

**GEOLOGICAL SURVEY OF INDIA, CENTRAL REGION, OPERATION MP.II, JABALPUR**  
**PRELIMINARY SEISMOLOGICAL BULLETIN FOR EVENTS REGISTERED AT SEISMOLOGICAL OBSERVATORY**  
**SUMATRA EARTHQUAKE OF 26<sup>TH</sup> DECEMBER 2004 AND REGISTERED AFTERSHOCKS**

Sl. No.	Date	Origin time (UTC) (H:M:S)	P-arrival Time (UTC) (H:M:S)	S-arrival Time (UTC) (H:M:S)	Onset Phase	Coordinates		Epi. Dist. (km)	Mag.	Region
						Lat <sup>(o)</sup>	Long <sup>(o)</sup>			
1	26.12.04	01:00:19.59	01:04:43.03	01:08:19.48	EPC	07.504	91.602	2136	Ms=8.6	Sumatra Main Shock
2	26.12.04	04:22:11.1	04:26:37.77	04:30:17.98	IPD	07.906	92.641	2168	Ms=7.0	Indian Ocean(And Isl)
3	26.12.04	09:20:22.87	09:24:44.52	09:28:18.82	EPC	06.966	90.469	2118	Ms=6.2	Indian Ocean (East of And)
4	26.12.04	10:19:19.61	10:23:12.04	10:26:17.29	EPC	15.266	95.414	1850	Ms=5.8	Indian Ocean(Thai Coast)
5	26.12.04	19:20:28.37	19:25:49.27	19:30:12.51	EPC	03.640	95.791	2755	Ms=5.5	Sumatra A/S
6	27.12.04	00:32:48.42	00:37:42.19	00:41:45.64	EPC	05.201	93.222	2448	Ms=5.4	Sumatra A/S
7	27.12.04	07:48:03.60	07:53:24.56	07:57:47.31	EPC	01.060	91.608	2752	Ms=4.8	Sumatra A/S
8	27.12.04	09:39:40.34	09:44:34.77	09:48:38.7	EPC	04.647	92.497	2455	Mb=5.6	Sumatra A/S
9	27.12.04	17:40:27.02	17:45:21.53	17:49:25.61	EPD	01.892	86.489	2455	Mb=5.3	SW of Nicobar Isl
10	27.12.04	23:58:29.4	00:02:50.62	00:06:24.52	EPD	10.985	95.247	2114	Mb=4.9	Sumatra A/S
11	28.12.04	05:36:37.7	05:41:01.52	05:44:38.48	EPD	07.835	92.134	2141	Mb=5.6	Sumatra A/S
12	28.12.04	19:55:50.11	20:00:00.76	20:03:23.18	EPD	09.281	92.114	2013	Mb=5.5	Sumatra A/S
13	28.12.04	21:48:14.67	21:52:23.18	21:55:43.54	EPC	10.165	92.882	1993	Mb=5.1	Sumatra A/S
14	29.12.04	01:40:20.16	01:44:34.66	01:48:00.46	EPD	10.338	93.764	2046	Mb=5.6	Sumatra A/S
15	29.12.04	05:57:15.12	06:01:40.23	06:05:18.25	EPC	07.717	92.137	2151	Ms=5.9	West of Nicobar Islands
16	29.12.04	18:50:47.19	18:55:44.03	18:59:50.01	EPC	01.143	34.312	2480	Ms=5.9	Ind. Ocean S of Sri Lanka
17	29.12.04	21:13:31.44	21:18:29.36	21:22:36.26	EPD	07.424	96.557	2491	Mb=5.4	North of Sumatra
18	30.12.04	01:05:26.4	01:10:29.87	01:15:40.5	EPC	46.056	81.943	2549	Mb=5.0	NW China
19	30.12.04	17:35:24.5	17:39:50.83	17:43:30.79	EPC	08.704	93.591	2166	Mb=5.1	Great Nicobar
20	30.12.04	21:36:33.2	21:41:29.9	21:45:35.82	EPC	05.598	94.248	2479	Mb=5.2	NW of Sumatra
21	30.12.04	23:55:07.76	23:59:08.07	24:02:20.6	EPD	17.961	97.460	1919	Mb=5.4	Myanmar-Thailand Border
22	31.12.04	02:24:27.08	02:29:02.43	02:32:49.57	EPC	05.479	90.277	2250	Mb=6.0	Ind. Ocean SW of Sumatra
23	31.12.04	05:54:41.6	05:58:16.15	06:01:00.65	EPC	11.591	90.394	1696	Mb=5.6	Andaman Sea W of Port Blair
24	31.12.04	12:05:21.9	12:10:10.07	12:14:08.87	EPC	05.112	92.131	2389	Ms=5.7	Indian Ocean W of Sumatra
25	31.12.04	13:42:04.3	13:47:36.34	13:52:07.36	IPC	12.269	104.744	2888	Mb=5.3	Thailand Border
26	31.12.04	14:49:34.6	15:00:46.13	15:05:01.64	EPD	03.574	93.860	2637	Mb=5.6	Ind. Ocean S of Andamans
27	01.01.05	04:03:41.85	04:08:36.74	04:12:41.13	EPC	06.043	94.539	2460	Mb=5.3	NW of Sumatra Isl.
28	01.01.05	06:26:09.91	06:31:03.57	06:35:06.98	EPD	04.106	91.460	2447	Mb=6.6	Sumatra Islands
29	01.01.05	19:08:35.71	19:13:16.29	19:17:08.78	IPD	05.039	90.627	2311	Mb=5.8	Sumatra Islands
30	02.01.05	08:28:02.85	08:33:34.32	08:38:04.93	IPC	04.892	99.004	2881	Mb=5.3	Sumatra
31	02.01.05	12:12:40.98	12:17:39.23	12:21:46.39	EPC	05.092	93.801	2495	Mb=5.4	Sumatra