

Interactive comment on “Influence of spectral solar irradiance on the formation of new particles in the continental boundary layer” by M. Boy and M. Kulmala

M. Boy and M. Kulmala

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As discussed with the referee we agree that the title of the paper could be changed in a more precise way: (The part of the solar spectrum with the highest influence on the formation of SOA in the continental boundary layer)

The second point of the comment (the definition 400 particles cm^{-3} and 600 W m^{-2}) must be directly pointed to the situation in Hyytiälä Finland and is not valid for other measurements sites. This should and will be add in the final version of the paper in ACP.

The last comment concerned the motivation for calculating the production rate of $\text{O}(1\text{D})$ in chapter 4. In this point we agree with the referee; already the title of this chapter could be more accurate: (A potential mechanism explaining the indirect influence of

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short wavelength irradiance on the formation of SOA). Further in the introduction of this chapter the explained mechanism should be used as hypothesis in which way the short wavelength irradiance could in a first step influence the formation of SOA although additional following steps are not exactly known till now.

All three major comments of this referee will be included in the final version of the paper in the mentioned way and we want to thank the referee for his constructive advices.

Interactive comment on Atmos. Chem. Phys. Discuss., 2, 1317, 2002.

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