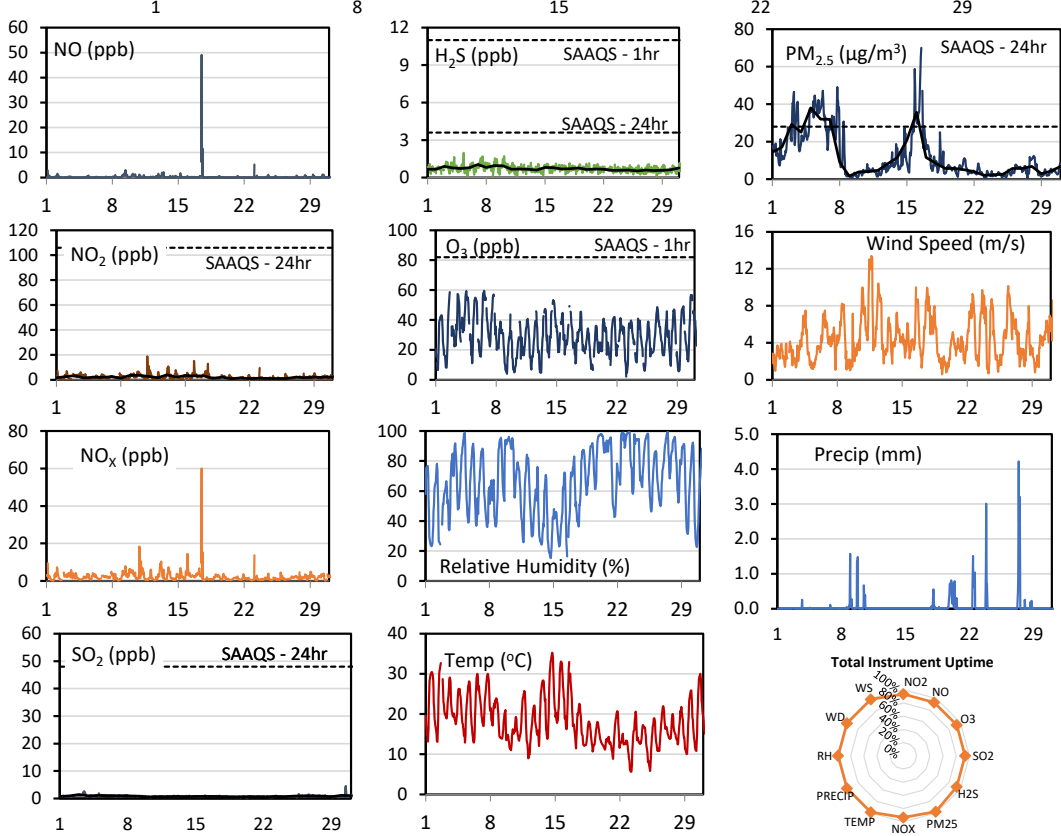
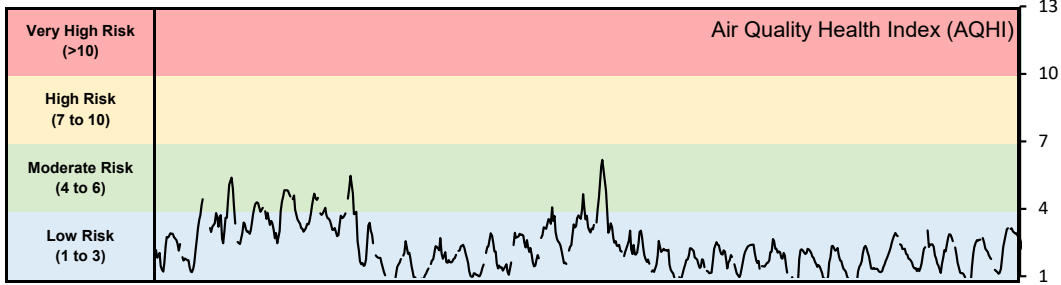


GPAZ Pense Station - August 2021 Summary Report

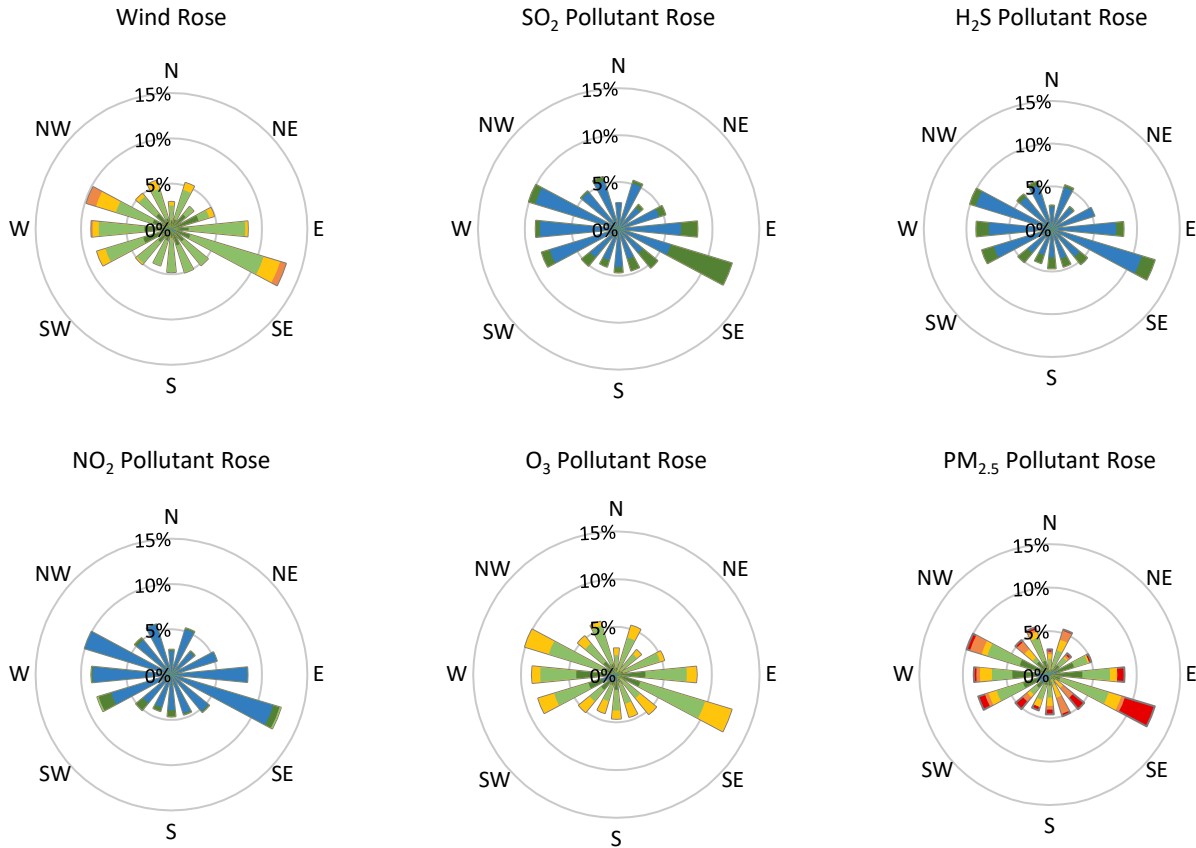
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.3	93%	3.4	Aug-17	-	-	49.1	Aug-17 11:00	-	-
NO ₂	ppb	2.1	93%	4.0	Aug-13	106	0	18.9	Aug-10 21:00	159	0
NO _x	ppb	2.3	93%	6.1	Aug-17	-	-	60.0	Aug-17 11:00	-	-
SO ₂	ppb	0.8	93%	1.4	Aug-03	48	0	4.6	Aug-30 11:00	172	0
H ₂ S	ppb	0.7	93%	1.0	Aug-07	3.6	0	2.0	Aug-05 07:00	11	0
O ₃	ppb	29.4	93%	44.6	Aug-04	-	-	59.6	Aug-06 15:00	82	0
PM _{2.5}	µg/m ³	11.8	98%	38.0	Aug-05	28	5	70.0	Aug-16 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 Pense Station - August 2021 Summary Report



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	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$	
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 at least 93% of scheduled uptime for all parameters
- Downtime of <7% due to routine daily internal zeroes and spans, and quarterly calibration
- Forest fires contributed to elevated particulate levels

GPAZ Pense Station - August 2021 Summary Report

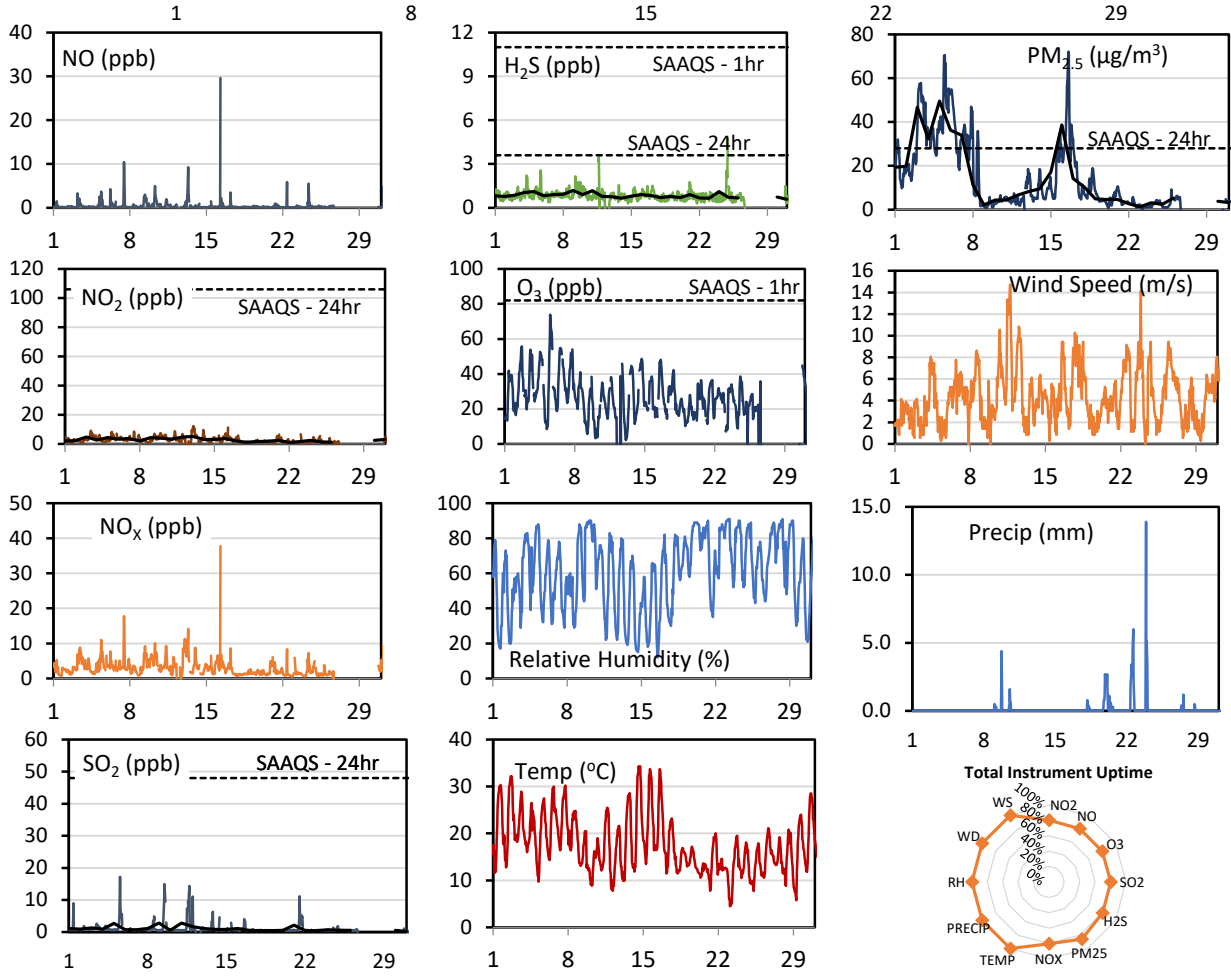
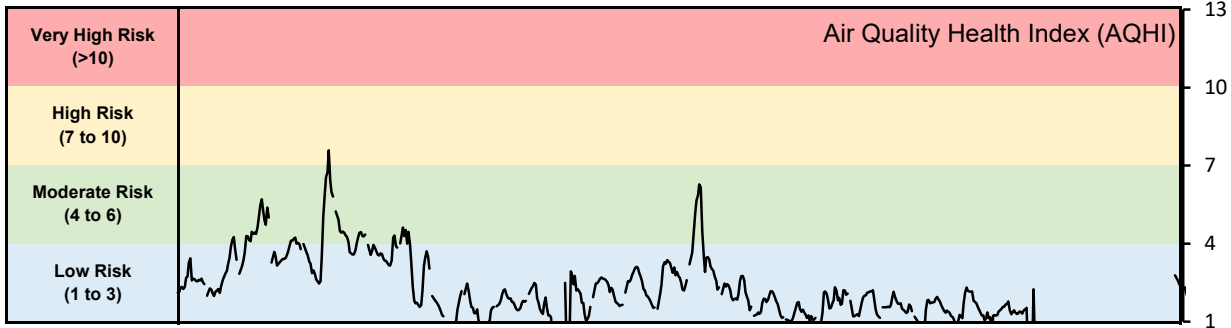
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

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
Aug-03	3.5	3.3	0.2	1.4	36.3	3.2	0.9	29.2	22.5	164.2	2.5
Aug-05	3.9	2.1	0.2	1.1	36.6	2.1	0.7	38.0	21.0	186.0	2.1
Aug-06	3.7	2.0	0.1	1.0	39.2	2.0	0.8	32.0	21.8	119.0	5.2
Aug-07	3.7	2.6	0.2	1.0	38.0	2.5	1.0	31.9	23.5	173.0	4.1
Aug-16	3.6	3.2	0.2	0.8	31.8	3.1	0.8	35.6	22.5	220.7	5.4

GPAZ Regina Station - August 2021 Summary Report

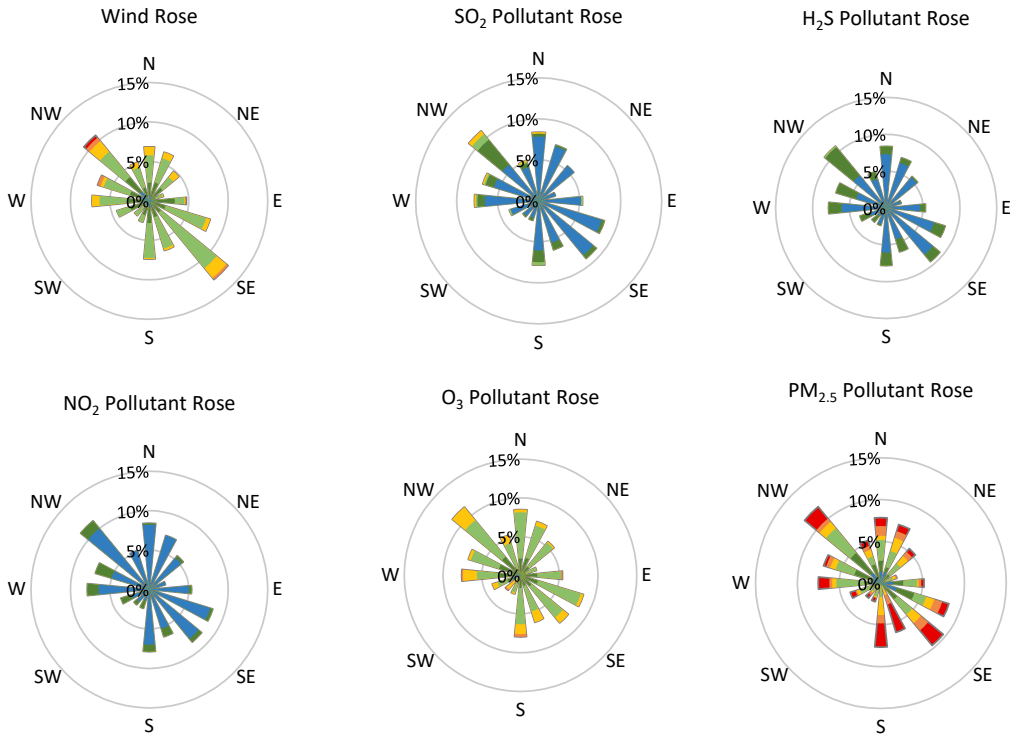
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.5	80%	1.6	Aug-16	-	-	29.6	Aug-16 07:00	-	-
NO ₂	ppb	2.8	80%	5.1	Aug-13	106	0	12.3	Aug-13 01:00	159	0
NO _x	ppb	3.0	80%	5.7	Aug-13	-	-	37.7	Aug-16 07:00	-	-
SO ₂	ppb	1.1	80%	2.8	Aug-11	48	0	17.2	Aug-05 13:00	172	0
H ₂ S	ppb	0.9	80%	1.2	Aug-09	3.6	0	4.7	Aug-24 22:00	11	0
O ₃	ppb	27.3	80%	41.3	Aug-30	-	-	73.8	Aug-05 13:00	82	0
PM _{2.5}	µg/m ³	15.0	86%	49.6	Aug-05	28	6	72.1	Aug-16 14:00	-	-

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 Regina Station - August 2021 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	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 > 80% of scheduled uptime for all parameters except weather (0%)
- Downtime of <20% due to routine daily internal zeroes and spans, HVAC failure caused instruments to overheat causing invalid data
- Weather data was taken from the Regina RCS station operated by ECCC - MSC while the sensor was being calibrated
- Forest fires contributed to elevated particulate levels

GPAZ Regina Station - August 2021 Summary Report

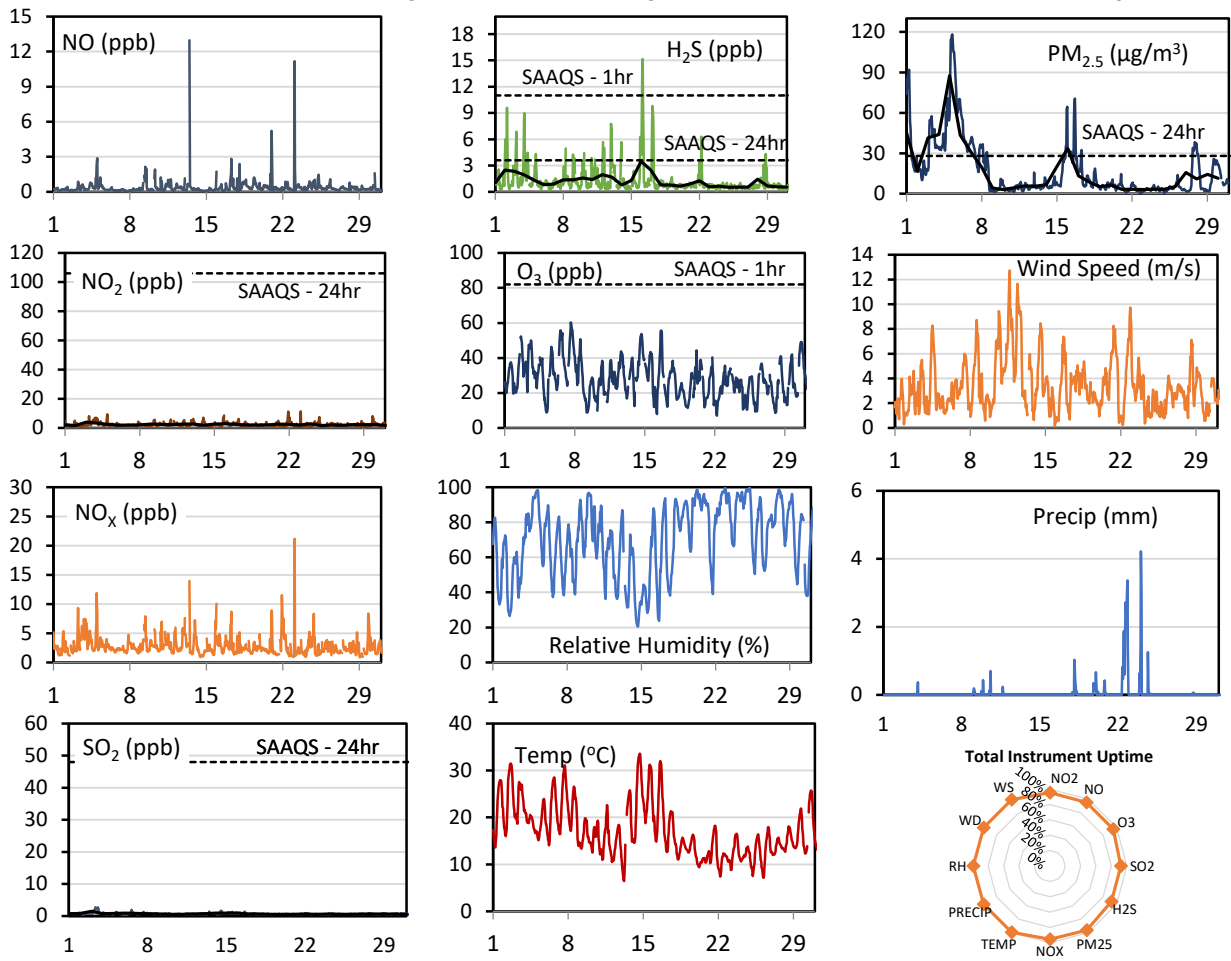
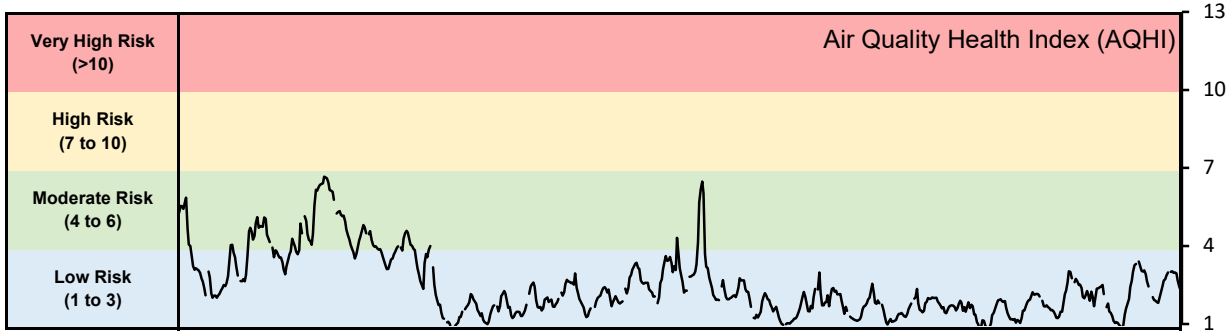
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

Exceedance Time	AQHI -	NO ₂ ppb	NO ppb	SO ₂ ppb	O ₃ ppb	NO _x ppb	H ₂ S ppb	PM _{2.5} µg/m ³	Temp °C	WD deg	WS m/s
Aug-03	4.4	4.8	0.6	1.3	34.5	4.9	0.9	46.7	22.0	175.8	2.3
Aug-04	3.7	2.6	0.2	0.9	37.8	2.5	1.0	32.2	20.4	227.1	5.3
Aug-05	4.5	4.3	0.8	2.8	35.0	4.6	1.1	49.6	19.5	189.2	1.6
Aug-06	4.0	3.3	0.6	0.7	38.0	3.5	0.8	36.3	22.0	147.5	5.0
Aug-07	3.8	3.8	1.0	0.8	36.0	4.4	0.9	34.0	23.2	179.2	4.3
Aug-16	3.7	3.8	1.6	1.1	29.6	4.9	0.9	38.7	22.7	240.4	5.2

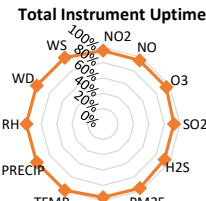
GPAZ Yorkton Station - August 2021 Summary Report

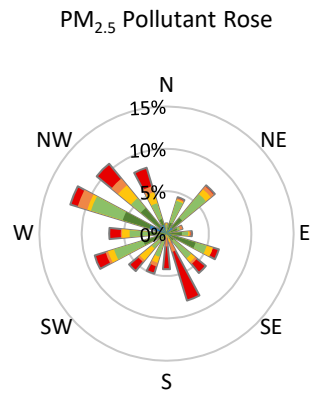
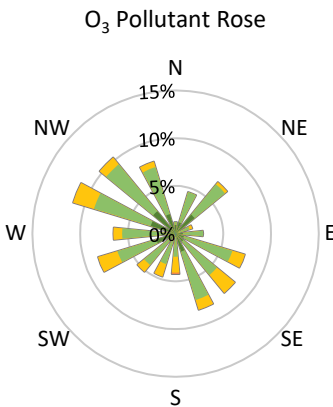
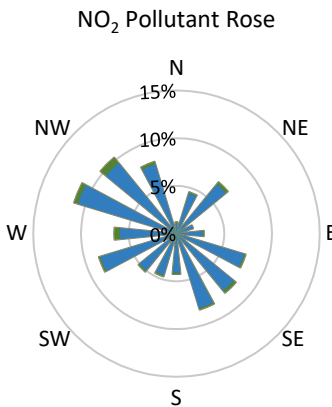
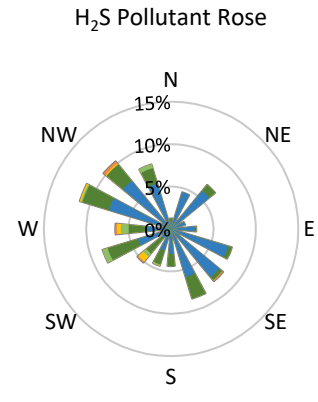
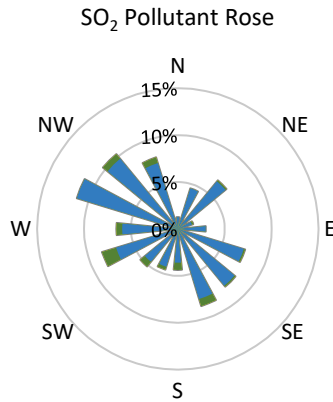
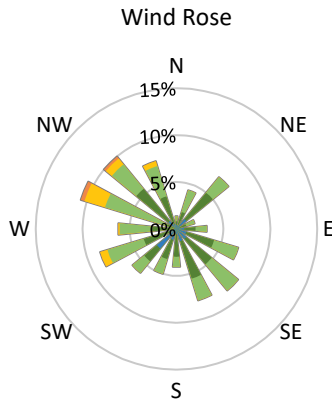
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	95%	1.0	Aug-13	-	-	13.0	Aug-13 11:00	-	-
NO ₂	ppb	2.3	95%	4.0	Aug-03	106	0	11.3	Aug-23 02:00	159	0
NO _x	ppb	2.8	95%	4.6	Aug-03	-	-	21.2	Aug-23 02:00	-	-
SO ₂	ppb	0.7	92%	1.5	Aug-03	48	0	2.7	Aug-03 09:00	172	0
H ₂ S	ppb	1.2	92%	3.5	Aug-16	3.6	0	15.2	Aug-16 04:00	11	3
O ₃	ppb	28.5	95%	42.6	Aug-07	-	-	60.3	Aug-07 15:00	82	0
PM _{2.5}	µg/m ³	17.4	96%	87.5	Aug-05	28	7	118.1	Aug-05 06:00	-	-

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 at least 95% of scheduled uptime for all parameters
- Downtime of <5% due to routine daily internal zeroes and spans
- Forest fires contributed to elevated particulate levels

GPAZ Yorkton Station - August 2021 Summary Report

Exceedance Summary (1- Hour Average - Exceedances Highlighted)

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
Aug-16 02:00	2.6	3.3	0.2	1.0	15.4	3.5	11.5	33.1	17.1	340.3	0.6
Aug-16 03:00	2.2	2.6	0.2	1.0	11.7	2.8	14.7	29.4	16.0	222.3	0.8
Aug-16 04:00	2.3	3.0	0.2	1.0	12.2	3.2	15.2	29.8	15.0	350.0	0.6

Exceedance Summary (24- Hour Average - Exceedances Highlighted)

Exceedance Summary (24- 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
Aug-01	3.8	2.1	0.2	0.8	28.1	2.5	1.0	45.3	21.7	246.0	1.9
Aug-03	4.3	4.0	0.4	1.5	37.8	4.6	2.3	41.4	23.3	231.0	2.8
Aug-04	4.0	3.3	0.5	0.7	31.0	4.1	1.9	43.9	19.2	263.1	4.0
Aug-05	5.8	2.4	0.5	0.8	26.9	3.1	1.3	87.5	19.0	267.2	1.9
Aug-06	4.2	1.9	0.2	0.9	38.9	2.3	0.8	43.4	21.8	170.7	2.8
Aug-07	3.9	2.0	0.1	0.8	42.6	2.4	0.9	30.9	23.7	173.1	3.9
Aug-16	3.4	2.8	0.3	0.9	30.8	3.0	3.5	33.5	22.6	215.6	3.6