

## **Testing Multi-Model Ensemble Systems for Prediction on Weeks to Seasons**

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Multi-model ensemble prediction systems offer an immediate route to improved skill for predictions on subseasonal to longer timescales, leveraging the known forecast reliability that results from simply averaging the results of a number of models and prediction systems. The Modeling, Analysis, Predictions, and Projections (MAPP) program, as part of NOAA's Climate Program Office, has supported pioneering work in the area of multi-model ensembles for prediction on subseasonal and longer timescales. This work is motivated by an interest from NOAA operational centers, the research community, and the interagency community to explore the utility of multi-model ensemble prediction approaches.

Beginning in 2011, MAPP, with the co-support of interagency partners (NASA, DOE, and NSF) initiated the development of a seasonal multi-model ensemble prediction system -- the North American Multi Model Ensemble (NMME), which recently transitioned to operations. Inspired by the success of the NMME as both an operational prediction system and research dataset, in FY16, MAPP solicited and funded SubX, a multi-model ensemble prediction system focused specifically on forecasts at the subseasonal timescale. The SubX project is independent from the NMME and envisioned to transition to operations, if it proves to contribute usefully to subseasonal prediction skill improvements.

This talk will discuss MAPP's funding efforts in the area of multi-model ensemble prediction, and our work to transition research projects like the NMME to operations through the Climate Test Bed..