

Atmos. Chem. Phys. Discuss., referee comment RC3 https://doi.org/10.5194/acp-2021-214-RC3, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on acp-2021-214

Anonymous Referee #3

Referee comment on "Coupled and decoupled stratocumulus-topped boundary layers: turbulence properties" by Jakub L. Nowak et al., Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2021-214-RC3, 2021

I support publication. The authors present a comprehensive suite of measurements of turbulence in stratocumulus layers. This is a rich dataset, measured from a unique platform (ACTOS).

I have little to add beyond what other reviewers have highlighted. Overall, this is a well written, well presented manuscript. I agree with a previous comment that this is a long paper, but I think one primary value in the manuscript is presentation and synthesis of a comprehensive dataset. I don't see anything that I think could be cut without sacrificing that. I particular, keep figure 21. It's a nice synthesis of what's presented.

This may seem a minor point... The use of acronyms and abbreviations in the paper... I have no quarrel with use of commonly accepted acronyms and abbreviations like CCN, TKE, CAPE, etc... Using ACTOS instead of Airborne Cloud Turbulence Observations System every time is preferable. However, this paper has gone too far, in my opinion, with acronyms and abbreviations.

Abbreviating "coupled" by CP, for example, saves 5 letters, but introduces the additional effort required to recall that CP means "coupled" in this context.

I lost the thread of many arguments through the paper because I kept having to go back and find what CP or SCL or TSL meant. I know it makes the paper a little bit longer, but it would be much, much more readable if fewer abbreviations were used.