

# ADVANCING TOOLS: MONTHLY MOBILE LAB (MAML) MISSIONS

Jason Meyers, P.E.









# Capabilities

- Criteria Pollutant Monitors:
  - Ozone
  - NO<sub>2</sub>
  - SO<sub>2</sub>
  - CO
  - PM<sub>2.5</sub> and PM<sub>10</sub>
- Additional Monitors:
  - H<sub>2</sub>S
  - Mercury
  - Methane/Non-Methane Hydrocarbons
  - Ammonia
- Met Data
- 3 GCs
  - TO-15 and Sulfur compounds



# Purpose

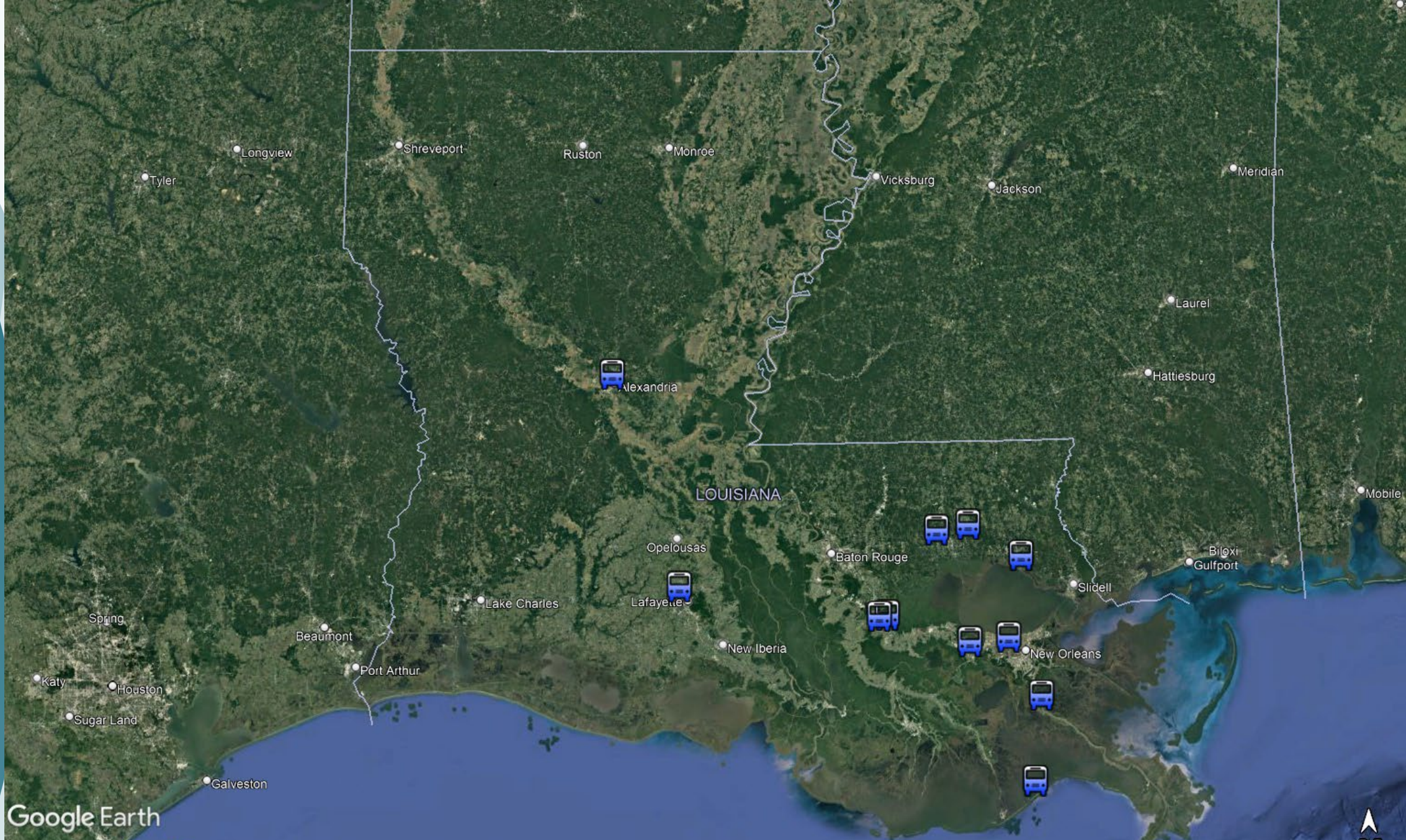
- Helps improve training
  - Keeps staff engaged
  - Staff gets familiar with the equipment
- Missions are low priority but great for P.R.
- High quality data from other areas around the state



# Where have we been?

- December 7, 2021 – December 10, 2021 – St Gabriel
- February 21, 2022 – February 24, 2022: Nine Mile Point, New Orleans
- April 26, 2022 – April 27, 2022: Dutchtown
- May 3, 2022 – May 5, 2022: Dutchtown
- May 24, 2022 – May 26, 2022: St. James, LA
- June 28, 2022 – June 30, 2022: Luling, LA
- July 25, 2022 – July 29, 2022: St. James
- September 12, 2022- September 16, 2022: Alexandria
- October 17, 2022- October 19, 2022: Grand Isle
- November 14, 2022- November 16, 2022: Ironton, Plaquemines Parish
- January 24, 2023- January 26, 2023: Hammond
- February 7, 2023- February 9, 2023: Mandeville
- March 15, 2023- March 17, 2023: Lafayette





Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus  
Image © 2023 TerraMetrics







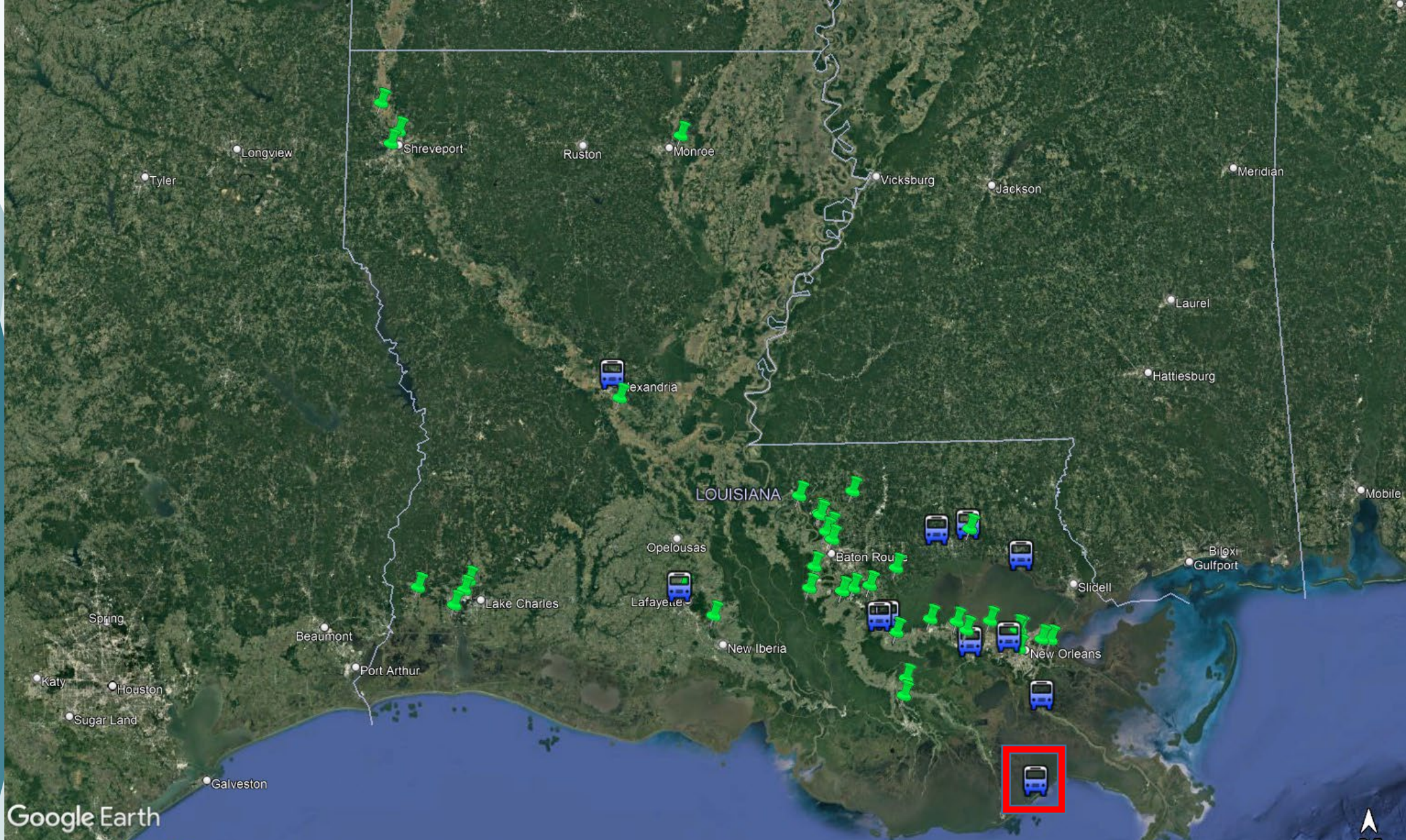
Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat / Copernicus

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Google Earth

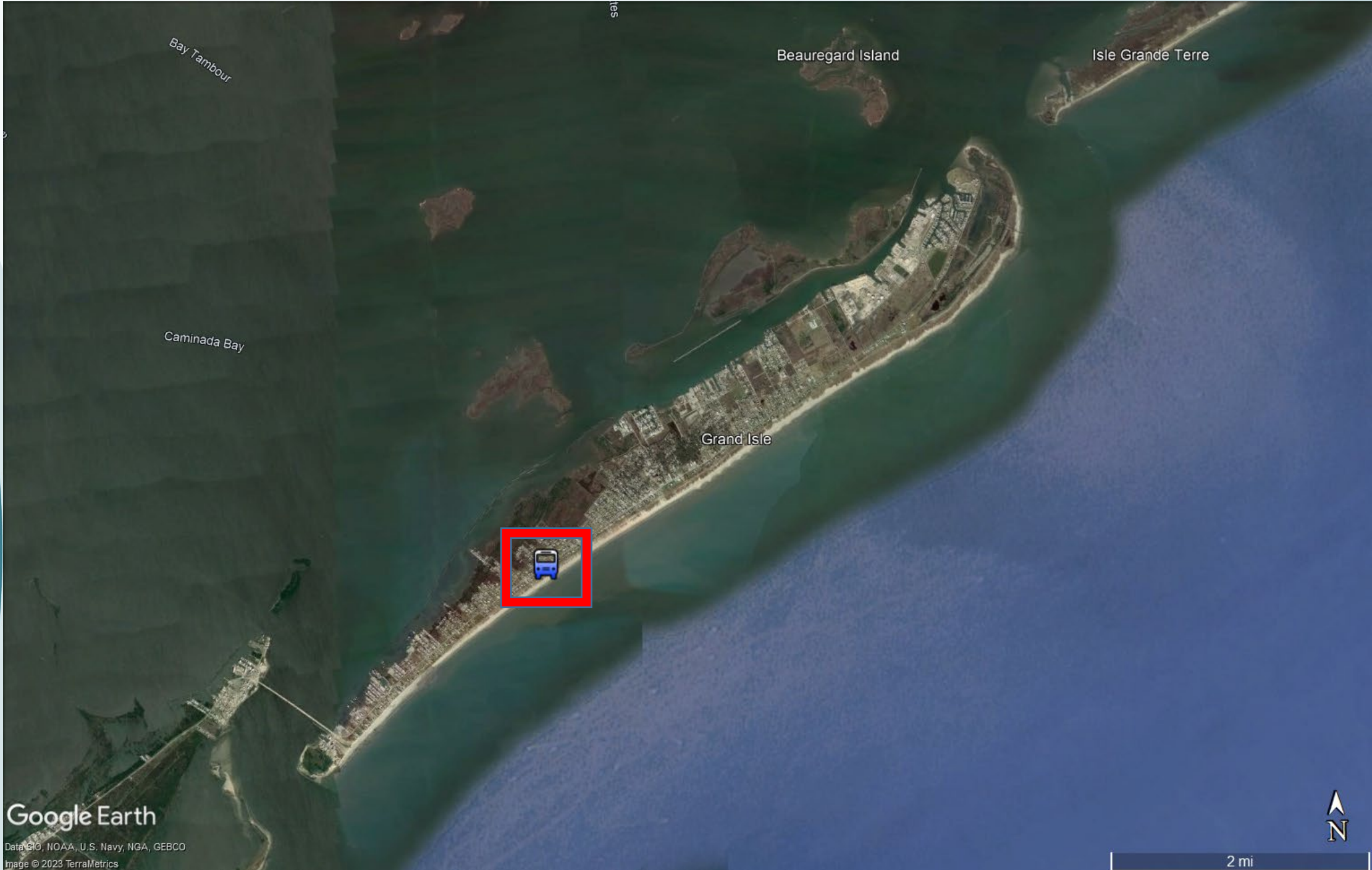
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus  
Image © 2023 TerraMetrics





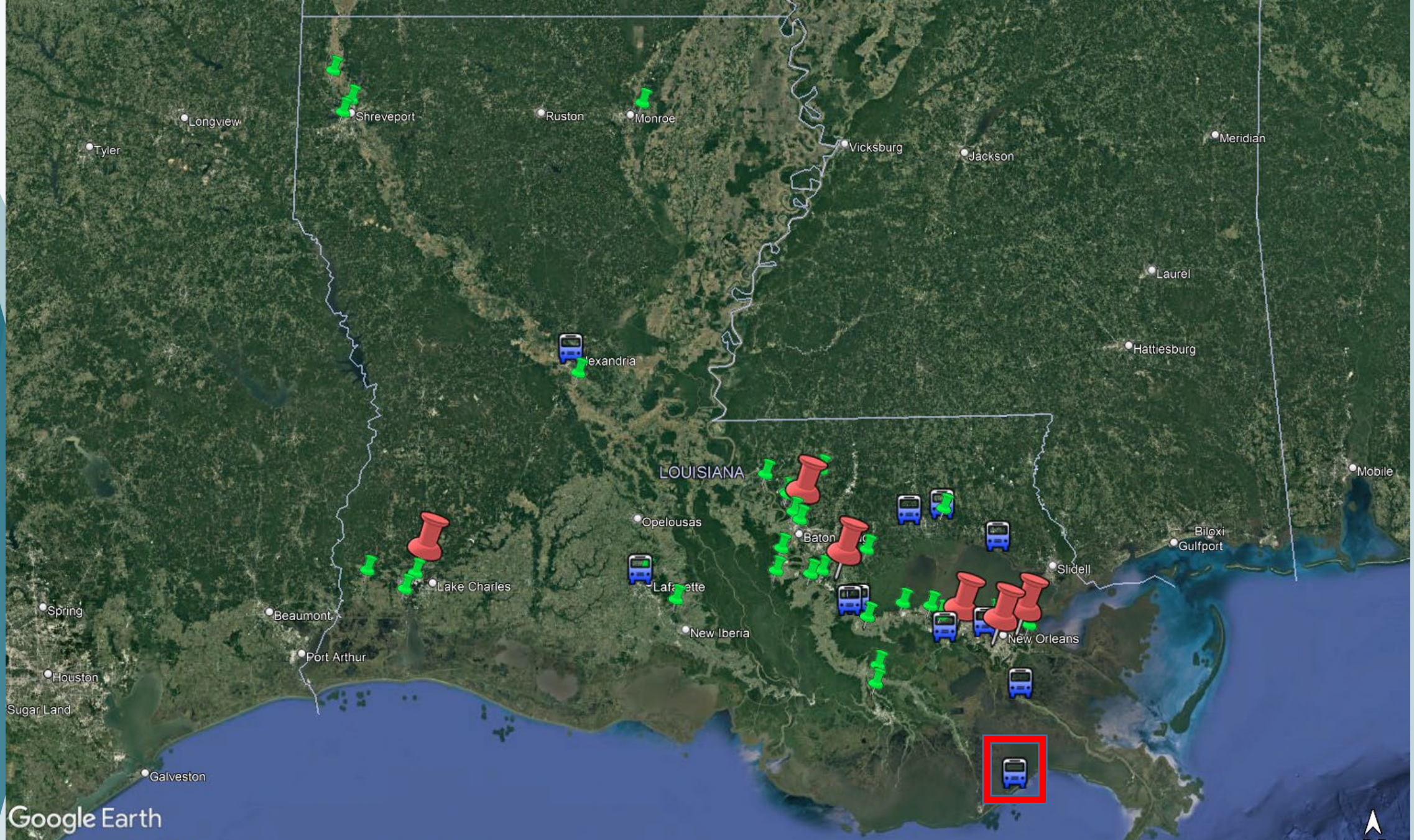
Google Earth

Data © 2010, NOAA, U.S. Navy, NGA, GEBCO  
Image © 2023 TerraMetrics



2 mi





Google Earth

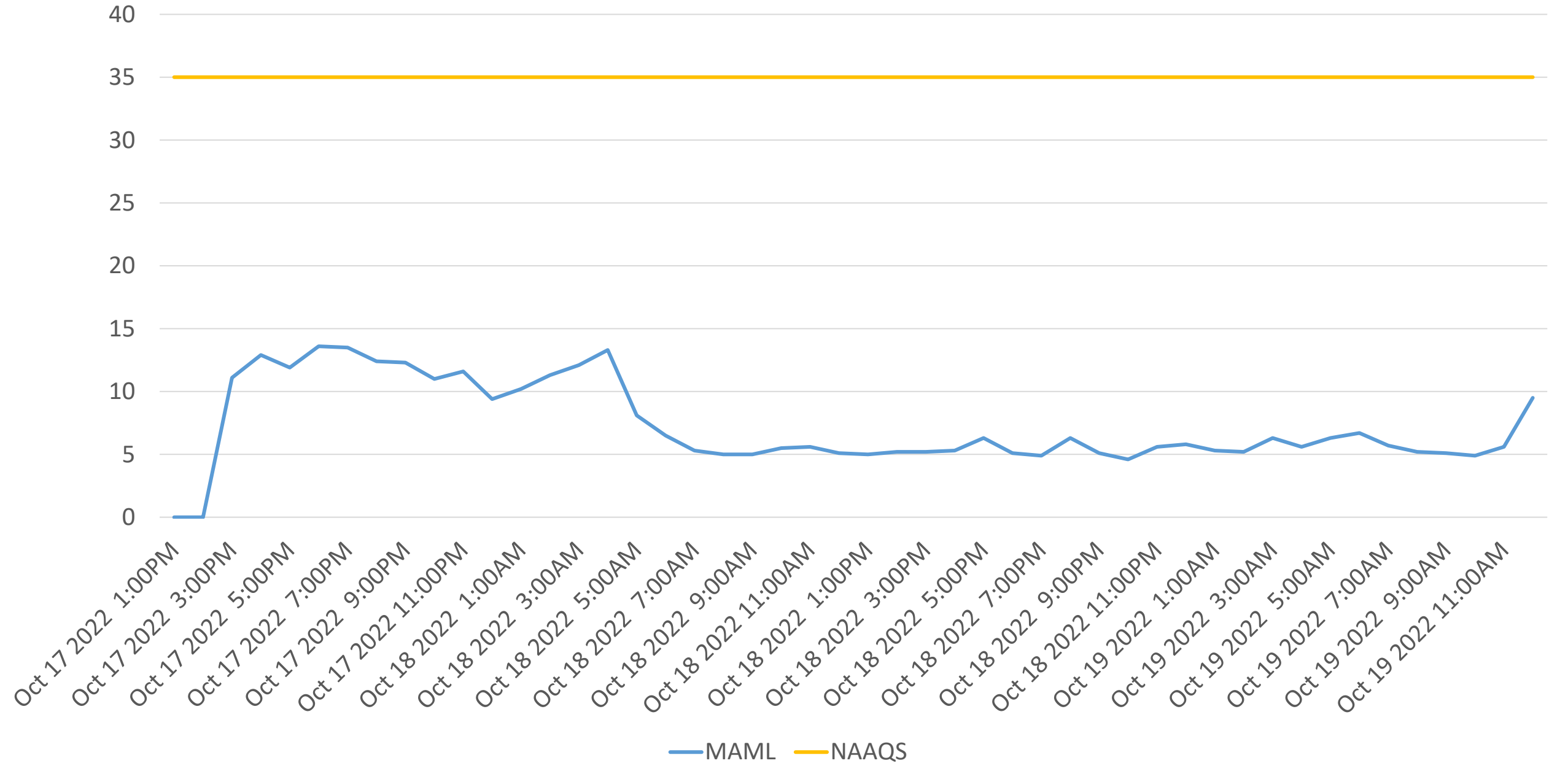
Data SIO, NOAA, U.S. Navy, MGA, GEBCO  
Image Landsat / Copernicus  
Image © 2023 TerraMetrics

100 mi



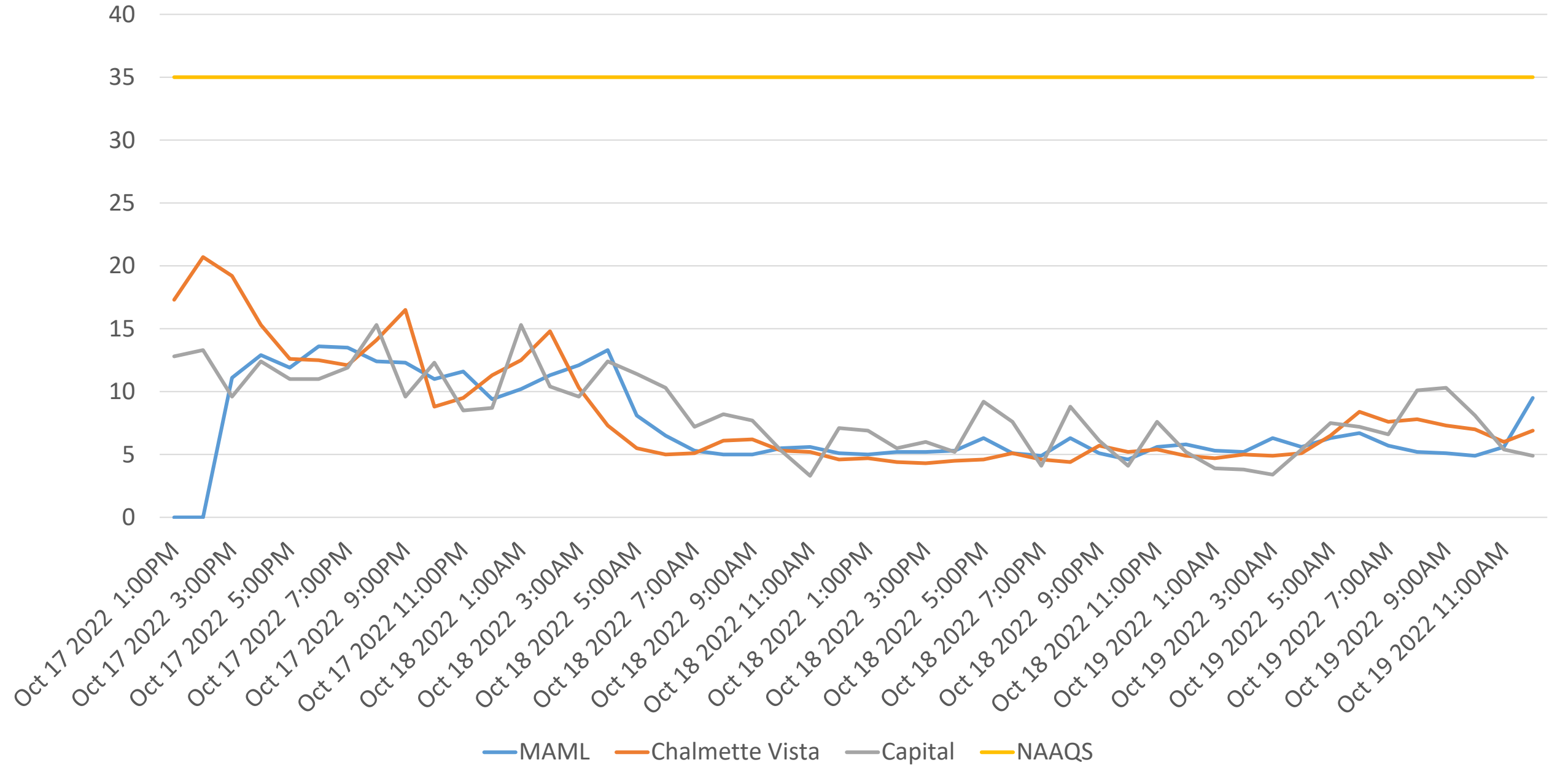
# PM<sub>2.5</sub> MAML vs Ambient Monitoring Sites Comparison

## October 17-19, 2022



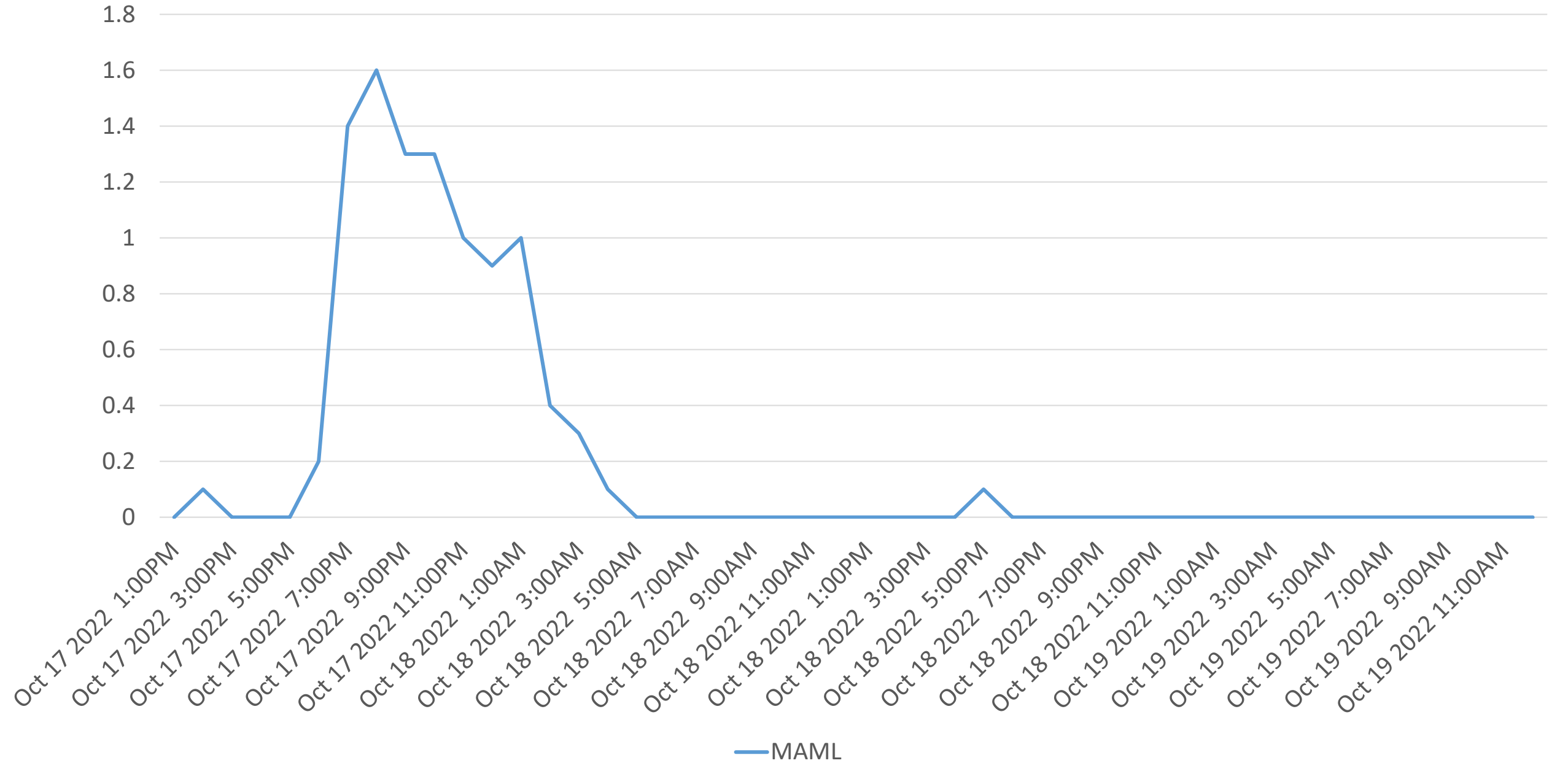
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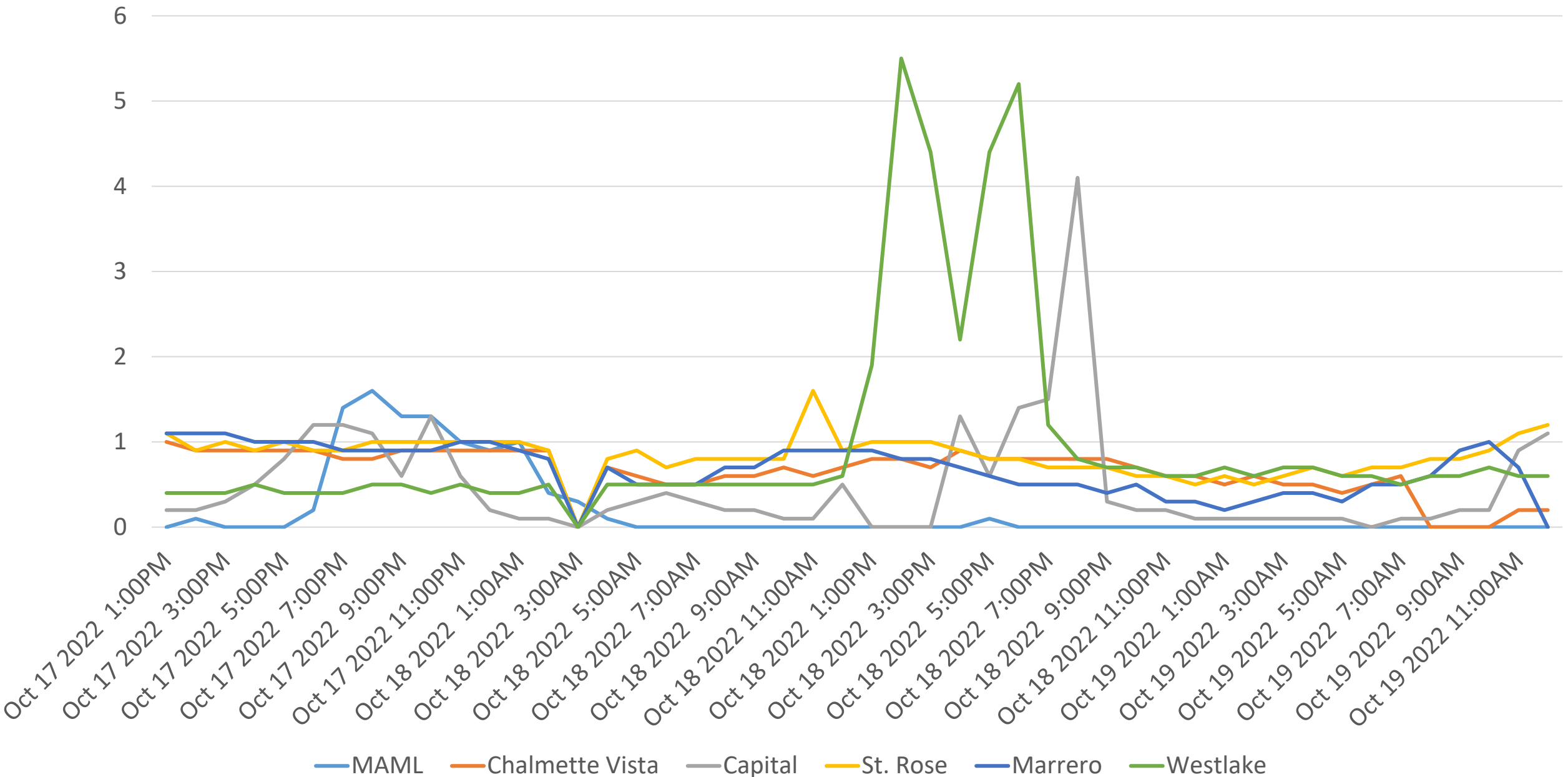
# SO2 MAML vs Ambient Monitoring Sites Comparison

## October 17-19, 2022



# SO2 MAML vs Ambient Monitoring Sites Comparison

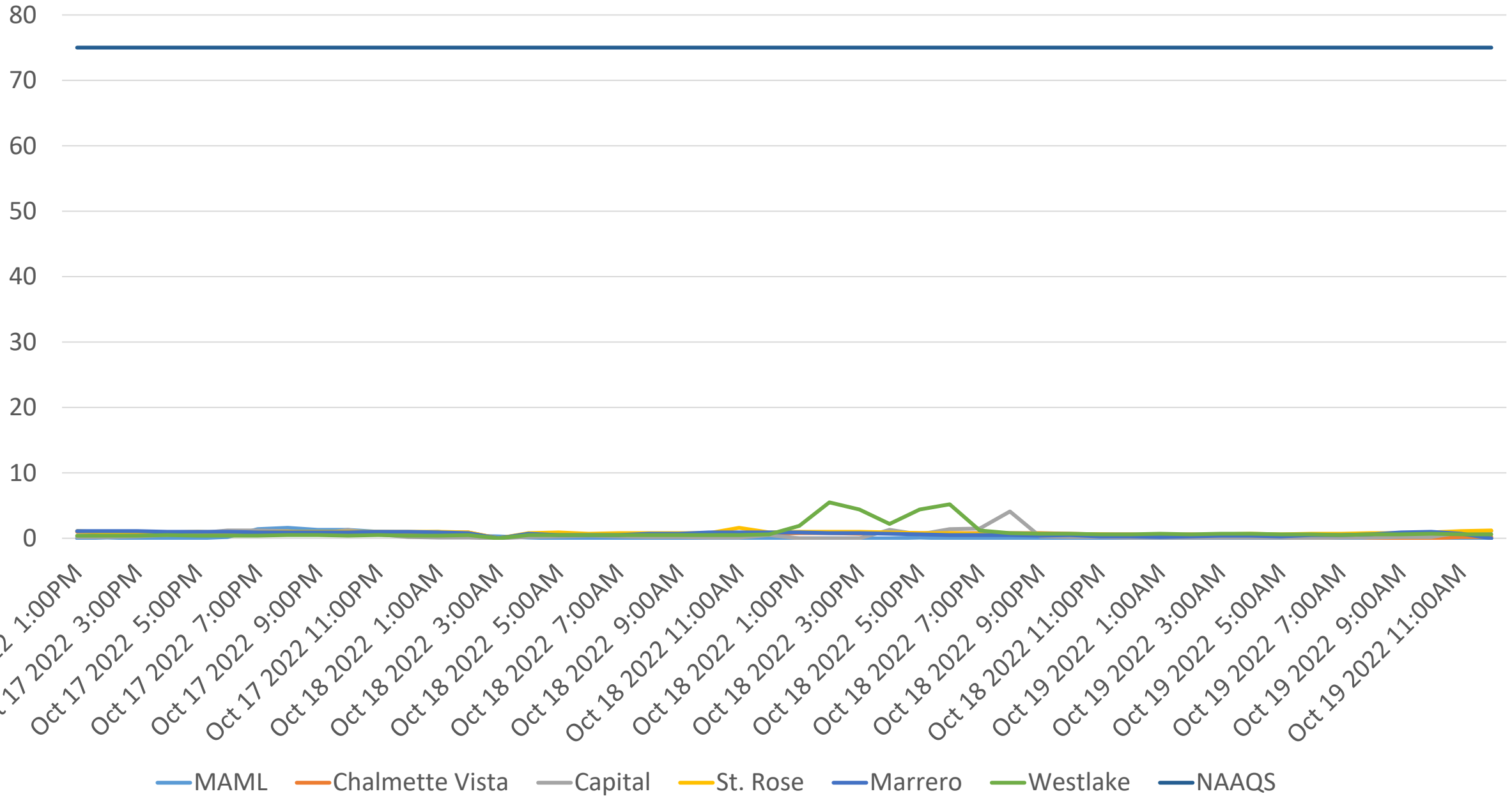
October 17-19, 2022





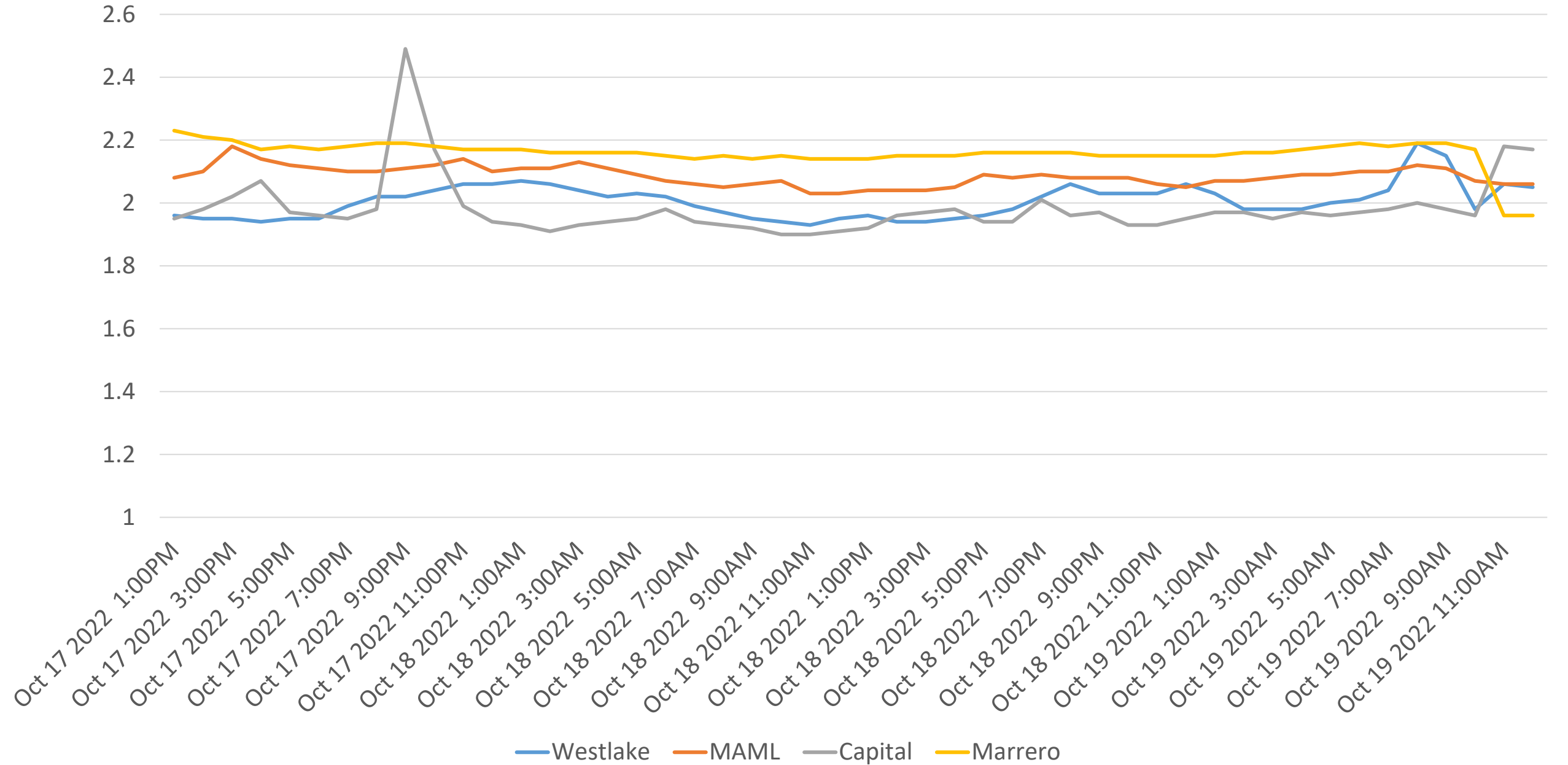
# SO2 MAML vs Ambient Monitoring Sites Comparison

October 17-19, 2022



# Methane MAML vs Ambient Monitoring Sites Comparison

October 17-19, 2022



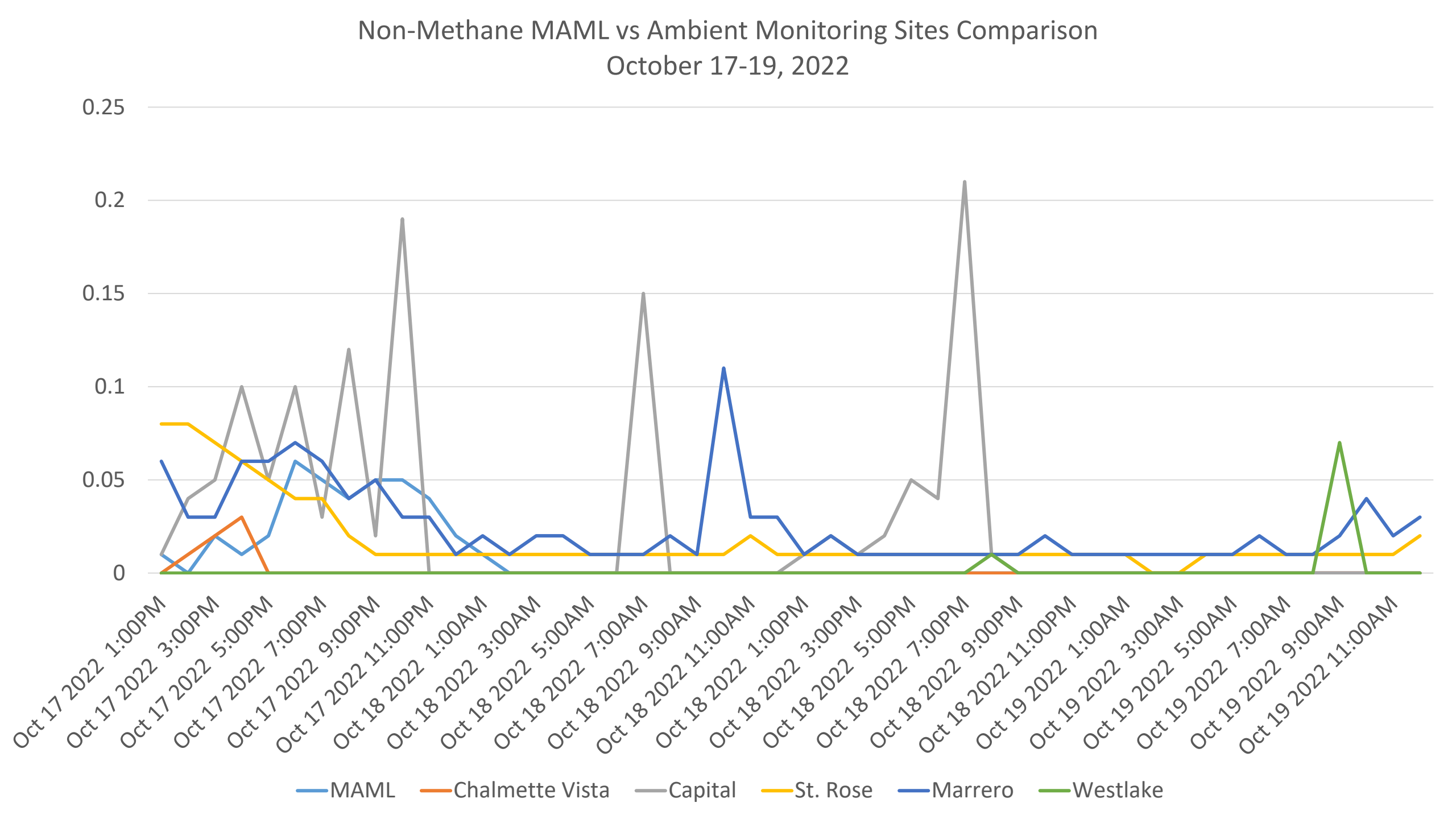
# Non-Methane MAML vs Ambient Monitoring Sites Comparison

October 17-19, 2022

0.25  
0.2  
0.15  
0.1  
0.05  
0

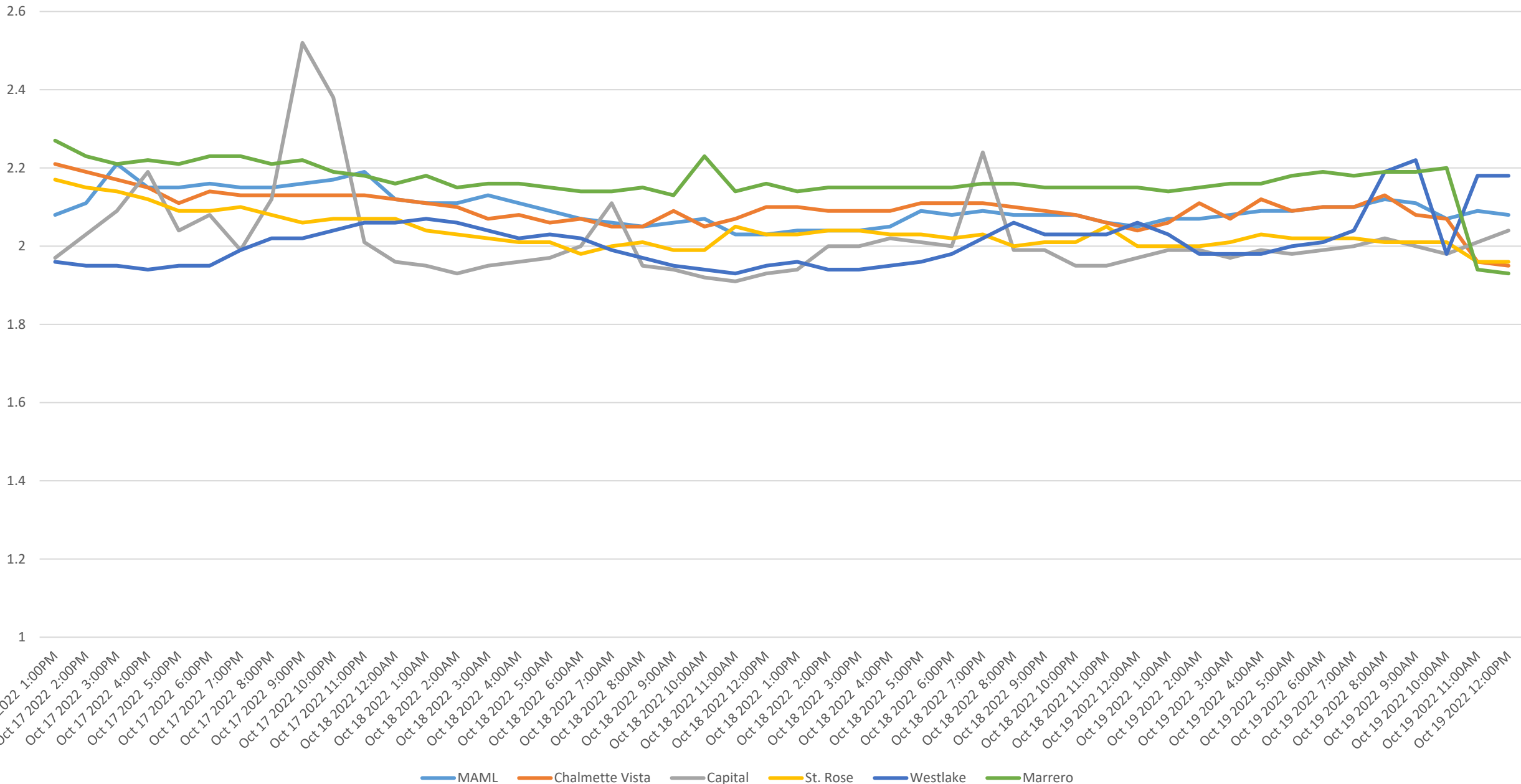
Oct 17 2022 1:00PM  
Oct 17 2022 3:00PM  
Oct 17 2022 5:00PM  
Oct 17 2022 7:00PM  
Oct 17 2022 9:00PM  
Oct 17 2022 11:00PM  
Oct 18 2022 1:00AM  
Oct 18 2022 3:00AM  
Oct 18 2022 5:00AM  
Oct 18 2022 7:00AM  
Oct 18 2022 9:00AM  
Oct 18 2022 11:00AM  
Oct 18 2022 1:00PM  
Oct 18 2022 3:00PM  
Oct 18 2022 5:00PM  
Oct 18 2022 7:00PM  
Oct 18 2022 9:00PM  
Oct 18 2022 11:00PM  
Oct 19 2022 1:00AM  
Oct 19 2022 3:00AM  
Oct 19 2022 5:00AM  
Oct 19 2022 7:00AM  
Oct 19 2022 9:00AM  
Oct 19 2022 11:00AM

MAML Chalmette Vista Capital St. Rose Marrero Westlake

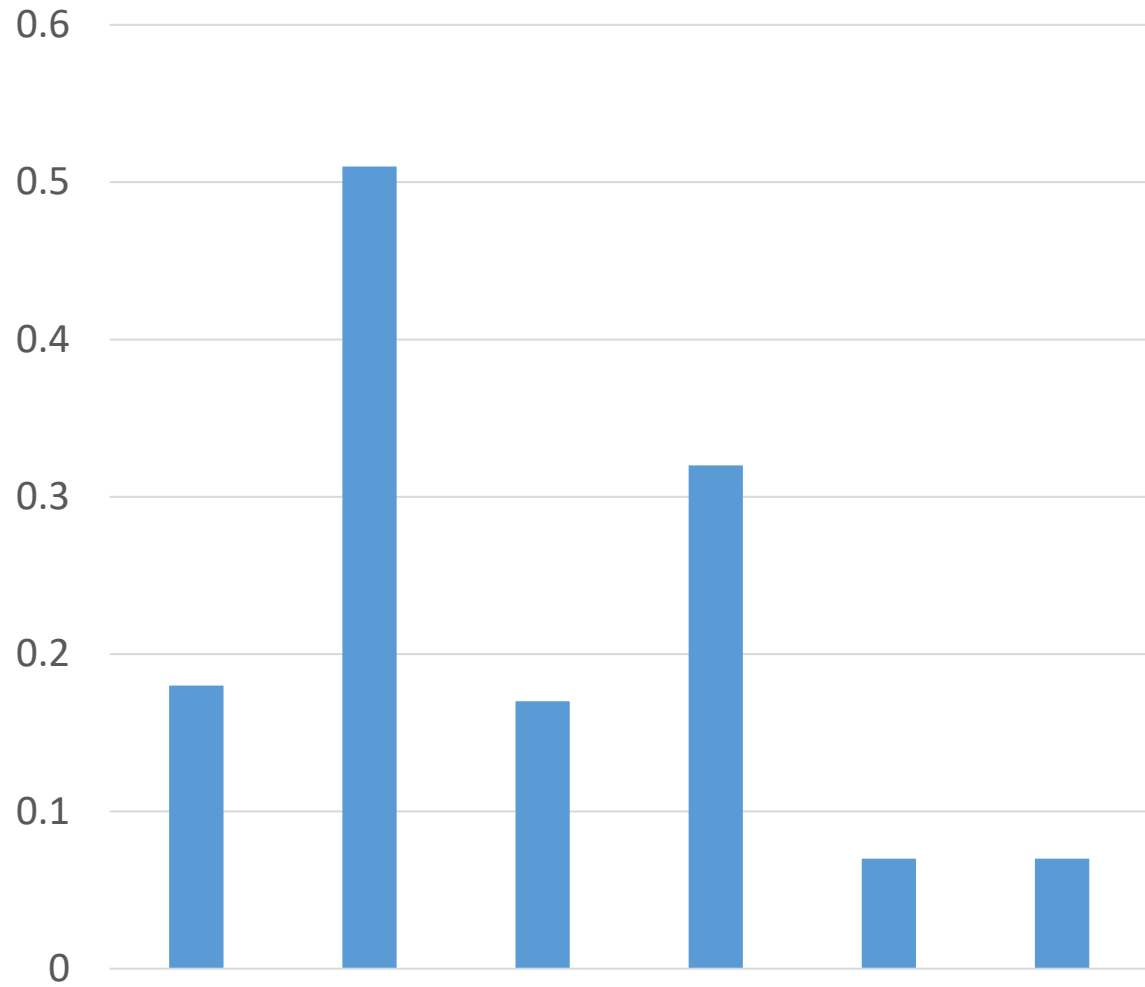


# THC MAML vs Ambient Monitoring Sites Comparison

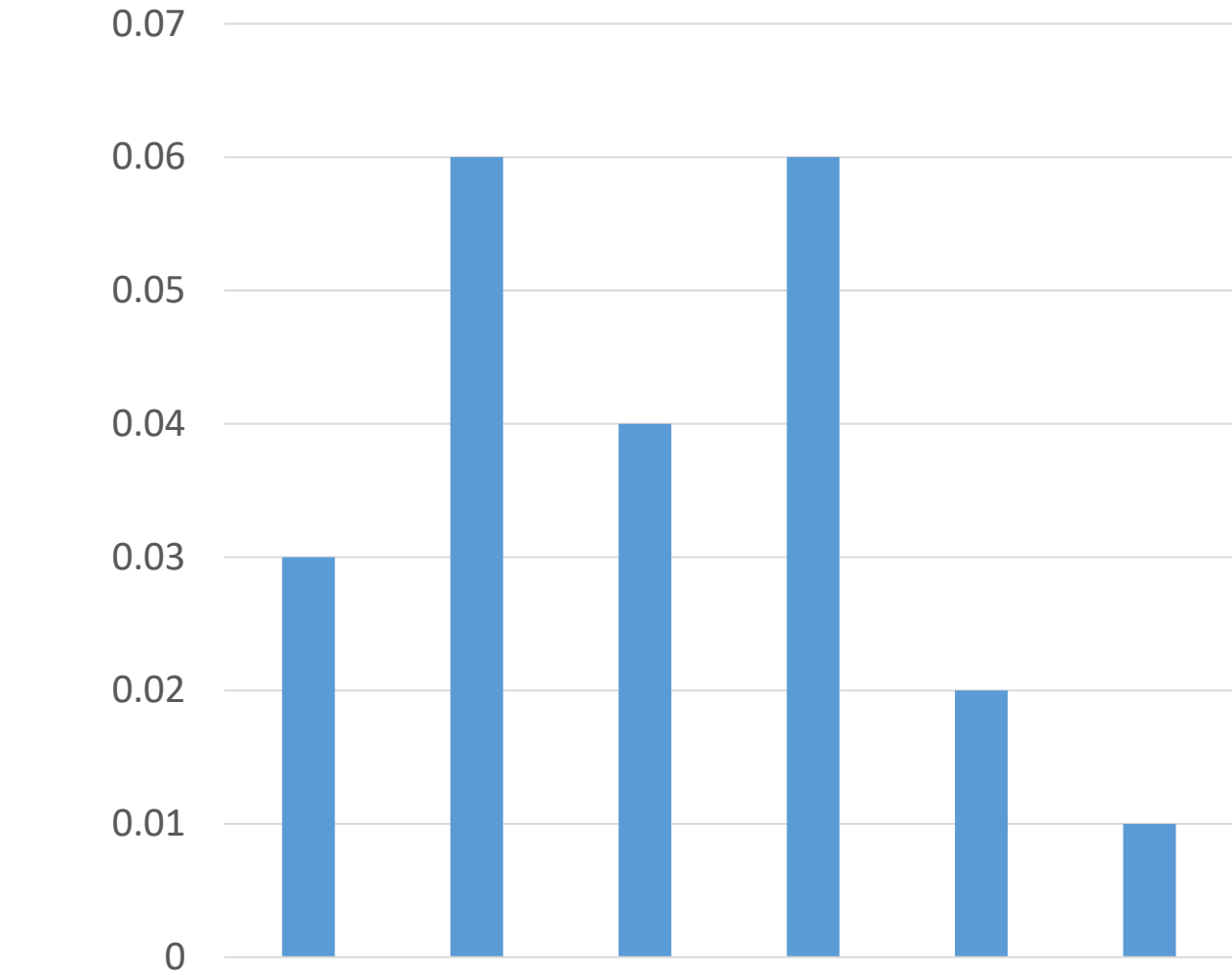
## October 17-19, 2022



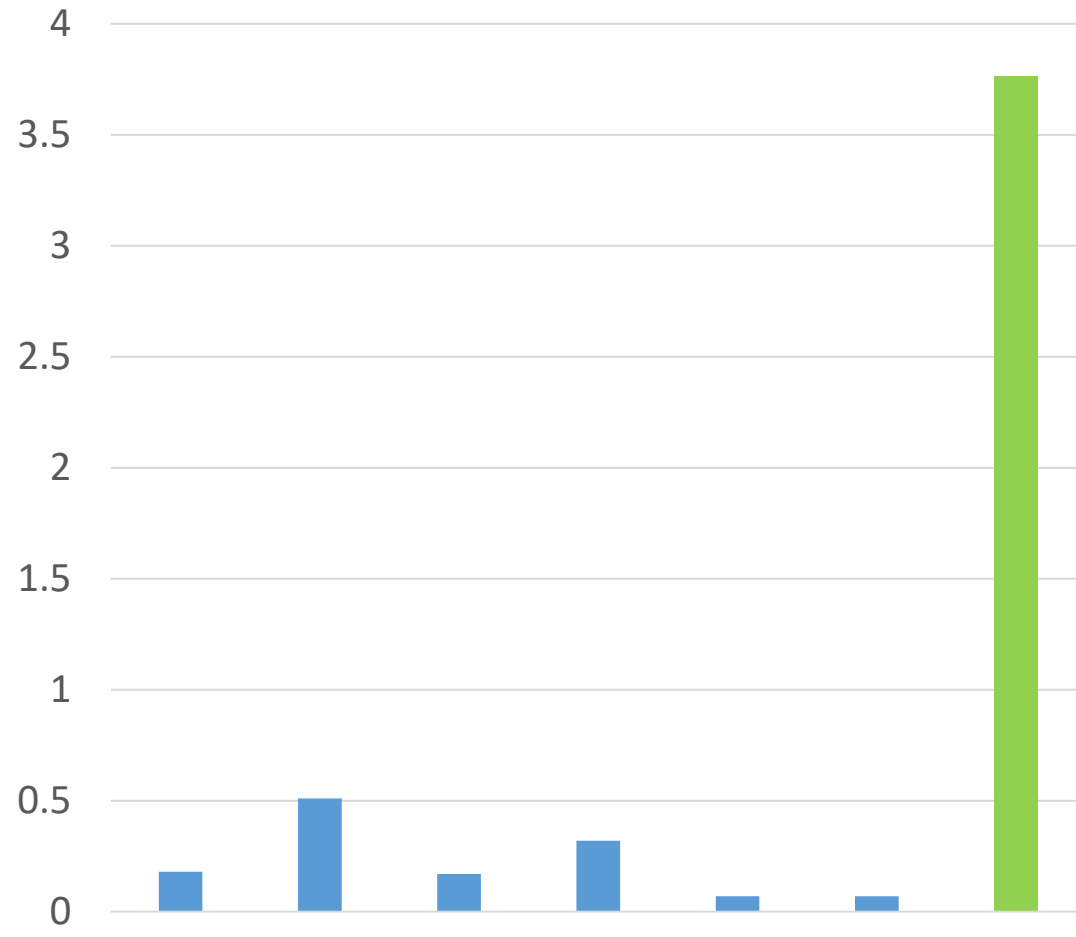
Benzene



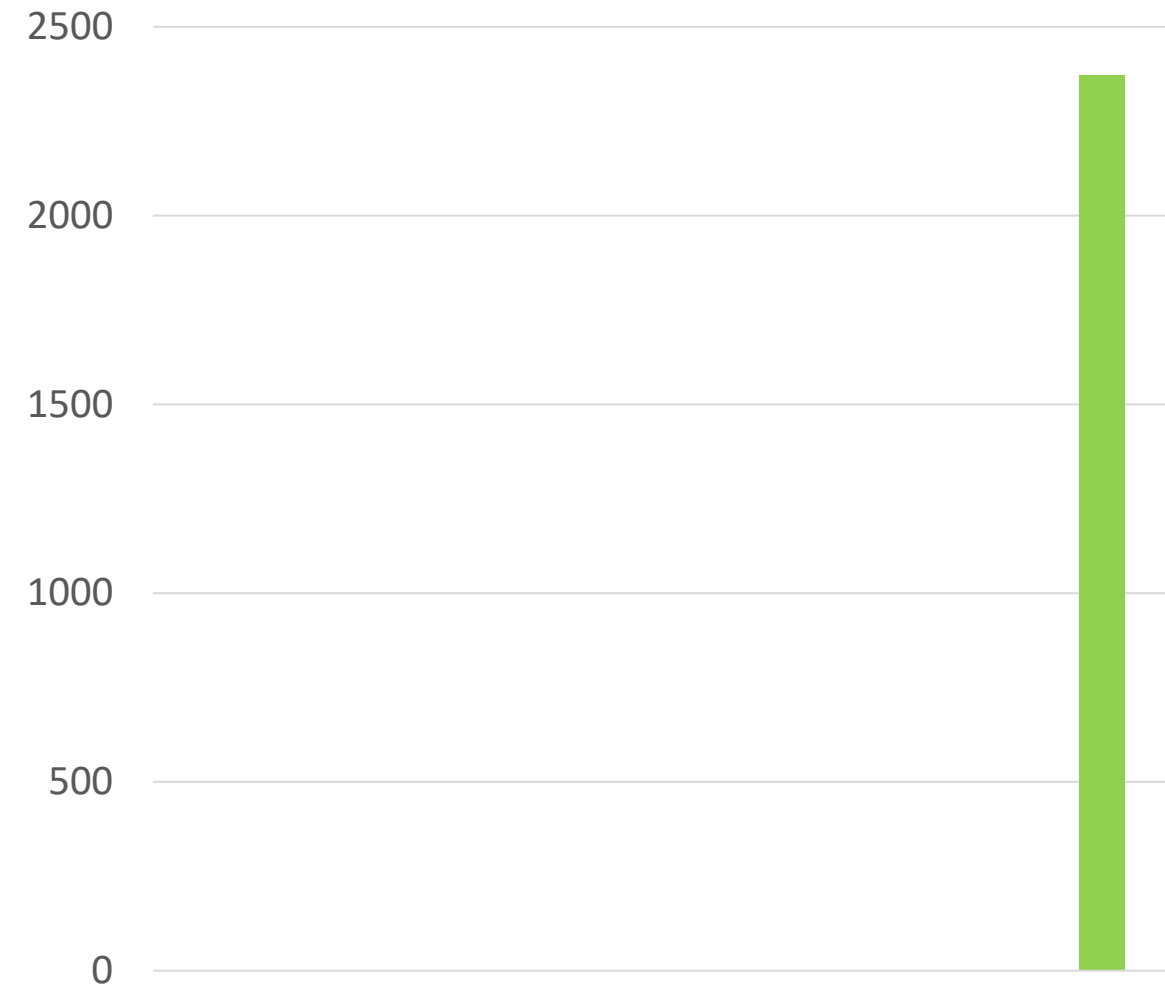
Ethylbenzene



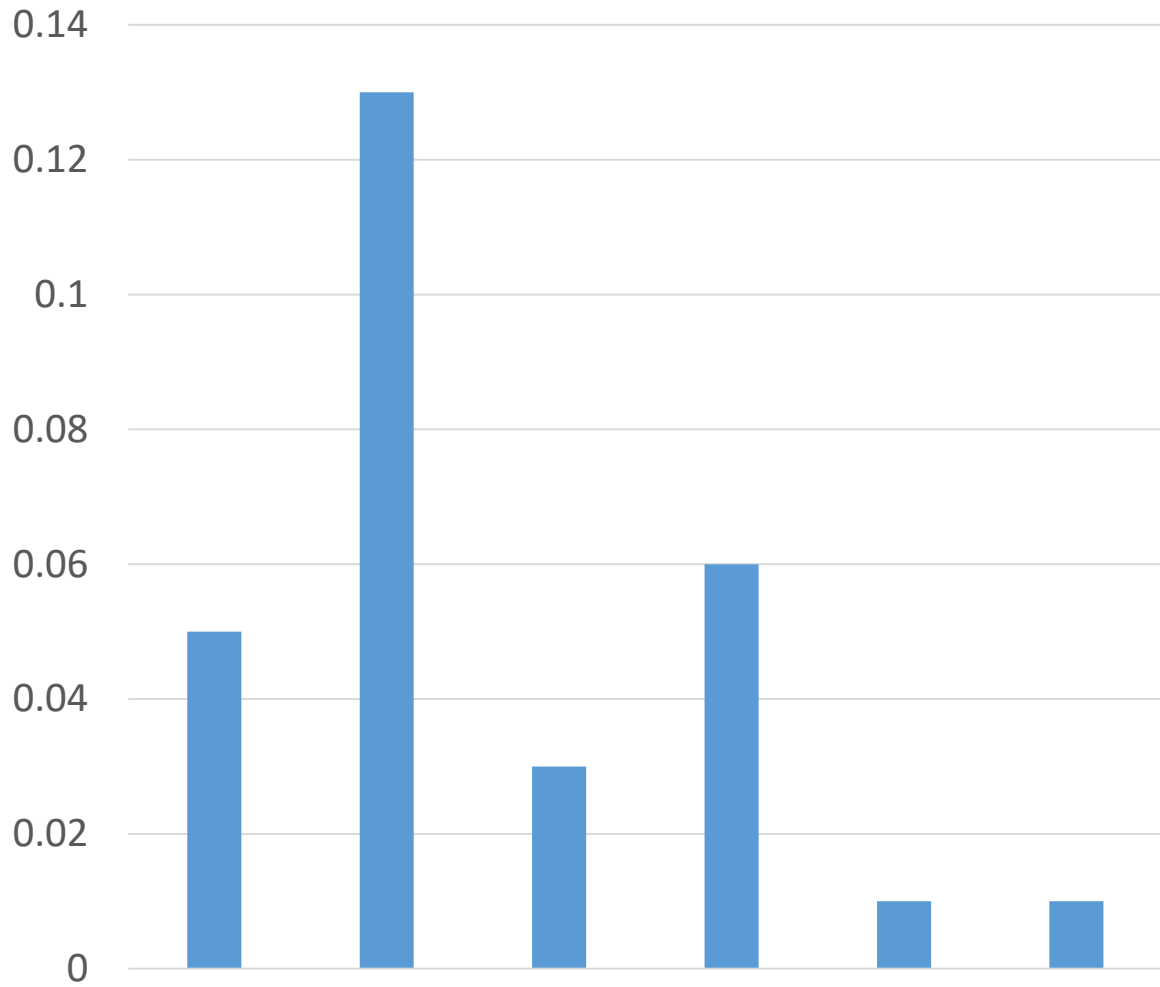
Benzene



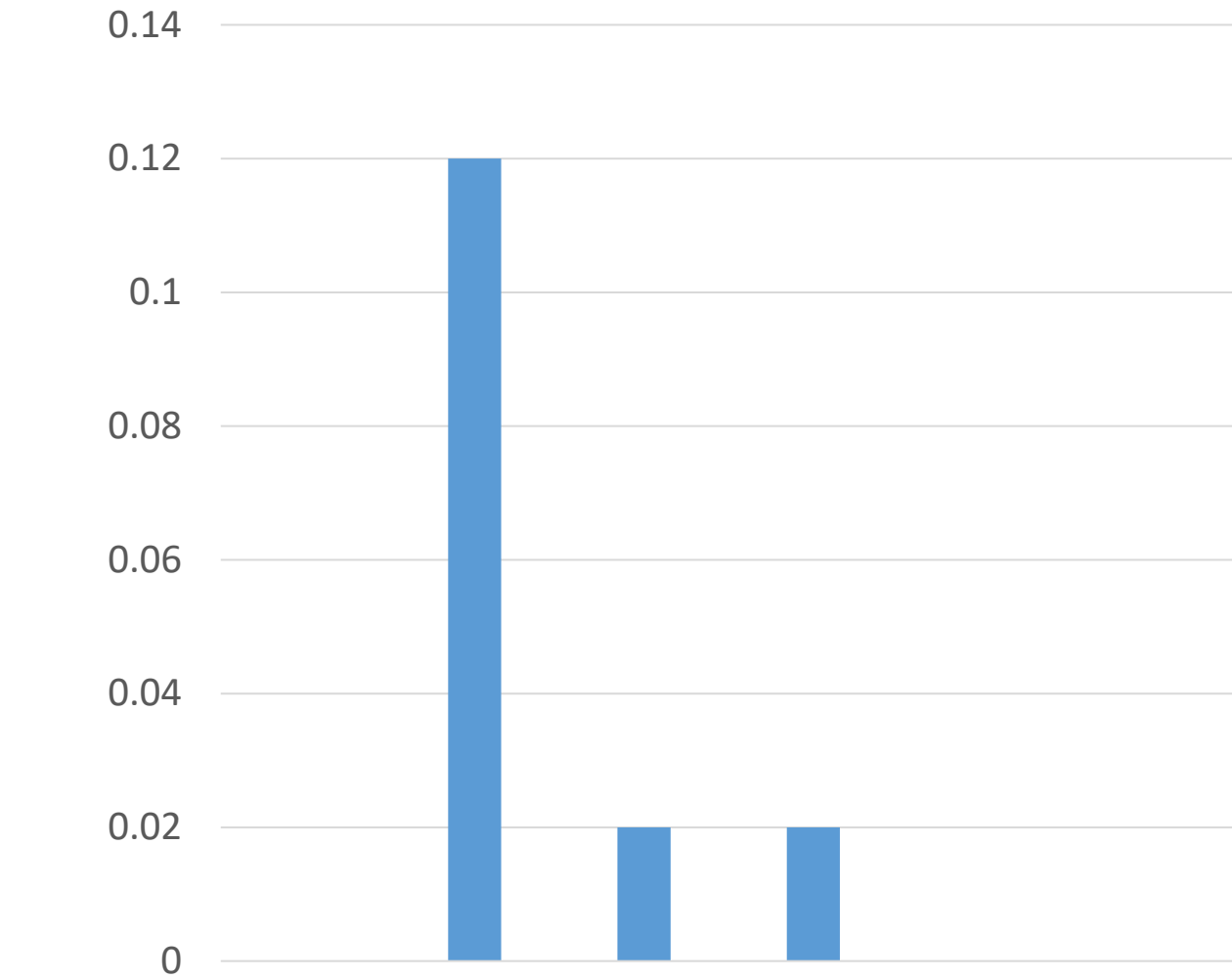
Ethylbenzene



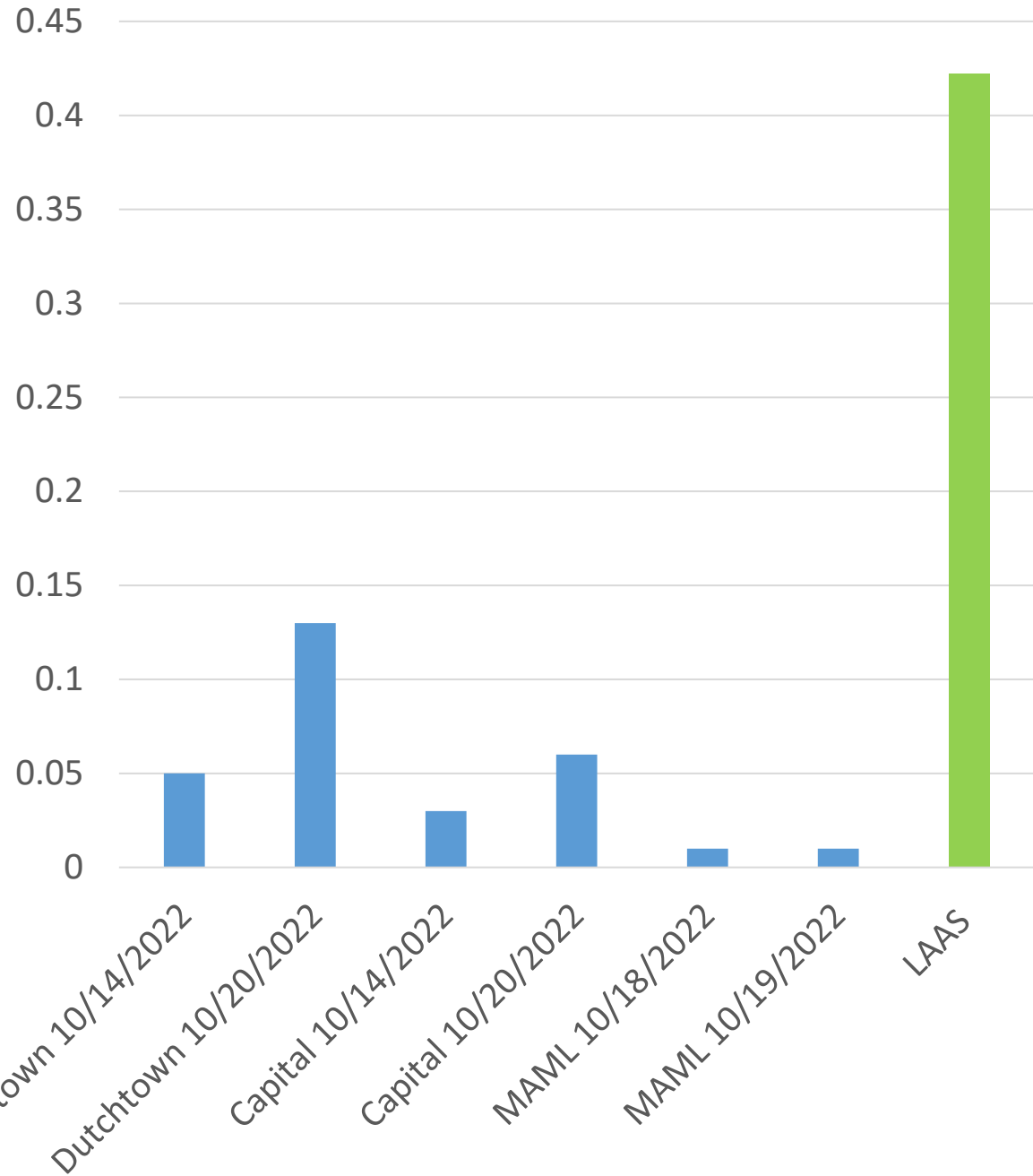
1,3-Butadiene-ppb



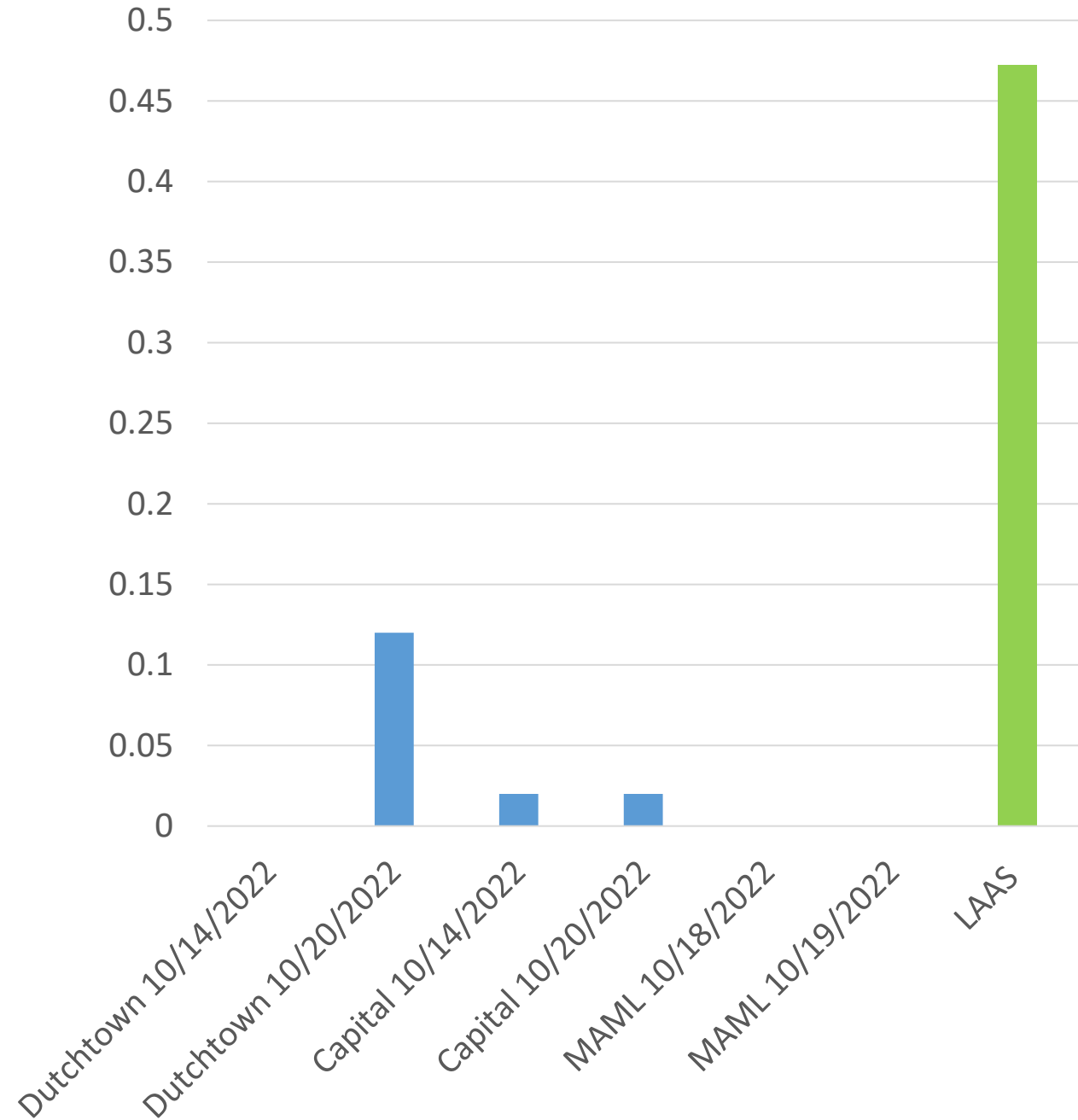
Vinyl Chloride



1,3-Butadiene-ppb



Vinyl Chloride







Top Stories

## Discover DEQ Newsletter - March 2023

What's Inside? LDEQ starts monthly podcast to inform public, Message from the Secretary, Dr. Chuck Carr Brown announces resignation at the Louisiana Environmental Conference, and more!



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### For Citizens

The Louisiana Department of Environmental Quality seeks to provide citizens with all the resources they need to be environmentally responsible.



### For Businesses

The Louisiana Department of Environmental Quality seeks to provide businesses with all the resources they need to be environmentally responsible.



### For Government

The Louisiana Department of Environmental Quality seeks to provide government with all the resources they need to be environmentally responsible.



### For Educators

The Louisiana Department of Environmental Quality seeks to provide educators with all the resources they need to be environmentally responsible.





# Air Monitoring Data & AQI



- Current AQI Data
- Forecast
- Regional 8 Hour Ozone Data
- Regional Hourly Ozone Data
- Site Data**
- Notifications

Site Map:



Pollutant:

Any

By Region:

-- Select Region --

Go

OR

By Site:

-- Select Site --

Go

## Current Monitoring Data & AQI

### Baton Rouge Capitol Site

<b>37</b> OZONE	<b>Good</b> 40 PPB 3/15/2022 2:00 PM
<b>16</b> PM25	<b>Good</b> 3.767 UG/M3 3/15/2022 2:00 PM
<b>0</b> SO2	<b>Good</b> 0.4 PPB 3/15/2022 2:00 PM

### Baton Rouge LSU Site

<b>34</b> OZONE	<b>Good</b> 37 PPB 3/15/2022 2:00 PM
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### Bayou Plaquemine Site

<b>44</b> OZONE	<b>Good</b> 48 PPB 3/15/2022 2:00 PM
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### Carlyss Site

<b>31</b> OZONE	<b>Good</b> 34 PPB
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### Carville Site

<b>42</b> OZONE	<b>Good</b> 45 PPB
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### Chalmette Vista Site

<b>0</b> SO2	<b>Good</b> 0.1 PPB
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# Air Monitoring Data & AQI

Current AQI Data

Forecast

Regional 8 Hour Ozone Data

Regional Hourly Ozone Data

Site Data

Notifications

Site:

Date:

## Site Monitoring Data

[Search multiple dates](#) | [Search by site and date with 5 minute, 10 minute, and 1 hour averaging times](#) | [Search Canister Data](#).

### More Information About Understanding AQI Information

Any questions about interpreting this monitoring data should be directed to the DEQ Customer Services Section at 1-866-896-5337.

TO REPORT ENVIRONMENTAL CONCERNS, INCLUDING ODORS, CONTACT THE DEQ SINGLE POINT OF CONTACT (SPOC) - 225-219-3640 or Toll Free 1-888-763-5424. In the event of an environmental emergency, citizens are encouraged to first contact their local authorities - police, sheriff, fire department, etc. Otherwise citizens and the regulated community can contact the SPOC line to report environmental concerns during business hours, 8 a.m. - 4:30 p.m., Monday through Friday at the number listed above. To report a concern outside of business hours call 225-342-1234 or the toll free number. Concerns include spills, releases, odors, fish kills, open burning, waste tires and any other types of environmental incidents. Citizens can [report the incident online](#).

**The data has not been quality reviewed or validated. Continuous PM2.5 readings shown are not NAAQS comparable.**

[Ozone and PM2.5 Air Quality Index \(AQI\) Forecast](#) | [Ambient Air Monitoring Data and Reports](#) | [Louisiana Department of Environmental Quality](#)





# Air Monitoring Data & AQI

- Current AQI Data
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Site:

- Select Site --
- Lafayette USGS Site
- Lake Charles Lighthouse Lane Site
- Baton Rouge LSU Site
- Madisonville/Northshore Site
- Mobile Air Monitoring Lab #1**
- Mobile Air Monitoring Lab #2
- Marrero Site
- Meraux Site
- Monroe Airport Site
- New Roads Site
- Norco Site
- Port Allen Site
- Pride Site
- Shreveport Downtown Airport Site
- Southern University Site
- St. Martinville Site
- St. Rose Site
- Thibodaux Site
- Vinton Site
- Westlake Site

Date:

2022-03-15

[date with 5 minute, 10 minute, and 1 hour averaging times](#) | [Search Canister Data.](#)

## Reporting AQI Information

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Update with 5 minute, 10 minute, and 1 hour averaging times | [Search Canister Data.](#)

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# Air Monitoring Data & AQI

- Current AQI Data
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Site:  Date:

## Site Monitoring Data at Mobile Air Monitoring Lab #1 on 10/18/2022

[Search multiple dates](#) | [Search by site and date with 5 minute, 10 minute, and 1 hour averaging times](#) | [Search Canister Data](#)

Time	Lat	Lon	AMBTEMP (DEGF)	BARPRESS (INHG)	CO (PPM)	H2S (PPB)	METHANE (PPM)	NMOC (PPM)	OZONE (PPB)	PM10 (UG/M3)	PM25 (UG/M3)	RELHUM (PERCENT)	SO2 (PPB)	THC (PPM)	WDIR (DEG)	WSP (MPH)
12:00 AM	29.222794	-90.0125021	70	29.92	0.09	3	2.1	0.02	30	34	9.4	63	0.9	2.12	151	10
1:00 AM	29.222794	-90.0125021	69	29.91	0.08	4	2.11	0.01	30	44	10.2	60	1	2.11	128	11
2:00 AM	29.222794	-90.0125021	67	29.92	0.07	4	2.11	0	31	52	11.3	59	0.4	2.11	124	11
3:00 AM	29.222794	-90.0125021	65	29.92	0.08	4	2.13	0	30	44	12.1	63	0.3	2.13	129	10
4:00 AM	29.222794	-90.0125021	64	29.94	0.07	3	2.11	0	32	45	13.3	57	0.1	2.11	113	10
5:00 AM	29.222794	-90.0125021	62	29.96	0.05	2	2.09	0	33	49	8.1	52	0	2.09	100	11
6:00 AM	29.222794	-90.0125021	61	29.98	0.04	2	2.07	0	32	42	6.5	52	0	2.07	120	12
7:00 AM	29.222794	-90.0125021	60	30	0.06	2	2.06	0	32	26	5.3	54	0	2.06	73	12





# Air Monitoring Data & AQI

Current AQI Data

Forecast

Regional 8 Hour Ozone Data

Regional Hourly Ozone Data

Site Data

Notifications

Site:

Mobile Air Monitoring Lab #1

Date:

2022-10-18

Go

## Site Monitoring Data at Mobile Air Monitoring Lab #1 on 10/18/2022

[Search multiple dates](#) | [Search by site and date with 5 minute, 10 minute, and 1 hour averaging times](#) | [Search Canister Data](#)

Time	Lat	Lon	AMBTEMP (DEGF)	BARPRESS (INHG)	CO (PPM)	H2S (PPB)	METHANE (PPM)	NMOC (PPM)	OZONE (PPB)	PM10 (UG/M3)	PM25 (UG/M3)	RELHUM (PERCENT)	SO2 (PPB)	THC (PPM)	WDIR (DEG)	WSP (MPH)
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8:00 AM	29.222794	-90.0125021	59	30.02	0.06	2	2.05	0	32	32	5	53	0	2.05	78	12
9:00 AM	29.222794	-90.0125021	60	30.04	0.06	2	2.06	0	31	28	5	54	0	2.06	98	11
10:00 AM	29.222794	-90.0125021	59	30.06	0.06	2	2.07	0	31	30	5.5	56	0	2.07	87	10
11:00 AM	29.222794	-90.0125021	59	30.06	0.08	1	2.03	0	33	33	5.6	54	0	2.03	120	10





# Air Monitoring Data & AQI

Current AQI Data

Forecast

Regional 8 Hour Ozone Data

Regional Hourly Ozone Data

Site Data

Notifications

Site:

Mobile Air Monitoring Lab #1

Date:

2022-10-18

Go

## Site Monitoring Data at Mobile Air Monitoring Lab #1 on 10/18/2022

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[Search Canister Data](#)

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8:00 AM	29.222794	-90.0125021	59	30.02	0.06	2	2.05	0	32	32	5	53	0	2.05	78	12
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10:00 AM	29.222794	-90.0125021	59	30.06	0.06	2	2.07	0	31	30	5.5	56	0	2.07	87	10
11:00 AM	29.222794	-90.0125021	59	30.06	0.08	1	2.03	0	33	33	5.6	54	0	2.03	120	10





# Questions?



## Contact:

**Jason Meyers, P.E.**  
**(225) 219-3408**  
**[jason.Meyers@la.gov](mailto:jason.Meyers@la.gov)**

