

The authors have responded to the reviewers comments and revised their manuscript accordingly or have explained their original text as needed.

With the one minor editor's comment below, the manuscript is ready for publication by ACP.

It would be good to identify the size distribution in line 201 as a “number-size distribution” at least once in the text so it is clear to readers and that it is not interpreted as volume- or mass-distribution. Clearly it is number in the formula in line 204.

For your present study, I think a single mode size distribution is adequate and useful for comparison as you have stated.

Furthermore, the number size distribution parameters you use, median radius and sigma, yield a volume (or mass) mode that is dominantly “coarse”. This a good starting point.

For future reference two modes would probably capture 90% or more of the information which is adequate considering the uncertainties in the models and input data. More important than adding more modes would be better observational data on the mean and standard deviations of the modes for various sources, surface wind speeds and transport meteorology.