

= Typhoon Elsie ( 1989 ) =

Typhoon Elsie , known in the Philippines as Typhoon Tasing , was one of the most intense known tropical cyclones to make landfall in the Philippines . A powerful Category 5 super typhoon , Elsie formed out of a tropical disturbance on October 13 , 1989 , and initially moved relatively slowly in an area of weak steering currents . On October 15 , the storm underwent a period of rapid intensification , attaining an intensity that corresponds to a Category 3 hurricane on the Saffir ? Simpson Hurricane Scale . After taking a due west track towards the northern Philippines , the storm intensified further , becoming a Category 5 super typhoon hours before making landfall in Luzon . After moving inland , the typhoon rapidly weakened to a tropical storm . Once back over water in the South China Sea , wind shear prevented re @-@ intensification . Elsie eventually made landfall in Vietnam on October 22 and dissipated the following day over Laos .

In the Philippines , Elsie worsened the situation already left in the wakes of typhoons Angela and Dan . Although it was stronger than the previous two , Elsie caused far less damage due to the relatively sparse population in the area of landfall . During the storm 's passage , 47 people were killed and another 363 were injured . Damages throughout the country amounted to \$ 35 @. @ 4 million and roughly 332 @, @ 000 people were left homeless .

= = Meteorological history = =

Super Typhoon Elsie , the third typhoon to impact the Philippines within a 12 @-@ day span during 1989 , originated from a Tropical Upper Tropospheric Trough ( TUTT ) over the western Pacific Ocean in mid @-@ October . By October 13 , a tropical disturbance developed out of the system roughly 1 @, @ 240 kilometres ( 770 mi ) east @-@ northeast of Manila , Philippines . At this time , the Japan Meteorological Agency ( JMA ) began to monitor the system as a tropical depression . Located between two other TUTT cells , the disturbance 's outflow was enhanced , allowing it to intensify . The Joint Typhoon Warning Center ( JTWC ) issued a Tropical Cyclone Formation Alert late on October 13 . Early the following day , the disturbance was designated as Tropical Depression 30W as it began to stall in an area of weak steering currents between two subtropical highs .

Shortly after being declared a depression , the JTWC upgraded the system to a tropical storm , giving it the name Elsie . At the same time , the JMA also upgraded the depression to a tropical storm . By October 15 , Elsie began to take a slow track to the west @-@ northwest and intensified . Later that day , a short @-@ wave trough passed to the north of the storm , again enhancing its outflow . This led to a period of rapid intensification , during which Elsie intensified from a tropical storm to the equivalent of a high @-@ end Category 3 hurricane on the Saffir ? Simpson Hurricane Scale in a 24 @-@ hour span . The JMA also upgraded Elsie to a typhoon , though they reported a much more gradual rate of intensification . After strengthening further to Category 4 intensity , maximum winds leveled out for most of October 17 .

On October 18 , another period of intensification took place as the storm neared the northern Philippines . Early in the day , Elsie was upgraded to a super typhoon , a storm with winds of at least 240 km / h ( 150 mph ) . Hours before making landfall in Luzon , the storm attained its peak intensity as a Category 5 super typhoon with winds of 260 km / h ( 160 mph ) and a barometric pressure of 898 hPa ( mbar ) . The peak intensity of Elsie was assessed by the JMA at the same time . They reported that the typhoon attained winds of 175 km / h ( 115 mph 10 @-@ minute sustained ) and a minimum pressure of 915 hPa ( mbar ) . The center of Elsie crossed the Philippine coastline at around 0300 UTC on October 19 .

Rapid weakening took place as the storm moved over the mountainous terrain of northern Luzon . Roughly nine hours after crossing the coastline , Elsie was downgraded to a tropical storm . The weakened storm continued its westward track as it entered the South China Sea along a monsoonal surge . This surge also helped to keep Elsie as a tropical storm due to increased wind shear over the northern portion of the cyclone . The JMA , unlike the JTWC , did not downgrade Elsie to a tropical storm until October 21 . Failing to re @-@ intensify , Elsie eventually made landfall in central

Vietnam on October 22 and degenerated into a remnant @-@ low pressure system early the following day . The remnants of Elsie were monitored by the JTWC on satellite imagery for a short time until the former typhoon dissipated over Laos .

= = Impact and aftermath = =

During the storm , roughly 50 @, @ 500 people sought refuge in shelters set up across the country . Throughout the Philippines , 47 people were killed by the typhoon , mostly from drowning . Sixteen of these fatalities occurred in Isabela Province , where Elsie made landfall . Heavy rains triggered several landslides across mountainous areas of the country . High winds also created deadly air @-@ borne debris , including roofing and tree limbs . Downed power lines across the northern provinces left most of Luzon without power . Officials stated that about 61 @, @ 300 homes were either damaged or destroyed by Elsie in the Philippines . In the wake of the typhoon , roughly 332 @, @ 000 people were left homeless . Damages sustained by agriculture amounted to 105 million PHP ( \$ 2 @, @ 253 @, @ 702 USD ) . In all , Typhoon Elsie killed 47 people and injured 363 others in the Philippines , and left roughly \$ 35 @. @ 4 million in damages .

Although Elsie brushed Hainan Island in China and made landfall in northern Vietnam , little damage was reported in these regions . In addition to damages caused by Brian , Angela and Dan , roughly ¥ 1 @. @ 9 billion ( \$ 278 @. @ 3 million ) was left in damages .

Following the storm , the Red Cross and World Food Council ( UNDRO ) set up shelters and began assisting residents in need of food and shelter . Several thousand residents were provided food , clothing and shelter across the country in mass @-@ feeding shelters . The UNDRO also contributed \$ 461 @, @ 000 in funds to the Philippines . Another \$ 46 @, @ 000 was provided by the Government of Norway and the Catholic Relief Services donated \$ 50 @, @ 000 . The Government of Japan provided \$ 300 @, @ 000 and the Government of the United States donated \$ 25 @, @ 000 in response to the overall effects of Elsie and the three preceding storms . Two other non @-@ governmental organizations , the Lutheran World Federation and World Council of Churches allocated \$ 10 @, @ 000 and \$ 30 @, @ 000 , respectively , for the Philippines .