

## Running ARPEGE-NH at 2.5km

*Thursday, 27 September 2018 14:15 (30 minutes)*

For about 15 years, Météo-France has been running non-hydrostatic limited area models in operations. These non-hydrostatic dynamics, currently used in Météo-France limited area model AROME can be enabled in our global model ARPEGE.

The renewal of Météo-France HPC systems in 2020 shall increase its computing power by a factor of five, and may make possible the operation of a short-range (2 or 3 days) global very high-resolution non-hydrostatic model. Météo-France is currently engaged in the Dyamond project whose purpose is the comparison of different non-hydrostatic global models running at 2.5km.

The presentation will describe the workings of the non-hydrostatic dynamics, the expected and measured performance of ARPEGE-NH, and the work achieved so far in the framework of the Dyamond project. We will eventually discuss the feasibility of implementing a 2.5km ARPEGE-NH in operations.

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