ABSTRACT

Wind speed has a great influence on the lives, such as one element of weather climate that is used to determine the regional climate. Besides wind speed is also a factor that greatly considered in airport as aircraft landing considerations. Therefore there is need for prediction system of wind speed for some time later.

In this thesis I did a wind speed prediction using neural network autoregressive with exogenous inputs (NNARX). NNARX is a variant of ANN by utilizing exogenous inputs in the learning process.

At the end of the study can be concluded that NNARX have more capabilities than the ANN if the exogenous inputs used to have strong relations with the predicted data

Keywords: NNARX, ANN, predictions, wind speed, exogenous inputs