ABSTRACT

The city of Bandung have almost the same problem with other towns, namely, one of which is a bottleneck. Congestion in Bandung occurred caused by various aspects. One cause is the vehicle of a private car. Spatial analysis is closely related to methods used in predicting the number of private cars distribution with the goal of accurate results. One of the methods used are universal kriging. Geostatistical method Kriging was used to estimate the value of a point against point more to get a new point as value predictions, or in other words the use of spatial data. In this case, universal kriging method used in the prediction of the number of private cars scattered around points of congestion in the city of Bandung. Universal kriging is kriging the data of a non-stationary. In this simulation, modeling with a contour map is used to describe the distribution of results the number of private cars as well as presented the results of the estimation. The stages being performed include the calculation of the value of the experimental semivariogram, theoretical semivariogram model validation, testing, and using universal kriging estimation. Once defined the best model that is used in the process of fitting a semivariogram model previously then proceeded into the process of estimation and validation of models, obtained a value of variance for each model was the best. The value of variance is sought based on congestion point and range time congestion. The value of the smallest of kriging variance 2.34047 E-05 on Pungkur Road at the time of the working day (Weekday) time 6.00-8.00 am. Then there are the largest variance value on the Stones at the time 16.00-18.00 pm. After the kriging estimation is done, find the value of variance is needed to measure the accuracy of the data. Obtained information that at the time the weekday morning Gaussian model is selected that has the value variance of 0.047452932. On a weekday afternoon exponential model is selected that has the value variance of 0.016214159. On a weekday afternoon exponential model is selected that has the value variance of 0.007402846. On a weekend morning a spherical model variance has a value of 0.029550205. On a weekend during the exponential model is selected that has the value variance of 0.030334276. As for the exponential model afternoon weekend elected that has a value of variance of 0.03512605. The smaller the value of variance is better for the estimation accuracy and in accordance with the actual conditions

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