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Earthquake Shaking Green Alert

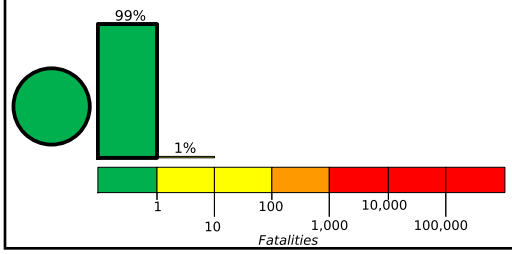
GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 5.7, TONGA

Origin Time: Fri 2013-10-25 17:54:31 UTC (05:54:31 local)
Location: 19.36°S 173.73°W Depth: 8 km

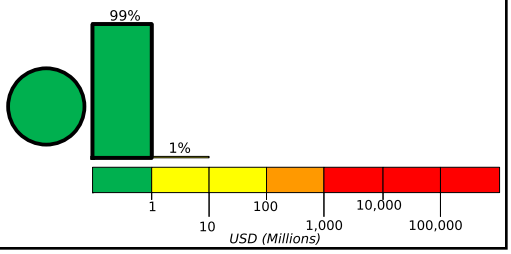
PAGER Version 6
Created: 9 weeks, 6 days after earthquake

Estimated Fatalities



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

Estimated Economic Losses



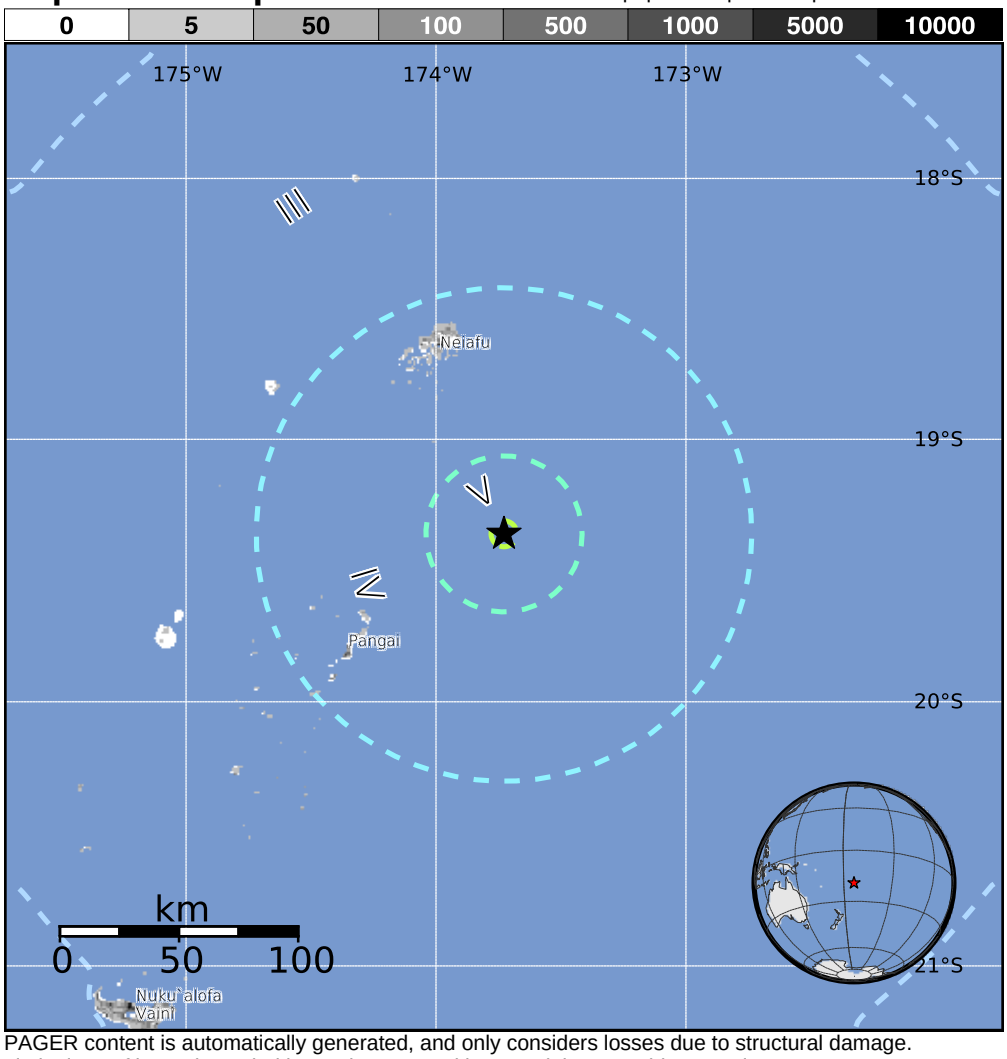
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	87k	26k	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 vulnerable to earthquake shaking, though some resistant structures exist.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2006-09-28	358	6.9	IV(220k)	0
1983-03-21	292	6.7	VII(53k)	0
2006-05-03	97	8.0	VIII(9k)	0

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	**Pangai**	**2k**
IV	**Neiafu**	**4k**
III	**Nuku`alofa**	**22k**
III	Havelu	3k
III	**Vaini**	**3k**

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: usc000kn6g