

ABSTRACT

One of the problem in minning is estimation the levels in one of area closely related with the method that used in that estimation in order to get the true method. In the present study, the Universal Kriging method is used for estimation the levels besides the sample data that contained in Kutai Kertanegara.

Kriging method consist of a variety like ordinary kriging, simple kriging. Ordinary and simple kriging just can be used for the stationary data, but for the nonstationary data or called drift, the method for estimation is Universal Kriging. The phase is count the eksperimental semivariogram, teority semivariogram, model validation and esmtimation using Universal Kriging. The best semivariogram model is eksponensial model with the parameter value, nugget effect : 0. sill : 3.6 and range : 20. Estimation is done by dividing the area into small square or called grid and search the centre as a estimates point. The best estimating obtained with the value grid : 0.77 that which produces variance : 0.0497053 and MAPE : 13.34371257%. Based on that experiments, the information explain that the smaller the grid size, the higher the rate of spread which causes more points that can be estimated.

Keywords : *semivariogram, Universal Kriging, estimation, grid*