

***Interactive comment on “Volatile organic compounds (VOCs) in photochemically aged air from the Eastern and Western Mediterranean” by Bettina Derstroff et al.***

**D. Taraborrelli**

d.taraborrelli@fz-juelich.de

Received and published: 15 September 2016

The physical Henry's law coefficients ( $H$ ) of methanol, acetone and acetic acid are used by the EMAC model and considered for the discussion of the results. However, for acetic acid the use of the effective coefficients ( $H^*$ ) is more appropriate. With an acidity constant ( $K_a$ ) of  $1.8E-5$  M, an assumed mesophyll liquid pH of 7 and an ocean pH of 8.14,  $H^*$  is estimated to be a factor of 181 and 2486 larger than  $H$  over vegetation and sea water, respectively. The authors might want to consider  $H^*$  rather than  $H$  for acetic acid in their discussion.

---

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2016-746, 2016.