

Dear Sara,

Thanks for raising an important question. We addressed the negative uptake by saltmarsh soil and revised the manuscript accordingly as following:

L281-289: The fluxes measured in the coastal wetlands of this study, -1191 to 10,970 mg m⁻² d⁻¹ for CO₂, -0.3 to 3.9 mg m⁻² d⁻¹ for CH₄, and -0.2 to 2.8 mg m⁻² d⁻¹ for N₂O, were within the range of those measured in other subtropical/tropical wetlands, worldwide (except for the negative CO₂ fluxes in saltmarsh soils, Table 3). For CO₂, fluxes can range between 44 and 11,328 mg m⁻² d⁻¹, for CH₄, from 0.03 to 1255 mg m⁻² d⁻¹ and for N₂O, from 0.1 to 279 mg m⁻² d⁻¹ (Table 3). Despite being in tropical regions, GHG fluxes from this study were lower compared to other climates (Table 3). Contrary to previous studies, CO₂ uptake by saltmarsh soil was likely to be linked with dark CO₂ fixation in wetland soils (Akinyede et al., 2020; Mar Lynn et al., 2017). Wetland soils exhibit autotrophic bacteria which contribute to dark CO₂ fixation at ~311 mg m⁻² d⁻¹ however these rates could vary depending upon abundance and diversity of microbial communities ((Akinyede et al., 2020). Further studies exploring presence and abundance of CO₂ fixing bacteria in saltmarsh soils is recommended.