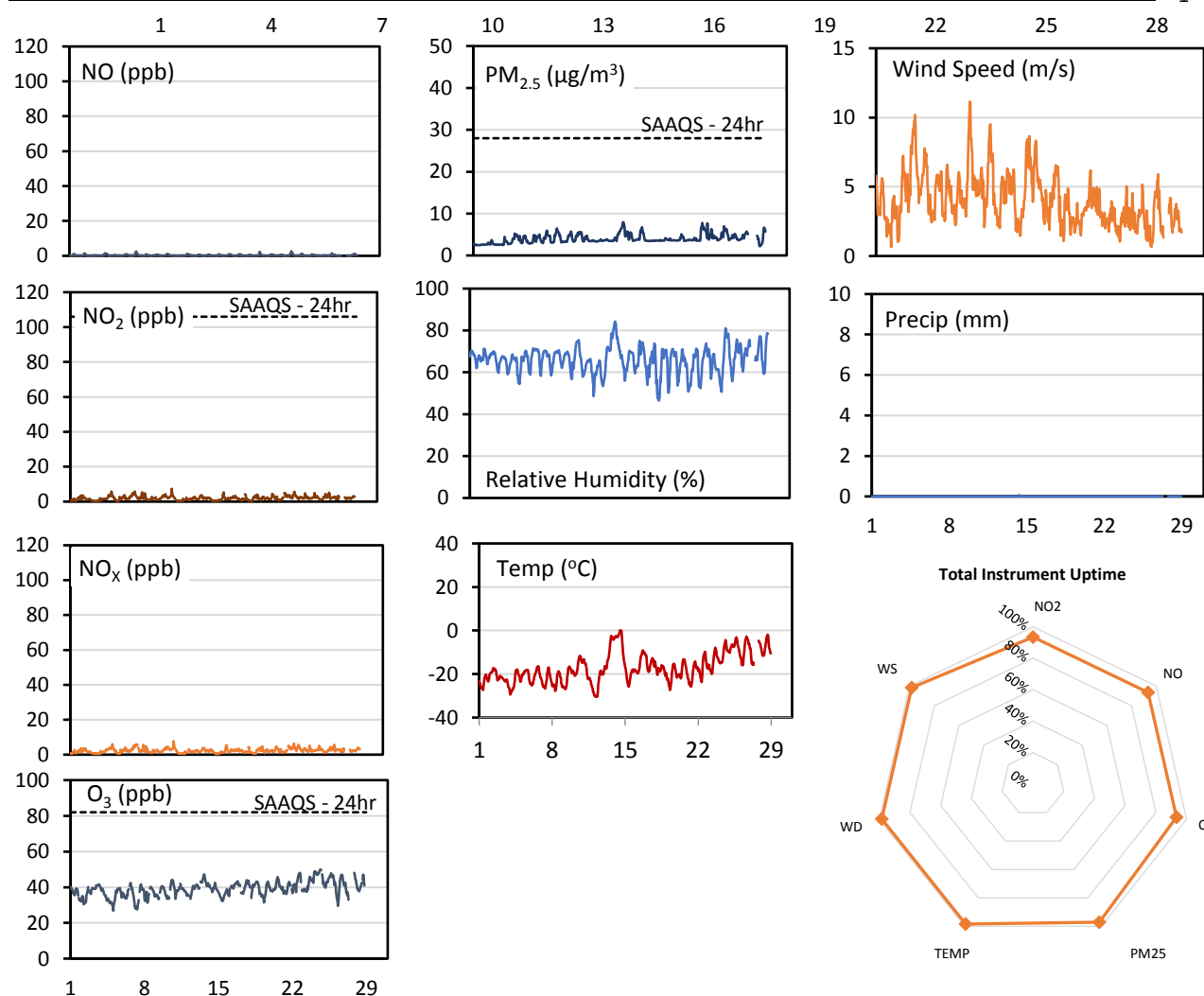
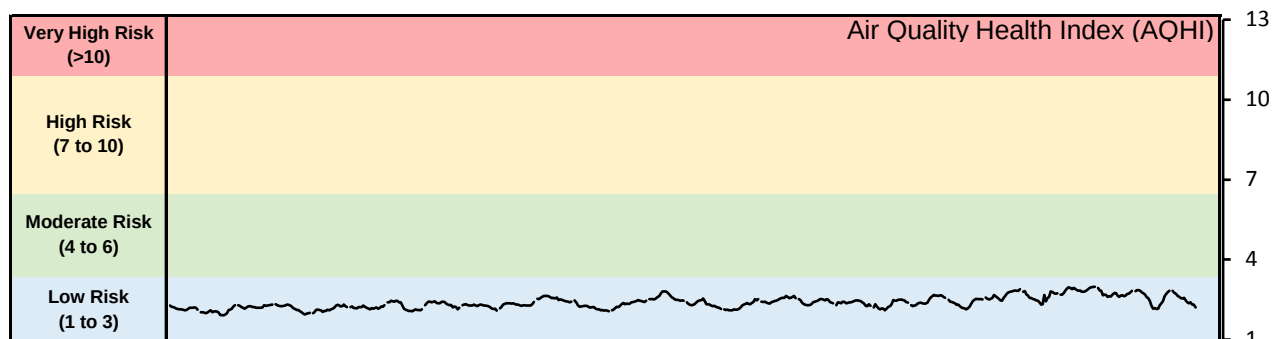


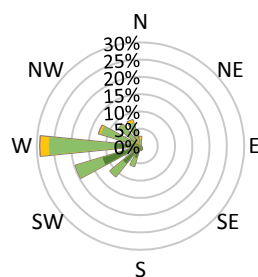
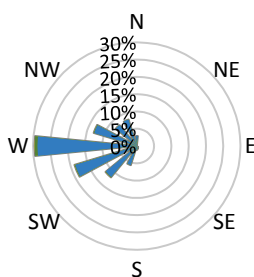
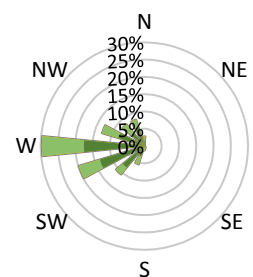
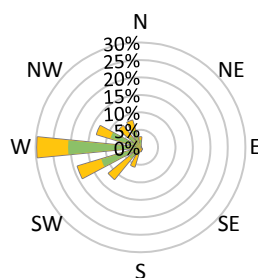
SESAA Esterhazy Station - February 2018 Summary Report

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	93%	0.7	Feb-22	-	-	2.7	Feb-22 11:00	-	-
NO ₂	ppb	2.0	93%	3.3	Feb-22	106	0	7.4	Feb-10 22:00	159	0
NO _x	ppb	2.3	93%	4.0	Feb-22	-	-	7.7	Feb-10 22:00	-	-
O ₃	ppb	39.0	93%	47.3	Feb-24	-	-	50.0	Feb-24 15:00	82	0
PM _{2.5}	µg/m ³	4.0	97%	5.9	Feb-15	28	0	7.9	Feb-15 08:00	-	-

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

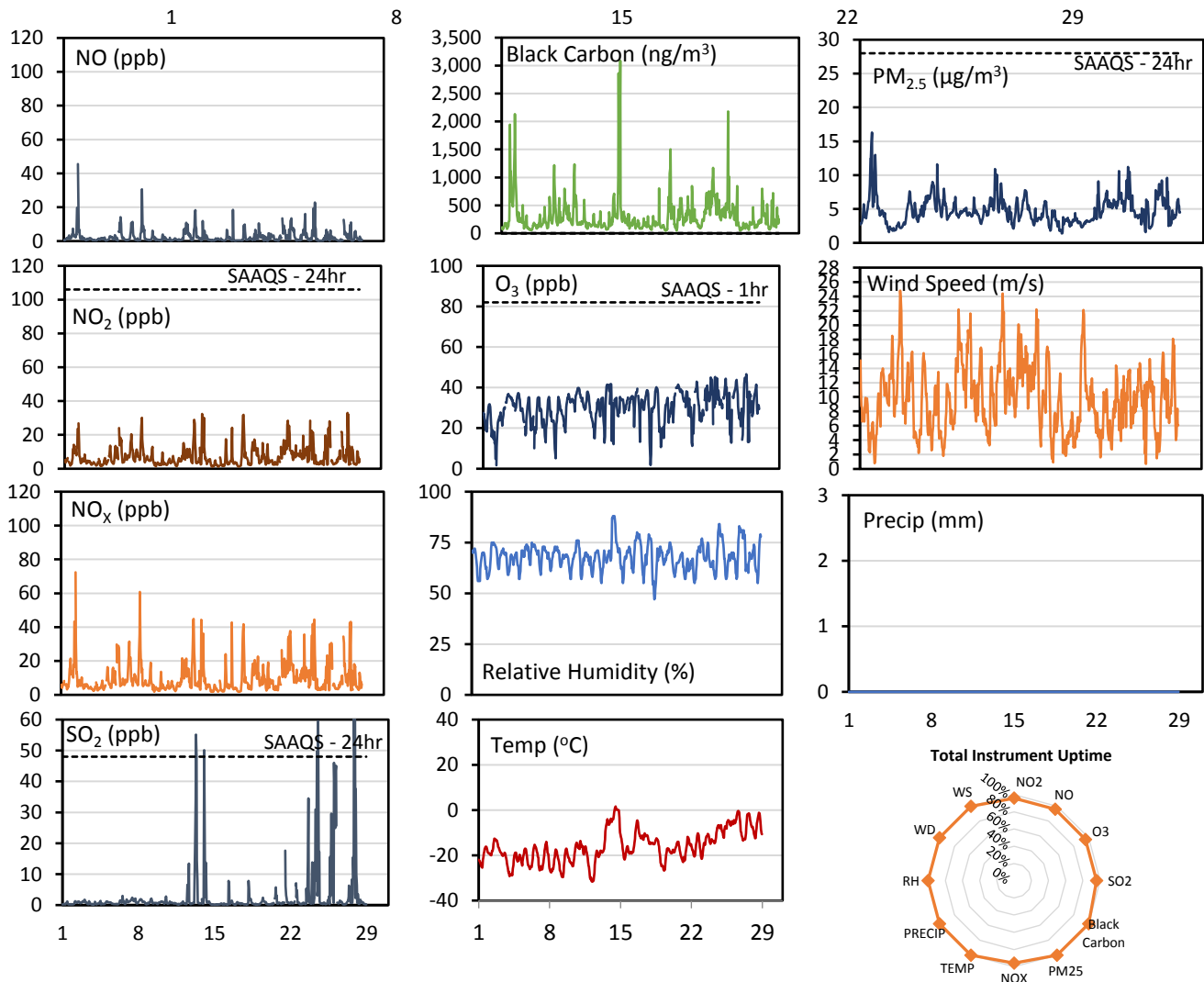
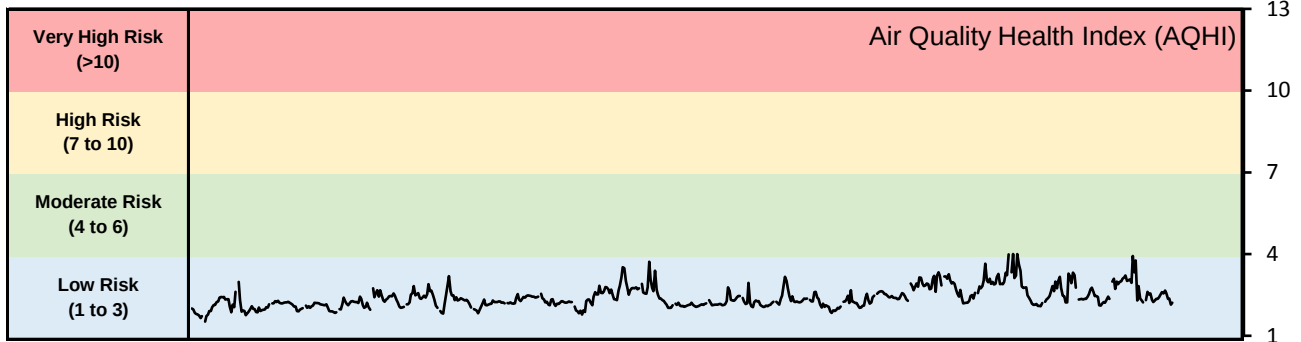
Monthly Update

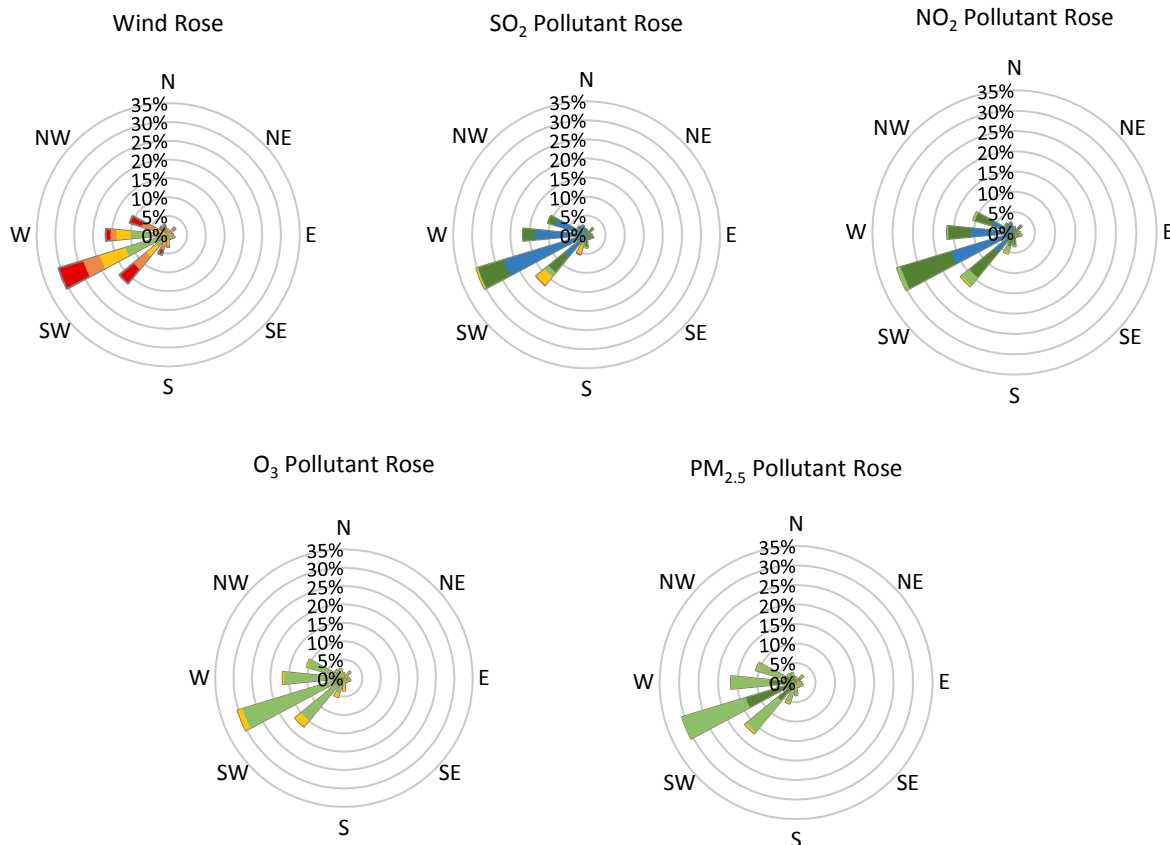
- Achieved >93% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Data loss due to operational issues

SESAA Estevan Station - February 2018 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.	Day			Conc.	Time		
NO	ppb	2.6	96%	5.8	Feb-02	-	-	45.5	Feb-02 08:00	-	-
NO ₂	ppb	7.2	96%	13.2	Feb-22	106	0	33.0	Feb-27 20:00	159	0
NO _x	ppb	9.7	96%	17.7	Feb-22	-	-	72.4	Feb-02 08:00	-	-
SO ₂	ppb	2.7	96%	11.2	Feb-27	48	0	87.1	Feb-27 22:00	172	0
Black Carbon	ng/m ³	297.3	100%	675.7	Feb-12	-	-	3086.0	Feb-12 23:00	-	-
O ₃	ppb	30.2	96%	38.1	Feb-24	-	-	46.6	Feb-27 16:00	82	0
PM _{2.5}	µg/m ³	4.7	100%	7.2	Feb-02	28	0	16.3	Feb-02 01:00	-	-

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

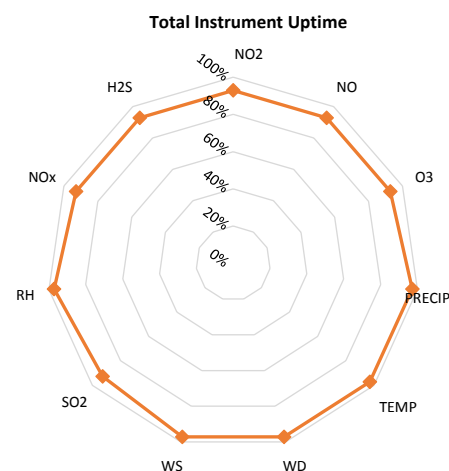
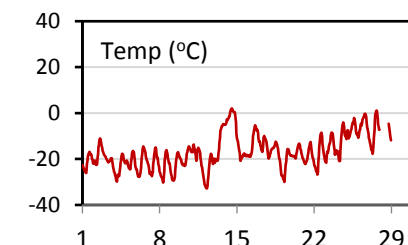
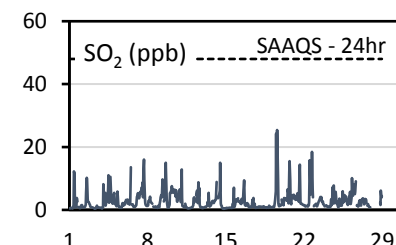
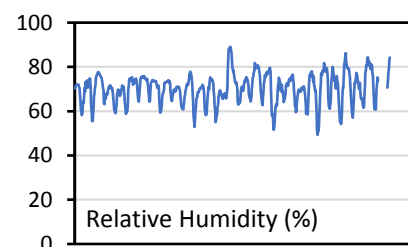
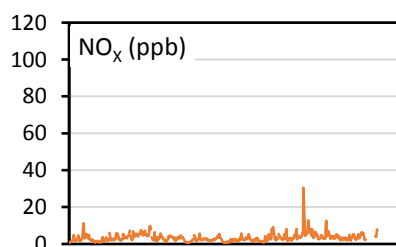
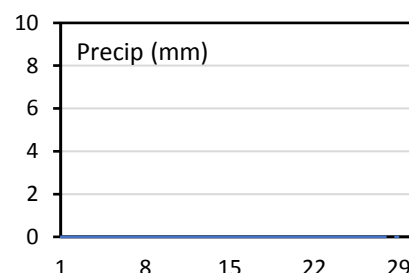
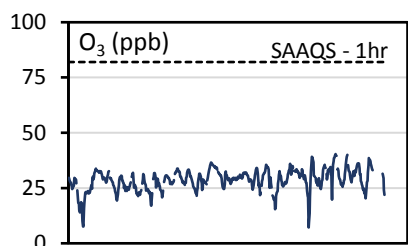
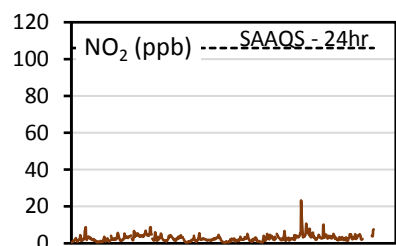
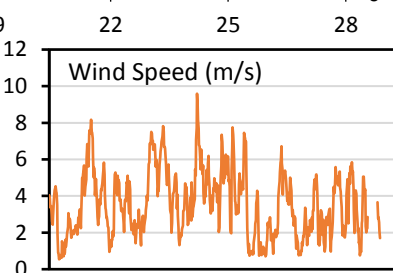
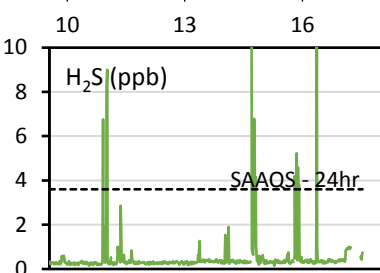
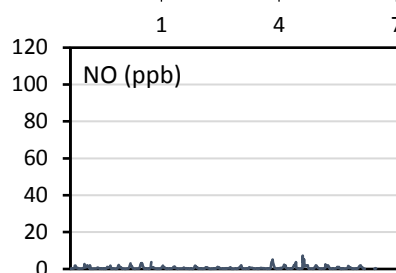
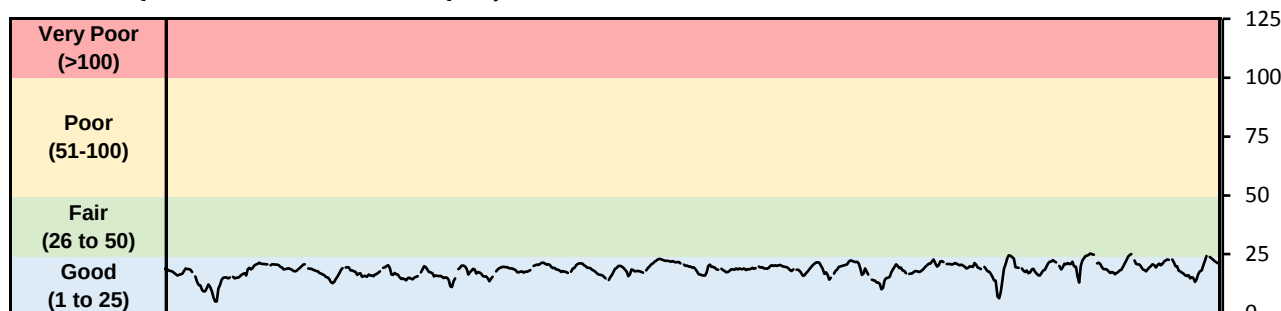
Monthly Update

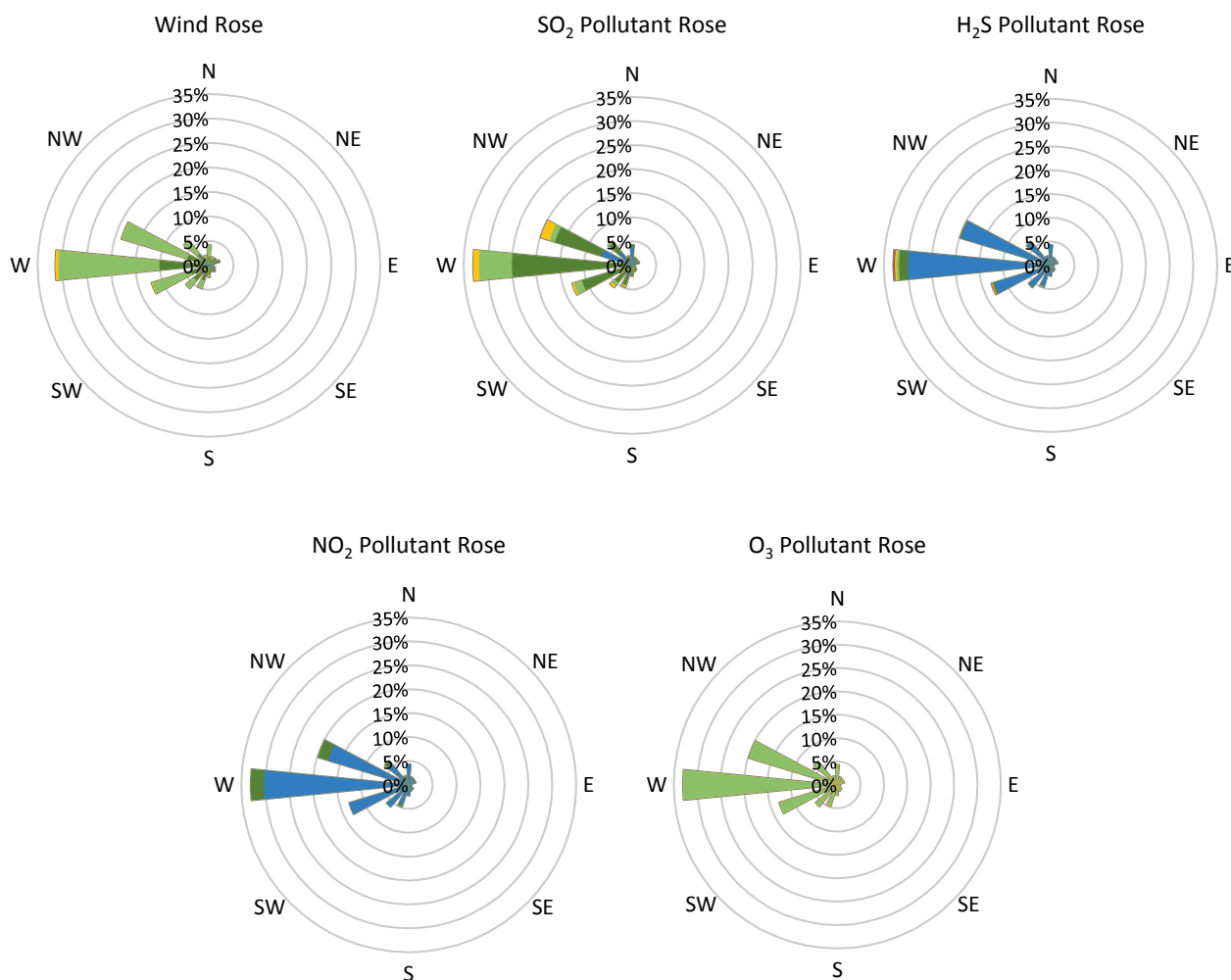
- Achieved >95% of scheduled uptime for all parameters
- Downtime of 4% results from daily internal zeroes and spans

SESAA Glen Ewen Station - February 2018 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	93%	1.6	Feb-22	-	-	7.2	Feb-22 06:00	-	-
NO ₂	ppb	2.8	93%	7.0	Feb-22	106	0	23.3	Feb-22 06:00	159	0
NO _x	ppb	3.4	93%	8.5	Feb-22	-	-	30.5	Feb-22 06:00	-	-
SO ₂	ppb	2.9	93%	5.2	Feb-10	48	0	25.4	Feb-19 14:00	172	0
H ₂ S	ppb	0.5	93%	1.8	Feb-19	3.6	0	11.1	Feb-19 01:00	11	1
O ₃	ppb	28.6	93%	33.6	Feb-24	-	-	40.4	Feb-24 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 93% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Data loss due to operational issues

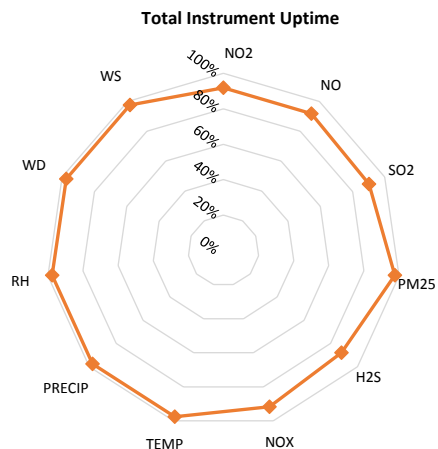
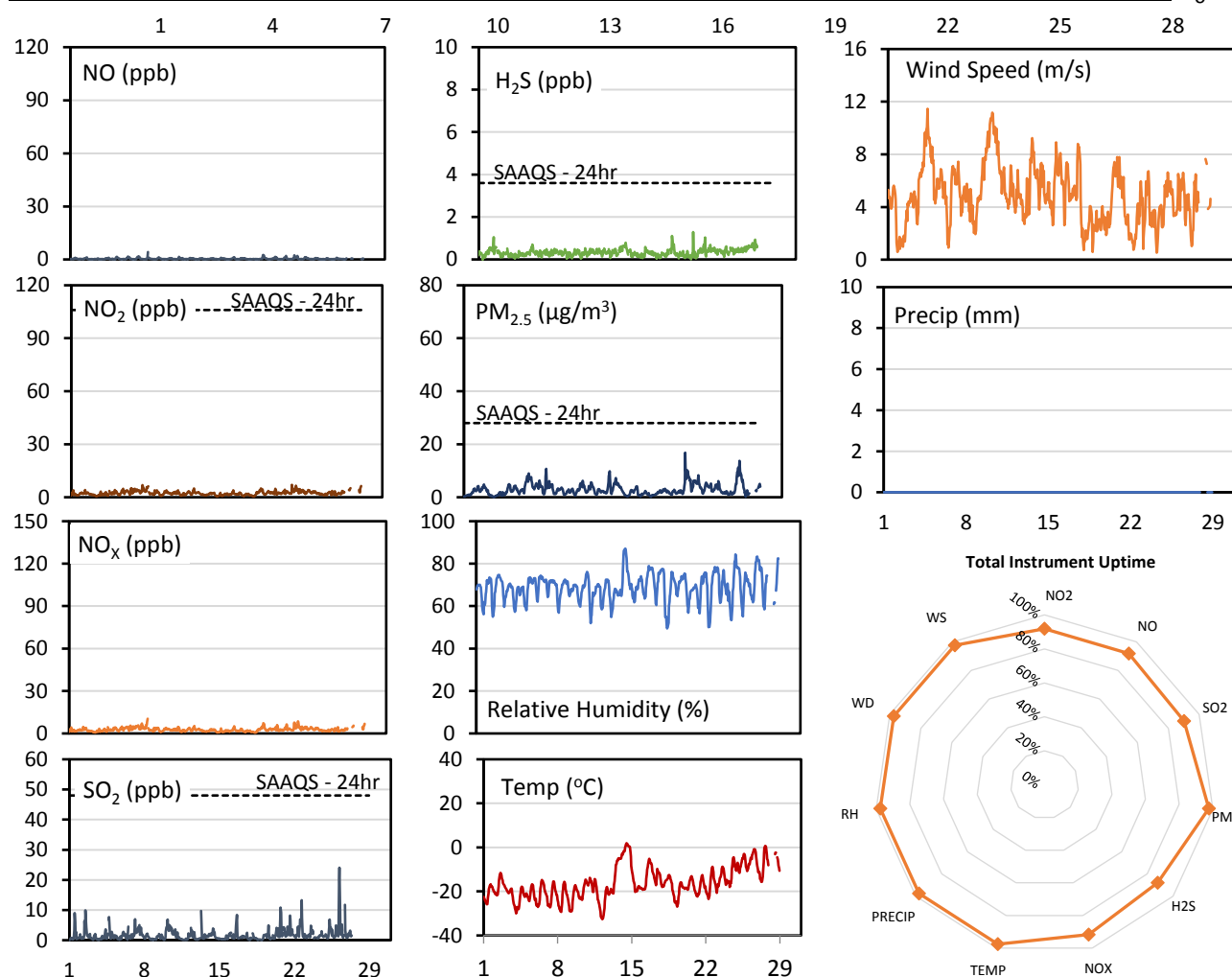
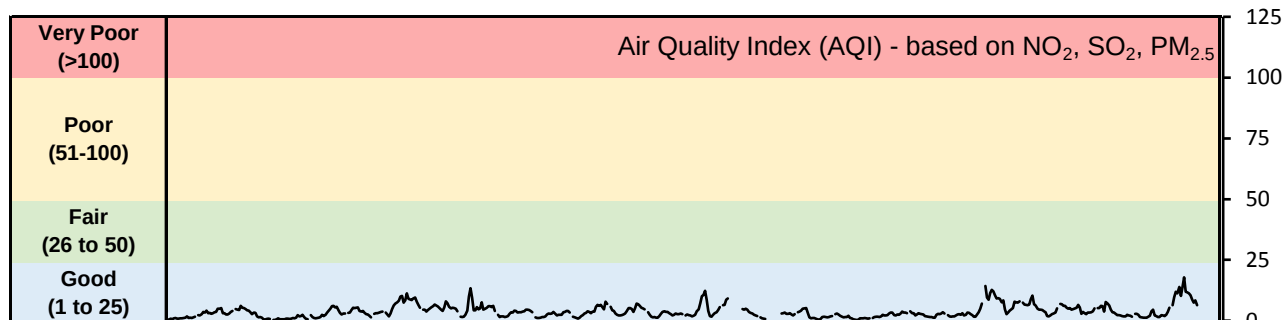
Exceedance Summary (1- Hour Average - Exceedances Highlighted)

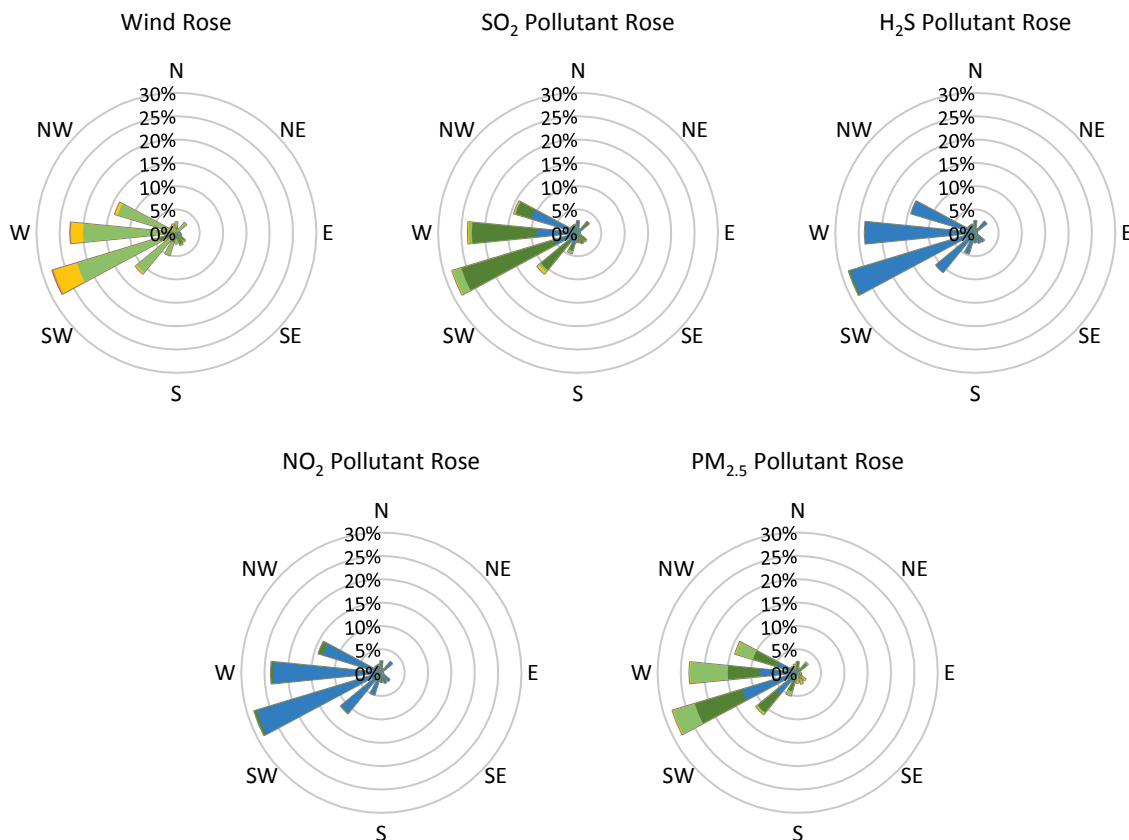
Exceedance Time	AQI	NO ₂	NO	SO ₂	O ₃	NO _x	H ₂ S	Temp	WD	WS
	-	ppb	ppb	ppb	ppb	ppb	ppb	°C	deg	m/s
Feb-19 01:00	14.2	2.1	0.1	0.9	21.7	2.3	11.1	-27.2	277.8	1.1

SESAA Oxbow Station - February 2018 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	92%	0.7	Feb-19	-	-	4.2	Feb-08 10:00	-	-
NO ₂	ppb	2.3	92%	4.3	Feb-28	106	0	7.0	Feb-22 07:00	159	0
NO _x	ppb	2.7	92%	4.7	Feb-28	-	-	10.4	Feb-08 10:00	-	-
SO ₂	ppb	1.8	90%	4.7	Feb-26	48	0	24.1	Feb-26 05:00	172	0
H ₂ S	ppb	0.3	88%	0.6	Feb-27	3.6	0	1.3	Feb-21 07:00	11	0
PM _{2.5}	µg/m ³	3.0	98%	6.1	Feb-22	28	0	16.8	Feb-21 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
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}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

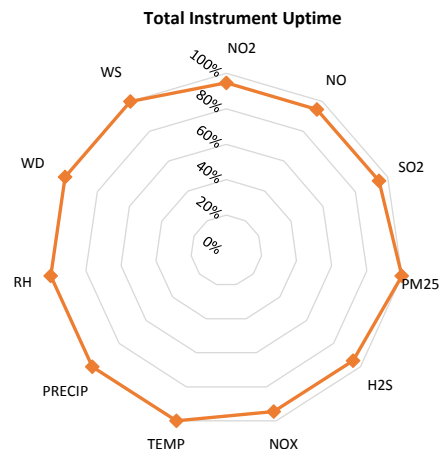
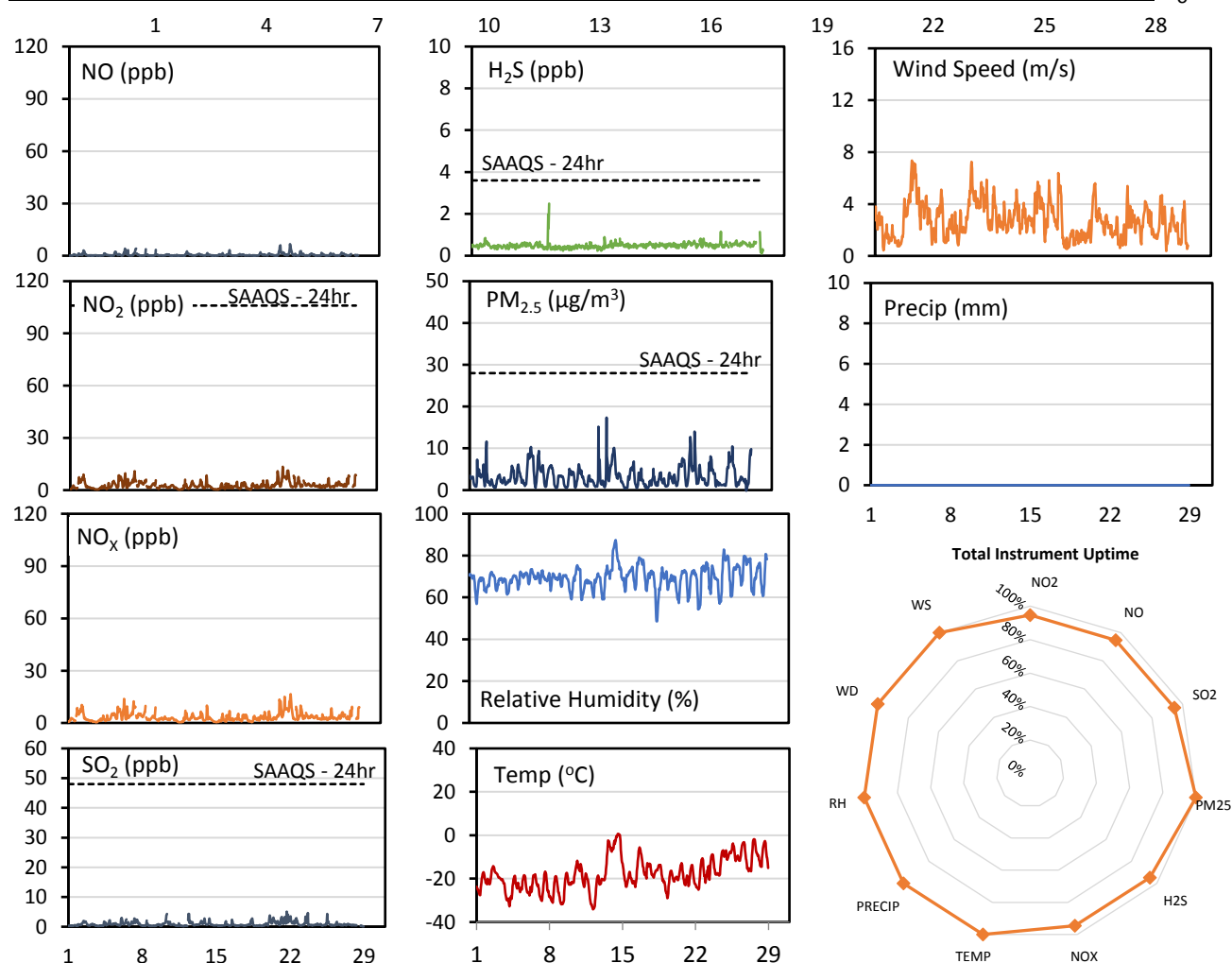
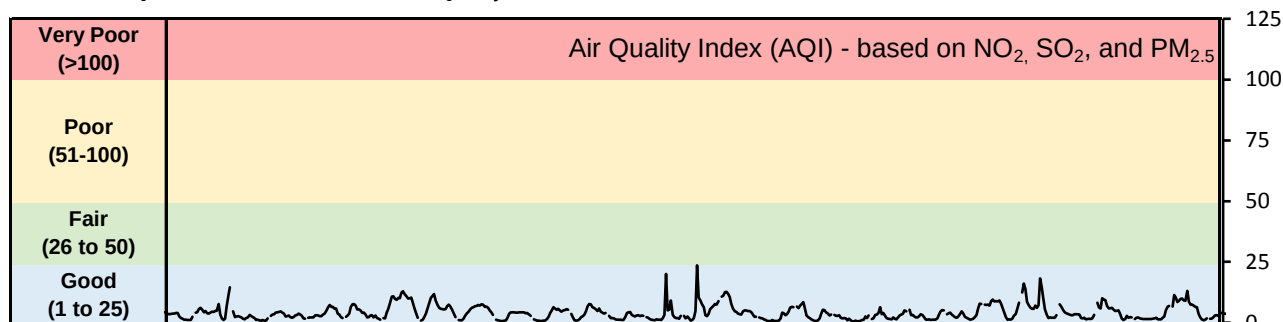
Monthly Update

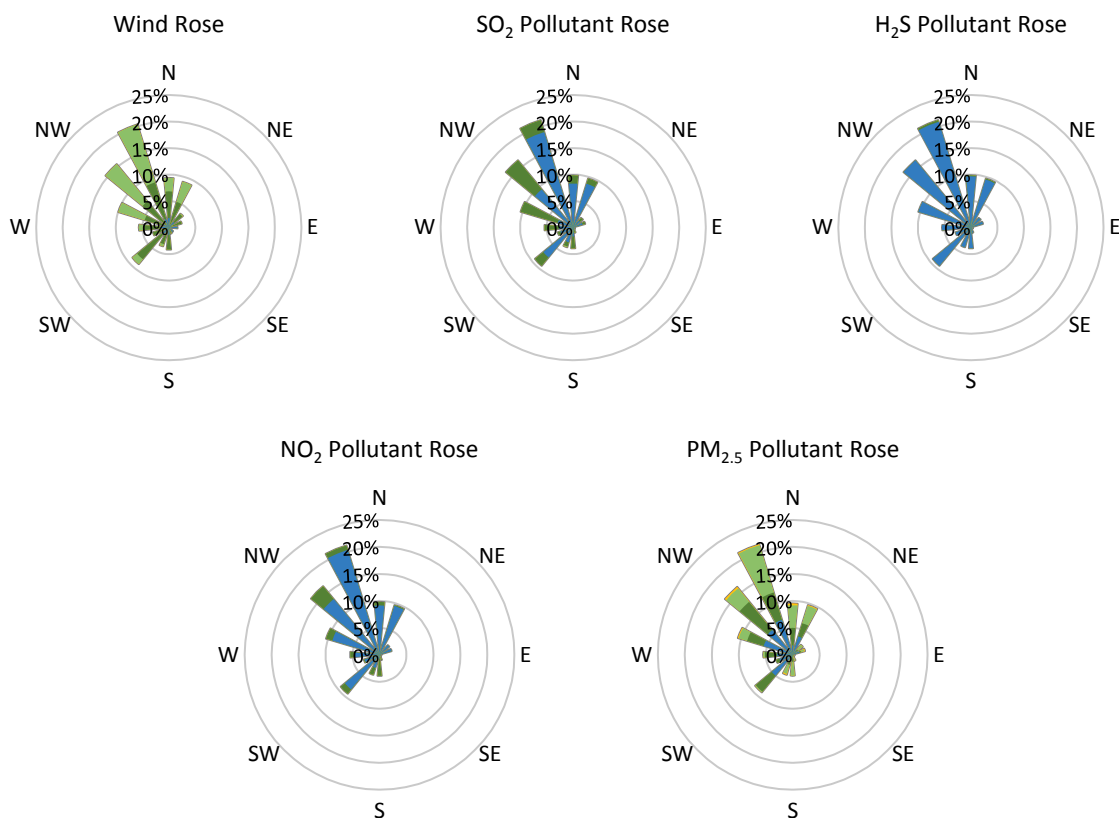
- Achieved >90% of scheduled uptime for all parameters except H₂S (88%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Data loss due to operational issues. Replaced H₂S/SO₂ analyzer.
- Calibration performed February 27th

SESAA Stoughton Station - February 2018 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	95%	1.5	Feb-21	-	-	6.6	Feb-22 09:00	-	-
NO ₂	ppb	2.9	95%	6.2	Feb-22	106	0	13.4	Feb-21 19:00	159	0
NO _x	ppb	3.4	95%	7.7	Feb-22	-	-	16.5	Feb-22 09:00	-	-
SO ₂	ppb	0.9	95%	2.1	Feb-21	48	0	5.1	Feb-21 16:00	172	0
H ₂ S	ppb	0.5	95%	0.6	Feb-22	3.6	0	2.5	Feb-08 10:00	11	0
PM _{2.5}	µg/m ³	3.3	100%	6.0	Feb-07	28	0	17.4	Feb-14 14:00	-	-

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

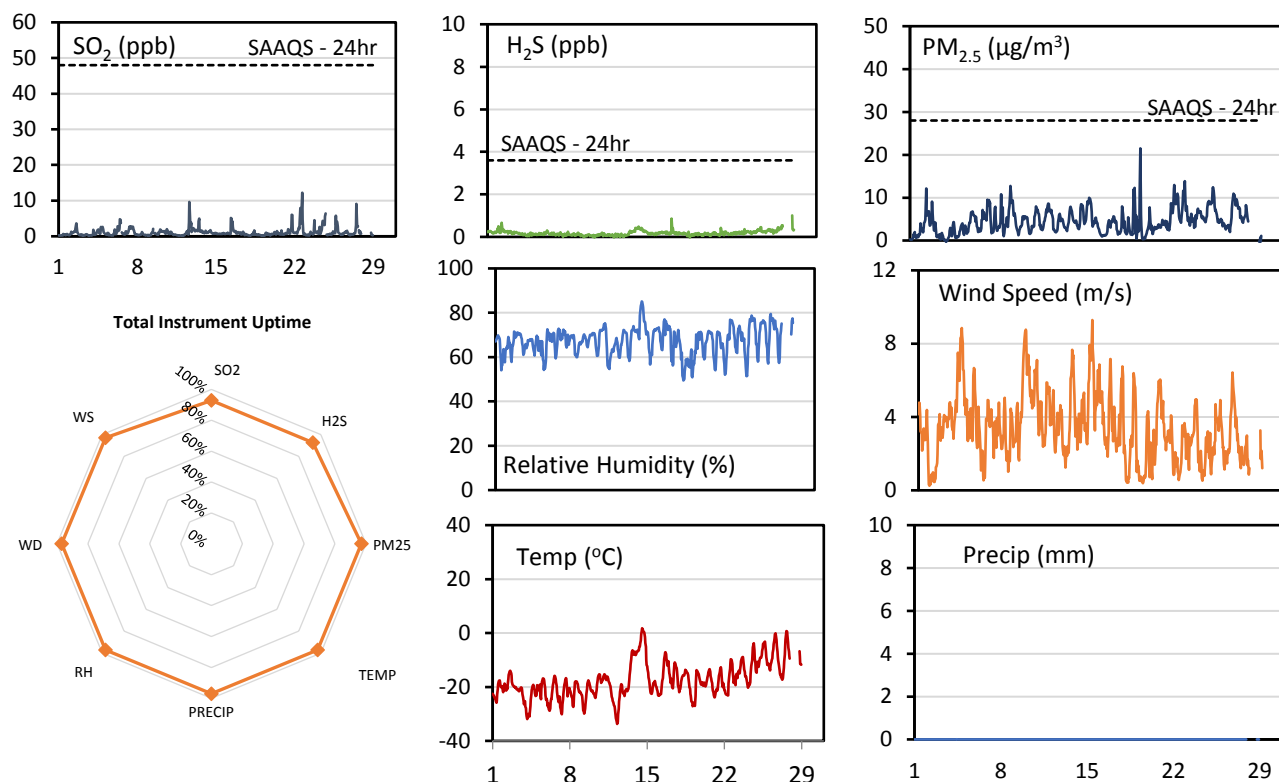
Monthly Update

- Achieved >94% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Calibration performed February 28th

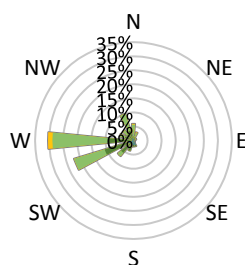
SESAA Wauchope Station - February 2018 Summary Report

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	1.1	93%	2.7	Feb-22	48	0	12.2	Feb-22 16:00	172	0
H ₂ S	ppb	0.2	93%	0.5	Feb-28	3.6	0	1.0	Feb-28 19:00	11	0
PM _{2.5}	µg/m ³	4.5	97%	6.6	Feb-24	28	0	21.5	Feb-19 08:00	-	-

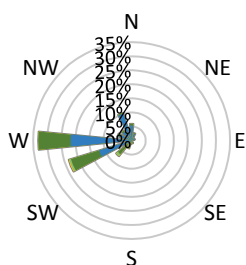
SAAQS: Saskatchewan Ambient Air Quality Standards



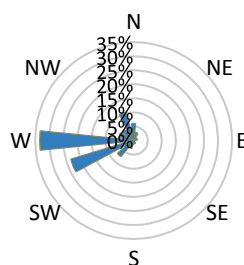
Wind Rose



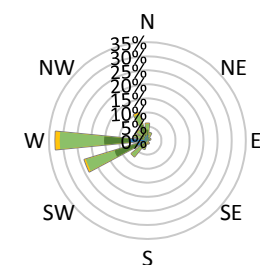
SO₂ Pollutant Rose



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

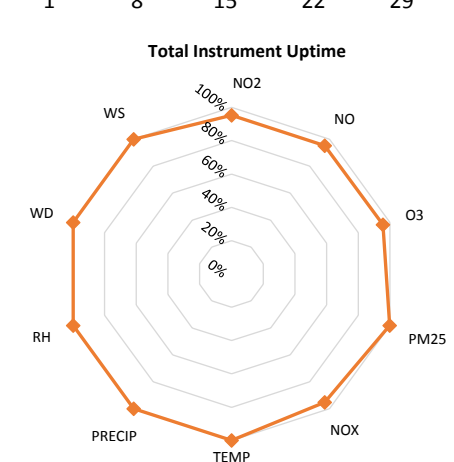
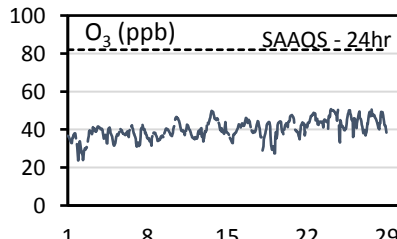
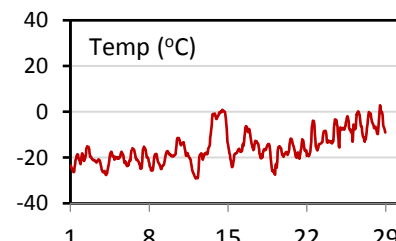
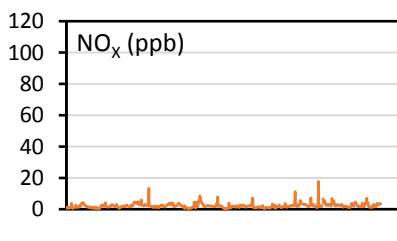
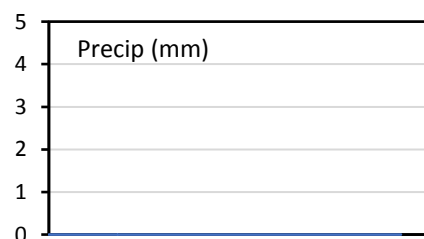
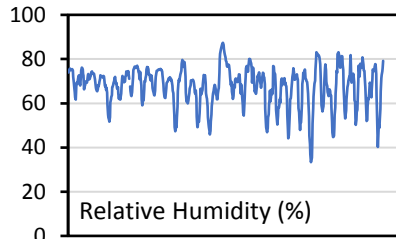
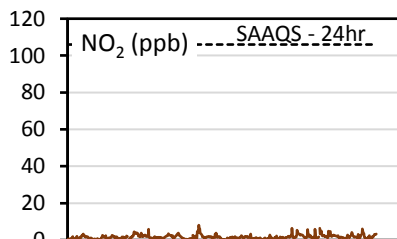
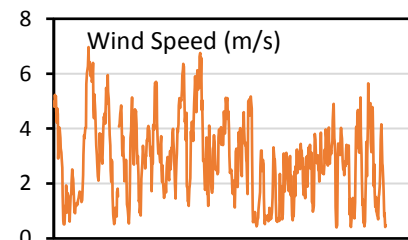
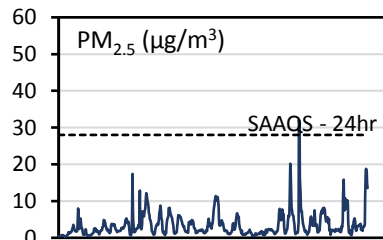
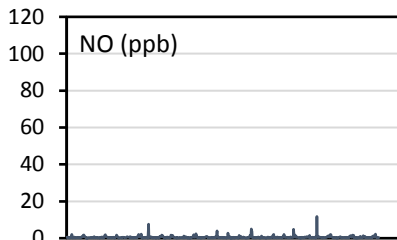
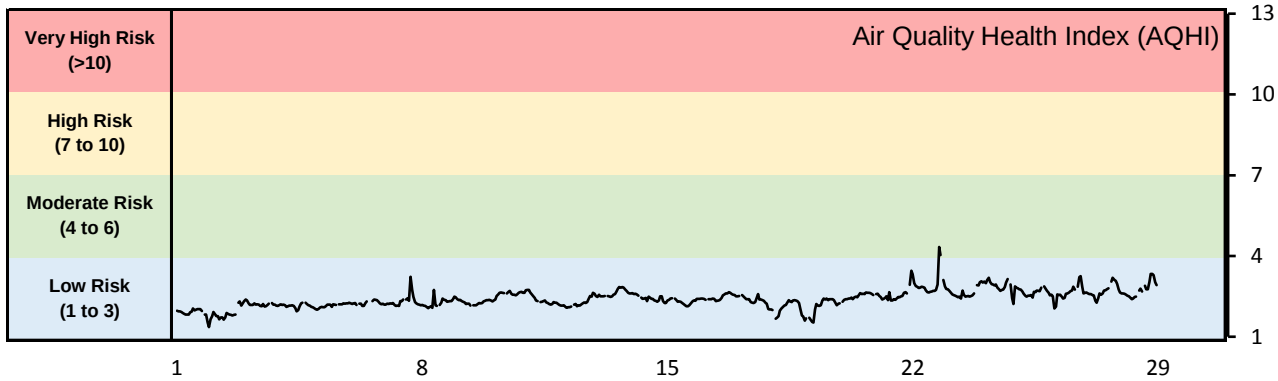
Monthly Update

- Achieved >93% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Data loss due to operational issues

SESAA Wawota Station - February 2018 Summary Report

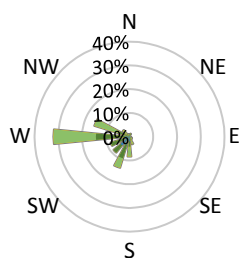
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.5	95%	1.0	Feb-23	-	-	11.8	Feb-23 10:00	-	-
NO ₂	ppb	1.7	95%	2.9	Feb-07	106	0	8.1	Feb-12 21:00	159	0
NO _x	ppb	2.2	95%	3.6	Feb-07	-	-	17.7	Feb-23 10:00	-	-
O ₃	ppb	40.2	96%	47.1	Feb-24	-	-	50.7	Feb-24 02:00	82	0
PM _{2.5}	µg/m ³	3.5	100%	8.1	Feb-22	28	0	32.1	Feb-22 18:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

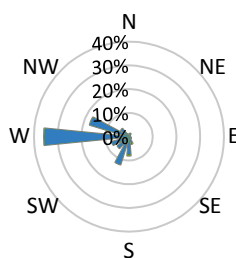


SESAA Wawota Station - February 2018 Summary Report

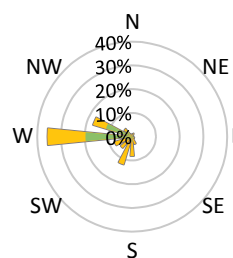
Wind Rose



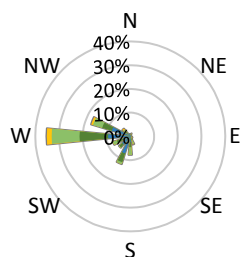
NO₂ Pollutant Rose



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	

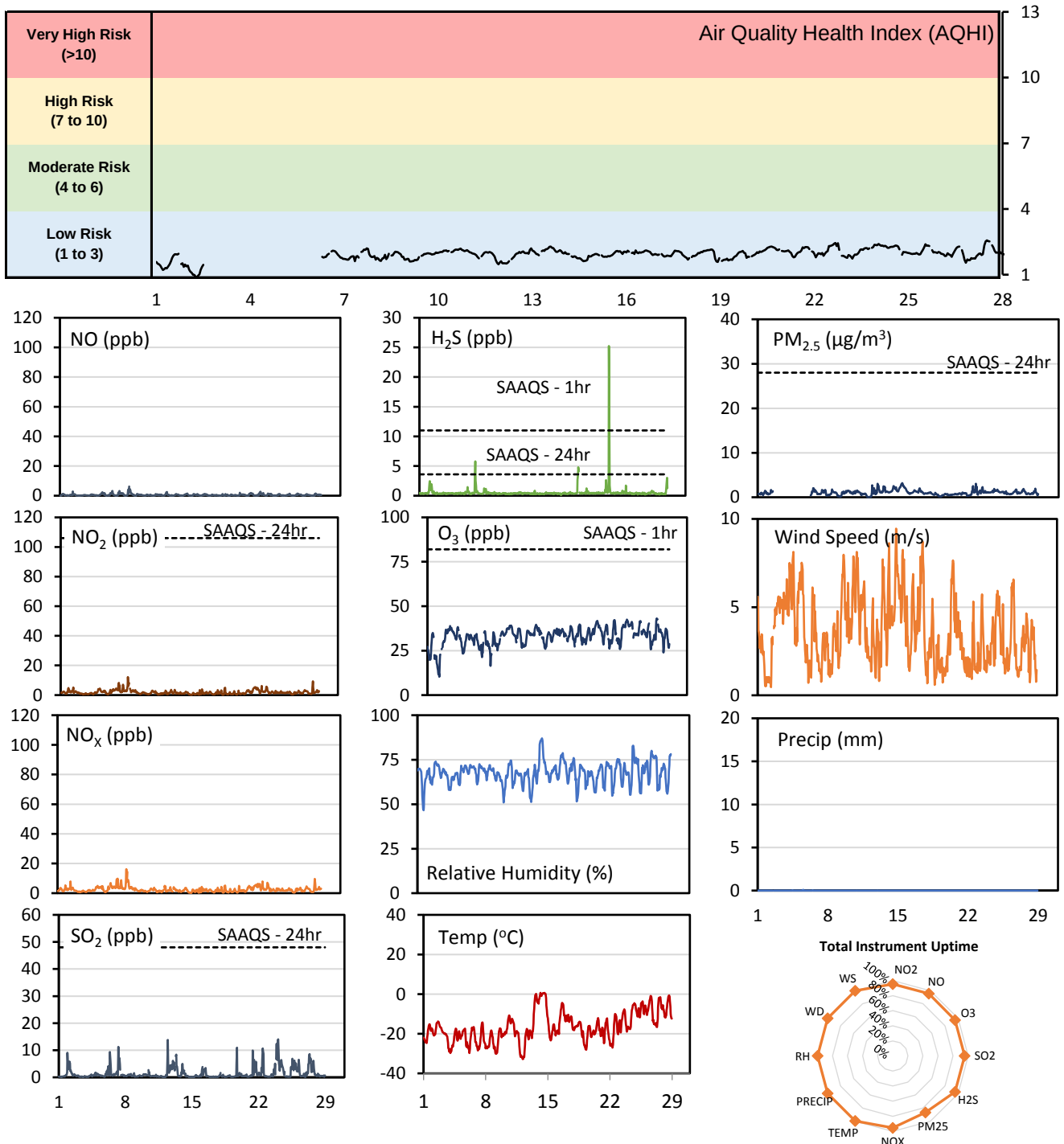
Monthly Update

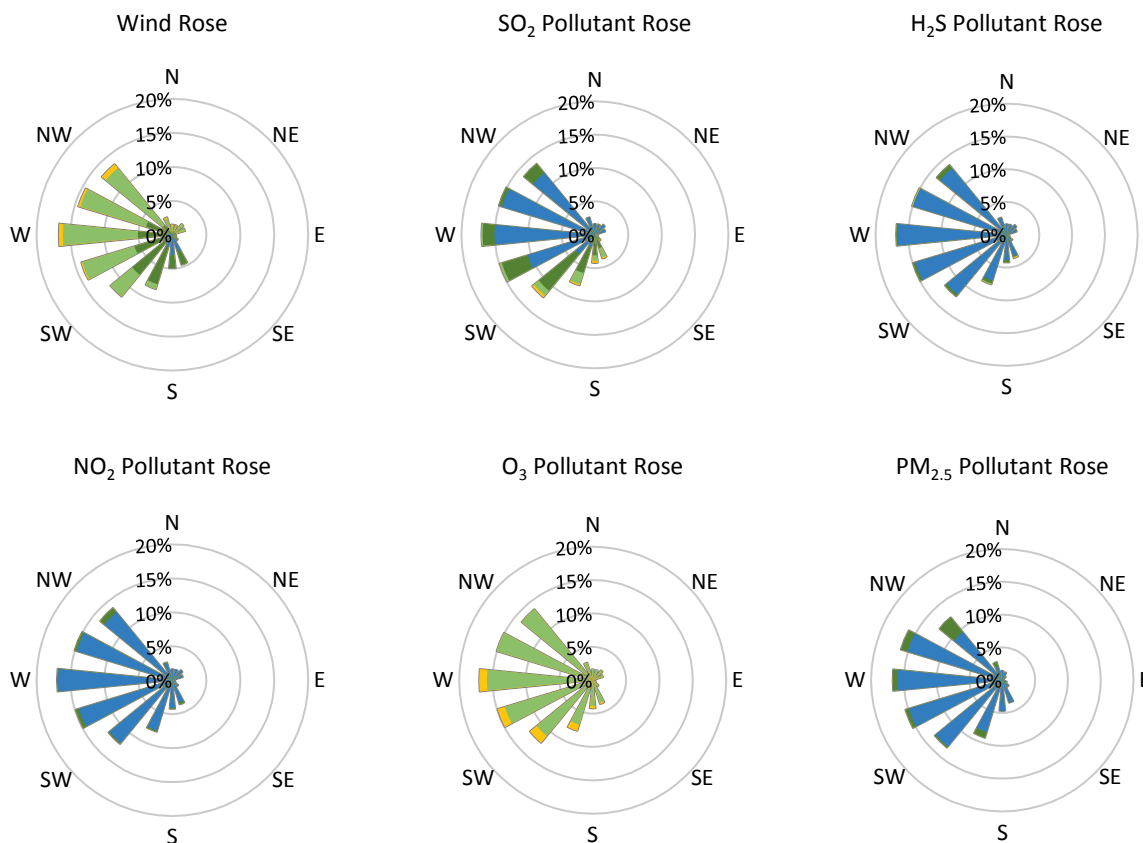
- Achieved >95% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans

SESAA Weyburn Station - February 2018 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	0.5	95%	1.5	Feb-08	-	-	6.2	Feb-08 10:00	-	-
NO ₂	ppb	1.9	95%	4.0	Feb-08	106	0	12.2	Feb-08 07:00	159	0
NO _x	ppb	2.4	95%	5.5	Feb-08	-	-	16.2	Feb-08 07:00	-	-
SO ₂	ppb	1.5	95%	4.1	Feb-24	48	0	14.0	Feb-24 01:00	172	0
H ₂ S	ppb	0.5	95%	2.2	Feb-22	3.6	0	25.2	Feb-22 09:00	11	1
O ₃	ppb	33.0	95%	38.8	Feb-24	-	-	43.2	Feb-27 12:00	82	0
PM _{2.5}	µg/m ³	1.1	87%	2.1	Feb-15	28	0	3.2	Feb-15 10:00	-	-

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 >95% of scheduled uptime for all parameters except PM_{2.5} (87%)
- Downtime of 4% due to routine daily Internal Zeroes and Spans
- Data loss due to operational issues

Exceedance Summary (1- Hour Average - Exceedances Highlighted)

Exceedance Time	AQHI	NO ₂	NO	SO ₂	O ₃	NO _x	H ₂ S	PM _{2.5}	Temp	WD	WS
	-	ppb	ppb	ppb	ppb	ppb	ppb	$\mu\text{g}/\text{m}^3$	°C	deg	m/s
Feb-22 09:00	2.0	3.8	2.2	6.5	31.8	6.0	25.2	1.4	-22.5	143.8	1.1