Installing QGIS

ECOSTRESS Tutorials

This tutorial will show you how to download and install QGIS on MacOS.

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# What is QGIS?

QGIS is an open-source Geographic Information System used to display and analyze geographic data. QGIS is free to the public and is user friendly. QGIS can be used for interacting with vector and raster data.

## How to Download QGIS

1. Start by going to <https://www.qgis.org/en/site/> or by searching the web for QGIS. The page should look something like this:

Graphical user interface

Description automatically generated

1. Select the green **Download** button.

Text

Description automatically generated

1. The new screen that pops up will ask you if you would like to make a donation. You can do so if you want to, or select **Skip it and go to download**.

Text

Description automatically generated

1. Select the green **Long Term Version for Mac OS** button to begin downloading the newest version of QGIS.

Graphical user interface, text, application

Description automatically generated

1. A file should appear in your downloads looking like this.

A picture containing text, jack, electronics, projector

Description automatically generated

1. Double click on the download to launch it. Once launched, a window will appear asking you to agree to the terms of the license. Select **Agree**.

Graphical user interface, text, application, email

Description automatically generated

1. Once you agree, a pop up will appear prompting you to add QGIS to your applications. Drag and drop the **QGIS** icon into the **Applications** folder icon. It may take some time to copy over.

Graphical user interface, application

Description automatically generated

Now QGIS has been installed on your computer!

## Preparing QGIS for use with ECOSTRESS Data

1. Now that you have QGIS on your device, lets prepare it for use with ECOSTRESS data by adding **basemaps**. For your first time opening QGIS, start by navigating to your **Applications** folder, **right clicking** on QGIS, and selecting **Open**.

Graphical user interface, text, application, chat or text message

Description automatically generated

1. A warning will pop up asking if you are sure that you want to open this application. Select **open**. You should only need to do this the first time that you open QGIS. For all other times, you can simply double click on the application to open it.

Graphical user interface, text, application

Description automatically generated

**Tip**: If the pop-up warning does not give you an option to **Open** on the first try, select **Cancel** and again **right click** on QGIS and select **Open** from the dropdown menu. The **Open** option should now appear in the warning pop-up.

1. QGIS should open looking something like this:

Graphical user interface, application, Word

Description automatically generated

1. Next, lets add a plugin to allow us to use **basemaps**. With the application open, select for **Plugins** on the menu bar.

Graphical user interface, application, Word

Description automatically generated

1. From the drop-down options, select **Manage and Install Plugins...**

Graphical user interface, text, application, chat or text message

Description automatically generated

1. A Plugins window should appear looking like this:

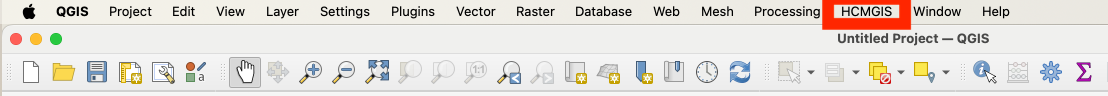
Graphical user interface, text, application

Description automatically generated

1. In the search bar, type in **HCMGIS**. Once you have found HCMGIS, click **Install Plugin**. A notification will appear saying “Plugin installed successfully.”

Graphical user interface, text, application, Word

Description automatically generated

1. Close the plugin window. There should now be a new option in the menu bar titled **HCMGIS**. Select this option. 
2. Under the HCMGIS dropdown, hover over **Basemaps** to see all of the options. For now, we can select **Google Satellite**.

Graphical user interface, text, application, chat or text message

Description automatically generated

1. Now a basemap should appear on your screen, as well as a Google Satellite layer toggled on under the **Layers** panel. You can practice toggling the layer on and off by pressing the box next to the Google Satellite layer to check or un-check it.

Graphical user interface, application, Word, PowerPoint

Description automatically generated

1. You can also practice navigating the map by using the tools provided at the top of the window. Select the white hand icon to access the **pan map** tool. With this tool you can click on the map, hold, and drag it to a different location. You can also use the **magnifying glass** icons to control how much **zoom** you would like. Select the magnifying glass with the plus sign and click on a place to zoom into. Alternatively, you can click and drag to create a box over an area you would like to zoom into. To zoom out, select the magnifying glass with the minus sign and click on the map.

A close-up of a logo

Description automatically generated with low confidence

1. Let’s save this project so we can keep working on it. Select the blue save button in the top left corner of the window and follow the prompt to name your project and select a location for it to save to. You will know that you have successfully saved the project when the top of the screen changes from **\*Untitled Project** to whatever you have named your new project.

Map

Description automatically generated

You now have a project in QGIS set up for working with ECOSTRESS data!