Atmos. Chem. Phys. Discuss., 10, C8853–C8855, 2010
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Atmospheric Chemistry and Physics Discussions

Interactive comment on "A two-dimensional volatility basis set: 1. organic-aerosol mixing thermodynamics" *by* N. M. Donahue et al.

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The wrong figure was displayed as Figure 3 in the published *ACPD* manuscript (as published it is a duplicate of Figure 7). Please use the attached figure instead. Note that the difference between the two figures is in the dashed structure activity lines.

Fig. 3. Structure-activity trends for singly and doubly functionalized oxygenated organics. Volatility ($\log_{10}$ C° in μg m^{-3}) vs n_C (carbon number) for different classes of organic compounds (indicated with colored symbols) forming the basis for the carbon and oxygen isopleths presented in the top panel. Each class contains the same oxygen functionality but a range of n_C. The slopes of the class lines show the effect of increasing n_C (-0.475 decades per C), while offsets from the hydrocarbon line show the effects of functionalization. Carbonyls decrease C^o by about 1 decade per (=O) while alcohols

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decrease C^o by about 2.3 decades per (-OH). For a linear approximation we adopt an average of -1.7 decades per O, indicated with dashed lines for 0, 1, 2, and 4 oxygens; later (Figure **??**) we shall add a modest nonlinearity.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 24091, 2010.

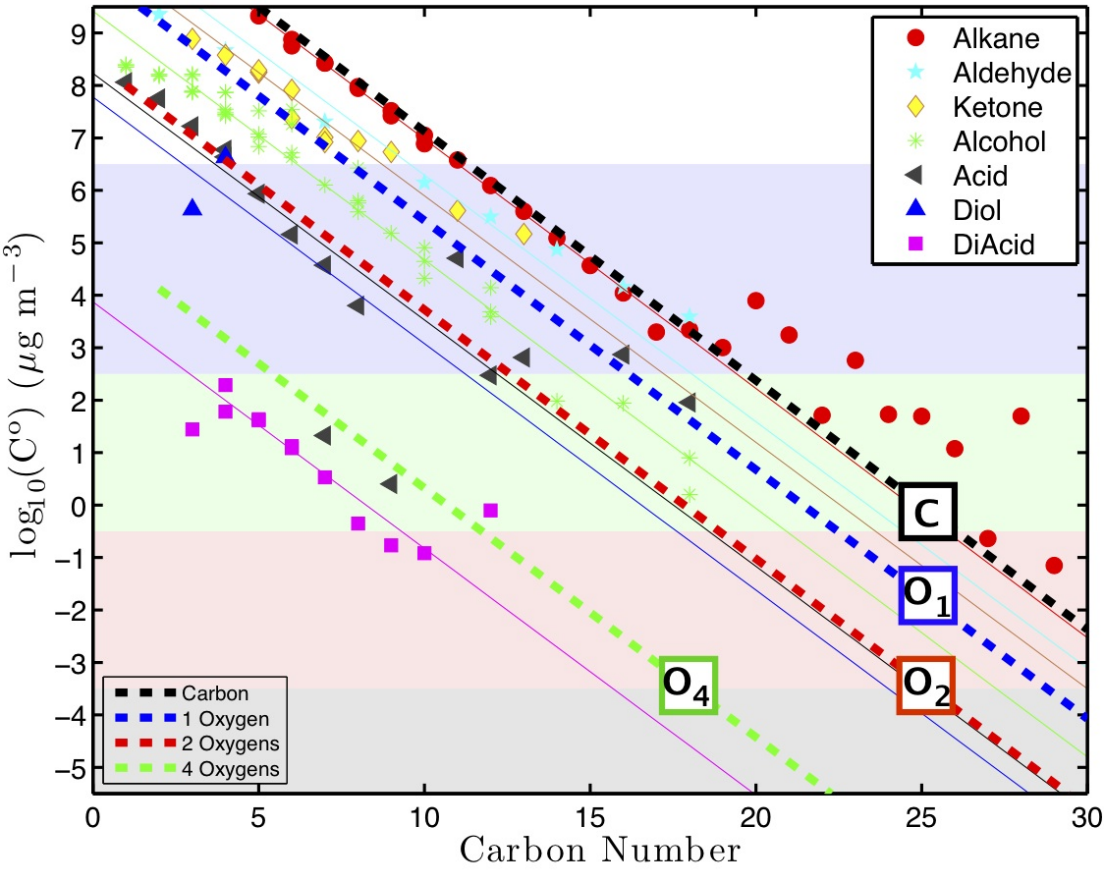

Fig. 1.

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