

**Postdoc position: EnKF based global ensemble forecast system using HYCOM**

The objective of this project is to develop a state of the art global ensemble forecast system based on the Navy's HYbrid Coordinate Ocean Model (HYCOM) model. The system is expected to provide superior ocean forecasts and the associated uncertainty estimates which are critical to the US Navy's future missions. The technology to be used is based on the classical ensemble Kalman filter (EnKF) theory with HYCOM which is the operational model. The ensemble system will adequately represent the initial state uncertainties and accurately predict the ocean state and probabilistic information at any time in the future up to months. A stochastic forcing model is expected to be developed to account for the model-related uncertainties in HYCOM. The system is expected to be implemented for operation in the future.

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