

LITERATURE SURVEY

Demeke Endalie, Getamesay Haile, Wondmagegn Taye (2022) : Rainfall estimation can be used for a variety of purposes, including reducing traffic accidents and congestion, increasing water management, reducing flooding, and so on. Meteorologists have long strived for weather forecasting that is both reliable and timely. Traditional theory-driven numerical weather prediction (NWP) approaches, on the other hand, face a slew of issues, including a lack of understanding of physical processes, difficulty extracting useful knowledge from a flood of observational data, and the need for powerful computational resources (Pu & Kalnay 2018). Their rainfall prediction model was created using ANN and KNN. The three basic rainfall parameters used were maximum temperature, minimum temperature, and average rainfall.

Chalachew Muluken Liyew & Haileyesus Amsaya Melese (2021) : The study by Arnav Garg and Kanchipuram shows three machine learning algorithm experiments such as support vector machine (SVM), support vector regression (SVR), and K-nearest neighbor (KNN) using the patterns of rainfall in the year. The SVM algorithm performs best among the three machine learning algorithms. This research did not show the experiment result that which environmental features impact the intensity of rainfall.

Wanie M. Ridwan, Michelle Sapitang, Awatif Aziz, Khairul Faizal Kushiar, Ali Najah Ahmed, Ahmed El-Shafie (June 2021): The comparative study was conducted focusing on developing and comparing several Machine Learning (ML) models, evaluating different scenarios and time horizon, and forecasting rainfall using two types of methods. Data involved for this research consist of taking the average rainfall from 10 stations around the study area using Thiessen polygon to weight the station area and projected rainfall. The forecasting model uses four different ML algorithms, which are Bayesian Linear Regression (BLR), Boosted Decision Tree Regression (BDTR), Decision Forest Regression (DFR) and Neural Network Regression (NNR).