

Leveraging ISI Multi-Model Prediction for Navy Forecast Requirements

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LONG-TERM GOALS

Determine how best to leverage existing multi-model ensemble intra-seasonal to seasonal to interannual (ISI) climate predictions for the purpose of serving the U.S. Navy's ISI prediction requirements.

OBJECTIVES

1. Determine what information products on ISI time scales would have the most value to the U.S. Navy.
2. Identify those predictions and information products of value to the U.S. Navy that could be produced by the National Multi-Model Ensemble (NMME) project, currently underway under the direction of the PI and co-PI of this project, along with investigators from several other U.S. institutions.
3. Investigate opportunities to engage in collaborative research and development of forecast capabilities of value to the Navy, with the Naval Research Laboratory (NRL) Marine Meteorology and Oceanography Divisions and other U.S. Navy centers, e.g. Fleet Numerical Meteorological and Oceanographic Center and the Naval Oceanographic Office.

APPROACH

Review the existing and planned efforts at the relevant centers. Conduct discussions with appropriate personnel at NRL centers, focusing on forecast requirements and desired capabilities. Produce a white paper documenting the findings and providing recommendations for a path forward.

WORK COMPLETED

This project was awarded on 9 August 2012. Since that time, several documents have been obtained from various U.S. Navy sources describing requirements for forecast information. A series of meetings with Naval Research Laboratory staff has been scheduled for November 2012.

RESULTS

This project was awarded on 9 August 2012, so there are no results to report as yet.

IMPACT/APPLICATIONS

This project has the potential to identify high-value and/or high-impact forecast products from real-time ISI prediction efforts that can be used by the U.S. Navy to enhance its operations.

This project also has the potential to facilitate new collaborations between U.S. Navy research centers and the major ISI modeling and prediction centers funded by other U.S. federal agencies.

RELATED PROJECTS

This project will draw on the results of the National Multi-Model Ensemble (NMME) prediction project, funded by the National Oceanic and Atmospheric Administration, in collaboration with other U.S. federal agencies. The NMME project will develop a real-time ensemble prediction capability at seasonal and longer lead for the global atmospheric, oceanic and sea ice domains.