

= Tropical Storm Ignacio (1997) =

Tropical Storm Ignacio was a weak tropical cyclone affected parts of the western United States in August 1997 . The 12th tropical cyclone and 9th named storm of the 1997 Pacific hurricane season , Ignacio formed west of Mexico from a weather disturbance embedded within a more broad system . It was classified as a tropical depression on August 17 , and although it quickly intensified into a tropical storm , harsher environmental conditions caused it to begin weakening as the cyclone moved northward . On August 19 , Ignacio transitioned into an extratropical cyclone as it approached California , where its remnants produced unprecedented August rainfall , numerous traffic accidents , and 78 @, @ 000 power outages .

= = Meteorological history = =

Tropical Storm Ignacio originated in a broad region of active weather that persisted west of Mexico during the middle of August 1997 . Among multiple other disturbances , the precursor to Ignacio developed on August 16 , well to the southwest of the Baja California Peninsula . Later that day , banding features formed and convection began turning counterclockwise around a nascent area of low pressure in the middle levels of the atmosphere . It continued to become better organized , and at 0000 UTC on August 17 , the National Hurricane Center classified it a tropical depression . At the time , the storm was situated approximately 520 mi (840 km) southwest of Cabo San Lucas , outside of the area in which tropical cyclones usually form in the Eastern Pacific ocean basin .

The depression moved northwestward at 11 to 17 mph (18 to 27 km / h) under the steering currents of mid- to upper @-@ level trough of low pressure off the coast of California . A burst of deep convection formed near the cyclone 's center early on August 17 , and its estimated maximum sustained winds subsequently increased to 40 mph (64 km / h) . As such , it was upgraded to Tropical Storm Ignacio at 1200 UTC . At the same time , the storm reached its lowest recorded barometric pressure of 1005 millibars . However , due to increasingly colder waters and the presence of inhibiting southwesterly wind shear , it immediately stopped intensifying . Ignacio maintained tropical storm status for a short time , and early on August 18 , it weakened back into a depression .

During its weakening stage , deep convection existed only in the northwestern quadrant of the circulation . On August 19 , cold cloud tops reappeared , although this brief revival has been attributed to non @-@ tropical baroclinic instability . At 1200 UTC , the depression was declared extratropical , and it continued northward until dissipating near California a day later . Moisture from the system persisted as it passed through the state and the Pacific Northwest , ultimately merging with a larger extratropical cyclone involving the remnants of Hurricane Guillermo .

= = Impact = =

As a tropical cyclone , Ignacio had little or no effect on land . However , its remnants produced unprecedented precipitation in parts of coastal California . Rainfall accumulations reached record levels in some areas , amounting to as much as 2 @. @ 17 in (55 mm) . San Francisco received about 1 in (25 mm) of precipitation , leading to its wettest August on record , and also constituting the city 's first ever recorded rainfall on the date of August 19 . In contrast , the area usually receives just trace of moisture during August . By the estimation of one meteorologist , the atypical rainfall represented a 1 @-@ in @-@ 50 @-@ year event . A Major League Baseball game at O.co Coliseum on August 19 was canceled due to the inclement weather . The atypical rainfall triggered isolated flash flooding in some locations and a debris flow about 7 ft (2 @. @ 1 m) deep . Wine grape were adversely impacted by the heavy rainfall from Ignacio , which ruined about 10 % of the year 's Chardonnay and Sauvignon grapes . The unfavorable growing conditions were compounded by further rains from Hurricane Linda in September , creating what was described as a " tumultuous " year for the crops .

The storm contributed to numerous weather @-@ related traffic accidents , at least one of them

classified as major . Around 20 collisions occurred on the night of August 19 across the San Francisco Peninsula . Two crashes on Interstate 80 forced the closure of four lanes for 30 minutes , while California State Route 9 was blocked in Saratoga by a large tree which fell due to saturated soil . It is unclear how many injuries resulted from the various incidents . Thunderstorms associated with the storm system left about 78 @, @ 000 electric customers in Sonoma County without power after lightning struck a power substation . The outages lasted up to a few hours . Lightning also knocked three workers unconscious in a vineyard near Lodi ; they were in good condition after hospitalization .

Rainfall extended as far north as the northwestern United States , ending an unusually long , 35 @-@ day dry spell at Astoria , Oregon . It remains the most significant rainfall from a tropical cyclone in the states of Washington and Oregon .