

Field Name on Excel File	Field Definition
Collection method	Method used for aerosol collection
TCAC	Aerosol collection using the Turbulent-mixing, Condensation Aerosol Concentrator
SSS	Aerosol collection using a Sequential Spot Sampler™
25FLTR	Aerosol collection using a filter with a diameter of 25 mm
Th	Vapor (saturator) temperature, °C
Tc	Aerosol temperature, °C
Time step	Time interval used in numerical calculations for droplet growth, sec
dd	Droplet diameter, μm
Qh	Vapor flow rate, L min^{-1}
Qc	Aerosol flow rate, L min^{-1}
GE>300 nm	Growth efficiency in optical diameters greater than 300 nm, unitless
GE>700 nm	Growth efficiency in optical diameters greater than 700 nm, unitless
GE>1400 nm	Growth efficiency in optical diameters greater than 1400 nm, unitless
Error	Standard deviation calculated from three replicates
S	Saturation ratio, unitless
Dkelvin	Kelvin diameter (the threshold diameter of the particle that neither grows nor evaporates), nm
dp	Aerodynamic diameter, nm
RH	Relative humidity of the aerosol stream, %
X	X-coordinate of point location, mm
Z	Z-coordinate of point location, mm

A	Projected area of the collected particulate sample on the substrate, mm ²
Nconc	Aerosol number concentration, cm ³
heta,diff	Transmission efficiency of particles undergoing diffusive deposition, unitless
Part	Section of the TCAC tested experimentally for particle losses
GT	Growth tube of the TCAC
Nozzle	Converging Nozzle of the TCAC
Nozzle with grease	Converging Nozzle of the TCAC with grease applied on the interior walls
Min-U-Sil Diameter	Grade (5 µm or 10 µm) of fine, ground silica of high purity, µm
Losses	Particle losses measured experimentally across different sections of the TCAC, unitless
Operation time	Time of operation of the TCAC, min
Uncertainty	Fiber Count Uncertainty, %
Sampling time	Collection time of fibers, min
Nafion tube	Cases used for the calculation of the saturation ratio at the exit of the Nafion membrane tube.
Water-saturated	The case where water-saturated walls were assumed for the Nafion membrane tube.
Flux	The case where a water permeability rate was considered through the Nafion membrane tube.