1107-60-266 **Kayo Ide*** (ide@umd.edu), University of Maryland, Department of Atmospheric and Oceanic Science, College Park, MD 20910. *A Local Method to Hybrid Data Assimilation.*

The use of hybrid covariance models, which combine a fixed climatological estimate with the ensemble-based representation have, has become quite popular for numerical weather prediction and other geophysical prediction problems. While the ensemble-based models represent the time-evolving covariance, it is rank-deficient and due to the under-sampling. The fixed covariance models, in contrast, have full rank but lack any information of underlying dynamics. The use of the hybrid covariance models aims to enhance the advantages and suppresses the disadvantages of these models. One computational method for hybrid approach utilized optimization in the global variational framework through an augmented control variable. In this talk, we present a new local method that solves the optimization problems at every grid without the variational framework. (Received January 17, 2015)