

Discover Yahoo! With Your Friends

Explore news, videos, and much more based on what your friends are reading and watching. Publish your own activity and retain full control.

[Login with Facebook](#)

Today's Japan Earthquake Could Be 2011 Quake Aftershock

By Douglas Main, OurAmazingPlanet Staff Writer | LiveScience.com – 11 hrs ago

Was the 7.3-magnitude earthquake that struck today (Dec. 7) east of Sendai, Japan, in any way related to last year's enormous, 9.0 earthquake?

It's too early to tell definitively, said U.S. Geological Survey (USGS) geophysicist Jessica Turner, but the quake did happen in the "aftershock zone" of the March 2011 Tohoku earthquake. This zone is an area on the ocean floor that the 2011 quake physically moved and where [more than 5,000 aftershocks](#) have been recorded, according to the USGS.

Scientists say it's quite possible for aftershocks to arrive so late. "It's very normal to have aftershocks more than a year later," Turner told OurAmazingPlanet. It's debatable how long aftershocks can occur following earthquakes, however. But last year's monster temblor released so much energy that it wouldn't be surprising if the Earth is still adjusting, Turner said.

In general, such adjustments cause aftershocks, as the earth attempts to "get back to normal," Turner said. "It's going to take a long time for the Earth to get back to the background level of seismicity after last year's event," she said.

The March 2011 quake and subsequent tsunami killed nearly 20,000 people and caused a nuclear crisis when the [Fukushima-Daiichi nuclear plant](#) was destroyed, leaking radiation into the atmosphere and the ocean. [[In Pictures: Japan Earthquake & Tsunami](#)]

Today's earthquake, with a preliminary magnitude of 7.3, was caused by reversing faulting, in which the Pacific Plate subducts, or moves underneath the Eurasian plate, Turner said. The plate-boundary region surrounding the site of today's quake hosts moderate to large earthquakes fairly regularly. Over the past 40 years, 12 earthquakes of magnitude-7.0 or greater have occurred within 155 miles (250 kilometers) of the site, according to the USGS.

The temblor's epicenter was 152 miles (245 km) southeast of Kamaishi, Japan. It originated 22.4 miles (36.1 km) below the Earth's surface and struck at 5:18 p.m. local time (3:18 a.m. ET).

The powerful quake shook buildings as far away as Tokyo and triggered a 3.3-foot (1-meter) tsunami in an area devastated by last year's Fukushima disaster, according to news reports. (If you felt any shaking from the earthquake, you can tell the USGS [here](#).)

Fortunately, today's earthquake hasn't caused any major injuries or destruction, Turner said.

Reach Douglas Main at dmain@techmedianetwork.com. Follow him on Twitter [@Douglas_Main](#). Follow OurAmazingPlanet on Twitter [@OAPlanet](#). We're also on [Facebook](#) and [Google+](#).

- [7 Craziest Ways Japan's Earthquake Affected Earth](#)
- [Image Gallery: This Millennium's Destructive Earthquakes](#)
- [The 10 Biggest Earthquakes in History](#)

Copyright 2012 OurAmazingPlanet, a TechMediaNetwork company. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

