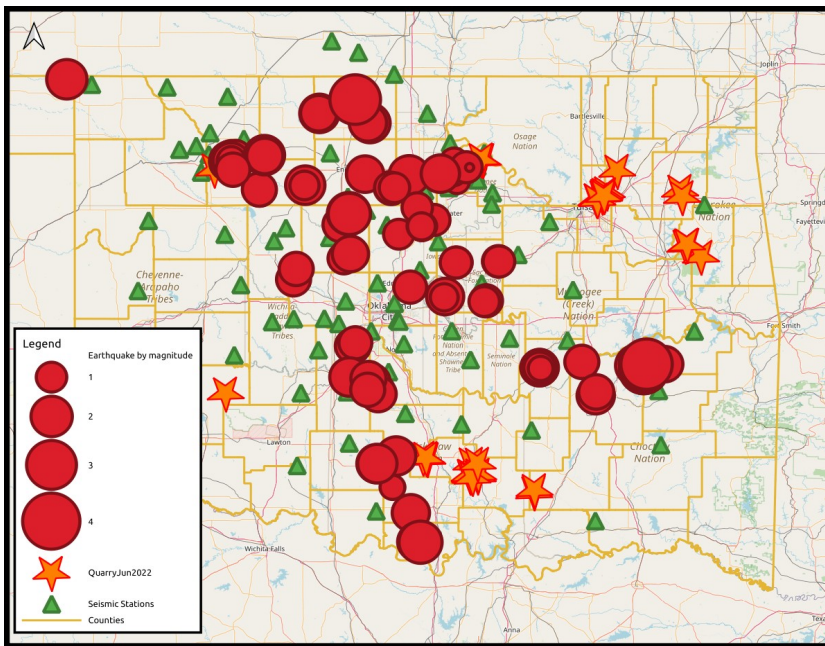




Bulletin of seismic activity in Oklahoma for the month of June 2022

This bulletin details earthquake activity as analyzed by the Oklahoma Geological Survey for June 2022. During June, a total of 206 earthquakes including 32 quarry blasts (Figure 1), were detected and reviewed. That represents a decrease of 40 earthquakes as compared with the previous month, May 2022, during which 246 earthquakes were detected and reviewed. The cumulative number of earthquakes from January through June 2022 is 1288.



During June 2022, Pittsburg county recorded the most seismic activity with 45 earthquakes, followed by Kingfisher and Major counties with 21 earthquakes. 31 out of 77 counties within the state have experienced at least 1 earthquake in June 2022 (Table 1).

The earthquake depths range from 0 to 23 km while the magnitudes fluctuate from 0.4 M_L to 3.1 M_L (Table 2). Excluding the quarry blasts that have a depth of 0, the average depth during this month is 7.37 km.

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

Earthquakes per Counties							
County	Earthquakes	County	Earthquakes	County	Earthquakes	County	Earthquakes
Alfalfa	2	Harper	1	Muskogee	4	Woodward	1
Atoka	2	Huges	6	Noble	8		
Blaine	11	Kingfisher	21	Oklahoma	3		
Caddo	1	Lincoln	7	Pawnee	8		
Carter	5	Logan	6	Payne	1		
Cherokee	1	Love	2	Pittsburg	45		
Garfield	2	Major	21	Rogers	1		
Garvin	5	Mayes	2	Stephens	1		
Grady	3	McClain	3	Tulsa	7		
Grant	13	Murray	11	Woods	2		

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

Number of Earthquakes per Magnitude range		
Magnitude range	Number of Earthquakes	Earthquake Effects
0 – 0.9	27	Usually not felt.
1 – 1.9	167	Usually not felt.
2 – 2.9	10	Often felt.
3 – 3.9	2	Most likely to be felt

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

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

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