

## The response of New Zealand waters to the Peru tsunami of 23 June 2001

Derek G. Goring

*National Institute of Water and Atmospheric Research Ltd., Christchurch, New Zealand*

**Abstract.** The Peru tsunami of 23 June 2001 arrived at New Zealand's east coast 16.5 hrs after generation, having travelled approximately 8000 km across the Pacific Ocean. All the sea-level recorders on the east coast recorded waves, but the response was highly variable, with the greatest response in Lyttelton Harbour, where the water initially fell by 26 cm, then rose over the next hour to peak at 30 cm. None of the recorders on the west coast felt the tsunami. The time-scale of the waves was between 2 and 20 min and they persisted for more than 20 hrs after the first waves arrived, before starting to slowly decay. In some places, like Pegasus Bay, the tsunami excited local seiche, but these waves quickly dissipated.

---

<sup>1</sup>National Institute of Water and Atmospheric Research Ltd., P.O. Box 8602, Christchurch, New Zealand (d.goring@niwa.cri.nz)