

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.

Hao Yu

hyu2@islander.tamucc.edu

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A very impressive paper about the OM composition modification at a tropical river-estuary system!

Although the $\delta^{13}\text{C}$ of DOC indicated a significant conservative behavior of DOC at this estuary, detailed OM compositions surprisingly uncovered the nonconservative distributions of DOM.

Given this estuary is surrounded by peatland, the addition of DOC from peatland is reasonable. Although we don't know the $\delta^{13}\text{C}$ of peatland in this estuary, its range

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probably overlays with the $\delta^{13}\text{C}$ of DOC at this estuary ($-20 \sim 30\text{‰}$), so it cannot be identified from $\delta^{13}\text{C}$ signals. The detailed compositions of OM provided a powerful tool to make clear the mechanisms of OM at this estuary. Since the fieldwork was carried out at dry season, the input from peatland probably was minimal, particularly the particle input. Hence the compositions of POC didn't show a visible contribution from peatland. I agree with the authors that in the wet season the signals from peatland probably will increase.

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