Create a choroplethic map

Click on the "Map" button in the table header to create a map with the data of the column below. The map creation view appears on your screen (see illustration below).

The right half of the window remains empty at the beginning because in this area you are going to see the map preview later on. Note the two blinking green arrows near the selection boxes "Method" and "Classes". You have to choose an option at least for these two selection boxes to be able to create a map. If you did that correctly, the green arrows will disappear and the "Apply" button is enabled. The "Back to table" button lets you switch back to the table view. The dark blue area above shows some descriptive statistical values for the selected data column and is displayed for information purposes only. At the very bottom of the window you will see a line showing the estimated map creation time in seconds. The estimated loading time may vary depending on the selected data class building method (selection box "Method"). Note that with method "Standard deviation" the "Classes" selection box is disabled because the number of classes is automatically set with the "Standard deviation" method.

The map options

- *Select method:* Choose how the legend classes should be defined. You can select one of these options:
    - *Equal interval:* The numeric range of all classes has the same size.
    - *Quantiles:* The elements are evenly distributed so that each class contains the same number of elements.
    - *Standard deviation:* The class ranges are defined according to the standard deviation of the elements.
    - *Equal area:* The elements are distributed in a way that each class covers (approximately) the same area (sum of municipality areas in each class is equal).
    - *Natural breaks (ArcView):* The natural breaks algorithm minimizes the variance within classes and maximizes the variance between classes. This option produces an output similar to the algorithm used in ESRI's ArcView GIS.
    - *Natural breaks (Jenks):* same as above but using the Jenks algorithm which produces slightly different results than the ArcView method.
    - *Manual choice:* Using this option you can define the limits for the selected number of classes on your own. See chapter 6 for more information on how to do this.
- *Select number of classes:* lets you define how many classes you will have in your map legend. This is disabled if you select the standard deviation method above.
- *Select outline width/Select outline colour:* Define the width and the colour of the polygon outlines of your thematic map.
- *Select colour ramp:* Define the colours of your thematic map. You can choose between monochromatic, dichromatic and gradient colour ramps. The difference between dichromatic and gradient colour ramps ist that dichromatic colour ramps go from colour 1 to white and then from white to colour 2 (e. g. grey – white – red) whereas gradient colour ramps directly fade from colour 1 to colour 2 and then from colour 2 to colour 3 (e. g. yellow – orange – red). Colour 2 is never white.
- *Invert colour ramp:* Check this box to invert the sequence of colours (e. g. green to red dichromatic will turn to red to green dichromatic, monochromatic colour ramps will have darkest colours on top).
- *Define zero handling* (only available with dichromatic colour ramps and columns containing values both greater than zero and less than zero!)*:*
    - *No special zero handling:* leave everything as it is
    - *Treat white as zero only:* The class including zero is split into two classes, and a separate class having zero as only value is added. Note: The effective number of classes is higher by 2 than the preselected number of classes.
    - *Use white for class incl. 0:* preserve class definition, but shift the colour ramp so that white is used for the class including the zero value.
    - *No white in legend:* preserve class definition, but build a colour ramp with no white class Labels: lets you define colour, halo and content of text labels in your thematic map. See chapter 7 for details.

Remember the two blinking green arrows near the selection boxes "Method" and "Classes"? If you have selected at least a method and a number of classes (or method only if it is "standard deviation"), the arrows will disappear and the "OK" button is enabled so that you can press it now to start the creation of the map preview. Also keep in mind that the estimated loading time is higher if you select one of the natural breaks methods – these methods use an iterative algorithm which takes more time to calculate the classes.
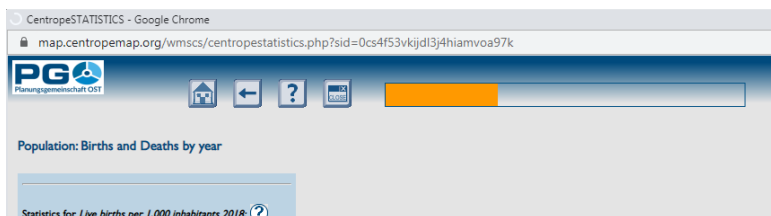
After you pressed the "OK" button, a progress bar appears in the top area of the window (see illustration on the left).
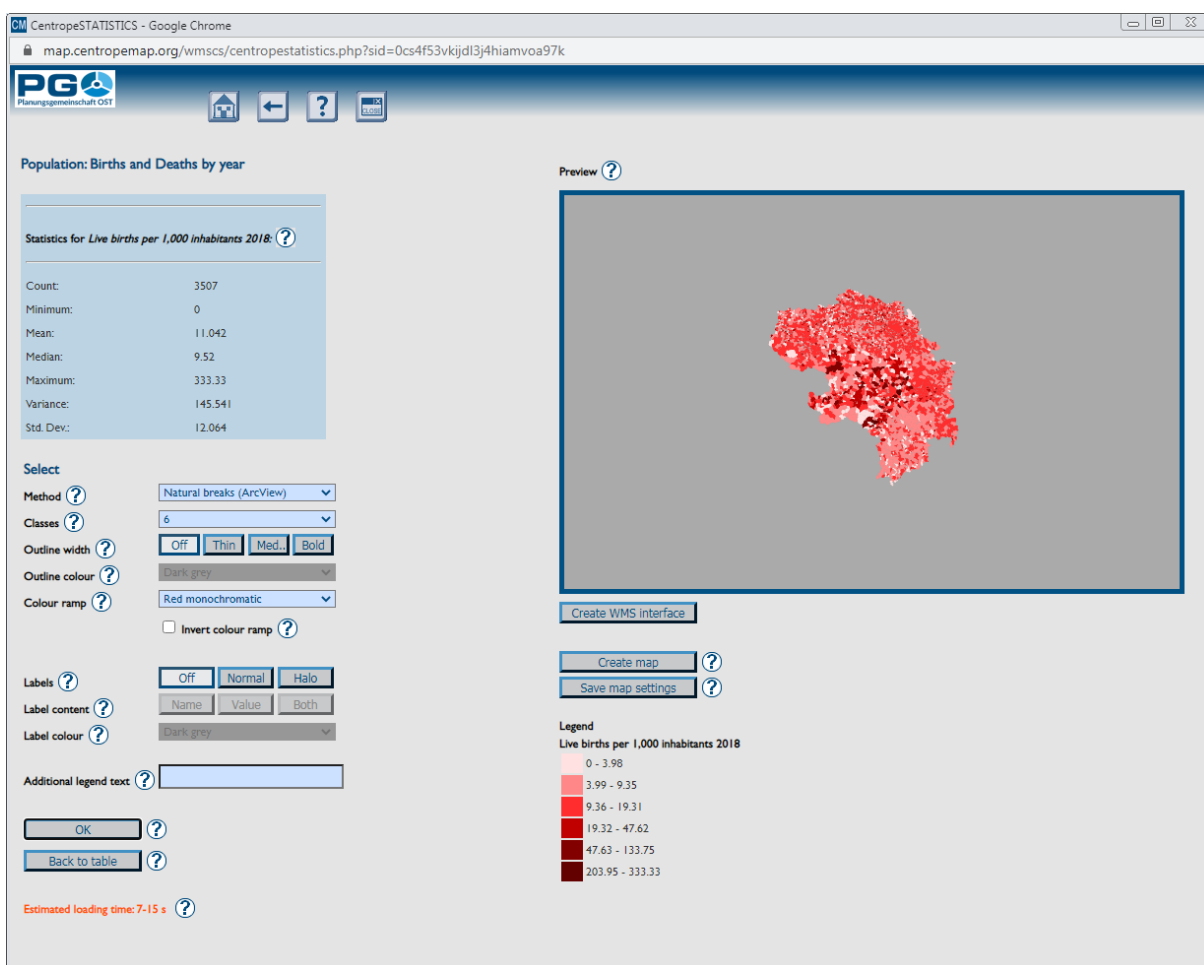
After you pressed the "Apply" button, the figures from the originating statistics table are shifted to a temporary table and the stylesheet for map display has to be created. In rare cases the progress bar might become full and then be replaced by a warning message which tells you that CentropeSTATISTICS is waiting for the server to reply. The statistics tables are cleaned up once a day automatically (typically during night). If there were lots of queries during the day, it may happen that the database response time is extended by a few seconds. After preview calculation your screen will look like the illustration on bottom of the previous page.

The image on the right in this illustration is just a preview of the map. You can neither pan nor zoom into it. To copy the thematic map contents to the main map window as map layer, click on the "Create Map" button. The map, which has been precalculated in the background, is now brought into the CentropeMAP window. Change to the CentropeMAP window to see your thematic map *(but do not close the CentropeSTATISTICS window because as soon as the CentropeSTATISTICS window is closed, your CentropeSTATISTICS session is terminated and all table and map data is removed from your screen.)*

Congratulations, you're done. You can use the thematic layer exactly as any other CentropeMAP layer (zoom, pan, set transparency, print, …). The only thing which is different to the other layers is how to turn the layer completely off (and on again). To do so, you have separate buttons in the left side menu of the map window. Click on "Hide thematic map" to turn of visibility of the thematic map. Click the same button (which is then labelled "Show thematic map again") to turn it on again. If you close the CentropeSTATISTICS window, the thematic map is turned off automatically and cannot be turned on again unless you start a new CentropeSTATISTICS working session.