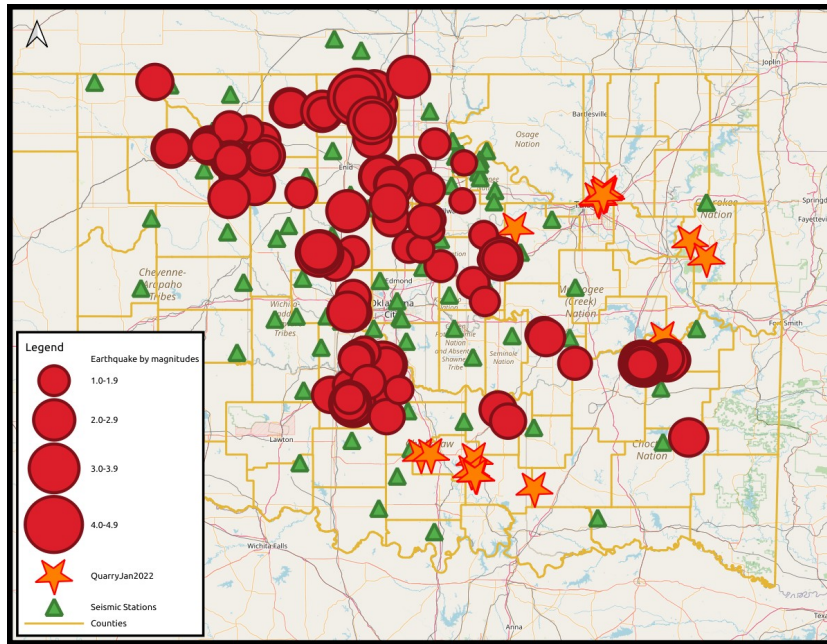


Bulletin of seismic activity in Oklahoma for the month of January 2022

This bulletin details earthquake activity as analyzed by the Oklahoma Geological Survey for January 2022. During January, a total of 246 earthquakes including 17 quarry blasts (Figure 1), were detected and reviewed.

That represents an increase of 63 earthquakes as compared with the previous month, December 2021, during which 183 earthquakes were detected and reviewed.



During January 2022, Pittsburg county recorded the most seismic activity with 39 earthquakes, followed by Grady county with 37 earthquakes. 31 out of 77 counties within the state have experienced at least 1 earthquake in January 2022 (Table 1).

The earthquake depths range from 0 to 24 km while the magnitudes fluctuate from 0.4 M_L to 4.5 M_W (Table 2). Excluding the quarry blasts that have a depth of 0, the average depth during this month is 7.3 km.

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

Earthquakes per Counties							
County	Earthquakes	County	Earthquakes	County	Earthquakes	County	Earthquakes
Alfalfa	6	Grady	37	Major	14	Pontotoc	2
Atoka	1	Grant	13	McClain	19	Tulsa	6
Blaine	1	Harper	1	Murray	6	Woods	2
Canadian	22	Hughes	3	Muskogee	1	Woodward	16
Cherokee	1	Kay	4	Noble	11		
Creek	1	Kingfisher	10	Oklahoma	1		
Dewey	2	Le Flore	1	Pawnee	1		
Garfield	2	Lincoln	6	Payne	2		
Garvin	7	Logan	8	Pittsburg	39		

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

Number of Earthquakes per Magnitude range		
Magnitude range	Number of Earthquakes	Earthquake Effects
0 – 0.9	29	Usually not felt.
1 – 1.9	197	Usually not felt.
2 – 2.9	20	Often felt.
3 – 3.9	0	Most likely to be felt.
4 – 4.9	1	Widely Felt.

The largest earthquake that was recorded during January 2022 was in Grant county and had a magnitude of 4.5 M_W and was widely felt trough all the North Central part of Oklahoma

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

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