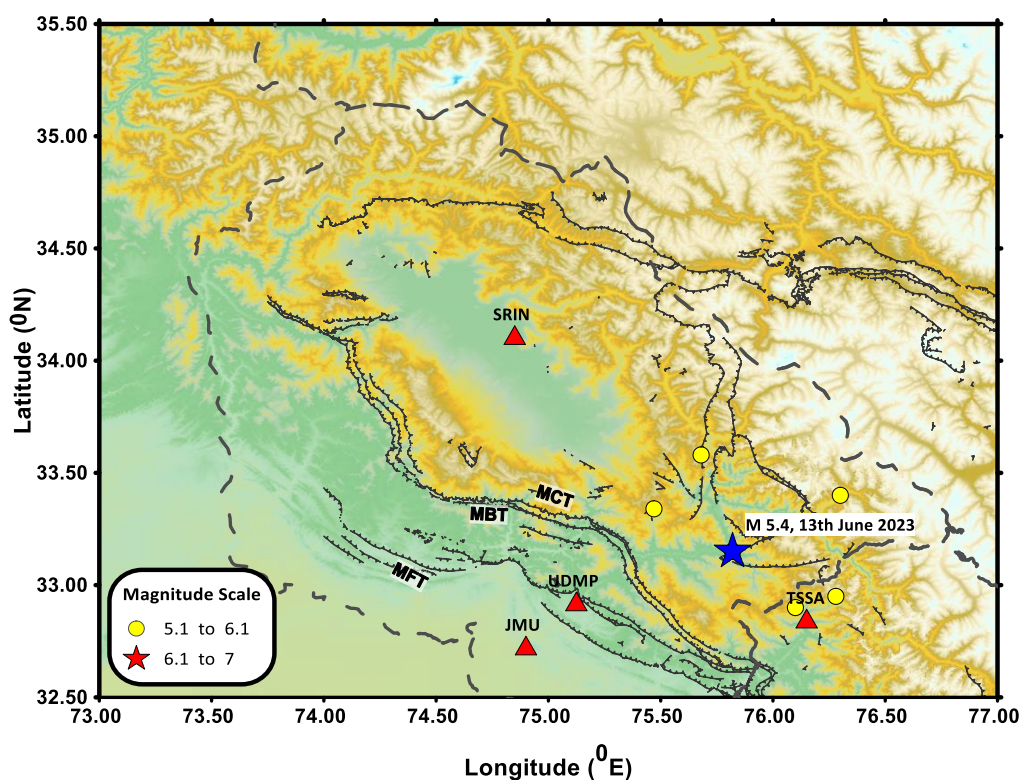


## Earthquake Report on M 5.4, Jammu and Kashmir occurred on 13<sup>th</sup> June 2023

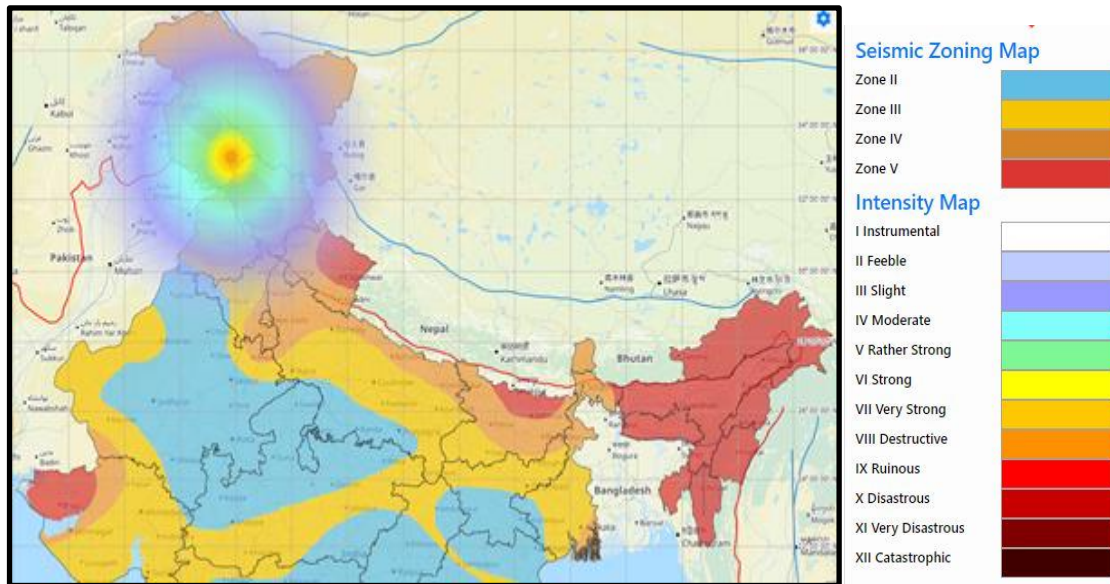
An earthquake of magnitude M: 5.4 occurred at 13:33:42 IST in Doda, district of Jammu and Kashmir, with epicenter at 33.15° N and 75.82° E and a focal depth of 06 km. The epicenter was about 140 km southeast of Srinagar. The epicenter location and intensity map of earthquake are shown in Figures 1 and 2.

The epicenter of the earthquakes lies between the MCT and Jammu thrust (JT) which is NW-SE trending major thrust fault of the Himalaya. The analysis of past 5-years earthquake that minor earthquake in the close of vicinity of the Doda region is usual seismic activity (Figure 1). The preliminary fault plane solution obtained from waveform inversion suggest the dominant thrust for the event and causative source of the event. The maximum Intensity VI (MMI scale) have been reported near to the source region (Figure 2).

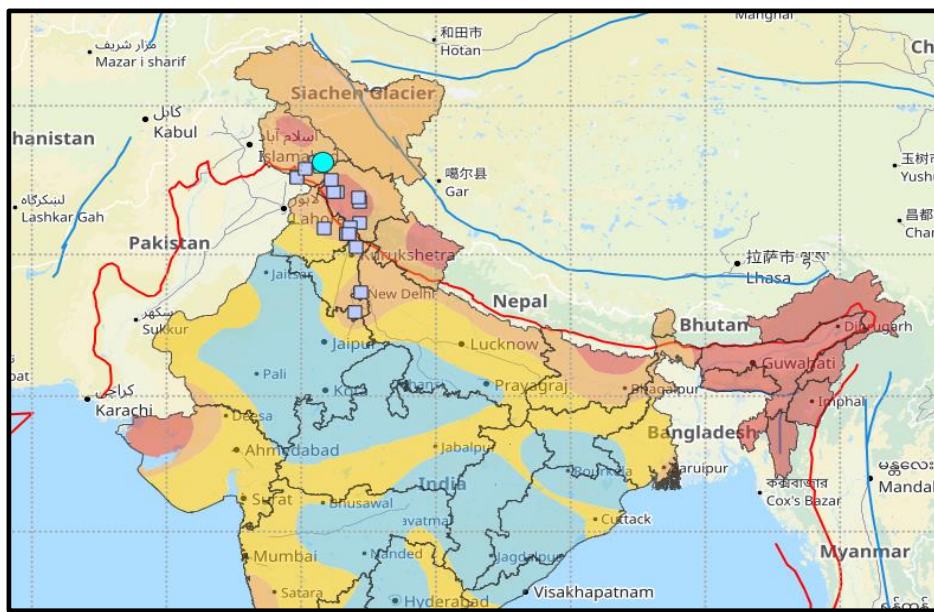
The earthquake was widely felt in Jammu & Kashmir region and neighbouring states. More than 30 felts responses have been received with in 2 hours; from Himachal Pradesh, Delhi-NCR, Haryana, Punjab through Website and mobile app having intensity ranging from II to IV on MMI scale (Figure 3).



**Fig 1:** Map showing the location of earthquake of M: 5.4 (Blue Star) occurred on 13<sup>th</sup> June 2023 at Doda District, Jammu and Kashmir. The continuous thick black lines are the major fault system in the epicentral region. Filled yellow circles are the last 5-year event occurred within 100 km radius of today epicenter. Red triangles are NCS Seismic station.



**Fig 2:** Expected Intensity map of earthquake of M:5.4 occurred on 13<sup>th</sup> June 2023 at Doda District, Jammu & Kashmir.



**Figure 3:** Felt responses (squares) of the 13<sup>th</sup> June 2023 earthquake of M:5.4 (circle) received through [www.seismo.gov.in](http://www.seismo.gov.in) and BhooKamp mobile-app. More than 20 responses were received within one hours from the time of occurrence of earthquake.