

## Asian THORPEX, Our Strategy to Mitigate Disasters

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THORPEX is a 10-year international research program to improve high-impact weather forecast between 1 day and 14 days under the World Meteorological Organization (WMO). Asian THORPEX Regional Committee (Currently 5 countries, China, Korea, India, Japan and Russia) is now developing Asian THORPEX Implementation Plan, which includes seven research areas; dynamic process and predictability, ensemble forecasts, observational network design, targeting observation, 4-D Data assimilation, observing system experiments and social/economic impact assessment. One of the main reasons for the difficulty in predicting severe weather events is their multi-scale structure in time and space. While transient and local conditions are very important for heavy rainfall, some of the events seem to be triggered by long-lived and global phenomena, such as propagation of a Rossby wave packet and the Madden-Julian Oscillation and the variability of Monsoon. In these cases, longer-term predictability may be expected even in local severe weather events as long as the long-term global phenomena are well predicted. THORPEX will provide global ensemble model forecast data freely to all users, who are interested in the data. Thus THORPEX will encourage individual operational center in your country or researcher to run their mesoscale NWP models, by starting from the initial/boundary conditions of some members of global ensemble forecasts, to get useful information for mitigating disasters.