

Series of quakes strikes off Northwest US coast; no tsunamis

June 1 2015, by Tim Fought

A cluster of earthquakes ranging in magnitude up to 5.9 have struck off the coast of the Pacific Northwest, but haven't been strong enough to generate tsunamis, scientists said.

The sixth and seventh quakes in the series struck Monday evening. They were the weakest so far, at magnitude 3.9 and 4.2.

The first quake came a few minutes before midnight Sunday, Pacific time, at magnitude 5.8.

It usually takes an earthquake of magnitude 7 or better to trigger a tsunami, said geophysicist Paul Caruso of the U.S. Geological Survey.

The quakes have been shallow—about 6 miles (9.6 kilometers) deep. They have been centered in an area about 300 miles (480 kilometers) west of Coos Bay, Oregon, along what's known as the Blanco Fracture Zone.

"It's a well-known place for earthquakes," said another agency geophysicist, Julie Dutton. "They're frequent throughout the year."

A 2008 agency report said the zone had produced about 70 quakes of magnitude 5 or greater in the previous 28 years, as many as eight in some years. Also in 2008, scientists detected a swarm of hundreds of smaller quakes.

In the Blanco faults, blocks of crust slide horizontally past each other, Dutton said. Faults that feature blocks rising and falling violently in relation to each other are the kind that can generate the energy for tsunamis, she said.

The magnitude 5.9 quake hit shortly after 1 p.m. Monday.

Reports to the geology agency and law enforcement offices suggest that people along the coast barely felt the earthquakes.

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