ASOR Cultural Heritage Initiative

QGIS

Module 02.05: Coordinate Reference System (CRS)

Jared Koller | William Raynolds | Meg Heaney

ASOR QGIS Module 02.05 – Coordinate Reference System (CRS)

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 (02.05)** instructs users to set up the Coordinate Reference System (CRS).
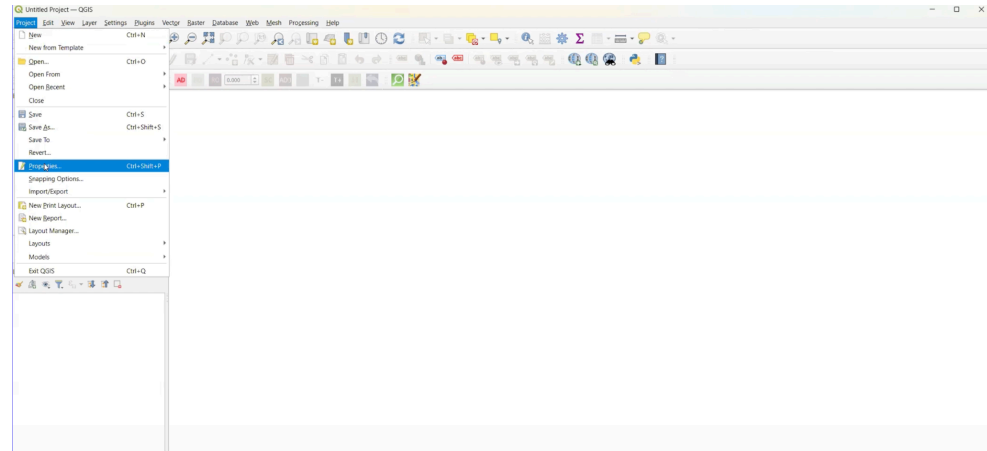
KEY CONCEPTS

- ❖ Understanding what the CRS does within a project.
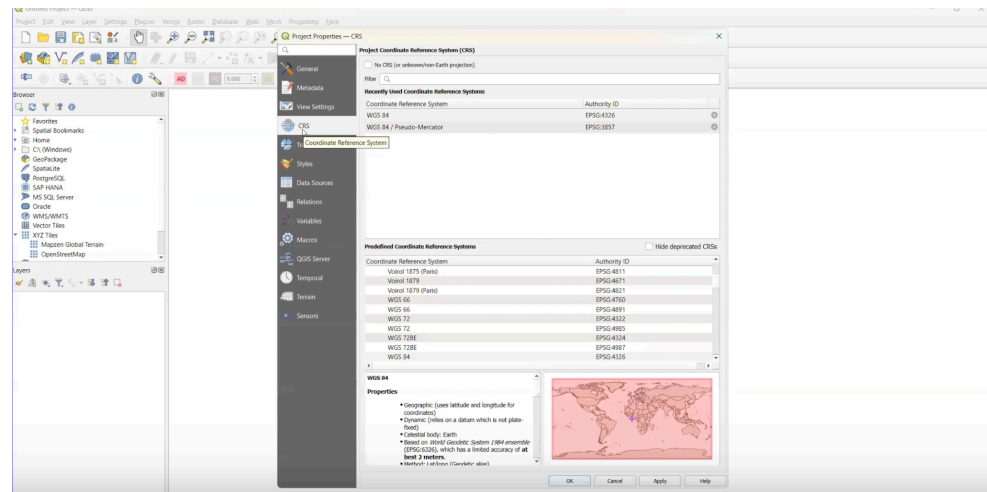- ❖ Selecting layers and changing CRS.

OVERVIEW OF FUNCTIONS

UNDERSTANDING CRS

Map projections try to portray the surface of the earth or a portion of the earth on a flat piece of paper or computer screen. A coordinate reference system (CRS) then defines, with the help of coordinates, how the two dimensional, projected map in your GIS is related to real places on the earth. The decision as to which map projection and coordinate reference system to use, depends on the regional extent of the area you want to work in, on the analysis you want to do, and often on the availability of data.
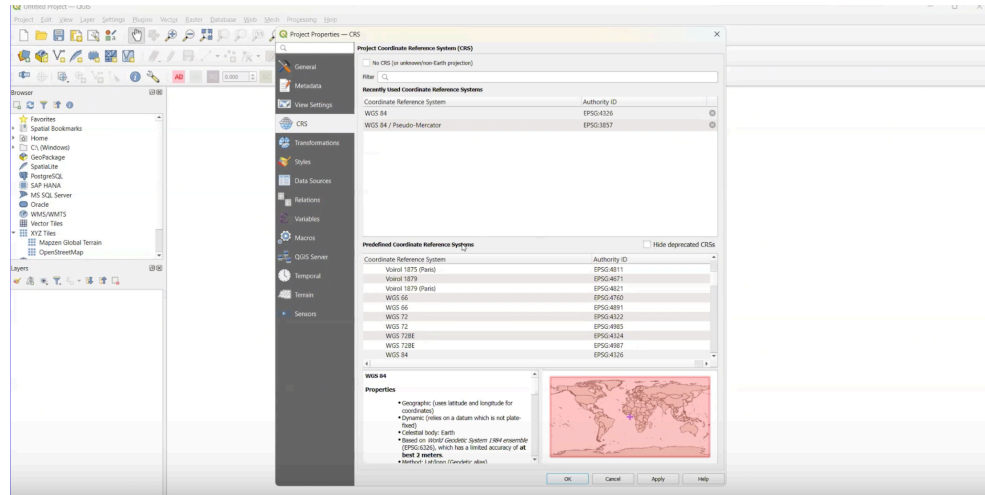
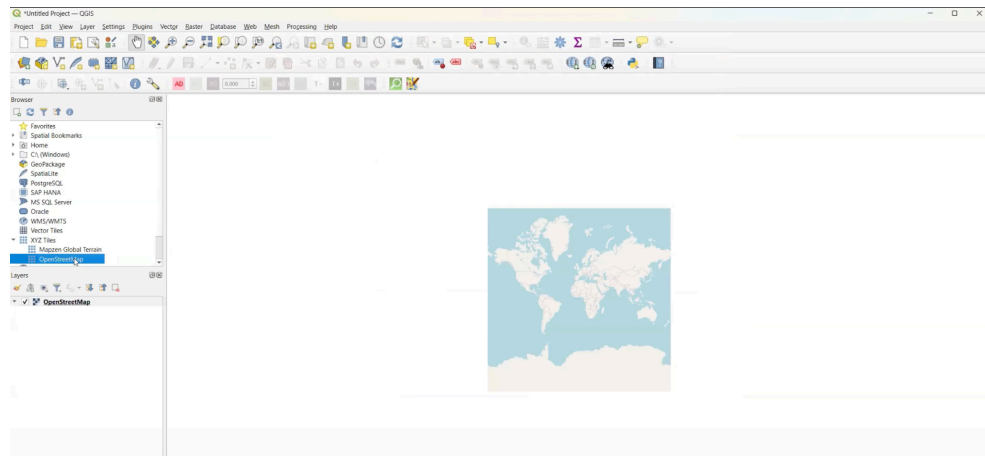1. Open **Project Properties** from the top left corner.

2. In the pop-up, select CRS. The WGS projection system will be sufficient for most cultural heritage mapping projects. For more information about CRS and the differences between projection systems, visit the QGIS documentation page: https://docs.qgis.org/2.8/en/docs/gentle_gis_introduction/coordinate_reference_systems.html
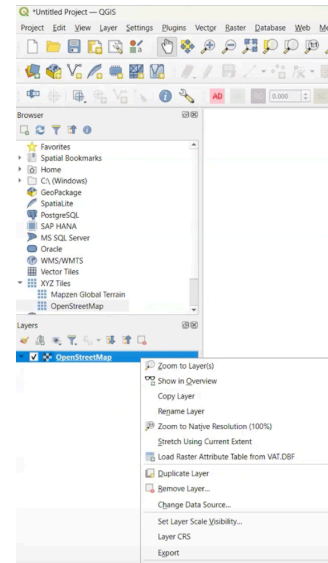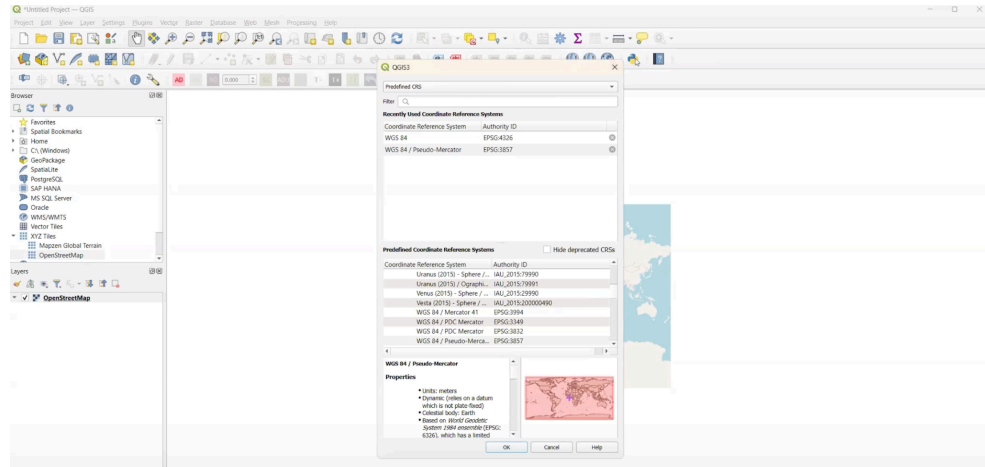
3. Select Apply.

4. Now, check the CRS for any layer that you add to your project. Begin checking by right-clicking any given layer.

5. From there, select Layer CRS and continue to toggle to Set Layer CRS.

6. The CRS should be set to Preferred CRS as this is the same as your project CRS.

7. It is important to note that layers will display incorrectly if the project and layers do not match. Therefore, correct any CRS inconsistencies before proceeding with the process.	

RESOURCES

QGIS Download: https://qgis.org/

QGIS Support: https://qgis.org/resources/support/

VIEW ALL ASOR TUTORIALS FOR FREE

asor.org/chi/chi-tutorials