

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

2024 Summer Season Air Quality Report for Sitka Tribe of Alaska, Sitka, Alaska

The QuantAQ MODULAIR sensor in Sitka (456 Katlian St, Sitka, AK 99835) was installed on 03/21/2024.

The sensor measures for carbon monoxide (CO), ozone (O₃), nitrogen oxide (NO), nitrogen dioxide (NO₂), particulate matter (PM_{2.5} and PM₁₀), temperature (°C), and relative humidity (RH).

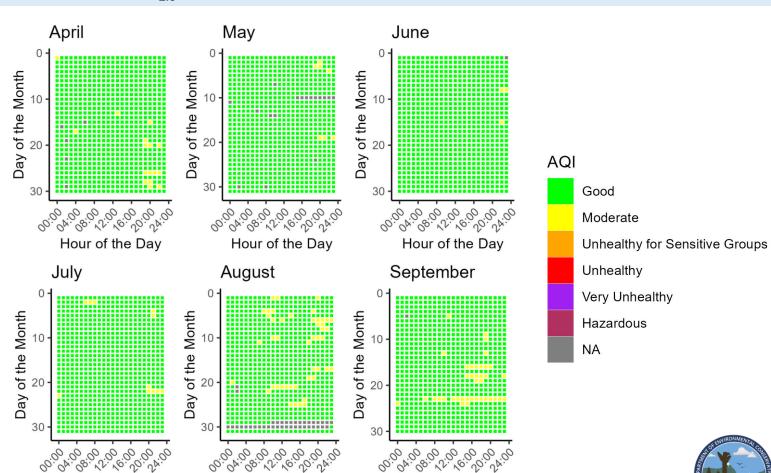
Data is collected every minute and is then processed into hourly averages. The sensor in Sitka has run well since its installation in March of 2024; there have been no physical issues with the sensor.

This data report covers the date range of April 1, 2024, to September 30, 2024.

Hour of the Day



Daily $PM_{2.5}$ Air Quality Index (AQI) for April 1, 2024 - September 30, 2024



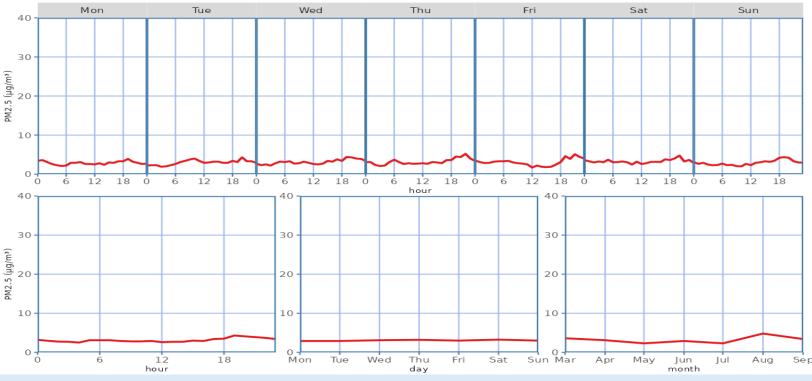
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Hour of the Day

Hour of the Day

2024 Summer Season Air Quality Report for Sitka Tribe of Alaska

Median PM_{2.5} Concentrations for April 1, 2024 - September 30, 2024



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								
	0.10	0.80	0.00	0.80	14.10	1.79	1.38	254.89
Mean								
	3.47	3.45	22.34 **	22.31 **	36.56	8.18	4.84	363.33
1 st Max								
	28.70	9.60	1205 **	136 **	62.64	34.08	45.77	756.83
2 nd Max								
	23.00	7.10	889 **	129 **	62.28	30.97	43.00	732.46

Data Discussion

Sitka's $PM_{2.5}$ ambient air quality for the summer 2024 season fell mostly in the "good" range of the Air Quality Index (AQI; more information about AQI is provided on page 3), with several very brief periods of "moderate" AQI levels each month. Diurnal patterns show little variability of $PM_{2.5}$ concentrations across different days of the week. From April to September, August showed the highest concentrations of $PM_{2.5}$, potentially due smoke carried from wildfires in Canada.

* 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).

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^{**} 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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