

Geothermal plant 'triggered earthquake' in S. Korea

March 20 2019



Unlike neighbouring Japan, the Korean peninsula rarely experiences significant quakes

A rare earthquake in South Korea was triggered by the country's first experimental geothermal power plant, a team of government-

commissioned experts said Wednesday.

The southeastern port city of Pohang was rattled by a 5.4-magnitude earthquake in November 2017—the second-most powerful tremor ever in the normally seismically stable South.

Dozens of people were injured and more than 1,500 left homeless—while a nationwide college entrance exam was postponed in an unprecedented move as authorities scrambled with recovery efforts.

A year-long government-commissioned study pointed to the geothermal power plant as the cause.

The plant works by injecting high-pressure water deep underground to tap heat from the Earth's crust, but the process had produced micro-sized [seismic activity](#) as a result, said Lee Kang-kun, who led the research.

"And as time passed, this triggered the earthquake in Pohang," he added. "We concluded that the Pohang earthquake was a 'triggered quake'. It wasn't a natural earthquake."

Pohang residents filed a lawsuit against the government after the quake, and following the assessment Seoul expressed its "deep regret".

The geothermal plant—which was temporarily suspended during the study—will be "permanently shuttered", the trade, industry and energy ministry said in a statement.

It cost around 80 billion won (\$71 million) to build and test operations began in 2016.

Unlike neighbouring Japan, the Korean peninsula rarely experiences significant quakes but seismic activity is closely monitored as a spike can

be the first indication that North Korea has staged a [nuclear test](#).

The country's most powerful quake to date was a 5.8-magnitude tremor that struck Gyeongju, also in the southeast, in September 2016.

© 2019 AFP

Citation: Geothermal plant 'triggered earthquake' in S. Korea (2019, March 20) retrieved 14 July 2024 from <https://phys.org/news/2019-03-geothermal-triggered-earthquake-korea.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.