

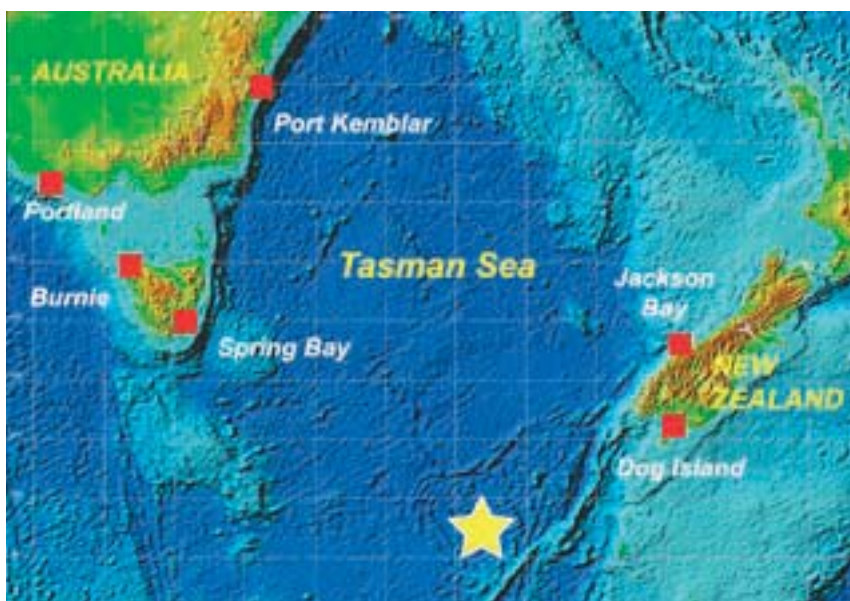
# NORTH OF MACQUARIE ISLAND, $M_W=8.1$ , 23 DECEMBER 14:59 UTC

An earthquake of magnitude  $M_W$  8.1 (HRV) occurred at 14:59 UTC on 24 December 2004, north of Macquarie Island and 405 km west of Auckland Island, New Zealand. The Harvard CMT suggests a 28-km focal depth along a transform fault line trending roughly northeast southwest.

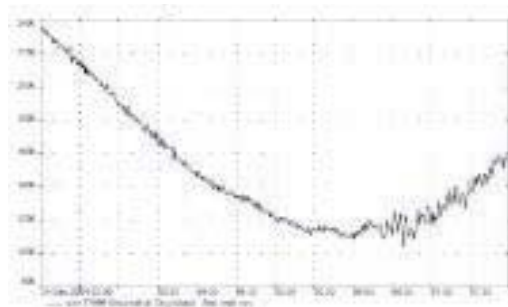
The earthquake was felt throughout Tasmania, Australia and over much of the South Island, New Zealand.

A small tsunami (0.2 m crest-to-trough) was observed on the Dog Island sea level gauge located offshore from Bluff Harbor, New Zealand National Institute of Water and Atmospheric Research (NIWA). The National Tidal Centre (Bureau of Meteorology, Australia) also reported that small tsunamis were observed at Jackson Bay, New Zealand (0.3 m crest-to-trough, 24-min period), Spring Bay, Tasmania (0.15 m), and Port Kembla, New South Wales (0.10 m).

No tsunami was detectable above the background noise at Burnie, Tasmania or Portland, Victoria.



Dog Island, NZ



New Zealand and Australia  
1-minute sample sea level records.  
The time of the earthquake  
is indicated by the triangle  
(above). (Data courtesy of James  
Chittleborough, National Tidal  
Centre, Bureau of Meteorology,  
Australia.)

Left: Dog Island, NZ sea level  
record. Data courtesy Rob Bell,  
National Institute of Water and  
Atmospheric Research.

