

## **ABSTRACT**

*Predicting the pattern's system of dengue's disease in Sukoharjo region is formed by semivariogram model and Ordinary Block Kriging estimation. This model and method are do not require the information of data's mean, so that it is simpler. Cross validation are used to measure the validity of the model, then it is feasible to continue the next proccess.*

*The best model in this research is Gaussian, that has 0.3140 of validity value, and 0.0251 of kriging variance by grid 0.05. From that result, it can conclude that the largest distributing are in Kartasura, Gatak, Baki, and Grogol region . The ratio between training data and estimating result has 0.158845523 of error tolerance or about 15%. The prediction result indicates an X factor that influence the distributing of dengue's disease in Sukoharjo region.*

**Keywords :** *semivariogram, ordinary kriging, cross validation*