

Comments to the Author:

Dear Dr Xie

Thank you for submitting your revision to Atmospheric Chemistry and Physics, and for your careful attention to the earlier reviews of this article and my own comments.

I think that your manuscript is nearly ready for acceptance, except for a small error in Equations 5 and 18, which are currently still dimensionally wrong. Based on your own explanations, the right hand side needs to be divided by the density of water (ρ_w) and this needs to be shown by the equation. With $\rho_w = 1000 \text{ kg m}^{-3}$ and the suggested units as per your manuscript, the result should then be in $\mu\text{g m}^{-3} \text{ h}^{-1}$, so I think numerically this does not lead to any changes.

Incidentally, the equation of Seinfeld and Pandis (2006) is also wrong. It needs to be divided by the density of water and atmospheric pressure, to be dimensionally correct. I haven't got the the latest (third) edition of this textbook to hand, but if the equation is also wrong in the latest edition, I'd be happy to write to Seinfeld and Pandis and explain this.

Kind regards

Jan Kaiser

Editor Atmospheric Chemistry and Physics

Responses to the Editor:

Dear Dr Kaiser

Thanks very much for your careful comments. The right hand side of equation 5 and 18 is divided by the density of water (ρ_w) now and ρ_w is identified as " ρ_w is the density of water (1 kg L^{-1})."

 in line 167 and 255. As for the equation of Seinfeld and Pandis (2006), I think you are right. I'm sorry that I haven't got the third edition of this textbook either, so I'm not sure whether they have corrected this mistake.

Yours sincerely

Zhouqing Xie

On behalf of all co-authors