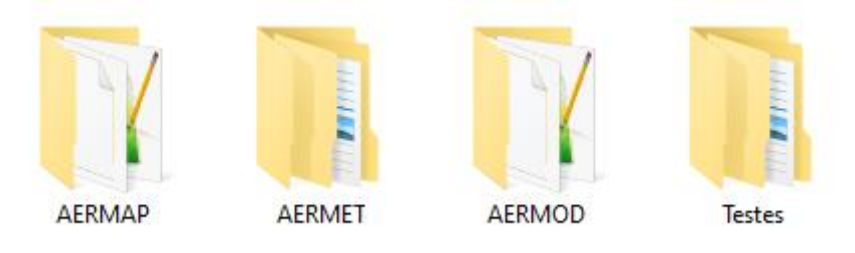
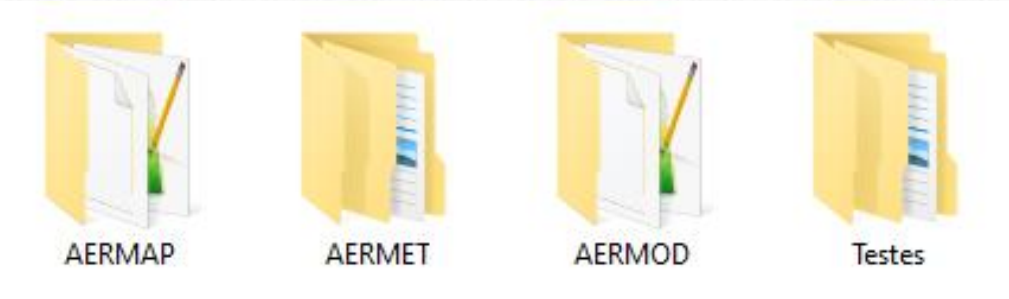
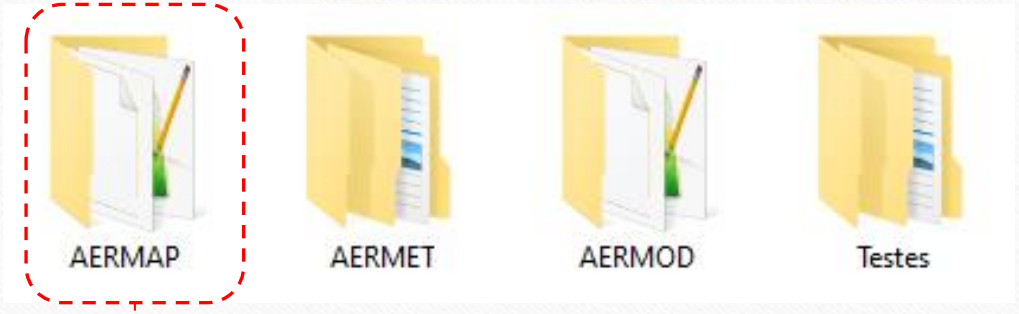
HOW TO ORGANIZE YOUR WORK FOLDERS AERMAP/AERMET/AERMOD

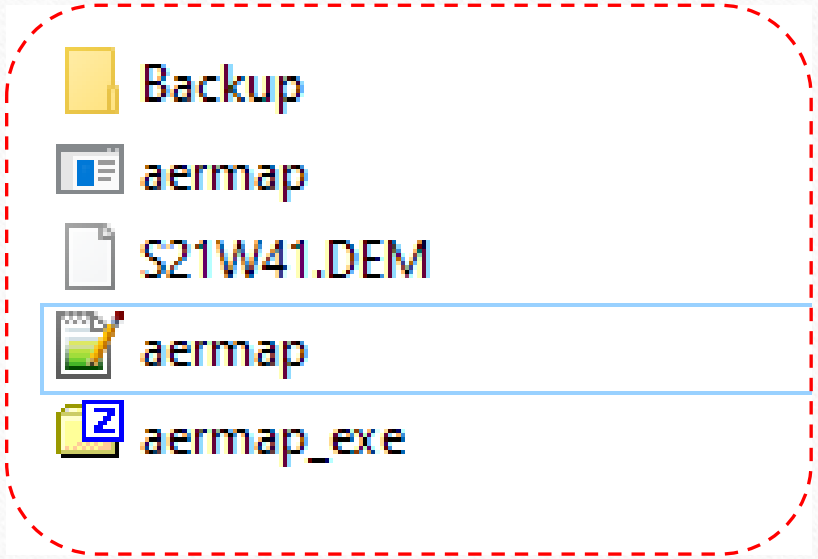
by Davi de Ferreyro Monticelli



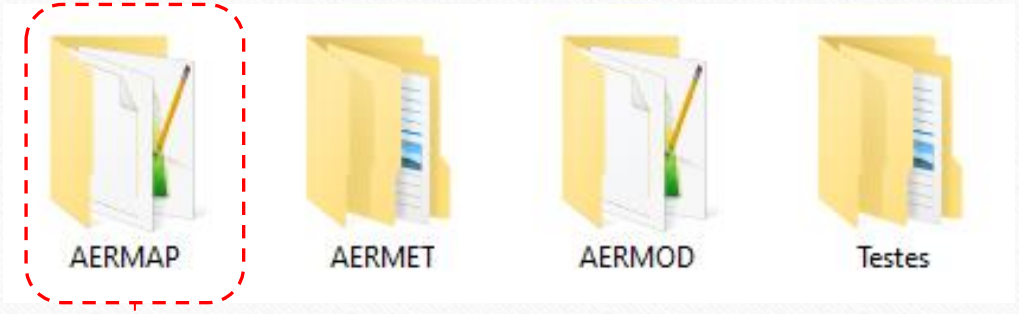


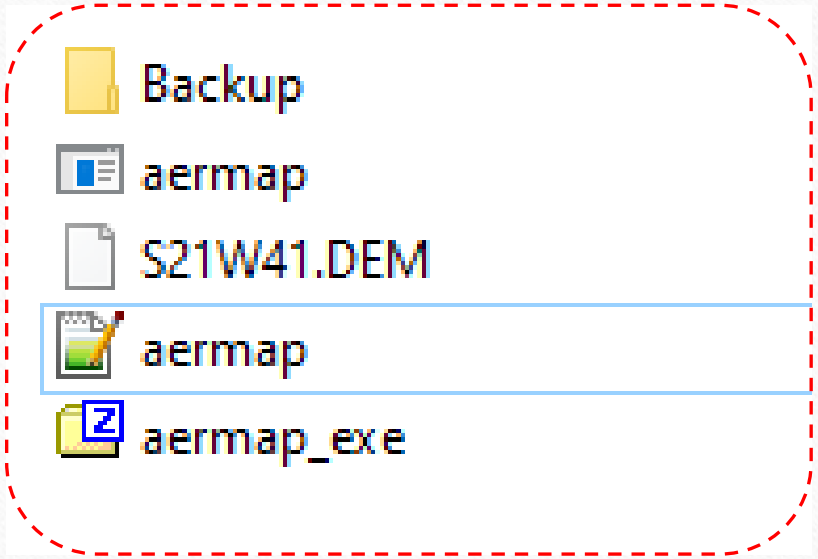
- Create a folder for each stage of the model run (AERMET, AERMAP and AERMOD) and one extra folder for any test you will make during the modeling;





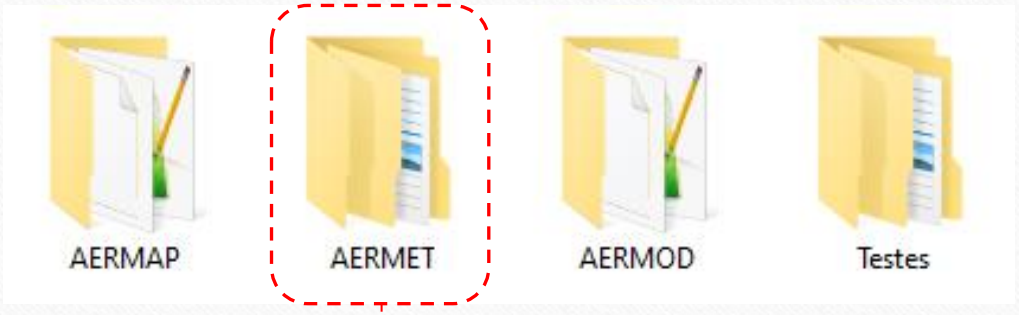
- Inside AERMAP folder, include on ‘Backup’ folder, because everytime you run the model the previous output files are lost and new ones are created (unless you change their names ervery run).
- This way you can preseve previous run if you need to test something

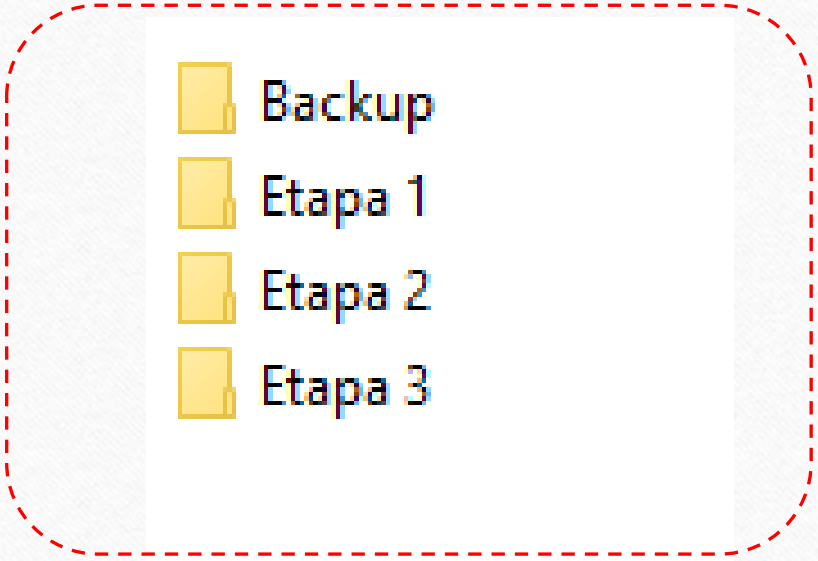




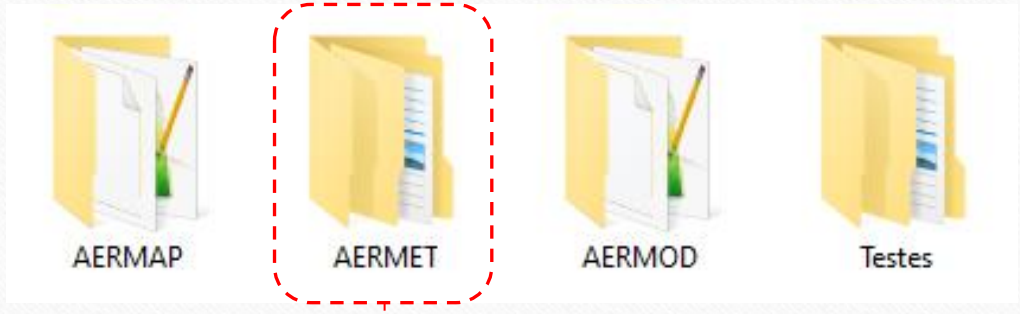
- In this folder still, you should include the aermap executable file that can be downloaded at: https://www.epa.gov/scram/air-quality-dispersion-modeling-related-model-support-programs

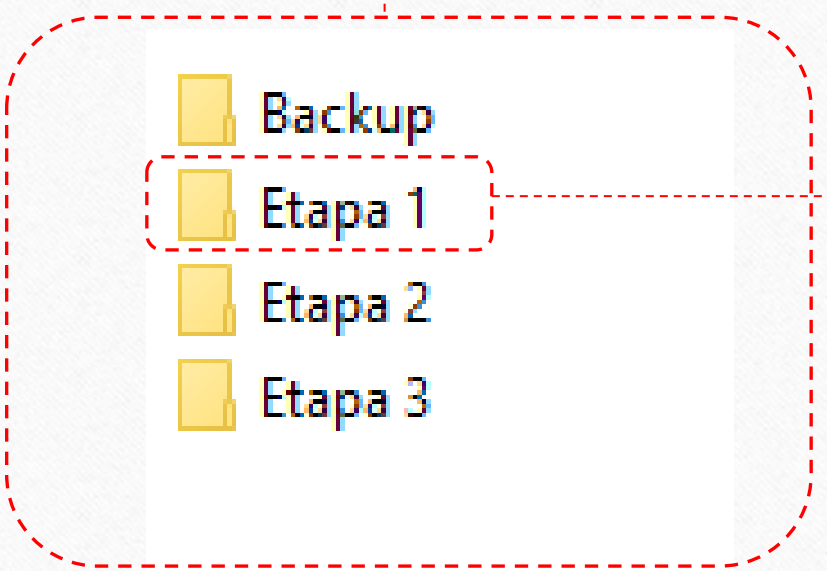
- Moreover, it must contain the input file (in this case a digital elevation file .DEM) and the preprocessor instructions 'aermap.inp' (.INP)

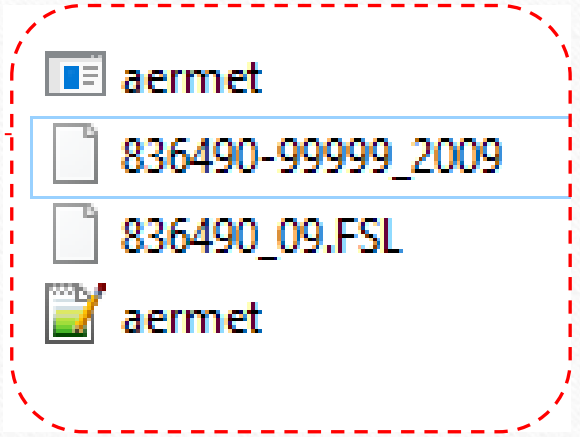




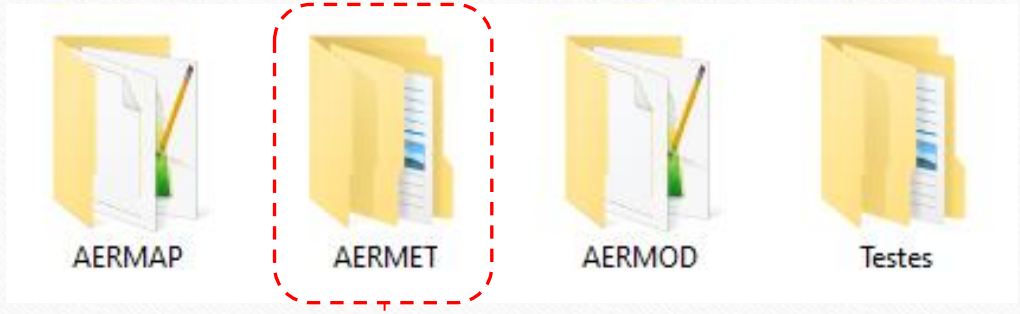
- In AERMET folder, it is good practice to create a single folder for every stage of the run;
- Just like in AERMAP folder, it is advised to have a 'Backup' folder to save output files of each stage. The same could be created inside each subfolder instead

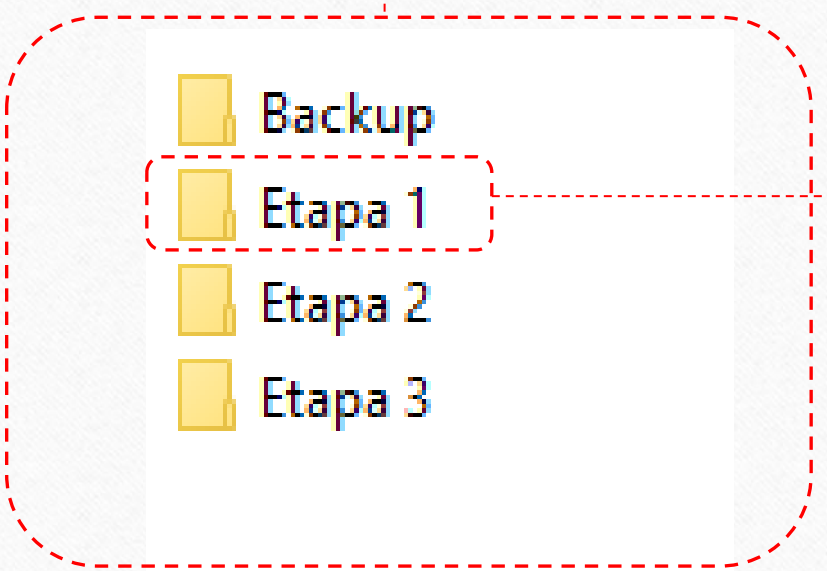


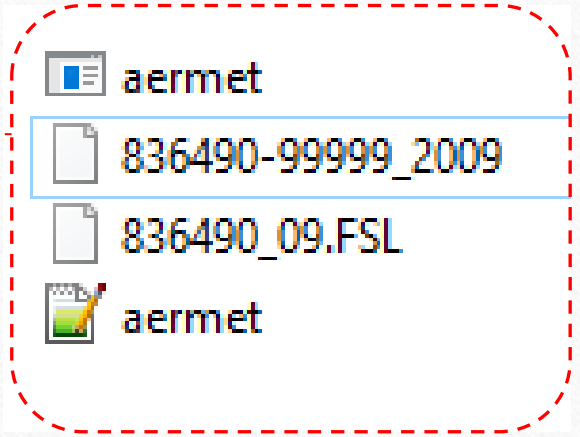




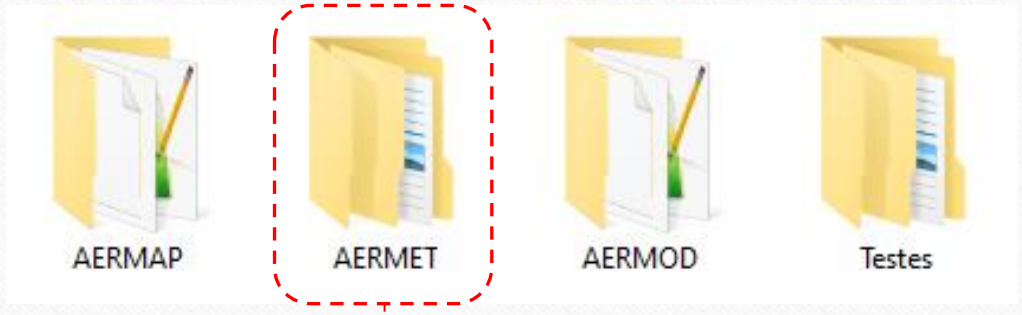
- In the Stage 1 subfolder, you must include the AERMET executable file, you can download it here: https://www.epa.gov/scram/meteorological-processors-and-accessory-programs

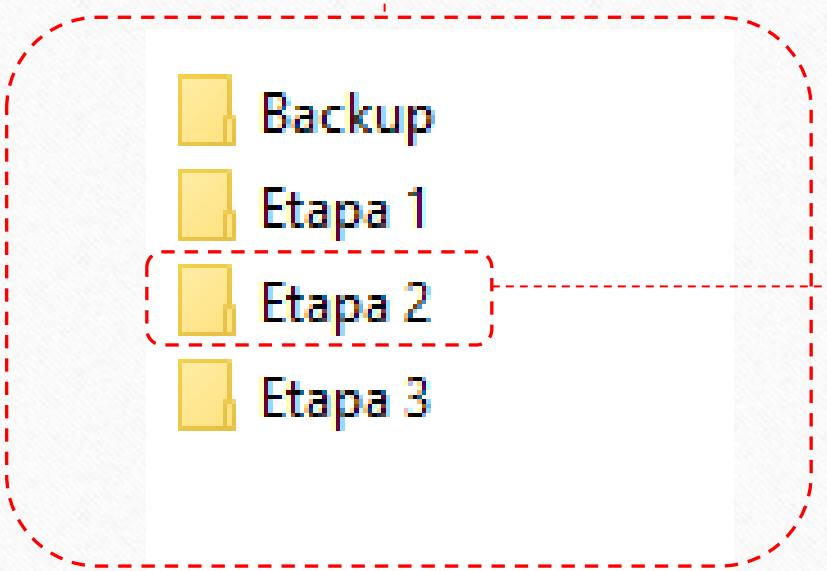


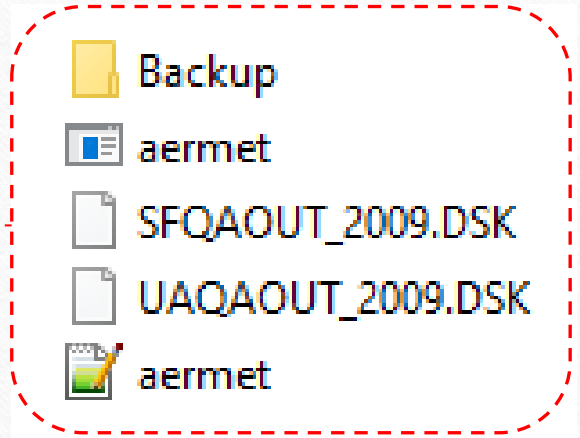




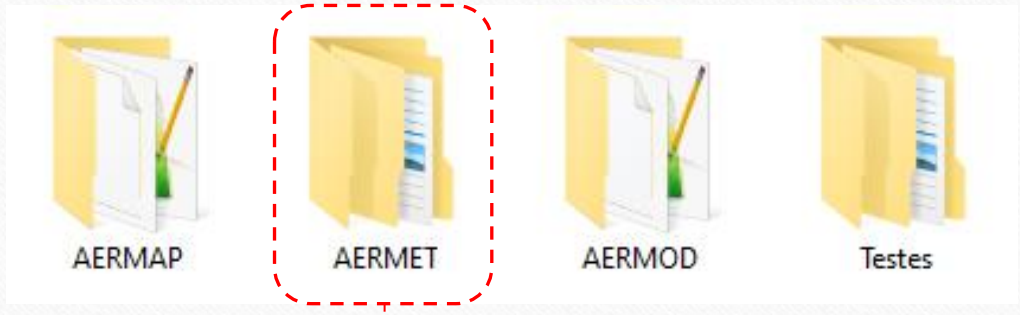
- This folder must also have the .FSL (upper air) e FTP (ISDH) input files, together with the preprocessor instructions ‘aermet.inp’ (.INP)
- This .inp file should be written following Stage 1 purpose

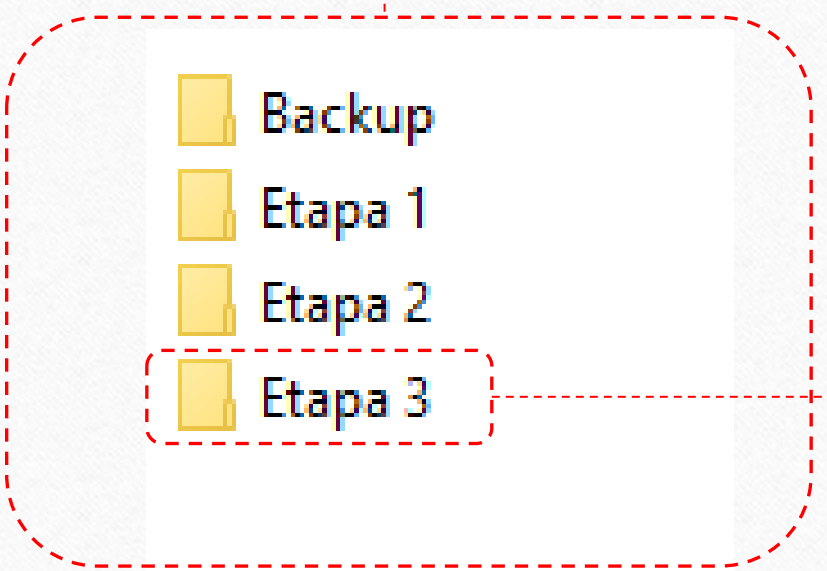


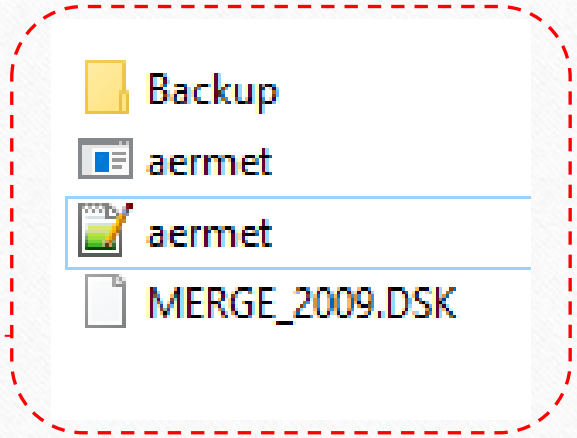




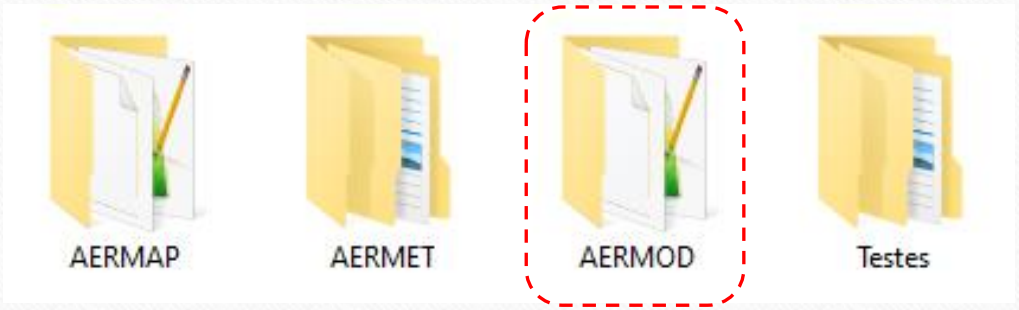
- In Stage 2 subfolder, before modeling , it should contain the output files of Stage 1 (.DSK) and the command lines in the **new** 'aermet.inp' file (.INP) (+aermet.exe)

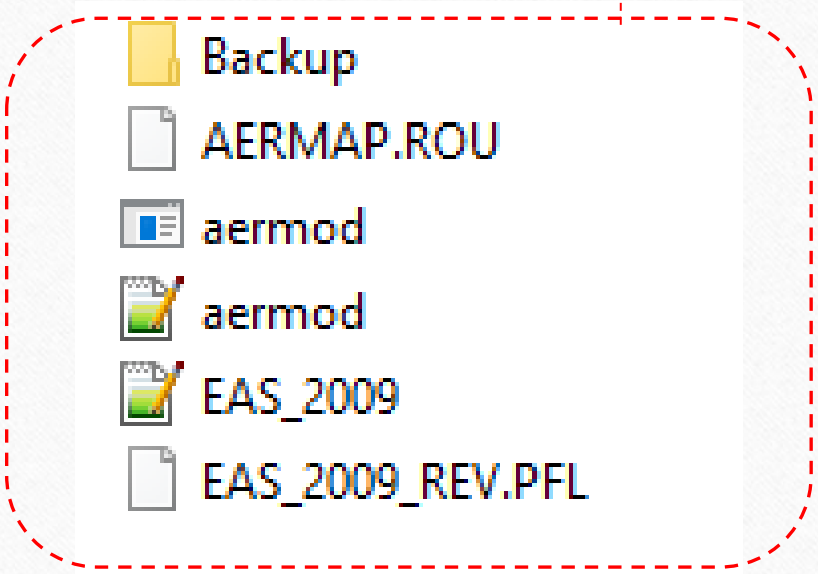




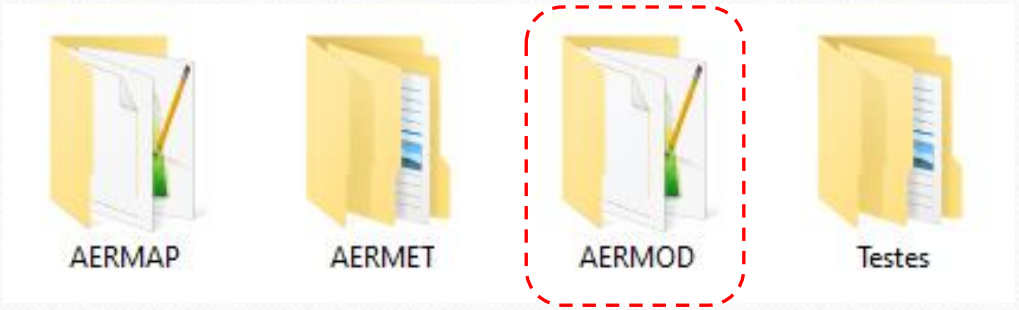


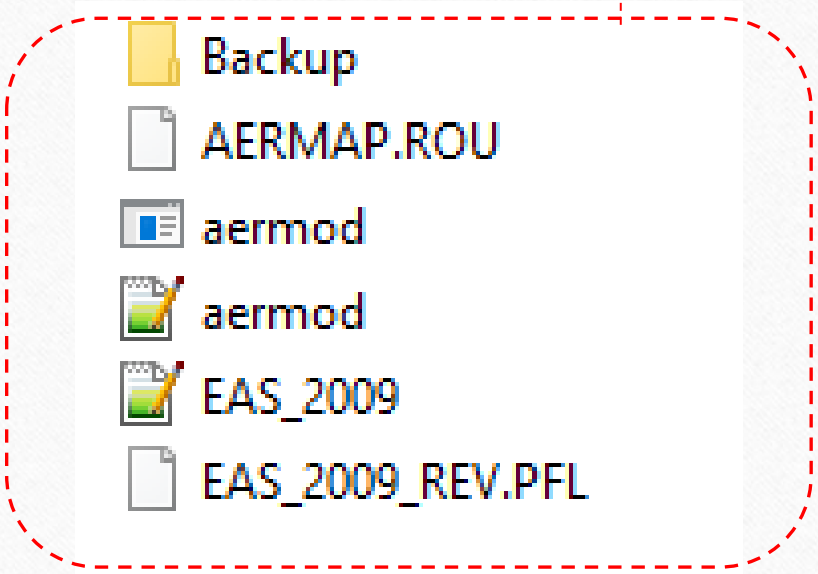
- In Stage 3 subfolder, before modeling , it should contain the output files of Stage 2 (.DSK) and the command lines in the **new** 'aermet.inp' file (.INP) (+aermet.exe)



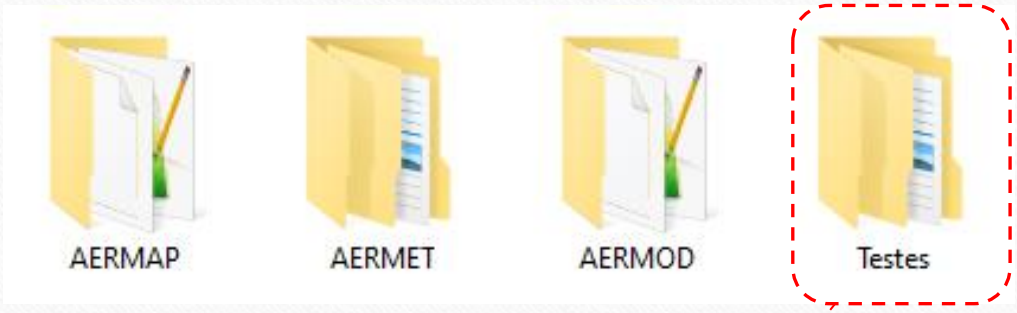


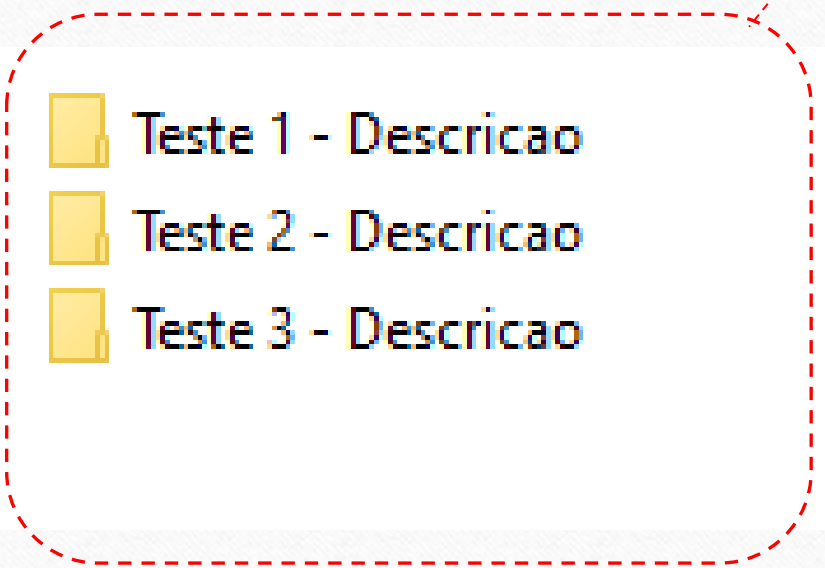
- In the AERMOD folder, include a 'Backup' subfolder just as in the previous stages
- This will make more easy to compare runs outputs





- This folder should contain the AERMOD executable file that can be downloaded at: https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models
- Moreover, it should contain the output data from AERMAP (.ROU and .SOU) and .PFL e .SFC output data from AERMET Stage 3.
- It sould also have the instructions given by the 'aermod.inp' input file (.INP)





- How this folder is organized depends on the user. The reccomendation is to include the test number, followed by a brief description. Also organize it chronologically. Inside each test folder, a .TXT file could decribe in details the test, and last update changes and date;
- Very useful when a major change must be performed (example: opt to run dry deposition schemes);
- It can contain only the output files or every file in each run

Thank you!

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