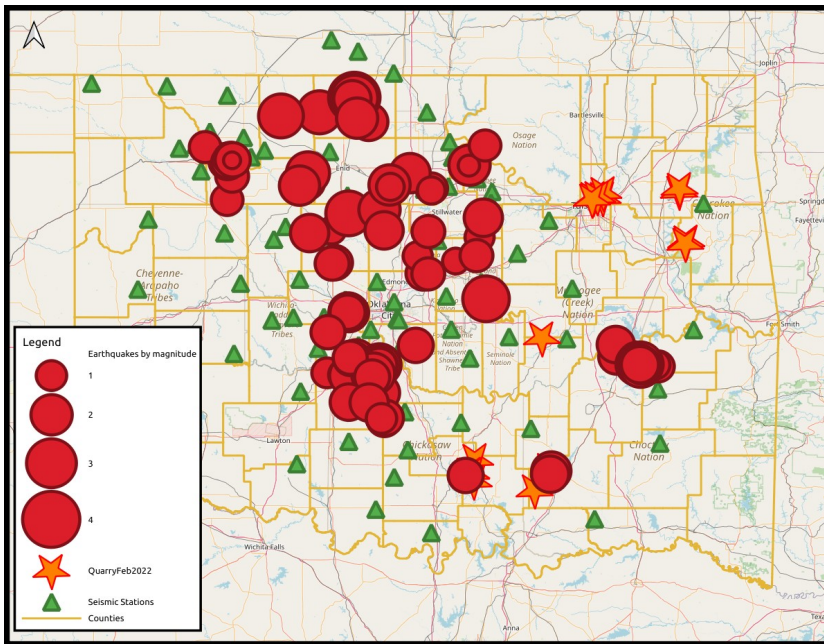


Bulletin of seismic activity in Oklahoma for the month of February 2022

This bulletin details earthquake activity as analyzed by the Oklahoma Geological Survey for February 2022. During February, a total of 232 earthquakes including 17 quarry blasts (Figure 1), were detected and reviewed. That represents a decrease of 14 earthquakes as compared with the previous month, January 2022, during which 246 earthquakes were detected and reviewed. The cumulative number of earthquakes from January through February 2022 is 478.



During February 2022, Pittsburg county recorded the most seismic activity with 55 earthquakes, followed by Grant county with 48 earthquakes. 29 out of 77 counties within the state have experienced at least 1 earthquake in February 2022 (Table 1).

The earthquake depths range from 0 to 27 km while the magnitudes fluctuate from 0.1 M_L to 3.2 M_L (Table 2). Excluding the quarry blasts that have a depth of 0, the average depth during this month is 7.38 km.

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

Earthquakes per Counties							
County	Earthquakes	County	Earthquakes	County	Earthquakes	County	Earthquakes
Alfalfa	3	Grant	48	McIntosh	2	Tulsa	5
Atoka	3	Hughes	1	Murray	5	Woodward	2
Blaine	4	Johnston	1	Muskogee	2		
Canadian	7	Kingfisher	10	Noble	11		
Cleveland	1	Lincoln	6	Oklahoma	2		
Coal	1	Logan	6	Osage	1		
Dewey	1	Major	8	Pawnee	6		
Garvin	8	Mayes	2	Payne	2		
Grady	7	McClain	22	Pittsburg	55		

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

Number of Earthquakes per Magnitude range		
Magnitude range	Number of Earthquakes	Earthquake Effects
0 – 0.9	29	Usually not felt.
1 – 1.9	169	Usually not felt.
2 – 2.9	33	Often felt.
3 – 3.9	1	Most likely to be felt

The largest earthquake that was recorded during February 2022 was in Grant county and had a magnitude of 3.2 M_L .

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

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