

Interactive comment on “Nitrous acid (HONO) emissions under real-world driving conditions from vehicles in a UK road tunnel” by Louisa J. Kramer et al.

Anonymous Referee #2

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This paper shows the measurements of nitrous acid (HONO) in road tunnel air and the determination of the HONO/NO_x for the vehicular emission. Due to the importance of nitrous acid on the atmospheric chemistry, especially the formation of HO radicals and the formation process of the HONO, this paper shows the important knowledge of the primary emissions of HONO; vehicular emissions. Without some correction which the reviewer 1 has already indicated, there seems to be a little minor correction. Therefore, I recommend that this paper should be published when something correction which the reviewer 1 and shown below have indicated should be performed.

Comments : 1. 2.3 Instrumental techniques There is no information for the components

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of the BBCEAS. Because the BBCEAS system for HONO have been originally built up by the authors, the authors should show the company name and products number for the parts of the BBCEAS, especially LED, mirror and detector.

2. 3.2.3 HONO emission ratios The definition of "delta"HONO seems to be ambiguous. Does "delta_HONO" mean the background corrected HONO ($\text{delta_HONO} = \text{HONO_tunnel} - \text{HONO_bg}$), or the background and secondary formation corrected HONO ($\text{delta_HONO} = \text{HONO_tunnel} - \text{HONO_bg} - \text{HONO_secondary formation}$)? The authors should make clear.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-1070>, 2019.

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