= Typhoon Conson (2004) =

Typhoon Conson , known in the Philippines as Typhoon Frank , was the first of the record ten typhoons to impact Japan during the 2004 Pacific typhoon season . Developing out of a tropical depression near the northern Philippines in early June , Conson slowly traveled towards the north . Gradually strengthening , the storm reached typhoon status late on June 7 according to the Joint Typhoon Warning Center and several hours later according to the Japan Meteorological Agency . After turning towards the northeast , the typhoon brushed Taiwan and reached its peak intensity with winds of 150 km / h (90 mph 10 @-@ minute winds) on June 9 . After reaching its peak , Conson gradually weakened , passing through Okinawa before being downgraded to a tropical storm the next day . On June 11 , the storm made landfall as a minimal tropical storm in the K?chi Prefecture just before becoming extratropical . The extratropical remnants continued towards the northeast and were last mentioned on June 14 crossing the international date line .

Typhoon Conson brought heavy rains and high winds to the Philippines , Taiwan , Okinawa , and Japan . Flooding in the Philippines killed two people and caused about PHP1.6 million (US $ 35 @,@ 000) in damages . However , some reports state that up to 30 people died in the Philippines . In the Ryukyu Islands , the storm brought heavy rains and high winds to several islands , damaging crops and leaving many without power . As it became extratropical , Conson caused moderate damage in southern Japan , including a few landslides which prompted evacuations . Throughout Japan , losses reached 355 @.@ 7 million yen (US $ 3 @.@ 8 million) .

= = Meteorological history = =

Early on June 4 , the Joint Typhoon Warning Center (JTWC) began monitoring an area of low pressure associated with deep convection about 780 km (485 mi) south @-@ southeast of Hong Kong . Later that day , following notable development , they classified the system as Tropical Depression 07W . At the same time , the Japan Meteorological Agency (JMA) also began monitoring the system as a tropical depression . Slowly moving towards the southeast , 07W gradually strengthened , being classified a tropical storm by the JTWC at 1200 UTC the next day . Around the same time , the storm entered the Philippine Atmospheric , Geophysical and Astronomical Services Administration 's area of responsibility and was given the local name Frank . Twenty @-@ four hours later , 07W made its closest approach to the Philippines , passing within 295 km (185 mi) of Manila . A few hours later , the JMA upgraded the depression to a tropical storm and gave it the name Conson ; a name contributed by Vietnam that is a picturesque place in the country , consisting of a mountain , pine forest , streams , pagodas and many historical monuments .

A ridge located over the central Philippines caused Conson to turn towards the north . Continuing to intensify , the JTWC assessed the storm to have reached typhoon status at 1800 UTC on June 7 . The JMA also upgraded the storm to a typhoon about twelve hours later . A 28 km (17 mi) wide eye developed as the cyclone turned towards the northeast . Originally , forecasts showed the typhoon making landfall in southern Taiwan but the turn towards the northeast spared the island from a direct hit . Shortly after being classified as a typhoon by the JMA , the JTWC upgraded Conson to a Category 2 typhoon on the Saffir @-@ Simpson Hurricane Scale with winds of 155 km / h (100 mph 1 @-@ minute winds) . The eye later became slightly disorganized and the cloud tops around the center warmed . However , the storm reorganized the next day and was upgraded to a Category 3 typhoon by the JTWC with winds of 185 km / h (115 mph 1 @-@ minute winds) . The intensification was the result of the influence of an approaching shortwave trough which enhanced poleward outflow . Around this time , PAGASA issued their final advisory on Typhoon ' Frank ' as it moved out of their area of responsibility .

The strengthening was the result of Conson passing over the warm waters of the Kuroshio Current . The forward motion on the typhoon also began to increase as it interacted with a baroclinic zone . Shortly after , the JMA assessed the storm to have reached its peak intensity with winds of 150 km / h (90 mph 10 @-@ minute winds) and a minimum pressure of 960 hPa (mbar) . Later that day ,

the storm passed over Okinawa as it weakened . By June 10 , Conson began to undergo an extratropical transition . Continuing increase in forward speed caused the low to become exposed from shower and thunderstorm activity on the southern edge of the circulation . Around 1200 UTC , the center of circulation became separated from deep convection , leading to the typhoon being downgraded to a tropical storm by both agencies several hours later . Early on June 11 , the JTWC reported that the storm had completed its extratropical transition just south of Japan . However , the JMA kept Conson has a tropical cyclone through its landfall in K?chi Prefecture as a minimal tropical storm . Shortly after landfall , it was classified as an extratropical cyclone . Continuing towards the northeast , the storm remained weak and was last mentioned as it crossed the international date line on June 14 near the Aleutian Islands .

The Japan Meteorological Agency uses 10 @-@ minute sustained winds , while the Joint Typhoon Warning Center uses 1 @-@ minute sustained winds . The conversion factor between the two is 1.14x. JMA 's peak intensity for Conson was 150 km / h (90 mph) 10 @-@ minute sustained , or 160 km / h (105 mph) 1 @-@ minute sustained . The JTWC 's peak intensity for Conson was 185 km / h (115 mph) 1 @-@ minute sustained , or 155 km / h (100 mph) 10 @-@ minute sustained . The National Meteorological Center of China estimated a peak intensity of 150 km / h (90 mph) 10 @-@ minute sustained , or 160 km / h (105 mph) 1 @-@ minute sustained . The Hong Kong Observatory assessed Conson to be slightly weaker than other agencies , with peak winds estimated at 130 km / h (80 mph) 10 @-@ minute sustained , or 150 km / h (90 mph) 1 @-@ minute sustained .

= = Preparations and impact = =

= = = Philippines = = =

On June 7 , the Philippine Atmospheric , Geophysical and Astronomical Services Administration raised Public Storm Signal No. 1 for most of Luzon . As Conson strengthened into a typhoon , northern areas of Luzon were placed under Public Storm Signal No. 3 , resulting in school closures . As the typhoon passed by the Philippines , it dropped heavy rains , peaking at 333 @.@ 8 mm (13 @.@ 1 in) in Iba . The highest 24 ? hour rainfall was recorded in Subic Bay at 230 mm (9 in) . Minor flooding and power outages were reported in Manila . These heavy rains led to flooding which reportedly killed 30 people in Luzon . However , the fatalities are uncertain as PAGASA reported that two people were killed by the storm . In all , Conson caused about PHP1.6 million (US35,000) in damage .

= = = Taiwan and Hong Kong = = =

High winds and heavy rain warnings were issued for most of Taiwan along with sea warnings . Schools and businesses on Orchid Island were suspended on June 9 and 10 as Typhoon Conson passed by . Some domestic flights were cancelled and rail and ferry services were suspended ahead of the storm . When Conson was first classified , Hong Kong was placed under a standby signal as the storm was located within 800 km (500 mi) of the city Only a few showers were reported in the city due to the storm . Taiwanese officials checked water gates throughout the island on June 8 and found that 68 were missing . Water management officials stated that the missing gates could " ... wreak unnecessary damage ... " . The following day , 42 of the missing gates had been replaced . Fishing boats returned to port for shelter during the storm . An emergency operations center was set up to carry out search and rescue missions during and following the typhoon . Heavy rains from the typhoon peaked at 262 @.@ 5 mm (10 @.@ 3 in) in Yilan County . The storm caused minor damage and one minor injury during as it passed by Taiwan . Although Conson dropped heavy rains across the island , it was not enough to alleviate drought conditions in the southern areas .

= = = Japan = = =

Traveling towards the northeast , Conson headed towards Okinawa where schools were closed and local transportation was disrupted due to the storm . The Japan Meteorological Agency warned residents about the threat of heavy rains and high winds resulting from the storm . A United States naval base located in Okinawa was placed under a Tropical Cyclone Condition of Readiness (TCCR) Four as Typhoon Conson was approaching . As the storm neared the islands , the naval base was put under TCCR Three , indicating that winds of 92 km / h (57 mph) were anticipated within 48 hours . Ahead of the storm , upwards of 254 mm (10 in) fell across the islands , which were indirectly related to the storm . In southern Japan , several airlines canceled flights due to poor weather conditions .

Heavy rains , peaking at 345 mm (13 @.@ 5 in) on Tarama , triggered flooding and landslides throughout the islands . The highest sustained winds on the islands were also recorded on Tarama at 137 km / h (85 mph) and the highest gust was recorded on Miyako @-@ jima at 185 km / h (115 mph) . Despite transitioning into an extratropical cyclone while impacting Japan , Conson brought heavy rains and high winds to Ky?sh? . The highest rainfall and gusts were recorded in Tanegashima at 277 @.@ 5 mm (10 @.@ 9 in) and 146 km / h (91 mph) respectively ; the highest sustained wind was recorded in Muroto , K?chi at 109 km / h (68 mph) .

On Ishigaki Island , high winds and heavy rains cut power to many residences and damaged crops . A total of 1 @,@ 960 ha (4 @,@ 800 acres) of agricultural land was damaged by the storm , leaving 31 @.@ 9 million yen (US $ 346 @,@ 000) in losses . Significant agricultural damage was also sustained on Miyako @-@ jima , leaving 76 @.@ 5 million yen (US $ 805 @,@ 000) in losses . Okinawa sustained moderate damage during the passage of Conson , with several homes flooded and large lengths of power lines were lost . At the height of the storm , roughly 3 @,@ 300 residences were without power and 1 @,@ 305 power lines were downed . Additionally , 1 @,@ 685 ha (4 @,@ 160 acres) of agricultural land was damaged , leaving 32 @.@ 3 million yen (US $ 350 @,@ 000) in losses .

In Kagoshima Prefecture , Conson damaged 1 @,@ 846 ha (4 @,@ 560 acres) of agricultural land and flooded six homes . Agricultural and property damage in the prefecture amounted to 100 million yen (US $ 1 million) and 115 million yen (US $ 1 @.@ 2 million) respectively . A large landslide , roughly 30 m (98 ft) wide , in Matsuyama , Ehime prompted the evacuation of 19 homes ; however , no known damage resulted from the incident . Throughout K?chi Prefecture , several highways were shut down after being damaged by Conson . Over 20 schools were let out early due to the deteriorating conditions .