


University of Albany

High impact weather is a growing area of societal concern – particularly given the increased frequency and intensity of extreme weather in the face of a rapidly changing climate. The social and socioeconomic impacts of high impact weather systems is directly related to the public response to the weather forecast and related hazardous weather information. In the aftermath of a high impact, extreme weather event, the public’s protective actions are indeed critical to safeguarding life and property. Ensuring that the general public adheres to weather forecast information is a multi-disciplinary challenge that demands a team science and integrated research approach. Social scientists, meteorologists, emergency managers, and communication and media practitioners need to work closely together in order to effectively communicate science, weather forecasts and hazardous weather information, as well as to enhance the messaging of forecast uncertainty to the public.

Faculty Scholars and Researchers from the University at Albany have expertise that addresses a wide range of the needed areas for work in this area:

TABLE 1: University at Albany Faculty Scholars/Researchers				 UNIVERSITY AT ALBANY <small>State University of New York</small>			
Discipline	Name	Title	Expertise	Discipline	Name	Title	Expertise
Atmospheric Sciences	Christopher Thorncroft	Director/Full Professor	Weather and climate variability in the tropics; Extreme weather in the NE US; New York State Mesonet.	Atmospheric Sciences	Jeffrey Freedman	Research Associate	Renewable energy and atmospheric boundary layer (ABL) processes. Extreme weather risk tools.
Atmospheric Sciences	Nick Bassill	Director of R&D	Melding private sector interests with public sector research knowledge, with a focus on meteorological needs.	Emergency Communication	Amber Silver	Assistant Professor	Public attention, risk perception, and communication play in protective action decision making during extreme events.
Atmospheric Sciences	Jerald Brotzge	Program Manager	Program Manager for the NYS Mesonet. Expertise in synoptic-scale and mesoscale weather systems and their impacts. Applications of NYS Mesonet data for decision-making.	Emergency Communication	Samantha Penta	Assistant Professor	Health and medical care in crises, decision-making in preparedness and response, and humanitarian logistics
Atmospheric Sciences	Kara Sulia	Research Associate	Ice microphysics focuses on crystal growth theory as a means to improve microphysical parameterizations within numerical models. Leads xCITE Visualization laboratory working on AI and decision-making	Emergency Communication	Jeanette Sutton	Associate Professor	Disaster and risk with a primary focus on online informal communication, and public alerts and warning disseminated via terse messaging channels.
Atmospheric Sciences	Kristen Corbosiero	Associate Professor	Interaction between tropical cyclones and the environments in which they are embedded, with an emphasis on storm structure, the intensity and duration of convection, and the properties of clouds that comprise the storm.	Emergency Communication	DeeDee Bennett	Associate Professor	Emergency management, socially vulnerable populations during disasters, emergency communications, disaster policy, and mobile wireless communications.
Atmospheric Sciences	Ryan Torn	Chair/Full Professor	Predictability, data assimilation, synoptic and mesoscale meteorology.	Emergency Management	Havidán Rodríguez	President of UAlbany	Sociology in disaster research; social and economic vulnerability during extreme weathers.
Atmospheric Sciences	Lance Bosart	Distinguished Professor	Planetary-scale, synoptic-scale and mesoscale meteorology. I work on a variety of multiscale (time and space) research problems that relate to the weather and climate of higher- and middle-latitude	Emergency Management	Eric Stern	Full Professor	Crisis decision-making, social media and crisis preparedness, post-crisis evaluation and learning, interactive education and instructional design, and case research/teaching methodologies.
Atmospheric Sciences	Robert Fovell	Full Professor	Mesoscale and convective scale meteorology, primarily using high-resolution numerical models.	Emergency Management	Alex Greer	Assistant Professor	Hazard adjustments, relocation decision-making processes, and organizational culture.
Atmospheric Sciences	Andrea Lang	Associate Professor	Role of stratospheric dynamics on subseasonal variability of weather. Research is applied to decision-making applications.	Emergency Management	Jason Kratoville	Director	Change management; development and delivery of training and exercise programs for practitioners in emergency management, e.g., NYS DHSES.
Atmospheric Sciences	Paul Roundy	Full Professor	Analysis of observations to study modulation of tropical cyclogenesis and the El Niño/Southern Oscillation (ENSO) by convectively coupled waves and intraseasonal oscillation. Research is applied and integrated in decision-making applications.	Emergency Management	David Turetsky	Professor of Practice	Lawyer, former head of the FCC Emergency Bureau, and Cybersecurity expert.