

# M 7.7, IRAN-PAKISTAN BORDER REGION

Origin Time: Tue 2013-04-16 10:44:20 UTC (15:14:20 local)

Location: 28.11°N 62.05°E Depth: 82 km

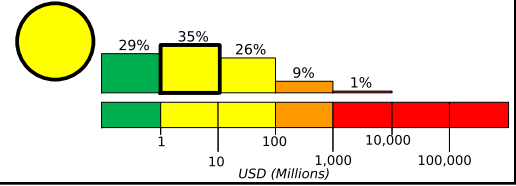
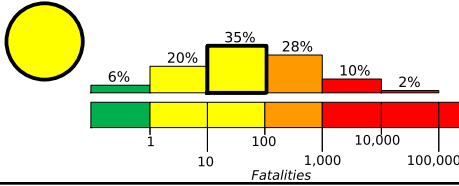
Created: 1 week, 1 day after earthquake

## Estimated Fatalities

Yellow alert for shaking-related fatalities and economic losses. Some casualties and damage are possible and the impact should be relatively localized. Past yellow alerts have required a local or regional level response.

## Estimated Economic Losses

Estimated economic losses are less than 1% of GDP of the Islamic Republic of Iran.

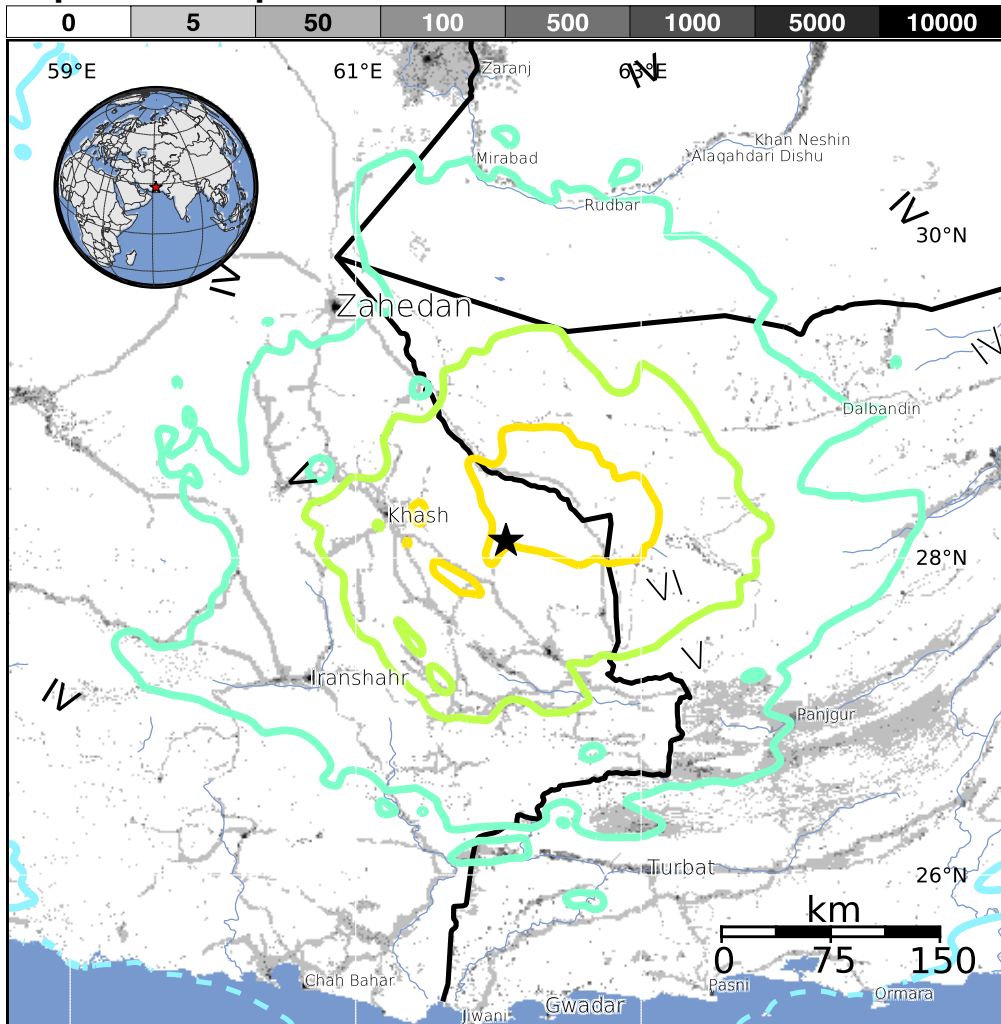


## Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)	- -*	9k*	3,435k*	898k	427k	28k	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



### Structures:

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are adobe block and unreinforced brick with timber floor construction.

### Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1989-12-07	389	5.9	VIII(127)	0
1994-02-23	339	6.1	VII(508)	6
2003-12-26	386	6.6	IX(70k)	26k

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
VI Khash	70k
V Iranshahr	131k
V Panjgur	< 1k
V Rudbar	11k
V `Alaqhdari Dishu	9k
V Dalbandin	15k
IV Turbat	76k
IV Zaranj	< 1k
IV Zabol	122k
IV Zahedan	552k
IV Gwadar	52k

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/pager>

Event ID: usb000g7x7