Statistical Analysis of Earthquakes Recorded in Japan in 2023

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Abstract : Southeast Asia, particularly Japan, remains a global hotspot for seismic activity. In 2023, this region experienced a notable surge in earthquake occurrences compared to the preceding decade. Advancements in seismic monitoring technologies have significantly improved the detection and analysis of earthquakes, revealing a concerning trend of increasing seismic energy release. This heightened seismic activity poses substantial risks to infrastructure, public safety, and economic stability. To gain a deeper understanding of this trend, this study delves into a comparative analysis of the seismic energy released in 2023 with major earthquakes from the past seven decades. By examining these historical data, we aim to identify potential patterns and implications for future seismic events. This research underscores the urgent need for international cooperation in developing robust early warning systems, strengthening infrastructure resilience, and promoting public awareness to mitigate the devastating impacts of earthquakes in this region.

Keywords : earthquake, Japan, earthquake statistics, seismic energy, preparedness
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