

# M 7.9, NEW IRELAND REGION, PAPUA NEW GUINEA

Origin Time: Sat 2016-12-17 10:51:12 UTC (10:51:12 local)

Location: 4.51°S 153.45°E Depth: 103 km

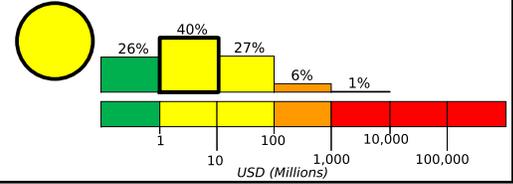
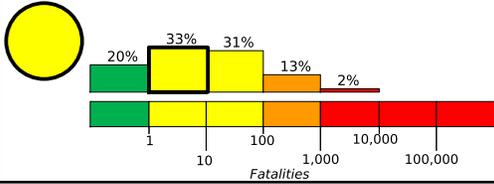
Created: 2 hours, 4 minutes after earthquake

## 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

Estimated economic losses are less than 1% of GDP of Papua New Guinea.

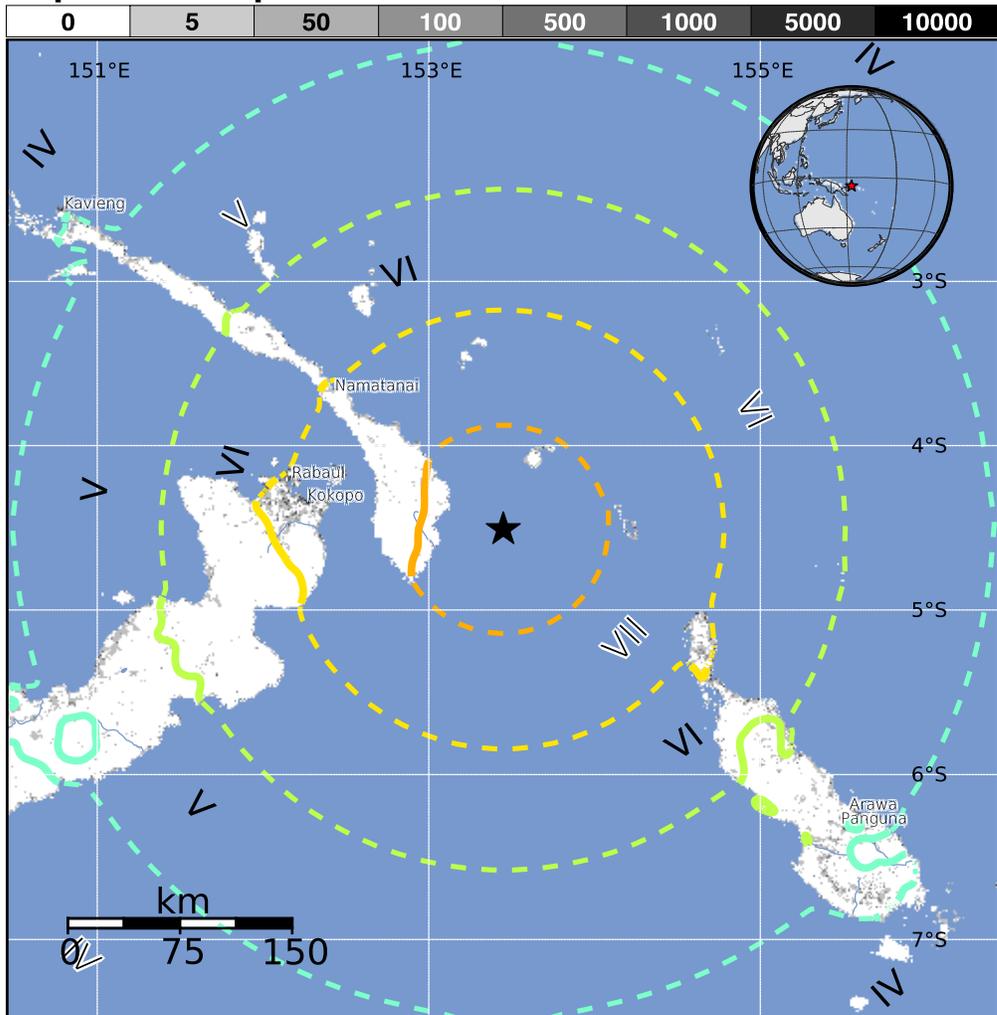


## Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)	--*	--*	31k*	208k	126k	287k	18k	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	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	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 vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are unreinforced brick masonry and informal (metal, timber, GI etc.) construction.

### Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2005-09-09	6	7.6	VIII(14k)	0
2000-11-16	144	8.0	VIII(131k)	1
1983-12-21	201	6.2	VII(5k)	10

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

### Selected City Exposure

from GeoNames.org

MMI City	Population
VII Kokopo	26k
VII Namatanai	1k
VII Rabaul	8k
V Kavieng	14k
V Kieta	4k
V Panguna	3k
V Arawa	40k

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/us200081v8>

Event ID: us200081v8