PRINCIPAL EARTHQUAKES IN NEW ZEALAND IN 1996

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It was a quiet year for earthquakes throughout New Zealand in 1996. In each of the previous three years a large earthquake with thousands of aftershocks has occurred. In comparison, 1996 was a return to quiet times, with no shallow earthquake larger than magnitude six being recorded.

The most damaging earthquakes occurred near Hanmer in the South Island on August 29 and September 20. These shocks were both of about magnitude 5.5 and mainly caused damage to contents of dwellings in Hanmer. Local residents have since continued to be disturbed by small aftershocks.

On September 28 a large deep earthquake of magnitude 6.2, located under the central North Island, was felt from Christchurch to Auckland. This shock, the largest for the year, caused no significant damage because of its 220 km depth. There is a zone of deep earthquakes under the North Island due to the collision of the Pacific and Australian tectonic plates. The more dense Pacific Plate is sinking slowly under the Australian Plate, and the zone of deep earthquakes is due to the heating and bending of this material as it sinks.

Southern Hawke's Bay was hit by two magnitude 5.0 earthquakes during the year, the first on April 8 and the other on October 6. Neither event was sufficiently large or shallow to cause significant damage. A slightly larger magnitude 5.3 earthquake on June 1 occurred 10 km east of Levin, and was felt as far away as Christchurch. It had a depth of 36 km, so again was not significantly damaging. On December 23 a magnitude 5.2 earthquake occurred near Palmerston North. The depth was 80 km, so again little damage was reported.

Mt Ruapehu erupted for a second time within a year on June 17. As was the case for the 1995 eruption, there was little associated seismic activity, just small earthquakes and volcanic tremor associated with the actual eruption near the crater.

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