

Interactive comment on “Simulated radiative forcing from contrails and contrail cirrus” by C.-C. Chen and A. Gettelman

Anonymous Referee #2

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This paper presents a further development in contrail radiative forcing, looking in detail at the diurnal cycle effect in more sophisticated models than previously published. It finds that the diurnal effect is even more important than previously thought and importantly calculates the effects on linear contrails and contrail cirrus separately.

I would like to see two very brief discussions added to the paper to make it more complete

1. How does using the SD model constrain the hydrological feedbacks. In particular, I can see how use of the SD model version might reduce/affect contrail cirrus as it can't feedback on the system?
2. A brief discussion of uncertainty would also provide better context. For example

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you say your results are stronger than Stuber and Forster, but would this be within the uncertainty range? Some numbers have uncertainties attached, e.g. the total forcing and Table 1. However, it is unclear to me how these uncertainties are derived

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 10939, 2013.