

Interactive comment on “Hypersaline tidal flats as important “Blue Carbon” systems: A case study from three ecosystems” by Dylan R. Brown et al.

Anonymous Referee #1

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This manuscript presented an important contribution of Blue carbon from the hypersaline tidal flats widely distributed in the arid and semi-arid regions near mangrove supratidal zones, caused by microphytobenthos. The experiments are well designed and documented. I suggest acceptance of the manuscript after minor revision.

Major comments: Microphytobenthos also exist in the arid or semi-arid area near salt-marshes, as well as in the lower intertidal flats inundated daily, with much larger area than the hypersaline tidal flats in this study. Thus they also contribute to the blue car-

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bon. This can be discussed as a potential for further studies as well.

The number of sites in this study is only 3 (2 in australia and 1 in brazil). Thus extrapolation of the result to the global scale still needs more studies, in addition to the estimation of hypersaline tidal flats area. This can be discussed as well.

Minor corrections: Page 2, line 65: "these microphytobenthos and are ...", remove "and". Page 3, line 77: "extent" should be "extend". Page 4, line 137: "A total 6..." should be "a total of 6..." Page 9, line 297: delete "in" at the end of this line. Page 10, line 326: "polices" should be "policies".

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