



## Abstract View

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## A Numerical Study of the Storm Surge Generated by Tropical Cyclone Jane

**Yong Ming Tang**

*Bureau of Meteorology Research Centre, Melbourne, Australia*

**Peter Holloway**

*Department of Geography and Oceanography, Australian Defence Force Academy, Canberra, Australia*

**Roger Grimshaw**

*Department of Mathematics, Monash University, Clayton, Australia*

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### ABSTRACT

In 1983 Tropical Cyclone Jane crossed the North West Coast of Australia generating a storm surge. Currents associated with this storm surge were recorded at two offshore moorings south of the cyclone track. The data from these moorings are suggestive of the propagation of a continental shelf wave between the two stations. This hypothesis is tested by carrying out a numerical simulation of this storm surge based on the depth-integrated shallow-water equations, with wind-wave-enhanced bottom friction. Analysis of the numerical results shows that the storm surge can be interpreted as due to continental shelf waves.

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DC Office: 1120 G Street, NW, Suite 800 Washington DC, 20005-3826  
[amsinfo@ametsoc.org](mailto:amsinfo@ametsoc.org) Phone: 617-227-2425 Fax: 617-742-8718  
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