

Review of Lolli et al., ACP -2016-980

I thank the authors for including the suggested changes. I believe the manuscript can be published now.

Yet, I do still have 1 scientific comment (n6) and some comments on the writing style.

Comments

1.) *“Nighttime results will instead be considered as context to understanding net diurnal differences between the models when examining the GSFC dataset.”*

This isn't very clear, please rephrase.

2.)

I suggest restructuring section 3.2.

In the present form, the simultaneous description of 20 and 30 sr results does not help in the clarity of the message of the manuscript.

You first describe in lines 185-186 the 20 sr results, only later 30 sr results. But all of your further conclusions are based on 30 sr results, so I believe one should start with 30 sr, describe the results, and only later show the 20 sr results in a separate paragraph as some kind of a sensitivity test.

Moreover:

You kind of justify the choice of 30 sr for consistency with Sassen and Cho (1992), but not clearly stated why is valuable to look also at a different lidar ratio. I would just rephrase the sentence: *“The results here mirror the work...”* It might not be clear to a reader what you meant with mirror? Please use more straightforward expressions for the convenience of the reader.

3.) lines 222-224

Please rephrase the following sentence:

“A relative differencing here is impractical. Suffice however, this is a significant difference, and the sign of the net daytime forcing term is in direct question between the two.”

4.) line 226

I suggest the removing the first couple of words in the long and complicated sentence:

~~*The thought here is that,*~~ *Relative to prior estimates of CP uncertainty compared with more complex models, a diurnal average would be likely to produce a different, and plausibly closer, relative agreement consistent with prior studies.*

5.) lines 296-297:

Net daytime TOA CRE was evaluated versus cloud optical depth (COD) for steps of

0.03 (COD range: 0-1) at 20 sr and for steps of 0.1 at 30 sr (COD range: 0-3) for both the Singapore and Greenbelt, Maryland datasets.

Please, be careful – you only show 20 sr for Singapore!

6.) Figure 7

I am surprised to see such a strongly negative net CRE. Could you briefly, maybe in one sentence, comment on that in the text at the end of the section 3.4?