

# QUAKE BULLETIN

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## EARTHQUAKE EVENTS:

This database will give the information about the earthquakes that occurred worldwide and India wide from October 2015. The list of the earthquakes is as follows:

### Worldwide:

(Source: <http://earthquake.usgs.gov/earthquakes/>)

Date	Time (UTC)	Lat	Long	Depth (km)	Mw	Location
20/10/2015	21:52:02	14.842°S	167.306°E	127	7.1	Vanuatu
26/10/2015	09:09:32	36.441°N	70.717°E	212	7.5	Munjan, Afghanistan

### India wide:

(Source: Indian Meteorological Department, IMD,

<http://www.imd.gov.in/section/seismo/dynamic/CMONTH.HTM>)

Date	Time (UTC)	Lat	Long	Depth (km)	Mw	Location
02/10/2015	11:29:20	22.5°N	93.2°E	05	4.0	INDIA (MIZORAM)- MYANMAR BORDER REGION
08/10/2015	01:04:17	31.5°N	77.0°E	10	3.8	DISTT- MANDI, HIMACHAL PRADESH
09/10/2015	20:10:13	28.7°N	77.4°E	05	3.0	DELHI-NCR REGION
10/10/2015	01:48:43	27.2°N	88.8°E	15	4.5	SIKKIM
11/10/2015	08:34:56	25.1°N	93.8°E	21	4.1	SENAPATI, MANIPUR
17/10/2015	06:29:42	25.0°N	94.1°E	10	3.5	MANIPUR- SENAPATI
19/10/2015	00:04:38	29.5°N	80.3°E	10	2.6	PITHORAGARH, UTTARAKHAND
23/10/2015	00:27:39	29.7°N	70.4°E	25	5.6	PAKISTAN
23/10/2015	21:20:02	02.5°N	93.7°E	10	5.2	NORTHERN SUMATRA
24/10/2015	04:35:00	30.3°N	80.2°E	20	3.9	PITHORAGARH, UTTARAKHAND
26/10/2015	09:09:31	36.5°N	70.8°E	190	7.5	HINDU KUSH, REGION AFGHANISTAN
26/10/2015	09:49:35	36.5°N	70.2°E	170	5.0	HINDU KUSH, REGION AFGHANISTAN
26/10/2015	10:37:05	36.5°N	70.4°E	202	4.5	HINDU KUSH, REGION AFGHANISTAN
27/10/2015	13:14:07	36.6°N	70.7°E	187	5.0	HINDUKUSH, AFGHANISTAN
27/10/2015	13:15:09	27.4°N	66.0°E	10	5.2	PAKISTAN
29/10/2015	22:15:53	24.6°N	92.3°E	15	4.9	KARIMGANJ, ASSAM

## GROUND MOTION RECORDS:

In our centre around 633 ground motion records are available. Since 1973 the ground motions are available with N-S, E-W and U-D components. All the available ground motions are listed.

(Source: PESMOS-IITR)

S No	Earthquake	Date	Station	Component		
				NS	EW	UD
1	Myanmar	12 Mar 2010	Bongaigaon	✓	✓	✓
			Goalpara	✓	✓	✓
			Guwahati	✓	✓	✓
			Hailakandi	✓	✓	✓
			Tura	✓	✓	✓
2	Punab-HP border	12 Mar 2010	Ambala	✓	✓	✓
			Dasua	✓	✓	✓
			Dehra	✓	✓	✓
			Garsain	✓	✓	✓
			Hamirpur	✓	✓	✓
			Jalandhar	✓	✓	✓
			Jubbal	✓	✓	✓
			Kapurthala	✓	✓	✓
			Nathpa	✓	✓	✓
			Nawan Shahar	✓	✓	✓
			Roorkee	✓	✓	✓
			Sangrur	✓	✓	✓
SunderNagar	✓	✓	✓			

## EERC LIBRARY:

### **Publications:**

The following publications are very useful for research and are available in server

- ❖ Swajit S. Goud and R. Pradeep Kumar (2015), "Rationalising acceptable levels of damage for structures designed as per codes IS 456, IS 1893 and IS 13920", Indian Concrete Journal, Vol.13, pp.2481-2491.
- ❖ Rajaratnam and Santha Kumar (2015), "Assessment of seismic building vulnerability based on rapid visual screening technique aided by aerial photographs on a GIS platform", Natural Hazards, Vol.78, pp. 779-802.
- ❖ Subhadra, Simanchal Padhy, Prabhakara Prasad, and Seshunarayana (2015), "Site-specific ground motion simulation and seismic response analysis for microzonation of Nanded City, India ", Natural Hazards, Vol.78, pp.915-938.
- ❖ Joshi, Chun-Hsiang Kuo, Piu Dhibar, Sandeep, Sharma (2015), " Simulation of the records of the 27 March 2013 Nantou Taiwan earthquake using modified semi-empirical approach", Natural Hazards, Vol.78, pp.995-1020.

## **Reports:**

The following reports are very useful for research

- ❖ Stewart J, Seed R, and Fenves G. (1998)., "Empirical Evaluation of Inertial Soil-Structure Interaction Effects", PEER Report 1998/07, Pacific Earthquake Engineering Research Centre, College of Engineering, Univ. of California, Berkeley.