

10 QUICK FACTS ABOUT THE SPARTA, NC EARTHQUAKE

01.

The magnitude 5.1 earthquake (EQ) occurred at 8:07am on August 9, 2020 in Sparta, Alleghany County. There were no injuries or fatalities.



02.

The hypocenter (the point within Earth's crust where the rocks rupture) was shallow, approximately 2.5 miles (4.7 km) below the surface, according to the US Geological Survey.



03.

This earthquake occurred on the previously-unmapped Little River Fault (LRF) which trends west northwest to southeast, parallel to the Little River in some places.



04.

The LRF is a reverse fault. Reverse faults are caused by horizontal compressional stress, which means rocks on either side of the fault are being pushed together.



05.

There was approximately \$15 million dollars worth of damage in the area, mostly to foundations, chimneys, roads, and utility lines.



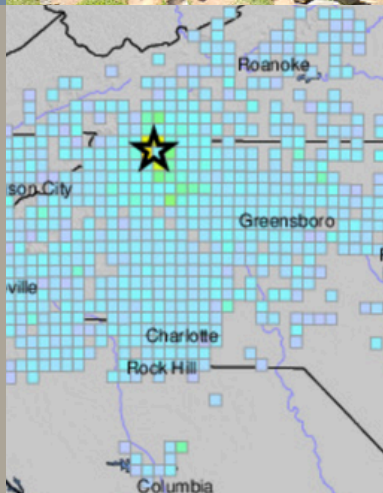
06.

This earthquake caused visible ground rupture, which has never been documented in the eastern U.S. In some locations near Sparta, the ground was displaced by nearly 39 inches.



07.

There were 66,717 responses to USGS' "Did you feel it?" Visit their website for more information:
<https://earthquake.usgs.gov/earthquakes/eventpage/se60324281/executive>



08.

There were eight foreshocks - small earthquakes that occur before the major earthquake. Magnitudes ranged from M1.8 - 2.6.



09.

There were approximately 300 aftershocks, smaller earthquakes that occur after the major earthquake, over the next 6 months. The largest had a magnitude of M2.9, but most were less than M1.5.



10.

North Carolina is not located in an active seismic area. This EQ and other small EQs in our state are likely old 'scars' left over from active plate tectonic activity millions of years ago.

