

## ***Interactive comment on “From Canals to the Coast: Dissolved Organic Matter and Trace Metal Composition in Rivers Draining Degraded Tropical Peatlands in Indonesia” by Laure Gandois et al.***

**Laure Gandois et al.**

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Received and published: 8 November 2019

The authors present a unique data set on trace metals from the water draining tropical peatlands and provide a valuable insight into downstream DOM processing. This data is greatly needed and of value to the tropical peatland community and the effects of land use change on such fragile ecosystems. I support the publication of this research and offer only minor comments, which I outline below.

We thank the reviewer for the appreciative feedback. We have addressed the comments below.

C1

Line 103: is the predominate agriculture from oil palm? Would be nice to add some detail in regarding the current land-use i.e. industrial plantations/ small holders etc. if known. We unfortunately do not have any detailed data on land use. Current land use consists of small scale rubber plantation, secondary forest, and oil palm. This information has been added (l.103).

Line 108: Should figure 1 be referenced somewhere in this area? I am not sure if it is referenced at all? Reference to figure 1 has been added in the text, at line 97 and 109.

Line 126: how long after collection were the DOC samples left until they were analysed? I assumed that they needed to be shipped back for analysis on the TOC machine? Did any DOC flocculation occur with acidification? As this can hinder analysis. The samples were acidified in Pontianak immediately following collection. Acidification was kept as minimal as possible to avoid flocculation. At the end of each mission, the samples were brought back to Toulouse and analyzed within two weeks. These details have been added in the text (l. 119-121).

Line 148: ‘Fluorescence’ is in blue font colour needs to be changed to black. The color has been changed.

Line 163: I wouldn’t say that the DOC concentrations were ‘extremely’ high for a black water river maybe just ‘high’ or moderately high. The text has been modified.

Line 294: ‘Corals’ is in blue font needs to be changed to black. The color has been changed.

Table 1: the numbers have a mixture of decimal places and commas to separate the numbers. Should all be decimal places. The SUVA column needs to be centralised. There is also a mixture of italics and regular font. I am not sure if this is on purpose and if so what this signifies? The suggested changes have been made. The italic text is the standard deviation. It has been added in the table legend.

Figure 4: the bar caps are missing from the standard deviation? Also there is no

C2

mention of whether these lines represent +/- standard error. This should be added from clarification. The description of the boxplots has been added in the figure's legend.

Figure 6: there appear to be grey triangles on Fig 6b – should these be purple to indicate Java aerosols? Also would be good to indicate what the error bars refer to i.e. +/- standard deviation or standard error of the mean? The grey triangles are Borneo soils data. The legend has been truncated. An updated figure has been included in the manuscript. The error bars are the +/- standard deviation of the analysis. It has been added in the figure's legend.

Figure S1:1 it is quite hard to distinguish the minus standard deviation part of the bar as it is the same colour (blue) as the bar chart lines. Perhaps change the bars to black so that they stand out. The color has been changed.

Figure S1.2: the bar caps are missing from the standard deviation? Also there is no mention of whether these lines represent +/- standard error. This should be added from clarification. Similar to Figure 4, the description of the boxplots has been added in the figure's legend.

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Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2019-253>, 2019.