

M 5.9, MINDANAO, PHILIPPINES

Origin Time: Sun 2016-09-04 02:38:12 UTC (10:38:12 local)

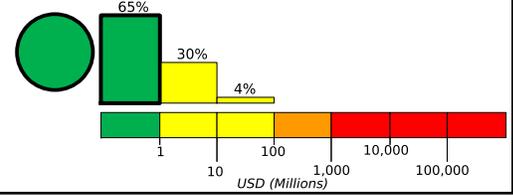
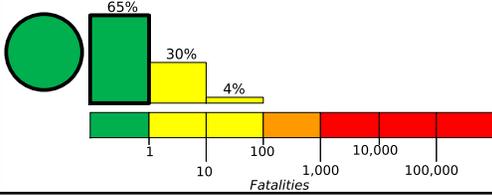
Location: 8.38°N 125.91°E Depth: 12 km

Created: 2 hours, 3 minutes 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



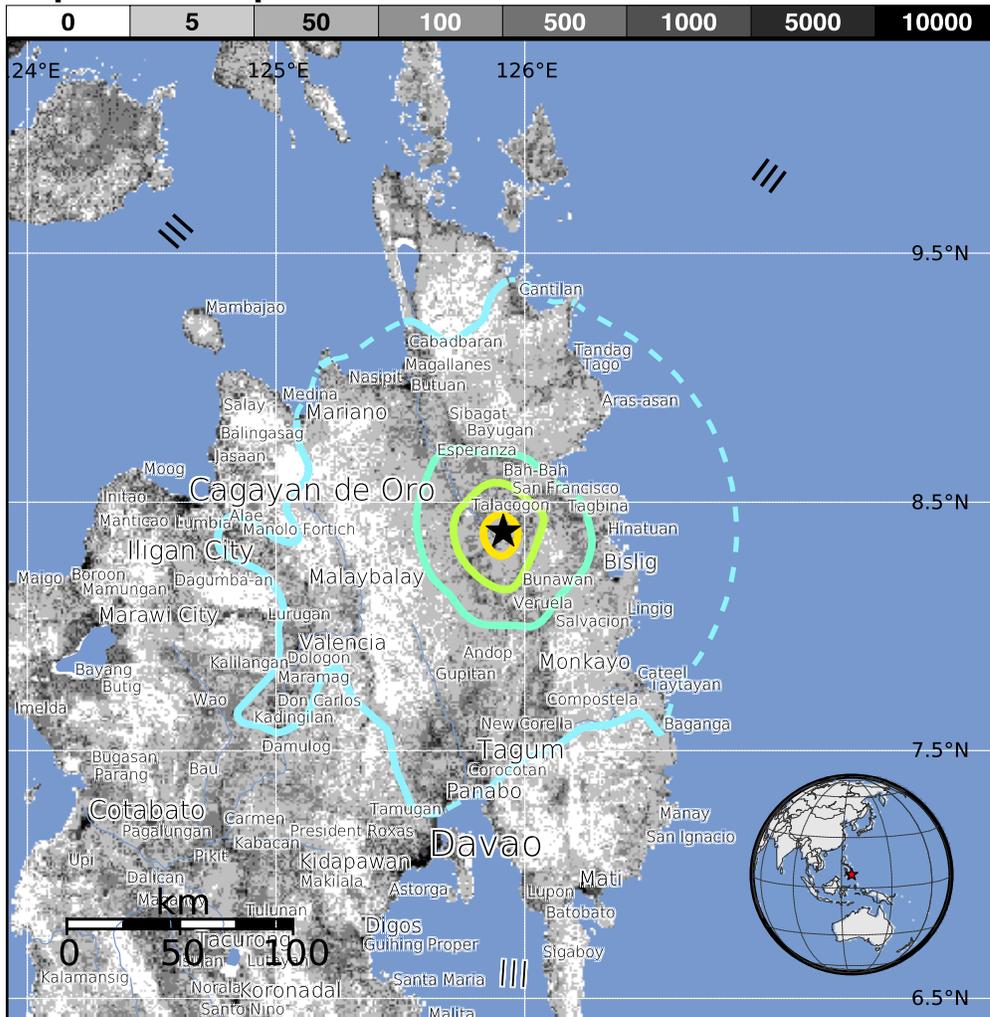
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	13,648k*	5,159k	540k	235k	58k	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 Landsat



Structures:

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1996-10-23	180	5.5	VII(72k)	0
1987-05-23	62	5.7	VII(70k)	1
2002-03-05	323	7.5	VIII(12k)	15

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
VII	Rosario	< 1k
VI	Lapinigan	4k
VI	Causwagan	2k
VI	Borbon	2k
VI	San Francisco	19k
VI	La Paz	4k
IV	Butuan	< 1k
IV	Cagayan de Oro	445k
IV	Davao	1,213k
III	Cotabato	179k
III	Koronadal	126k

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/us10006k8f>

Event ID: us10006k8f