

## ***Interactive comment on “Vertical advection and nocturnal deposition of ozone over a boreal pine forest” by Ü. Rannik et al.***

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Received and published: 31 October 2008

My clarification was not intended to answer your short comment! It was intended to reflect on the use of correct units. Since the present article is about ozone, I prefer exact definitions used in atmospheric chemistry (e.g. Seinfeld and Pandis, Atmospheric Chemistry and Physics, 1998). ‘Concentration’ is not an ambiguous definition (even though it is often falsely used in the literature). There is an exact definition, which is the amount (or mass) of a substance in a given volume divided by that volume. A mixing ratio, as pointed out, refers to mole fractions; in atmospheric chemistry mixing ratios are usually defined with respect to dry air. It has become common use to describe mixing ratios as ppm or ppb - sometimes quantities are distinguished by an added *v* (e.g. for volume). ACP policy is to use SI units wherever possible. For example the

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correct SI units for mixing ratios should be in mol/mol (e.g.  $\mu\text{mol}/\text{mol}$ ).

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Interactive comment on Atmos. Chem. Phys. Discuss., 8, 18437, 2008.

**ACPD**

8, S8714–S8715, 2008

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