

Additional comment on

Review response on “Denitrification in soil as a function of oxygen supply and demand at the microscale” by Lena Rohe et al.

Anonymous Referee #1

Reconsidering our data in detail revealed a mistake in calculating the fluxes of CO₂, N₂O and (N₂O+N₂). This error occurred because of wrong parentheses in the calculation. Correcting the calculation revealed increased values of fluxes by a constant factor compared to the previous values. All calculated fluxes have been corrected, having effects on CO₂, N₂O and (N₂O+N₂) fluxes, N loss and Figure 3, Figure 5 (will be removed to Supplementary Material), Figure S1, S3, Table S1 and S4, and the explained variability of N₂O and (N₂O+N₂) fluxes (calculated by the partial least square regression; PLSR) (Figure 8, Figure S7 and Table S2). We want to point out, that the values of fluxes are higher in the revised version, although the course of CO₂, N₂O and (N₂O+N₂) fluxes over incubation time did not change. We apologize very much for this mistake, but the changes made because of the increased fluxes did not affect the interpretation of data or statements of our study.

In the meantime we were able to calculate the $ansvf$ ($ansvf_{cal}$) from parallel incubations using (N₂O+N₂) fluxes during oxic conditions and after switching to anoxic conditions (Supplementary Material). Therefore, instead of reporting $ansvf_{cal}$ based on the comparison between oxic and anoxic (N₂O+N₂) fluxes of two different incubation experiments, we now report values based on fluxes of the same experiment which we consider more reliable. Although $ansvf_{cal}$ values changed slightly our previous conclusions remain unchanged.