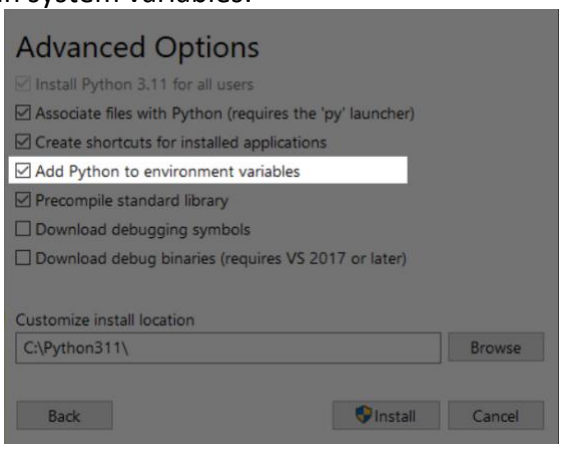
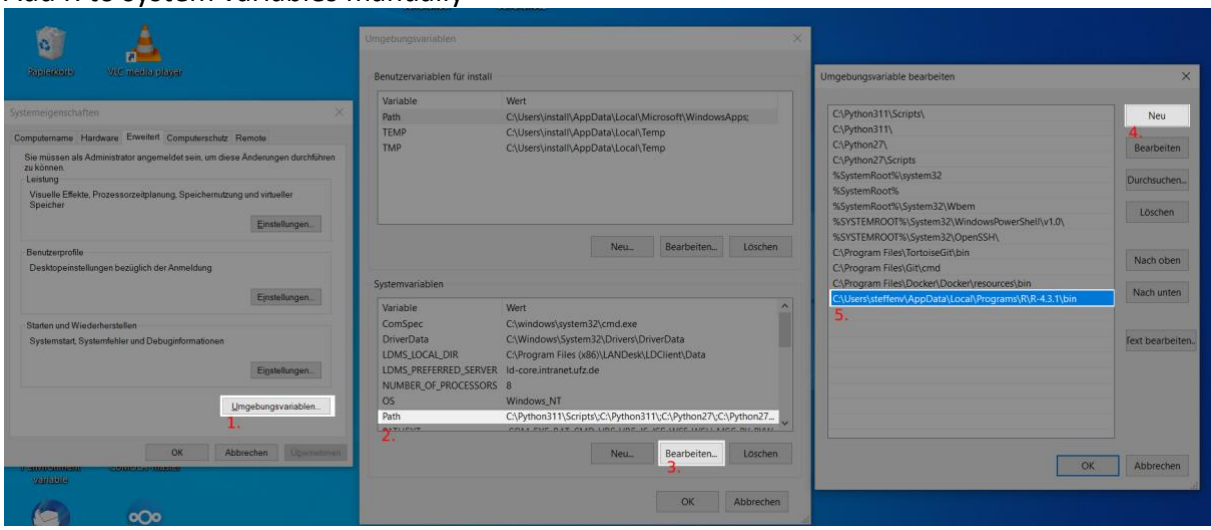
CoMOLA installation guide

General

Download the CoMOLA Project Folder on your computer.
CoMOLA is an optimization tool written in the programming language Python and optimized for Python 3.11. It can be coupled with various models – in our case these are written in R. Therefore, it is required to install Python 3.11 and R including several packages on your computer.

Setup

1. Install Python v:3.11 (https://www.python.org/downloads/) making sure python is added in system variables:
   a. 

2. Install R v:latest (https://cran.r-project.org/) making sure to be able to trace back the location of R
   a. Add R to system variables manually
   b. 

      1. Go to System-settings → advanced system settings and click environment variables.
      2. Search for the variable entry “Path” and highlight it.
      3. Click “edit”
      4. Click “new”
      5. Paste the full path of the /bin-directory of your currently installed R-Version
3. Install RStudio (https://posit.co/download/rstudio-desktop/) (only for post analysis!)

4. Install packages for python: Open the terminal/cmd
   Type: `pip install matplotlib`
5. Install packages for R (only for post-analysis!):
   a. Navigate to the location of the folder CoMOLA/output_analysis and open the CoMOLA_postprocessing.R-File in RStudio
   b. Uncomment the first five lines by deleting the hashtags at the beginning of every line and run them to install missing packages (highlight and press cmd/ctrl + Enter)
   c. Comment the first five lines again, by inserting the hashtags.

Run CoMOLA

1. Open the terminal/cmd
2. Change the directory to the location where your CoMOLA-project folder is stored by using "`cd`"
3. Type "`python __init__.py`"
4. Python should start running the optimization process
5. Check if there occur any error warnings in the command line/log-file in output-folder