

I appreciate the efforts that the authors have gone to in order to respond to my comments. My comments have all been addressed very well and this version of the manuscript is much improved. In particular, the paper has been restructured to present the discussion of aerosol processing and aerosol-induced changes in the cloud field in separate sections. This greatly improves the flow of the argument and the clarity of the paper to the reader.

I recommend publication after addressing the few very minor comments below:

General comment: it would be worth including a very short (e.g. single sentence) description of the difference between bin vs bulk microphysics schemes (especially as you introduce CASIM as a new bulk scheme), before listing which of the cited studies use bin schemes and which use bulk schemes.

Revised manuscript:

P1 L2: heigh => height

P3 L11-13: "In addition..." – this sentence is incomplete?

P4 L4: "satellite data, that" – delete comma

P4 L15: sea => Sea

P4 L25 & L34: inconsistent spelling of focuses / focusses

P10 L4: "Another possibility are" => "Another possibility is"

P13 L21: waterpath => water path

P14 L28: waterpath => water path

P15 Lines 1,3,4,5,6,8,9,10: waterpath => water path

P15 L4, L5: rate => rates

P18 L18: "a results" => "a result"

P19 L25: "associated to" => "associated with"

P19 L25: "hypothesis" => "hypothesise"

P20 L 14: "may point to either with" => "may point either to issues with"

P20 L26: heigh => high

P22 L21: "smaller, if" => "smaller if"

Fig. 5: waterpath => water path

Fig. 7 L1, L3: waterpath => water path

Fig. A1: "For example illustrated with the green shaded area assumes a precipitation efficiency" => "For example the green shaded area illustrates an assumed precipitation efficiency"

Supplementary Information:

Fig. 3: groudn => ground

Fig. 9: profilesfrom => profiles from

Fig. 10: "on an air parcel" or "on air parcels"

Fig. 17: "certain rate" => "certain rates"

Fig. 19: I can't see a grey horizontal line on any of the profiles?