



HEPEX: a community of practice for the advancement of hydrologic ensemble predictions

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Since its inception in 2004, HEPEX (the Hydrologic Ensemble Prediction Experiment) has created and maintained an active Community of Practice of researchers and practitioners around the world. The HEPEX mission is to establish a more holistic view of hydro-meteorological forecasting for purposes as diverse as water resources management, flood emergency management, shipping, hydropower production and many more. The HEPEX Community of Practice actively discusses various topics related to its mission. These include various 'technical' topics such as data assimilation, hydro-meteorological modelling chains, statistical post-processing techniques and forecast verification. Over the years, the HEPEX focus has broadened to topics such as training and institutional development, the use of expert knowledge and serious gaming. A specific interest is forecast informed decision making, including appropriate communication and visualisation tools, decision techniques and decision support tools.

Over the years, considerable progress has been made in terms of using ensemble hydro-meteorological forecasting. Many institutional, scientific and operational challenges still exist, though. In this presentation, we discuss how the HEPEX Community of Practice contributes to meeting those challenges. We will outline the range of HEPEX activities, including workshops, conference sessions, testbeds, learning material and our long-running blog portal (www.hepex.org). We also discuss how HEPEX can continue to be relevant also in the future. A large part of that answer lies in the fact that HEPEX members use its online platform to share their research, make announcements, report on workshops, projects and meetings, and hear about related research and operational challenges. It is also a forum for early career scientists to become increasingly involved in hydrological and hydrometeorological forecasting science and applications.