

= Tropical Storm Elena ( 1979 ) =

Tropical Storm Elena was a weak tropical storm that moved ashore along Texas in the 1979 Atlantic hurricane season . The sixth tropical storm of the season , Elena developed from a tropical wave to the south of Louisiana on August 29 . It tracked generally west @-@ northwest , strengthening little before making landfall on Matagorda Island on September 1 as a minimal tropical storm ; the storm quickly dissipated over land . Elena dropped moderate rainfall along its path , causing two direct deaths in Houston from drowning ; storm damage was minor , amounting to less than \$ 10 million ( 1979 USD , \$ 28 million 2007 USD ) . Lightning from the storm set fire to an oil supertanker in Houston , causing three indirect deaths and 13 injuries .

= = Meteorological history = =

A tropical wave moved off the coast of Africa on August 17 . It tracked westward , passing through the Lesser Antilles on August 22 , and on August 27 the weak wave axis crossed through Florida . A tropical disturbance organized along the wave axis , with ship and buoy reports indicating the development of a low @-@ level circulation by August 29 . At 2308 GMT later that day , a Hurricane Hunters flight reported the existence of a tropical depression ; it was classified as Tropical Depression Thirteen , while located about 240 miles ( 390 km ) south of the mouth of the Mississippi River . With a ridge of high pressure located over the southeastern United States , the depression continued tracking generally westward and intensified into Tropical Storm Elena late on August 30 . Elena was the sixth tropical storm of the season , as Hurricane Frederic attained tropical storm status six hours prior to Elena .

Unfavorable northerly vertical wind shear persisted through much of Elena 's duration , which prohibited the development of convection . An approaching frontal trough weakened the high pressure system to its north , which resulted in Elena turning northwestward toward the Texas coastline . The storm remained poorly organized , failing to strengthen further , and on September 1 it made landfall on Matagorda Island as a minimal tropical storm . The cyclone rapidly weakened after moving ashore , and early on September 2 Elena degenerated into a remnant low pressure area over southeastern Texas . Trapped between two high pressure systems , the remnant mid @-@ level circulation drifted southwestward just inland for several days before dissipating on September 6 .

= = Impact = =

As Elena was upgraded to a tropical storm , the National Hurricane Center issued a gale warning from Port O 'Connor , Texas to Morgan City , Louisiana ; these remained in effect until the storm moved ashore . Winds were fairly minor in association with the storm ; a station in Galveston , Texas recorded a peak wind gust of 46 mph ( 74 km / h ) . As Elena moved ashore , it produced a 3 foot ( 0 @.@ 9 m ) storm tide at Galveston and Baytown . Rainfall from the storm was generally limited to the coastline , and peaked at 10 @.@ 3 inches ( 261 mm ) at Palacios ; light rainfall also extended along the coastline of Louisiana . Near Houston , 4 @.@ 6 inches ( 117 mm ) of precipitation was reported , which caused two drownings from flooding . Overall storm damage was fairly minor , totaling to less than \$ 10 million ( 1979 USD , \$ 28 million 2007 USD ) .

At a dock owned by Shell Oil Company in Deer Park near Houston , a lightning bolt from thunderstorms of Elena struck the oil supertanker SS Chevron Hawaii . The lightning started a fire on the ship , which expanded and wrecked one adjacent barge and burned nearby docks . The ship was nearly split in half from the lightning strike , and oil seeped into Houston Ship Channel for several hours . Firefighters combated the fire on the tanker in boats , but their efforts were hindered due to unsettled weather from Elena , as well as unsafe water to travel through . The fire caused three deaths and 13 injuries , and damage related to the incident totaled \$ 27 million ( 1979 USD , \$ 76 million 2007 USD ) .

Two Sperry Technicians that were dispatched to repair the radar on the ship were crossing the

gangplank at the time of the explosion and were killed . Their names are David Strout and Don Wampler .