

## **Project DYAMONDDS**

Project DYAMOND describes a framework for the intercomparison of an emerging class of atmospheric circulation models 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. Phase 0 of DYAMOND experiments has been finished considering 9 models (ICON, NICAM, MPAS, GEOS, FV3, SAM, UM, ARPEGE-NH, IFS). Simulations have been performed for a forty day period with the goal of: (i) identifying similarities and differences that emerge at storm resolving scales (1 km to 5 km) as compared to traditional (hydrostatic-scale) representations of the atmospheric circulation; and (ii) to better define the frameworks and protocols for subsequent, and scientifically more ambitious, phases.

DYAMOND started as a joint initiative between the MPI-M (Bjorn Stevens) and University of Tokyo (Masaki Satoh). Further impulse was given through the involvement of US participants (Chris Bretherton, University of Washington), the support of DWD through the HErZ project (Daniel Klocke) and with the help of organisational support from DKRZ in the scope of the ESIWACE project (Joachim Biercamp, Philipp Neumann).

The data management project “DYAMONDDS” (short for diamond data storage) takes care of the data archival for the project phase 0 output of all nine models.