

General comments

Authors significantly improved the manuscript. It is an important contribution into methane dynamics in highly heterogeneous system of river delta and thorough modification of manuscript by authors allowed to emphasize main assets of this study. I strongly recommend it to be published as it adds important piece into the knowledge about spatial and temporal variability of CH₄ in delta system. However there are few minor points, which still needs to be addressed before the publication.

Specific Comments

Abstract

Overall, the abstract reads well.

Specific comment:

We found large to extreme diel cycles: The “extreme cycles” doesn’t sound correct: What is an extreme diel cycle? Very variable? Please specify

Introduction:

Introduction was shortened. Selected parts which distracted the reader from the main path of the manuscript were removed.

Overall it reads smoothly and sets a good background and motivation for this study. Authors significantly improved this part.

Specific comments:

Line 30: Please reformulate part of the sentence: “Due to their significant source strength...”It doesn’t read well in English

Line 40-41: Sentence “In the anthropogenically...” Fits more to the method section than to the introduction section. I would suggest to remove it from introduction.

Line 62-73: Authors nicely emphasized the importance of this study, good job!

Methods:

The method section is clear and together with references and implemented improvements provides sufficient information about studied area and methods used.

The figure (Fig. 1) which describes the studied locations with distinction into channels, river and lakes provides clear overview of the investigated area.

Also, additional information, including streams velocity or information about quasi-stagnant waters, which occur in the delta, provide sufficient justification for implementation of Cole and Caraco gas transfer model to obtain CH₄ flux estimates.

Results and discussion:

Many points have been clarified, redundant information has been removed and multiple sentences have been rewritten. This allows the reader to follow this section more easily. Result and discussion section reads well, however several parts still need to be addressed.

Specific comments:

Figure 4 provides informative overview of CH₄ concentrations in Delta system

Line 151: letter "t" is missing in the word "Throughout"

Line 169-180: This section has been clarified regarding the extrapolation, it is clear now how authors performed the extrapolation.

Line 176: word "estimated" is missing letter "e"

Line 224-227: Despite the attempt made by authors to clarify this sentence, it still needs to be rephrased as it is difficult to grasp the main message of this sentence.

Line 236: word "were" is missing letter "e"

Line 251: Please change from 'hot spot' measured the largest concentrations" to "the largest concentration was measured...."

Line 258: Please rephrase: Oct by itself cant have median and percentiles, fluxes can.

Line 264: The sentence seems not complete: Higher median than where?

Line 264: Are you sure about this number (2030) ?

Line 287: "as the CH₄ due to being quickly oxidized" : This sounds like authors actually measured CH₄ oxidation (which was not the case). Please rephrase

Line 307: Please indicate correct letters for the fig.7

Line 307-315: Please use past tense while reporting results, for example "diel cycle showed" instead of "diel cycle shows". It is important to be coherent with other parts of manuscript where past tense was used to describe the results.

Line 311: (Fig9): Numbering of the figures needs to follow description in the text. Thus, if this Fig appears in the text for the first time at this point, it should be Fig. 8, not Fig.9. Please change accordingly in following parts of the manuscript.

Line 327: Please change "is" to "was"

Line 330-343: Please use past tense while reporting results to be coherent with other parts of manuscript

Line 349: Fig. 8: Nice visualization! However, where is this fig discussed in the text? Please clarify

Line 396-397: This sentence sounds like finding of the study (which I don't think it is). Please rephrase