

RAINFOREST ALLIANCE

QGIS GUIDANCE

INSTALLING QGIS IN OSGEO4W AND
PYTHON.

Version 1.0

Translation Disclaimer

For any question related to the precise meaning of the information contained in the translation, please refer to the English official version for clarification. Any discrepancies or differences in meaning due to translation are not binding and have no effect for auditing or certification purposes.

More information?

For more information about the Rainforest Alliance, visit www.rainforest-alliance.org or contact info@ra.org

Document Name:		Document Code:	Version:	Language:
Guidance on the Installation QGIS in OSGEO4W and Python		SA-G-AS-51	V1	EN
Date of first publication:	Date of revision:	Valid From:	Expires by:	
August 1 st , 2023	NA	August 1 st , 2023	Until further notice	
Developed by:		Approved by:		
Rainforest Alliance Department Standards and Assurance		Director of Standards & Assurance		
Linked to:				
SA-S-SD-1-V1.1 Rainforest Alliance 2020 Sustainable Agriculture Standard, Farm requirements (1.2.12. 1.2.13. 1.2.14. 1.2.15. and 6.1.1. 6.1.2) SA-S-SD-13-V1 Annex S12: Additional Details on requirements for no-conversion Document code Annex S17: Collecting Geolocation Data				
Replaces:				
N/A				
Applicable to:				
Farm Certificate holders				
Country/Region:				
China				
Crop:		Type of Certification:		
All crops in the scope of the Rainforest Alliance certification system; please see Certification Rules.		Farm Certification		

TABLE OF CONTENT

TABLE OF CONTENT	3
TABLE OF FIGURES	3
1. INTRODUCTION	4
2. DOWNLOADING QGIS IN OSGeo4W	4
3. SET UP PYTHON FOR QGIS	8

TABLE OF FIGURES

Figure 1. QGIS installer.....	4
Figure 2. Install QGIS using the Advanced Install.....	5
Figure 3. Install QGIS from the internet.....	5
Figure 4. (default) Root directory "C:\OSGeo4W"	6
Figure 5. Keep the default setting.....	6
Figure 6. Select your internet connection step.....	6
Figure 7. Select the site where to download QGIS (https://ftp.osuosl.org).	7
Figure 8. Select the packages to be installed with QGIS.....	7
Figure 9. Accept all the terms and conditions to start the installation.	8
Figure 10. Create a .txt file in "C:\OSGeo4W".....	8
Figure 11. Create a txt file in "C:\OSGeo4W" and paste the text as above.....	9
Figure 12. Saving the txt file as a "pygis.cmd" file.	10
Figure 13. The file stored in the OSGeo4W folder location.....	10

1. INTRODUCTION

What is QGIS

QGIS is an open-source, user-friendly, and professional GIS application licensed under the GNU General Public License. It runs on Linux, Unix, Max OSX, Windows, and Android and supports numerous vectors, raster, and database formats and functionalities.

This document will guide how to use QGIS tool to:

- 1) Download and install QGIS in OSGeo4W
- 2) Set up Python for QGIS

The first section shows how to download and set up QGIS. In the second section, you can see how to configure python and install the required packages to run the QGIS risk tool.

Please note:

QGIS 3.2.4 Tisler for Windows 10 was used to create this guidance document.

2. DOWNLOADING QGIS IN OSGeo4W

To download QGIS go to the [official page](#) and select the option QGIS in OSGeo4W (recommended for regular users) and download the installer.

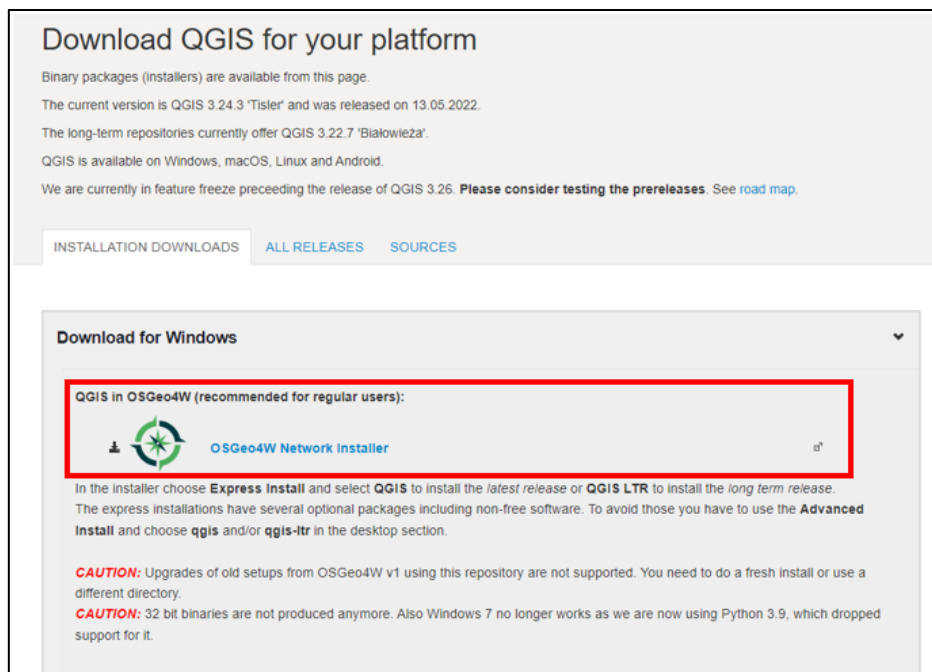


Figure 1. QGIS installer.

Once the installer has been downloaded, execute it, and follow the next instructions:

1. Select Advance install

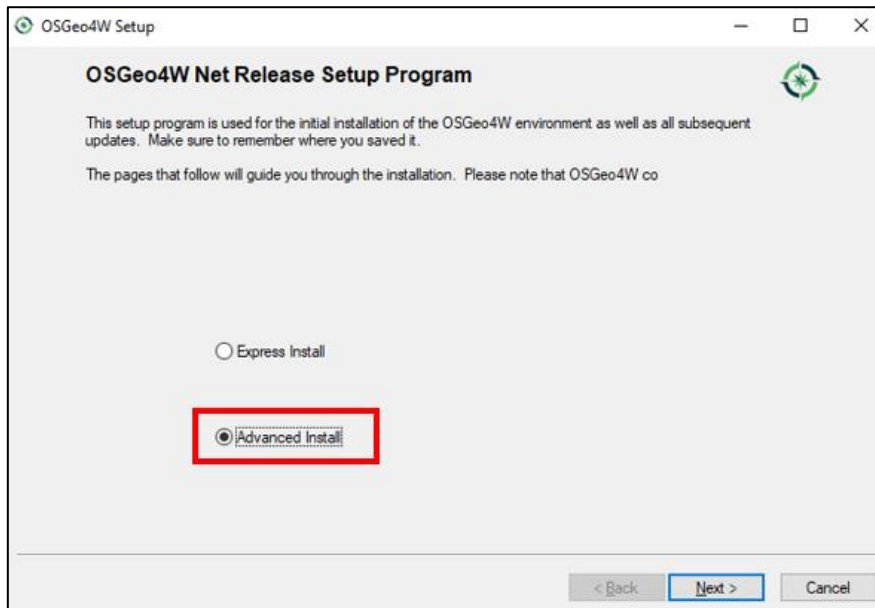


Figure 2. Install QGIS using the Advanced Install

2. Select install from the internet

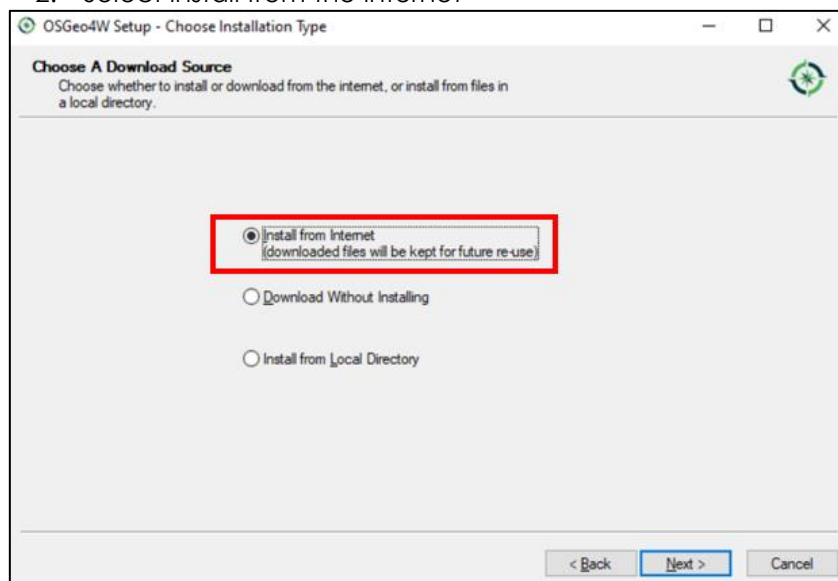


Figure 3. Install QGIS from the internet.

After selecting install from the internet, it will be required to define a root install directory. By default, the installer tool points to C:\ in this case, leave it. In case of C:\ is not automatically selected, please select C:\OSGeo4W.

3. Select installation just for me and add an icon to Start Menu.

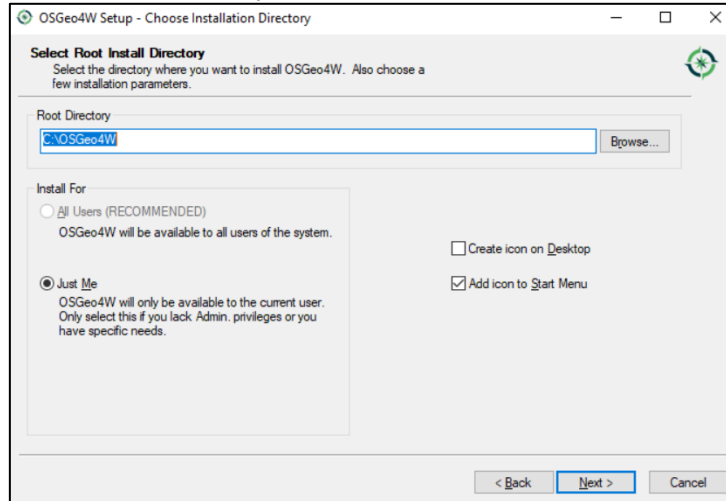


Figure 4. (default) Root directory "C:\OSGeo4W"

4. The next window(s) will be left by default as well.

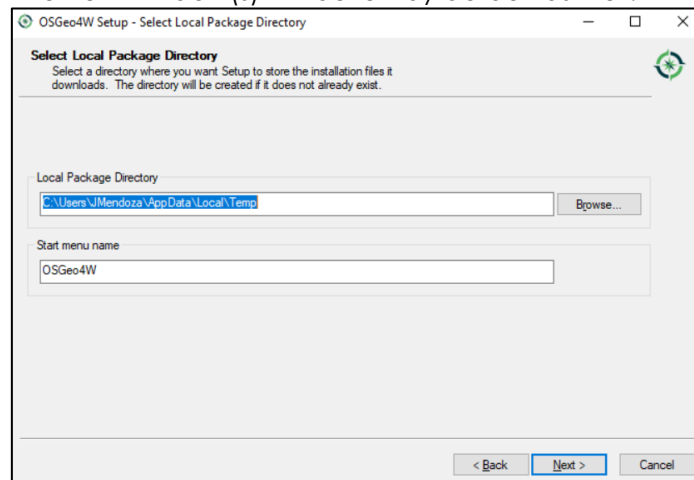


Figure 5. Keep the default setting.

5. Select the internet connection selecting "Use System Proxy Settings".

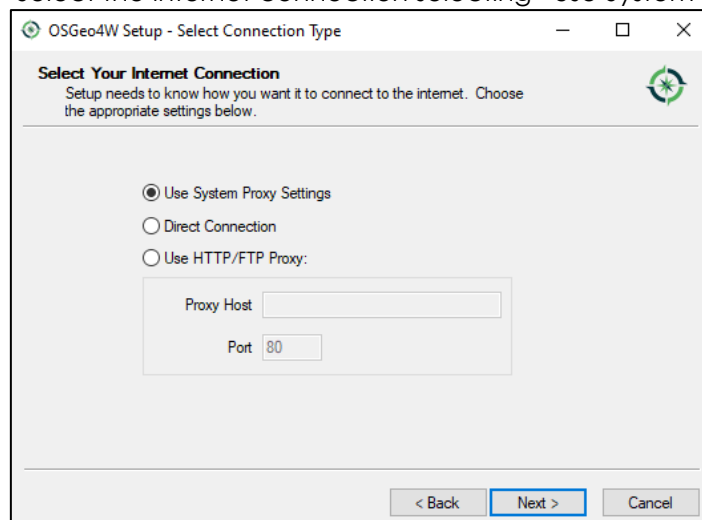


Figure 6. Select your internet connection step

6. Select <http://ftp.osuosl.org> option when asked to pick a download site

Note: in case the recommended site does not work, try the other two sites.

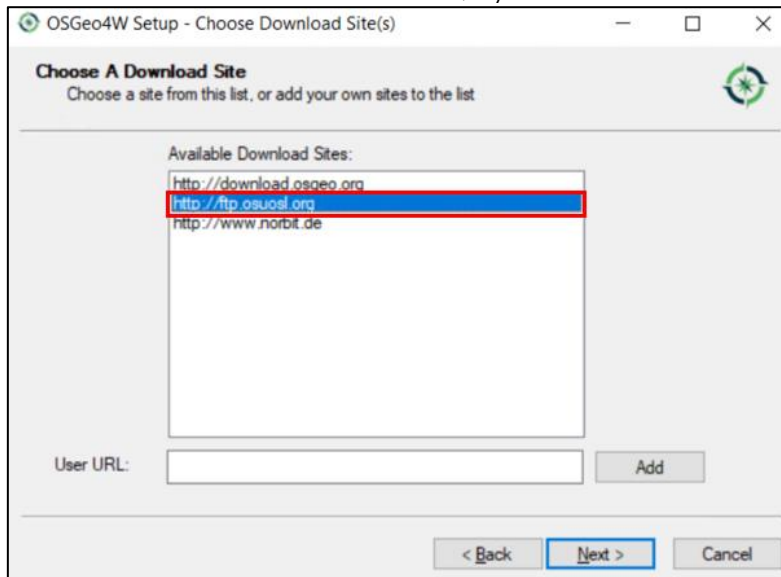


Figure 7. Select the site where to download QGIS (<https://ftp.osuosl.org>).

7. The next step is to activate the packages to be installed together with QGIS, click on "skip" to enable the installation of:
 - a. qgis: QGIS Desktop and,
 - b. qgis-full: QGIS full Desktop

Note: The software version 3.24 may be different from the image below

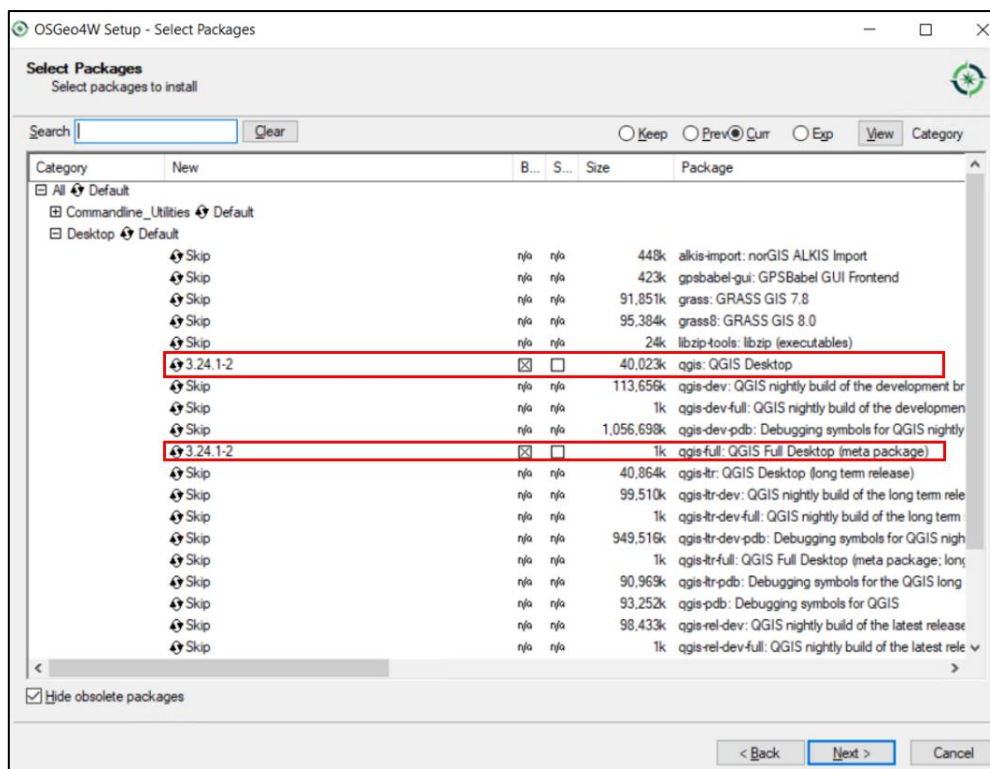


Figure 8. Select the packages to be installed with QGIS

8. Finally, accept the additional packages that will be installed and then license conditions.

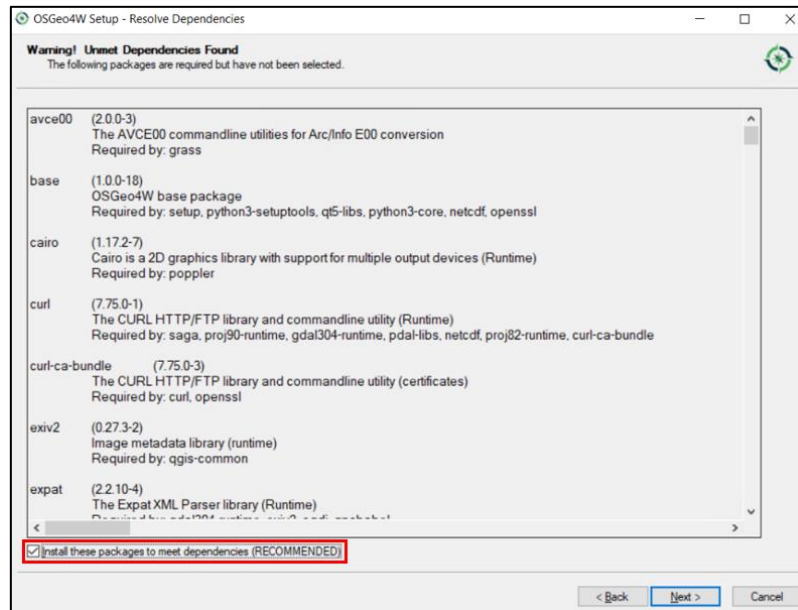


Figure 9. Accept all the terms and conditions to start the installation.

2) SET UP PYTHON FOR QGIS

After installing QGIS on your computer, we can start with the configuration of Python. This is a critical step to enable QGIS to work with Python.

1. Go to C:\OSGeo4W and create a .txt file, to do this right-click to open the window > select New > Text Document and name the file pygis.txt

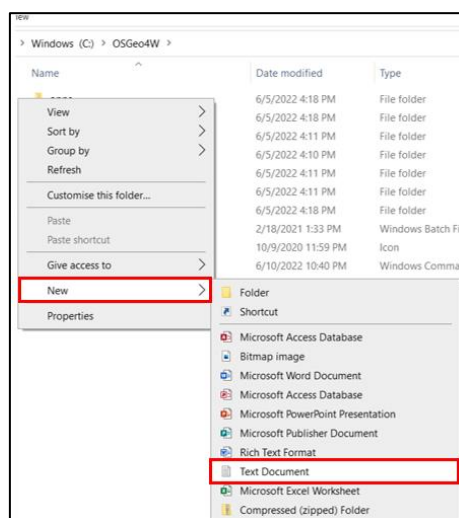


Figure 10. Create a .txt file in "C:\OSGeo4W".

2. Open the new pygis.txt and copy and paste the following lines into the file. if you prefer you can also download the file [here](#) and go to step 3.

```
@echo off
Set OSGEO4W_ROOT=C:\OSGeo4W
call "%OSGEO4W_ROOT%\bin\o4w_env.bat

@echo off
path %PATH%;%OSGEO4W_ROOT%\apps\qgis\bin
Path %PATH%;%OSGEO4W_ROOT%\apps\grass\grass78\bin
path %PATH%;C:\OSGeo4W\apps\Qt5\bin
path %PATH%;C:\OSGeo4W\apps\Python39\Scripts

set PYTHONPATH=%PYTHONPATH%;%OSGEO4W_ROOT%\apps\qgis\python
set PYTHONHOME=%OSGEO4W_ROOT%\apps\Python39

cmd.exe
```

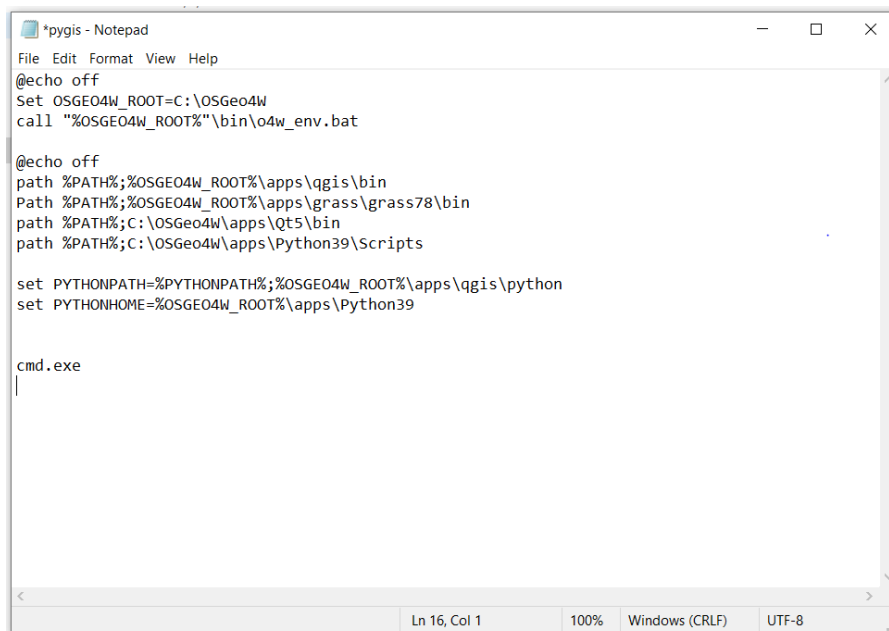


Figure 11. Create a txt file in "C:\OSGeo4W" and paste the text as above.

Once you have copied the lines into the pygis file, proceed by saving it as a "cmd" file by doing the following:

Go to File > Save As, and there modify the name by adding the extension ".cmd" to the name and proceed to save the file.

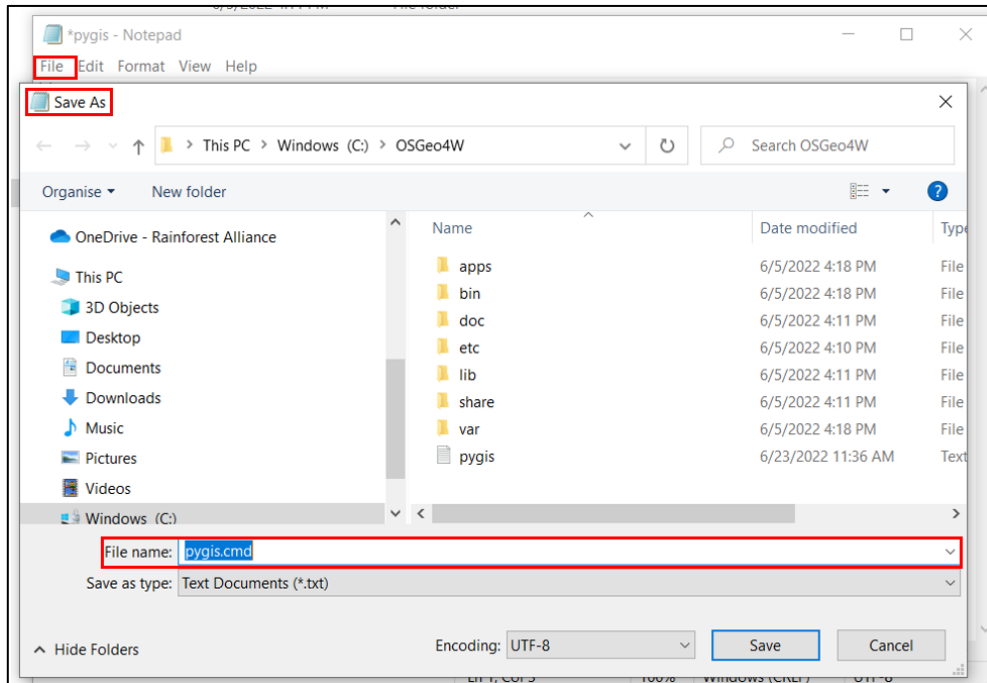


Figure 12. Saving the txt file as a "pygis.cmd" file.

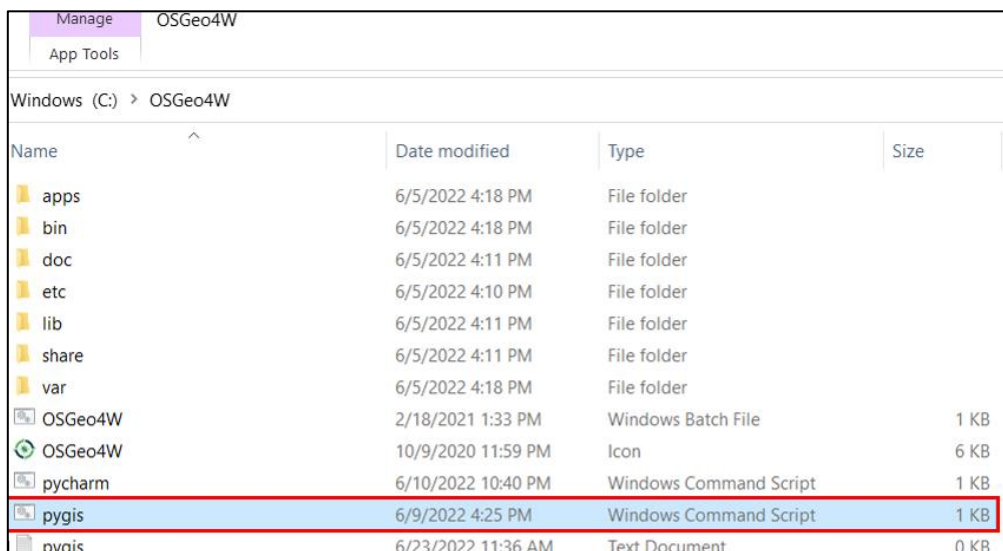
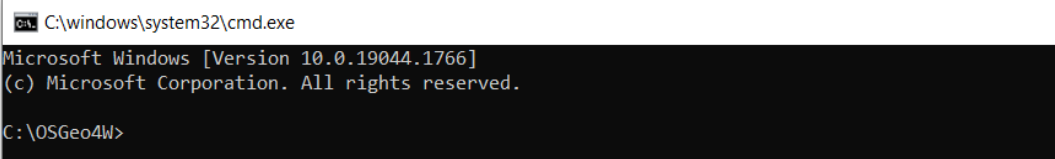
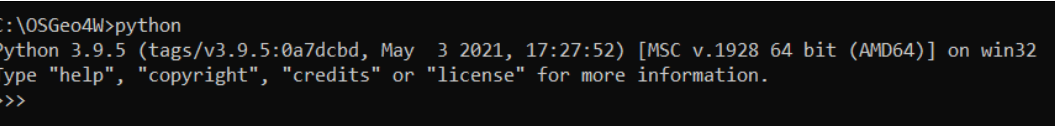
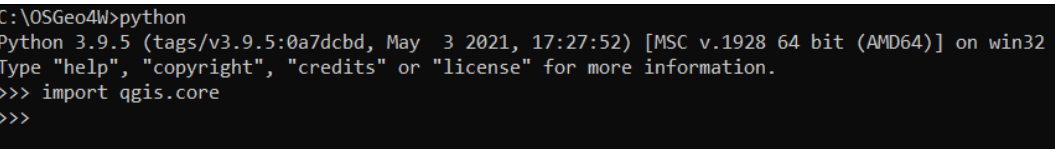
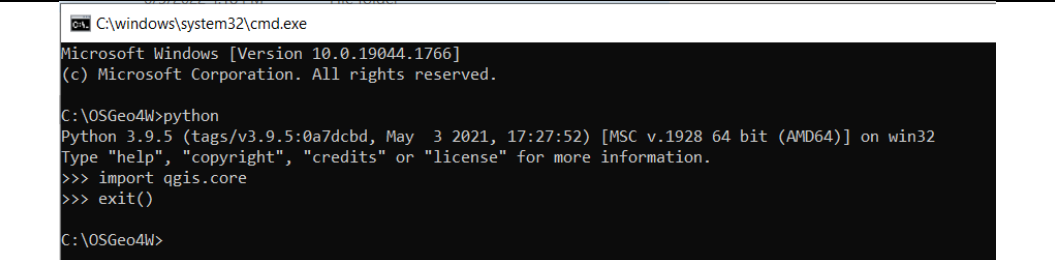


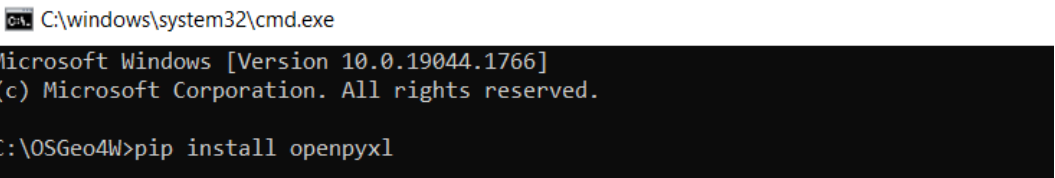
Figure 13. The file stored in the OSGeo4W folder location.

- Now is the time to open the pyqgis.cmd file and test the connexion. To execute the file do double click in pyqgis.cmd to deploy the command prompt window.

1. Once the cmd is open you will see this window
C:\OSGeo4W>

2. Type python and press ENTER.
C:\OSGeo4W>python

3. Now type import qgis.core and press ENTER.
>>> import qgis.core

4. Type exit python typing exit() and press ENTER
>>> exit()


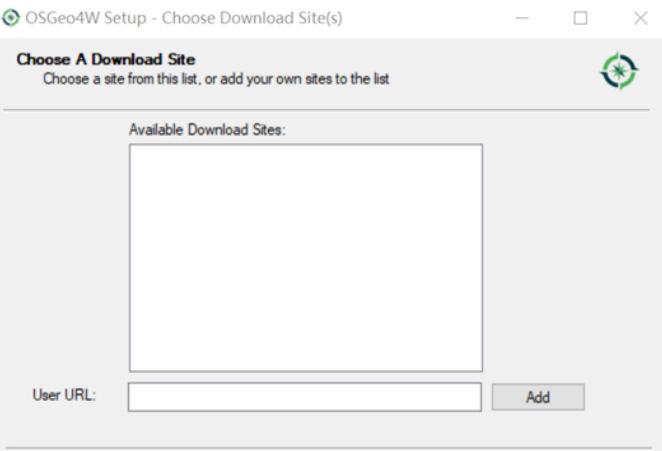
If you do not see any errors when calling python or QGIS, it means that the setup was successful.

- The next step is to install the followed python library:

5. pip install openpyxl
C:\OSGeo4W>pip install openpyxl


5. Troubleshooting

This section includes some possible errors and solutions the user may encounter when installing Qgis in OSGeo4W. If the problem you are facing is not documented, please contact RA.

Problem	Solution
<p>Problem with OSGeo4w installer file</p> <p>There are no available download sites</p> 	<p>Download the installer file using this link and repeat the installation instructions.</p>