

QUAKE BULLETIN

Monthly Bulletin

Vol.5 No.3 March 2016

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 February 2016. The list of the earthquakes is as follows:

Worldwide:

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

Date	Time (UTC)	Lat	Long	Depth (km)	Mw	Location
01/02/2016	19:00:46	30.76 S	179.96 W	391.0	6.2	125km NW of L'Esperance Rock, New Zealand
05/02/2016	19:57:27	22.94 N	120.59 E	23.0	6.4	24km SSE of Yujing, Taiwan
08/02/2016	16:19:13	6.62 S	154.71 E	31.6	6.4	92km WSW of Panguna, Papua New Guinea
10/02/2016	00:33:05	30.58 S	71.59 W	29.0	6.3	37km W of Ovalle, Chile
12/02/2016	10:02:23	9.74 S	119.45 E	28.0	6.3	2km S of Lahihagalang, Indonesia
15/02/2016	15:02:32	20.98 S	175.48 W	10.0	5.9	33km WNW of Nuku`alofa, Tonga
15/02/2016	19:28:04	49.05 S	164.48 E	10.0	5.9	220km NNW of Auckland Island, New Zealand
16/02/2016	23:48:35	55.78 S	125.17 W	13.0	6.1	Southern East Pacific Rise
17/02/2016	17:26:02	0.85 N	129.07 E	10.0	6.0	153km SE of Tobelo, Indonesia
22/02/2016	06:37:03	30.46 S	72.06 W	10.2	5.9	84km W of Ovalle, Chile
27/02/2016	21:29:43	51.78 S	139.56 E	10.0	5.9	Western Indian-Antarctic Ridge

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
01/02/2016	19:48:37	23.8 N	93.8 E	111	3.8	India-Myanmar Border Region
01/02/2016	23:49:30	26.4 N	93.4 E	33	3.7	Karbi Anglong, Assam
02/02/2016	16:14:00	25.5 N	91.9 E	10	2.5	Shillong, Meghalaya
04/02/2016	7:10:27	32.7 N	75.7 E	10	4.1	Himachal Pradesh(Chamba)- J & K Border Region
04/02/2016	15:30:51	14.4 N	93.2 E	10	4.8	Andman Islands India Region

05/02/2016	16:20:09	27.8 N	85.4 E	10	5.2	Nepal
08/02/2016	11:05:56	24.7 N	94.6 E	118	3.8	Ukhrul Manipur
09/02/2016	15:13:47	32.8 N	76.4 E	10	4.4	Lahul & Spiti, Himachal Pradesh
10/02/2016	22:45:27	25.6 N	92.1 E	6	2.7	Shillong
15/02/2016	16:35:29	30.2 N	79.6 E	10	3.5	Chamoli,Uttarakhand
16/02/2016	23:06:55	26.3 N	93.3 E	10	4.4	Karbi Anglong, Assam
21/02/2016	3:40:00	07.1 N	92.1 E	50	4.5	Nicobar Islands
21/02/2016	7:50:56	30.9 N	78.3 E	5	3.5	Uttarkashi , Uttarakhand
21/02/2016	9:12:08	36.5 N	70.9 E	177	5.7	Hindukush Region, Afghanistan
21/02/2016	16:32:07	36.3 N	78.4 E	50	4.4	India(Kashmir)-China Border Region
21/02/2016	18:10:00	27.8 N	84.6 E	30	5	Nepal
22/02/2016	18:20:58	07.5 N	92.0 E	20	4.8	Nicobar Islands
24/02/2016	2:06:51	24.9 N	72.3 E	26	3	Jalor, Rajasthan
24/02/2016	9:22:17	27.6 N	85.6 E	19	4.5	Nepal
27/02/2016	0:31:03	13.6N	94.0E	60	4.6	North Andaman Sea

GROUND MOTION RECORDS:

In our centre around 624 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	Gangtok	26 May 2010	Gangtok	✓	✓	✓
2	Himachal Pradesh	28 May 2010	Barkot	✓	✓	✓
			Jubbal	✓	✓	✓
			Roorkee	✓	✓	✓
			Una	✓	✓	✓
3	Almora District	31 May 2010	Champawat	✓	✓	✓
			Pithoragarh	✓	✓	✓

EERC LIBRARY:

Publications:

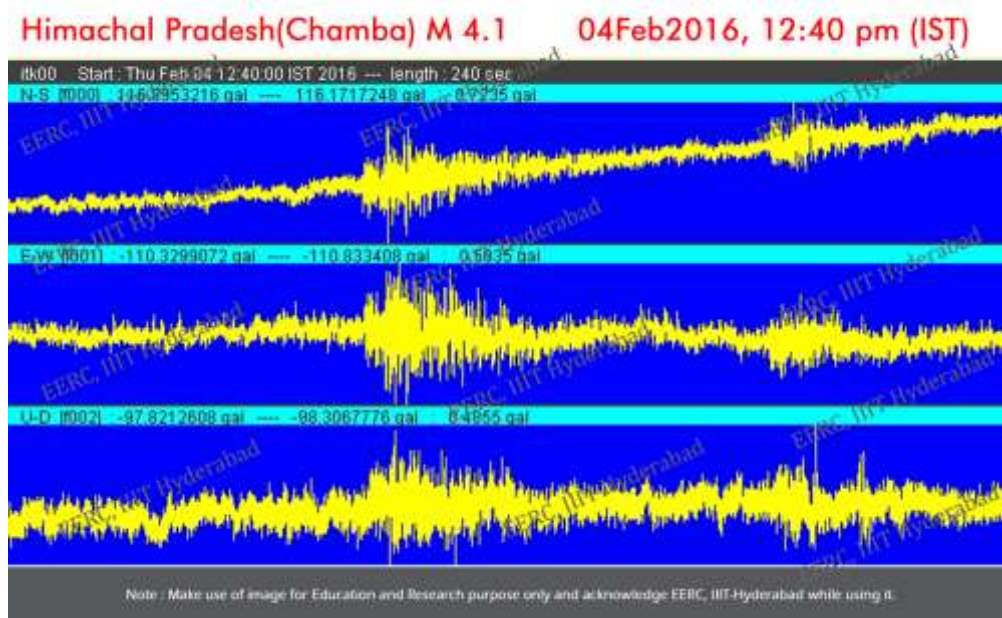
The following publications are very useful for research and are available in server

- ❖ V. Mariani, M. Tanganelli, S. Viti and M. De Stefano (2016), "Combined effects of axial load and concrete strength variation on the seismic performance of existing RC buildings", Bulletin of Earthquake Engineering, March, Vol. 14(3), pp. 805-819.
- ❖ D. Asprone, R. De Risi and G. Manfredi (2016), "Defining structural robustness under seismic and simultaneous actions: an application to precast RC buildings", Bulletin of Earthquake Engineering, February, Vol. 14(2), pp. 485-499.

- ❖ F. Mazza (2016), "Effects of near-fault vertical earthquakes on the nonlinear incremental response of RC base-isolated structures exposed to fire", Bulletin of Earthquake Engineering, February, Vol. 14(2), pp. 433-454.
- ❖ D. G. Giovanis, M. Fragiadakis and V. Papadopoulos (2016), "Epistemic uncertainty using incremental Dynamic Analysis and Neural Networks", Bulletin of Earthquake Engineering, February, Vol. 14(2), pp. 529-547.
- ❖ C. Petrone, G. Magliulo and G. Manfredi (2016), "Floor response spectra in RC frame structures designed according to Eurocode 8", Bulletin of Earthquake Engineering, February, Vol. 14(2), pp. 747-767.

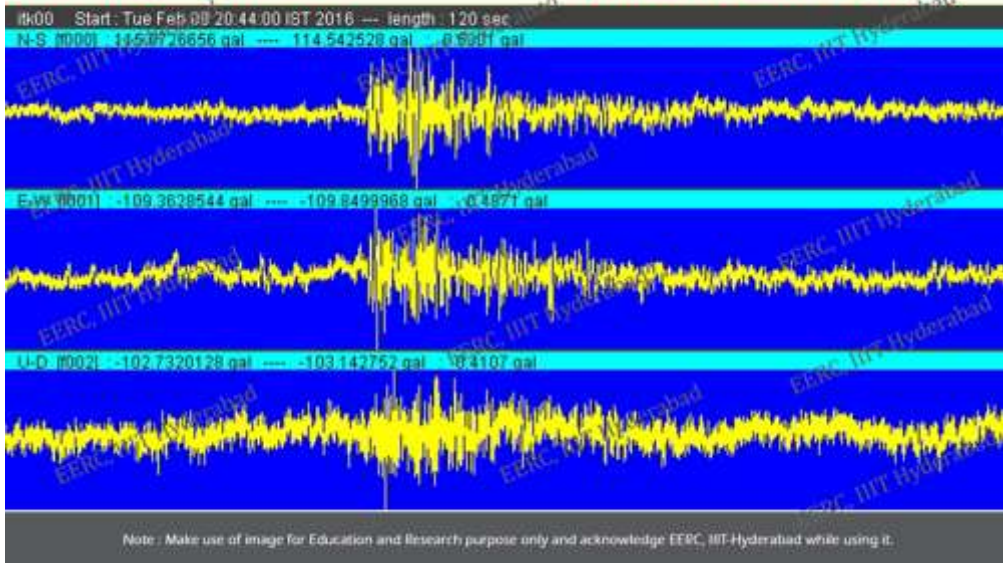
Latest Earthquake Records:

The following ground motions were recorded at CDG00 station Chandigarh, Punjab.



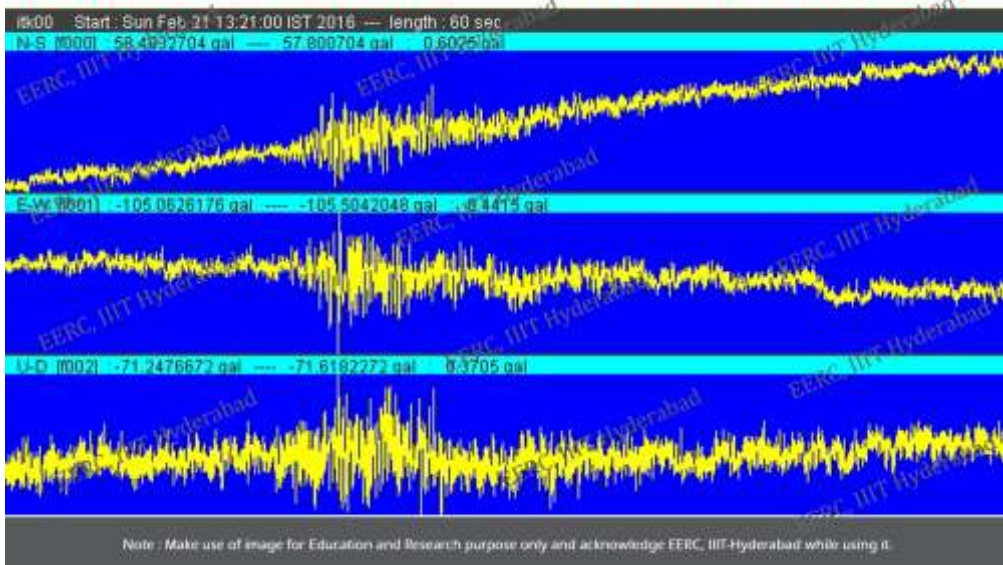
Lahul & Spiti, HP M 4.4

09Feb2016, 20:44 pm (IST)



Uttarkashi, Uttarakhand M 3.5

21Feb2016, 13:21 pm (IST)



Hindkush Region, Afganistan M 5.7

21Feb2016, 14:23 pm (IST)

