

**M 5.9, COOK STRAIT, NEW ZEALAND**

Origin Time: Fri 2013-08-16 05:31:16 UTC (17:31:16 local)

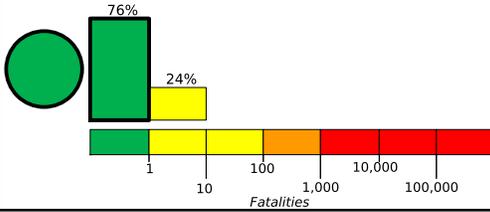
Location: 41.67°S 174.26°E Depth: 14 km

Created: 5 weeks, 6 days after earthquake

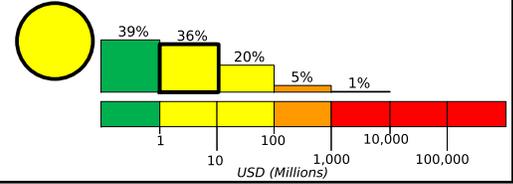
**Estimated Fatalities**

Yellow alert level for economic losses. Some damage is possible and the impact should be relatively localized. Estimated economic losses are less than 1% of GDP of New Zealand. Past events with this alert level have required a local or regional level response.

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



**Estimated Economic Losses**

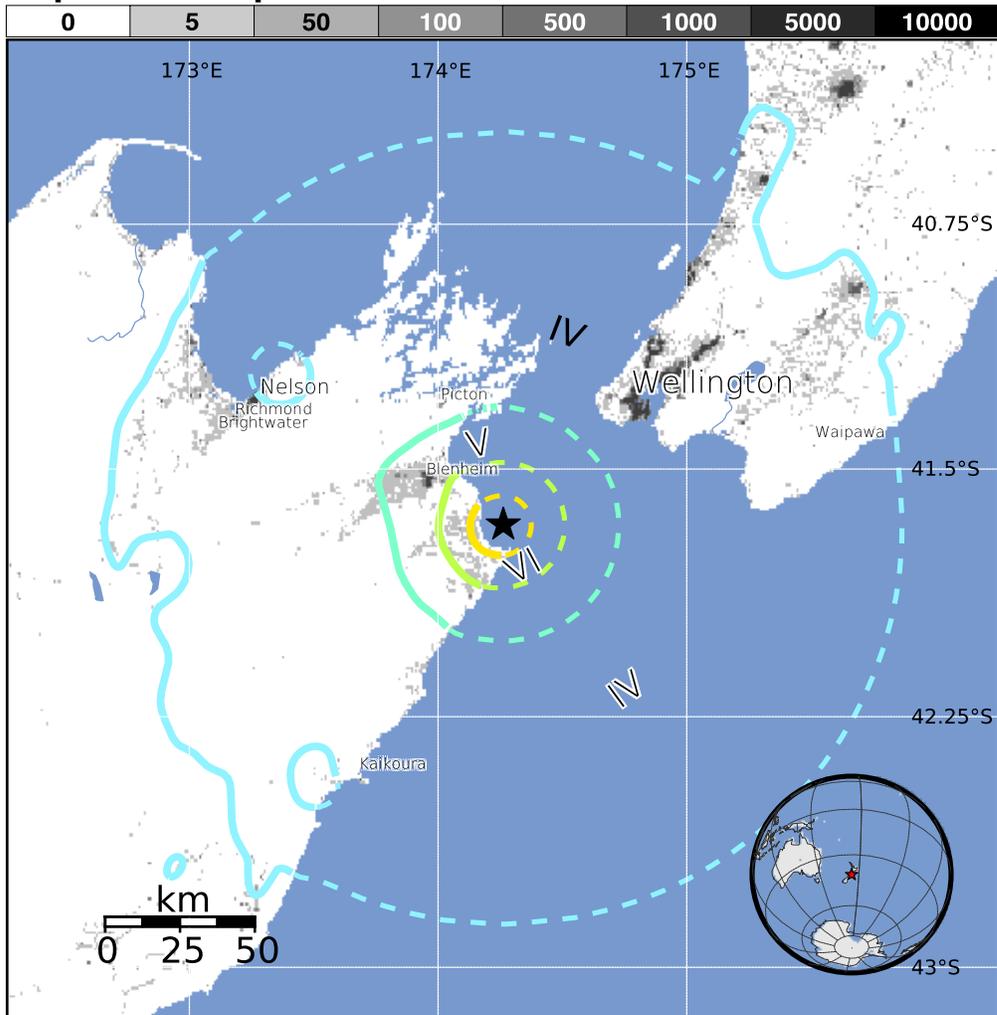


**Estimated Population Exposed to Earthquake Shaking**

ESTIMATED POPULATION EXPOSURE (k = x1000)		--*	173k*	581k	36k	2k	1k	0	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
1995-11-24	239	6.1	VII(71)	0
1990-02-10	130	6.0	VIII(61)	0
1990-05-13	228	6.4	VIII(440)	0

**Selected City Exposure**

from GeoNames.org

MMI City	Population
<b>V</b> Blenheim	27k
<b>IV</b> Picton	3k
IV Karori	14k
IV Porirua	51k
IV Brooklyn	4k
IV Petone	7k
<b>IV</b> Wellington	382k
IV Lower Hutt	101k
<b>IV</b> Richmond	14k
III Palmerston North	76k
<b>III</b> Nelson	59k

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/pager>

Event ID: usb000j4n4