## 1. List the top 5 and bottom 5 areas with highest average AQI. (Consider areas which contains data from last 6 months: December 2024 to May 2025)

| area     | Average of Avg_AQI | Data Points |
|----------|--------------------|-------------|
| Byrnihat | 284.19             | 118         |
| Delhi    | 238.92             | 150         |
| Hajipur  | 233.67             | 141         |
| Gurugram | 204.14             | 146         |
| Patna    | 199.65             | 150         |

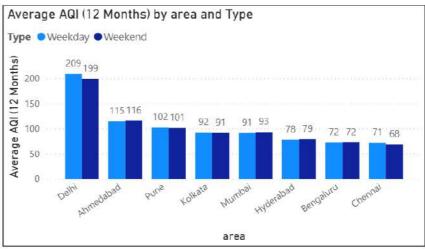
| area           | Avg AQI | data points |
|----------------|---------|-------------|
| Tirunelveli    | 33.31   | 129         |
| Palkalaiperur  | 42.79   | 117         |
| Madikeri       | 42.95   | 143         |
| Chamarajanagar | 44.81   | 130         |
| Thanjavur      | 45.51   | 115         |

2. Top 2 and bottom 2 pollutants for each state of southern India

| Тор               | Pollutants      | Bottom            | <b>Pollutants</b>                 |
|-------------------|-----------------|-------------------|-----------------------------------|
| Andra Pradesh     | PM10, PM2.5     | Andra Pradesh     | SO <sub>2</sub> , NO <sub>2</sub> |
| Kerala            | PM10, PM2.5     | Kerala            | SO <sub>2</sub> , NH <sub>3</sub> |
| <b>Tamil Nadu</b> | PM10, PM2.5     | <b>Tamil Nadu</b> | $NH_3,O_3$                        |
| Telengana         | PM10, PM2.5     | Telengana         | $NO_2,O_3$                        |
| Karnataka         | <b>PM10, CO</b> | Karnataka         | NH <sub>3</sub> , NO <sub>2</sub> |

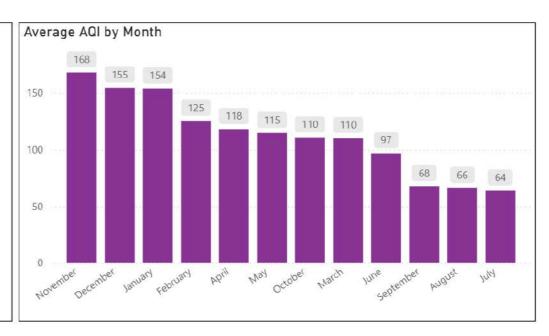
3. Does AQI improve on weekends vs weekdays in Indian metro cities (Delhi, Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Ahmedabad, Pune)? (Consider data from last 1 year)





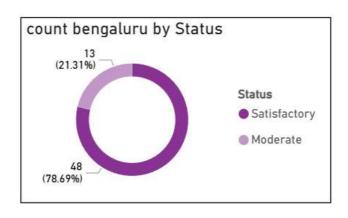
## 4. Which months consistently show the worst air quality across Indian states — (Consider top 10 states with high distinct areas)

| state          | count dist |
|----------------|------------|
| Rajasthan      | 34         |
| Maharashtra    | 31         |
| Karnataka      | 27         |
| Tamil Nadu     | 26         |
| Bihar          | 25         |
| Haryana        | 25         |
| Uttar Pradesh  | 20         |
| Odisha         | 16         |
| Madhya Pradesh | 15         |
| Andhra Pradesh | 9          |



5. For the city of Bengaluru, how many days fell under each air quality category (e.g., Good, Moderate, Poor, etc.) between March and May 2025?

| Status       | Days fell under each categor ▼ |  |
|--------------|--------------------------------|--|
| Satisfactory | 48                             |  |
| Moderate     | 13                             |  |
| Total        | 61                             |  |



## 7. List the top 5 states with high EV adoption and analyse if their average AQI is significantly better compared to states with lower EV adoption

| state         | EV Count<br>▼ | AvgAQI |
|---------------|---------------|--------|
| Uttar Pradesh | 921471        | 126.42 |
| Maharashtra   | 650823        | 105.33 |
| Karnataka     | 480191        | 62.67  |
| Tamil Nadu    | 329634        | 67.76  |
| Rajasthan     | 305605        | 127.99 |

| State                          | EV count | Avg AQI |
|--------------------------------|----------|---------|
| Jharkhand                      | 67695    | 164.94  |
| Himachal Pradesh               | 4963     | 160.26  |
| Chandigarh                     | 17888    | 141.56  |
| Tripura                        | 22631    | 126.70  |
| Punjab                         | 100630   | 117.85  |
| West Bengal                    | 98668    | 114.19  |
| Manipur                        | 1394     | 100.93  |
| Uttarakhand                    | 55704    | 87.90   |
| Nagaland                       | 84       | 80.46   |
| Jammu and Kashmir              | 30785    | 69.50   |
| Meghalaya                      | 1175     | 62.73   |
| Andaman and Nicobar<br>Islands | 165      | 57.71   |
| Puducherry                     | 10136    | 56.51   |
| Arunachal Pradesh              | 195      | 54.49   |
| Sikkim                         | 29       | 53.69   |
| Mizoram                        | 1095     | 47.25   |