

= Cyclone Joni =

Severe Tropical Cyclone Joni was a damaging tropical cyclone that impacted the island nations of Tuvalu and Fiji . It was first noted within the South Pacific Convergence Zone at the start of December 1992 , as a shallow tropical depression in the vicinity of the island nation Tuvalu . Over the next few days the system gradually developed further as it affected Tuvalu , before it was declared to be a tropical cyclone and named Joni by the Fiji Meteorological Service ( FMS ) during December 7 . Over the next couple of days the system intensified further as it was steered south @-@ westwards and posed a threat towards the Fijian dependency of Rotuma and the French territory of Wallis and Futuna . The system subsequently peaked as a Category 4 severe tropical cyclone on the Australian tropical cyclone intensity scale as it approached the Fijian Islands during December 10 . Over the next couple of days the system moved through the Fijian Islands , before it became an extratropical cyclone during December 13 . The system was last noted during the next day as it was absorbed by a mid @-@ latitude trough of low pressure to the east of New Zealand .

Joni caused gale to storm force winds on the Tuvuluan island of Niulakita and minor damage to most of the Tuvuluan islands . Total damages to crops in the island nation were estimated at AU \$ 6 @. @ 9 thousand ( US \$ 5 thousand ) . There were no damages reported on the islands of Wallis and Futuna or Rotuma , while 1 person was killed , 10 people went missing and total damages were estimated at FJ \$ 2 million ( US \$ 1 @. @ 6 million ) in Fiji . The main impacts of Joni in Fiji were confined to the Western Division , with the islands of Yasawa , Mamanuca , Viti Levu , Kadavu and Vatulele being the worst affected areas . Damages in both Tuvalu and Fiji were exacerbated a month later by Severe Tropical Cyclones Nina and Kina interacting with each other . Due to the impact of this system , the name Joni was subsequently retired from the list of names for the region by the World Meteorological Organization .

= = Meteorological history = =

At the start of December 1992 , a shallow tropical depression developed along the South Pacific Convergence Zone in the vicinity of Tuvalu . Over the next few days the system persisted near Tuvalu , before it started to move south @-@ eastwards and develop further during December 5 . During December 6 , the United States Joint Typhoon Warning Center designated the system as Tropical Cyclone 03P and initiated advisories , while the system was located on the 180th meridian about 180 km ( 110 mi ) southeast of Funafuti , Tuvalu . Over the next couple of days , the system slowly deepened as it organised further and caused gale to storm force winds on the island of Niulakita and strong squally winds over the rest of Tuvalu . During December 7 , the Fiji Meteorological Service ( FMS ) reported that the depression had developed into a Category 1 tropical cyclone on the Australian tropical cyclone intensity scale and named it Joni . After it had been named the system passed near Niulakita as it was steered towards the southwest by a low to mid level flow and intensified further .

The FMS classified Joni as a Category 3 severe tropical cyclone during December 9 , after an eye had become apparent in satellite imagery . The system subsequently slowed down and started to recurve and move southwards towards Fiji , due to a weakness in the subtropical ridge of high pressure . Early on December 10 , the FMS reported that Joni had peaked as a Category 4 severe tropical cyclone , with 10 @-@ minute sustained wind speeds of 165 km / h ( 105 mph ) . The JTWC also reported at around this time that the system had peaked with 1 @-@ minute sustained wind speeds of 205 km / h ( 125 mph ) , which made it equivalent to a Category 3 hurricane on the Saffir ? Simpson hurricane wind scale . During that day Joni passed near or over the Fijian island groups of Yasawa and Mamanuca , before it passed about 55 km ( 35 mi ) to the west of the main Fijian island : Viti Levu . At around 10 : 30 UTC ( 22 : 30 FST ) on December 10 , the system was successfully located on the Nadi weather radar , while it was located about 65 km ( 40 mi ) to the west @-@ southwest of Nadi . Over the next few hours the system was located by radar , until it passed near or over the island of Vatulele . After passing near the island , the system moved south @-@ eastwards towards Kadavu and Ono @-@ i @-@ Lau , with the eye of the system passing

directly over Kadavu during December 11 . The system subsequently started to weaken and transition into an extratropical cyclone , as it entered a region of strong vertical wind shear and cooler sea waters . The system was declared to be an extratropical cyclone early on December 13 , before it was absorbed by a mid @-@ latitude trough of low pressure to the east of New Zealand during December 14 .

= = Preparations and impact = =

Severe Tropical Cyclone Joni impacted the island nations of Tuvalu and Fiji , while it also threatened the Fijian dependency of Rotuma and the French territory of Wallis and Futuna . The majority of the Tuvaluan islands suffered minor damage from Joni , while in Fiji the system caused a moderate to severe amount of damage . Due to the impact of this system , the name Joni was subsequently retired , from the list of names for the region by the World Meteorological Organization . This would normally mean that the name would not be used again in the region , however , the name remained on the list and was used during the 2008 ? 09 season .

During its developing stages , Joni was the first of two tropical cyclones to affect Tuvalu during the 1992 ? 93 season . As the system started to affect the islands during December 5 , the FMS issued a gale warning for Niulakita , while strong wind warnings were issued for the rest of the island nation . Joni subsequently passed near Niulakita during December 7 , where it caused gale to storm force winds and minor damage to the islands . The system also caused some damage to crops which were valued at AU \$ 6 @.@ 9 thousand ( US \$ 5 thousand ) . A tropical cyclone alert was issued for Wallis and Futuna during January 6 , while a gale warning was issued for Rotuma during January 7 . There was subsequently no damage reported in either the French Territory or the Fijian dependency .

Between December 9 ? 11 , 1992 , Joni became the first named tropical cyclone to directly impact the Fiji Islands since Severe Tropical Cyclone Sina of 1990 . Joni caused a moderate to severe amount of damage to Viti Levu , with an overall damage total of about FJ \$ 2 million ( US \$ 1 @.@ 6 million ) . At various times between December 7 ? 11 , the whole of the main Fijian islands were placed under either a gale , storm or hurricane @-@ force wind warning by the FMS . Ahead of the system affecting Fiji , international and domestic flights to and from the Nadi International Airport were cancelled during December 9 and 10 , while ships and small boats in Lautoka were moved to a nearby river . Hundreds of tourists on Fiji 's offshore islands were evacuated to the mainland before the cyclone hit , while around 350 elected to ride out the system at island resorts . Other preparations included the erection of hurricane shutters , while people rushed to stock up on supplies with shelves cleared of emergency supplies . On some islands , villagers were evacuated to community centres , schools and churches at the height of the storm .

Joni 's impact on Fiji was generally confined to the Western Division , with the islands of Yasawa , Mamanuca , Viti Levu , Kadavu and Vatulele being the worst affected areas . The system caused high seas and widespread flooding including in several rivers on Viti Levu , which led to a substantial loss of livestock . In the immediate aftermath of the system a total of ten people were left missing , including a group of three fishermen in the Yasawa Islands . A group of three females on a fishing trip also went missing and were later found on an offshore island . A search party of four men went missing off Vanua Levu , while looking for the women , however , one swam ashore , while the other three were picked up by a cargo ship . Parts of Fiji 's main cities of Suva , Nadi , and Lautoka were left without power , as falling trees brought down power lines . The Fijian Government reported that coconut plantations had been extensively damaged and that there was limited communications with the Western Division . Despite Joni 's eye passing directly over Kadavu during December 11 , the damage on the island was limited to wave induced coastal erosion , root crop damage and the loss of a few trees . The system passed near the wave rider station on the island , which recorded a peak wave height of about 7 @.@ 2 metres ( 24 ft ) as Joni made its closest point of approach . During December 12 , an army helicopter was deployed to conduct a damage survey of offshore islands . A total of six people were subsequently arrested in Suva and Nadi on December 14 , in relation to a series of burglaries , committed during power blackouts caused by the cyclone . Joni 's

damage in both Tuvalu and Fiji was exacerbated a month later , by Severe Tropical Cyclones Nina and Kina interacting with each other .