

## 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.

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Standard

Data Analytics Pages

Columns Measure Names

Rows Category Region Segment

Search

Tables

- Category
- City
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Exclude 1

Filters

Measure Names

Marks

Automatic

Color Size Text

Detail Tooltip

Measure Values

SUM(Fixed 1)

SUM(Sales)

# Fixed LOD

Category	Region	Segment	Fixed 1	Sales
Furniture	Central	Consumer	2,297,201	86,229
		Corporate	2,297,201	52,086
		Home Office	2,297,201	25,482
	East	Consumer	2,297,201	114,212
		Corporate	2,297,201	64,209
		Home Office	2,297,201	29,870
	South	Consumer	2,297,201	70,800
		Corporate	2,297,201	29,645
		Home Office	2,297,201	16,853
Office Supplies	West	Consumer	2,297,201	119,808
		Corporate	2,297,201	83,080
		Home Office	2,297,201	49,725
	Central	Consumer	2,297,201	93,111
		Corporate	2,297,201	41,138
		Home Office	2,297,201	32,777
	East	Consumer	2,297,201	101,255
		Corporate	2,297,201	66,475
		Home Office	2,297,201	37,786
	South	Consumer	2,297,201	59,505
		Corporate	2,297,201	45,930
		Home Office	2,297,201	20,217
	West	Consumer	2,297,201	110,081
		Corporate	2,297,201	
		Home Office	2,297,201	
	Central	Consumer	2,297,201	
		Corporate	2,297,201	
		Home Office	2,297,201	

Data Guide

Fixed 1

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

Orders (Sample - Superstore)

- Category
- Measure Names
- Region
- Segment

Data Source Sheet 1 Fixed 1 Fixed 2 Sheet 4 Fixed 3 Sheet 6 Fixed 4 Sheet 8 Exclude 1 Sheet 10

**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 preserve 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 segments field from the rows.

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

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Search

Tables

- Category
- City
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Exclude 1

Filters

- Measure Names

Marks

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip
- Measure Values

Measure Values

- ATTR(Exclude 1)
- SUM(Sales)

Columns: Measure Names

Rows: Category, Region

### Exclude LOD

Category	Region	Exclude 1	Sales
Furniture	Central	216	163,797
	East	238	208,291
	South	242	117,299
	West	226	252,613
Office Supplies	Central	216	167,026
	East	238	205,516
	South	242	125,651
	West	226	220,853
Technology	Central	216	170,416
	East	238	264,974
	South	242	148,772
	West	226	251,992

Data Guide

Exclude 1

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

Orders (Sample - Superstore)

- Category
- Measure Names
- Region
- Measure Values

Data Source

Sheet 1 Fixed 1 Fixed 2 Sheet 4 Fixed 3 Sheet 6 Fixed 4 Sheet 10

Google Chrome

## 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

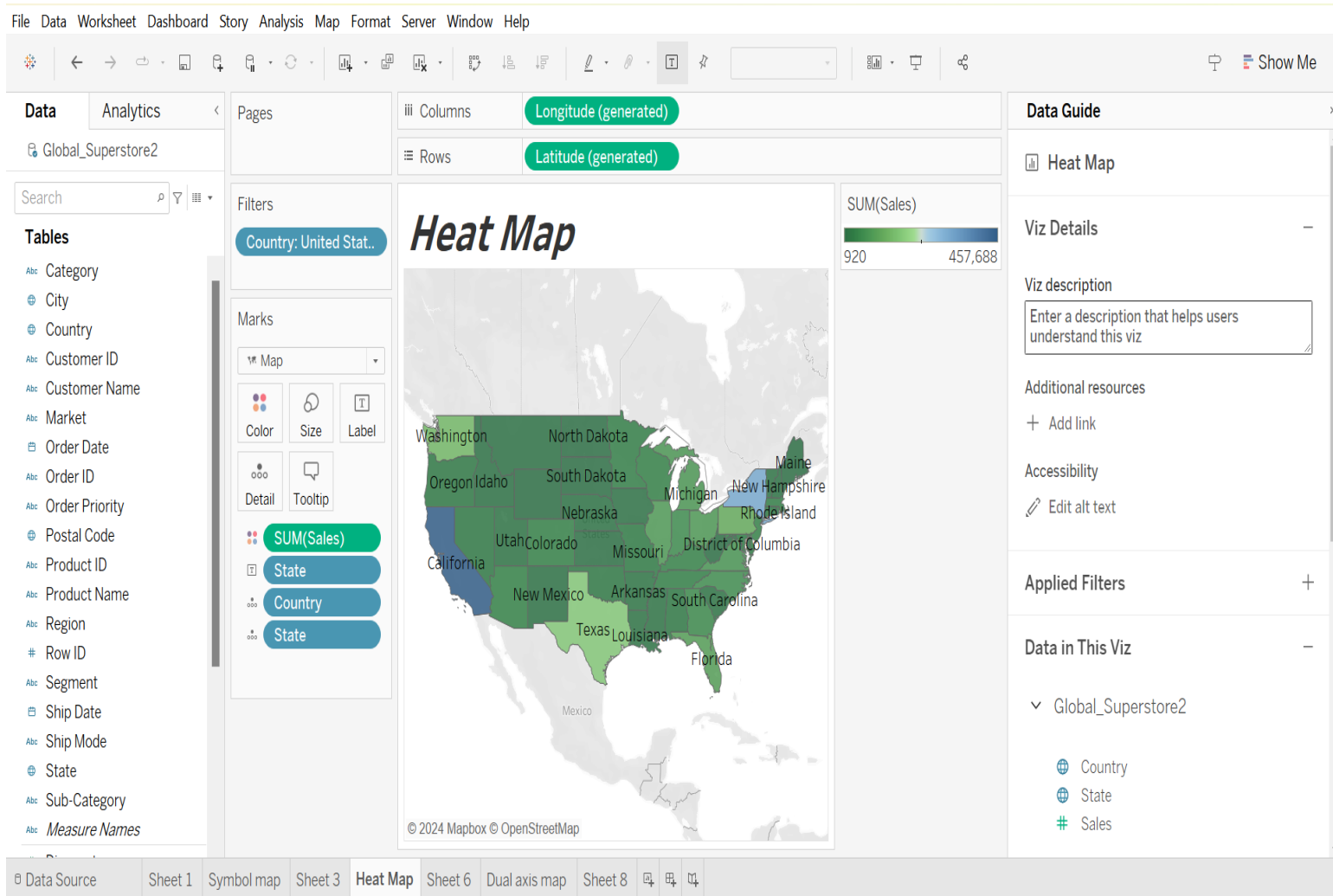
They are : 1. Heat Map

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.

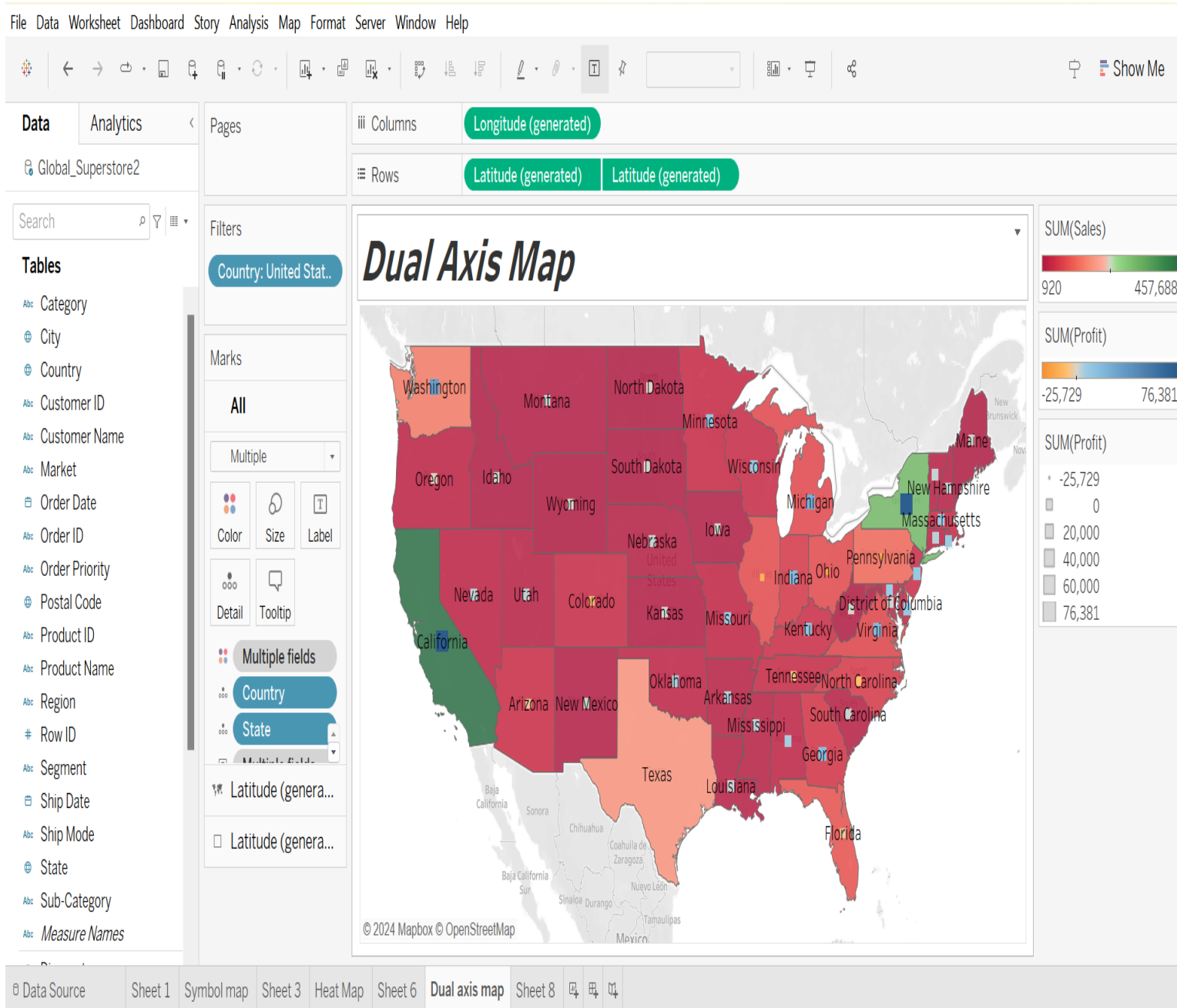
In this heat map longitude value is taken in column field and latitude value is taken in row field then we get resultant heat map. Here we can observe that the sales values are represented with different shades of colours respected to different areas.



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.

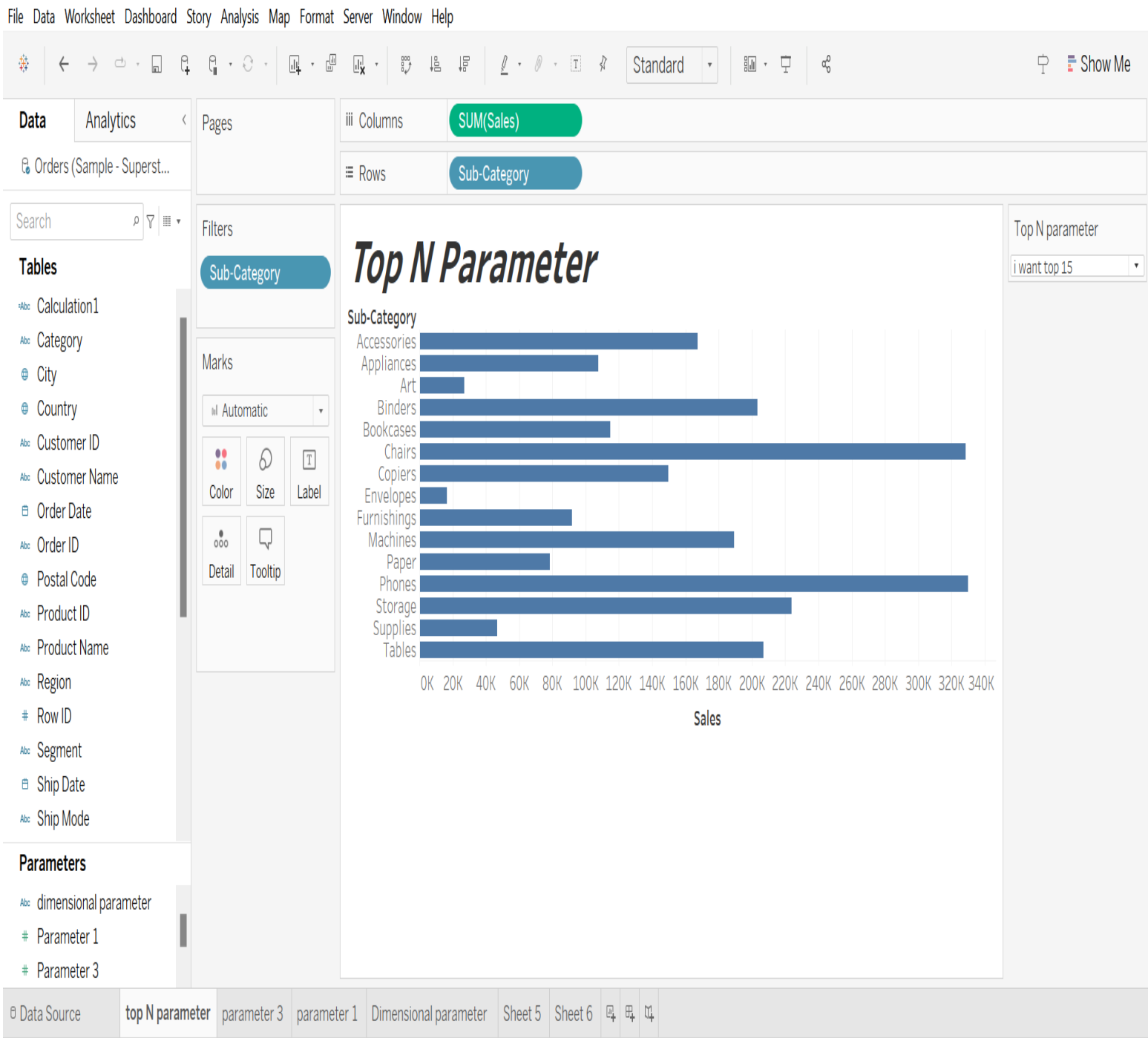
With this dual axis layered map, users can easily tell which state generated more sales while at the same time tell the leading cities within those high performing states



## 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.



**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.

