Dear Editor,

Regarding your comment on the CGS unit, we have added the following note in the caption of Table 10: "**Note that CGS units are used in all of the equations and tables except Eqs. 6-9 because many empirical formulas in Tables 1-7 were developed based on CGS units."**

Regarding the new comments from the reviewer, we have addressed all the comments. Most comments are simple wording changes. Only two comments need some significant changes as described below.

For comment (5), the revised text reads: The table, however, only covers collector (raindrop) sizes of 10 to 300 μm in radius colliding with aerosol particles (collected particles) with size ratios (the so-called p-ratio) from 0.05 to 1.0. There are no data available for collectors larger than 300 μm in radius, a size range that has appreciable concentrations in medium to heavy rain, or for particles with size ratios less than 0.05, which can include particles from 0.5 to 10 μm in radius. As well, collision efficiencies for collectors smaller than 30 μm were later found to be underestimated (Vohl et al., 2007). These deficiencies appear to be the main causes of the lower values of Λ_{rain} for particles in the diameter range from 1.0 μm to 10.0 μm compared to the rest of the Λ_{rain} formulas.

For comment (8), we have added a new paragraph: To gain an idea of how $A(d)$ and $B(d)$ in Eqs. (6) and (7) would differ if $\Lambda_{rain}(d, R)$ values other than 90^{th}-percentile ones had been used, a separate empirical fitting was performed using 50^{th}-percentile values. It was found that $B(d)$ values did not change by very much whereas A(d) values differed by one order of magnitude. As noted above, B(d) represents the rate of change of $\Lambda_{rain}(d, R)$ for changes of R while A(d) represents the $\Lambda_{rain}(d, R)$ value when $R = 1.0$ mm h^{-1}. This means that $\Lambda_{rain}(d, R)$ for the 90^{th} and 50^{th} percentiles vary similarly with changes in R, but the magnitude of the 90^{th}-percentile $\Lambda_{rain}(d, R)$ is much larger than the 50^{th}-percentile $\Lambda_{rain}(d, R)$.

Thank you very much for editing the paper.

Sincerely

Leiming Zhang and coauthors