PRISM is an analytical model that uses point data and a digital elevation model (DEM) to generate gridded estimates of annual, monthly and event-based climatic parameters. The data are average monthly and average annual precipitation in inches and average minimum and average maximum temperature in degrees Fahrenheit for the climatological period 1961-1990. ~800m cell size.

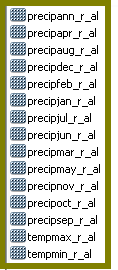
List of Theme Files and The File Naming Convention:

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Zip file containing all files for each state (there is also a national dataset available – see FAQ #37):

In the file geodatabase are the following raster files (example for Alabama):

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****

**precipjan\_r\_al thru precipdec\_r\_al** = the 30-yr normal precipitation for January thru December **precipann\_r\_al** = the 30-yr normal yearly precipitation

**tempmax\_r\_al** = the 30-yr normal average maximum temperature

**tempmin\_r\_al** = the 30-yr normal average minimum temperature

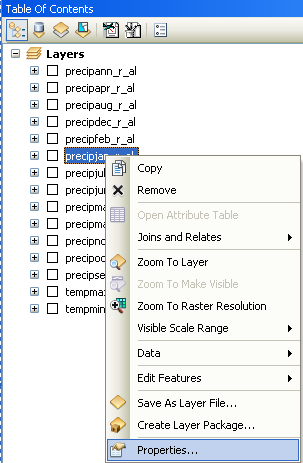
Note: the rasters are 30-arcsecond (~800m), buffered 8 km past the state border to ensure complete coverage.

For more information visit the PRISM Climate Group at: <http://www.prism.oregonstate.edu/>

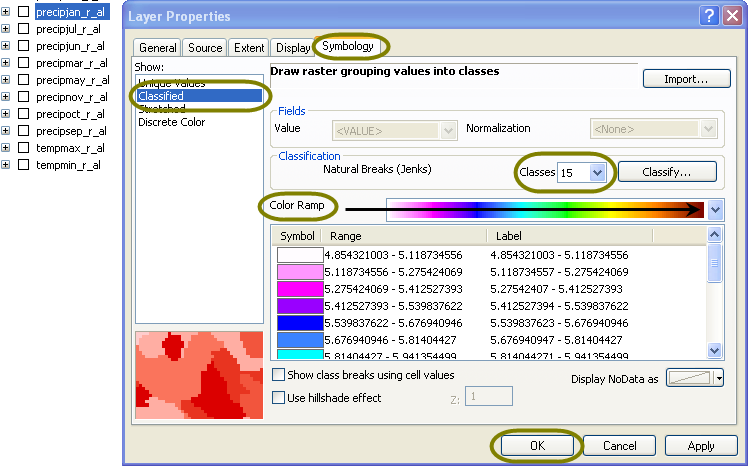
**Symbolizing the Precipitation and Temperature Rasters using ESRI ArcMap**®

**Precipitation Raster:**

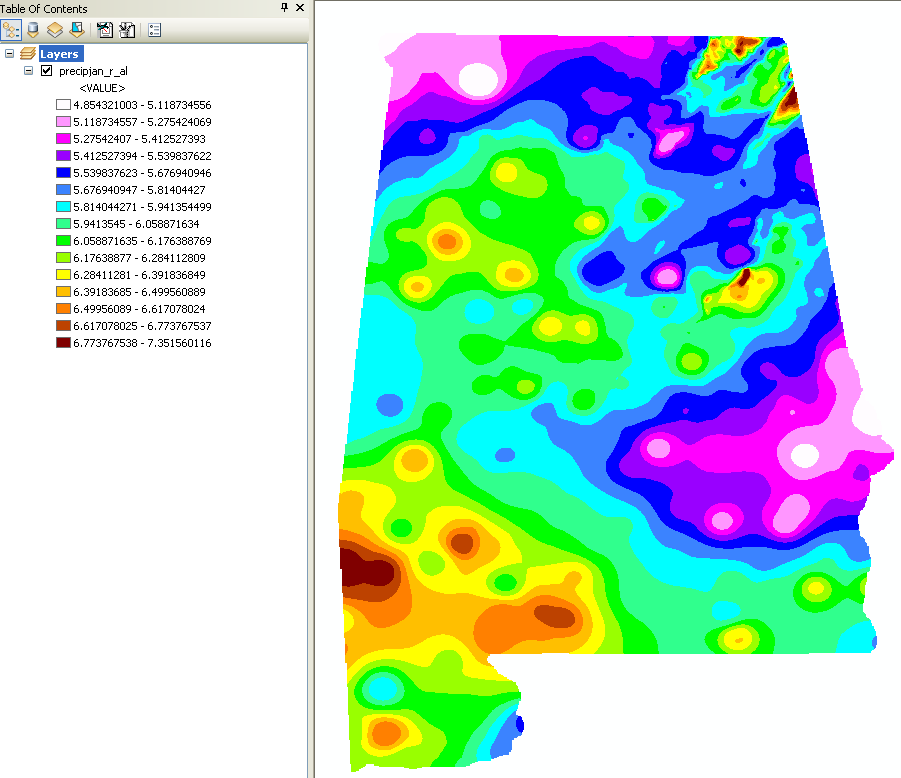
Right-click on the raster in the ArcMap® table of contents, and left-click on Properties…



Select the Symbology tab. Choose “Classified”. Choose the # of Classes or breaks you would like. In this example, 15 classes were chosen. Choose the Color Ramp. Click OK.

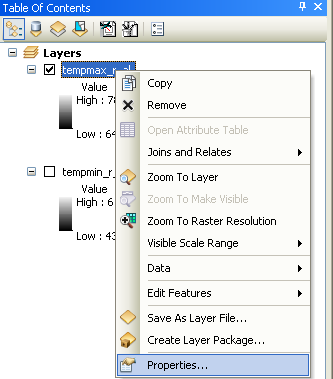


The precipitation raster is now symbolized by the classes and colors you have chosen:

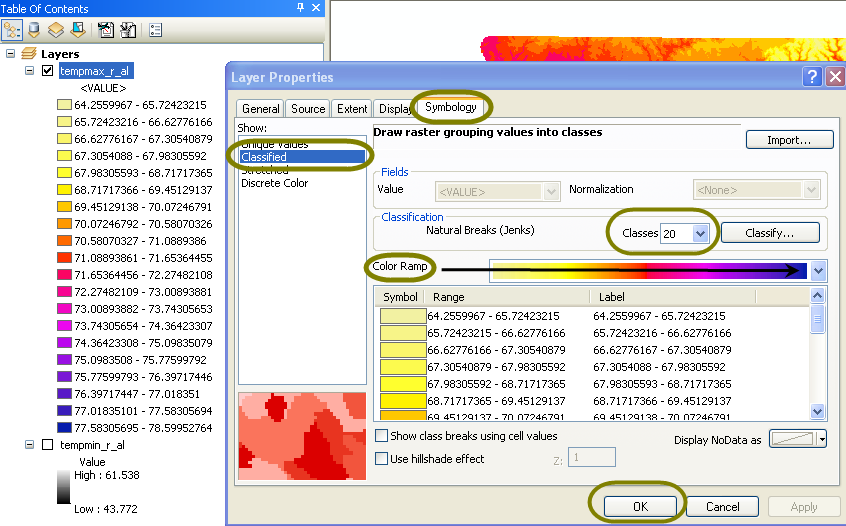


**Temperature Raster:**

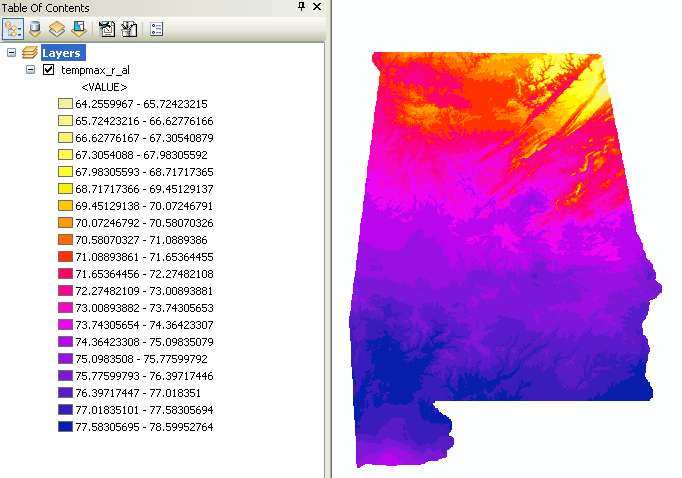
Right-click on the raster in the ArcMap® table of contents, and left-click on Properties…



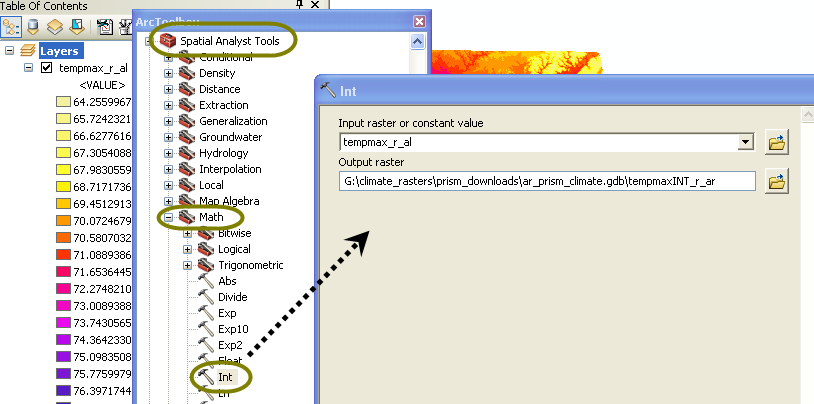
Select the Symbology tab. Choose “Classified”. Choose the # of Classes or breaks you would like. In this example, 20 classes were chosen. Choose the Color Ramp. Click OK.



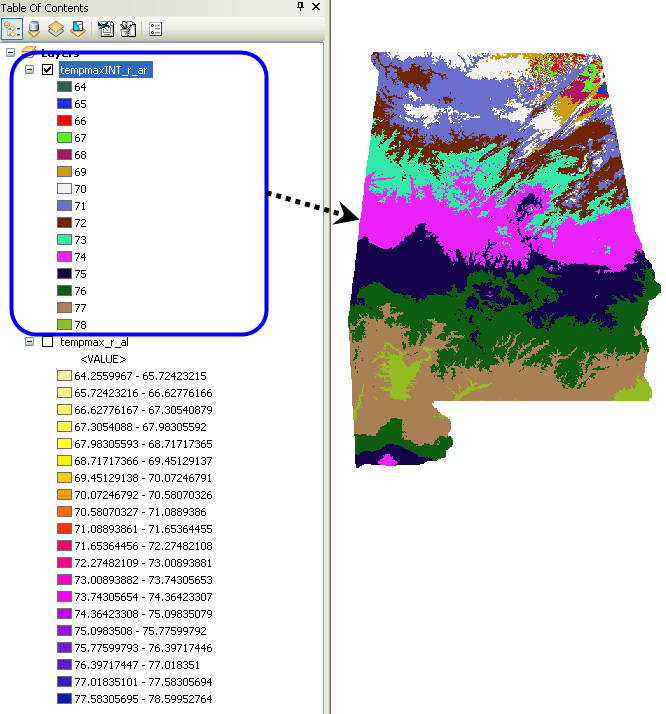
The temperature raster is now symbolized by the colors you have chosen:



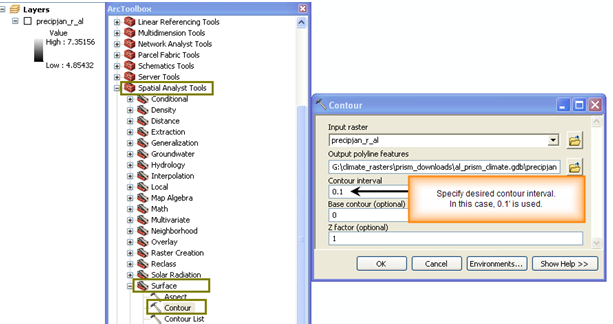
If desired, you can change the precipitation or temperature values to integers. Using Arc Toolbox, Spatial Analyst Tools🡪Math 🡪Int. This example is the temperature data.



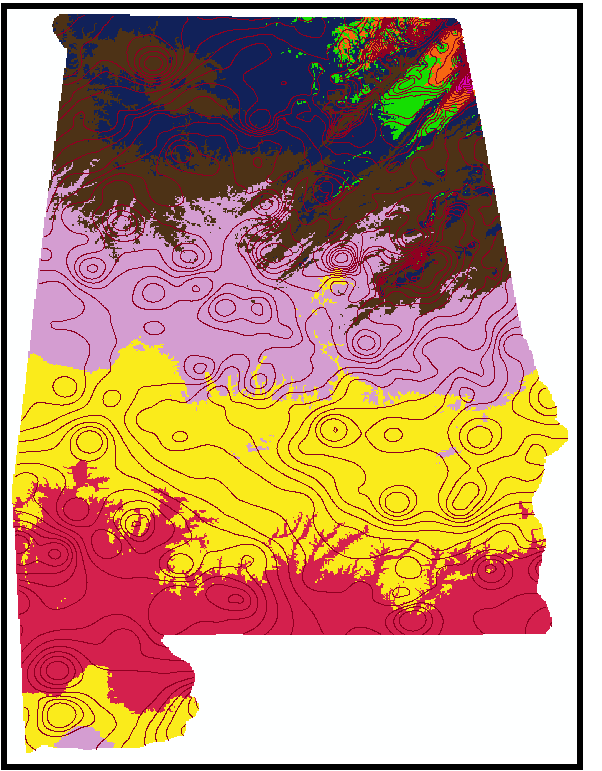
Here is the result:



You can also create isolines from the raster data. One method, using Arc Toolbox, is to use the Spatial Analyst Tools 🡪Surface🡪Contour. This example is the precipitation data.



Here is the result:



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