

= Cyclone Vaianu (2006) =

Severe Tropical Cyclone Vaianu (RSMC Nadi designation : 12F , JTWC designation : 11P) was the fourth named tropical cyclone of the 2005 ? 06 South Pacific cyclone season . The system formed on February 11 , and moved generally towards the south throughout its life . Vaianu ultimately peaked with winds corresponding to Category 1 status on the Saffir @-@ Simpson Hurricane Scale , and passed between Fiji and Tonga . Moving into cooler waters , the storm dissipated on February 16 . Although the cyclone avoided land for the most part , it caused heavy rainfall and gusty winds in portions of Tonga . Flooding hit the capital city of Nuku 'alofa , and on some islands , the storm destroyed crops .

= = Meteorological history = =

Late on February 9 , the Regional Specialized Meteorological Centre (RSMC) in Nadi , Fiji reported that Tropical Depression 12F had developed within a convergence zone which was located about 140 km (87 mi) to the northeast of Vanua Levu . The depression tracked southeastward , although further development was initially inhibited by wind shear . During the next day , the depression turned towards the southeast and moved into a more favorable environment for intensification . It was then designated as Tropical Depression 11P at 1800 UTC by the Joint Typhoon Warning Center (JTWC) . On February 11 , the system significantly organized , and at 1200 UTC that day , RSMC Nadi reported that the depression had intensified into a Category 1 tropical cyclone on the Australian tropical cyclone intensity scale ; it was assigned the name Vaianu .

At the time of being upgraded to a cyclone , Vaianu was situated about 190 km (120 mi) to the northwest of Vava'u , a Tonga island chain . The storm turned southwestward under the steering currents of a ridge to the southeast . The JTWC recognized the system as a tropical storm on February 12 , and upgraded it into a tropical cyclone shortly thereafter . Vaianu continued to strengthen , and passed west of Tonga . The JTWC reported that the cyclone peaked in intensity at 1200 UTC on February 13 , with maximum sustained 1 @-@ minute winds of 140 km / h (85 mph) . RSMC Nadi assessed the storm as having peaked slightly later , with 10 @-@ minute winds of 130 km / h (80 mph) , which made it a Category 3 severe tropical cyclone .

The storm held its strength for some time as it moved southward between Ono @-@ i @-@ Lau and Tongatapu . Beginning to accelerate , Vaianu entered the area of responsibility of the Tropical Cyclone Warning Centre in Wellington , New Zealand . It curved southeastward and slowly deteriorated due to increasing wind shear and colder sea surface temperatures . The JTWC downgraded it to a tropical storm on February 15 , and by the next day it was undergoing an extratropical transition . At 0600 UTC , the JTWC classified it as extratropical , but it remained a powerful storm system for several days as it tracked over the open ocean .

= = Preparations and impact = =

Early on February 10 , RSMC Nadi placed Niuafo 'ou and Niuatoputapu under a tropical cyclone alert , before early the next day extending the alert to the whole of Tonga . Later that day the Vavau , Haapai , and Nomuka islands were placed under a gale warning . The warnings stayed in force until late on February 12 when the gale warning was canceled , and concurrently , southern Tonga was placed under a tropical cyclone warning . These warnings were canceled on February 14 . During the cyclone , RSMC Nadi placed the Lau Islands under a strong wind warning , and a damaging swell warning was declared for Fiji . Businesses in Nuku 'alofa closed as the storm passed by .

At the Fua'amotu station , sustained winds blew at 68 km / h (42 mph) during the worst of the storm , with gusts reaching 100 km / h (62 mph) . Barometric pressure there fell to 995 millibars at 1400 UTC on February 13 , and 97 @-@ 7 mm (3 @-@ 85 in) of rain fell . Since the cyclone remained predominately over water , its effects were limited . Nonetheless , portions of Tongan

experienced torrential rainfall and high winds . On Tongatapu and Eua , the storm inflicted extensive crop damage , and it is estimated that 70 % of the banana crop was destroyed . While little property damage took place , the storm caused power outages across its path that took up a week to fully restore . In Nuku 'alofa , the capital of Tonga , flooding of low @-@ lying areas reportedly shut down the city for two days . The high winds brought down trees and dispersed debris throughout the region , while schools were forced to close .