EMS7/ECAM8 Abstracts,
Vol. 4, EMS2007-A-00173, 2007
7th EMS Annual Meeting / 8th ECAM


# The impact of using persistence as a reference on forecast skill

**M. Mittermaier**

Met Office, Exeter, UK (E-mail: marion.mittermaier@metoffice.gov.uk)

Actual forecast skill is typically expressed relative to the skill of a reference forecast. It is shown that the choice of reference (e.g. random or persistence) can affect the actual, and perceived, performance of the forecast system.

Simplified hypthetical scenarios are used to compare two scores, one referenced with respect to a random forecast, the other with respect to persistence. It can be shown that persistence offers a sterner test of true forecast added value and skill. After all, to judge the value of NWP forecasting systems we should ask the following question: Is it possible to demonstrate that a computationally expensive NWP model provides significant skill and added value over a simple persistence forecast (which says that ‘‘tomorrow will be like today”). Unfortunately it is also true that despite the benefits of using a more realistic (or plausible) reference forecast it may cause NWP forecasts to be seen in a less favourable or optimistic light.