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Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 6.2, NEAR THE COAST OF ECUADOR

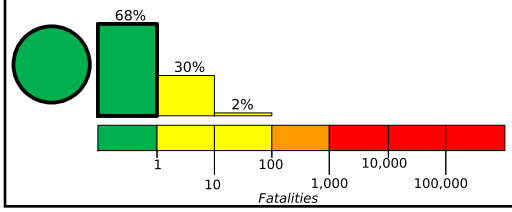
Origin Time: Wed 2016-04-20 08:33:47 UTC (08:33:47 local)
Location: 0.64°N 80.21°W Depth: 14 km

PAGER Version 5

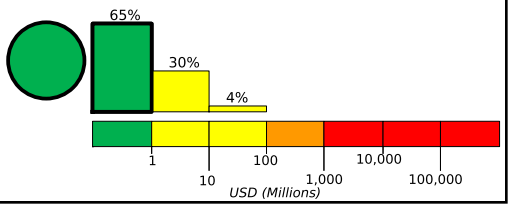
Created: 6 weeks, 2 days after earthquake

Estimated Fatalities

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



Estimated Economic Losses



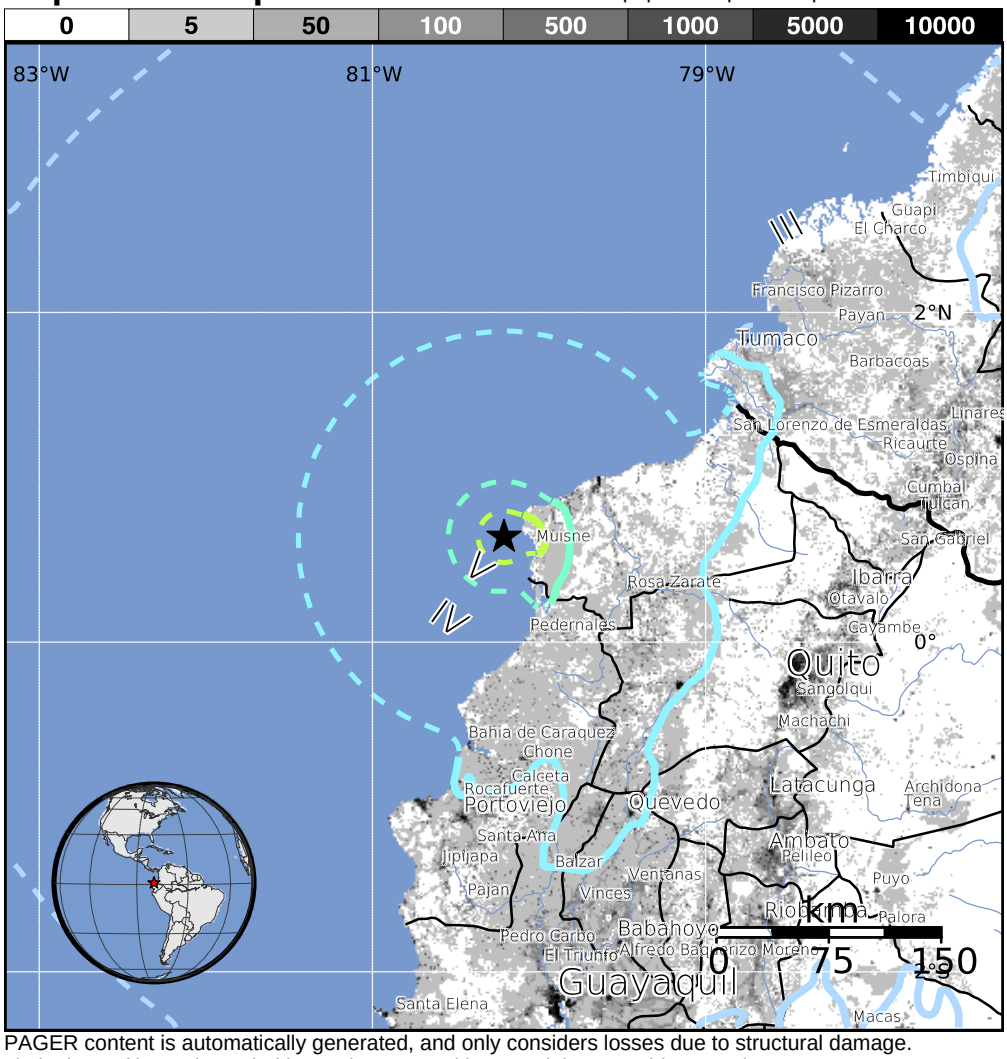
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	12,361k*	2,111k	44k	11k	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 unreinforced brick masonry and mud wall construction.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2005-01-28	208	5.9	VI(594)	0
2000-09-20	285	5.5	VI(99k)	1
1987-03-06	281	7.1	IX(2k)	1k

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	**Muisne**	**13k**
IV	**Pedernales**	**6k**
IV	**Rosa Zarate**	**42k**
IV	Tosagua	15k
IV	Valdez	11k
III	**Portoviejo**	**170k**
III	**Guayaquil**	**1,952k**
III	**Quito**	**1,400k**
III	**Riobamba**	**124k**
III	Pasto	382k

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/us20005k37

Event ID: us20005k37