A parameterization of model error and its use in ocean data assimilation

Balasubramanya Nadiga

Los Alamos National Lab., Los Alamos, United States (btnadiga@gmail.com)

Drawing on ideas of subgrid modeling in the Large Eddy Simulation framework, we consider a representation of model error that results from truncation analysis. An important aspect of this parameterization of model error is its allowance for backscatter. We examine the use of such a representation of model error in better estimating ensemble error covariance and maintaining ensemble spread in an ocean data assimilation setting.