

Final Circular

2012 International Workshop on Hydrological Ensemble Prediction Experiment (HEPEX), Beijing, October 22-24, 2012

Dear Colleagues

It is our pleasure to announce the 2012 International Workshop on Hydrological Ensemble Prediction Experiment (HEPEX), to be held on October 22-24, 2012, in Beijing, China. This workshop will be co-hosted by Beijing Normal University (BNU), National Meteorological Center of Chinese Meteorological Administration (CMA), and Bureau of Hydrology of the Ministry of Water Resources (MWR).

HEPEX was initiated in 2004 to bring meteorologists, hydrologists and water resources managers together to develop reliable hydrological ensemble forecasts that can be used with confidence to assist the emergency management and water resources sectors to make decisions that have important consequences for the economy, for public health and safety and for the environment.

The main scientific issues that HEPEX seeks to address include:

- Do existing meteorological forecasts fully account for important uncertainties and meet the needs of hydrological predictions?
- What key scientific, methodological and data developments are needed to meet the requirements for hydrologic predictions and the end-user needs?
- How do we fully utilize numerical forecasts as well as the knowledge and skills of operational forecasters in an ensemble hydrological prediction framework?

Since the inaugural workshop at ECMWF in Reading, UK, in 2004, a series of HEPEX workshops have addressed a range of topics related to hydrological ensemble prediction,

from pre-processing and downscaling of atmospheric ensemble predictions, to data assimilation and post-processing of hydrological predictions, and from uncertainty quantification to ensemble verification. Remarkable progress has been achieved in the short history of HEPEX, especially in coupling of meteorological and hydrological forecasts, applications for hydrometeorological forecasts to water hazards and water resources management. The results have been published in several HEPEX special journal issues. Many of the methodologies developed in HEPEX scientific research are being adopted in operational use in Europe and in the United States. Up to now, most of the HEPEX scientific activities have occurred in European and North American countries, with limited participation by Asian Pacific countries. This HEPEX workshop in Beijing will introduce the HEPEX initiative to the meteorological, hydrological and water resources communities in China and other Asian Pacific countries.

The Beijing workshop is designed to have cross-cutting themes that span all aspects of HEPEX scientific topics. The ultimate goal is to help develop a HEPEX component in China and/or other Asian Pacific countries so this region can stay abreast of the cutting-edge developments in hydrological ensemble predictions. Specific objectives of this workshop include:

- (1) Develop a work report of HEPEX scientific activities from the recent years;
- (2) Presentations of latest developments in hydrometeorological ensemble forecasting methodologies and applications
- (3) Write a white paper on the state of research and applications in ensemble meteorological and hydrological predictions in China and other Asian Pacific countries; Identify a list of priorities and pathways to develop HEPEX components in China and other Asian Pacific countries;
- (4) Strategic planning and discussion of

intercontinental HEPEX activities including global flood forecasting system and a China/Asian HEPEX testbed.

- (5) Preparing for a special HEPEX issue to be published in Journal of Hydrology, Journal of Hydrometeorology or other journals.

Workshop logistics:

The workshop will be held in Jingshi Hotel, on the campus of Beijing Normal University. We have negotiated with Jingshi Hotel to allocate a block of rooms for HEPEX participants. The hotel rate for the workshop is ¥438/night (Chinese yuans) for a standard room (double bed or single large bed). **For those who are interested in attending the workshop, and/or wish to make oral or poster presentations, please complete [THE REGISTRATION FORM](#).**

Link to Registration Form:

http://hydro.bnu.edu.cn/HEPEX2012Registration/2012HEPEX_Register_Form.doc

Meeting Organization Information

Primary sponsors:

- Beijing Normal University
- National Meteorological Center, CMA
- Bureau of Hydrology, MWR

Co-Sponsors:

- ECMWF
- NOAA

Meeting Organizers:

Qingyun Duan (Coordinator), Yihong Duan, Liu Zhiyu, Jutta Thielen, Florian Pappenberger, Andy Wood

Meeting Advisory Committee:

Jiao Meiyuan (Deputy Administrator of CMA)
Liu Changming (Academician, Institute of Geography Science and Natural Resources Research/Chinese Academy of Sciences)
Wang Hao (Academician, Institute of Water and Hydrological Research)

Wang Guangqian (Academician, Tsinghua University)

Zhang Jianyun (Academician, Nanjing Institute of Hydraulic Research)

Jian Deng (Director General of Bureau of Hydrology, MWR)

Silong Zhang (Director of Hydrological Forecasting Information Center, MWR)

Hao Fanhua (Vice President of Beijing Normal University)

Xu Xinyi (Dean of College of Water Science at BNU)

John Schaake (Consultant)

Toshio Koike (Professor, University of Tokyo)

Q.J. Wang (Science Leader, CSIRO)

Jun Xia (Professor, IGSNRR/CAS)

Ross Woods (Science Leader, NIWA)

Zhijia Li (Professor, Hohai University)

Yi (Helen) He (Lecturer, Tyndall Center for Climate Change Research/University of East Anglia)

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Link to HEPEX website:

<http://www.hepex.org>

(Per HEPEX tradition, there is no registration fee for international participants. The meeting facilities and logistical support will be shared by Chinese sponsors. The travel and accommodation expenses will be participants' responsibility.)