



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Ambient Air Quality Monitoring Program

Monthly Report

October 2024

November 30, 2024

Alberta Environment and Protected Areas

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

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

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

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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, Happy Valley-Portable and Milner.
Detailed Summaries are included in the report.

Calibration and Data Submission:

Monthly report, hourly data and calibration reports for October 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 three readings above the 30min TRS AAAQG and one reading above the monthly dustfall AAAQG for the month

30min-readings above the TRS AAAQG (5ppb) recorded as follows:

Site	Pollutant	Date	From MST	To MST	Average Ppb	WS km/hr	WD degrees
Happy Valley	TRS	30-Oct-24	03:00	03:30	8.0	1.3	226
Happy Valley	TRS	30-Oct-24	03:30	04:00	7.2	1.3	226
Happy Valley	TRS	30-Oct-24	06:00	06:30	5.7	4.4	190

Readings above the residential/recreational dustfall monthly AAAQG (53mg/100cm²/30d) recorded as:

Site	reference	Pollutant	Date	Average mg/100cm ² /30d
Milner Wanyandie	435504	Total Dustfall	October 2024	111.1

Operational times less than 90 percent

All instruments in the network 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 October:

- Eight SO₂ duplicates located at Spirit River, Poplar, Kinuso, Deer Mountain, Duvernay 2, Kakwa 4, Milner Powerline, Jayar4 7-8 or 8-8 Pad
 - RPD ranging from 0% to 33% (no fails)
- One O₃ duplicate located at Crooked Creek
 - RPD 8% (no fails)
- Seven NO₂ duplicates at Webber Creek, Sylvester, Little Smoky, East Prairie, Kakwa 1, Milner Pipeline, Jayar2 14-8
 - RPD ranging from 7% to 39% (no fails)
- Four H₂S duplicates at Duvernay 2, Girouxville 4, Kakwa 2, Jayar5 Camp
 - RPD ranging from 6% to 33% (no fails)

Dustfall Monitoring

- Five Stations collected Total Dustfall and Fixed Dustfall
- Total dustfall ranged from 4.6 to 111.1 mg/100cm²/30day
 - One reading at Milner Wanyandie was >53 mg/100cm²/30day, reference 435504
- RPD was 15% (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.

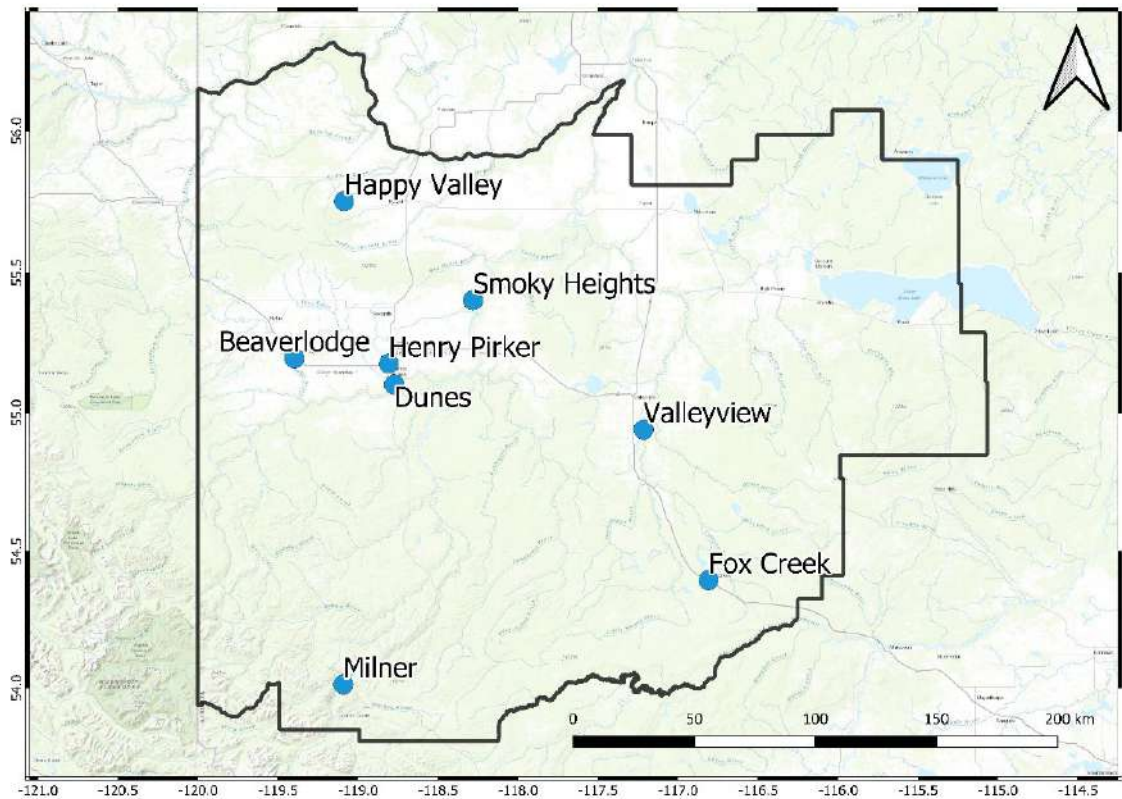


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Program Manager

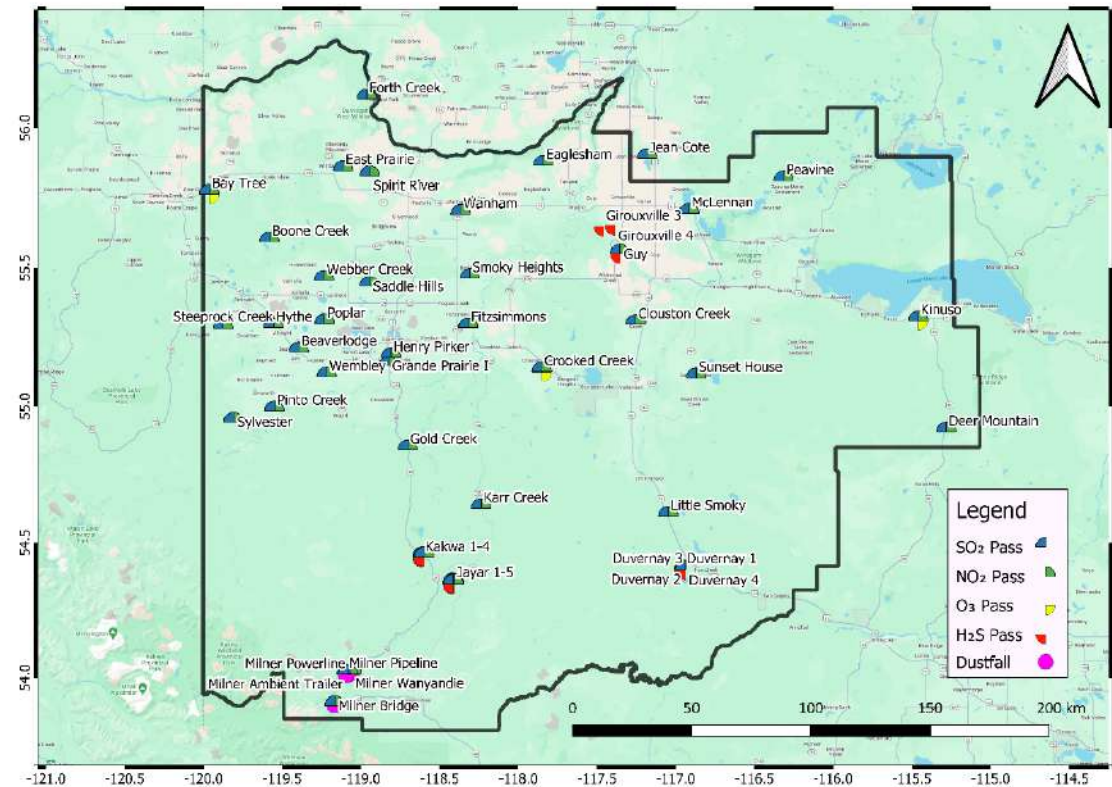
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PAZA Continuous Monitoring Station Locations



PAZA Passive Monitoring Station Locations



1 October 2024 Monthly Station Summaries

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

1.1 Beaverlodge Air Monitoring Station

PAZA - October 2024 Beaverlodge Station Report

	October				1-hour			24-hour			Exceedance				Calibration
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
NO (ppb)	0.6	0.0	94.1%	99.3%	20.5	-	Oct-16 08:00	2.8	-	Oct-16	-	-	-	-	Oct 01, 2024
NO ₂ (ppb)	3.5	0.3	94.1%	99.3%	16.4	159	Oct-16 08:00	7.2	-	Oct-27	0	-	-	-	Oct 01, 2024
NO _x (ppb)	4.1	0.3	94.1%	99.3%	36.9	-	Oct-16 08:00	9.3	-	Oct-16	-	-	-	-	Oct 01, 2024
O ₃ (ppb)	23.4	1.4	95.2%	100.0%	45.3	76	Oct-14 19:00	36.7	-	Oct-23	0	-	-	-	Oct 01, 2024
PM _{2.5} (µg/m³)	3.4	0.2	99.7%	100.0%	16.2	80	Oct-31 21:00	11.5	29	Oct-31	0	-	0	-	Oct 02, 2024
SO ₂ (ppb)	0.4	0.0	95.3%	100.0%	9.8	172	Oct-12 13:00	1.8	48	Oct-12	0	-	0	0	Oct 02, 2024
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	4.1	-11.6	95.3%	95.3%	22.1	Note: Valid hours must be greater than 75% Operational hours must be greater than 90%									
RH (%)	69.4	27.5	100.0%	100.0%	99.9										
WS (km/hr)	10.1	0.1	100.0%	100.0%	44.7										
WD (deg)	254	0.1	100.0%	100.0%	358.8	Average Wind Direction		254	WSW						

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	42iQ	Oct 22, span failure, Oct 22 calibration as found, no issues and within limits, calibration on Oct 22 (4hrs maint.)
O ₃	Thermo	49iQ	No Operational issues noted during the month
PM _{2.5}	API	T640	No Operational issues noted during the month
SO ₂	Thermo	43i-TLE	No Operational issues noted during the month
Met Equip	MetOne	50.5	For ET, daily drop removed every day 04:21-04:43 (31hrs); Oct 2, additional 4hrs removed due to data shift

1.2 Dunes Air Monitoring Station

PAZA - October 2024 Dunes Station Report

Parameter	October				30min / 1-hour				24-hour			Exceedance				Calibration
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time		Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
PM _{2.5} (µg/m³)	2.0	0.0	96.8%	97.0%	24.5	80	Oct-11	19:00	7.2	29	Oct-28	0	-	0	-	Oct-15-2024
SO ₂ (ppb)	0.2	0.0	92.5%	97.0%	3.7	172	Oct-27	15:00	0.8	48	Oct-27	0	-	0	0	Oct-15-2024
TRS (ppb)	0.4	0.0	92.3%	97.0%	4.2	5	Oct-14	03:00	0.8	3	Oct-14	0	-	0	-	Oct-15-2024
	Average	Minimum	Valid	Operational	Maximum											
Temp (°C)	4.0	-14.2	97.0%	97.0%	20.1	Note: Valid hours must be greater than 75% Operational hours must be greater than 90%										
RH (%)	72.0	28.0	97.0%	97.0%	99.9											
WS (km/hr)	3.2	0.0	97.0%	97.0%	13.5											
WD (deg)	235	0.3	97.0%	97.0%	359.3	Average Wind Direction			235	SW						

Update Summary:

Parameter	Make	Model	Equipment summary
PM _{2.5}	Thermo	SHARP 5030	Oct 20-21, Data communication failure, 22hrs removed
SO ₂	Thermo	43i	Oct 20-21, Data communication failure, 22hrs removed
TRS	Thermo	43i	Oct 20-21, Data communication failure, 22hrs removed; new charts reflect the 30min AAAQG of 5ppb
Met Equip	Gil/RMYoung	MetPak/RMY86004	Oct 20-21, Data communication failure, 22hrs removed

1.3 Grande Prairie - Henry Pirker Air Monitoring Station

PAZA - October 2024 Henry Pirker Station Report

Parameter	October				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)	4.6	0.0	95.2%	100.0%	100.5	-	Oct-30 08:00	20.2	-	Oct-30	-	-	-	-	Oct 01, 2024
NO ₂ (ppb)	9.0	0.9	95.2%	100.0%	39.9	159	Oct-15 08:00	17.0	-	Oct-13	0	-	-	-	Oct 01, 2024
NO _x (ppb)	13.7	1.0	95.2%	100.0%	123.7	-	Oct-30 08:00	32.2	-	Oct-30	-	-	-	-	Oct 01, 2024
O ₃ (ppb)	17.8	0.2	95.3%	100.0%	41.9	76	Oct-08 16:00	33.7	-	Oct-23	0	-	-	-	Oct 01, 2024
PM _{2.5} (µg/m ³)	4.2	0.3	99.9%	100.0%	23.6	80	Oct-13 20:00	8.7	29	Oct-13	0	-	0	-	Oct 04, 2024
SO ₂ (ppb)	0.2	0.0	95.3%	100.0%	7.5	172	Oct-26 17:00	1.2	48	Oct-26	0	-	0	0	Oct 04, 2024
H ₂ S (ppb)	0.2	0.0	95.3%	100.0%	1.4	10	Oct-15 09:00	0.4	3	Oct-16	0	-	0	-	Oct 04, 2024
CH ₄ (ppm)	2.2	1.9	92.3%	96.9%	3.8	-	Oct-16 09:00	2.4	-	Oct-29	-	-	-	-	Oct 08, 2024
THC (ppm)	2.2	1.9	92.3%	96.9%	3.8	-	Oct-16 09:00	2.4	-	Oct-29	-	-	-	-	Oct 08, 2024
NMHC (ppm)	0.0	0.0	92.3%	96.9%	0.1	-	Oct-14 08:00	0.0	-	Oct-14	-	-	-	-	Oct 08, 2024
CO (ppm)	0.2	0.1	95.3%	100.0%	0.7	13	Oct-07 09:00	0.3	5	Oct-29	0	0	-	-	Oct 07, 2024
Average	4.4	-10.9	100.0%	100.0%	21.0	Note: Valid hours must be greater than 75% Operational hours must be greater than 90%									May 21, 2024
Temp (°C)	67.1	30.1	100.0%	100.0%	88.6										May 21, 2024
RH (%)	45.9	0.0	100.0%	100.0%	370.6										May 21, 2024
SR (W/m ²)	5.4	0.2	100.0%	100.0%	21.1										May 21, 2024
WS (km/hr)	201	1.9	100.0%	100.0%	356.8										May 21, 2024
WD (deg)									Average Wind Direction	201	SSW				

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	42i	No operational issues noted during the month
O ₃	TECO	49i	No operational issues noted during the month
PM _{2.5}	API	T640	No operational issues noted during the month
SO ₂	Thermo	43i-TLE	No operational issues noted during the month
H ₂ S	TEI	450i	No operational issues noted during the month
THC/CH ₄ /NMHC	TEI	55i	Oct 7, removal calibration to investigate random drops in readings below 1.8ppm (<5min increments), THC left to condition overnight (20hrs removed); Oct 8, calibration stable, changed hydrogen cylinder (3hrs maintenance)
CO	Thermo	48i-TLE	No operational issues noted during the month
Met Equip	MetOne	50.5	No operational issues noted during the month

1.4 Smoky Heights Air Monitoring Station

PAZA - October 2024 Smoky Heights Station Report

Parameter	October				30min / 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)	2.2	0.0	99.1%	99.2%	22.1	80	Oct-31 10:00	8.4	29	Oct-31	0	-	0	-	Oct 10, 2024
SO ₂ (ppb)	0.2	0.0	94.6%	99.2%	3.5	172	Oct-05 22:00	0.5	48	Oct-23	0	-	0	0	Oct 10, 2024
TRS (ppb)	0.2	0.0	94.5%	99.2%	2.0	5	Oct-03 00:00	0.3	3	Oct-03	0	-	0	-	Oct 10, 2024
Average	3.6	-12.6	99.2%	99.2%	21.5	Note: Valid hours must be greater than 75% Operational hours must be greater than 90%									Oct 10, 2024
Temp (°C)	10.3	0.2	98.9%	99.2%	41.0										Oct 10, 2024
WS (km/hr)	246	0.6	98.9%	99.2%	359.0										Oct 10, 2024
WD (deg)									Average Wind Direction	246	WNW				

Update Summary:

Parameter	Make	Model	Equipment summary
PM _{2.5}	Sharp	5030	Oct 30 and 31, power failure at 3hrs each day (6hrs removed)
SO ₂	TECO	43i	Oct 30 and 31, power failure at 3hrs each day (6hrs removed)
TRS	TEI	43i APSAA	Oct 30 and 31, power failure at 3hrs each day (6hrs removed); new charts reflect the 30min AAAQG of 5ppb
Met Equip	MetOne	50.5	Oct 30 and 31, power failure at 3hrs each day (6hrs removed)

1.5 Valleyview Air Monitoring Station

PAZA - October 2024 Valleyview Station Report

Parameter	October				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	
SO ₂ (ppb)	0.1	0.0	95.4%	100.0%	1.3	172	Oct-27 17:00	0.2	48	Oct-27	0	-	0	0	Oct 17, 2024
H ₂ S (ppb)	0.1	0.0	95.3%	100.0%	0.7	10	Oct-29 06:00	0.3	3	Oct-28	0	-	0	-	Oct 17, 2024
	Average	Minimum	Valid	Operational	Maximum	Note: Valid hours must be greater than 75% Operational hours must be greater than 90% Average Wind Direction 229 NW									
Temp (°C)	4.2	-10.7	100.0%	100.0%	24.5										
RH (%)	78.4	25.4	100.0%	100.0%	100.2										
WS (km/hr)	3.2	0.1	100.0%	100.0%	14.6										
WD (deg)	229	0.1	100.0%	100.0%	359.8										

Update Summary:

Parameter	Make	Model	Equipment summary
SO ₂	TEI	43i-APSCB	No operational issues noted during the month
H ₂ S	TEI	450i-APHAA / 43C	No operational issues noted during the month
Met Equip	RMYoung	RMY86004	No operational issues noted during the month

1.6 Fox Creek Air Monitoring Station

PAZA - October 2024 Fox Creek Station Report

Parameter	October				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)	7.4	0.0	94.6%	99.6%	74.0	-	Oct-23 11:00	18.0	-	Oct-30	-	-	-	-	Oct 17, 2024
NO ₂ (ppb)	7.4	0.1	94.6%	99.6%	33.6	159	Oct-30 18:00	13.8	-	Oct-30	0	-	-	-	Oct 17, 2024
NO _x (ppb)	15.1	0.3	94.6%	99.6%	95.5	-	Oct-30 18:00	32.1	-	Oct-30	-	-	-	-	Oct 17, 2024
O ₃ (ppb)	16.7	0.3	95.0%	99.6%	37.3	76	Oct-23 16:00	27.1	-	Oct-17	0	-	-	-	Oct 17, 2024
PM _{2.5} (µg/m ³)	4.2	0.1	96.8%	96.9%	35.7	80	Oct-07 17:00	11.3	29	Oct-31	0	-	0	-	Oct 09, 2024
SO ₂ (ppb)	0.5	0.0	94.8%	99.6%	53.2	172	Oct-19 06:00	4.7	48	Oct-19	0	-	0	0	Oct 09, 2024
H ₂ S (ppb)	0.2	0.0	94.9%	99.6%	0.8	10	Oct-09 04:00	0.3	3	Oct-04	0	-	0	-	Oct 09, 2024
	Average	Minimum	Valid	Operational	Maximum	Note: Valid hours must be greater than 75% Operational hours must be greater than 90% Average Wind Direction 202 SSW									
Temp (°C)	4.6	-7.0	99.6%	99.6%	24.9										
WS (km/hr)	5.3	0.3	99.6%	99.6%	20.5										
WD (deg)	202	1.6	99.6%	99.6%	359.5										

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	42IQ	Oct 3, power failure, 3hrs removed
O ₃	TECO	49I	Oct 3, power failure, 3hrs removed
PM _{2.5}	API	T640	Oct 3, power failure, 3hrs removed; Oct 8-9, analyzer froze, calibration performed following reset
SO ₂	TEI	43i-TLE	Oct 3, power failure, 3hrs removed
H ₂ S	TEI	450i	Oct 3, power failure, 3hrs removed
Met Equip	MetOne	50.5	Oct 3, power failure, 3hrs removed

1.7 Happy Valley Air Monitoring Station

PAZA - October 2024 Happy Valley Station Report

Parameter	October				30min / 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	95.2%	100.0%	5.5	-	Oct-08 09:00	1.5	-	Oct-27	-	-	-	-	Oct 02, 2024
NO ₂ (ppb)	2.1	0.3	95.2%	100.0%	16.1	159	Oct-16 06:00	4.6	-	Oct-27	0	-	-	-	Oct 02, 2024
NO _x (ppb)	2.6	0.3	95.2%	100.0%	20.8	-	Oct-16 06:00	6.0	-	Oct-27	-	-	-	-	Oct 02, 2024
O ₃ (ppb)	24.0	1.5	95.3%	100.0%	42.6	76	Oct-14 19:00	34.7	-	Oct-23	0	-	-	-	Oct 02, 2024
PM _{2.5} (µg/m³)	3.3	0.2	99.9%	100.0%	37.4	80	Nov-01 00:00	10.0	29	Oct-31	0	-	0	-	Oct 03, 2024
SO ₂ (ppb)	0.3	0.0	95.4%	100.0%	5.6	172	Oct-06 21:00	1.0	48	Oct-12	0	-	0	0	Oct 02, 2024
TRS (ppb)	0.4	0.1	95.3%	100.0%	8.0	5	Oct-30 03:30	1.1	3	Oct-30	3	-	0	-	Oct 03, 2024
THC (ppm)	2.0	1.9	95.4%	100.0%	3.3	-	Oct-04 05:00	2.2	-	Oct-04	-	-	-	-	Oct 03, 2024
Average					Maximum										
Temp (°C)	3.4	-12.1	100.0%	100.0%	21.6										
WS (km/hr)	11.5	0.2	94.2%	94.2%	40.7										
WD (deg)	242	3.6	94.2%	94.2%	358.1										
Note: Valid hours must be greater than 75% Operational hours must be greater than 90%															
Average Wind Direction										242	WSW				

Update Summary:

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	TEI	42i	No operational issues during the month
O ₃	TEI	49I	No operational issues during the month
PM _{2.5}	API	T640	No operational issues during the month
SO ₂	TEI	43I	No operational issues during the month
TRS	TEI	43I	New charts reflect the 30min AAAQG of 5ppb; Oct 30, 3x30min readings over the AAAQG
THC	TEI	55I / 51II-LT	No operational issues during the month
Met Equip	MetOne	50.5	Oct 19 - 21, wind speed and direction were flat, suspected frozen due to freezing rain and snow (43hrs removed)

1.8 Milner Air Monitoring Station

PAZA - October 2024 Milner Station Report

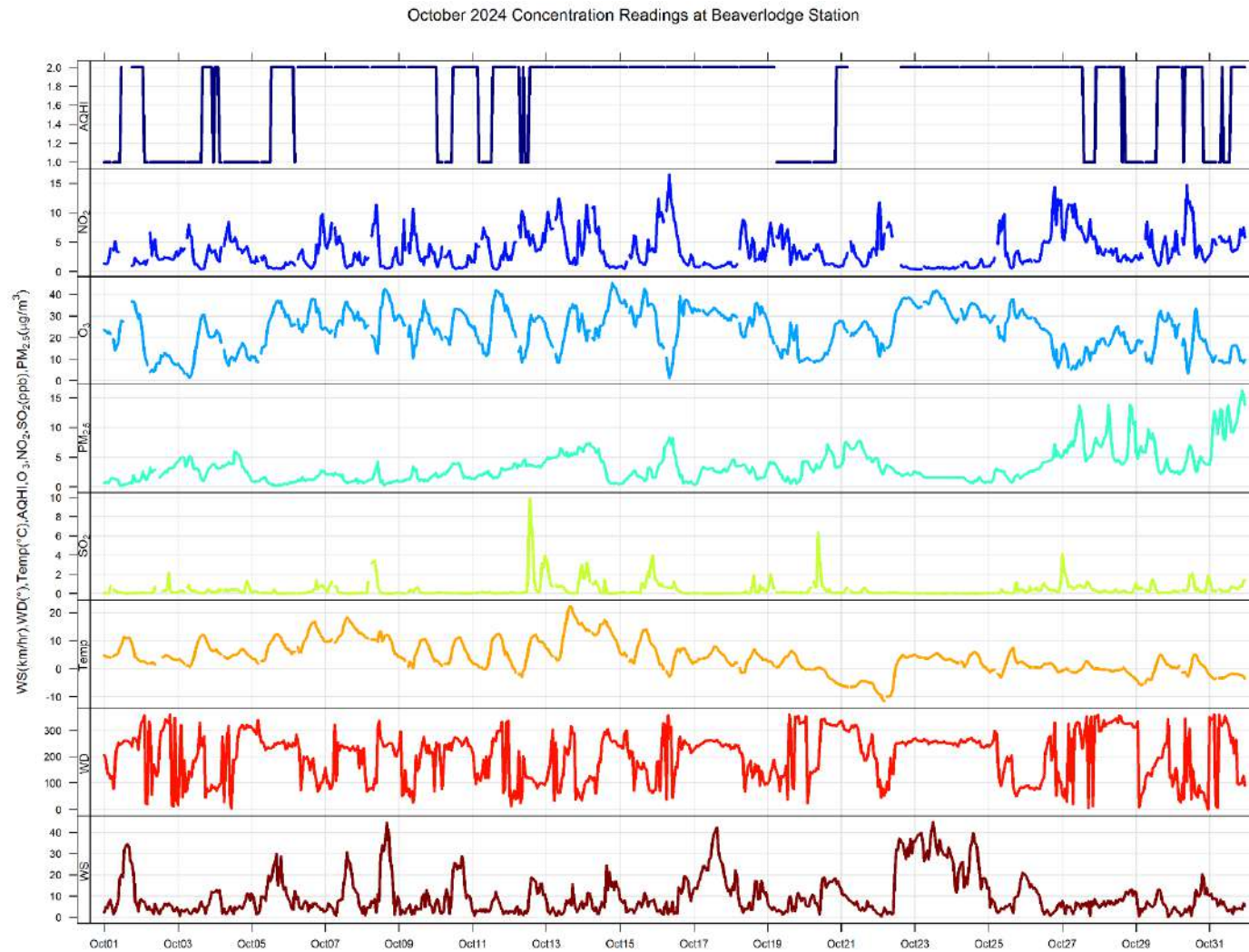
Parameter	October				1-hour			24-hour			Exceedance				Calibration Date
	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	
NO (ppb)	1.2	0.0	95.2%	100.0%	31.8	-	Oct-27 11:00	7.4	-	Oct-27	-	-	-	-	Oct 29, 2024
NO ₂ (ppb)	3.4	0.0	95.2%	100.0%	19.7	159	Oct-26 02:00	8.8	-	Oct-27	0	-	-	-	Oct 29, 2024
NO _x (ppb)	4.6	0.0	95.2%	100.0%	45.2	-	Oct-27 11:00	16.3	-	Oct-27	-	-	-	-	Oct 29, 2024
PM _{2.5} (µg/m³)	2.8	0.1	99.3%	100.0%	26.4	80	Oct-12 18:00	6.2	29	Oct-13	0	-	0	-	Oct 29, 2024
Average					Maximum										
WS (km/hr)	7.1	0.2	100.0%	100.0%	36.3										
WD (deg)	251	1.3	100.0%	100.0%	358.5										
Note: Valid hours must be greater than 75% Operational hours must be greater than 90%															
Average Wind Direction										251	WSW				

Update Summary:

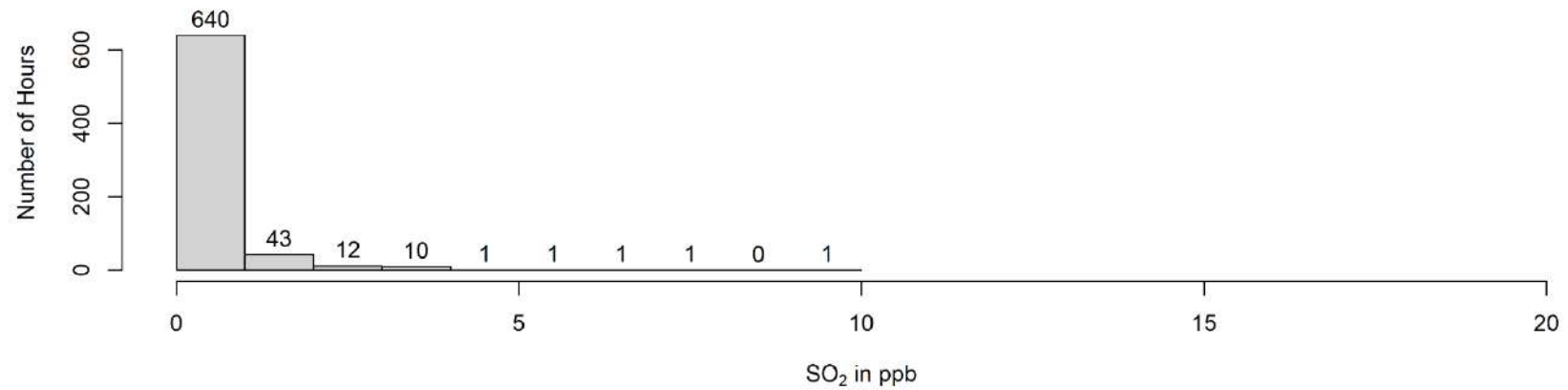
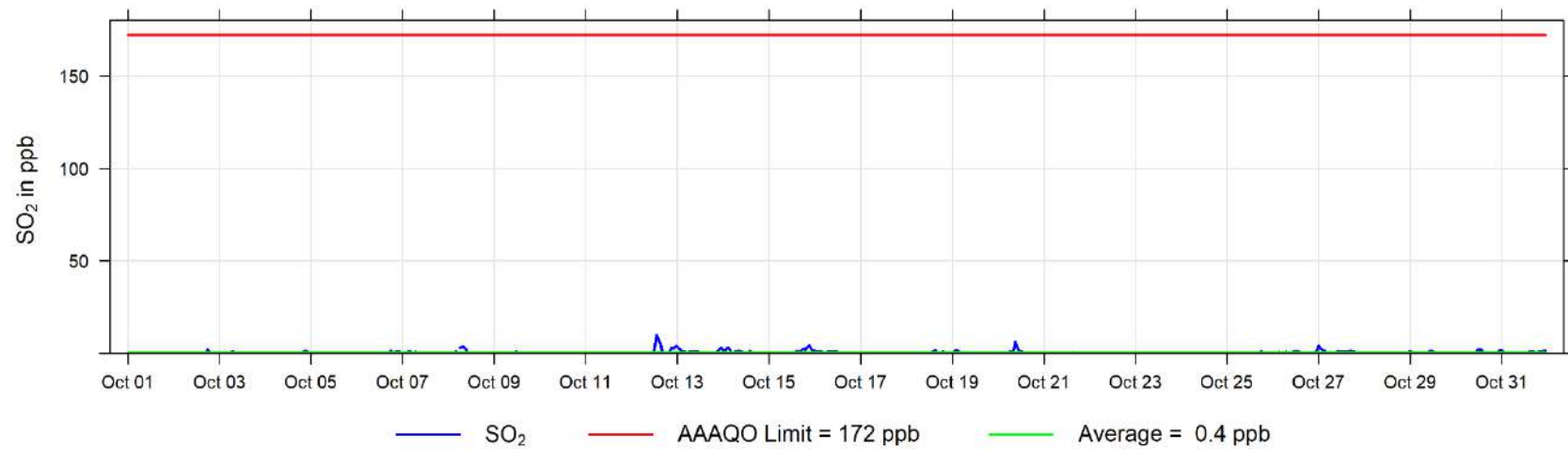
Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _x	Thermo	42i	No Operational issues noted in the month
PM _{2.5}	API	T640	No Operational issues noted in the month; removal calibration performed for pump swap, no issues reported
Met Equip	MetOne	50.5	No Operational issues noted in the month

2 Beaverlodge Charts

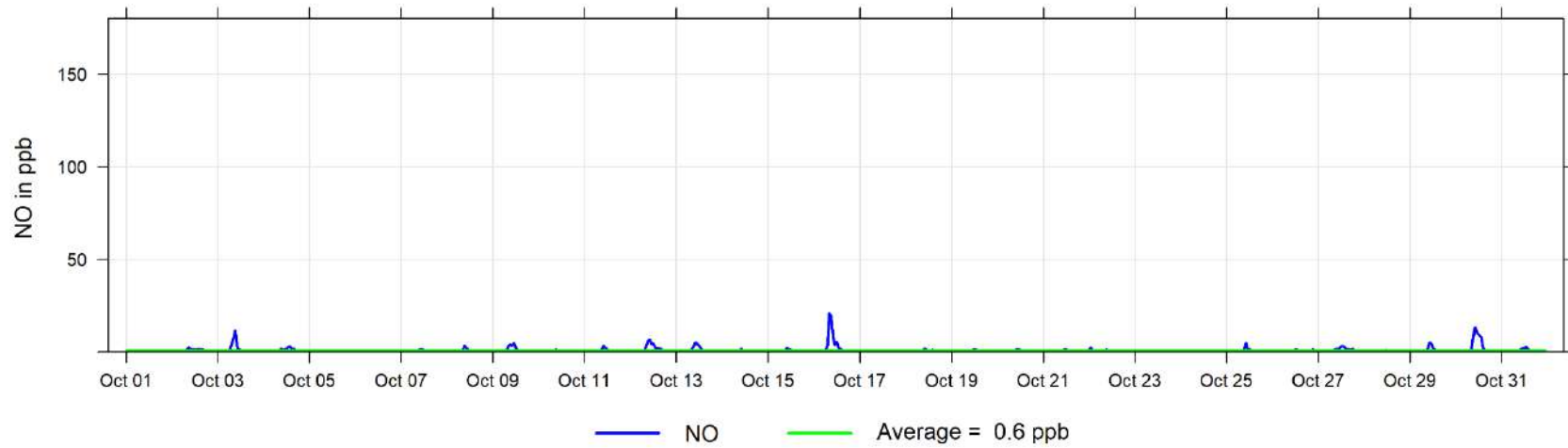
The following pages include the charts and histograms for Beaverlodge Station



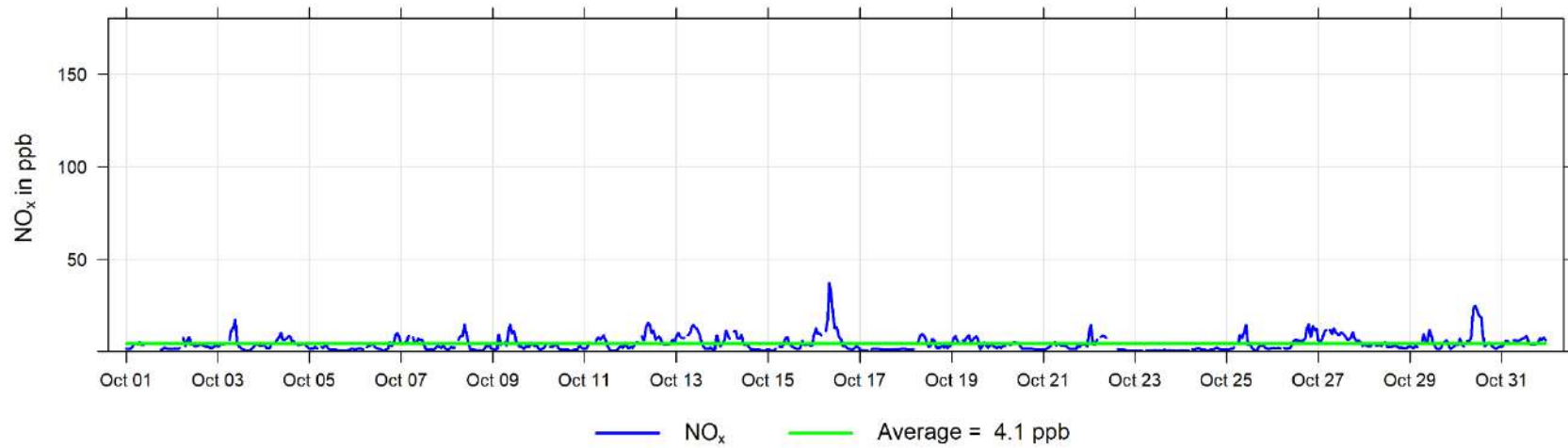
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Beaverlodge



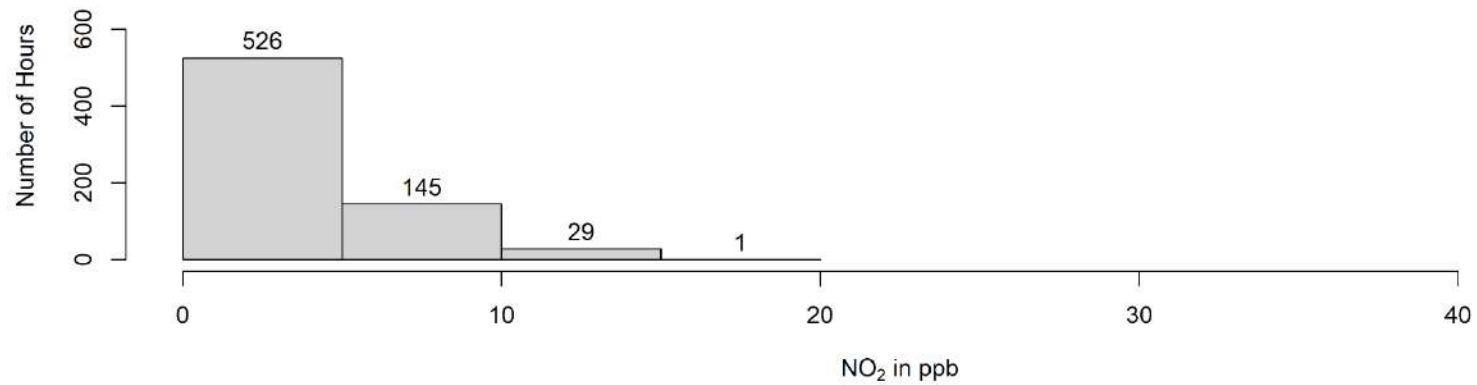
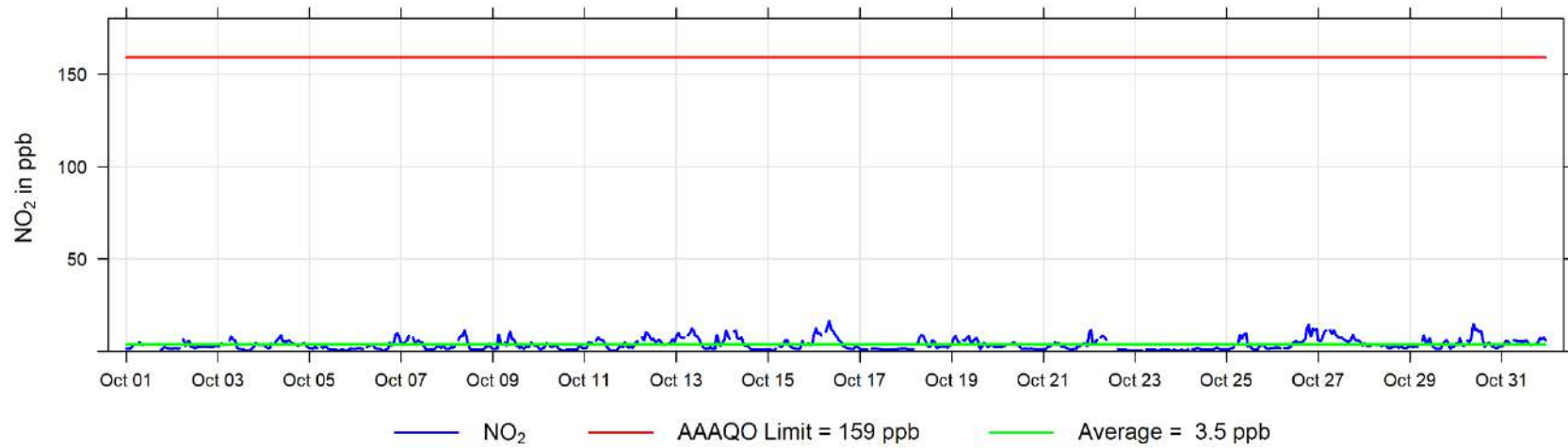
October 2024 Hourly Concentration Readings of NO (in ppb) at Beaverlodge



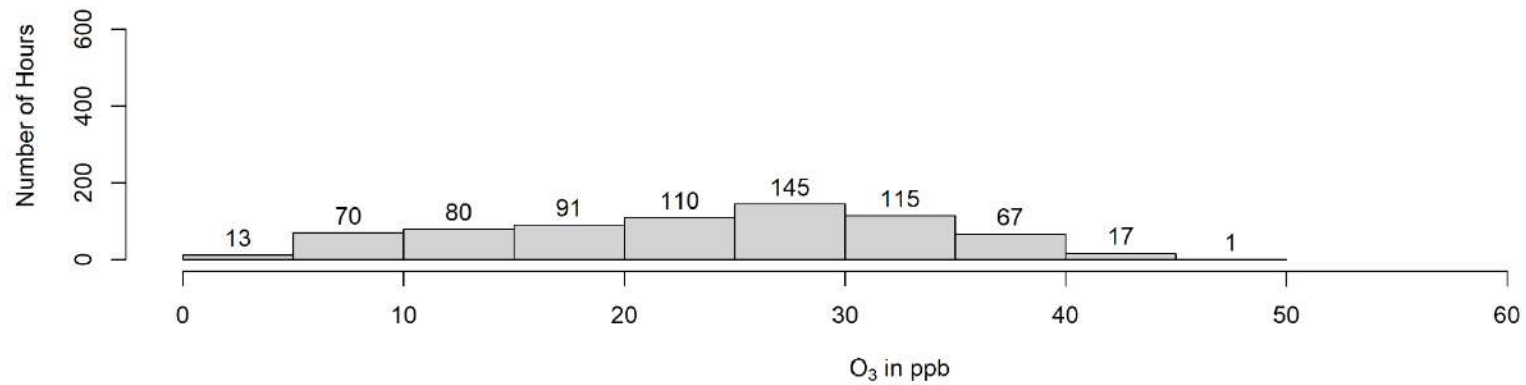
October 2024 Hourly Concentration Readings of NO_x (in ppb) at Beaverlodge



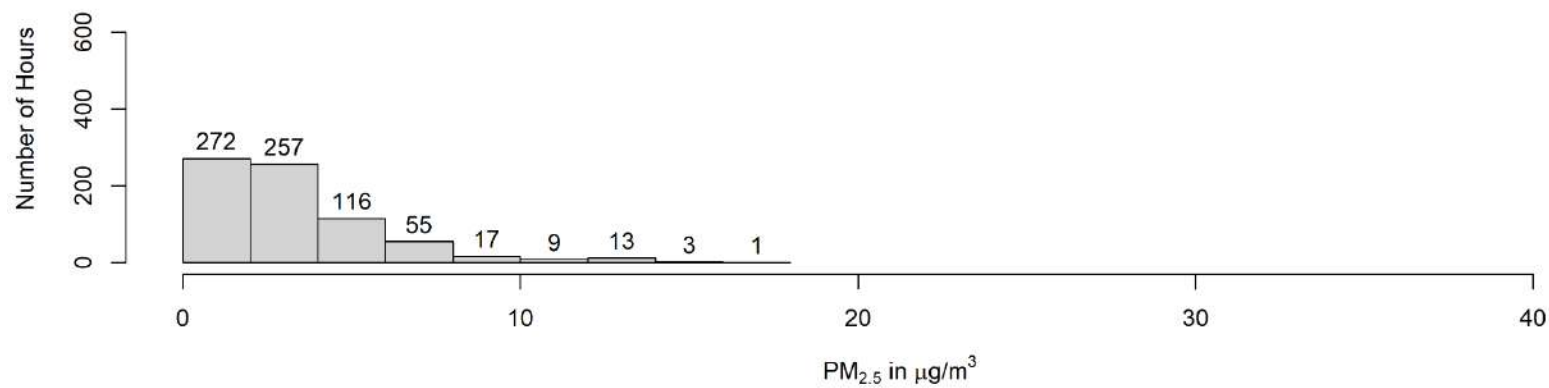
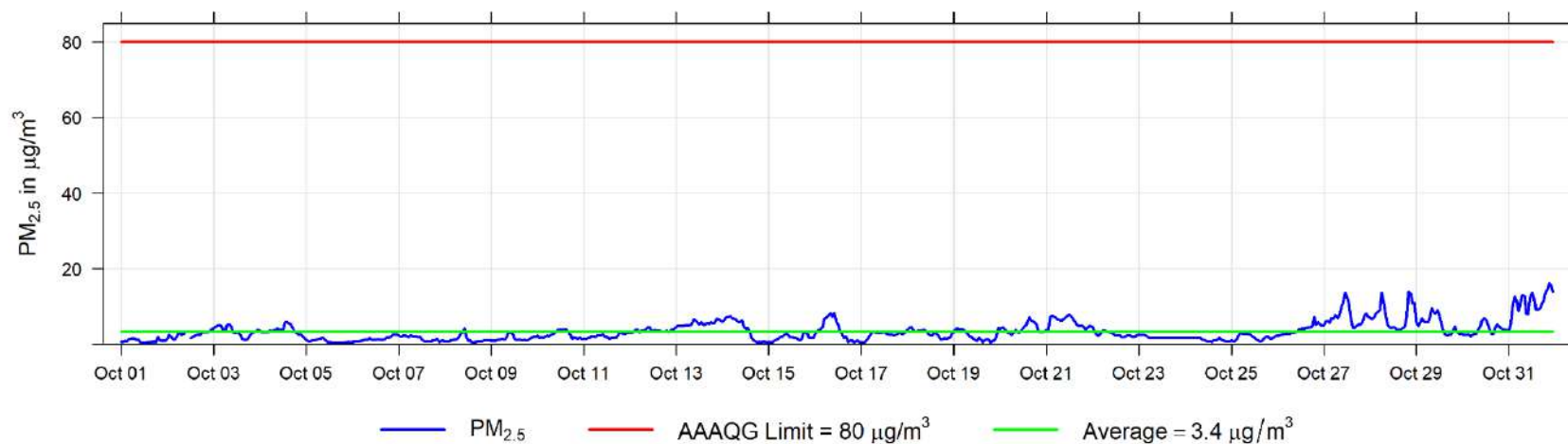
October 2024 Hourly Concentration Readings of NO₂ (in ppb) at Beaverlodge



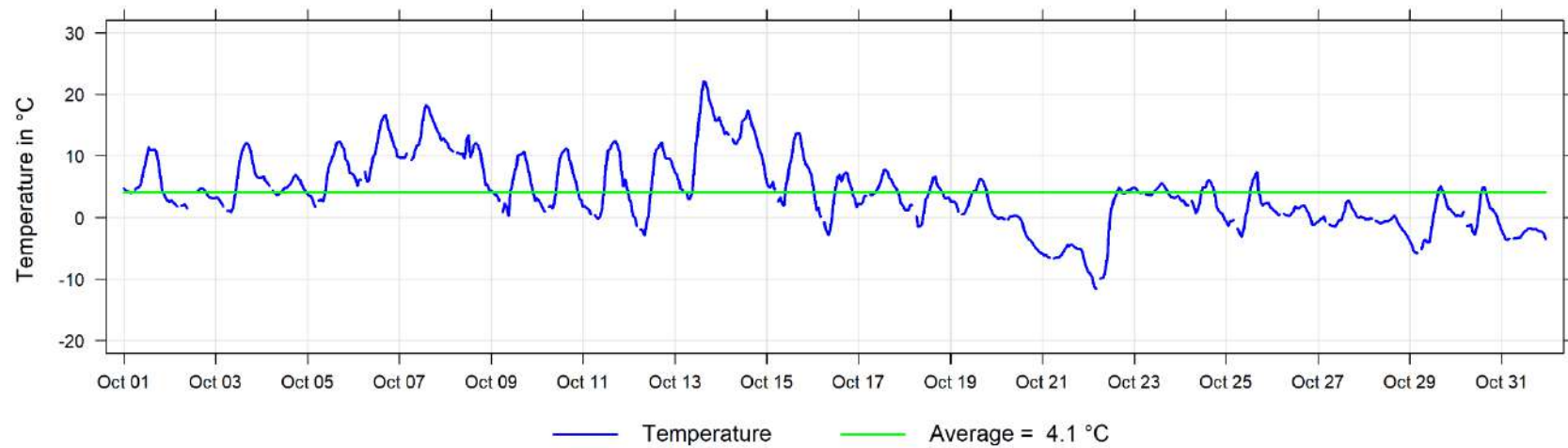
October 2024 Hourly Concentration Readings of O₃ (in ppb) at Beaverlodge



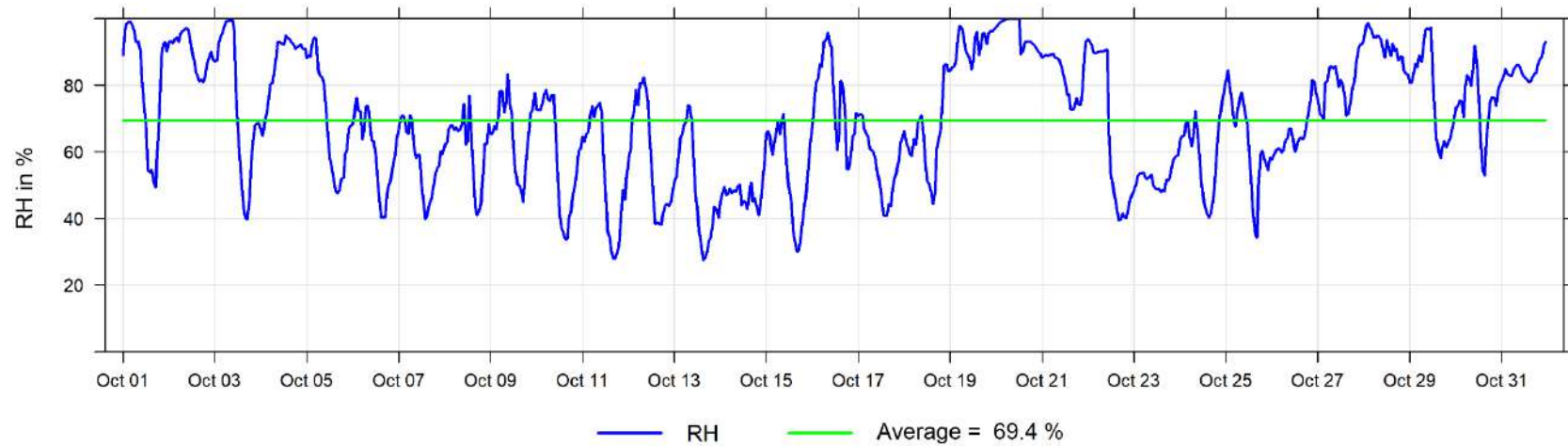
October 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Beaverlodge



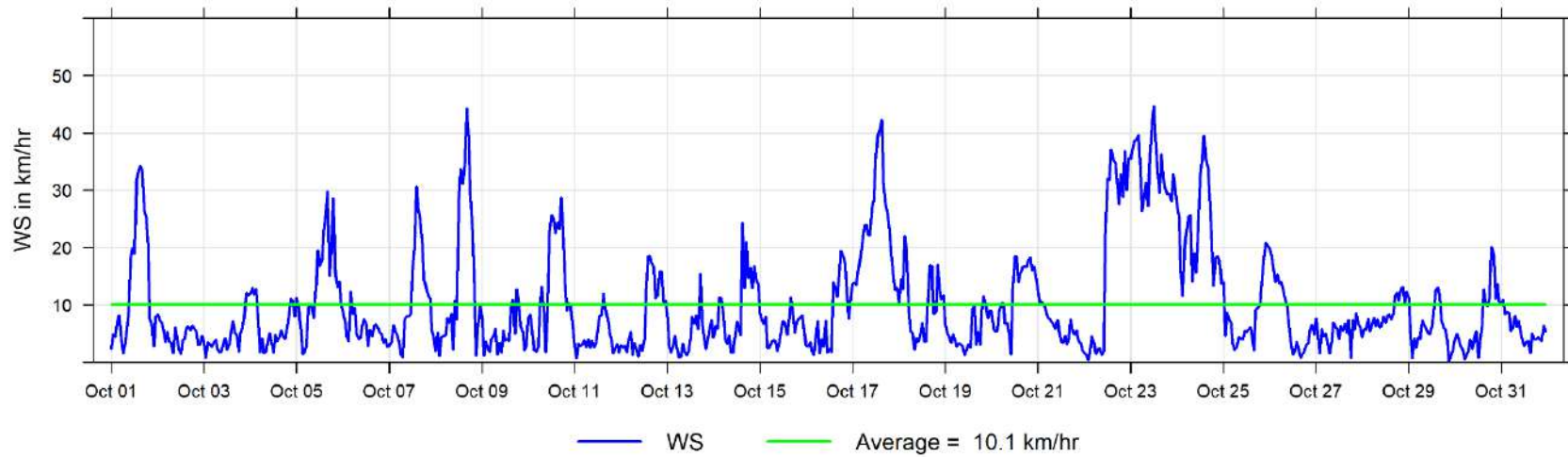
October 2024 Hourly Temperature Readings (in °C) at Beaverlodge



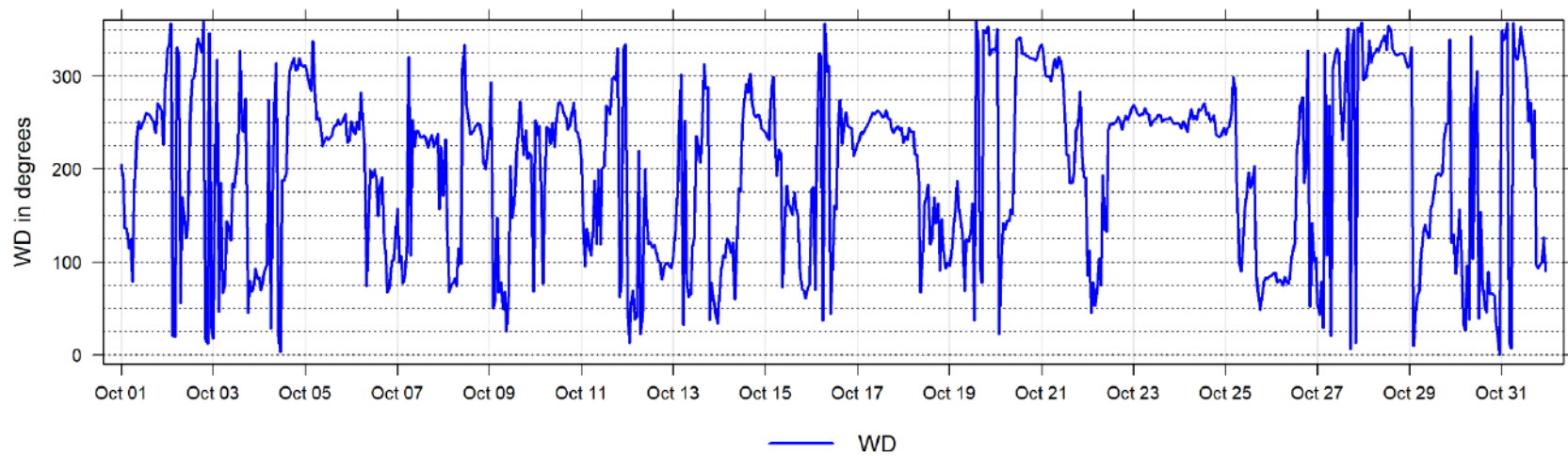
October 2024 Hourly Readings of Relative Humidity (in %) at Beaverlodge



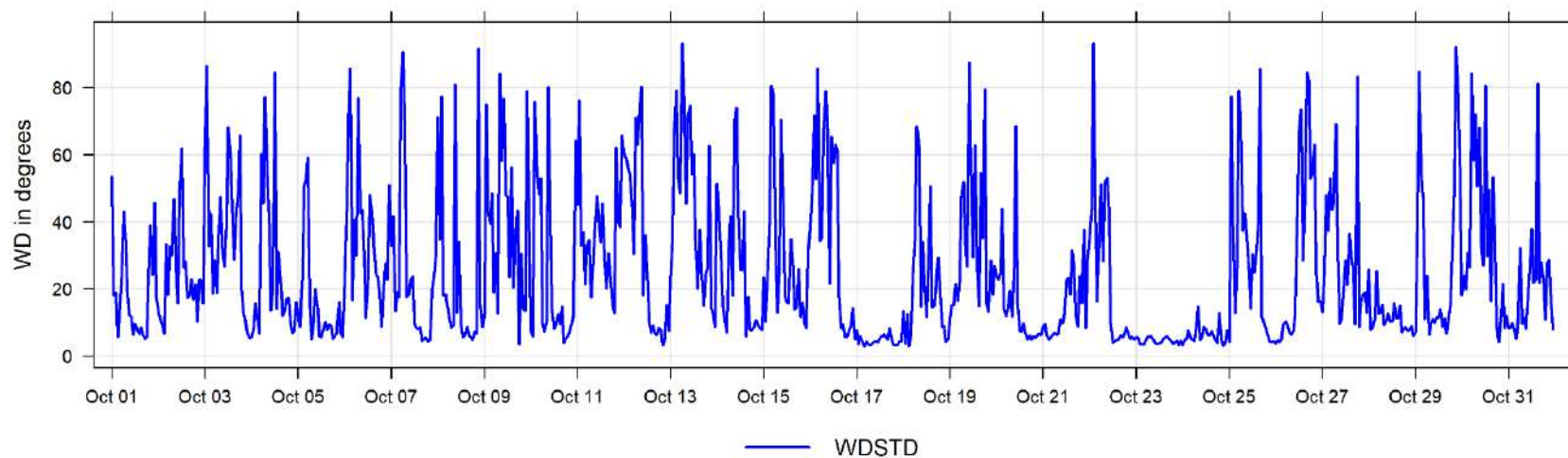
October 2024 Hourly Readings of Wind Speed (in km/hr) at Beaverlodge

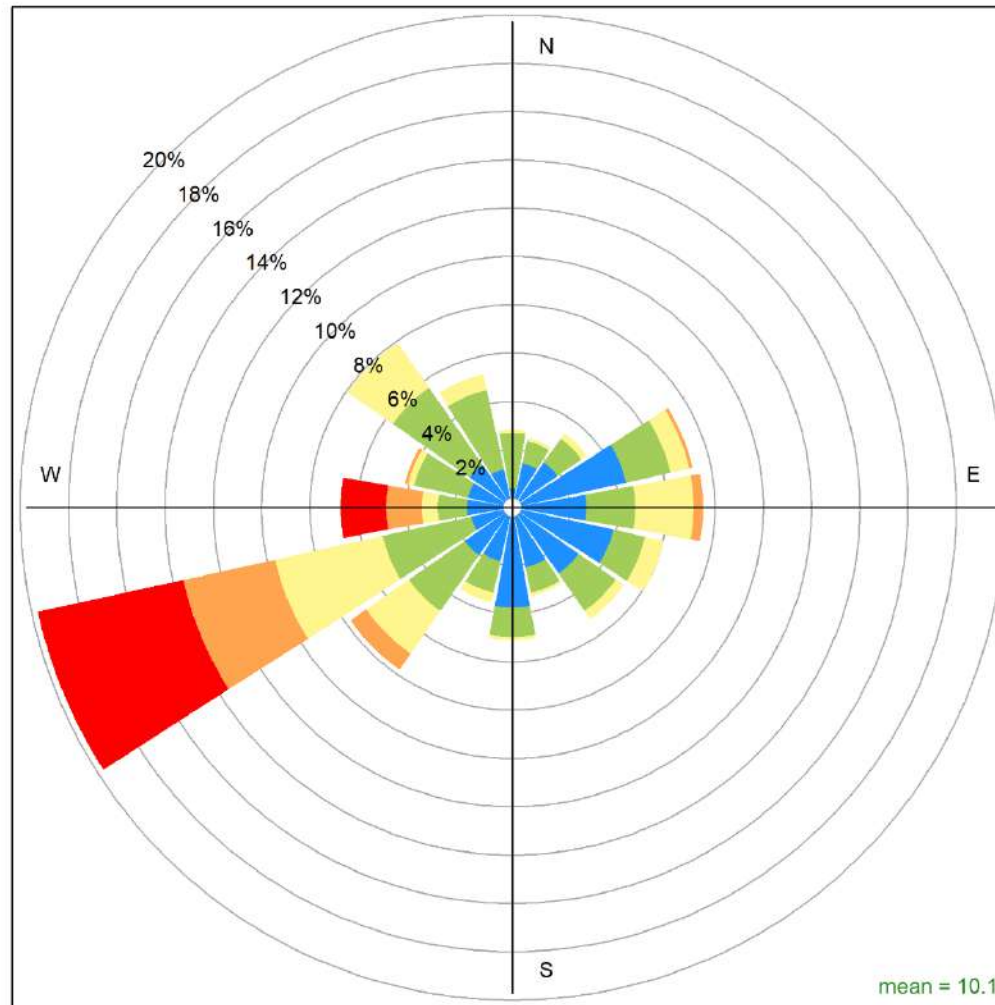


October 2024 Hourly Readings of Wind Direction (in degrees) at Beaverlodge

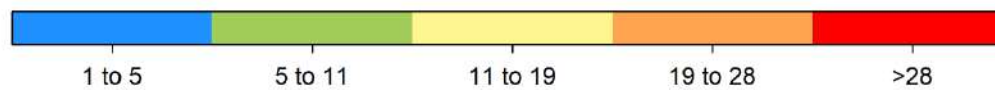


October 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Beaverlodge





mean = 10.1

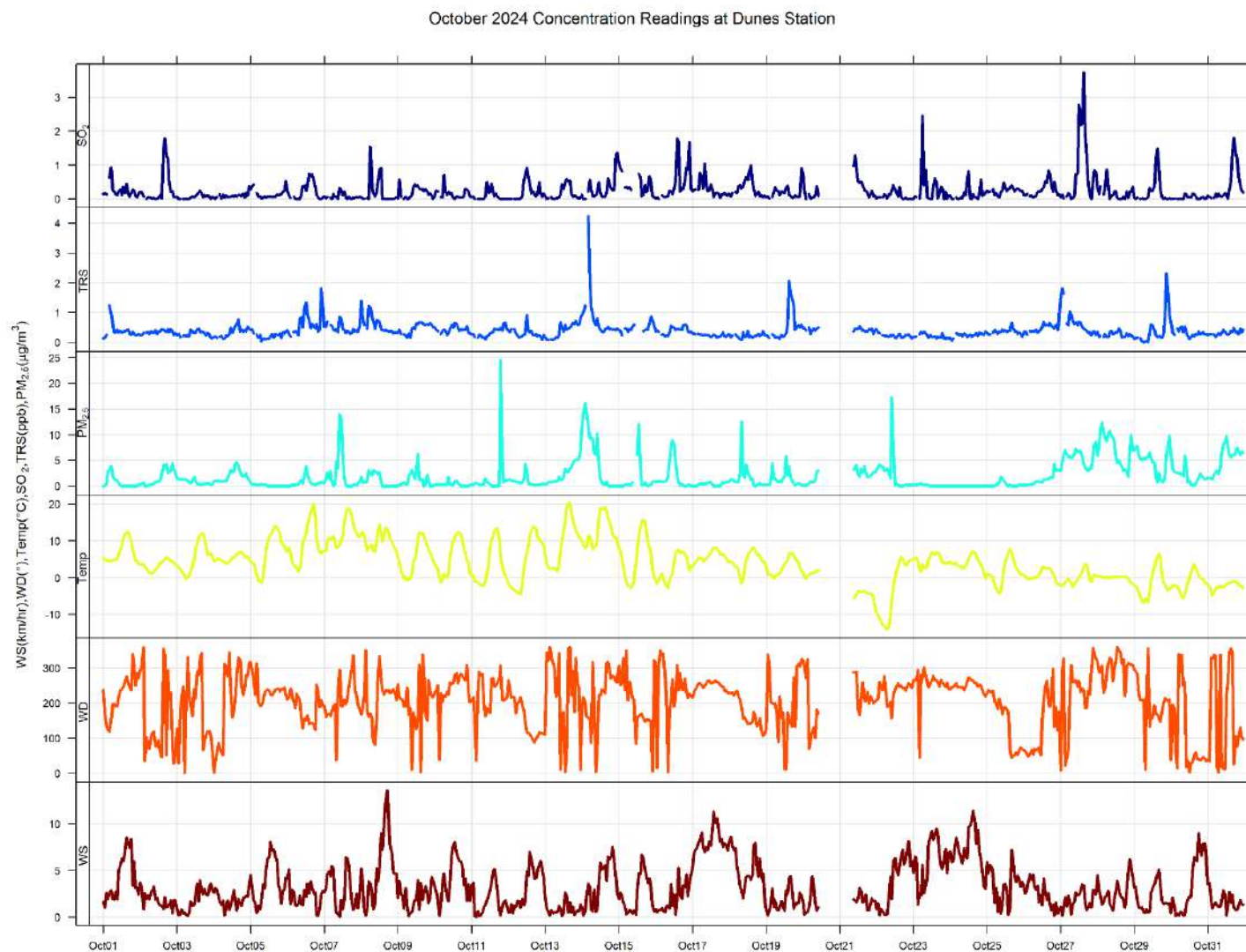


Beaverlodge October 2024 Wind Rose, wind speed in km/hr

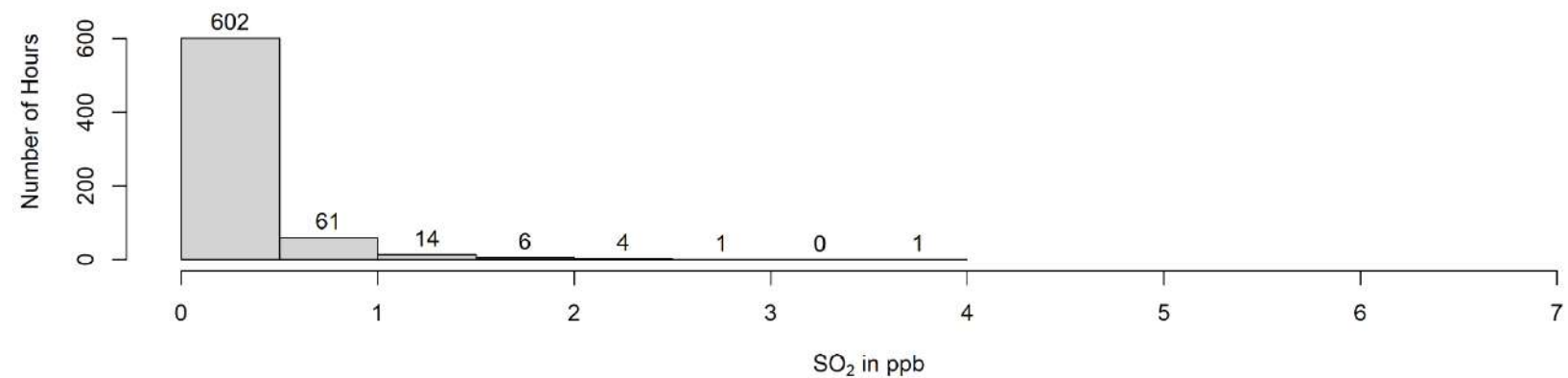
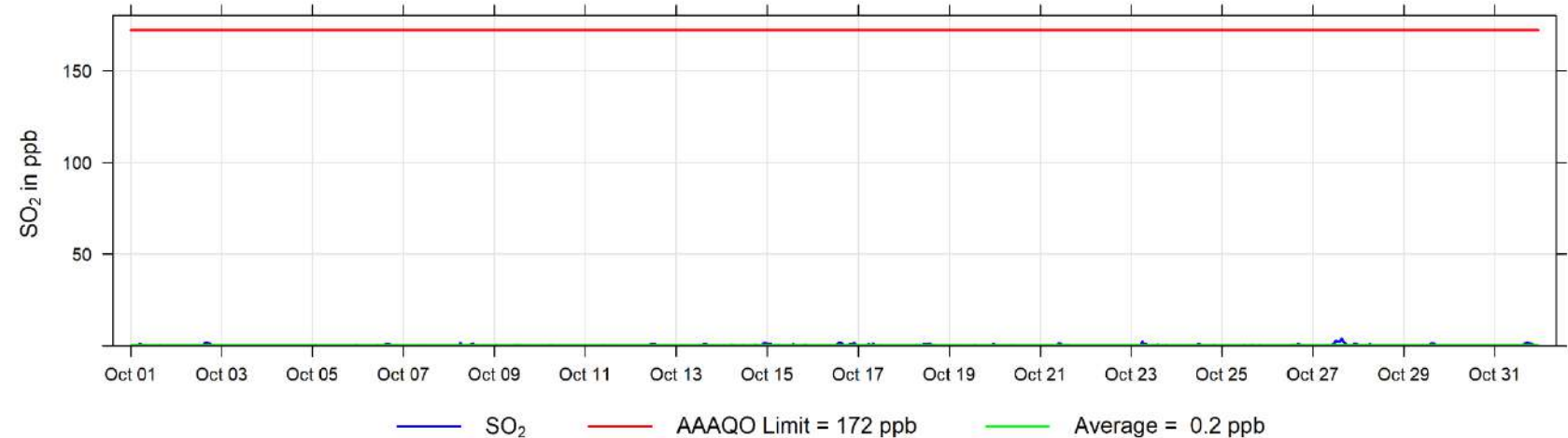
Calms (<1km/hr) = 1.6 %

3 Dunes Charts

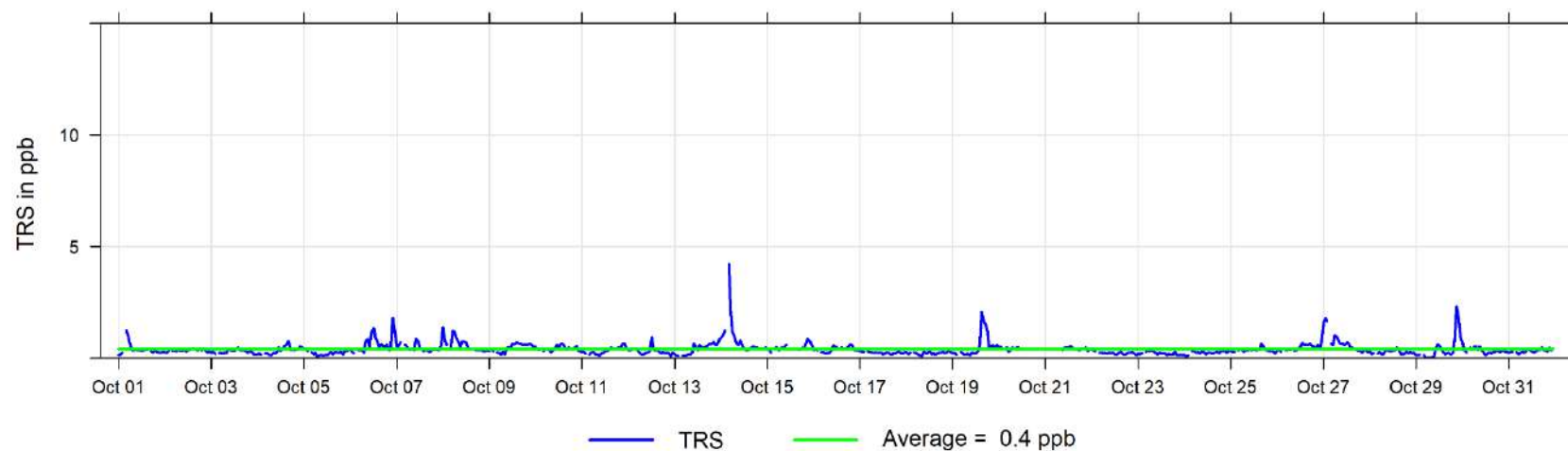
The following pages include the charts and histograms for Dunes Station



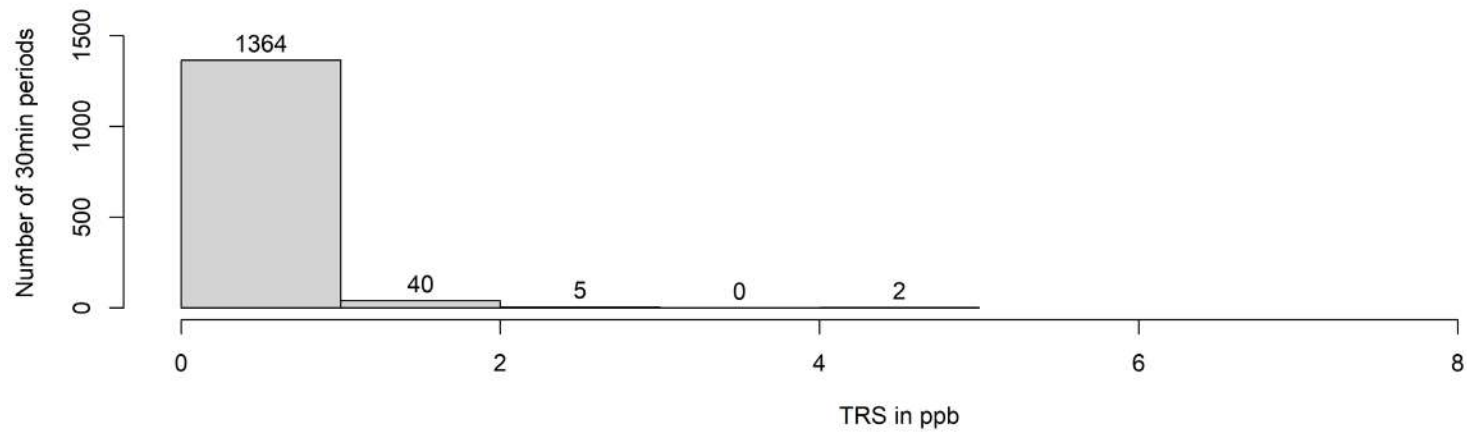
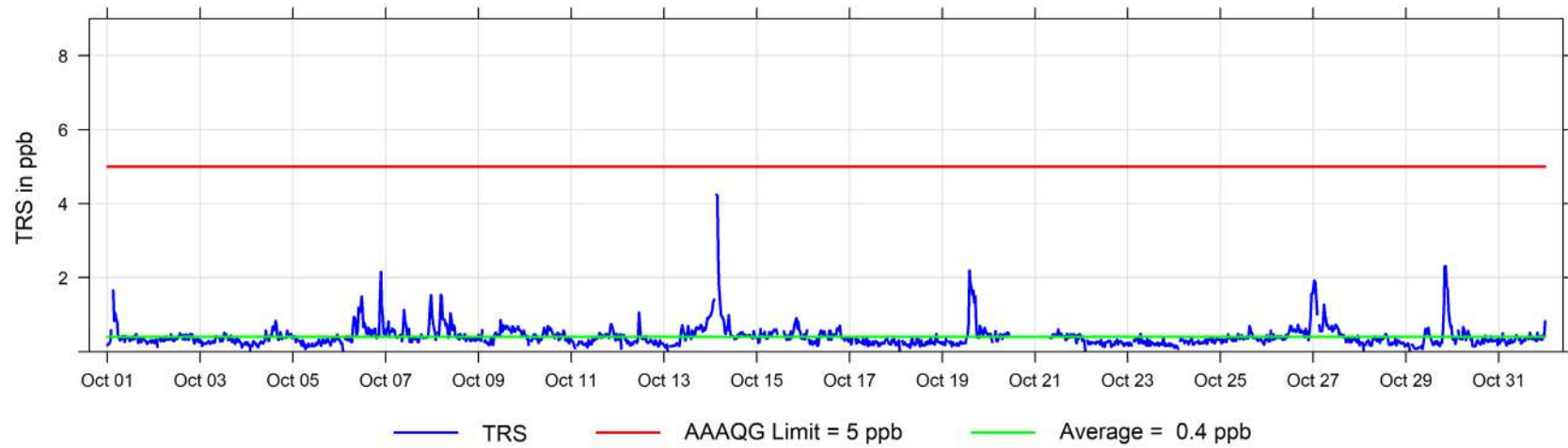
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Dunes



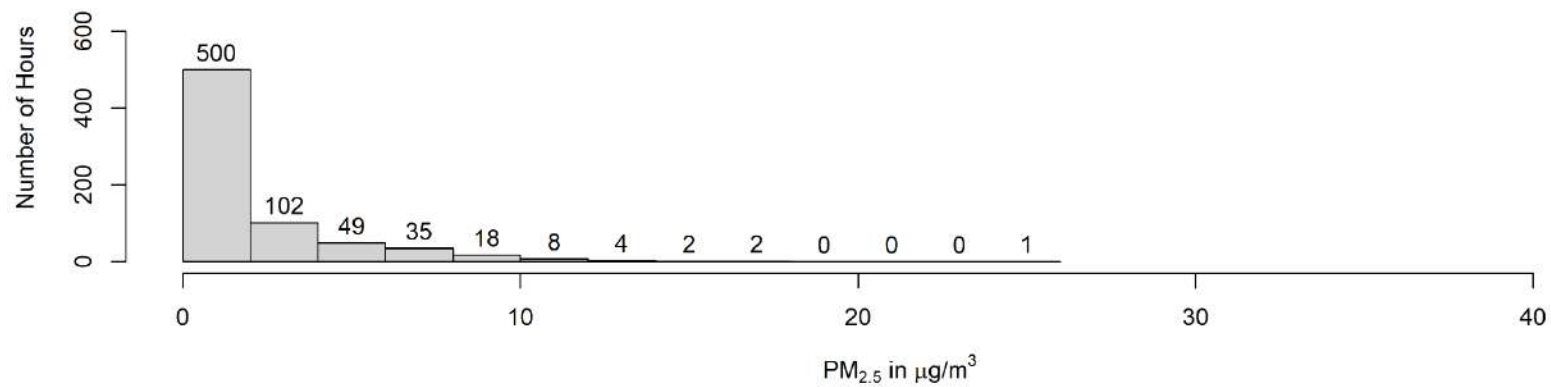
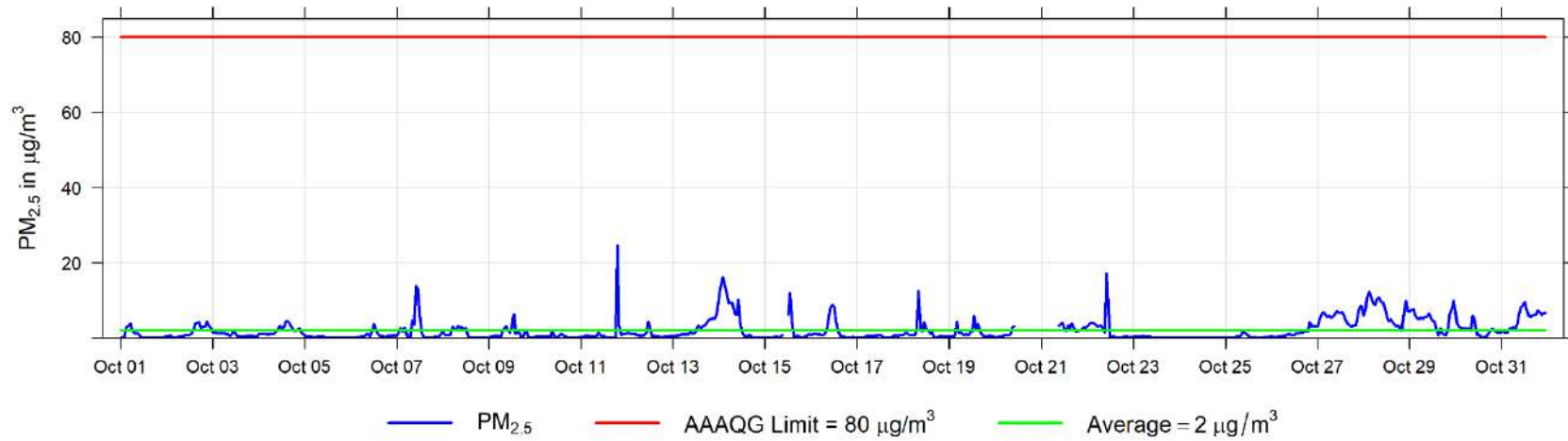
October 2024 Hourly Concentration Readings of TRS (in ppb) at Dunes



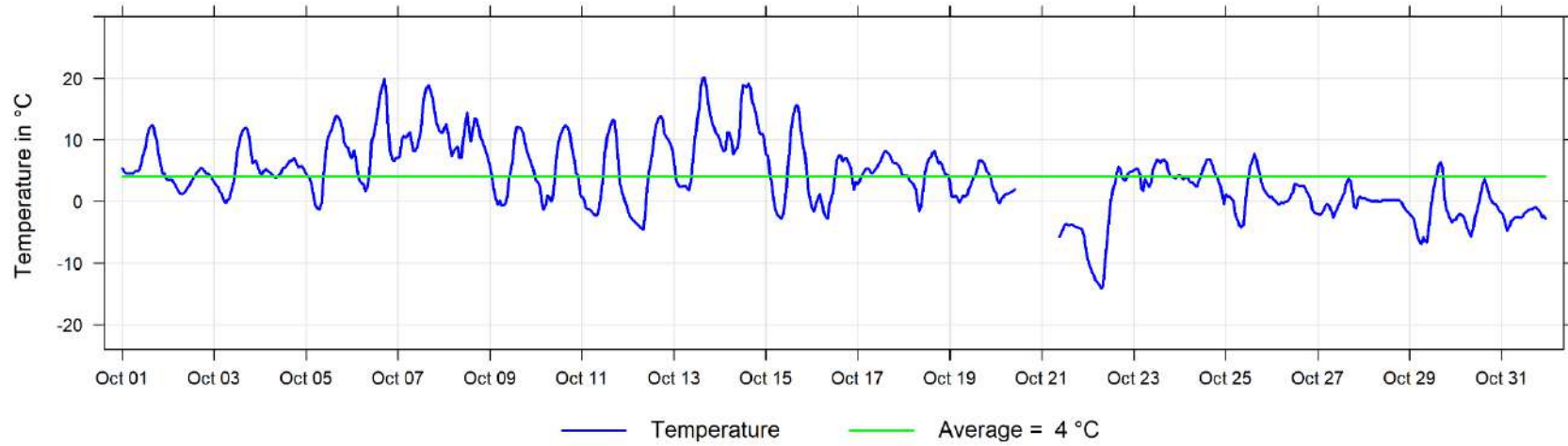
October 2024 30 min Concentration Readings of TRS (in ppb) at Dunes



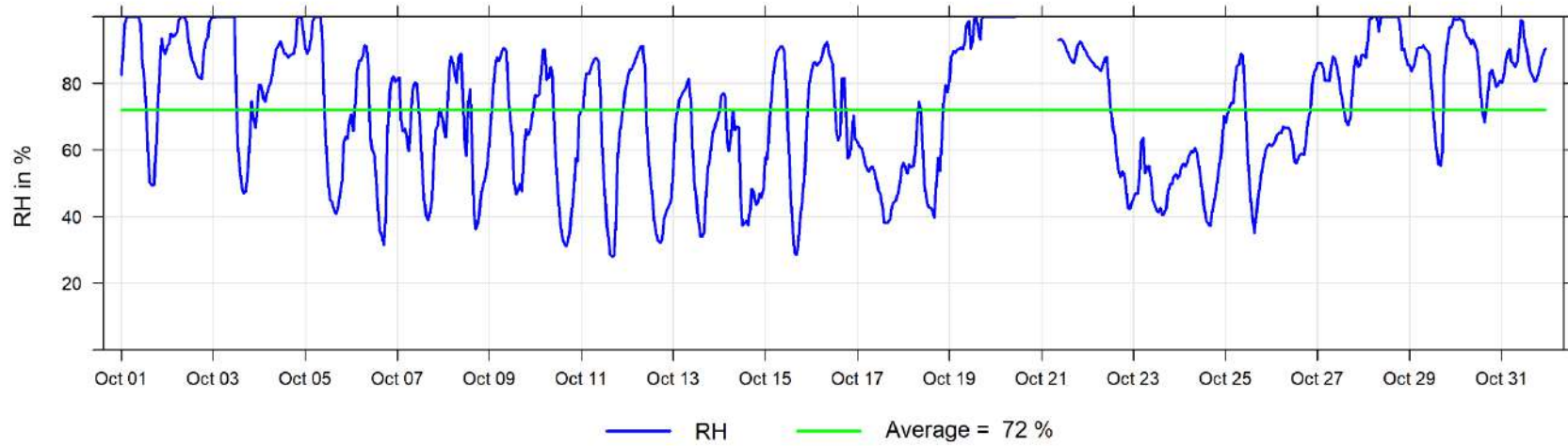
October 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Dunes



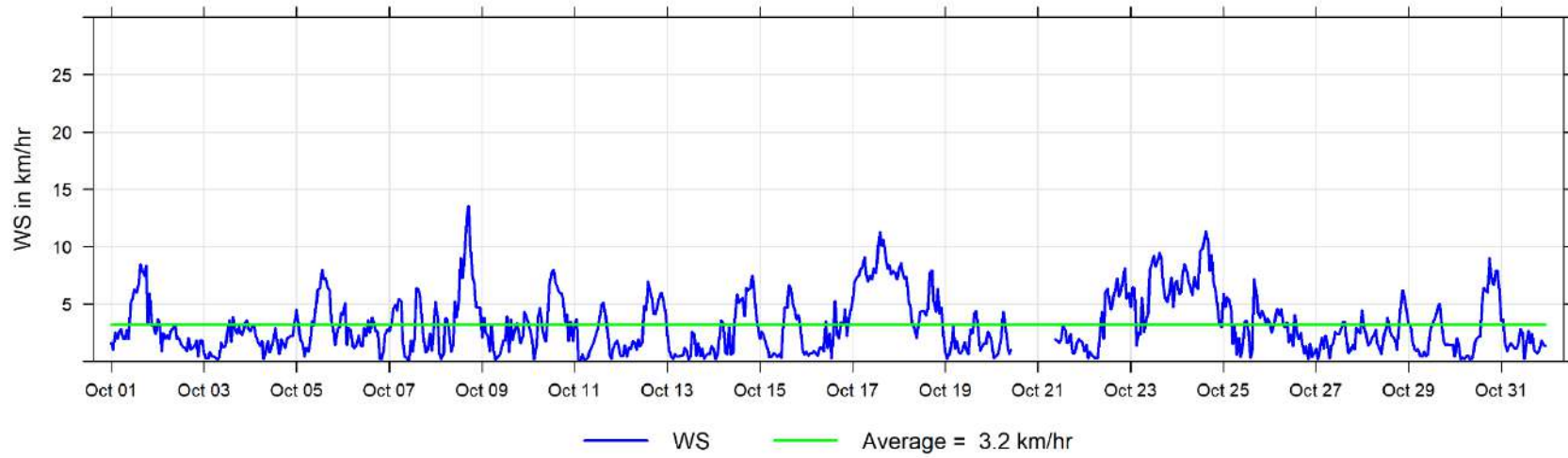
October 2024 Hourly Temperature Readings (in °C) at Dunes



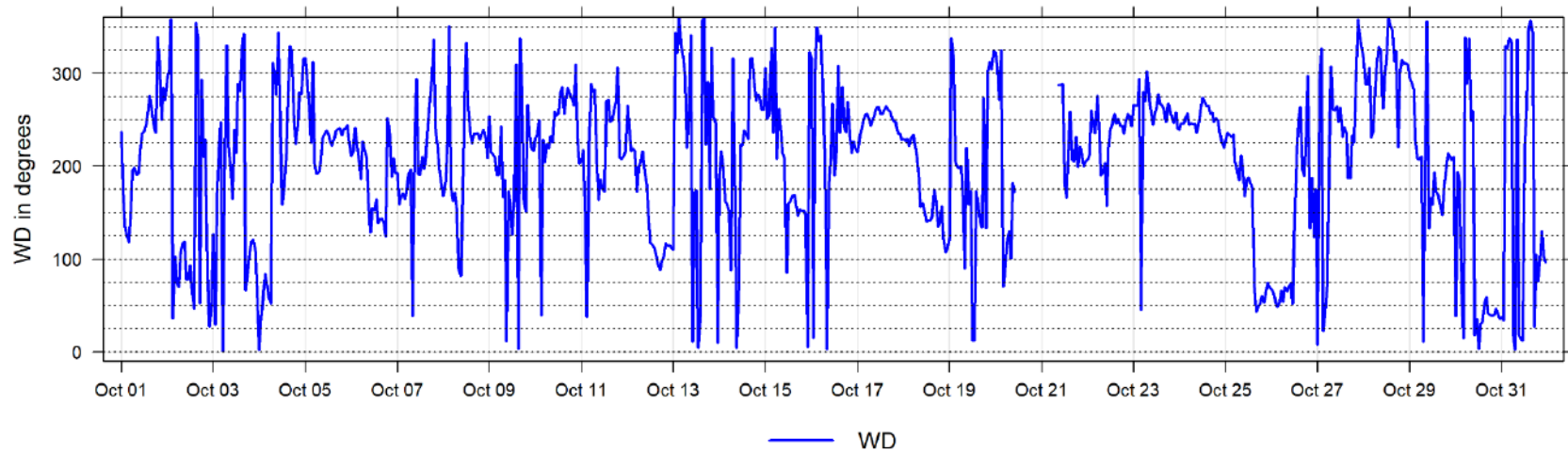
October 2024 Hourly Readings of Relative Humidity (in %) at Dunes



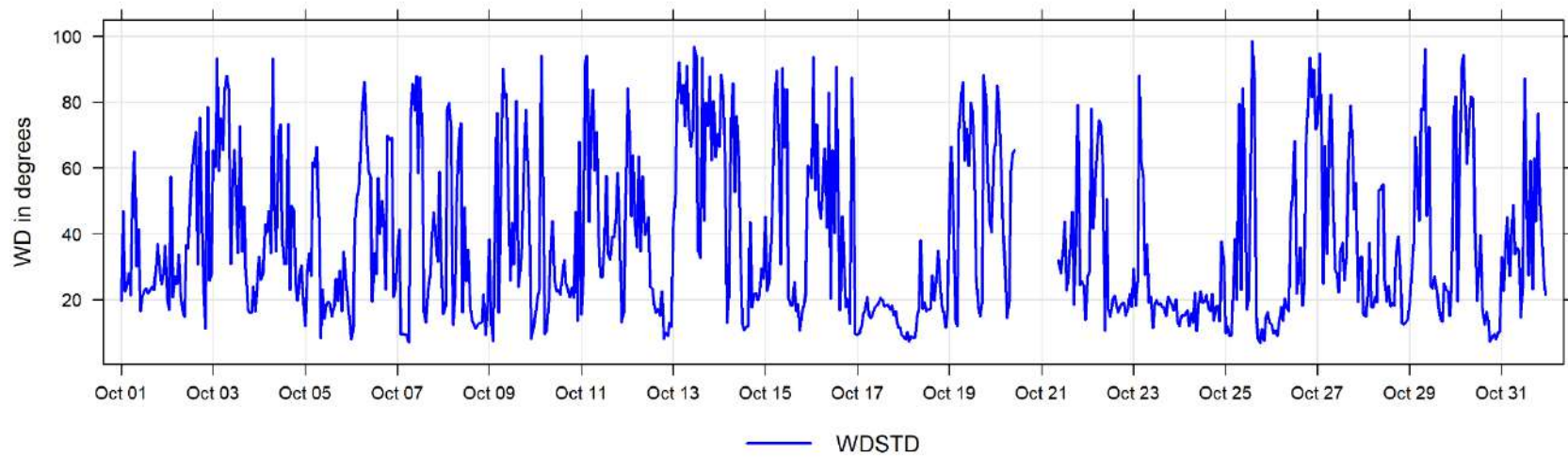
October 2024 Hourly Readings of Wind Speed (in km/hr) at Dunes

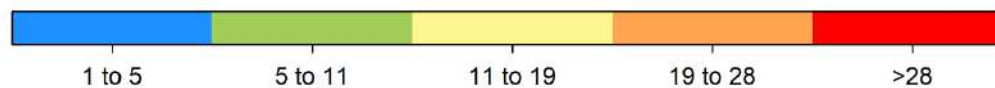
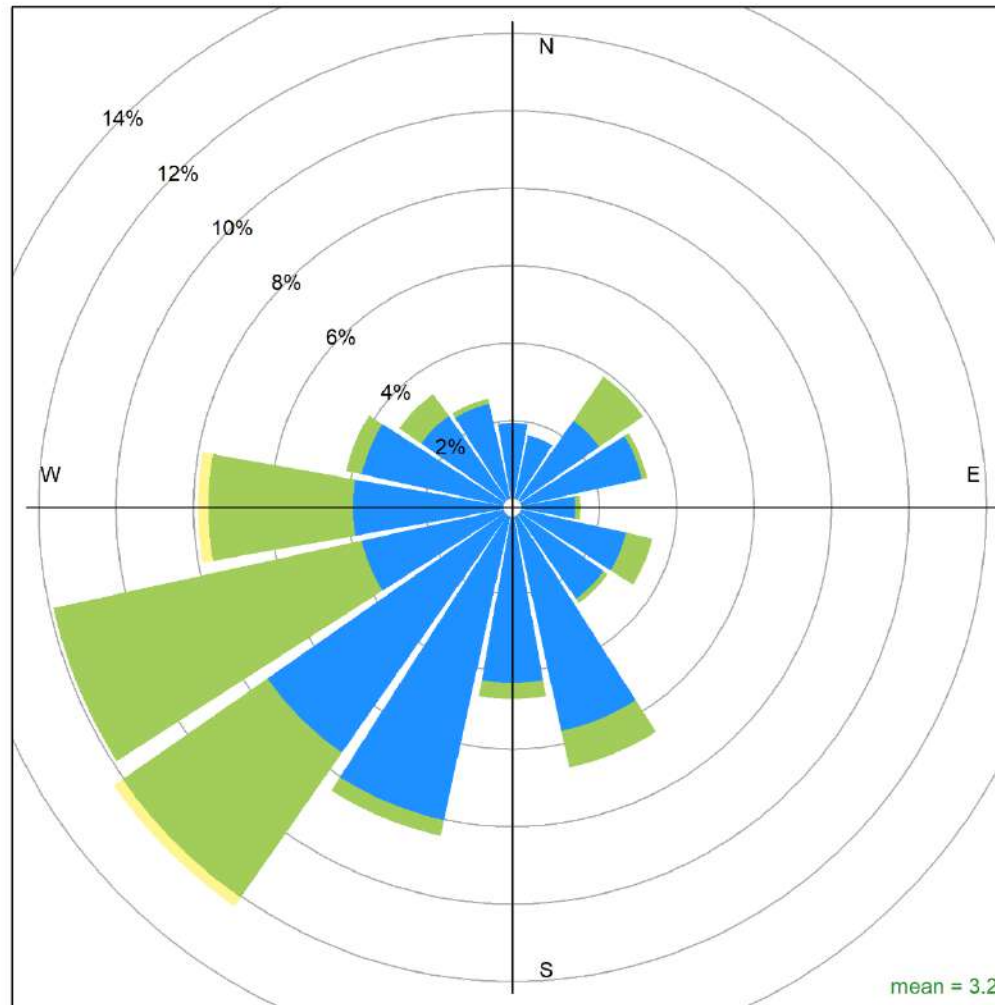


October 2024 Hourly Readings of Wind Direction (in degrees) at Dunes



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





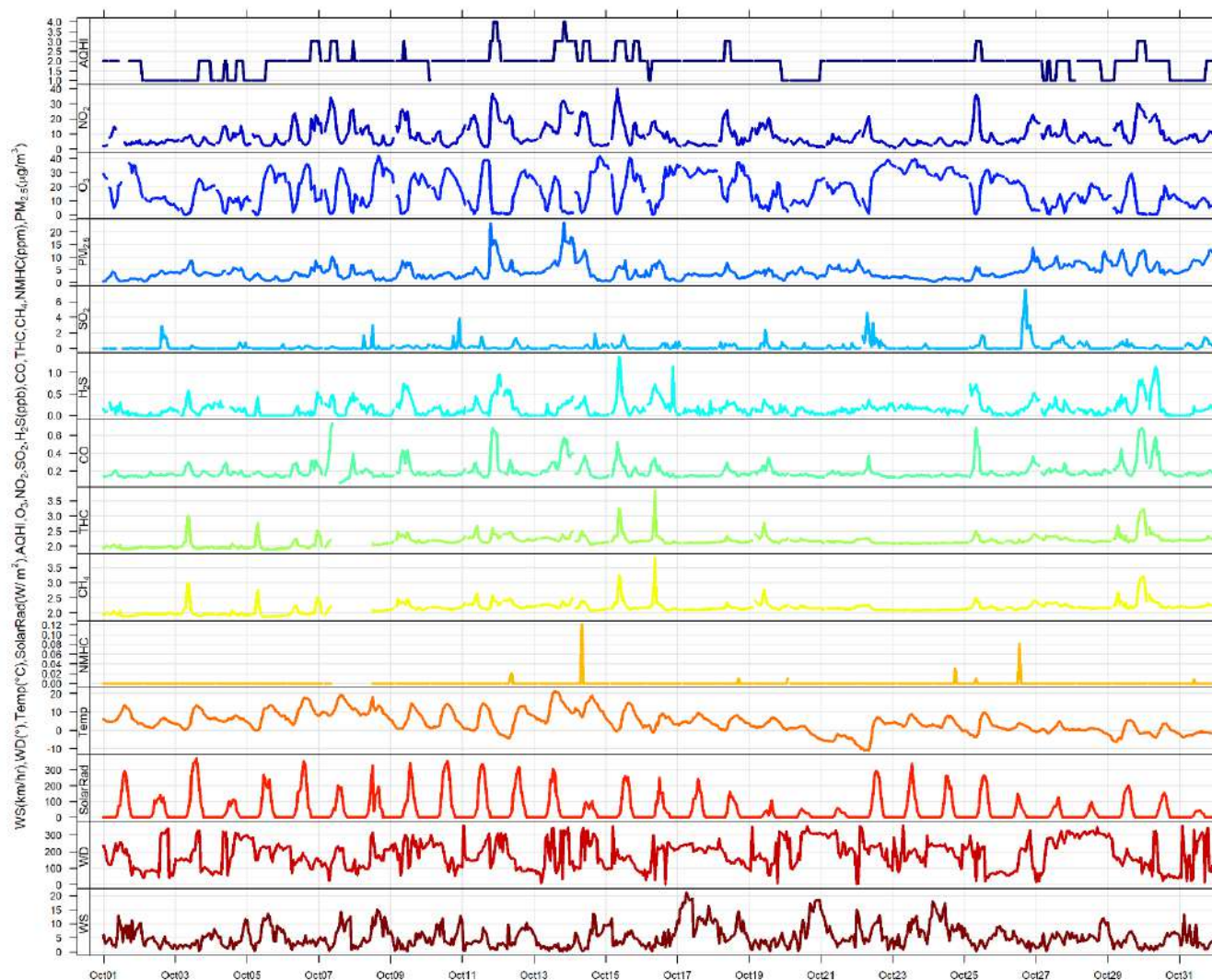
Dunes October 2024 Wind Rose, wind speed in km/hr

Calms (<1km/hr) = 19.5 %

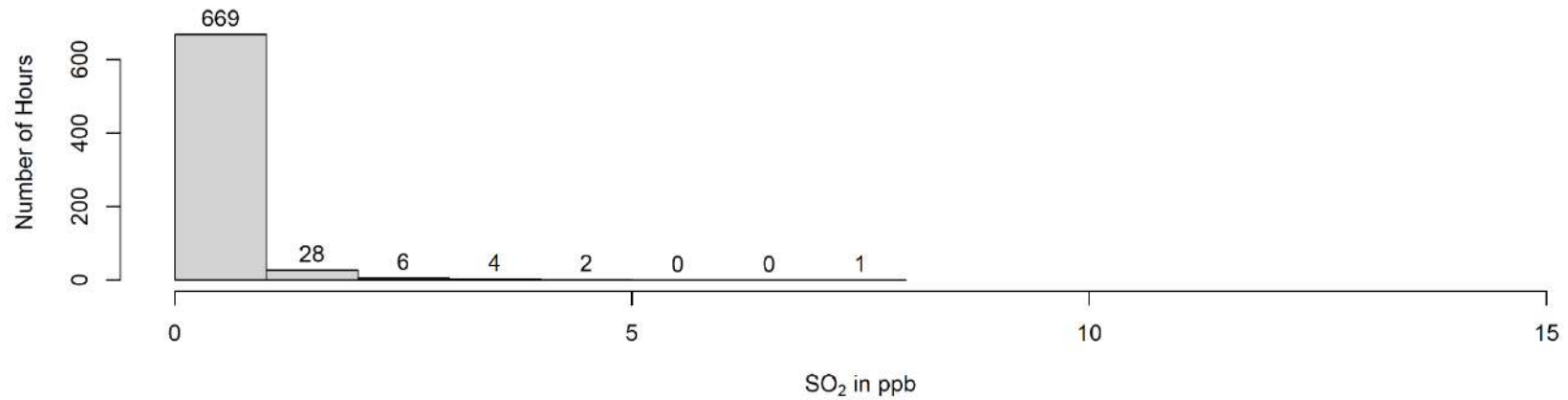
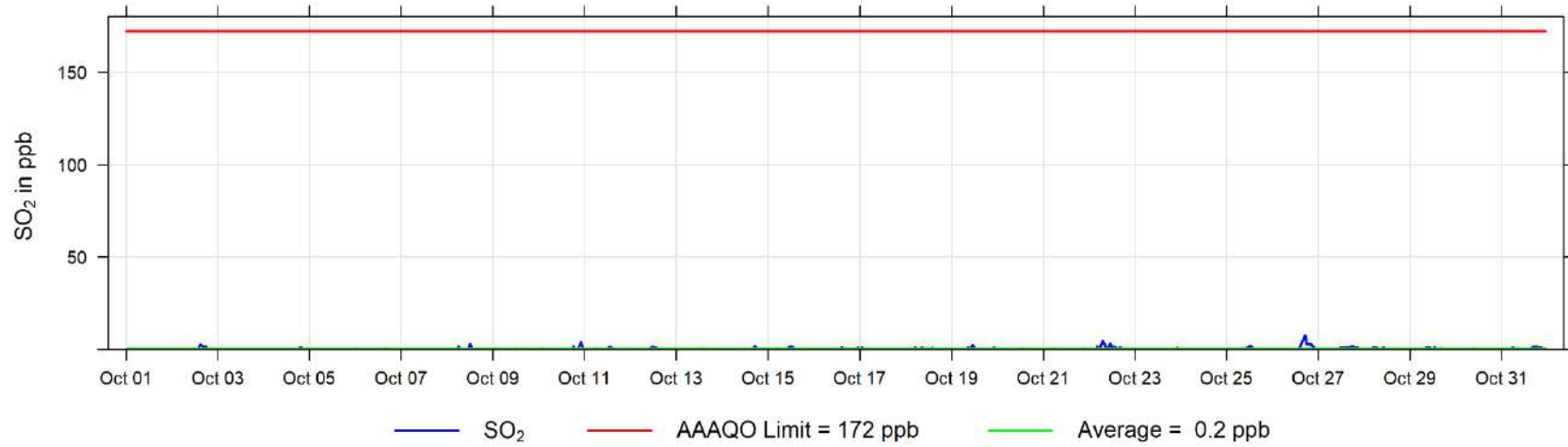
4 Grande Prairie - Henry Pirker Charts

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

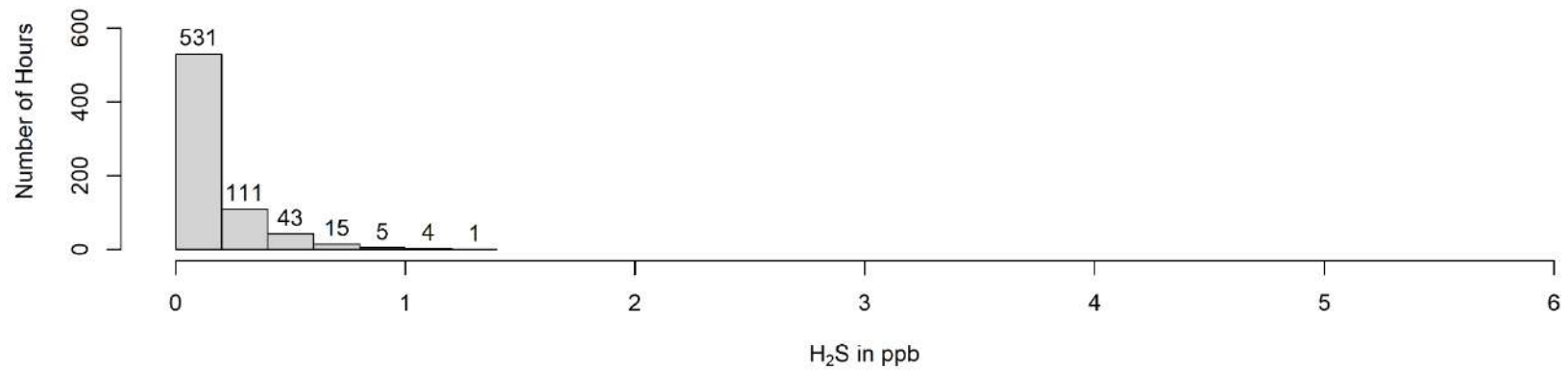
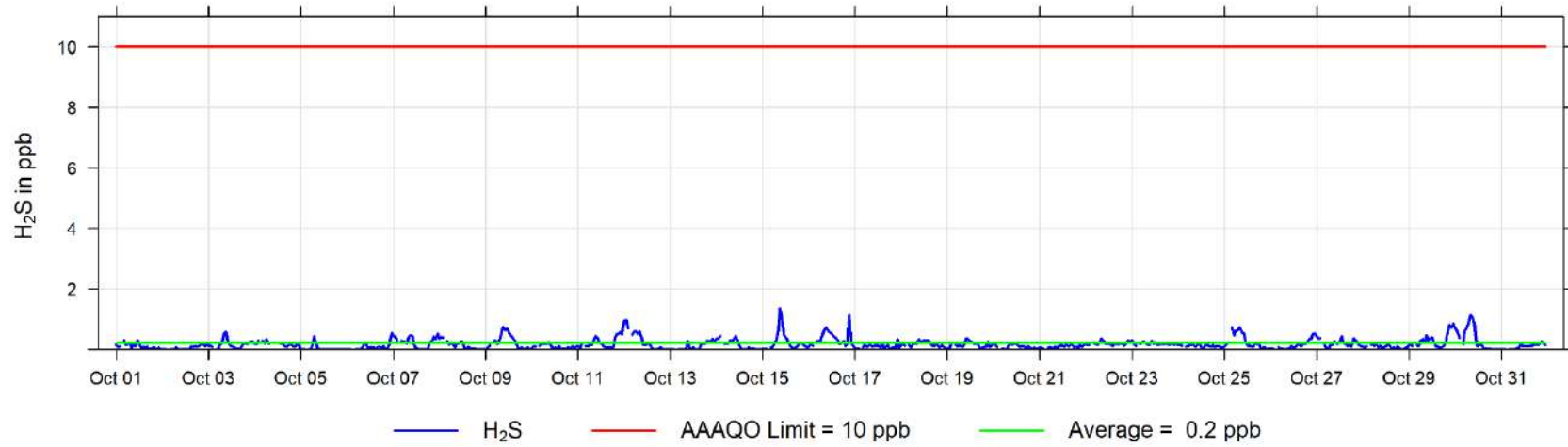
October 2024 Concentration Readings at Henry Pirker Station



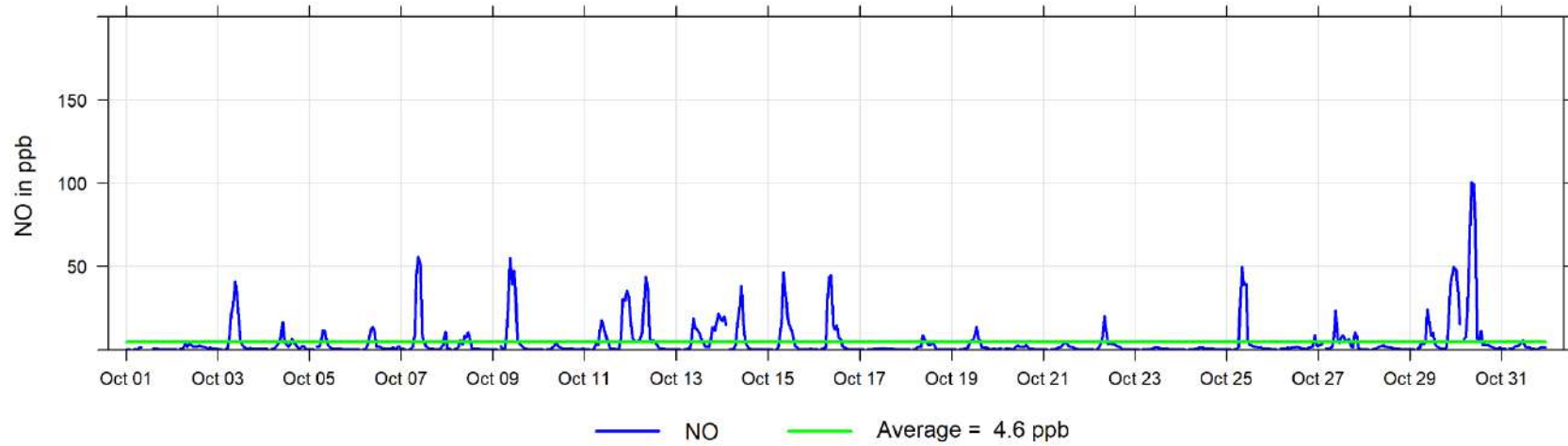
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Henry Pirker



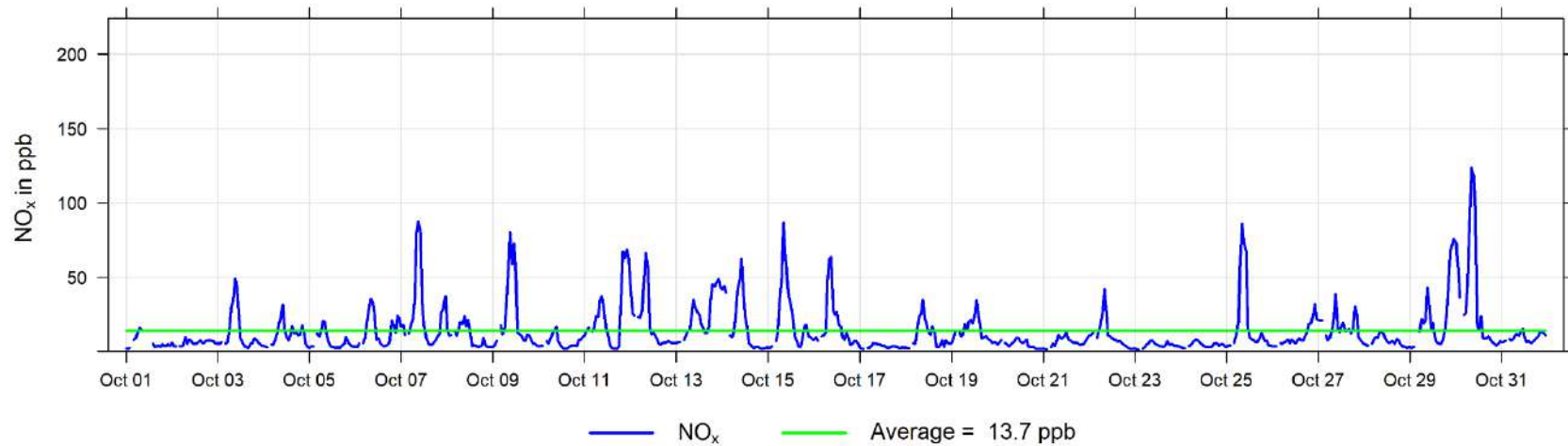
October 2024 Hourly Concentration Readings of H₂S (in ppb) at Henry Pirker



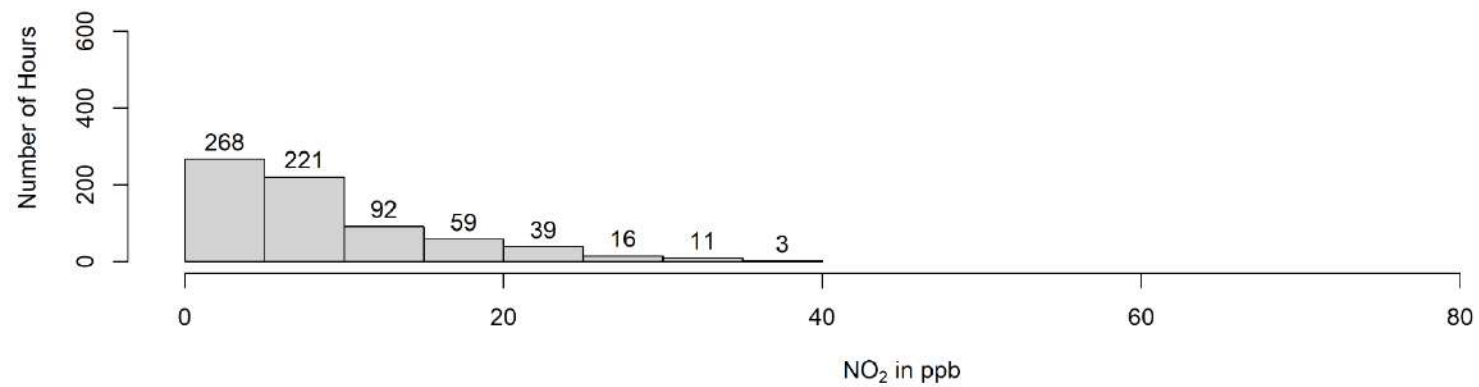
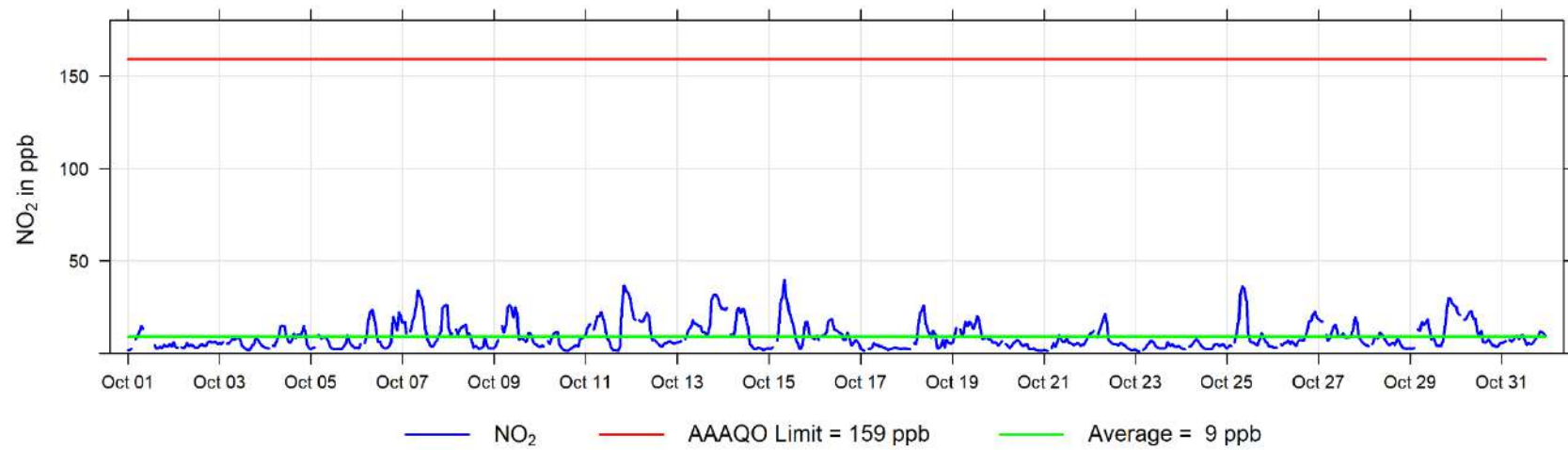
October 2024 Hourly Concentration Readings of NO (in ppb) at Henry Pirker



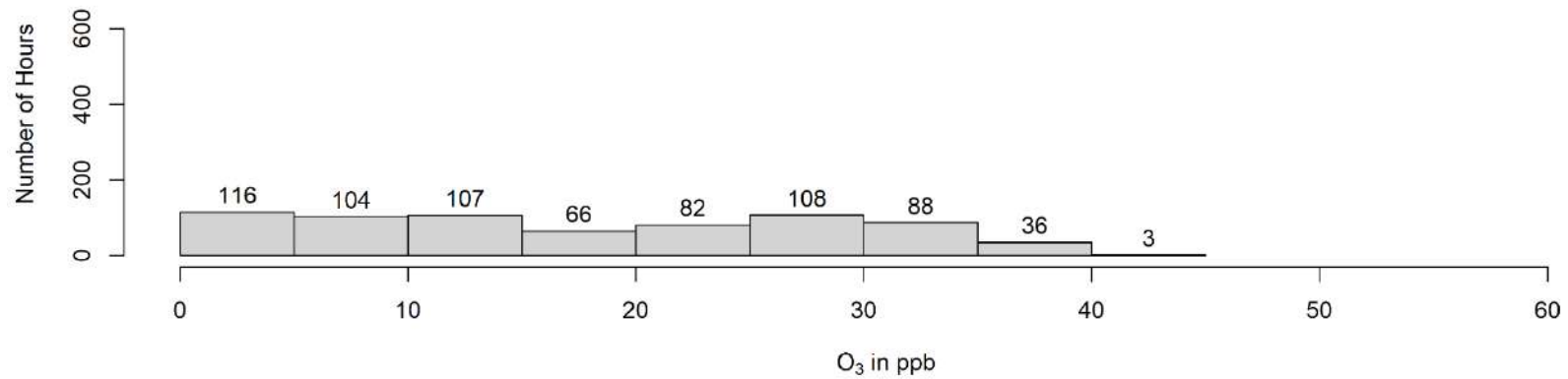
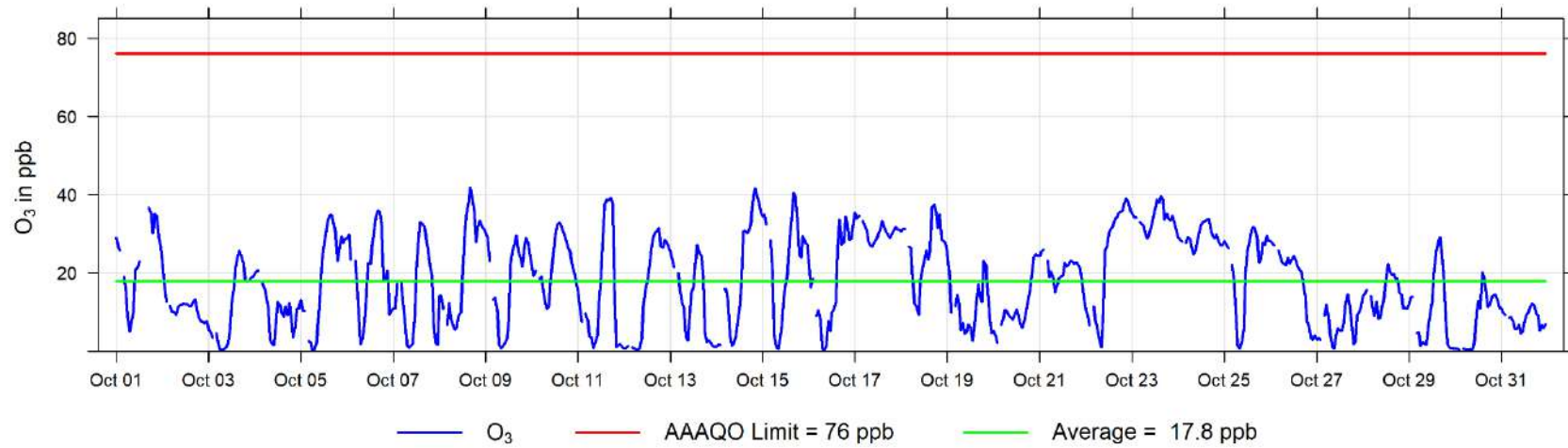
October 2024 Hourly Concentration Readings of NO_x (in ppb) at Henry Pirker



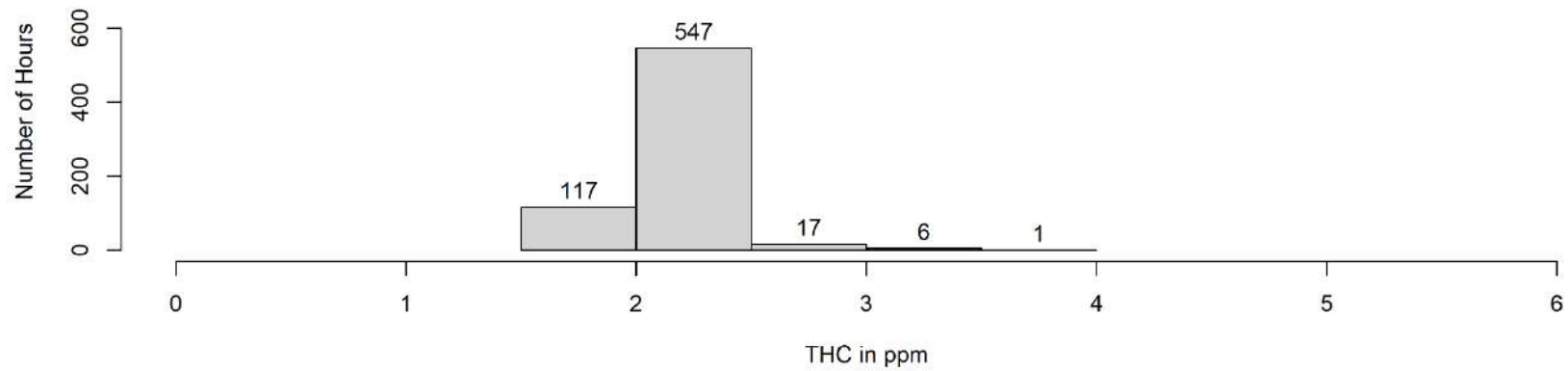
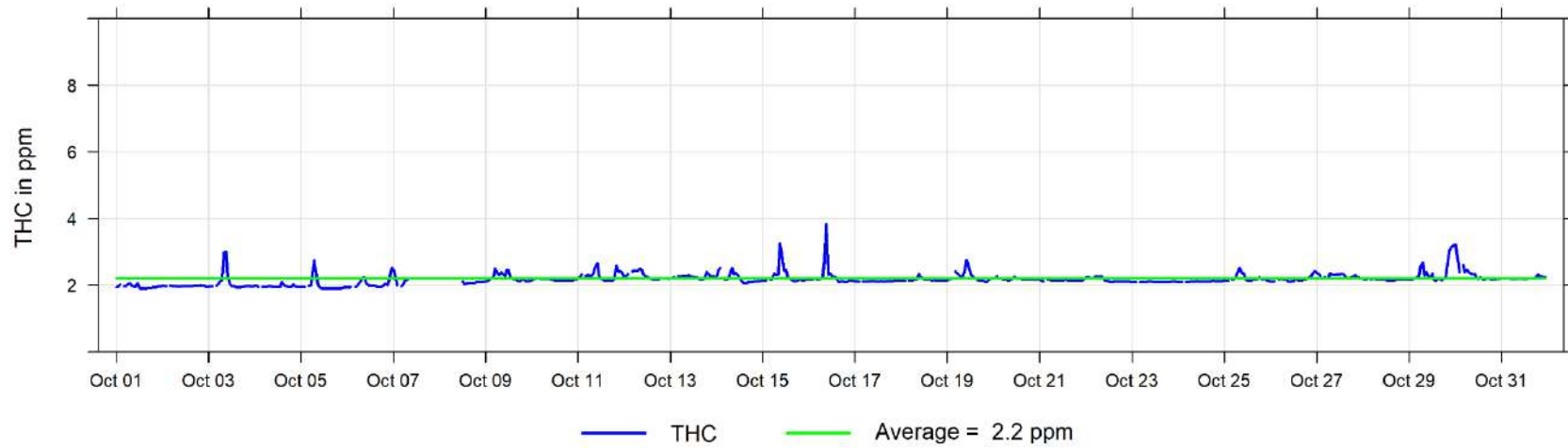
October 2024 Hourly Concentration Readings of NO₂ (in ppb) at Henry Pirker



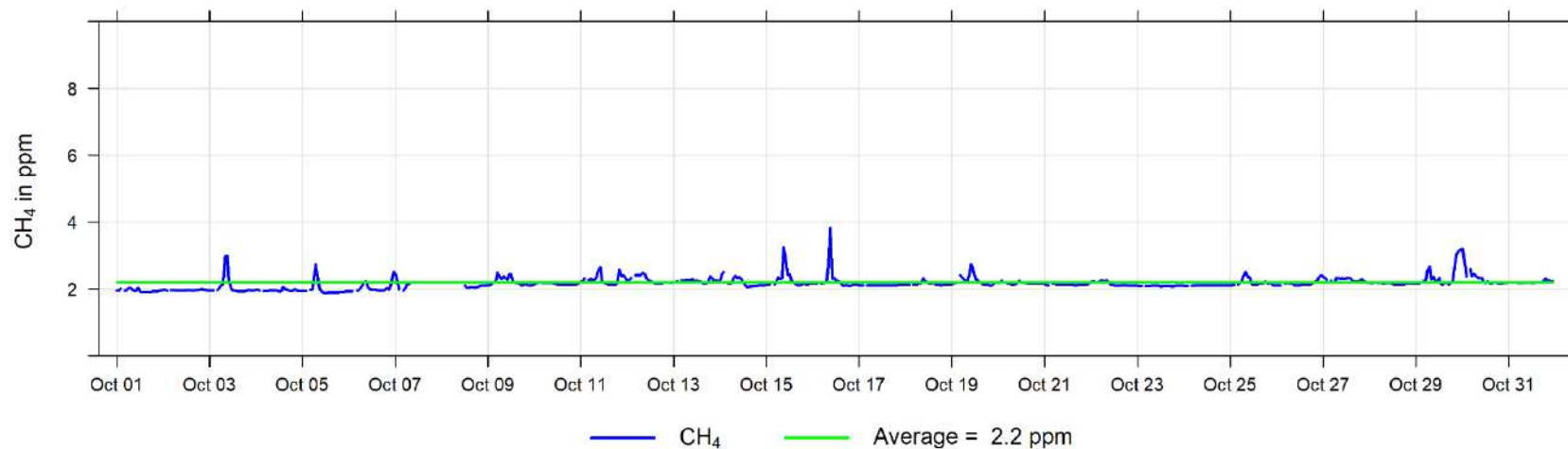
October 2024 Hourly Concentration Readings of O₃ (in ppb) at Henry Pirker



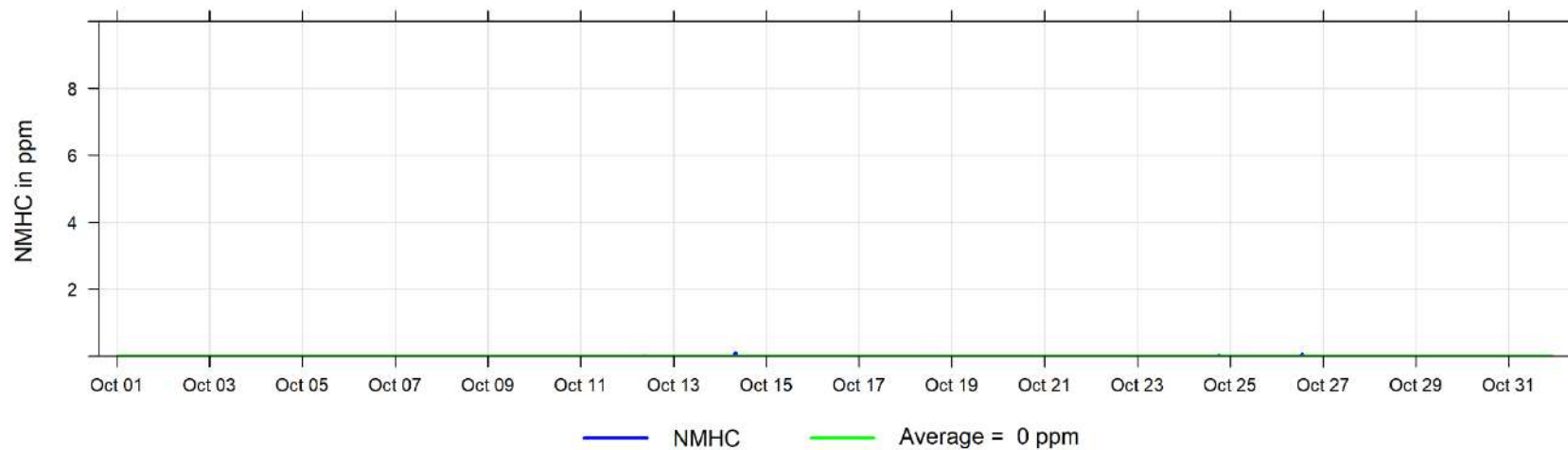
October 2024 Hourly Concentration Readings of THC (in ppm) at Henry Pirker



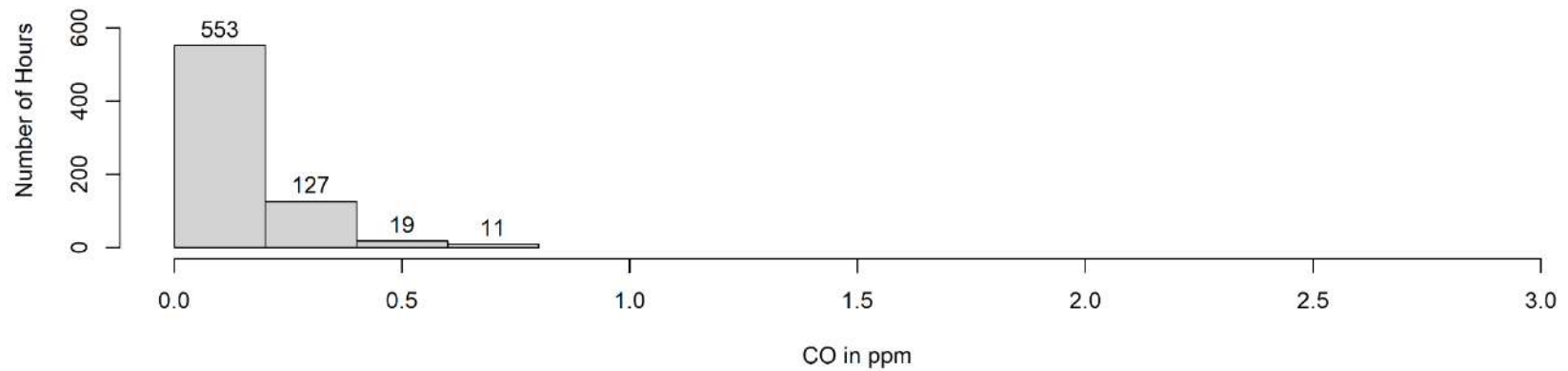
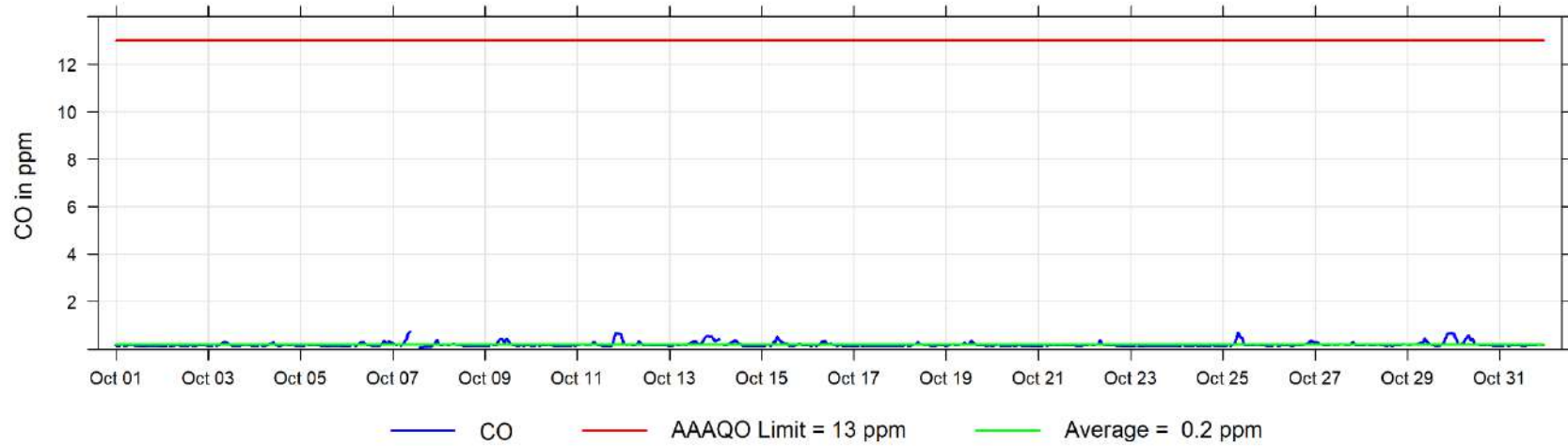
October 2024 Hourly Concentration Readings of CH₄ (in ppm) at Henry Pirker



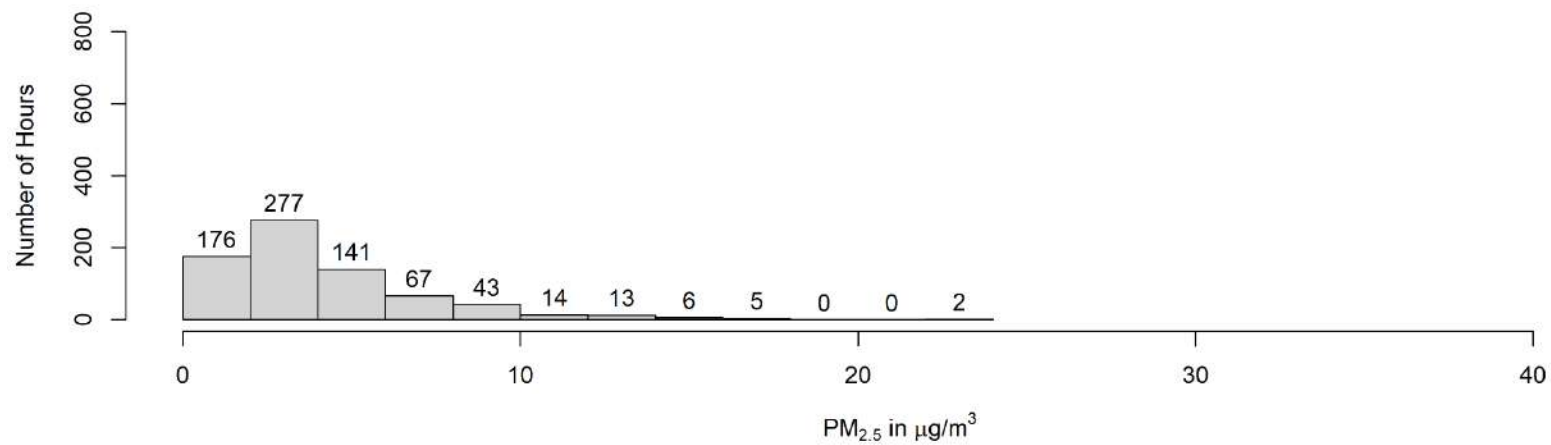
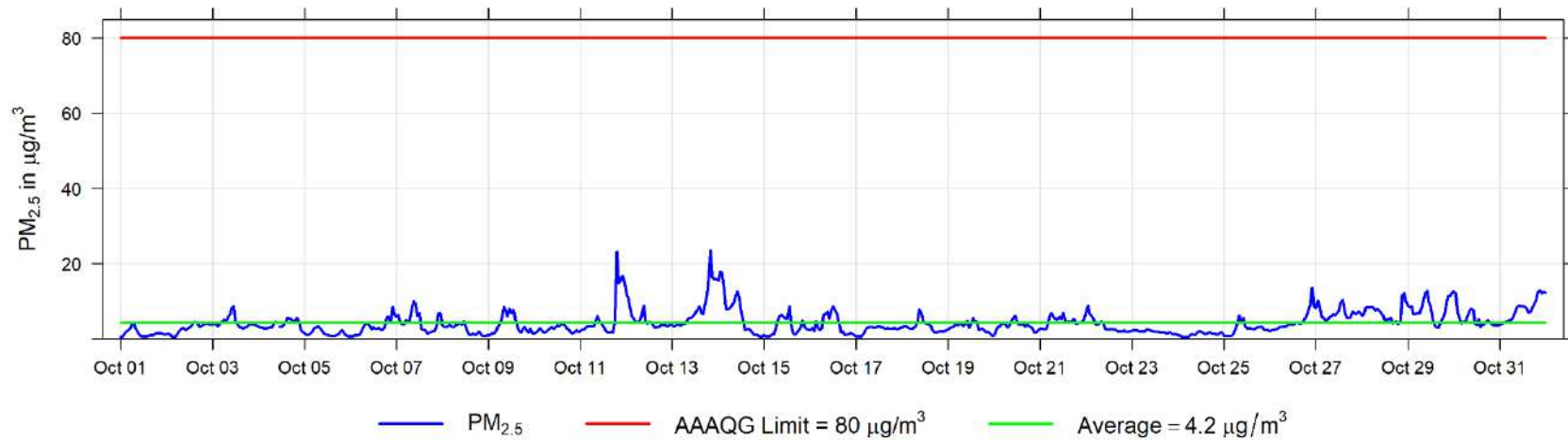
October 2024 Hourly Concentration Readings of NMHC (in ppm) at Henry Pirker



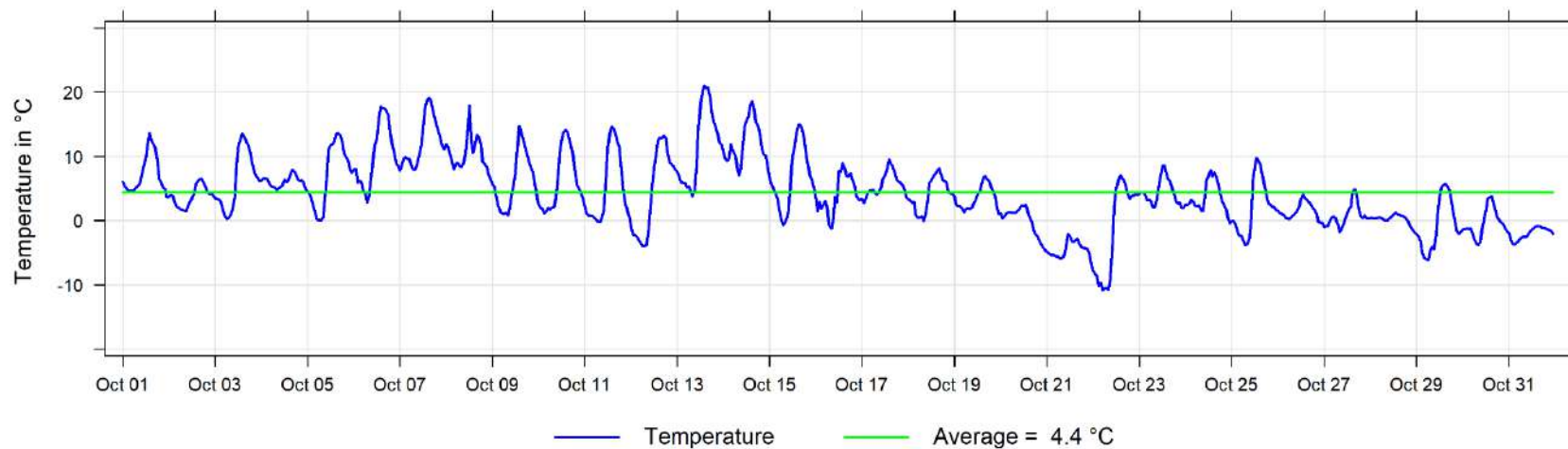
October 2024 Hourly Concentration Readings of CO (in ppm) at Henry Pirker



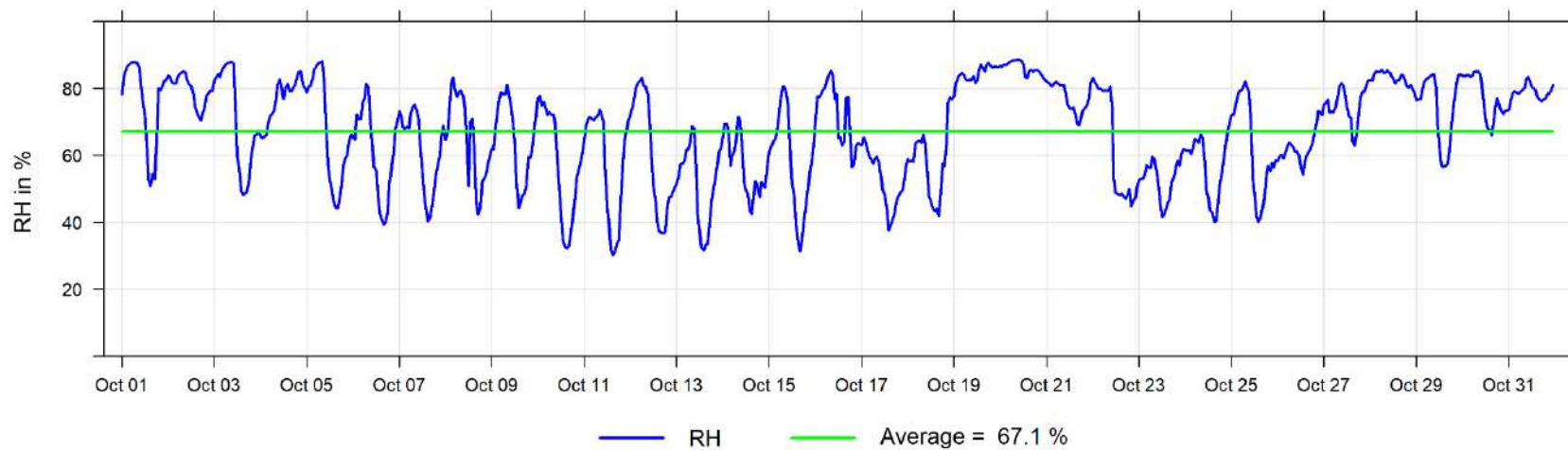
October 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Henry Pirker



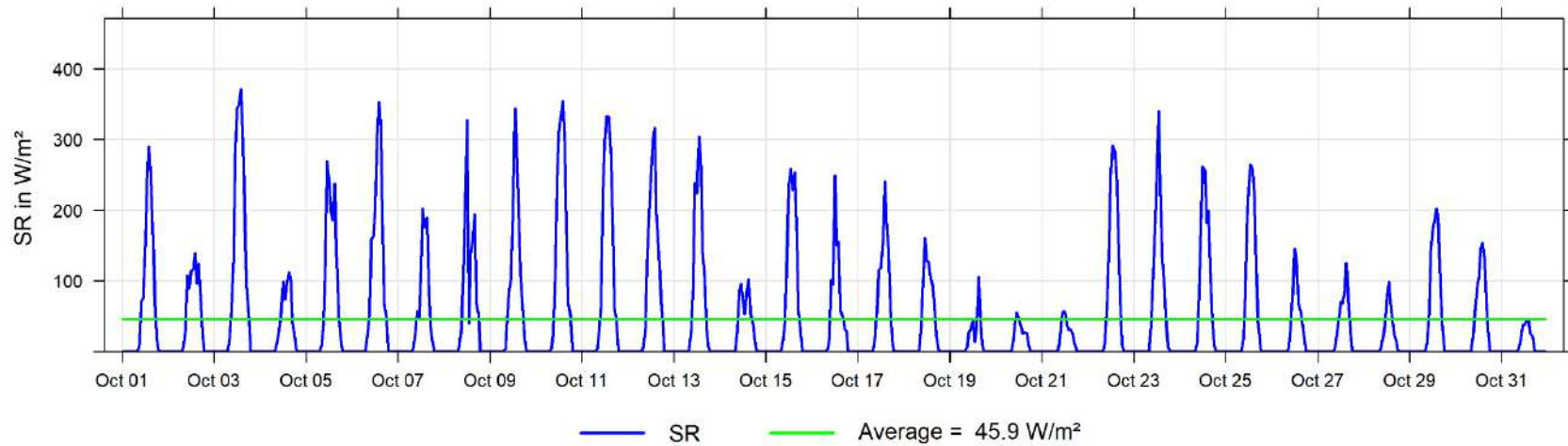
October 2024 Hourly Temperature Readings (in °C) at Henry Pirker



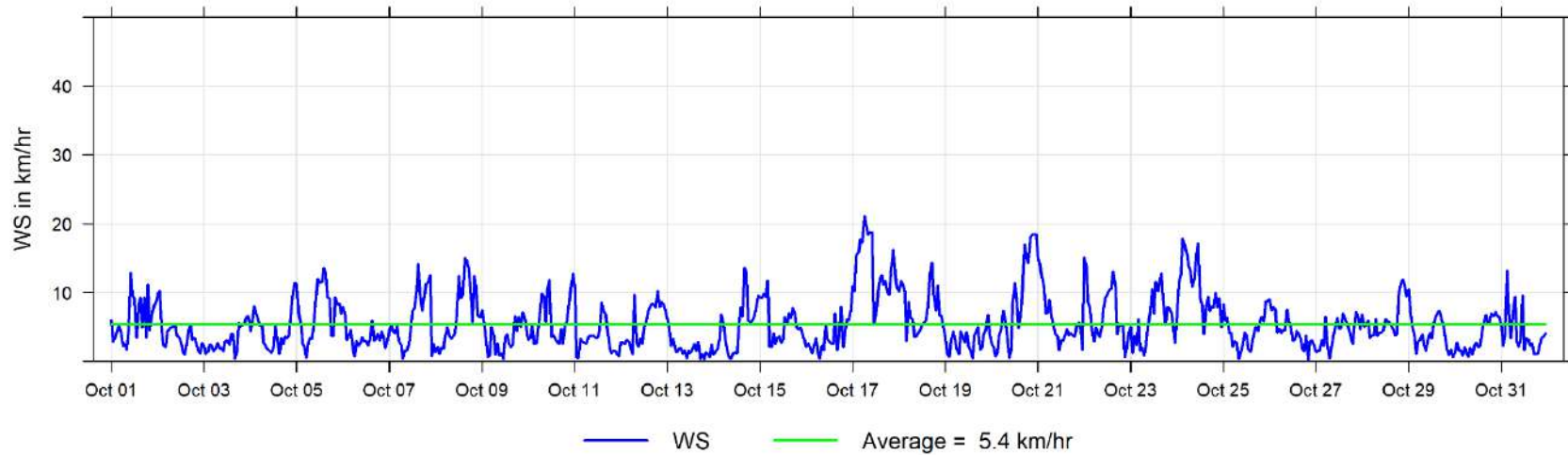
October 2024 Hourly Readings of Relative Humidity (in %) at Henry Pirker



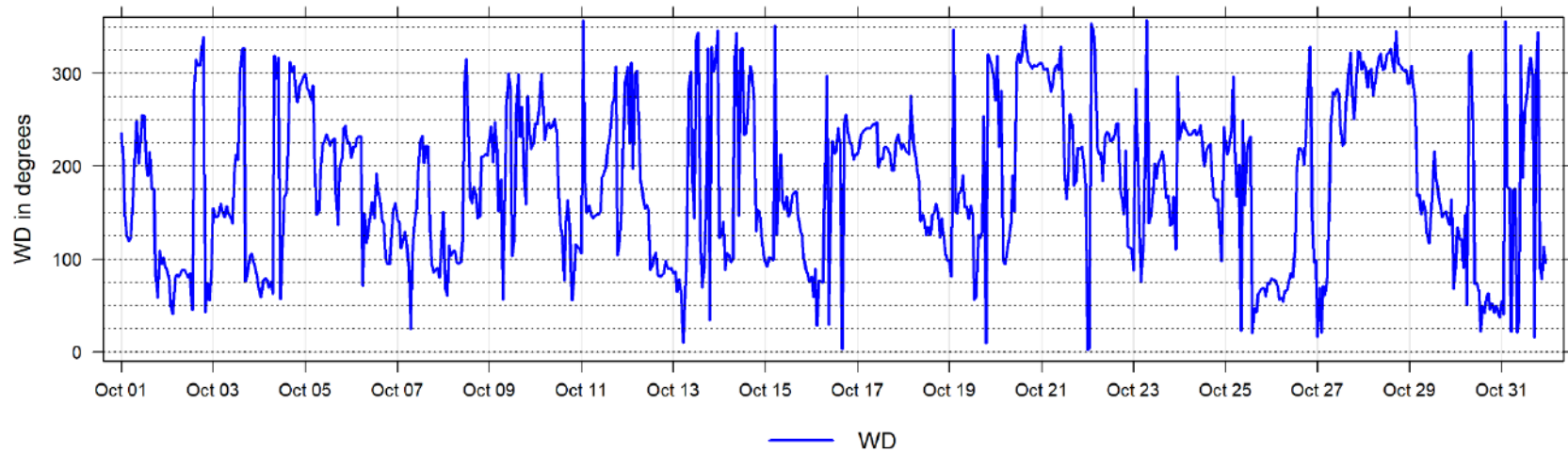
October 2024 Hourly Readings of Solar Radiation (in W/m^2) at Henry Pirker



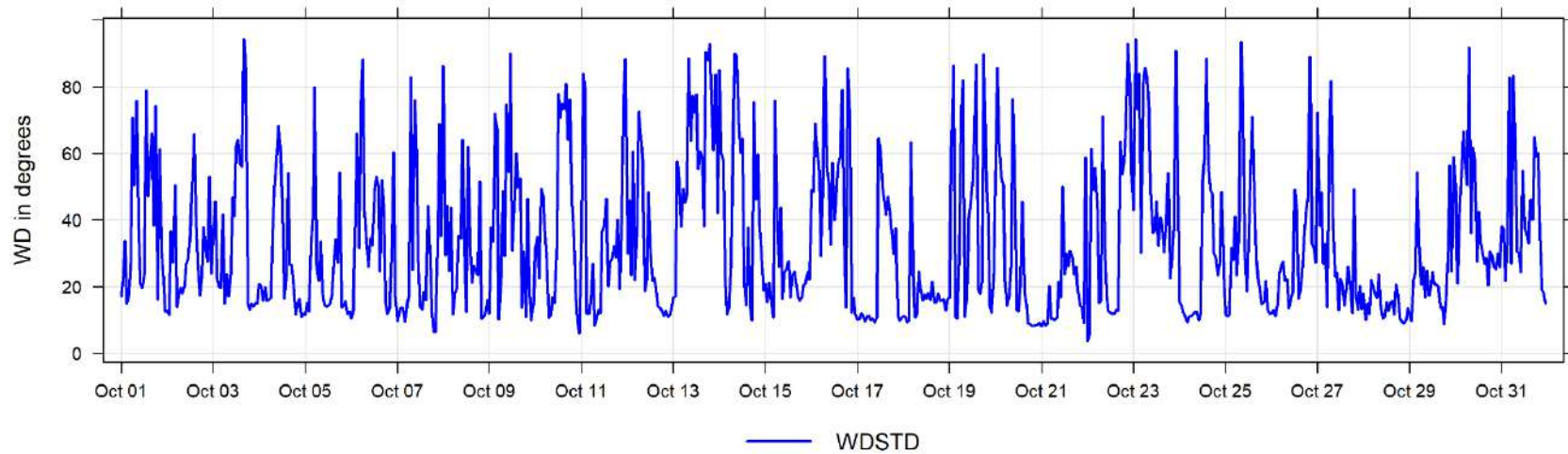
October 2024 Hourly Readings of Wind Speed (in km/hr) at Henry Pirker

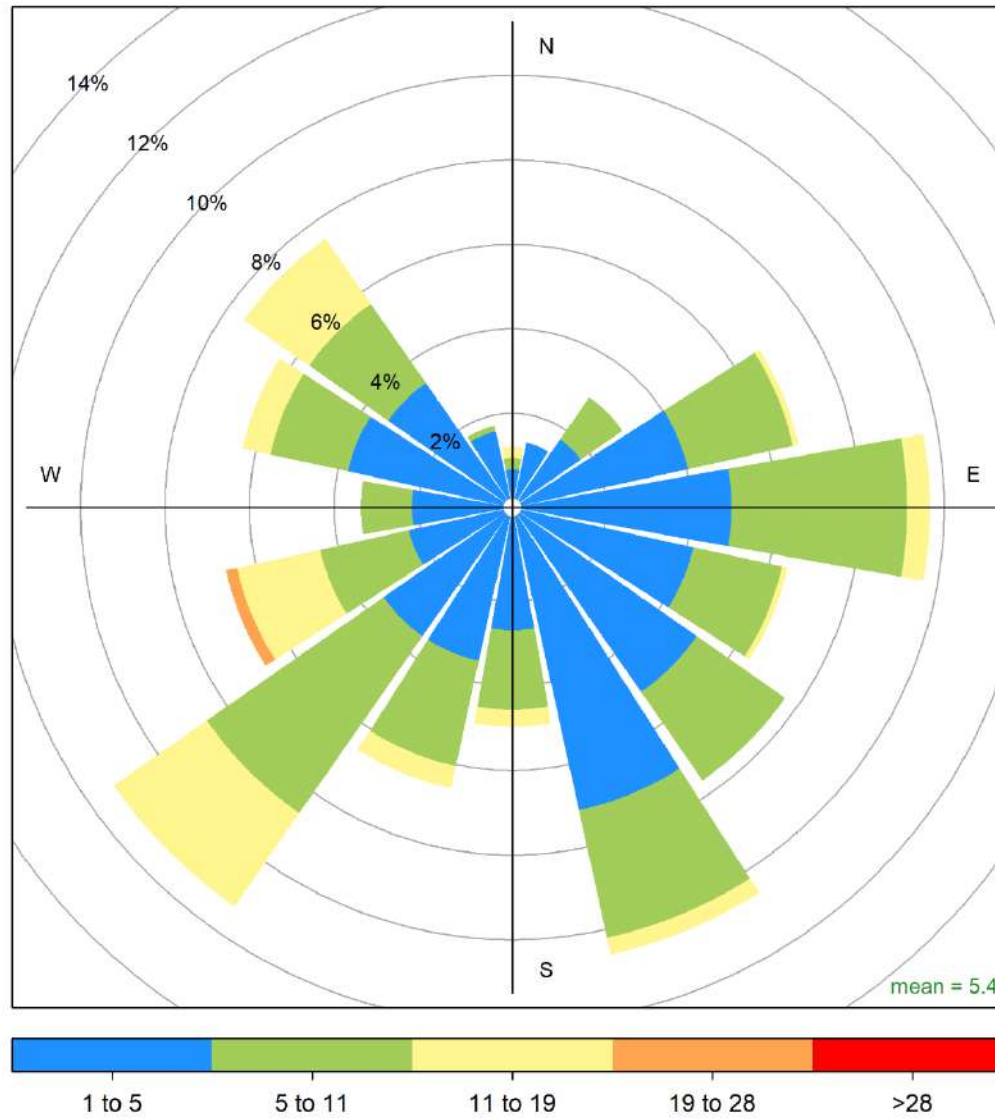


October 2024 Hourly Readings of Wind Direction (in degrees) at Henry Pirker



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



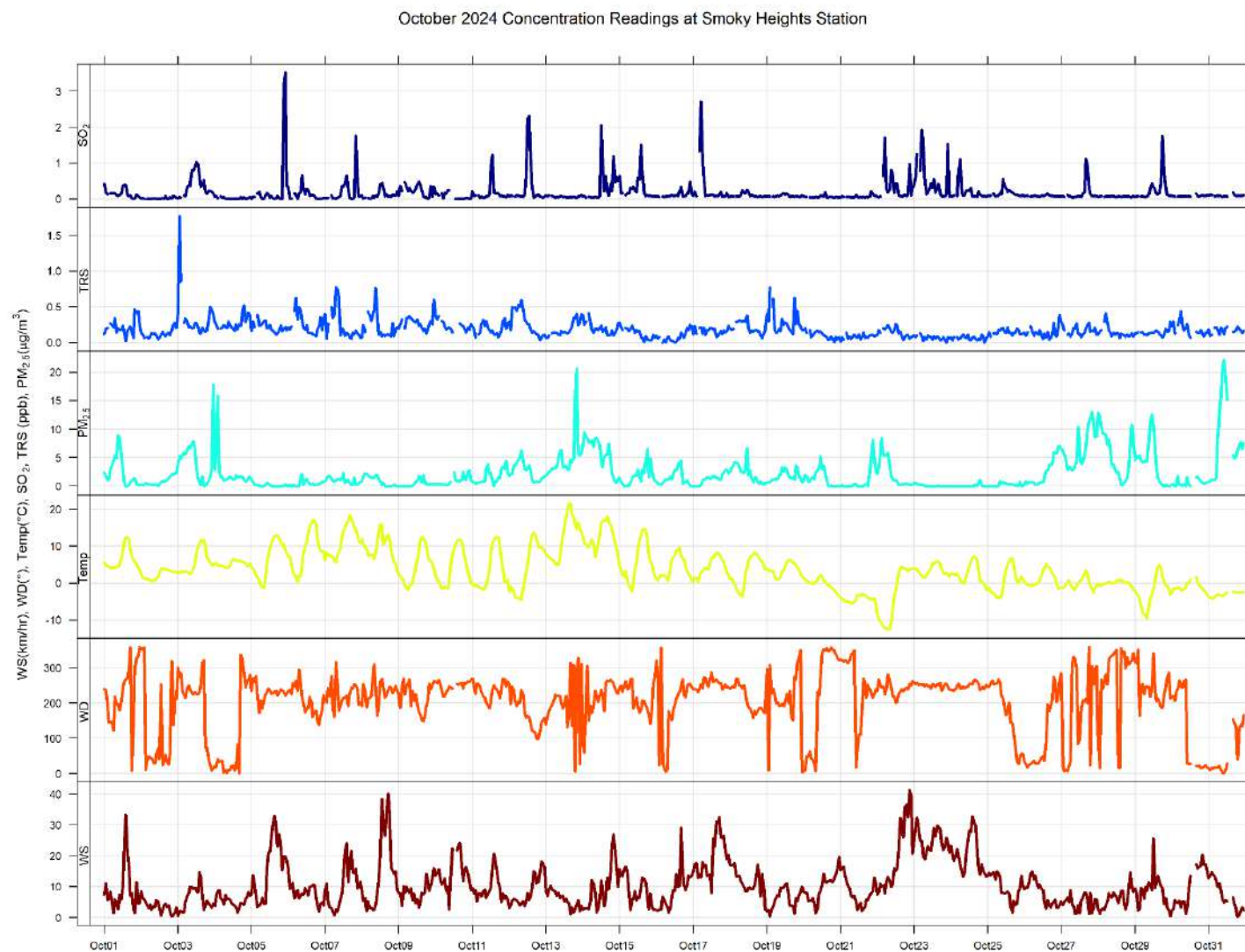


Henry Pirker October 2024 Wind Rose, wind speed in km/hr

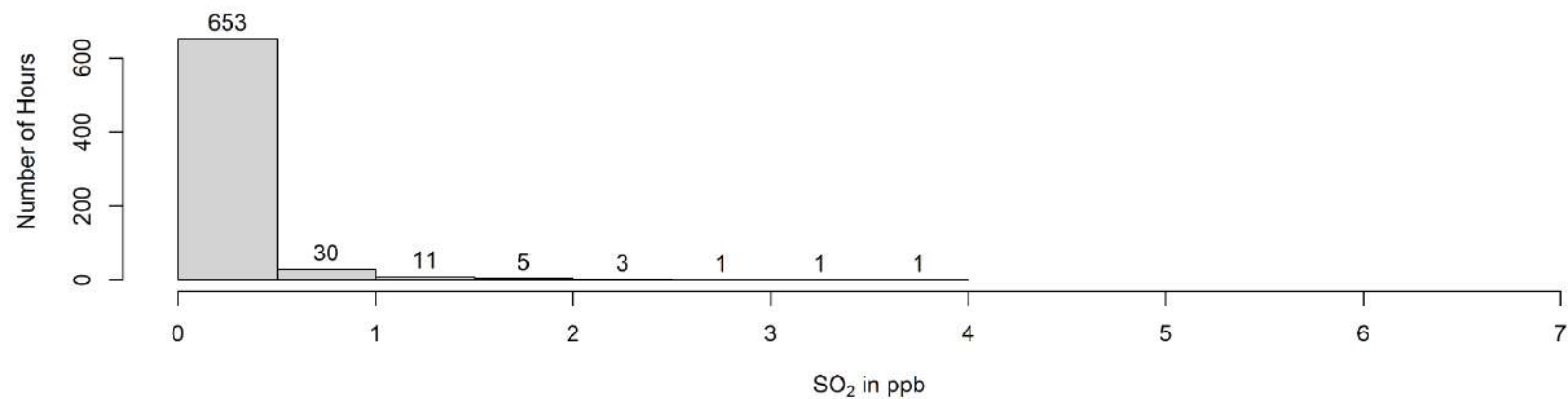
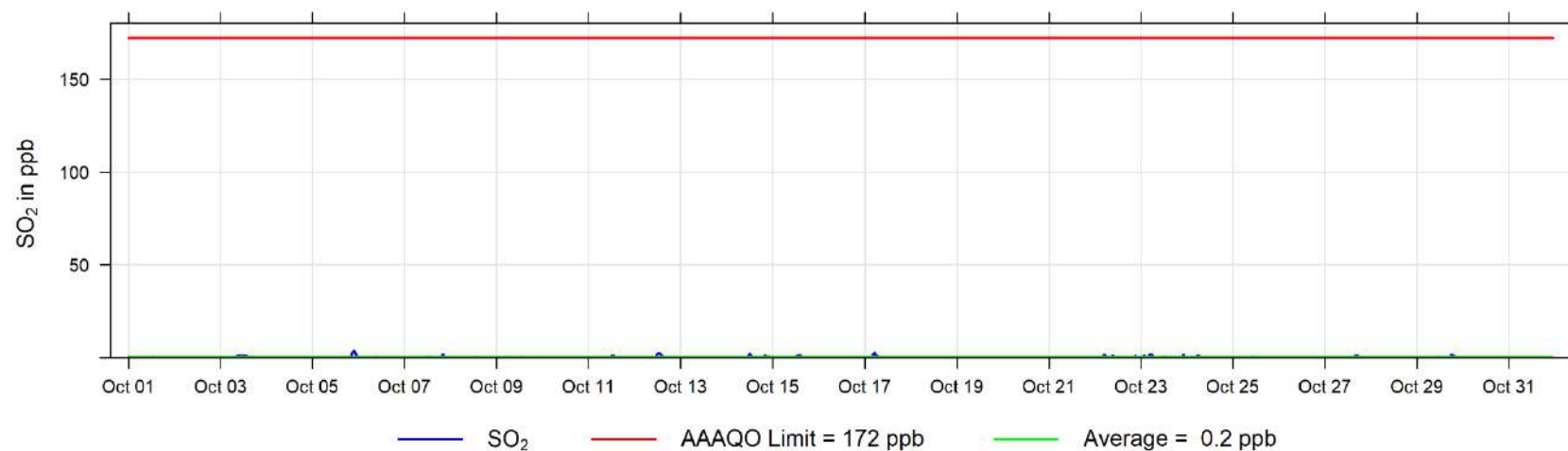
Calms (<1km/hr) = 5 %

5 Smoky Heights Charts

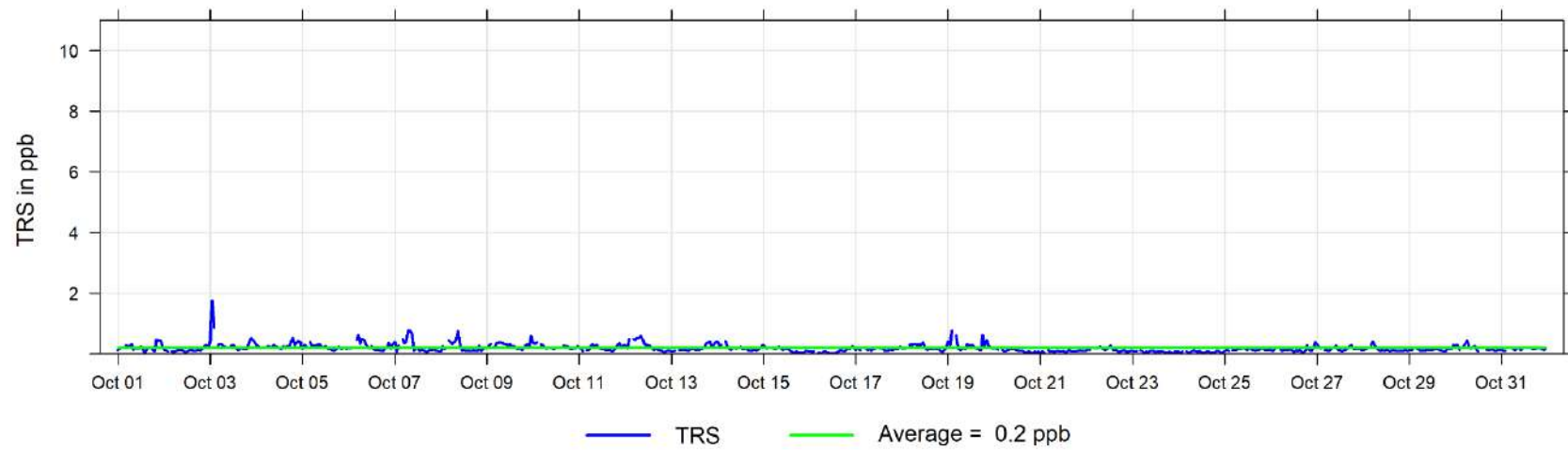
The following pages include the charts and histograms for Smoky Heights Station



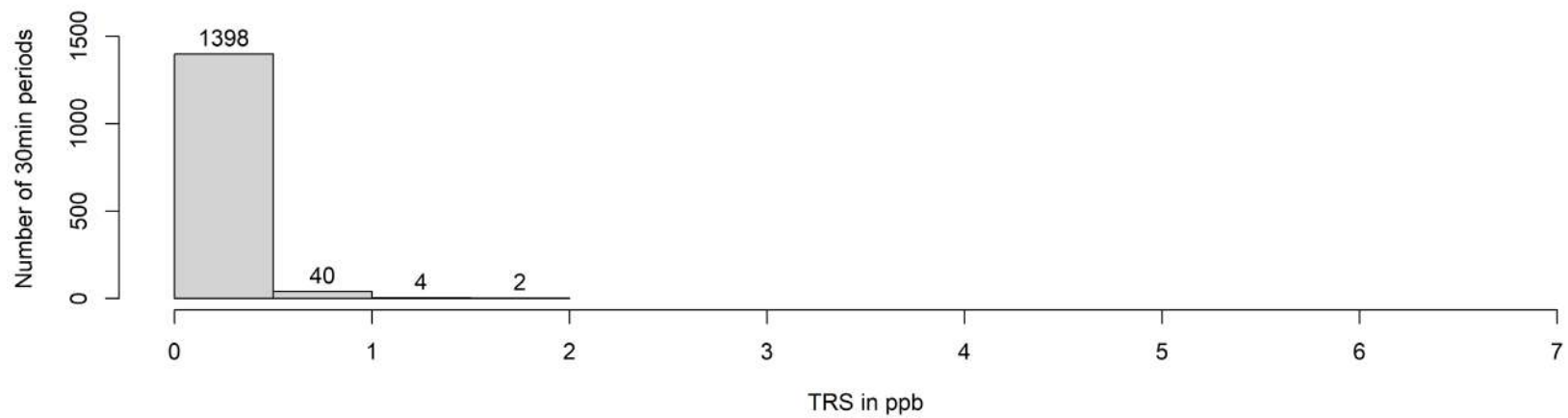
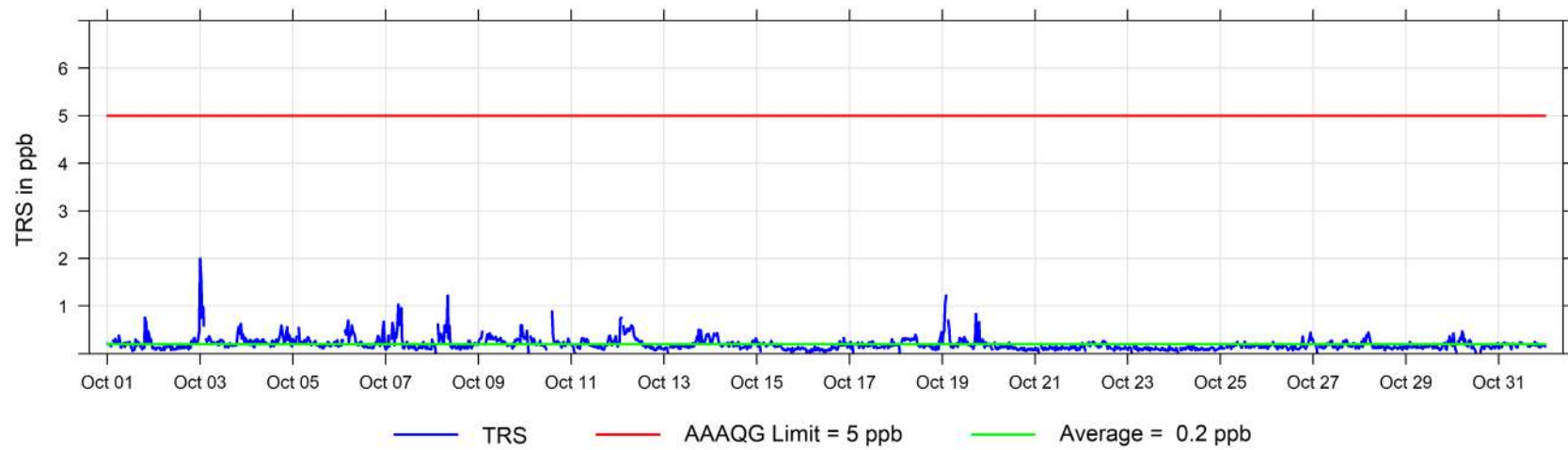
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Smoky Heights



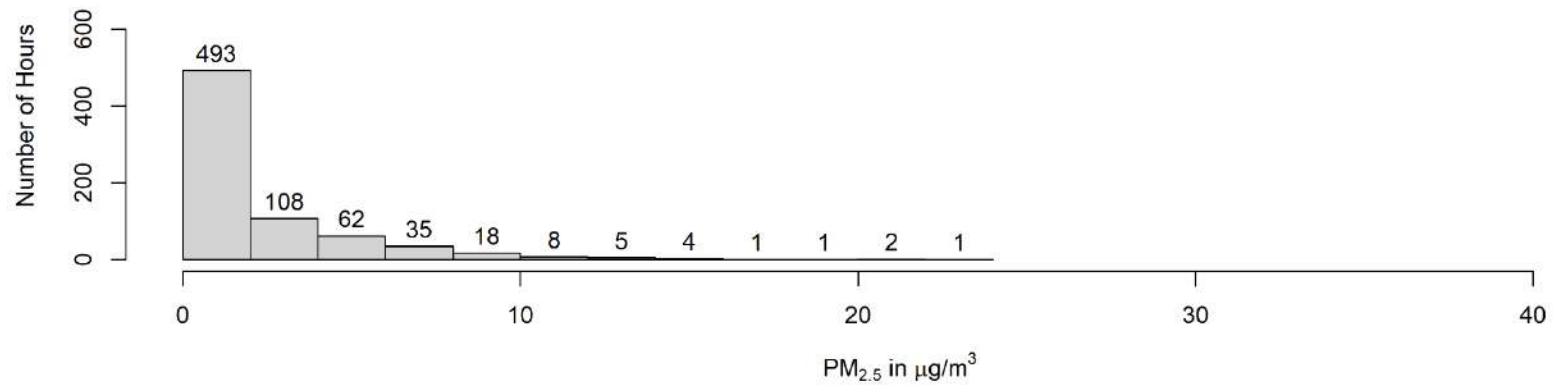
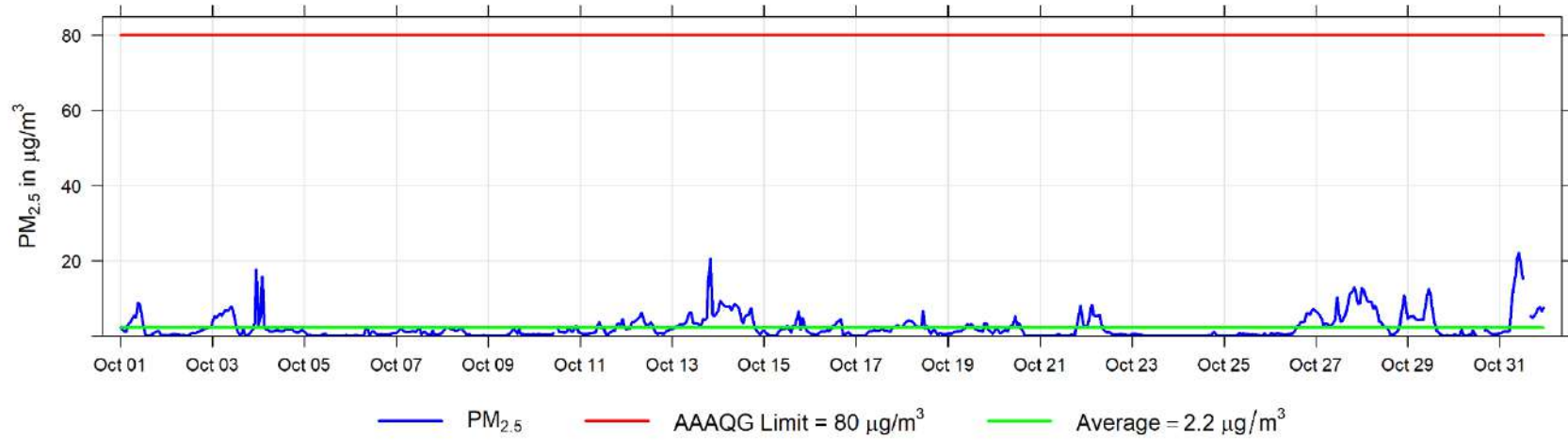
October 2024 Hourly Concentration Readings of TRS (in ppb) at Smoky Heights



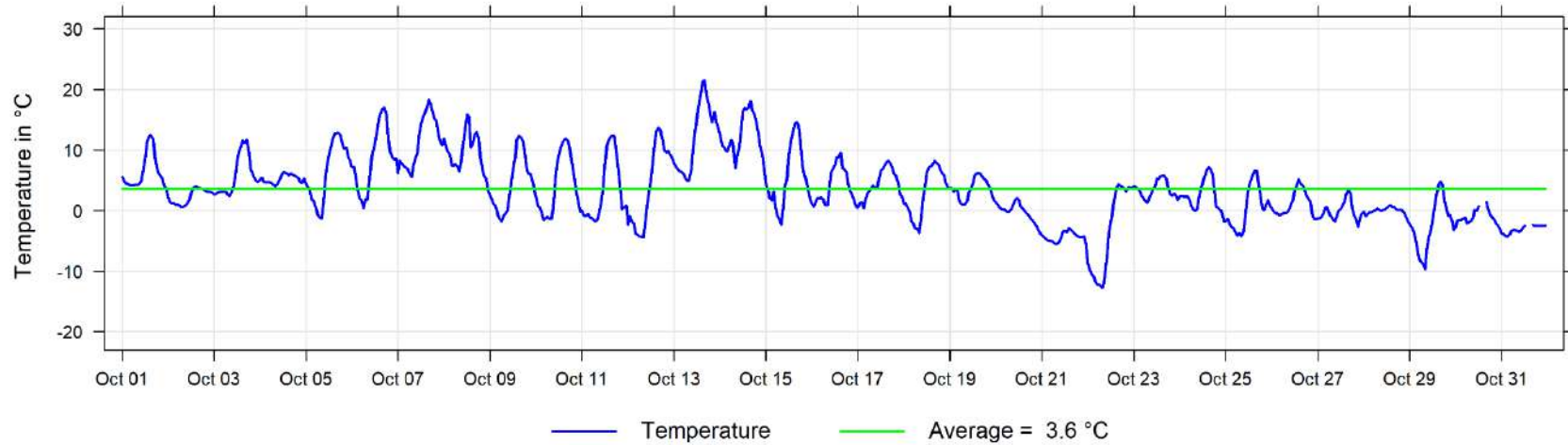
October 2024 30 min Concentration Readings of TRS (in ppb) at Smoky Heights



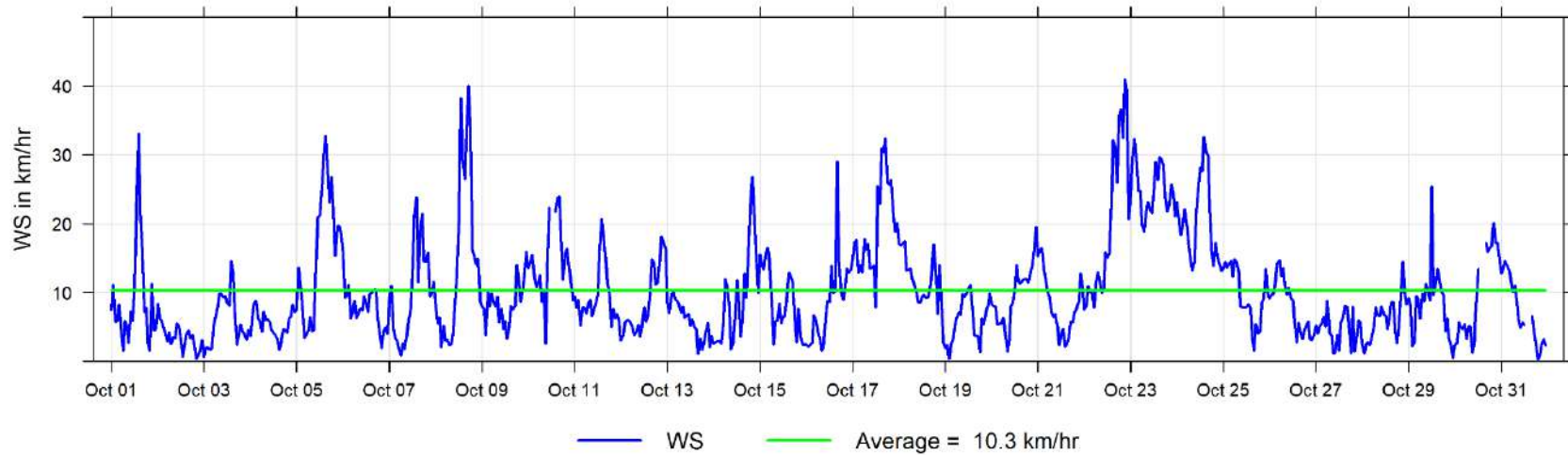
October 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Smoky Heights



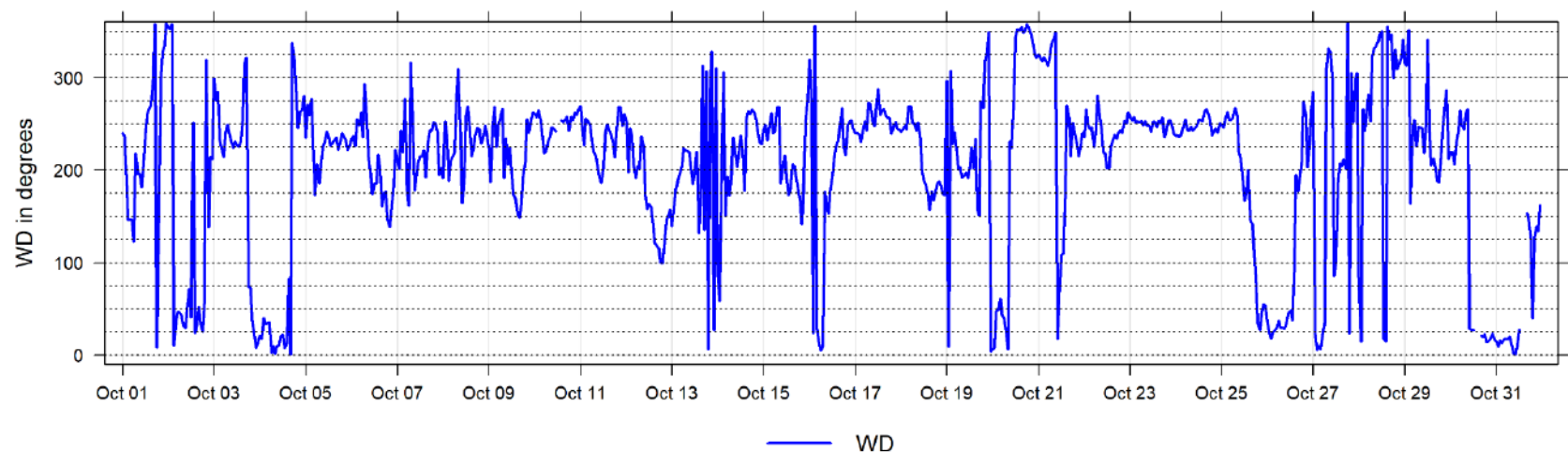
October 2024 Hourly Temperature Readings (in °C) at Smoky Heights



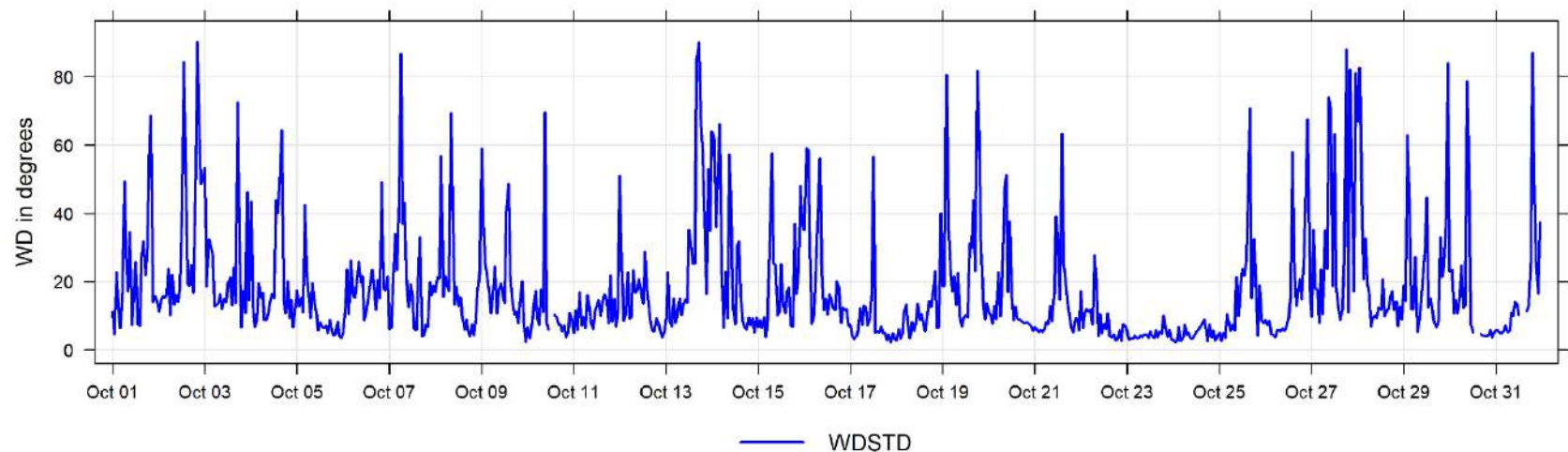
October 2024 Hourly Readings of Wind Speed (in km/hr) at Smoky Heights

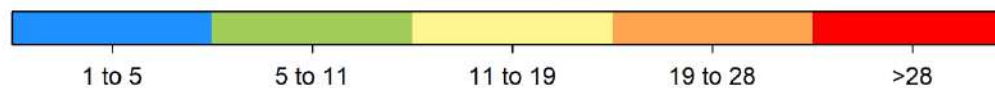
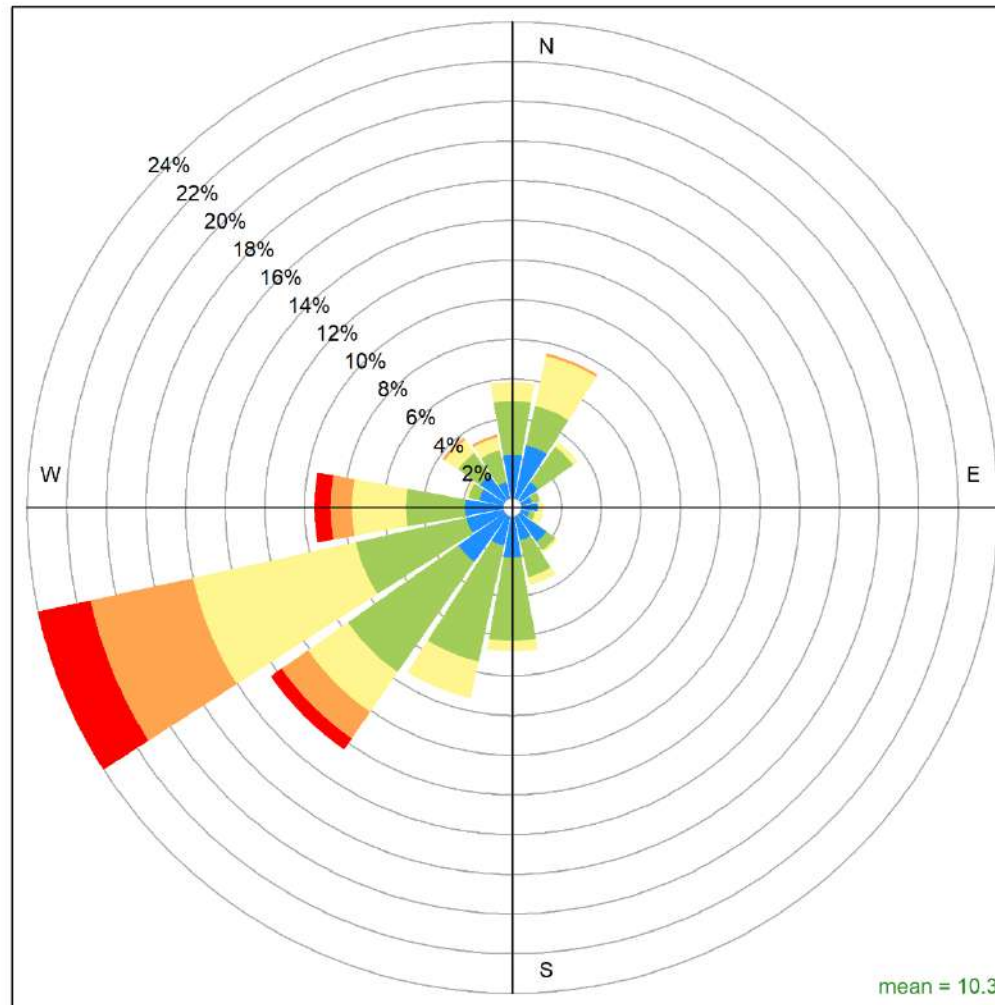


October 2024 Hourly Readings of Wind Direction (in degrees) at Smoky Heights



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



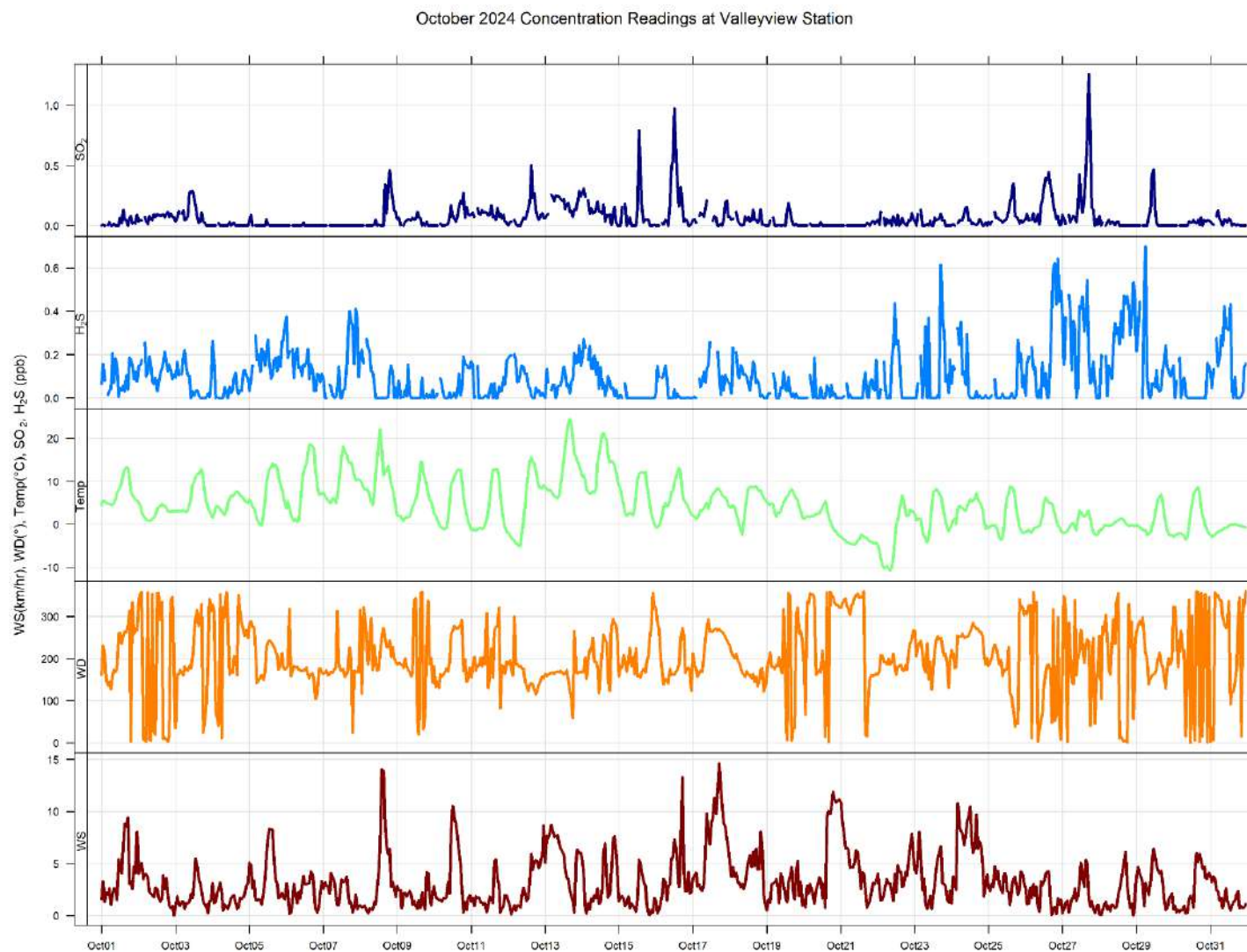


Smoky Heights October 2024 Wind Rose, wind speed in km/hr

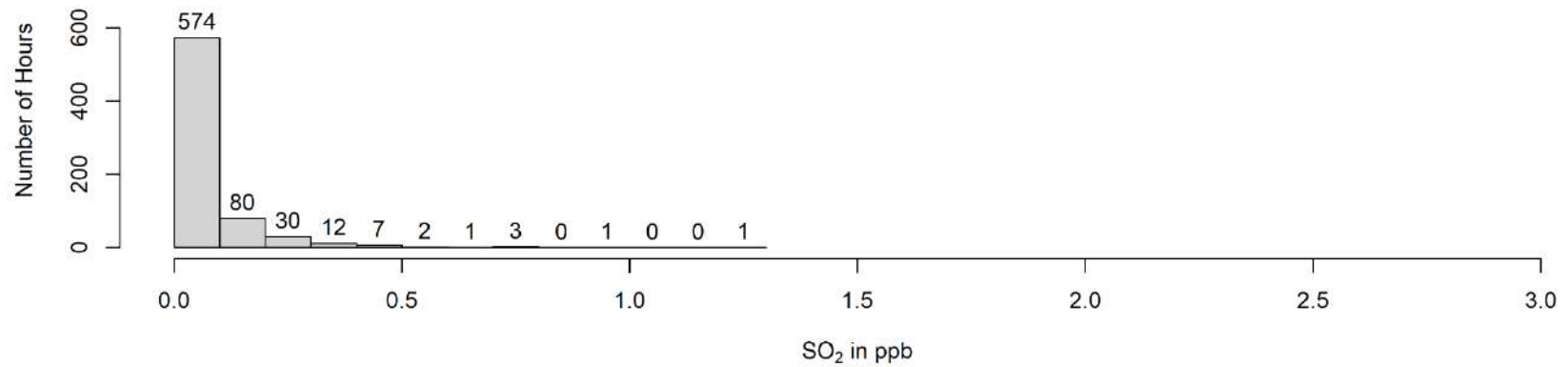
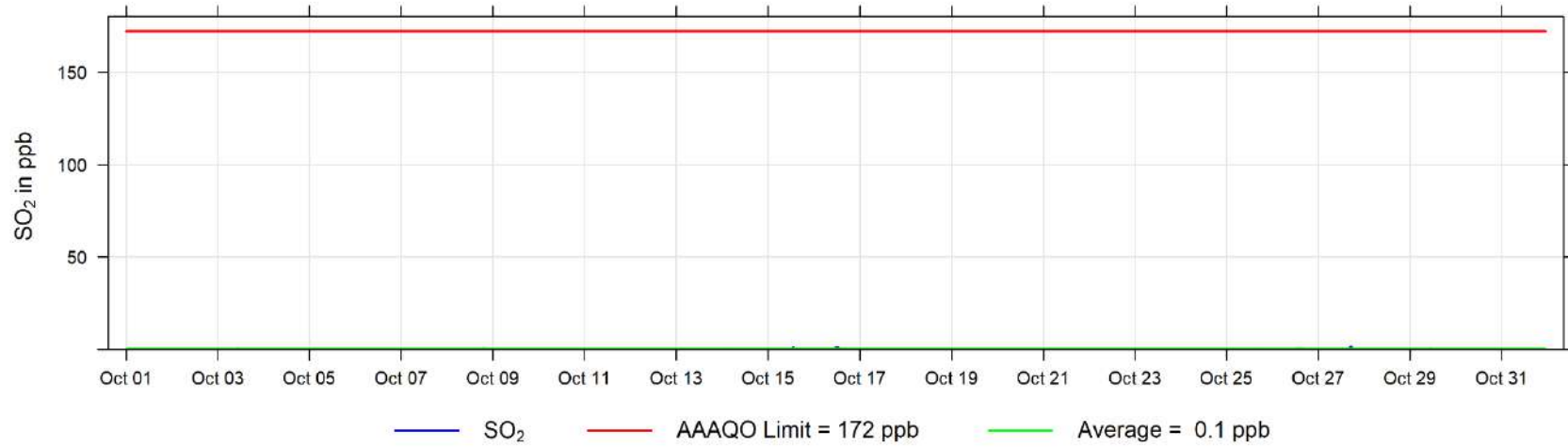
Calms (<1km/hr) = 1.2 %

6 Valleyview Charts

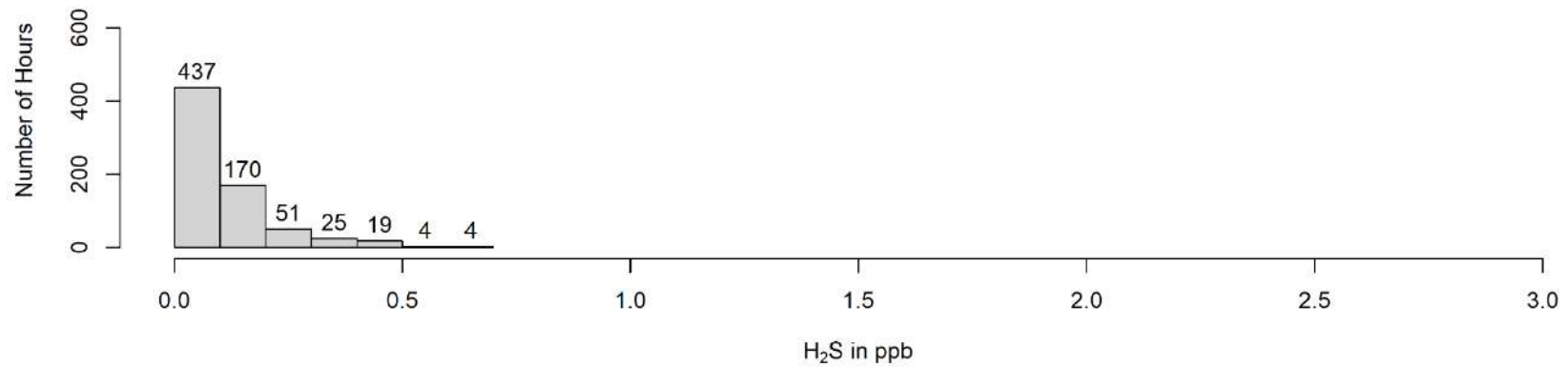
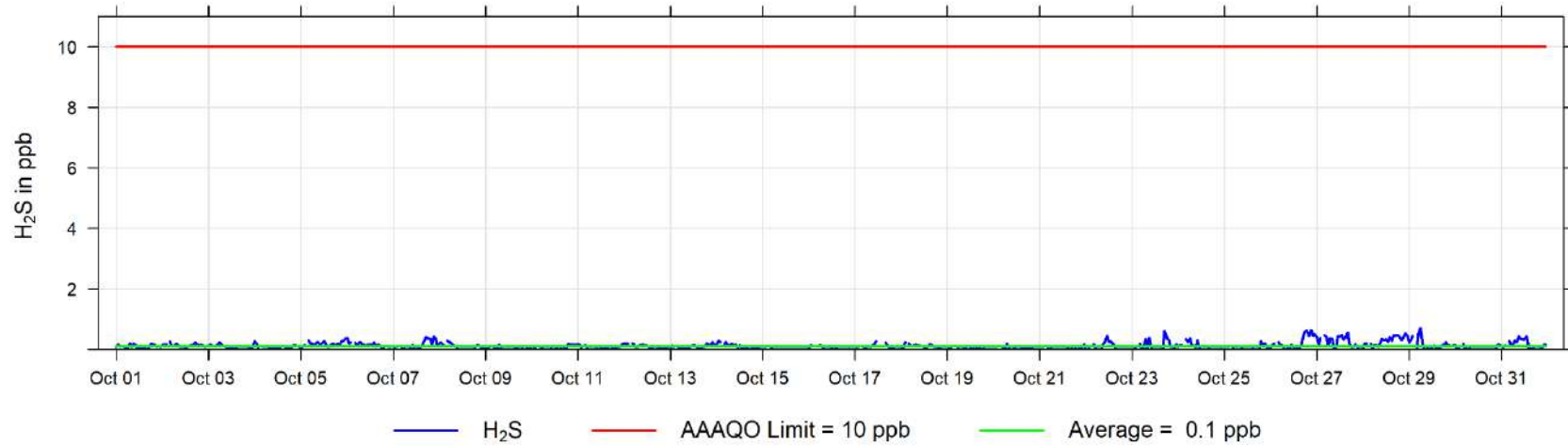
The following pages include the charts and histograms for Valleyview Station



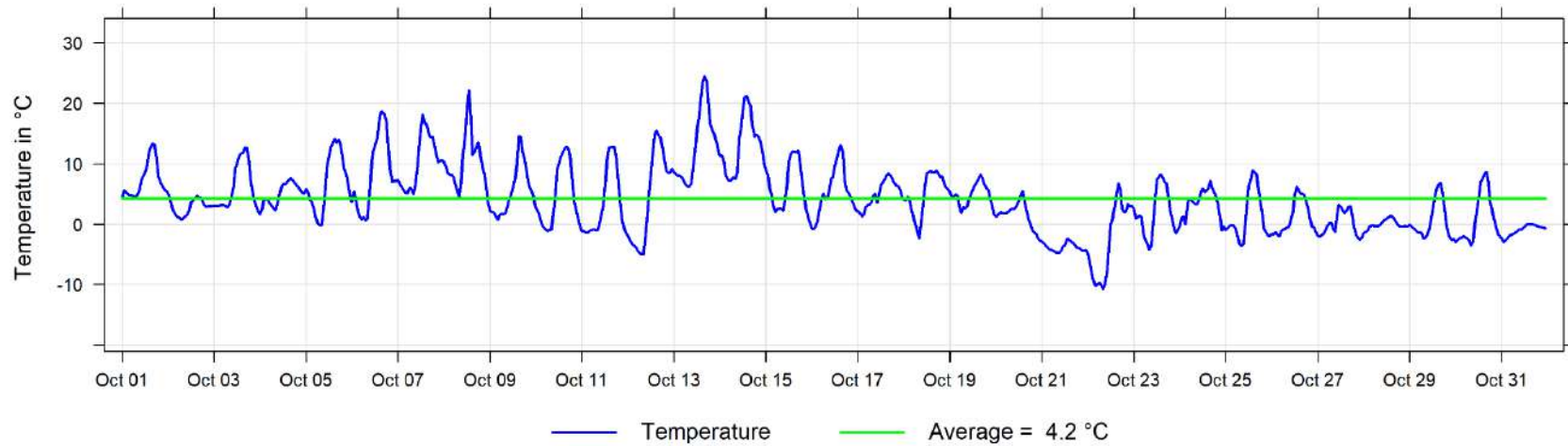
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Valleyview



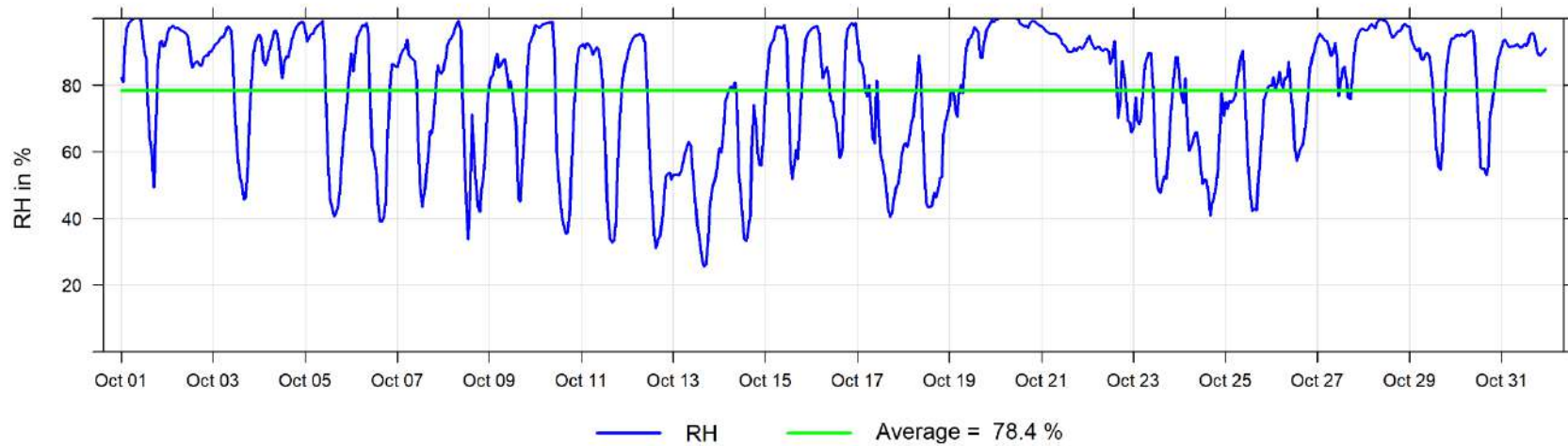
October 2024 Hourly Concentration Readings of H₂S (in ppb) at Valleyview



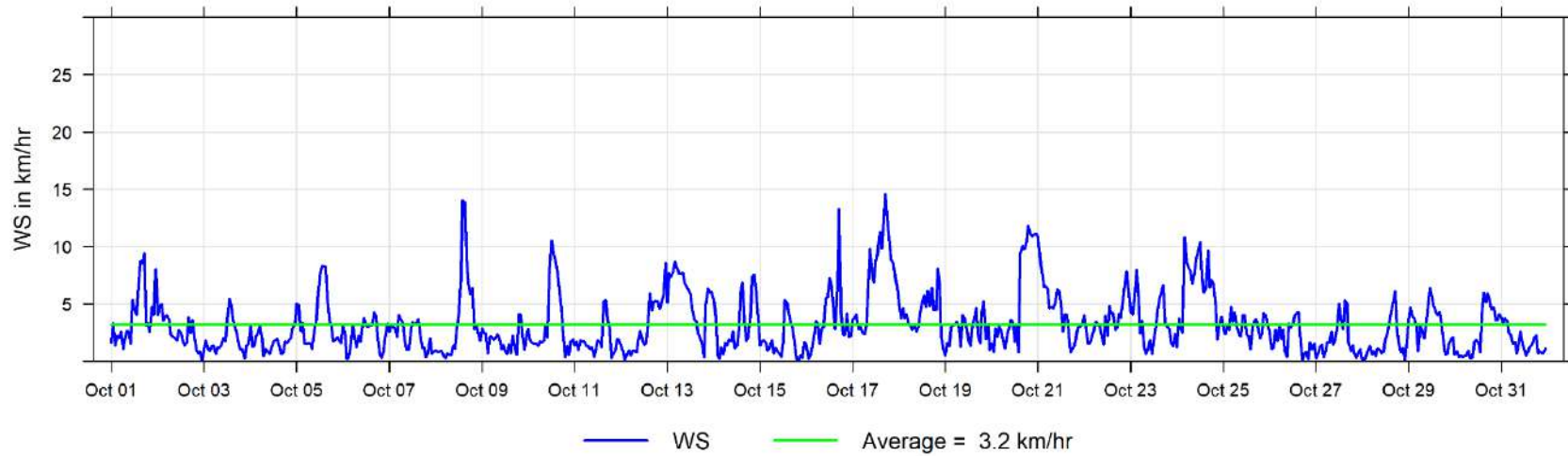
October 2024 Hourly Temperature Readings (in °C) at Valleyview



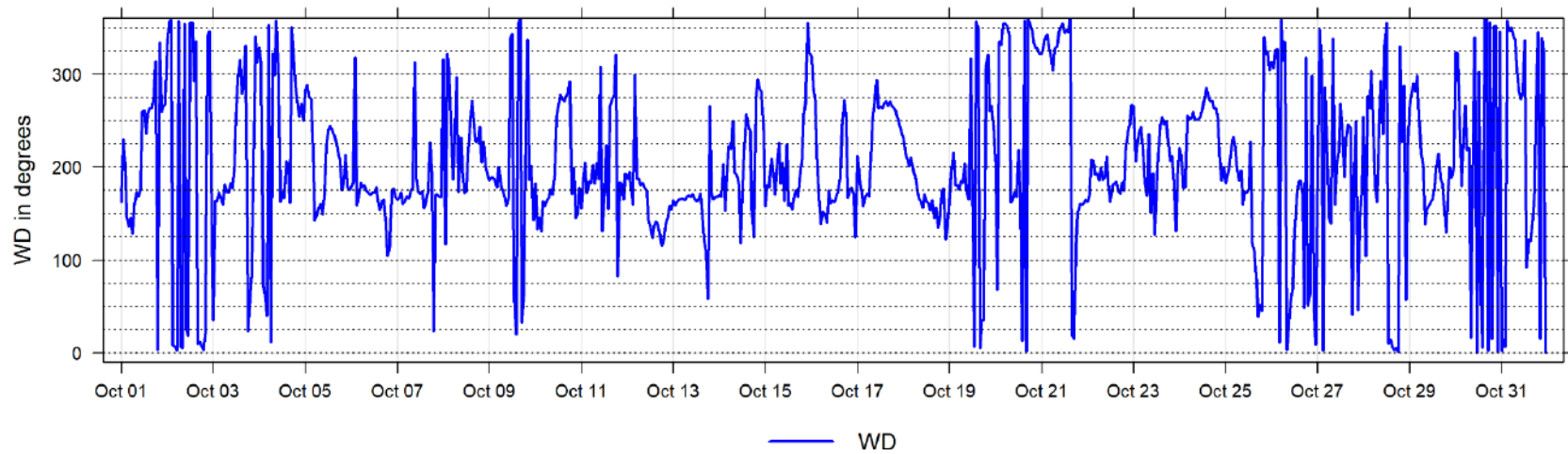
October 2024 Hourly Readings of Relative Humidity (in %) at Valleyview



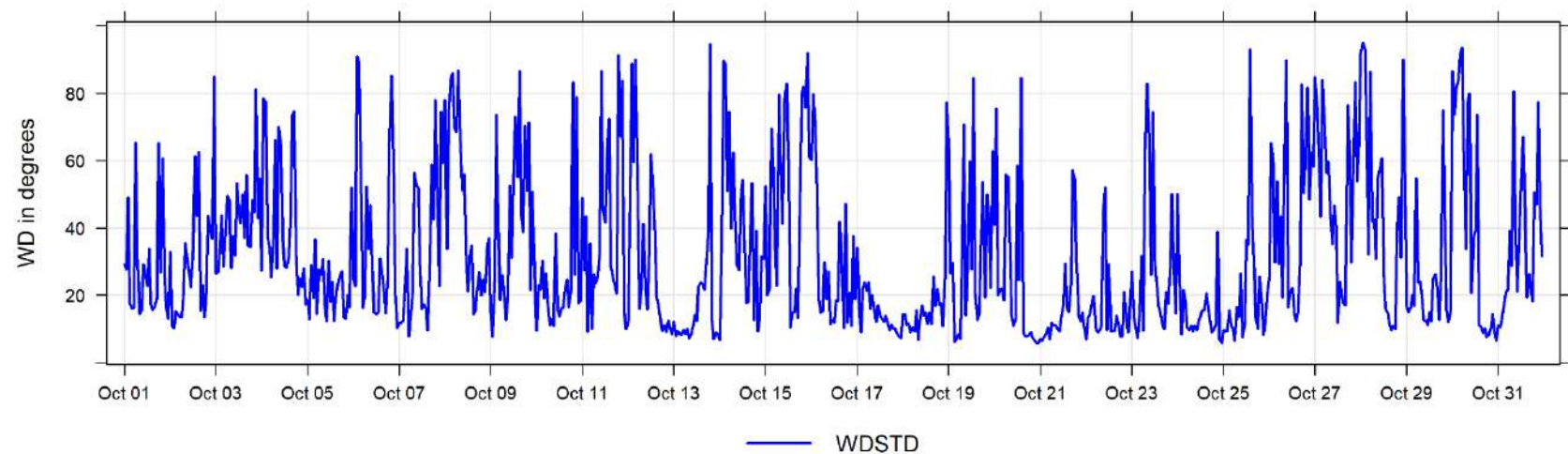
October 2024 Hourly Readings of Wind Speed (in km/hr) at Valleyview

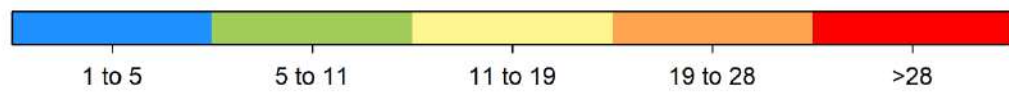
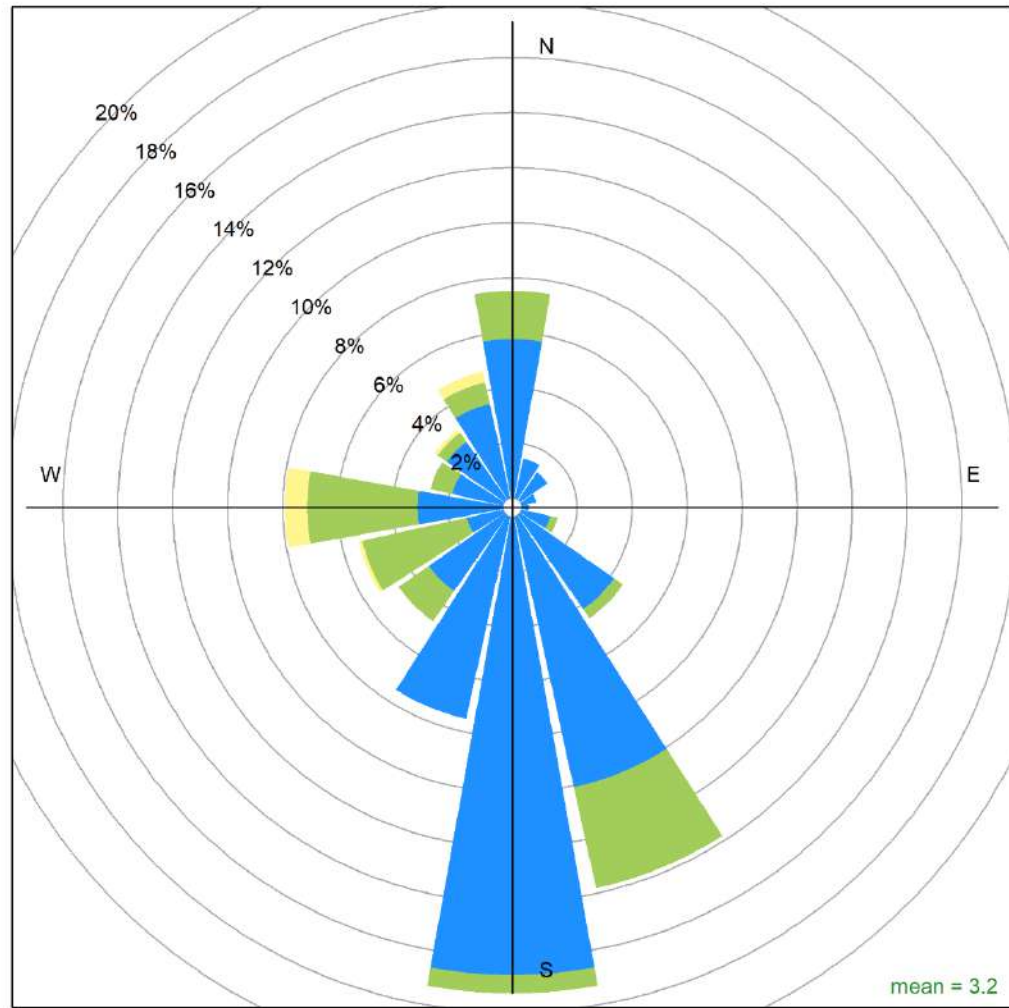


October 2024 Hourly Readings of Wind Direction (in degrees) at Valleyview



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





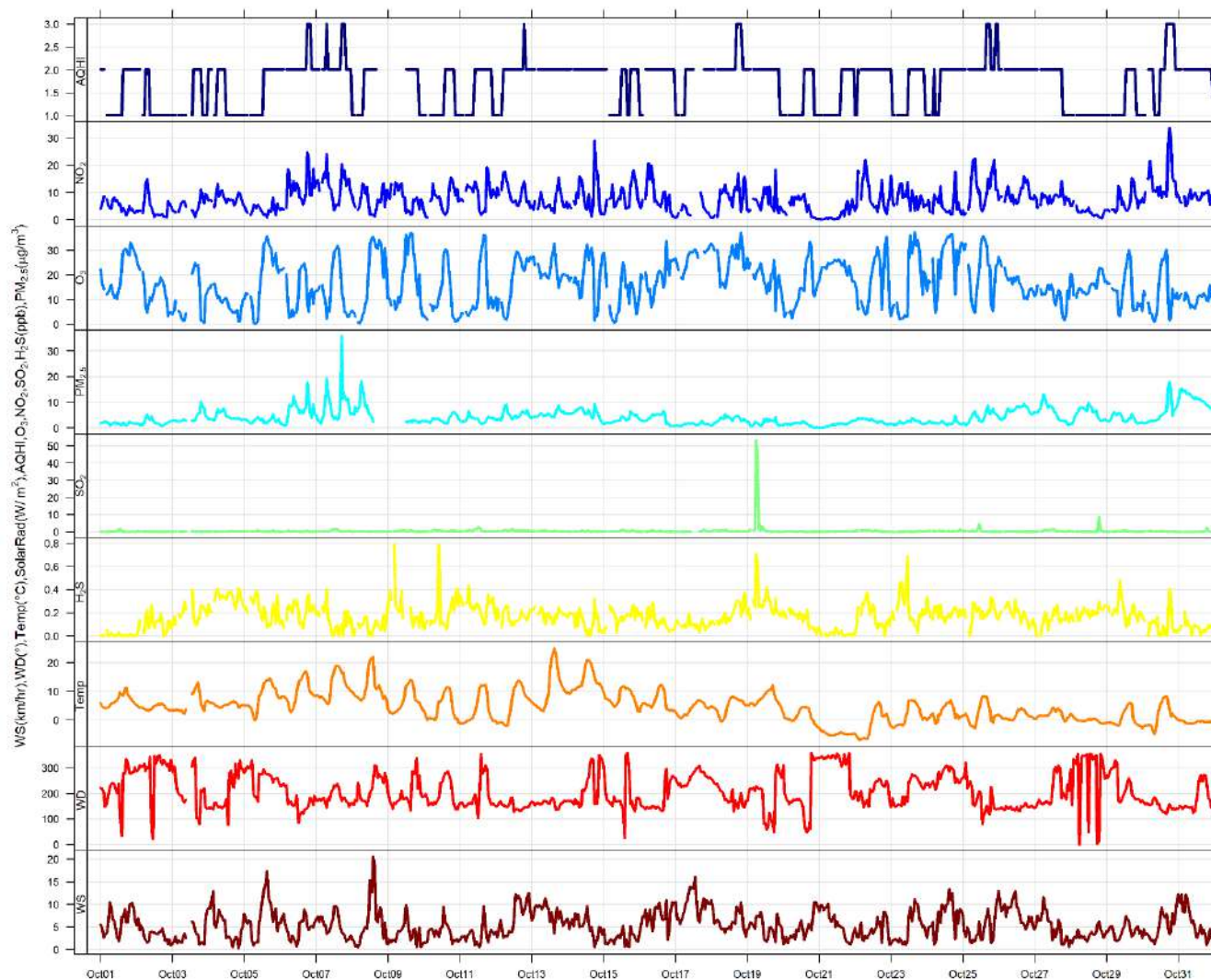
Valleyview October 2024 Wind Rose, wind speed in km/hr

Calms (<1km/hr) = 16 %

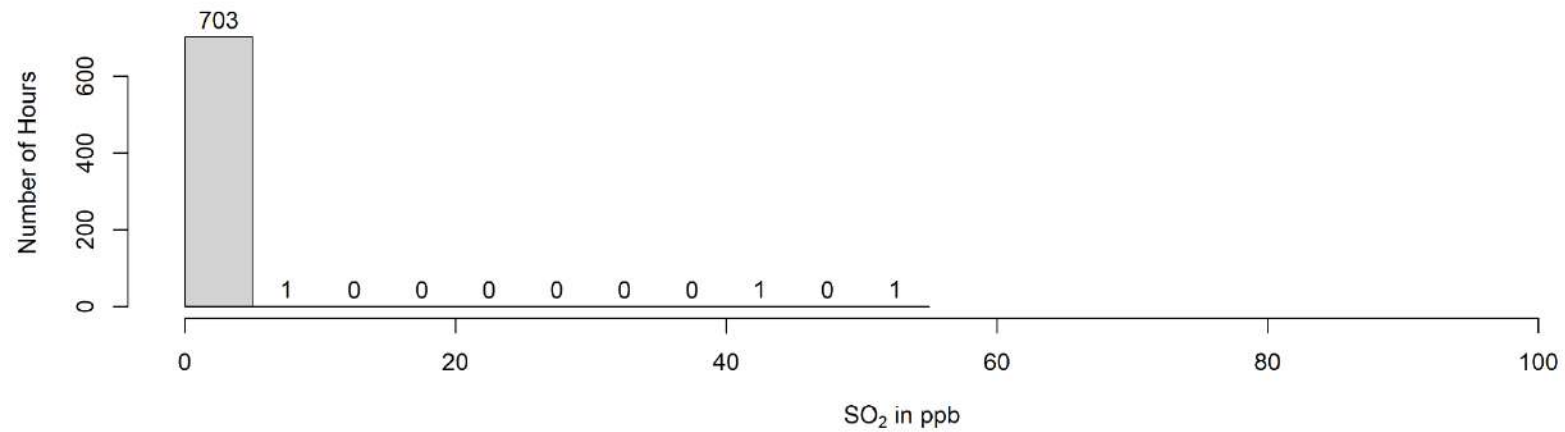
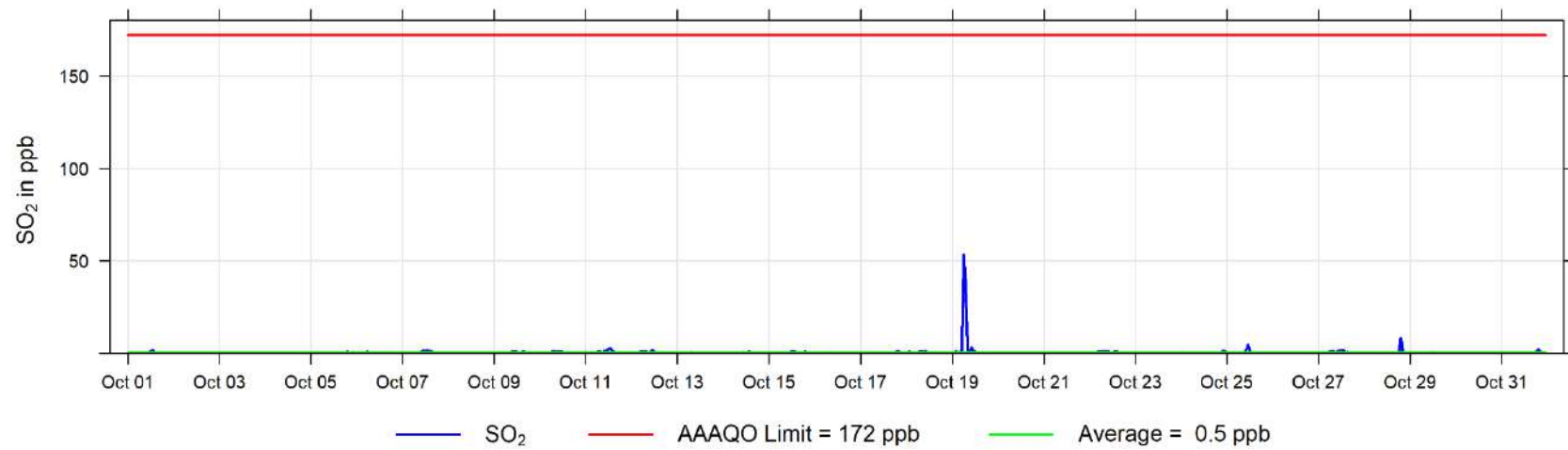
7 Fox Creek Charts

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

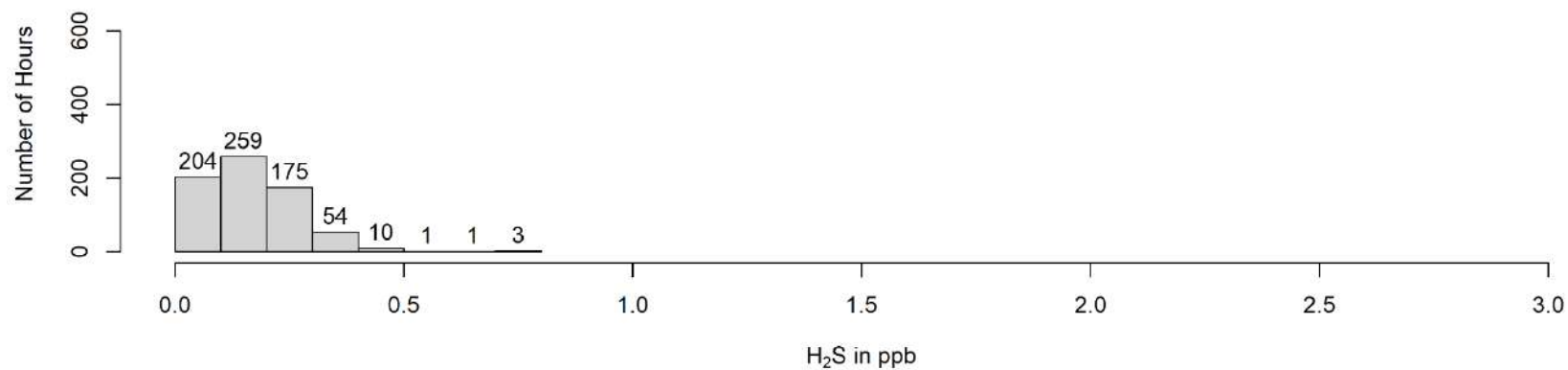
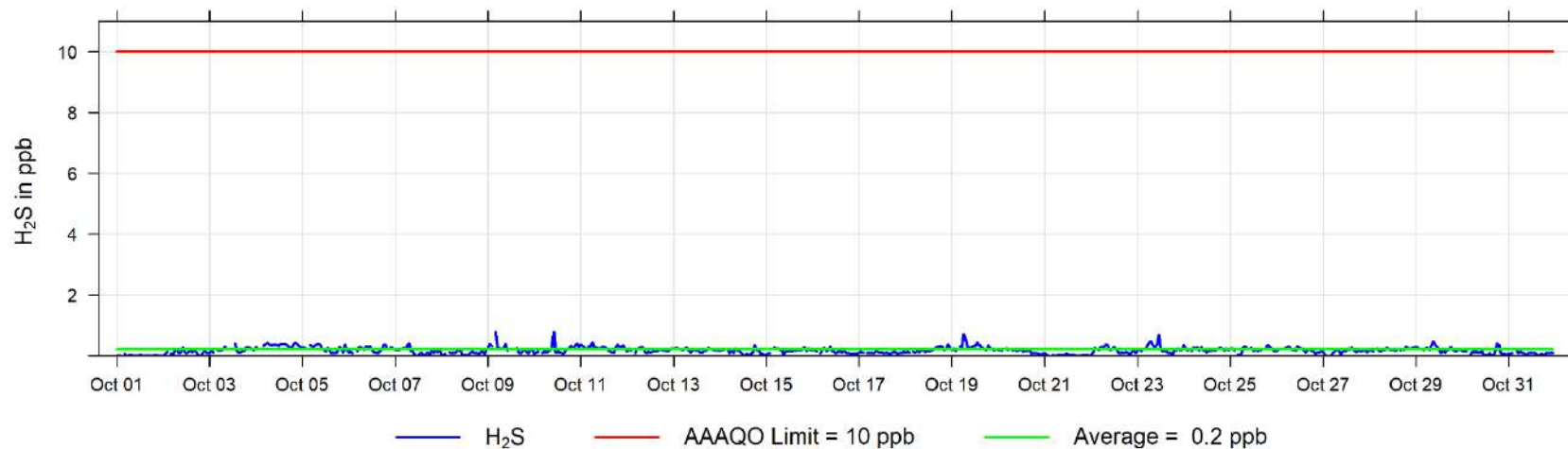
October 2024 Concentration Readings at Fox Creek Station



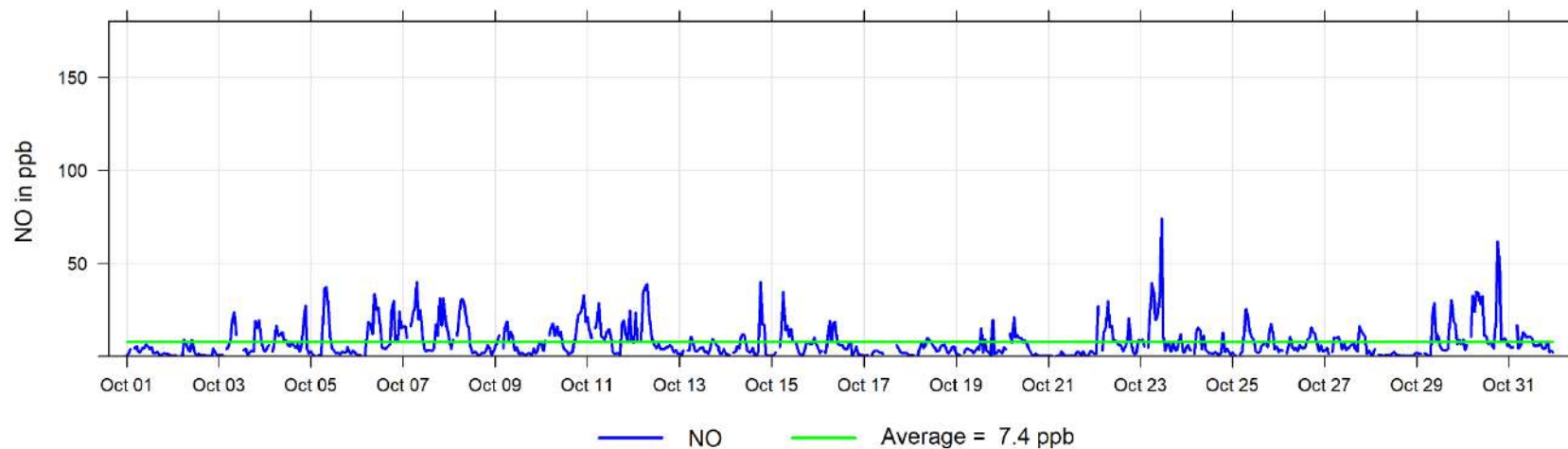
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Fox Creek



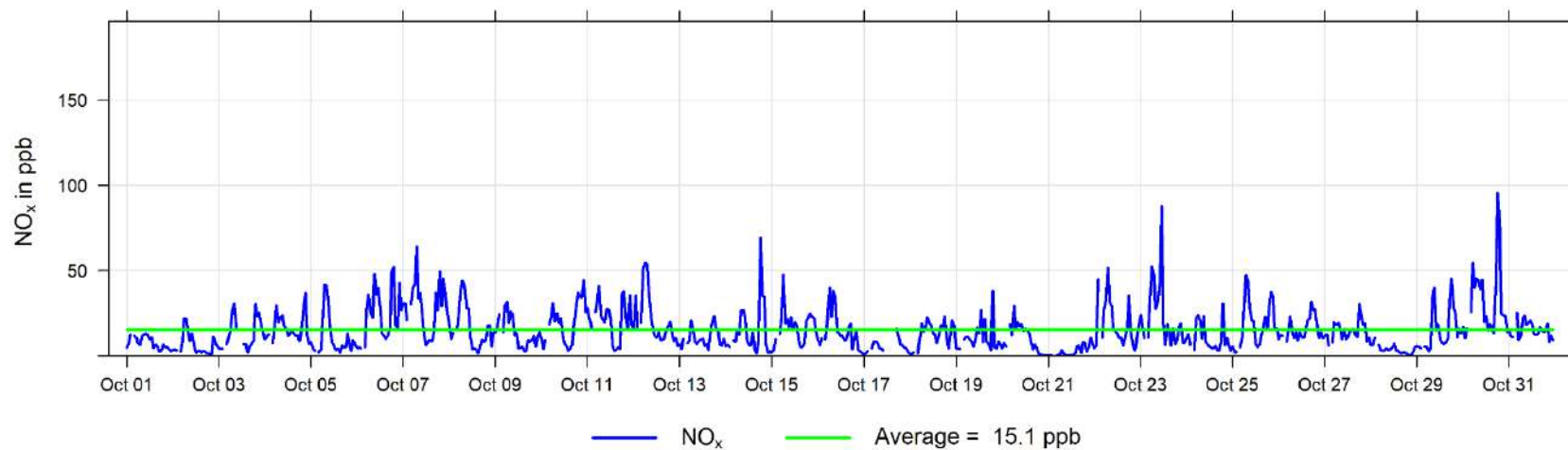
October 2024 Hourly Concentration Readings of H₂S (in ppb) at Fox Creek



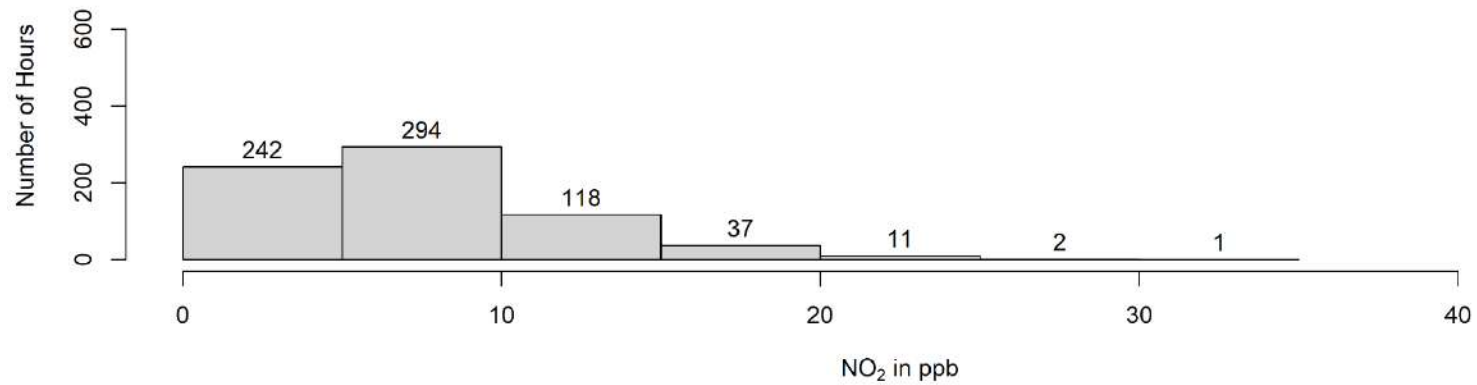
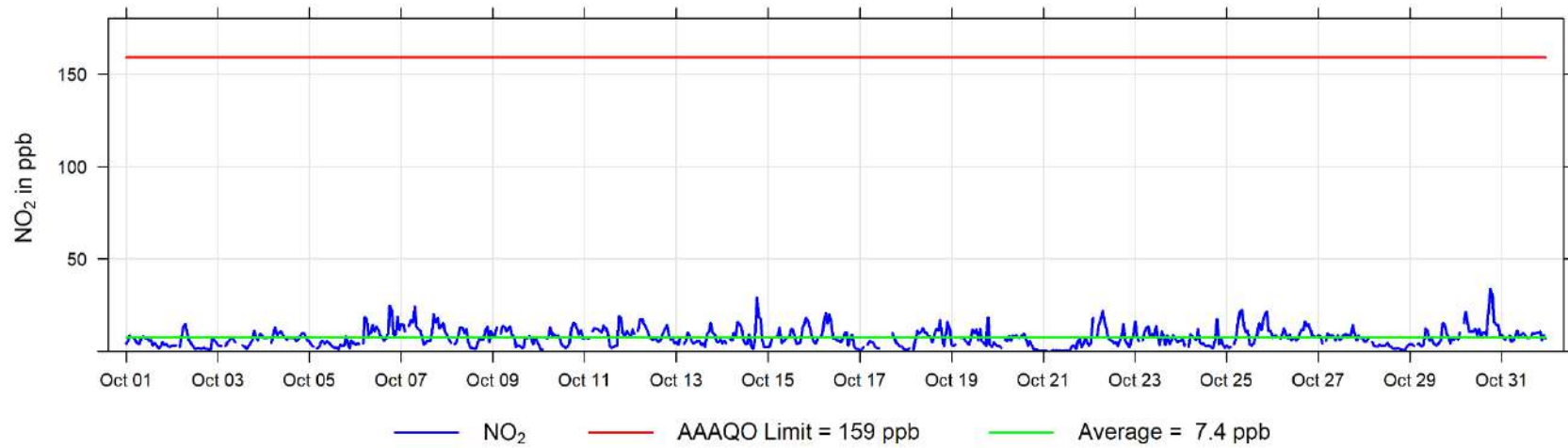
October 2024 Hourly Concentration Readings of NO (in ppb) at Fox Creek



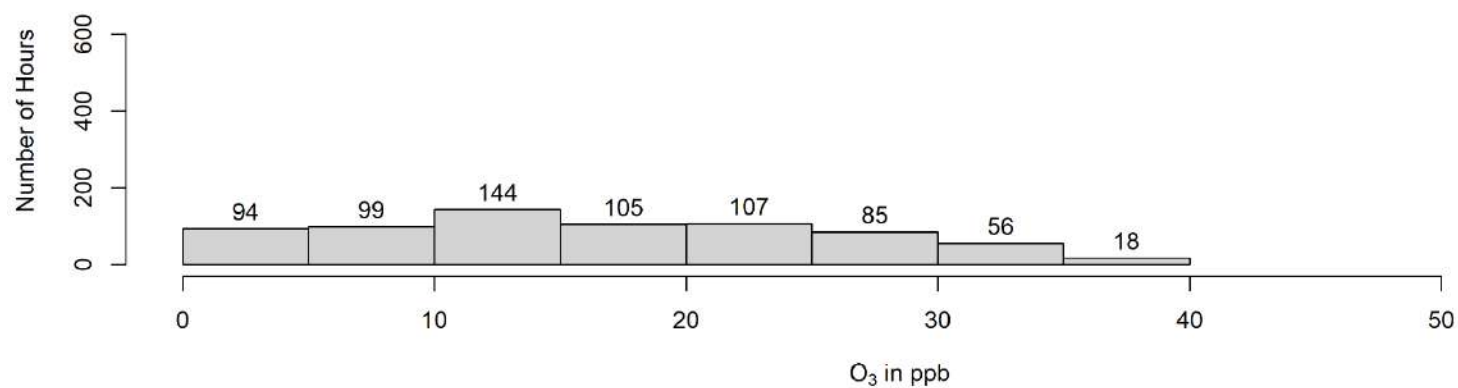
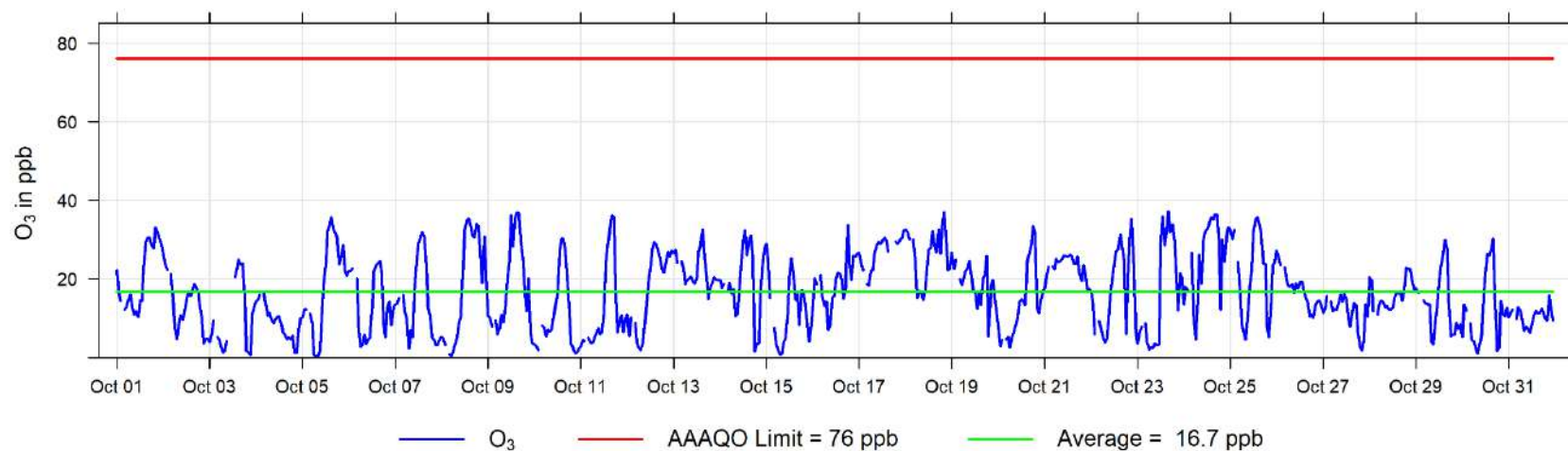
October 2024 Hourly Concentration Readings of NO_x (in ppb) at Fox Creek



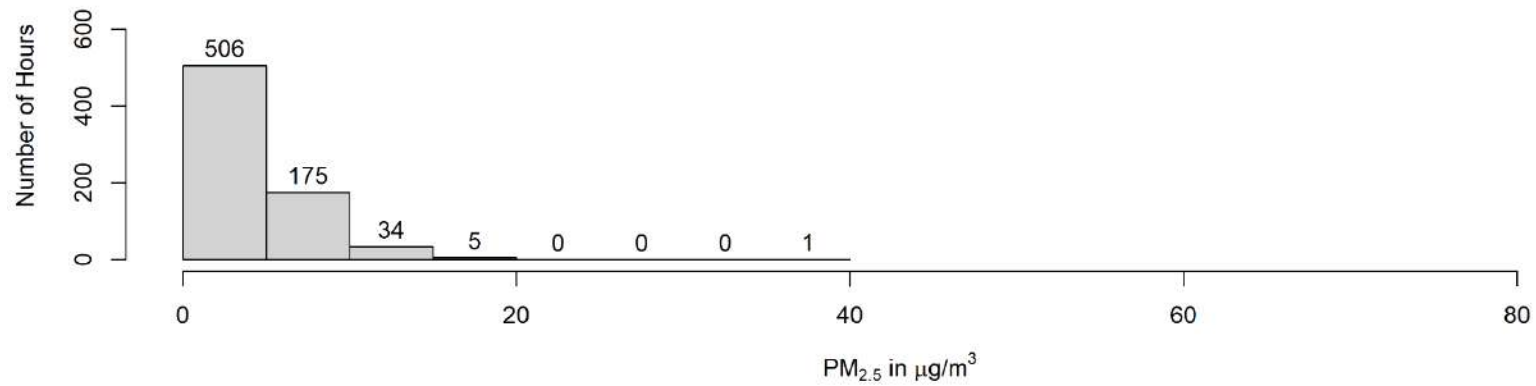
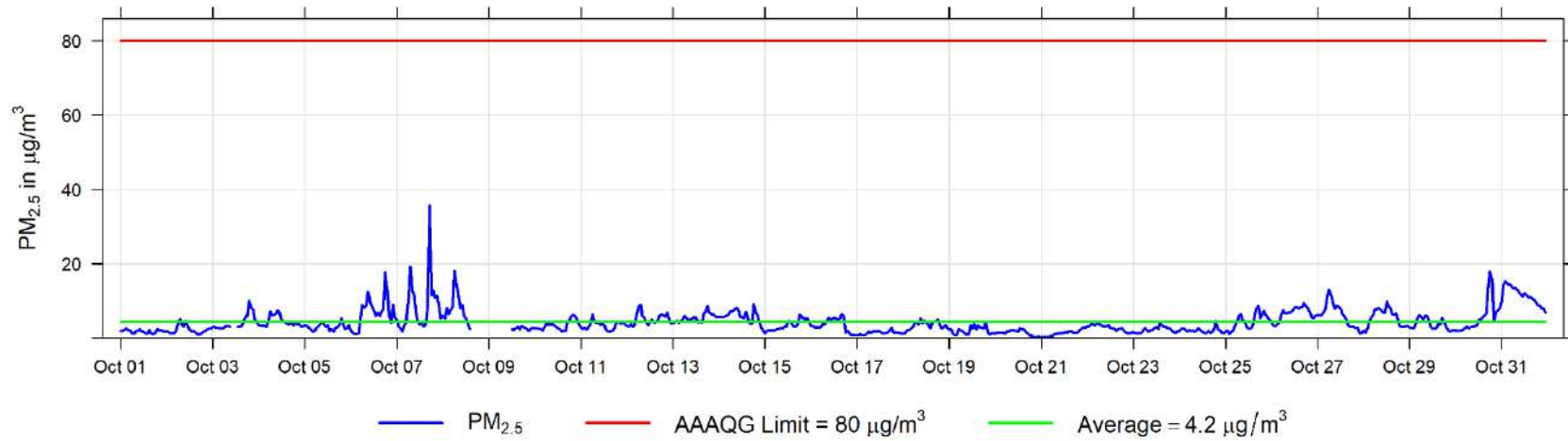
October 2024 Hourly Concentration Readings of NO₂ (in ppb) at Fox Creek



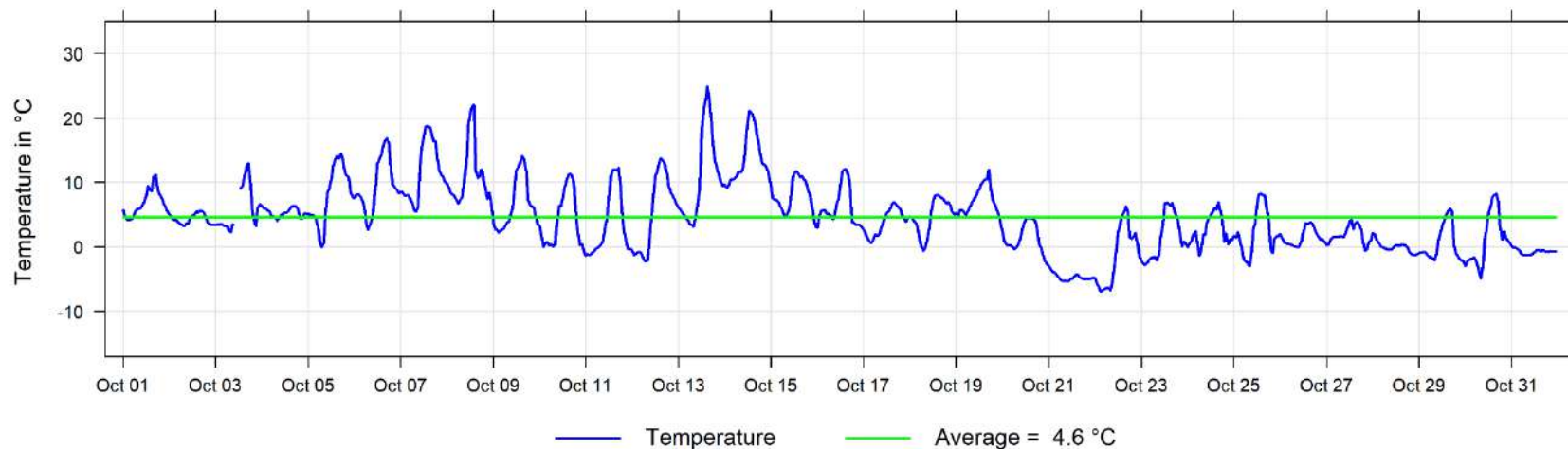
October 2024 Hourly Concentration Readings of O₃ (in ppb) at Fox Creek



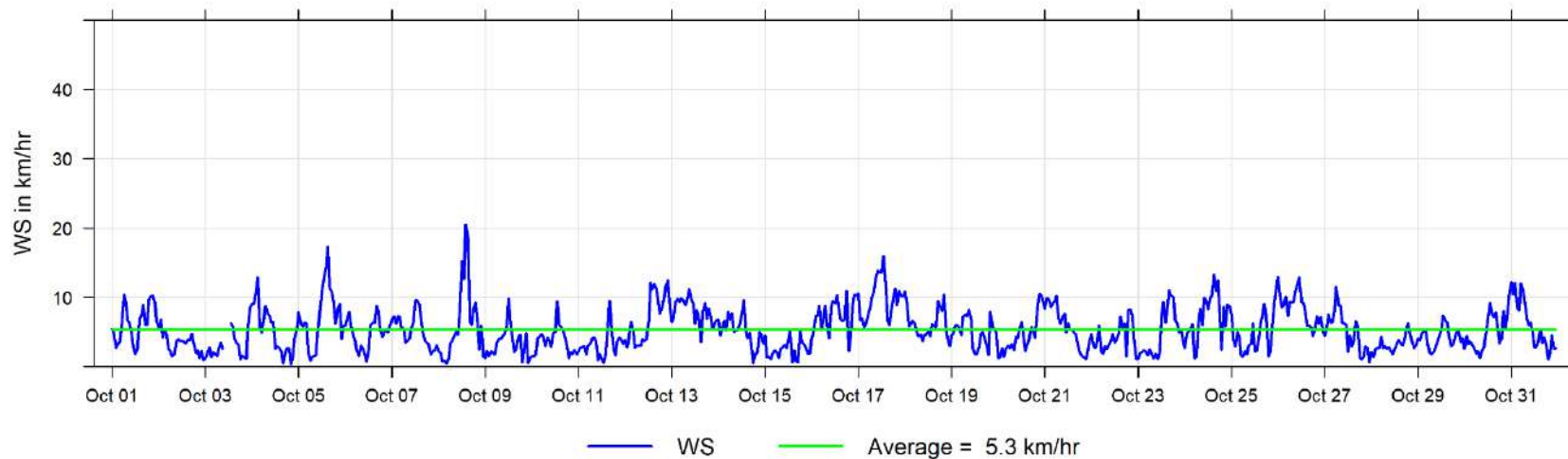
October 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Fox Creek



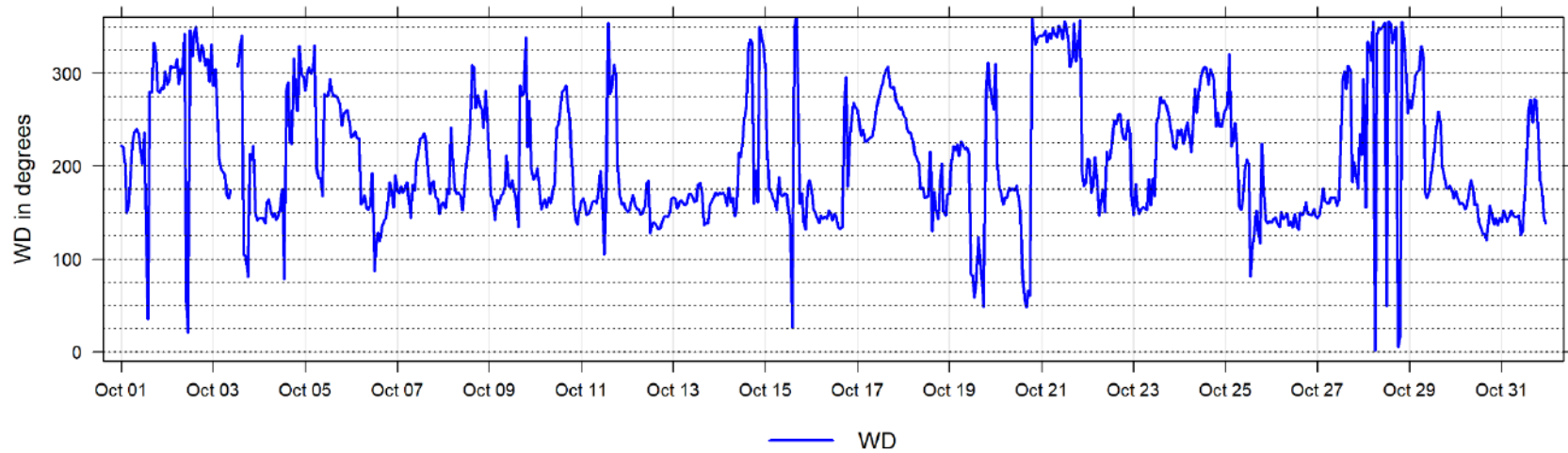
October 2024 Hourly Temperature Readings (in °C) at Fox Creek



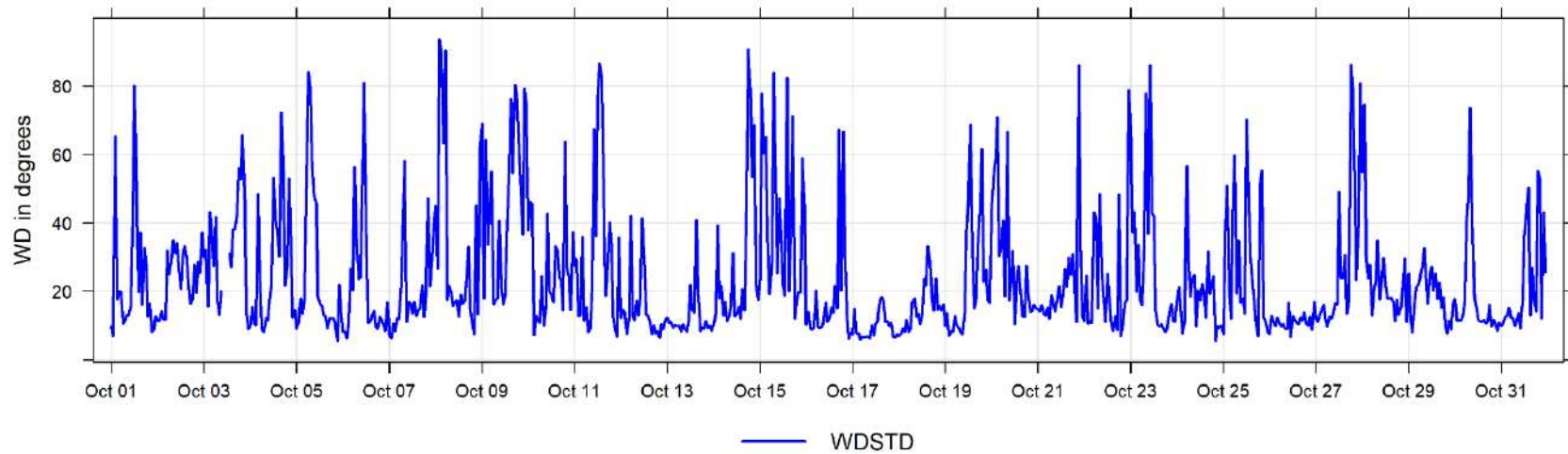
October 2024 Hourly Readings of Wind Speed (in km/hr) at Fox Creek

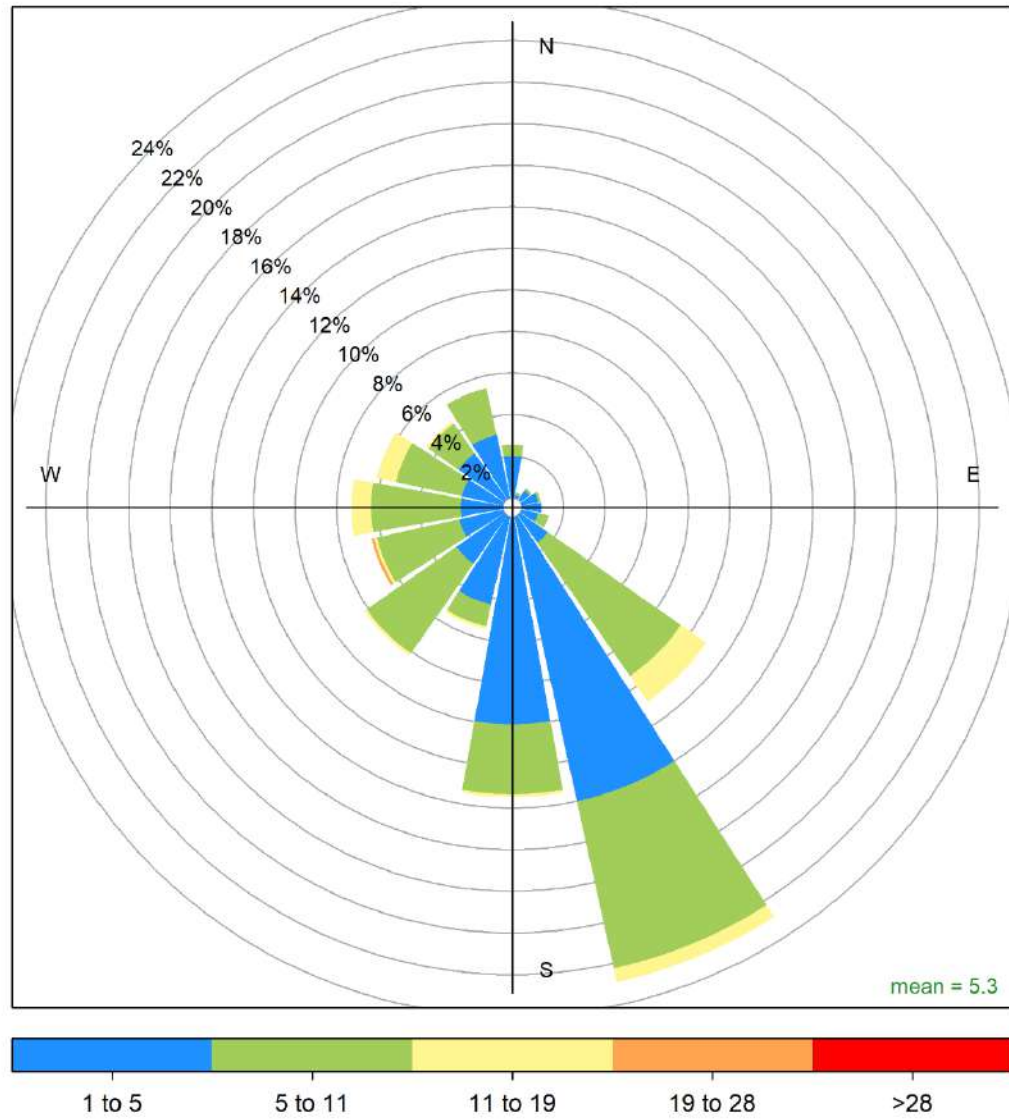


October 2024 Hourly Readings of Wind Direction (in degrees) at Fox Creek



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





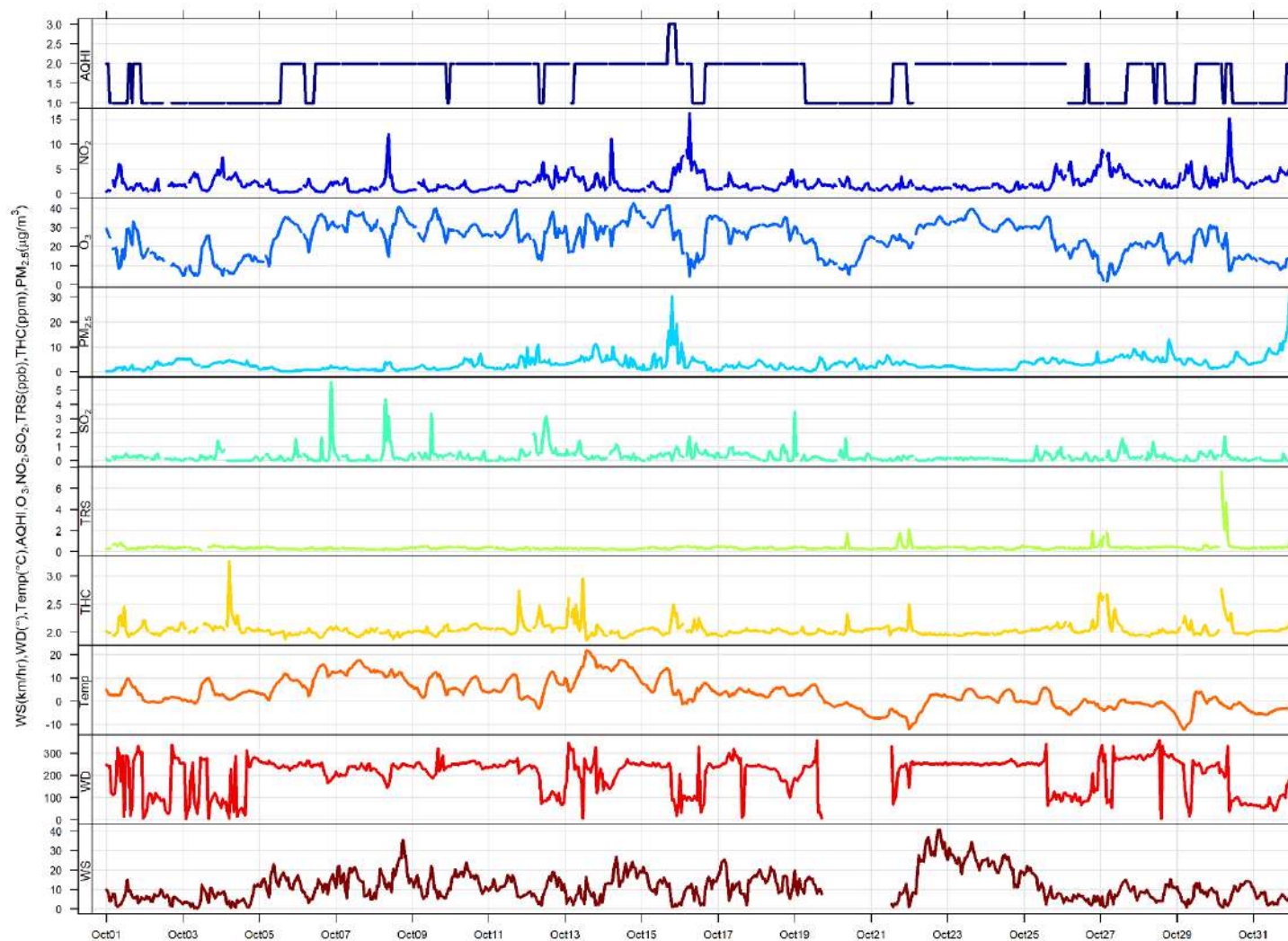
Fox Creek October 2024 Wind Rose, wind speed in km/hr

Calms (<1km/hr) = 2.3 %

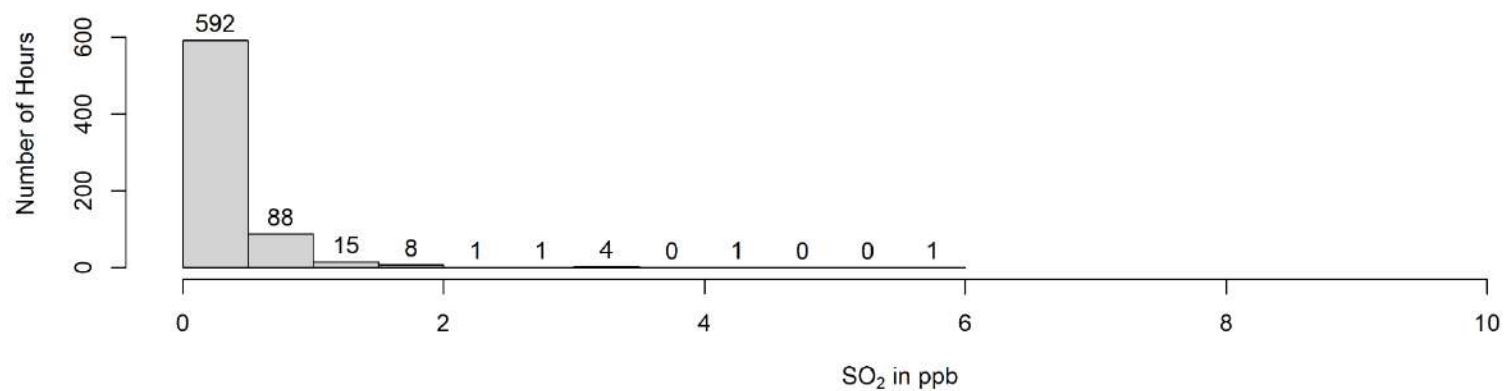
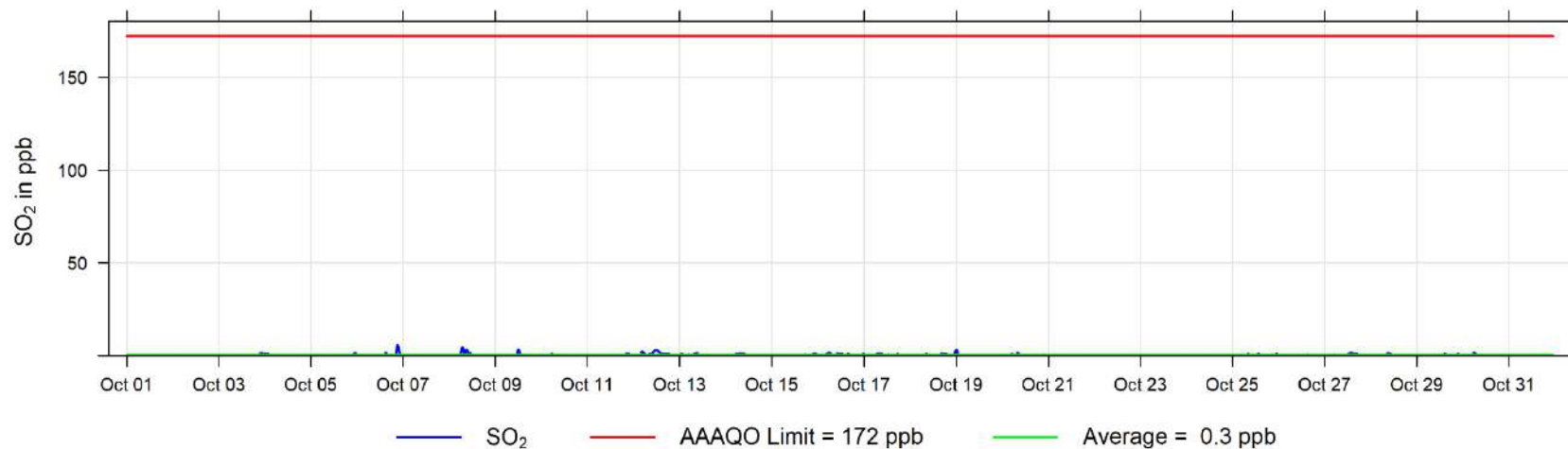
8 Happy Valley (Portable) Charts

The following pages include the charts and histograms for Happy Valley Portable Station

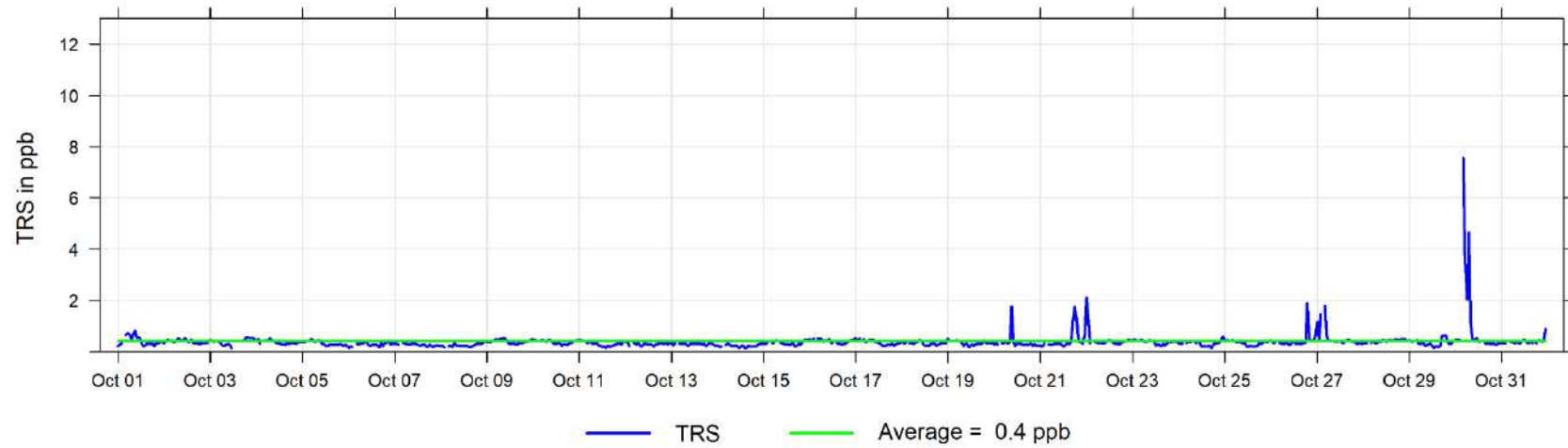
October 2024 Concentration Readings at Happy Valley Station



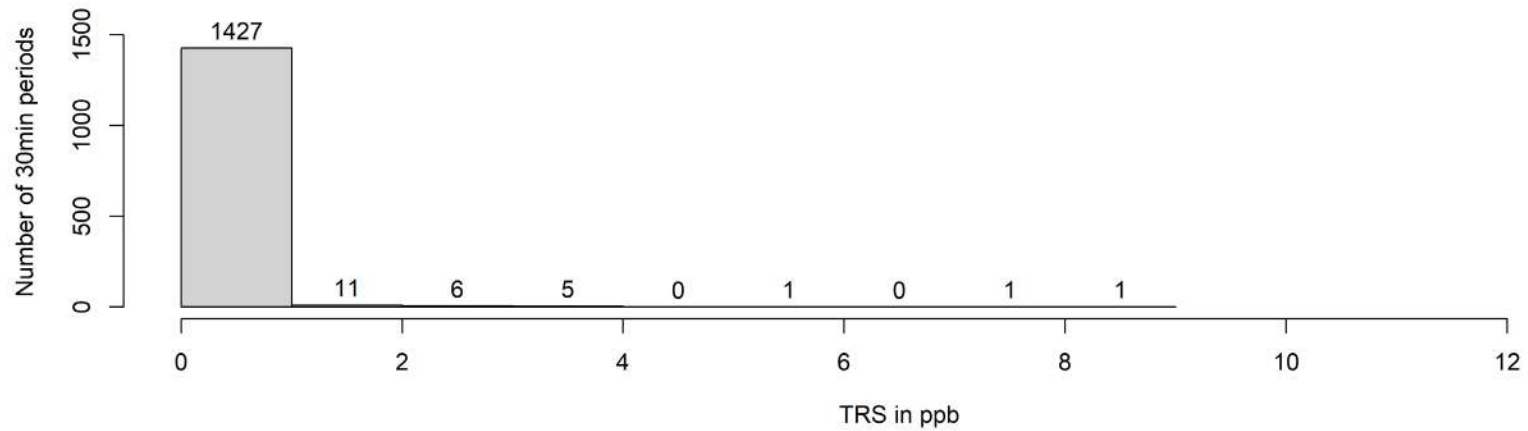
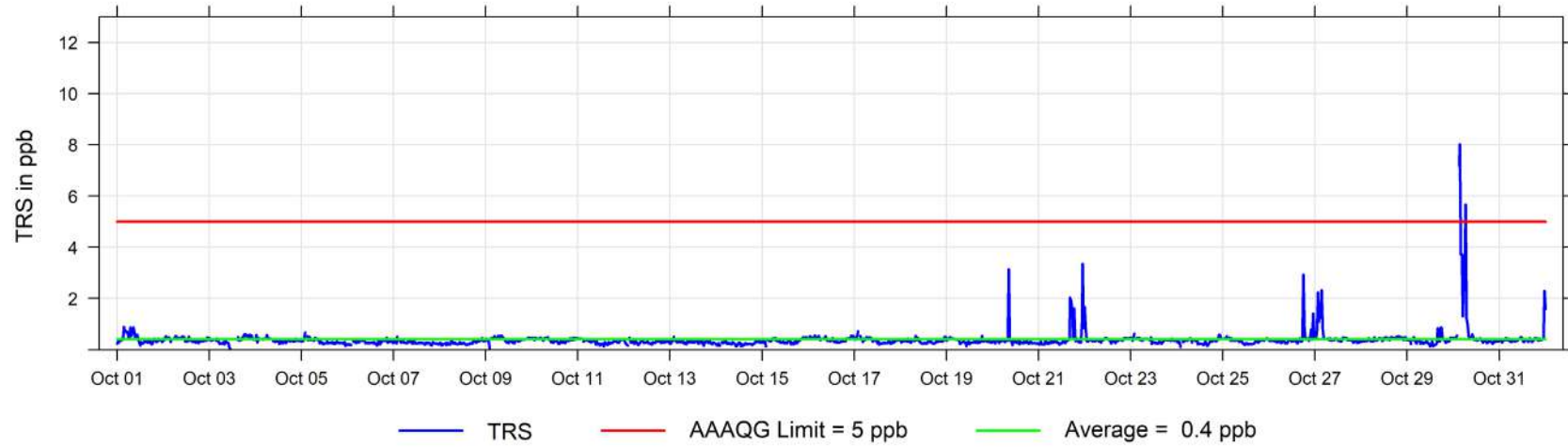
October 2024 Hourly Concentration Readings of SO₂ (in ppb) at Happy Valley



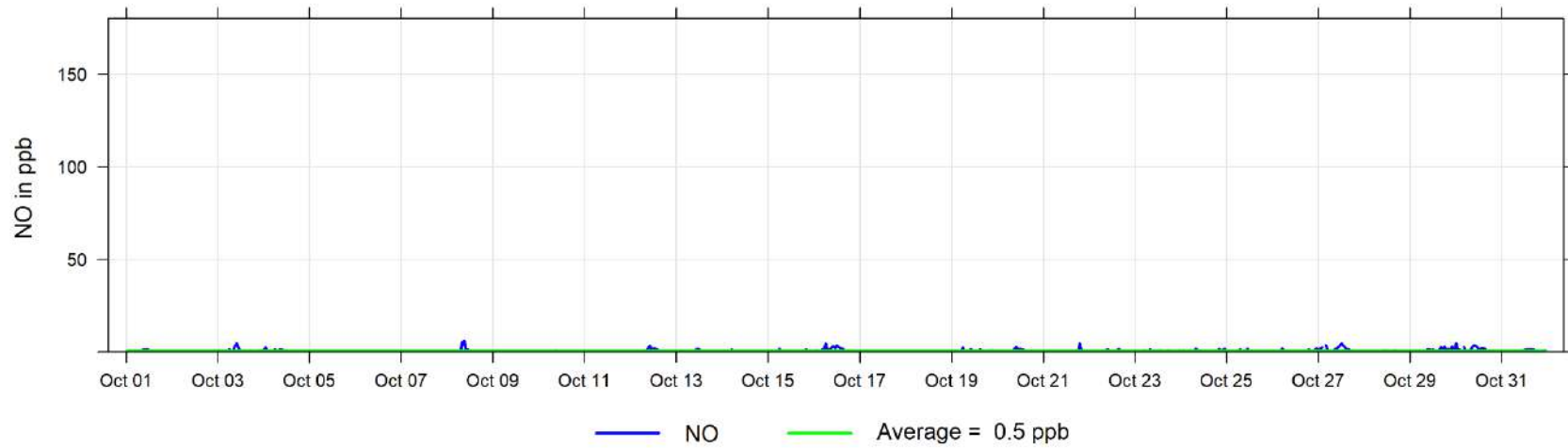
October 2024 Hourly Concentration Readings of TRS (in ppb) at Happy Valley



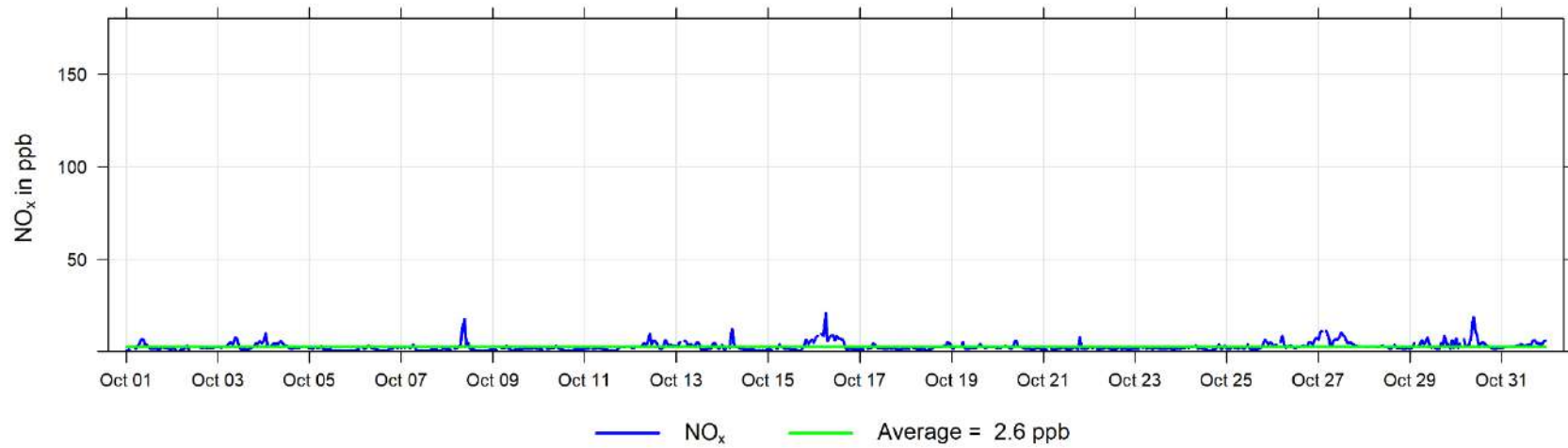
October 2024 30 min Concentration Readings of TRS (in ppb) at Happy Valley



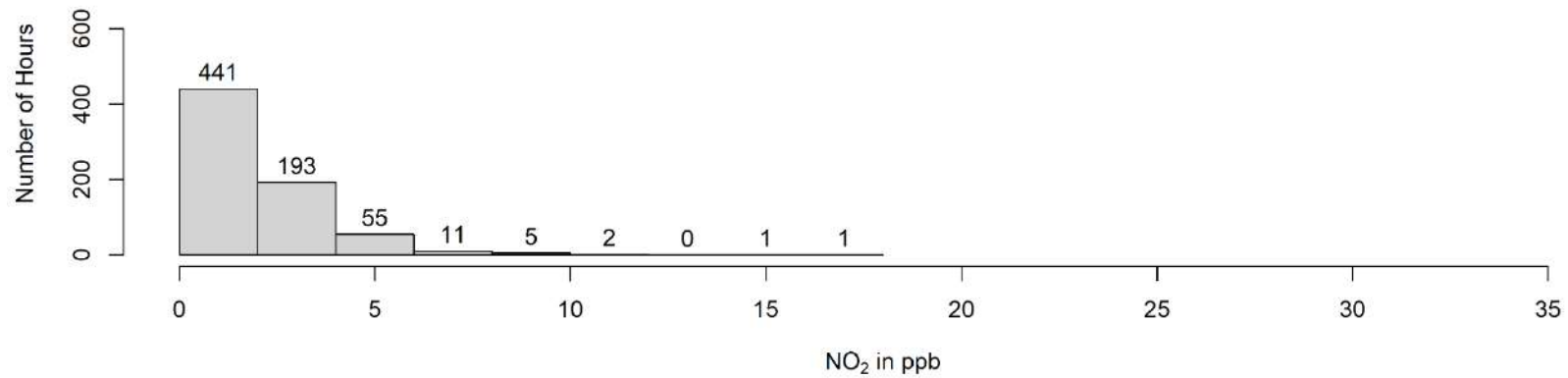
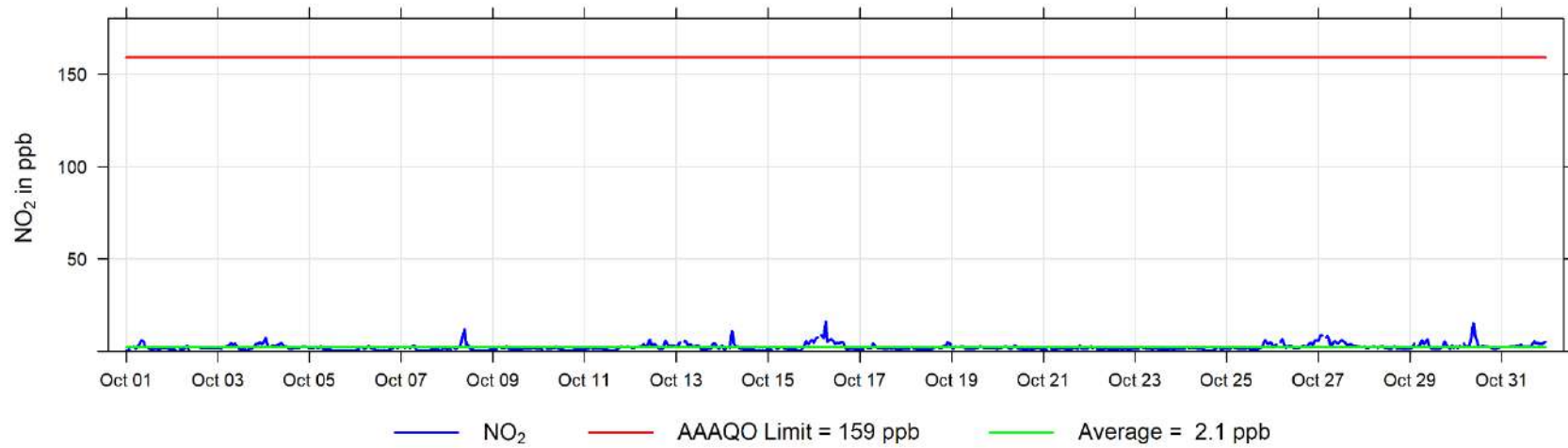
October 2024 Hourly Concentration Readings of NO (in ppb) at Happy Valley



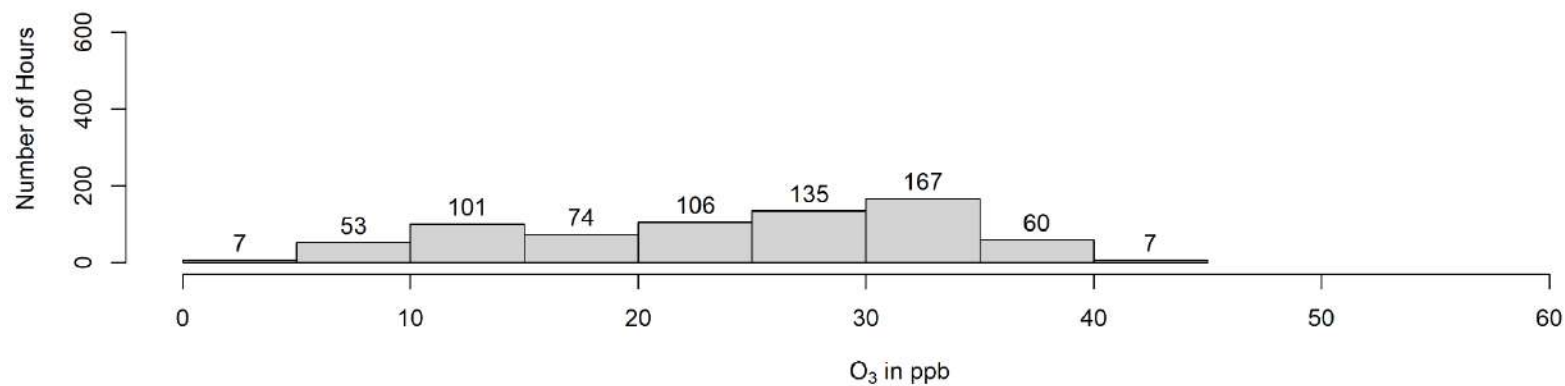
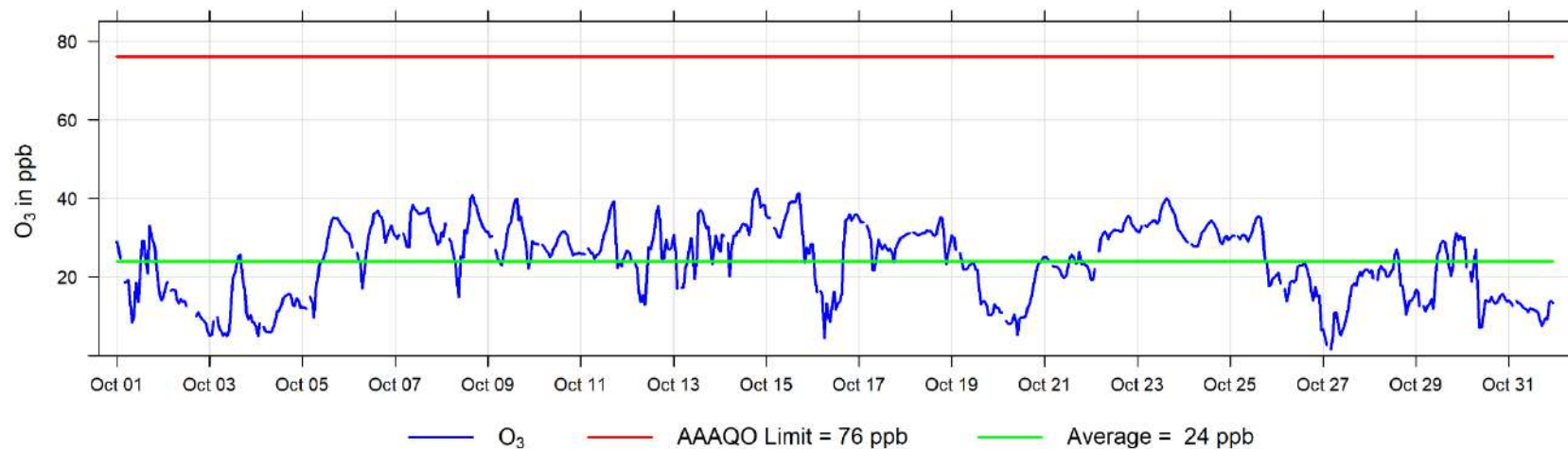
October 2024 Hourly Concentration Readings of NO_x (in ppb) at Happy Valley



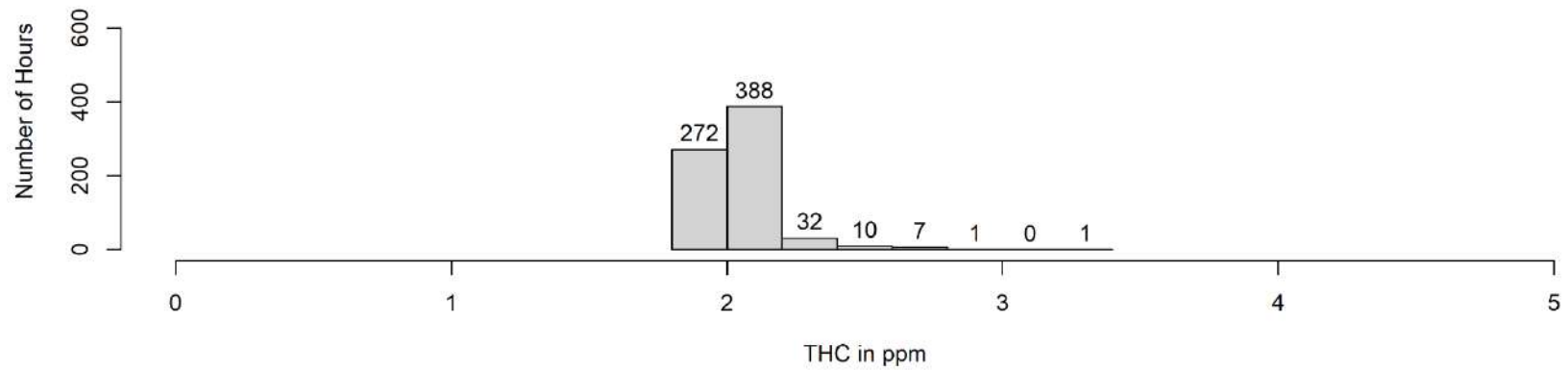
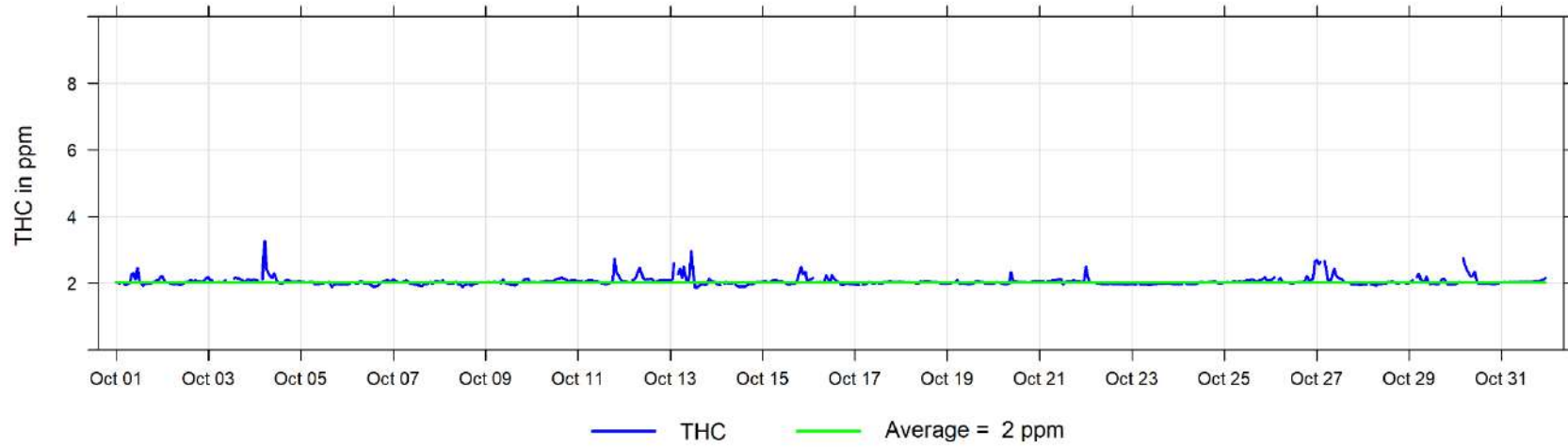
October 2024 Hourly Concentration Readings of NO₂ (in ppb) at Happy Valley



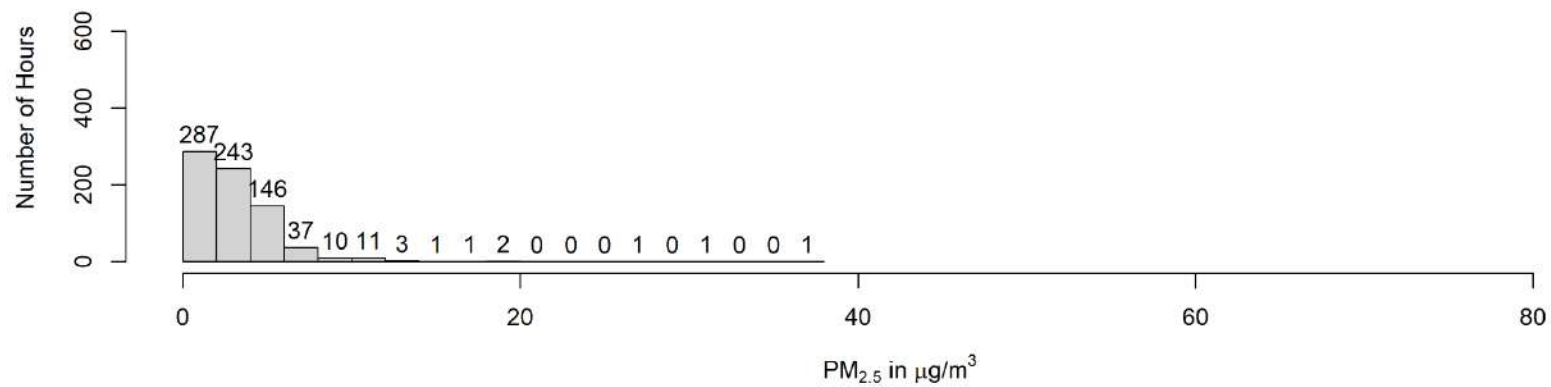
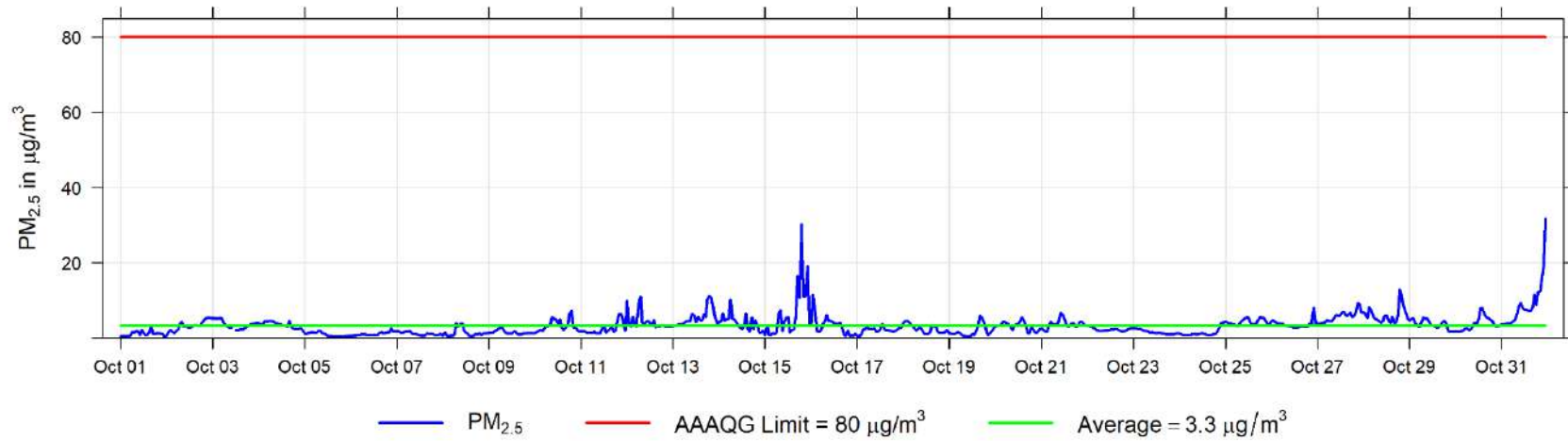
October 2024 Hourly Concentration Readings of O₃ (in ppb) at Happy Valley



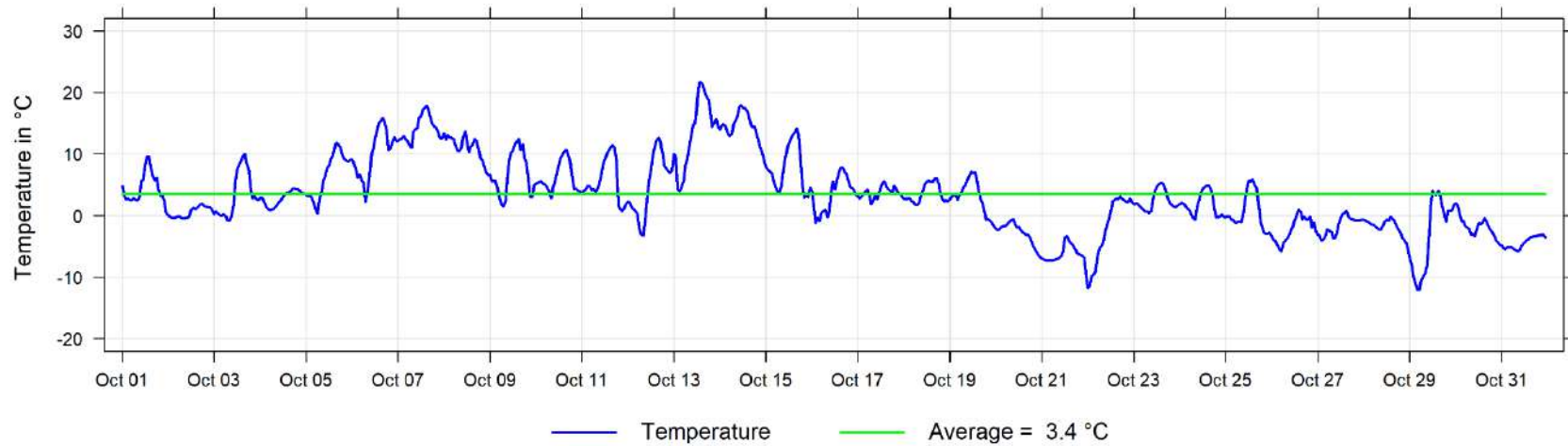
October 2024 Hourly Concentration Readings of THC (in ppm) at Happy Valley



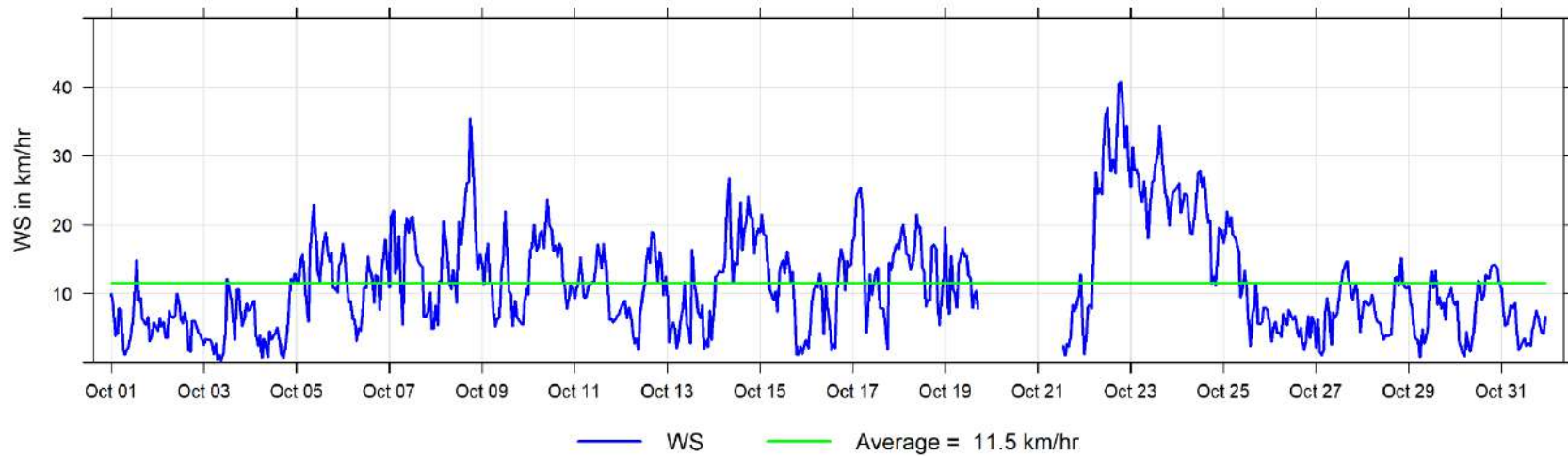
October 2024 Hourly Concentration Readings of PM_{2.5} in µg/m³ at Happy Valley



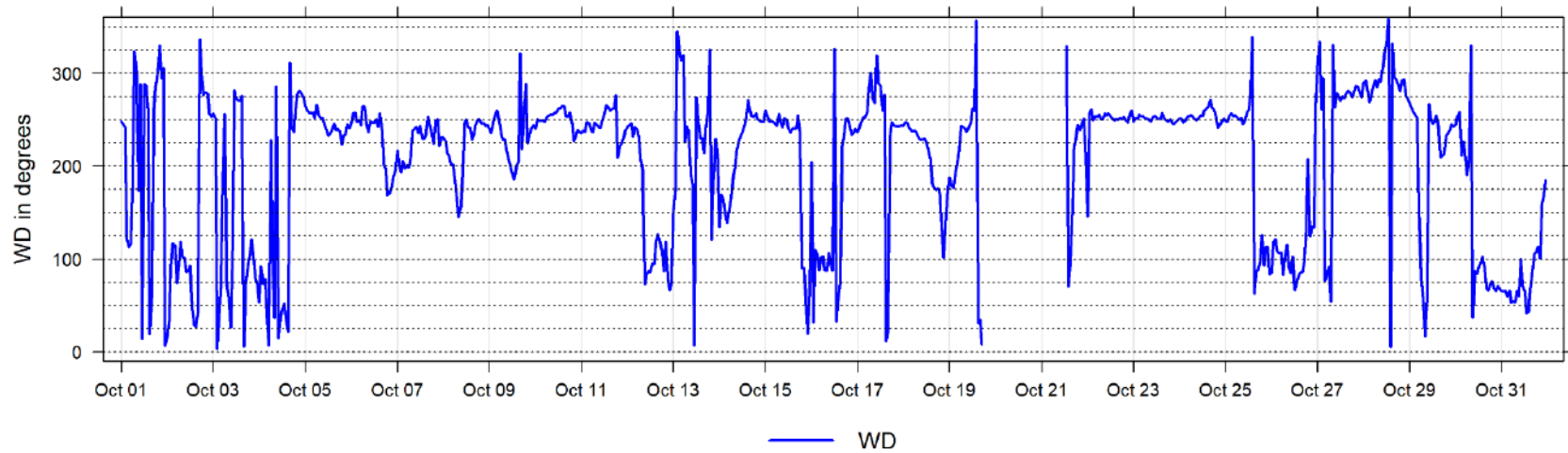
October 2024 Hourly Temperature Readings (in °C) at Happy Valley



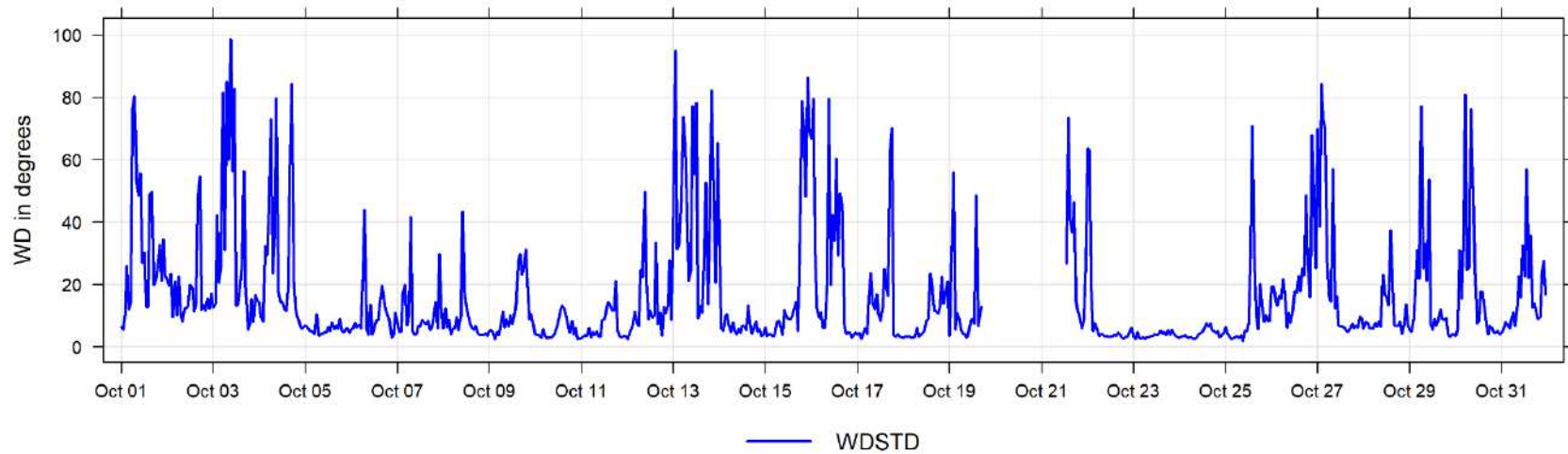
October 2024 Hourly Readings of Wind Speed (in km/hr) at Happy Valley

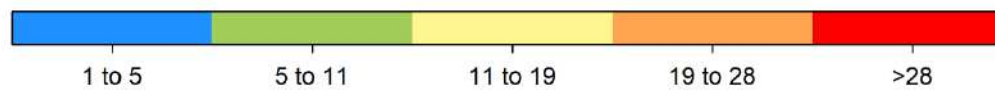
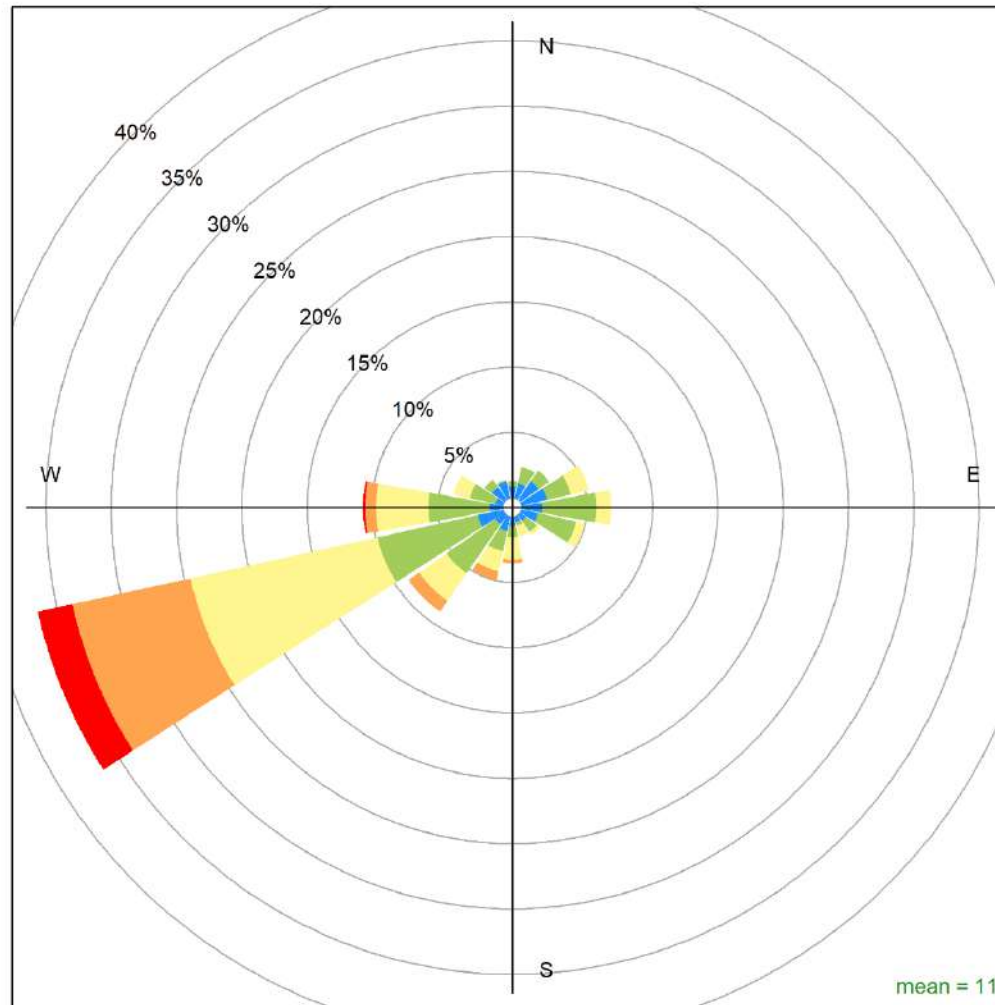


October 2024 Hourly Readings of Wind Direction (in degrees) at Happy Valley



October 2024 Hourly Readings of Wind Direction Standard Deviation (in degrees) at Happy Valley



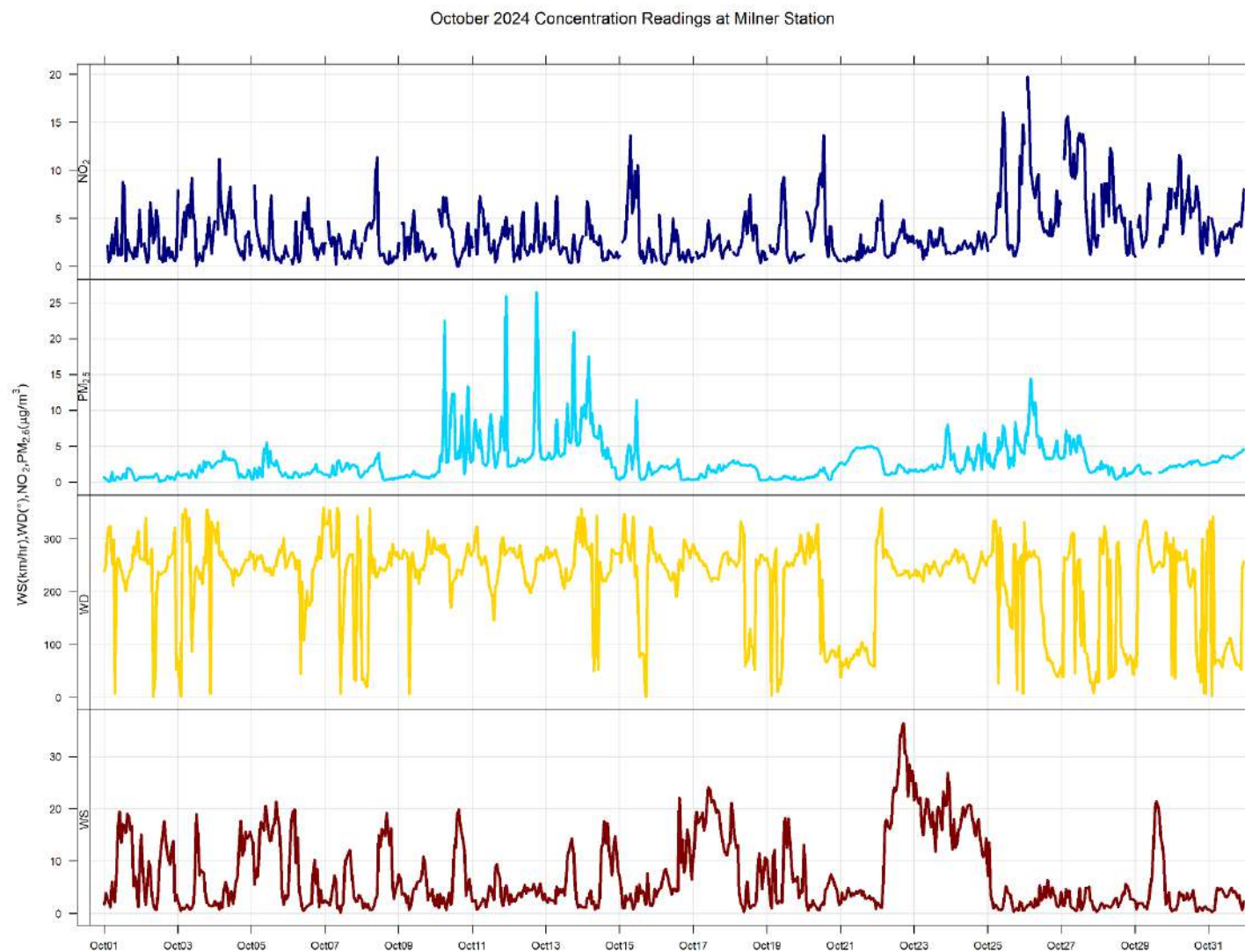


Happy Valley October 2024 Wind Rose, wind speed in km/hr

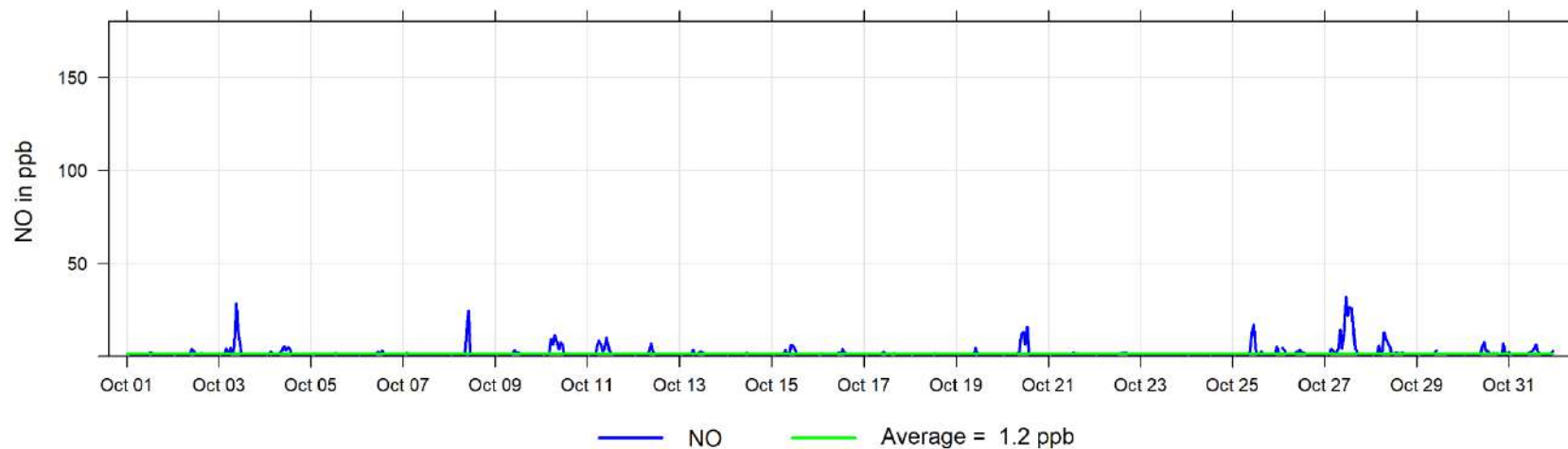
Calms (<1km/hr) = 1.3 %

9 Milner Charts

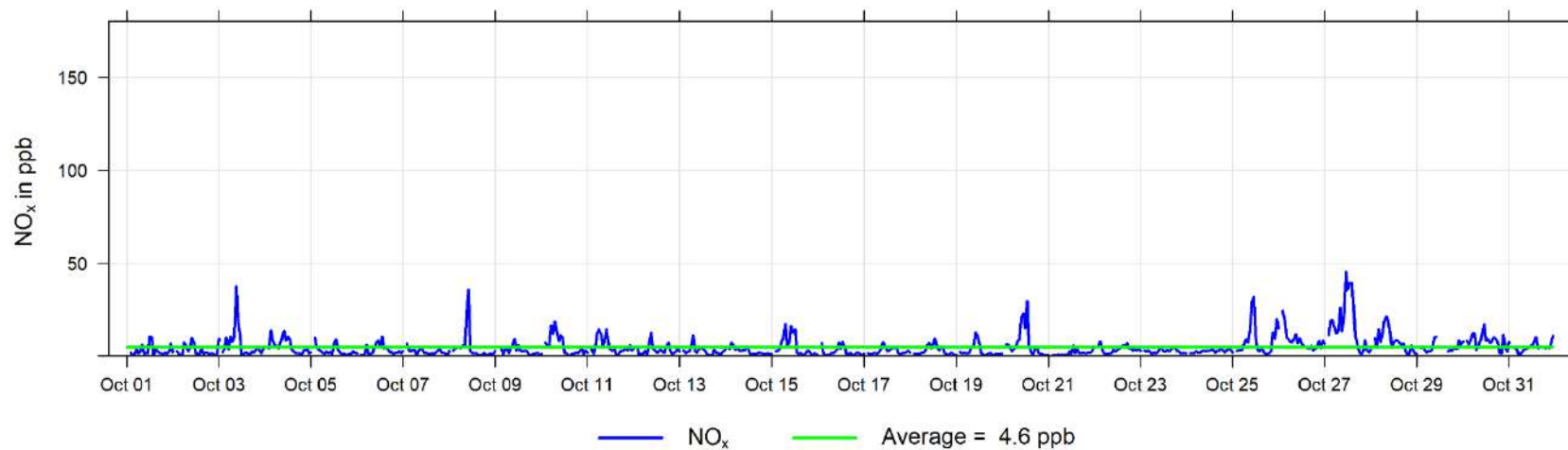
The following pages include the charts and histograms for Milner Station



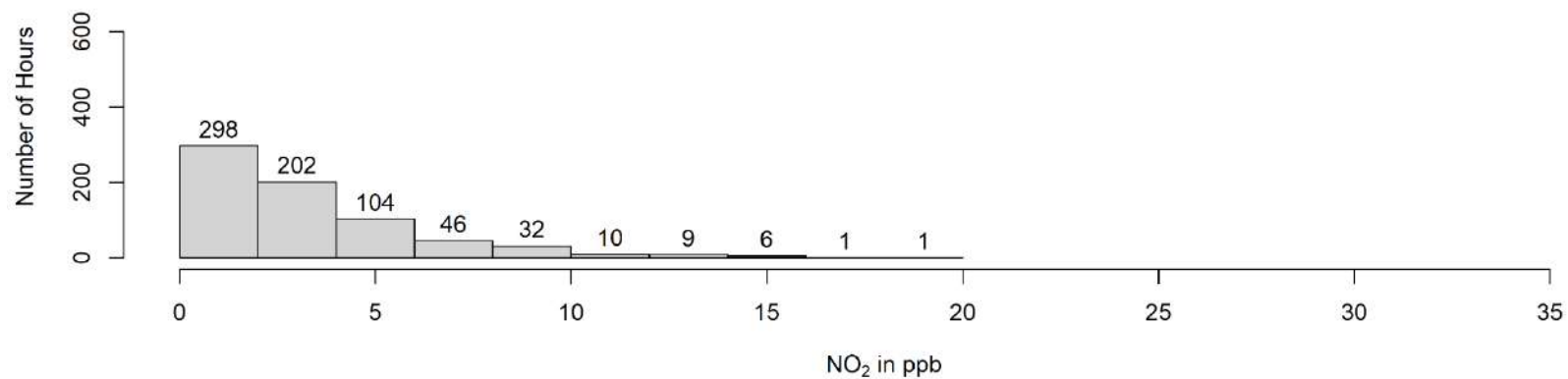
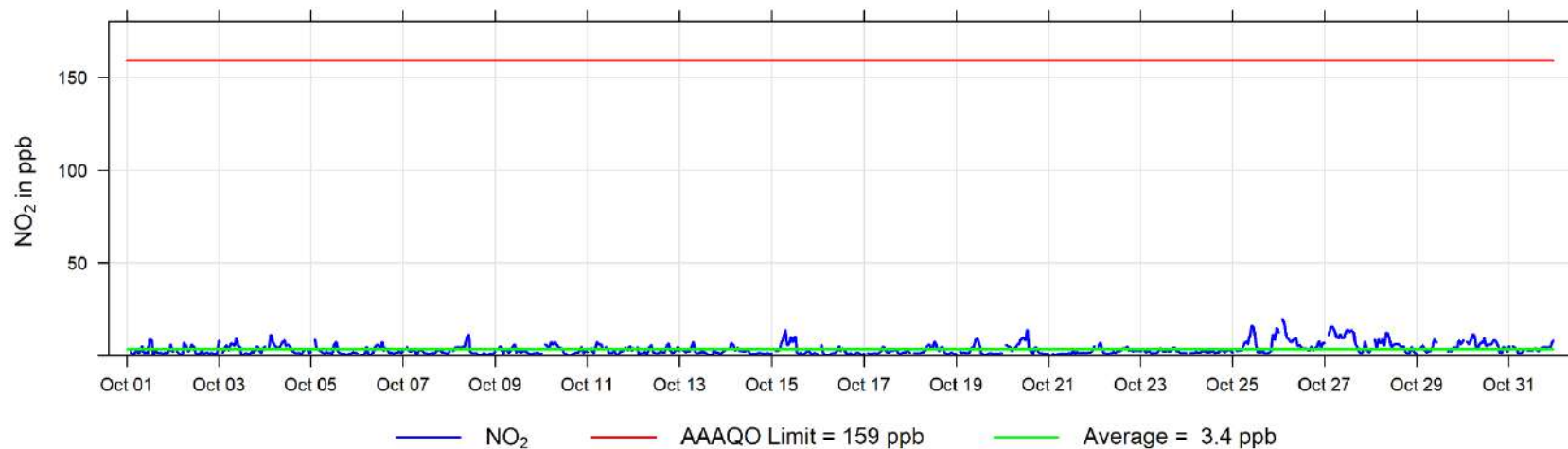
October 2024 Hourly Concentration Readings of NO (in ppb) at Milner



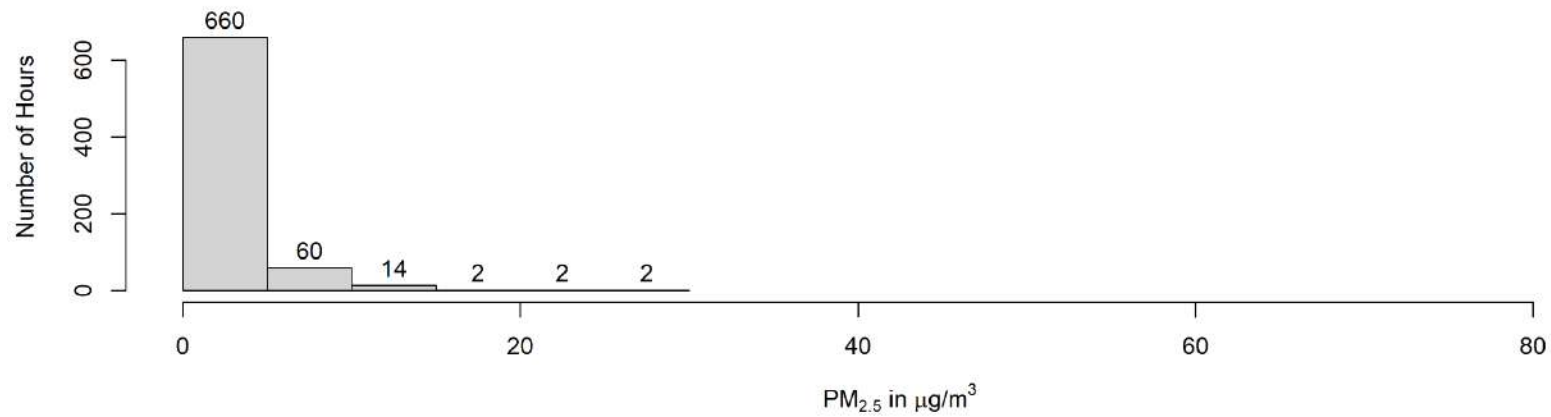
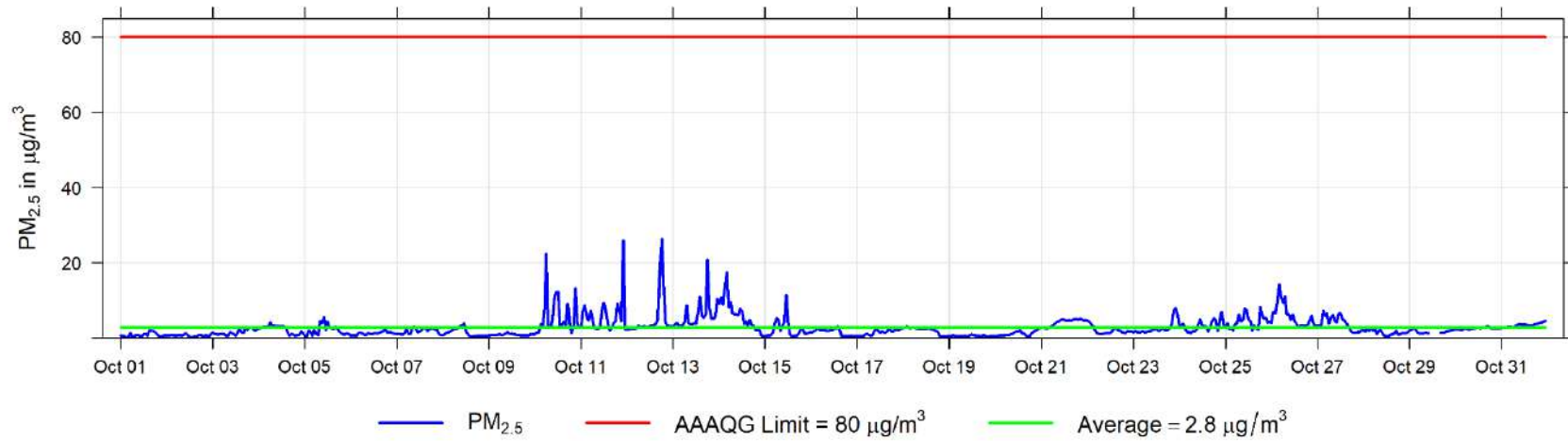
October 2024 Hourly Concentration Readings of NO_x (in ppb) at Milner



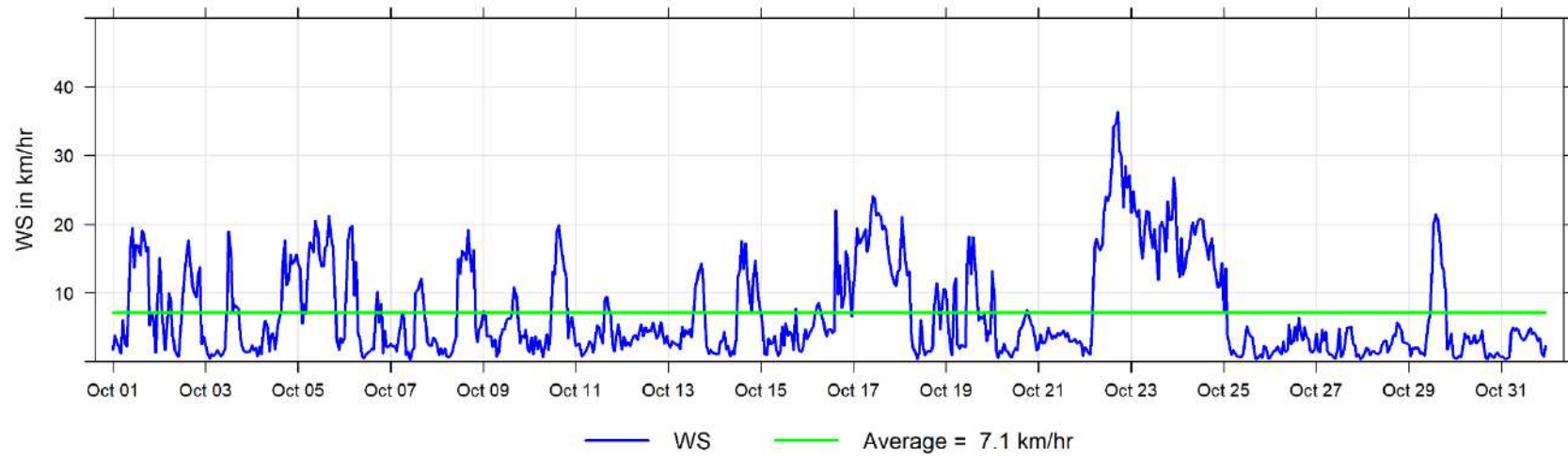
October 2024 Hourly Concentration Readings of NO₂ (in ppb) at Milner



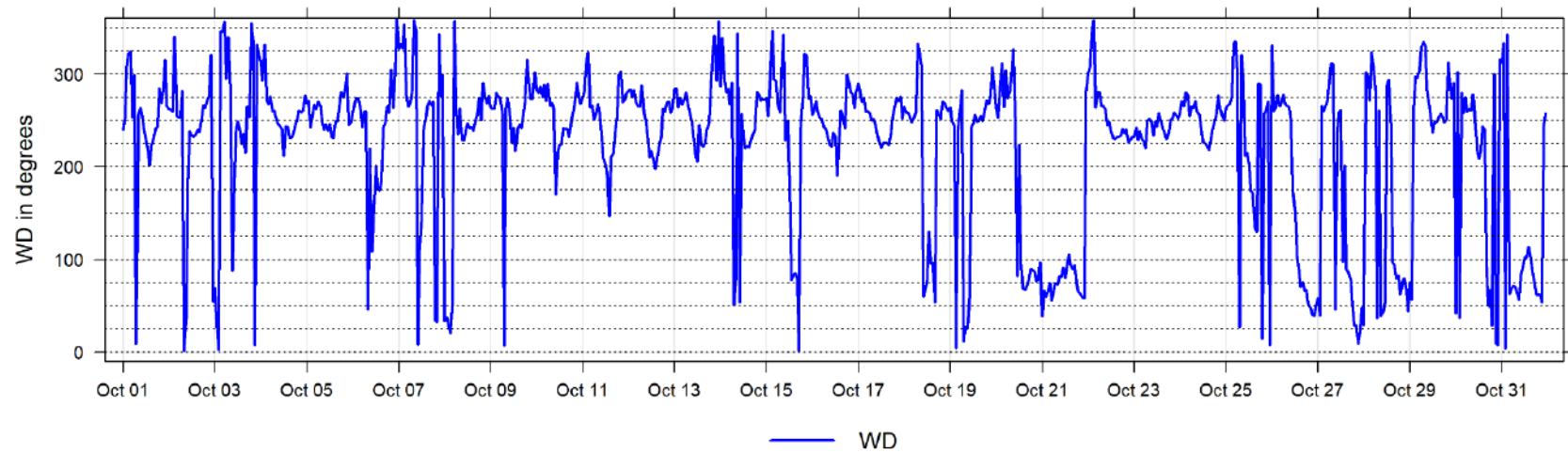
October 2024 Hourly Concentration Readings of PM_{2.5} in $\mu\text{g}/\text{m}^3$ at Milner



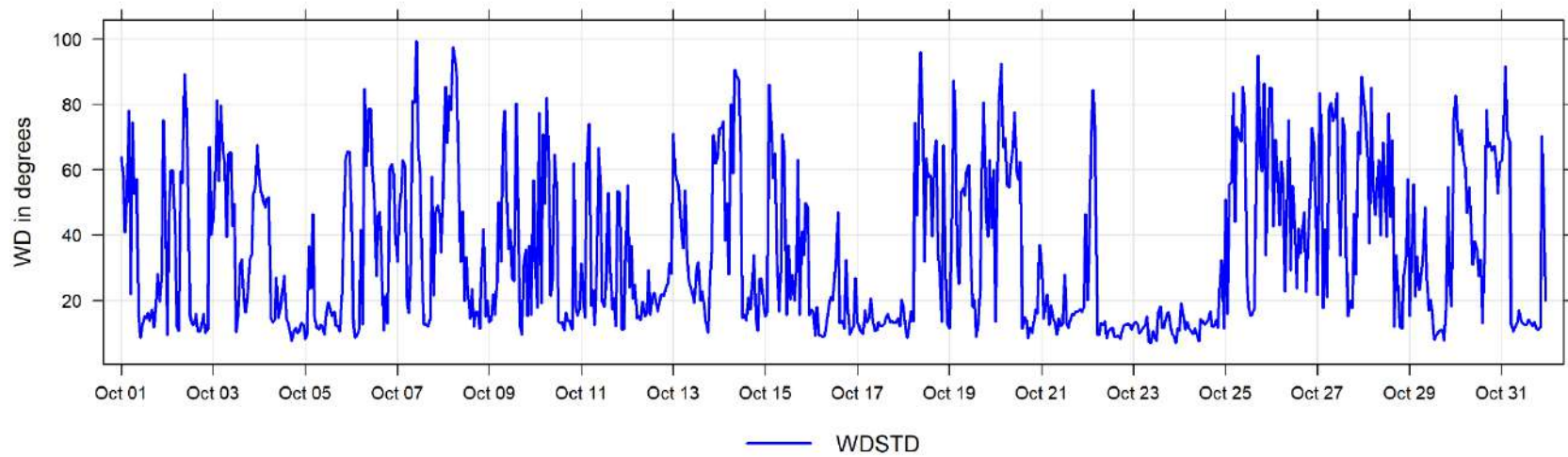
October 2024 Hourly Readings of Wind Speed (in km/hr) at Milner

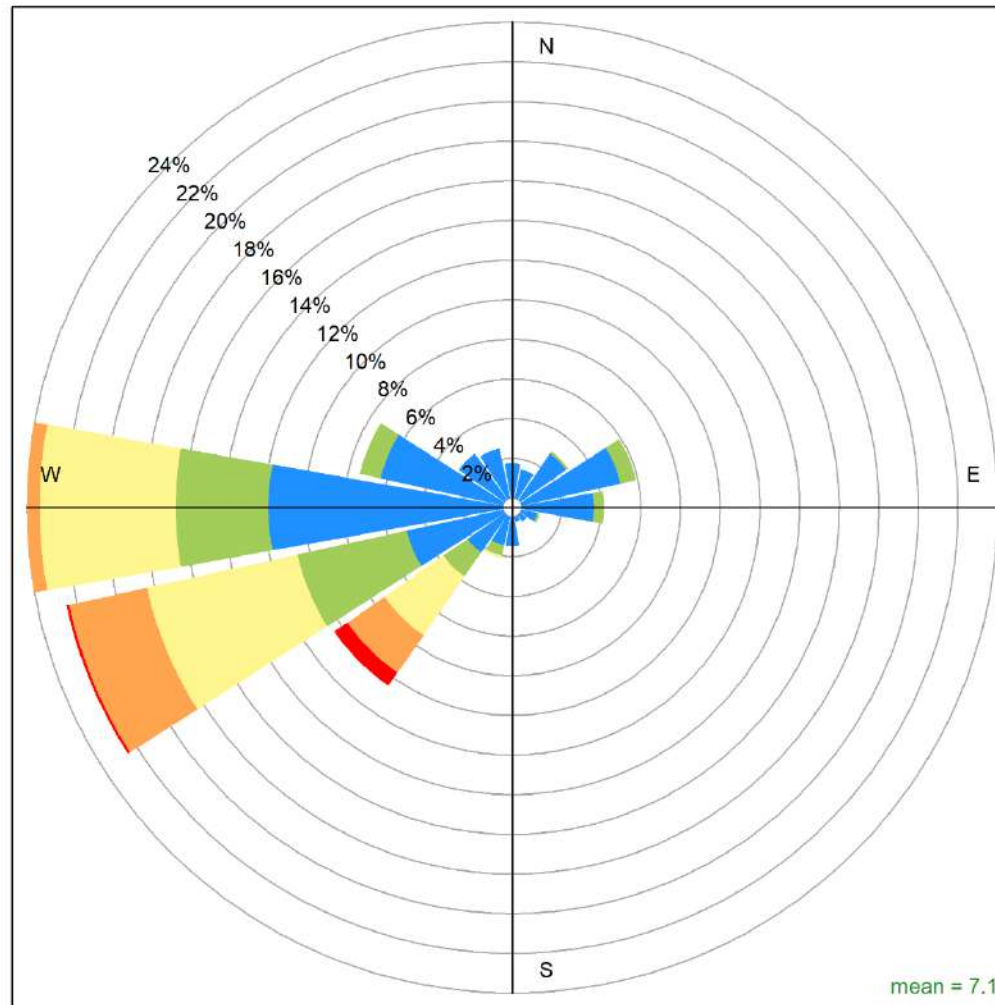


October 2024 Hourly Readings of Wind Direction (in degrees) at Milner



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





mean = 7.1

1 to 5

5 to 11

11 to 19

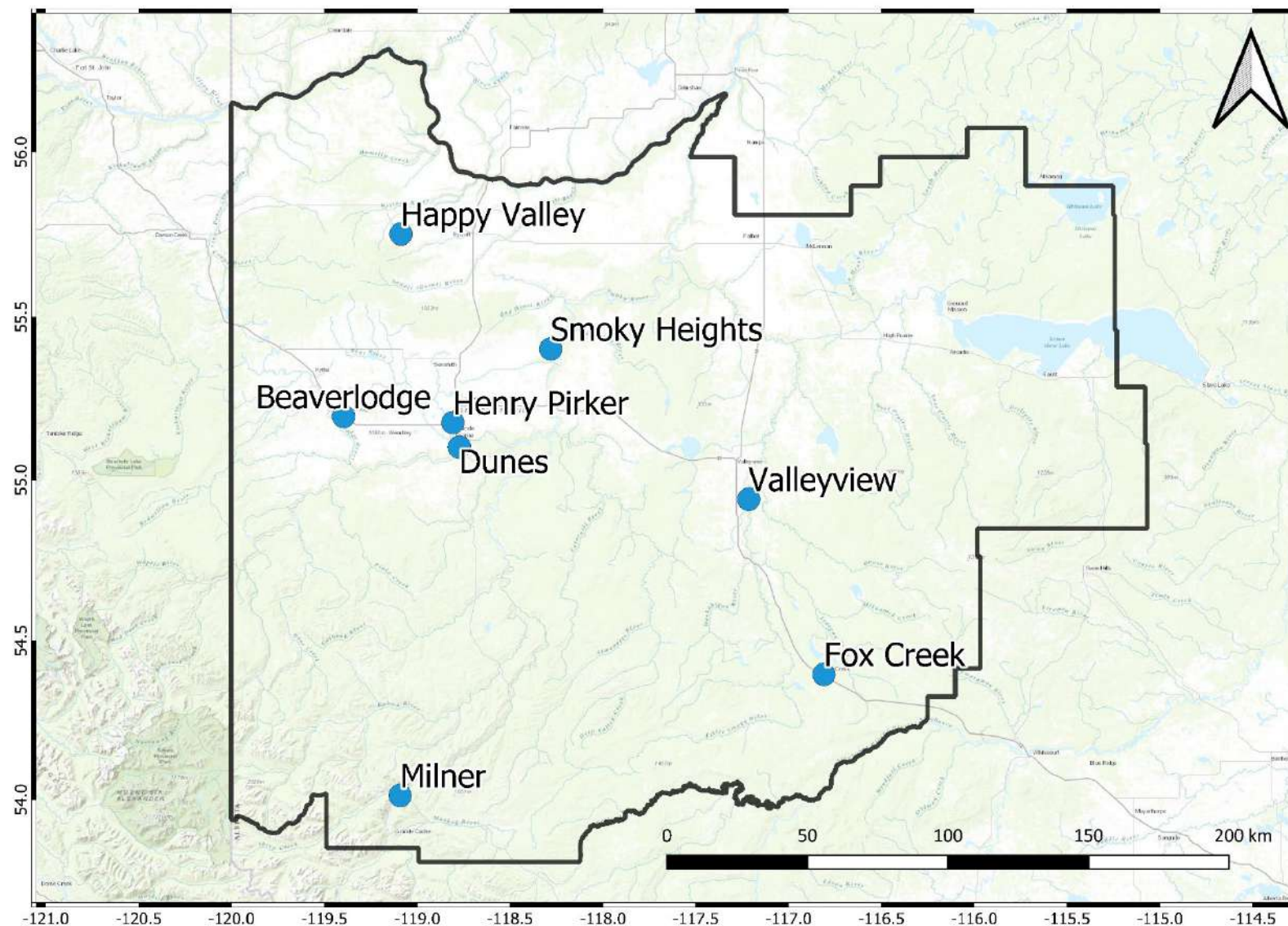
19 to 28

>28

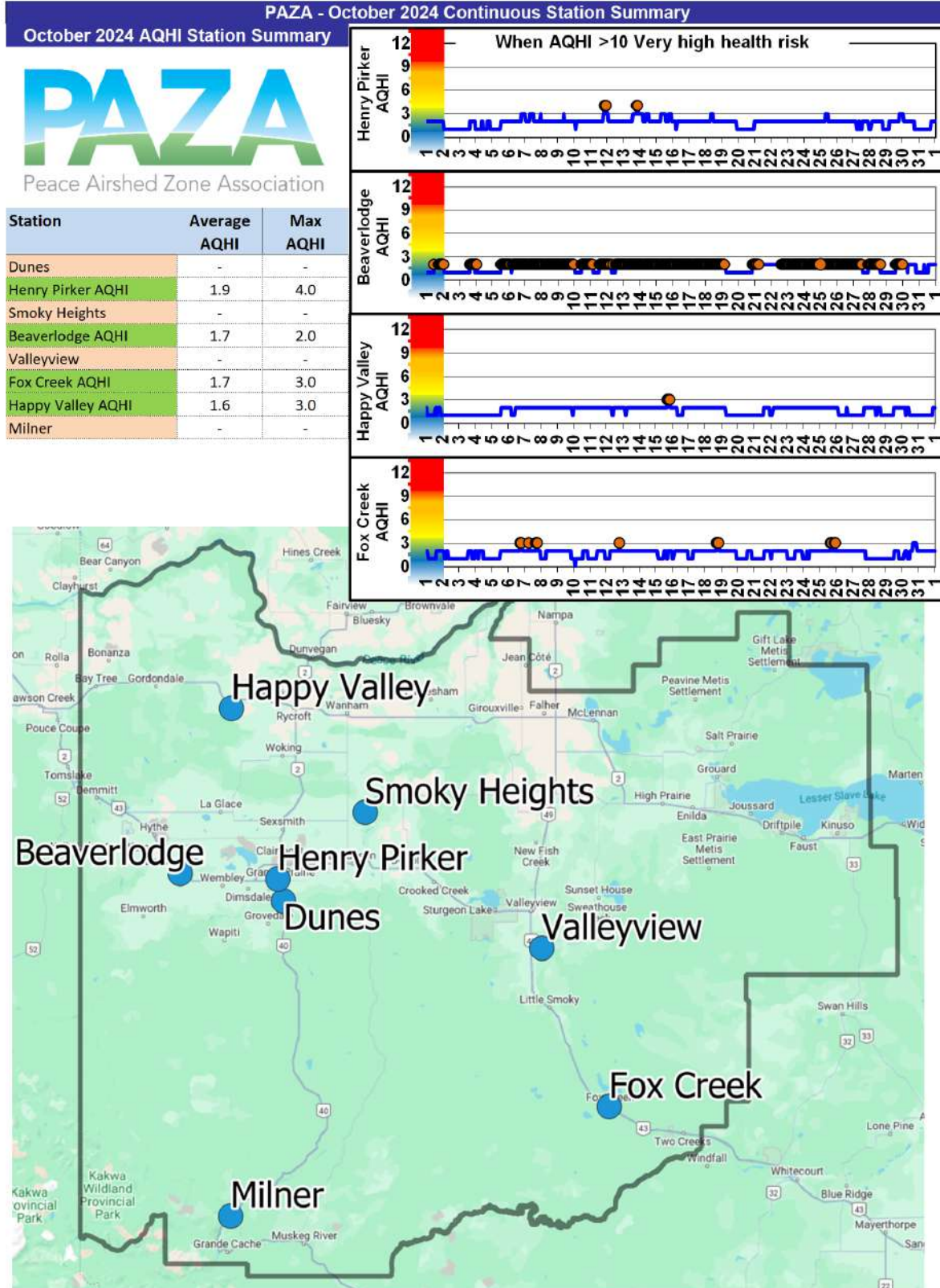
Milner October 2024 Wind Rose, wind speed in km/hr

Calms (<1km/hr) = 8.7 %

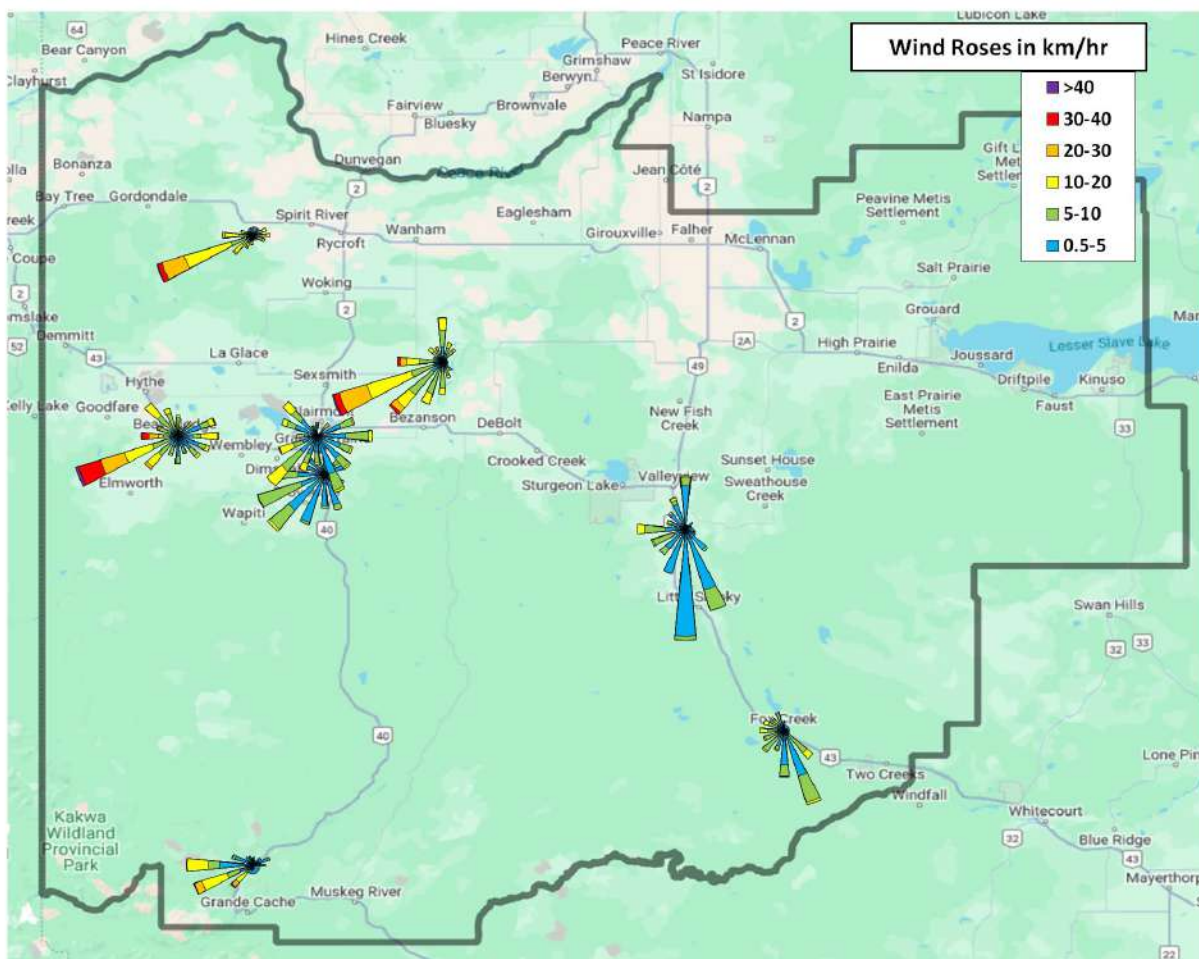
10 Concentration Summaries and Roses for PAZA



10.1 Air Quality Health Index (AQHI) Plots



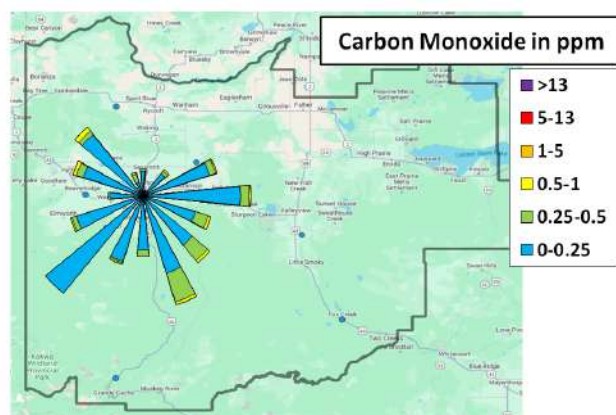
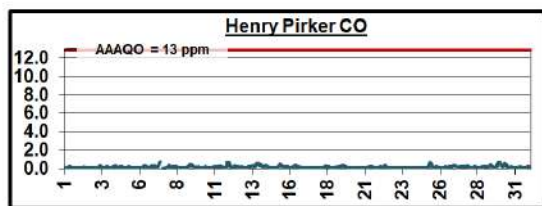
10.2 Wind Roses



10.3 Carbon Monoxide (CO) Plots

October 2024 CO Station Summary

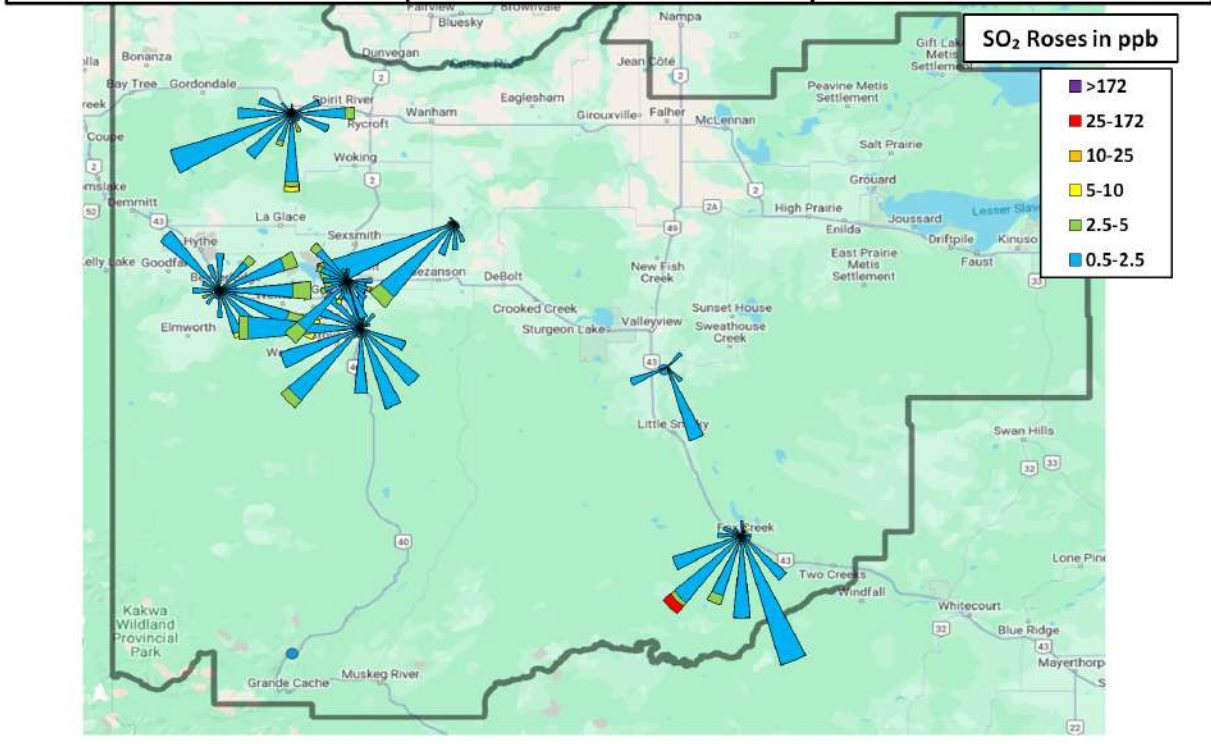
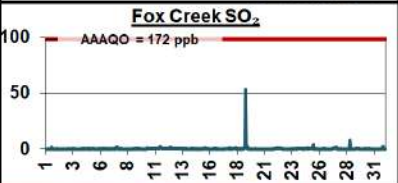
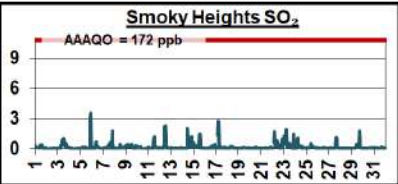
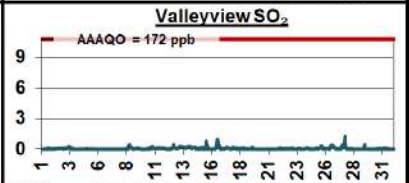
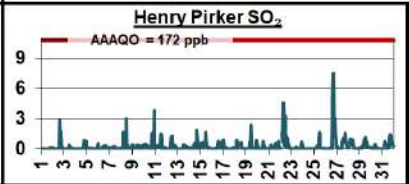
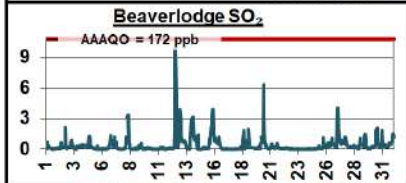
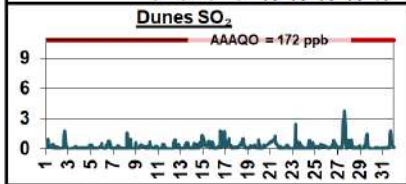
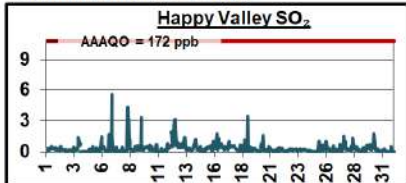
Station	Avg (ppm)	Max (ppm)
Henry Pirker CO	0.19	0.73



10.4 Sulphur Dioxide (SO₂) Plots

October 2024 SO ₂ Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes SO ₂	0.2	3.7
Henry Pirker SO ₂	0.2	7.5
Smoky Heights SO ₂	0.2	3.5
Beaverlodge SO ₂	0.4	9.8
Valleyview SO ₂	0.1	1.3
Fox Creek SO ₂	0.5	53.2
Happy Valley SO ₂	0.3	5.6
Milner SO ₂	-	-

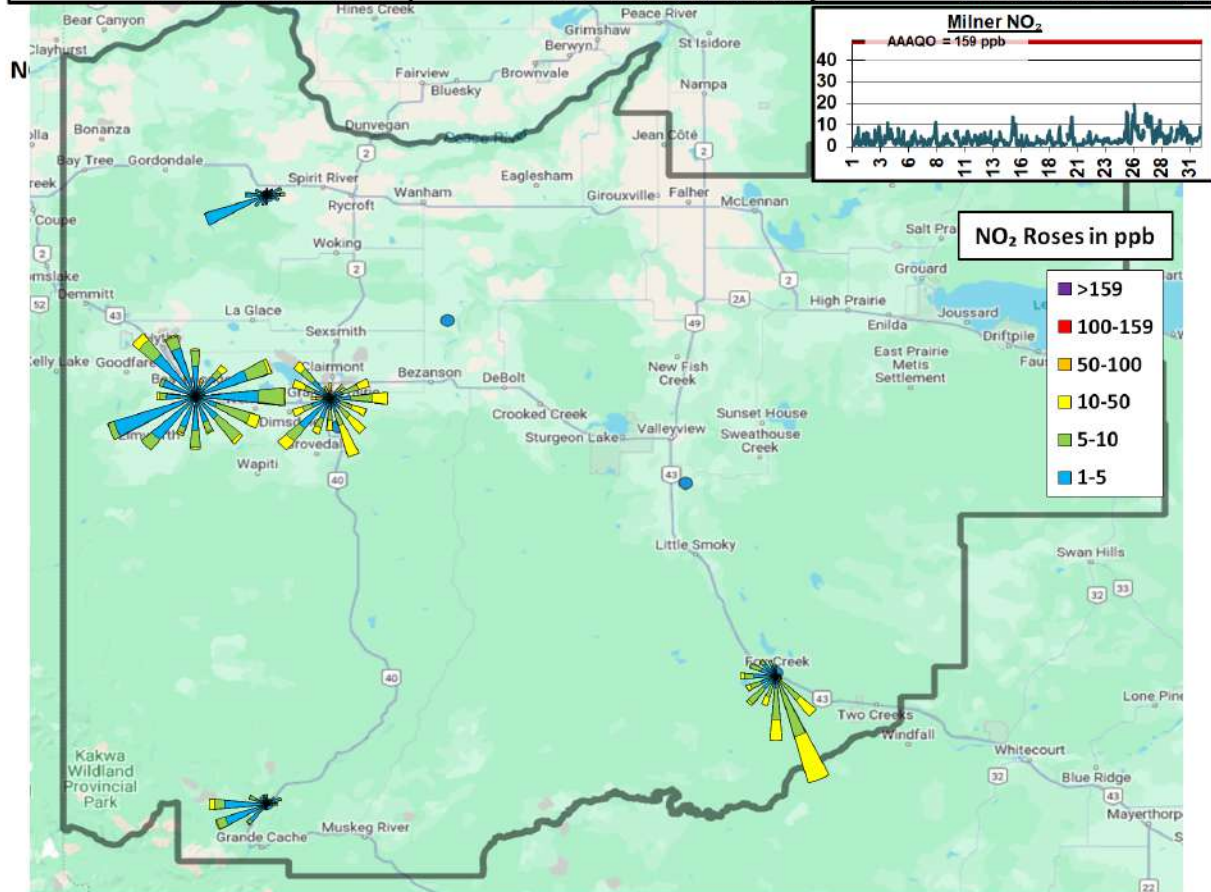
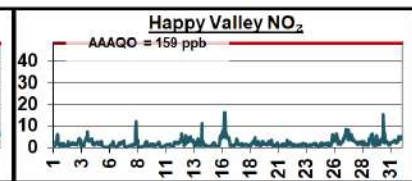
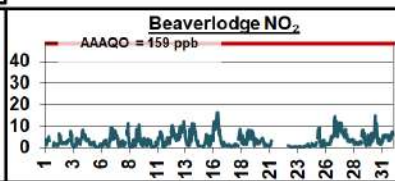
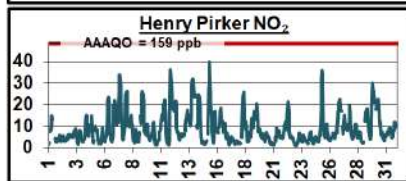
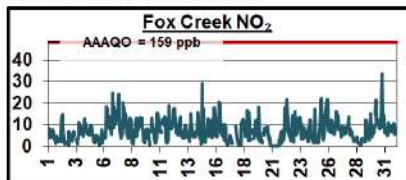
Sulphur Dioxide in ppb



10.5 Nitrogen Dioxide (NO₂) Plots

October 2024 NO ₂ Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes NO ₂	-	-
Henry Pirkler NO ₂	9.0	39.9
Smoky Heights NO ₂	-	-
Beaverlodge NO ₂	3.5	16.4
Valleyview NO ₂	-	-
Fox Creek NO ₂	7.4	33.6
Happy Valley NO ₂	2.1	16.1
Milner NO ₂	3.4	19.7

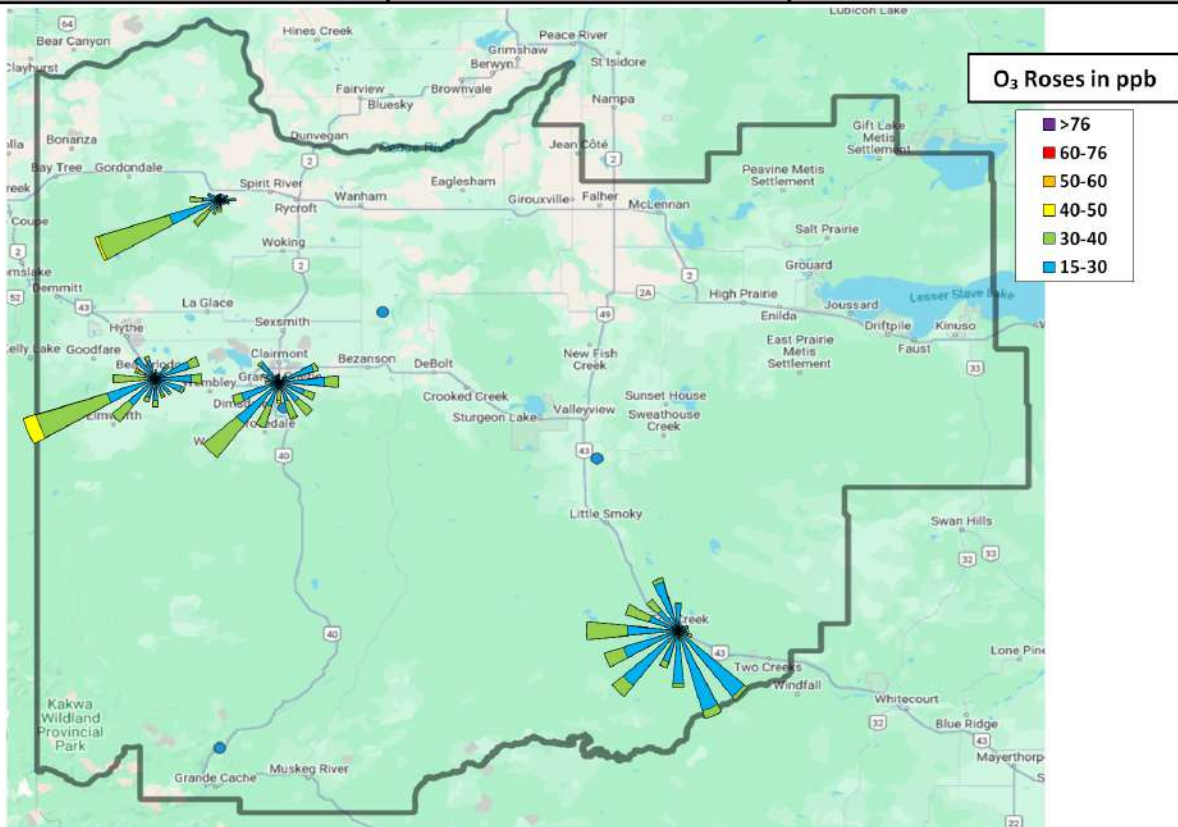
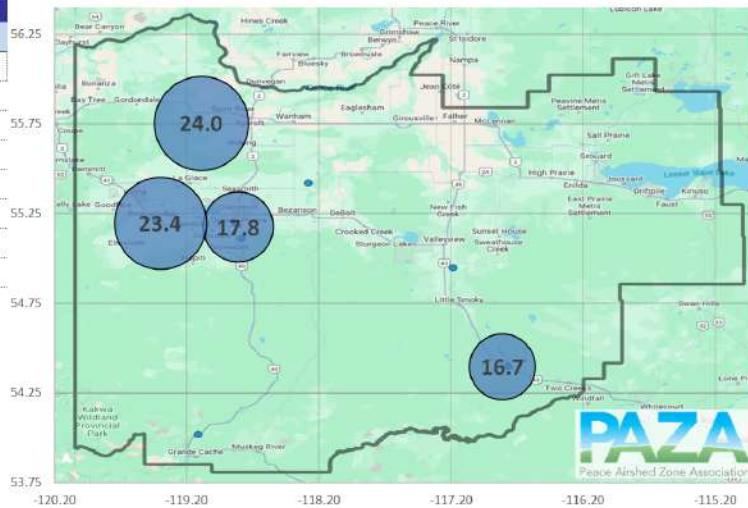
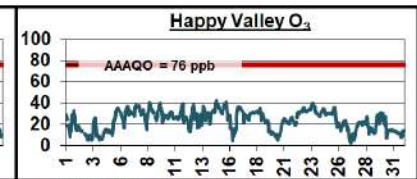
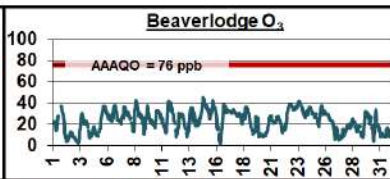
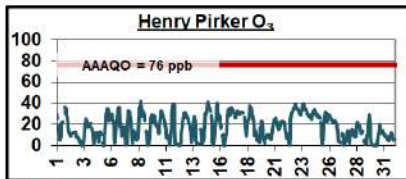
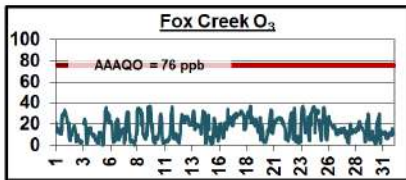
Nitrogen Dioxide in ppb



10.6 Ozone (O₃) Plots

October 2024 O ₃ Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes O ₃	-	-
Henry Pirkler O ₃	17.8	41.9
Smoky Heights O ₃	-	-
Beaverlodge O ₃	23.4	45.3
Valleyview O ₃	-	-
Fox Creek O ₃	16.7	37.3
Happy Valley O ₃	24.0	42.6
Milner O ₃	-	-

Ozone in ppb

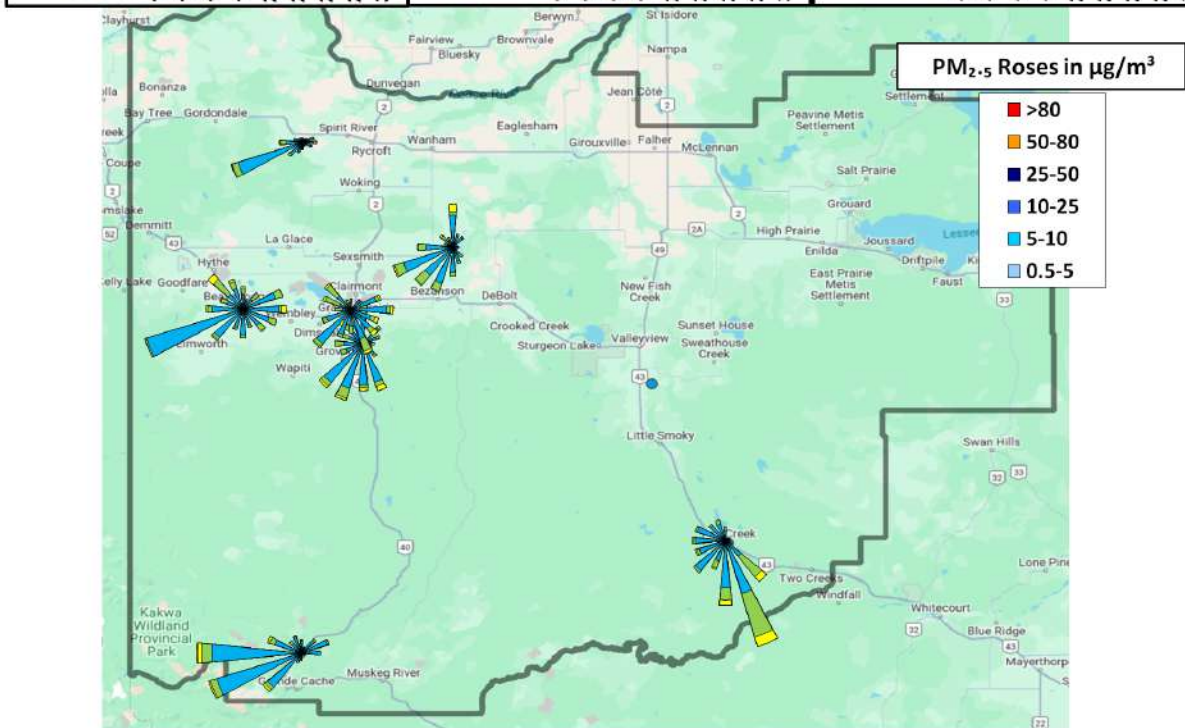
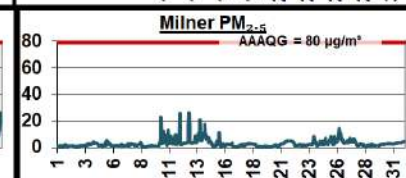
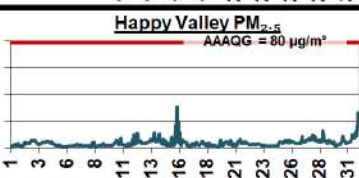
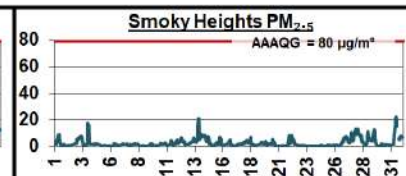
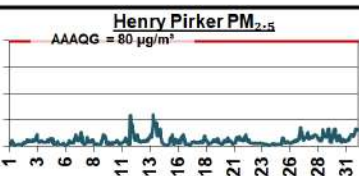
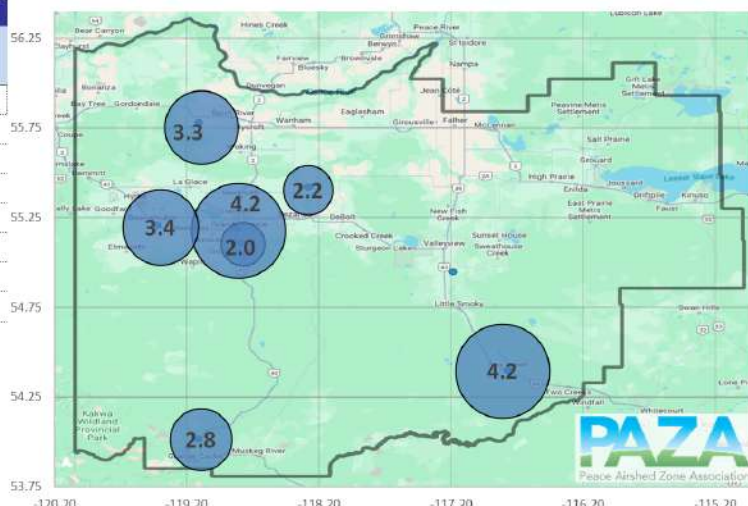
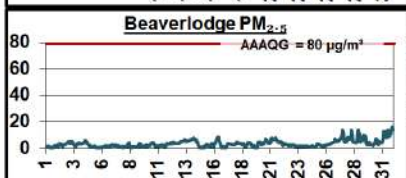
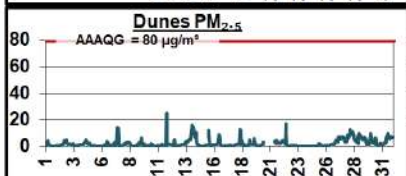
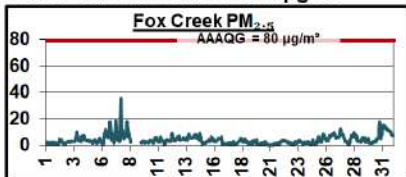


10.7 Fine Particulate Matter (PM_{2.5}) Plots

October 2024 PM_{2.5} Station Summary

Station	Avg µg/m ³	Max µg/m ³
Dunes PM _{2.5}	2.0	24.5
Henry Pirker PM _{2.5}	4.2	23.6
Smoky Heights PM _{2.5}	2.2	22.1
Beaverlodge PM _{2.5}	3.4	16.2
Valleyview PM _{2.5}	-	-
Fox Creek PM _{2.5}	4.2	35.7
Happy Valley PM _{2.5}	3.3	37.4
Milner PM _{2.5}	2.8	26.4

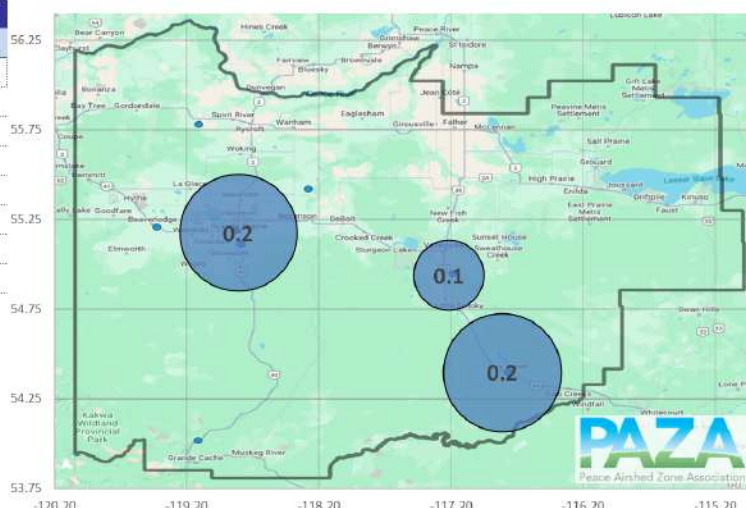
Fine Particulate Matter in µg/m³



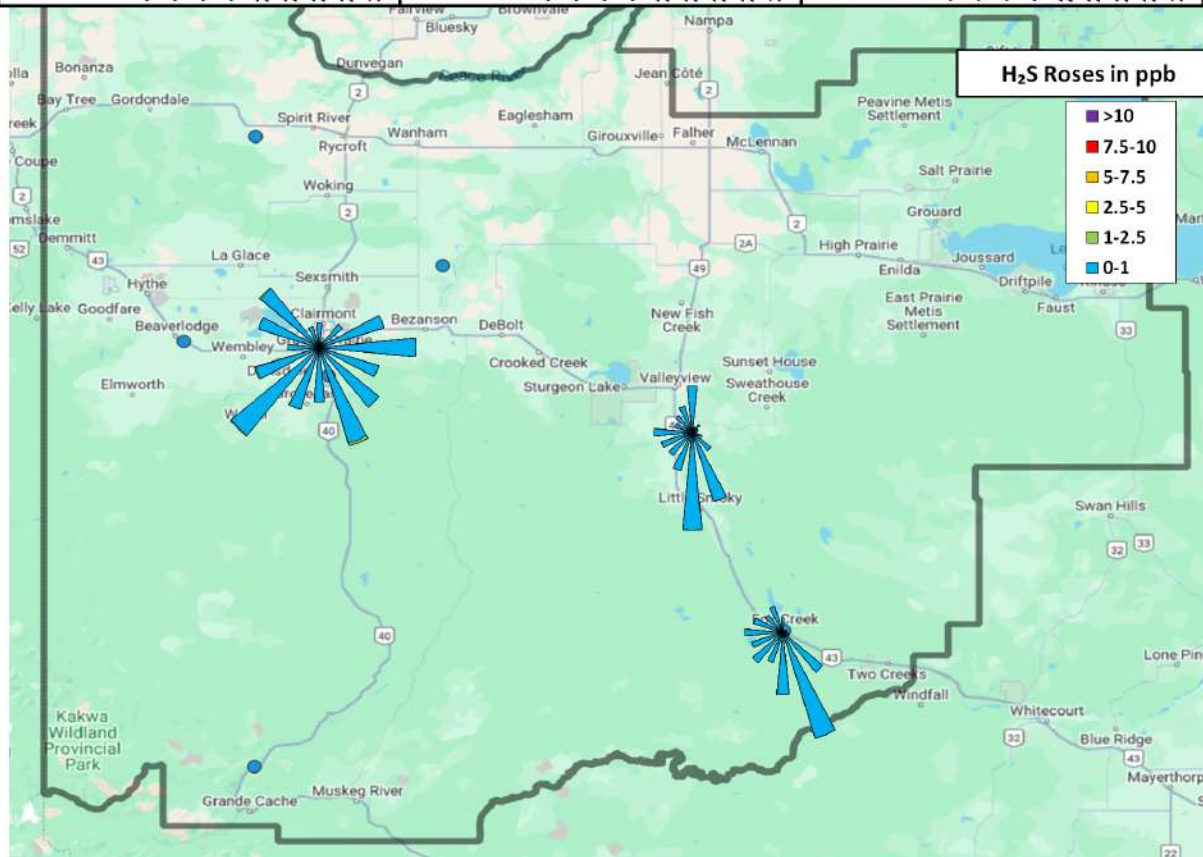
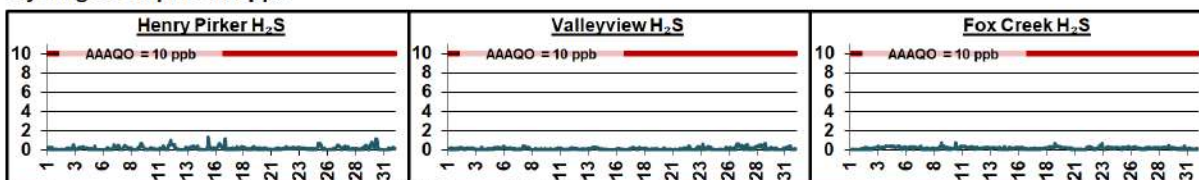
10.8 Hydrogen Sulphide (H₂S) Plots

October 2024 H₂S Station Summary

Station	Avg (ppb)	Max (ppb)
Dunes H ₂ S	-	-
Henry Pirkler H ₂ S	0.2	1.4
Smoky Heights H ₂ S	-	-
Beaverlodge H ₂ S	-	-
Valleyview H ₂ S	0.1	0.7
Fox Creek H ₂ S	0.2	0.8
Happy Valley H ₂ S	-	-
Milner H ₂ S	-	-

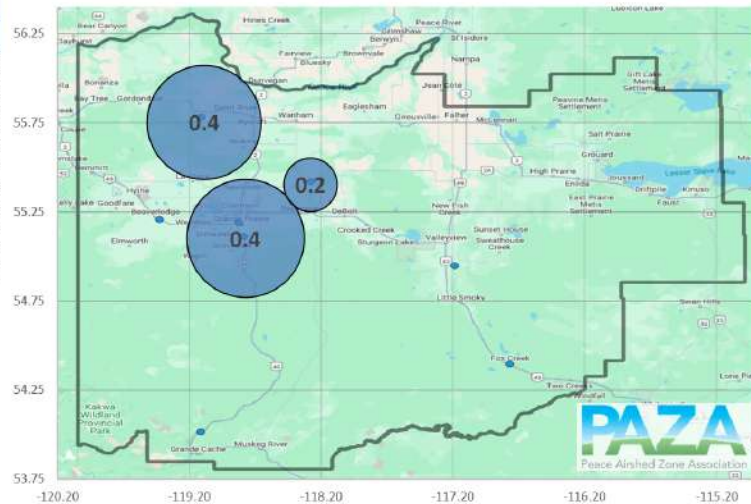


Hydrogen Sulphide in ppb

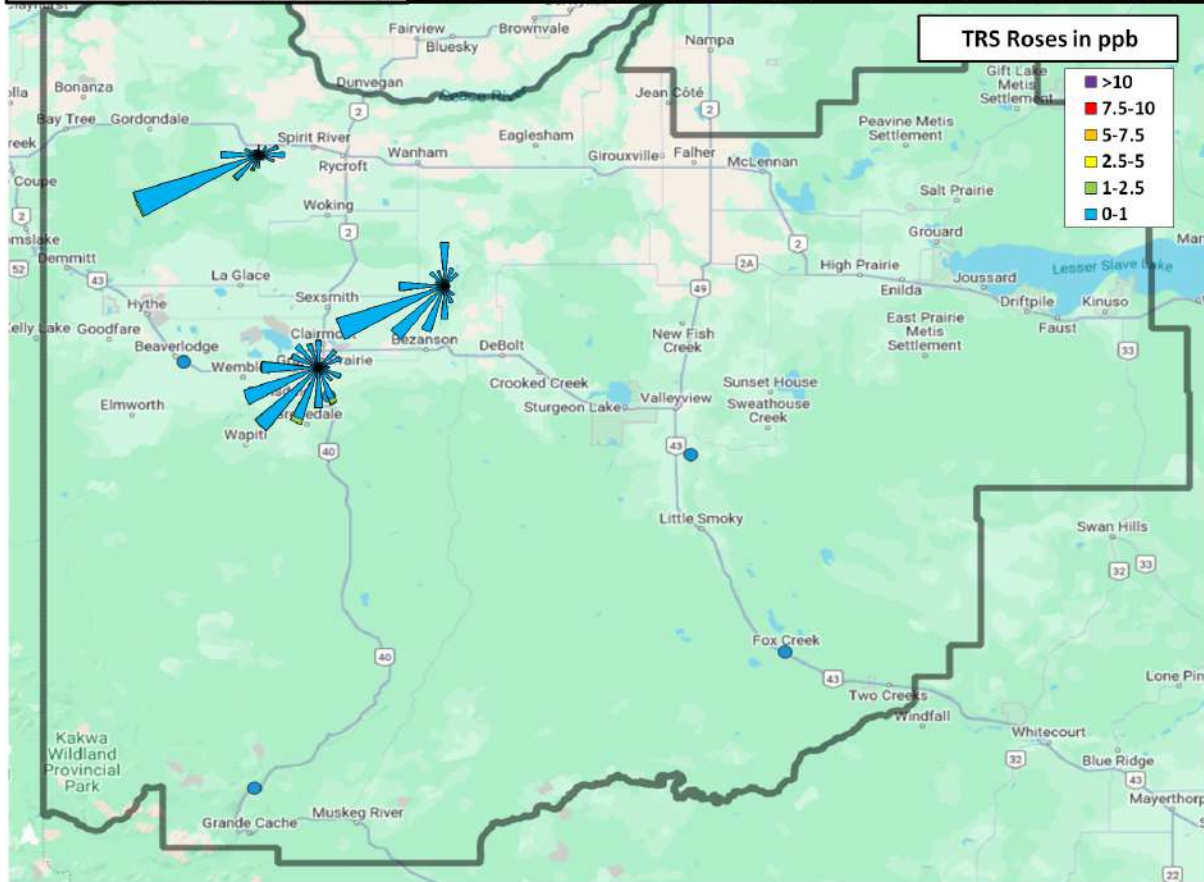
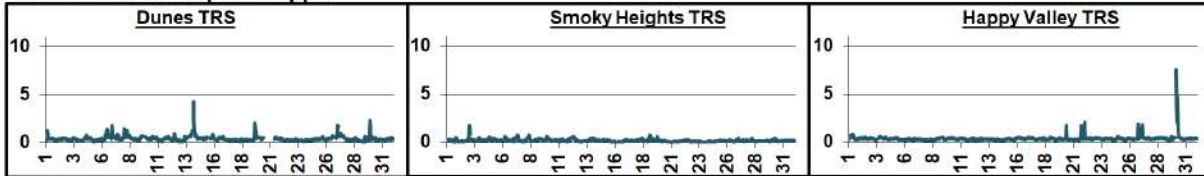


10.9 Total Reduced Sulphur (TRS) Plots

October 2024 TRS Station Summary		
Station	Avg (ppb)	Max (ppb)
Dunes TRS	0.4	4.2
Henry Pirkier TRS	-	-
Smoky Heights TRS	0.2	1.8
Beaverlodge TRS	-	-
Valleyview TRS	-	-
Fox Creek TRS	-	-
Happy Valley TRS	0.4	7.6
Milner TRS	-	-



Total Reduced Sulphur in ppb

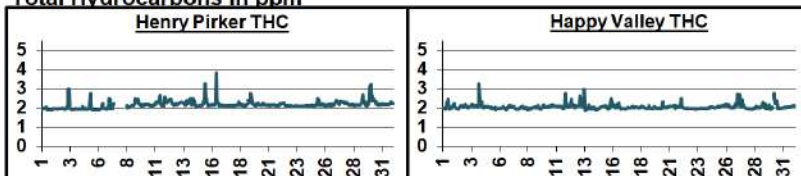


10.10 Total Hydrocarbon (THC) Plots

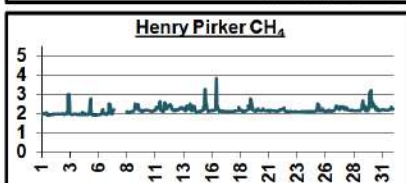
October 2024 THC Station Summary

Station	Total Hydrocarbons		Methane		Non-Methane HCs	
	Avg (ppm)	Max (ppm)	Avg (ppm)	Max (ppm)	Avg (ppm)	Max (ppm)
Dunes THC	-	-	-	-	-	-
Henry Pirker THC	2.2	3.8	2.2	3.8	0.00	0.12
Smoky Heights THC	-	-	-	-	-	-
Beaverlodge THC	-	-	-	-	-	-
Valleyview THC	-	-	-	-	-	-
Fox Creek THC	-	-	-	-	-	-
Happy Valley THC	2.0	3.3	-	-	-	-

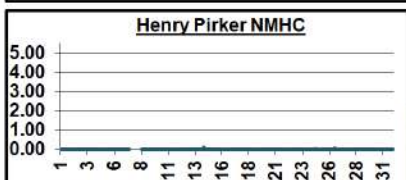
Total Hydrocarbons in ppm



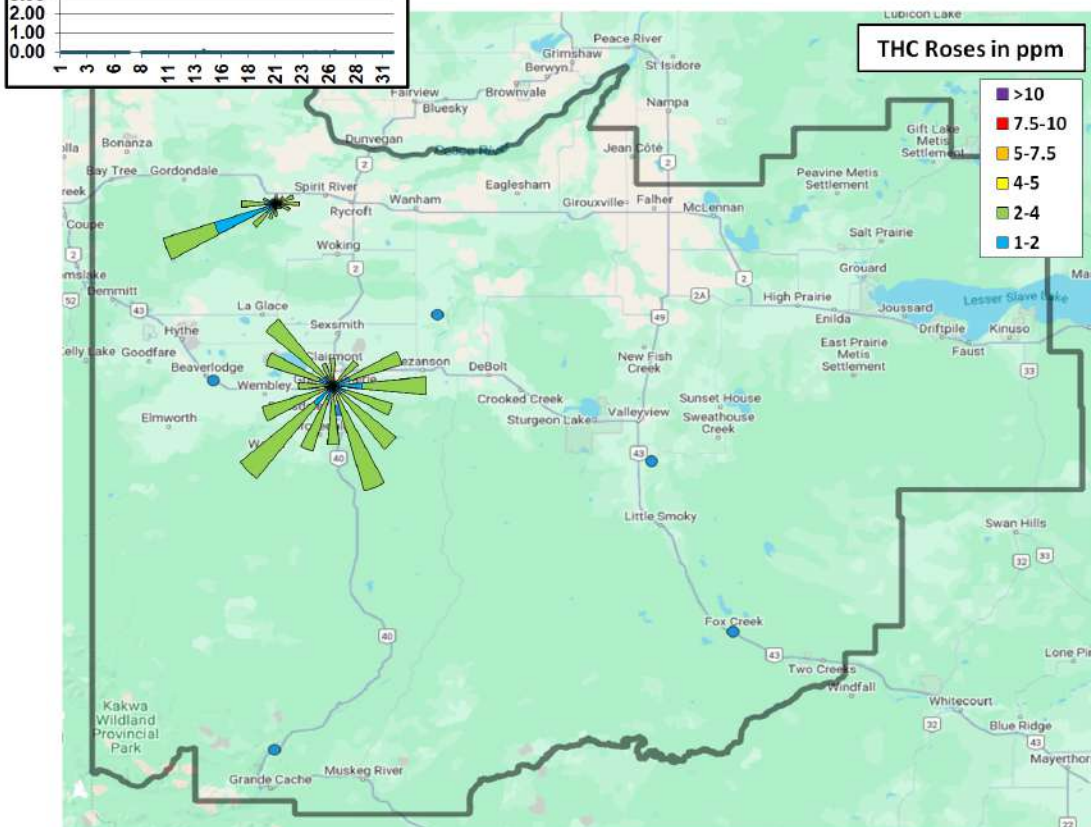
Total Hydrocarbons (THC)



Methane (CH₄)



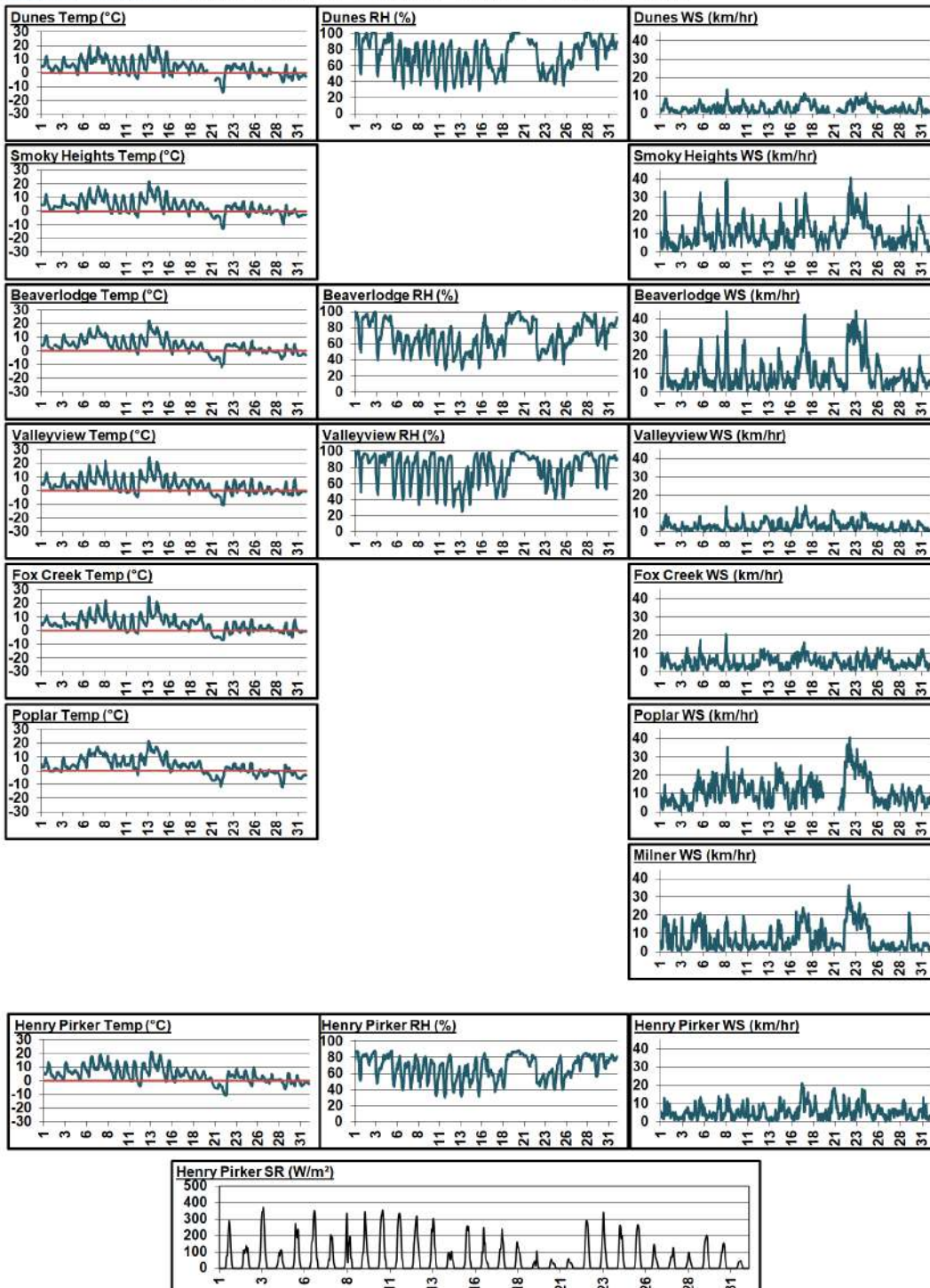
Non-Methane Hydrocarbons (NMHC)



10.11 Meteorology Summary

October 2024 Meterological Summary						
Station	Temp (°C)	RH (%)	SR (W/m ²)	WS (km/hr)	WD (deg)	WD
Dunes	4.0	72.0	-	3.2	235	SW
Henry Pirker	4.4	67.1	45.9	5.4	201	SSW
Smoky Heights	3.6	-	-	10.3	246	WSW
Beaverlodge	4.1	69.4	-	10.1	254	WSW
Valleyview	4.2	78.4	-	3.2	229	SW
Fox Creek	4.6	-	-	5.3	202	WSW
Happy Valley	3.4	-	-	11.5	242	WSW
Milner	-	-	-	7.1	251	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 - update

Peace Airshed Zone Association - PAZA Passive Stations for October 2024

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	LSD
Duplicates						
9a	Spirit River	0.3				08-12-079-07 W6M
9b	Spirit River	0.2				
11a	Webber Creek			2.9		09-36-074-09 W6M
11b	Webber Creek			2.3		
14a	Sylvester			0.6		08-06-069-12 W6M
14b	Sylvester			0.6		
17a	Poplar	0.5				13-06-073-08 W6M
17b	Poplar	0.6				
18a	Saddle Hills					04-25-074-07 W6M
18b	Saddle Hills					
37a	Crooked Creek		26.4			16-01-071-26 W5M
37b	Crooked Creek		24.3			
46a	Little Smoky			2.2		12-01-065-21 W5M
46b	Little Smoky			2.4		
47a	Kinuso	0.1				12-10-073-10 W5M
47b	Kinuso	0.1				
48a	Deer Mountain	0.1				15-22-068-09 W5M
48b	Deer Mountain	0.1				
50a	East Prairie			0.6		11-13-079-08 W6M
50b	East Prairie			0.8		
D2a	Duvernay 2	0.5			0.08	04-33-062-20 W5M
D2b	Duvernay 2	0.4			0.10	
G4a	Girouxville 4				0.27	
G4b	Girouxville 4				0.37	
K1a	Kakwa 1			2.4		01-13-063-05 W6M
K1b	Kakwa 1			2.6		
K4a	Kakwa 4	2.3				06-18-063-04 W6M
K4b	Kakwa 4	2.8				
K2a	Kakwa 2				0.06	08-13-063-05 W6M
K2b	Kakwa 2				0.05	
M9Aa	Milner Pipeline			2.3		12-14-058-08 W6M
M9Ab	Milner Pipeline			3.4		
M10a	Milner Powerline	0.1				06-14-058-08 W6M
M10b	Milner Powerline	0.1				
J2Da	Jayar2 14-8			2.0		07-08-062-03 W6M
J2Db	Jayar2 14-8			2.6		
J4Da	Jayar4 7-8 or 8-8 Pad	0.3				10-08-062-03 W6M
J4Db	Jayar4 7-8 or 8-8 Pad	0.4				
J5Da	Jayar5 Camp				0.36	11-08-062-03 W6M
J5Db	Jayar5 Camp				0.34	

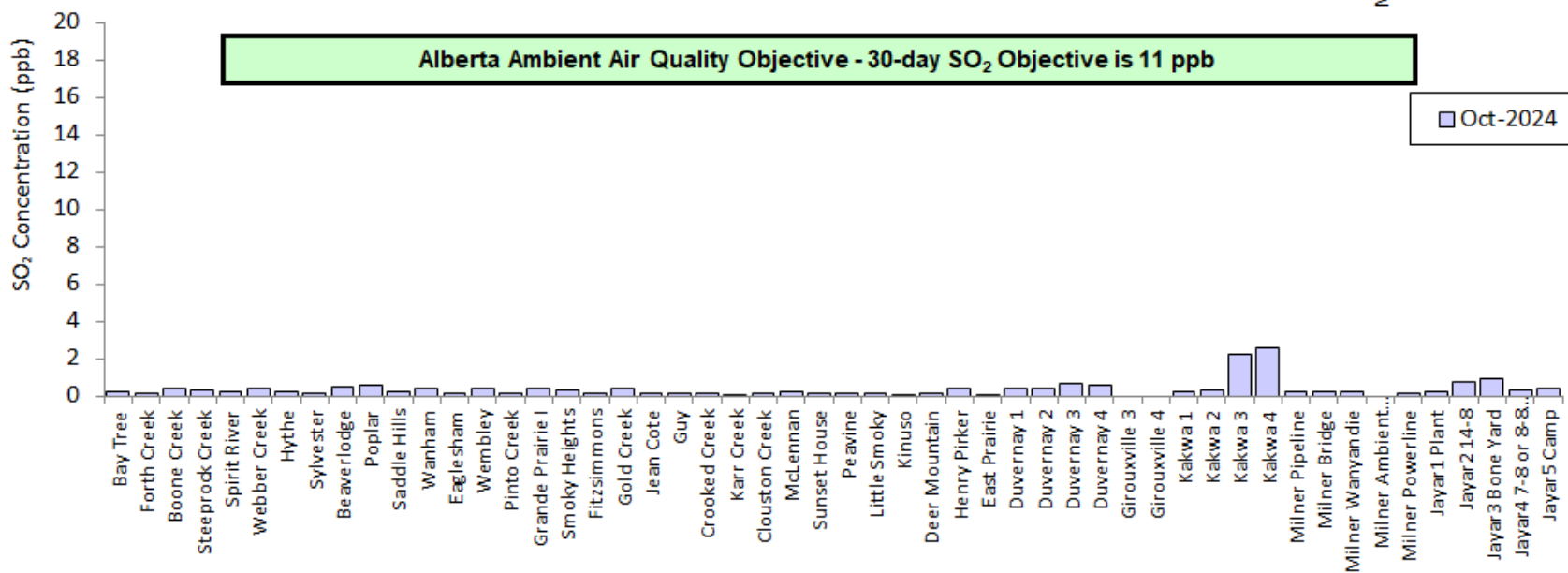
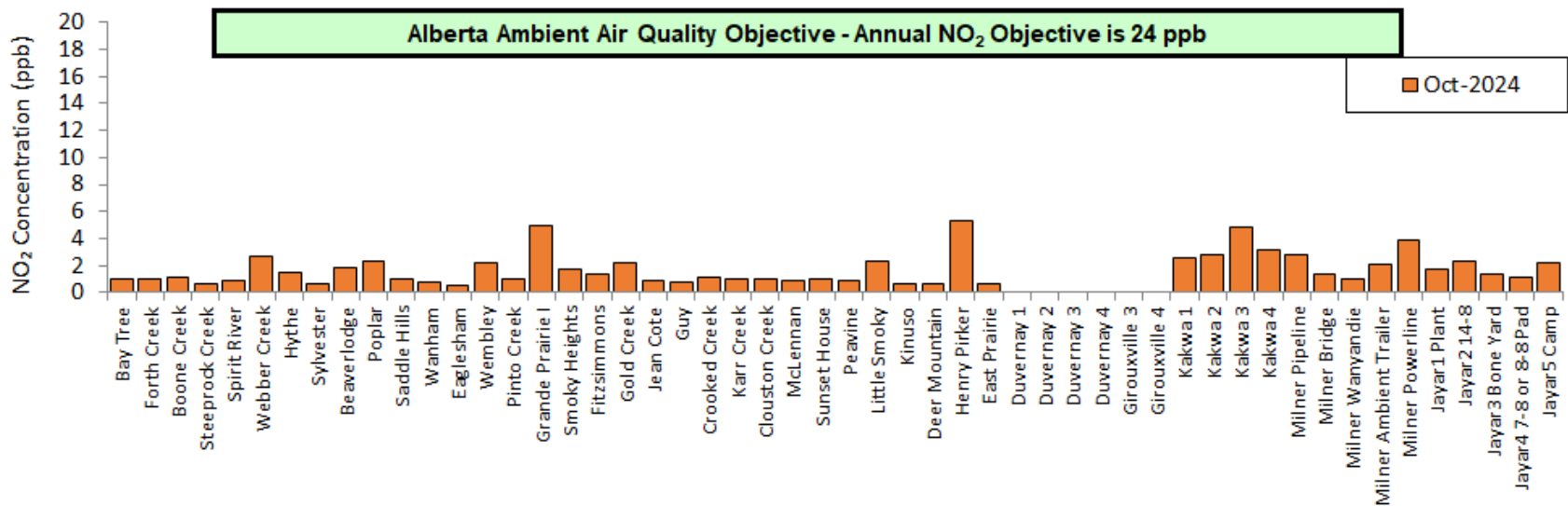
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	LSD
2	Bay Tree	0.2	26.7	1.0	-	13-16-078-13 W6M
3	Forth Creek	0.2	-	1.0	-	04-13-082-07 W6M
5	Boone Creek	0.4	-	1.1	-	01-23-076-11 W6M
7	Steeprock Creek	0.3	-	0.6	-	09-35-072-13 W6M
9	Spirit River	0.3	-	0.9	-	08-12-079-07 W6M
11	Webber Creek	0.4	-	2.6	-	09-36-074-09 W6M
12	Hythe	0.2	-	1.5	-	14-36-072-11 W6M
14	Sylvester	0.1	-	0.6	-	08-06-069-12 W6M
16	Beaverlodge	0.5	-	1.9	-	15-36-071-10 W6M
17	Poplar	0.6	-	2.4	-	13-06-073-08 W6M
18	Saddle Hills	0.2	-	1.0	-	04-25-074-07 W6M
19	Wanham	0.4	-	0.8	-	16-22-077-03 W6M
21	Eaglesham	0.1	-	0.6	-	16-21-079-25 W5M
24	Wembley	0.4	-	2.2	-	12-31-070-08 W6M
25	Pinto Creek	0.1	-	1.0	-	04-24-069-11 W6M
27	Grande Prairie I	0.4	-	5.0	-	08-15-071-06 W6M
29	Smoky Heights	0.3	-	1.7	-	04-06-075-02 W6M
30	Fitzsimmons	0.2	-	1.4	-	15-36-072-03 W6M
32	Gold Creek	0.4	-	2.2	-	06-33-067-05 W6M
35	Jean Cote	0.2	-	0.9	-	12-35-079-21 W5M
36	Guy	0.2	-	0.7	0.1	03-04-076-22 W5M
37	Crooked Creek	0.1	25.4	1.2	-	16-01-071-26 W5M
38	Karr Creek	0.1	-	1.0	-	10-16-065-02 W6M
39	Clouston Creek	0.1	-	1.0	-	12-01-073-22 W5M
40	McLennan	0.2	-	0.8	-	03-29-077-19 W5M
42	Sunset House	0.2	-	1.0	-	05-32-070-19 W5M
44	Peavine	0.1	-	0.8	-	03-05-079-15 W5M
46	Little Smoky	0.1	-	2.3	-	12-01-065-21 W5M
47	Kinuso	0.1	24.3	0.6	-	12-10-073-10 W5M
48	Deer Mountain	0.1	-	0.6	-	15-22-068-09 W5M
49	Henry Pirker	0.4	-	5.3	-	17-26-071-06 W6M
50	East Prairie	0.1	-	0.7	-	11-13-079-08 W6M
D1	Duvernay 1	0.4	-	-	0.10	04-33-062-20 W5M
D2	Duvernay 2	0.4	-	-	0.09	04-33-062-20 W5M
D3	Duvernay 3	0.7	-	-	0.16	04-33-062-20 W5M
D4	Duvernay 4	0.6	-	-	0.10	04-33-062-20 W5M
G3	Girouxville 3	-	-	-	0.33	14-02-077-23 W5M
G4	Girouxville 4	-	-	-	0.32	04-08-077-22 W5M
K1	Kakwa 1	0.2	-	2.5	0.04	01-13-063-05 W6M
K2	Kakwa 2	0.3	-	2.8	0.06	08-13-063-05 W6M
K3	Kakwa 3	2.2	-	4.8	0.12	12-18-063-04 W6M
K4	Kakwa 4	2.6	-	3.2	0.09	06-18-063-04 W6M
M1	Milner Pipeline	0.2	-	2.9	-	12-14-058-08 W6M
M2	Milner Bridge	0.2	-	1.3	-	08-06-057-08 W6M
M3	Milner Wanyandie	0.2	-	1.0	-	11-13-058-08 W6M
M4	Milner Ambient Trailer	<0.1	-	2.1	-	09-15-058-08 W6M
M5	Milner Powerline	0.1	-	3.9	-	06-14-058-08 W6M
J1	Jayar1 Plant	0.2	-	1.7	0.05	06-08-062-03 W6M
J2	Jayar2 14-8	0.7	-	2.3	0.14	07-08-062-03 W6M
J3	Jayar3 Bone Yard	0.9	-	1.3	0.08	14-08-062-03 W6M
J4	Jayar4 7-8 or 8-8 Pad	0.4	-	1.1	0.08	10-08-062-03 W6M
J5	Jayar5 Camp	0.4	-	2.2	0.35	11-08-062-03 W6M

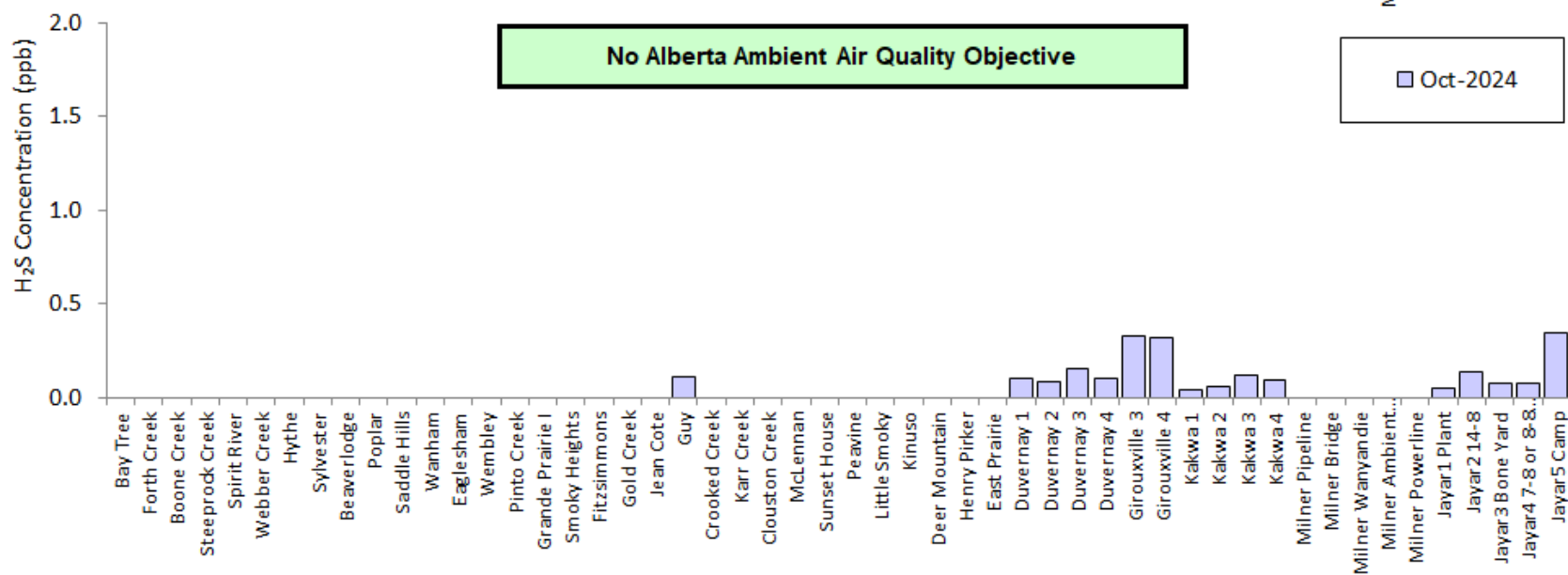
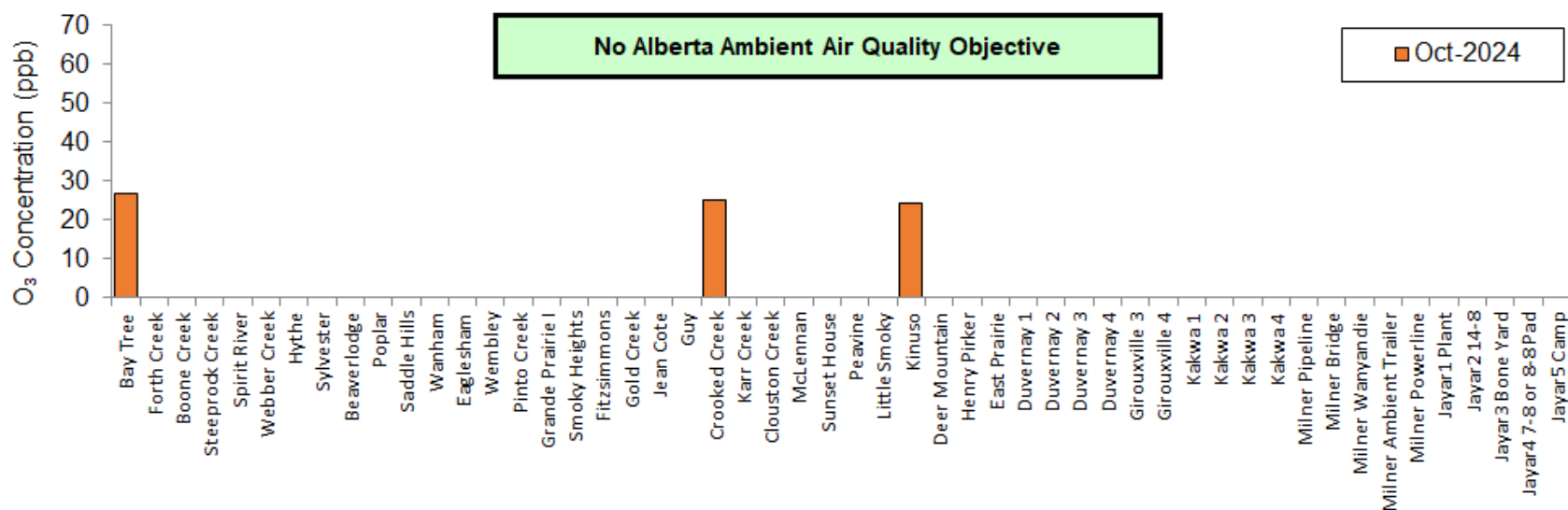
Passive Summary for October 2024

Stats	Sulphur Dioxide SO ₂	Ozone O ₃	Nitrogen Dioxide NO ₂	Hydrogen Sulphide H ₂ S
	ppb	ppb	ppb	ppb

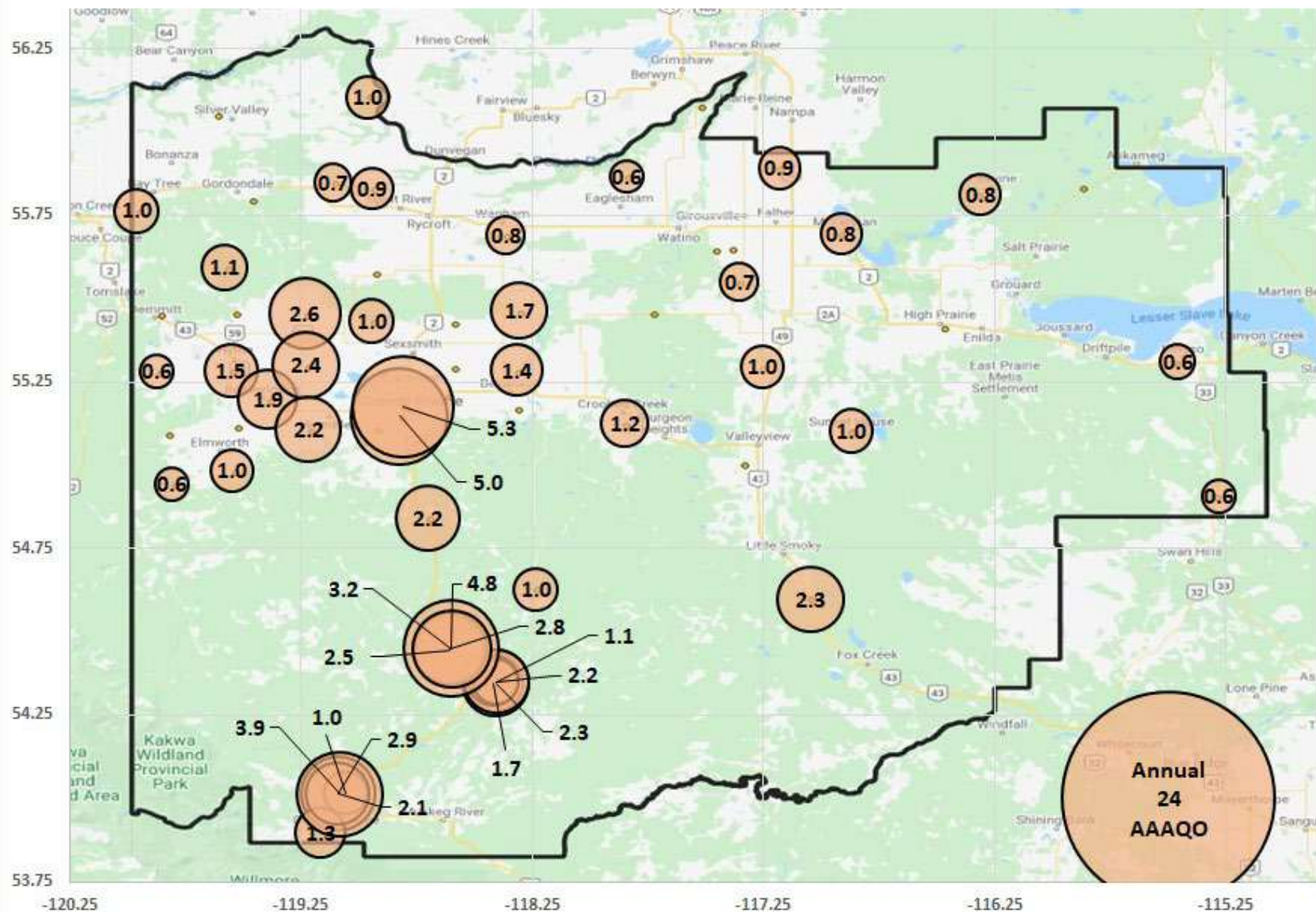
Passive Summary for May 2024 (PAZA)				
Mean	0.4	25.5	1.7	0.1
Standard Deviation	0.5	1.2	1.2	0.1
Minimum	0.1	24.3	0.6	0.0
	East Prairie (#50)	Kinuso (#47)	Eaglesham (#21)	Kakwa 1 (#K1)
Maximum	2.6	26.7	5.3	0.4
	Kakwa 4 (#K4)	Bay Tree (#2)	Henry Pirker (#49)	Jayar5 Camp (#J5)

Continuous and Passive Monitoring Comparision				
PAZA Beaverlodge Station	0.4	23.4	3.5	-
Beaverlodge Passive (#16)	0.5	-	1.9	-
PAZA Henry Pirker Station	0.2	17.8	9.0	0.2
Henry Pirker passive (#49)	0.4	-	5.3	-
Milner Station	-	-	3.4	-
Milner passive	<0.1	-	2.1	-

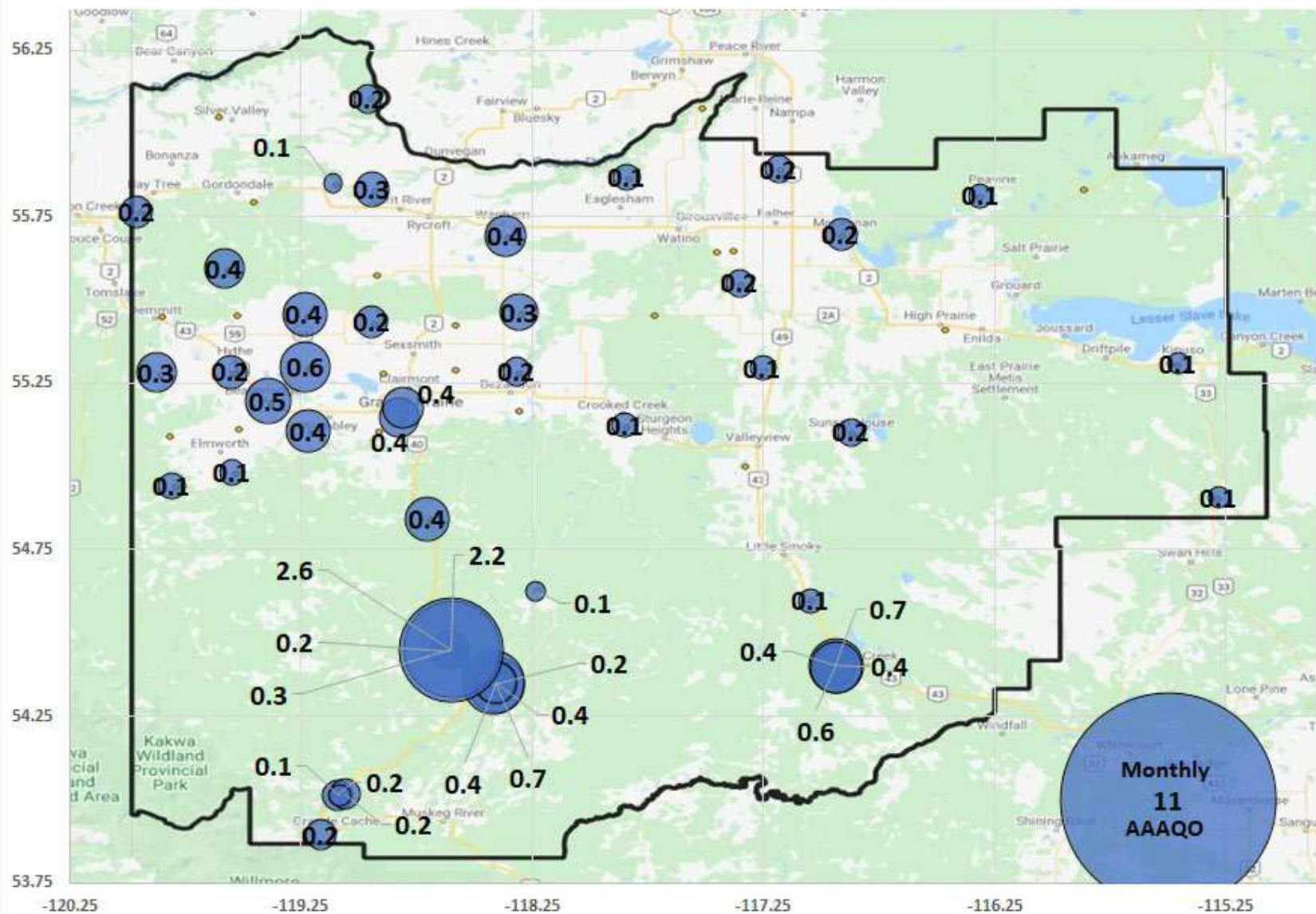




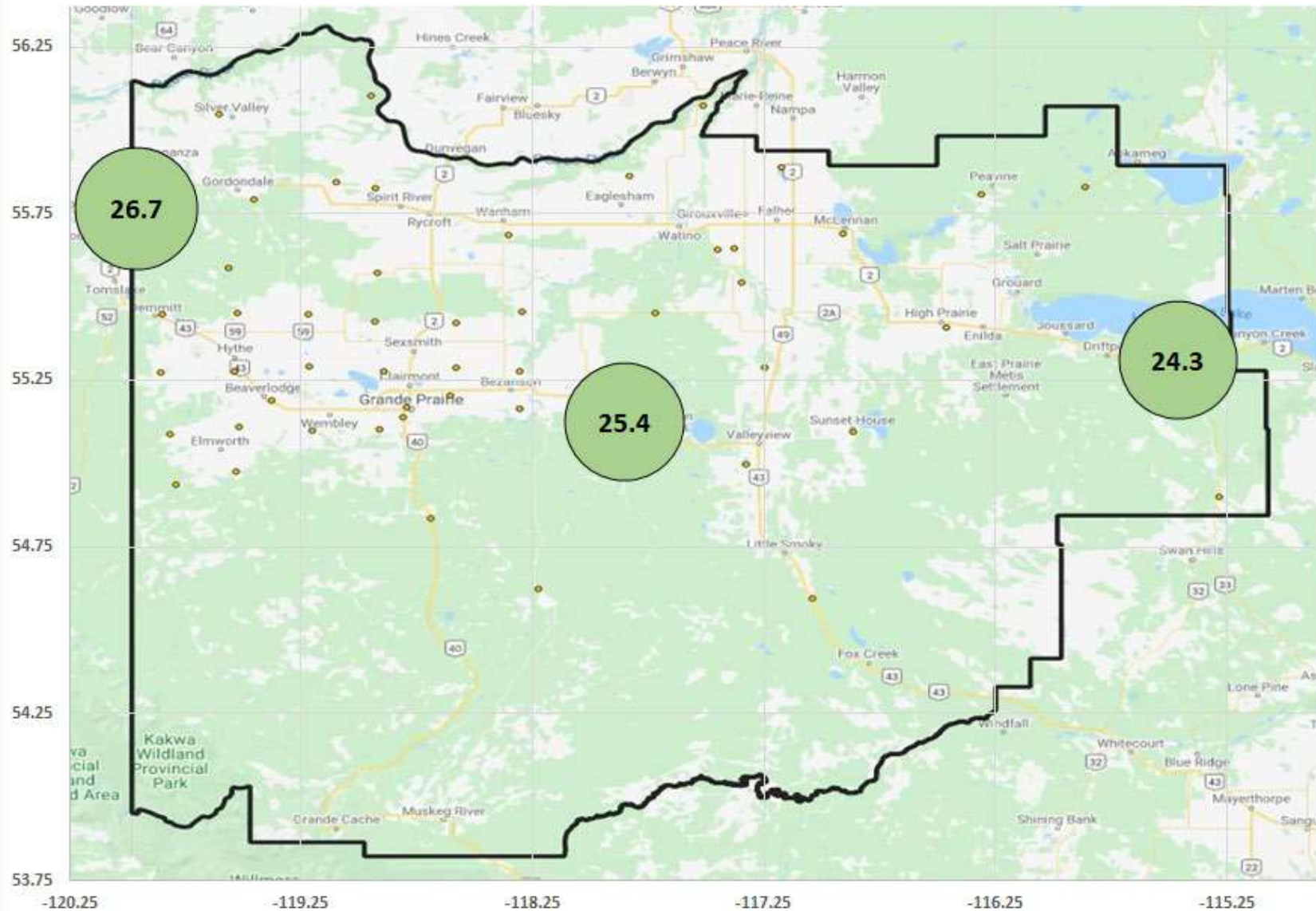
NO₂ Monthly Average (units in ppb)



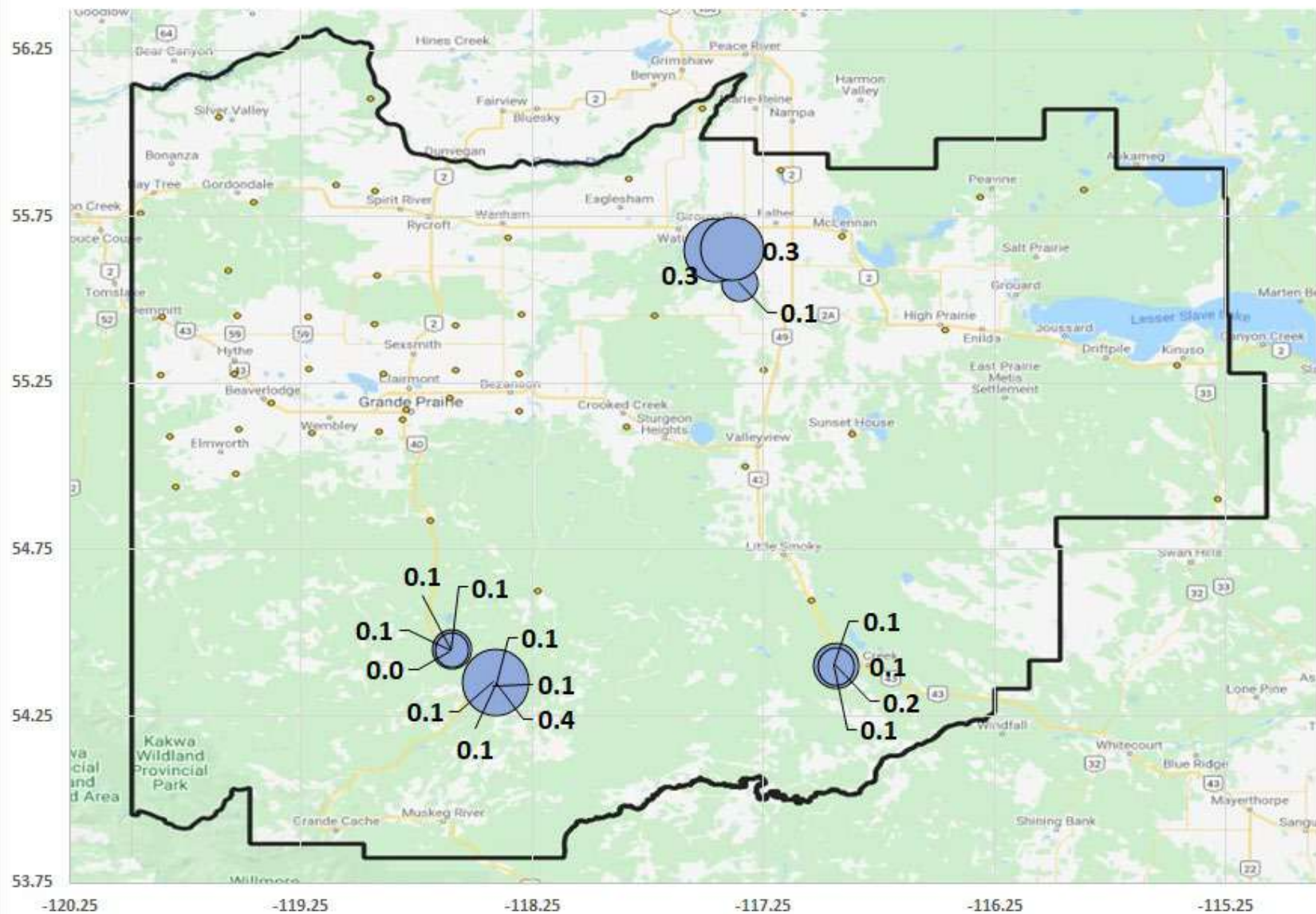
SO₂ Monthly Average (units in ppb)



O₃ Monthly Average (units in ppb)



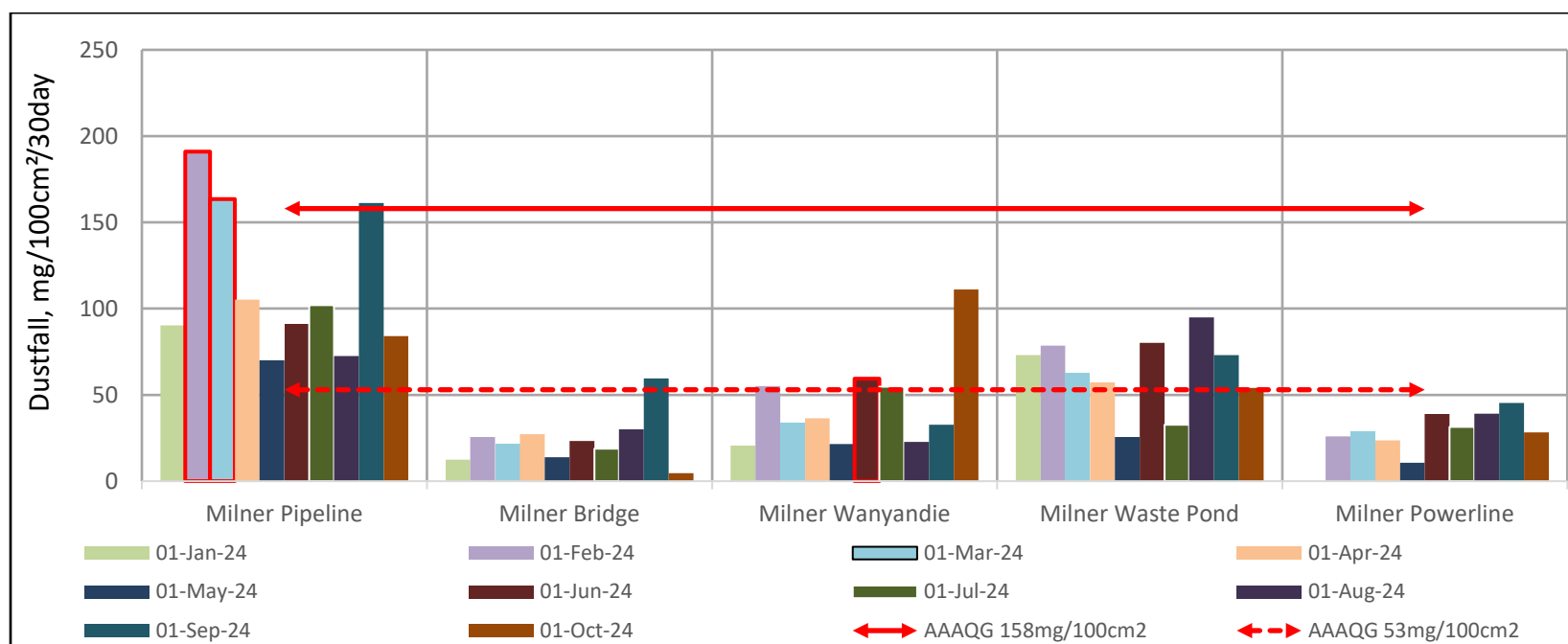
H₂S Monthly Average (units in ppb)



12 Dustfall Monitoring Data - update

Milner Dustfall Samples October 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
October	2024	Milner Pipeline	84.1	27.0	32	
October	2024	Milner Bridge	4.6	4.6	32	
October	2024	Milner Wanyandie	111.1	16.7	32	reading>AAAQG; 435504
October	2024	Milner Waste Pond	54.0	25.1	32	
October	2024	Milner Powerline	28.2	13.7	32	
October	2024	Milner Powerline Dup	32.7	16.0	32	RPD, 15% / 15%



End of Report



Peace Airshed Zone Association

Ambient Air Monitoring Report

October 2024