USGS
science for a changing world

Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 5.5, KYUSHU, JAPAN

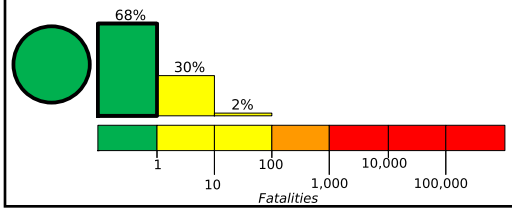
Origin Time: Mon 2016-04-18 11:42:00 UTC (20:42:00 local)
Location: 33.01°N 131.10°E Depth: 10 km

PAGER Version 2

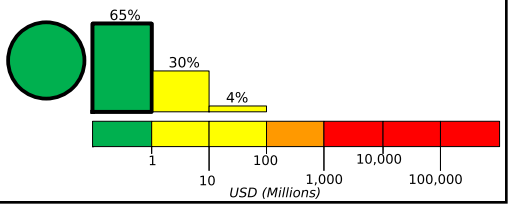
Created: 6 weeks, 3 days after earthquake

Estimated Fatalities

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



Estimated Economic Losses



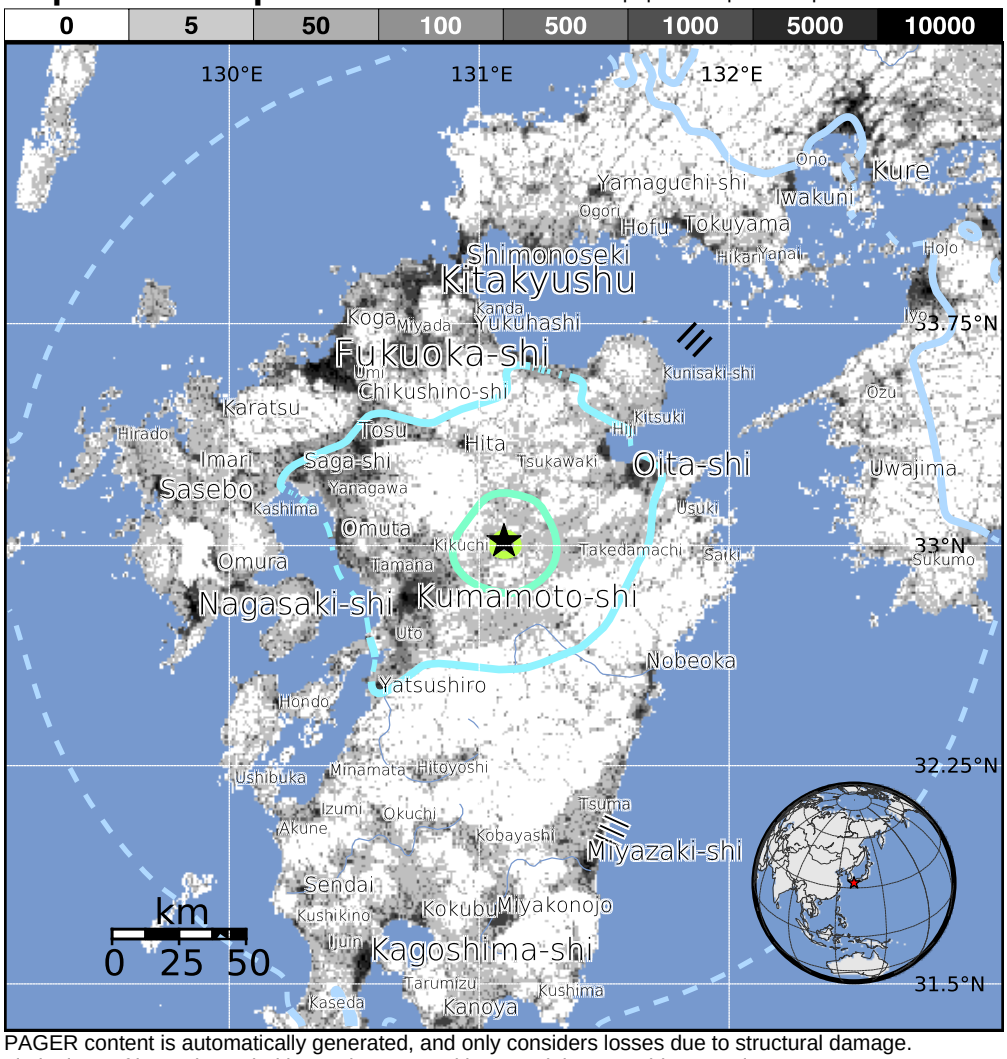
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	12,551k*	4,922k	40k	18k	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	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/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 some vulnerable structures exist.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1997-06-25	164	5.8	VI(31k)	0
1987-03-18	124	6.6	VII(593k)	1
2001-03-24	180	6.8	VIII(5k)	2

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	**Ozu**	**30k**
IV	**Kikuchi**	**27k**
IV	**Tsukawaki**	**18k**
IV	**Takedamachi**	**16k**
IV	Yamaga	32k
IV	**Kumamoto-shi**	**680k**
IV	**Oita-shi**	**449k**
IV	**Fukuoka-shi**	**1,392k**
III	Hiroshima-shi	1,144k
III	Matsuyama-shi	443k
III	**Kagoshima-shi**	**555k**

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.

http://earthquake.usgs.gov/earthquakes/eventpage/us20005jgz

Event ID: us20005jgz