

RDEX Newsletter 1 January 2013

Welcome to the first CORDEX newsletter. The <u>Coordinated Regional Climate Downscaling Experiment (CORDEX)</u> was launched by the World Climate Research Programme (WCRP) to create a framework for evaluating and comparing these various techniques that are in use all over the world.

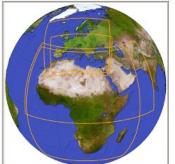
In this edition of the newsletter you can find:

- News from the Arctic, North America, MED, South Asia and East Asia CORDEX groups (p2-4)
- Information on the new CORDEX website (p4)
- Details of the CORDEX Conference 2013 (p5)
- Contact information for CORDEX people (p6)

The bi-annual newsletter aims to connect the CORDEX groups across the world, to keep interested readers informed on current progress and activities, and act as a dissemination portal for preliminary results, best practice, useful information, and events of interest. We rely on the contributions of the CORDEX community to ensure the success of the newsletter; if you would like to contribute please contact <u>Eleanor O'Rourke</u>.

The CORDEX community









The CORDEX community has grown to now include 13 domains;

- Arctic CORDEX
- EURO-CORDEX
- Central Asia CORDEX
- South America CORDEX

- North America CORDEX
- MED-CORDEX
- South Asia CORDEX
- CORDEX Antarctica

- Central America CORDEX
- CORDEX Africa
 - MENA-CORDEX
- East Asia CORDEXAustralasia CORDEX

In each newsletter an update of the activities in selected domains will be provided. It should be noted that some domains have only been recently initiated so their activities are slowly building when compared to the more established communities. Information on each of the domains is available from the **CORDEX website**.



RDEX News from the CORDEX community

Contact: John Cassano

Contact: William Gutowski

Arctic CORDEX



A CORDEX workshop on Arctic climate modeling results was held on March 20-th-21st in Norrköping, Sweden in collaboration with the Swedish ADSIMNOR project. Presentations reviewed the state of several Arctic CORDEX models. Stand-alone atmosphere only model configurations have been run to downscale reanalysis data sets and GCM scenario simulations have been carried out. Presentations on coupled ocean-ice-atmosphere models discussed either major updates of previous systems (e.g. the Swedish model RCAO), or new models (the US model RACM). These models have been shown to run stably for decadal scale baseline simulations. Control and scenario runs are planned for late 2012 and early 2013.

Concerning Polar CORDEX coordination, it was concluded that each group will choose the model domain that is most appropriate for their model and intended uses. All domains will be at least as large as the specified CORDEX domain and all groups will provide output interpolated to the specified CORDEX domain. The details of the domains will be posted on the Polar CORDEX web page. Given the importance of coupled climate system processes in the Arctic, all groups will be encouraged to submit both atmosphere-land and coupled atmosphere-ocean-ice-land simulations for Arctic CORDEX. The atmosphere-land simulations will follow the general CORDEX specifications in terms of model experiments and forcing data. Both nudged (spectral or otherwise) and non-nudged simulations can be submitted. The design and forcing for the coupled model experiments, as well as an ocean spin-up strategy remains to be specified by a team representing RACM and RCAO. Additional groups are more than welcome to participate.

With the goal to provide polar and other CORDEX simulations to the scientific community, a CORDEX-enabled ESGF (Earth System Grid Federation) data node is on the way to be established at the Swedish National Supercomputer Centre (NSC).

CORDEX North America



William Gutowski: Coordinator CORDEX North America

There have been ongoing attempts to develop funding to support an organized CORDEX North America simulation program. A goal of the effort beyond performing and archiving the CORDEX simulations is to engage end-users in the planning and implementation of the program. This is to help satisfy the CORDEX goal to promote greater interactions between climate modelers and end-users and thus better support impact and adaptation activities.

As a prelude to the simulation program, efforts are also underway to develop a highly focused, yet multi-disciplinary planning workshop whose goal would be to define a program of simulation, diagnosis and exchange of climate information among three communities: water resources, agricultural modeling and climate sciences. The program would build on the experience of the North American Regional Climate Change Assessment Program (NARCCAP) and regional modeling and applications programs elsewhere to develop a coordinated program that yields climate change and confidence information at scales suitable for applications. Discussions are currently underway with U.S. federal agencies on possible support for the planning workshop and the organized simulation program.

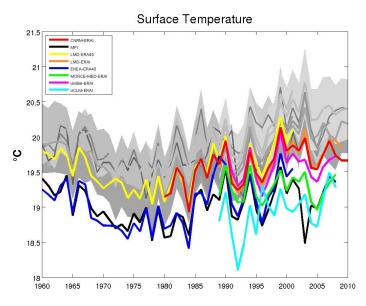


RDEX News from the CORDEX community

MED-CORDEX

Contact: Samuel Somot

During 2012, the MED-CORDEX community completed most of their ERA-Interim runs. RCP are in preparation or ongoing with some already finished. The first runs have been uploaded for ERA-Interim (1979-2010) and RCP4.5 and RCP8.5 scenario (1950-2100). The database where interested users can access the available data is now open at the MED CORDEX <u>website</u>.



(left) First intercomparison of fully-coupled atmosphereocean RCM for the interannual time series of the Mediterranean SST (various observed estimates in grey, 8 runs in color from 7 models). Credit: Clotilde Dubois, CNRM



(above) Group photo of MED-CORDEX meeting in Toulouse 28th-30th March 2012. Credit: Alain Braun, CNRM

CORDEX East Asia

Contact: Won Tae Kwon

After rolling out the compact version of the CORDEX East Asia databank in July 2012 the full service for archiving and redistributing services with the results from CORDEX East Asia activities was launched in December 2012 by the coordinators, the Korea Meteorological Administration (KMA).

After an online registration users can download data files as well as some basic plots for the current climate and regional projections simulated by five regional climate models. Any groups who want to upload their own results are also very much welcome. Further information on the databank and contact details can be found at the CORDEX East Asia website here



In November 2012 the CORDEX East Asia group held their 2nd International Workshop in Jeju, Korea organised by National Institute of Meteorological Research and KMA.



RDEX News from the CORDEX community

CORDEX South Asia

The Centre for Climate Change Research (CCCR) at the Indian Institute of Tropical Meteorology (IITM) hosted the Coordinated Regional Climate Downscaling Experiment (CORDEX) South Asia Training Workshop during 17-20 October 2012 at CCCR-IITM, Pune. This training workshop was organized by the World Climate Research Programme (WCRP) in partnership with START, and in collaboration with ICTP, CSAG, SMHI and ICSU-ROAP.

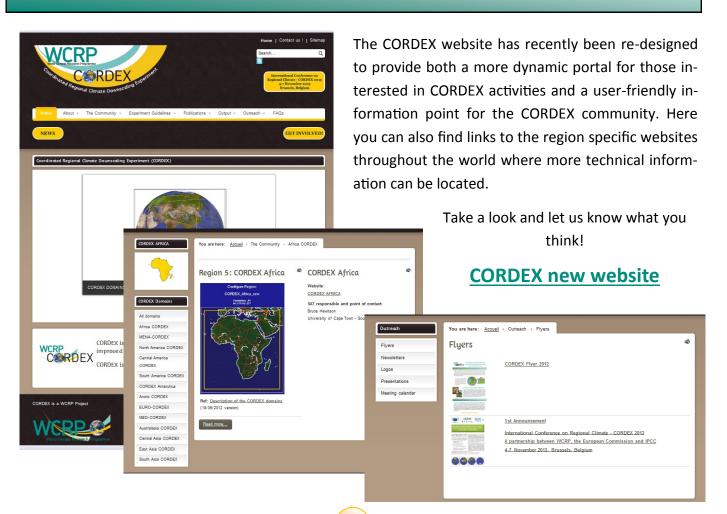


Contact: R Krishnan

The four-day training workshop focused on skill development in analysis and verification of results from the CORDEX climate models. This capacity building effort helped to foster trans-disciplinary collaborations between individuals from the physical sciences and the vulnerability, impacts and adaptation (VIA) research community.

Full details of the workshop and presentations available for download can be found here.

New CORDEX website





Events of interest

CORDEX Conference 2013



The International Conference on Regional Climate - CORDEX 2013 brings together the international community of regional climate scientists to present and discuss results from WCRP regional climate studies, with a particular emphasis on the CORDEX initiative.

The first day of the meeting will feature two important pre-conference events: a High Level Session with the participation of the European Commissioners for Research & Innovation and for Climate Action where the Intergovernmental Panel on Climate Change (IPCC) presents key findings from the IPCC Working Group I contribution to the Fifth Assessment Report Climate Change 2013: The Physical Science Basis. This will be followed by a Stakeholder Dialogue focusing on how science-based regional climate information can best serve the needs of regional decision-makers. Both events are open to all the conference participants.

The second segment of the conference over the following three days is organized around the key scientific results from CORDEX Phase I. A discussion on future priority research areas for the next phase of CORDEX, of other WCRP regional climate initiatives and of major funding programmes – such as the EU FP7 and the future Horizon2020 - will also take place, taking into account the recommendations from the first segment of the conference.

Click <u>here</u> for the conference website where information on registration, programme, and abstract submission can be found.

Important dates

15th January 2013	Open call for abstracts, registration and support applications
1st April 2013	Deadline for abstract submission and support applications
20th June 2013	Notification to applicants
20th August 2013	Deadline for early bird registration
20th October 2013	Deadline for online registration

Other CORDEX related events can be found in the meeting calender on our website.



Contact information

CORDEX People

The Scientific Advisory Team (SAT) is responsible for implementing and overseeing CORDEX to ensure it achieves its goals. The current members, and their responsible domains are;

Filippo Giorgi (co-chair) MED

Colin Jones (co-chair) EURO, MENA

Bruce Hewitson Africa

Won Tae Kwon East Asia

R Krishnan South Asia

William Gutowski North America

Silvina Solman South America

Clare Goddess Impacts

For those domains not represented by SAT members there are the following points of contact;

Jason Evans Australasia

John Cassano Arctic, Antarctica

The WCRP Joint Planning Staff contact is Michel Rixen.

The CORDEX Communication & Outreach team are responsible for the CORDEX website, communication between the domains and promoting CORDEX to those outside the community;

Roberta Boscolo (WCRP) Catherine Michaut (IPSL)

Samuel Somot (CNRM) <u>Eleanor O'Rourke</u> (SMHI)

CORDEX is a WCRP Project sponsored by:









