

QUAKE BULLETIN

Monthly Bulletin

Vol.4 No.2 Feb 2015

Editor: Ramancharla Pradeep Kumar

Associate Editors: Chenna Rajaram

Pulkit Velani

Raju Sangam

EARTHQUAKE EVENTS:

This database will give the information about the earthquakes that occurred worldwide and India wide from January 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
07/01/2015	05:07:08	05.828°N	082.625°W	010.0	6.6	Punta de Burica, Panama
23/01/2015	03:47:27	17.000°S	168.531°E	084.0	6.8	Port-Villa, Vanuatu
28/01/2015	02:43:19	20.907°S	178.352°W	483.6	6.1	Ndoi Island, Fiji

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
02/01/2015	07:23:34	24.1°N	93.9°E	20	3.5	India (Manipur)-Myanmar Border Region
05/01/2015	09:20:15	24.1°N	93.7°E	10	3.7	Churachandpur, Manipur
05/01/2015	19:41:40	29.0°N	81.8°E	05	4.2	Nepal
09/01/2015	22:59:13	02.7°N	96.1°E	48	5.4	Off West Coast Of Northern Sumatra
10/01/2015	13:06:36	11.0°N	93.5°E	117	4.9	Andaman Islands
13/01/2015	06:33:56	24.6°N	94.0°E	10	3.2	Distt. Thoubal, Manipur
14/01/2015	15:49:52	28.9°N	77.0°E	5	3.3	Sonipat, Haryana
15/01/2015	01:33:01	22.6°N	92.5°E	5	4.0	India (Mizoram)-Bangladesh Border Region
22/01/2015	07:43:14	12.9°N	93.0°E	15	4.0	North Andaman Islands Region
23/01/2015	00:29:44	12.9°N	92.8°E	38	4.5	Andaman Islands

23/01/2015	04:48:24	30.0°N	81.6°E	10	3.2	Nepal-India(Uttarakhand) Border Region
24/01/2015	16:11:32	25.1°N	95.0°E	10	4.8	Myanmar - India (Manipur) Border Region
26/01/2015	18:29:27	12.5°N	92.8°E	50	4.5	Middle Andaman Island
27/01/2015	00:53:25	1.2°N	97.3°E	40	5.5	Northern Sumatra, Indonesia
31/01/2015	13:59:47	28.2°N	83.8°E	10	4.6	Nepal
31/01/2015	21:11:11	24.3°N	94.1°E	85	3.4	Distt.Chandel Manipur

GROUND MOTION RECORDS:

In our centre around 561 ground motion records are available. Since 1973 the ground motions are available with N-S, E-W and U-D components. Some of the available ground motions are listed.

(Source: PESMOS-IITR)

Sr No	Earthquake	Date	Station	Component		
				NS	EW	UD
1	India Manipur Border	11 Aug 2009	Hailakandi	✓	✓	✓
			Karimganj	✓	✓	✓
			Kokhrajhar	✓	✓	✓
			Nongstoin	✓	✓	✓
			Silchar	✓	✓	✓
			Tejpur	✓	✓	✓
			Tura	✓	✓	✓
2	Gangtok	16 Aug 2009	Gangtok	✓	✓	✓
3	Sonitpur- Assam	19 Aug 2009	Boko	✓	✓	✓
			Guwahati	✓	✓	✓
4	Uttarakhand	27 Aug 2009	Bageshwar	✓	✓	✓
			Kapkot	✓	✓	✓
			Munsiari	✓	✓	✓
5	Manpur Meghalaya Border	30 Aug 2009	Boko	✓	✓	✓
			Diphu	✓	✓	✓
			Guwahati	✓	✓	✓
			Lakhimpur	✓	✓	✓
			Tura	✓	✓	✓

EERC LIBRARY:

Publications:

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

- ❖ Emel Seyhan, Jonathan P. Stewart, and Robert W. Graves (2013), "Calibration of a Semi-Stochastic Procedure for Simulating High-Frequency Ground Motions", *Earthquake Spectra*, Vol. 29, No. 4, pp. 1495-1519.
- ❖ Fariba Abazarsa, Fariborz Nateghi, S. Farid Ghahari, and Ertugrul Taciroglu (2013), "Blind Modal Identification of Non-Classically Damped Systems from Free or Ambient Vibration Records", *Earthquake Spectra*, Vol. 29, No. 4, pp. 1137-1157.
- ❖ Mehmet Çelebi, Mark Sereci, Ruben Boroschek, Rodrigo Carreño, and Patricio Bonelli (2013), "Identifying the Dynamic Characteristics of a Dual Core-Wall and Frame Building in Chile Using Aftershocks of the 27 February 2010 ($M_w = 8.8$) Maule, Chile, Earthquake." *Earthquake Spectra*, Vol. 29, No. 4, pp. 1233-1254.
- ❖ Qaisar Ali, Akhtar Naem Khan, Mohammad Ashraf, Awais Ahmed, Bashir Alam, Naveed Ahmad, Mohammad Javed, Shahzad Rahman, Mohammad Fahim, and Mohammad Umar (2013), "Seismic Performance of Stone Masonry Buildings Used in the Himalayan Belt", *Earthquake Spectra*, Vol. 29, No. 4, pp. 1159-1181.
- ❖ Rui Pinho, Mário Marques, Ricardo Monteiro, Chiara Casarotti, and Raimundo Delgado (2013), "Evaluation of Nonlinear Static Procedures in the Assessment of Building Frames" *Earthquake Spectra*, Vol. 29, No. 4, pp. 1459-1476.
- ❖ Ufuk Hancilar, Fabio Taucer, and Christina Corbane (2013), "Empirical Fragility Functions based on Remote Sensing and Field Data after the 12 January 2010 Haiti Earthquake", *Earthquake Spectra*, Vol. 29, No. 4, pp. 1275-1310.
- ❖ Yu-Chen Ou, Yusak Oktavianus, and Mu-Sen Tsai (2013), "An Emulative Precast Segmental Concrete Bridge Column for Seismic Regions", *Earthquake Spectra*, Vol. 29, No. 4, pp. 1441-1457.

Reports:

The following reports are very useful for research

- ❖ Lowes L. and Mitra N. and Altoontash A. (2003)., "A bEam-Column Joint Model for Simulating the Earthquake Response of Reinforced Concrete Frames", PEER Report 2003/10, Pacific Earthquake Engineering Research Centre, College of Engineering, Univ. of California, Berkeley.