

| Field Name on Excel File | Field Definition  |
|--------------------------|---|
| Collection method        | Method used for aerosol collection                              |
| NSC                      | NanoSpot Collector  |
| 13FLTR                   | Aerosol collection using a filter with a diameter of 13 mm      |
| 25FLTR                   | Aerosol collection using a filter with a diameter of 25 mm      |
| SSS                      | Sequential Spot Sampler   |
| AL                       | Aerodynamic lenses  |
| CN                       | Converging Nozzle of the NanoSpot Collector                     |
| GT                       | Growth tube of the NanoSpot Collector                           |
| Location                 | Part of the NanoSpot Collector where losses were calculated for |
| Losses                   | Wall losses calculated, unitless                                |
| Inlet                    | Inlet of the NSC  |
| T <sub>ini</sub>         | Initiator temperature, °C                                       |
| T <sub>mod</sub>         | Moderator temperature, °C                                       |
| T <sub>cond</sub>        | Conditioner temperature, °C                                     |
| NC                       | Number concentration, cm <sup>-3</sup>                          |
| dp                       | Aerodynamic diameter, nm  |
| dm                       | Mobility diameter, nm   |
| Aerosol                  | Aerosol type used, either NaCl or Min-U-Sil@5                   |
| Generation               | Generation method used, either Nebulizer or Fluidized Bed       |
| Set                      | Replicates  |
| CE                       | Collection Efficiency, unitless                                 |
| TE                       | Transport efficiency, unitless                                  |
| Error                    | Standard deviation calculated from three replicates             |

|                   |  |
|-------------------|--|
| heta,dif          | Transmission efficiency of particles undergoing diffusive deposition, unitless                   |
| A                 | Deposition area of collected particulate sample, mm <sup>2</sup>                                 |
| Sc                | Analytical measurement sensitivity, mg <sup>-1</sup> m <sup>3</sup>                              |
| N                 | Particle number  |
| X                 | X-coordinate of point location, mm   |
| Y                 | Y-coordinate of point location, mm   |
| z                 | Distance from inlet of Growth Tube, mm   |
| mp                | Collected particulate mass, µg   |
| RI                | Raman Signal Intensity, a.u.   |
| RSL               | Raman Sampling Location, mm  |
| Path              | Direction used for Raman sampling (horizontal, vertical, 1st diagonal, 2 <sup>nd</sup> diagonal) |
| Shift             | Raman Shift, cm <sup>-1</sup>  |
| Sr                | Saturation ratio, unitless   |
| tc                | Collection time, min   |
| Cf                | Concentration of fibers, fibers/cm <sup>3</sup>  |
| Q                 | Flowrate, lpm  |
| Count Uncertainty | Fiber Count Uncertainty, %   |
| Mass Uncertainty  | Estimated particulate mass uncertainty, unitless   |

Define the column headers in Row one of Fiber Count Uncertainty. (In the methods you don't mention sequential spot sampler, or 13 and 15 mm filter collection. How you derived the uncertainty measure is also not described.) What are the units of Uncertainty or are they unitless numbers? Limit the number of significant figures in columns D, H and I. (please look at all of your files and limit the significant figures to only those needed.)

Define the column headers in Row one of Raman Intensity vs. Particle mass. Intensity is misspelled in the CSV file name. Limit your significant digits. Provide the units of measure if the numbers are not

unitless. You defined RI in the table, but I assume RI is the average of the 3 sets? RI-error is the standard error of the mean?

Raman Spectra raman intensity files: What are the numbers after RI-?

What are the units of the heta,dif numbers? Again sig figs need to be limited. – Transmission efficiency through diffusive deposition file.

Transport efficiency and losses vs. dp numerical: Define the terms in the first row. Note the typo in the title – “losse”. What are the units of measure for the numbers?