

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

2024-25 Winter Season Air Quality Report for Wrangell, Alaska

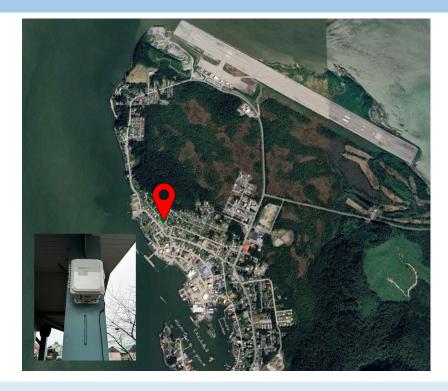
The QuantAQ MODULAIR[™] sensor in Wrangell (124 2nd Street, Wrangell, AK 99929) was installed on 02/01/2024.

The sensor measures for carbon monoxide (CO), ozone (O_3) , nitrogen oxide (NO), nitrogen dioxide (NO₂), particulate matter (PM_{2.5} and PM₁₀), temperature (°C), and relative humidity (RH). Data is collected every minute and is then processed into hourly averages.

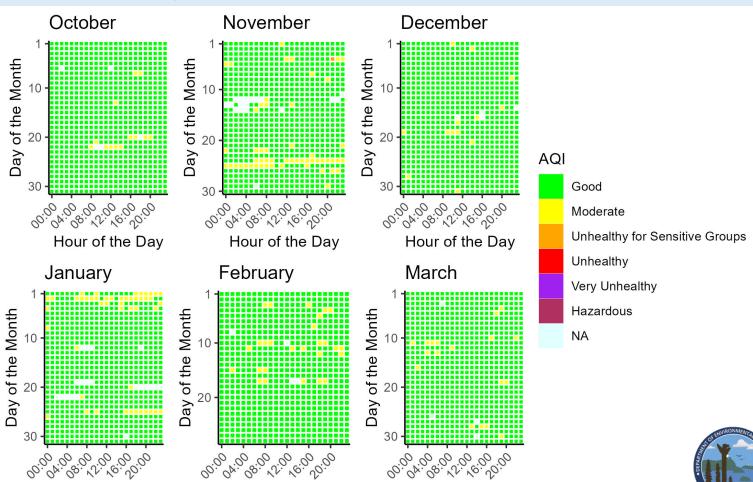
The sensor in Wrangell has run well since its installation in February of 2024; there have been no physical issues with the sensor.

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

Hour of the Day



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



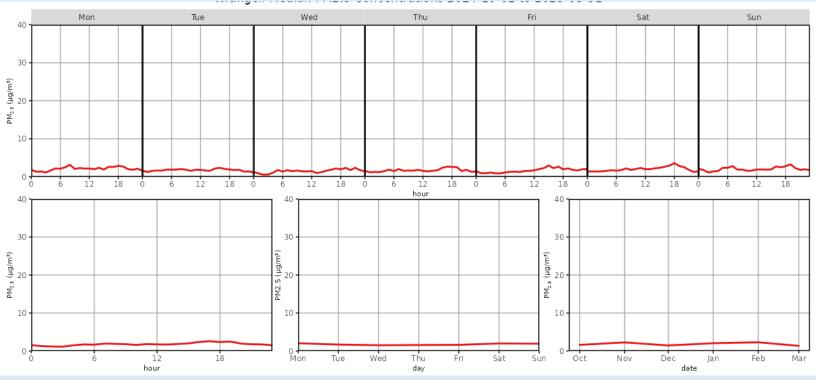
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Hour of the Day

Hour of the Day

2024-25 Winter Season Air Quality Report for Wrangell

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



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 NO ₂ (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
Min								
	0.04	0.56	0.00	1.00	7.76	1.70	0.33	0.20
Mean								
	2.75	2.70	17.57	17.11	32.51	18.94	2.22	0.30
1 st Max								
	35.89	13.23	688.00	175.25	51.59	30.35	5.05	0.80
2 nd Max								
	33.39	12.02	515.00	144.25	51.08	28.72	4.79	0.70

Data Discussion

Wrangell'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 very brief periods in November and January reporting in the "moderate" AQI range. Diurnal patterns show little variability of $PM_{2.5}$ concentrations across different times of day or days of the week.

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^{*} 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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Resources



Alaska Department of Environmental Conservation





EPA NAAQS Information





Air Quality Index (AQI) Basics





Real-Time AQI Data



Data Access

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

Questions or Comments?

Please contact us!

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