

Episode 56JY October 18, 2023. Coast to Coast PurpleAir Wood Smoke PM2.5 levels Maps & Data October 9 to 12, 2023.

What is the real goal of this podcast? We have been collecting news data on indoor residential wood smoke pollution since a year and a half ago, April 2022 and the news on wood smoke pollution on this podcast expanded to wildfire wood smoke pollution since the massive influx of Canadian wildfire smoke beginning on June 7, 2023. Even before that, news topics of this podcast included industrial biomass (wood smoke) pollution and outdoor wood boiler pollution, and even wood particulate emission pollution from the manufacture of wood pellets in factories, which was the reason for formation of another resident group called the Dogwood Alliance. The connection between all these forms of wood smoke pollution and wood particulate pollution is that their PM2.5 emissions can all be detected by PurpleAir PM2.5 monitors. \$229 resident-owned PurpleAir PM2.5 monitor data is on PurpleAir Maps, but is also put on United States Environmental Protection Agency (E P A) AirNow maps of Smoke & Fire alongside \$100,000 official E P A PM2.5 monitors, correlated to the official E P A monitors with a simple mathematical formula. In Wisconsin, that simple mathematical formula is $(PA \times 0.5140 + 1.8304)$ Those EPA AirNow Smoke and Fire maps were consulted by millions of United States citizens this summer when deciding whether it was safe enough to exercise outdoors or unsafe enough to stay inside in a sealed homes running an air purifier against the wood smoke of the wildfire. Welcome to the world of a near neighbor of an indoor wood burner, America. Is this experience enough to make the general public pay attention to the “canaries in a coal mine” who are near neighbors of indoor residential wood burners, and stop this pollution?

This RAWSEPresidents Coast to Coast episode will be repeated every 3 days until our organization Residents Against Wood Smoke Emission Particulates Corporation a non-profit 501c3 organization, either 1)receives Federal Grant funds allowing us to give out free Pm2.5 monitors to any near neighbor of an indoor wood burner whose wood smoke particulate emissions enter the yard of that near neighbor, increasing the probability that the near neighbor will experience adverse health effects and early death, and secondarily allows us to distribute highly subsidized Heat Pumps to the near neighbors as well as to indoor wood burners who agree to exchange their wood burning appliances for Heat Pumps that work at temperatures down to 40 degrees below zero Fahrenheit or 2)our organization attains the same result of indoor residential wood burners giving up their indoor wood burning without funding from a Federal grant, for instance by passage of local ordinances, or state and federal laws that do RAWSEPresidents work for them.

This episode shows through maps and data how easy it is to prove that PM2.5 particulate matter of 2.5 micrometer size, the perfect size to infiltrate the human lung and set off a cascade of human health problems and early deaths, how easy it is to detect that PM2.5, convert the PurpleAir Data to EPA Standard data and prove that the PM2.5 detected in near neighbor’s yards is above National Ambient Air Quality Standards (NAAQS) which the EPA has set in 2023 at 35 micrograms per cubic meter in a 24 hour period and at 12 micrograms per cubic meter annually.

The 3 Coast to Coast PM2.5 monitors are in California, Wisconsin, and Maine. It will be interesting to compare their maps and data as the days go by.

October 12, 2023. The Wisconsin Monitor. The 3 day data collected every 10 minutes October 12 to October 15, 2023 and saved as a CSV file, converted to an Excell file shows

	0.514	1.8304
October 9, 2023. 7AM to October 12, 2023 7AM		
1.8 miles Lafollette is the High School 1.8 miles away		
2.9 miles 1885 E Main is the Central City of Madison, WI 2.9 miles away		
Elinor and Gary A	Elinor and Gary B	
	22.43318	22.00922
PA x 0.5140 + 1.8304 WI conversion math formula conversion from PurpleAir Map data to EPA Airnow maps of Smoke and Fire		
	13.36105	13.14314
Above 12 micrograms per cubic meter annual?		
YES	YES	
Above 25 micrograms per cubic meter 24 hour?		

October 10, 2023. 21:30 PM (9:30 PM) to October 11, 2023 2:30 AM

5 hours above 25 micrograms per cubic meter

Above 35 micrograms per cubic meter 24 hour?

October 10, 2023. 22:00 PM (10PM) to October 11, 2023 0.30 (12:30 AM)

2.5 hours above 35 micrograms per cubic meter

In a 3 day period.

This data is better than

Washington State Opacity limits at stack of wood burner is

over 20% opacity for six minutes

Because who can tell if a photo of wood smoke shows 19% opacity or 21% opacity wood smoke, especially if a near neighbor has developed cataracts from contact with wood smoke PM2.5 over time?

Stay tuned for more exciting episodes involving Wisconsin, California, and Maine!

https://www.google.com/maps/dir/4205+Elinor+St,+Madison,+WI+53716/La+Follette+High+School,+702+Pflaum+Rd,+Madison,+WI+53716/@43.07

Best 6 min 13 min 38 min 11 min

4205 Elinor St, Madison, WI 53716

La Follette High School, 702 Pflaum Rd, Madison, WI 53716

Add destination

Leave now Options

Send directions to your phone

- via Maher Ave 6 min 1.8 miles
Fastest route now due to traffic conditions
Details
- via Spaanem Ave 6 min 1.9 miles
- via US-51 S 7 min 2.0 miles

Explore nearby La Follette High School

https://www.google.com/maps/dir/4205+Elinor+St,+Madison,+WI+53716/1885+E+Main+St,+Madison,+WI+53704/@43.0906379,-89.357246,14z/data=!3m1!1e3

Best 10 min 17 min 1 hr 4 17 min

4205 Elinor St, Madison, WI 53716

1885 E Main St, Madison, WI 53704

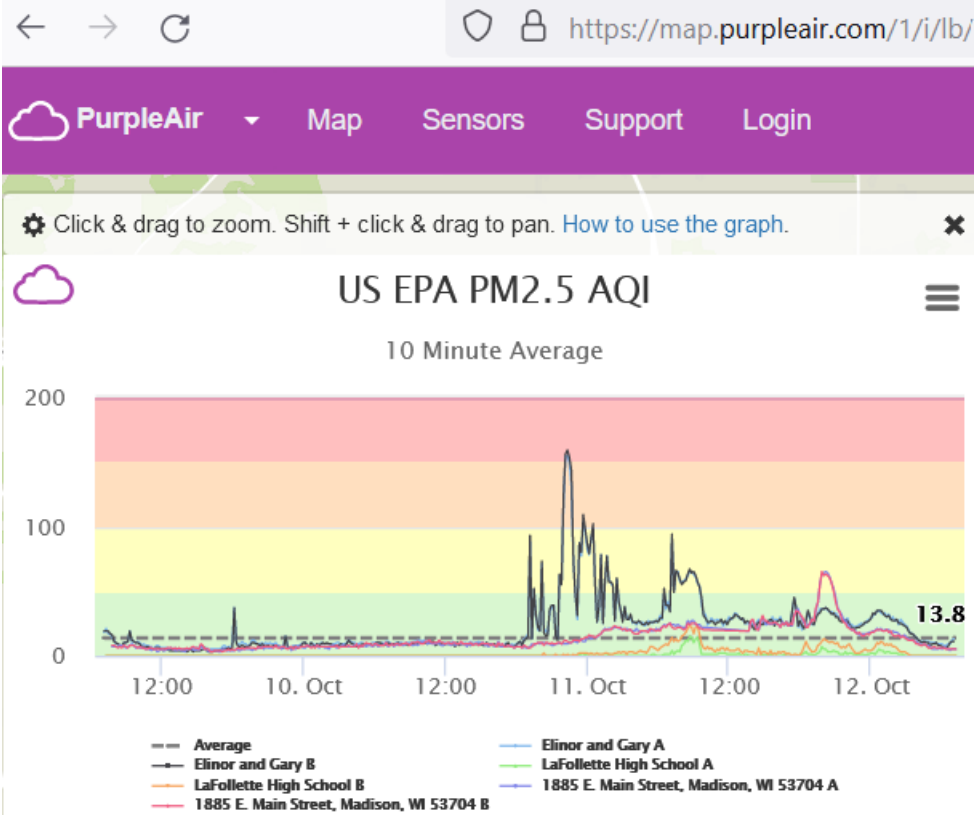
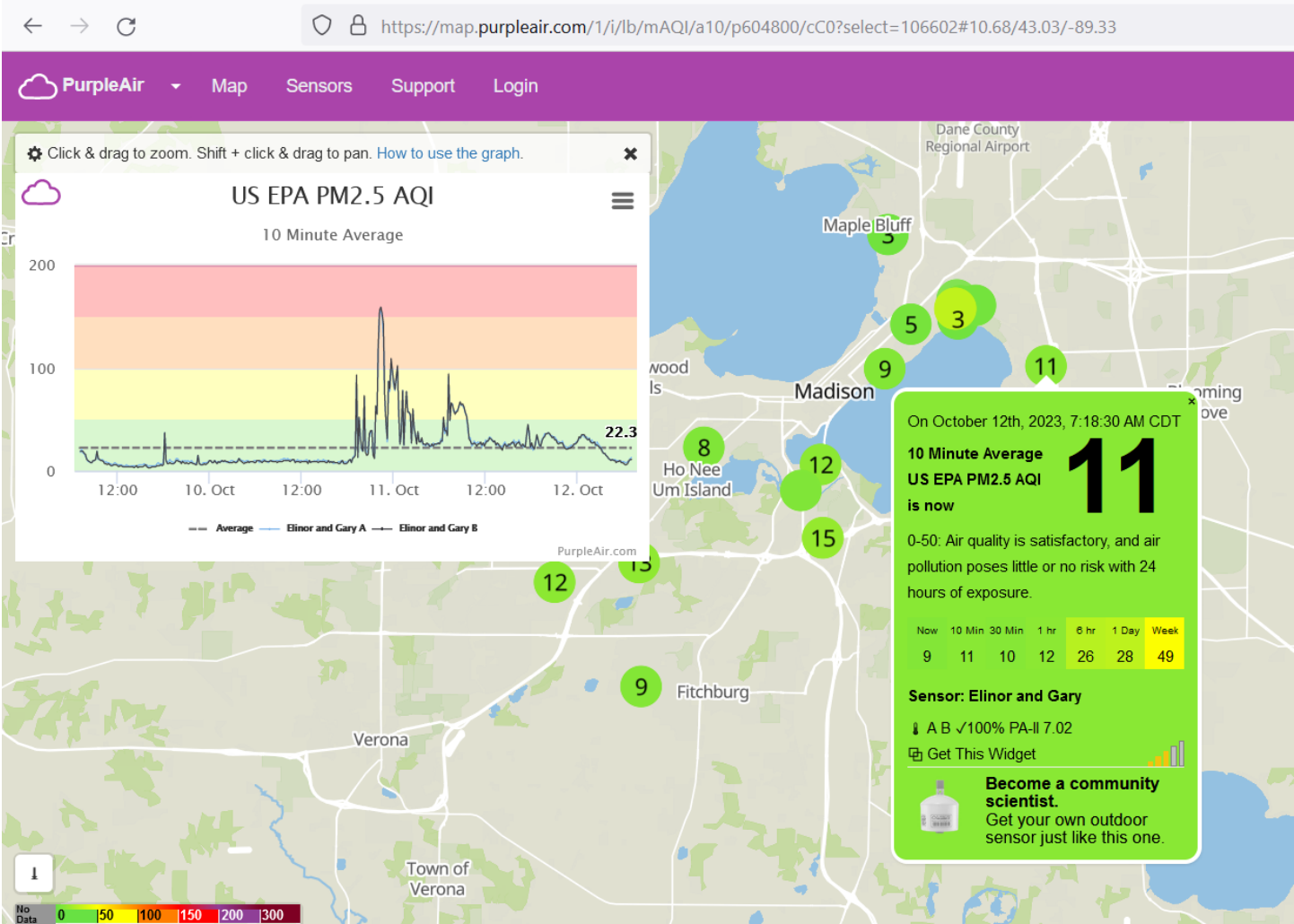
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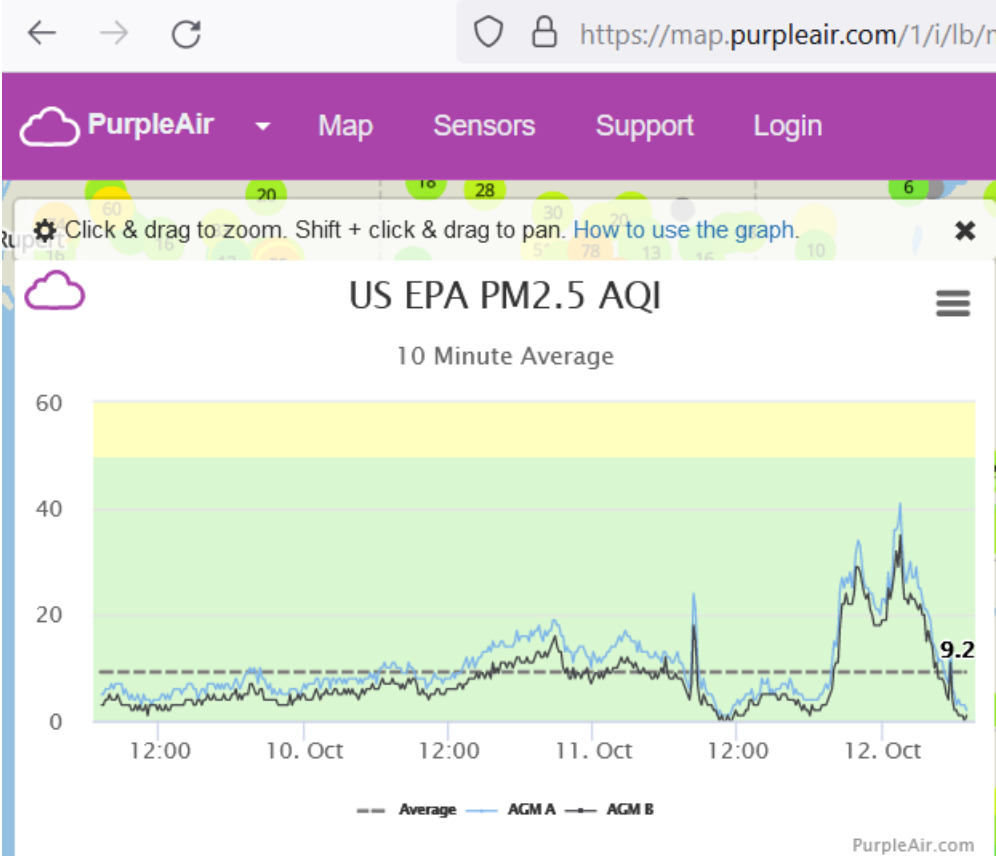
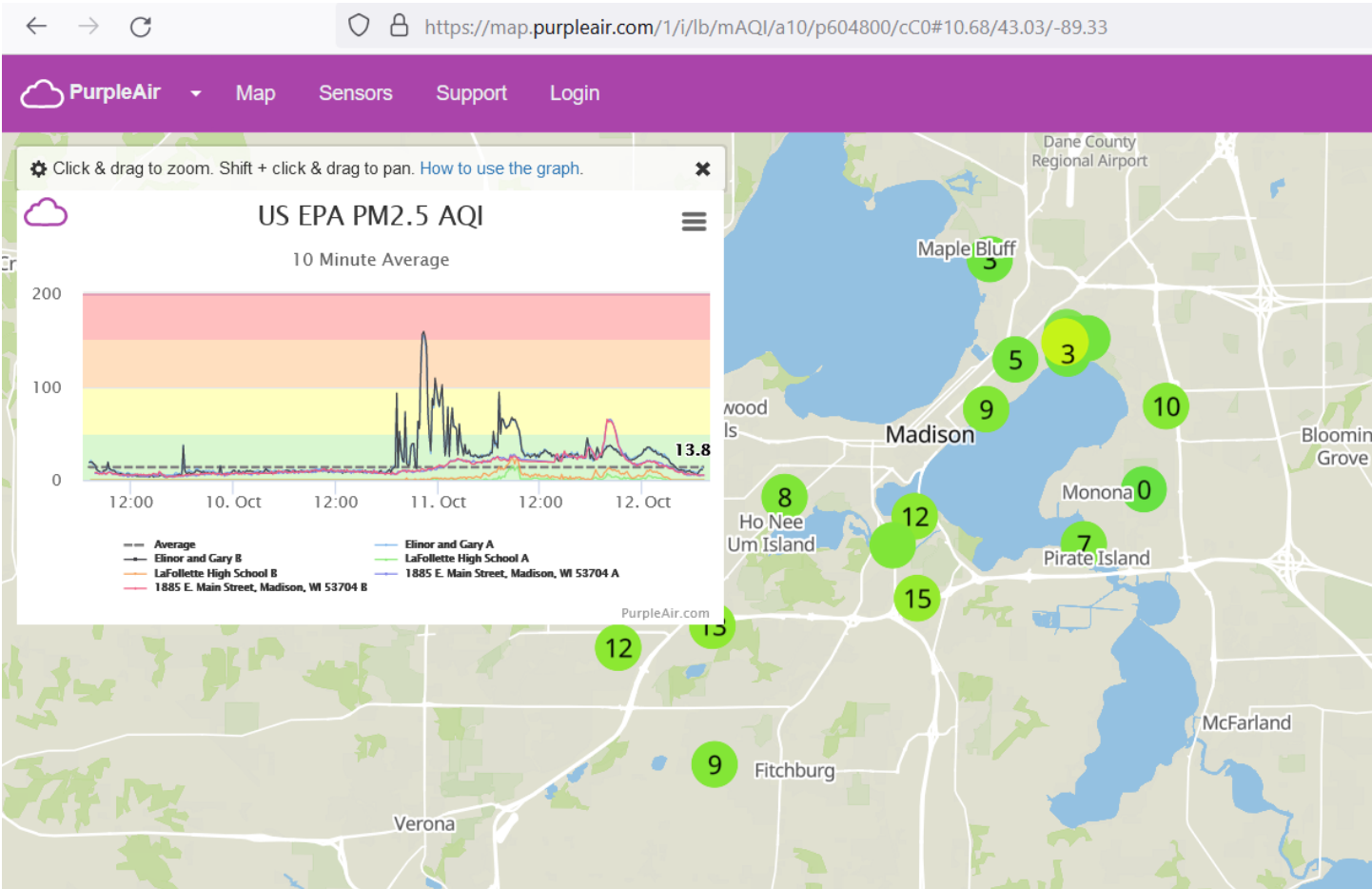
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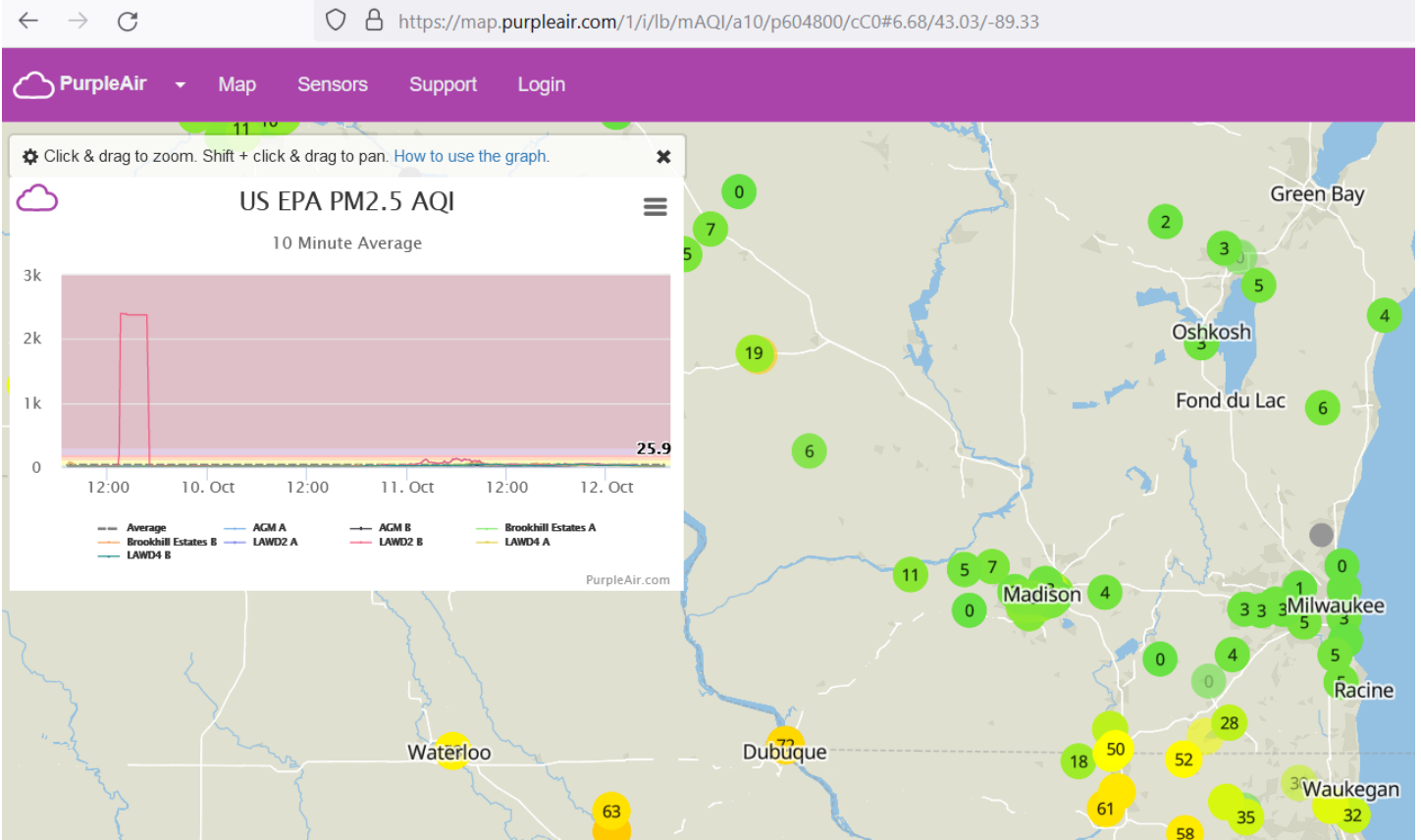
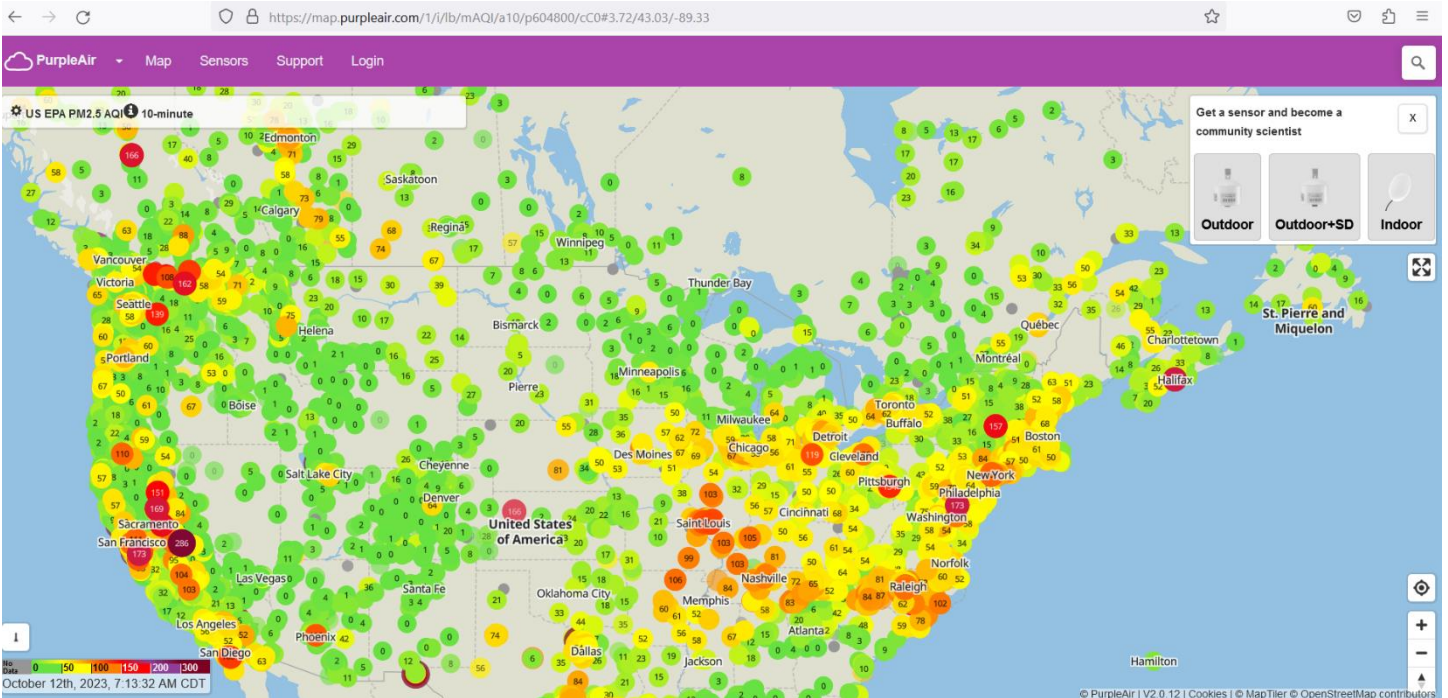
Send directions to your phone

- via Atwood Ave 10 min 2.9 miles
Fastest route now due to traffic conditions
Details
- via Milwaukee St 13 min 3.9 miles

Explore nearby 1885 E Main St









Data layer:

US EPA PM2.5 AQI



Apply conversion:

No



Averaging period (* = graph only):

10-minute



Base map type:

Basic



Use accessible colors when available:



Show outside



show inside



and show my



sensors

Reporting or modified within:

7-days



Show averages as rings:



Show place names on top:



Experts tip: After choosing options, zoom and pan, bookmark the page or copy and share the url to open the map with those options pre-defined.