Abstract

This study discusses the development of a prediction model for the classification of rainfall based on time in Java. The method used in this research is naive bayes and simple kriging. Naive Bayes is used for classification pre-diction, while simple kriging is an interpolation method used for mapping. There are two scenarios used, that is building a prediction model for daily and monthly rainfall classification, with data taken from 27 weather stations on the island of Java from 2010 to 2021. The results obtained in the classification process are an accuracy value of 67% for the daily model and 88% for the monthly model. The daily model data uses a spherical semivariogram with an average RMSE of 1,021. For the monthly model data using a Gaussian semivariogram with an average RMSE of 0,34. Then interpolation using simple kriging for mapping rainfall. The results of this study are predic-tions for the classification and mapping of daily rainfall models from April 1 to April 7 2022 and monthly models from April to September 2022. The contribution of this research is to provide predictive information and mapping of future rainfall so that public people can anticipate more.

Keywords: naïve bayes, simple kriging, interpolation, classification