

= Hurricane Lorenzo (2007) =

Hurricane Lorenzo was a rapidly developing tropical cyclone that struck the Mexican state of Veracruz in late September 2007 . The twelfth named storm and fifth hurricane of the 2007 Atlantic hurricane season , it formed in the southwestern Gulf of Mexico from a tropical wave . After meandering for two days without development , the storm began a steady westward track as its structure became better organized . In an 18 ? hour period , Lorenzo 's winds increased from 35 mph (55 km / h) to 80 mph (130 km / h) , or from a tropical depression to a hurricane . On September 28 it struck near Tecolutla , Veracruz , a month after Hurricane Dean affected the same area , before it quickly dissipated over land .

The most significantly affected area was Veracruz , where damage reached over \$ 1 billion pesos (\$ 92 million 2007 USD) . Most of it came from road damage in the state 's northern portion , although there were also hundreds of damaged houses . Between Veracruz and neighboring Hidalgo , there were 123 @, @ 320 people affected across 112 municipalities . Overall there were six deaths in the country , one in Veracruz and five in Puebla . In the latter state , a family of three perished in a landslide .

= = Meteorological history = =

The origins of Hurricane Lorenzo were from a tropical wave that exited the coast of Africa on September 11 . After moving across the tropical Atlantic Ocean , it traversed much of the Caribbean Sea before developing an area of thunderstorms on September 21 . The system developed a low pressure area on September 23 after the northern portion of the wave broke off and crossed the Yucatán Peninsula . Initially , a Hurricane Hunters flight was scheduled to investigate the system , although the low became disorganized over the southeastern Gulf of Mexico due to high wind shear . However , the wind shear decreased , and late on September 25 , another Hurricane Hunters flight indicated the development of a closed low @-@ level circulation . Based on that observation , along with sufficient persistence of the thunderstorms , the system developed into Tropical Depression Thirteen about 190 mi (305 km) east of Tampico , Tamaulipas .

Upon developing , the depression was located in an area of weak steering currents , resulting in an erratic movement generally to the south . In its formative stages , the depression executed a small loop . As it did so , it moved into an area of very warm waters and decreasing wind shear . The depression 's convection gradually organized , although the winds were slower to increase . An anticyclone became established over the system , and the depression intensified into Tropical Storm Lorenzo at around 1200 UTC on September 27 . At the time , it was located about 150 mi (240 km) east of Tuxpan , Veracruz , moving steadily westward under the influence of a building ridge to its east . As it approached the coast , Lorenzo rapidly intensified unexpectedly , and within 12 hours of attaining tropical storm status it strengthened into a hurricane .

Hurricane Lorenzo quickly developed a closed eyewall , which was observed on radar and provided a peak intensity estimate of 80 mph (130 km / h) at 0000 UTC on September 28 . The cyclone maintained vigorous and symmetric convection across the center , although the structure deteriorated slightly before Lorenzo crossed the coast near Tecolutla , Veracruz at 0500 UTC that day , with winds estimated around 75 mph (120 km / h) . After making landfall , the hurricane rapidly weakened to tropical depression intensity . Progressing inland , the circulation became difficult to locate as the convection diminished to rainbands along the coast . Within 19 hours after moving ashore , the circulation of Lorenzo dissipated , therefore ending its duration as a tropical cyclone .

= = Preparations and impact = =

About 26 hours before landfall , the Mexican government issued a tropical storm watch from Palma Sola to La Cruz in Veracruz . About 14 hours before landfall , a tropical storm warning was put into place from Palma Sola to Cabo Rojo , which in turn was upgraded to a hurricane warning six hours

later . Mexico 's Civilian Protection officials declared a " red alert " for much of the state of Veracruz . Along the coast of Veracruz , officials canceled school classes . Officials opened 315 shelters in Veracruz , along with six in neighboring Hidalgo , which housed 45 @, @ 164 people during the storm . The government of Veracruz provided buses for people to transport from their houses to the shelters . Ports in Tecolutla , Tuxpan and Nautla were forced to close . Lorenzo 's formation caused gas prices to rise due to its potential to disrupt oil facilities in the Gulf of Mexico .

Hurricane Lorenzo made landfall in Veracruz , the same region of east @- @ central Mexico as Hurricane Dean did one month prior . The hurricane primarily affected small fishing villages along the coast , where strong winds knocked down power lines , leaving about 85 @, @ 000 people without electricity . To prevent the danger of fallen wires , officials shut off the power grid in several municipalities in northern Veracruz . The winds also destroyed the roofs of several houses in Nautla . In addition to the high winds , Lorenzo dropped heavy rainfall along the coast and further inland , peaking at 12 @. @ 83 in (326 mm) in El Raudal , Veracruz . The rains caused flash flooding and mudslides that killed at least four people , including a family of three in Puebla state . Landslides also closed portions of three highways . In some locations , floodwaters reached about 1 foot (300 mm) in depth . The combination of winds and rains damaged 169 houses in Puebla , while in Hidalgo , the San Lorenzo River overflowed its banks and forced the evacuation of over 200 people . Overflowed rivers in Veracruz forced about 25 @, @ 000 people to leave their houses . Along the Cazonas River , more than 1 @, @ 000 houses were flooded , resulting in local police officials to assist in evacuations . Damage in Veracruz was estimated at \$ 1 billion pesos (\$ 92 million 2007 USD) , much of it from road damage in the northern portion of the state .

Overall , the hurricane affected 123 @, @ 320 people across Veracruz and Hidalgo , prompting the declaration of a state of emergency in 112 municipalities . The declaration allowed the usage of emergency resources for the affected people . There were a total of six deaths in the country , five of which in Puebla . By about three days after the storm , all schools were reopened . The Mexican government distributed food , water , and construction materials for the areas most affected in Veracruz . Following the storm , about 500 power workers were dispatched in Veracruz to restore electricity in the affected areas .