Dallas
Community Air Management Program

Monthly Data Summary

September – November 2023

For Questions or Comments:
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Sensor Data Information

- Disclaimer

- When using data from D-CAMP, please note the following:

- The data presented on this website are not validated or verified

- The data does not come from regulatory monitors. This data cannot be used to infer violations of the the National Ambient Air Quality Standards (NAAQS) or other regulatory violations

- This data should be used with discretion

- Data from regulatory monitors is available here:
  https://www.tceq.texas.gov/airquality/monops

Data Guidance

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Low Level of Air Pollution	O_3 less than 35 ppb NO_2 less 50 ppb PM_{10} less than 75 µg/m³ $PM_{2.5}$ less than 17 µg/m³
Moderate Level of Air Pollution	O_3 higher than 35 ppb and less than 70 ppb NO_2 higher 50 ppb and less than 100 ppb PM_{10} higher than 75 µg/m³ and less than 150 µg/m³ $PM_{2.5}$ higher than 17 µg/m³ and less than 35 µg/m³
High Level of Air Pollution	O_3 higher than 70 ppb NO_2 higher 100 ppb PM_{10} higher than 150 µg/m³ $PM_{2.5}$ less than 35 µg/m³

Technical Information

Sensors Used in the Network

There are five AQMesh monitors currently operating in the network. These units use an optical light scattering sensor to measure particulates. They use electrochemical sensors to measure other pollutants. All AQMesh units measure particulate (PM), ozone (O_3), and nitrogen dioxide NO_2.

The AQMesh units also have sensors for ambient temperature, humidity, and barometric pressure. Extreme conditions of these factors can impact the accuracy of the sensors for all the measured pollutants. When the unit detects extreme conditions, it will cease to report one, or more, affected pollutants. Once it detects that the environmental conditions have returned to normal, reporting will resume.

Sensor Accuracy

- A primary goal of D-CAMP is to provide the most accurate data possible with the available technology. To meet this goal, all the sensors used in the network undergo a period of co-location before they are placed in the field.
- co-location refers to the process of operating a regulatory grade reference monitor (FRM/FEM) and non-reference monitor (air sensor) at the same time and location under real-world conditions for a defined evaluation period. Collocating air sensors with regulatory monitors can help evaluate the accuracy of the sensors by comparison of the two data sets.
- At the end of the co-location period, the data is compared, and correction factors are calculated for each pollutant and each sensor.
- These correction factors have been applied to the data in this report.
- This co-location process provides a more accurate view of the air quality than some networks, such as the Purple Air network, that do not use this procedure.

Larry Johnson Recreation Center
Data Summary September 2023

Larry Johnson Recreation Center - Sept
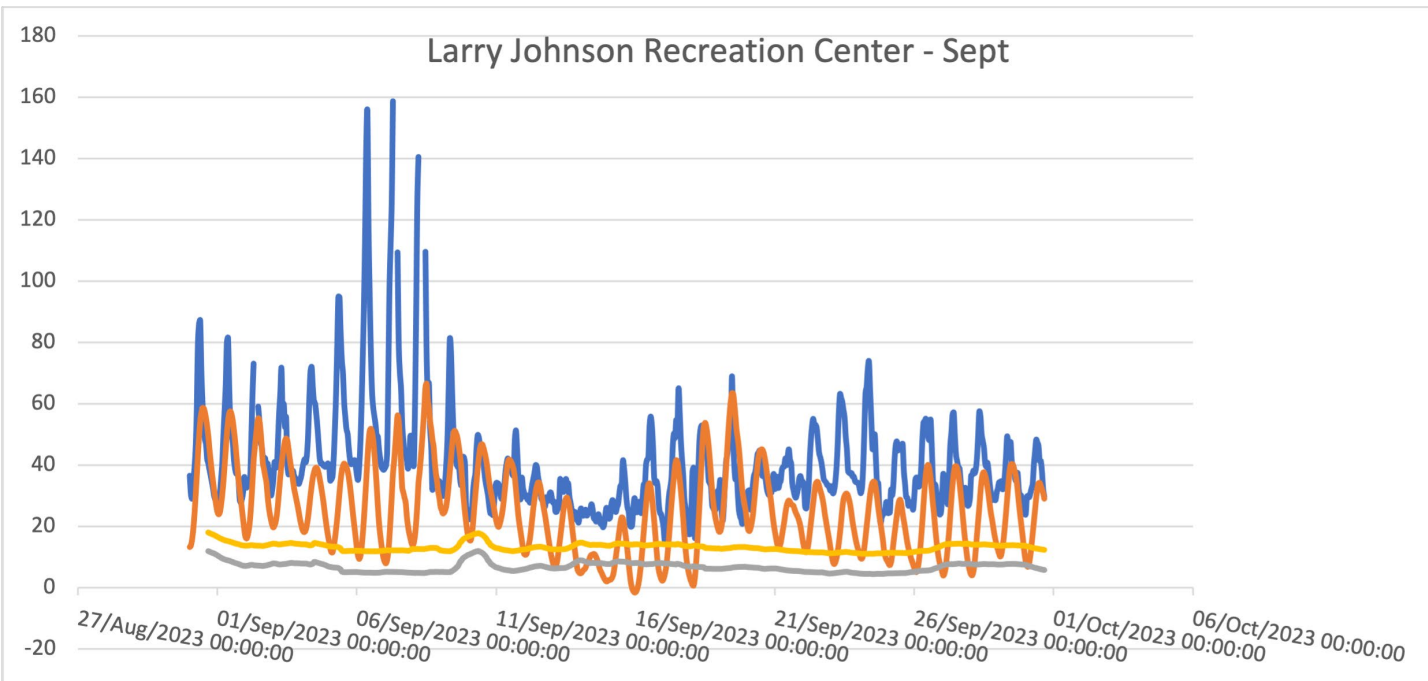
Data Summary

Larry Johnson Recreation Center (Sept)	NO_2 Hourly Average (ppb)	O_3 8-Hr Average (ppb)	$PM_{2.5}$ 24-Hr Average ($\mu g/m^3$)	PM_{10} 24-Hr Average ($\mu g/m^3$)
Average Concentration	40.1	25.4	6.7	13.2
Maximum Observed Concentration	158.8	66.5	12.0	17.7

5000 Scyene Road
Data Summary September 2023
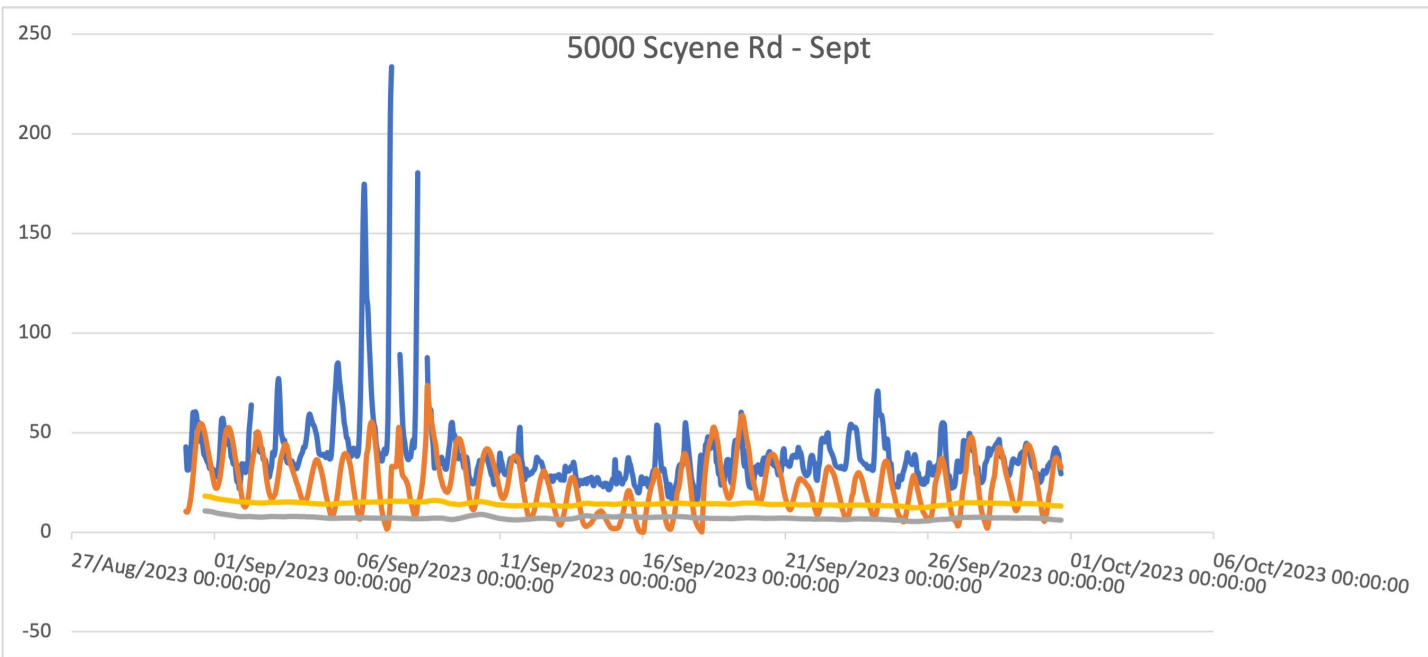
5000 Scyene Rd - Sept

Data Summary

5000 Scyene Road (Sept)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (µg/m^3)	PM$_{10}$ 24-Hr Average (µg/m^3)
Average Concentration	38.5	23.9	7.1	14.3
Maximum Observed Concentration	233.5	72.9	8.9	15.9

South Central Park
Data Summary September 2023

South Central Park - Sept
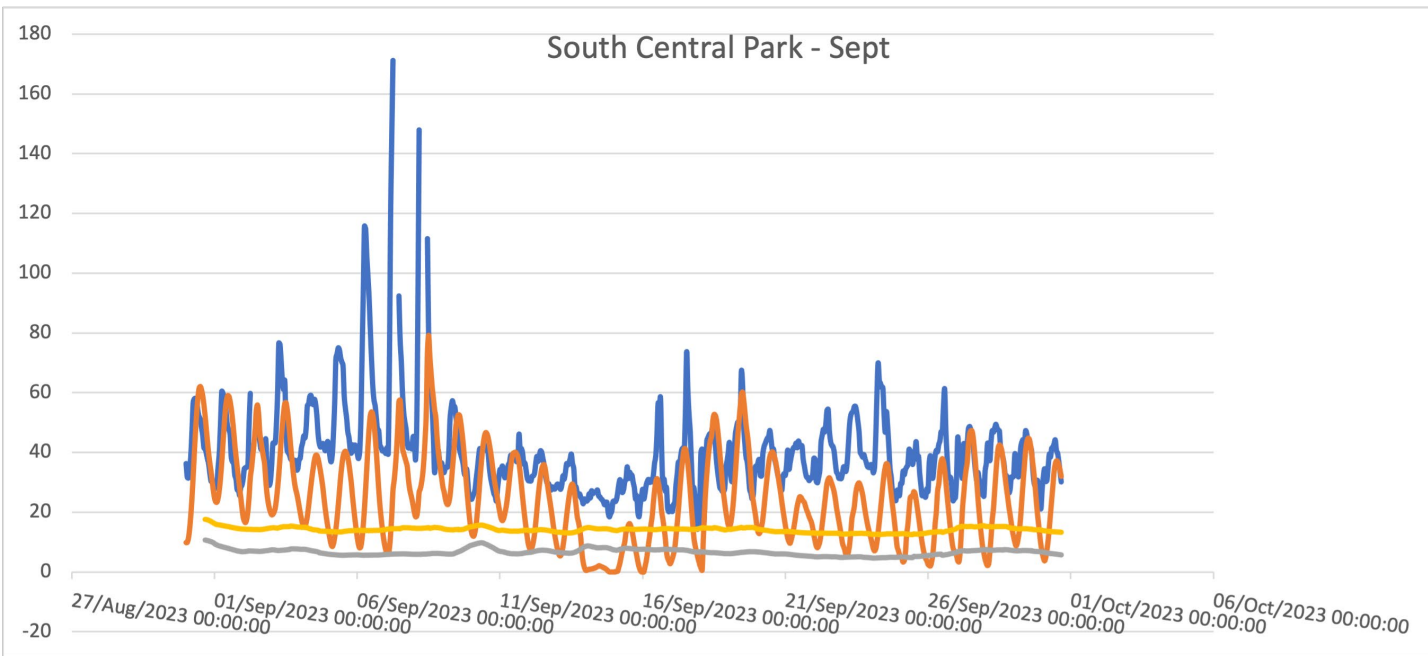
Data Summary

South Central Park (Sept)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (µg/m^3)	PM$_{10}$ 24-Hr Average (µg/m^3)
Average Concentration	39.9	24.4	6.7	14.1
Maximum Observed Concentration	171.2	79.1	9.8	15.7

West Dallas Multipurpose Center
Data Summary September 2023
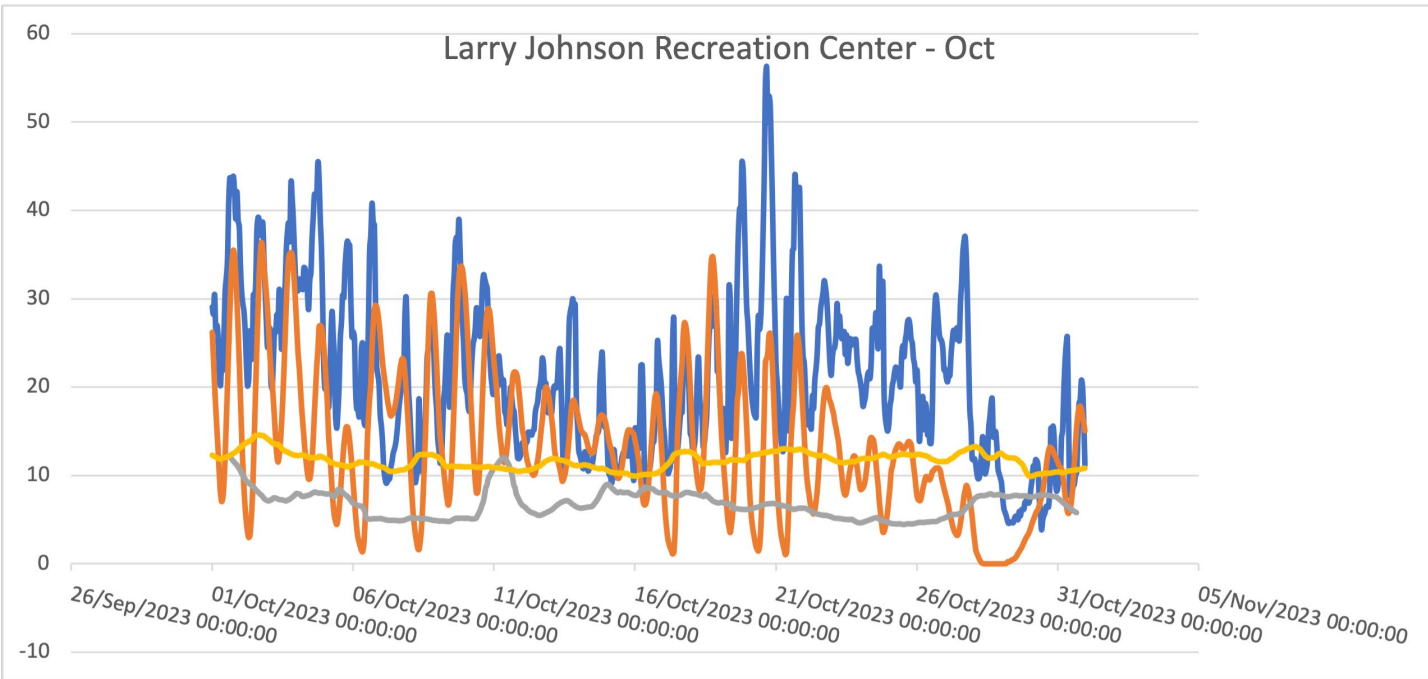

West Dallas Multipurpose Center- Sept
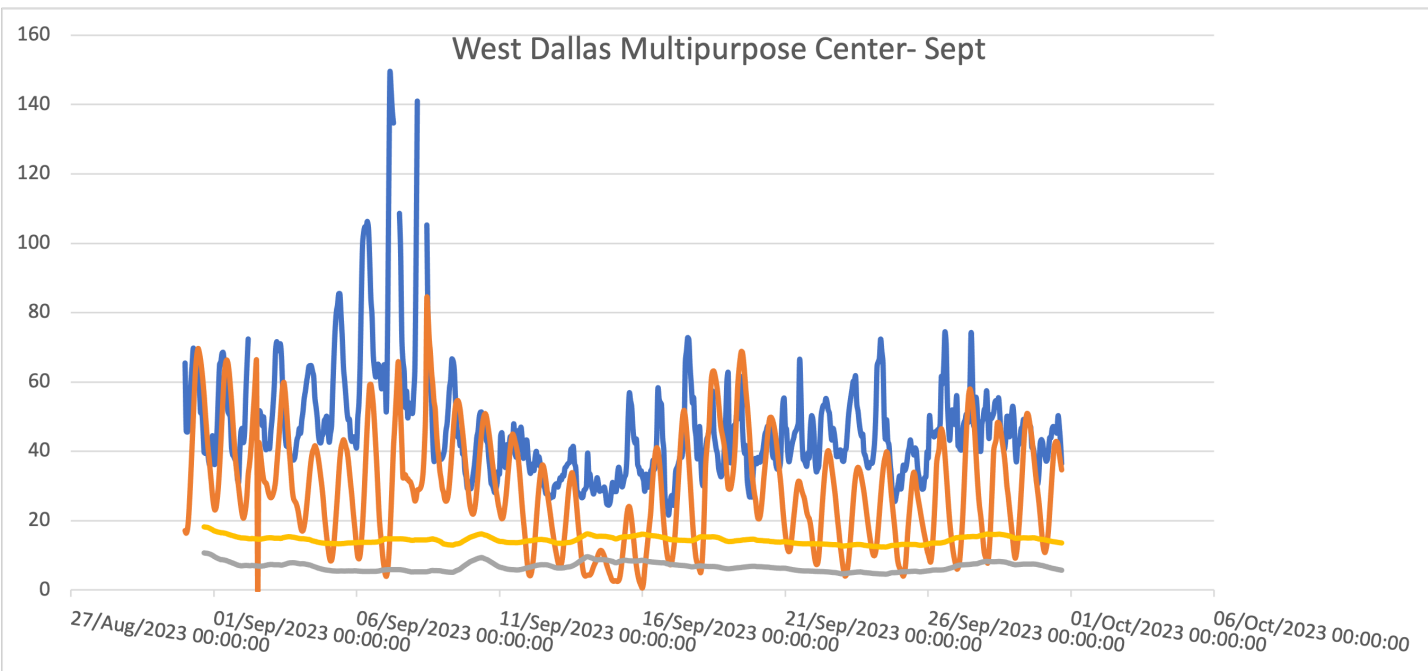
Data Summary

West Dallas Multipurpose Center (Sept)	NO_2 Hourly Average (ppb)	O_3 8-Hr Average (ppb)	$PM_{2.5}$ 24-Hr Average ($\mu g/m^3$)	PM_{10} 24-Hr Average ($\mu g/m^3$)
Average Concentration	46.1	29.0	6.7	14.4
Maximum Observed Concentration	149.0	84.1	9.6	16.2

# Larry Johnson Recreation Center
Data Summary October 2023

Larry Johnson Recreation Center - Oct

Data Summary

Larry Johnson Recreation Center (Oct)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (µg/m^3)	PM$_{10}$ 24-Hr Average (µg/m^3)
Average Concentration	21.4	13.6	4.7	11.7
Maximum Observed Concentration	56.3	36.4	7.9	14.6

5000 Scyene Road
Data Summary October 2023
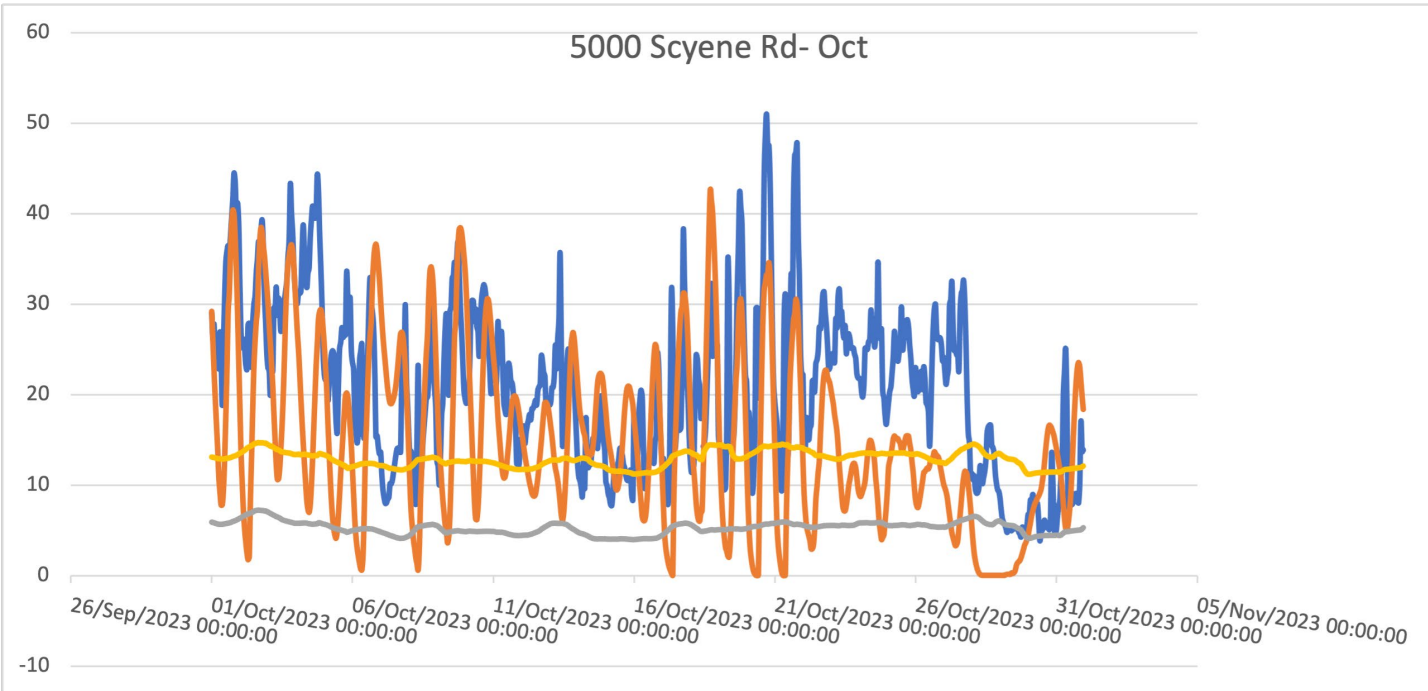
5000 Scyene Rd- Oct

Data Summary

5000 Scyene Road (Oct)	NO_2 Hourly Average (ppb)	O_3 8-Hr Average (ppb)	$PM_{2.5}$ 24-Hr Average ($\mu g/m^3$)	PM_{10} 24-Hr Average ($\mu g/m^3$)
Average Concentration	21.1	15.1	5.3	12.9
Maximum Observed Concentration	51.0	42.6	7.2	14.7

South Central Park
Data Summary October 2023

South Central Park - Oct
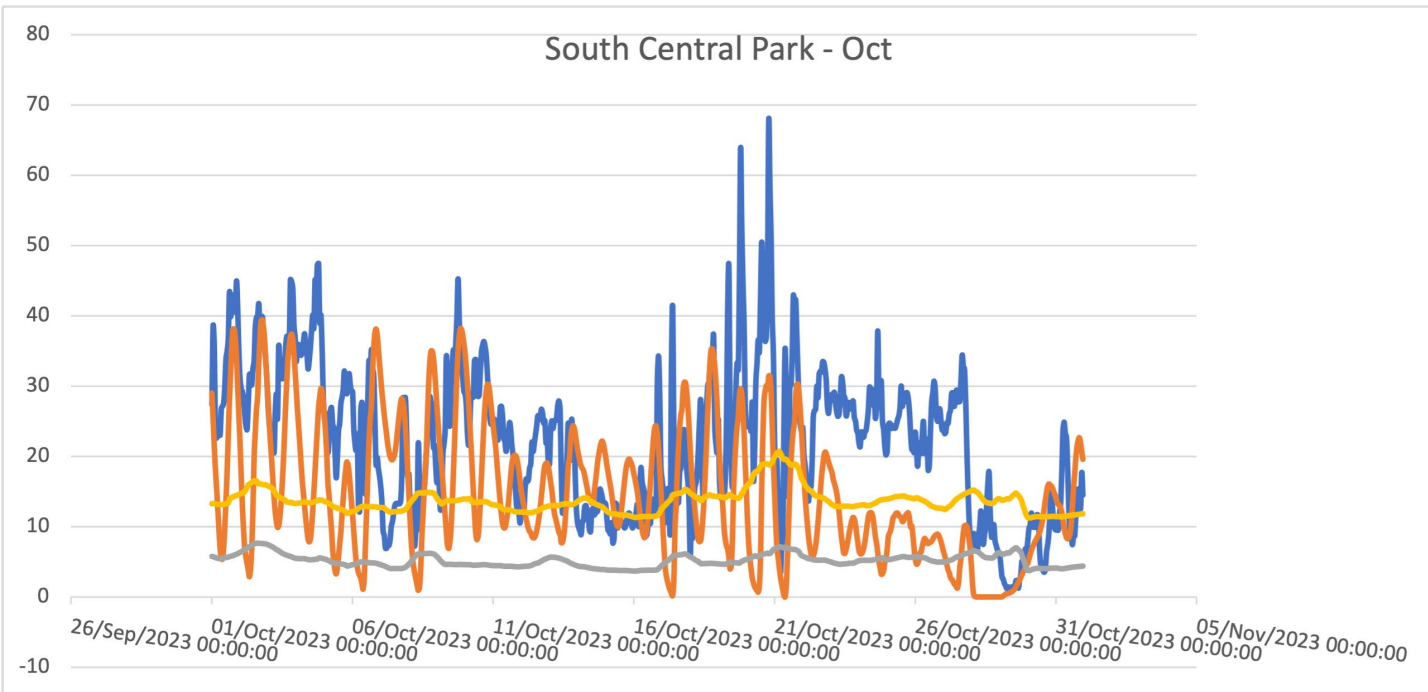
Data Summary

South Central Park (Oct)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (µg/m³)	PM$_{10}$ 24-Hr Average (µg/m³)
Average Concentration	22.4	14.7	5.1	13.7
Maximum Observed Concentration	67.8	39.4	7.6	20.7

# West Dallas Multipurpose Center
Data Summary October 2023

West Dallas Multipurpose Center - Oct
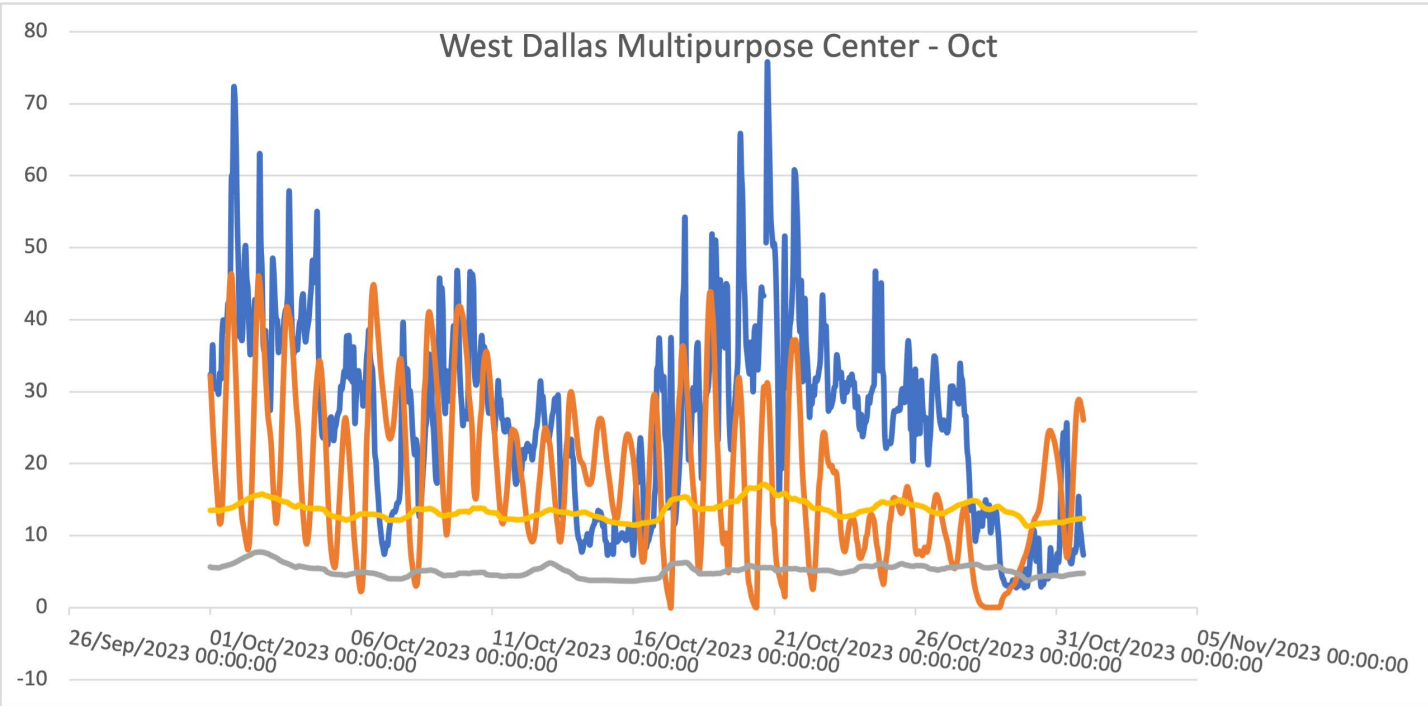
Data Summary

West Dallas Multipurpose Center (Oct)	NO_2 Hourly Average (ppb)	O_3 8-Hr Average (ppb)	$PM_{2.5}$ 24-Hr Average (µg/m³)	PM_{10} 24-Hr Average (µg/m³)
Average Concentration	26.8	18.1	5.2	13.5
Maximum Observed Concentration	75.2	46.3	7.8	17.1

# Larry Johnson Recreation Center
Data Summary November 2023

Larry Johnson Recreation Center - Nov
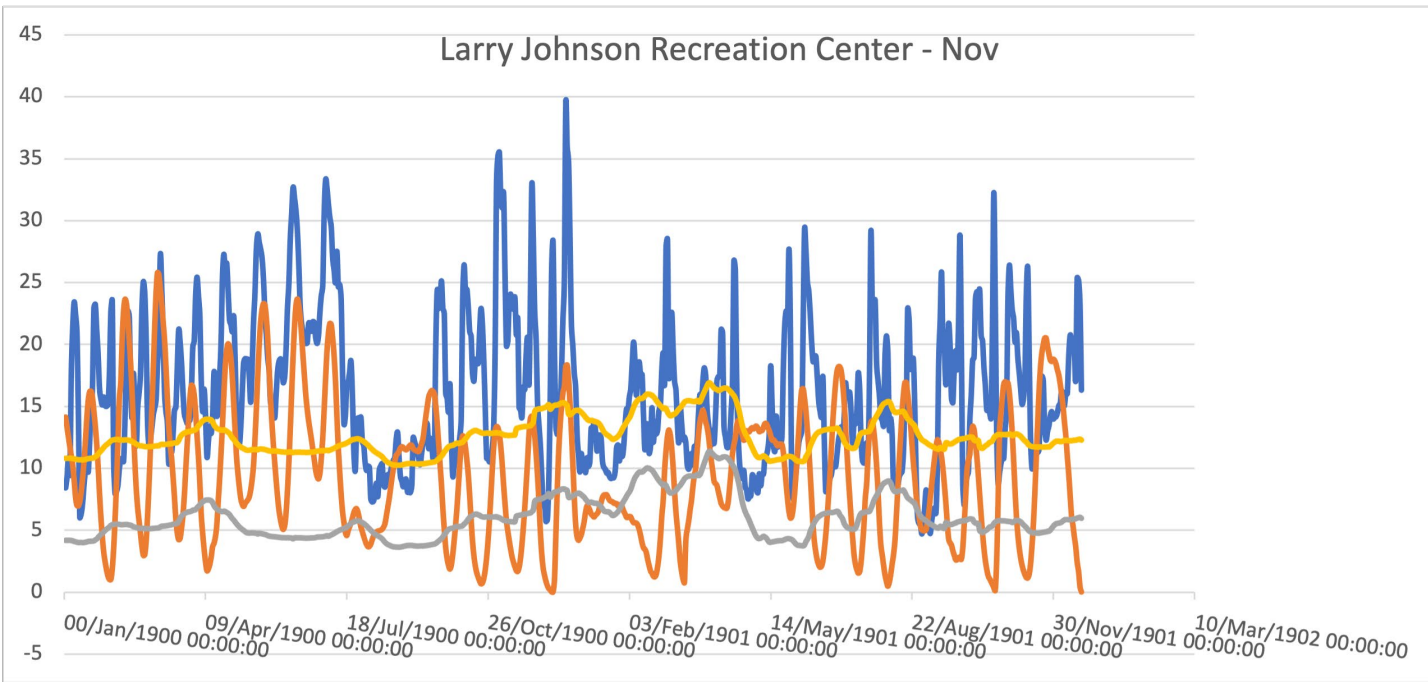
Data Summary

Larry Johnson Recreation Center (Nov)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (μg/m³)	PM$_{10}$ 24-Hr Average (μg/m³)
Average Concentration	16.1	9.4	6.0	12.6
Maximum Observed Concentration	39.4	25.8	11.4	16.9

5000 Scyene Road
Data Summary November 2023
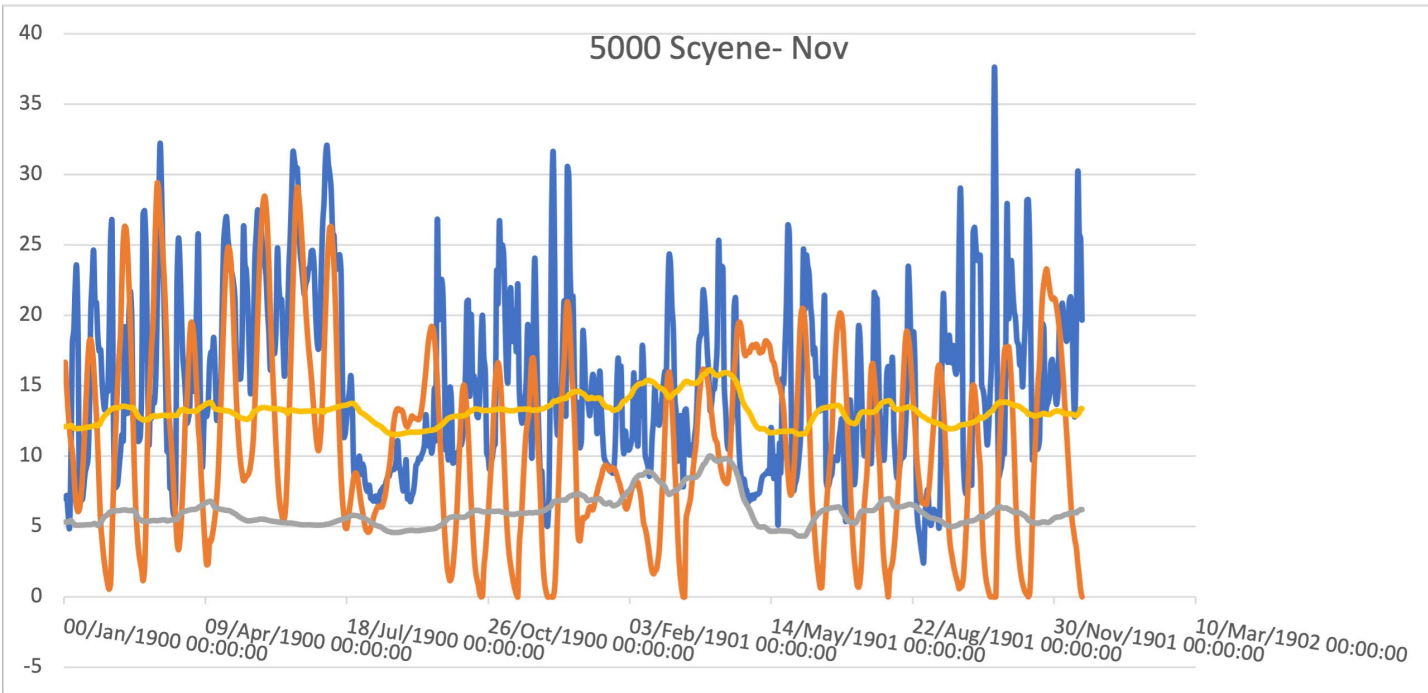
5000 Scyene- Nov

Data Summary

5000 Scyene Road (Nov)	NO₂ Hourly Average (ppb)	O₃ 8-Hr Average (ppb)	PM₂.₅ 24-Hr Average (µg/m³)	PM₁₀ 24-Hr Average (µg/m³)
Average Concentration	15.2	10.8	6.0	13.2
Maximum Observed Concentration	37.4	29.4	10.0	16.1

South Central Park
Data Summary November 2023

South Central Park - Nov
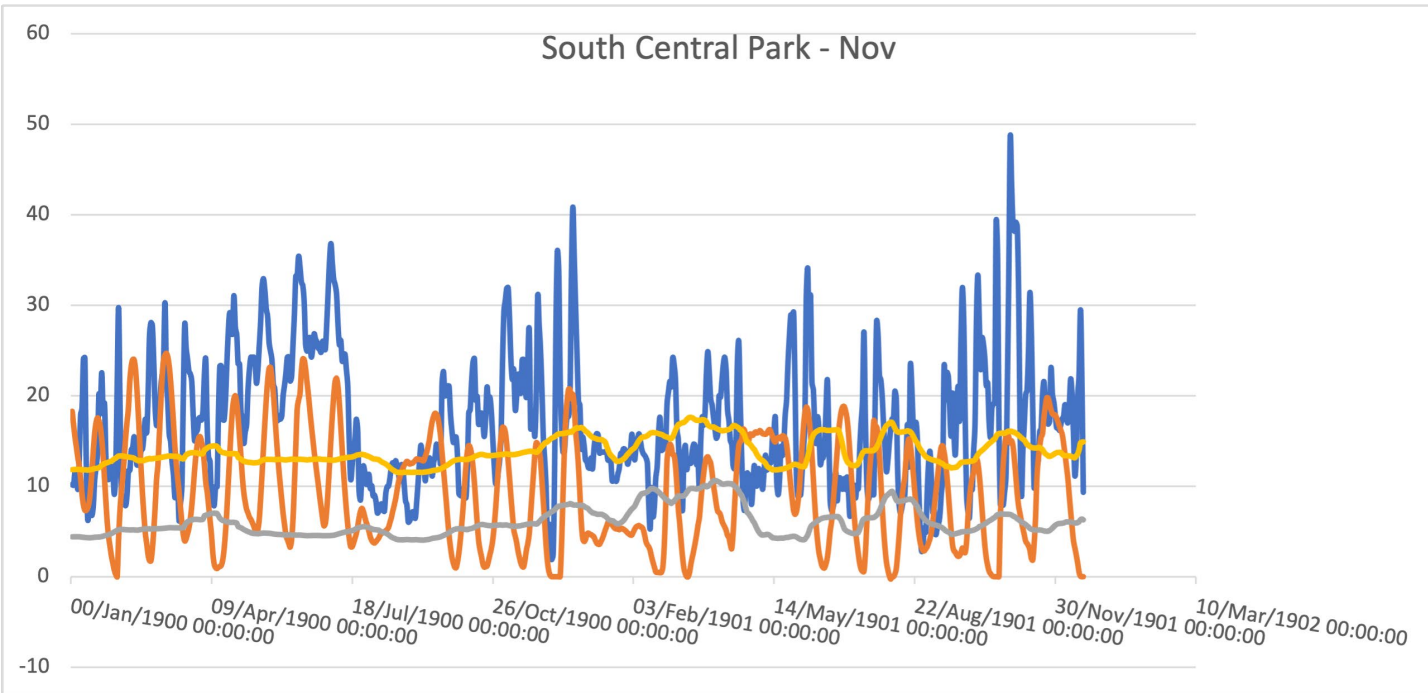
Data Summary

South Central Park (Nov)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (µg/m^3)	PM$_{10}$ 24-Hr Average (µg/m^3)
Average Concentration	17.0	9.3	6.0	13.8
Maximum Observed Concentration	48.5	24.7	10.6	17.6

West Dallas Multipurpose Center
Data Summary November 2023

West Dallas Multipurpose Center - Nov
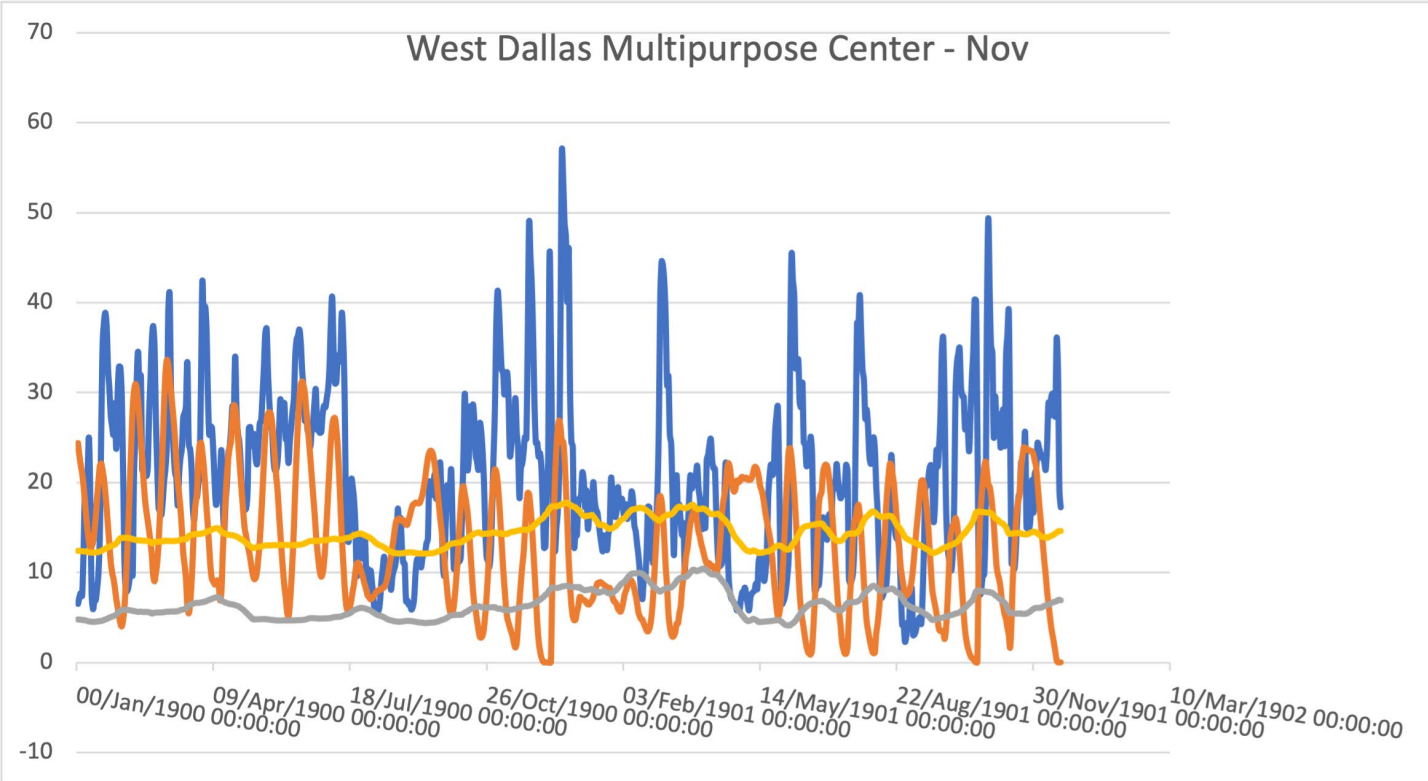
Data Summary

West Dallas Multipurpose Center(Nov)	NO$_2$ Hourly Average (ppb)	O$_3$ 8-Hr Average (ppb)	PM$_{2.5}$ 24-Hr Average (µg/m^3)	PM$_{10}$ 24-Hr Average (µg/m^3)
Average Concentration	20.7	13.2	6.3	14.3
Maximum Observed Concentration	56.8	33.6	10.4	17.8

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Notes - September

Larry Johnson
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

5000 Scyene Road
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

South Central Park
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

W Dallas Multipurpose
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

Notes - October

Larry Johnson
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

5000 Scyene Road
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

South Central Park
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

W Dallas Multipurpose
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

Notes - November

Larry Johnson
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

5000 Scyene Road
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

South Central Park
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

W Dallas Multipurpose
- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low