

Scientists studying Yellowstone NP earthquake clusters

well, KPAX (Missoula, Mont. television), 11-4-13

YELLOWSTONE- Western Montana and Yellowstone National Park are certainly no strangers to earthquakes, but this summer several clusters of earthquakes were raising the eyebrows of scientists.

This summer marked an event that in many respects was normal around Yellowstone National Park earthquakes. But, there was one exception- the sheer number of earthquakes that shook the area.

30 small magnitude earthquakes occurred between Sept. 10 and Sept. 16 with different epicenters throughout the park- these clusters of earthquakes are known as swarms.

"An earthquake swarm is indeed a cluster of earthquakes without one large outstanding event," Director of Earthquake Studies at Montana Tech, Mike Stickney said

"Earthquake swarms kind of come in two flavors," he added. "One is a main shock-aftershock sequence where a big shock is a big earthquake followed by smaller earthquakes that typically die away with time."

The other is just a bunch of earthquakes without any outstanding earthquake. You get numerous earthquakes of similar magnitude in that sequence of events," Stickney said

The earthquakes that hit Yellowstone in September all fit into the second category. "They were actually very dense if you were looking at a seismograph centered near the epicenter of those earthquakes," Stickney said

"You could be two, three or four-minute earthquakes going off every minute. Most of those were tiny magnitude one or smaller earthquakes," he continued

It's more- visitors to the park may not have even known it was happening. "Depending on how close you are about the animals they might not have even noticed the earthquake," Stickney said.

Stickney said that there are fairly logical explanations, and one of them isn't necessarily that Yellowstone's volcanic activity is back to life

There's good evidence to suggest that as magma, the molten rock at depth, cools, and crystallizes, it releases water and gasses and those make their way out through fractures in the earth to the surface we see as thermal features in the park," Stickney told us