

Interactive comment on “An investigation of processes controlling the evolution of the boundary layer aerosol size distribution properties at the Swedish background station Aspvreten” by P. Tunved et al.

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Received and published: 18 October 2004

The MS is very interesting and useful. The scientific ideas behind the work are very good, and the obtained results are useful. However, there are some difficult sentences, and before publishing the final MS in ACP, it would be good to read the text very carefully once again.

Some minor scientific points: 1) In Page 4510 it is said that coagulation is very important sink of particles below 10 nm. Although I admit that this is the case for particles below 3 nm, I do not agree that the sink is important for particles around 10 nm e.g. for

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particles from 6nm to 10nm. 2) In page 4524, The authors state that it is not possible to rule out the role of entrainment of air from free to troposphere in order to be able to explain the nucleation events. This sentence would need some more explanation. 3) In page 4526, it is said that recent nucleation is nearly always associated with a low mass aerosol and corresponding low surface area. How often (99% ??) is nearly always?

Interactive comment on Atmos. Chem. Phys. Discuss., 4, 4507, 2004.

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