NOAA Earth System Research Laboratory and NCAR Societal Impacts Program
Seminar Series

NCAR Societal Impacts Program (SIP) and Weather and Society Integrated Studies (WAS*IS)

David Skaggs Research Center (DSRC - NOAA Building)
325 Broadway
Boulder, Colorado 80305-3328
Room GC402 (Multipurpose Room)
Monday, February 23, 2009 2:00 - 3:00pm
discussion following / <u>refreshments will be served</u>

Socio-Economic Research on Hurricane Forecasts and Warnings: A Discussion of Results and Research Plans

Jeff Lazo, Rebecca Morss, and Julie Demuth

National Center for Atmospheric Research (NCAR)/Research Applications Laboratory (RAL)
Institute for the Study of Society and Environment (ISSE)/Mesoscale and Microscale Meteorology Division (MMM)

<u>Abstract</u>

We will discuss our research program on socio-economic aspects of the hurricane forecast and warning system. We will start with a brief review of the Hurricane Forecast Socio-Economic Working Group effort that defined a social science research agenda on hurricane forecasts. We will then present methods and results from a small sample survey of Miami households on their uses, perceptions, and values for current and improved forecasts. This will include a discussion of non-market approaches for deriving values for hurricane forecasts. Our discussion will then focus on three funded projects examining different yet related aspects of the hurricane forecast and warning process integrating a variety of social sciences. These projects are:

> <u>Hurricane Forecast Improvement Project (HFIP) Socio-Economic Impacts Assessment</u> — This NOAA funded 1-year project focuses on (1) assessment of emergency managers' needs, uses, and decision-making primarily with respect to hurricane intensity forecast information and (2) households' values for improved intensity forecasts related to NOAA's Hurricane Forecast Improvement Project.

> <u>Warning Decisions in Extreme Weather Events - An Integrated Multi-Method Approach</u> — This NSF funded 3-year project implements a multidisciplinary, multimethod approach — using two case studies of flash floods in Boulder, CO, and hurricanes in Miami, FL — to better understand weather warning systems by (1) studying the warning process, with an emphasis on how information is created, interpreted and used by forecasters, public officials, media organizations, and the public; (2) identifying commonalities and variations in information preferences and use of forecast and warning information across different users; (3) exploring the decision processes and mental models that underlie behavior with respect to warnings for extreme weather events.

> <u>Communicating Hurricane Information</u> — This NSF and NOAA funded 2-year project advances the communication of hurricane forecast advisories and warnings by examining 1) the process through which advisories and warnings are developed, and the resulting content; 2) the communication channels used by various actors in this process; and 3) how at-risk coastal residents, including more vulnerable populations, comprehend and react to specific components of advisories and warnings.

ESRL

<u>Off-Site Guests Attending</u>

Mention the <u>WAS*IS Seminar</u> when checking in through DSRC security.

<u>Questions/Problems</u>

Contact Annie Reiser
303-497-6634
Ann.M.Reiser@noaa.gov

WAS*IS CULTURE CHANGE
weather & society * integrated studies
www.sip.ucar.edu/wasis/   NCAR
Sponsored by the NCAR Societal Impacts Program
Changing from what **WAS** to what **IS**
the future of integrated weather studies