

# Basic Vector Styling

QGIS Tutorials and Tips



Author

Ujaval Gandhi

<http://google.com/+UjavalGandhi>

Translations by

Ilya Trofimov Fayçal Fatihi

## Geographic Information Systems (GIS) and Remote Sensing

Geographic Information Systems (GIS) and Remote Sensing are tools used to collect, store, analyze, and display spatial data. GIS is a computer-based system that allows users to create maps and analyze spatial data. Remote Sensing is the process of collecting data about the Earth's surface from a distance, typically using satellites or aircraft. Both GIS and Remote Sensing are used in a variety of fields, including urban planning, environmental management, and agriculture. QGIS is a free and open-source GIS software package that provides a robust framework for GIS data management and analysis. It is used by a wide range of users, from students to professionals, and is available on a variety of operating systems.

### Geographic Information Systems (GIS)

Geographic Information Systems (GIS) are computer-based systems that allow users to create maps and analyze spatial data. GIS is used in a variety of fields, including urban planning, environmental management, and agriculture. QGIS is a free and open-source GIS software package that provides a robust framework for GIS data management and analysis. It is used by a wide range of users, from students to professionals, and is available on a variety of operating systems.

### Geographic Information Systems (GIS) and Remote Sensing

- Geographic Information Systems (GIS) and Remote Sensing are tools used to collect, store, analyze, and display spatial data.

### Geographic Information Systems (GIS)

Geographic Information Systems (GIS) are computer-based systems that allow users to create maps and analyze spatial data. GIS is used in a variety of fields, including urban planning, environmental management, and agriculture. QGIS is a free and open-source GIS software package that provides a robust framework for GIS data management and analysis. It is used by a wide range of users, from students to professionals, and is available on a variety of operating systems. (SAGE) <http://www.sage.wisc.edu/atlas/maps.php> \_ is a free and open-source GIS software package that provides a robust framework for GIS data management and analysis.

Geographic Information Systems (GIS) are computer-based systems that allow users to create maps and analyze spatial data. GIS is used in a variety of fields, including urban planning, environmental management, and agriculture. QGIS is a free and open-source GIS software package that provides a robust framework for GIS data management and analysis. It is used by a wide range of users, from students to professionals, and is available on a variety of operating systems. <http://www.sage.wisc.edu/atlas/data.php?incdataset=Life%20Expectancy> \_ is a free and open-source GIS software package that provides a robust framework for GIS data management and analysis. This software package is used by a wide range of users, from students to professionals, and is available on a variety of operating systems.

lifeexpectancy.zip

Geographic Information Systems (GIS)

### Geographic Information Systems (GIS)

1. Geographic Information Systems (GIS) is a computer-based system that allows users to create maps and analyze spatial data...



2. lifeexpectancy.zip newsweek\_data.shp WGS84 EPSG:4326 ( ).



3. **WGS 84** is the most common CRS used in GIS applications. It is a geocentric CRS, meaning that the origin is at the center of the Earth. It is also a datum, meaning that it defines the shape and size of the Earth. The WGS 84 datum is based on the International Earth Rotation Service (IERS) reference frame. The WGS 84 CRS is used in a wide range of applications, including mapping, navigation, and geospatial analysis.



4. ■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■ ■■■■■ ■■ ■■■■■■ ■■■■ ■ ■■■■■■■■■■  
 ■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■.



5. **newweek\_data** is a vector layer. It contains a table with the following fields: **LIFEXPCT**, **Life Expectancy** - **newweek\_data**.

Attribute table - newweek\_data :: Features total: 165, filtered: 165, selected: 0

	GRWRATE	URBPOP	MIG_RATE	POP_15	POP65_	LIFEXPCT	CONTRCEP
0	2.620000000	47.000000000	0.000000000	45.200000000	3.800000000	47.000000000	7.000000000
1	2.660000000	33.000000000	0.000000000	44.900000000	3.100000000	42.000000000	4.000000000
2	1.900000000	53.000000000	-0.400000000	33.200000000	5.100000000	76.000000000	58.000000000
3	0.940000000	35.000000000	-9.900000000	32.300000000	4.000000000	65.000000000	31.000000000
4	3.320000000	46.000000000	2.200000000	46.000000000	3.700000000	55.000000000	6.000000000
5	3.170000000	44.000000000	0.500000000	48.100000000	2.800000000	52.000000000	1.000000000
6	3.360000000	32.000000000	-0.100000000	48.000000000	2.500000000	50.000000000	8.000000000
7	3.400000000	5.000000000	0.700000000	49.800000000	2.300000000	46.000000000	10.000000000
8	2.880000000	8.000000000	0.000000000	46.300000000	2.900000000	48.000000000	9.000000000
9	3.720000000	29.000000000	-0.200000000	47.100000000	2.900000000	46.000000000	1.000000000
10	2.840000000	49.000000000	-0.100000000	48.500000000	2.200000000	49.000000000	1.000000000
11	3.310000000	15.000000000	-7.700000000	49.200000000	2.600000000	45.000000000	7.000000000
12	2.370000000	51.000000000	-0.100000000	39.700000000	3.900000000	59.000000000	30.000000000
13	2.830000000	27.000000000	32.000000000	44.900000000	3.300000000	47.000000000	4.000000000
14	2.970000000	25.000000000	-0.300000000	44.600000000	2.800000000	60.000000000	43.000000000
15	3.180000000	33.000000000	0.000000000	45.000000000	3.400000000	58.000000000	26.000000000
16	1.550000000	84.000000000	0.000000000	30.500000000	6.400000000	72.000000000	43.000000000
17	2.920000000	25.000000000	0.000000000	44.900000000	3.300000000	68.000000000	33.000000000
18	2.690000000	46.000000000	0.000000000	39.600000000	3.600000000	67.000000000	48.000000000
19	2.370000000	60.000000000	0.200000000	37.500000000	4.000000000	62.000000000	48.000000000
20	2.680000000	30.000000000	0.000000000	42.500000000	3.100000000	57.000000000	20.000000000
21	2.470000000	9.000000000	0.000000000	40.700000000	3.900000000	56.000000000	5.000000000

Show All Features

6. **GRWRATE** **URBPOP** **MIG\_RATE**. **POP\_15** **POP65\_** **LIFEXPCT** **CONTRCEP**  
**GRWRATE** **URBPOP** **MIG\_RATE** **POP\_15** **POP65\_** **LIFEXPCT** **CONTRCEP**.



7. The screenshot shows the QGIS 2.0.1-Dufour interface. The main window displays a world map with landmasses in green. On the left, the 'Layers' panel shows a single layer named 'newweek\_data'. A right-click context menu is open over this layer, listing various actions. The 'Properties' option is highlighted by the mouse cursor. The bottom status bar indicates the current coordinate is -187.8, 113.1, the scale is 1:245366721, and the project CRS is EPSG:4326.





8. The 'Layer Properties' dialog box is used to configure the appearance of a layer. It contains several tabs, including 'General', 'Style', 'Labels', 'Fields', 'Display', 'Actions', 'Joins', 'Diagrams', and 'Metadata'. The 'Style' tab is used to define the symbology for a layer. It includes options for 'Layer rendering' (transparency and blending mode) and 'Symbol' (symbol type and color). The 'Symbol' section also includes a 'Symbol layers' list and a 'Saved styles' section with predefined styles like 'corners', 'diagonal', 'dotted', 'green', 'land', 'water', and 'wine'.





10. The first step in the process of creating a map is to define the data. This is done by specifying the data source and the data format. The data source can be a file, a database, or a web service. The data format can be a vector format (e.g., shapefile) or a raster format (e.g., GeoTIFF). The next step is to load the data into the map. This is done by clicking on the 'Load Data into Map' button in the 'Layers' panel. The data will then be displayed on the map. The final step is to save the map. This is done by clicking on the 'Save Map' button in the 'Layers' panel. The map will then be saved as a file.



11. 

1. The first step is to open the 'Layer Properties' dialog for the layer you want to style. This can be done by right-clicking on the layer in the 'Layers' panel and selecting 'Properties'.

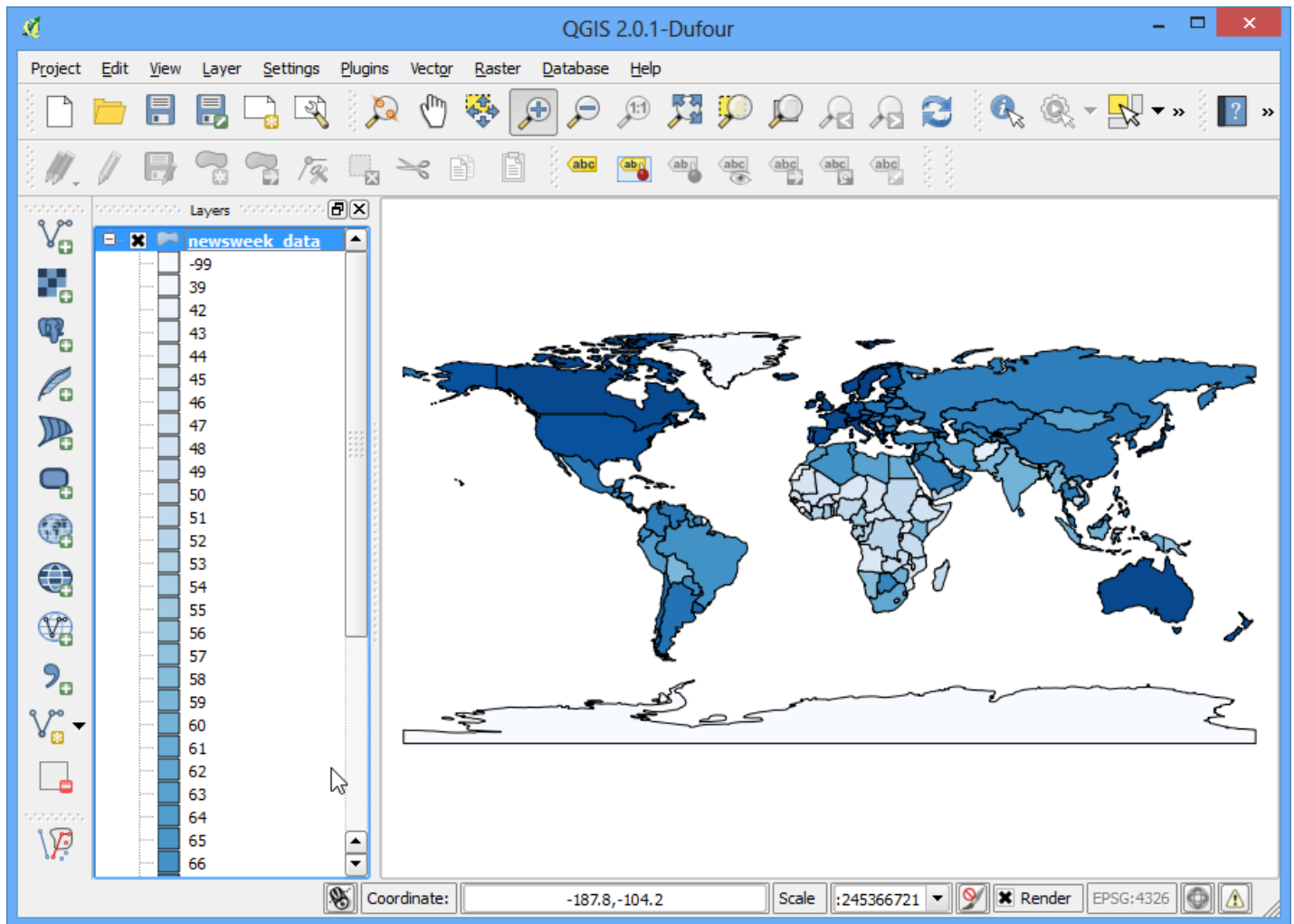
2. In the 'Style' tab, you can choose the 'Categorized' method for styling. This method allows you to create a legend for your data based on the values of a specific attribute.

3. The 'Column' dropdown menu allows you to select the attribute you want to use for categorization. In this case, the 'LIFEXPCT' attribute is selected.

4. The 'Symbol' dropdown menu allows you to choose a symbol for each category. In this case, the 'Blues' color ramp is selected.

5. The 'Classify' button is used to create the legend for the categorized data. This button is highlighted with a red box in the screenshot.

6. The 'OK' button is used to apply the changes and close the dialog. This button is also highlighted with a red box and a mouse cursor in the screenshot.

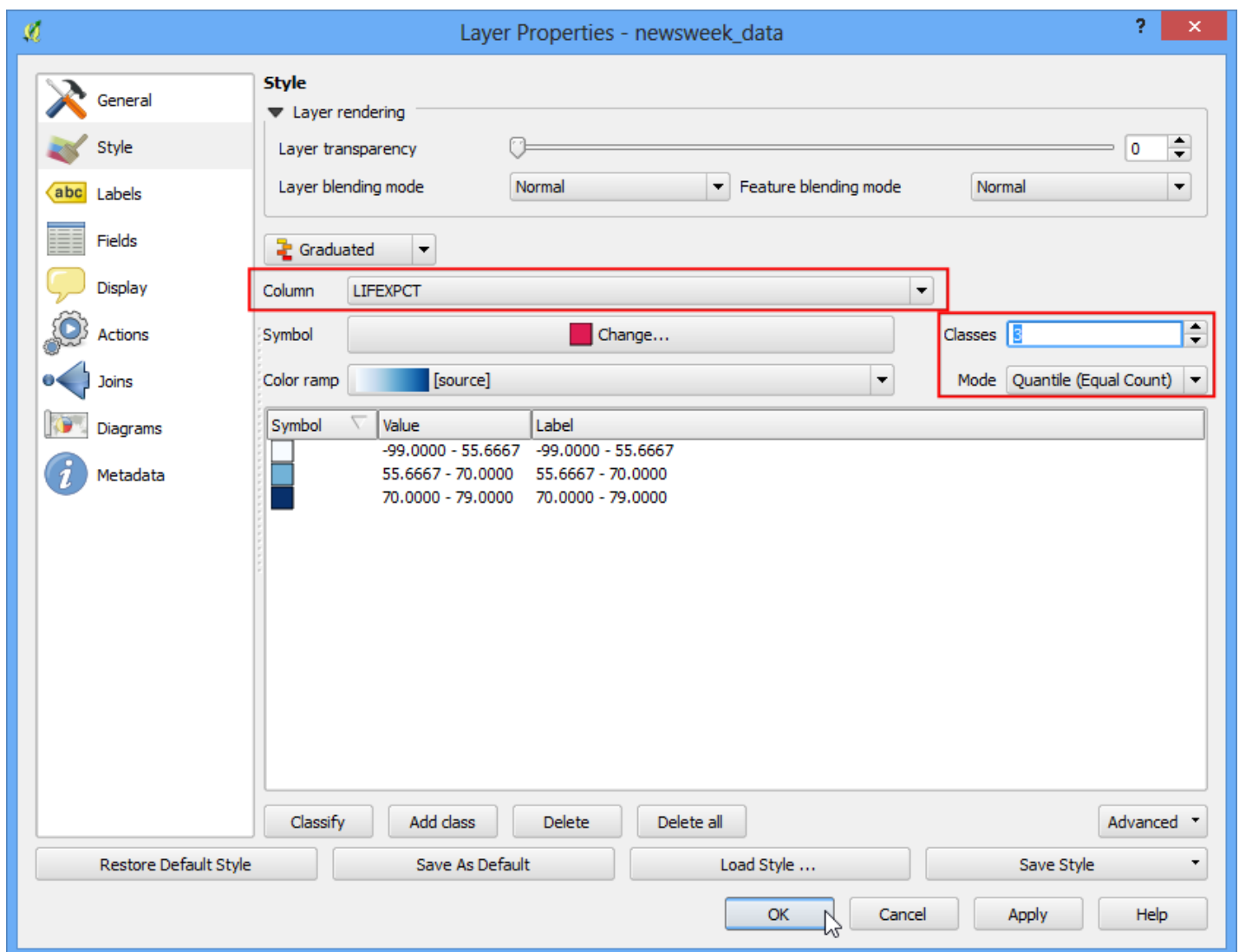


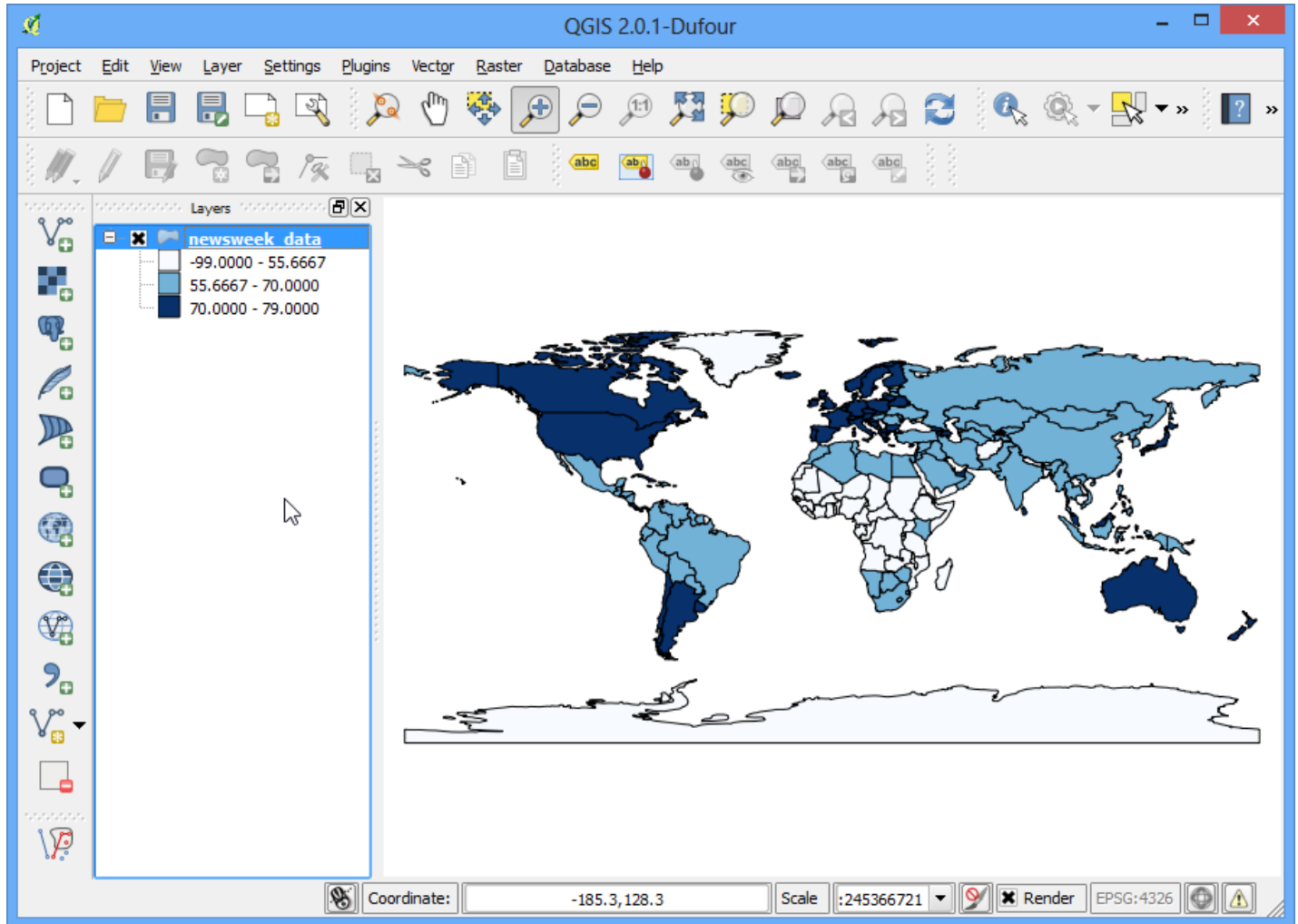
12. **Graduated** **Style** **classes** **3** **LOW, MEDIUM HIGH. LIFEXPCT Column** **3** **Mode options** **5** **Equal, Quantile, Natural (Jenks), Standard, Pretty** **10** **10**

- **0-100, 10** **0-10, 10-20, 20-30** **10**
- **100** **4** **25**
- **10** **10**

[illegible]

THESE ACTIVITIES ARE CONDUCTED IN A MANNER THAT IS CONSISTENT WITH THE POLICY OF THE COMPANY, AND THE RESULTS OF THESE ACTIVITIES ARE USED TO IMPROVE THE COMPANY'S OPERATIONS AND TO INCREASE THE COMPANY'S PROFITS.



[illegible]

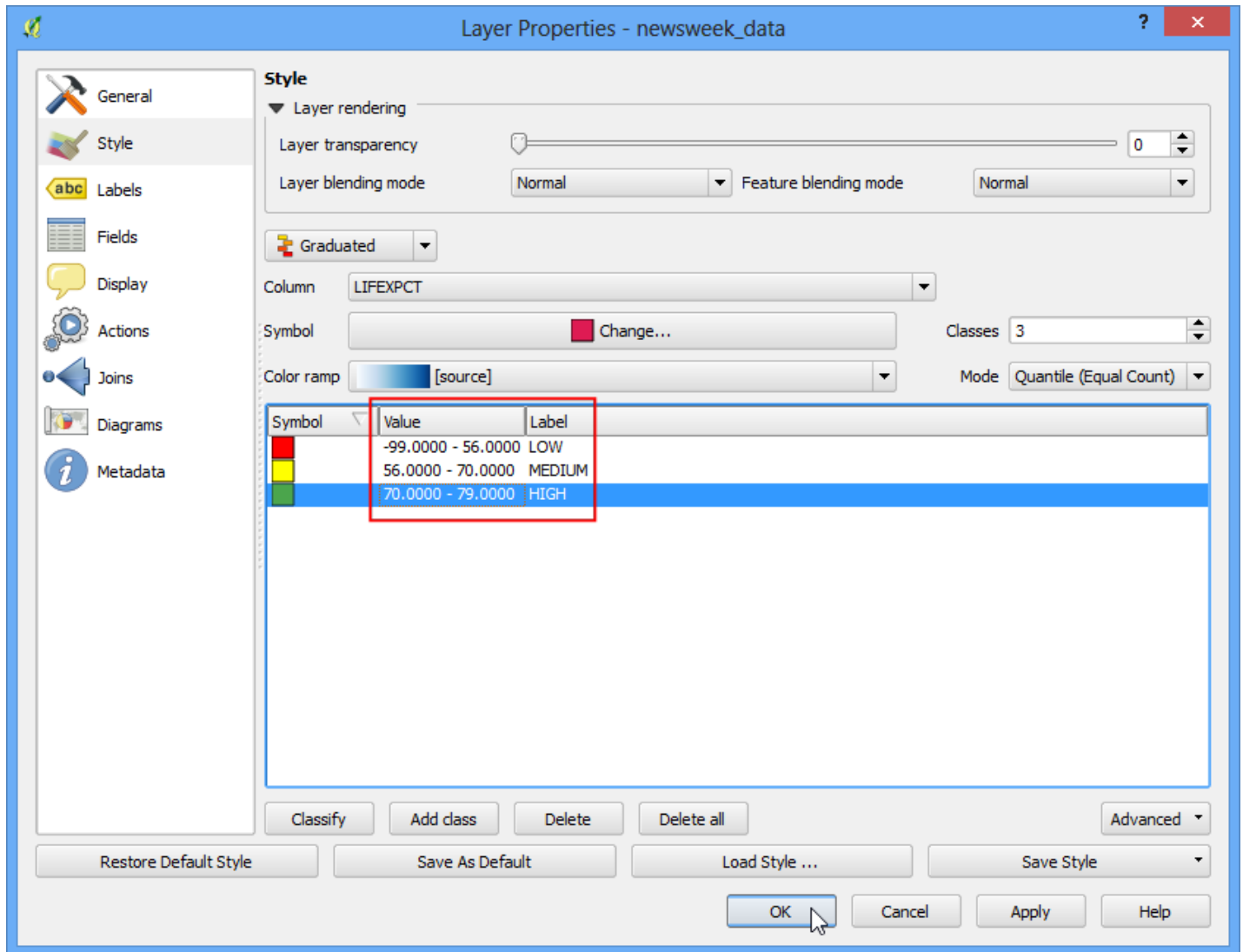
14. [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED], [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED]. [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]. [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]. [REDACTED]  
[REDACTED] [REDACTED] [REDACTED], [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED], [REDACTED]  
[REDACTED] [REDACTED], [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED].







17. [REDACTED]



18. [REDACTED]

