PBEG12-104

Potential of Limestone Geohazard by Using GIS Analysis at Kg. Gunung Batu Melintang, Jeli, Kelantan

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Rigorous geological fissures and their connection to karst structure in tropical regions are frequently resulted with unpredictable environmental and geotechnical engineering problems. This requires an accurate modelling using modern techniques. This paper discussed about the identification of limestone karst condition at Kg. Gunung Batu Melintang, Jeli by using GIS and to mark the potential limestone geohazard in that particular area. For the determination of potential limestone geohazard, the raster multi-overlay analysis method was selected. The analysis of raster data was performed by using the ArcGIS-integrated weighted overlay tools corresponding to the specifications assessment. Based on the GIS analysis interpretation, the potential of limestone geohazard in this area is considered only moderate hazard and its potential hazard values did not exceed the value of 6.5. From thematic geohazard map analysis, the limestone geohazard that might occurring within the marked zone could be rock falls, sinkhole or land subsidence. Thus, the further precautions should be taken to avoid any misfortune and losses.