

# QUAKE BULLETIN

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## EARTHQUAKE EVENTS:

This database will give the information about the earthquakes that occurred worldwide and in India in the month of March, 2012. The list of the earthquakes is as follows:

### Worldwide:

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

Date	Time (UTC)	Lat	Long	Depth (km)	Mw	Location
25/3/2012	22:37:06	35.183°S	71.792°W	34.8	7.1	Maule, Chile
21/3/2012	22:15:05	6.244°S	145.959°E	105.9	6.6	New Guinea, Papua New Guinea
20/3/2012	18:02:48	16.662°N	98.188°W	20	7.4	Oaxaca, Mexico
14/3/2012	09:08:37	40.899°N	144.923°E	26.6	6.9	Off The East Coast of Honshu, Japan
9/3/2012	07:09:53	19.115°S	169.643°E	31.7	6.7	Vanuatu
3/3/2012	12:19:55	22.157°S	170.317°E	15.2	6.6	Southeast of The Loyalty Islands

### 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
27/3/2012	23:40:08	26.1°N	87.8°E	12	4.9	India - Nepal Border Region
27/3/2012	4:49:27	11.2°N	78.6°E	10	3.6	Tiruchchirappalli, Tamil Nadu
20/3/2012	10:18:48	09.5°N	93.3°E	10	4.8	Andaman Sea
15/3/2012	14:56:00	10.8°N	93.9°E	20	4.8	Andaman Sea
12/3/2012	22:07:20	28.9°N	77.3°E	5	3.5	Baghpat, Uttar Pradesh
12/3/2012	6:06:44	36.8°N	73.4°E	33	5.8	India (J&K) -Pakistan Border
10/3/2012	20:58:04	09.2°N	94.3°E	10	4.6	Nicobar Islands Region
10/3/2012	18:06:33	08.8°N	94.0°E	18	4.5	Nicobar Islands Region
7/3/2012	13:18:19	32.1°N	78.1°E	20	3.8	Spiti, Himachal Pradesh
6/3/2012	2:59:33	08.7°N	93.8°E	47	4.9	Nicobar Islands Regions
6/3/2012	2:52:42	08.9°N	93.9°E	10	5.4	Nicobar Islands Region
5/3/2012	2:52:42	28.7°N	76.7°E	10	4.9	Haryana - Delhi Border Region
5/3/2012	6:55:32	04.2°N	97.2°E	10	5.1	Northern Sumatra, Indonesia
2/3/2012	12:41:35	07.5°N	94.0°E	5	4.8	Nicobar Islands Region, India
1/3/2012	17:52:40	13.1°N	92.5°E	10	5	Andaman Islands Region

## GROUND MOTION RECORDS:

In our centre around 100 ground motions 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
1	NL	14 Sep 2007	Chamba	E-W
2	NL	14 Sep 2007	Chamba	N-S
3	NL	14 Sep 2007	Chamba	U-D
4	Chamba	4 Oct 2007	Chamba	E-W
5	Chamba	4 Oct 2007	Chamba	N-S
6	Chamba	4 Oct 2007	Chamba	U-D
7	Noida	18 Oct 2007	Noida	E-W
8	Noida	18 Oct 2007	Noida	N-S
9	Noida	18 Oct 2007	Noida	U-D
10	NL	28 Oct 2007	Bilaspur	E-W
11	NL	28 Oct 2007	Bilaspur	N-S
12	NL	28 Oct 2007	Bilaspur	U-D
13	NL	21 Nov 2007	Morigaon	E-W
14	NL	21 Nov 2007	Morigaon	N-S
15	NL	21 Nov 2007	Morigaon	U-D

The records are available at server ([\\10.2.28.225](http://10.2.28.225))

## EERC LIBRARY:

### **Publications:**

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

- ❖ ML Sharma., "Attenuation Relationship for Estimation of Peak Ground Horizontal Acceleration Using Data from Strong-Motion Arrays in India", Bulletin of the Seismological Society of America, Vol.88, No. 4, pp. 1063-1069, 1998.
- ❖ R N Iyengar and STG Raghukanth, "Strong Ground Motion Estimation During the Kutch, India Earthquake ", Pure Applied Geophysics No.163, pp.153-163, 2006.
- ❖ Anil K Chopra and Rakesh K Goel, "Capacity Demand Diagram methods Based on Inelastic Design Spectrum", Earthquake Spectra, Vol.15, No.4, 1999.
- ❖ Tagel Din Hatem, "A New Efficient Method for Nonlinear, Large Deformation and Collapse Analysis of Structures ", PhD Thesis, University of Tokyo, 1999.

- ❖ Hemanth B Kaushik, Durgesh C Rai and Sudhir K Jain., "Stress-Strain Characteristics of Clay Brick Masonry Under Uniaxial Compression ", Journal of Materials in Civil Engineering, ASCE, Vol.19, No.9, 2007.
- ❖ Chenna Rajaram and Ramancharla Pradeep Kumar., "Comparison of Codal Provisions on Pounding between Adjacent Buildings", International Journal of Earth science & Engineering, Vol.5, No.1, 2012.

The publications are available at server ([\\10.2.28.225](http://10.2.28.225))