CORRESPONDENCE

Storm surges along the Queensland coast associated with tropical cyclones

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Since my paper on "The Bathurst Bay Hurricane and Associated Storm Surge" appeared in the Aust. Met. Mag. for December, 1958 much interest has been aroused in the possibility of storm surges along the Queensland coast in association with tropical cyclones. Dr. G.R. Mackay of the Engineering Department, University of Queensland, is investigating the occurrence of storm surges in Southern Queensland waters in connection with low level flooding in various estuaries.

I am indebted to Mr. Alex Kebblewhite, Observer, who has drawn my attention to a book by N. Bartlett entitled "The Pearl Seekers", (Melrose, 1954), in Chapter XV of which, "High Winds and Hurricanes", mention is made of the Bathurst Bay hurricane. The storm is described on pages 249 -254. The popular legend of two storms clashing is aired once again, but then follow these lines:-

> "Elemental hell raged for twelve hours. Five mother ships foundered and two were wrecked but refloated. Thirty-five diving luggers and nineteen swim boats were lost and twelve luggers were wrecked but refloated. The Channel Rock lightship went down with all hands. When the "Kasuga Maru" sailed south after the blow she passed through floating dead bodies for the whole of one day. The tally was 307 lives lost, 12 white men and 295 coloured men. On land trees crashed across aborigine mia-mias, and <u>the wind hurled stones with such force</u> that they were found embedded up to <u>six inches</u> in the trunks of trees.
>
> "<u>At Flinders Island searchers found thirteen dead propoises fifty feet up a cliff</u> hurled there by wind and waves".

The last paragraph is of extreme significance. As anyone who has observed porpoises gambolling in the breakers will agree, they are amongst the most active and acrobatic inhabitants of the sea. It is highly unlikely that any ordinary wave would hurl any porpoise anywhere

it did not want to go. However, we recall that Constable J.M. Kenny and his party at nearby Barrow Point experienced a storm surge reaching waist deep on the top of a ridge fully 40 ft. above sea level and about half a mile from the beach.

It is therefore most likely that the thirteen porpoises were stranded by the same storm surge as it passed over Flinders Island, and the height of 50 ft mean sea level agrees very closely with Kenney's account. It is quite conceivable that the wave would have lost a few feet in height by the time it had moved half a mile inland, and the figure 50 feet may well indicate the height of the storm surge as it crossed the coast.

The frightening fact about the storm surge is its extreme height. If a surge of even a fraction of that magnitude were to pass over any of our coastal cities south from Cooktown - and there appears to be no reason why it should not - the damage and loss of life could well become catastrophic.