



Forecast (in)consistency in a hydro-meteorological chain: Curse or blessing?

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Flood Forecasting increasingly relies on Numerical Weather Prediction (NWP) forecasts to achieve longer lead times. One of the key difficulties that is emerging in constructing a decision framework for these flood forecasts is when consecutive forecasts are different in some way and so inconsistent. In this opinion paper we explore some of the issues surrounding such forecast inconsistency (also known as “Jumpiness”, “Turning points”, “Continuity” or number of “Swings”). We discuss what inconsistency is; why forecasts might be inconsistent; how we should analyse it; what we should do about it; how we should communicate it and whether it is a totally undesirable property. The property of consistency is increasingly emerging as a hot topic in many forecasting environments.

Pappenberger, F., Cloke, H.L., Persson, A., Demeritt, D., 2011, HESS Opinions on forecast (in)consistency in a hydro-meteorological chain: Curse or blessing?

Pappenberger, F., Wetterhall, F., Ye, H., Cloke, H.L., Thielen, J., 2011, Fixed-event forecasting: properties of a hydro-meteorological forecasting chain, AdGeo, in press

Pappenberger, F. and Buizza, R., 2011, The probabilistic Forecast Convergence Score (pFCS), Monthly Weather Review