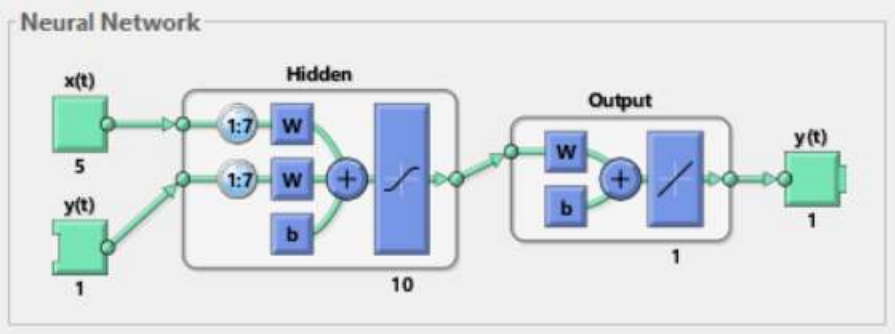
Forecasting with Artificial Neural Network

- Done using MATLAB
- The Structure contains 7 Input layers and 10 Hidden layers
- The Activation function used is Sigmoid Function [1/ {1+exp ($P^{Transpose} * T$)}]
- Error reducing of cost function is done using Back-Propagation method.

Structure of Neural nets



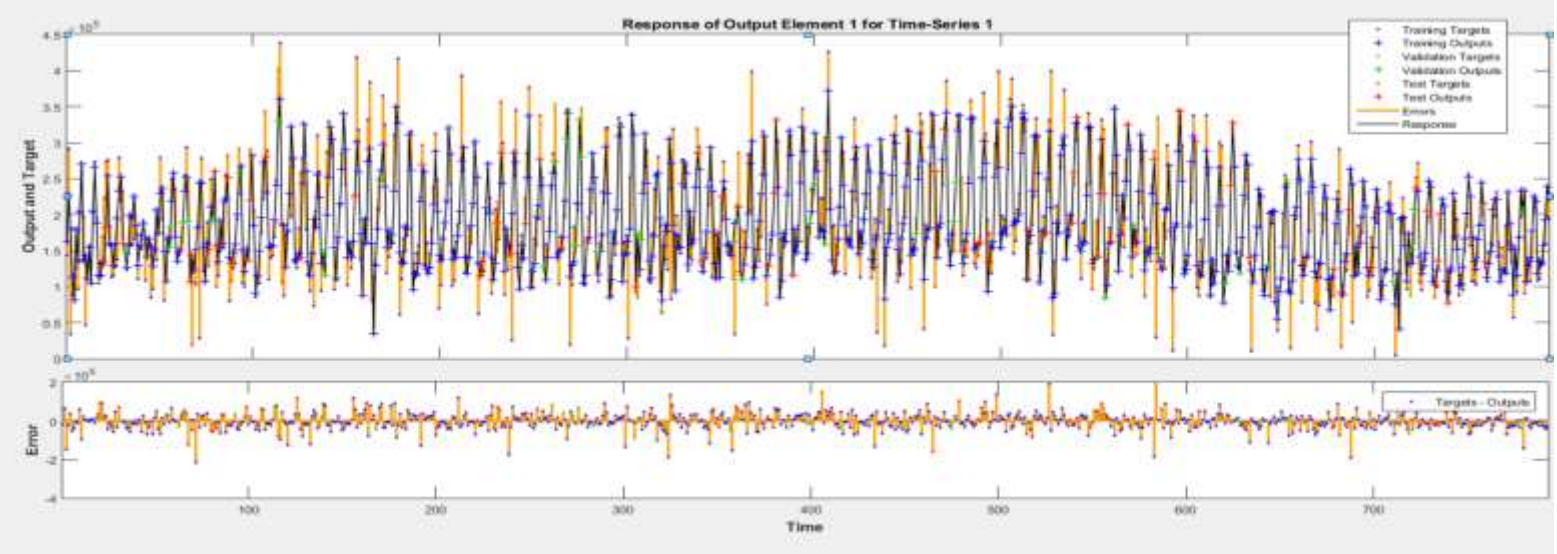
[x(t)] - date, day, month, year, degree

[y(t)] – total_consumption

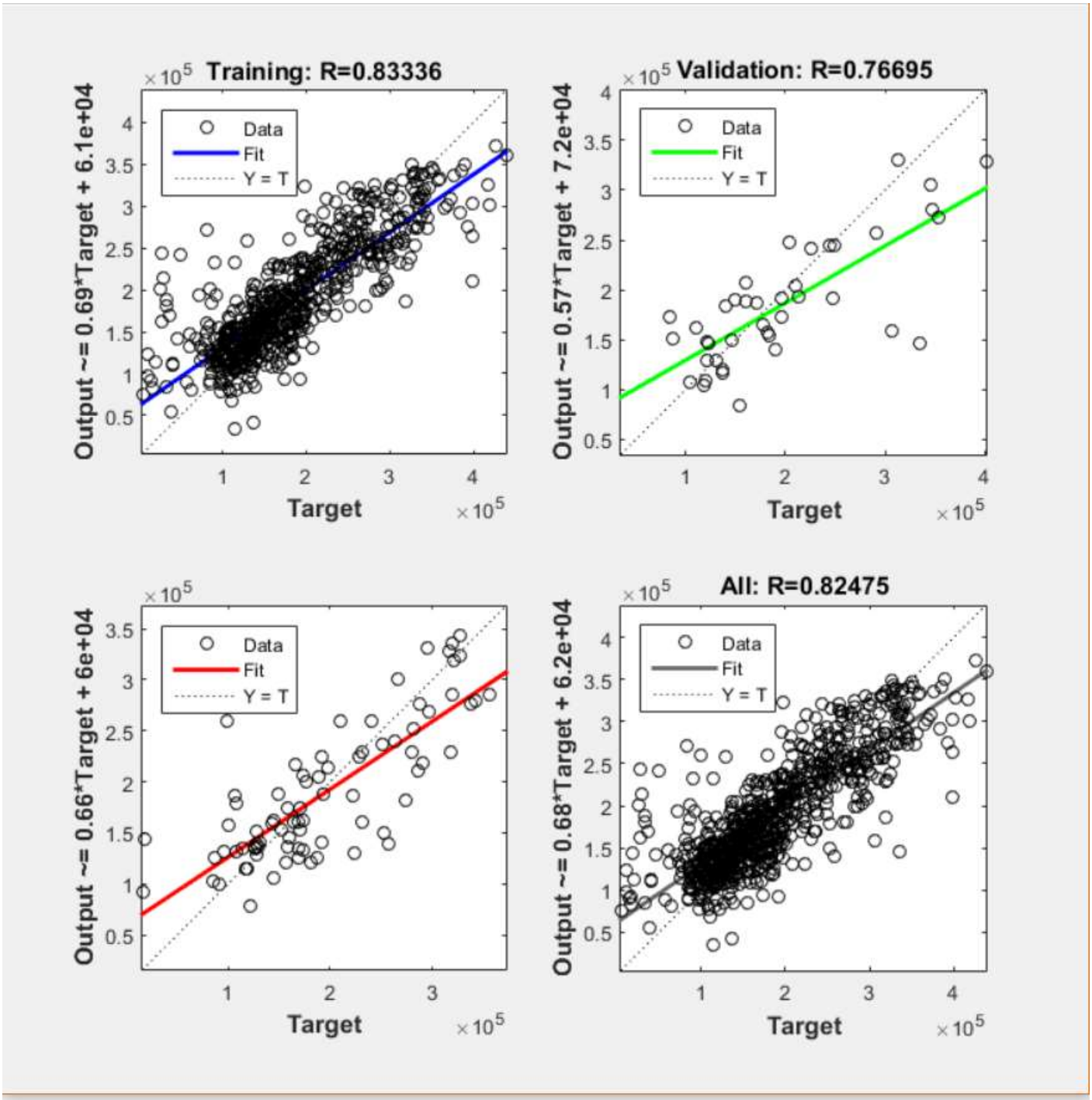
Input layers - 7

Hidden layers – 10

Time Series Forecasted Response



Regression Plots



Final result with an overall efficiency of 82.45 %