

Department of Environmental Conservation's Air Monitoring Program Community-Based Air Monitoring Project

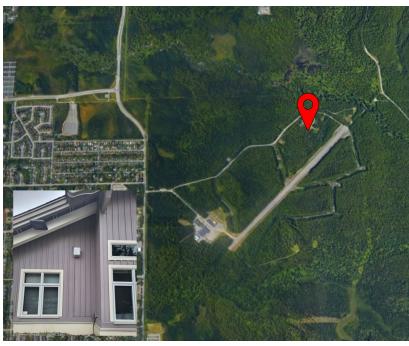
2024-25 Winter Season Air Quality Report for BLM - Campbell Creek Science Center, Anchorage, Alaska

The QuantAQ MODULAIR[™] sensor at the Campbell Creek Science Center (5600 Science Center Dr, Anchorage, AK 99507) was installed on 05/03/2024. Due to technical issues, the original sensor was removed and replaced on 6/18/2024.

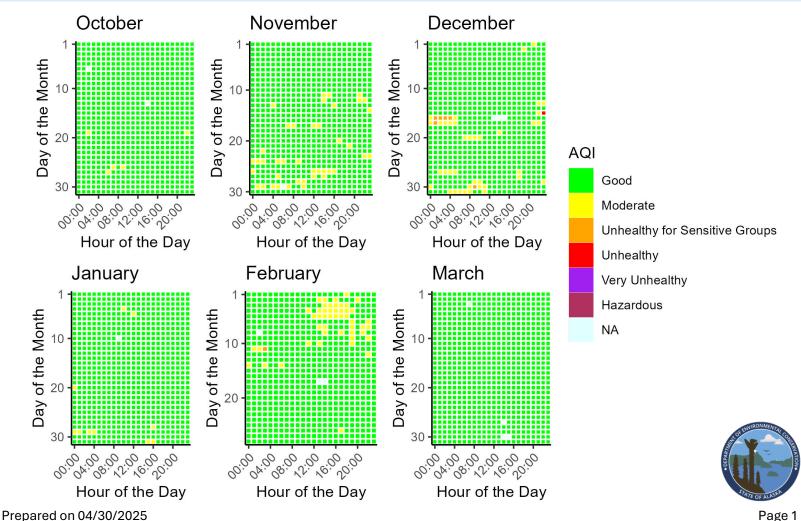
The sensor measures for carbon monoxide (CO), ozone (O_3) , nitrogen oxide (NO), nitrogen dioxide (NO_2) , particulate matter $(PM_{2.5} \text{ and } PM_{10})$, temperature (°C), and relative humidity (RH). Data is collected every minute and is then processed into hourly averages.

The replacement sensor at Campbell Creek Science Center has run well since its installation in June of 2024; there have been no physical issues with the sensor.

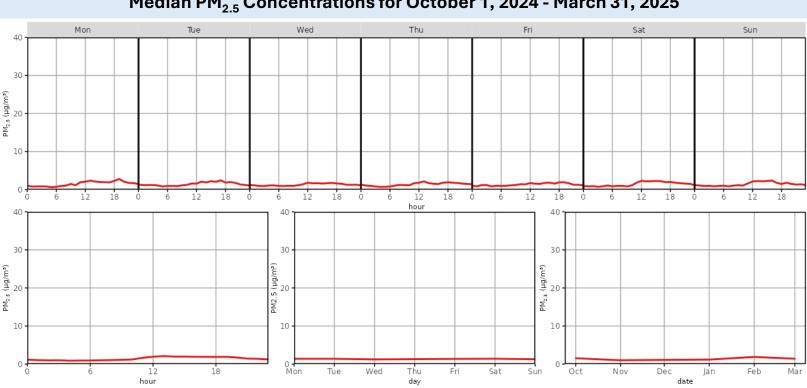
This data report covers the date range of October 1, 2024, to March 31, 2025.



Daily PM_{2.5} Air Quality Index (AQI) for October 1, 2024 - March 31, 2025



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Median PM_{2.5} Concentrations for October 1, 2024 - March 31, 2025

Descriptive Statistics of Air Pollutants*

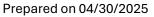
Parameter	1-hr PM _{2.5} (µg/m³)	24-hr PM _{2.5} (µg/m³)	1-hr PM ₁₀ (µg/m³)**	24-hr PM ₁₀ (µg/m³)**	1-hr O ₃ (ppb)	1-hr NO₂ (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
Min								
	0.02	0.08	0.00	1.04	9.40	3.64	1.40	0.19
Mean								
	2.32	2.26	13.94	13.13	23.71	22.10	5.70	0.26
1 st Max								
	56.39	7.98	849.00	92.62	52.80	35.04	1351.89	0.60
2 nd Max								
	54.25	7.69	703.00	85.92	52.60	34.47	936.81	0.60

Data Discussion

Campbell Creek Science Center's PM_{2.5} ambient air quality for the winter 2024-25 season fell mostly in the "good" range of the Air Quality Index (AQI; more information about AQI is provided on page 3), with several days in December and February reaching the "moderate" or "unhealthy for sensitive groups" AQI range. Diurnal patterns show higher concentrations of PM_{2.5} in the afternoon and early evenings, and little variability across different days of the week. From October to March, February showed highest PM_{2.5} concentrations, with several hours over consecutive days reaching the "moderate" AQI range.

* These statistics are based on preliminary data readings and are intended to provide a brief overview of sensor activity. Finalized data may be obtained upon request and through our annual statistical reports. Data from the community sensor network is non-regulatory and not comparable to the EPA's National Ambient Air Quality Standards (NAAQS; more information about the EPA NAAQS is provided on page 3).

** PM₁₀ particle sensors are influenced by weather events such as fog and snow due to hygroscopic effects, creating false maximum values that do not pose health risks.



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Data Access

To access historical data for your community's sensor, please email a request to: <u>AMQA-Data-Request@alaska.gov</u>. Data will be provided in Excel or .csv format.

Questions or Comments?

Please contact us!

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