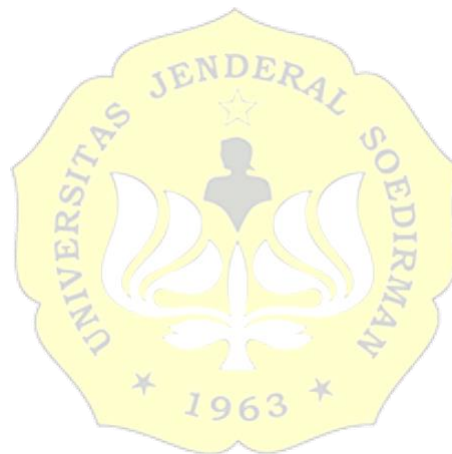


## ABSTRAK

Informasi terkait suhu udara sangat penting bagi masyarakat di Kabupaten Cilacap khususnya masyarakat di daerah pesisir pantai yang menjadi produsen ikan asin dan garam. Tujuan dari penelitian ini adalah memodelkan data suhu udara di Kabupaten Cilacap periode Januari 2009 sampai Desember 2021 untuk peramalan suhu udara minimum, suhu udara rata-rata dan suhu udara maksimum di periode berikutnya. Metode yang digunakan yaitu metode analisis deret waktu SARIMA. Hasil penelitian menunjukkan bahwa model paling akurat untuk data suhu udara minimum yaitu SARIMA(0,1,1) (0,1,1)<sup>12</sup> dengan MAPE 2,1225% dan RMSE 0,6454. Model data suhu udara maksimum yaitu SARIMA(1,1,1)(0,1,1)<sup>12</sup> dengan MAPE 1,9846% dan RMSE 0,8787. Sementara, model SARIMA(1,1,1)(0,1,1)<sup>12</sup> tidak layak untuk peramalan suhu udara rata-rata karena residu model tidak berdistribusi normal.

**Kata kunci:** Suhu udara, SARIMA, MAPE dan RMSE



## **ABSTRACT**

*Information about air temperature is important for people in Cilacap Regency, especially for people in beach areas who are producers of a salted fish and salt. The purpose of this research is to model air temperature data in Cilacap Regency for the period January 2009 to December 2021 to forecast minimum air temperature, average air temperature and maximum air temperature in the following period. The method used is the SARIMA time series analysis method. The research results show that the most accurate model for minimum air temperature data is SARIMA(0,1,1) (0,1,1)<sup>12</sup> with MAPE 2.1225% and RMSE 0.6454. The maximum air temperature data model is SARIMA(1,1,1)(0,1,1)<sup>12</sup> with MAPE 1.98467% and RMSE 0.8787. Meanwhile, the SARIMA(1,1,1)(0,1,1)<sup>12</sup> model is not suitable for forecasting average air temperature because the model residuals are not normally distributed.*

**Keywords:** Air temperature, SARIMA, MAPE and RMSE

