Study on Climate Change in Mueang District, Kalasin Province from 2021 to 2023

Kalasinpittayasan School

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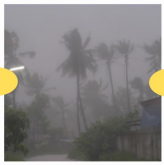
Abstract

From 2021 to 2023, northeastern Thailand experienced significant climate changes. Summer temperatures reached up to 40°C, while winters became warmer and shorter. Reduced relative humidity led to drier conditions, and unpredictable rainfall caused both floods and droughts. These changes have severely impacted agriculture, public health, and water resource management, especially in Mueang District, Kalasin Province. Continuous weather monitoring, effective water management, agricultural adjustments, and community adaptation are crucial for long-term sustainability

Introduction


Objective

To study the impacts of climate change in northeastern Thailand, particularly in Kalasin Province, focusing on temperature and relative humidity.

Research question

How important is continuous weather monitoring for planning responses to climate change?

Research hypothesis

The increase in temperature and decrease in relative humidity have led to drier conditions in Mueang District, Kalasin Province, during the summer and winter seasons from 2021 to 2023.

Experimental method

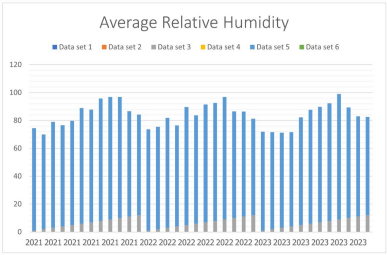
Determine the point you want to study

1.Set study points in the survey

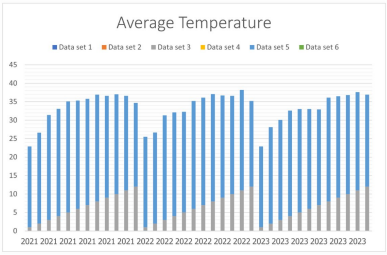
2.Study information from existing sources.

3.Use the Excel program to help analyze.

Experimental results



The chart showing average relative humidity



The chart showing average Temperature

Summary of experimental results

An analysis of climate data from northeastern Thailand between 2021 and 2023 indicates significant changes in temperature and relative humidity. The overall trend shows a continuous increase in temperature, particularly during the summer, with some areas reaching up to 40°C. Meanwhile, winters have become warmer, and the duration of cold weather has shortened. Additionally, relative humidity has decreased during both summer and winter, leading to increasingly dry conditions.

Another factor contributing to climate change is the variability in rainfall during the rainy season, resulting in alternating years of heavy rainfall and flooding, as well as drought conditions.

This unpredictability has made water resource management more complex, especially in severely affected areas such as Mueang District, Kalasin Province, where extreme heat and a significant decline in relative humidity have been observed.

Bibliography

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