

Nowcasting earthquake occurrence in Sabah

ABSTRACT

. In line with the increasing availability of seismic data, nowcasting method provides a systematic way to depict the current state of earthquake hazard within a specific geographic area. This paper implements nowcasting method to statistically assess the earthquake progression in Sabah region over the large earthquakes cycle. The analysis includes earthquake data in the state of Sabah and the surrounding regions, which is acquired from Malaysia Meteorological Department catalogue and United States Geological Survey (USGS) catalogue from year 2009 to 2018. This study discovered that EPS corresponding to $M \geq 4$ events in Ranau and Lahad Datu reach about 92% and 97%, respectively. These findings indicate that both areas are in the last quarter way through their cycle to magnitude 4.0 or larger earthquakes.