

## Classification Earthquake Distribution in the Banda Sea Collision Zone with Point Process Approach

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**Abstract :** Banda Sea collision zone (BSCZ) of is the result of the interaction and convergence of Indo-Australian plate, Eurasian plate and Pacific plate. This location in the eastern part of Indonesia. This zone has a very high seismic activity. In this research, we will be calculated rate ( $\lambda$ ) and Mean Square Error (MSE). By this result, we will identification of Poisson distribution of earthquakes in the BSCZ with the point process approach. Chi-square test approach and test Anscombe made in the process of identifying a Poisson distribution in the partition area. The data used are earthquakes with Magnitude  $\geq 6$  SR and its period 1964-2013 and sourced from BMKG Jakarta. This research is expected to contribute to the Moluccas Province and surrounding local governments in performing spatial plan document related to disaster management.

**Keywords :** molluca banda sea collision zone, earthquakes, mean square error, poisson distribution, chi-square test, anscombe test

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