EMS Annual Meeting Abstracts
Vol. 10, EMS2013-75, 2013
13th EMS / 11th ECAM

No Skill, Fake Skill and Real Skill (in probabilistic hydrological forecasting)

F Pappenberger, L Alfieri, F Wetterhall, and K Bogner

European Centre for Medium Range Weather Forecasts, Reading, United Kingdom (florian.pappenberger@ecmwf.int, +44-(0)118-9869450)

Probabilistic forecasting is becoming increasingly popular in operational environments. More and more agencies around Europe and the World believe that using probabilities will lead to 'better' forecasts, which are not only more reliable, but will also improve decision making. Probabilistic forecasting as such are a relatively expensive in comparison to deterministic or data based forecasting. The skill (not value) of complex forecast systems is often established by comparing against simple benchmarks (e.g. climatology) easily beaten even by the most rudimentary forecasting system. Detail studies which try to assess the skill in comparison to more difficult to beat benchmarks such as persistency in discharge/precipitation, ensemble stream flow predictions or other methods are rare. In this paper we will evaluate a large variety of different options of benchmarks and evaluate their individual skill. We will demonstrate the methodology on the example of the European Flood Awareness System, which is running in operational mode at the European Center For Medium Range Weather forecasts in collaboration with other European partners (see www.efas.eu). This forms part of the verification testbed project of the Hydrological Ensemble Prediction experiment (HEPEX, www.hepex.org)