



GOVERNMENT OF INDIA  
GEOLOGICAL SURVEY OF INDIA

A note on earthquake of magnitude 5.5 mb of 7<sup>th</sup> January, 2018 in India  
(Manipur) Myanmar border region

A moderate earthquake of magnitude 5.5 mb occurred at a depth of 23.4 km in India (Manipur) Myanmar Border Region, on 7<sup>th</sup> January, 2018 at 06hrs: 47min: 13.30sec.(UTC). The epicentre of the earthquake has been located at Latitude 24.544°N and Longitude 95.043°E (Fig. 1) using data recorded at five Seismo-geodetic observatories of GSI located at Agartala, Itanagar, Jammu, Mangan and Nagpur. The waveform of the event with location parameters are presented in Fig. 2 (a & b) respectively.

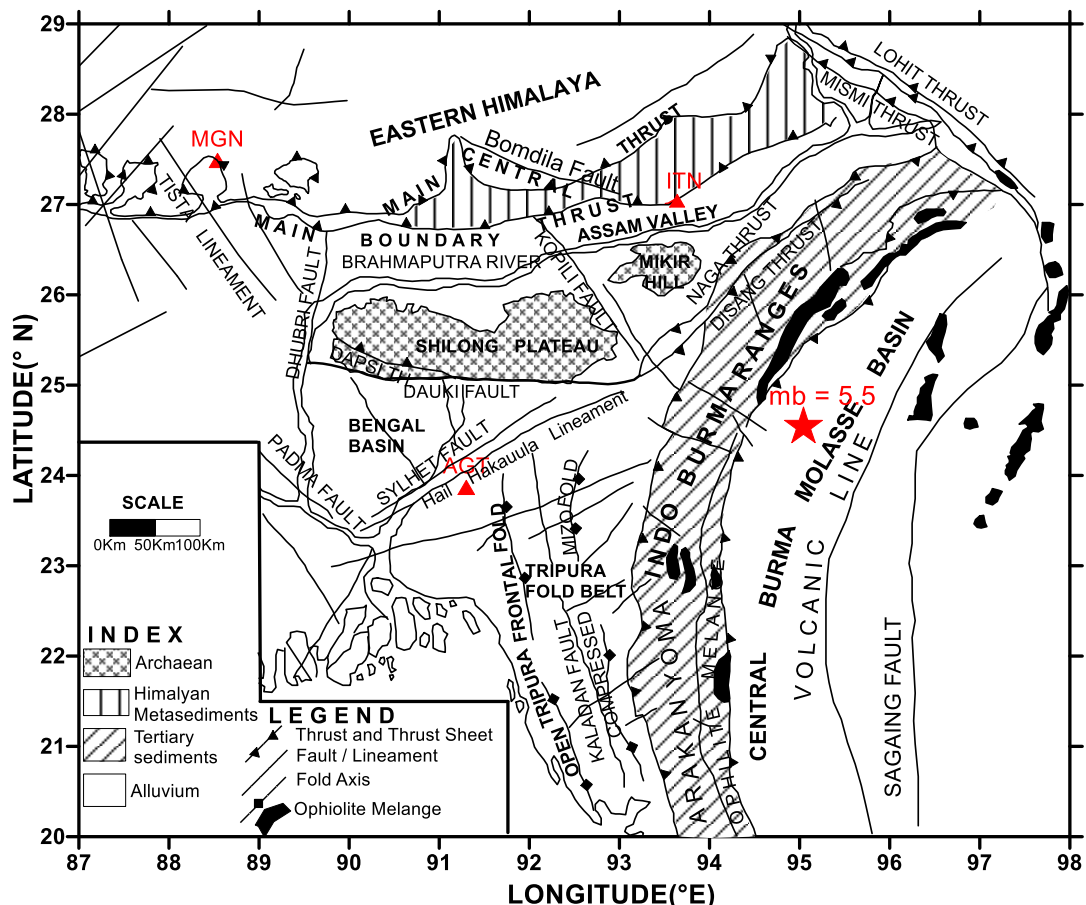


Fig. 1. Tectonic map of NE India and surroundings (after Evans, 1964 and Krishnana, 1960) showing location of the epicentre of the earthquake. The triangles indicate the location of the seismic observatories (AGT: Agartala, ITN: Itanagar and MGN: Mangan).

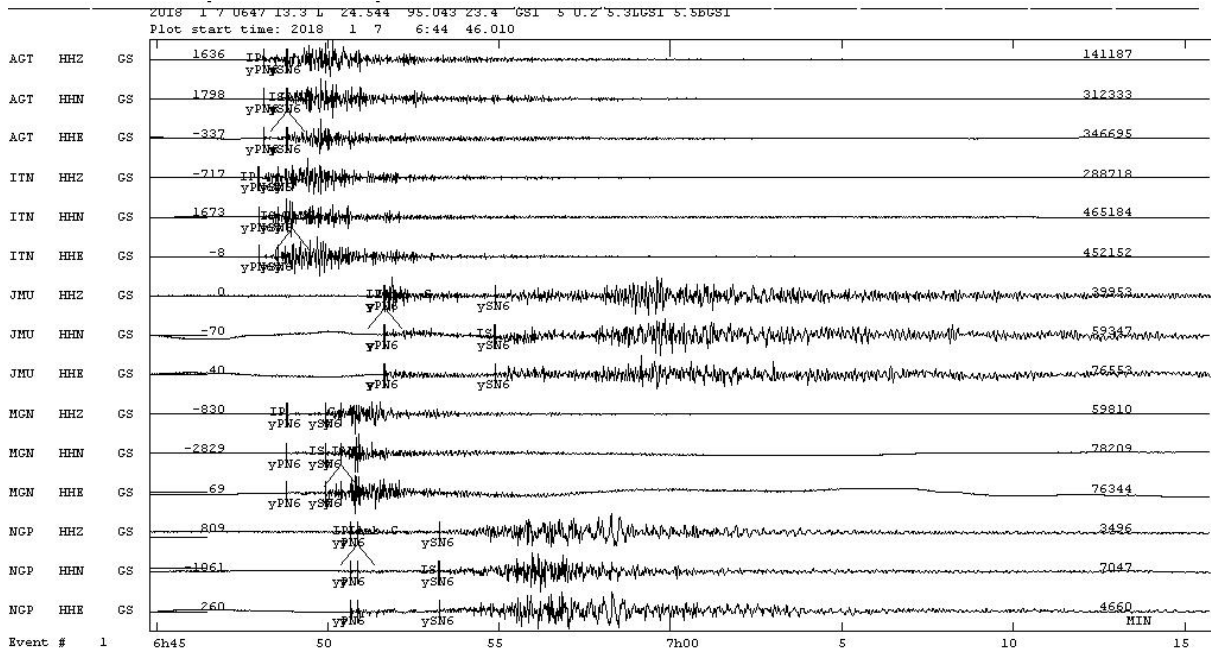


Fig. 2(a) Waveform of the earthquake.

date	hrmn	sec	lat	long	depth	no	m	rms	damp	erln	erlt	erdp	i	
18 1 7	647	13.30	2432.64N	95 2.6E	23.4	6	3	0.23	0.000	17.8	8.4	19.7		
stn	dist	azm	ain	w	phas	calc	phs	hrmn	tsec	t-obs	t-cal	res	wt	di
ITN	317	333.0	50.2	0	P	C	PN6	647	57.7	44.39	44.64	-0.25	1.00	11
ITN	317	333.0	50.2	0	S		SN6	648	31.1	77.82	77.68	0.14	1.00	22
ITN	317	333.0	0	0	IAML			648	56.3	103.0				
AGT	388	259.6	50.2	0	P	C	PN6	648	6.3	53.02	53.08	-0.05	1.00	11
AGT	388	259.6	50.2	0	S		SN6	648	45.7	92.38	92.35	0.03	1.00	22
AGT	388	259.6	0	0	IAML			648	48.9	95.6				
MGN	728	298.0	50.2	0	P	C	PN6	648	47.5	94.25	93.80	0.45	0.82	*10
MGN	728	298.0	50.2	0	S		SN6	649	56.3	162.95	163.21	-0.26	0.82	*23
MGN	728	298.0	0	0	IAML			650	23.9	190.6				
NGP	1682	260.4	50.2	0	P	C	PN6	650	40.3	207.00	207.16	-0.15	0.00	*0
NGP	1682	260.4	0	0	I Amb			650	51.7	218.4				
NGP	1682	260.4	50.2	0	S		SN6	653	12.5	359.16	360.46	-1.29	0.00	*0
JMU	2164	299.3	50.2	0	P	C	PN6	651	37.5	264.21	264.61	-0.39	0.00	*0
JMU	2164	299.3	0	0	I Amb			651	39.8	266.5				
JMU	2164	299.3	50.2	0	S		SN6	654	52.5	459.17	460.42	-1.24	0.00	*0
ITN	HN	hdist:	317.9	amp:	22452.0	T:	0.6	m1 =	5.3					
AGT	HN	hdist:	388.7	amp:	24033.7	T:	0.5	m1 =	5.4					
MGN	HN	hdist:	728.4	amp:	3710.5	T:	0.8	m1 =	5.2					
NGP	HZ	dist:	1682.0	amp:	105.8	T:	0.8	mb =	5.2					
JMU	HZ	dist:	2164.0	amp:	584.8	T:	0.9	mb =	5.9					
2018	1 7	0647 13.3	L 24.544	95.043	23.4	GSI	5 0.2	5.3L	GSI	5.5b	GSI			
OLD:	1 7	0647 13.3	L 24.544	95.043	23.4	GSI	5 0.2	5.3L	GSI	5.5b	GSI			

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