

# Zooming In: Community Risk Assessments

Since 2020, Louisiana has struggled with rising insurance premiums and finding reliable coverage, largely due to the increasing frequency and intensity of severe weather.

LSU's College of the Coast & Environment's coastal meteorology team responds by delivering crucial data analysis that improves predictions of storm surge, flood risks and storm impacts. Using advanced tools like the Coastal Emergency Risks Assessment (CERA) and the new Center for Risks, Insurability, and Sustainable Protection (CRISP), the team supports disaster preparedness, resource management and community resilience, providing decision-makers with clearer insight into which communities are most at risk from Louisiana's severe weather.



## CC&E's Recent Research

### Shaping Water Resources in Louisiana

Focuses on real-time monitoring and understanding the dynamic interactions between continental, marine and local water sources in shaping Louisiana's environment.

### Studying Desert Dust

Studies how dust from the Shara Desert suppresses hurricane development in the Gulf of Mexico by increasing dry air, increasing vertical wind shear and blocking sunlight, which cools sea surface temperatures.

### Understanding Convective Weather Impacts

Studies how severe convective weather along Louisiana's coast affects offshore energy operations and navigation.

### Analyzing Residential Flood Risk

Develops computational frameworks focusing on assessing average annual loss at the neighborhood level to guide flood mitigation decisions.

### Predicting Storm Surge

Advances storm surge forecasting with improved meteorological scenarios and emergency response tools to predict the potential impacts and timing of storm surge during hurricanes.

### Accounting for Fiscal Environmental Impacts

Estimates the fiscal impact of environmental decisions, risks and ecosystems, equipping local governments with data for decision making.

### Tracking Hurricane Paths

Delivers near real-time environmental data on the Loop Current and Gulf of Mexico eddies using satellites and remote sensing.