

Accessing Python and Jupyter Notebooks for class through a Jupyter Hub

We will be using a program called Jupyter Notebooks for this class, which allows you to access and run python code on a server without having to install anything special on your end. This is accomplished by accessing a Jupyterhub server through a webpage.

If you are registered for the class you have an account already made for you on this server that uses your UWNetID and password. If you don't have an account contact me with your UWNetID and I will add you.

Step 1: access the server

To access the Jupyterhub in your web browser go to:

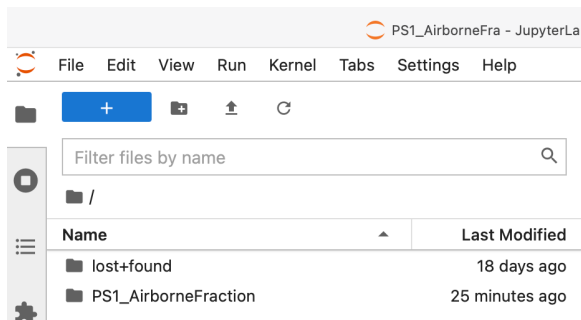
<https://jupyter.rtll.uw.edu/2024-winter-atm-s-588-a>

It should prompt you to login – use your *UWNetID and password* if you aren't already logged in.

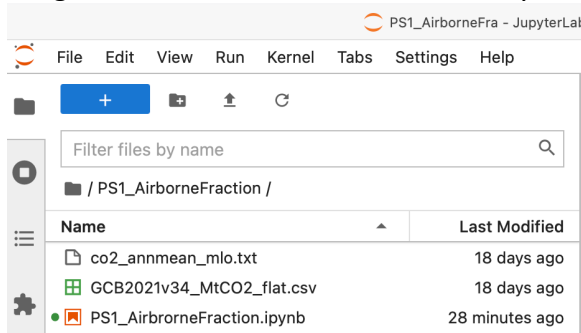
Step 2: Copy the notebook and data files into your hub account

Download the “PS1_Files.zip” file to your computer and unzip it. Inside you should find a folder that contains a few files.

- a. Create a folder by hitting the folder plus symbol (or right clicking and selecting “new folder”) and name it `PS1_AirborneFraction` (exactly!). After you do so it should look like this:



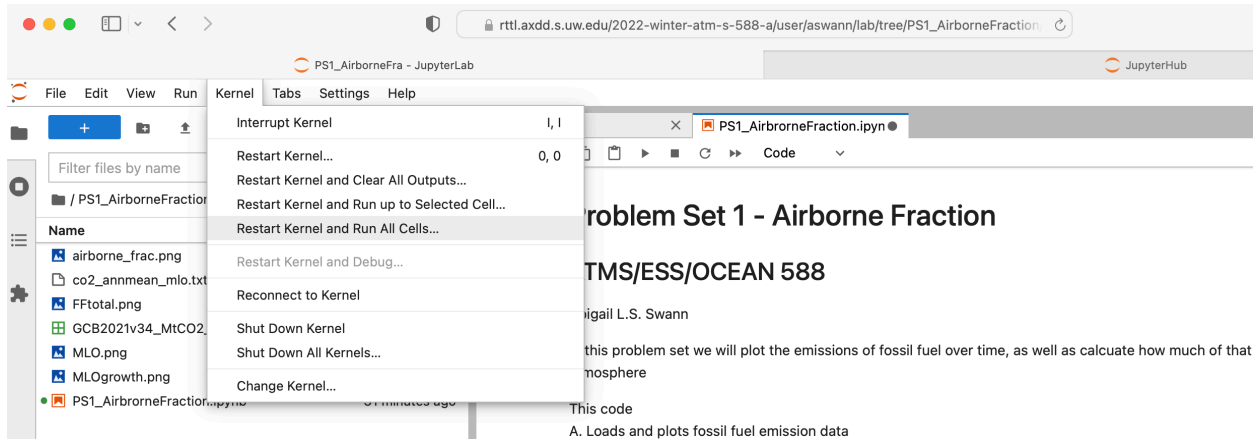
- b. Double click on the `PS1_AirborneFraction` folder.
- c. Drag the three files for PS1 into it from your computer.



- d. Click on the `.ipynb` file in the folder which has our jupyter notebook in it. For the first problem set it is called `PS1_AirborneFraction.ipynb`

Step 3. Run the Notebook

You next want to run the code in the notebook. You can run the whole notebook at once by choosing “Restart & Run All” from the Kernel folder. You can also run each individual cell by hitting *shift* and *enter* together. If you make modifications at the bottom of the code you can re-run just those cells and don’t need to start at the beginning.



Step 4. You can make modifications to the code and save them

If you want to make additional calculations or plots you can add to the Jupyter notebook. Don’t forget to hit “save” to save your changes.

Other Notes

The plots made and saved by the script show up inline in the notebook and are also saved to the problem set folder. If you open the original tab with the folder for the problem set after running the notebook you will see the image files of the saved plots there where you can save them to your computer.

If you modify the notebook in a way that you think has made it incorrect or made it stop working you can go to the assignment folder on canvas to view the original, and copy a new version into your folder if needed (make sure to re-name one of the files to avoid overwriting your work). To run the code you have to use the jupyterhub server though.

If you want to upload or download files from your server folder you can drag them in from your computer to the server, or right click and choose “download” to get them onto your computer.