

Interactive comment on “The tilt-effect in DOAS observations” by Johannes Lampel et al.

Anonymous Referee #2

Received and published: 7 August 2017

Lampel et al. present an important study showing the relationship between the so-called Tilt effect and the DOAS shift. It is an important work which is of interest for the DOAS community. The methodology is scientifically sound. I think this study should be published in AMT and I have only few minor comments:

- I find the paper could be improve in its structure. The author sometimes refer to figures or equations that are only properly introduced few pages later and I found it hard to follow.
- Eq.3 : the optical density commonly refers to the log-ratio of t and s . Please harmonize throughout the paper
- Eq. 17: there is an editing issue “eq:shiftdef”
- Table 1: For O3 cross-sections, I guess $S_0=1e19$ molec. cm^{-2} and not $1e18$

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molec. cm^{-2} . It is not clear what is “Add. Polynomial degree”.

- Table 2: typo: (squeeze de6inition-> squeeze definition)

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2017-168, 2017.

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