## = Tropical Storm Podul (2013) =

Tropical Storm Podul , known in the Philippines as Tropical Depression Zoraida , was a weak but destructive tropical cyclone that affected the Philippines shortly after the devastating Typhoon Haiyan . The 31st named storm of the 2013 Pacific typhoon season , Podul developed as a tropical depression on November 11 between Palau and the Philippine island of Mindanao . The system moved west @-@ northwestward and struck Davao Oriental in Mindanao on November 12 , bringing heavy rainfall that killed two people and disrupted relief efforts following Haiyan . After crossing the Philippines , the depression intensified into Tropical Storm Podul on November 14 . Shortly thereafter , the storm struck southeastern Vietnam , and its circulation dissipated on November 15 . In Vietnam , Podul produced heavy rainfall that resulted in severe flooding . The storm damaged or destroyed 427 @,@ 258 houses , and overall damage was estimated at 1 @.@ 5 trillion ? ( 2013 Vietnamese dong , \$ 72 million 2013 USD ) . Podul killed 42 people in the country and caused 74 injuries .

## = = Meteorological history = =

On November 9 , an area of disorganized convection , or thunderstorms , persisted about 1175 km (730 mi) southeast of Palau . The system consisted of a broad circulation , affected to its detriment by moderate wind shear . Moving west @-@ northwestward , the convection persisted and organized into the circulation , indicative of an increased potential for tropical cyclogenesis . Late on November 10 , the Joint Typhoon Warning Center ( JTWC ) issued a Tropical Cyclone Formation Alert ( TCFA ) , meaning the agency anticipated a tropical depression would develop within 24 hours . Shortly thereafter , the Philippine Atmospheric , Geophysical and Astronomical Services Administration ( PAGASA ) initiated advisories on Tropical Depression Zoraida after the system entered its area of responsibility of the agency . At 1200 UTC on November 11 , the Japan Meteorological Agency ( JMA ) estimated that a tropical depression formed about halfway between Palau and the Philippine island of Mindanao , although operationally the agency had classified the system two days prior .

After passing south of Palau , the system 's circulation became more broad and its convection became less organized , despite decreased wind shear . Early on November 12 , the depression made landfall on Mindanao in Davao Oriental province . Shortly thereafter , PAGASA discontinued advisories on Zoraida , declaring that the depression degenerated into a low pressure area . By contrast , the JMA continued monitoring the depression as it moved through the Philippines and into the Sulu Sea . On November 13 , the center crossed over Palawan island into the South China Sea . At 1200 UTC the next day , the JMA upgraded the depression to Tropical Storm Podul about 275 km ( 170 mi ) east of the Vietnam coast . Around the same time , the JTWC began issuing warnings on the system as a tropical depression 32W , noting that convection had rapidly increased over the circulation . The agency also mentioned the continued presence of wind shear , although warm water temperatures and moderate outflow were expected to allow intensification . Although the JMA estimated peak 10 ? minute winds of 65 km / h ( 40 mph ) , the JTWC only estimated tropical depression @-@ force 1 ? minute winds of 45 km / h ( 30 mph ) .

Late on November 14 , Podul made landfall in southeastern Vietnam near Phan Rang ? Tháp Chàm and quickly weakened into a tropical depression . The JTWC assessed the circulation was dissipating near the coast , and the JMA declared Podul dissipated at 1200 UTC on November 15 . Operationally , the agency tracked the system into the Gulf of Thailand , and the Thai Meteorological Department tracked Podul to near the Malay Peninsula on November 16 , before ceasing advisories on the storm . The remnants later redeveloped into Cyclonic Storm Helen in the Bay of Bengal , which later struck southeastern India on November 22 before dissipating .

## = = Preparations and impact = =

The Guam National Weather Service warned of the potential of heavy rainfall and high surf for

Palau and nearby Yap island . While passing south of Palau , the system produced light winds of about 28 km / h ( 17 mph ) .

Late on November 10 , as the system moved into the Philippine area of responsibility , PAGASA issued the Public Storm Warning Signal Number 1 for seven areas in Mindanao , indicating the potential for winds between 30 ? 60 km / h ( 20 ? 35 mph ) . Over the next day these warnings were extended to cover three provinces in Luzon , eight provinces in Visayas and twenty @-@ one provinces in Mindanao . On Cebu Island , officials ordered schools to close during the storm 's passage . After the extreme damage due to Typhoon Haiyan in the Philippines , the depression that became Podul affected the same areas just days later , which affected rescue work . The depression caused additional difficulties in travel and communications . In addition to causing a landslide in Monkayo , flooding from the depression covered roads and forced about 1 @,@ 000 families to evacuate . In Davao del Norte , the depression resulted in river flooding that killed two people .

In Vietnam , Podul produced heavy rainfall , peaking at 973 mm (  $38\ @.@\ 3$  in ) in two districts in Qu?ng Ngãi Province . The rains caused flooding that forced over 78 @,@ 000 people to flee their homes , including 1 @,@ 400 the resort town H?i An where floodwaters reached 1 @.@ 6 m ( 5 @.@ 2 ft ) deep . High volumes of flooding caused water to be released from reservoirs , which some local officials credited for the widespread flooding . About 260 km (  $160\ mi$  ) of canals and dykes were washed away during the storm . The high rainfall increased water levels along rivers , with the Ba River in Gia Lai Province reaching 410 mm (  $16\ in$  ) higher than the record set in 1981 . Flooding also damaged over 6 @,@ 000 ha (  $15\ @,@\ 000\ acres$  ) of crops , mostly to rice . Podul damaged or flooded about 280 @,@ 000 m2 (  $3\ @,@\ 000\ @,@\ 000\ sq$  ft ) of roadways and bridges , resulting in traffic jams , and halted three train lines . The storm damaged or destroyed 427 @,@ 258 houses , and overall damage was estimated at 1 @.@ 5 trillion ? (  $2013\ Vietnamese\ dong$  , \$ 72 million 2013 USD ) . Throughout Vietnam , Podul killed 42 people and injured 74 others . By November 20 , the floods began receding from most locations . Newspapers described the flooding as the worst in Vietnam since 1999 . After the storm , the Vietnamese provincial governments assisted in rebuilding houses and roads .