

CASE STUDY: Cooktown Cyclone, February 1949

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A tropical cyclone crossed the coast North of Cooktown with much devastation. Only 12 of the towns 125 houses remained intact with 30 flattened, 40 badly damaged and others requiring repairs. There were 300 left homeless out of a population of 420. Five business houses out of the 25 were wrecked with the others damaged, some extensively. The main part of the hospital was OK but surrounding buildings were wrecked. The Shire Office was flattened and the Railway Station and Wharf sheds were extensively damaged. Wind was estimated to have increased from SE/60 knots to ESE at 80 knots. At Laura (85km west of Cooktown) people sheltered in the stone Bank of NSW building and the only store in the town was demolished.

Big seas washed away part of the Cairns to Mossman Road and a 35 foot launch was wrecked at Turtle Bay near Cairns on the 9 February. The Cairns to Mareeba road was cut and Mossman was isolated by floods. Three stockmen were missing in the Normanton Area. There were widespread floods in the south Peninsula across to the Normanton areas.

From Figure 1 (top left frame) the cyclone was 200 miles ENE of Cairns and Willis Island Meteorological Station was reporting gales heavy rain and very rough seas. The cyclone then can be seen to have intensified up to landfall and then moved over to the Gulf of Carpentaria. By 15 February it had moved back to the east coast in the vicinity of Townsville and there were wind gusts to 43 knots at Cairns with big seas. A woman rescued from a houseboat and a man drowned in Townsville.

Description of the cyclone at Cooktown from the Cairns Post Friday 11 Feb 1949

“About 10 o'clock at night the wind came in stronger and it increased in intensity until at 3am yesterday (Thursday 10th), when it reached its height. The force of the wind then was estimated at 70miles an hour. At that hour the barometer had fallen to 999.0hPa. It had been on the down grade for the previous 12 hours. The readings being

- Wednesday 3 pm 1005.1hPa and at 9 pm 1001.7hPa.

The cyclone was by then raging in earnest and buildings began to go down before the terrific wind. As dawn broke it was seen that considerable damage had been done and other buildings were beginning to fall before the fury of the wind as the hurricane gained still greater intensity.

The barometer reading was

- 995.6hPa at 6pm,
- at 9 pm it read 994.2hPa,
- at midday 992.9hPa,
- at 3pm 991.8hPa,

At 4.40pm Thursday 10 February the last contact was made with Cooktown by telephone. After that the line was dead. The wind continued to howl and wreak damage and there appeared to have been little abatement in its force since 3 a.m.

Courier Mail Friday 11 February 1949

At the height of the pounding, the last line of communication with the town suddenly went dead at 4.40pm (Thursday 10 February) and 90-mile-an-hour winds and torrential rain was then sweeping the town and its 600 population. Between 3 a.m., when the blow began, and 4.40 p.m., 90 of the town's 120 buildings were estimated to have been destroyed or badly damaged. Last messages said the residents were huddled in temporary accommodation in the Bank of New South Wales, hotels and undamaged buildings. Last night the Weather Bureau reported that the cyclonic centre was just off the coast north of Cooktown and moving slowly inland. After the cyclone hit yesterday morning old wooden buildings collapsed roofs were blown and walls were breached. Heavy rain and high winds continued all day and at 3.15pm the winds increased to 90mph as the cyclone moved closer to the town. The coast road north from Cairns was blocked by landslides and sea erosion early yesterday. Just before the town was cut off the Postmaster said Lewis' general store, the Commercial Hotel, Woorall's garage Zahlton's store, the wharf sheds, the Cook Shire Council rooms, and many homes had been flattened. The Sovereign Hotel, Mrs. Harris' boarding house, N. Palmer's butcher shop, Meldruni's cafe and newsagency, the railway station, and more homes had been extensively damaged. A change of winds from southeast to east-south-east and increase in velocity from 69 miles per hour to 90 miles per hour, indicated that the centre was moving inland to the north of Cooktown.

Courier Mail Saturday 12 February 1949

Cairns Fri. — Three hundred of Cooktown's population of 420 are homeless after yesterday's 70-90 mph cyclone which caused great damage. The cyclone wrecked or badly damaged 117 of the town's 125 houses. The police station, court, and post office are among the buildings left intact. The hospital, school, and railway sheds and almost all business houses were damaged. The town's two aerodromes were flooded. The launch Merinda, which runs a weekly service between Cairns and Cooktown, was undamaged, although it remained at the wharf during the blow. Police reported that three small fishing boats are missing. Inland the only store at Laura was demolished. Big seas washed away part of the main road between Cairns and Mossman.

Courier Mail Monday 14 February.

The township is littered with wrecked and badly damaged buildings, and 300 homeless are appealing for State Government aid. Six aged people are in hospital suffering from shock and exposure in the cyclone. Cooktown, with only 12 of 125 homes intact, resembles a badly bombed town. Thirty of the homes were flattened, and 40 very badly damaged. Most if the others need repairing. During the cyclone which destroyed Cooktown the winds at Archer Point lighthouse, a few miles away at the mouth of the Endeavour River, reached 120 mph a report to the Navigation Department said yesterday.

Rainfall

Following the landfall of the cyclone very heavy rain fell in the Cooktown Cairns region (Figure 2) and the heaviest totals were recorded at Archer Point Lighthouse 16 km SE of Cooktown which recorded the following 24 hour totals:-

- 346.5mm to 9am 10 February
- 507.2mm to 9am 11 February
- 310.4mm 9am 12 February.

The heavy rain then contracted over to the Gulf of Carpentaria area.

Large 24 hour totals there:-

- Aurukun 134.4mm 12 February and 211.8mm 13 February.
- Karumba 119.4mm 13 February and 225.6mm 14 February.
- Kowanyama 108.0mm 14 February and 342.9mm 15 February.

- Normanton 114.8mm 13 February and 282.2mm 14 February.

Heavy rain then fell in the Mackay region when the ex-cyclone moved back to the east coast.

Larger totals were:-

- Cannon Valley 48 km SE of Bowen 247.7mm 16 February.
- Farleigh 10 km WNW of Mackay 263.9mm 16 February.
- Mackay 287.3mm 16 February.

See over page for diagrams.

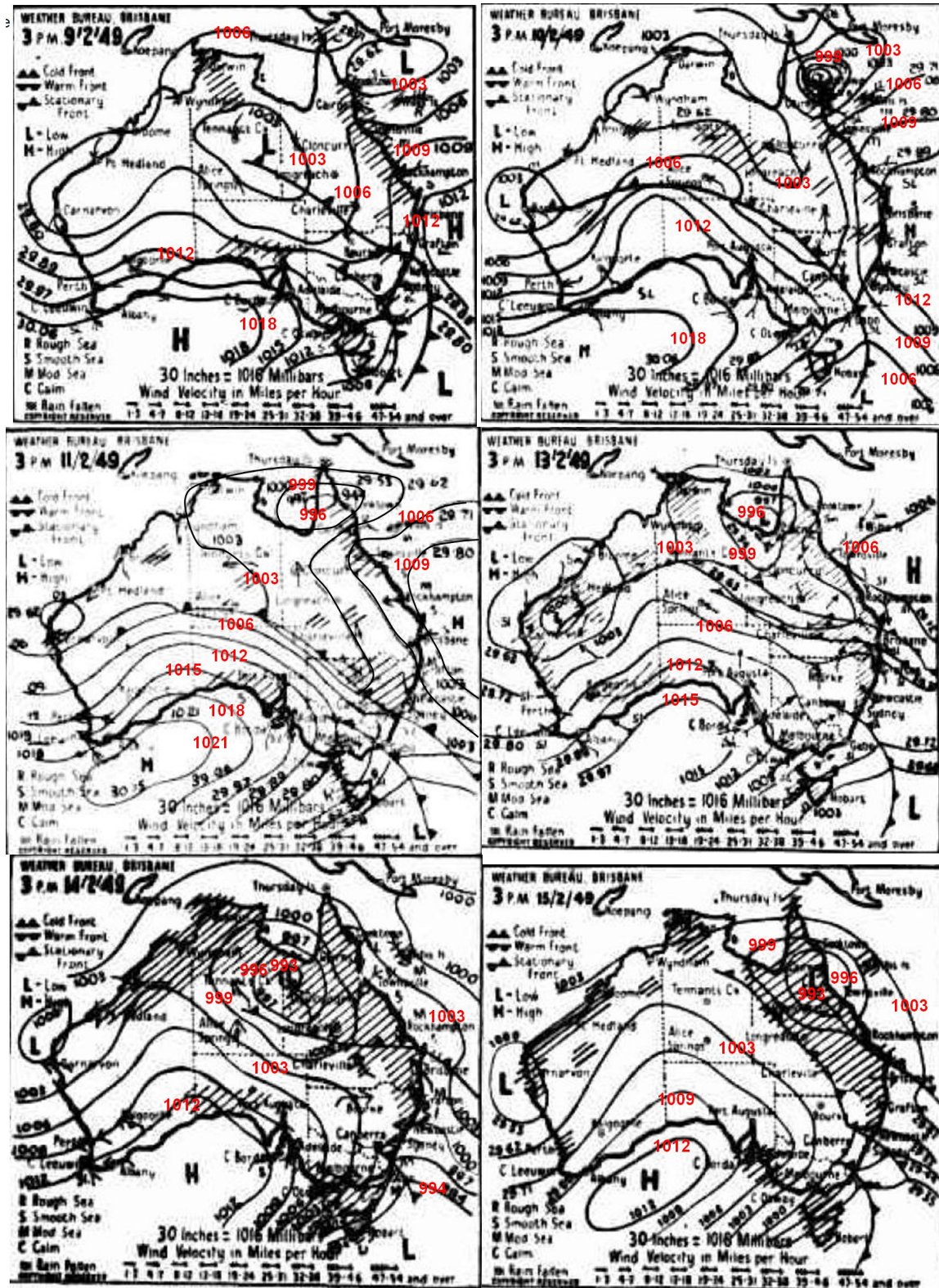


Figure 1. Mean sea level analyses by the Bureau of Meteorology Brisbane as published in the Courier Mail for 3pm 9 February 1949 (top left), 3pm 10 February 1949 (top right), 3pm 11 February 1949 (centre left), 3pm 13 February 1949 (centre right), 3pm 14 February 1949 (lower left) and 3pm 15 February 1949 (lower right). The hatched areas indicate areas of rain.

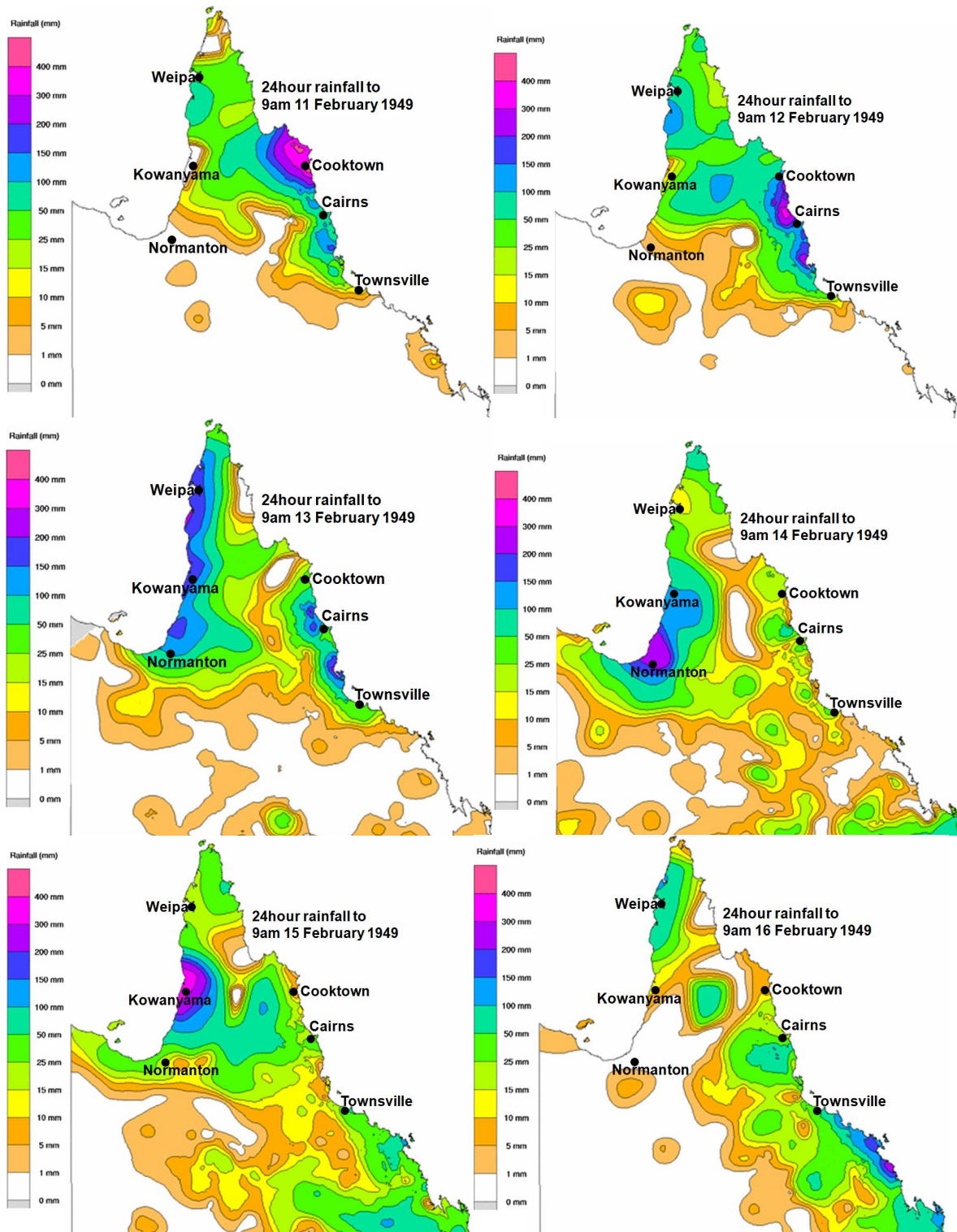


Figure 2. Twenty four hour rainfall totals (mm) to 9am 11 February 1949 (top left), 9am 12 February 1949 (top right), 9am 13 February 1949 (centre left), 9am 14 February 1949 (centre right), 9am 15 February 1949 (lower left) and 9am 16 February 1949 (lower right).