
Abstract

The increase in air temperature due to climate change and global warming is a concern for many people, especially in big cities in Jakarta, the impact of an increase in temperature is an increase in demand, energy consumption to extreme changes. temperature. The model used in this research is Conv-Bidirectional Long Short-Term Memory (Conv-BiLSTM) and Bidirectional Long Short-Term Memory (BiLSTM). In this study the data used is ERA5 temperature data located in Tanjung Priok, North Jakarta with a period of 5 years (2017-2021), as training data the author only uses 4 years (80%) to train the model, to be able to predict data Last 1 year and some short data test 3, 7, and 14 days ahead. Forecasting results obtained by Conv-BiLSTM show relatively better results than BiLSTM. This result is because Conv-BiLSTM uses a 1d convolutional layer to select better features for inclusion in BiLSTM. The results of this study indicate that Conv-BiLSTM provides better performance than BiLSTM when predicting long and short term data.

Keywords: *Forecast, Prediction, Temperature, Weather, Climate, Convolutional Long Short Term Memory, Convolutional Neural Network – Long Short Term Memory.*
