

CASE STUDY: Tropical Cyclone *David*, January 1976

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David crossed the coast to the north of St Lawrence. It passed over Gannet Cay AWS where a central pressure of 970 hPa was recorded. It was intensifying right up to the time of landfall. A feature was its huge size with gales extending from PNG waters down to Lord Howe Is. It generated huge swells and these combined with large tides caused extensive damage to Heron Island as it passed to the north. It crossed the coast in a sparsely populated area however well to the south, winds unroofed 30 buildings in Yeppoon and several in Mt Morgan. Wind gusts reached 95 knots at Pine Islet and 84 knots at the Gladstone Meteorological Office. Large seas combined with high tides caused considerable damage to breakwaters, retaining walls and other structures especially at Rosslyn Bay Harbour (Yeppoon) where the Breakwater was destroyed along with yachts and trawlers. Storm tides flooded houses and shops at Urangan, Noosa and Kirra on the Gold Coast. A storm surge at Beachmere on Moreton Bay cut all roads into the town. The Port of Brisbane was closed. At wave recording stations the significant wave (peak) height reached 5.8 m (8.9 m) at Double Island Pt and 3.8 m (8.7 m) at Yeppoon. Storm tides flooded houses and shops between the cyclone and Northern NSW. The larger storm surges measured were 1.2m at Port Alma, 1.45m at Port Alma and 1.25m at Gladstone.

Flooding

Between 20th and 23rd, stream rises and some flooding occurred in the south-east quarter, including the Brisbane and Mary Rivers, from heavy rain associated with Cyclone *David*. Laidley Creek recorded a major flood in this period with flood waters entering the town of Laidley.

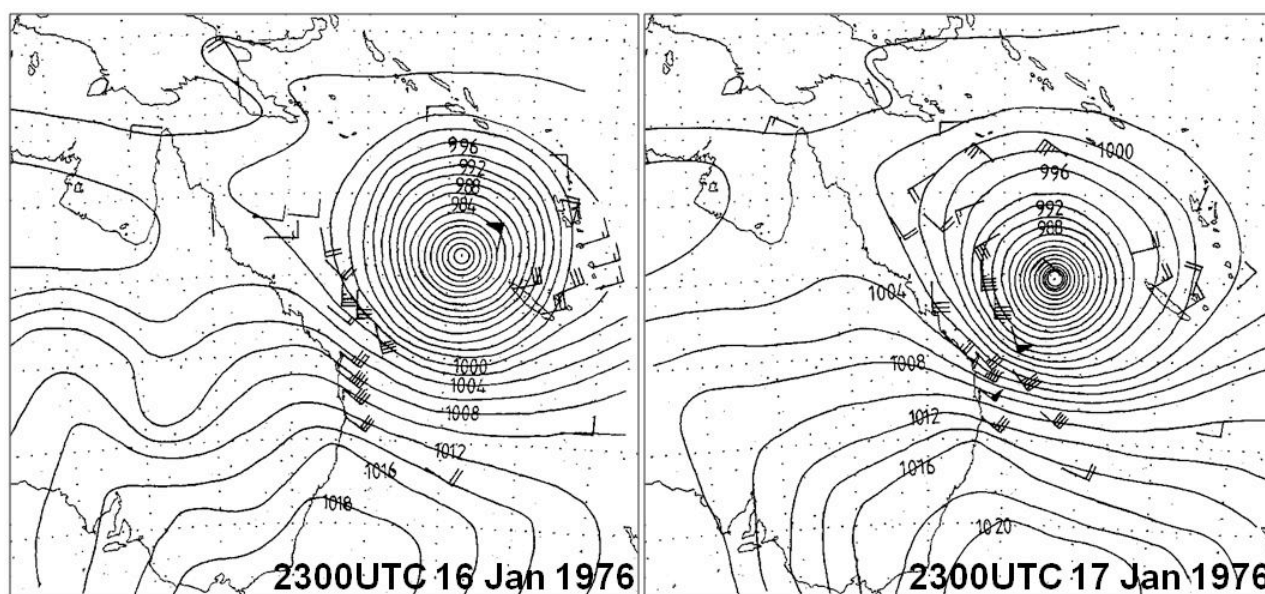


Figure 1 continued over page

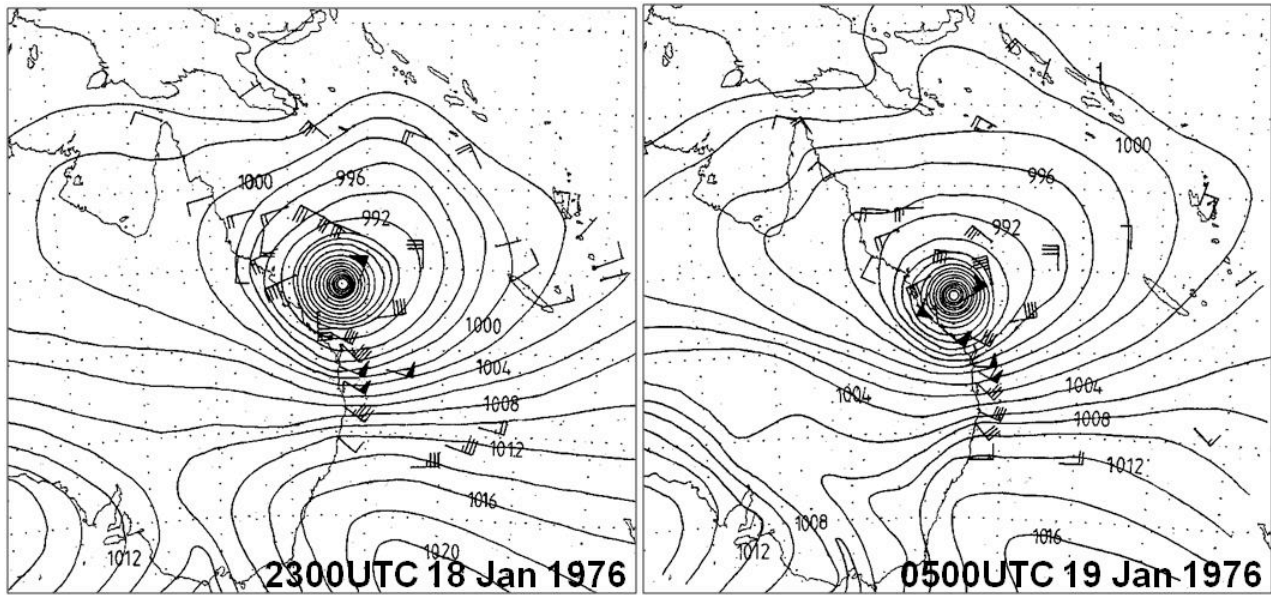


Figure 1 Mean Sea Level Analyses for 2300UTC 16 January 1976 (9am 17 January AEST) in the top left, 2300UTC 17 January 1976 (9am 18 January AEST) in the top right, 2300UTC 18 January 1976 (9am 19 January AEST) in the lower left and 0500UTC 19 January 1976 (3pm 19 January AEST) in the lower right.



Figure 2 Large seas combined with high tides caused considerable damage to breakwaters, retaining walls and other structures especially at Rosslyn Bay Harbour (above) where the Breakwater was destroyed along with yachts and trawlers.