

# QUAKE BULLETIN

Monthly 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 February, 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
26/2/2012	06:17:19	51.731°N	95.921°E	11.7	6.7	South Western Siberia, Russia
15/2/2012	03:31:20	43.536°N	127.381°W	10.0	6.0	Off the Coast of Oregon
14/2/2012	08:19:58	10.387°S	161.262°E	54.7	6.4	Solomon Islands
13/2/2012	21:07:02	41.143°N	123.790°W	28.2	5.6	Northern California
6/2/2012	03:49:16	9.964°N	123.246°E	11.0	6.7	Negros Cebu Region, Philippines
2/2/2012	13:34:40	17.766°S	167.134°E	23.1	7.1	Vanuatu

### 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
26/2/2012	23:08:42	29.6°N	80.8°E	10	4.3	Western Nepal
26/2/2012	15:55:31	24.7°N	93.7°E	36	4.5	Manipur
26/2/2012	6:17:19	51.8°N	95.9°E	10	6.8	Southwestern Siberia, Russia
25/2/2012	8:45:56	26.3°N	88.7°E	33	3.8	Bangladesh-India (W.B) Border Region
22/2/2012	12:02:05	5.1°N	94.5°E	10	5	Off West Coast of Sumatra
20/2/2012	14:18:05	35.8°N	79.8°E	10	5	Kashmir - China Border Region
20/2/2012	13:59:24	35.8°N	79.7°E	10	4.9	Kashmir - China Border Region
20/2/2012	2:28:18	01.9°N	99.6°E	190	5.2	Northern Sumatra, Indonesia
17/2/2012	15:44:21	32.4°N	82.8°E	10	5.4	Western Tibet
15/2/2012	18:31:53	06.3°N	92.9°E	10	5	Off West Coast of Great Nicobar Island
14/2/2012	13:48:43	27.3°N	88.2°E	5	3.6	Sikkim - Nepal Border Region
14/2/2012	8:19:57	10.3°S	161.1°E	60	6.4	Solomon Islands
10/2/2012	15:45:16	26.6°N	93.7°E	10	4.4	Assam - Nagaland Border Region
9/2/2012	19:17:29	30.9°N	78.2°E	10	5	Uttarkashi District, Uttarakhand
6/2/2012	10:10:19	09.8°N	123.2°E	10	6.2	Negros-Cebu Region, Philippines

6/2/2012	3:49:16	10.0°S	123.1°E	25	6.6	Negros-Cebu Region, Islands
5/2/2012	16:40:43	17.9°S	167.4°E	33	6.2	Vanuatu , Islands
3/2/2012	3:46:18	17.4°S	167.3°E	10	6.1	Vanuatu , Islands
2/2/2012	13:34:39	17.8°S	167.1°E	12	6.8	Vanuatu , Islands
1/2/2012	7:14:29	03.7°S	102.1°E	78	5.6	Southern Sumatra, Indonesia

## **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-IIITR)

<b>S No</b>	<b>Earthquake</b>	<b>Date</b>	<b>Station</b>	<b>Component</b>
1	Jhajjar	31 Mar 2006	Rohtak	E-W
2	Jhajjar	31 Mar 2006	Rohtak	N-S
3	Jhajjar	31 Mar 2006	Rohtak	U-D
4	Alwar	29 Nov 2006	Alwar	E-W
5	Alwar	29 Nov 2006	Alwar	N-S
6	Alwar	29 Nov 2006	Alwar	U-D
7	Mandi	12 Oct 2006	Mandi	E-W
8	Mandi	12 Oct 2006	Mandi	N-S
9	Mandi	12 Oct 2006	Mandi	U-D
10	NL	06 Sep 2007	Roorkee	E-W
11	NL	06 Sep 2007	Roorkee	N-S
12	NL	06 Sep 2007	Roorkee	U-D
13	NL	22 Jun 2007	Port Blair	E-W
14	NL	22 Jun 2007	Port Blair	N-S
15	NL	22 Jun 2007	Port Blair	U-D
16	Uttarkasi	22 Jul 2007	Roorkee	E-W
17	Uttarkasi	22 Jul 2007	Roorkee	N-S
18	Uttarkasi	22 Jul 2007	Roorkee	U-D
19	Uttarkasi	22 Jul 2007	Nathpa	E-W
20	Uttarkasi	22 Jul 2007	Nathpa	N-S
21	Uttarkasi	22 Jul 2007	Nathpa	U-D

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

## **IIIT LIBRARY:**

### **New Arrivals:**

- ✓ Muneo Hori (2011), "Introduction to Computational Earthquake Engineering" Imperial College Press, London.

- ✓ Kameswara Rao, N S V (2011), "Foundation Design Theory and Practice" John Wiley & Sons Singapore.
- ✓ Reddy, J N ed. and Shrimali, M K, (2012), "4<sup>th</sup> International Conference on Structural Stability and Dynamics" Structural Stability and Dynamics--India: MNIT, Jaipur: 4-6 Jan'12-- New Delhi: Excel India Pub.
- ✓ Farhang, (2011)," Discrete Element Modeling of Granular Materials" John Wiley, Radjai and Frederic Dubois ed.-- London

## **EERC LIBRARY:**

### **Publications:**

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

- ❖ Susender Muthukumar and Reginald DesRoches., "A Hertz Contact Model With Nonlinear Damping for Pounding Simulation", Earthquake Engineering and Structural Dynamics, Vol.35, pp. 811-828, 2006.
- ❖ Rodriguez-Gomez S and Cakmak A S, "Evaluation of seismic damage indices for reinforced concrete structures", Technical report NCEER-90-0022, State university of New York, 1990.
- ❖ Ramancharla Pradeep Kumar, "Damage based life of structures in seismic environment", M.Tech Thesis, Civil Engg. Dept., Indian Institute of Technology Kanpur, June, 1997.
- ❖ Pantelides C P and Ma X, "Linear and Nonlinear Pounding of Structural Systems", Computers and Structures, vol.66, No.1, pp.79-92, 1998.
- ❖ Kun YE and Li LI., "Impact Analytical Models for Earthquake Induced Pounding Simulation", Front. Archit. Civ. Eng. China, Vol 3, No.2, pp. 142-147, 2009.

The publications are available at server ([\10.2.28.225](#))