TS1 Please give an explanation of why the equation needs to be changed. We have to ask the handling editor for approval. Thanks.
TS2 Please give an explanation of why the equation needs to be changed. We have to ask the handling editor for approval. Thanks.
TS3 Please give an explanation of why the equation needs to be changed. We have to ask the handling editor for approval. Thanks.

This refers to the three equations below. Here is what happened. During the final submission we changed the text from a "Google doc" to "MS. Word". I asked a student to help me with transcribing the equations into the new equation editor and they inadvertently changed the ∂ to δ. While I did check that work, this change was subtle enough for me to miss.

Note that it was correct in the original submission that is posted on ACPD, and the intent is clear from the text below the equations. Also see Eq. S1 in the supplement which derives one of the equations in question (Eq. 17).

ticle number concentration $D > \sim 0.5\,\mu m$. The relationship between backscatter and particle number is TS1

$$\beta(S) = \left(\frac{\delta\beta}{\delta N}\right)_S N(S) + c(S), \qquad (15)$$

where S is the saturation ratio ($S = \mathrm{RH}/100\,\%$), $\beta(S)$ is the backscatter at saturation ratio S, $N(S)$ is the number concentration of particles larger than a specified threshold diameter, $(\partial\beta/\partial N)_S$ is the slope, and $c(S)$ is the intercept of the regression lines shown in Fig. 4a–l. In practice, $(\partial\beta/\partial N)_S$ and

Original

$$\beta' = \left(\frac{\partial\beta}{\partial N}\right)_S N' + \left(\frac{\partial\beta}{\partial S}\right)_N S' \qquad (16)$$

Typesetting

$$\beta(S) = \left(\frac{\delta\beta}{\delta N}\right)_S N(S) + c(S), \qquad (15)$$

Original

$$\beta(S) = \left(\frac{\partial\beta}{\partial N}\right)_S N(S) + c(S) \qquad (15)$$

Typesetting

$$\beta' = \left(\frac{\delta\beta}{\delta N}\right)_S N' + \left(\frac{\delta\beta}{\delta S}\right)_N S'. \quad (16)$$

TS5

Original

$$\langle w'N' \rangle = \langle w'\beta' \rangle / \left(\frac{\partial\beta}{\partial N}\right)_S - \left(\frac{\partial\beta}{\partial S}\right)_N / \left(\frac{\partial\beta}{\partial N}\right)_S \langle w'S' \rangle \quad (17)$$

Typesetting

$$< w'N' > = < w'\beta' > / \left(\frac{\delta\beta}{\delta N}\right)_S - \left(\frac{\delta\beta}{\delta S}\right)_N / \left(\frac{\delta\beta}{\delta N}\right)_S < w'S' >, \quad (17)$$

TS4 Please confirm this section and the removal of the acknowledgements.

Confirmed.

TS5 Please confirm article number.

Confirmed.