

= Cyclone Erica =

Severe Tropical Cyclone Erica (RSMC Nadi designation : 10F , JTWC designation : 23P) of March 2003 was a powerful cyclone that severely affected New Caledonia and was considered the worst to affect the country since Cyclone Beti . The system was the eighth cyclone and the fifth severe tropical cyclone of the 2002 @-@ 03 South Pacific cyclone season . Cyclone Erica developed from a monsoonal trough on 4 March just off of Queensland . Originally , the storm moved slowly towards the east and then north early in its existence . However , increasing wind shear caused the storm to be degenerated into a tropical low . After conditions once again became more favorable for development , the remnants regenerated into a tropical cyclone on 10 March . Steadily intensifying , Erica reached peak intensity on 13 March as a Category 5 equivalent on the Saffir ? Simpson Hurricane Scale .

On the same day Erica paralleled the coast of New Caledonia before making landfall on the southern end of the island at L 'Île @-@ des @-@ Pins . However , at the same time the cyclone also entered an area with strong wind shear and thus began to weaken . After passing the island , an extratropical transition begun , weakening the cyclone as it moved towards the southeast . On 15 March , Erica completed its transition into an extratropical cyclone and later fully dissipated the next day .

Cyclone Erica severely impacted the island nation of New Caledonia , causing intense winds and heavy rain . An estimated 892 families were affected by the cyclone on the island , and two people were killed . As many as 60 % of people on the west coast lost power . On 17 March only 17 of the 66 secondary schools on the island were functioning . After the storm it was feared that the existing dengue fever epidemic on the island would spread . Erica caused \$ 15 million (2003 USD) in damages , primarily on New Caledonia . Following the deaths and damage , the name " Erica " was later retired .

= = Meteorological history = =

The origins of Cyclone Erica can be traced back to a tropical low which developed within a monsoonal trough near the Tiwi Islands on 13 February . Two days later , the low moved inland near the Western Australia ? Northern Territory border . After passing south of Alice Springs , the low turned east and entered the Coral Sea on 3 March 2003 . Strong wind shear separated the convection from the system at the time . However , shear quickly weakened the next day . With the lower shear , the low was able to intensify and at 0630 UTC on 4 March , the Joint Typhoon Warning Center (JTWC) issued a tropical cyclone formation alert . Despite the center of the storm being elongated , conditions for further development were present . At 0600 UTC the Bureau of Meteorology in Australia upgraded the low to a Category 1 cyclone and gave it the name Erica .

As Erica moved towards the south and subsequently to the north , the cyclone strengthened , becoming equivalent to a tropical storm according to the JTWC by 1500 UTC on 5 March . Erica later attained maximum sustained winds of 105 km / h (65 mph 1 @-@ minute sustained) . However the system began to move against the direction of the wind shear environment , and it lost much of its organization . On 7 March at 2230 UTC , Erica lost cyclone status and degenerated into a tropical low . The remnant circulation moved slowly to the northeast , and the wind shear conditions abated . As a result , Erica began to gain some signs of organization . At this time the remnants moved towards the southeast as a result of an upper ? level trough developing over Australia .

The area of low pressure gained sufficient shower activity and organization to be renamed as a tropical cyclone at 1800 UTC on 10 March while located southwest of the Solomon Islands capital of Honiara . Erica gradually intensified , attaining the equivalent to a Category 1 hurricane on the Saffir ? Simpson Hurricane Scale (SSHS) Originally moving to the southeast at a slow pace , Erica began to accelerate due to the influence of weak mid ? level ridge to its east . Continuing to intensify , the cyclone reached its peak intensity on 13 March with a minimum barometric pressure of 915 mbar (27 @-@ 0 inHg) , and peak winds of 260 km / h (150 mph 1 @-@ minute sustained) . The

eye of the cyclone began to shrink in diameter and become symmetrical . Later on 13 March , Erica began to parallel the western coast of New Caledonia while maintaining a strong intensity , before crossing the extreme southern end of the island at the Caledonian island commune of L 'Île @-@ des @-@ Pins .

After passing the island , Erica accelerated and began to rapidly weaken in the presence of strong wind shear . As a result , the cyclone began a phase of extratropical transition as it quickly paced to the southeast . On 15 March , Erica completed this transition . The remnant low continued to the east ? southeast , before the Meteorological Service of New Zealand Limited office at Wellington , New Zealand (TCWC Wellington) issued their last advisory on Erica at 1800 UTC on 16 March .

= = Preparations , impact , and aftermath = =

= = = Australia = = =

As a tropical low , Erica brought strong winds to northern Queensland . Several large trees were uprooted , one of which fell on a car in Cape Tribulation and another on a house in Port Douglas . Numerous trees were defoliated and some boats were reported to have been pulling their moorings due to the wind . Power lines were also damaged by the low .

= = = New Caledonia = = =

On 12 March , officials in New Caledonia issued a pre @-@ alert as Erica was forecast to impact the territory . Evacuation centers were set up in churches and community halls . All schools throughout the island were closed and airports were shut down .

Despite the rapid weakening before landfall , Erica produced intense winds , gusting to a record 202 km / h (125 mph) in Nouméa . Ten @-@ minute sustained winds were recorded up to 144 km / h (89 mph) around the center of the storm .

An estimated 892 families were affected by Erica , and Erica was also reported to have caused two deaths and injured 80 people . In addition 1 @,@ 000 people were estimated to be homeless . Several communication lines were severed , and tribes and farms were devastated . 20 % of electricity customers in Nouméa were without power , and 60 % of customers on the main island 's west coast were also without power . In Yaté , police assessed that half of the population was without shelter , and in Pohé , it was estimated that 90 % of the crops were destroyed by Erica . On 17 March 2003 , only 17 of the 66 secondary schools in New Caledonia were functioning , with others still closed primarily due to safety concerns . The University of New Caledonia was also badly damaged . However , all primary schools were functioning .

South Province , New Caledonia formed an emergency committee following the storm , led by Jacques Lafleur . The committee assisted in filing damage claims caused by the cyclone . After the storm , 60 French specialists were sent to New Caledonia to help in rebuilding areas hit hard by Erica . Ministry of Overseas France head Brigitte Girardin arrived in Nouméa on 17 March to investigate the damage . Following the visit , Brigitte Girardin announced that US \$ 17 million would be sent to rebuild 1 @,@ 000 homes on the island nation , including an additional US \$ 500 @,@ 000 in disaster relief to the island country . A transport aircraft stationed in Tahiti brought 1 @.@ 5 short tons (1 @,@ 400 kg) of emergency supplies .

Following Erica 's heavy rains , it was feared that the already existing dengue fever epidemic would become more widespread . Prior to Erica , there were already 437 cases of dengue fever in 2003 alone . The risk for leptospirosis was also increased by Erica . High winds and strong rains resulted in damages of at least US \$ 15 million , particularly to schools . Two fatalities total were reported as a result of Erica . The name Erica was retired after the season .