



The THORPEX Interactive Grand Global Ensemble (TIGGE)

D. S. Richardson

Met Office (david.s.richardson@metoffice.gov.uk)

A major research challenge of 21 century is to reduce and mitigate natural disasters and to realise the societal and economic benefits of improved weather forecasts. The WMO THORPEX research programme (www.wmo.int/thorpex) will address this research challenge, thereby contributing to the development of a future truly integrated Global Interactive Forecast System (GIFS), which would generate numerical probabilistic products, available to all nations including developing countries. Global signifies both global participation and global application; the system would in principle use global and regional models as appropriate. An Interactive forecast system changes according to situation and user needs: all parts of the system from observations through data assimilation and the forecast production to the end-user applications are integrated, adaptive, and interactive.

One key part of the THORPEX plan is the establishment of a THORPEX Interactive Grand Global Ensemble (TIGGE). This will provide a framework for international collaboration on the development of ensemble prediction for Numerical Weather Prediction (NWP) and create a multi-model ensemble database as a resource for THORPEX researchers. TIGGE is planned to provide the main prediction tool in THORPEX Demonstration Projects and will constitute a facility to test and prototype the GIFS concepts.

This presentation will review the background, issues and the developing plans for the TIGGE project, and will report on the outcomes of the first TIGGE Workshop, held at ECMWF in March 2005.