EMS7/ECAM8 Abstracts, Vol. 4, EMS2007-A-00515, 2007 7th EMS Annual Meeting / 8th ECAM © Author(s) 2007



Early and envisioned research uses of the TIGGE data sets

J. Hansen (1), A. Cofino (2), C. Doyle (3), and S. Majumdar (4)

(1) Naval Research Laboratory, USA, (2) University of Cantabria, Spain, (3) Environment Canada, Canada, (4) University of Miami, USA

Early users of the THORPEX Interactive Grand Global Ensemble (TIGGE) will present research results and ideas that utilize the collection of operational ensembles available through the TIGGE archive. Examples include: issues associated with balance in multi-model ensemble forecasts with an eye towards model improvement and data assimilation; coupling TIGGE forecasts to wave models to quantify the sensitivity of high-impact ocean surface conditions to atmospheric precursors; the identification of optimal sampling locations in the environment of tropical cyclones; an assessment of the effects of weather types on sporting events and operationally related areas, like transportation, and to determine the decisions that follow from particular forecasts of adverse weather; multi-model, analog downscaling methods using a Bayesian framework.