



## **Studies of MM5 parametrization sensibility for INM SREPS**

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INM is building a short range ensemble prediction system (SREPS), which is expected to be a fully-operational tool for operational weather forecasting.

The main goal is to define the best SREPS to be used in the prediction of low-level/surface fields, e.g. wind power forecasts, or heavy convective precipitation events in the Mediterranean area.

Different strategies for SREPS are being explored: multi-model, multi-boundaries, Scaled Lagged Averaged Forecasts (SLAF) and breeding vectors.

The multi-model approach (Hirlam, HRM, MM5, UM) uses four initial and boundary conditions for each limited area model obtained from a global model. Each model runs with a fixed combination of parametrizations of physical processes.

In this study will be shown the sensibility of different parametrizations of physical processes in the MM5 model. This allow us to explore a different way to add new members to the SREPS and a possible determination of the best combination of parametrizations for the integration area.