

HURRICANE ELENA'S ERRATIC PATH

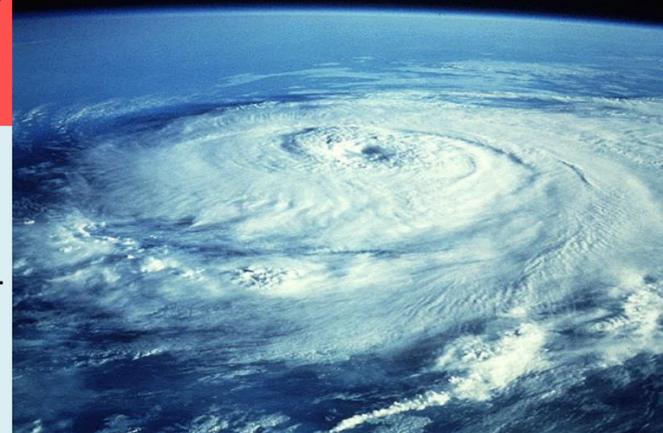
Labor Day Weekend 1985

Overview

Hurricane Elena is widely known for its multifaceted legacy. Not only is it known for the severe impacts it caused, but also for its wide array of pre-storm preparations, very erratic path, and its unprecedented amount of evacuations. Elena developed as a tropical wave near Cuba. The storm then became a tropical storm on the 28th of August and quickly grew into a hurricane on August 29. It then strengthened into a Category 2 hurricane on the Saffir-Simpson Scale. At this point it was forecasted to make landfall around Tampa Bay, Florida but instead headed west and intensified into a Category 3 storm. It eventually made landfall near Biloxi, Mississippi on the morning of September 2. The storm weakened upon coming ashore and dissipated on September 4. The name Elena was retired from the list of hurricane names in 1986.

Elena's Erratic Path

Elena formed during the peak period of the 1985 Atlantic Hurricane Season but wasn't your classic Cape Verde storm. The storm spent the majority of its 8 day span making up its mind on where to make landfall. Elena caused nearly 1 million people in low lying areas to evacuate from New Orleans, LA to Tampa, FL. Along the west coast of Florida alone some 300,000 residents were forced to evacuate. The storm literally held residents along the Gulf Coast hostage. Due to its erratic nature, Florida's western coast and parts of Louisiana, Mississippi, and Alabama were evacuated twice. As a result of the indecisiveness, Elena became a powerful major hurricane over the Gulf's warm waters.

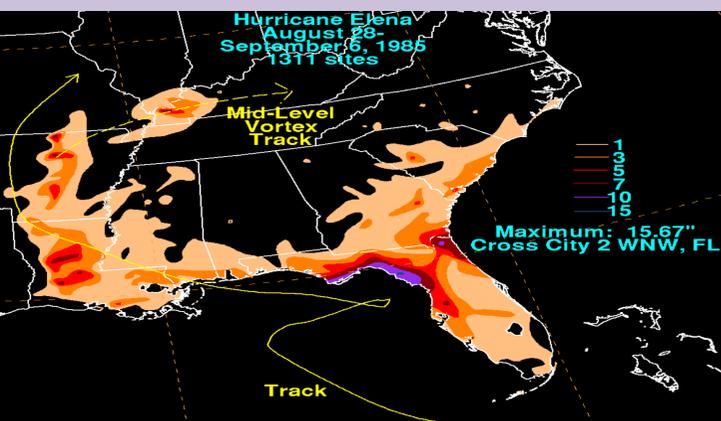
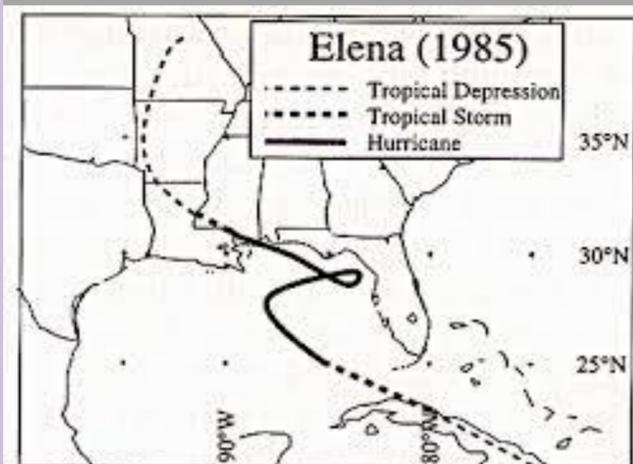


View of Elena from the space shuttle.
Courtesy of NASA.

Saffir-Simpson Hurricane Wind Scale

Category	Sustained Wind Speed	Effects
Category 1	74-95 mph (119-153 km/hr)	Very dangerous winds will produce some damage. Low-lying coastal roads flooded, minor pier damage.
Category 2	96-110 mph (154-177 km/hr)	Extremely dangerous winds will cause extensive damage. Major damage to exposed mobile homes, evacuation of some shoreline residents.
Category 3	111-130 mph (178-209 km/hr)	Devastating damage will occur. Some structural damage to small buildings; serious flooding at coast and many smaller structures near coast destroyed.
Category 4	131-155 mph (210-249 km/hr)	Catastrophic damage will occur. High risk of injury or death to people, livestock, and pets due to flying and falling debris. Long-term water shortages will increase human suffering. Most of the area will be uninhabitable for weeks or months.
Category 5	> 155 mph (249 km/hr)	Catastrophic damage will occur. People, livestock, and pets are at very high risk of injury or death from flying or falling debris. A high percentage of frame homes will be destroyed. Long-term power outages and water shortages will render area uninhabitable for weeks or months.

Elena's Erratic Path. Courtesy of NOAA.



Rainfall Map. Courtesy of NOAA.

Meteorology

1. Landfall: September 2, 1985
2. Maximum winds: 125 mph at landfall around Biloxi, MS.
3. Lowest Pressure: 953 mb near Pascagoula, Mississippi
4. Maximum Rainfall Total: 15.67" near Cedar Key, Florida
5. Maximum Storm Surge: 9.2 feet
6. Category 3 Duration: 24 hours

Impacts/Damages

1. \$1.25 billion dollars in damage
2. Destroyed 294 homes while damaging thousands more
3. 9 fatalities were attributed to the storm
4. Caused evacuations of over 1 million people from New Orleans, LA to Tampa, FL
5. Destroyed the landmark Indian Rocks Pier in Indian Rocks Beach, Florida
6. Areas affected: Cuba, Florida, Alabama, Mississippi, Louisiana, and Mississippi Valley Region



Damage from Elena.



"For a quarter century the Big Indian Rocks Fishing Pier was the social center of the community. All this came to an end when Hurricane Elena swept by in 1985, taking with it most of the pier." – R.B. Johnson, Florida resident