Abstract

COVID-19 has not yet subsided in all countries, including Indonesia. As a result, all community activities are limited which results in a decline in the economy in Indonesia. Therefore, the researcher conducted a study to forecast the daily spread of new COVID-19 cases in East Java by using data on new cases and newly recovered cases. This study aims to predict the daily number of new COVID-19 cases in East Java. In this study, the model used to predict new cases of COVID-19 is the Vector Autoregressive Moving Average (VARMA) model. The results of this study indicate that the VARMA(5,1) model has a MAPE value of 12.18%. The smaller the MAPE value, the better the model or forecasting results.

Keywords: COVID-19, new case, forecast, VARMA, east java, MAPE