

Review of “The impact of mesh size and microphysics scheme on the representation of mid-level clouds in the ICON model in hilly and complex terrain” by Omanovic et al. (egusphere-2024-1989)

The authors addressed my comments with great care, and their additional explanations provided important insights. Thank you! I only have two minor comments left below.

Minor Comments

Tabs. 3 and 4: Could the authors comment on the assumed ‘cloud mask’ they used to determine the LWC, IWC, LWP, and IWP? Since most modeled mean values are substantially smaller than the observed values, it might be the case that more almost non-cloudy columns are considered in the calculation of the modeled mean values. Since the LWC also strongly depends on the height above the cloud base, I wonder at which height level the LWC is determined. Lastly, I suggest showing histograms of LWC, IWC, LWP, and IWP.

Fig. 5: Since the two-moment microphysics predict very low droplet concentrations, I wonder if autoconversion/accretion are affecting these simulations. Those processes should be absent in the one-moment microphysics simulations.