

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 693
TO BE ANSWERED ON MONDAY, MARCH 04, 2013

MAPPING OF EARTHQUAKE PRONE ZONES

693. SHRI AYYANUR MANJUNATHA:

Will the Minister of **EARTH SCIENCES** be pleased to state:

- (a) whether the Indian Meteorological Department has identified and mapped the earthquake prone zones in the country;
- (b) if so, the details thereof;
- (c) the details of seismic tremors reported along with their intensity during the last three years and the current year;
- (d) whether adequate steps have been taken to deal with earthquakes, including creating awareness amongst masses; and
- (e) if so, the details thereof?

ANSWER

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI S. JAIPAL REDDY)

- (a) Yes Sir.
- (b) Bureau of Indian Standards [IS-1893 (Part-1): 2002], based on the past seismic history, grouped the country into four seismic zones, viz. Zone-II, -III, -IV and -V. Of these, Zone V is the most seismically active region, while zone II is the least. The Modified Mercalli (MM) intensity, which measures the impact of the earthquakes on the surface of the earth, broadly associated with various zones, is as follows:

Seismic Zone	Intensity on MM scale
II (Low intensity zone)	VI (or less)
III (Moderate intensity zone)	VII
IV (Severe intensity zone)	VIII
V (Very severe intensity zone)	IX (and above)

Broadly, Zone-V comprises of entire northeastern India, parts of Jammu and Kashmir, Himachal Pradesh, Uttaranchal, Rann of Kutch in Gujarat, parts of North Bihar and Andaman & Nicobar Islands. Zone-IV covers remaining parts of Jammu & Kashmir

and Himachal Pradesh, Union Territory of Delhi, Sikkim, northern parts of Uttar Pradesh, Bihar and West Bengal, parts of Gujarat and small portions of Maharashtra near the west coast and Rajasthan. Zone-III comprises of Kerala, Goa, Lakshadweep islands, remaining parts of Uttar Pradesh, Gujarat and West Bengal, parts of Punjab, Rajasthan, Madhya Pradesh, Bihar, Jharkhand, Chhattisgarh, Maharashtra, Orissa, Andhra Pradesh, Tamilnadu and Karnataka. Zone-II covers remaining parts of the country.

- (c) Details of the seismic tremors reported in the country, for the last 3-years and the current year, are presented in Annexure.
- (d) Yes Sir.
- (e) Guidelines have also been published by the Bureau of Indian Standards (BIS), Building Materials & Technology Promotion Council (BMTPC), Housing and Urban Development Corporation (HUDCO) and National Disaster Management Authority (NDMA) for the design and construction of earthquake resistant structures to minimize the loss of life and damage to property caused by earthquakes. Loss of life and damage to property due to earthquakes could be consider ably reduced through proper planning and implementation of pre- and post-disaster preparedness and management strategies by respective State and Central Government agencies in a coordinated manner following the above mentioned guidelines.

Further, as part of pre-disaster preparedness measure, Government of India has also completed seismic microzonation studies of some of the major cities in the country such as, Jabalpur, Guwahati, Bangalore, greater Bharuch in Gujarat, Jammu in J & K, Shillong in Meghalaya, Chennai in Tamilnadu and Sikkim state. Such studies are under progress at urban centers viz. Vijayawada, Surat, Jalandhar, Jorhat, etc. These studies involving preparation of geological, geomorphological and land use maps followed by drilling, geological logging, standard penetration test and geophysical studies to demarcate the zones of least to most damage prone areas within the urban areas helps the respective town and country planning agencies to formulate perspective planning within the overall earthquake impact minimization efforts. The Government has implemented various programmes to educate and raise awareness amongst school children and general public on various aspects of earthquakes, their impacts and measures to mitigate losses

Annexure

Details of earthquakes 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 Seismological Network of India Meteorological Department (IMD) during the years 2010, 2011, 2012 and current year.

(i) YEAR 2010

Date	Origin-TIME			Latitude	Longitude	Depth	Magnitude
Year Mon day	hr	min	sec(UTC)	⁰ N	⁰ E	(Km)	(Richter scale)
2010 1 1	2	22	25.1	30.44	83.71	10.	4.8
2010 1 1	2	42	50.2	29.15	80.61	10.	2.5
2010 1 3	17	47	.5	35.40	70.36	33.	4.3
2010 1 3	20	5	7.1	32.91	78.85	15.	2.9
2010 1 4	0	19	46.4	35.40	69.59	33.	4.5
2010 1 5	0	52	32.3	34.01	70.82	10.	3.7
2010 1 5	3	16	40.0	36.36	70.49	33.	3.7
2010 1 5	14	28	12.1	32.83	85.64	33.	4.8
2010 1 5	15	4	31.7	30.00	79.97	10.	3.4
2010 1 6	5	36	31.4	36.56	71.01	33.	4.6
2010 1 6	6	59	60.0	37.20	71.53	33.	4.1
2010 1 7	22	19	51.7	33.98	79.01	15.	3.2
2010 1 9	0	15	53.8	26.96	75.45	10.	2.3
2010 1 10	17	0	39.9	26.02	76.01	10.	2.7
2010 1 11	3	38	42.0	14.27	93.11	33.	4.0
2010 1 11	5	15	18.0	29.82	80.36	10.	4.1
2010 1 11	6	11	8.1	33.51	75.44	19.	3.7
2010 1 11	16	7	7.1	35.74	70.13	67.	4.5
2010 1 11	19	42	44.6	30.89	77.88	10.	2.8
2010 1 11	23	15	13.3	31.31	73.25	10.	3.6
2010 1 12	9	25	29.3	17.18	73.64	10.	4.1
2010 1 12	10	46	56.4	36.14	78.01	33.	3.4
2010 1 13	10	17	55.6	28.88	77.64	10.	2.9
2010 1 15	0	52	45.9	35.88	70.44	33.	4.1
2010 1 16	6	31	29.0	14.19	93.07	30.	4.8
2010 1 16	15	42	30.9	27.80	76.44	10.	2.2
2010 1 17	19	9	52.7	35.78	70.41	33.	3.7
2010 1 18	5	58	32.0	32.83	76.68	10.	2.7
2010 1 19	0	3	8.8	20.72	94.68	96.	4.6
2010 1 19	4	36	13.5	34.79	72.68	10.	3.8
2010 1 19	7	17	50.0	34.74	71.50	10.	3.7

2010	1	19	20	45	54.6	32.35	76.76	10.	3.6
2010	1	20	13	44	40.4	10.88	91.75	10.	4.0
2010	1	21	4	36	23.3	36.01	70.04	33.	4.3
2010	1	22	22	8	5.3	35.38	69.88	33.	4.0
2010	1	23	16	7	42.3	36.57	71.24	85.	5.2
2010	1	24	5	57	47.3	30.92	90.58	10.	3.7
2010	1	25	17	0	44.3	21.56	76.93	10.	3.2
2010	1	26	6	51	20.1	29.72	80.55	33.	3.5
2010	1	26	16	46	6.5	17.24	73.79	10.	3.4
2010	1	26	21	20	50.1	33.87	71.58	15.	3.9
2010	1	27	5	19	43.3	36.79	70.43	33.	4.2
2010	1	27	12	10	14.4	30.44	78.43	10.	3.2
2010	1	27	17	37	11.1	35.81	68.73	10.	4.0
2010	1	28	4	44	6.2	34.33	73.40	10.	3.5
2010	1	29	5	40	44.6	35.82	69.94	33.	4.2
2010	1	29	9	41	2.4	29.17	77.01	10.	3.3
2010	1	30	8	18	7.8	28.96	76.45	10.	2.3
2010	1	30	16	39	27.1	12.92	92.10	10.	4.0
2010	1	30	21	37	36.1	37.09	70.92	63.	5.0
2010	1	31	0	42	54.5	32.76	76.04	10.	2.8
2010	2	1	5	38	46.7	28.15	75.96	15.	2.7
2010	2	2	5	54	53.8	10.82	91.97	15.	4.6
2010	2	2	14	35	49.4	30.52	76.03	10.	3.3
2010	2	3	5	17	11.2	28.70	76.77	10.	2.9
2010	2	5	3	52	7.4	36.14	70.13	33.	4.6
2010	2	5	12	17	1.2	27.59	76.30	10.	2.4
2010	2	5	15	14	37.7	23.64	70.16	10.	3.0
2010	2	7	4	55	53.0	36.19	70.30	33.	4.4
2010	2	7	20	4	32.6	29.49	81.41	10.	3.8
2010	2	10	18	2	36.2	14.07	93.05	32.	4.6
2010	2	13	0	31	29.5	8.68	92.14	31.	4.6
2010	2	14	6	58	50.6	34.73	68.75	10.	4.1
2010	2	14	14	10	23.1	35.80	70.58	33.	4.2
2010	2	16	4	14	25.2	14.05	92.87	33.	4.5
2010	2	16	7	7	52.4	14.05	92.90	33.	4.6
2010	2	16	10	5	49.0	36.34	70.84	33.	4.1
2010	2	16	20	57	55.6	27.96	92.88	25.	4.2
2010	2	16	22	10	12.9	37.31	71.62	33.	4.5
2010	2	18	16	57	5.5	34.22	72.61	10.	3.9
2010	2	19	2	15	29.9	13.01	93.44	82.	4.8
2010	2	19	16	14	55.0	30.61	83.87	33.	4.0

2010	2	20	7	47	59.1	36.16	70.86	33.	4.2
2010	2	20	21	7	26.7	23.22	94.55	87.	4.8
2010	2	21	7	9	20.2	36.20	69.74	33.	4.5
2010	2	21	8	9	40.8	28.54	76.23	10.	2.1
2010	2	22	1	3	30.9	29.98	69.64	10.	4.5
2010	2	22	1	51	35.3	35.76	70.14	33.	4.6
2010	2	22	11	51	2.8	36.70	82.62	33.	4.1
2010	2	22	14	57	45.7	32.29	82.93	10.	3.4
2010	2	22	17	23	46.5	29.93	80.07	10.	4.6
2010	2	23	6	55	45.4	26.28	93.03	33.	4.7
2010	2	23	12	13	26.2	35.44	91.18	10.	4.7
2010	2	23	19	29	24.7	34.92	69.96	10.	3.9
2010	2	24	4	36	36.9	35.99	69.97	33.	4.5
2010	2	24	13	6	45.8	32.20	76.26	10.	3.2
2010	2	24	15	18	43.3	29.07	80.52	10.	3.1
2010	2	24	19	20	52.7	28.58	76.97	10.	2.6
2010	2	25	0	49	57.5	28.33	77.39	10.	2.6
2010	2	25	3	51	46.0	14.27	93.25	10.	4.9
2010	2	25	12	18	41.8	34.50	83.25	33.	4.2
2010	2	25	14	6	20.1	29.57	81.75	33.	4.2
2010	2	25	16	56	32.9	36.46	69.68	33.	3.8
2010	2	25	22	26	32.4	27.21	88.28	10.	3.2
2010	2	26	1	34	45.7	35.24	78.08	33.	3.7
2010	2	26	4	42	37.4	28.41	86.73	33.	5.4
2010	2	26	8	55	39.7	36.71	71.14	33.	4.6
2010	2	27	23	21	8.7	36.05	69.82	82.	5.7
2010	2	28	22	3	26.0	28.39	86.64	10.	4.1
2010	3	1	21	15	15.8	14.19	92.88	30.	4.6
2010	3	2	1	26	56.2	30.58	79.41	10.	2.7
2010	3	3	11	48	18.8	28.83	76.97	16.	2.3
2010	3	5	5	15	52.2	29.16	76.92	10.	2.7
2010	3	5	19	18	59.3	35.35	96.06	33.	4.8
2010	3	6	2	53	56.3	36.03	70.81	33.	4.4
2010	3	6	19	11	19.1	19.94	96.01	33.	4.5
2010	3	7	0	27	5.1	27.59	74.68	10.	2.7
2010	3	8	2	7	46.8	30.85	75.60	10.	2.5
2010	3	8	14	27	17.5	29.69	80.16	10.	3.1
2010	3	9	22	21	16.3	30.51	84.00	33.	3.4
2010	3	10	14	32	23.4	36.31	86.74	10.	4.6
2010	3	10	17	5	57.9	32.85	76.27	10.	3.6
2010	3	10	23	14	28.1	35.97	70.22	33.	4.3

2010	3	11	7	24	23.6	34.12	68.82	33.	4.3
2010	3	11	7	53	16.7	32.60	76.65	10.	3.0
2010	3	12	7	4	47.5	37.14	71.14	33.	4.0
2010	3	12	17	59	46.9	36.72	71.02	33.	3.7
2010	3	12	18	23	53.0	36.03	69.85	33.	4.1
2010	3	12	23	19	55.7	23.02	94.46	96.	5.5
2010	3	13	16	45	8.0	34.43	75.61	33.	4.6
2010	3	13	21	45	10.4	32.43	75.95	10.	3.1
2010	3	14	0	1	41.9	36.13	70.20	33.	4.1
2010	3	14	2	43	27.0	8.80	92.27	33.	4.7
2010	3	14	6	53	22.0	31.62	76.07	27.	4.5
2010	3	14	19	9	8.5	34.94	73.85	33.	5.2
2010	3	15	8	9	22.7	28.89	76.64	10.	2.3
2010	3	15	20	17	14.8	30.51	82.14	10.	4.9
2010	3	15	20	23	25.6	30.69	82.07	10.	4.7
2010	3	16	5	23	2.0	29.21	77.22	10.	2.8
2010	3	16	22	44	50.4	31.71	78.06	10.	3.1
2010	3	17	15	40	51.5	33.65	79.97	10.	3.1
2010	3	17	21	5	40.3	34.59	82.38	10.	3.4
2010	3	18	7	52	28.5	34.10	81.82	10.	5.0
2010	3	18	10	25	33.5	36.11	70.61	33.	4.4
2010	3	20	20	15	6.5	13.97	92.87	33.	4.3
2010	3	20	23	26	43.3	30.35	80.30	10.	3.2
2010	3	21	7	49	38.4	24.94	95.43	91.	4.3
2010	3	22	3	54	22.0	28.72	76.57	10.	2.2
2010	3	23	6	25	33.1	30.74	80.01	10.	3.2
2010	3	23	9	59	53.9	33.98	75.38	10.	3.8
2010	3	23	10	53	27.9	30.47	83.79	33.	4.0
2010	3	23	17	46	44.1	28.66	76.62	10.	2.8
2010	3	24	2	6	9.4	32.58	92.64	10.	5.5
2010	3	24	2	44	47.4	32.68	92.95	10.	5.6
2010	3	24	22	51	8.0	36.06	71.73	33.	4.4
2010	3	25	2	33	32.1	32.72	75.92	10.	3.5
2010	3	26	1	6	37.2	37.53	72.33	33.	4.1
2010	3	26	23	16	36.4	36.26	70.34	33.	4.1
2010	3	27	16	35	57.1	37.71	72.85	33.	4.0
2010	3	27	17	20	2.0	13.64	92.75	14.	4.0
2010	3	28	19	19	20.8	12.97	92.36	10.	3.9
2010	3	29	1	26	46.3	36.26	69.77	33.	4.0
2010	3	29	3	13	35.6	30.87	76.51	15.	2.7
2010	3	29	12	34	28.0	36.22	70.45	33.	4.1

2010	3	29	18	30	46.4	29.62	69.88	10.	4.2
2010	3	30	8	14	42.0	36.21	71.09	33.	4.0
2010	3	30	16	54	48.9	13.64	92.67	33.	6.4
2010	3	30	18	40	54.2	35.48	69.32	33.	4.1
2010	3	30	20	33	37.3	13.11	92.36	33.	4.3
2010	3	30	23	42	22.4	34.25	73.38	10.	3.3
2010	3	31	7	21	10.6	13.05	92.21	10.	4.1
2010	4	1	7	19	59.8	13.61	92.92	35.	4.9
2010	4	1	14	7	28.3	29.96	69.19	33.	5.0
2010	4	2	19	41	38.0	32.65	76.53	10.	3.7
2010	4	3	15	56	24.9	35.61	69.36	33.	3.8
2010	4	3	16	5	23.6	34.64	72.40	10.	3.9
2010	4	4	18	18	24.8	31.44	77.14	10.	2.7
2010	4	4	19	4	13.0	31.35	76.95	10.	2.6
2010	4	6	0	43	26.8	36.07	70.31	33.	4.1
2010	4	6	10	13	18.6	36.31	70.42	33.	4.2
2010	4	6	12	56	41.4	23.32	70.39	10.	3.4
2010	4	7	7	5	51.2	27.79	76.62	10.	3.4
2010	4	8	22	41	31.6	36.45	77.75	33.	4.3
2010	4	9	8	10	47.2	34.85	69.75	33.	4.2
2010	4	9	12	59	6.0	28.19	82.96	33.	3.4
2010	4	9	17	56	2.7	35.77	68.93	33.	4.7
2010	4	10	12	26	19.7	32.97	76.23	10.	3.9
2010	4	10	19	56	53.4	33.05	76.25	10.	2.9
2010	4	11	5	36	13.0	36.63	71.23	33.	4.4
2010	4	11	14	0	35.7	36.54	68.97	33.	4.0
2010	4	12	0	37	46.1	34.11	69.47	33.	4.7
2010	4	12	16	1	42.0	36.34	70.46	33.	4.0
2010	4	13	14	8	18.9	30.27	81.31	10.	3.6
2010	4	13	20	14	56.2	7.93	91.85	10.	5.3
2010	4	13	21	39	56.1	33.26	96.87	10.	5.2
2010	4	13	23	49	37.9	33.17	96.53	10.	6.5
2010	4	14	1	25	14.9	33.22	96.45	10.	5.8
2010	4	14	6	19	24.2	27.55	82.80	10.	3.4
2010	4	15	8	12	8.4	28.93	76.93	23.	2.7
2010	4	15	9	7	59.7	30.24	76.75	10.	2.8
2010	4	15	18	30	19.0	33.28	96.49	10.	4.8
2010	4	15	20	22	40.8	18.69	74.31	10.	3.3
2010	4	16	19	49	25.2	30.81	77.97	10.	2.6
2010	4	17	0	58	59.5	32.48	92.68	33.	5.1
2010	4	18	16	14	48.4	36.03	71.11	33.	4.0

2010	4	19	13	54	6.6	11.02	93.86	155.	4.7
2010	4	19	22	33	4.0	31.36	75.03	10.	2.6
2010	4	20	4	34	48.4	31.76	71.76	10.	3.8
2010	4	20	7	40	44.6	34.69	72.96	10.	4.4
2010	4	21	9	43	24.1	36.48	71.03	33.	4.0
2010	4	21	17	31	27.2	29.83	86.01	10.	3.2
2010	4	21	23	54	32.8	36.23	71.24	33.	4.5
2010	4	23	0	2	27.6	35.83	77.79	33.	4.5
2010	4	23	5	27	27.6	31.85	76.00	10.	2.8
2010	4	24	21	16	45.8	37.31	71.25	33.	4.2
2010	4	26	8	27	37.8	35.74	69.81	10.	4.5
2010	4	26	10	37	41.7	35.34	75.29	10.	4.3
2010	4	27	14	20	37.5	24.19	93.71	33.	4.1
2010	4	28	16	48	41.4	33.06	96.31	33.	4.8
2010	4	28	18	1	21.6	19.40	93.12	33.	5.4
2010	4	28	18	54	40.4	24.24	94.27	33.	4.5
2010	4	29	3	5	54.2	37.57	80.19	10.	4.0
2010	4	30	3	57	6.1	36.85	70.54	33.	4.4
2010	5	1	8	35	2.4	37.69	71.46	33.	4.5
2010	5	1	21	18	58.2	13.62	92.64	33.	5.0
2010	5	1	22	36	27.1	29.91	80.10	18.	4.6
2010	5	2	1	44	44.1	6.48	92.78	10.	4.7
2010	5	2	5	53	44.5	13.58	92.53	24.	4.5
2010	5	3	9	50	27.8	32.14	76.48	10.	3.5
2010	5	3	17	15	9.4	30.31	78.31	15.	4.1
2010	5	4	15	35	32.5	36.17	70.17	33.	4.4
2010	5	5	9	31	10.6	14.24	92.85	20.	4.3
2010	5	5	13	47	20.6	35.73	70.30	33.	4.1
2010	5	6	10	28	57.2	33.27	70.70	33.	5.0
2010	5	7	5	39	29.5	25.16	92.36	10.	3.3
2010	5	7	9	23	53.5	13.66	92.65	33.	4.7
2010	5	7	17	58	37.2	9.38	92.83	33.	4.7
2010	5	9	3	15	3.1	26.57	96.37	10.	4.2
2010	5	10	13	55	34.2	33.10	77.00	33.	3.2
2010	5	11	6	31	32.3	36.47	70.68	33.	4.8
2010	5	11	7	17	3.7	37.39	71.43	33.	4.6
2010	5	11	20	15	2.4	36.05	69.12	33.	4.6
2010	5	11	21	57	28.3	34.67	80.24	33.	3.2
2010	5	13	0	19	32.0	14.04	92.43	33.	4.2
2010	5	13	8	47	4.6	29.09	77.61	10.	3.0
2010	5	13	12	54	50.3	36.45	70.85	33.	4.8

2010	5	13	15	8	1.5	36.18	70.55	33.	4.0
2010	5	14	7	59	36.3	37.19	81.66	33.	4.2
2010	5	14	8	40	37.6	31.36	76.86	10.	3.3
2010	5	14	11	31	31.1	14.06	92.72	33.	4.2
2010	5	14	14	46	29.8	29.58	90.15	10.	5.0
2010	5	14	16	59	18.0	14.06	92.87	33.	4.4
2010	5	16	8	55	47.2	14.40	93.06	33.	5.3
2010	5	16	20	48	35.1	36.23	70.08	33.	4.5
2010	5	17	9	19	12.0	14.22	93.24	33.	4.2
2010	5	18	16	50	18.8	33.36	75.36	10.	3.2
2010	5	19	7	39	45.6	37.54	72.61	33.	4.3
2010	5	22	8	14	57.3	35.98	69.68	33.	4.7
2010	5	22	17	34	4.1	26.86	74.40	10.	2.5
2010	5	25	0	51	58.7	11.25	92.06	33.	4.5
2010	5	26	2	22	20.5	32.02	76.92	10.	2.9
2010	5	28	7	25	5.6	31.09	77.78	10.	4.5
2010	5	28	10	15	45.6	27.96	75.56	10.	2.4
2010	5	29	2	29	46.4	33.25	96.32	10.	5.5
2010	5	30	10	2	13.9	35.53	77.55	10.	3.7
2010	5	30	10	19	27.2	36.80	70.18	33.	4.3
2010	5	30	13	53	48.1	36.01	70.54	33.	4.7
2010	5	30	23	54	19.3	37.29	69.23	33.	4.3
2010	5	31	0	22	15.4	37.57	69.45	33.	4.5
2010	5	31	11	37	2.0	29.95	79.98	10.	3.6
2010	5	31	19	51	46.2	11.23	93.92	105.	6.1
2010	6	1	3	54	26.1	25.07	96.25	33.	4.5
2010	6	1	13	33	56.9	24.15	94.83	33.	4.3
2010	6	1	15	13	9.1	34.66	81.04	10.	4.3
2010	6	1	17	9	53.0	29.43	69.95	10.	4.6
2010	6	1	17	40	7.7	26.26	74.56	10.	2.7
2010	6	2	0	56	16.4	36.23	76.05	33.	4.1
2010	6	2	3	30	5.2	31.56	76.82	18.	3.1
2010	6	2	8	5	20.2	31.61	80.52	33.	4.0
2010	6	2	18	6	4.4	28.71	76.64	10.	2.6
2010	6	3	5	35	44.1	33.28	96.07	10.	5.2
2010	6	3	5	47	2.0	33.12	95.98	10.	4.5
2010	6	3	8	24	31.9	36.47	70.45	33.	4.1
2010	6	3	20	47	4.8	33.38	96.02	10.	4.8
2010	6	3	22	31	12.4	36.29	77.33	10.	4.4
2010	6	4	11	49	37.7	36.53	69.88	183.	5.1
2010	6	4	11	58	5.7	33.34	75.32	33.	3.5

2010	6	6	9	0	51.4	36.10	69.70	79.	4.3
2010	6	6	12	58	42.6	35.96	70.24	33.	4.1
2010	6	6	16	42	43.1	33.66	96.33	33.	4.6
2010	6	7	12	4	1.7	35.85	69.58	33.	4.2
2010	6	7	17	12	34.2	28.83	77.32	10.	3.2
2010	6	8	7	30	22.3	37.49	71.69	33.	4.3
2010	6	8	11	46	51.3	28.53	79.59	10.	2.7
2010	6	9	16	1	9.9	35.60	68.93	33.	4.3
2010	6	12	9	42	44.7	30.97	78.06	10.	2.9
2010	6	12	11	24	46.3	37.34	71.50	33.	3.9
2010	6	12	19	0	3.0	36.02	70.87	33.	4.1
2010	6	12	19	26	50.6	7.90	91.96	33.	7.0
2010	6	12	22	44	42.7	7.72	91.97	33.	5.2
2010	6	12	22	58	2.6	8.22	92.27	33.	4.8
2010	6	13	2	50	35.3	8.03	92.05	10.	4.8
2010	6	13	4	1	8.5	7.95	92.18	33.	5.0
2010	6	13	6	26	5.2	7.82	91.97	33.	5.1
2010	6	13	7	5	37.2	7.96	91.99	33.	5.1
2010	6	13	14	10	54.0	36.30	70.93	33.	4.5
2010	6	13	14	31	52.5	29.33	81.40	10.	4.3
2010	6	13	14	38	.3	29.94	81.56	10.	4.0
2010	6	14	16	55	44.7	29.28	80.28	10.	2.9
2010	6	15	8	8	39.8	33.13	95.68	33.	4.5
2010	6	15	9	14	31.8	7.51	91.78	33.	4.2
2010	6	15	23	24	28.6	7.57	91.79	33.	4.8
2010	6	16	0	12	21.2	35.95	69.75	33.	4.5
2010	6	16	7	50	45.5	14.02	92.70	33.	4.7
2010	6	16	11	17	39.4	36.57	71.28	33.	4.1
2010	6	16	12	10	46.4	7.82	91.88	33.	4.3
2010	6	17	12	48	55.1	29.88	80.71	10.	3.2
2010	6	17	16	27	35.4	29.91	80.76	10.	2.9
2010	6	18	5	15	22.2	34.04	73.29	10.	3.7
2010	6	18	23	9	32.6	13.29	92.82	10.	6.1
2010	6	19	9	23	38.5	27.89	76.49	10.	3.0
2010	6	19	12	58	29.6	37.51	71.47	33.	4.7
2010	6	19	14	42	4.3	37.15	71.28	33.	4.4
2010	6	20	2	10	33.4	8.11	92.08	10.	4.3
2010	6	20	9	36	4.2	36.24	70.50	33.	4.2
2010	6	21	8	42	19.1	32.77	75.99	10.	3.4
2010	6	22	15	42	20.2	30.05	79.65	33.	2.8
2010	6	22	23	14	10.2	29.74	80.53	10.	4.8

2010	6	23	4	51	50.0	37.27	71.97	96.	4.3
2010	6	23	10	1	48.8	37.19	71.53	33.	4.5
2010	6	24	4	8	35.8	7.82	91.94	21.	5.4
2010	6	24	18	7	44.7	7.56	91.81	10.	4.9
2010	6	24	23	48	30.7	36.40	70.91	33.	4.7
2010	6	25	7	29	1.0	7.72	91.89	33.	5.0
2010	6	27	9	43	52.0	14.04	95.34	33.	4.7
2010	6	27	14	58	9.1	36.91	71.28	33.	4.5
2010	6	28	3	30	14.8	35.43	70.21	33.	4.4
2010	6	29	8	5	10.7	36.75	69.87	33.	4.6
2010	6	30	2	9	25.6	36.63	70.62	33.	4.3
2010	7	1	2	12	30.1	36.35	70.24	33.	4.7
2010	7	2	13	35	15.0	37.65	74.21	33.	4.4
2010	7	2	18	23	8.0	10.19	92.10	13.	5.4
2010	7	4	2	35	58.9	29.77	80.54	10.	4.5
2010	7	5	2	4	9.0	30.95	80.53	10.	4.7
2010	7	5	10	48	41.2	18.43	76.84	16.	2.7
2010	7	5	14	54	11.3	34.38	73.43	15.	3.9
2010	7	5	15	31	10.0	32.59	74.26	10.	3.6
2010	7	6	19	8	23.4	29.80	80.53	10.	4.7
2010	7	7	16	52	3.7	18.12	76.66	10.	2.9
2010	7	7	23	44	11.9	31.23	80.66	10.	3.4
2010	7	8	13	47	.8	14.44	93.04	33.	5.3
2010	7	8	19	6	32.0	32.35	75.59	10.	3.9
2010	7	9	2	8	40.8	11.29	93.48	90.	4.3
2010	7	9	16	52	44.1	27.92	76.43	10.	2.4
2010	7	9	18	25	7.4	35.17	68.87	27.	4.0
2010	7	10	3	16	19.3	30.01	79.62	10.	4.4
2010	7	10	5	49	13.9	27.78	80.60	10.	2.6
2010	7	10	10	15	45.4	29.17	87.02	33.	4.7
2010	7	10	16	49	21.6	31.72	77.33	10.	4.0
2010	7	11	1	26	44.0	30.36	79.44	10.	3.5
2010	7	11	13	40	16.7	32.81	76.25	10.	3.3
2010	7	11	19	22	40.7	36.34	70.72	33.	4.4
2010	7	11	21	8	24.7	7.64	91.88	33.	5.1
2010	7	14	12	30	8.8	36.20	70.31	33.	4.2
2010	7	15	15	35	5.3	36.39	70.08	96.	4.5
2010	7	16	23	31	34.5	35.74	70.15	33.	4.5
2010	7	17	1	53	38.8	32.98	73.97	10.	3.5
2010	7	18	1	54	42.5	29.79	70.00	10.	4.5
2010	7	18	11	49	16.5	30.07	79.79	10.	2.9

2010	7	19	0	29	49.5	36.42	70.94	33.	4.1
2010	7	20	8	31	.9	28.76	77.02	10.	2.4
2010	7	20	16	52	35.6	36.64	70.89	33.	4.1
2010	7	21	0	38	45.5	35.83	70.58	33.	4.2
2010	7	21	2	57	16.8	27.58	91.29	10.	4.2
2010	7	21	4	59	41.4	36.37	70.87	33.	4.0
2010	7	21	6	23	18.1	36.60	70.74	33.	4.3
2010	7	21	22	19	42.4	31.50	77.50	10.	2.7
2010	7	22	6	20	27.5	10.92	91.83	33.	4.4
2010	7	22	12	43	15.7	33.78	69.92	33.	3.3
2010	7	23	8	48	31.4	28.52	75.35	10.	2.1
2010	7	24	19	8	57.8	36.46	70.81	33.	4.4
2010	7	25	6	25	14.0	10.91	91.81	33.	4.0
2010	7	25	13	6	18.8	30.19	78.53	10.	3.1
2010	7	25	20	37	29.4	36.13	70.15	33.	4.2
2010	7	26	6	19	13.6	33.68	73.54	15.	3.6
2010	7	26	15	24	49.1	36.42	69.79	33.	4.7
2010	7	26	19	13	27.5	26.43	91.32	33.	4.1
2010	7	26	22	58	10.7	36.04	70.49	33.	4.0
2010	7	27	10	14	23.6	30.17	95.00	33.	4.8
2010	7	27	19	38	15.5	32.05	70.63	33.	4.2
2010	7	28	3	55	40.9	36.53	70.00	33.	4.6
2010	7	29	6	38	4.4	36.28	70.83	33.	4.2
2010	7	29	12	10	6.8	30.24	94.75	33.	4.7
2010	7	30	1	4	32.0	30.31	94.83	10.	4.6
2010	7	30	18	3	36.8	30.49	94.83	33.	4.6
2010	7	30	23	57	27.0	36.12	78.16	33.	3.9
2010	7	31	23	34	50.6	36.23	69.64	96.	4.7
2010	8	2	12	12	46.9	35.78	70.15	33.	4.4
2010	8	2	18	36	20.8	32.82	69.28	33.	4.0
2010	8	3	1	48	12.3	11.02	93.27	79.	5.0
2010	8	5	6	8	49.3	36.55	70.32	33.	4.7
2010	8	5	18	14	17.8	26.47	97.08	33.	4.3
2010	8	5	18	17	46.0	26.33	97.20	33.	4.6
2010	8	5	22	14	32.9	35.20	70.52	96.	4.2
2010	8	6	12	0	43.4	31.32	80.71	10.	3.5
2010	8	6	16	10	40.3	32.77	77.94	38.	3.1
2010	8	6	20	25	28.2	22.95	93.70	72.	4.2
2010	8	7	7	39	33.6	17.14	73.46	10.	3.4
2010	8	8	18	13	43.8	31.35	74.47	10.	3.6
2010	8	9	2	54	51.5	30.30	94.60	33.	4.9

2010	8	9	7	14	47.5	30.03	94.54	33.	4.4
2010	8	9	22	21	46.2	13.70	92.72	31.	5.3
2010	8	10	14	4	17.9	30.32	94.31	33.	4.7
2010	8	11	23	55	19.7	23.50	70.31	10.	3.9
2010	8	13	17	11	7.9	31.37	77.74	10.	3.4
2010	8	14	8	51	5.5	30.83	76.75	10.	2.7
2010	8	14	14	15	49.4	35.50	69.21	33.	4.5
2010	8	15	2	21	42.1	35.63	70.08	96.	4.4
2010	8	15	6	8	53.7	26.42	74.34	10.	4.0
2010	8	16	19	36	45.5	19.34	73.79	10.	2.5
2010	8	17	1	39	28.7	11.47	94.89	10.	5.2
2010	8	17	8	42	7.0	37.13	71.71	33.	4.3
2010	8	17	18	31	9.0	35.02	81.53	33.	4.3
2010	8	19	10	38	12.8	31.38	78.61	10.	3.1
2010	8	19	22	19	16.7	11.28	95.23	10.	5.0
2010	8	20	20	52	27.1	37.97	76.09	33.	3.7
2010	8	20	21	21	13.0	35.04	69.05	33.	4.2
2010	8	21	15	2	35.5	32.79	76.85	10.	3.5
2010	8	21	21	52	7.1	37.38	71.79	33.	4.2
2010	8	22	7	16	25.4	35.94	72.44	33.	4.0
2010	8	23	2	11	22.1	23.38	70.39	10.	3.7
2010	8	24	8	34	15.7	36.64	71.08	202.	5.1
2010	8	24	18	25	7.8	36.38	70.32	33.	4.4
2010	8	25	18	21	26.0	23.61	70.23	10.	3.2
2010	8	25	22	2	50.2	37.97	72.65	33.	4.3
2010	8	26	4	4	36.5	10.20	93.60	10.	4.0
2010	8	26	16	56	43.7	35.99	69.75	33.	4.4
2010	8	27	14	6	34.6	28.80	77.54	10.	2.7
2010	8	27	14	42	48.9	36.19	72.76	33.	4.1
2010	8	27	15	24	58.9	36.68	69.11	33.	4.8
2010	8	27	15	42	8.9	10.94	92.01	33.	4.3
2010	8	28	11	19	27.4	36.15	69.97	33.	5.1
2010	8	29	18	31	12.4	33.13	76.07	10.	3.8
2010	8	30	7	22	29.0	37.16	71.30	96.	4.6
2010	8	30	9	39	29.0	25.37	94.76	96.	4.7
2010	8	30	15	45	12.5	29.02	77.22	10.	2.9
2010	8	30	15	47	24.0	29.04	77.29	10.	2.9
2010	8	30	16	47	58.9	36.49	71.04	33.	4.6
2010	8	31	5	55	50.8	17.18	73.80	10.	3.2
2010	8	31	16	49	25.5	25.51	68.08	10.	4.7
2010	9	2	0	16	38.6	12.89	92.50	10.	5.1

2010	9	2	3	9	9.2	23.65	71.96	10.	4.1
2010	9	2	9	30	32.9	28.39	75.34	10.	2.8
2010	9	2	16	12	45.8	8.51	91.88	34.	4.4
2010	9	3	22	10	28.3	33.87	85.52	33.	4.1
2010	9	5	17	58	37.3	35.73	69.74	33.	4.4
2010	9	6	7	51	36.1	31.51	69.79	10.	3.7
2010	9	7	7	31	58.7	36.51	71.17	33.	4.1
2010	9	7	20	50	56.6	33.30	96.33	10.	5.0
2010	9	8	1	58	8.5	33.47	96.45	10.	4.3
2010	9	8	6	10	.4	36.23	71.03	33.	3.8
2010	9	9	1	0	4.9	36.13	71.12	33.	3.7
2010	9	9	22	38	39.3	28.64	76.93	12.	2.3
2010	9	10	3	51	37.3	37.71	73.33	33.	4.2
2010	9	10	17	24	16.6	23.51	90.61	10.	4.7
2010	9	11	3	10	39.9	33.83	75.10	33.	4.6
2010	9	11	7	2	7.9	25.92	90.23	10.	4.6
2010	9	11	11	43	6.9	7.80	94.40	10.	5.4
2010	9	12	0	56	34.4	33.53	74.13	10.	3.7
2010	9	12	7	51	17.6	32.04	80.81	15.	3.0
2010	9	12	18	24	52.5	34.87	69.08	33.	4.0
2010	9	13	13	5	33.7	32.87	69.47	10.	4.1
2010	9	13	19	14	7.0	32.78	69.85	10.	4.5
2010	9	13	19	23	13.0	33.03	69.29	10.	4.4
2010	9	17	19	21	3.8	36.88	70.40	135.	6.0
2010	9	17	23	30	8.7	34.81	73.55	10.	3.8
2010	9	18	7	3	5.3	29.77	71.09	10.	3.6
2010	9	18	22	5	53.3	31.47	74.98	10.	3.5
2010	9	19	4	12	35.8	35.95	69.95	33.	4.1
2010	9	19	11	10	18.1	11.18	95.06	10.	4.9
2010	9	19	17	26	21.9	23.61	70.46	10.	3.0
2010	9	21	8	36	7.0	33.85	75.08	10.	3.6
2010	9	24	18	45	5.5	33.06	79.20	10.	3.0
2010	9	24	19	19	56.4	30.58	73.08	10.	2.9
2010	9	25	7	37	5.0	36.67	71.00	33.	4.6
2010	9	26	22	30	40.3	37.01	71.03	33.	4.6
2010	9	27	4	36	54.2	12.41	92.61	33.	4.6
2010	9	28	18	15	53.7	29.83	80.05	19.	3.2
2010	9	29	8	3	27.8	36.19	70.11	33.	4.8
2010	9	29	15	28	46.8	17.18	73.68	10.	3.8
2010	9	30	5	48	45.6	29.01	77.32	10.	2.3
2010	10	3	2	58	10.0	14.11	92.98	18.	4.7

2010	10	4	3	40	23.9	33.88	77.75	10.	3.1
2010	10	4	7	20	56.0	36.08	69.61	33.	4.4
2010	10	5	13	44	5.4	37.44	71.65	33.	3.9
2010	10	6	2	55	11.4	31.67	76.38	10.	3.3
2010	10	6	17	49	42.5	29.67	69.47	10.	5.1
2010	10	7	9	11	13.8	33.13	90.22	33.	4.6
2010	10	10	21	44	19.7	34.23	72.71	33.	5.1
2010	10	12	10	14	6.3	36.97	71.29	33.	4.5
2010	10	12	17	36	26.9	37.07	72.81	33.	3.5
2010	10	14	22	41	51.3	28.50	79.89	39.	2.8
2010	10	15	5	59	15.4	36.51	70.47	33.	4.1
2010	10	16	1	47	42.9	34.52	68.94	33.	3.8
2010	10	16	19	51	50.8	6.66	94.44	94.	5.6
2010	10	17	5	32	31.3	10.81	91.15	10.	4.8
2010	10	17	10	15	12.1	13.04	92.38	33.	4.9
2010	10	17	20	11	21.6	28.55	85.68	33.	4.9
2010	10	18	4	26	54.3	28.48	85.69	33.	4.1
2010	10	19	5	42	28.4	32.10	84.30	10.	3.4
2010	10	21	8	4	48.0	36.46	69.87	33.	4.2
2010	10	22	7	4	56.6	28.69	76.59	10.	2.4
2010	10	24	21	7	58.6	26.16	69.97	10.	3.8
2010	10	28	3	59	39.9	36.45	70.85	161.	5.2
2010	10	28	15	55	11.1	36.20	70.30	33.	4.7
2010	10	29	1	25	38.5	35.00	73.62	33.	3.9
2010	10	29	7	11	.4	36.59	70.21	33.	3.8
2010	10	31	14	39	21.6	30.88	78.05	10.	2.4
2010	10	31	15	12	35.4	32.95	82.90	33.	3.1
2010	10	31	19	3	54.3	37.98	73.82	33.	4.1
2010	11	1	21	26	40.7	33.27	71.72	10.	3.5
2010	11	2	21	30	2.2	36.67	70.83	33.	5.1
2010	11	3	11	52	49.9	35.11	69.66	33.	4.2
2010	11	3	14	33	36.4	28.72	76.53	10.	2.4
2010	11	3	22	38	17.2	29.73	80.56	10.	2.9
2010	11	4	9	31	6.1	37.27	71.74	33.	3.7
2010	11	4	15	50	31.2	31.24	82.46	10.	3.0
2010	11	4	20	23	33.7	31.35	77.21	28.	2.7
2010	11	5	15	57	47.5	24.61	72.53	10.	3.0
2010	11	6	6	9	11.6	37.34	71.75	96.	4.5
2010	11	6	15	7	30.7	36.33	71.28	33.	3.9
2010	11	7	3	40	17.8	34.59	73.88	33.	4.4
2010	11	9	21	19	24.6	36.66	70.41	96.	4.8

2010 11 9	22 46 21.0	25.22	73.72	10.	4.7
2010 11 10	20 40 56.2	36.77	70.52	232.	4.6
2010 11 12	18 20 26.8	21.24	70.32	10.	2.8
2010 11 14	20 3 45.5	36.10	71.57	33.	4.5
2010 11 15	0 29 24.1	14.07	93.72	33.	4.9
2010 11 15	0 51 47.2	35.02	69.85	33.	5.2
2010 11 15	22 3 26.6	37.77	72.12	33.	4.3
2010 11 16	0 12 50.2	34.44	69.88	33.	4.3
2010 11 16	11 42 7.9	17.32	73.71	10.	3.4
2010 11 17	4 37 9.1	28.72	94.52	34.	4.5
2010 11 21	22 51 38.7	6.53	95.94	241.	4.8
2010 11 22	10 0 33.9	30.83	78.15	10.	2.6
2010 11 23	19 4 28.5	36.26	70.64	33.	4.5
2010 11 25	14 5 31.6	28.49	82.89	10.	4.0
2010 11 25	17 14 11.3	32.00	78.10	10.	2.9
2010 11 26	7 25 13.0	37.07	70.87	33.	4.3
2010 11 27	6 27 17.2	27.78	75.53	10.	2.8
2010 11 27	11 16 1.2	36.49	70.72	33.	3.8
2010 11 27	14 34 24.7	19.39	95.31	33.	4.5
2010 11 28	1 40 14.8	36.32	71.00	33.	3.9
2010 11 29	9 2 7.5	28.37	76.23	22.	2.0
2010 11 29	18 13 43.5	32.43	70.26	10.	4.3
2010 11 30	8 39 54.0	30.14	90.53	10.	5.4
2010 12 1	9 24 23.6	34.66	69.68	33.	3.3
2010 12 3	14 59 4.5	36.81	71.24	33.	3.8
2010 12 5	2 31 18.2	36.47	70.11	33.	3.9
2010 12 9	15 46 56.5	13.12	92.51	22.	4.9
2010 12 9	23 17 32.7	31.54	70.03	10.	5.1
2010 12 11	15 34 27.7	30.27	69.34	10.	5.1
2010 12 12	1 40 2.5	24.89	93.49	33.	4.8
2010 12 12	12 8 53.2	32.31	69.53	10.	5.0
2010 12 13	9 15 1.8	29.00	76.59	10.	2.3
2010 12 13	16 11 21.6	27.56	76.10	10.	2.4
2010 12 14	14 42 9.6	34.97	81.98	10.	3.1
2010 12 14	23 56 44.7	27.34	77.07	10.	3.2
2010 12 16	20 36 36.2	28.28	75.93	10.	2.0
2010 12 17	12 14 50.7	30.17	80.86	10.	2.8
2010 12 18	5 57 57.0	31.46	77.15	10.	2.6
2010 12 19	7 22 52.5	36.54	70.57	148.	4.7
2010 12 20	10 50 27.7	36.40	70.66	124.	4.6
2010 12 24	7 54 49.0	36.33	70.33	33.	3.8

2010	12	24	15	36	28.5	29.67	80.63	10.	2.8
2010	12	25	22	14	17.2	23.12	70.34	10.	2.8
2010	12	26	4	41	52.5	31.46	75.74	10.	2.5
2010	12	26	4	58	22.0	36.42	71.02	33.	4.0
2010	12	26	5	36	52.5	28.93	76.27	10.	2.2
2010	12	26	5	47	16.5	24.90	85.79	15.	3.1
2010	12	27	8	7	53.0	33.37	68.05	33.	3.5
2010	12	29	14	3	57.7	26.13	92.18	10.	3.6
2010	12	29	18	30	56.7	30.97	86.82	10.	5.2
2010	12	29	18	39	11.1	30.85	86.78	10.	4.2
2010	12	29	19	1	33.2	30.71	86.41	10.	4.8

(ii) YEAR 2011

Date	Origin-TIME			Latitude	Longitude	Depth	Magnitude
Year Mon day	hr	min	sec(UTC)	⁰ N	⁰ E	(Km)	(Richter scale)
2011	1	1	17 36 11.1	14.38	93.17	33.	4.8
2011	1	1	20 17 50.9	36.38	70.49	33.	4.5
2011	1	2	3 36 13.1	35.96	68.16	33.	5.0
2011	1	2	6 23 57.5	36.42	68.65	33.	4.5
2011	1	3	14 43 30.0	37.37	69.24	33.	4.5
2011	1	3	17 46 5.5	36.60	69.16	33.	4.6
2011	1	4	15 1 2.4	36.53	69.18	33.	4.1
2011	1	5	22 23 23.2	28.91	76.73	10.	2.0
2011	1	6	20 26 9.3	29.65	77.54	8.	2.3
2011	1	6	21 10 59.5	35.13	68.78	33.	4.4
2011	1	8	15 10 11.1	23.30	70.35	10.	3.1
2011	1	14	19 19 8.8	37.47	71.84	107.	4.4
2011	1	16	9 27 27.8	36.72	70.14	33.	4.2
2011	1	16	12 50 51.7	28.76	76.98	10.	2.3
2011	1	17	7 21 37.4	30.97	78.35	10.	2.7
2011	1	18	2 15 43.7	24.85	94.97	33.	4.7
2011	1	18	6 47 43.0	27.74	83.08	10.	3.3
2011	1	18	6 47 37.4	26.40	81.80	10.	3.3
2011	1	18	23 14 36.7	36.22	70.49	33.	4.6
2011	1	20	20 32 15.3	7.63	91.87	33.	4.4
2011	1	21	13 46 27.1	29.36	69.18	10.	4.0
2011	1	24	16 36 9.3	34.27	74.71	10.	2.9
2011	1	26	3 6 45.0	29.06	77.21	10.	3.2
2011	1	26	20 47 10.5	30.84	78.15	10.	3.5
2011	1	27	22 40 5.5	24.27	94.37	55.	4.6
2011	1	31	4 11 52.2	35.73	69.88	33.	4.3

2011	1	31	5	29	52.5	26.88	75.65	10.	2.4
2011	1	31	9	38	40.2	37.08	71.45	33.	4.3
2011	2	1	7	11	27.1	24.81	97.78	33.	4.8
2011	2	1	8	52	45.5	23.87	91.73	10.	3.7
2011	2	1	13	39	43.4	10.54	94.32	10.	5.5
2011	2	2	2	31	52.2	36.50	70.76	33.	3.8
2011	2	2	13	11	22.6	13.90	92.63	33.	4.5
2011	2	3	9	33	24.8	29.03	76.65	16.	2.9
2011	2	3	10	16	7.4	28.69	76.61	13.	2.4
2011	2	4	13	53	41.2	24.93	94.80	33.	6.4
2011	2	4	20	1	58.5	24.81	94.78	33.	3.8
2011	2	5	6	11	57.5	30.57	69.51	10.	3.4
2011	2	5	13	57	49.2	16.55	74.12	10.	3.1
2011	2	6	0	47	23.3	31.39	72.52	10.	3.3
2011	2	6	16	16	57.4	31.60	76.43	10.	3.2
2011	2	7	14	24	39.2	36.15	82.11	10.	4.6
2011	2	7	16	22	41.7	36.42	70.43	96.	4.6
2011	2	8	7	23	11.8	22.66	79.80	10.	3.5
2011	2	8	14	16	15.3	27.82	76.54	10.	2.0
2011	2	9	4	36	39.7	36.29	73.40	33.	4.9
2011	2	10	19	27	21.5	9.28	92.69	33.	4.4
2011	2	11	17	9	56.5	36.69	71.89	33.	3.8
2011	2	11	18	14	58.0	13.12	92.33	33.	4.4
2011	2	12	10	22	44.5	23.62	90.79	10.	4.1
2011	2	12	17	41	28.6	37.19	71.42	33.	3.9
2011	2	13	0	12	8.8	14.12	92.78	33.	4.5
2011	2	13	16	42	12.0	22.77	94.35	33.	4.4
2011	2	13	17	51	21.1	27.39	86.93	10.	4.6
2011	2	14	23	44	27.0	26.41	96.64	33.	4.7
2011	2	16	10	55	24.6	10.62	91.72	10.	4.7
2011	2	16	17	25	29.2	32.28	85.35	33.	4.1
2011	2	16	18	16	34.0	36.81	68.90	33.	4.8
2011	2	17	9	48	37.2	29.45	81.16	10.	3.1
2011	2	18	13	27	.6	29.04	77.28	5.	2.0
2011	2	18	14	44	15.5	28.60	77.24	5.	2.3
2011	2	18	22	36	38.9	36.18	70.41	33.	4.4
2011	2	20	19	48	37.0	37.15	71.98	33.	4.1
2011	2	22	10	19	2.5	28.81	76.73	10.	2.2
2011	2	22	22	57	21.6	23.90	94.43	66.	3.9
2011	2	24	8	28	13.8	19.50	95.05	66.	4.7
2011	2	24	21	1	16.3	29.03	76.95	10.	2.6

2011	2	25	6	51	52.0	36.26	69.67	33.	3.7
2011	2	26	5	33	31.2	31.06	70.24	10.	3.5
2011	2	26	15	40	10.5	27.43	75.72	10.	3.0
2011	2	28	0	55	4.0	19.89	95.16	96.	4.6
2011	2	28	1	52	9.0	37.33	72.12	33.	3.9
2011	2	28	4	44	44.2	36.51	70.04	159.	4.5
2011	3	1	10	7	5.5	28.49	76.58	10.	2.2
2011	3	1	13	26	39.2	28.44	76.59	10.	1.9
2011	3	2	1	23	40.2	37.22	71.45	73.	4.5
2011	3	2	12	45	14.5	36.60	70.43	166.	4.7
2011	3	5	13	35	44.2	36.31	70.53	40.	4.2
2011	3	6	0	18	20.3	23.91	93.97	28.	4.4
2011	3	6	10	57	25.0	36.53	70.71	194.	4.3
2011	3	7	18	47	2.7	37.75	72.82	69.	4.7
2011	3	8	17	48	33.2	23.02	93.90	89.	4.4
2011	3	9	13	57	28.7	8.67	92.34	26.	5.2
2011	3	10	4	58	17.0	24.77	97.82	23.	5.4
2011	3	11	11	32	31.8	36.50	69.90	96.	5.0
2011	3	14	9	1	31.2	30.43	79.13	10.	3.7
2011	3	15	1	11	32.5	28.87	76.61	18.	2.1
2011	3	15	5	0	6.6	36.88	71.24	33.	4.6
2011	3	15	9	0	5.3	36.15	69.64	38.	4.6
2011	3	16	2	16	55.5	29.74	80.02	10.	2.9
2011	3	16	15	23	39.5	37.00	71.20	96.	4.2
2011	3	19	10	21	47.7	36.43	70.91	33.	3.8
2011	3	19	12	42	41.5	13.08	92.39	23.	4.9
2011	3	19	23	24	5.9	35.87	70.19	83.	3.8
2011	3	20	17	31	33.9	22.85	94.47	85.	4.7
2011	3	21	1	7	3.7	30.07	69.34	33.	3.8
2011	3	21	1	25	35.5	30.06	69.36	15.	3.8
2011	3	21	9	48	57.5	36.52	70.57	159.	5.8
2011	3	21	12	9	56.4	37.23	71.48	90.	4.0
2011	3	23	0	45	18.5	37.44	71.92	49.	4.7
2011	3	23	5	55	52.4	36.38	76.35	87.	5.0
2011	3	25	7	19	25.2	28.98	77.11	17.	2.8
2011	3	28	16	57	41.9	27.94	76.57	15.	2.2
2011	3	29	13	15	25.2	36.71	71.37	173.	4.5
2011	3	30	13	19	38.4	36.26	70.16	33.	4.0
2011	3	30	19	17	.4	36.38	70.80	33.	3.4
2011	4	1	13	50	49.7	36.51	70.50	155.	4.8
2011	4	1	14	36	49.5	17.15	73.75	10.	3.2

2011	4	2	4	24	50.5	36.54	76.65	87.	4.6
2011	4	2	6	38	55.2	37.95	72.62	128.	4.6
2011	4	2	14	39	23.1	33.74	72.07	10.	3.5
2011	4	4	11	31	40.9	29.58	80.88	9.	5.5
2011	4	4	13	42	43.0	29.51	80.79	10.	3.1
2011	4	4	23	47	37.5	28.65	77.60	11.	2.8
2011	4	5	1	0	40.2	29.52	81.00	10.	3.2
2011	4	6	3	51	26.2	30.27	79.14	10.	2.8
2011	4	6	14	11	59.2	36.63	70.72	77.	4.8
2011	4	7	10	34	42.0	22.00	94.53	106.	4.2
2011	4	8	5	39	36.4	21.65	94.47	27.	4.5
2011	4	8	21	18	24.2	30.98	77.97	8.	3.4
2011	4	9	3	32	58.4	27.00	97.34	26.	4.3
2011	4	9	15	8	51.9	28.92	77.14	10.	2.4
2011	4	10	10	45	35.7	28.69	77.40	8.	2.1
2011	4	10	18	43	54.5	29.76	81.03	10.	3.2
2011	4	15	12	43	.1	10.75	91.68	39.	4.3
2011	4	15	17	21	17.2	27.63	86.33	10.	3.9
2011	4	16	3	42	25.5	18.06	76.62	9.	2.5
2011	4	17	3	21	6.1	36.32	71.06	33.	4.3
2011	4	18	1	6	53.9	13.13	93.17	41.	4.3
2011	4	18	1	20	2.0	36.04	70.76	38.	4.1
2011	4	18	21	44	3.9	19.99	85.79	10.	2.9
2011	4	19	0	14	41.7	31.36	73.38	40.	3.4
2011	4	19	3	34	5.1	24.52	94.36	35.	4.4
2011	4	19	13	39	34.5	23.78	92.82	10.	3.6
2011	4	20	15	33	21.7	30.83	77.67	10.	2.7
2011	4	21	3	42	36.9	36.15	68.46	26.	4.4
2011	4	21	14	18	28.0	36.33	70.16	131.	4.6
2011	4	21	19	31	14.3	34.33	78.75	10.	3.1
2011	4	21	19	54	11.1	29.58	81.01	28.	3.4
2011	4	22	21	35	45.5	36.50	70.42	33.	4.4
2011	4	23	13	59	18.2	37.37	71.36	79.	4.6
2011	4	23	22	41	35.2	28.37	76.07	10.	2.1
2011	4	24	2	22	56.2	29.57	89.12	10.	4.2
2011	4	24	21	13	4.0	34.64	73.32	10.	3.4
2011	4	25	0	54	31.3	35.98	71.94	15.	5.0
2011	4	26	8	44	47.5	31.57	77.53	10.	2.5
2011	4	26	17	0	33.9	25.33	93.03	38.	4.3
2011	4	27	8	33	24.6	28.81	77.36	10.	2.5
2011	4	28	7	32	33.7	31.47	77.35	10.	2.4

2011	4	28	9	53	2.7	33.15	76.47	10.	3.8
2011	4	29	2	39	15.1	25.54	94.79	10.	4.4
2011	4	29	11	23	45.5	28.83	77.08	10.	2.2
2011	4	29	13	0	10.0	36.49	70.26	33.	3.6
2011	4	29	16	48	29.2	33.03	76.34	9.	2.7
2011	5	2	13	46	15.0	20.44	93.94	14.	4.3
2011	5	2	18	51	57.0	31.07	78.09	10.	3.0
2011	5	2	20	32	1.7	14.45	93.22	38.	4.2
2011	5	3	14	38	54.2	23.53	90.73	10.	3.9
2011	5	4	12	12	19.3	28.52	76.19	10.	2.0
2011	5	4	20	57	17.6	30.24	80.46	10.	4.7
2011	5	4	21	43	19.2	30.25	80.66	10.	3.3
2011	5	5	7	15	25.2	31.19	80.70	15.	3.1
2011	5	5	13	8	40.0	30.48	80.20	10.	3.2
2011	5	6	15	8	57.4	30.82	80.38	15.	3.1
2011	5	6	22	41	6.4	30.72	80.83	10.	2.9
2011	5	7	1	47	13.5	23.13	95.15	131.	4.7
2011	5	7	9	42	56.7	27.76	76.06	10.	2.1
2011	5	8	1	4	56.2	31.08	80.06	10.	2.6
2011	5	8	1	26	26.8	30.43	80.46	10.	3.0
2011	5	8	12	32	19.7	30.42	80.22	10.	3.2
2011	5	10	18	28	52.7	30.85	80.10	10.	2.4
2011	5	10	19	19	55.7	35.47	70.76	33.	3.7
2011	5	11	1	12	26.5	36.41	70.34	33.	4.2
2011	5	11	1	51	24.0	30.51	80.38	10.	3.1
2011	5	11	17	7	20.5	18.11	76.65	16.	2.8
2011	5	11	20	17	23.0	36.27	70.07	33.	4.1
2011	5	12	2	0	12.8	31.82	82.56	10.	3.5
2011	5	12	7	40	45.9	33.02	73.66	10.	3.1
2011	5	12	22	47	37.2	35.28	69.06	40.	3.9
2011	5	13	7	36	11.6	32.44	76.34	10.	3.9
2011	5	13	14	40	57.2	31.01	78.25	10.	3.2
2011	5	13	18	53	39.2	33.42	75.02	10.	3.3
2011	5	13	21	39	23.1	36.71	70.47	182.	5.0
2011	5	14	10	21	29.6	36.71	70.57	193.	5.0
2011	5	14	21	7	16.6	36.81	70.63	170.	5.9
2011	5	15	6	48	32.7	34.94	72.54	33.	4.5
2011	5	15	7	50	52.5	32.24	71.84	39.	3.9
2011	5	17	0	30	34.0	36.61	70.65	180.	5.0
2011	5	17	16	0	45.2	23.44	70.48	15.	3.6
2011	5	18	1	7	25.3	10.43	77.89	10.	3.2

2011	5	18	14	21	58.5	33.28	77.55	10.	3.0
2011	5	18	14	33	46.0	28.59	76.18	10.	2.4
2011	5	20	18	52	2.9	33.99	69.78	35.	3.4
2011	5	22	7	46	27.2	36.06	78.07	15.	4.0
2011	5	23	14	38	10.6	27.75	76.11	10.	2.2
2011	5	24	3	14	18.0	25.39	92.56	47.	4.1
2011	5	24	5	18	29.0	28.50	76.49	15.	2.9
2011	5	25	15	31	2.0	30.50	80.03	10.	2.8
2011	5	25	15	36	54.9	30.38	69.91	10.	3.5
2011	5	29	0	5	39.5	28.08	76.49	11.	3.5
2011	5	30	3	45	3.7	32.05	69.54	40.	4.3
2011	5	31	18	45	6.0	24.51	94.93	33.	4.4
2011	6	1	12	0	13.3	29.06	76.97	14.	2.2
2011	6	2	0	17	22.7	27.84	75.79	9.	2.1
2011	6	2	19	50	30.5	27.79	74.84	10.	2.3
2011	6	3	0	53	23.2	27.54	87.92	9.	5.0
2011	6	3	2	28	21.7	34.87	72.23	14.	4.0
2011	6	3	7	27	9.6	9.76	92.63	15.	5.9
2011	6	3	12	8	30.7	7.70	91.91	23.	4.5
2011	6	4	6	29	52.9	34.65	69.21	37.	4.6
2011	6	4	12	1	14.8	34.23	69.11	20.	4.2
2011	6	7	1	16	.4	36.97	70.94	56.	4.5
2011	6	7	9	8	30.1	31.89	72.33	10.	4.5
2011	6	8	14	51	2.0	29.18	76.15	17.	2.5
2011	6	8	16	6	15.6	37.92	73.38	10.	3.6
2011	6	9	7	34	23.7	23.82	89.72	10.	4.3
2011	6	9	9	51	2.0	14.21	93.00	24.	4.7
2011	6	10	1	33	57.2	36.22	71.18	17.	4.2
2011	6	10	2	37	56.0	36.57	72.79	39.	4.5
2011	6	10	9	11	49.2	28.96	76.78	10.	2.3
2011	6	11	2	59	2.2	30.61	80.62	10.	3.0
2011	6	13	2	15	16.0	36.30	70.36	22.	4.4
2011	6	14	18	13	33.0	33.03	76.61	10.	2.5
2011	6	15	0	59	31.2	30.45	79.97	10.	3.1
2011	6	18	10	3	53.0	13.71	92.67	27.	4.6
2011	6	20	2	59	5.3	37.37	71.84	35.	3.9
2011	6	20	6	27	18.8	30.41	79.36	11.	4.9
2011	6	20	23	51	35.7	12.09	77.96	10.	2.8
2011	6	21	2	4	5.5	35.75	75.18	47.	4.6
2011	6	21	2	55	37.2	12.07	78.16	10.	3.1
2011	6	22	11	56	1.3	33.49	88.93	35.	4.7

2011	6	22	15	48	25.3	33.80	89.17	10.	4.5
2011	6	23	11	6	35.2	25.65	94.89	20.	4.1
2011	6	23	12	39	36.0	23.82	91.56	16.	4.4
2011	6	23	18	23	4.0	27.95	75.86	18.	2.5
2011	6	23	20	23	17.2	29.17	77.51	10.	2.3
2011	6	23	22	13	45.9	30.02	80.54	10.	3.2
2011	6	25	23	40	37.5	23.97	94.28	81.	4.6
2011	6	26	7	48	11.3	32.73	96.27	29.	5.2
2011	6	26	10	20	36.2	36.02	69.35	39.	3.4
2011	6	29	13	58	45.0	36.63	70.44	33.	3.4
2011	7	2	11	1	5.5	30.94	78.22	10.	2.5
2011	7	2	11	22	51.7	31.13	78.31	9.	2.6
2011	7	3	3	51	41.7	32.95	75.50	13.	3.7
2011	7	4	9	43	55.7	29.90	79.69	16.	3.4
2011	7	5	12	42	9.0	35.94	70.30	33.	4.4
2011	7	5	20	22	34.9	26.95	97.38	17.	3.5
2011	7	7	16	49	36.0	29.33	94.37	10.	3.8
2011	7	10	0	26	36.2	34.28	78.66	10.	2.7
2011	7	10	0	40	24.2	20.98	93.71	23.	4.9
2011	7	11	7	58	11.8	29.12	76.58	15.	2.1
2011	7	12	1	41	4.5	29.52	80.53	10.	3.0
2011	7	12	1	44	29.6	29.56	80.49	10.	2.4
2011	7	12	7	17	15.0	26.40	93.26	38.	3.9
2011	7	12	14	46	11.1	34.37	73.01	10.	4.2
2011	7	13	7	8	8.0	36.20	71.06	15.	3.8
2011	7	13	21	55	42.0	30.43	75.48	10.	2.2
2011	7	14	3	22	58.2	25.42	93.80	10.	3.8
2011	7	14	15	17	38.0	17.18	73.41	10.	3.3
2011	7	16	9	36	47.5	9.60	92.54	35.	4.6
2011	7	18	19	58	4.9	31.09	69.54	10.	4.3
2011	7	19	5	17	58.0	33.62	71.95	15.	3.6
2011	7	20	2	36	16.8	37.09	70.55	15.	3.6
2011	7	20	19	42	2.7	28.90	94.67	10.	4.6
2011	7	20	20	21	15.6	28.48	76.87	10.	2.1
2011	7	20	22	7	33.5	36.31	69.44	33.	4.5
2011	7	22	0	58	51.4	24.73	92.00	16.	3.9
2011	7	26	7	39	16.7	9.55	76.37	10.	3.7
2011	7	26	8	45	55.2	9.60	76.48	10.	3.2
2011	7	26	21	24	3.9	30.33	78.99	10.	2.6
2011	7	27	3	17	13.0	36.25	69.16	138.	4.6
2011	7	27	7	14	23.2	36.35	70.80	98.	4.7

2011	7	27	20	49	14.6	27.46	76.95	10.	2.1
2011	7	28	3	56	44.9	27.54	72.94	10.	2.8
2011	7	28	15	30	32.7	30.48	75.75	10.	2.1
2011	7	28	17	53	38.2	25.23	88.65	15.	4.5
2011	7	28	18	42	33.0	33.53	75.82	33.	4.5
2011	7	28	22	58	33.9	33.47	75.64	10.	2.8
2011	7	29	22	22	49.7	33.38	75.68	10.	2.9
2011	8	1	0	26	14.5	24.50	93.82	38.	3.8
2011	8	1	10	12	7.6	35.80	69.31	35.	3.8
2011	8	1	19	40	56.2	33.54	87.61	20.	5.0
2011	8	3	20	37	39.4	36.64	69.13	30.	4.2
2011	8	4	19	0	40.2	28.91	76.63	15.	2.5
2011	8	5	1	24	35.0	32.96	75.52	17.	2.9
2011	8	5	6	21	11.6	24.34	94.44	30.	3.5
2011	8	5	16	23	43.5	24.77	95.04	115.	4.2
2011	8	6	8	57	38.7	36.60	71.15	89.	4.6
2011	8	6	17	24	53.0	23.17	79.99	12.	2.6
2011	8	6	20	17	40.0	26.39	93.10	36.	3.0
2011	8	8	17	5	44.4	36.04	70.00	36.	3.9
2011	8	8	17	53	20.6	36.93	70.85	82.	4.9
2011	8	8	18	54	40.0	22.75	93.92	10.	3.7
2011	8	9	3	33	46.7	22.80	86.71	10.	3.5
2011	8	10	17	35	4.4	26.99	91.13	10.	2.9
2011	8	11	17	6	14.6	37.65	95.63	10.	5.0
2011	8	11	20	22	32.5	37.78	73.29	20.	3.6
2011	8	11	21	1	18.2	26.20	92.16	10.	3.5
2011	8	11	22	1	28.5	29.96	86.86	31.	4.1
2011	8	12	2	28	23.1	36.16	69.95	114.	4.1
2011	8	12	6	6	29.5	11.20	79.25	12.	3.5
2011	8	13	2	59	14.6	23.38	70.40	10.	4.3
2011	8	13	22	53	37.4	32.94	76.51	10.	3.1
2011	8	14	0	14	51.0	32.28	76.62	8.	2.6
2011	8	14	2	3	51.9	33.04	76.51	10.	2.9
2011	8	14	2	25	39.5	33.09	76.61	10.	2.9
2011	8	14	4	30	34.0	32.85	76.92	15.	2.5
2011	8	14	5	30	7.4	34.74	71.85	15.	3.5
2011	8	15	13	14	43.2	24.72	94.63	81.	4.3
2011	8	15	16	48	9.3	27.39	86.33	35.	4.0
2011	8	15	18	22	33.7	29.07	76.67	10.	2.3
2011	8	17	23	51	55.4	36.76	68.53	35.	5.3
2011	8	19	1	52	8.8	29.58	81.58	10.	3.9

2011	8	19	23	49	8.8	36.73	68.91	35.	4.8
2011	8	20	14	5	53.5	24.24	93.54	64.	3.5
2011	8	21	0	57	51.2	30.57	70.25	10.	4.0
2011	8	22	19	14	28.2	36.65	70.35	165.	4.8
2011	8	23	1	22	54.2	33.18	76.88	10.	4.6
2011	8	23	14	28	53.7	36.41	70.88	90.	4.8
2011	8	23	20	14	3.7	28.64	76.99	10.	2.5
2011	8	24	13	6	38.9	36.39	71.31	33.	3.9
2011	8	26	20	32	36.2	36.54	70.47	151.	5.5
2011	8	26	21	0	14.1	36.11	70.64	38.	4.3
2011	8	27	20	16	10.8	28.92	76.59	10.	2.0
2011	8	27	20	44	28.3	28.61	77.00	10.	2.0
2011	8	28	4	40	41.9	26.52	96.67	79.	4.6
2011	8	28	8	1	49.7	25.72	70.08	10.	3.5
2011	8	28	8	54	3.5	30.82	78.54	10.	2.8
2011	8	28	16	0	30.8	33.36	76.94	15.	2.5
2011	8	29	9	27	22.6	27.62	75.54	9.	2.1
2011	8	29	15	41	7.6	12.61	78.89	13.	3.1
2011	9	1	2	31	32.0	37.87	73.33	33.	4.3
2011	9	1	11	42	10.6	36.27	71.10	30.	3.9
2011	9	2	6	13	17.1	28.95	76.69	10.	2.0
2011	9	4	13	53	22.2	36.00	71.64	15.	4.1
2011	9	4	18	22	55.7	26.06	92.33	10.	3.1
2011	9	4	20	52	51.5	25.15	94.27	32.	4.2
2011	9	5	20	46	33.9	32.80	70.31	10.	3.8
2011	9	7	0	33	19.7	26.07	91.18	15.	3.7
2011	9	7	0	55	30.2	31.31	76.37	10.	3.4
2011	9	7	17	58	18.6	28.63	77.11	10.	3.8
2011	9	8	23	46	11.0	26.45	95.98	10.	3.9
2011	9	9	10	26	44.4	28.64	77.22	8.	1.8
2011	9	9	14	27	47.2	19.60	73.04	10.	2.2
2011	9	10	15	45	54.0	26.36	95.46	20.	3.8
2011	9	10	20	59	32.7	25.20	92.16	10.	2.7
2011	9	11	14	33	47.0	23.15	70.15	15.	3.5
2011	9	11	20	58	45.4	36.51	70.17	20.	4.1
2011	9	11	21	41	54.5	28.64	77.18	12.	2.0
2011	9	12	10	39	8.6	33.33	76.02	20.	2.9
2011	9	14	11	26	13.3	36.63	70.22	182.	4.7
2011	9	14	23	28	32.7	28.63	77.13	8.	2.1
2011	9	15	15	27	13.6	35.56	82.61	39.	5.2
2011	9	15	22	3	34.4	36.37	70.29	121.	4.3

2011	9	16	13	31	13.6	24.28	94.56	84.	4.2
2011	9	16	21	57	3.2	36.63	77.77	33.	3.6
2011	9	17	8	39	41.0	27.73	92.74	10.	3.5
2011	9	17	15	28	33.9	36.12	69.74	33.	4.2
2011	9	18	12	40	46.9	27.85	88.06	45.	6.9
2011	9	18	13	5	48.5	36.14	70.01	33.	4.3
2011	9	18	13	11	59.2	27.60	88.44	15.	4.9
2011	9	18	13	26	40.4	27.33	88.90	26.	3.4
2011	9	18	13	30	4.0	27.33	88.96	11.	3.5
2011	9	18	13	54	14.8	27.48	88.32	37.	4.7
2011	9	18	14	54	45.0	27.57	88.46	39.	3.5
2011	9	18	14	58	34.0	26.97	88.04	19.	3.2
2011	9	18	17	18	18.2	27.09	88.32	25.	3.3
2011	9	18	19	17	30.2	27.64	88.75	30.	3.7
2011	9	18	19	20	55.5	25.58	91.11	14.	3.9
2011	9	18	19	27	44.0	27.20	88.89	13.	3.7
2011	9	18	21	51	53.5	27.23	88.93	10.	4.1
2011	9	19	0	52	4.6	18.02	76.60	10.	3.9
2011	9	19	2	38	15.1	28.06	88.57	20.	3.3
2011	9	19	4	35	13.8	27.88	88.62	23.	3.6
2011	9	19	16	28	27.2	27.51	88.93	25.	3.3
2011	9	20	0	22	37.9	27.29	88.23	19.	3.2
2011	9	20	8	51	25.5	27.92	88.31	43.	3.8
2011	9	20	8	55	23.1	34.82	70.04	39.	4.6
2011	9	20	19	35	26.2	27.41	88.97	13.	3.0
2011	9	21	1	15	7.9	27.86	88.74	20.	3.2
2011	9	21	2	24	36.5	30.89	78.35	10.	3.1
2011	9	21	12	20	39.5	28.02	87.92	30.	3.3
2011	9	21	21	21	41.2	28.00	88.46	25.	3.1
2011	9	22	14	17	36.5	23.76	94.81	142.	4.8
2011	9	22	16	44	39.2	27.55	88.32	51.	3.9
2011	9	23	13	23	16.1	24.37	93.96	10.	4.2
2011	9	24	14	32	19.3	30.88	78.37	10.	3.0
2011	9	24	15	21	34.2	34.19	75.16	30.	4.3
2011	9	25	10	6	33.5	33.00	75.96	10.	3.3
2011	9	25	11	7	52.2	32.46	77.23	15.	2.7
2011	9	26	21	17	18.2	31.00	79.06	10.	2.7
2011	9	26	22	24	3.9	27.23	88.64	10.	3.0
2011	9	27	11	2	59.2	36.65	76.95	82.	5.0
2011	9	28	14	40	2.2	13.96	92.64	10.	4.3
2011	9	28	15	54	1.2	32.73	76.74	12.	2.7

2011	9	29	22	33	23.6	30.82	78.33	20.	2.9
2011	10	1	4	22	13.3	12.96	95.87	19.	5.2
2011	10	1	4	26	6.0	29.86	82.40	10.	3.8
2011	10	1	12	48	56.4	13.08	95.84	10.	5.0
2011	10	2	11	29	40.5	28.06	80.29	10.	2.7
2011	10	3	4	35	4.0	13.06	95.61	43.	4.7
2011	10	3	10	52	31.5	27.47	88.86	21.	3.4
2011	10	4	5	36	35.5	37.64	72.03	33.	4.0
2011	10	4	5	51	50.5	36.79	68.52	15.	4.6
2011	10	5	14	40	54.4	37.81	87.01	18.	4.9
2011	10	7	3	29	32.0	27.93	88.10	34.	3.6
2011	10	7	11	17	25.7	34.71	72.90	15.	4.2
2011	10	7	20	59	2.0	36.05	70.96	33.	3.5
2011	10	8	3	0	40.9	24.43	93.57	13.	3.1
2011	10	8	23	2	3.5	31.23	77.79	11.	2.5
2011	10	9	7	34	51.7	29.94	80.75	10.	3.2
2011	10	9	8	22	22.1	28.15	87.71	37.	3.6
2011	10	10	22	54	17.7	35.83	69.97	33.	4.6
2011	10	11	6	34	28.3	28.33	94.06	29.	3.6
2011	10	11	13	40	26.3	13.87	94.09	39.	4.8
2011	10	12	4	23	7.9	26.94	92.68	29.	3.3
2011	10	12	10	27	25.2	28.10	75.97	13.	3.5
2011	10	13	10	43	15.0	26.99	87.94	15.	3.4
2011	10	13	18	57	31.7	31.77	71.56	37.	4.1
2011	10	13	19	32	52.0	24.08	91.49	10.	3.5
2011	10	14	15	6	26.5	27.20	95.65	34.	3.4
2011	10	14	17	40	41.2	36.03	70.60	66.	4.1
2011	10	14	19	58	9.6	36.01	70.09	33.	4.0
2011	10	15	10	49	13.3	23.61	86.86	15.	3.0
2011	10	15	10	50	59.5	23.68	86.97	10.	2.9
2011	10	16	0	31	2.2	35.90	76.42	18.	4.3
2011	10	16	0	53	49.2	23.53	93.65	30.	3.4
2011	10	16	1	13	51.0	36.75	71.28	33.	3.5
2011	10	16	6	33	34.7	31.34	77.29	10.	2.8
2011	10	17	9	51	48.7	31.31	68.64	10.	3.7
2011	10	17	13	4	51.5	27.29	88.77	12.	3.4
2011	10	18	0	40	5.4	34.76	75.28	15.	3.4
2011	10	19	13	31	44.7	34.57	69.20	39.	4.4
2011	10	19	18	53	45.4	16.54	79.11	10.	3.6
2011	10	20	17	18	32.7	21.17	70.50	10.	5.2
2011	10	20	20	52	40.5	35.03	81.69	10.	4.8

2011	10	21	2	49	40.5	27.36	88.58	10.	3.0
2011	10	21	3	7	8.1	21.12	70.54	10.	3.8
2011	10	21	7	20	51.0	35.89	70.56	33.	4.2
2011	10	21	8	29	26.7	27.07	91.43	10.	4.1
2011	10	21	14	40	35.0	24.87	94.08	33.	4.5
2011	10	21	16	12	17.2	35.54	82.52	10.	3.4
2011	10	21	18	15	24.6	29.51	77.70	13.	2.7
2011	10	22	4	31	32.9	29.85	81.86	15.	3.5
2011	10	22	20	41	21.7	29.10	75.90	15.	2.6
2011	10	22	21	7	40.9	33.17	76.05	26.	3.8
2011	10	22	21	12	16.5	32.98	75.55	9.	2.9
2011	10	22	21	15	.4	33.15	75.41	17.	3.4
2011	10	22	23	32	1.0	26.36	96.08	11.	3.4
2011	10	23	1	28	52.0	36.81	69.17	42.	4.2
2011	10	23	10	47	3.9	26.98	88.36	8.	3.4
2011	10	24	19	7	23.8	25.64	93.97	19.	3.1
2011	10	26	11	21	2.2	28.14	76.93	10.	2.0
2011	10	26	16	17	34.5	31.47	76.88	10.	3.5
2011	10	27	10	4	52.9	32.72	72.12	15.	3.9
2011	10	28	5	3	53.4	30.67	80.04	10.	3.1
2011	10	28	10	28	49.0	28.52	77.67	10.	2.0
2011	10	28	11	13	33.4	27.91	77.48	10.	2.4
2011	10	29	0	43	39.2	27.42	88.38	23.	3.5
2011	10	29	9	3	7.5	27.55	88.56	15.	2.6
2011	10	29	10	17	58.2	27.39	88.20	13.	2.7
2011	10	29	13	50	34.9	27.52	75.97	10.	2.1
2011	10	30	13	36	29.2	30.58	80.22	15.	2.9
2011	10	30	13	38	53.7	26.94	92.25	27.	3.6
2011	10	30	15	10	28.0	27.59	88.42	18.	2.9
2011	10	31	2	11	47.5	36.39	70.50	183.	4.7
2011	10	31	20	6	7.0	26.02	92.54	58.	2.8
2011	11	1	6	56	57.0	26.96	92.10	10.	2.9
2011	11	1	16	41	46.9	23.60	93.98	21.	3.6
2011	11	2	15	45	33.0	30.23	78.87	10.	2.5
2011	11	3	11	34	14.3	36.43	70.76	77.	4.8
2011	11	3	19	37	21.0	29.69	80.60	10.	3.4
2011	11	4	4	26	50.4	28.91	76.72	10.	2.5
2011	11	4	5	32	4.1	33.64	75.42	10.	3.2
2011	11	4	10	14	43.7	24.92	95.58	146.	4.6
2011	11	4	15	52	54.4	28.92	77.02	15.	2.6
2011	11	4	22	20	53.2	35.74	75.62	10.	3.8

2011	11	5	2	32	12.5	21.50	85.57	21.	3.9
2011	11	5	4	45	5.4	24.50	90.28	30.	3.5
2011	11	6	18	34	39.7	30.36	80.55	10.	3.8
2011	11	7	9	52	21.1	36.45	70.40	30.	4.3
2011	11	7	11	59	26.5	36.66	70.77	183.	5.7
2011	11	8	12	41	29.5	26.43	90.56	15.	3.7
2011	11	8	13	37	30.7	24.80	94.26	37.	3.7
2011	11	8	15	45	18.8	27.19	92.35	30.	2.9
2011	11	8	23	23	11.1	27.36	91.36	20.	3.3
2011	11	9	15	21	47.5	20.37	82.50	10.	2.6
2011	11	10	9	57	30.7	26.79	89.46	18.	4.0
2011	11	11	1	20	40.7	26.03	95.66	15.	3.5
2011	11	11	1	45	36.7	35.39	72.99	10.	4.3
2011	11	11	3	44	48.5	36.72	71.64	33.	4.3
2011	11	11	9	57	31.7	26.71	89.28	10.	3.9
2011	11	11	17	47	18.3	29.16	89.65	10.	3.1
2011	11	12	7	1	52.2	21.15	70.51	10.	4.3
2011	11	12	23	46	52.7	28.10	84.92	10.	4.1
2011	11	15	6	49	10.6	26.30	93.00	17.	3.6
2011	11	15	10	18	42.0	11.29	93.67	117.	4.6
2011	11	15	16	59	32.0	10.95	77.53	10.	2.8
2011	11	18	0	15	35.5	9.88	77.04	15.	3.0
2011	11	18	7	31	34.2	37.32	71.51	20.	4.6
2011	11	18	9	50	31.5	30.26	79.37	15.	3.1
2011	11	20	10	29	14.6	30.65	78.66	15.	2.8
2011	11	21	3	15	42.0	24.95	95.15	113.	5.8
2011	11	21	9	56	1.7	29.11	76.83	19.	2.8
2011	11	21	17	5	29.1	27.53	93.90	15.	2.5
2011	11	21	17	19	4.4	25.20	93.92	10.	2.3
2011	11	23	1	56	21.0	36.01	71.12	37.	4.1
2011	11	24	19	9	20.5	28.70	77.15	11.	2.5
2011	11	24	20	38	13.8	33.65	68.56	10.	4.2
2011	11	25	21	44	57.9	9.71	76.85	10.	3.3
2011	11	26	17	50	11.8	27.44	91.34	15.	3.3
2011	11	26	18	34	51.4	16.82	77.53	10.	3.1
2011	11	26	18	51	22.5	29.36	69.90	18.	4.3
2011	11	27	9	36	57.0	28.61	76.75	10.	2.1
2011	11	27	13	38	17.2	29.88	77.85	10.	2.9
2011	11	27	22	42	1.1	36.14	69.97	30.	4.5
2011	11	28	15	6	49.5	25.05	97.84	45.	5.2
2011	11	29	13	37	17.5	21.38	94.16	20.	4.9

2011	11	30	3	33	24.2	26.40	92.98	36.	3.3
2011	11	30	19	42	37.5	7.97	93.92	27.	5.5
2011	11	30	19	49	3.0	7.69	94.00	22.	5.1
2011	12	1	3	50	59.0	31.56	83.89	10.	5.0
2011	12	2	9	14	55.7	23.61	93.16	15.	2.9
2011	12	2	12	14	30.0	36.24	70.05	33.	4.0
2011	12	2	19	37	41.9	7.40	94.31	38.	5.3
2011	12	3	12	48	18.7	27.83	76.85	10.	2.3
2011	12	5	5	59	11.1	12.63	93.15	53.	4.4
2011	12	5	16	10	29.8	37.52	71.58	92.	4.5
2011	12	5	18	55	38.0	32.99	92.88	17.	4.6
2011	12	6	1	22	30.6	12.36	91.65	24.	4.7
2011	12	7	3	7	48.2	35.92	70.61	33.	4.5
2011	12	7	6	10	44.2	12.61	93.83	82.	4.2
2011	12	7	15	46	26.7	25.29	94.06	25.	3.0
2011	12	8	1	2	27.8	32.05	75.46	19.	2.7
2011	12	8	1	7	18.2	36.64	70.34	33.	3.9
2011	12	8	1	48	34.4	28.61	77.11	10.	2.6
2011	12	8	19	43	7.3	28.69	76.87	10.	2.2
2011	12	9	4	40	47.5	27.81	76.60	10.	2.2
2011	12	9	22	56	58.0	27.97	88.15	33.	3.7
2011	12	11	6	47	21.3	28.30	77.64	10.	2.3
2011	12	11	12	17	5.0	25.62	90.76	15.	3.1
2011	12	12	4	45	42.9	25.33	95.17	22.	4.0
2011	12	12	7	16	10.8	27.32	92.55	10.	3.5
2011	12	12	11	25	13.8	32.24	69.61	30.	4.0
2011	12	12	15	2	18.7	36.25	70.68	102.	4.8
2011	12	12	19	36	59.0	32.14	78.34	14.	3.4
2011	12	13	1	26	43.0	27.35	88.54	10.	3.2
2011	12	13	10	57	30.2	27.79	76.97	10.	2.1
2011	12	13	15	9	12.0	25.20	91.50	17.	3.5
2011	12	14	10	0	7.6	36.17	73.52	33.	4.1
2011	12	14	20	20	53.5	27.65	88.08	11.	4.1
2011	12	14	23	55	26.2	30.49	79.34	10.	3.2
2011	12	15	13	26	45.2	25.76	94.12	11.	3.4
2011	12	15	20	27	11.3	25.81	91.19	12.	2.9
2011	12	16	15	12	41.5	7.85	94.29	30.	4.8
2011	12	16	15	47	25.1	7.62	94.13	45.	5.0
2011	12	18	12	28	10.6	36.43	71.65	15.	4.6
2011	12	18	17	48	43.5	36.42	71.25	33.	4.0
2011	12	18	19	5	34.7	24.02	94.41	33.	3.5

2011 12 18	21 35 23.6	28.06	88.24	15.	3.7
2011 12 21	4 23 9.8	26.32	95.51	26.	3.8
2011 12 21	13 29 43.0	25.09	91.62	29.	2.6
2011 12 21	13 59 37.5	36.89	70.68	143.	5.2
2011 12 22	1 38 59.0	37.17	71.75	77.	4.3
2011 12 22	23 42 59.9	31.64	86.37	35.	4.6
2011 12 23	11 45 8.1	16.86	84.29	10.	3.2
2011 12 23	12 2 1.8	28.84	68.20	14.	5.1
2011 12 26	8 35 41.7	36.56	70.79	158.	4.9
2011 12 27	3 25 51.2	7.01	93.07	37.	5.1
2011 12 28	19 19 10.6	36.68	70.02	185.	4.8
2011 12 30	15 14 .6	26.39	92.77	36.	3.6

(iii) YEAR 2012

Date Day/Mon/Year	Origin-Time hr min sec (UTC)	Latitude °N	Longitude °E	Depth (Km)	Magnitude (Richter scale)
01/01/2012	02:35:19	23.5° N	91.8° E	12	4.2
03/01/2012	17:32:28	07.8° N	92.2° E	26	4.4
04/01/2012	16:31:24	33.7° N	75.0° E	10	4.0
11/01/2012	22:23:19	25.3° N	94.7° E	10	4.0
16/01/2012	05:01:00	29.7° N	78.9° E	10	3.6
18/01/2012	14:12:52	27.3° N	88.5° E	5	3.4
20/01/2012	21:28:42	09.7° N	92.5° E	10	4.3
28/01/2012	23:24:52	28.8° N	76.7° E	10	3.5
29/01/2012	21:37:05	28.8° N	76.8° E	10	3.2
30/01/2012	22:58:02	07.9° N	94.0° E	10	4.3
09/02/2012	19:17:29	30.9° N	78.2° E	10	5.0
10/02/2012	15:45:16	26.6° N	93.7° E	10	4.4
14/02/2012	13:48:43	27.3° N	88.2° E	05	3.6
15/02/2012	18:31:53	06.3° N	92.9° E	10	5.0
20/02/2012	13:59:24.	35.8° N	79.7° E	10	4.9
20/02/2012	14:18:05	35.8° N	79.8° E	10	5.0
25/02/2012	08:45:56	26.3° N	88.7° E	33	3.8
26/02/2012	15:55:31	24.7° N	93.7° E	36	4.5
26/02/2012	23:08:42	29.6° N	80.8° E	10	4.3
01/03/2012	17:52:40	13.1° N	92.5° E	10	5
02/03/2012	12:41:35	07.5° N	94.0° E	5	4.8
05/03/2012	07:41:03	28.7° N	76.7° E	10	4.9
06/03/2012	02:52:42	08.9° N	93.9° E	10	5.4
06/03/2012	02:59:33	08.7° N	93.8° E	47	4.9
07/03/2012	13:18:19	32.1° N	78.1° E	20	3.8
10/03/2012	18:06:33	08.8° N	94.0° E	18	4.5
10/03/2012	20:58:04	09.2° N	94.3° E	10	4.6

12/03/2012	06:06:44	36.8° N	73.4° E	33	5.8
12/03/2012	22:07:20	28.9° N	77.3° E	5	3.5
15/03/2012	14:56:00	10.8° N	93.9° E	20	4.8
20/03/2012	10:18:48	09.5° N	93.3° E	10	4.8
07/03/2012	04:49:27	11.2° N	78.6° E	10	3.6
27/03/2012	23:40:08	26.1° N	87.8° E	12.0	4.9
31/03/2012	04:16:54	36.5° N	71.3° E	218	5.2
14/04/2012	03:23:04	23.5° N	71.0° E	07	4.0
14/04/2012	05:27:40	17.4° N	73.8° E	10	4.9
14/04/2012	06:17:31	17.0° N	73.5° E	10	4.0
24/04/2012	14:57:10	09.0° N	94.1° E	10	5.5
24/04/2012	19:14:41	09.1° N	93.9° E	10	5.0
25/04/2012	07:42:23	08.9° N	94.1° E	10	5.8
25/04/2012	07:53:26	09.1° N	94.0° E	10	5.1
30/04/2012	13:06:59	14.5° N	93.2° E	10	5.3
01/05/2012	22:43:12.	26.2° N	92.2° E	13	3.8
02/05/2012	09:57:32	08.9° N	93.8° E	15	4.7
02/05/2012	23:12:14	28.2° N	76.3° E	05	3.5
03/05/2012	01:18:03	10.5° N	93.2° E	10	5.1
03/05/2012	04:59:35	08.9° N	93.8° E	33	4.8
03/05/2012	06:42:35	36.3° N	70.7° E	115	5.1
04/05/2012	20:09:26	27.5° N	95.1° E	15	4.4
06/05/2012	05:42:59	32.4° N	76.3° E	05	3.6
09/05/2012	18:05:58	34.3° N	74.5° E	08	3.4
10/05/2012	22:00:40	30.2° N	79.4° E	05	3.9
11/05/2012	12:41:28	26.6° N	93.0° E	20	5.4
17/05/2012	13:39:19	28.9° N	76.7° E	27	3.5
22/05/2012	12:19:49	25.2° N	94.4° E	63	4.0
24/05/2012	19:39:28	14.5° N	93.2° E	33.0	5.0
27/05/2012	15:01:28	26.7° N	91.6° E	18	4.5
30/05/2012	01:54:28	27.4° N	88.0° E	10	4.0
30/05/2012	13:23:03	08.4° N	91.8° E	25	4.7
01/06/2012	19:11:33	29.0° N	95.5° E	33	4.0
01/06/2012	23:39:34	30.4° N	79.2° E	10	3.7
03/06/2012	23:19:04	35.3° N	80.4° E	10	3.1
09/06/2012	08:14:41	20.1° N	82.9° E	5	3.9
11/06/2012	04:35:56	27.2° N	88.3° E	5	3.8
11/06/2012	05:02:10	36.7° N	69.9° E	20	5.4
11/06/2012	05:29:11	36.1° N	69.3° E	33	5.7
12/06/2012	01:09:43	22.2° N	78.8° E	10	3.4
13/06/2012	03:16:03	28.7° N	76.6° E	10	2.8
13/06/2012	11:20:39	25.9° N	92.7° E	28	3.4
16/06/2012	05:38:31	26.3° N	92.8° E	33	3.8
19/06/2012	14:00:08	28.7° N	76.6° E	5	3.8
19/06/2012	20:14:02	23.6° N	70.4° E	10	5.1

20/06/2012	08:46:25	11.1° N	76.0° E	05	3.4
22/06/2012	02:44:42	29.0° N	77.1° E	07	3.5
22/06/2012	04:38:47	29.0° N	77.0° E	15	3.4
29/06/2012	05:29:59	24.2° N	91.9° E	15	3.7
30/06/2012	19:43:22	28.7° N	96.2° E	10	4.8
01/07/2012	04:13:52	25.7° N	94.6° E	50	5.8
02/07/2012	10:07:12	28.6° N	76.3° E	07	3.3
05/07/2012	09:29:33	25.7° N	94.2° E	20	3.1
09/07/2012	20:13:08	25.5° N	96.3° E	10	5.2
10/07/2012	13:03:41	26.5° N	93.2° E	56	4.5
10/07/2012	15:53:57	25.7° N	91.7° E	5	3.5
11/07/2012	17:23:26	29.5° N	81.3° E	10	4.4
12/07/2012	14:00:32	36.5° N	70.9° E	170	6.3
12/07/2012	14:44:53	36.5° N	71.1° E	126	5.1
14/07/2012	19:55:18	25.5° N	94.2° E	35	5.5
19/07/2012	07:36:34	37.3° N	71.4° E	92	5.6
22/07/2012	02:11:10	25.1° N	96.3° E	10	5.2
26/07/2012	05:31:36	33.2° N	76.3° E	05	3.8
28/07/2012	05:48:06	29.7° N	80.7° E	10	4.5
29/07/2012	02:21:12	23.0° N	94.2° E	70	6.0
05/08/2012	06:36:49	24.8° N	91.8° E	19	4.3
06/08/2012	18:29:45	32.8° N	76.4° E	10	3.2
09/08/2012	04:08:51	26.2° N	93.6° E	26	3.1
09/08/2012	13:12:05	28.4° N	86.7° E	10	4.8
13/08/2012	20:32:59	34.8° N	73.7° E	30	5.2
14/08/2012	15:17:01	26.4° N	93.1° E	42	3.2
19/08/2012	09:24:49	26.7° N	92.5° E	35	5.0
19/08/2012	19:04:56	26.7° N	92.6° E	40	4.0
23/08/2012	16:30:19	28.4° N	82.7° E	10	5.0
27/08/2012	12:05:23	10.3° N	92.8° E	48	5.0
31/08/2012	03:43:36	20.8° N	85.0° E	20	3.7
04/09/2012	07:42:35	26.3° N	92.5° E	20	3.1
06/09/2012	18:27:09	25.7° N	91.1° E	10	4.2
08/09/2012	07:18:16	06.6° N	95.5° E	230	5.0
10/09/2012	06:19:22	13.6° N	92.7° E	45	5.0
10/09/2012	14:35:45	10.7° N	93.8° E	40	5.2
10/09/2012	15:43:07	17.4° N	73.5° E	10	3.2
10/09/2012	18:52:17	10.7° N	93.7° E	35	4.5
11/09/2012	11:09:50	23.9° N	94.0° E	10	4.0
11/09/2012	18:09:48	24.6° N	93.7° E	33	3.7
12/09/2012	19:29:54	36.7° N	71.4° E	175	5.2
16/09/2012	19:29:06	28.9° N	77.4° E	24	3.4
18/09/2012	12:26:21	27.4° N	88.5° E	10	4.1
18/09/2012	23:12:52	26.4° N	93.3° E	45	3.5
21/09/2012	14:20:42	26.2° N	95.2° E	96	4.1

25/09/2012	08:33:02	36.5° N	69.2° E	54	5.3
29/09/2012	11:24:29	06.2° N	92.8° E	15	5.5
02/10/2012	03:45:28	32.4° N	76.4° E	10	4.5
02/10/2012	08:34:52	32.4° N	76.3° E	10	4.9
02/10/2012	18:37:39	26.9° N	92.8° E	35	5.1
03/10/2012	10:04:34	32.4° N	76.3° E	05	3.8
03/10/2012	10:49:28	32.4° N	76.3° E	10	3.6
04/10/2012	15:00:44	32.4° N	76.3° E	05	3.0
08/10/2012	17:46:21	32.0° N	78.6° E	10	4.7
11/10/2012	13:21:06	32.2° N	77.7° E	10	3.5
11/10/2012	13:56:04	28.0° N	88.2° E	15	3.3
11/10/2012	23:54:27	34.1° N	73.5° E	10	4.5
12/10/2012	23:16:15	24.7° N	93.6° E	10	4.2
13/10/2012	09:05:09	27.0° N	92.7° E	20	3.7
14/10/2012	08:51:54	12.6° N	75.6° E	05	3.9
15/10/2012	23:43:45	35.9° N	69.6° E	100	5.2
16/10/2012	12:53:39	25.7° N	91.0° E	05	3.2
17/10/2012	21:13:52	24.1° N	94.2° E	10	3.5
18/10/2012	02:33:27	23.8° N	81.4° E	27	5.0
18/10/2012	05:32:18	25.7° N	91.8° E	10	3.2
20/10/2012	01:31:55	24.1° N	94.2° E	98	3.7
21/10/2012	07:54:47	13.9° N	96.1° E	20	4.7
22/10/2012	06:56:51	28.0° N	87.8° E	68	3.9
22/10/2012	15:43:50	24.8° N	94.1° E	79	3.5
24/10/2012	21:07:43	28.8° N	94.2° E	80	4.0
26/10/2012	01:50:25	24.1° N	92.9° E	10	3.8
26/10/2012	04:10:52	30.2° N	79.6° E	05	3.5
28/10/2012	03:08:49	10.4° N	92.4° E	10	5.3
28/10/2012	05:44:21	28.4° N	94.3° E	10	4.2
28/10/2012	12:11:15	36.5° N	71.2° E	201	5.2
29/10/2012	06:23:06	16.2° N	79.7° E	10	3.9
29/10/2012	00:34:56	25.7° N	91.8° E	05	3.4
30/10/2012	01:40:24	26.2° N	92.4° E	15	3.9
30/10/2012	13:52:57	22.7° N	77.5° E	10	2.9
30/10/2012	17:21:51	25.8° N	71.2° E	10	3.5
06/11/2012	12:21:12	32.3° N	76.2° E	05	4.1
09/11/2012	05:44:34	36.9° N	73.5° E	10	4.3
11/11/2012	01:12:36	23.0° N	95.9° E	10	6.7
11/11/2012	01:29:58	22.9° N	96.1° E	10	5.0
11/11/2012	01:32:34	22.8° N	96.0° E	12	5.0
11/11/2012	10:54:43	22.8° N	95.9° E	10	5.8
11/11/2012	18:19:43	23.1° N	96.0° E	10	5.7
11/11/2012	18:39:19	29.2° N	81.5° E	10	5.0
11/11/2012	20:23:12	32.3° N	76.2° E	05	4.0
12/11/2012	20:02:12	30.7° N	78.5° E	5	2.5

14/11/2012	22:10:04	23.3° N	91.5° E	10	3.5
15/11/2012	06:46:07	30.2° N	80.1° E	5	3.0
16/11/2012	16:58:00	28.0° N	93.2° E	5	3.5
19/11/2012	06:25:21	28.7° N	76.6° E	5.0	3.5
19/11/2012	17:25:50	23.0° N	96.0° E	10	5.0
19/11/2012	17:54:07	30.5° N	67.7° E	15	5.4
20/11/2012	04:15:35	22.1° N	75.6° E	28	3.3
25/11/2012	06:01:44	23.7° N	91.5° E	15	4.2
26/11/2012	00:34:29	30.3° N	80.0° E	05	2.8
26/11/2012	23:13:53	14.1° N	93.5° E	50	4.8
27/11/2012	12:15:15	30.9° N	78.4° E	12	4.8
28/11/2012	22:19:21	11.9° N	77.9° E	15	3.3
30/11/2012	03:52:22	25.9° N	95.7° E	10	4.7
30/11/2011	04:59:20	24.5° N	94.4° E	06	3.5
30/11/2012	19:39:29	27.3° N	88.3° E	10	4.1
05/12/2012	08:05:03	25.1° N	94.8° E	85	4.1
06/12/2012	14:33:58	27.8° N	94.1° E	10	3.4
08/12/2012	07:06:09	23.0° N	70.4° E	10	4.3
11/12/2012	07:19:05	23.5° N	93.4° E	23	3.8
19/12/2012	22:32:00	28.6° N	76.8° E	10	2.9
20/12/2012	03:44:15	28.6° N	76.7° E	20	2.7
20/12/2012	13:00:56	27.5° N	76.2° E	5.0	3.6
21/12/2012	07:59:45	25.6° N	94.1° E	10	3.6
22/12/2012	16:41:44	22.5° N	94.8° E	115	5.7
26/12/2012	02:04:42	26.5° N	92.7° E	26	3.4
28/12/2012	02:46:08	26.3° N	92.8° E	40	3.4
29/12/2012	17:50:50	35.7° N	70.6° E	94	5.9
30/12/2012	08:16:45	24.2° N	91.6° E	30	4.2
05/12/2012	08:05:03	25.1° N	94.8° E	85	4.1
06/12/2012	14:33:58	27.8° N	94.1° E	10	3.4
08/12/2012	07:06:09	23.0° N	70.4° E	10	4.3
11/12/2012	07:19:05	23.5° N	93.4° E	23	3.8
19/12/2012	22:32:00	28.6° N	76.8° E	10	2.9
20/12/2012	03:44:15	28.6° N	76.7° E	20	2.7
20/12/2012	13:00:56	27.5° N	76.2° E	5.0	3.6
21/12/2012	07:59:45	25.6° N	94.1° E	10	3.6
22/12/2012	16:41:44	22.5° N	94.8° E	115	5.7
26/12/2012	02:04:42	26.5° N	92.7° E	26	3.4
28/12/2012	02:46:08	26.3° N	92.8° E	40	3.4
29/12/2012	17:50:50	35.7° N	70.6° E	94	5.9
30/12/2012	08:16:45	24.2° N	91.6° E	30	4.2

(iv) CURRENT YEAR 2013 (Till 26-02-2013)

Date Day/Mon/Year	Origin-Time hr min sec (UTC)	Latitude °N	Longitude °E	Depth (Km)	Magnitude (Richter scale)
01/01/2013	14:43:41	26.3° N	93.2° E	35	3.5
02/01/2013	14:53:41	27.3° N	88.6° E	10	3.0
02/01/2013	17:42:15	29.4° N	81.1° E	10	4.8
02/01/2013	22:06:31	23.2° N	94.2° E	18	3.2
03/01/2013	05:47:27	25.4° N	93.6° E	14	3.8
07/01/2013	05:32:46	28.1° N	94.3° E	10	4.5
07/01/2013	07:06:47	28.1° N	94.4° E	10	3.9
07/01/2013	07:19:58	28.1° N	94.4° E	10	4.2
08/01/2013	10:36:58	15.8° N	73.9° E	35	2.5
09/01/2013	01:41:52	25.4° N	94.9° E	89	5.9
10/01/2013	15:16:13	30.1° N	80.4° E	5	3.2
11/01/2013	09:10:12	13.5° N	92.8° E	35	5.0
13/01/2013	17:35:49	26.5° N	86.1° E	10	3.0
22/01/2013	15:09:22	36.4° N	68.9° E	45	5.2
22/01/2013	23:54:33	07.5° N	93.7° E	60	4.5
26/01/2013	02:24:33	17.1° N	73.7° E	2	3.6
29/01/2013	19:42:52	30.0° N	81.6° E	07	4.0
30/01/2013	21:30:18	30.2° N	80.0° E	05	2.6
04/02/2013	01:19:28	11.7° N	92.7° E	10	4.8
06/02/2013	05:29:22	15.5° N	80.0° E	5	2.9
06/02/2013	08:22:45	28.8° N	76.5° E	05	2.7
11/02/2013	10:48:55	31.0° N	78.4° E	5	4.3
11/02/2013	21:40:26	29.2° N	95.9° E	10	4.0
17/02/2013	01:35:08	36.5° N	71.7° E	100	5.2
17/02/2013	16:27:07	30.9° N	78.4° E	10	3.2
19/02/2013	21:05:11	25.4° N	89.1° E	10	4.5
20/02/2013	05:15:07	20.7° N	85.1° E	05	2.9
24/02/2013	00:57:17	26.3° N	75.6° E	05	4.1
25/02/2013	02:28:25	30.9° N	78.4° E	11	3.1
26/02/2013	17:26:35	11.2° N	75.8° E	15	3.0
