ABSTRACT

Aircraft often experience delays that interfere with passenger activity. Especially on the weather factor which is so very big influence on aircraft flight delays. This research will discuss about the prediction of aircraft delay using the ARIMA (Autoregressive Integrated Moving Average) method. This research used the case of Halim Pradana Kusuma, Semarang, Surabaya and Yogyakarta. In this study an evaluation of domestic flights served by the Wings Air airline at Bandung Husein Sastra Negara Airport.

The actual aircraft data was obtained using the Minitab 16 application program and the daily flight schedule of the aircraft was obtained from PT Angkasa Pura II. Evaluation is done by processing aircraft time performance data in September and October 2019. The existence of this research topic provides information via the web to the passengers to help and make it easier to see flight schedules if there is a delay on the plane. Flight delay analysis uses the ARIMA (Autoregressive Integrated Moving Aviation) method where this forecasting measures in the short term.

From the results of this study show that the model of forecasting delays with the help of minitab 16 gives the results of the Model Arima Arrival Halim Pradana kusuma with plane code IW 1721 HLM September Arima (2,1,2) MSE 4061.7, October Arima (1,1,2) MSE 5105. Arima model Arrival Semarang with the IW 1895 SRG aircraft code September model Arima (1,1,2) MSE 4421, October ARIMA (0,1,1) MSE 11398, IW 1897 SRG September model Arima (3,1,3) MSE 623.0, October model Arima (0,1,1) MSE 2805.1. Arima Model Arrival Surabaya with the plane code IW 1971 SUB September model Arima (0,1,1) MSE 660.5, October Arima (2,1,2) MSE 1449.7, IW 1973 SUB September Arima (3,1,3) MSE 2852.7, October Arima (3,1,3) MSE 1821.5. Arima Model Arrival Yogyakarta IW 1907 JOG September Arima (2,1,3) MSE 1078.6, October Arima (3,1,3) MSE 909.4, IW 1811 JOG September Arima (0,1,2) MSE 3136.0, October Arima (0,1,1) MSE 4070.

Keywords: delay, ARIMA, minitab 16, web.