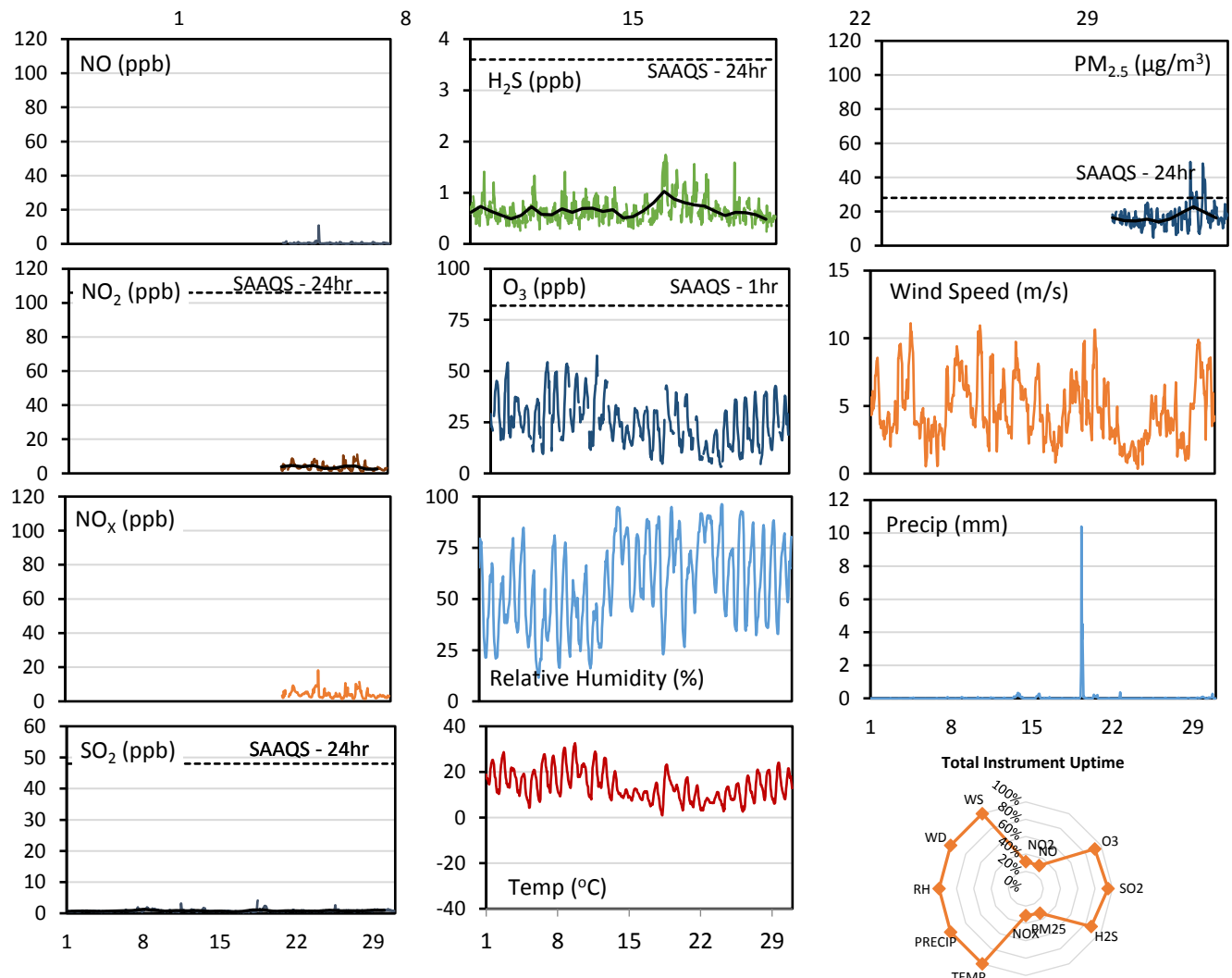


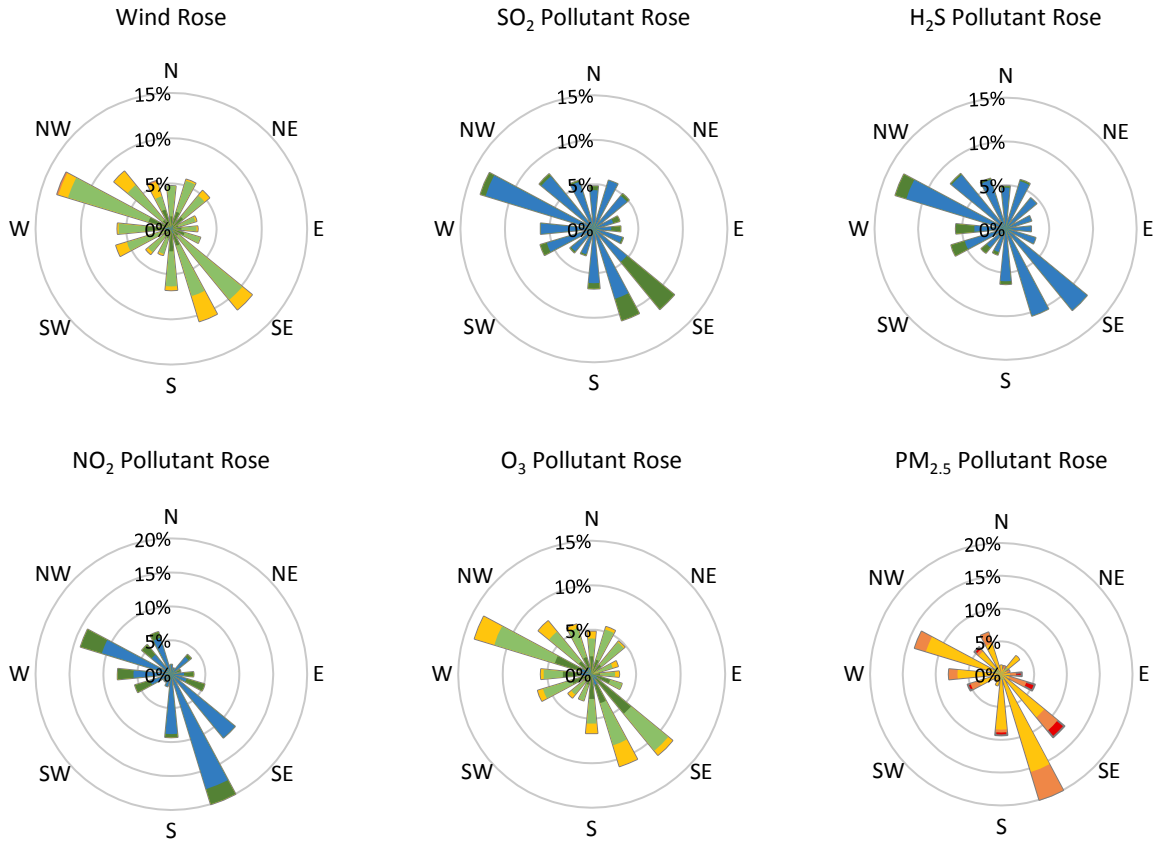
GPAZ Pense Station - September 2017 Summary Report

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	0.5	31%	1.3	Sep-24	-	-	10.8	Sep-24 08:00	-	-
NO ₂	ppb	3.6	31%	4.6	Sep-22	106	0	11.0	Sep-28 03:00	159	0
NO _x	ppb	4.1	31%	5.8	Sep-24	-	-	18.2	Sep-24 08:00	-	-
SO ₂	ppb	0.8	95%	1.3	Sep-08	48	0	4.1	Sep-18 11:00	172	0
H ₂ S	ppb	0.7	87%	1.0	Sep-20	3.6	0	1.7	Sep-20 04:00	11	0
O ₃	ppb	25.1	92%	35.1	Sep-08	-	-	57.5	Sep-11 16:00	82	0
PM _{2.5}	µg/m ³	16.9	33%	22.8	Sep-28	28	0	49.1	Sep-27 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_{2.5}, NO₂, SO₂, and H₂S



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

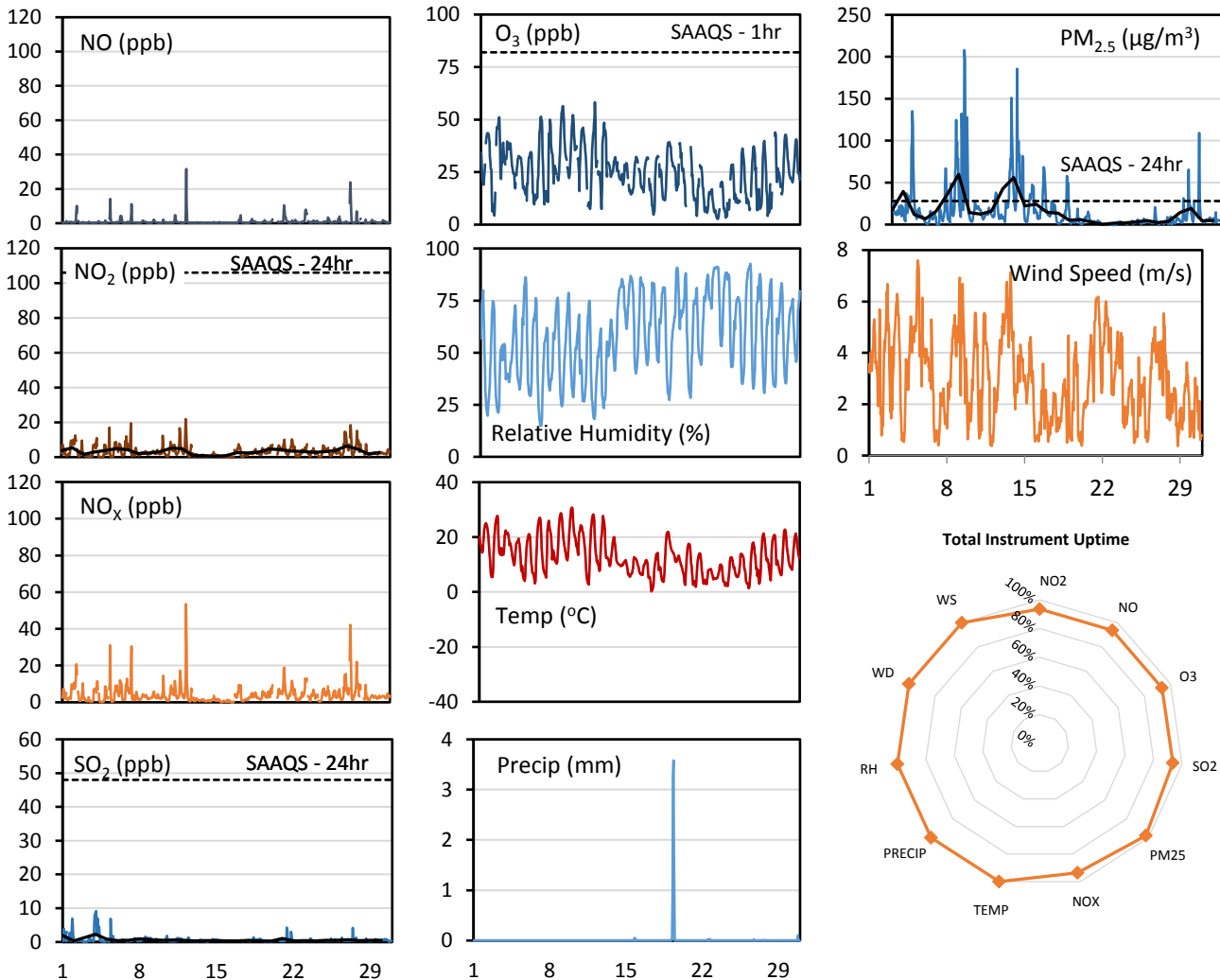
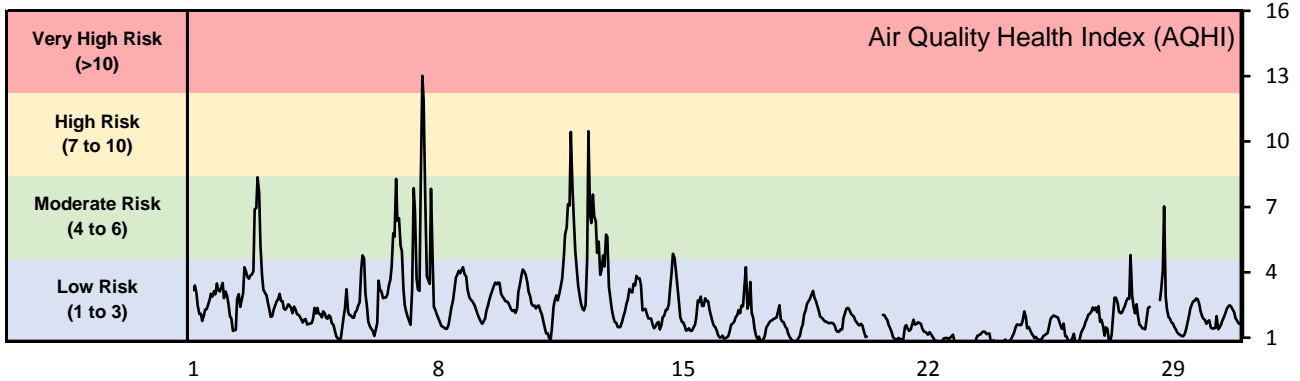
Monthly Update

- Achieved 99.2%, 96.1%, and 91.2% of scheduled uptime for SO₂, O₃, and H₂S respectively
- Achieved 95%, 92% and 87% of total uptime for SO₂, O₃ and H₂S respectively
- Downtime of 4% due to routine daily internal zeroes and spans (8% for O₃)
- Downtime for all other parameters due to operational issues
- Calibration performed September 21

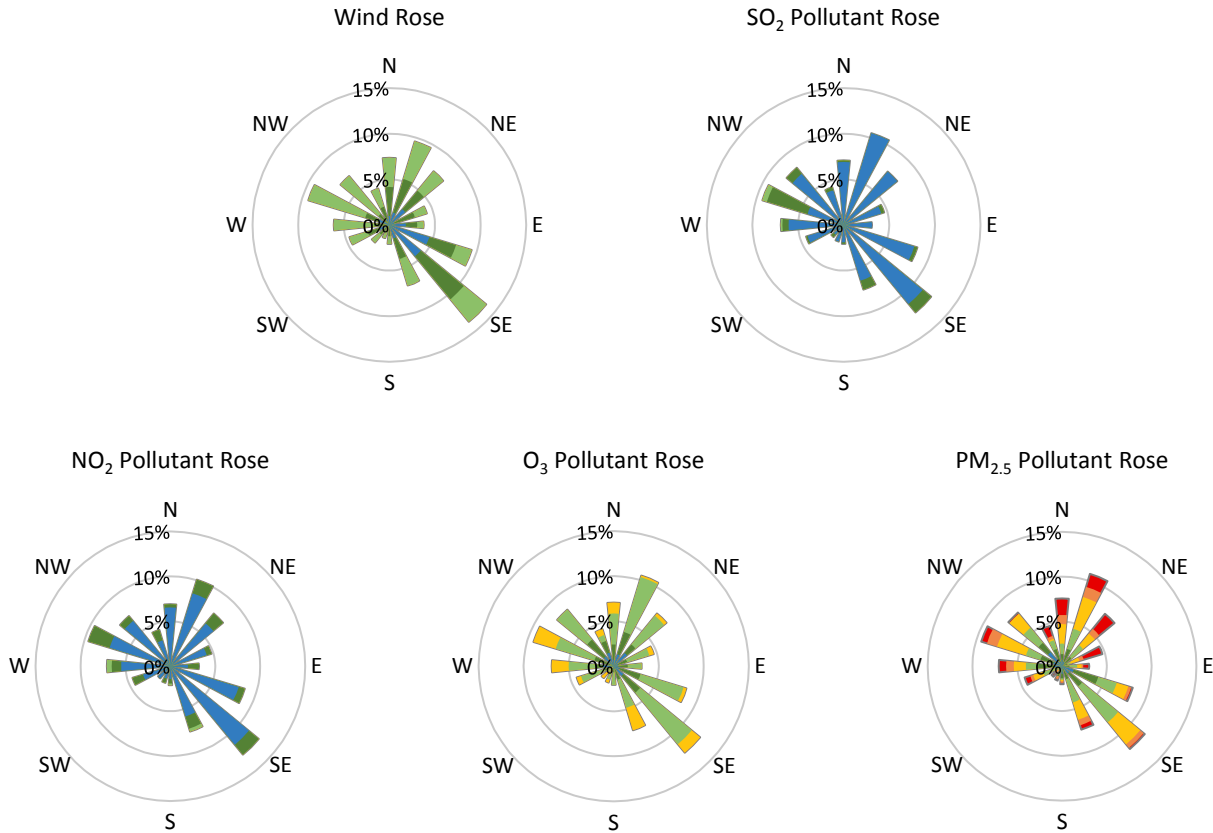
GPAZ East Regina Station - September 2017 Summary Report

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	0.5	31%	1.3	Sep-24	-	-	10.8	Sep-24 08:00	-	-
NO ₂	ppb	3.6	31%	4.6	Sep-22	106	0	11.0	Sep-28 03:00	159	0
NO _x	ppb	4.1	31%	5.8	Sep-24	-	-	18.2	Sep-24 08:00	-	-
SO ₂	ppb	0.8	95%	1.3	Sep-08	48	0	4.1	Sep-18 11:00	172	0
O ₃	ppb	25.1	92%	35.1	Sep-08	-	-	57.5	Sep-11 16:00	82	0
PM _{2.5}	µg/m ³	16.9	33%	22.8	Sep-28	28	0	49.1	Sep-27 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_{2.5}, NO₂, and SO₂



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
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 >97.9% of scheduled uptime for all parameters
- All parameters achieved >93.6% of total uptime
- Downtime of 4% results from routine daily internal zeroes and spans
- Calibration performed September 20
- Audit performed by Ministry of Environment September 28

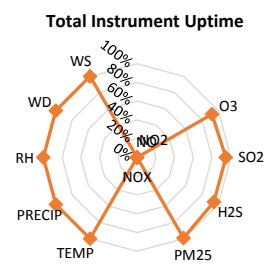
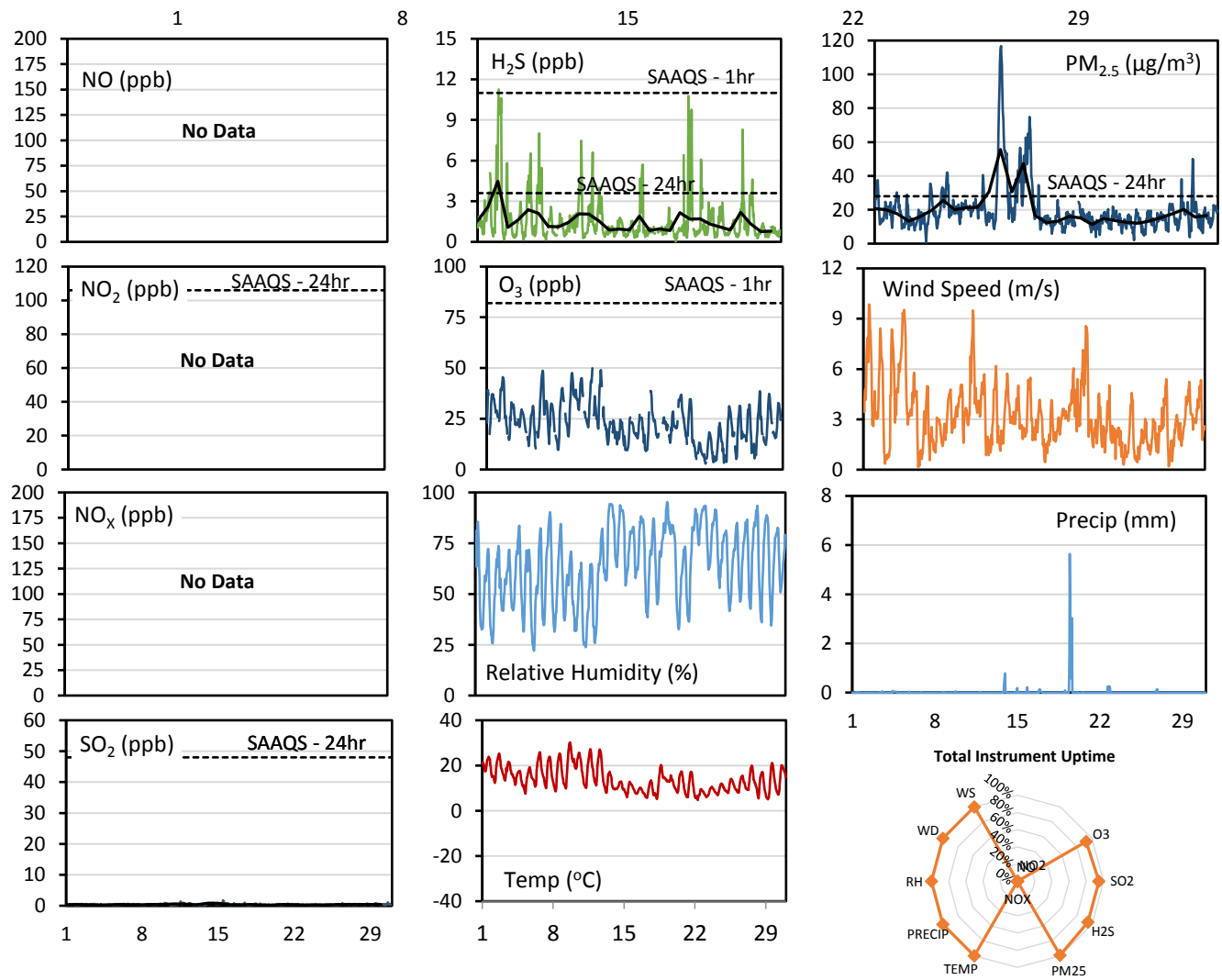
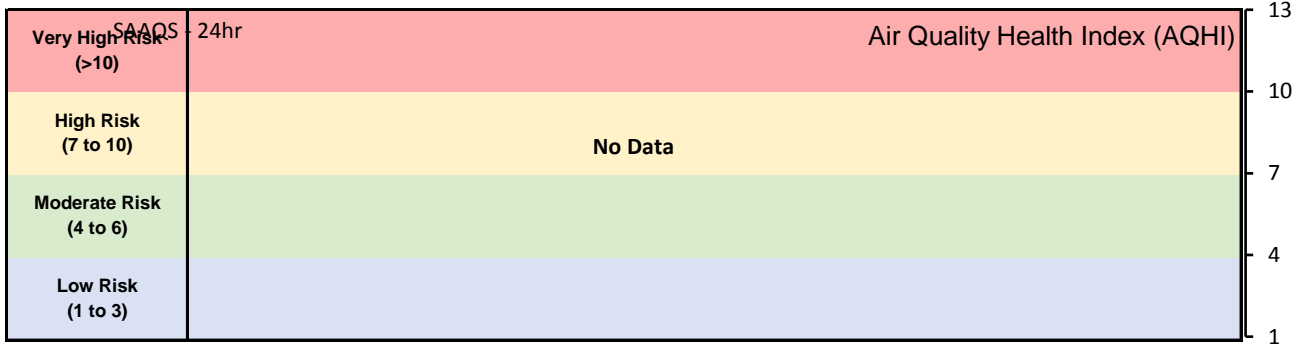
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

Exceedance Time	AQHI	NO ₂ ppb	NO ppb	SO ₂ ppb	O ₃ ppb	NO _x ppb	PM _{2.5} µg/m ³	Temp °C	WD deg	WS m/s
Sep-02	3.8	5.3	1.4	0.3	28.0	6.7	39.3	16.6	146.6	3.6
Sep-06	3.6	4.9	1.1	0.4	27.8	6.0	36.3	15.2	160.0	3.1
Sep-07	4.6	4.3	1.1	0.5	27.5	5.4	59.8	15.4	95.4	1.5
Sep-11	3.9	5.2	1.0	0.6	28.4	6.1	42.6	15.6	143.9	3.2
Sep-12	4.6	4.9	2.4	0.5	30.3	7.3	56.0	16.4	206.9	2.4

GPAZ Yorkton Station - September 2017 Summary Report

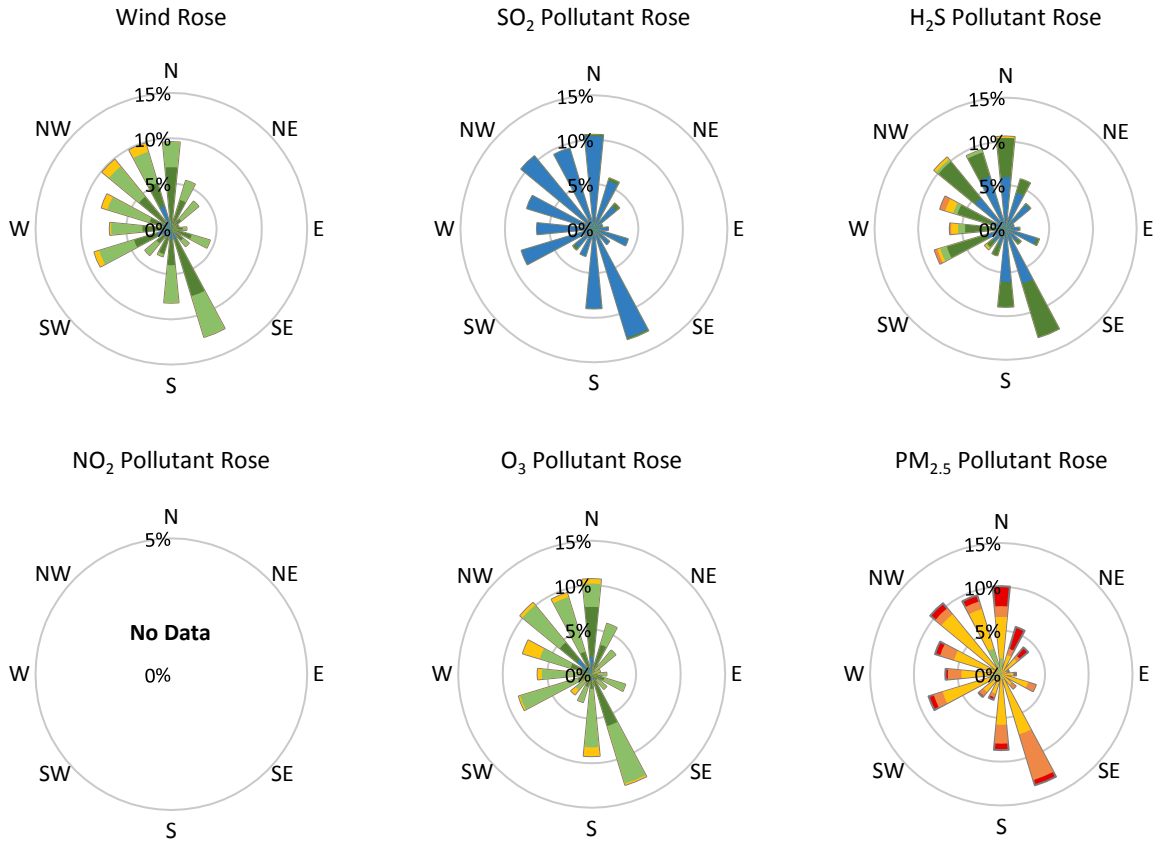
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	No Data	No Data	No Data	No Data	-	No Data	No Data	No Data	-	No Data
NO ₂	ppb	No Data	No Data	No Data	No Data	106	No Data	No Data	No Data	159	No Data
NO _x	ppb	No Data	No Data	No Data	No Data	-	No Data	No Data	No Data	-	No Data
SO ₂	ppb	0.8	95%	1.3	Sep-08	48	0	4.1	Sep-18 11:00	172	0
H ₂ S	ppb	0.7	87%	1.0	Sep-20	3.6	0	1.7	Sep-20 04:00	11	0
O ₃	ppb	25.1	92%	35.1	Sep-08	-	-	57.5	Sep-11 16:00	82	0
PM _{2.5}	µg/m ³	16.9	33%	22.8	Sep-28	28	0	49.1	Sep-27 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_{2.5}, NO₂, SO₂, and H₂S

GPAZ Yorkton Station - September 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 > 96.3% of scheduled uptime for all parameters except for NO_x
- Achieved 95% of total uptime for SO₂ and H₂S, 92% for O₃
- Downtime of 4% due to routine daily internal zeroes and spans
- Calibration performed September 18
- NO_x invalidated due to operational issues

Exceedance Summary (1- 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
Sep-03 02:00	#N/A	0.0	0.0	0.3	17.6	0.0	11.3	27.5	15.9	291.6	0.8

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
Sep-03	#N/A	-	-	0.3	24.6	-	4.5	17.6	17.6	301.6	3.7
Sep-11	#N/A	-	-	0.6	31.4	-	2.1	30.7	18.3	229.7	3.6
Sep-12	#N/A	-	-	0.5	31.4	-	2.1	55.6	18.6	282.7	2.9
Sep-13	#N/A	-	-	0.3	19.5	-	1.5	30.7	12.4	82.4	3.2
Sep-14	#N/A	-	-	0.7	17.2	-	0.9	47.3	10.7	158.2	3.2