Abstract

To recognize application of Artificial Neural Networks (ANNs) in weather forecasting, especially in rainfall forecasting a comprehensive literature review from 1923 to 2012 is done and presented in this paper. And it is found that architectures of ANN such as BPN, RBFN is best established to be forecast chaotic behavior and have efficient enough to forecast monsoon rainfall as well as other weather parameter prediction phenomenon over the smaller geographical region.

References


Application of Artificial Neural Networks in Weather Forecasting: A Comprehensive Literature Review

Journal Of Climatology, pp. 1401–1414.


- Chaudhuri Sutapa, Chattopadhyay Surajit, 2005, "Neuro-computing based short
range prediction of some meteorological parameters during the pre-monsoon season”; Springer-Verlag, 9, pp. 349–354.


- Chattopadhyay Goutami, Chattopadhyay Surajit, Jain Rajni, 2008, "Multivariate forecast of winter monsoon rainfall in India using SST anomaly as a predictor: Neurocomputing and statistical approaches".


- KOŠCAK Juraj, JAKŠA Rudolf, SEPEŠI Rudolf, SINCÁK Peter., 2009, "Weather forecast using Neural Networks", 9th Scientific Conference of Young Researchers


Application of Artificial Neural Networks in Weather Forecasting: A Comprehensive Literature Review

- Soman Saurabh S, Zareipour Hamidreza, Malik Om, and Mandal Paras, 2010, “A Review of Wind Power and Wind Speed Forecasting Methods With Different Time Horizons”.
Neural Network for a mountainous region in West Iran; 
neeri. res. in/jese. html.

Index Terms

Computer Science
Artificial Intelligence

Keywords
ANN BPN Back-propagation RBF Rainfall Forecasting