Air quality analysis in tamilnadu

Introduction

In this part we will begin building our project by loading and preprocessing the dataset. Begin the analysis by loading and preprocessing the air quality dataset we Load the dataset using Python and data manipulation libraries (e.g., pandas)

The coding is as follows:

To load the air quality dataset in Tamil Nadu using Python and pandas, follow these steps:

1. Install the necessary libraries:

   - pandas: pip install pandas

2. Import the required libraries:

Python

Import pandas as pd

3. Load the dataset:

Python

Assuming the dataset is in a CSV file format

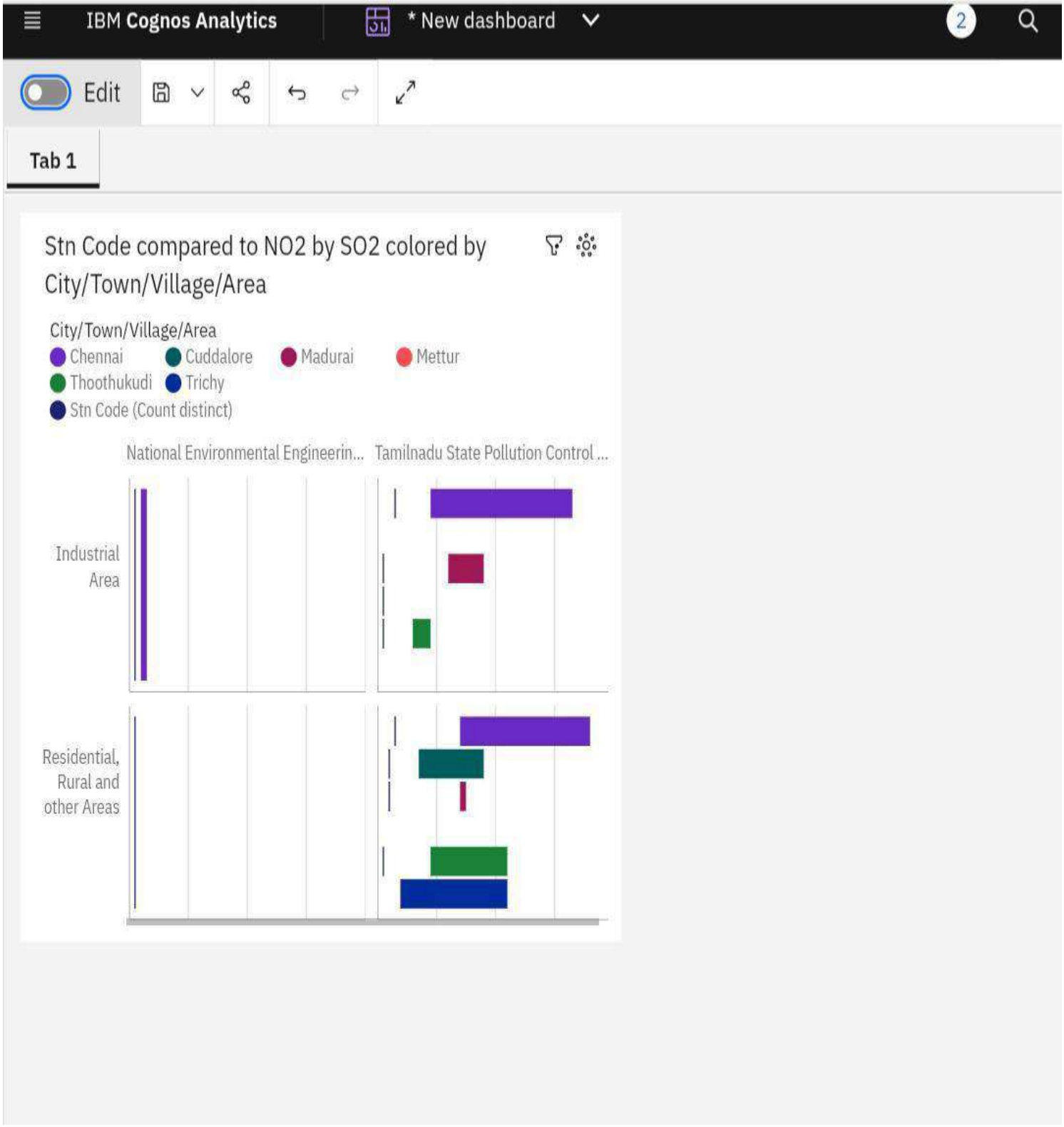
Dataset_path = ‘path/to/air_quality_dataset.csv’

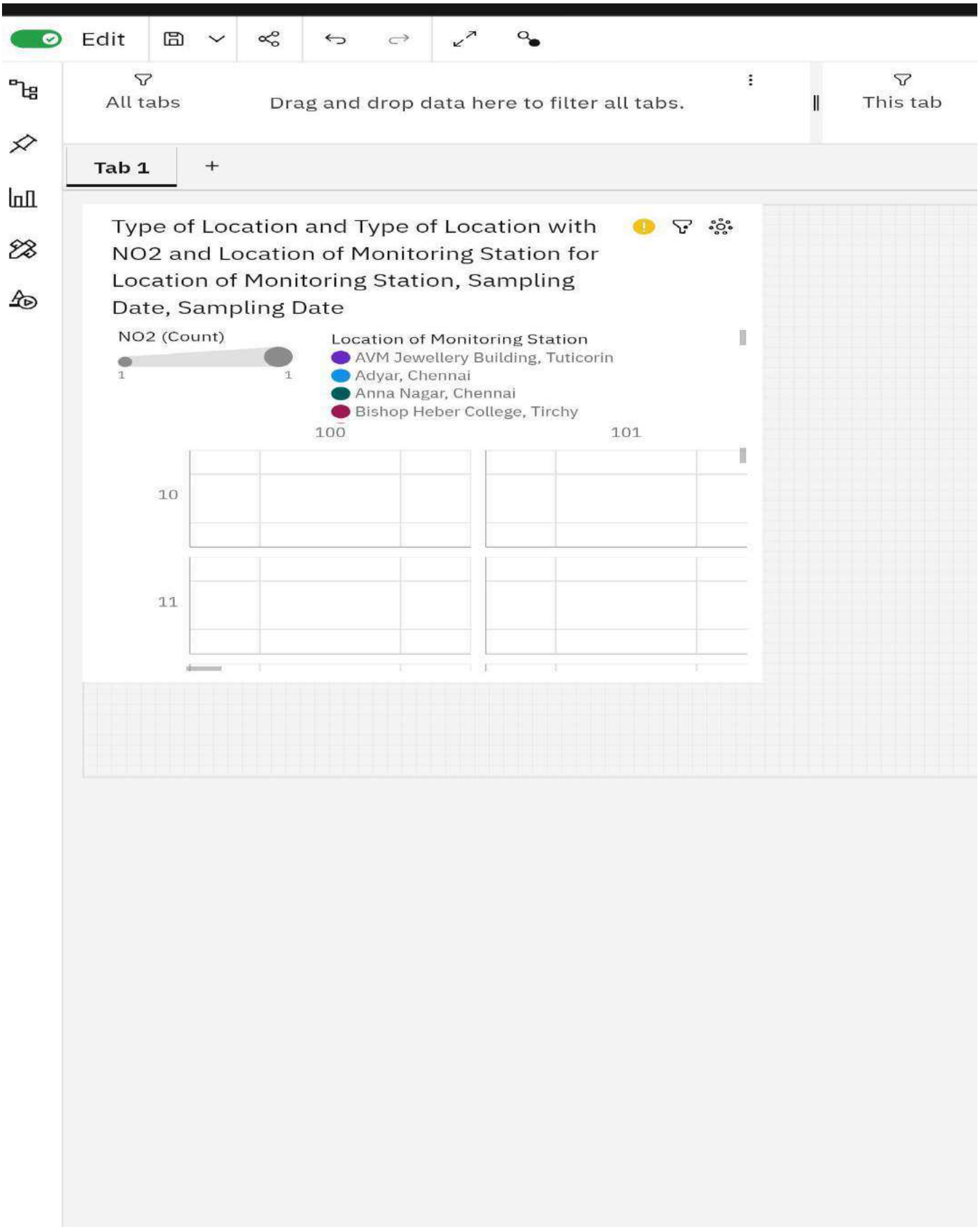
Df = pd.read_csv(dataset_path)

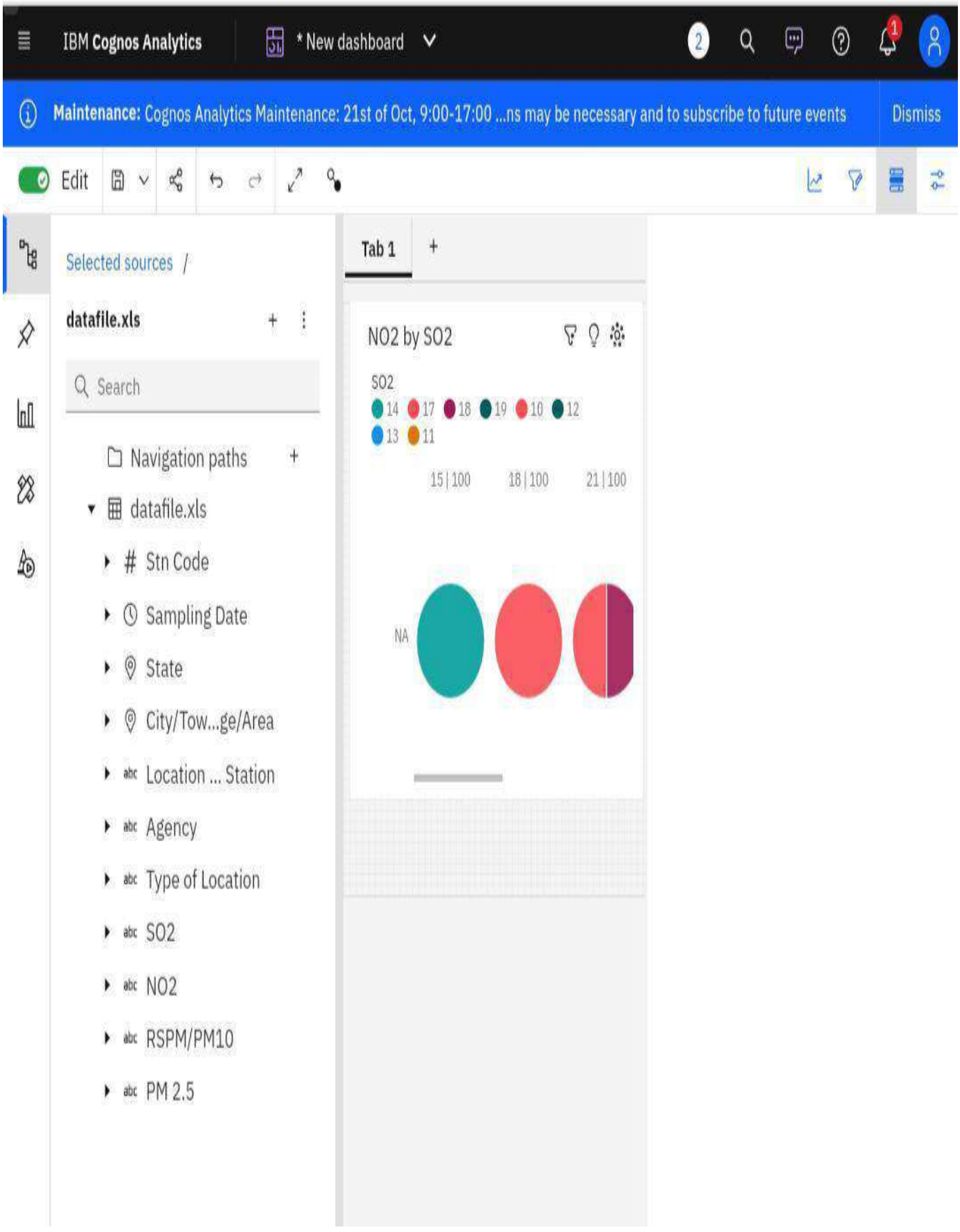
Replace ‘path/to/air_quality_dataset.csv’ with the actual path to your air quality dataset file.

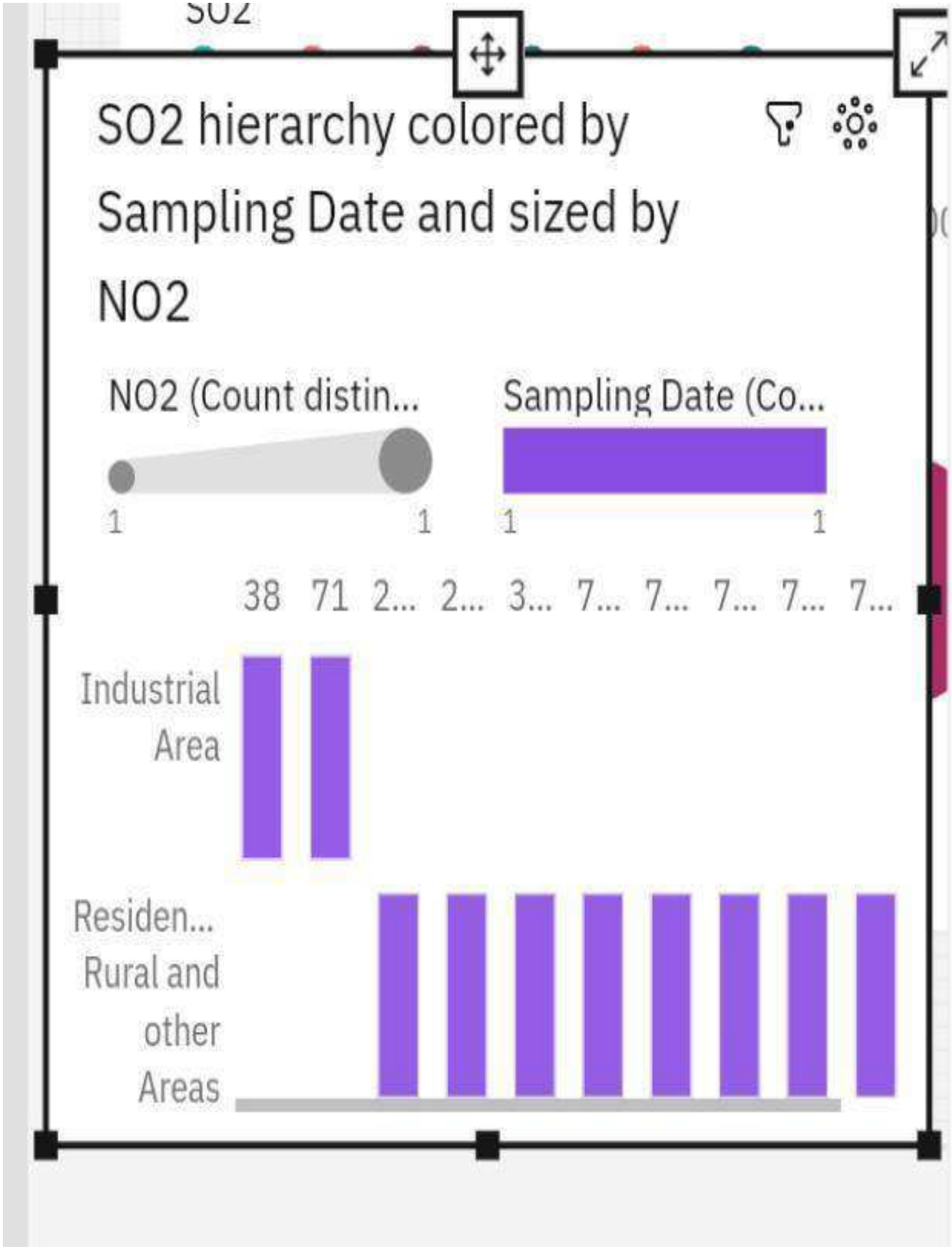
Now you have loaded the dataset into a pandas DataFrame named df. You can proceed with further data manipulation and analysis using pandas and other libraries.

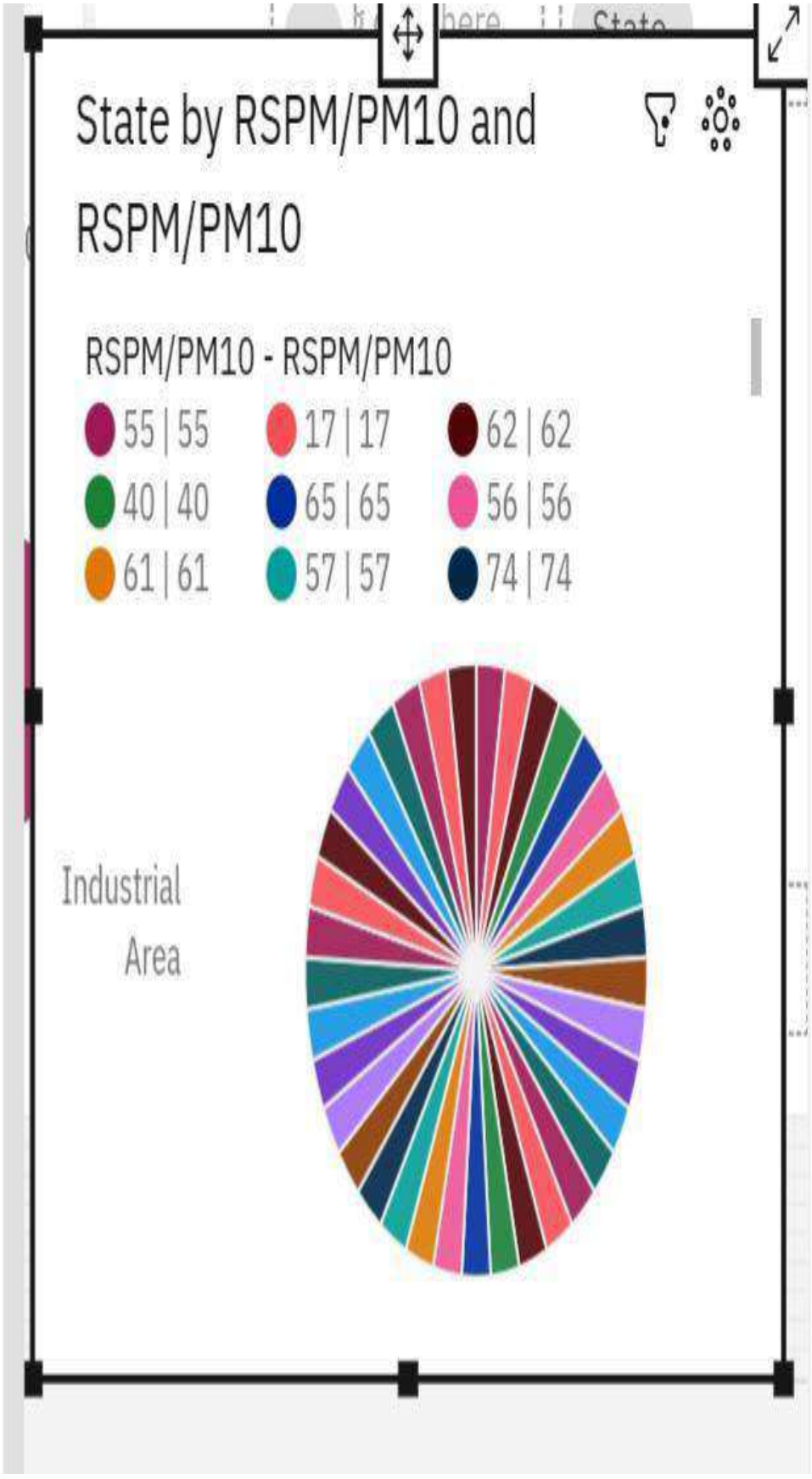
The visualization images created according to given dataset through ibm platform is represented as:




Edit
All tabs
Drag and drop data here to filter all tabs.
This tab
Tab 1
+
Type of Location and Type of Location with NO2 and Location of Monitoring Station for Location of Monitoring Station, Sampling Date, Sampling Date
NO2 (Count)
1
1
Location of Monitoring Station
AVM Jewellery Building, Tuticorin
Adyar, Chennai
Anna Nagar, Chennai
Bishop Heber College, Tirchy
100
101
10
11


IBM Cognos Analytics
* New dashboard
Maintenance: Cognos Analytics Maintenance: 21st of Oct, 9:00-17:00 ...ns may be necessary and to subscribe to future events
Dismiss
Edit
Selected sources /
datafile.xls
Search
Navigation paths
datafile.xls
Stn Code
Sampling Date
State
City/Tow...ge/Area
Location ... Station
Agency
Type of Location
SO2
NO2
RSPM/PM10
PM 2.5
Tab 1
NO2 by SO2
SO2
14 17 18 19 10 12
13 11
15 | 100
18 | 100
21 | 100
NA


SO2
SO2 hierarchy colored by
Sampling Date and sized by
NO2
NO2 (Count distin...
Sampling Date (Co...
1
1
1
1
38
71
2...
2...
3...
7...
7...
7...
7...
7...
Industrial Area
Residen... Rural and other Areas



RSPM/PM10

Click or

Size*

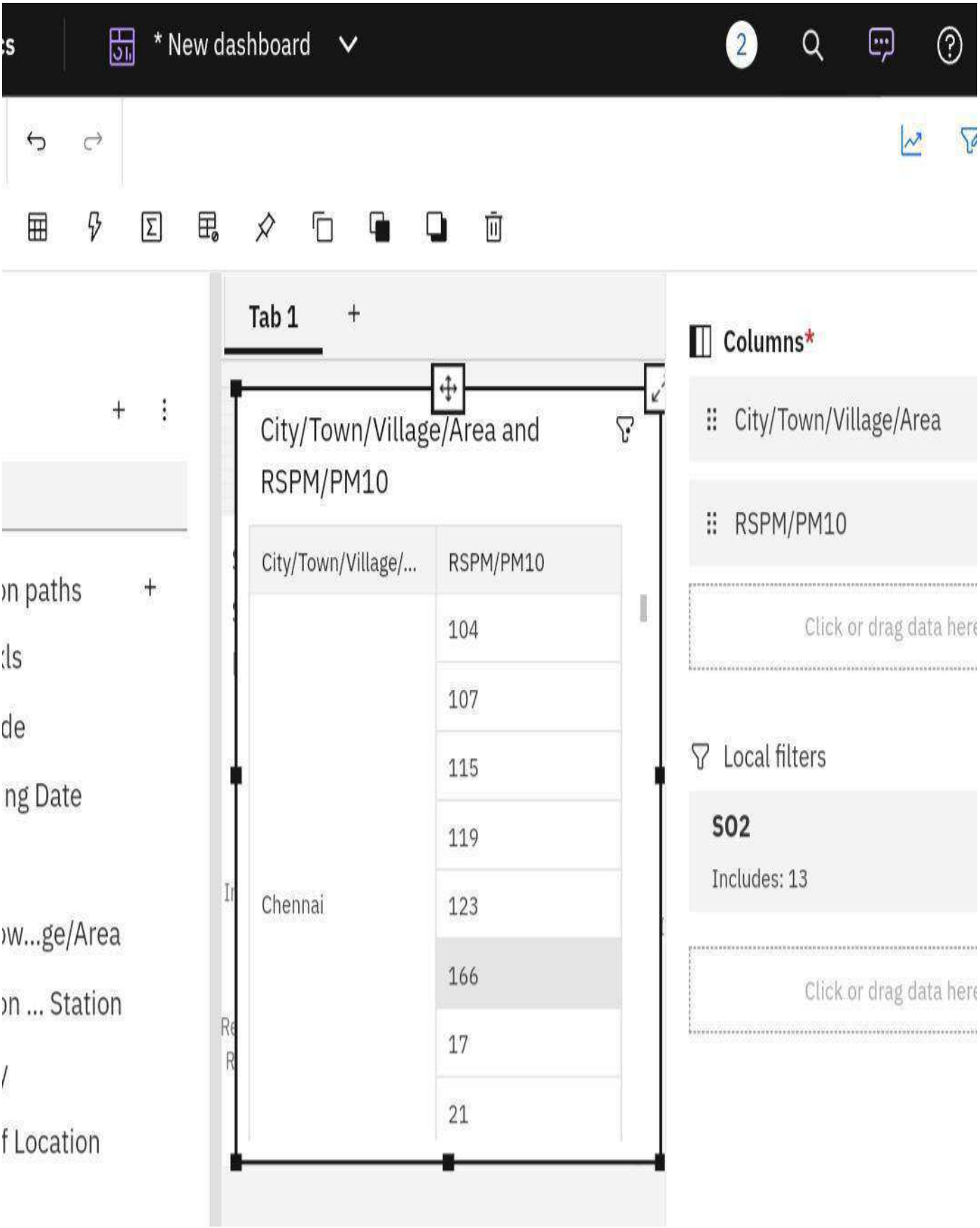
State

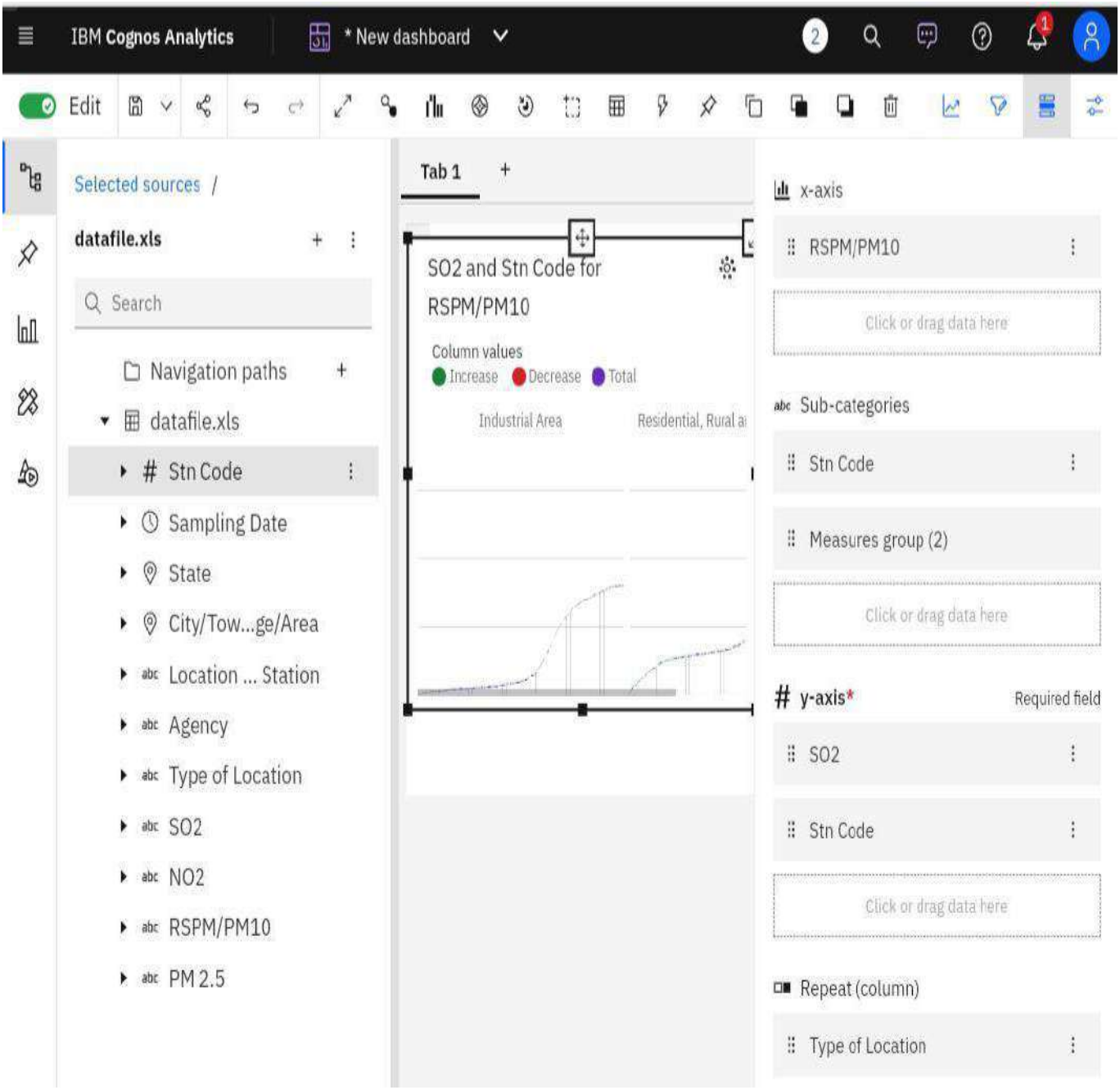
Repeat (column)

Click or

Repeat (row)

Type of Locatio


* New dashboard
2
Tab 1
City/Town/Village/Area and RSPM/PM10
City/Town/Village/...
RSPM/PM10
Chennai
104
107
115
119
123
166
17
21
Columns*
City/Town/Village/Area
RSPM/PM10
Click or drag data here
Local filters
SO2
Includes: 13
Click or drag data here



Conclusion

The generated graph images through ibm platform made us to understand about the air quality analysis through the tamilnadu state and it greatly helped for our easy prediction about air quality analysis and it’s bad effects towards people in highly polluted area.

Conclusion