

Interactive comment on “Spatial and temporal variations of dissolved organic carbon and inorganic carbon concentrations and $\delta^{13}\text{C}$ in a peatland-stream continuum: implications of peatland invasion by vascular plants” by S. Gogo et al.

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First, I would like to thank Anonymous Referee #1 for the comments that will help us to amend the article. The main problem raised is the lack of data to support the conclusion. Nothing was known on this peatland, as such, both temporal and spatial variability of DOC and DIC concentrations and C isotopic signature were studied. Although we were aware that four dates were maybe not enough, some interesting aspects of the

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results of these preliminary works encouraged us to submit an article based on the results obtained. The lack of organization is the second main problem pointed out. As these measurements were novel on this peatland, some aspect that were not initially though aroused during the interpretation of the data (e.g. the CO₂ critical zone). It was probably inappropriate to discuss such aspect.

Comment on reviewer #1 remarks: “The authors talk about “more DOC” in the open plots. This refers to concentration data and not fluxes (conc x flow) - concentration data alone does not tell you whether there is more/less DOC in a stream”. The open and closed plots denomination refers to vegetation (open vegetation versus closed vegetation, closed mainly by *Betula* and *Pinus*). These plots are located within the peatland and not in streams. The water at these plots was stagnant. As such, it is possible to use concentration to infer whether one plots contains more or less DOC than the other.

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