Response to the minor comment on the manuscript: Parameterising cloud base updraft velocity of marine stratocumuli, Ref. ACP-2021-757.

Dear Editor,

we would like to thank the Editorial Board for considering our paper for publication in ACP. We have addressed the Editor's constructive comment and modified the paper accordingly. Text from the 1st revised manuscript that has been removed in the revised manuscript is marked in red. New text in the 2nd revised manuscript is marked in blue.

Answers to Editor

Specific comment E.1 Dear Authors, many thanks for your careful revision of the manuscript. I have only one remaining comment: Please add more details about the supplemental material at the end of Section 2.3. The newly added sentence is very brief and general. In your response to the reviewer comments (e.g. R1.11), you give much more detail which deserves to be included in the manuscript.
After this, i will be happy to accept your manuscript for publication in ACP. Best regards Barbara Ervens
Answer to E.1 The mentioned paragraph is now rewritten according to the comment by the Editor.

Changes in the manuscript, last paragraph of Sect. 2.3 *Setting up the LES runs*:

"Although we show here only the few selected parameters, some additional details about the cloud evolution is provided in the Supplementary material. ~~This analysis includes discussion about the possible decoupling of clouds from the surface,~~ In the Supplement we show statistics about cloud development based on the difference between the initial and final states (Figs S1–S3). Figures S1 and S2 show that the cloud top and base ~~changes, water path development, surface precipitation and how~~ heights are not changing much during the simulations. However, LWP decreases from the initial value (Fig. S3), because entrainment mixing at the cloud tops leads to sub-adiabatic liquid water mixing ratio profiles. In addition, precipitation removes some of the liquid water although precipitation rates are typically low (Fig. S4). We also show that the tendencies of updraft velocities during the last simulations hour are close to zero (Fig. S5), which indicates that the turbulence is ~~developed~~fully developed. Finally, analysis of different decoupling measures (Figs. S6 and S7) confirms that the majority of the simulations are not decoupled from the surface."