- And finally shows the status or output of the whole system.

6. Conclusion

In this work the FP Growth Algorithm was used to generate decision trees and rules for classifying weather parameters such as maximum temperature, minimum temperature, rainfall, humidity and wind speed in terms of the month and year. The input data used in this project ate collected from weather department in between 2010 to 2014 for Nagpur station. On the available data sets apply FP Growth algorithm with the evaluation of MAE, MSE and SD. These calculations are accurate more than the existing model Neural Network (NN). It requires the output sensor s like radar, tipping bucket and etc. With FP Growth Algorithm shows correct monthly rainfall prediction than Neural Network. This work is important to climatic change studies because the variation in weather conditions in term of temperature, rainfall and wind speed can be studied using these data mining techniques.

References

[1] Carlos Domenech and Tobias Wehr," Use of Artificial Neural Networks to Retrieve TOA SW Radiative Fluxes for the Earth CARE Mission" IEEE trans on geo science and remote sensing,VOL.49,NO.6,pp.1841-1843 ,JUNE 2011.
[2] Andrew Kusiak," Modelling and Prediction of Rainfall Using Radar Reflectivity Data: A Data-Mining Approach" " IEEE trans on geo science and remote sensing,VOL.51,NO.4,pp.2337-2339,APRIL 2013.
[3] Stephen Dunne and Bidisha Ghosh," Weather Adaptive Traffic Prediction Using Neuro wavelet Models" , IEEE trans on intelligent transportation system, VOL. 14, NO. 1,pp.370, MARCH 2013.
[4] Kit Yan Chan,'' Neural-Network-Based Models for Short-Term Traffic Flow Forecasting Using a Hybrid Exponential Smoothing and Leven berg–Marquardt Algorithm" , IEEE trans on intelligent transportation system, VOL. 13, NO. 2, pp.644-646,JUNE 2012.
[5] Rongrui Xiao, Member, IEEE, and V. Chandrashekar, Member, IEEE," Development of a Neural Network Based Algorithm for Rainfall Estimation from Radar Observations" " IEEE trans on geo science and remote sensing,VOL.35,NO.1,pp.160,JANUARY 2007
[6] Lorenzo Luini and Carlo Capsoni," A Unified Model for the Prediction of Spatial and Temporal Rainfall Rate Statistics" IEEE trans on 2013.
[7] Jarno Mielikainen, Bormin Huang, Hung-Lung Allen Huang, and Mitchell D. Goldberg," GPU Acceleration of the Updated Goddard Shortwave Radiation Scheme in the Weather Research and Forecasting (WRF) Model" IEEE journal, VOL. 5,NO. 2,APRIL 2012.
[8] G. Peter Zhang and Douglas M. Kline," Quarterly Time-Series Forecasting With Neural Networks" IEEE transaction on neural networks VOL.18,NO.18,NOVEMBER 2007.
[9] Yang Hong, Robert F. Adler, and George Huffman," An Experimental Global Prediction System for Rainfall-Triggered Landslides Using Satellite Remote Sensing and Geospatial Datasets" IEEE trans on intelligent transportation system, VOL. 45, NO. 6, JUNE 2007.
[10] M. Fauvel, J. A. Benediktsson, J. Chanussot, and J. R. Sveinsson, "Spectral and spatial classification of hyperspectral data using SVMs and morphological profiles," IEEE Trans. Geosci. Remote Sens., vol. 46, no. 11,pp. 3804–3814, Nov. 2008.