[DEODE: Destination Earth on-demand Extremes](#)

Description

The project proposes a solution for making on-demand configurable digital twin engines for forecasting of environmental extremes at the sub-km scale. We name the solution Destination Earth On-Demand Extremes (DEODE). The core of our solution is to provide an on-demand workflow with co-design of high resolution predictions about extreme weather events combined with decision making support for impact sectors including hydrology, air quality and energy meteorology, with use of a physics-based and data driven model system and computationally-intensive data-flow organised on the EuroHPC high performance computer platform. In phase 1, national and ECMWF HPCs will also be used for some of the tasks related tocapability demonstration and preparation of the workflows. Other applications such as those important for agriculture are also addressed. To maximise the use of its products, the DEODE system will be co-developed and co-designed in close collaboration with the users. Their data and feedback enable the optimisation of our system.

News: https://stories.ecmwf.int/m-t-o-france-wins-bid-to-develop-destination-earth-s-on-demand-extremes-digital-twin/index.html

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