



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

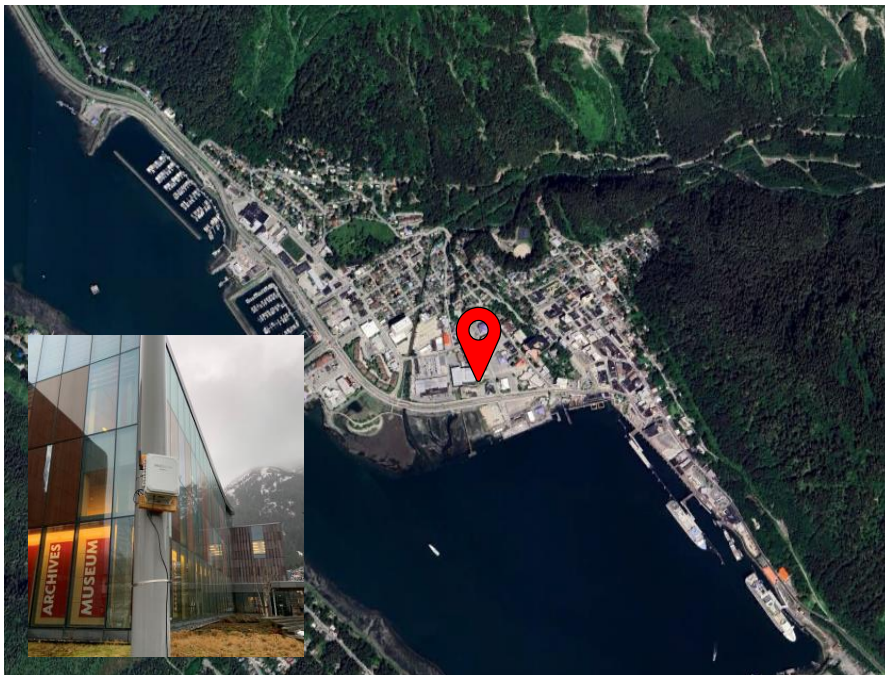
## 2024 Summer Season Air Quality Report for Alaska State Museum, Juneau, Alaska

The QuantAQ MODULAIR sensor at the Alaska State Museum (58.3000° N, 134.4150° W) was installed on 01/29/2024.

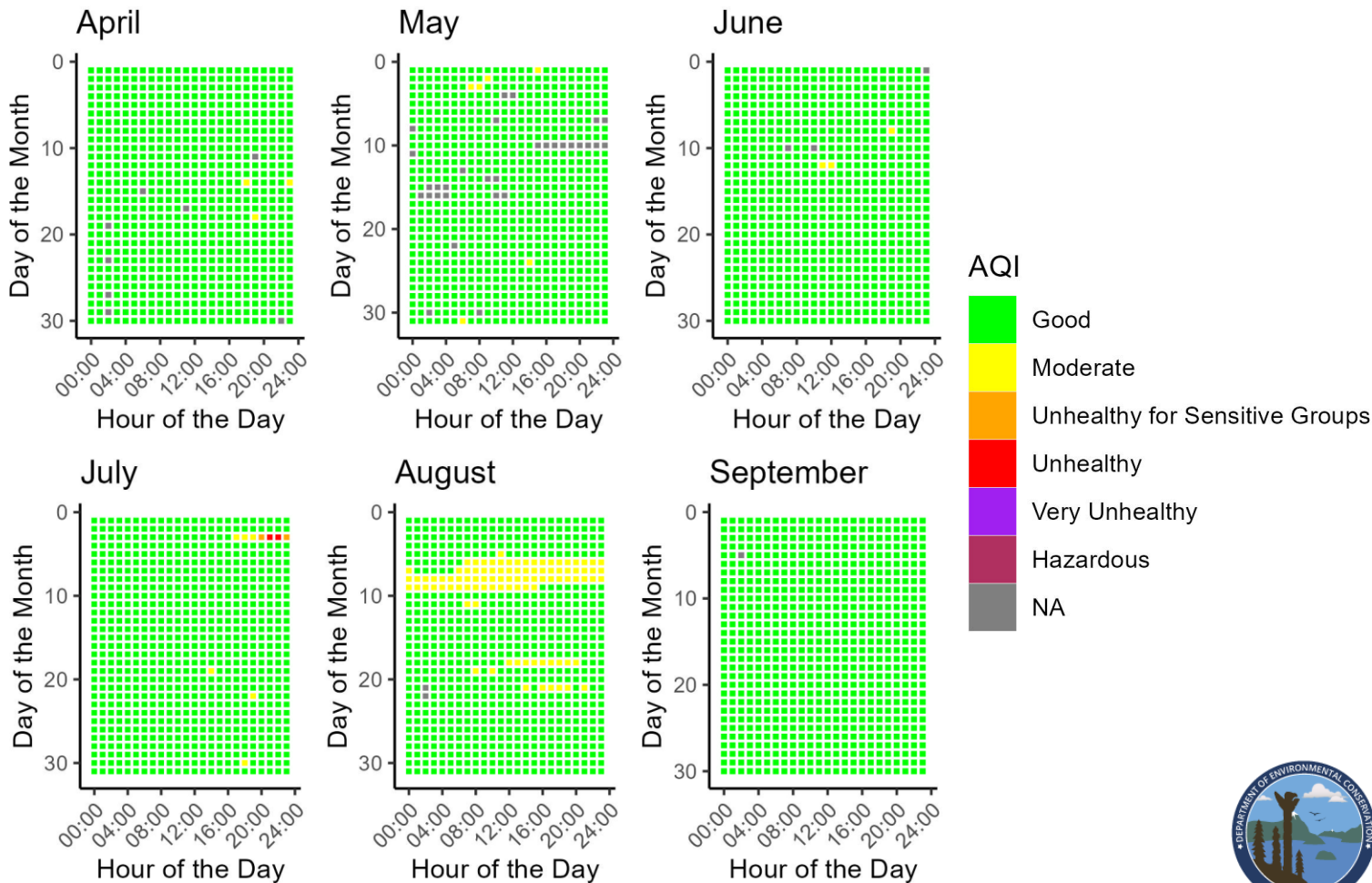
The sensor measures for carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen oxide (NO), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), temperature (°C), and relative humidity (RH).

Data is collected every minute and is then processed into hourly averages. The sensor in Juneau has run well since its installation in January 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.

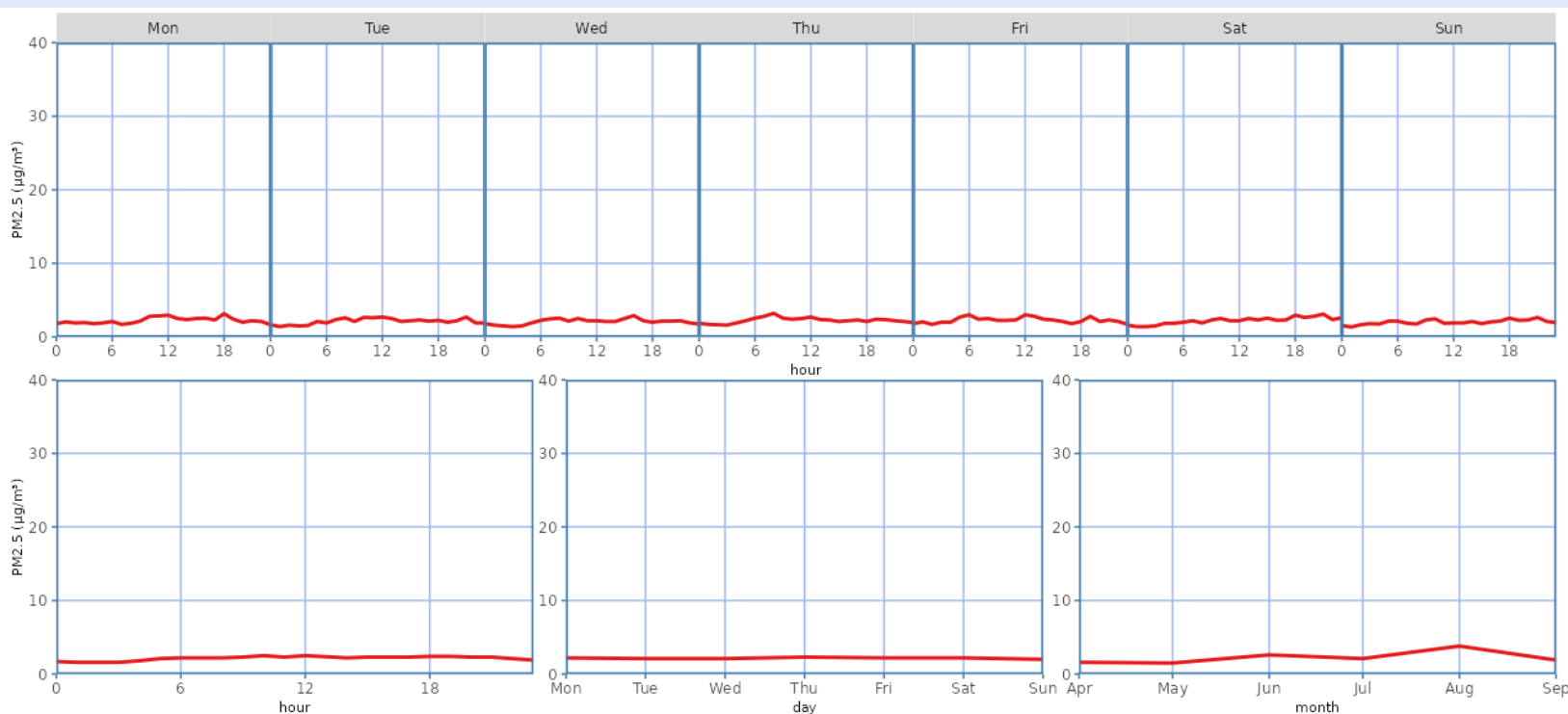


### Daily PM<sub>2.5</sub> Air Quality Index (AQI) for April 1, 2024 - September 30, 2024



# 2024 Summer Season Air Quality Report for Alaska State Museum

## Median PM<sub>2.5</sub> Concentrations for April 1, 2024 - September 30, 2024



### Descriptive Statistics of Air Pollutants\*

Parameter	1-hr PM <sub>2.5</sub> (µg/m <sup>3</sup> )	24-hr PM <sub>2.5</sub> (µg/m <sup>3</sup> )	1-hr PM <sub>10</sub> (µg/m <sup>3</sup> )	24-hr PM <sub>10</sub> (µg/m <sup>3</sup> )	1-hr O <sub>3</sub> (ppb)	1-hr NO <sub>2</sub> (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
<b>Min</b>	0.00	0.50	0.00	0.50	-1.70	2.72	1.43	282.86
<b>Mean</b>	2.87	2.87	12.16 **	11.78 **	19.02	16.38	4.95	390.58
<b>1<sup>st</sup> Max</b>	91.40	16.70	1452 **	85 **	50.03	39.87	132.34	907.41
<b>2<sup>nd</sup> Max</b>	66.70	16.70	878 **	78 **	49.39	39.33	123.62	760.29

### Data Discussion

Juneau’s PM<sub>2.5</sub> 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 a brief period in August reporting “moderate”. AQI levels reached “unhealthy” levels for a several-hour period in early July. Diurnal patterns show little variability of PM<sub>2.5</sub> concentrations across different days of the week. From April to September, August showed slightly elevated PM<sub>2.5</sub> levels compared to the rest of the 2024 summer season.

\* 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.



## Resources



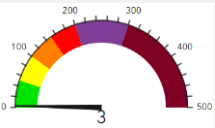
[Alaska Department of Environmental Conservation](#)



[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](mailto:AMQA-Data-Request@alaska.gov) . Data will be provided in Excel or .csv format.

## Questions or Comments?

Please contact us!

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