

# Sapphire

This page gives a short overview of selected experiments with the paths to the directories where the output is stored.

**Note that the volume of data is very large for this kind of simulations. Users should only copy to the workspace/scratch the variables they really need for their analysis.**

## 1. DYAMOND

DYAMOND stands for The DYnamics of the Atmospheric general circulation Modeled On Non-hydrostatic Domains, and it was the first ever intercomparison of global-storm-resolving models. Nine models participated, run for 40 days (1.8-10.9.2016), with a great number of simulations performed with ICON (NWP version). A general overview of DYAMOND is given in Stevens et al. 2020 [doi](#) and a more specific presentation of the ICON results in Hohenegger et al. 2020 [doi](#). More technical information on the participating models can also be found on the ESIWACE DYAMOND website ([website](#)).

### Accessing output

Regridded statistics on a 0.1×0.1 grid can be found on mistral under:

```
/work/ka1081/Hackathon/GrossStats
```

Full output of all models is saved on the DKRZ tape archive:

```
/hpss/arch/mh1113
```

## 2. ICON-LEM simulations over Germany

As part of the HD(CP)2 project (<http://hdc2.eu/>), simulations with the ICON Large-Eddy Model have been performed over Germany with grid spacings of 625, 312 and 156 m for selected days. The ICON-LEM code is documented in Dipankar et al. 2015 [doi](#) and overview of the simulations are given in Riecke et al. 2017 [doi](#) and Stevens et al. 2020 [doi](#).

### Accessing output

Full output is saved on the DKRZ tape archive:

```
/hpss/arch/bm0834/k203095/ICON_LEM_DE
```

### 3. NARVAL simulations

As a support to the NARVAL two field campaigns, ICON simulations (NWP version) have been performed over the tropical Atlantic. Storm-resolving simulations with a grid spacing of 2.5 km over the whole tropical Atlantic basin with a local grid refinement of 1.25 km over the western basin have been performed for December 2013 (NARVAL) and August 2016 (NARVALII). Those simulations are documented in Klocke et al. 2017 [doi](#). Large-eddy simulations with a grid spacing of 1250, 600, 300 and 150 m have been performed over the western Atlantic for selected days and are documented in Stevens et al. 2019 [doi](#).

#### Accessing output

Output of the storm-resolving simulations is saved for the two field campaigns NARVAL and NARVALII on the DKRZ tape archive:

```
/hpss/arch/bm0834/k203095/HErZ-NARVAL  
/hpss/arch/bm0834/k203095/HErZ-NARVALII
```

Output of the large-eddy simulations is saved on the DKRZ tape archive:

```
/hpss/arch/bm0834/k203095/HDCP2_TA
```

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