

Creating an Open data Portal for Citizens: the MISTRAL Project

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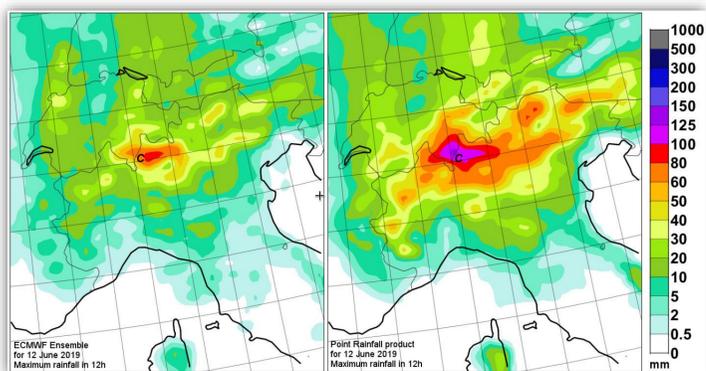


Fig 1. “Point Rainfall” product, a key component in ECMWF’s contribution to MISTRAL



Fig 2. CINECA Supercomputer



The **MAIN GOAL** of the project is to create a **National Meteorological Open Data Portal** to provide citizens, public administrations and national and international private organizations with high accuracy meteorological data from observational networks and historical and real-time analyses and forecasts.

The **MISTRAL** portal will facilitate and foster the **re-use** of the datasets by the weather community, as well as by other cross-cutting communities, to provide added value **services** through the use of HPC resources, and creating also new business opportunities.



Fig 3. MISTRAL partners in the MISTRAL Hackathon

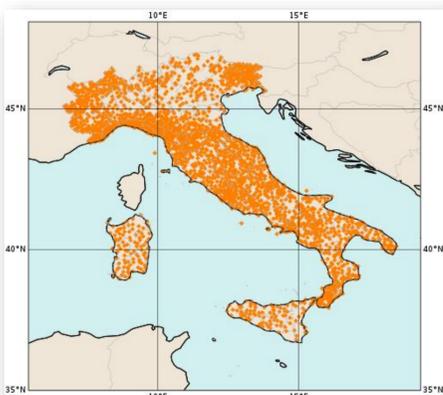
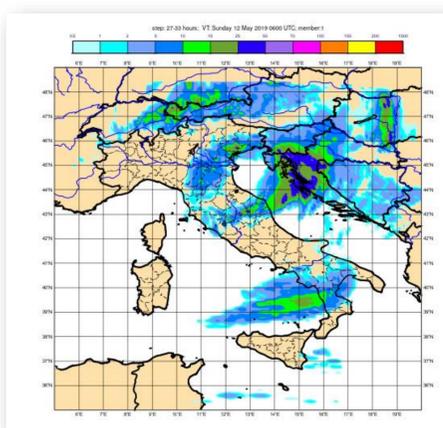


Fig 4. Example of COSMO-21 2.2 km 6-h total precipitation forecast (top) and the Italian High-density observation network (bottom)

ACTIVITIES

1. **Improve access** to large **datasets** of public weather institutions;
2. **Unleash** creative exploitation of **massive weather datasets** using supercomputers;
3. Create a new service at the **Italian national level**, to exploit the massive amounts of public open data that are available (Big Data Challenge);
4. Exploit supercomputing facilities to analyze complex combinations of large public weather datasets to **make the forecasts more valuable**;
5. **Improve the interoperability of weather regional data providers** using international standards;
6. **Directly upload the data generated by the supercomputers onto the Italian National Data Open Portal and also onto the EU Open Data Portal**, assuring trans-European access;
7. **Provide official and certified data and services** to foster data re-use in accordance with Public Sector Information and Open Government initiatives;
8. Provide **citizens with free access** to the weather observations and to forecast data visualizations;
9. Implement **new ways of displaying and visualizing datasets and metadata**, tailored to users’ needs;
10. **Identify viable business models** that can support sustainable use of weather datasets and exploit valuable Italian public weather institution resources in European repositories.