Exercises

Get together in groups of three (max four) and prepare this small project as a conversation starter for the small oral exam on Wednesday 16th in the time frame from 16:00 - 20:00. Note, this will only be a conversation starter and does not exhaustively cover all possible questions during the exam.

0 Nahuelbuta weather station

The data file contains data from a weather station in Nahuelbuta.

- Read in the CSV file `"data0_no_time.csv"`. (use `np.loadtxt()` and `delimiter=","`))
- Write a function that filters out the negative values (-9999.0) from the data.
- Plot the first (air temperature in deg C) and second column (solar radiation $\frac{Watt}{m^2}$) in two separate plots.
- The time information is missing, try to figure out from what time period the data is.

1 Smoothing data

Load data from text, apply smoothing to the data (sliding window)

2 Min, Max, Mean

- Read in data from the user as input from the command line. If the user types ”x” stop reading.
- Write a function that calculates the min, max and mean values from that input. The function should return a tuple (a, b, c) containing the three values
- Print the values at the end

3 TODO

TODO

4 TODO

TODO

5 TODO

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6 TODO

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9 TODO

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10 TODO

TODO