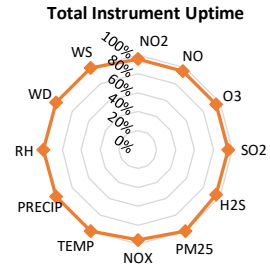
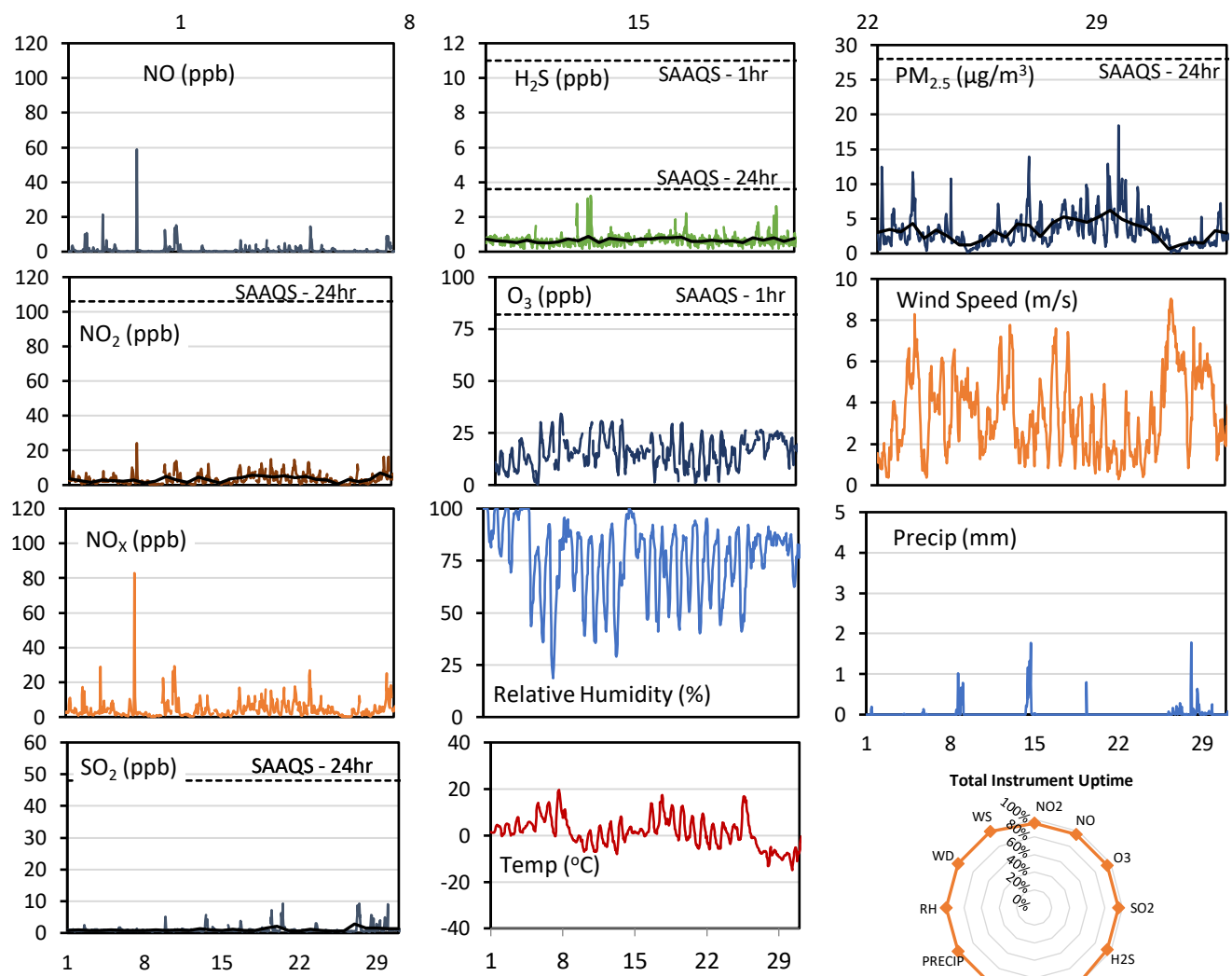
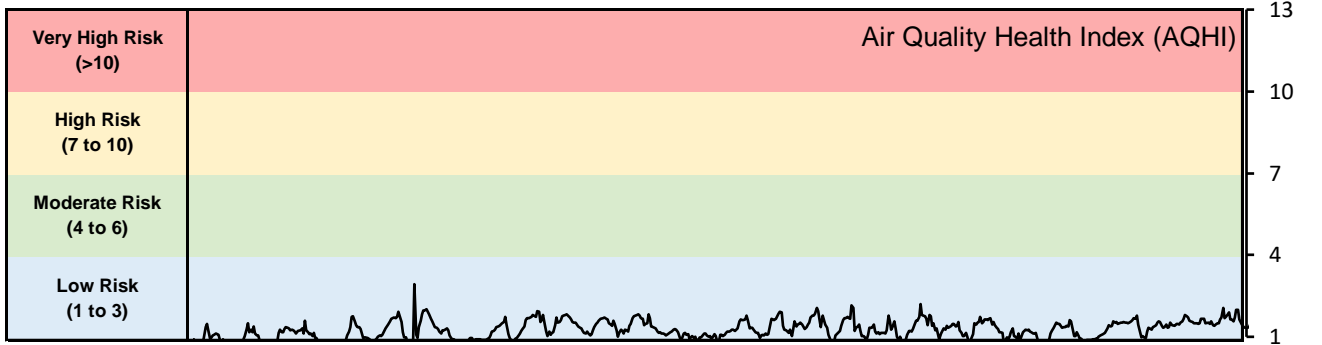


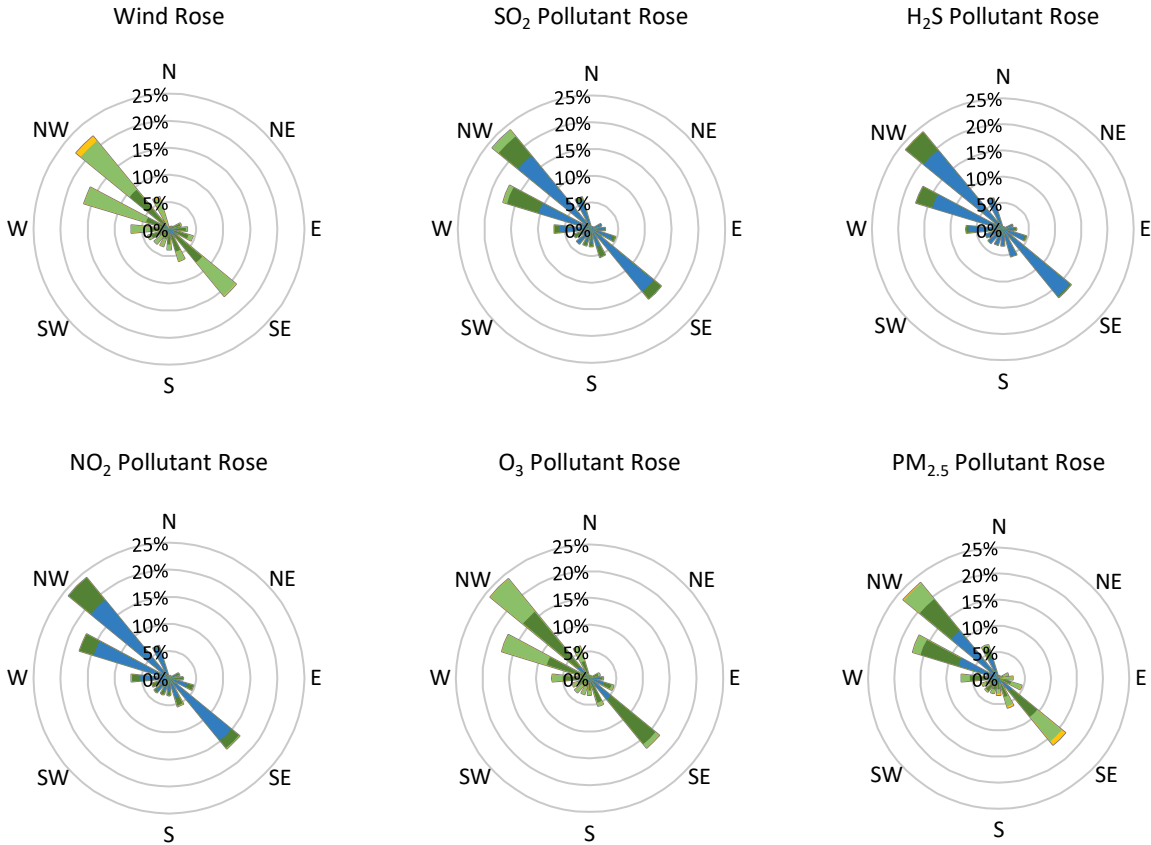
## GPAZ Regina Station - October 2019 Summary Report

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	0.9	96%	3.2	Oct-10	-	-	58.9	Oct-07 07:00	-	-
NO <sub>2</sub>	ppb	3.3	96%	7.0	Oct-30	106	0	24.2	Oct-07 07:00	159	0
NO <sub>x</sub>	ppb	4.3	96%	9.8	Oct-30	-	-	82.9	Oct-07 07:00	-	-
SO <sub>2</sub>	ppb	1.0	96%	2.8	Oct-27	48	0	9.3	Oct-20 12:00	172	0
H <sub>2</sub> S	ppb	0.7	96%	0.9	Oct-11	3.6	0	3.2	Oct-11 05:00	11	0
O <sub>3</sub>	ppb	16.0	95%	23.5	Oct-29	-	-	34.3	Oct-07 13:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	3.2	100%	6.2	Oct-21	28	0	18.4	Oct-21 17:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



**GPAZ Regina Station - October 2019 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 <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>	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

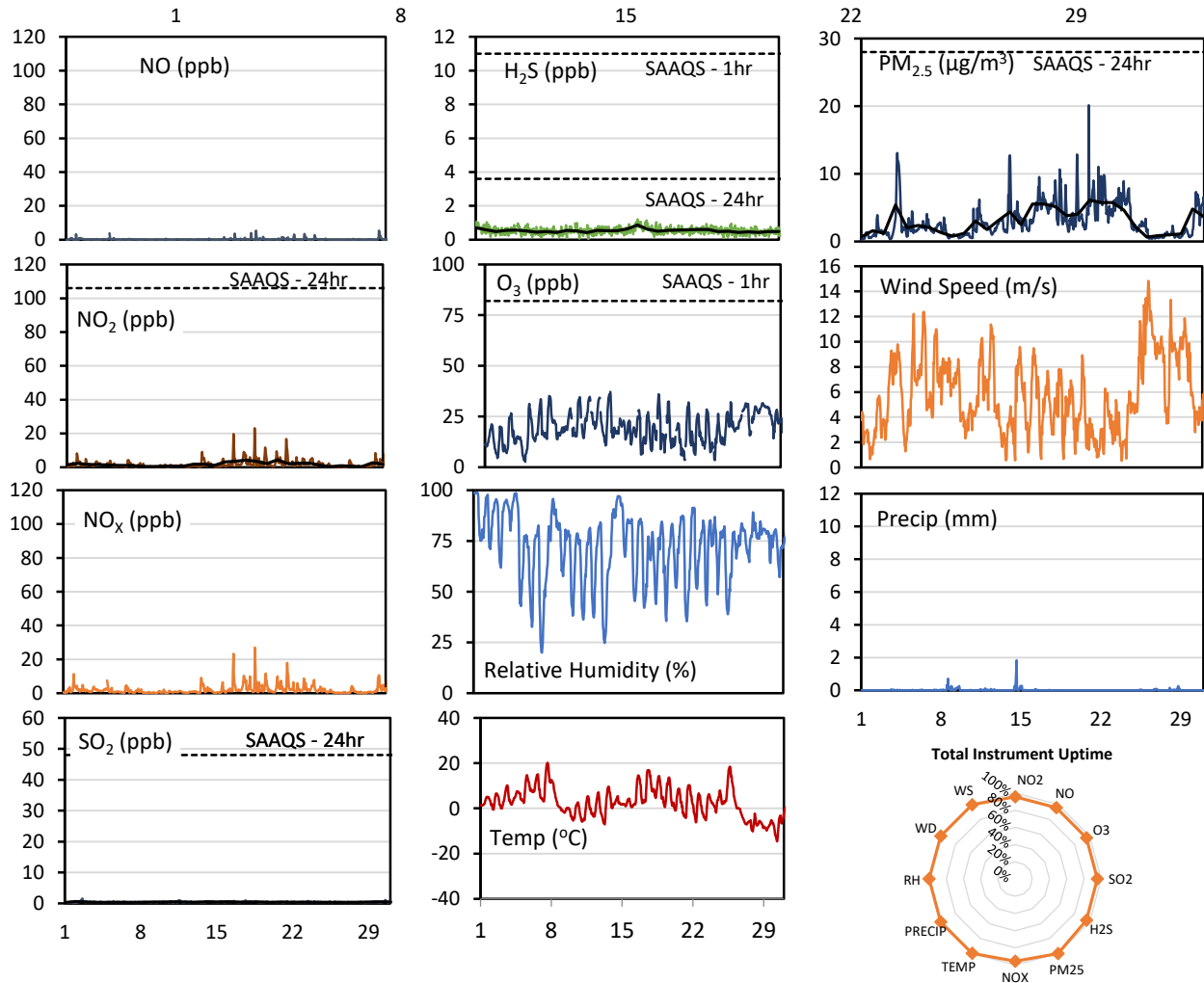
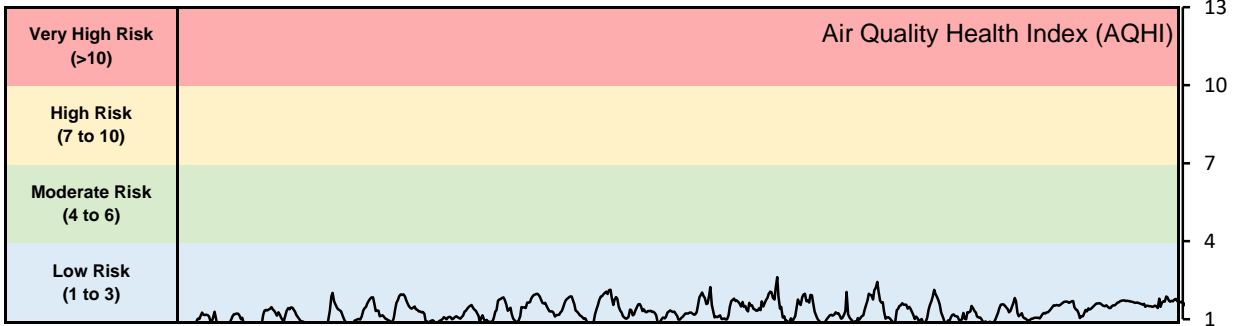
**Monthly Update**

- Achieved >99% of scheduled uptime for all parameters
- Downtime of 4% due to routine daily internal zeroes and spans

## GPAZ Pense Station - October 2019 Summary Report

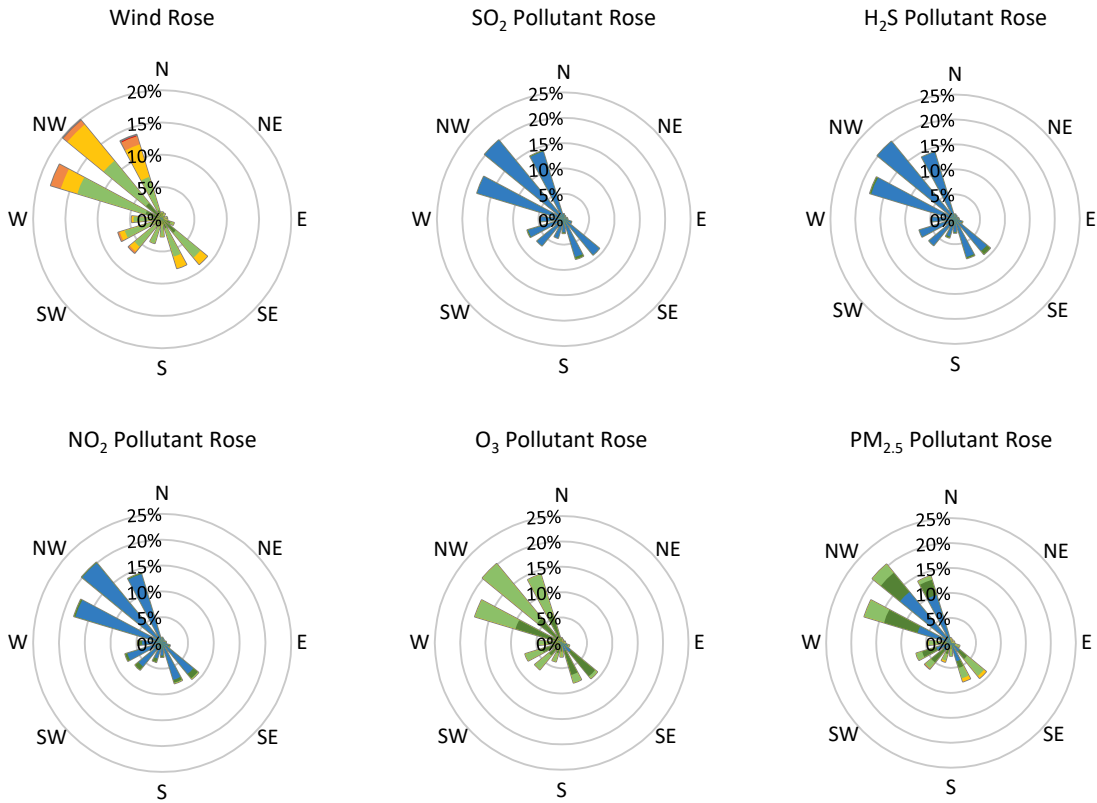
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.3	96%	0.9	Oct-30	-	-	5.4	Oct-30 09:00	-	-
NO <sub>2</sub>	ppb	1.7	96%	4.4	Oct-21	106	0	23.1	Oct-18 20:00	159	0
NO <sub>x</sub>	ppb	1.9	96%	4.9	Oct-18	-	-	27.0	Oct-18 20:00	-	-
SO <sub>2</sub>	ppb	0.4	96%	0.6	Oct-02	48	0	1.6	Oct-02 15:00	172	0
H <sub>2</sub> S	ppb	0.5	96%	0.9	Oct-17	3.6	0	1.2	Oct-17 00:00	11	0
O <sub>3</sub>	ppb	19.5	96%	29.8	Oct-29	-	-	37.2	Oct-13 17:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	3.0	100%	6.1	Oct-21	28	0	20.1	Oct-20 22:00	-	-

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 - October 2019 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>	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

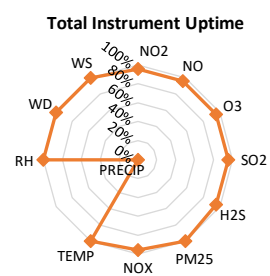
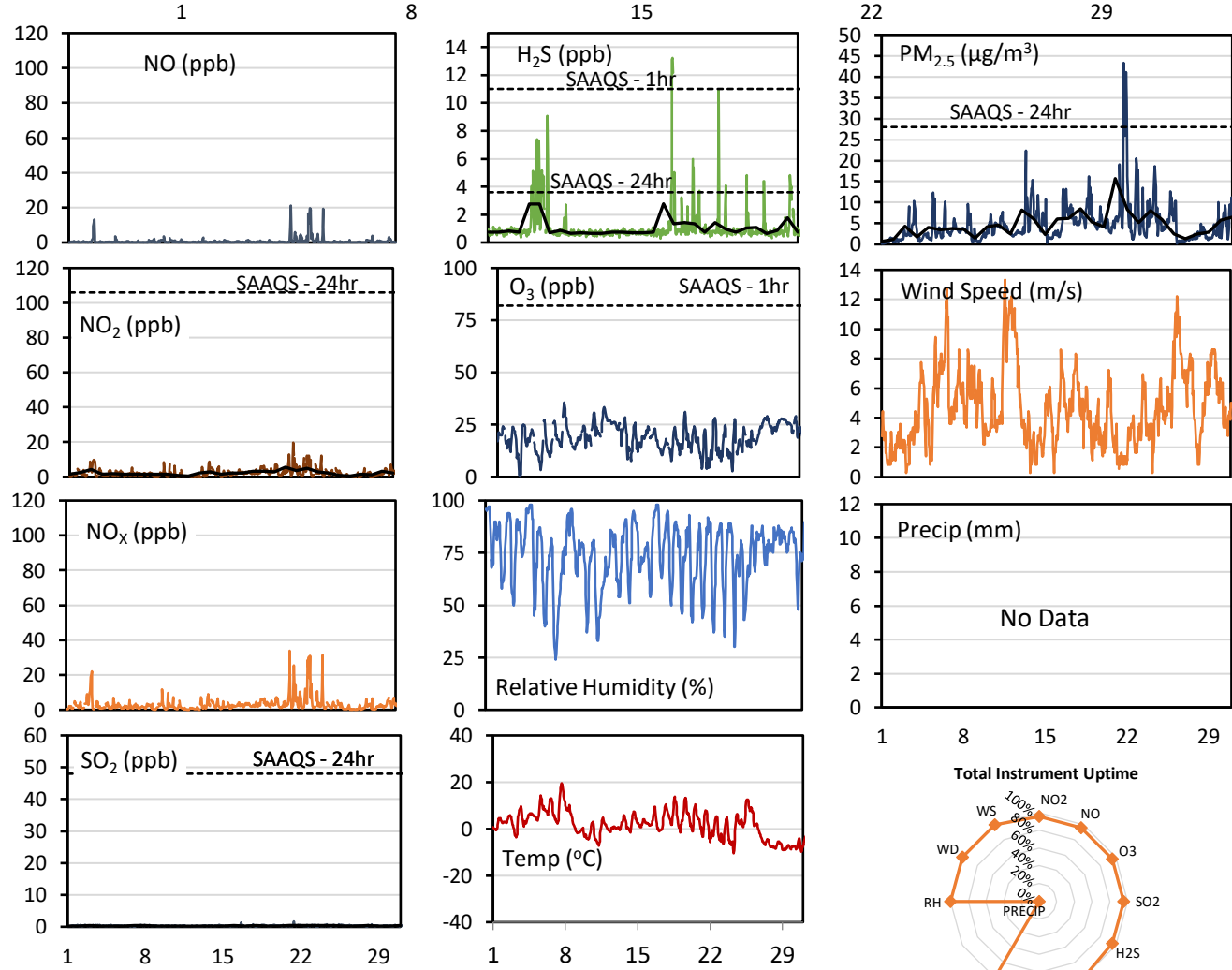
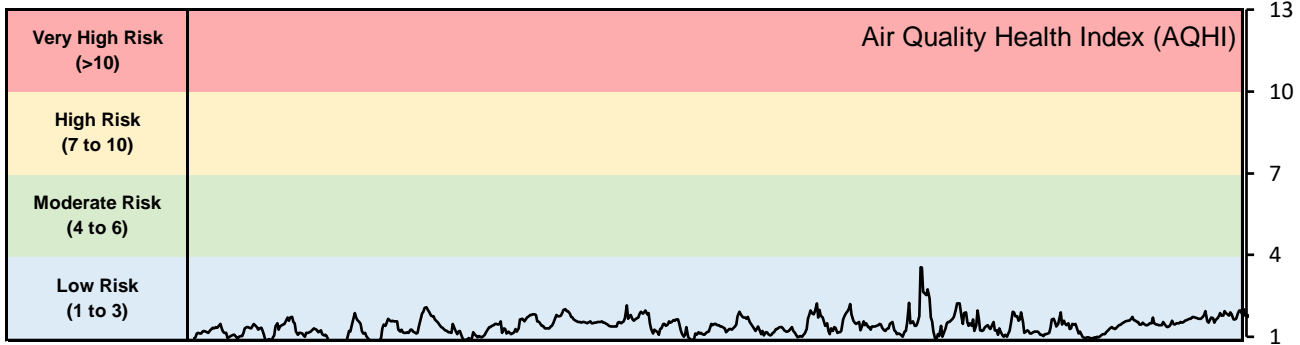
**Monthly Update**

- Achieved >99% of scheduled uptime for all parameters
- Downtime of 4% due to routine daily internal zeroes and spans

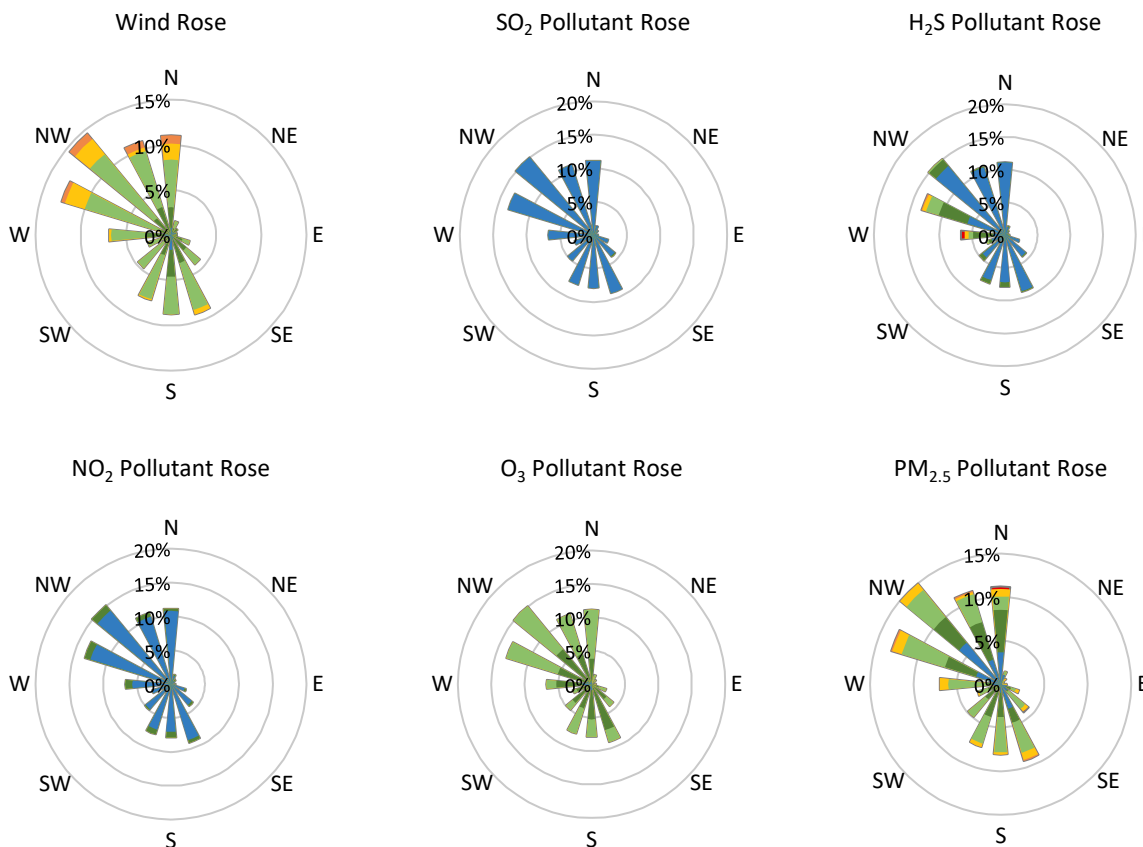
## GPAZ Yorkton Station - October 2019 Summary Report

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	0.8	96%	5.3	Oct-23	-	-	21.1	Oct-21 09:00	-	-
NO <sub>2</sub>	ppb	2.3	96%	5.6	Oct-21	106	0	19.7	Oct-21 18:00	159	0
NO <sub>x</sub>	ppb	2.9	96%	10.2	Oct-23	-	-	33.9	Oct-21 09:00	-	-
SO <sub>2</sub>	ppb	0.3	96%	0.4	Oct-21	48	0	1.7	Oct-21 09:00	172	0
H <sub>2</sub> S	ppb	1.1	96%	2.8	Oct-18	3.6	0	13.2	Oct-18 21:00	11	3
O <sub>3</sub>	ppb	19.0	96%	26.9	Oct-29	-	-	35.6	Oct-07 15:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	4.7	100%	15.7	Oct-21	28	0	43.3	Oct-21 17:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



## GPAZ Yorkton Station - October 2019 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 >100% of scheduled uptime for all parameters except meteorological parameters (0%)
- Downtime of 4% due to routine daily internal zeroes and spans
- Weather sensor failed. A replacement sensor was installed and also failed. Weather sensors were shipped to the vendor for repair or replacement. Weather data was taken from Environment and Climate Change Canada station at the Yorkton airport.
- No precipitation data available

### Exceedance Summary (1- Hour Average - Exceedances Highlighted)

Exceedance Time	AQHI	NO <sub>2</sub>	NO	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>x</sub>	H <sub>2</sub> S	PM <sub>2.5</sub>	Temp	WD	WS
	-	ppb	ppb	ppb	ppb	ppb	ppb	µg/m <sup>3</sup>	°C	deg	m/s
Oct-18 20:00	2.0	5.2	0.4	0.2	17.5	5.5	<b>13.1</b>	13.6	5.0	280.0	4.4
Oct-18 21:00	1.8	5.3	0.4	0.3	15.9	5.6	<b>13.2</b>	11.1	3.2	280.0	3.3
Oct-18 22:00	1.7	6.1	0.3	0.4	15.4	6.3	<b>12.2</b>	8.6	2.7	270.0	4.4