

Interactive comment on “Carbon accumulation rates in salt marsh sediments suggest high carbon storage capacity” by X. Ouyang and S. Y. Lee

X. Ouyang

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Page 8, lines 16-17: Sediment salinity changes also with latitude and it is one of the main environmental factors conditioning primary productivity. I think you should cite it here and discuss salinity influences on CAR.

Response: we will add the following text addressing salinity influences on CAR: “Sediment salinity also changes with latitude and it is one of the main environmental factors influencing primary productivity Additionally, variations in salinity lead to difference in soil properties, and thus soil bulk density was positively correlated while organic carbon concentrations. Carbon accumulation was negatively correlated with salinity, attributing to impact of salinity on decomposition rate of organic matter (Loomis and Craft, 2010)”.

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References

Loomis, M. J., and Craft, C. B.: Carbon sequestration and nutrient (nitrogen, phosphorus) accumulation in river-dominated tidal marshes, Georgia, USA, *Soil Sci. Soc. Am. J.*, 74, 1028-1036, 2010.

Interactive comment on *Biogeosciences Discuss.*, 10, 19155, 2013.

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