

Seismologists warn of more quakes in New Zealand

November 18 2016



People walking to a helicopter with their suitcases as hundreds of tourists were evacuated from Kaikoura, after an earthquake hit New Zealand

Seismologists in New Zealand said Friday that this week's 7.8 earthquake was one of the most complex ever recorded and warned there was a high likelihood of further powerful aftershocks.

As a massive clean-up continued following the tremor that claimed two lives early Monday, scientists were coming to grips with the "astonishing" scale of the seismic seizure.

The official GeoNet science agency said the land moved up to 11 metres (36 feet) along the many faultlines in the South Island disaster zone, permanently changing the region's geography.

The quake also pushed up the seabed by as much as two metres along a 110 kilometre (70 mile) stretch of coastline that includes the tourist town of Kaikoura.

GeoNet said the quake ruptured at least four faults and was "clearly... one of the most complex earthquakes that has ever been observed".

New Zealand is on the boundary of the Australian and Pacific tectonic plates, which form part of the so-called "Ring of Fire", and experiences up to 15,000 tremors a year.

There have been well over 2,000 aftershocks since Monday and the agency said statistical analysis showed residents should prepare for more major shakes in the coming weeks.

The current probability of quakes of magnitude 6.0 and above hitting in the next month was "about 100 times larger than what we would normally expect", it said.



Stranded tourists relaxing on the HMNZS Canterbury after being evacuated from Kaikoura, following an earthquake in New Zealand

The warning came as warships from the United States, Canada and Australia began delivering emergency supplies to Kaikoura, which bore the brunt of the tremor.

A convoy of New Zealand military vehicles also reached the town by land for the first time, travelling via a back road after huge landslides cut the main highway and rail lines.

About 1,000 tourists were evacuated from Kaikoura by air and sea in the days after the quake but some 2,000 locals still face difficult conditions.

The occupants of eight houses were ordered to flee their homes early Wednesday amid fears a cliff could fall on them following heavy rains.

Authorities also warned that some rain-swollen rivers had been blocked by quake debris, creating dangerous temporary dams.



Stranded tourists were evacuated from Kaikoura to a naval ship on November 16, 2016, after an earthquake hit New Zealand two days earlier

"Landslide dams can break quickly, and release large volumes of water and sediment as a flood wave," Civil Defence director Sarah Stuart-Black said.

The tremor was felt across the country, causing violent shaking in Wellington about 250 kilometres (155 miles) away.

Many buildings in the capital have been sealed off amid fears they have sustained structural damage, including an office block housing the

defence department's headquarters.

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