

**M 5.3, OFFSHORE TARAPACA, CHILE**

Origin Time: Fri 2015-07-24 23:14:39 UTC (20:14:39 local)

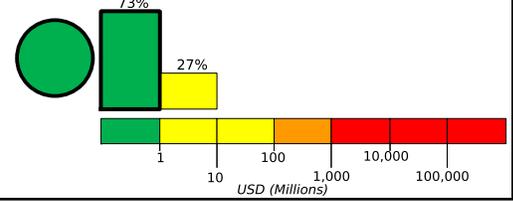
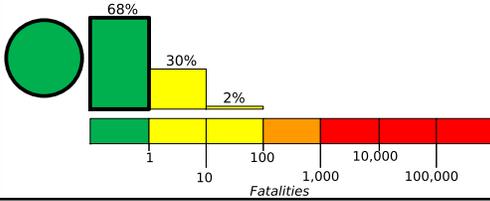
Location: 20.30°S 70.25°W Depth: 34 km

Created: 11 weeks, 6 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**

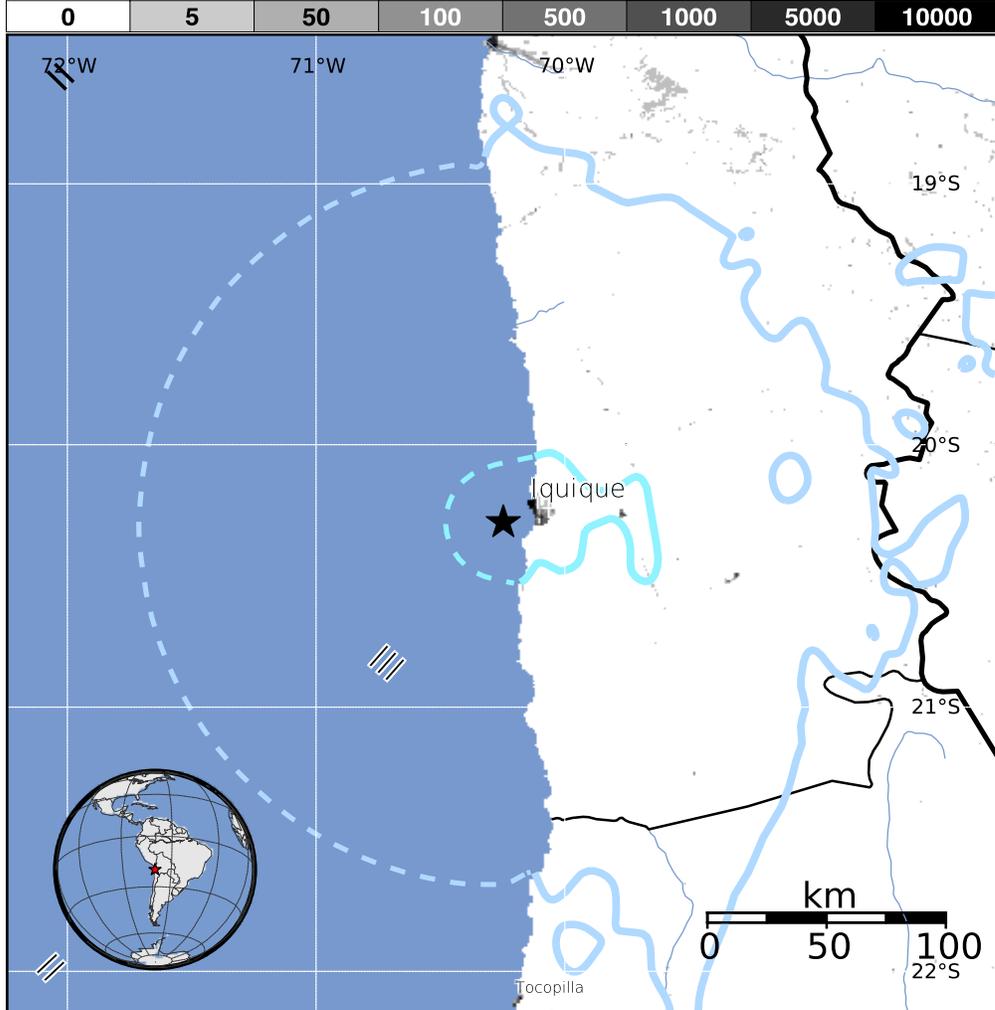


**Estimated Population Exposed to Earthquake Shaking**

ESTIMATED POPULATION EXPOSURE (k = x1000)	--*	280k	155k	146k	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**



**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
1981-01-07	398	5.6	VI(1)	0
1987-08-08	136	7.2	VIII(112)	5
1981-06-21	13	5.7	VII(6k)	10

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
V Iquique	227k
III Arica	186k
II Tocopilla	24k

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>