

Earth Tremors in Nigeria: A Precursor to Major Disaster?

Authors : Oluseyi Adunola Bamisaiye

Abstract : The frequency of occurrence of earth tremor in Nigeria has increased tremendously in recent years. Slow earthquakes/ tremor have preceded some large earthquakes in some other regions of the world and the Nigerian case may not be an exception. Timely and careful investigation of these tremors may reveal their relation to large earthquakes and provides important clues to constrain the slip rates on tectonic faults. Thus making it imperative to keep under watch and also study carefully the tectonically active terrains within the country, in order to adequately forecast, prescribe mitigation measures and in order to avoid a major disaster. This report provides new evidence of a slow slip transient in a strongly locked seismogenic zone of the Okemesi fold belt. The aim of this research is to investigate the different methods of earth tremor monitoring using fault slip analysis and mapping of Okemesi hills, which has been the most recent epicenter to most of the recent tremors.

Keywords : earth tremor, fault slip, intraplate activities, plate tectonics

Conference Title : ICESG 2020 : International Conference on Earth Science and Geography

Conference Location : Vienna, Austria

Conference Dates : December 24-25, 2020