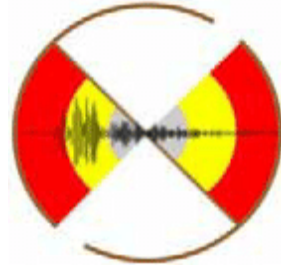




# **A Preliminary Report of September 11<sup>th</sup>, 2023 Myanmar Earthquake (M 5.1)**

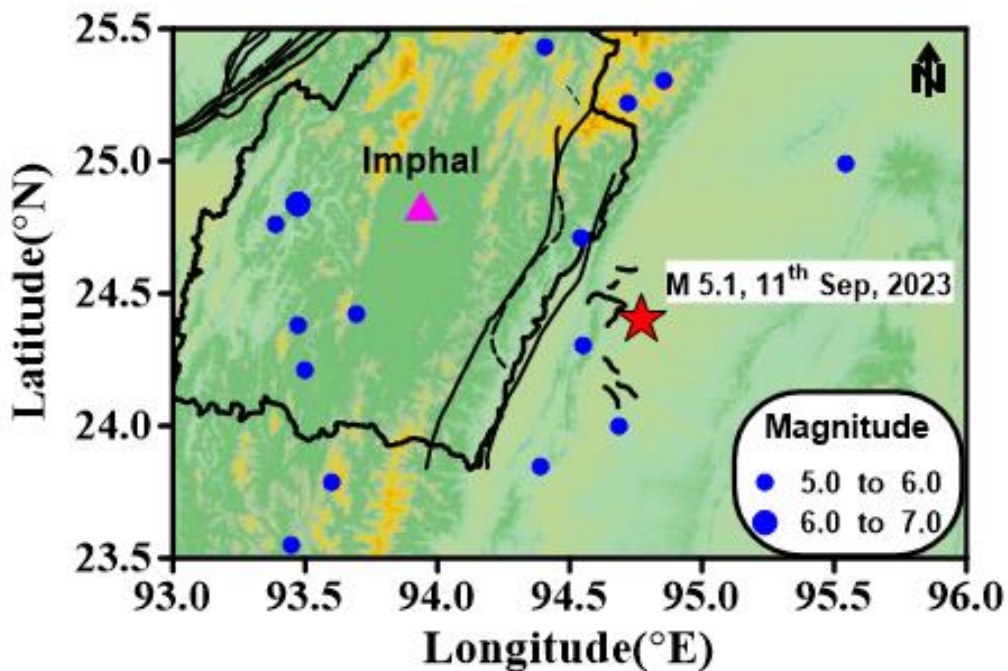
**(Report No.: NCS-NSN-EPG-06)**



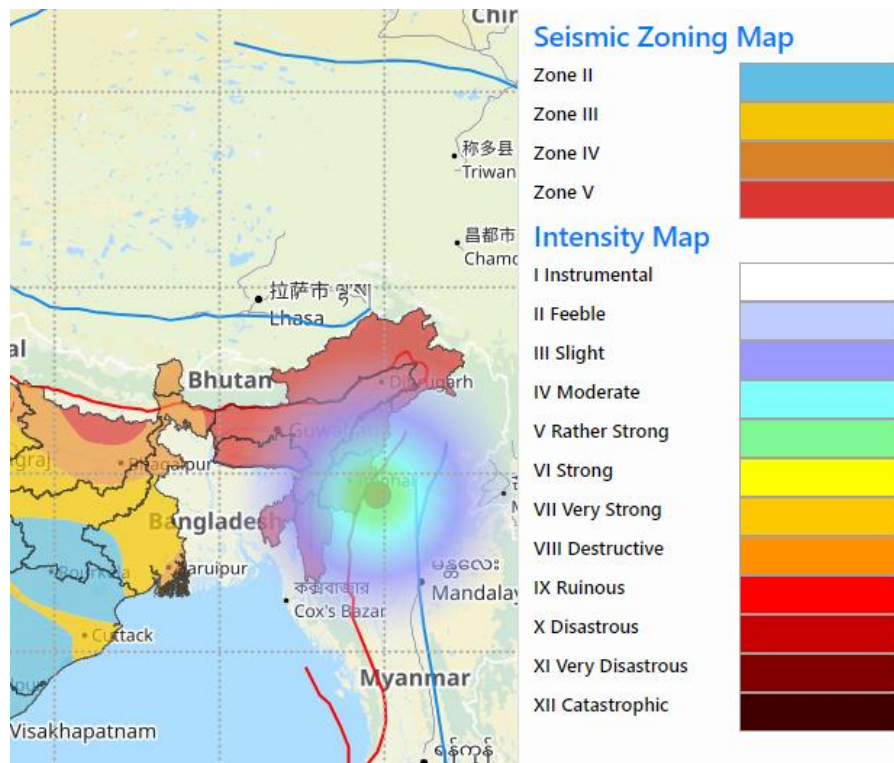
**National Centre for Seismology  
Ministry of Earth Sciences, Government of India  
Mausam Bhavan Complex, Lodi Road, New Delhi - 110003**

An earthquake of magnitude M 5.1 occurred at 23:01:49 IST, epicenter at 25.40° N and 94.77° E at a depth of 20 km. The epicenter is in Myanmar and it is 156 Km SSE of Nagaland, India; 180 Km ENE of Champhai, Mizoram, India. The event was well recorded by more than 100 broadband seismic stations installed by National Centre for Seismology, New Delhi. The past seismicity map of the region and epicenter of the 11<sup>th</sup> September 2023 is shown in **Figure 1**.

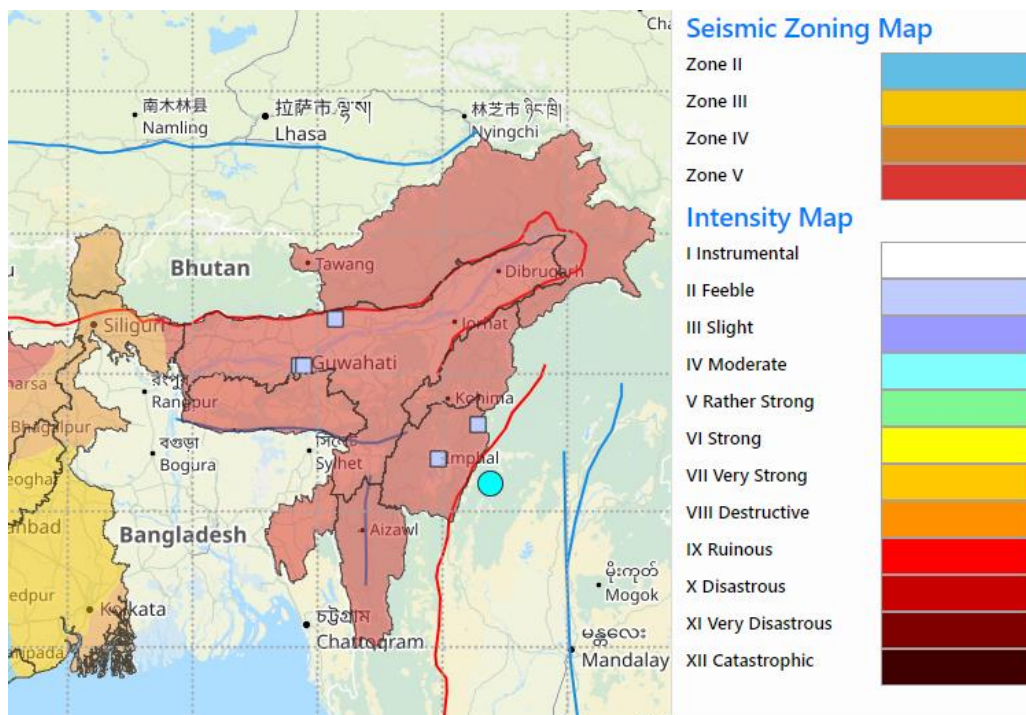
Expected intensity of this earthquake is assimilated by NCS, MoES as shown in **Figure 2** which is range from III to VI. The earthquake is widely felt in Manipur region and neighboring states. Five felt reports due to this earthquake, have been received from Imphal and Guwahati through NCS website and Mobile App within one hours having intensity III on Modified Mercalli Intensity (MMI) Scale as shown in **Figure 3 & 4**.



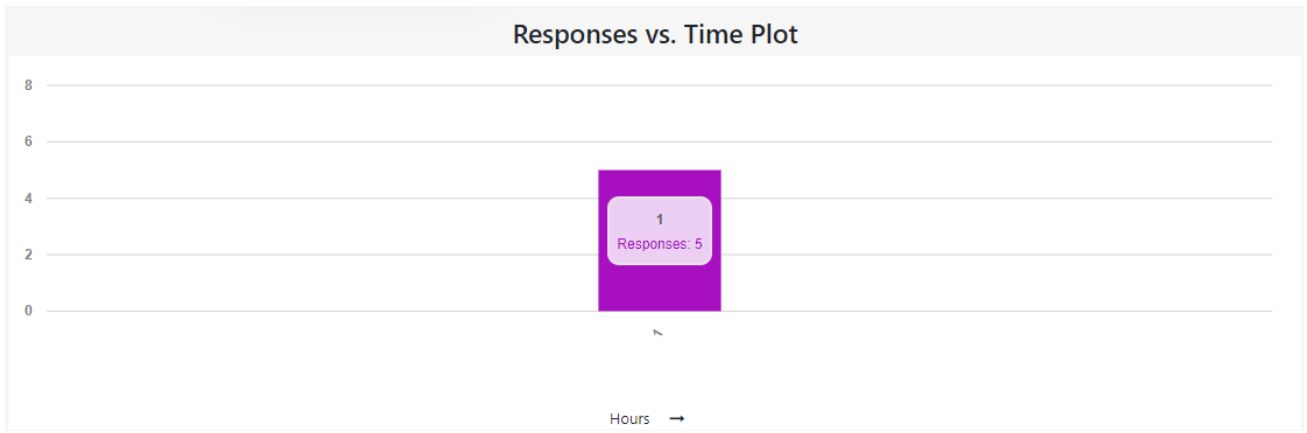
**Figure 1:** The present earthquake (M 5.1) of 11<sup>th</sup> September 2023 and seismicity in the epicentral and surrounding region since last 10 years (2012-2023) (source: [www.seismo.gov.in](http://www.seismo.gov.in); NCS-MoES). The geological faults and lineament were obtained from Bhukosh, GSI. All red star represents the location of mainshock (M 5.1)



**Figure 2:** Earthquake Intensity Map of the earthquake of M 5.1 of 11<sup>th</sup> September 2023.



**Figure 3:** Felt responses (purple squares) of the 11<sup>st</sup> September 2023 earthquake M 5.1 (circle) from different users reported on website ([www.seismo.gov.in](http://www.seismo.gov.in)) and BhooKamp mobile-app. More than 5 responses were received within one hours from the time of occurrence of earthquake.



**Figure 4:** Number of felt responses with respect to time lapses.