



## **THORPEX: A Refuge for Research or the Future of Forecasting**

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Numerical Weather Prediction was arguably one of the most effective scientific enterprises of the last century. Notwithstanding there has not been a major NWP-centred international research programme for over 25 years, and moreover NWP research is not generally acknowledged to be a leading and pioneering field. However THORPEX is a new NWP-focussed international research programme that can contribute to elevating the perception of NWP research, and likewise help spearhead that research.

THORPEX is designed to build upon the current and foreseen research capabilities, serve as a focus for future activity, help identify the major challenges, and provide an organizational framework that bridges the realms of fundamental research, operational forecasting, and forecast application. Thus it is geared to making advances across a broad front that includes extending the range of skilful weather forecasts to time-scales of value in decision-making by using ensemble forecast techniques; developing accurate and timely weather warnings designed *ab initio* to be user-useful whilst contributing to mitigating the effects of weather-related natural hazards. Achievement of these goals is to be underpinned by the four THORPEX sub-programmes :- Predictability and Dynamical Processes (PDP); Observing Systems (OS); Data Assimilation and Observing Strategies (DAOS); and Societal and Economic Research and Applications (SERA).

In effect within THORPEX quality basic research is allied to social and economic relevance. This combination is central to the emerging relationship between science and society, and THORPEX is an exemplar of this new relationship.