

***Interactive comment on “Modeling global radiative effect of brown carbon: A larger heating source in the tropical free troposphere than black carbon” by Aoxing Zhang et al.***

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Thankyou for this interesting and well-written paper. I have a couple of questions/comments that I think would help clarify some details

L125: You talk about the BrC optical properties, but what MAE/optical properties did you use for BC? This would affect the BrC/BC DRE ratio

L317 - 323: Can you comment on the mechanism for BrC being transported further than BC? This seems quite important to your conclusions, if you are saying they are from the same source in the tropics. You say it's a "simulated feature" that BrC DRE is

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larger than BC in some regions- do you expect this to be a real feature?

Please can you also add a table explaining what all the different simulations are (ICB, ICNB, CNN etc.)

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