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Earthquake Shaking Red Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

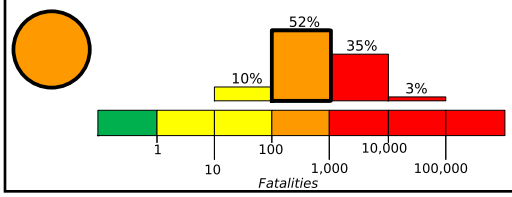
M 7.0, KYUSHU, JAPAN

Origin Time: Fri 2016-04-15 16:25:06 UTC (01:25:06 local)
Location: 32.79°N 130.75°E Depth: 10 km

PAGER Version 7

Created: 7 weeks, 1 day after earthquake

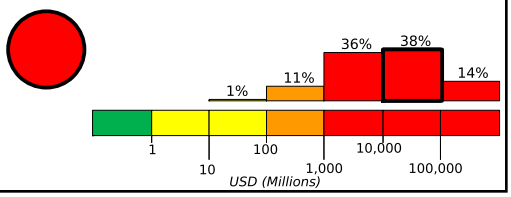
Estimated Fatalities



Red alert level 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 level for shaking-related fatalities. Significant casualties are likely.

Estimated Economic Losses



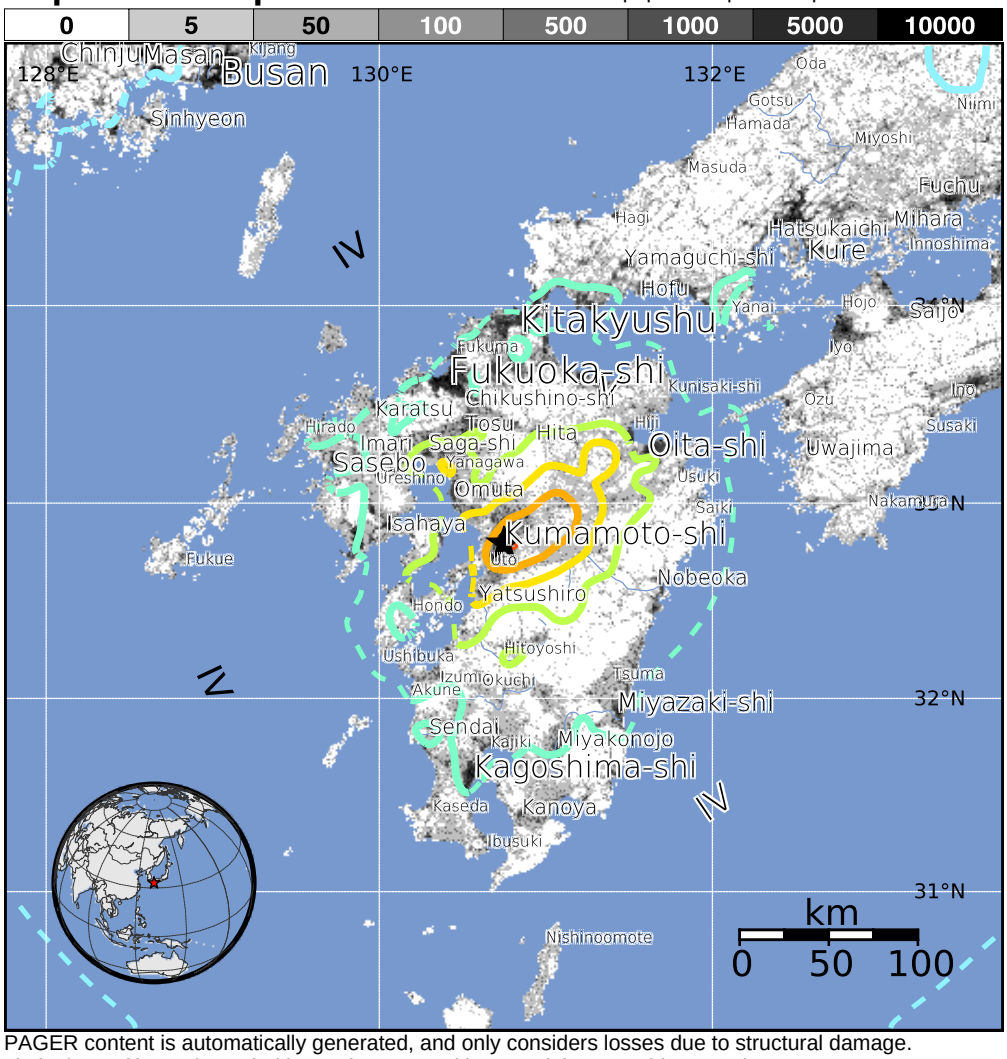
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	1,360k*	11,732k*	8,684k	2,811k	644k	772k	193k	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. The predominant vulnerable building types are heavy wood frame and low-rise concrete wall construction.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1997-03-26	95	6.1	VIII(31k)	0
2005-03-20	121	6.6	IX(74k)	1
2001-03-24	223	6.8	VIII(5k)	2

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

Selected City Exposure

from GeoNames.org

MMI	City	Population
IX	**Kumamoto-shi**	**680k**
VIII	**Ozu**	**30k**
VIII	**Uto**	**39k**
VII	Matsubase	26k
VII	Ueki	32k
VII	Kikuchi	27k
V	**Fukuoka-shi**	**1,392k**
V	**Kagoshima-shi**	**555k**
V	Hiroshima-shi	1,144k
IV	Changwon	550k
IV	**Busan**	**3,679k**

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/us20005iis

Event ID: us20005iis