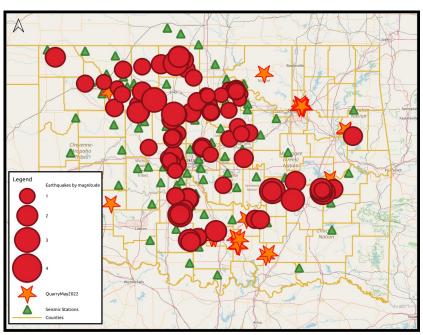
OKLAHOMA GEOLOGICAL SURVEY *The* UNIVERSITY of OKLAHOMA



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

This bulletin details earthquake activity as analyzed by the Oklahoma Geological Survey for May 2022. During May, a total of 246 earthquakes including 28 quarry blasts (Figure 1), were detected and reviewed. That represents an increase of 69 earthquakes as compared with the previous month, April 2022, during which 177 earthquakes were detected and reviewed. The cumulative number of



earthquakes from January through May 2022 is 1082.

During May 2022, Pittsburg county recorded the most seismic activity with 48 earthquakes, followed by Kingfisher county with 23 earthquakes. 37 out of 77 counties within the state have experienced at least 1 earthquake in May 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.

Earthquakes per Counties							
County	Earthquakes	County	Earthquakes	County	Earthquakes	County	Earthquakes
Alfalfa	3	Grant	14	McIntosh	1	Pontotoc	3
Atoka	1	Harper	1	Murray	10	Pottawatomie	1
Blaine	20	Huges	12	Muskogee	2	Rogers	1
Bryan	1	Kay	1	Noble	10	Stephens	7
Canadian	20	Kingfisher	23	Oklahoma	5	Tulsa	7
Carter	5	Kiowa	1	Okmulgee	1	Woods	1
Cherokee	1	Lincoln	7	Osage	1	Woodward	3
Dewey	1	Logan	2	Pawnee	10		
Garvin	3	Major	3	Payne	3		
Grady	2	McClain	11	Pittsburg	48		

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

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

Number of Earthquakes per Magnitude range						
Magnitude range	Number of Earthquakes	Earthquake Effects				
0 – 0.9	22	Usually not felt.				
1-1.9	190	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 May 2022 was in Hughes county and had a magnitude of $3.1~M_L$.

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

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