



Introduction

My name is Alexandra Poppy, I am a PhD student working with IMOS (Soil Moisture and Ocean Salinity) satellite on the link between rainfall and salinity.

In our project we will investigate...

Describe how the climate problem/issues that you want to investigate.

In the school garden in October we found that the soil is very dry. Tree planting has been difficult. Why does soil have low humidity in October? Why is it not raining in the autumn season? Why is it not raining in the autumn season? Soil water reserve during which time period can be restored? What are the negative effects of lack of precipitation? What is the reason for the lack of precipitation for a long time in the south-east of Romania?

Scientist feedback

Some questions asked here seems to be very difficult. By using these datasets, I think that it is better to concentrate your work on the negative effects of the lack of rainfall and evolution of climate in the south-east of Romania during these last years in the context of climate change. How temperatures have changed? How precipitations decreased? What is the impact on the vegetation?

To investigate our problem, we will...

Describe how you plan to investigate the identified climate problem and which data (satellite/ground measurements) you plan to collect/analyse.

To investigate our problem, we will measure the air temperature, calculate the amount of precipitation from one day / week / month, investigate the negative effects of lack of precipitation, analyse the data obtained, look at ways to diminish the negative effects.

Scientist feedback

The identified data may be used in order to investigate the problem but additional data may be needed, mainly historical data. Additional data that may be used:

- NDVI (Normalized Difference Vegetation Index) measurements from (satellite) or (terrestrial) variables that you can find on <https://apps.sentinel-hub.com/sentinelhub/>.
- Rain measurements from GPCC that you can find on <https://climate.geog.udel.edu/climate/catalog/metadata/global-precipitation-climatehub-prod/>

To make a difference we will...

Identify minimum one and maximum three possible actions to help reduce the identified climate problem.

"participation in tree planting actions, "making posters that will be displayed in the school hall and in the courtyard of the school

Scientist feedback

These actions are very interesting and relevant to the problematics. You may also promote observation of climate and maintain a network that allow the monitoring of temperature and rainfall long time series are very important for climate studies.

General comments

Your project is very exciting. By concentrating your work on the main questions and adding in the study some historical datasets, I am sure that the results you will obtain will be very interesting.