

Bulletin of seismic activity in Oklahoma for the month of March 2022

This bulletin details earthquake activity as analyzed by the Oklahoma Geological Survey for March 2022. During March, a total of 181 earthquakes including 17 quarry blasts (Figure 1), were detected and reviewed. That represents a decrease of 51 earthquakes as compared with the previous month, February 2022, during which 232 earthquakes were detected and reviewed. The cumulative number of earthquakes from January through March 2022 is 659.

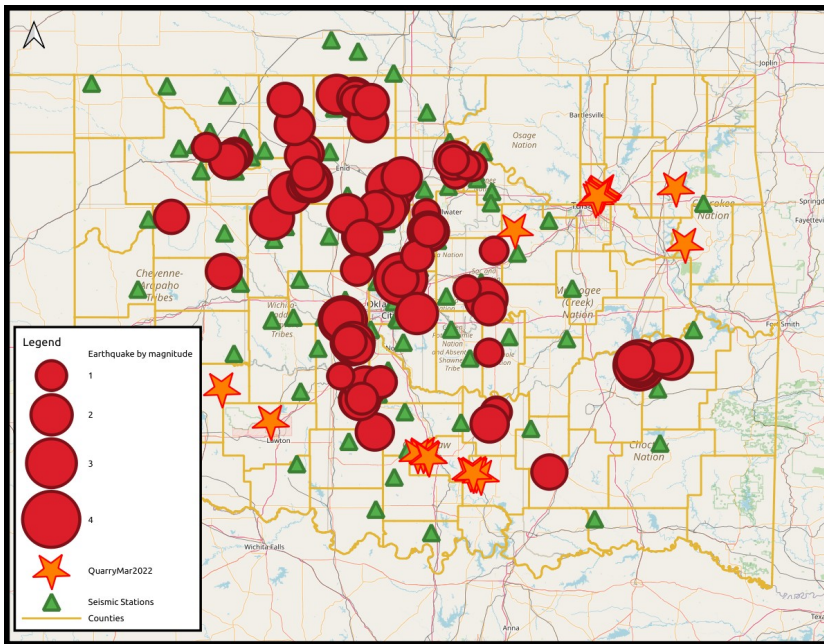


Figure 1. Epicenter Map of Earthquakes in Oklahoma during March 2022.

During March 2022, Pittsburg county recorded the most seismic activity with 38 earthquakes, followed by Grady county with 19 earthquakes. 31 out of 77 counties within the state have experienced at least 1 earthquake in March 2022 (Table 1).

The earthquake depths range from 0 to 27 km while the magnitudes fluctuate from 0.3 M_L to 3.3 M_L (Table 2). Excluding the quarry blasts that have a depth of 0, the average depth during this month is 7.38 km.

Earthquakes per Counties							
County	Earthquakes	County	Earthquakes	County	Earthquakes	County	Earthquakes
Alfalfa	6	Garvin	8	Mayer	1	Seminole	1
Atoka	1	Grady	19	Murray	10	Tulsa	6
Blaine	3	Grant	11	Muskogee	1	Woods	5
Canadian	7	Johnston	1	Noble	4	Woodward	3
Comanche	1	Kingfisher	2	Oklahoma	4		
Creek	1	Kiowa	1	Pawnee	12		
Custer	7	Lincoln	4	Payne	1		
Dewey	1	Logan	14	Pittsburg	38		
Garfield	2	Major	9	Pontotoc	3		

Table 1. Table of earthquakes per county in Oklahoma during March 2022.

Number of Earthquakes per Magnitude range		
Magnitude range	Number of Earthquakes	Earthquake Effects
0 – 0.9	33	Usually not felt.
1 – 1.9	132	Usually not felt.
2 – 2.9	13	Often felt.
3 – 3.9	2	Most likely to be felt

The largest earthquake that was recorded during March 2022 was in Oklahoma county and had a magnitude of 3.3 M_L .

Table 2. Number of earthquakes per magnitude in Oklahoma during March 2022.

For the most current information on earthquakes and other OGS-related news, visit: <https://www.ou.edu/ogs>.