

FORECASTING OF WIND SPEED AND DIRECTIONS IN KIRKLARELI, TURKEY BY SIMPLE MULTILAYER PERCEPTRON

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ABSTRACT

Artificial neural network model was used for short term wind speed and wind directions forecasting in the Kirklareli area, located in the Marmara region of Turkey in this paper. Using data of 2010 year that was obtained from State Meteorological Service. A simple ANN model was used in this study. The mean squared error and approximation values for training of this model were 0.231491 and 0.994802, respectively. Only 153 data was used in this study. 38 data of them was used for testing and validation of the Multilayer Perceptron. The ANN model used in the study has produced satisfactory results. The model can be used by the Kirklareli Electric Utility Control Center.