Remote Sensing Of Tobacco Fields: Detection of Tobacco Fields and Area in Malawi and Mozambique

This document is a written record of significant activities, events or processes that occur during the life of this projects. It oulines my daily activities on the project for the 8 weeks residency in Kigali.

Week 1 residency

Thursday 23/09/2021: Arrived in Kigali and was given the laptop and started setting up the laptop.

Friday 23/09/2021: Setting up of laptop, installation of packages necessary for the completion of the project.

Week 2 residency

Monday 27/09/2021: Created Geojson file and downloaded the data.

Problem faced: Most of the api product id were not online, we had to test the id one by one to get one id that is working.

Tuesday 28/09/2021: Working on reading and visualizing the data.

Wednesday 29/09/2021: We visualised the different bands present in our data.

Thursday 30/09/2021: computed and plotted the NDVI for the data downloaded.

Friday 01/10/2021: Started integrating my python code into functions.

Week 3 residency

Monday 04/10/2021: working on python function and building a pipeline.

Tuesday 05/10/2021 : We wre advised by Alicia during the last meeting to work on improving the data quality we have by looking for data with lower noise, and we did that.

Wednesday 06/10/2021 : Downloaded new data for Malawi and Mozambique and plotted the NDVI, created classes and applied to Ndvi results, did a plot of the classified NDVI with a categorical legend using the draw legend function from the earth.pyplot module.

Thursday 06/10/2021 : we computed and plotted The Visible Atmospherically Resistant Index (VARI) is designed to emphasize vegetation in the visible portion of the spectrum, while mitigating illumination differences and atmospheric effects. It is ideal for RGB or color images; it utilizes all three color bands.

For the rest of the week, we will focus on the pipeline and how to analyse NDVI trend