# Interactive plots

## Creating interactive maps

### Creating a map and selecting a provider

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| Graphical user interface, map  Description automatically generated | Graphical user interface, text  Description automatically generated  "CartoDB","Esri","CartoDB.PositronNoLabels" |

Graphical user interface, map

Description automatically generated

### Dynamic provider selector

Map

Description automatically generated

### Adding a blue mark and message from vectors

Map

Description automatically generated

### Setting popups design

**htmlwidgets::htmlEscape()** function will sanitize characters that may be interpreted as HTML.

Scatter chart

Description automatically generated

### Getting a position from a direction

Graphical user interface, text, application

Description automatically generated

Text

Description automatically generated

### Getting a direction from a position

library(tmaptools)

rev\_geocode\_OSM(x=lon, y=lat,as.data.frame = TRUE)

# the direction is the column “names"

### Selecting a position and zoom in the map

In **setView()** we need to specify the center of the view with lat and log.

Whiteboard

Description automatically generated

### Limiting the map view

#### Fixing the map in a view

Switching dragging to FALSE will prevent panning and setting the min and max zoom arguments will limit the zoom, effectively setting and maintaining the focal point, while preserving the interactive features of our web map.

Graphical user interface, text, application

Description automatically generated

#### Taking back the user to original position

If users try to pan your map outside of the max bounds they will be automatically bounced back into the boundary.

A picture containing map

Description automatically generated

### Taking out the boundaries and markers

Map

Description automatically generated

### Adding a circle and message from a dataframe

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| Graphical user interface, application  Description automatically generated | Graphical user interface, application  Description automatically generated |

#### Changing points’ color

Graphical user interface, application

Description automatically generated

A picture containing chart

Description automatically generated

#### Adding a static legend for categorical data

**colorFactor()** creates a function to relate color and levels.

Text

Description automatically generated

#### Adding a dynamic legend for categorical data

A picture containing graphical user interface

Description automatically generated

#### Adding a static legend for numerical data

**colorNumeric()** creates a function to relate color and numbers.

Graphical user interface, text, application

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

### Setting dynamic provider and legend

Text

Description automatically generated

Text

Description automatically generated

### Group many circles in clusters

Map

Description automatically generated

### leaflet.extras Package

#### Adding a general search bottom

Graphical user interface, text, application

Description automatically generated

#### Adding a search bottom for our data

Text

Description automatically generated with medium confidence

#### Adding a reset position bottom

Map

Description automatically generated

### Adding polygons to our map

Graphical user interface, text, application

Description automatically generated

slotNames(shp): shows the names

Map

Description automatically generated

Graphical user interface, application

Description automatically generated

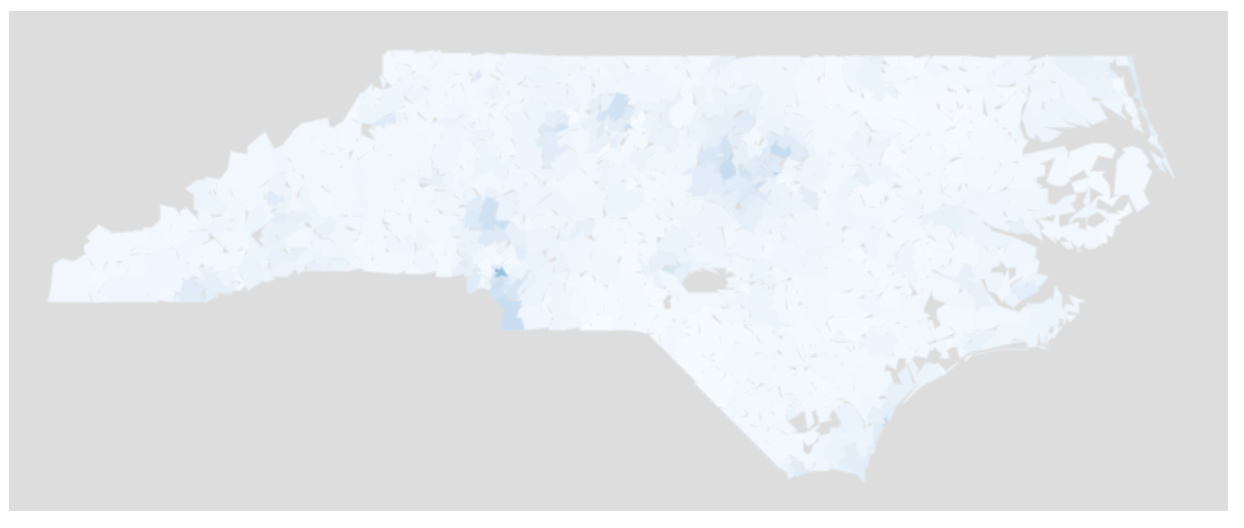
Map

Description automatically generated

Now let’s use palette color

Text

Description automatically generated



### Let’s see all together

Text

Description automatically generated

Text

Description automatically generated

Map

Description automatically generated

### Exporting our map to html file

A picture containing logo

Description automatically generated