

# Plugging into the Future An Exploration of Electricity Consumption Patterns Using Tableau

## 1. Dataset Link:

[https://drive.google.com/file/d/1JxIkHNwXxjFztKq7ad0\\_KtkukCqTckNy/view  
?usp=sharing](https://drive.google.com/file/d/1JxIkHNwXxjFztKq7ad0_KtkukCqTckNy/view?usp=sharing)

## 2. Data Preprocessing Steps:

### 1. Import Data

- Open Tableau → Connect → Text File → Select *Consumption.csv*

### 2. Preprocess

- Check data types (Date, Number, String)
- Rename columns
- Remove null values
- Hide unnecessary fields

### 3. Create Calculations (if needed)

- Total Consumption →  $\text{SUM}(\text{[Consumption]})$
- Month/Year from Date (if date column exists)

### 4. Build Visualizations

- Consumption by **State/City** (Bar chart)
- Consumption by **Month/Year** (Line chart)
- Category-wise Consumption (Pie/Bar)
- Top/Bottom performers

### 5. Create Dashboard

- Combine all charts
- Add filters (State, Year, Category)
- Add title

### 6. Format

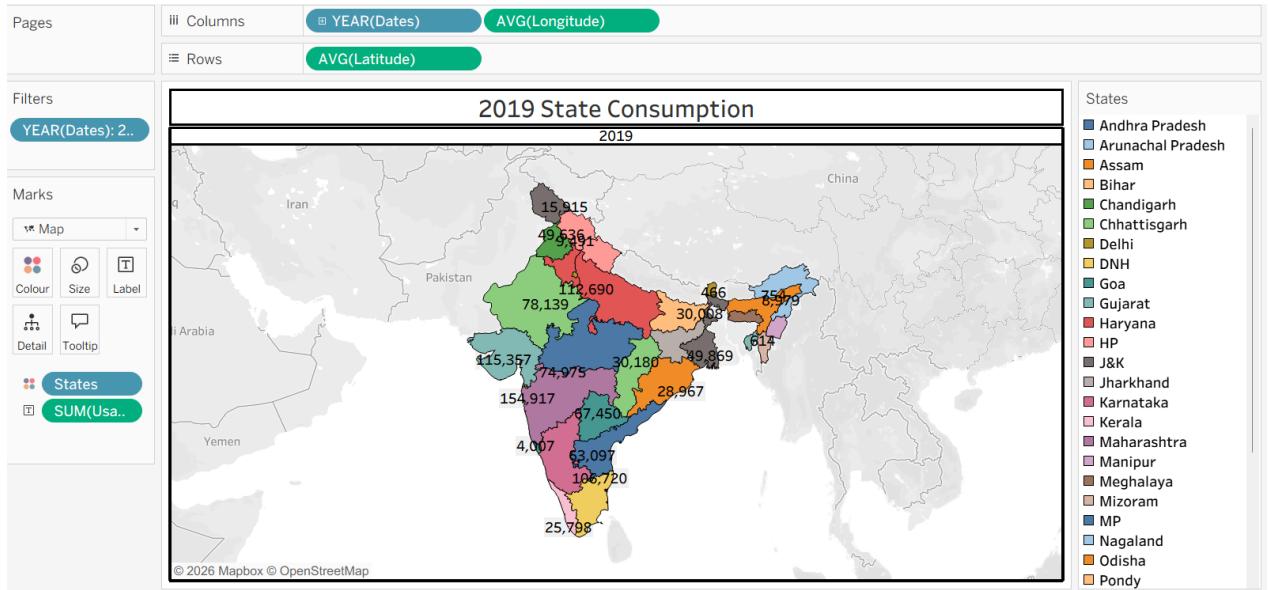
- Sort in descending order
- Show labels
- Use clear colors

### 7. Save / Export

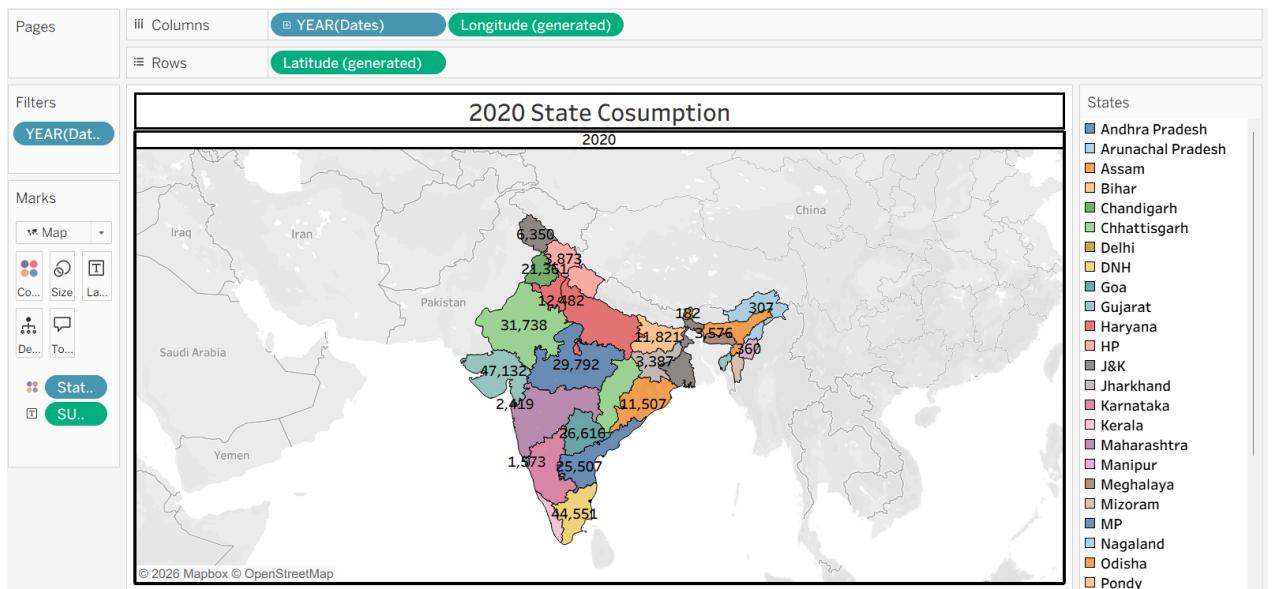
- Save workbook
- Export dashboard

### 3. Business Questions with visualization:

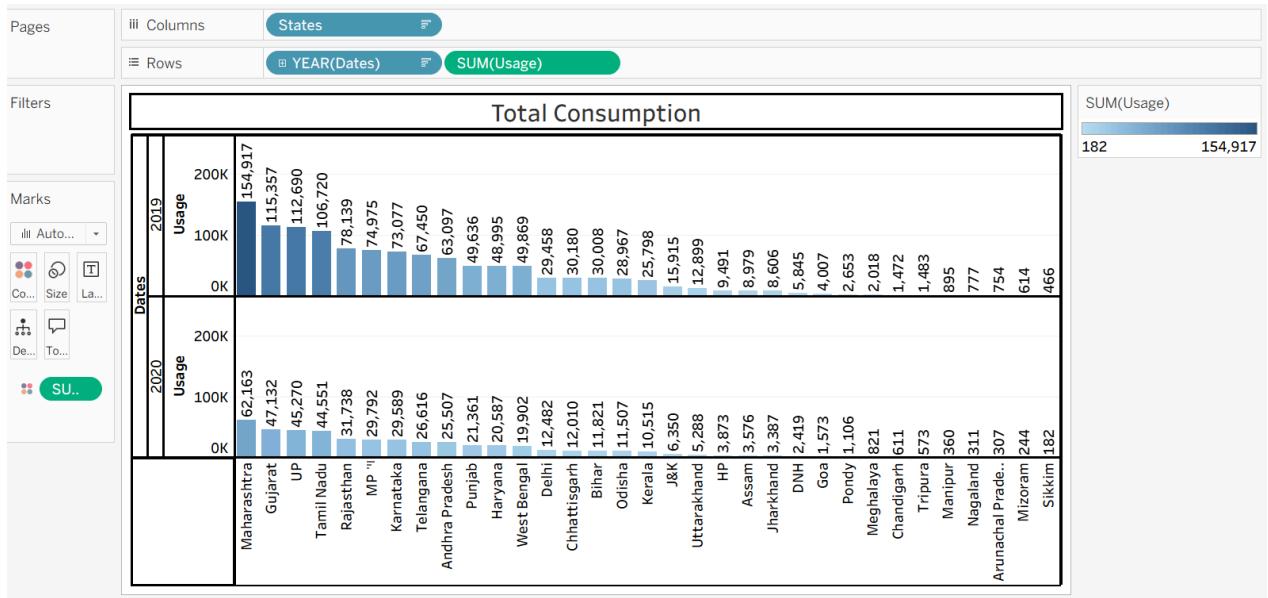
#### A. 2019 State Consumption



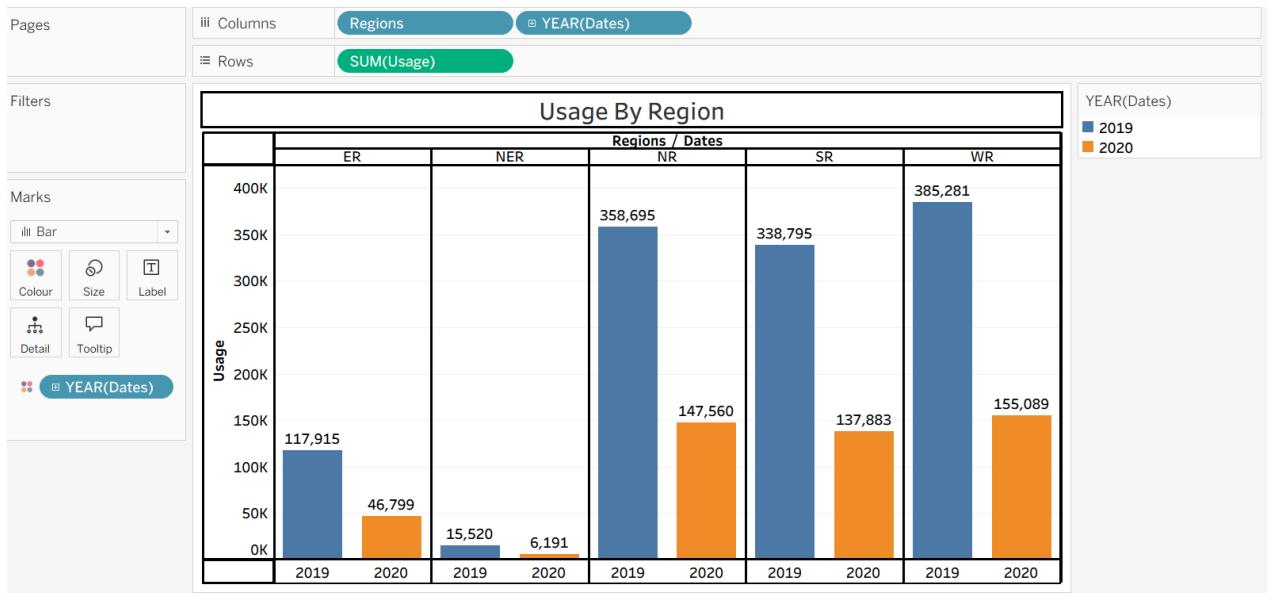
#### B. 2020 State Consumption



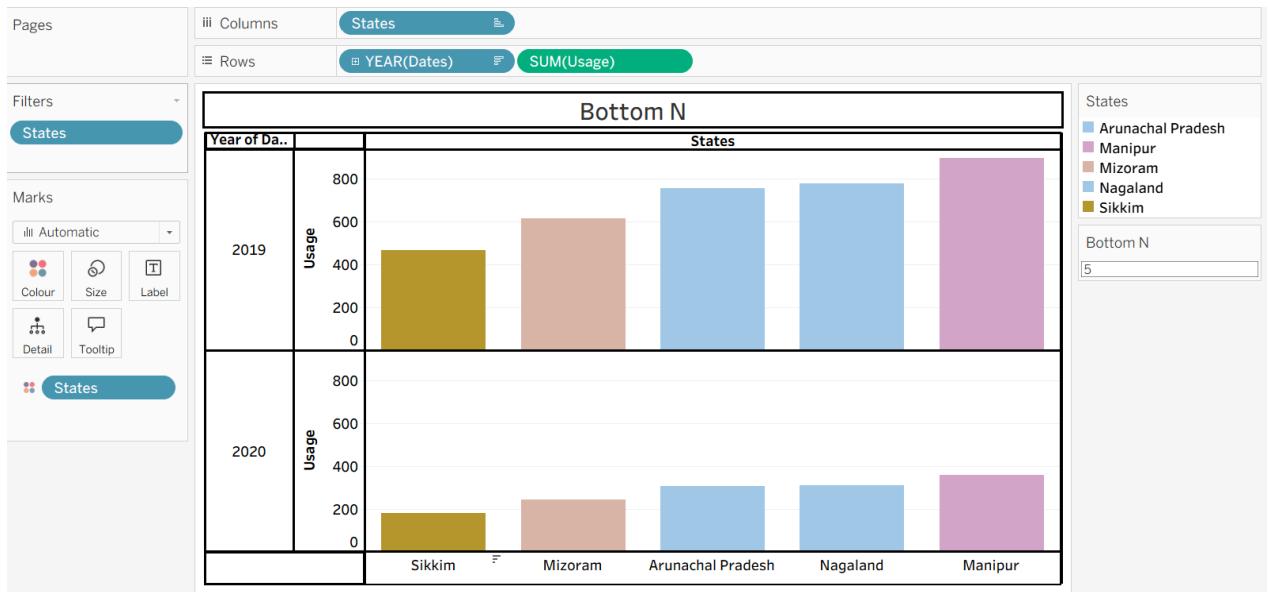
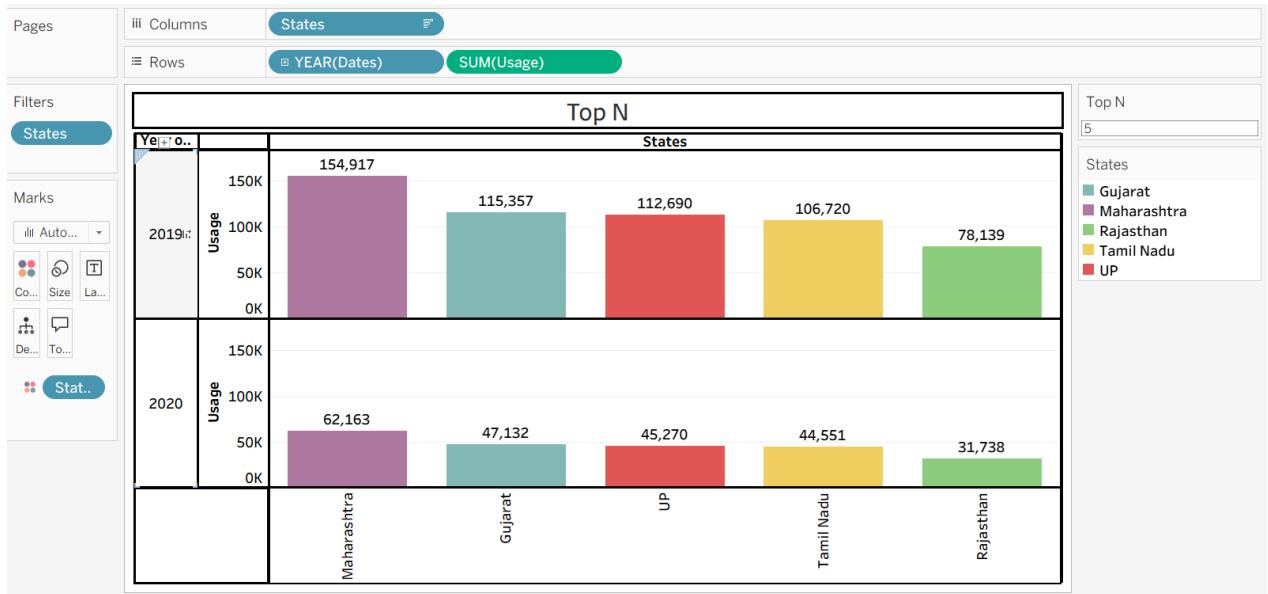
## C. Total Consumption



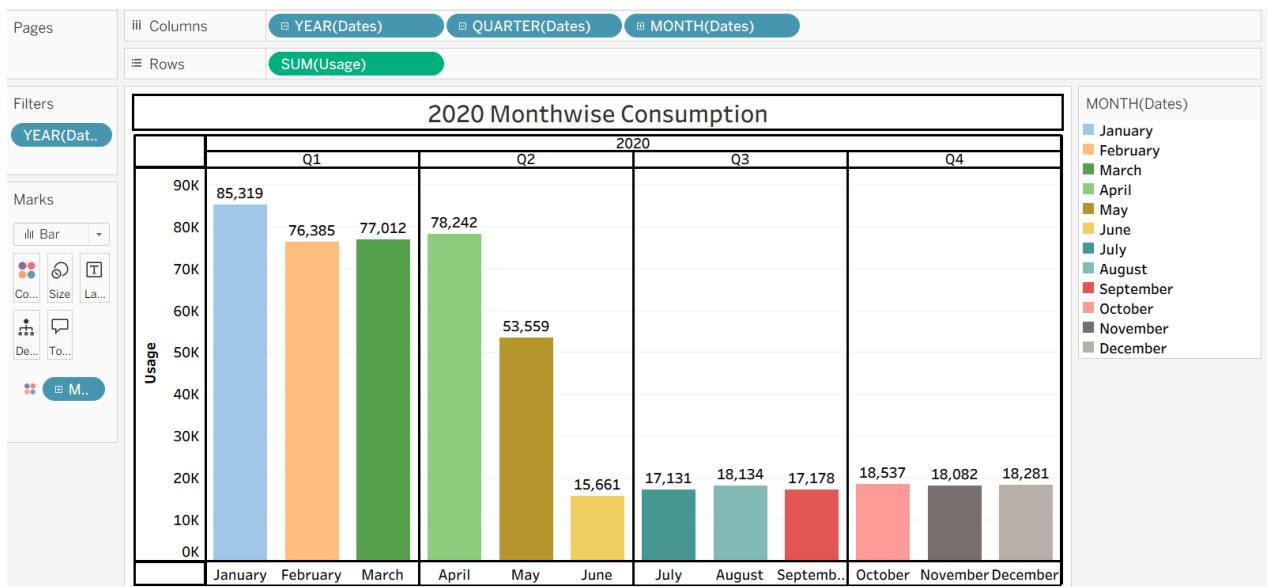
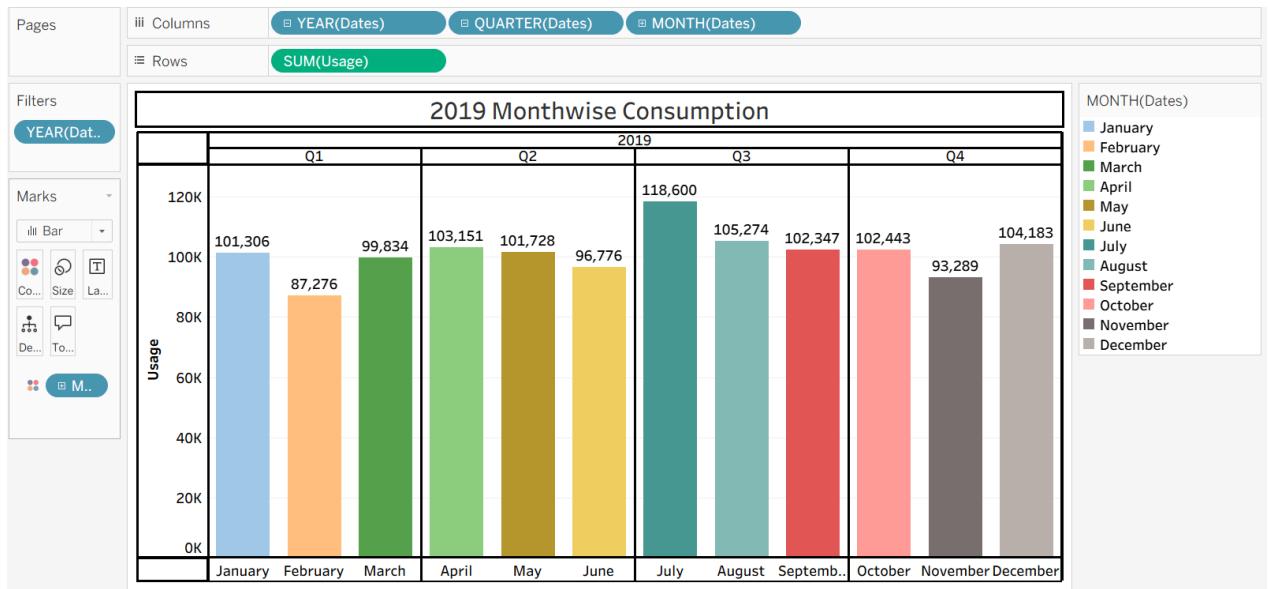
## D. Usage By Region



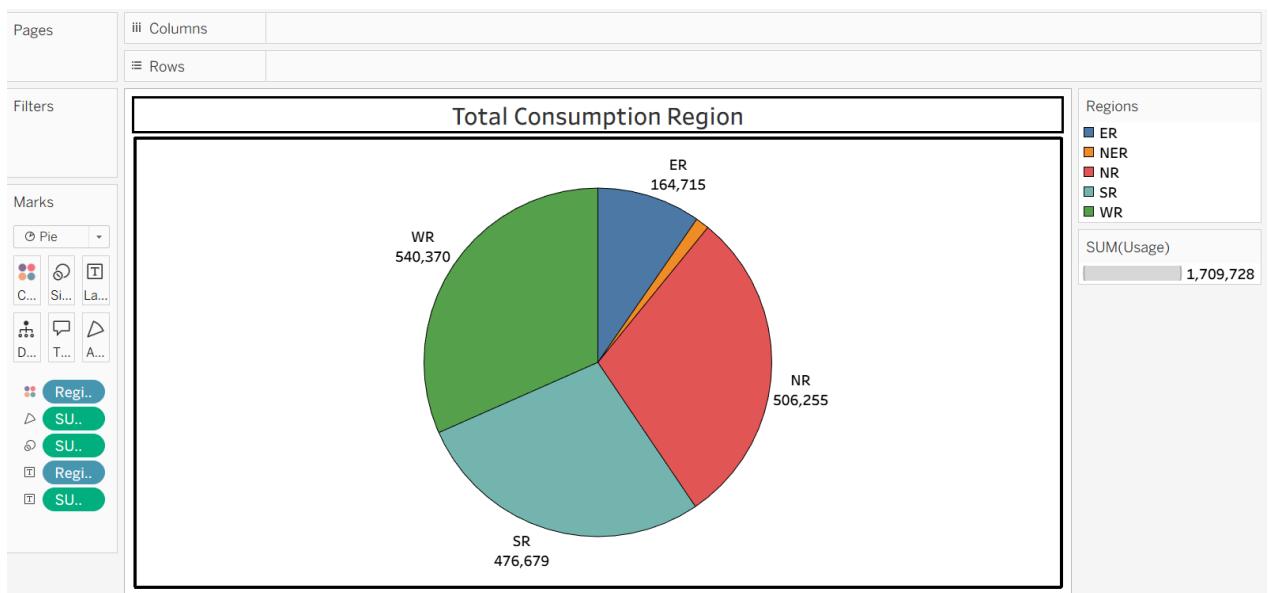
## E. Top N and Bottom N



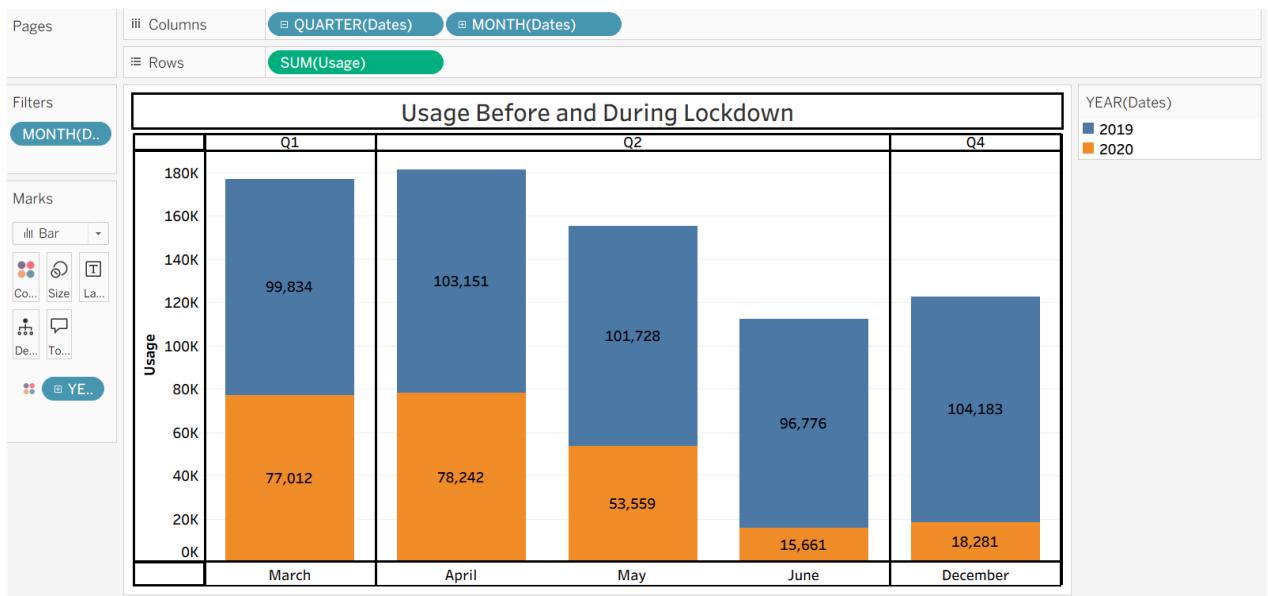
## F. 2019 and 2020 Monthwise Consumption



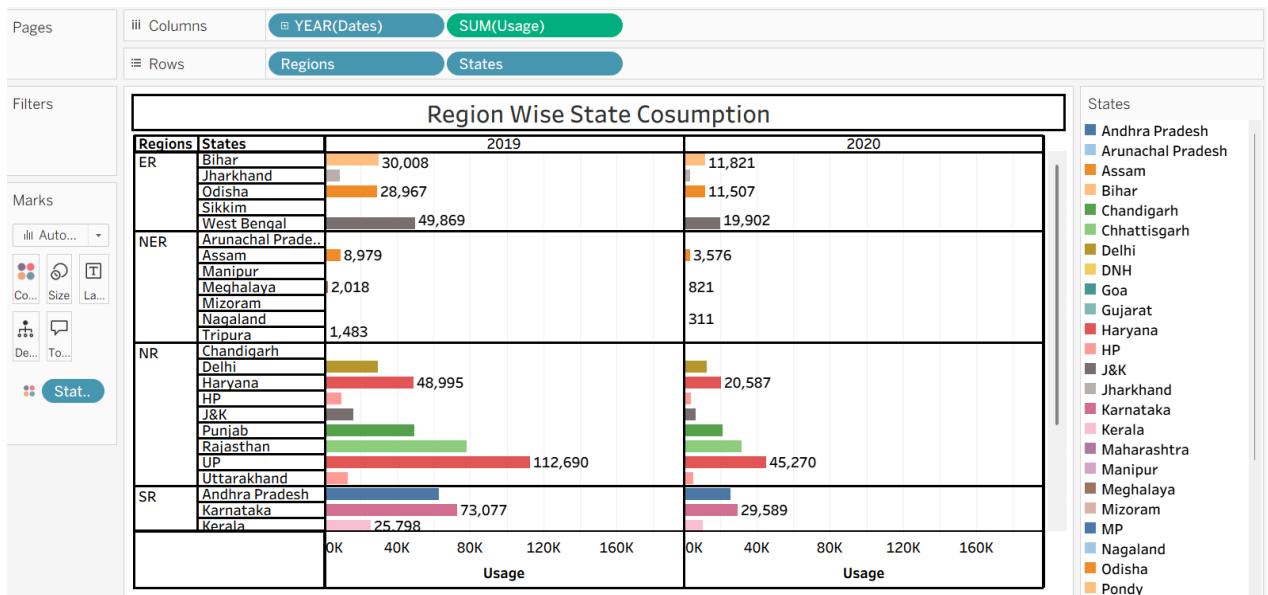
## G. Total Consumption Region Wise



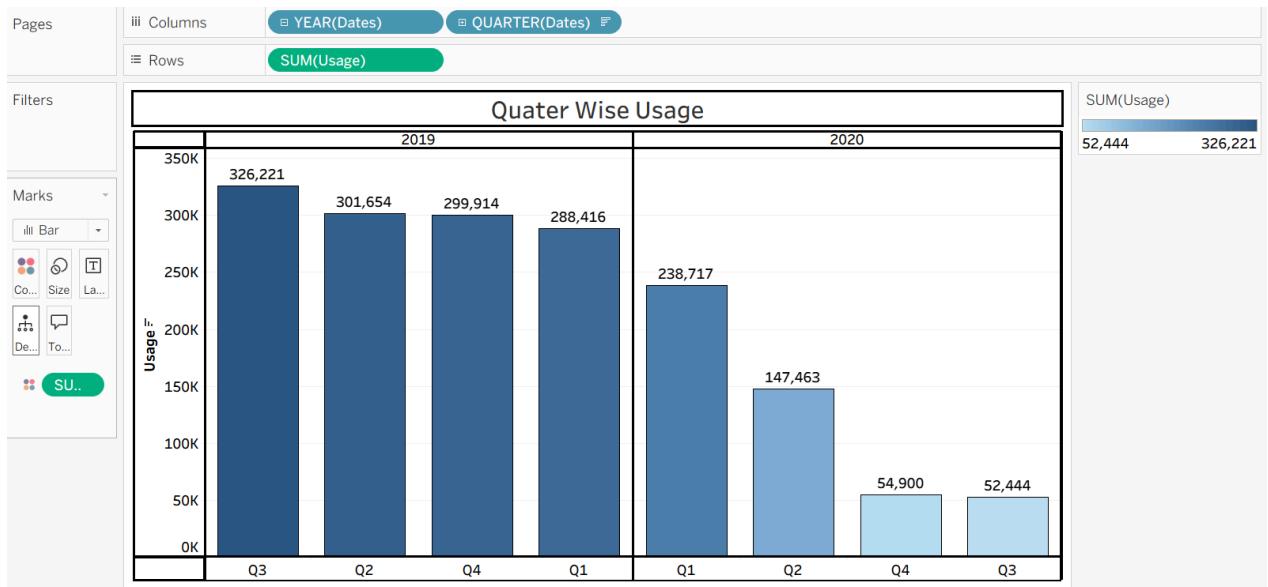
## H. Usage Before and After Lockdown



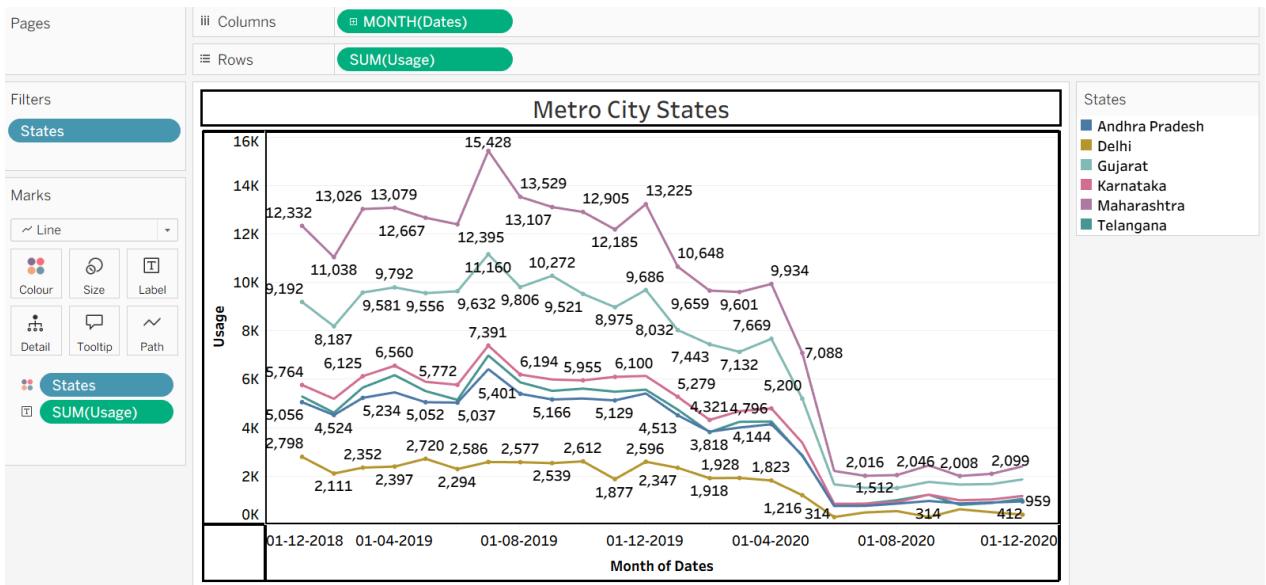
## I. Region wise State Usage



## J. Quarter Usage



## K. Metro city State usage



## L. Usage by year

