M 7.7, SOLOMON ISLANDS

Origin Time: Thu 2016-12-08 17:38:47 UTC (17:38:47 local)
Location: 10.67°S 161.34°E Depth: 48 km
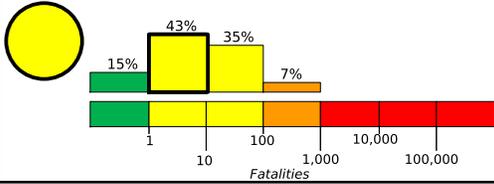**FOR TSUNAMI INFORMATION, SEE: tsunami.gov**

PAGER
Version 1
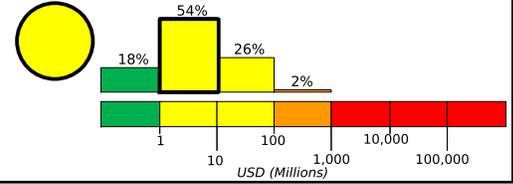Created: 23 minutes, 25 seconds after earthquake

Estimated Fatalities

Yellow alert for shaking-related fatalities and economic losses. Some casualties and damage are possible and the impact should be relatively localized. Past yellow alerts have required a local or regional level response.

Estimated economic losses are 0-1% GDP of the Solomon Islands.

15% | 43% | 35% | 7%

1   10   100   1,000   10,000   100,000
Fatalities

Estimated Economic Losses

18% | 54% | 26% | 2%

1   10   100   1,000   10,000   100,000
USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	2k*	95k	133k	194k	31k	20k	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

| 0 | 5 | 50 | 100 | 500 | 1000 | 5000 | 10000 |
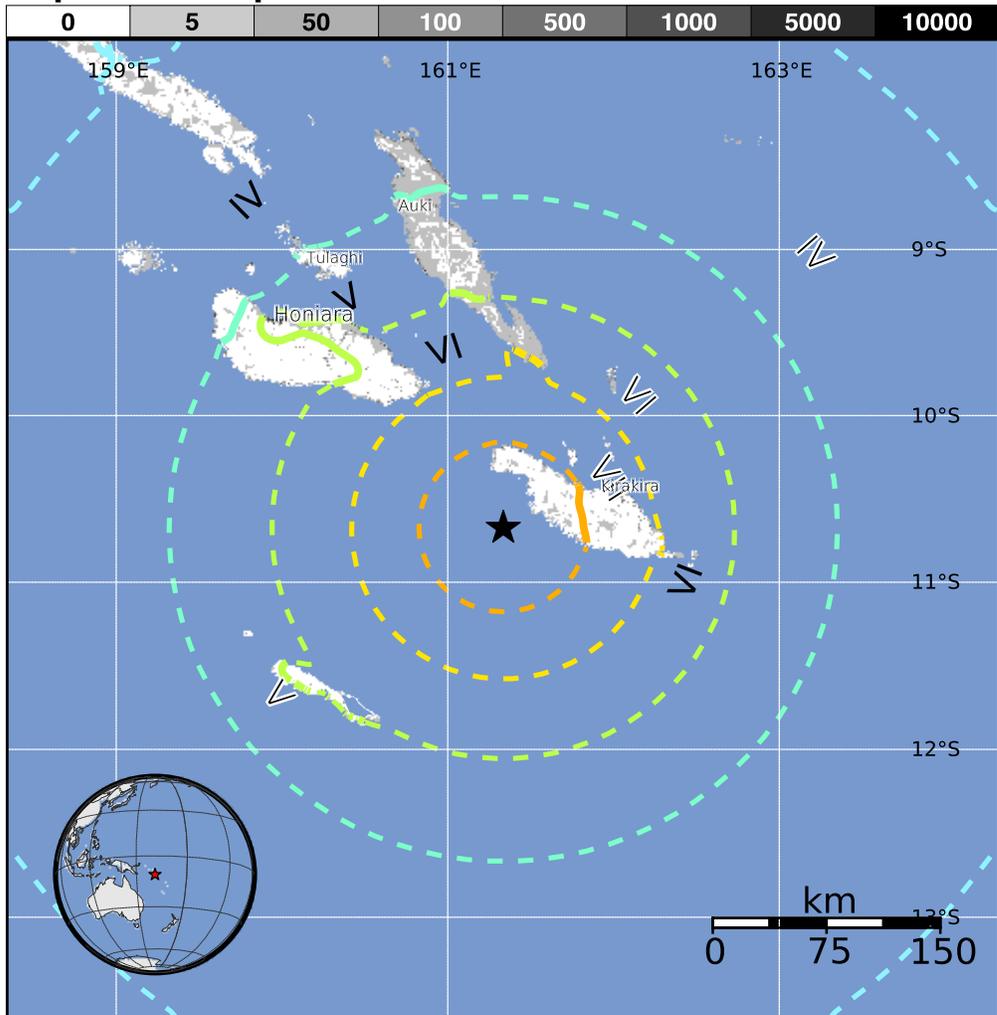
Structures:
Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1989-10-27	121	6.9	VIII(7k)	0
1984-02-07	115	7.5	IX(7k)	0
1977-04-20	144	7.1	IX(17k)	0

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

Selected City Exposure
from GeoNames.org

MMI	City	Population
VII	**Kirakira**	**1k**
VI	**Honiara**	**56k**
V	**Tulaghi**	**1k**
V	**Auki**	**4k**
IV	Buala	< 1k

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/earthquakes/eventpage/us20007z80

Event ID: us20007z80