



Civil Protection Practitioners' Response to Introducing Nowcasting in Weather Warnings

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The HErZ project WEXICOM (Improving the process of weather warnings and extreme weather information in the chain from the meteorological forecasts to their communication for the Berlin conurbation) assesses the communication and use of weather warnings. In cooperation with DWD we conducted two online surveys with German relief forces before and after a nowcasting application was introduced into the weather warning platform FEWIS. The aim is to investigate how relief workers make use of the additional information.

DWD supports German civil protection by providing the warning platform FeWIS (Fire brigade Weather Information System) for registered relief workers. The platform provides information on meteorological hazards needed to take precautions and to support rescue actions.

In June 2013 DWD added nowcasted estimates of storm attributes including warning cones based on a 1x1 km grid. The tool named "GewitterMonitor" is based on NowcastMIX and uses short-term weather models and observations to derive warnings with high precision on intensity, location and timing of thunder storm cells for the following two hours.

A first survey provided prior to the addition of nowcasted information investigates how users benefit from FeWIS and how they perceive its functionality and reliability.

Following the introduction users gain experience applying the nowcasting tool in the thunderstorm season 2013. In Winter 2013/2014 we conducted another online survey. The post-survey comprises questions on the use of the GewitterMonitor and on how the tool supports relief forces in responding to meteorological risks. The post survey also repeats questions on the perception of functionality and function of FeWIS and poses questions derived from the previous survey. This second survey collects practitioners feedback on GewitterMonitor and allows to detect changes in how users perceive the performance of FeWIS after the addition by relating responses to the prior survey.