



Air Pollution & Public Health: A Data-Driven Story



CITY ANALYSIS

- ◆ Explore air pollution trends across cities to identify the most affected regions.
- ◆ Compare PM_{2.5}, NO₂, CO, and SO₂ levels across different cities.



STATION ANALYSIS

- ◆ Deep dive into station-wise air pollution levels across different monitoring sites.
- ◆ Identify pollution hotspots and compare stations in the same city.



HOURLY & SEASONAL TRENDS

- ◆ Track pollution patterns across different times of the day and seasons.
- ◆ Identify rush-hour pollution spikes and weather-driven variations.



TRAFFIC & INDUSTRY IMPACT

- ◆ Examine how vehicle emissions & industrial activities contribute to pollution.
- ◆ Analyze NO₂ & CO levels to understand traffic-related air quality issues.



POLICY INSIGHTS & HEALTH RISKS

- ◆ Evaluate the impact of pollution control measures & public health risks.
- ◆ Compare pollution before & after major government interventions.



Click on any section to explore detailed insights!



CITY ANALYSIS



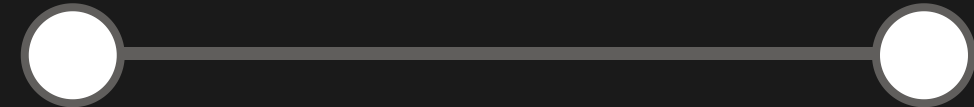
FILTERS

Date

1/1/2015



7/1/2020



City

Ahmedabad	Bhopal
Aizawl	Brajrajnagar
Amaravati	Chandigarh
Amritsar	Chennai
Bengaluru	Coimbatore



Delhi

Most Polluted City

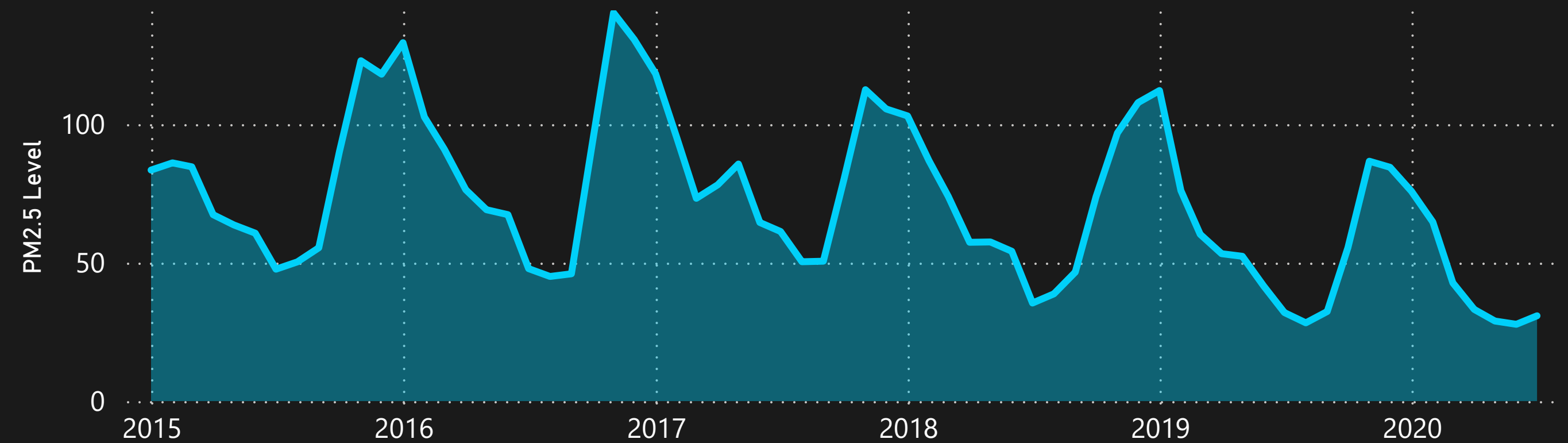
Aizawl

Least Polluted City

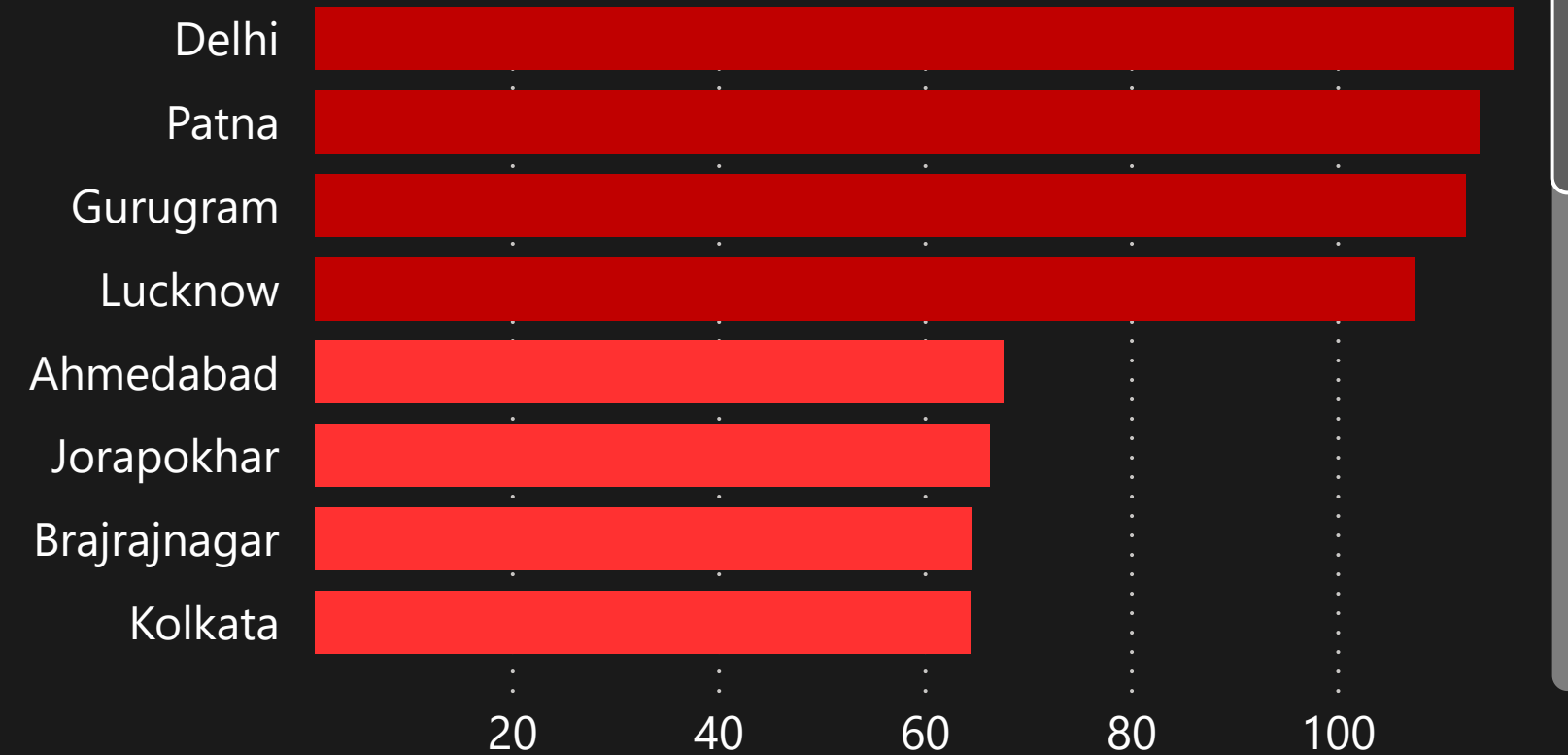
29-08-2017

Worst Air Quality Day

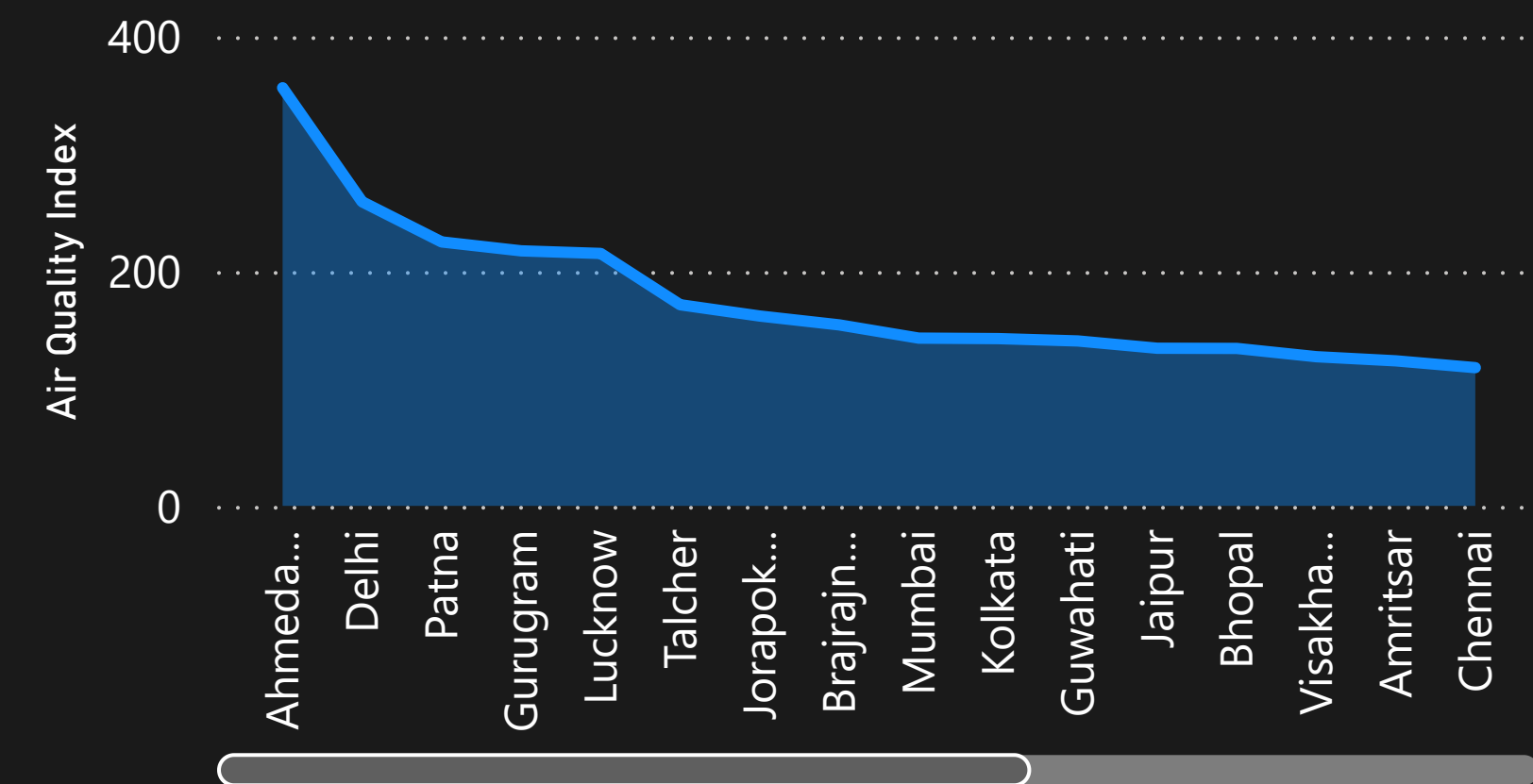
Yearly Trends in PM2.5 Levels (2015-2020)



City-Wise PM2.5 Concentration



City-Wise Air Quality Index Comparison





STATION ANALYSIS



FILTERS

Pollutant Type

Benzene

NH3

NO2

CO

NO

NOx

Status

(Blank)

Active

Inactive

StationName

(Blank)

Adarsh Nagar, Jai...

Year

2015

2017

2019

2016

2018

2020

Anand Vihar, Delhi - DPCC

Most Polluted Station

Sikulpuikawn, Aizawl - Mizoram PCB

Least Polluted Station

Falling ↓

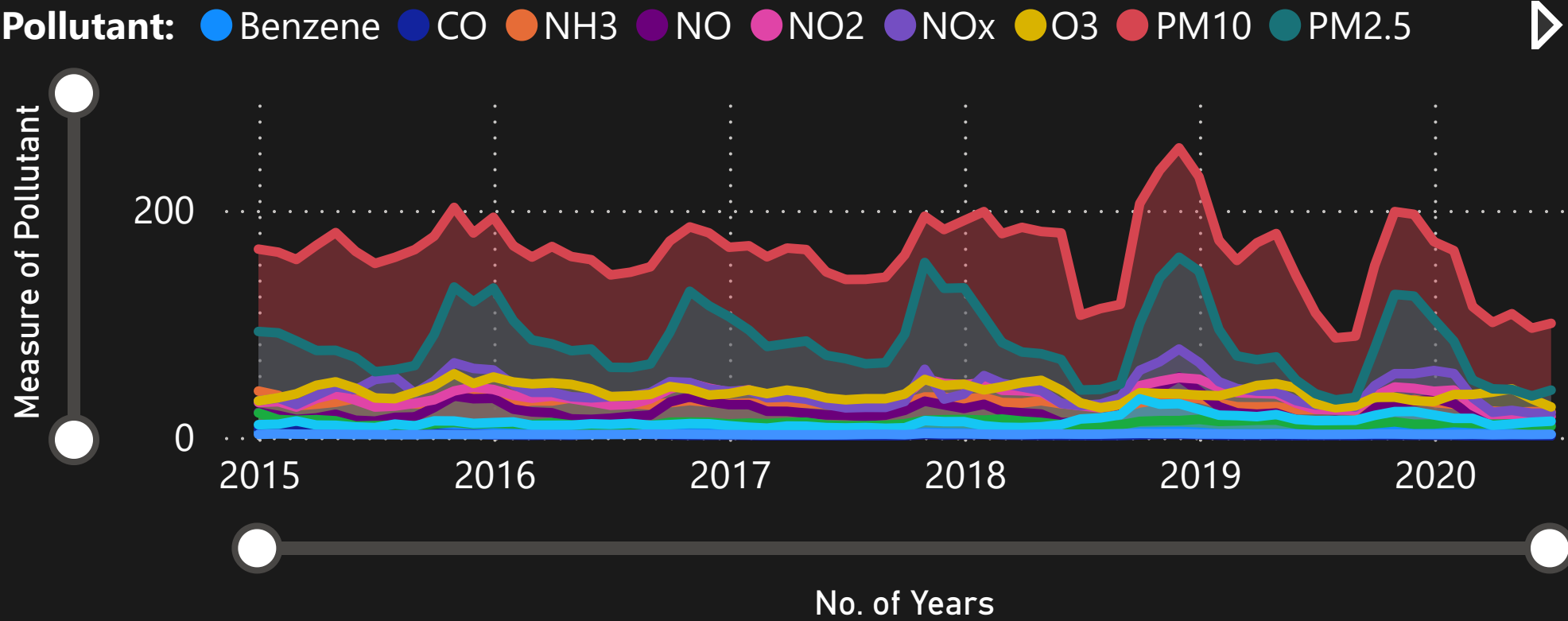
AQI Trend

Top Polluted Monitoring Stations – PM2.5 Levels

PM2.5 Level 31.30 139.24



Yearly Trends of Air Pollutants – 2015 to 2020



StationId	City	AQI_Bucket	PM2.5 Level	PM10 Level	O3 Level	NOx Level	SO2 Level	NO2 Level	NO Level	NH3 Level	CO Level
AP001	Amaravati	Very Poor	125.87	199.94	30.18	60.27	20.21	93.99	12.64	12.55	1.1
AP005	Visakhapatnam	Very Poor	143.62	245.99	67.76	59.79	20.14	72.52	26.12	16.09	1.3
AS001	Guwahati	Very Poor	146.66	234.44	22.58	104.93	14.72	17.30	53.09	19.11	1.4
BR005	Patna	Very Poor	80.27	323.54	43.94	84.56	7.57	61.16	143.71	47.19	1.4

📌 This page provides a deep dive into pollution levels at different monitoring stations, showcasing the worst-affected locations, trends over time, and key air quality insights. 📍 📊 🌿



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HOURLY AND SEASONAL TRENDS



FILTERS

Year

2015	2018
2016	2019
2017	2020

Season

Monsoon	Summer
Spring	Winter

11:00 PM

Highest Pollution Hour

12:00 AM

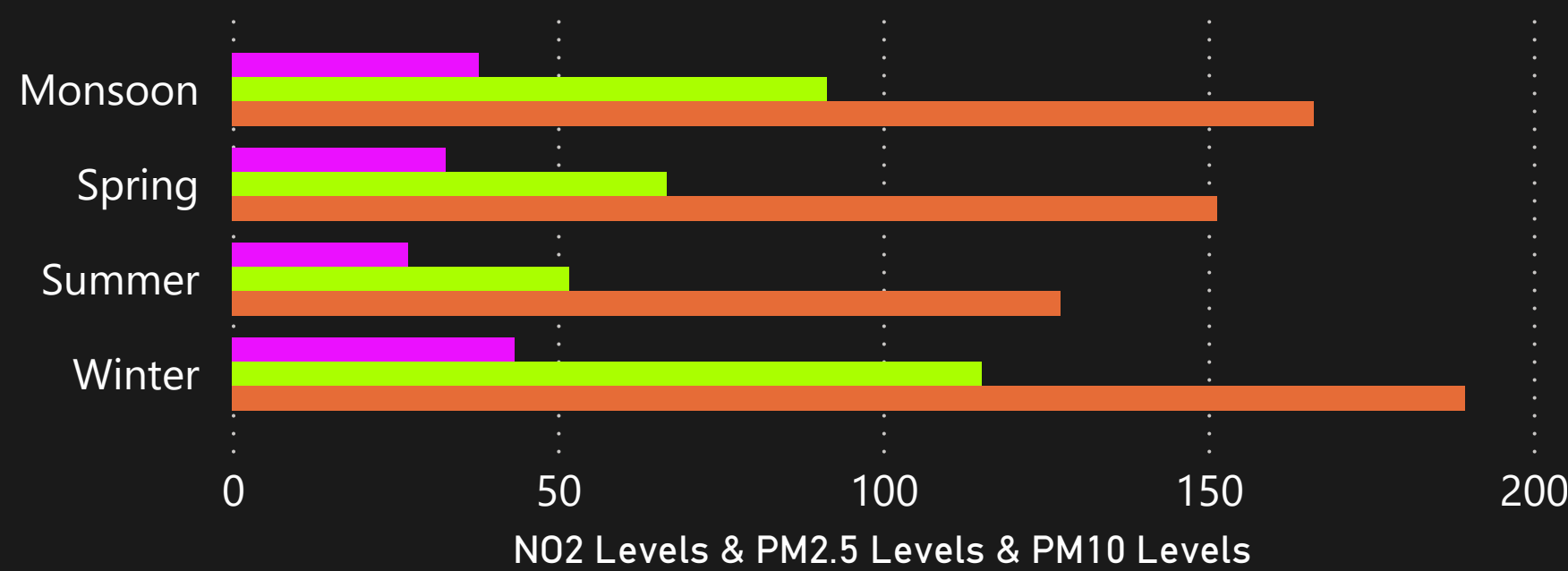
Lowest Pollution Hour

Winter

Most Polluted Season

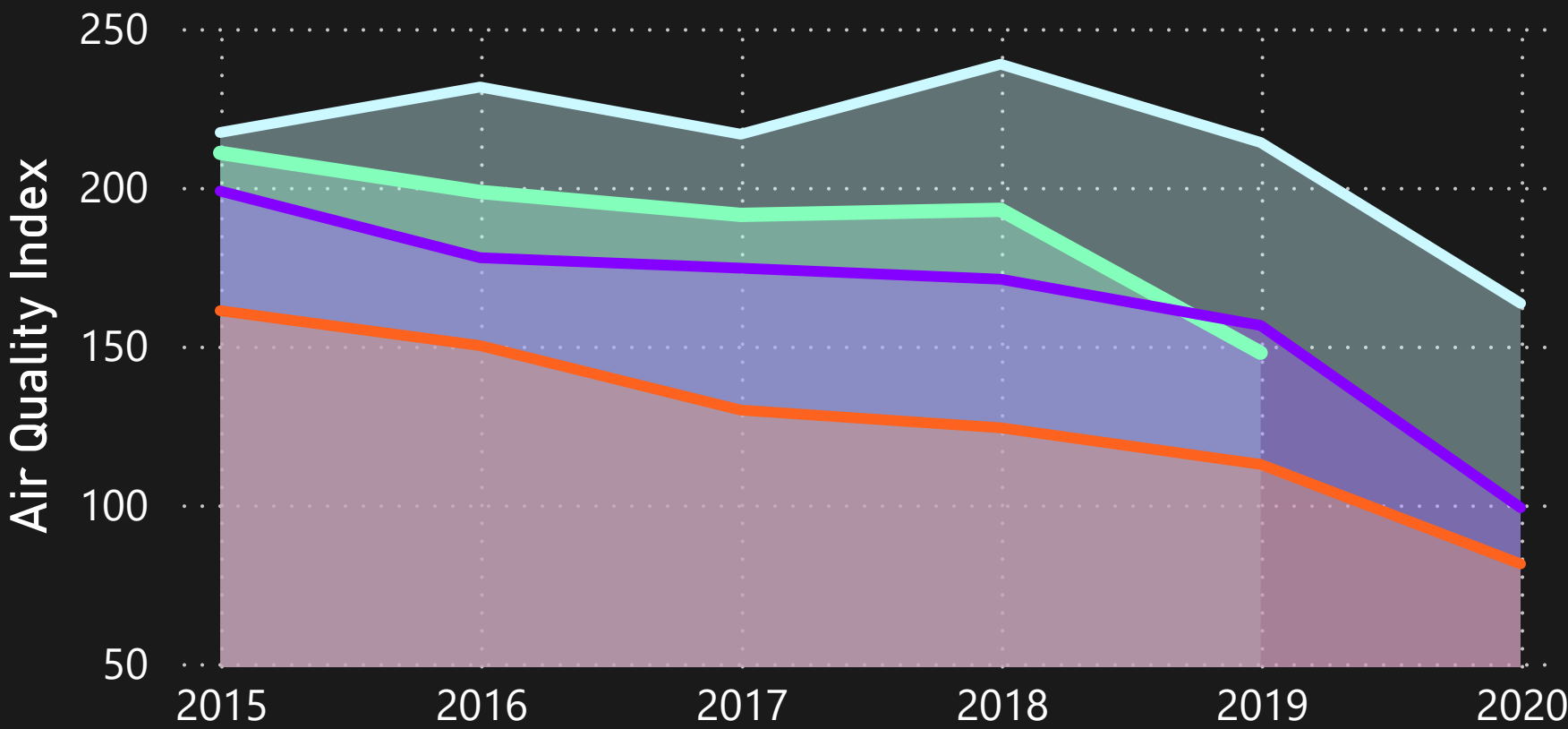
Seasonal Pollution Levels

Pollutant Type: ● NO₂ Levels ● PM2.5 Levels ● PM10 Levels



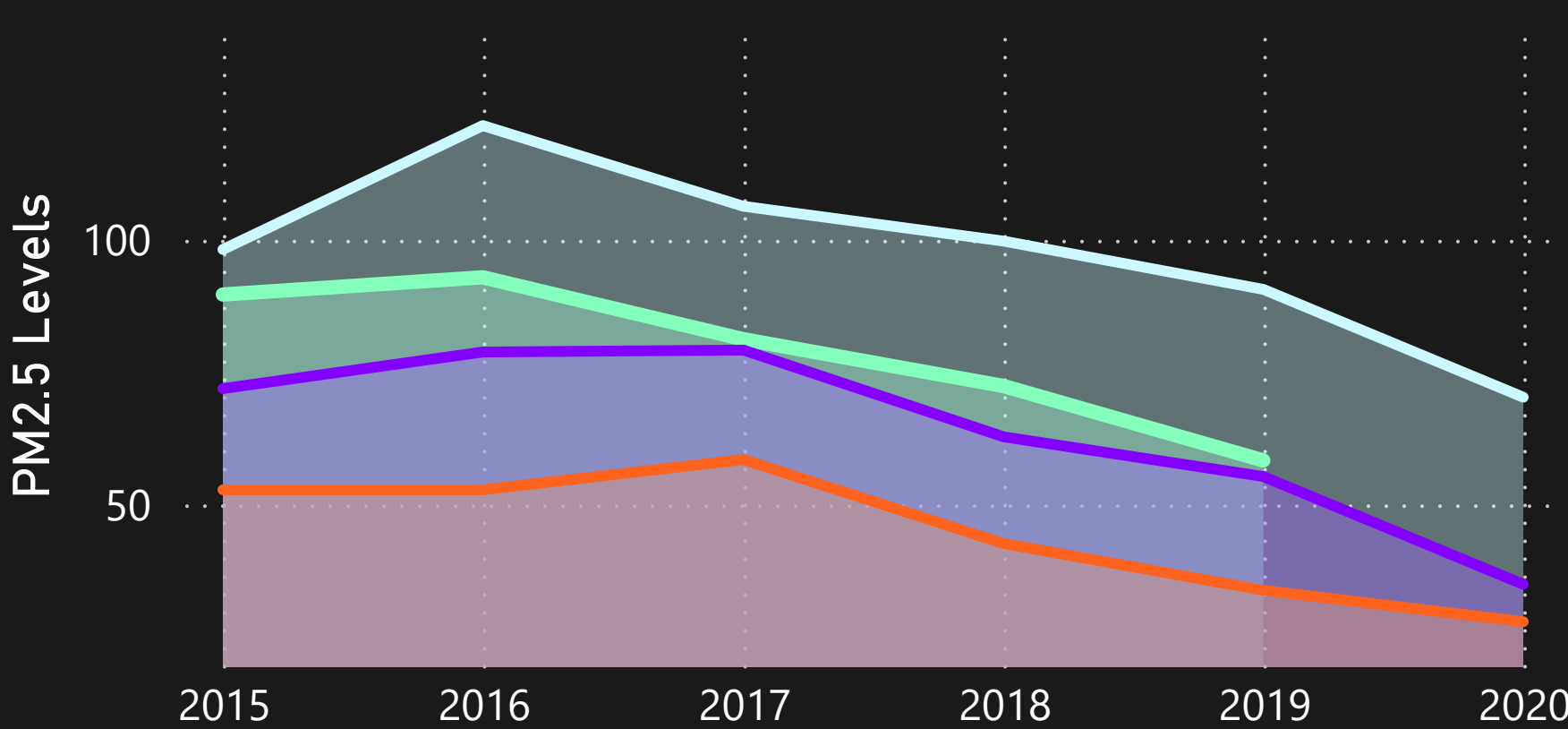
Seasonal AQI Trends Over the Years (2015-2020)

Season: ● Monsoon ● Spring ● Summer ● Winter



Seasonal PM2.5 Trends Over the Years (2015-2020)

Season: ● Monsoon ● Spring ● Summer ● Winter



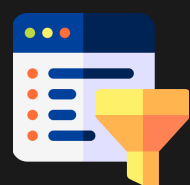
Discover how pollution fluctuates across different hours of the day and seasons, revealing peak pollution times and the impact of seasonal changes on air quality! 🕒 🌍 ❄️ 🔥



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TRAFFIC AND INDUSTRY IMPACT



FILTERS

Year

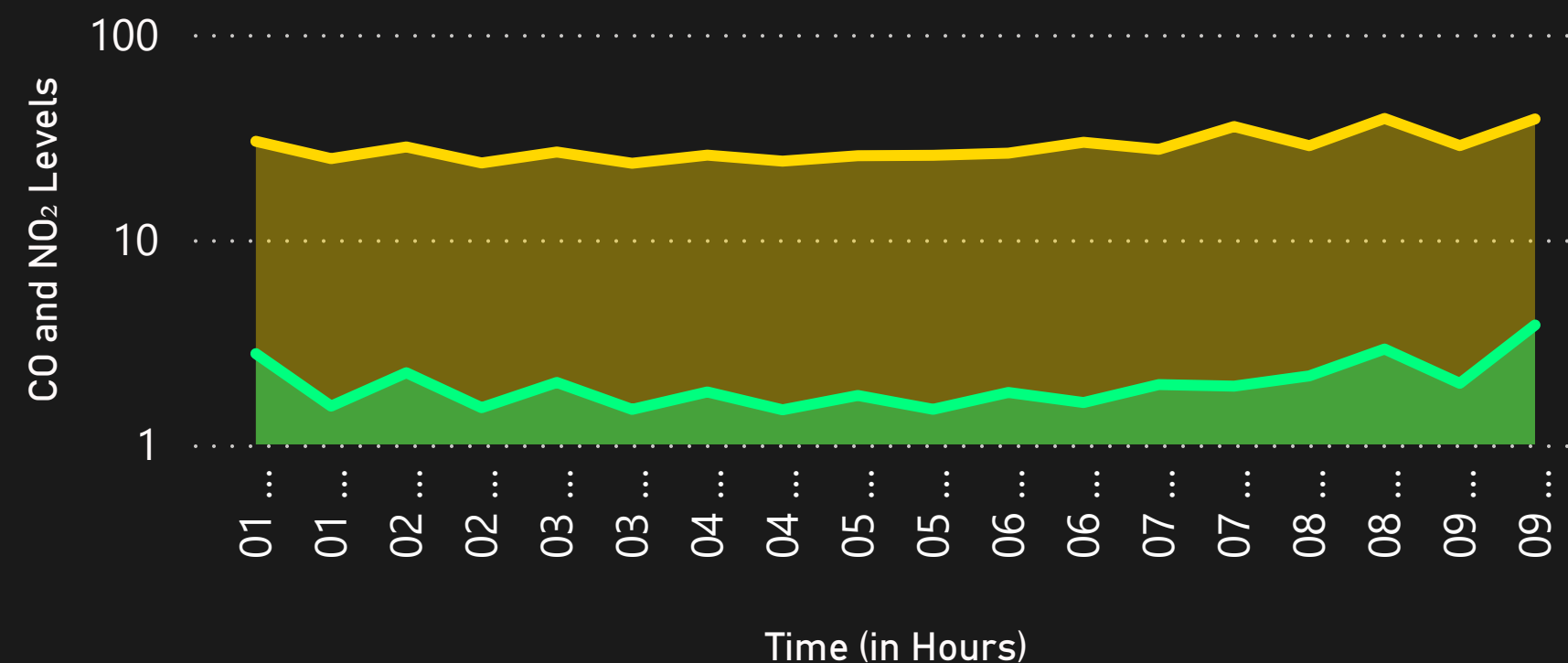
2015	2018
2016	2019
2017	2020

City

Ahmedabad	Bengaluru
Aizawl	Bhopal
Amaravati	Brajrajnagar
Amritsar	Chandigarh

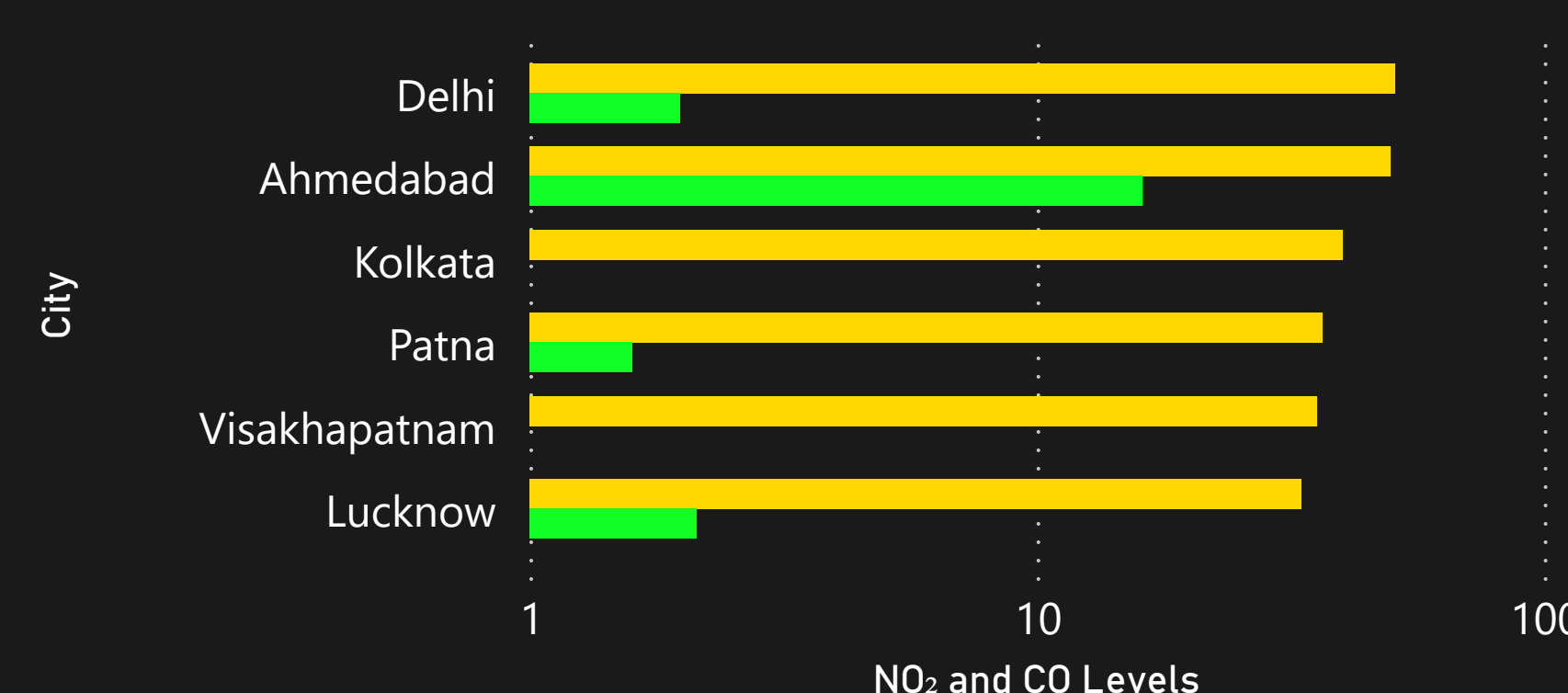
Hourly Trend of Traffic-Related Pollutants

Pollutant Type: ● NO₂ Levels ● CO Levels



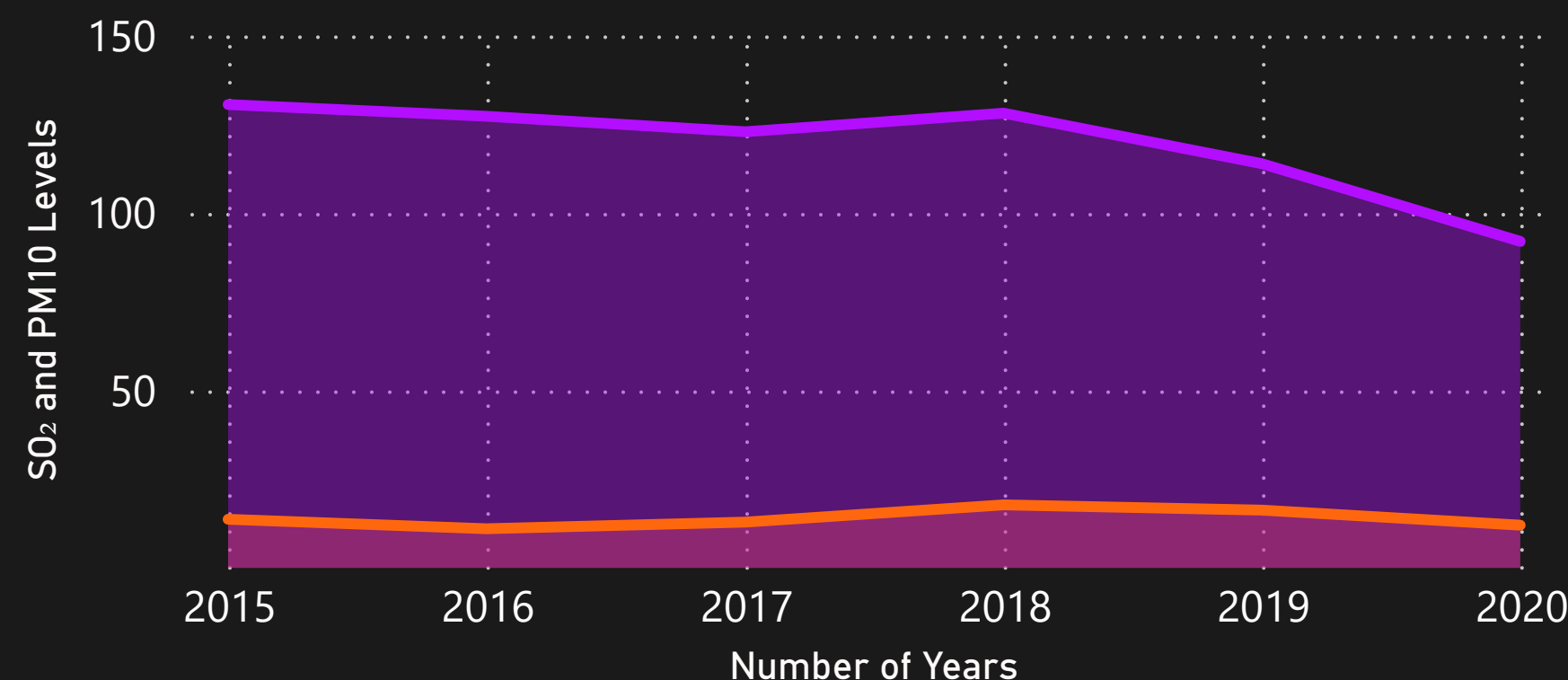
City-Wise Traffic Pollution Rankings

Pollutant Type: ● NO₂ Levels ● CO Levels



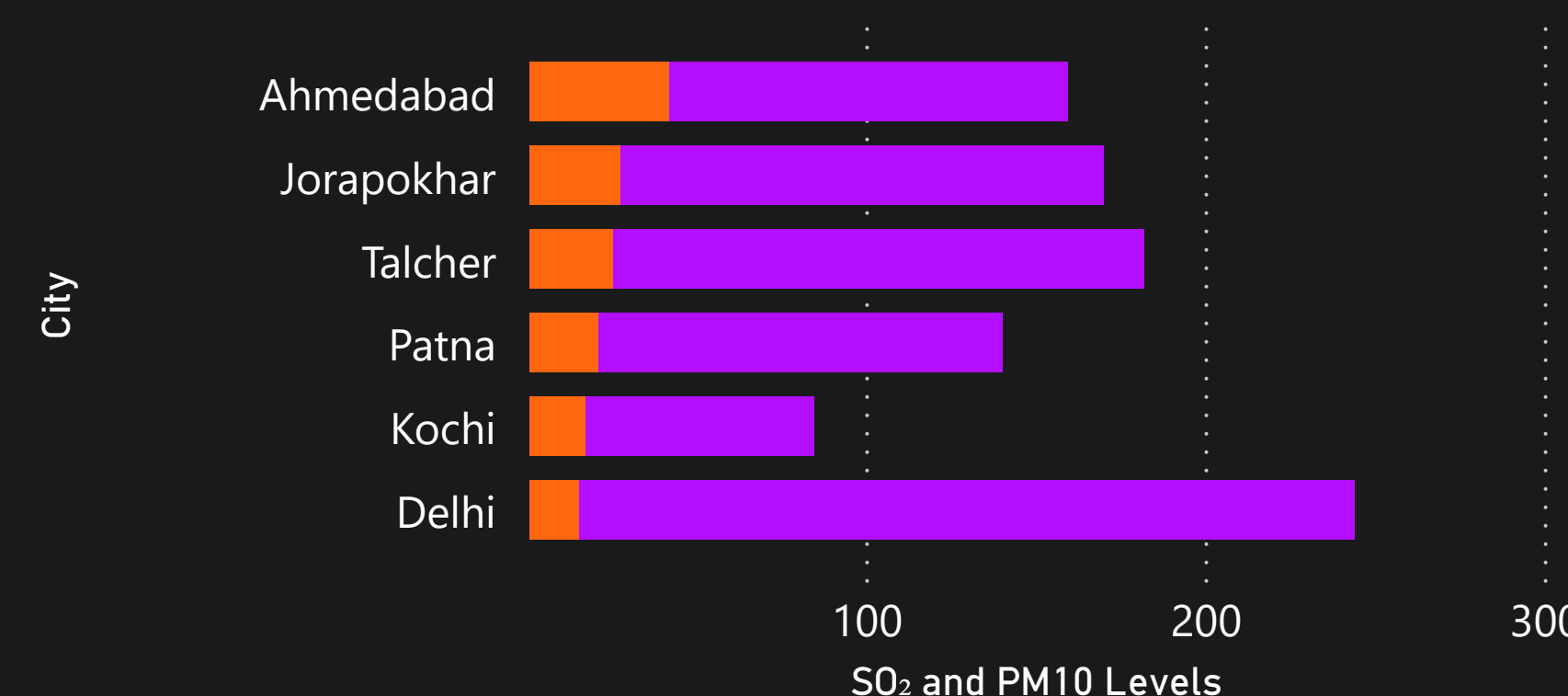
Industrial Pollutants Trends Over Time

Pollutant Type: ● SO₂ Levels ● PM10 Levels



City-Wise Industrial Pollution Contribution

Pollutant Type: ● SO₂ Levels ● PM10 Levels





POLICY INSIGHTS AND HEALTH RISKS



FILTERS

Date

1/1/2015



7/1/2020



AQI_Bucket

Good

Satisfactory

Moderate

Severe

Poor

Very Poor

Delhi

Top Traffic Polluted City

Ahmedabad

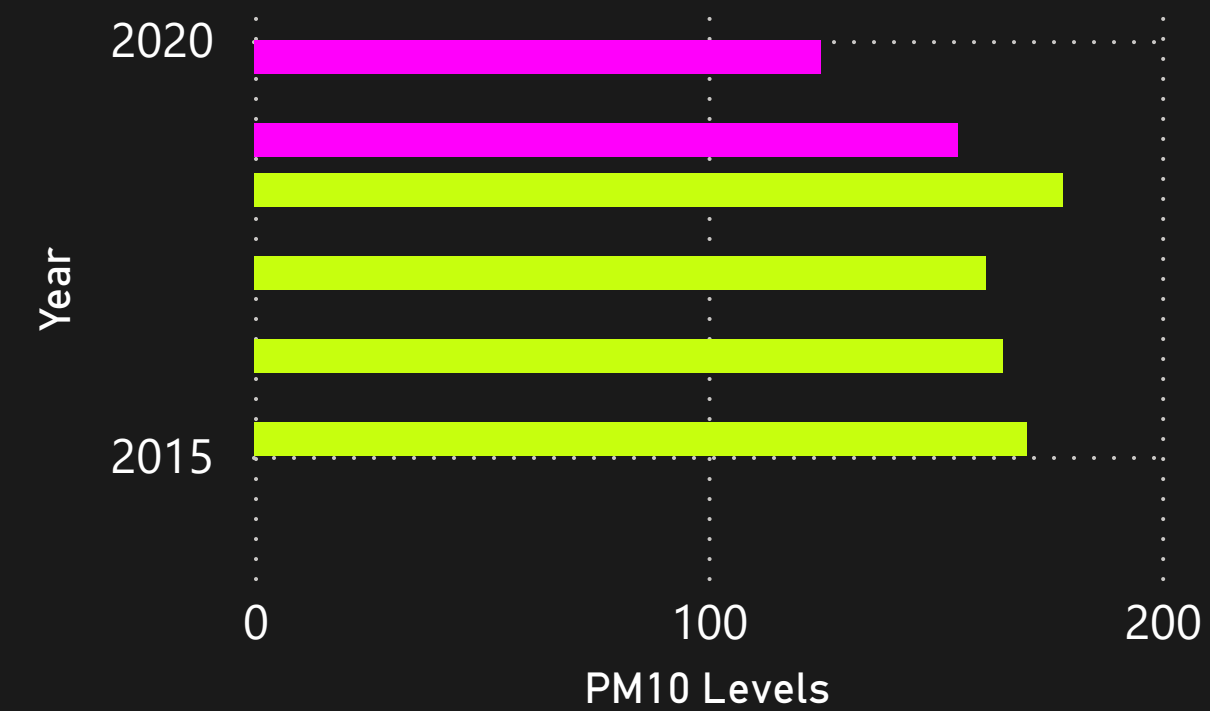
Top Industrial Polluted City

Amritsar

Most Improved City after NCAP

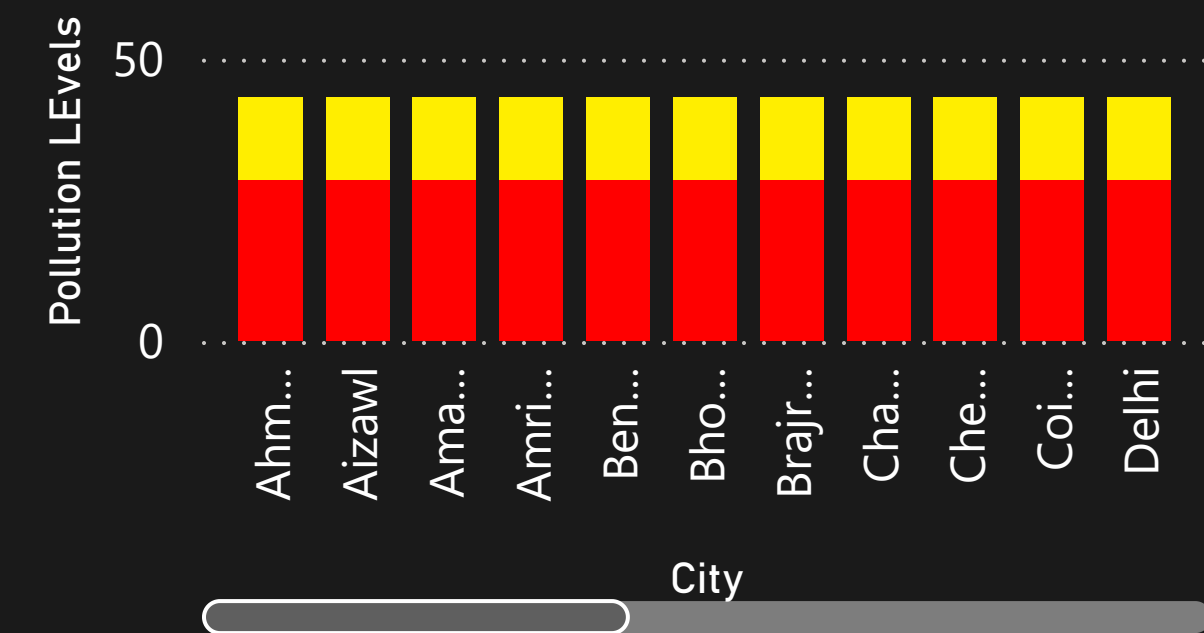
NCAP Before vs. After Analysis

PM10 Before NCAP Policy PM10 After NCAP Po...



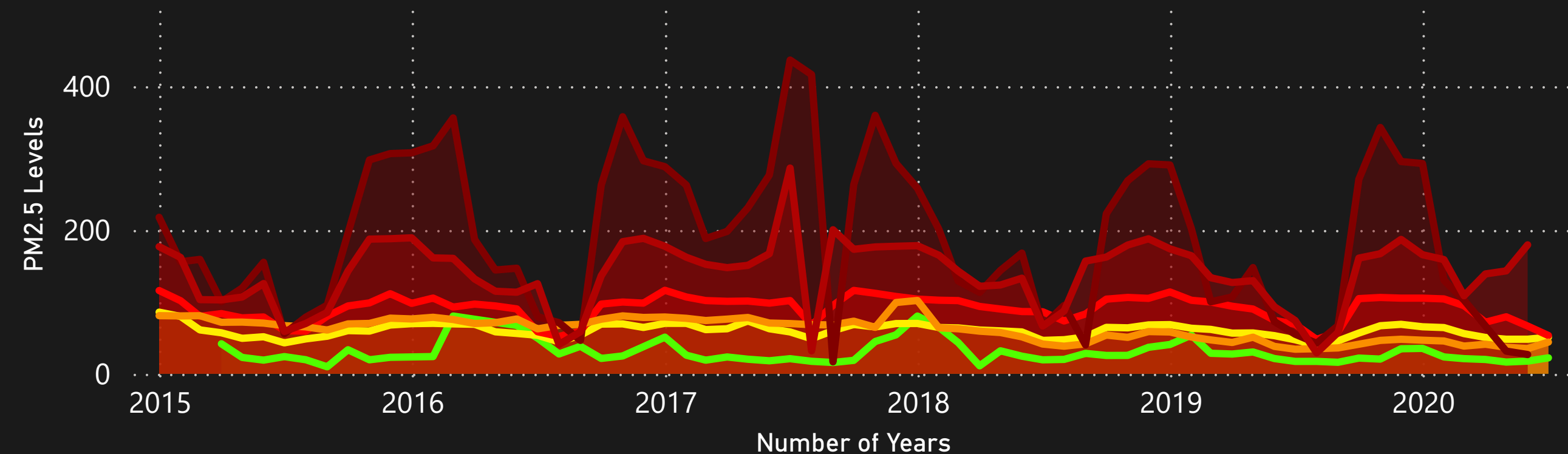
Impact of Traffic & Industrial Regulations

Traffic Pollution Industrial Pollution



Tracking Pollution Trends & Air Quality Impact Over Time

AQI_Bucket: Good Moderate Poor Satisfactory Severe Very Poor



Discover how policies impact pollution levels, identify high-risk cities, explore the link between air quality and public health and understand the policy effectiveness over time! 🌍 ⚖️ 🚦



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