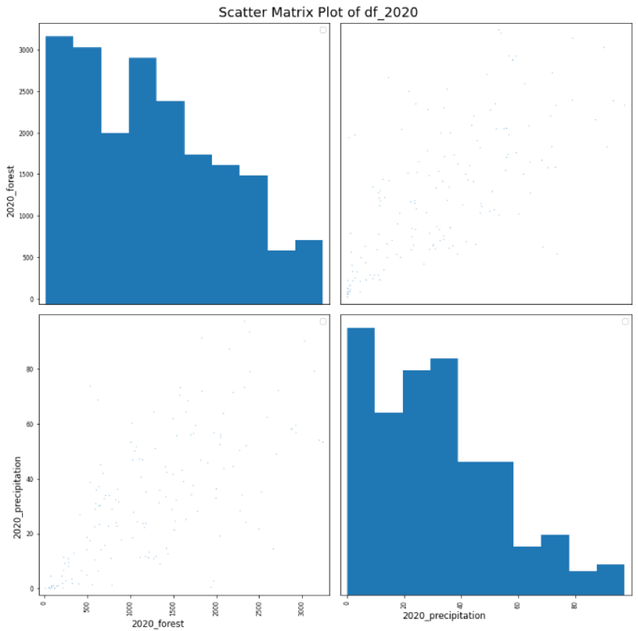
Forest Area and Precipitation: Understanding the Interplay for Ecosystem

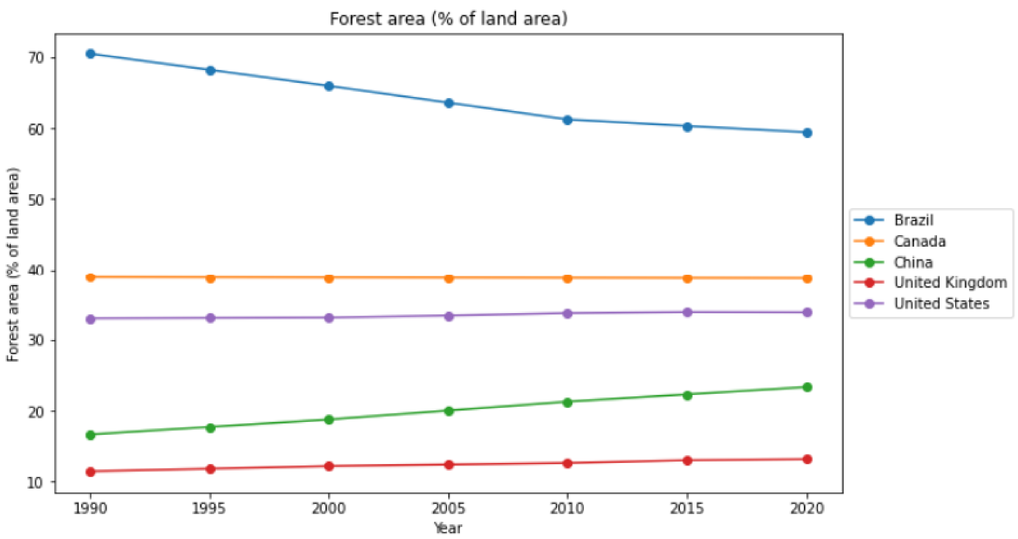
Abstract

This poster explores the relationship between forest area and precipitation patterns, Through visuals and explanations, aims to raise awareness and inform decision-making for safeguarding forests and mitigating the impacts of climate change with proper forecasting.

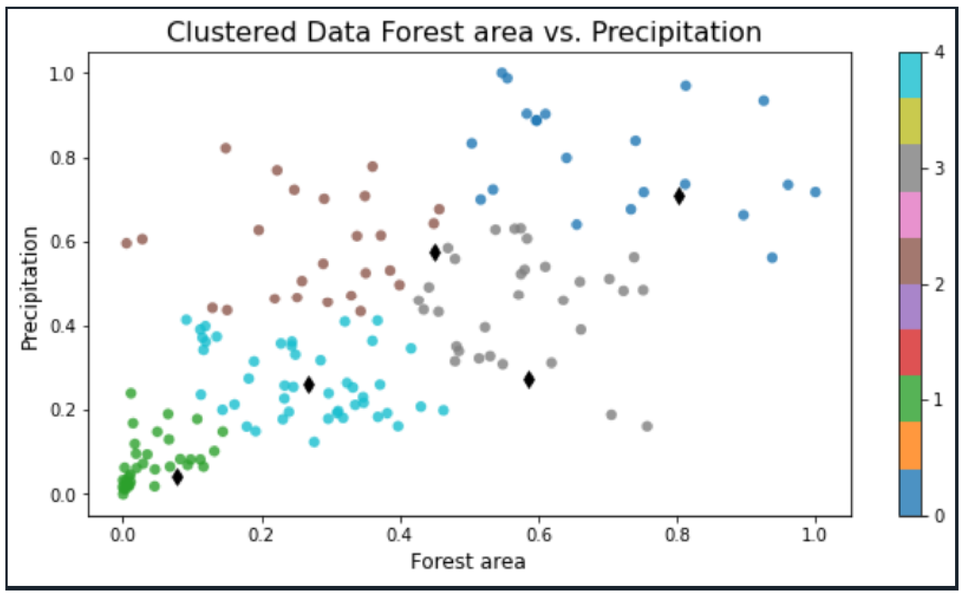
Introduction

Forests enhance precipitation by facilitating the condensation of moisture and the formation of clouds through transpiration, resulting in increased rainfall. Conversely, changes in precipitation patterns can impact forest ecosystems, altering species composition, distribution, and overall productivity.



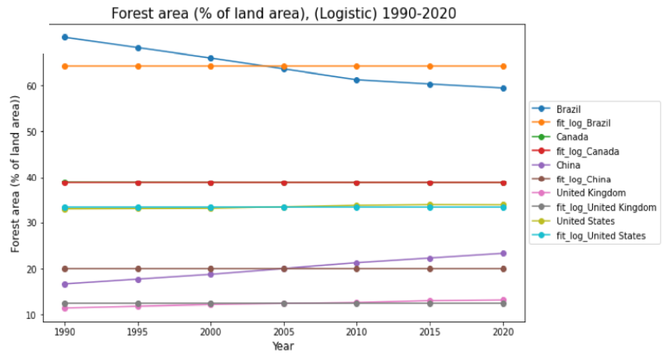


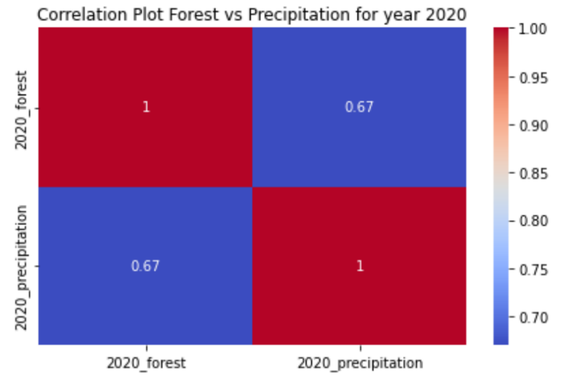
1 BILLION hectares cut down in 40 years

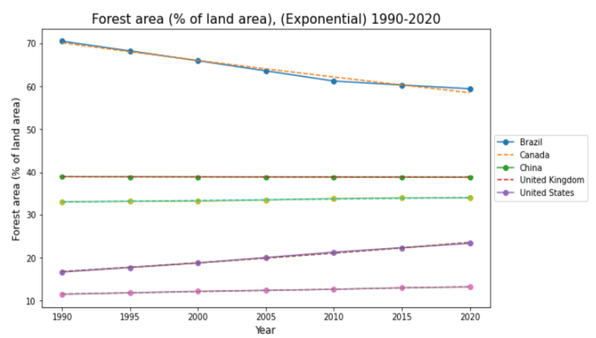


Summary

As a conclusion by employing advanced data analysis techniques, including data set clustering, scaling normalization, and exponential and logistic function modeling. By fitting these models to historical data, future trends and projections are generated, allowing for informed predictions regarding the potential impacts of changing precipitation patterns on forest ecosystems. The results aim to provide valuable information for policymakers, researchers, and stakeholders working towards sustainable forest management and climate resilience.







Author : Wijekoon Mudiyanselage Bhagya Wijekoon

University of Hertfordshire UH

Github_Repo
https://github.com/Bhagyaw/ADS03/blob/83ce14f13f67eeb63fa5a2202207e58b68c063ca/ADS03-Final.py