

CASE STUDY: Cape Tribulation Cyclone, 1934

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The Weather Bureau's analyses leading up to this event

In the Brisbane Courier of Monday March 12 1934, The Weather Bureau in Brisbane issued the following warning: 'A cyclone which has formed northwest of Willis Island is moving towards the Queensland coast, and the Weather Bureau has issued a warning to all towns between Thursday Island and Mackay.'

Earlier the Bureau had issued a special report at 9 p.m. Sunday 11 March 1934 which stated: 'This morning advices from Willis Island indicated the development of a cyclone between that station, Samarai, and the Louisiades. Observations at 8 p.m. show that the centre was approximately north-northwest from Willis Island-in latitude about 15 degrees south. It seems that it is moving rapidly towards the coastline between Princess Charlotte Bay and Townsville.'

In the Brisbane Courier Tuesday March 13 1934 the Weather Bureau stated that an important event over the weekend was the development of a cyclone north of Willis Island and its swift movement to the northern coast of Queensland according to observations on the 9am Chart. From Mondays (12th) chart (Figure 1) it is evident that the cyclone is a very small but intense atmospheric swirl, the centre of which at 9am Monday was just a little north of Port Douglas where an easterly gale was blowing.

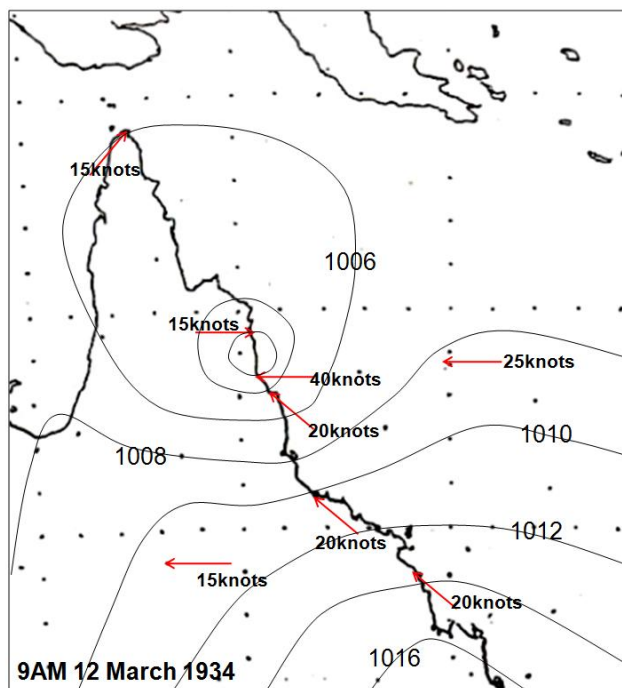


Figure 1- Mean sea level analysis constructed from Weather Bureau charts in The Brisbane Courier and The Sydney Morning Herald.

Report of the impact of this cyclone

On 12 March a tropical cyclone crossed the coast near Cape Tribulation with a 9.1 m storm surge at nearby Baileys Creek destroying banana plantations. The Pearling fleet just off the coast near Cape Tribulation was devastated with many luggers and 79 lives lost. The launch *Mossman* which plied between Cairns and Cooktown was wrecked 1.5 miles (2.4 km) northeast of Cape Tribulation. Banana plantation settlers in the Cape Tribulation area stated that near the centre of the cyclone huge trees 4 feet across were snapped like carrots. The plantations were destroyed and the worst damage was in a six mile (9.6 km) wide swathe. The damage extended from Bloomfield River to Mossman. There were several reports of huge storm surges in areas which are not particularly conducive to large storm surges. The depth correction factors for the area are between 0.5 and 0.59 which means that the ocean floor rises relatively quickly approaching the coast. In calculating the expected storm surge for a particular cyclone, the heights arrived at after considering the intensity, size and speed and direction of movement are reduced by these factors.

Huge storm surge at Almason. The cyclone did extensive damage to the banana growing settlement at Bailey's Creek known as Almason, where there were at the time five settlers. There was a large crop of bananas almost ready for picking. The wind and tidal wave reduced the whole plantation to ruins. Mrs. W. W. Mason said there was not a banana stool standing in the plantation. Mrs. Mason said the cyclone began at 8 a.m. on Monday 12 March, and continued until about noon. When they saw the tidal wave coming, the settlers rushed to their houses to get all possible food and clothing, which were rushed to higher ground. The water rose about 30 feet above the ordinary high tide level, and entered several dwellings. Luckily all the occupants were clear. Had the wave come during the night probably all would have drowned. Several huts occupied by the local indigenous population on the beach were carried away, but they also unoccupied at the time. The water began to rise at 9 a.m.

Daintree. At Daintree the bar dropped to 978 hPa at 10 am 12th and by 12.30 pm huge trees were snapped and all vegetation was defoliated. Three houses were totally demolished, one house had its veranda torn off, and one house was torn in half and one half blown away. Another house was lifted and turned upside down and the sawmill was unroofed.

From Mossman to North Daintree all standing timber was swept away by the storm surge.

Rocky Point. A 15 feet (4.6 m) storm surge a few miles beyond Rocky Point wiped out a coconut plantation and all buildings were smashed. A poultry farmer lost nearly all his fowls and had his home ruined by the wave.

Small settlement south side of the Mossman River (now Cooya Beach). The storm surge destroyed 15 houses. The cottages were built on the water front. Those that were strong enough to withstand the onslaught of the wind were smashed when the sea rose in giant waves and beat into the homes. The residents lost all their possessions.

Whole mining Camp wrecked. The Enterprise Mine, which is located about 10 miles inland from Cape Tribulation sent the following message "Terrific cyclone; camp wrecked; lost nearly everything; heavy rain following; road completely blocked; Starved for food."

Low Isle. Two cottages were unroofed and out buildings wrecked on Low Isle on March 12. The laboratory, owned by the Great Barrier Reef Committee, was demolished.

Mossman. At Mossman the cyclone struck at 10am 12th and a hotel lost its balcony and main roof. The front veranda of a Café was torn off and the windows smashed. The windows of the Post Office were smashed. Roads were strewn with iron timber and other debris.

Port Douglas. At Port Douglas there gales and a 1.8 m storm surge.

Cairns. At Cairns limbs were snapped from trees and a large tree was uprooted however most damage was from huge seas which damaged rowing boats beached along the Esplanade. There was large washaways on the Cairns to Mossman road by landslides and huge seas.

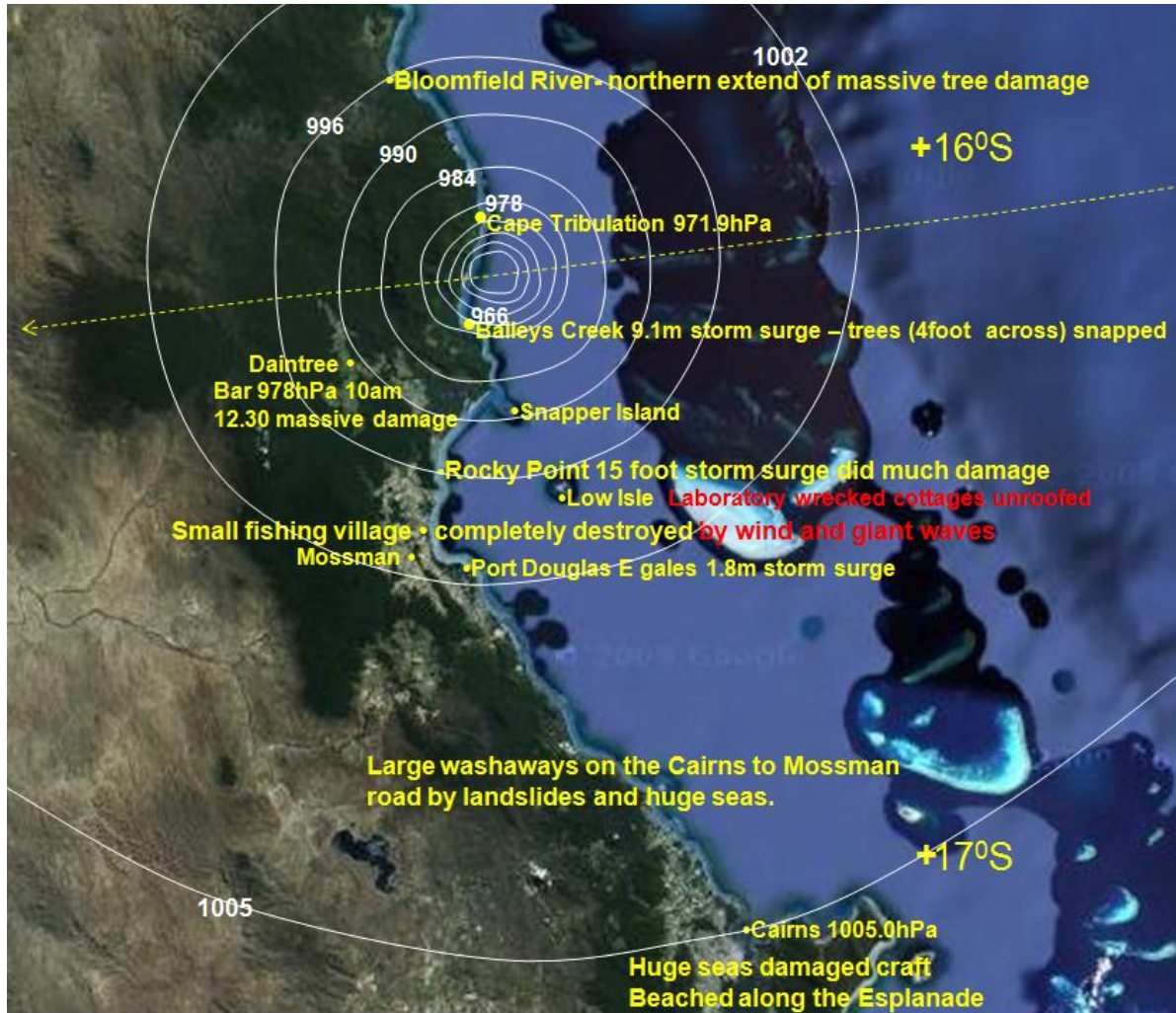


Figure2- Map of the damage area with isobars every 6hPa and an indication of the track marked by dashed yellow line.