# USGS
science for a changing world

**Earthquake Shaking** 🟢 **Green Alert**

GSN • UNITED STATES AGENCY INTERNATIONAL DEVELOPMENT • **USAID** FROM THE AMERICAN PEOPLE
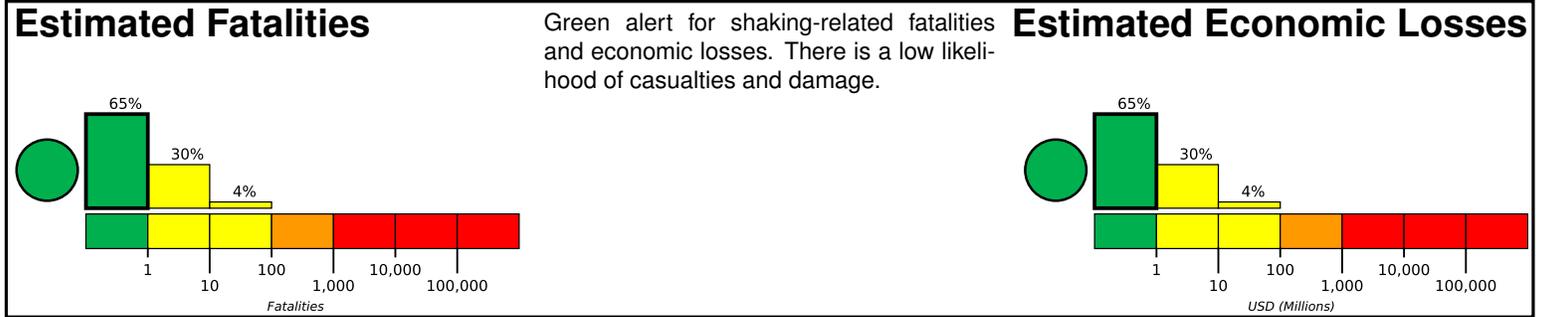
ANSS

**PAGER**
**Version 5**

## M 6.8,
Origin Time: 2023-05-21 14:56:48 UTC (Sun 17:56:48 local)
Location: 43.3991° S 39.3035° E Depth: 28.0 km
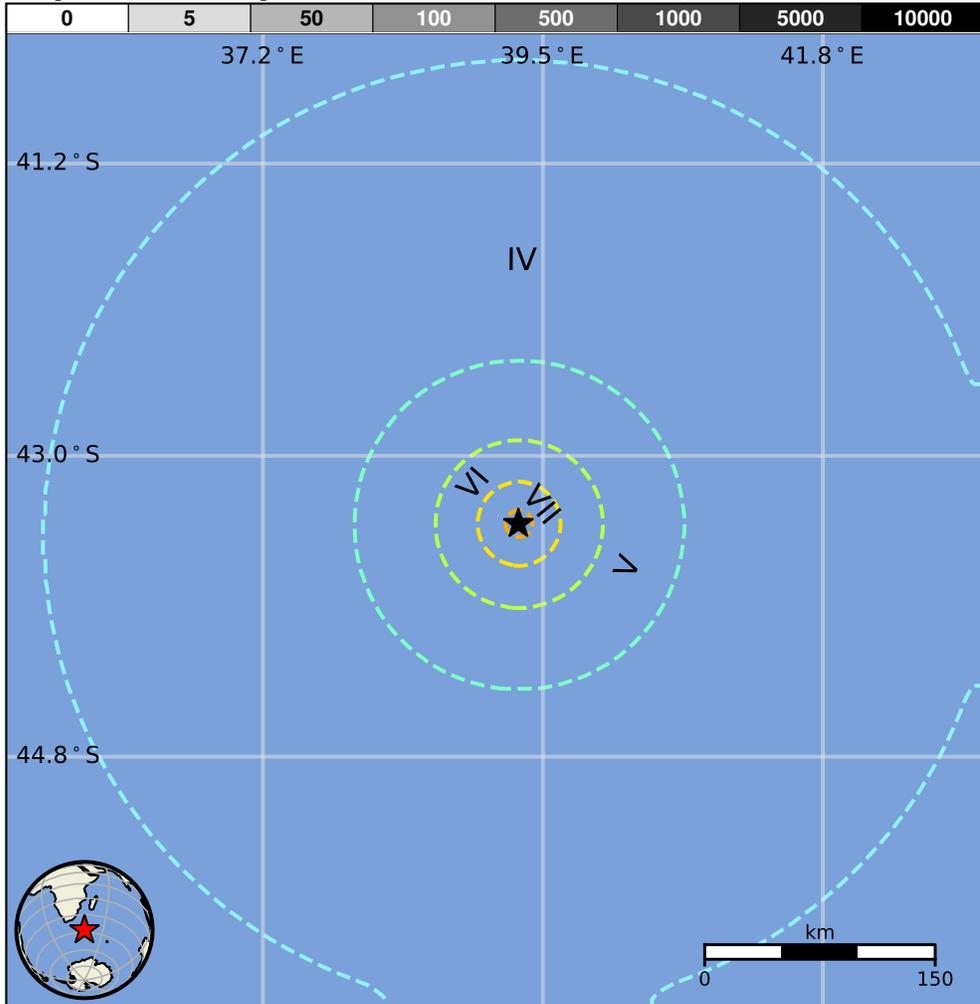
Created: 6 weeks, 4 days after earthquake

## Estimated Fatalities

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

65%
30%
4%
1    10    100    1,000    10,000    100,000
*Fatalities*

## Estimated Economic Losses

65%
30%
4%
1    10    100    1,000    10,000    100,000
*USD (Millions)*

## Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) | | —* | —* | 0 | 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

| 0 | 5 | 50 | 100 | 500 | 1000 | 5000 | 10000 |
|---|---|---|---|---|---|---|---|



## 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 mud wall and informal (metal, timber, GI etc.) construction.

## Historical Earthquakes
There were no earthquakes with significant population exposure to shaking within a 400 km radius of this event.

## Selected City Exposure
from GeoNames.org

| MMI | City | Population |
|---|---|---|
| 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/us6000kdmq#pager**

**Event ID: us6000kdmq**