



**GOVERNMENT OF INDIA
GEOLOGICAL SURVEY OF INDIA**

**A note on the moderate earthquake (5.5 mb) occurred on 19th July,
2019 near Bomdila, Arunachal Pradesh**

A moderate earthquake of magnitude 5.5 mb occurred at 18.1 km depth on 19th July, 2019 at 09Hrs 22Min 20.9Sec. (UTC) and 14hrs: 52min: 20.9Sec. (IST). The epicentre of the earthquake has been located at Latitude 27.453 °N and Longitude 92.726 °E using data recorded at Seismo-Geodetic observatories of GSI at Jammu, Lucknow, Mangan(Sikkim), Nagpur, Pune and Hutbay(Little Andaman). The epicentre of the earthquake lies near the junction of Bomdila fault and Main Central Thrust (MCT), Bomdila, Arunachal Pradesh as shown in Fig.1. The waveform and location parameters of the earthquake are presented in Fig.2 and Fig.3, respectively.

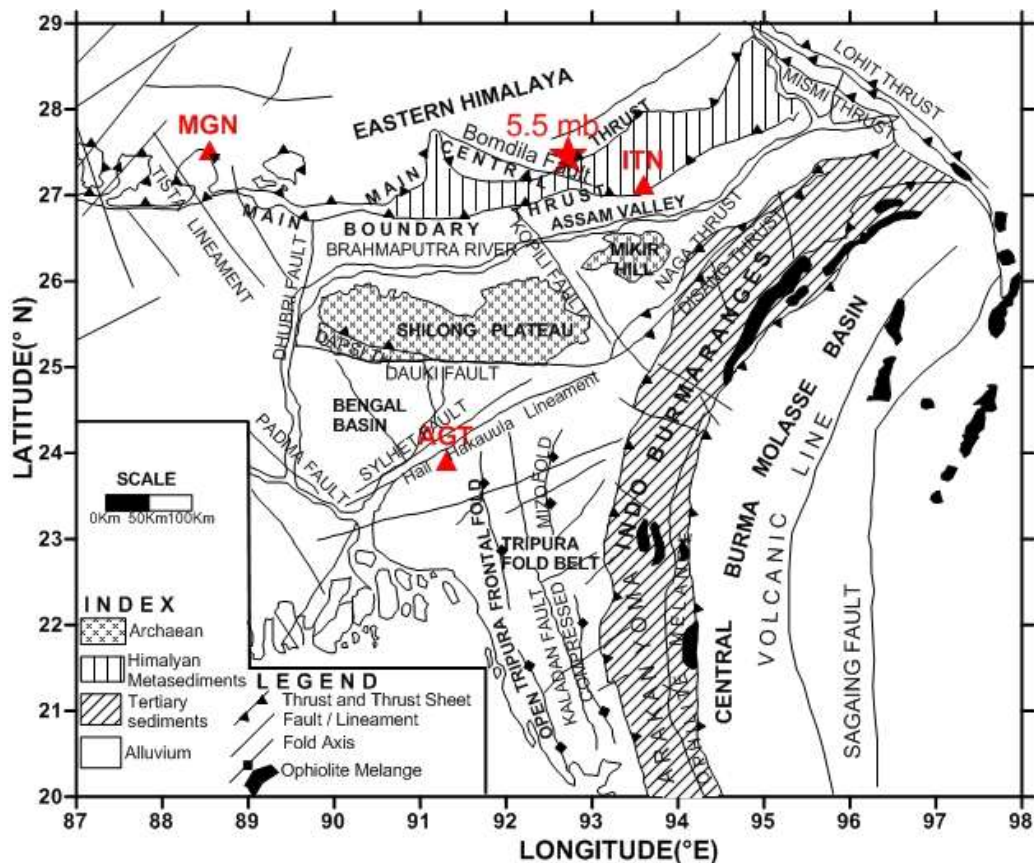


Fig.1: Map showing the location of the earthquake (5.5 mb) occurred on 19th July, 2019 with red star . The red triangles show the location of the observatories (AGT:Agartala, ITN:Itanagar and MGN:Mangan).

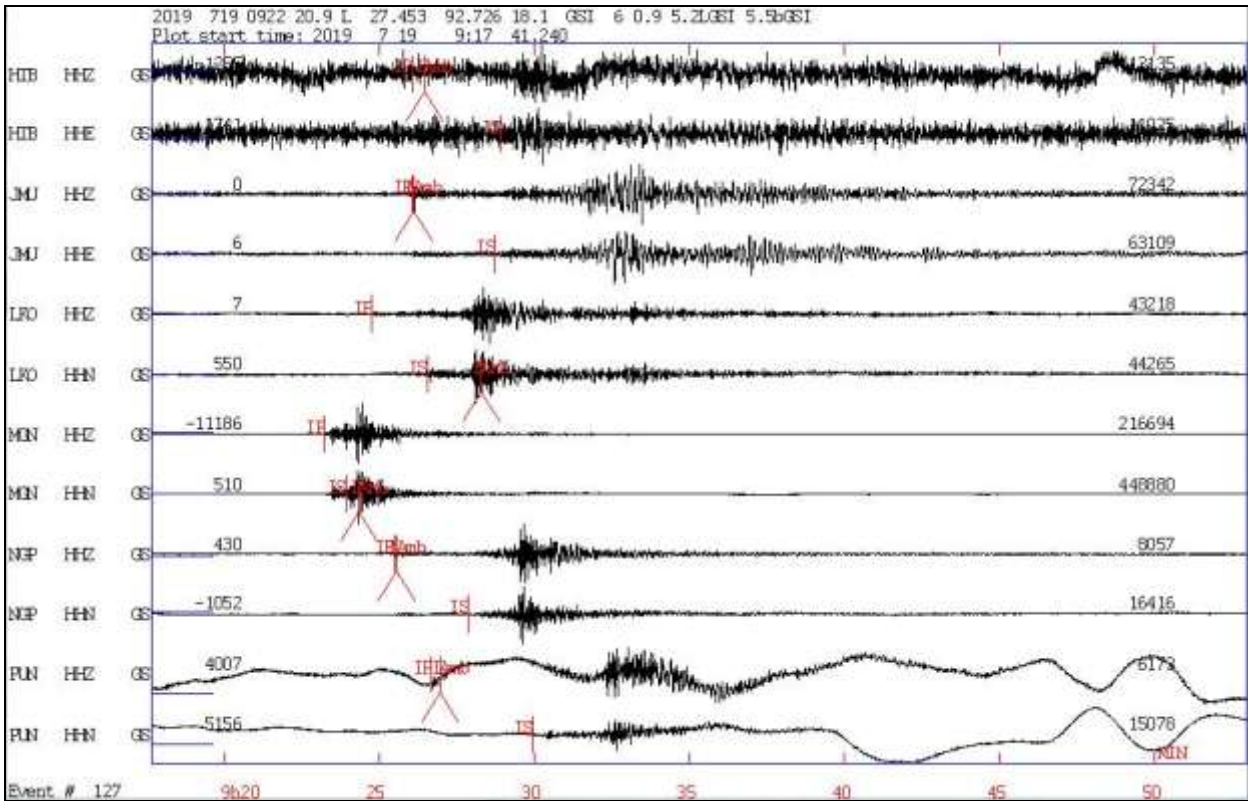


Fig.2: Waveform of the earthquake (5.5 mb) occurred on 19th July, 2019.

date	hrmn	sec	lat	long	depth	no	m	rms	damp	erln	erlt	erdp
19 719	922	20.86	2727.20N	92 43.6E	18.1	12	3	0.86	0.000	25.8	19.6	32.3
stn	dist	azm	ain	w	phas	calcp	h	t-obs	t-cal	res	wt	di
MGN	414	271.5	53.1	0	P	PN5	923	15.7	54.83	55.23	-0.40	1.00 10
MGN	414	271.5	53.1	0	S	SN5	923	56.4	95.58	96.11	-0.53	1.00 9
MGN	414	271.5	53.1	0	IAML		924	20.6	119.7			
LKO	1169	269.6	50.9	0	P	PN6	924	46.5	145.60	144.93	0.67	0.94* 5
LKO	1169	269.6	50.9	0	S	SN6	926	33.4	252.54	252.17	0.37	0.94*10
LKO	1169	269.6	50.9	0	IAML		928	17.7	356.8			
NGP	1551	246.3	50.9	0	P	PN6	925	30.3	189.39	189.84	-0.45	0.59* 5
NGP	1551	246.3	50.9	0	IAMB		925	34.2	193.3			
NGP	1551	246.3	50.9	0	S	SN6	927	51.7	330.81	330.32	0.49	0.59*13
JMU	1813	293.0	50.9	0	P	PN6	926	3.6	222.75	220.73	2.02	0.35* 6
JMU	1813	293.0	50.9	0	IAMB		926	7.8	227.0			
JMU	1813	293.0	50.9	0	S	SN6	928	44.1	383.22	384.07	-0.85	0.35*15
HTB	1865	180.7	50.9	0	P	PN6	926	5.3	224.41	226.73	-2.32	0.31* 8
HTB	1865	180.7	50.9	0	IAMB		926	28.1	247.2			
HTB	1865	180.7	50.9	0	S	SN6	928	56.2	395.34	394.51	0.83	0.31*20
PUN	2165	246.9	50.9	0	P	PN6	926	42.2	261.38	262.10	-0.72	0.03* 0
PUN	2165	246.9	50.9	0	IAMB		926	58.2	277.3			
PUN	2165	246.9	50.9	0	S	SN6	929	57.1	456.26	456.06	0.20	0.03* 0

Return to continue, q to end listing

MGN	HN	hdist:	414.4	amp:	20218.6	T:	0.5	ml =	5.4
LKO	HN	hdist:	1169.1	amp:	953.3	T:	0.6	ml =	5.1
NGP	HZ	dist:	1551.0	amp:	56.6	T:	1.1	mb =	5.2
JMU	HZ	dist:	1813.0	amp:	689.2	T:	0.7	mb =	5.9
HTB	HZ	dist:	1865.0	amp:	239.7	T:	0.7	mb =	5.4
PUN	HZ	dist:	2165.0	amp:	176.1	T:	1.0	mb =	5.3

2019 719 0922 20.9 L 27.453 92.726 18.1 GSI 6 0.9 5.2L GSI 5.5bGSI

Fig.3: Location parameters of the earthquake (5.5 mb).