

Choropleth Map

A thematic map in which areas are shaded in proportion to the measurement of the statistical variable being displayed.

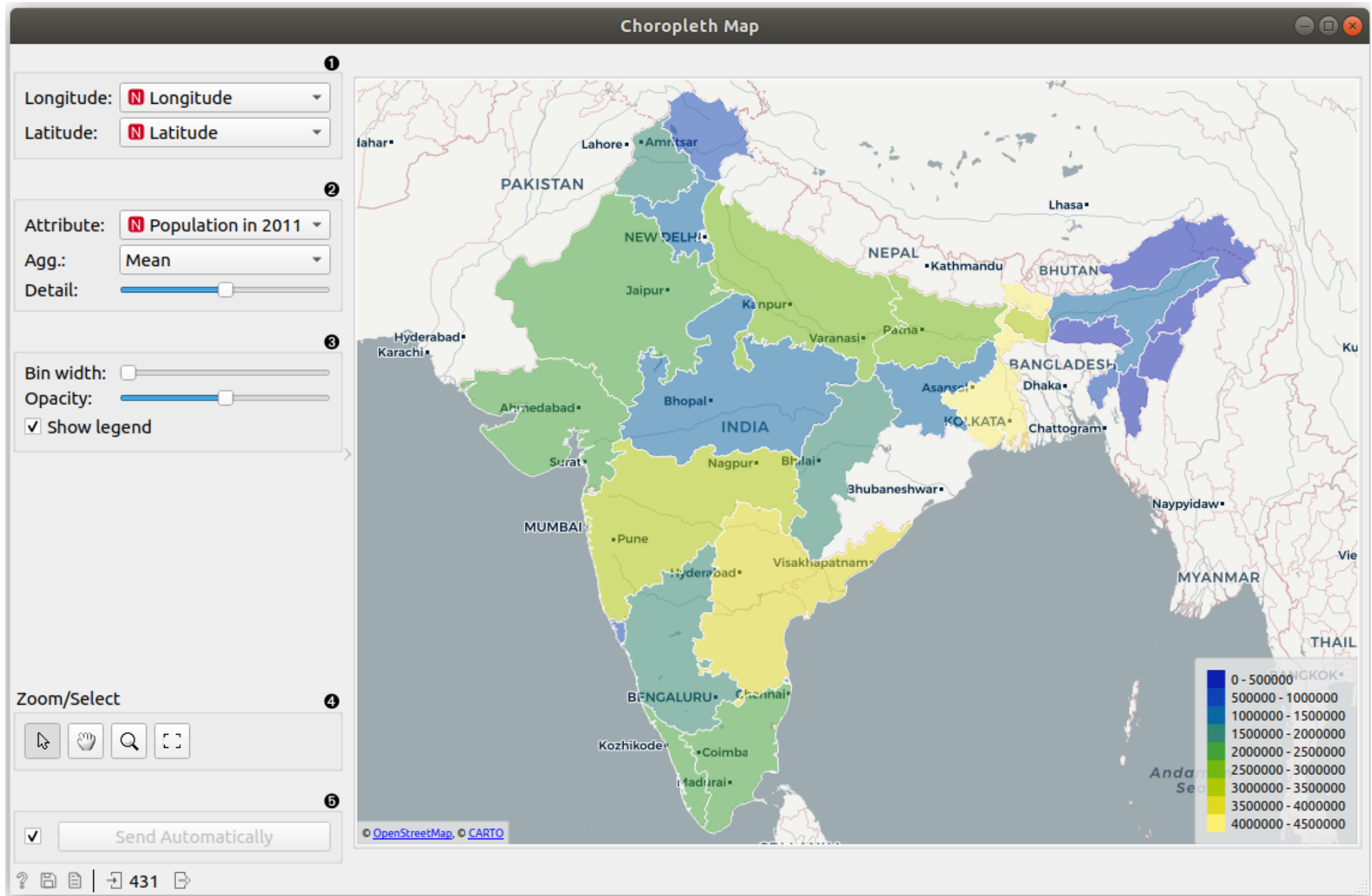
Inputs

- Data: input dataset

Outputs

- Selected Data: instances selected from the map.
- Data: data with an additional column showing whether a point is selected

Choropleth provides an easy way to visualize how a measurement varies across a geographic area or show the level of variability within a region. There are several levels of granularity available, from countries to states, counties, or municipalities.



1. Set latitude and longitude attributes, if the widget didn't recognize them automatically.

2. Set *Attribute* to color the region by. Set *Agg.* which by default counts the number of occurrences of the region in the data. *Count defined* shows which regions appear in the data. *Sum*, *Mean*, *Median*, *Maximal*, *Minimal* and *Std.* (standard deviation) work for numeric data, while *Mode* works for categorical. Set *Detail* level to countries, states (US)/counties/Bundesländer/provinces or counties (US)/municipalities.
3. Adjust plot properties:
 - *Bin width* for discretize displayed color.
 - *Opacity* sets transparency of regions.
 - *Show legend* displays a legend on the right. Click and drag the legend to move it.
4. *Select*, *zoom*, *pan* and *zoom to fit* are the options for exploring the map. The manual selection of data instances works as an angular/square selection tool. Scroll in or out for zoom.
5. If *Send automatically* is ticked, changes are communicated automatically. Alternatively, press *Send*.

Example

We will use *HDI* data from the **Datasets** widget. Open the widget, find *HDI* data and double click. **Choropleth** widget requires latitude and longitude pairs, so we will use **Geocoding** to extract this information. We used the attribute *Country* and found lat/lon pairs that **Choropleth** can use.

Choropleth will automatically look for attributes named *latitude*, *longitude*, *lat*, *lon* or similar. It will use them for plotting. Alternatively, set the attributes manually.

Since *HDI* attribute is our target variable, it will automatically be used for coloring. We change it in the *Attribute* dropdown to *Life expectancy*. We have set the level of aggregation to *Mean*, but since we have only one value per country, we could use *Sum* or *Median* just as well.

The widget shows life expectancy as reported by the United Nations per country. Yellow countries are those with a high Life expectancy and blue ones are the ones with a low life expectancy.

