TABLEAU

Day 10

Heat Map:

A density heat map is used to analyze the areas in a plot where data points are dense or scattered. Heat maps are specifically used where there is a huge data set with overlapping data values. This helps analysts to see the areas with greater density and discover data trends.

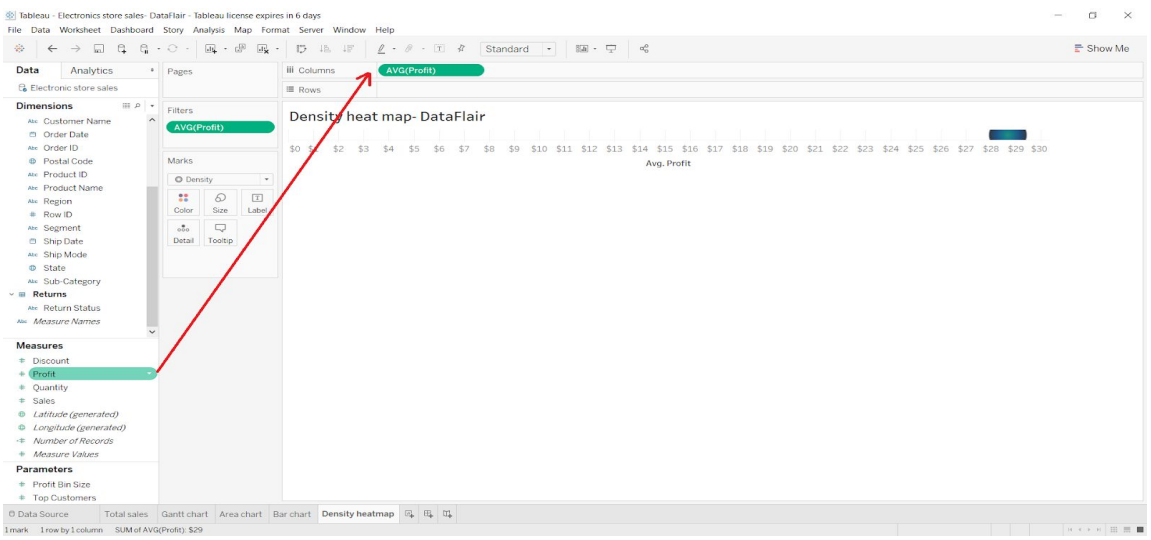
Points we need to take care of before creating a heat map:

- *Columns*: At least one continuous measure
- *Rows*: At least one measure or dimension
- *Mark type*: Density
- *Marks card*: At least one dimension

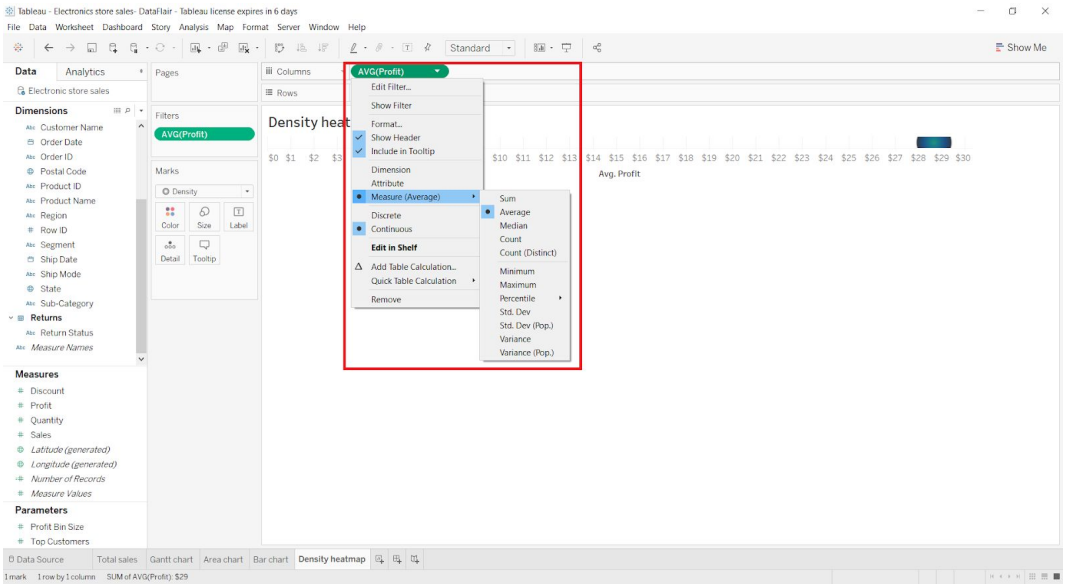
How to create a heat map?

Step 1: Add Measure Profit

To begin with, we add a measure Profit to the Columns section.

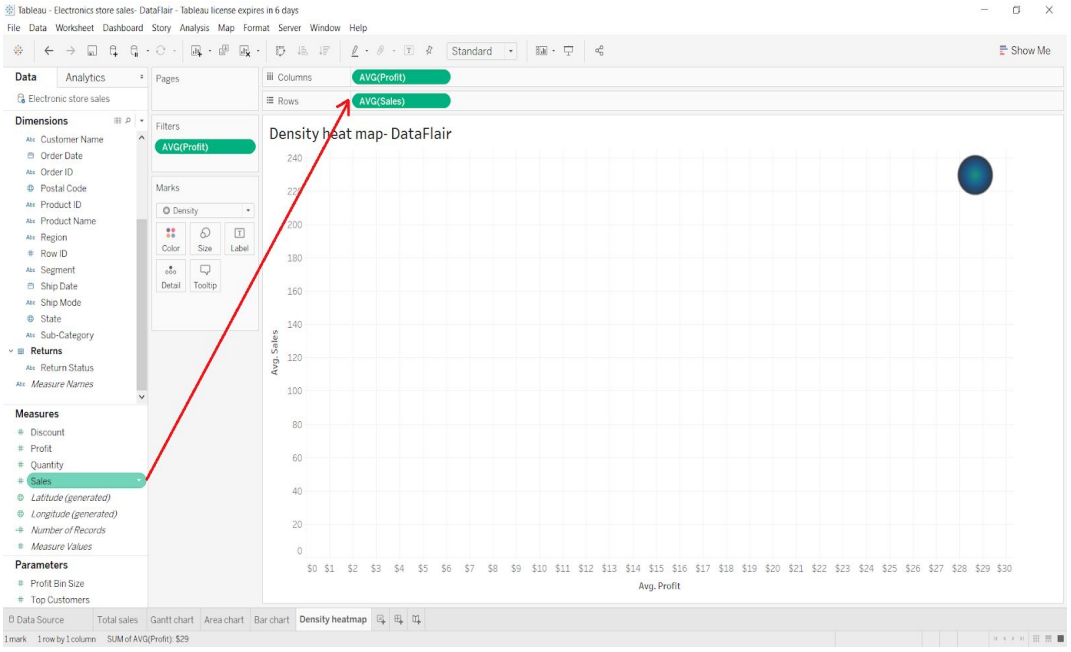


We select the aggregation type as AVG, that is, an average of the field values. Also, we make sure that our measure is Continuous type.



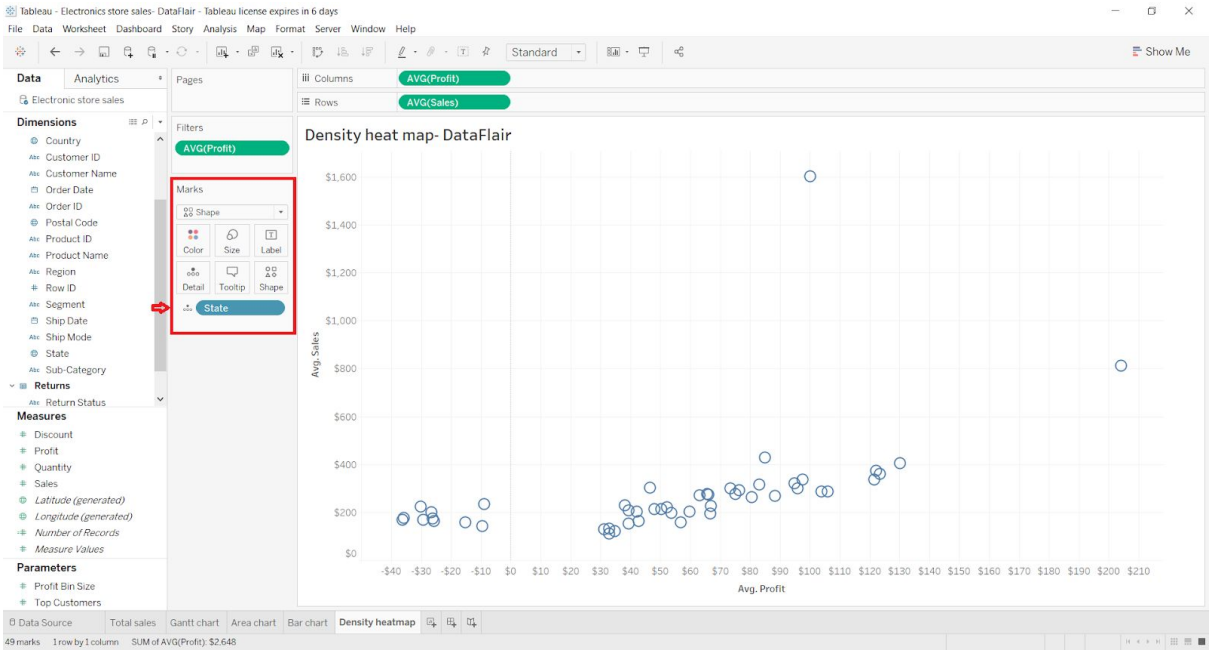
Step 2: Add Measure to Rows Section

Next, we add one more measure field; Sales to the Rows section and again select Average of the field values.



Step 3: Add Dimension Field

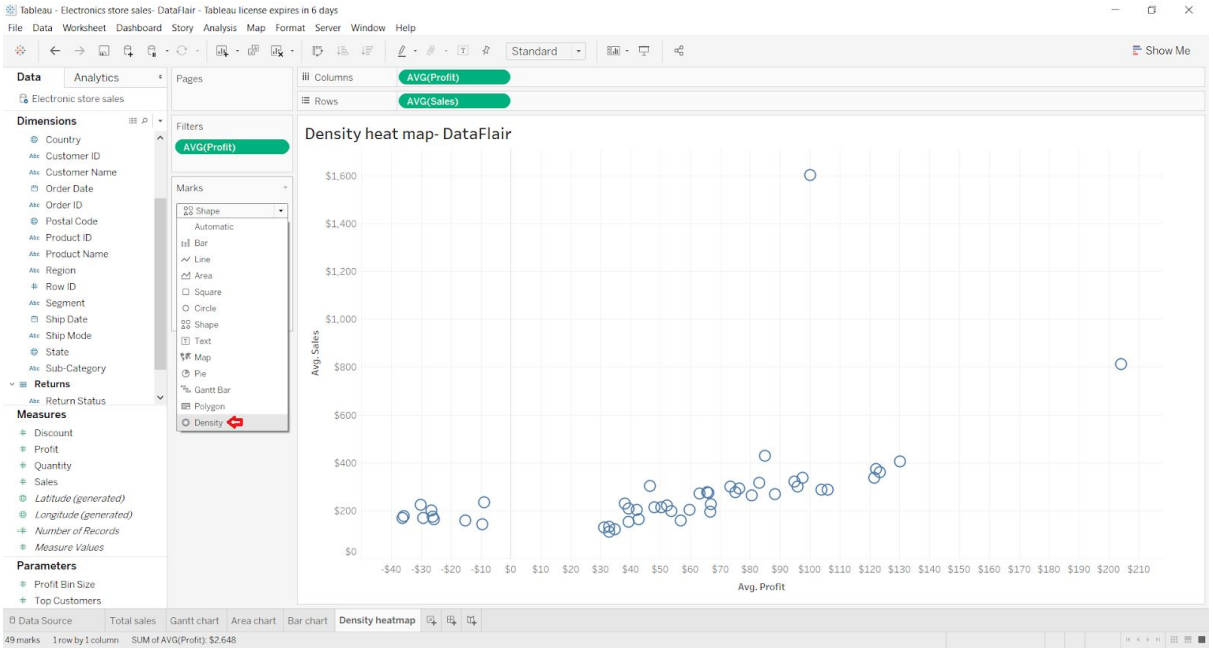
Next, we put a dimension field, State into Detail card present in Marks section. This will add a group circle representing different states on the plot showing average sales and average profit for each state.



Step 4: Select Density Mark

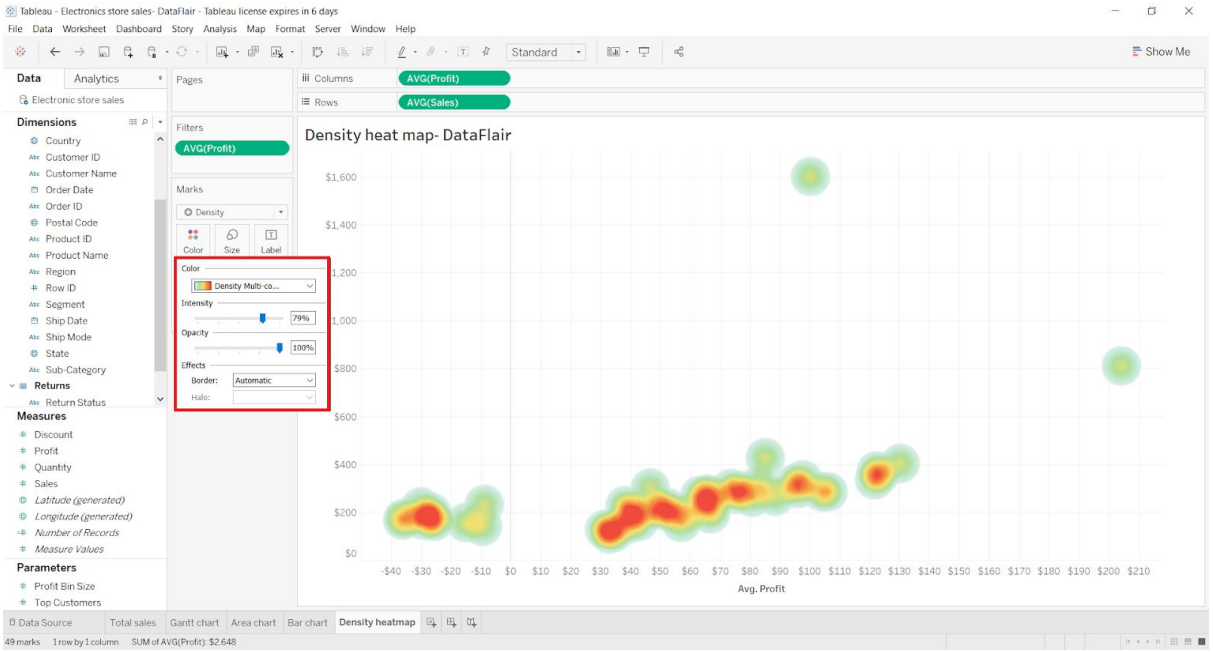
Now, we'll convert this plot into a density heat map by selecting the Shape as Density. This will change the shape of data points from circles to density spots. That is, the color scheme of data points will follow a density gradient.

The regions with most data points or dense regions will be in red/orange whereas, the areas with lesser or scattered data points appear in greenish-blue shades. You can select color schemes of your choice for heat maps.

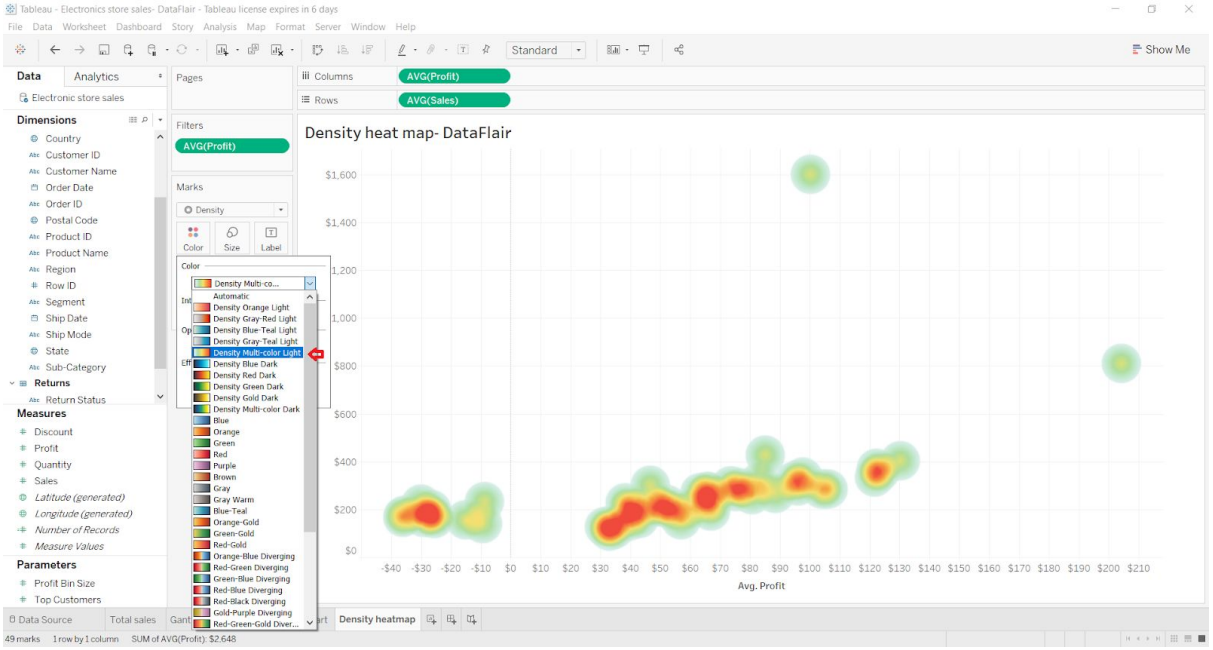


Step 5: Set Intensity and Opacity

To select a color scheme of your choice, right-click on Color card and explore the options. From here, we can also set the intensity, opacity and other border effects for the heat map.

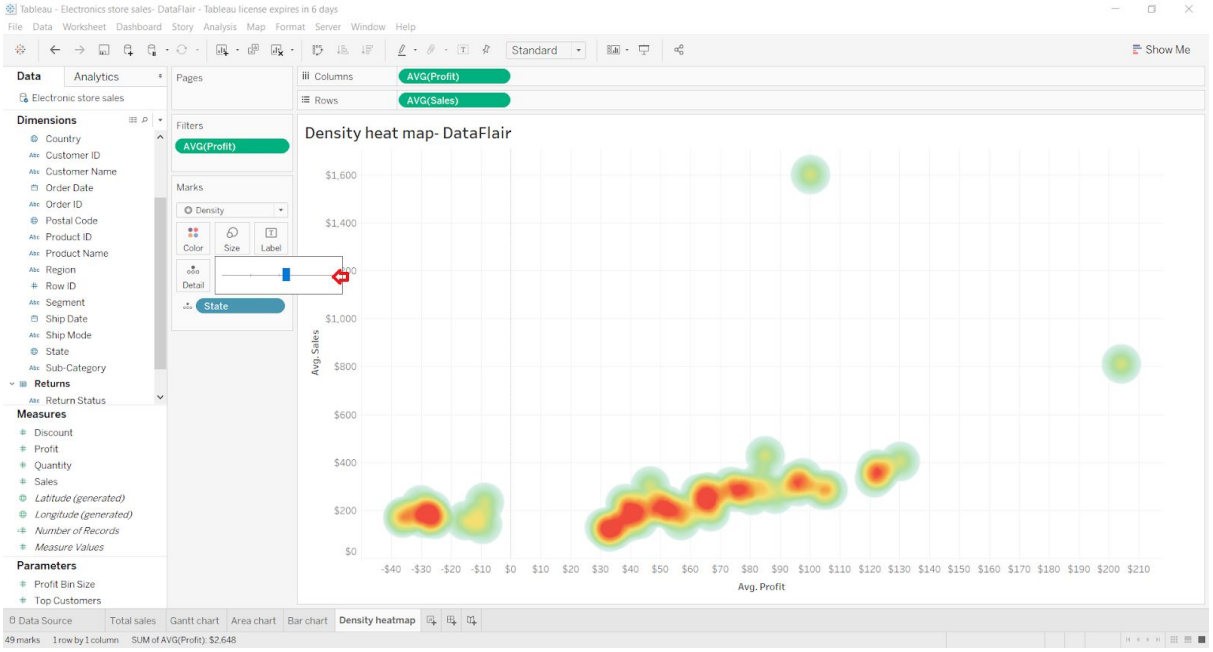


We can select the colour scheme from a long list of available options.



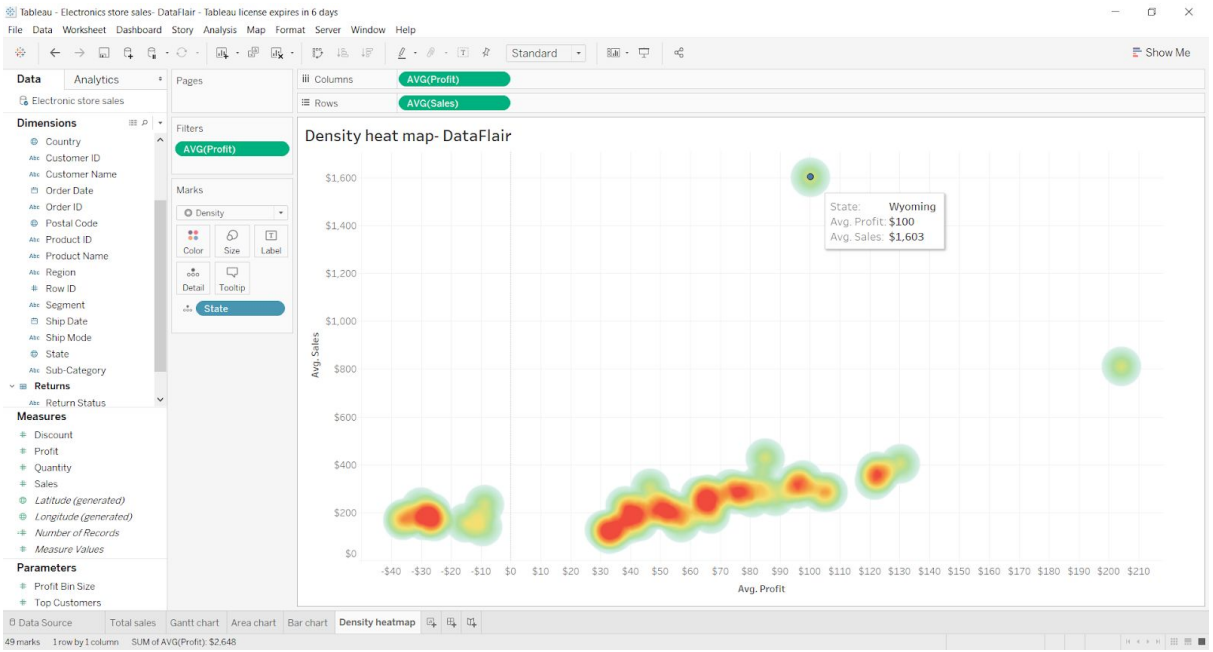
Step 6: Set Size of Tableau Heat Map

We can also increase or decrease the size of density spots.



Step 7: Create Final Tableau Heat Map

In this way, we create a heat map or density heat map in Tableau. To see more details of the data points in the map, hover your cursor on the density points.



Tree Map:

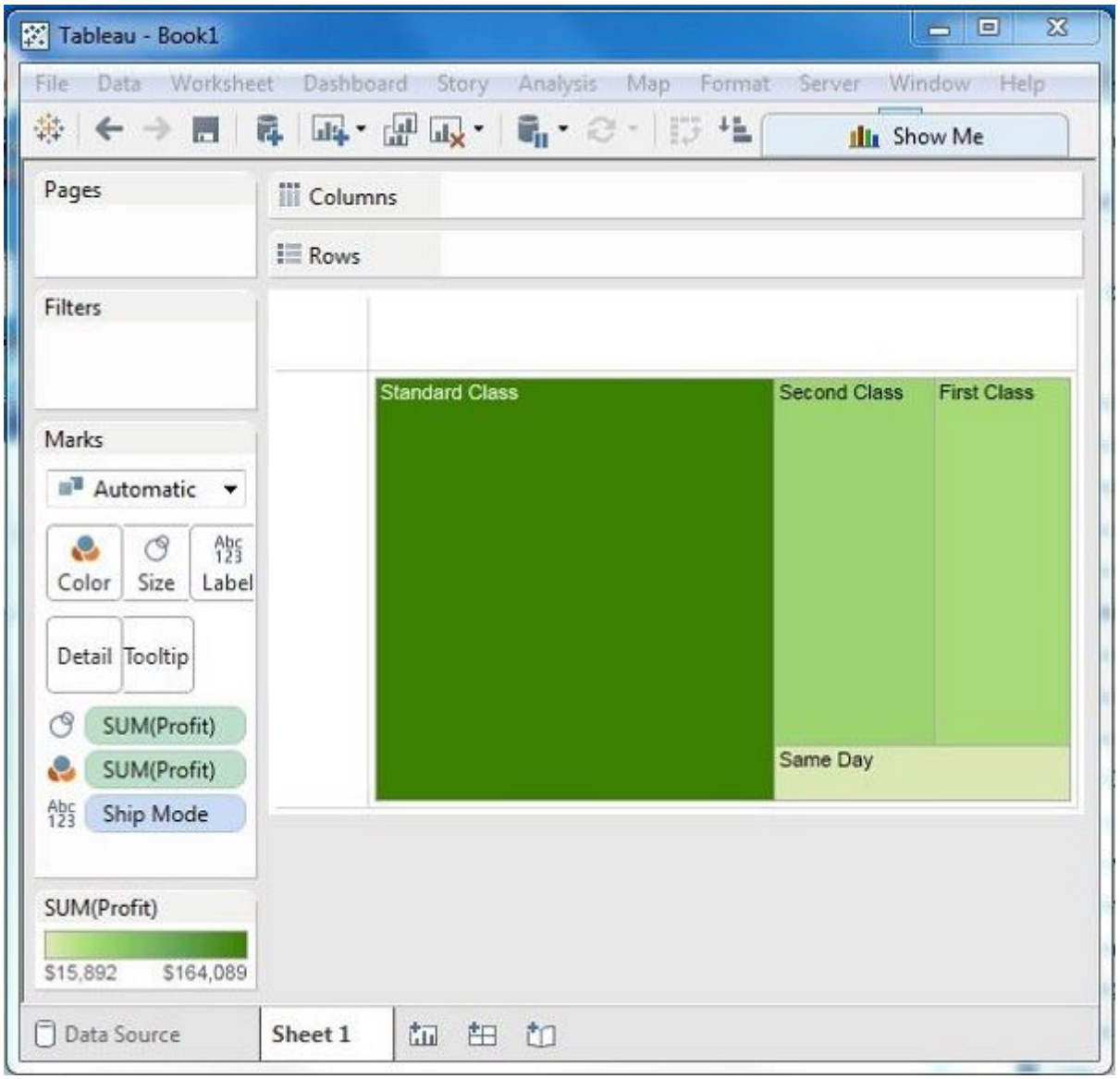
The tree map displays data in nested rectangles. The dimensions define the structure of the tree map and measures define the size or color of the individual rectangle. The rectangles are easy to visualize as both the size and shade of the color of the rectangle reflect the value of the measure.

A Tree Map is created using one or more dimension with one or two measures.

How to create a tree map?

Step 1 − Drag and drop the measure profit two times to the Marks Card. Once to the Size shelf and again to the Color shelf.

Step 2 − Drag and drop the dimension ship mode to the Label shelf. Choose the chart type Tree Map from Show Me. The following chart appears.



Tree Map with Two Dimensions:

You can add the dimension Region to the above Tree map chart. Drag and drop it twice. Once to the Color shelf and again to the Label shelf. The chart that appears will show four outer boxes for four regions and then the boxes for ship modes nested inside them. All the different regions will now have different colors.

Youtube link to the tree map: https://www.youtube.com/watch?v=4Sx3VQg7LgI