

***Interactive comment on “The role of alkalinity generation in controlling the fluxes of CO<sub>2</sub> during exposure and inundation on tidal flats” by P. A. Faber et al.***

**P. A. Faber et al.**

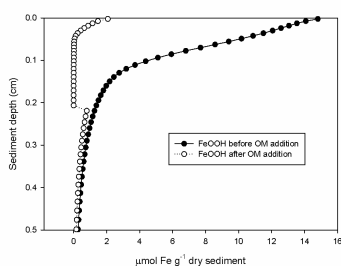
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Extra figures attached

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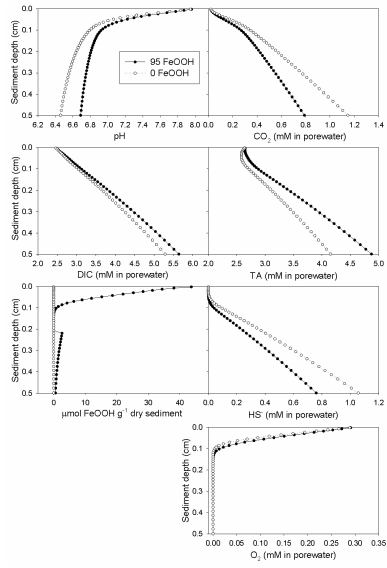
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**Fig. 5** A simulation showing the FeOOH concentration before and after an organic matter pulse with initial FeOOH concentration of 19  $\mu\text{mol g}^{-1}$  sediment (d.w). Note: The step around 0.2 cm is due to the pulse of organic matter added to only the top 0.2 cm.

**Fig. 1.**

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**Fig.7** Profiles of pH, CO<sub>2</sub>, DIC, TA, FeOOH and HS<sup>-</sup> and O<sub>2</sub> from two simulations. Empty circles represent a simulation with no FeOOH, whereas filled circles represent 95 μmol g<sup>-1</sup> sediment (d/w) FeOOH.

**Fig. 2.**

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