

Ordinary kriging as a method to determine the clay mapping distribution in highland area of Sabah

ABSTRACT

Ordinary Kriging (OK), is one of the geostatistical methods, which were used in the variation types of mapping, which related to the soil. Compliment by semivariogram models, OK has become one of the most sought out method for the digital mapping, which applied Geographical Information System (GIS) as a main approach. In this method, four semivariogram models, which are spherical, exponential, circular and gaussian would be applied to determine the best model for the mapping purposes, with RMSE as a performance indicator. This method would be implemented in determining the clay mapping distribution for Kundasang area in Sabah, which has been known for the highland tourism and susceptible for the geohazard such as soil mass movement and landslides. Through this method, the clay percentage distribution mapping would be produced.