

Basic Raster Styling and Analysis

QGIS Tutorials and Tips



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Translations by

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QGIS is a free and open source geospatial software package. It provides a graphical user interface to view and edit vector and raster data. QGIS is a cross-platform application that runs on Windows, Mac OS, and Linux. It is a powerful tool for spatial analysis and visualization.



The data is available in two formats: 1990 and 2000. The data is available in two formats: 1990 and 2000. The data is available in two formats: 1990 and 2000.



- QGIS is a free and open source geospatial software package.



Columbia University Gridded Population of the World (GPW) v3, 1990-2000 ASCII. The data is available in two formats: 1990 and 2000. The data is available in two formats: 1990 and 2000.

1. Go to the [Population Density Grid, v3 download page](#). Select the *Data Attributes* as *.ascii format*, *1° resolution* and *1990 year*. Click *Download*. At this point, you may create a free account and login, or use the *Guest Download* button at the bottom to immediately download the data. Repeat the process for 2000 year data.

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Center for International Earth Science Information Network - CIESIN - Columbia University, and Centro Internacional de Agricultura Tropical - CIAT. 2005. Gridded Population of the World, Version 3 (GPWv3): Population Density Grid. NY: NASA Socioeconomic Data and Applications Center (SEDAC). <http://sedac.ciesin.columbia.edu/data/set/gpw-density>. Accessed DAY MONTH YEAR.

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Please check the Research Note field for issues pertaining to importing authors that are organizations.

ENW Use this format for EndNote and RefWorks software.

RIS Use this format for ProCite, Reference Manager and Zotero software.

Data:

Geography:
Region » Global

Data Set:
Population Density Grid

Data Attributes:
.ascii 1° 1990

Download

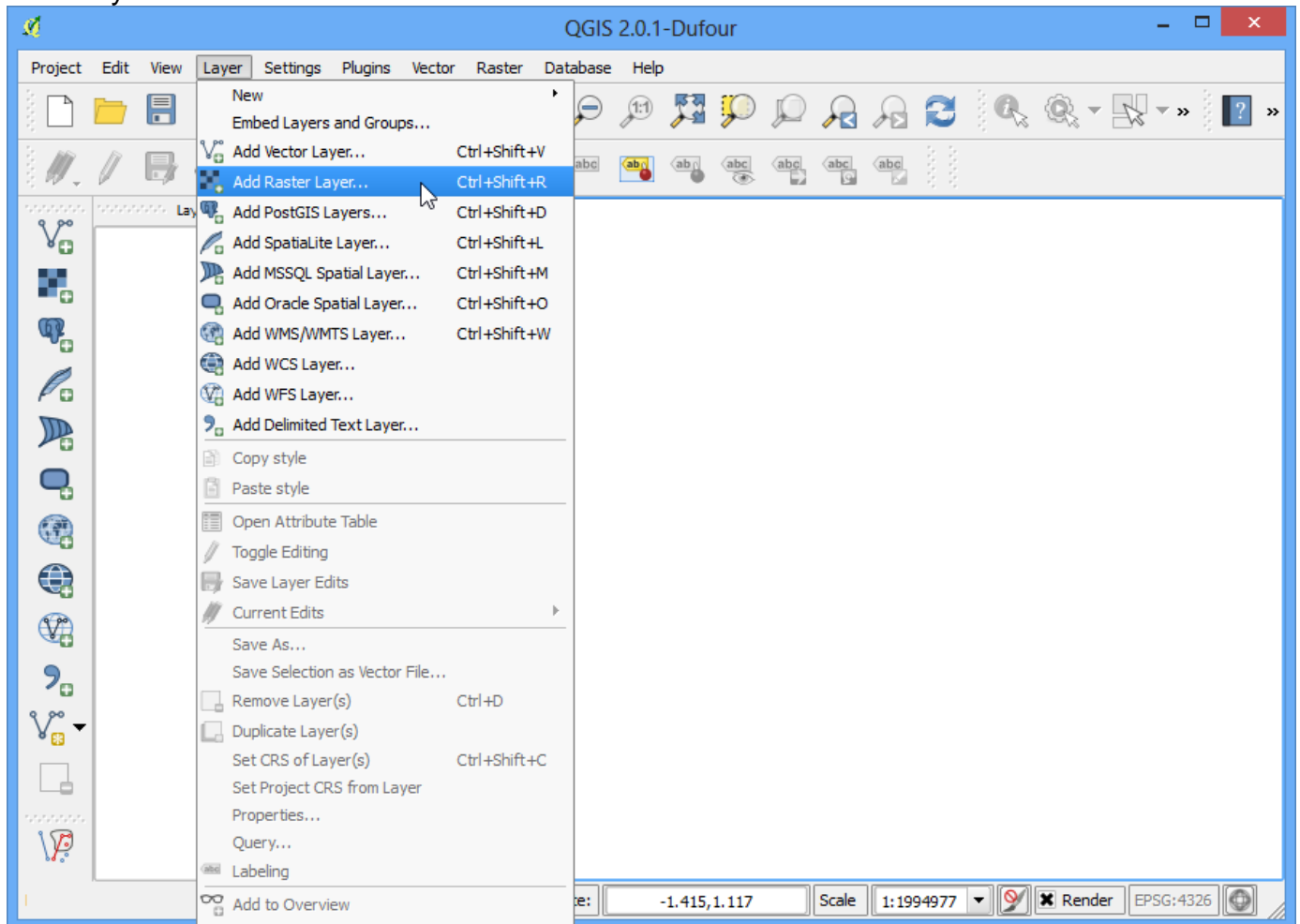
feedback and support

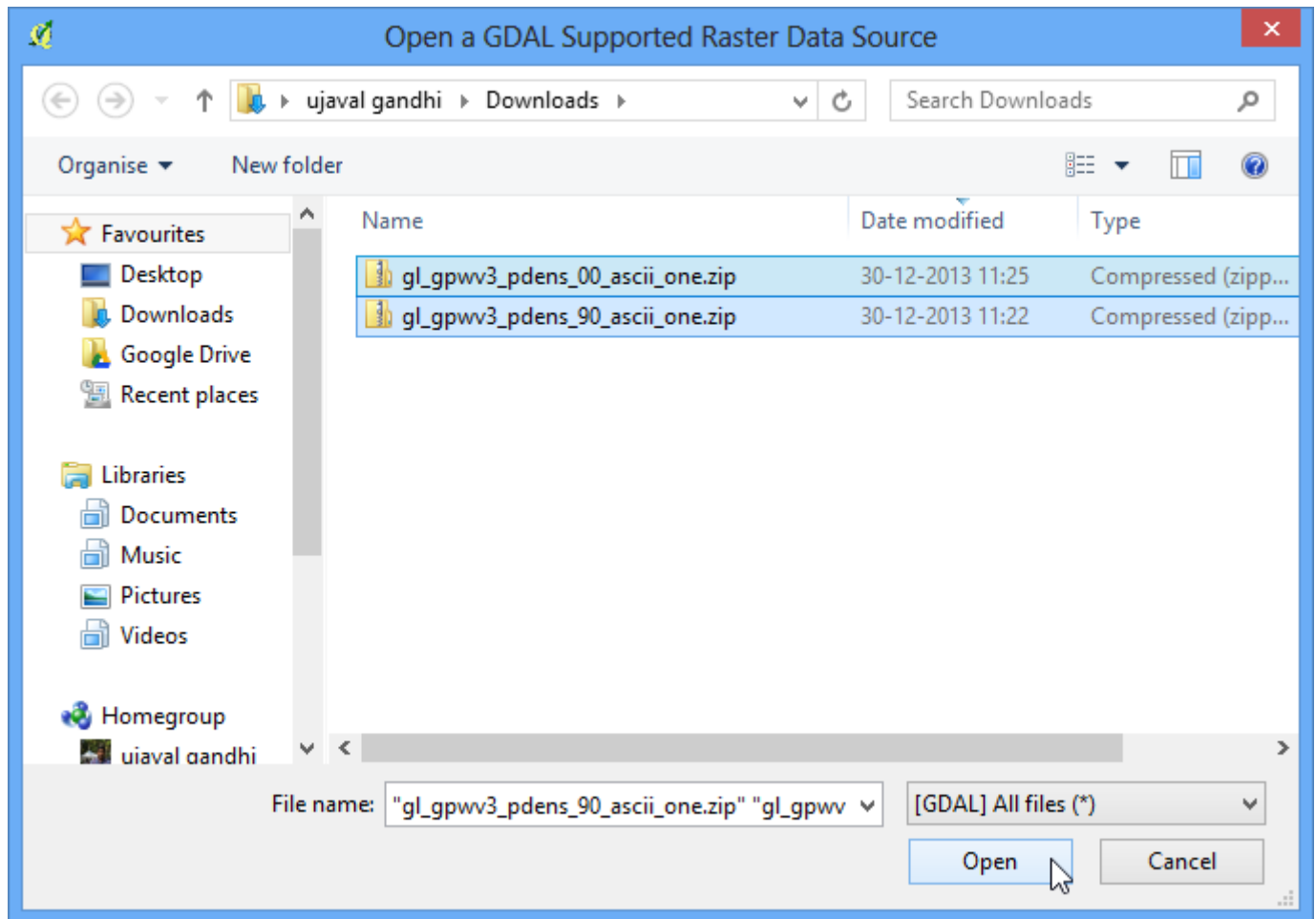
2

■■■■ ■■ [GPW3]

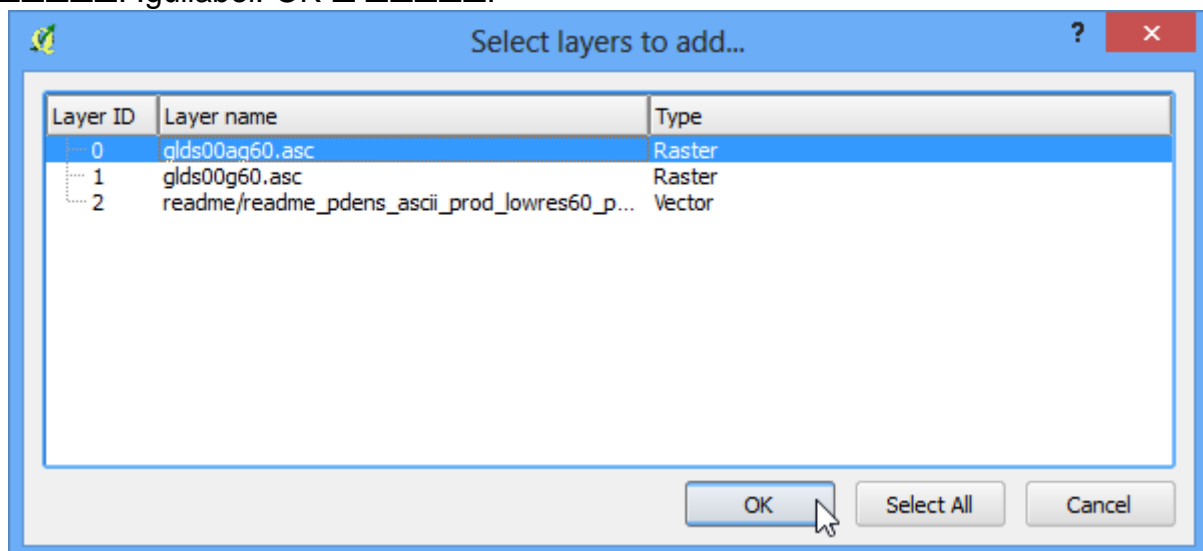


```
2. QGIS ■■■■■ ■■ ■■■ --> ■■■ ■■■ ■■ :menuselection: Layer --> Add Raster
Layer.. ■■■■■.
```

[illegible]



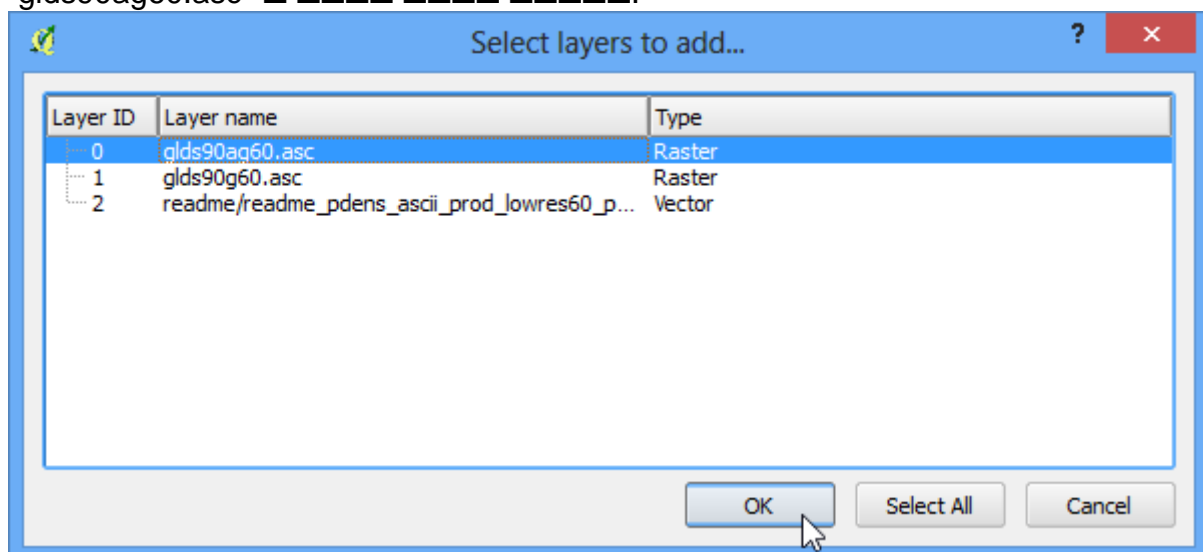
- [illegible]



5. `CRS = EPSG:4326`



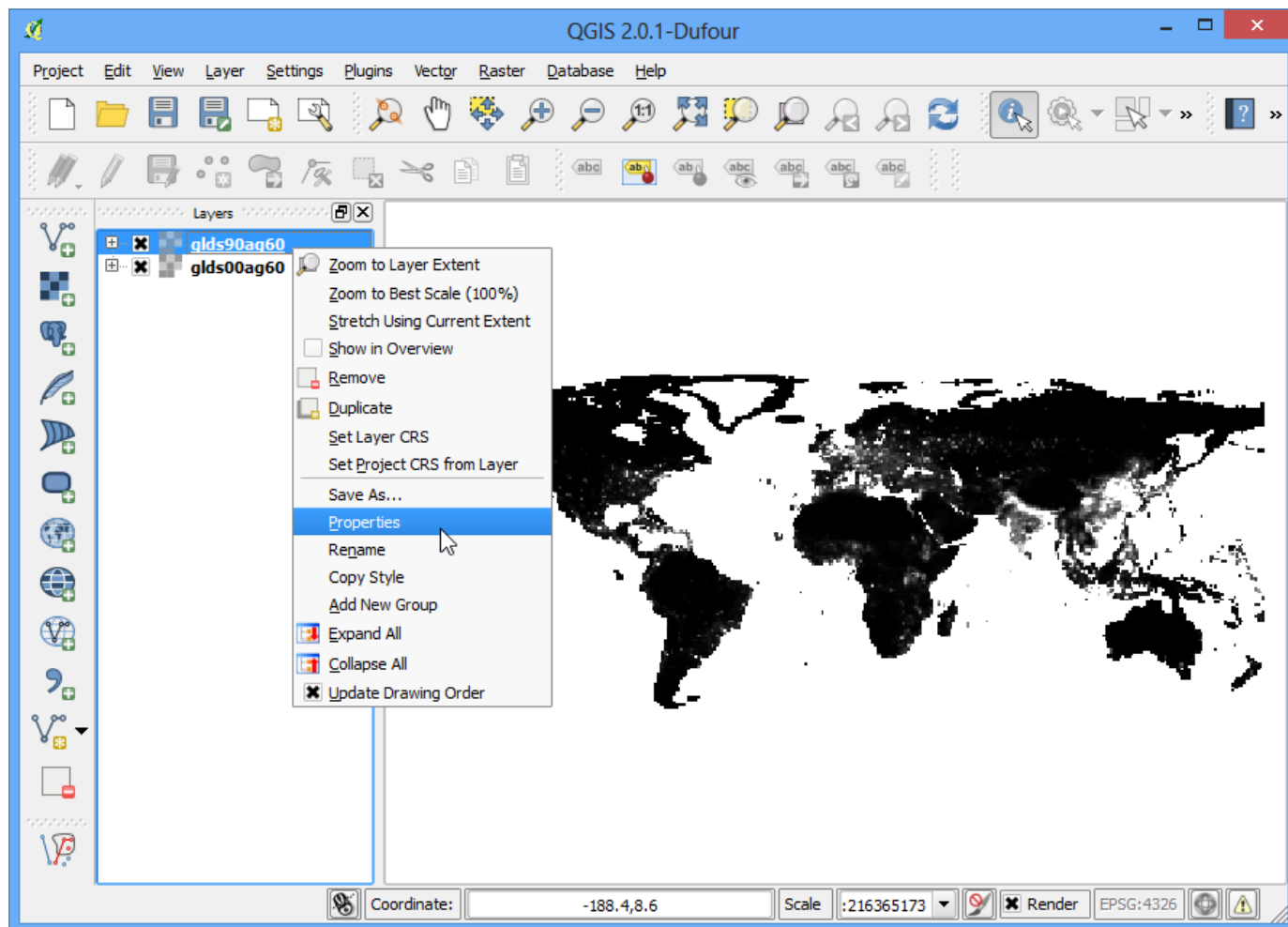
6. `glds90ag60.asc`



7. CRS `EPSG:4326`



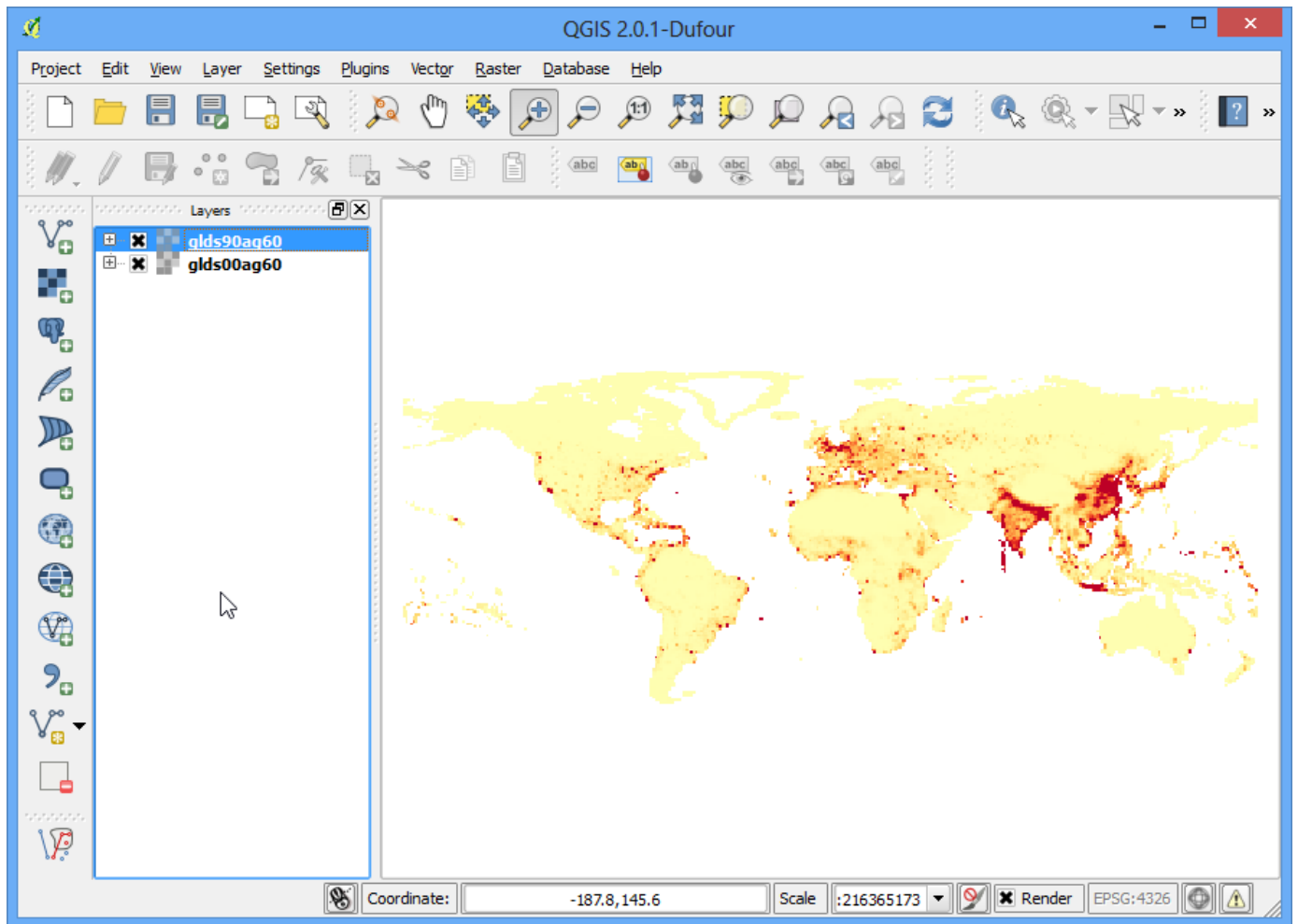
8. ■■■ QGIS ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■. ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■. ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■, ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■.



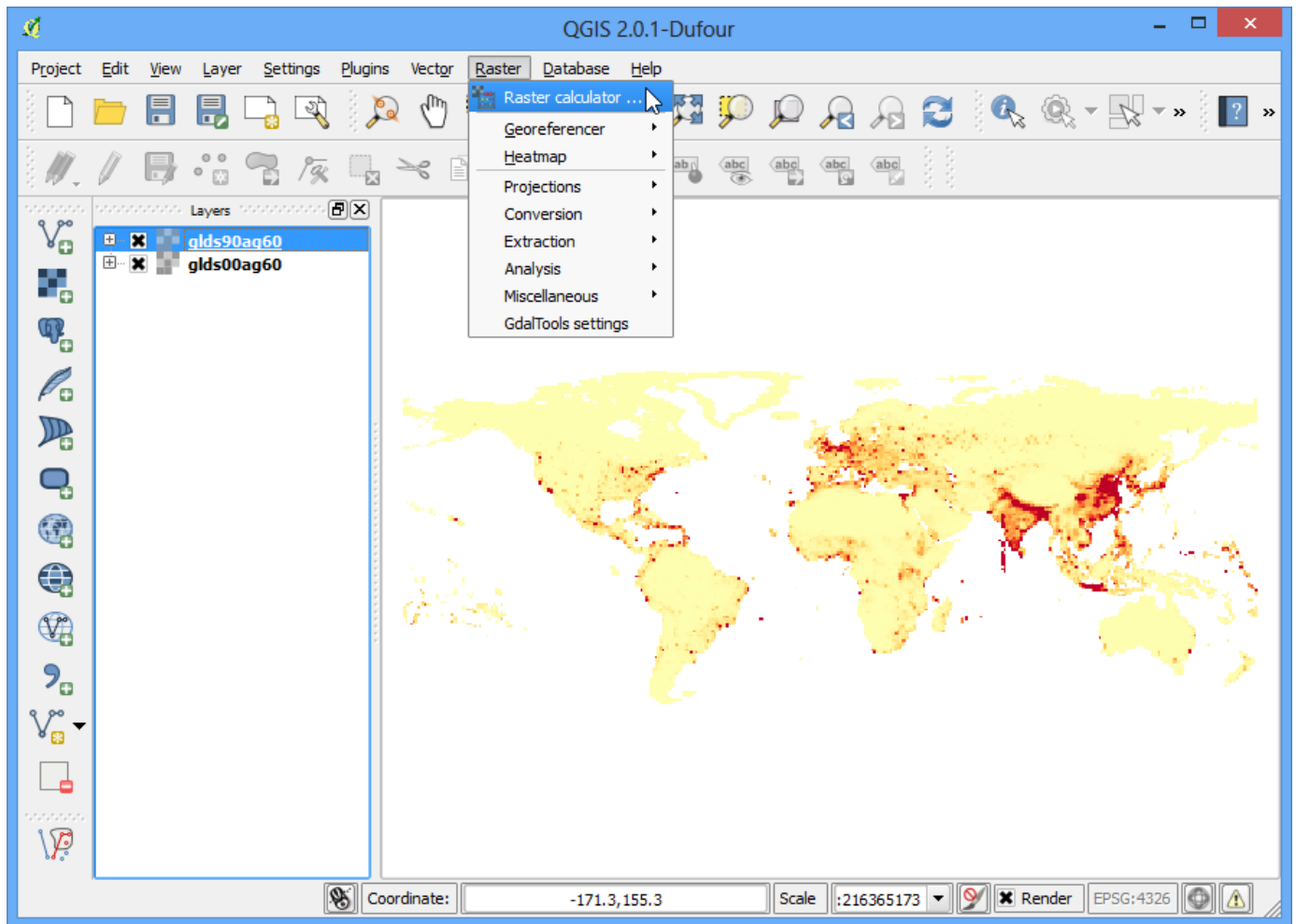
11. **Style** **Render type** **Singleband pseudocolor**
:guilabel: 'Generate a new color map' **:guilabel: 'Classify'**
5 **:guilabel: 'OK'**



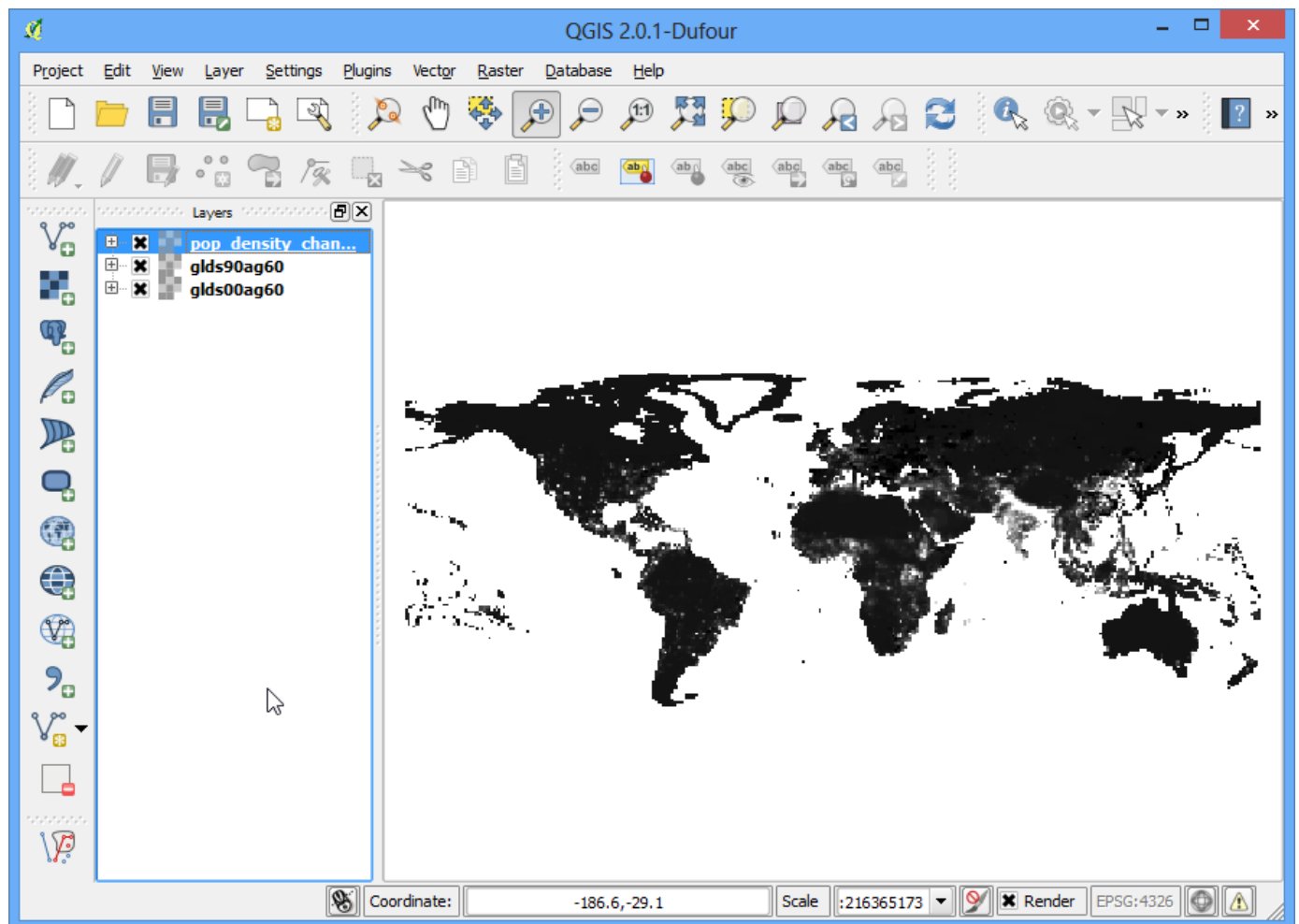
12. QGIS ■■■■ ■■■■ ■■■■. ■■■■ ■■■■ ■■ ■■■■ ■■ ■ ■■■■. ■■ ■■■■ ■■ ■■■■ ■■ ■■■■.



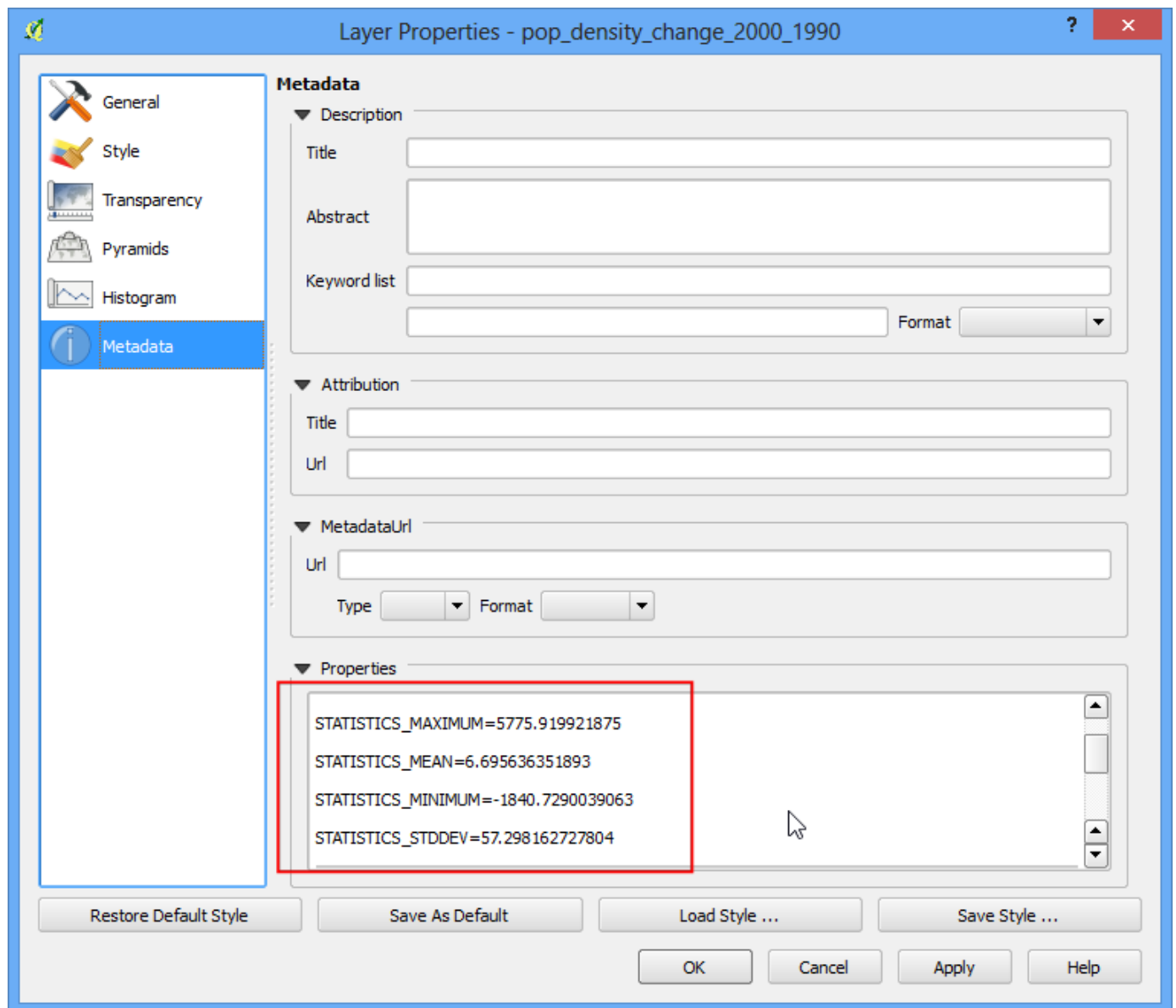
13. ■■■■■■ 1990■■■ 2000■ ■■■■ ■■ ■■■■■■ ■ ■■ ■■ ■■■■■■. ■■■■ ■■■■■■ ■■ ■■■■ ■■■■ ■■■■■■ ■ ■■■■ ■■■■ ■■ ■■■■ ■■ ■■■■. ■■■> ■■■■ --> ■■■■ ■■■■
:menuselection: Raster --> Raster calculator`■ ■■■■■■.



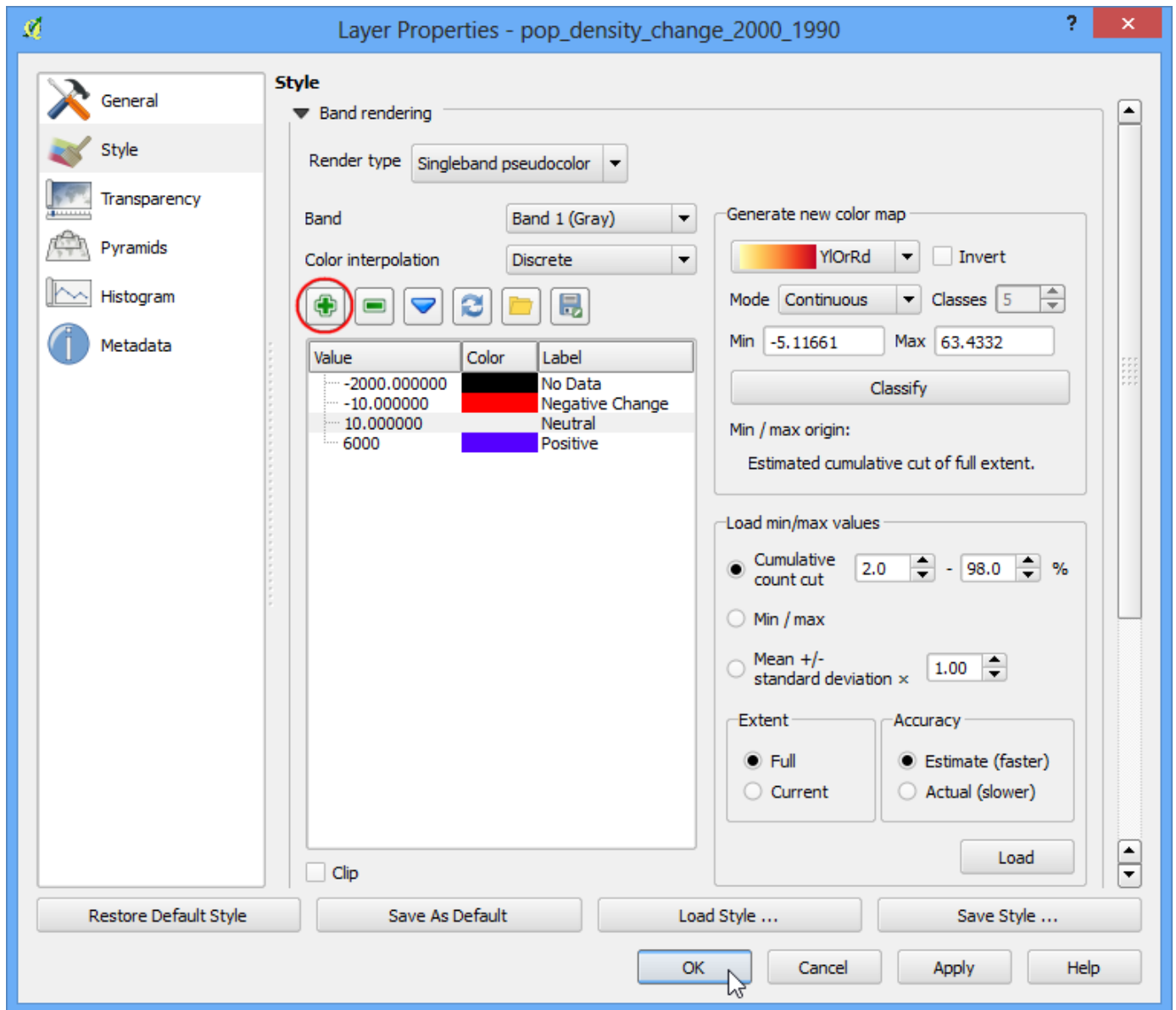
14. **Raster bands** **glds00ag60@1** - **glds90ag60@1** **pop_density_change_2000_1990.tif** **Add result to project** **OK**



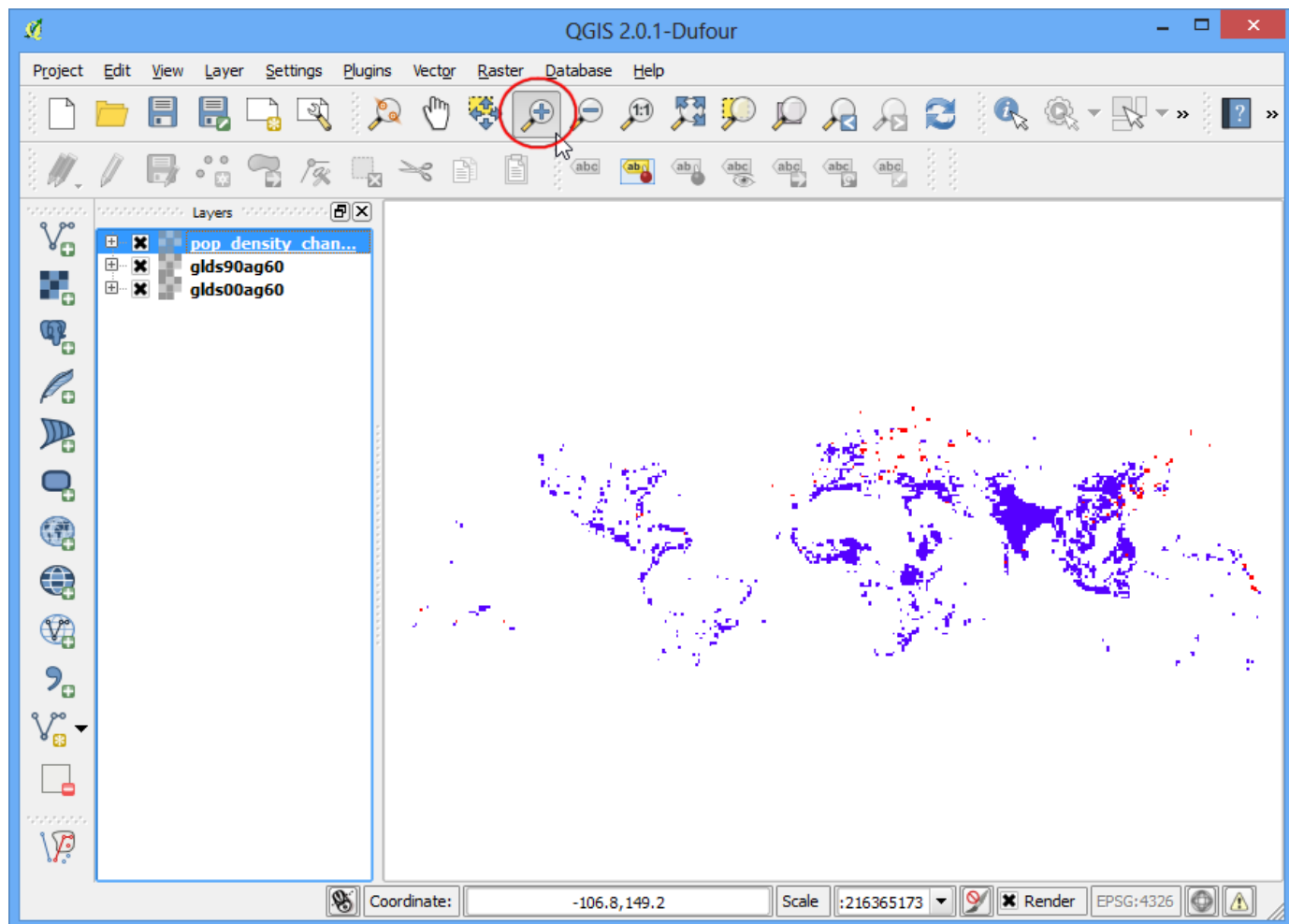
16. `pop_density_change_2000_1990``
:guilabel: Properties



18. **Style** **Band Rendering** **Render type** **Singleband pseudocolor** **Color interpolation** **Discrete** **Add entry** **4** **-2000** **-2000** **No Data** **OK**



19. `self.zoom_in_button.setText('Zoom In')`



20. ■■■ ■■■ :guilabel: 'Identify' ■■■ ■■■■, ■■ ■■■■ ■■■■■■ ■■■■ ■ ■■■■■■ ■■■■
 ■■ ■■■■ ■■■■ ■■■■ ■■■■ ■■■■.



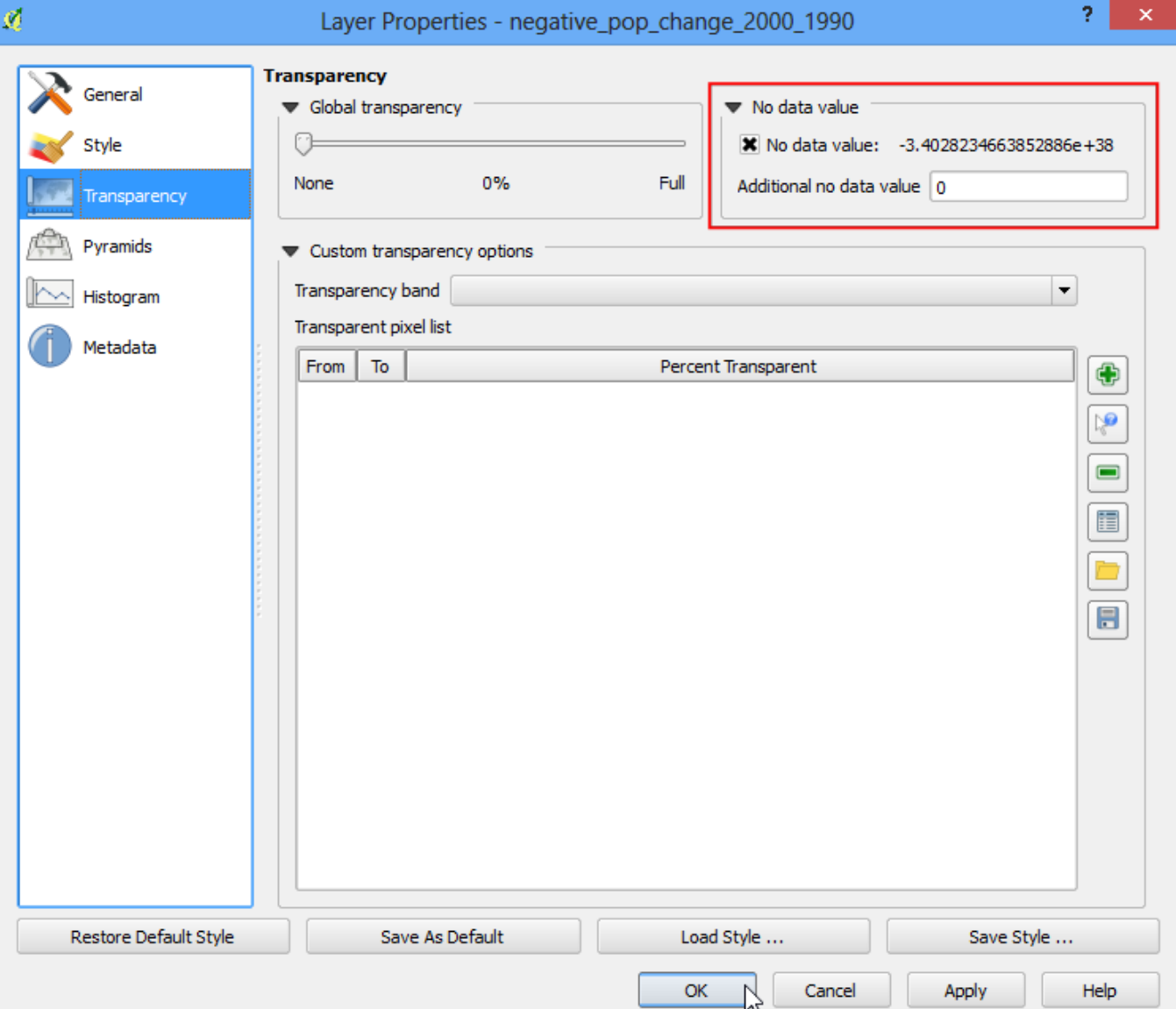
21. ■■■ ■ ■ ■ ■■■■ ■■■■■ '■■■' ■■■■ ■■■■■. ■■ ■■■ --> ■■■ ■■■
:menuselection:`Raster --> Raster calculator` ■■■■.



22. `pop_density_change_2000_1990@1 < -10`. `negative_pop_change_2000_1990`.
 1 0. `negative_pop_change_2000_1990`.
 0. `negative_pop_change_2000_1990`.
 :guilabel: Add result to project. OK.



23. ■■■ ■■■■ ■■■■ ■■■■■■■■■■. ■■■■ ■■■■ ■■■■ ■ ■■■ ■■■ :guilabel: `Properties` ■■■■■■■■. ■■■■ :guilabel: `Transparency` ■■■■ ■■■■ no data value :guilabel: `Additional no data value` ■ 0 ■■■■■■■■. ■■■■ ■■■■ 0 ■■■ ■■■ ■■■ ■■■■ ■■■■■■. :guilabel: `OK` ■■■■■■■■.



24. ■■ ■■■■■ ■■■ ■■■ ■■ ■■■ ■ ■■■■.

