

M 7.8, SOUTH ISLAND OF NEW ZEALAND

Origin Time: Sun 2016-11-13 11:02:56 UTC (00:02:56 local)

Location: 42.74°S 173.05°E Depth: 15 km

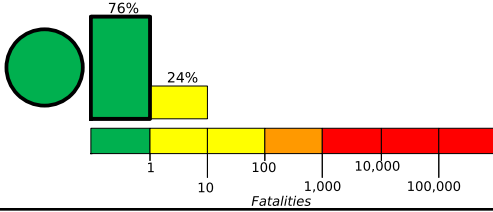
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Created: 12 weeks, 1 day after earthquake

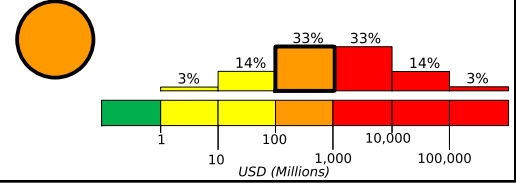
Estimated Fatalities

Orange alert level for economic losses. Significant damage is likely and the disaster is potentially widespread. Estimated economic losses are 0-1% GDP of New Zealand. Past events with this alert level have required a regional or national level response.

Green alert level for shaking-related fatalities. There is a low likelihood of casualties.



Estimated Economic Losses

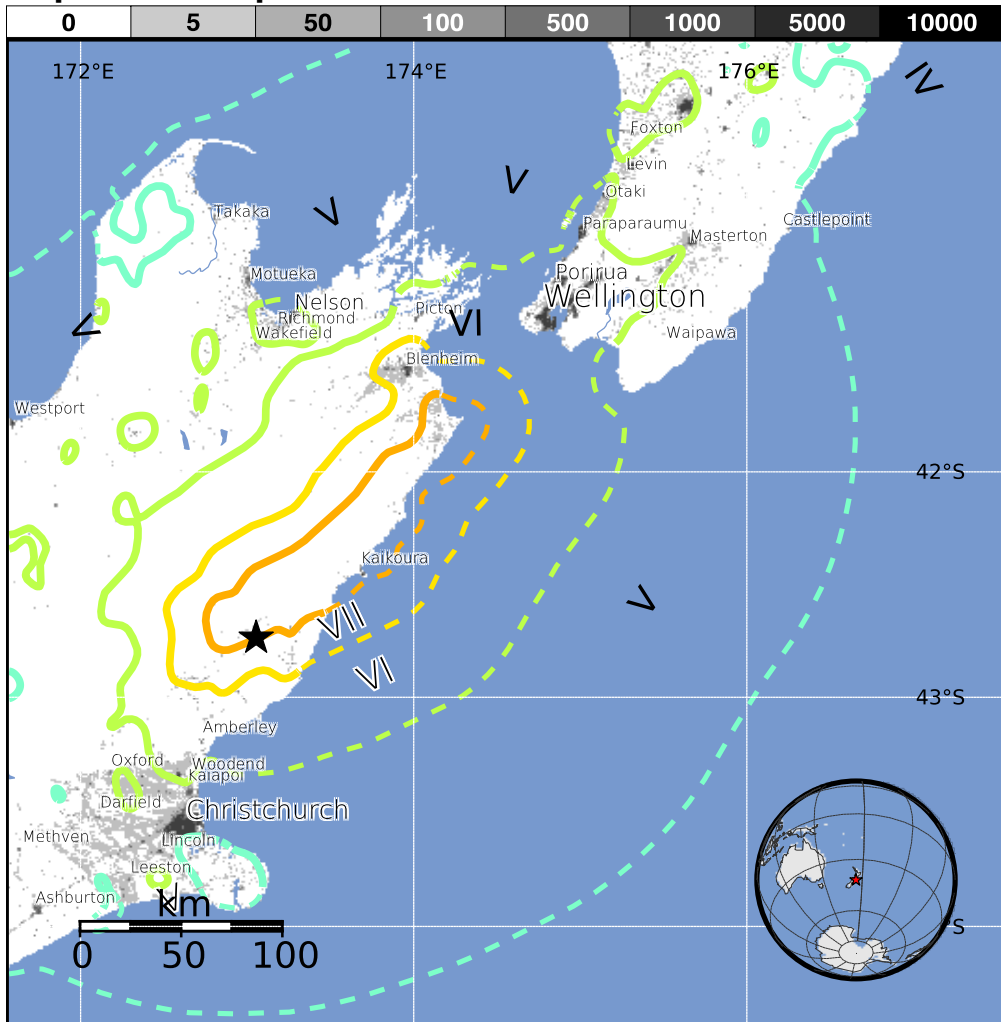


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		--*	--*	14k*	518k*	692k	109k	11k	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures:

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though some vulnerable structures exist.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1984-06-24	219	6.1	VIII(18)	0
1990-02-10	57	6.0	VIII(61)	0
1990-05-13	374	6.4	VIII(440)	0

Selected City Exposure

from GeoNames.org

MMI City	Population
VIII Kaikoura	2k
VII Blenheim	27k
VII Karori	14k
VI Wellington	382k
VI Kelburn	4k
VI Amberley	1k
VI Lower Hutt	101k
VI Richmond	14k
VI Palmerston North	76k
VI Nelson	59k
V Christchurch	364k

bold cities appear on map

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

<http://earthquake.usgs.gov/earthquakes/eventpage/us1000778i>

Event ID: us1000778i