



ASOR Cultural Heritage Initiative

QGIS

Module 02.15: Edit Data Layers

Jared Koller | William Reynolds



ASOR QGIS Module 02.15 – Edit Data Layers

QGIS is a free and open source Geographic Information System (GIS), or geodatabase, licensed under the GNU General Public License. QGIS runs on Linux, Unix, Mac OSX, Windows and Android and supports numerous vector, raster, and database formats and functionalities. Download QGIS here: <https://qgis.org/>.

QGIS users can view, edit, and analyze spatial information through its free software toolkit.

This **ASOR Tutorial (02.15)** provides an overview of advanced layer features.

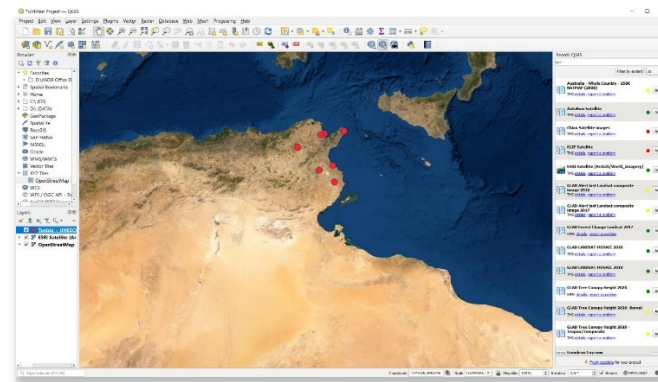
KEY CONCEPTS

- ❖ **Layer Management Tools:** Users can rename, duplicate, delete, and export layers in QGIS by right-clicking the layer name. These tools help organize and maintain data efficiently within a project.
- ❖ **Scale Visibility:** Layers can be set to appear only at specific zoom levels using “Set Layer Scale Visibility,” ensuring maps remain clear and uncluttered when zoomed in or out.
- ❖ **Symbology and Labeling:** The *Layer Properties* window allows users to adjust visual styles (color, size, opacity) and add labels drawn from attribute data, enabling clear, customized map presentations.
- ❖ **Design and Communication:** All layer types—vector, raster, and elevation—are editable in QGIS. Users should thoughtfully design maps to effectively convey spatial information and data relationships.

LAYERS | ADVANCED FEATURES

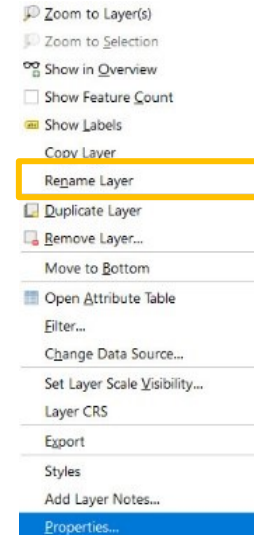
Open a new project.

Add a basemap and the Tunisian UNESCO vector layer.



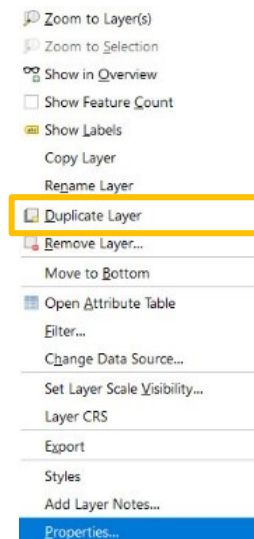
Rename Layers

Right click on layer > Rename Layer



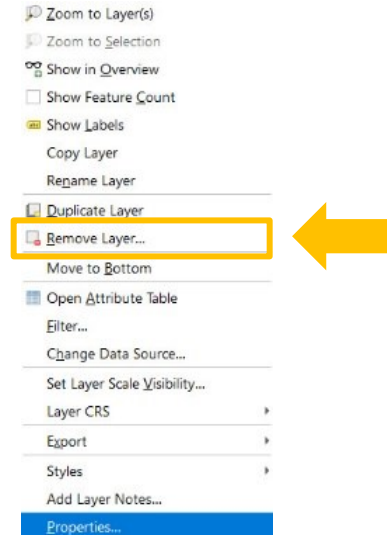
Duplicate Layers

Right click on layer > Duplicate Layer



Delete Layers

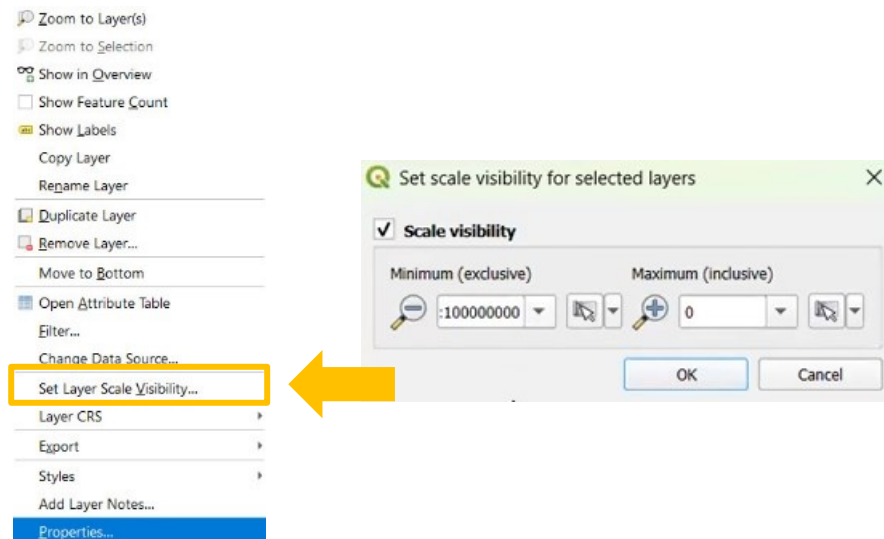
Right click on layer > Remove Layer



Scale Visibility

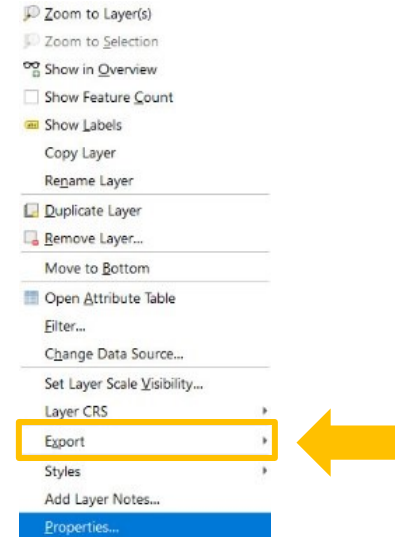
Right click on layer > Set Layer Scale Visibility...

By setting a minimum and maximum scale, you can ensure a layer only appears at certain zoom levels, preventing it from becoming cluttered or obscuring other important features when the map is zoomed out or too detailed when zoomed in.



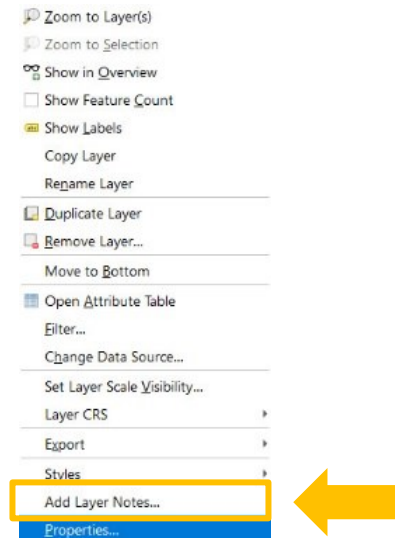
Export Layers

Right click on layer > Export



Layer Notes

Right click on layer > Add Layer Notes

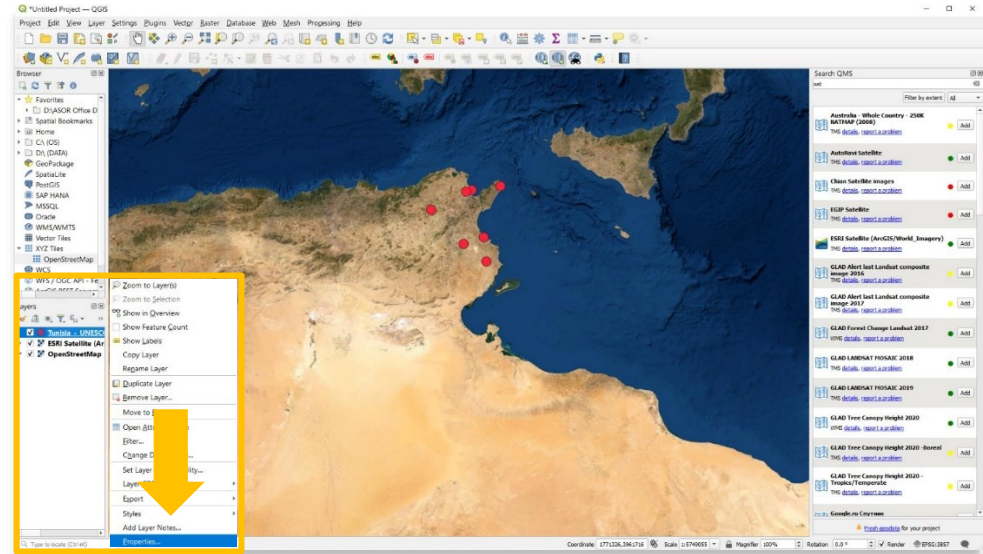


Properties

Right click on layer > Properties

Or

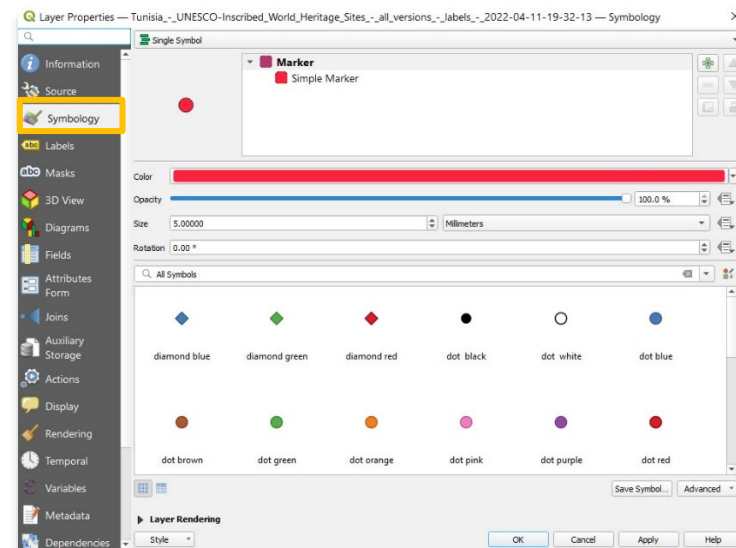
Double-click on the layer



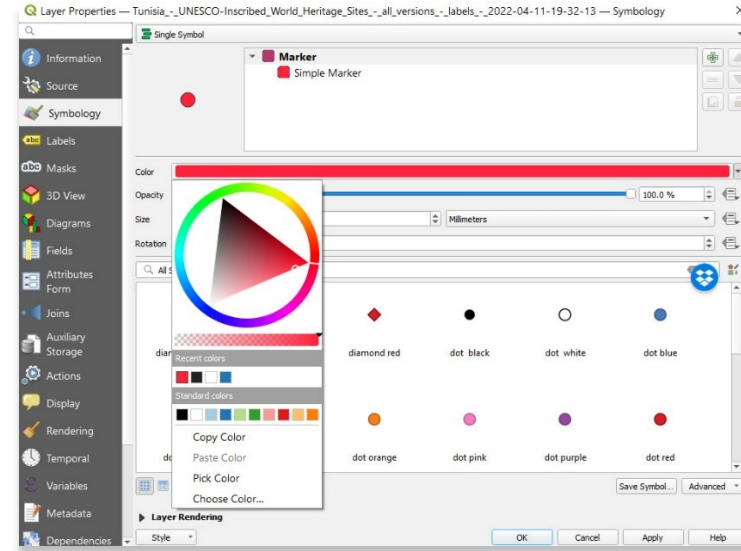
Symbology

A pop-up window will appear. You can use the menu bar on the left for different purposes.

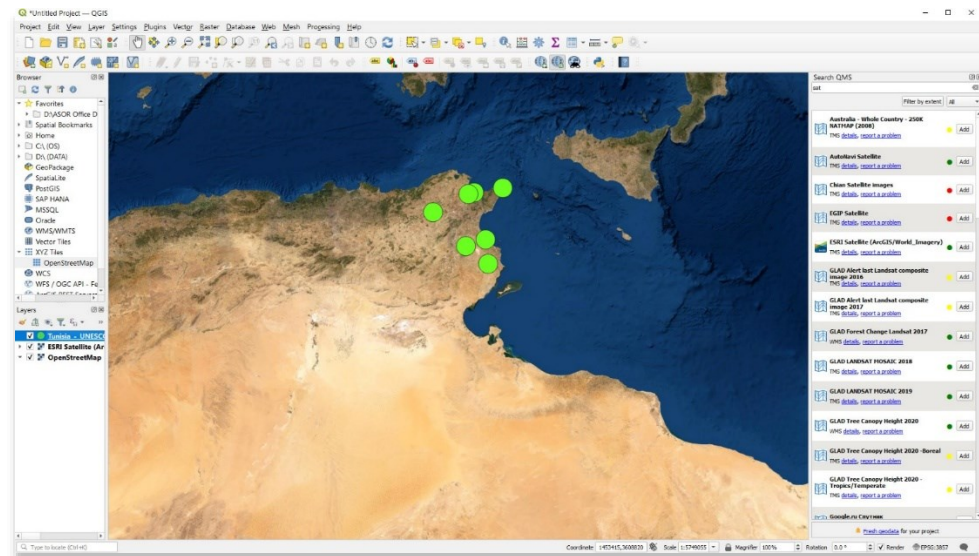
Select **Symbology**.



Users can adjust the size, color, and opacity of points, lines, and polygons through the **Symbology** tab.

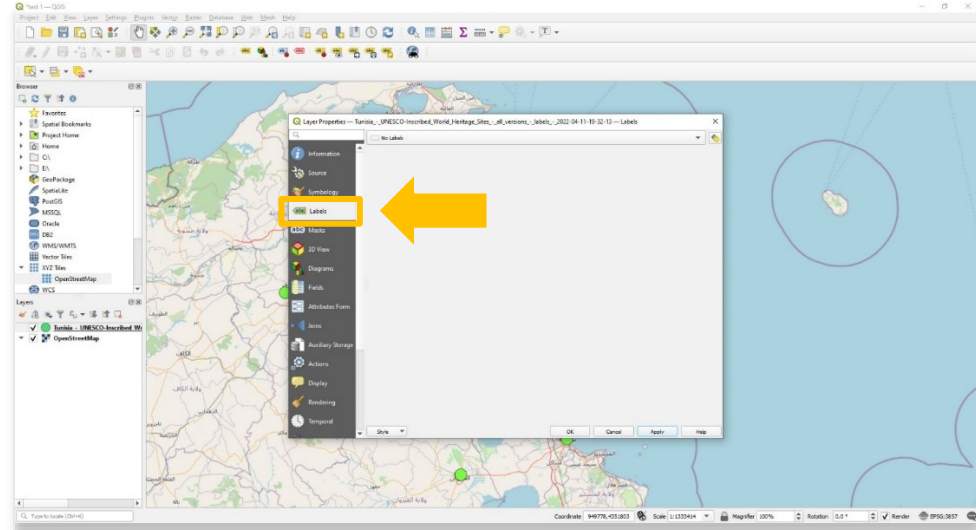


Once done, press **OK** to view the changes made to your layer.

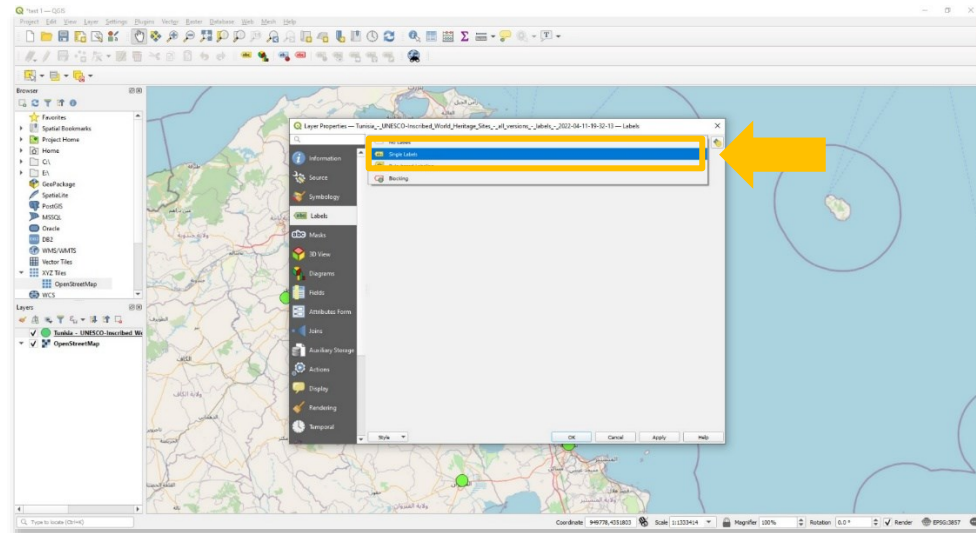


Adding Labels

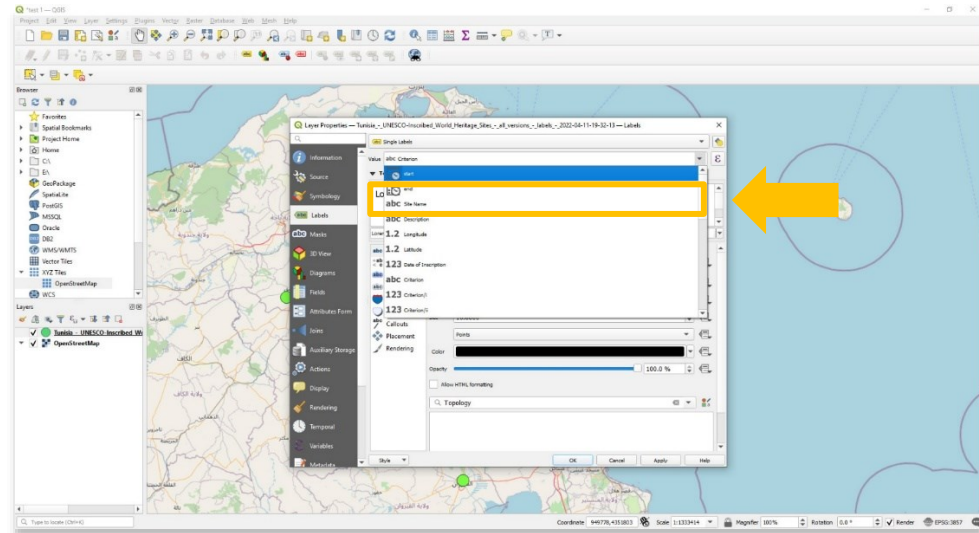
Users can add labels to any layer. Labels are taken from the Attribute Table. **Double-click** on the layer to open the **Layer Properties**. Select **Labels** in the right menu.



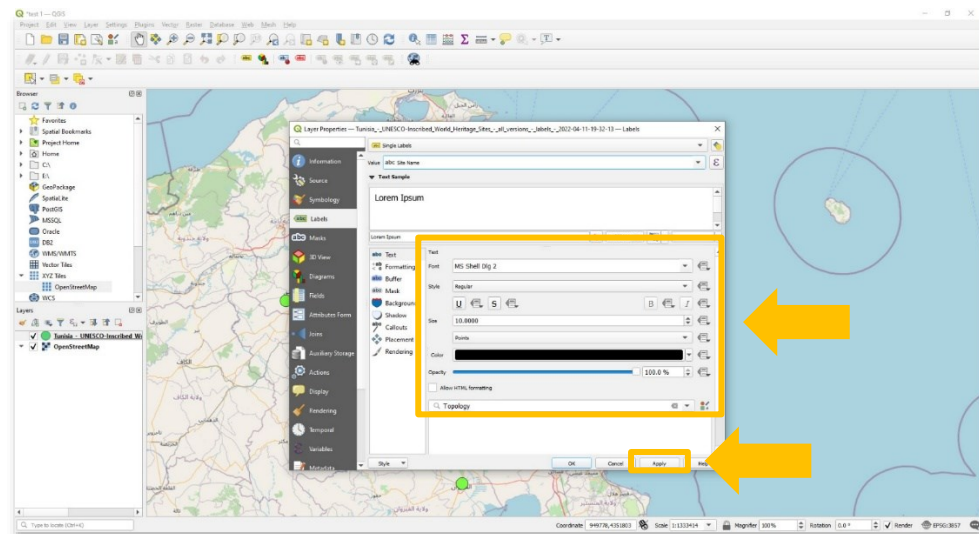
Choose **Single Label** from the drop-down menu.



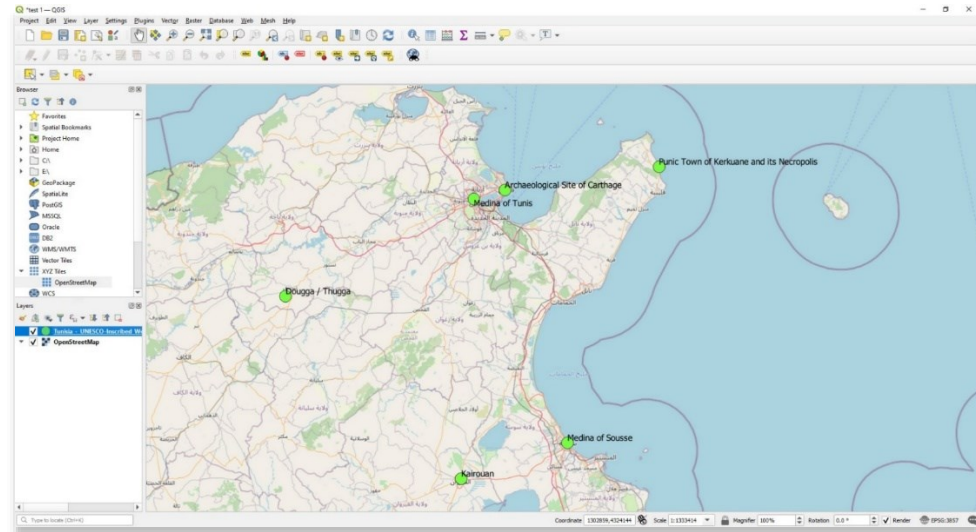
Select the value you wish to display as a label on your map. In this example, choose **Site Name**.



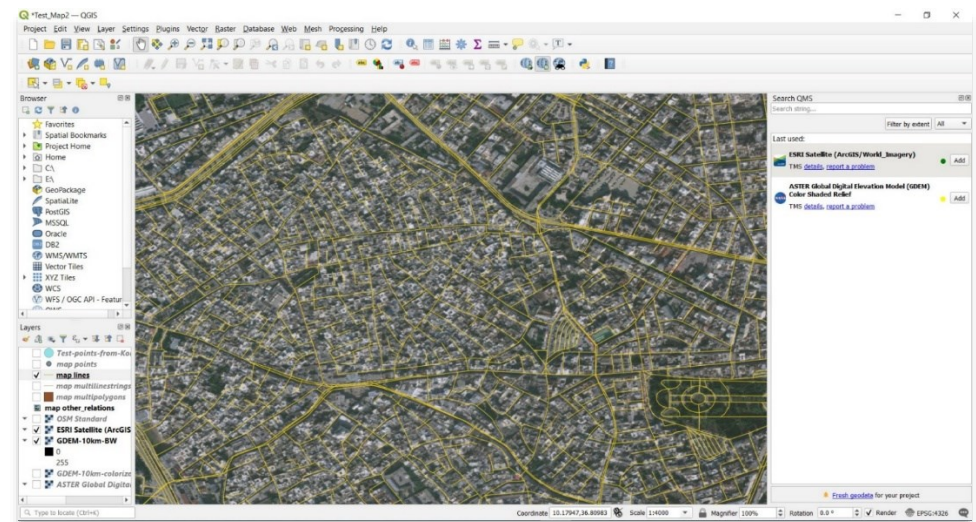
Users can style the label font, size and, position before selecting **Apply**.



Close the **Layer Properties**, and you will now see labels for every point for the Tunisian UNESCO Heritage Site point layer.



Any type of layer is editable in QGIS, including vectors, rasters, and elevation models. Significant thought should be put into how to design and effectively convey spatial information in GIS, especially when creating maps or visualizations to share.



RESOURCES

QGIS Download: <https://qgis.org/>



VIEW ALL ASOR TUTORIALS FOR FREE

asor.org/chi/chi-tutorials