

1.5 The Model for Prediction Across Scales Version 6.0 release and future development directions.

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The Model for Prediction Across Scales – Atmosphere (MPAS-A) is based on the numerics and physics used in the Advanced Research WRF (ARW) except that it uses an unstructured global spherical centroidal Voronoi mesh to alleviate the pole problems inherent in ARW's latitude-longitude global grid and it uses a geometric height vertical coordinate in contrast to the ARW mass vertical coordinate. We will briefly review features in the MPAS-A Version 6.0 release and discuss applications for which it has been tested. We will also provide an overview of our ongoing and future development efforts: MPAS-A as a dynamical core in NCAR's Community Earth System Model (CESM), a regional version of MPAS-A, MPAS-A and accelerators, and open development using GitHub.