NICAM results of the project DYAMOND for global storm-resolving model intercomparison

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Project DYAMOND (DYnamics of the Atmospheric general circulation Modeled On Non-hydrostatic Domains; https://www.esiwace.eu/services/dyamond) describes a framework for the intercomparison of an emerging class of atmospheric circulations model that, through their resolution of the major modes of atmospheric heat transport, endeavor to represent the most important scales of the full three-dimensional fluid dynamics of the atmospheric circulation.

Nine models submitted simulations of the forty day intercomparison period. Eight of these employed a tiling of the sphere that was uniformly less than 5km. At these scales vertical accelerations that are non-hydrostatic become important, and convective storms in the tropics can be resolved by the underlying equations of motion. The models and some basic characteristics of their output are described in more detail, as is the availability and planned use of this output for future scientific study.

In this presentation, I will show some results of the DYAMOND simulations with NICAM and current status of DYAMOND with a list of possible participants, together with diagnostics considered.

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