Science* 311 No. 5763: 986-990.

Hannah H. et al. (2005) *Journal of Geophysical Research* 110 D13108 Doi 10.1029/2004JD005641.

Greenland ice swells ocean rise – and creates new coastlines by the year 3000

As the Greenland Ice Sheet is sliding towards the sea much faster than previously believed, the sea level will also rise a great deal faster. If Greenland's glaciers melted completely, they would raise global sea levels by about 7 m – at what rate this will occur is not yet certain.

Tide-gauges show that sea level rose constantly by 1.44 mm per year in 1870 but since 1950 it has increased to a rate of 1.75 mm per year. The sea level at the end of this century is likely to be 30 cm higher than now.

A report published by the Tyndall Centre for Climate Change Research claims "Britain could look radically different in the year 3000 with sea level rising as much as 11.4 m". This millennial projection is based on the same emission scenarios as used by the IPCC that, however, go no further than 2100. Accordingly, only a serious reduction in emissions will help us to avoid this crisis.

Church J.A. and White N.J. (2006) *Geophysical Research Letters* 33 (published online).

Dowdeswell J.A. (2006) *Science* 311 No. 5763: 963-964.

Lenton T.M. et al. (2006) Report to the Environment Agency of Tyndall Centre Research Project T3.18.

Events

Exploring the Earth System: ESSP Conference in Beijing, November 2006

Five years after their first meeting, the Earth System Science Partnership (ESSP) is curious about end-users' needs for risk management information. The second Open Science Conference Global Environmental Change: Regional Challenges that will take place in Beijing, China, 9-12 November 2006, presents progress in our understanding of the natural and social systems of global environmental change. The Conference focuses on the sustainability of resources (food, water, carbon) and is planning a special session on global change research in monsoon Asia. Abstracts for papers can be submitted now. www.essp.org/essp/ESSP2006/

Reducing uncertainty for policy on sea level rise: WCRP workshop in Paris, June 2006

Sea level rise is accelerating and environmental refugees have already been forced to evacuate from inundated islands in Kiribati and Tuvalu. Despite the urgent policy needs, the forthcoming IPCC Fourth Assessment Report is unlikely to be able to make definitive statements about the speed of future rise. To reduce these uncertainties WCRP is initiating an intense research effort at a workshop in Paris, France, 6-9 June 2006. The deadline for abstract and poster submission is 20 April 2006.

<http://copes.ipsl.jussieu.fr/Workshops/SeaLevel/>

“Greening WCRP”

In view of the continuing warming of the planet and the clear need to reduce emissions of greenhouse gases WCRP is searching for initiatives by which it can become 'greener'. This is quite a challenge as our work tends to be focused around facilitating meetings (all of which burn loads of fossil fuel) and publishing reports (which use paper). Any ideas on how WCRP activities can be organized to make a smaller impact on the Earth will be very gratefully received. We shall publish the best ones on our web site. Please send your ideas to Carolin Arndt (wcrp@wmo.int).

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