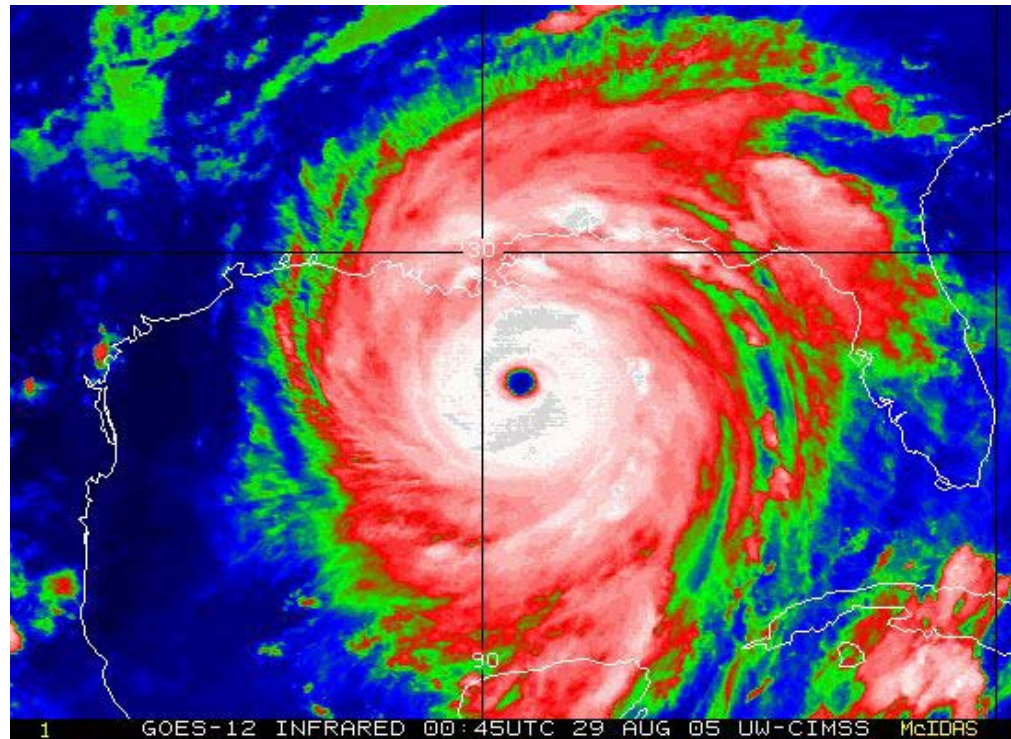


# Risk Perception and Hurricane Preparedness



Dr. Steve J. Collins  
University of Central Florida





Perhaps it should be MORE academic

We seek to produce graphics that better communicate information about hurricane risks



# Method

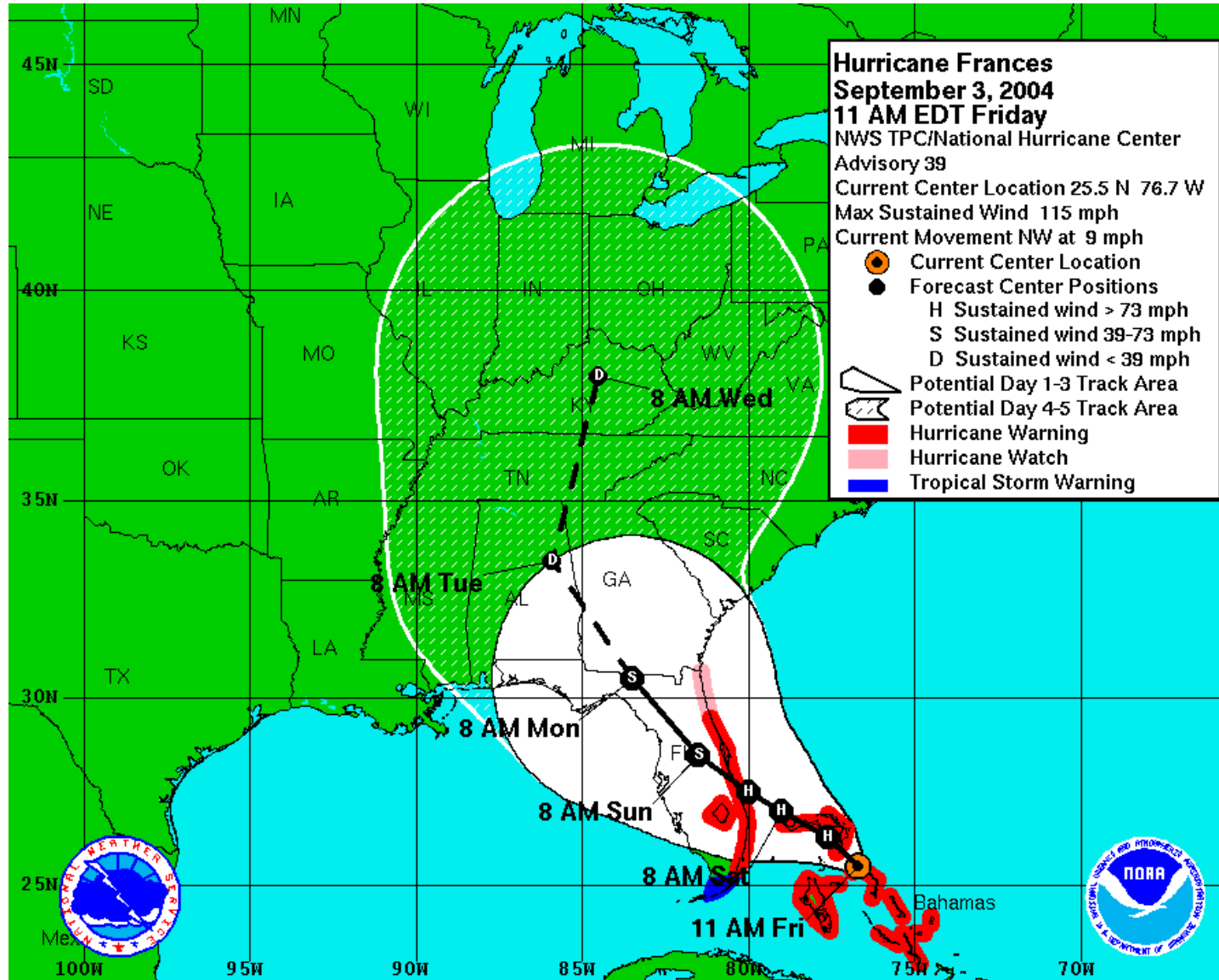
- A pair of online surveys (non-students/students)
- Non-student data (n = 360) reported here
- Diverse but not representative



# Method

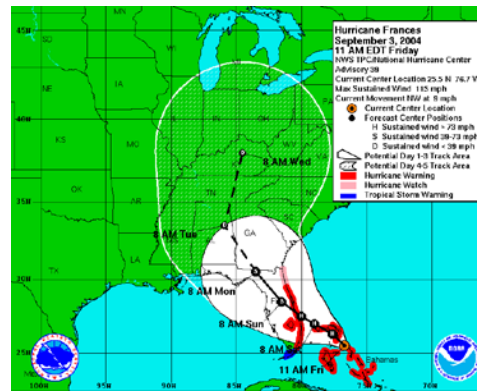
- 7-item knowledge scale
- 16-point measure of proactive behavior
- 3 measures of experience
- 3 measures of media exposure
- 4 experimental treatments

# Cone of Uncertainty



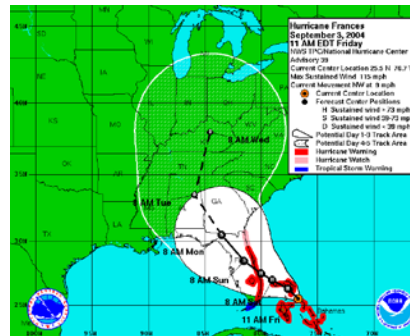
# Experimental Treatments

- Treatment 1: Asked to imagine a hurricane tracking map in which their area fell within the “cone of probability” but there was no black line representing the hurricane’s most likely path.
- Treatment 2: Asked to imagine a hurricane tracking map in which their area fell within the “cone of probability,” and a black line representing the hurricane’s most likely path crossed over the area.



# Experimental Treatments

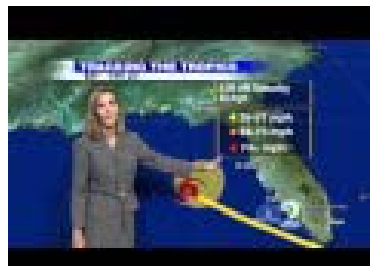
- Treatment 3: Asked to imagine a hurricane tracking map in which their area fell within the “cone of probability,” but a black line representing the hurricane’s most likely path did not cross over the area.
- Treatment 4: Asked to imagine a hurricane tracking map that contained no “cone of probability,” but instead several black lines representing the hurricane’s possible paths. One of those lines crossed over the area in question.



# How well informed is the general public?

Not Very!!!

- M = 4.8 out of 7 (69%)
- 62 % understand Saffir-Simpson scale
- 20 % couldn't distinguish between a watch & warning





To what extent does knowledge of hurricanes vary by primary news medium?

- Neither the primary medium nor the number of mediums relied upon was significant
- How closely people reported following hurricane information explained 2 percent of variance after controlling for demographics ( $p < .05$ )

Is hurricane experience associated with greater knowledge of hurricanes?

—No

# of hurricanes, property damage and evacuation all NS

# In an experimental setting, do tracking lines matter?

Yes ... sometimes

- People whose tracking line missed their area were less proactive than other 3 groups
- No difference between group without line & group whose line crossed their area

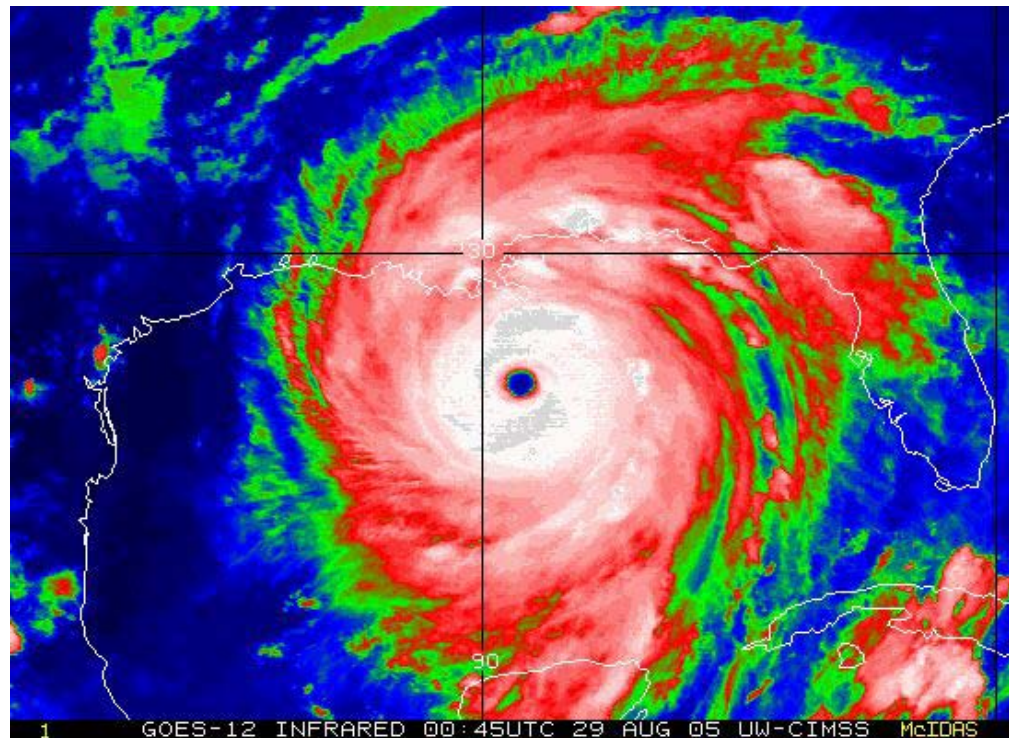


# Discussion

- Preliminary research suggests “less is more”
- Tracking lines seem to work as a disincentive when they miss one’s area without increasing urgency when they cross over the area
- Future research needs to include more refined measures, more representative samples & actual hurricane graphics



# Thank You for Your Time



Dr. Steve J. Collins  
University of Central Florida

