

Interactive comment on “Technical note: Determination of binary gas phase diffusion coefficients of unstable and adsorbing atmospheric trace gases at low temperature – Arrested Flow and Twin Tube method” by Stefan Langenberg et al.

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We thank Mingjin Tang for commenting our discussion paper. His remarks are marked like [this](#). All references, cited herein refer to the discussion paper. To the questions we answer as follows:

1) As diffusion coefficients depend on temperature, it took me a while to know the

corresponding temperature for D_0 presented in Tables 2-3. Although it is clear in the text, it may be helpful to explain D_0 in the table captions.

This will be done in the revised manuscript.

2) It will be useful to provide an outlook to tell the readers which trace gases will be (are being) investigated using the two nice techniques?

The experiments were performed 1992-1997. Encouraged by the reviews of Tang et al. (2014a, 2015), we decided to publish our data. Today, the experimental setups do not exist anymore. Besides of the diffusion coefficients reported in our paper, diffusion coefficients of O₂, CCl₄ and CCl₂F₂ in N₂ were investigated using the AF method. With CH₄ as internal standard, ethene; ethane; propene in air and propane; *n*-butane; isoprene in N₂ were measured simultaneously using the TT method.

Interactive comment

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-1050>, 2019.

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