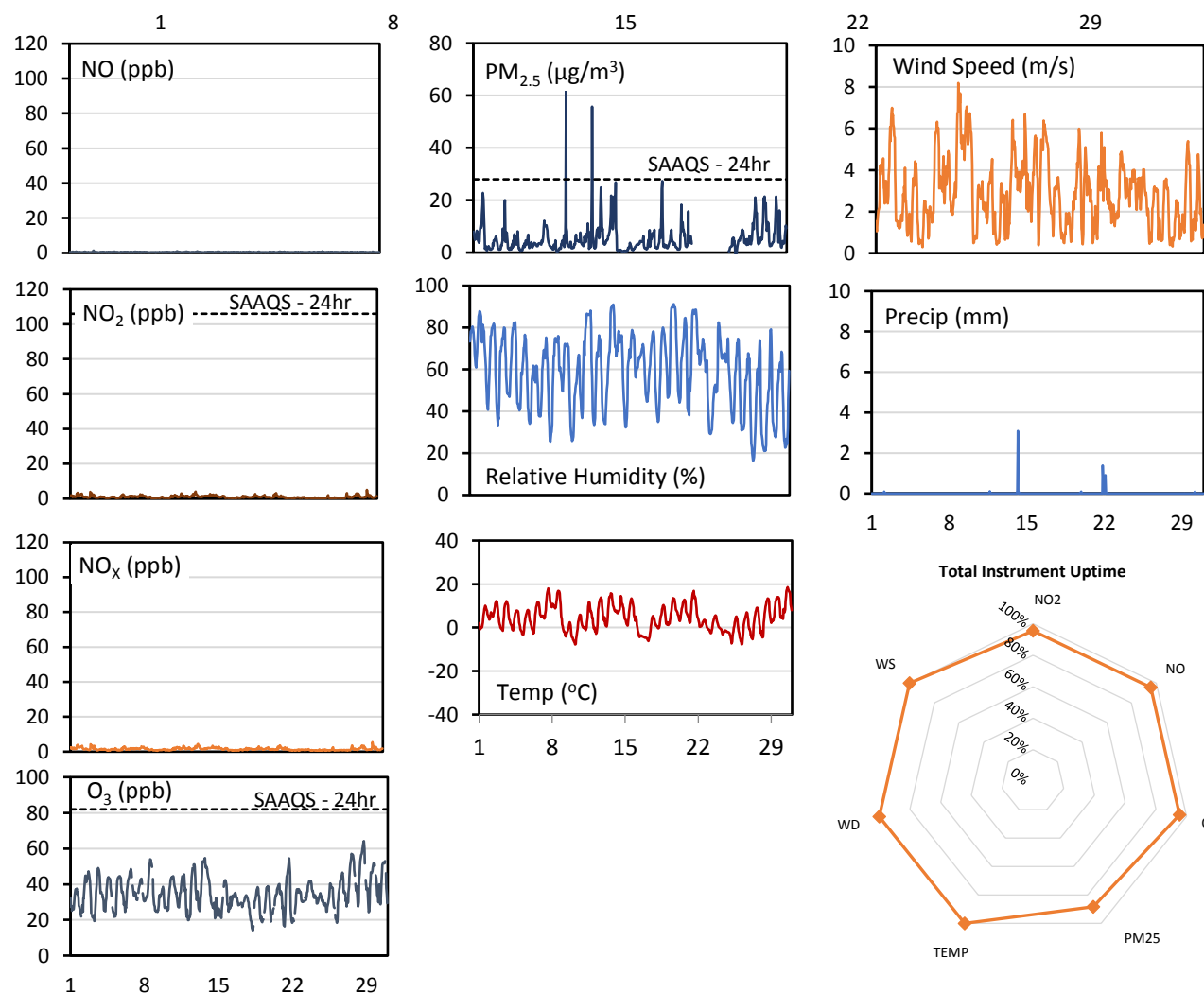
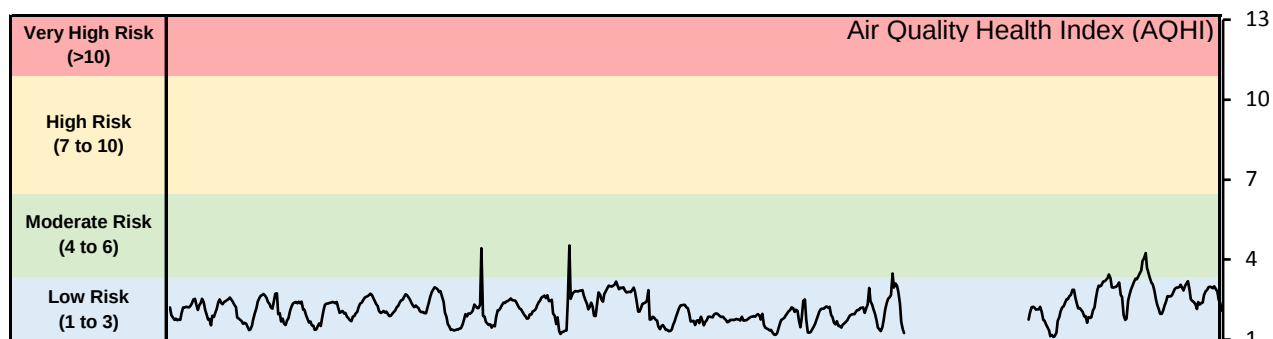


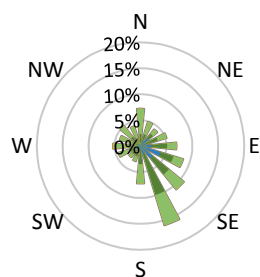
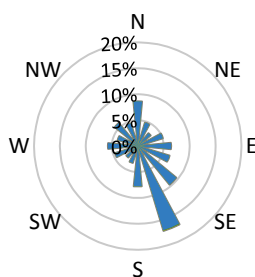
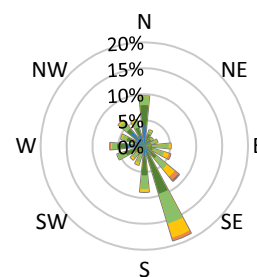
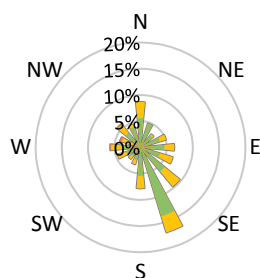
SESAA Esterhazy Station - April 2017 Summary Report

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%	0.5	Apr-01	-	-	1.4	Apr-03 08:00	-	-
NO ₂	ppb	1.1	96%	1.8	Apr-13	106	0	5.0	Apr-30 00:00	159	0
NO _x	ppb	1.5	96%	2.3	Apr-13	-	-	5.5	Apr-30 00:00	-	-
O ₃	ppb	34.9	95%	47.5	Apr-28	-	-	64.2	Apr-28 18:00	82	0
PM _{2.5}	µg/m ³	5.3	88%	10.8	Apr-14	28	0	62.0	Apr-09 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



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

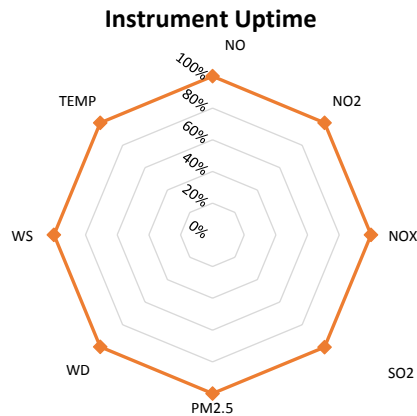
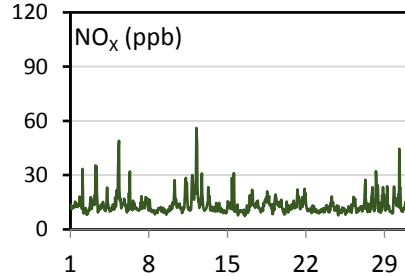
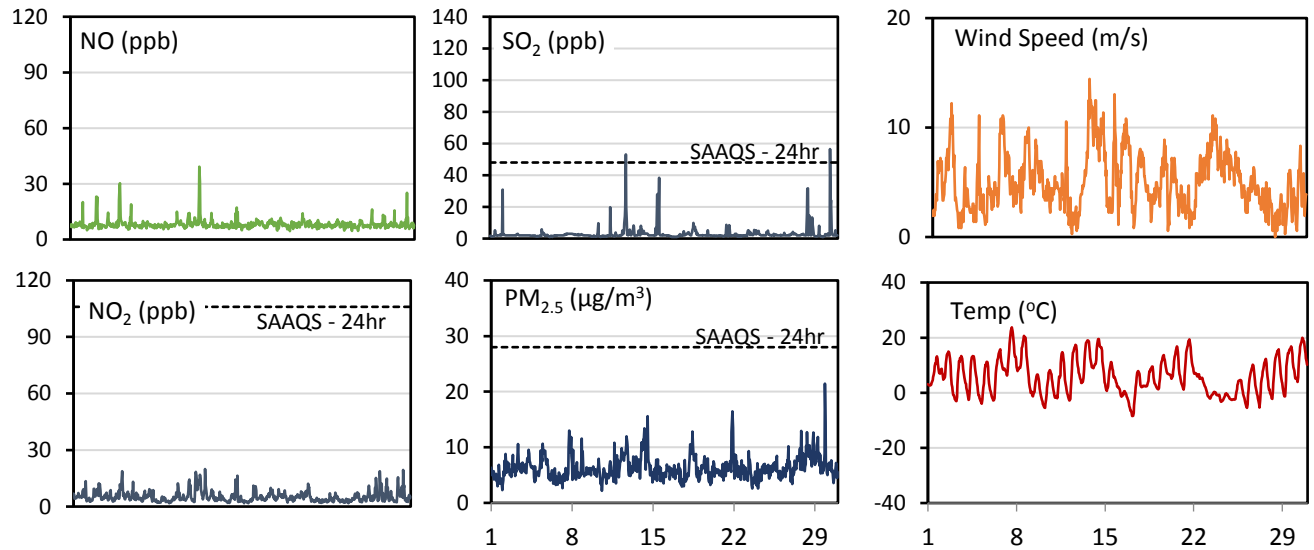
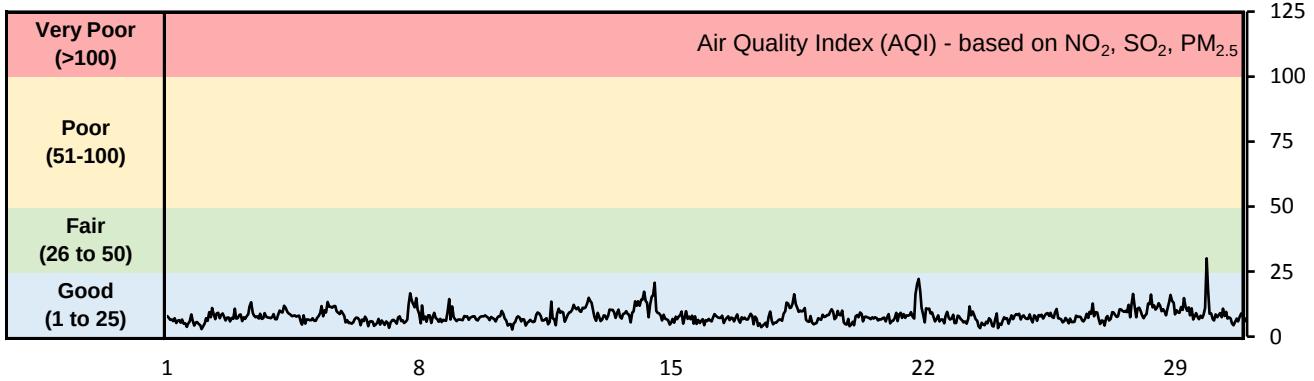
Monthly Update

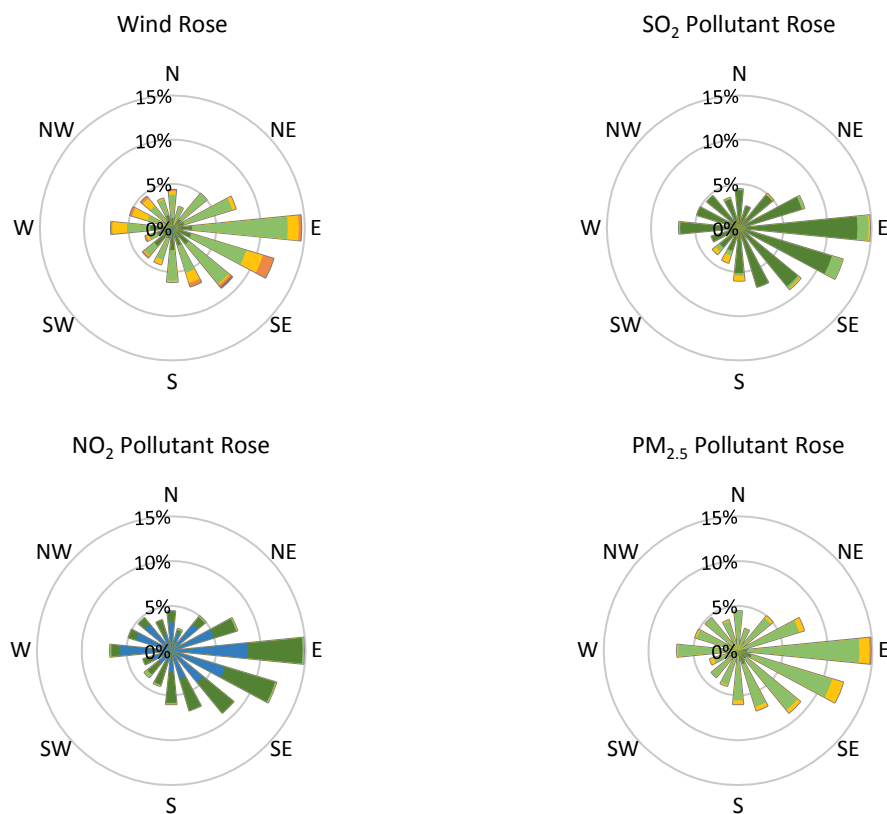
- Achieved >99% of scheduled uptime for all parameters except PM_{2.5} (88%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Particulate downtime due to operational issues

SESAA Estevan Station - April 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	8.2	100%	11.6	Apr-12	-	-	39.2	Apr-12 06:00	-	-
NO ₂	ppb	5.3	100%	9.3	Apr-12	106	0	19.9	Apr-12 17:00	159	0
NO _x	ppb	13.5	100%	20.9	Apr-12	-	-	56.1	Apr-12 06:00	-	-
SO ₂	ppb	3.0	100%	7.2	Apr-12	48	0	56.5	Apr-30 08:00	172	0
PM _{2.5}	µg/m ³	6.3	100%	9.0	Apr-28	28	0	21.4	Apr-29 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$	
SO ₂	ppb	$1 \leq C < 5$	$6 \leq C < 15$	$16 \leq C < 30$	$31 \leq C < 100$	$101 \leq C < 212$	$C \geq 213$	
PM _{2.5}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

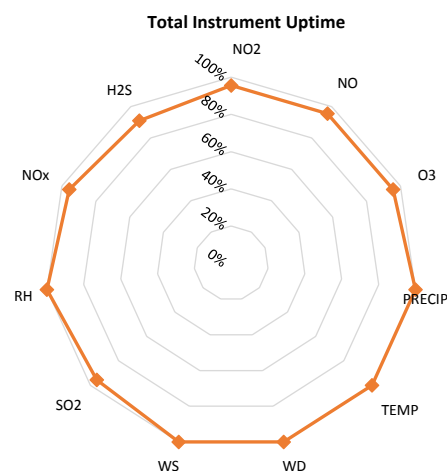
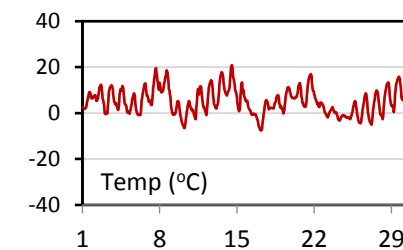
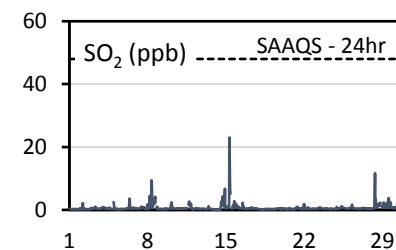
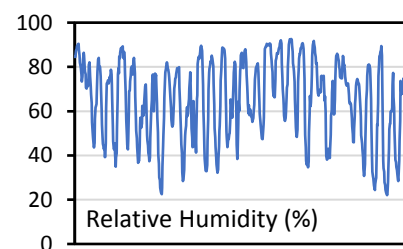
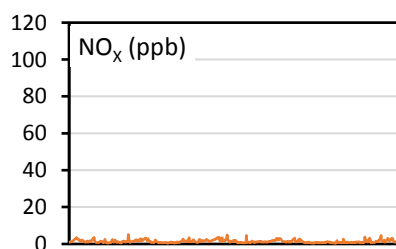
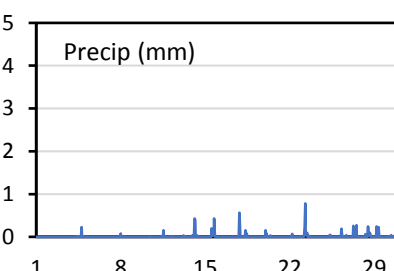
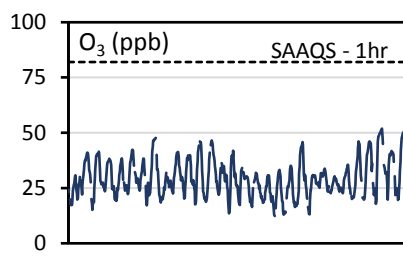
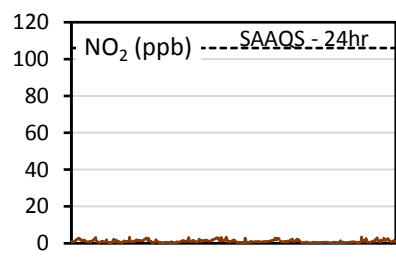
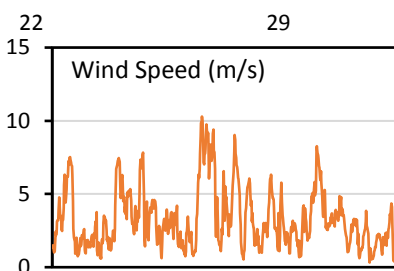
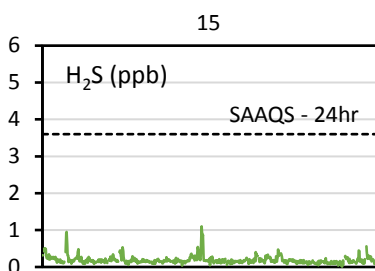
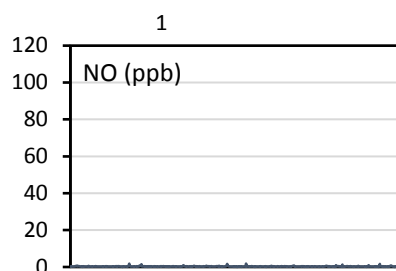
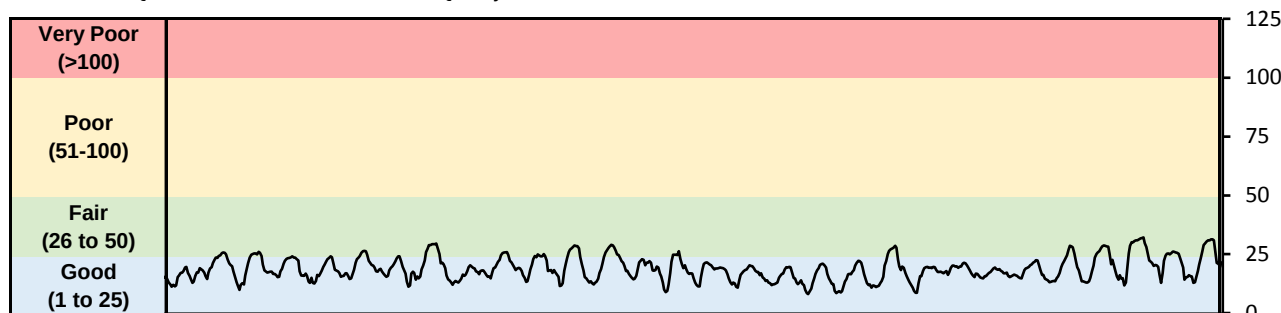
Monthly Update

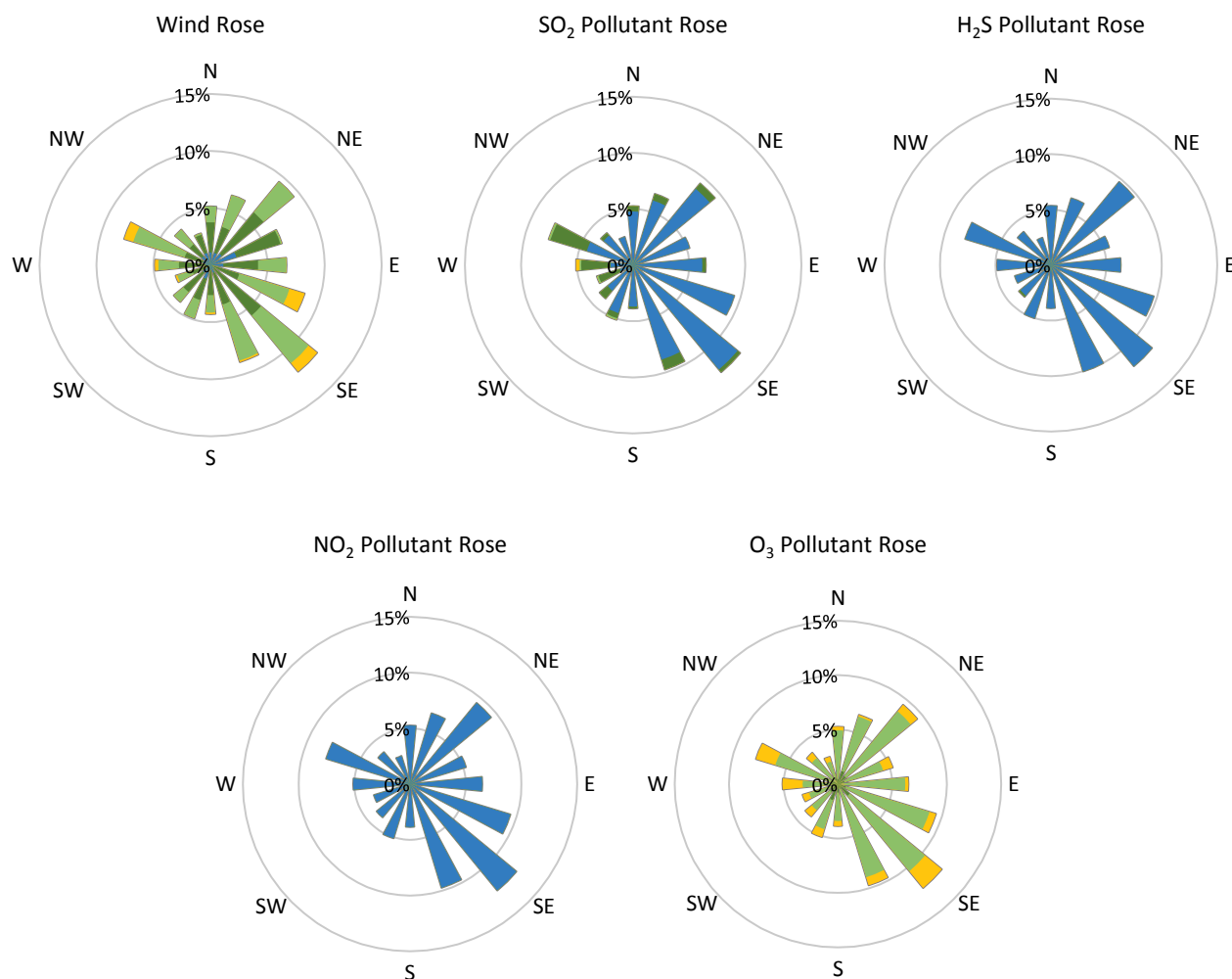
- Achieved 100% uptime for all parameters
- Wind speed and direction data was taken from Estevan Airport

SESAA Glen Ewen Station - April 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	0.3	96%	0.4	Apr-07	-	-	1.8	Apr-06 09:00	-	-
NO ₂	ppb	1.1	96%	2.2	Apr-14	106	0	3.5	Apr-27 20:00	159	0
NO _x	ppb	1.4	96%	2.5	Apr-14	-	-	5.1	Apr-06 09:00	-	-
SO ₂	ppb	0.7	96%	2.4	Apr-15	48	0	23.0	Apr-15 08:00	172	0
H ₂ S	ppb	0.2	91%	0.3	Apr-15	3.6	0	1.1	Apr-15 05:00	11	0
O ₃	ppb	29.5	96%	38.4	Apr-28	-	-	51.9	Apr-28 18:00	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	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$

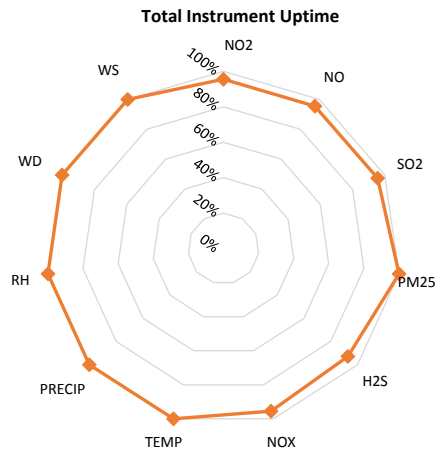
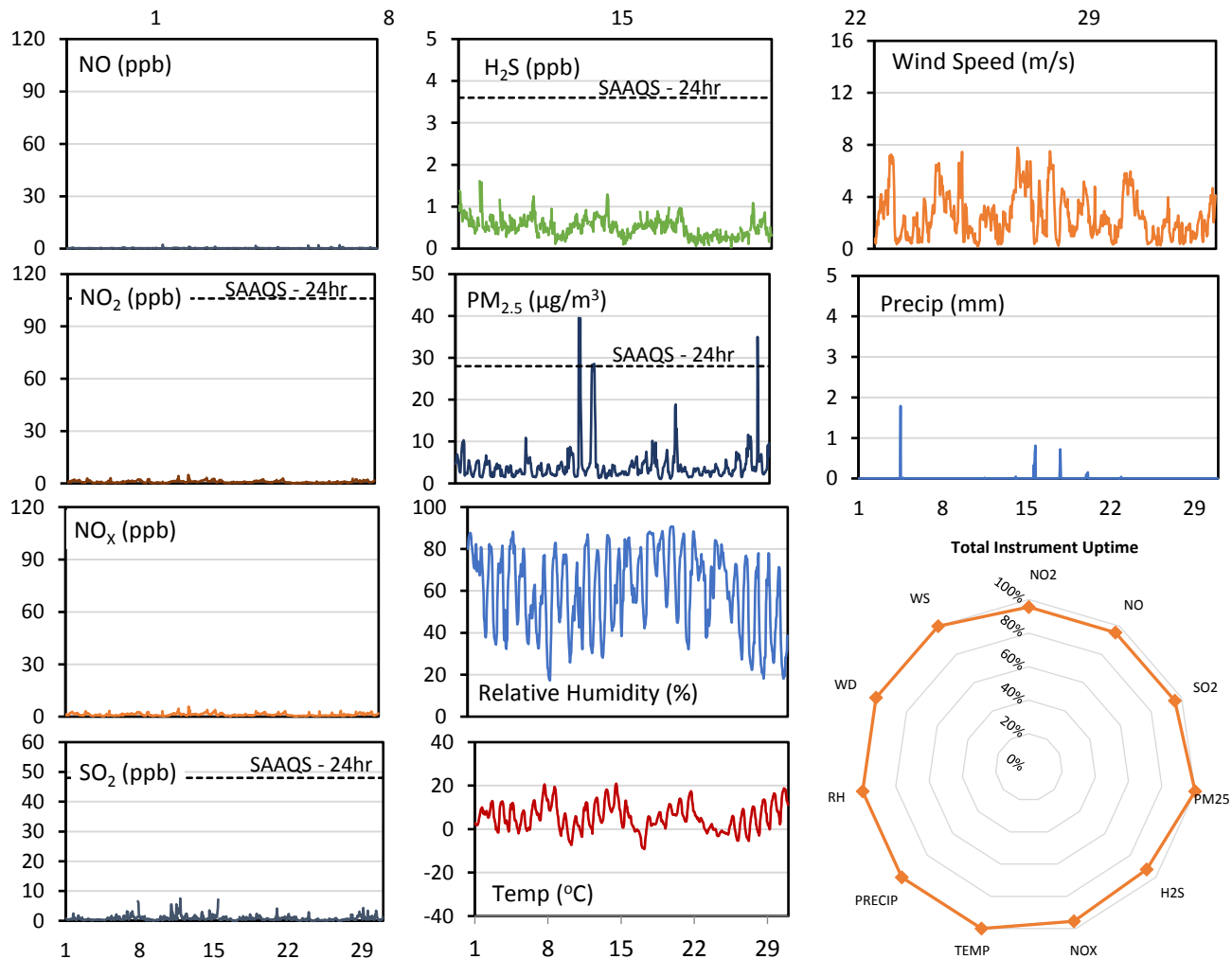
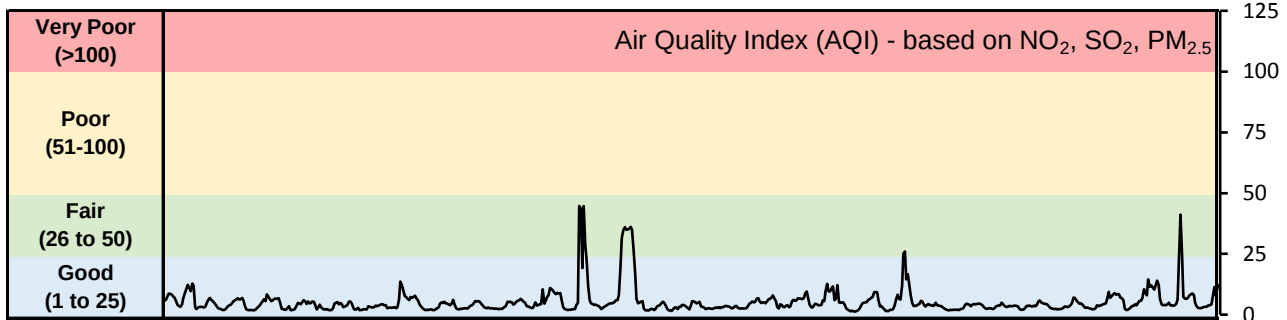
Monthly Update

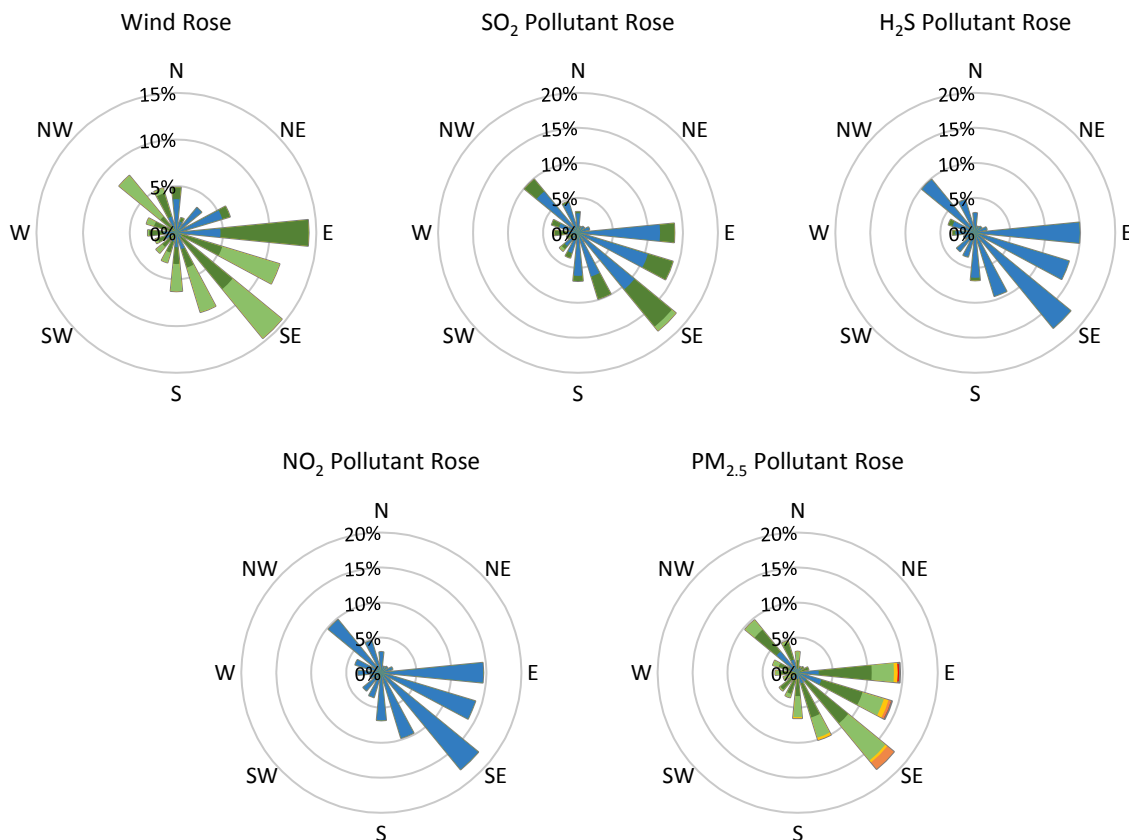
- Achieved >99% of scheduled uptime for all parameters except H₂S (95%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans

SESAA Oxbow Station - April 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	0.2	95%	0.3	Apr-27	-	-	2.3	Apr-10 07:00	-	-
NO ₂	ppb	0.9	96%	1.6	Apr-14	106	0	4.9	Apr-12 19:00	159	0
NO _x	ppb	1.1	95%	1.9	Apr-14	-	-	5.7	Apr-12 19:00	-	-
SO ₂	ppb	0.8	96%	2.3	Apr-11	48	0	7.5	Apr-11 20:00	172	0
H ₂ S	ppb	0.5	93%	0.9	Apr-01	3.6	0	1.6	Apr-03 01:00	11	0
PM _{2.5}	µg/m ³	4.2	100%	11.9	Apr-14	28	0	39.5	Apr-12 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 ≤ 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	

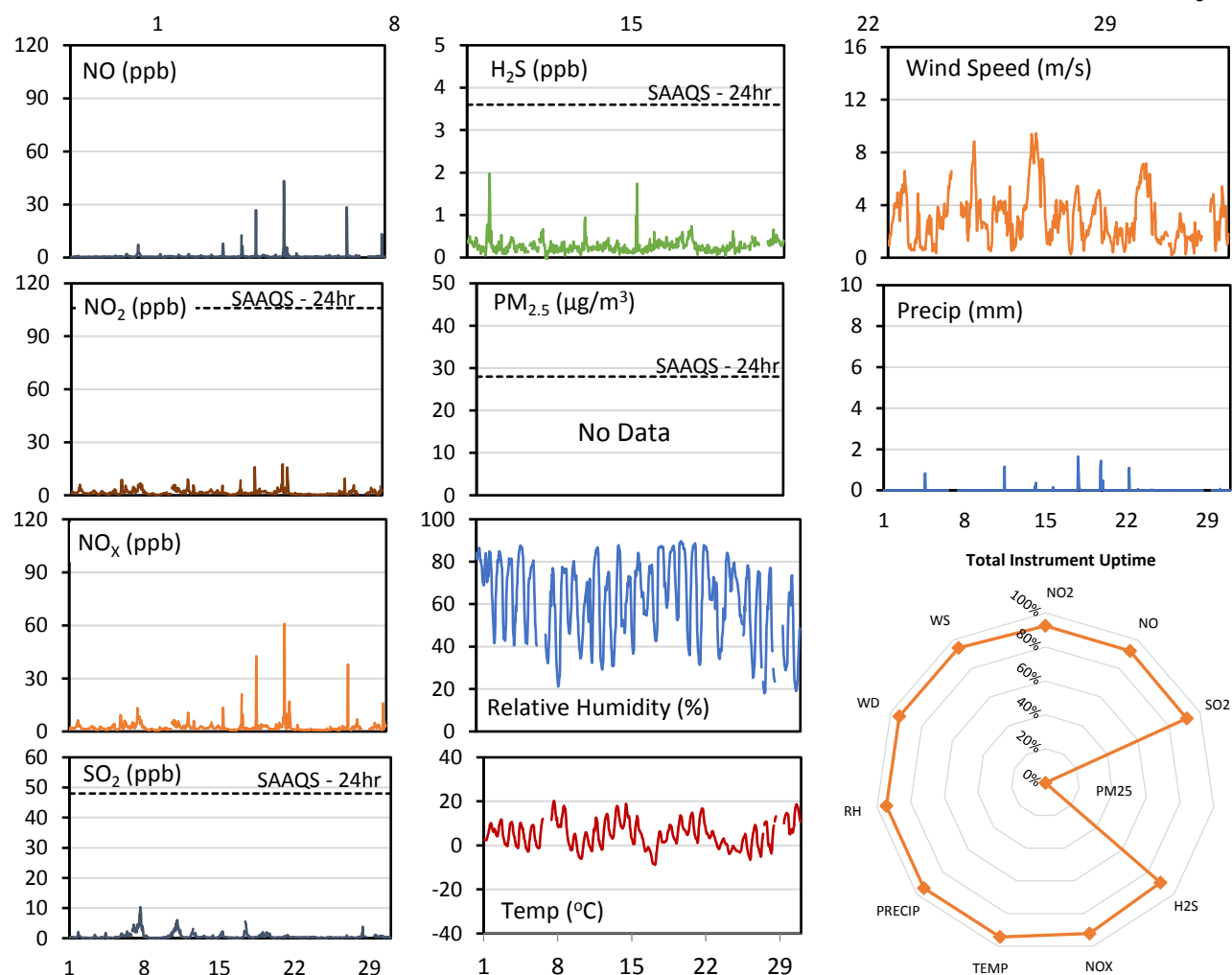
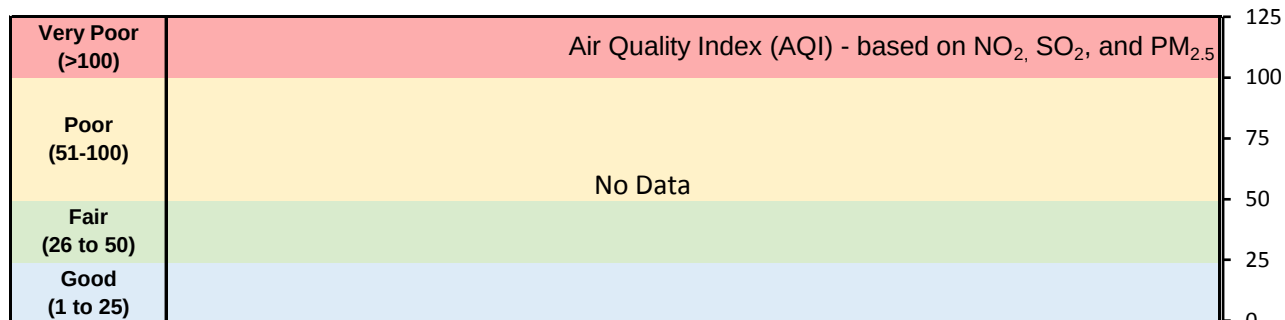
Monthly Update

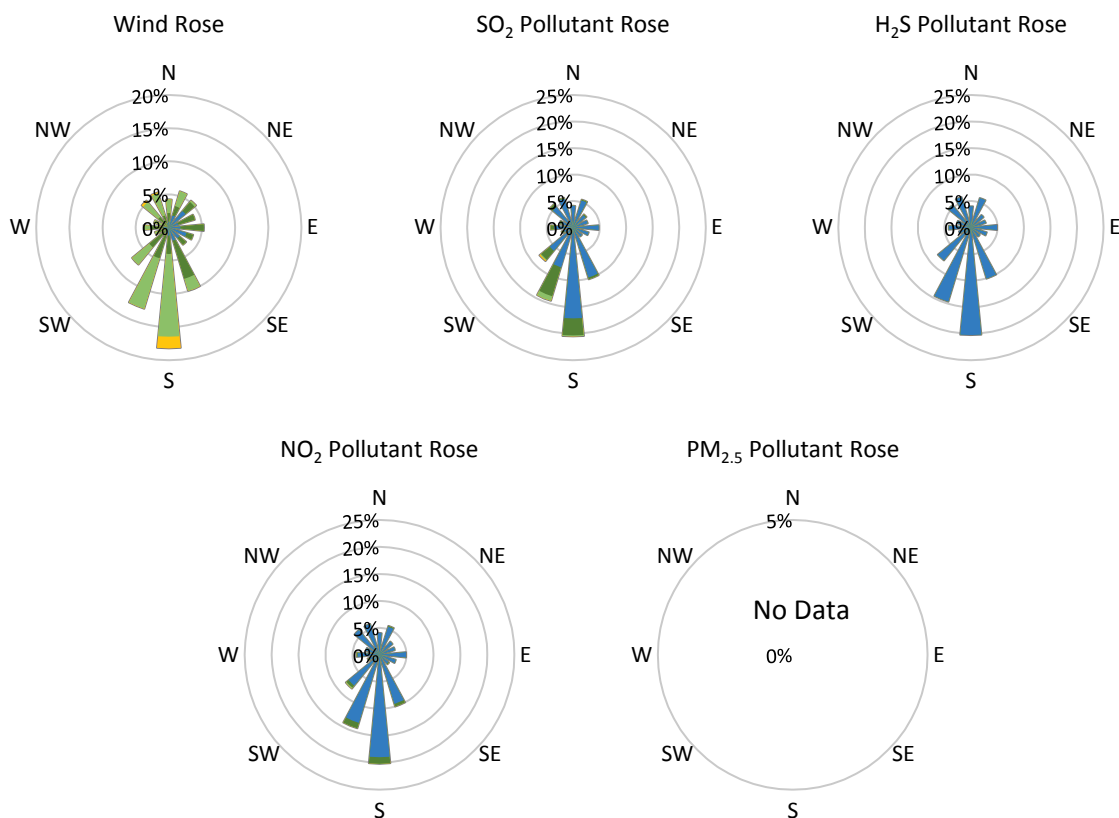
- Achieved >99% of scheduled uptime for all parameters except H₂S (97%)
- All compliance parameters are above 90% data validity
- Downtime of 4% results from routine daily Internal Zeroes and Spans

SESAA Stoughton Station - April 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	0.8	92%	3.7	Apr-21	-	-	43.3	Apr-21 09:00	-	-
NO ₂	ppb	1.6	92%	4.7	Apr-21	106	0	17.6	Apr-21 09:00	159	0
NO _x	ppb	2.4	92%	8.3	Apr-21	-	-	60.8	Apr-21 09:00	-	-
SO ₂	ppb	0.7	91%	4.0	Apr-07	48	0	10.3	Apr-07 15:00	172	0
H ₂ S	ppb	0.3	89%	0.4	Apr-03	3.6	0	2.0	Apr-03 03:00	11	0
PM _{2.5}	µg/m ³	NoData	0%	NoData	NoData	28	0	NoData	NoData	-	-

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}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$

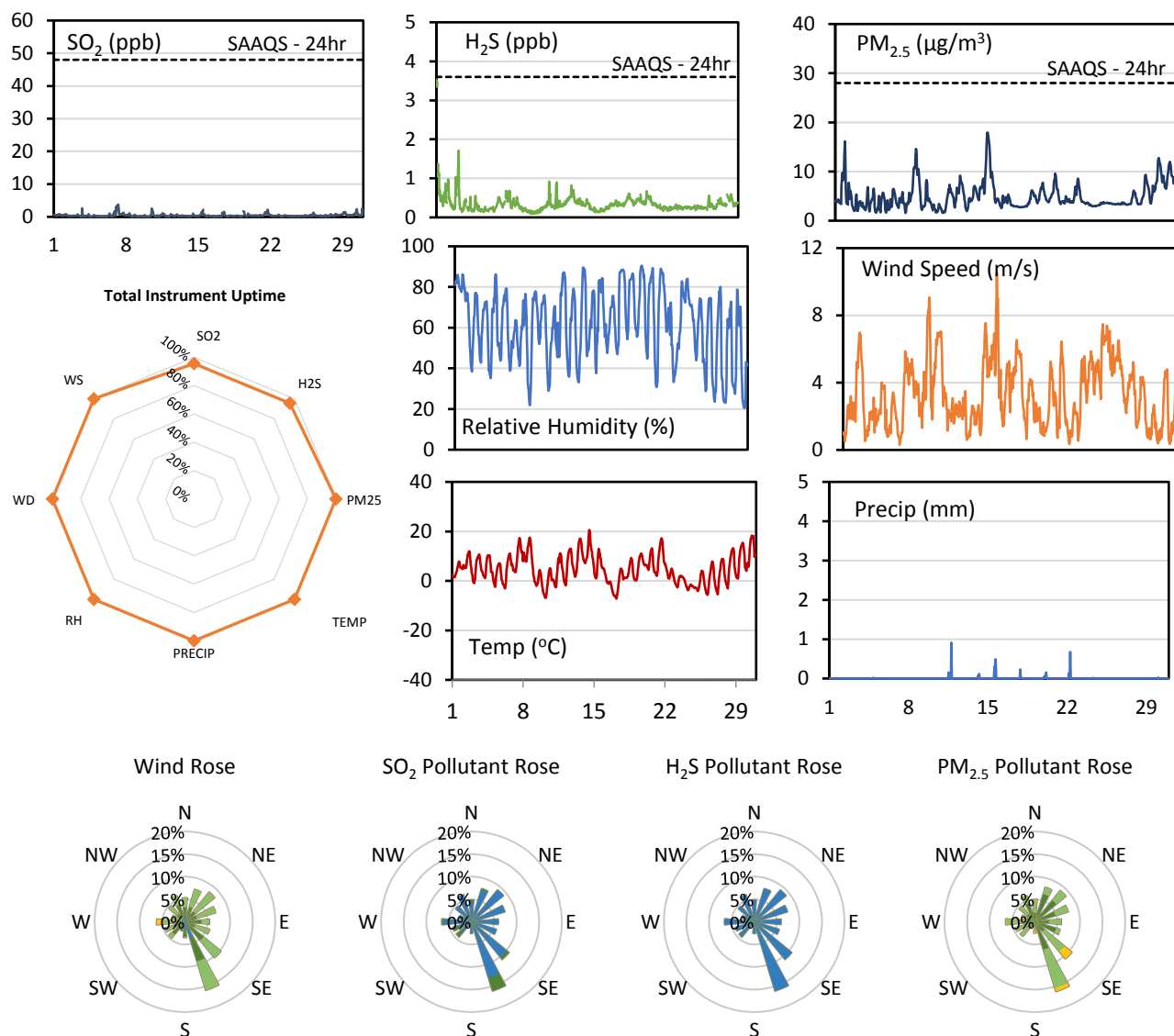
Monthly Update

- Achieved 93-97% of scheduled uptime for all parameters except PM_{2.5} (no data)
- Downtime of 4% due to routine daily internal zeroes and spans
- Particulate downtime due to instrument issues

SESAA Wauchope Station - April 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	0.5	96%	1.4	Apr-07	48	0	3.7	Apr-07 06:00	172	0
H ₂ S	ppb	0.3	96%	1.0	Apr-01	3.6	0	3.5	Apr-01 00:00	11	0
PM _{2.5}	µg/m ³	5.0	100%	10.5	Apr-14	28	0	17.9	Apr-14 05:00	-	-

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
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

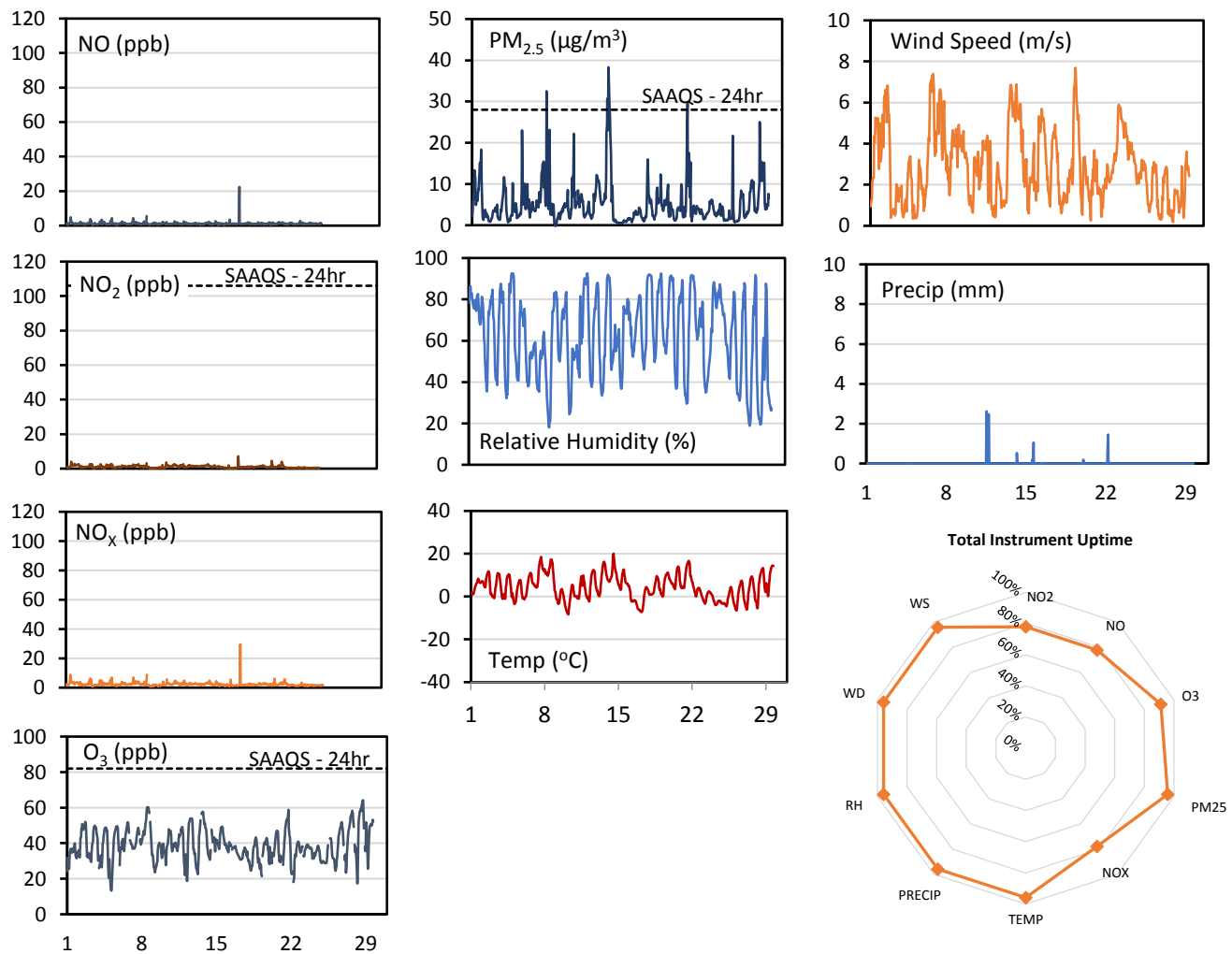
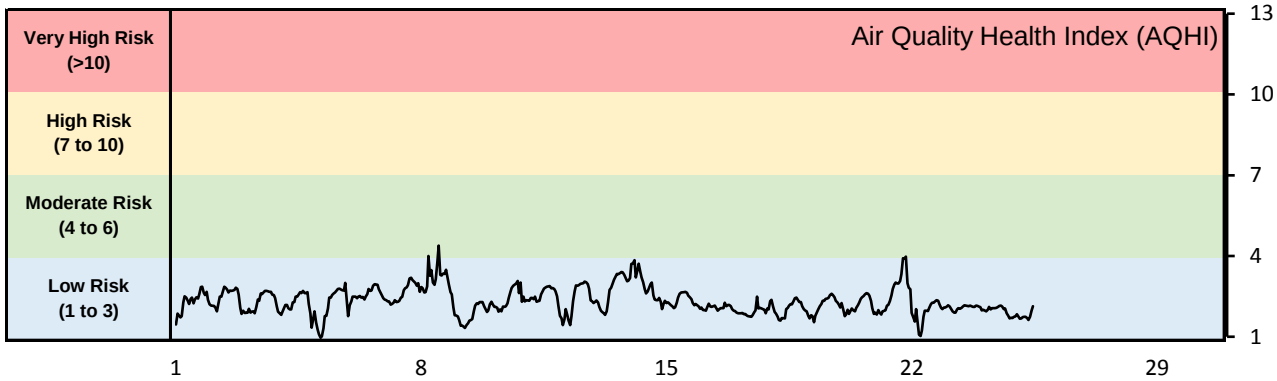
Monthly Update

- Achieved >99% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans

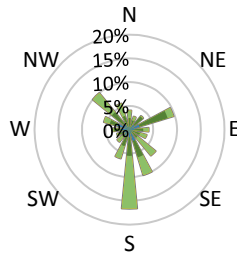
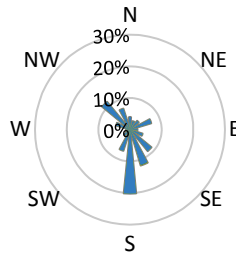
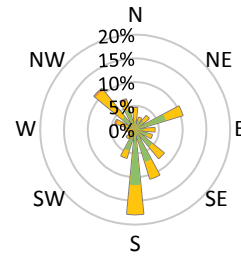
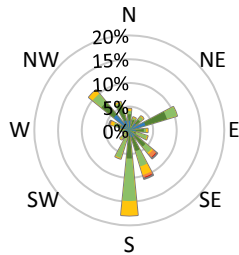
SESAA Wawota Station - April 2017 Summary Report

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	1.2	78%	2.0	Apr-17	-	-	22.4	Apr-17 14:00	-	-
NO ₂	ppb	1.1	78%	1.8	Apr-01	106	0	7.1	Apr-17 14:00	159	0
NO _x	ppb	2.3	78%	3.3	Apr-01	-	-	29.5	Apr-17 14:00	-	-
O ₃	ppb	38.9	91%	49.3	Apr-08	-	-	64.2	Apr-28 18:00	82	0
PM _{2.5}	µg/m ³	5.1	96%	14.4	Apr-14	28	0	38.3	Apr-14 05:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



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	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
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}	µg/m ³	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

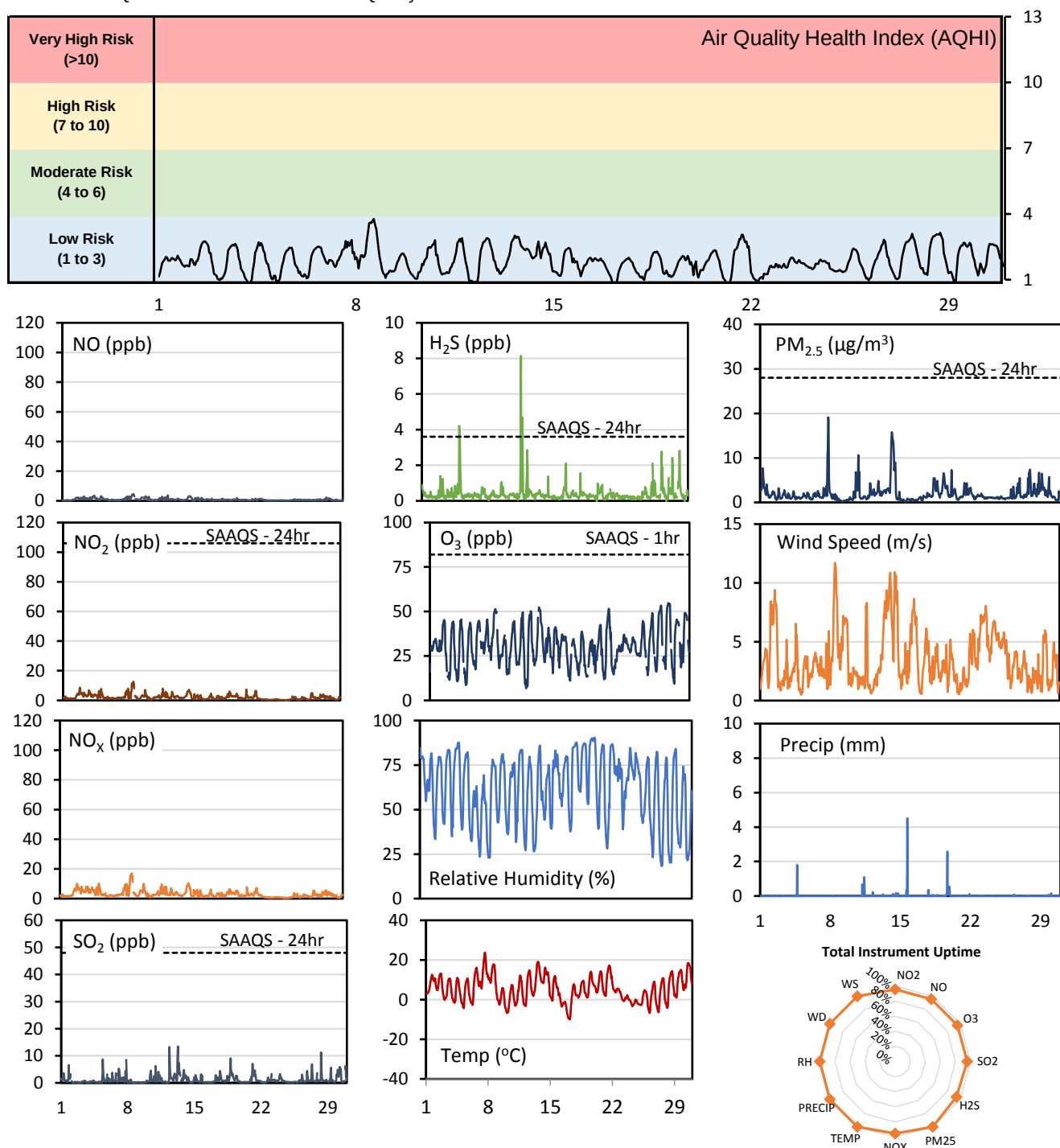
Monthly Update

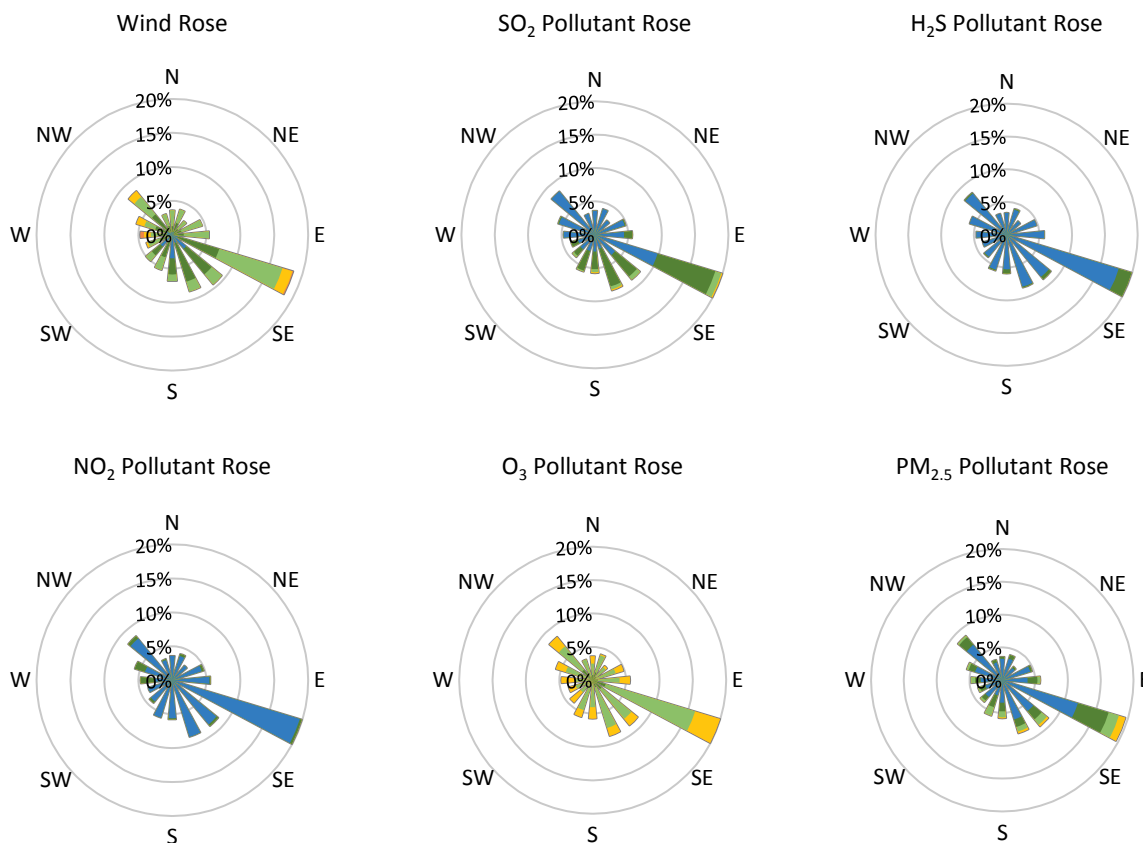
- Achieved >95% of scheduled uptime for all parameters except NO/NO₂/NO_x (81.5%)
- Downtime of 4% due to routine daily internal zeroes and spans
- NO_x analyzer removed April 25 for repair

SESAA Weyburn Station - April 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	0.9	96%	2.4	Apr-08	-	-	4.5	Apr-08 14:00	-	-
NO ₂	ppb	2.2	96%	5.6	Apr-08	106	0	12.6	Apr-08 15:00	159	0
NO _x	ppb	3.1	96%	7.9	Apr-08	-	-	17.0	Apr-08 15:00	-	-
SO ₂	ppb	1.2	96%	3.3	Apr-13	48	0	13.5	Apr-13 06:00	172	0
H ₂ S	ppb	0.4	94%	1.4	Apr-12	3.6	0	8.1	Apr-12 04:00	11	0
O ₃	ppb	30.4	96%	38.2	Apr-08	-	-	54.7	Apr-28 13:00	82	0
PM _{2.5}	µg/m ³	2.0	100%	6.6	Apr-14	28	0	19.1	Apr-07 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	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$
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 >98% of scheduled uptime for all parameters
- Downtime of 4% due to routine daily Internal Zeroes and Spans