

= Cyclone Hyacinthe =

Tropical Cyclone Hyacinthe was the wettest tropical cyclone on record in the world . The eighth named storm of the season , Hyacinthe formed on January 15 , 1980 , to the northeast of Mauritius in the southern Indian Ocean . Initially it moved to the west @-@ southwest , and while slowly intensifying it passed north of the French overseas department of Réunion . On January 19 , Météo @-@ France estimated that the storm had intensified to a tropical cyclone . Hyacinthe looped to the south of eastern Madagascar and weakened , although it restrengthened after turning to the east . The storm executed another loop to the southwest of Réunion , passing near the island for a second and later third time . Hyacinthe became extratropical on January 29 after turning southward , dissipating two days later .

For twelve days , Hyacinthe dropped torrential rainfall on Réunion ; nearly all of the island received more than 1 m (3 @. @ 3 ft) of precipitation . Over a 15 day period from January 14 to January 28 , 6 @, @ 083 mm (239 @. @ 5 in) of rainfall were recorded at Commerson 's Crater , a volcano . The heaviest rainfall occurred through a process called orographic lift in the mountainous interior , leading to hundreds of landslides . Widespread floods damaged half the roads on Réunion and isolated three villages . Hyacinthe caused heavy damage to crops and damaged or destroyed 2 @, @ 000 houses . Losses from the storm totaled \$ 167 million (1980 USD , 676 million francs) , and 25 people were killed .

= Meteorological history =

In the middle of January 1980 , the Intertropical Convergence Zone persisted along 10 ° S , spawning a small low @-@ level circulation near St. Brandon . According to Météo @-@ France (MFR) , a tropical depression formed about 355 km (220 mi) northeast of Mauritius on January 15 . It tracked to the west @-@ southwest , passing north of the island on January 17 . That day , the Joint Typhoon Warning Center (JTWC) also reported that a tropical depression had developed , labeling it " 08S " . Shortly thereafter , the JTWC upgraded the depression to a tropical storm , and the MFR followed suit on January 18 , naming the storm Hyacinthe . The storm gradually intensified as it passed north of Réunion , with 1 @-@ minute winds of 110 km / h (70 mph) by January 19 , according to the JTWC . That day , an eye developed , and MFR estimated that Hyacinthe intensified to tropical cyclone status , with 10 @-@ minute winds of 120 km / h (75 mph) . A strengthening anticyclone to the south turned the storm northwestward , and on January 20 Hyacinthe executed a small loop to the south just offshore eastern Madagascar .

While moving to the south , Hyacinthe 's winds steadily decreased . On January 21 , the storm weakened below tropical cyclone intensity , and on January 22 the JTWC estimated winds decreased to 75 km / h (45 mph) . The next day , it turned to the east while slowly re @-@ intensifying . On January 24 , the JTWC upgraded Hyacinthe to the equivalent of a minimal hurricane , with winds of 120 km / h (75 mph) . After approaching within 175 km (120 mi) west @-@ southwest of Réunion , the cyclone turned to the northwest and executed another loop . The JTWC estimated that Hyacinthe reached peak winds of 130 km / h (80 mph) on January 25 , which the storm maintained for about 24 hours . During that time , Hyacinthe turned to the southeast and later weakened . On January 26 , it moved near Réunion for the third time , passing about 105 km (65 mi) to the south . The storm turned southward , becoming extratropical on January 29 . Over the next two days , the remnants of Hyacinthe accelerated , turned to the east , and dissipated over the southern Indian Ocean .

= Impact =

For twelve days , the circulation of the storm produced cloudiness and thunderstorms over Réunion . Hyacinthe broke several rainfall records for tropical cyclones , becoming the wettest tropical cyclone on record . From January 14 to January 28 , the storm dropped 6 @, @ 083 mm (239 @. @ 5 in) at Commerson , just north of the Piton de la Fournaise volcano . Over ten days , Hyacinthe

produced 5 @, @ 678 mm (223 @. @ 5 in) , also at Commerson . In twelve hours , Hyacinthe dropped 1 @, @ 095 mm (43 @. @ 1 in) of rainfall at Grand Ilet , just 49 mm (1 @. @ 9 in) shy of the record set by Cyclone Denise in 1966 . The highest daily total was on January 25 , when 1 @, @ 140 mm (45 in) fell at Commerson . Over a three @- @ day period , the storm dropped 3 @, @ 240 mm (127 @. @ 6 in) at Commerson , as well as 4 @, @ 300 mm (169 in) over a five @- @ day period ending on January 28 . Only a small portion of the island near Saint @- @ Pierre received less than 1 m (3 @. @ 3 ft) of rainfall , and totals increased further inland , with over 2 m (6 @. @ 6 ft) recorded at four locations . Such heavy rainfall typically occurs on the island when tropical cyclones approach , owing to orographic enhancement in the mountainous interior .

In addition to the rainfall , Hyacinthe produced a minimum barometric pressure of 977 @. @ 8 mbar (28 @. @ 87 inHg) at Saint @- @ Pierre on January 27 . Wind gusts reached 150 km / h (93 mph) in Saint @- @ Denis , although the mountainous portion of the island reported winds as strong as 180 km / h (110 mph) . Wave action was not severe due to the quick changes in track and lack of significant intensity . There was some beach erosion along western @- @ facing beaches , and Pointe des Galets sustained damage to coastal properties . However , any major damage caused by the storm was largely due to the heavy rainfall . The Rivière Langevin reported increased flow , reaching a discharge of about 300 m ³ / s (10 @, @ 500 ft ³ / s) . Along Rivière @- @ du @- @ Mat les Bas , river flooding entered five houses . Floods washed out a 30 m (98 ft) and a 60 m (200 ft) portion of a highway along a ravine near Chaudron . Along Route nationale 1 , traffic was disrupted after rocks blocked the roadway . In Petite @- @ Île , floods washed out a bridge and 200 m (660 ft) of roads . About half of the roads on Réunion were damaged , and road damage was estimated at \$ 40 million (1980 USD , 161 @. @ 3 million francs) . The rain caused widespread mudslides , including hundreds near Salazie and Cilaos . Three towns were temporarily isolated , including Hell @- @ Bourg which was cut off for about eight days , Helicopters delivered food and clothing to the villages .

Throughout Réunion , Hyacinthe killed 25 people and left 7 @, @ 000 homeless . Four of the deaths occurred after a house was washed away at Petite @- @ Île . A school was destroyed in Saint @- @ Louis . The storm caused power and water outages , and about 30 % of the island temporarily lost phone service . Hyacinthe damaged 1 @, @ 712 houses and destroyed another 288 ; housing damage totaled about \$ 42 million (1980 USD , 170 million francs) . Flooding caused \$ 48 million (1980 USD , 194 million francs) in agricultural damage , including about 1 @, @ 000 killed cattle and near @- @ total losses to bananas , mangoes , and avocados . Overall damage was estimated at \$ 167 million (676 million francs) . Many records set by the storm were broken by Cyclone Gamede in 2007 , including the rainfall accumulations from three to eight days . However , Hyacinthe retained its status as the wettest overall tropical cyclone .

Elsewhere , Hyacinthe affected Madagascar as a weaker storm . Wind gusts reached 126 km / h (78 mph) at Mananjary and 111 km / h (69 mph) on Île Sainte @- @ Marie . At the same two locations , rainfall reached 207 mm (8 @. @ 1 in) and 134 mm (5 @. @ 3 in) , respectively . On Mauritius , the storm 's passage forced the main port to close .