



Much ado about wind warnings

Martin Göber (1,2) and Marcus Paulat (1)

(1) Deutscher Wetterdienst (DWD), Offenbach, Germany (martin.goebert@dwd.de), (2) Hans-Ertel-Centre for Weather Research

In Germany, wind warnings keep forecasters busy. Be it in mesoscale regions of a large scale cyclone, or as a severe concomitant phenomenon of thunderstorms - gust warnings are more frequent than warnings of all other meteorological phenomena together. Nowadays wind warnings hardly ever miss an event completely, but sometimes the severity is underestimated. The low miss rate is partly achieved by a strong overforecasting of gusts, resulting in a high ratio of false alarms. It will be shown by simulating the observational network, that the false alarm ratio is also strongly overestimated because of a lack of observations. Thus a strict "deterministic" verification is not sufficient, but a probabilistic treatment of observations is needed.

At least we can notice a pronounced reduction of false alarms over the last decade, due to a reduction in overforecasting which is based partly on changing the operational warning process. Some skill exists in estimating the occurrence of convective gusts, but forecasting the intensity of convective gusts remains the largest problem in gust prediction.