A 'slow-motion' earthquake lasting 32 years -- the slowest ever recorded -- eventually led to the catastrophic 1861 Sumatra earthquake, researchers at the Nanyang Technological University, Singapore (NTU Singapore) have found.
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The NTU research team says their study highlights potential missing factors or mismodelling in global earthquake risk assessments today.

'Slow motion' earthquakes or 'slow slip events' refer to a type of long, drawn-out stress release phenomenon in which the Earth's tectonic plates slide against one another without causing major ground shaking or destruction. They typically involve movements of between a few cm/year to cm/day.

The NTU team made the surprise discovery while studying historic sea-levels using ancient corals called ‘microatolls’ at Simeulue Island, located off the coast of Sumatra. Growing both sideways and upwards, the disc-shaped coral microatolls are natural recorders of changes in sea level and land elevation, through their visible growth patterns.

Read more at Nanyang Technological University

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