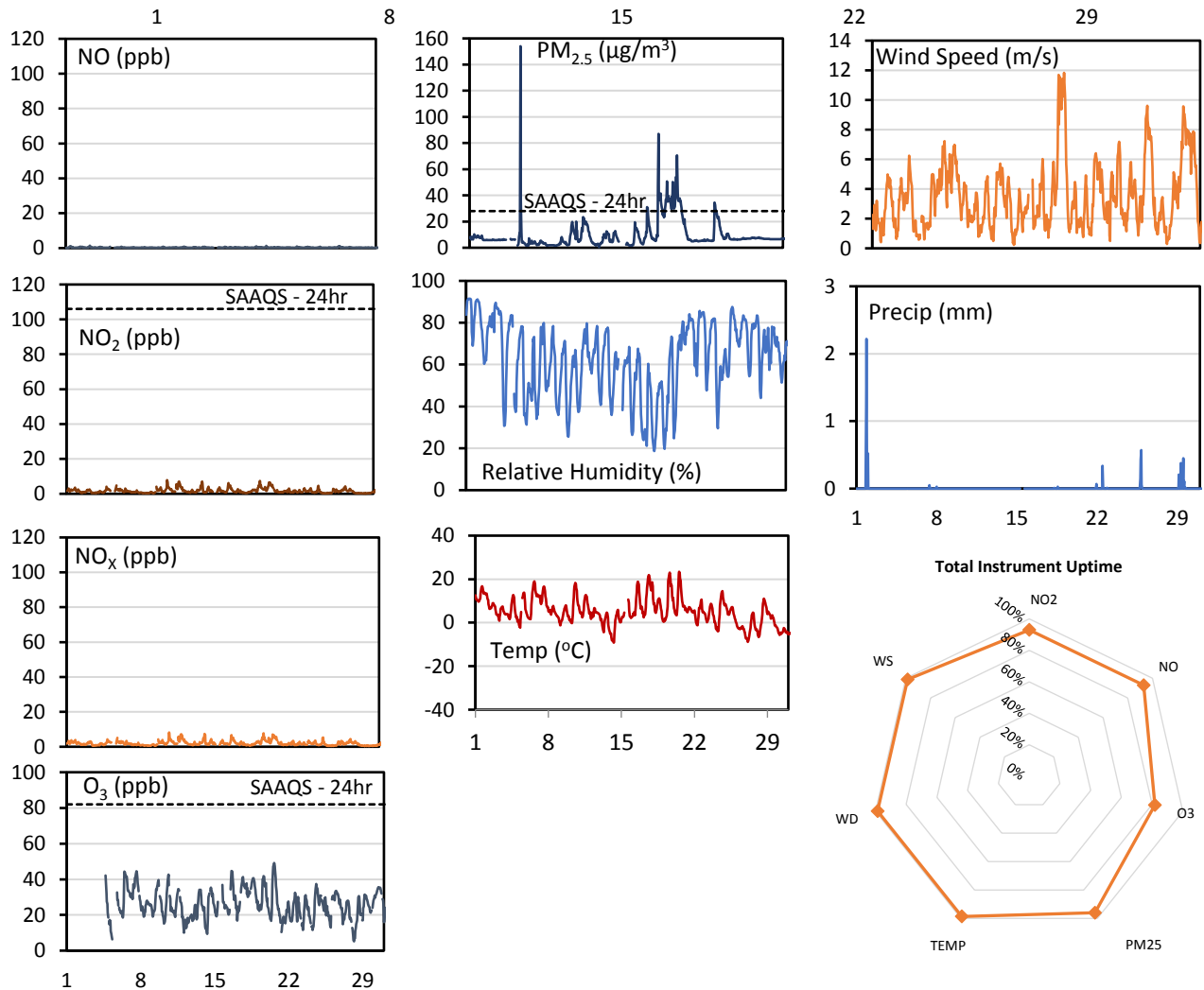
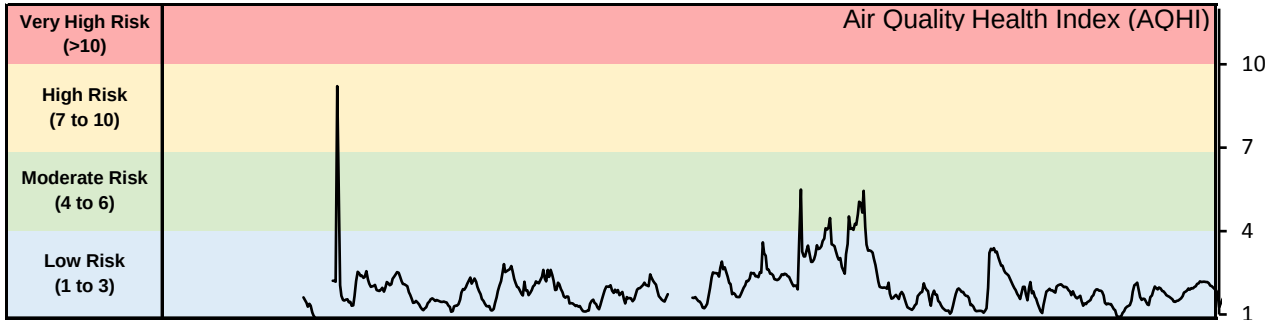


SESAA Esterhazy Station - October 2017 Summary Report

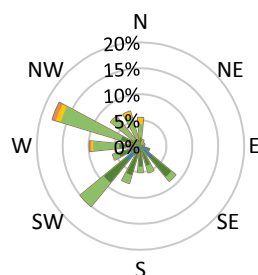
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	93%	0.5	Oct-27	-	-	1.4	Oct-03 08:00	-	-
NO ₂	ppb	1.7	93%	3.6	Oct-20	106	0	7.9	Oct-10 20:00	159	0
NO _x	ppb	2.0	93%	4.1	Oct-20	-	-	8.2	Oct-10 20:00	-	-
O ₃	ppb	26.1	82%	35.1	Oct-07	-	-	49.1	Oct-20 15:00	82	0
PM _{2.5}	µg/m ³	9.9	96%	40.1	Oct-20	28	2	154.0	Oct-05 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

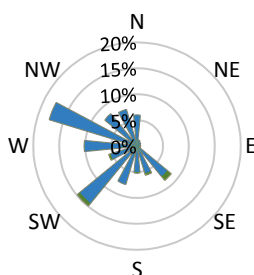


SESAA Esterhazy Station - October 2017 Summary Report

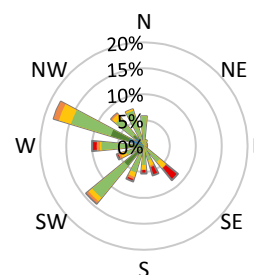
Wind Rose



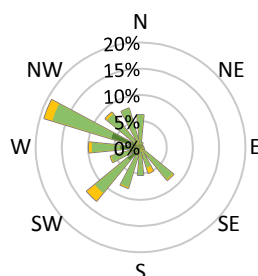
NO₂ Pollutant Rose



PM_{2.5} Pollutant Rose



O₃ Pollutant Rose



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6	
O ₃	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
NO ₂	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
PM _{2.5}	ug/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

Monthly Update

- Achieved >90% of scheduled uptime for all parameters except O₃ (82%)
- Downtime of 4% results from routine daily internal zeroes and spans
- Repaired O₃ analyzer installed October 4 and calibrated October 5

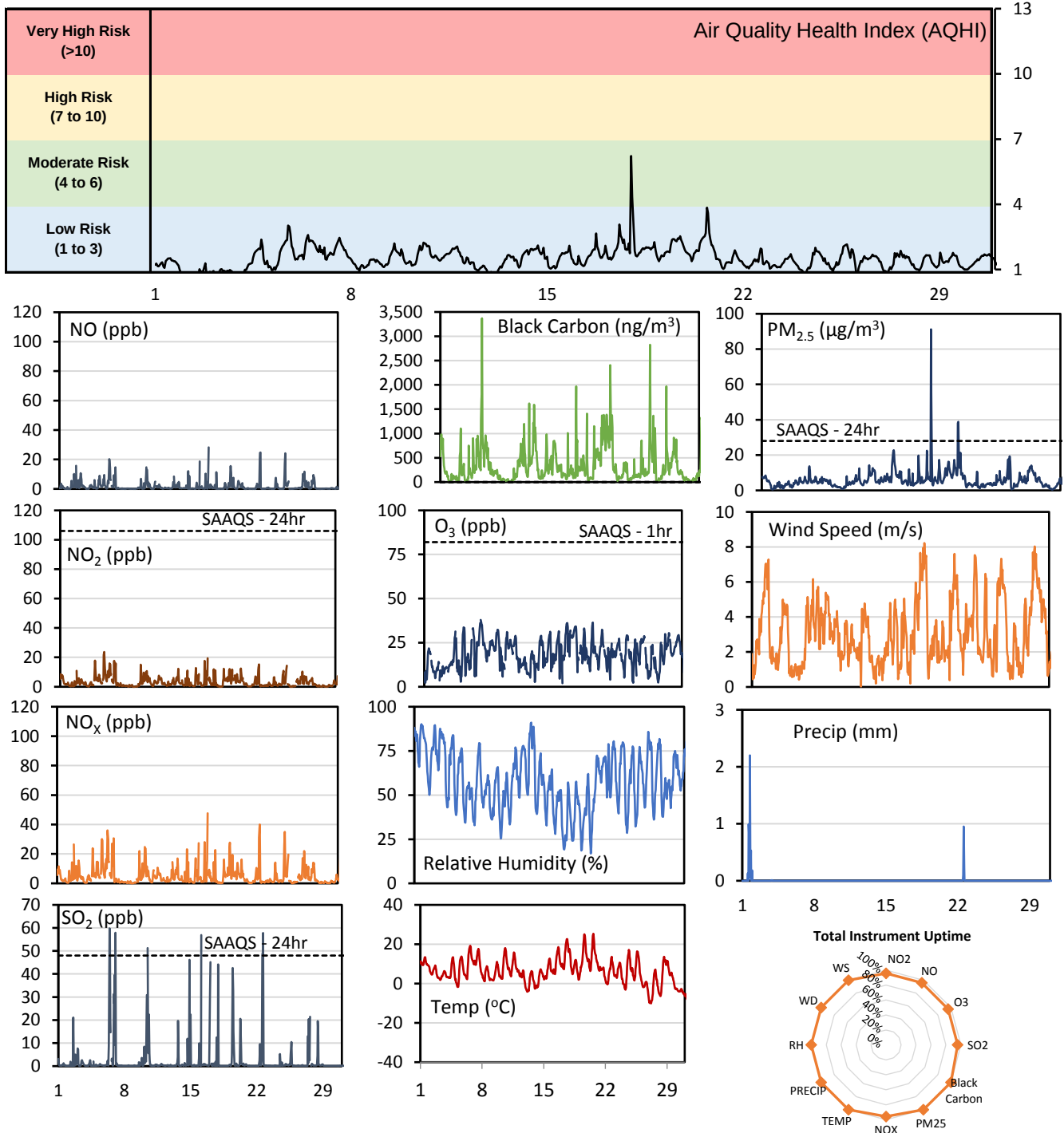
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

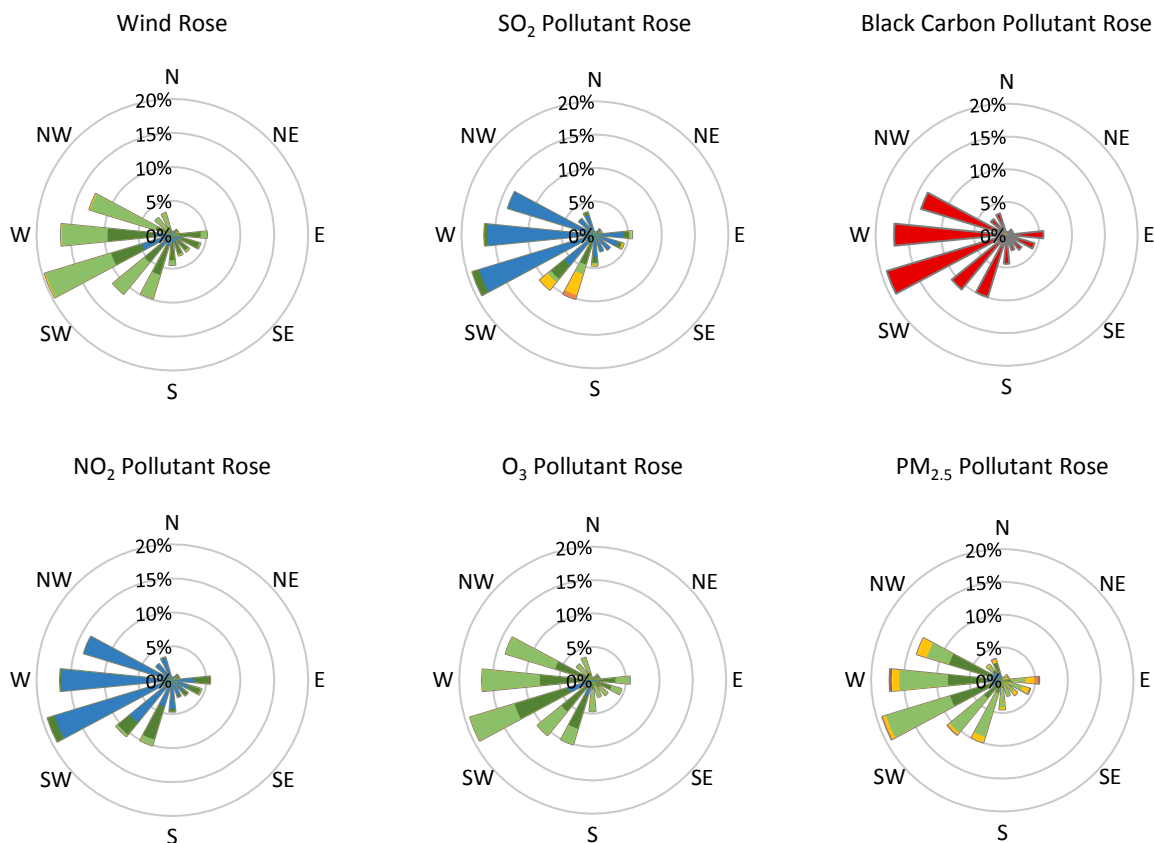
Exceedance Time	AQI	NO ₂ ppb	NO ppb	O ₃ ppb	PM _{2.5} ug/m ³	NO _x ppb	Temp C	WD deg	WS m/s
Oct-19	3.5	2.7	0.4	30.8	35.5	3.1	10.3	179.8	2.3
Oct-20	3.8	3.6	0.4	31.6	40.1	4.1	11.1	133.8	2.1

SESAA Estevan Station - October 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	1.8	96%	5.2	Oct-06	-	-	28.2	Oct-17 02:00	-	-
NO ₂	ppb	3.2	96%	8.1	Oct-06	106	0	23.7	Oct-05 19:00	159	0
NO _x	ppb	5.0	96%	13.2	Oct-06	-	-	47.6	Oct-17 02:00	-	-
SO ₂	ppb	2.3	96%	13.3	Oct-06	48	0	59.8	Oct-06 10:00	172	0
Black Carbon	ng/m ³	351.3	100%	1071.9	Oct-20	-	-	3370.0	Oct-05 20:00	-	-
O ₃	ppb	18.5	96%	27.2	Oct-18	-	-	37.9	Oct-07 14:00	82	0
PM _{2.5}	µg/m ³	6.0	100%	14.3	Oct-20	28	0	91.2	Oct-18 00:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
SO ₂	ppb	$0 \leq C < 1$	$1 \leq C < 5$	$5 \leq C < 10$	$10 \leq C < 57$	$57 \leq C < 172$	$C \geq 172$	
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$	
O ₃	ppb	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$	
PM _{2.5}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

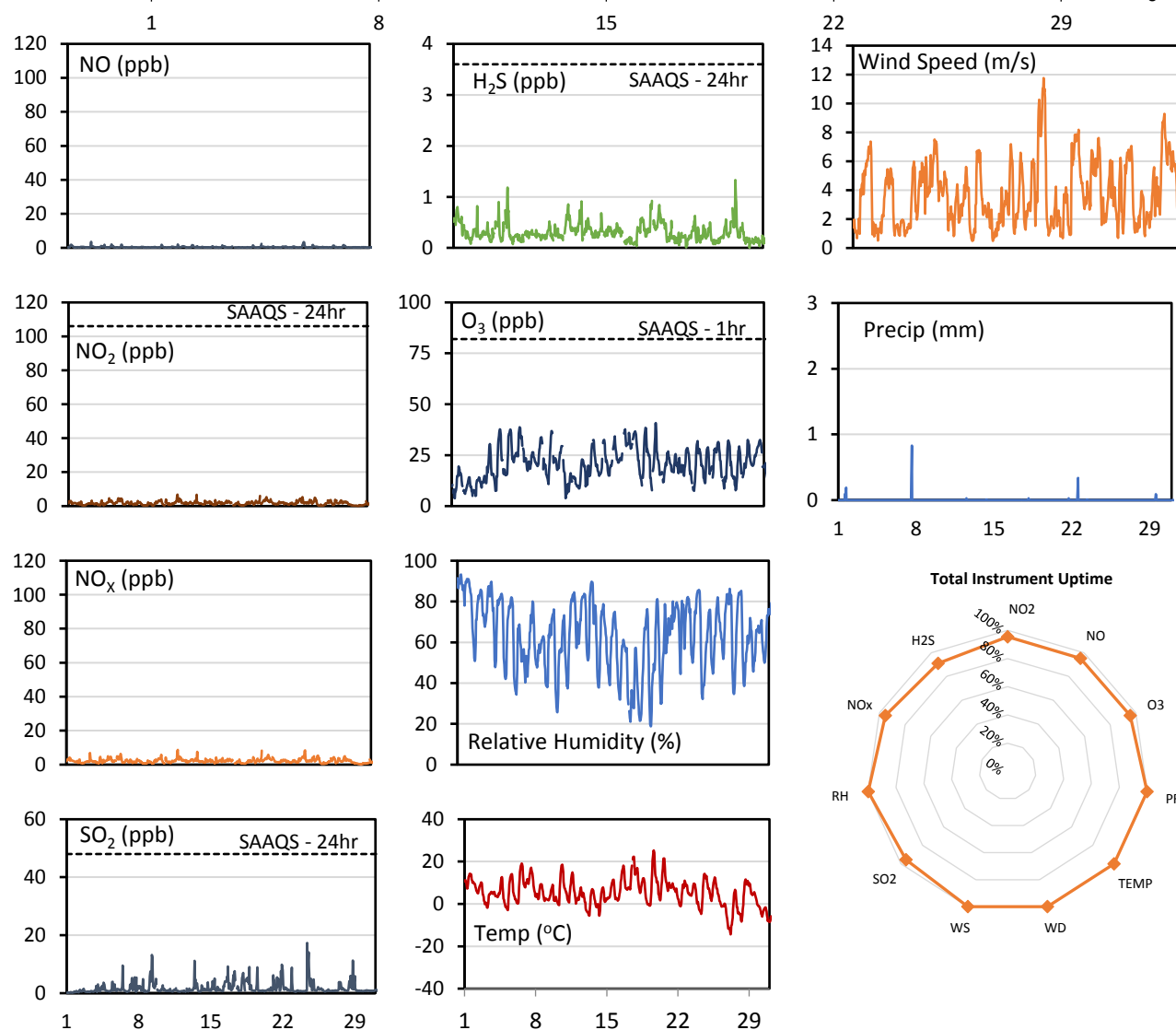
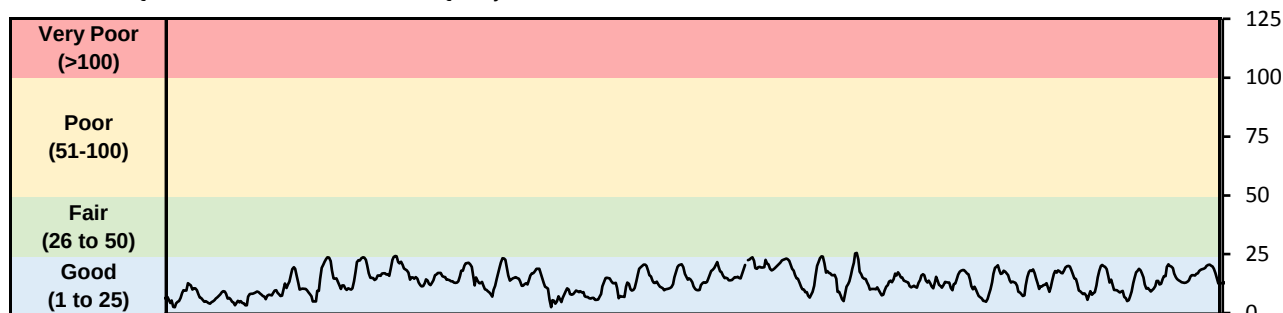
Monthly Update

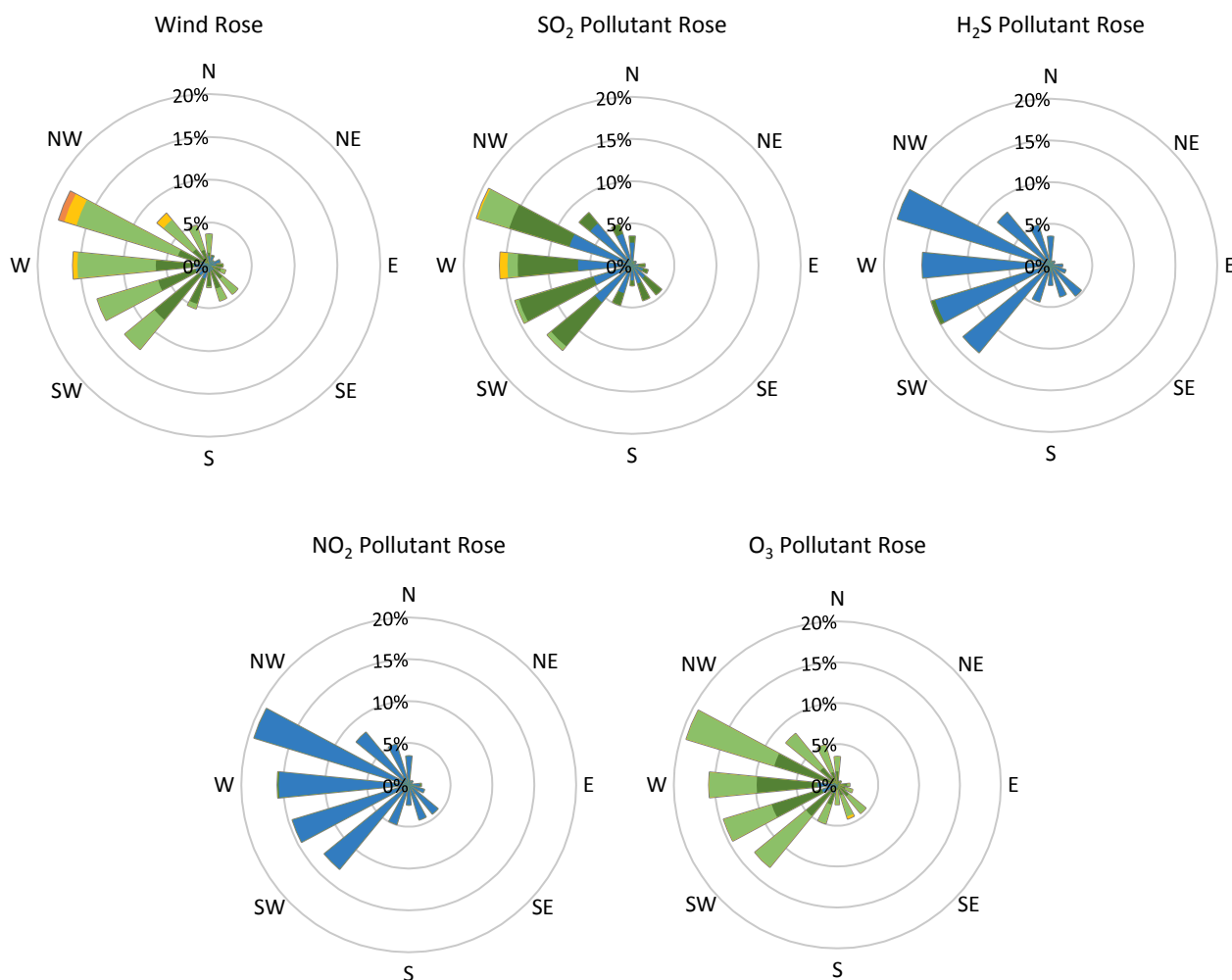
- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from daily internal zeroes and spans

SESAA Glen Ewen Station - October 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	95%	0.8	Oct-24	-	-	3.5	Oct-03 08:00	-	-
NO ₂	ppb	1.8	95%	3.0	Oct-20	106	0	6.8	Oct-11 23:00	159	0
NO _x	ppb	2.2	95%	3.6	Oct-20	-	-	8.7	Oct-11 23:00	-	-
SO ₂	ppb	1.7	95%	4.1	Oct-09	48	0	17.3	Oct-24 09:00	172	0
H ₂ S	ppb	0.3	91%	0.6	Oct-20	3.6	0	1.3	Oct-28 08:00	11	0
O ₃	ppb	20.8	95%	31.3	Oct-18	-	-	40.8	Oct-20 15:00	82	0

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$
SO ₂	ppb	$0 \leq C < 1$	$1 \leq C < 5$	$5 \leq C < 10$	$10 \leq C < 57$	$57 \leq C < 172$	$C \geq 172$
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$
H ₂ S	ppb	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$
O ₃	ppb	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$

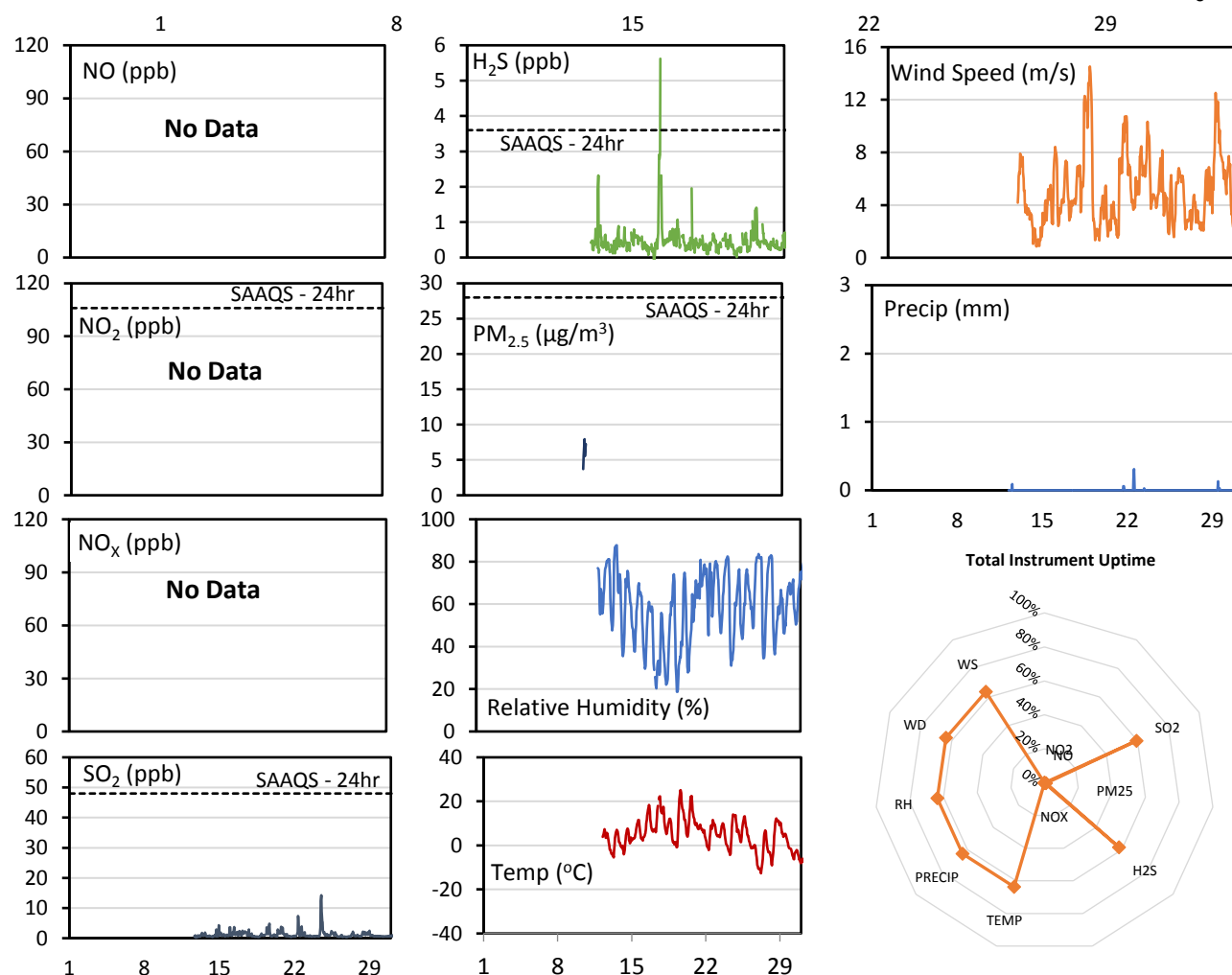
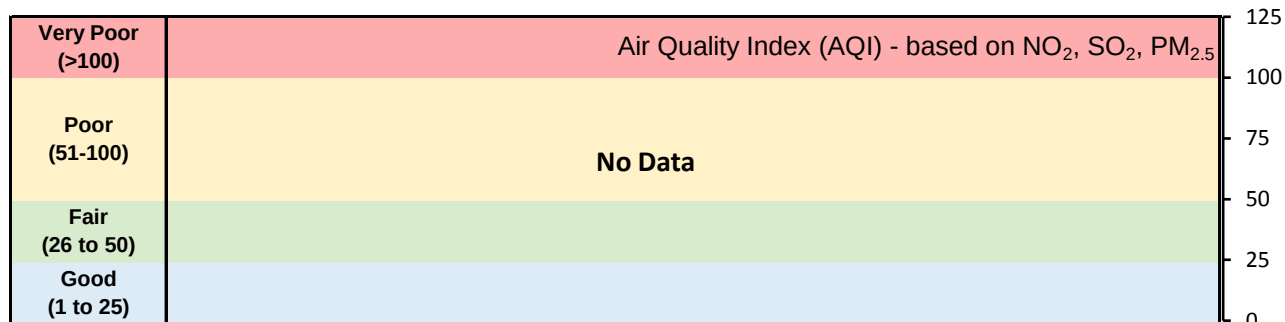
Monthly Update

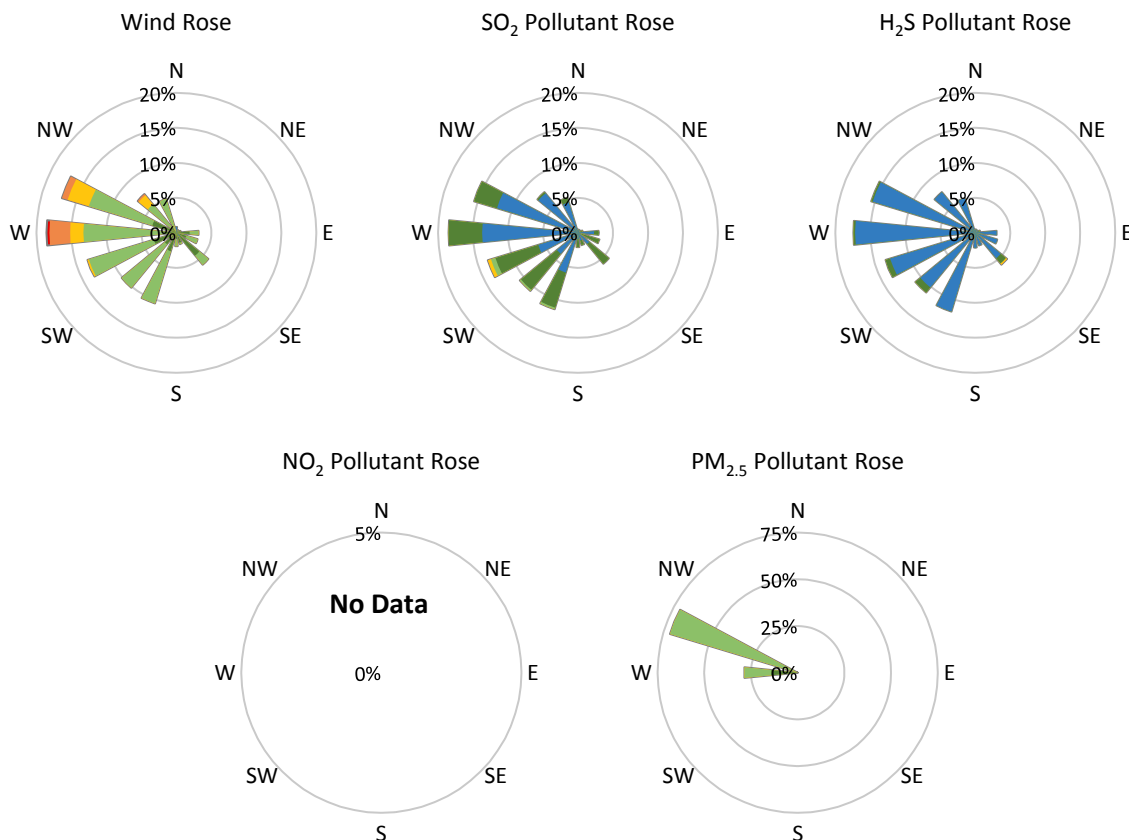
- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily internal zeroes and spans (8% for H₂S)

SESAA Oxbow Station - October 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	N/A	0%	0.0	N/A	-	-	0.0	N/A	-	-
NO ₂	ppb	N/A	0%	0.0	N/A	106	0	0.0	N/A	159	0
NO _x	ppb	N/A	0%	0.0	N/A	-	-	0.0	N/A	-	-
SO ₂	ppb	1.2	59%	3.0	Oct-24	48	0	14.3	Oct-24 12:00	172	0
H ₂ S	ppb	0.5	58%	1.1	Oct-19	3.6	0	5.6	Oct-19 07:00	11	0
PM _{2.5}	µg/m ³	6.2	1%	6.2	Oct-12	28	0	7.9	Oct-12 09:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6	
SO ₂	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172	
NO ₂	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
H ₂ S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8	
PM _{2.5}	µg/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

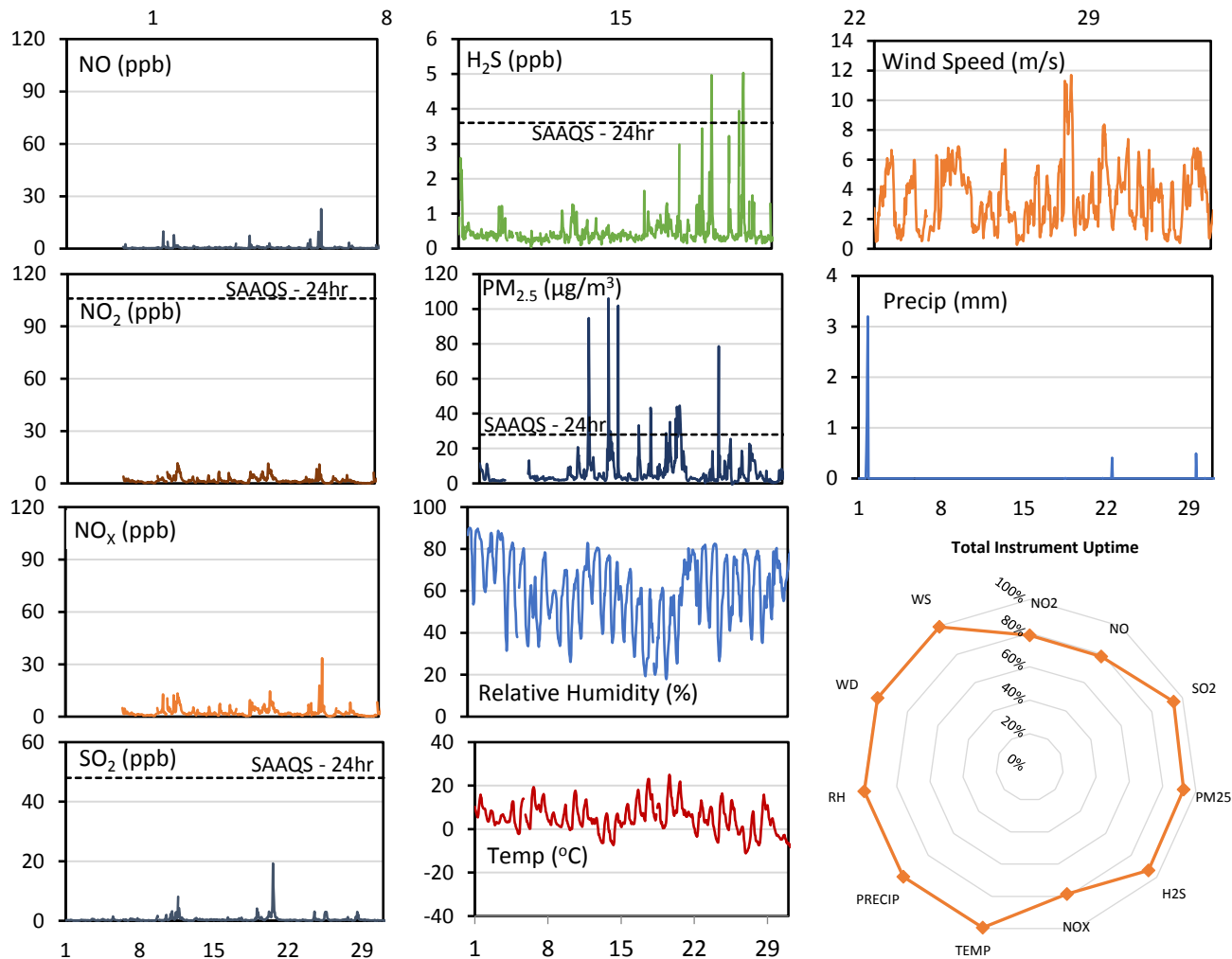
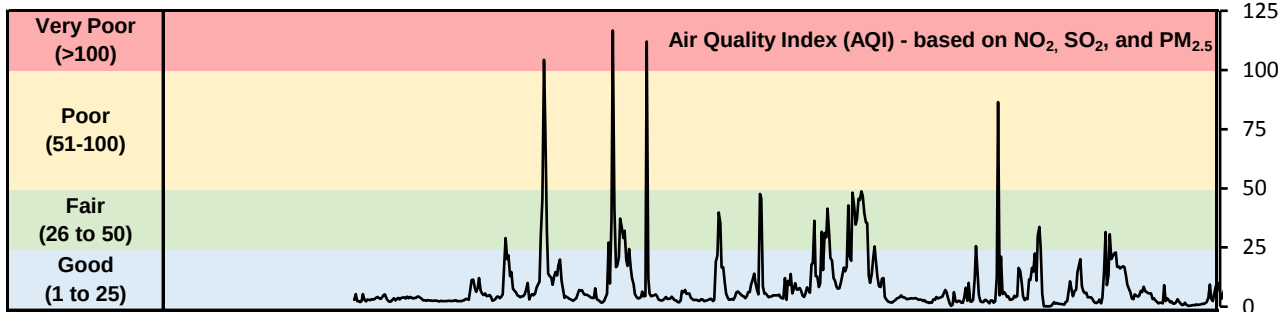
Monthly Update

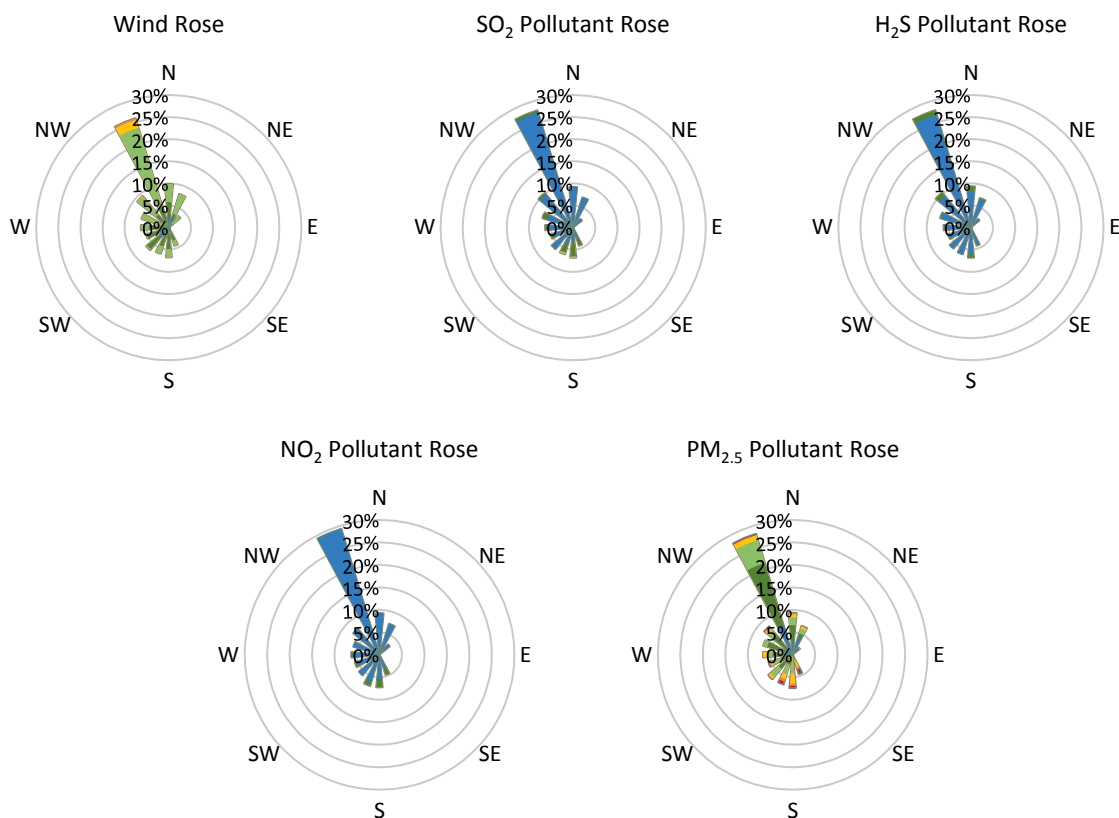
- Downtime due to instrument issues
- Downtime of 4% results from routine daily internal zeroes and spans
- Airpointer moved to new location
- NO/NO₂/NO_x analyzer removed October 12 for repairs
- Calibration performed October 12

SESAA Stoughton Station - October 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.7	79%	2.2	Oct-25	-	-	24.9	Oct-31 11:00	-	-
NO ₂	ppb	1.8	79%	5.0	Oct-20	106	0	11.6	Oct-11 18:00	159	0
NO _x	ppb	2.4	79%	5.8	Oct-20	-	-	33.5	Oct-25 14:00	-	-
SO ₂	ppb	0.5	94%	3.3	Oct-20	48	0	19.3	Oct-20 14:00	172	0
H ₂ S	ppb	0.5	94%	1.0	Oct-28	3.6	0	5.0	Oct-28 07:00	11	0
PM _{2.5}	µg/m ³	6.8	93%	22.6	Oct-20	28	0	106.1	Oct-13 19:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
SO ₂	ppb	$0 \leq C < 1$	$1 \leq C < 5$	$5 \leq C < 10$	$10 \leq C < 57$	$57 \leq C < 172$	$C \geq 172$	
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$	
H ₂ S	ppb	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$	
PM _{2.5}	µg/m ³	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

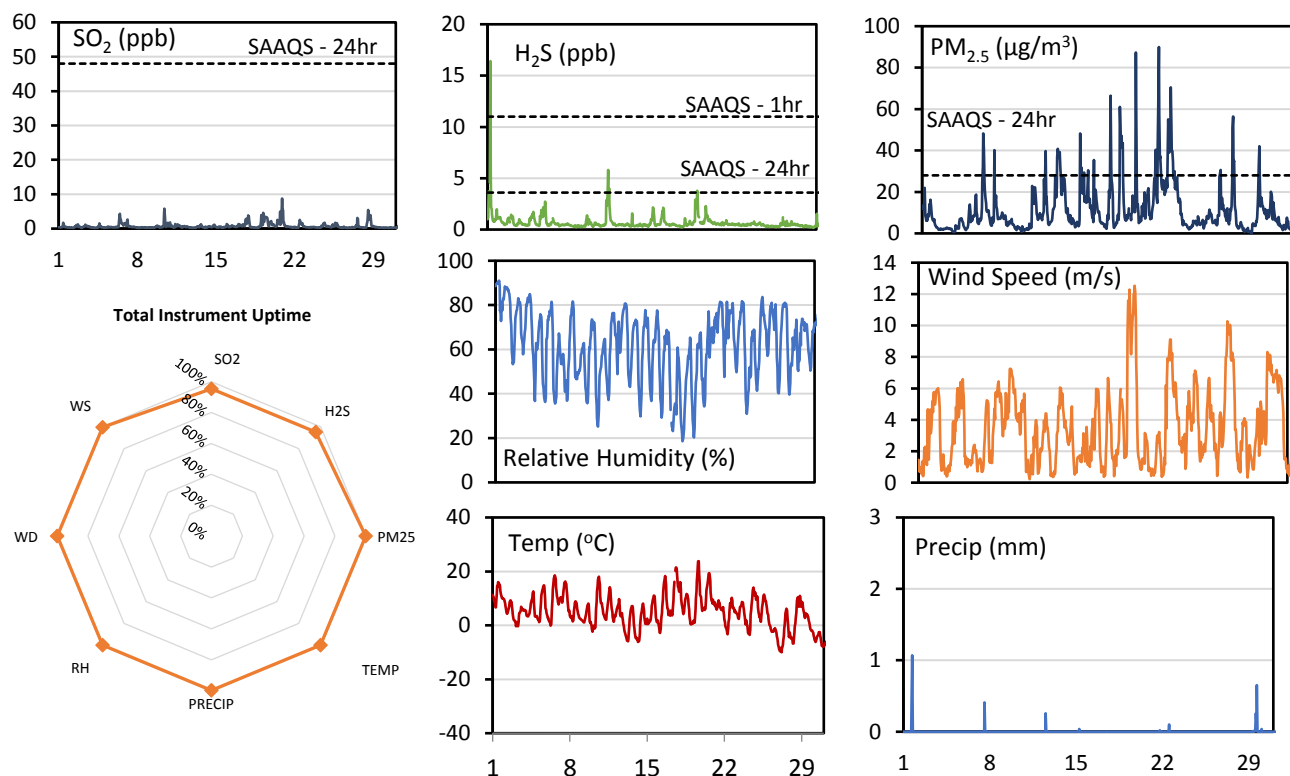
Monthly Update

- Achieved >90% of scheduled uptime for all parameters except NO/NO₂/NO_x (79%)
- Downtime of 4% due to routine daily internal zeroes and spans
- Repaired NO/NO₂/NO_x analyzer installed October 5 and calibrated October 6

SESAA Wauchope Station - October 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
SO ₂	ppb	0.8	95%	2.3	Oct-20	48	0	8.8	Oct-20 21:00	172	0
H ₂ S	ppb	0.7	95%	2.4	Oct-01	3.6	0	16.4	Oct-01 06:00	11	1
PM _{2.5}	µg/m ³	11.3	100%	33.4	Oct-20	28	1	89.9	Oct-19 20:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

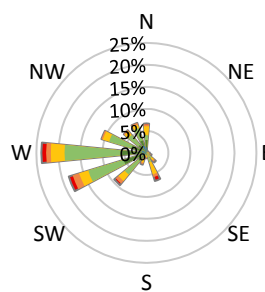
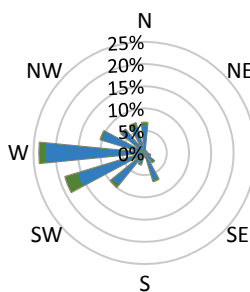
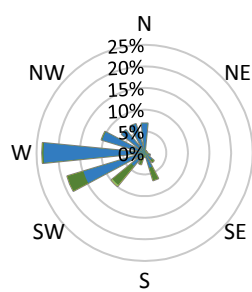
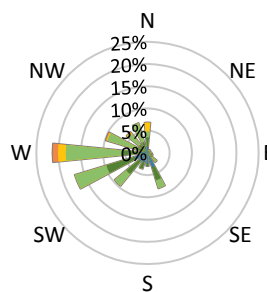


Wind Rose

SO₂ Pollutant Rose

H₂S Pollutant Rose

PM_{2.5} Pollutant Rose



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6
SO ₂	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
H ₂ S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8
PM _{2.5}	µg/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30

Monthly Update

- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily internal zeroes and spans

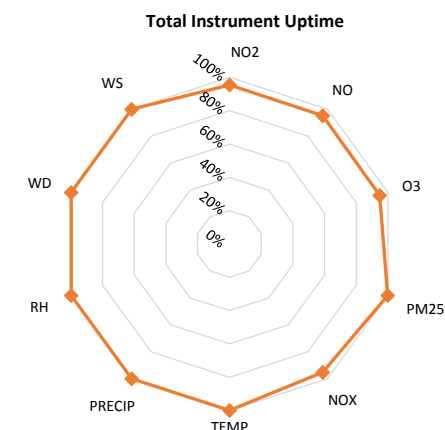
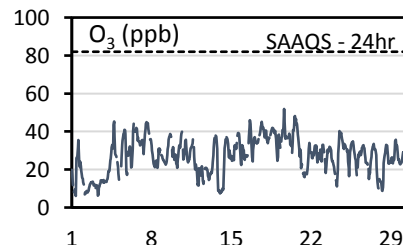
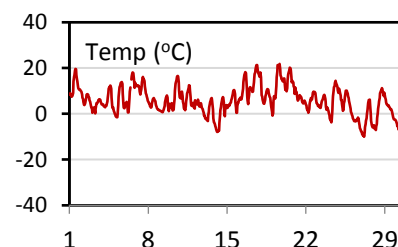
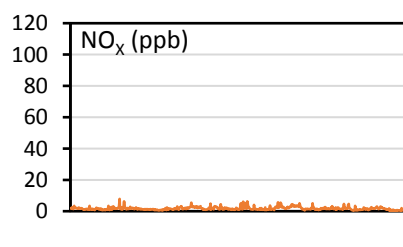
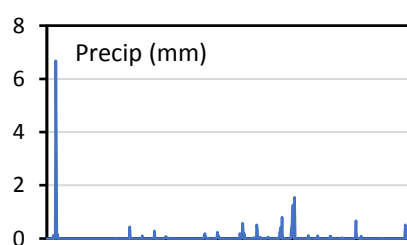
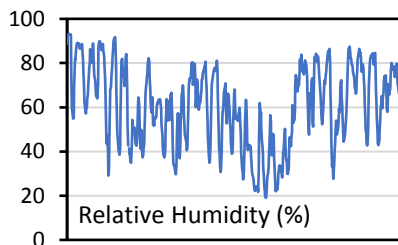
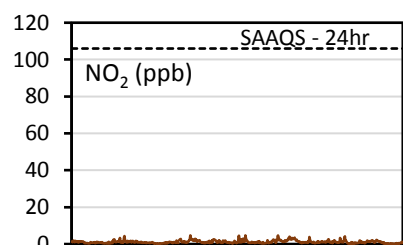
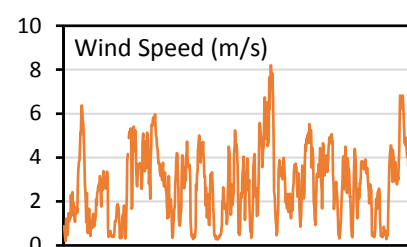
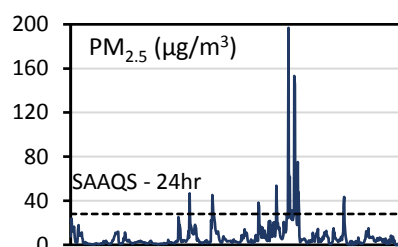
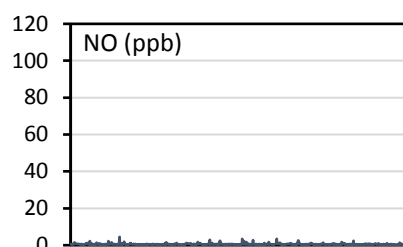
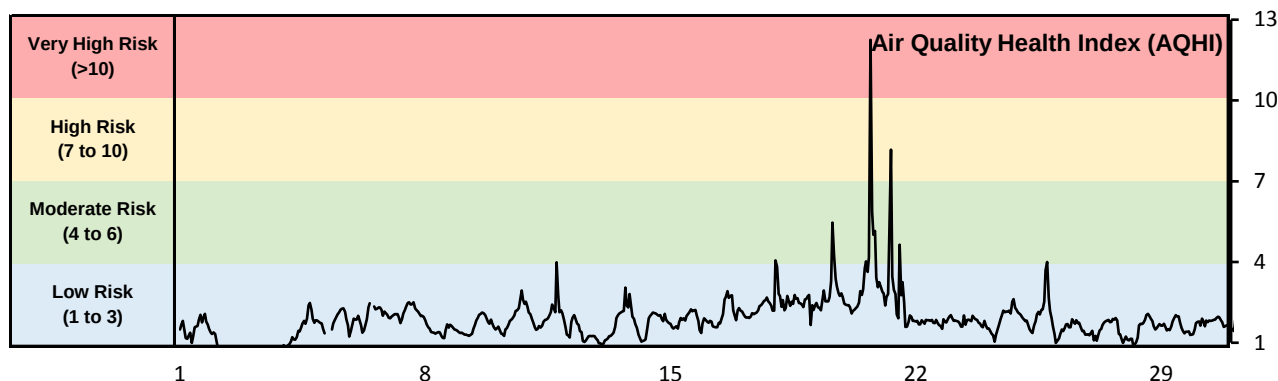
Exceedance Summary (1- Hour Average - Exceedances Highlighted)						
Exceedance Time	SO ₂ ppb	PM _{2.5} µg/m ³	H ₂ S ppb	Temp °C	WD deg	WS m/s
Oct-01 06:00	0.4	8.6	16.4	6.7	336.0	0.6

Exceedance Summary (24- Hour Average - Exceedances Highlighted)						
Exceedance Day	SO ₂ ppb	PM _{2.5} µg/m ³	H ₂ S ppb	Temp °C	WD deg	WS m/s
Oct-20	2.29	33.4	1.3	11.2	117.5	1.4

SESAA Wawota Station - October 2017 Summary Report

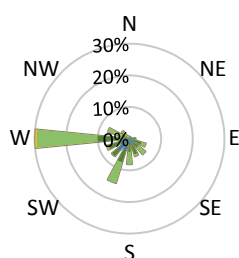
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.6	95%	0.8	Oct-05	-	-	4.5	Oct-05 09:00	-	-
NO ₂	ppb	1.2	95%	2.2	Oct-20	106	0	4.6	Oct-19 17:00	159	0
NO _x	ppb	1.8	95%	2.8	Oct-19	-	-	7.9	Oct-05 09:00	-	-
O ₃	ppb	27.5	95%	38.9	Oct-20	-	-	51.9	Oct-19 15:00	82	0
PM _{2.5}	µg/m ³	7.3	100%	34.9	Oct-21	28	2	196.8	Oct-20 17:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

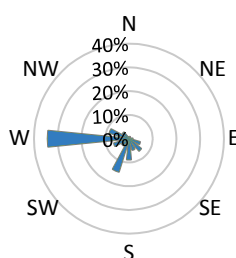


SESAA Wawota Station - October 2017 Summary Report

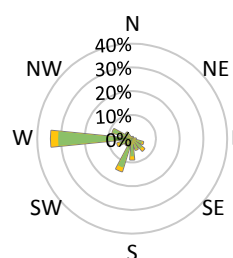
Wind Rose



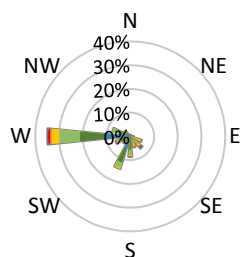
NO₂ Pollutant Rose



O₃ Pollutant Rose



PM_{2.5} Pollutant Rose



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6	
O ₃	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
NO ₂	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
PM _{2.5}	µg/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

Monthly Update

- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from daily internal zeroes and spans

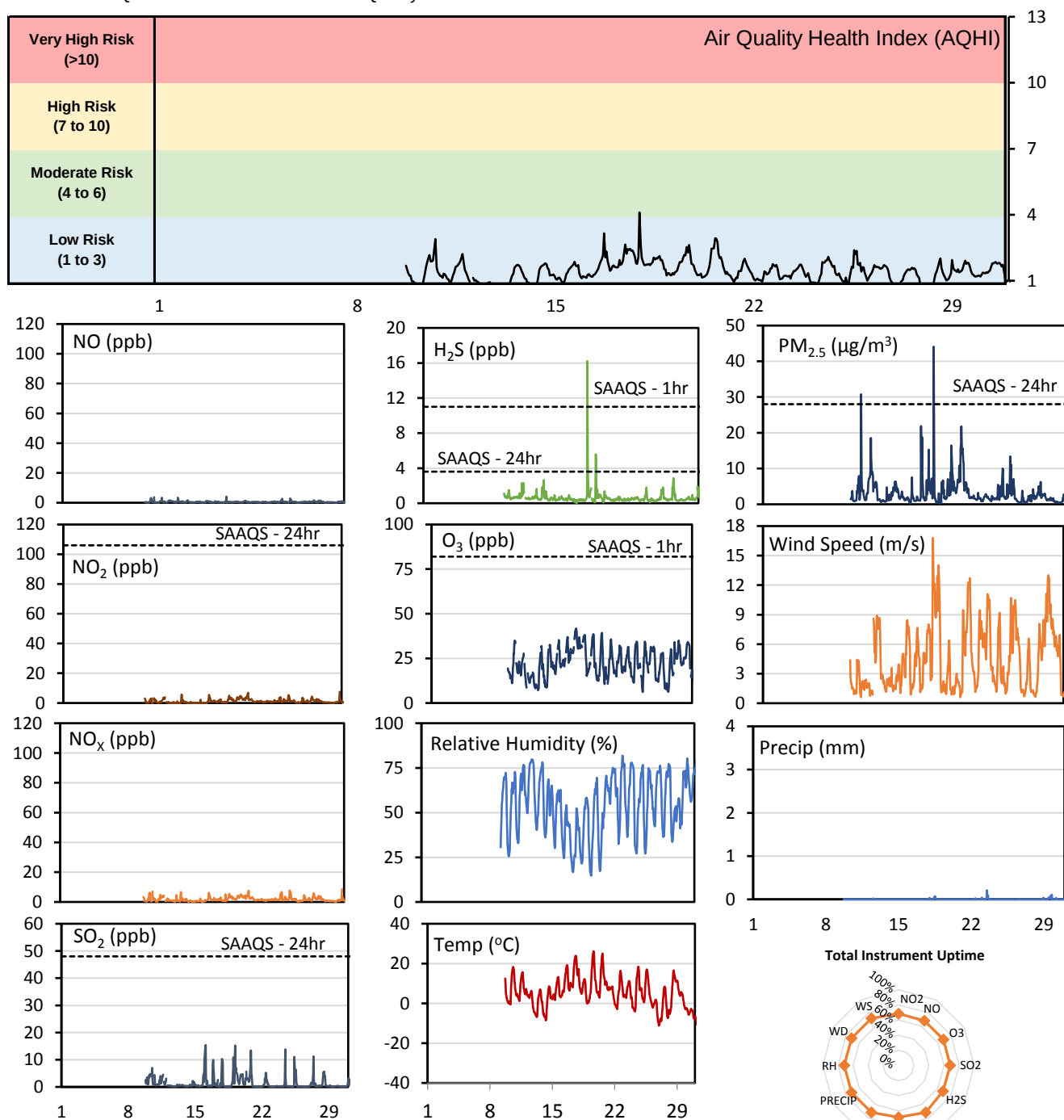
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

Exceedance Time	AQI	NO ₂ ppb	NO ppb	SO ₂ ppb	PM _{2.5} ug/m ³	NO _x ppb	Temp C	WD deg	WS m/s
Oct-20	3.6	2.2	0.6	38.9	28.9	2.8	14.8	133.2	2.5
Oct-21	3.0	1.8	0.7	23.3	34.9	2.4	7.0	255.9	4.0

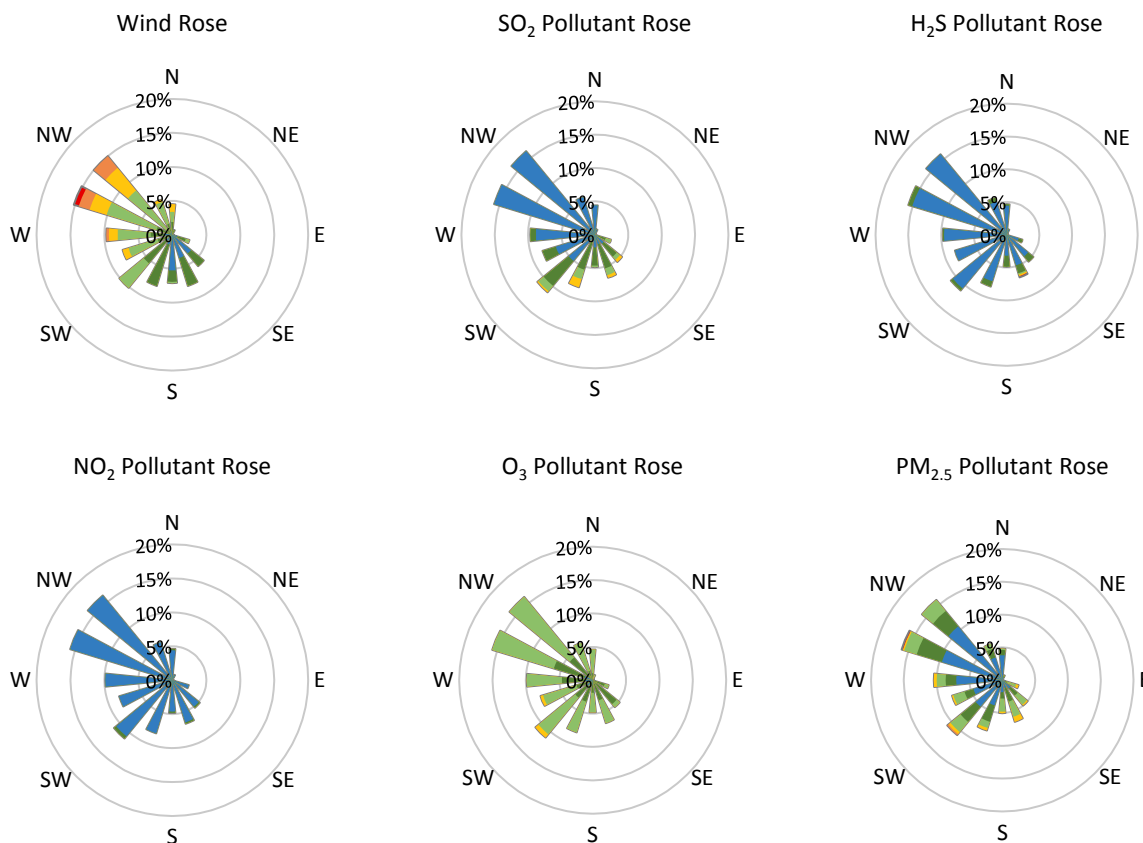
SESAA Weyburn Station - October 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.6	68%	0.8	Oct-10	-	-	4.2	Oct-18 11:00	-	-
NO ₂	ppb	1.2	68%	3.6	Oct-20	106	0	7.6	Oct-30 19:00	159	0
NO _x	ppb	1.8	68%	4.1	Oct-20	-	-	8.5	Oct-30 19:00	-	-
SO ₂	ppb	1.5	68%	4.9	Oct-19	48	0	15.4	Oct-16 02:00	172	0
H ₂ S	ppb	0.7	68%	1.4	Oct-18	3.6	0	16.2	Oct-18 21:00	11	1
O ₃	ppb	22.5	68%	33.1	Oct-17	-	-	41.8	Oct-17 16:00	82	0
PM _{2.5}	µg/m ³	3.2	72%	8.8	Oct-20	28	0	44.1	Oct-17 23:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



SESAA Weyburn Station - October 2017 Summary Report



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
SO ₂	ppb	$0 \leq C < 1$	$1 \leq C < 5$	$5 \leq C < 10$	$10 \leq C < 57$	$57 \leq C < 172$	$C \geq 172$	
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$	
H ₂ S	ppb	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$	
O ₃	ppb	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$	
PM _{2.5}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

Monthly Update

- Downtime due to instrument issues
- Downtime of 4% results from daily internal zeroes and spans

Exceedance Summary (1- Hour Average - Exceedances Highlighted)											
Exceedance Time	AQHI	NO ₂ ppb	NO ppb	SO ₂ ppb	O ₃ ppb	NO _x ppb	H ₂ S ppb	PM _{2.5} $\mu\text{g}/\text{m}^3$	Temp °C	WD deg	WS m/s
Oct-18 21:00	1.5	4.9	0.6	1.8	15.1	5.5	16.2	6.7	0.0	163.8	1.6