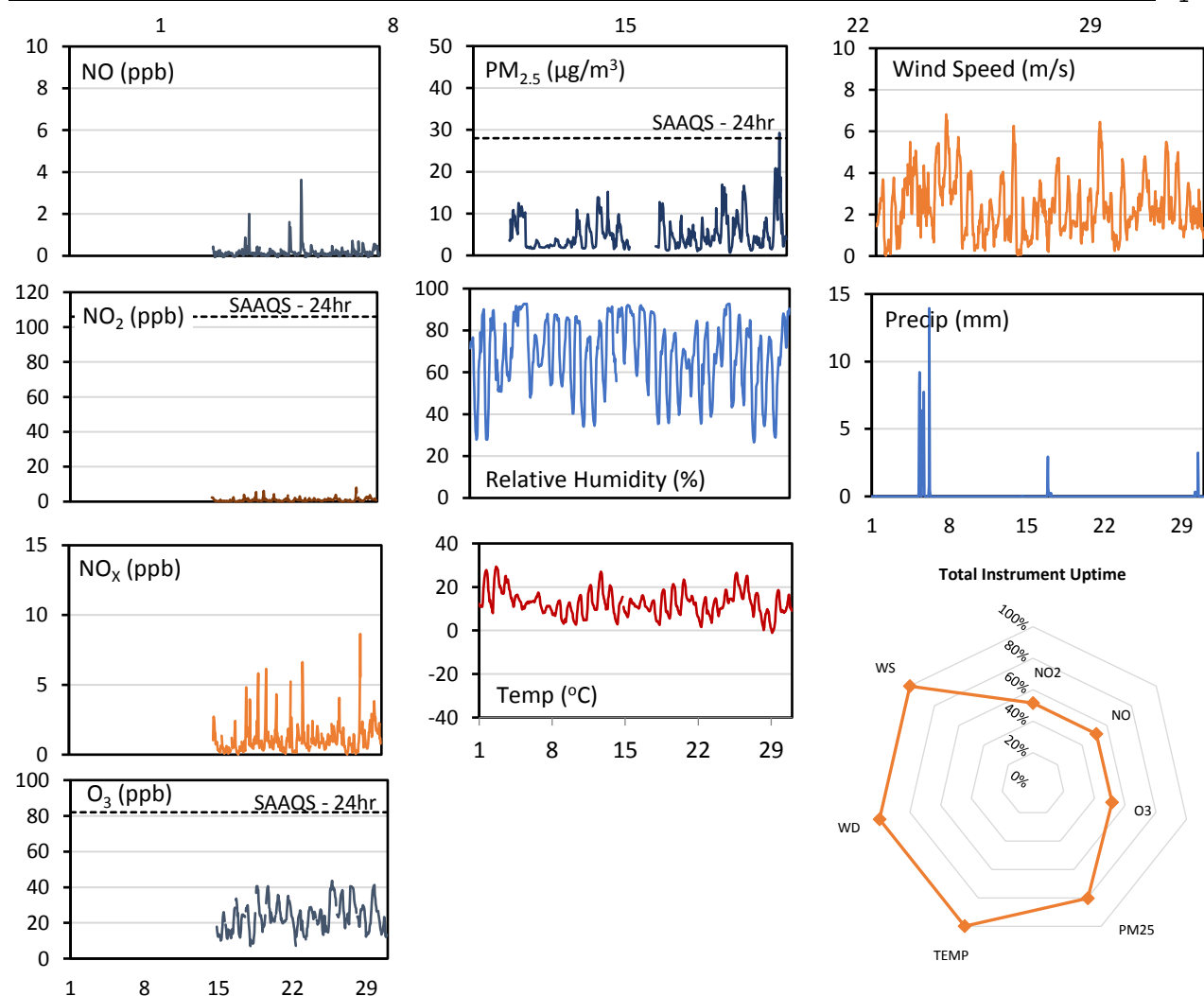


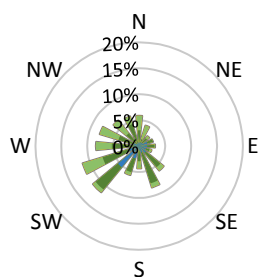
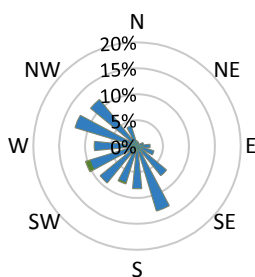
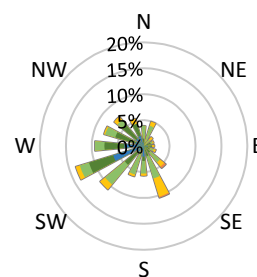
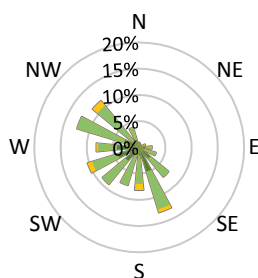
SESAA Esterhazy Station - September 2015 Summary Report

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	51%	0.5	Sep-23	-	-	3.6	Sep-23 10:00	-	-
NO ₂	ppb	1.0	52%	2.3	Sep-14	106	0	8.0	Sep-28 23:00	159	0
NO _x	ppb	1.1	52%	2.2	Sep-14	-	-	8.6	Sep-28 23:00	-	-
O ₃	ppb	23.6	52%	30.9	Sep-27	-	-	43.6	Sep-25 18:00	82	0
PM _{2.5}	µg/m ³	5.1	80%	10.1	Sep-30	28	0	29.3	Sep-30 07:00	-	-

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

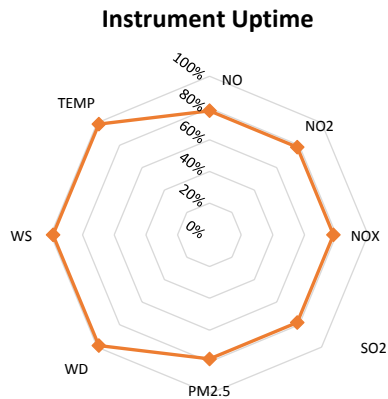
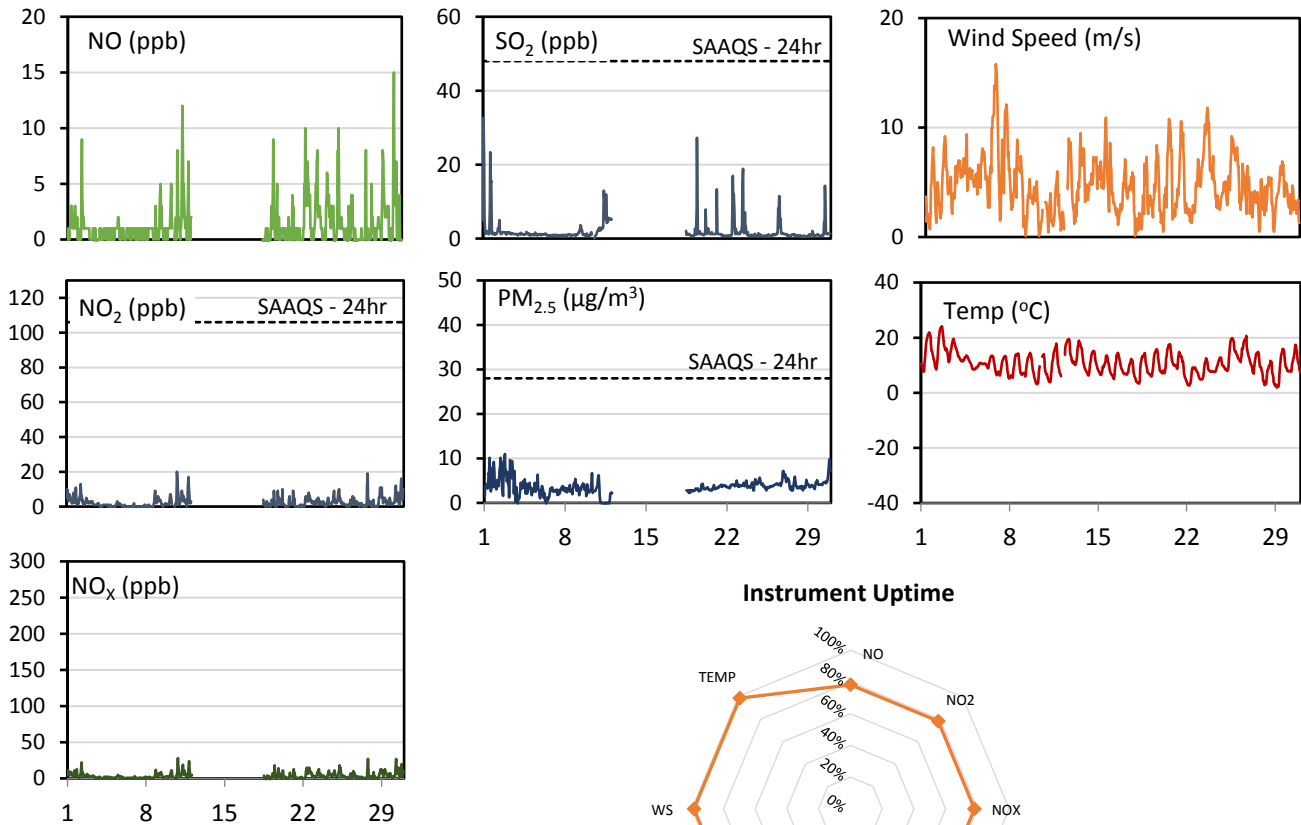
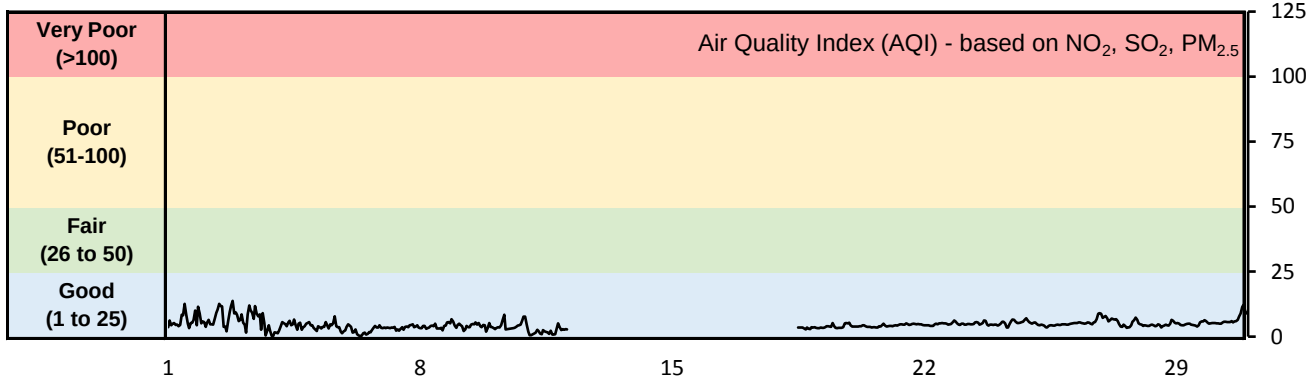
Monthly Update

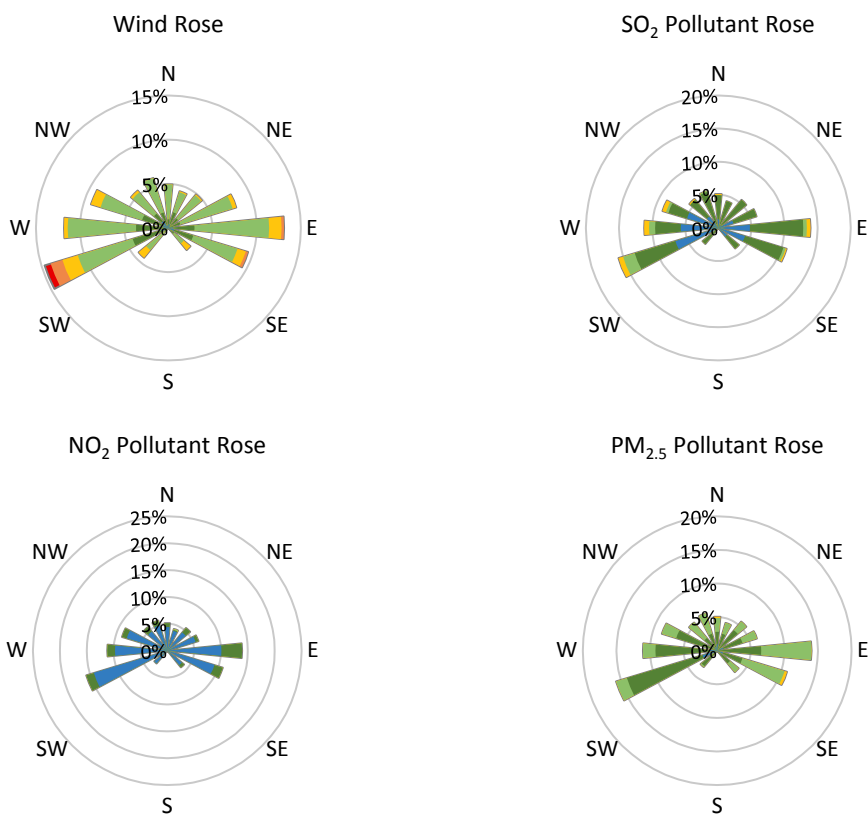
- Operational issues of the particulate monitoring equipment resulted in downtime
- Calibrations were performed September 14th.
- NO_x and O₃ data invalidated due to a operational issues

SESAA Estevan Station - September 2015 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	1.3	78%	3.0	Sep-22	-	-	15.0	Sep-30 07:00	-	-
NO ₂	ppb	2.4	78%	5.4	Sep-30	106	0	20.0	Sep-10 20:00	159	0
NO _x	ppb	3.8	78%	8.0	Sep-30	-	-	28.0	Sep-10 20:00	-	-
SO ₂	ppb	1.9	78%	6.3	Sep-01	48	0	32.7	Sep-01 01:00	172	0
PM _{2.5}	µg/m ³	3.7	78%	6.0	Sep-02	28	0	11.0	Sep-02 19:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





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

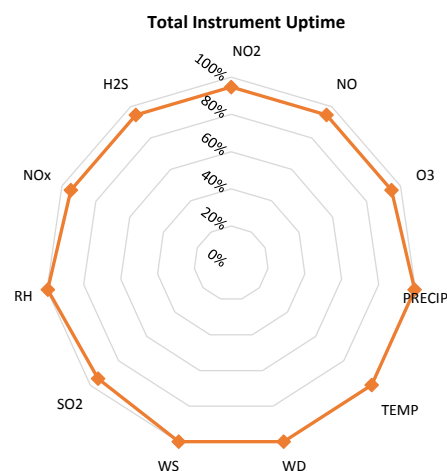
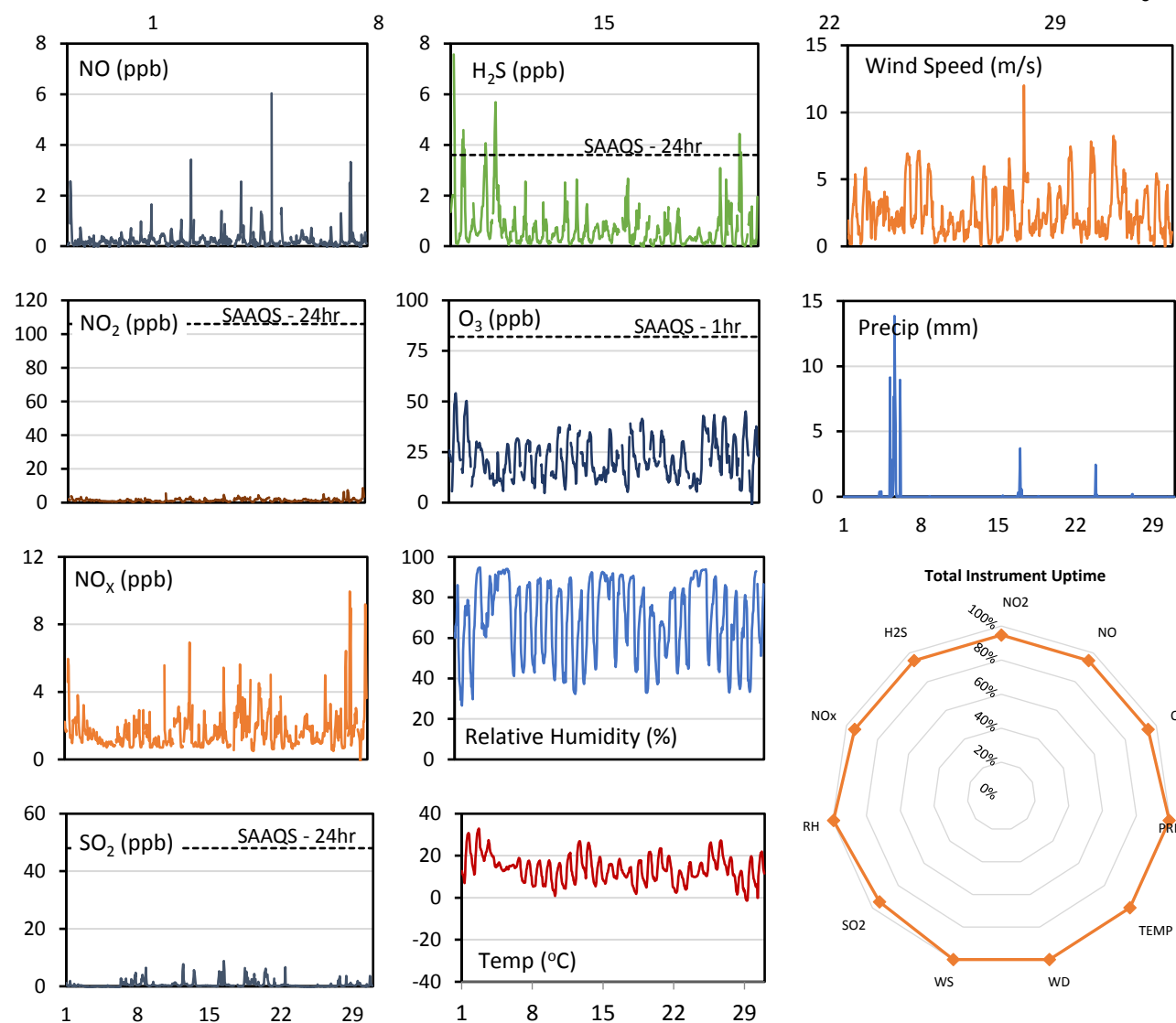
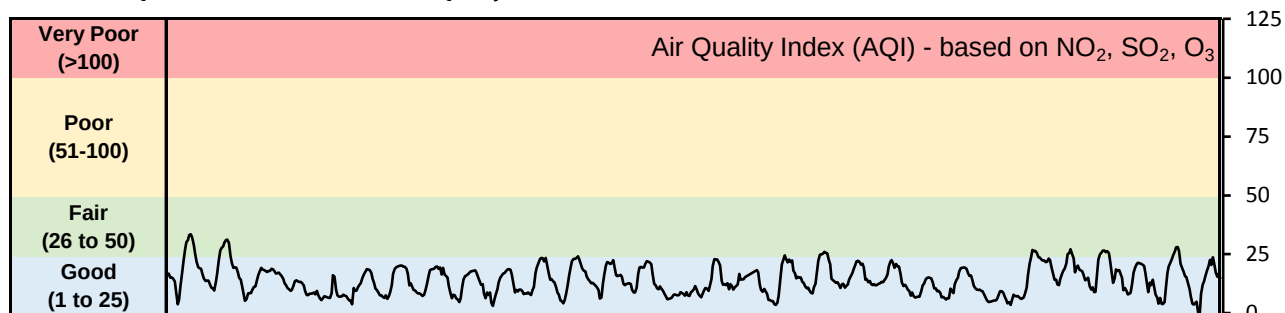
Monthly Update

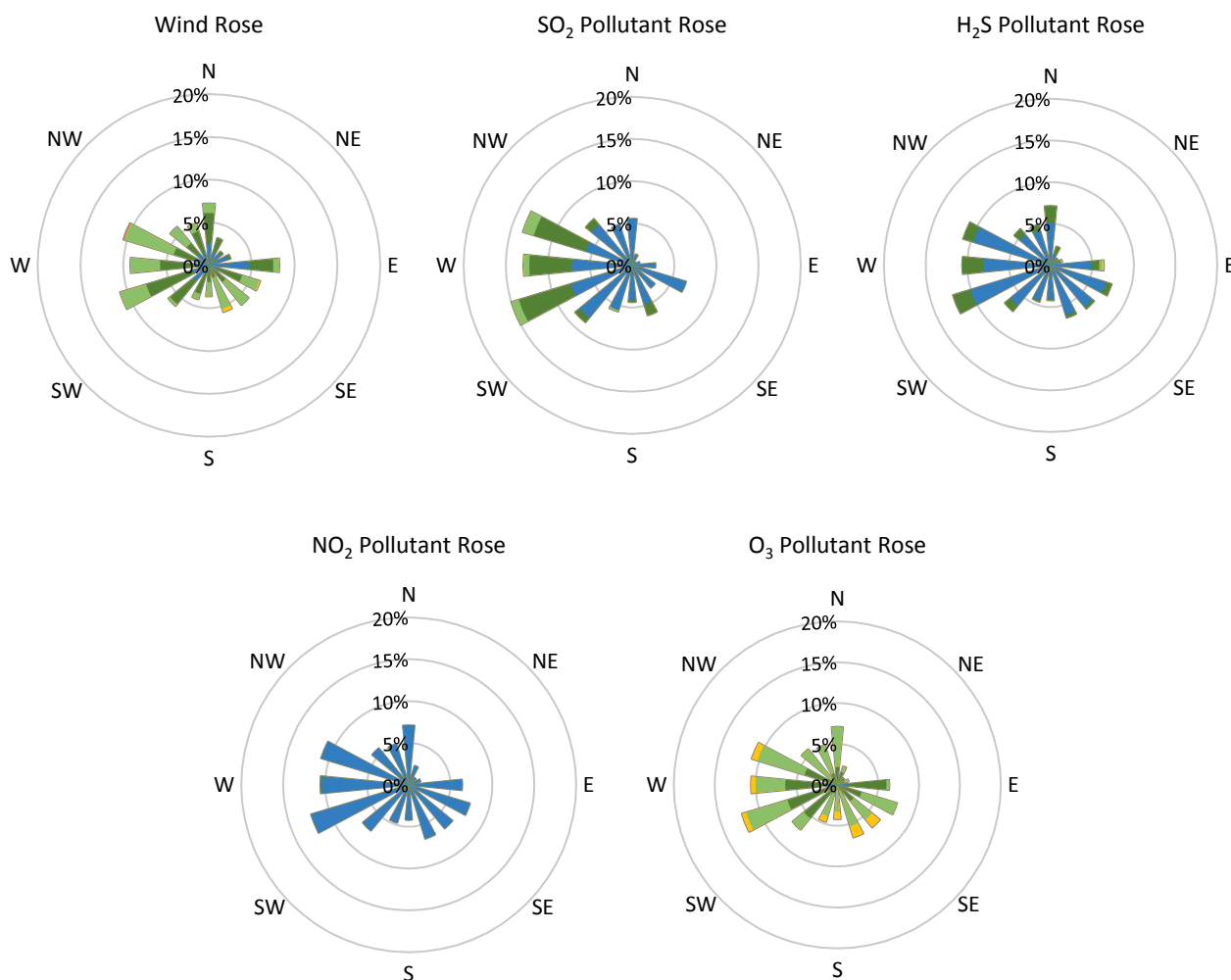
- Station operational issues resulting in 22% of data being invalidated
- Calibrations were performed September 10th

SESAA Glen Ewen Station - September 2015 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%	0.6	Sep-29	-	-	6.0	Sep-21 10:00	-	-
NO ₂	ppb	1.4	95%	2.3	Sep-29	106	0	8.6	Sep-30 19:00	159	0
NO _x	ppb	1.7	95%	2.9	Sep-29	-	-	10.0	Sep-29 06:00	-	-
SO ₂	ppb	0.6	95%	1.8	Sep-16	48	0	8.8	Sep-16 10:00	172	0
H ₂ S	ppb	0.7	95%	2.2	Sep-05	3.6	0	7.6	Sep-01 07:00	11	0
O ₃	ppb	21.9	95%	32.3	Sep-01	-	-	54.1	Sep-01 16:00	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	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$

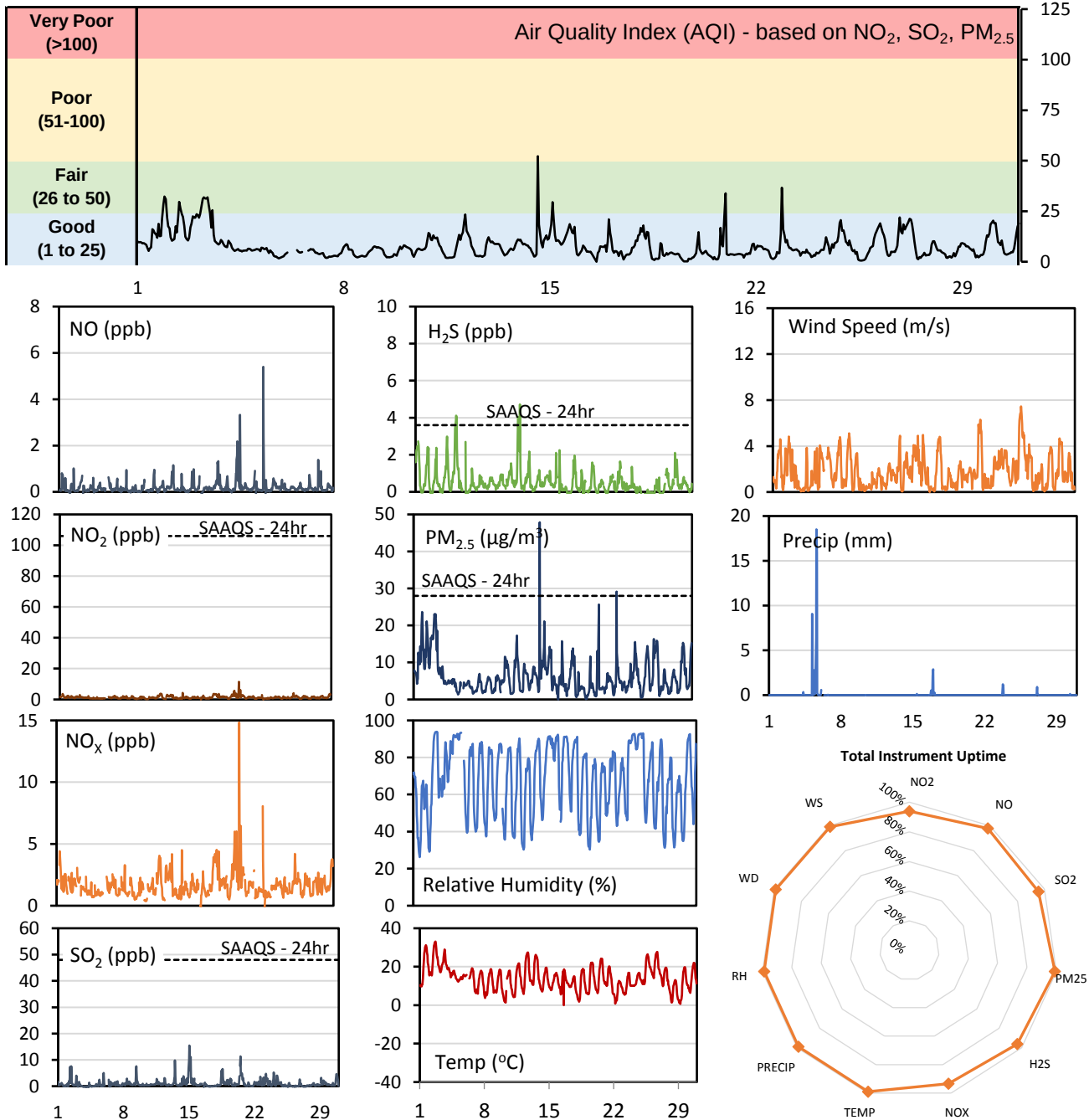
Monthly Update

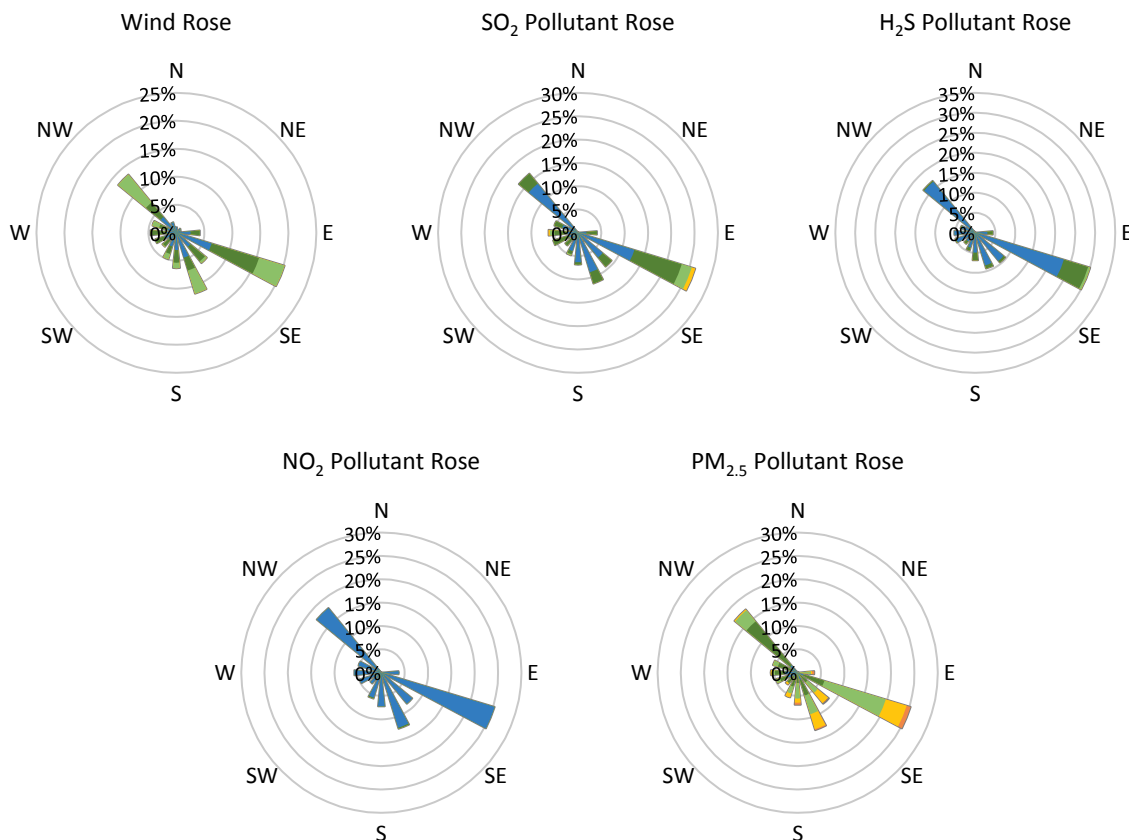
- Achieved >99% of scheduled uptime
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Calibrations were performed September 17th
- All compliance parameters are above 90% data validity; no operational issues

SESAA Oxbow Station - September 2015 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	98%	0.6	Sep-20	-	-	5.4	Sep-23 08:00	-	-
NO ₂	ppb	1.4	94%	3.2	Sep-20	106	0	11.4	Sep-20 19:00	159	0
NO _x	ppb	1.6	93%	3.8	Sep-20	-	-	14.8	Sep-20 19:00	-	-
SO ₂	ppb	1.0	96%	3.2	Sep-15	48	0	15.5	Sep-15 01:00	172	0
H ₂ S	ppb	0.5	96%	1.5	Sep-05	3.6	0	4.7	Sep-12 08:00	11	0
PM _{2.5}	µg/m ³	6.2	99%	14.5	Sep-03	28	0	47.9	Sep-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 ≤ 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	

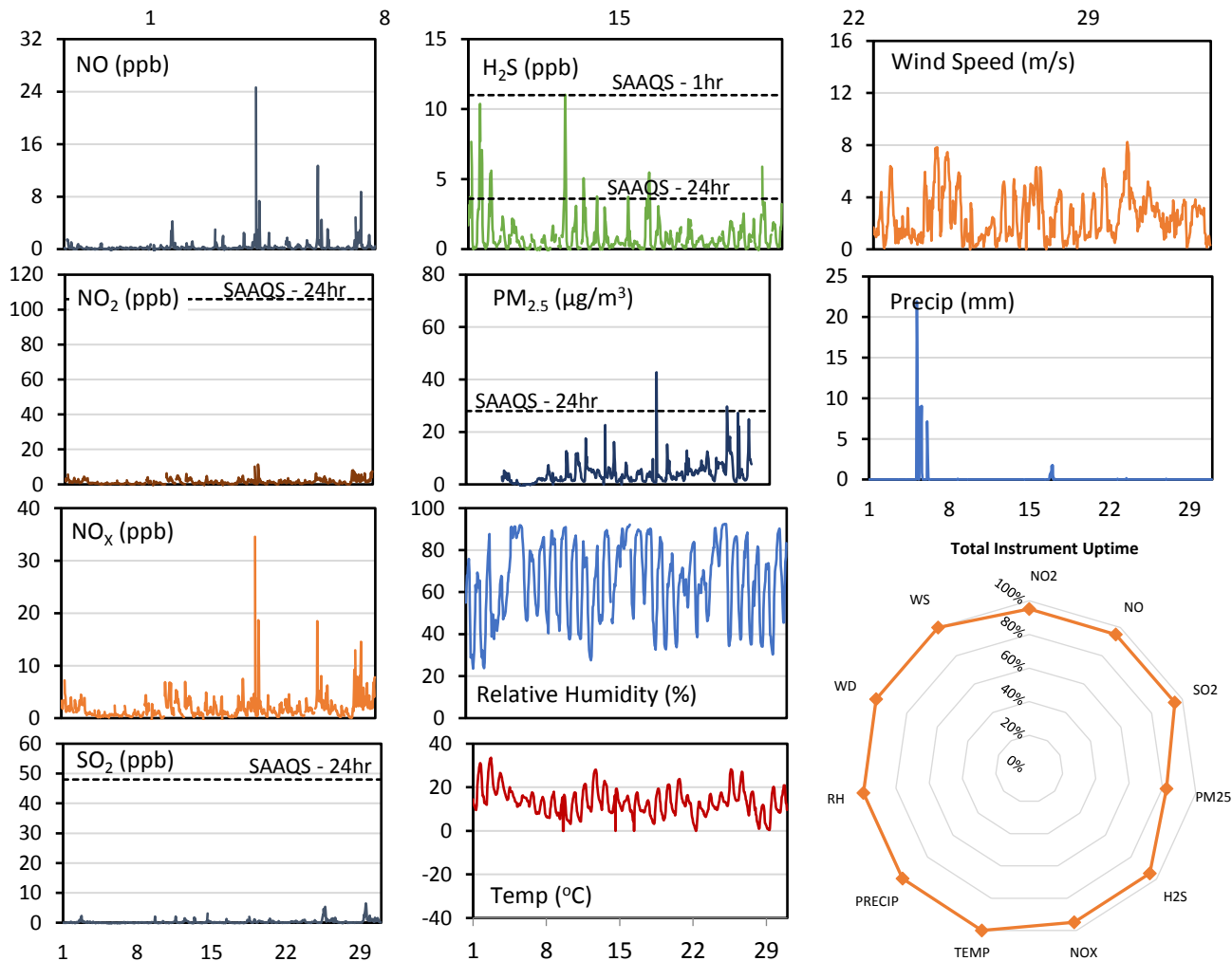
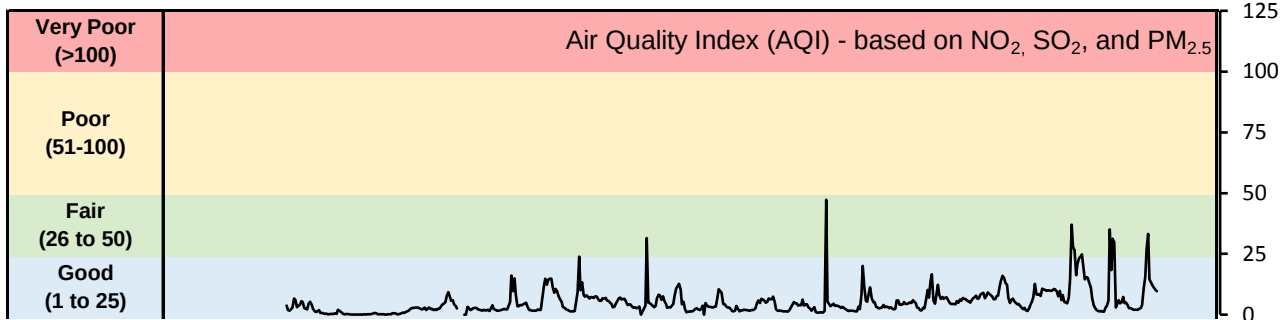
Monthly Update

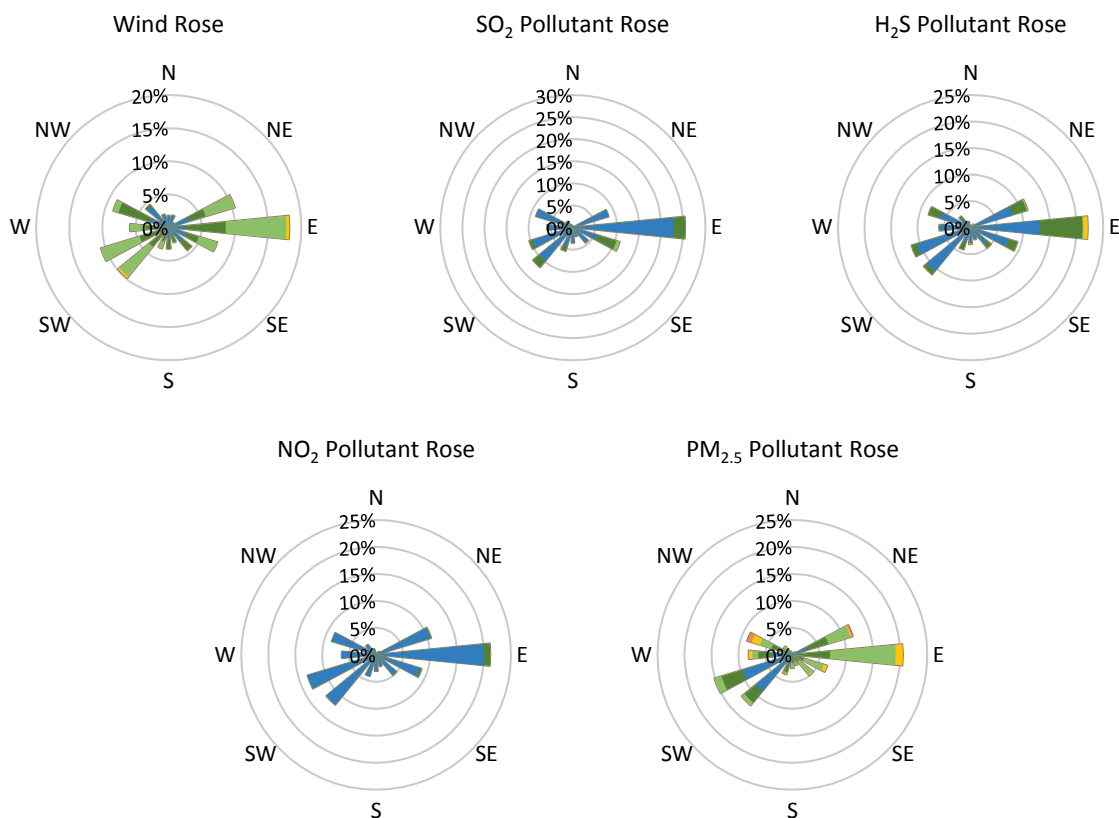
- Achieved >99% of scheduled uptime
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Calibrations were performed September 16th.
- All compliance parameters are above 90% data validity; no operational issues

SESAA Stoughton Station - September 2015 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%	2.0	Sep-19	-	-	24.6	Sep-19 12:00	-	-
NO ₂	ppb	1.5	95%	3.9	Sep-29	106	0	11.4	Sep-19 20:00	159	0
NO _x	ppb	1.8	95%	5.4	Sep-29	-	-	34.5	Sep-19 12:00	-	-
SO ₂	ppb	0.3	95%	1.7	Sep-29	48	0	6.5	Sep-29 13:00	172	0
H ₂ S	ppb	0.9	95%	2.4	Sep-02	3.6	0	11.0	Sep-10 06:00	11	1
PM _{2.5}	µg/m ³	4.1	82%	9.7	Sep-26	28	0	42.8	Sep-19 20:00	-	-

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
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Particulate monitor reinstalled part way throughout the month. Monitor malfunctioning resulting in downtime.

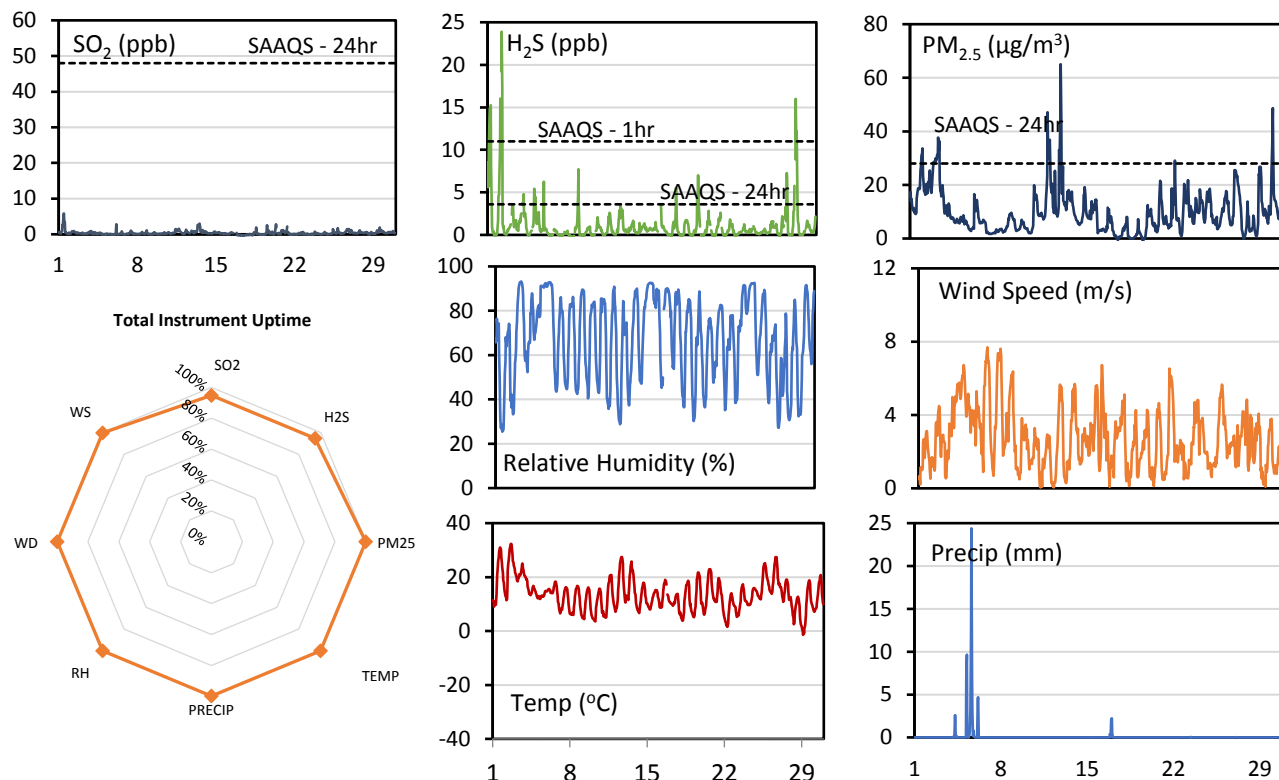
Exceedance Summary (1- Hour Average - Exceedances Highlighted)

Exceedance Time	AQI	NO ₂ ppb	NO ppb	SO ₂ ppb	PM _{2.5} µg/m ³	NO _x ppb	H ₂ S ppb	Temp °C	WD deg	WS m/s
Sep-10 06:00	2.0	1.2	0.2	-0.1	1.6	1.4	11.0	3.5	290.4	0.3

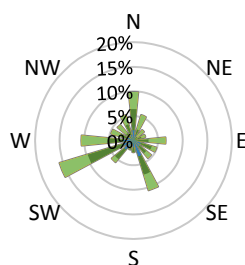
SESAA Wauchope Station - September 2015 Summary Report

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	0.4	95%	1.2	Sep-01	48	0	5.8	Sep-01 11:00	172	0
H ₂ S	ppb	1.1	95%	4.8	Sep-02	3.6	2	23.9	Sep-02 07:00	11	9
PM _{2.5}	µg/m ³	10.0	100%	21.6	Sep-02	28	0	65.1	Sep-13 00:00	-	-

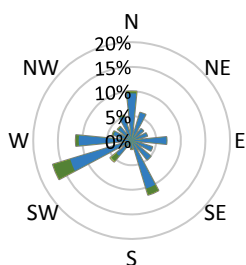
SAAQS: Saskatchewan Ambient Air Quality Standards



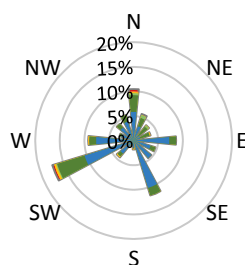
Wind Rose



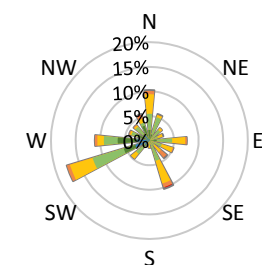
SO₂ Pollutant Rose



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 >99% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity; no operational issues

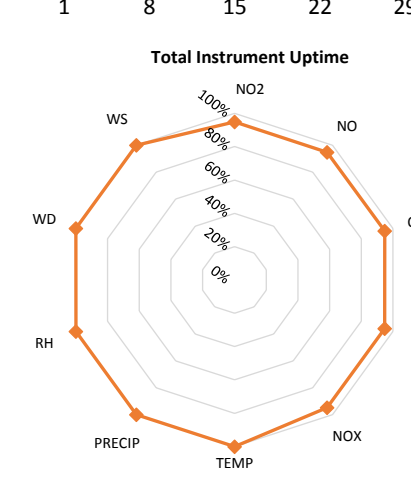
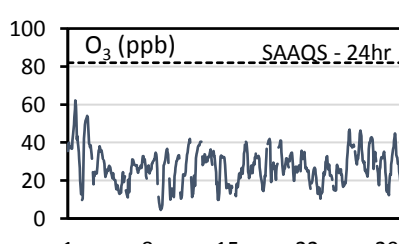
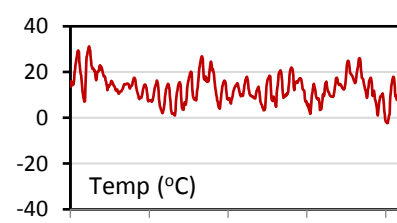
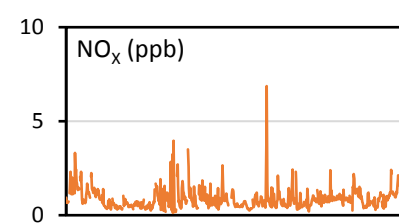
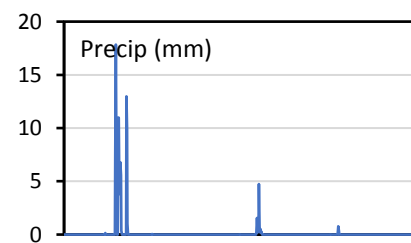
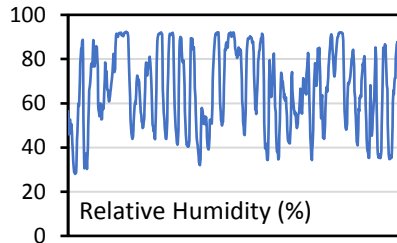
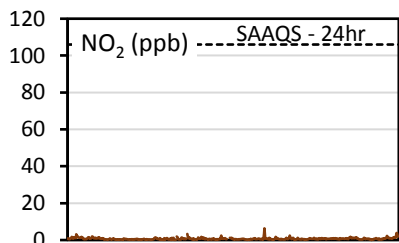
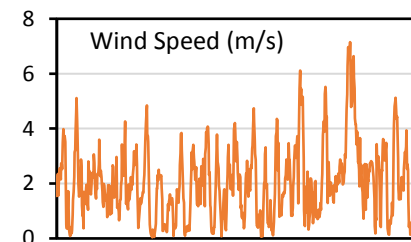
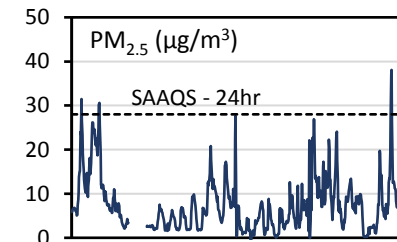
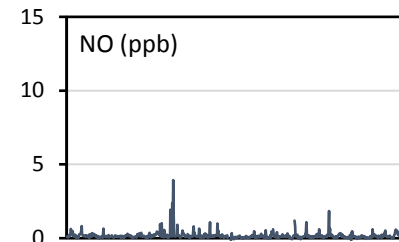
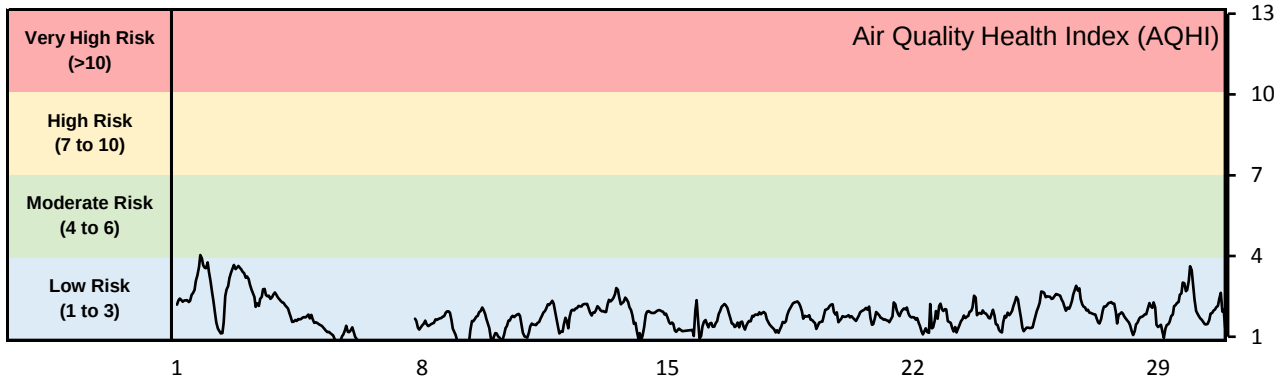
Exceedance Summary (1- Hour Average - Exceedances Highlighted)						
Exceedance Time	SO ₂ ppb	PM _{2.5} µg/m ³	H ₂ S ppb	Temp °C	WD deg	WS m/s
Sep-01 04:00	0.2	11.5	13.6	9.9	249.0	1.1
Sep-01 05:00	0.2	11.2	14.9	9.9	244.0	1.2
Sep-01 07:00	0.8	11.4	15.2	9.7	265.7	1.0
Sep-02 04:00	0.8	17.4	16.0	13.0	2.3	1.2
Sep-02 06:00	0.6	17.2	19.2	11.4	5.2	1.3
Sep-02 07:00	0.7	20.4	23.9	11.9	9.8	1.0
Sep-02 08:00	0.9	18.9	17.4	15.4	19.8	1.1
Sep-29 03:00	0.2	9.2	16.0	-1.4	10.6	0.2
Sep-29 05:00	0.2	9.8	12.2	-0.8	204.0	0.1

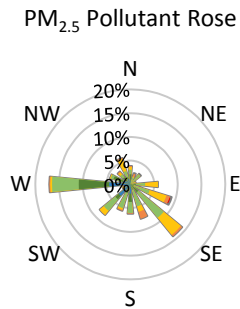
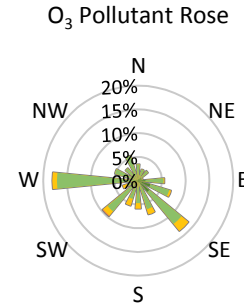
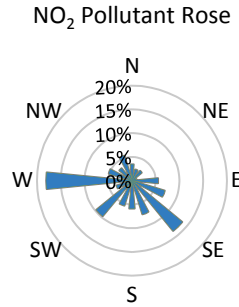
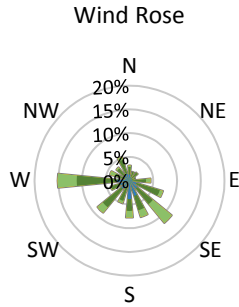
Exceedance Summary (24- Hour Average - Exceedances Highlighted)						
Exceedance Time	SO ₂ ppb	PM _{2.5} µg/m ³	H ₂ S ppb	Temp °C	WD deg	WS m/s
Sep-01	1.2	16.5	3.9	19.9	220.4	1.6
Sep-02	0.5	21.6	4.8	22.7	99.2	2.5

SESAA Wawota Station - September 2015 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	0.2	95%	0.7	Sep-10	-	-	3.9	Sep-10 13:00	-	-
NO ₂	ppb	0.7	95%	1.5	Sep-30	106	0	6.3	Sep-18 20:00	159	0
NO _x	ppb	0.9	95%	1.7	Sep-30	-	-	6.9	Sep-18 20:00	-	-
O ₃	ppb	27.4	95%	43.7	Sep-01	-	-	62.2	Sep-01 16:00	82	0
PM _{2.5}	µg/m ³	7.6	95%	19.1	Sep-03	28	0	38.1	Sep-29 23:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





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

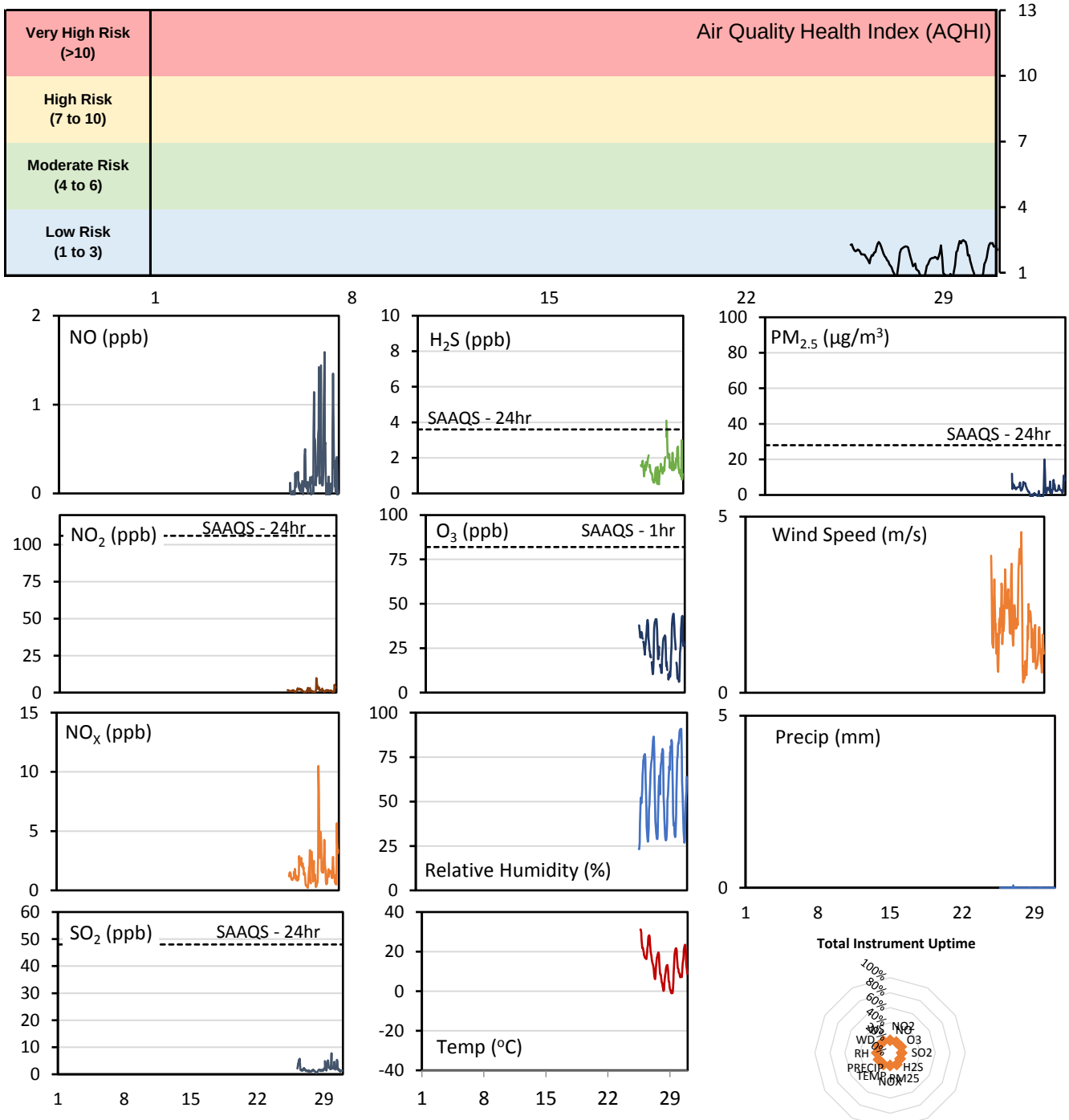
Monthly Update

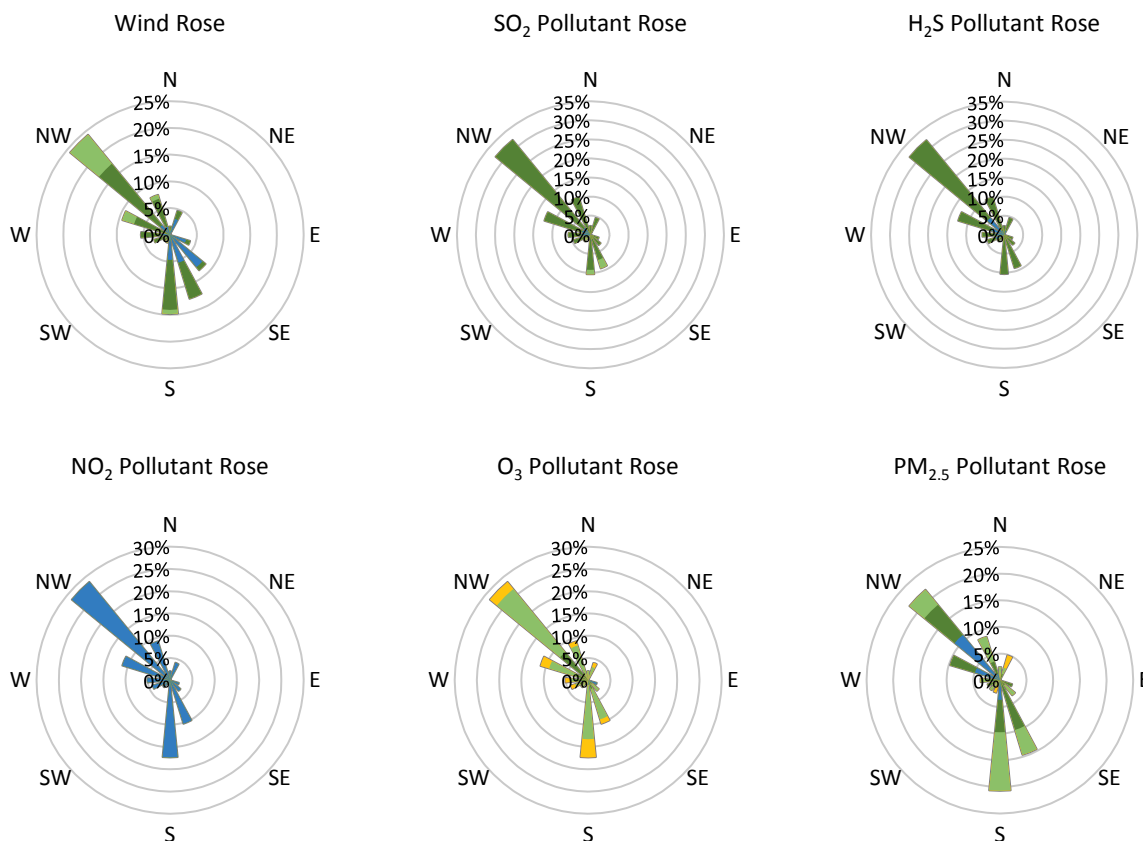
- Achieved >99% of scheduled uptime
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Calibrations were performed September 15th.
- All compliance parameters are above 90% data validity; no operational issues

SESAA Weyburn Station - September 2015 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	0.2	16.7%	0.4	Sep-28	-	-	1.6	Sep-29 11:00	-	-
NO ₂	ppb	1.5	16.8%	1.9	Sep-28	106	0	9.8	Sep-28 20:00	159	0
NO _x	ppb	1.7	16.8%	2.3	Sep-28	-	-	10.5	Sep-28 20:00	-	-
SO ₂	ppb	2.1	15.3%	3.0	Sep-29	48	0	7.8	Sep-29 19:00	172	0
H ₂ S	ppb	1.5	15.3%	2.1	Sep-29	3.6	0	4.1	Sep-29 02:00	11	0
O ₃	ppb	25.8	16.8%	34.0	Sep-25	-	-	44.4	Sep-29 16:00	82	0
PM _{2.5}	µg/m ³	3.2	17.8%	5.7	Sep-25	28	0	20.0	Sep-28 22:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
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
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Issues with the air conditioning unit resulted in significant downtime