## Plotting the Grow Dataset

## Handin date: 6<sup>th</sup> January 2023

You are provided with:

- The Grow dataset Growlocations.csv. This file contains the locations of all the GROW sensors as Latitude and Longitude
- A map of the UK from Openstreet map.

You should create a Python program that can read the dataset into a dataframe and plot the locations of the sensors on the map provided. You can use online tutorials to do this (but mention them in comments section of your code. However there are a number of errors with the dataset that you will need to fix in order to get the correct plot. These include

- Some location values are way outside the allowed values for latitude and Longitude.
- Some locations are not on the map provided.
- The labels of the columns have not be verified so may be incorrect.

The bounding box for the map is as follows:

- Longitude Min -10.592
- Longitude Max 1.6848
- Latitude Min 50.681
- Latitude Max 57.985

Marks will be allocated as follows:

- Reading the data into a data frame. 25%
- Removing bad values. . 25%
- Fixing other problems. . 25%
- Plotting the data correctly. . 25%

An example map is on the next page. Note, I do not expect you to get the sensors in the absolute correct locations, but the locations should match approximately the ones on the map below.

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