The North American Mult-Model Ensemble Intraseasonal to Interannual Prediction System

Ben KIRTMAN

University of Miami, United States, bkirtman@rsmas.miami.edu

Given the pragmatic utility of the multi-model approach, there is multi-agency US agency (NOAA, NSF, NASA, and DOE) support for a North American Multi-Model Ensemble (NMME) Intra-seasonal to Seasonal to Inter-annual (ISI) prediction experiment. This experiment leverages an NMME team that has already formed and began producing routine real-time multi-model ensemble ISI predictions since August 2011. The forecasts are provided to the NOAA Climate Prediction Center (CPC) on an experimental basis for evaluation and consolidation as a multi-model ensemble ISI prediction system. Nine different modeling groups from the US and Canada are participating in the NMME and for each real-time and retrospective forecast there are over 100 ensemble members covering the period 1981-present. This talk provides: (i) an overall assessment of the retrospective forecast quality for SST, T2m and precipitation in terms probabilistic and deterministic metrics, (ii) a focused evaluation of how well the NMME models capture the diversity of ENSO events and (iii) an evaluation of how well the system has performed in real-time.