USGS science for a changing world

Earthquake Shaking — Red Alert

GSN ANSS

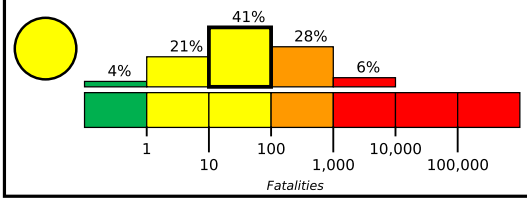
M 7.7, 12 km WSW of Pitaloza Arriba, Panama

Origin Time: 2026-10-09 17:56:06 UTC (Fri 12:56:06 local)
Location: 7.5868° N 80.7690° W Depth: 12.6 km

PAGER Version 5

Created: 1 hour, 24 minutes after earthquake

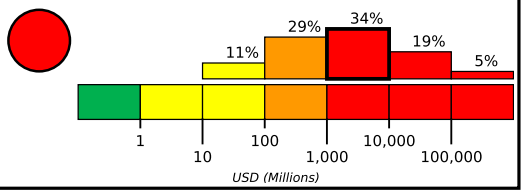
Estimated Fatalities



Red alert for economic losses. Extensive damage is probable and the disaster is likely widespread. Estimated economic losses are 0-9% GDP of Panama. Past events with this alert level have required a national or international level response.

Yellow alert for shaking-related fatalities. Some casualties are possible.

Estimated Economic Losses

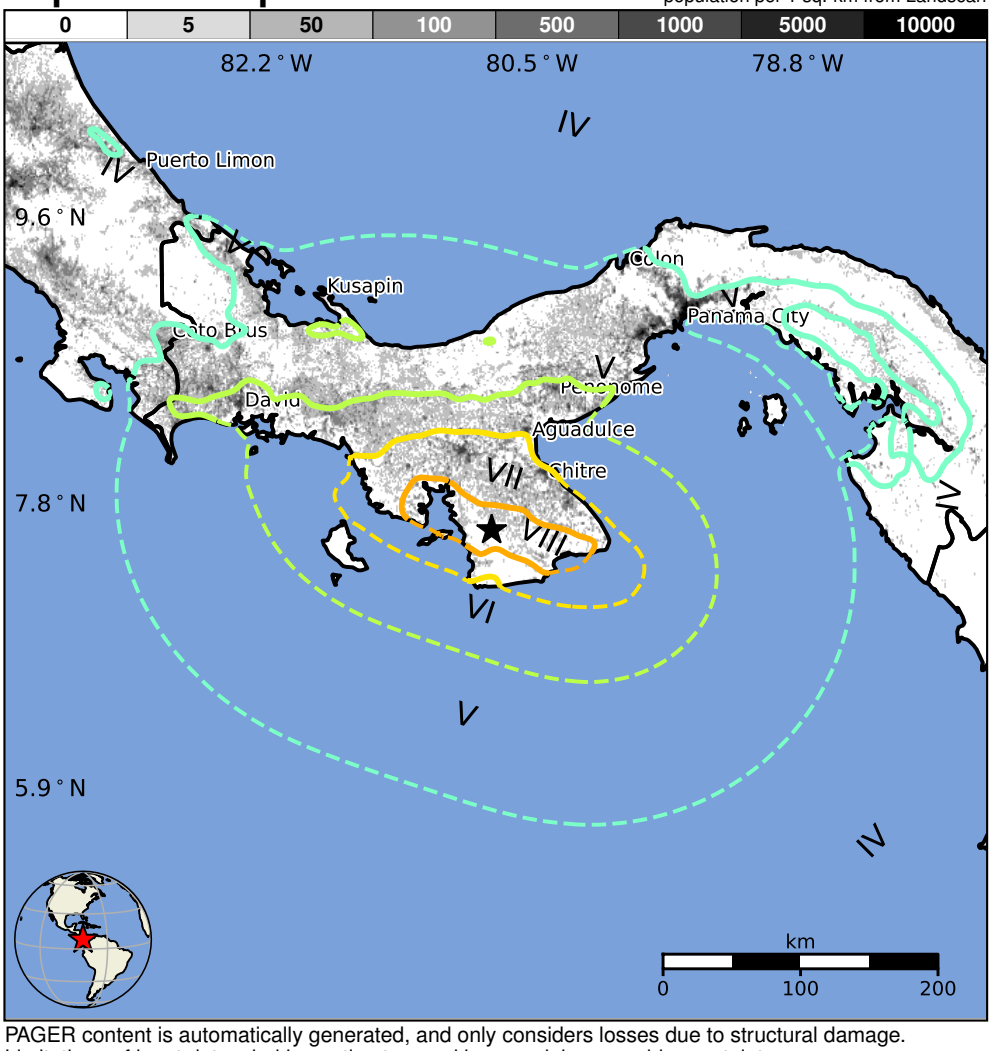


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	–*	1,297k*	3,460k	749k	444k	38k	4k	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	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. 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 a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unreinforced brick masonry and adobe block construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1982-08-19	232	6.8	V(1k)	0
1974-07-13	346	7.3	IX(2k)	11
1991-04-22	342	7.6	VII(213k)	75

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

Selected City Exposure

from simplemaps.com

MMI	City	Population
VIII	Tonosi	2k
VIII	Llano de Piedra	2k
VIII	Macaracas	3k
VII	Pedasi	2k
VII	Las Tablas	11k
VII	Ocu	7k
VII	Guarare	9k
VII	Santiago	46k
VII	Chitre	46k
VI	Nata	6k
VI	Aguadulce	52k

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.

https://earthquake.usgs.gov/earthquakes/eventpage/us6000u18k#pager

Event ID: us6000u18k