= Cyclone Bejisa =

Cyclone Bejisa was a tropical cyclone that affected the islands of Réunion and Mauritius in early January 2014 . In late December 2013 , a tropical disturbance developed to the north of Madagascar . With favorable conditions , the low developed into a disturbance and soon into a depression on December 28 . The system continued to develop and intensified into Moderate Tropical Storm Bejisa on December 29 , with rapid intensification occurring . It developed into an Intense Tropical Cyclone on December 30 , reaching peak maximum sustained winds of 165 km / h (105 mph) . Due to an eyewall replacement cycle , Bejisa weakened , but re @-@ intensified to a secondary peak of 160 km / h (100 mph) on January 1 . Increased wind shear weakened the eyewall , which passed within 15 km (9 mi) of Réunion . After having moved generally south @-@ southeastward for much of its duration , Bejisa turned to the southwest on January 3 , by which time it had weakened to tropical storm status . It became a post @-@ tropical cyclone on January 5 after the convection weakened over the center , and Bejisa became extratropical the next day as it meandered southwest of Madagascar .

In its formative stages , Bejisa brought heavy rainfall to Seychelles , and it also dropped rainfall in Mauritius and Madagascar . Effects were worst on Réunion , where wind gusts were around 130 ? 150 km / h (80 ? 90 mph) along the coast . The storm also dropped torrential rainfall , peaking at 800 mm (31 in) at a volcano in Cilaos . The winds and rains downed many trees and power lines , which blocked roads and left 181 @,@ 000 people without power . About 49 % of the island also lost water supply . Bejisa left heavy damage to the agriculture industry , mainly to vanilla and sugar cane , totaling ? 63 million (US $ 85 @.@ 2 million) in losses . The commune of Saint @-@ Paul sustained moderate damage , with losses estimated at ? 3 million (US $ 4 million) . Bejisa killed one person on the island due to head trauma , and there were 16 injuries . Later , the cyclone produced high waves in South Africa .

= = Meteorological history = =

In late December 2013 , computer forecast models began to predict the development and cyclogenesis of a disturbance within the monsoon trough north of Madagascar . At 1800 UTC on December 27 , the Joint Typhoon Warning Center (JTWC) noted a discrete area of disturbed weather approximately 1 @,@ 350 km (840 mi) north @-@ northwest of Réunion that corresponded with model forecasts and had the potential to develop . Accompanied by a low @-@ level circulation center , the monitored storm complex developed rainbands about its southern periphery the following day . At 1200 UTC on December 28 , Météo @-@ France deemed the system sufficiently organized to be considered a tropical disturbance , the fourth system to be given such a classification by the agency that season . Upon its designation , the disturbance was analyzed to have an unusually high barometric pressure , based on nearby weather station observations . Météo @-@ France projected for the system to peak as a tropical cyclone before slightly weakening and impacting the Mascarene Islands .

Tracking southward , the disturbance steadily organized following December 28 . As a result of wind shear , the system 's low @-@ level circulation center remained partially exposed , though the shearing conditions were expected to lessen At 0000 UTC on December 29 , the disturbance was upgraded to a tropical depression . At 1800 UTC that day , the depression intensified to moderate tropical storm intensity , thus receiving the name Bejisa by the Mauritius Meteorological Services . This coincided with the improving satellite appearance of the storm 's central dense overcast . Intensification subsequently quickened , and at 0600 UTC the next day Bejisa was considered to be a severe tropical storm . Concurrently a strengthening ridge in the mid @-@ levels of the troposphere began to steer the storm towards the south @-@ southeast . Following the development of a small pinhole eye , Bejisa was upgraded to tropical cyclone status at 1200 UTC on December 30 , followed by intense tropical cyclone status six hours thereafter , with peak winds of 165 km / h (105 mph) . In addition , the JTWC estimated 1 ? minute winds of 195 km / h (120 mph) , utilizing the Dvorak technique to estimate the intensity . The agency noted that decreasing wind

shear , favorable outflow , and warm sea surface temperatures allowed for the intensification . At that time of the peak winds , Bejisa was located about 825 km (515 mi) north @-@ northwest of Réunion .

The intensification phase of Bejisa was short @-@ lived , as an eyewall replacement cycle resulted in a slight deterioration and fluctuation of the storm 's organization and structure . On December 31 , the system weakened below intense tropical cyclone status as the eye became less organized . When the eyewall replacement cycle completed , the eye became larger and the winds increased . Late on December 31 , Bejisa passed about 125 km (75 mi) west of Tromelin Island . On the next day , the cyclone attained a secondary peak intensity of 160 km / h (100 mph) . However , increasing wind shear eroded the eyewall , which opened the eyewall in the northern periphery . Despite Météo @-@ France assessing that Bejisa had weakened , at the same time the JTWC estimated that the cyclone had intensified further to reach peak 1 ? minute winds of 205 km / h (125 mph) on January 2 . That day , the storm 's center passed within 155 km (95 mi) of Réunion while continuing to the southeast , and the eyewall passed within 15 km (9 mi) of the island . Continued wind shear stripped the convection , coupled with cooler water temperatures , and early on January 3 , Bejisa weakened below tropical cyclone status . By that time , the ridge to the southeast turned the storm to the southwest . A slight decrease in wind shear was expected to allow the convection to rebuild on January 4 , and the storm strengthened slightly . By January 5 , Bejisa began evolving into a post @-@ tropical cyclone , with weaker convection over the center . That day , Météo @-@ France reclassified Bejisa as a post @-@ tropical depression , noting that the radius of maximum winds had expanded . On the same day , the JTWC discontinued warnings after assessing that the storm had become a subtropical cyclone . Increasing wind shear displaced the remaining convection west of the center , and Météo @-@ France discontinued advisories on Bejisa on January 6 after the exposed turned more to the south . The storm became extratropical and turned to the northeast , and was last noted on January 7 .

= = Preparations and impact = =

Upon designation as a tropical disturbance , the predecessor to Cyclone Bejisa dropped heavy rainfall across the Seychelles . A weather station on Mahé observed 164 mm (6 @.@ 46 in) of rain over a 24 @-@ hour period beginning on December 27 . The Farquhar Group were particularly affected , as the storm 's incipient central region of convection remained over the area for an extended period of time .

Before the storm affected Réunion , Bejisa passed west of Tromelin Island , producing winds of 80 km / h (49 mph) . The storm also produced heavy rainfall on Mauritius . Rainfall and gusty winds also affected portions of Madagascar . Later , Bejisa produced high waves along the coast of KwaZulu @-@ Natal in South Africa .

= = = Réunion = = =

In advance of the storm striking Réunion , officials advised residents to remain inside . Officials ordered residents in Saint @-@ Leu along the coast to evacuate inland , and at least 300 people evacuated island @-@ wide . The airport at Saint @-@ Denis was closed , but reopened after the storm passed the island ; several flights were canceled as a result . The main port was also closed , as were most childcare facilities , and mail service was suspended . Officials issued a red alert for the island , the first since Cyclone Dumile a year prior .

On Réunion , Bejisa produced strong wind gusts , averaging 130 ? 150 km / h (80 ? 90 mph) along the coast , and peaking in Saint @-@ Louis . The winds downed numerous trees and power lines , leaving an estimated 181 @,@ 000 people without electricity , and closing roads due to debris . All eight of the island 's high tension lines were affected . Thirty percent of cell phone service was temporarily lost due to the outages . Torrential rains impacted much of the island , with a 24 hour total of 800 mm (31 in) measured at a volcano in Cilaos and 600 mm (24 in) measured in a nearby town . The rains caused rivers to rise , resulting in flooding . About 49 percent of homes lost

their water supply . Tremendous agricultural damage occurred across Réunion , with some areas reporting 80 ? 100 percent losses . Damage in the sector reached ? 63 million (US $ 85 @.@ 2 million) alone , mostly to sugar cane and vanilla . The communne of Saint @-@ Paul sustained moderate damage , with losses estimated at ? 3 million (US $ 4 million) . Approximately ? 1 million of this stemmed from wind and water damage to homes ; 121 residences qualified for relief aid . Along the coast , a pier was destroyed , several boats were damaged , and roads were impacted . One person died from head trauma while 16 people were injured in various incidents . Two of the injuries were severe due to falling off ladders while attempting to secure their homes during the high winds .

In the wake of Bejisa , Électricité de France (EDF) deployed 500 personnel and 6 helicopters to restore power on the island . Within three days , roughly 160 @,@ 000 residences were restored , considerably faster than previous restoration efforts in previous cyclones . By January 9 , all but a few dozen homes had power . In addition , water supply was largely restored within four days . A state of national disaster was declared for Réunion on January 17 , by Overseas Minister of France , Victorin Lurel . This declaration covered 16 towns on the island : Les Avirons , Cilaos , L 'Entre @-@ Deux , L 'Étang @-@ Salé , Petite @-@ Île , La Plaine @-@ des @-@ Palmistes , Le Port , La Possession , Saint @-@ Joseph , Saint @-@ Leu , Saint @-@ Louis , Saint @-@ Paul , Saint @-@ Pierre , Salazie , Le Tampon , and Trois @-@ Bassins . Insurance estimates indicated that ? 25 million (US $ 33 @.@ 8 million) was needed for relief funding . Farmers were eligible for compensation under the disaster declaration ; however , many voiced their skepticism following a lack of follow @-@ through by the government to supply funds after Tropical Cyclone Dumile in January 2013 . Ultimately , the affected farmers had to indicate their taxed losses by February 26 to receive the assistance . By April 2014 , all farmers affected by the declaration were compensated .