Earthquake Shaking Green Alert

M 5.4, 65 km NE of Saman, Dominican Republic

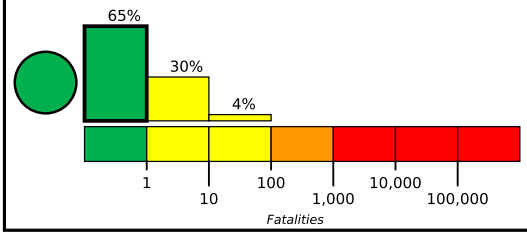
Origin Time: 2023-12-22 18:30:10 UTC (Fri 14:30:10 local)
Location: 19.2745° N 68.6799° W Depth: 7.2 km

PAGER Version 4

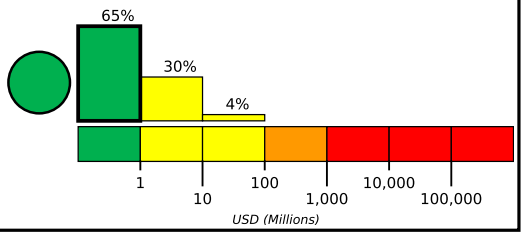
Created: 1 day, 0 hours after earthquake

Estimated Fatalities

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



Estimated Economic Losses



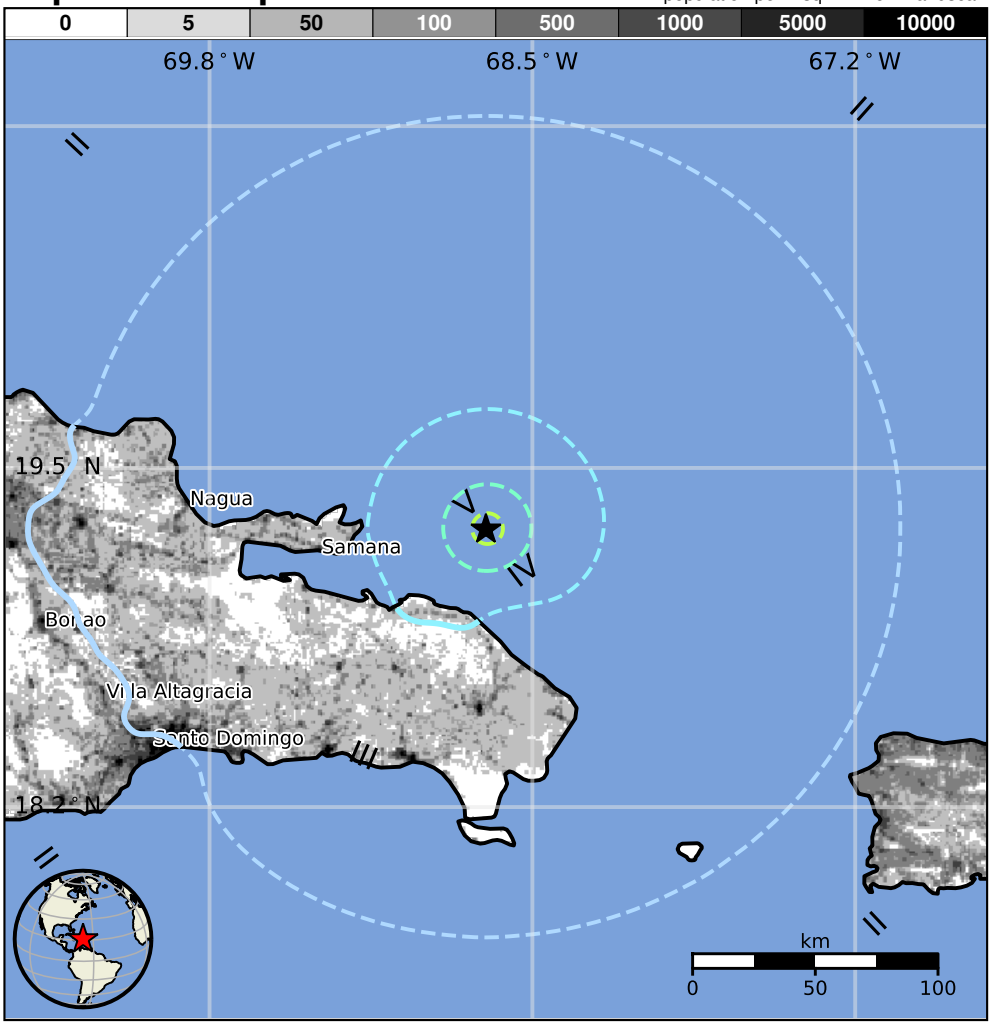
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	8,489k	28k	0	0	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	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

population per 1 sq. km from Landscan



Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2003-09-22	217	6.4	IX(132k)	1
1979-03-23	151	6.6	VI(605k)	0
1984-06-24	161	6.7	VII(326k)	5

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
IV	Miches	9k
III	Santa Cruz de El Seibo	24k
III	Pedro Sanchez	2k
III	**Samana**	**11k**
III	Sabana de La Mar	14k
III	El Valle	6k
III	La Romana	208k
III	San Pedro de Macoris	218k
III	Santo Domingo Este	700k
II	**Santo Domingo**	**2,202k**
II	San Cristobal	154k

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/pr2023356000#pager

Event ID: pr2023356000