= 1983 ? 84 South @-@ West Indian Ocean cyclone season =

The 1983 ? 84 South @-@ West Indian Ocean cyclone season featured above normal activity and several deadly storms . There was steady storm activity from December through April due to favorable conditions , such as warm sea surface temperatures and an active monsoon . The first named storm ? Andry ? was tied for the strongest with Bakoly , Jaminy , and Kesiny . Cyclone Andry passed near Agaléga island within Mauritius , damaging or destroying every building there and killing one person . It later struck Madagascar , the first of three storms to strike the nation within two months , which collectively caused $ 25 million in damage and 42 deaths . The third of these storms , Tropical Storm Domoina , caused deadly flooding in southeastern Africa that killed 242 people and caused $ 199 million in damage . The storm destroyed more than 50 small dams in Madagascar and caused the worst flooding in Swaziland in 20 years . In addition three of the first storms affecting Madagascar , Cyclone Bakoly in December left $ 21 million in damage on Mauritius .

Less than two weeks after Domoina caused severe flooding in South Africa , Tropical Storm Imboa produced additional rainfall and high seas in the country , killing four people . The final storm of the season was Cyclone Kamisy , which caused $ 250 million in damage and 68 deaths when it made landfalls in northern and northwestern Madagascar . The cities near landfall were largely destroyed , and about 100 @,@ 000 people were left homeless . The penultimate storm , Jaminy , was tied for the strongest storm in the basin after it crossed from the Australian region , where it was named Annette . Cyclone Fanja in January also crossed from the Australian region , where it was named Vivienne .

= = Season summary = =

During the season , the Réunion Meteorological Service tracked storms in the basin , using the Dvorak technique to estimate tropical cyclone intensities via satellite imagery . The agency later became Météo @-@ France 's meteorological office at Réunion (MFR) . At the time , the basin extended from the east coast of Africa to 80 ° E. Eleven storms were named by the Mauritius Meteorological Service and the Madagascar Meteorological Service . The rest of the naming list was Lalao , Monja , Nora , Olidera , Pelazy , Rija , Saholy , Tsira , Vaosolo , Wilfredy , Yannika , and Zozo . The 11 named storms were slightly above the normal of 9 , most of which formed in January and February . There were four intense tropical cyclones , which is twice the average . The increased activity of the season was in part due to enhanced easterlies , a strong monsoon trough , and warm water temperatures around 28 ° C (82 ° F) which extended to 25 ° S.

In addition to the 11 named storms , there were two additional storms in the season , classified by the Joint Typhoon Warning Center (JTWC) . The first developed in July in the Australian basin , and briefly crossed into the south @-@ west Indian Ocean on July 14 . Soon after it re @-@ entered the Australian basin and dissipated . The other formed just southeast of Diego Garcia on November 20 . It tracked to the southwest , and the JTWC estimated peak 1 minute sustained winds of 85 km / h (50 mph) . The storm dissipated on November 25 northeast of Mauritius . In addition , Cyclone Daryl , which formed in the Australian basin on March 6 , crossed into the south @-@ west Indian Ocean on March 16 as a weakening storm without being renamed . Two days later it re @-@ entered the Australian basin before dissipating .

In December and January , three storms ? Andry , Caboto , and Domoina ? struck Madagascar in short succession . Collectively they dropped heavy rainfall , and some areas of the country reported precipitation totals that were 220 % above normal . The storms damaged roads , bridges , dams , and croplands , wrecking 10 @,@ 000 tons of rice . Damage from the three storms was estimated at $ 25 million , and 13 @,@ 560 people were left homeless . The storms cumulatively killed 42 people . After seven cyclones struck or affected the country , causing 23 @.@ 9 billion Malagasy francs ($ 200 million 1984 USD) in crop damage , the African Development Bank approved a loan of 559 million Malagasy francs ($ 1 @.@ 35 million 1989 USD) to rebuild the damaged water infrastructure . The program lasted until December 22 , 1993 , and consisted of repairing irrigation systems and dams .

= = Storms = =

= = = Intense Tropical Cyclone Andry = = =

On December 5 , an area of convection persisted between Agaléga and Diego Garcia , which corresponded to a satellite @-@ derived Dvorak rating of T2.0 ; on this basis , MFR assessed the system as a tropical disturbance , and later that day , JTWC also initiated advisories . The Réunion Meteorological Service named the system Andry . On December 7 , the storm intensified into a tropical cyclone , the same day that the JTWC upgraded Andry to the equivalent of a minimal hurricane . After having moved to the west , the cyclone turned more to the west @-@ southwest , and while doing so it passed just south of the Agaléga islands , producing wind gusts of 174 km / h (108 mph) . The storm damaged or destroyed every house on the island , leaving the 350 residents without power , food , water , or shelter . Andry also downed most of the coconut trees on the island , which was the source of employment for most residents . High waves flooded wells and contaminated the water supply . The cyclone injured 30 people , and killed one . The Mauritius government later evacuated residents to structures that were not destroyed . Following the storm , various countries donated to the country to assist , including France who sent crews from Réunion to set up shelter and provide care for the residents . The island was largely rebuilt after about two years .

Cyclone Andry reached peak winds of December 9 , when MFR estimated winds of 170 km / h (105 mph) . The next day , JTWC estimated 1 minute winds of 240 km / h (150 mph) . Around that time , Andry was passing just north of the northernmost tip of Madagascar at Diego @-@ Suarez , where the storm produced wind gusts of 250 km / h (160 mph) . The cyclone weakened while curving to the southwest and later to the south , making landfall on western Madagascar near Majunga with wind gusts of 198 km / h (123 mph) . While over land and turning to the southeast , Andry rapidly weakened into a tropical depression , which later passed near the capital Antananarivo . The storm emerged back into the Indian Ocean on December 14 , by which time the system was disorganized . That day , MFR estimated that Andry dissipated , although the JTWC assessed that the system re @-@ intensified slightly and turned sharply southwestward before dissipating over Madagascar on December 16 .

= = = Intense Tropical Cyclone Bakoly = = =

On December 19 , a tropical disturbance formed near Diego Garcia , which initially tracked to the south @-@ southeast before turning to the southwest . Later that day , the system intensified to moderate tropical storm status , prompting the Mauritius Meteorological Service to name it Bakoly . The storm gradually intensified into an intense tropical cyclone , reaching peak winds of 170 km / h (105 mph) on December 23 . After maintaining that intensity for about 12 hours , Bakoly weakened below cyclone status as it turned to the south @-@ southeast . On December 25 , the storm passed between Réunion and Mauritius , and later resumed its south @-@ southwest trajectory . After executing a small loop , Bakoly turned to the southeast and dissipated on December 30 .

On Mauritius , Bakoly produced 197 km / h (122 mph) wind gusts and heavy rainfall , reaching 507 mm (20 @.@ 0 in) at Midlands . The high winds caused roof damage , and eight people were injured on the island . Bakoly caused power outages and damaged 4 % of the telephone network . Damage was estimated at RS300 million ($ 21 million USD) . Passing within 100 km (60 mi) of Réunion , Bakoly produced 100 km / h (62 mph) winds and dropped 300 mm (12 in) of rainfall .

= = = Moderate Tropical Storm Caboto = = =

MFR began tracking a tropical disturbance in the Mozambique channel on January 4 . The next day , the agency estimated the system intensified into a moderate tropical storm , prompting the

Madagascar Meteorological Service to name it Caboto . The storm moved southward along Madagascar 's western coast , reaching peak winds of about 65 km / h (40 mph) . Caboto made landfall on January 7 to the north of the mouth of the Mangoky River , and crossed the southern portion of the country , emerging near Farafangana into the Indian Ocean . Winds associated with the storm reached 43 km / h (27 mph) at Morondava on the west coast and 63 km / h (39 mph) at Farafangana on the east coast . A developing ridge caused Caboto to slow after it reached open waters , executing a partial loop southwest of Réunion before turning to the south and dissipating on January 10 .

Severe Tropical Storm Domoina

Domoina developed on January 16 off the northeast coast of Madagascar . With a ridge to the north , the storm tracked generally westward and later southwestward . On January 21 , Domoina struck eastern Madagascar . After crossing the country , Domoina strengthened in the Mozambique channel to peak winds of 95 km / h (60 mph) . On January 28 , the storm made landfall in southern Mozambique , and slowly weakened over land . Domoina crossed into Swaziland and later eastern South Africa before dissipating on February 2 .
 In Mozambique , Domoina dropped heavy rainfall in the capital Maputo that accounted for 40 % of the annual total . Floods in the country destroyed over 50 small dams and left widespread crop damage just before the summer harvest .
 Later , the rains caused the worst flooding in over 20 years in Swaziland , which damaged or destroyed more than 100 bridges . Disrupted transport left areas isolated for several days . In South Africa , rainfall peaked at 950 mm (37 in) , which flooded 29 river basins , notably the Pongola River which altered its course after the storm . Flooding caused the Pongolapoort Dam to reach 87 % of its capacity ; when waters were released to maintain the structural integrity , additional flooding occurred in Mozambique , forcing thousands to evacuate . Throughout the region , Domoina caused widespread flooding that damaged houses , roads , and crops , leaving about $ 199 million in damage . There were 242 deaths in southeastern Africa .

Moderate Tropical Storm Edoara

A circulation developed south of Diego Garcia on January 20 , and the next was classified as a tropical disturbance by MFR . Given the name Edoara by the Mauritius Meteorological Service , it quickly intensified into a moderate tropical storm , although it never strengthened beyond winds of 65 km / h (40 mph) . While maintaining a southwest track , Edoara passed southeast of Rodrigues , Mauritius , and Réunion . On Rodrigues , the storm produced wind gusts of 131 km / h (81 mph) , and heavy rainfall reaching 253 mm (10 @.@ 0 in) at Baie aux Huîtres . After moving away from the islands , Edoara dissipated on January 25 .

Moderate Tropical Storm Vivienne @-@ Fanja

The origins of Vivienne @-@ Fanja are unclear as a result of sparseness of data , due to a disruption in satellite imagery coverage . It is estimated that a tropical low formed on January 23 west of Christmas Island in the Australian basin . The Bureau of Meteorology named the storm Vivienne , which gradually intensified while moving to the west . On January 27 , the cyclone crossed 80 ° E into the southwest Indian Ocean , at which time it was renamed Fanja . While in the basin , the storm reached peak winds of 80 km / h (50 mph) . It continued moving to the southwest before dissipating on January 30 .

Moderate Tropical Storm Galy

On January 29 , a circulation developed between Agaléga and Tromelin island . Initially the system moved to the southwest , followed by a turn to the southeast . Given the name Galy , the storm

attained winds of 65 km / h (40 mph) on January 30 , but weakened into a tropical disturbance the next day . By that time , Galy turned to the west toward the Madagascar coastline , and on February 1 re @-@ intensified into a moderate tropical storm . The next day , Galy made landfall near Mananjary , but soon after recurved to the southeast and emerged into the Indian Ocean near Fort Dauphin . On February 4 , the storm dissipated in a polar trough . While over land , Galy dropped light rainfall of around 44 @.@ 5 mm (1 @.@ 75 in) .

= = = Severe Tropical Storm Haja = = =

 A tropical depression formed on February 7 south of Diego Garcia . For about a week , the system remained weak and changed directions several times ; after an eastward movement , it turned to the northwest , curved to the southeast , and later began a steady track to the southwest . On February 13 , it intensified into a moderate tropical storm , and quickly attained peak winds of 95 km / h (60 mph) . Given the name Haja , the storm passed southeast of Rodrigues and Réunion . Haja approached the southeast coast of Madagascar , but turned to the southeast and weakened , dissipating on February 19 .

= = = Severe Tropical Storm Imboa = = =

 On February 10 , MFR began tracking a tropical disturbance in the Mozambique channel near Juan de Nova Island . The system tracked generally south @-@ southwestward , gradually intensifying . Given the name Imboa , the storm reached peak winds of 95 km / h (60 mph) on February 13 while passing near Europa Island . After executing a small loop , Imboa turned toward the southeastern African coastline and approached the eastern coasts of Mozambique and South Africa as a weakened system . A ridge caused the storm to turn to the east and northeast , dissipating on February 19 .
 Early in its duration , Imboa produced winds of 111 km / h (69 mph) at Maintirano while passing off the west coast of Madagascar . While offshore South Africa , Imboa dropped heavy rainfall along the coast just weeks after Domoina flooded the region , reaching over 350 mm (14 in) in some locations . The rains caused flooding along the Mhlatuze and Mfuluzone rivers , which destroyed a temporary bridge along the Umfolozi River built after Domoina . Along the coast , Imboa produced high tides that caused beach erosion . There were four deaths in the country .

= = = Intense Tropical Cyclone Annette @-@ Jaminy = = =

 Cyclone Annette developed simultaneously with Cyclone Willy in the Australian basin and Cyclone Haja in the south @-@ west Indian . On February 3 , a tropical low formed northeast of the Cocos Islands . Steered by a ridge to the south , it moved generally southwestward and intensified into Tropical Cyclone Annette , named by the Bureau of Meteorology . After executing a loop , Annette crossed 80 E into the south @-@ west Indian Ocean on February 16 . Upon crossing into the basin , the storm was renamed Jaminy by the Mauritius Meteorological Service . Around that time , the cyclone attained peak winds of 170 km / h (105 mph) . Jaminy moved generally southwestward and weakened below cyclone status on February 20 . The next day , it turned to the southeast , later dissipating on February 24 .

= = = Intense Tropical Cyclone Kamisy = = =

 A tropical disturbance formed near Diego Garcia on April 3 and subsequently moved westward , intensifying into a moderate tropical storm two days later . Given the name Kamisy , the storm gradually intensified into an intense tropical cyclone by April 9 . Kamisy reached winds of 170 km / h (105 mph) before making landfall in extreme northern Madagascar near Diego Suarez . It weakened upon entering the Mozambique channel , but briefly re @-@ intensified on April 10 . That day while passing near Mayotte , the cyclone turned to the southeast , striking Madagascar again

near Majunga . Kamisy quickly crossed the country and quickly weakened into a tropical disturbance . After emerging into the Indian Ocean off the east coast of Madagascar , the system re @-@ intensified into a moderate tropical storm before dissipating on April 16 .

In northern Madagascar , Kamisy produced wind gusts of 250 km / h (160 mph) , which destroyed 80 % of the city of Diego Suarez . About 39 @,@ 000 people were left homeless in the area , and there were five deaths . In western Madagascar , the cyclone dropped 232 @.@ 2 mm (9 @.@ 14 in) of rainfall in 24 hours in Majunga , which damaged rice fields in the region after causing widespread river flooding . The storm destroyed about 80 % of Majunga where the storm struck . Throughout the country , Kamisy caused $ 250 million in damage and 68 deaths , with 215 people injured and 100 @,@ 000 left homeless . Kamisy also affected Mayotte with winds of over 100 km / h (62 mph) , which left about 25 @,@ 000 homeless and left widespread damage . One death was reported on the island .