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Operational user-centric verification of severe weather warnings

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User expectations of accurate and timely severe weather warnings are growing. These severe weather warnings are usually issued as a part of the official duty of national meteorological services. But also private meteorological services provide severe weather warnings based on flexible custom-tailored thresholds for different audiences.

The quality of such warnings can be measured in various ways. Next to the use of scientifically sound techniques it is not less important to find an approach which is understood and accepted by the user community. This can be supported by the use of modern visualisation techniques.

In the example we present hit rates and false alarm rates are used to make an assessment of the warning accuracy. These indicators are calculated for various severe weather categories in Germany in order to be reported towards to the user on a quarterly basis. Secondly these reports are also used for internal feedback and retrospectives of the forecasters in order to stimulate continuous learning and improvement. And last but not least the verification reports are an important management tool to understand the effectiveness of certain improvement initiatives.