



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Ambient Air Quality Monitoring Program

Monthly Report

April 2024

May 31, 2024

Alberta Environment and Protected Areas

11th Floor, Oxbridge Place
9820-106 Street
Edmonton Alberta T5K 2J6

Subject: **Peace Airshed Zone Association (PAZA)**
April 2024 Ambient Air Quality Monitoring Report

Please find enclosed the PAZA Ambient Air Quality Monitoring Network Report for the month of April 2024.

The representative of the Person Responsible for this monitoring program is:

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This report was prepared by Dr. Kevin McCullum, P.Eng., and reviewed by Mandeep Dhaliwal.

PAZA has retained the services of WSP Canada Inc. to conduct continuous ambient monitoring and Dr. Kevin McCullum, P.Eng. to provide data validation and reporting.

This report is submitted by PAZA on behalf of the industrial member companies to satisfy the requirements of the facility Operating Approvals listed in Table A

The monthly summary report includes the operational summaries and hourly continuous monitoring and monthly passive results. The Milner station is being reported under the PAZA Monthly report.

Continuous Monitoring:

Eight (8) Stations including Henry Pirker (Grande Prairie), Dunes, Smoky Heights, Beaverlodge, Valleyview, Fox Creek, Poplar-Portable and Milner.
Detailed Summaries are included in the report.

The Poplar-Portable was shutdown at the end of April for movement to Happy Valley

Calibration and Data Submission:

Monthly report, hourly data and calibration reports for April 2024 were submitted to the ETS data system.

Table A. PAZA members with Facility Operating Approvals

Company	Facility	LSD	EPEA Approval No.
Advantage Oil & Gas Ltd.	Glacier	05-02-076-13-W6	00262479-00-00
Alberta Power (2000) Ltd. (an ATCO company)	Sturgeon	SW-06-069-21-W5	00010283-02-02
ATCO Power Canada	Poplar Hill	11-19-073-08-W6	00067774-01-01
ATCO Power Canada	Valleyview	SW-06-069-21-W5	00147709-01-01
AltaGas Ltd.	Pouce Coupe	03-03-081-13-W6	00247673-00-00
	Gordondale	02-26-068-25-W5	00287474-00-00
Apache Canada Ltd.	House Mountain	01-08-070-10-W5	00010137-02-02
ARC Resources Ltd.	ARC Ante Creek	02-26-068-25-W5	00266694-01-00
Birchcliff Energy Ltd.	Pouce Coupe	03-22-078-12-W6	00252529-00-00
Canadian Natural Resources Limited	Bonanza	11-25-081-11-W6	00000029-01-00
	Progress/Gordondale	01-01-077-10-W6	00010036-02-00
	Gold Creek	13-26-067-05-W6	00010446-02-00
	Teepee Creek	SE-2-074-04-W6	00001635-02-00
	Sturgeon/Valleyview	02-02-069-22-W5	00001633-02-00
Canfor Forest Products	Grande Prairie	SW-23-071-06-W6	00152645-01-00
Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	00000212-01-00
Encana Corporation	Sexsmith	04-08-075-07-W6	00010002-01-00
Enerplus Resources	Pouce Coupe	SW-06-069-21-W5	00001464-02-03
Exshaw Oil Corporation	Spirit River	03-10-077-07-W6	00344521-00-00
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	00238762-00-00
Inception Exploration Ltd.	Gold Creek	03-26-069-05-W6	00335317-00-02
KANATA Energy Group Ltd.	Valhalla	13-21-076-09-W6	00017620-02-02
Long Run Exploration	Eaglesham	01-25-076-01-W6	00241532-00-00
	Kakut	14-12-075-03-W6	00248469-00-00
	Donnelly	06-01-077-21-W5	00000087-02-00
	Puskwaskau	03-26-074-01-W6	00017524-01-00
Longview Oil Corp.	Sunset House	06-22-070-20-W5	00138884-01-00
Milner Power Limited Partnership	H.R. Milner thermal electric power plant	SE-15-058-08-W6	00009814-03-03
NorthRiver Midstream Inc.	Fourth Creek	16-11-082-09-W6	00000263-01-00
	Gordondale	11-26-079-09-W6	00011495-01-01
	Pouce Coupe/Bonanza	03-23-080-13-W6	00070203-01-01
Pembina Pipeline Corporation	Kakwa River	08-13-063-05 W6	00335342-01-00
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	00001746-02-00
	Pouce Coupe	16-07-078-11-W6	00000614-01-00
Petrus Resources	Rycroft	08-25-077-06-W6	00011351-02-00
	Spirit River	08-34-077-06-W6	00011096-02-00
Strathcona Resources Ltd.	Jayar Sour Gas Processing Plant	06-08-062-03 W6	03612040-00-00
Suncor Energy Inc.	Progress	07-22-078-09-W6	00011428-02-00
Tidewater Midstream and Infrastructure Ltd.	Pipestone Sour Gas Plant	NW-35-70-9 W6	00403309-00-00
Veresen Energy	Hythe Brainard	11-18-074-12-W6	00010910-02-00
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	00000113-02-00

Concentrations in excess of the Clean Air (Maximum Levels) Regulation:

There were no readings above the AAAQG or AAAQO for the month.

Operational times less than 90 percent

Poplar CH₄/NMHC are not in operation.

All other instruments were in operation >90% during the month.

Air Incidents

None were reported.

Deviations from Authorized Monitoring Methods

None were reported.

Passive Monitoring

- 52 Stations throughout the PAZA zone
 - Passive sample analyses were performed by Bureau Veritas Laboratories

There were 20 duplicates sampled in the month of April:

- Eight SO₂ duplicates located at Steeprock Creek, Pinto Creek, Jean Cote, McLennan, Duvernay 3, Kakwa 1, Milner Powerline, Jayar2 14-8
 - RPD ranging from 0% to 34% (Milner Powerline both samples were <0.01ppb)
- One O₃ duplicate located at Kinuso
 - RPD 23% (no fails)
- Seven NO₂ duplicates at Sylvester, Beaverlodge, Clouston Creek, Sunset House, Kakwa 2, Milner Pipeline, Jayar5 Camp
 - RPD ranging from 0% to 31% (no fails)
- Four H₂S duplicates at Duvernay 3, Girouxville 4, Kakwa 4, Jayar4 7-8 or 8-8 Pad
 - RPD 10% to 22% (Kakwa 4 both samples were <0.02ppb)

Dustfall Monitoring

- Five Stations collected Total Dustfall and Fixed Dustfall
- Total dustfall ranged from 23.7 to 105.2 mg/100cm²/30day.
- RPD ranged from 9% to 13% (no fails)

I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization, and reporting requirements.

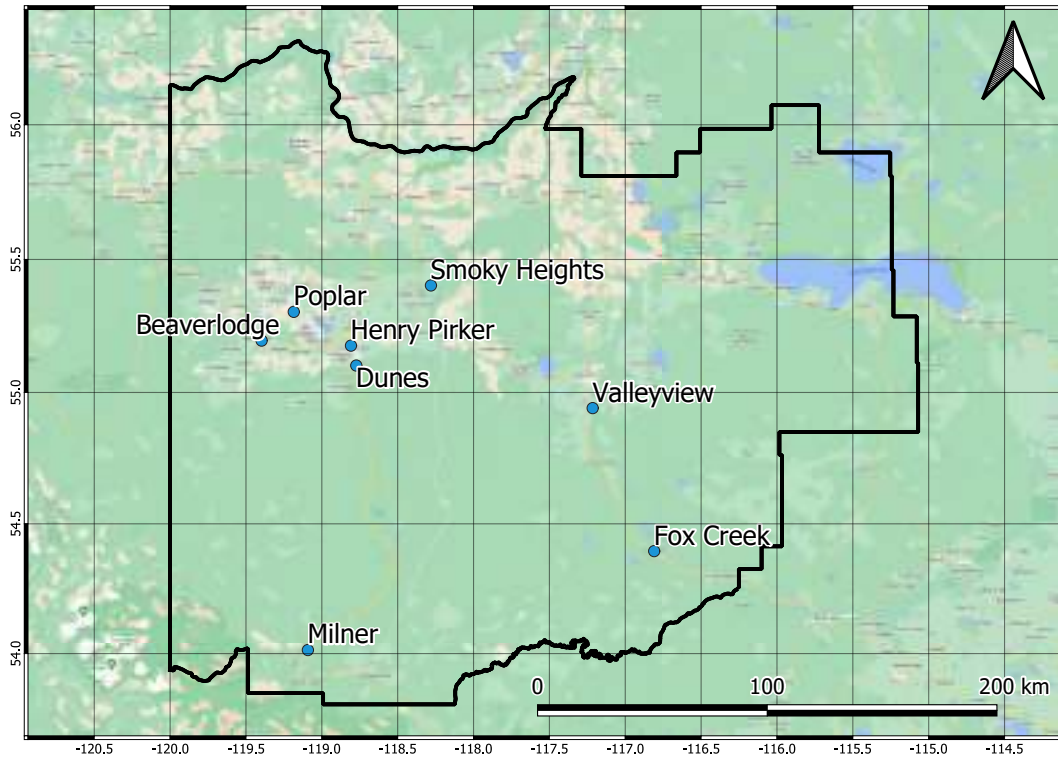


Mandeep Dhaliwal, B.Sc., P.Chem.
Program Manager

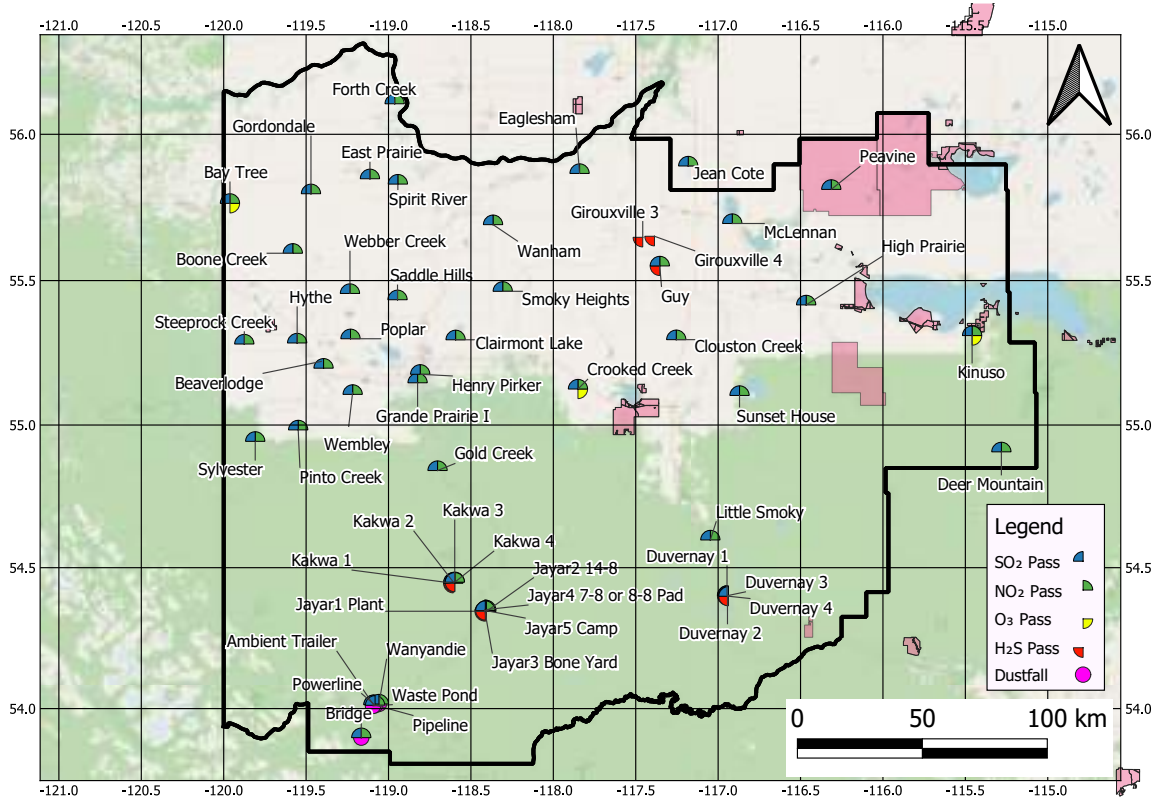
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PAZA Continuous Monitoring Station Locations



PAZA Passive Monitoring Station Locations



1 April 2024 Monthly Station Summaries

The following summaries are for the equipment and data results from the continuous ambient monitoring network

1.1 Beaverlodge Air Monitoring Station

PAZA - April 2024 Beaverlodge Station Report

Parameter	April				1-hour			24-hour			Exceedance				Calibration Date
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	
NO (ppb)	0.2	0.0	92.2%	97.1%	11.8	-	Apr-18 08:00	1.1	-	Apr-18	-	-	-	-	Apr-02, 2024
NO ₂ (ppb)	2.1	0.3	92.2%	97.1%	18.0	150	Apr-18 08:00	4.5	-	Apr-20	0	-	-	-	Apr-02, 2024
NO _x (ppb)	2.3	0.3	92.2%	97.1%	28.4	-	Apr-18 08:00	5.2	-	Apr-18	-	-	-	-	Apr-02, 2024
O ₃ (ppb)	30.0	9.5	93.3%	100.0%	59.0	78	Apr-20 18:00	49.8	-	Apr-01	0	-	-	-	Apr-02, 2024
PM _{2.5} (µg/m ³)	2.5	0.1	99.9%	100.0%	10.9	80	Apr-21 02:00	4.5	25	Apr-21	0	-	0	-	Apr-04, 2024
SO ₂ (ppb)	0.5	0.0	95.1%	99.9%	5.1	172	Apr-23 10:00	0.9	45	Apr-15	0	-	0	0	Apr-04, 2024
Average	Minimum	Valid	Operational	Maximum											
Temp (°C)	4.9	-3.1	95.4%	95.4%	13.8	<div style="border: 1px solid black; padding: 5px;"> Note: Valid hours must be greater than 75% Operational hours must be greater than 90% </div>									
RH (%)	47.8	10.4	100.0%	100.0%	95.4										
WS (m/s/hr)	13.1	0.5	100.0%	100.0%	43.1	<div style="border: 1px solid black; padding: 5px;"> Average Wind Direction: 270 W </div>									
WD (deg)	270	0.7	100.0%	100.0%	393.3										

Update Summary:

Parameter	Make	Model	Equipment summary
NO _x /NO ₂ /NO	Thermo	42IQ	Apr 6-7 analyzer failure, data removed until manual open (20hrs removed with 1hr maintenance)
O ₃	Thermo	89IQ	No issues noted
PM _{2.5}	API	T640	No issues noted
SO ₂	Thermo	43i-TLE	Apr 2, 2hr removed due to loss of air flow
Met Equip	MetOne	50.5	For ET, daily drop removed every day 04:21-04:45 (30hrs); Apr 4 extreme data shifts (3hrs removed)

1.2 Dunes Air Monitoring Station

PAZA - April 2024 Dunes Station Report

Parameter	April				1-hour			24-hour			Exceedance				Calibration Date
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	
PM _{2.5} (µg/m ³)	1.0	0.0	98.3%	99.6%	15.5	80	Apr-01 23:00	3.5	25	Apr-06	0	-	0	-	Apr-04-2024
SO ₂ (ppb)	0.4	0.0	94.3%	99.0%	21.7	172	Apr-27 11:00	1.8	45	Apr-27	0	-	0	0	Apr-04-2024
TRS (ppb)	0.5	0.0	94.3%	99.0%	4.1	10	Apr-29 06:00	0.9	5	Apr-19	0	-	0	-	Apr-04-2024
Average	Minimum	Valid	Operational	Maximum											
Temp (°C)	5.2	-3.6	99.0%	99.0%	17.2	<div style="border: 1px solid black; padding: 5px;"> Note: Valid hours must be greater than 75% Operational hours must be greater than 90% </div>									
RH (%)	46.0	8.4	99.0%	99.0%	99.9										
WS (m/s/hr)	4.9	0.0	99.0%	99.0%	12.4	<div style="border: 1px solid black; padding: 5px;"> Average Wind Direction: 281 W </div>									
WD (deg)	281	0.9	99.0%	99.0%	393.4										

Update Summary:

Parameter	Make	Model	Equipment summary
PM _{2.5}	Thermo	SHARP 5030	Apr 5, data communication issues (This removed); Apr 26 excessive drifting (spikes and negative), 3hrs removed
SO ₂	Thermo	43i	Apr 5, data communication issues (This removed)
TRS	Thermo	43i	Apr 5, data communication issues (This removed)
Met Equip	Gill/RMYoung	MetPak/RMY86004	Apr 5, data communication issues (This removed)

1.3 Grande Prairie - Henry Pirkler Air Monitoring Station

PAZA - April 2024 Henry Pirkler Station Report

Parameter	April				1-hour			8-hour / 24-hour			Exceedance				Calibration Date																																				
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d																																					
NO (ppb)	1.2	0.0	94.7%	99.7%	51.9	-	Apr-11 07:00	5.1	-	Apr-11	-	-	-	-	Apr 01, 2024																																				
NO ₂ (ppb)	3.5	0.8	94.7%	99.7%	36.2	159	Apr-08 07:00	12.3	-	Apr-02	0	-	-	-	Apr 01, 2024																																				
NO _x (ppb)	7.1	0.9	94.7%	99.7%	82.2	-	Apr-11 07:00	15.8	-	Apr-02	-	-	-	-	Apr 01, 2024																																				
O ₃ (ppb)	34.7	0.5	95.0%	99.7%	63.9	76	Apr-20 17:00	47.0	-	Apr-20	0	-	-	-	Apr 01, 2024																																				
PM ₁₀ (µg/m ³)	3.2	0.5	99.6%	100.0%	13.7	80	Apr-24 00:00	5.5	25	Apr-06	0	-	0	-	Apr 02, 2024																																				
SO ₂ (ppb)	0.2	0.0	95.0%	99.7%	5.5	172	Apr-07 01:00	0.7	48	Apr-07	0	-	0	0	Apr 02, 2024																																				
H ₂ S (ppb)	0.1	0.0	95.1%	100.0%	1.1	10	Apr-29 04:00	0.3	5	Apr-08	0	-	0	-	Apr 02, 2024																																				
CH ₄ (ppm)	2.1	2.0	95.1%	100.0%	3.0	-	Apr-07 04:00	2.2	-	Apr-18	-	-	-	-	Apr 01, 2024																																				
THC (ppm)	2.1	2.0	95.1%	100.0%	3.1	-	Apr-07 04:00	2.2	-	Apr-18	-	-	-	-	Apr 01, 2024																																				
MMHC (ppm)	0.0	0.0	95.1%	100.0%	0.0	-	Apr-11 06:00	0.0	-	Apr-28	-	-	-	-	Apr 01, 2024																																				
CO (ppm)	0.2	0.1	94.7%	100.0%	0.6	17	Apr-02 08:00	0.2	5	Apr-02	0	0	-	-	Apr 01, 2024																																				
<table border="1"> <thead> <tr> <th></th> <th>Average</th> <th>Minimum</th> <th>Valid</th> <th>Operational</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>Temp (°C)</td> <td>6.0</td> <td>-10.6</td> <td>100.0%</td> <td>100.0%</td> <td>19.0</td> </tr> <tr> <td>RH (%)</td> <td>45.1</td> <td>6.6</td> <td>100.0%</td> <td>100.0%</td> <td>84.0</td> </tr> <tr> <td>SR (µW/m²)</td> <td>169.4</td> <td>0.0</td> <td>100.0%</td> <td>100.0%</td> <td>723.3</td> </tr> <tr> <td>WS (m/s/hr)</td> <td>9.0</td> <td>0.2</td> <td>100.0%</td> <td>100.0%</td> <td>26.5</td> </tr> <tr> <td>WD (deg)</td> <td>267</td> <td>1.3</td> <td>100.0%</td> <td>100.0%</td> <td>304.7</td> </tr> </tbody> </table>																	Average	Minimum	Valid	Operational	Maximum	Temp (°C)	6.0	-10.6	100.0%	100.0%	19.0	RH (%)	45.1	6.6	100.0%	100.0%	84.0	SR (µW/m ²)	169.4	0.0	100.0%	100.0%	723.3	WS (m/s/hr)	9.0	0.2	100.0%	100.0%	26.5	WD (deg)	267	1.3	100.0%	100.0%	304.7
	Average	Minimum	Valid	Operational	Maximum																																														
Temp (°C)	6.0	-10.6	100.0%	100.0%	19.0																																														
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WS (m/s/hr)	9.0	0.2	100.0%	100.0%	26.5																																														
WD (deg)	267	1.3	100.0%	100.0%	304.7																																														
<p>Note: Valid hours must be greater than 75% Operational hours must be greater than 90%</p> <p>Average Wind Direction: 267 W</p>																																																			

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	42i	Apr 2 manifold flow lost (2hrs removed)
O ₃	TECO	49i	Apr 2 manifold flow lost (2hrs removed)
PM ₁₀	API	T640	No operational issues noted
SO ₂	Thermo	43i-TLE	Apr 2 manifold flow lost (2hrs removed)
H ₂ S	TEI	45B	No operational issues noted
THC/CH ₄ /MMHC	TEI	55i	No operational issues noted
CO	Thermo	48i-TLE	No operational issues noted
Met Equip	MetDra	50.5	No operational issues noted

1.4 Smoky Heights Air Monitoring Station

PAZA - April 2024 Smoky Heights Station Report

Parameter	April				1-hour			24-hour			Exceedance				Calibration Date																								
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d																									
PM ₁₀ (µg/m ³)	3.3	0.0	99.7%	100.0%	59.2	80	Apr-27 23:00	9.7	25	Apr-27	0	-	0	-	Apr 08, 2024																								
SO ₂ (ppb)	0.2	0.0	95.1%	100.0%	2.8	172	Apr-07 06:00	0.6	48	Apr-12	0	-	0	0	Apr 08, 2024																								
THS (ppb)	0.2	0.0	95.1%	100.0%	0.6	10	Apr-21 08:00	0.3	5	Apr-28	0	-	0	-	Apr 08, 2024																								
<table border="1"> <thead> <tr> <th></th> <th>Average</th> <th>Minimum</th> <th>Valid</th> <th>Operational</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>Temp (°C)</td> <td>5.0</td> <td>-8.0</td> <td>100.0%</td> <td>100.0%</td> <td>16.7</td> </tr> <tr> <td>WS (m/s/hr)</td> <td>14.4</td> <td>0.4</td> <td>100.0%</td> <td>100.0%</td> <td>44.2</td> </tr> <tr> <td>WD (deg)</td> <td>260</td> <td>0.5</td> <td>100.0%</td> <td>100.0%</td> <td>359.7</td> </tr> </tbody> </table>																	Average	Minimum	Valid	Operational	Maximum	Temp (°C)	5.0	-8.0	100.0%	100.0%	16.7	WS (m/s/hr)	14.4	0.4	100.0%	100.0%	44.2	WD (deg)	260	0.5	100.0%	100.0%	359.7
	Average	Minimum	Valid	Operational	Maximum																																		
Temp (°C)	5.0	-8.0	100.0%	100.0%	16.7																																		
WS (m/s/hr)	14.4	0.4	100.0%	100.0%	44.2																																		
WD (deg)	260	0.5	100.0%	100.0%	359.7																																		
<p>Note: Valid hours must be greater than 75% Operational hours must be greater than 90%</p> <p>Average Wind Direction: 290 WNW</p>																																							

Update Summary:

Parameter	Make	Model	Equipment summary
PM ₁₀	Sharp	1030	No Operational issues noted
SO ₂	TECO	43i	No Operational issues noted
THS	TEI	43i-APSAA	No Operational issues noted
Met Equip	MetOne	50.5	No Operational issues noted

1.5 Valleyview Air Monitoring Station

PAZA - April 2024 Valleyview Station Report

Parameter	April					1-hour			24-hour			Exceedance			Calibration Date	
	Average	Minimum	Valid	Operational	Maximum	Objective	Max Day and Time	Max	Objective	Max Day	1hr	5hr	24hr	30d		
SO ₂ (ppb)	0.1	0.0	92.9%	97.5%	0.8	172	Apr-05 09:00	0.2	48	Apr-27	0	-	0	0	Apr 15, 2024	
H ₂ S (ppb)	0.1	0.0	92.9%	97.5%	1.3	30	Apr-14 22:00	0.3	3	Apr-24	0	-	0	-	Apr 15, 2024	
	Average	Minimum	Valid	Operational	Maximum											
Temp (°C)	5.4	-10.2	97.5%	97.5%	18.3	<div style="border: 1px solid black; padding: 5px;"> <p>Note: Valid hours must be greater than 75%</p> <p>Operational hours must be greater than 50%</p> </div>										
RH (%)	55.1	12.8	97.5%	97.5%	99.5											
WS (km/hr)	3.2	0.1	97.5%	97.5%	16.9											
WD (deg)	280	3.0	97.5%	97.5%	357.9											
Average Wind Direction									280	MW						

Update Summary:

Parameter	Make	Model	Equipment summary
SO ₂	TEI	431-AP5CB	Apr 14-15, communications failure, 18 hrs removed
H ₂ S	TEI	450-APHAA / 43C	Apr 14-15, communications failure, 18 hrs removed
Mst Equip	RMYoung	RMFB006	Apr 14-15, communications failure, 18 hrs removed

1.6 Fox Creek Air Monitoring Station

PAZA - April 2024 Fox Creek Station Report

Parameter	April					1-hour			8-hour / 24-hour			Exceedance			Calibration Date	
	Average	Minimum	Valid	Operational	Maximum	Objective	Max Day and Time	Max	Objective	Max Day	1hr	5hr	24hr	30d		
NO (ppb)	2.6	0.0	95.1%	100.0%	44.3	-	Apr-02 05:00	6.4	-	Apr-02	-	-	-	-	Apr 17, 2024	
NO ₂ (ppb)	3.7	0.2	95.1%	100.0%	37.5	150	Apr-02 05:00	10.3	-	Apr-23	0	-	-	-	Apr 17, 2024	
NO _x (ppb)	8.5	0.2	95.1%	100.0%	82.2	-	Apr-02 05:00	15.9	-	Apr-02	-	-	-	-	Apr 17, 2024	
O ₃ (ppb)	36.3	0.5	95.4%	100.0%	63.3	78	Apr-01 15:00	40.8	-	Apr-01	0	-	-	-	Apr 17, 2024	
PM _{2.5} (µg/m ³)	3.0	0.2	99.9%	100.0%	13.7	80	Apr-23 20:00	5.5	25	Apr-20	0	-	0	-	Apr 17, 2024	
NO _x (ppb)	0.1	0.0	95.3%	100.0%	6.9	172	Apr-09 09:00	0.5	48	Apr-09	0	-	0	0	Apr 17, 2024	
H ₂ S (ppb)	0.1	0.0	95.0%	100.0%	0.6	30	Apr-12 08:00	0.3	3	Apr-27	0	-	0	-	Apr 18, 2024	
	Average	Minimum	Valid	Operational	Maximum											
Temp (°C)	-4.6	-10.1	100.0%	100.0%	19.2	<div style="border: 1px solid black; padding: 5px;"> <p>Note: Valid hours must be greater than 75%</p> <p>Operational hours must be greater than 50%</p> </div>										
WS (km/hr)	6.6	0.4	100.0%	100.0%	23.9											
WD (deg)	283	0.0	100.0%	100.0%	359.2											
Average Wind Direction																283

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	42IQ	No operational issues noted
O ₃	TECO	89I	No operational issues noted
PM _{2.5}	API	T640	No operational issues noted
SO ₂	TEI	431-TLE	No operational issues noted
H ₂ S	TEI	450I	No operational issues noted
Mst Equip	MstDra	50.5	No operational issues noted

1.7 Poplar Air Monitoring Station

PAZA - April 2024 Poplar Station Report

Parameter	April				1-hour			24-hour			Exceedance				Calibration Date
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	
NO (ppb)	0.5	0.0	93.5%	98.5%	10.3	-	Apr-08 08:00	1.8	-	Apr-06	-	-	-	-	Apr 25, 2024
NO ₂ (ppb)	3.2	0.4	93.5%	98.5%	21.2	159	Apr-07 04:00	6.3	-	Apr-11	0	-	-	-	Apr 25, 2024
NO _x (ppb)	3.7	0.5	93.5%	98.5%	24.6	-	Apr-11 09:00	8.1	-	Apr-11	-	-	-	-	Apr 25, 2024
O ₃ (ppb)	36.3	4.2	93.5%	98.5%	62.2	78	Apr-20 18:00	46.8	-	Apr-01	0	-	-	-	Apr 25, 2024
PM _{2.5} (µg/m ³)	2.7	0.1	97.9%	98.5%	24.2	80	Apr-21 01:00	5.9	25	Apr-21	0	0	0	-	Apr 25, 2024
SO ₂ (ppb)	3.0	0.0	93.6%	98.5%	42.4	172	Apr-23 09:00	3.5	48	Apr-13	0	0	0	0	Apr 25, 2024
TRS (ppm)	0.5	0.3	93.8%	98.5%	2.0	38	Apr-09 14:00	0.6	3	Apr-07	0	0	0	-	Apr 25, 2024
CH ₄ (ppm)	removed Dec 12, 2022														
THC (ppm)	2.2	1.9	93.5%	98.5%	2.8	-	Apr-28 07:00	2.3	-	Apr-29	-	-	-	-	Apr 25, 2024
NRHC (ppm)	removed Dec 12, 2022														
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	3.7	-10.7	98.1%	98.2%	15.4										
WS (mm/hr)	15.4	0.2	98.1%	98.2%	47.7										
WD (deg)	257	3.3	98.1%	98.2%	399.6										

Note: Valid hours must be greater than 75%
Operational hours must be greater than 90%

Average Wind Direction: 257 WSW

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	TEI	421	Apr 12 comm fail, followed by excessive negatives (1hr); Apr 30 shutdown calibration (12hrs not in service)
O ₃	TEI	491	Apr 12 comm fail, followed by excessive negatives (1hr); Apr 30 shutdown calibration (12hrs not in service)
PM _{2.5}	API	T640	Apr 12 comm fail, followed by excessive negatives (1hr); Apr 30 shutdown calibration (12hrs not in service)
SO ₂	TEI	431	Apr 12 comm fail, followed by excessive negatives (1hr); Apr 30 shutdown calibration (12hrs not in service)
TRS	TEI	431	Apr 12 comm fail, followed by excessive negatives (1hr); Apr 30 shutdown calibration (12hrs not in service)
THC	TEI	55i / 518-LF	Apr 12 comm fail, followed by excessive negatives (1hr); Apr 30 shutdown calibration (12hrs not in service)
Met Equip	MetOne	50.5	Apr 30 shutdown (12hrs not in service)

1.8 Milner Air Monitoring Station

PAZA - April 2024 Milner Station Report

Parameter	April				1-hour			24-hour			Exceedance				Calibration Date
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	
NO (ppb)	0.4	0.0	94.3%	99.2%	8.1	-	Apr-24 05:00	1.0	-	Apr-20	-	-	-	-	Apr 22, 2024
NO ₂ (ppb)	2.4	0.0	94.3%	99.2%	20.8	159	Apr-04 03:00	4.4	-	Apr-14	0	-	-	-	Apr 22, 2024
NO _x (ppb)	2.8	0.0	94.3%	99.2%	25.8	-	Apr-04 02:00	5.4	-	Apr-14	-	-	-	-	Apr 22, 2024
PM _{2.5} (µg/m ³)	4.5	0.1	98.8%	99.2%	35.3	80	Apr-27 07:00	11.2	29	Apr-01	0	0	0	-	Apr 22, 2024
	Average	Minimum	Valid	Operational	Maximum										
WS (mm/hr)	8.9	0.1	98.8%	98.8%	31.4										
WD (deg)	248	0.3	98.8%	98.8%	393.7										

Note: Valid hours must be greater than 75%
Operational hours must be greater than 90%

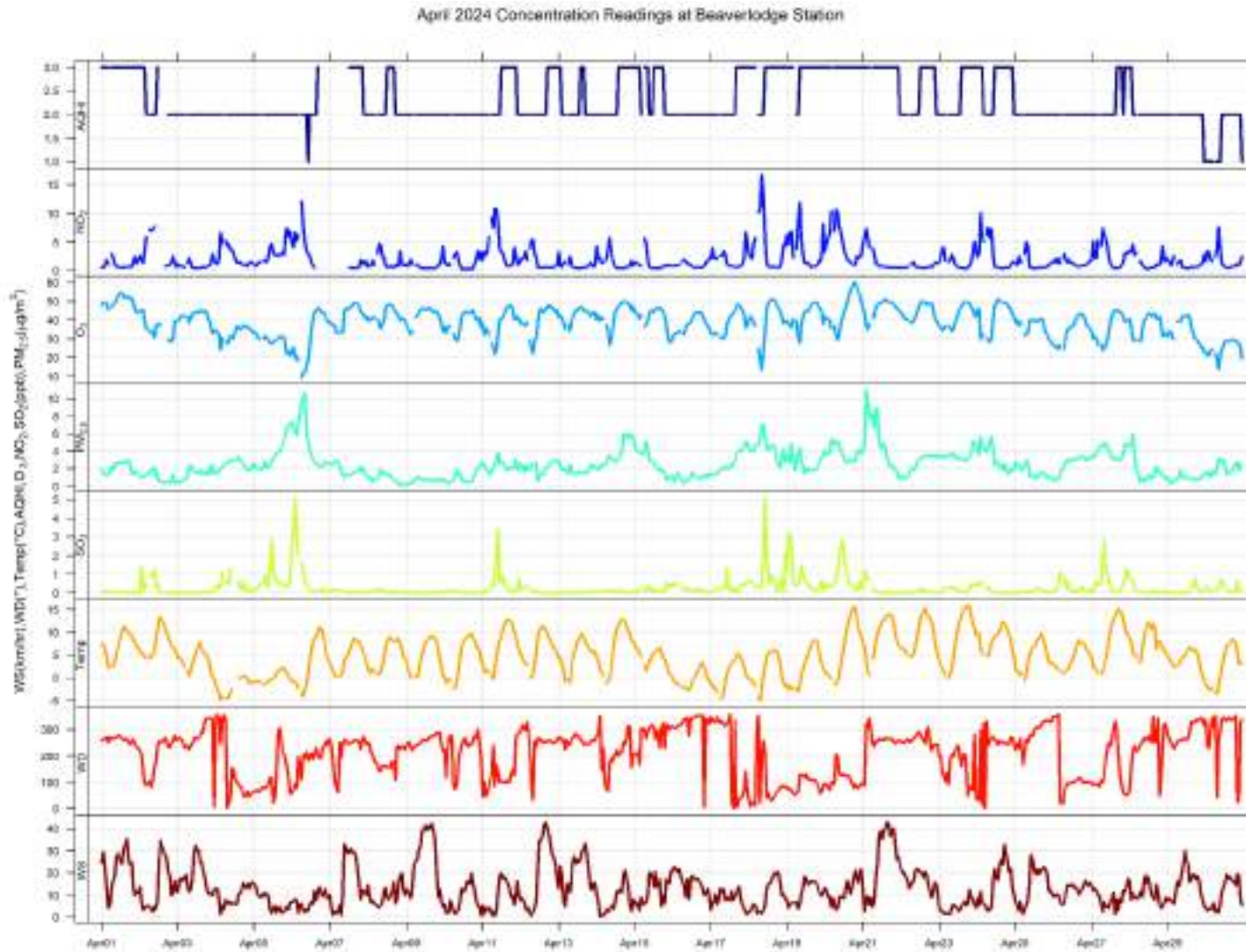
Average Wind Direction: 248 WSW

Update Summary:

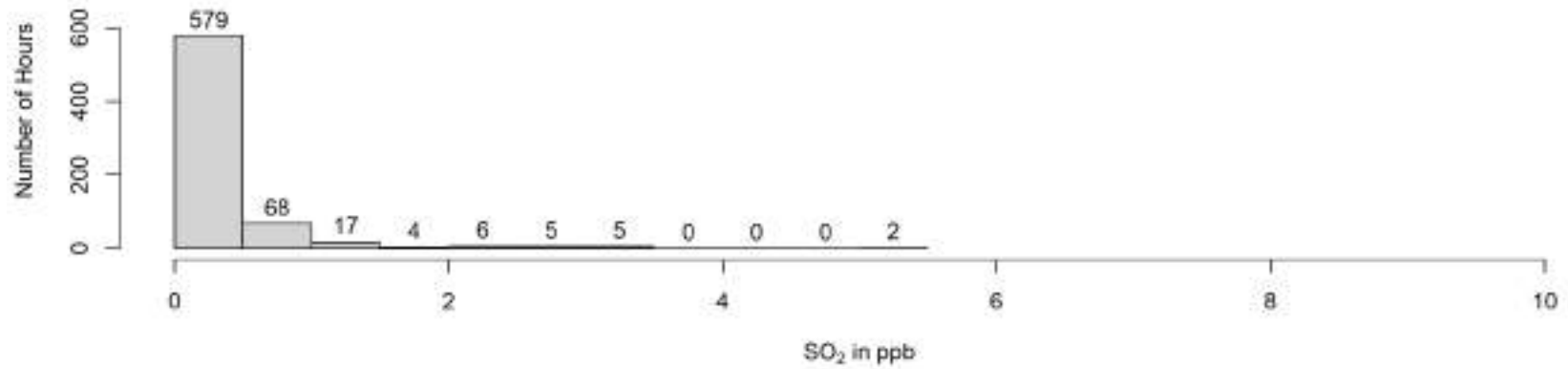
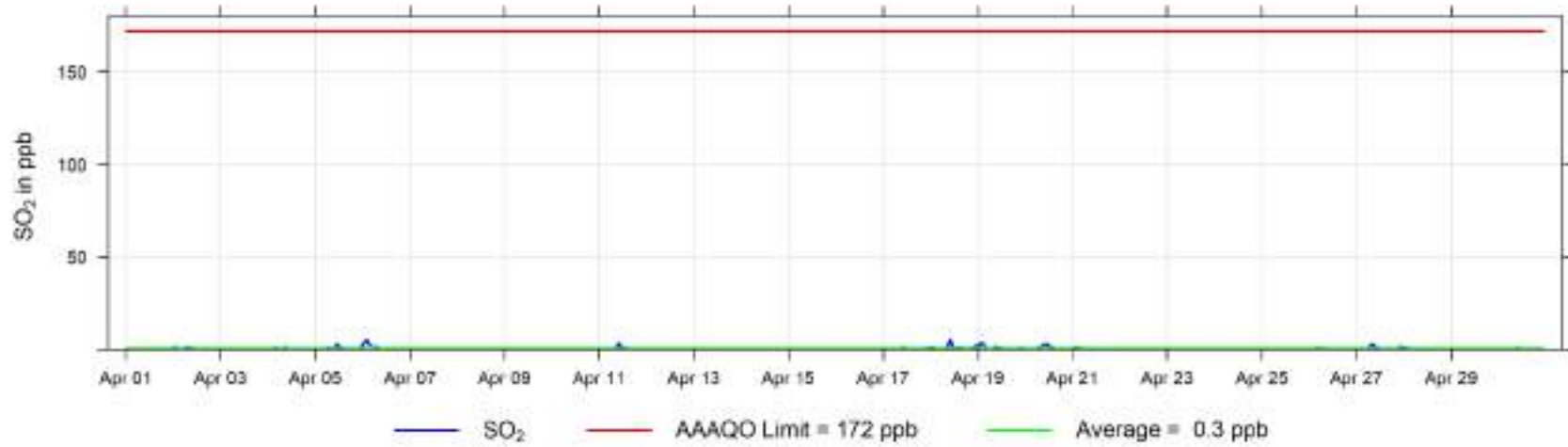
Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	421	Apr 3 power failure (2hrs); Apr 16 AEPA audit (4hrs)
PM _{2.5}	API	T640	Apr 3 power failure (2hrs); Apr 16 AEPA audit (4hrs)
Met Equip	MetOne	50.5	Apr 3 power failure (2hrs) following analyzer failure (7hrs removed)

2 Beaverlodge Charts

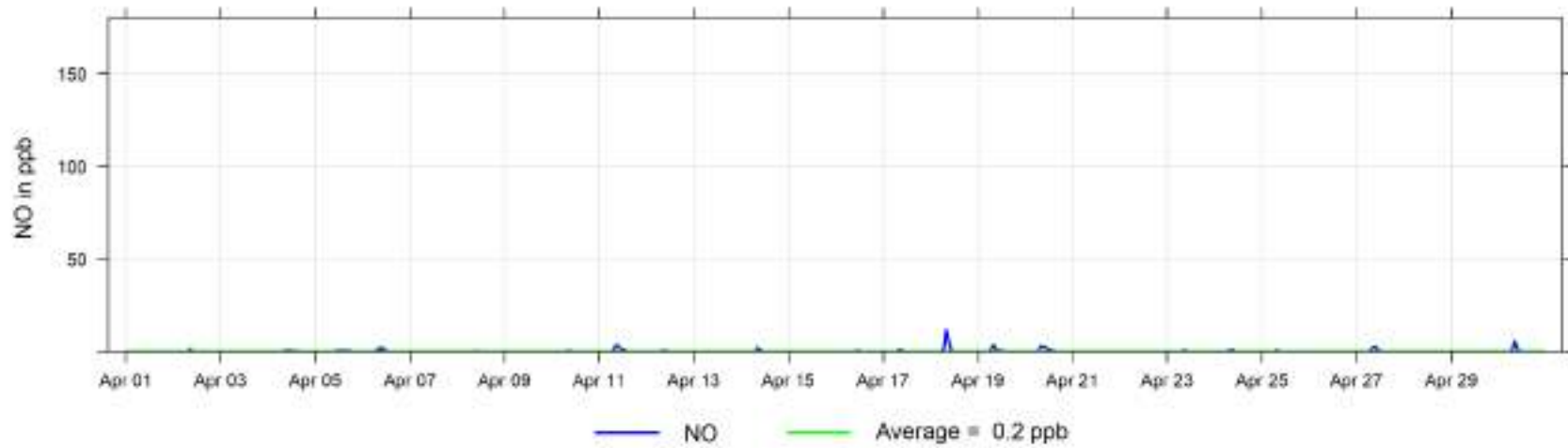
The following pages include the charts and histograms for Beaverlodge Station



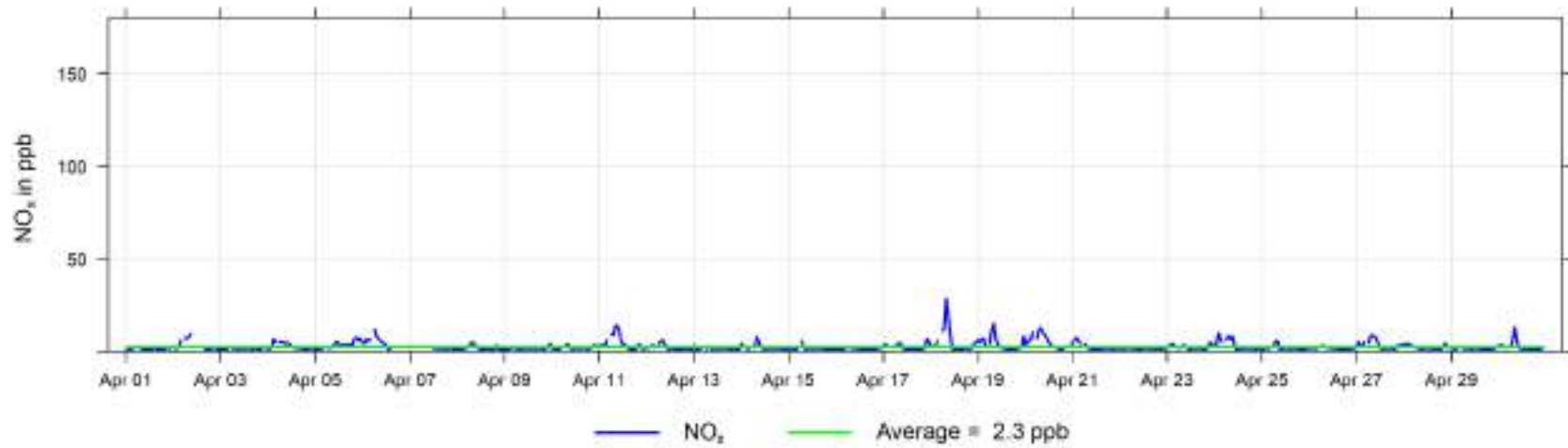
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Beaverlodge



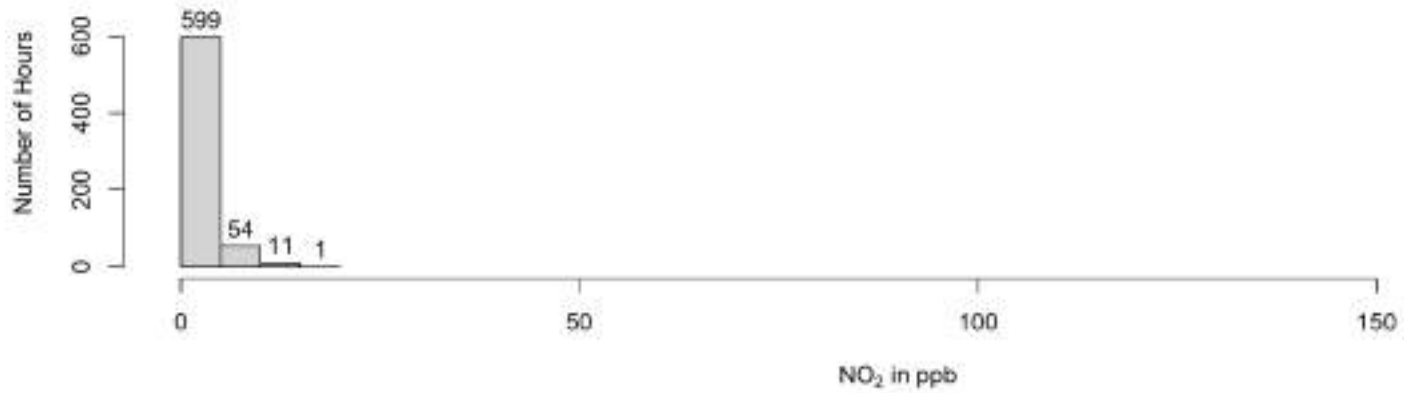
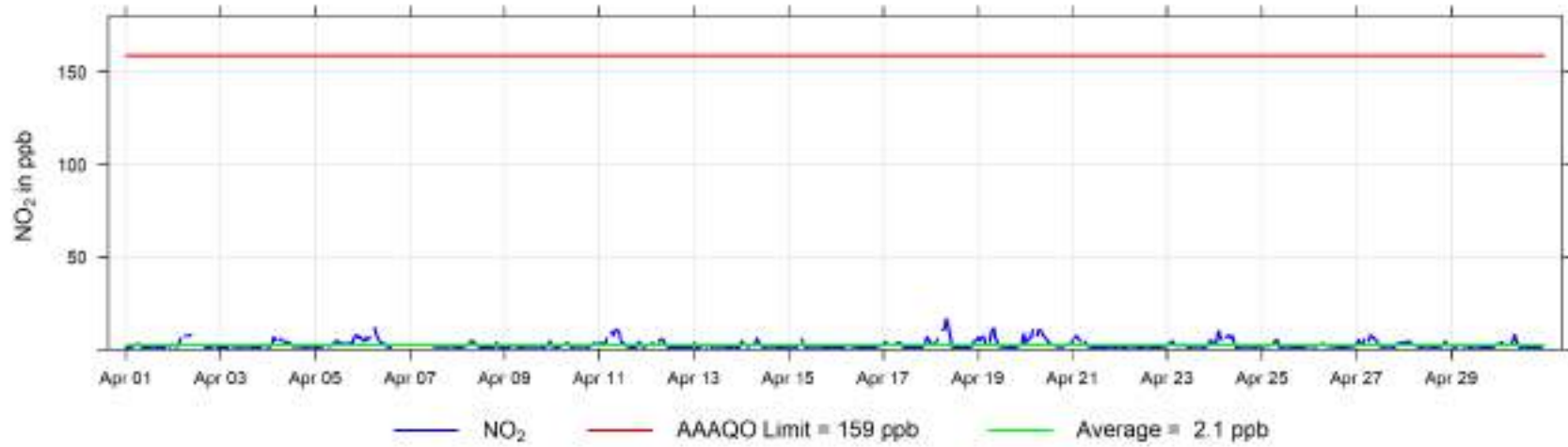
April 2024 Hourly Concentration Readings of NO (in ppb) at Beaverlodge



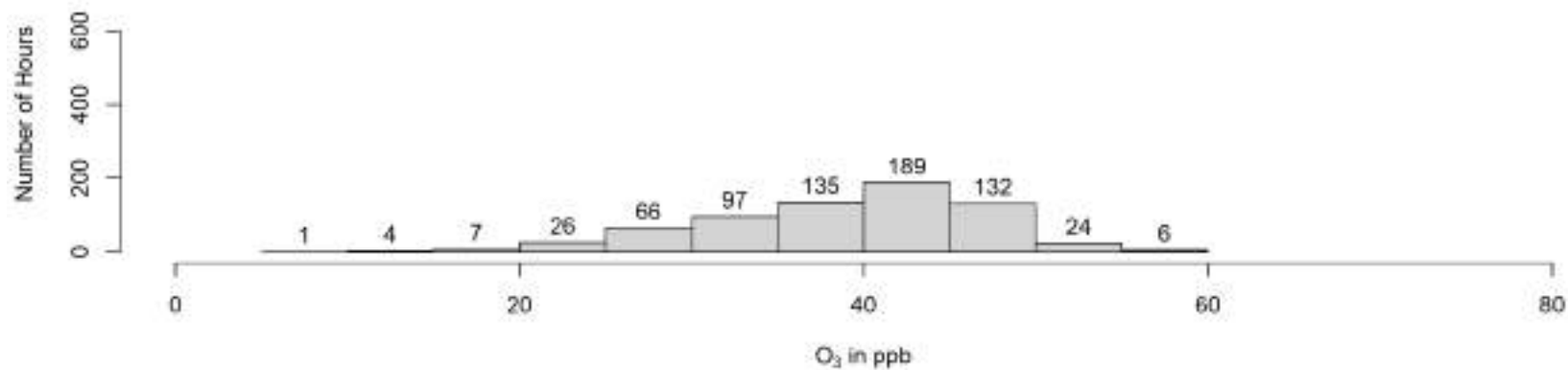
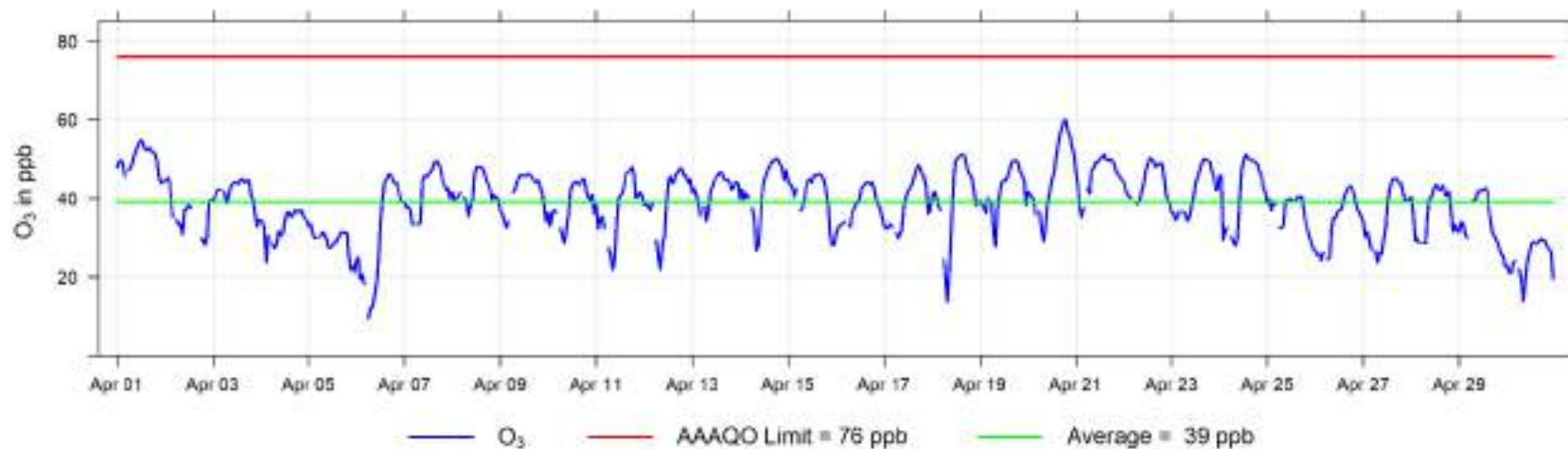
April 2024 Hourly Concentration Readings of NO_x (in ppb) at Beaverlodge



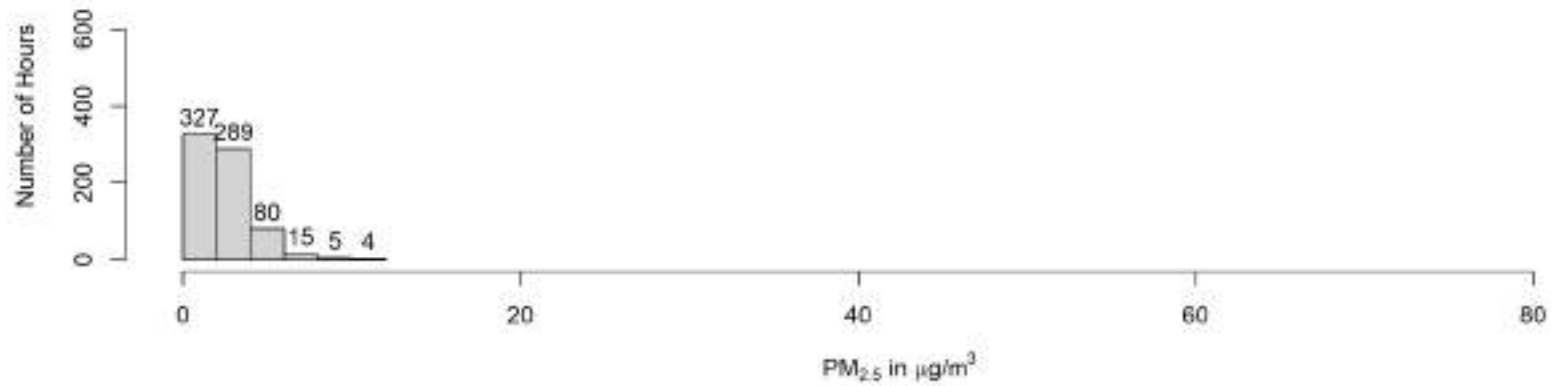
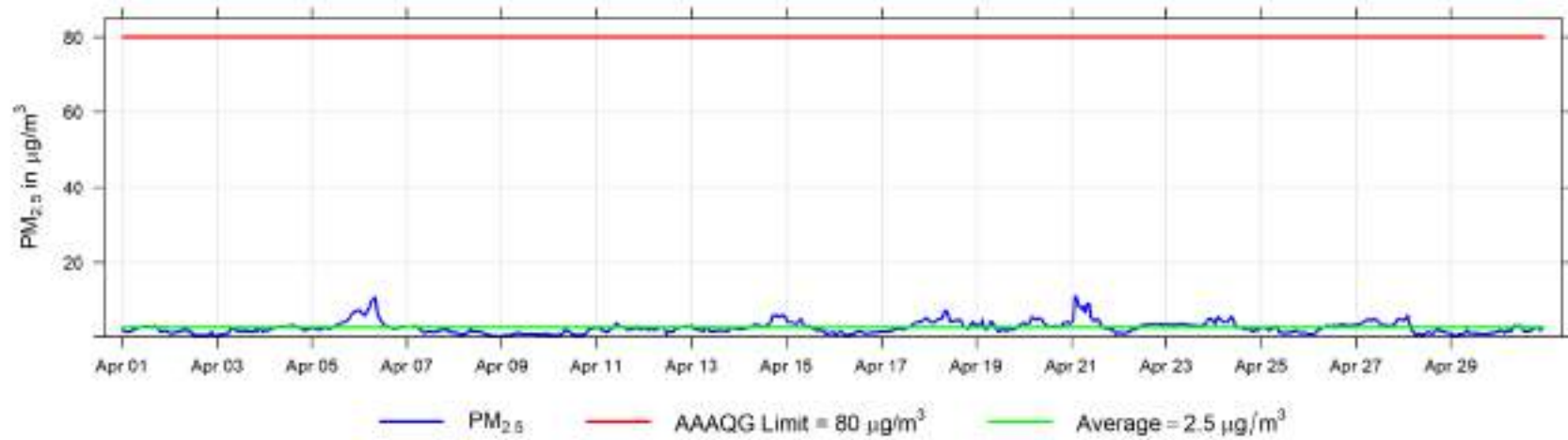
April 2024 Hourly Concentration Readings of NO₂ (in ppb) at Beaverlodge



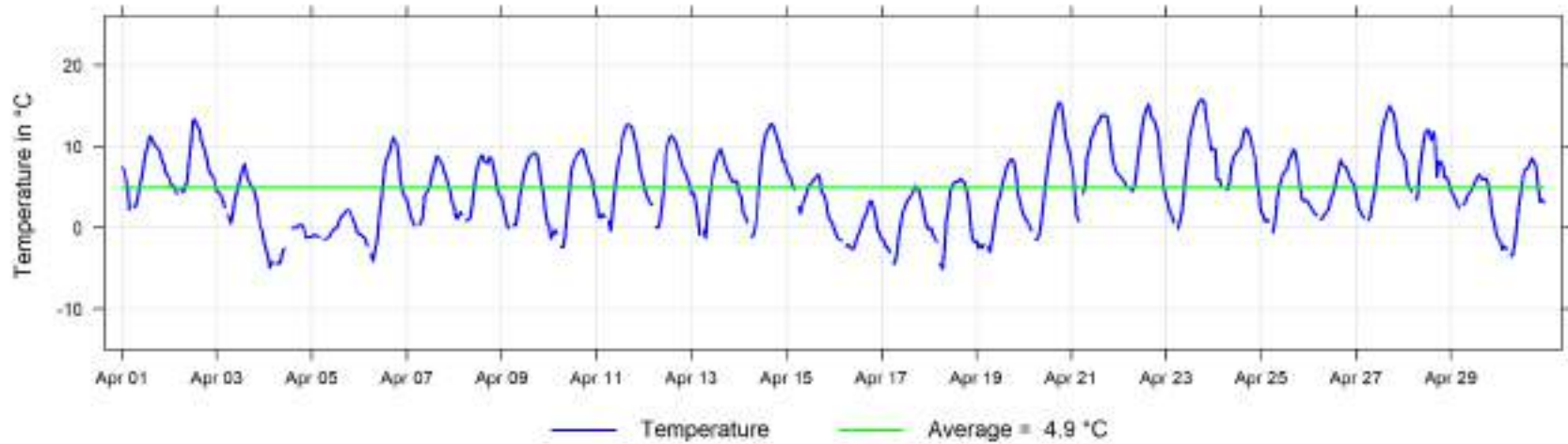
April 2024 Hourly Concentration Readings of O₃ (in ppb) at Beaverlodge



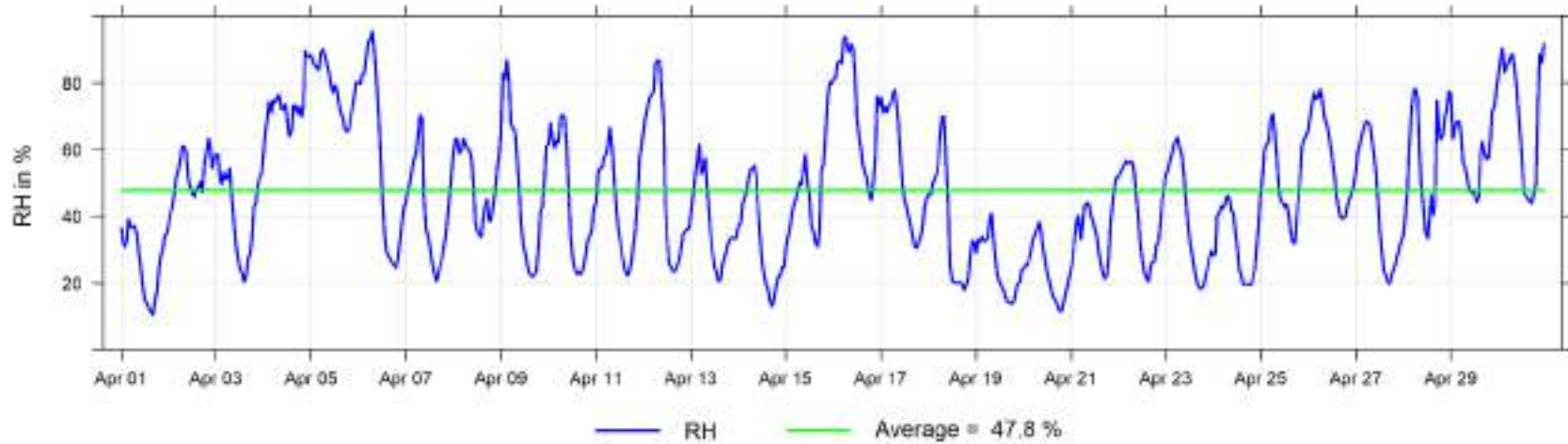
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Beaverlodge



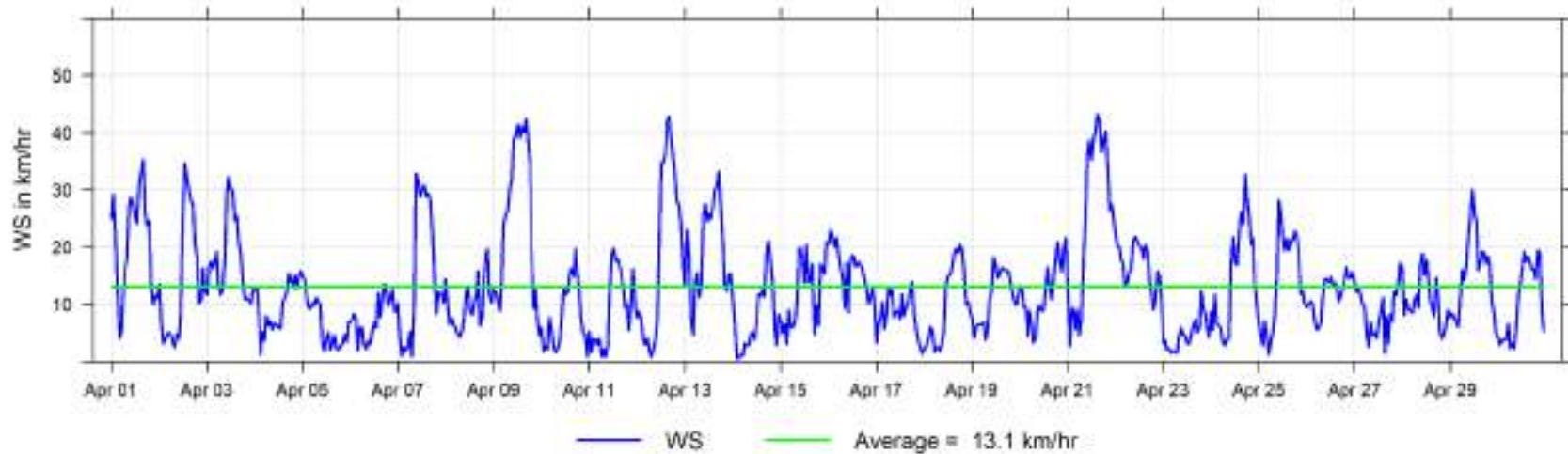
April 2024 Hourly Temperature Readings (in °C) at Beaverlodge



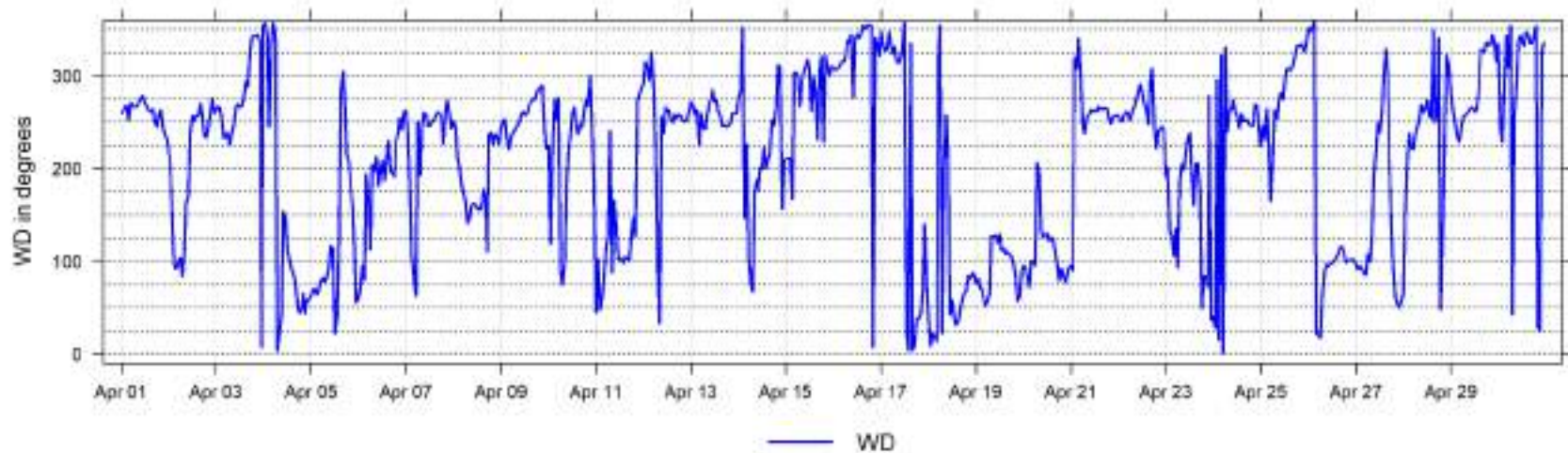
April 2024 Hourly Readings of Relative Humidity (in %) at Beaverlodge



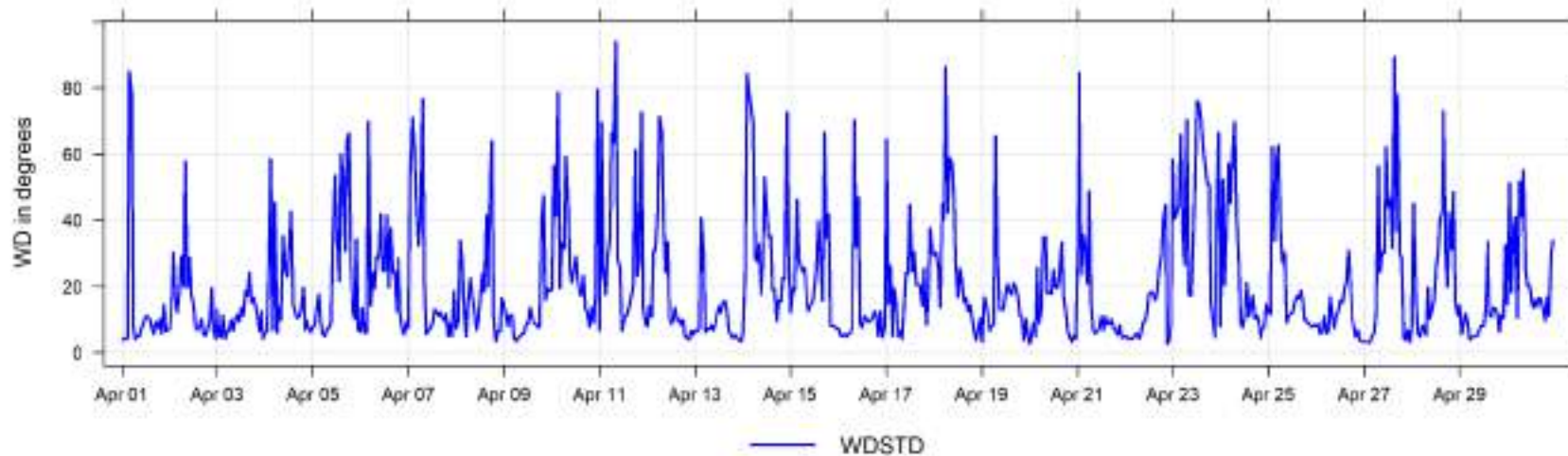
April 2024 Hourly Readings of Wind Speed (in km/hr) at Beaverlodge

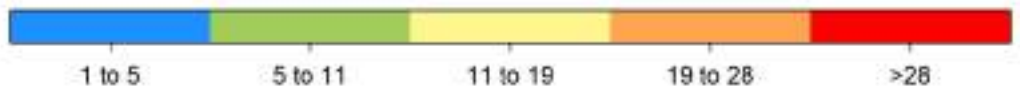
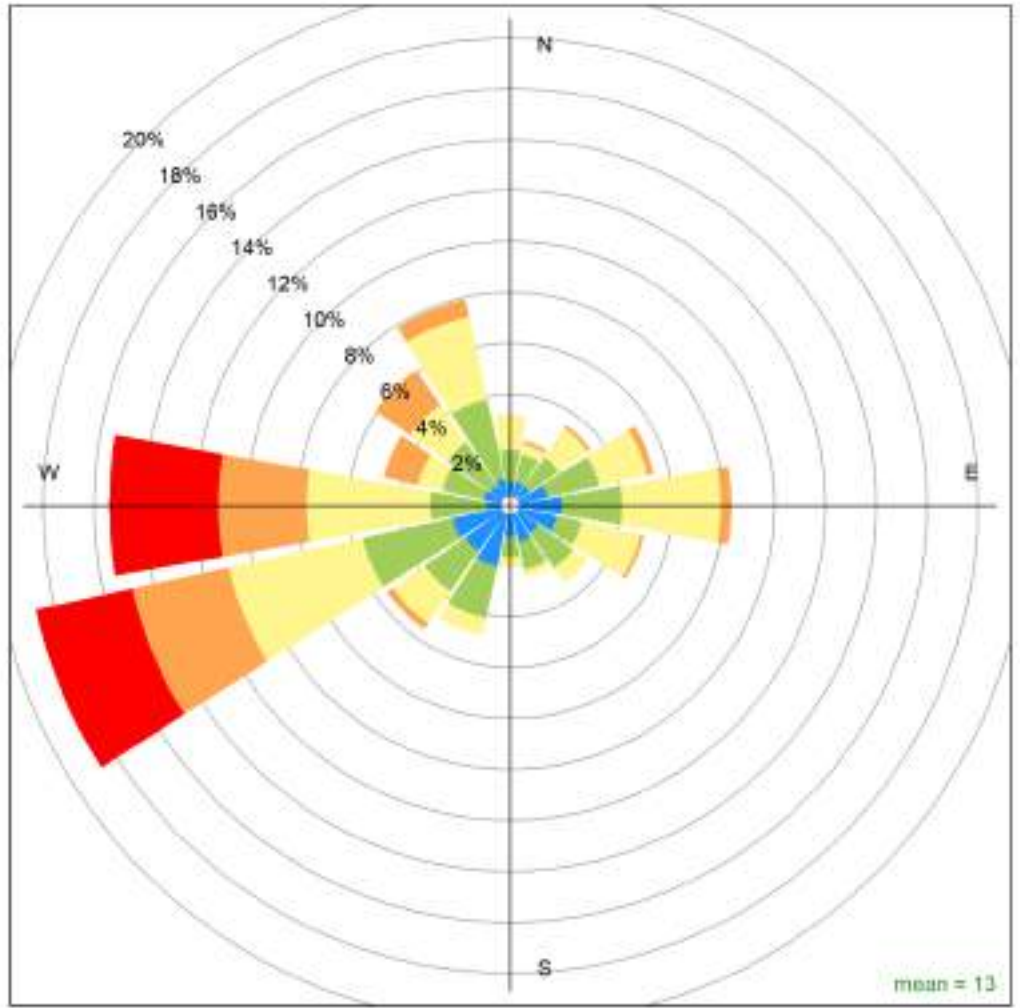


April 2024 Hourly Readings of Wind Direction (in degrees) at Beaverlodge



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Beaverlodge



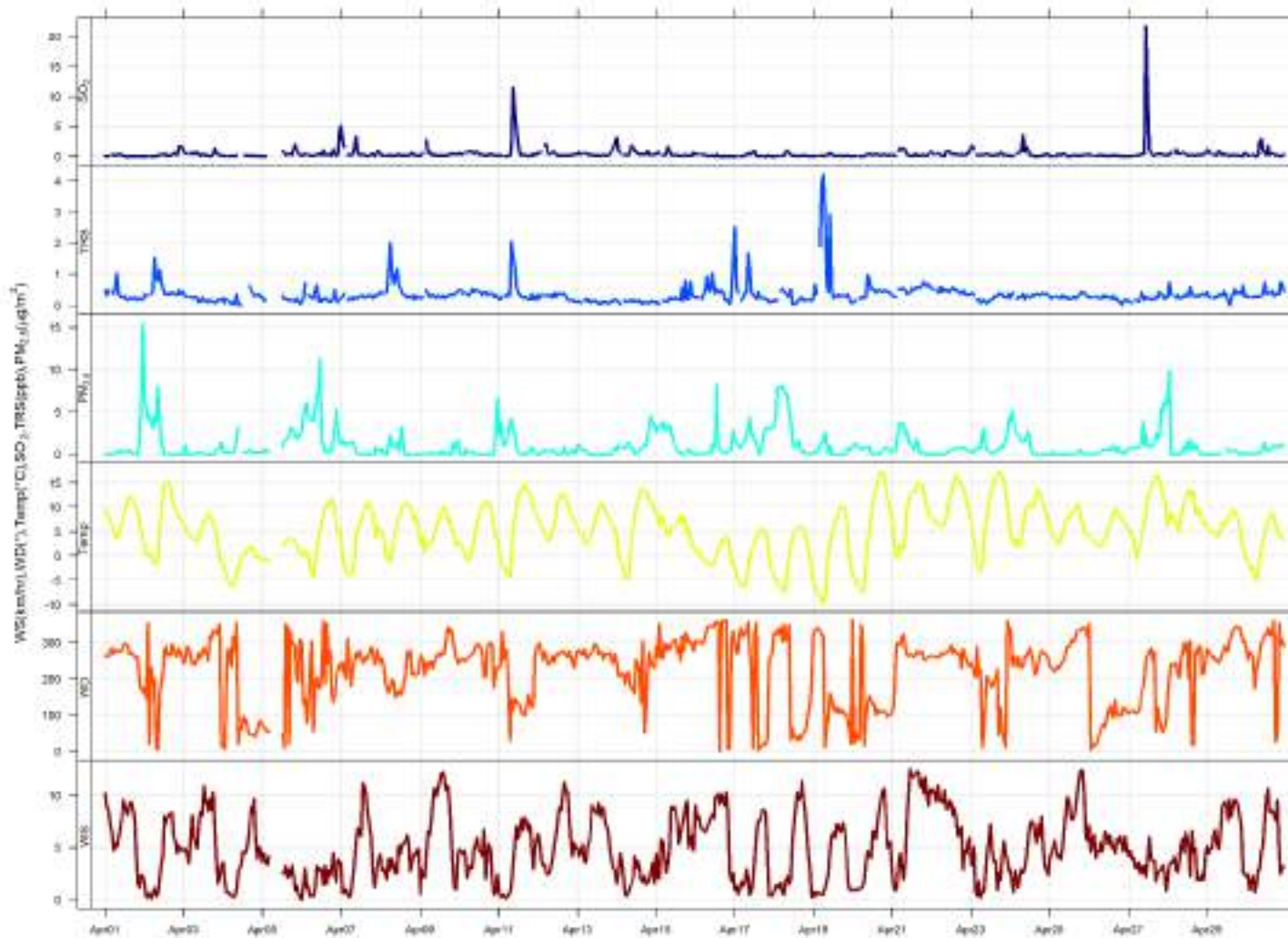


Beaverlodge April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 1.2 %

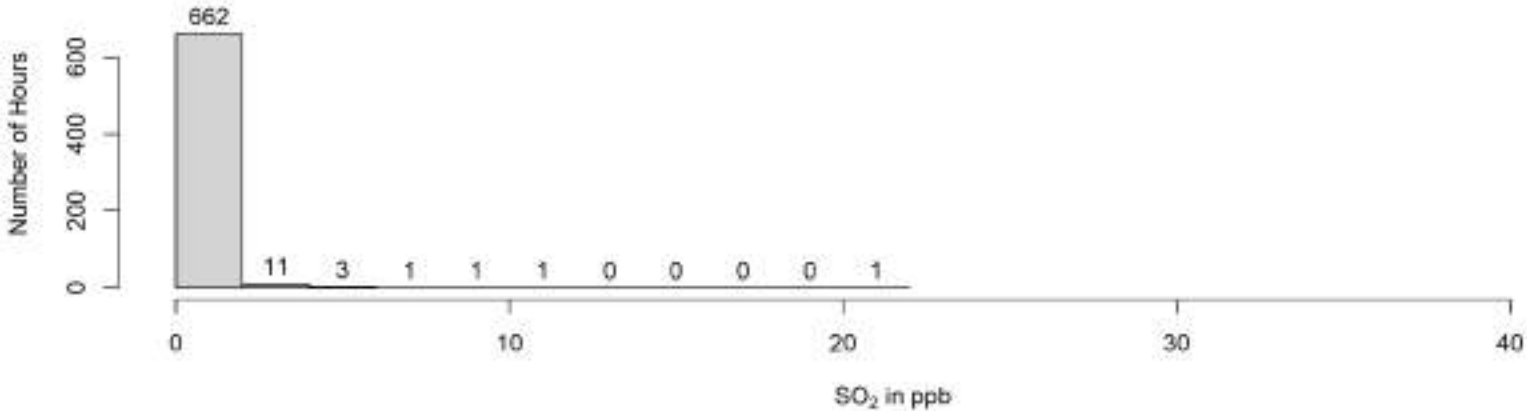
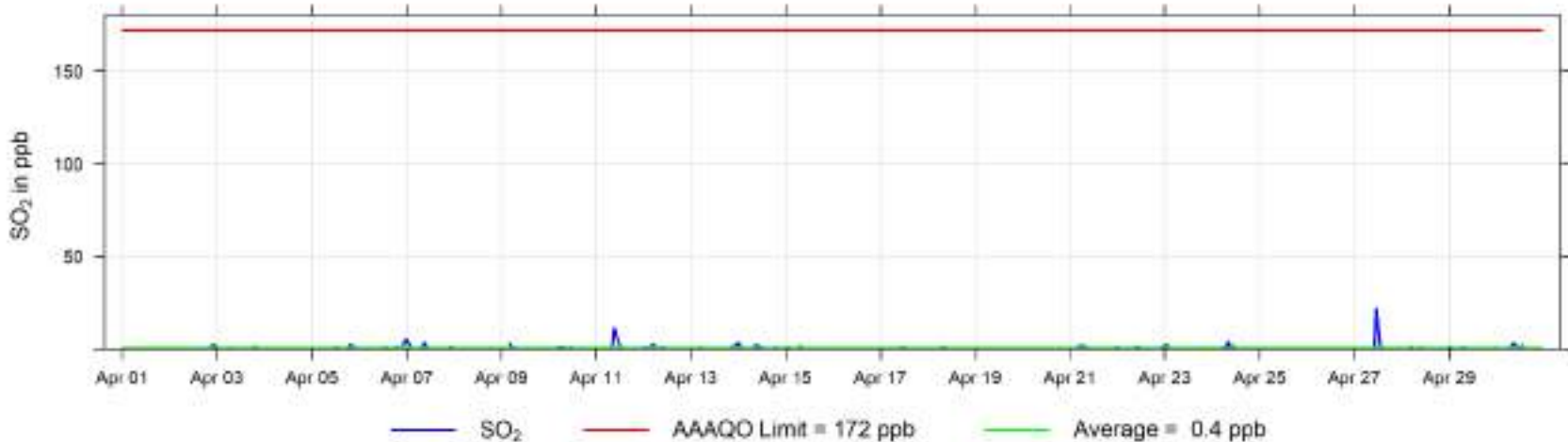
3 Dunes Charts

The following pages include the charts and histograms for Dunes Station

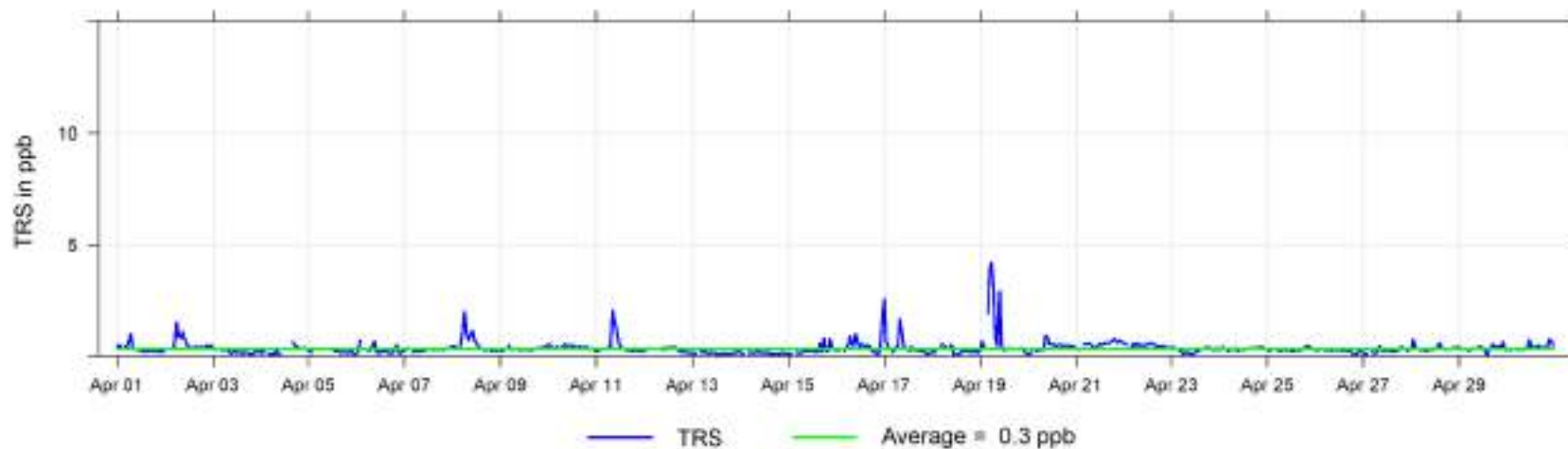
April 2024 Concentration Readings at Dunes Station



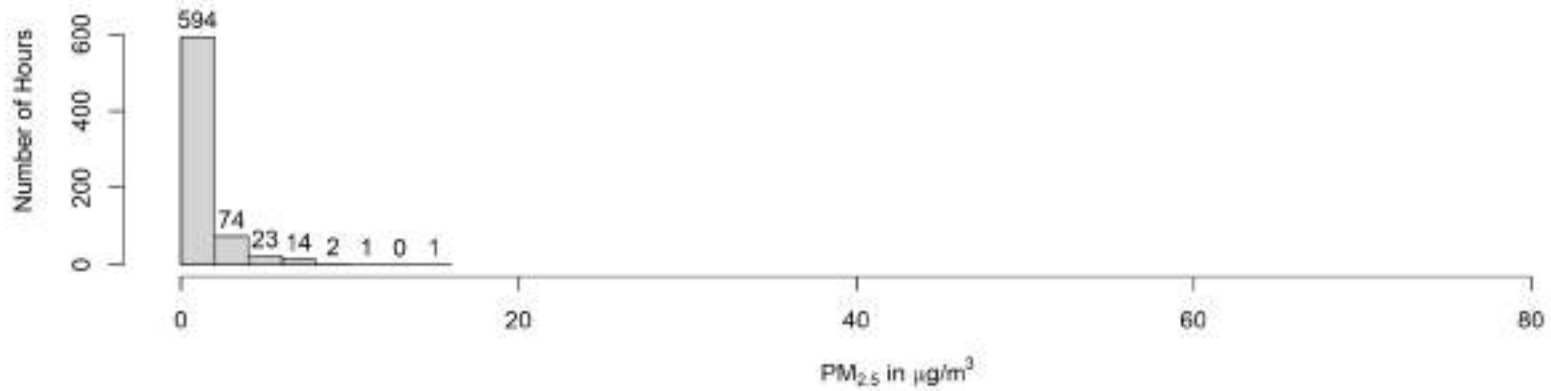
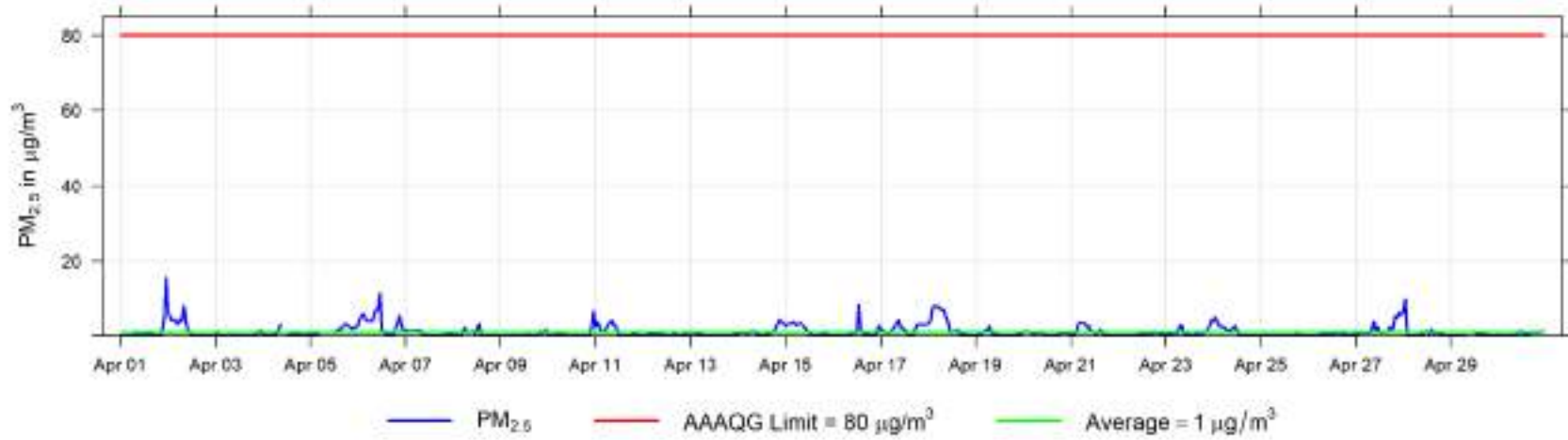
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Dunes



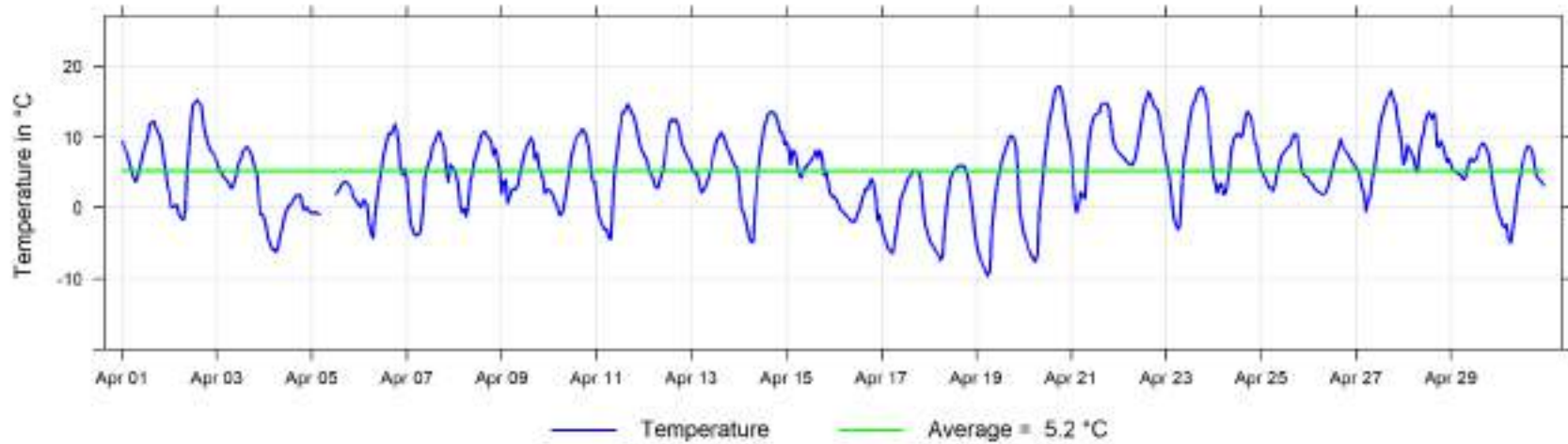
April 2024 Hourly Concentration Readings of TRS (in ppb) at Dunes



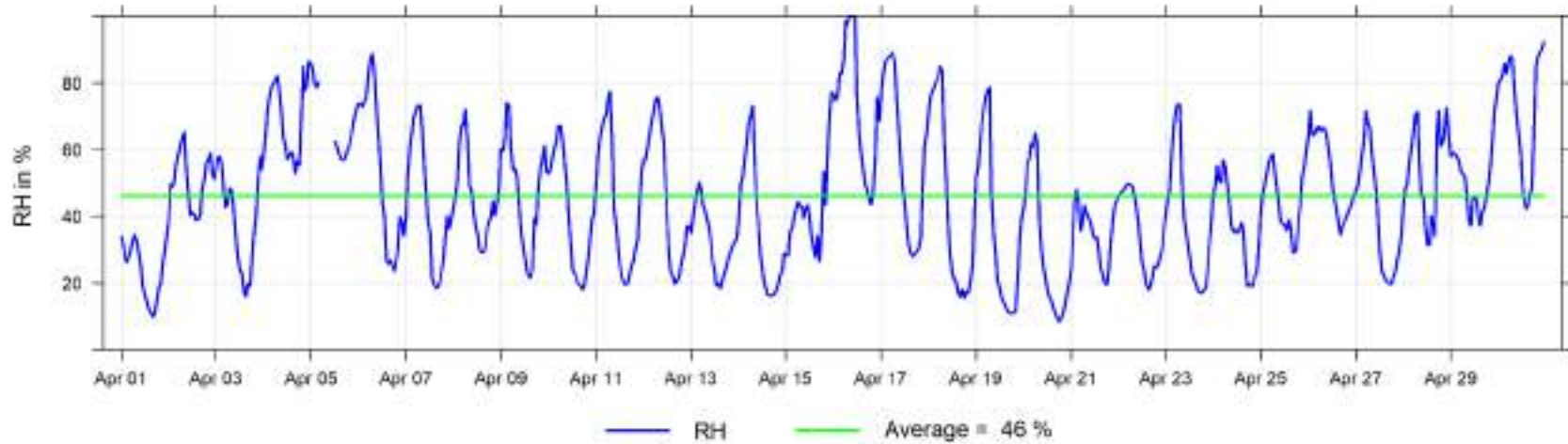
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Dunes



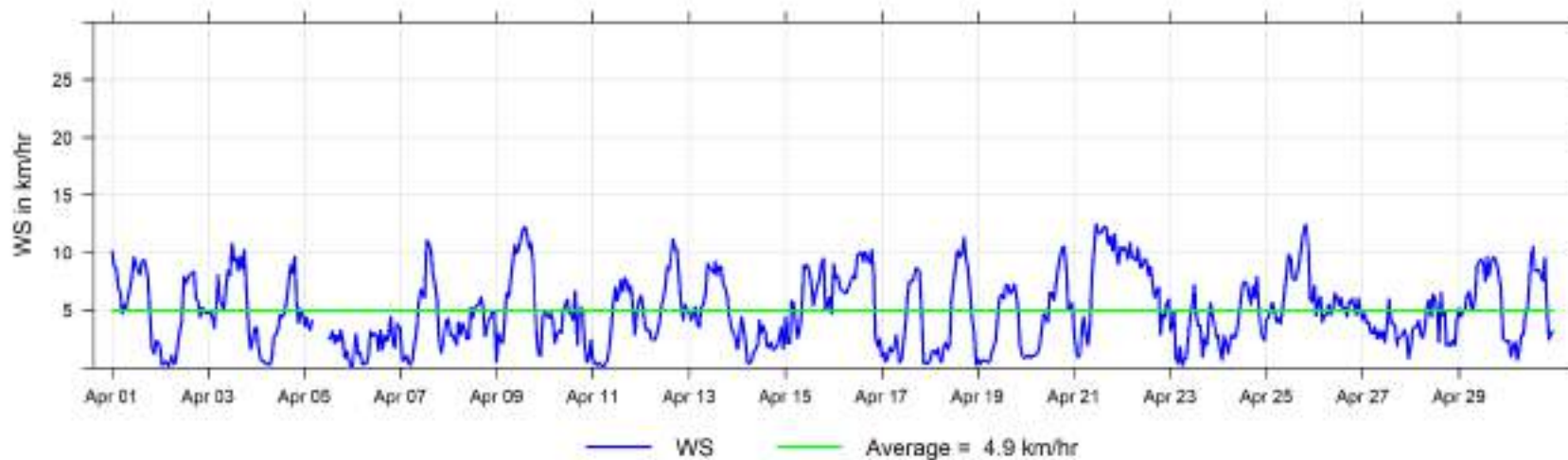
April 2024 Hourly Temperature Readings (in °C) at Dunes



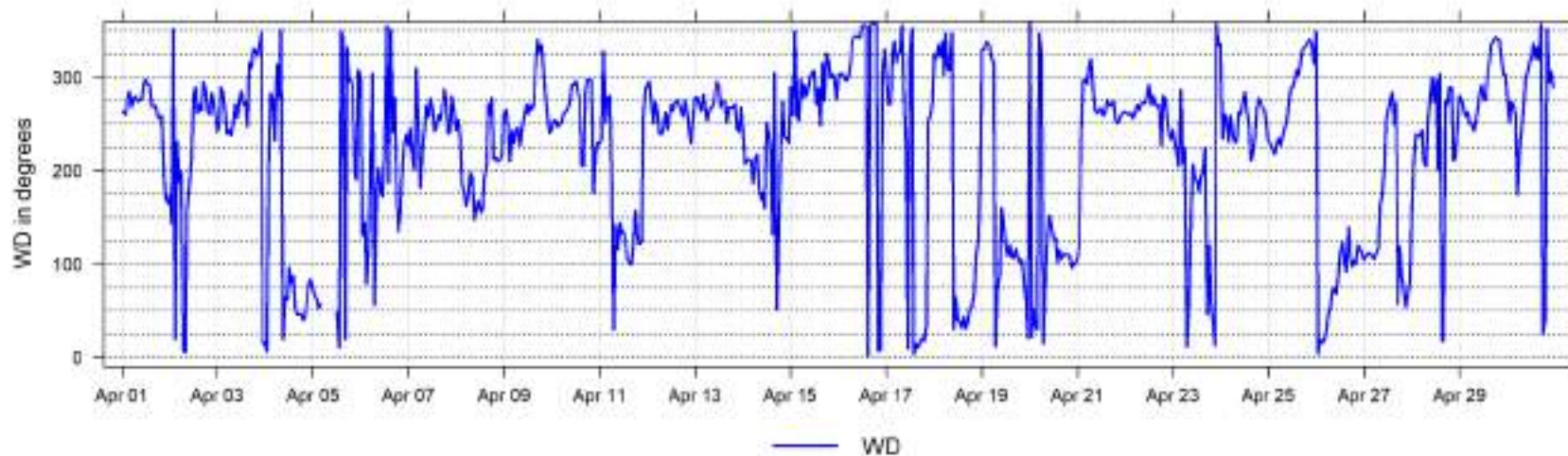
April 2024 Hourly Readings of Relative Humidity (in %) at Dunes



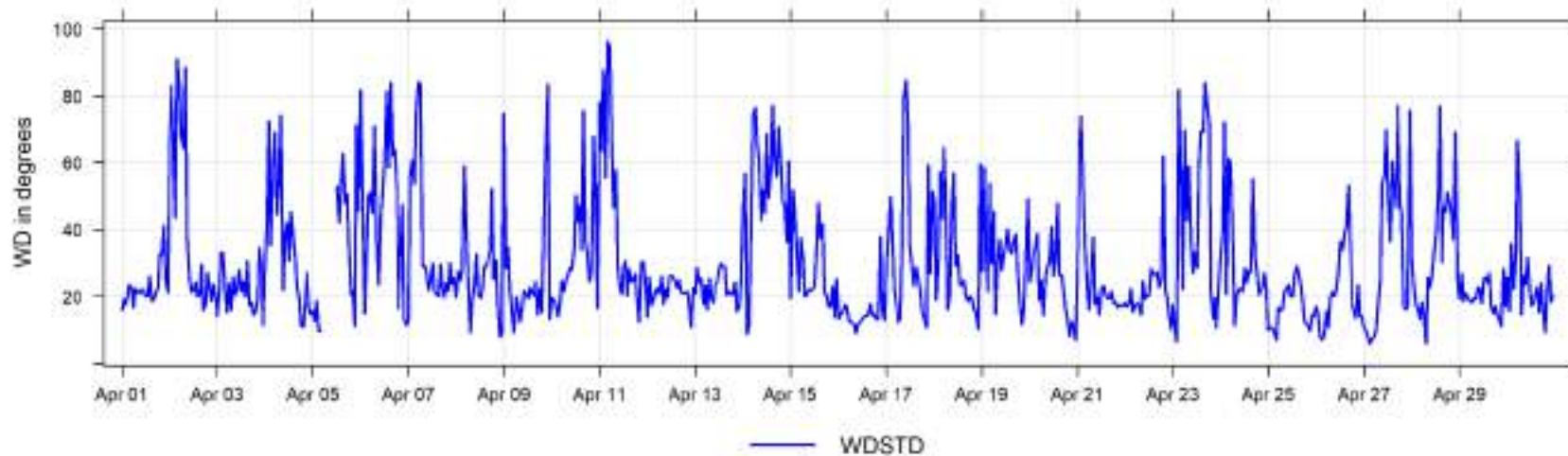
April 2024 Hourly Readings of Wind Speed (in km/hr) at Dunes

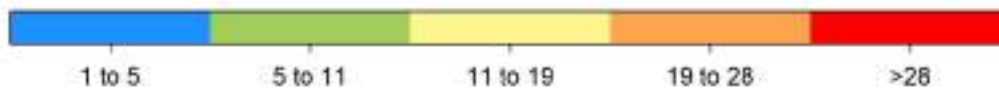
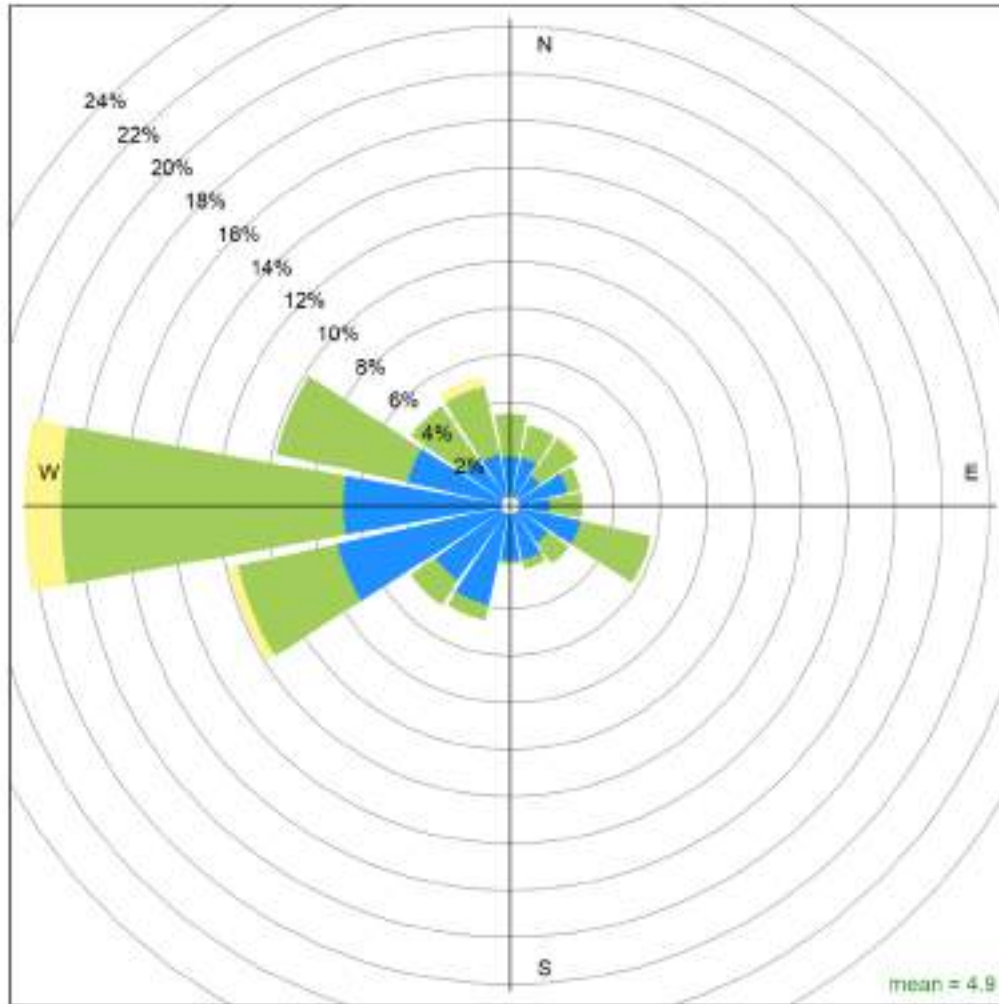


April 2024 Hourly Readings of Wind Direction (in degrees) at Dunes



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Dunes



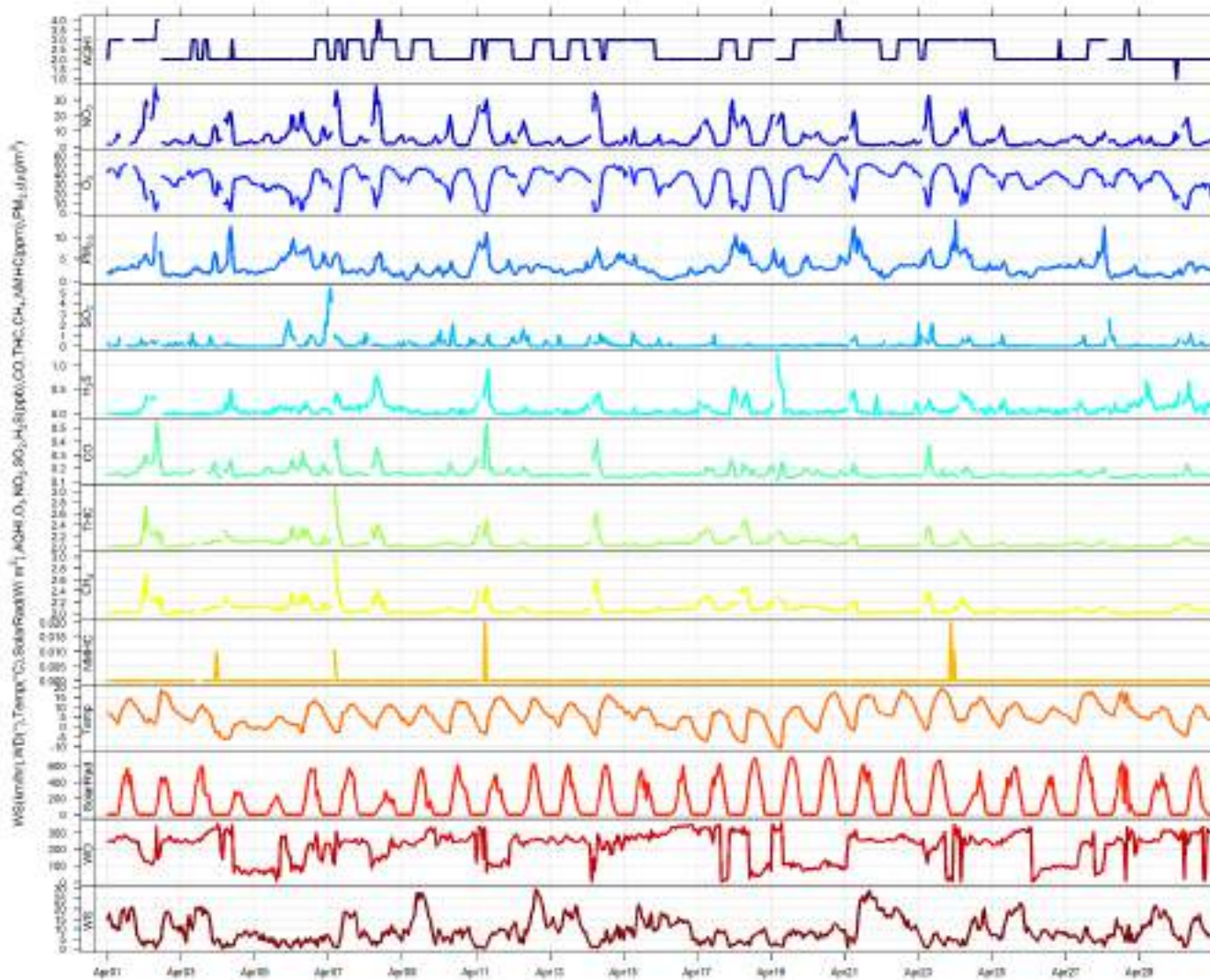


Dunes April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 10.6 %

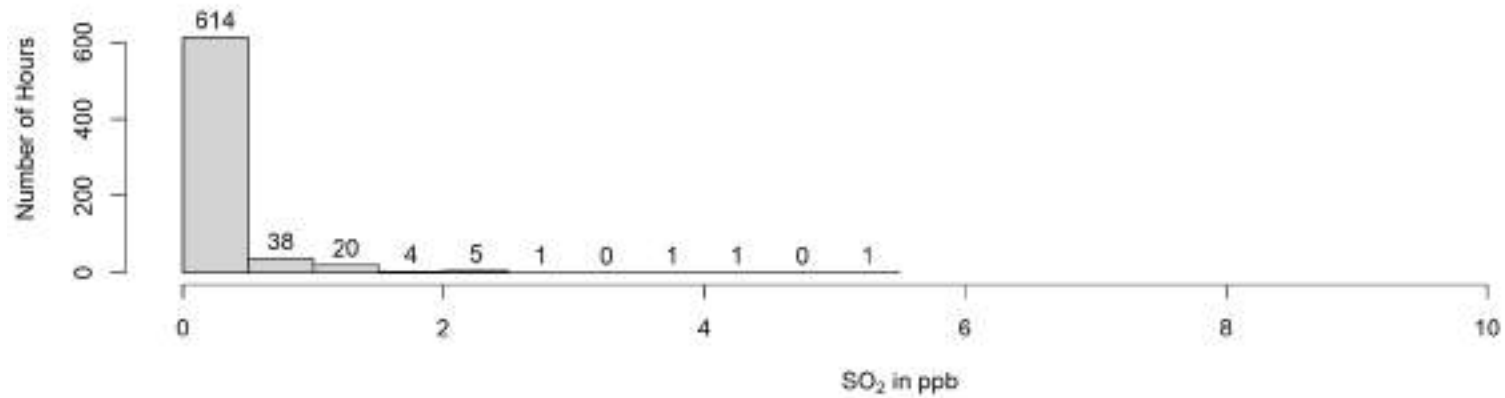
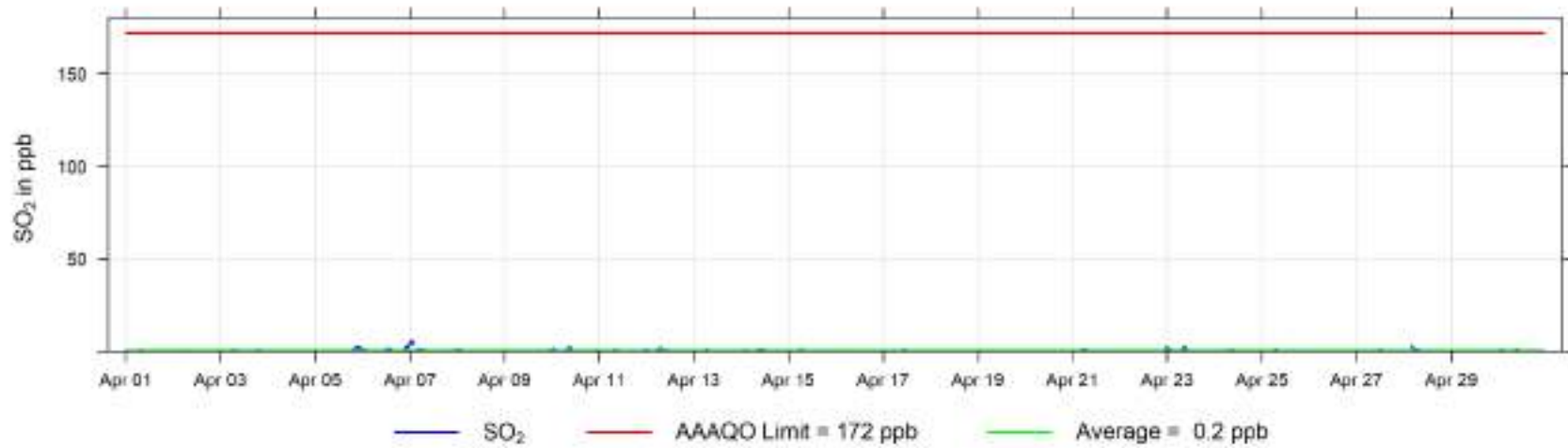
4 Grande Prairie - Henry Pirker Charts

The following pages include the charts and histograms for Henry Pirker Station in Grande Prairie

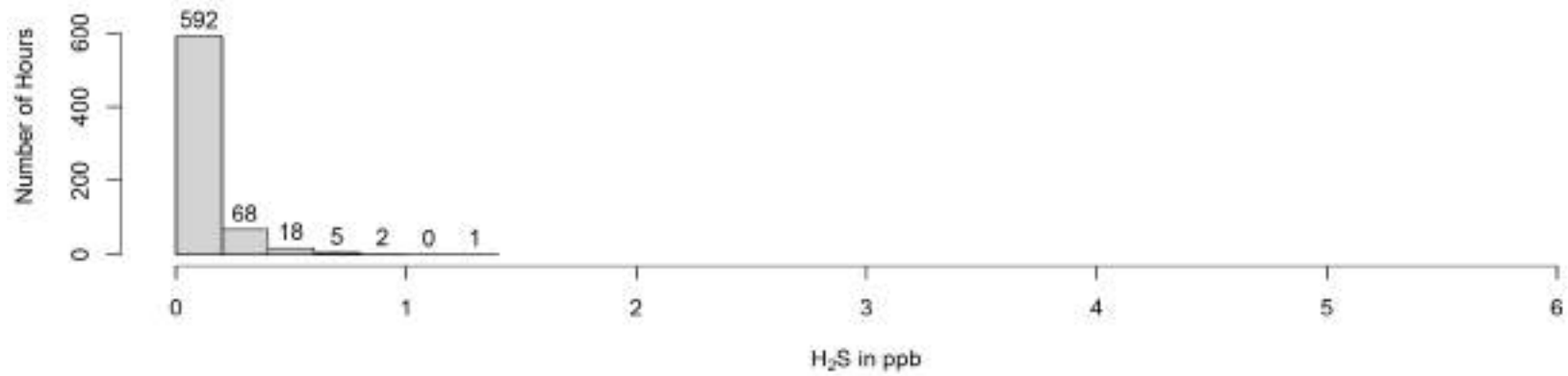
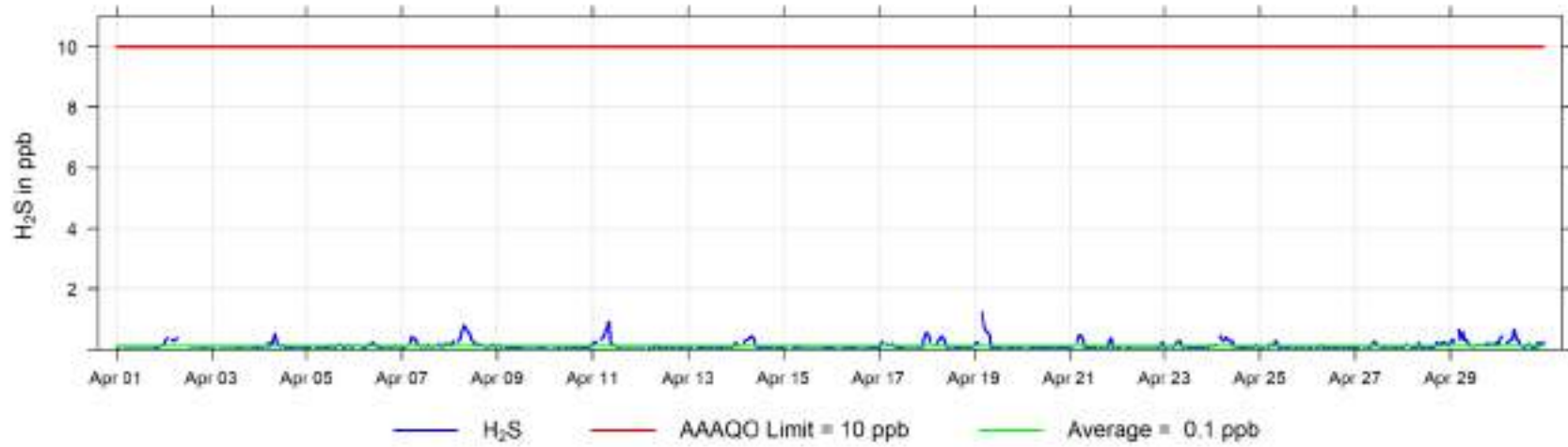
April 2024 Concentration Readings at Henry Pirker Station



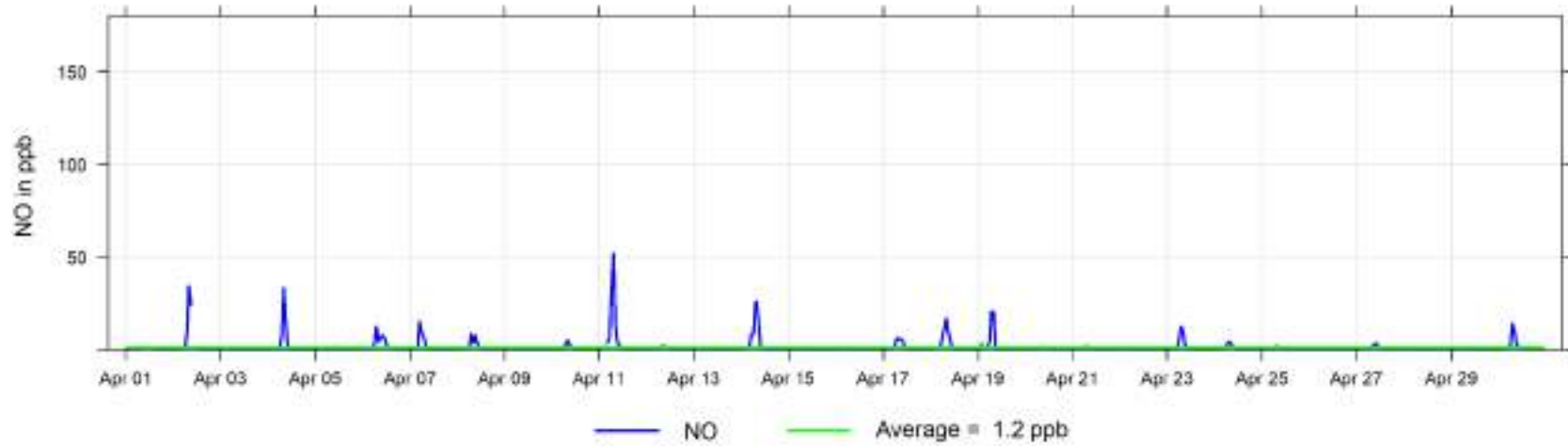
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Henry Pirker



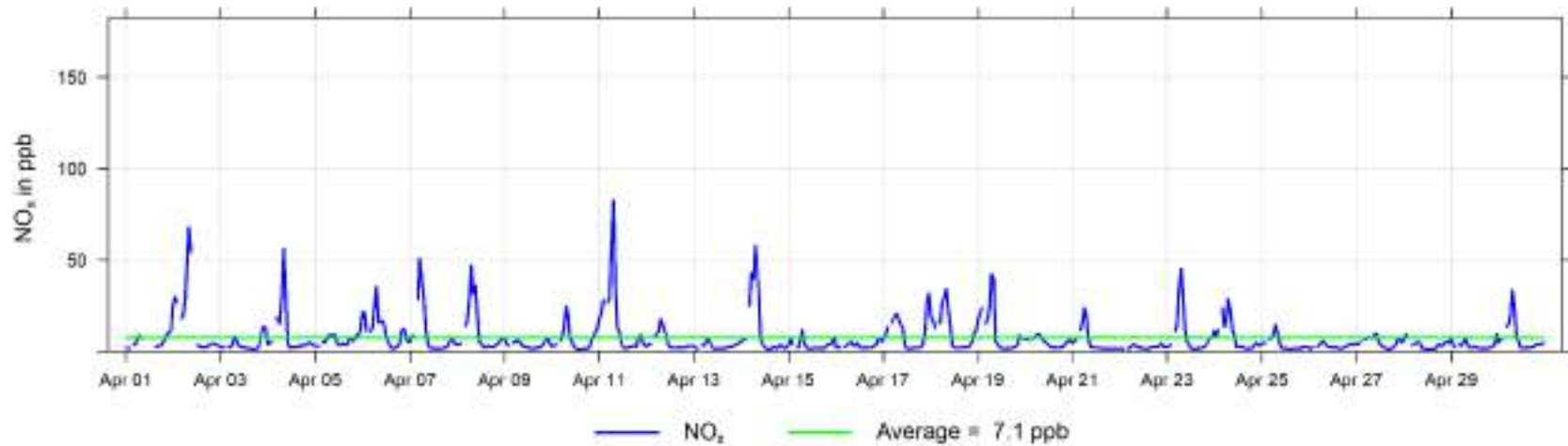
April 2024 Hourly Concentration Readings of H₂S (in ppb) at Henry Pirker



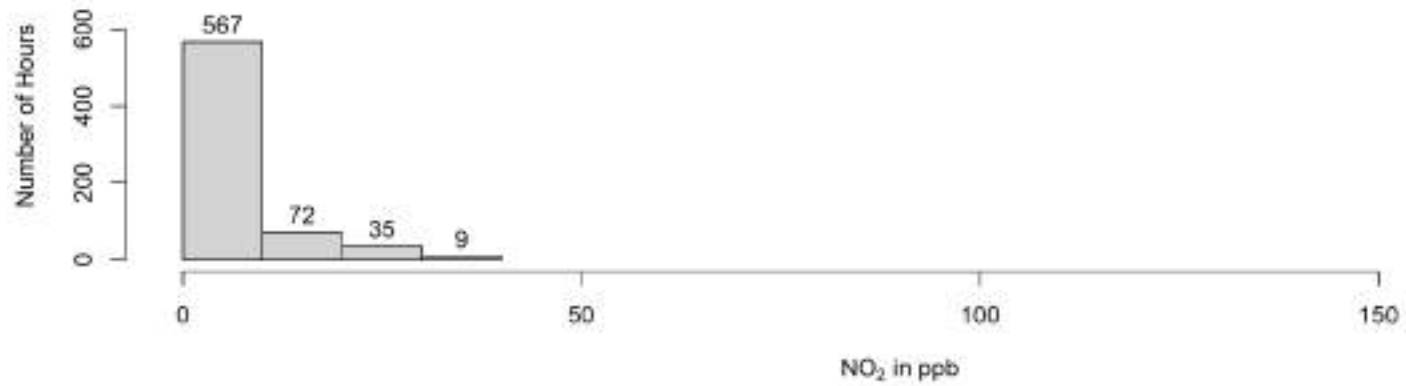
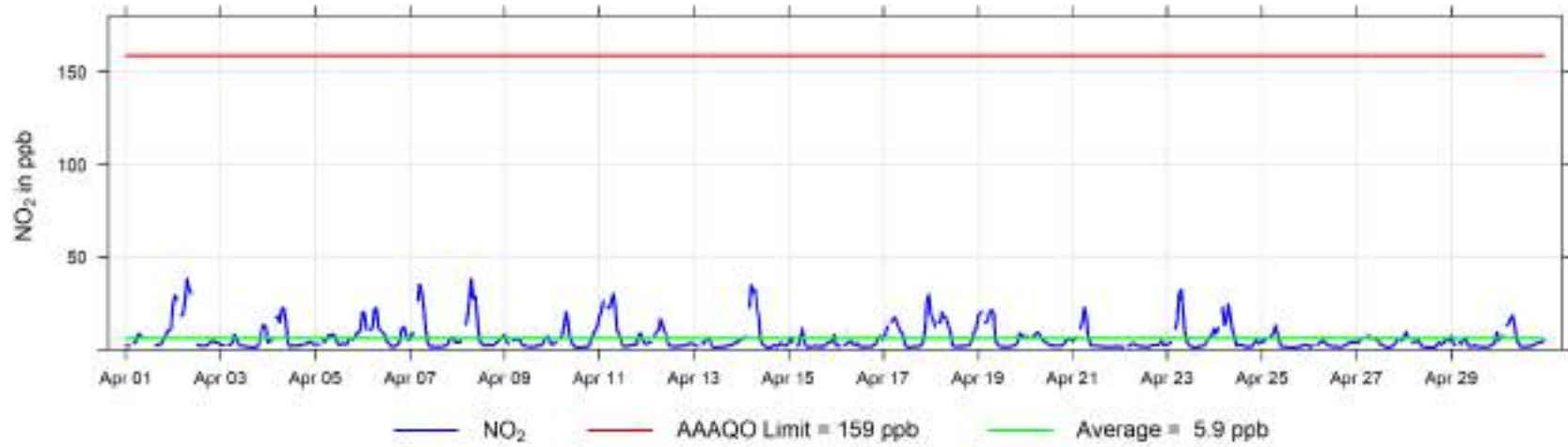
April 2024 Hourly Concentration Readings of NO (in ppb) at Henry Pirker



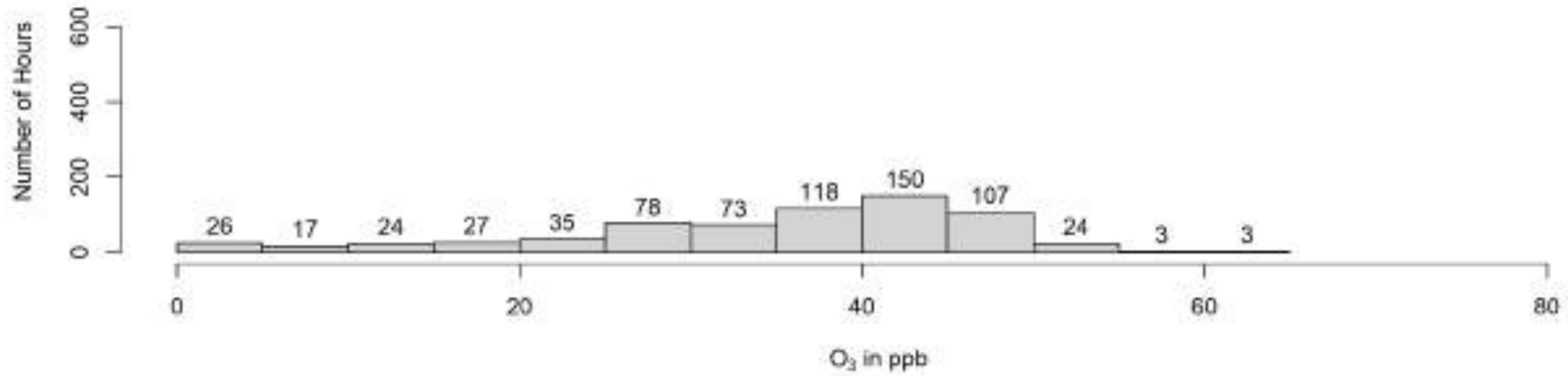
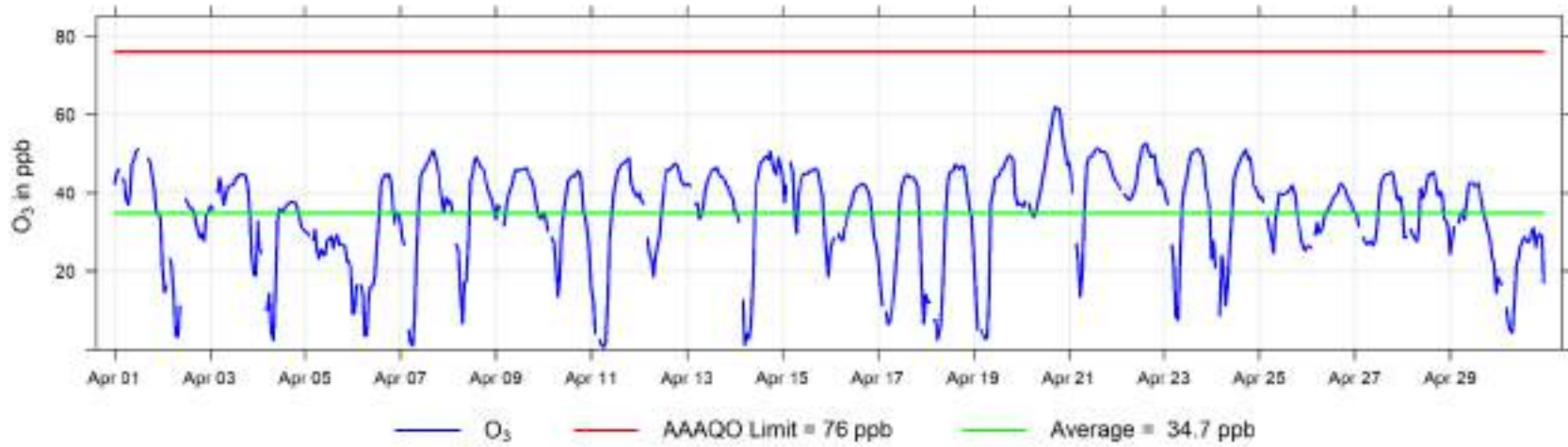
April 2024 Hourly Concentration Readings of NO_x (in ppb) at Henry Pirker



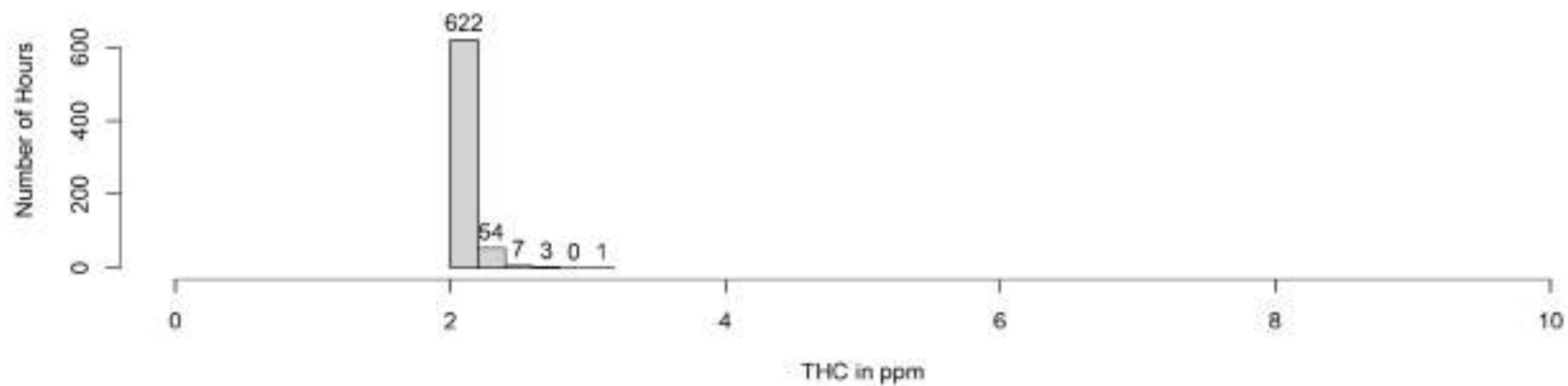
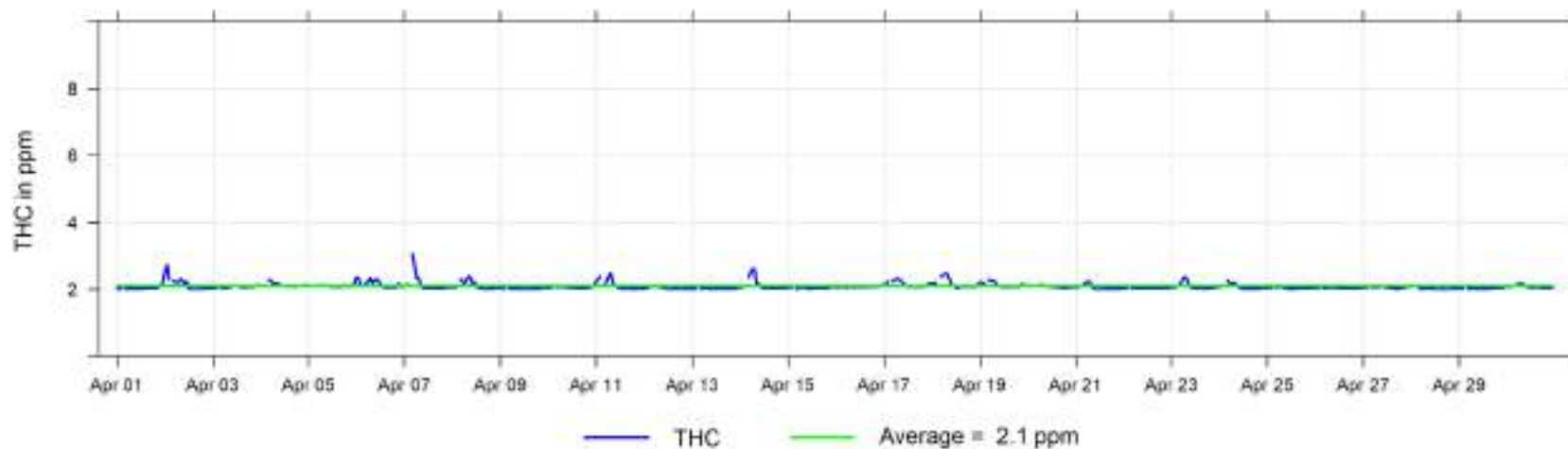
April 2024 Hourly Concentration Readings of NO₂ (in ppb) at Henry Pirker



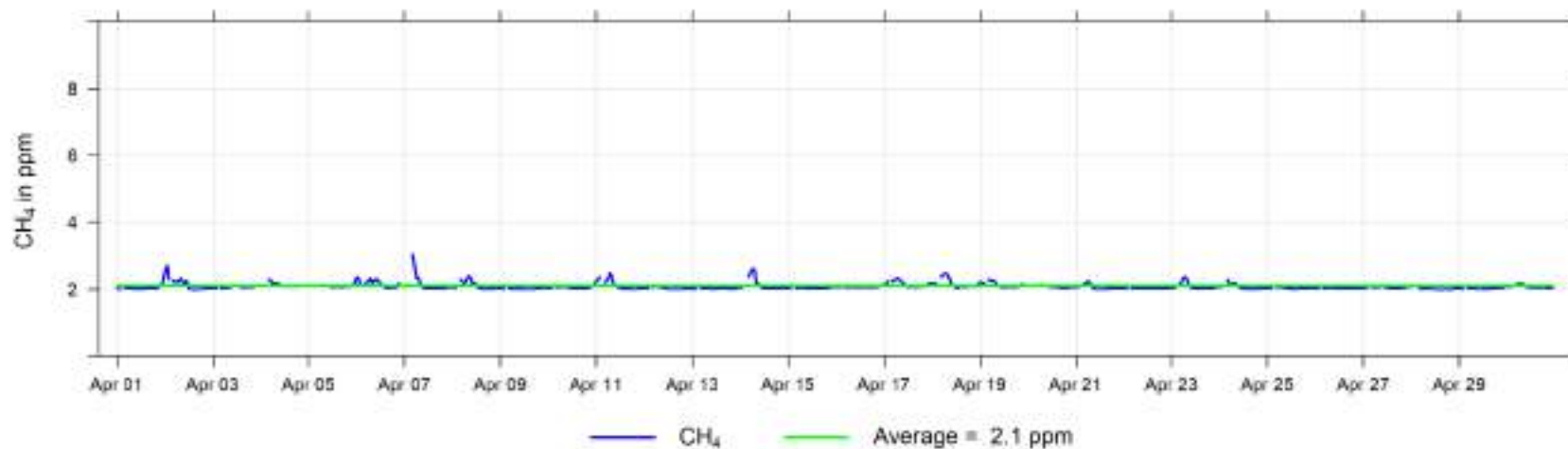
April 2024 Hourly Concentration Readings of O₃ (in ppb) at Henry Pirker



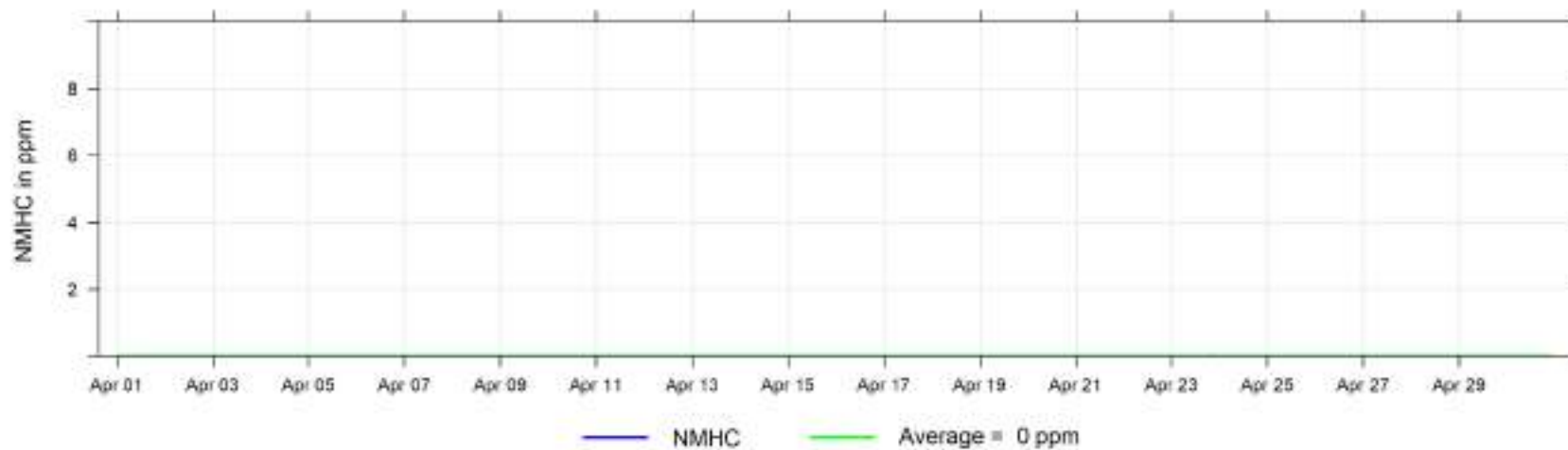
April 2024 Hourly Concentration Readings of THC (in ppm) at Henry Pirker



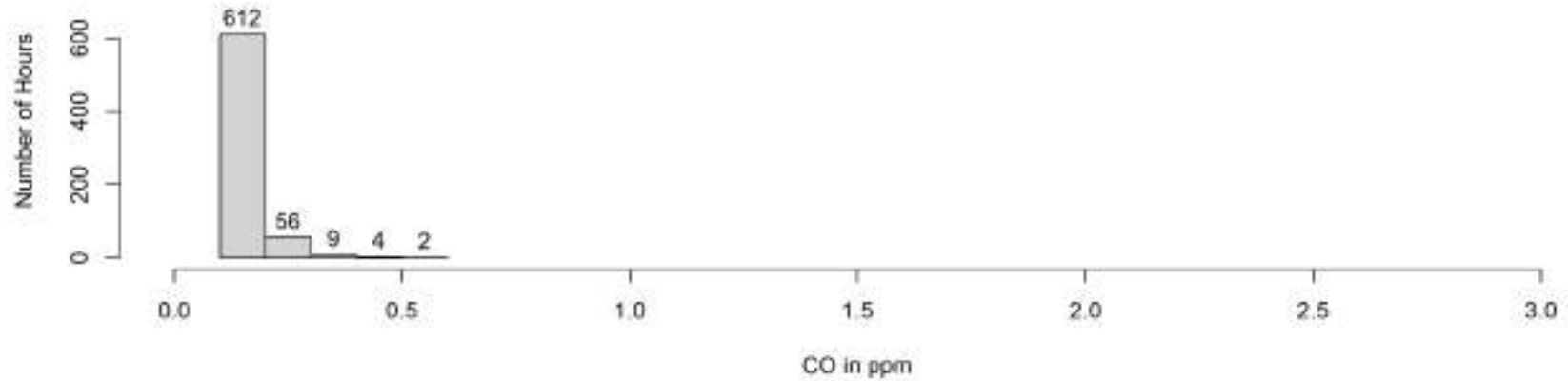
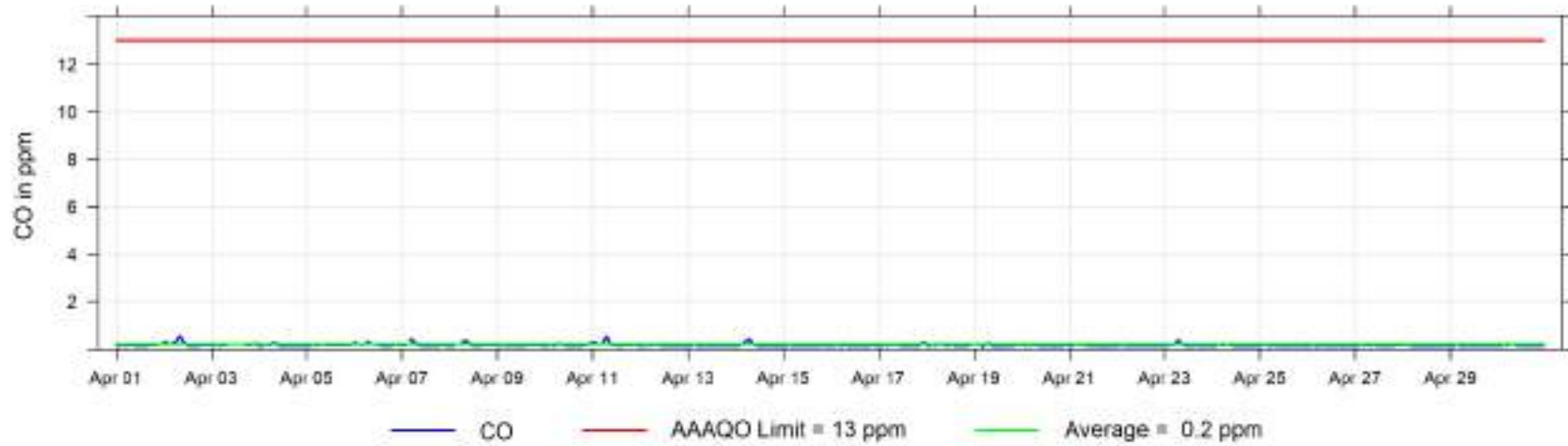
April 2024 Hourly Concentration Readings of CH₄ (in ppm) at Henry Pirker



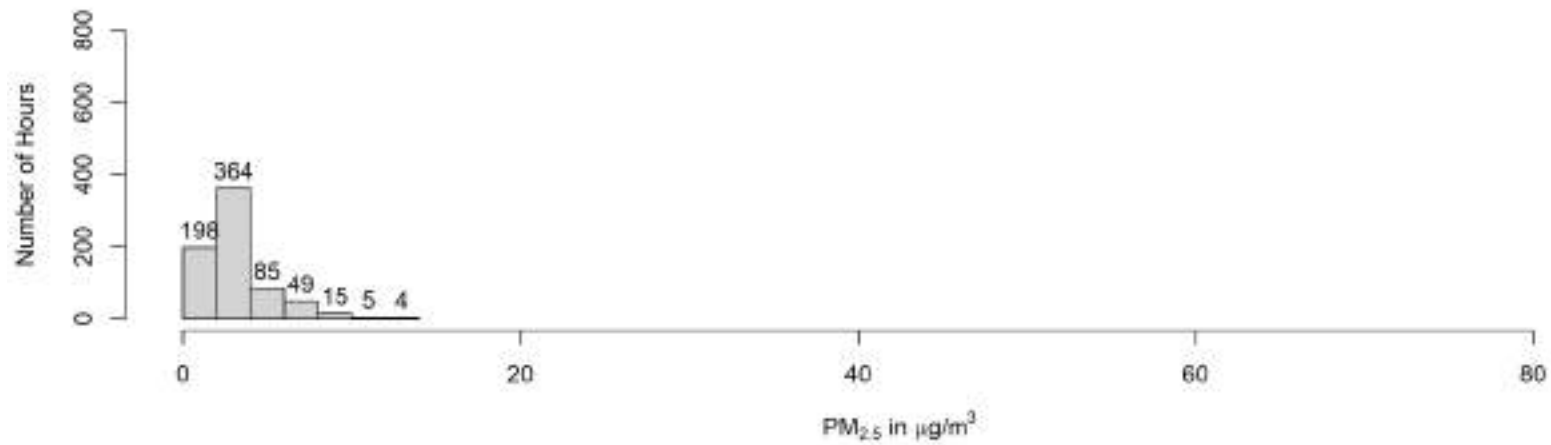
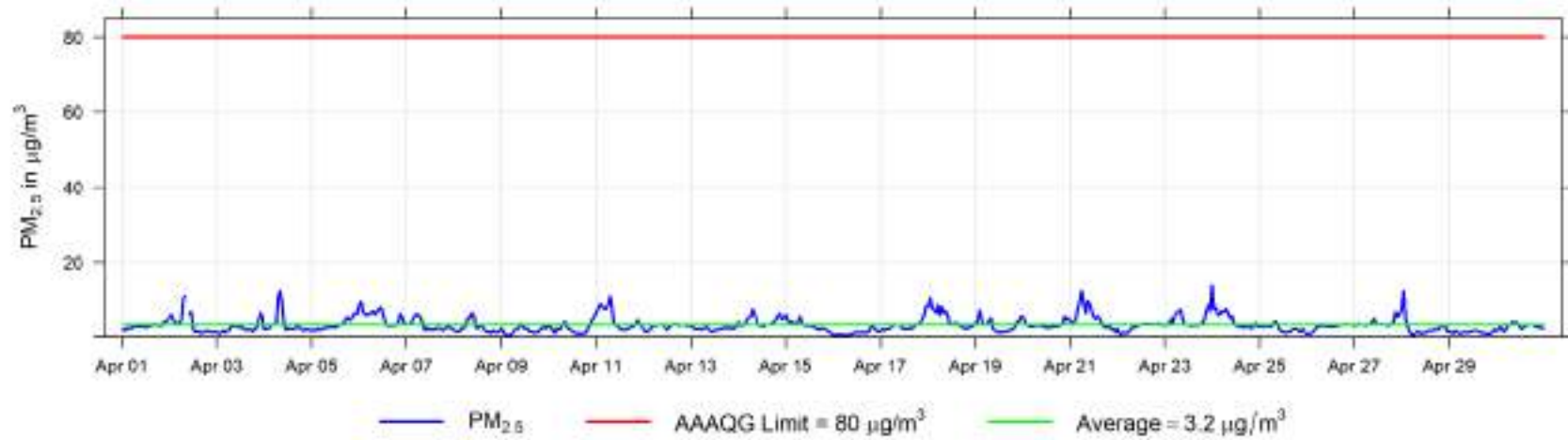
April 2024 Hourly Concentration Readings of NMHC (in ppm) at Henry Pirker



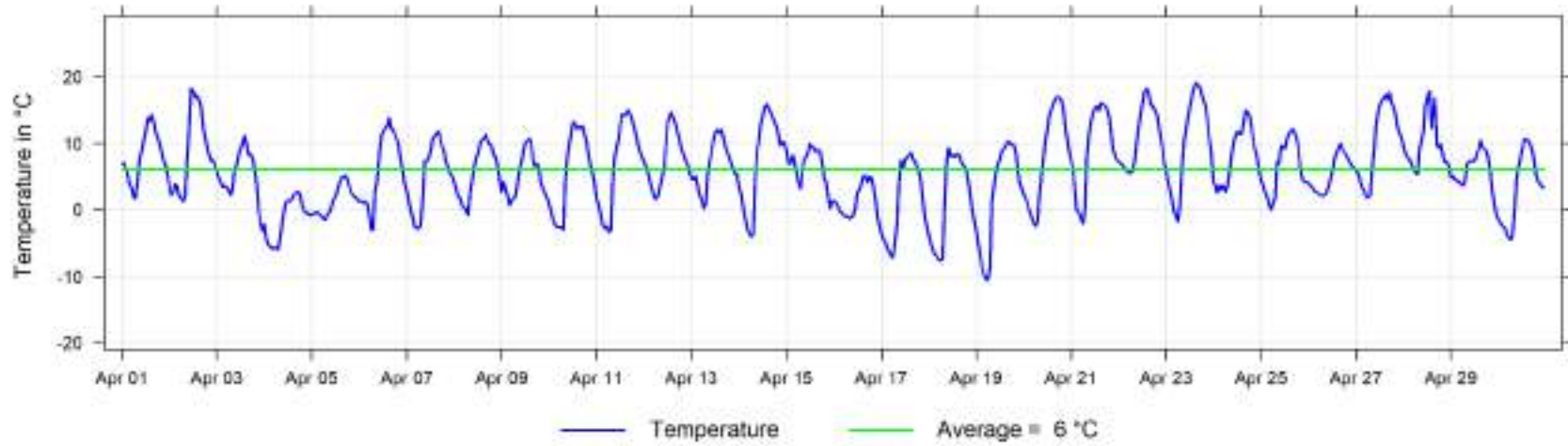
April 2024 Hourly Concentration Readings of CO (in ppm) at Henry Pirker



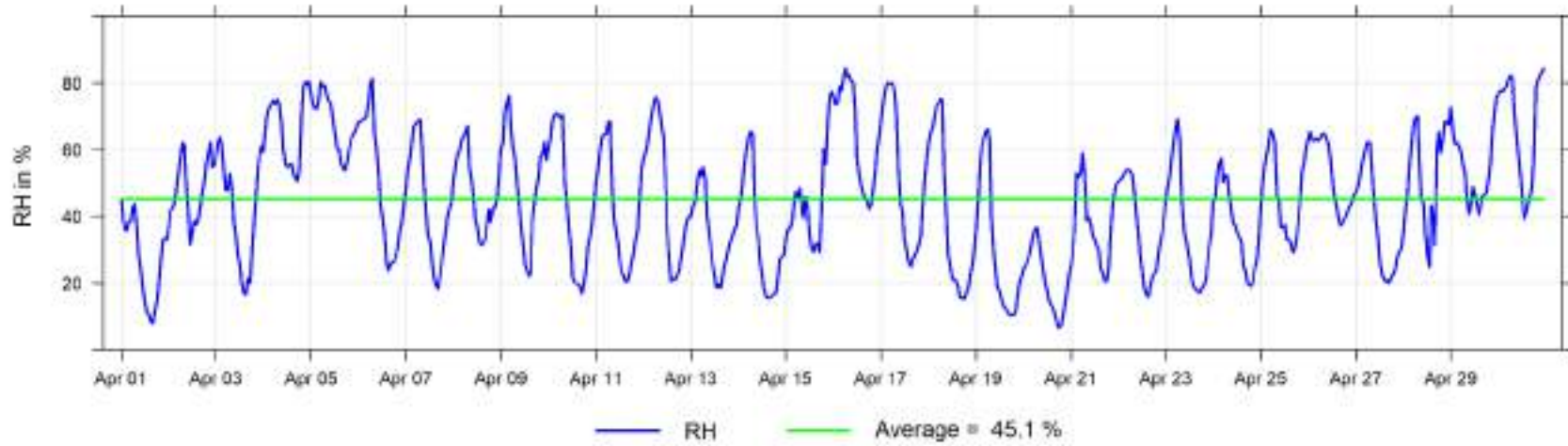
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Henry Pirker



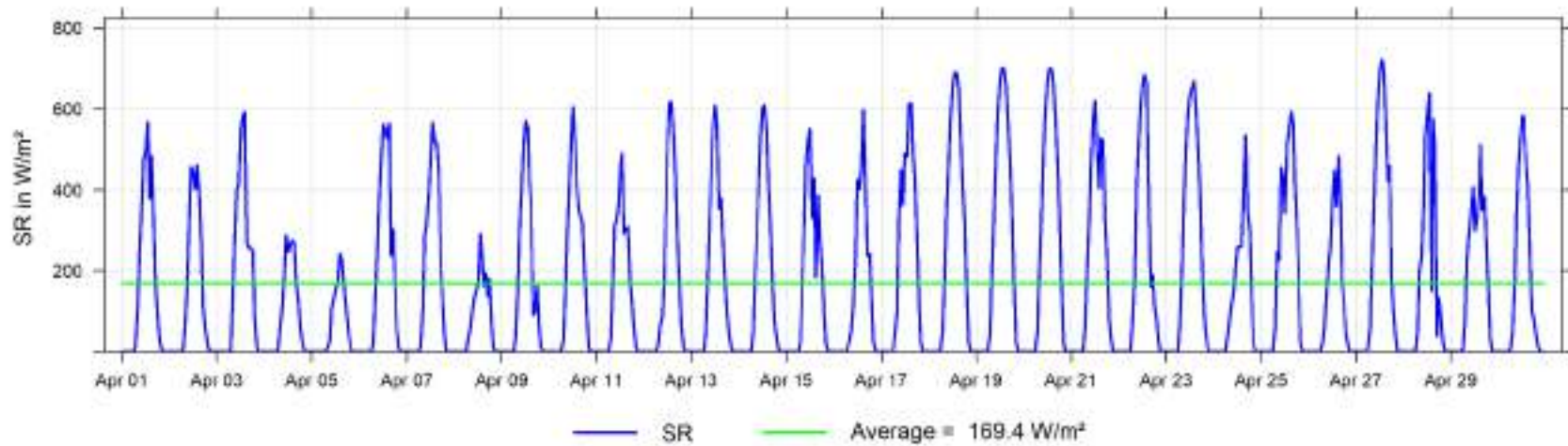
April 2024 Hourly Temperature Readings (in °C) at Henry Pirker



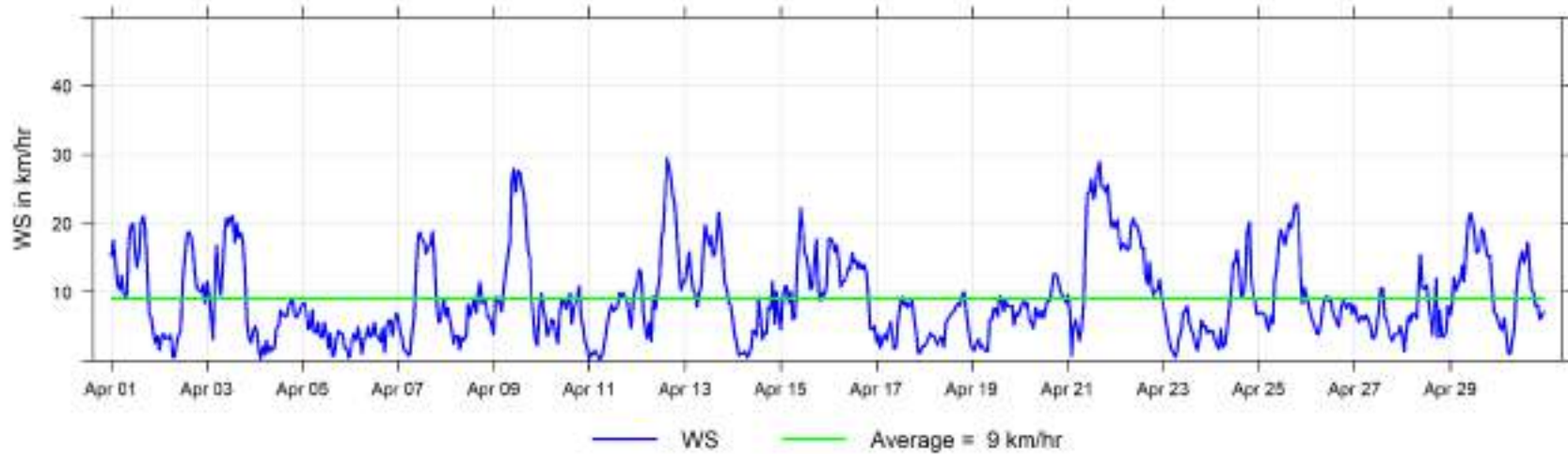
April 2024 Hourly Readings of Relative Humidity (in %) at Henry Pirker



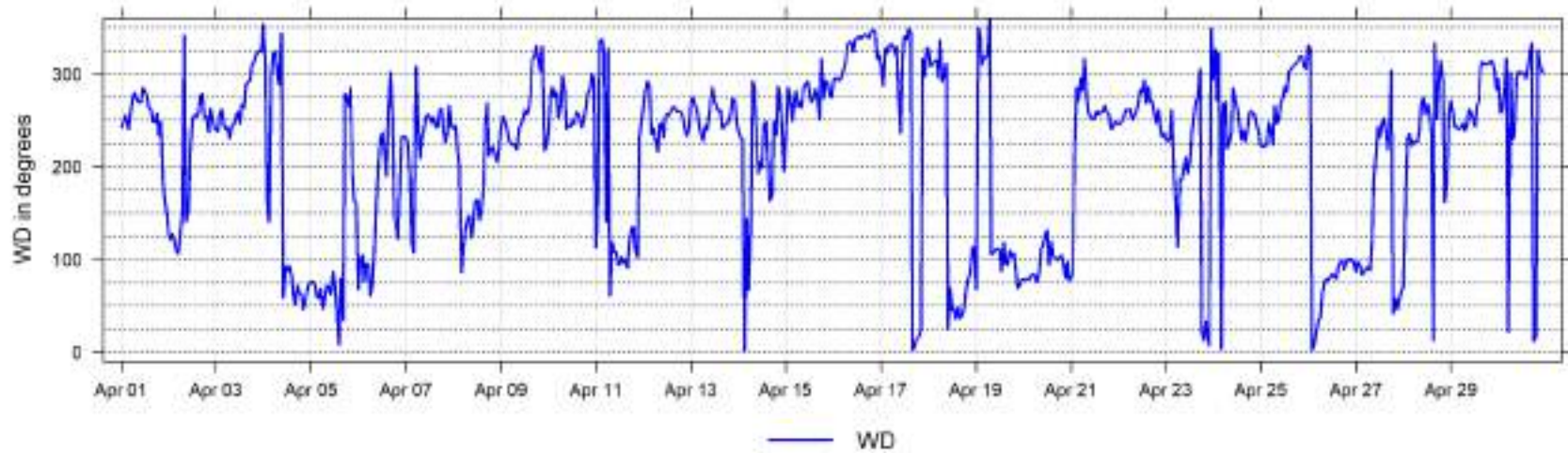
April 2024 Hourly Readings of Solar Radiation (in W/m²) at Henry Pirker



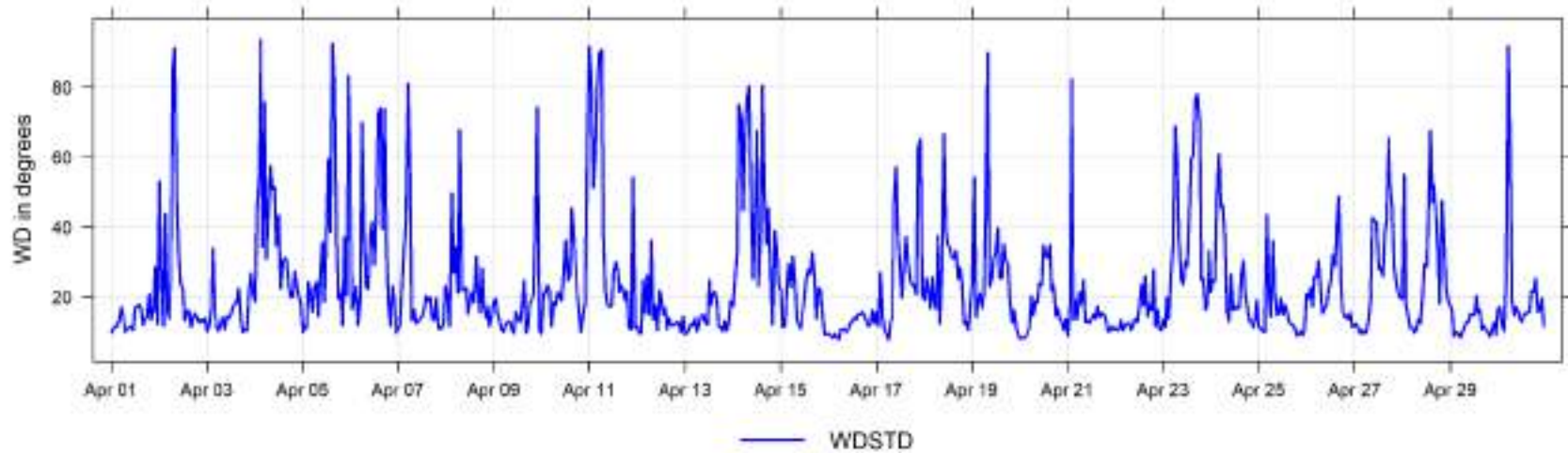
April 2024 Hourly Readings of Wind Speed (in km/hr) at Henry Pirker

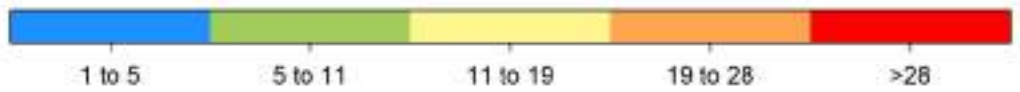
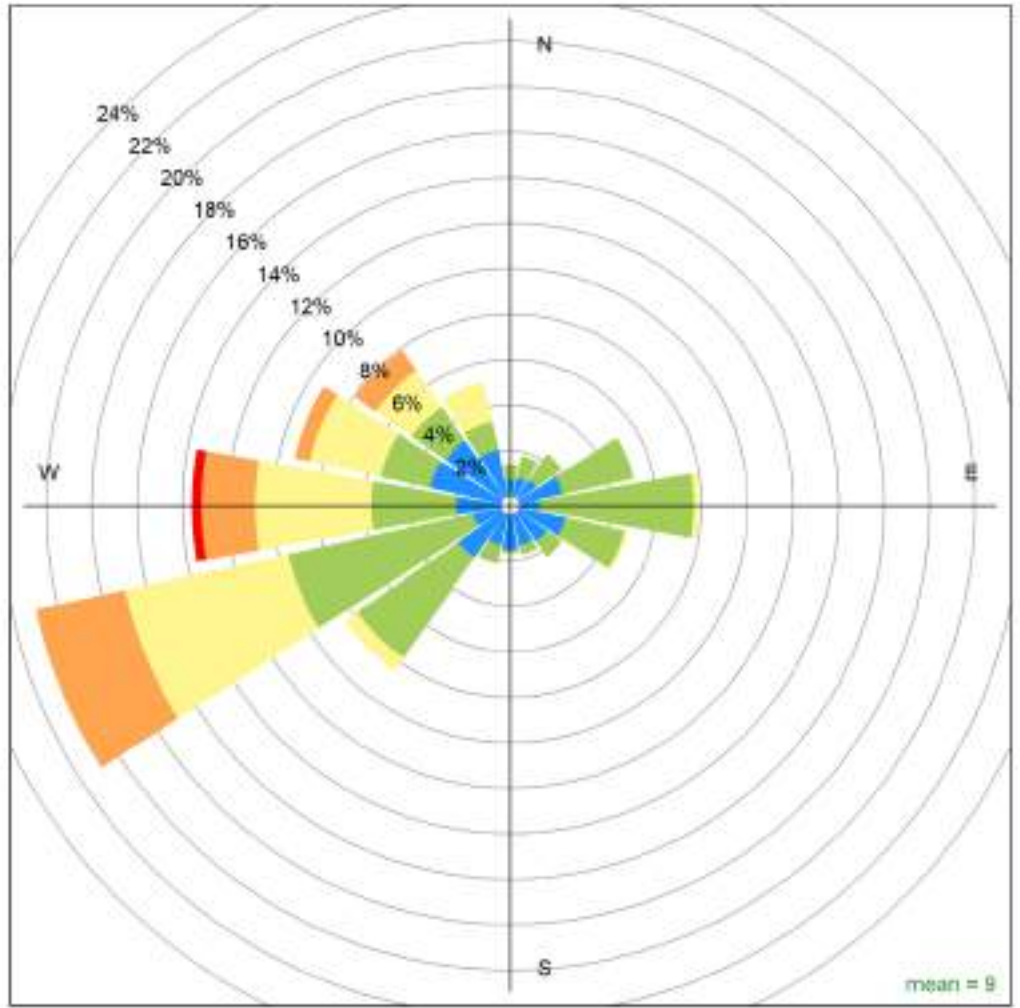


April 2024 Hourly Readings of Wind Direction (in degrees) at Henry Pirker



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Henry Pirker

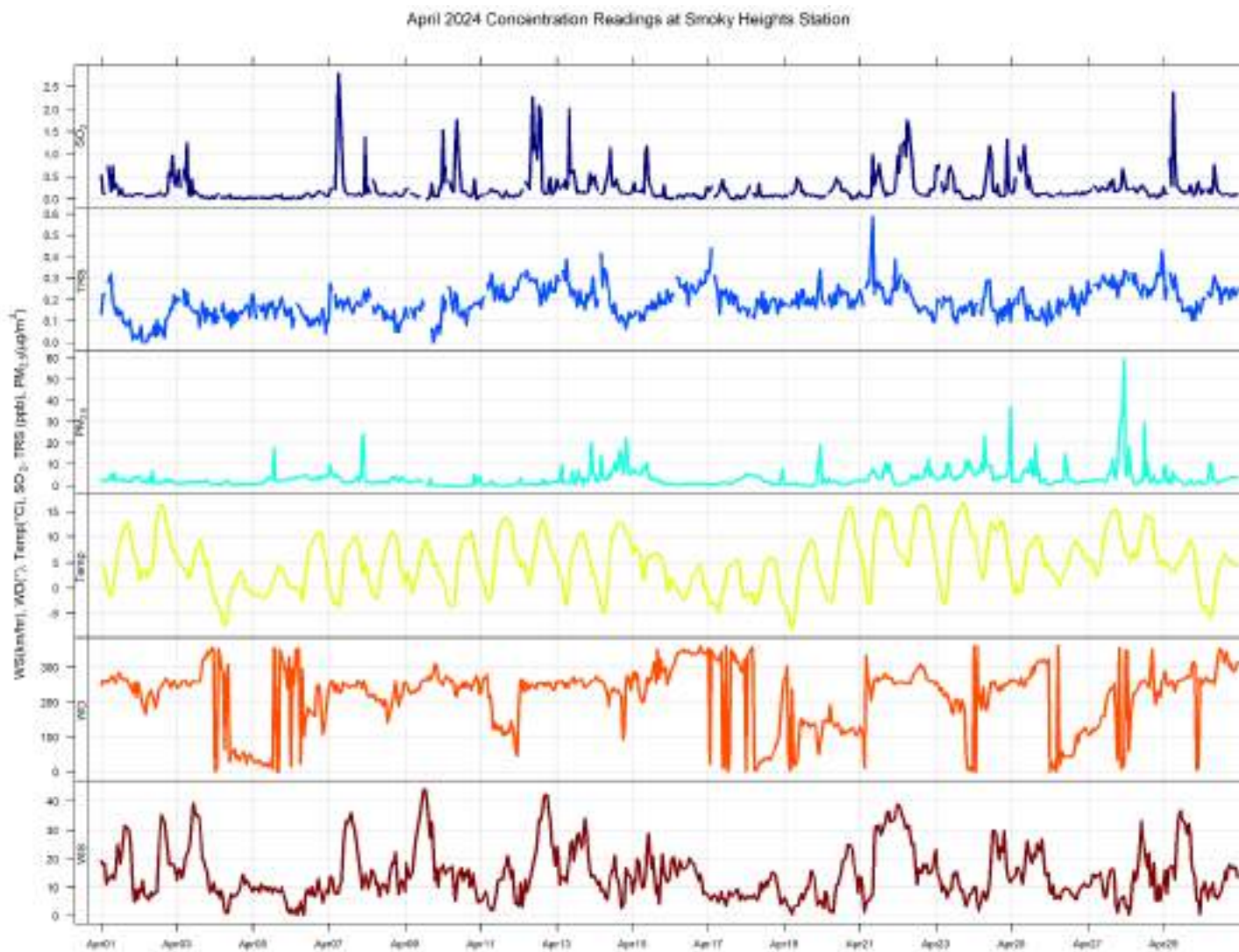




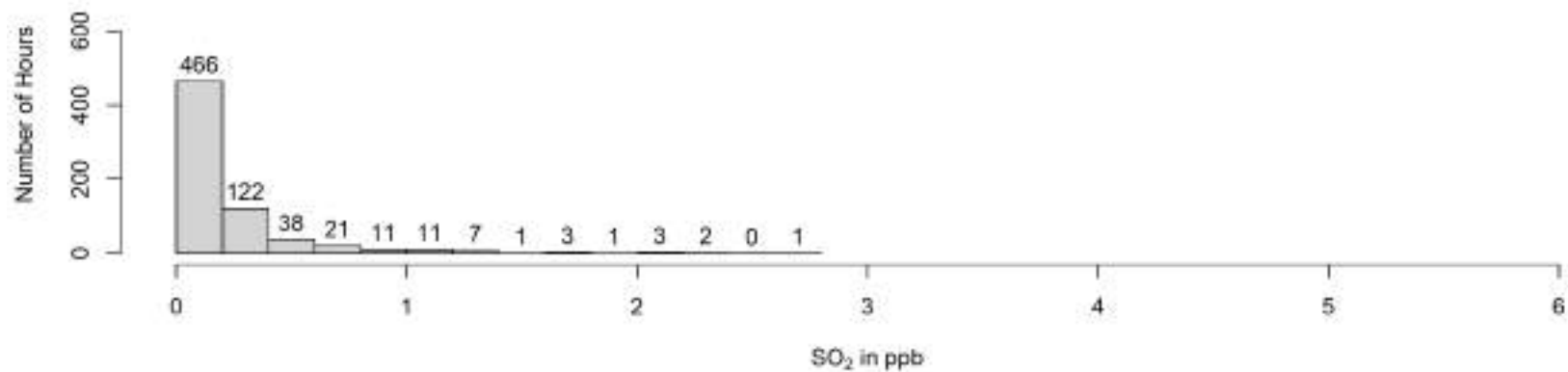
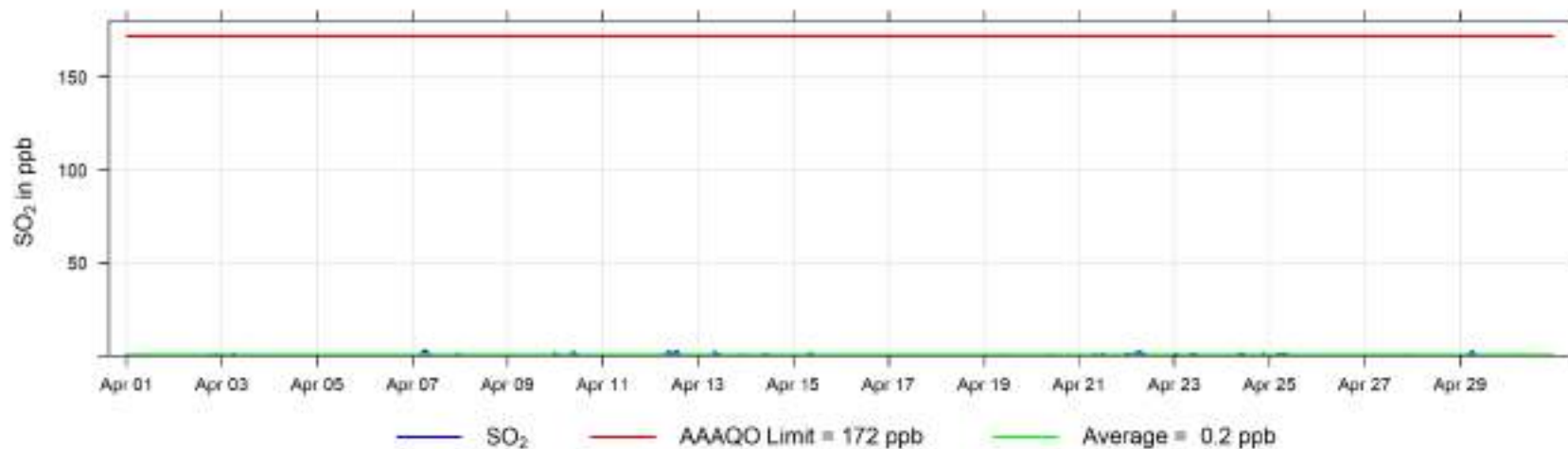
Henry Pirker April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 3.2 %

5 Smoky Heights Charts

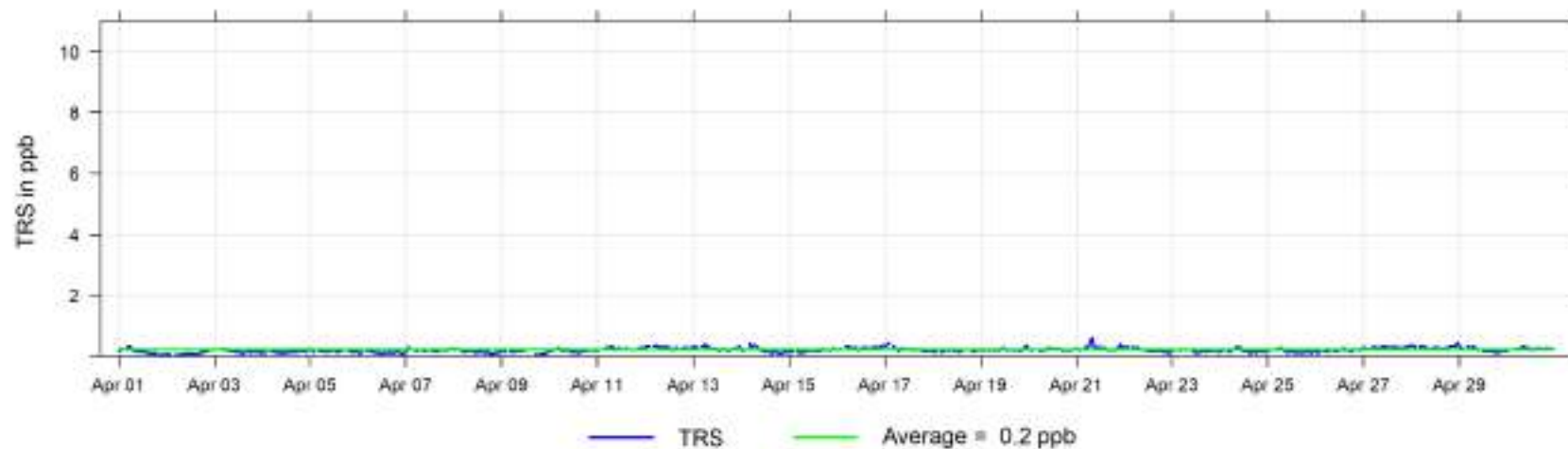
The following pages include the charts and histograms for Smoky Heights Station



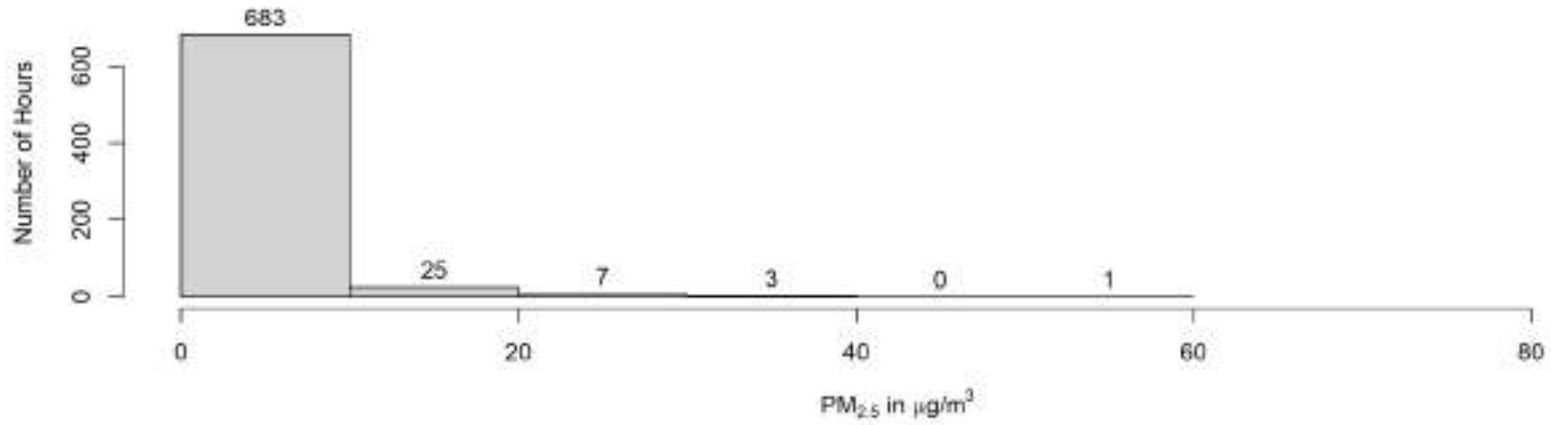
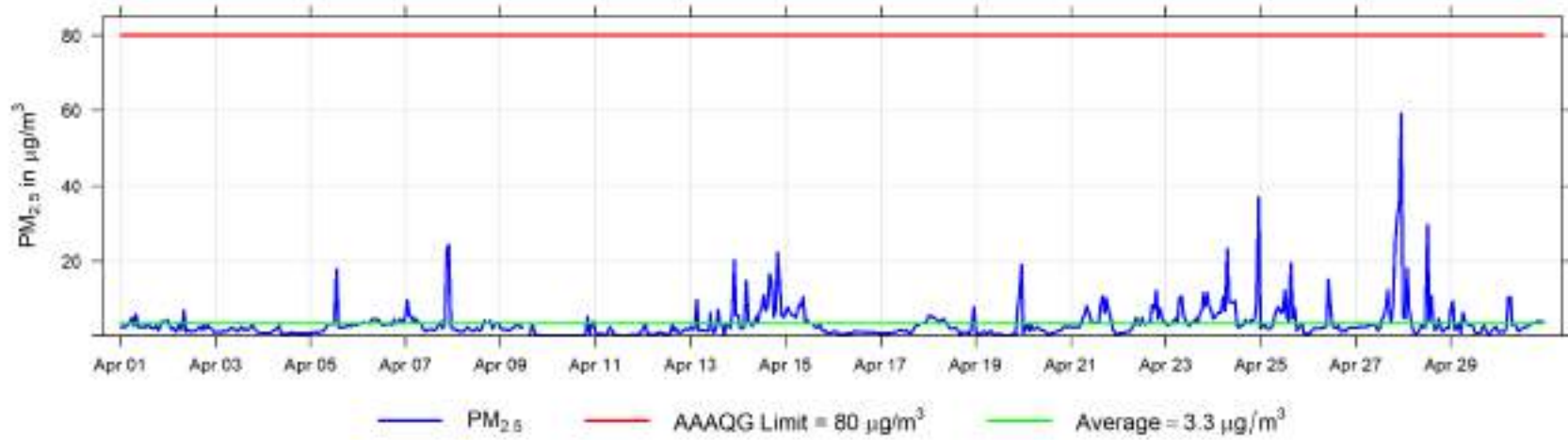
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Smoky Heights



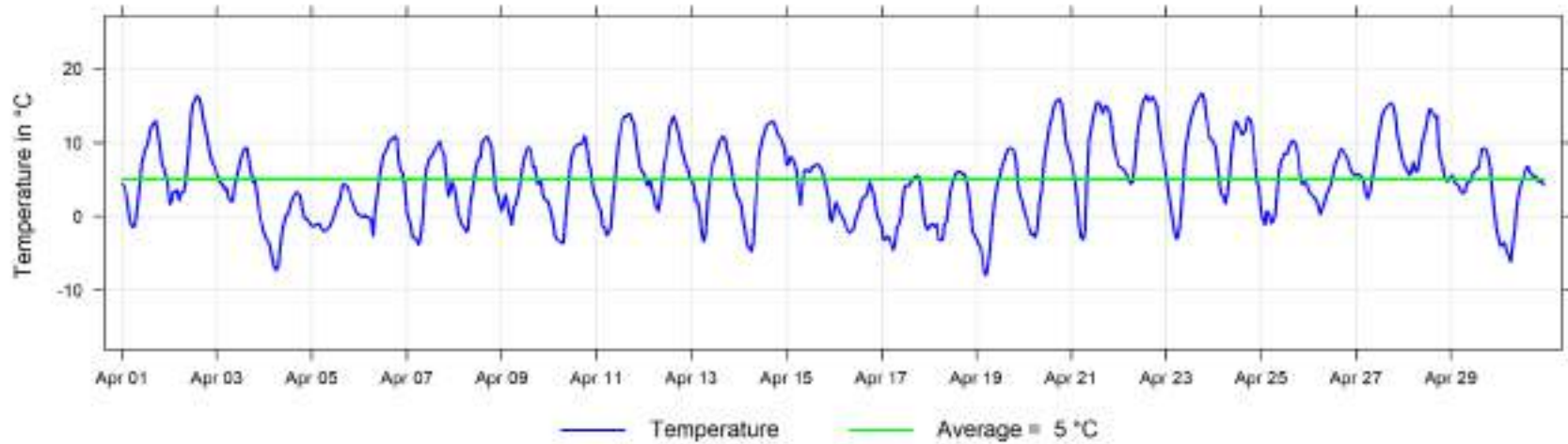
April 2024 Hourly Concentration Readings of TRS (in ppb) at Smoky Heights



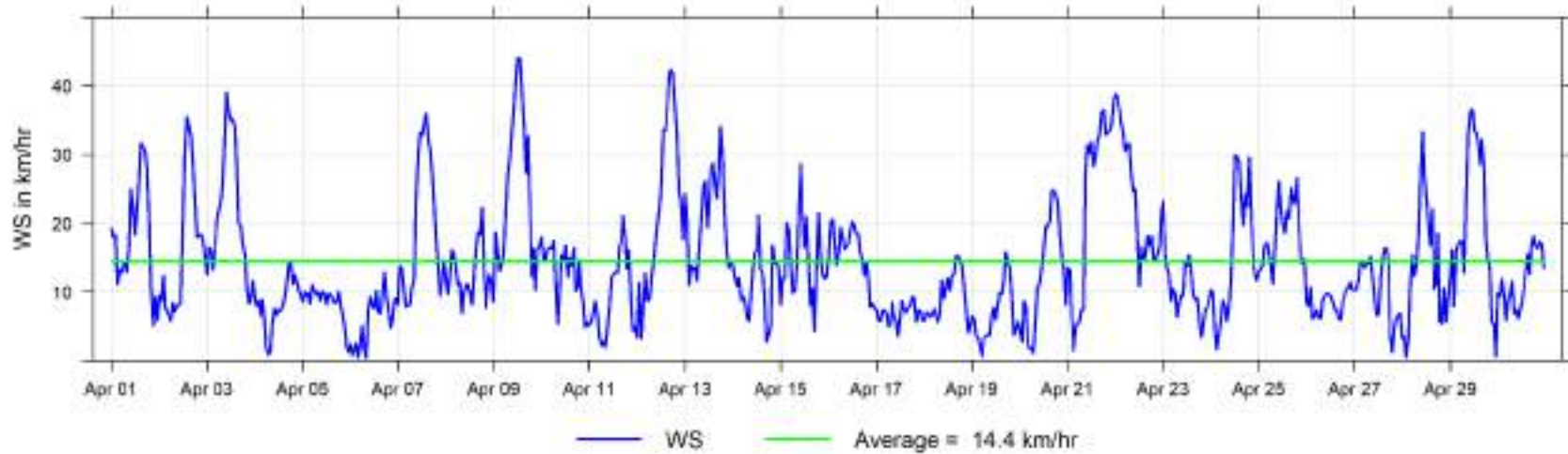
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Smoky Heights



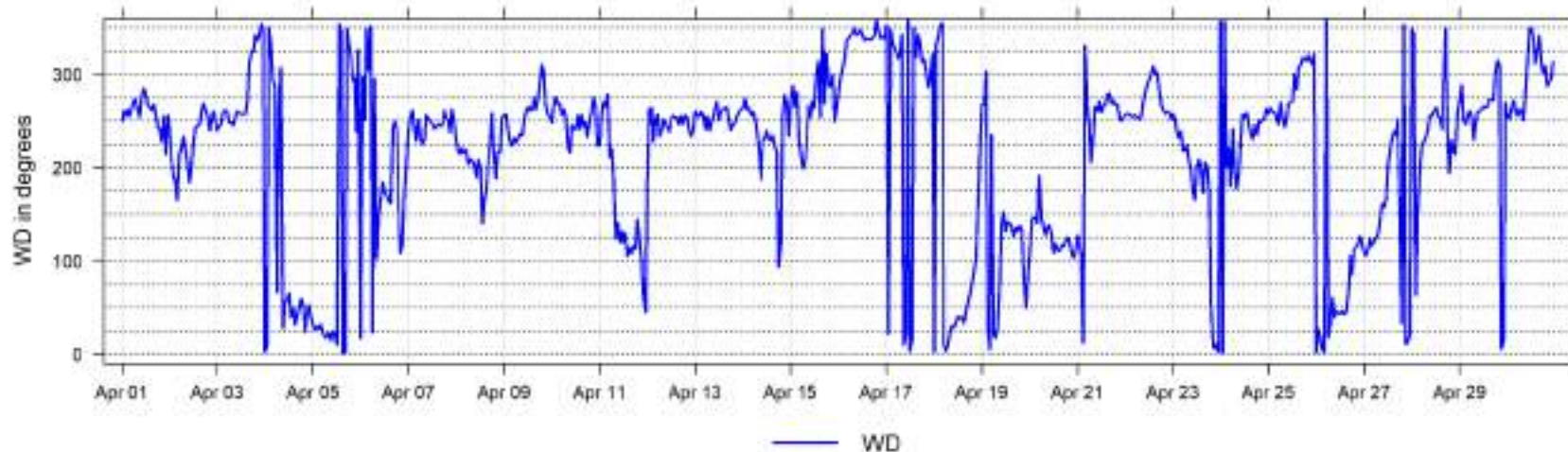
April 2024 Hourly Temperature Readings (in °C) at Smoky Heights



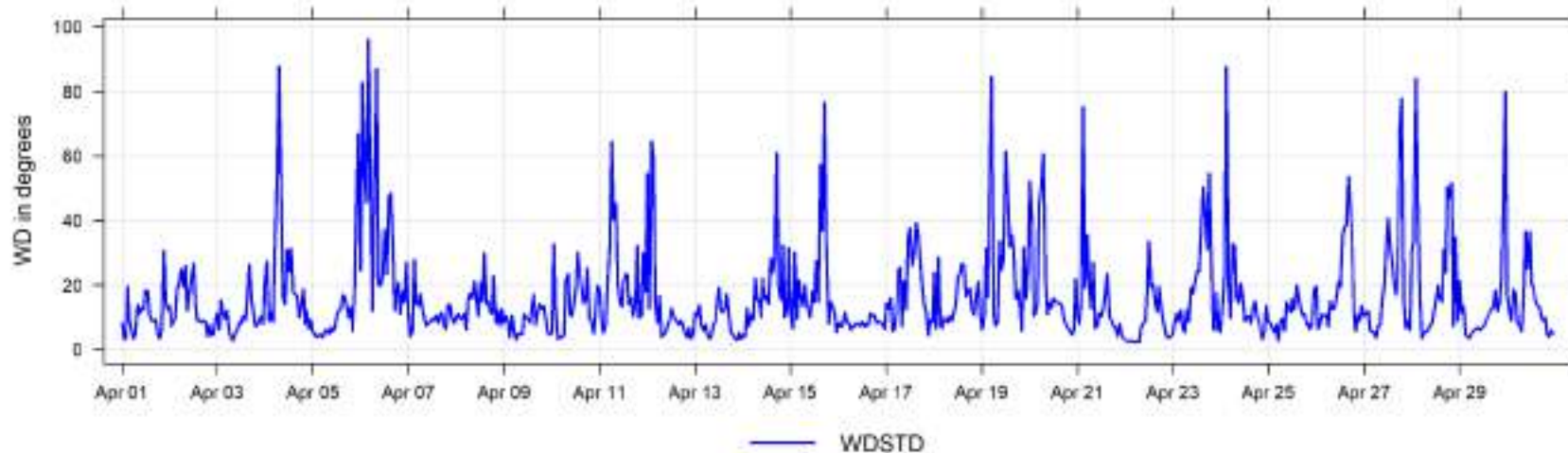
April 2024 Hourly Readings of Wind Speed (in km/hr) at Smoky Heights

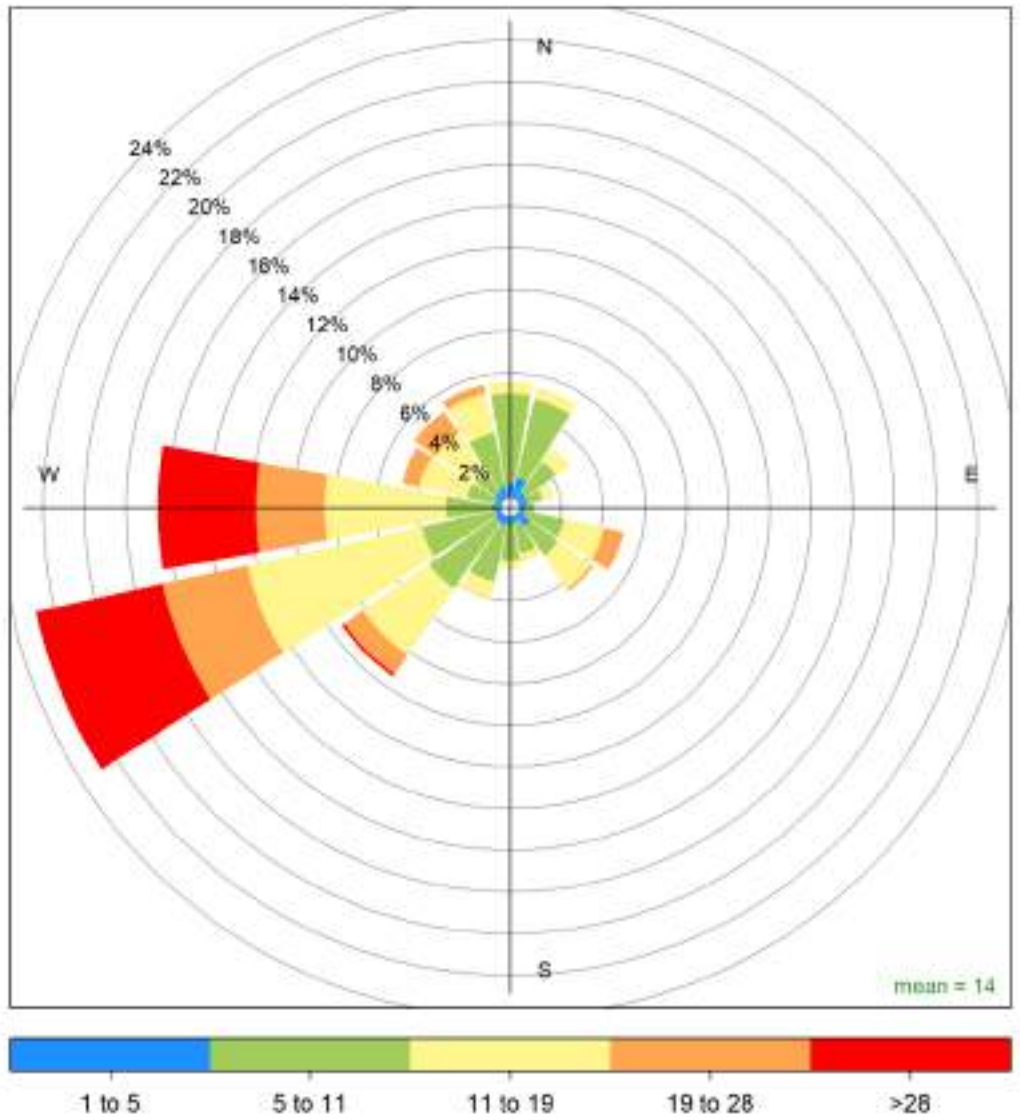


April 2024 Hourly Readings of Wind Direction (in degrees) at Smoky Heights



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Smoky Heights

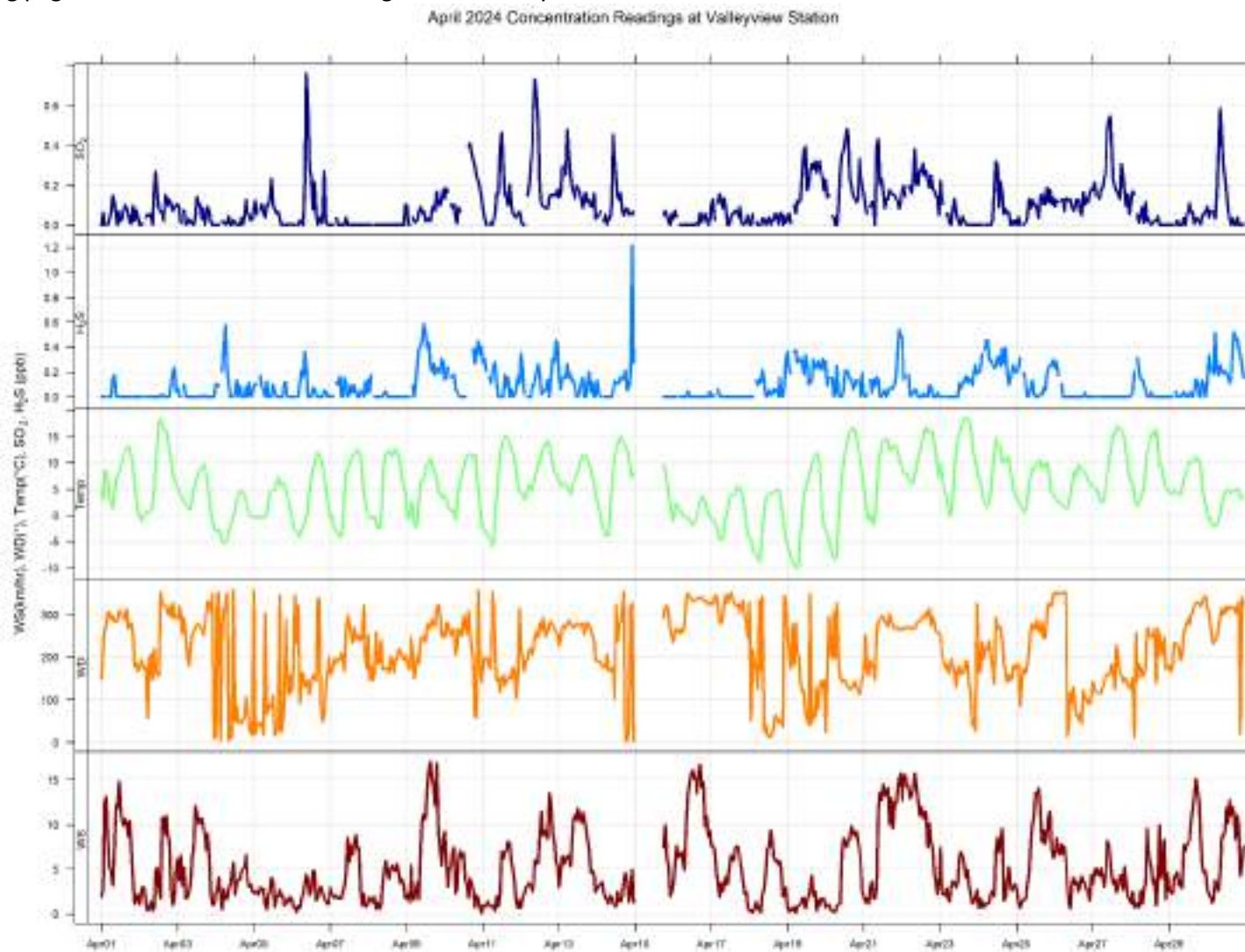




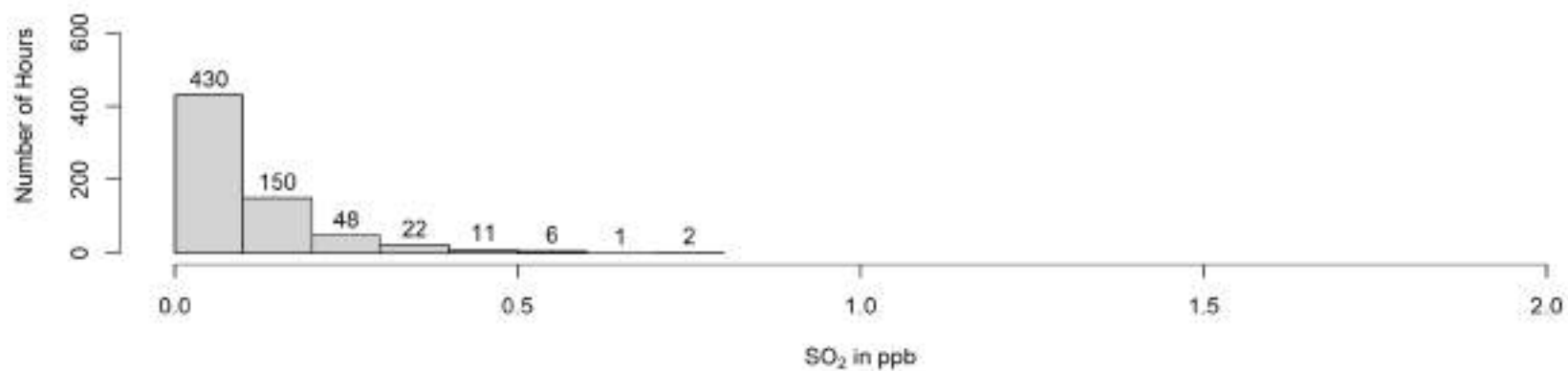
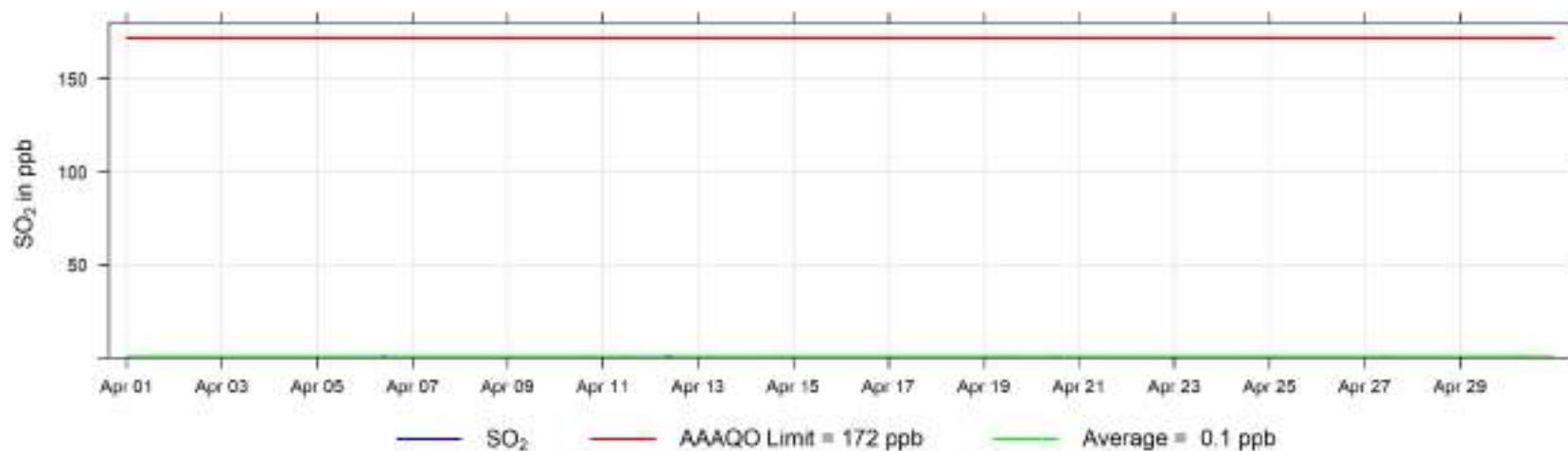
Smoky Heights April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 1 %

6 Valleyview Charts

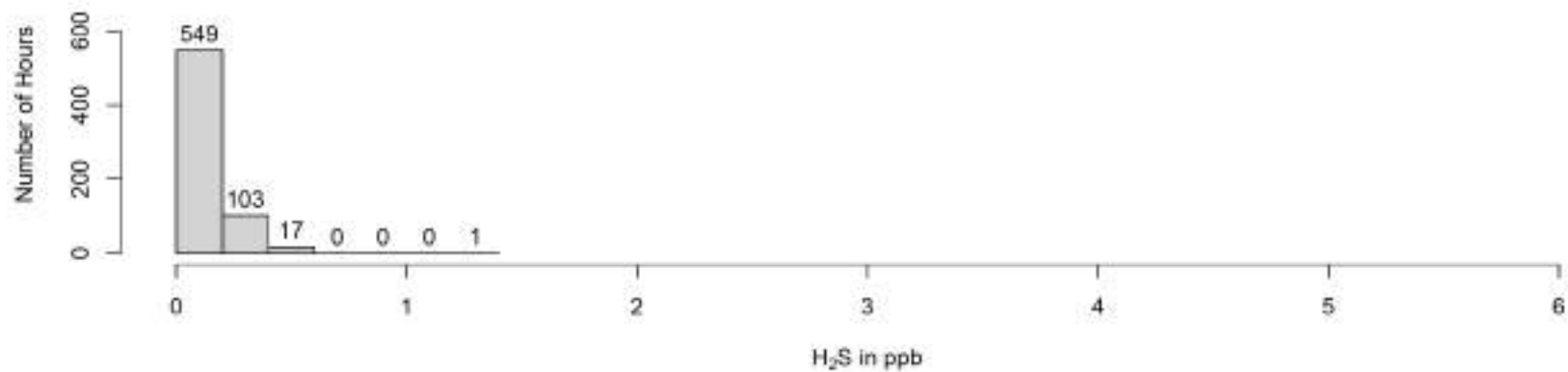
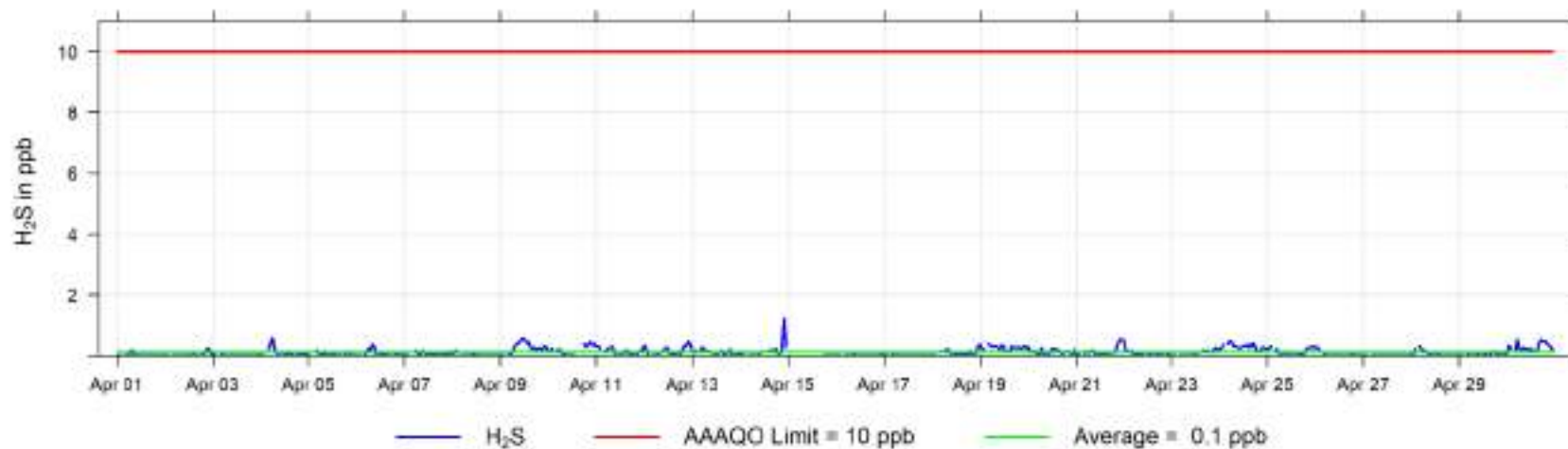
The following pages include the charts and histograms for Valleyview Station



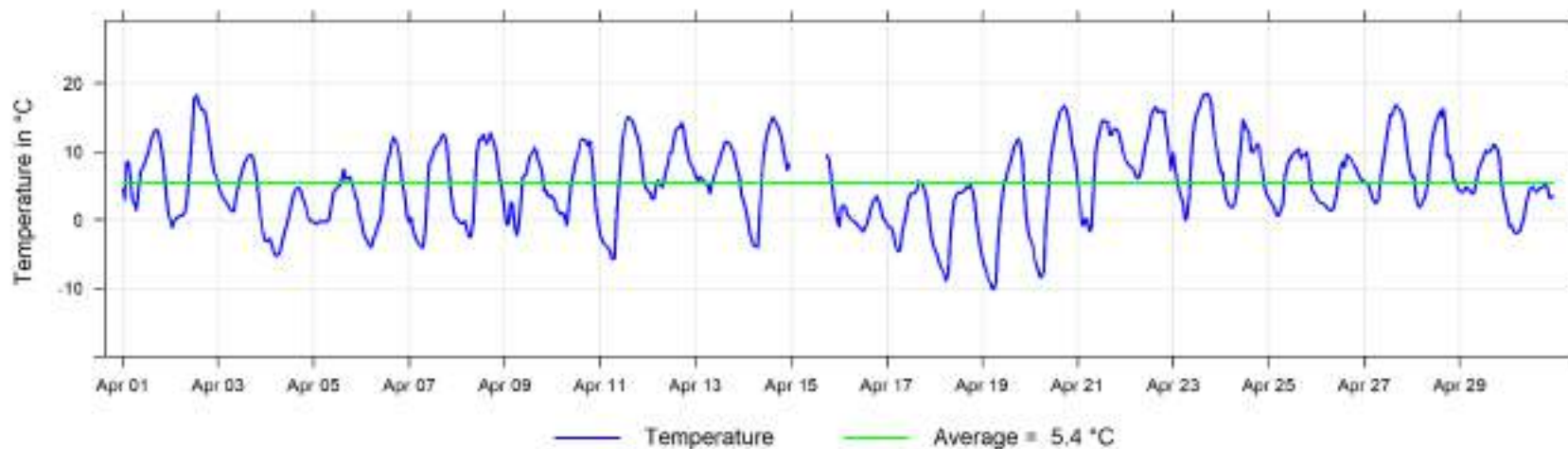
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Valleyview



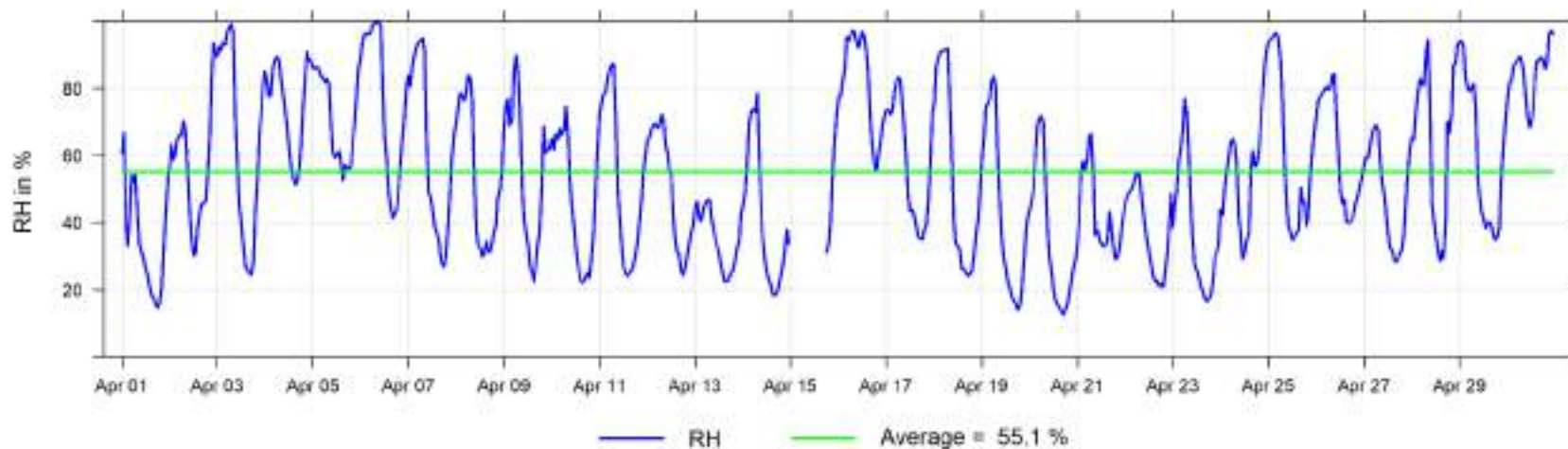
April 2024 Hourly Concentration Readings of H₂S (in ppb) at Valleyview



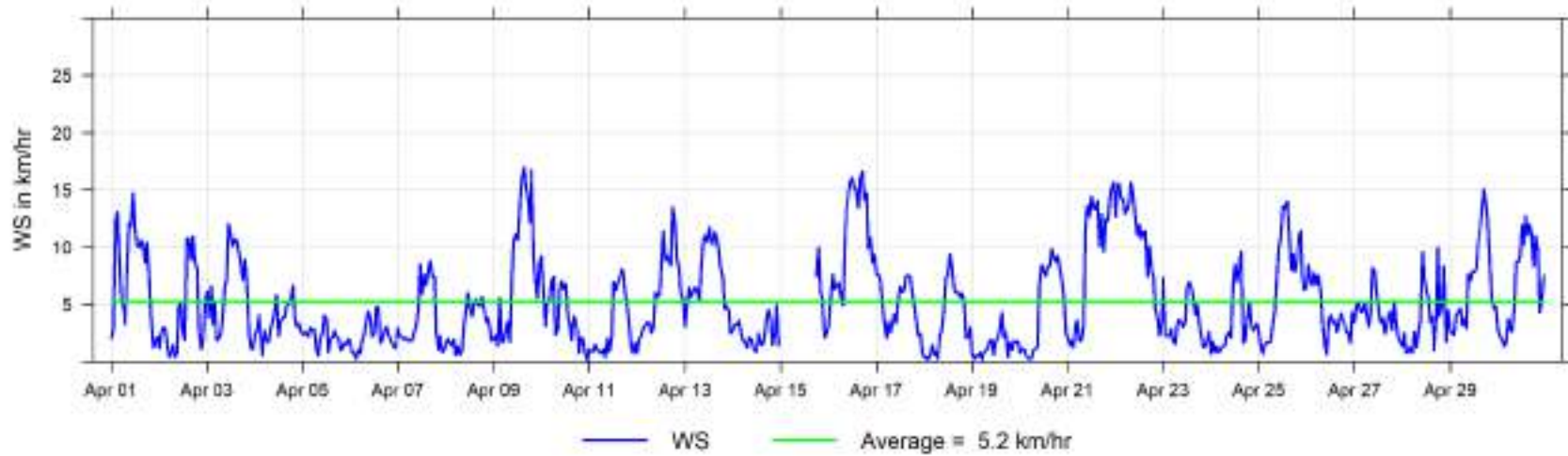
April 2024 Hourly Temperature Readings (in °C) at Valleyview



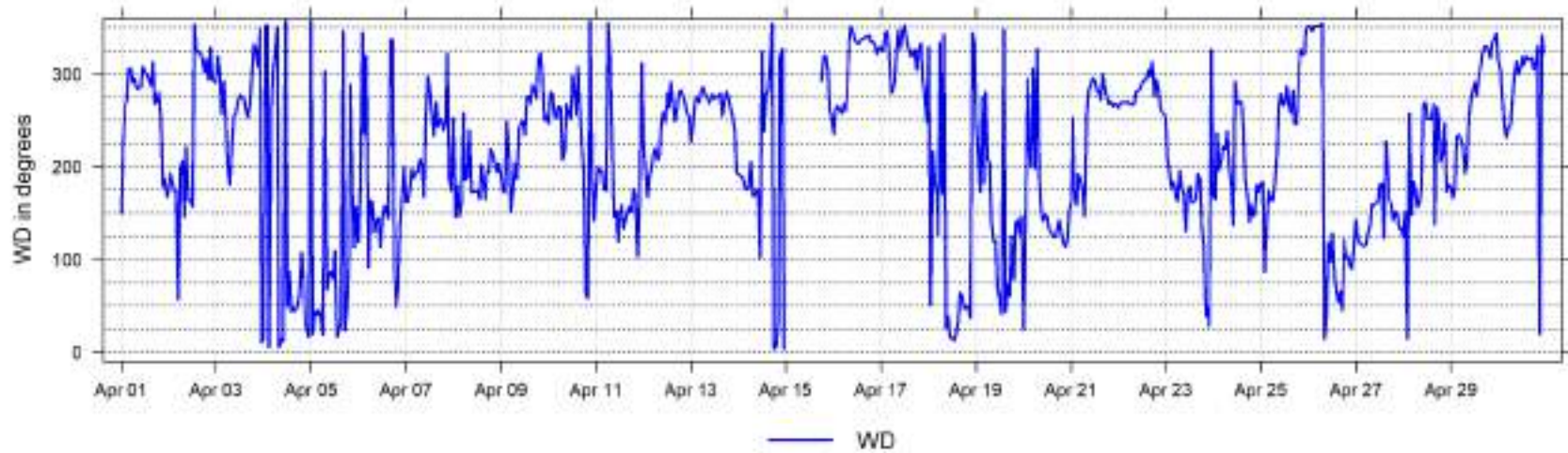
April 2024 Hourly Readings of Relative Humidity (in %) at Valleyview



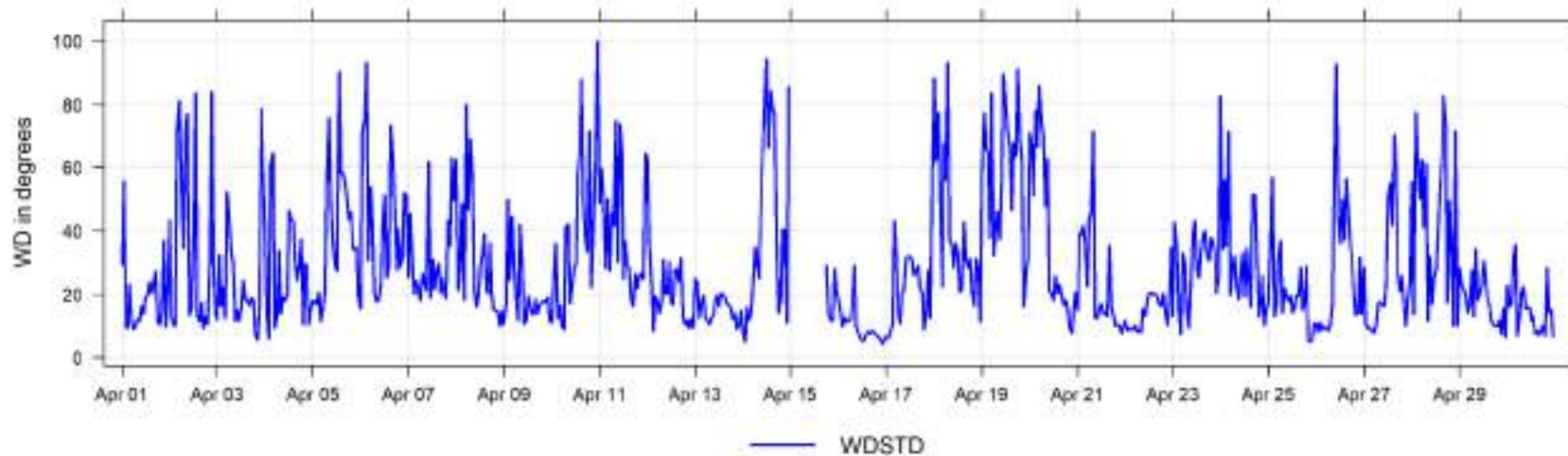
April 2024 Hourly Readings of Wind Speed (in km/hr) at Valleyview

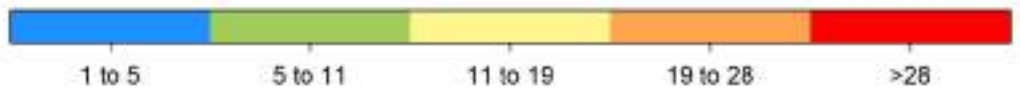
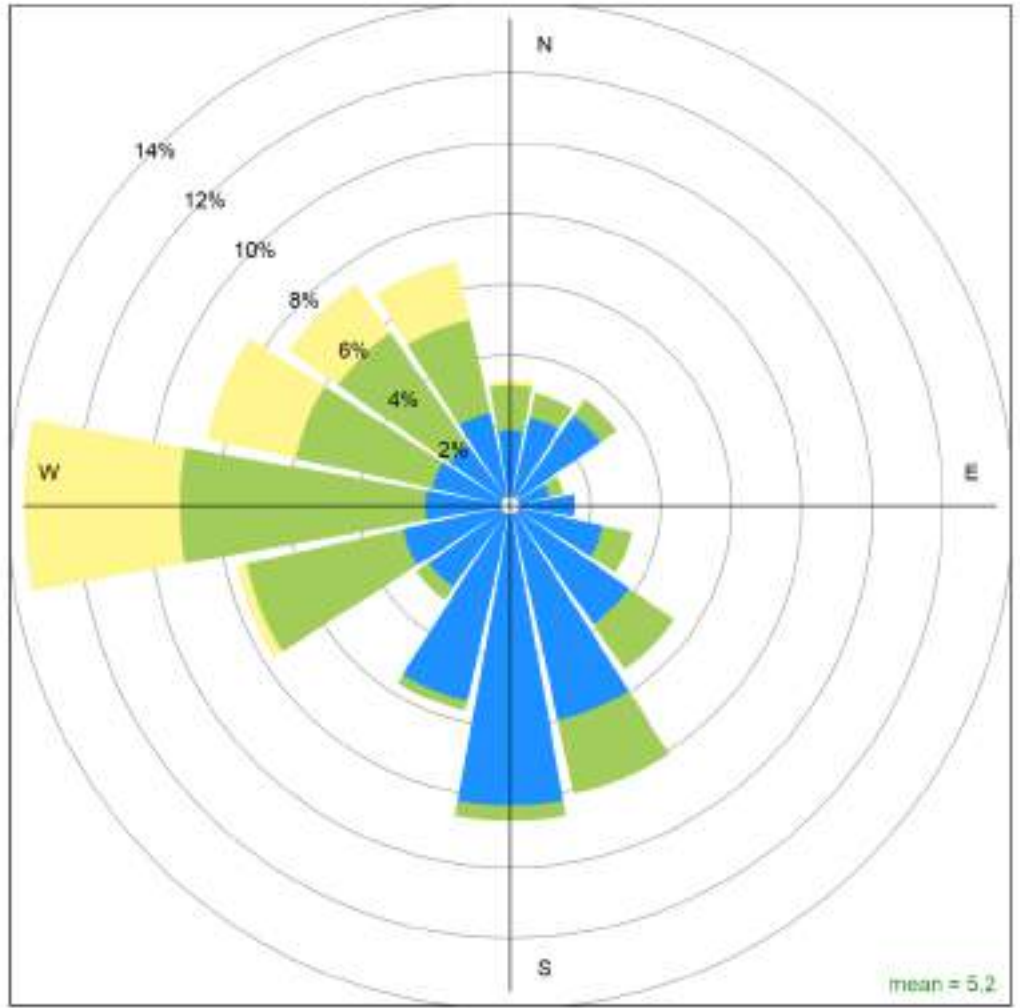


April 2024 Hourly Readings of Wind Direction (in degrees) at Valleyview



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Valleyview



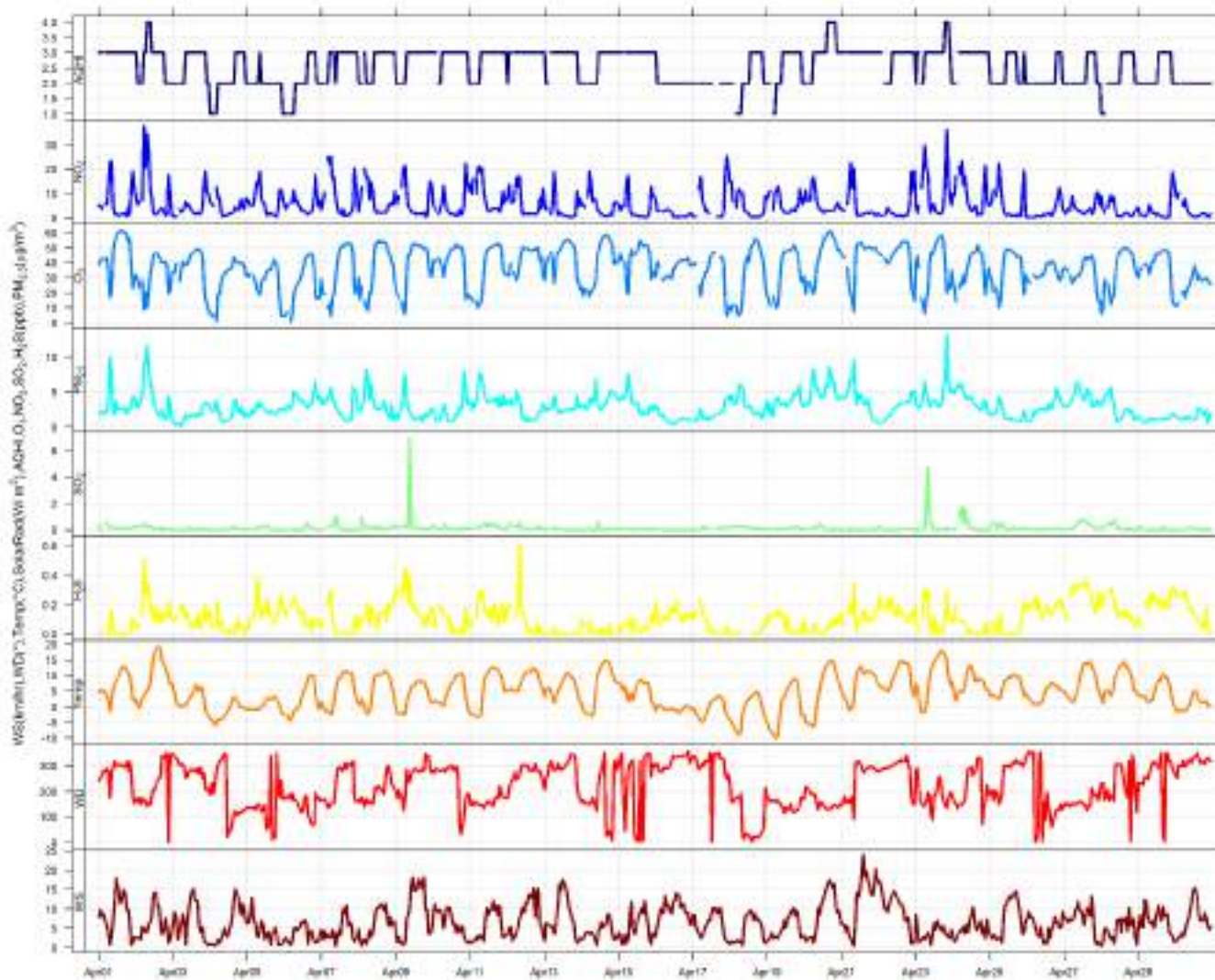


Valleyview April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 9.4 %

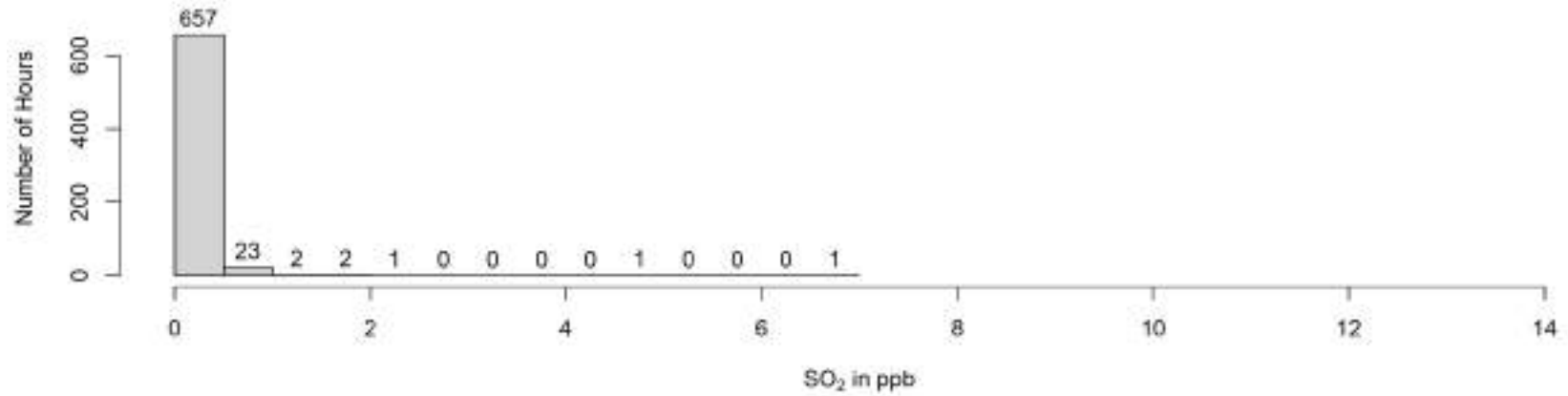
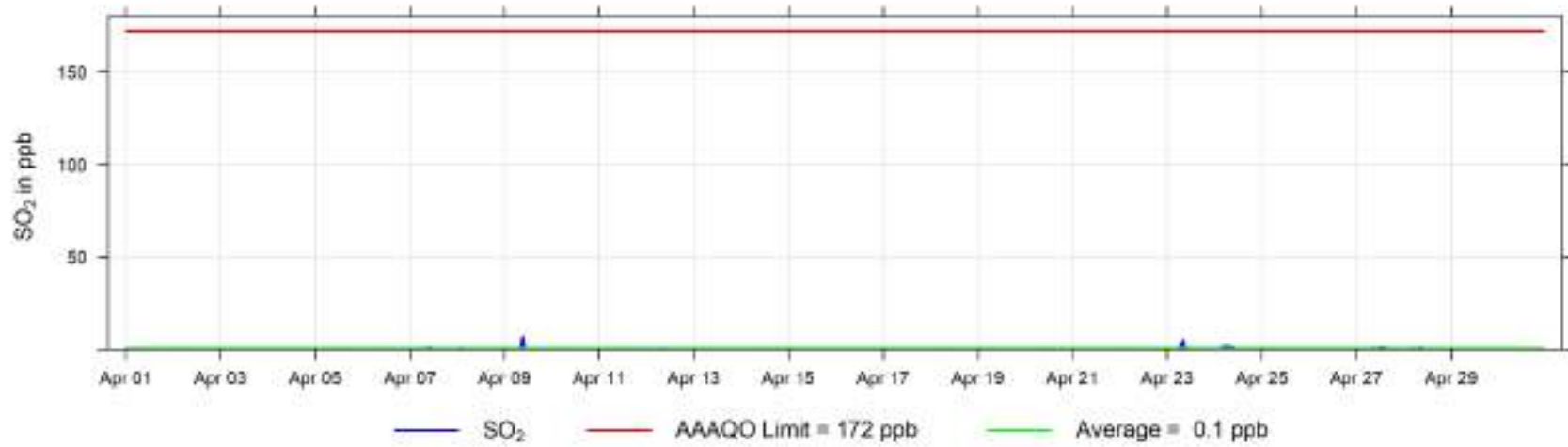
7 Fox Creek Charts

The following pages include the charts and histograms for Fox Creek Station

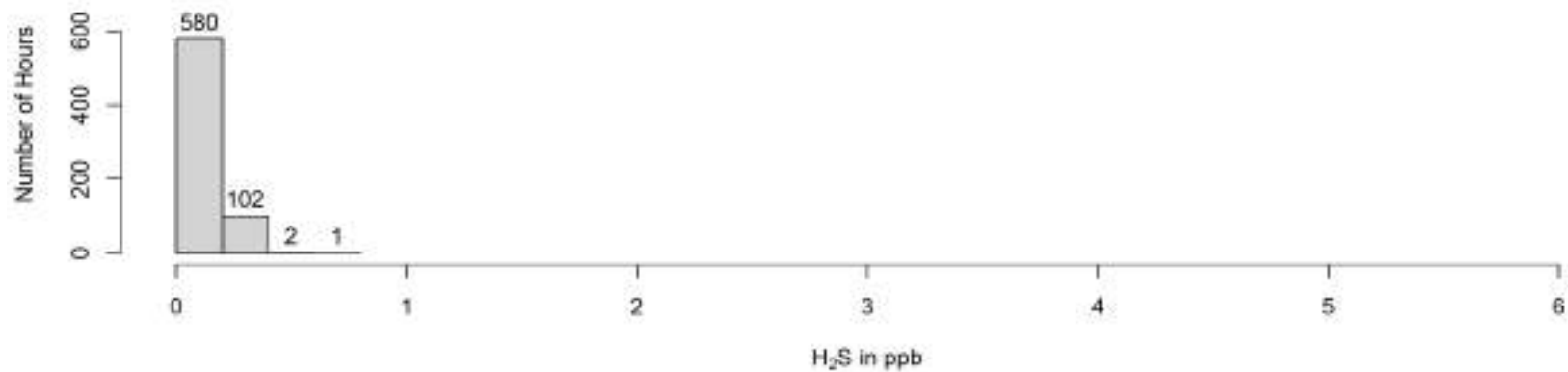
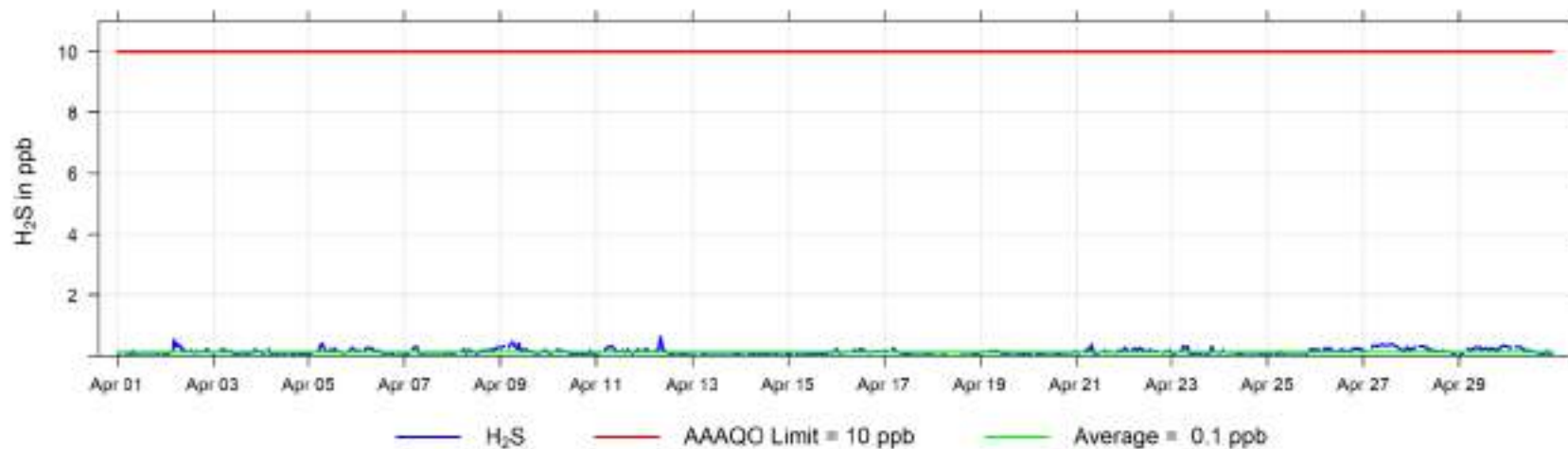
April 2024 Concentration Readings at Fox Creek Station



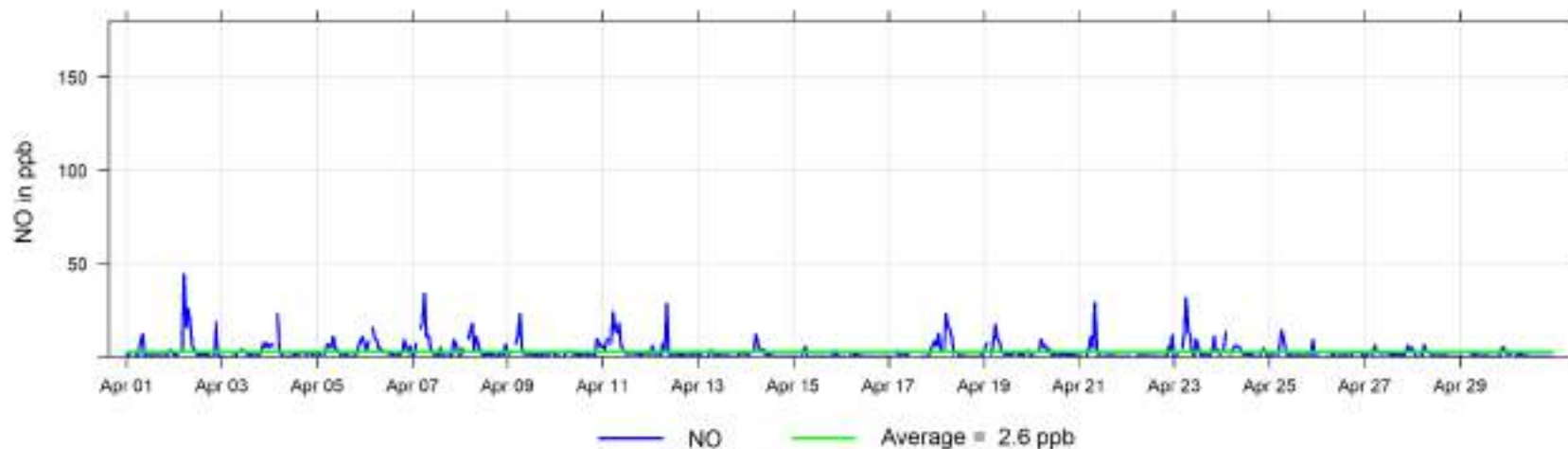
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Fox Creek



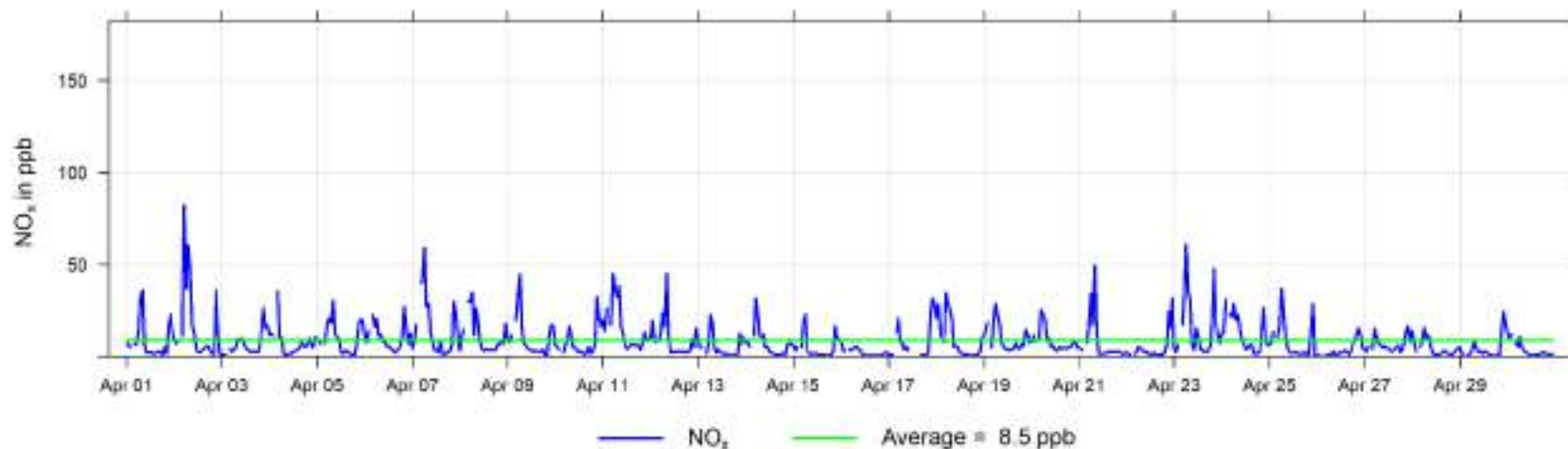
April 2024 Hourly Concentration Readings of H₂S (in ppb) at Fox Creek



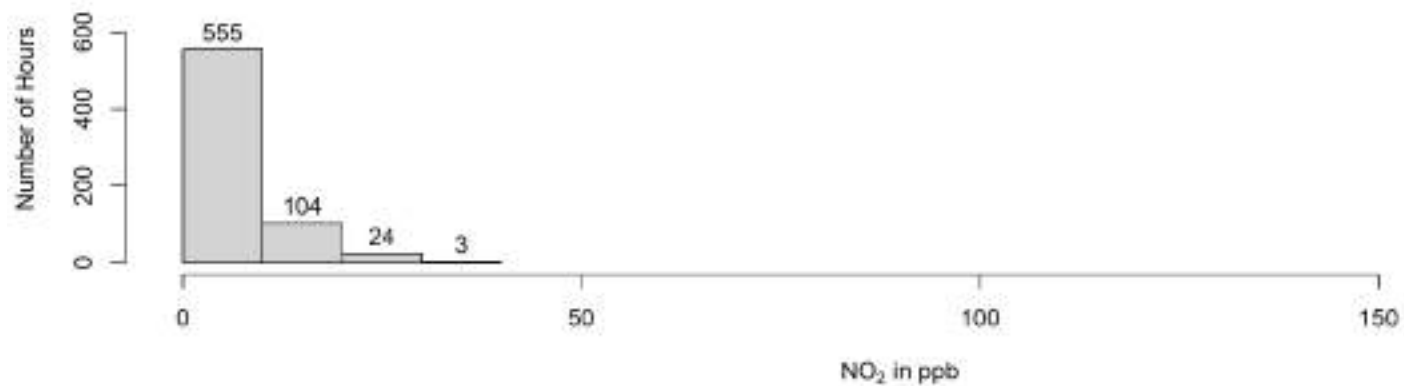
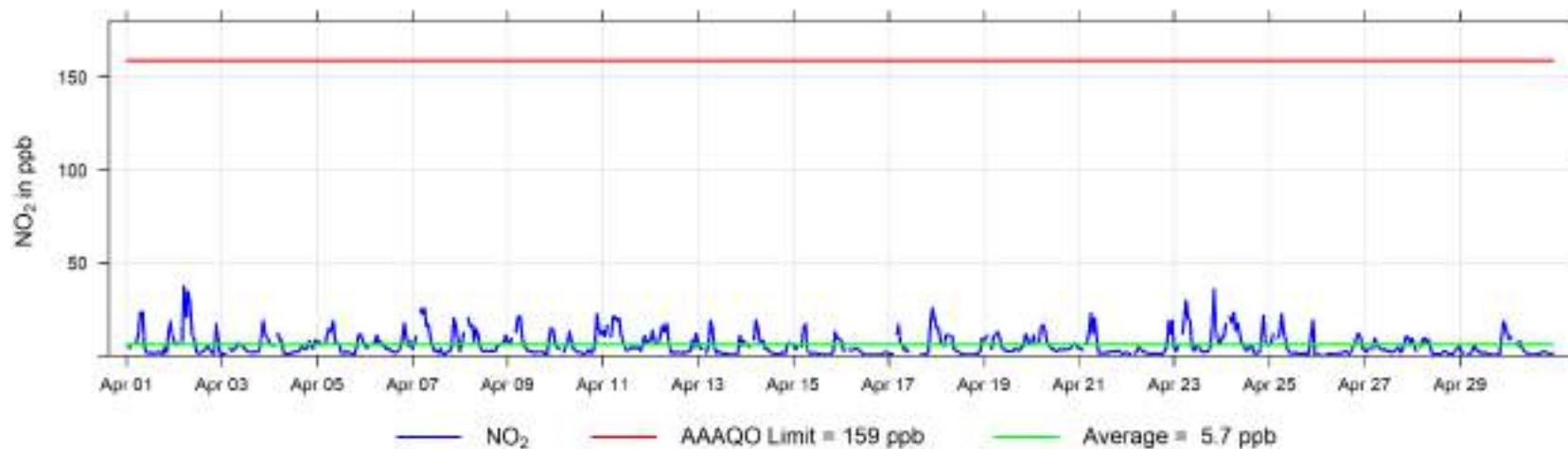
April 2024 Hourly Concentration Readings of NO (in ppb) at Fox Creek



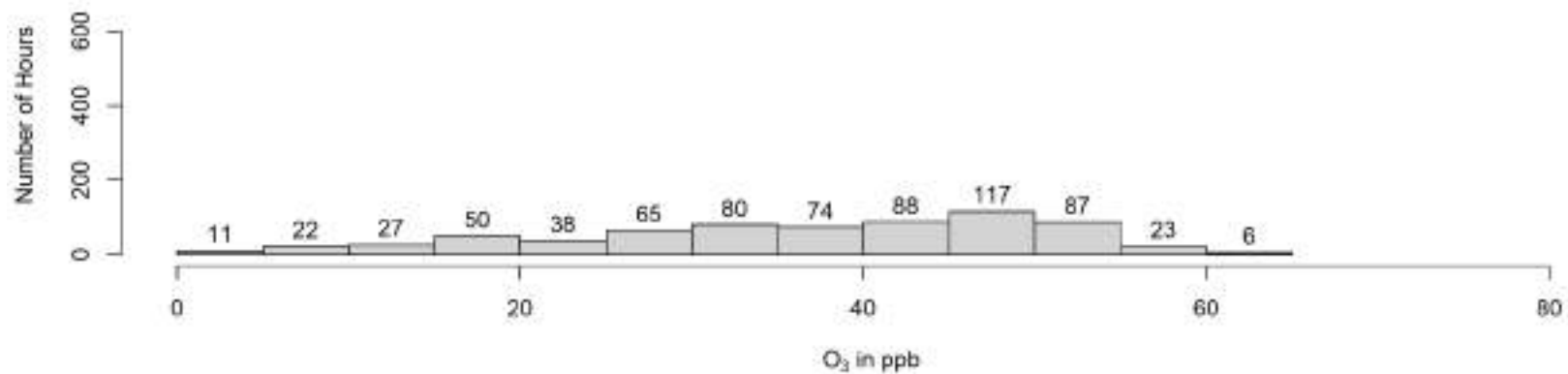
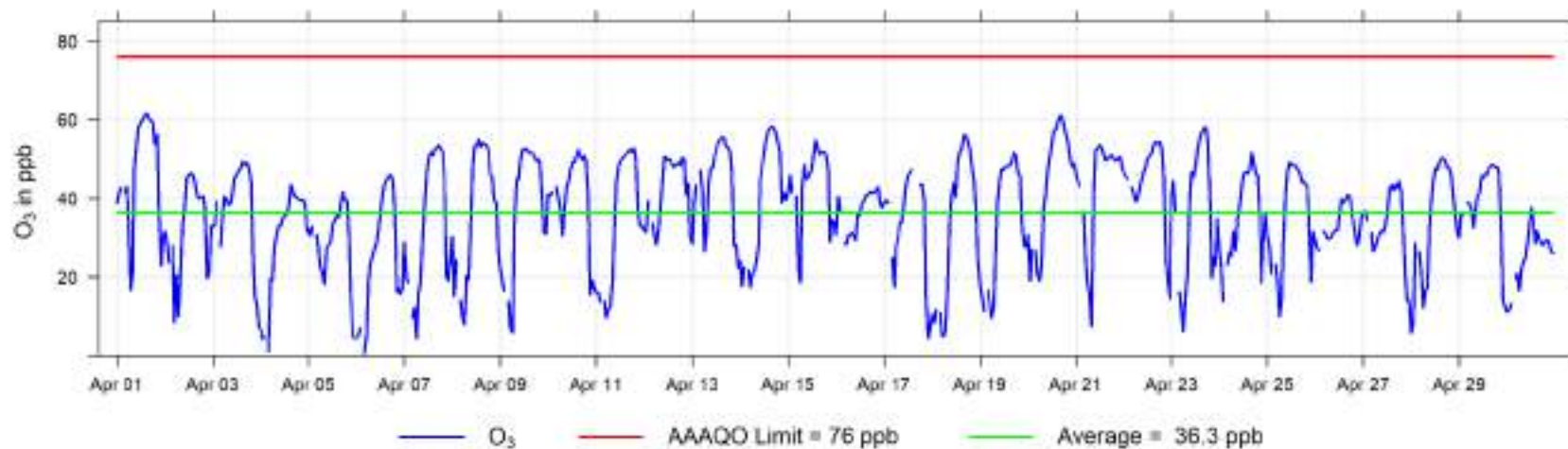
April 2024 Hourly Concentration Readings of NO_x (in ppb) at Fox Creek



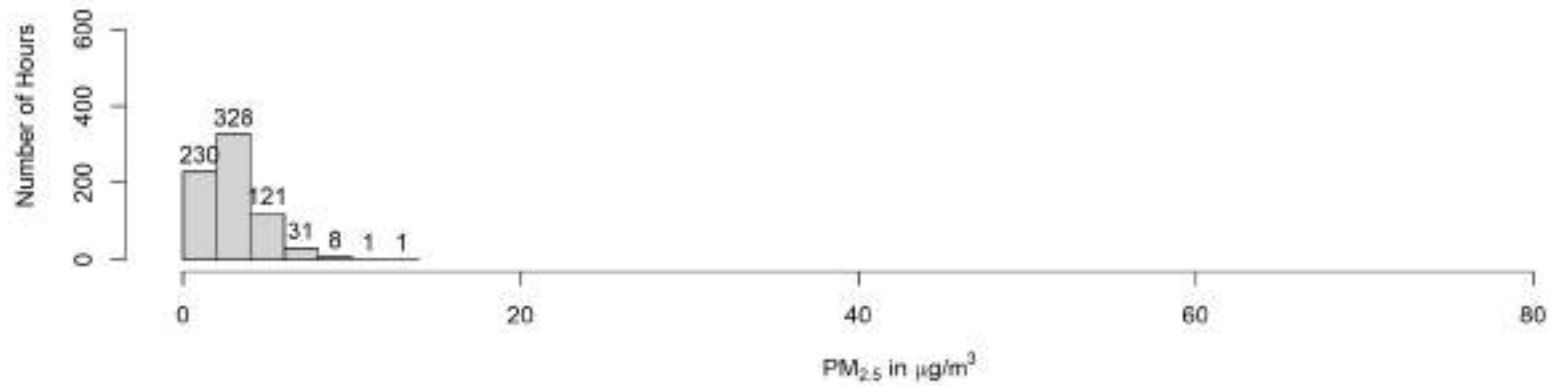
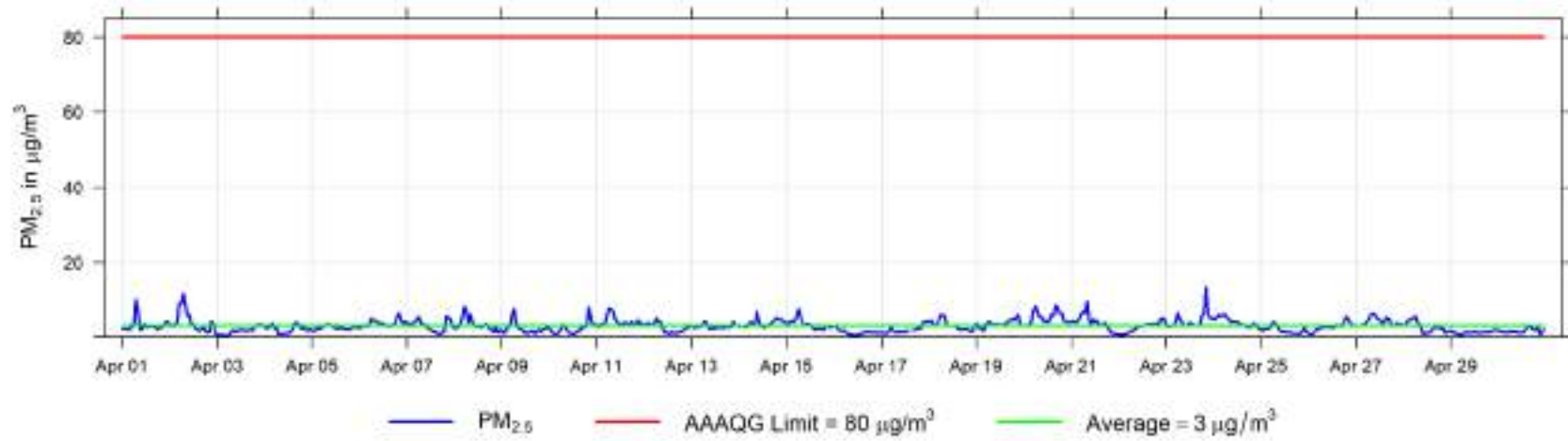
April 2024 Hourly Concentration Readings of NO₂ (in ppb) at Fox Creek



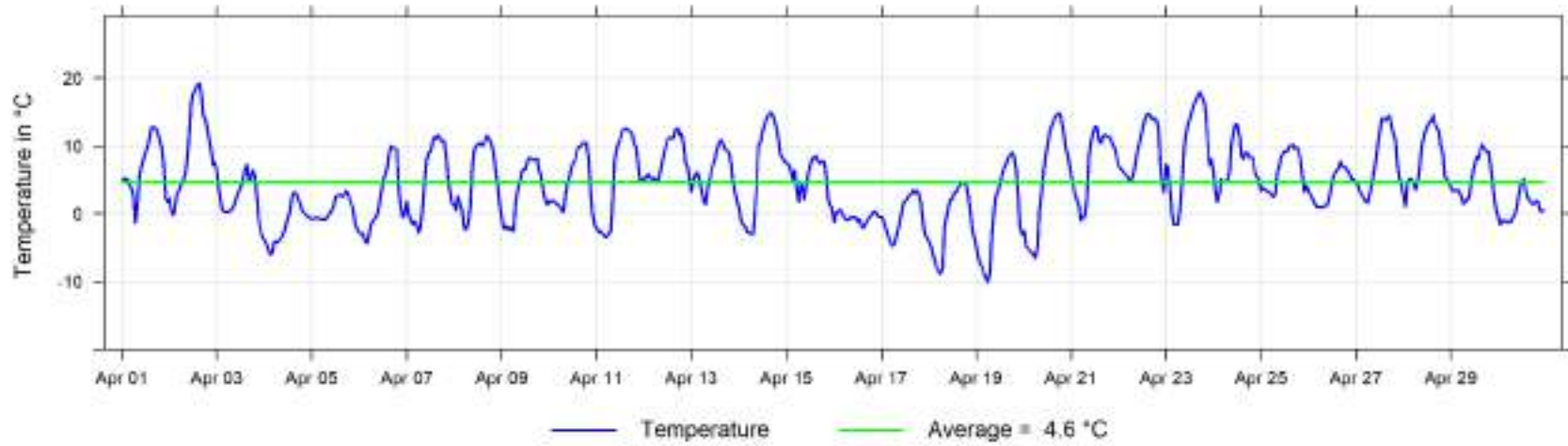
April 2024 Hourly Concentration Readings of O₃ (in ppb) at Fox Creek



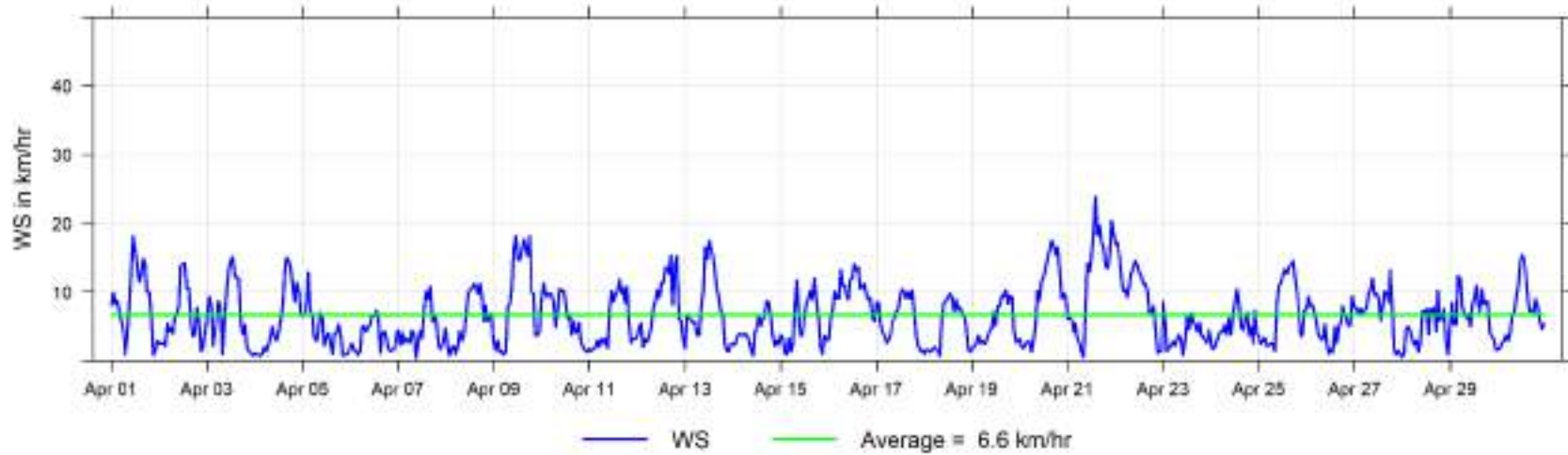
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Fox Creek



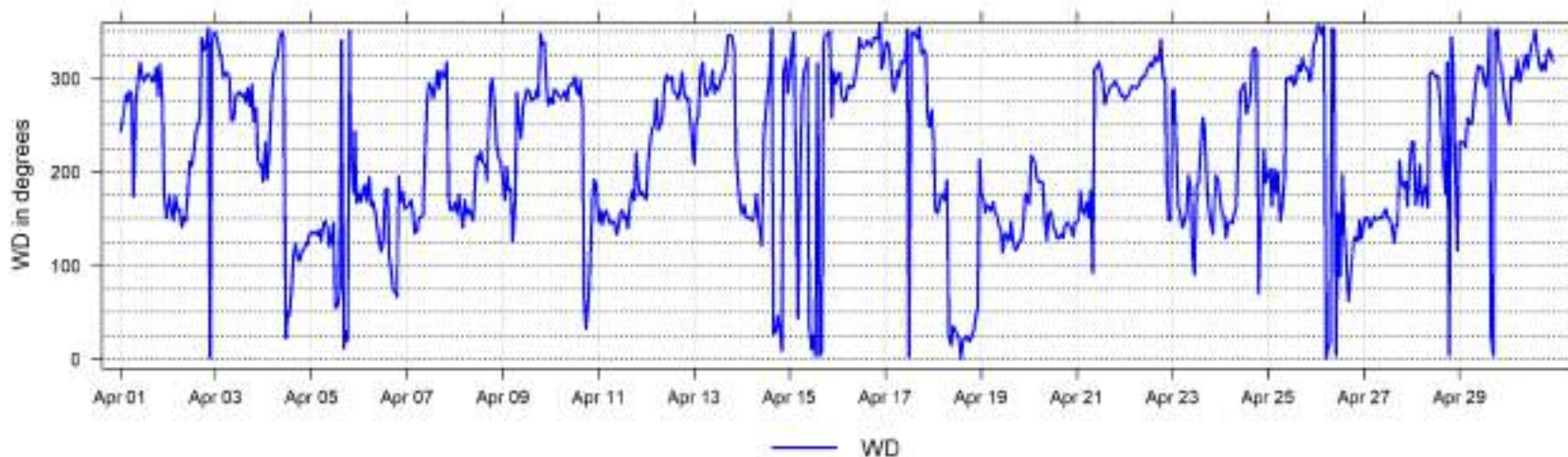
April 2024 Hourly Temperature Readings (in °C) at Fox Creek



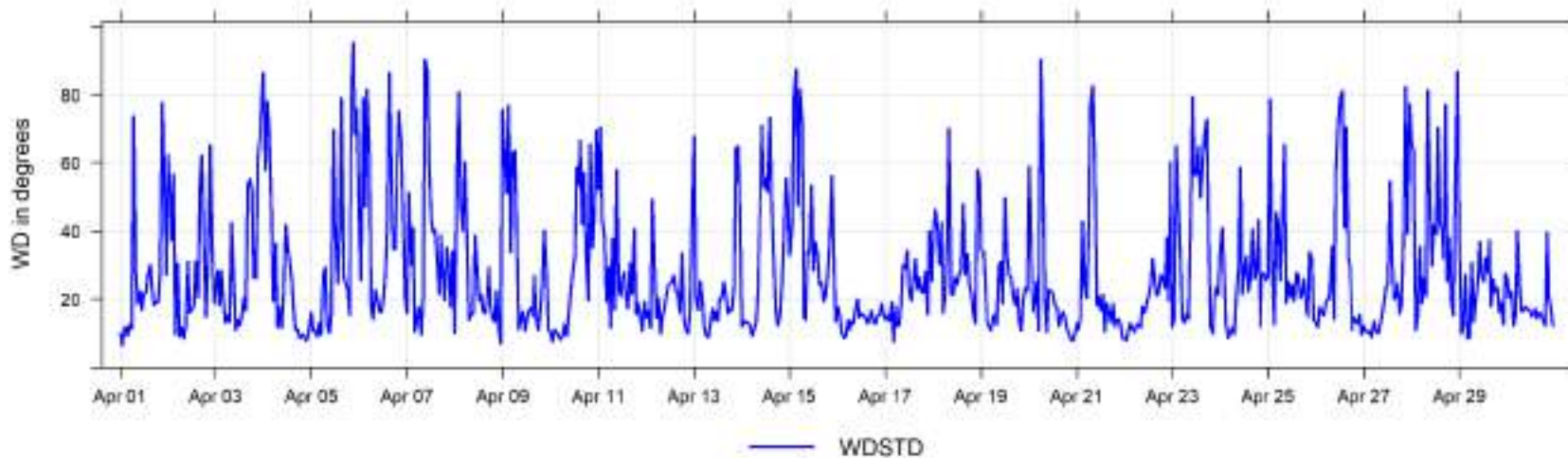
April 2024 Hourly Readings of Wind Speed (in km/hr) at Fox Creek

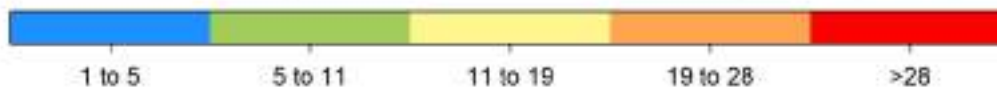
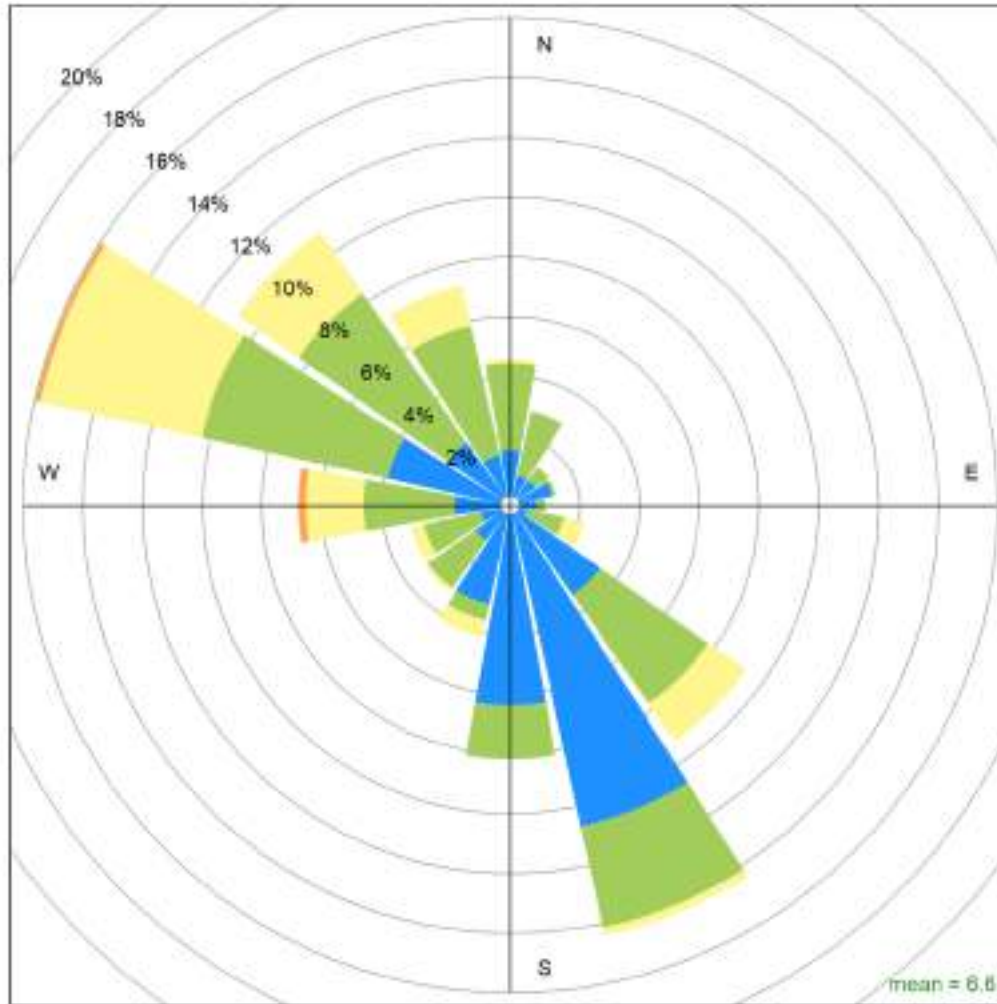


April 2024 Hourly Readings of Wind Direction (in degrees) at Fox Creek



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Fox Creek





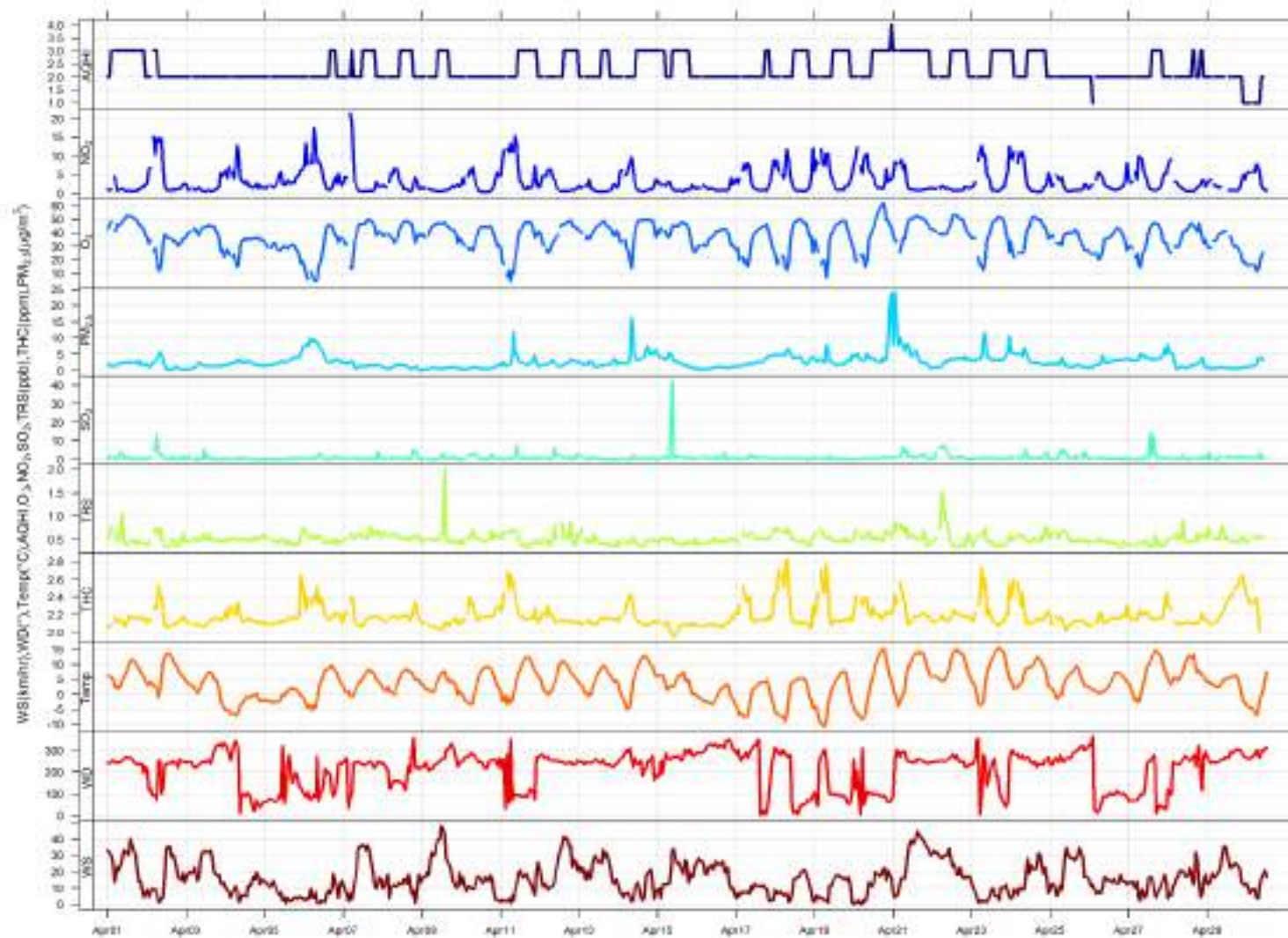
Fox Creek April 2024 Wind Rose, wind speed in km/hr

Calms (<1km/hr) = 3.9 %

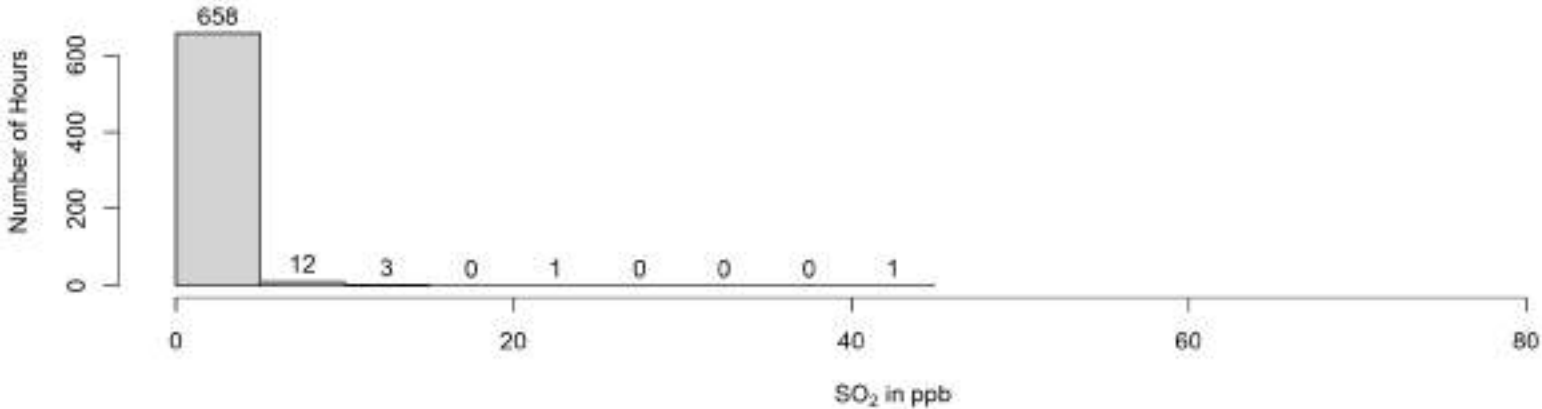
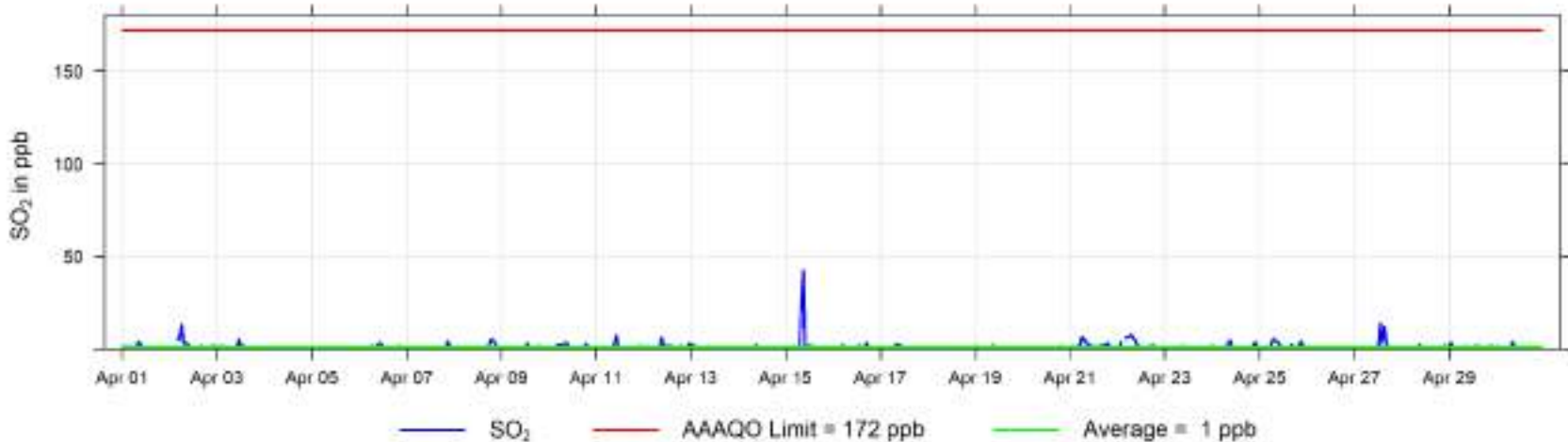
8 Poplar (Portable) Charts

The following pages include the charts and histograms for Poplar Portable Station

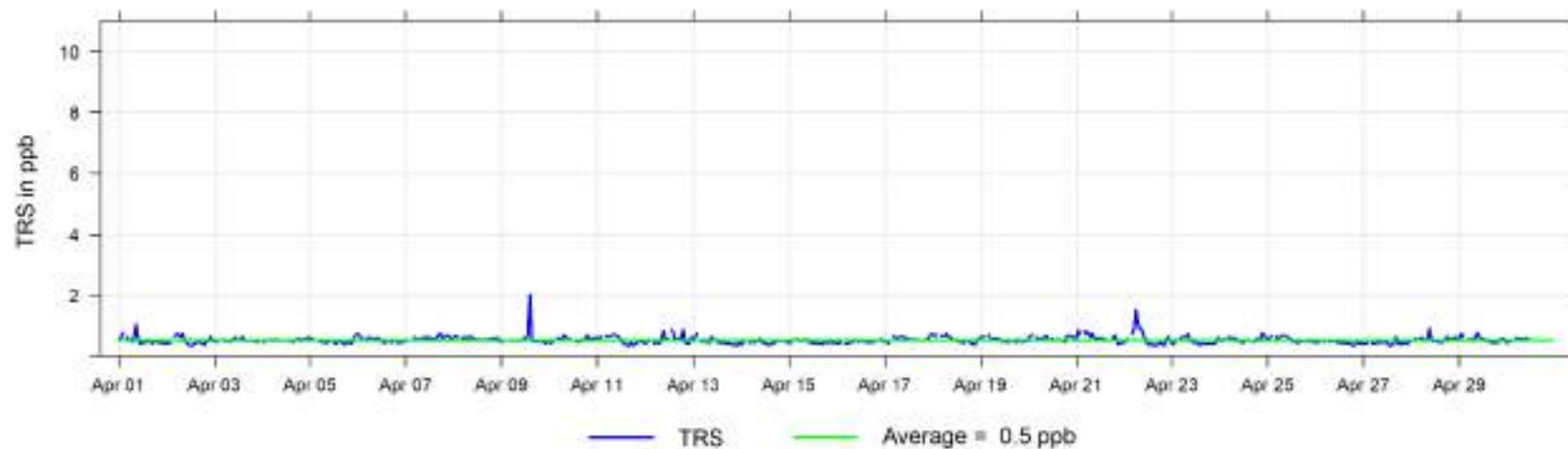
April 2024 Concentration Readings at Poplar Station



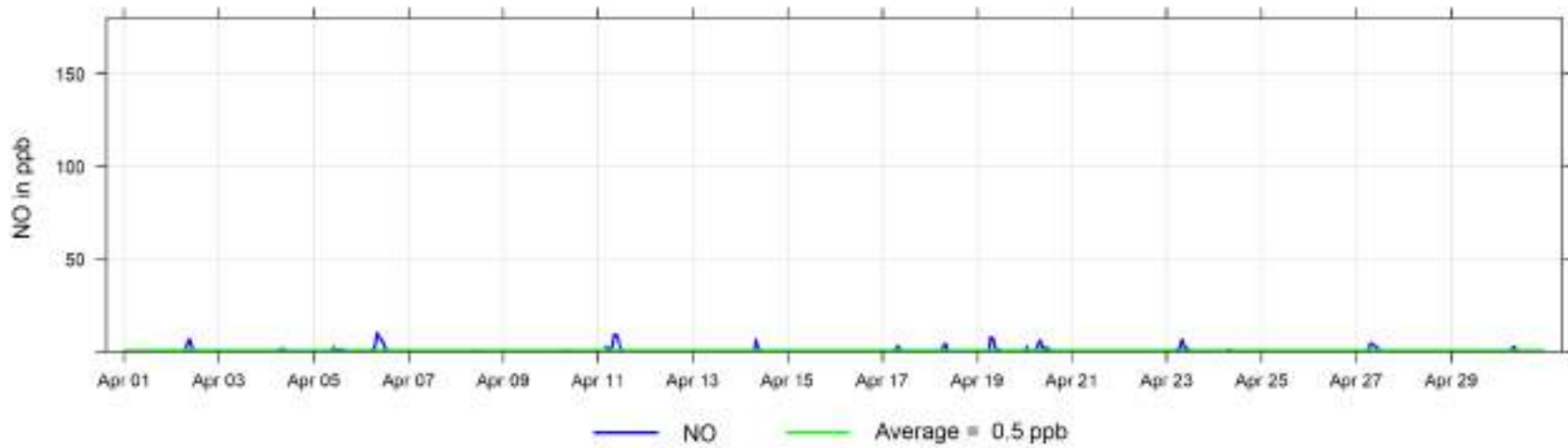
April 2024 Hourly Concentration Readings of SO₂ (in ppb) at Poplar



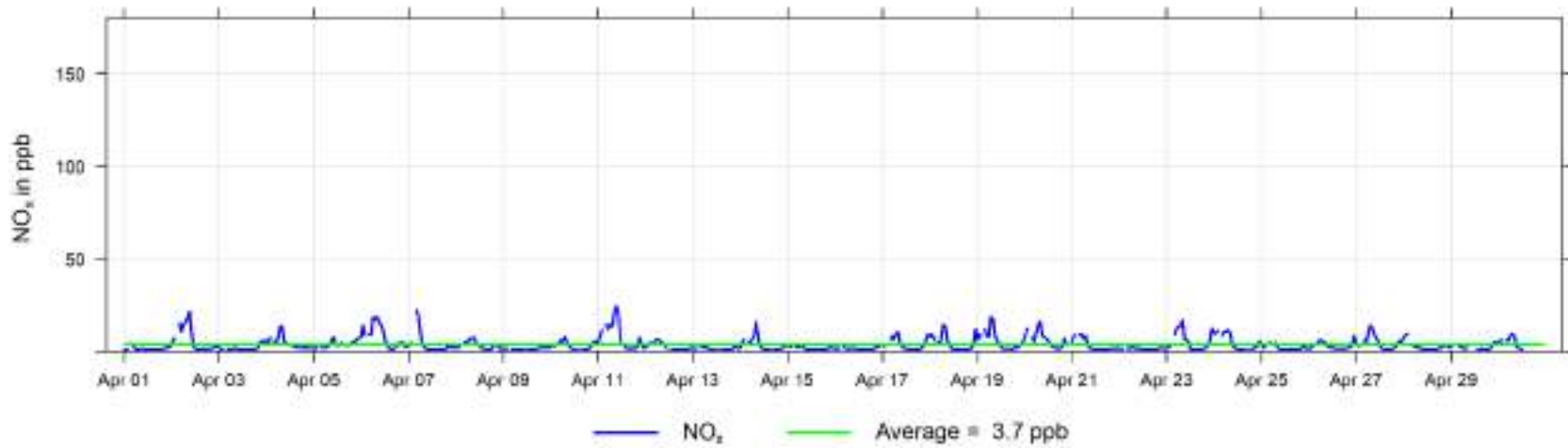
April 2024 Hourly Concentration Readings of TRS (in ppb) at Poplar



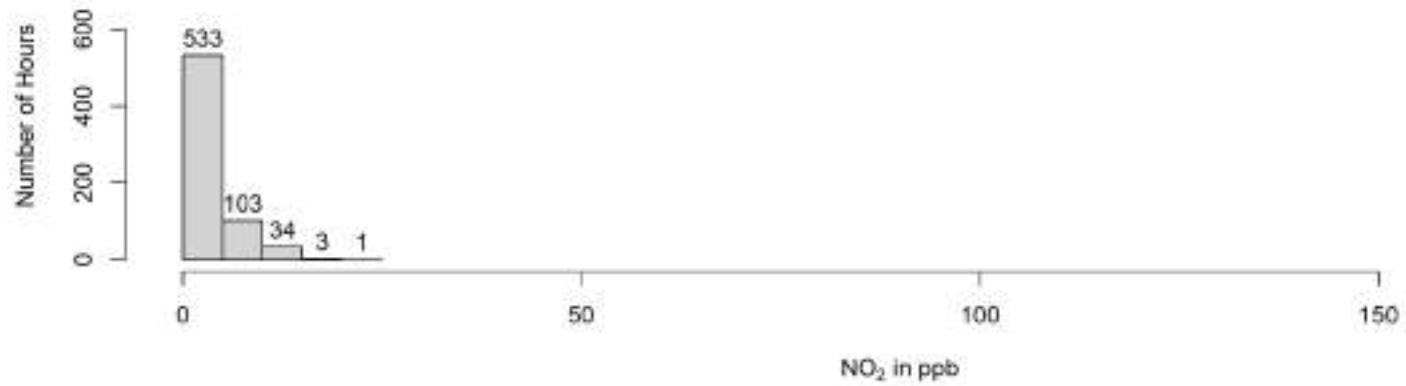
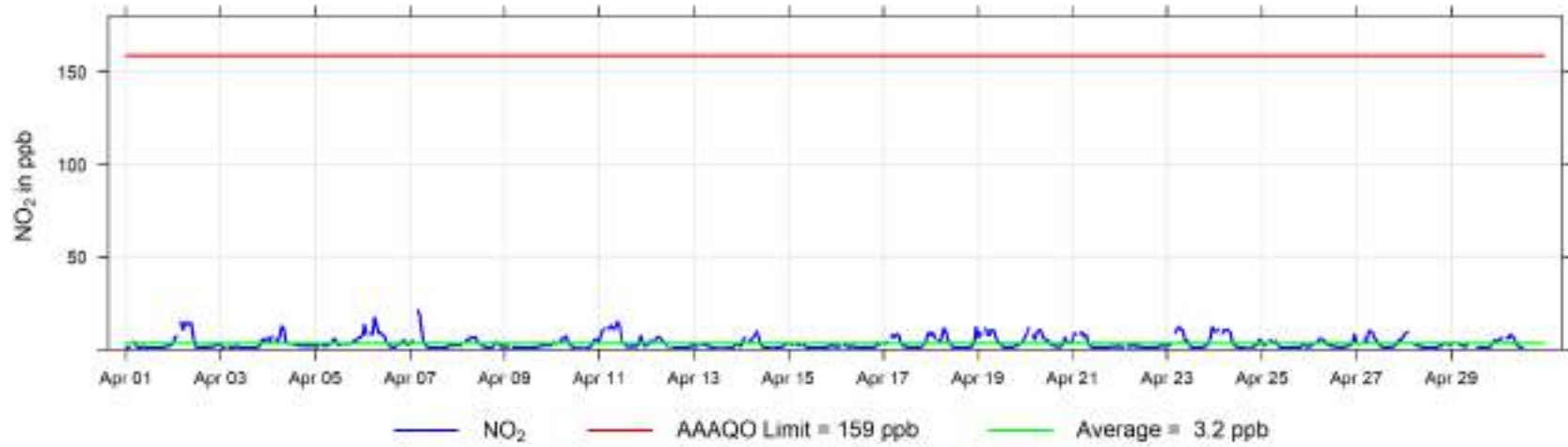
April 2024 Hourly Concentration Readings of NO (in ppb) at Poplar



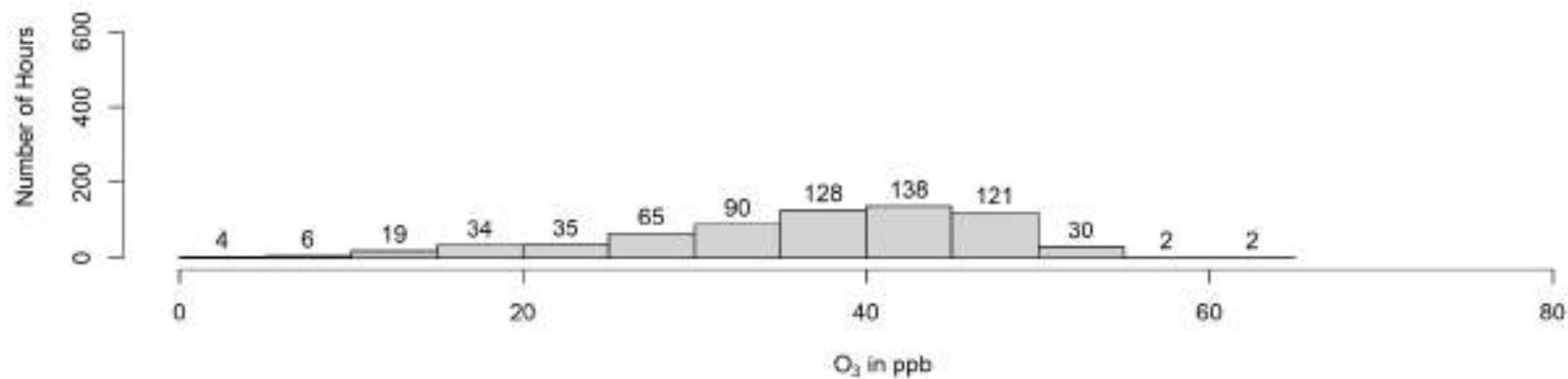
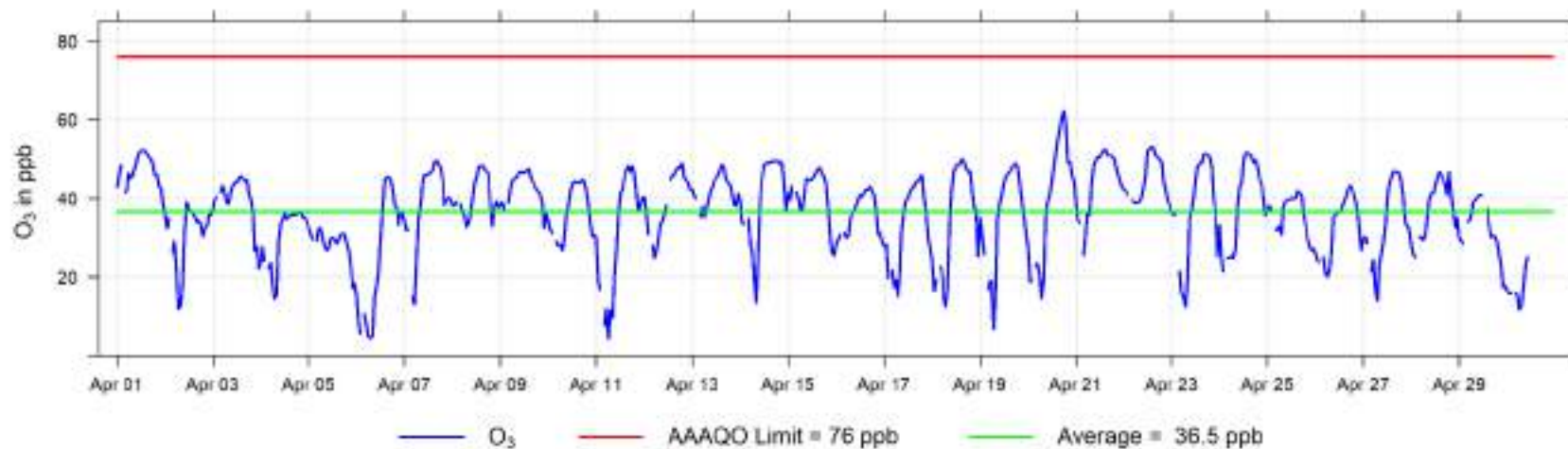
April 2024 Hourly Concentration Readings of NO_x (in ppb) at Poplar



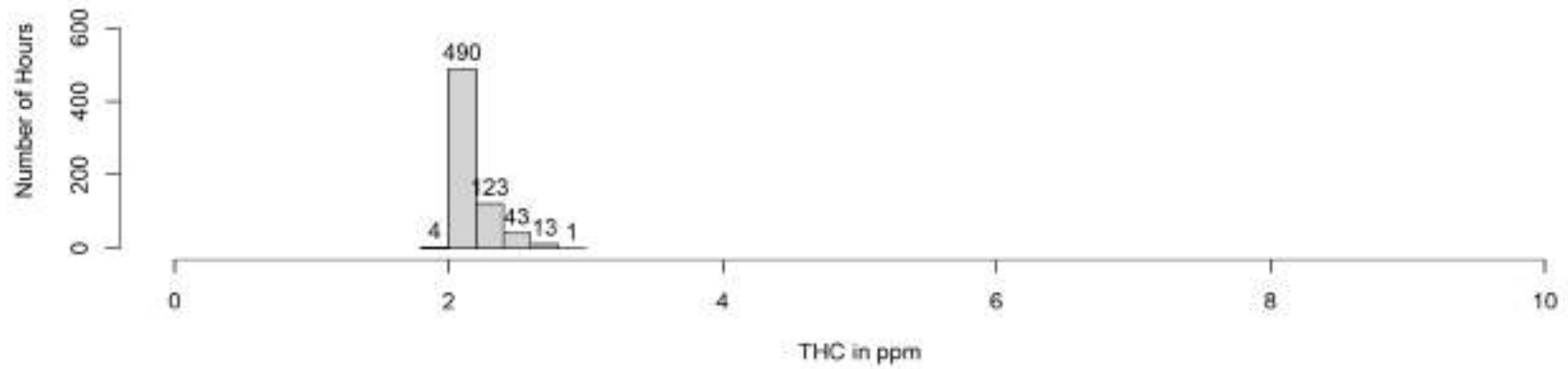
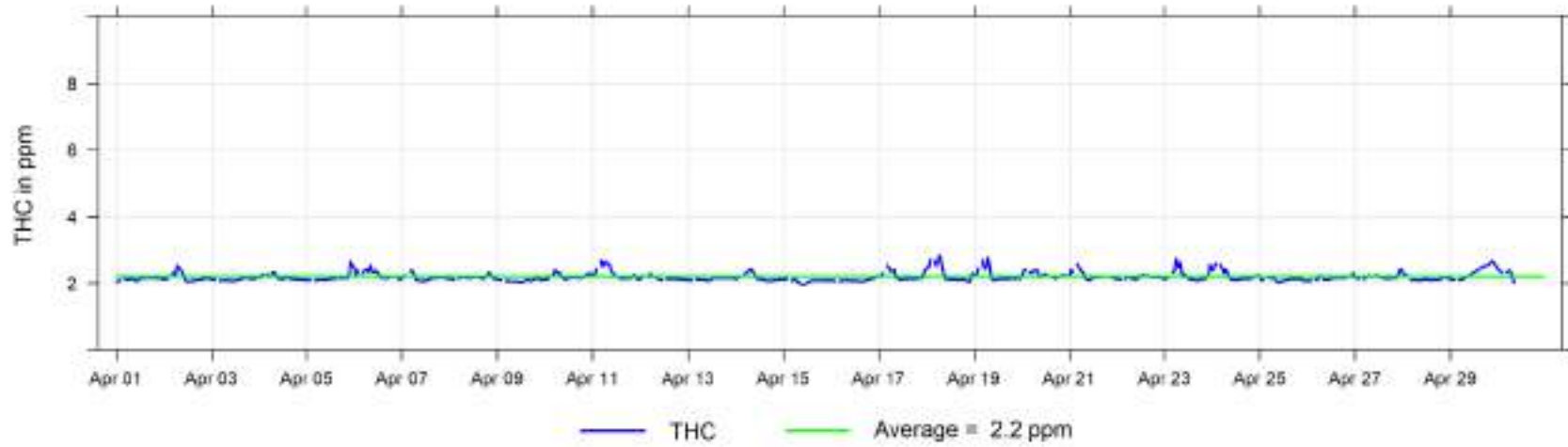
April 2024 Hourly Concentration Readings of NO₂ (in ppb) at Poplar



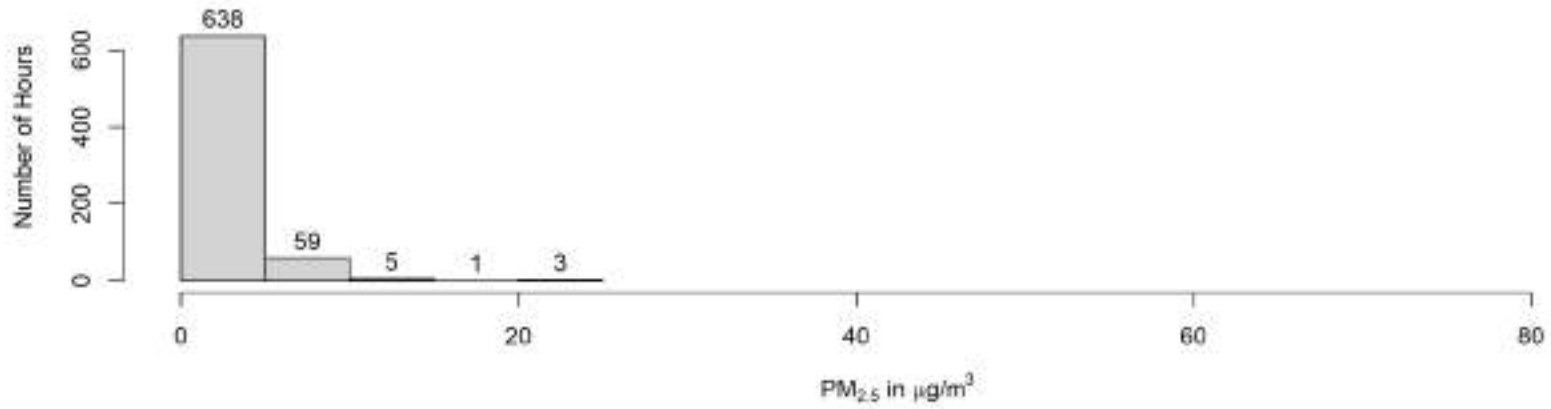
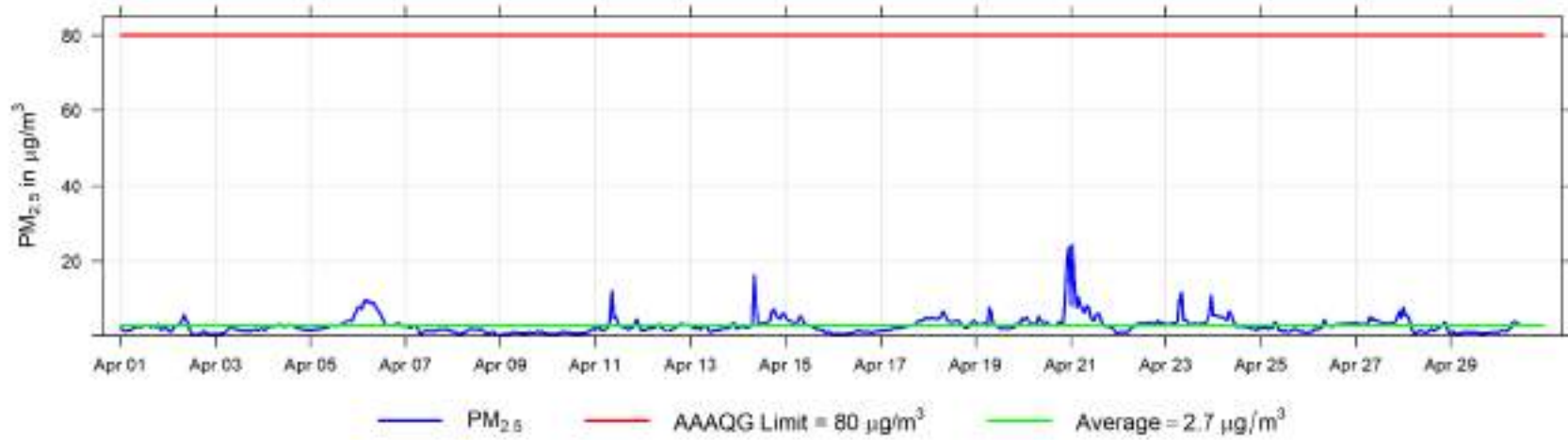
April 2024 Hourly Concentration Readings of O₃ (in ppb) at Poplar



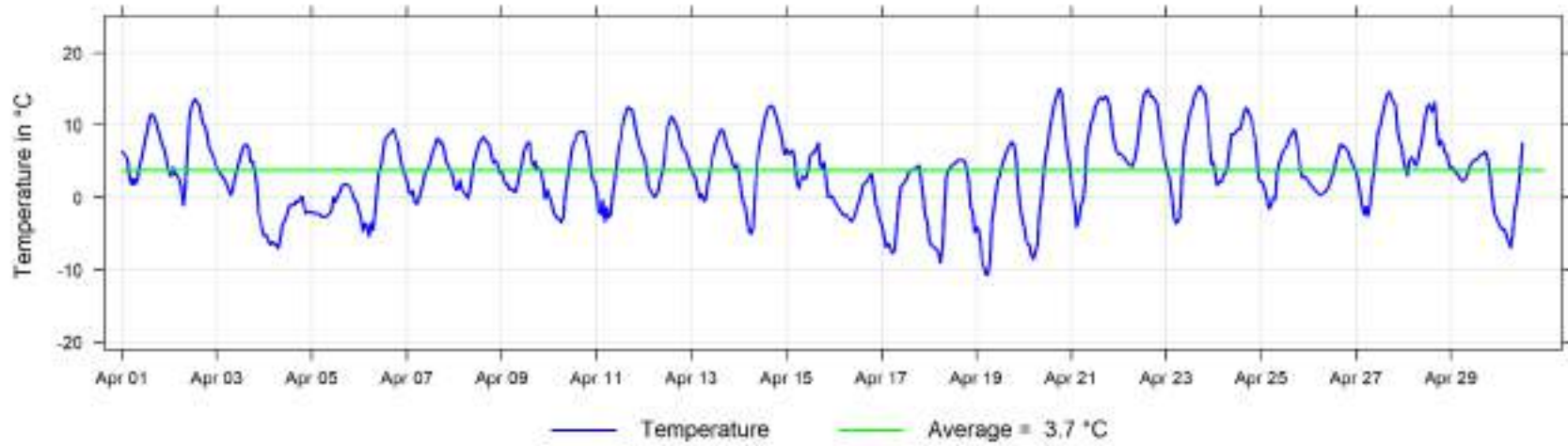
April 2024 Hourly Concentration Readings of THC (in ppm) at Poplar



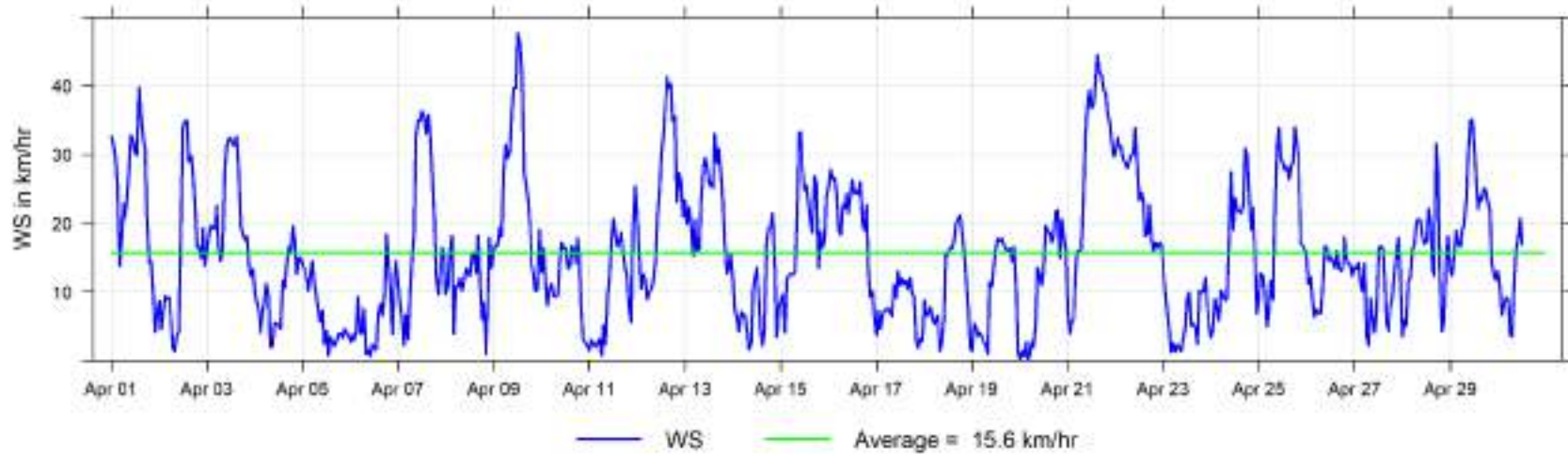
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Poplar



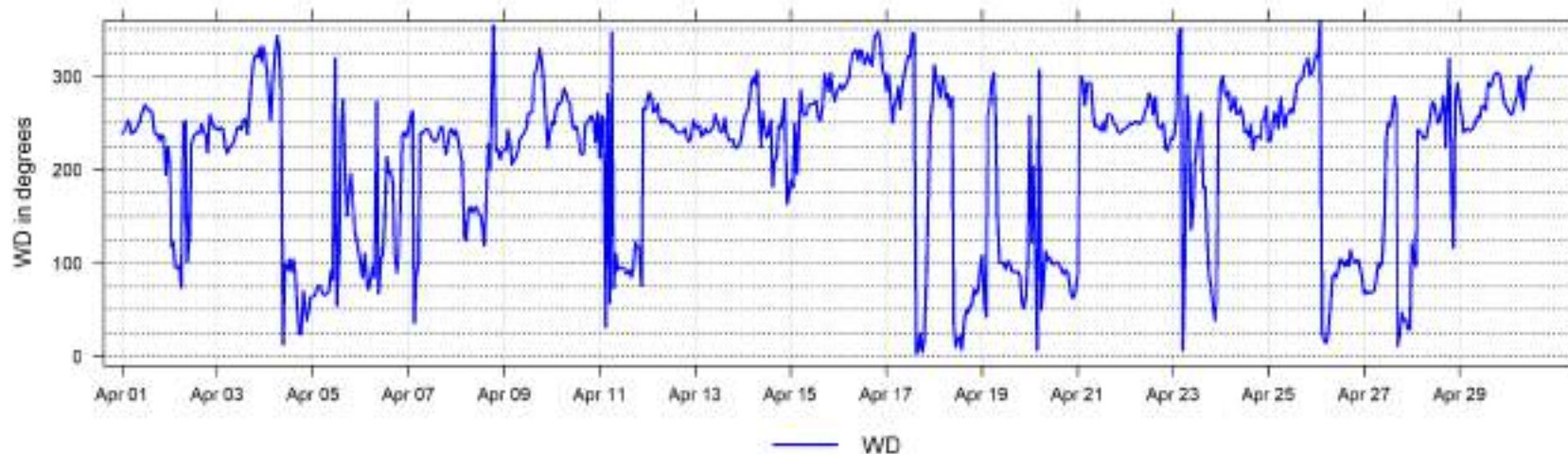
April 2024 Hourly Temperature Readings (in °C) at Poplar



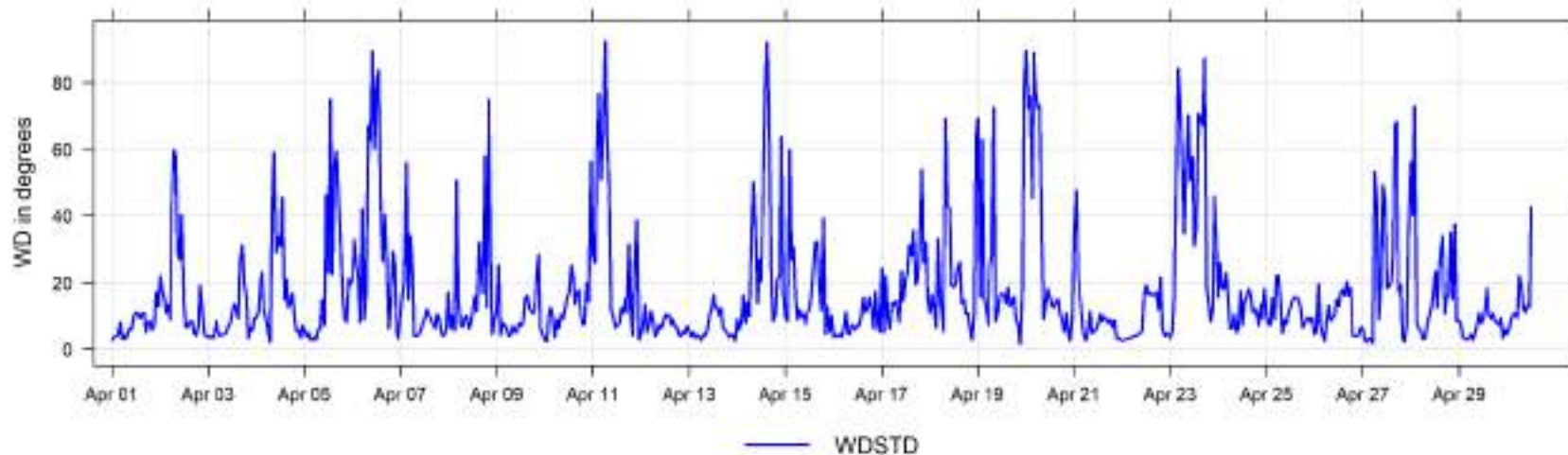
April 2024 Hourly Readings of Wind Speed (in km/hr) at Poplar

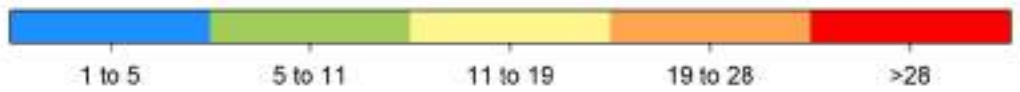
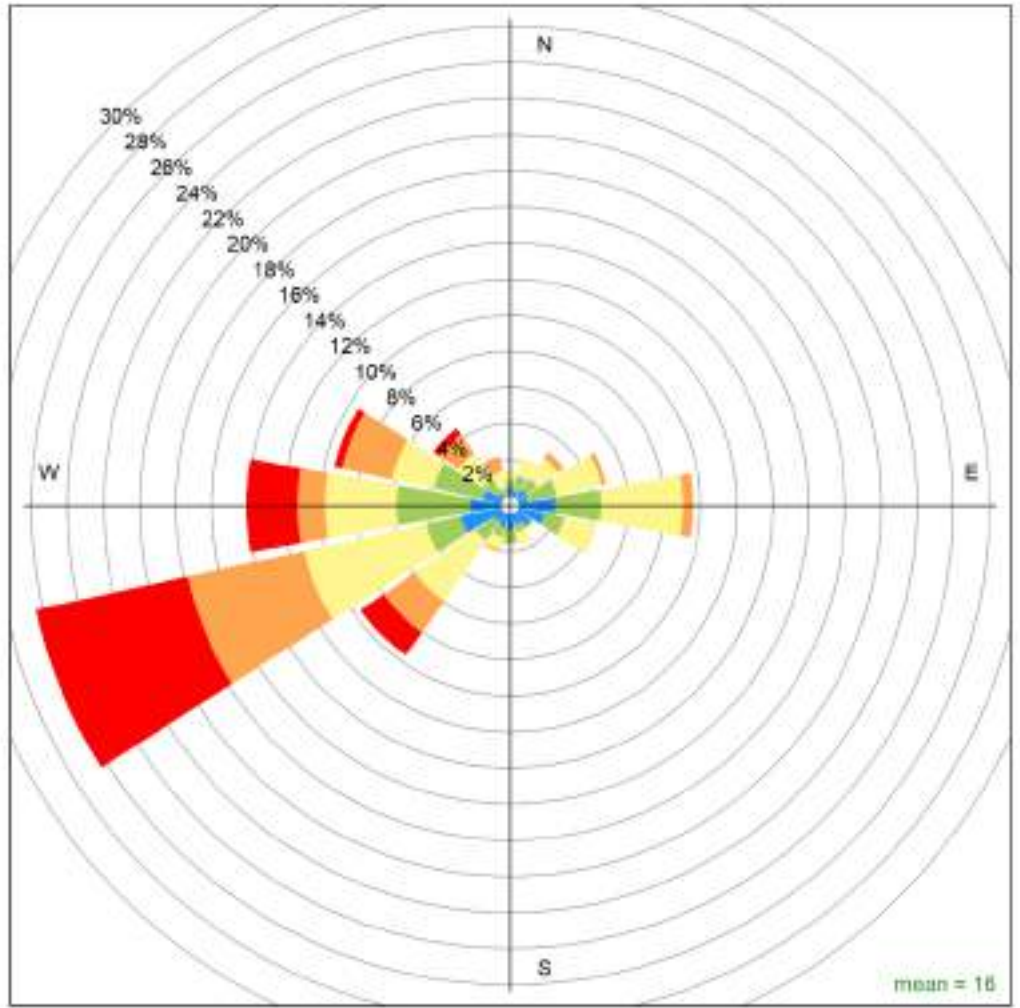


April 2024 Hourly Readings of Wind Direction (in degrees) at Poplar



April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Poplar

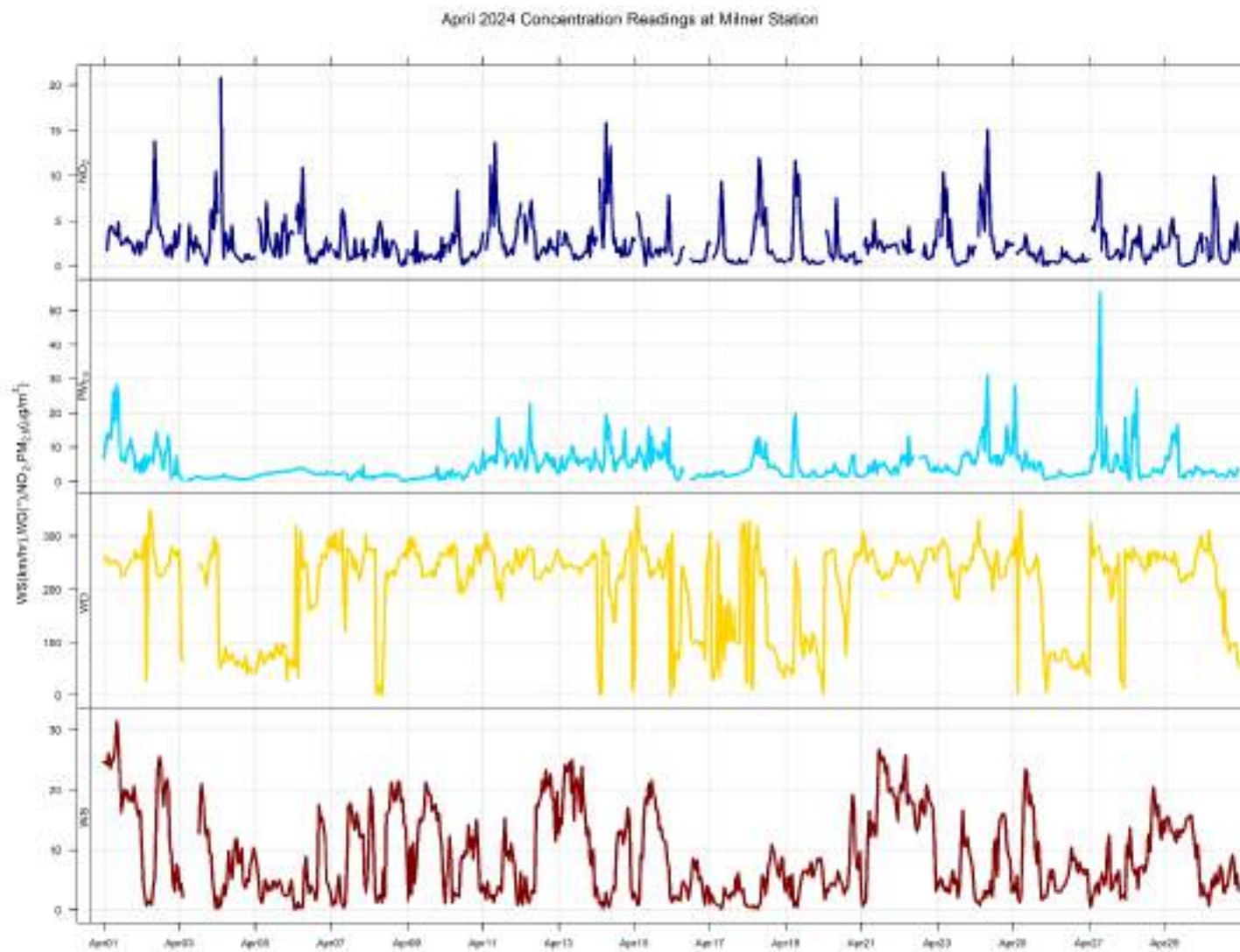




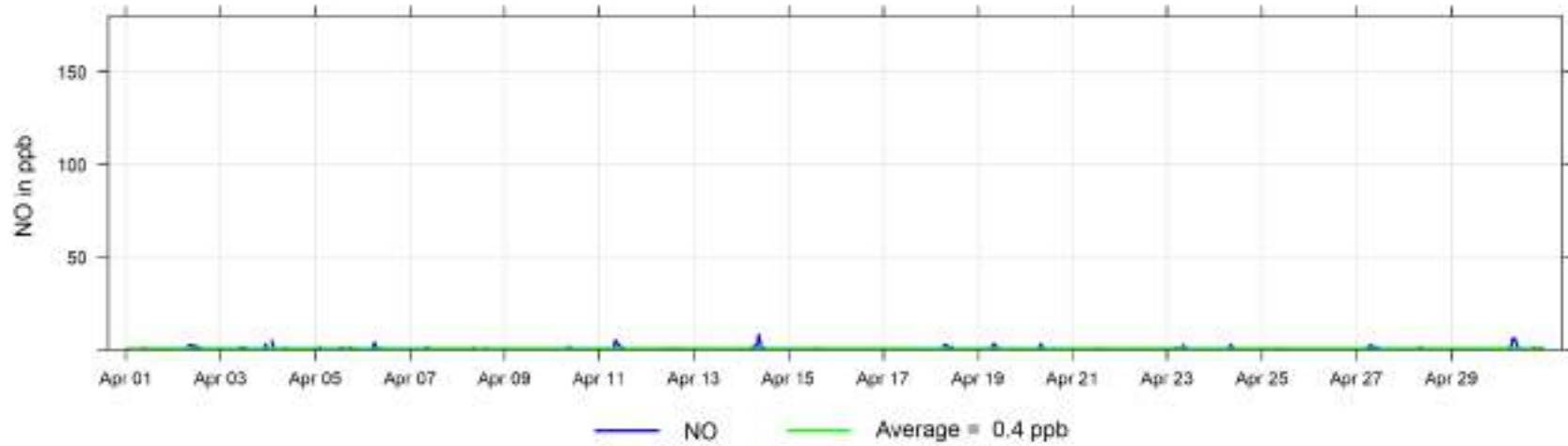
Poplar April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 1.4 %

9 Milner Charts

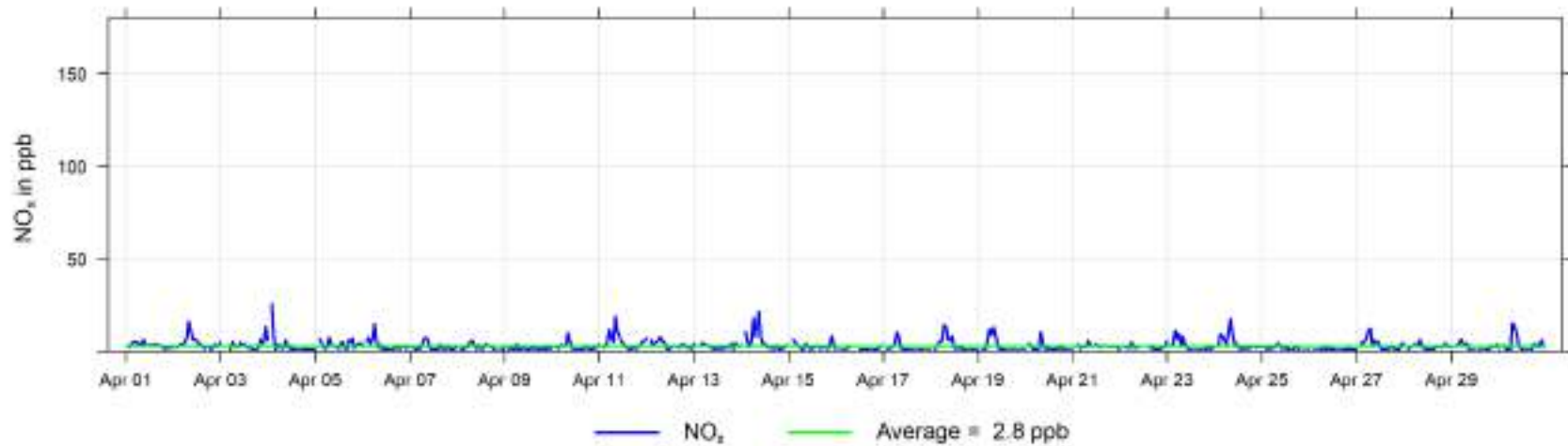
The following pages include the charts and histograms for Milner Station



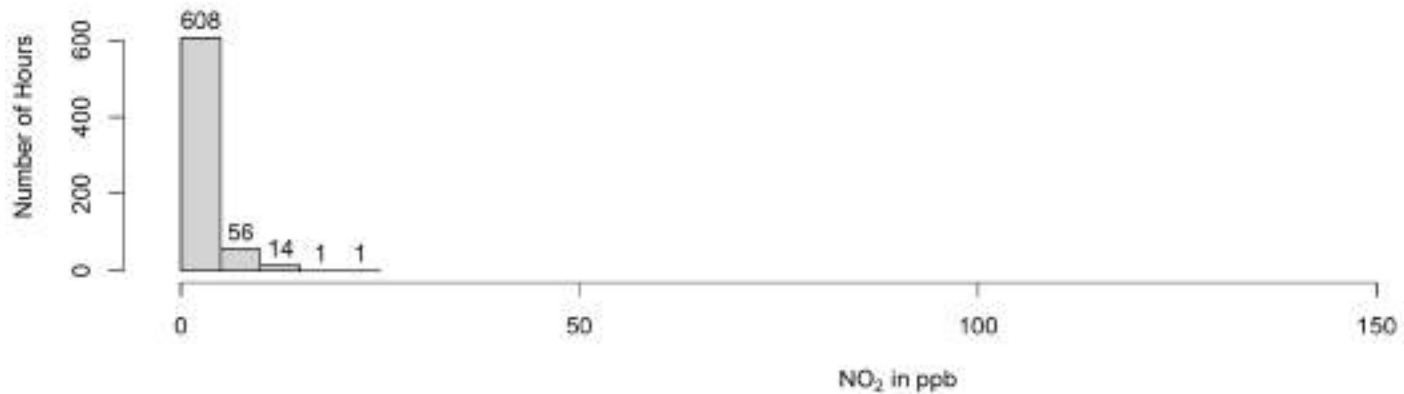
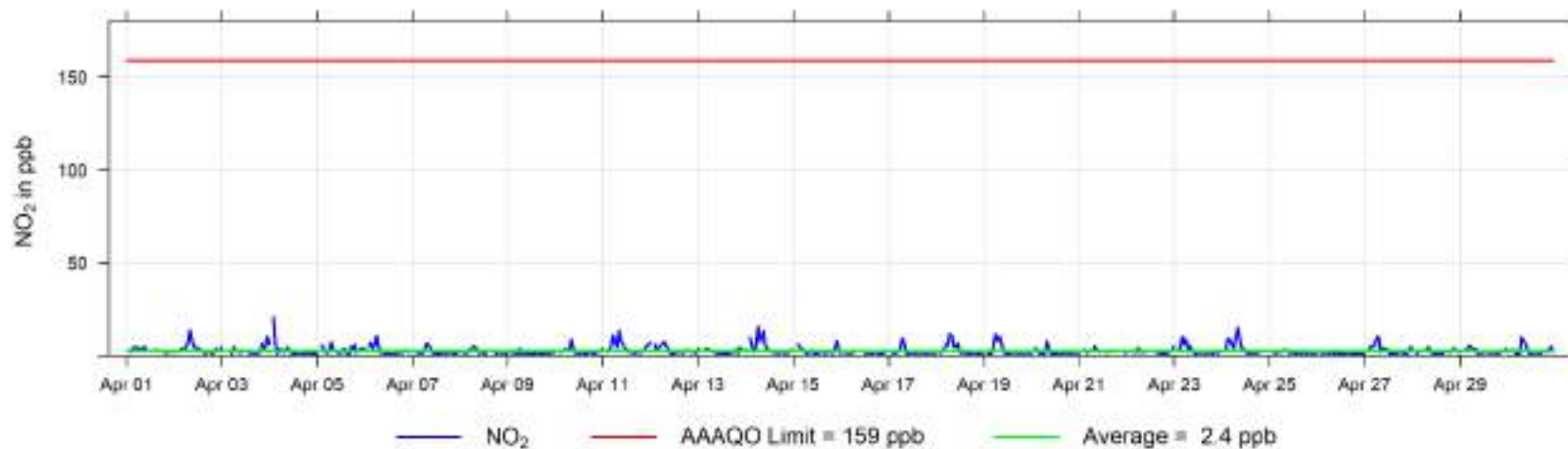
April 2024 Hourly Concentration Readings of NO (in ppb) at Milner



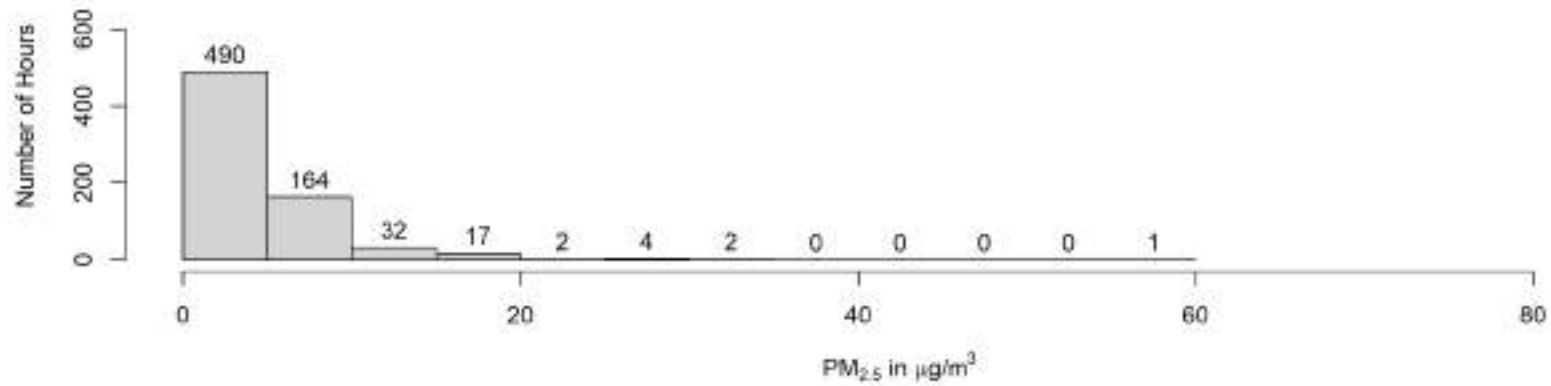
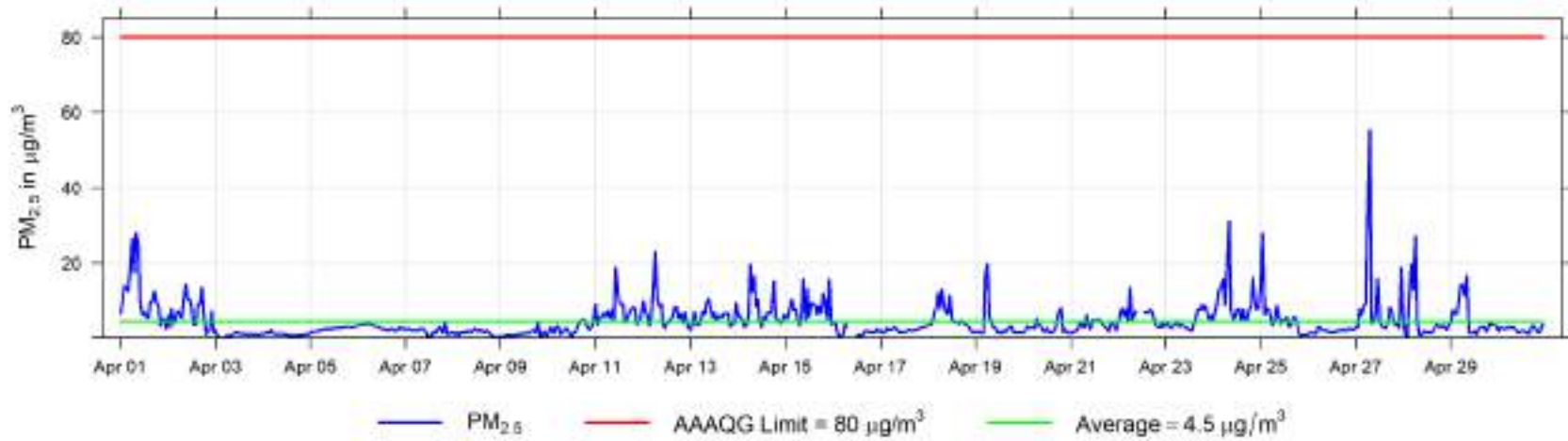
April 2024 Hourly Concentration Readings of NO_x (in ppb) at Milner



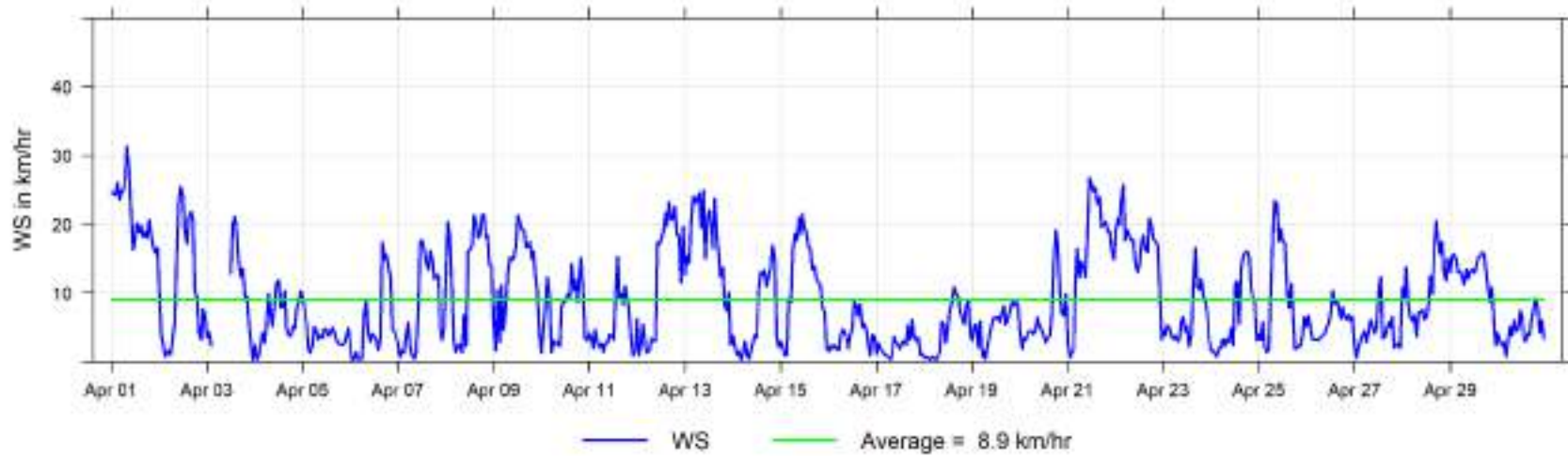
April 2024 Hourly Concentration Readings of NO₂ (in ppb) at Milner



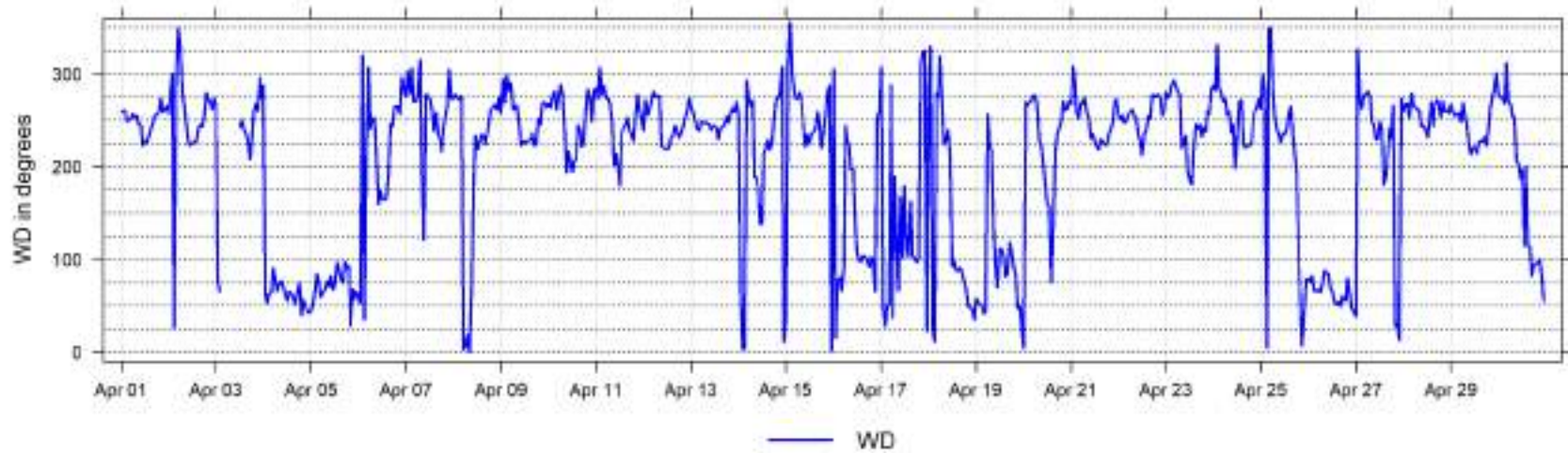
April 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Milner



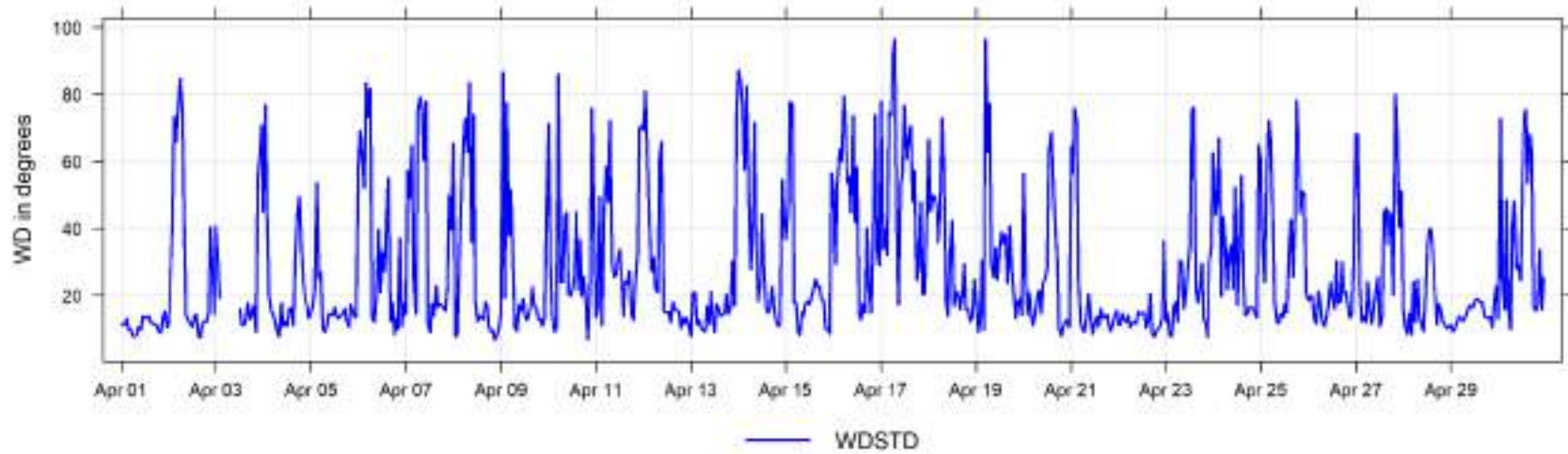
April 2024 Hourly Readings of Wind Speed (in km/hr) at Milner

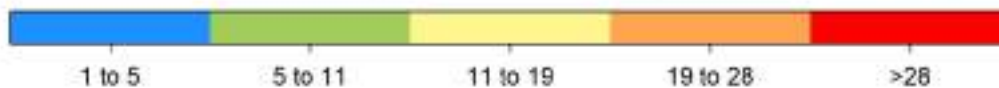
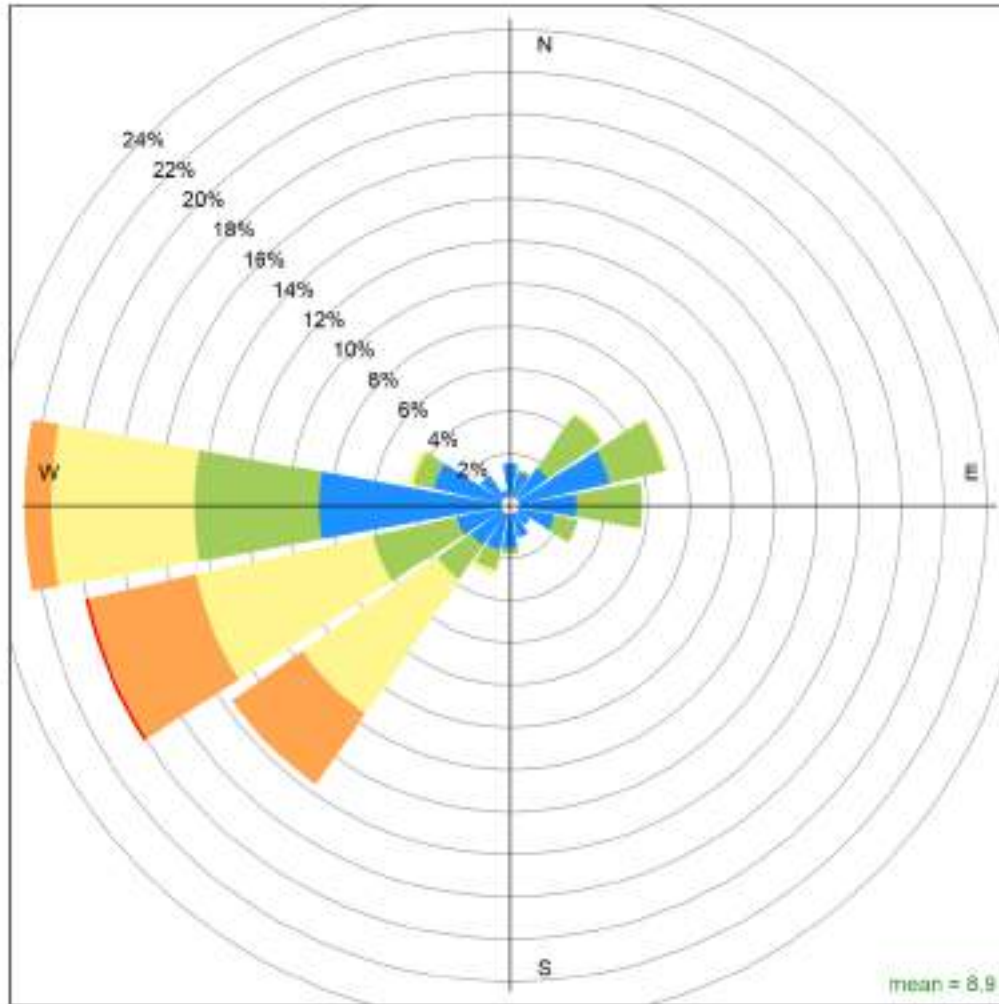


April 2024 Hourly Readings of Wind Direction (in degrees) at Milner



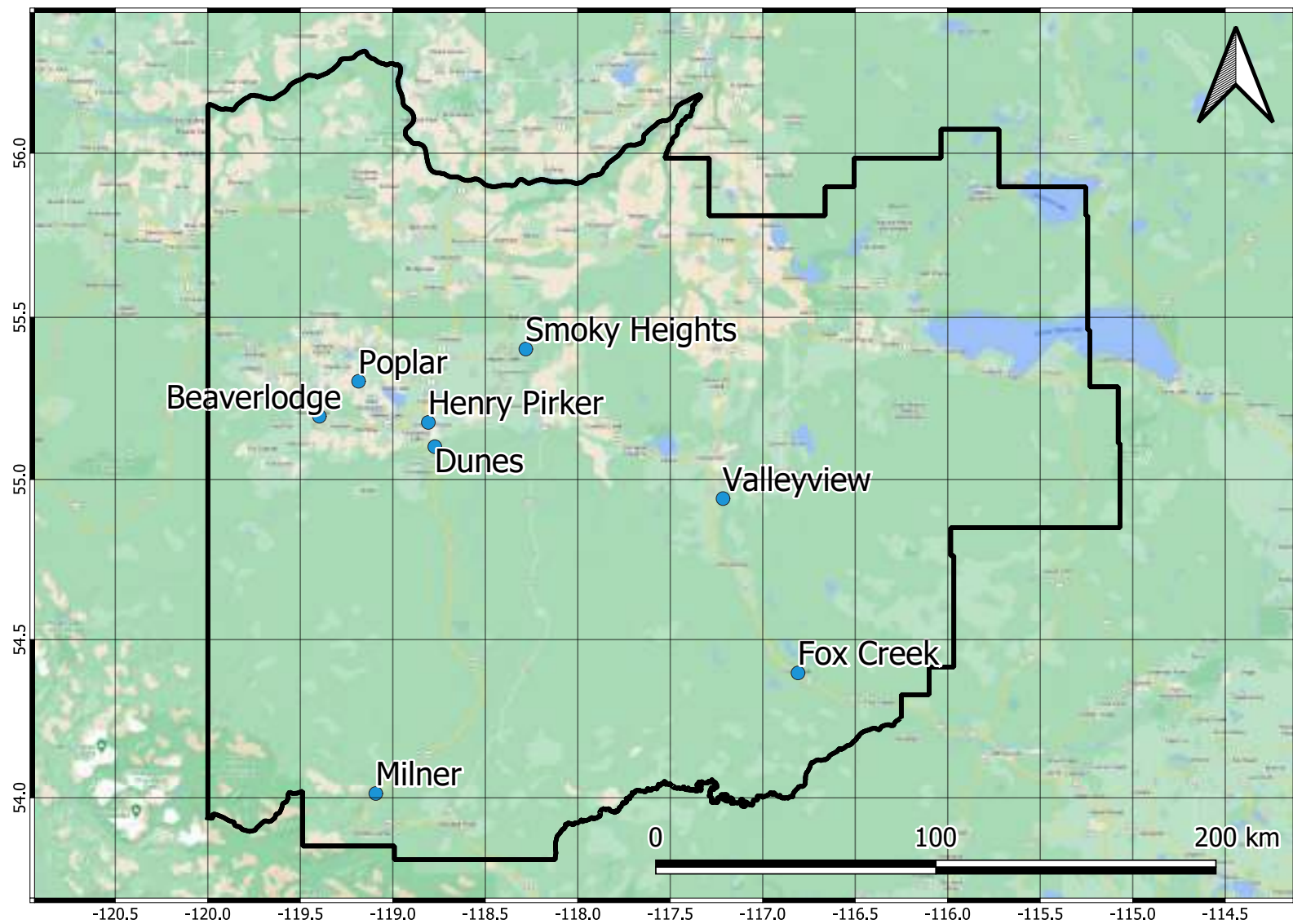
April 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Milner



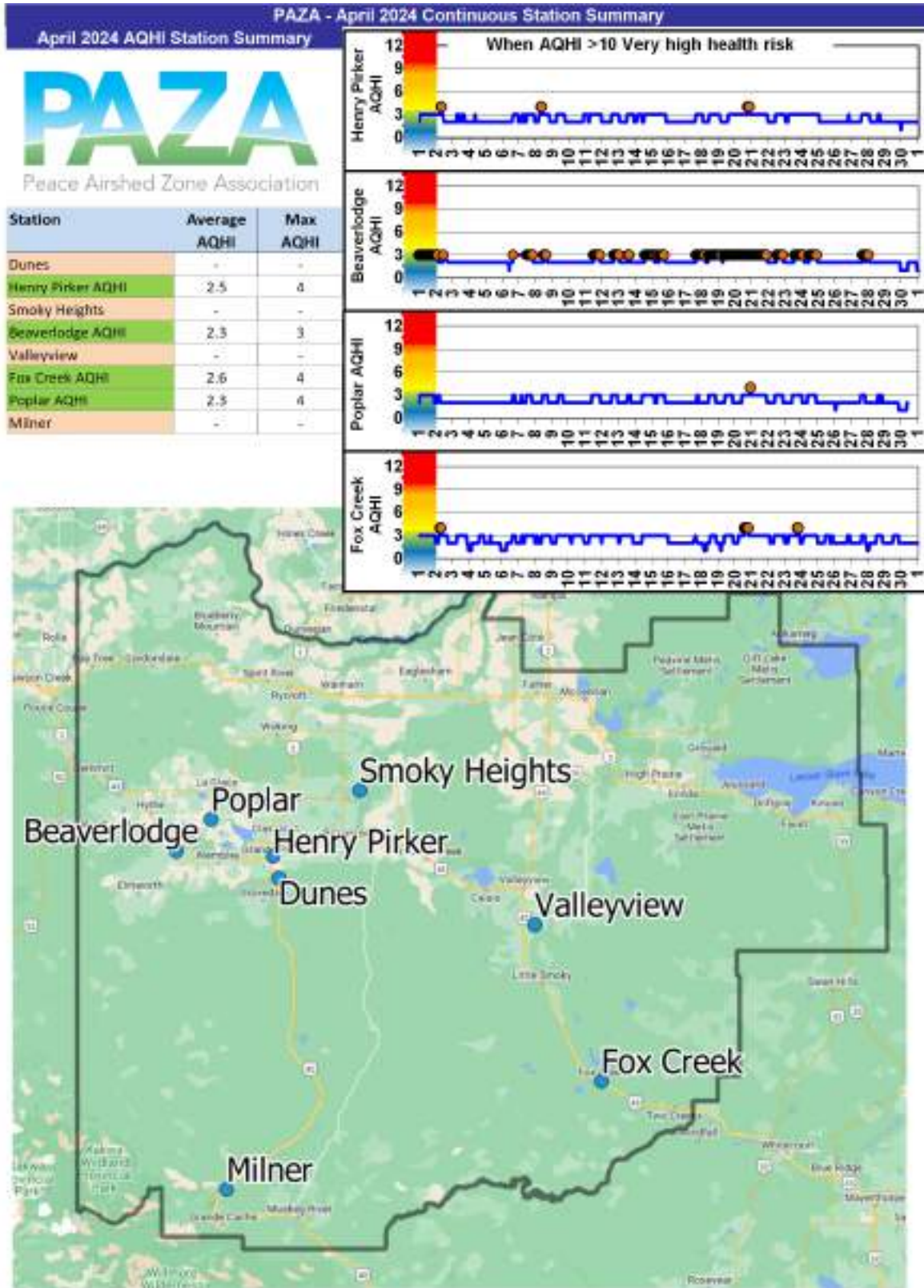


Milner April 2024 Wind Rose, wind speed in km/hr
Calms (<1km/hr) = 5.8 %

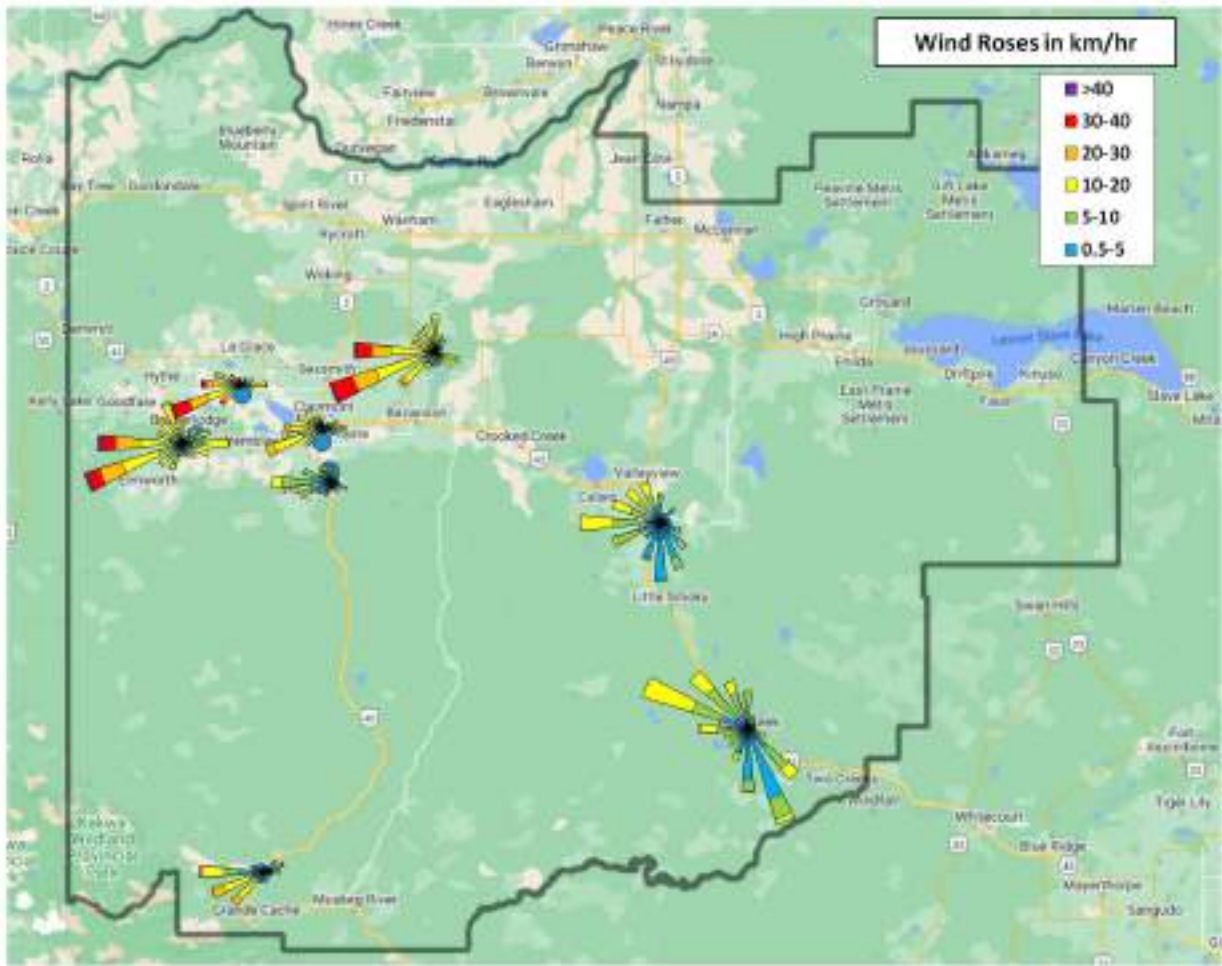
10 Concentration Summaries and Roses for PAZA



10.1 Air Quality Health Index (AQHI) Plots

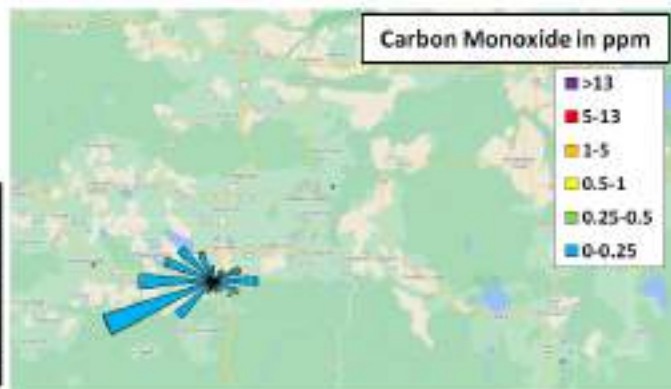


10.2 Wind Roses



10.3 Carbon Monoxide (CO) Plots

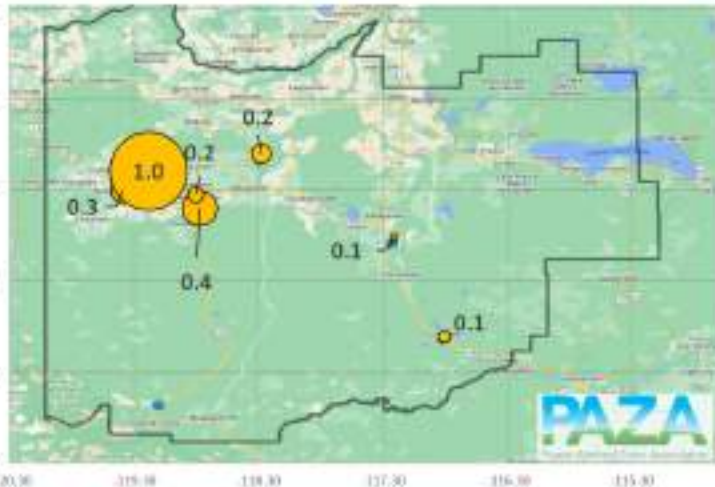
April 2024 CO Station Summary		
Station	Avg (ppm)	Max (ppm)
Henry Pirker CO	0.16	0.55



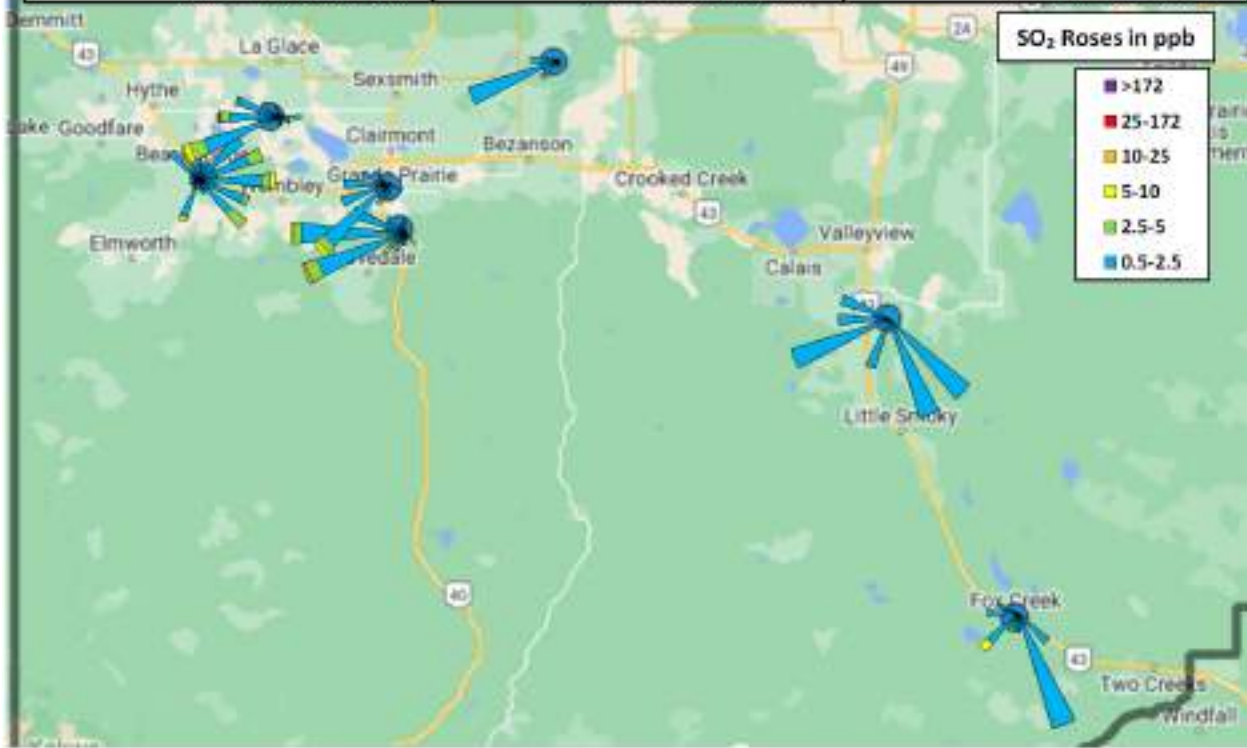
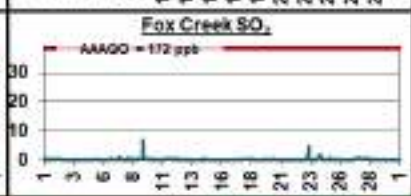
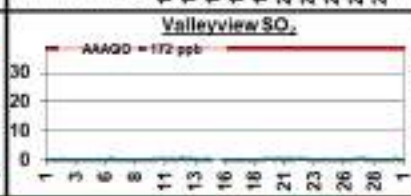
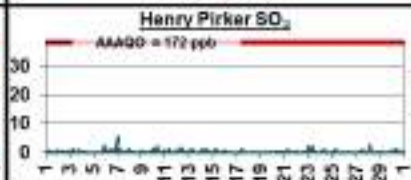
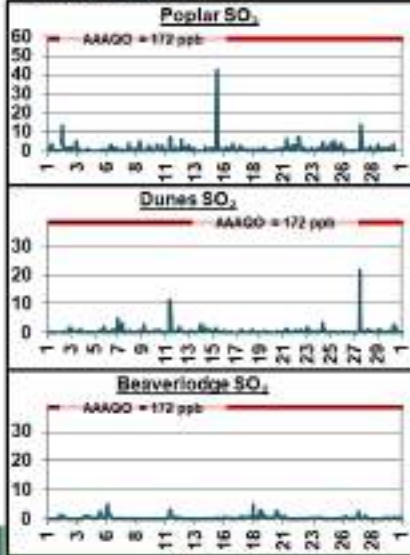
10.4 Sulphur Dioxide (SO₂) Plots

April 2024 SO₂ Station Summary

Station	Avg (ppb)	Max (ppb)
Dunes SO ₂	0.4	21.7
Henry Pirkler SO ₂	0.2	5.5
Smoky Heights SO ₂	0.2	2.8
Beaverlodge SO ₂	0.3	5.1
Valleyview SO ₂	0.1	0.8
Fox Creek SO ₂	0.1	6.9
Poplar SO ₂	1.0	42.4
Milner SO ₂	*	*

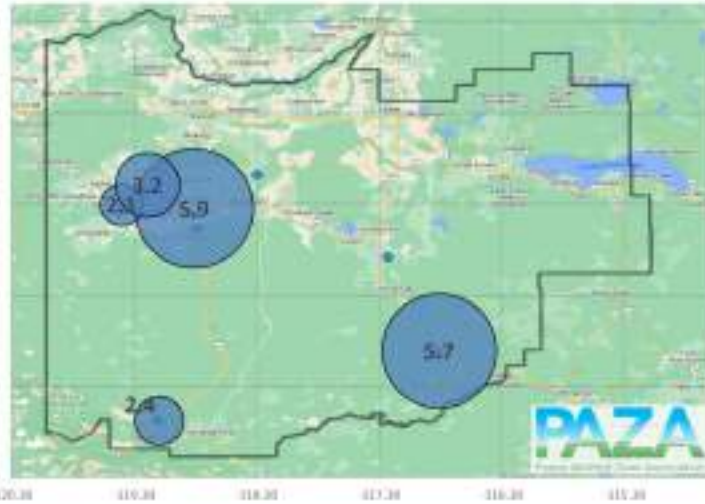


Sulphur Dioxide in ppb

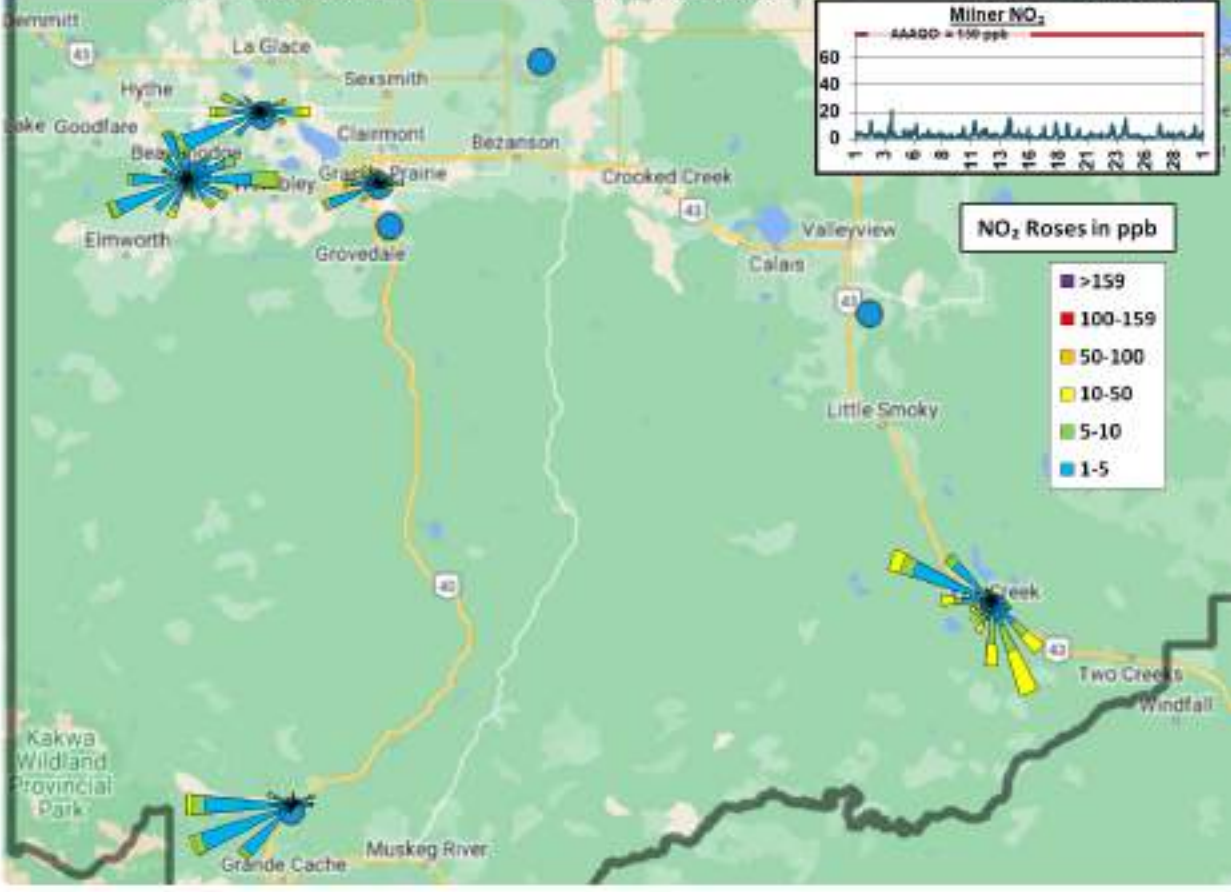
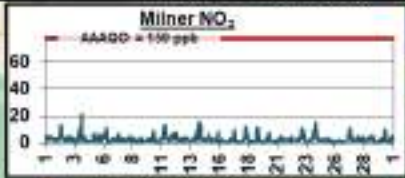
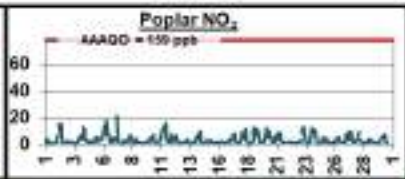
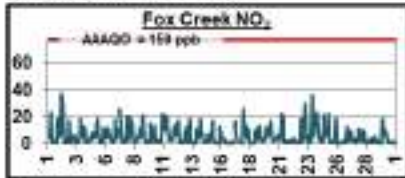


10.5 Nitrogen Dioxide (NO₂) Plots

April 2024 NO ₂ Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes NO ₂	-	-
Henry Parker NO ₂	5.9	38.2
Smoky Heights NO ₂	-	-
Beaverfodge NO ₂	2.1	16.6
Valleyview NO ₂	-	-
Fox Creek NO ₂	5.7	37.5
Poplar NO ₂	3.2	21.2
Milner NO ₂	2.4	20.8

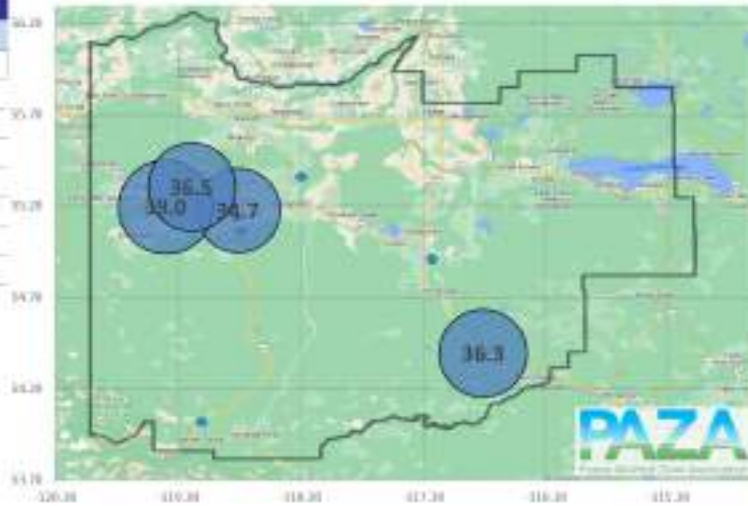


Nitrogen Dioxide in ppb

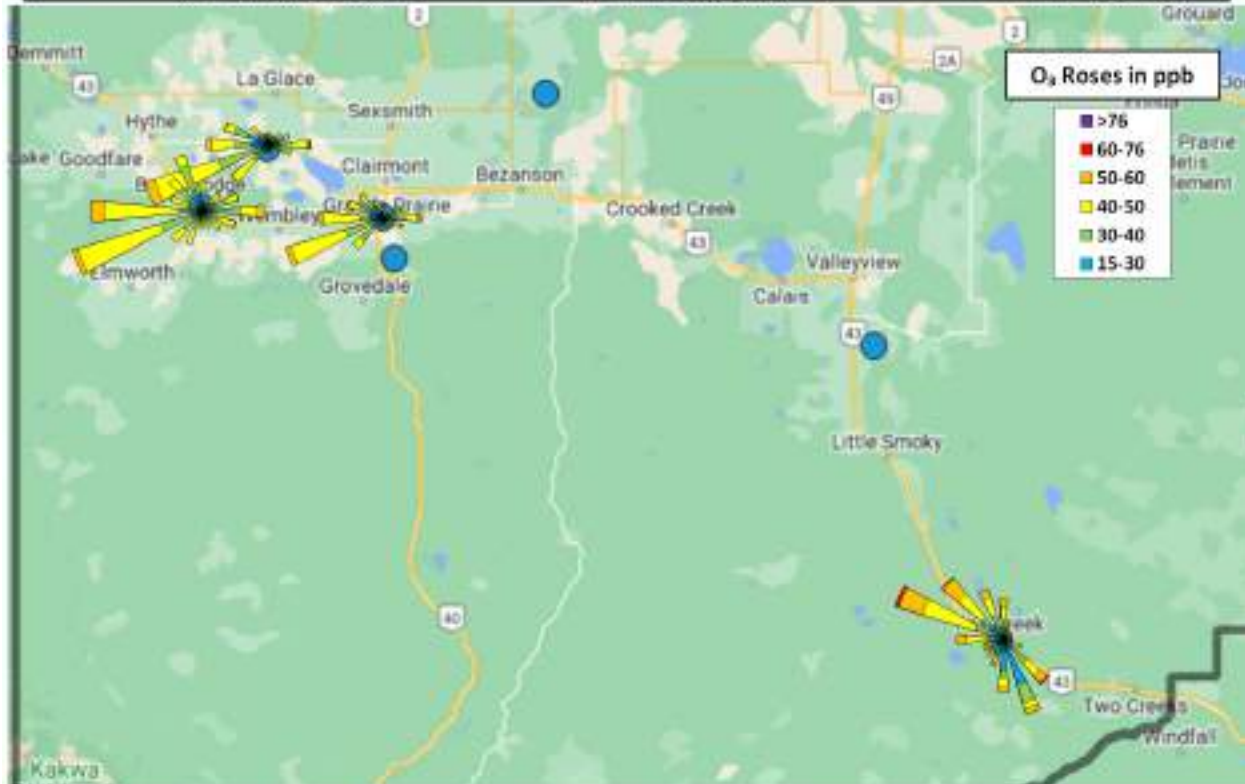
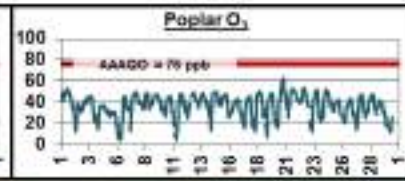
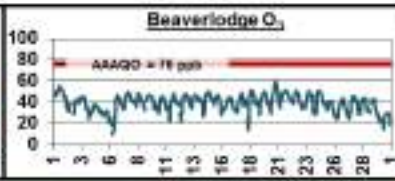
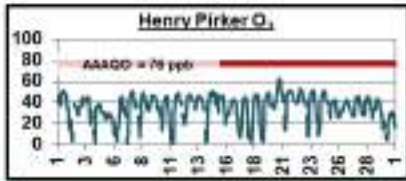
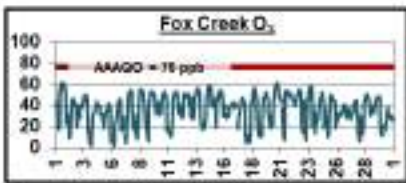


10.6 Ozone (O₃) Plots

April 2024 O ₃ Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes O ₃	-	-
Henry Pirkler O ₃	34.7	61.9
Smoky Heights O ₃	-	-
Beaverlodge O ₃	39.0	39.9
Valleyview O ₃	-	-
Fox Creek O ₃	36.3	61.5
Poplar O ₃	36.5	62.2
Milner O ₃	-	-



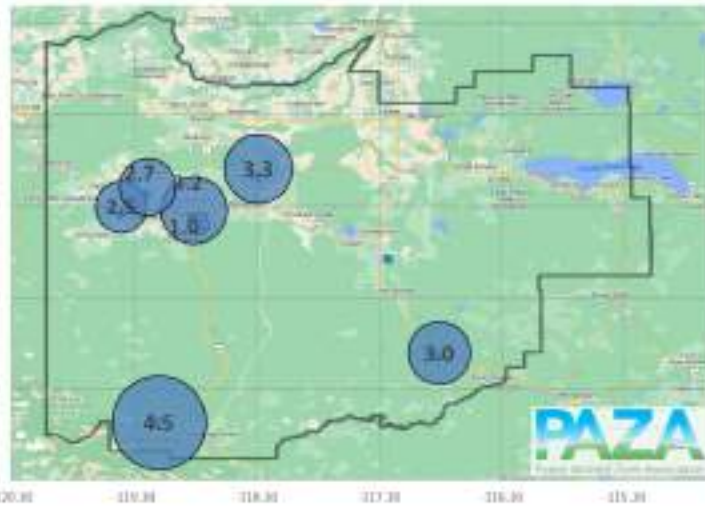
Ozone in ppb



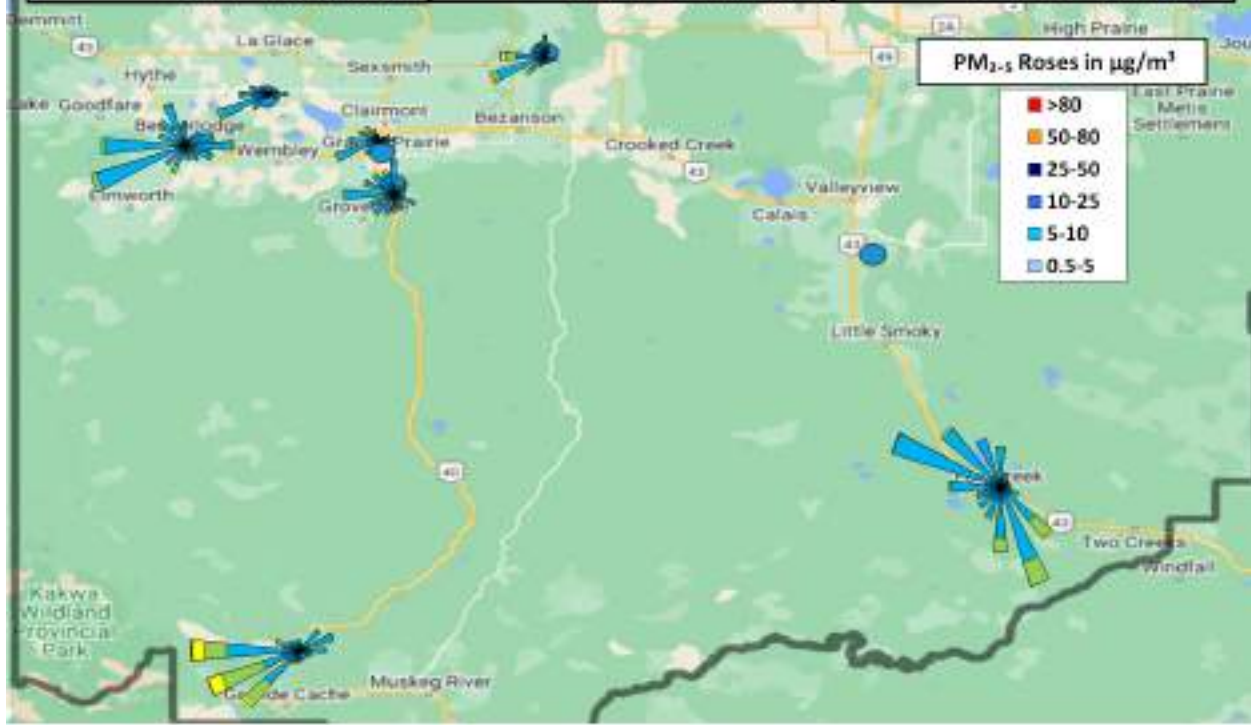
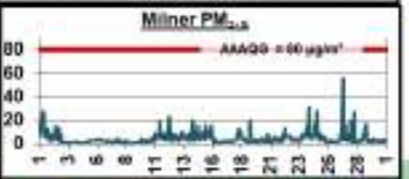
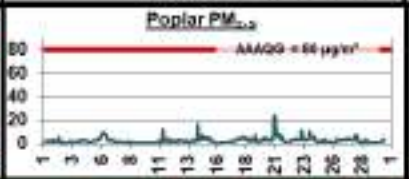
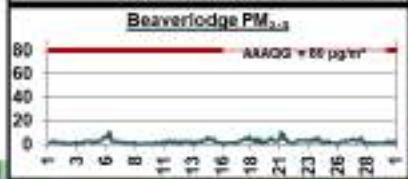
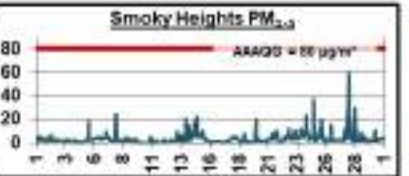
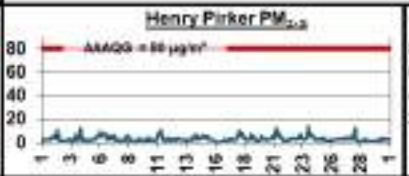
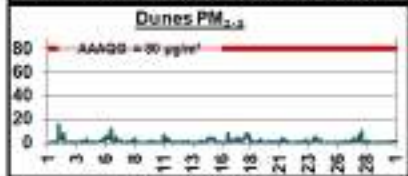
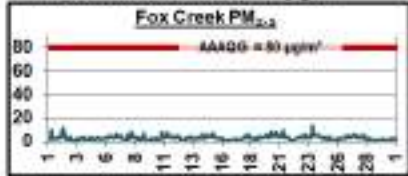
10.7 Fine Particulate Matter (PM_{2.5}) Plots

April 2024 PM_{2.5} Station Summary

Station	Avg µg/m ³	Max µg/m ³
Dunes PM _{2.5}	1.0	15.5
Henry Pirkler PM _{2.5}	3.2	13.7
Smoky Heights PM _{2.5}	3.3	59.2
Beaverlodge PM _{2.5}	2.5	10.9
Valleyview PM _{2.5}	-	-
Fox Creek PM _{2.5}	3.0	13.2
Poplar PM _{2.5}	2.7	24.2
Milner PM _{2.5}	4.5	55.3

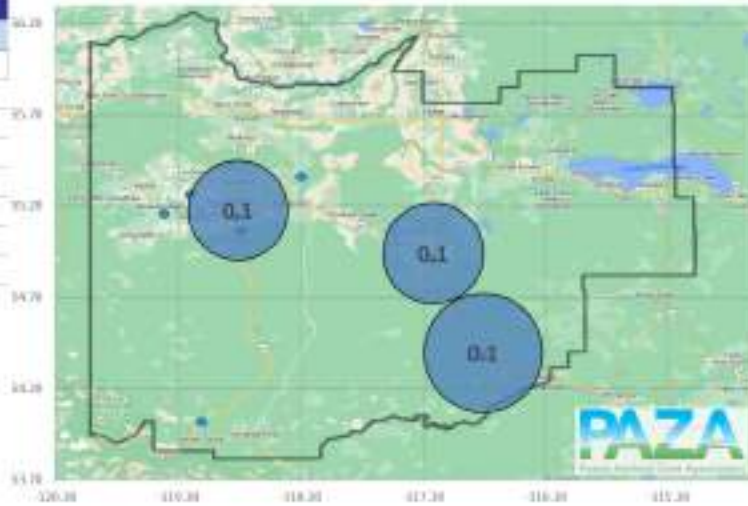


Fine Particulate Matter in µg/m³

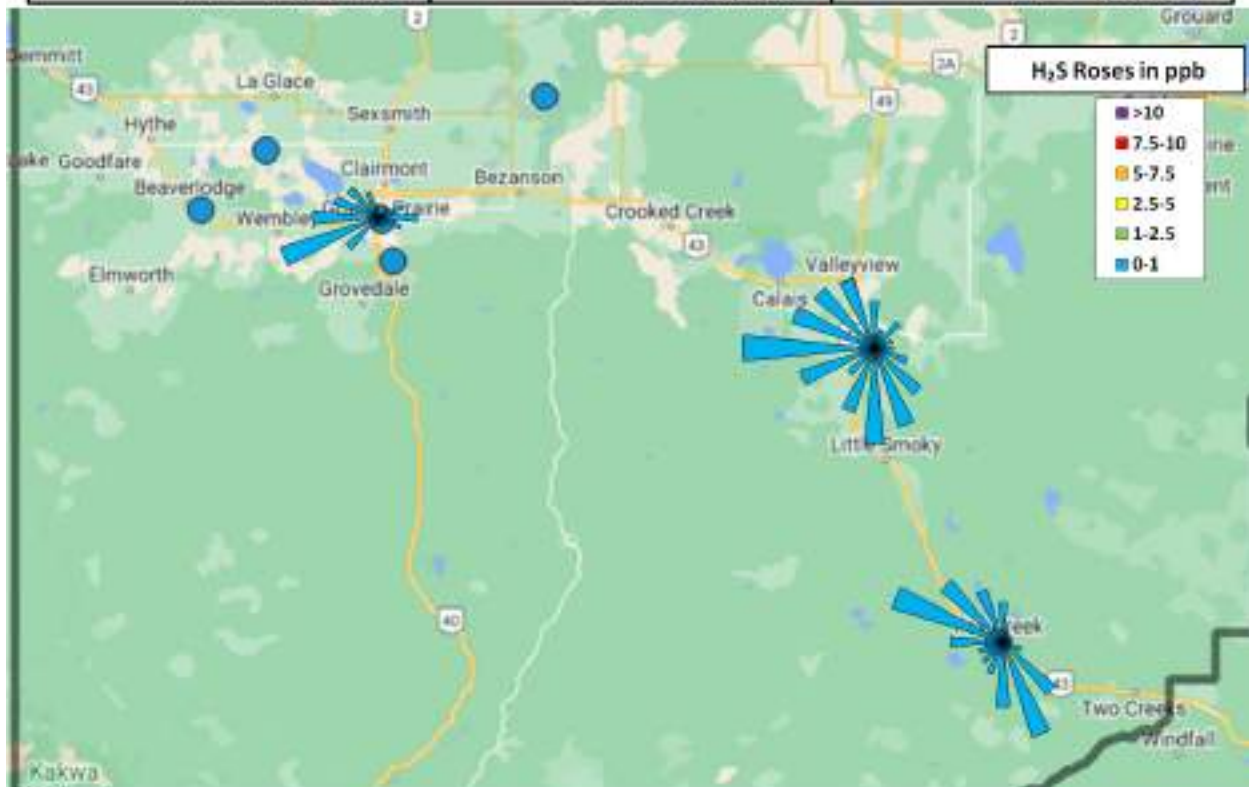
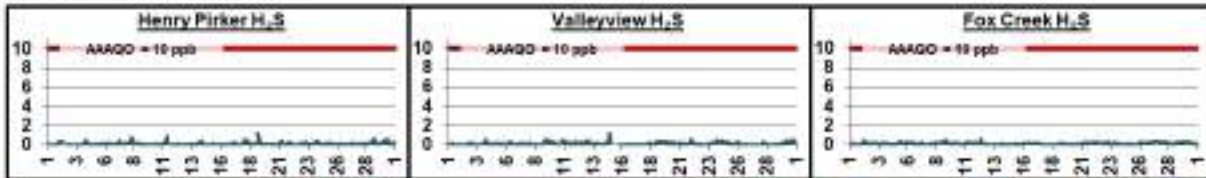


10.8 Hydrogen Sulphide (H₂S) Plots

April 2024 H ₂ S Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes H ₂ S	-	-
Henry Pirkler H ₂ S	0.1	1.2
Smoky Heights H ₂ S	-	-
Beaverlodge H ₂ S	-	-
Valleyview H ₂ S	0.1	1.2
Fox Creek H ₂ S	0.1	0.6
Poplar H ₂ S	-	-
Milner H ₂ S	-	-



Hydrogen Sulphide in ppb

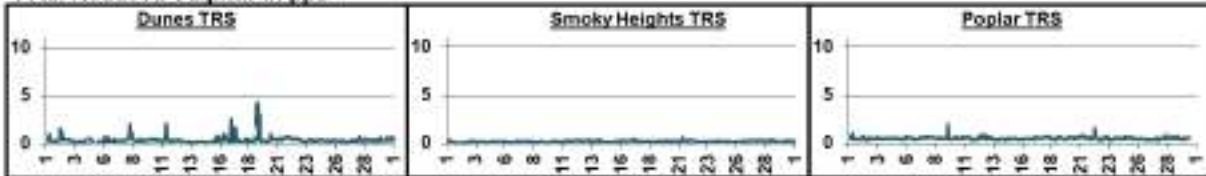


10.9 Total Reduced Sulphur (TRS) Plots

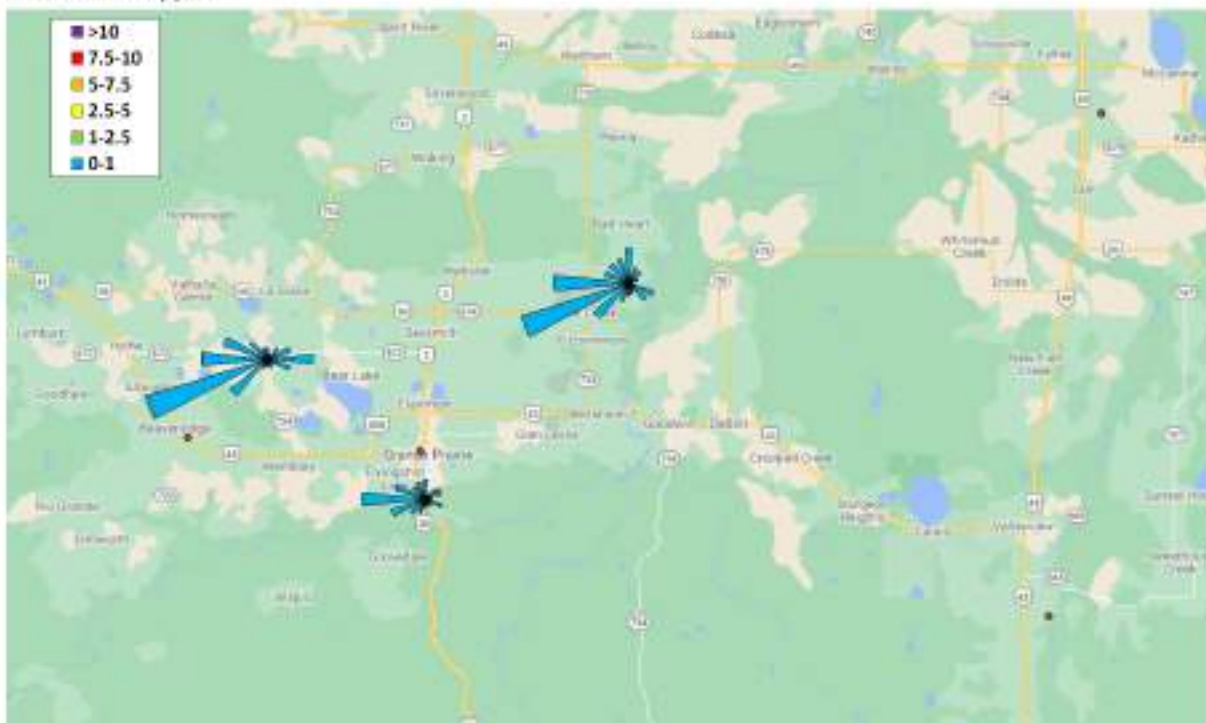
April 2024 TRS Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes TRS	0.3	4.2
Henry Piker TRS	-	-
Smoky Heights TRS	0.2	0.6
Beaverlodge TRS	-	-
Valleyview TRS	-	-
Fox Creek TRS	-	-
Poplar TRS	0.5	2.0
Milner TRS	-	-



Total Reduced Sulphur in ppb



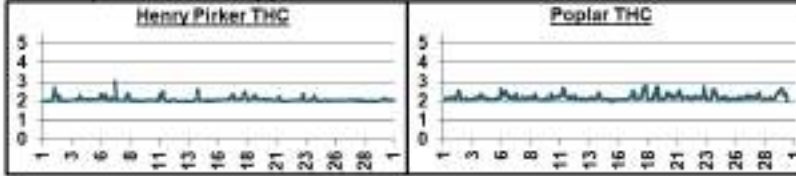
TRS Roses in ppb



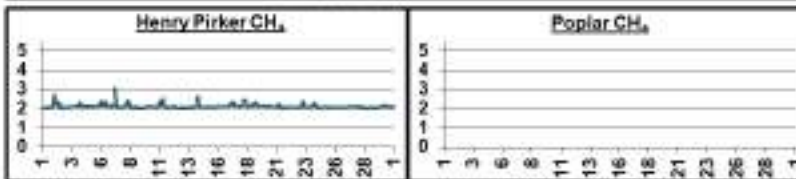
10.10 Total Hydrocarbon (THC) Plots

April 2024 THC Station Summary						
Station	Total Hydrocarbons		Methane		Non-Methane HCs	
	Avg (ppm)	Max (ppm)	Avg (ppm)	Max (ppm)	Avg (ppm)	Max (ppm)
Dunes THC	-	-	-	-	-	-
Henry Pirkler THC	2.1	3.1	2.1	3.0	0.00	0.02
Smoky Heights THC	-	-	-	-	-	-
Beaveridge THC	-	-	-	-	-	-
Valleyview THC	-	-	-	-	-	-
Fox Creek THC	-	-	-	-	-	-
Poplar THC	2.2	2.8	-	-	-	-

Total Hydrocarbons in ppm



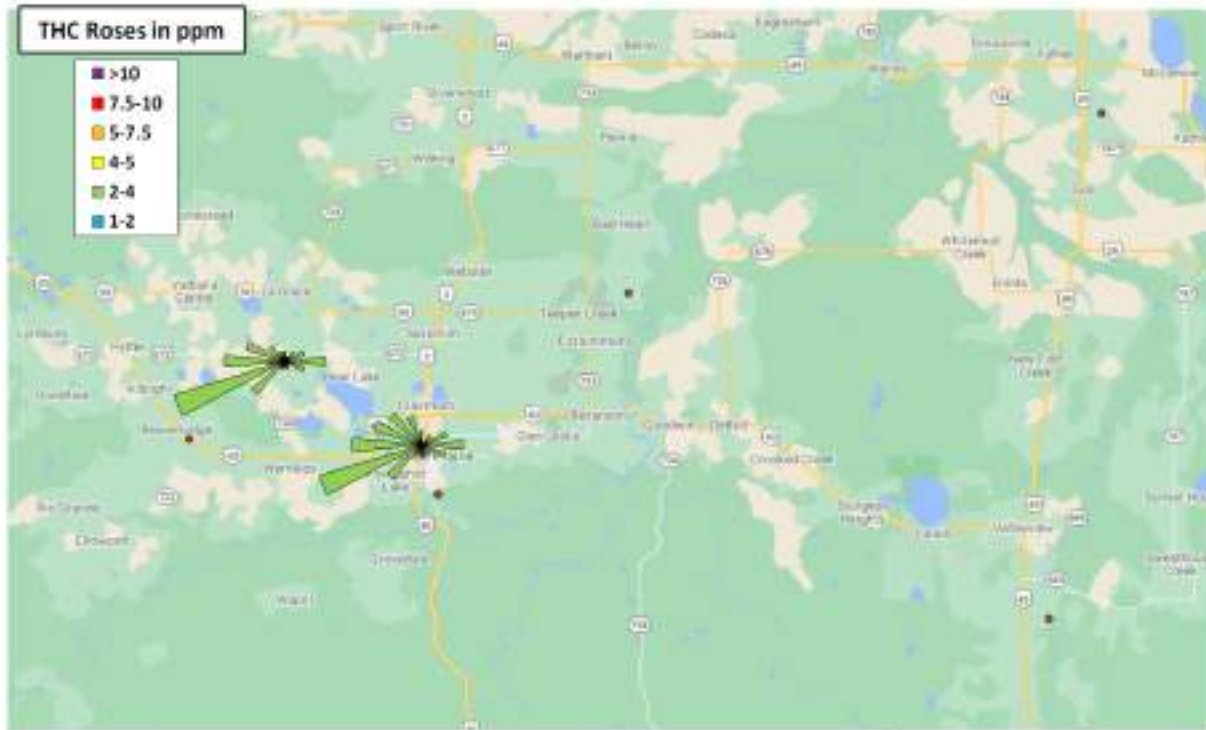
Total Hydrocarbons (THC)



Methane (CH₄)



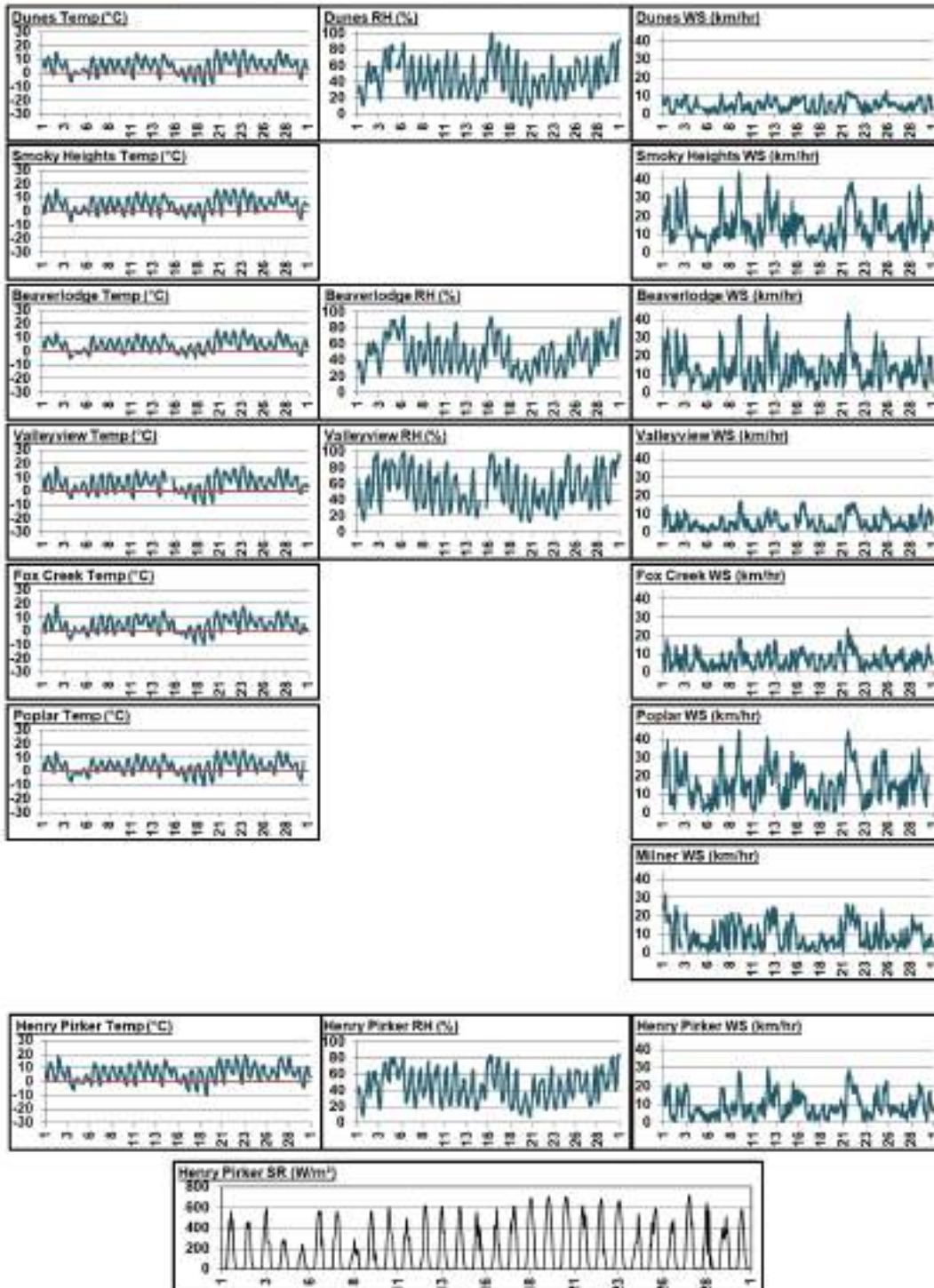
Non-Methane Hydrocarbons (NMHC)



10.11 Meteorology Summary

April 2024 Meteorological Summary						
Station	Temp (°C)	RH (%)	SR (W/m ²)	WS (km/hr)	WD (deg)	WD
Dunes	5.2	46.0	-	4.9	281	W
Henry Parker	6.0	45.1	169.4	9.0	267	W
Smoky Heights	5.0	-	-	14.4	260	W
Beaverlodge	4.9	47.8	-	13.1	270	W
Valleyview	5.4	53.1	-	5.2	280	W
Fox Creek	4.6	-	-	6.6	283	WSW
Poplar	3.7	-	-	15.6	257	WSW
Milner	-	-	-	8.9	247	WSW

Temp (°C) Outside Temperature
 RH (%) Relative Humidity
 SR (W/m²) Solar Radiation
 WS (km/hr) Wind Speed
 WD (deg) Wind Direction
 WD Wind Direction



11 Passive Monitoring Data

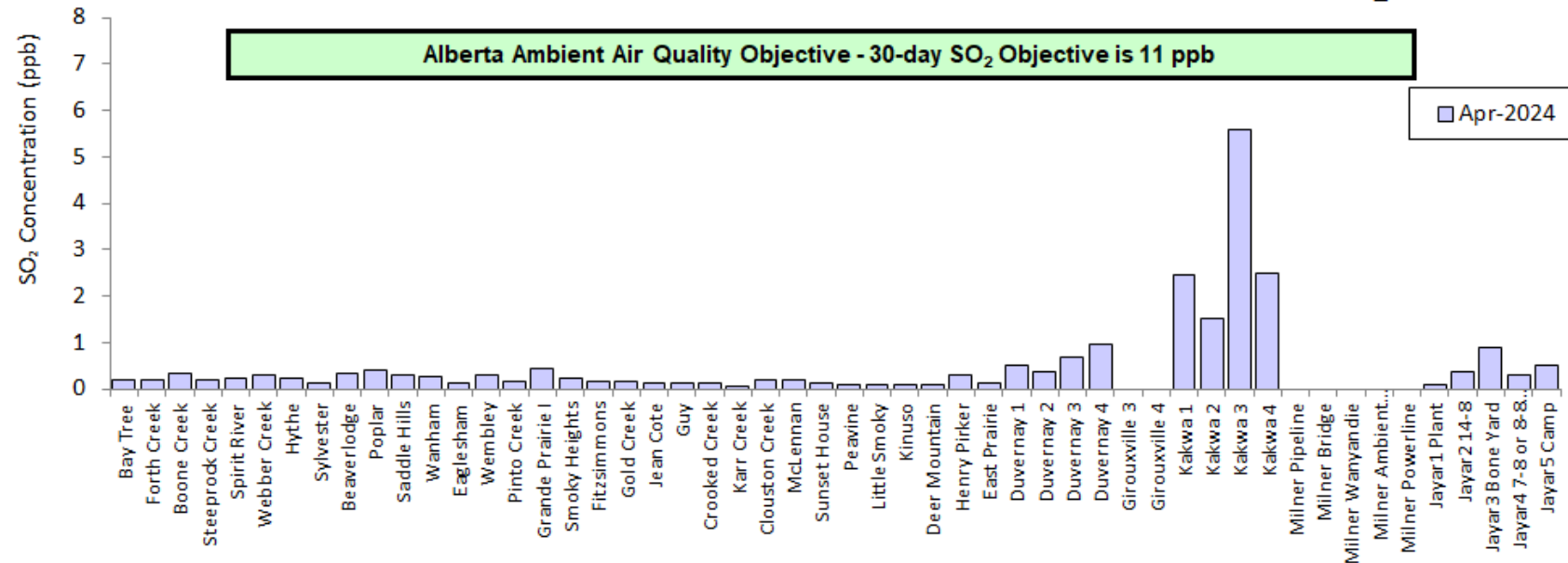
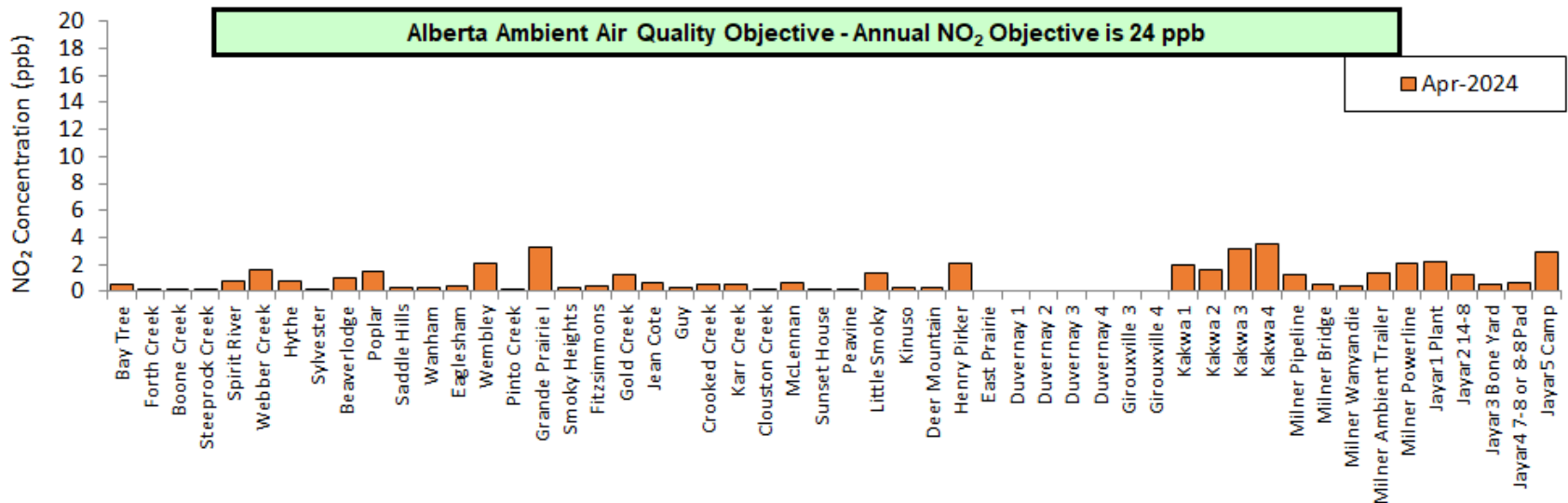
Peace Airshed Zone Association - PAZA Passive Stations for April 2024

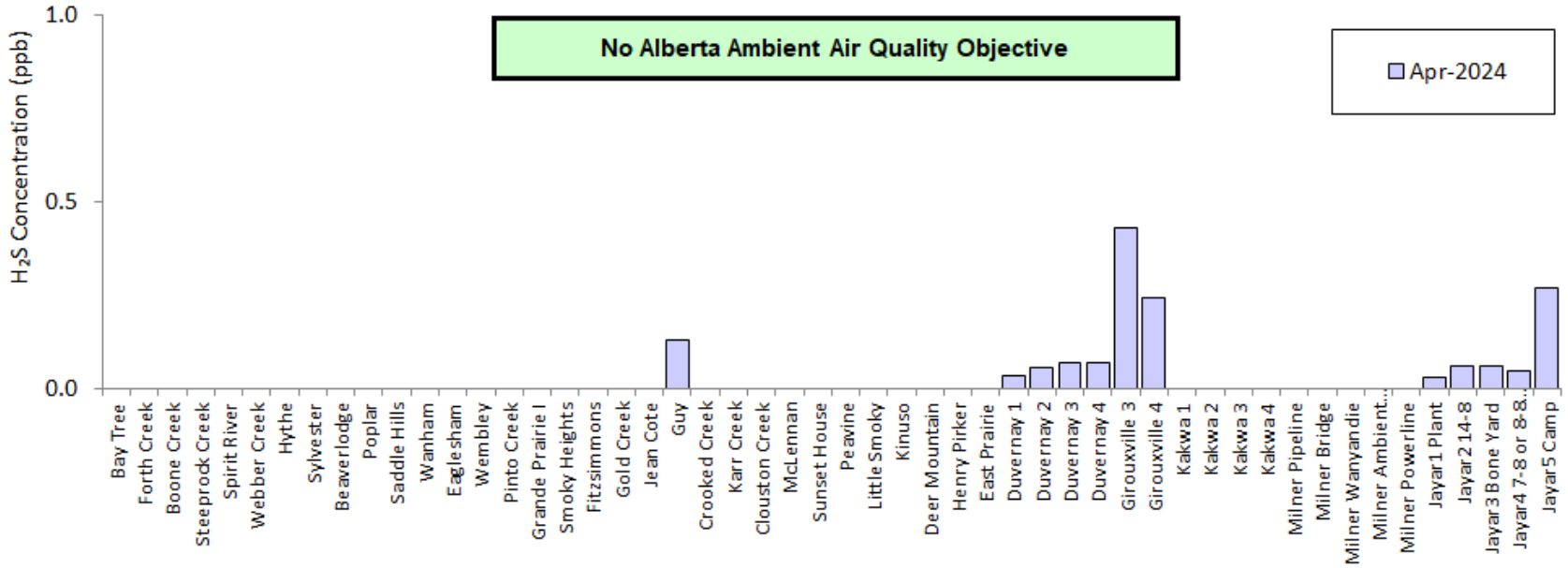
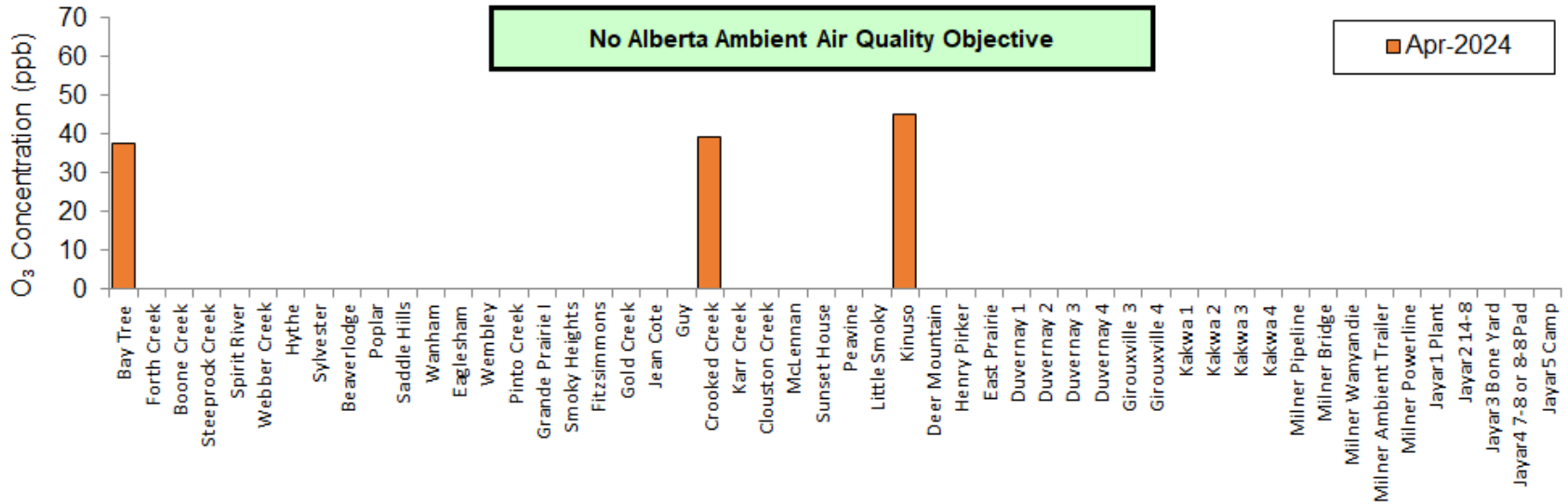
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	LSD
Duplicates						
7a	Steepprock Creek	0.2				09-35-072-13 W6M
7b	Steepprock Creek	0.2				
14a	Sylvester			0.2		08-06-069-12 W6M
14b	Sylvester			0.2		
16a	Beaverlodge			1.0		15-36-071-10 W6M
16b	Beaverlodge			1.0		
25a	Pinto Creek	0.2				04-24-069-11 W6M
25b	Pinto Creek	0.1				
35a	Jean Cote	0.1				12-35-079-21 W5M
35b	Jean Cote	0.1				
39a	Clouston Creek			0.2		12-01-073-22 W5M
39b	Clouston Creek			0.2		
40a	McLennan	0.2				03-29-077-19 W5M
40b	McLennan	0.2				
42a	Sunset House			0.1		05-32-070-19 W5M
42b	Sunset House			0.1		
47a	Kinuso		40.1			12-10-073-10 W5M
47b	Kinuso		50.6			
D3a	Duvernay 3	0.6			0.06	04-33-062-20 W5M
D3b	Duvernay 3	0.7			0.08	
G4a	Girouxville 4				0.25	04-08-077-22 W5M
G4b	Girouxville 4				0.23	
K1a	Kakwa 2			1.9		08-13-063-05 W6M
K1b	Kakwa 2			1.4		
K4a	Kakwa 1	2.5				01-13-063-05 W6M
K4b	Kakwa 1	2.4				
K2a	Kakwa 4				<0.02	06-18-063-04 W6M
K2b	Kakwa 4				<0.02	
M10a	Milner Powerline			2.1		06-14-058-08 W6M
M10b	Milner Powerline			2.0		
M9Aa	Milner Pipeline	<0.1				12-14-058-08 W6M
M9Ab	Milner Pipeline	<0.1				
J5a	Jayar5 Camp			3.1		11-08-062-03 W6M
J5b	Jayar5 Camp			2.7		
J2a	Jayar2 14-8	0.3				07-08-062-03 W6M
J2b	Jayar2 14-8	0.4				
J4a	Jayar4 7-8 or 8-8 Pad				0.04	10-08-062-03 W6M
J4b	Jayar4 7-8 or 8-8 Pad				0.05	

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	LSD
2	Bay Tree	0.2	37.7	0.5	-	13-16-078-13 W6M
3	Forth Creek	0.2	-	0.2	-	04-13-082-07 W6M
5	Boone Creek	0.3	-	0.2	-	01-23-076-11 W6M
7	Steepprock Creek	0.2	-	0.2	-	09-35-072-13 W6M
9	Spirit River	0.2	-	0.8	-	08-12-079-07 W6M
11	Webber Creek	0.3	-	1.6	-	09-36-074-09 W6M
12	Hythe	0.2	-	0.8	-	14-36-072-11 W6M
14	Sylvester	0.1	-	0.2	-	08-06-069-12 W6M
16	Beaverlodge	0.3	-	1.0	-	15-36-071-10 W6M
17	Poplar	0.4	-	1.5	-	13-06-073-08 W6M
18	Saddle Hills	0.3	-	0.2	-	04-25-074-07 W6M
19	Wanham	0.3	-	0.2	-	16-22-077-03 W6M
21	Eaglesham	0.1	-	0.4	-	16-21-079-25 W5M
24	Wembley	0.3	-	2.0	-	12-31-070-08 W6M
25	Pinto Creek	0.2	-	0.2	-	04-24-069-11 W6M
27	Grande Prairie I	0.4	-	3.3	-	08-15-071-06 W6M
29	Smoky Heights	0.2	-	0.3	-	04-06-075-02 W6M
30	Fitzsimmons	0.1	-	0.4	-	15-36-072-03 W6M
32	Gold Creek	0.2	-	1.3	-	06-33-067-05 W6M
35	Jean Cote	0.1	-	0.6	-	12-35-079-21 W5M
36	Guy	0.1	-	0.3	0.1	03-04-076-22 W5M
37	Crooked Creek	0.1	39.5	0.6	-	16-01-071-26 W5M
38	Karr Creek	0.1	-	0.5	-	10-16-065-02 W6M
39	Clouston Creek	0.2	-	0.2	-	12-01-073-22 W5M
40	McLennan	0.2	-	0.7	-	03-29-077-19 W5M
42	Sunset House	0.1	-	0.1	-	05-32-070-19 W5M
44	Peavine	0.1	-	0.2	-	03-05-079-15 W5M
46	Little Smoky	0.1	-	1.3	-	12-01-065-21 W5M
47	Kinuso	0.1	45.3	0.3	-	12-10-073-10 W5M
48	Deer Mountain	0.1	-	0.2	-	15-22-068-09 W5M
49	Henry Pirker	0.3	-	2.0	-	17-26-071-06 W6M
50	East Prairie	0.1	-	0.0	-	11-13-079-08 W6M
D1	Duvernay 1	0.5	-	-	0.04	04-33-062-20 W5M
D2	Duvernay 2	0.4	-	-	0.06	04-33-062-20 W5M
D3	Duvernay 3	0.7	-	-	0.07	04-33-062-20 W5M
D4	Duvernay 4	0.9	-	-	0.07	04-33-062-20 W5M
G3	Girouxville 3	-	-	-	0.43	14-02-077-23 W5M
G4	Girouxville 4	-	-	-	0.24	04-08-077-22 W5M
K1	Kakwa 1	2.5	-	1.9	<0.02	01-13-063-05 W6M
K2	Kakwa 2	1.5	-	1.7	<0.02	08-13-063-05 W6M
K3	Kakwa 3	5.6	-	3.2	<0.02	12-18-063-04 W6M
K4	Kakwa 4	2.5	-	3.5	<0.02	06-18-063-04 W6M
M1	Milner Pipeline	<0.1	-	2.1	-	12-14-058-08 W6M
M2	Milner Bridge	<0.1	-	0.5	-	08-06-057-08 W6M
M3	Milner Wanyandie	<0.1	-	0.4	-	11-13-058-08 W6M
M4	Milner Ambient Trailer	<0.1	-	1.4	-	09-15-058-08 W6M
M5	Milner Powerline	<0.1	-	2.1	-	06-14-058-08 W6M
J1	Jayar1 Plant	0.1	-	2.2	0.03	06-08-062-03 W6M
J2	Jayar2 14-8	0.4	-	1.2	0.06	07-08-062-03 W6M
J3	Jayar3 Bone Yard	0.9	-	0.5	0.06	14-08-062-03 W6M
J4	Jayar4 7-8 or 8-8 Pad	0.3	-	0.6	0.05	10-08-062-03 W6M
J5	Jayar5 Camp	0.5	-	2.9	0.27	11-08-062-03 W6M

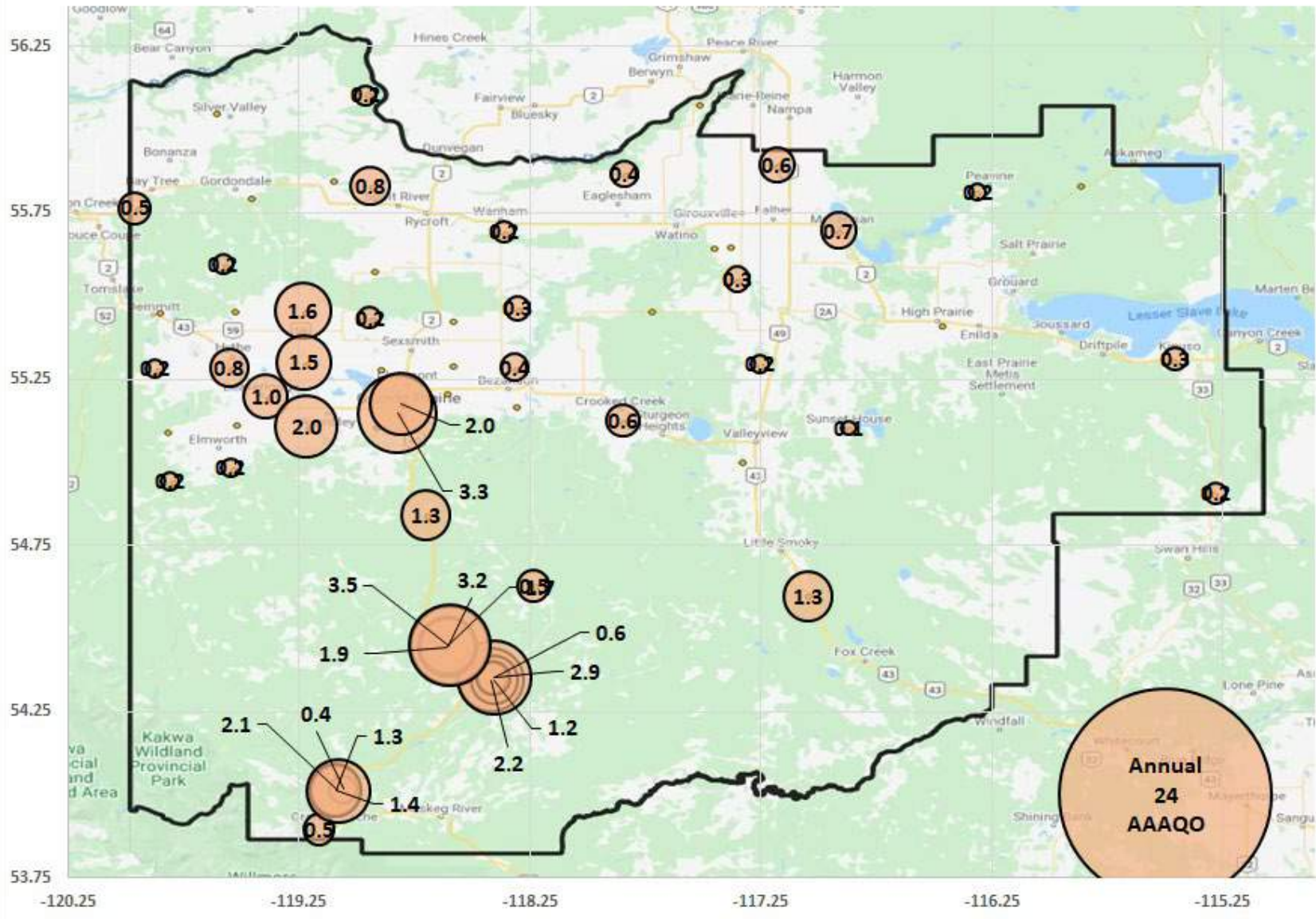
Passive Summary for April 2024

Stats	Sulphur Dioxide SO ₂ ppb	Ozone O ₃ ppb	Nitrogen Dioxide NO ₂ ppb	Hydrogen Sulphide H ₂ S ppb
Passive Summary for April 2024 (PAZA)				
Mean	0.5	40.9	1.0	0.1
Standard Deviation	0.9	4.0	0.9	0.1
Minimum	0.1	37.7	0.0	0.0
	Karr Creek (#38)	Bay Tree (#2)	East Prairie (#50)	Jayar1 Plant (#J1)
Maximum	5.6	45.3	3.5	0.4
	Kakwa 3 (#K3)	Kinuso (#47)	Kakwa 4 (#K4)	Girouxville 3 (#G3)
Continuous and Passive Monitoring Comparision				
PAZA Beaverlodge Station	0.3	39.0	2.1	-
Beaverlodge Passive (#16)	0.3	-	1.0	-
PAZA Henry Pirker Station	0.2	34.7	5.9	0.1
Henry Pirker passive (#49)	0.3	-	2.0	-
Milner Station	-	-	2.4	-
Milner passive	<0.1	-	1.4	-

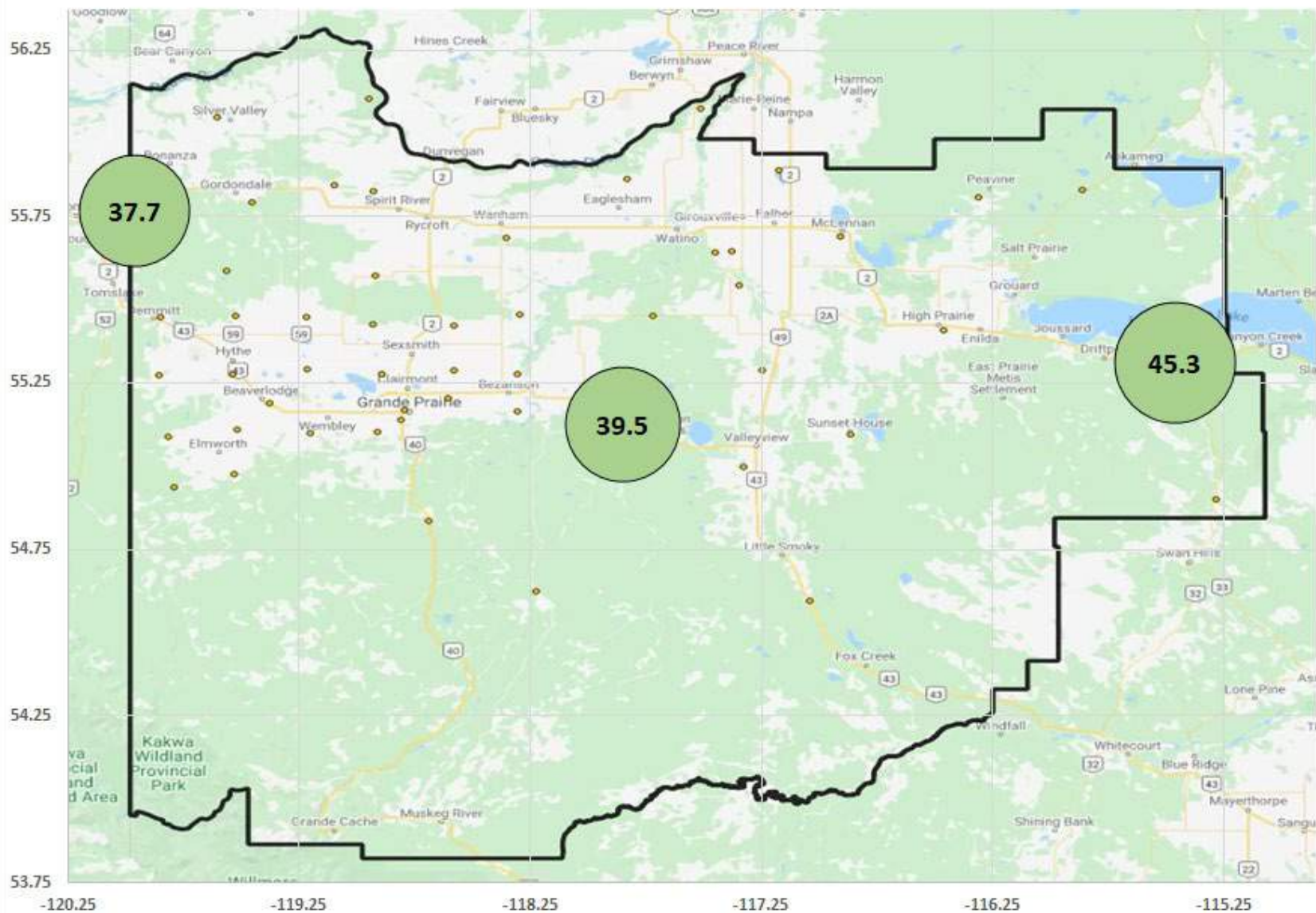




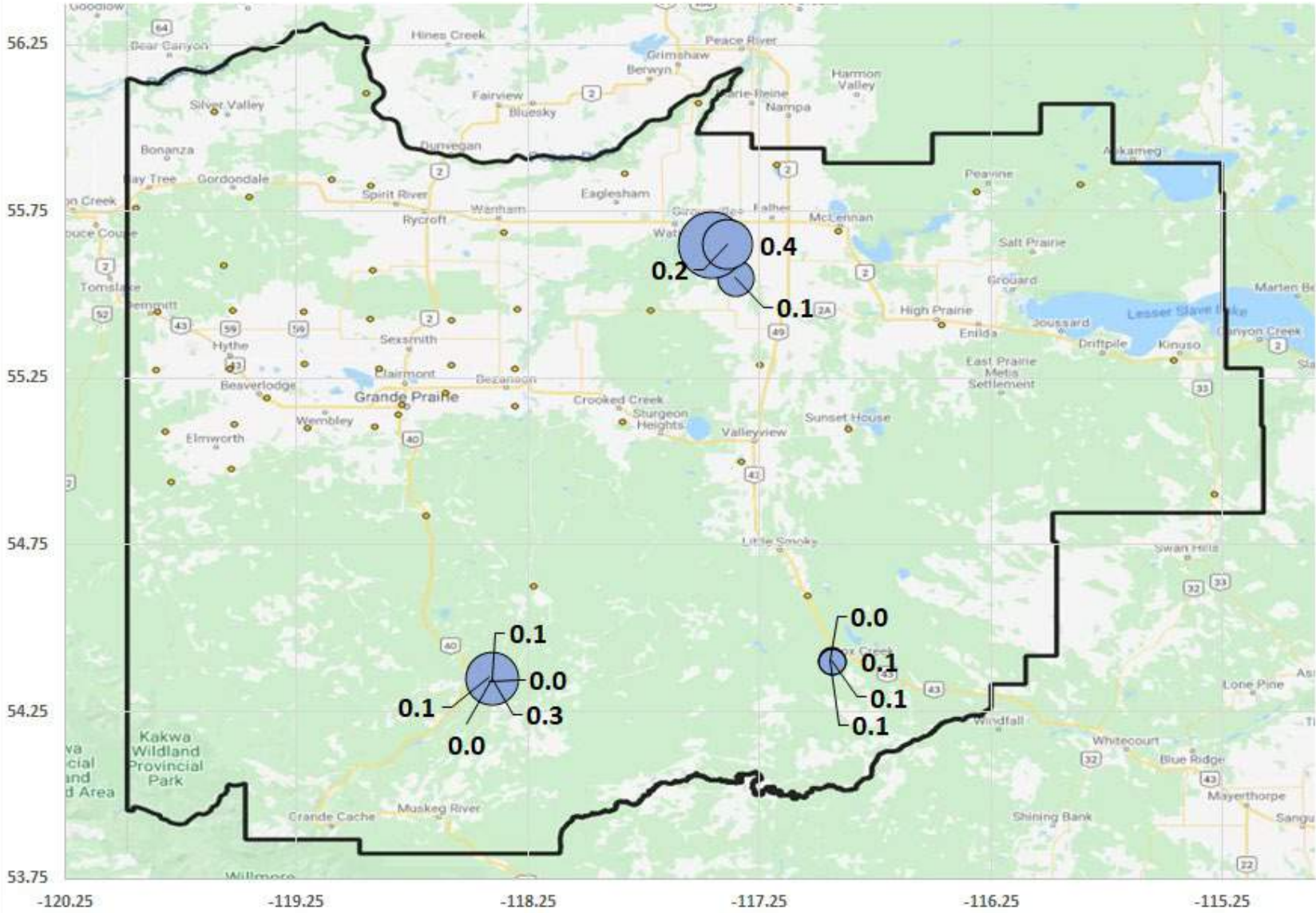
NO₂ Monthly Average (units in ppb)



O₃ Monthly Average (units in ppb)



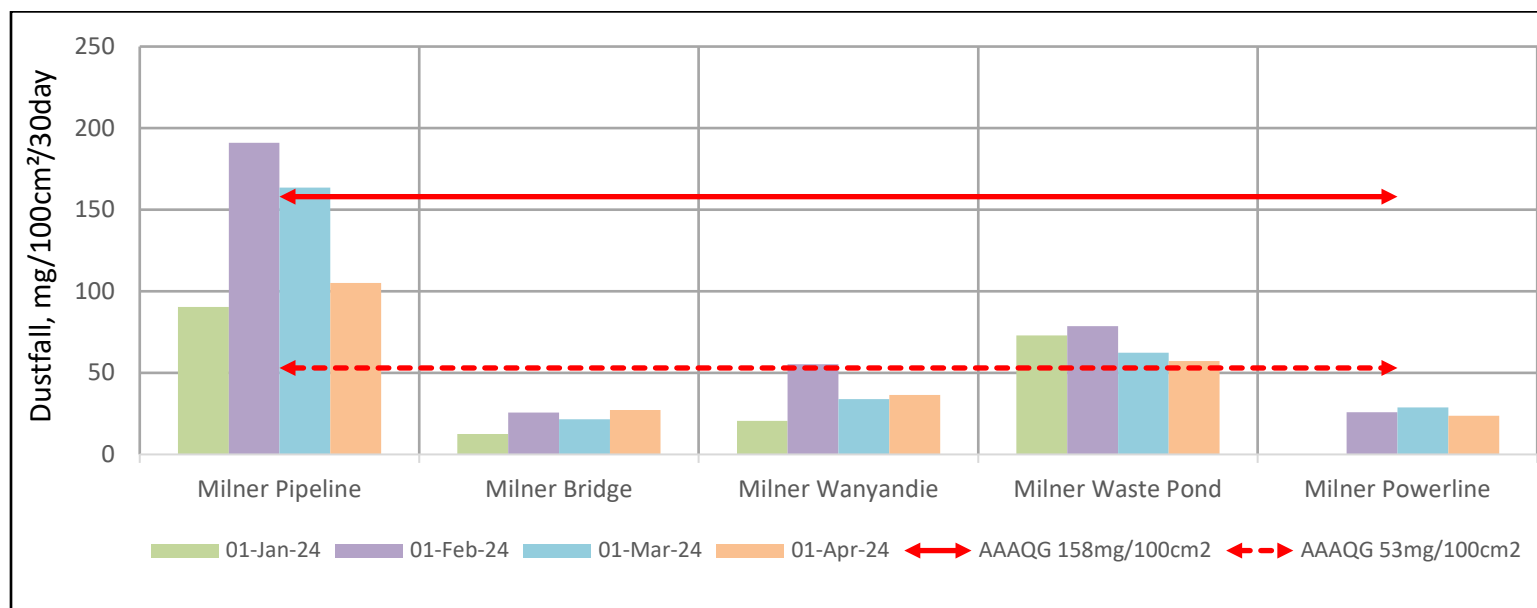
H₂S Monthly Average (units in ppb)



12 Dustfall Monitoring Data

Milner Dustfall Samples April 2024

Exposure Month	Year	Sample	Total Dustfall (30 day) mg/100cm ² /30day	Fixed Dustfall (30 day) mg/100cm ² /30day	Exposure days	Field Notes
April	2024	Milner Pipeline	105.2	39.6	32	
April	2024	Milner Bridge	27.3	2.6	32	
April	2024	Milner Wanyandie	36.4	16.2	32	
April	2024	Milner Waste Pond	57.2	26.0	32	
April	2024	Milner Powerline	23.7	13.3	32	
April	2024	Milner Powerline Dup	26.0	11.7	32	RPD, 9% / 13%



End of Report



Peace Airshed Zone Association

Ambient Air Monitoring Report

April 2024