

WHISTLER PURPLEAIR/BAM JULY SUMMARY

Monitoring Period: July 1st – July 31st 2023

Location: Whistler, BC, Canada



Figure 1 - Monitoring Locations

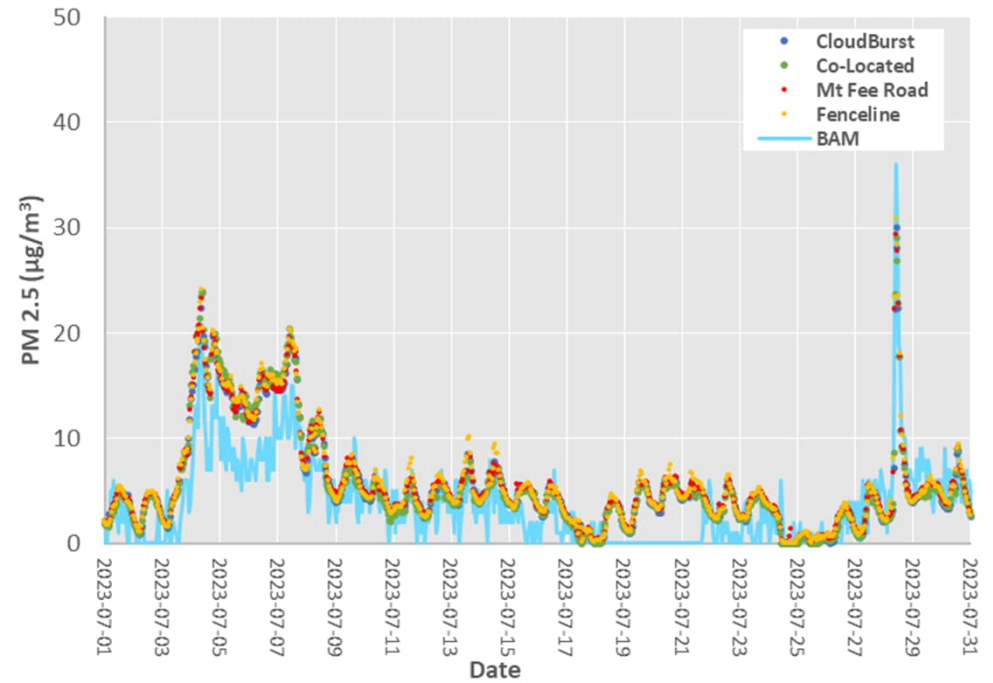


Figure 2 - PM_{2.5} Time Series of Purple Air Monitors and Whistler BAM



Figure 3 - Monthly Averages and Maximum 24-Hour Averages By Station

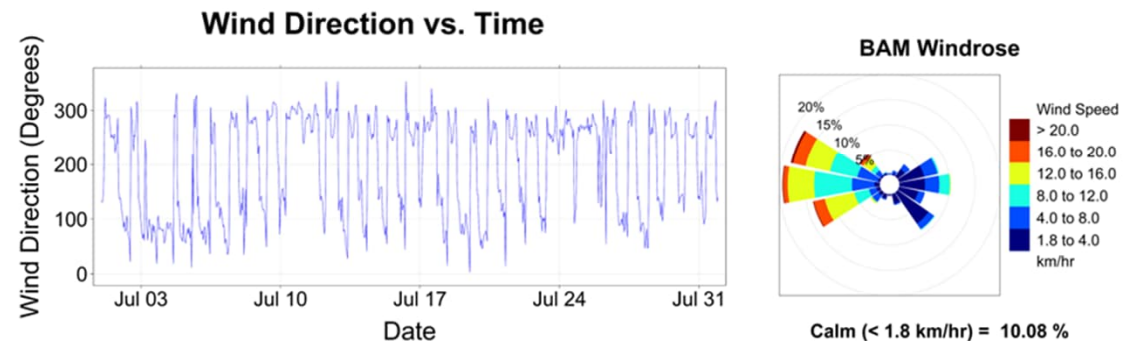


Figure 4 - Wind Direction vs. Time and BAM Windrose

Discussion: The 24-hour maximums for the monitors were all below the BC MOE PM_{2.5} Air Quality Objective as shown in Figure 3.

The BAM was under annual calibration from July 18, 2023, at 9 am to July 21, 2023, at 4 pm. BAM data from that period was excluded from the analysis.

There was no Air Quality Advisory ([metrovancouver.org](https://www.metrovancouver.org)) posted for July 3 to July 7 and July 28, but the particulate matter spikes observed in Figure 2 were also recorded at the MOE station located in Meadow Park.

Data from the PurpleAir monitors was corrected using Model 7, as suggested by Nilson et al. in the journal Atmospheric Measurement Techniques (<https://doi.org/10.5194/amt-2021-425>).