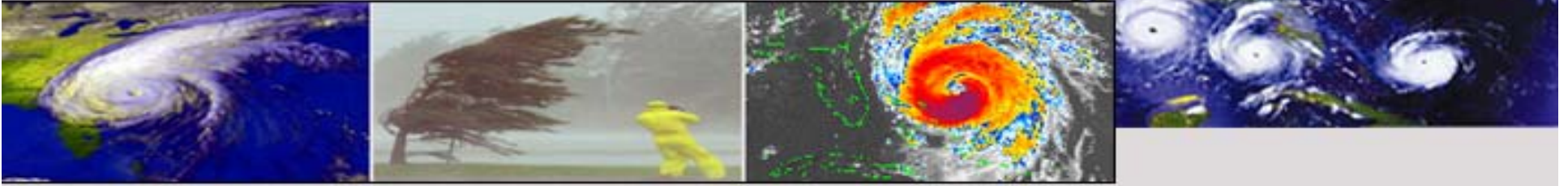


The Economic Value of Hurricane Forecasts

Michael Thomas
Florida A&M University

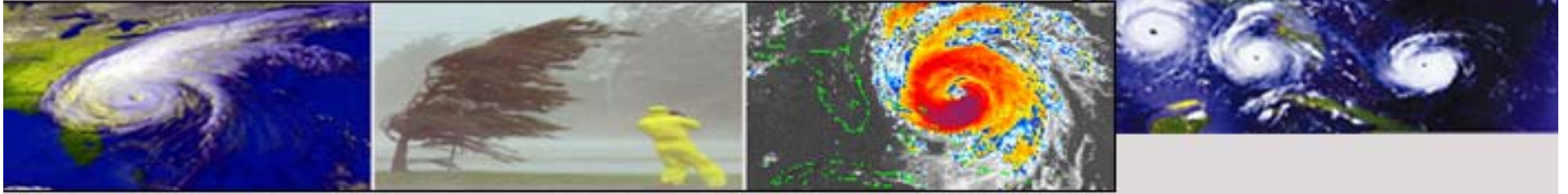
David Letson
University of Miami

Edward Mahoney and Sang-Mi Jeon
Michigan State University



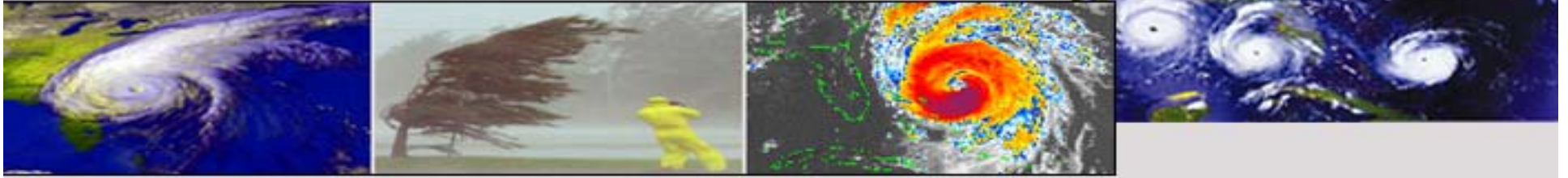
Progress to Date

- Initial Scope of work
 - Develop theoretical basis for valuing forecasts
 - Develop a survey instrument for WTP for forecast attributes
 - Prototype intercept survey with limited Miami sample



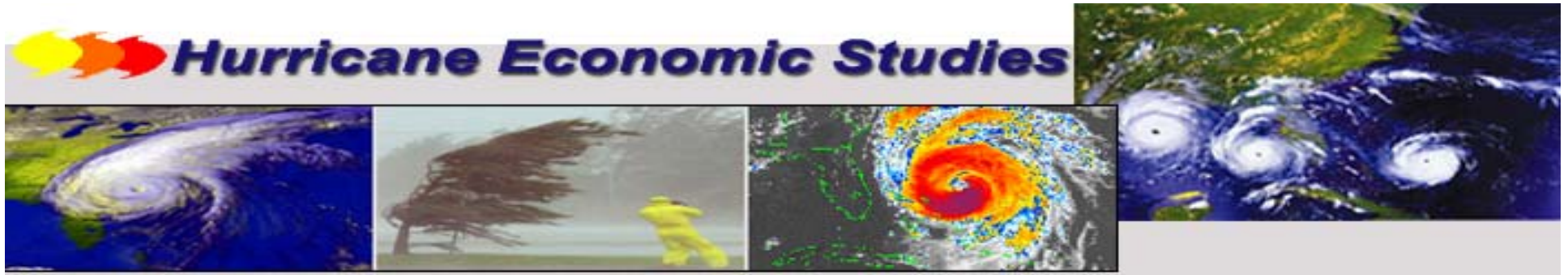
Progress to Date

- The theory is worked out:
 - Classified the basic “mistakes” by users of forecasts
 - Determined the WTP methodology for incremental improvements in forecasts.



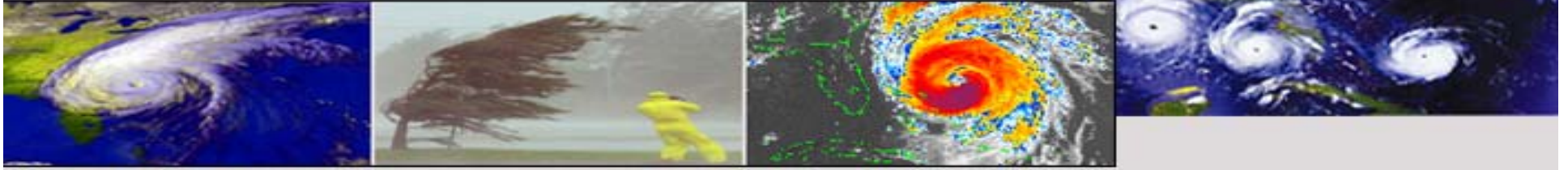
Progress to Date

- Goal of improving forecasts: Reduce mistakes by forecast users
- Mistakes can be classified into two types:
 - False assurance (Type I mistake)
 - False alarm (Type II mistake)
- WTP for forecast attributes may differ by type of mistake.



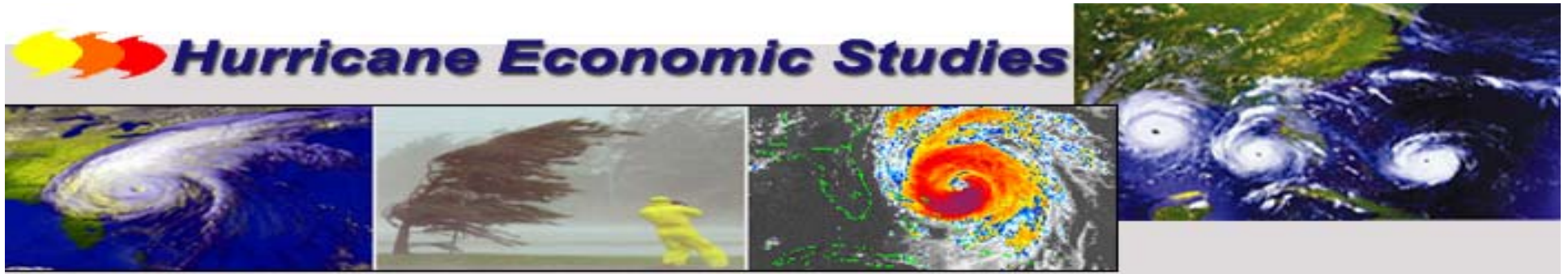
Progress to Date

- Identified two approaches to measure WTP for incremental improvements in forecasts:
 - Hypothetical storms using conjoint analysis to determine the WTP for varying levels of forecast attributes.



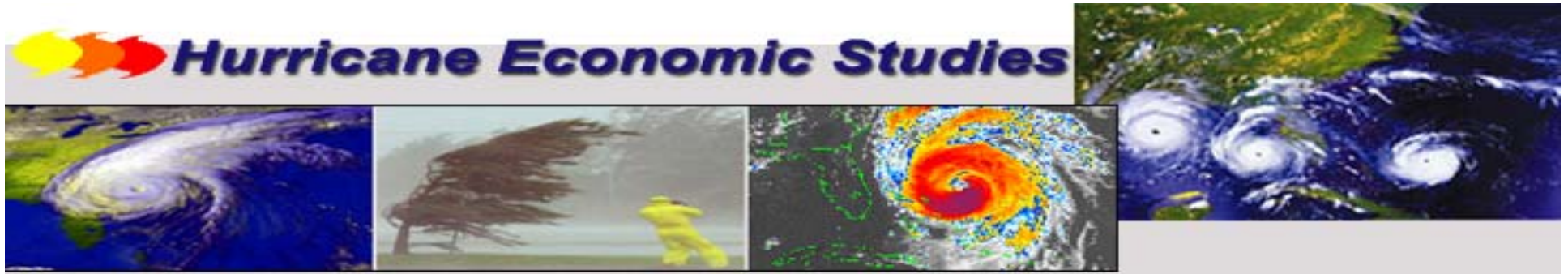
Progress to date

- Real storms (after-the-fact) using revealed preferences and the actual cost of mitigation/evacuation to calculate WTP for varying levels of storm severity and forecast attributes (random utility model)



Progress to Date

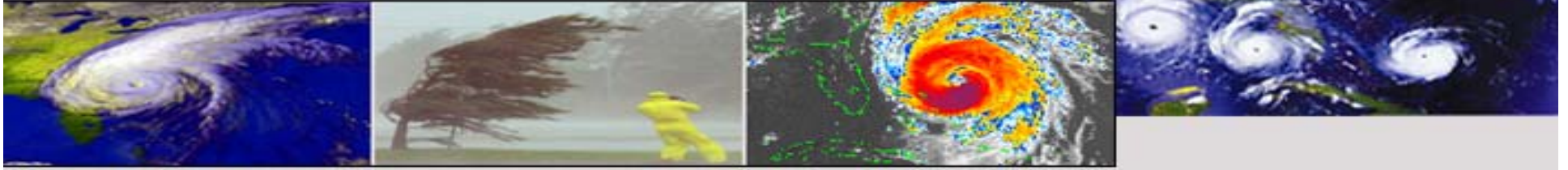
- A draft survey instrument was developed to measure user attitudes and to estimate WTP for previous storms (revealed preference study).
- Yet to be completed,
 - Prototype survey for hypothetical storms (conjoint analysis)
 - Miami test survey



Revised Scope of Work

- Additional Phase II funds have become available
- Can now increase the scope of work
- We will scrap the limited Miami intercept survey and replace it with a Web-based survey.
- Include Pensacola and Miami/Dade County to cover wide range of demographics





Major Tasks Remaining

- Take first Web-survey to the field by June 1
- Start conjoint survey by January 2007.
- Have preliminary results from both surveys by June 2007.