

Report on the CliC SSG Meeting, Boulder, Colorado, 4-8 December 2006

This was the third meeting of the CliC Steering Committee, which was held at the Cooperative Institute for Research in Environmental Sciences (CIRES) on the University of Colorado campus in Boulder. Wednesday was a science day when various members of the SSG and CIRES gave presentations on current research interests in the cryospheric sciences. The rest of the week was taken up with the business of the SSG.

Dr Ann Henderson-Sellers, the new Director of WCRP, was at the meeting for the first two days. She gave a presentation on current WCRP activities, such as COPES, the new major initiative of WCRP for the next few years.

For several years CliC has had four CliC Project Areas (CPAs) on (1) the terrestrial cryosphere, (2) glaciers, ice sheets and sea level, (3) the marine cryosphere and (4) links between the cryosphere and the global climate system, which I lead. In August CliC gave presentations on its four CPAs at the IGS conference in Cambridge, UK. However, it was reluctantly agreed that the cryospheric community had not really embraced the CPAs, and many scientists were still unaware of them. It was therefore agreed that CliC's work in these four important areas of research should be re-branded and given a clearer focus. This will be carried out over the next year. These four areas of work will be known as THEMES and will deal with:

- Hydro-climatology effects of the shrinking cryosphere
- Predicting Ice Change and Sea Level (PICSL)
- The Marine Cryosphere (MarC)
- Global Prediction of the Cryosphere (GPC)

The old CPA 4 is therefore to be called the CliC Global Prediction of the Cryosphere project. This will have a much clearer role of developing a view on how the cryosphere will evolve over the next century. GPC will establish a small steering committee to guide the work of the group.

There was still a great deal of concern about the lack of funds available to CliC to hold workshops, support travel and for data recovery initiatives. However, this problem affects the whole of WCRP and the situation is unlikely to get better over the next few years. The CliC themes therefore do not have budgets and have to apply to WCRP for funding on a case by case basis.

There was virtually a whole day devoted to the IGOS-P Cryospheric Theme with SSG members and invited experts reviewing individual chapters. Jeff Key had gone an outstanding job of editing the final report, which had been produced following three meetings on this subject.

There were presentations on progress with the four CPAs over the last year. With CPA 2 there has been a great deal of work on the Greenland ice sheet, which continues to show marked melting in the coastal regions, although increasing precipitation over the interior. Remarkable video footage was shown from (waterproof) cameras lowered down into streams of melt water descending into the ice sheet. This water is thought to be providing greater lubrication to the base of the ice sheet. CPA 2 has also held a very successful workshop on sea level rise during the summer.

I gave a series of presentations on progress with CPA 4. A very valuable tool had been the output from the 23 models used to compile the IPCC Assessment Report 4 - the data from these models are on the web at http://www-pcmdi.llnl.gov/ipcc/about_ipcc.php. These models had been run from 1850 to the

present using observed greenhouse gas measurements and then out to 2100 using a range of greenhouse gas emission scenarios. I highlighted the difficulty these models had in reproducing the observed variability of the cryosphere over the last two decades.

Under CPA 3 Tony Worby gave a report on the Hobart sea ice workshop that had been held just prior to the SCAR Open Science Conference. This had been a great success and Tony was thanked for all his hard work.

I reported on the High Latitude Re-analysis workshop that had been held in Cambridge, UK in April 2007. I highlighted the request from ECMWF for better lake ice and snow cover data for future re-analysis exercises.

Several workshops are planned for the next year:

- A second workshop on recent high latitude climate change scheduled for 22-24 October 2007 in Seattle. This is sponsored by SCAR, CliC and ICPM.
- A workshop concerned with Southern Ice Ocean Model Intercomparison (SIOMIP) will be held in Boulder over 14-15 March 2007. It is being organised by Todd Arbetter and Siobhan O'Farrell and is sponsored by CliC and SCAR.

With WCRP funding being so limited in 2007 it is unclear whether there will be a meeting of the SSG this year, however, the dates of 12-16 November 2007 have been pencilled in for a possible meeting in Geneva.

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3 January 2007