

= Typhoon Ken (1982) =

Typhoon Ken , known in the Philippines as Typhoon Tering , was the fourth typhoon to strike Japan during the 1982 Pacific typhoon season . Forming along the western end of the monsoon trough in the Philippine Sea , the system had organized into a tropical depression on September 16 , and by that night a tropical storm . As a compact system , rapid intensification continued , with Ken becoming a typhoon on the evening of September 17 and a major typhoon on September 18 . The cyclone up to this point had a history of progressing slowly west @-@ northwest , but Ken eventually stalled on September 20 and became a larger cyclone . As a mid @-@ latitude trough to its north deepened , Ken took off to the northeast towards Okinawa . Ken made landfall upon Shikoku early on September 25 , and moved onward into the Sea of Japan where it evolved into an extratropical cyclone . Five people were killed while 18 others were hurt . A total of 114 mudslides were reported , resulted in over 2 @, @ 000 homes flooded . Additionally , 12 homes were damaged or destroyed . Seventy @-@ four flights were cancelled as well .

= = Meteorological history = =

During mid @-@ September , a monsoon trough was present in the Philippine Sea . On September 14 , a persistent area disturbance weather was first visible on satellite imagery . On September 15 , the Japan Meteorological Agency (JMA) started to monitor the system . The next day , a Hurricane Hunter aircraft reported a closed atmospheric circulation . Based on this , the Joint Typhoon Warning Center (JTWC) upgraded the storm into a tropical depression , without issuing a Tropical Cyclone Formation Alert (TCFA) . Six hours later , the storm was upgraded into a tropical storm . Around this time , the JMA followed suit and upgraded the system into a tropical storm . Initially , Ken was expected by the JTWC to move west and pass near Luzon , but this did not occur . At 0600 UTC on September 17 , Ken was upgraded into a severe tropical storm by the JTWC and the JMA . That evening , Ken was upgraded to typhoon status by both the JTWC and the JMA when the hunters recorded a pressure of 976 mbar (28 @.@ 8 inHg) . Ken continued to gain strength ; at 1800 UTC on September 18 , the Hurricane Hunter aircraft reported winds of 185 km / h (115 mph) . This wind speed is equivalent to a low @-@ end Category 3 typhoon on the Saffir ? Simpson hurricane wind scale (SSHWS) . Several hours later , the JTWC reported that Ken attained peak intensity of 200 km / h (125 mph) while centered about 800 km (495 mi) east @-@ southeast of Taiwan .

The typhoon moved west @-@ northwest at a slower rate than expected , but on September 19 , Typhoon Ken , a subtropical ridge moved west @-@ southwest , moving into south China and the South China Sea . As such , many tropical cyclone forecast models showed Ken turning north @-@ northeast , but Ken began to stall on September 20 instead . Around this time , the JMA estimated peak wind speeds of 110 mph (175 km / h) and a peak pressure of 940 mbar (28 inHg) . Initially , Ken was small , but around this time the storm began to grow in size . The cause of the structural change is unknown , but it is possible that some dry air got induced into the storm 's circulation , which also caused the eye to collapse and the storm to weaken .

By September 21 , Ken began to move erratically due to a deepening trough that was centered north of Typhoon Ken before taking off in the general direction of Japan . Weakening ensued thereafter due to increased wind shear . By September 23 , the JWC reported that winds had diminished below Category 2 @-@ equivalent strength on the SSHWS while the JMA reported winds of 130 km / h (80 mph) . At this time , Ken was located around 650 km (405 mi) south of Tokyo . By the next day , however , this weakening trend had leveled off ; data from the JMA suggests that the storm did not weaken further until September 25 . After according to the JTWC , maintain winds of 135 km / h (85 mph) during September 24 , the typhoon weakened slightly . Ken made landfall near Shikoku early on September 25 with winds of 130 km / h (80 mph) , and after weakening a little according to the JTWC , Ken passed over Honshu . That day , the system moved into the Sea of Japan , where it transitioned into an extratropical cyclone while producing winds just below typhoon @-@ force . Despite this , the JMA kept an eye on the system for two more days .

= = Impact and aftermath = =

Because Ken posed a threat to shipping lanes , a tropical cyclone warning was issued for shipping lanes for a span of 66 hours , lasting from 0900 UTC September 19 until 0300 UTC September 22 . Upon making landfall in Japan , Ken became the fourth storm to strike the nation during the season . Ken was responsible strong winds , including a 90 km / h (56 mph) wind speed on Honshu . Additionally , wind gusts of 221 km / h (137 mph) were measured on Shikoku . Torrential rains were also recorded ; a peak rainfall total was measured at 500 mm (20 in) in Funato , which also sustained the highest hourly rainfall total of 79 @. @ 0 mm (3 @. @ 11 in) . In Uwajima on the island Shikoku (the smallest of the four main Japanese islands) , a peak six @- @ hour total of 220 mm (8 @. @ 7 in) was recorded . Additionally , a daily rainfall peak of 280 mm (11 in) was measured at Kadena . Somewhere in Shikoku , 470 mm (19 in) of rain was recorded in a two @- @ day time span .

Heavy rains resulted in 114 mudslides , which destroyed eight homes . According to nation 's police service , a total of 2 @, @ 440 dwellings were flooded including over 450 in Uwajimi . Four homes were also damaged in Shikoku . Two minor bridges were washed away due to flooding rivers . Airlines cancelled 74 flights and the Japan National Railways halted 17 trains on the southernmost main island of Kyushu . A total of five people were killed by the storm , including three oh Shikoku . An elderly couple was killed in their bed while a 30 @- @ year @- @ old man drowned in his car . In addition to these fatalities , 18 persons were hurt ; five of these injuries occurred on Shikoku . Overall , the storm directly affected 21 districts of Japan .