

Massive quake moves NZealand closer to Australia

July 22 2009, by David Brooks



The Great Barrier Reef off Australia's eastern coast. A massive 7.8 magnitude earthquake last week has moved the south of New Zealand closer to Australia, scientists said

A massive 7.8 magnitude earthquake last week has moved the south of New Zealand closer to Australia, scientists said Wednesday.

With the countries separated by the 2,250-kilometre-wide (1,400-mile-wide) Tasman Sea, the 30 centimetre (12 inch) closing of the gap in New Zealand's southwest won't make much difference.

But [earthquake](#) scientist Ken Gledhill of GNS Science said the shift illustrated the huge force of the tremor, the biggest in the world so far this year.

"Basically, New Zealand just got a little bit bigger is another way to think about it," he told AFP.

While the southwest of the South Island moved about 30 centimetres closer to Australia, the east coast of the island moved only one centimetre westwards, he said.

The biggest [quake](#) in New Zealand in 78 years caused only slight damage to buildings and property when it struck the remote southwest Fiordland region of the South Island last Thursday.

A small tsunami was generated by the earthquake, with a tide gauge on the West Coast of New Zealand recording a wave of one metre.

"For a very large earthquake, although it was very widely felt, there were very few areas that were severely shaken," Gledhill said.

Aerial inspection of the forested fiords near the quake's epicentre showed few land slips or other signs of damage.

This was partly because the type of rupture at the boundaries of the Australian and Pacific plates meant the energy from the quake was largely directed westwards towards the sea rather than inland towards the nearest towns.

The type of quake, known as a subduction thrust rupture, also meant the quake produced lower frequency shaking, felt as a rolling motion, rather than sharp jolts which would have caused more damage.

New Zealand frequently suffers earthquakes because it marks the meeting point of the Australian and Pacific continental plates.

Gledhill said the latest quake may have brought forward a major quake

on the offshore section of the Alpine fault, off the coast of Fiordland in the Tasman Sea.

"There could easily be another large earthquake in another part of that region. We can't predict that obviously."

The latest quake was the biggest since February 2, 1931 when a 7.8 quake killed at least 256 people in the North Island city of Napier.

The biggest quake recorded here measured 8.2 and caused major damage in 1855 in the fledgling European settlement that later became the capital Wellington.

The latest quake was unusual in striking right on the boundary of the Australian and Pacific plates and will be important in researching earthquake hazards, Gledhill said.

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