

Reports on the 1st Sessions of WMAC and WDAC, 16 July 2012, Beijing China

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The first sessions of the newly formed WCRP Modeling Advisory Council (WMAC) and the WCRP Data Advisory Council (WDAC) were held on 16 July in Beijing, China, prior to the 33rd session of WCRP Joint Scientific Committee. The meetings provided an opportunity to look at the respective modeling and data efforts across WCRP and its affiliated partners.



1) WMAC (<http://www.wcrp-climate.org/WMAC.shtml>)

Terms of Reference were revised as follows:

In partnership with WCRP projects and working groups act as a focal point for WCRP modelling and advise the JSC and WCRP community on issues pertaining to modelling.

1. Regularly assess modelling capabilities within WCRP and identify gaps, overlaps and opportunities for synergy.

2. Provide advice on priorities for modelling across WCRP including the Grand Challenges.
3. Facilitate effective communication on modelling issues within the WCRP and with the broader community.
4. Promote capacity development in model development, evaluation, and applications.

The individual modelling groups keep the main responsibility for international coordination of modelling activities around the world while WMAC will facilitate the synergies between the WCRP modelling working groups and climate and weather research communities. WMAC will also form a Task Team with IGBP to advance and accelerate the prediction of the Earth System. WMAC shall act as a forum for discussion and should identify and promote priority areas. The Council proposed to facilitate coordination amongst the groups and Projects through the use of online communication tools.

More information on the meeting can be found at <http://www.wcrp-climate.org/WMAC/WMAC1.html>



2) WDAC (<http://www.wcrp-climate.org/WDAC.shtml>)

The report of the 4th WCRP International Conference on Reanalyses (<http://icr4.org/>) indicated a distinct need for international coordination of the input observations (in situ and remotely sensed and covering atmosphere, ocean and land) for climate reanalyses. Given the complexity and depth of the issues involved, the WDAC finds that an appropriate way forward is to develop a proposal for a WCRP workshop addressing these issues which would likely be planned within about 2 years at ECMWF and determine the need for and scope of a potential working group.

The Earth System Grid Federation (ESGF) is the primary repository for the CMIP5 data. NASA presently hosts relevant satellite-based datasets for model evaluation (i.e. like-variables in the same format as the CMIP model output) on their ESGF Portal (<http://esg-gateway.jpl.nasa.gov>). This activity, developed in concert with PCMDI and now termed obs4MIPs, will facilitate the evaluation of global climate models and provide useful observation-based metric information for the Climate Metrics Panel. NASA has formed an obs4MIPs Science Working Group, that includes membership from PCMDI and NOAA, and is seeking inputs from ESA-CCI, EUMETSAT and CEOS WG. Included in the discussion of the expansion of the obs4MIPs activity is the addition of ARM in-situ observations as well as reanalysis products. Some reanalyses, such as MERRA are already available and additional ones are being prepared for inclusion into this ESG node, a.k.a the Ana4MIPs. Additional information on obs4MIPs can be found at the activity's home page <http://obs4mips.llnl.gov:8080/wiki>.

The WDAC would take responsibility for organizing the next reanalysis conference that would most likely be held at ECMWF in 2014. The WDAC was also already planning for its next meeting that would include on the agenda a discussion of the Earth System Grid and possible need for further governance.

It was noted that the Co-Ordinated Processing of Environmental Satellite Data for Climate Monitoring (SCOPE-CM) collaboration between research and operational groups was essential to generate climate quality data records from the raw satellite data. This initiative was worthy of wider participation by WCRP projects, and significant scientific support from WCRP was needed to make the operational processing tasks successful. The Council had also considered the inventory of Essential Climate Variables (ECVs) proposed at the recent meeting co-sponsored by WCRP and GCOS in Frascati.

WDAC will help facilitate harmonization between the GOSIC and CEOS/CGMS initiatives to provide a composite ECV inventory of in situ and satellite observations. WDAC will also work with GCOS, GEOS and CEOS to encourage existing networks to place higher priority on measuring non-physical variables such as partial pressure of carbon dioxide (pCO₂) (an Essential Climate Variable (ECV)).

More information on the meeting can be found at <http://www.wcrp-climate.org/WDAC/WDAC1.html>