

TONGA—2009 May 19 (May 20 local time)

Earthquake Details

Magnitude	7.6
Date-Time	Thursday, March 19, 2009 at 18:17:40 UTC Friday, March 20, 2009 at 06:17:40 AM at epicenter Time of Earthquake in other Time Zones
Location	23.050°S, 174.668°W
Depth	34 km (21.1 miles) set by location program
Region	TONGA REGION
Distances	220 km (135 miles) SSE of NUKU'ALOFA, Tonga 490 km (305 miles) S of Neiafu, Tonga 495 km (305 miles) ESE of Ndoi Island, Fiji 1845 km (1140 miles) NE of Auckland, New Zealand
Location Uncertainty	horizontal +/- 5.5 km (3.4 miles); depth fixed by location program
Parameters	NST=323, Nph=323, Dmin=760.8 km, Rmss=0.96 sec, Gp= 14°, M-type=teleseismic moment magnitude (Mw), Version=A
Source	USGS NEIC (WDCS-D)
Event ID	us2009ejbr

MEDIA COVERAGE

Title:Strong quake hits Tonga

Source:Arabia 2000; 03/20/2009 **Database:** Newspaper Source

Strong quake hits Tonga

Nuku'alofa, March 20 (QNA) - A major 7.9-magnitude earthquake shook the South Pacific nation of Tonga Friday, prompting a tsunami warning but causing no major damage, officials said.

The quake, which hit at 7.17 am (1817 GMT), was centred 210 kilometres south-southeast of the Tongan capital Nuku'alofa, the United States Geological Survey (USGS) said.

There were no immediate reports of injury or damage from the quake, which was felt more than 3,000 kilometers away in New Zealand. A tsunami warning for islands within 625 miles of the epicenter was canceled two hours later.

A 5.2-magnitude aftershock was also recorded in the same region just over two hours after the initial quake.

A resident of Nuku'alofa said there was no sign of significant damage or of a tsunami after the shallow quake, which struck at a depth of 10 kilometres

Tonga, a 170-island archipelago about halfway between Australia and Tahiti, is part of the Pacific “ring of fire” - an arc of earthquake and volcanic zones stretching from Chile in South America through Alaska and down through Vanuatu to Tonga. (QNA)

QS,MD QNA 0716 GMT 2009/03/20

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nzherald.co.nz

Tsunami alert cancelled after large Tonga quake

12:47PM Friday Mar 20, 2009



***A sea volcano has been erupting in the area in recent days.
Photo / AP***

No damage has been reported on Tonga's main island following a 7.7 magnitude earthquake this morning.

Waves just a few centimetres high washed ashore on Tongatapu.

Radio and TV Tonga news editor Talita Tuipulotu says fortunately there have been no casualties although locals have been calling in wanting to know if work and school is still being held today.

Authorities are still waiting to hear whether the 47 other inhabited islands have suffered any damage.

Civil Defence in New Zealand cancelled its tsunami warning following the earthquake.

It had earlier said a tsunami was "possible" but unlikely.

The US Geological Survey said the quake struck at 7.17am NZT at a depth of 10km. Its epicentre was about 210 km south-south-east of the Tongan capital Nuku'alofa.

The quake came after an undersea volcano has been erupting for days in the region.

A tsunami warning was issued by the Pacific Tsunami Warning Centre and Civil Defence had been monitoring the situation.

"There's a tsunami in the water, but it's not gonna do much," said Robert Cessaro, a geophysicist with the tsunami centre told CNN.

Jose C. Borrero, a researcher with Raglan based oceanographic consultants ASR Limited and the University of Southern California, told nzherald.co.nz that any tsunami hitting New Zealand was likely to be limited.

He said: "Because of the orientation of the Tonga-Kermadec trench relative to New Zealand, tsunami generated from this area are not 'aimed' towards NZ, so the wave heights are quite small upon reaching Northland or the Bay of Plenty".

GNS Science convened its tsunami expert panel and all available New Zealand and international data about the earthquake and sea levels was being monitored earlier this morning.

Civil Defence spokesman Vince Cholewa said: "There is no evidence that a tsunami has been generated, but an earthquake of that magnitude at that shallow a depth can theoretically create a tsunami. If it did, it would most probably only be in the Tongan region."

The Pacific Tsunami Warning Centre earlier predicted these times for a tsunami to hit if one was formed by the earthquake, which was not confirmed:

Tonga, Nukualofa – 7.45am NZT

Niue, Niue Islands – 8.04am NZT

Kermadec Is, Raoul Islands – 8.12am NZT

American Samoa, Pago Pago – 8.25am NZT

Samoa, Apia – 8.34am NZT

Wallis-Futuna, Wallis Is. – 8.47am NZT

Fiji, Suva – 9.03am NZT

– NZ HERALD STAFF

Title:Tsunami fears in Tonga Quake shake

Authors:TONGA Nuku'alofa, Friday

Source:Geelong Advertiser; 03/21/2009, p32-32, 1 Item: 200903211032405710

Database: Newspaper Source

Tsunami fears in Tonga Quake shake

Section: World Edition: 1 - Main

A MAJOR 7.9-magnitude earthquake shook the South Pacific nation of Tonga on Friday, prompting a tsunami warning but causing no major damage, officials said.

The quake, which hit at 7.17am (5.17am AEDT), was centred 210km south-southeast of the Tongan capital Nuku'alofa, the United States Geological Survey (USGS) said.

A 5.2-magnitude aftershock was also recorded in the same region just over two hours after the initial quake.

A resident of Nuku'alofa said there was no sign of significant damage or of a tsunami after the shallow quake, which struck at a depth of 10 kilometres (six miles).

The US Pacific Tsunami Warning Centre issued a tsunami warning for Tonga, Niue, the Kermadec Islands, American Samoa and Fiji, but lifted it nearly two hours after the quake struck.

The centre later said that a tsunami had been generated that could have been destructive along coastlines of the region near the earthquake epicentre.

In Fiji, the authorities warned people to move to higher ground and schools along the coast were closed. Many schools and government offices stayed closed until after the warning was lifted.

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Title: Quake shakes volcano

Source: Townsville Bulletin; 03/21/2009, p16-16, 1 Item: 200903211016570879

Database: Newspaper Source

Quake shakes volcano

Section: News Edition: 1 -

A POWERFUL 7.9-magnitude earthquake struck yesterday in the Pacific Ocean, shaking an erupting underwater volcano off Tonga's main island and raising fears of increased lava and ash flows, officials said.

There were no immediate reports of injury or damage from the quake, which was felt more than 3000km away in New Zealand. A tsunami warning for islands within 1000km of the epicentre was cancelled two hours later.

Tongan government chief seismologist Keleti Mafi warned the powerful quake ``will

directly affect the eruption" of the volcano about 10km from the south-west coast of Tongatapu island and could lead to more molten lava and ash flowing into the sea.

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Title:Quake triggers tsunami alert

Source: Herald Sun (Melbourne); 03/21/2009, p22-22, 1 Item: 200903211022403349

Database: Newspaper Source

Quake triggers tsunami alert

Section: NEWS Edition: 1 - FIRST

AN earthquake shook Tonga yesterday, prompting a tsunami warning.

The 7.9-magnitude quake, which hit at 7.17am, was centred 210km south of the Tongan capital Nuku'alofa.

A 5.2-magnitude aftershock was also recorded.

A resident of Nuku'alofa said there was no sign of significant damage or of a tsunami after the shallow quake, which struck at a depth of 10km.

The US Pacific Tsunami Warning Centre issued a warning for Tonga, Niue, the Kermadec Islands, American Samoa and Fiji, but lifted it nearly two hours after the quake.

The centre later said that a tsunami had been generated that could have been destructive along coastlines of the region near the earthquake's epicentre.

In New Zealand, the Ministry of Civil Defence issued a tsunami advisory for all coastal regions. It said after cancelling the alert that a 4cm rise in sea level was recorded.

A volcanic eruption near Tonga has destroyed rich birdlife and vegetation on the small, uninhabited islet of Hunga Ha'apai, witnesses said.

The volcano continued to erupt yesterday after starting on Monday.

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Title:TSUNAMI WARNING Quake rattles Tonga

Source:Gold Coast Bulletin, The; 03/21/2009, p22-22, 1 Item: 20090321B022486111

Database: Newspaper Source

TSUNAMI WARNING Quake rattles Tonga

Section: World Briefing Edition: B - Main

A MAJOR 7.9-magnitude earthquake shook the South Pacific nation of Tonga yesterday, prompting a tsunami warning but causing no major damage, said officials.

The quake, which hit at 7.17am, was centred 210km south of the Tongan capital

Nuku'alofa, said the United States Geological Survey.

A 5.2-magnitude aftershock was recorded just over two hours later. The US Pacific Tsunami Warning Centre issued a tsunami warning but lifted it nearly two hours after the quake struck.

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