USGS science for a changing world

Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 6.3, MOLUCCA SEA

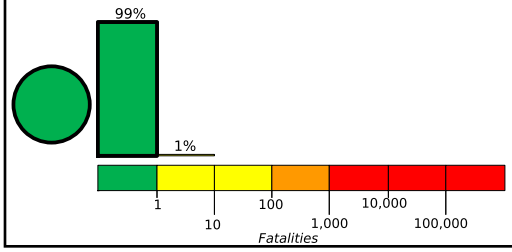
Origin Time: Tue 2016-06-07 19:15:15 UTC (19:15:15 local)

Location: 1.28°N 126.37°E Depth: 31 km

PAGER Version 5

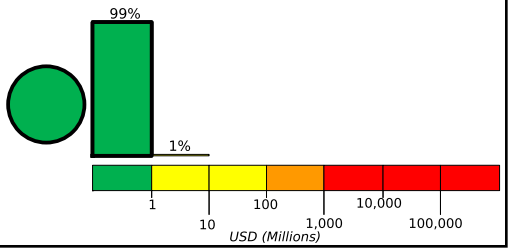
Created: 4 weeks, 5 days after earthquake

Estimated Fatalities



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

Estimated Economic Losses



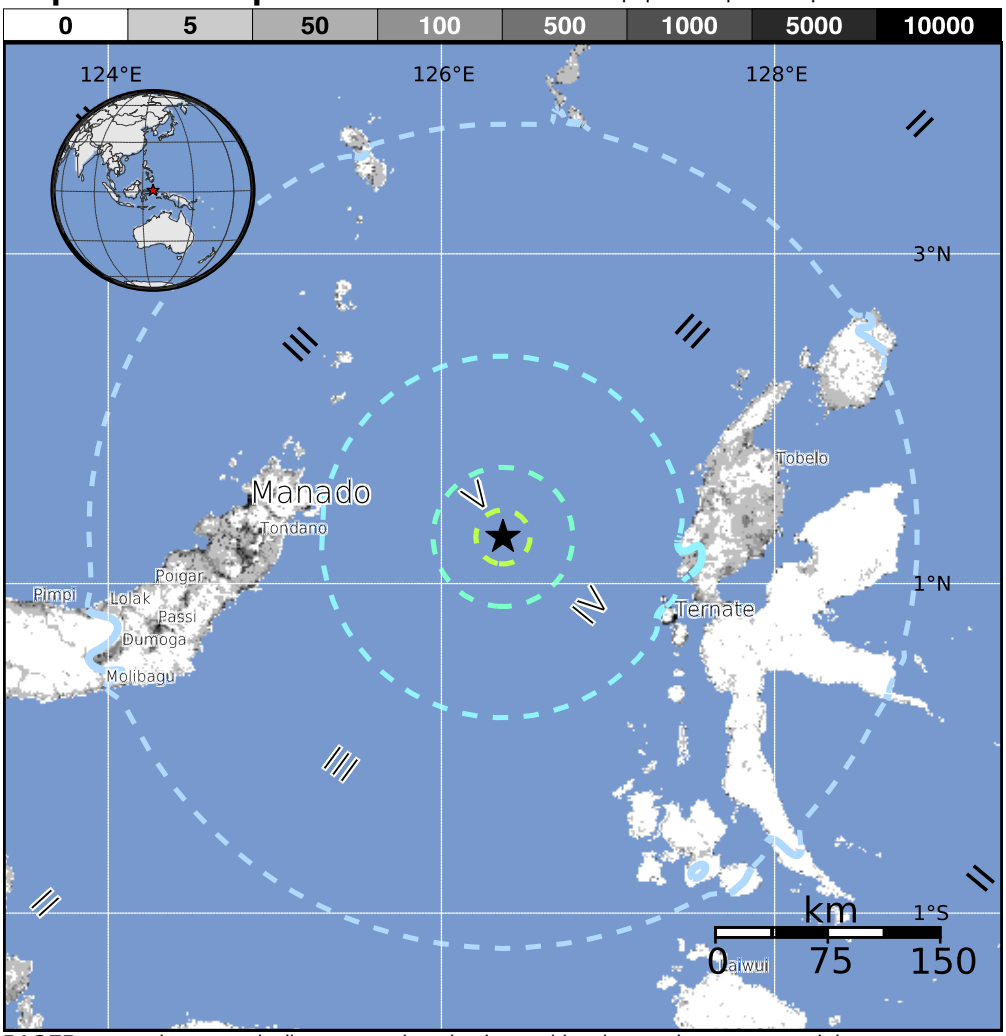
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	3,361k	166k	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
1979-05-18	85	6.3	V(3k)	0
2007-01-21	20	7.5	VI(283k)	3
1998-11-29	398	7.7	VIII(5k)	41

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	**Tondano**	**33k**
III	Bitung	137k
III	**Ternate**	**102k**
III	Kota Ternate	< 1k
III	**Manado**	**452k**
III	Tomohon	28k
III	**Tobelo**	**10k**
III	**Poigar**	**< 1k**
III	Tompasobaru	< 1k
III	**Dumoga**	**< 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/us20006219

Event ID: us20006219