

of Anomalous Seismic Events in India

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The US National Data Centre (NDC) observed five relatively large seismic events in the Chhattisgarh Province of India from September 2018 through October 2022. These events are of interest as they exhibit some explosive characteristics, and their respective yields are approximately equivalent to a 1 kiloton underground nuclear explosion. The events occurred near a known coal mine that uses retreat style mining, which has been known to cause catastrophic collapses at other mining areas. The US NDC conducted Interferometric Synthetic Aperture Radar (InSAR) analysis in concert with waveform correlation and cluster analysis to show that these events can likely be attributed to randomly occurring collapses at the mine. Further, the radius of the InSAR observed surface deformation was compared to the theoretical cavity/chimney radius of an equivalent size underground nuclear test. This comparison excludes the possibility of the events being nuclear related.

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Promotional text

The US NDC will be discussing a set of interesting set of anomalous seismic events observed in India from 2018 to 2022.

Oral preference format

in-person

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