

PROJECT BIO-VIZ

Science of Cartography, Biometrics, and Hurricane Risk Perception

Project Bio-Viz is a multidisciplinary research effort at RENCI at ECU examining how people interpret hurricane forecast maps. The project links hurricane modeling, cartography and geovisualization, visual motor research, and risk communications specialists. Research subjects are shown different types of hurricane forecast maps and visualizations of potential storm surges. While they are looking at the maps, staff simultaneously collect biometric data (e.g., eye-tracking, heart rate, facial muscle movement, and brainwaves) and quantitative and qualitative questionnaire responses.

The project begins with the analysis of the hurricane "Cone of Uncertainty," alternative map designs, storm surge visualizations, and scenario-based evacuation decision-making. By understanding how people perceive and react to these maps, we hope to learn and inform forecasters and emergency managers how they can better communicate risks in the future.

For more information visit:
<http://www.ecu.edu/renci/>

