Breaking the barriers: how HEPEX contribute to bridging the gap between researchers and practitioners to advance hydrologic ensemble predictions

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Since 2004, HEPEX (Hydrologic Ensemble Prediction Experiment) has been fostering a community of researchers and practitioners around the world. The mission is still today to establish a more integrated view of hydrological forecasting, where data assimilation, hydro-meteorological modelling chains, pre- and post-processing techniques, expert knowledge, participatory co-evolution of knowledge and user needs, communication and visualisation tools, and decision support systems are connected to enhance operational systems and water management applications. Massive progress has been made over the years in terms of using ensemble hydro-meteorological forecasting, but there are still institutional, scientific and operational challenges that faces the community. Here we present the outcome of a HEPEX workshop in Melbourne, Australia, dedicated to "breaking the barriers" between researchers and practitioners in ensemble hydro-meteorological forecasting. We will also present the full range of HEPEX activities, including workshops, conference sessions, testbeds, learning material and our long-running blog portal (www.hepex.org). Through this website, members can continuously share their research, make announcements, report on workshops, projects and meetings, and hear about related research and operational challenges. It also creates a platform for early career scientists to become increasingly involved in hydrological forecasting science and applications.