

# Geo Map

Show data points on a map.

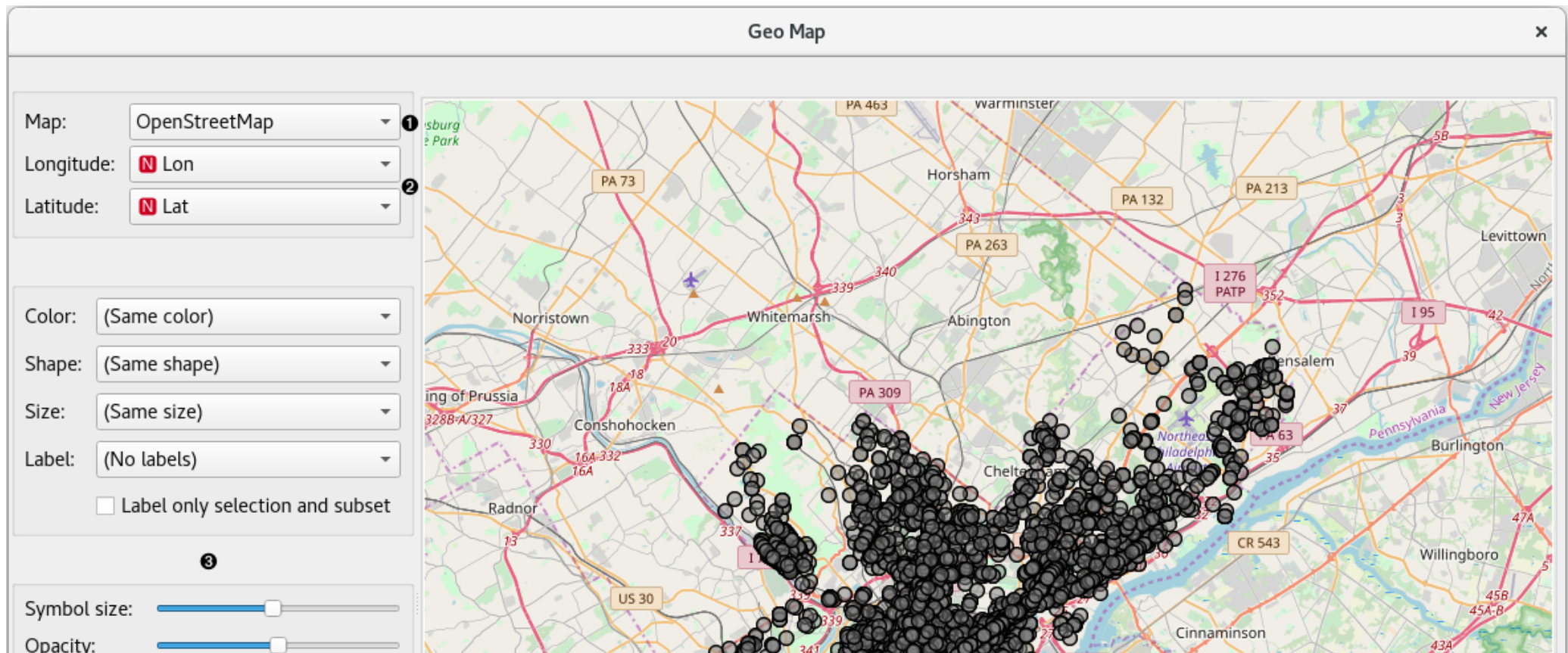
## Inputs

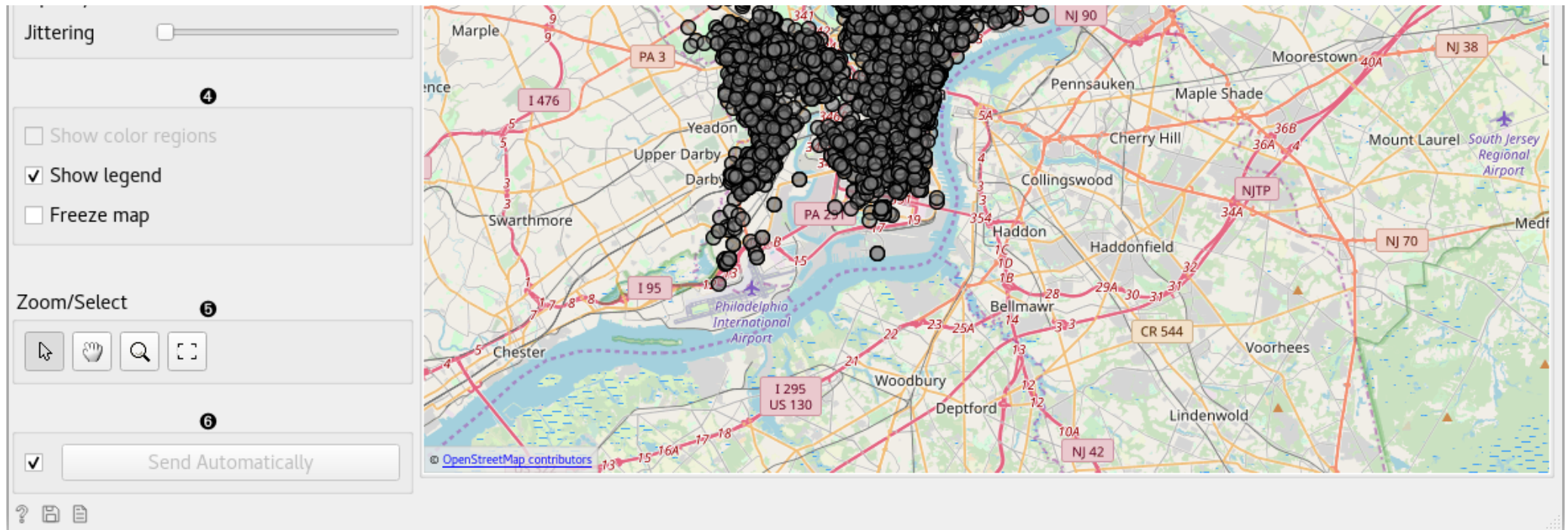
- Data: input dataset
- Data Subset: subset of instances

## Outputs

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

**Geo Map** widget visualizes geo-spatial data on a map. It works on datasets containing latitude and longitude variables in WGS 84 (EPSG:4326) format. We can use it much like we use Scatter Plot widget.

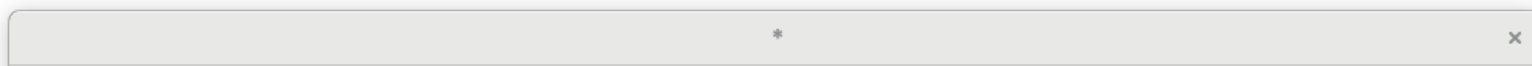




1. Set the type of map: **OpenStreetMap**, Black and White, Topographic, Satellite, Print, Dark.
2. Set latitude and longitude attributes, if the widget didn't recognize them automatically. Latitude values should be between -85.0511(S) and 85.0511(N) (a limitation of the projections onto flat maps) and longitude values between -180(W) and 180(E).
3. Set color, shape, size and label to differentiate between points. Set symbol size, opacity and jittering for all data points.
4. Adjust *plot properties*:
  - *Show color region* colors the graph by class (color must be selected).
  - *Show legend* displays a legend on the right. Click and drag the legend to move it.
  - *Freeze map* freezes the map so it doesn't update when input data changes.
5. *Select*, *zoom*, *pan* and *zoom to fit* are the options for exploring the graph. The manual selection of data instances works as an angular/square selection tool. Scroll in or out for zoom.
6. If *Send automatically* is ticked, changes are communicated automatically. Alternatively, press *Send*.

## Examples

In this simple example we visualize the *Philadelphia Crime* dataset that we can find in the **Datasets** widget. We connect the output of that widget to the **Map** widget. Latitude and longitude variables get automatically detected and we additionally select the crime type variable for color. We can observe how different crimes are more present in specific areas of the city.





File Edit View Widget Options Help

**Data**

File CSV File Import Datasets SQL Table

Data Table Paint Data Data Info Data Sampler

Select Columns Select Rows Pivot Table Rank

Correlation Merge Data Concatenate Select by Data Index

Transpose Randomize Preprocess Apply Domain

Impute Outliers Edit Domain Python Script

Color Continuize Create Class Discretize

Feature Construct Feature Statistics Neighbors Purge Domain

Select a widget to show its description.

See [workflow examples](#), [YouTube tutorials](#), or open the [welcome screen](#).

**Geo Map**

Datasets Data Geo Map

Map: OpenStreetMap

Longitude: N Lon

Latitude: N Lat

Color: Type

Shape: (Same shape)

Size: (Same size)

Label: (No labels)

☐ Label only selection and subset

Symbol size:

Opacity:

Jittering: ☐

☐ Show color regions

☒ Show legend

☐ Freeze map

Zoom/Select

**Geo Map**

Map showing data points colored by Type (Family Abuse, Gambling, Homicide, Liquor Law Violations, Prostitution) overlaid on a street map of Philadelphia and surrounding areas. The legend indicates:

- Family Abuse (Blue)
- Gambling (Red)
- Homicide (Green)
- Liquor Law Violations (Orange)
- Prostitution (Yellow)

