

Thanks for all your comments.

From your answers and manuscript I understand now that you have obtained the EF as slope of the CTCL or CT (on x axis) against measured emission (y axis) without forcing line through origin. Then you compare the algorithm performance by slope of measured emission (x axis) against modeled emission (y axis). In the case of non-linear relations this will lead to slopes below 1, even though modeled emission (x axis) vs measured emission (y axis) would have slope of unity. Thus, the result concerning the slopes being below unity may be partly due to non-linear relation of modeled and measured emission. The nonlinearity of relation for isoprene is actually interesting, as it can be due to light penetration deeper to canopy in high light levels. The algorithm used here is anyway a big leaf approximation.

**Page 1, lines 22-13: "these 3 last compounds detected under the same ion". Actually, not the same ion but same mass-to-charge ratio.**

We changed that in the manuscript as: these 3 last compounds detected under the same m/z (lines 23 and 150)

**Page 2, lines 69-70: "...impact of water stress on highly BVOCs emissions." What does "highly" mean here? Please reformulate.**

In this sentence, we talked about highly volatile BVOC emissions. So, we changed that in the manuscript as: impact of water stress on highly volatile BVOCs emissions (e.g. methanol) (line 70).

**Pages 5-6, lines 181-182: The slope of those correlations indicate if there was an under- or over- estimation of modelled emissions when  $sl < 1$  and  $sl > 1$ , respectively. There is also under/over estimation if significant intercept, even if slope is 1. See fig 5, autumn methanol AD.**

We changed this sentence as : these correlations indicate if there was an under- or over-estimation of modelled emissions with  $sl < 1$  and  $sl > 1$ , respectively, or if the intercept (called "b" afterwards) are different from 0. For that, slope comparison tests were performed to check for slope significant differences from 1 and intercept tests were performed to check for intercept significant differences from 0 (line 182 – 187).