Programs Installation



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Programs to install

ANACONDA

https://geoframe.blogspot.com/2020/01/the-winter-school-on-geoframe-system-is.html

Link for download: https://www.anaconda.com/distribution/

Download the program and follow the **installation instruction**.

OMS3 console 3.6.28

https://geoframe.blogspot.com/2020/01/the-winter-school-on-geoframe-system-is.html

Link for download https://alm.engr.colostate.edu/cb/wiki/16961

Download the folder and **unzip it**. The OMS console is **ready**.



Materials download...

geoframe_rossano.yaml

Anaconda Environment for GEOframe models

Download: https://github.com/geoframecomponents/python4GEOframe

ex01 «Hello World»

OMS example project to test the console

→ Download: https://osf.io/5e9jp/

Notebook Test

Notebook to test Anaconda Environment

→ Download: https://osf.io/fzy5g/

AFTER downloading and installing everything...

Let's START...





1. Open Anaconda Prompt

Anaconda Prompt (Anaconda3)

Арр

- 1. Set the folder path in which there is the **geoframe_rossano.yaml** file;
- 2. Create the environment: conda env create -f geoframe_rossano.yaml;
- 3. Activate the environment: conda activate geoframe_rossano;
- 4. Copy the folder path of JAVA_HOME.

Anaconda Prompt (Anaconda3)

(base) C:\Users\Concetta><u>c</u>d Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials

- 1. Set the folder path in which there is the **geoframe_rossano.yaml** file;
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```
Seleziona Anaconda Prompt (Anaconda3)

(base) C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>
conda activate geoframe_rossano

C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>set "JA VA_HOME_CONDA_BACKUP=C:\Program Files\Java\jdk1.8.0_231"

C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>set "JA VA_HOME=C:\Users\Concetta\Anaconda3\envs\geoframe_rossano\Library"

(geoframe_rossano) C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>
```



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(base) C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>conda activate geoframe_rossano

C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>set "JAVA_HOME_CONDA_BACKUP=C:\Program_Files\Java\jdk1.8.0_231"

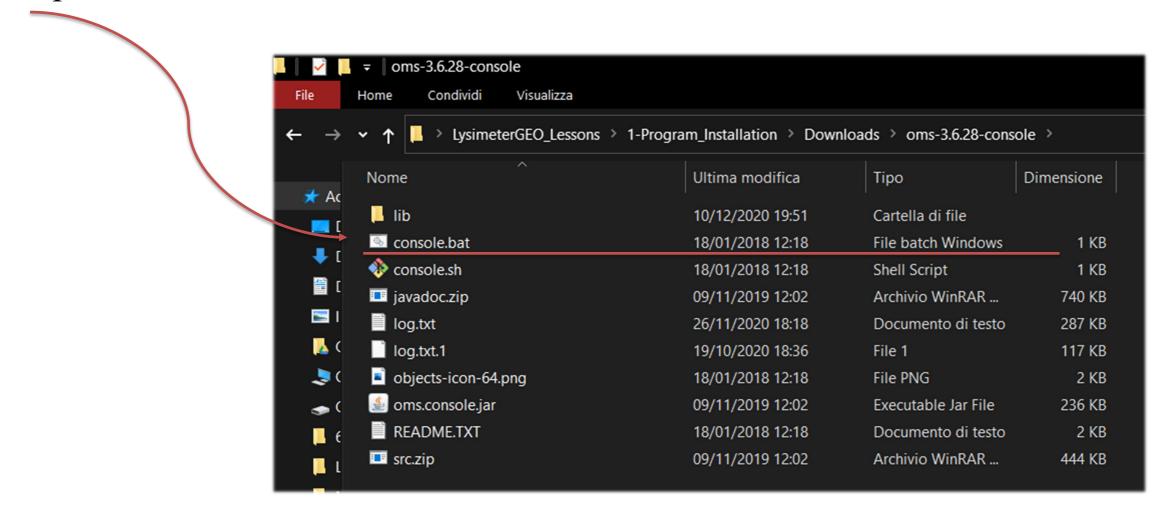
C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materia\s>set "JAVA_HOME=C:\Users\Concetta\Anaconda3\envs\geoframe_rossano\Library"

(geoframe_rossano) C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials>
```

>set "JAVA_HOME=C:\Users\Concetta\Anaconda3\envs\geoframe_rossano\Library"



➤ Open OMS console



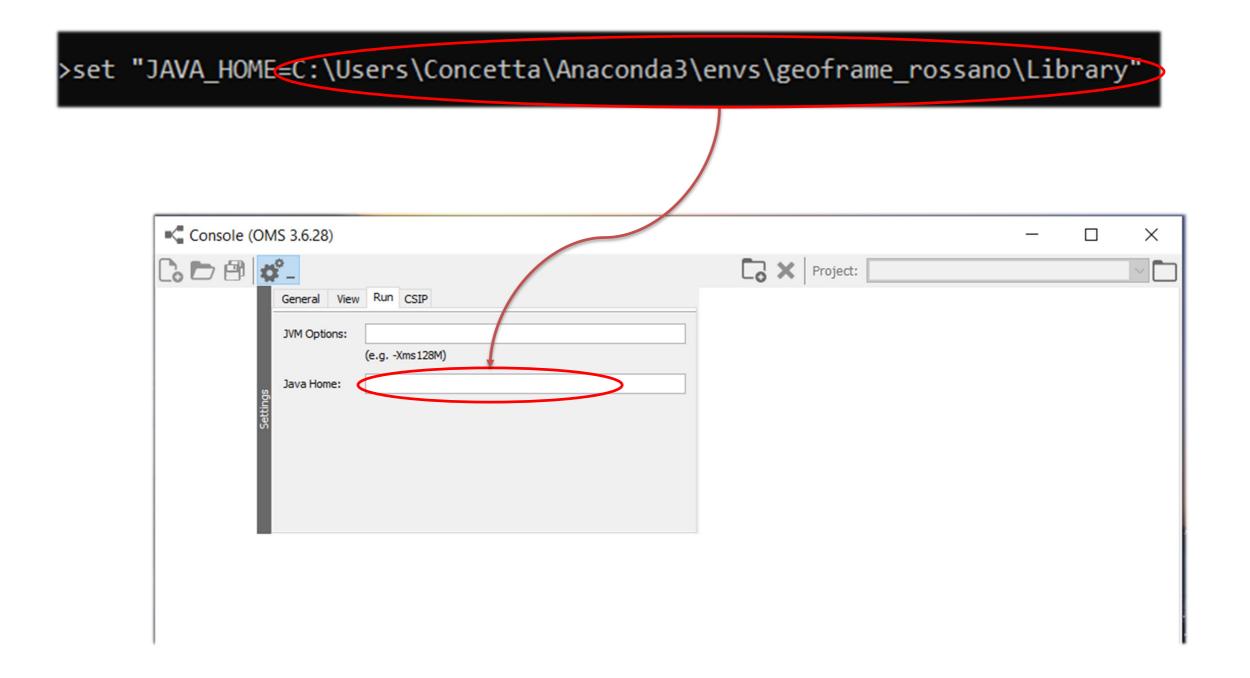
ATTENTION

Windows users: Open file console.bat

Linux/macOS users: Open file console.sh

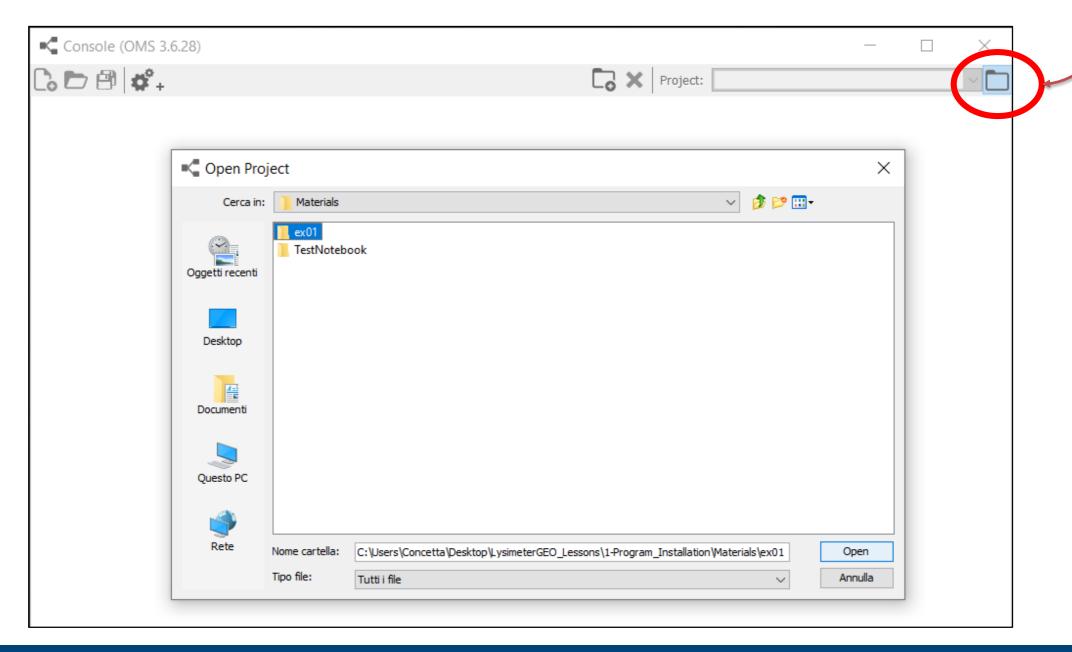


➤ Paste the path of JAVA_HOME copied before inside OMS console





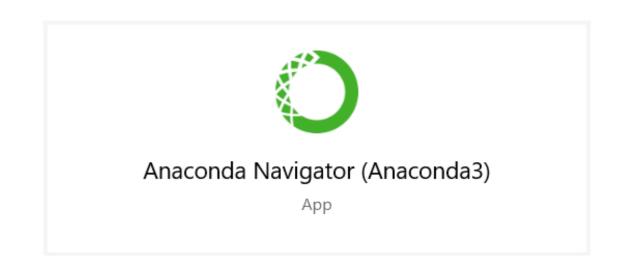
To check if OMS console has been installed correctly, load the project ex01

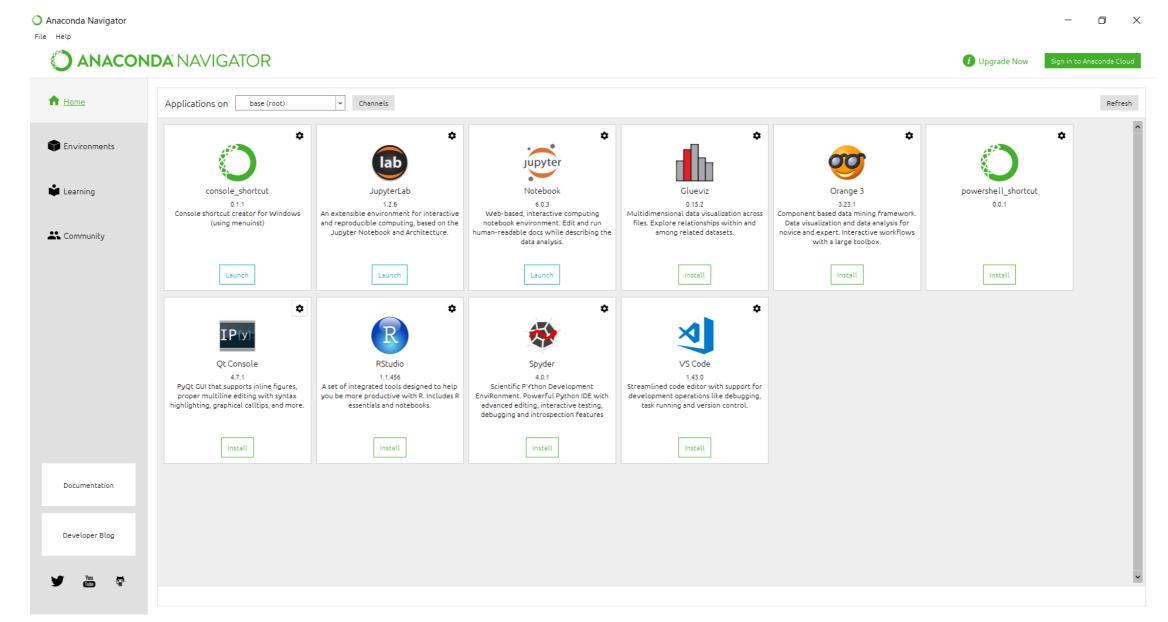


> Run the project ex01

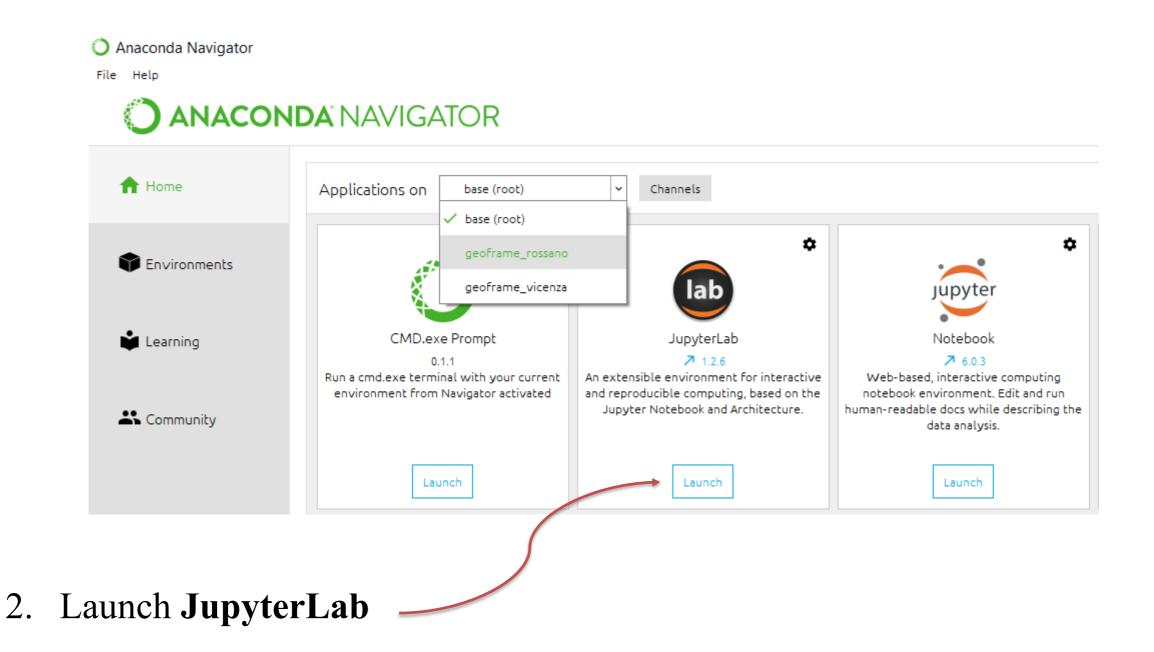
```
ex01 - ex00_HelloWorld.sim - Console (OMS 3.6.28)
                                                                                                                           \times
Co 🗁 🗗 🗳 +
                                                                         Project: ex01 - C:\Users\Concetta\Desktop\LysimeterGEO_Les. \
ex00_HelloWorld.sim
                                             Logging: OFF
 18 /*
     * Hello 'world' example.
         A component printing a greeting.
   import static oms3.SimBuilder.instance as OMS3
 7 - /*
     * Classic 'Hello World' ...
     * passing in a string message to an '@In' filed of a component;
     * the component just prints out the message.
12 □ OMS3.sim {
13
14⊟
        model() {
15⊟
            components {
               // "componentname" -> "component class"
               "c" "ex00.Component"
    STARTING: C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Installation\Materials\ex01\simulation\ex00_HelloWorld.sim
    Hello World ...
                                        IT WORKS!!!
    DONE. (1,91 seconds)
                                                                            http://alm.engr.colostate.edu
                                                                                                                          1:1
 'C:\Users\Concetta\Desktop\LysimeterGEO_Lessons\1-Program_Inst...
```

> Open ANACONDA NAVIGATOR





1. Change the environment in **geoframe_rossano**



Once JupyterLab has been launched, the following screen will open

```
t numpy as np

t os

rojec
('\n')

Build Recommended

C: JupyterLab build is suggested:

dir(c @jupyterlab/plotly-extension needs to be included in build istdi

ile = CANCEL BUILD

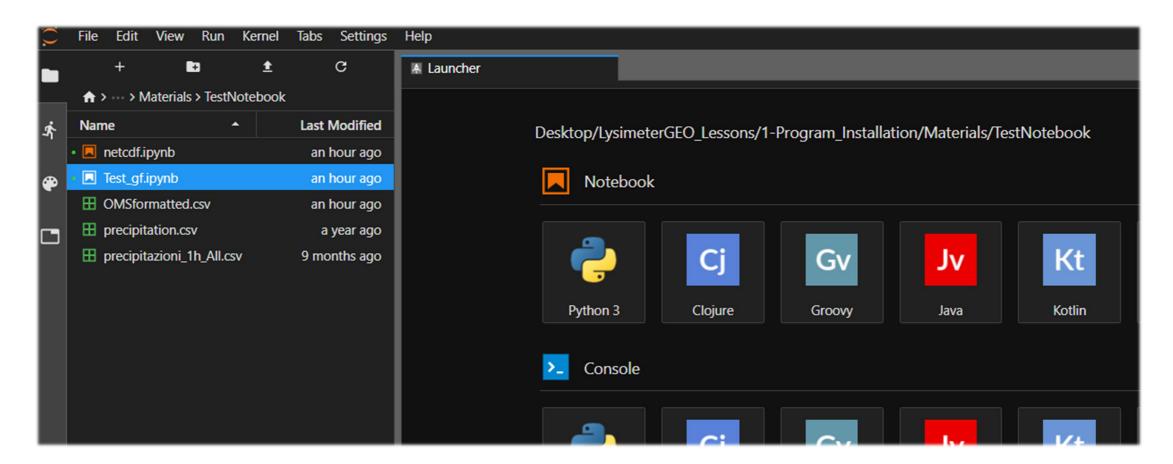
pd.read csv (nameFile, skiprows = 11, sep = '.', na values = -9999,usecols
```

Run the **Build** and wait until another screen appears which will ask you to reload the program (**Reload**).



To check if Anaconda has been installed correctly, once the reload has been carried out, launch the **Test gf** notebook:

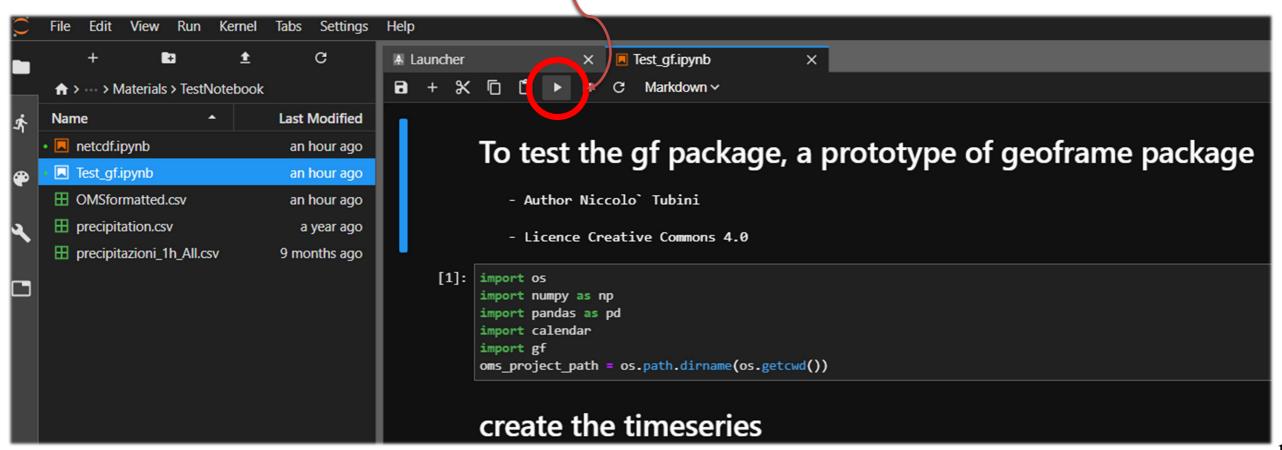
- 1. Go to the folder where you have the above file by using the "Dialog box" and open it;
- 2. Run the notebook as the figure shows.

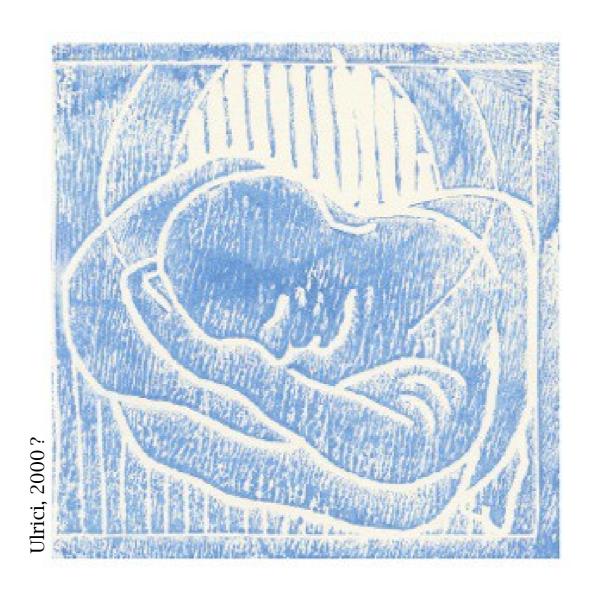




To check that Anaconda has also been installed correctly, once the reload has been carried out, launch the **Test gf** notebook:

- 1. Go to the folder where you have the above file by using the "File Browser" and open it;
- 2. Run the notebook as the figure shows.





Thank you for your attention



Programs installation - FAQ



Programs installation - FAQ

1. Cannot find the javaw file

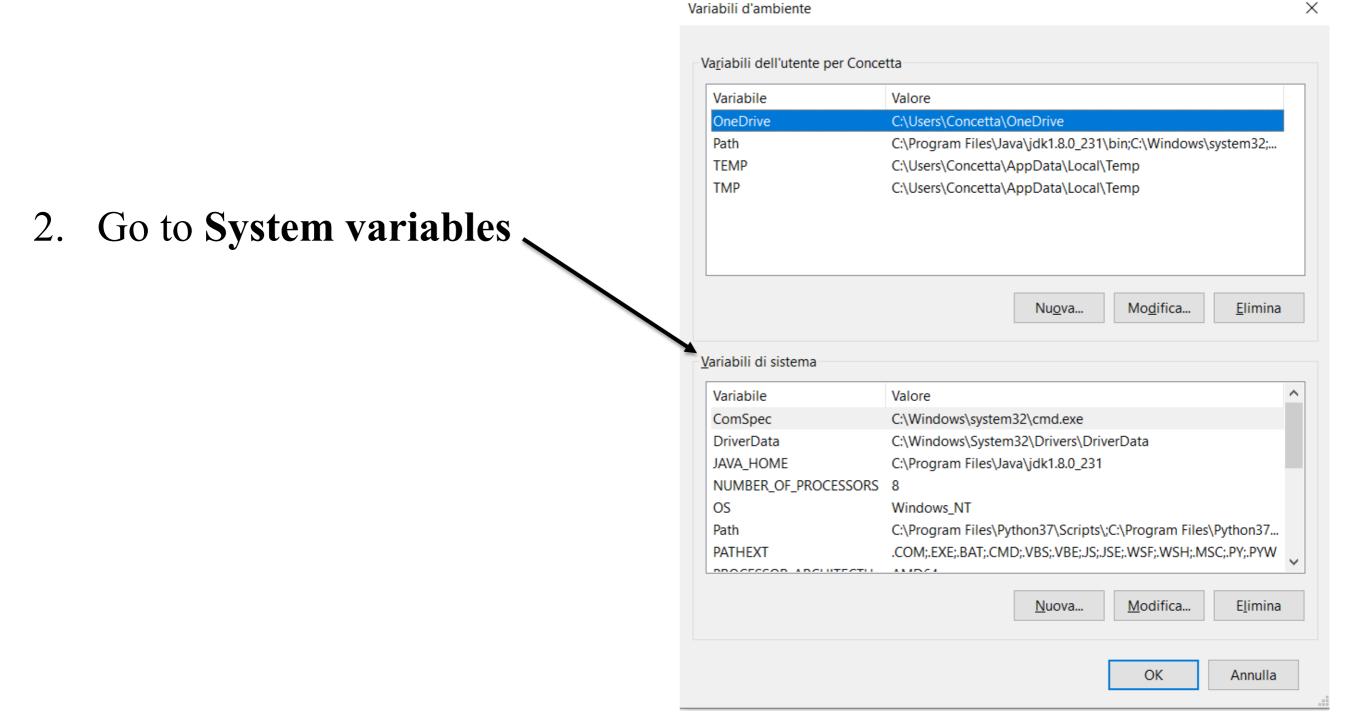


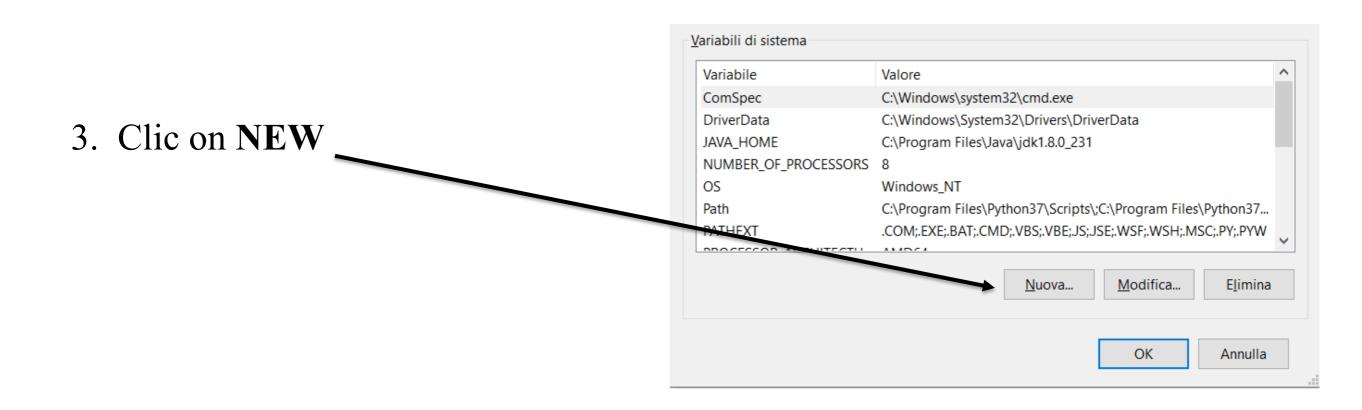
2. White screen when JupyterLab opens

1. Cannot find the javaw file

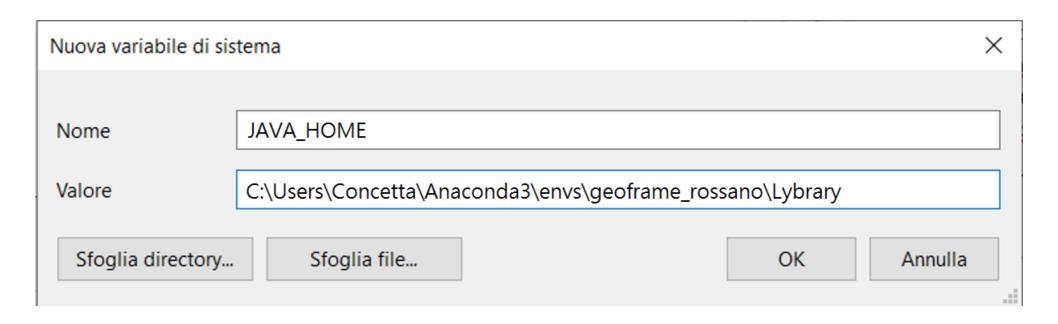
1. Open: Control Panel → System → Advanced system

settings > Environment variables



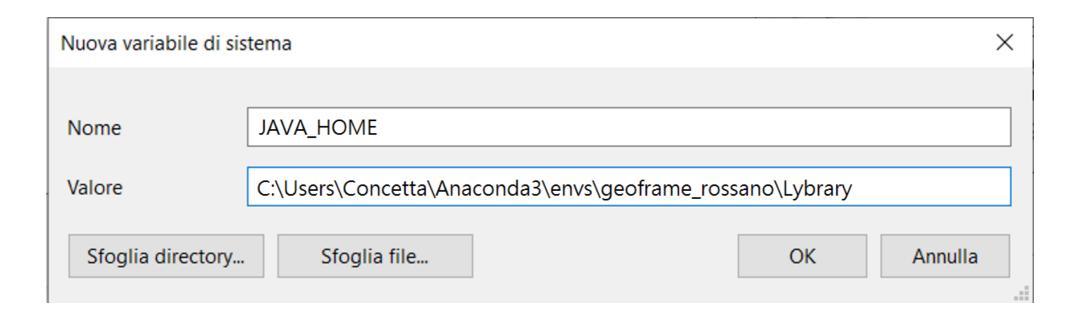


4. The following screen will open where you must enter "Name" and "Value".





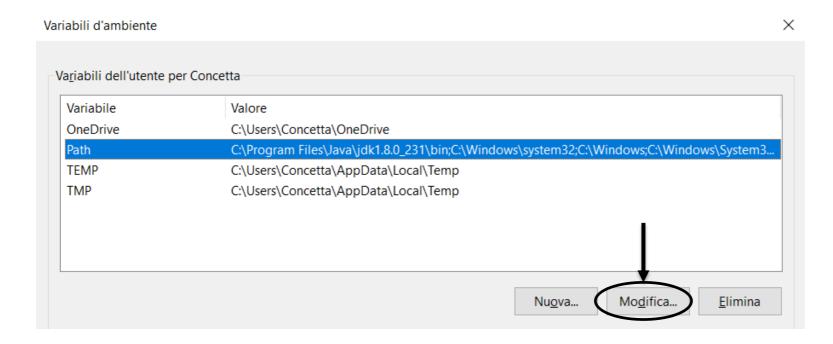
4. The following screen will open where you must enter "Name" and "Value".



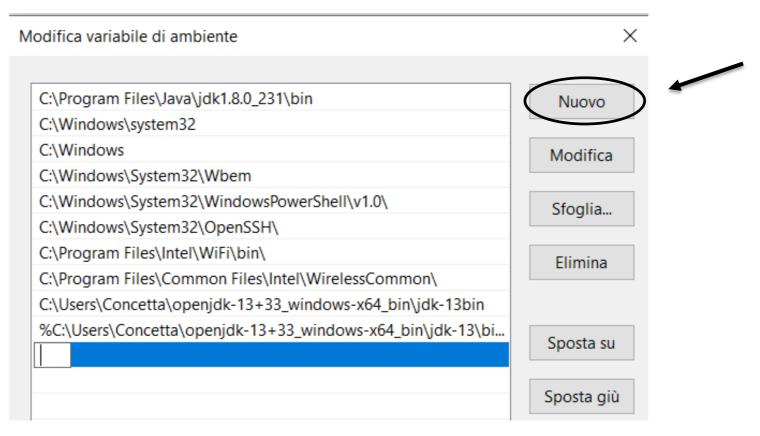
ATTENTION

- The name must be exactly JAVA_HOME
- The path is the one that must be copied from the Anaconda prompt after activating the geoframe_rossano environment

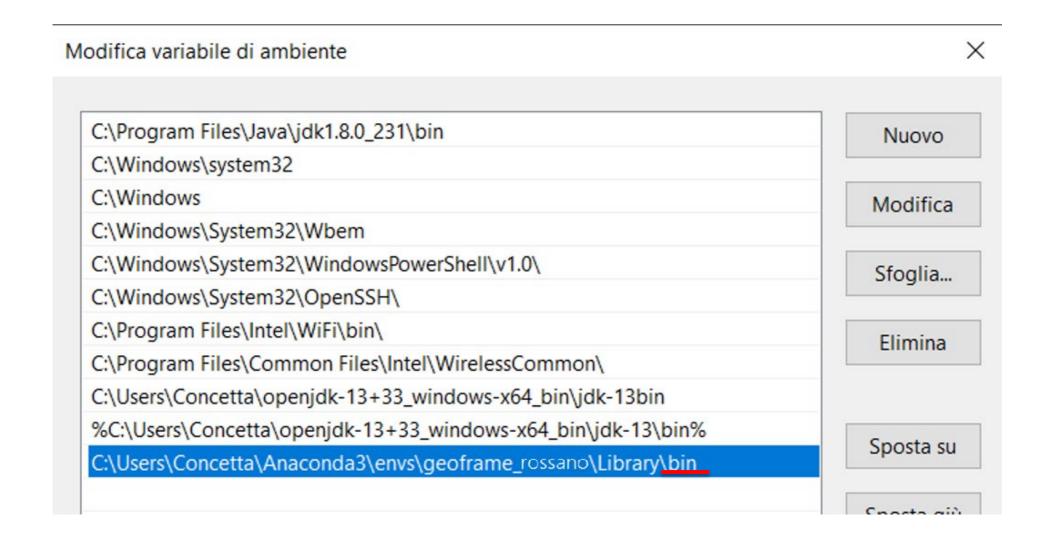




5. Go to
 User variables → Path →
 → Modify → New



6. Paste the previous path by adding **bin** (AS SHOWN)



7. **Save** and open OMS console



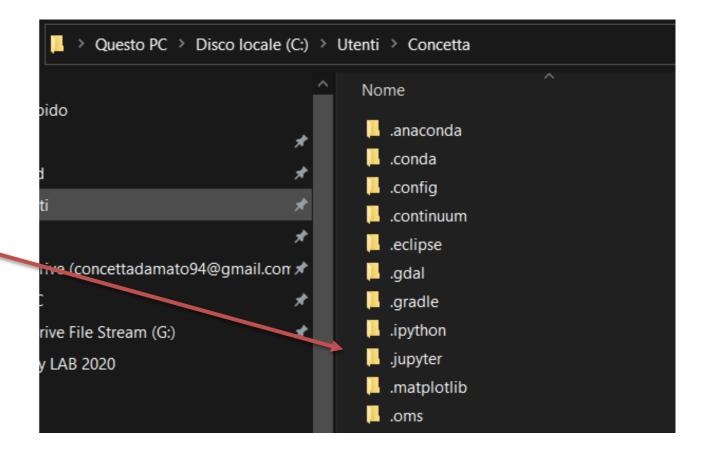
2. White screen when JupyterLab opens

1. Open ANACONDA PROMPT and write: Jupyter notebook --generate-config

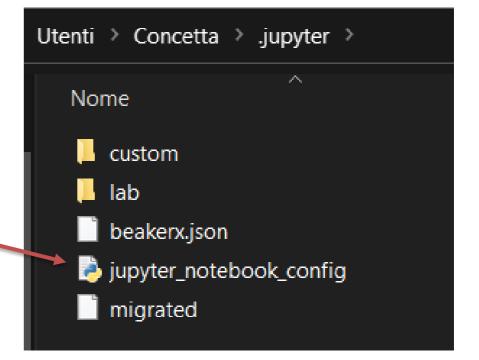
```
(base) C:\Users\Concetta>jupyter notebook --generate-config
Writing default config to: C:\Users\Concetta\.jupyter\jupyter_notebook_config.py
(base) C:\Users\Concetta>
```

Programs installation - FAQ: White screen when JupyterLab opens

2. Go to user folder and open the folder . jupyter



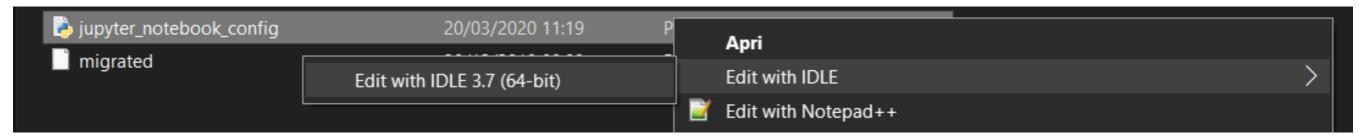
3. Open jupyter_notebook_config





Programs installation - FAQ: White screen when JupyterLab opens

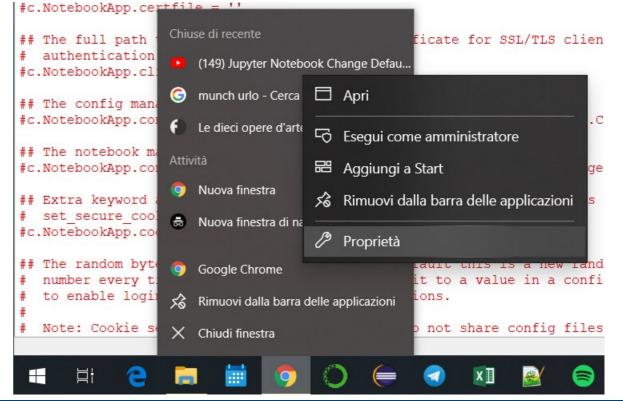
4. Open the file using **IDLE**, as shown in figure



5. Go to the highlighted lines and modify the string c.NotebookApp.browser

```
## Specify what command to use to invoke a web browser when opening the notebook.
# If not specified, the default browser will be determined by the `webbrowser`
# standard library module, which allows setting of the BROWSER environment
# variable to override it.
#c.NotebookApp.browser = ''
```

6. Choose the **browser** with which to open the Jupyter files, for example Chrome

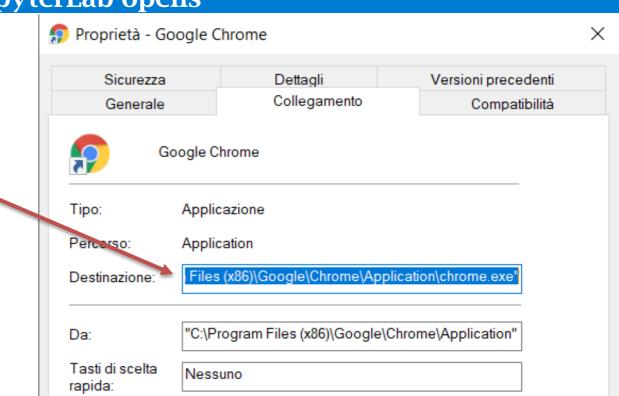


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Programs installation - FAQ: White screen when JupyterLab opens

Copy the path where it is located the executable of the application



Paste it in the jupyter_notebook_config file as shown in the figure.

ATTENTION: add "u" and "% s" as shown in the figure

```
## Specify what command to use to invoke a web browser when opening the notebook.
# If not specified, the default browser will be determined by the `webbrowser`
# standard library module, which allows setting of the BROWSER environment
# variable to override it.
c.NotebookApp.browser = u'C:/Program Files (x86)/Google/Chrome/Application/chrome.ex# %s'
## The full path to an SSL/TLS certificate file.
#c.NotebookApp.certfile = ''
```

SAVE and open JupyterLab.

