

# Nearly 100 earthquakes swarm Yellowstone in 24 hours. Here's what experts are saying

September 14 2020, by Katie Camero, The Idaho Statesman

---



Credit: Unsplash/CC0 Public Domain

A swarm of 91 earthquakes rattled the Yellowstone National Park region in just 24 hours on Thursday, according to the United States Geological Survey. The quakes trembled southwest of Yellowstone Lake between

Heart Lake and West Thumb.

Although the area is one of the most seismically active regions in the U.S., the cluster of quakes "is on the large side in terms of number and magnitude, but nowhere near the largest," Michael Poland, scientist-in-charge at the Yellowstone Volcano Observatory, told McClatchy News in an email.

"Yellowstone has had swarms that include many hundreds of earthquakes in a day," Poland said. "For example, there was a 3-month-long swarm that occurred in June-September 2017 with 2,400 located earthquakes and maximum (magnitude) 4.4." The recent cluster of quakes didn't pass 3.0 magnitude. The biggest temblor was recorded at 2.8 magnitude, while the weakest was measured at 0.1 [magnitude](#). It's when earthquakes reach magnitudes between 2.5 and 5.4 that activity is usually felt, with minor resulting damage.

What's more, the 91 quakes rattled alongside "fake" tremors set off by a "vibroiseis" truck driven through Old Faithful, West Thumb, Canyon Village and Lake Butte as part of an experiment conducted by the University of Utah and University of New Mexico, Poland added.

These trucks are giant vehicles that can weigh up to 70,000 pounds that vibrate steel plates on the ground, sending low frequency energy through it; they are helping to create images of the top of Yellowstone's magma chamber—or that sleeping "supervolcano" people fear will explode unannounced—with the help of hundreds of temporary seismometers located across the park.

Luckily, there are no signs of an imminent eruption. The USGS Volcano Hazards Program declared a "normal" alert level on Sept. 1.

For some, "2020 its just not the year to be messing about with things like

Yellowstone's magma chamber," one Twitter user wrote.

But scientists say there's nothing to worry about. "Happily, the volcano doesn't know what year it is. And even more happily, the Yellowstone magma chamber is mostly solid!" the USGS tweeted Friday in response.

The most recent swarm of earthquakes was good news for seismologists on the project, Poland said.

"So, the 91 quakes were real quakes and it happened to occur when there is also a synthetic experiment happening, which is really cool because it means the natural swarm was 'seen' by hundreds of temporary seismometers!" Poland wrote to McClatchy News. "It will be the best-recorded [earthquake](#) swarm in Yellowstone ever!" The park usually experiences an average of 1,500 to 2,000 earthquakes per year, according to the USGS.

©2020 The Idaho Statesman (Boise, Idaho)  
Distributed by Tribune Content Agency, LLC.

Citation: Nearly 100 earthquakes swarm Yellowstone in 24 hours. Here's what experts are saying (2020, September 14) retrieved 25 April 2024 from <https://phys.org/news/2020-09-earthquakes-swarm-yellowstone-hours-experts.html>

<p>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.</p>
--