Lund, 2020-03-11

ClimBEco- Workshop 2

Introduction

Today we are going to analyse and compare results from the vegetation modelling and inverse modelling. You will compare the following model results to the FLUXNET observations:

- Vegetation model results from an LPJ-GUESS run for the FLUXNET stations.
- Vegetation model results from an LPJ-GUESS run on a grid for Europe.
- Atmospheric inversion results for Europe from the LUMIA inversion system.

The first notebook (exercise2.ipynb) includes a set of tasks. You will write your own code to analyse carbon flux estimates from different types of models and compare them with the observed fluxes in the FLUXNET dataset you worked with yesterday.
Note that there are several questions in the different parts of the notebook. Try to answer!

The second notebook (inspect_fluxnet_files.ipynb) includes visualizations of the FLUXNET observations for the 18 stations you work with throughout all exercises. Use this notebook to get more information on the stations you picked.

The third notebook (inspect_lpjguess.ipynb) provides an overview of gpp, nee and respiration time series per station from the two LPJ-GUESS model runs (PNV[1] and vegetation type specific[2]) and FLUXNET observations. Use this notebook to get more information on LPJ-GUESS results for the stations you picked.
This notebook can also be used to help you answering the questions posed in the exercise2.ipyng notebook.

Notebooks

- exercise2.ipynb
- inspect_fluxnet_files.ipynb
- inspect_lpjguess.ipynb
- tools.ipynb --- > includes ready functions (used in all notebooks)

Tips

Remember to download “tools.ipynb” to your **work** directory.

Save your notebook frequently!!!

To save intermediate steps of your work, you can save a static version of the notebook by downloading it as html-file.

[1] Potential Natural Vegetation
[2] coniferous or deciduous forest, or cropland/grassland/wetland