

Atmos. Chem. Phys. Discuss., referee comment RC1  
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## Comment on acp-2020-1138

Anonymous Referee #2

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Referee comment on "On the role of aerosol radiative effect in the wet season onset timing over the Congo rainforest during boreal autumn" by Sudip Chakraborty et al., Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2020-1138-RC1>, 2021

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- Line 59: The season abbreviation for September to December is given as SON. In analogy with other season MAM, it should be SOND?
- Line 143-150: The section gives an idea what authors did in the present manuscript. However, the connectivity from the previous paragraphs is not there. The section should be improved to clearly state the objective of the present work blended with the previously known knowledge.
- Section 2, Line 154: is it GPGP or GPCP?
- Line 173: Can authors explain the rationale behind choosing the MODIS Aqua data and particularly deep blue algorithm?
- In general, it was observed that the magnitude from re-analysis data is different to the satellite observations. Can authors comment on this aspect for their work, and how MERRA-2 was still able to pick up the dynamics expected by the authors?
- Figure 6: I am unable to believe the correlation and fit provided by the authors. Please check the June AOD fit and corresponding  $r$  value given. Which points the line is fitting to? It seems that the scattering is too high and somewhere in between the software fit the line to give some result. Same goes with JJA AOD fit.
- Can authors give few bullet points in their conclusion?