



Risk Communication, Assessment, and Responses for Extreme Weather Events

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Extreme weather poses risks to people, our environment, and our way of life. Science and technology have tremendously improved our observation, understanding, and prediction of the atmosphere. At the same time, we have an unprecedented ability to communicate this improved weather risk information—oftentimes days in advance of the event—via a multitude of sources and channels. Although providing skillful and timely weather risk information is important, people’s assessment of and responses to extreme weather risks are influenced by more than the scientific information about the risk itself. Thus, to achieve the fundamental goal of reducing harm from extreme weather, it’s necessary to complement meteorological research with research to observe and understand how and why people react to extreme weather risks in the ways that they do. In this presentation, I will discuss current research efforts to examine the influences of weather risk communication and of non-weather related factors on people’s assessment of and responses to extreme weather risks. In doing so, I also will illustrate how these topics can be examined via different research approaches and methods, with different populations, and for different weather hazards. I will first discuss how, using survey data, people’s different past experiences with extreme weather affect their risk perceptions, their beliefs about responding to the risk, and their protective behavioral intentions. Next, using an analysis of Twitter data, I will illustrate the dynamic, evolving ways that people evaluated and responded to Hurricane Sandy. Finally, I will introduce a new research effort that explores how investigating risk assessment and responses also applies to National Weather Service forecasters who create weather risk information using ensemble-based model products. I will conclude with a discussion of key areas for future research.

*This seminar will be webcast live at:
<http://www.fin.ucar.edu/it/mms/fl-live.htm>*

*Recorded seminar link can be viewed here:
<https://www.mmm.ucar.edu/events/seminars>*

Friday, 26 February 2016, 11:00 AM
Refreshments 10:45 AM
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Bldg 2 Main Auditorium, Room 1022