



## **Near-Real-Time Analysis of Publicly Communicated Disaster Response Information**

Trevor Girard

Geophysical Institute, Karlsruhe Institute of Technology, Karlsruhe, Germany (trevor.girard@kit.edu)

During a disaster situation the public will need to make critical actions regarding what to do, where to go, how to get there, and so on. The more informed the public is, the better actions they are able to make, resulting in reduced disaster impacts. The criteria for what information to provide the public needs to change depending on the specific needs of the disaster affected population. The method of dissemination also needs to match the communication channels that the public typically uses in disaster situations. This research project investigates the dynamic information needs of disaster affected populations and how information leads to actions.

The purpose of the research project is to identify key indicators for measuring how well informed the public is during disasters. The indicators are limited to those which can be observed as communication is happening (i.e. in near-real-time). By doing so, the indicators can be analyzed as disaster situations unfold, deficiencies can be identified, and recommendations can be made to potentially improve communication while the response is still underway. The end goal of the research is to improve the ability of communicators to inform disaster affected communities.

A classification scheme has been developed to categorize the information provided to the public during disasters. Under each category is a set of typical questions that the information should answer. These questions are the result of a best observed practice review of the information available during 11 disasters. For example, under the category 'Life Saving Response', the questions which should be answered are who is doing what (Evacuation, SAR), where and when, and the amount of the affected communities' needs being covered by these actions. Review of what questions remain unanswered acts as the first indicator, referred to as an 'Information Gap Analysis'. Comparative analysis of the information within categories, between categories, and between similar disasters allows for further indicators to be observed in near-real-time. Other indicators include: timing of information provision; appropriate emphasis on most critical information; appropriate terminology; appropriate information medium; appropriate comparison to past events, and; guidance regarding what to do.