

Author's Response

Manuscript Title: Seasonal variations and controlling factors of nitrogen fluxes at the sediment-water interface in a semi-enclosed inland sea

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Dear Associate Editor,

Thank you very much for your careful reading of our revised manuscript and for your kind decision to accept our paper. We sincerely appreciate your helpful suggestions, which have further improved the clarity and readability of the manuscript. We have carefully considered both suggestions and made the corresponding revisions. Our point-by-point responses are provided below.

Sincerely,

Xinyu Guo, on behalf of all authors

Comment 1:

Page, 6, line 144, please provide annual primary production not only in mmol m⁻² d⁻¹ but also as about 360 g C m⁻² y⁻¹ (because most readers will have familiarity with g C m⁻² y⁻¹)

Response 1:

Thank you for this helpful suggestion. We have revised the sentence to express the annual primary production in the more widely used unit of g C m⁻² y⁻¹. Specifically, we now cite the value of approximately 320 g C m⁻² y⁻¹ reported in Tada (2021), rather than presenting the original N-based value. As this value is provided only to describe the background characteristics of the study area, we considered that retaining the C-based annual value alone would provide the relevant information more directly while avoiding unnecessary conversion between N- and C-based units.

Revision in manuscript 1:

Section 2.1, Page 6, Line 144

Comment 2:

Line 189: ... are transported and diffused vertically (i.e. delete downward because ODU and NH₄ usually go upward).

Response 2:

Thank you for pointing this out. We have deleted “downward” from the sentence and revised the text to “... are transported and diffused vertically” as suggested.

Revision in manuscript 2:

Section 2.2, Page 9, Table 189