Name: Jin Huang
Jin.Huang@noaa.gov
NCEP Climate Test Bed
5830 University Research Court
Suite 3100, W/NP52
College Park, MD 20740
Country: US
Title: NMME Status and Its Future Plan
Additional authors:
Additional Affiliations:

Abstract:
 The National Multi-Model Ensemble (NMME) is multi-institutional multi-agency system to improve operational monthly and seasonal forecasts based on the prediction systems developed at the major US climate modeling centers (NOAA/EMC, NOAA/GFDL, NCAR, NASA) and Canada.   Although currently in an experimental stage, the NMME prediction system has been providing routine real-time monthly and seasonal forecasts since August 2011 that adhere to the CPC operational schedule. The monthly mean NMME reforecast data are archived and available to the public. The Phase-II monthly and the daily NMME reforecast data will be available, beginning in July 2014, from the UCAR server. NMME real-time forecasts are currently being used for applications such as drought and hydrologic prediction, and serve as a key guidance element for operational CPC forecasters.

The NMME current seasonal forecast system is developed as a Climate Test Bed (CTB) research project supported by NOAA/MAPP program with additional contribution from DOE, NASA and NSF. This NMME research project will end in July 2014. There is ongoing discussion on the future plan for the NMME beyond 2014. The planned NMME future activities include
1)   Bringing the experimental system to full operational capability by August 2014,
2)   Improving the NMME prediction system and products including
a.   bringing new models or upgrading existing models to the current NMME seasonal forecast system,
b.   optimizing the NMME seasonal forecast system for operational reliability,
c.   developing a sub-seasonal forecast capability including developing the sub-seasonal forecast protocol, improving understanding of sub-seasonal predictability and prediction based on the NMME data and experimental operation, incorporating high-resolution models in the sub-seasonal forecast system, and developing sub-seasonal forecast and application products.
d.   assessing and developing long-range forecast capabilities for high impact weather and climate extremes such as hurricanes, tornadoes, and droughts,
3)   Archiving and disseminating the NMME data to the research and user community, and
4)   Providing an operational platform for predictability studies and model diagnosis and evaluations at ISI time scales.

The NMME database, operational experience, and research outcomes will provide the US contributions to the international Sub-seasonal to Seasonal Prediction (S2S) Research Project and will also benefit from S2S international efforts.

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