



# The influence of weather conditions on the electricity production by photovoltaic modules

Larissa Reichart   Leo Gönner   Julius Rau   Sarah Hüwels

# Data

- We will use data from a photovoltaik system (generated by the pv of one of our group members family's house)
    - Contains amount of electricity in kWh produced per day
    - Data collected over five years
    - Location: town close to munich
  - Data for weather conditions: opendata münchen<sup>1</sup>
    - Data for cloud cover, temperature, min temp, max temp, rainfall and hours of sunshine
    - Daily data
- We will combine these two data sets

<sup>1</sup> <https://opendata.muenchen.de/dataset/daten-der-raddauerzaehlstellen-muenchen-2022/resource/1779016c-968c-4572-bfe4-7bd1ff3859dc>

# Tasks

- Investigate effect of different weather conditions (e.g. hours of sunshine) on the amount of generated electricity
- Compare how this changes for different months (summer or winter)
- We expect that during the summer months there will be more electricity generated per hour of sunshine
- Investigate which of the different weather features play the biggest role in the generation of electricity (e.g. compare hours of sun, cloud cover, rainfall, temperature)