# **Downloading and Installing QGIS**

NASA Applied Remote Sensing Training (ARSET)

**The objective** of this document is to provide a step-by-step guide to download, install and configure QGIS (Quantum GIS).

# This exercise contains three parts:

- 1. About QGIS
- 2. Downloading and Installing QGIS
- 3. QGIS Plugins

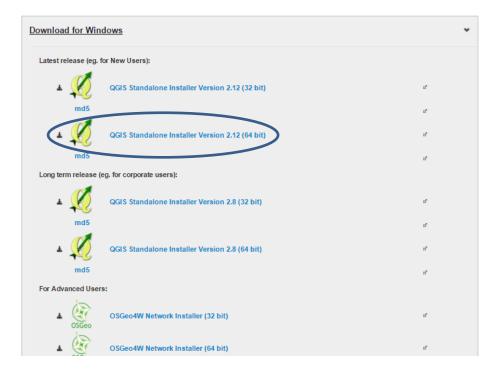
#### **PART 1: About QGIS**

Quantum GIS (QGIS) is an Open Source Geographic Information System. QGIS is available at no cost to users and provides an alternative to costly GIS software. The QGIS software package currently runs on most versions of Unix, Windows and Mac OS X and supports a number of common raster and vector data formats. QGIS is available under the GNU General Public License (GPL).

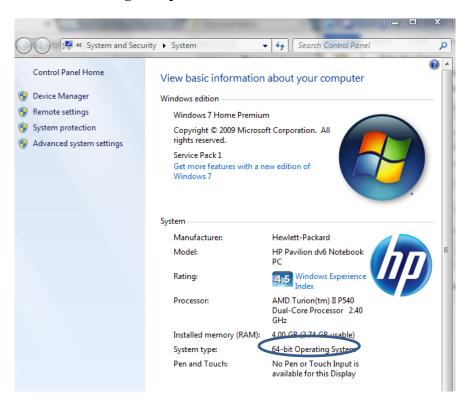
## **PART 2: Downloading and Installing QGIS**

## **Exercise 1: Download and Install QGIS**

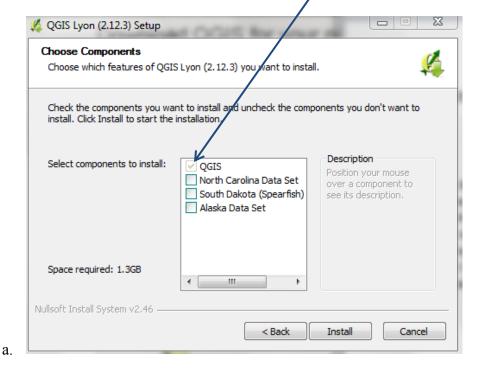
- A. In your preferred web browser navigate to the QGIS download page: http://www.qgis.org/en/site/forusers/download.html
- B. Based on your operating system (Mac OSX, Windows, Unix) locate the "latest release" and download the "QGIS Standalone Installer." The examples below outline the Download for Windows and Mac OSX (Version 2.12 or higher).



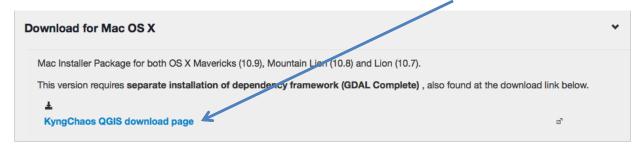
\*If you are a Windows user, be sure to check your machine and download the correct file based on system type (32 bit vs. 64 bit). This can be done by right clicking on "Computer" in the start menu and selecting "Properties"



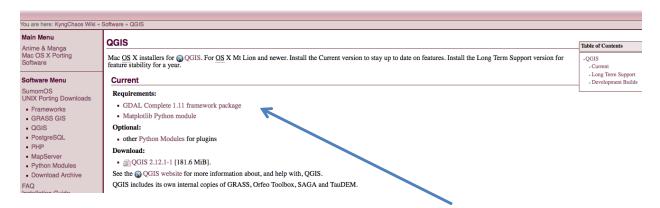
- 1. After the file download has completed (about 2-5 minutes depending on connection), run the '.exe' program. The file name will be similar to "QGIS-OSGeo4W-2.12.3-1-Setup-x86\_64.exe" and can be located in your default downloads folder.
- 2. After running the file and accepting the terms of agreement, select where you would like the program saved under "Destination Folder" (default is recommended).
- 3. Select the components to install. Make sure the QGIS box is selected. The data sets are optional and go along with the QGIS tutorial: <a href="http://docs.ggis.org/2.8/en/docs/training\_manual/">http://docs.ggis.org/2.8/en/docs/training\_manual/</a>.



- 4. Click "Install."
- 5. After the installation, shortcuts will be placed to the desktop and the start menu. To open QGIS, click on the "QGIS Desktop 2.12.3" or QGIS Desktop 2.12.3 with GRASS 6.4.3" icon.
- \*If you are a Mac user, you will first have to download and install GDAL and Matplotlib Python routines. From the QGIS download page go to the following link.



1. Download GDAL and MatPlotlib. Then download and QGIS



2. After download is complete on your computer, go to 'GDAL Complete' folder and click on 'GDAL Complete.pkg'. Follow the installation steps

QGIS

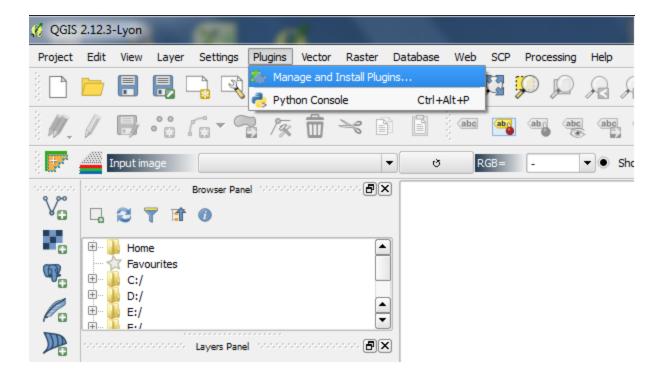
- 3. Next go to 'NumPy' folder and click on 'NumPy.pkg' to install the software
- 4. Go to 'Matplotlib' folder and click on 'Matplotliby.pkg' to install the software
- 5. Finally, go to the QGIS folder on your computer and click on 'Install QGIS.pkg'
- 6. You will find QGIS in your Applications folder
- 7. Click on this icon to start QGIS

## **PART 3: QGIS Plugins**

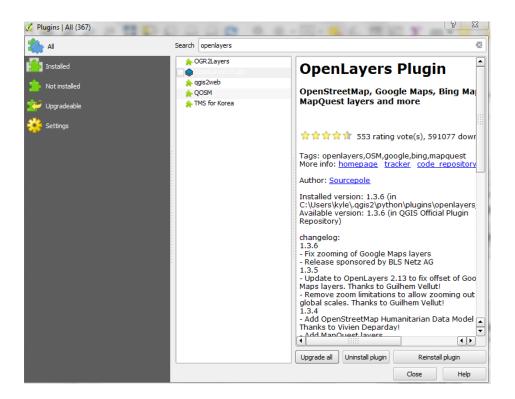
Plugins are optional tools that you can download and import into your QGIS for additional functionality.

## **Exercise 2: Configuring Plugins**

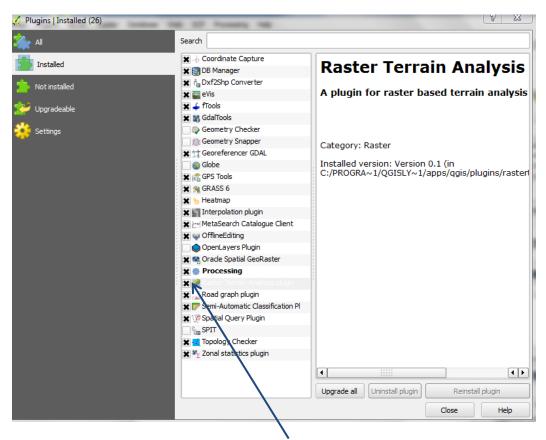
A. After opening the QGIS Desktop application, navigate to the *Plugins* dropdown and select *Manage and Install Plugins*.



- B. A useful plugin for QGIS is OpenLayers and includes Google Maps, OpenStreetmap and Yahoo Map. Type "Openlayers" in the search field and select *OpenLayers Plugin* from the list.
- C. Click the *Install Plugin* button. This will download the plugin from the repository, install it, and load it into QGIS.



D. After the desired plugins have been downloaded and installed, navigate to the *Installed* tab.



Note: In order to use the plugins you must check the box next to the name to enable their functions.

#### **Additional Resources:**

QGIS Users Guide: <a href="http://docs.qgis.org/2.8/en/docs/user-manual/index.html">http://docs.qgis.org/2.8/en/docs/user-manual/index.html</a>

Introduction to GIS: http://docs.ggis.org/2.8/en/docs/gentle\_gis\_introduction/index.html

QGIS Training Manual: http://docs.ggis.org/2.8/en/docs/training manual/index.html

QGIS User Groups: http://www.qgis.org/en/site/forusers/usergroups.html

QGIS Plugin Repository: <a href="http://plugins.qgis.org/plugins/">http://plugins.qgis.org/plugins/</a>