# M 7.3, 57 km ENE of Namie, Japan

Origin Time: 2022-03-16 14:36:33 UTC (Wed 23:36:33 local)
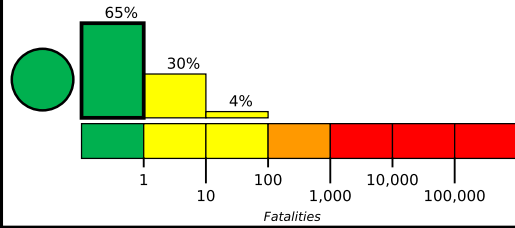Location: 37.7015° N 141.5870° E Depth: 63.1 km
**FOR TSUNAMI INFORMATION, SEE: tsunami.gov**

**PAGER**
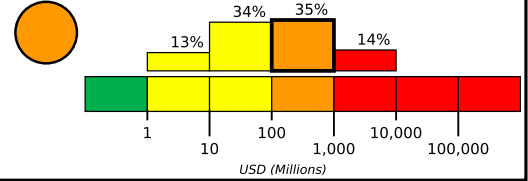**Version 2**

Created: 2 hours, 9 minutes after earthquake

## Estimated Fatalities



Orange alert for economic losses. Significant damage is likely and the disaster is potentially widespread. Estimated economic losses are less than 1% of GDP of Japan. Past events with this alert level have required a regional or national level response.

Green alert for shaking-related fatalities. There is a low likelihood of casualties.
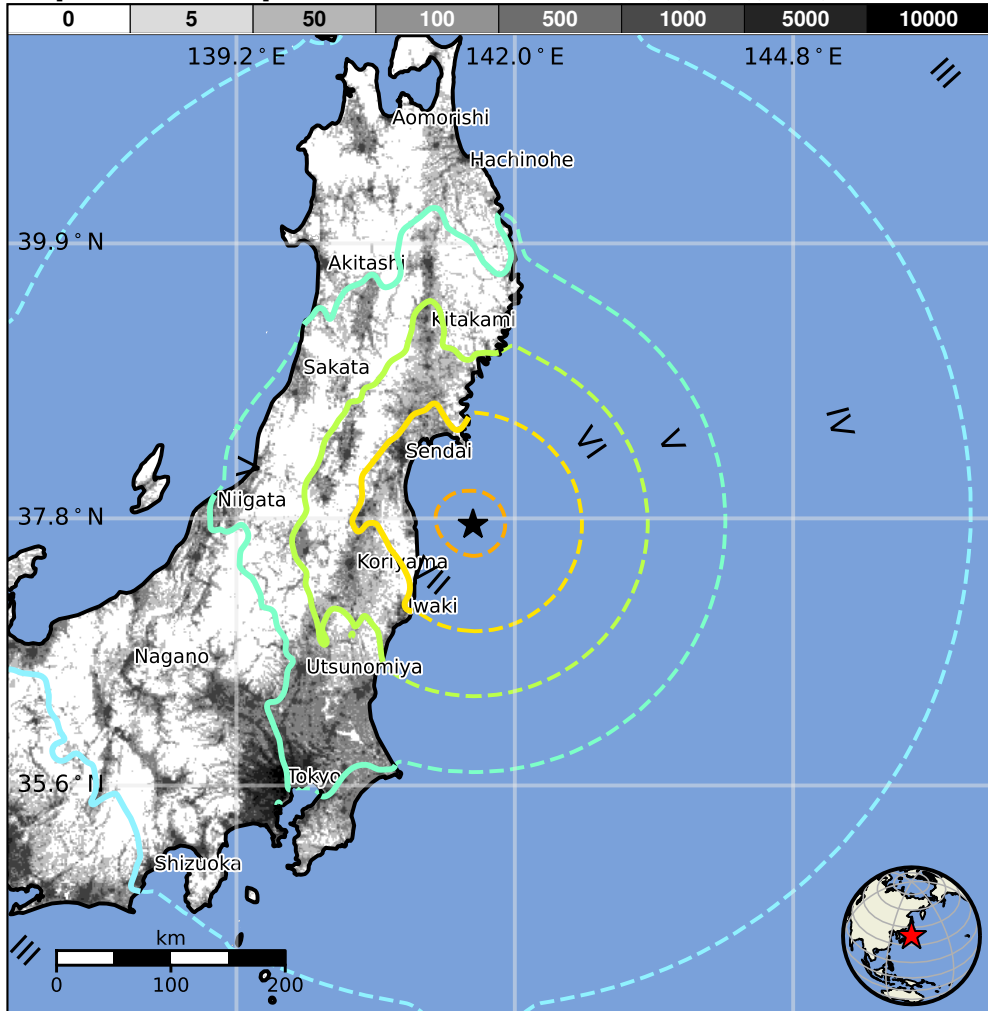
## Estimated Economic Losses



## Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) | | –* | 5,222k* | 33,313k | 20,691k | 3,215k | 2,392k | 15k | 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 resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are heavy wood frame and reinforced/confined masonry construction.

## Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|---|---|---|---|---|
| 1978-06-12 | 69 | 7.6 | VIII(1,304k) | 22 |
| 2007-07-16 | 276 | 6.6 | IX(6k) | 9 |
| 1983-05-26 | 375 | 7.7 | VII(174k) | 104 |

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

## Selected City Exposure

from GeoNames.org

| MMI | City | Population |
|---|---|---|
| VIII | Kakuda | 33k |
| VII | Marumori | 17k |
| VII | Watari | 36k |
| VII | Namie | 22k |
| VII | Okawara | 23k |
| VII | Iwanuma | 42k |
| **VII** | **Sendai** | **1,063k** |
| V | Chiba | 920k |
| V | Yokohama | 3,574k |
| IV | Saitama | 1,193k |
| **IV** | **Tokyo** | **8,337k** |

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/us6000h519#pager

**Event ID: us6000h519**