USGS
science for a changing world

Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 5.5, 144 km WNW of Naha, Japan

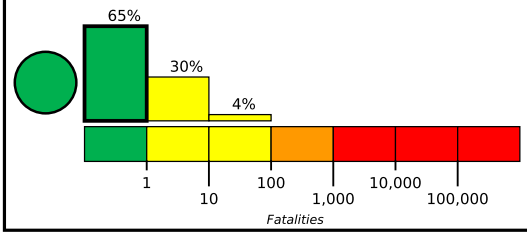
Origin Time: 2022-02-21 20:52:32 UTC (Tue 04:52:32 local)
Location: 26.8813° N 126.4362° E Depth: 9.7 km

PAGER Version 5

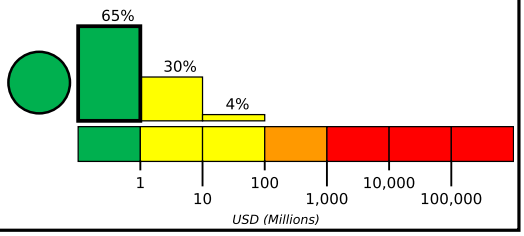
Created: 1 day, 0 hours after earthquake

Estimated Fatalities

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



Estimated Economic Losses



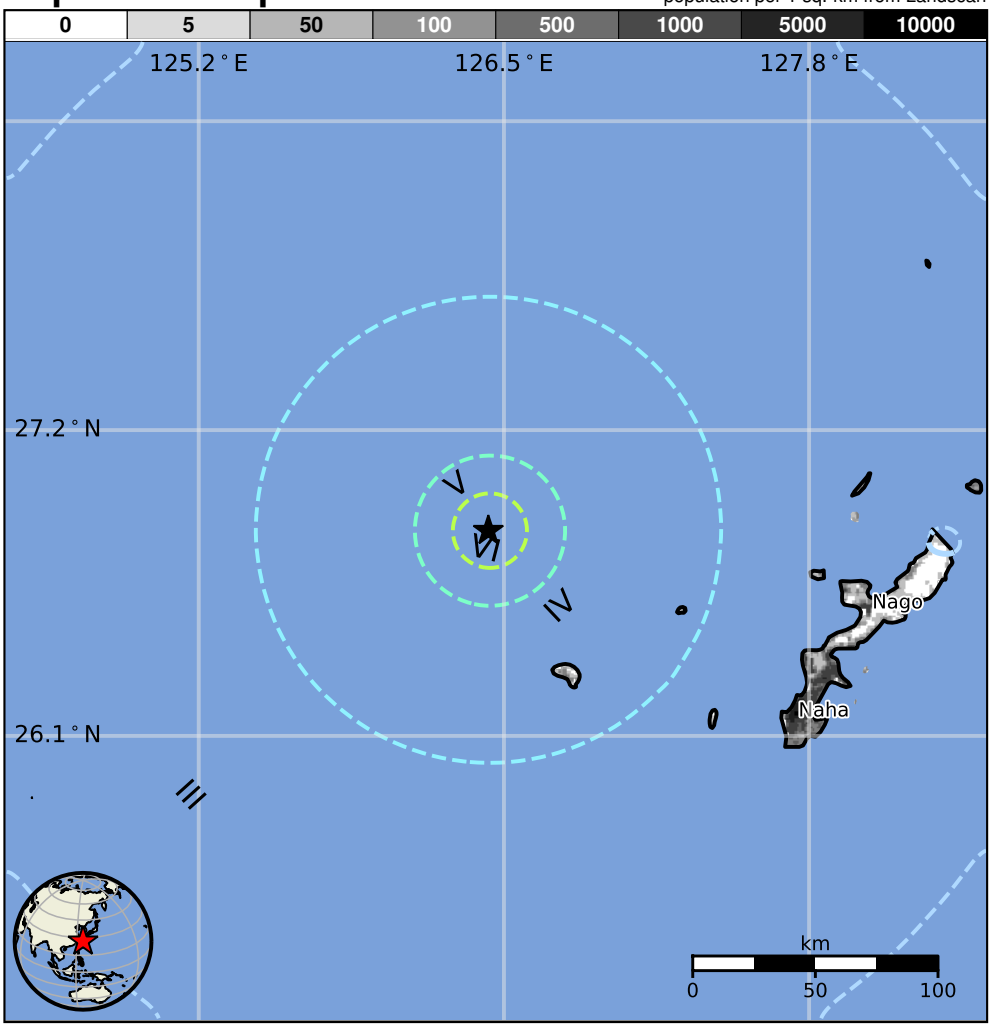
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	1,256k	9k	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 heavy wood frame and reinforced/confined masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2001-08-17	123	5.9	V(10k)	–
2001-12-08	336	6.2	VII(75k)	–
1990-05-17	140	5.8	VII(162k)	–

Selected City Exposure

from GeoNames.org

MMI	City	Population
III	Tomigusuku	56k
III	**Naha**	**301k**
III	Okinawa	125k
III	Ginowan	92k
III	Ishikawa	22k
III	Chatan	28k
III	**Nago**	**60k**
III	Itoman	57k
III	Gushikawa	65k
III	Katsuren-haebaru	34k

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/us7000gmrx#pager

Event ID: us7000gmrx