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Earthquake Shaking Green Alert

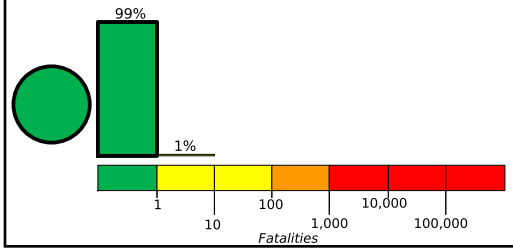
GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 5.4, OFFSHORE COQUIMBO, CHILE

Origin Time: Wed 2015-04-01 08:17:27 UTC (03:17:27 local)
Location: 29.34°S 71.72°W Depth: 31 km

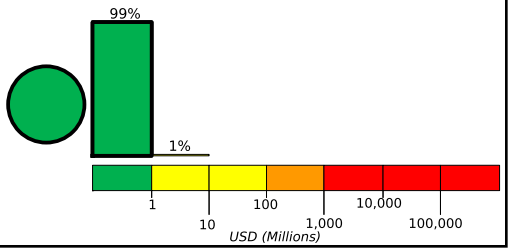
PAGER Version 3
Created: 5 weeks, 0 days after earthquake

Estimated Fatalities



Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses



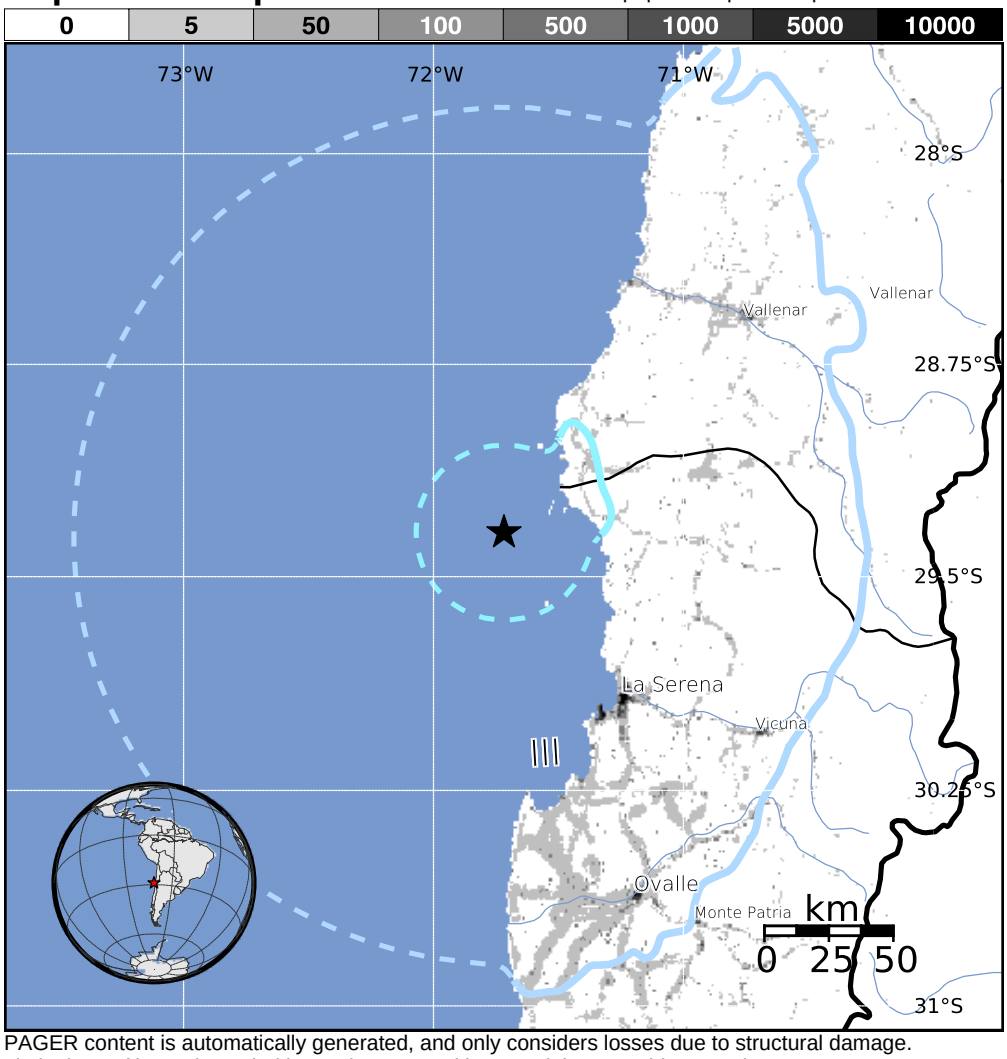
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	634k	99k	0	0	0	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

population per ~1 sq. km from Landscan



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
1975-06-14	370	5.7	V(299k)	0
1983-10-04	334	7.6	VIII(504)	5
1997-10-15	185	7.1	VIII(3k)	7

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	**La Serena**	**155k**
III	Coquimbo	161k
III	**Vicuna**	**13k**
III	**Vallenar**	**45k**
III	**Ovalle**	**77k**
III	**Monte Patria**	**14k**

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: us10001spm