

## CASE STUDY: The Innisfail Cyclone, 1918

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This cyclone is widely regarded as the worst cyclone to hit a populated area of Queensland. It crossed the coast and passed directly over Innisfail. Recent reports suggest that 37 people died in the Innisfail region while 40 to 60 (mostly aborigines) lost their lives in surrounding areas. The pen on Innisfail Post Office barograph was prevented from registering below 944.0 hPa by a flange on bottom of the drum and a pressure of 926 hPa was read at the Mourilyan Sugar mill around 7pm 10 March. In Innisfail, then a town of 3,500 residents, only around 12 houses remained intact, the rest being blown flat or unroofed. The storm reached its height about 8pm on Sunday night, when it lulled till 9pm, and then came back with redoubled violence from the north-west. A Sugar Mill manager in Innisfail stated that the wind started to blow at 11am on Sunday morning and it increased in violence until between 7 and 8pm the same evening. Then it quietened suddenly and he proceeded to go outside and make an inspection of the damage. It was soon seen that terrible destruction had been caused. The wind suddenly came up again from the opposite direction and people had to take shelter again. The lowest pressure was recorded at 7.45pm on the barograph (Figure 1) but couldn't fall lower as the pen was stuck on the bottom flange which also slowed the rotation of the drum. Therefore the pressure would have continued to fall for another 15 minutes possibly bringing it closer to the 27.34inches (926hPa) read at Mourilyan. The wind change to northwesterly means the centre of the cyclone passed to the south of Innisfail which is consistent with the low pressure reading at Mourilyan (see location map Figure 2). Ten fatalities were reported in Innisfail itself in the initial press report. There were 2 deaths later from injuries received at Innisfail.

### **Babinda**

Houses were flattened everywhere with only 3 houses left standing in a complete condition at Babinda. To gauge the strength of the wind a whole train was blown on its side as well as assorted wagons in the sidings. There was 1 death in Babinda and a visitor from Mackay said that the damage at Babinda was worse than in the Mackay cyclone.

### **St Johnstone**

The tram route which runs 21 miles from Liverpool Creek to St Johnstone was covered by huge trees, no scrubs were left standing and houses were devastated. Most buildings at South Johnstone were wrecked. The police in South Johnstone advised of terrible destruction in the area and that there were 5 fatalities in the district.

### **Storm surge**

A report from the Harbours and Marine Engineer indicated that at Maria Creek (see map) the sea rose to a height of about 3m above high water (If this refers to HAT the water was 4.65m above the tide for that day). Around 5pm 10 Mar at Bingil Bay (see location map Figure 1) a 'tidal wave' was seen surging into Bingil Bay from the direction of Dunk Island taking the bridge over the creek 400 m inland. Mission Beach was covered by 3.6 m water for hundreds of metres inland, the debris reached a height of 7m in the trees. All buildings and structures were destroyed by the storm surge in the Bingil Bay Mission beach area. Further north the

surge was 2.6m at Flying Fish Point. The Superintendent of the Hull River Mission Station (Rev Mr Kenny) and his daughter were killed, and Mrs Kenny seriously injured. The Hull River Mission was located where South Mission Beach stands today and many of the indigenous inhabitants were killed by the surge. Those that didn't perish or could be rounded up after the cyclone were transported to Palm Island mission.

The 'tidal wave' observed at 5pm has been depicted in paintings and looks like a steep faced large wave not unlike one suitable for surfing. It may have been a rare solitary wave phenomena produced by trapped fetch within a squall line (see Churchill et al 1995). There is more open water fetch for this to have occurred in the direction of from Dunk Island. This may have occurred well in advance of the main surge which should have occurred closer to 7pm. There was much loss of life associated with the storm surge. There was also a drowning in the Herbert River on Monday 11 March.

### Cairns

The largest tree on the Esplanade Cairns came down at 8.30pm Sunday Night (10<sup>th</sup>). In Cairns most of the houses on the outskirts of Cairns were unroofed. The Newmarket Hotel was stripped of its roof. Houses were badly damaged in Lake Street. The high tides reached the pavement opposite the Strand Hotel. A man was lost to the sea off Cairns.

### Cairns to Babinda

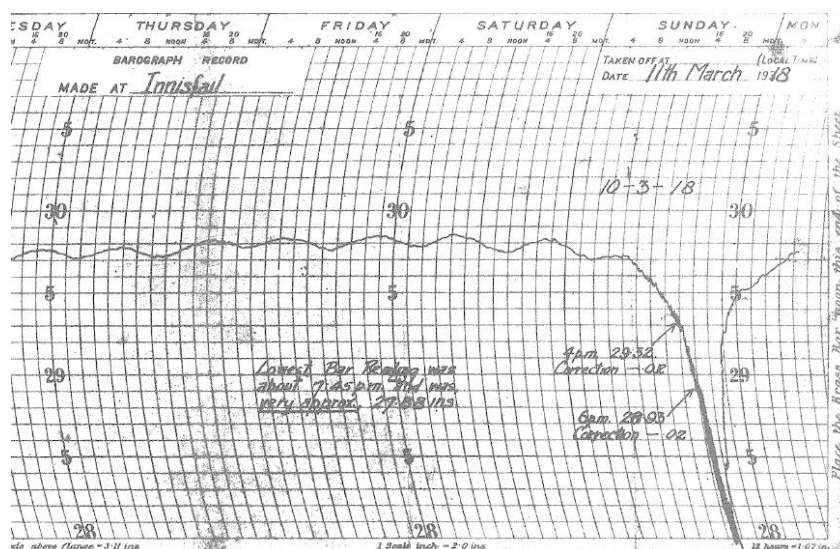
The Post Master General Department's crew heading south to repair damage to lines described the damage which started 6 miles out from Cairns and increased in the direction of Babinda, where a mile of poles were downed. On a train trip inspection from Cairns to Babinda severe devastation was witnessed. On portion of the Bellenden Ker Range the cyclone had levelled trees for a long distance. There was hardly a house between Cairns and Babinda which was not unroofed. At Gordonvale in the height of the storm the pressure got down to 975.3hPa

### North Barnard Island off Kurrimine Beach

The cyclone struck at 5.30pm and the house was unroofed. The family then took refuge in the lighthouse. By 10pm the dwellings and outhouses had been levelled with the ground.

### Atherton Tablelands

Reports indicated that the cyclone passed to the south of Malanda. In Malanda the cyclone struck the Tableland on Sunday evening, doing immense damage. Sunday morning broke threatening with a strong easterly wind, which gradually worked around to the south southwest and finally to west, increasing in violence with each shift, and all the time being accompanied by extremely heavy rain, nearly six inches being registered at Malanda. The cyclone reached its maximum force at ten pm on Sunday, when the wind was blowing with terrific and destructive force. Vivid lightning added to a terribly trying time. Monday morning revealed the severe damage. Crops, fruit trees and most outbuildings levelled to the ground, many old or lightly built houses collapsed altogether, nearly all windmills, cow sheds and stables were unroofed, while even substantially built buildings were canted or partly stripped of roofing. Immense piles of trees, which were broken off or uprooted, were overlaying the roads. Many cattle were killed but no loss of life was reported. Reports from Atherton indicated that there



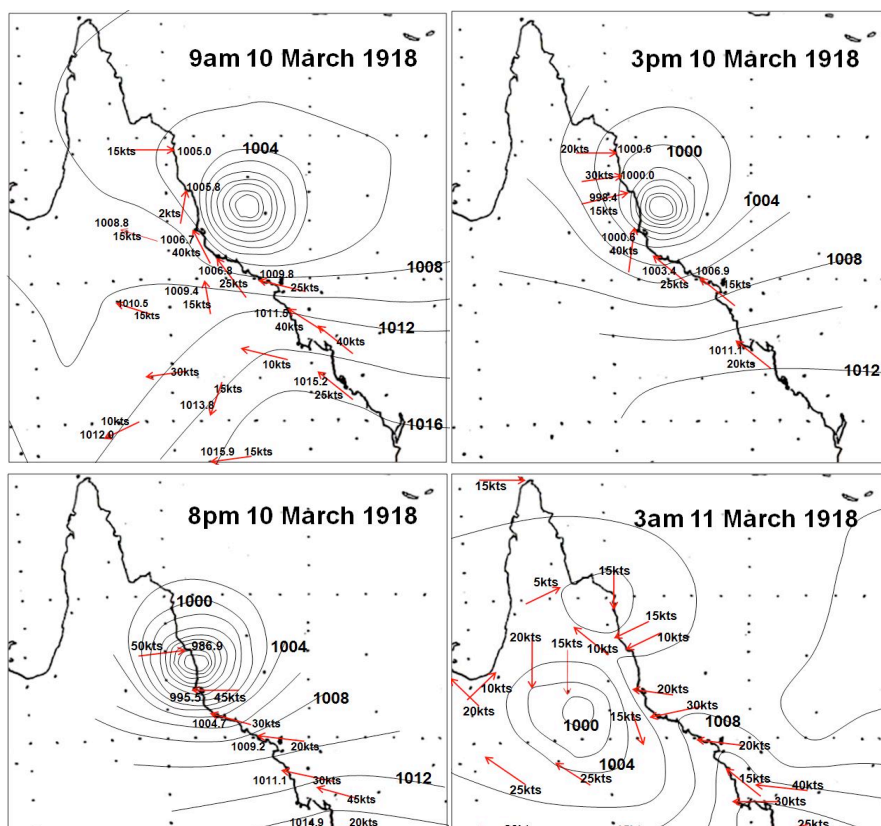
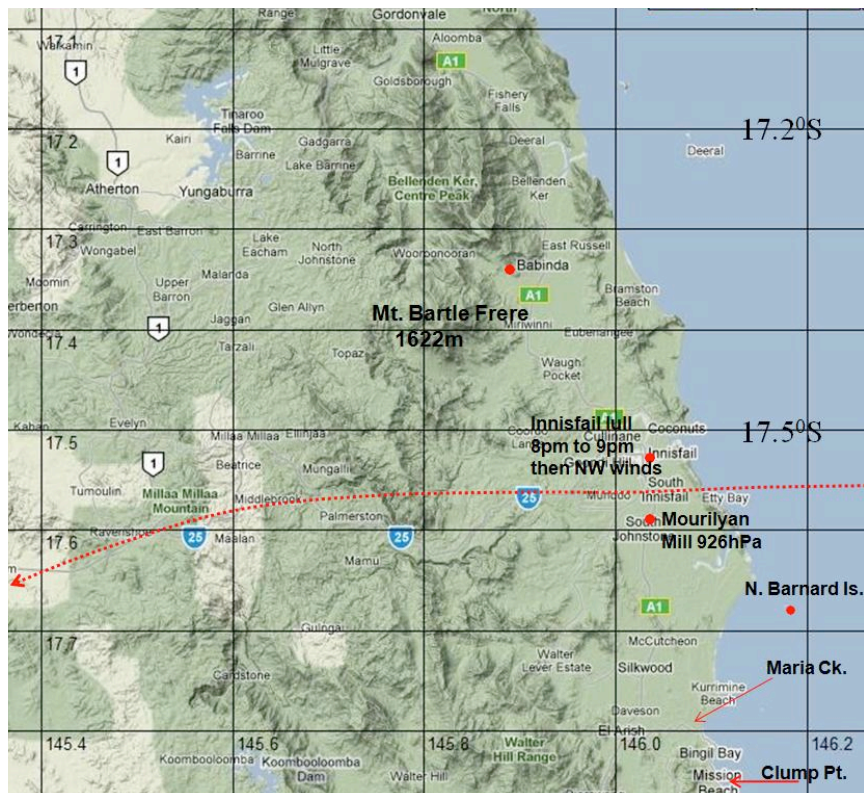
was great damage there. Two women were killed by falling trees at Tolga.

**Figure 1** Innisfail Post Office barograph stuck on the bottom flange from flange from 0745pm 10 March 1918 when the pressure was 944hPa

#### Cardwell and south

Nearly every place suffered to the extent of the loss of a sheet of iron or two, but otherwise there was no damage. The sea was very high and washed up to the post office yard, a thing never known before. The rainfall from 9pm on Sunday night to 9am on Monday morning was 1300 points. Six men lost in the lugger *Shamrock* lost 10 miles NE of Hinchinbrook Channel. At Lucinda on Sunday huge waves were breaking over the jetty and damage was done to the foreshores.

**Figure 2** Location map for the Innisfail 1918 Cyclone showing track of cyclone in red.



**Figure 3** Outer isobars (every 2hPa) of the 1918 Innisfail cyclone

#### MSL Analyses

The mean sea level analyses of the Innisfail cyclone (Figure 2) indicates the relatively small size of the cyclone at landfall and from the available data appears to have shrunk in size as it approached the coast and show *Larry* did the same below. At landfall observations from Cairns



and Cardwell were reporting storm force or near storm force winds either side of the cyclone.

Below the devastation at Innisfail is shown from photographs taken soon after the event.



**Panorama of ruins Innisfail**



**Edith Street Innisfail**

**Figure 4** Damage photographs Innisfail March 1918



**Figure 5** Roman Catholic Convent and Environs Innisfail 1918