



Oklahoma Geological Survey

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M5 and aftershocks near Cushing, OK

A M5.0 earthquake occurred on the evening of 2016 November 06, about 2 miles west of Cushing, OK. This area has been an active zone of seismicity since 2015. The USGS estimates the maximum Modified Mercalli Intensity to be VI, in accord with reports of damage near the epicenter.

We derived several focal plane solutions (FPS or beachball diagrams) from each event that indicate strike-slip displacement dominated the motion along the fault.

The magnitude 5.0 earthquake has already triggered several aftershocks of magnitudes less than 3. Aftershocks are earthquakes that occur following a large earthquake, in the same general area as the earthquake, ranging from days to even a few years. The likelihood of an aftershock being larger than this earthquake is about 5%. Aftershocks have the potential to create damage, just like other earthquakes and are a normal occurrence after large earthquakes. They may be expected to continue and become less frequent with time. If you have observed damage to your residence or workplace, please note that further damage from aftershocks is possible.

In case of further seismicity, we urge the public to protect themselves from falling objects: (1) drop to the ground; (2) cover your head and neck; and (3) hold on to any sturdy cover.

