= Cyclone Hondo =

Intense Tropical Cyclone Hondo (JTWC designation : 16S) was the strongest and longest lived tropical cyclone to develop during the 2007 ? 08 South @-@ West Indian Ocean cyclone season . The third tropical cyclone and first intense tropical cyclone of the season , Hondo developed out of a tropical disturbance in early February about 1 @,@ 020 km (635 mi) east @-@ southeast of Diego Garcia . The disturbance quickly strengthened , becoming a moderate tropical storm on February 4 and a severe tropical storm the following day . After a brief period of slower intensification , Hondo rapidly intensified into an intense tropical cyclone and reached its peak intensity with winds of 215 km / h (130 mph 10 @-@ minute winds) on February 7 . The cyclone gradually weakened over the next several days due to an increase in forward speed and a decrease in sea surface temperatures . On February 12 , Hondo rapidly degenerated into a remnant @-@ low pressure area . Over the following week , the remnant low traveled in a general west @-@ northwest direction with no development . On February 20 , about 2 @,@ 780 km (1 @,@ 725 mi) northeast of where the final advisories were issued , the storm began to regenerate . The next day , advisories were issued on Tropical Disturbance Ex @-@ Hondo , which briefly strengthened into a tropical depression . However , according to the Joint Typhoon Warning Center , Hondo continued to strengthen and attained winds of 95 km / h (60 mph 1 @-@ minute winds) before passing directly over Réunion . Interaction with the island caused the storm to weaken and degenerate into a remnant low once more . The storm dissipated on February 29 after executing a counterclockwise loop .

= = Meteorological history = =

On February 2 , the Regional Specialized Meteorological Centre for the southwest Indian Ocean , Météo @-@ France , and the Joint Typhoon Warning Center (JTWC) began monitoring a tropical disturbance located in the western portion of Météo @-@ France 's area of responsibility . However , it was not operationally classified as a disturbance for another two days . Traveling generally towards the southwest , the disturbance slowly strengthened . At 0300 UTC on February 4 , the JTWC issued a Tropical Cyclone Formation Alert for the system as deep convection and outer bands developed around the center . Located within a narrow area of low to moderate wind shear , the system traveled towards the west @-@ southwest at 15 km / h (9 mph) . Shortly after , Météo @-@ France began issuing advisories on Tropical Disturbance 10 while it was located about 1 @,@ 020 km (635 mi) east @-@ southeast of Diego Garcia . A buoy located just to the south of the small circulation recording decreasing atmospheric pressure , having lowered by 4 hPa (mbar) in the past 24 hours .

With weak steering currents provided by an area of high pressure to the north , the disturbance slowly moved towards the east @-@ southeast . At 1500 UTC , the JTWC began issuing advisories on the disturbance which they designated as Tropical Cyclone 16S . With high oceanic heat content , low wind shear , and good divergence aloft , significant strengthening was likely . Early the next day , Météo @-@ France upgraded the disturbance to a tropical depression as winds increased to 55 km / h (35 mph 10 @-@ minute winds) . However , in the post @-@ season analysis , Météo @-@ France determined that the system had become a depression about 12 hours earlier and was already a moderate tropical storm by the time of the operation upgrade . At 0600 UTC , Météo @-@ France classified the depression as a moderate tropical storm and was given the name Hondo ; a name submitted to the World Meteorological Organization by Zimbabwe . It was later determined that Hondo was already a severe tropical storm by the time it was named operationally .

Hondo continued to quickly strengthen , becoming a tropical cyclone , the equivalent of a Category 1 hurricane on the Saffir @-@ Simpson Hurricane Scale , that same day . After maintaining its through the early hours of February 6 , a pinhole eye began to develop , signifying that Hondo was beginning to undergo rapid intensification . During this intensification phase , the storm became nearly stationary again due to a weakness in the ridge which was previously steering the cyclone towards the east . Later that day , Hondo was upgraded to an intense tropical cyclone with winds of 175 km / h (110 mph 10 @-@ minute winds) . After becoming an intense tropical cyclone , wind

shear began to increase , causing the eye to become slightly disorganized , temporarily slowed the intensification . Later in the day , the eye became better defined , allowing Hondo to intensify further . Operationally , Hondo was upgraded to a very intense tropical cyclone with winds of 220 km / h (140 mph 10 @-@ minute winds) with a minimum pressure of 906 hPa (mbar) . However , after reanalysis , it was found that Hondo never intensified beyond intense tropical cyclone status and winds peaked at 215 km / h (130 mph 10 @-@ minute winds) with a minimum pressure of 915 hPa (mbar) .

Around the same time that Météo @-@ France assessed Hondo to have peaked , the JTWC reported that the storm had attained winds of 230 km / h (145 mph 1 @-@ minute winds) , equivalent to a strong Category 4 hurricane . Shortly after reaching peak intensity , the cloud tops around the eye began to warm , meaning that the storm was beginning to weaken . Hondo also turned towards the southwest and kept a steady pace as two subtropical highs began influencing its movement . The storm continued to weaken as cloud tops warmed but remained an intense tropical cyclone as its eye was still well @-@ defined . Hondo briefly re @-@ intensified later on February 8 despite the structure of the storm deteriorating . The cyclone maintained intense tropical cyclone status through February 10 due to the formation of a large eye which helped maintain the storms structure . Hondo gradually began to weaken due to a combination of decreasing sea surface temperatures and increasing forward motion . On February 10 , Hondo started a gradual curving path due to a trough located to the south and strengthening high pressure systems to the north . At 0600 UTC , the storm was downgraded to a tropical cyclone as winds decreased to 155 km / h (100 mph) .

Continued weakened led to the storm being downgraded to a severe tropical storm early on February 11 as it tracked towards the southeast . After spending several hours over cold waters , most of the convection associated with Hondo dissipated due to the lack of energy and the storm was further downgraded to a moderate tropical storm . Later that day , no convection remained around the storm as it weakened to a tropical depression . The JTWC issued their final advisory on February 12 as the storm showed no signs of convective activity . Hondo degenerated into a remnant @-@ low pressure area as Météo @-@ France issued their final advisory at 1200 UTC . For the next week , the remnant low traveled in a general west @-@ northwestward direction with little or no development . On February 20 , about 2 @,@ 780 km (1 @,@ 725 mi) northeast of where the final advisories were issued , the low began to develop weak convection around the northern edge of the center of circulation .

On February 21 , Météo @-@ France began to issue advisories on Tropical Disturbance Ex @-@ Hondo which presented a well @-@ defined circulation . Later that day , deep convection redeveloped around the center as the low entered an area favorable for development . At 0830 UTC , the JTWC issued a Tropical Cyclone Formation Alert , stating that Hondo was likely to regenerate into a tropical cyclone . Later that day , Hondo became almost stationary and was upgraded to a tropical depression as it continued to develop . The next day , Hondo was downgraded to a tropical disturbance as wind shear constrained convective development and caused the system to weaken . However , early on February 23 , the JTWC began issuing advisories on Hondo as they estimated winds to have reached 65 km / h (40 mph) once more . At 0600 UTC , Hondo attained winds of 95 km / h (60 mph 1 @-@ minute winds) near Mauritius and Réunion . Due to the proximity to the islands , convection associated with the storm became disorganized and it began to weaken . The JTWC issued their final advisory early on February 24 as the system significantly weakened , with the center devoid of convection . Météo @-@ France issued their final advisory several hours later . The remnants of Hondo persisted for another five days , executing a counterclockwise loop before dissipating on February 29 .

= = Preparations and impact = =

As Hondo began to regenerate , Mauritius and Réunion were placed under a state of alert . Residents in Réunion were advised to stay up to date with the latest warnings on the storm , not go hiking in the mountains , ensure their disaster kit is fully stocked , stay away from the shore , and

know the locations of the nearest shelters . Initially , residents in Madagascar feared that Hondo would make landfall in the country after being struck by Cyclone Ivan on February 16 . However , the storm turn towards the southwest , away from Madagascar . On February 23 ex @-@ Hondo tracked just offshore Mauritius before passing directly over Réunion , just short of moderate tropical storm status . Sustained winds of 50 km / h (31 mph) with gusts up to 76 km / h (47 mph) were recorded on Mauritius while sustained winds of 55 km / h (35 mph) with gusts up to 99 km / h (61 mph) were recorded on Réunion . The highest rainfall total was recorded at Takamaka , totaling to 750 mm (29 @.@ 5 in) . Up to 760 @,@ 000 people were affected on Réunion and overall damage was minimal .