

## **HARMONIE: AEMET new operational weather prediction model. The roadmap to the mesoscale.**

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### **ABSTRACT**

Numerical weather prediction (NWP) models are the main tool to support the operational weather forecast activities in all the meteorological institutes around the world. At the same time they are very powerful tools to investigate the behaviour of the Atmosphere in many different aspects. But these tools need, as a first condition, a large amount of computer power and this is the reason why traditionally meteorologist have set up different kind of models, devoted to different applications. But in the last years the computer power has increased dramatically and NWP operational models are going to increase their horizontal resolution and then surface processes (orography, soil temperature, soil moisture and so on) are much better represented in the models. In this presentation the new AEMET operational NWP model, HARMONIE, is presented and show how its resolution (2.5 Km) may improve the forecast of surface parameters and in this way improving the products we can supply for Road Authorities around Spain.