

SESSION: (A2) Modelling issues in S2S prediction

(A2-05)

Seasonal prediction experiments in a global coupled system based on a non-hydrostatic global atmospheric model

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The Korea Institute of Atmospheric Prediction Systems (KIAPS) began a national project in developing a new global atmospheric model system in 2011. As of February 2018, the 12-km Korean Integrated Model (KIM) system, which consists of a new spectral-element non-hydrostatic dynamical core on a cubed sphere and the state-of-the-art physics parameterization package, has been launched in a real-time forecast framework, with the initial conditions obtained from the advanced hybrid four-dimensional ensemble variational data assimilation (4D-EnVar) over its native grid. Further, KIM has been coupled with the ocean model, HYCOM, for expansion of the application to seasonal prediction and climate studies. Predictability experiments with this couple system are being conducted and the results will be presented at the conference, with a focus on the stochastic coupling of ocean and atmosphere.