

Interactive comment on “Automated tracking of shallow cumulus clouds in large domain, long duration Large Eddy Simulations” by T. Heus and A. Seifert

Anonymous Referee #2

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This is a carefully done study that advances previous work on cloud tracking in LES by significantly extending the size of the domain and using a slightly simplified two-dimensional cloud tracking scheme to cope with the extra computational burden. The separate statistical distributions for the passive and active cloud eliminates, precipitating regions and thermals and the reported sensitivity of the shape of these distributions to domain size are results that I believe will be the subject of future studies by several research groups. The approach and the topic are both good fits for GMD.

unclear/usage

p 2289: line 14: "due to collisions of otherwise separate objects of clouds" – unclear

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p. 2290: line 7: "a function of the cloud size of the single convective element" – what is the cloud size?

p. 2294: line 20: "active but isolate pulse clouds" – define "pulse cloud"?

p. 2295: line3: "(number) of iterations"

p. 2298: line 6 "and the also"

p. 2300: line 5: "that never have buoyant core"

p. 2300: line18: "close to LCL"

p 2303, line17: "allows us to more fine grained"

Interactive comment on Geosci. Model Dev. Discuss., 6, 2287, 2013.