

12 March 2019

Dear Editor,

Thank you for your positive Decision on our paper. As requested, we now made all the additional technical revisions you indicated and hope you will find the paper ready for publication in ACP.

Sincerely yours,

Fulin Yang and Dan Yakir on behalf of all co-authors.

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**Editor comments:**

Lines 17-20: “The spatial heterogeneity in soil COS exchange indicated net uptake below and between trees of up to  $-4.6 \text{ pmol m}^{-2} \text{ s}^{-1}$ , and net emission in sun exposed soil between rows, of up to  $+2.6 \text{ pmol m}^{-2} \text{ s}^{-1}$ , with a mean uptake value of  $-1.10 \pm 0.10 \text{ pmol m}^{-2} \text{ s}^{-1}$ .” Negative uptake, as stated in the text, is emission. Thus, this sentence needs revision. My suggestion is “The spatial heterogeneity in soil COS exchange indicated net uptake below and between trees of up to  $4.6 \text{ pmol m}^{-2} \text{ s}^{-1}$ , and net emission in sun exposed soil between rows, of up to  $2.6 \text{ pmol m}^{-2} \text{ s}^{-1}$ , with overall mean uptake value of  $1.1 \pm 0.1 \text{ pmol m}^{-2} \text{ s}^{-1}$ .”

**Response:** We agree with and revised as suggested.

Line 27: “ $-0.37$ ”. The second decimal in this value is not significant (does not contain information) as the uncertainty of the value is 0.3. Thus, I recommend expressing it here as  $-0.4 \pm 0.3$  (see also my comments below).

**Response:** Revised as suggested.

I have several changes to the representation of significant digits of numeric values, These are listed below.

**Response:** We accepted all these changes to the significance digit, and updated in the text and also in the abstract as suggested.

Line 20:  $1.10 \pm 0.10 \text{ pmol m}^{-2} \text{ s}^{-1}$  should be written as  $1.1 \pm 0.1 \text{ pmol m}^{-2} \text{ s}^{-1}$  as second decimal is as uncertain to be insignificant.

Line 23:  $-1.02 \pm 0.26 \text{ pmol m}^{-2} \text{ s}^{-1}$  should be expressed as  $-1.0 \pm 0.3 \text{ pmol m}^{-2} \text{ s}^{-1}$ .

Line 180: “ $-1.10 \pm 0.10 \text{ pmol m}^{-2} \text{ s}^{-1}$ ”. As mentioned above, should be written as  $1.1 \pm 0.1 \text{ pmol m}^{-2} \text{ s}^{-1}$ .

Line 183: “ $-3.00 \pm 0.10$ ”. This should be written as  $-3.0 \pm 0.1$ .

Line 252: “ $4.40 \pm 0.29 \text{ mm}^2 \text{ s}^{-1}$ ”. This should be written as  $4.4 \pm 0.3 \text{ mm}^2 \text{ s}^{-1}$

Line 254: “ $-1.02 \pm 0.26 \text{ pmol m}^{-2} \text{ s}^{-1}$ ” should be  $-1.0 \pm 0.3 \text{ pmol m}^{-2} \text{ s}^{-1}$ .

Line 255: “ $-1.10 \pm 0.10 \text{ pmol m}^{-2} \text{ s}^{-1}$ ” should be  $1.1 \pm 0.1 \text{ pmol m}^{-2} \text{ s}^{-1}$ .

Line 270: “ $-0.37 \pm 0.31$ ” should be written as  $-0.4 \pm 0.3$ . **This should be reflected in the value reported in the abstract.**

Line 282: “ $(+0.53 \pm 0.66)$ ” should be written as  $(+0.5 \pm 0.7)$ .