

= Typhoon Nina (1987) =

Typhoon Nina , known in the Philippines as Typhoon Sisang , was the most intense typhoon to strike the Philippines since Typhoon Irma in 1981 . Typhoon Nina originated from an area of convection near the Marshall Islands in mid @-@ November 1987 . It gradually became better organized , and on November 19 , was first classified as a tropical cyclone . Moving west @-@ northwest , Nina attained tropical storm intensity that evening . Late on November 20 , Nina passed through the Chuuk Lagoon . After a brief pause in intensification , Nina intensified into a typhoon on November 22 . Two days later , the typhoon intensified suddenly , before attaining its peak 10 minute intensity of 165 km / h (105 mph) . During the afternoon of November 25 , Nina moved ashore in southern Luzon at the same intensity . It gradually weakened over land , before entering the South China Sea and turning to the north . By November 30 , Nina dissipated .

Across the Chuuk Lagoon , four people were killed and damage ranged from \$ 30 ? \$ 40 million (1987 USD) . In the capital of Weno , 85 % of dwellings and 50 % of government buildings were damaged . Throughout the atoll , at least 1 @,@ 000 people were rendered homeless , approximately 1 @,@ 000 houses were damaged , and 39 injuries were reported . While crossing the Philippines , Nina brought extensive damage to the northern portion of the island group . The town of Matnog sustained the worst damage from the typhoon , where 287 people died . Sixty @-@ one lives were lost in the nearby city of Verla , where 98 % of all structures were either damaged or destroyed . Four hundred people died , 80 % of all crops were destroyed , and 90 % of all homes were either damaged or destroyed in the Sorsogon province . Nearby , in the Albay province , 73 people were killed . Throughout both the Albay and Sorsogon provinces , four @-@ fifths of all schools and half of all public infrastructure were destroyed . Elsewhere , in Boac , 80 % of homes lost their roofs . In Bacacay , 18 of the village 's 200 homes were destroyed . However , the capital city of Manila avoided the brunt of the typhoon . Throughout the Philippines , approximately 114 @,@ 000 people sought shelter , approximately 90 @,@ 000 houses were destroyed , leaving more than 150 @,@ 000 homeless . Nationwide , damage from the storm totaled \$ 54 @.@ 5 million and 808 people perished .

= = Meteorological history = =

An area of convection developed within near the Marshall Islands in mid @-@ November . Initially , convection waxed and waned , but on November 17 , the Joint Typhoon Warning Center (JTWC) started tracking the system . At this time , the system developed deep convection as well as good outflow . The JTWC issued a Tropical Cyclone Formation Alert (TCFA) at 0100 UTC on November 19 due to a significant increase in organization . Five hours later , the Japan Meteorological Agency (JMA) started monitoring the system . Continuing to rapidly become better organized while moving west @-@ northwest , the cyclone was classified as a tropical depression by the JTWC at midday . On the evening of November 19 , both the JTWC and the JMA upgraded the system to Tropical Storm Nina , shortly after developing banding features . Initially forecast by the JTWC to move slowly , instead , Nina accelerated while gradually intensifying . At 1600 UTC on November 20 , Tropical Storm Nina passed 75 km (45 mi) south of Weno Island in the Chuuk Lagoon . Two hours later , the JMA upgraded Nina to a severe tropical storm . After moving away from the island on the morning of November 21 , the JTWC upgraded Nina to a typhoon at 1200 UTC , with the JMA following suit early on November 22 . Shortly thereafter , Nina made its closest approach to Ulithi , passing 110 km (70 mi) to the north . At 1600 UTC , Nina tracked about 175 km (110 mi) north of Yap .

Typhoon Nina accelerated slightly as it traversed the open waters of the Philippine Sea . The storm continued to slowly deepen , though early on November 23 , the system leveled off in intensity . That day , the Philippine Atmospheric , Geophysical and Astronomical Services Administration (PAGASA) also monitored the storm and assigned it with the local name Sisang . However , midday on November 24 , Nina entered a phase of explosive intensification , at a rate of 1 @.@ 33 mbar (0 @.@ 039 inHg) an hour . Despite this , the JMA only increased the intensity slightly to 170 km / h (

105 mph) . After developing a well @-@ defined eye , the JTWC reported that Nina attained its peak intensity of 270 km / h (170 mph) , making it a low @-@ end Category 5 system on the Saffir @-@ Simpson Hurricane Wind Scale . At 1500 UTC on November 25 , Nina moved ashore along the southern tip of Luzon at its peak intensity .

Despite interacting with land , little change in strength occurred until 0000 UTC on November 26 , at which time , the system began to weaken . After traversing Luzon and Mindoro , the JTWC reduced the wind speed of the typhoon to 110 mph (175 km / h) . Although no eye was visible on satellite imagery , radar imagery indicted that an eye was present , but cloud @-@ filled ; henceforth , the JTWC increased the intensity of Nina to 185 km / h (115 mph) , equivalent to a weak Category 3 hurricane . According to the JMA , however , Nina never re @-@ intensified . By 0000 UTC on November 27 , the low and mid level circulations began to decouple , deeply frustrating many forecasters at the JTWC . During this time , the cyclone posed a serious threat to Southern China and Hong Kong . Instead , Nina veered northward while gradually weakening ; by midday on November 27 , the JMA had reduced the intensity of Nina to 130 km / h (80 mph) . Early on November 28 , an eye once again became visible on satellite imagery . However , no re @-@ intensification occurred . By the afternoon , increased wind shear took toll on the cyclone , causing Nina to become less organized due to deep convection being sheared off to the east @-@ northeast . Thus , the JTWC expected Nina to move into the Luzon Straits and rapidly transitioned into an extratropical cyclone . After meandering within the South China Sea , Nina turned south , before dissipating on November 29 , though the JMA continued to monitor its remnants until 0000 UTC on November 30 .

= = Preparation , impact , and aftermath = =

= = = Federated States of Micronesia = = =

While passing near Truk , which has a population of 42 @,@ 000 , Typhoon Nina inflicted heavy crop damage on the area . In the capital of Weno , 85 % of homes and 50 % of government buildings were damaged . There , communication lines were downed and hundreds of people were evacuated . Throughout the atoll , four lives were lost , including a woman and a 14 @-@ year @-@ old boy killed by a falling breadfruit tree and an 11 @-@ year @-@ old girl died after her leg was struck by a piece of flying metal . One person was reported missing . Over 1 @,@ 000 people were rendered homeless while roughly 1 @,@ 000 homes were damaged . Damaged from the storm ranged from \$ 30 ? 40 million (1987 USD) and 39 were wounded .

= = = Philippines = = =

Prior to landfall , around 10 provinces , including most of Luzon , was placed under a typhoon alert . However , many fisherman ignored the alerts and refused to flee to higher ground . Furthermore , Philippine Air Lines cancelled 21 domestic flights and three international flights . Numerous other flights were delayed . Local authorities also suspended school classes .

Typhoon Nina brought widespread damage to much of the northern Philippines . It was the strongest system to strike the archipelago since Typhoon Irma in 1981 . The capital city of Manila was spared the worst of Nina . There , only minor damage and power outages were reported , though 800 were evacuated to shelters due to flooding and the city 's airport closed . Two men were crushed to death in Lucena City . The worst effects of the storm were felt in Matnog , where 287 people drowned due to storm surge . In nearby Verla , 61 fatalities occurred , where 98 % of the city 's buildings were damaged or destroyed and its supply of drinking water was cut off . Throughout the Sorsogon province , 80 % of all crops were destroyed and 90 % of all homes were either damaged or destroyed . Province @-@ wide , 400 people died . In the Albay province , 73 people were killed . Throughout both the Albay and Sorsogon provinces combined , 80 % of all schools and 50 % of all public buildings were demolished .

Elsewhere , seven casualties occurred in the Laguna province , while one person perished each in San Pablo , Batangas , Marinduque and Mindoro Oriental . Thirty @-@ two people were killed in the Camarines Sur province and 23 other lives were lost in Camarines Norte . Five others were killed in the Masbate province , and one died in Marinduque . In Boac , the capital of Marinduque , 80 % of all dwellings lost their roofs and damage was severe to churches , schools and city buildings . In Bacacay , situated to the southeast of Legaspi , all but 15 of the town 's 200 dwellings were leveled . Although there were no deaths , Samar Island also suffered severe damage . Offshore , five fisherman perished and a tugboat and cargo ship were rendered missing due to rough seas . Nina also brought widespread power outages to most of Luzon ; consequently , trading on the nation 's two biggest stock exchange was suspended for November 26 .

Overall , around 114 @,@ 000 persons were evacuated to shelters , 153 @,@ 339 were listed homeless , and 1 @,@ 075 were wounded . A total of 90 @,@ 173 homes were demolished due to Nina while an additional 109 @,@ 633 were partially destroyed . Nationwide , 808 people were killed . In all , damage from the storm totaled \$ 54 @.@ 5 million (1987 USD) , \$ 7 @.@ 9 million of which occurred along the Bicol Region .

Due to the damage wrought by Nina , President Corazon Aquino declared four Luzon provinces a disaster area . Initially , only 11 provinces were declared a state of emergency , but by November 29 , this total increased to 17 . United States Ambassador Nicholas Platt released \$ 25 @,@ 000 in emergency aid and sent officials to help with relief efforts . The American Red Cross also provided \$ 24 @,@ 000 worth of aid to post @-@ storm victims . The Roman Catholic Church also provided \$ 160 @,@ 000 worth of food to the nation . Additionally , Social Welfare and Development Secretary Mita Pardo de Tavera donated \$ 50 @,@ 000 for emergency disaster relief , though many locals complained that this aid was too little and too late . Around 11 @,@ 000 lb (5 @,@ 000 kg) of rice was donated for use in eight provinces , and on December 1 , an additional 35 @,@ 000 lb (16 @,@ 000 kg) pounds of aid was airlifted to the region . Belgium also launched a four @-@ month program to help 380 @,@ 000 post @-@ storm victims . Most flights in and out of Manila had returned to a normal schedule by November 28 . In all , nine countries and several foreign Red Cross organizations responded by providing aid , totaling roughly \$ 700 @,@ 000 worth of value , mostly from Japan . PAGASA later retired the name Sisang on the list of tropical cyclones in the country ; it was replaced by Sendang .

= = = China = = =

Although Nina was rapidly weakening over the South China Sea , the storm brought 4 @.@ 7 mm (0 @.@ 19 in) of rain to Hong Kong , prompting a tropical cyclone signal for nearby Macau .