TEAM ID: PNT2022TMID09651

EXPLORATORY ANALYSIS OF RAIN FALL DATA IN INDIA FOR AGRICULTURE

LITERATURE SURVEY

TEAM MEMBERS:

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S.NO	PAPER TITLE	AUTHOR(S)	YEAR	INFERENCE
1.	Prediction of Rainfall using Artificial Neural Networks	A.Kala, Dr. S. Ganesh Vaidyanathan	2018	Artificial Neural Network(ANN) such as Feed Forward Neural Network(FFNN) model is used to predict rainfall. ANN is based on self-adaptive mechanism in which the model learns from historical data and captures functional relationship between them. The accuracy is measured using confusion matrix and RMSE. The results show that prediction using ANN produces acceptable accuracy.
2.	Analysis of rainfall prediction using machine learning data mining and satellite techniques	Nikhilkumar B. Shardoor, Mandapati Venkateswar Rao	2018	Effective rainfall is computed considering the different attributes, such as Max Temp, Min Temp, Wind Speed, Humidity, evaporation, Cloud form, Radiation, Sunshine and Rain FallHourly, Monthly, yearly and etc. There few approaches used to predict the rainfall are, Empirical Method, Physical Method and Statistical Method.

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S.NO	PAPER TITLE	AUTHOR(S)	YEAR	METHOD AND ALGORITHM
3.	Impacts of irrigation and rainfall on agricultural production under climate change	GN Gurjar and Sanjay Swami	2019	The hydrological cycle is predicted to be more intense, with higher annual average rainfall as well increased drought. Thus, surface water availability showed a general increase over all 3 basins (though future populations projections would need to be considered to project per capita water availability.
4.	Rainfall prediction: A comparative analysis of modern machine learning algorithms for time-series forecasting	Ari Yair BarreraAnimas, Lukumon Oyedele, Muhamma Bilal, Taofeek Dolapo Akinosho Juan , Manuel Davila Delgado, Lukman Adewale Akanbi	2022	Originally adopted for natural language processing and time series modelling, RNNs are now being explored for meteorological time-series To overcome the limitation of long term forecast of RNN, , a variation of the ANNs called Long short-term memory (LSTM) Networks has been developed with the inclusion of memory cells that regulate the passage of information in and out of its cells

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5.	Analysis and prediction of rainfall using machine learning techniques	Anurag Kumar, Lalsingh Chouhan	2022	This proposes a method based on the Multiple Linear Regression (MLR) and Support Vector Regression(SVR). Multiple regression is used to predict the values with the help of descriptive variables and is a statistical method.SVR works on the principle of structural risk minimization from statistical learning theory and establishes a hyperplane that can predict the distribution of data. Comparing the different performance matrices, we can conclude that SVR accuracy is better than MLR