

(17 Nov 2013) by Dr. Lucietta Martorano:

Thank you for the invitation to review the text Dr. Ringeval and everyone

It is known that in wetlands occurs that large amounts of dissolved organic carbon and particulates are transported to other aquatic and terrestrial ecosystems, the process of flood and drought in the floodplains of the Amazon and its tributaries.

To evaluate the order of magnitude is worth noting: Richey et al. (2002) estimated the CO₂ emissions of all Amazonian floodplains as 0.5 Gt C yr⁻¹ Melack et al. (2004) estimated methane emissions from wetlands in the Amazon 22 Tg C yr⁻¹, much smaller than the flow of CO₂. However, for the thermal potential of methane, this flow has a power of atmospheric warming equivalent to 0.2 Gt C yr⁻¹ CO₂.

Regarding the document made the following suggestions:

1. Figures are out of editorial standards. Subtitles without standardization, see Figures 1, 8, 9 and 10.. The units do not follow the rules of the International System (IS), for example, KgC m⁻²yr⁻¹
2. Reinforcing the need to give all citations in the text. - for example, Belger et al., 201and Keller et al., 1990, cited in Table 2.
3. There is much repeated quote in the text.
4. I suggest that you use the term evaporation process and not "Ebullition"

Despite the cited author Zürcher et al. (2013) in Impact of an abrupt cooling event on interglacial methane emissions..., but the process in itself is connected evaporation or evapotranspiration rates, agitation of molecules by heating, but it is not "Ebullition", but the mass and energy transport in aerenchyma level to atmosphere.

*Best wishes,
Lucietta Martorano*