An hybrid short-range ensemble prediction system

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An Hybrid Short-Range Ensemble Prediction System (HSREPS) has been developed in order to improve the short-range forecasts at the Spanish Met Service (INM), focusing in the precipitation and close to the ground wind fields. The method is based on supplying the uncertainty information from a coarse Ensemble Prediction System (EPS) to a higher resolution deterministic forecast (Du, 2006). The HSREPS uses the Short-Range Multi-model EPS (SREPS) and the deterministic operational HIRLAM models running both at the INM. The probabilistic precipitation and wind forecast performances of HSREPS have been verified against INM high-resolution climate network, and compared with the multi-model system (SREPS).