

An Update on Our Comparison of Alternative Dynamical Frameworks for Global Cloud-Resolving Models

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Various approaches are being explored in the rapidly evolving world of global cloud-resolving models. Issues include alternative equation sets (fully compressible versus sound-proof), alternative choices of prognostic variables (momentum versus vorticity), alternative methods to discretize the sphere itself (icosahedral versus cubic), and alternative vertical staggerings (Lorenz versus Charney-Phillips). In this talk we will show comparisons of cloud-resolving simulations with different dynamical cores but identical physics for both idealized (e.g., bubble) and realistic (e.g., TWP-ICE) cases.