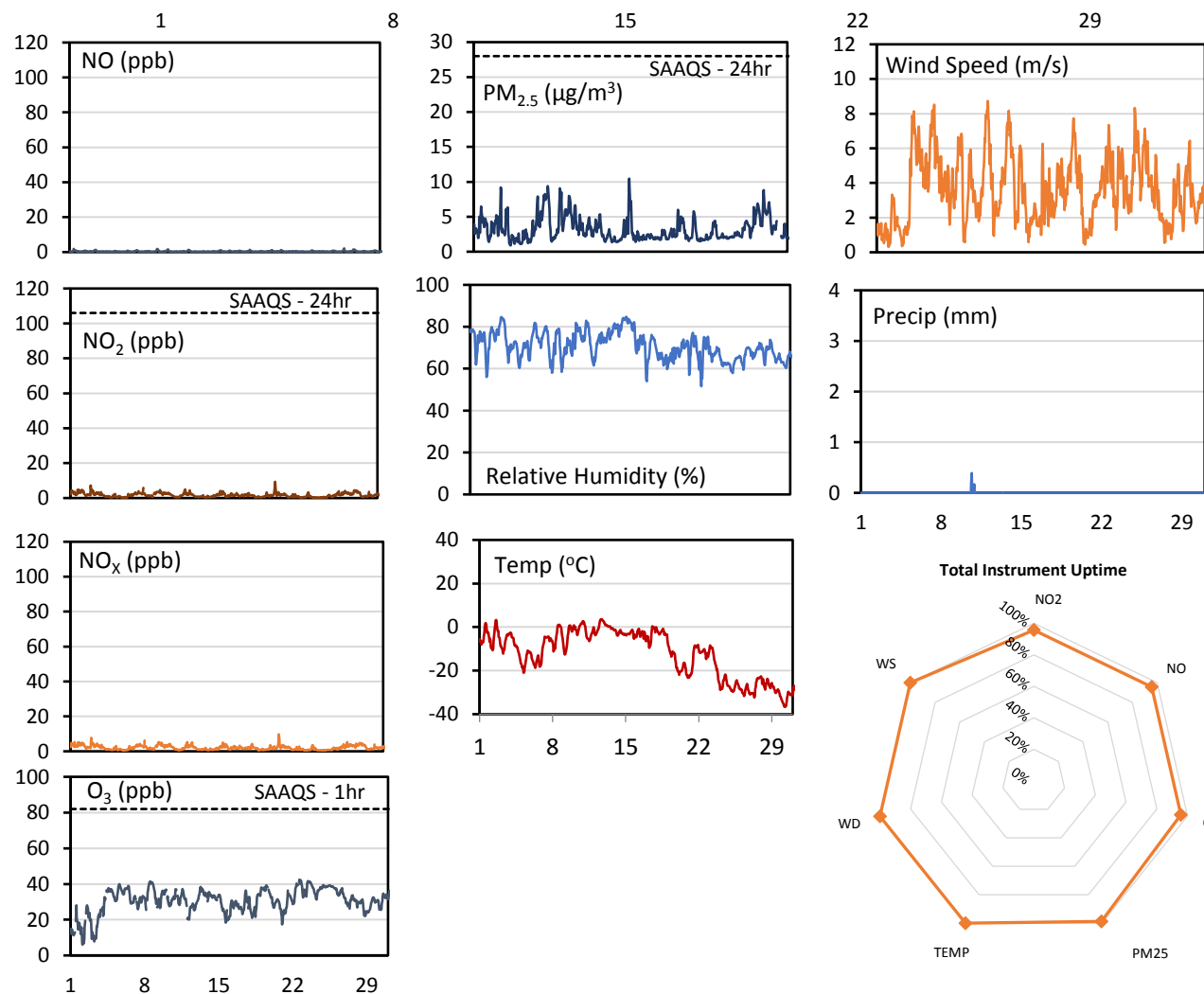
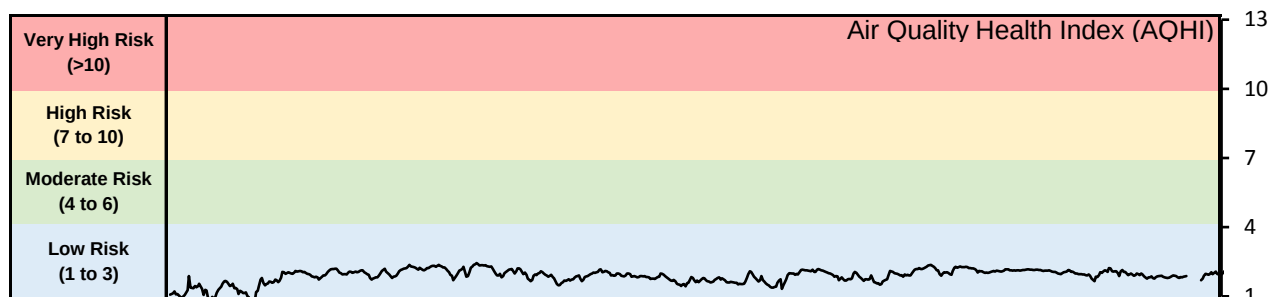


SESAA Esterhazy Station - December 2017 Summary Report

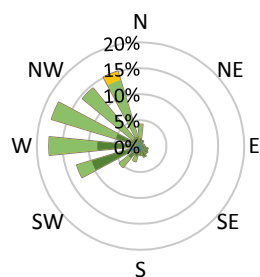
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	96%	0.6	Dec-28	-	-	2.1	Dec-27 13:00	-	-
NO ₂	ppb	1.7	96%	3.2	Dec-01	106	0	9.3	Dec-21 00:00	159	0
NO _x	ppb	2.1	96%	3.7	Dec-01	-	-	9.7	Dec-21 00:00	-	-
O ₃	ppb	30.6	96%	38.5	Dec-25	-	-	42.4	Dec-22 15:00	82	0
PM _{2.5}	µg/m ³	3.2	99%	6.0	Dec-07	28	0	10.5	Dec-15 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

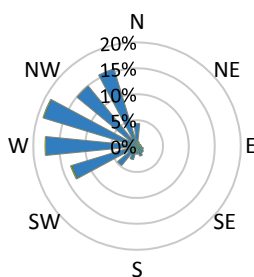


SESAA Esterhazy Station - December 2017 Summary Report

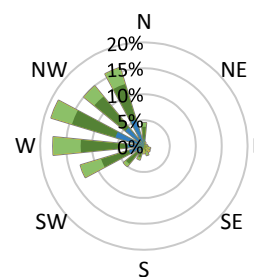
Wind Rose



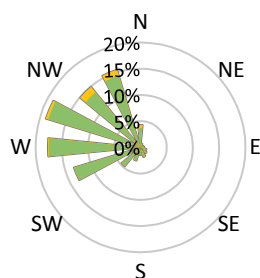
NO₂ Pollutant Rose



PM_{2.5} Pollutant Rose



O₃ Pollutant Rose



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

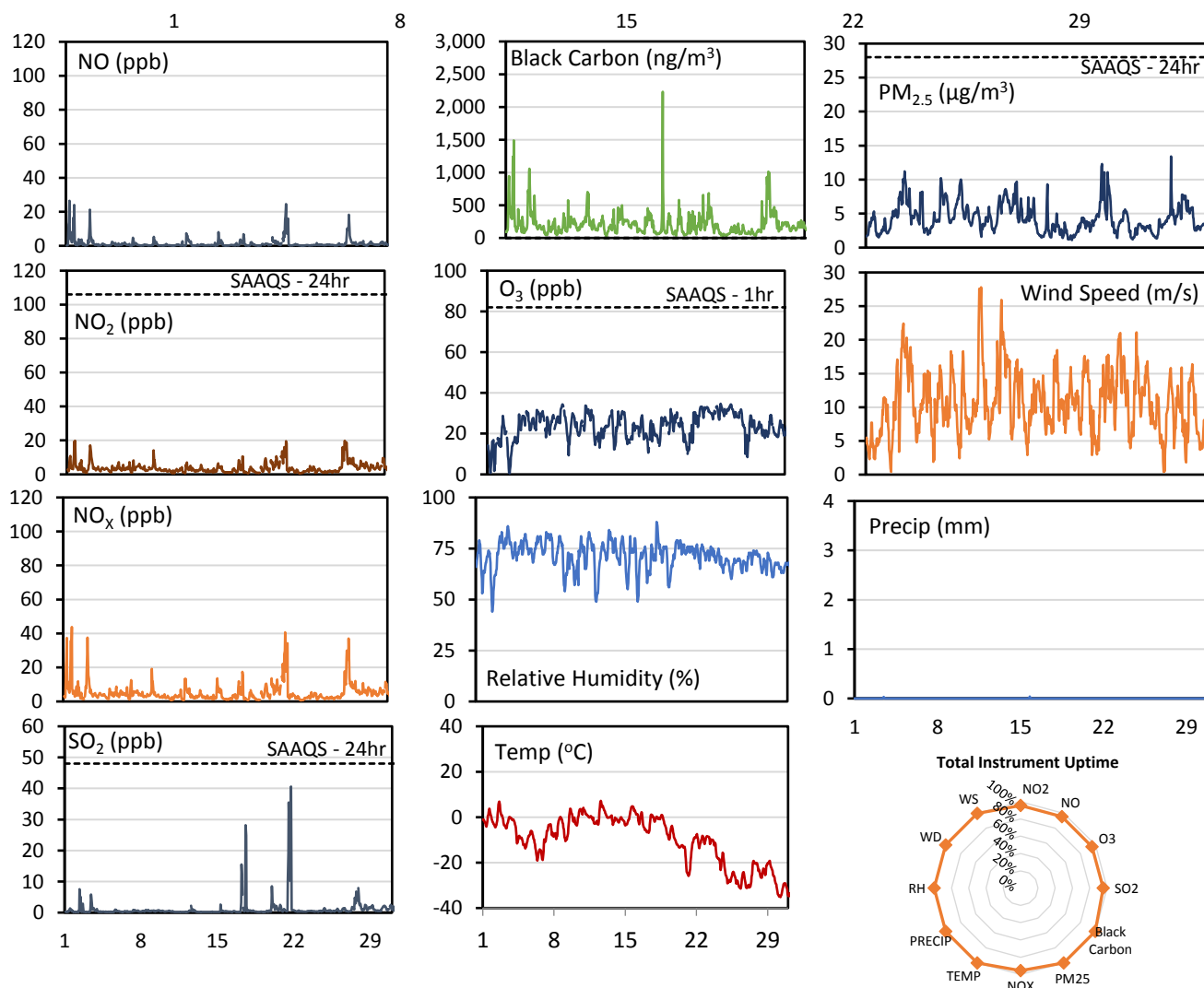
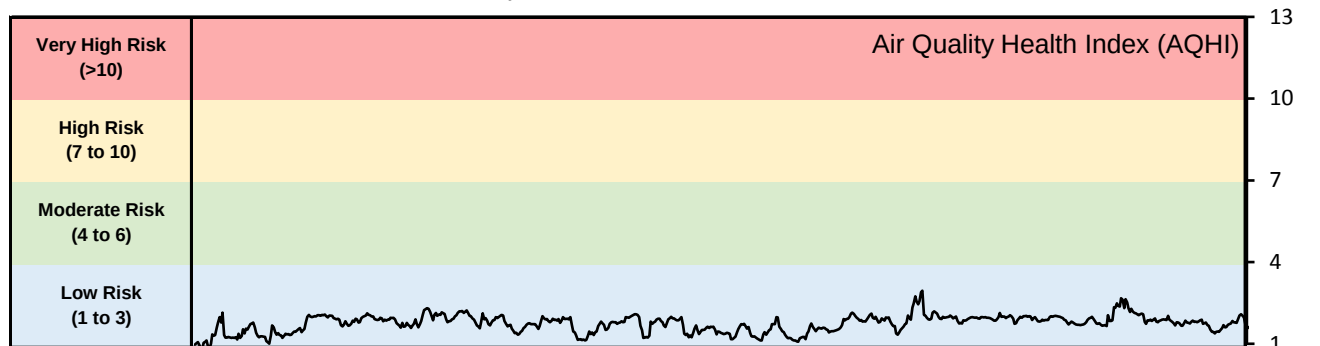
Monthly Update

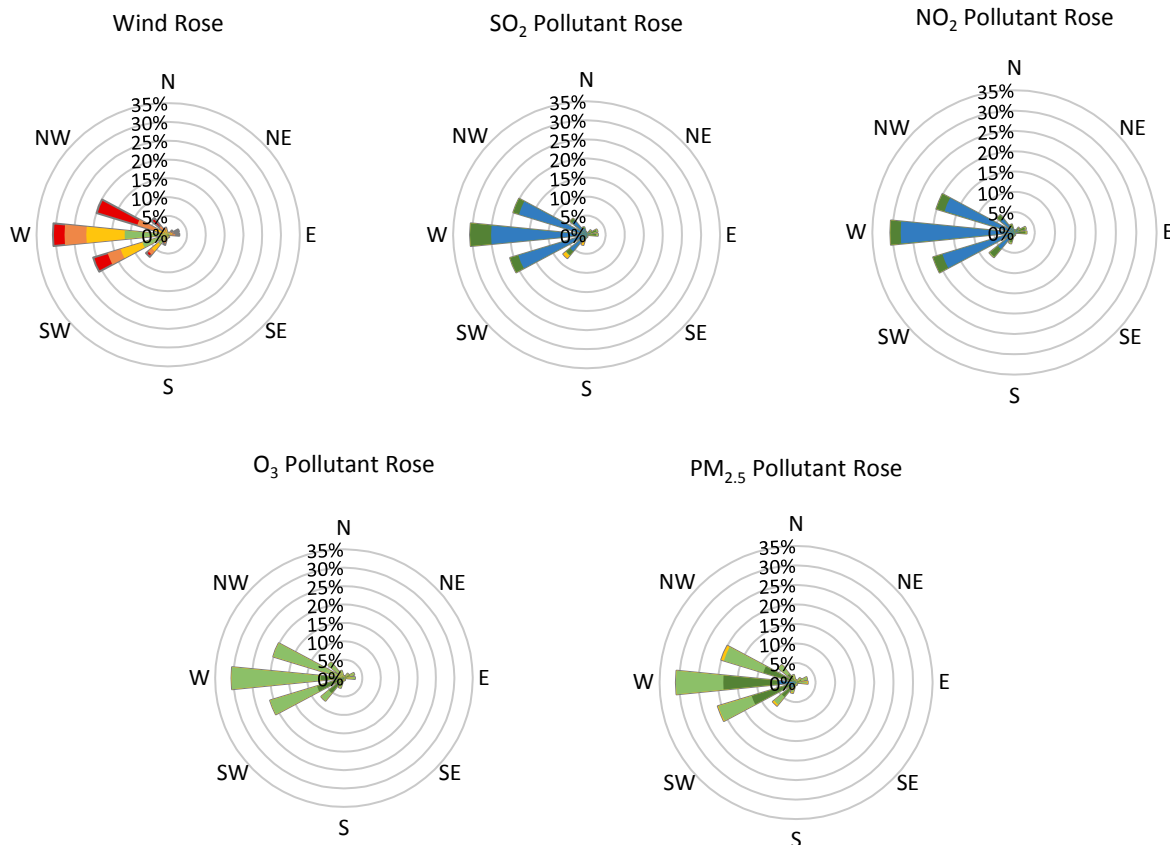
- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily internal zeroes and spans

SESAA Estevan Station - December 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	1.4	96%	6.7	Dec-21	-	-	26.5	Dec-01 08:00	-	-
NO ₂	ppb	3.8	96%	10.7	Dec-27	106	0	19.8	Dec-01 19:00	159	0
NO _x	ppb	5.2	96%	15.8	Dec-21	-	-	43.8	Dec-01 19:00	-	-
SO ₂	ppb	1.1	96%	8.8	Dec-21	48	0	40.6	Dec-21 18:00	172	0
Black Carbon	ng/m ³	208.7	100%	518.6	Dec-27	-	-	2232.0	Dec-16 18:00	-	-
O ₃	ppb	23.6	96%	31.7	Dec-25	-	-	34.7	Dec-24 13:00	82	0
PM _{2.5}	µg/m ³	4.3	100%	7.5	Dec-04	28	0	13.4	Dec-27 13:00	-	-

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	
O ₃	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
PM _{2.5}	µg/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

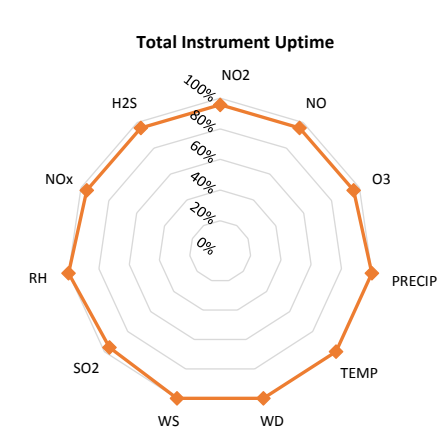
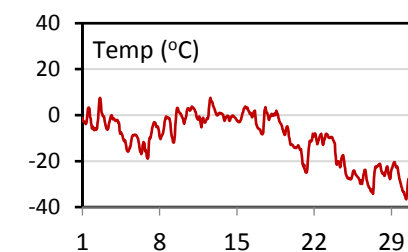
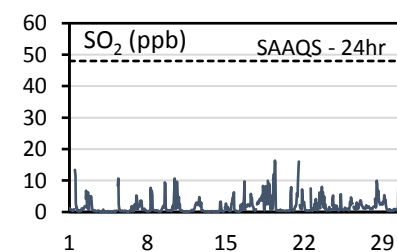
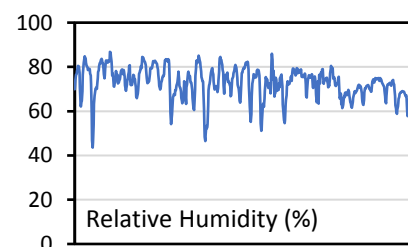
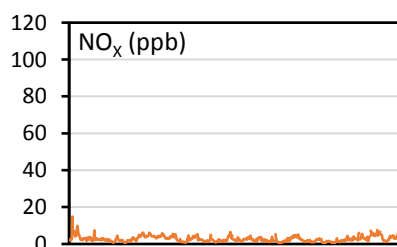
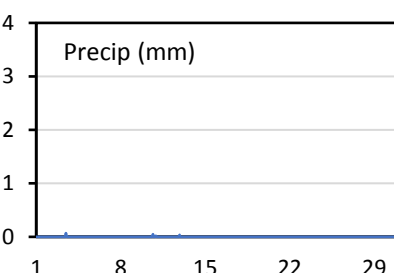
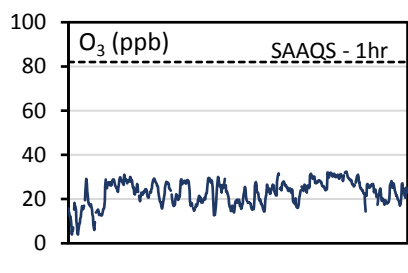
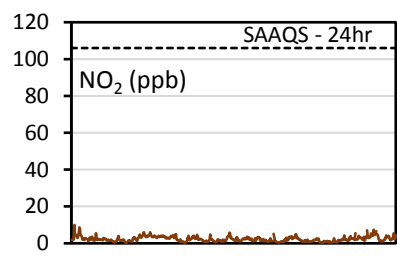
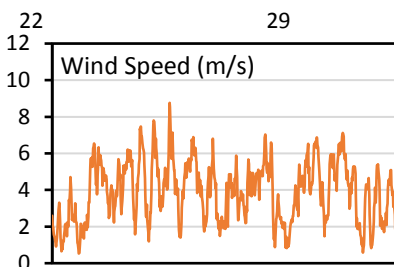
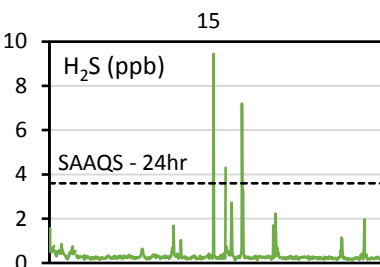
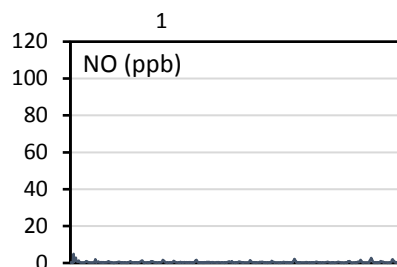
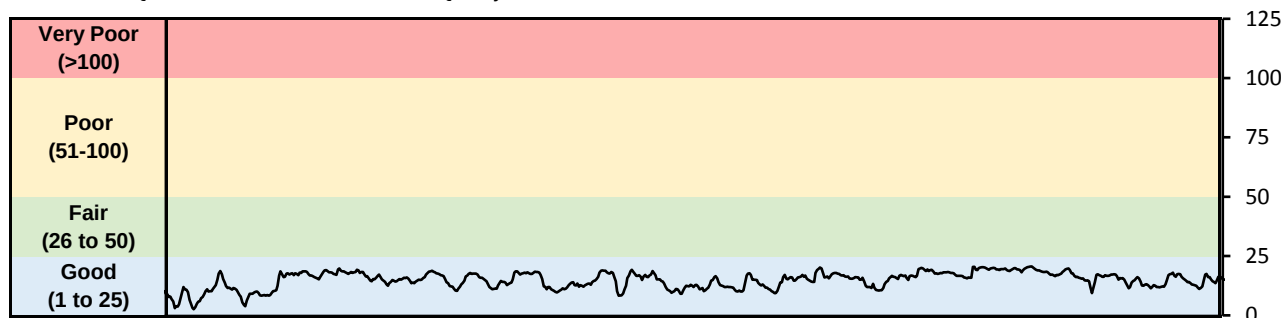
Monthly Update

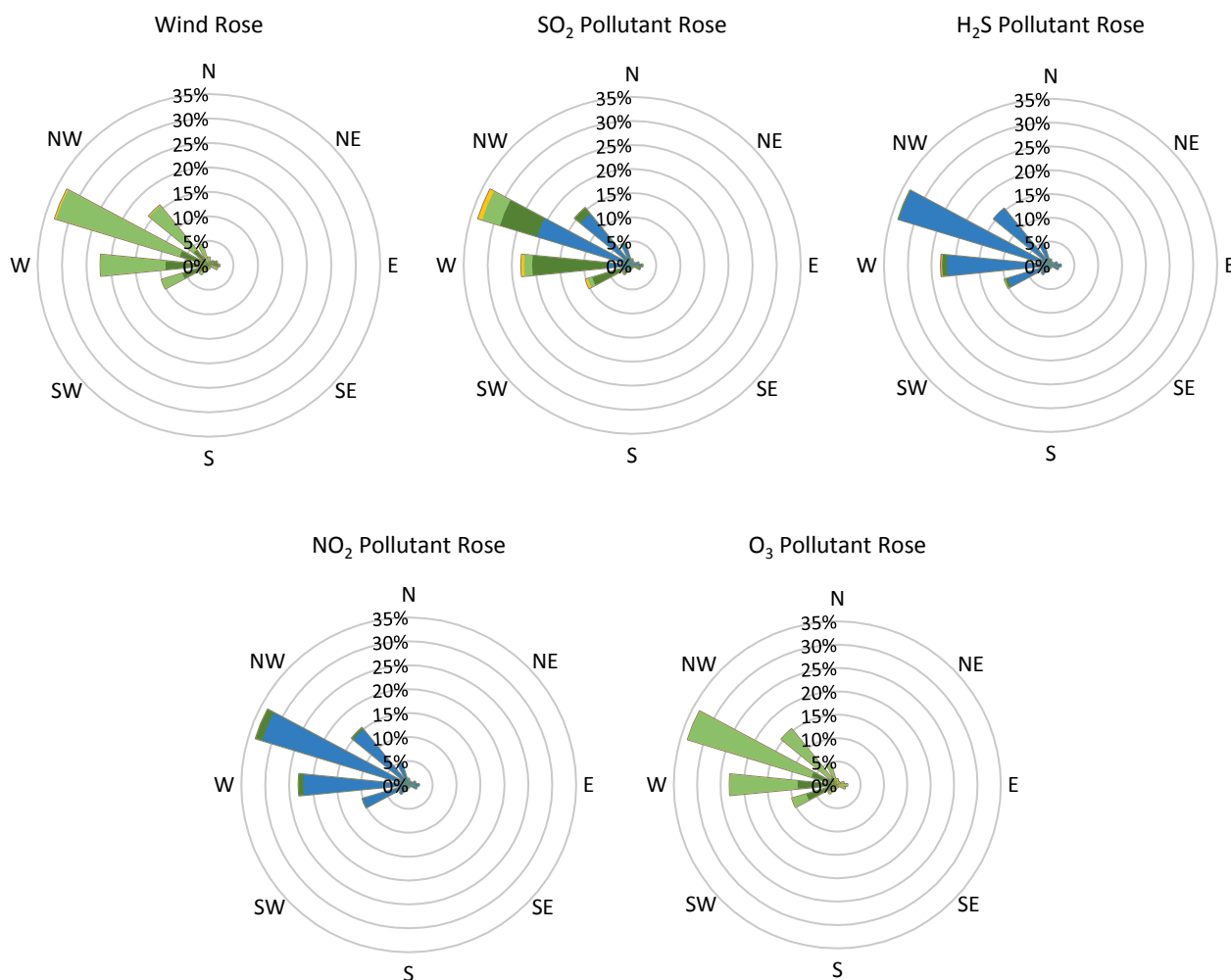
- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from daily internal zeroes and spans

SESAA Glen Ewen Station - December 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	96%	1.0	Dec-01	-	-	4.9	Dec-01 07:00	-	-
NO ₂	ppb	2.4	96%	4.2	Dec-01	106	0	10.0	Dec-01 07:00	159	0
NO _x	ppb	2.8	96%	5.2	Dec-01	-	-	14.9	Dec-01 07:00	-	-
SO ₂	ppb	1.8	96%	4.5	Dec-18	48	0	19.0	Dec-30 11:00	172	0
H ₂ S	ppb	0.3	96%	0.8	Dec-18	3.6	0	9.5	Dec-15 16:00	11	0
O ₃	ppb	23.0	96%	30.7	Dec-24	-	-	32.5	Dec-25 14:00	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	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$

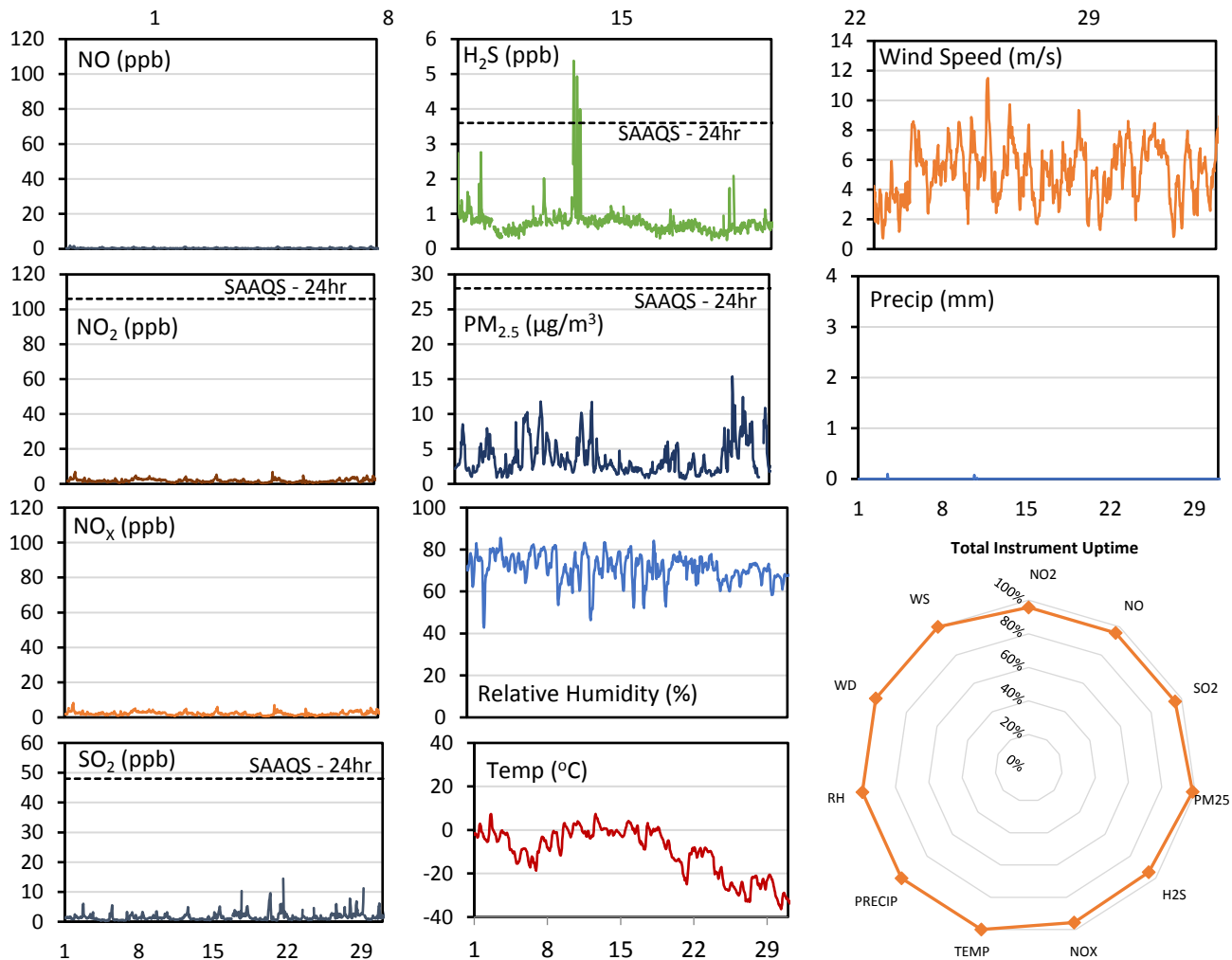
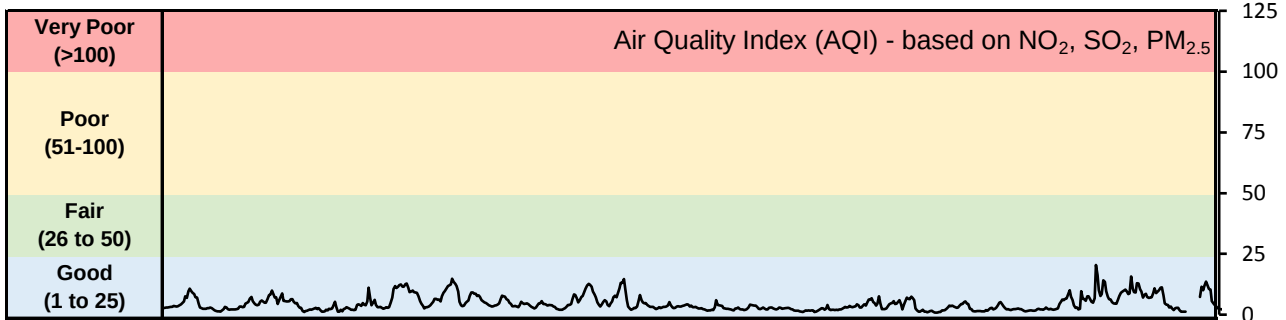
Monthly Update

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

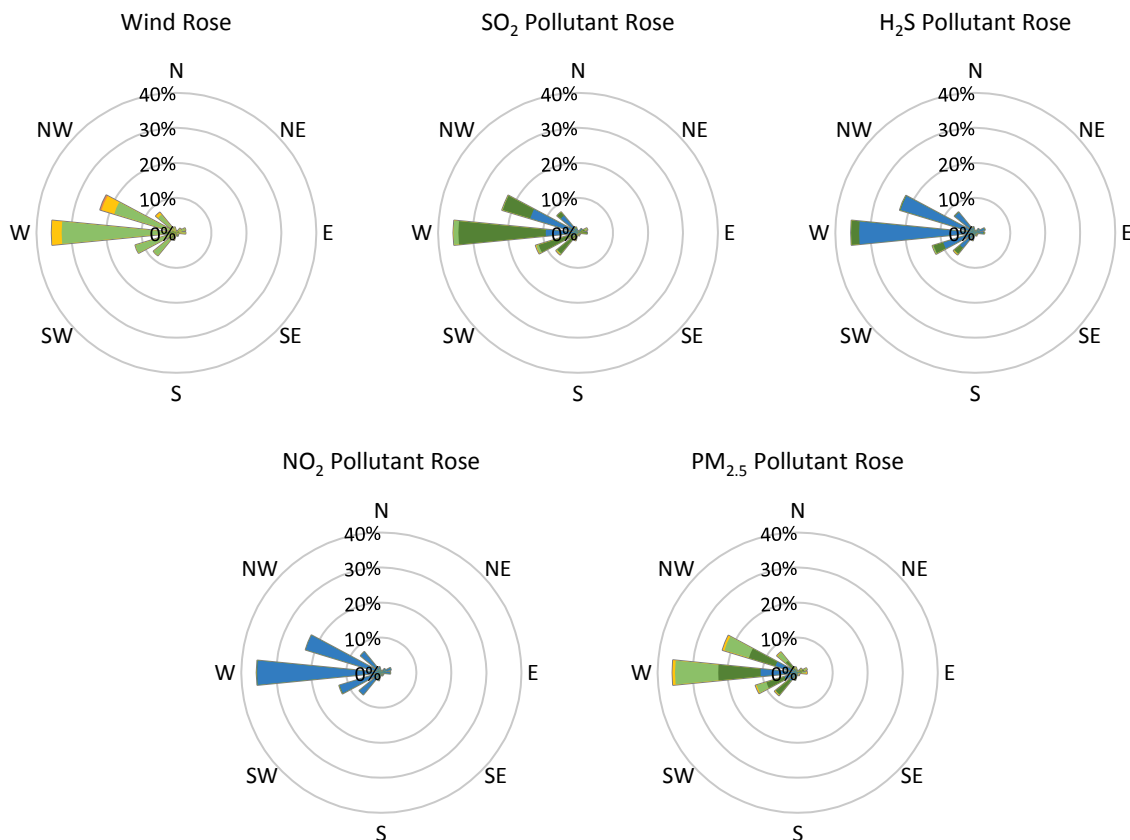
SESAA Oxbow Station - December 2017 Summary Report

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	96%	0.7	Dec-01	-	-	1.9	Dec-01 10:00	-	-
NO ₂	ppb	1.8	96%	3.1	Dec-01	106	0	6.8	Dec-21 02:00	159	0
NO _x	ppb	2.2	96%	3.7	Dec-01	-	-	8.3	Dec-01 20:00	-	-
SO ₂	ppb	1.7	96%	3.1	Dec-21	48	0	14.5	Dec-21 15:00	172	0
H ₂ S	ppb	0.8	94%	2.0	Dec-12	3.6	0	5.4	Dec-12 02:00	11	0
PM _{2.5}	µg/m ³	3.7	99%	7.2	Dec-28	28	0	15.4	Dec-27 12:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



SESAA Oxbow Station - December 2017 Summary Report



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	

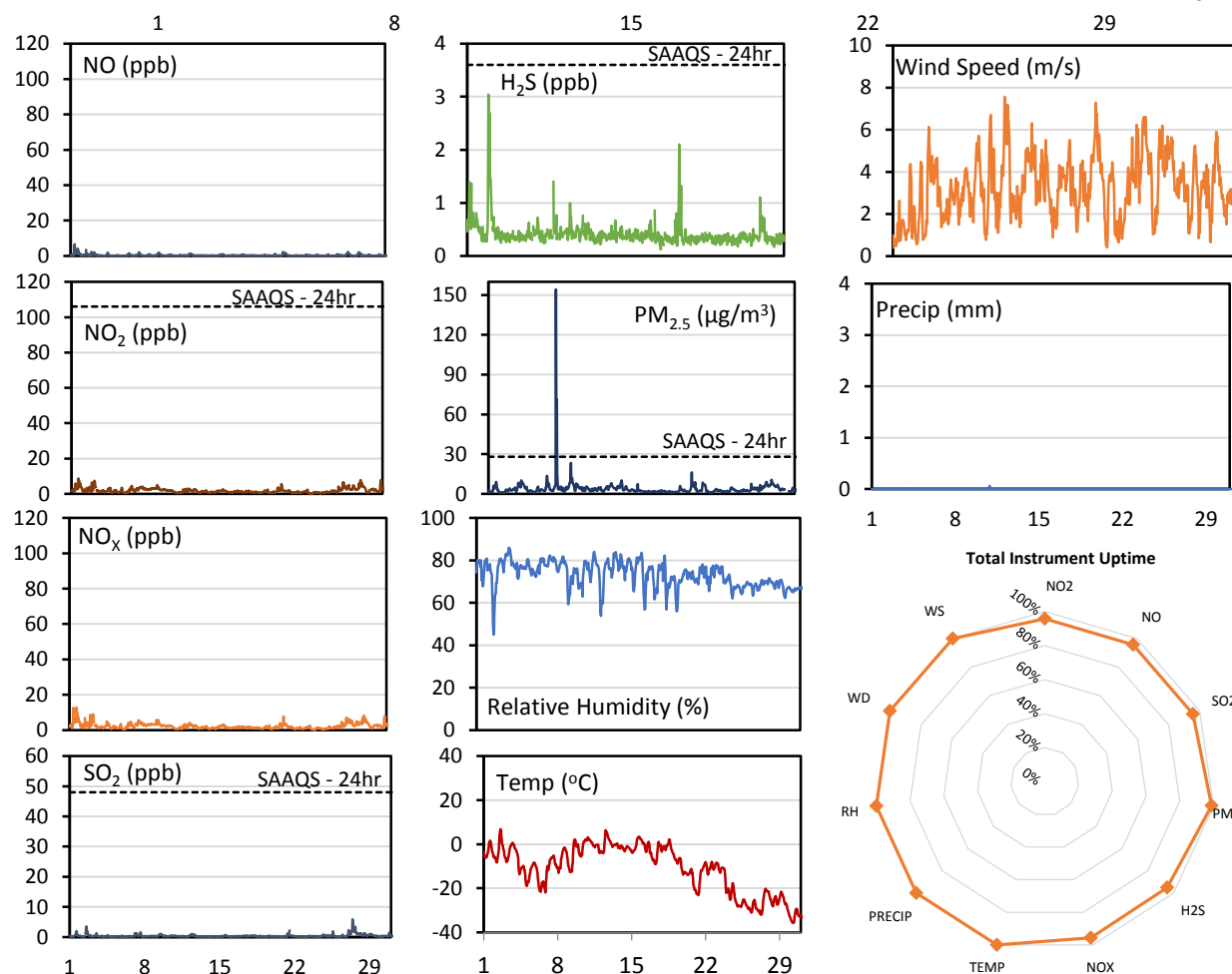
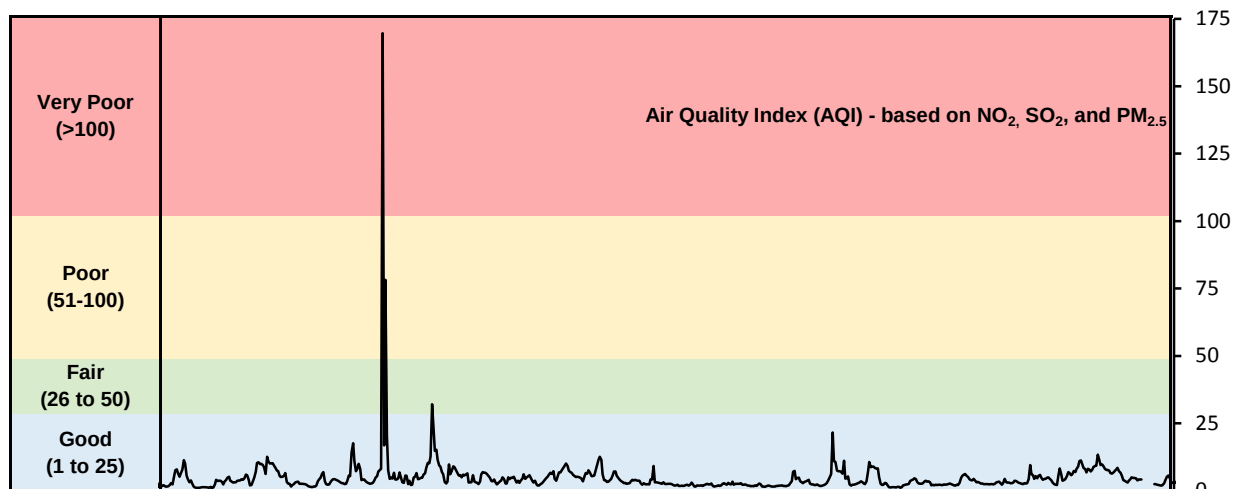
Monthly Update

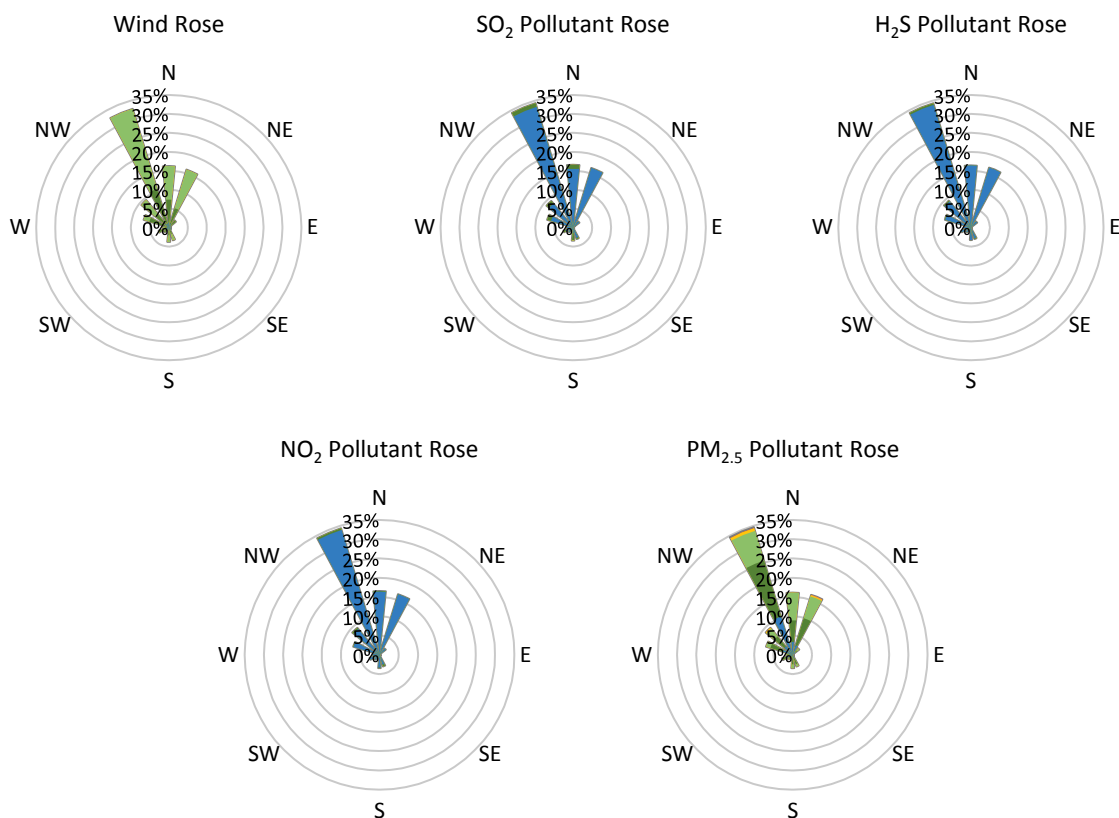
- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily internal zeroes and spans

SESAA Stoughton Station - December 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	96%	1.5	Dec-01	-	-	6.6	Dec-01 09:00	-	-
NO ₂	ppb	1.9	96%	3.7	Dec-28	106	0	8.7	Dec-01 16:00	159	0
NO _x	ppb	2.3	96%	5.2	Dec-01	-	-	12.8	Dec-01 16:00	-	-
SO ₂	ppb	0.4	96%	1.9	Dec-27	48	0	5.9	Dec-27 10:00	172	0
H ₂ S	ppb	0.4	95%	1.0	Dec-03	3.6	0	3.0	Dec-03 00:00	11	0
PM _{2.5}	µg/m ³	3.8	99%	13.7	Dec-07	28	0	154.3	Dec-07 15:00	-	-

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	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$

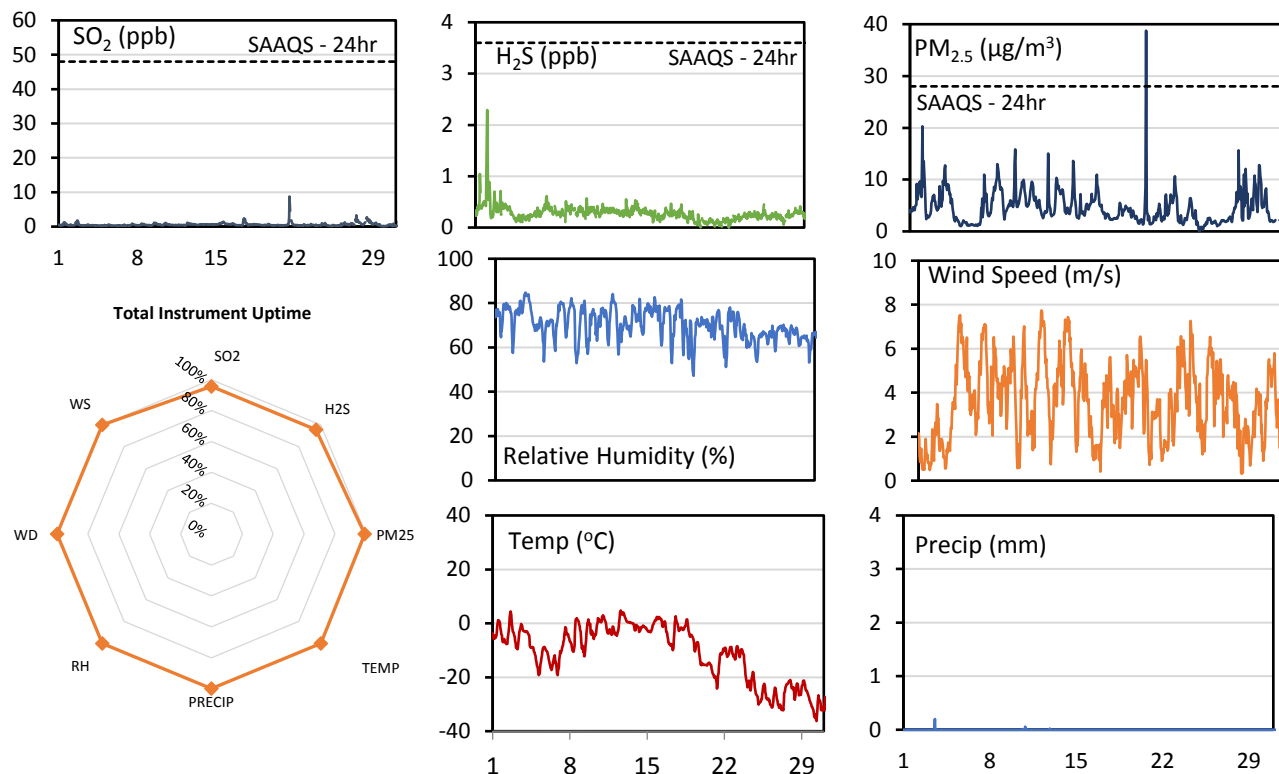
Monthly Update

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

SESAA Wauchope Station - December 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	0.6	96%	1.3	Dec-28	48	0	8.7	Dec-21 13:00	172	0
H ₂ S	ppb	0.3	96%	0.6	Dec-02	3.6	0	2.3	Dec-02 02:00	11	0
PM _{2.5}	µg/m ³	4.5	99%	7.2	Dec-28	28	0	38.8	Dec-19 19:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

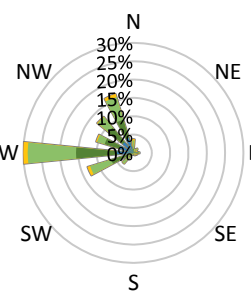
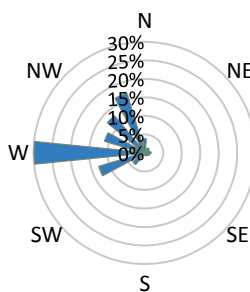
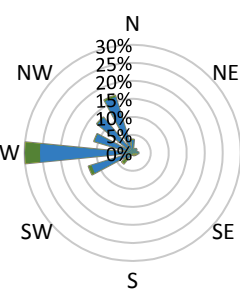
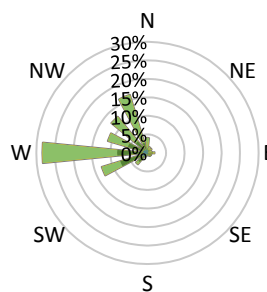


Wind Rose

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

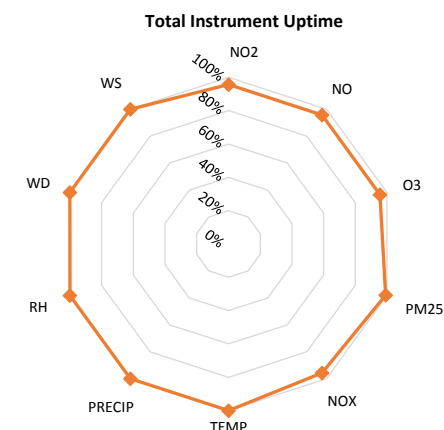
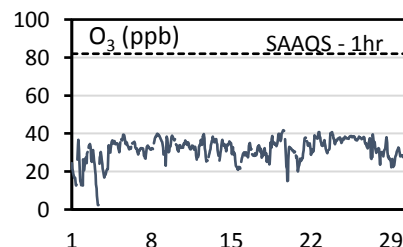
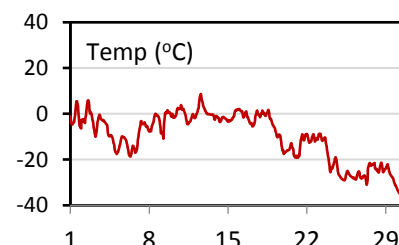
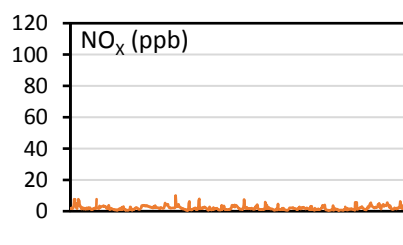
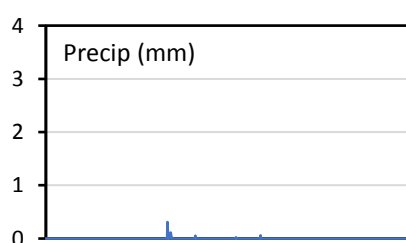
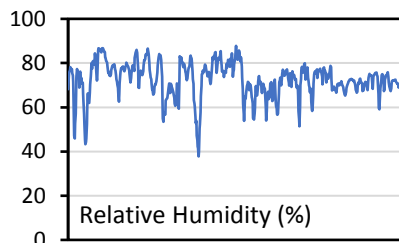
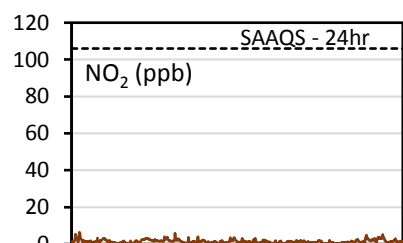
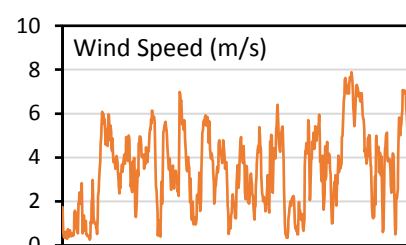
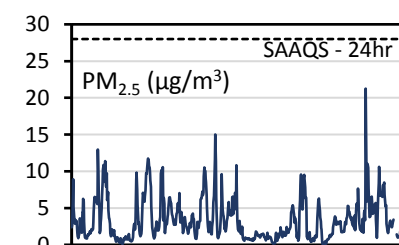
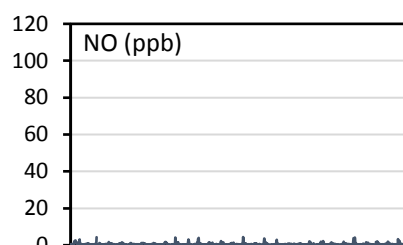
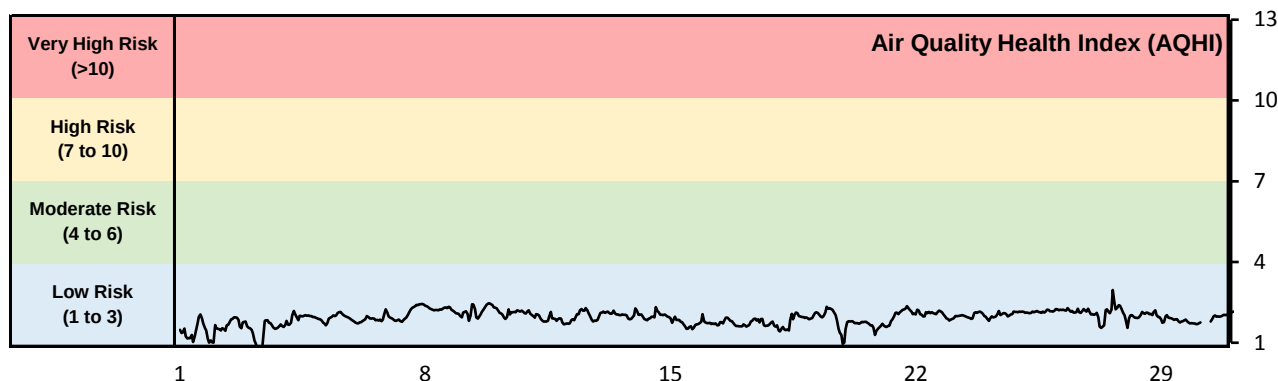
Monthly Update

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

SESAA Wawota Station - December 2017 Summary Report

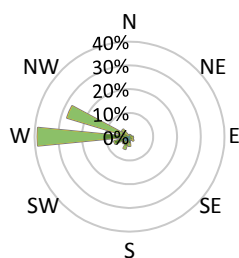
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.6	96%	0.9	Dec-01	-	-	4.4	Dec-16 11:00	-	-
NO ₂	ppb	1.4	96%	2.7	Dec-01	106	0	6.4	Dec-01 17:00	159	0
NO _x	ppb	2.0	96%	3.6	Dec-01	-	-	10.0	Dec-10 09:00	-	-
O ₃	ppb	31.8	96%	37.8	Dec-25	-	-	41.7	Dec-19 13:00	82	0
PM _{2.5}	µg/m ³	3.3	99%	6.5	Dec-03	28	0	21.3	Dec-27 15:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

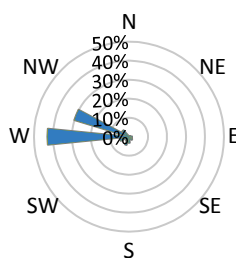


SESAA Wawota Station - December 2017 Summary Report

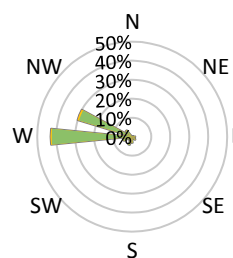
Wind Rose



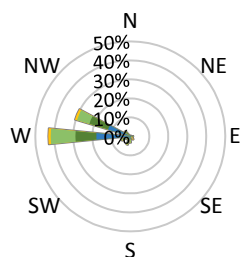
NO₂ Pollutant Rose



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	

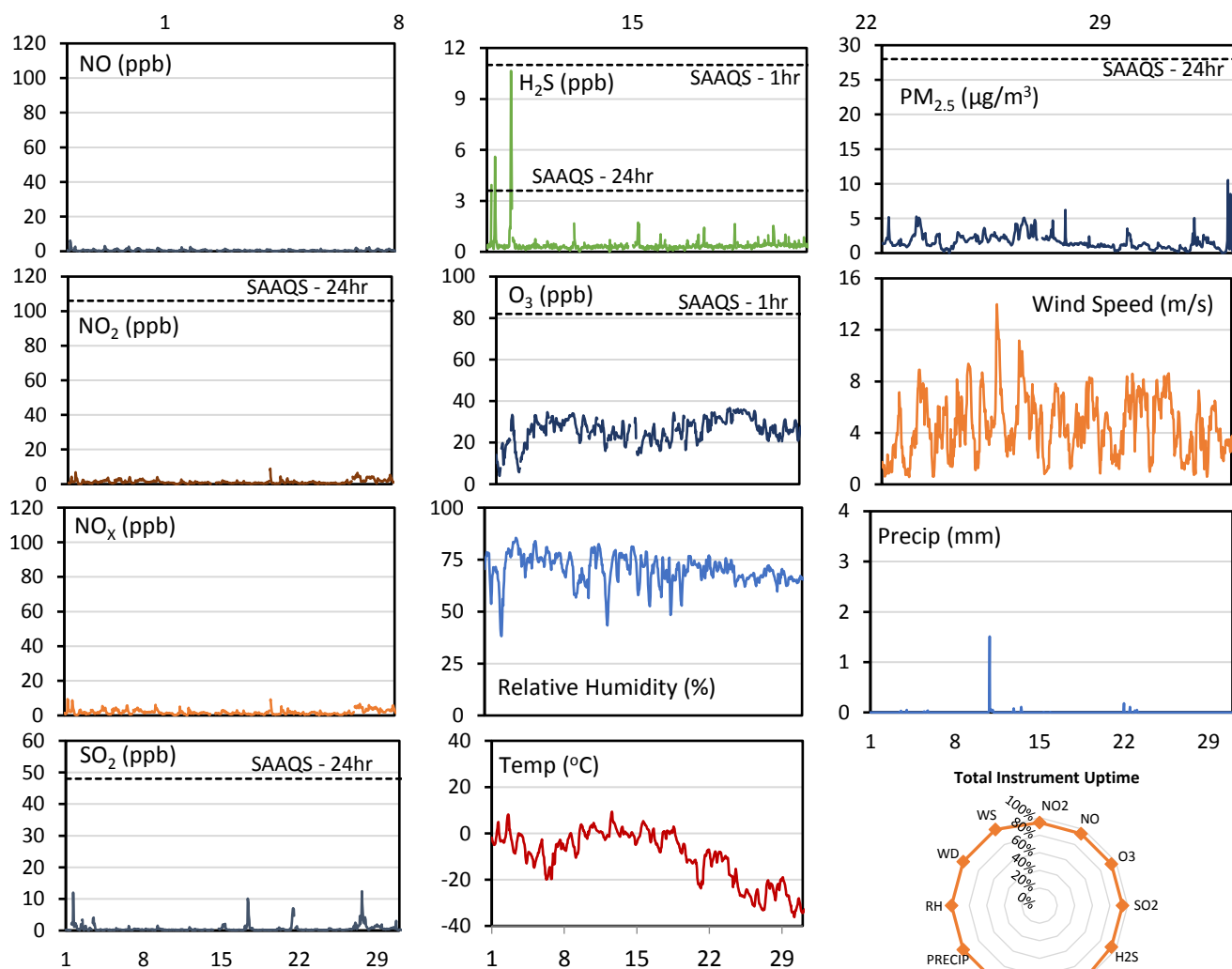
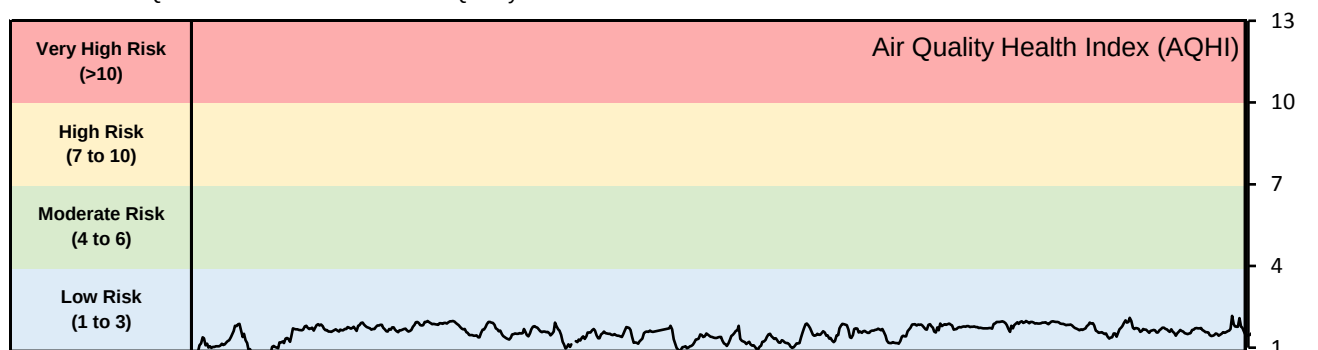
Monthly Update

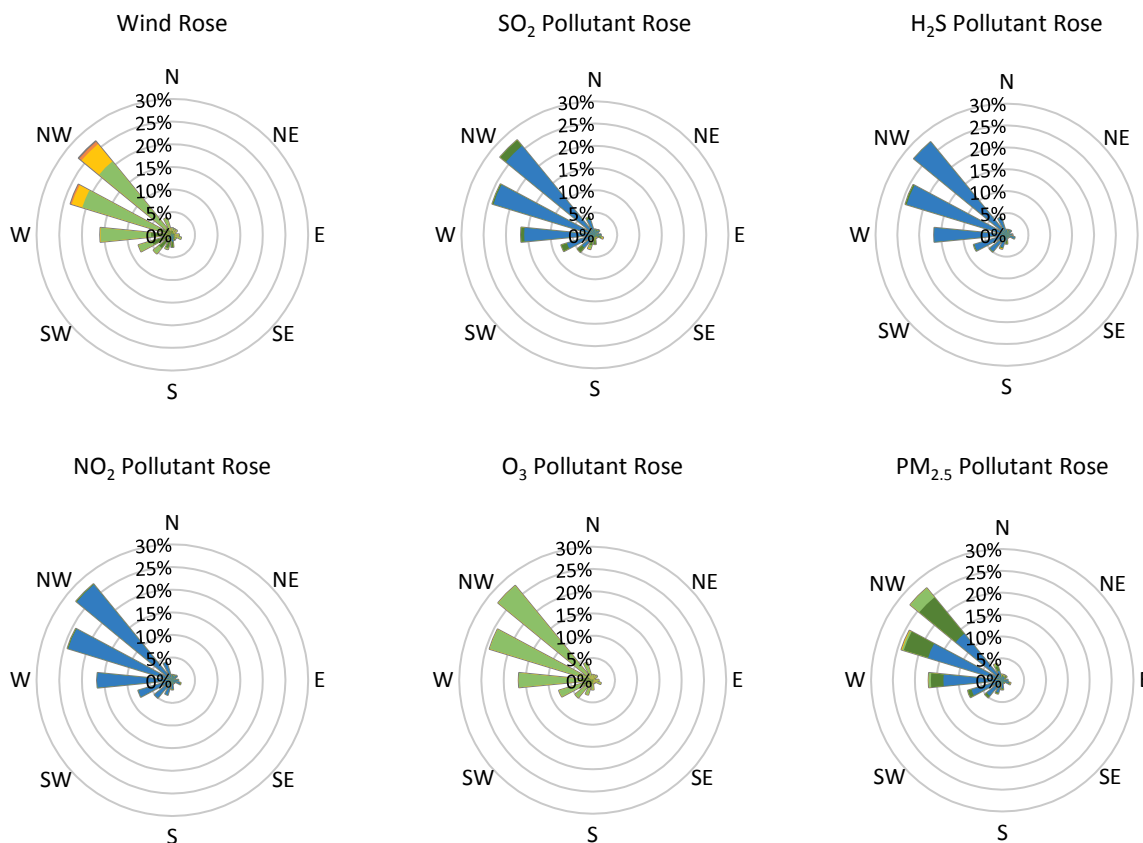
- Achieved >90% of scheduled uptime for all parameters
- Downtime of 4% results from daily internal zeroes and spans

SESAA Weyburn Station - December 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	0.5	94%	1.2	Dec-01	-	-	6.2	Dec-01 07:00	-	-
NO ₂	ppb	1.3	94%	3.2	Dec-27	106	0	9.0	Dec-19 18:00	159	0
NO _x	ppb	1.9	94%	3.8	Dec-27	-	-	9.5	Dec-01 07:00	-	-
SO ₂	ppb	0.6	94%	3.2	Dec-27	48	0	12.4	Dec-27 15:00	172	0
H ₂ S	ppb	0.4	94%	1.4	Dec-03	3.6	0	10.7	Dec-03 06:00	11	0
O ₃	ppb	26.1	94%	34.9	Dec-25	-	-	37.7	Dec-31 15:00	82	0
PM _{2.5}	µg/m ³	1.6	99%	3.6	Dec-13	28	0	10.5	Dec-30 13:00	-	-

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	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$	
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
- Calibration performed December 14, 2017