

**WMO/ICSU/IOC
WORLD CLIMATE RESEARCH PROGRAMME**

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WOAP Report

(Submitted by Dr Kevin E. Trenberth)

There has not been a WOAP meeting since the last JSC meeting: the last meeting was September 2008 and was reported on in some detail. The next WOAP meeting is scheduled for 29-31 March 2010 in Hamburg, Germany. The main topics to be addressed include the following:

Meeting objectives:

- Progress achieved during the last two years in relation to observations
 - GRUAN
 - Flux tower measurement exploitation; IGBP
 - observations from space; CEOS,
 - interactions between GCOS and WCRP activities,
 - Participation in GEOSS.
- IPCC AR5 report and scoping
- Datasets for evaluating models
- Implications of WCC-3, COP-15 and OceanObs'09.
- Implications of the new GCOS implementation plan
- Implications of new WCRP implementation plan.
- Matters arising from JSC 31
- Matters arising from GCOS SC XVII meeting
- Assess the activities and results of Task Group on Data Management and the Joint Working Group on Observational Data Sets for Reanalysis
- Participation in WCRP conference in October 2011
- Organization of next International Reanalysis conference

Of particular note are the developing plans for the next international reanalysis conference possibly to be held in the United States in 2011. At the same time, WCRP is planning to have a WCRP-wide conference, targeting about 1500 participants, also to be held in the United States in 2011. One option is that the reanalysis conference will be subsumed into the larger conference as a 2 day event. The full conference will likely have plenary sessions to start each day, and then break out into 3 parallel sessions for each of the 5 days of the conference, with perhaps some modifications on the last day. Posters will play a prominent role. It means that there will be 4 or 5x3 slots for symposia (or in our case sub-conference), and we would aim to occupy two of those. Many topics ordinarily covered in a reanalysis conference could be offered in other symposia. The second option is to simply participate in the full conference and put off the International Reanalysis Conference until 2012.

A major issue for WOAP is the access and advice on observational and analyzed datasets for evaluation of model results, and specifically for the CMIP5 datasets being generated for AR5 under IPCC. The GCOS climate panels and various WCRP groups can play a key role in this.

Progress on reprocessing activities, led by GEWEX, will also be reviewed. The CCI: Climate Change Initiative from ESA also plays a key role. This activity intersects with space agency curation of datasets and development of climate datasets. Progress on data management across WCRP will also be reviewed. The Working Group on Observational Data Sets for Reanalysis is joint with AOPC and progress will be assessed.

Also prominent on the agenda will be implications for WOAP and climate observations for outcomes of WCC-3 and the development of climate services. The very successful OceanObs'09 meeting and any outcomes from the COP meeting in Copenhagen will also be considered. WOAP is expected to play a role in the WCRP evolution, as outlined in the WCRP Implementation plan 2010-2015 http://wcrp.wmo.int/documents/WCRP_IP_2010_2015.pdf.

At the successful GEWEX/iLEAPS meeting in Melbourne in August, note was made of the growing numbers of flux tower measurements, set up under IGBP often focused on carbon and biogeochemistry fluxes. The utility of these towers for physical variables, and the covariability of physical (especially water vapor) and biogeochemical fluxes seems to have not been exploited as much as it might. The independent developments of networks or all sorts is a key issue for GCOS,

as extra efficiencies can cut costs and enable more and better observations to be made. GRUAN is another example of a developing network.

The chair participated in the GEWEX/iLEAPs and OceanObs'09 meeting, but was not able to attend the WCC-3.

A new white paper on observations was prepared by the chair of WOAP and it discusses future directions and issues. In particular, the JSC has opportunities to influence the discussions at WOAP-4. The Chair of WOAP will have run 4 meetings after the March meeting; the first was in June 2005. Accordingly, it is time to seek a new chair of WOAP. Membership in WOAP has been as representatives of other projects, and there are no core WOAP members aside from the Chair. Along with no project office, this also places a huge burden on the Chair.