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Earthquake Shaking Green Alert

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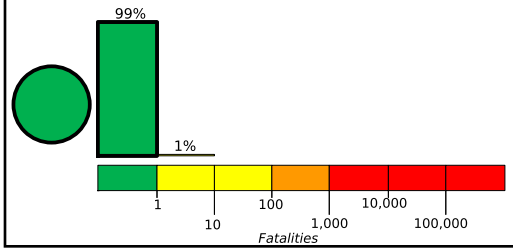
# M 5.5, OFFSHORE COQUIMBO, CHILE

Origin Time: Sun 2015-10-04 03:49:49 UTC (03:49:49 local)
Location: 30.31°S 72.10°W Depth: 5 km

**PAGER Version 3**

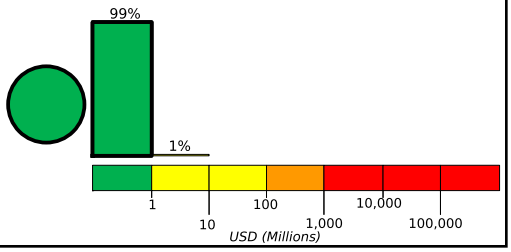
Created: 12 weeks, 3 days after earthquake

## Estimated Fatalities




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

## Estimated Economic Losses



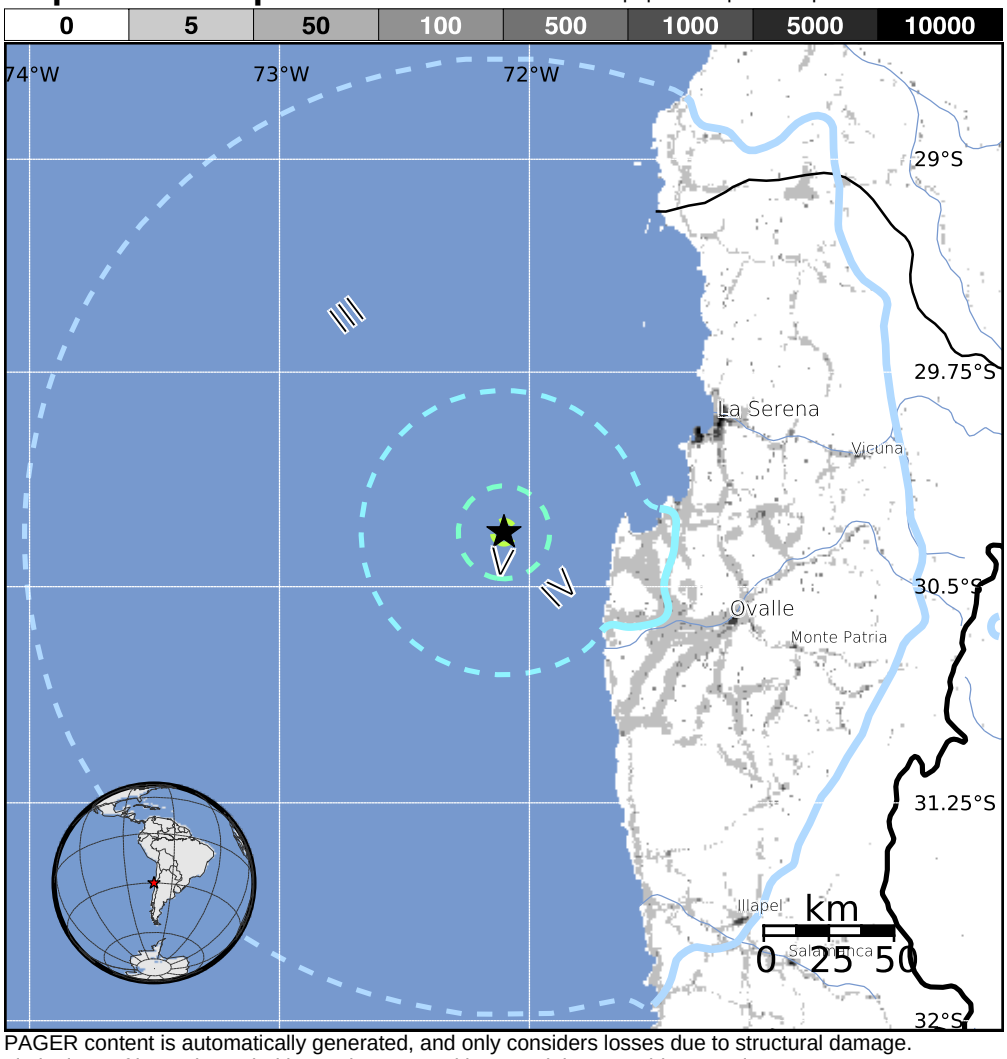

## Estimated Population Exposed to Earthquake Shaking

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ESTIMATED POPULATION EXPOSURE (k = x1000) | | - -* | 746k | 14k | 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 |
|---|---|---|---|---|
| 1986-12-19 | 308 | 5.0 | V(236k) | 0 |
| 1997-10-15 | 113 | 7.1 | VIII(3k) | 7 |
| 1985-03-03 | 317 | 7.9 | VII(7,023k) | 177 |

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

## Selected City Exposure

from GeoNames.org

| MMI | City | Population |
|---|---|---|
| **III** | **La Serena** | **155k** |
| **III** | **Ovalle** | **77k** |
| III | Coquimbo | 161k |
| **III** | **Monte Patria** | **14k** |
| **III** | **Vicuna** | **13k** |
| **III** | **Illapel** | **23k** |
| **II** | **Salamanca** | **13k** |

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: us10003k53