

## Earthquake Report

### Earthquake occurred Near East Coast of Honshu, Japan on 16/03/2022

1. An earthquake of magnitude (M7.1) occurred near east coast of Honshu, at 37.82 N and 141.64 E with focal depth of 81 km at 20:06:36 IST. The epicenter of this earthquake was found to be located ~100 km in NW direction from the epicenter of the 11<sup>th</sup> March 2011 Tohoku tsunamigenic earthquake (M:9.1). The earthquake was widely felt across the capital Tokyo and prompting a tsunami advisory for parts of the northeast coast. The earthquake location is approximately 6000km from the New Delhi.

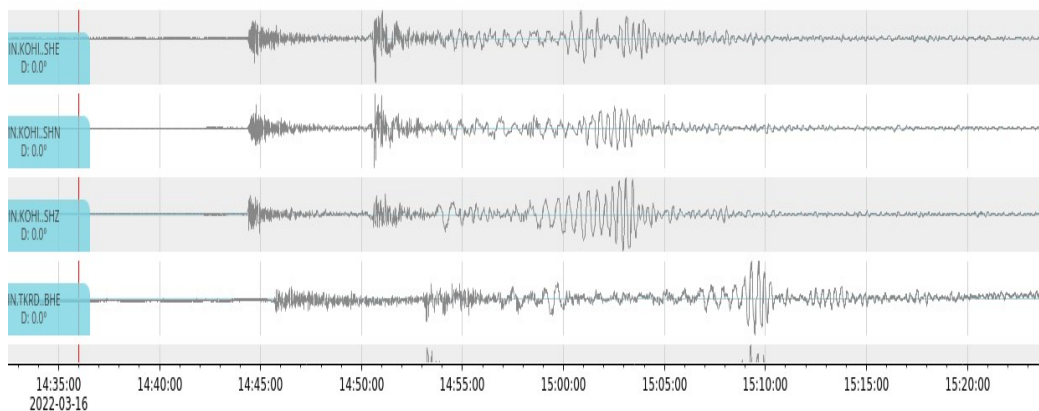


Fig 1: Recorded seismograms of earthquake M7.1 (mainshock) by seismic stations ascribed to National Center for Seismology (NCS), MoES.



Fig 2: Location of earthquake (M7.1) of 16<sup>th</sup> March 2022.

2. The earthquake occurred due to thrust faulting along the plate boundary of the subducting Pacific slab beneath the northeast Japan forearc. The mainshock (M7.1) didn't yet generate tsunami in the northeast coast of Japan that suggests that the earthquake (M7.1) is not a tsunamigenic earthquake.
3. It is here noteworthy to mention that this earthquake was preceded by a foreshock of magnitude M:6.1 approximately 2 minutes earlier. Moreover, an earthquake of magnitude M:7.1 is found to occur ~15 km east of this event in February 2021
4. Total of 33 earthquakes of M:7.0 or greater have occurred within 250 km of the present 16<sup>th</sup> March 2022 earthquake, including 7 earthquakes >M:7.0 since the 11<sup>th</sup> March 2011 M:9.1 Tohoku earthquake.