

Practice on 1. Introduction

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NOAA / Climate Prediction Center - International Desks

Fiji Pacific Climate Early Warning Workshop

Fiji, 15 – 24 July 2023

Exercise 1: Familiarization With QGIS

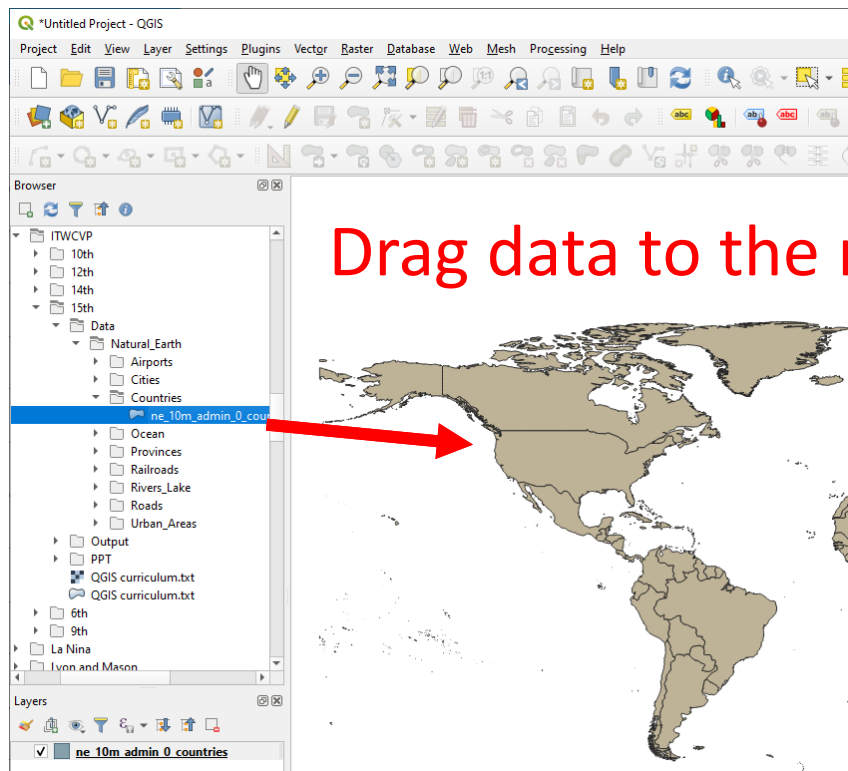
- Try to find these tools and identify their purposes



- Locate and hold your mouse over each toolbar for a while

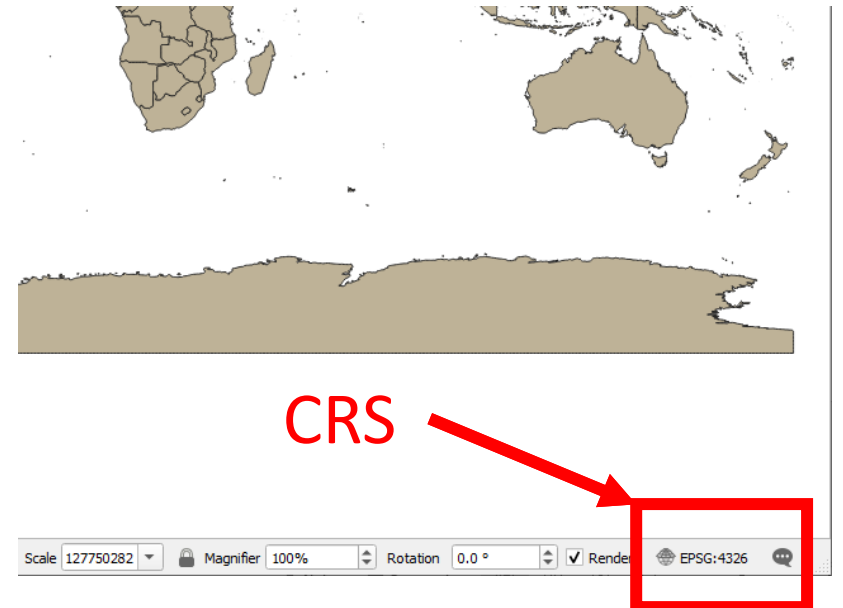
Exercise 2: Loading Vector Data

- Navigate to the workshop data and load countries shapefile




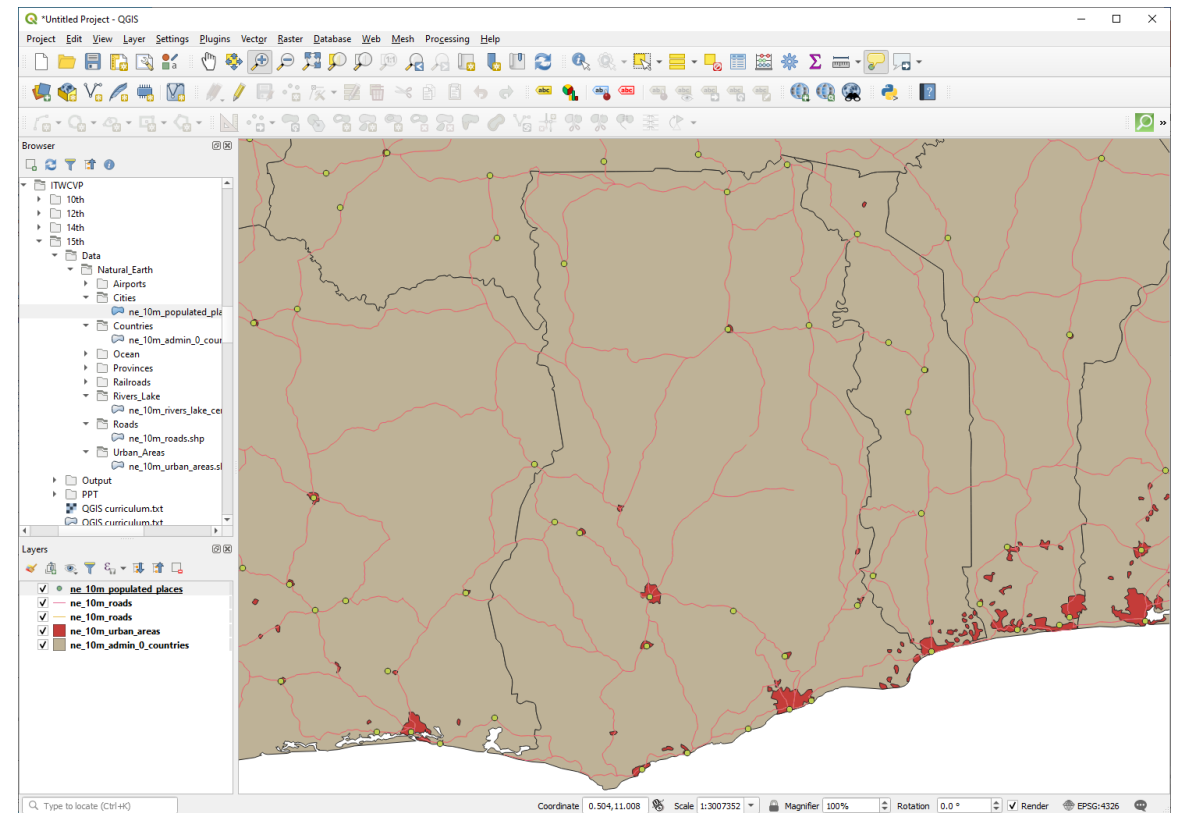
Drag data to the map canvas

- Identify the CRS for project



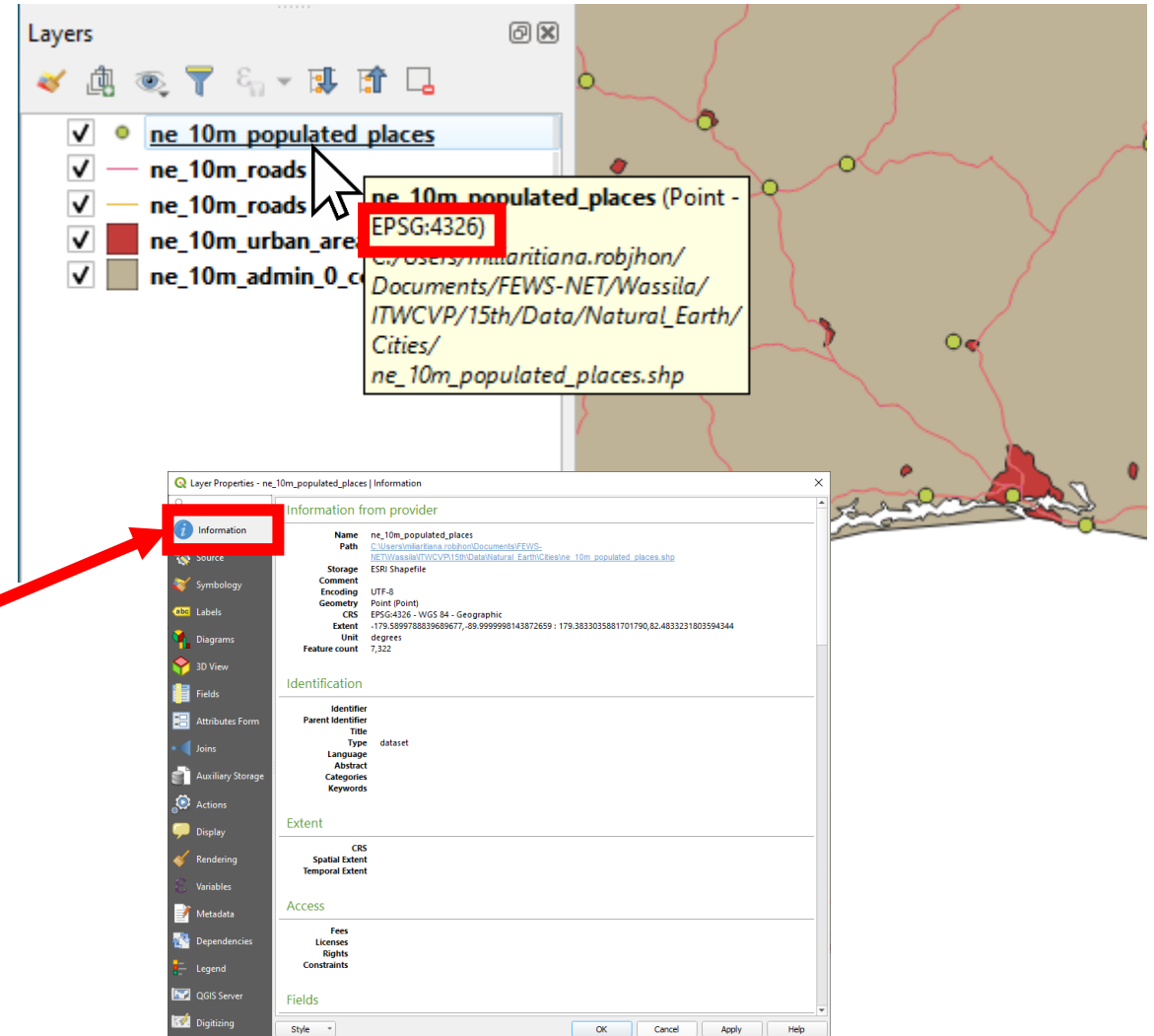
Exercise 2: Loading Vector Data (Cont'd.)

- Load urban areas, roads, rivers lake, and cities shapefiles
- Use the  toolbar and draw a rectangle to zoom in over any country
- Identify the **geometry** for each vector data



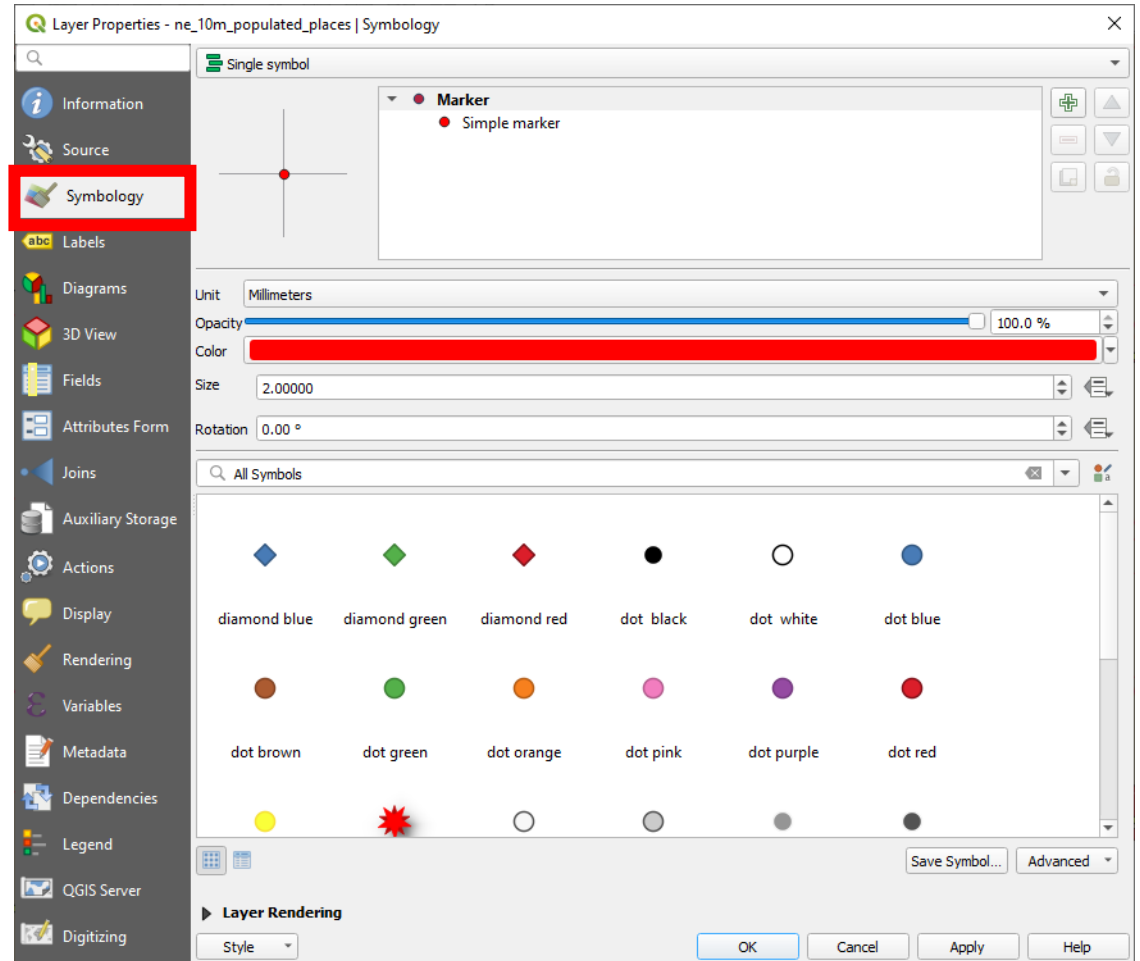
Exercise 3: Properties and Classification

- Identify the CRS for each data (layer) by hovering the mouse over
- Explore populated places properties by double clicking the data and selecting information in the left tab
- Repeat the above for each data



Exercise 3: Properties and Classification

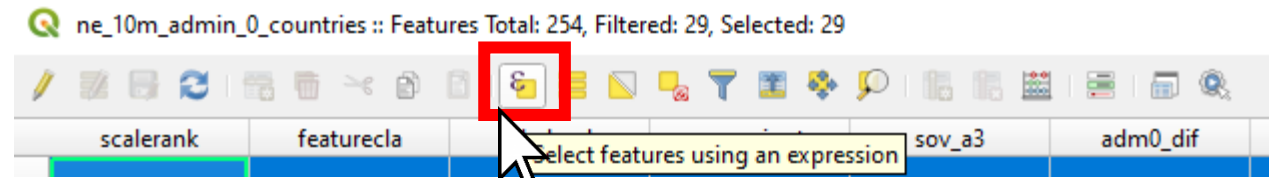
- Change the color of populated places to red by opening its properties and selecting Symbology in the left tab
- Change also the properties for the remaining data to your likings



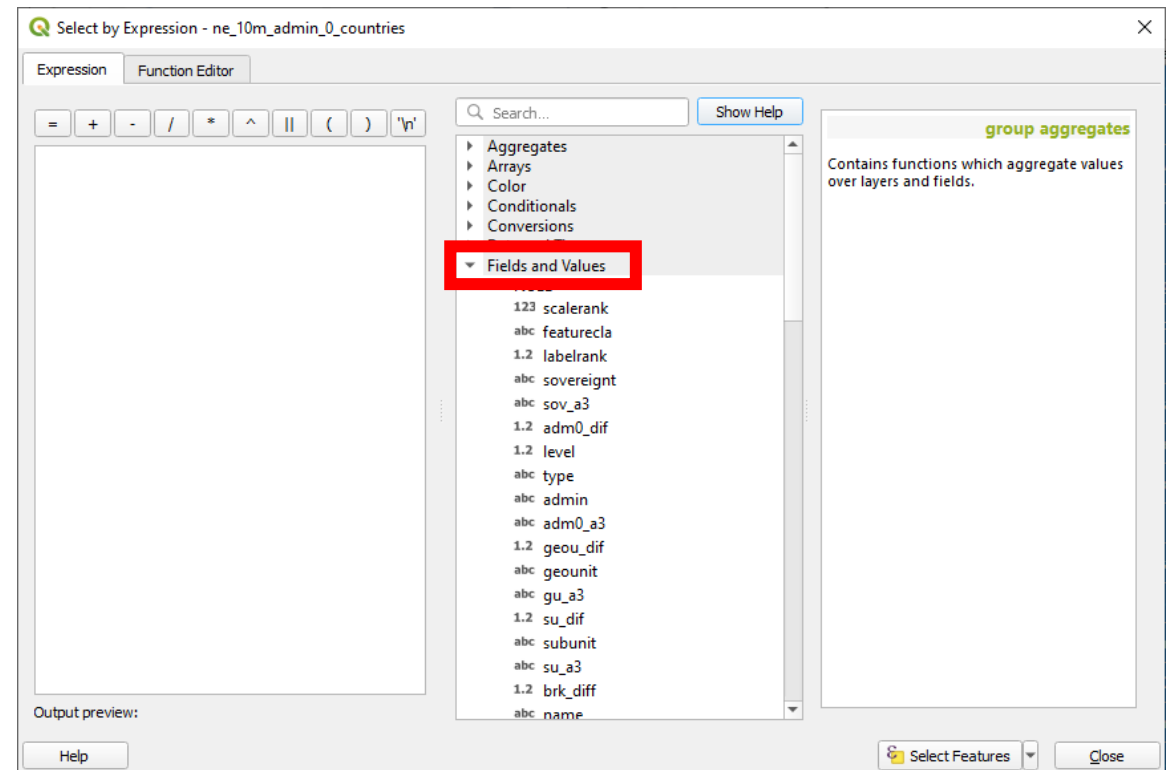
Exercise 4: Querying Attribute Table

Objective: Find countries in Africa with a population $\geq 10M$

- Right click on admin0 and open its Attribute Table

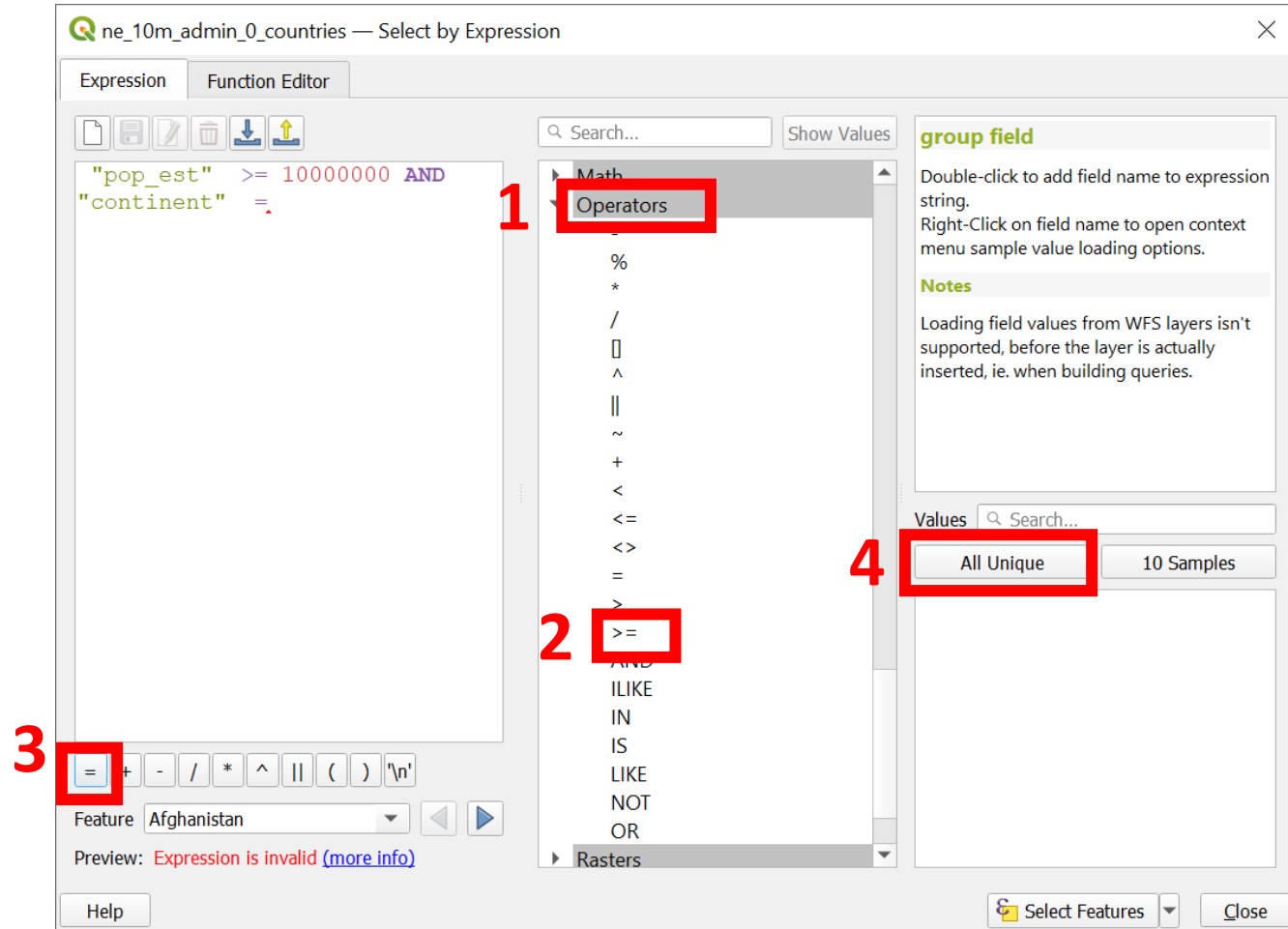


- Expand Fields and Values, find and double click pop_est



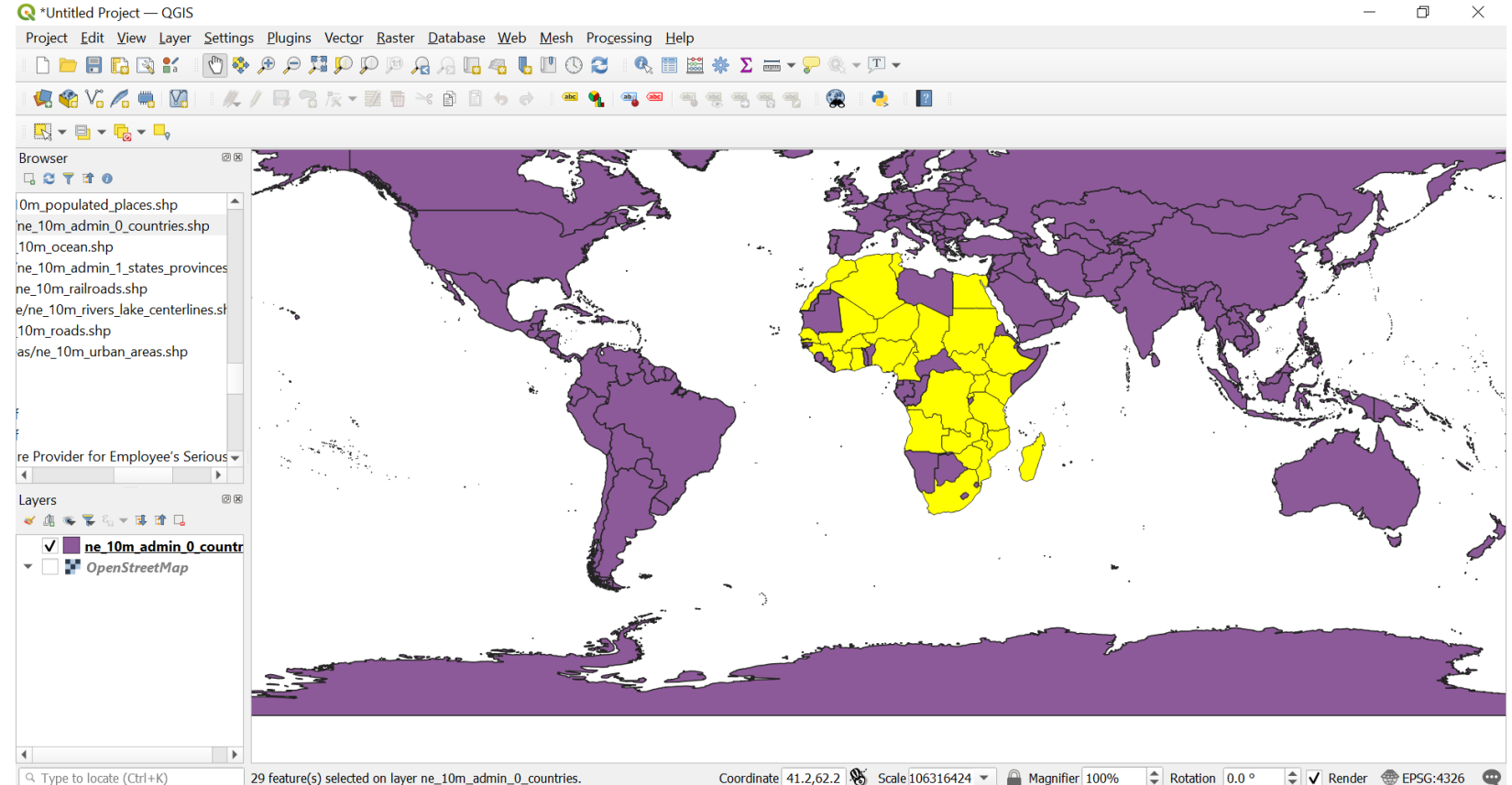
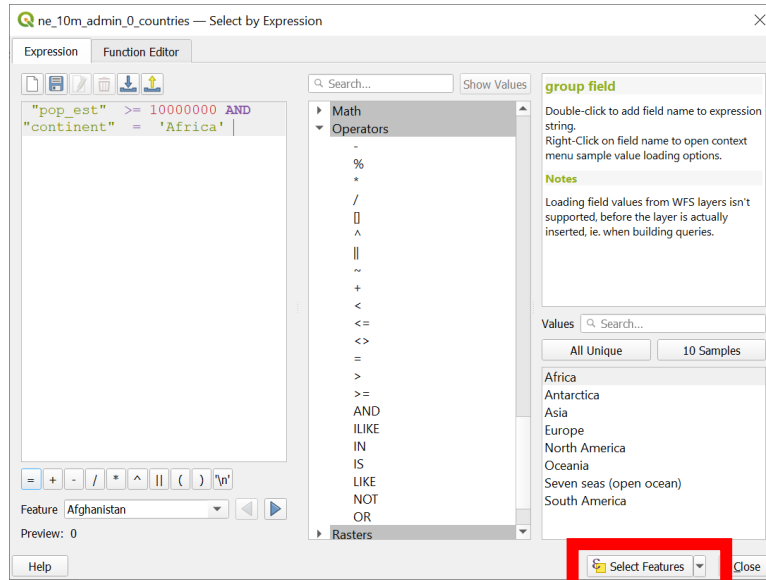
Exercise 4: Querying Attribute Table (Cont.)

- Scroll down to Operators, double click \geq , and type 10000000 in the Expression field
- In Operators, double click AND, scroll up to Fields and Values, find, and double click continent
- Click on =, click All Unique, and double click Africa



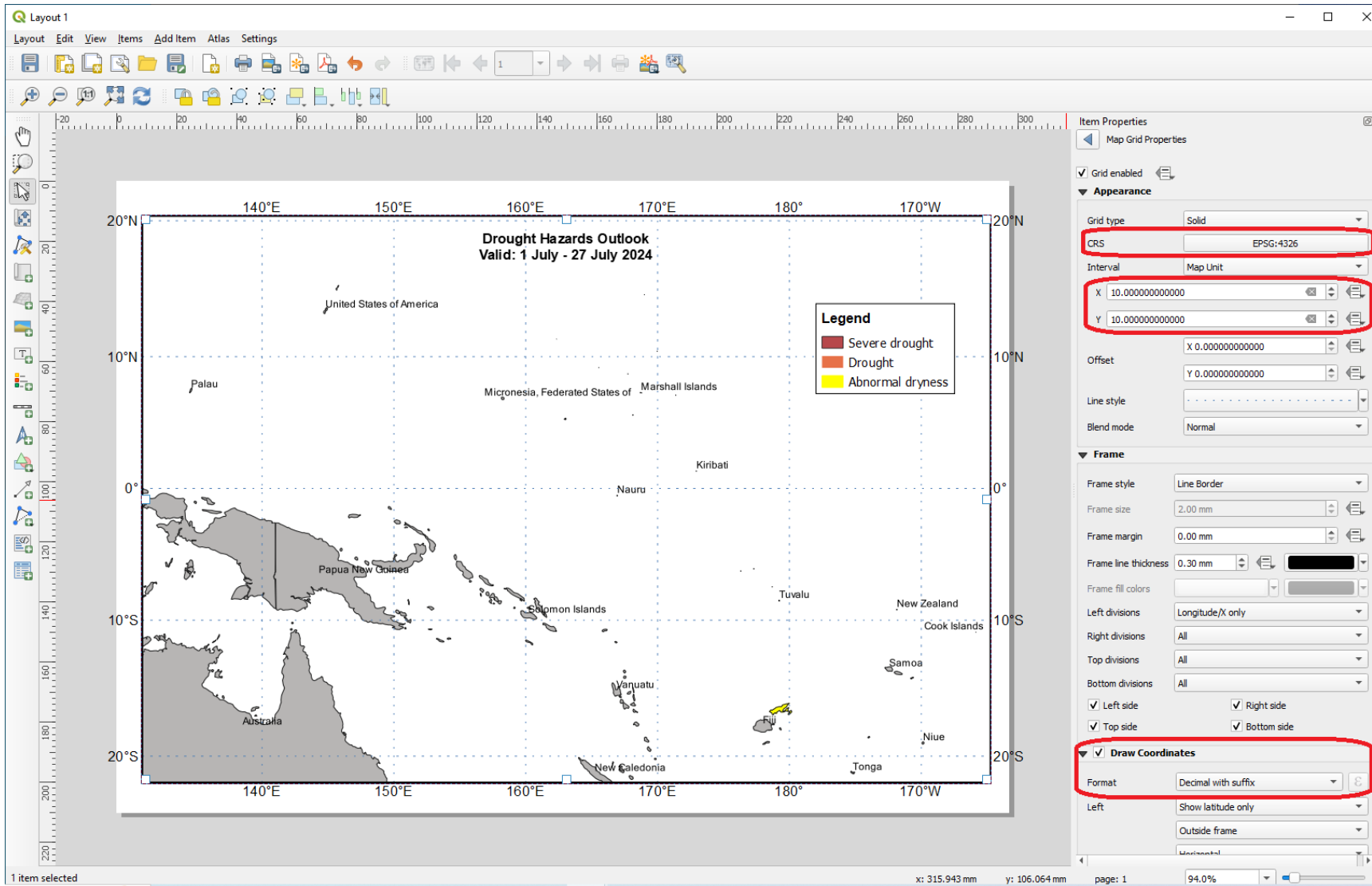
Exercise 4: Querying Attribute Table (Cont.)

- Click Select Features. Save as a new data by right clicking on admin0, then Export > Save Selected Features As



Projection

- Original map CRS :EPSG 4326
- Then convert to EPSG 3832 CRS
- EPSG 3832 CRS (PDC Mercator) which is the appropriate projection
- EPSG 3832 CRS (PDC Mercator)
- Example



Drought Hazards Outlook
Valid: 1 July - 27 July 2024

Legend

- Severe drought
- Drought
- Abnormal dryness

Item Properties

Map Grid Properties

Grid enabled

Appearance

Grid type: Solid

CRS: EPSG:4326

Interval: Map Unit

X: 10.000000000000

Y: 10.000000000000

Offset: X: 0.000000000000, Y: 0.000000000000

Line style: [Dotted line]

Blend mode: Normal

Frame

Frame style: Line Border

Frame size: 2.00 mm

Frame margin: 0.00 mm

Frame line thickness: 0.30 mm

Frame fill colors: [White, Grey]

Left divisions: Longitude/X only

Right divisions: All

Top divisions: All

Bottom divisions: All

Left side Right side

Top side Bottom side

Draw Coordinates

Format: Decimal with suffix

Left: Show latitude only

Outside frame