

## **Geoplanology Modeling and Applications Engineering of Earth in Spatial Planning Related with Geological Hazard in Cilegon, Banten, Indonesia**

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**Abstract :** The condition of a spatial land in the industrial park needs special attention to be studied more deeply. Geoplanology modeling can help arrange area according to his ability. This research method is to perform the analysis of remote sensing, Geographic Information System, and more comprehensive analysis to determine geological characteristics and the ability to land on the area of research and its relation to the geological disaster. Cilegon is part of Banten province located in western Java, and the direction of the north is the Strait of Borneo. While the southern part is bordering the Indian Ocean. Morphology study area is located in the highlands to low. In the highlands of identified potential landslide prone, whereas in low-lying areas of potential flooding. Moreover, in the study area has the potential prone to earthquakes, this is due to the proximity of enough research to Mount Krakatau and Subduction Zone. From the results of this study show that the study area has a susceptibility to landslides located around the District Waringinkurung. While the region as a potential flood areas in the District of Cilegon and surrounding areas. Based on the seismic data, this area includes zones with a range of magnitude 1.5 to 5.5 magnitude at a depth of 1 to 60 Km. As for the ability of its territory, based on the analyzes and studies carried out the need for renewal of the map Spatial Plan that has been made, considering the development of a fairly rapid Cilegon area.

**Keywords :** geoplanology, spatial plan, geological hazard, cilegon, Indonesia

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