

= Tropical Storm Faxai ( 2007 ) =

Severe Tropical Storm Faxai , known in the Philippines as Tropical Storm Juaning , was a short-lived tropical storm that had minor effects on land . The twentieth named storm of the 2007 Pacific typhoon season , Faxai originated from a tropical depression over the open waters of the western Pacific Ocean in late October . The storm quickly strengthened , becoming a severe tropical storm on October 26 as it rapidly traveled towards the northeast . The storm became extratropical the following day as it brushed Japan . The remnants dissipated on October 28 .

Although Faxai never made landfall , outer bands associated with the storm produced torrential rains , amounting to 458 mm ( 18 in ) on Miyakejima . A Japan Airlines flight to Narita Airport encountered severe turbulence during the afternoon of October 27 . One person sustained serious injuries , and five others received minor injuries ; the plane was damaged during the event . One person was killed near Tokyo as the storm passed by , and three others were injured . Damages from the storm amounted to ¥ 150 million ( US \$ 1 @. @ 5 million ) .

= = Meteorological history = =

Tropical Storm Faxai began as an area of convection that persisted about 805 kilometers ( 500 mi ) west of Guam on October 24 . Satellite imagery indicated broad cyclonic turning in the lower levels of the atmosphere , and a trough was located near the surface . Convection consolidated around the center of the low-level circulation , and the upper-level environment ? low wind shear and good divergence ? favored development . The following day , the Japan Meteorological Agency ( JMA ) classified the system as a tropical depression . Shortly after , the Joint Typhoon Warning Center ( JTWC ) issued a Tropical Cyclone Formation Alert as convection deepened around a partially exposed low . The storm traveled northwest under the influences of a subtropical ridge to the north . At 0000 UTC on October 26 , the Philippine Atmospheric , Geophysical and Astronomical Services Administration ( PAGASA ) designated the system as a tropical depression and gave it the local name Juaning . Around the same time , the JMA upgraded the depression to a tropical storm and gave it the name Faxai .

The JTWC issued advisories on Faxai , designating it as 20W ; however , they classified it as a tropical depression . Several hours later , the storm began to undergo an extratropical transition , with convection persisting mainly in the northwestern portion of the storm and cold , dry air entering into the southwestern portion . At 1200 UTC , PAGASA issued their final advisory on Tropical Storm Juaning as it moved out of their area of responsibility . The JTWC reported that Tropical Depression 20W ( Faxai ) had become extratropical around this time as it merged with a baroclinic zone . A cold front developed along the southern portion of Faxai , a feature of extratropical cyclones . Around that time , the JMA upgraded Faxai to a severe tropical storm with winds of 95 km / h ( 60 mph 10-minute sustained ) .

The JTWC subsequently upgraded the depression to a tropical storm based on the development of a well-defined central dense overcast . A shortwave trough located over the Korean peninsula provided a favorable upper-level environment for Faxai to intensify . Early the next day , Faxai began accelerating rapidly towards the northeast in the mid-latitude westerlies . An anticyclone located over Japan created a strong pressure gradient between it and the tropical storm , causing the wind field of Faxai to expand significantly to the northeast . As the JTWC issued their final advisory , they assessed the storm to have reached its peak intensity , with winds of 75 km / h ( 45 mph one-minute sustained ) . The JMA also assessed Faxai to have reached its peak intensity at that time , with winds of 100 km / h ( 65 mph 10-minute sustained ) and a minimum pressure of 975 hPa ( mbar ) ; however , the National Oceanic and Atmospheric Administration ( NOAA ) reported that Faxai had attained hurricane-force winds by this time , peaking at 130 km / h ( 80 mph ) . The storm continued towards the northeast at a rapid pace and became extratropical off the eastern coast of Honshu around 1200 UTC on October 27 . The extratropical remnants persisted for more than a day before dissipating over open waters late on October 28 . NOAA , on the other hand , continued to monitor the remnants of Faxai , with the system reaching

the Aleutian Islands on October 29 . The following day , the storm rapidly intensified , with the central pressure dropping to 957 hPa ( mbar ) by 1800 UTC . On October 31 , the system tracked into Alaska and weakened .

The Japan Meteorological Agency uses 10 @-@ minute sustained winds , while the Joint Typhoon Warning Center uses one @-@ minute sustained winds . The conversion factor between the two is 1 @.@ 14 . JMA 's peak intensity for Faxai was 100 km / h ( 65 mph ) 10 @-@ minute sustained , or 120 km / h ( 75 mph ) one @-@ minute sustained . The JTWC 's peak intensity for Faxai was 75 km / h ( 45 mph ) one @-@ minute sustained , or 65 km / h ( 40 mph ) 10 @-@ minute sustained .

= = Preparations and impact = =

As Faxai approached Japan , All Nippon Airways canceled day flights between Tokyo and the Izu Islands . Tokai Kisen , which operates ferries between Tokyo , the Izu Islands , and Shizuoka Prefecture , canceled some services due to the storm . Areas around Tokyo were notified of the expected heavy rains , waves up to 6 m ( 19 @.@ 6 ft ) , and high winds . Residents were advised to stay indoors during the storm , especially after sunset , and to avoid possible flying debris .

Although Faxai did not make landfall , the outer bands produced heavy rains , which caused minor damage along the eastern coast of Japan . The highest total rainfall was recorded on Miyakejima at 458 mm ( 18 in ) and in the ?shima Subprefecture of Tokyo , 192 mm ( 7 @.@ 5 in ) was recorded . The rainfall in Miyakejima nearly surpassed the record daily rainfall for October 27 . Rainfall rates peaked at 95 mm / h ( 3 @.@ 7 in / h ) on Miyaketsubota , which triggered seven mudslides throughout the country . One woman was killed near Tokyo , and three people were injured . One home , two hectares of farmland , 2 km ( 1 @.@ 2 mi ) of roads , and one ship were damaged by the storm . At the height of the storm , 9 @,@ 605 residences were without power throughout Japan . Damages from cyclone totaled ¥ 150 million ( US \$ 1 @.@ 5 million ) .

At 5 : 31 pm Japan Standard Time ( 0831 UTC ) on October 27 , a Japan Airlines Boeing 767 @-@ 300 heading to Narita International Airport , encountered severe turbulence from Faxai about 74 km ( 46 mi ) southeast of Narita . The turbulence caused seven injuries on the flight , as well as some damage to the plane .