

= Typhoon Dot (1989) =

Typhoon Dot , known in the Philippines as Typhoon Kuring , was one of several tropical cyclones to impact southern China and northern Vietnam during the 1989 Pacific typhoon season . Originating from a tropical disturbance near Palau on June 4 , Dot tracked west @-@ northwestward towards the Philippines . Crossing the country on June 6 , the system moved over the South China Sea and attained typhoon status . Late on June 8 , Dot reached its peak intensity with winds estimated at 185 km / h (115 mph) . The system weakened slightly the next day before making landfall in Hainan Island . A weakened storm then entered the Gulf of Tonkin before striking northern Vietnam and dissipating on June 12 .

Throughout its course , Typhoon Dot produced heavy rains in the Philippines , China and Vietnam , resulting in significant damage and eight fatalities . The most severe impacts took place on Hainan Island where 1 @, @ 400 homes were destroyed and another 60 @, @ 000 were damaged . In Vietnam , Dot exacerbated flooding triggered in late May by Tropical Storm Cecil .

= = Meteorological history = =

In early June 1989 , the Joint Typhoon Warning Center (JTWC) began monitoring a tropical disturbance that developed over the southern Philippine Sea . Over the following two days , convection associated with this system increased and became better organized . This development prompted the issuance of a Tropical Cyclone Formation Alert on June 4 as the system moved just north of Palau . By this time , the Japan Meteorological Agency (JMA) classified the system as a tropical depression . Early on June 5 , the JTWC followed suit and issued their first advisory on Tropical Depression 05W , at which time the system was situated roughly 555 km (345 mi) southwest of the island of Samar in the Philippines . Due to the cyclone 's proximity to the Philippines , the Philippine Atmospheric , Geophysical and Astronomical Services Administration also monitored the storm , assigning it with the local name Kuring . Tracking generally towards the west @-@ northwest , the depression intensified into a Tropical Storm and was given the name Dot , 12 hours before making landfall in Samar on June 6 .

Crossing over the central Philippines and the Sibuyan Sea , Tropical Storm Dot grew in size and intensity . By June 7 , the storm entered the South China Sea and acquired a brief northerly component to its track . At the time , forecasters at the JTWC anticipated that Dot would interact with an approaching weather front and track north of Hainan Island . The front failed to materialize , however , and the storm resumed a west @-@ northwesterly track . Owing to low wind shear and warm waters , Dot attained typhoon status on June 8 . Following the development of an eye , the storm reached its peak intensity later that day as a Category 3 equivalent typhoon on the Saffir ? Simpson Hurricane Scale , with maximum sustained winds estimated at 185 km / h (115 mph) . By the morning of June 9 , the JMA assessed Dot to have attained ten @-@ minute sustained winds of 150 km / h (90 mph) and a barometric pressure of 955 mbar (hPa ; 28 @. @ 2 inHg) .

Gradual weakening occurred as Dot neared Hainan Island on June 9 . The typhoon subsequently made landfall near Sanya on June 10 and weakened to a tropical storm . Later that day , the storm emerged into the Gulf of Tonkin before making its third and final landfall near Hai Phong , Vietnam . Once onshore , Dot quickly degraded over the mountainous terrain of northern Vietnam , and was last noted on June 12 .

= = Impact = =

Tropical Storm Dot produced widespread rainfall in the Philippines , leading to several landslides . In Toledo City , the Carmen copper Concentrator had to temporarily shut down after a landslide disrupted the facility 's water supply . As a result , the Atlas Consolidated Mining and Development Corporation lost approximately 272 @, @ 000 kg (600 @, @ 000 lb) of copper .

Across Hainan Island , the storm produced heavy rains and damaging winds that left eight cities without power or telephone service . Throughout Hainan , about 1 @, @ 400 homes were destroyed

and 60 @, @ 000 more were damaged . Press reports indicated that two people died as a result of Typhoon Dot while another was listed as missing . Overall , damage in Hainan reached 170 million Renminbi (\$ 45 @. @ 1 million USD) . Three rescue teams were deployed to the region to assist in recovery efforts . In nearby Guangxi Province , heavy rains caused additional flooding that destroyed 300 homes and injured eight people . However , these rains also helped alleviate drought conditions in the region . At Tai Mo Shan in Hong Kong , sustained winds from Dot reached 79 km / h (49 mph) and gusts peaked at 110 km / h (70 mph) . More than 55 @, @ 000 hectares (136 @, @ 000 acres) of crops were flooded , the majority of which were rice fields .

Roughly two weeks after Tropical Storm Cecil devastated parts of Vietnam , Dot caused further flooding along the Red River Delta . Portions of Hanoi were inundated with up to 1 m (3 ft) . Winds up to 116 km / h (72 mph) reportedly affected coastal areas near where the typhoon moved ashore . Nearly 162 @, @ 000 hectares (400 @, @ 000 acres) of rice fields were submerged by the storm . At least six fatalities were attributed to the storm in Vietnam , and many more were injured .