

Interactive comment on “Primary and secondary sources of formaldehyde in urban atmospheres: Houston Texas region” by D. D. Parrish et al.

Anonymous Referee #1

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The manuscript of Primary and Secondary sources of formaldehyde in urban atmospheres: Houston Texas region by Parrish et al. addressed the methodologies of source apportionment of aldehydes, very important VOCs species in the air. I think this MS was essentially important as the aldehydes are of increasing interest, however the way to understand their sources, very often correction to makers, are problematic. I agree with the acceptance of the MS for publication in ACP. Before it, I would like to add one point for the consideration of the authors. Indeed, the correction by using makers for primary and secondary sources has problem, there are several works trying to quantify the chemical processes when calculating HCHO sources: (1)De Gouw, J. A.; Middlebrook, A. M.; Warneke, C.; Goldan, P. D.; Kuster, W. C.; Roberts, J. M.; Fehsenfeld, F. C.; Worsnop, D. R.; Canagaratna, M. R.; PszennyA. A. P. Budget of organic carbon in a polluted atmosphere: Results from the New England Air Quality Study in 2002 J.

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Geophys. Res., [Atmos.] 2005, 110, D16305, doi: 10.1029/2004JD005623. (2) Ying Liu, Min Shao*, William C. Kuster, Paul D. Goldan, Xiaohua Li, Sihua Lu and Joost A. de Gouw, Source identification of reactive hydrocarbons and oxygenated VOCs in the summertime in Beijing, Environmental Science and Technology, 43 (1), 75-81, DOI: 10.1021/es801716n, 2009

While the authors perform the comaprison with other studies, I would suggest this kind of research will be needed to be reviewed in this MS.

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 32601, 2011.