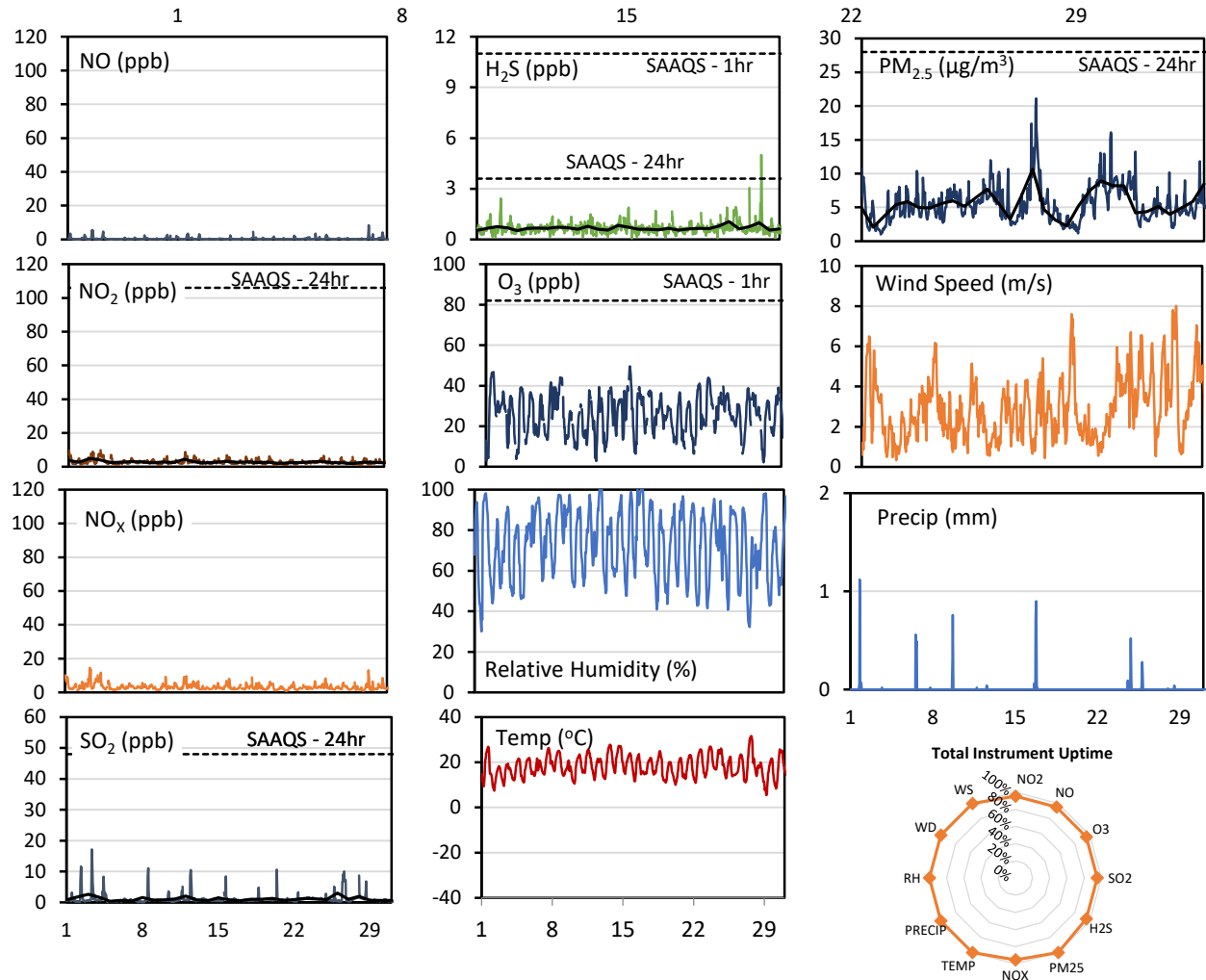
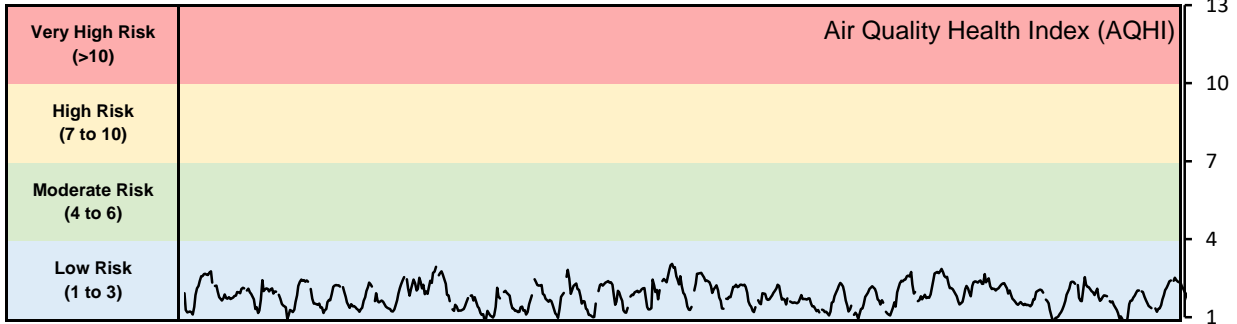


GPAZ Regina Station - July 2019 Summary Report

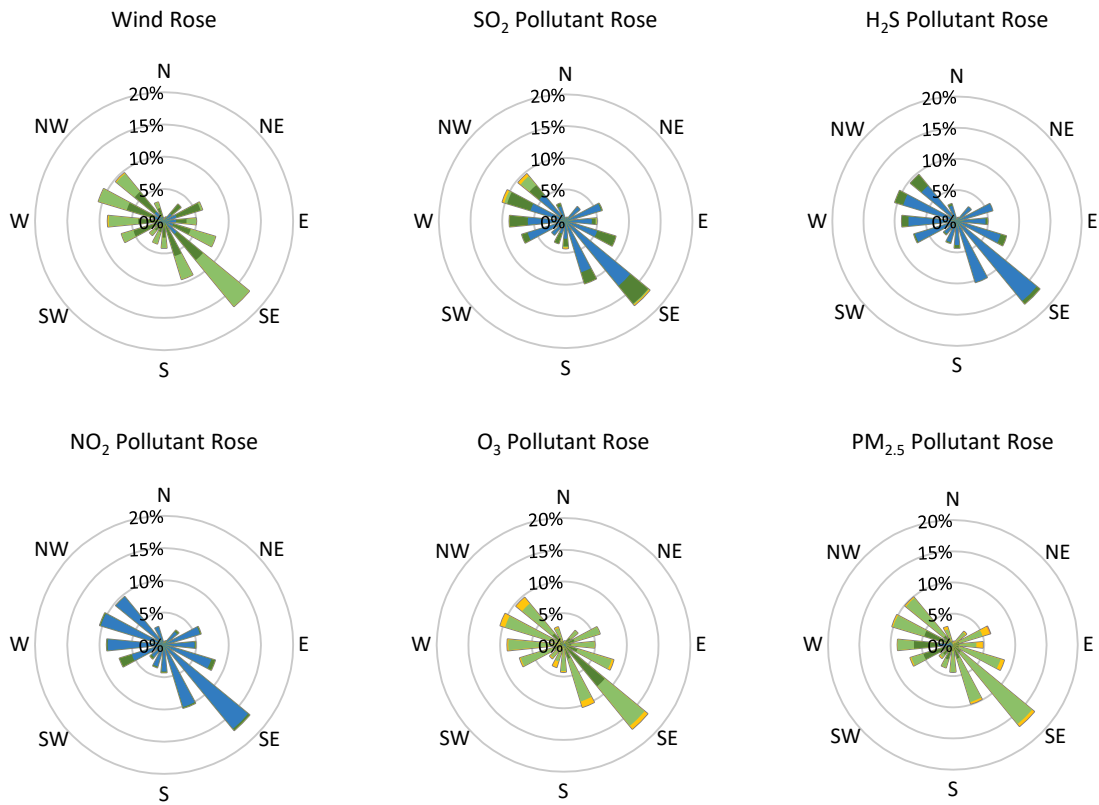
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	95%	1.0	Jul-29	-	-	8.4	Jul-29 07:00	-	-
NO ₂	ppb	2.8	95%	4.9	Jul-03	106	0	9.8	Jul-04 01:00	159	0
NO _x	ppb	3.2	95%	6.0	Jul-03	-	-	14.5	Jul-03 07:00	-	-
SO ₂	ppb	1.1	95%	3.0	Jul-26	48	0	17.2	Jul-03 08:00	172	0
H ₂ S	ppb	0.7	95%	1.1	Jul-26	3.6	0	5.0	Jul-29 05:00	11	0
O ₃	ppb	25.8	95%	35.1	Jul-08	-	-	49.6	Jul-15 15:00	82	0
PM _{2.5}	µg/m ³	5.6	100%	10.7	Jul-16	28	0	21.1	Jul-16 07:00	-	-

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 - July 2019 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	

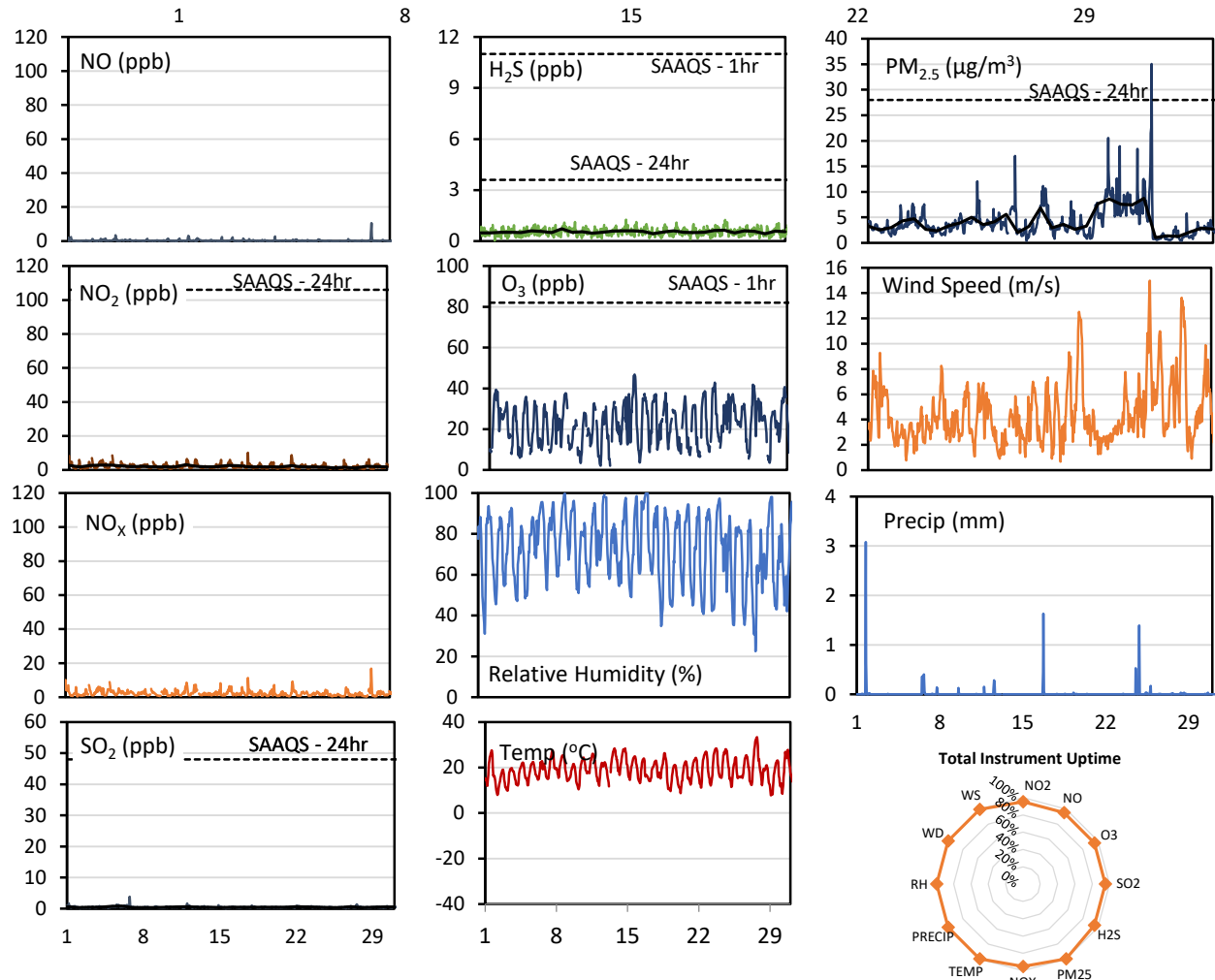
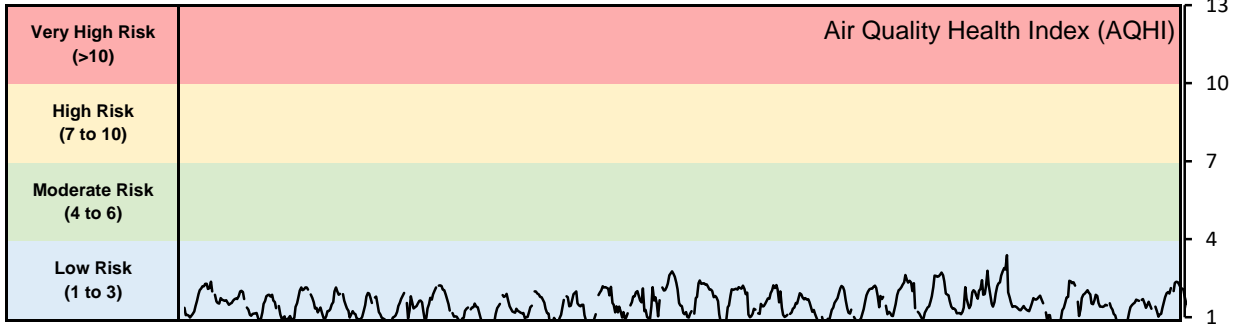
Monthly Update

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

GPAZ Pense Station - July 2019 Summary Report

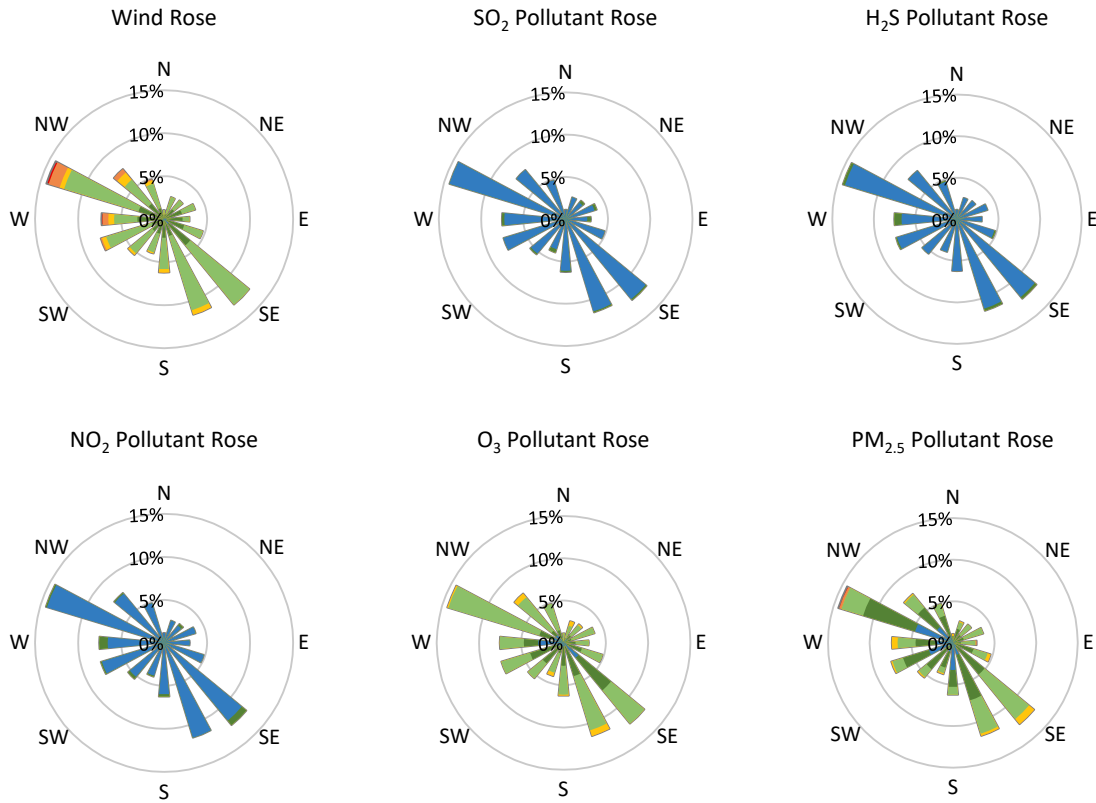
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.3	95%	1.0	Jul-29	-	-	10.6	Jul-29 07:00	-	-
NO ₂	ppb	2.0	95%	3.1	Jul-12	106	0	10.1	Jul-17 21:00	159	0
NO _x	ppb	2.2	95%	3.6	Jul-12	-	-	16.8	Jul-29 07:00	-	-
SO ₂	ppb	0.5	95%	0.8	Jul-06	48	0	3.8	Jul-06 18:00	172	0
H ₂ S	ppb	0.5	95%	0.7	Jul-09	3.6	0	1.3	Jul-15 08:00	11	0
O ₃	ppb	22.8	95%	30.8	Jul-15	-	-	46.8	Jul-15 15:00	82	0
PM _{2.5}	µg/m ³	4.0	100%	8.7	Jul-25	28	0	35.1	Jul-25 16:00	-	-

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 - July 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 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}	µg/m ³	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

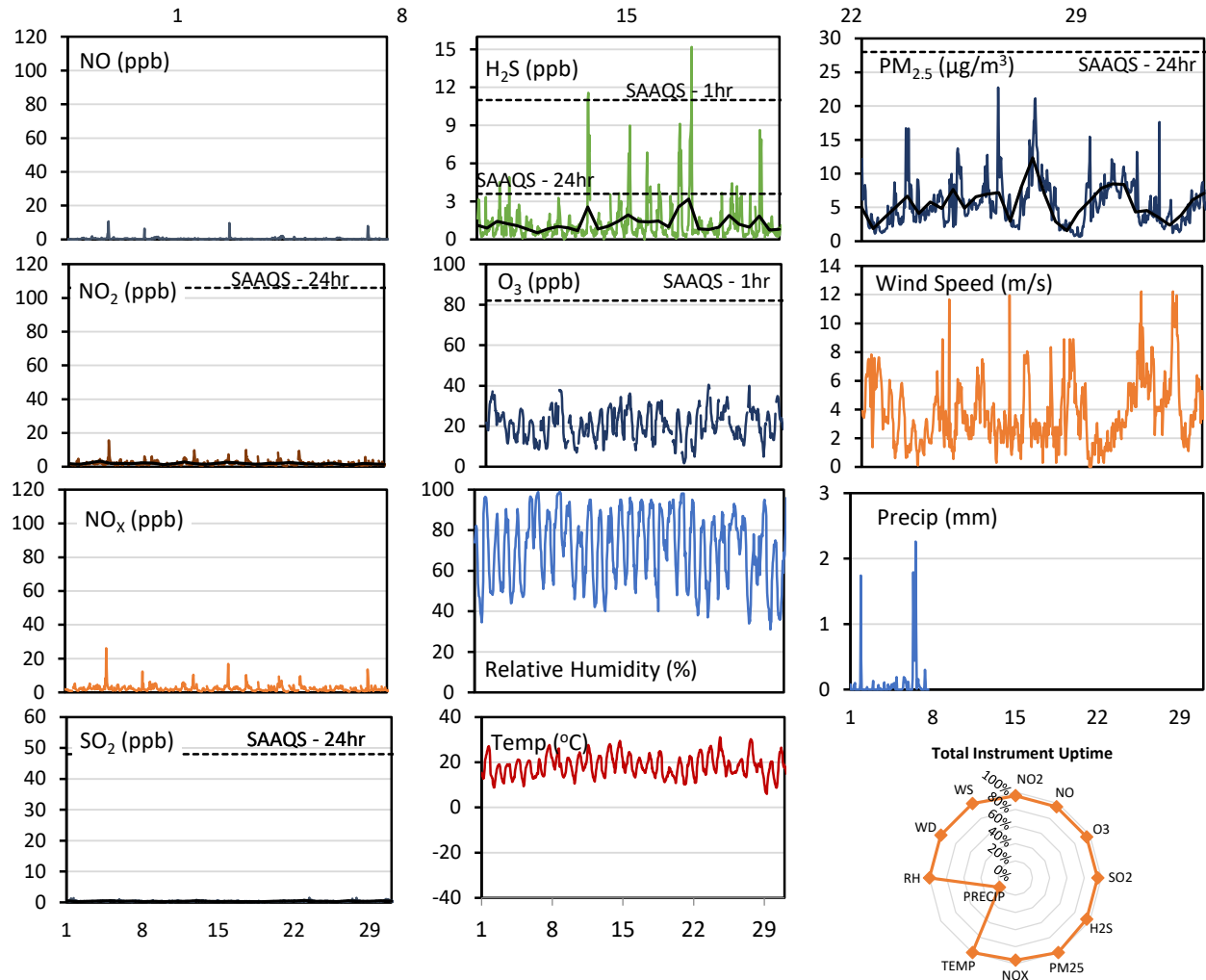
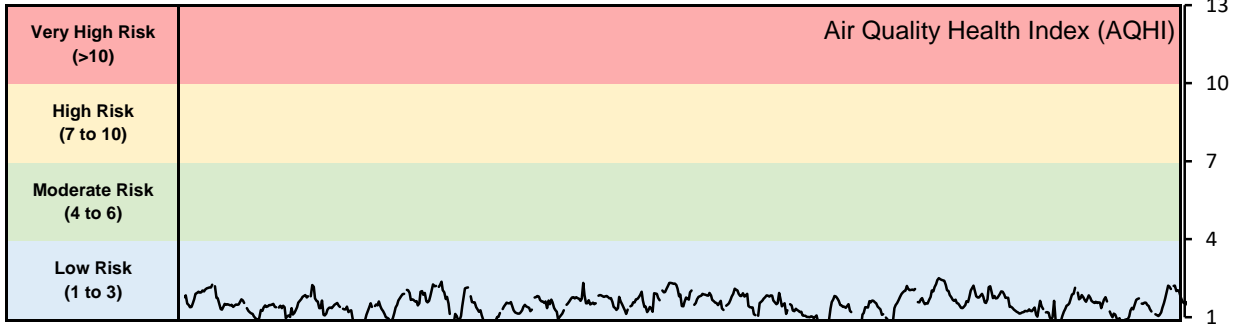
Monthly Update

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

GPAZ Yorkton Station - July 2019 Summary Report

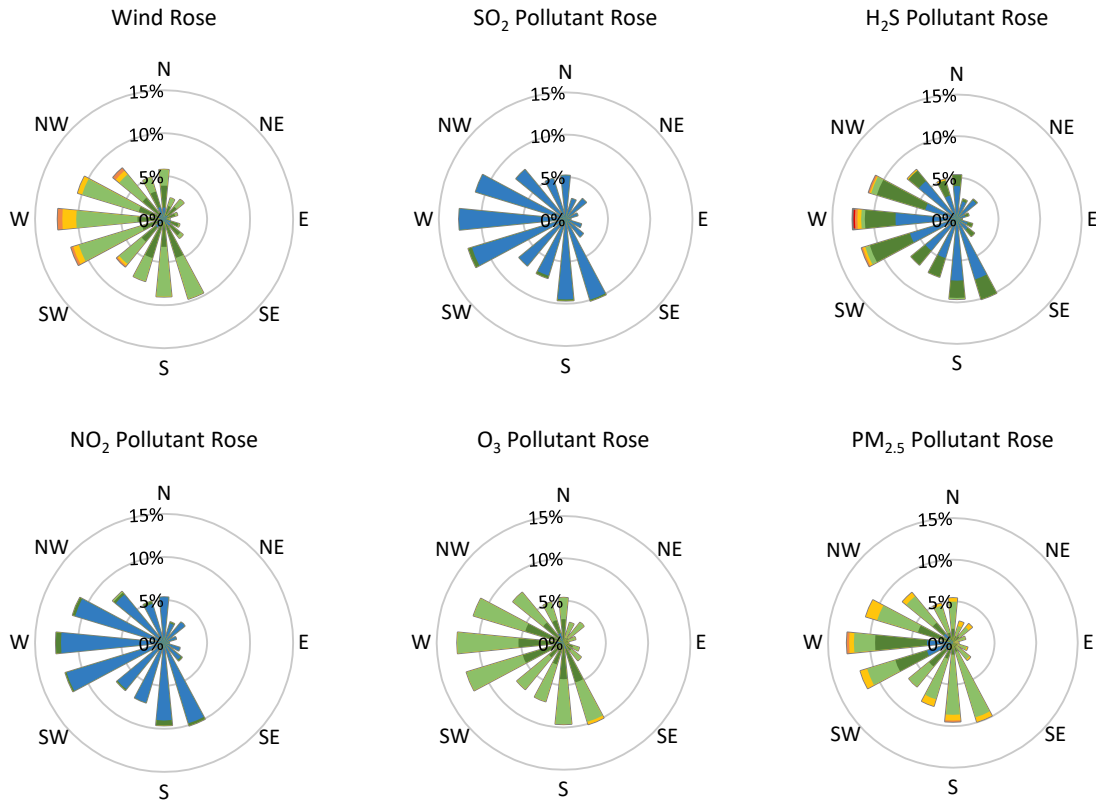
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.4	96%	1.2	Jul-04	-	-	10.7	Jul-04 20:00	-	-
NO ₂	ppb	1.9	96%	3.3	Jul-04	106	0	15.6	Jul-04 20:00	159	0
NO _x	ppb	2.2	96%	4.4	Jul-04	-	-	26.1	Jul-04 20:00	-	-
SO ₂	ppb	0.4	96%	0.6	Jul-23	48	0	1.5	Jul-23 10:00	172	0
H ₂ S	ppb	1.3	96%	3.2	Jul-22	3.6	0	15.2	Jul-22 07:00	11	2
O ₃	ppb	21.0	96%	28.7	Jul-01	-	-	40.5	Jul-23 15:00	82	0
PM _{2.5}	µg/m ³	5.5	100%	12.3	Jul-16	28	0	22.7	Jul-12 23:00	-	-

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 - July 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	13.6 ≤ WS < 17.2	WS ≥ 17.2
SO ₂	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	172 ≤ C < 212	C ≥ 212
NO ₂	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	212 ≤ 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	10.8 ≤ C < 10.8	C ≥ 10.8
O ₃	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	82 ≤ 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	30 ≤ C < 30	C ≥ 30

Monthly Update

- Achieved >99% of scheduled uptime for all parameters except for meteorological parameters (21.5%)
- Downtime of 4% due to routine daily internal zeroes and spans
- Weather sensor failed on July 7
- Weather data was taken from the Environment and Climate Change Canada station at the Yorkton airport after July 7
- Precipitation data is unavailable after July 7

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
Jul-12 01:00	1.6	5.56	0.4	0.42	12.1	5.86	11.57	10.29	13.4	280	3.33
Jul-22 07:00	1.3	3.04	1.53	0.36	12.09	4.46	15.19	9.88	13.9	220	0.56