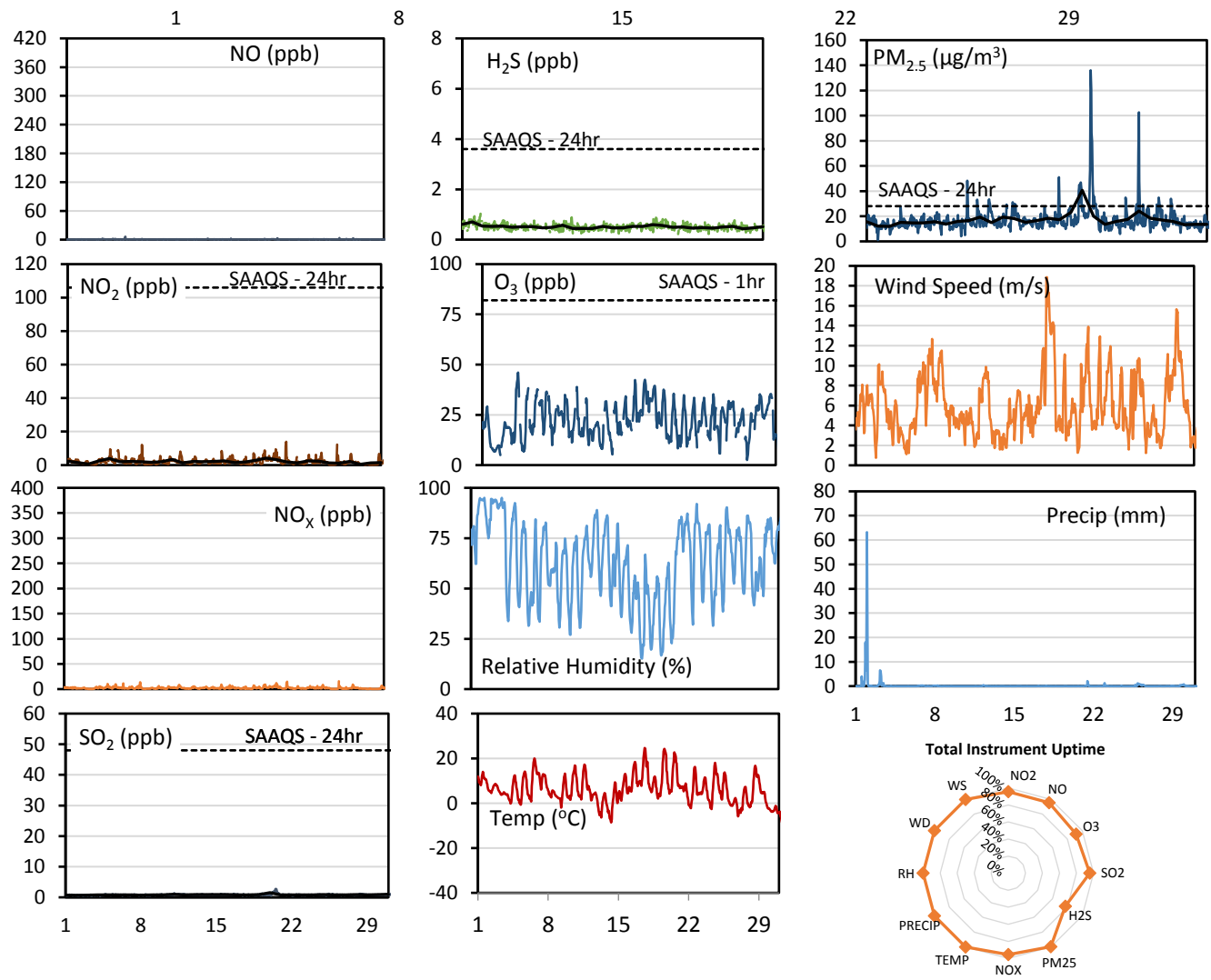
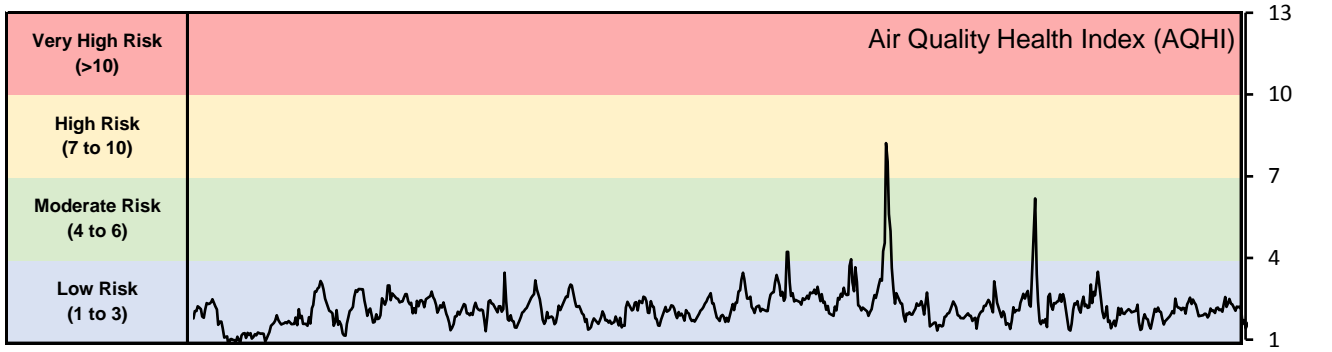


GPAZ Pense Station - October 2017 Summary Report

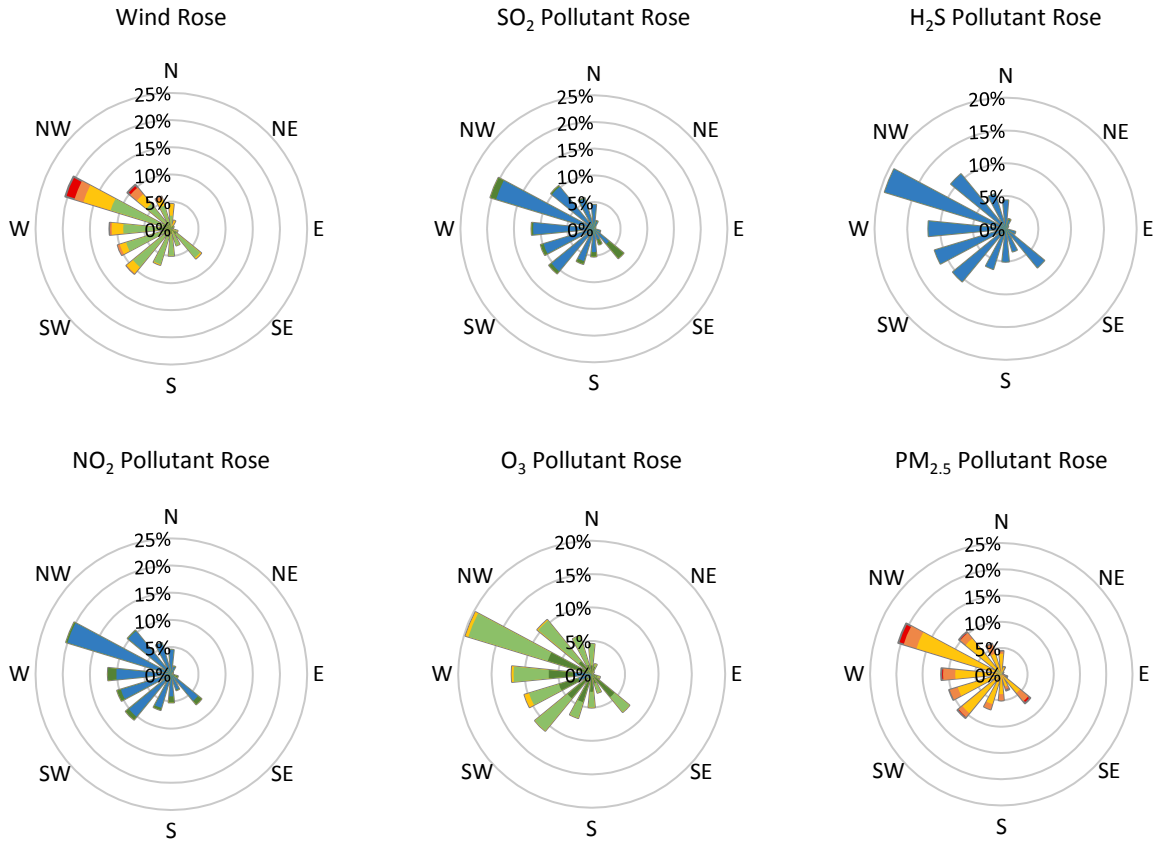
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.3	96%	0.6	Oct-06	-	-	6.1	Oct-06 13:00	-	-
NO ₂	ppb	2.1	96%	4.2	Oct-20	106	0	13.9	Oct-21 22:00	159	0
NO _x	ppb	2.4	96%	4.7	Oct-20	-	-	15.6	Oct-26 19:00	-	-
SO ₂	ppb	0.8	96%	1.5	Oct-20	48	0	2.8	Oct-20 13:00	172	0
H ₂ S	ppb	0.5	77%	0.7	Oct-02	3.6	0	1.0	Oct-02 20:00	11	0
O ₃	ppb	22.1	92%	32.0	Oct-17	-	-	46.1	Oct-04 16:00	82	0
PM _{2.5}	µg/m ³	17.1	100%	40.6	Oct-20	28	1	136.0	Oct-20 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 Pense Station - October 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% of scheduled uptime for all parameters except H₂S (80.1%)
- Achieved 96%, 92% and 77% of total uptime for SO₂, O₃ and H₂S respectively
- Downtime got H₂S due to operational issue
- Downtime of 4% due to routine daily internal zeroes and spans

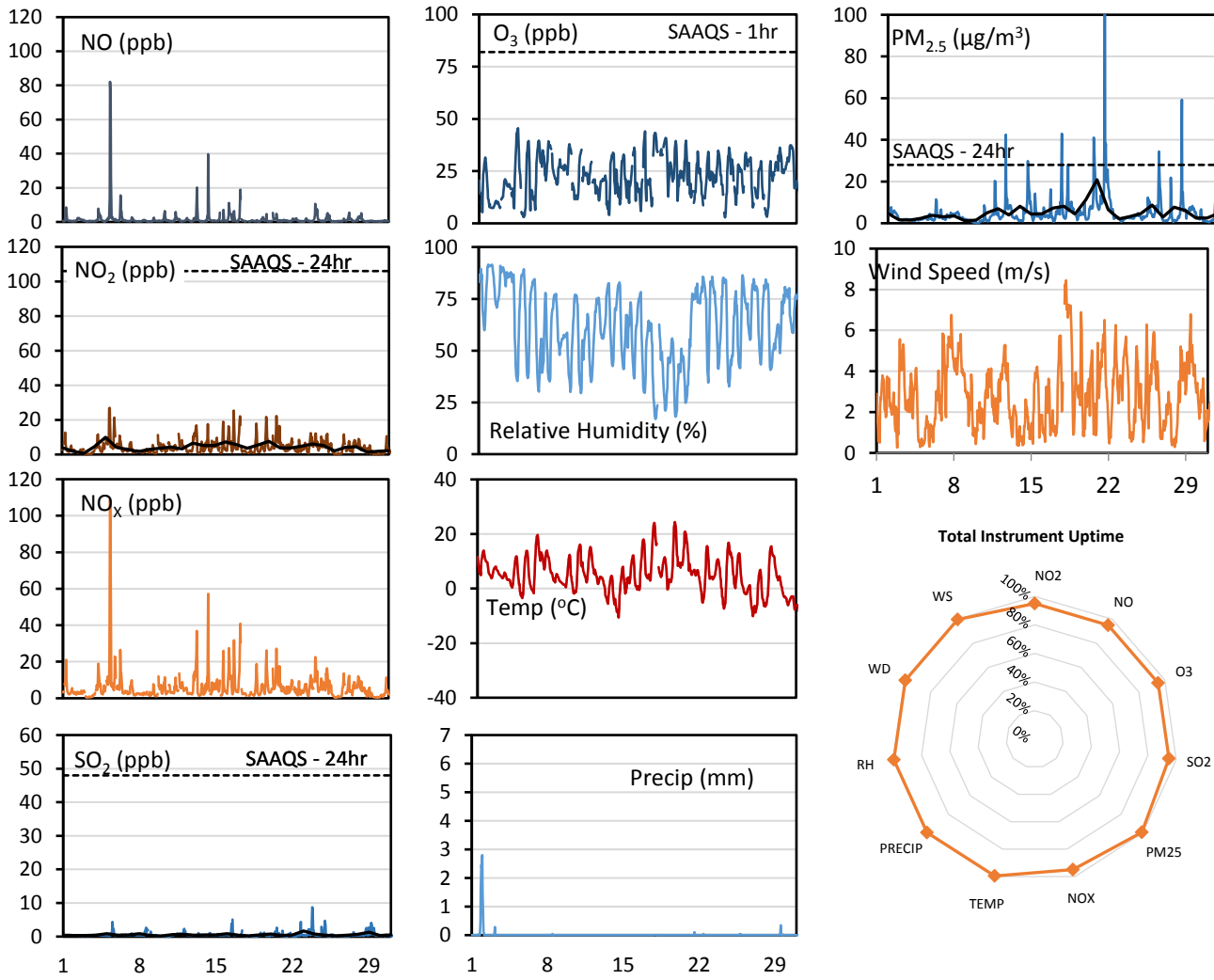
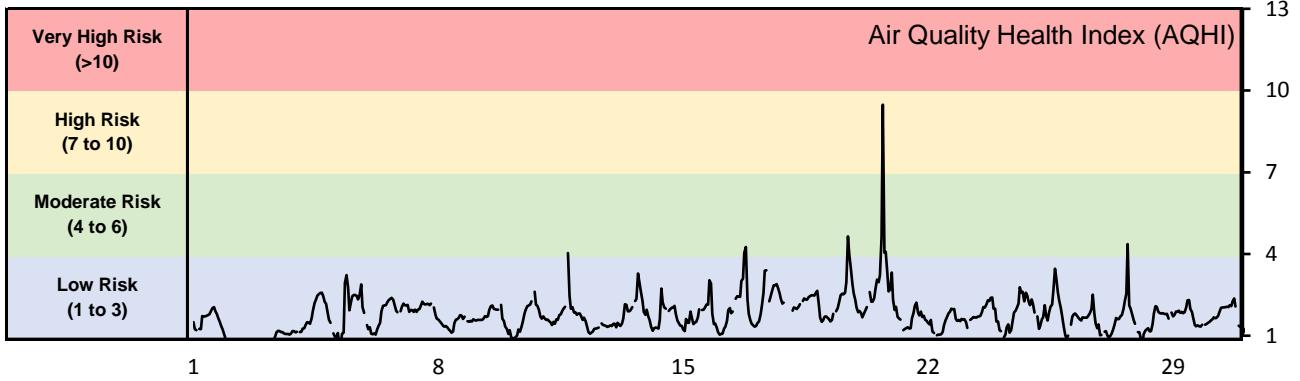
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

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
Oct-20	3.4	4.2	0.5	1.5	20.8	4.7	0.6	40.6	12.4	141.1	4.3

GPAZ East Regina Station - October 2017 Summary Report

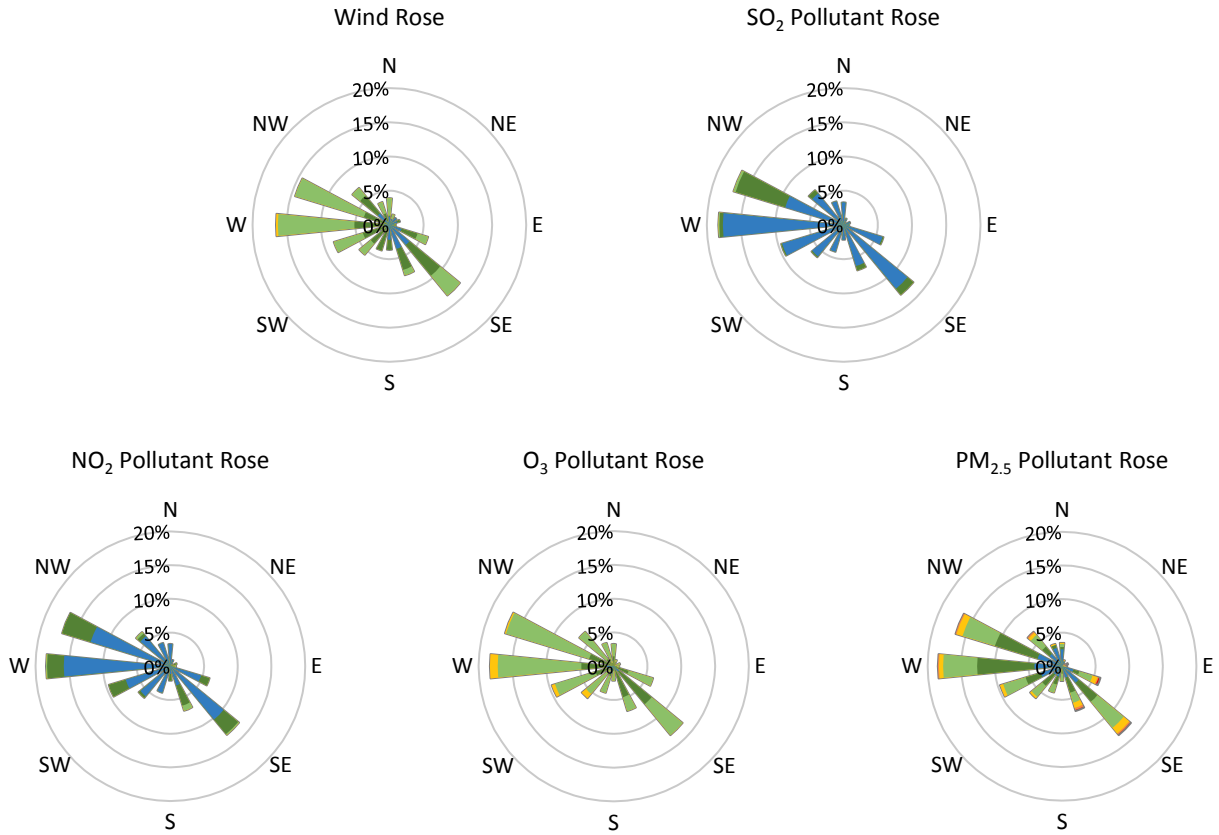
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	1.6	95%	9.7	Oct-05	-	-	82.1	Oct-05 08:00	-	-
NO ₂	ppb	4.2	95%	9.9	Oct-05	106	0	26.9	Oct-05 09:00	159	0
NO _x	ppb	5.8	95%	19.7	Oct-05	-	-	108.7	Oct-05 08:00	-	-
SO ₂	ppb	0.6	95%	1.7	Oct-23	48	0	8.7	Oct-23 19:00	172	0
O ₃	ppb	22.4	95%	32.4	Oct-18	-	-	45.6	Oct-04 16:00	82	0
PM _{2.5}	µg/m ³	5.2	99%	20.9	Oct-20	28	0	144.9	Oct-20 17:00	-	-

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

GPAZ East Regina Station - October 2017 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	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$	
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}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

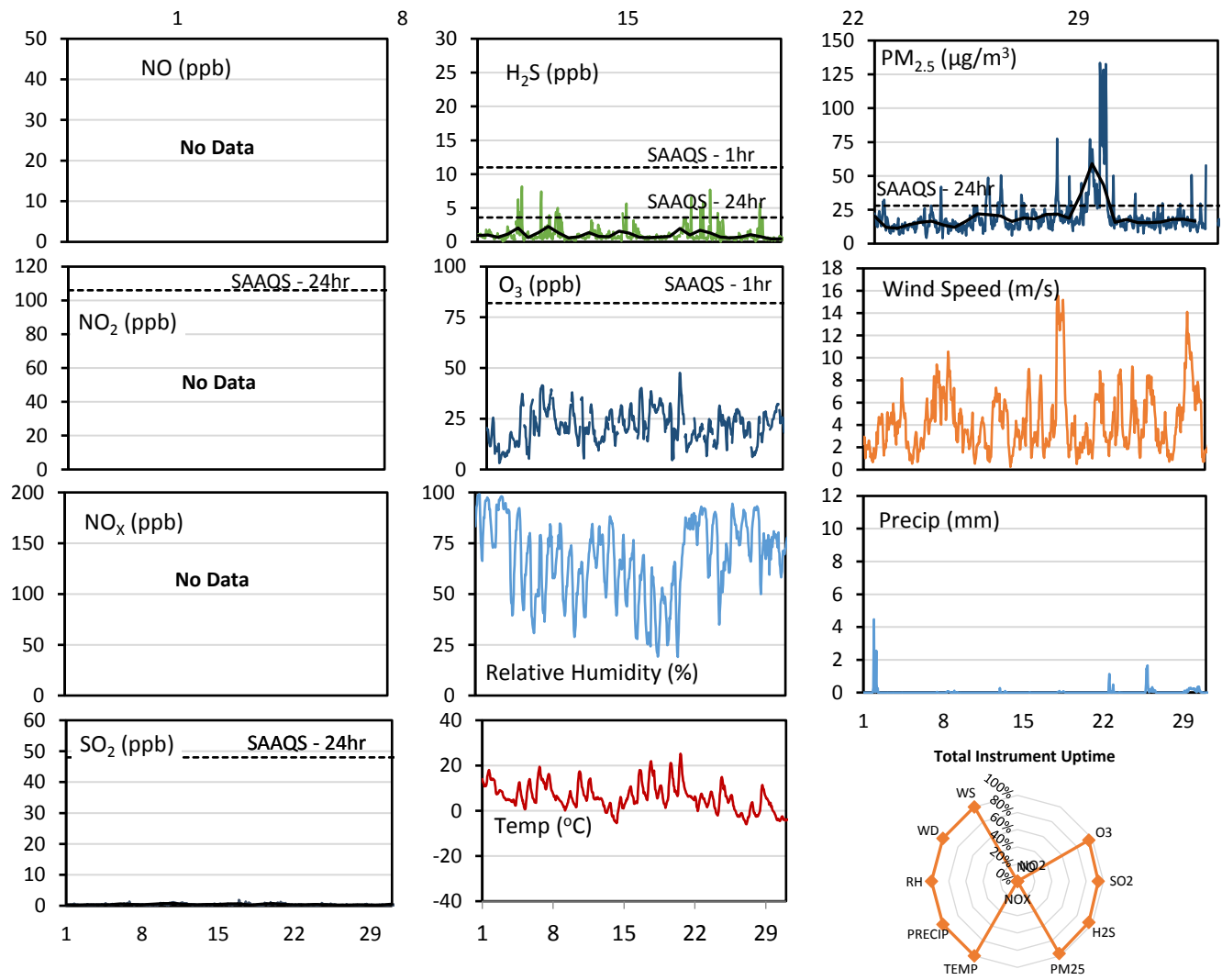
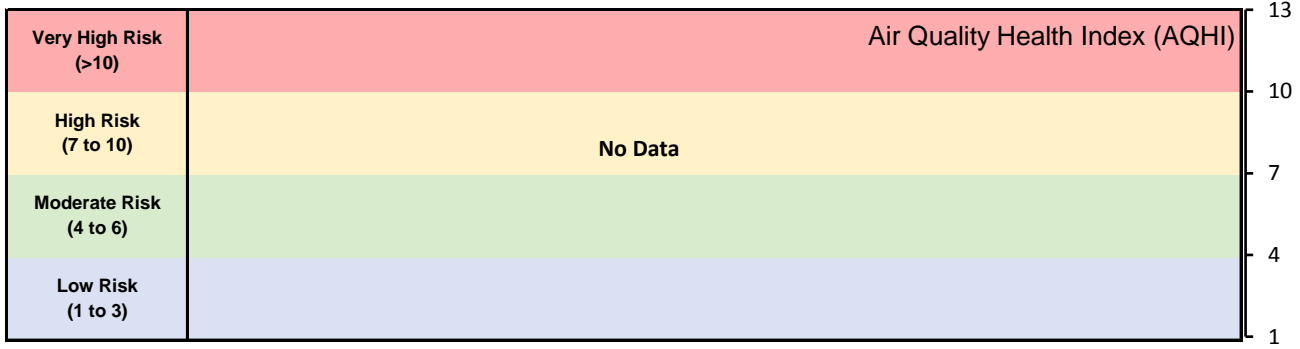
Monthly Update

- Achieved >99.2% of scheduled uptime for all parameters
- Achieved >95% of total uptime for all parameters
- Downtime of 4% due to routine daily internal zeroes and spans

GPAZ Yorkton Station - October 2017 Summary Report

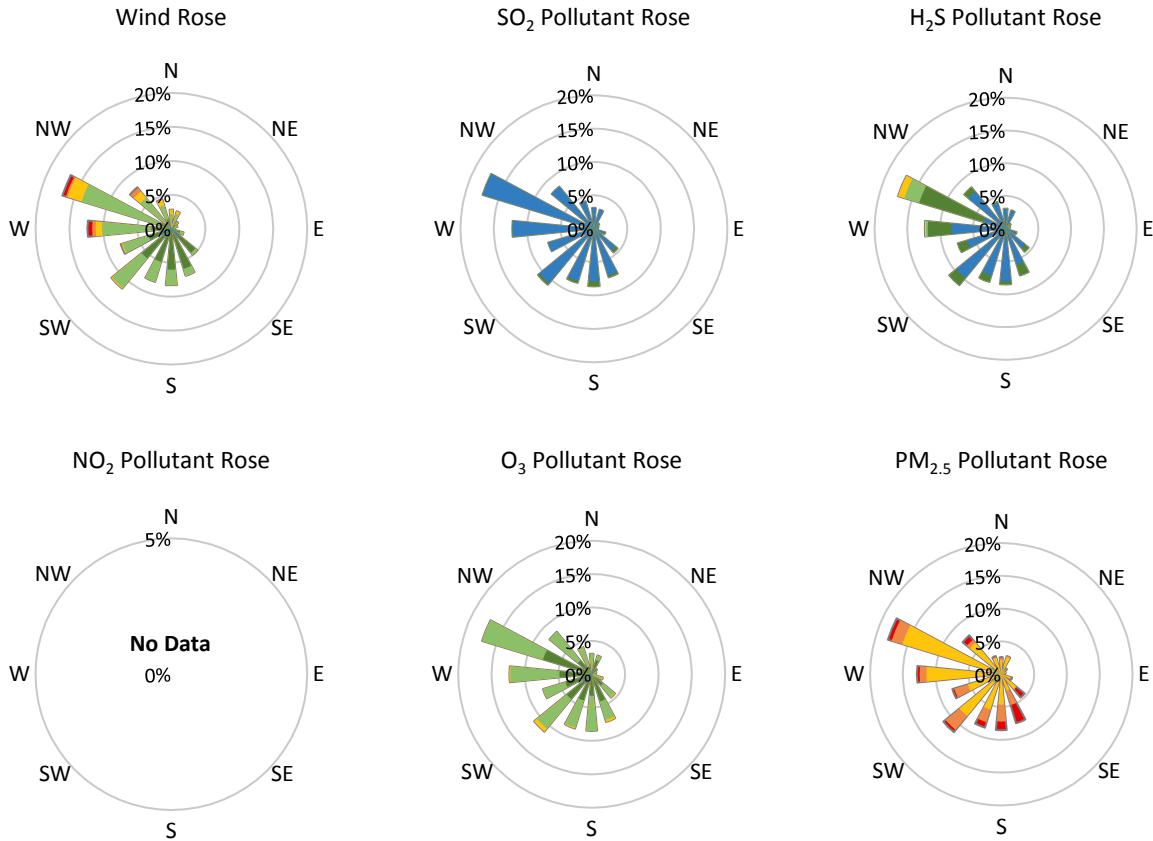
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	No Data	No Data	No Data	No Data	-	No Data	No Data	No Data	-	No Data
NO ₂	ppb	No Data	No 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	0.4	94%	0.7	Oct-11	48	0	1.9	Oct-16 22:00	172	0
H ₂ S	ppb	1.0	96%	2.3	Oct-08	3.6	0	8.2	Oct-05 09:00	11	0
O ₃	ppb	21.4	96%	31.0	Oct-07	-	-	47.7	Oct-20 14:00	82	0
PM _{2.5}	µg/m ³	20.0	97%	59.1	Oct-20	28	3	133.5	Oct-20 17:00	-	-

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 - October 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 >96.8% of scheduled uptime for all parameters except for NO_x
- Achieved 96% of total uptime for H₂S and O₃, and 94% for SO₂
- Downtime of 4% due to routine daily internal zeroes and spans
- NO_x invalidated due to operational issues

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
Oct-19	#N/A	-	-	0.5	21.8	-	0.7	36.4	10.8	179.3	2.3
Oct-20	#N/A	-	-	0.7	27.7	-	0.8	59.1	13.7	143.9	2.5
Oct-21	#N/A	-	-	0.4	14.3	-	2.0	43.5	6.5	278.8	5.1