
Temperature analysis using excel files

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Mar 16, 2021

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A python script for the analysis of temperatures in excel files.

WHY SHOULD I USE THIS PROJECT ?

It makes it easy to analyse excel files with temperatures in them.

HOW TO CITE THIS PROJECT?

Please email training@esciencecenter.nl to get instructions on how to properly cite this project.

CONTRIBUTING

You are welcome to contribute to the code via pull requests. Please have a look at the NLeSC guide for guidelines about software development.

3.1 Setup

You need `python>3.5` to run this script.

The project depends on the `pandas` library, install it with `pip`: `pip install pandas`

3.2 How to run?

You can run the script from the command-line using

```
python analyse_spreadsheet.py
```

You can use functions directly, for example: calculate the mean temperature of some data:

```
from analyse_spreadsheet import mean_temperature
```

3.3 analyse_spreadsheet

`analyse_spreadsheet.get_spreadsheet_columns` (*file_loc*, *print_columns=False*)

Gets and prints the spreadsheet's header columns

Parameters

- **file_loc** (*str*) – The file location of the spreadsheet
- **print_columns** (*bool*, *optional*) – A flag used to print the columns to the console (default is `False`)

Returns a list of strings used that are the header columns

`analyse_spreadsheet.main` ()

Analyse a spreadsheet file with temperatures.

Prompt the user for the file name, print the columns in the spreadsheet, and print the mean temperature.

`analyse_spreadsheet.mean_temperature` (*data*)

Get the mean temperature

Parameters **data** (*pandas.DataFrame*) – A pandas dataframe with air temperature measurements.

Returns The mean air temperature (float)

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