

## ABSTRACT

Sea Level Forecasting is vital for shores engineering applications such as for engineering construction plan in the shore or in offshore, and routing ships at harbour. Researcher have been conducting many methods to predict sea levels, such as Artificial Neural Network, SARIMA, and ARIMA. In This Paper, we will use a model of Autoregressive Integrated Moving Avarage(ARIMA) to predict sea level in Cilacap, Indonesia. The ARIMA parameters are obtained by conducting parameter tuning so that the model give the lowest root mean square error value (RMSE) and highest correlation coefficient.

**Key Word** : *Sea Level, Forecasting, ARIMA, Root Mean Square Error (RMSE), correlation coefficient.*