

The authors thank the reviewer for her/his positive comments on our work and for her/his constructive remarks

The manuscript presented results of a study carried out on carbon dioxide emissions from the Nam Theun 2 Reservoir in the Mekong River watershed in Laos. The major focus has been on the influence of Dam and commissioning of a power plant. Their study clearly shows the impact of human interference on the natural flow systems and processes on carbon dioxide system and its emissions. The authors deserve compliments for their meticulous planning of their experiments and strategic location of sampling sites. Results are presented and discussed adequately and I do not have any major comments. The following three minor points may help the authors in contributing to the clarity.

1. Please define 'drawdown area' in introduction.

The following lines were added in the introduction: "In some reservoirs with large water level variations, large surface areas of soils known as drawdown zones are periodically exposed to the atmosphere (for example, Three-Gorges and Nam Theun 2 reservoirs)."

2. Caption for Figure 5 needs a revision

The extra (a) label was removed from the caption

and 3. The influence of freshwater discharge on distributions of carbon parameters in the studied hydrological regime has not been explicitly presented. A strategy showing the river discharge variations in relation to changes in carbon dioxide properties in reservoir and drawdown area might help explain "We confirm the importance of the flooded stock of organic matter as a source of C fuelling emissions and we show that the drawdown area contributes, depending on the year, from 50% to 75% of total annual gross emissions in this flat and shallow reservoir (lines 47-50)."

The large variation of the contribution of the drawdown zone do not result from hydrological variations since emissions from the drawdown zone are constant throughout the years. The following sentence was added in order to clarify: "Since the CO₂ emissions from the drawdown zone are almost constant throughout the years, the large interannual variations result from the significant decrease of diffusive fluxes and downstream emissions between 2010 and 2013."