

Interactive comment on “The non-conservative distribution pattern of organic matter in Rajang, a tropical river with peatland in its estuary” by Zhuoyi Zhu et al.

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We think the paragraph from line 294 to line 297 was a little bit confusing, especially the words “bacteria and their detritus simply tend to 297 accumulate in the dissolved phase, relative to the particulate phase” literally is misleading. —We should say that bacteria tends to attach to particles, relative to dissolved form.

When judged by biomarker signals like D/L ratios of amino acid enantiomers (fig. 6), DOM and POM had ratios of ~ 0.5 and 0.1 , respectively (fig. 6). On one hand, by comparing the ratios itself, it seems that DOM is highly degraded/more refractory relative to POM (as higher D/L ratio usually indicates more refractory and $0.5 > 0.1$). And bac-

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teria tends to attach to the particles while its metabolism products (which may be more refractory) tends to be released as dissolved form, which also indicates that DOM may be more refractory. On the other hand, though the age of POM and DOM is not available in this work, but in river/estuary the dissolved OM usually is younger relative to particulate OM (i.e., DOM usually has an older ^{14}C age than POM), which complicates the comparison of OM natures. Hence, we should be very careful in making any conclusions in comparing the POM and DOM lability/refractory nature in the river/estuary. By only D/L ratio along it is hard to reach a solid conclusion which form (dissolved vs. particulate) is more refractory.

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