

October 2024: Active Monitoring Program

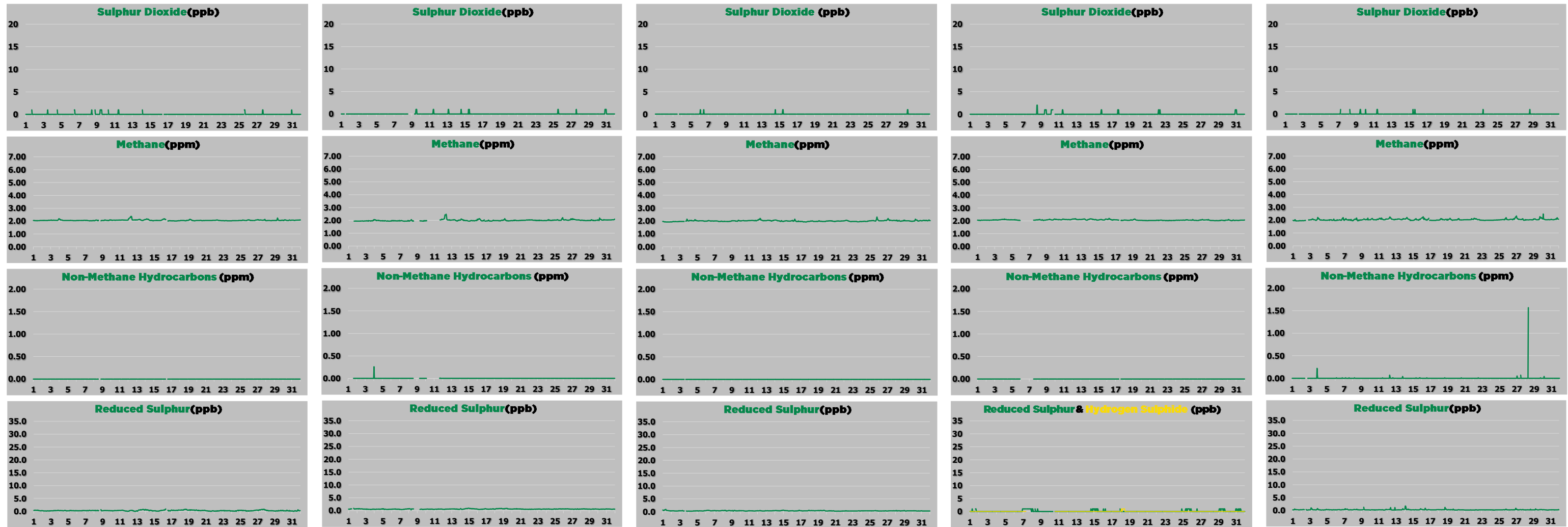
986-C Station

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

- RH/AT: To address AEPA station audit finding, which was conducted on June 17, the Rotronic HC2-S3 sensor, s/n: 20370767, was removed for manufacture maintenance/calibration, and a new Reotronic HC2-S3 sensor, s/n: 24010202, was installed On October 1.
- THC/CH4/NMHC:
 - The Thermo 55i analyzer (s/n: 1501663728) failed the October 1 as-found check due to baseline drift and was recalibrated the same day. Data were invalidated back to the last valid calibration on September 30, resulting in 12 hours of downtime.
 - On October 10, the same analyzer failed the shutdown calibration due to bad injections and was replaced with Thermo 55i (s/n: 12208316589). After overnight stabilization, installation calibration was completed on October 11. Data were invalidated back to October 10, hour 3, with 35 hours of downtime recorded.

Reno-B Station

- No major operational issues this month.

PRC Station

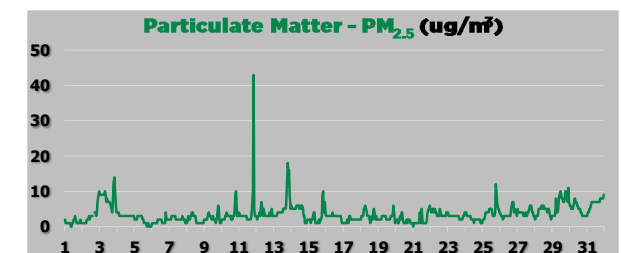
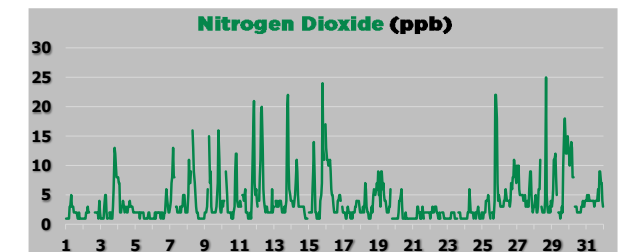
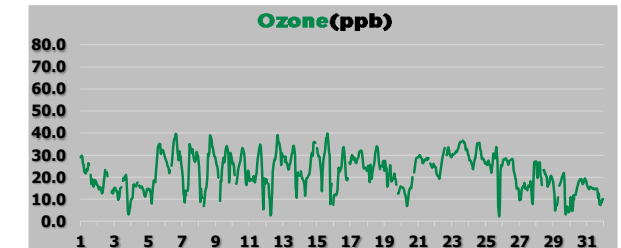
- SO2: The analyzer failed the daily span check on October 9 due to permeation tube depletion. The permeation tube was replaced on October 16. A new expected span value was entered on October 18. Data quality was not compromised due to this event.

AQHI Station - Grimshaw

- No major operational issues this month.
- During the AEPA station audit on June 19, 2024, the Teledyne T200 NO_x/NO/NO₂ analyzer (s/n: 837) exhibited performance issues and was removed for troubleshooting on July 10. The root cause of low NO/NO_x point drift was identified as contamination from wildfire smoke. The unstable NO₂ readings during rapid concentration changes were due to reduced flow, preventing proper flushing of the reaction chamber. This led to spurious NO₂ readings and inaccurate AZERO values, a known issue with Teledyne analyzers due to dynamic averaging. To resolve this, the sample flow path, critical orifices, and sinter filters were cleaned or replaced, and the moly converter was swapped with a known good unit.

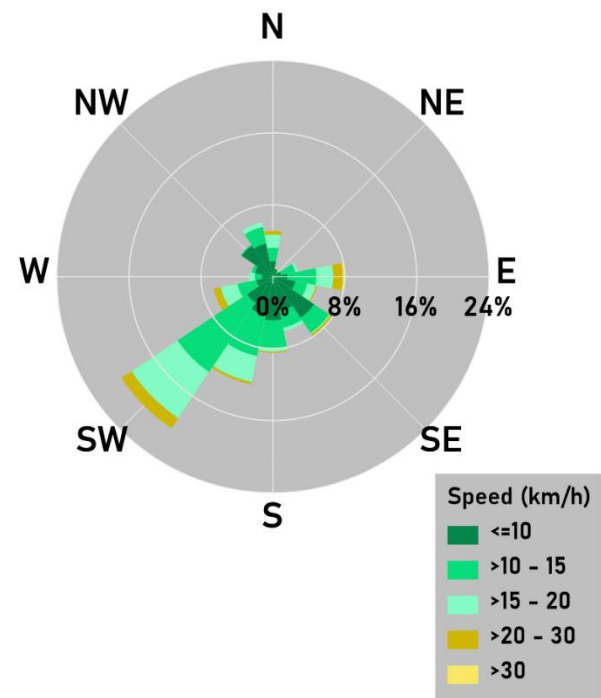
NMHCs Canister Sampling Program

- No valid canister events were recorded this month. The canister event triggered at the 842-B station on October 4 at 01:00 was not valid. The system was triggered when the time bad injections occurred on the HC analyzer.

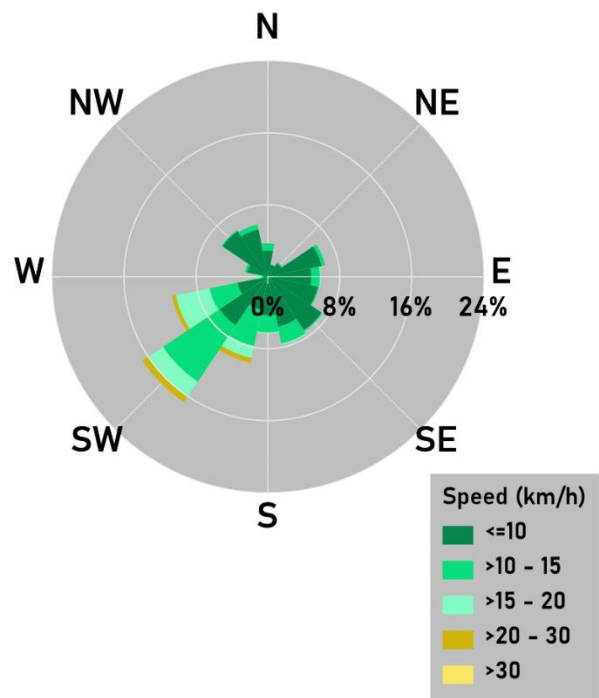


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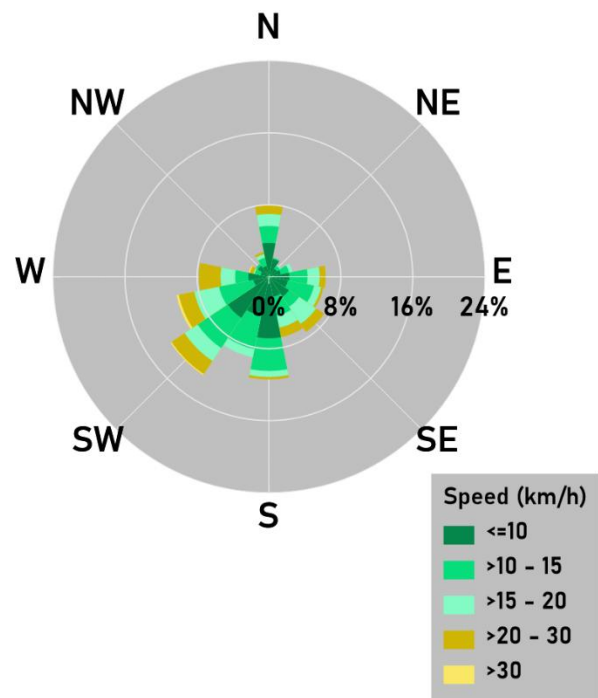
986-C Station



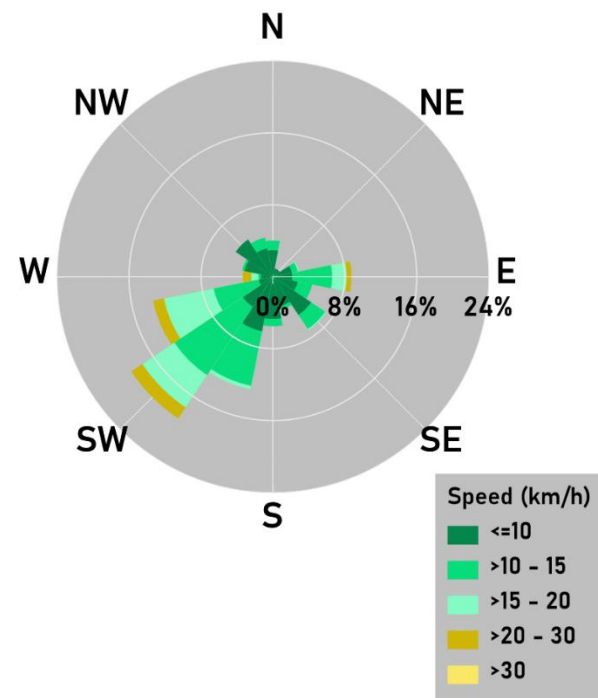
842-B Station



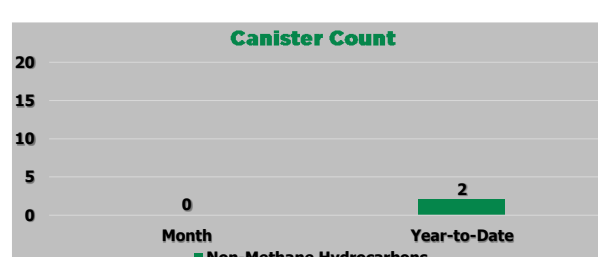
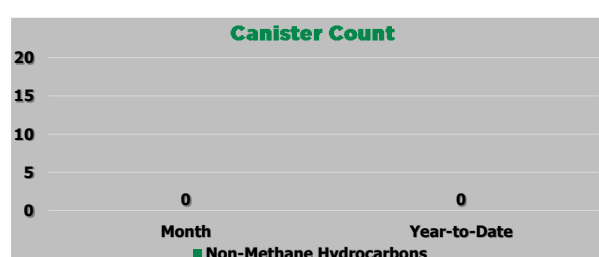
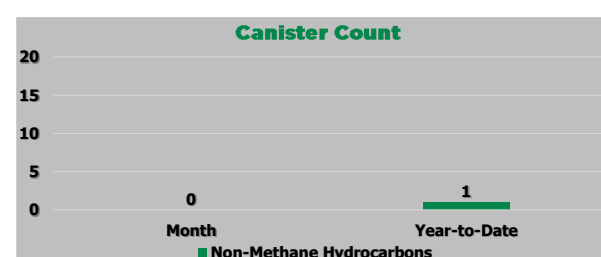
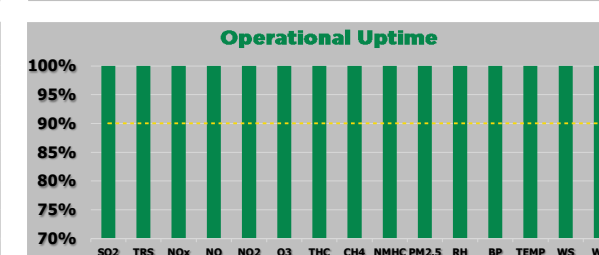
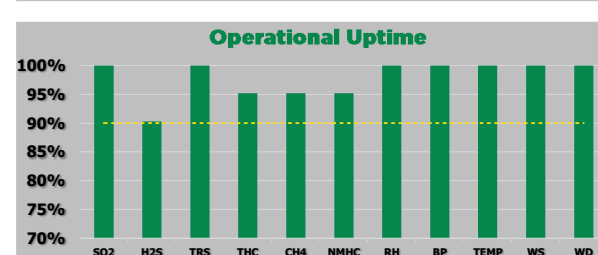
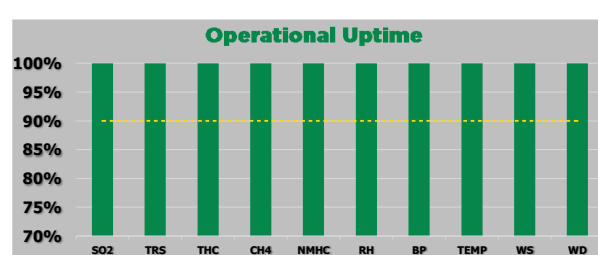
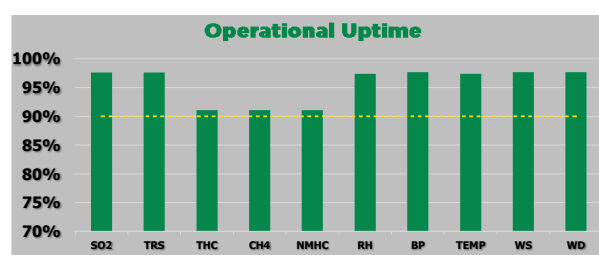
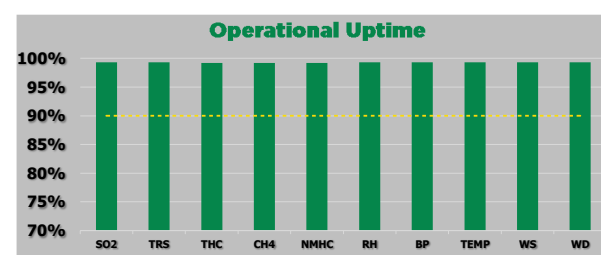
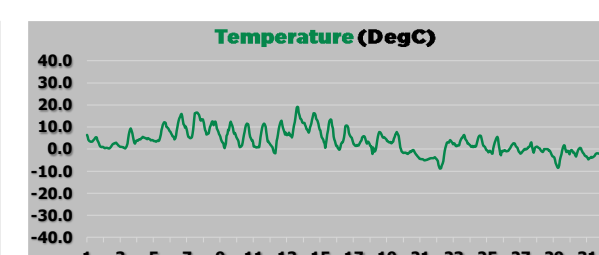
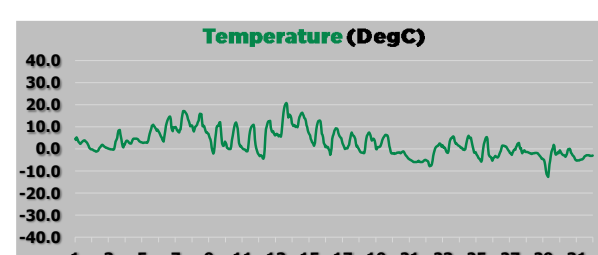
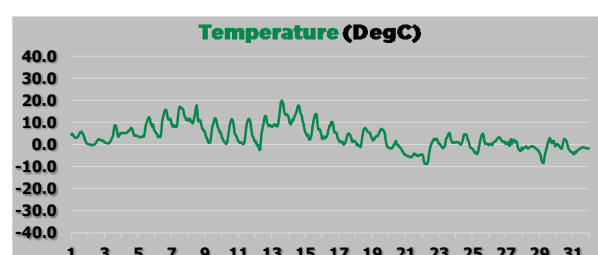
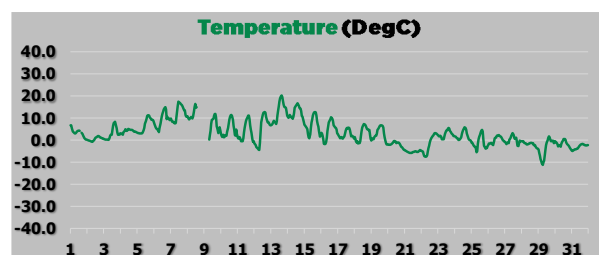
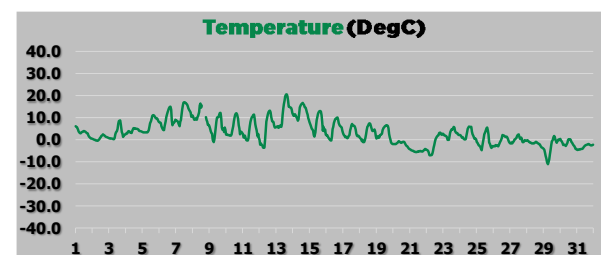
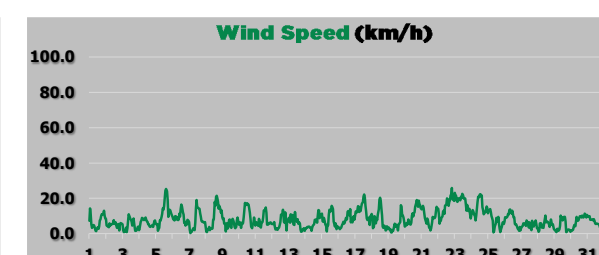
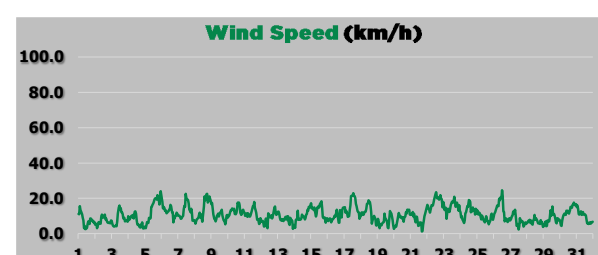
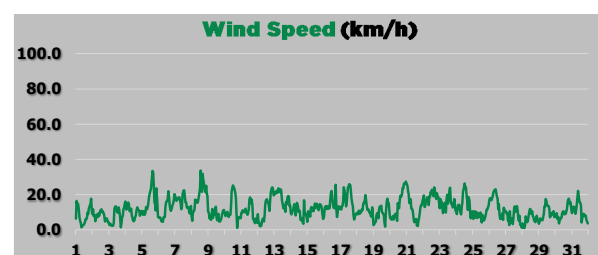
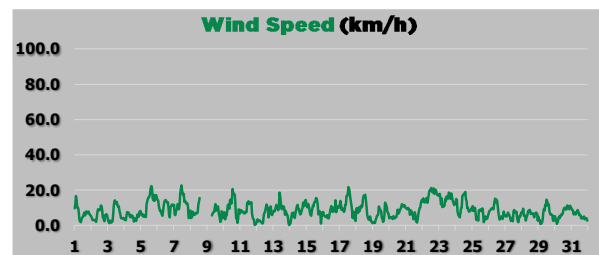
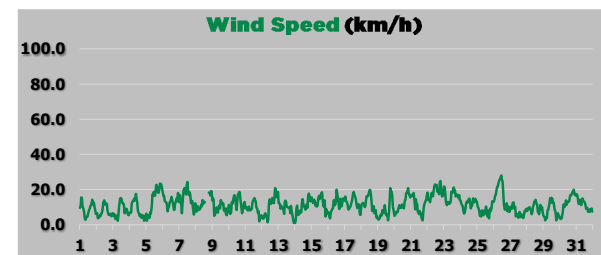
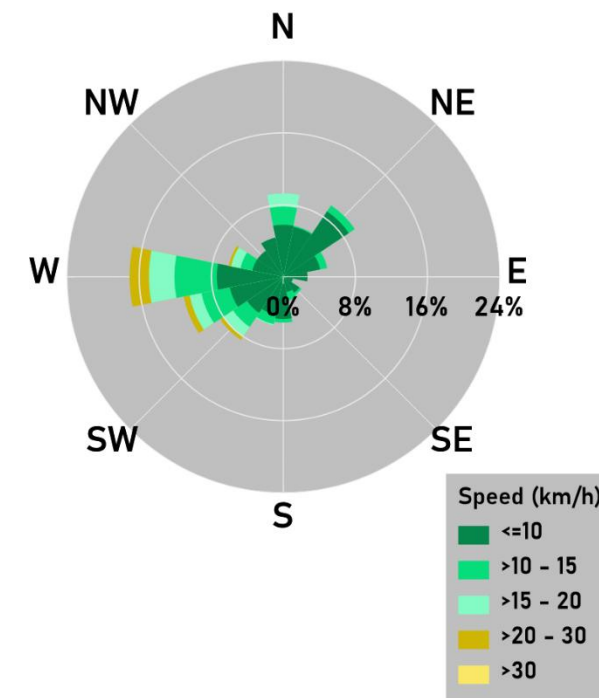
Reno-B Station



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

