ABSTRACT

Increases of motor vehicle usage and industrial growth in Bandung cause the never-ending growth of air pollutant level. This research explains of how to estimate the spread of pollutants that increase air pollutant level in Bandung. Estimation of air pollutant spread in Bandung is hopefully able to help reducing the growth of air pollution in Bandung. The pollutant growths that will be estimated are Nitrogen Dioxide (NO₂) and Sulfur Dioxide (SO₂). The estimation of air pollutant in Bandung could be done with geo-statistical approach. The method that used in this research are Inverse Distance Weighted (IDW) and Ordinary Kriging (OK). Sample data that used in this research is the pollutant level of Nitrogen Dioxide (NO₂) and Sulfur Dioxide (SO₂) in 10 points of Bandung from 2005 to 2007. The comparison of these two methods is hoped to give the best estimation. The research shows that Ordinary Kriging(OK) give better estimation than Inverse Distance Weighted (IDW) because Ordinary Kriging (OK) method give error and confidence measurement.

Keywords: Estimation, SO₂, NO₂, Inverse Distance Weighted, Ordinary Kriging.