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Impact of Stochastic Kinetic Energy Backscatter Scheme on the Navy Earth System Prediction Capability (Navy ESPC) in predicting the Madden Julian Oscillation during 2017



DATE: Wednesday, May 24, 2023

TIME: 11:00 AM – 12:00 PM MDT (VIRTUAL)

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The Navy Earth System Prediction Capability (Navy ESPC) is used to examine the prediction of the Madden-Julian Oscillation (MJO) with and without the addition of Stochastic Kinetic Energy Backscatter (SKEB) forcing to account for model uncertainty. The formulation of the SKEB forcing in the Navy ESPC System uses a moisture convergence mask which adds random perturbations to the rotational component of the wind. The Navy ESPC is comprised of the Navy Global Environmental Model (NAVGEM) atmospheric model coupled to Hybrid Coordinate Ocean Model (HYCOM) and the Los Alamos Community Ice Code (CICE).

These ensembles were run once per week between February 2017 through January 2018 with 5 and 16 members for the SKEB and the Non-SKEB configurations respectively.

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