

Total sulfur variability analysis of coal deposits using ordinary kriging estimation

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Abstract. Coal's price collapse has become a challenge in the exploration and exploitation of coal deposits in the mining industry. Total sulfur is one of the coal qualities sufficiently considered in the use of coal. The Geostatistics method using ordinary kriging estimation is done to determine the variation of total sulfur in the coal seam. Modeling was performed on every three meters of coal thickness using 193 samples on a seam of coal with a thickness of up to 30 meters. The results obtained prove to be variations in each layer model. These results can assist in selecting mining stages and exploration drilling activities in the context of increasing coal reserves.

Keywords: Coal, Total sulfur, Ordinary kriging