



Predicting failures of point forecasts

S. Hallerberg (1,2), J. Bröcker (2,3), H. Kantz (2), and L. A. Smith (3)

(1) Max Planck Institute for Dynamics and Self-Organization, 37077 Göttingen, Germany, (2) Max Planck Institute for the Physics of Complex Systems, Nöthnitzer Str. 38, D 01187 Dresden, Germany, (3) Centre for the Analysis of Time Series, Department of Statistics, London School of Economics, London WC2A 2AE. UK

We investigate the predictability of errors in deterministic temperature forecasts. More precisely, the aim is to issue warnings whenever the differences between forecast and verification exceed a given threshold. The warnings are generated by analyzing the output of an ensemble forecast system in terms of a decision making approach. The quality of the resulting predictions is evaluated by computing receiver operating characteristics, the Brier score, and the Ignorance score. Special emphasis is also given to the question whether rare events are better predictable.