



## **Web-based Weather and Climate Information Service of Forensic Disaster Analysis**

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Extreme meteorological events not only trigger natural disasters, they also control the impact of various catastrophes. Especially for cascading effects or in case of multihazards, for example when an earthquake occurs in conjunction with a cold wave, the actual weather situation might substantially boost the impact. Thus, reliable information on extreme meteorological events and the general weather condition during disasters is an important component of Forensic Disaster Analyses.

The Web Service “Wettergefahren-Frühwarnung” (early warning of weather hazards) provides information on imminent or just occurring unusual or extreme weather events worldwide. Of particular interest are events with a high impact and massive damage that occur around the globe, but with a special focus on Germany and Europe. The Service started on 1 February 2004 with an operational routine. During the last 10 years, “Wettergefahren-Frühwarnun” examined and assessed more than 800 unusual or extreme weather events that occurred all over the world. Permanent availability, daily updated information, editorially enhanced reports on extreme or unusual weather events enriched by images and measured values, are the hallmarks of the internet project. All warnings, special notes, detailed and high-quality reports can be found in an ever-growing archive.

In addition to daily monitoring and assessment of global weather events, “Wettergefahren-Frühwarnung” also creates its own special maps and images. In recent years, increasingly complex codes have been developed that now produce many hundreds of weather charts for the entire world every 6 hours. Allegedly threatened areas or cities can be identified immediately. The maps give information about rainfall, temperature deviations, convection indices, wind, snow accumulation and much more. Additionally, for some 2800 cities worldwide, daily point forecasts are calculated and the predicted weather parameters are clearly arranged in tables for Germany, Europe, and the other continents.

In 2007, “Wettergefahren-Frühwarnung” became part of CEDIM and contributed to the activity of near-real time Forensic Disaster Analysis ahead, during and after a major event. Information is provided as text, own weather charts or data.