

July 2024: Active Monitoring Program

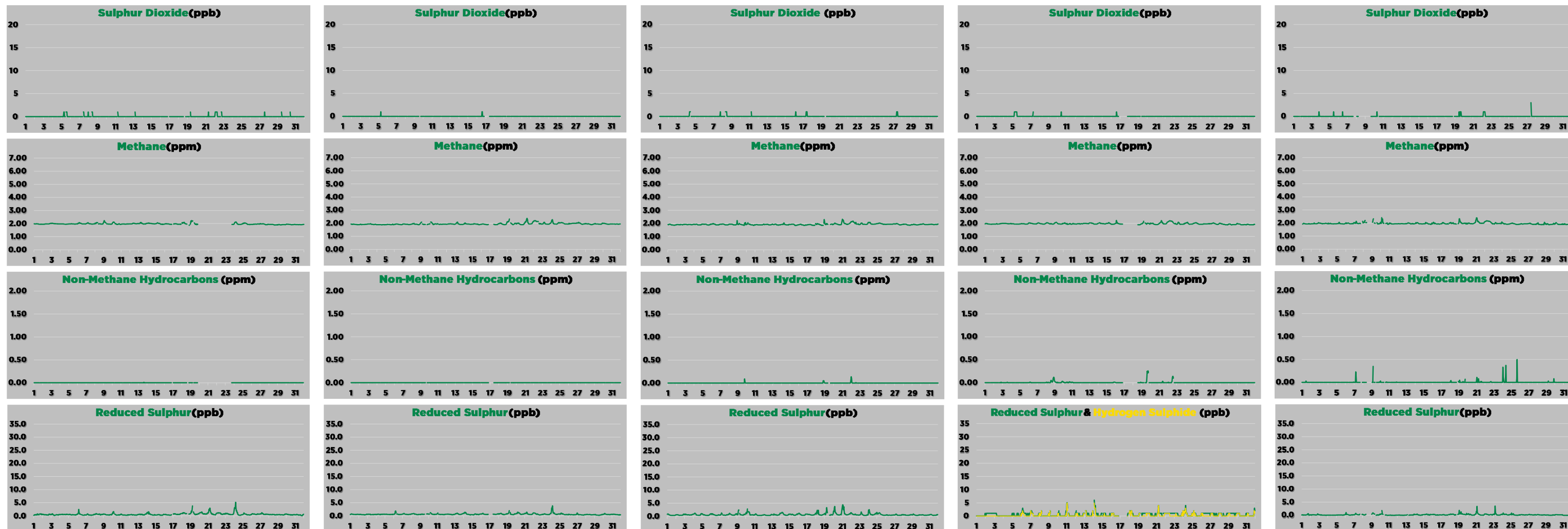
986-C Station

842-B Station

Reno-B Station

PRC Station

AQHI Station - Grimshaw



Field Operations Summary (detailed field operations notes can be found in the monthly technical reports on the [PRAMP website](#))

986-C Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable. All data collected this month were compliant with the requirements outlined in the AMD 2016.
- THC/CH₄/NMHC:** The analyzer failed due to an issue with the hydrogen generator on July 19 hour 22. The generator was serviced following a successful post-repair calibration on July 23. Ninety- one hours of downtime were recorded due to this event. DINC0010231.

842-B Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable. All data collected this month were compliant with the requirements outlined in the AMD 2016. All parameters met the 90% operational uptime.

Reno-B Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable. All data collected this month were compliant with the requirements outlined in the AMD 2016. All parameters met the 90% operational uptime requirement, except THC/CH₄/NMHC (88.2%). DINC0006946.

PRC Station

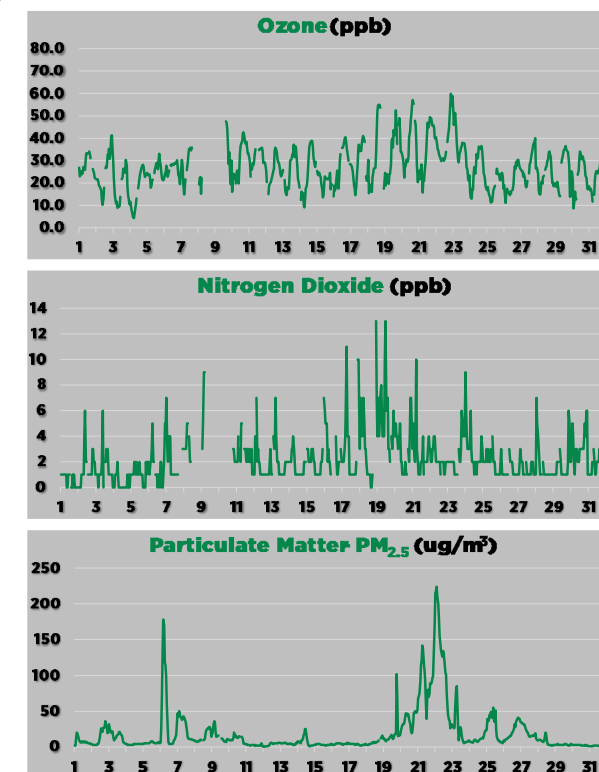
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable. All data collected this month were compliant with the requirements outlined in the AMD 2016. All parameters met the 90% operational uptime.
- THC/CH₄/NMHC:** PRAMP's Thermo 55i analyzer (s/n: 1191032505) was replaced by CNRL's Thermo 55i analyzer (s/n: 1034745845) on July 17. After stabilizing overnight, a calibration was completed on July 18. CNRL's analyzer had been removed for repair on June 11. Sixteen hours of downtime were recorded during this event.

AQHI Station - Grimshaw

- Station HVAC:** Between July 1 and July 9, a malfunction in the HVAC system caused temperatures inside the station to exceed the recommended limits for gas analyzers (35°C for NO_x/NO/NO₂, TRS, and THC/CH₄/NMHC; 30°C for SO₂ and O₃). This may have affected data quality, leading to the discarding of 22 to 36 hours of data. PM_{2.5} data, however, was unaffected as the T640 analyzer operates within 4°C - 50°C. A portable AC unit was installed, and HVAC repairs were completed on July 9.
- PM_{2.5}:** On June 11, the T640 PM_{2.5} unit's intake glass jar was found broken. It was replaced, and annual maintenance was performed on July 10, followed by a successful audit.
- NO_x/NO/NO₂:** The Teledyne T200 analyzer failed a calibration check on July 10 and was replaced with BV's Thermo 42i analyzer the same day. Data from July 9 onwards was invalidated, resulting in 32 hours of downtime.

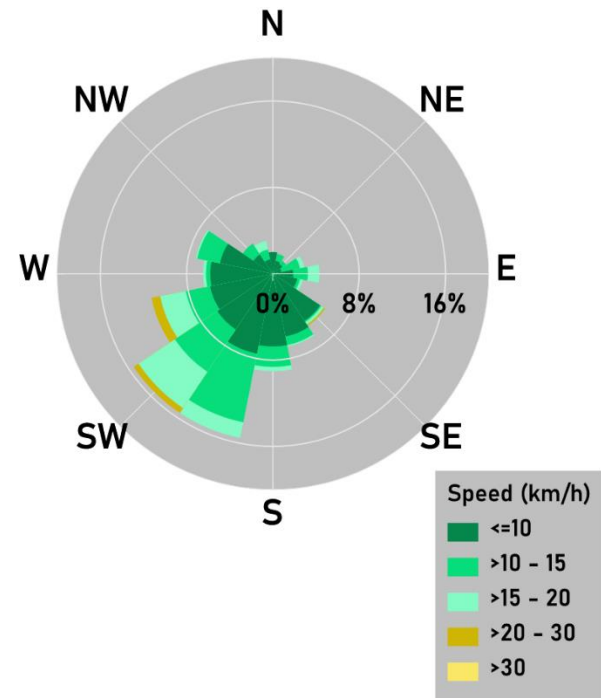
NMHCs Canister Sampling Program

- One canister event was recorded this month. The canister system at the Reno-B station was triggered on July 18 at 20:55 after the 5-minute average of NMHC concentration was recorded at 0.40ppm at 20:50.

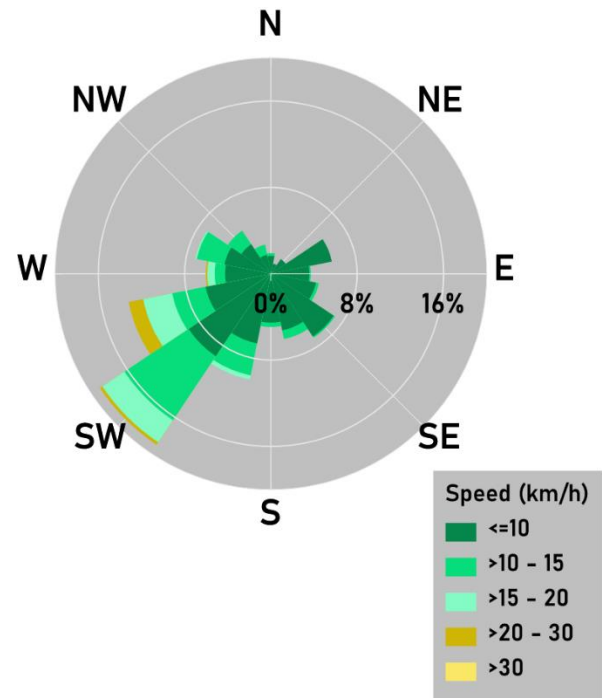


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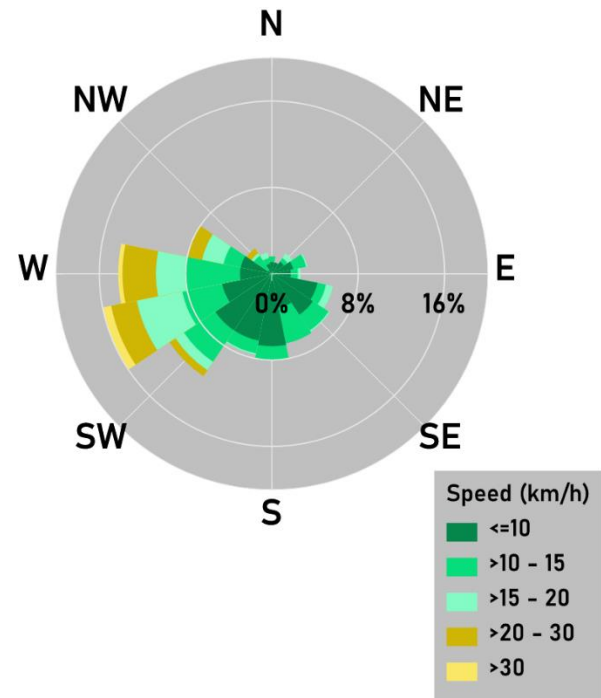
986-C Station



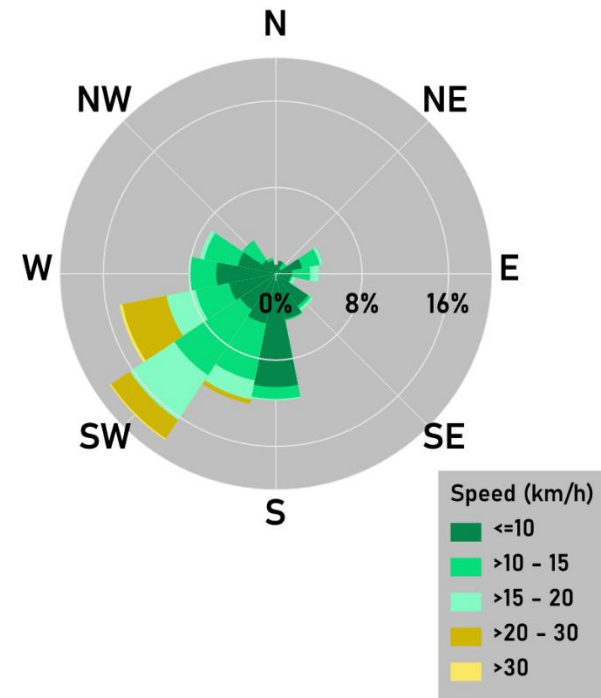
842-B Station



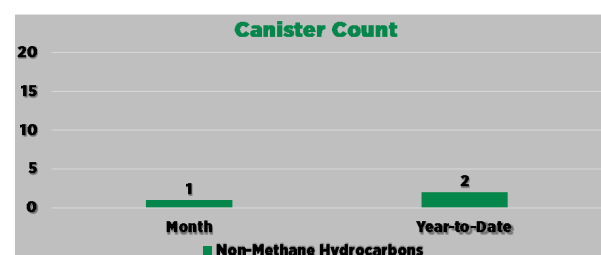
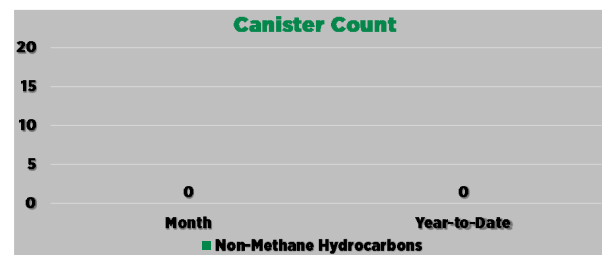
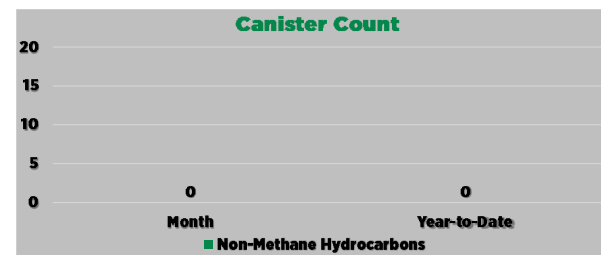
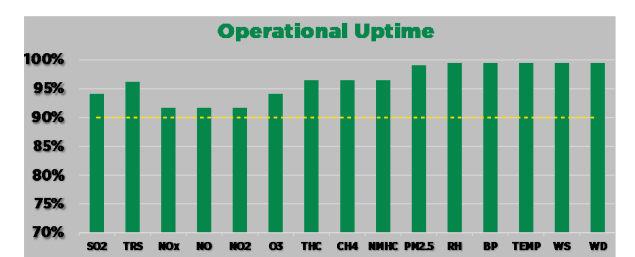
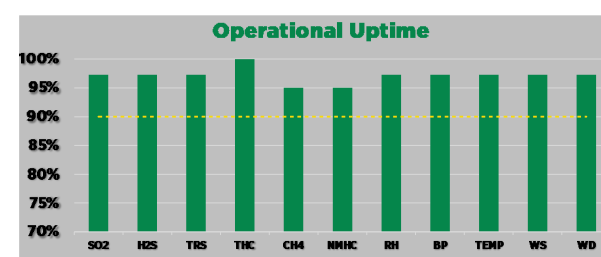
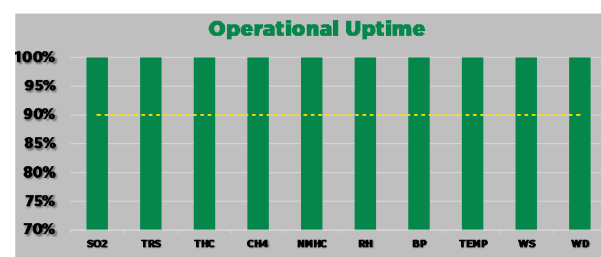
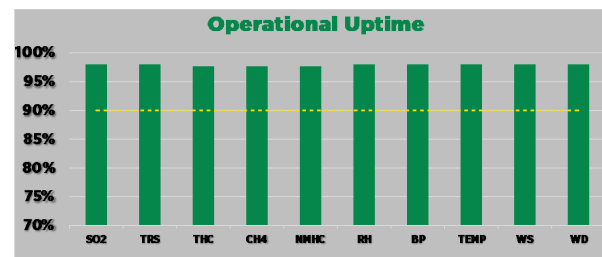
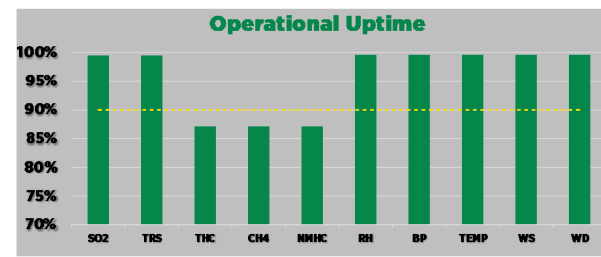
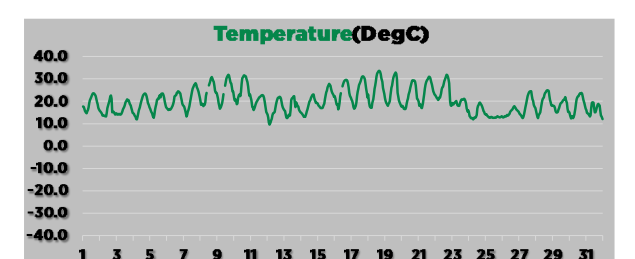
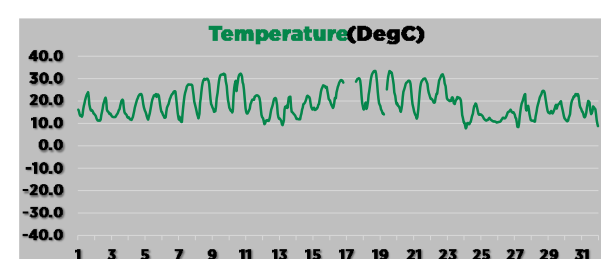
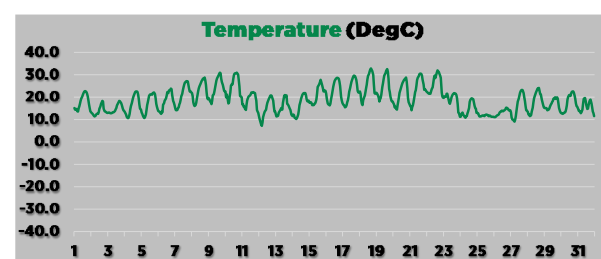
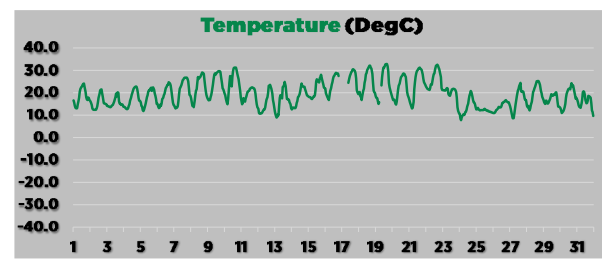
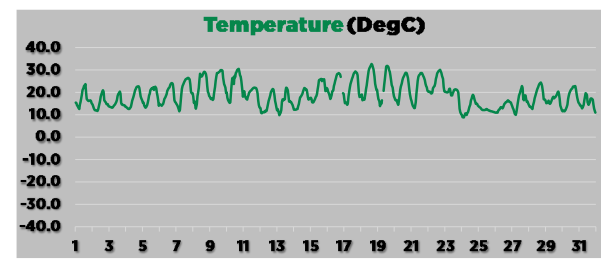
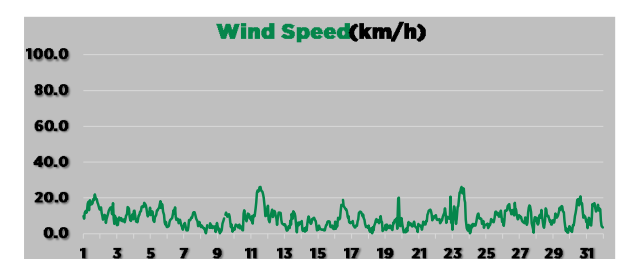
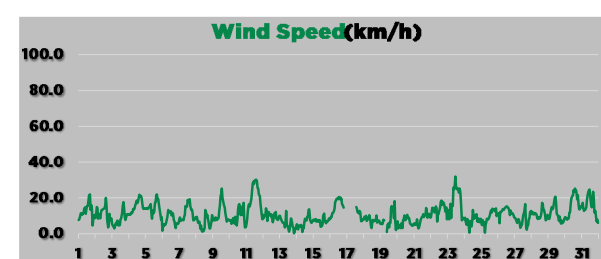
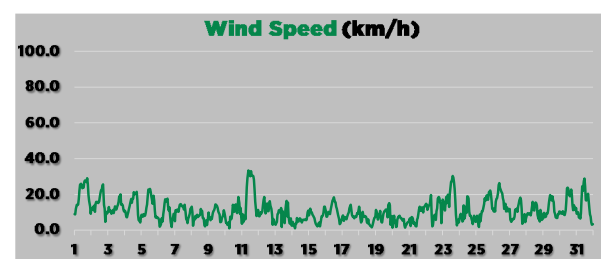
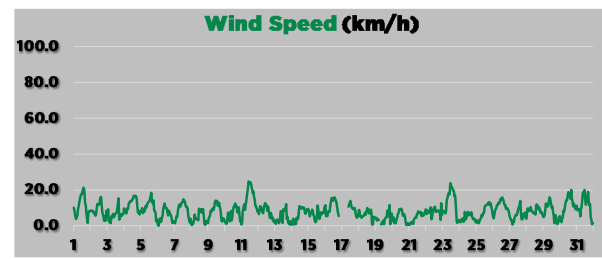
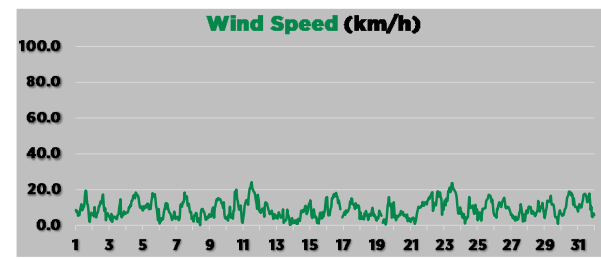
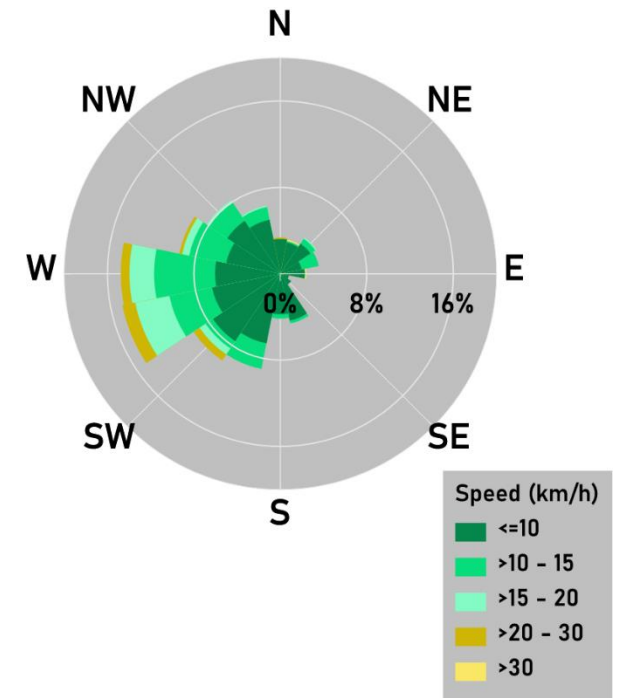
Reno-B Station



PRC Station



AQHI Station - Grimshaw



Targets, Guidelines, and Objectives
 Sulphur Dioxide 1h AAAQO = 172 ppb
 Ozone 1h AAAQO = 76 ppb
 Particulate Matter (PM_{2.5}) 1h AAAQO = 80 ug/m³
 Nitrogen Dioxide 1h AAAQO = 159 ppb
 Operational Uptime Requirement = 90%
 AQHI Risk Value = 1-3 Low, 4-6 Moderate, 7-10 High, >10 Very High

