

ASOR Cultural Heritage Initiative

QGIS

Module 02.17: Data Layer Classifications

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ASOR QGIS Module 02.17 – Data Layer Classifications

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 (02.17)** will cover how to classify data layers in QGIS. Classifying vector data allows you to assign different symbols to features (different objects in the same layer), depending on their attributes. This allows someone who uses the map to easily see the attributes of various features.

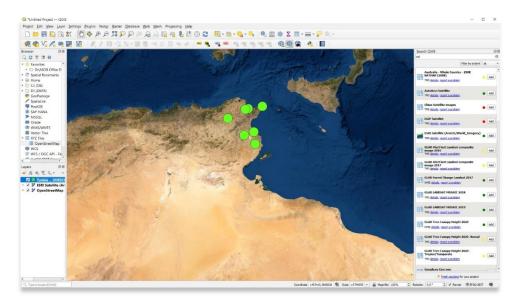
KEY CONCEPTS

- Purpose of Data Classification | Classifying vector data in QGIS assigns different symbols or colors to features based on their attributes, allowing users to visually distinguish variations within a single data layer.
- Applying Classification in QGIS | Using the *Categorized* symbology option, users can select a specific attribute (e.g., "Criterion/vi" from the UNESCO dataset) and apply the *Classify* function to automatically color-code features according to that attribute.
- Practical Example UNESCO Criteria | The tutorial demonstrates how to display Tunisian UNESCO heritage sites by classification, showing differences based on which UNESCO criteria (such as Criterion vi) were used for site inclusion.

DATA CLASSIFICATION

In ASOR Tutorial 02.16 (Editing Data Layers), you learned how to change the symbology for a single data layer. This is useful when everything within the dataset (points, lines, or polygons) can be displayed using the same color.

However, you may wish to highlight specific differences within a single data layer. Classifying layers are a way to show differences in data visually.



Open a new project.

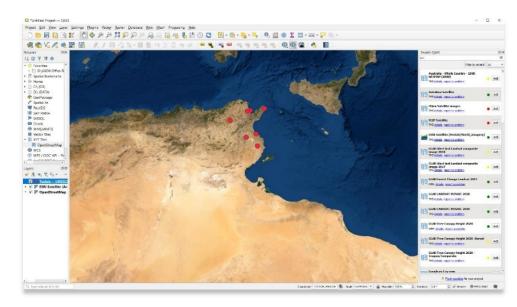
Add a basemap and the Tunisian UNESCO vector layer.

One of the categories included in the UNESCO dataset is **Criterion**. UNESCO lists 10 official criteria to justify the inclusion of any UNESCO applicant: https://whc.unesco.org/en/criteria/.

We can see in the dataset above that some cultural heritage sites in Tunisia share the same UNESCO criteria (Criteria vi).

The following steps will show you how to visually present this dataset in QGIS so that heritage sites are separated by UNESCO criteria.

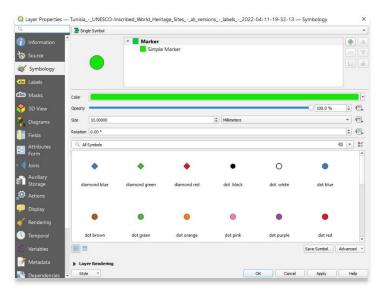


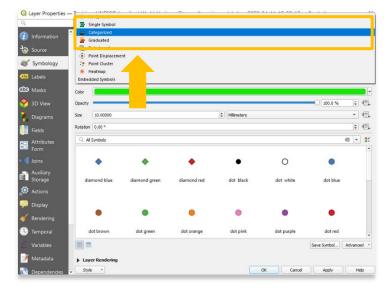


In QGIS, double-click on the Kobo layer file in the **Layers Panel** to bring up the **Properties** popup.

Ensure that the **Symbology** tab is selected.

Choose **Categorized** from the dropdown menu located near the top of **Layer Properties**.

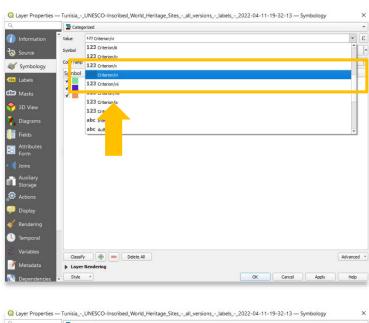


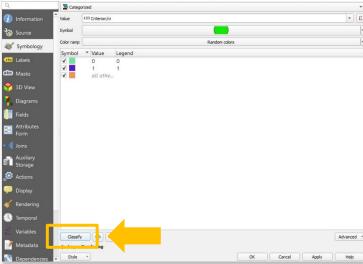


Next choose the Value (column in your CSV file) that you wish to display differently among your data.

In this case, Criterion/vi is selected because numerous UNESCO-inscribed sites in Tunisia used Criteria vi as justification for inclusion among recognized World Heritage Sites.

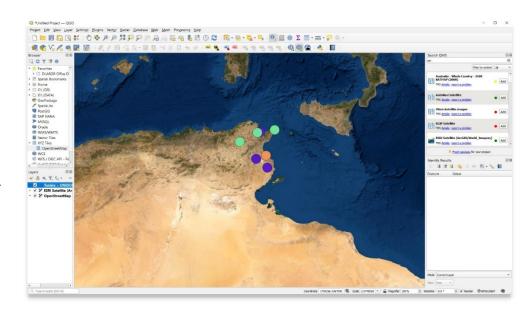
Finally, select the **Classify** button near the bottom left of **Layer Properties**.





Close Layer Properties to view your dataset.

You will see sites display in different colors depending on if they included Criteria vi in their UNESCO application.



RESOURCES

QGIS Download: https://qgis.org/



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