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## Time delayed Ensemble Nudging Method ZHE AN, HENRY ABAR-

BANEL, University of California San Diego — Optimal nudging method based on time delayed embedding theory has shows potentials on analyzing and data assimilation in previous literatures. To extend the application and promote the practical implementation, new nudging assimilation method based on the time delayed embedding space is presented and the connection with other standard assimilation methods are studied. Results shows the incorporating information from the time series of data can reduce the sufficient observation needed to preserve the quality of numerical prediction, making it a potential alternative in the field of data assimilation of large geophysical models.

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