

P10 Three-dimensional variational and hybrid data assimilation for the MPAS-A system

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The Model for Prediction Across Scales – Atmosphere (MPAS-A) is a global non-hydrostatic atmosphere model based on unstructured centroidal Voronoi meshes. Initial capabilities of 3-D variational and hybrid data assimilation based on NCEP's GSI and EnKF systems have been developed and tested for MPAS-A. Month-long MPAS-A cycling experiments with different data assimilation techniques, GSI-3DVAR, EnKF and hybrid GSI-3DVAR/EnKF, are conducted. Conventional observations, GPS radio occultation bending angle, and AMSU-A radiances are assimilated in the experiments.