



## The Joint China-WCRP Symposium on WCRP Plans and Projects for Regional and Global Climate Research

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The joint China-WCRP symposium that precedes the 33rd Session of the WCRP Joint Scientific Committee, was organized with the aim to explore the synergistic activities between the Chinese science community and the WCRP's goals and objectives. Better prediction of the climate is of great importance to China because of the numerous impacts of the changing climate on society and thus on economy. Dr Guoguang Zheng demonstrated China's commitment to WCRP related activities by acknowledging the 100 000 CHF contribution from the Chinese government to the Global Framework for Climate services.

Ted Shepard, co-chair of SPARC, shared the recent developments in the SPARC project. Such international effort provides added value to individual scientist lead projects and to national programmes. Helping with model comparisons and reducing large variabilities and knowledge gaps are key outcomes of SPARC activities. Professor Yongyun Hu highlighted the importance of looking back in time at the ozone layer to help predict changes for the future, a topic that SPARC plans to explore more in the coming years. Dr. Greg Bodecker moderated a discussion focused on advances in our understanding of the Stratosphere, and how further collaboration between SPARC and Chinese researchers might be valuable in developing a focus on the role of the Stratosphere in paleoclimate and how that might help improve current climate models. Dr

Daren Lu noted that data from Chinese projects is available for developing collaborations and encouraged cooperation in field campaigns.

The CLIVAR's co-chairs, Jim Hurrell and Martin Visbeck, were in charge of presenting the recent achievements of the CLIVAR project. Martin Visbeck highlighted some examples of key successes under each of CLIVAR's frontiers and imperatives, and how the project may evolve going forward. He pointed out that traditionally CLIVAR has focused on ocean-atmosphere interactions, but there is now increasing interest and emphasis on marine ecosystems and biogeochemical cycles.

Zooming on the regional effort, the Chinese science community demonstrated to be very active in contributing to WCRP initiatives. Professor Hui-Jun Wang, chair of the CLIVAR Chinese National Committee, presented the Chinese effort on seasonal climate prediction and Professor Riyu Lu of the Chinese Academy of Sciences gave an overview of the east Asian summer monsoon variability. Professors Xiaodong Zeng and Yaoming Ma (Chinese Academy of Sciences) showed progresses of Eco-hydrological modeling studies in China especially on the study of energy and water cycle over the Tibetan Plateau.

Kevin Trenberth, chair of GEWEX, presented the GEWEX's aims, structural organisation, and touched on post-2013 directions and grand challenges (proposed). He stated that it is an exciting time for WCRP because of new opportunities arising through new observations and products. The following discussion highlighted the issue of data sharing, as well as the issue of code sharing, with respect to climate (and earth system) models.

In the heat of the Beijing sun, things cooled off in the lecture room with a few presentations about CliC and changes in the cryosphere. Prof. Shichang Kang gave an overview of how aerosols are impacting the melt of glaciers in Asia, where 51.2% of the world's glaciers are. Black carbon concentrations there are high compared to Arctic and Antarctic regions and more research is needed into how these dark sun-attracting particles may be enhancing glacial melt. Koni Steffen, former CliC chair, updated the participants on the role of the cryosphere in the global sea-level rise: 1mm/yr from Greenland melt, 0.4mm/yr from Antarctica and 1.5mm/yr from glaciers - another reason why these 'cool' areas of our planet are so important to study. He ended the session with a report from Greenland that this week is the first time in 35 years of measuring the summit of Greenland that they are seeing melting!

WCRP is very grateful to the Chinese Academy of Science (CAS), the China Association for Science and Technology (CAST) and the local host, the Institute of Atmospheric Physics in Beijing, for organizing this meeting and for creating such a wonderful environment for WCRP groups to exchange ideas and strengthen collaborations.

