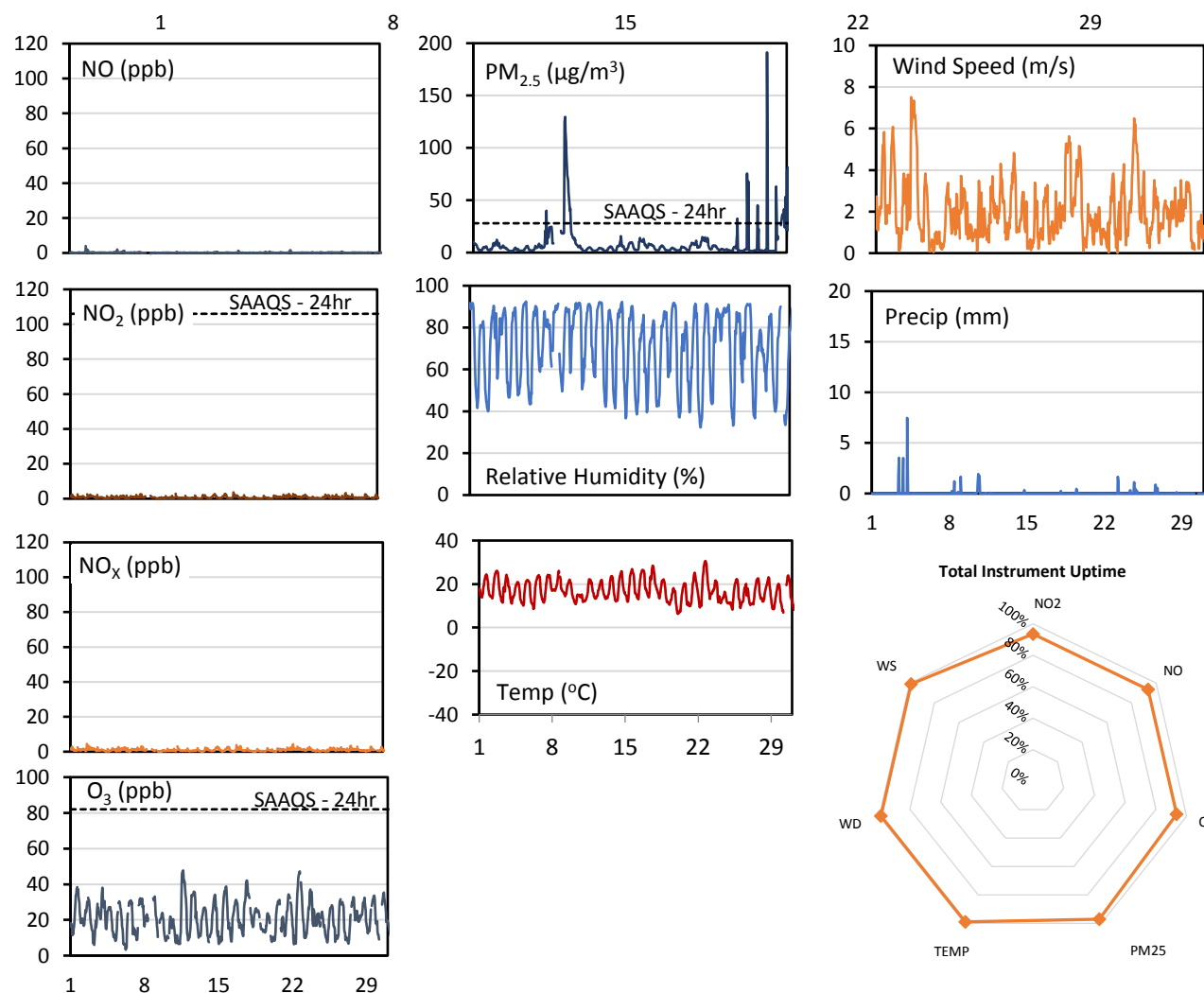
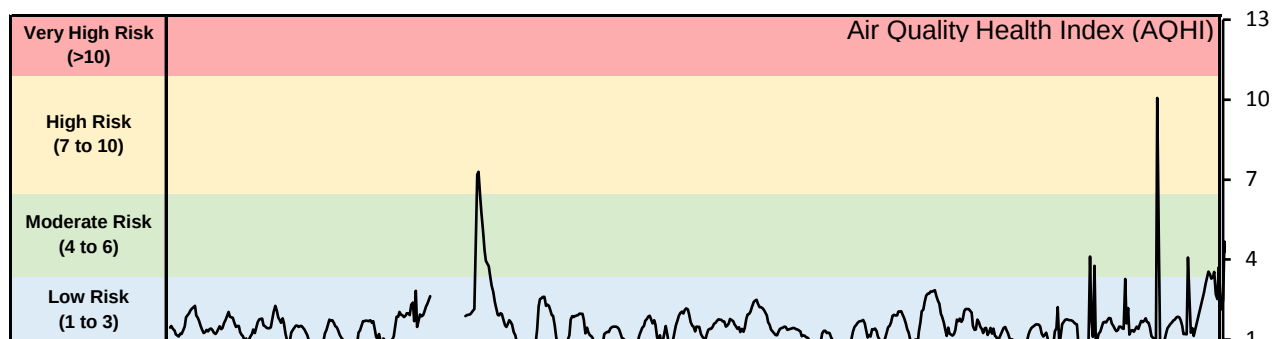


SESAA Esterhazy Station - August 2016 Summary Report

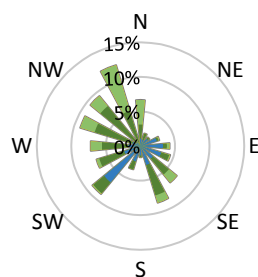
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.2	94%	0.6	Aug-02	-	-	4.0	Aug-02 14:00	-	-
NO ₂	ppb	0.8	94%	1.4	Aug-22	106	0	3.8	Aug-08 10:00	159	0
NO _x	ppb	1.0	94%	1.7	Aug-22	-	-	4.4	Aug-02 14:00	-	-
O ₃	ppb	21.2	94%	26.8	Aug-17	-	-	47.7	Aug-11 16:00	82	0
PM _{2.5}	µg/m ³	8.6	97%	57.8	Aug-09	28	2	191.3	Aug-29 03:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

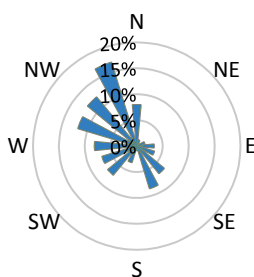


SESAA Esterhazy Station - August 2016 Summary Report

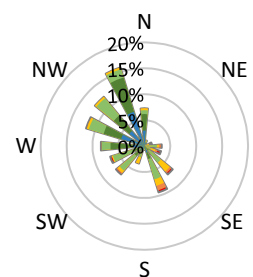
Wind Rose



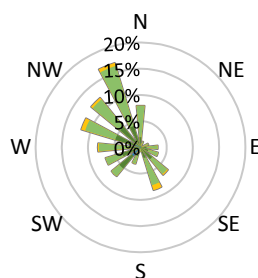
NO₂ Pollutant Rose



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 >97% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Particulate data from August 29 to 31 is suspect due to possible instrument error

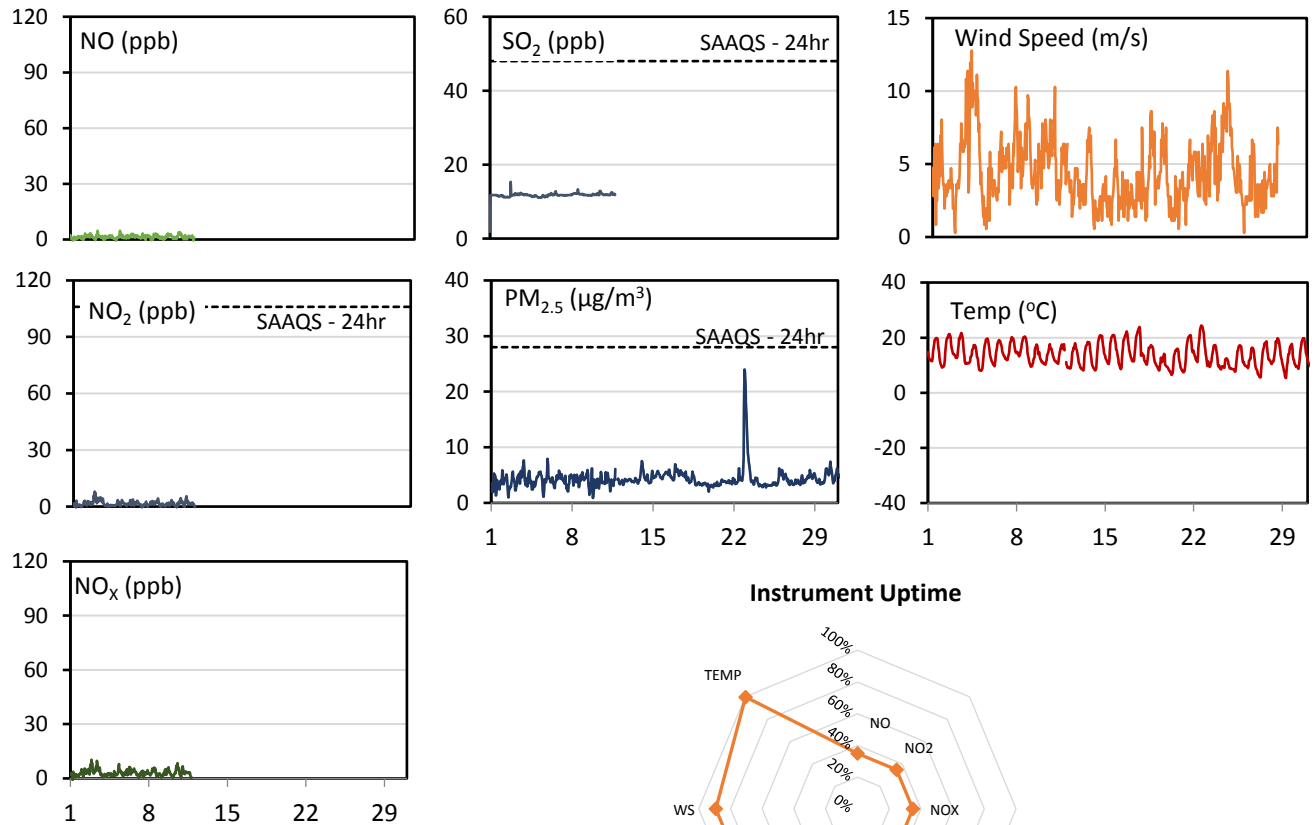
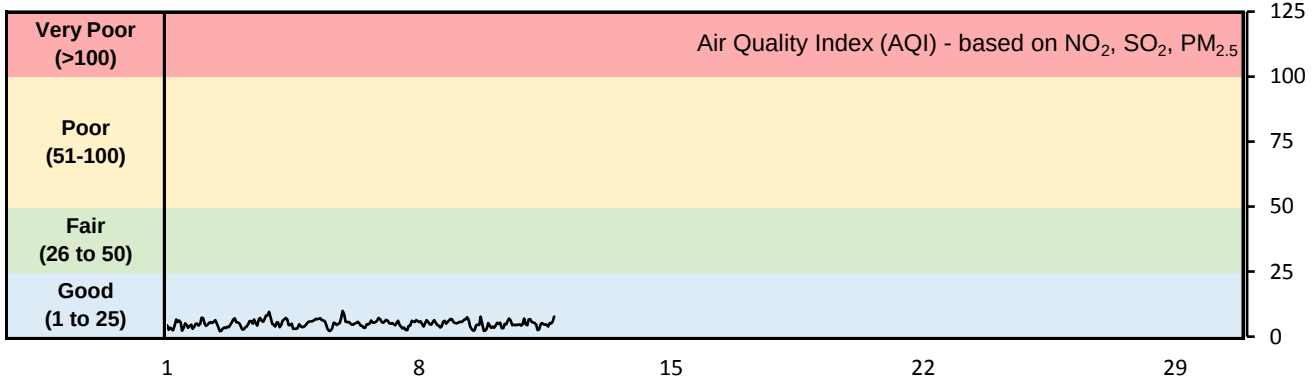
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

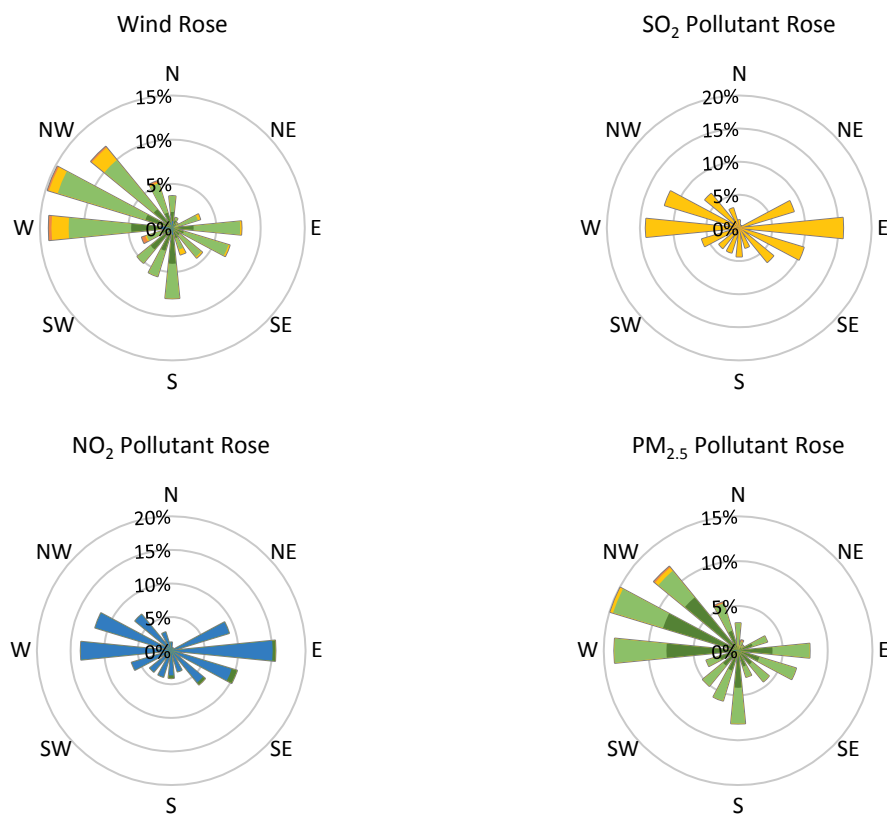
Exceedance Time	AQI	NO ₂	NO	O ₃	PM _{2.5}	NO _x	Temp	WD	WS
	-	ppb	ppb	ppb	ug/m ³	ppb	C	deg	m/s
Aug-09	3.8	0.4	0.0	18.9	57.8	0.4	18.0	121.3	1.5
Aug-30	2.8	0.9	0.2	23.8	31.6	1.0	16.5	146.2	0.9

SESAA Estevan Station - August 2016 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	1.4	35%	1.8	Aug-06	-	-	4.7	Aug-03 09:00	-	-
NO ₂	ppb	1.6	35%	2.6	Aug-03	106	0	7.9	Aug-02 21:00	159	0
NO _x	ppb	3.1	35%	4.4	Aug-02	-	-	10.3	Aug-02 21:00	-	-
SO ₂	ppb	11.8	35%	12.2	Aug-08	48	0	15.3	Aug-02 19:00	172	0
PM _{2.5}	µg/m ³	4.3	100%	7.2	Aug-23	28	0	24.0	Aug-22 22:00	-	-

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

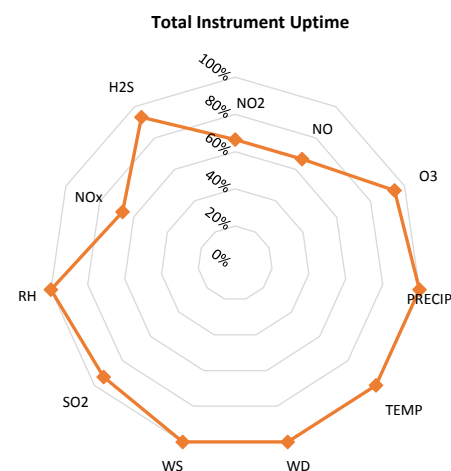
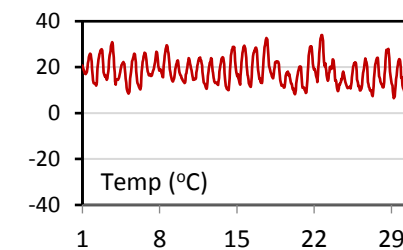
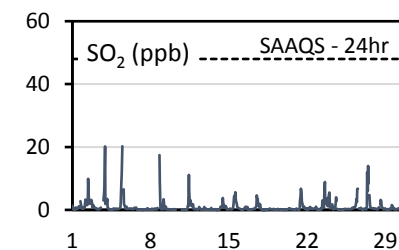
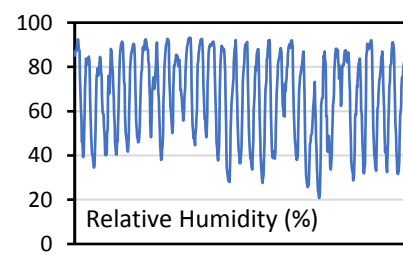
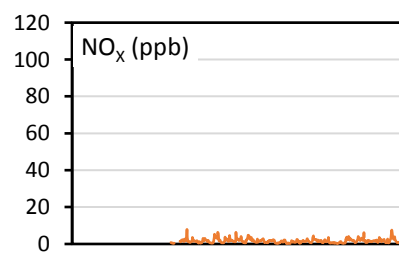
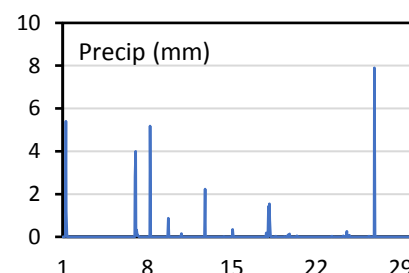
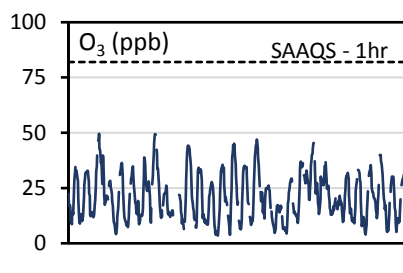
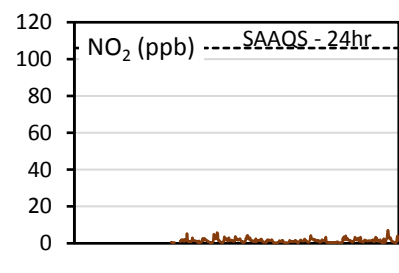
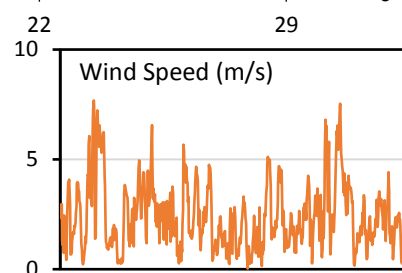
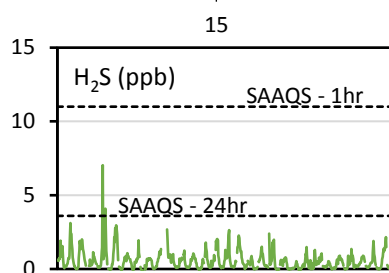
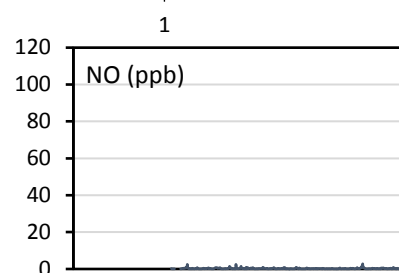
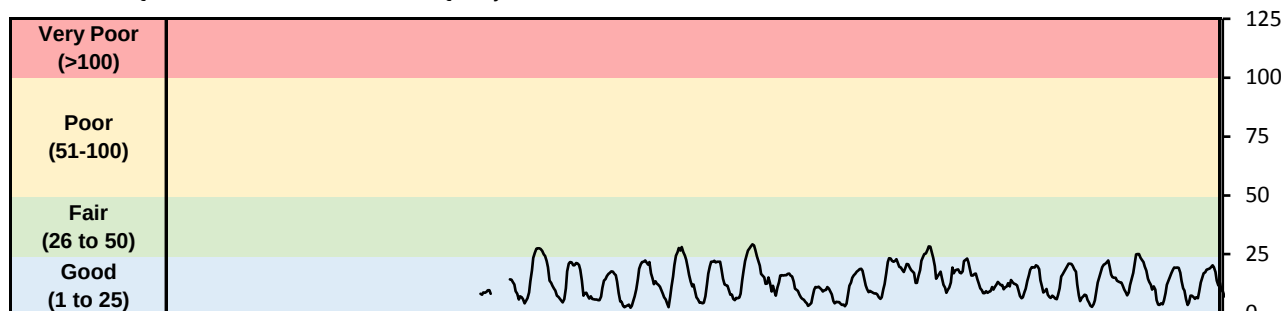
Monthly Update

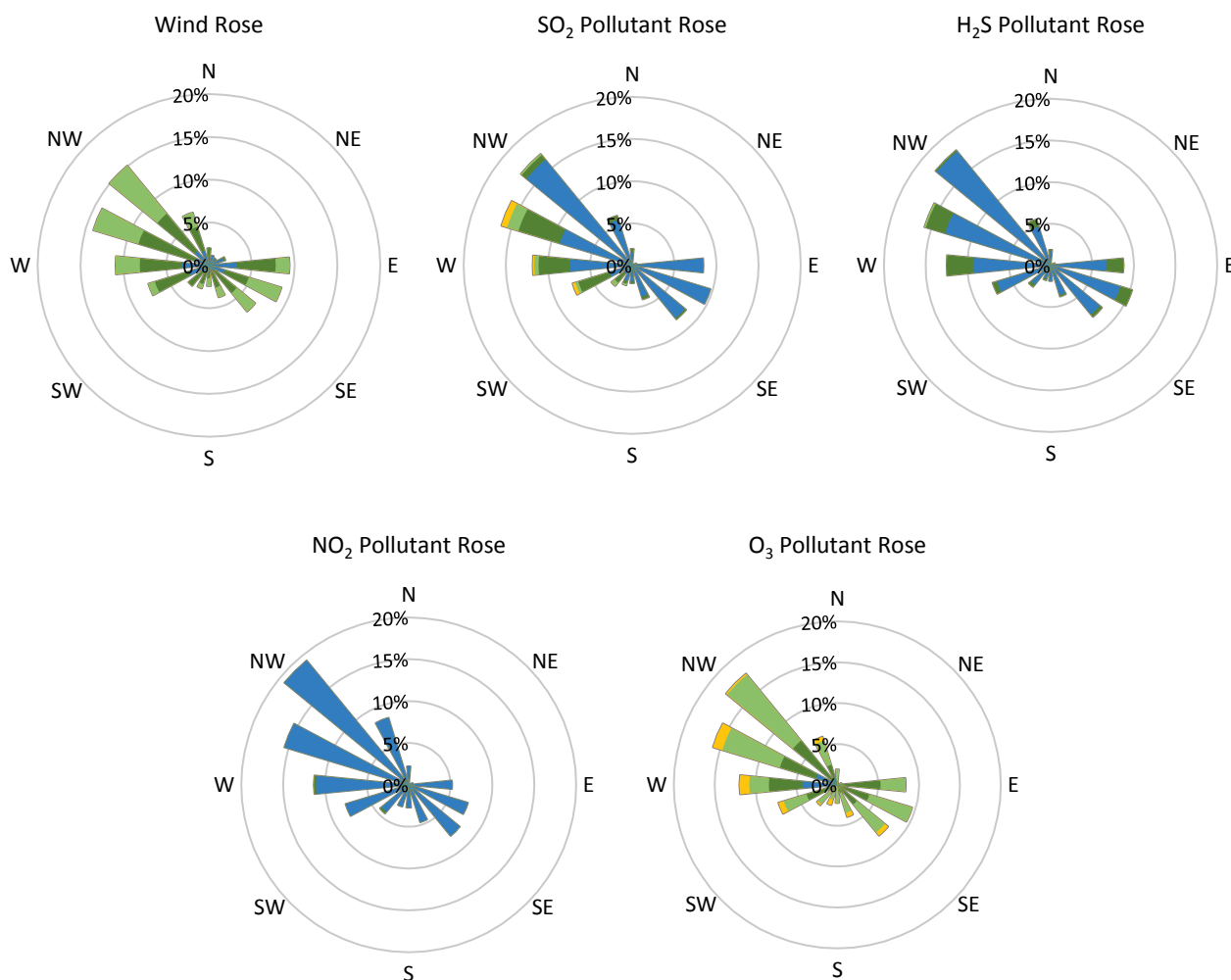
- Achieved 34.9% uptime for NO/NO₂/NO_x and SO₂
- Wind speed and direction data was taken from Estevan Airport
- Achieved >99% of scheduled uptime for all other parameters
- SO₂ analyzer removed for repairs August 11
- NO/NO₂/NO_x sensor malfunctioned beginning August 11 22:00. Data discarded.

SESAA Glen Ewen Station - August 2016 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	67%	0.5	Aug-27	-	-	2.8	Aug-27 11:00	-	-
NO ₂	ppb	1.4	67%	2.2	Aug-30	106	0	7.1	Aug-30 00:00	159	0
NO _x	ppb	1.6	67%	2.4	Aug-30	-	-	7.9	Aug-11 10:00	-	-
SO ₂	ppb	0.9	93%	2.9	Aug-05	48	0	20.2	Aug-05 11:00	172	0
H ₂ S	ppb	0.5	93%	1.2	Aug-10	3.6	0	7.0	Aug-05 01:00	11	0
O ₃	ppb	21.4	94%	31.8	Aug-08	-	-	49.6	Aug-03 17:00	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	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$

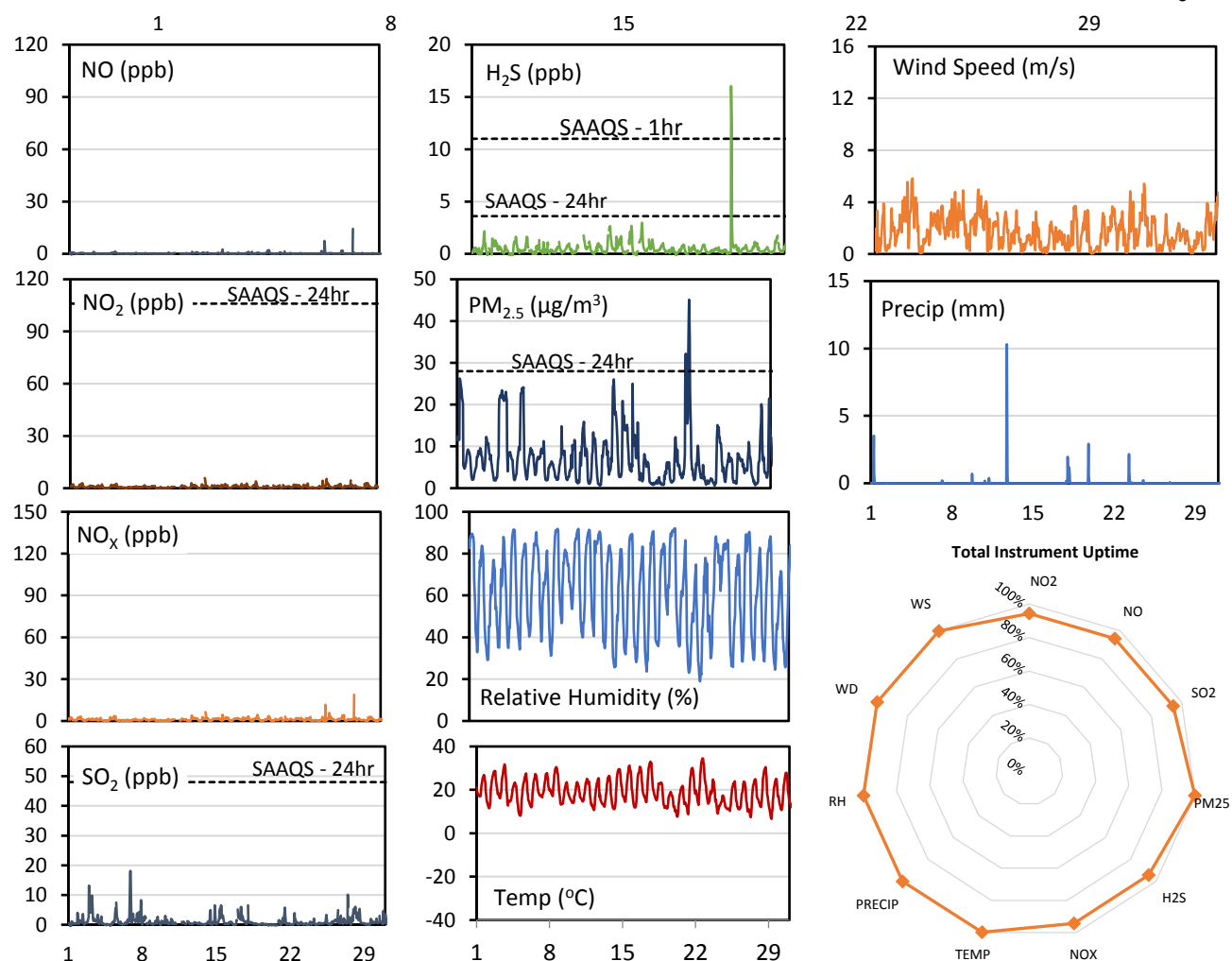
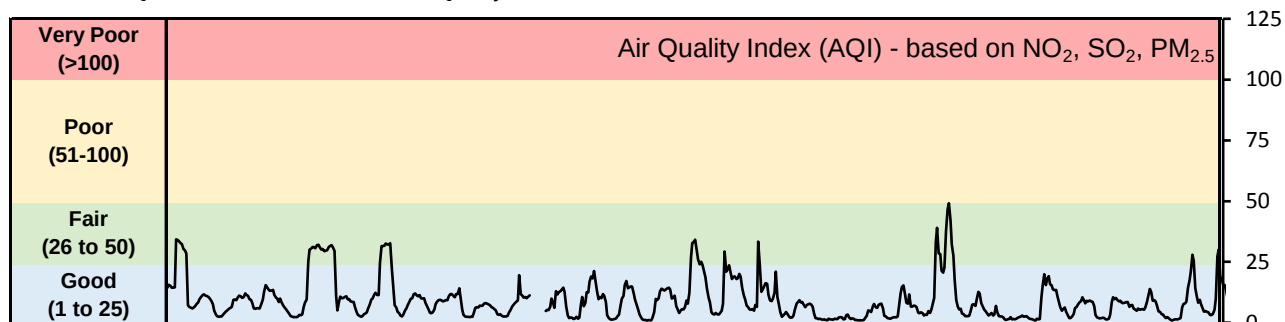
Monthly Update

- Achieved >97% of scheduled uptime for all parameters except NO/NO₂/NO_x (69.6%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans

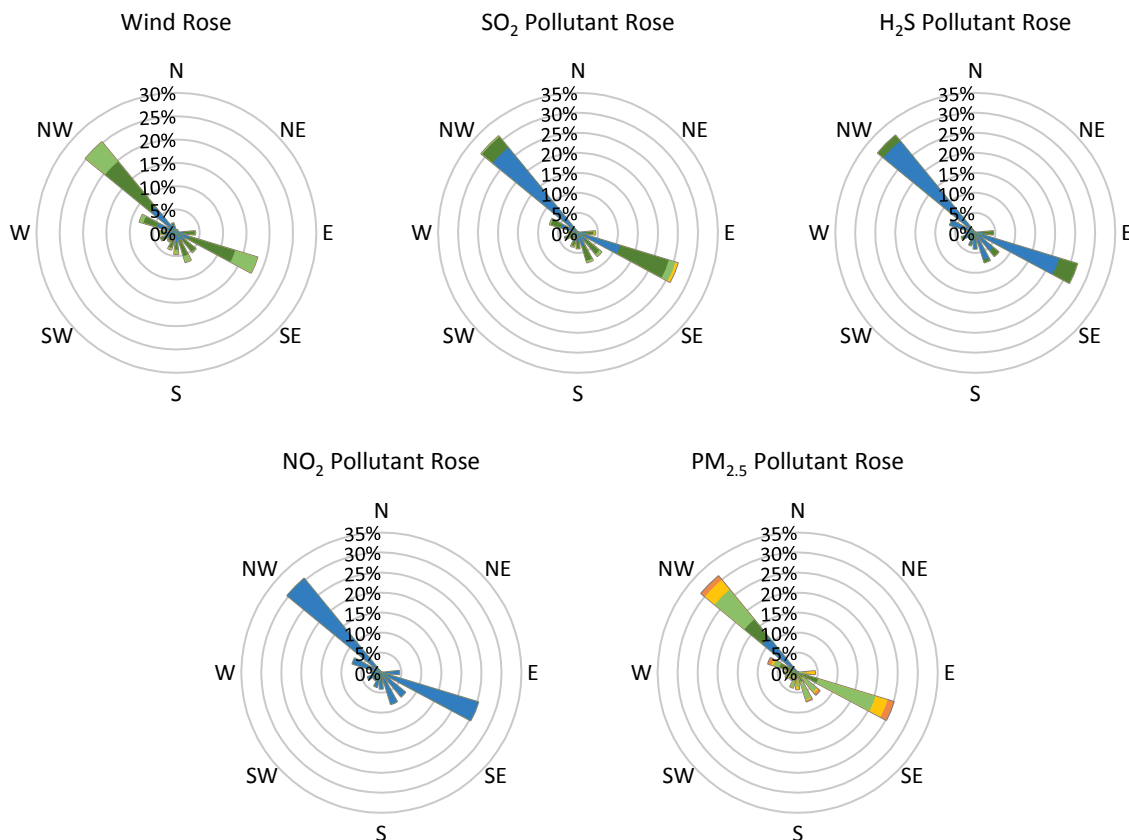
SESAA Oxbow Station - August 2016 Summary Report

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	94%	0.8	Aug-28	-	-	14.3	Aug-28 11:00	-	-
NO ₂	ppb	0.8	94%	1.4	Aug-26	106	0	5.8	Aug-14 04:00	159	0
NO _x	ppb	1.1	94%	1.9	Aug-28	-	-	18.8	Aug-28 11:00	-	-
SO ₂	ppb	1.2	94%	2.9	Aug-03	48	0	18.1	Aug-06 21:00	172	0
H ₂ S	ppb	0.5	94%	1.4	Aug-25	3.6	0	16.0	Aug-25 22:00	11	2
PM _{2.5}	µg/m ³	7.2	100%	18.7	Aug-05	28	0	45.1	Aug-23 05:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



SESAA Oxbow Station - August 2016 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 >98% of scheduled uptime for all parameters
- All compliance parameters are above 90% data validity
- Downtime of 4% results from routine daily internal zeroes and spans

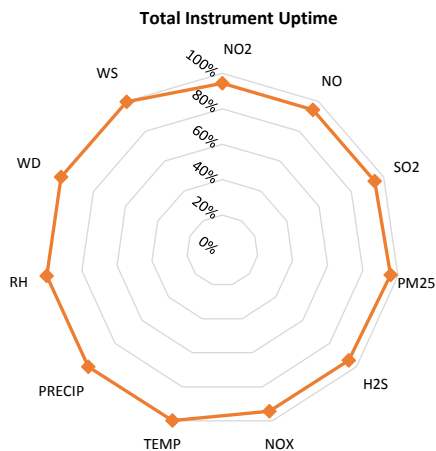
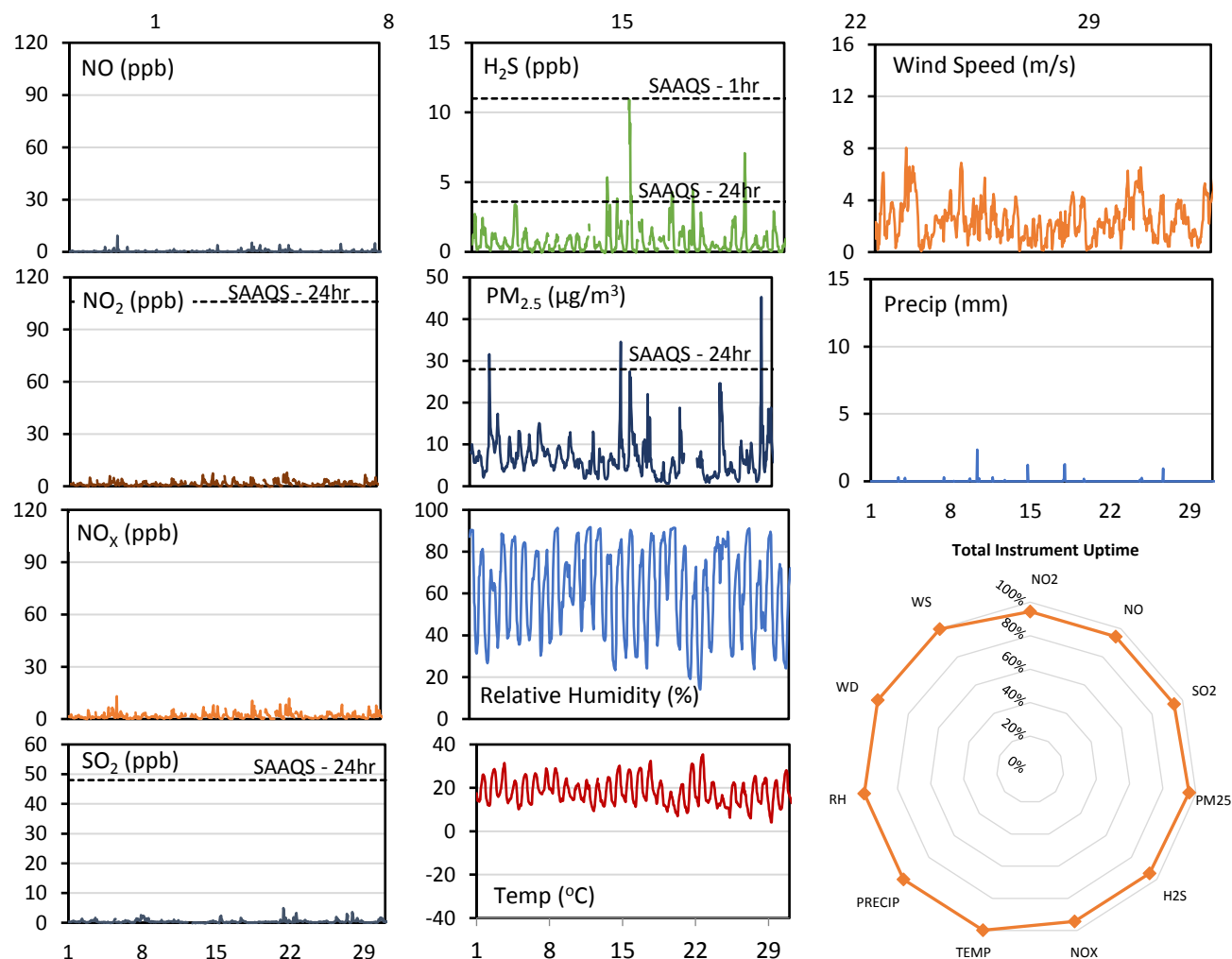
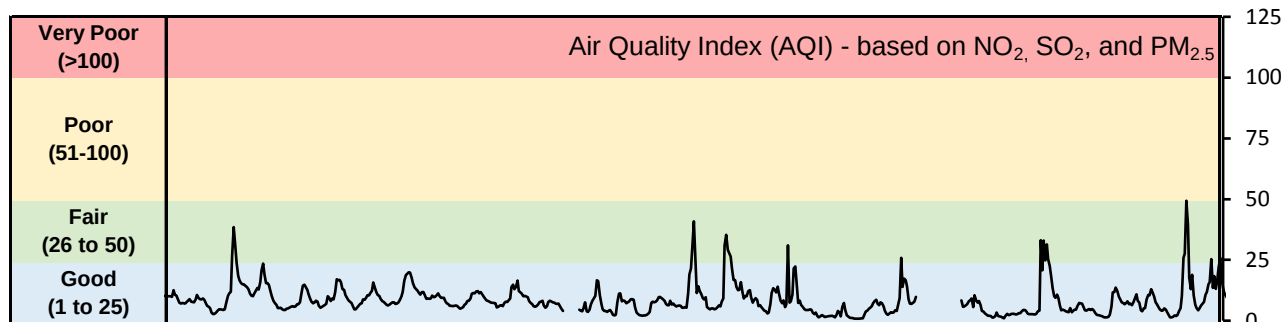
Exceedance Summary (1- Hour Average - Exceedances Highlighted)

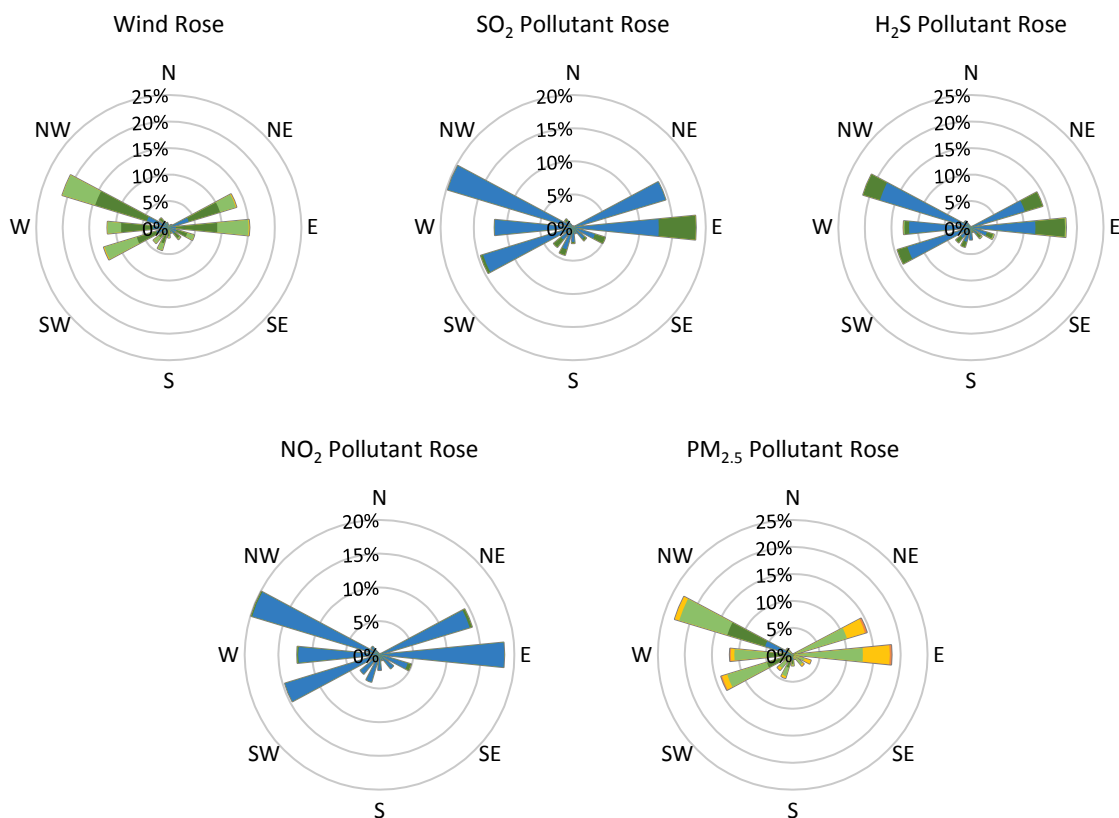
Exceedance Time	AQI	NO ₂ ppb	NO ppb	SO ₂ ppb	PM _{2.5} ug/m ³	NO _x ppb	H ₂ S ppb	Temp C	WD deg	WS m/s
Aug-25 22:00	19.9	0.8	0.1	0.9	15.1	0.9	16.0	15.1	92.6	0.3
Aug-25 23:00	15.5	1.4	0.0	1.0	12.3	1.4	12.2	14.0	111.3	0.5

SESAA Stoughton Station - August 2016 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	94%	1.1	Aug-05	-	-	9.3	Aug-05 16:00	-	-
NO ₂	ppb	1.3	94%	2.7	Aug-22	106	0	7.8	Aug-22 05:00	159	0
NO _x	ppb	1.7	94%	3.3	Aug-22	-	-	13.0	Aug-05 16:00	-	-
SO ₂	ppb	0.4	94%	1.0	Aug-08	48	0	4.9	Aug-21 09:00	172	0
H ₂ S	ppb	0.8	94%	2.4	Aug-16	3.6	0	10.9	Aug-16 03:00	11	0
PM _{2.5}	µg/m ³	6.7	96%	12.3	Aug-03	28	0	45.3	Aug-29 23:00	-	-

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

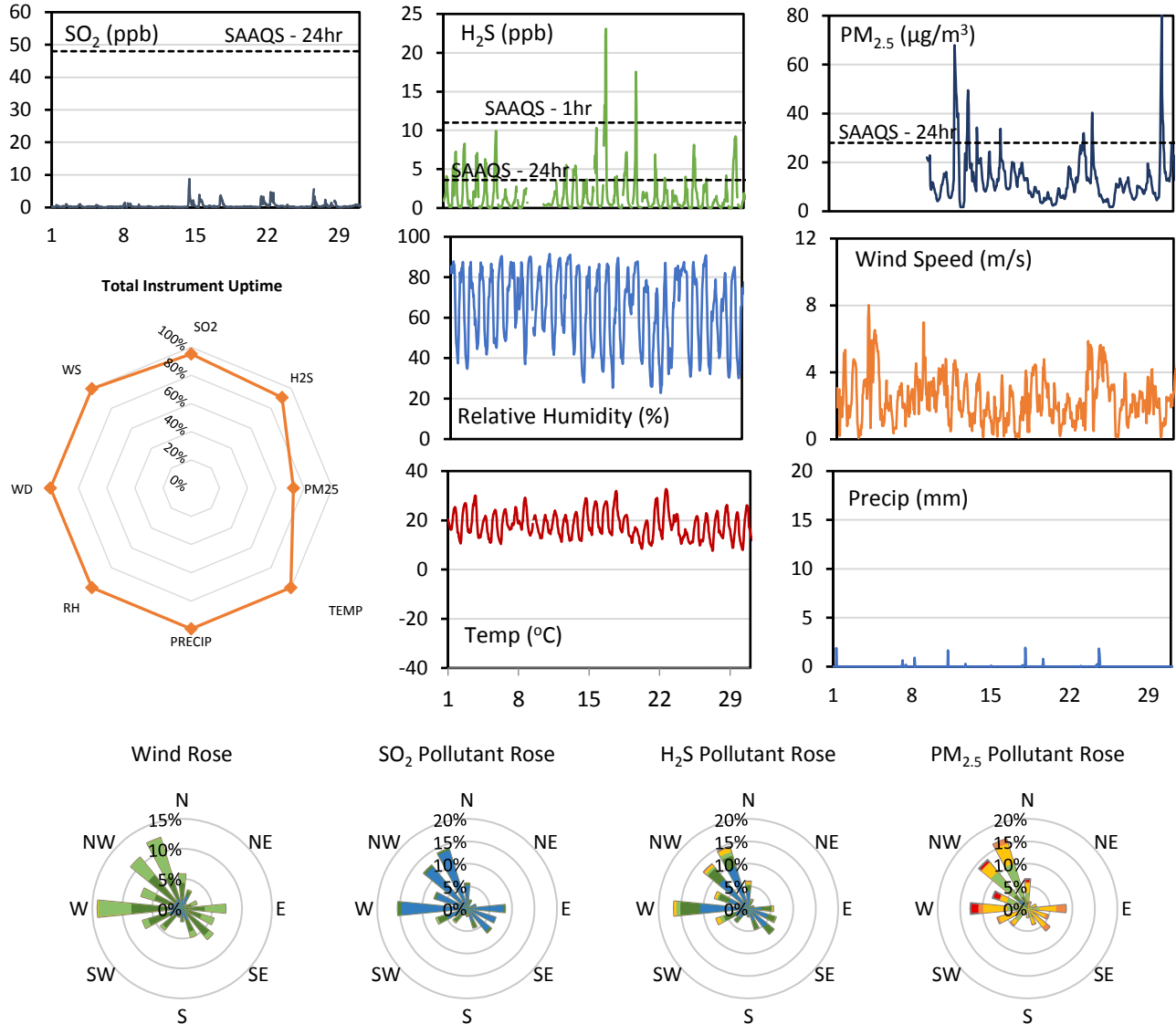
Monthly Update

- Achieved >98% of scheduled uptime for all parameters except PM_{2.5} (95.8%)
- Downtime of 4% due to routine daily internal zeroes and spans
- All compliance parameters are above 90% validity

SESAA Wauchope Station - August 2016 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	95%	1.6	Aug-14	48	0	8.7	Aug-14 10:00	172	0
H ₂ S	ppb	1.7	91%	4.9	Aug-17	3.6	1	23.1	Aug-17 06:00	11	6
PM _{2.5}	µg/m ³	12.9	72%	22.9	Aug-30	28	0	81.7	Aug-30 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 ≤ 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 except PM_{2.5} (72.4%) and H₂S (95.1%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- New H₂S analyzer installed August 9

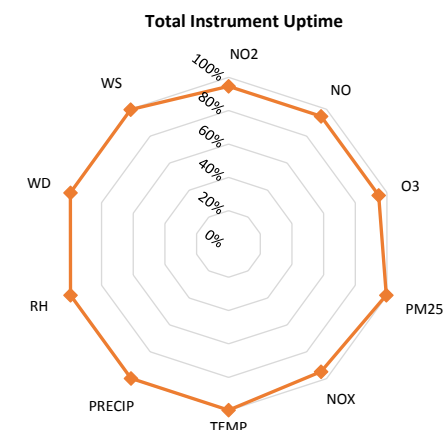
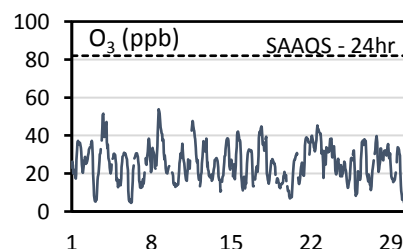
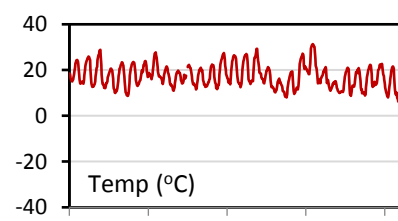
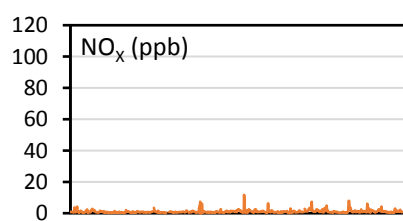
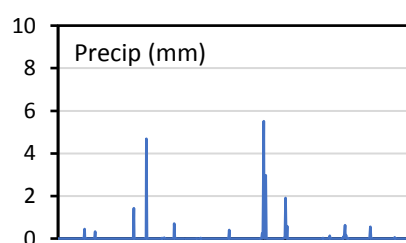
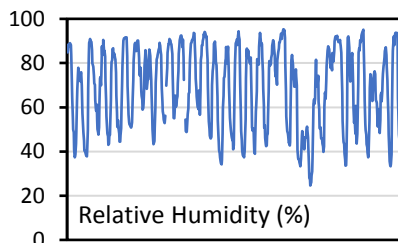
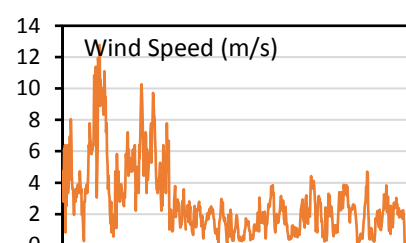
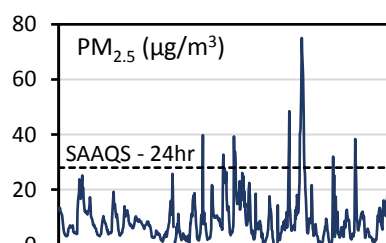
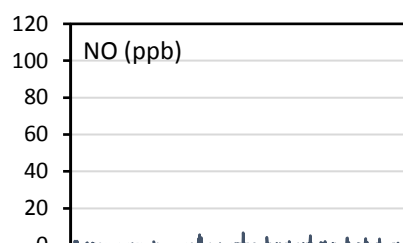
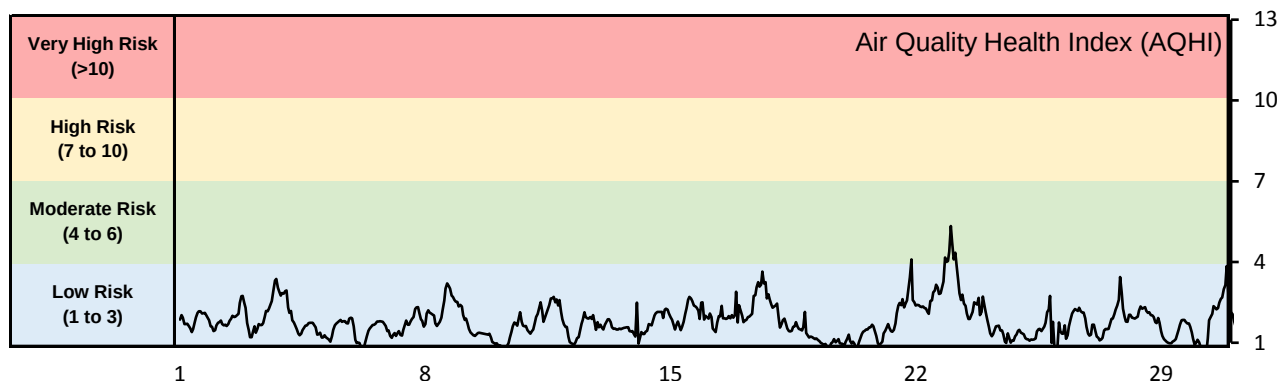
Exceedance Summary (1- Hour Average - Exceedances Highlighted)						
Exceedance Time	SO ₂ ppb	PM _{2.5} µg/m ³	H ₂ S ppb	Temp °C	WD deg	WS m/s
Aug-17 02:00	0.2	19.7	11.1	15.1	13.7	0.3
Aug-17 03:00	0.1	19.5	13.2	14.6	22.9	0.4
Aug-17 05:00	0.3	16.2	22.4	14.5	20.8	0.2
Aug-17 06:00	0.2	15.2	23.1	13.9	62.1	0.1
Aug-20 06:00	0.2	5.0	17.6	8.4	343.1	0.9
Aug-20 07:00	0.2	5.1	13.1	9.3	327.3	1.2

Exceedance Summary (24- 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
Aug-17	1.1	16.0	4.9	22.4	168.2	1.6

SESAA Wawota Station - August 2016 Summary Report

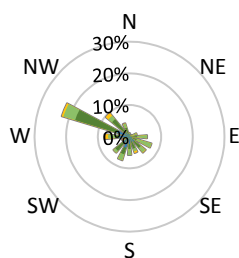
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	95%	0.8	Aug-12	-	-	6.8	Aug-16 11:00	-	-
NO ₂	ppb	0.7	95%	1.3	Aug-22	106	0	4.9	Aug-16 11:00	159	0
NO _x	ppb	1.0	95%	2.0	Aug-22	-	-	11.7	Aug-16 11:00	-	-
O ₃	ppb	25.5	95%	37.9	Aug-22	-	-	53.9	Aug-08 15:00	82	0
PM _{2.5}	µg/m ³	9.2	100%	23.8	Aug-23	28	0	75.0	Aug-23 00:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

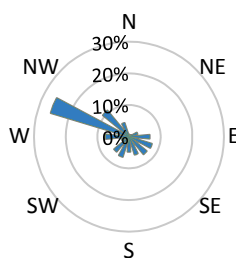


SESAA Wawota Station - August 2016 Summary Report

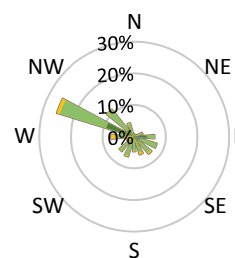
Wind Rose



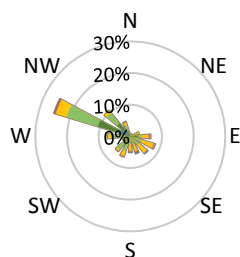
NO₂ Pollutant Rose



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	

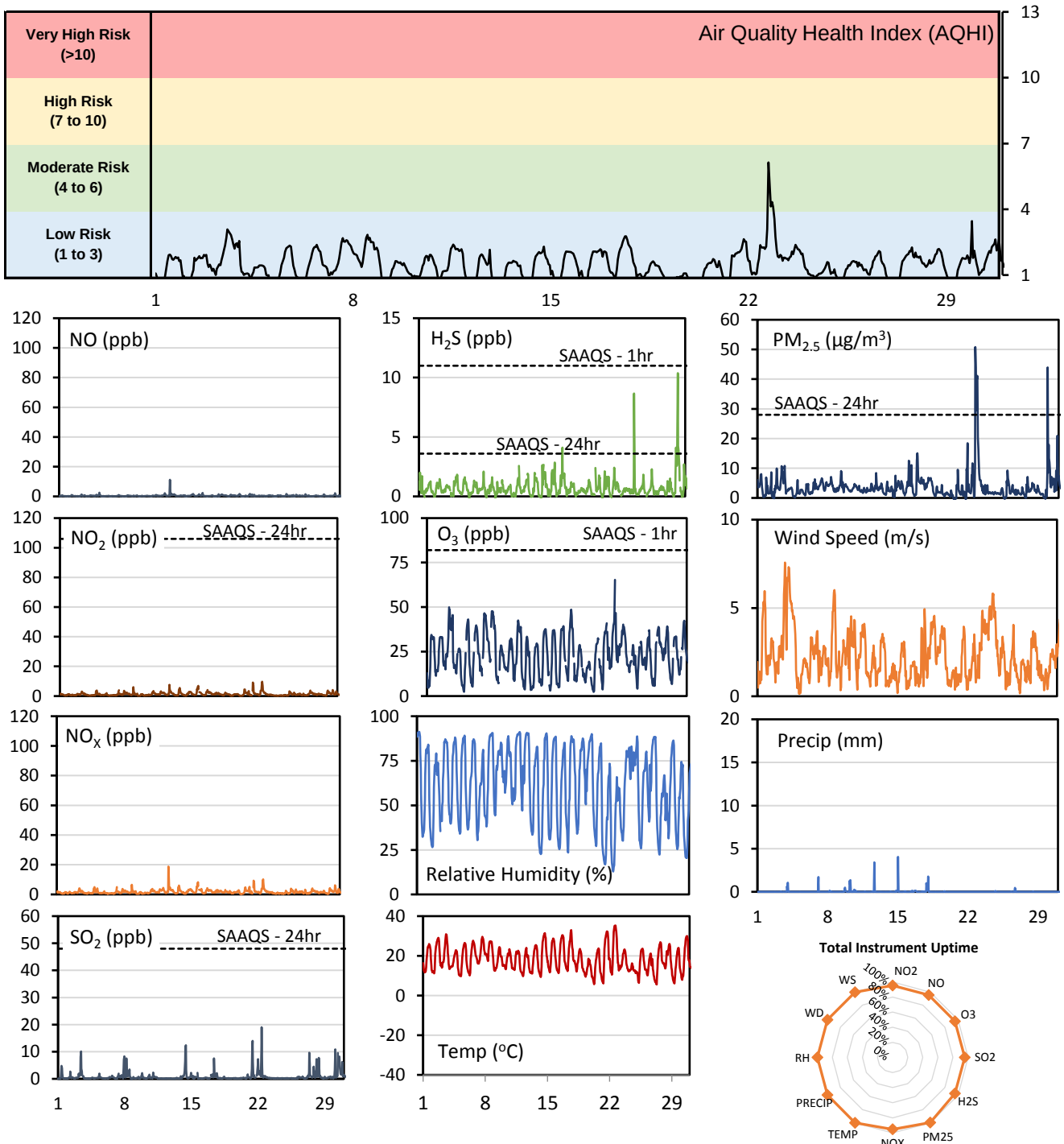
Monthly Update

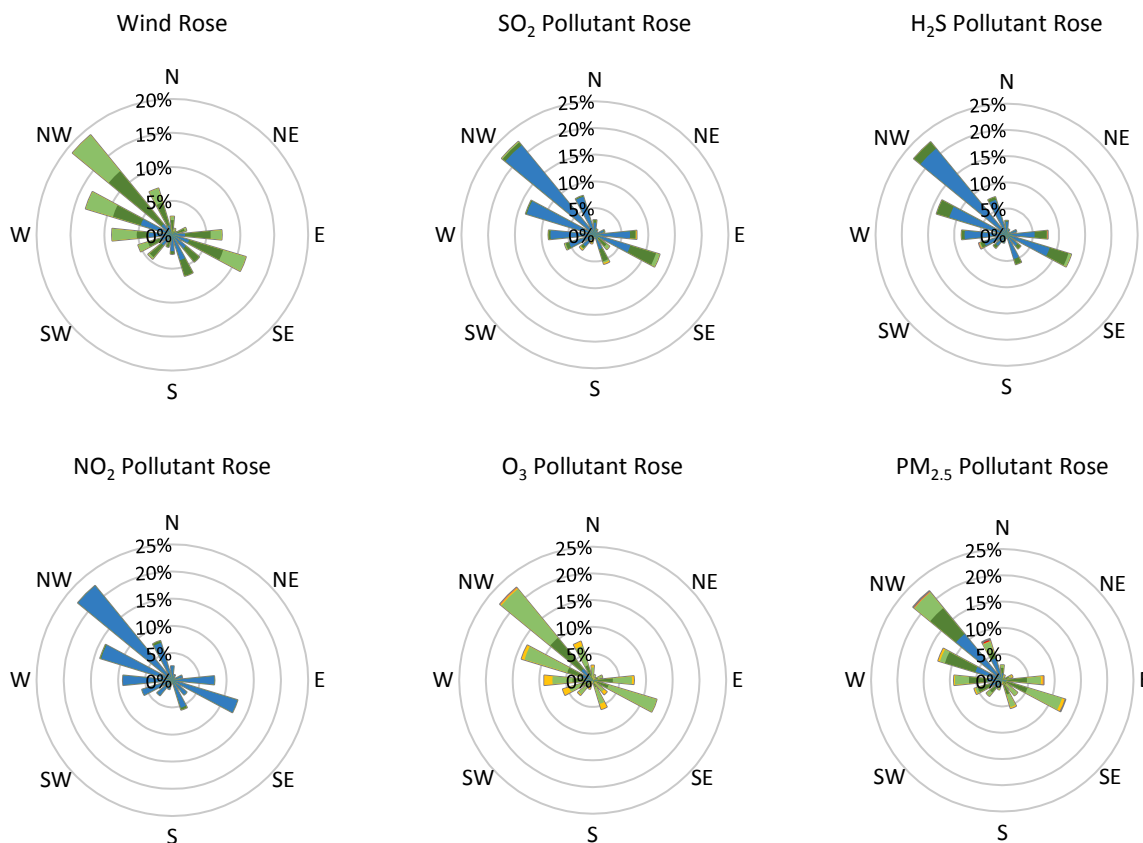
- Achieved >98% of scheduled uptime for all parameters except wind direction and speed
- Downtime of 4% due to routine daily internal zeroes and spans
- All compliance parameters are above 90% validity
- Wind direction and speed taken from Estevan Airport from August 1 through 9

SESAA Weyburn Station - August 2016 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	0.4	95%	1.4	Aug-12	-	-	11.2	Aug-12 20:00	-	-
NO ₂	ppb	1.3	95%	2.4	Aug-22	106	0	9.7	Aug-22 21:00	159	0
NO _x	ppb	1.7	95%	3.4	Aug-12	-	-	18.8	Aug-12 20:00	-	-
SO ₂	ppb	0.9	96%	3.3	Aug-30	48	0	19.0	Aug-22 09:00	172	0
H ₂ S	ppb	0.7	95%	2.1	Aug-30	3.6	0	10.4	Aug-30 04:00	11	0
O ₃	ppb	23.0	95%	34.3	Aug-08	-	-	65.3	Aug-22 17:00	82	0
PM _{2.5}	µg/m ³	3.8	100%	14.1	Aug-22	28	0	50.8	Aug-22 17:00	-	-

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 >99% of scheduled uptime for all parameters
- Downtime of 4% due to routine daily Internal Zeroes and Spans