

## ABSTRACT

### **Water precipitation in Bandung according to time series analysisi with SARIMA Model ( *Seasonal Autoregressive Integrated Moving Average*)**

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Weather forecasting is one of the main needs to support activities in various fields. Information needed is in the form of weather or climate predictions. To get precise and accurate results, many weather forecasting methods have been developed, namely ARIMA and SARIMA which are based on several aspects including time aspects. , aspects of the desired level of prediction accuracy, and aspects of the model that you want to observe. Based on its function, current weather forecasts are needed, along with more and more parties using and utilizing this information. Therefore BMKG is required to be able to provide fast information , accurate and precise. Thus, the development of science in an effort to answer these challenges is becoming increasingly important. New methods are needed that can accommodate the need for increasingly complex weather information. Based on the problems in this study the writer will research and search and try to find a good model using the SARIMA method because this model is easier to test when the data has Seasonal data. The aim of this research is to determine the level of accuracy of the SARIMA method for rainfall prediction and to try new things where the effect of differencing for the SARIMA model can affect the accuracy of the SARIMA method with the data used is the average rainfall data in January. 2016- December 2019 .