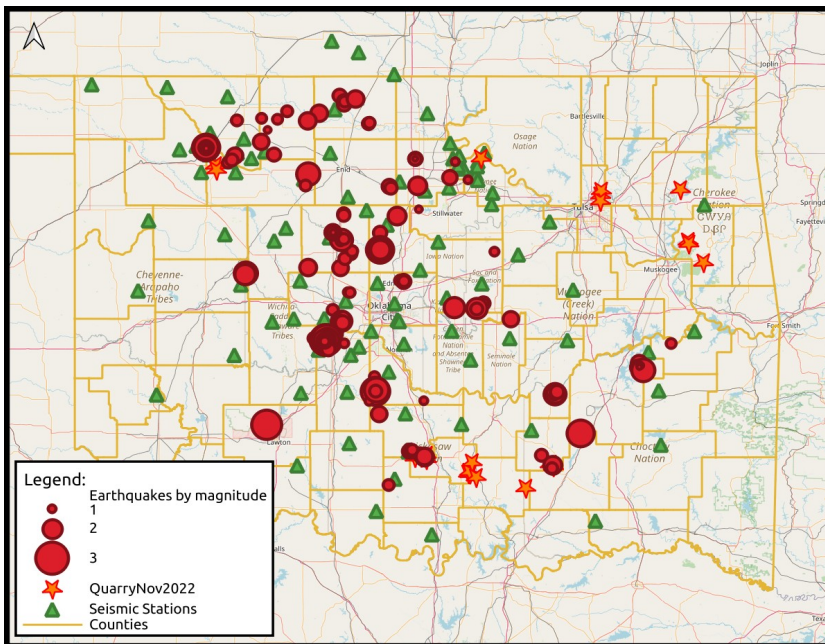


## Bulletin of seismic activity in Oklahoma for the month of November 2022

This bulletin details earthquake activity as analyzed by the Oklahoma Geological Survey for November 2022. During November, a total of 355 earthquakes including 24 quarry blasts (Figure 1), were detected and reviewed. That represents a decrease of 137 earthquakes as compared with the previous month, October 2022, during which 492 earthquakes were detected and reviewed. The cumulative number of earthquakes from January through November 2022 is 2776.



During November 2022, Grady county recorded the most seismic activity with 116 earthquakes, followed by Woodward county with 36 earthquakes. 31 out of 77 counties within the state have experienced at least 1 earthquake in November 2022 (Table 1).

The earthquake depths range from 0 to 27 km while the magnitudes fluctuate from 0.4  $M_L$  to 2.9  $M_L$  (Table 2). Excluding the quarry blasts that have a depth of 0, the average depth during this month is 6.77 km.

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

Earthquakes per Counties							
County	Earthquakes	County	Earthquakes	County	Earthquakes	County	Earthquakes
Alfalfa	10	Garvin	16	Major	4	Osage	1
Blaine	1	Grady	116	Mayes	1	Pawnee	2
Canadian	29	Grant	13	McClain	1	Payne	1
Carter	1	Hughes	12	Murray	15	Pittsburg	8
Cherokee	1	Johnston	1	Muskogee	2	Tulsa	3
Coal	7	Kingfisher	34	Noble	8	Woods	3
Comanche	1	Lincoln	7	Okfuskee	1	Woodward	36
Custer	7	Logan	8	Oklahoma	5		

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

Number of Earthquakes per Magnitude range		
Magnitude range	Number of Earthquakes	Earthquake Effects
0 – 0.9	37	Usually not felt.
1 – 1.9	279	Usually not felt.
2 – 2.9	42	Often felt.

The largest earthquake that was recorded during November 2022 was in Grady county and had a magnitude of 2.9  $M_L$ .

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

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