



Ensemble post-processing methods for short-range ensemble forecasts.

Dr. Descamps

Météo-France, France (laurent.descamps@meteo.fr)

Calibration of Ensemble Prediction Systems (EPS) aims at partly correcting deficiencies in forecast error estimates. A number of studies have shown that post-processing methods can improve ensemble reliability. However, most of them have focused on medium-range and some questions remained unanswered about the best approach for short-range EPS. Using the Météo-France short-range EPS, some of those key points will be addressed in the present study. Several post-processing methods, from simple approaches (using a correction based on a reliability diagram) to more complex ones (such as Bayesian Model Averaging, Analogs or CDF corrections) will be assessed. The need to use a reforecast dataset as training data will be investigated. The use of calibration as a way to represent model error in EPS will also be discussed. Finally, the interest of post-processing methods for severe events will be illustrated using some heavy precipitation cases which occurred in France during June 2010. Particular attention will be paid on the extreme precipitation case of the Draguignan region which took place on June 15 and 16.