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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 (λ) and Mean Square Eror (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

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