



GOVERNMENT OF INDIA
GEOLOGICAL SURVEY OF INDIA

A note on the moderate earthquakes of magnitude 5.2 mb occurred on 13th April, 2019 in Andaman Sea

A moderate earthquake of magnitude 5.2 mb occurred at 36.5 km depth on 13th April, 2019 in Andaman Sea at 16Hrs 13Min 0.2Sec. (UTC) and 21hrs: 43min: 0.2Sec.(IST). The epicentre of the earthquake(**Fig.1**) have been located using data recorded at Seismo-geodetic observatories of GSI at Hutbay, Itanagar, Jaipur, Jammu, Lucknow, Mangan, Nagpur, Pune and Thiruvananthapuram. The waveforms of the events and location parameters are presented in **Fig. 2** and **Fig.3** respectively.

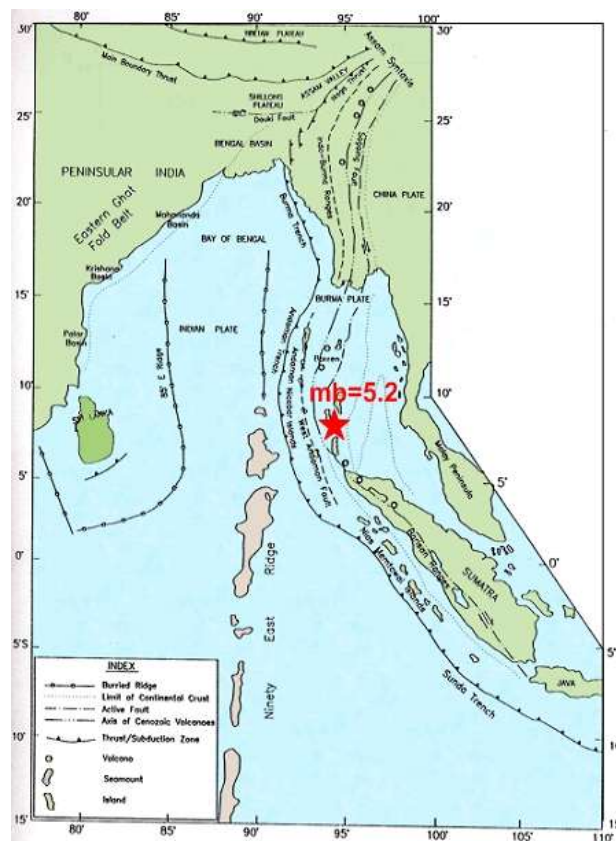


Fig.1: Tectonic map of the region (after Ghosh, 1997; Verma et al. 1978) showing location of epicentre of the earthquake (red star).

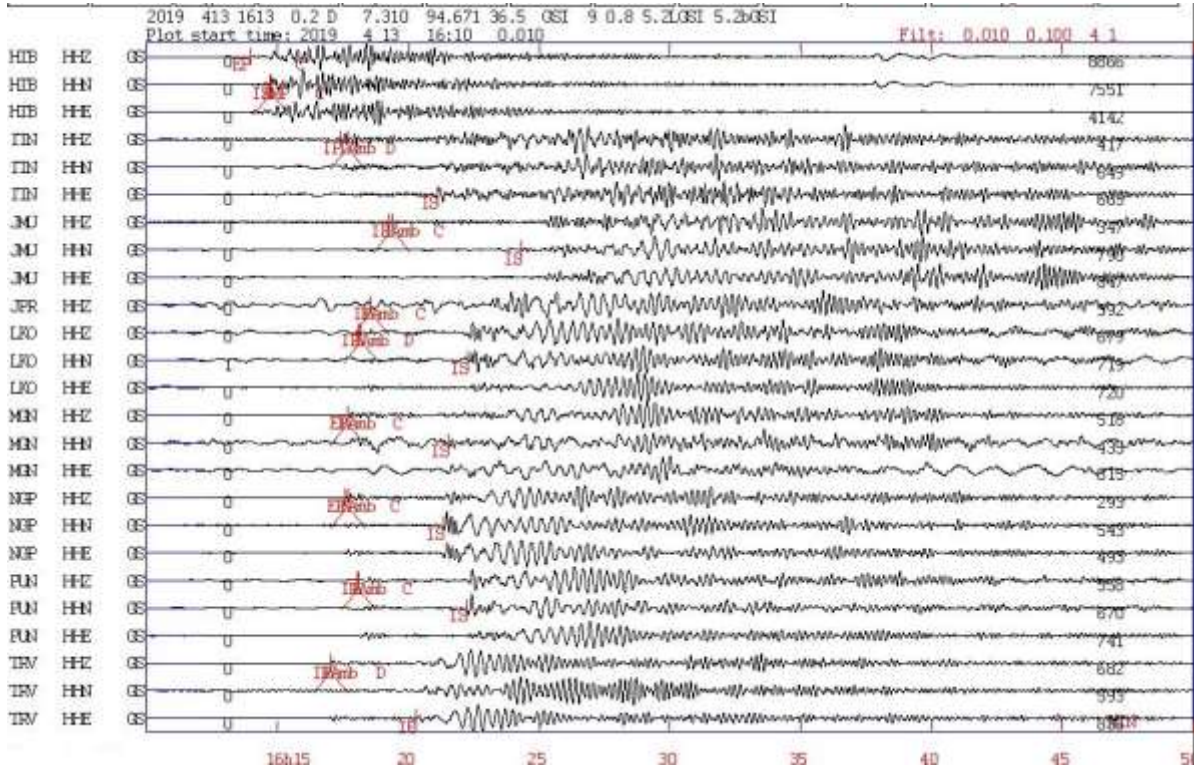


Fig. 2 Waveform of the earthquake of magnitude 5.2 mb.

date	hrmn	sec	lat	long	depth	no	m	rms	damp	erln	erlt	erdp		
19 413	1613	0.21	718.60N	94 40.3E	36.5	17	3	0.77	0.000	10.3	10.5	10.2		
stn	dist	azm	ain	w	phas	calc	phs	hrmn	tsec	t-obs	t-cal	res	wt	di
HTB	433	327.3	83.6	0	P	C	Pn	1613	57.5	57.31	57.29	0.02	1.00*	8
HTB	433	327.3	83.4	0	S	C	Sn	1614	42.7	102.49	102.39	0.10	1.00*	20
HTB	433	327.3	0	0	AMP			1614	45.5	105.3				
TRU	1955	275.2	63.3	0	P	D	Pn	1617	0.9	240.72	241.84	-1.12	0.96*	6
TRU	1955	275.2	0	0	I Amb			1617	2.5	242.3				
TRU	1955	275.2	76.5	0	S		Sn	1620	17.1	436.87	437.00	-0.13	1.00*	16
ITN	2192	357.2	52.0	0	P	D	P	1617	24.9	264.69	266.29	-1.60	0.92*	4
ITN	2192	357.2	0	0	I Amb			1617	41.2	281.0				
ITN	2192	357.2	53.7	0	S		S	1621	7.8	487.60	487.29	0.31	1.00*	7
NGP	2275	314.0	51.6	0	P	C	P	1617	34.5	274.31	274.44	-0.13	1.00*	1
NGP	2275	314.0	0	0	I Amb			1617	42.4	282.2				
NGP	2275	314.0	53.1	0	S		S	1621	22.4	502.21	502.25	-0.04	1.00*	5
MGN	2326	344.6	51.3	0	P	C	P	1617	40.0	279.80	279.53	0.26	1.00*	3
MGN	2326	344.6	0	0	I Amb			1617	42.3	282.1				
MGN	2326	344.6	52.7	0	S		S	1621	31.8	511.64	511.57	0.07	1.00*	5
PUN	2573	300.9	49.5	0	P	C	P	1618	4.2	304.01	303.02	0.98	0.97*	2
PUN	2573	300.9	0	0	I Amb			1618	6.4	306.2				
PUN	2573	300.9	40.9	0	S		S	1622	13.8	553.55	552.74	0.81	0.98*	7
Return to continue, q to end listing														
LRO	2609	327.8	41.4	0	P	D	P	1618	7.5	307.30	306.30	0.99	0.97*	2
LRO	2609	327.8	0	0	I Amb			1618	12.9	312.7				
LRO	2609	327.8	40.8	0	S		S	1622	18.2	558.01	557.95	0.06	1.00*	5
JPR	2943	319.6	40.7	0	P	C	P	1618	34.2	334.02	333.62	0.40	0.99*	2
JPR	2943	319.6	0	0	I Amb			1618	35.2	335.0				
JMU	3478	326.6	39.5	0	P	C	P	1619	16.9	376.74	376.40	0.34	1.00*	2
JMU	3478	326.6	0	0	I Amb			1619	23.3	383.1				
JMU	3478	326.6	38.8	0	S		S	1624	19.7	679.48	681.42	-1.94	0.88*	4
HTB	HN	hdist:	434.5	amp:	13272.9	T:	1.9	ml =	5.2					
TRU	HZ	dist:	1955.0	amp:	27.2	T:	1.2	mb =	4.3					
ITN	HZ	dist:	2192.0	amp:	805.6	T:	2.0	mb =	5.7					
NGP	HZ	dist:	2275.0	amp:	109.8	T:	1.6	mb =	4.9					
MGN	HZ	dist:	2326.0	amp:	129.7	T:	1.0	mb =	5.3					
PUN	HZ	dist:	2573.0	amp:	24.4	T:	0.8	mb =	4.7					
LRO	HZ	dist:	2609.0	amp:	127.9	T:	0.9	mb =	5.4					
JPR	HZ	dist:	2943.0	amp:	456.6	T:	1.6	mb =	5.8					
JMU	HZ	dist:	3478.0	amp:	55.4	T:	0.9	mb =	5.4					
2019	413	1613	0.2	D	7.310	94.671	36.5	GSI	9	0.8	5.2L	GSI	5.2b	GSI

Fig. 3 Location parameters of the earthquake of magnitude 5.2 mb.

SGDRPC, M-IV, CHQ, GSI, KOLKATA