

CASE STUDY: The Port Douglas Cyclone, March 1911

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A Tropical Cyclone crossed the coast near Pt Douglas. The Bar was read at 959.7 hPa by a ship at Low Woody Is (9 nm south of Cape Flattery). Two lives were lost at Pt Douglas and most buildings in the town were levelled with only 7 out of 57 houses left standing and 100 persons left homeless. Similar damage occurred at Mossman. At Cairns balconies were stripped off buildings and roofing iron lost and verandas collapsed. The Empire Hotel had the Balcony torn off and one wall stove in. The cargo sheds on the wharf were badly damaged and one shed was wrecked. Considerable damage was done to houses, outhouses and stables in the suburbs with one house lifted completely off its stumps. The Chillagoe Company Warehouse and the Harbourmasters office were unroofed. Two boarding houses were badly damaged. A whole row of shops in Spence Street were badly damaged by one terrific gust. At Nelson on the Mulgrave, the hotel was wrecked, the ventilating roof of the Mulgrave Mill was taken away and a great deal of damage was done to the residences. There was widespread damage to plantations near Cooktown by winds and floods.

Report from Mossman stated that the winds were violent from 6pm to 9pm Thursday 16 March with houses levelled to the ground and others unroofed-there was a lull at 9pm and the wind then came from the opposite direction but not as violent.

Conditions at Cairns as the cyclone passed

Wednesday morning 15 March - Heavy NE swell on the Esplanade

Wednesday night- Bar 1015.4hPa

Thursday morning 16 March 9am – SE Wind Bar 1009.0hPa.

Thursday noon –Violent SSE wind Bar 1007.7hPa

Thursday 2pm – Full gale from SSE heavy rain and Bar 1004.4hPa- branches being blown off trees.

Thursday 4.50pm- Bar 1002.0hPa SE hurricane force and southern balcony roof of the Railway Hotel-Verandas blown off buildings. On the Esplanade the baths were damaged and unroofed and sheds on the Wharves were damaged especially the “Chillagoe Company “sheds suffered roof damage. Trees on the Esplanade were denuded of their foliage.

Thursday 5pm Lowest Bar 1002.0hPa and highest wind.

Thursday 6.05pm- Verandas were demolished along Spence Street.

Thursday 7.35pm - Bar 1008.6hPa

Thursday 8pm – Much damage around the wharfs to sheds and cargo. The veranda of the Shamrock Boarding house was lifted and the Railway boarding house was unroofed. A plate glass window was shattered in one of the emporiums.

Thursday 10.30pm- the wind turned NW or thereabouts.

Thursday 16 March 10pm to 2am Friday 17 March morning damage not as great as with the SE winds. Winds were from several points but predominately NW to N veering a little to NNE at times

Mean Sea Level analysis and track.

The Bureau of Meteorology Best track (Figure 1) had the cyclone pass to the west of Cairns at 2300UTC 16 March (9am 17th AEST) however the wind at Cairns turned NW around 1230 UTC 16 March so the cyclone

was south of Cairns then. The analyses at 9am 17 March (right frame Figure 2) has SE winds at Townsville and NW winds at Cooktown so the centre was then between these two centres and moving towards the Gulf.

Rainfall

The rainfall distribution in Figure 3 was created from a limited number of observations but the heaviest rain fell in the 24 hours to 9am 17 March. Some of the heavier falls over the two days are listed below:-

Cairns Post Office 81.5mm 16 March and 262.9mm 17 March.

Kamerunga 8 km WNW of Cairns 48.8mm 16 March and 261.6mm 17 March.

Kuranda 18 km NW of Cairns 60.5mm 16 March and 383.5mm 17 March.

Mossman- 66 km NW of Cairns 66.0mm 16 March and 408.9mm 17 March.

Port Douglas- 58 km NNW of Cairns 66.0mm 16 March and 408.9mm 17 March.

Flooding

Later reports spoke of a memorable flood on the Barron River with this cyclone. The Myola tide gauge near Kuranda recorded its highest ever reading (15.37metres) and the river was the highest on record at Mareeba.

Figure 1 Track of Port Douglas Cyclone.

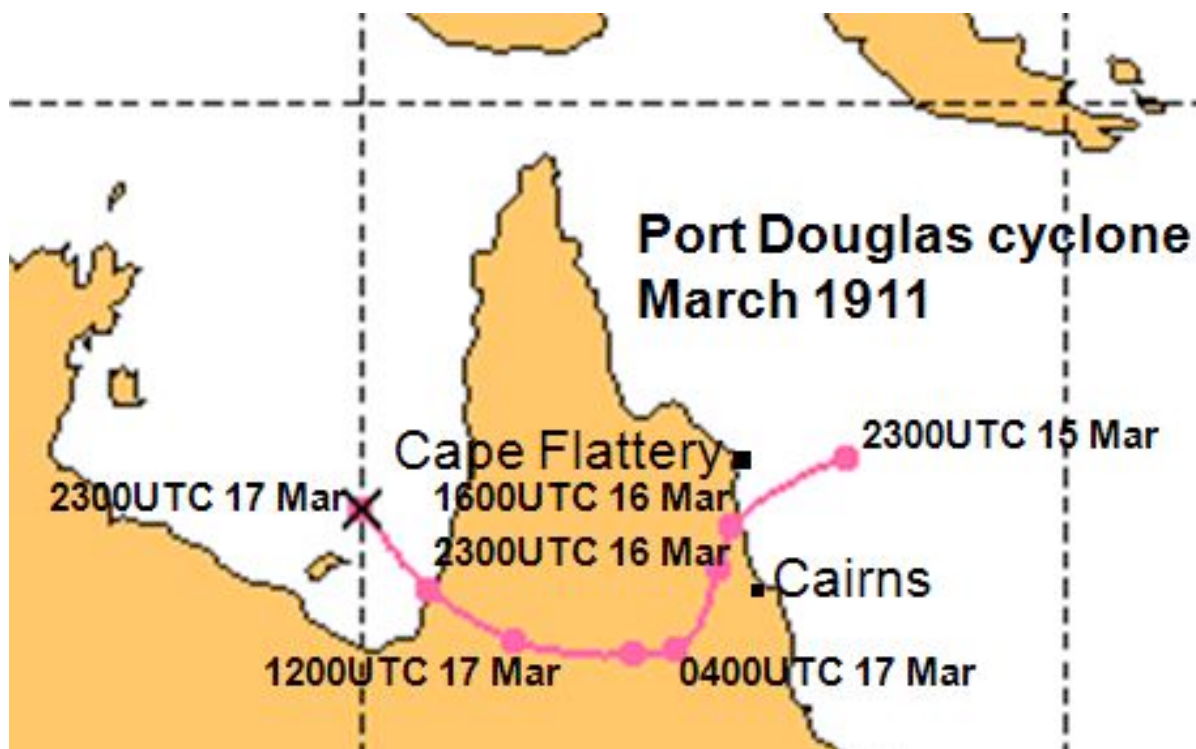


Figure 2 Mean Sea Level analyses from the Sydney Morning Herald for 9am 16 March 1911 (left) and 9am 17 March 1911.

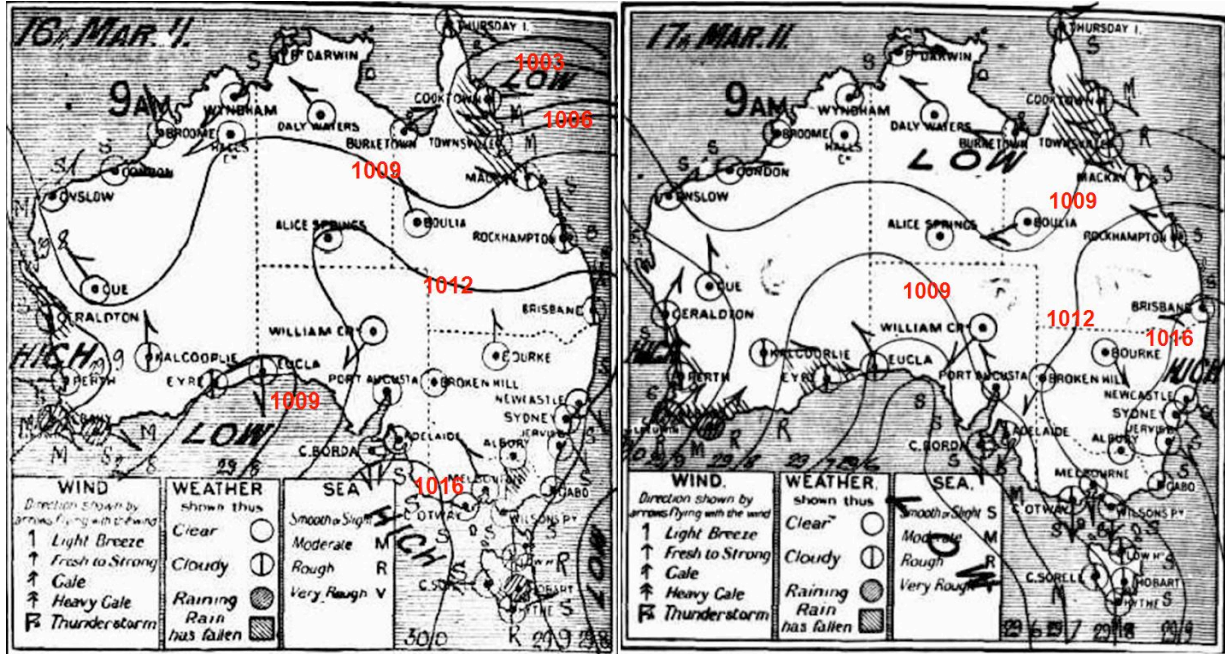


Figure 3 24hour rainfall to 9am 16 March 1911 (left) and 9am 17 March 1911 (right).

