

M 7.5, 2024 Noto Peninsula, Japan Earthquake

Origin Time: 2024-01-01 07:10:09 UTC (Mon 16:10:09 local)

Location: 37.4877° N 137.2711° E Depth: 10.0 km

FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Created: 6 weeks, 4 days after earthquake

Estimated Fatalities

Estimated fatalities by magnitude range:

Magnitude Range	Percentage
1-2	7%
2-3	36%
3-4	44%
4-5	12%

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

Orange alert for shaking-related fatalities. Significant casualties are likely.

Estimated Economic Losses

Estimated economic losses by magnitude range:

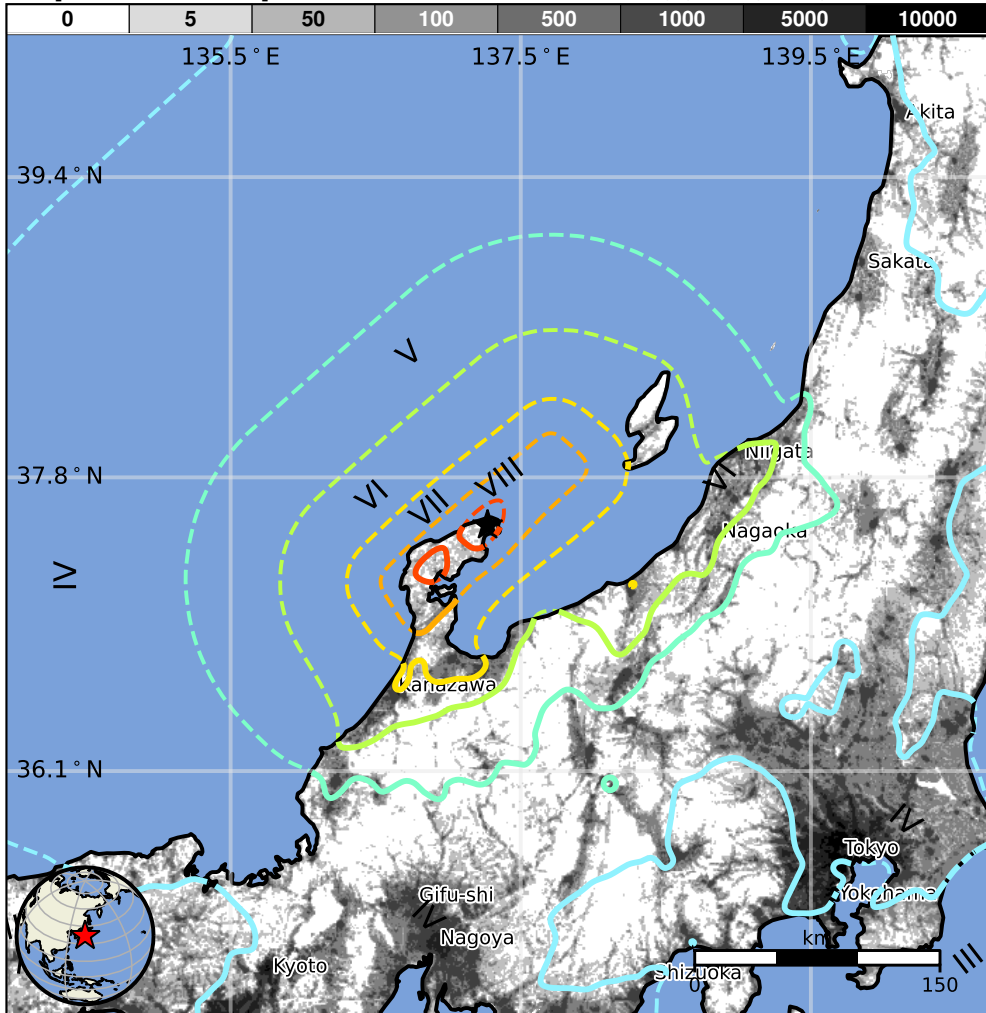
Magnitude Range	Percentage
1-2	8%
2-3	27%
3-4	38%
4-5	21%
5-6	5%

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	8,938k*	61,527k*	1,704k	2,771k	1,172k	150k	41k	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 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
1996-08-10	331	5.9	V(118k)	0
1983-05-26	367	7.7	VII(174k)	104
1995-01-16	381	6.9	IX(1,740k)	6k

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

Selected City Exposure

from GeoNames.org

MMI	City	Population
VIII	Nanao	45k
VIII	Hakui	25k
VII	Himimachi	55k
VII	Nishishinminato	36k
VII	Takaoka	170k
VII	Toyama	326k
IV	Nagoya	2,191k
IV	Tokyo	8,337k
IV	Saitama	1,193k
IV	Kyoto	1,460k
IV	Yokohama	3,574k

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/us6000m0xl#pager>

Event ID: us6000m0xl