= Tropical Storm Linfa (2015) =

Severe Tropical Storm Linfa , known in the Philippines as Severe Tropical Storm Egay , was a tropical cyclone that affected the northern Philippines , Taiwan and southern China in early July 2015 . The tenth named storm of the annual typhoon season , Linfa developed on July 1 over in the Philippine Sea . It moved erratically westward toward the Philippines , eventually striking the island of Luzon on July 4 . Linfa weakened across the island , but reorganized over the South China Sea . It turned northward and strengthened to near typhoon intensity , or winds of 120 km / h (75 mph) , but weakened as it curved to the northwest toward southern China . On July 9 , the storm made landfall along the Chinese province of Guangdong , dissipating the next day west of Hong Kong .

Interacting with the monsoon , Linfa brought heavy rainfall across much of the Philippines for several days , causing flooding and landslides that resulted in traffic accidents and power outages . Across Luzon , Linfa damaged 198 houses and destroyed another seven , causing ? 214 @.@ 6 million ($ 4 @.@ 8 million USD) in damage . The storm briefly threatened Taiwan , prompting warnings and restricted ferry travel . Over China , Linfa produced heavy rainfall and gusty winds that wrecked 288 homes . Damage in the country totaled ¥ 1 @.@ 7 billion ($ 284 million USD) , and there was one death .

= = Meteorological history = =

Toward the end of June , a westerly wind burst moved across the western Pacific Ocean , spawning Typhoon Chan @-@ hom as well as the storm that would become Linfa . On July 1 , a large area of convection persisted east of the Philippines , with an associated circulation exposed due to moderate wind shear . At 06 : 00 UTC that day , the Joint Typhoon Warning Center (JTWC) assessed a low probability of tropical cyclogenesis over the subsequent 24 hours . However , the system quickly organized , prompting the JTWC to issue a tropical cyclone formation alert later that day , indicating that a storm would likely form imminently . At 18 : 00 UTC on July 1 , the Japan Meteorological Agency (JMA) estimated that a tropical depression developed about 500 km (300 mi) east @-@ northeast of the Philippine island of Samar . Early the next day , the JTWC classified the system as Tropical Depression 10W , based on the organization of the rainbands about the center . PAGASA ? the Philippines ' weather agency ? also began monitoring the system , giving it the local name Egay .

With the subtropical ridge to the northeast , the nascent system moved northwestward initially . Despite persistent shear dislocating the convection , the JMA upgraded the system to a tropical storm at 12 : 00 UTC on July 2 , naming it Linfa . The storm slowly intensified , amplified by good outflow to the south and the presence of warm water temperatures . On July 3 , Linfa 's track briefly shifted to the southwest , by which time the convective structure had evolved into a central dense overcast . There was uncertainty in the storm 's future as it approached the Philippines . This was due to potential interaction with Typhoon Chan @-@ hom to the northeast , and differences in storm models whether an approaching trough would turn Linfa to the east or the west .

After turning back to the northwest , the convection around Linfa became even more symmetrical , although the circulation became slightly elongated . At 06 : 00 UTC on July 4 , the storm reached a preliminary peak intensity , with 10 minute sustained winds of 85 km / h (50 mph) according to the JMA . As Linfa neared the northern Philippines , the bulk of the convection was shifted to the southern periphery , due to the continued wind shear . Late on July 4 , the center of Linfa made landfall over Palanan , Isabela , on the island of Luzon . Moving westward across the island , the circulation became disorganized as the core convection diminished . By late on July 5 , Linfa emerged into the South China Sea . Once over open waters , Linfa began moving to the north @-@ northwest , still moving around the subtropical ridge , and it was expected to move over Taiwan . The circulation remained well @-@ defined but exposed , with the deep convection displaced to the south . With the isolated thunderstorms and unfavorable wind shear , the JTWC noted the potential for the circulation to dissipate over open waters . By July 7 , easing wind shear allowed the convection to rebuild and for the structure to improve in organization . By that time , the future of the

storm was still uncertain , although a turn to the northwest toward China was expected . Also on July 7 , PAGASA issued its final bulletin on the storm as Linfa exited their area of responsibility .

More favorable conditions allowed the storm to intensify more on July 8 . Around that time , the storm turned more to the northwest due to a ridge exiting China , bringing the storm southwest of western Taiwan . At 00 : 00 UTC on July 8 , the JMA estimated peak 10 minute winds of 95 km / h (60 mph) , making it a severe tropical storm . The JTWC assessed further strengthening , upgrading Linfa to typhoon status at 18 : 00 UTC that day based on a developing well @-@ defined eye . At that time , the agency estimated peak 1 minute winds of 120 km / h (75 mph) . Early on July 9 , the Hong Kong Observatory (HKO) sent a reconnaissance aircraft into the storm , which measured winds of near hurricane @-@ force , as well as gale force winds 100 km (60 mi) from the center . As the storm approached the southern China coast , the eye expanded to a diameter of 37 km (23 mi) , while the thunderstorms on the northern periphery diminished . Around 03 : 00 UTC on July 9 , Linfa made landfall east of Hong Kong near Lufeng , Guangdong , and it quickly weakened once over land . The storm turned westward , inland and parallel to the southern Chinese coastline . As the thunderstorms diminished , the surface sustained winds continued to drop . At 18 : 00 UTC on July 9 , the JTWC issued their final advisory for Linfa , and shortly after the JMA downgraded the storm to a tropical depression . The system turned to the southwest , dissipating over open waters on July 10 off the coast of Guangdong province .

= = Preparations = =

As Linfa (locally known as Egay) approached closer to the Philippine island of Luzon , PAGASA issued Public Storm Warning Signal (PSWS) # 2 , expecting gale force @-@ winds in Apayao , Aurora , Cagayan , northern Isabela , Kalinga , and Quirino , including the offshore Babuyan and Calayan islands . A lower PSWS was issued for other portions of Luzon . Ahead of the storm , 45 @,@ 336 people evacuated in the Philippines , utilizing 31 government shelters and assisted by police officers . Restricted travel by boat stranded 1 @,@ 147 people during the storm 's passage . Due to the enhancement of the southwest monsoon by the storm , all ships in the Port of Manila were ordered to remain in harbor , and 20 flights were cancelled in northern Luzon . La Union province declared a state of calamity on July 6 because of the storm . Road @-@ clearing teams were prepared ahead of the storm .

The threat of the storm prompted officials in Taiwan to issue sea warnings for the island 's southern coast , causing ferry service to two offshore islands to be canceled . A hot air balloon festival was canceled in Taitung City . On July 8 , the HKO issued a Standby Signal # 1 for Hong Kong due to the increased threat from Linfa . On the next day , the agency upgraded it to a Warning Signal # 8 , indicating that gale force winds were expected , although it was dropped in 5 @.@ 5 hours , becoming one of the shortest @-@ lasting such warning . The local government opened 22 shelters , housing 196 people during the storm . The storm caused the Hong Kong International Airport to close , causing 1 @,@ 020 flights to be canceled . The China Meteorological Administration also issued 14 warnings for the Chinese mainland , advising residents on the threat of the storm . Schools were closed in Guangdong due to the storm , while train service was canceled and 10 @,@ 400 boats returned to port . The Chinese government handled the preparations for Linfa at the same time Typhoon Chan @-@ hom was threatening the country 's east coast .

= = Impact = =

In its formative stages , Linfa brought light rainfall to Palau and Yap , causing minimal effects . The outskirts of the storm increased winds across eastern Malaysia , which knocked down trees and destroyed the roofs of eight school and several houses . In one of the damaged homes , an 18 @-@ month @-@ old baby inside was thrown into a nearby field and suffered injuries .

While moving through the Philippines , Linfa caused flooding and four separate landslides . The storm 's heavy rainfall caused water levels to rise in reservoirs , prompting officials to drain some excess waters from the Binga Dam in Benguet province . Schools were closed in Metro Manila for

three days due to flooding and landslides . The storm damaged 18 sections of roads , as well as two bridges and an irrigation canal in San Gabriel , La Union . Slick roads and a fallen tree caused a bus accident in Quezon City , injuring ten people . Portions of Luzon lost power during the storm , including the entirety of La Union province , and Bacnotan briefly lost water access . In the Ilocos region , a Chinese fishing vessel docked at Currimao port ran aground after being battered by huge waves . Three days of high waves washed 30 tons of mussels ashore Valladolid , Negros Occidental , prompting officials to use trucks to bury the rotting shells to prevent the spread of disease . Rough waves also disrupted rescue efforts for an unrelated ferry disaster in the country that killed 54 . The storm interacted with the monsoon to spawn two tornadoes in Negros Occidental , as well as strong winds that knocked down trees and billboards . Across Luzon , Linfa damaged 198 houses and destroyed another seven . The storm damaged ? 34 million ($ 71 @,@ 000 USD) worth of crops , and total damage reached ? 214 @.@ 6 million ($ 4 @.@ 8 million USD) . Most of the power outages were repaired within a few days of Linfa 's passage . After the storm , officials distributed meals to affected residents .

Linfa was originally forecast to move northwards and make landfall in Taiwan . However , Linfa curved to the west and hit Southern China instead . Only heavy rains and gusty winds were felt in Southern and Central Taiwan .

Moving ashore southern China , Linfa produced wind gusts of 171 km / h (106 mph) in Huilai County , while a station in Lufeng , Guangdong recorded sustained winds of 123 km / h (76 mph) . The storm also dropped heavy rainfall in southern China , peaking at 269 mm (10 @.@ 6 in) in Meizhou . About 370 @,@ 000 lost power in Shanwei and Shantou . Linfa caused 288 homes to collapse in the country , while 56 @,@ 000 people were displaced . One person was killed in the country . Damage totaled ¥ 1 @.@ 7 billion ($ 284 million USD) . Linfa passed about 50 km (30 mi) north of Hong Kong as a weakening storm , producing gusts of around 47 km / h (29 mph) . During its passage , the storm produced a storm surge of 0 @.@ 48 m (1 @.@ 6 ft) along Waglan Island . Rainfall reached around 40 mm (1 @.@ 6 in) in the territory . The winds remained fairly weak , knocking down a few trees , both in Hong Kong and nearby Macau .