

NATIONAL | FOCUS

Japan's latest quake evokes memories of 3/11. Was it an aftershock?



A supermarket is littered with merchandise in Shiroishi, Miyagi Prefecture, on Thursday after a 7.4 magnitude earthquake jolted northeast Japan the night before. | AFP-JIJI

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The 7.4 magnitude earthquake that hit northeastern Japan late Wednesday shook a region that's still recovering from the devastation of the Great East Japan Earthquake and the ensuing tsunami and nuclear disaster.

But were the two quakes related? And if not, was this temblor a foreshock that could portend an even larger earthquake in the near future, as was the case when a 7.2 magnitude quake struck the Tohoku region two days ahead of the mega-quake on March 11, 2011?

At least three people died and scores more were injured in the Wednesday night quake, which registered a strong 6 on the Japanese seismic intensity scale to 7 in Miyagi and Fukushima prefectures. A smaller quake registering a weak 5 occurred two minutes before the larger shock.

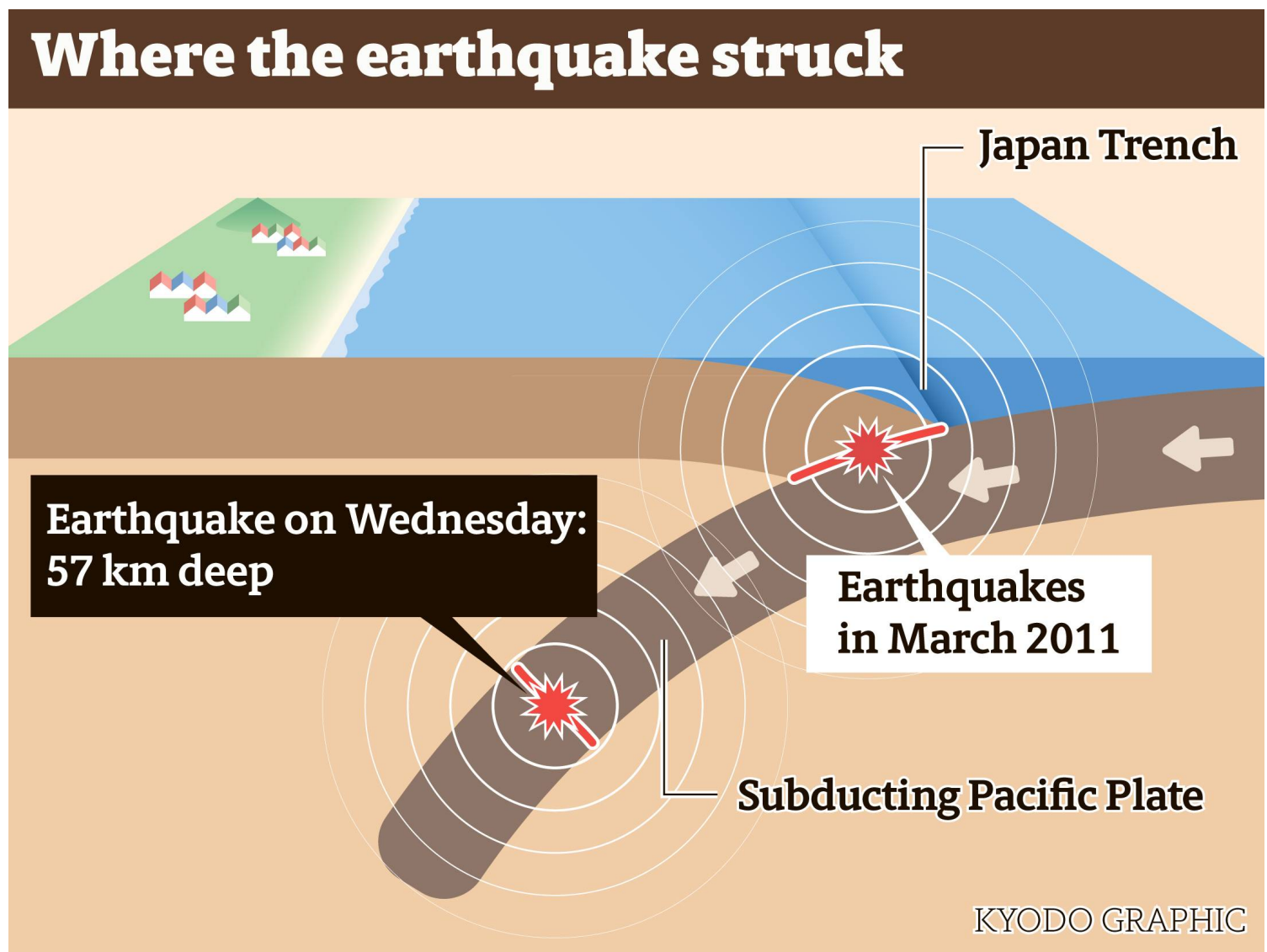
Authorities issued a tsunami advisory for waves of up to a meter in the two prefectures, but the actual waves measured only up to 30 cm higher than usual in some areas.

Masaki Nakamura, a quake expert at the Meteorological Agency, says there is no way of telling whether it is a foreshock of a bigger quake, calling on people to be on alert for a possible tremor of the same scale for about a week or so based on past cases.

In the Tohoku area, the Pacific Plate moving from the east is subducting the North American Plate along a boundary known as the Japan Trench, Nakamura explained during a news conference in the early hours of Thursday morning.

But what was different from the March 2011 quakes, Nakamura said, was that Wednesday's quake didn't occur directly on the plate boundary and was relatively deep at 57 kilometers below the Earth's surface. The epicenter in 2011 occurred on the boundary and was shallower at about 24 km.

"It's a different type," he said.



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A strong quake occurred in almost the same location about a year ago, on Feb. 13, 2021, and the weather agency says there may be a connection between the two tremors, which both occurred in the same area as the March 2011 quakes, Nakamura said. Initially, the Meteorological Agency had said that the February 2021

quake may have been an aftershock of March 2011 but a decade on, the agency has said it is becoming more difficult to determine any linkage.

In 2019, the government's earthquake panel said there is a 60% to 70% chance that a magnitude 7 to 7.5 quake will occur in the next 30 years in the Pacific Plate in the region stretching from off the coast of Ibaraki Prefecture to Aomori Prefecture.

Another earthquake expert offered a conflicting view of Wednesday's quake, seeing it as an aftershock of the March 2011 quakes that was smaller due to its deeper epicenter.

"Broadly speaking, it's an aftershock of the 2011 quakes," Manabu Takahashi, a specially appointed professor at Ritsumeikan University's Research Center for Pan-Pacific Civilization, said. "Because it occurred deeper than in 2011 at 57 km, luckily it did not cause a massive tsunami."

Although the Pacific Plate was the direct cause of Wednesday's quake, it also caused a domino effect on the Philippine Sea Plate further south, which could trigger a large-scale quake that would affect Tokyo, western Japan and Okinawa, said Takahashi.

"The Japanese archipelago is in a dangerous state whether it be volcanoes or earthquakes," Takahashi said.

Staff writer Alex K.T. Martin contributed to this report
