Data Analytics

with Tableau

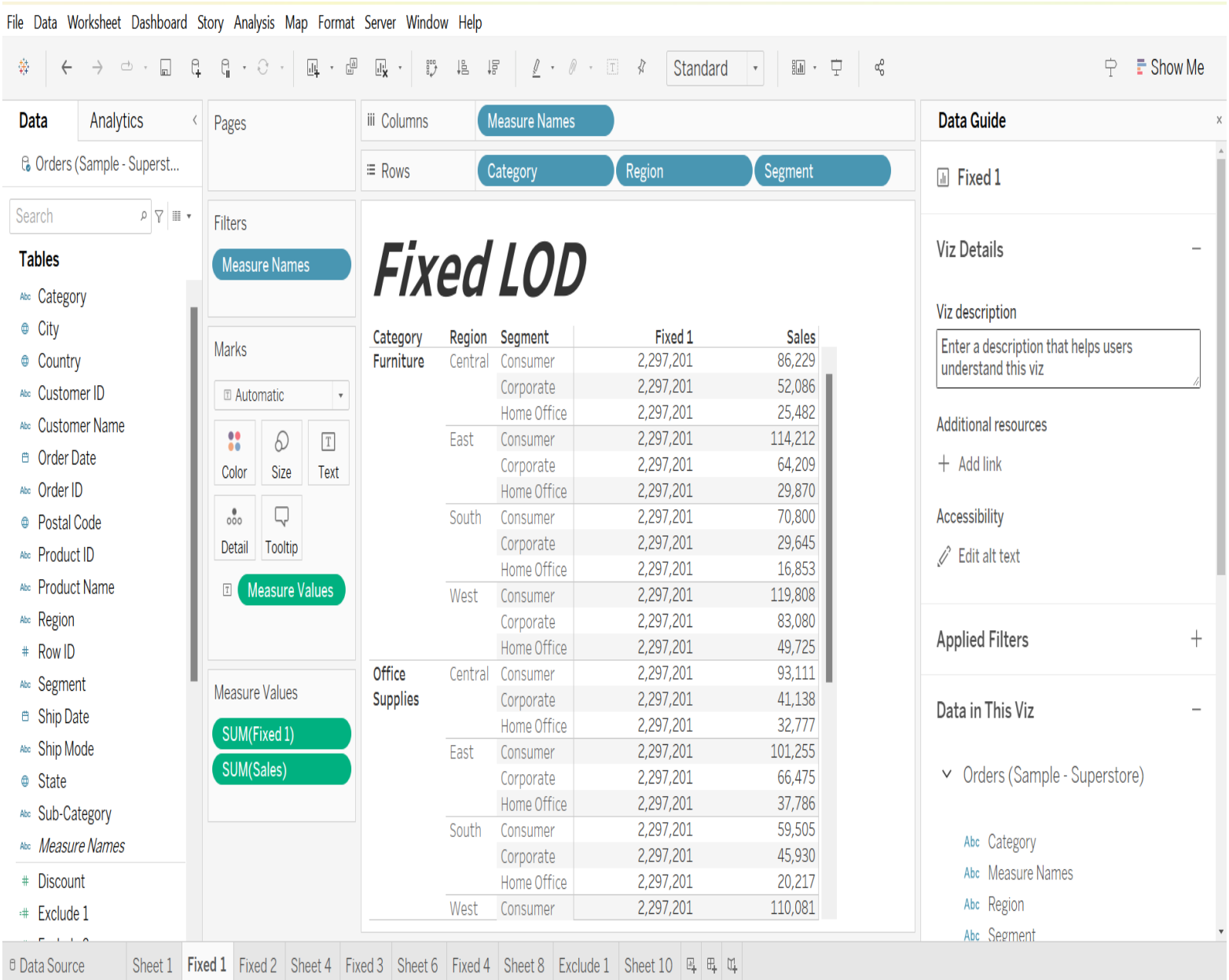
Assignment-4

Task-1

FIXED LOD : This function allows users to define a fixed level of detail for a particular calculation, regardless of the level of detail in their view. Fixed LOD functions are useful when users need to perform calculations at a specific level of detail, such as at the customer or product level.

In below visualizations we can see that different data values are considered as the columns and rows, based on this values we can observe that a fixed column with measured values are obtained.

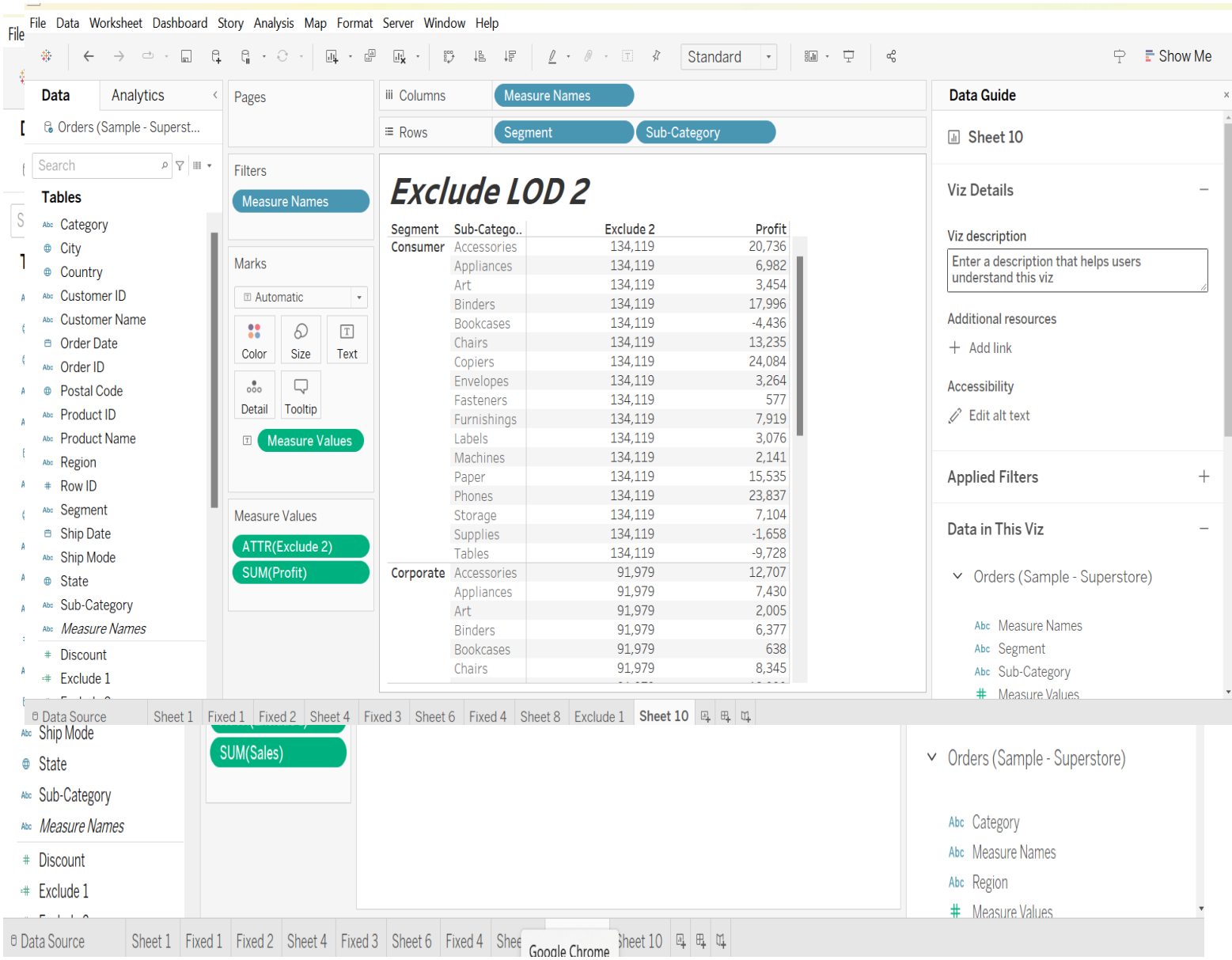
In second visualization we get another fixed value for the same values which are considered in first visualization. Based on fixed values we get appropriate sales values for the customer in both the visualizations.



EXCLUDE LOD : These functions allow users to exclude specific fields from the calculation while still preserving the level of detail of the view. Exclude LOD functions are useful when users need to perform calculations that exclude specific fields but still need to perserve the level of detail in their view.

In below visualizations we can observe that excluded values to get the detailed view of sales compared to fixed lod we excluded the segemts field from the rows.

We use category and region in rows and measures names in column.



Task-2

Visualizing geographic information helps data consumers quickly and easily derive insights and meaning. Tableau is designed to make the most of geographical data, with instant geocoding, tableau automatically turns the location data. Map visualization is used to analyze and display the geographically related data and present in the forms of map.

In Task 2 we created different map visualizations using geographical data

They are : 1. Heat Map

2. Symbol Map

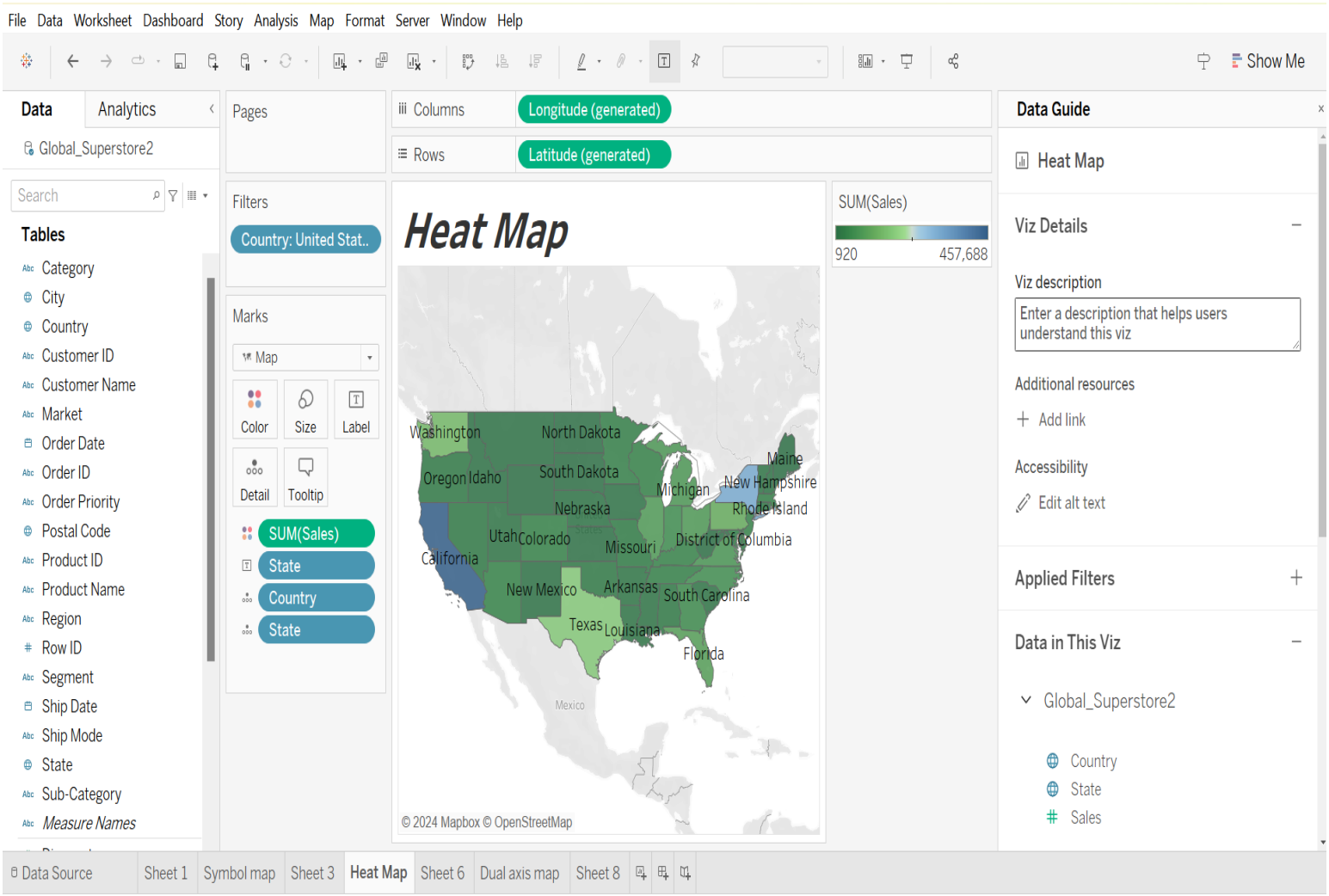
3. Dual Axis map

In this visualizations global super store data is used,

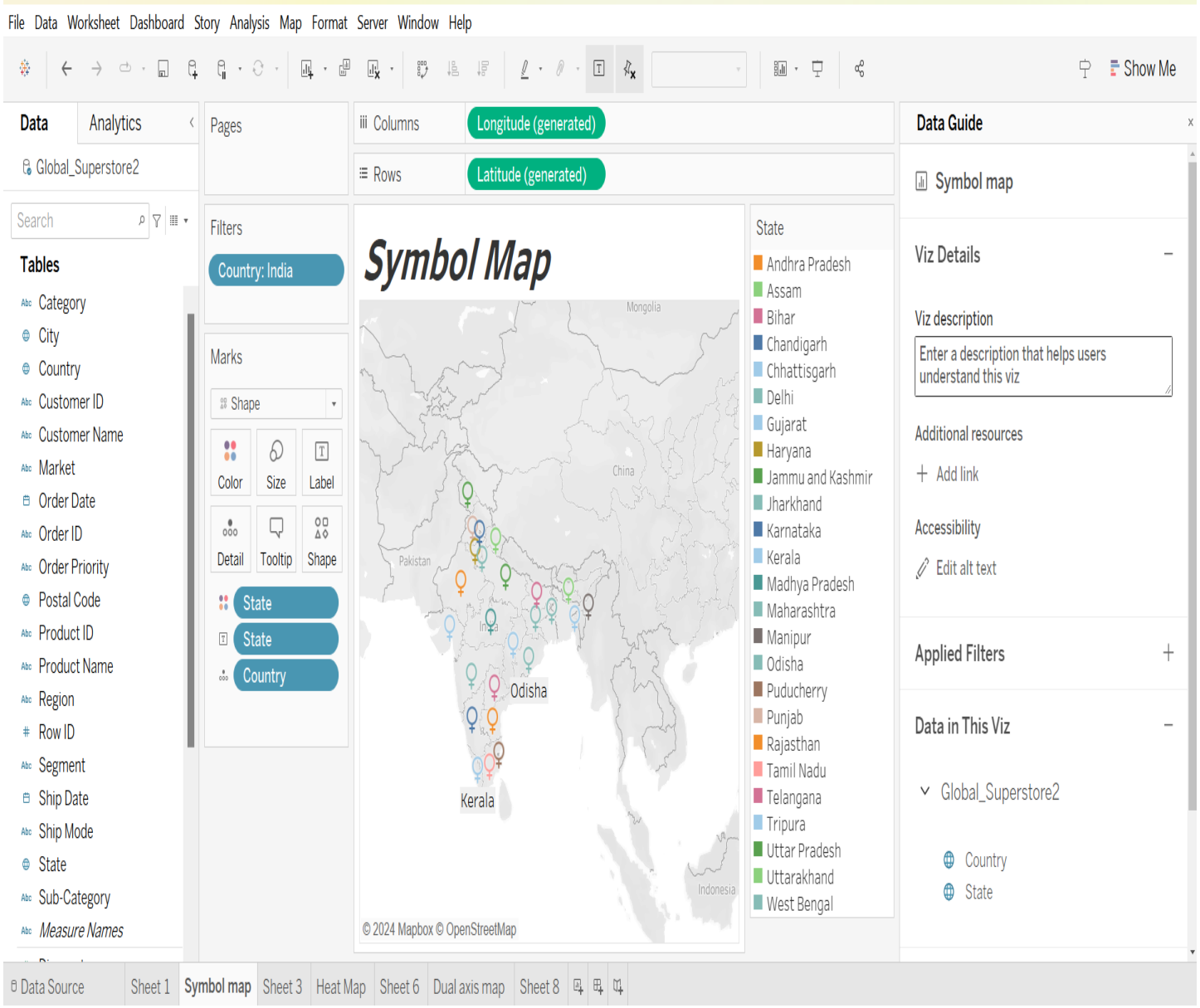
Heat Map : Heatmap visualization is a method of graphically representing numerical data where the value of each data point is indicated using colors.

In this heat map longitude value is taken in column field and latitude value is taken in row field then we get resultant heat map. Here we can observe that the sales values are represented with different shades of colours respected to different areas.

Symbol map: A symbol is an abstraction or pictorial representation of something else. Symbols on a map consist of discrete points, lines, or shaded areas; they have size, form, and color. Map symbols present information collectively, leading to appreciation of form, relative position, distribution, and structure.



In below symbol map we use longitude values in column field and latitude values in row filed, state in colour for clear visulizationand country in detail then we get the resultant symbol map.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Row ID
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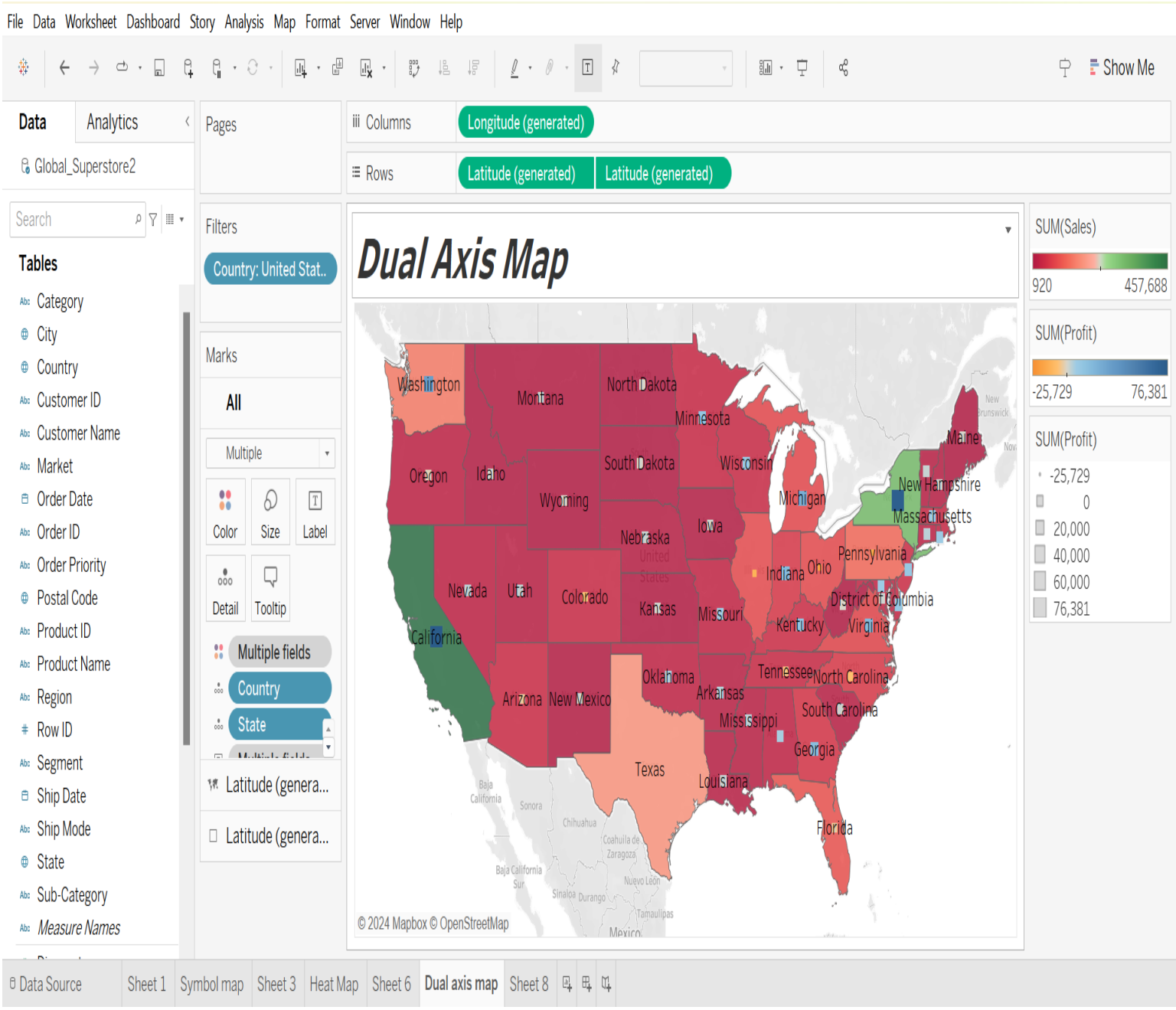
Data Guide
Symbol map
Viz Details
Viz description
Enter a description that helps users understand this viz
Additional resources
Add link
Accessibility
Edit alt text
Applied Filters
Data in This Viz
Global_Superstore2
Country
State
Data Source
Sheet 1
Symbol map
Sheet 3
Heat Map
Sheet 6
Dual axis map
Sheet 8

Dual Axis_ : Dual axis map is a map with two sets of geographical data overlaid on top of one another.

- To create dual axis map we use longitude in column and latitude in row as well as multiple fields in colors, state field and country in detail then we get the resultant dual axis map.

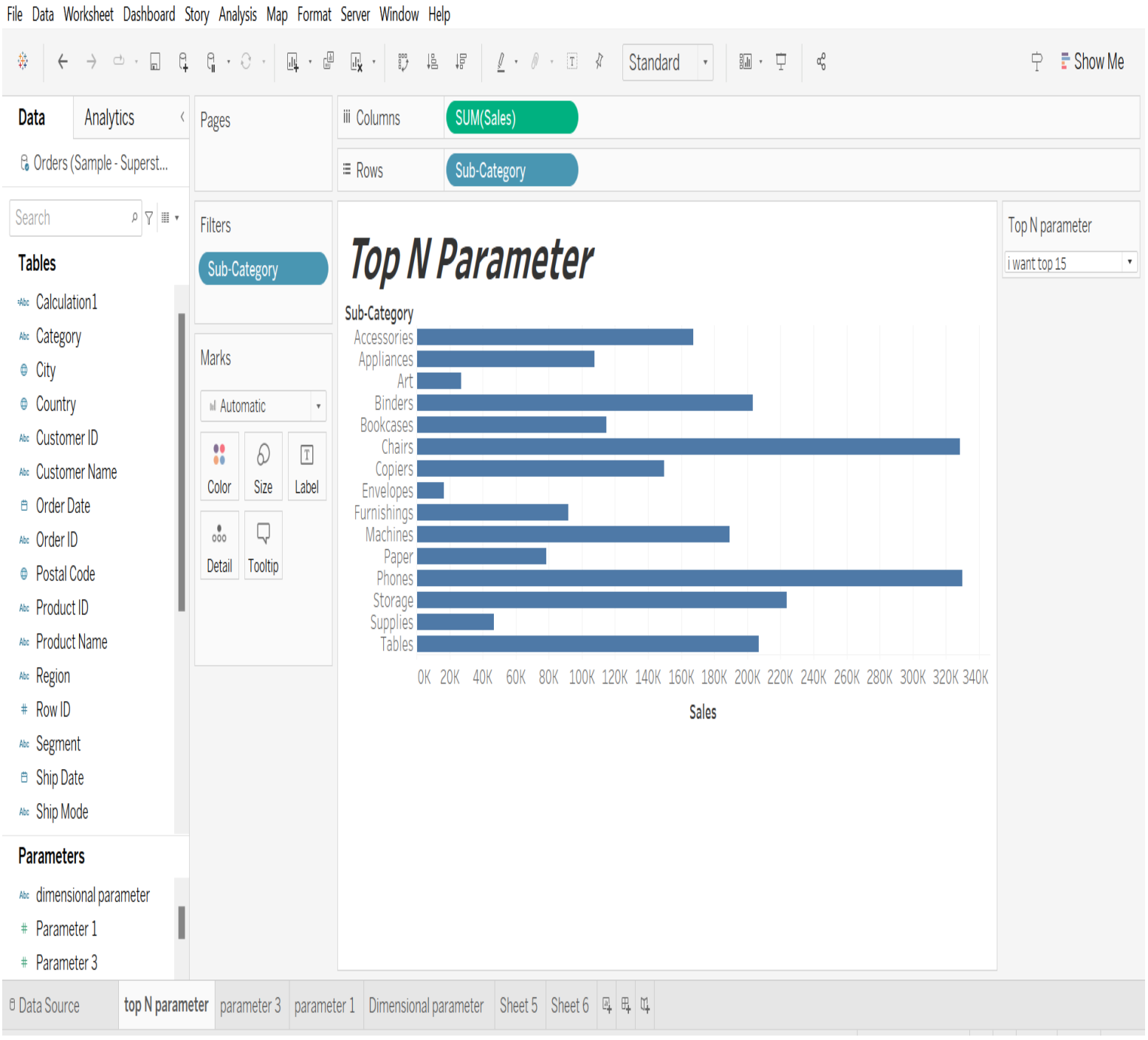
With this dual axis layered map, users can easily tell which state generated more sales while at the same time tell the leading cities within those high performing states



Task-3

Top N parameter : A Top N parameter returns data according to a number you assign it, hence the N in the name.

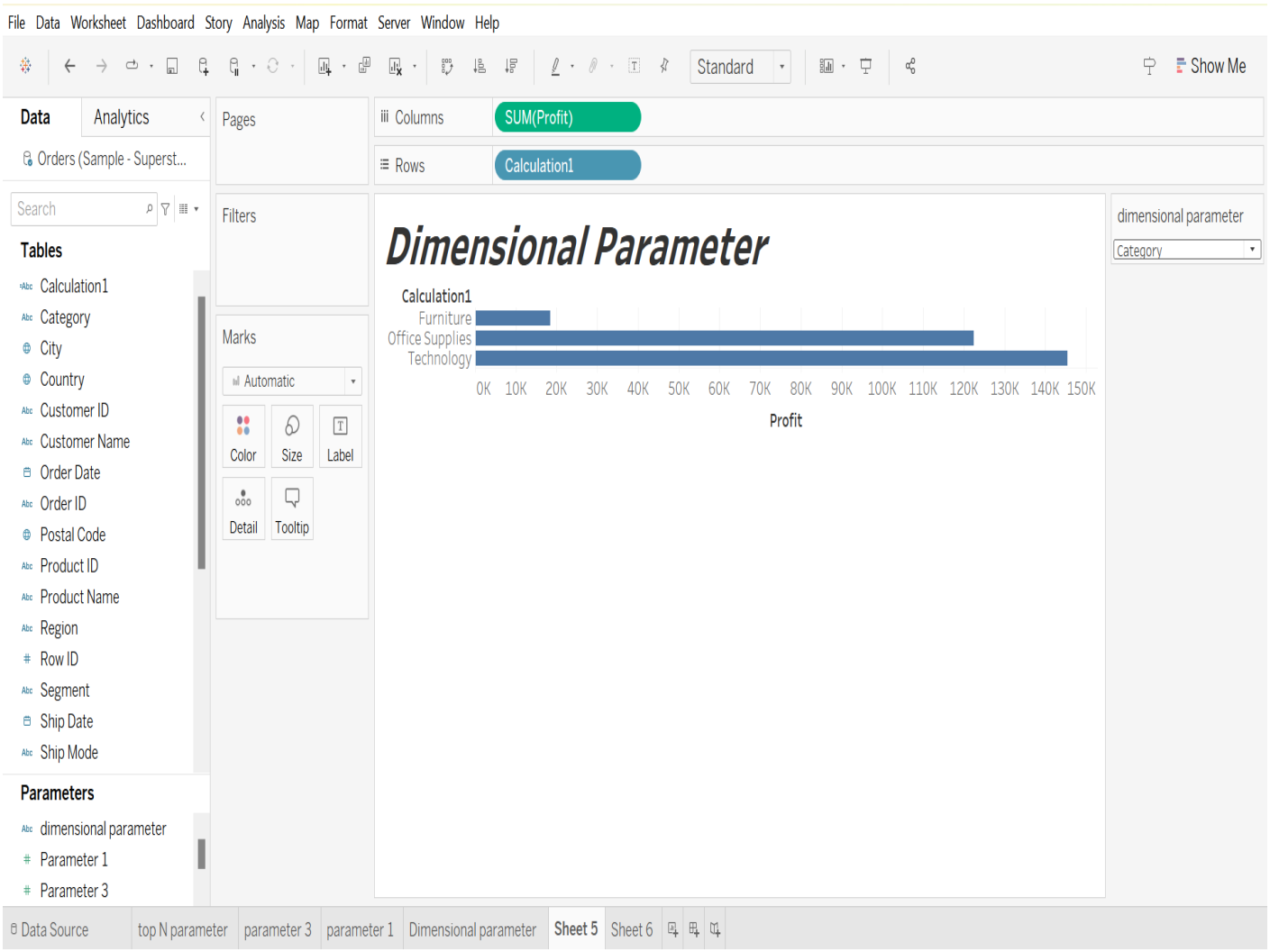
In below visualization we can observe that the Top N parameter display the top 25 sub category values according to their sales. We used sum of sales in colum field and sub category im rows field the we got the resultant visualization showing top 15 sub category values.



Dimensional Parameter : Dimensions contains qualitative values (such a names, dates or geographical data). We can use dimensions to categorize, segment, and reveal the details in your data. Dimensions affect the level of detail in the view.

- Dimensions are categorical data fields that represent qualitative attributes.
- They provide context and structure to data, allowing users to segment, group, and categorize information for analysis.
- They are typically used on the rows and columns of a visualization, defining the axes of charts and graphs.

In below visualization we use sum of profit in column field and calculation in row field gives the resultant visualization shows the the profit of categorical values by performed calcualtion



Dynamic Dimensional Parameter : Dynamic dimensional parameter is very similar to dynamic dimensional parameter, but the values in dimension are changed dynamically according to the user guidance.

- ❖ After creating a dimensional parameter we use it in the visualizations then we get the resultant visualization by performing the calculations below.
- ❖ The values in visualizations changes according to the dynamic changes in dimensional parameter.