= Typhoon Oliwa =

Typhoon Oliwa was one of a record eleven super typhoons in the 1997 Pacific typhoon season . It formed in the central Pacific Ocean on September 2 to the southwest of Hawaii , but it became a typhoon in the western Pacific . Oliwa explosively deepened on September 8 , increasing its winds from 85 mph to 160 mph in a 24 ? hour period . Afterward , it slowly weakened , and after passing east of Okinawa , Oliwa turned northeast and struck Japan with winds of 85 mph (140 km / h) . There , it affected 30 @,@ 000 people and killed 13 ; thousands of houses were flooded , and some were destroyed . Offshore South Korea , the winds and waves wrecked 28 boats , while one boat went missing with a crew of 10 people . Typhoon Oliwa dissipated on September 19 in northern Pacific Ocean near the International Date Line .

= = Meteorological history = =

The origins of Typhoon Oliwa were from an unusually eastward extension of the monsoon trough in late August 1997 . The tropical disturbance organized southwest of Hawaii , and slowly organized . On September 2 , the Central Pacific Hurricane Center (CPHC) initiated advisories on Tropical Depression Two @-@ C about 590 miles (950 km) southwest of Johnston Island , slightly east of the International Date Line . The depression quickly attained tropical storm status , and the CPHC gave it the name " Oliwa " , meaning " Oliver " in the Hawaiian language .

A moderately powerful ridge persisted north of Tropical Storm Oliwa , which caused a slow west to west @-@ northwest track . Water temperatures were slightly warmer than usual , and there was a favorable upper @-@ level environment for strengthening . Initially , however , Oliwa was somewhat disorganized on satellite imagery , and on September 4 , as it crossed the International Date Line , there may have been multiple circulations . Upon entering the western Pacific Ocean , the Joint Typhoon Warning Center (JTWC) and the Japan Meteorological Agency (JMA) began issuing advisories on the system (9719) . Despite the favorable conditions , further intensification was slow , and it reached typhoon status - winds of at least 75 mph (120 km / h) - on September 8 . Prior to that time , Oliwa co @-@ existed with a weak tropical cyclone that formed in a similar location in the south Pacific .

About twelve hours after reaching typhoon status , Oliwa began to undergo unexpected explosive deepening . In a 24 ? hour period , the JTWC assessed the typhoon as nearly doubling in intensity , from 85 to 160 mph (140 to 260 km / h 1 @-@ min winds) , while the pressure dropped 69 mbar to a minimum of 898 mbar ; based on the estimated intensity , the JTWC classified Oliwa as a super typhoon . The JMA , which is the official agency of the western Pacific , assessed Oliwa as reaching a peak of 115 mph (185 km / h 10 @-@ min winds) , with a pressure of 915 mbar . Around that time , satellite imagery indicated a possible eyewall mesovorticy , which is a small scale rotational feature found in the eyewall of an intense tropical cyclone . Additionally , concentric eyewalls developed in the center of Oliwa , which typically occur in strong typhoons .

After maintaining peak intensity for 36 hours , Oliwa gradually weakened as it continued to the west @-@ northwest , during which it passed through the Northern Marianas Islands . On September 14 , the typhoon slowed to the north of Okinawa , and it turned to the northeast toward Japan . As a weakened typhoon , Oliwa moved ashore on Makurazaki , Kagoshima , Kyushu with winds of 85 mph (140 km / h) late on September 15 . It weakened to tropical storm strength while crossing Japan , and deteriorated further to tropical depression status on September 16 . On September 17 , the JTWC issued the final advisory on Oliwa while it was in the eastern portion of the Sea of Japan . The JMA maintained advisories as the storm crossed northern Japan , and it accelerated over the open Pacific Ocean . On September 19 , Oliwa dissipated near the International Date Line to the south of the Aleutian Islands .

= = Impact and records = =

While weakening after peaking in intensity , Oliwa passed about 60 miles (95 km) north of Agrihan

in the Northern Marianas Islands . Sustained winds on the island reached 75 mph (120 km / h) , with gusts to 85 mph (135 km / h) . The winds downed two coconut trees onto a radio antenna , which left the island temporarily without contact to the outside world . On the Japanese island of Kyushu , where Oliwa made landfall as a weakened typhoon , thousands of homes were flooded , and dozens were destroyed . Its slow movement caused heavy rainfall that created a mudslide in Tashiro , Kagoshima , killing three people . Across Kagoshima Prefecture , officials issued evacuations due to flooding , although many did not heed the warnings . In the prefecture , the typhoon destroyed 131 buildings and damaged about 1 @,@ 700 more . Damage there was estimated at 14 million yen (1997 JPY , $ 150 @,@ 000 in 1997 USD) . Across Japan , Typhoon Oliwa caused 12 fatalities and displaced a total of 30 @,@ 000 people . Total damage amounted to 4 @.@ 36 billion yen ($ 50 @.@ 1 million USD) . Offshore the South Korea coast , the winds and strong waves wrecked 28 vessels , and 10 people were reported missing from one ship .

Typhoon Oliwa was one of eleven super typhoons in the western Pacific , which is tied to the previous record of eleven ; a typical typhoon season has four super typhoons . The period of heightened activity was the result of one of the most powerful El Niño events on record . The track Oliwa was unusual , due to its origin as a cyclone from the central Pacific Ocean and its path over the Northern Marianas Islands and Japan . The typhoon was one of only two during the season to undergo explosive deepening , which is a decrease in barometric pressure of ? 2 @.@ 5 mbar per hour for a period of at least 12 hours . In 24 hours , the pressure dropped 69 mbar , which averages 2 @.@ 9 mbar per hour ; such values are usually estimated in the western Pacific using the Dvorak technique .

The name was not retired , although due to the low activity in the central Pacific Ocean , the name will not be used for several years .