



COSMO Priority Project C2I

COSMO to ICON

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CURRENT STATUS

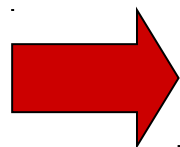
✓ ICON has been successfully installed and compiled on ECMWF

✓

✗ ICON has not yet been successfully compiled on CINECA

Different autoconf configurations have been tested but none has been successful:

- intel or gcc
- openmp or mpi
- grib_api or eccodes



Find optimal configuration in collaboration with DWD and ARPAE



FUTURE PLANS

✓ ICON simulations with IFS boundary conditions have been planned in order to become familiar with the model and compare it with COSMO

✓ ICON simulations will focus on VAIA storm, an extreme meteorological event that took place over Northern Italy on October 2018

X IFS IC and BCs have been obtained through the script **mars4icon.sh** provided by DWD with the option **-a**, in order to bound a domain, but there is still a bug: cdo recognizes different horizontal grids for T and SST and ICON crashes!!

=> ICON IC and BCs have been requested to the DWD. The simulations will be performed as soon as the data will be available (in September hopefully)

SIMULATION SET-UP

✓ ICON run since 20181026 00 UTC up to +144h in analysis mode with BCs every 6h at ~ 5 km over European domain

✓ ICON run since 20181029 00UTC up to +48h in forecast mode with BCs every 3h at ~ 2 km over Italian domain

