

Interactive comment on “Conceptual study on nucleation burst evolution in the convective boundary layer – Part II: Meteorological characterization” by O. Hellmuth

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Conceptual study on nucleation burst evolution in the convective boundary layer - Part II: Meteorological characterization

General comments to all papers are given under paper I.

Special comments: Page 11493, line 14: In this sentence the author state that decreasing relative humidity during the course of the day disfavoring NPF. However, this statement is not proved until now; we know e.g. from laboratory experiments (Bonn et al., J. Phys. Chem. 106, 2002) that under dry conditions (compared to wet conditions)

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higher amount of new formed particles were detected by the ozonolysis of beta-pinene. Also Boy and Kulmala (ACP, 2, 2002) investigated clear NPF events always on days with low relative humidity in a boreal forest site in Southern Finland. So I would recommend the author to rewrite this sentence.

Page 11505, line 7: The author mentioned that a part of the incoming solar radiation contributes to evaporation. By reading the manuscript I could not clear for myself what kind of emission scheme the author used in his model for the input of water vapor from the biosphere into the atmosphere. Is this based on water vapor flux measurements or does the author use a subroutine to calculate emissions. I would appreciate if the author could clear this up by a short statement inside the manuscript.

Interactive comment on Atmos. Chem. Phys. Discuss., 5, 11489, 2005.

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