

Report on Real Time Earthquake Location

**From: Earthquake Monitoring Center (EMC) of NCS
(R. K. Singh, S. K. Prajapati, Auchitya Pandey, Chaitanya Popali,
Mukesh Das and Sanjay Kumar)**

National Center for Seismology
Ministry of Earth Sciences
Government of India

Month: November 2025
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Report of Earthquakes occurred in the month of November 2025

1) Introduction:

National Center for Seismology maintains a National Seismological Network of **169 stations** each having state of art equipment and spreading all across the country (**Figure:1**). Using these stations during the period 01st – 30th November 2025 a total number of 350 earthquakes have been located

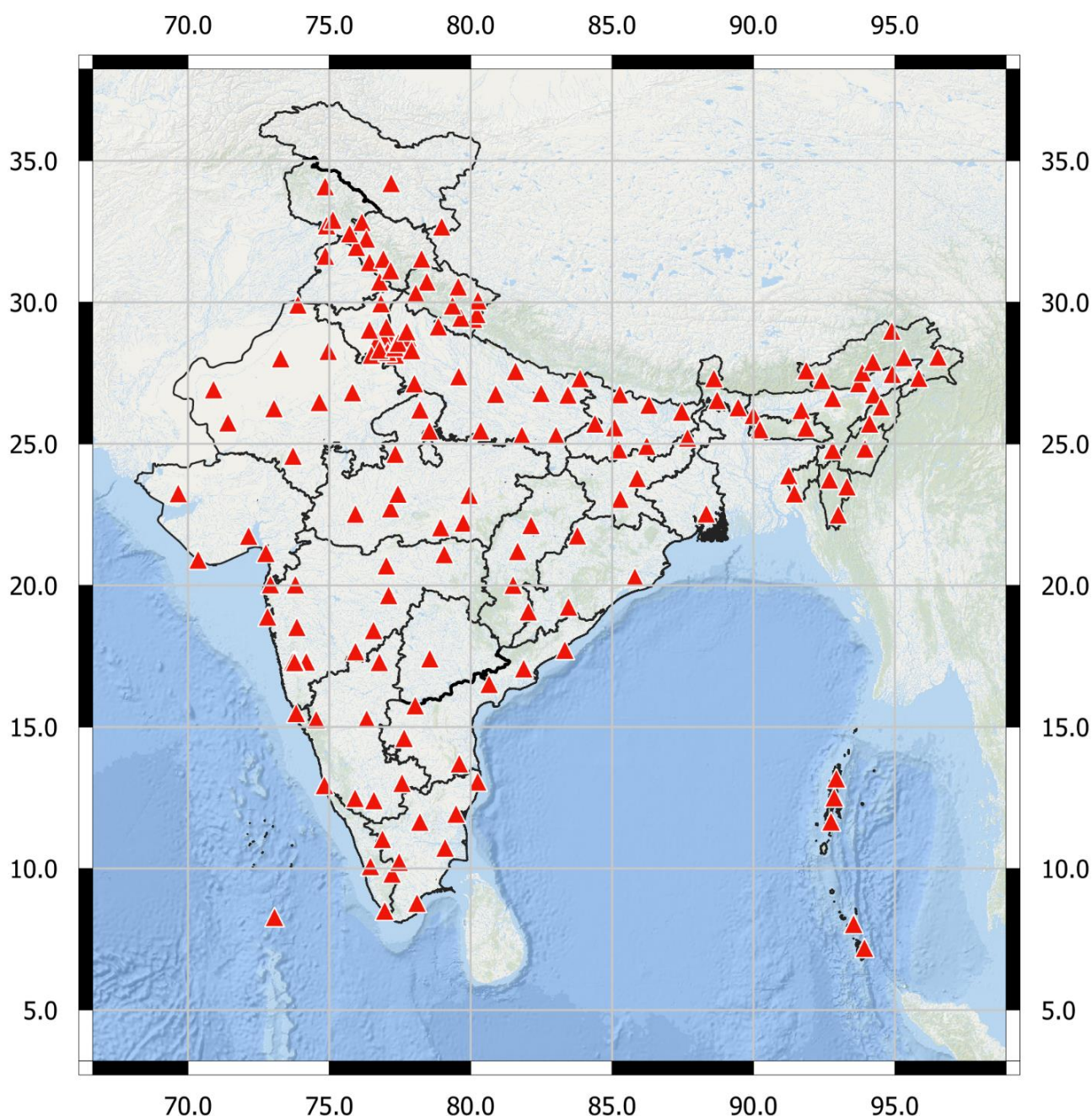


Figure 1: National Seismological Network (NSN) of 169 Stations

and disseminated from the center (**Figure:2**), out of which 144 earthquakes have occurred in India and its neighborhood region bounded by the coordinates 0°- 40°N & 60°-100°E (**Figure:3**).

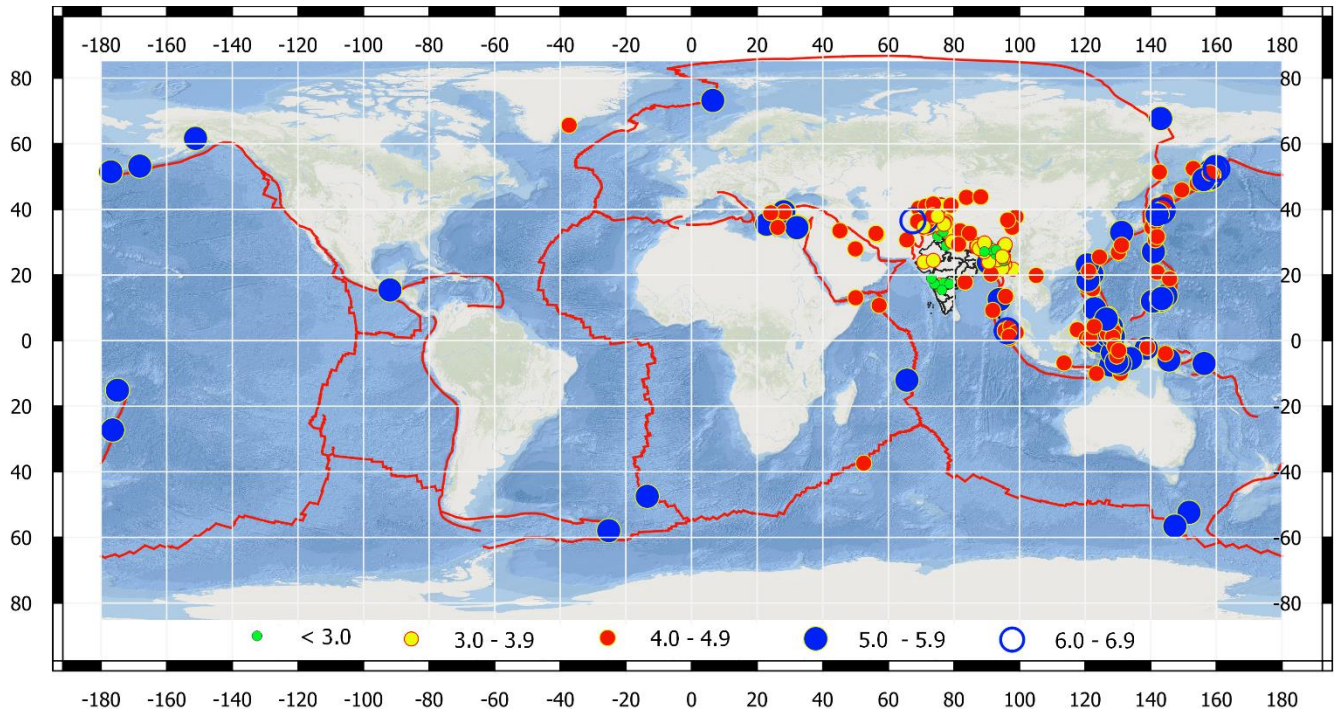


Figure 2: Earthquakes located and disseminated by NCS during 01st – 30th NOV 2025

2) Seismicity:

During the period, the majority of earthquakes within India and its neighbourhood region bounded by the coordinates 0-40°N & 60-100°E; were located in Hindu Kush region, North India (Ladakh, Himachal Pradesh and Uttarakhand), North East India (Arunachal Pradesh, Assam, Manipur, Meghalaya, Nagaland and Sikkim) as shown in **Figure 3**.

Few earthquakes of smaller magnitudes were also reported in northern (Gurdaspur in Punjab and Ghaziabad in Uttar Pradesh); western (Udaipur in Rajasthan; Kachchh in Gujrat; Raigar, Sangali and Satara in Maharashtra) and southern (Vijayapura, Kalaburgi and Koppal in Karnataka; Rangareddy in Telangana and Vishakhapatnam in Andhra Pradesh) part of country. **Thirty nine** earthquakes of smaller magnitude (**M < 3.0**) comprising **11%** of all earthquakes occurred during 01st to 30th November 2025. **Five** (**Three** in the magnitude range **5.0-5.9** and **Two** in the magnitude range **6.0-6.9**) earthquakes of magnitude **M:5.0 and above** occurred during the month in the region; as detailed in **Table:1**.

Out of total 350 earthquakes **18%**; **40%** and **28%** earthquakes occurred in the magnitude range **3.0-3.9**, **4.0-4.9** and **5.0-5.9** respectively. **Nine** earthquakes in the magnitude range **6.0-6.9** occurred

Table:1 Earthquakes of $M \geq 5.0$ occurred during November 2025 within India and its neighbourhood

SN	Date	Time (IST)	Lat($^{\circ}$ N)	Long($^{\circ}$ E)	D (KM)	M	Region
1	2025-11-03	01:59:02	36.51	67.50	23	6.3	Afghanistan
2	2025-11-09	12:06:28	12.49	93.83	90	5.4	Andaman Sea
3	2025-11-21	03:09:12	36.12	71.51	135	5.2	Pakistan
4	2025-11-21	10:08:26	23.77	90.51	10	5.7	Bangladesh
5	2025-11-27	10:26:25	02.99	96.23	10	6.4	Northern Sumatra (Indian Ocean)

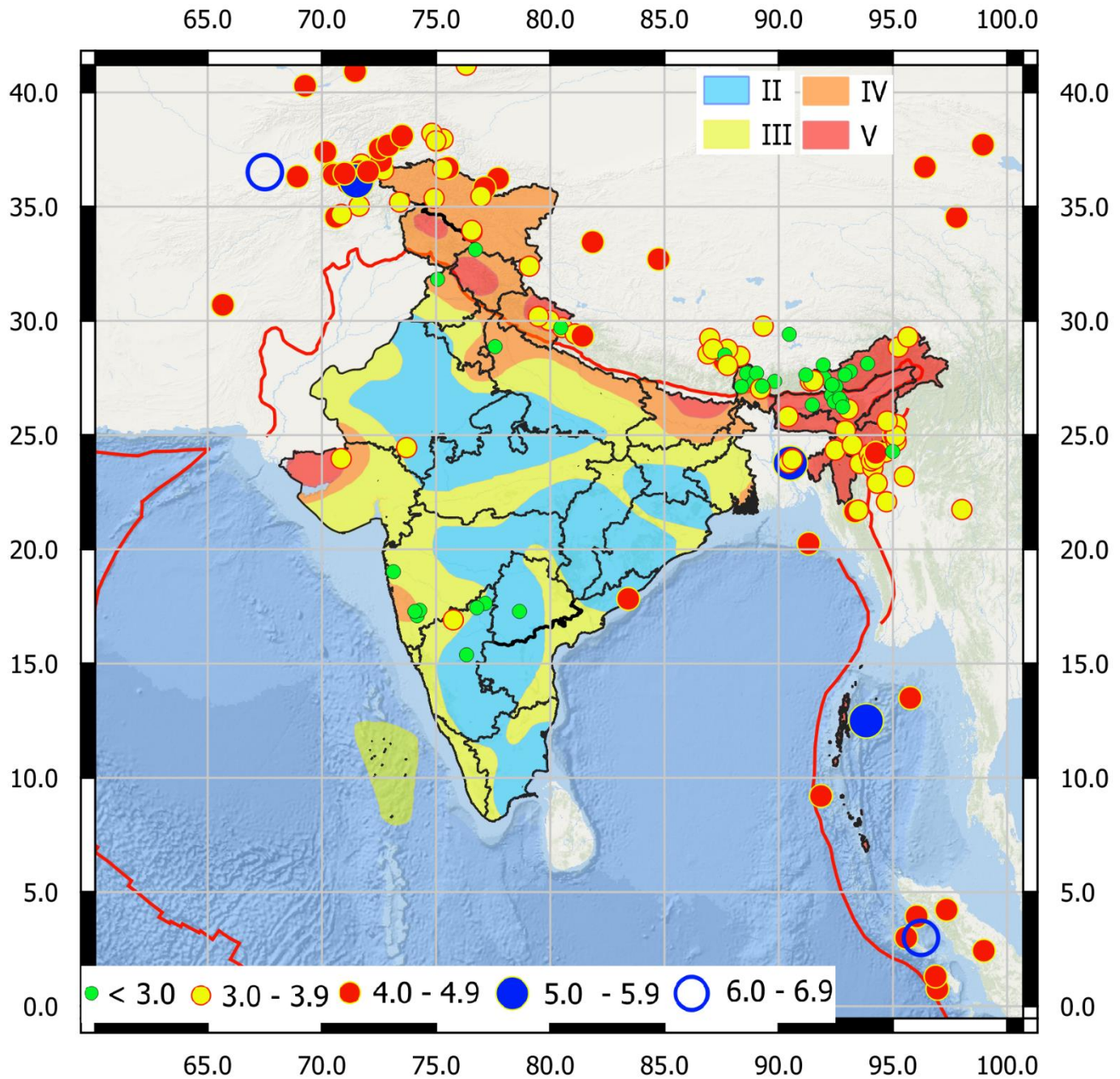


Figure 3: Map showing the seismicity during the period 01st – 30th NOV 2025 occurred in India and its neighbourhood region along with the seismic zone of India.

during the period; of which two earthquakes were inside the grid of 0- 40°N & 60-100°E as shown in **Figure 2** and **Figure 4(a)**. Details of earthquakes occurred during the month is available at www.seismo.gov.in.

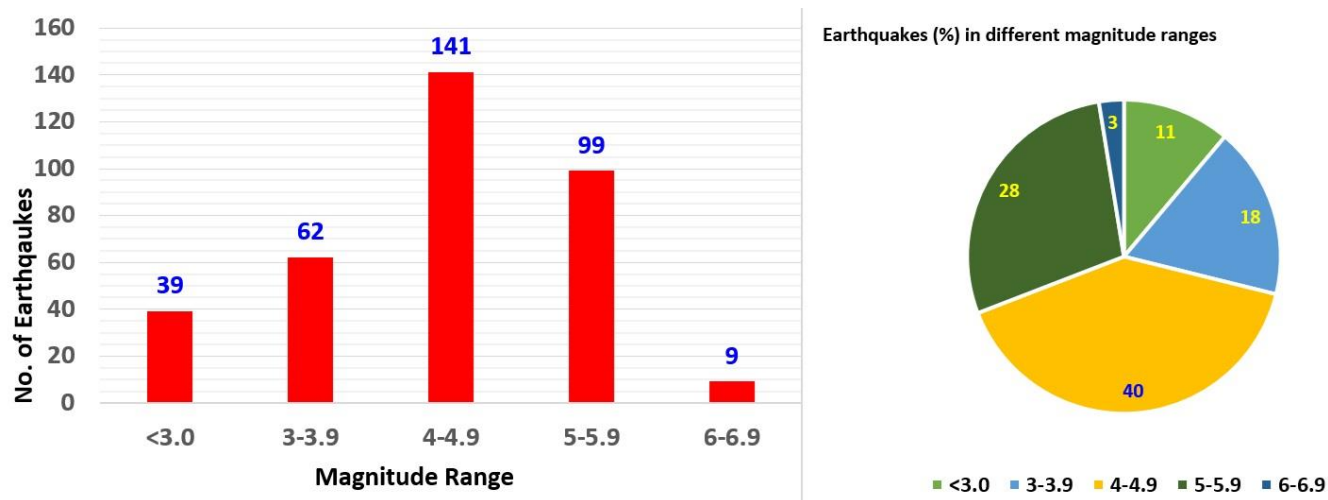


Figure 4 (a) : Distribution of earthquakes in the different magnitude range during 01st – 30th NOV 2025.

There is **negative change** in number of earthquakes in the magnitude ranges of **3.0 -3.9**, **6.0-6.9** and **7.0 -7.9**. The change for different magnitude ranges with respect to previous month (October 2025) is shown in Figure 4 (b).

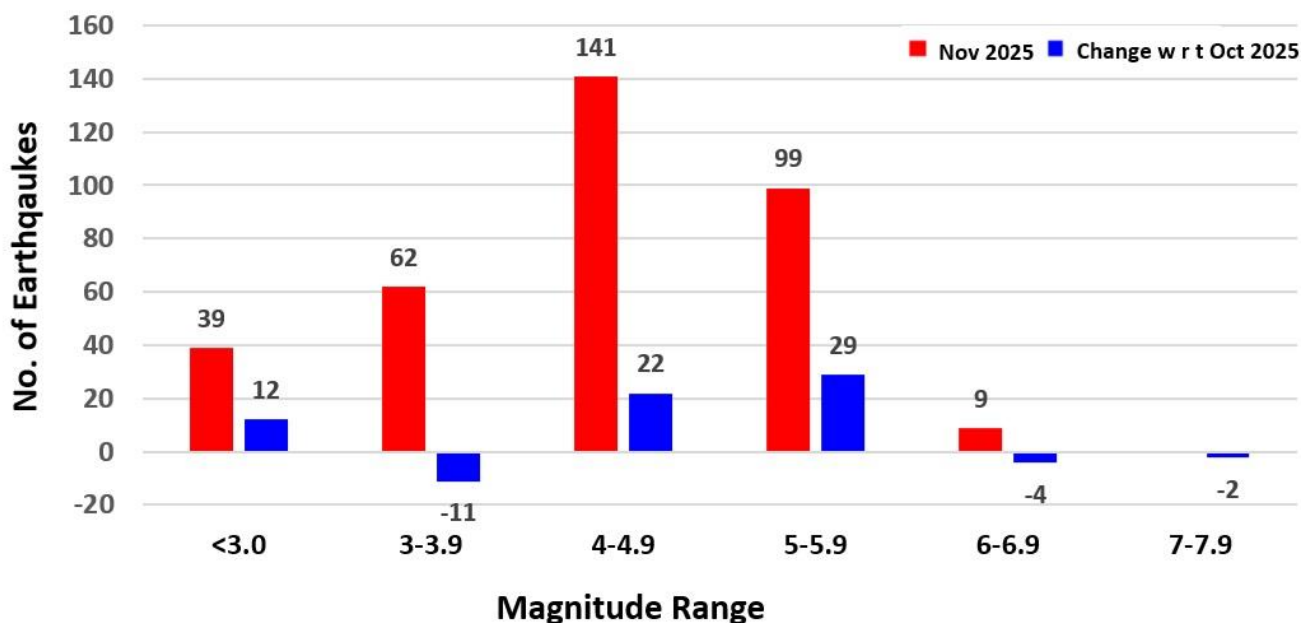


Figure 4 (b) : Change of occurrence of earthquakes in different magnitude ranges w r t previous month

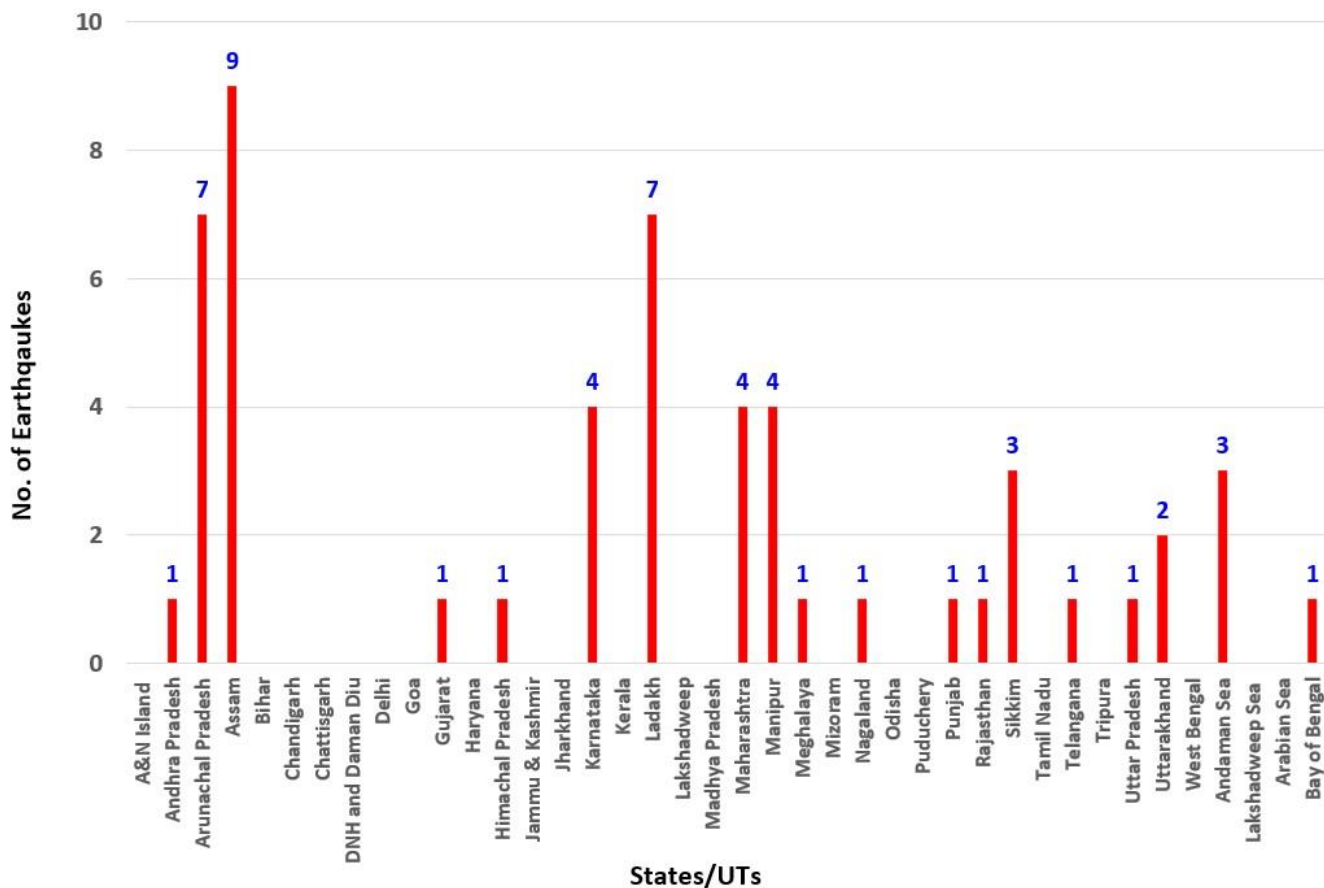


Figure 5: State wise distribution of earthquakes during the period 01st – 30th NOV 2025.

Total **53** earthquakes occurred within Indian territory; of which 9 earthquakes occurred in Assam and 7 each in Arunachal Pradesh and Ladakh during the period. Out of 53 earthquakes **12** and **25** earthquakes occurred in **North** and **North-East** region respectively. State/UT and region wise distribution of earthquakes occurred during 01st – 30th November 2025 is shown in **Figure 5** and **Figure 7** respectively. There was no activity in east and central part of the country during 01st – 30th November 2025 (**Figure 3** and **Figure 6**).

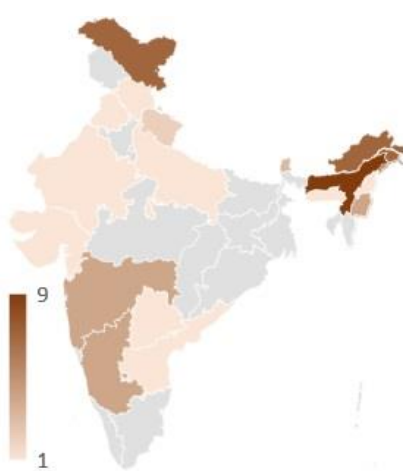


Figure: 6 Earthquake Density map

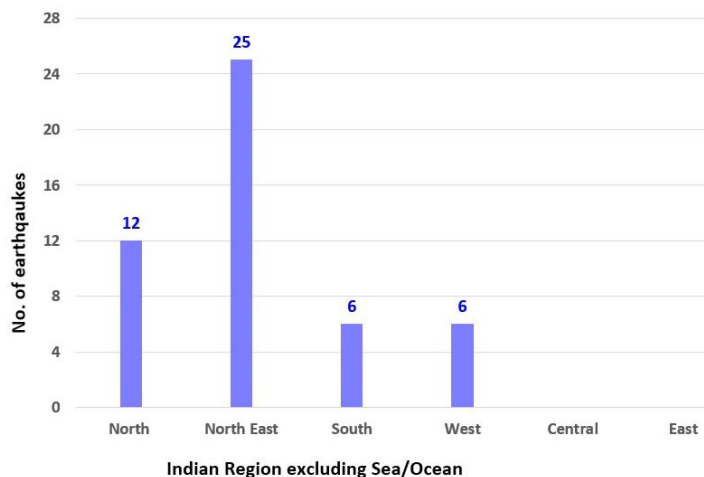


Figure: 7 Region wise distribution

3) Significant Activity:

- A. Afghanistan Earthquake:** An earthquake of **M:6.3** occurred at **01:59:02 IST** of **03rd Nov 2025** in Afghanistan at 36.51° N and 67.50° E with focal depth of 23 km. The epicentre was approximately 40 Km SE of Mazar-i-Sharif (Afghanistan); 250 Km SW of Dushanbe (Tajikistan) and 266 Km NW of Kabul (Afghanistan). The area is seismically very active associated with collisional tectonics where Indian plate subducts beneath the Eurasian Plate. The occurrence of earthquakes in the region is attributed mainly to the tectonic settings of the Himalaya comprising Herat Fault, Himalayan Frontal Thrust (HFT), Main Boundary Thrust (MBT) and Main Central Thrust (MCT) besides several local faults and geological demarcated lineaments. **Figure 8** depicts the expected intensity of this earthquake around the source zone. More details about the event are available at URL <https://riseq.seismo.gov.in/riseq/earthquake/event/UDVNTWc5WkxrUWd1K0daZy9nRW R2UT09/Reviewed>

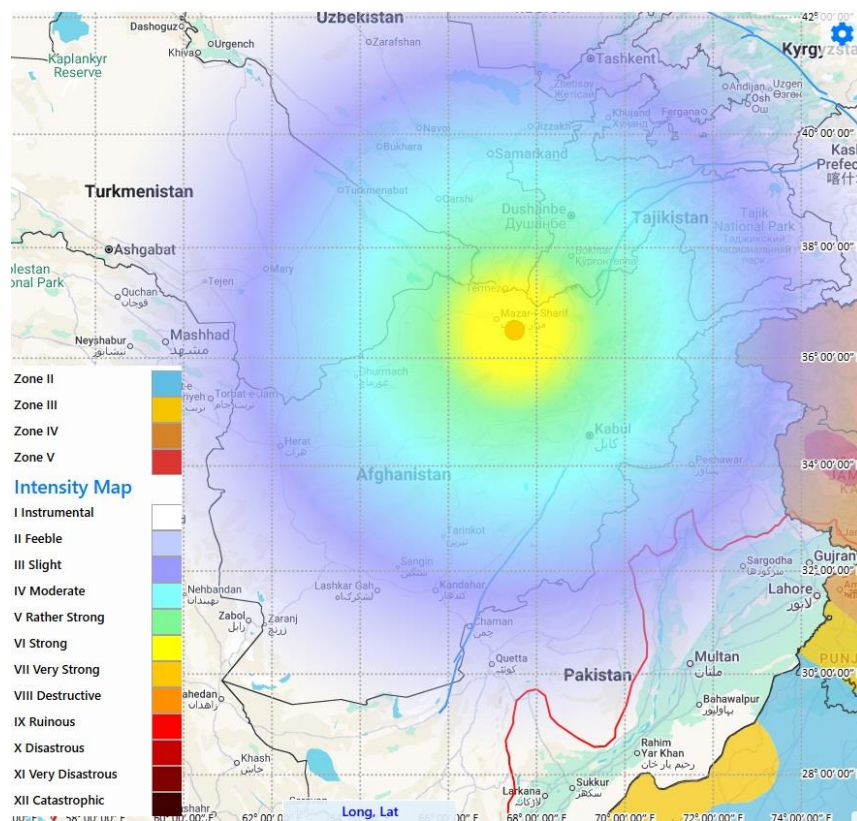


Figure 8: Intensity map of earthquake of M:6.3 occurred on 03rd NOV 2025 in Afghanistan

- B. Visakhapatnam Earthquake:** An earthquake of magnitude **M 4.0** occurred at **04:19:31 IST** of **04th Nov 2025** in Visakhapatnam, Andhra Pradesh at 17.83°N and 83.41°E with a focal depth of 10 km. The epicentre is about 18 km NE of Visakhapatnam near Thotlakonda

Beach. And 30 km South of Vizianagram of Andhra Pradesh. This event occurred near the Vizianagaram lineament (VZL), providing a very apt location for triggering this shock due to appreciable structural heterogeneity in and around the source region. This earthquake was widely felt in Andhra Pradesh. **Figure 9** depicts the expected intensity of this earthquake around the source zone. Following URL may be visited for more details <https://riseq.seismo.gov.in/riseq/earthquake/event/L0R0VThSR0NKbmNkVE5XU2JqYm84Zz09/Reviewed>.

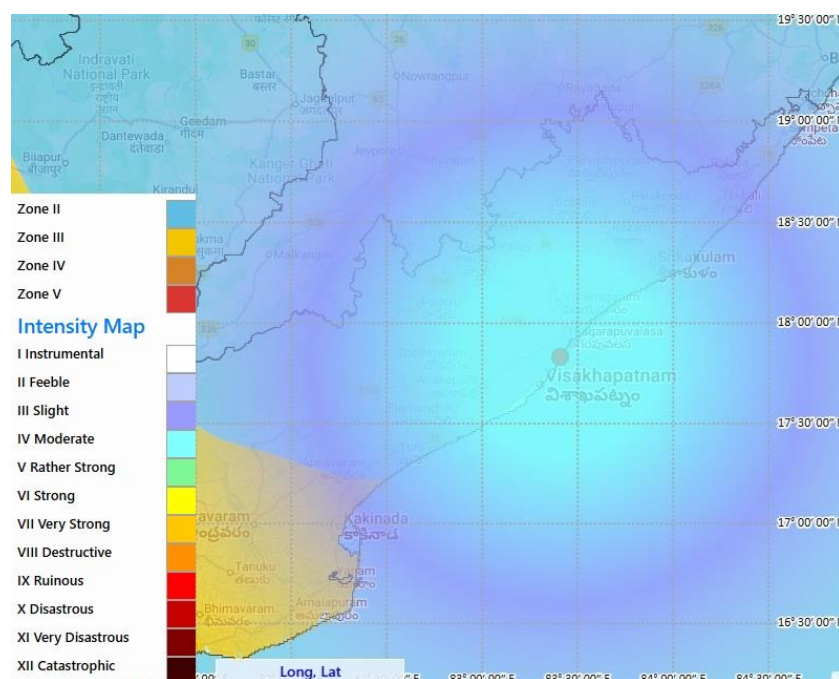


Figure 9: Intensity map of earthquake of M:4.0 occurred on 04th NOV 2025 in Visakhapatnam

- C. Bangladesh earthquake:** An earthquake of magnitude **M 5.7** occurred at **10:08:26 IST** of **21st Nov 2025** in Dhaka, Bangladesh at 23.77°N and 90.51°E with a focal depth of 10 km. The epicentre is located 75 km West of Agartala, 247 km South of Shillong, Meghalaya and 246 km northeast of Kolkata, India. The area is seismically active and associated with Rakhine-Bangladesh megathrust (RBM), which is the inferred deformation front of the Chittagong-Myanmar fold and thrust belt (CMFB). This epicentre is in close proximity to RBM a major convergent boundary accommodating the ongoing collision between the India Plate and the Burma–Sunda microplates. The maximum intensity of this earthquake, as measured on the Modified Mercalli Intensity (MMI) scale, was VI near the epicentral region and widely felt in West Bengal and NE region. **Figure 10** depicts the expected intensity of this earthquake around the source zone. Following URL may be visited for more details

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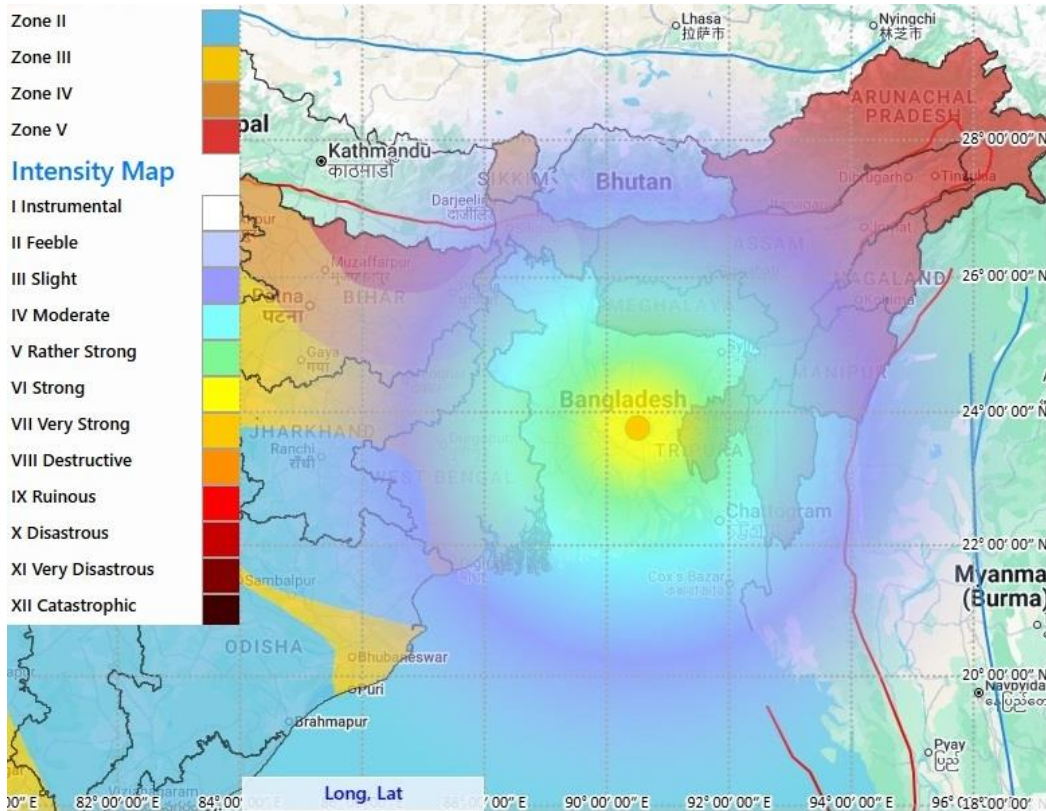
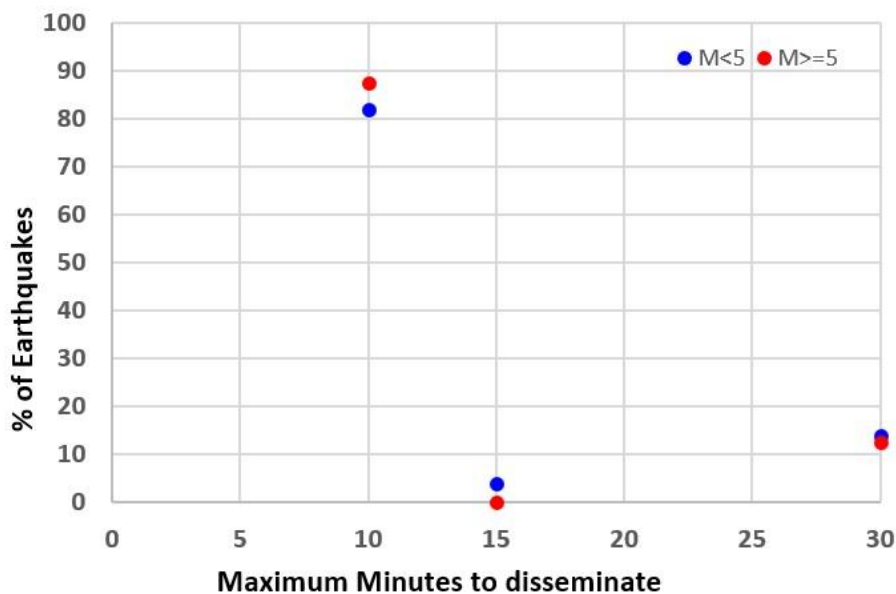


Figure 10: Intensity map of earthquake of M:5.7 occurred on 21st NOV 2025 in Bangladesh

4) Dissemination Performance:



More than **80%** earthquakes of **M<5.0** and **M>5.0** occurred within India and its neighbourhood region bounded by the coordinates 0-40°N & 60-100°E were disseminated within 10 minutes as shown in **Figure 11**.

Figure 11: Dissemination of earthquakes within different time ranges during 01st – 30th NOV 2025.