

The background is a vibrant green with a gradient from dark green at the top to a lighter green at the bottom. There are several bright, curved light streaks or lens flares that sweep across the frame from the left side towards the right, creating a sense of motion and energy.

# CHARTING THE COURSE OF INNOVATION :

## PLUGGING INTO THE FUTURE : AN EXPLORATION ELECTRICITY CONSUMPTION PATTERNS

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# PLUGGING INTO THE FUTURE : AN EXPLORATION ELECTRICITY CONSUMPTION PATTERNS

- Introduction
- Problem definition and design thinking
- Advantages and disadvantages
- Applications
- Future scope
- Step in tableau, dashboard, story, web integration, visualization
- Conclusion

# **1. INTRODUCTION**

## **1.1 OVERVIEW**

- Whereas electricity consumption represents the amount of electrical energy that has been consumed over a specific time, in units of Wh (or kWh), electricity demand represents that rate at which electrical energy is consumed for a needed output rating, in units of W (or kW).

## **1.2 PURPOSE**

- Annual electricity consumption per capita serves as an important measure of a country's electric power development. Generally speaking, electricity consumption grows faster when the industrialization process develops quickly and goes down rapidly when industrialization is completed or near completion.

# ADVANTAGES






- It is a clean, safe, cheap and convenient source of energy.
  - Lower maintenance cost.
  - More efficient.
  - No tailpipe emission.
  - We all know that it can be set up in many sizes.
- 
- It doesnot require as many employees.
  - Reduces greenhouse emission.

# DISADVANTAGES

- More expensive than gasoline.
- Loss of fish species.
- Sometimes messes up wildlife.
- Dependent on precipitation.
- More power plants and more pollution.
- Damming can cause loss of land suitable for agriculture as well as recreation.
- Cost for construction.
- Change in river or stream quality.

# EMPATHY MAP

- we have done the empathy map for better understanding of the problem

	<b>SAYS:</b> Electricity is an essential part of modern life.	
<b>THINKS:</b> I think electricity will create a new world.		<b>DOES:</b> Electricity is really just organized lightening.
	<b>FEELS:</b> I feel like the world will change a lot.	

# APPLICATIONS

- The Per Capita Electricity Consumption which was a mere 16.3 units in 1947, has increased to 1208 units in 2019-20. In the last 3 years, the shortages have reduced substantially and, in fact, at present we have unutilized generating capacity.
- The most usage of Electricity in India :
  - Entertainment.
  - Healthcare.
  - Engineering.
  - Transport and Communication.
  - Outdoors.
  - Household.
  - Commercial.
  - Office.



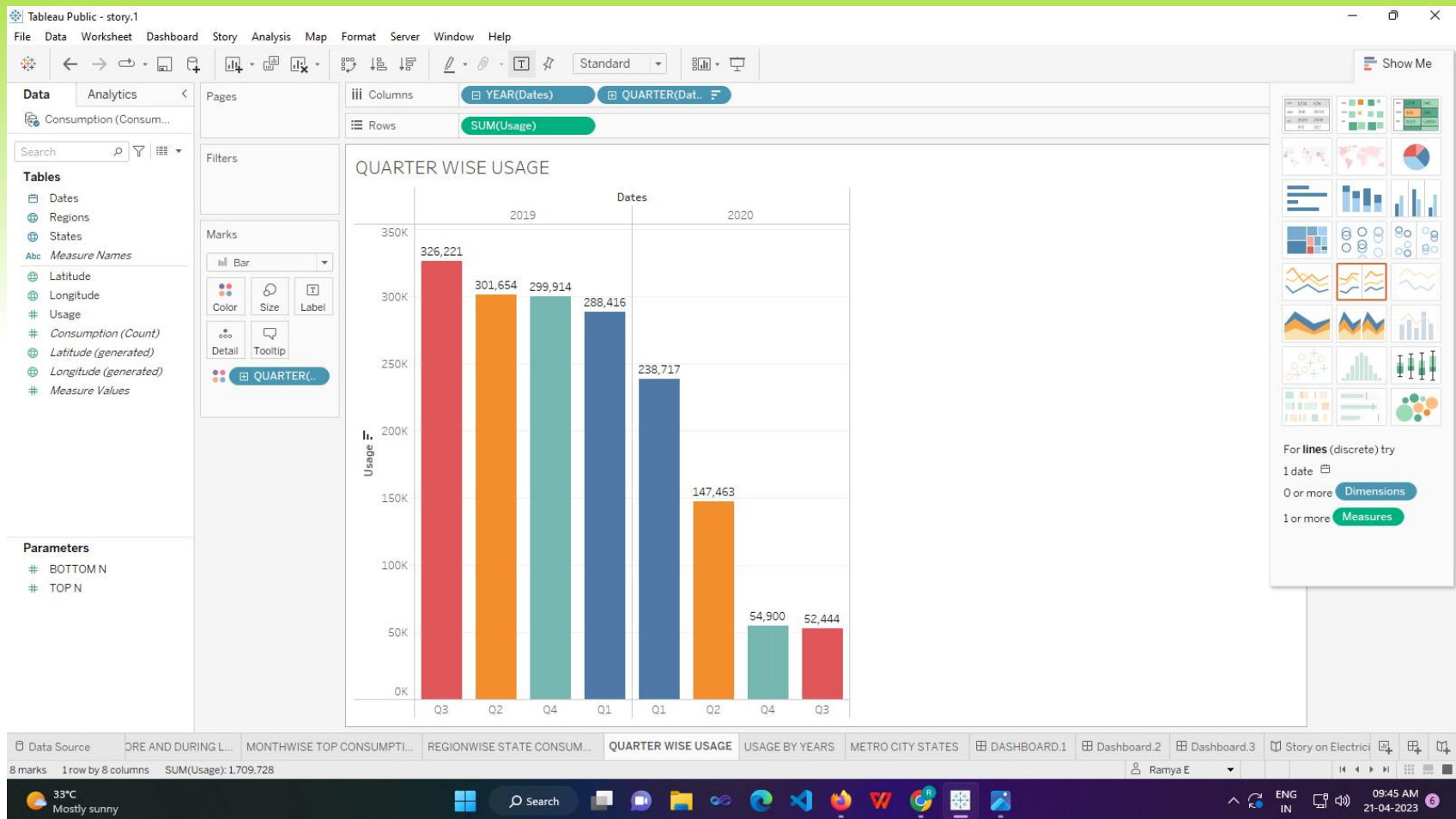
## 2. PROBLEM DEFINITION:

The worldwide consumption of the primary energy amounts to 10 billion tons equivalent crude oil per year, and as a result. The enormous volume of CO<sub>2</sub> emission is starting to cause serious environmental problems such as global warming.

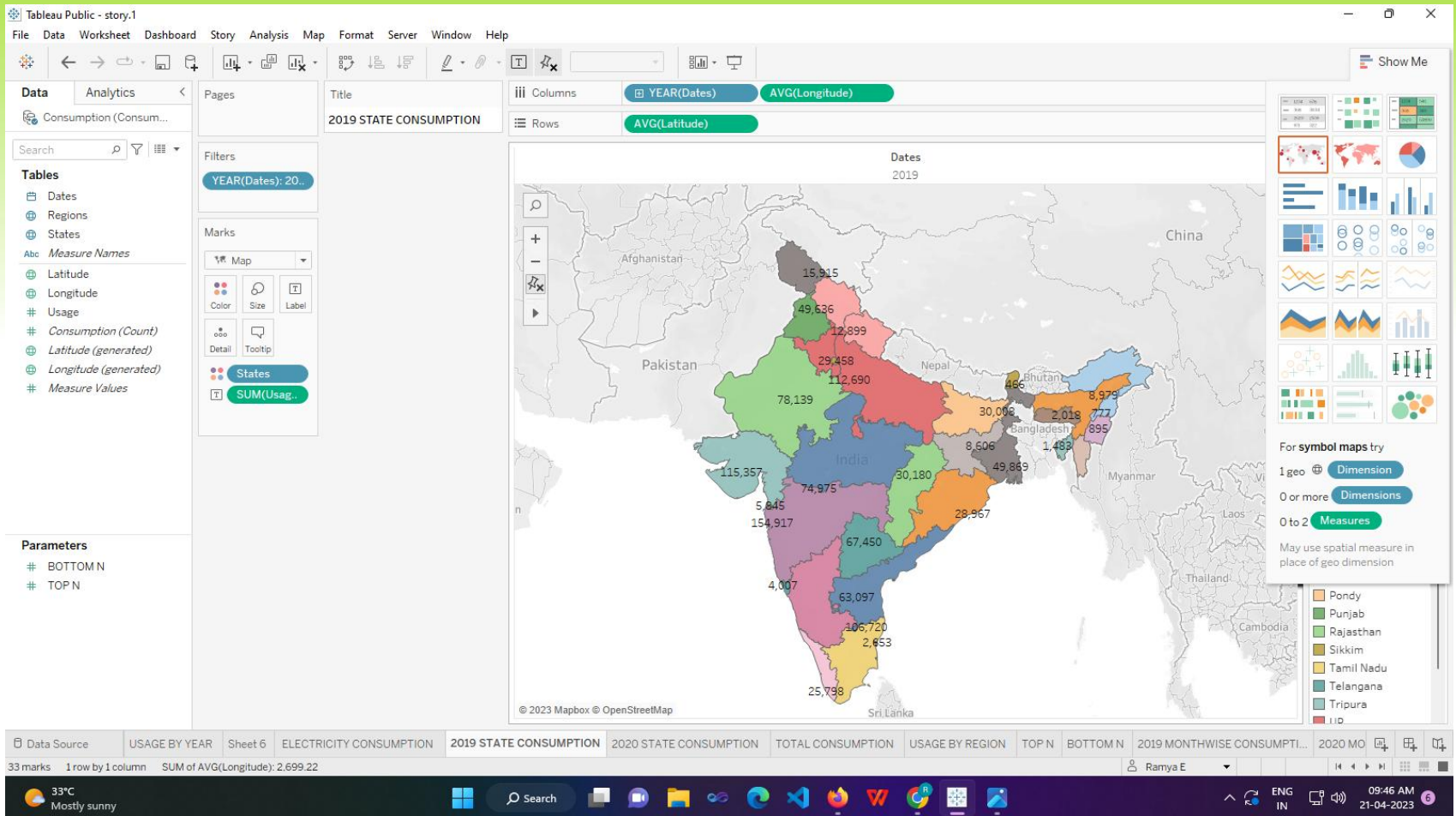
# FUTURE SCOPE

- The future of startup analysis is likely to be driven by advances in technology, particularly in the areas of data analytics and artificial intelligence. As the Indian Government plans to increase electrification of rail-route kilometers from 40 percent to 77 percent by 2022, the level of electricity consumption achieved by 2030 could be 35-43 TWh, growing at 5.0-6.3 percent CAGR from 17 TWh in 2015.

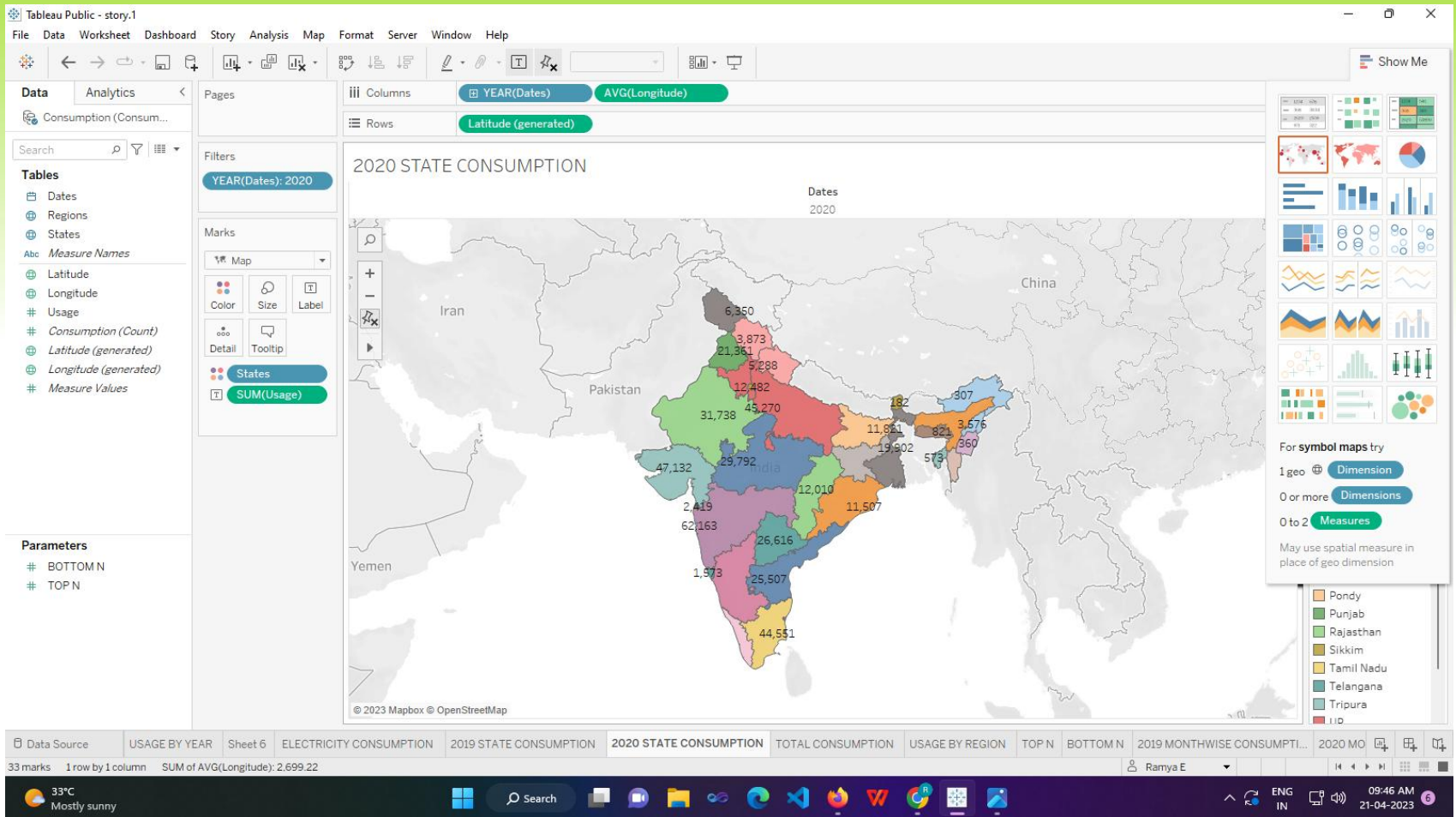
# STEP 1



# STEP 2

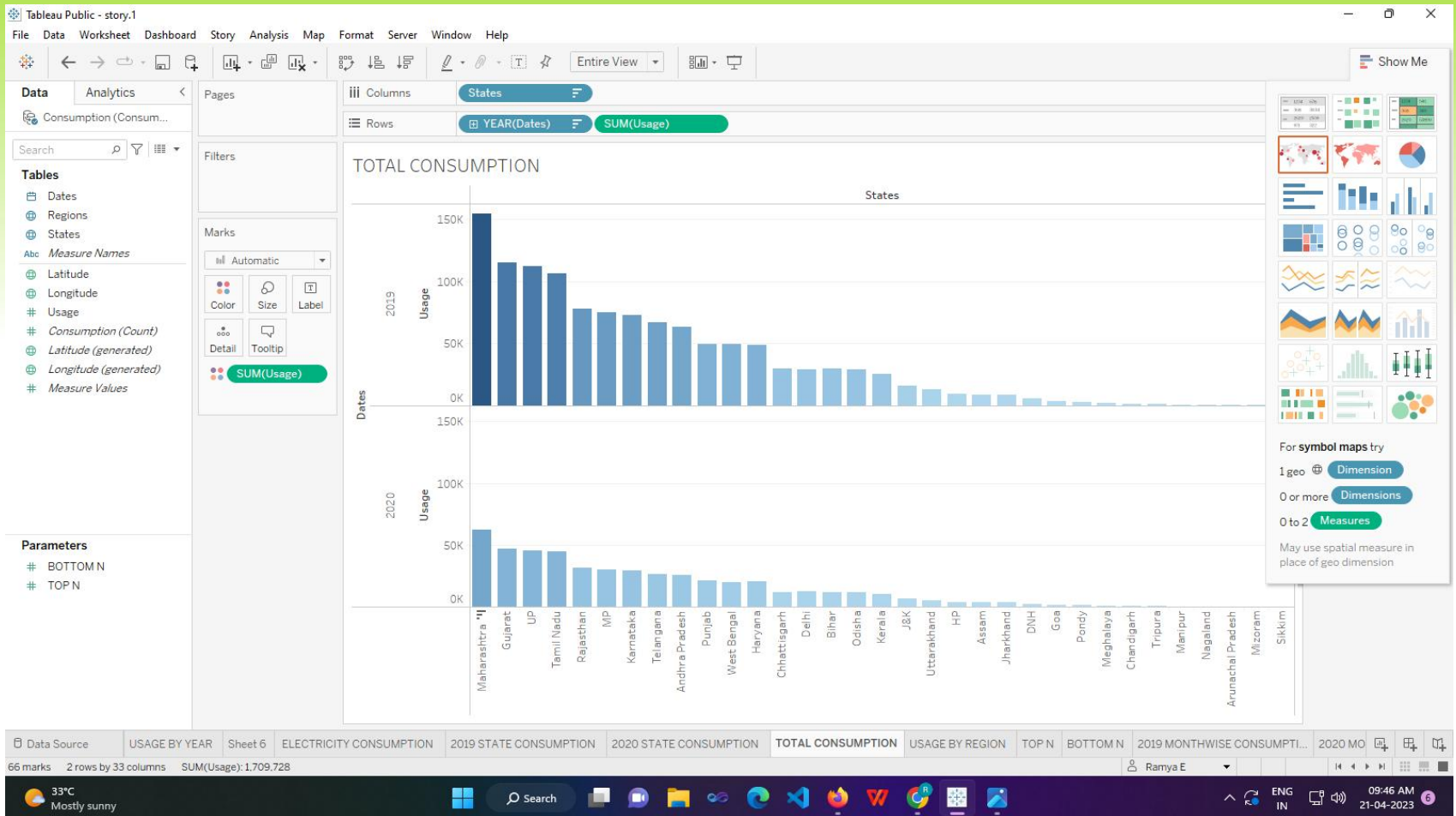


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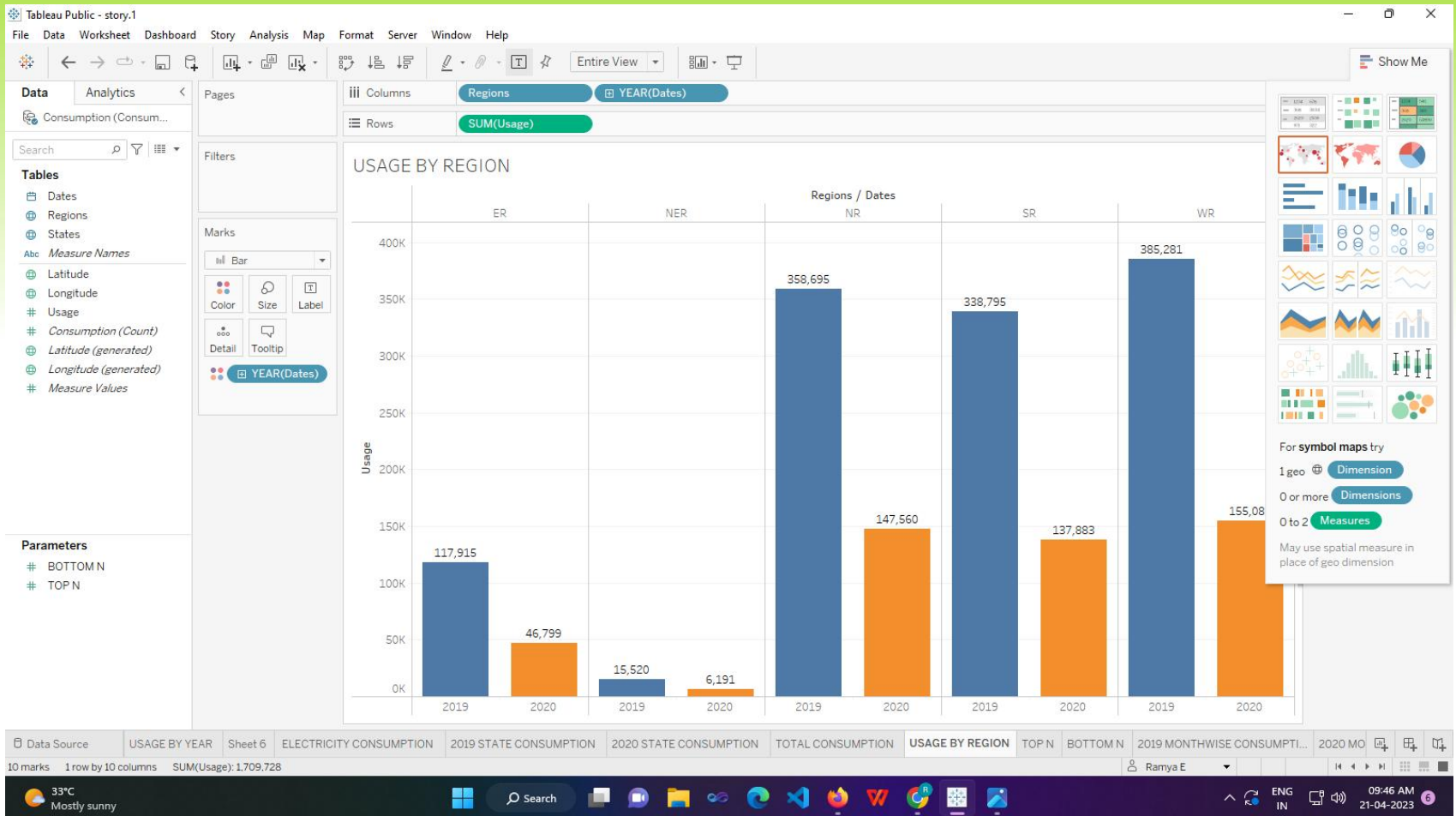




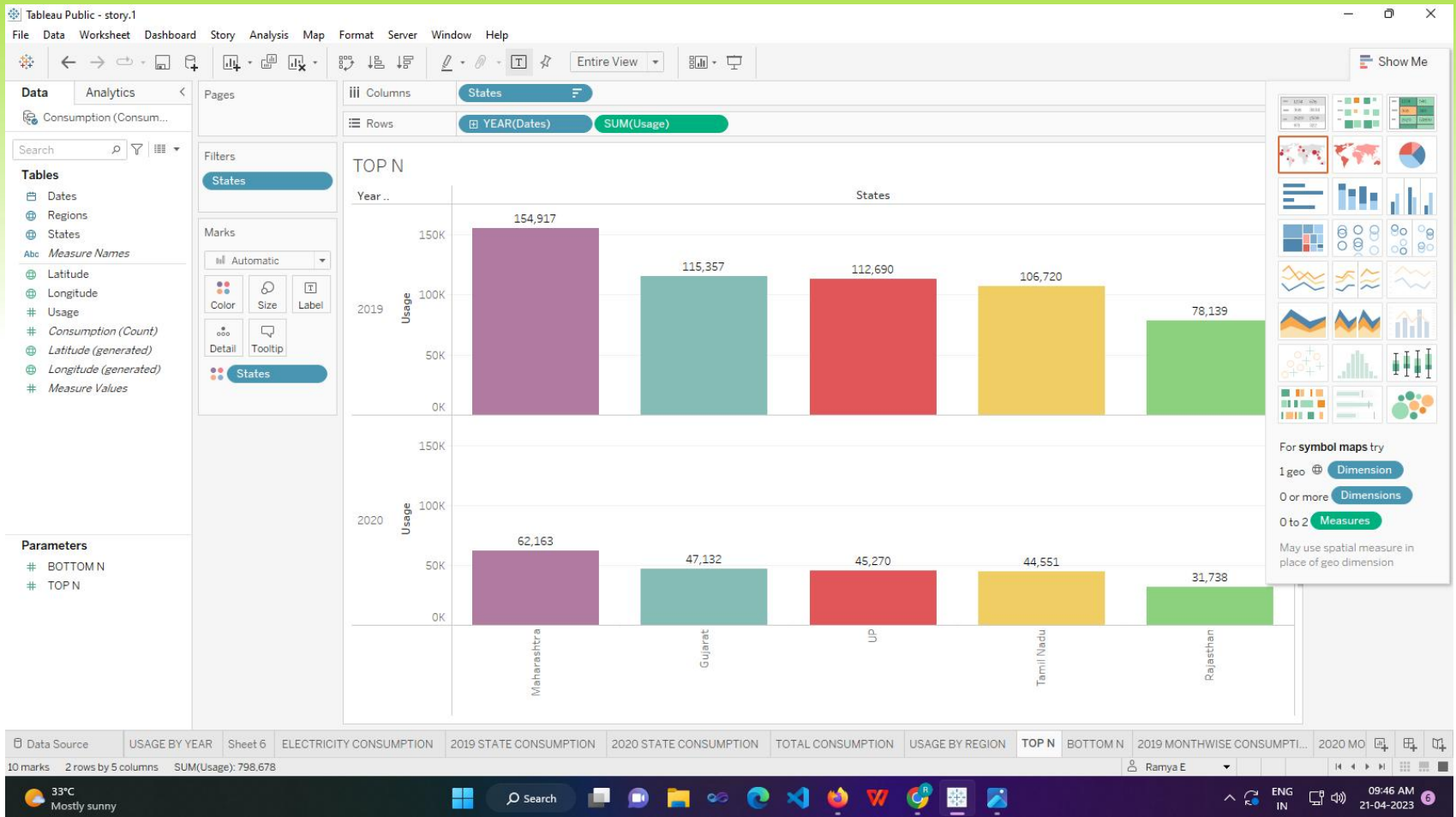
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# STEP 5

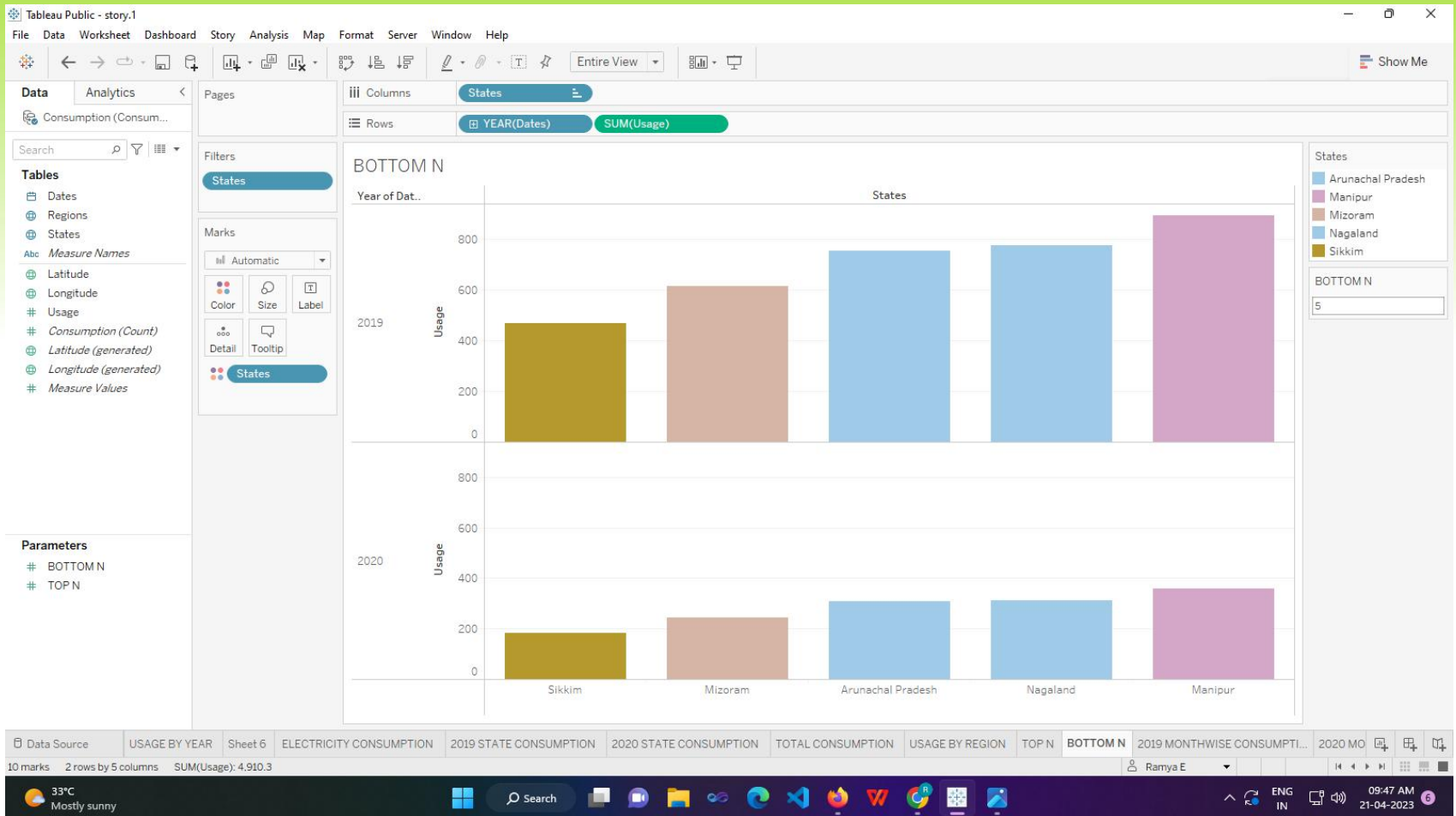


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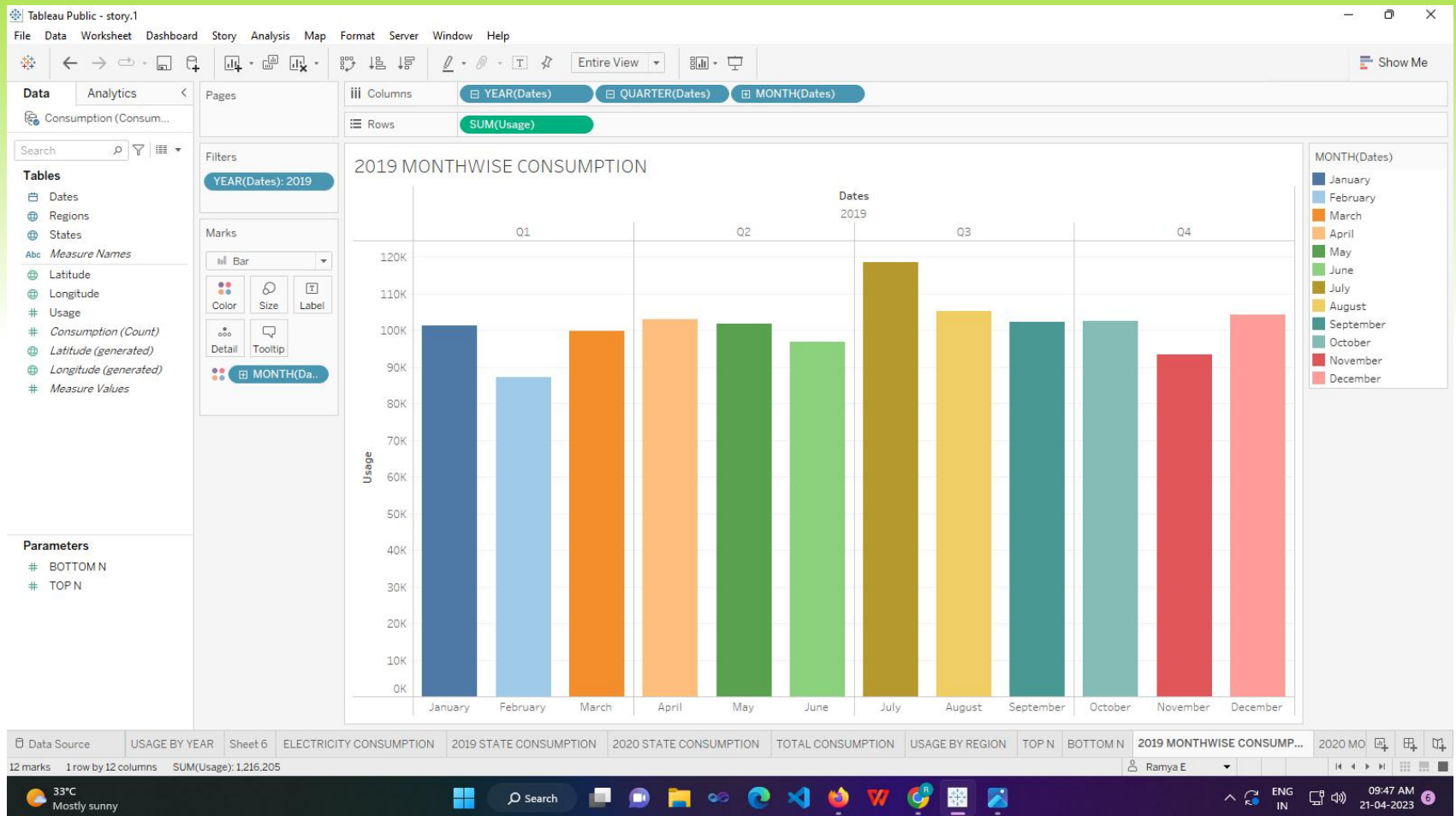




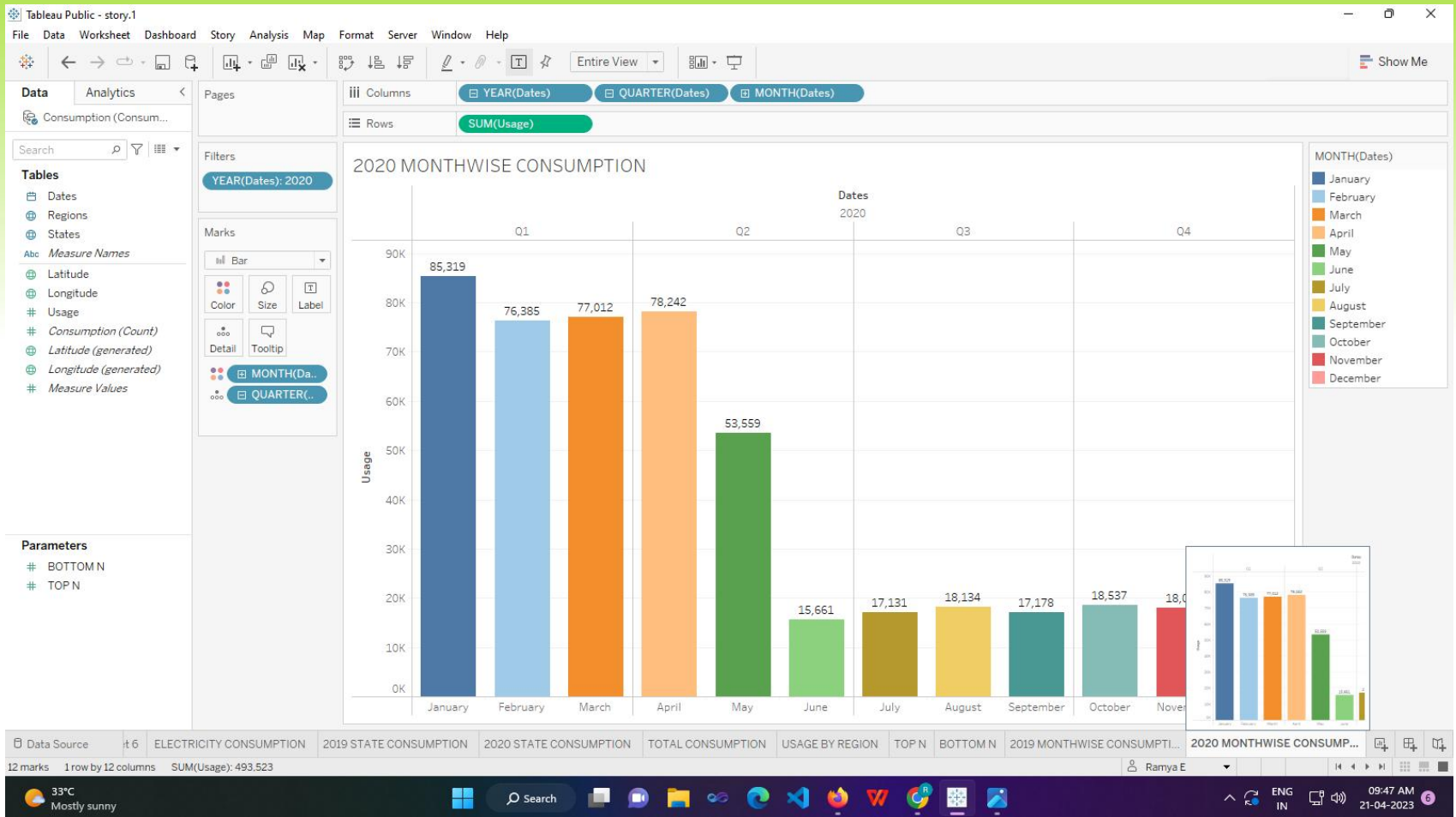
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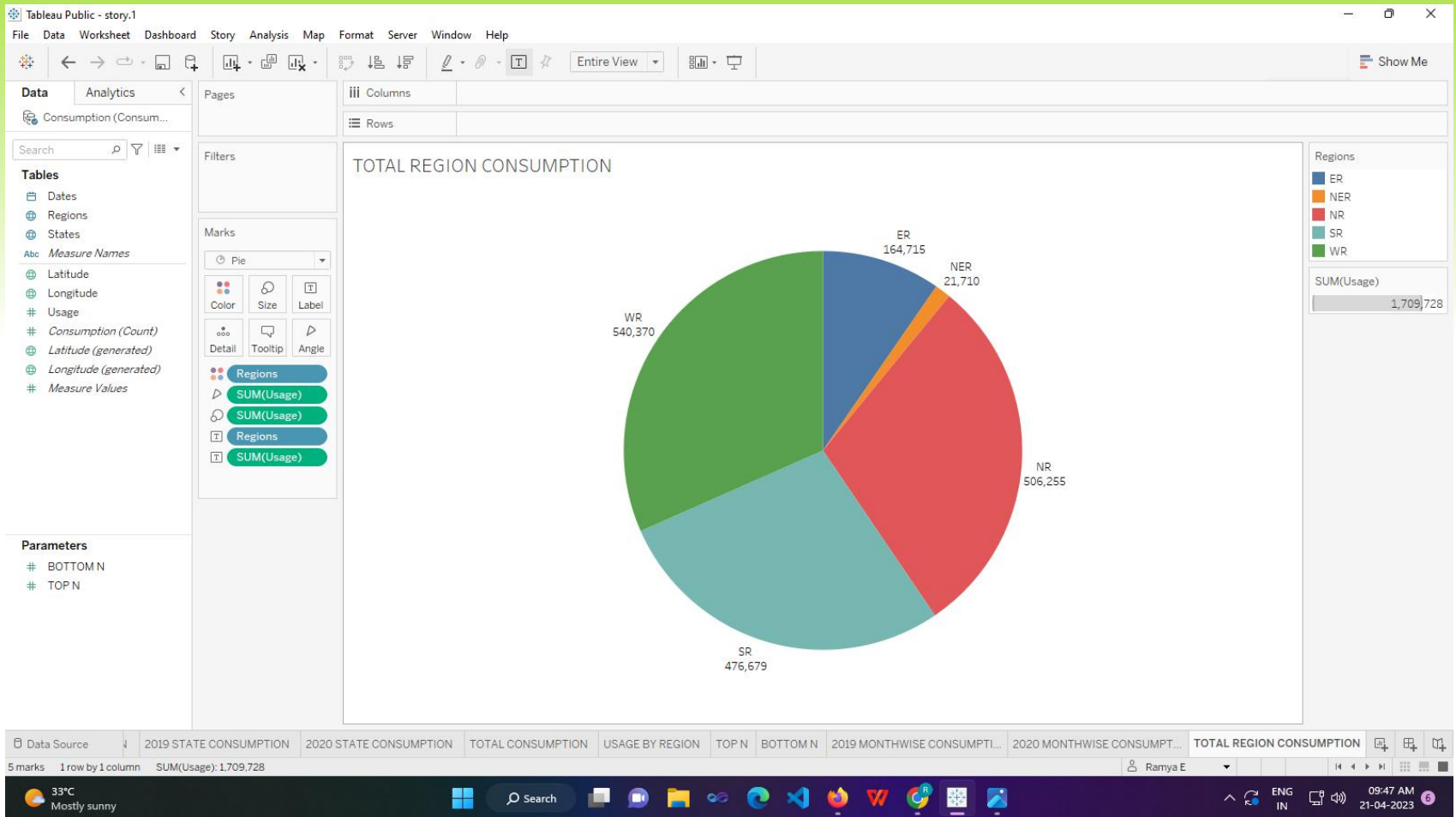
# STEP 8



# STEP 9

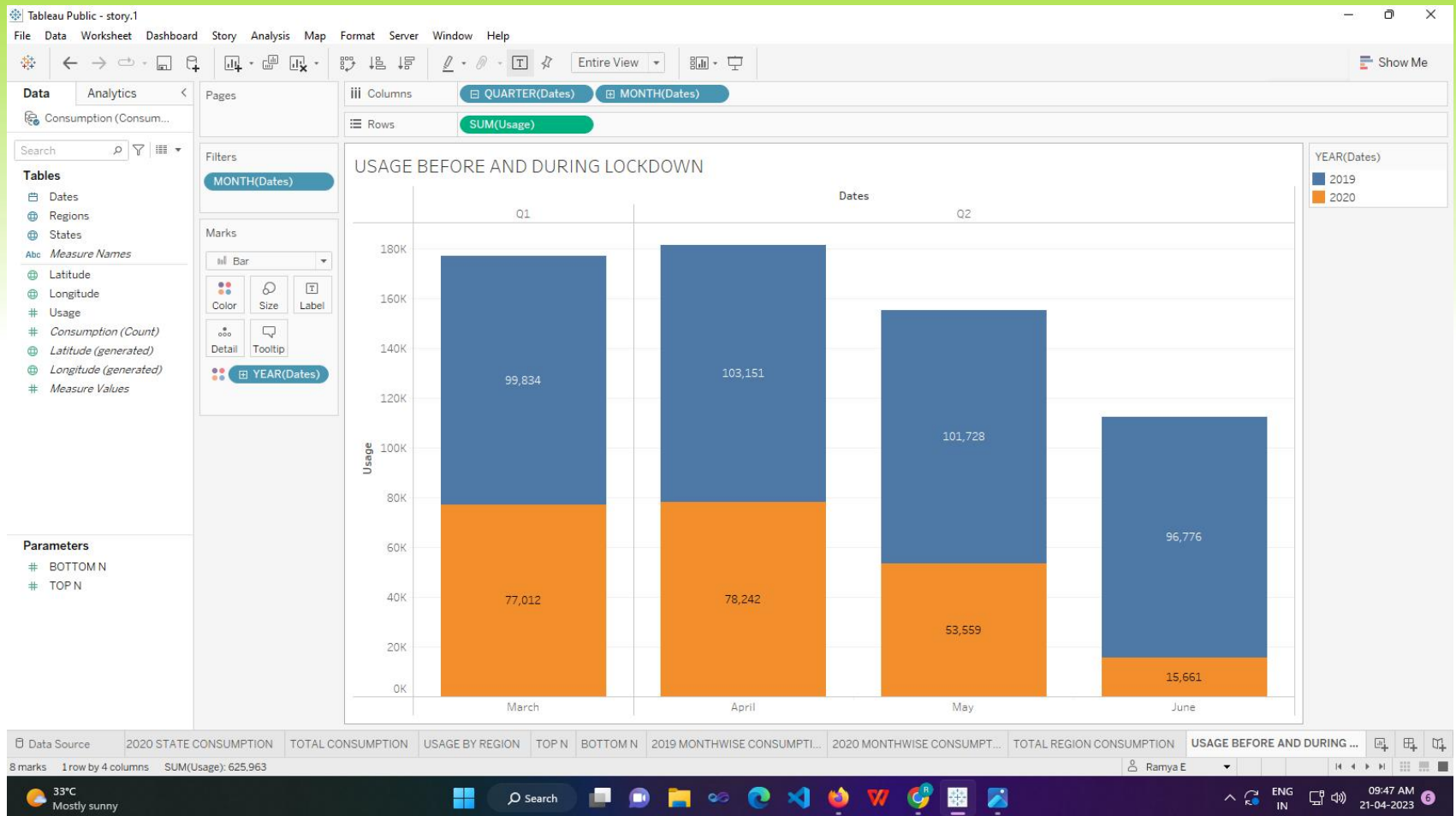


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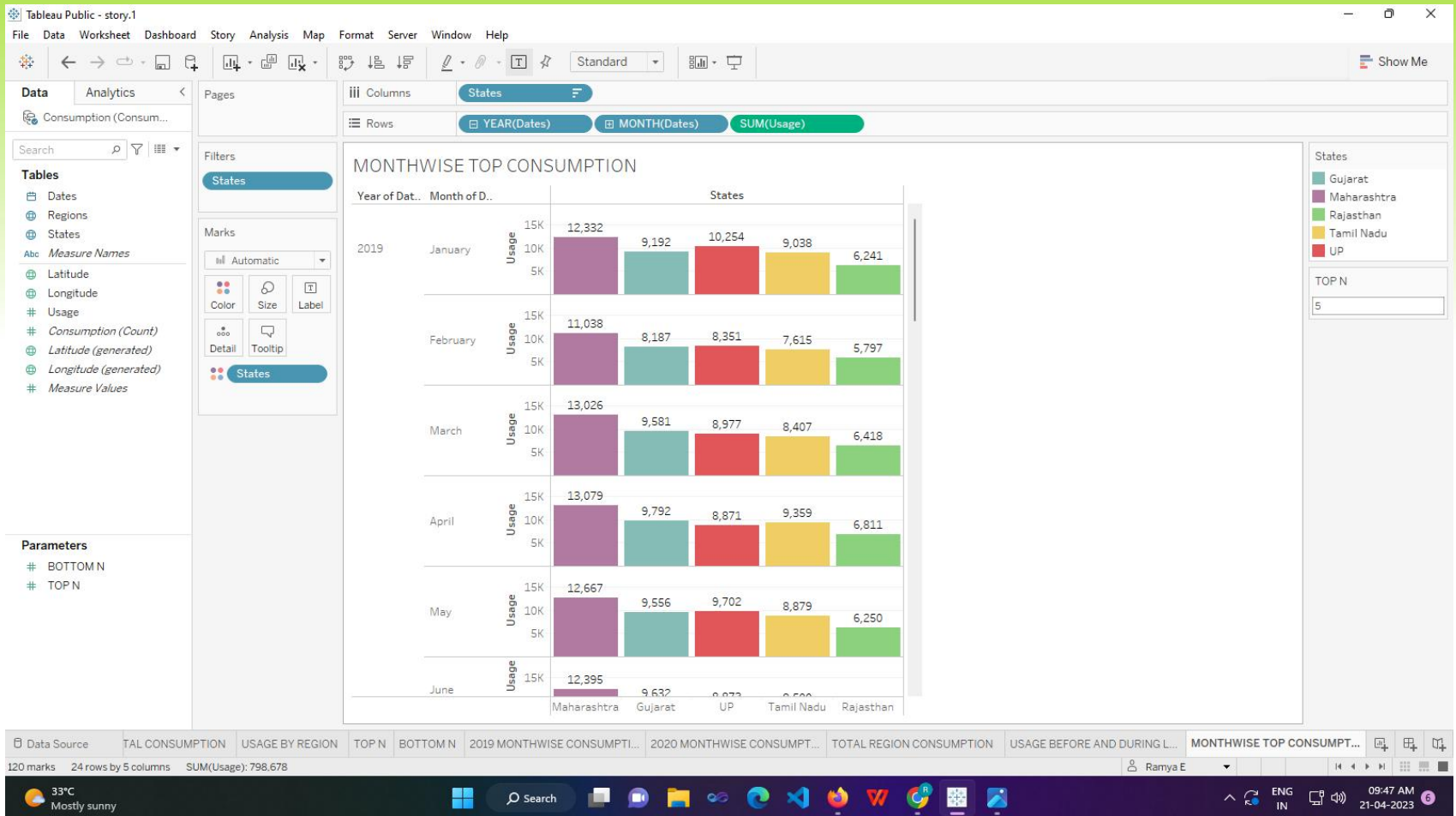


# STEP 11

## USAGE BEFORE AND DURING LOCKDOWN

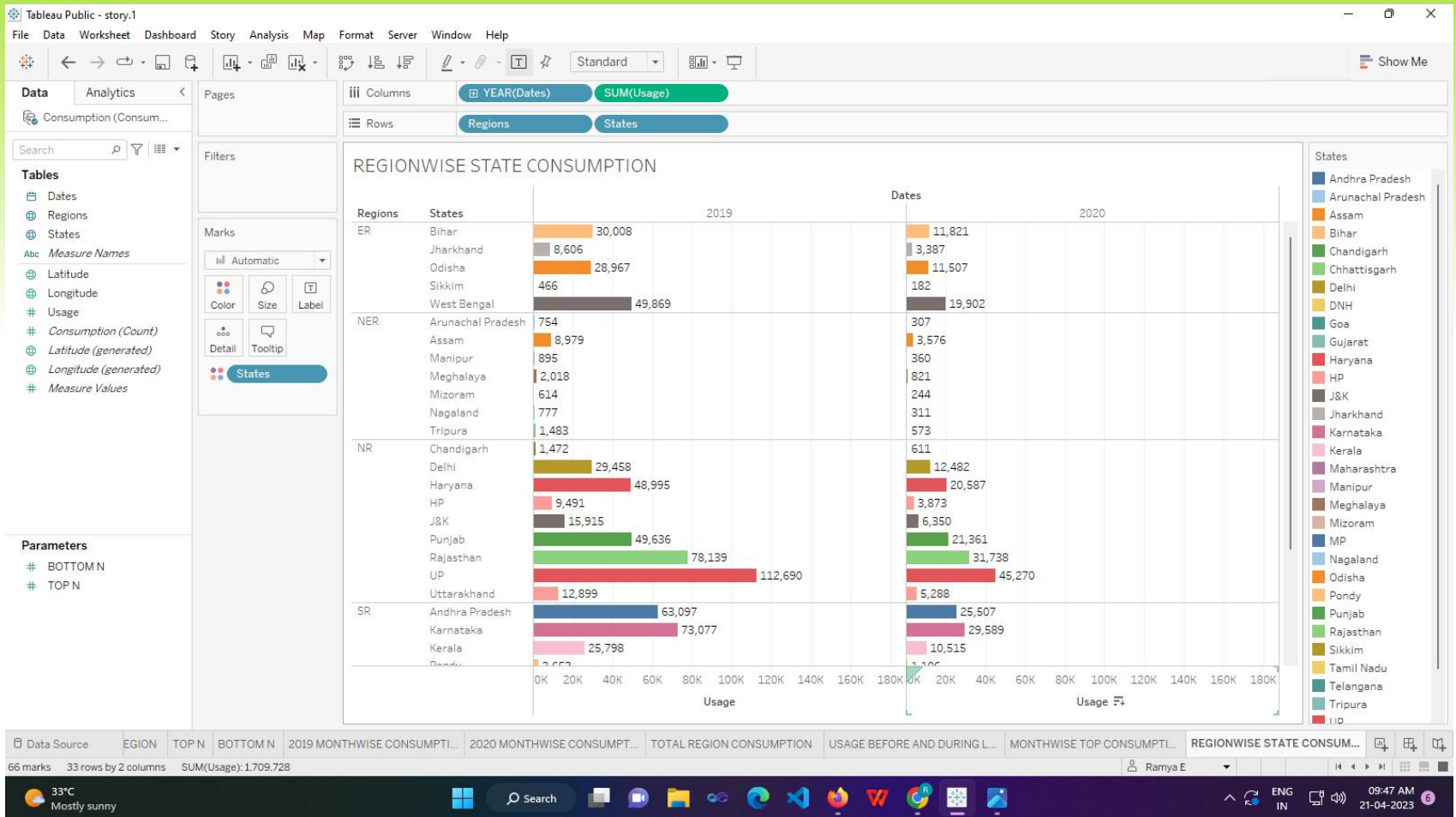


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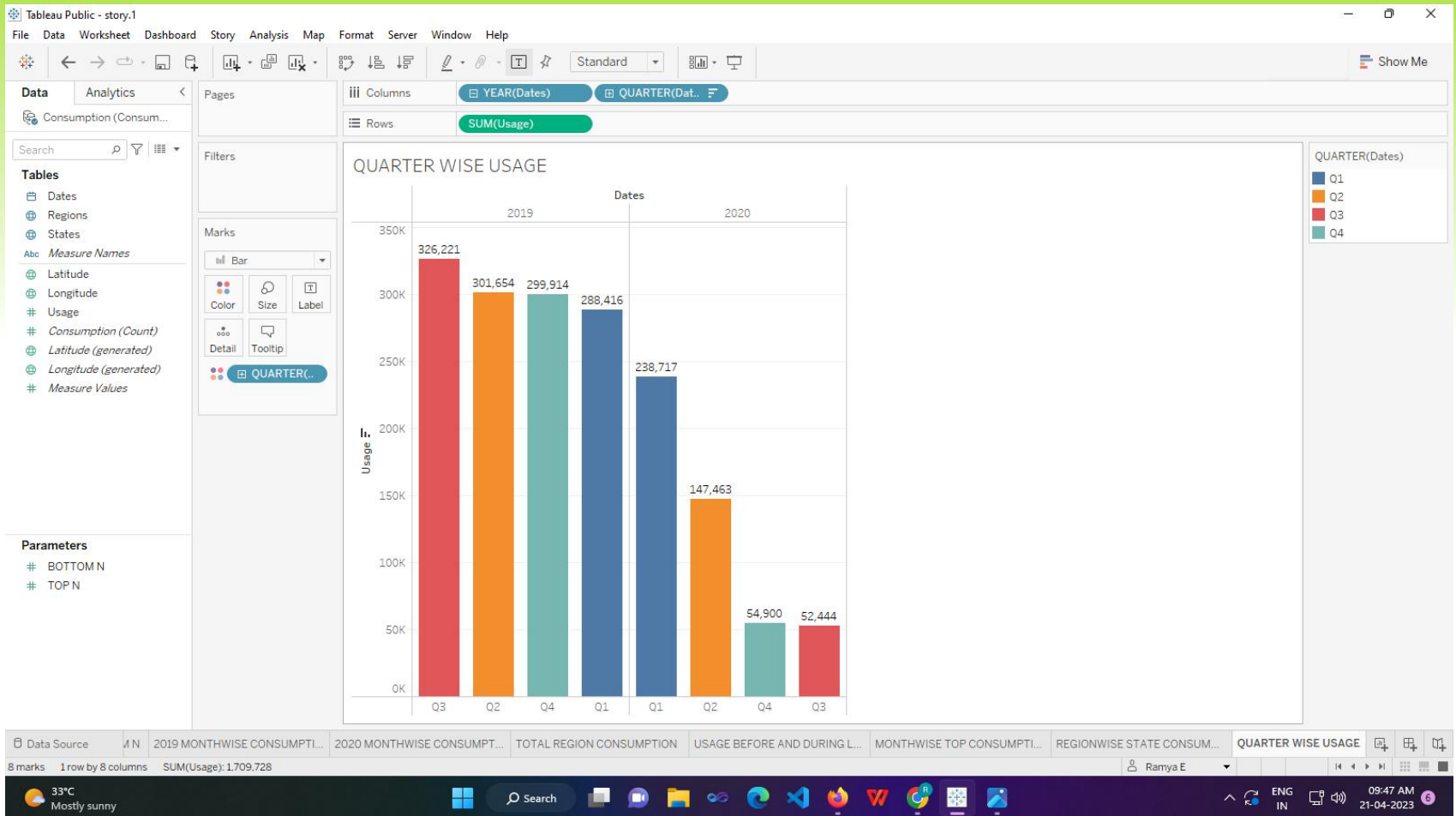




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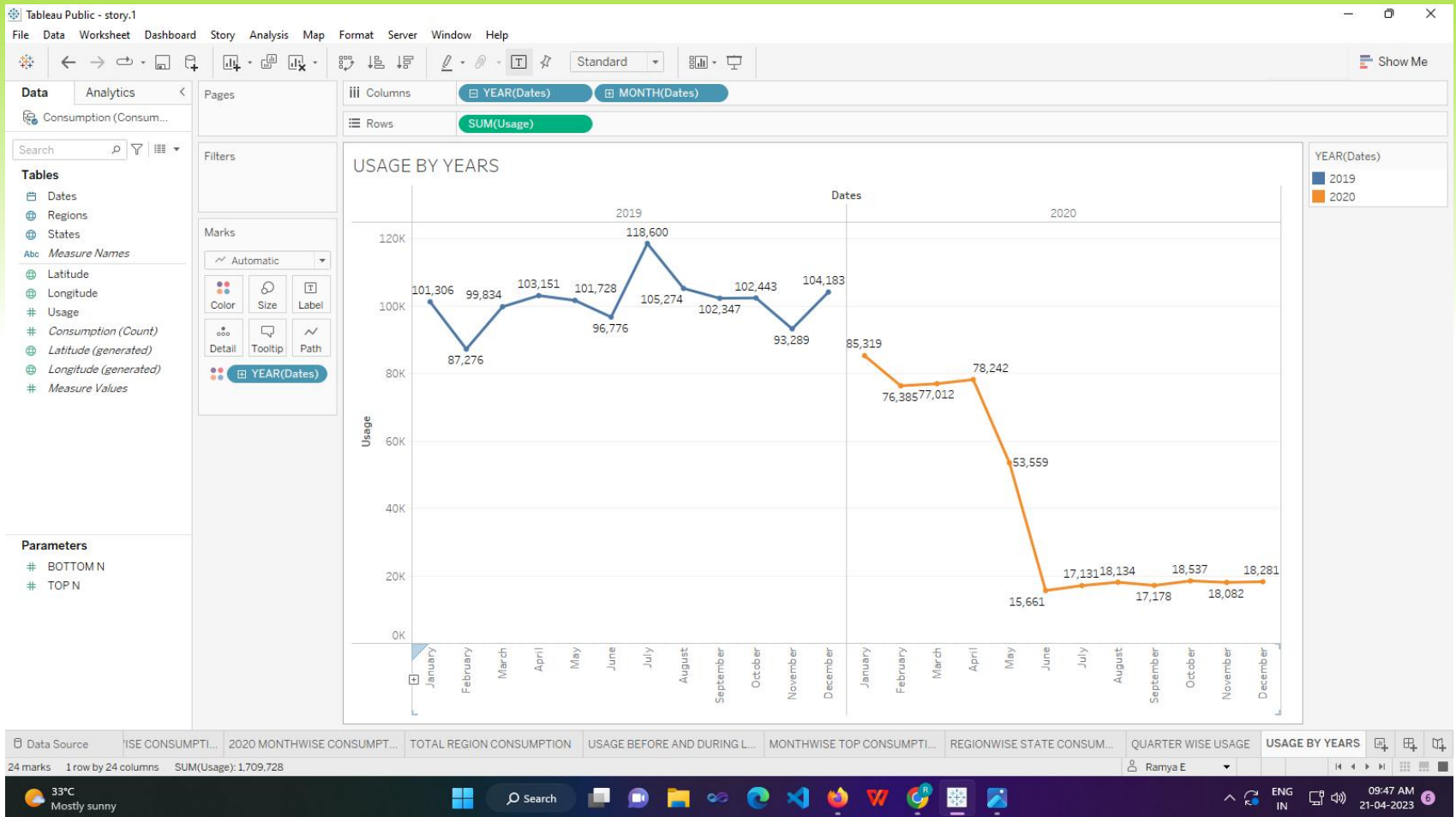


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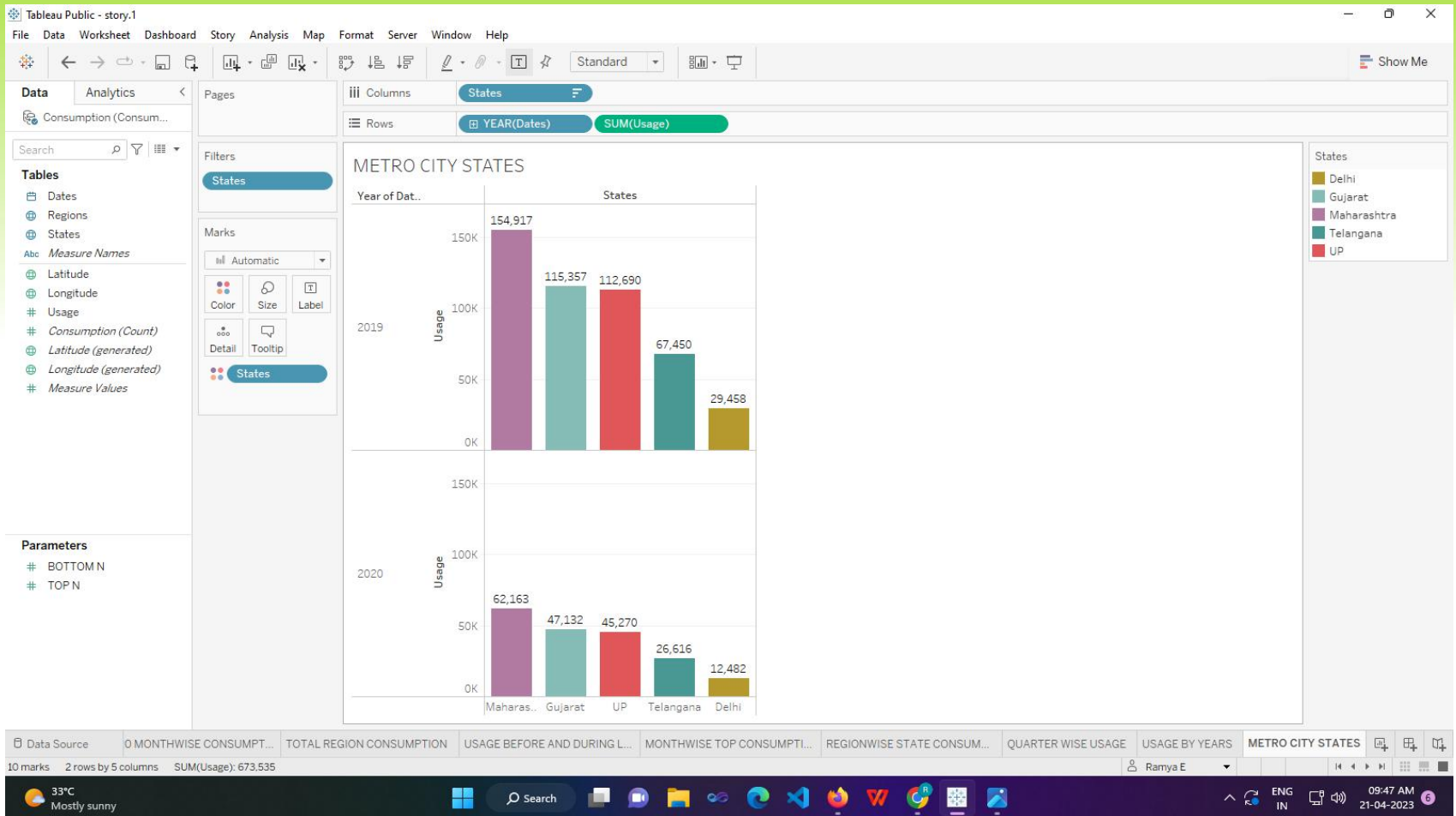




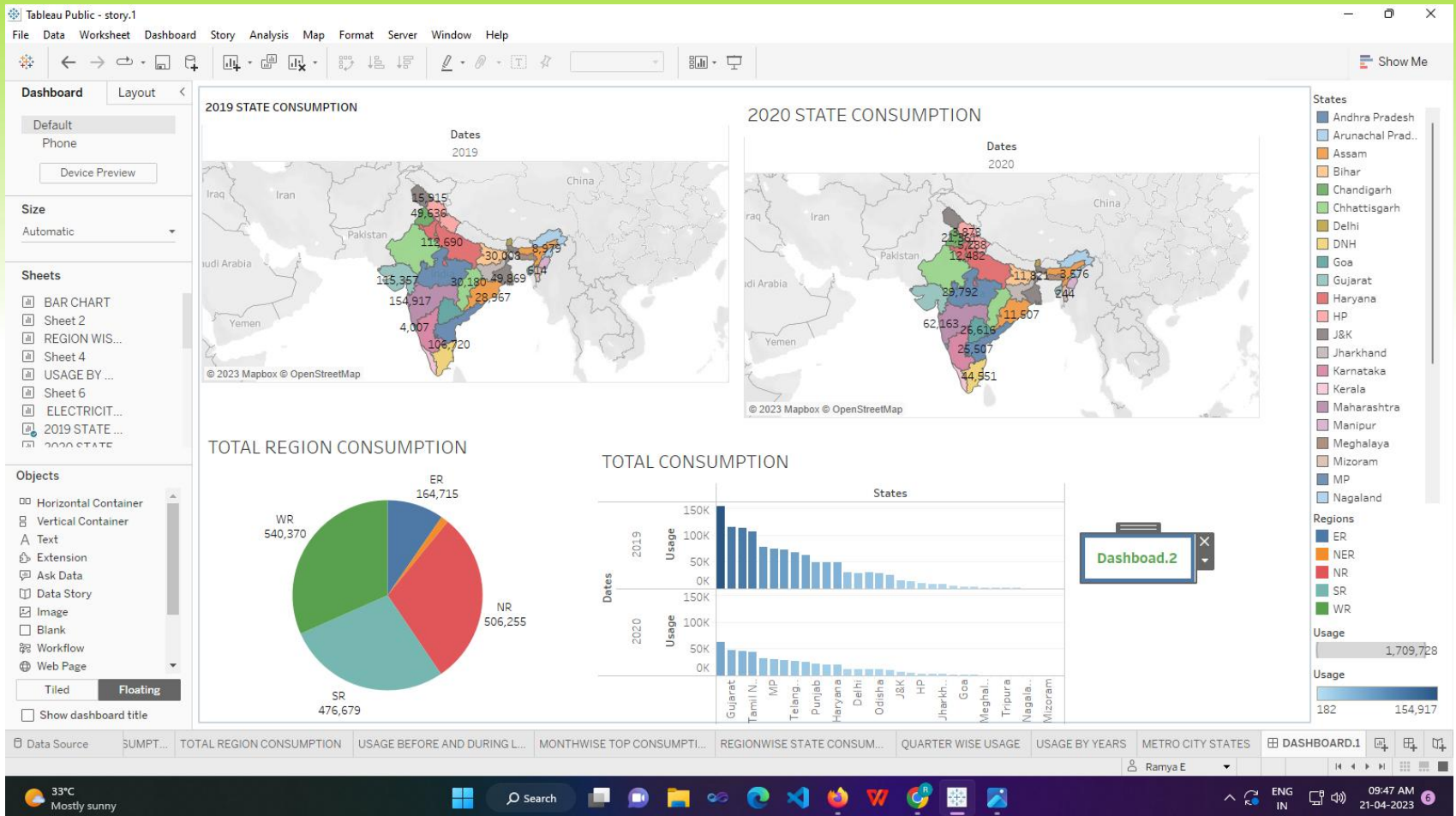
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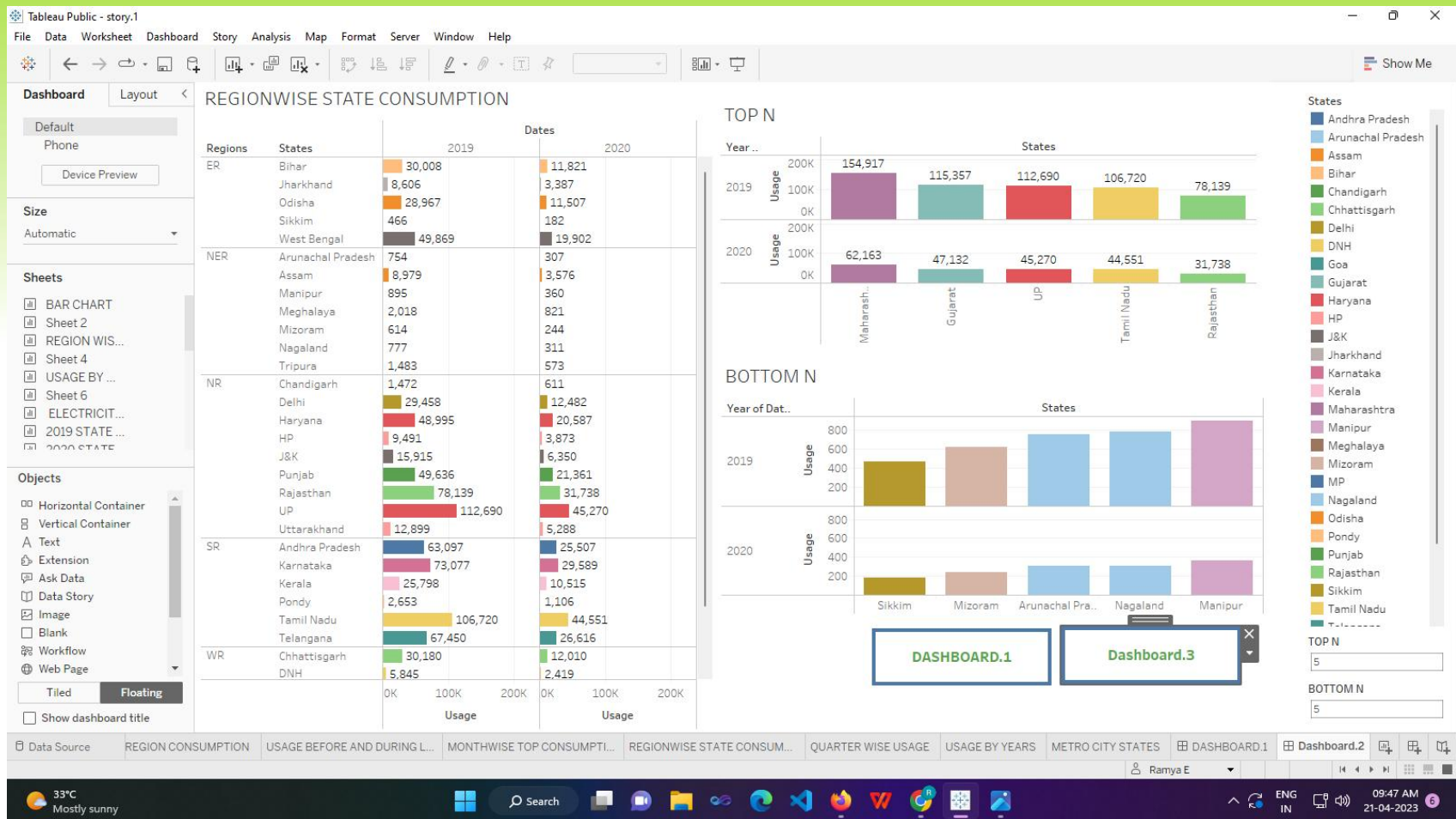
# STEP 16



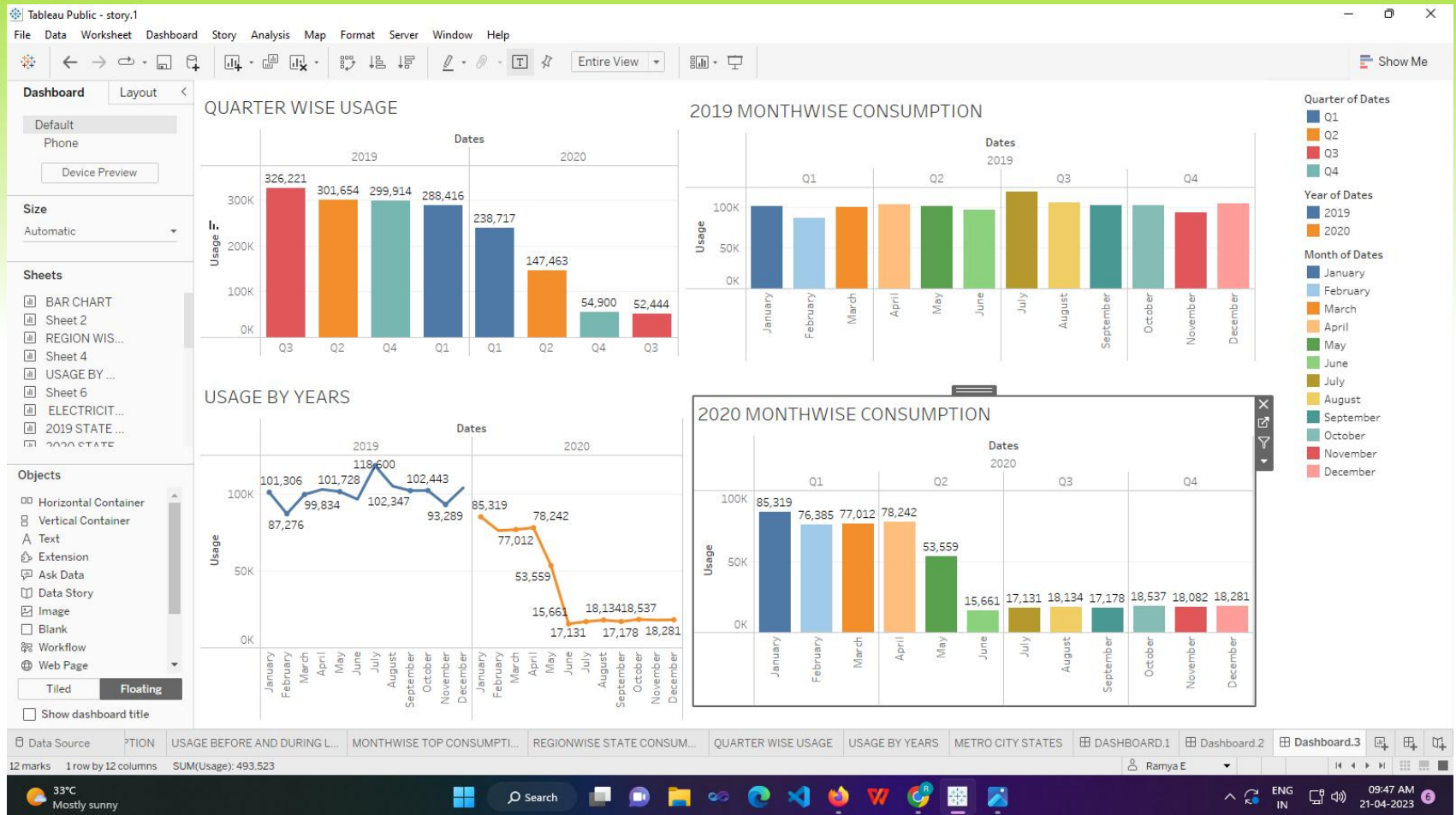
# DASHBOARD 1



# DASHBOARD 2

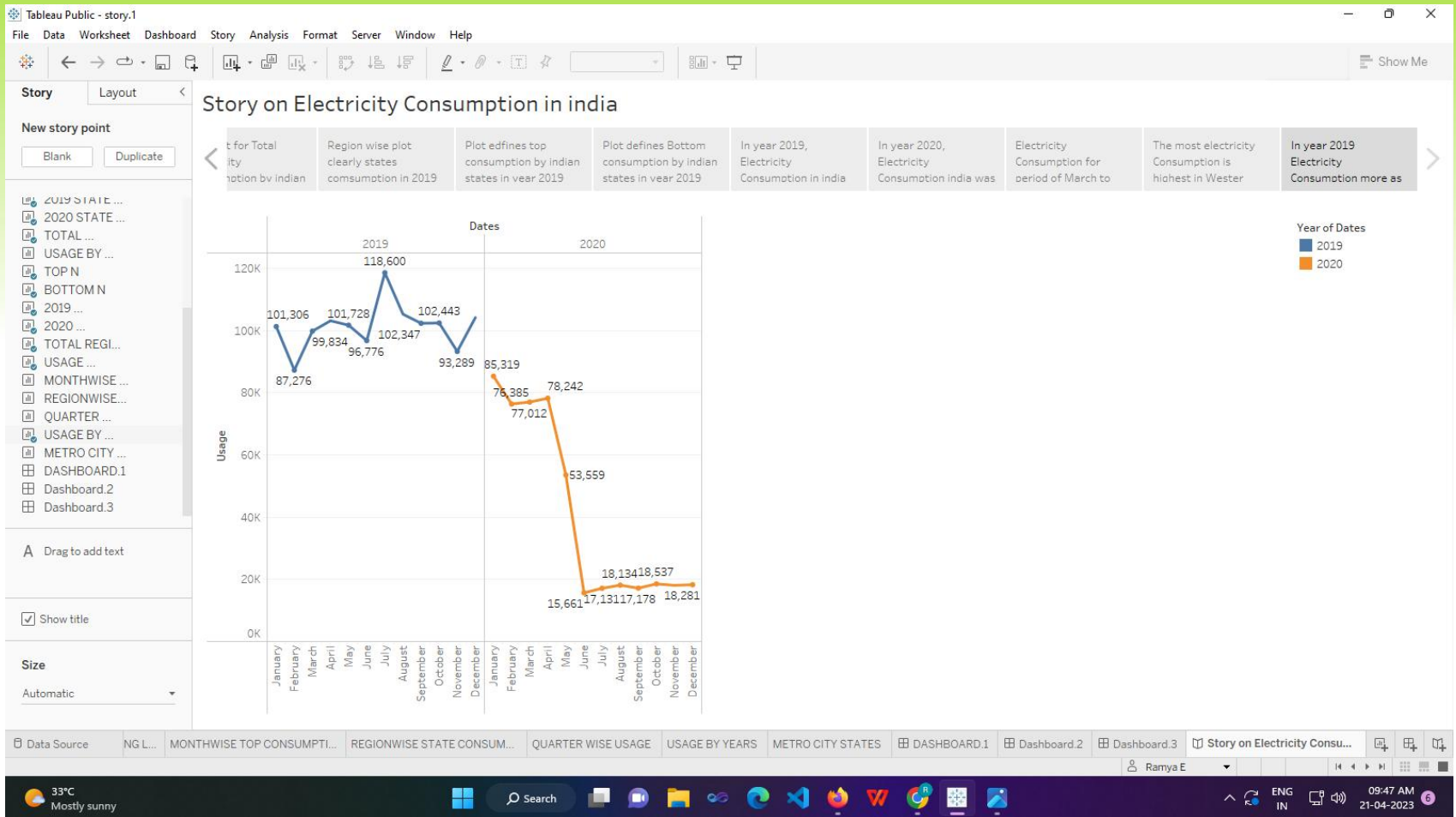


# DASHBOARD 3





# STORY



# CONCLUSION

- By doing this survey we learnt about how aware our community is about energy consumption and also about how aware they are about saving energy. We really thought that because of the amount of advertising about saving energy people would be more energy efficient but they weren't. A lot of people waste electricity without knowing it, and they also pollute the earth.