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® The Development of An Adaptive Mesh Atmospheric Model - Fluidity-Atmosphere

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This study presents the development of a three-dimensional unstructured adaptive finite-element model (Fluidity-Atmosphere) for atmospheric research. To improve the computational efficiency, a LSTM-based three-dimensional unstructured mesh generator is proposed to predict the evolution of the adaptive mesh. To evaluate the performance of adaptive meshes and physical parameterisations in Fluidity-Atmosphere, a series of idealized test cases have been setup and the unstructured tetrahedral meshes are adapted automatically with the specified fields in time and space.

Student or Postdoc?

No. Not a student nor Postdoc.

Primary authors: Dr LI, Jinxi; Dr FANG, Fangxin; Mr GAN, Pu; Prof. PAIN, Christopher; Dr WU, Xiaofei; Prof. WANG, Zifa; Dr ZHENG, Jie; Prof. ZHU, Jiang

Presenter: Dr LI, Jinxi

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