



**GOVERNMENT OF INDIA
GEOLOGICAL SURVEY OF INDIA**

A note on earthquake of magnitude 5.6 mb of 6th September, 2017 in Andaman, India

A moderate earthquake of magnitude 5.6 mb occurred at a depth of 98.6 km in Andaman, India on 6th September, 2017 at 00 hrs:11min: 00.7 sec.(UTC) and at 05 hrs: 41 min: 0.7 sec. (IST). The epicentre of the earthquake has been located at Latitude 10.627⁰ N and Longitude 93.151⁰ E using data recorded at three Seismo-geodetic observatories of GSI located at Mangnan (Sikkim), Itanagar and Jammu. The epicentre of the earthquake is located near Little Andaman lying close to West Andaman fault and shown on the tectonic map of the region (Fig.1). The waveform of the event with location parameters are presented in Fig. 2 (a & b).

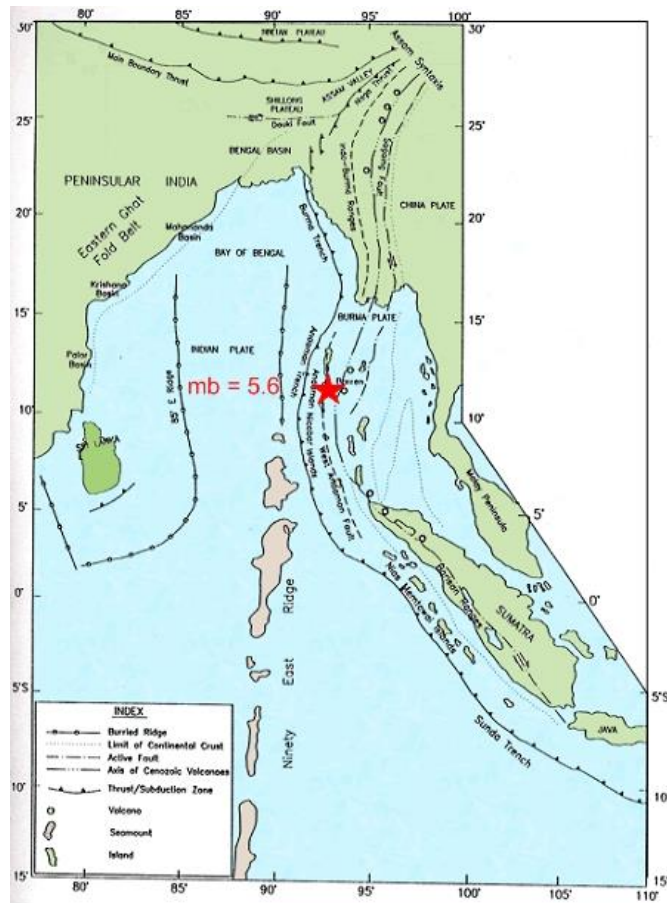


Fig.1 Tectonic map (after Ghosh, 1997; Verma et al, 1978) showing the location of epicentre of the earthquake (red star).

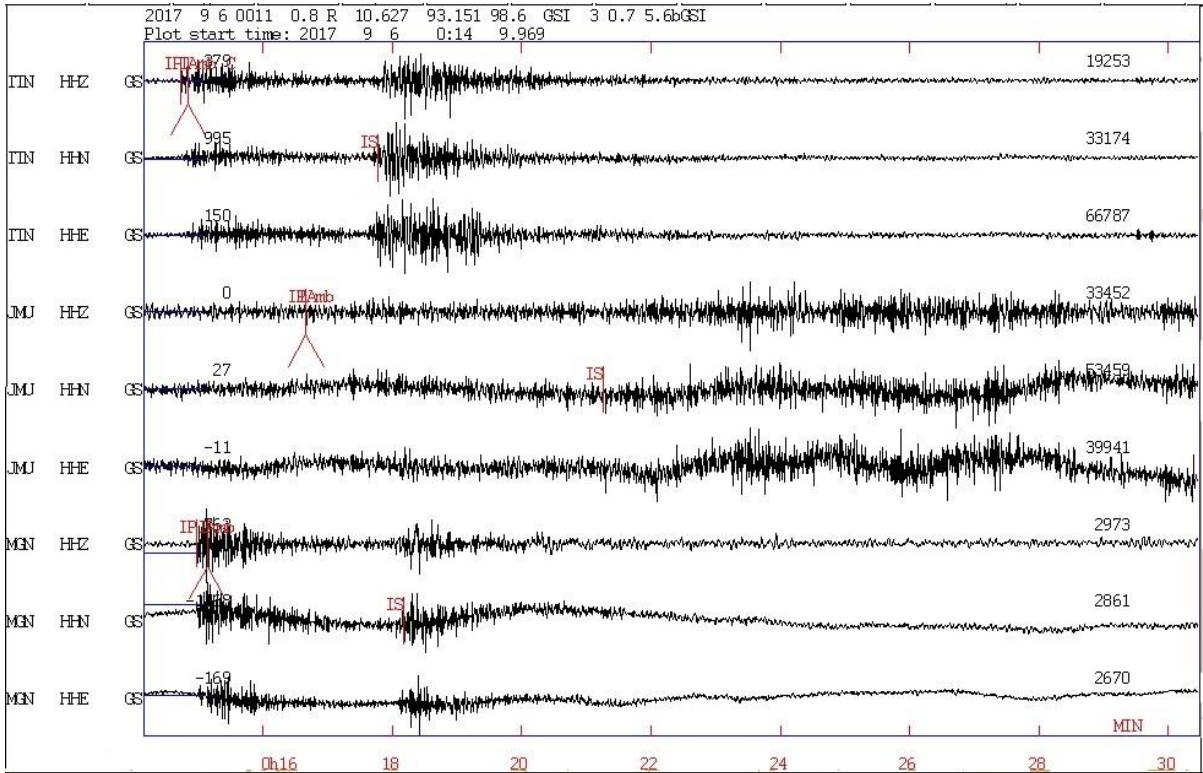


Fig. 2 (a) Waveform of the earthquake.

date	hrmn	sec	lat	long	depth	no	m	rms	damp	erln	erlt	erdp		
17 9 6	011	0.77	1037.63N	93 9.0E	98.6	6	3	0.71	0.000	38.4	16.1	28.7		
stn	dist	azm	ain	w	phas	cal	cp	hrmn	tsec	t-obs	t-cal	res	wt	di
ITN	1823	1.4	76.8	0	S	Sn		017	46.8	405.98	405.97	0.01	1.00	*21
ITN	1823	1.4	63.4	0	P	C	Pn	014	44.0	223.27	223.93	-0.66	0.99	*10
ITN	1823	1.4		0	I Amb			014	50.4	229.6				
MGN	1929	346.1	52.9	0	P	P		014	58.2	237.43	235.88	1.54	0.92	* 4
MGN	1929	346.1		0	I Amb			015	8.3	247.5				
MGN	1929	346.1	76.3	0	S	Sn		018	9.8	429.05	429.12	-0.07	1.00	*26
JMU	3080	325.3		0	I Amb			016	39.7	338.9				
JMU	3080	325.3	39.4	0	S	S		021	15.4	614.68	614.72	-0.04	1.00	*27
JMU	3080	325.3	40.2	0	P	P		016	39.1	338.28	338.86	-0.58	0.99	*12
MGN	HZ	dist:	1929.0	amp:	483.0	T:	1.2	mb =	5.6					
JMU	HZ	dist:	3080.0	amp:	56.0	T:	0.3	mb =	5.7					
ITN	HZ	dist:	1823.0	amp:	320.2	T:	0.8	mb =	5.6					
2017	9 6	0011	0.8	R	10.627	93.151	98.6	GSI	3	0.7	5.6	bGSI		

Fig. 2(b) Location parameters of the earthquake.