

How to Run the Code

- 1.) Make sure you have the folder called *Shahzaib's Code*
- 2.) Navigate to the *Code* folder and type “cmd” into the path bar to launch the command prompt for that folder
- 3.) Type “code script.py” to open up the main script in VSCode
- 4.) Change the file paths for the input data (on lines 402 and 439) to match the file paths in your local system
- 5.) Return to the command prompt and run the file via “python script.py”
 - a.) The first run of the code will be slower because it needs to launch the associated Excel file unless it's already open

To Do

- Rewrite the RFM and summarization functions in Rust
- Use file streaming (via polars, Dask, or a similar library) to allow for a steady stream of netCDF files that will be turned into object files, which will then be fed into the data processing code.
 - Make this sub process more efficient via asynchronous programming (ex. use asyncio)
- Finish building the GUI
 - Design aspects (make it more user friendly and appealing)
 - Manage threads more efficiently to reduce overhead
 - Use asynchronous programming so that the GUI isn't frozen during processing