= 1999 ? 2000 South @-@ West Indian Ocean cyclone season =

The 1999 ? 2000 South @-@ West Indian Ocean tropical cyclone season was the first on record in which two storms ? Leon ? Eline and Hudah ? struck Mozambique at tropical cyclone intensity , or with maximum sustained winds of at least 120 km / h (75 mph) . The most notable storm of the season was Eline , which was the longest @-@ lasting storm on record in the basin . It lasted for 29 days while traversing the southern Indian Ocean , making the strongest landfall in decades along eastern Madagascar in late February . The storm was the first in a series of three storms that struck the country in early 2000 , along with Gloria in March and Hudah in April . Collectively , the three storms killed at least 316 people . The season started on November 1 , 1999 , and ended for most of the basin on April 30 , 2000 ; for Mauritius and the Seychelles , the season continued until May 15 . These dates conventionally delimit the period of each year when most tropical cyclones form in the basin ;

Despite the destructive nature of the season , it began later than usual . Cyclone Astride originated toward the end of December , bringing rainfall and gusty winds to northern Madagascar while in the region . In January , cyclones Babiola and Connie both formed east of Madagascar and took southerly tracks . Connie passed near Réunion island , producing 1 @,@ 752 mm (69 @.@ 0 in) of rainfall in the mountainous peaks and killing two people . Eline , the longest lasting storm of the season , struck Mozambique while the country was experiencing its worst flooding in 50 years , collectively causing around 700 deaths and about $ 500 million in damage . The storm also killed 12 people in Zimbabwe and 21 in South Africa . Just two weeks after Eline struck Madagascar , Tropical Storm Gloria affected the same general region , bringing additional deaths and damage . Cyclone Hudah in April was the strongest storm of the season , reaching peak 10 ? minute winds of 220 km / h (140 mph) . It caused three deaths in Mozambique , although its effects were worse in Madagascar , where there were 111 deaths . The final storm of the season was Tropical Storm Innocente , which dissipated on April 24 . In addition to the named storms , there were four unnamed tropical disturbances or storms , as well as one subtropical cyclone that formed in the southern Mozambique Channel .

= = Season summary = =

The Météo @-@ France office (MFR) on Réunion island issued warnings in tropical cyclones within the basin during the season . The agency estimated intensity through the Dvorak technique , which utilized the continuous satellite imagery in the basin since May 1998 . Wind estimates were sustained over 10 minutes , to be converted to 1 ? minute winds by dividing by 0 @.@ 88 , as compared to a divisor of 0 @.@ 80 in previous years . Warnings on tropical cyclones in the region were from the coast of Africa to 90 ° E , south of the equator . The Joint Typhoon Warning Center ? a joint United States Navy ? United States Air Force task force ? also issued tropical cyclone warnings for the region . Beginning this season , the MFR changed their method for labeling tropical disturbances , classifying them sequentially by number . In previous years , the agency labeled disturbances by letter and number of the subsequent unnamed storm .

The season began later than usual , the third consecutive one to do so . There were no indications of tropical cyclogenesis before the middle of December , putting the season among the latest 20 % since 1967 in terms of seasons ' first storms . On December 26 , the MFR utilized the QuikSCAT satellite for the first time in the basin to assess a storm 's intensity . During the season , 14 tropical disturbances formed , which is near average , and they tended to last longer than normal . Eleven of these disturbances became tropical depressions , of which nine attained gale force winds and were named . In addition , four storms reached tropical cyclone intensity , or 10 ? minute sustained winds of 120 km / h (75 mph) . The 9 named storms and 4 tropical cyclones is also the basin average for each category in a given year . There were 61 days in which a storm was active , greater than the median of 48 and more than double than the previous season . In general , storms formed south of 10 ° S , with the exception of the first storm Astride , and most storms generally tracked east to west due to a strong ridge east of Madagascar .

= = Storms = =

= = = Severe Tropical Storm Astride = = =

On December 23 , a circulation with accompanying convection became evident about 400 km (250 mi) southeast of Diego Garcia , becoming a tropical disturbance . While moving to the south , the thunderstorms organized more , aided by low wind shear , good outflow , warm waters , and its position beneath an anticyclone . Curving west @-@ southwestward due to a ridge to the south , the system intensified into a tropical depression and later Tropical Storm Astride on December 25 . That day , the JTWC classified the system as Tropical Cyclone 03S . The storm developed a large area of convection , prompting the MFR to upgrade it to a severe tropical storm on December 26 , estimating 10 ? minute winds of 95 km / h (60 mph) . On December 27 , the JTWC upgraded Astride to the equivalent of a minimal hurricane due to the appearance of an eye feature , estimating 1 ? minute winds of 120 km / h (75 mph) . Later that day , the storm weakened unexpectedly , perhaps related to wind shear from a trough to the south . The convection deteriorated markedly , and the weakening storm turned more to the west @-@ northwest on December 29 due to a weaker ridge . Convection reorganized slightly , although it was dislocated from the center . Early on December 30 , the storm passed about 70 km (45 mi) northeast of Tromelin Island . Curving back to the west , Astride struck northeastern Madagascar between Vohemar and Antsiranana on December 31 as a minimal tropical storm . It emerged into the Mozambique Channel as a tropical depression , and despite forecasts to the contrary , it reintensified into a tropical storm before passing near Mayotte on January 2 . Early the next day , Astride weakened back to tropical depression status before moving ashore eastern Mozambique near Pemba , dissipating soon after .

On Tromelin , Astride brought strong winds , including 10 ? minute sustained winds of 101 km / h (63 mph) and gusts to 127 km / h (79 mph) . No damage was reported in Madagascar during the storm 's passage there . When Astride passed just south of Mayotte , it brought gusts to 76 km / h (47 mph) , strong enough to knock over some banana trees and to destroy a stone house . The storm also dropped 150 mm (5 @.@ 9 in) of rainfall over 24 hours , including 41 millimetres (1 @.@ 6 in) in one hour . Heavy rainfall accompanied Astride 's final landfall , penetrating as far inland as Malawi .

= = = Tropical Cyclone Babiola = = =

Toward the beginning of January , the Intertropical Convergence Zone (ITCZ) remained active across much of the basin , with low pressure and widespread thunderstorms . One such area persisted southeast of Diego Garcia and organized sufficiently to be classified as a tropical disturbance on January 3 . That day , the JTWC issued the first of three tropical cyclone formation alerts , noting the increase in convection . The system moved to the northeast along the southeastern edge of a ridge near the equator , but turned back to the southwest on January 5 . That day , convection increased over the center , after having previously been dislocated due to wind shear . Late on January 5 , the JTWC initiated advisories on Tropical Cyclone 02S , and on the next day , the MFR upgraded the system to Tropical Storm Babiola . The storm accelerated to the southwest and continued to intensity . An irregular eye formed on January 8 , prompting the MFR to upgrade Babiola to tropical cyclone status . The outflow and the eye became more pronounced after further strengthening , and the cyclone attained peak 10 ? minute winds of 155 km / h (100 mph) on January 9 . The JTWC , by contrast , estimated peak 1 ? minute winds of 165 km / h (105 mph) .

Around the time of peak intensity , Babiola began turning more to the south due to an approaching trough . Late on January 9 , the cyclone passed about 400 km (250 mi) east of Rodrigues . Increased shear weakened the eyewall and convection , and Babiola weakened below cyclone status on January 11 . Early the next day , the JTWC discontinued advisories as the storm was

beginning to become extratropical . The MFR followed suit later on January 12 , although the agency continued to track Babiola . The storm shifted south @-@ southwestward on January 13 before resuming its southeast trajectory , influenced by a ridge to the south . On January 14 , the remnants of Babiola passed just west of Île Amsterdam , where gusts reached 90 km / h (56 mph) . Later that day , the storm merged with the trough that had originally turned it to the southeast .

= = = Intense Tropical Cyclone Connie = = =

An area of thunderstorms formed on January 22 east of the northern tip of Madagascar , organizing into a tropical disturbance three days later . By late on January 25 , the MFR upgraded the system to Tropical Storm Connie , and on the same day the JTWC initiated advisories on the storm as Tropical Cyclone 08S . With favorable conditions , Connie gradually organized while initially stationary , later beginning a steady southeast motion on January 26 . The JTWC upgraded the storm to the equivalent of a minimal hurricane on January 27 , around the same time that the MFR upgraded Connie to tropical cyclone status . The storm 's eye became well @-@ defined as the winds increased , and the MFR estimated peak 10 ? minute winds of 185 km / h (115 mph) on January 28 ; on the same day , the JTWC estimated peak 1 ? minute winds of 220 km / h (140 mph) . Increased shear weakened the storm as it curved southwestward , and late on January 29 Connie passed about 130 km (80 mi) northwest of Réunion . The storm turned to the southeast again and became extratropical on February 1 , dissipating the next day .

While passing northwest of Mauritius , the outer fringes of Connie brought heavy rains peaking at 647 mm (25 @.@ 5 in) over the span of six days , or equivalent to a month 's worth of precipitation . These rains helped relieve extreme drought conditions . The storm also produced gusts of 134 km / h (83 mph) , and one person died after falling off his roof . The storm also brought heavy rainfall to Réunion , totaling 1 @,@ 752 mm (69 @.@ 0 in) , of which 1 @,@ 296 mm (51 @.@ 0 in) occurred in over 24 hours . Wind gusts there reached 155 km / h (95 mph) in Peite France . Many roads across the island were damaged , and about 40 @,@ 000 people lost power , while more than 100 homes were destroyed . Two persons were killed , and 600 people were left homeless . Although the agriculture sector suffered the most significant damages , overall damage was minor .

= = = Moderate Tropical Storm Damienne = = =

The same monsoon trough that spawned Connie also produced an area of convection southeast of Diego Garcia on January 28 . The circulation slowly organized , and the MFR classified it as a tropical disturbance on January 30 . A nearby trough steered the system southeastward initially and later to the southwest . On January 31 , the system became a tropical depression , and later Moderate Tropical Storm Damienne the next day , reaching peak winds of 65 km / h (40 mph) . Also on February 1 , the JTWC initiated warnings on Tropical Cyclone 10S , which estimated 1 ? minute winds of 95 km / h (60 mph) . Increased wind shear removed the convection on February 2 , causing marked weakening , and prompting the JTWC to discontinue advisories that day . This was despite forecasts of strengthening to near tropical cyclone status . As a weak tropical disturbance , Damienne turned to a rapid westward motion , passing north of Rodrigues and Tromelin . The circulation dissipated on February 7 off the northeast coast of Madagascar .

= = = Intense Tropical Cyclone Leon ? Eline = = =

On February 1 , a low @-@ pressure area formed within the monsoon trough to the south of Indonesia , which would eventually become Tropical Cyclone Leon in the Australian basin , as well as Tropical Cyclone 11S according to JTWC . The storm tracked westward across much of the Indian Ocean , fluctuating in strength due to changes in the atmosphere . After crossing 90 ° E , the MFR began tracking the system as Tropical Storm Eline on February 8 . The storm continued westward across the Indian Ocean and intensified greatly as it approached the east coast of Madagascar . Late on February 17 , Eline made landfall near Mahanoro with 10 ? minute winds of

165 km / h (105 mph) , making it the strongest storm to hit the country in several decades . The storm rapidly weakened over land , but restrengthened in the Mozambique Channel to reach peak 10 ? minute winds of 185 km / h (115 mph) . On February 22 , Eline made landfall about 80 km (50 mi) south of Beira , Mozambique near peak intensity and quickly weakened over land . The well @-@ defined circulation moved across southern African , finally dissipating over eastern Namibia on February 29 . Throughout its duration , Leon ? Eline lasted 29 days , a record longevity for a storm in the south @-@ west Indian Ocean . The track was over 11 @,@ 000 km (6 @,@ 800 mi) , or about 25 % of the Earth 's circumference .

Eline struck while Madagascar was in the midst of a cholera epidemic that had killed over 1 @,@ 000 people . The storm directly killed at least 64 people in Madagascar , although Tropical Storm Gloria struck shortly thereafter , compounding upon the damage and making it difficult to discern the individual damage totals . Damage from Eline was estimated at US $ 9 million . Collectively the two storms killed 205 people in the country , destroyed about half of the rice harvest , and left 10 @,@ 000 homeless . In the region around Vatomandry , where Eline made landfall , 65 % of houses were damaged , 90 % of crops were lost , and 75 % of health facilities were wrecked .

Before Eline struck Mozambique , the worst floods since 1951 had affected the nation since January , killing about 150 people . The additional rainfall and flooding from Eline created the country 's worst natural disaster in a century . The combined effects destroyed over 250 @,@ 000 ha (620 @,@ 000 acres) of crop fields and killed 40 @,@ 000 cattle . Eline 's passage disrupted ongoing relief efforts , with the port in Beira blocked for two weeks due to five sunken ships . High levels along the Limpopo River isolated the town of Xai @-@ Xai , with water levels along the river reaching as high as 11 m (36 ft) above normal in some areas , as well as 15 km (9 @.@ 3 mi) wide . A dam broke along the river , flooding the town of Chokwe in the middle of the night and trapping several unprepared residents . About 55 people drowned in Sofala Province after rescue helicopters arrived too late to save them . Around 20 @,@ 000 people in the capital city of Maputo lost their homes . In addition to the floods , strong winds blew away many roofs and some entire houses made of mud . The combined effects of the preceding floods and Eline left about 300 @,@ 000 people homeless , about 700 deaths , and damage estimated at $ 500 million (2000 USD) . The cyclone and the floods disrupted much of the economic progress Mozambique had made in the 1990s since the end of its civil war .

Elsewhere in southern Africa , Eline brought strong winds and heavy rainfall when it crossed into eastern Zimbabwe , due to maintaining a well @-@ defined structure . Rivers overflowed their banks in the country , damaging crops and houses while leaving 15 @,@ 000 people homeless . The storm killed 12 people in the country . Flooding from the storm extended southward into Swaziland and South Africa . In the latter country , Eline dropped 503 mm (19 @.@ 8 in) of rainfall in Levubu over three days , causing the Limpopo River to reach its highest level in 15 years . Officials opened dams along the Limpopo River to prevent structural damage , which caused higher levels along the river to the east . At least 21 people died in the country , and about 80 @,@ 000 people were left homeless , forcing many people into churches and schools . Damage in Limpopo Province alone was estimated at $ 300 million (USD) . To the north , Eline dropped about 90 mm (3 @.@ 5 in) of rainfall in southern Malawi , while gusty winds caused a power outage in Blantyre . Farther west , rainfall rates of 50 ? 100 mm (2 ? 4 in) were also reported in Botswana .

= = = Severe Tropical Storm Felicia = = =

While Eline was making landfall on Madagascar , another area of convection formed to its east on February 17 within the ITCZ . Its structure was similar to a monsoon depression , due to a large circulation with weak winds near the center . However , it was organized enough to be classified as a tropical disturbance on February 18 to the southeast of Diego Garcia . It moved southeastward with increasing convection , prompting the Mauritius Meteorological Service to name it Felicia while still as a tropical depression on February 20 . The convection however remained disorganized , and there were several small circulations within the broad gyre . After turning to the southwest due to a nearby trough , Felicia 's circulation became more compact , as evidenced by a QuikSCAT pass .

Outflow increased as wind shear decreased , and Felicia became a moderate tropical storm on February 21 . On the same day , the JTWC initiated advisories on the storm as Tropical Cyclone 12S .

Late on February 22 , the JTWC upgraded the storm to the equivalent of a minimal hurricane , while the MFR estimated peak 10 ? minute winds of 110 km / h (70 mph) . This was based on a 100 km (60 mi) wide eye feature that had developed in the storm 's center . Around the time of peak intensity , Felicia passed about 500 km (310 mi) southeast of Rodrigues . The interaction of the trough and a ridge to the east increased wind shear , causing the storm to weaken . On February 24 , the storm became extratropical while still maintaining a well @-@ defined circulation . It slowed and looped back to the northwest due to a ridge to the south , gradually becoming less defined and dissipating on February 26 .

= = = Severe Tropical Storm Gloria = = =

On February 27 , a circulation formed within the monsoon trough between Diego Garcia and St. Brandon , displaced due to wind shear , but organized enough for the MFR to track it as Tropical Disturbance 8 . The shear gradually decreased , allowing the thunderstorms to organize as it moved westward . On February 28 , the JTWC classified the system as Tropical Cyclone 15S , and on February 29 the MFR upgraded it to tropical depression status . The depression turned west @-@ northwestward before rounding a ridge and turning to the southwest . The thunderstorms organized into a central dense overcast on March 1 , prompting the MFR to upgrade it to Moderate Tropical Storm Gloria only 150 km (95 mi) from the northeast coast of Madagascar . Gloria continued quickly to the southwest , gradually intensifying and developing an eye feature ; on that basis , the MFR estimated peak 10 ? minute winds of 95 km / h (60 mph) , or severe tropical storm status , by the time it made landfall 10 km (6 mi) north of Sambava . Operationally , the JTWC upgraded Gloria to the equivalent of a minimal hurricane , with 1 ? minute winds of 120 km / h (75 mph) , although the agency downgraded the storm to the same peak as the MFR . The structure initially remained well @-@ defined , although the circulation became difficult to locate as it progressed through the country . On March 4 , the system exited Madagascar into the Mozambique Channel with scattered thunderstorms slowly reforming . On the next day , the JTWC discontinued advisories , although the MFR continued monitoring the system , labeling it as a tropical disturbance on March 8 . Later that day , Gloria made landfall near Inhambane in southeastern Mozambique before turning to a southward drift , dissipating on March 10 .

As a developing disturbance , Gloria produced winds approaching gale @-@ force on St. Brandon . Similar conditions were reported on Tromelin . When Gloria struck Madagascar , it produced sustained winds of 72 km / h (45 mph) at Antalaha , about 70 km (45 mi) south of Sambava . The storm brought heavy rainfall , with Mananjary reporting a two ? day total of 427 mm (16 @.@ 8 in) . The rains from Gloria occurred less than two weeks after Cyclone Leon ? Eline struck the country , bringing additional flooding , landslides , and damage . In Sambava , near where Gloria moved ashore , the storm killed 18 people , destroyed hundreds of homes , and damaged a road connecting the area to the capital of Madagascar , Antananarivo . Farther inland , the cyclone killed 40 people at Andapa . Overall , Gloria killed at least 66 people , although the exact toll was initially unknown due to disrupted communications . Before Gloria emerged into the Mozambique Channel , various news outlets noted the potential for the storm to affect storm @-@ ravaged Mozambique . However , minimal rainfall accompanied Gloria 's final landfall . The rains were enough to delay flights for a day , which were transporting relief aid following Eline 's devastating landfall in Mozambique .

= = = Very Intense Tropical Cyclone Hudah = = =

A tropical low formed in the Australian basin on March 24 , moving westward due to a strong subtropical ridge to the south . Despite having intensified enough , the Bureau of Meteorology did not name the system , and on March 25 the system crossed into the South @-@ West Indian Ocean

, whereupon it was named Hudah . An eye formed , and the storm intensified into a tropical cyclone on March 27 well to the southeast of Diego Garcia . The structure fluctuated due to dry air , although Hudah was able to intensify steadily on March 31 after conditions became more favorable . The next day , the MFR upgraded it to a very intense tropical cyclone , estimating peak 10 ? minute winds of 225 km / h (140 mph) . By contrast , the JTWC estimated 1 ? minute winds of 235 km / h (145 mph) . Cyclone Hudah maintained peak winds until making landfall just southeast of Antalaha , Madagascar on April 2 . It weakened greatly over land , but like Eline it re @-@ intensified over the Mozambique Channel . It re @-@ attained tropical cyclone status on April 5 and reached 10 ? minute winds of 160 km / h (100 mph) by the time it made landfall on Mozambique near Pebane , Mozambique on April 8 . It dissipated by the next day .

While in the vicinity , Hudah brought moderate winds to Rodrigues , St. Brandon , and Tromelin . The cyclone affected the same parts of Madagascar that were previously impacted by Eline and Gloria . Waves reached at least 8 m (26 ft) in height along the coast . The storm was considered the worst to affect the Antalaha region in 20 years , where 90 % of homes were destroyed . It was estimated that the storm left at least 100 @,@ 000 people homeless in Madagascar , and there were 111 deaths . In Mozambique , damage was much less than expected , and the storm affected areas farther north in the country than where Eline struck . Heavy rainfall occurred along the coast , but was insufficient to cause river flooding . Strong winds damaged roofs and downed trees , mostly around Pebane , and the storm killed three people .

= = = Subtropical Depression 13 = = =

On April 6 , a cold front exited the southeast coast of Africa into the Mozambique Channel , producing a small circulation on the next day southeast of Mozambique . On April 7 , the system organized into Subtropical Depression 13 and gradually separated from the dissipating cold front . A ridge to the south steered the depression northward as the system became better defined . However , persistent wind shear initially prevented convection from organizing over the center . On April 9 , the depression turned northwestward toward Mozambique as thunderstorms increased , aided by a decrease in wind shear through a shift in the jet stream . The center came very close to the Mozambique coast near Inhambane . Due to the small radius of maximum winds , the coastline was spared from strong gusts , although the system dropped 93 @.@ 8 mm (3 @.@ 69 in) of rainfall in Inhambane over 48 hours .

The storm turned toward the east on April 11 away from land . Convection organized thereafter into an eye feature , but was weaker than thunderstorms in typical tropical cyclones , resulting in its subtropical classification . The MFR estimated peak 10 ? minute winds of 95 km / h (60 mph) on April 12 , noting that the system should have been named , but also that its " structure has had no recent analogue in [the basin] . " Meanwhile , the JTWC issued three tropical cyclone formation alerts , but never issued advisories . An increase in wind shear deteriorated the eye feature and the convection , promptly causing weakening . On April 15 , the circulation dissipated off the southwest coast of Madagascar .

= = = Moderate Tropical Storm Innocente = = =

The final storm of the year had its origins in the Australian basin . An area of convection persisted on April 8 to the southwest of Indonesia , developing a distinct center two days later while moving to the west . However , the thunderstorms were unable to organize due to wind shear . On April 11 , the MFR estimated that the system became a tropical disturbance , although since it was east of 90 ° E the agency did not issue advisories at that time . On the next day , the system crossed into the basin and was classified as Tropical Disturbance 14 . Over the next few days , the convection waxed and waned , with the strongest winds in the northern periphery . On April 14 , the JTWC began tracking the system as Tropical Cyclone 26S . The disturbance maintained a general west @-@ southwest trajectory , influenced by a ridge to the south . After slowing down and encountering a more favorable environment , the system intensified into Moderate Tropical Storm Innocente on

April 17 , reaching peak 10 ? minute winds of 70 km / h (45 mph) . Operationally , the MFR upgraded Innocente to storm status a day earlier , only to downgrade and re @-@ upgrade ; it was maintained as a depression during this time . The return of wind shear again caused weakening , beginning on April 18 . A weak circulation persisted for several days , turning to the northwest with brief increases in thunderstorms . On April 24 , Innocente dissipated , although the circulation drew moisture from the south to produce heavy rainfall on Mauritius , peaking at around 400 mm (8 in) .

= = = Other storms = = =

Throughout the latter half of January , thunderstorms persisted in the Mozambique Channel . On January 12 , the MFR classified an area of convection as Tropical Disturbance 3 , although the agency ceased issuing advisories on the next day . Convection persisted , with an associated exposed circulation as of January 22 . Two days later , the MFR issued one bulletin on the system before dropping advisories . The JTWC tracked the system as an area of potential development until January 26 , when the thunderstorms weakened . The disturbance brought heavy rainfall to southwestern Madagascar , which followed a prolonged drought . In Morombe , rainfall over 36 hours accumulated to the average yearly total . This caused flooding and damage to crops and preceded devastating flooding that affected the nation over the subsequent months .

Toward the end of February , the ITCZ produced a large area of convection in the eastern portion of the basin which would spawn two disturbances . On February 29 , Tropical Disturbance 9 formed within the system well to the southeast of Diego Garcia . The convection organized slightly despite easterly wind shear , which left the circulation exposed . On March 1 , the JTWC classified it as Tropical Cyclone 17S , estimating winds of tropical storm force the next day . The MFR , by contrast , classified it as a tropical depression while moving generally southwestward . The convection weakened on March 3 due to the wind shear , and the circulation steered more to the west @-@ northwest . After nearly dissipating on March 5 , the thunderstorms reorganized , possibly due to influence from the monsoon . It turned back to the east , possibly due to interaction with the approaching Cyclone Norman in the Australian basin . Convection soon after diminished over the depression , and the system dissipated on March 11 near 90 ° E.

On March 1 , Tropical Disturbance 10 formed within the same system that spawned the previous depression , only farther to the west . It also encountered wind shear , preventing much intensification . The system remained nearly stationary and failed to organize more . The MFR issued its last advisory on March 3 . The MFR also issued bulletins on Norman as Tropical Disturbance 11 , which briefly entered the basin on March 10 before dissipating .

= = Storm names = =

A tropical disturbance is named when it reaches moderate tropical storm strength . If a tropical disturbance reaches moderate tropical storm status west of 55 ° E , then the Sub @-@ regional Tropical Cyclone Advisory Centre in Madagascar assigns the appropriate name to the storm . If a tropical disturbance reaches moderate tropical storm status between 55 ° E and 90 ° E , then the Sub @-@ regional Tropical Cyclone Advisory Centre in Mauritius assigns the appropriate name to the storm . A new annual list is used every year so no names are retired .