

= Tropical Storm Rachel (1990) =

Tropical Storm Rachel was the only tropical cyclone to make landfall during the 1990 Pacific hurricane season . The twenty @-@ fourth tropical depression and eighteenth named storm , Rachel developed on September 27 from a tropical wave southwest of mainland Mexico . After becoming a tropical depression , the system tracked slowly southwestward and eventually curved northwestward . The depression intensified into a tropical storm after three days and was named Rachel by the National Hurricane Center . Rachel continued to steadily strengthen , and peaked as a strong 65 mph (100 km / h) tropical storm on October 2 . After attaining peak intensity , Rachel re @-@ curved to make a landfall in southern Baja California Sur and again in the Mexican Mainland on October 3 . The storm produced heavy rainfall across northern Mexico and the Southwestern United States . Thousands of people were left homeless and 18 fatalities were reported .

= = Meteorological history = =

The origins of Rachel can be traced back to a tropical wave that moved off the west coast Africa in mid @-@ September 1990 . It moved westward into the Caribbean Sea without significant development . Poorly organized , the wave entered the Eastern Pacific on overnight September 22 . The thunderstorm activity became more concentrated two days later . Dvorak classifications , a technique used to estimate a tropical cyclone 's intensity , began late September 25 .

Early on September 27 , the twenty @-@ fourth tropical depression of the season had developed ; however , operationally it was not warned upon until the system was located 540 mi (870 km) south of Baja California Sur on September 30 . Post @-@ analysis later confirm that Rachel was already a minimal tropical storm by that time . Although convection initially remained displaced from the center , Rachel steadily intensified . Early on September 30 , the National Hurricane Center (NHC) operationally upgraded the depression into Tropical Storm Rachel . While intensifying , an upper @-@ level trough over California allowed Rachel to re @-@ curve towards Mexico . On October 2 , it reached its peak intensity of 65 mph (100 km / h) and a minimum pressure of 994 mbar (hPa ; 29 @.@ 35 inHg) .

After maintaining its intensity for 24 hours , Rachel made landfall at peak intensity near the southern tip of Baja California Sur . Strong wind shear prevented additional intensification , despite moving into the warm waters of the Gulf of California . After weakening slightly , Rachel made a second landfall midway between Las Mochis and Culiacán . Upon moving inland , the system rapidly weakened as the forward speed increased . Rachel dissipated several hours later on October 3 . By that time , the winds had decreased to 30 mph (45 km / h) . The remnants of Rachel entered the United States , and were last noted over Texas .

= = Preparations and impact = =

Prior to the arrival of Rachel , the Mexican government issued a tropical storm watch for southern Baja California Sur , encompassing areas south of La Paz on October 1 . As Rachel moved closer to the area , the watch was replaced with a tropical storm warning . In the mainland , a tropical storm watch was issued for the state of Sinaloa south of Los Mochis . Six hours later , the watches was replaced with a tropical storm warning . By the end of October 2 , all the watches and warnings were discontinued .

The two highest rainfall totals were 9 @.@ 85 in (250 mm) and 6 @.@ 5 in (170 mm) at Santa Anita and San Jose Del Cobe , near the southern tip of Baja California Sur . Two weather stations in Mexico reported barometric pressure of 1005 and 1006 mbar (hPa ; 29 @.@ 68 and 29 @.@ 71 inHg) during the passage of Rachel . In all , precipitation was measured at 996 different places across the country . Throughout northern Mexico , significant flooding was reported with the worst effects felt in the states of Nuevo Leon , Coahuila and Durango . Thousands were homeless , and 18 people died . In Monterrey , rescue workers freed dozens of trapped people .

The moisture associated with the Rachel and a cold front produced rainfall in Arizona , New Mexico

, and western Texas , while it was located southwest of Baja California Sur . After Rachel had dropped heavy rains , a flash flood watch was issued for several counties in New Mexico on October 1 , where rainfall had reportedly been 2 in (51 mm) since the last day of September . The remnants of the storm produced additional precipitation across the state . Heavy rains fell on almost all of western Texas , and a flash flood warning had been issued after some areas experienced rainfall over 1 in (25 mm) . With heavy rains falling in the western portion of Texas , some roads were washed out , especially in Big Bend National Park and Lubbock ; several car accidents were also reported on the roads . Several locations in Texas measured at least 0 @. @ 5 in (13 mm) of rain , and the highest amount of rainfall was 1 @. @ 5 in (38 mm) in Lubbock .