READ ME

The Welas2300 Data Recalculator was written for the recalculation of Aerosol size number distribution data, reanalyzed with the PDAnalyse software of PALAS GmbH. It allows for the free choosing of refraction parameter and resolution. It additionally gives the option of defining a dynamically changing refraction parameter, for example for the analyzing of deliquescence.

The source code was written in two files, named GUI_welas_recalculation.py and GUI_welas_recalculation_def.py, in python 3.10.8 with the following imported libraries: Tkinter, miepython, numpy, codecs, os, glob, matplotlib, PIL. Both files are saved in the distribution folder of this program. They got compiled into the executable file with the use of the packages pyinstaller and auto-py-to-exe. The code used for this is:

pyinstaller --noconfirm --onedir --windowed --icon „/path-of-your-.ico-file/Icon.ico" --name "Welas2300 Data Recalculator" --add-data "/path-of-your-secondary-program-file/GUI_welas_recalculation_def.py:." "/path-of-your-main-programm-file/GUI_welas_recalculation.py"

Output files are saved in a subfolder with the name „Files_with_new_refraction_index_and_resolution“, of the folder the entry data originates from.