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Daily briefing: The longest-known earthquake lasted 32 years

A 32-year-long undersea quake was recorded in coral. Plus, Thailand's pioneer of mRNA COVID vaccines and what the science says about lifting mask mandates.

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Coral microatolls, such as this one, cannot grow when exposed to air, so their fossilized bodies record elevation changes that push them up out of the water. Aron Meltzner/Earth Observatory of Singapore

Coral scars show 32-year-long earthquake

A devastating earthquake in Indonesia in 1861 was the crescendo of a 32-year-long clash between the tectonic plates below the island. It is the longest such 'slow slip event' ever recorded, and it left its mark in the bodies of the long-lived corals that inhabit the seas above. Researchers analysed growth patterns in corals on Simeulue Island, which were periodically exposed to the air as the land rose up and down. The corals record decades of vertical movement at the fault, from 1738 to the moment they died when thrust up by the 1861 quake. The findings will help seismologists to better understand some of the most dangerous quakes on Earth: the 2004 Indian Ocean earthquake and tsunami that killed more than 220,000 people were preceded by a slow slip.

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