

Dear Associate Editor,

Many thanks for your efforts! We reply to the comment from the reviewer below.

Dear Reviewer,

Please fine my response to your comment below.

Previous point 13. Line 477-478 in the track change version: It is mentioned here that inappropriateness of DOAS fit is included here in the systematic term, while in other places it is in the random term as I believe. Please check.

Author reply: Thanks for your comment! The inappropriate implementation of the DOAS fits can cause both random and systematic discrepancies between individual data sets of HONO dSCDs. For instance, a wrong cross section, which is mistakenly used in a DOAS fit, can normally cause systematic discrepancies. Differently, if the slit function of the instrument is not well characterized for a DOAS fit, random discrepancies are often observed. Therefore we don't change the manuscript.