

## Abstract

Renewable energy utilization for power plants in Indonesia is still inconsiderable. From research that has been done, Indonesia has 9,1 gigawatt of wind power potential for power plants. Wind spread become a thing when we want to build wind power plants. In this study wind speed data was collected in several places using anemometer, then dataset that has been collected analyzed with linear regression time series. before analyzing dataset, dataset must have been in a stationary form before analyzed with linear regression time series. 39 from 42 dataset has been found nonstationary, therefore we can't use linear regression time series to analyze our dataset. We use linear regression model to analyze the remaining data. Based on RMSE value from 3 location point, anemometer 2 have RMSE mode  $< 1$  as much as 10, thus we can conclude anemometer 2 location point is the optimal point when we want to place propeller for harvesting wind energy in Telkom university landmark tower.

Keywords : Linear Regression, time series, renewable energy, wind speed

