Evaluation and Calibration of Clarity Node S Low-Cost Sensors in Lubbock, Texas

John Garber and Karin Ardon-Dryer
Department of Geosciences, Texas Tech University, Lubbock TX, USA 79409.

Corresponding author: Karin Ardon-Dryer (karin.ardon-dryer@ttu.edu)

Supplement Figures

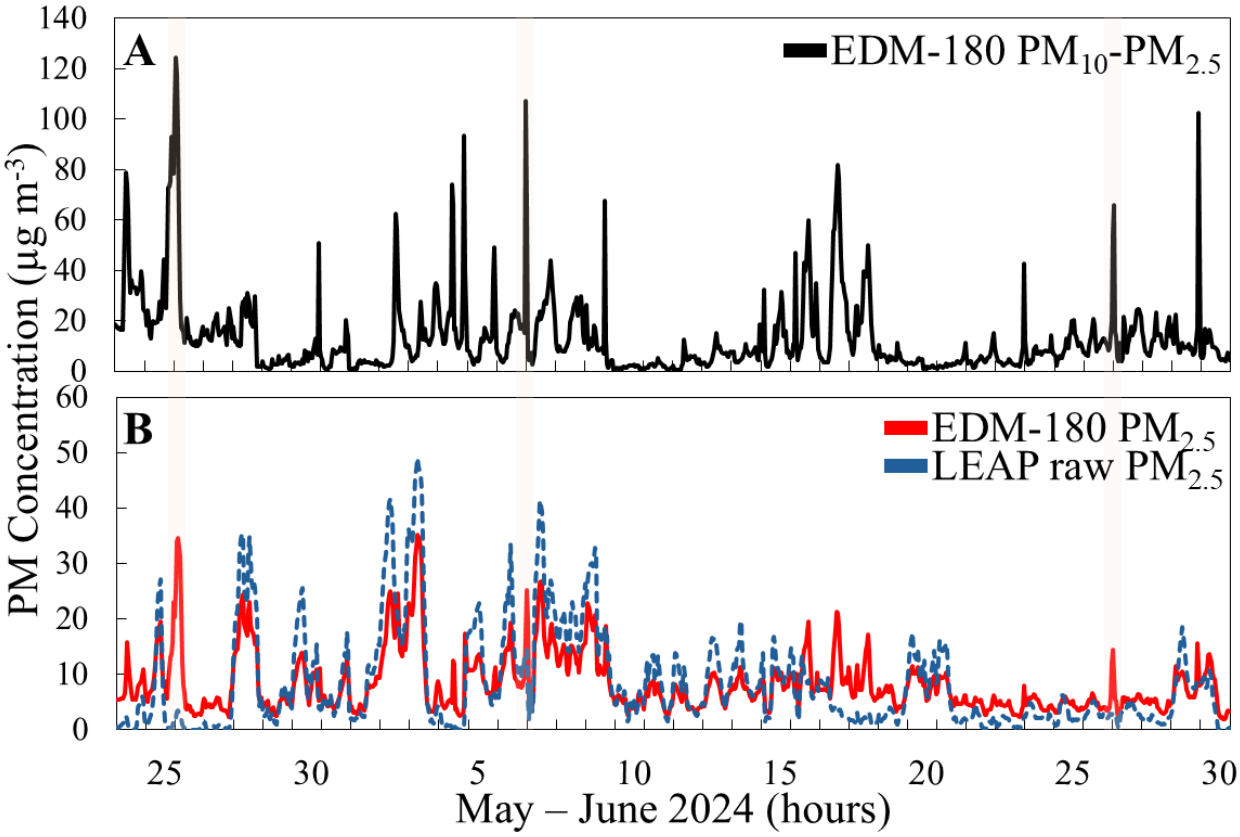

Figure S1: Time series plots for May and June 2024 showing (A) PM_{10}-$PM_{2.5}$ concentrations from the EDM-180, and (B) the comparison between the EDM-180 $PM_{2.5}$ (red) and raw LEAP01 $PM_{2.5}$ (blue) measurements. Light orange strips represent time with atmospheric dust particles.

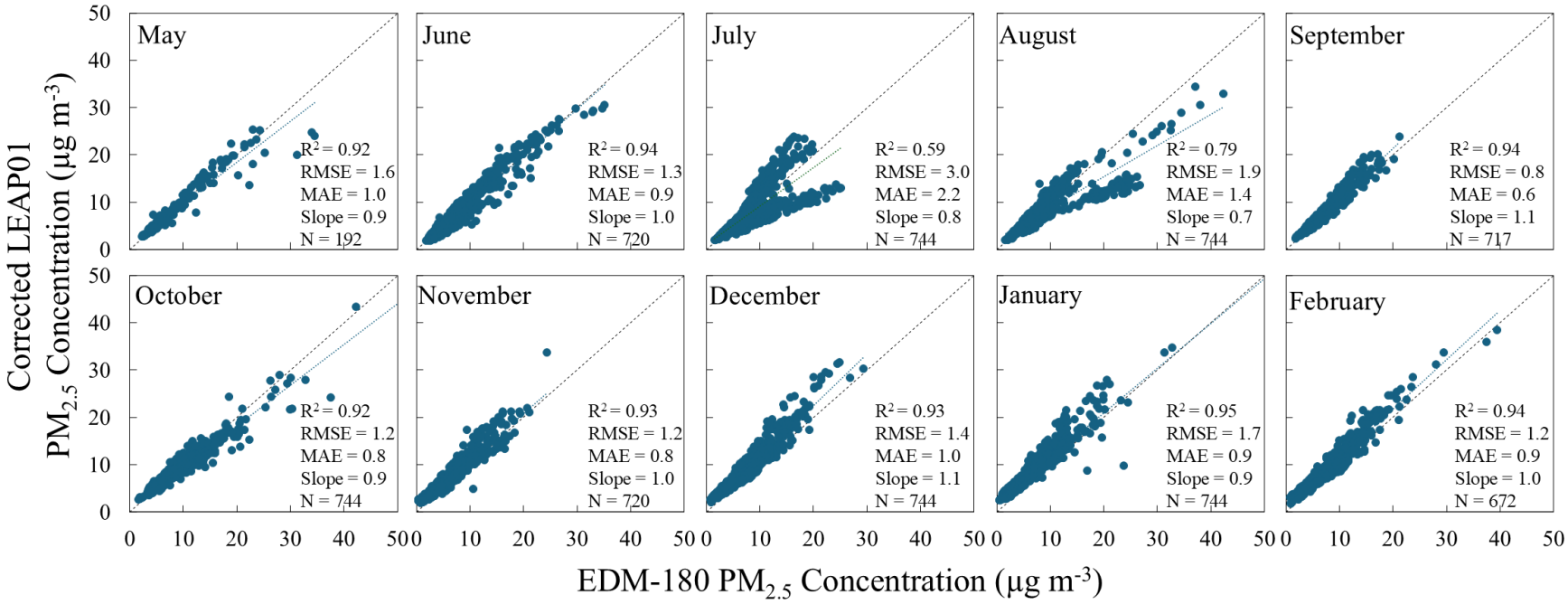

Figure S2: Comparison of hourly $PM_{2.5}$ concentrations between calibrated LEAP01 values to the EDM-180 for each month from May 2024 to February 2025. Statistics of each comparison are provided in each scatter plot.

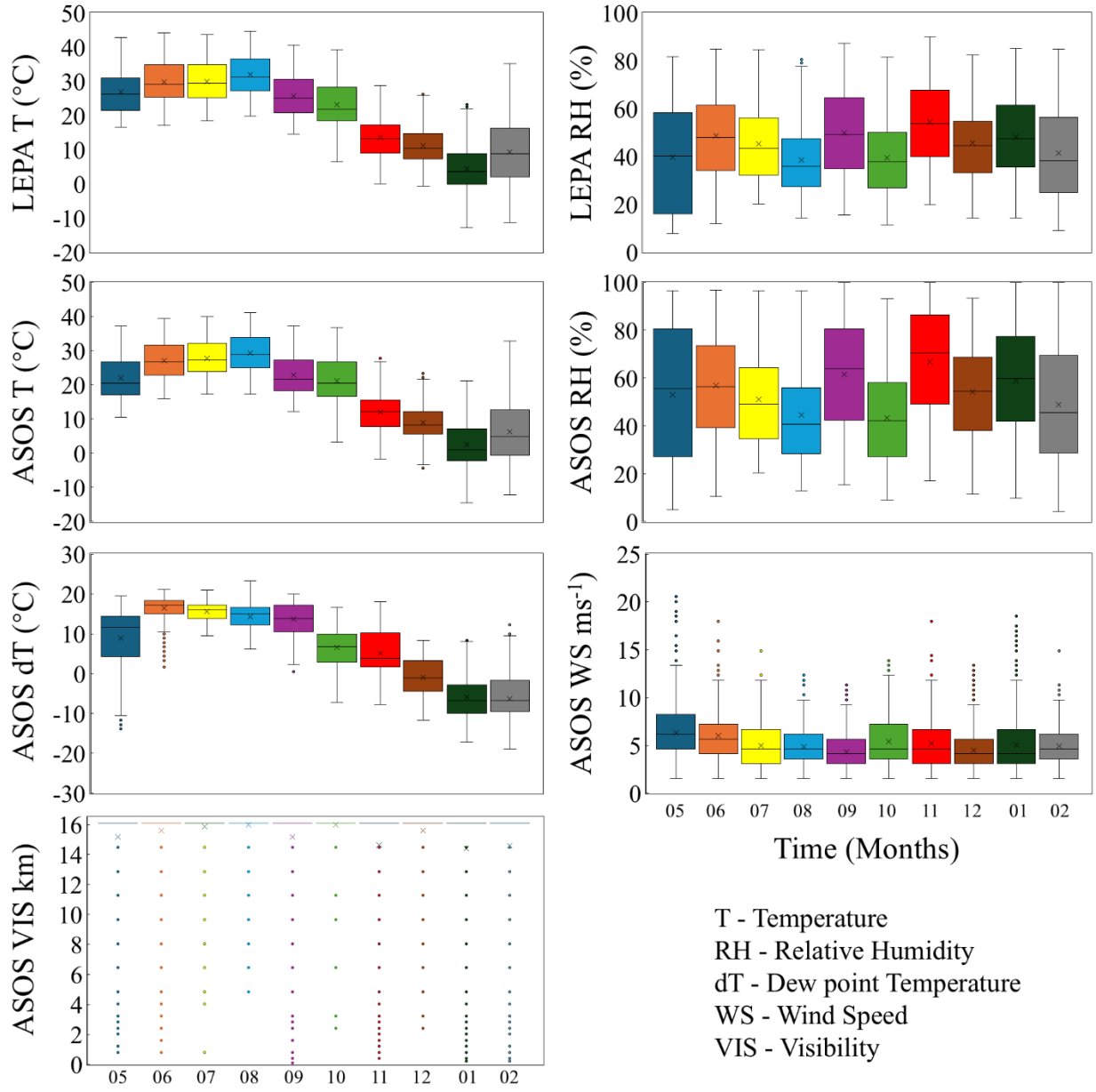

Figure S3: Comparison of meteorological conditions measured in each month during the study period, May 2024 to February 2025. T and RH measured by LEAP01. T, RH, dew point T (dT), wind speed, and visibility measured by the ASOS station. Each color represents a different month.

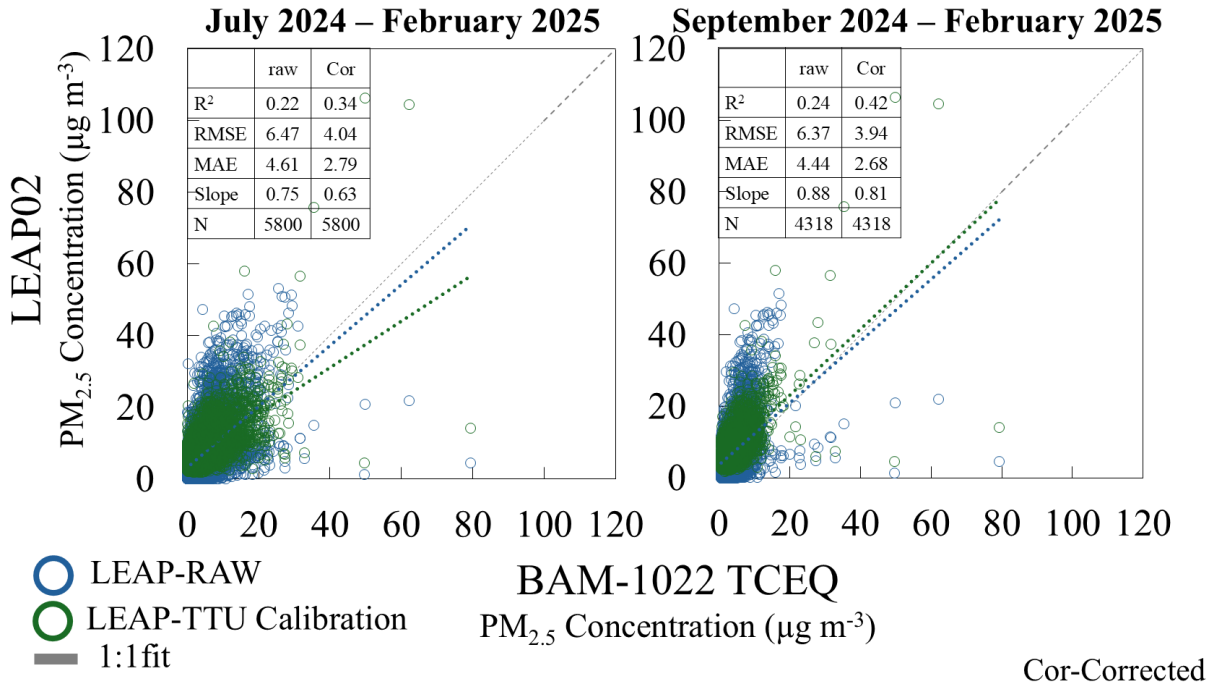

Figure S4: Comparison of $PM_{2.5}$ hourly concentrations between LEAP02 raw (blue) and LEAP calibrated (green) to the BAM-1022 for July to February (A) and for September to February (B). Statistics of each comparison are provided in the Table in each scatter plot. The dashed line represents the best fit between the BAM-1022 and the LEAP02, and the gray sash line represents the 1:1 line.