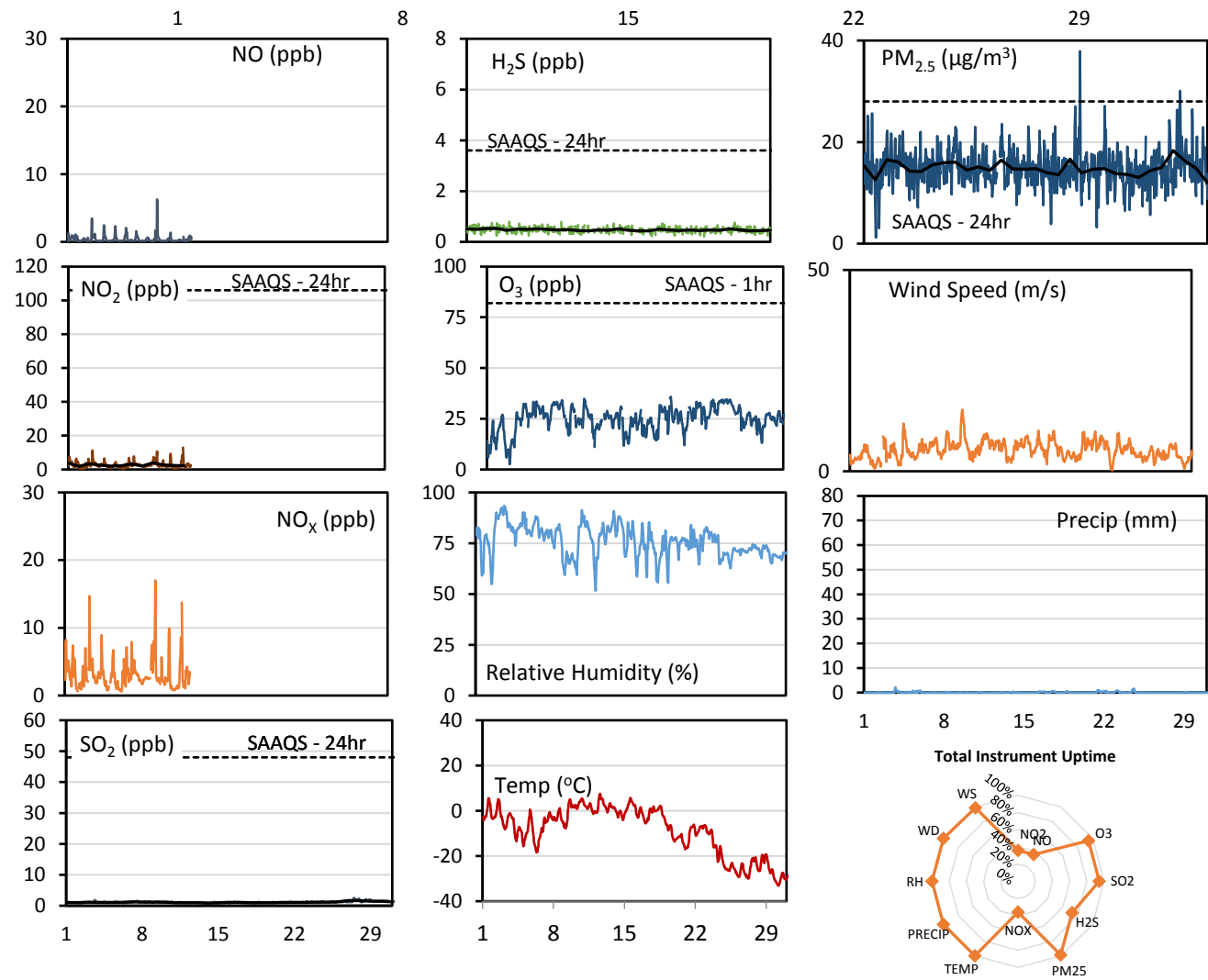
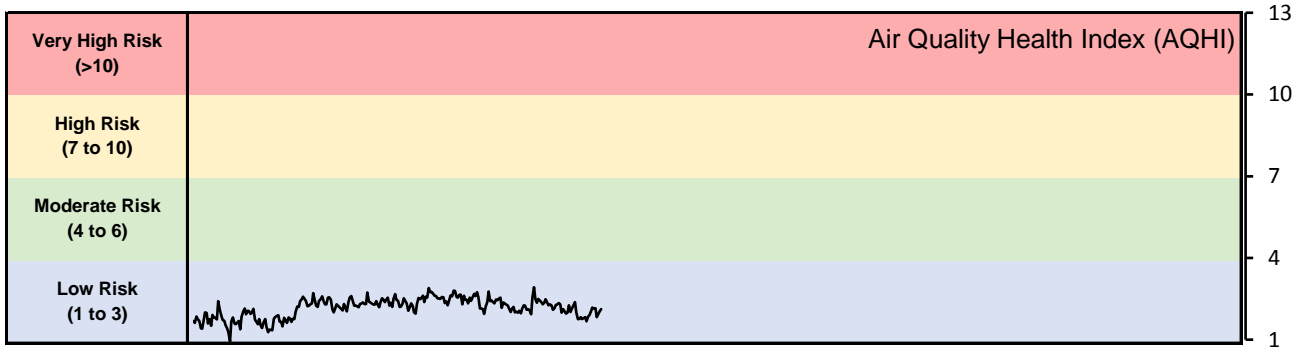


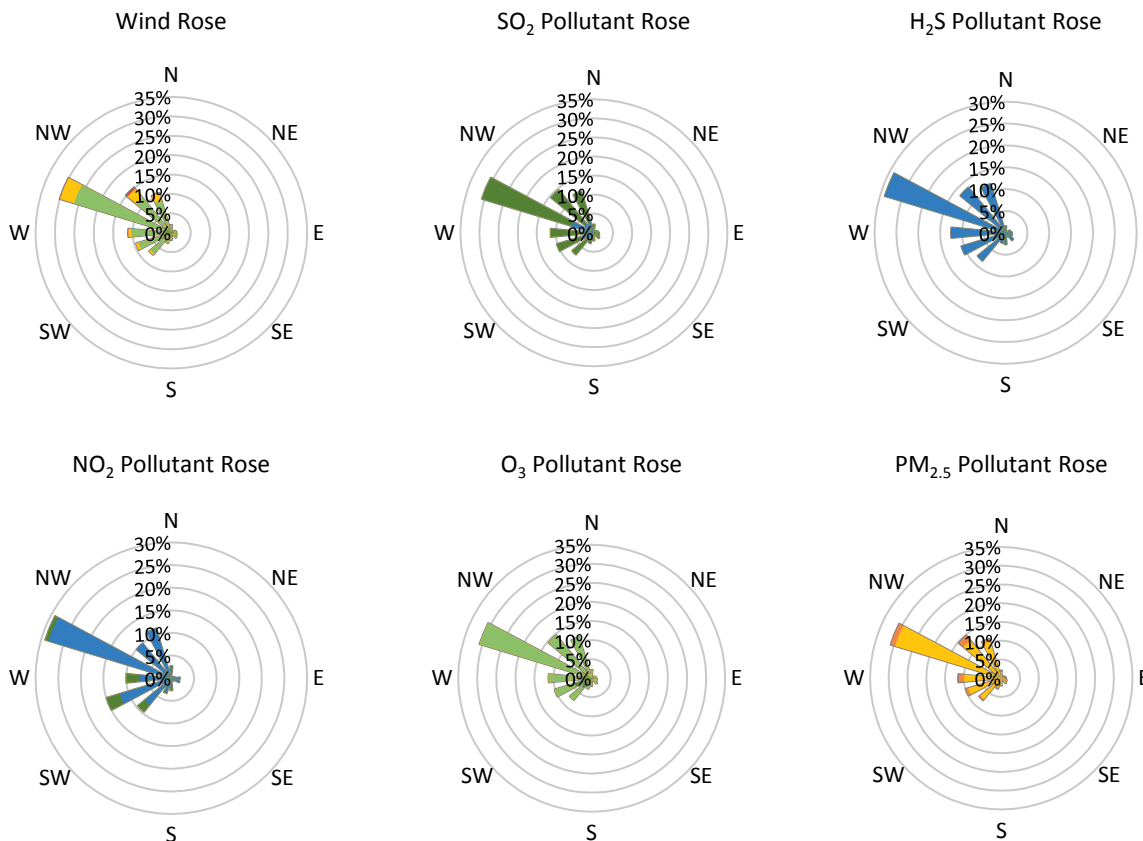
GPAZ Pense Station - December 2017 Summary Report

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	36%	0.7	Dec-09	-	-	6.3	Dec-09 10:00	-	-
NO ₂	ppb	2.7	36%	3.9	Dec-09	106	0	13.0	Dec-11 21:00	159	0
NO _x	ppb	3.1	36%	4.6	Dec-09	-	-	17.0	Dec-09 10:00	-	-
SO ₂	ppb	1.2	94%	1.7	Dec-27	48	0	2.5	Dec-27 12:00	172	0
H ₂ S	ppb	0.5	73%	0.5	Dec-03	3.6	0	0.8	Dec-05 05:00	11	0
O ₃	ppb	24.9	95%	33.1	Dec-25	-	-	35.8	Dec-19 15:00	82	0
PM _{2.5}	µg/m ³	14.8	99%	18.3	Dec-28	28	0	37.9	Dec-19 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



* colored lines indicate 1-hr concentration data for all parameters; solid black lines indicate 24-hr concentrations for PM_{2.5}, NO₂, SO₂, and H₂S



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
		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	
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	

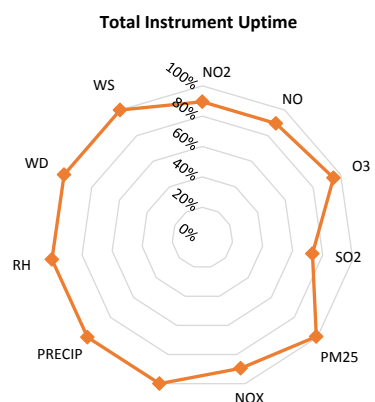
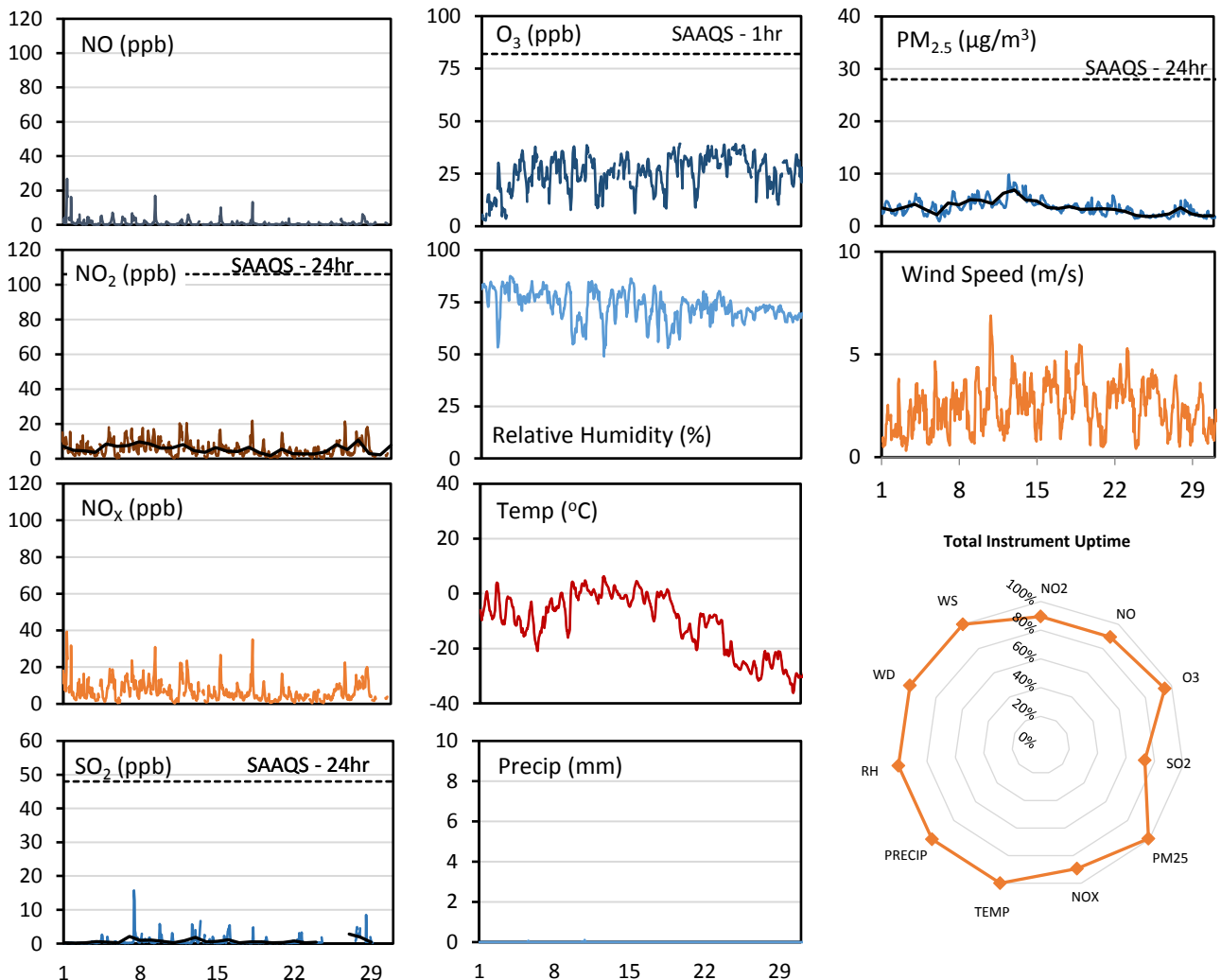
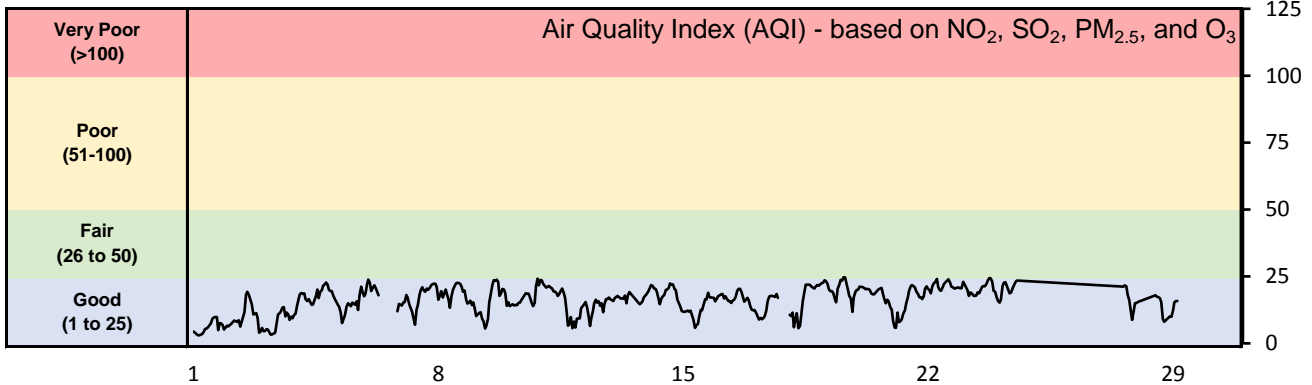
Monthly Update

- Achieved >98.7% of scheduled uptime for all parameters except NO_x (37.4%) and H₂S (75.9%)
- Achieved 94%, 95% and 73% of total uptime for SO₂, O₃, and H₂S respectively
- Downtime for NO_x and H₂S due to operational issues
- Downtime of 4% due to routine daily internal zeroes and spans

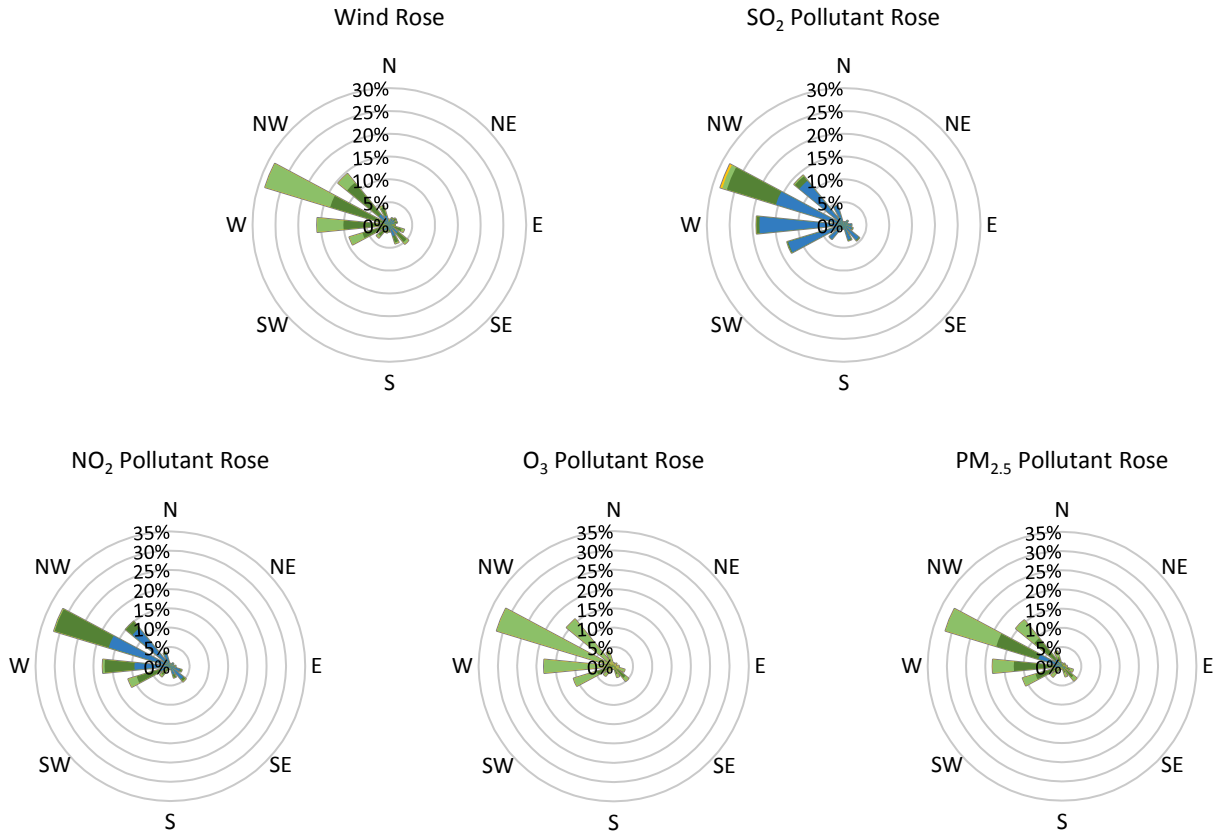
GPAZ East Regina Station - December 2017 Summary Report

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	1.1	90%	5.4	Dec-01	-	-	26.8	Dec-01 08:00	-	-
NO ₂	ppb	5.6	90%	10.8	Dec-28	106	0	21.8	Dec-18 08:00	159	0
NO _x	ppb	6.7	90%	12.8	Dec-28	-	-	39.3	Dec-01 08:00	-	-
SO ₂	ppb	0.7	73%	2.8	Dec-27	48	0	15.7	Dec-07 10:00	172	0
O ₃	ppb	25.5	95%	34.8	Dec-25	-	-	39.3	Dec-19 15:00	82	0
PM _{2.5}	µg/m ³	3.5	99%	6.9	Dec-13	28	0	9.8	Dec-12 12:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



* colored lines indicate 1-hr concentration data for all parameters; solid black lines indicate 24-hr concentrations for PM_{2.5}, NO₂, and SO₂



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
		$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$
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	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$
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}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$

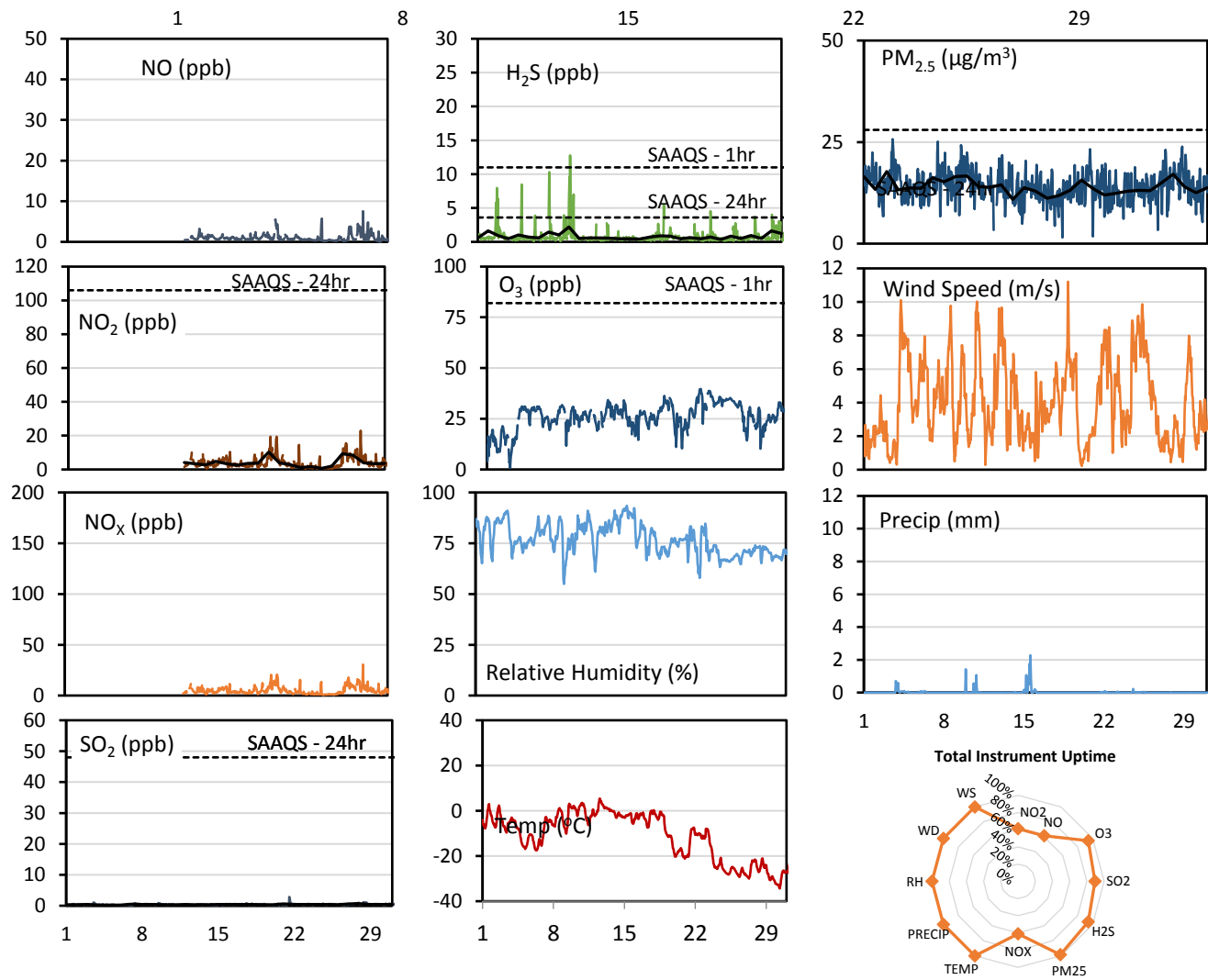
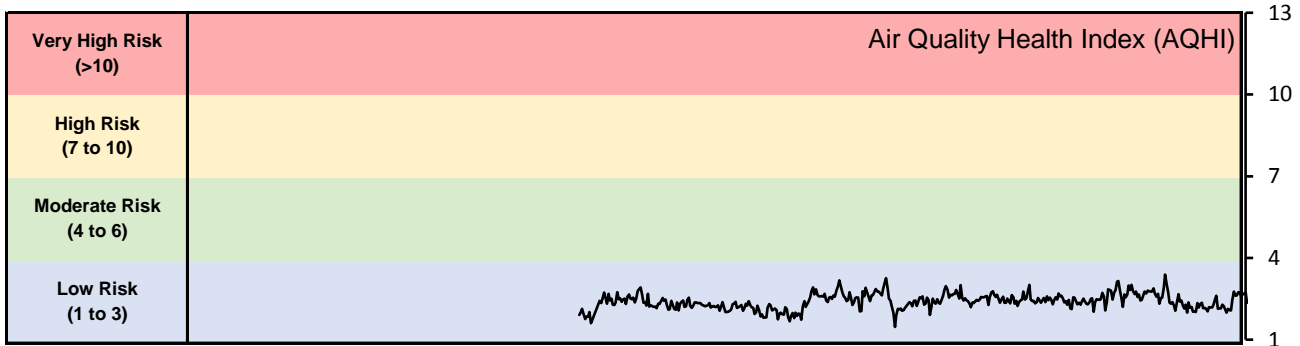
Monthly Update

- Achieved >93.6% of scheduled uptime for all parameters except SO₂ (76.4%)
- Achieved >89.5% of total uptime for all parameters except SO₂ (73.1%)
- Downtime of 4% results from routine daily internal zeroes and spans
- Downtime a result of operational issues

GPAZ Yorkton Station - December 2017 Summary Report

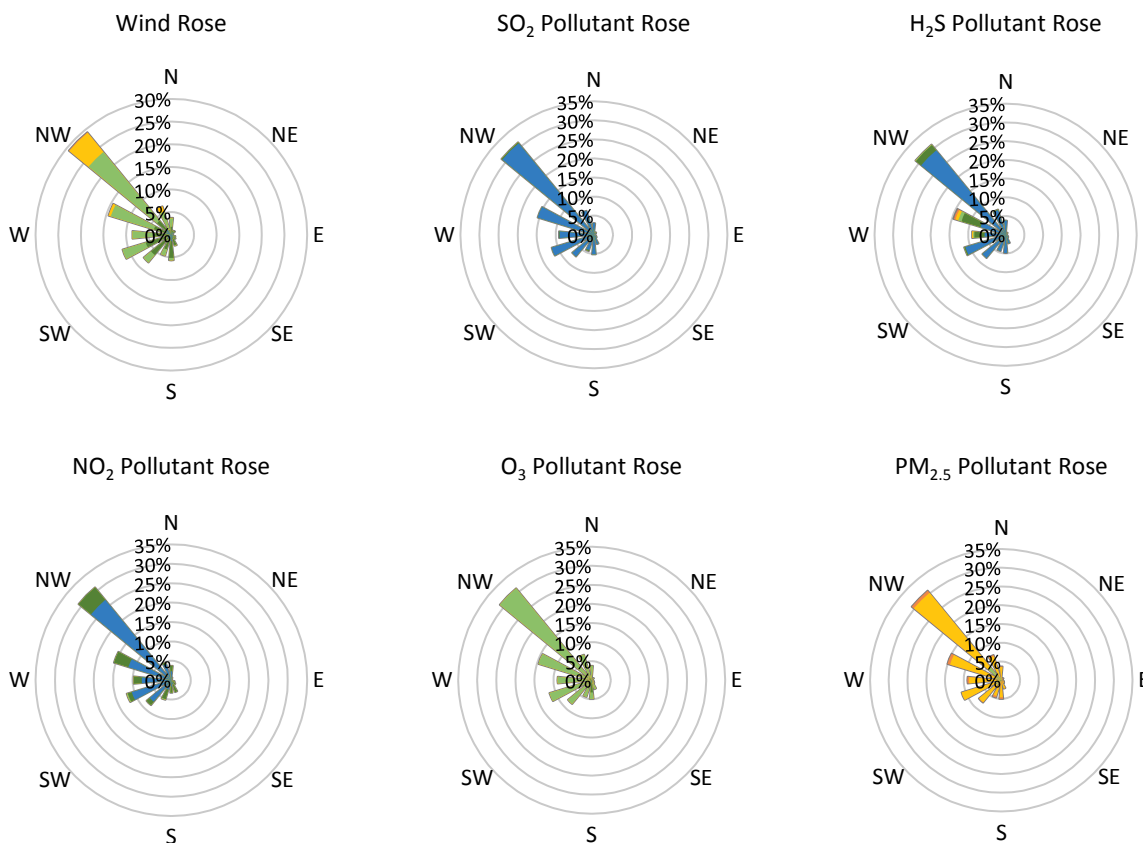
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	1.0	61%	2.1	Dec-28	-	-	7.6	Dec-28 17:00	-	-
NO ₂	ppb	4.0	61%	10.3	Dec-20	106	0	22.9	Dec-28 17:00	159	0
NO _x	ppb	5.0	61%	12.1	Dec-20	-	-	30.5	Dec-28 17:00	-	-
SO ₂	ppb	0.4	89%	0.7	Dec-28	48	0	2.8	Dec-21 13:00	172	0
H ₂ S	ppb	0.8	94%	2.2	Dec-10	3.6	0	12.8	Dec-10 03:00	11	1
O ₃	ppb	26.0	94%	35.0	Dec-23	-	-	39.7	Dec-22 16:00	82	0
PM _{2.5}	µg/m ³	14.0	99%	17.7	Dec-03	28	0	25.7	Dec-03 12:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



* colored lines indicate 1-hr concentration data for all parameters; solid black lines indicate 24-hr concentrations for PM_{2.5}, NO₂, SO₂, and H₂S

GPAZ Yorkton 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	
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 >93.4% of scheduled uptime for all parameters except for NO_x
- Achieved 94% of total uptime for H₂S and O₃, and 89% for SO₂
- Downtime of 4% due to routine daily internal zeroes and spans
- NO_x invalidated 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	µg/m ³	°C	deg	m/s
Dec-10 03:00	#N/A	0.0	0.0	0.5	24.6	0.0	12.8	19.4	1.5	294.8	2.4