



Near real time Forensic Disaster Analysis of the central European flood in June 2013 in Germany: Impact and management

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Within its current research activity on near real time Forensic Disaster Analysis (FDA), researchers from the Center for Disaster Management and Risk Reduction Technology (CEDIM) aim to identify major risk drivers and to understand the root causes of disaster and infer the implications for disaster mitigation. A key component of this activity is the development of rapid assessment tools which allow for a science based estimate of disaster impacts. The central European flood in June 2013 caused in Germany severe damage to buildings, infrastructure and agricultural lands and has had a great impact on people, transportation and the economy. In many areas thousands of people were evacuated. Electrical grid and local water supply utilities failed during the floods. Furthermore, traffic was disrupted in the interregional transportation network including federal highways and long distance railways. CEDIM analysed the impact and management of the flood event within an FDA activity. An analysis on the amount and spatial distribution of flood-related Twitter messages in Germany revealed a high interest in the flood in the social media. Furthermore, an analysis of the resilience of selected affected areas in Germany has been carried out to assess the impact of the flood on the district level. The resilience indicator is based on social, economic and institutional indicators which are supplemented with information on the number of people evacuated and transportation disruptions. Combined with the magnitude of the event, an index is calculated that allows for a rapid initial but preliminary estimate of the flood impact. Results show high resilience of the administrative districts along the Danube while heavy impacts are seen along the Mulde and Elbe.