Meeting of the World Climate Research Programme (WCRP) Global Energy and Water Exchanges (GEWEX) Project Hydroclimatology Panel (GHP)

Agenda

California Institute of Technology in Pasadena, California, USA 10 - 13 December 2014

Wednesday, December 10, 2014

0900-0920 Welcome Remarks and Meeting Logistics

- <u>Graeme Stephens, Co-Chair, GEWEX Scientific Steering Group (SSG) and</u> Director, NASA Jet Propulsion Laboratory Center for Climate Sciences
- Peter van Oevelen, Director International GEWEX Project Office
- 0920-1700 Joint meeting (open session) with representatives of the Global Drought Information System (GDIS) and all GHP participants. Reports will be heard from representatives of the GHP RHPs and other GHP/GDIS scientists on drought-related research.

0920-1000 Programmatic overviews of GHP and GDIS

- Jason Evans/Jan Polcher, GHP Co-Chairs
- <u>Siegfried Schubert GDIS Workshop Science Organizing Committee</u>

1000-1030 WCRP Grand Challenges on Extremes and Water Availability

- Extremes GC (15 minutes) Sonia Seneviratne
- Water Availability GC (15 minutes) Graeme Stephens

1030-1100 Coffee Break

1100-1240 Presentations on GEWEX RHPS and their drought-related research RHP Representatives – 25 minutes total; 20 minute presentation plus questions

- <u>Hydrological Cycle in the Mediterranean Basin Experiment (HyMeX)</u> Philippe Drobinski
- <u>Saskatchewan River Basin Study (SaskRB)</u> Howard Wheater
- Northern Eurasia Earth Sciences Partnership (NEESPI) Pavel Groisman
- La Plata Basin (LPB) Hugo Berbery

1240-1400 Lunch break

1400-1530 GDIS Representative Reports

- <u>European drought monitoring and prediction</u> Juergen Vogt (30 minutes including discussion)
- <u>US drought monitoring and prediction</u> Kingtse Mo (30 minutes including discussion)

- <u>Drought monitoring and prediction in Latin America</u> Will Pozzi (30 minutes including discussion)
- 1530-1600 Coffee Break
- 1600-1630 <u>Drought monitoring and prediction in Africa</u> Eric Wood (30 minutes including discussion)
- 1630-1700 Joint Session Wrap-Up

(Evans/Polcher/Schubert/All)

Review topics including RHP process level studies, triggers and/or mechanisms of intensification (both large-scale teleconnections and local feedbacks), and interactions with operational agencies in terms of drought monitoring and how those intersect with GDIS efforts.

Summarize how the joint session discussions could lead to better interaction between GDIS and the drought related efforts in the RHPs and how this could be of importance to society and relevant to climate services.

1700 Adjourn

Thursday, December 11, 2013

0900-1730

An open session will be organized on the topic of Hydrology that Addresses Water Challenges on a Changing Planet, including a remote sensing perspective. JPL scientists will be asked to contribute talks to this session.

0900-0945 Introductory talks (15 minutes)

- Panel objectives/meeting goals J. Polcher
- GEWEX priorities/outlook G. Stephens
- A short history of RHPs R. Stewart

0945-1730

Participants will present previous accomplishments, work underway, and future plans emphasizing existing/new cross-cutting activities. In all cases comments from existing (and past and prospective) RHPs are sought, with particular focus on relevant science underway or achieved within those programs. 30 minutes including questions.

0945-1045

- <u>Mid-latitude storms: GEWEX-Process Evaluation Study (PROES)</u>, associated with mid-latitude storms that would serve to initiate the new diagnostics in support of the goals of the GSQs/GCs (G. Tselioudis)
- <u>Sub-daily precipitation: "INTElligent use of climate models for adaptatioN to non-</u> <u>Stationary hydrological Extremes (INTENSE)"</u> (H. Fowler)

1045-1115 Coffee Break

1115-1215

- <u>Remote sensing of snow</u> (Tom Painter)
- Mountain hydrology International Network for Alpine Research Catchment Hydrology - INARCH (J. Pomeroy)

1215-1345 Lunch

1345-1515

- <u>Managed water resource systems</u> (R. Harding)
- Seasonal streamflow forecasting HEPEX (A. Wood)
- <u>Phase transition precipitation</u> (R. Stewart, P. Groisman)

1515-1545 Coffee Break

1545-1705

- <u>Snow pack and GPS</u> (Yuning Fu) (30 mins including questions)
- Mountain precipitation Skype session (James Renwick) (20 mins including questions)
- Kei Yoshimura (30 mins including questions)
 - Impact of the water resources management on projected future change of drought
 - o <u>Current status of water isotope studies</u>
- 1705-1730 Summary Discussion
- 1730 Adjourn
- 1900-2000 Public Lecture at Pasadena City College (Howard Wheater)

Friday December 12, 2013

0900-1700 Panel business (open to all)

0900-0920 IGPO Update, JSC Report, & GEWEX 2014 conference (P.J. van Oevelen)

0920-1000 Interactions other Groups

• <u>GRDC/GPCC</u> (Ulrich Looser)

1000-1030 Reports on RHP activities not covered in the previous days

- <u>NEESPI</u>
 - End of project plan (Pavel Groisman)
- MAHASRI
 - o End of project plan (Jun Matsumoto)
- SaskRB (Howard Wheater/Ron Stewart)
 - Extension to the Changing Cold Regions Network (CCRN)
 - Application for full RHP status

- HyMEX (Philippe Drobinski)
 - The HyMeX Euro-Mediterranean gridded dataset ECA&D (E-OBS)
- 1030-1100 Coffee Break
- 1100-1130 Reports on RHP activities not covered in the previous days (Continued)
- 1130-1230 Proposed/Potential RHPs Specific presentations must be made by representatives of candidate RHPs on their science/implementation plans and activities relevant to advancing to/beyond Initiating RHP per existing criteria (30 mins).
 - OZEWEX (A. Van Dijk)
 - <u>HyVic</u> (F. Semazzi)

1230-1400 Lunch

1400-1530 Proposed/Potential RHPs (Continued)

- BalticEarth (M. Reckerman)
- RELAMPAGO (J. Polcher/A. Nunes with cross-cutting project proposal)
- Eastern Europe/Pannonian Region (Joan Cuxart Rodamilans) to cover outcome of recent workshop in Zagreb and identification of potential participants
- US efforts for a GEWEX RHP type activity (G. Stephens, R. Rasmussen, F. Dominguez, A. Barros)

1530-1600 Coffee Break

1600-1630

- US efforts for a GEWEX RHP type activity (Continued)
- 1630-1700 Summary Discussion/Action review
- 1700 Adjourn

Saturday December 13, 2013

0900-1700 Panel business meeting (Mandatory for all Panel members and GEWEX/WGRC/RHP Reps available and open to all others)

0900-1000

- Presentation by Panel member attending her first meeting (30 mins including questions) Silvina Solman
- Presentation on interaction with WGRC (30 minutes including questions) Bruce Hewitson
- 1000-1030 Open Discussion
- 1030-1100 Coffee Break
- 1100-1230 RHP and Crosscutting Science (CCs) Projects

Review and evaluation with decision on candidates RHPs and CCs including Interactions between RHPs and CCs (Polcher/Evans as discussion leaders)

- 1230-1400 Lunch
- 1400-1500 Interactions with other GEWEX and WCRP activities (M. Ek, R. Uijlenhoet)
- 1500-1600 Evaluation on progress on the GEWEX science questions (Polcher/Evans as discussion leaders)
- 1600 Adjourn