



Comparing Non-homogeneous Gaussian Regression and Bayesian Model Averaging for post-processing hydrological ensemble forecasts

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Bayesian Model Averaging and Non-homogeneous Gaussian Regression have been proposed as techniques for post-processing ensemble forecasts into predictive probability distributions. Both methods make use of past forecast data for which observations are available to propose weights for the ensemble members along with bias and dispersion corrections. The mathematical basis and application of these methods though differs significantly.

In this work we contrast the forecast results derived using these methods within the European Flood Awareness System, an operational flood forecasting system covering Europe. The performance of the different methods at lead times up to 15 days is compared at multiple sites and for notable flood events.