= Typhoon Fengshen (2002) =

Typhoon Fengshen was the strongest storm of the 2002 Pacific typhoon season . It developed on July 13 from the monsoon trough near the Marshall Islands , and quickly intensified due to its small size . By July 15 , Fengshen attained typhoon status , and after initially moving to the north , it turned toward the northwest . On July 18 , the typhoon reached its peak intensity of 185 km / h (115 mph 10 ? minute winds) , according to the Japan Meteorological Agency . The Joint Typhoon Warning Center estimated peak winds of 270 km / h (165 mph 1 ? minute winds) , and the agency estimated that Fengshen was a super typhoon for five days . This broke the record for longest duration at that intensity , previously set by Typhoon Joan in 1997 , and which was later tied by Typhoon Ioke in 2006 .

While near peak intensity , Typhoon Fengshen underwent the Fujiwhara effect with Typhoon Fung @-@ wong , causing the latter storm to loop to its south . Fengshen gradually weakened while approaching Japan , and it crossed over the country 's ?sumi Islands on July 25 as a severe tropical storm . The typhoon washed a freighter ashore , killing four people and forcing the other 15 crew members to be rescued . In the country , Fengshen dropped heavy rainfall that caused mudslides and left $ 4 million (¥ 475 million 2002 JPY) , in crop damage . There was an additional death in the country . After affecting Japan , Fengshen weakened in the Yellow Sea to a tropical depression , before moving across China 's Shandong Peninsula and dissipating on July 28 .

= = Meteorological history = =

Late on July 13 , a tropical depression developed near the Marshall Islands northeast of Kwajalein Atoll . The cyclone quickly strengthened into Tropical Storm Fengshen just six hours after forming . On July 14 , the Joint Typhoon Warning Center (JTWC) initiated warnings on Fengshen just two hours after first monitoring the disturbance . By that time , the system consisted of a distinct circulation with developing convection , located in an area of weak wind shear . The storm initially moved northwestward , emerging from the monsoon trough as a small cyclone . Quick intensification followed , and an upper @-@ level low to the northwest assisted in providing outflow . After a 13 km (8 mi) wide eye developed , the Japan Meteorological Agency (JMA) upgraded Fengshen to a typhoon on July 15 to the southwest of Wake Island ; the JTWC also upgraded the storm the same day .

On July 16 , Fengshen turned sharply westward due to a subtropical ridge to its northwest , and it maintained that movement for the next four days . By late on July 18 , the JMA estimated that Fengshen attained maximum sustained winds of 185 km / h (115 mph 10 ? minute) , around the same time the JTWC upgraded the storm to a super typhoon . After maintaining its peak intensity for 24 hours , Fengshen weakened slightly and began a turn to the northwest . The weakening was possibly due to an eyewall replacement cycle , and although previously it was a small storm , the typhoon gradually increased in size . Around that time of its weakening , Fengshen began undergoing the Fujiwhara effect with Typhoon Fung @-@ wong ; the latter looped to the south of Fengshen and dissipated on July 29 . On July 21 , Fengshen began re @-@ intensifying , and the JMA reported that the typhoon again reached winds of 185 km / h (115 mph 10 ? minute) . At around the same time , the JTWC estimated winds of 270 km / h (165 mph 1 ? minute) . Fengshen retained much of its intensity until July 22 , being a super typhoon for five days . This set the record for greatest duration at the intensity , surpassing the previous record of 114 hours set by Typhoon Joan in 1997 ; Fengshen 's record was later tied by Typhoon Ioke in 2006 .

After several days as a powerful typhoon , Fengshen began a weakening trend due to decreased outflow and dry air . It weakened below super typhoon status after being at that intensity for five days . On July 24 , Fengshen turned more to the west while passing to the south of mainland Japan , and the next day it weakened below typhoon intensity . At 1145 UTC on July 25 , Fengshen made landfall on Yakushima in Japan 's ?sumi Islands , while a severe tropical storm . The next day , the storm passed a short distance southwest of Jeju Island offshore South Korea . After entering the Yellow Sea , Fengshen weakened into a tropical depression , and on July 27 the JTWC

discontinued advisories , after much of the convection had dissipated . The JMA continued tracking the system , and Fengshen made landfall on China 's Shandong Peninsula late on July 27 . The next day , the depression dissipated over the Bohai Sea .

= = Preparations and impact = =

Before Fengshen affected Japan , airline officials canceled more than 30 flights , and train and bus service was also interrupted . Along the coast of Kyushu , Fengshen washed a freighter onshore and split it in two , which was traveling from New Orleans , Louisiana to Kagoshima Prefecture . Four people were drowned while escaping the broken vessel , while the remaining crew of 19 were rescued . The typhoon produced strong winds and heavy rain in the country . A station in Miyazaki Prefecture reported the highest rainfall in Japan with a total of 717 mm (28 @.@ 2 in) . Most of the precipitation fell in a 24 ? hour period , and the heaviest 1 hour total was 52 mm (2 @.@ 0 in) in Taira , Toyama . The highest winds in Japan was 101 km / h (63 mph) recorded in K?chi Prefecture . The storm left about 8 @,@ 200 homes in Kagoshima Prefecture without power . High rainfall caused at least six mudslides , one of which damaged a county road . A total of 20 homes were damaged in the country , and 200 families were evacuated . High rains damaged 5 @,@ 699 hectares (14 @,@ 083 acres) of crop fields , totaling $ 4 million (¥ 475 million 2002 JPY) . Fengshen killed one person and severely injured another person in the country .

The remnants of Fengshen produced heavy rainfall in northeastern China . The storm affected the capital city of Beijing , becoming the first storm to produce significant impact there since Typhoon Rita in 1972 . In a two @-@ day period , a station in the city reported 41 @.@ 4 mm (1 @.@ 63 in) of rainfall . The heaviest rainfall was in Jilin province , where 104 @.@ 9 mm (4 @.@ 13 in) was recorded in Yushu .