GOVERNMENT OF INDIA
GEOLOGICAL SURVEY OF INDIA

A note on earthquake of magnitude 4.8 M_L of 7th December, 2017 in Jammu & Kashmir, India

A moderate earthquake of magnitude 4.8 M_L occurred at a depth of 35.0 km near Murgo, Jammu & Kashmir, on 06th December, 2017 at 023hrs: 29min: 9.6sec.(UTC) and at 04hrs: 59min: 9.6sec. on 7th December, 2017 (IST). The epicentre of the earthquake has been located at Latitude 35.020^{0}N and Longitude 78.002^{0}E (Fig. 1) using data recorded at four Seismo-geodetic observatories of GSI located at Agartala, Jammu, Mangan and Nagpur. The waveform of the event with location parameters are presented in Fig. 2 (a & b) respectively.

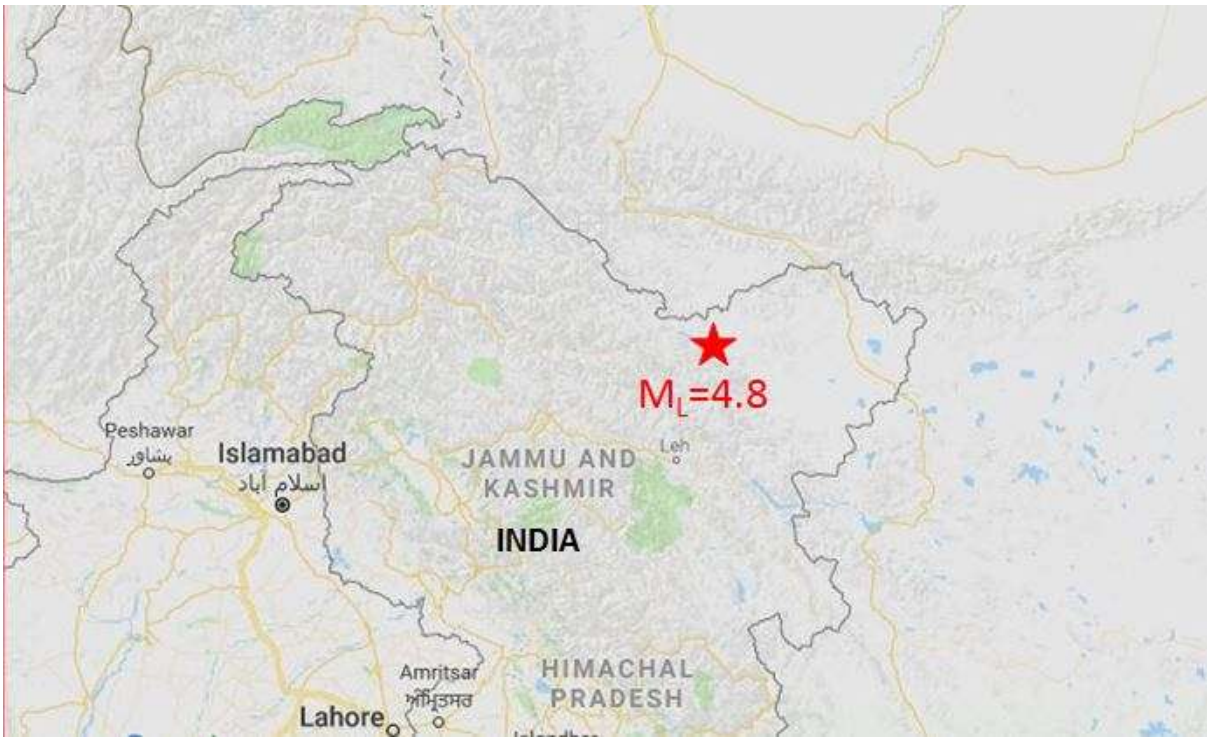

Fig. 1. The star shows the location of the epicentre of the earthquake.

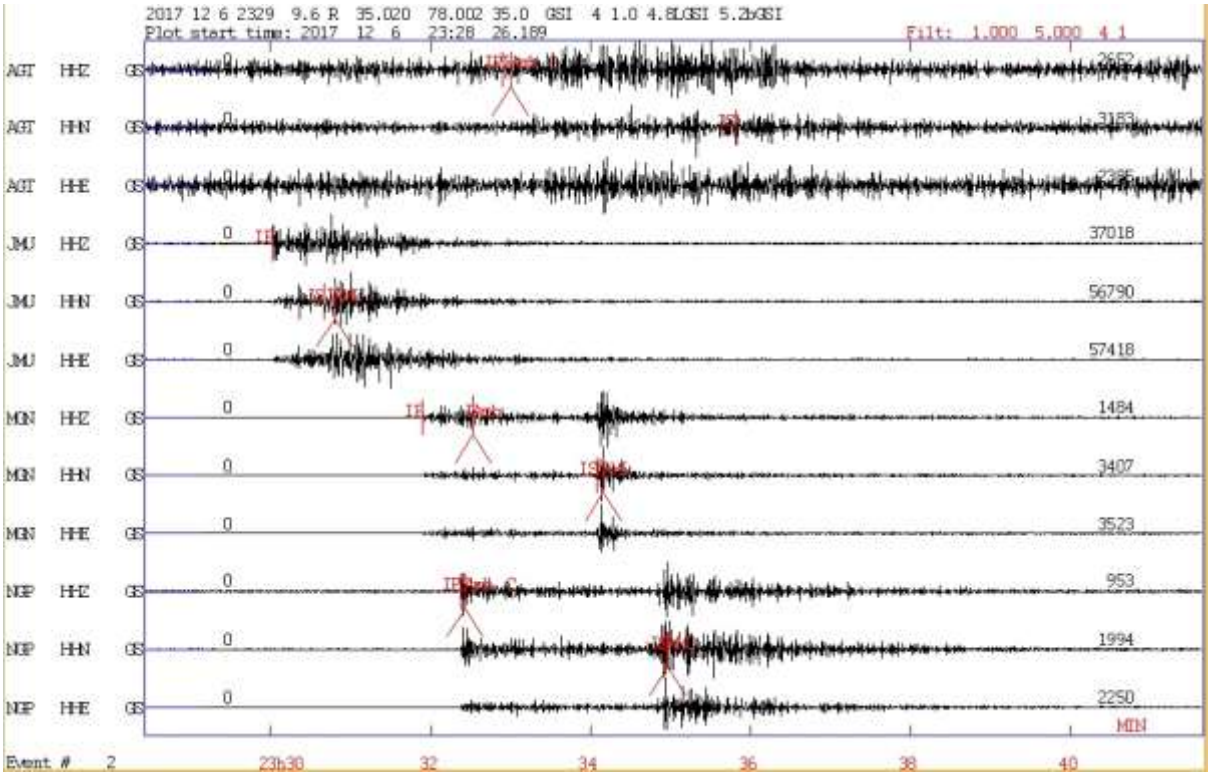

Fig. 2(a) Waveform of the earthquake.

date	hrmn	sec	lat	long	depth	no	m	rms	damp	erln	erlt	erdp
1712 6	2329	9.57	35 1.20N	78 0.1E	35.0	8	3	0.95	0.000	9.9	32.1	52.4

stn	dist	azm	ain	w	phas		calcphs	hrmn	tsec	t-obs	t-cal	res	wt	di
JMU	386	229.2	53.5	0	P		Pn	2330	1.9	52.29	51.54	0.76	0.98	*10
JMU	386	229.2	56.5	0	S		Sn	2330	40.7	91.12	92.05	-0.92	0.97	*23
JMU	386	229.2		0	IAML			2330	48.3	98.7				
MGN	1304	126.9	53.1	0	P		Pn	2331	53.9	164.29	164.89	-0.60	0.99	* 8
MGN	1304	126.9		0	IAmb			2332	32.1	202.6				
MGN	1304	126.9	55.6	0	S		Sn	2334	5.1	295.52	295.45	0.07	1.00	*11
MGN	1304	126.9		0	IAML			2334	9.7	300.1				
NGP	1538	175.9	55.2	0	S		Sn	2334	57.4	347.79	346.60	1.19	0.96	*22
NGP	1538	175.9		0	IAML			2334	58.0	348.4				
NGP	1538	175.9	52.9	0	P	C	Pn	2332	22.2	192.62	193.49	-0.87	0.98	*12
NGP	1538	175.9		0	IAmb			2332	26.0	196.4				
AGT	1783	130.3	54.9	0	S		Sn	2335	48.7	399.11	400.12	-1.00	0.97	* 9
AGT	1783	130.3		0	IAmb			2333	0.1	230.6				
AGT	1783	130.3	48.4	0	P	C	Pn	2332	53.9	224.31	222.75	1.56	0.93	* 5

AGT	HZ	dist:	1783.0	amp:	67.3	T:	0.6	mb =	5.0
JMU	HN	hdist:	387.6	amp:	5048.1	T:	0.0	ml =	4.7
MGN	HN	hdist:	1304.5	amp:	373.9	T:	0.6	ml =	4.9
NGP	HZ	dist:	1538.0	amp:	43.7	T:	0.6	mb =	5.4

2017 12 6 2329 9.6 R 35.020 78.002 35.0 GSI 4 1.0 4.8LGSI 5.2bGSI

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