Associate Editor Decision: Publish subject to minor revisions (review by editor) (19 Jan 2018) by Sebastiaan Luyssaert

Comments to the Author:

The authors properly addressed most of the concerns raised by the reviewers. One concern needs, however, more attention. Although the authors state in their cover letter that "We will send the revised manuscript to an language expert to improve the English and grammar", I'm unsure this has happened. If it happened, the language needs to be checked again. There are still too many typos and inconsistencies which hampers the readability of the manuscript. The tenses of the verbs should follow the conventions in scientific writing. On page P7 the present tense is used "do" on P8, L1 the past tense is used. P8, L2 another present tense is used. In the methods section it is customary to use a form of the simple past tense to describe what you did in your study. Passive voice is preferred. If you are unsure search the web for "Using tenses in scientific writing".

Thank you for this comment. We sent the manuscript to a professional language expert and checked the tenses of verbs.

Install a spelling checker for Latex. Just on the first pages I spotted the following issues: P1, L16 replace "archieve" by "achieve"; P2, L1 replace "climx" by "climax"; P2, L2 delete one "the"; P2, L13 add subscript to CO2; P2, L15 add \, in Latex between 350 and ppm. Apply for all numbers followed by units.; P5, L16 replace "available enough space" by "enough space available"; P5, L19 replace "every" by "any"; P7, caption replace "with in" by "within".

We corrected these issues and sent the manuscript to a professional language expert.

There is no space limit in Biogeosciences. So, there is no need to use acronyms. Writing in full as much as possible will largely increase the readability of the manuscript.

Thank you for this comment. We omit most acronyms and keep only AWP and Ω_{AWP} and SI_{MAT} & SI_{Q95} .

P15 Delete L10-14. The discussion should not start with a summary of the methods.

Thanks for this comment. We deleted this section

P15, L25-26 apply correct in-text citation format. Unless the author is the subject or object of the sentence the name and year should be between brackets. There is a difference between \cite and \citep in the Latex template for Biogeosciences.

We corrected this mistake.

P23, why was A4 included in the Appendix rather than the main text?

Thank you for this point. We shifted the figure and corresponding text to the Method section.

The text in the appendix as well as the figures need to be carefully checked and edited. Fig B5 remove h[!h!b]; Fig B6 check the units of the y-axis;

Thank you. We revised the text and the figures of the Appendix