



Wintertime component of the THORPEX Pacific-Asian Regional Campaign

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The THORPEX Pacific-Asian Regional Campaign (T-PARC) is a major effort aimed at studying and improving the observing system, as well as data assimilation, numerical modeling, and forecast applications related to high impact tropical and winter storms affecting Asia and North America. The tropical storm related phases of T-PARC will take place in Aug-Sept 2008, while the winter phase of T-PARC will occur during January - March 2009, in conjunction with other International Polar Year (IPY) activities. This presentation will review plans for the winter phase of T-PARC, including the scientific hypotheses, enhancements to the observing, data assimilation, numerical modeling, and application procedures, day-to-day operations during, and evaluation after the field phase. The underlying hypothesis is that adaptively configuring the observing network, data assimilation, numerical modeling, and application procedures have significant social and/or economic value. Scientific investigations will include: Rossby-wave initiation and propagation in the development of high impact weather events, eddy dynamics, cloud parameterization, multi-scale interactions, air-sea interactions, storm genesis, adaptive observations using singular vector or ensemble-based sensitivity calculations for additional dropsondes, radiosondes, and LIDAR observations.