

Setup resources on the WEkEO Cloud Computing Platform.

Navigate to: <https://www.wekeo.eu/>

### **Step1: Register to the WEkEO Cloud Service**

- Register, by providing your email address, username, password, country and organization category
- Check your email (using the email address provided), if you don't see an email from wekeo, check your spam account. Confirm your account and the account will be activated.
- Sign in, using your Username and Password
- Go to 'Jupyter Notebooks'
  - Sign in with OAuth 2.0232084
  - Check OTP Verification (see email for code)
  - Provide the code received and click 'Authenticate'
- As Server Options, select 'Machine Learning'

### **Step2: Creating a new Conda Environment**

Setup your Conda environment, open a Terminal Session:

You are now in: `jovyan@jupyter-,<username>`:

Execute the following commands and if asked to proceed, continue with 'y':

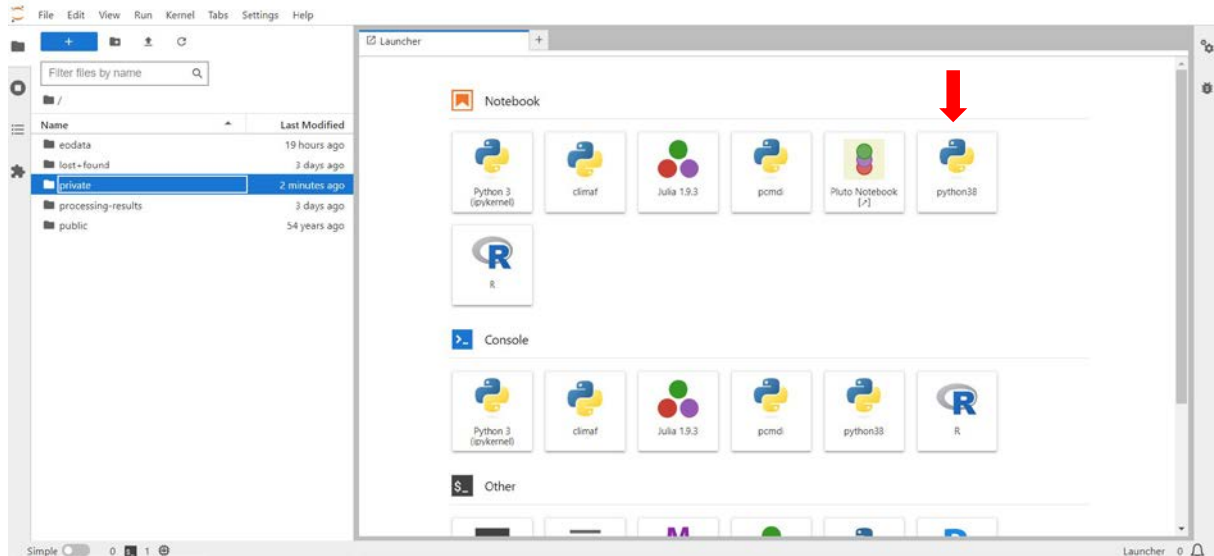
```
conda create --prefix /home/jovyan/.local/python38 python=3.8
conda config --append envs_dirs /home/jovyan/.local/
source activate python38
conda install ipykernel
ipython kernel install --user --name=python38
```

From the Jupyter Notebook menu, select:

```
File -> Hub Control Panel -> Stop My Server / Start My Server
Machine Learning -> Start
```

When you start a new instance, note that an additional kernel, with the name "pyhton38" is now at your disposal. See also figure 1.

Figure 1: newly created python38 environment



### Step3: uploading training package

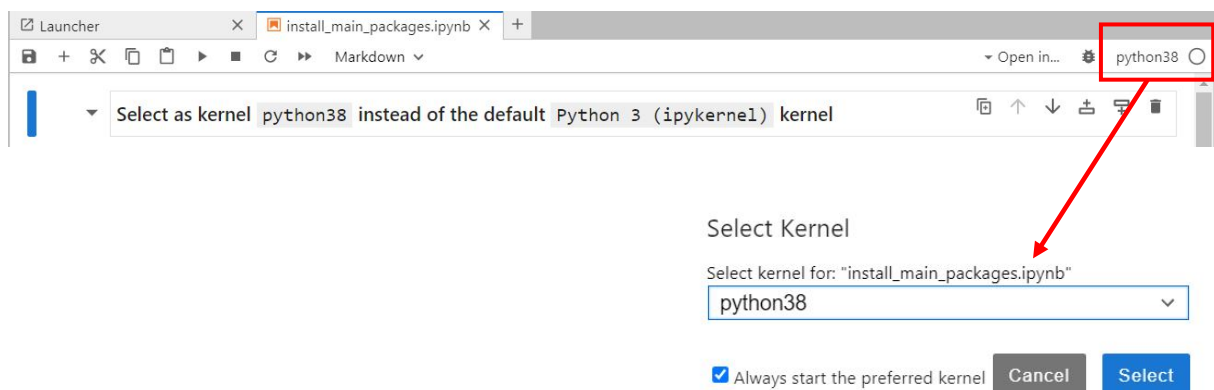
Download the notebook 'install\_TMT\_Vietnam\_resources.ipynb', available from: [https://filetransfer.itc.nl/pub/52n/TMT\\_Vietnam202401](https://filetransfer.itc.nl/pub/52n/TMT_Vietnam202401) to your local system

Create a new folder in the left hand 'table of content' and assign as directory name: 'private' (see also figure 1) and navigate to this folder. Upload the file into the WEkEO cloud service, in the new folder created (/private) and open / execute the notebook, e.g. using the notebook Menu options: 'Kernel' > 'Restart Kernel and run all cells'. Once the notebook is completed the training package is at your disposal.

### Step4: Installing the required software and site packages

Finally run the notebook: 'install\_main\_packages.ipynb'. Before you run this notebook, ensure that the python38 kernel is selected (instead of the default 'Python 3 ipykernel'), see the figure below. To switch the kernel, select the top right hand button displaying the current kernel and from the 'new kernel select' menu the 'python38' kernel should be selected.

Figure 2: Select the new kernel created – python38



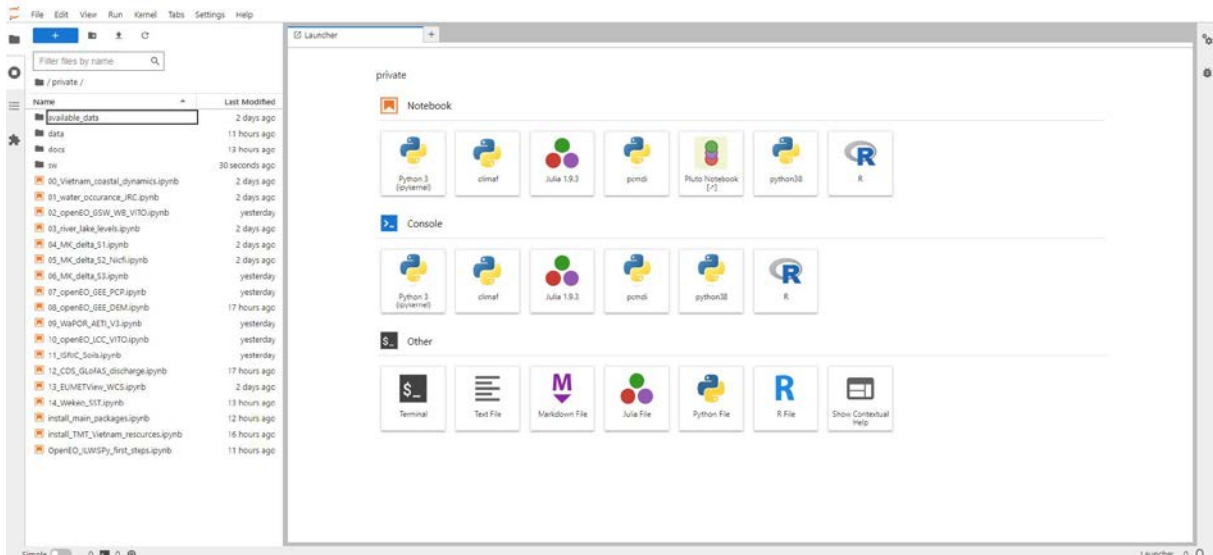
Upon completion of this notebook, all required resources should be at your disposal. From the Jupyter Notebook menu, select:

File -> Hub Control Panel -> Stop My Server / Start My Server

Machine Learning -> Start

Upon completion the Jupyter environment in the WEkEO cloud service should resemble the figure below. Run the notebooks in their sequential order, start with 00\_.\*.

Figure 3: WEkEO Environment with all resources and notebooks prepared



#### Remark:

In case something went wrong and you want to re-install the package, you can clean-up / remove the created environment 'python38'. Open a terminal session and type – execute the following commands:

```
conda env remove --name python38
```

```
conda env remove --prefix /home/jovyan/.local/python38
```

```
jupyter kernelspec uninstall python38
```

Log out of the WEkEO Cloud Service and log in before you re-install the resources provided.