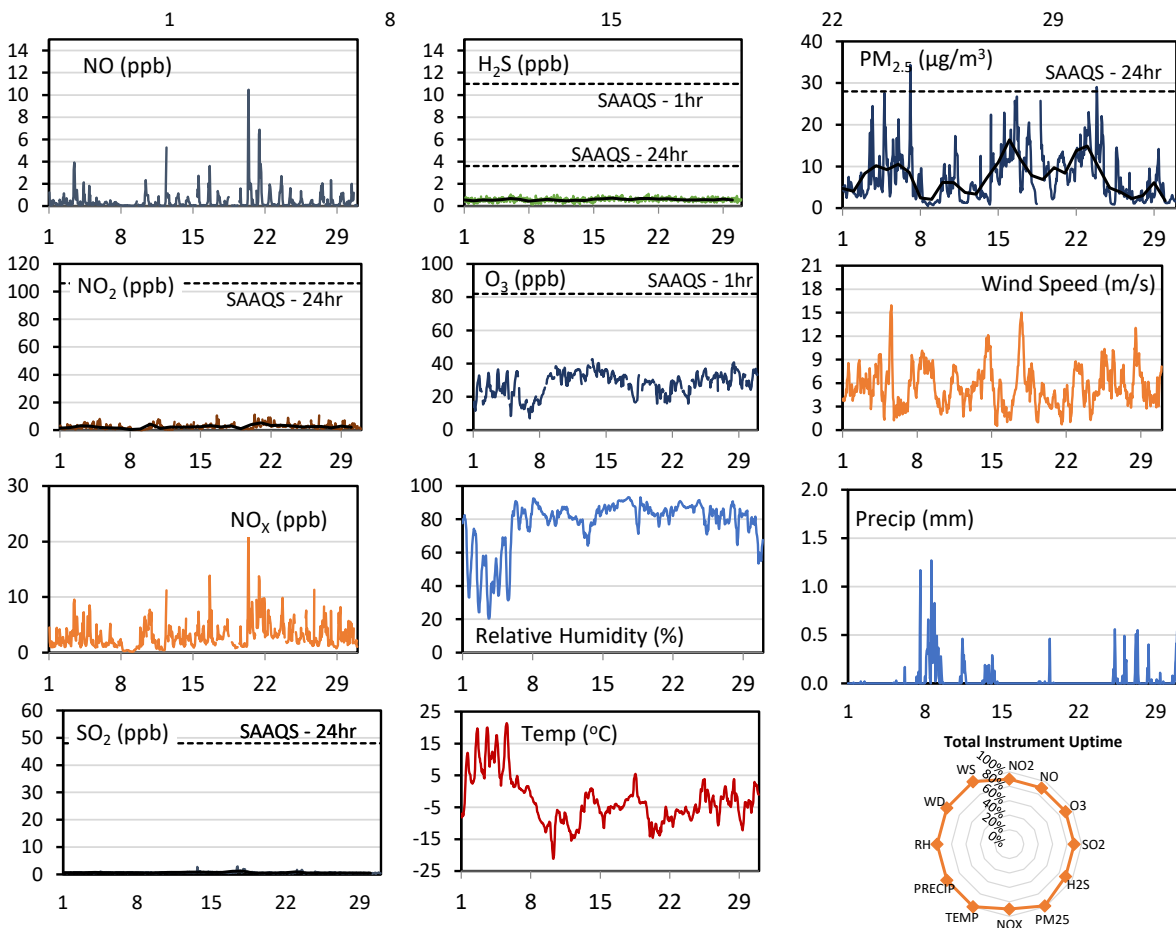
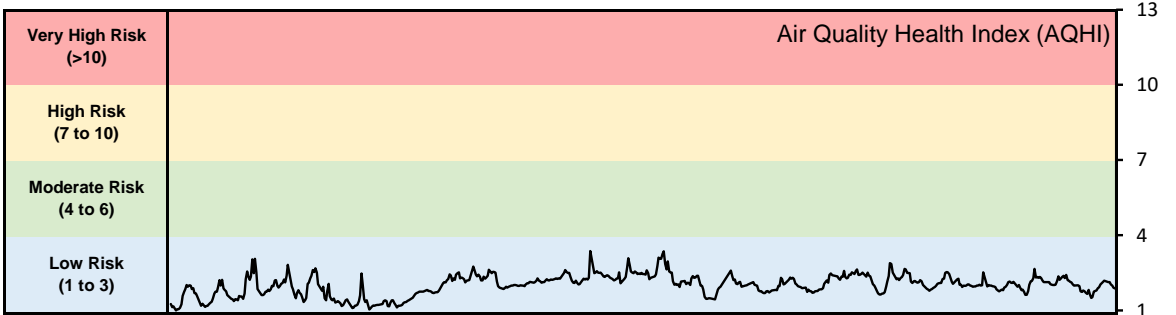


## GPAZ Pense Station - November 2020 Summary Report

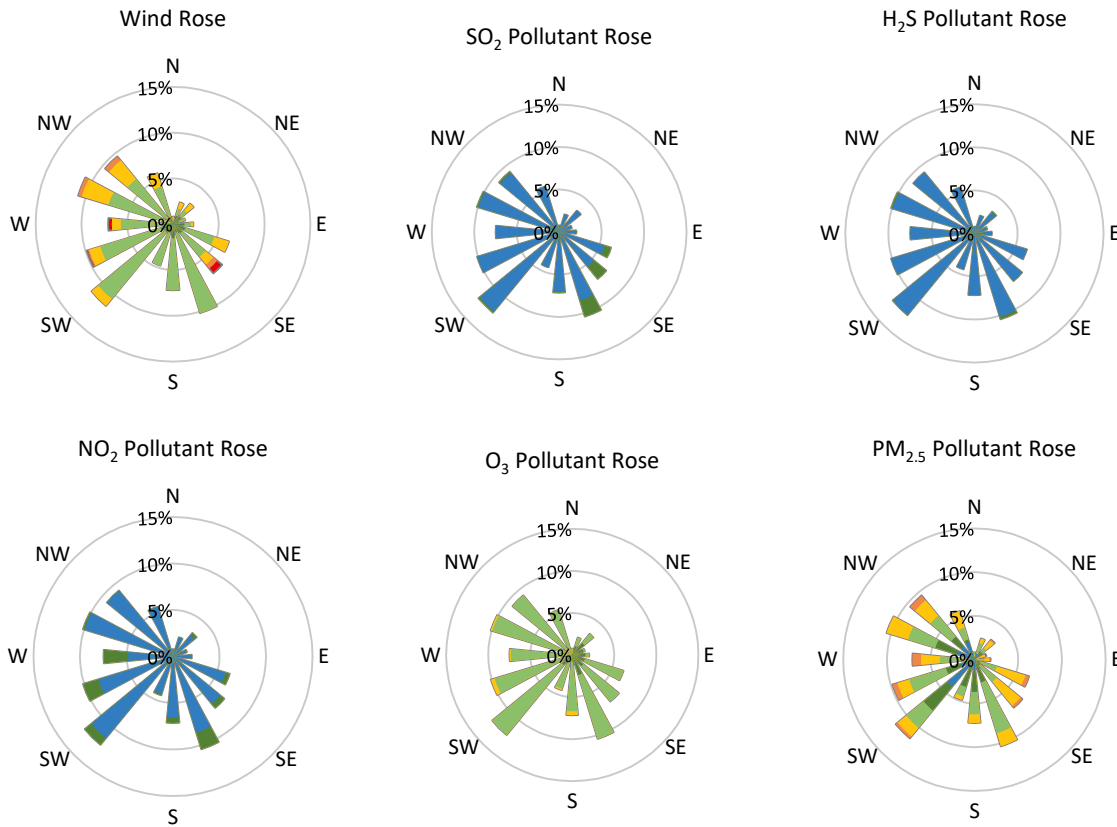
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	90%	1.6	Nov-20	-	-	10.5	Nov-20 10:00	-	-
NO <sub>2</sub>	ppb	2.4	90%	5.2	Nov-21	106	0	11.2	Nov-20 09:00	159	0
NO <sub>x</sub>	ppb	3.0	90%	7.1	Nov-21	-	-	21.9	Nov-20 09:00	-	-
SO <sub>2</sub>	ppb	0.7	90%	1.2	Nov-18	48	0	2.9	Nov-17 11:00	172	0
H <sub>2</sub> S	ppb	0.6	90%	0.7	Nov-17	3.6	0	1.1	Nov-20 22:00	11	0
O <sub>3</sub>	ppb	28.1	90%	37.8	Nov-13	-	-	42.8	Nov-13 13:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	7.3	99%	16.4	Nov-16	28	0	34.4	Nov-07 02:00	-	-

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<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, and H<sub>2</sub>S

**GPAZ Pense Station - November 2020 Summary Report**



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	13.6 ≤ WS < 17.2	WS ≥ 17.2
SO <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	172 ≤ C < 212	C ≥ 212
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	212 ≤ C < 212	C ≥ 212
H <sub>2</sub> S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	10.8 ≤ C < 10.8	C ≥ 10.8
O <sub>3</sub>	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	82 ≤ C < 82	C ≥ 82
PM <sub>2.5</sub>	μg/m <sup>3</sup>	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	30 ≤ C < 30	C ≥ 30

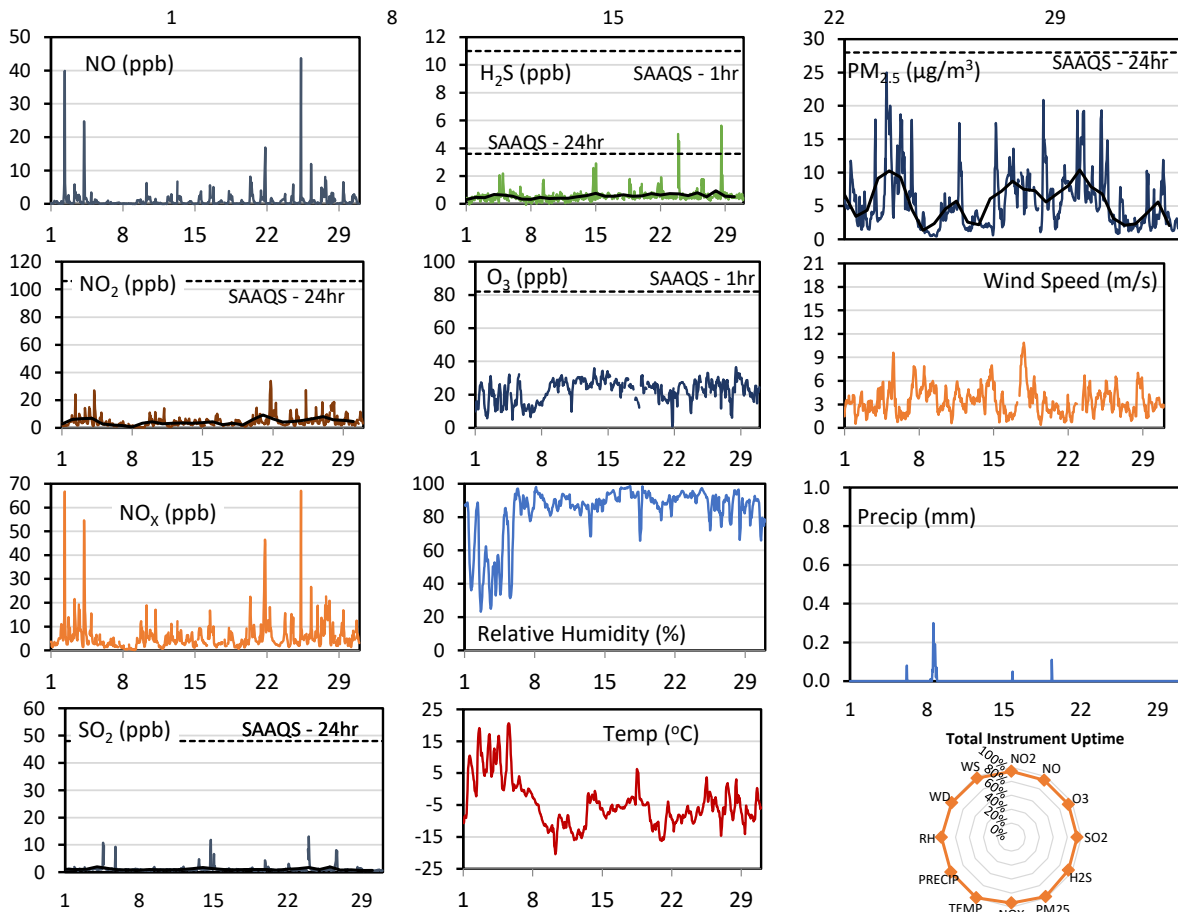
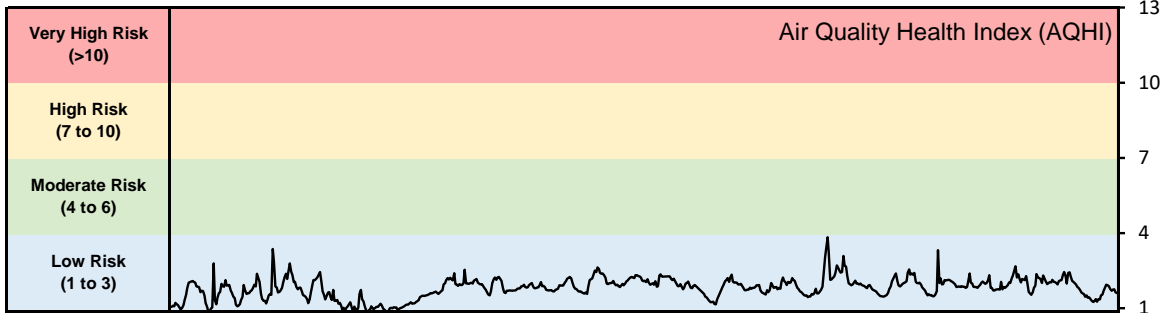
**Monthly Update**

- Achieved > 89% of scheduled uptime for all parameters
- Downtime of <11% due to routine daily internal zeroes and spans, and quarterly calibration

## GPAZ Regina Station - November 2020 Summary Report

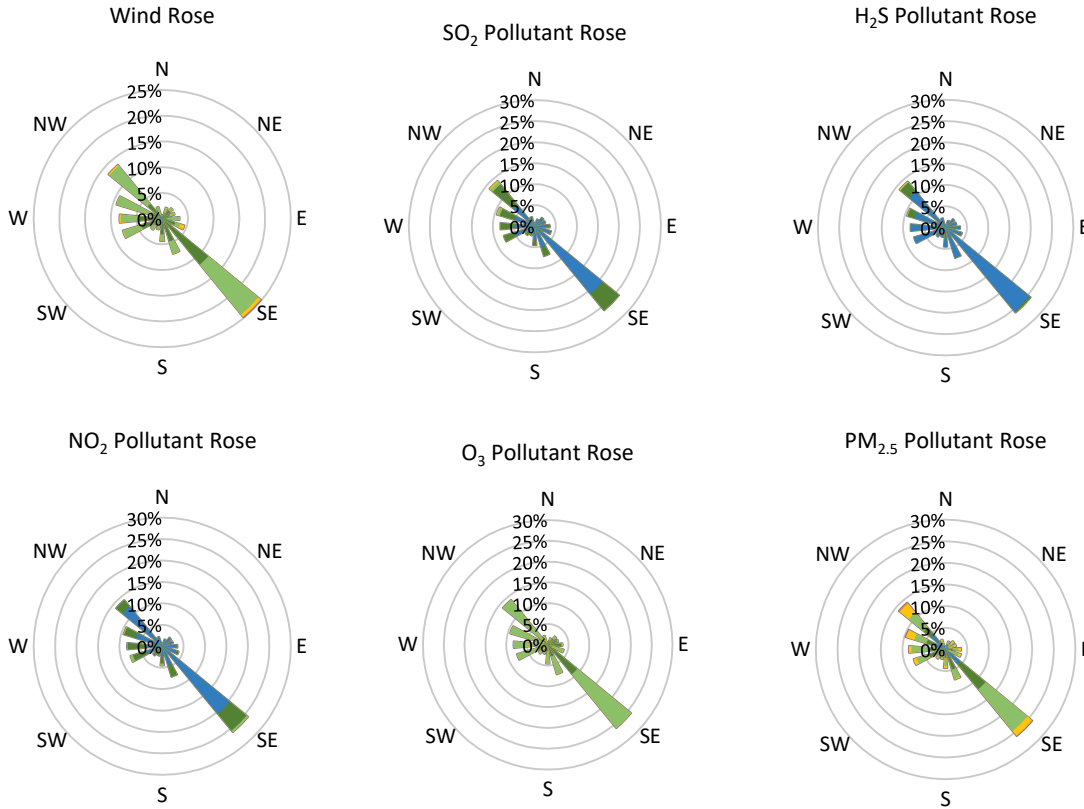
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	1.0	94%	2.9	Nov-02	-	-	43.7	Nov-25 07:00	-	-
NO <sub>2</sub>	ppb	4.4	94%	9.3	Nov-21	106	0	33.9	Nov-21 19:00	159	0
NO <sub>x</sub>	ppb	5.5	94%	11.6	Nov-21	-	-	67.1	Nov-25 07:00	-	-
SO <sub>2</sub>	ppb	1.1	94%	2.0	Nov-04	48	0	13.1	Nov-24 00:00	172	0
H <sub>2</sub> S	ppb	0.6	94%	0.9	Nov-28	3.6	0	5.6	Nov-28 14:00	11	0
O <sub>3</sub>	ppb	22.5	94%	29.2	Nov-14	-	-	36.6	Nov-28 12:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	5.6	98%	10.4	Nov-22	28	0	25.0	Nov-04 18:00	-	-

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<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, and H<sub>2</sub>S

**GPAZ Regina Station - November 2020 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 <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172	
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
H <sub>2</sub> S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8	
O <sub>3</sub>	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
PM <sub>2.5</sub>	μg/m <sup>3</sup>	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

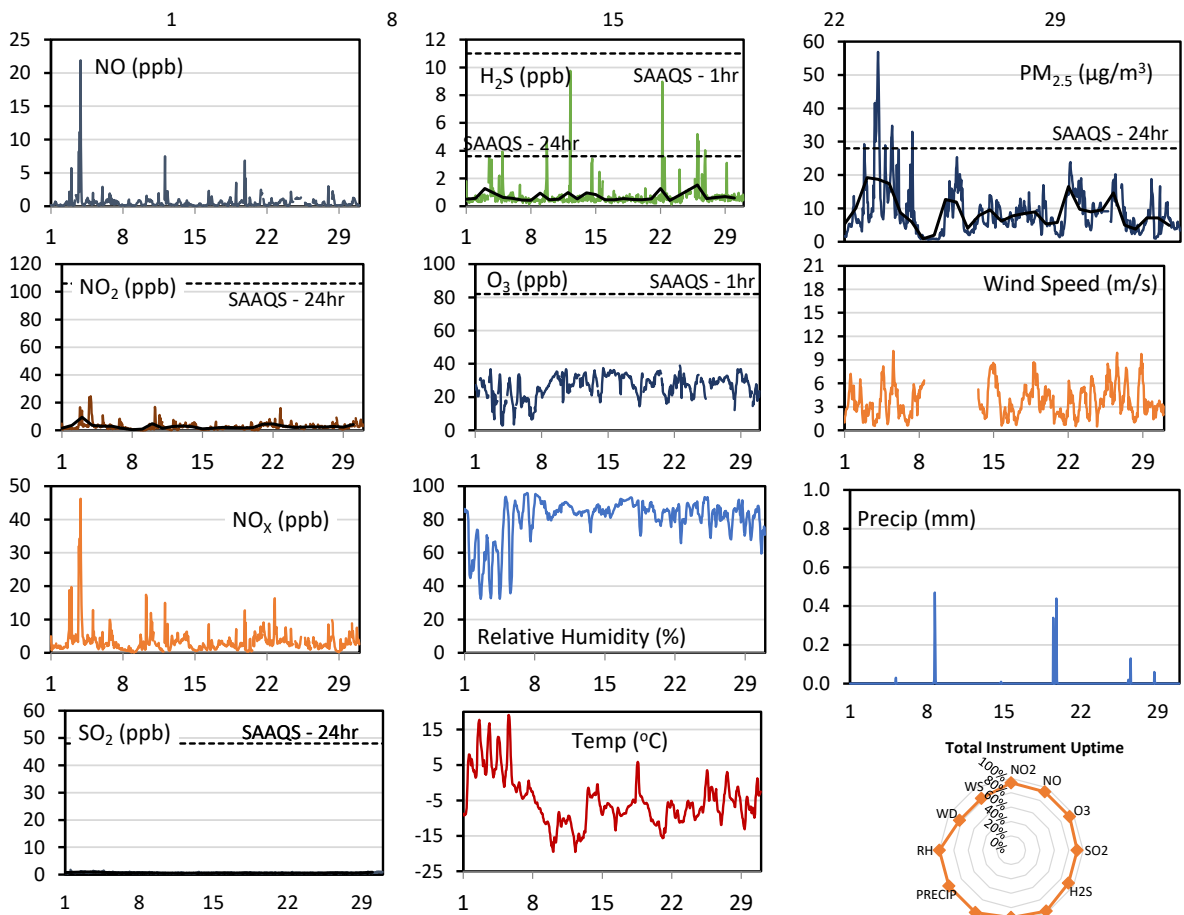
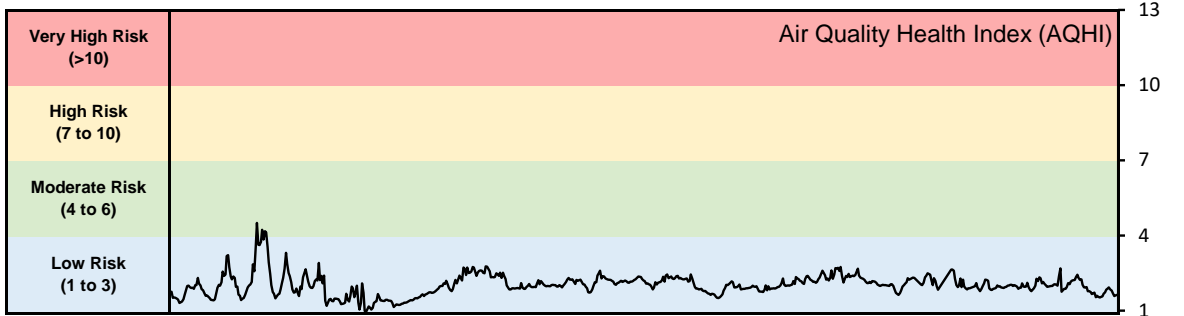
**Monthly Update**

- Achieved > 94% of scheduled uptime for all parameters
- Downtime of <6% due to routine daily internal zeroes and spans, and quarterly calibration

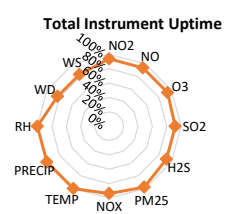
## GPAZ Yorkton Station - November 2020 Summary Report

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	94%	3.4	Nov-03	-	-	21.9	Nov-03 21:00	-	-
NO <sub>2</sub>	ppb	2.8	94%	9.4	Nov-03	106	0	24.6	Nov-03 21:00	159	0
NO <sub>x</sub>	ppb	3.3	94%	12.8	Nov-03	-	-	46.2	Nov-03 21:00	-	-
SO <sub>2</sub>	ppb	0.7	92%	1.0	Nov-04	48	0	1.8	Nov-01 12:00	172	0
H <sub>2</sub> S	ppb	0.7	92%	1.5	Nov-26	3.6	0	9.8	Nov-12 06:00	11	0
O <sub>3</sub>	ppb	26.6	94%	34.6	Nov-15	-	-	39.0	Nov-22 14:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	8.7	98%	19.2	Nov-03	28	0	56.9	Nov-04 00:00	-	-

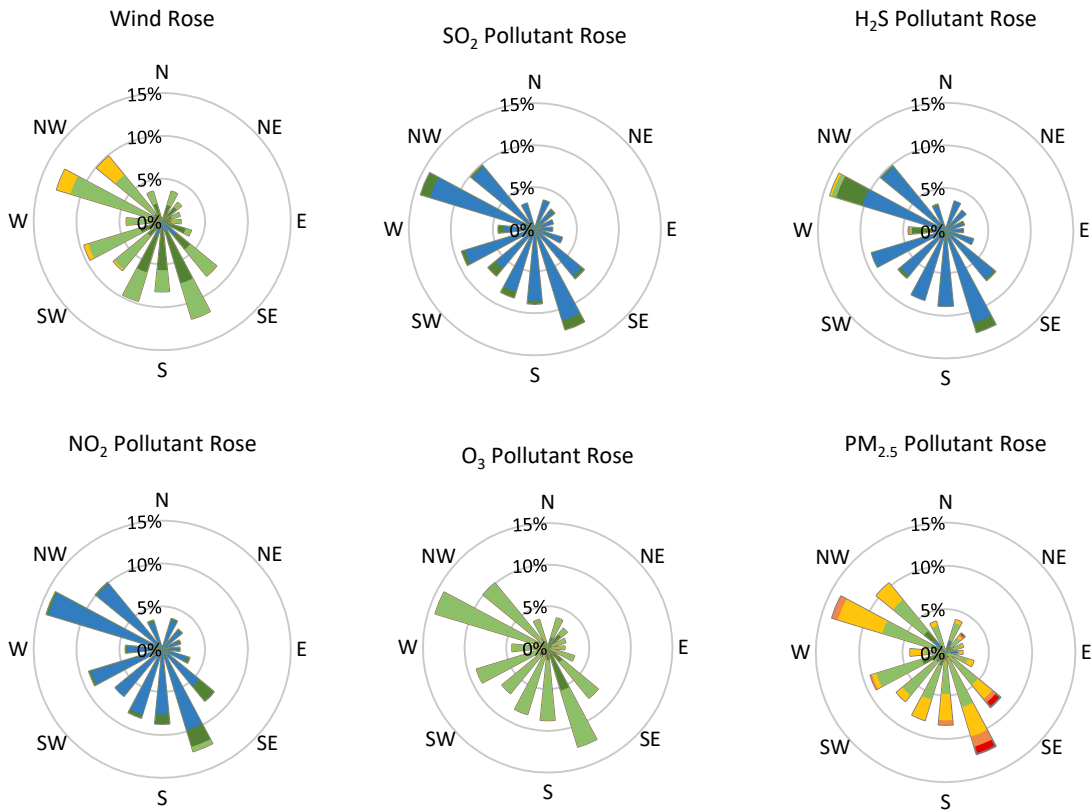
SAAQS: Saskatchewan Ambient Air Quality Standards



\* colored lines indicate 1-hr concentration data for all parameters; solid black lines indicate 24-hr concentrations for PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, and H<sub>2</sub>S



**GPAZ Yorkton Station - November 2020 Summary Report**



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 <sub>2</sub>	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 <sub>2</sub>	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 <sub>2</sub> 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 <sub>3</sub>	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 <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

**Monthly Update**

- Achieved > 92% of scheduled uptime for all parameters except WS and WD which was >83% do to freezing rain on the sensor
- Downtime of <8% due to routine daily internal zeroes and spans, and quarterly calibration