



Communicating probabilistic information in weather forecasts

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The warnings of extreme weather events are inherently uncertain, since both the chaotic nature of the atmosphere, as well as inaccuracies in the weather observation and in the computer models lead to ambiguity and incomplete knowledge (NRC 2006).

This inevitably leads to problems and makes the communication of weather warnings to both the population and to professional users difficult. Although forecasters have data about the uncertainty of a prediction or forecast, it is often unclear how this information is understood, interpreted and applied by the users (Gigerenzer et al. 2005; Handmer & Proudley 2007). Thus, such information is yet scarcely conveyed.

This poster presents results from the interdisciplinary research project WEXICOM at the Hans-Ertel-Centre for Weather Research Branch in Berlin. It shows results of several social science studies that discuss both the perception by the population as well as by experienced users (fire fighters, police, civil protection etc.) regarding uncertainties in weather warnings.

The studies are devoted to the question how weather warnings are communicated to expert users and how they can be evaluated in terms of their content and their effectiveness. In detail, the topics discussed are the tools professional forecast users rely on, their confidence in forecasts, user specific lead times or the information format (e.g. level of detail, verbal vs. numerical information, etc.) and hence their understanding of probabilistic information.