

Author's Response

We really appreciate all the comments and advices from the editor. Thank you very much for your patience in the review and revision of the manuscript. We need to apology for our proofreading on statistics and language. We found some mistakes of the values shown in the abstract, but in the latest version we corrected them and it will not affect the conclusion.

The specific comments are listed below:

Units - starting in the abstract - are the flux units of Carbon or CO₂ - consider a unit like mg-C m⁻² yr⁻¹, or use a molar unit but be consistent throughout.

Response: All the values of effluxes and graphs in the manuscript were expressed in mg CO₂ m⁻² d⁻¹ as illustrated from Fig. 4 to Fig. 10. But we used the flux unit of tons C when calculating the annual emission rates. To make the unit consist, we decide to change the unit of annual emission rates and put the unit as “mg CO₂ m⁻² d⁻¹” and “mg CO₂ yr⁻¹” to avoid confusion.

Figure 7 . change incontinuous to discontinuous to match figure legend.

Response: We changed it as suggested.

Pg 3 line 19 - how many dams in china? can you state?

Response: We added the number into the article.

Pg 1 Line 18 - check grammar - pelagic area...resulted from (please check grammar throughout)

Response: Very sorry for the grammar. We have corrected some mistakes and tried our best to examine the grammar.