

Dear Dr. Timothy Garrett,

Thank you for your suggestions. We have made the required changes to the manuscript. The following updates are reflected in the revised version (newly added text highlighted in red and deletions in blue):

Line 13: Now reads “A closure study of trends in CCN and cloud droplet concentrations suggests that dust-influenced and pristine-maritime environments *are primary regions that limit our current understanding of CCN-cloud-droplet relationships.*”

Line 58: N_d is now defined earlier in the introduction as “... reconciling not only their variability across diverse spatio-temporal scales but also their co-variability with relevant cloud properties, *such as cloud droplet number concentration (N_d).*”

Additional minor corrections:

Line 56: The supersaturation value used for comparing CCN concentrations is now introduced earlier in the manuscript: “Here, we conduct a closure study between the two independent novel n_{CCN} datasets *for a maximum supersaturation of 0.2 %*, reconciling ...”

Line 64: Modified from “We first compare the spatial variations in n_{CCN} climatology *at a supersaturation of 0.20 %* for altitudes ...” to “We first compare the spatial variations in n_{CCN} climatology for altitudes ...”

Acknowledgement section: Funding sources are updated.

Thank you for your consideration.

Best regards,

Goutam Choudhury