

## Data Science Test

Analyse data on fires detected in Guatemala from 2013 to 2017.

Data is provided by NASA FIRMS. Follow this link to learn more about the data and how it should be interpreted. We have downloaded two datasets from the FIRMS Archive and provide them to you as input for the assignment.

## Data specifications:

Datasets: MODIS Collection 6 and VIIRS 375m standard data products

Format: CSV

Country: GuatemalaFrom: 1 Jan 2013To: 31 Dec 2017

We welcome initiative and creativity in deciding what aspects of the data you wish to analyse and how you report your findings. Some ideas – by no means must-have requirements – to help you get started:

- How does fire activity vary over time?
- What is the geographic distribution of fires?
- What are the differences between MODIS and VIIRS detections and how can they be explained?
- How does weather affect fire activity?

Please use Python 3 for data analysis and generating data visualizations, demonstrating good coding practices. Feel free to use any libraries available on <u>PyPI</u>. Provide instructions for running the code on Ubuntu 16.04 or macOS.

The report should be about 2-4 pages. Consider using tables and figures to illustrate your results and include explanations of your findings. The report can be submitted as a PDF or, as a way of combining code and reporting, a Jupyter Notebook.

If you have any questions whatsoever, please do not hesitate to get in touch.

## Submission

This task should take less than half a day. Please submit your code and report as a zip file or by providing a link to a publicly accessible URL.

The submission will be marked on the quality of the code, analysis, and report.