

# Report on Real Time Earthquake Location

**From: Earthquake Monitoring Center (EMC) of NCS  
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Month: November 2021  
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# Report of Earthquakes occurred in the month of November 2021

## 1) Introduction:

National Center for Seismology maintains a National Seismological Network of 150 stations each having state of art equipment and spreading all across the country (**Figure:1**). Using these stations during the period 01<sup>st</sup> – 30<sup>th</sup> Nov 2021 a total number of 150 earthquakes have been

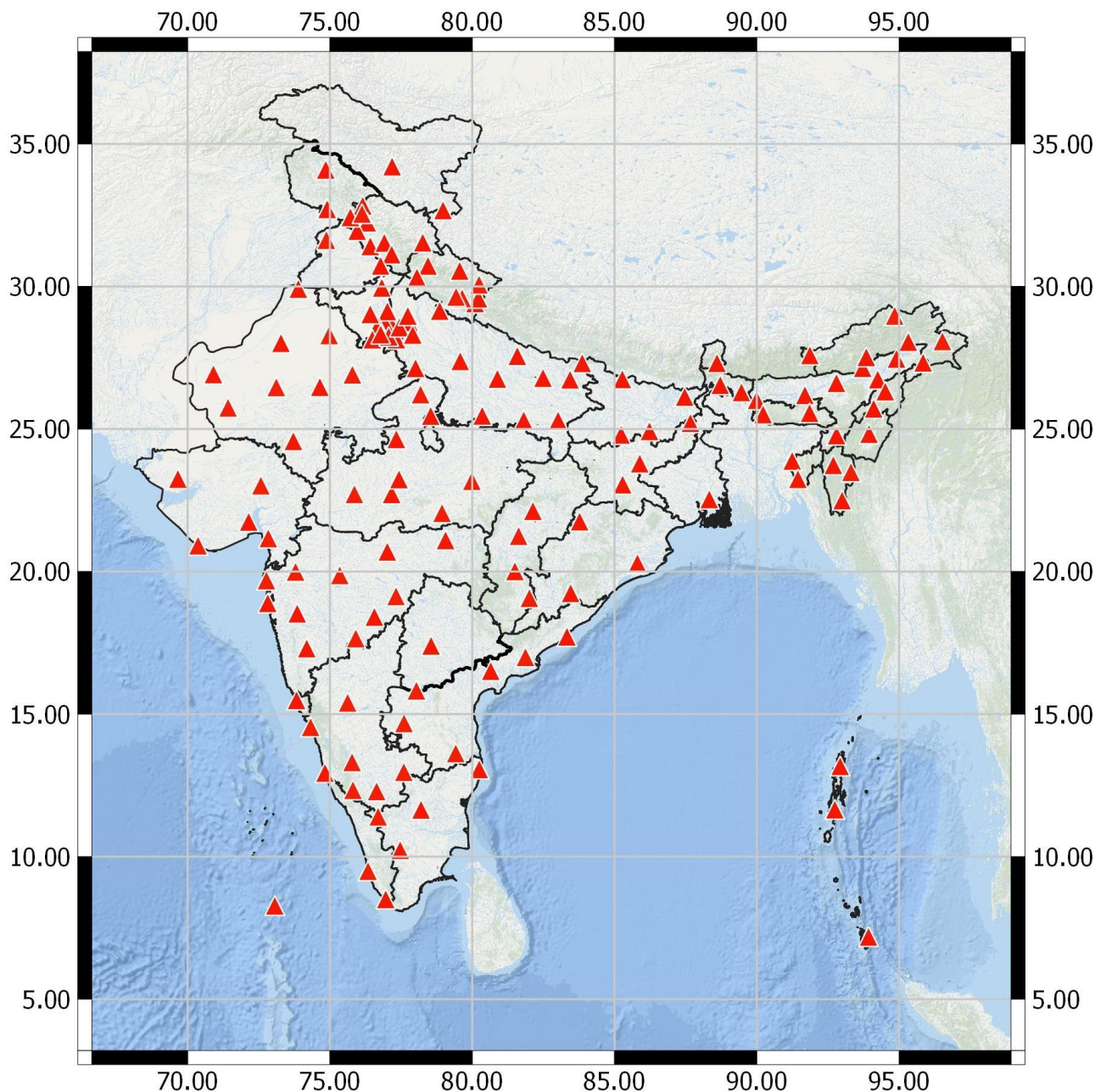


Figure 1: National Seismological Network (NSN) of 150 Stations

located and disseminated from the center (**Figure:2**), out of which 140 earthquakes has occurred in India and its neighborhood region bounded by the coordinates 0° - 40°N & 60°-100°E (**Figure:3**).

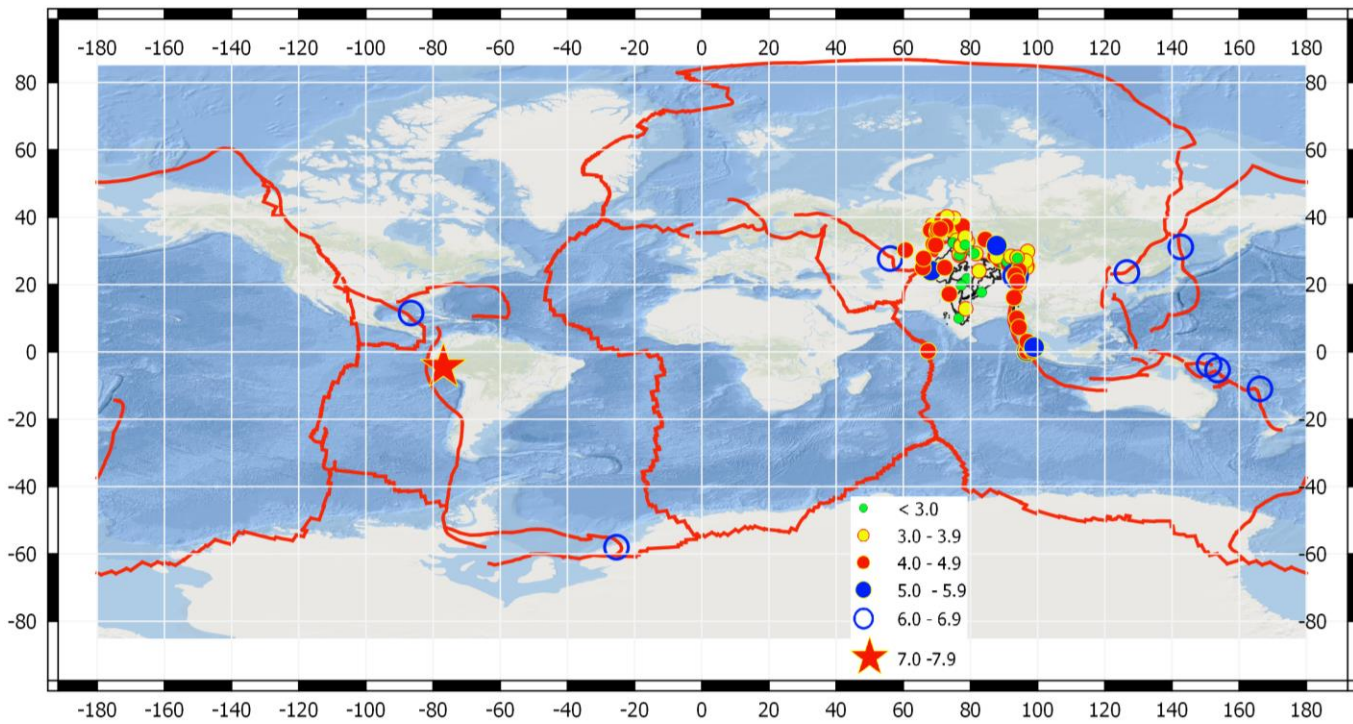


Figure 2: Earthquakes located and disseminated by NCS during 01<sup>st</sup> – 30<sup>th</sup> Nov 2021

## 2) Seismicity:

During the period, the density of earthquakes in India and its neighborhood region bounded by the coordinates 0- 40°N & 60-100°E; can largely be seen in Hindu Kush region, North Eastern part of India and Andaman-Nicobar Island region as shown in **Figure:3**. Few earthquakes of smaller magnitudes were also reported in Laddakh, Himachal Pradesh, Uttarakhand, NCT Delhi, Central (Seoni and Singraoli in MP and Hingloi in Maharashtra), Western (Jalore in Rajsthan and Ratnagiri in Maharashtra) and Southern(Vellore in Tamilnadu, Erankulam in Kerala and Coast of Vishakhapatnam in Andhra Pradesh) part of country. Thirty-nine (39) earthquakes of smaller magnitude ( $M < 3.0$ ) occurred during 01<sup>st</sup> to 30<sup>th</sup> November 2021. **Six** earthquakes of magnitude **M:5.0 and above** occurred during the month in the region; as detailed in following table.

SN	Date	Time (IST)	Lat(°N)	Long(°E)	Depth (KM)	M	Region
1	2021-11-30	19:23:43	31.56	87.81	10	5.4	Xizang
2	2021-11-26	05:15:41	22.62	93.45	27	6.2	Myanmar
3	2021-11-12	16:14:15	1.40	98.94	47	5.1	Northern Sumatra
4	2021-11-04	15:15:38	24.15	68.29	10	5	Pakistan
5	2021-11-01	22:34:17	0.19	96.80	20	5.8	Northern Sumatra
6	2021-11-03	06:20:33	1.16	98.60	24	5	Northern Sumatra

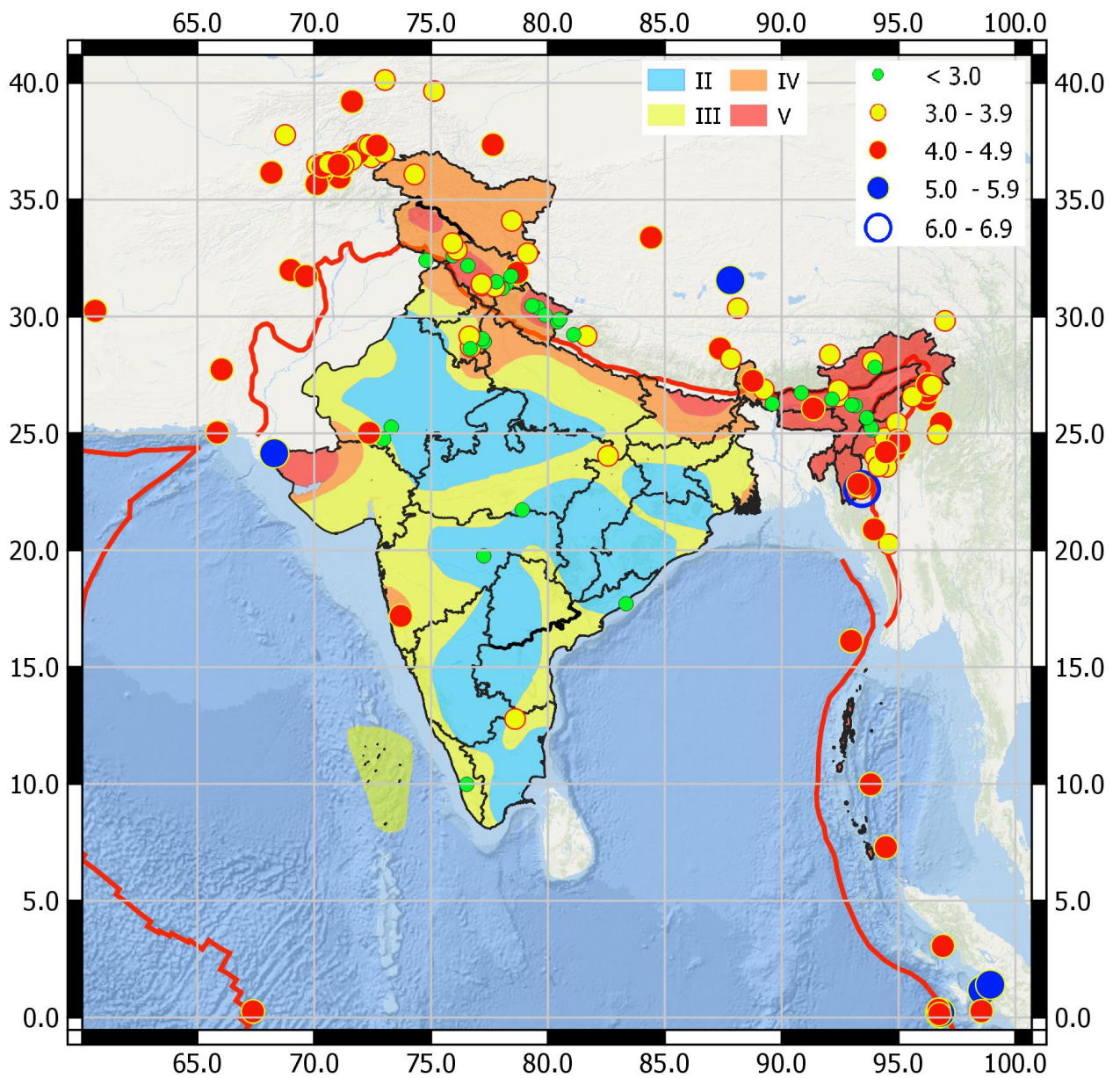


Figure 3: Map showing the seismicity during the period 01<sup>st</sup> – 30<sup>th</sup> Nov 2021 occurred in India and its neighbourhood region along with the seismic zone of India.

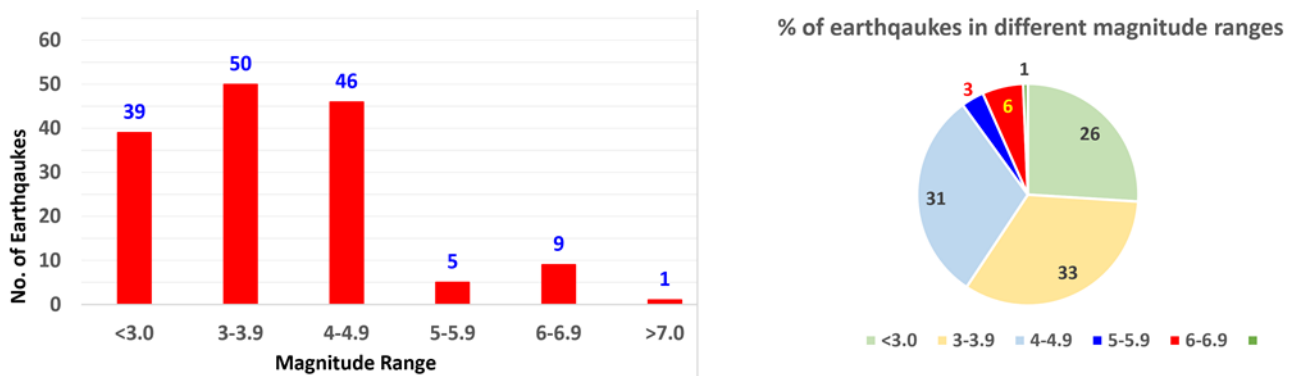


Figure 4: Pie-Chart and Bar-Diagram showing the number of earthquakes occurred in the magnitude range during the period 01<sup>st</sup> – 30<sup>th</sup> Nov 2021 that was disseminated.

Out of total 150 earthquakes, **33%** and **31 %** of events occurred in the magnitude range **3.0-3.9** and **4.0 - 4.9** respectively, whereas **five, nine** and **one** earthquakes occurred in each magnitude range of **5.0-5.9** , **6.0-6.9** and **> 7.0** respectively as shown in **Figure:4**. Detail list of earthquakes occurred during the month is available at [www.seismo.gov.in](http://www.seismo.gov.in)

### 3) Significant Activity:

#### Myanmar Earthquake of M:6.2:

An earthquake of magnitude **M:6.2** occurred at **05:15:38 IST** of **26<sup>th</sup> November 2021** in Myanmar, at  $22.62^{\circ}\text{N}$  and  $93.45^{\circ}\text{E}$  with focal depth of 27km. The epicentre is about 46 km ENE of Saiha (Mizoram), 95 km SSE of Champai (Mizoram), 140 km SSE of Aizwal (Mizoram), 250 km SSE of Silchar (Assam), 265 km SE of Agartala (Tripura) and 250 km SSW of Imphal, Manipur, 365 km SE of Shillong (Meghalaya). Location and intensity map of earthquake is shown in **Figure-5**.

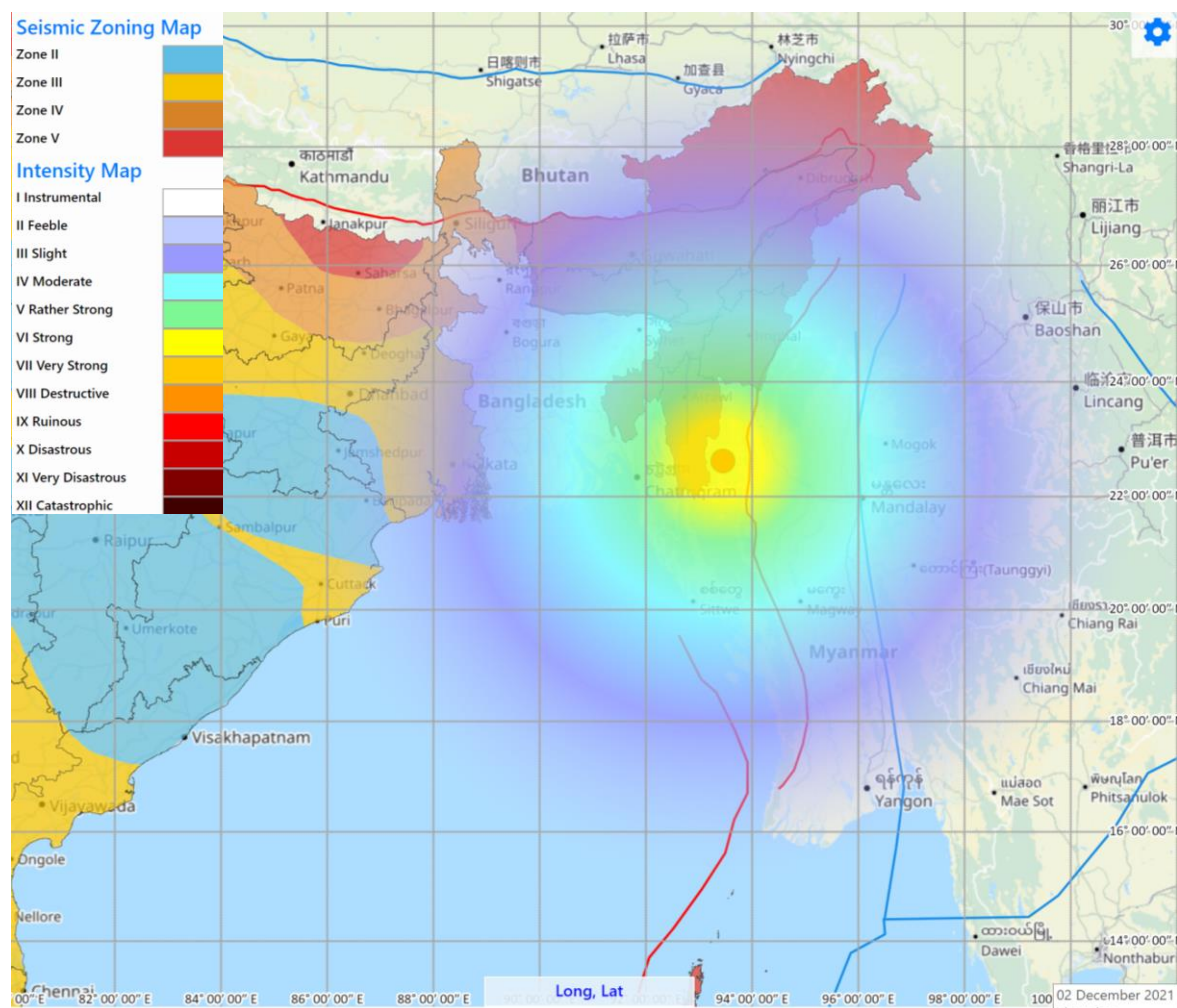


Figure 5: Map showing the epicentre (circle) and intensity of Myanmar earthquake of M:6.2, occurred on 2021-11-26 at 05:15:38(IST).

The earthquake occurred along a Churachandpur Mao Fault (CMF) located in India-Myanmar Region. Total 5 earthquakes of  $M \geq 6.0$  occurred during past 10 years within 100km range of this earthquake with maximum magnitude of  $M:6.9$  occurred on 13<sup>th</sup> April

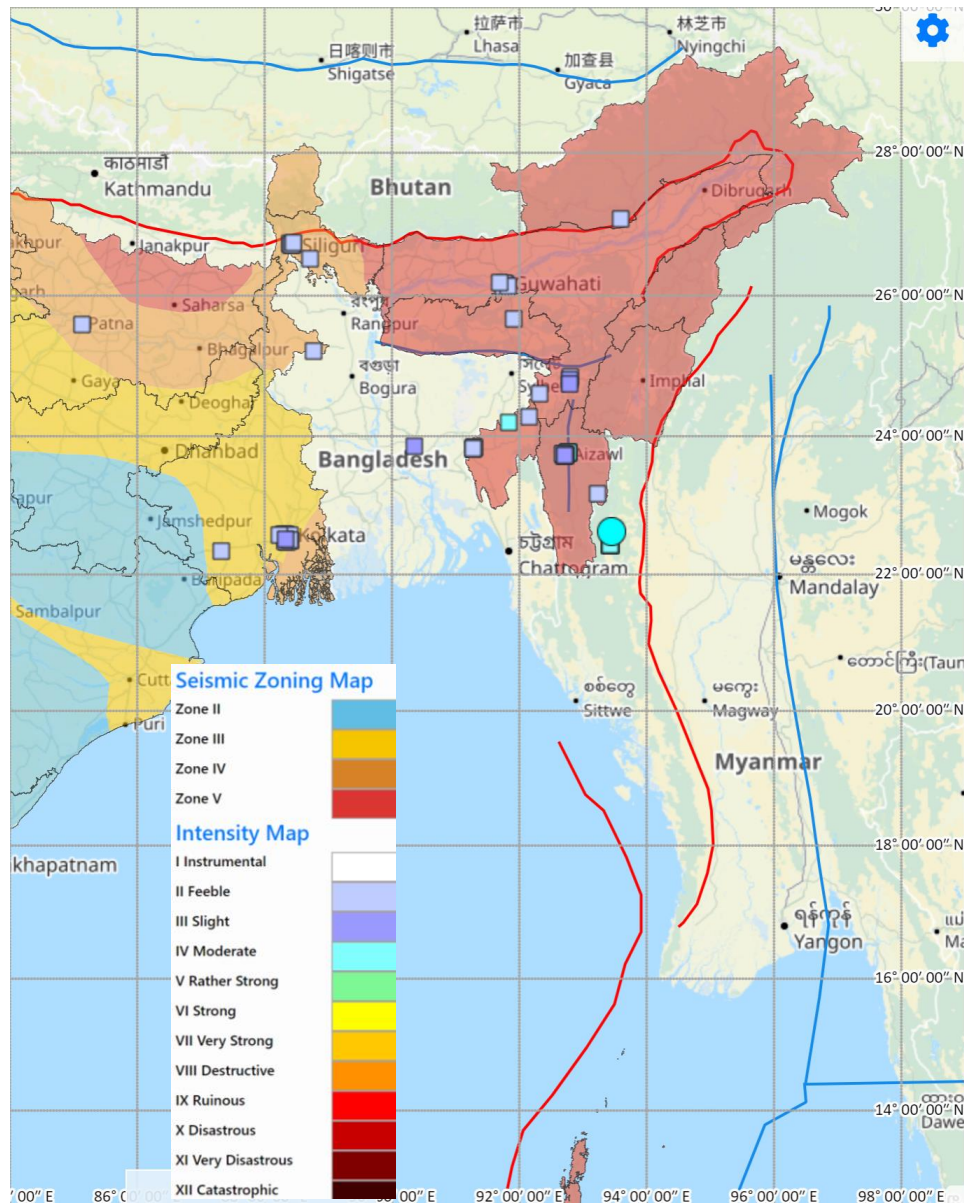


Figure 6: Map showing the felt responses received from different locations.

2016. As per the felt responses (**Figure-6**) received through the website and **BhooKamp** App, this earthquake was widely felt in NE India, West Bengal, Bangladesh and Myanmar. About 70 felt responses varying from MMI I to MMI IV within the range of 20 to 900 km from the epicentre.