Degradation of Amazon Rainforests

Description

This project delves into the degradation of the Amazon Rainforest over the two-decade period from 1999 to 2019, aiming to identify and analyze the major drivers behind the accelerating deforestation. By leveraging spatial data, environmental factors, and historical trends, the analysis provides insights into how human activities and natural phenomena have influenced forest loss.

One of the key aspects of the study is understanding the role of global climate events such as El Niño and La Niña. These phenomena are known to cause significant fluctuations in weather patterns, which may, in turn, affect the rate of deforestation in the Amazon. This analysis seeks to determine whether there is a correlation between the occurrence and severity of these events and the rate of forest degradation during this period.

Another critical element of the project is the investigation of fire activity within the Amazon region. The frequency and intensity of fires are analyzed across different states, providing a comprehensive view of how fire events may contribute to forest loss. Changes in fire occurrence over time are explored, highlighting potential links between fire management, human land use, and environmental conditions.

This multifaceted approach provides a deeper understanding of the complex factors contributing to the degradation of the Amazon Rainforest, offering valuable data that can inform policy decisions, conservation strategies, and sustainable management practices aimed at preserving this vital ecosystem.