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HEPEX: Connecting the dots in hydrologic ensemble predictions

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Since 2004, HEPEX (Hydrologic Ensemble Prediction Experiment) has built a community of researchers and practitioners around the world. After 15 years, its mission continues to be very relevant: to establish a more integrated view of hydrologic forecasting. In this view, data assimilation, hydro-meteorological modelling chains, user behavioural-decision models, pre- and post-processing techniques, expert knowledge, participatory co-evolution of knowledge and user needs, communication and visualisation tools, training material, games and decision support systems are connected to enhance operational services, early warning systems and water management applications. Great 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 the community faces. Here, we present the full range of HEPEX activities, such as workshops, conference sessions, testbeds, learning material and our long-running portal (www.hepex.org). We show how HEPEX can continue to be a relevant network in the coming decades. A large part of that answer lies in the fact that our members use the platform to continuously 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 hydrologic forecasting science and applications.