

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 1790
TO BE ANSWERED ON WEDNESDAY, JULY 26, 2017
EARTHQUAKES**

**1790. SHRI VISHNU DAYAL RAM:
SHRI JANAK RAM:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details of the earthquakes reported in the country during the last two years and the current year;**
- (b) the details of the loss of life and property due to these earthquakes;**
- (c) whether the Council of Scientific and Industrial Research has developed an earthquake warning system and if so, the details thereof;**
- (d) whether this warning system has been set in various cities of the country; and**
- (e) if so, the details thereof?**

ANSWER

**MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a) Details of significant earthquakes took place in the country (covering the area bounded by 6°-38°N Latitude and 68°-98°E Longitude)by National Seismological Network, National Center for Seismology, MoES during the last two year 2015, 2016 and current year up to July 2017 are furnished in Annexure-I.**
- (b) During last two years, Bay of Bengal (275 km South-East of Paradip), Nepal, Afghanistan, Tajikistan, Manipur, Tripura and Burma earthquake and its aftershocks caused loss of life and property in Indian territory also. 115 deaths have been reported (Bihar-79; Uttar Pradesh -19; West Bengal-3; Rajashthan-1; Jammu & Kashmir-4 and Manipur-8; Tripura-1) and about 13000 houses were reported damaged.**
- (c) The constituent laboratory of Council of Scientific & Industrial Research (CSIR) namely, CSIR-Central Scientific Instruments Organisation (CSIO), Chandigarh has developed an earthquake warning system and it has been set up only at Delhi Metro Rail Corporation, New Delhi.**
- (d-e) Yes, Madam. An Earthquake Warning System (EqWS) developed by CSIR-Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh consisting of five seismic sensing nodes at different Metro system locations at .Mundka, Botanical Garden, Huda City Centre, Metro Bhawan and Faridabad has been commissioned since October 2015.It has been functional and alerted recent substantial earthquakes via triggering of the majority of nodes on April 10, 2016, September 9, 2016 and February 6, 2017.**

Annexure-I

Details of earthquakes ($M \geq 3.0$) which have been detected and located in and around the country (Covering the area bounded by 6° - 38° N Latitude and 68° - 98° E Longitude) by the National Seismological Network during 2015, 2016 and current year (up to 18th July, 2017).

1) YEAR 2015

Day	Origin-TIME		Latitude	Longitude	Depth	Magnitude			
Year	Mon	day	hr	min	sec	$^{\circ}$ N	$^{\circ}$ E	(Km)	(Richter scale)

2015	1	2	7	23	33	24.09	94.08	84	3.8
2015	1	5	9	20	16.7	24.13	93.94	79	3.6
2015	1	5	19	41	42.5	28.87	81.65	10	4.0
2015	1	10	13	6	44.7	11.77	93.45	150	5.3
2015	1	11	22	56	13.1	36.81	75.3	10	3.3
2015	1	13	6	33	53.9	24.67	94.27	76	3.3
2015	1	15	1	33	1	22.62	92.52	10	4.6
2015	1	18	13	9	32.5	25.39	96.99	10	4.0
2015	1	18	22	23	59.5	27.99	93.9	10	3.1
2015	1	22	7	43	14.8	12.91	92.94	30	4.1
2015	1	23	0	29	42.2	12.87	92.8	10	4.1
2015	1	23	4	49	7	29.71	80.44	18	3.1
2015	1	27	12	41	31.5	22.94	95.85	10	3.8
2015	1	28	17	4	18	33.21	75.33	5	3.5
2015	1	30	6	37	41.5	12.85	95.26	10	3.6
2015	2	1	16	0	49.2	26.52	93.29	35	4.2
2015	2	3	9	28	4.4	26.24	90.83	11	3.8
2015	2	5	0	47	3	34.38	73.66	41	4.0
2015	2	6	13	13	9.3	26.87	91.97	16	3.4
2015	2	6	22	39	27.1	25.46	94.5	82	3.6
2015	2	7	23	35	54	36.83	72.54	33	4.4
2015	2	9	14	13	0.1	9.8	93.22	18	4.6
2015	2	11	3	30	12	13.23	92.22	9	5.3
2015	2	12	8	19	34.2	34.74	74.97	15	3.6
2015	2	12	14	33	8.3	24.1	93.83	60	4.7
2015	2	12	15	33	52.4	24.15	93.88	38	3.6
2015	2	15	14	14	12.3	35.07	76.04	72	4.5
2015	2	15	20	51	51	11.28	91.74	41	3.0
2015	2	18	4	7	48.9	24.13	93.8	77	3.5
2015	2	21	15	55	35.5	25.71	94.21	97	3.9
2015	2	23	6	32	3.4	10.84	91.69	10	4.2

2015	2	23	8	17	46.9	23.67	90.91	31	3.6
2015	2	24	12	54	41.4	25.66	91.5	18	3.6
2015	2	25	0	39	13.6	15.69	80.24	8	4.0
2015	3	2	20	51	54.7	36.03	77.67	28	4.4
2015	3	14	20	37	26	23.97	93.88	23	3.8
2015	3	17	15	28	40.7	24.48	94.93	100	4.1
2015	3	19	3	37	8.1	15.54	80.27	15	3.4
2015	3	19	9	41	57.2	24.02	72.72	10	3.6
2015	3	22	10	20	19	25.61	92.67	40	3.8
2015	3	22	12	6	44.7	22.73	92.69	10	3.5
2015	3	23	11	53	27.6	29	77.64	10	3.4
2015	3	25	10	13	10.1	13.44	91.83	29	4.6
2015	3	26	3	20	38	7.47	91.91	10	4.4
2015	3	27	18	51	40.7	9.56	93.9	52	4.9
2015	4	1	9	43	35.2	25.87	90.6	10	4.0
2015	4	1	21	23	54.2	30.27	79.49	5	4.9
2015	4	3	12	23	58.9	23.79	94.54	28	4.1
2015	4	3	12	45	23.2	10.79	93.78	100	4.8
2015	4	9	11	19	57.2	26.66	92.8	38	3.5
2015	4	9	12	58	29.6	25.67	91.52	5	3.4
2015	4	9	22	49	41.2	14.09	92.8	15	5.0
2015	4	12	23	39	35.7	24.03	93.85	90	3.8
2015	4	13	5	55	11.6	14.17	93.85	28	4.2
2015	4	15	4	49	48.9	28.15	95.71	26	4.5
2015	4	16	22	5	48.2	26.91	92.65	8	4.8
2015	4	17	0	20	14.5	26.33	92.4	24	3.8
2015	4	18	9	48	7.3	26.45	92.64	39	3.4
2015	4	18	17	22	19.2	10.13	92.39	100	4.0
2015	4	20	22	48	12.1	26.67	92.51	10	3.8
2015	4	21	0	17	27.7	14.16	92.92	10	5.1
2015	4	23	20	26	40	27.35	88.14	10	4.0
2015	4	23	23	58	21.6	12.17	94.57	30	5.1
2015	4	25	8	49	10.3	27.62	85.02	5	4.3
2015	4	25	20	7	4.9	28.03	84.56	10	4.3
2015	4	25	23	16	16.7	27.78	84.93	10	5.2
2015	4	26	4	58	41.2	27.99	84.84	5	4.3
2015	4	26	15	56	54.2	26.36	92.83	39	3.5
2015	4	26	18	54	52	28.03	84.97	10	4.1
2015	4	27	0	39	15.5	27.09	84.69	10	3.8
2015	4	27	4	14	46.9	28.12	85.14	10	4.1
2015	4	27	12	35	51.4	26.84	88.1	10	5.2
2015	4	29	0	48	15.8	26.85	92.47	6	3.6
2015	4	29	9	39	17.2	27.62	84.73	10	4.1
2015	4	30	0	37	12.8	27.61	84.68	10	4.3
2015	4	30	9	0	20.6	28.7	96.52	10	3.9
2015	4	30	19	21	19	26.45	94.74	10	4.8

2015	4	30	20	19	1.2	26.46	92.69	37	3.9
2015	4	30	20	33	19.1	26.06	95.02	10	3.7
2015	5	1	8	58	40.5	10.88	91.89	7	5.2
2015	5	1	18	47	21.7	27.98	84.76	10	3.3
2015	5	3	2	15	30	27.69	84.74	10	3.7
2015	5	3	11	35	10.8	27.98	85	10	4.3
2015	5	6	14	45	44.7	12.73	92.04	25	4.5
2015	5	8	5	8	26.7	29.11	76.85	6	3.3
2015	5	9	1	1	52.2	23.56	70.36	15	3.8
2015	5	12	10	4	5	27.44	85.85	10	3.9
2015	5	12	21	25	12.8	27.85	84.69	7	5.3
2015	5	15	1	42	44	27.66	84.71	10	4.7
2015	5	18	13	5	33.5	8.37	93.15	10	3.8
2015	5	22	10	59	36	28.13	85.11	10	4.3
2015	5	22	20	11	36.7	24.69	93.29	16	3.8
2015	5	23	11	53	57.7	30.42	79.23	6	3.4
2015	5	24	1	12	11	26.37	93.47	39	3.3
2015	5	25	15	59	7.8	22.27	93.88	33	3.5
2015	5	26	17	24	13.1	24.37	94.03	65	4.4
2015	5	27	7	30	45.5	27.82	85.46	10	4.2
2015	5	28	15	19	21.7	25.76	90.99	15	3.6
2015	5	29	3	57	53.2	26.16	90.03	18	4.0
2015	5	29	10	0	1.7	27.76	84.74	10	4.6
2015	5	30	16	28	21.7	27.69	85	10	4.0
2015	6	1	7	12	4.5	26.54	96.18	114	4.0
2015	6	2	6	34	14.3	28.65	77.79	17	3.6
2015	6	2	22	9	10	25.77	89.92	10	3.6
2015	6	3	11	28	25.7	30.44	79.25	5	4.3
2015	6	4	13	43	31.2	27.53	92.92	10	3.1
2015	6	8	15	21	18.2	6.94	92.37	30	3.9
2015	6	12	18	29	28.7	14.03	93.67	35	5.3
2015	6	18	14	36	3.2	22.8	92.17	10	3.6
2015	6	23	20	33	26.2	30.45	77.92	10	4.0
2015	6	27	6	4	29.7	29.84	80.21	10	3.5
2015	6	28	1	5	25.6	26.4	90.25	5	5.6
2015	6	29	17	27	5.9	26.54	94.98	10	3.7
2015	6	30	13	15	54.9	26.06	90.78	15	3.8
2015	7	2	15	9	5.9	25.84	89.86	15	3.0
2015	7	3	2	20	38.7	12.06	94.67	10	4.6
2015	7	3	3	16	39	11.95	94.89	10	5.6
2015	7	3	20	4	10.1	27.67	84.99	18	4.3
2015	7	4	18	41	33	13.25	93.17	33	3.6
2015	7	10	1	53	14.3	27.41	94.06	10	4.0
2015	7	10	12	53	21.7	26.75	90.5	10	4.4
2015	7	10	22	27	37	25.18	90.77	15	4.1
2015	7	18	23	48	9.3	30.45	79.17	6	4.2

2015	7	18	23	48	10.6	30.38	79.11	10	4.0
2015	7	21	8	21	41.5	24.4	93.69	53	3.7
2015	7	23	6	4	13.5	15.81	73.9	10	3.1
2015	7	23	14	36	6	21.35	80.11	10	4.0
2015	7	26	16	59	8.1	30.04	80.7	10	3.6
2015	8	3	20	47	48	11.7	92.3	30	4.7
2015	8	5	19	15	57.7	30.19	80.51	10	4.3
2015	8	6	21	43	41	30.16	79.37	10	3.1
2015	8	12	2	44	50.9	24.63	94.81	15	4.0
2015	8	16	21	35	27.2	13.74	92.53	10	5.0
2015	8	19	19	18	14.8	31.5	76.99	10	3.7
2015	8	20	19	21	14.6	25.71	89.5	18	4.1
2015	8	25	10	17	4.8	17.17	73.78	5	3.9
2015	8	26	1	56	51.9	18.7	84.39	10	4.4
2015	8	26	18	5	8.1	29.65	95.54	10	4.4
2015	8	28	19	22	0.8	25.75	89.6	10	4.1
2015	8	29	2	5	15.8	13.83	92.84	18	4.0
2015	8	31	0	27	48.4	35.73	78.39	80	4.0
2015	9	3	7	59	24.7	30	79.65	6	3.5
2015	9	3	17	57	52.7	27.61	75.68	10	4.3
2015	9	5	5	39	1	26.23	92.8	17	4.0
2015	9	6	3	21	40.5	35.83	78.21	194	4.1
2015	9	6	12	23	15.1	26.19	92.79	38	3.5
2015	9	7	10	13	35	23.22	93.55	86	3.2
2015	9	11	12	54	5.9	29.8	80.55	5	3.1
2015	9	13	9	45	22	28.58	76.26	10	3.3
2015	9	15	22	38	30.7	35.67	78.83	10	4.6
2015	9	16	11	10	13.3	35.31	78.97	33	4.8
2015	9	17	18	34	17.7	24.64	94.57	80	4.7
2015	9	18	20	25	20.1	23.9	93.95	73	3.3
2015	9	18	21	16	44.2	23.25	93.72	102	3.7
2015	9	19	1	1	15.1	7.6	94.44	33	4.7
2015	9	23	4	51	33.5	13.2	92.5	39	4.1
2015	9	25	16	57	40.5	26.52	91.72	33	4.1
2015	9	27	18	2	17.7	7.26	92.31	49	3.2
2015	9	27	22	54	52.9	7.33	92.38	15	3.3
2015	9	29	9	27	14.6	29.82	80.56	10	4.6
2015	9	29	19	5	15.6	10.02	93.97	99	3.4
2015	10	2	11	29	20.7	22.27	93.36	40	4.6
2015	10	6	4	17	34.5	28.87	76.68	13	3.0
2015	10	8	1	4	19	31.49	77.05	10	3.6
2015	10	9	20	10	13.8	28.62	77.18	5	3.3
2015	10	10	1	48	45.4	27.23	88.65	13	3.9
2015	10	11	8	34	53.4	24.86	94.16	20	4.2
2015	10	17	6	29	40.2	24.75	94.4	38	4.3
2015	10	19	0	4	40.7	29.67	80.42	5	3.3

2015	10	24	4	35	3	30.13	80.33	20	3.8
2015	10	27	13	50	48	24.56	94.94	20	4.4
2015	10	28	23	54	46.2	24.17	93.12	10	4.1
2015	10	29	22	15	52	24.58	92.39	10	5.1
2015	10	31	5	16	48.2	25.76	92.18	10	3.2
2015	11	2	17	34	57.4	28.83	76.69	10	3.2
2015	11	2	20	39	45.5	20.43	73	18	3.0
2015	11	5	16	27	45.9	31.7	74.32	24	3.5
2015	11	8	10	41	54.2	6.35	95.02	7	5.2
2015	11	8	10	53	27.2	6.61	95.2	20	4.8
2015	11	8	11	54	41.2	7.12	94.52	10	4.7
2015	11	8	13	23	59	6.95	94.36	10	5.0
2015	11	8	14	34	1	6.34	94.9	10	5.1
2015	11	8	16	47	2.2	6.57	94.81	35	5.8
2015	11	8	16	59	22.2	6.93	94.61	10	5.0
2015	11	8	17	46	49.7	6.43	94.25	10	4.7
2015	11	8	18	48	50.5	6.94	94.41	10	4.8
2015	11	8	19	14	42.5	6.34	94.76	10	5.0
2015	11	9	6	12	11.1	6.23	94.84	10	5.0
2015	11	9	8	12	48.7	6.66	94.67	10	5.5
2015	11	13	1	56	22	24.61	94.53	101	3.6
2015	11	13	7	44	23.6	29.82	80.66	10	3.2
2015	11	14	16	53	31.2	6.73	94.51	10	5.1
2015	11	15	9	19	7	13.54	93.49	29	3.5
2015	11	15	23	24	39.7	24.72	94.73	92	4.3
2015	11	18	8	25	38.2	29.73	80.72	6	3.5
2015	11	19	13	37	56.2	32.68	76.36	10	3.7
2015	11	25	16	15	10	26.42	92.97	36	4.7
2015	11	27	18	58	55	10.69	91.49	11	4.5
2015	11	28	18	32	53.2	12.55	93.84	34	3.6
2015	11	29	2	47	38.7	30.62	79.68	14	4.0
2015	12	7	13	20	2.0	38.10	72.90	10	7.0
2015	12	13	23	54	25.0	26.20	92.30	10	3.3
2015	12	15	8	5	14.0	24.20	86.60	91	4.2
2015	12	16	10	18	16.0	13.50	94.00	10	4.8
2015	12	19	3	46	55.0	29.30	81.70	48	5.4
2015	12	23	18	57	12.0	25.80	94.70	186	4.2
2015	12	30	22	54	54.0	25.10	91.10	10	3.7
2015	12	31	8	53	22.0	7.20	94.40	170	4.5

2) YEAR 2016

Day	Origin-TIME			Latitude	Longitude	Depth	Magnitude		
Year	Mon	day	hr	min	sec	°N	°E	(Km)	(Richter scale)

			(UTC)						
2016	1	04	4	35	0.0	24.80	93.50	20	6.7
2016	1	04	9	27	46.0	24.90	93.40	20	3.6
2016	1	04	14	30	2.0	24.80	93.50	40	3.4
2016	1	06	15	55	8.0	25.20	93.20	32	4.0

2016	1	07	19	12	58.0	27.70	93.30	225	4.5
2016	1	15	5	55	20.0	25.20	92.70	10	3.0
2016	1	16	0	54	52.0	11.90	92.50	10	4.0
2016	1	18	6	22	40.0	26.20	92.60	10	3.5
2016	1	22	0	52	43.0	28.10	85.10	50	4.8
2016	1	24	22	39	26.0	27.00	92.20	250	3.2
2016	1	29	4	17	8.0	27.10	75.50	111	3.8
2016	2	2	1	18	0.0	23.80	93.80	33	3.8
2016	2	2	5	19	0.0	26.40	93.40	10	3.7
2016	2	4	12	40	27.0	32.70	75.70	10	4.1
2016	2	4	21	0	51.0	14.40	93.20	10	4.8
2016	2	5	21	50	9.0	27.80	85.40	118	5.2
2016	2	8	16	35	56.0	24.70	94.60	10	3.8
2016	2	9	20	43	47.0	32.80	76.40	6	4.4
2016	2	15	22	5	29.0	30.20	79.60	10	3.5
2016	2	17	4	36	55.0	26.30	93.30	50	4.4
2016	2	21	9	9	42.0	7.10	92.10	5	4.5
2016	2	21	13	20	56.0	30.90	78.30	177	3.5
2016	2	21	22	2	7.0	36.30	78.40	30	4.4
2016	2	21	23	40	0.0	27.80	84.60	20	5.0
2016	2	22	23	50	58.0	7.50	92.00	26	4.8
2016	2	24	7	36	51.0	24.90	72.30	19	3.0
2016	2	24	14	52	17.0	27.60	85.60	60	4.5
2016	2	27	6	1	3.0	13.60	94.00	10	4.6
2016	3	2	9	33	58.0	26.50	95.20	10	4.0
2016	3	6	6	20	19.0	24.50	92.80	10	3.5
2016	3	6	14	21	18.0	24.70	92.90	8	3.3
2016	3	10	15	16	59.0	25.60	91.90	9	3.0
2016	3	10	15	20	32.0	25.60	91.90	21	3.2
2016	3	12	21	45	16.0	26.70	89.40	25	3.8
2016	3	13	10	45	36.0	27.80	84.90	10	3.8
2016	3	13	16	0	0.0	26.50	92.30	10	4.3
2016	3	15	2	57	40.0	27.20	86.20	10	3.9
2016	3	17	22	17	4.0	34.20	77.90	33	4.5
2016	3	18	9	7	33.0	25.40	73.40	10	3.5
2016	3	21	7	49	41.0	25.40	92.50	16	3.0
2016	3	22	17	19	12.0	26.10	95.30	5	3.7
2016	3	28	21	12	42.0	24.10	93.10	15	3.7
2016	3	30	7	34	11.0	32.50	76.00	10	3.8
2016	3	30	17	56	42.0	28.00	85.70	35	4.4
2016	4	4	2	1	0.0	24.40	94.30	10	4.0
2016	4	4	10	1	26.0	27.80	86.20	10	4.3
2016	4	5	13	12	27.0	25.90	90.40	15	5.4
2016	4	8	1	33	0.0	27.00	75.10	78	3.5
2016	4	9	18	50	14.0	27.60	85.20	190	4.5
2016	4	11	16	6	13.0	29.80	80.10	10	3.7
2016	4	12	17	25	48.0	26.50	90.80	10	3.8
2016	4	12	20	11	53.0	27.50	86.10	60	4.5
2016	4	13	9	26	54.0	24.90	94.00	134	4.6
2016	4	13	19	25	13.0	23.00	94.90	80	6.8
2016	4	14	11	11	55.0	23.80	94.00	5	4.5
2016	4	14	21	53	40.0	23.30	93.20	10	3.5
2016	4	19	6	44	46.0	24.80	92.70	10	3.7
2016	4	20	2	2	58.0	10.30	93.80	10	5.1
2016	4	24	2	1	1.0	28.70	85.10	150	4.6
2016	5	05	18	00	30	30.4	80.1	15	4.1
2016	5	06	06	55	40	26.3	92.6	10	3.0
2016	5	06	08	36	18	28.1	92.3	20	3.8
2016	5	06	15	14	07	26.6	92.4	10	3.0
2016	5	07	09	43	39	25.5	91.9	10	4.0

2016	5	09	06	12	02	26.2	92.8	24	3.0
2016	5	09	16	03	48	11.5	91.5	10	5.3
2016	5	11	01	15	51	32.0	95.0	10	5.5
2016	5	11	08	52	46	27.9	84.6	23	4.5
2016	5	12	07	54	13	24.3	94.2	60	4.9
2016	5	12	11	56	45	25.1	94.0	10	3.3
2016	5	12	16	59	46	24.5	72.2	5	3.0
2016	5	14	22	45	56	27.7	85.3	10	4.3
2016	5	15	06	56	04	23.2	70.1	10	3.4
2016	5	16	18	03	47	26.0	90.5	10	3.5
2016	5	17	10	12	32	26.2	88.8	08	3.5
2016	5	18	08	27	06	25.6	91.6	15	3.0
2016	5	18	13	23	24	17.3	73.7	05	3.9
2016	5	18	17	29	38	17.3	73.9	15	3.7
2016	5	18	19	17	42	17.3	73.7	05	4.0
2016	5	19	18	07	25	17.3	73.9	15	3.5
2016	5	20	13	36	18	24.9	92.3	25	3.2
2016	5	21	11	30	23	17.3	73.8	03	3.6
2016	5	24	12	35	15	26.2	92.4	10	3.2
2016	5	28	09	39	16	27.8	85.1	35	5.0
2016	5	30	22	39	25	25.1	93.2	10	3.2
2016	6	06	12	17	53	27.8	94.1	10	3.5
2016	6	07	12	01	13	27.4	92.7	5	3.8
2016	6	07	20	10	37	29.9	80.2	10	3.5
2016	6	09	16	17	32	27.5	92.7	10	3.5
2016	6	11	18	12	22	25.8	95.0	75	4.5
2016	6	12	11	20	22	17.2	73.9	16	3.5
2016	6	13	19	22	42	27.6	92.7	10	3.5
2016	6	13	23	27	44	27.7	84.6	10	4.2
2016	6	14	12	54	24	25.1	92.3	10	3.2
2016	6	21	16	47	11	35.7	74.0	33	4.5
2016	6	22	21	55	23	24.5	94.4	11	3.9
2016	6	24	23	01	16	24.1	93.6	10	3.1
2016	6	25	04	03	51	27.3	95.2	5	3.5
2016	6	27	00	27	44	22.6	92.0	20	5.0
2016	6	27	07	22	13	23.3	94.0	5	4.2
2016	6	28	14	15	38	24.7	92.3	10	3.3
2016	6	29	09	27	02	29.2	81.1	10	3.9
2016	7	01	00	31	50	24.1	93.3	10	3.3
2016	7	01	19	22	40	24.9	95.2	105	5.0
2016	7	02	00	23	49	29.4	81.1	10	4.0
2016	7	02	13	29	28	25.1	94.2	36	3.6
2016	7	04	03	31	13	26.1	94.2	94	3.0
2016	7	05	06	25	00	25.2	94.3	40	3.8
2016	7	07	08	59	38	28.2	84.2	10	4.0
2016	7	07	22	24	02	26.8	89.5	40	3.3
2016	7	09	20	42	08	30.5	79.3	10	3.9
2016	7	14	06	54	25	35.5	77.4	10	4.6
2016	7	15	05	51	25	26.5	93.3	30	3.0
2016	7	17	02	31	52	24.2	94.2	10	3.2
2016	7	17	03	55	01	21.7	72.5	10	4.5
2016	7	17	11	54	55	31.1	74.3	15	4.6
2016	7	21	14	42	07	31.5	77.7	5	3.5
2016	7	24	15	33	11	13.3	93.2	30	4.4
2016	7	26	06	06	47	26.3	92.5	10	4.0
2016	7	27	16	54	27	24.7	94.2	30	4.4
2016	7	30	20	37	01	24.7	94.3	90	4.0
2016	8	01	08	16	10	26.8	90.3	10	4.2
2016	8	01	10	01	08	21.2	94.7	120	5.7
2016	8	01	12	34	53	30.9	77.1	10	3.0

2016	8	01	13	38	32	31.4	77.6	10	3.6
2016	8	02	02	24	37	24.5	94.4	76	3.5
2016	8	03	18	31	23	28.5	95.5	20	3.4
2016	8	11	10	55	15	7.6	93.9	10	5.3
2016	8	11	21	27	00	25.6	91.1	10	3.3
2016	8	18	20	05	54	30.8	78.2	5	3.8
2016	8	19	10	46	34	25.0	94.0	38	3.5
2016	8	19	19	05	34	27.6	92.7	10	4.0
2016	8	20	21	24	28	25.6	93.2	10	3.2
2016	8	21	09	04	17	25.1	94.0	19	3.1
2016	8	22	05	28	28	25.5	93.6	10	3.5
2016	8	23	00	00	47	25.6	93.2	10	3.1
2016	8	23	02	11	13	23.8	94.5	100	5.5
2016	8	24	10	34	57	21.0	94.4	58	6.7
2016	8	26	11	21	28	24.3	94.2	89	3.5
2016	8	26	18	20	41	8.9	94.6	10	4.5
2016	8	27	01	14	32	31.4	77.5	10	4.6
2016	8	27	01	35	07	31.4	77.5	10	4.3
2016	8	27	03	38	15	31.4	77.4	10	4.2
2016	8	27	07	07	21	31.3	77.6	10	3.7
2016	8	27	15	04	54	24.8	93.5	14	3.7
2016	8	28	09	18	49	32.8	76.0	20	4.4
2016	8	28	10	01	01	25.7	93.2	10	3.2
2016	8	28	12	54	51	28.0	88.7	90	4.2
2016	8	28	19	41	11	25.7	90.8	10	3.6
2016	8	31	01	26	52	24.8	93.3	27	3.2
2016	8	31	23	24	02	26.6	92.0	10	3.0
2016	9	02	14	30	58	28.7	94.7	10	4.6
2016	9	03	01	07	59	24.6	94.3	104	3.8
2016	9	03	11	41	14	26.3	92.0	10	3.4
2016	9	05	02	04	16	27.7	86.2	10	4.5
2016	9	05	07	52	36	27.1	94.6	10	3.4
2016	9	07	20	52	45	24.3	70.5	10	3.9
2016	9	07	22	21	17	28.4	95.0	10	3.8
2016	9	08	20	46	48	26.6	89.4	10	3.5
2016	9	10	15	27	24	28.6	76.6	10	4.1
2016	9	11	08	00	37	17.4	73.8	10	3.6
2016	9	11	21	46	10	26.6	92.6	30	3.2
2016	9	13	21	52	13	25.0	93.8	21	3.7
2016	9	15	02	30	45	10.1	91.6	10	5.2
2016	9	17	02	46	25	24.5	93.6	40	4.0
2016	9	17	11	17	58	27.1	90.0	25	4.4
2016	9	18	05	28	58	26.9	93.6	10	3.2
2016	9	18	14	34	36	26.7	88.3	10	3.2
2016	9	20	21	59	20	26.8	92.5	10	3.0
2016	9	20	23	06	01	23.8	70.3	5	3.4
2016	9	23	22	27	20	8.4	94.6	10	4.6
2016	9	24	18	00	05	25.9	94.9	66	3.4
2016	9	25	20	43	52	23.7	70.2	19	3.5
2016	9	25	21	41	36	30.5	78.9	10	3.7
2016	9	26	19	04	13	8.0	94.5	10	4.7
2016	10	01	08	04	43	34.4	73.8	10	5.2
2016	10	03	21	16	03	25.0	94.6	114	3.7
2016	10	06	14	47	57	26.5	92.9	37	4.4
2016	10	07	04	52	33	27.7	86.1	15	4.5
2016	10	14	02	01	25	29.7	80.2	10	3.3
2016	10	14	10	34	36	25.6	92.0	10	3.6
2016	10	17	00	30	48	29.6	80.3	10	4.0
2016	10	18	21	31	33	22.9	92.5	147	3.5
2016	10	19	07	20	49	24.7	91.0	40	4.3

2016	10	21	13	04	57	24.8	91.1	10	4.2
2016	10	22	06	00	32	26.2	92.7	10	3.9
2016	10	23	15	57	40	25.9	90.1	10	4.7
2016	10	23	22	57	51	24.2	71.2	10	3.0
2016	10	24	10	51	57	34.9	72.9	115	4.5
2016	10	24	10	51	57	34.9	72.9	115	4.5
2016	10	25	22	00	28	7.2	92.4	10	4.7
2016	10	26	02	21	58	22.8	94.3	90	5.0
2016	10	26	06	29	07	23.1	92.7	45	4.8
2016	10	27	08	50	11	29.9	80.1	15	3.2
2016	10	31	22	55	01	26.4	95.0	70	3.2
2016	11	03	04	06	54	23.7	70.1	25	3.3
2016	11	08	00	37	25	26.6	93.0	36	3.5
2016	11	13	21	22	26	10.6	94.2	45	4.6
2016	11	15	02	10	22	24.7	92.3	10	5.0
2016	11	15	14	27	16	24.5	93.7	35	3.3
2016	11	15	16	02	54	36.5	70.8	150	5.2
2016	11	16	05	07	44	31.4	75.7	13	3.6
2016	11	16	22	58	56	27.8	76.7	10	4.4
2016	11	17	04	10	41	26.6	93.2	30	3.3
2016	11	21	18	09	18	27.9	91.6	5	4.4
2016	11	23	02	31	03	30.3	78.0	10	3.4
2016	11	23	17	02	50	26.4	93.4	10	3.1
2016	11	23	19	57	54	24.7	94.6	107	3.5
2016	11	24	02	06	28	24.8	94.9	48	3.4
2016	11	24	14	16	37	33.5	72.5	10	4.6
2016	11	24	19	27	25	17.3	73.8	10	4.0
2016	11	25	11	17	09	13.4	92.9	10	4.4
2016	11	25	19	37	58	7.4	92.4	10	4.2
2016	11	27	23	35	21	27.7	86.4	10	5.5
2016	11	30	22	42	48	31.4	77.5	10	3.3
2016	12	01	16	52	48	29.8	80.6	10	5.2
2016	12	01	19	41	19	27.2	88.9	10	3.5
2016	12	01	22	03	05	25.0	94.6	90	3.5
2016	12	02	22	50	32	33.3	75.5	10	3.5
2016	12	03	19	42	13	11.0	91.9	10	4.8
2016	12	05	05	26	00	23.9	94.2	104	4.0
2016	12	06	20	36	39	24.9	93.8	33	3.2
2016	12	07	05	21	23	23.5	70.5	20	3.6
2016	12	08	07	46	25	23.5	94.2	10	4.0
2016	12	08	09	33	05	25.4	94.1	5	3.2
2016	12	11	01	57	26	25.7	91.7	10	4.2
2016	12	11	19	43	15	25.3	91.4	33	3.2
2016	12	12	07	48	56	26.5	93.5	40	3.1
2016	12	13	19	14	04	30.8	78.0	5	3.9
2016	12	13	22	41	37	30.9	78.0	5	3.4
2016	12	17	17	26	00	33.8	73.7	10	4.6
2016	12	18	02	16	16	28.6	94.9	106	3.8
2016	12	18	16	08	10	26.1	92.2	10	3.2
2016	12	19	04	31	56	30.9	78.0	10	3.4
2016	12	19	17	14	02	24.9	94.1	70	3.2
2016	12	20	07	01	20	26.6	92.8	35	3.6
2016	12	20	08	56	18	27.0	92.6	15	3.1
2016	12	21	21	53	26	24.2	94.2	11	3.8
2016	12	23	04	56	16	12.5	92.3	13	4.5
2016	12	26	08	45	48	30.8	77.9	10	3.5
2016	12	26	08	45	48	30.8	77.9	10	3.5
2016	12	26	16	17	18	25.7	74.2	10	3.5
2016	12	26	22	26	55	31.4	77.2	10	3.2
2016	12	27	21	21	53	12.7	94.1	48	4.2

3) Current YEAR 2017 (upto 18th July)

Day	Origin-TIME			Latitude	Longitude	Depth	Magnitude		
Year	Mon	day	hr	min	sec	°N	°E	(Km)	(Richter scale)
			(UTC)						
2017	01	03	09	09	03	24.1	91.9	28	5.7
2017	01	03	18	49	51	23.4	94.0	10	5.4
2017	01	04	13	40	32	24.0	92.0	15	3.4
2017	01	05	05	56	52	25.1	95.0	123	4.3
2017	01	06	15	03	52	24.1	91.9	55	3.9
2017	01	08	04	28	16	25.2	94.4	20	3.3
2017	01	10	15	27	41	30.3	79.4	5	3.2
2017	01	11	13	21	14	28.3	94.1	10	3.3
2017	01	12	09	32	07	26.5	95.4	75	4.7
2017	01	17	15	22	16	27.6	88.6	10	3.6
2017	01	18	01	46	10	23.9	93.0	27	3.7
2017	01	18	03	03	17	24.5	94.8	22	4.2
2017	01	23	09	33	05	30.8	78.2	10	3.5
2017	01	24	12	25	38	25.6	91.7	15	3.4
2017	01	24	18	14	29	25.5	94.6	50	3.1
2017	01	29	09	09	04	24.8	92.8	10	3.2
2017	01	31	05	28	42	26.4	93.5	22	3.2
2017	02	03	13	35	48	30.5	79.2	10	3.6
2017	02	04	07	05	17	32.6	76.6	10	3.5
2017	02	05	12	54	59	27.9	93.8	10	3.8
2017	02	06	17	03	08	30.5	79.1	33	5.8
2017	02	06	20	21	45	30.6	79.0	10	3.6
2017	02	08	08	14	28	26.9	92.9	15	3.6
2017	02	11	17	21	13	30.5	79.1	5	3.2
2017	02	11	18	12	51	23.9	91.8	10	3.5
2017	02	11	17	21	13	30.5	79.1	5	3.2
2017	02	12	04	05	30	25.6	90.8	10	4.5
2017	02	16	15	13	10	26.2	92.8	20	3.6
2017	02	18	18	53	42	26.6	93.0	30	3.4
2017	02	23	20	16	07	23.7	94.5	82	3.4
2017	02	23	21	39	16	27.3	88.1	150	3.5
2017	02	24	12	02	49	24.1	93.4	20	5.2
2017	02	24	21	00	44	28.7	96.0	36	3.2
2017	02	25	00	00	44	28.7	96.0	10	3.5
2017	02	25	07	02	19	24.1	92.1	33	4.0
2017	02	27	03	37	47	27.3	85.9	10	5.0
2017	02	27	04	21	45	27.3	85.9	10	4.7
2017	03	01	20	09	31	32.3	76.6	10	3.8
2017	03	03	23	38	13	24.3	94.2	70	3.5
2017	03	04	02	11	52	25.2	94.6	70	5.0
2017	03	04	06	50	44	25.5	90.9	10	3.3
2017	03	06	02	44	16	35.7	74.0	50	4.8
2017	03	07	09	59	16	26.8	90.5	30	4.1
2017	03	09	08	39	56.0	32.5	76.6	5	3.5
2017	03	09	02	55	15.0	25.0	94.2	36	4.1
2017	03	10	12	39	33.0	8.5	91.9	10	4.7
2017	03	13	10	22	17.0	24.6	72.1	10	4.5
2017	03	14	02	51	19.0	6.4	92.2	10	5.9
2017	03	14	00	18	01.0	32.7	75.6	10	3.6
2017	03	17	14	01	49.0	11.5	92.7	60	4.9
2017	03	19	08	57	09.0	9.9	94.0	10	4.7

2017	03	21	15	40	44.0	24.9	92.1	37	3.9
2017	03	25	02	05	55.0	25.0	95.1	82	5.0
2017	03	26	21	42	09.0	27.3	88.6	10	4.6
2017	03	28	10	18	49.0	26.5	93.5	10	3.0
2017	03	29	19	14	33.0	26.1	91.3	18	3.5
2017	03	30	03	40	23.0	26.5	93.0	24	3.5
2017	04	05	16	44	34.0	14.5	92.9	10	5.0
2017	04	07	10	32	58.0	30.4	79.1	10	4.0
2017	04	10	08	50	34.0	30.7	78.6	10	3.8
2017	04	10	05	24	31.0	27.0	95.6	10	3.2
2017	04	12	17	34	33.0	23.9	93.9	10	3.2
2017	04	13	19	44	01.0	24.6	93.3	10	3.0
2017	04	15	22	35	14.0	26.0	91.0	10	3.5
2017	04	16	23	09	53.0	30.5	79.1	10	3.5
2017	04	16	08	08	02.0	26.1	91.4	24	3.3
2017	04	18	14	01	32.0	25.1	91.5	10	4.3
2017	04	18	05	11	56.0	33.8	76.6	33	5.0
2017	04	18	02	11	24.0	31.6	77.9	5	3.8
2017	04	18	02	06	17.0	12.6	77.4	33	3.4
2017	04	23	01	39	24.0	31.6	77.9	5	3.8
2017	04	24	10	53	46.0	23.4	94.1	70	4.3
2017	04	25	16	14	53.0	25.6	90.6	10	4.3
2017	04	29	23	23	57.0	24.1	93.5	55	3.4
2017	05	02	17	47	33.0	27.6	96.3	10	3.3
2017	05	02	17	43	50.0	27.5	96.2	10	3.4
2017	05	02	09	51	40.0	32.9	75.5	19	3.6
2017	05	03	00	12	33.0	24.7	94.5	10	3.4
2017	05	05	17	58	35.0	13.9	92.7	10	5.0
2017	05	06	17	57	11.0	36.4	75.3	10	4.2
2017	05	06	14	48	50.0	23.8	93.8	65	4.7
2017	05	09	03	26	54.0	26.6	93.2	28	3.4
2017	05	09	01	53	55.0	26.3	92.7	25	3.7
2017	05	16	22	13	19.0	27.3	88.2	10	4.0
2017	05	16	14	04	41.0	11.4	94.8	10	4.4
2017	05	17	17	45	50.0	13.0	93.9	10	5.0
2017	05	18	08	43	42.0	24.9	94.5	75	4.0
2017	05	19	00	02	29.0	32.8	76.3	5	4.5
2017	05	20	05	48	43.0	32.8	76.2	5	4.1
2017	05	20	03	41	46.0	32.8	76.2	10	3.6
2017	05	21	21	23	47.0	28.1	95.1	30	3.3
2017	05	21	17	38	36.0	13.6	94.0	10	4.6
2017	05	21	04	27	07.0	32.5	76.8	10	3.5
2017	05	22	19	41	43.0	33.9	75.8	5	3.3
2017	05	24	13	54	54.0	23.9	94.3	95	3.7
2017	05	26	14	17	49.0	24.4	94.0	70	3.8
2017	05	29	15	19	25.0	33.4	73.9	10	3.5
2017	05	29	14	43	17.0	26.7	88.8	30	3.7
2017	05	29	13	53	27.0	32.9	75.5	10	4.4
2017	05	30	22	25	08.0	12.2	92.6	107	4.6
2017	06	01	22	55	56.0	28.8	76.7	22	5.0
2017	06	01	12	13	47.0	25.5	93.9	10	3.2
2017	06	02	02	43	15.0	28.8	76.7	22	3.2
2017	06	03	18	14	52.0	17.1	73.8	10	4.8
2017	06	03	02	42	59.0	17.1	73.8	10	4.8
2017	06	05	16	40	07.0	24.0	92.1	96	3.0
2017	06	08	22	19	21.0	32.7	74.7	10	3.2
2017	06	09	17	38	23.0	27.8	95.7	91	3.2
2017	06	12	09	11	21.0	30.7	78.4	10	3.0
2017	06	14	17	56	17.0	32.9	76.5	5	3.1
2017	06	15	01	14	29.0	24.1	93.4	10	3.0

2017	06	16	05	14	18.0	27.0	94.4	31	3.1
2017	06	16	05	14	18.0	27.0	94.4	31	3.1
2017	06	18	22	35	44.0	24.7	93.9	10	4.4
2017	06	20	04	31	58.0	27.1	92.5	10	3.5
2017	06	21	20	51	17.0	17.0	73.7	10	3.3
2017	06	21	18	36	11.0	25.7	87.1	50	4.5
2017	06	24	20	17	01.0	24.4	94.2	82	3.5
2017	06	27	15	16	54.0	24.2	93.6	10	3.0
2017	06	27	14	02	55.0	25.1	93.9	10	3.0
2017	07	01	07	01	15.0	23.8	94.4	81	5.0
2017	07	02	05	27	44.0	24.3	94.4	80	4.9
2017	07	02	04	44	49.0	26.5	90.0	10	3.1
2017	07	02	01	58	28.0	27.4	86.5	10	4.9
2017	07	04	10	05	47.0	27.0	92.1	10	3.5
2017	07	05	09	37	23.0	25.9	90.3	10	3.3
2017	07	08	18	08	37.0	27.5	92.5	15	3.2
2017	07	08	11	21	01.0	27.3	88.5	10	3.0
2017	07	08	10	12	31.0	34.6	73.5	10	5.2
2017	07	09	07	9	49.0	29.2	95.5	10	4.8
2017	07	10	23	28	30.0	27.1	93.8	10	3.1
2017	07	10	21	38	59.0	30.4	79.2	70	3.8
2017	07	13	05	03	33.0	23.6	94.2	90	4.8
2017	07	15	16	35	31.0	28.8	81.5	81	4.5
2017	07	15	02	25	35.0	30.6	77.7	10	3.3
2017	07	17	20	20	26.0	24.9	95.0	113	4.0
2017	07	17	13	24	41.0	24.3	91.7	10	3.5
2017	07	17	09	47	26.0	26.8	89.2	10	3.4
2017	07	18	23	11	55.0	25.0	94.2	10	3.2
2017	07	18	17	05	17.0	24.7	94.1	10	3.4