

Artificial Neural Network Model to Forecast Ozone Concentration over Kolkata

ABSTRACT: Purpose of the present paper is to develop a model to forecast the ozone concentration (ppm) over Kolkata ($22^{\circ} 32'$, $88^{\circ} 22'$). The method adopted in this study belongs to soft computing category. The component of soft computing technique taken up is the Artificial Neural Network (ANN). The ANN Model considered for the purpose is multilayer perceptron model with Delta learning rule. Linear as well as nonlinear perceptron are attempted and the performances of the both are compared. The result reveals that non – linear perceptron model provides better prediction than the linear one. The quality of prediction is quantitatively evaluated. The suitability of ANN model for forecasting the average ozone concentration over Kolkata could thus be established.