USGS
science for a changing world

Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 6.3, SUMBA REGION, INDONESIA

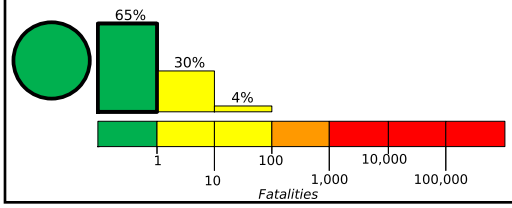
Origin Time: Fri 2016-02-12 10:02:24 UTC (18:02:24 local)
Location: 9.63°S 119.40°E Depth: 28 km

PAGER Version 6

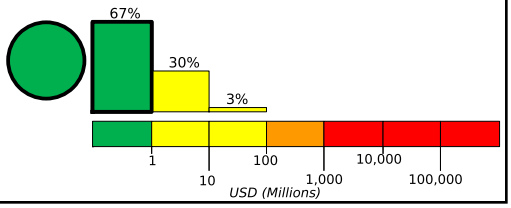
Created: 9 weeks, 6 days after earthquake

Estimated Fatalities

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



Estimated Economic Losses



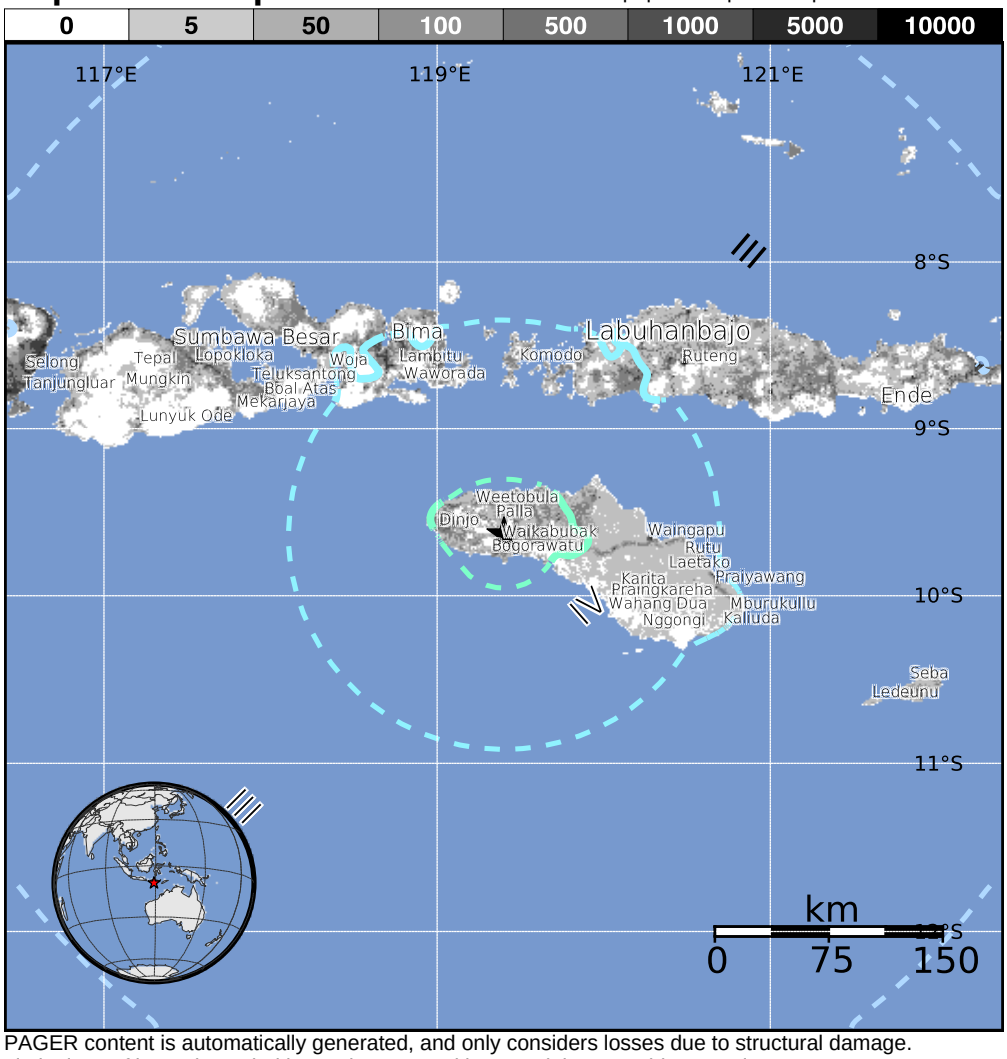
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	3,544k	1,287k	353k	90k	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. The predominant vulnerable building types are concrete/cinder block masonry and nonductile reinforced concrete frame construction.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1977-08-19	204	8.3	VII(246)	0
1992-12-12	293	7.7	VIII(13k)	0
2002-10-06	195	6.2	IX(641)	0

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
VI	Galubakul	< 1k
VI	Waibakul	< 1k
VI	Padedewatu	< 1k
VI	Kabondok	< 1k
VI	Tanarara	< 1k
VI	Tamanaimahu	< 1k
IV	**Waingapu**	**49k**
IV	**Labuhanbajo**	**189k**
IV	**Bima**	**67k**
III	**Sumbawa Besar**	**53k**
III	**Ende**	**77k**

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/us20004zp9

Event ID: us20004zp9