

# Report on Real Time Earthquake Location

**From: Earthquake Monitoring Center (EMC) of NCS  
(R. K. Singh, Shanker Pal, Ved Prakesh, Narendra Pandey,  
Prashant Singh Chingthem and Shashank Rai)**

National Center for Seismology  
Ministry of Earth Sciences  
Government of India

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# Report of Earthquakes occurred in the month of Sep 2021

## 1) Introduction:

National Center for Seismology strengthened its National Seismological Network of 115 stations to 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> Sep 2021 a total number of 106

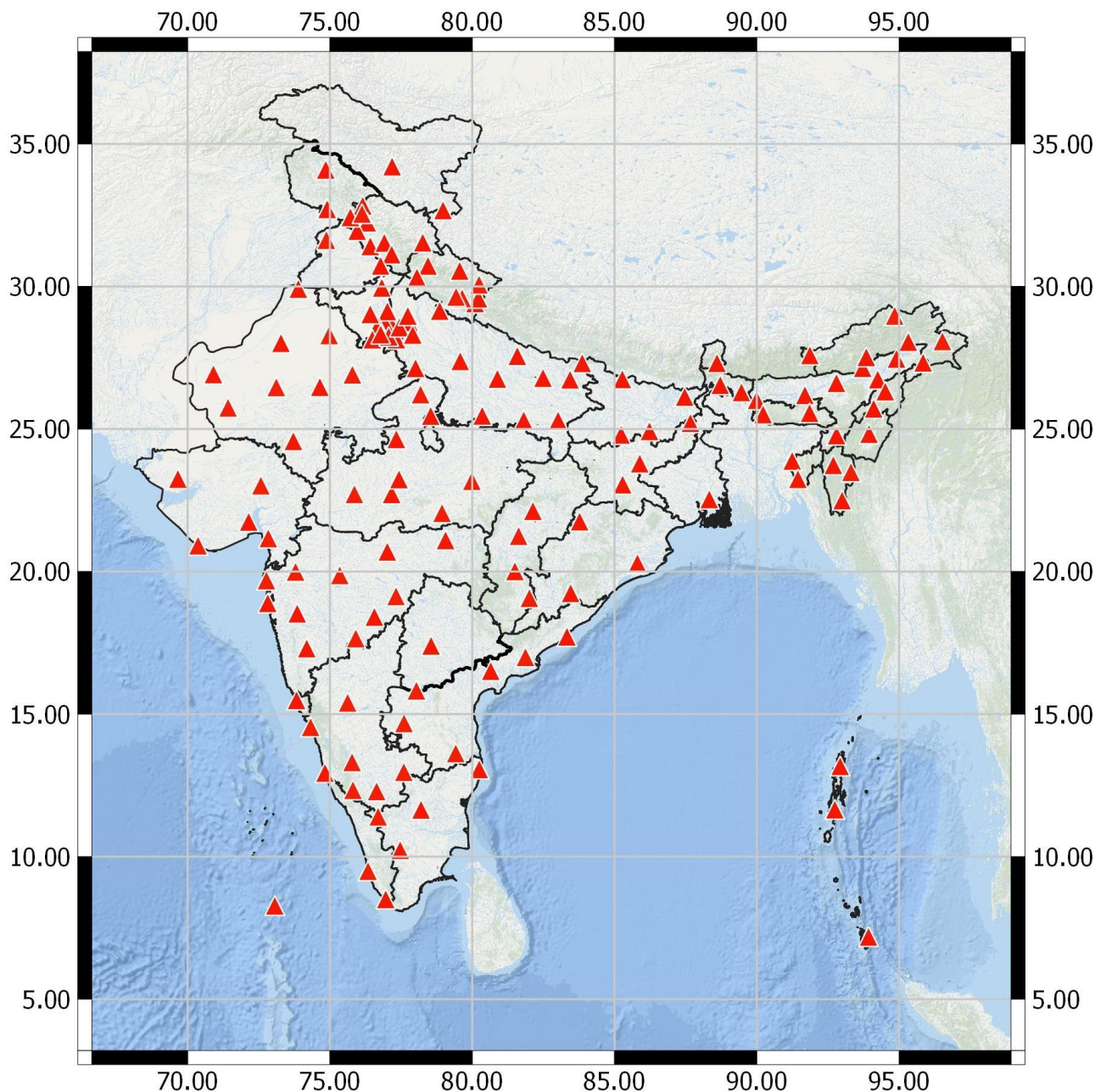


Figure 1: National Seismological Network (NSN) of 150 Stations

earthquakes have been located and disseminated from the center (Figure:2), out of which 101 earthquakes has occurred in India and its neighborhood region bounded by the coordinates 0°-40°N & 60°-100°E (Figure:3).

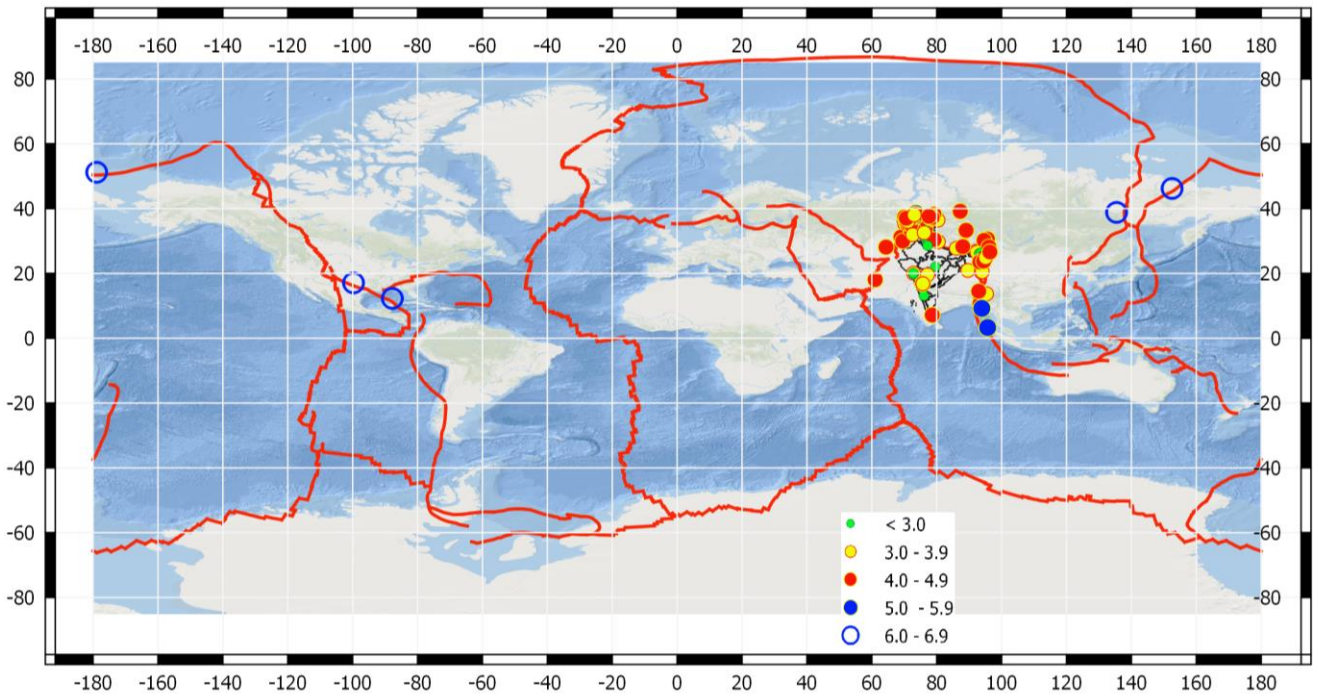


Figure 2: Earthquakes located and disseminated by NCS during 01<sup>st</sup> – 30<sup>th</sup> Sep 2021

## 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, Xinjiang(China), North Eastern part of India and Andaman-Nicobar Island region as shown in **Figure:3**. Few earthquakes of smaller magnitudes were also reported in NCT Delhi, Himachal Pradesh, Uttarakhand, Central (Chhindwara, MP), Western(Palghar, Maharashtra) and Southern(Vijayapua, Karnataka) part of country. **Five** earthquakes of magnitude **M:5.0 and above** occurred in during the month in the region; as detailed in following table.

SN	Date	Time (IST)	Lat(°N)	Long(°E)	Depth (KM)	M	Region
1	2021-09-08	11:50:09	37.85	73.43	195	5.5	Tajikistan
2	2021-09-15	01:43:59	3.30	95.71	30	5.3	Off west coast of Northern Sumatra
3	2021-09-24	20:34:27	9.22	93.92	63	5.2	Nicobar Islands
4	2021-09-18	03:36:42	38.43	73.61	129	5	Tajikistan
5	2021-09-20	00:54:03	25.26	94.70	82	5	Myanmar

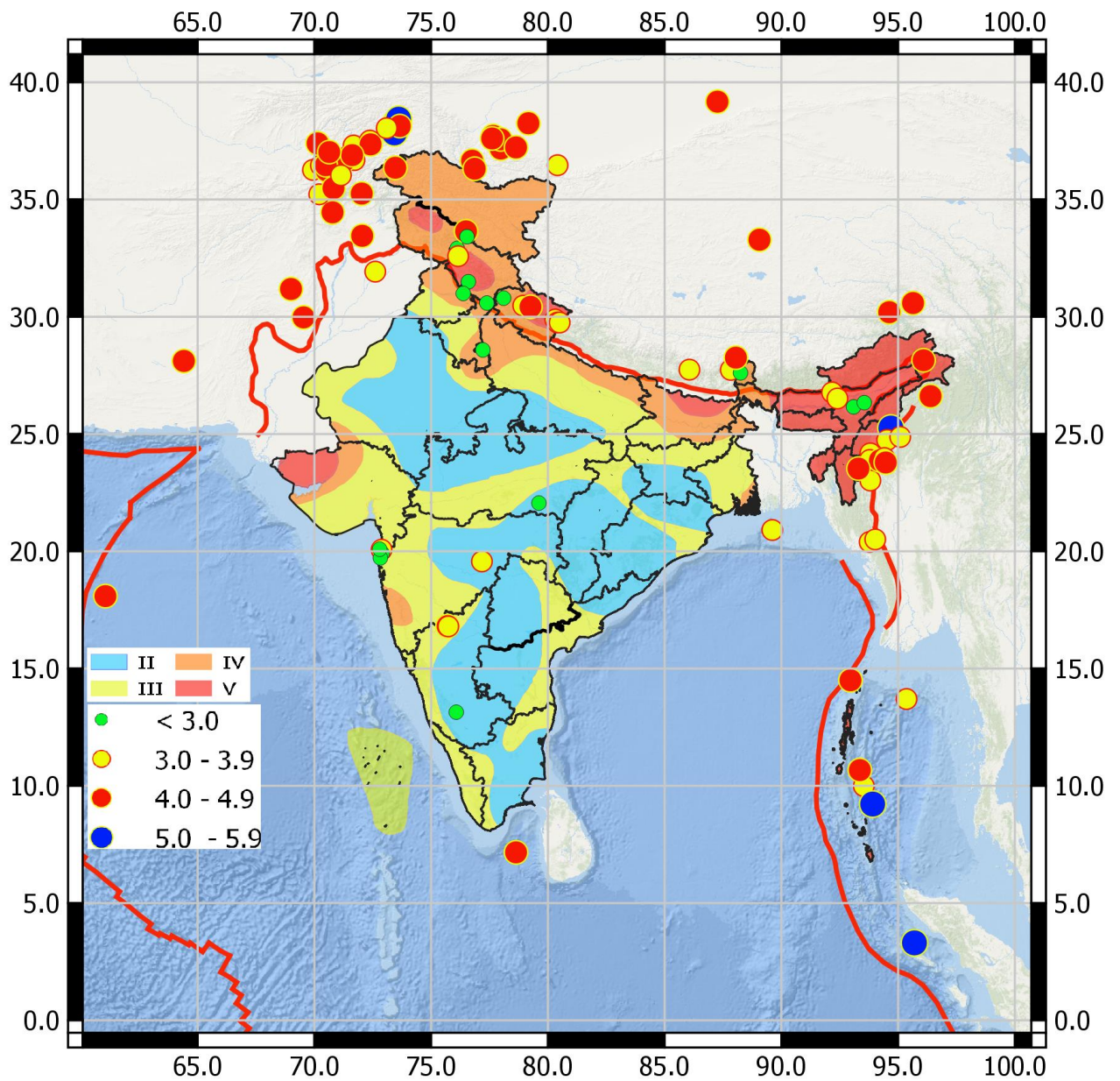


Figure 3: Map showing the seismicity during the period 01<sup>st</sup> – 30<sup>th</sup> Sep 2021 occurred in India and its neighbourhood region along with the seismic zone of India.

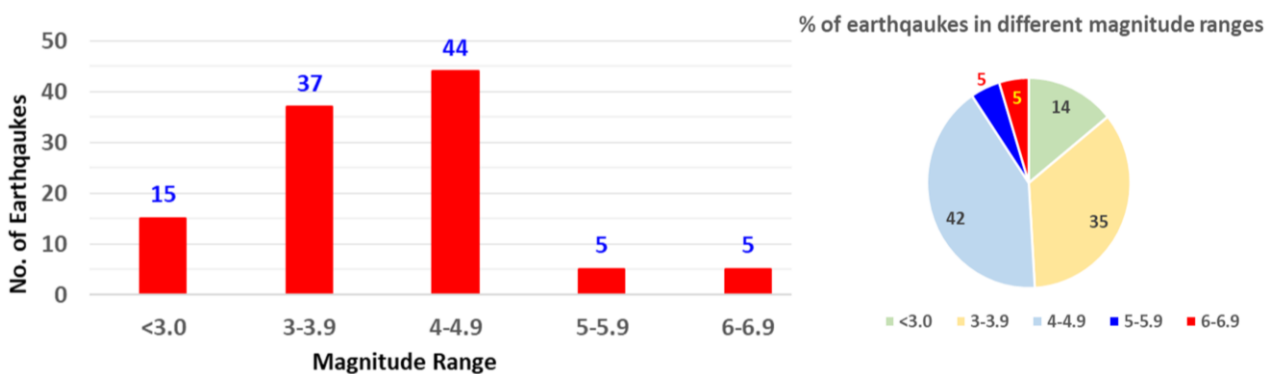


Figure 4: Pie-Chart and Bar-Diagram showing the number of earthquakes occurred in the magnitude range during the period 01<sup>st</sup> – 30<sup>th</sup> Sep 2021 that was disseminated.

Out of total 106 earthquakes, **42%** and **35%** of events occurred in the magnitude range **4.0-4.9** and **3.0 - 3.9** respectively, whereas **five** earthquakes occurred in each magnitude range of **5.0-5.9** and **6.0-6.9** 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:

Three earthquakes of **M: 3.3; M:4.1** and **M:3.2** occurred in Vijayapura, Karnataka at **23:48:17 IST of 04<sup>th</sup> Sep 2021; 23:49:24 IST of 04<sup>th</sup> Sep 2021** and **08:18:47 IST of 11<sup>th</sup> Sep 2021** respectively. The epicenter of M:4.1 was at 2km deep at 16.81<sup>0</sup>N and 75.71<sup>0</sup>E. All three earthquakes occurred within 2 km of Vijayapura and were reported felt with in Vijayapura.