



Impact of weather on society: How to improve the utility of a weather forecast

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Current advances in the accuracy of numerical weather prediction have unfortunately not resulted into a significant increase in the utility of the weather forecast i.e. supporting a good decision. There is therefore a need to understand why forecasts are a problem for many areas of application and to create an inventory of applications to study how information is used and to how it will be of most benefit to society. Thus, WMO established the Working Group on Social and Economic Research Application (WG SERA) under the World Weather Research Programme to focus on improving the utility of the forecast by moving into the risk forecast and decision-makers domains. Clearly, while there is general agreement within the scientific community that uncertainty between forecasts means that probabilistic forecasts are necessary to provide useful information, the decision-making process is inherently deterministic and this must be addressed through effective translation of weather forecasts to risk forecasts. To address these issues a multidisciplinary approach is required with social science interacting with the meteorological community and then with the decision-maker/user community. These issues will be explored in detail and the role of the WG SERA will be discussed.