

Interactive comment on “The impacts of drainage, nutrient status and management practice on the full carbon balance of grasslands on organic soils in a maritime temperate zone” by F. Renou-Wilson et al.

G. Wohlfahrt (Editor)

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Because the three reviews partly diverge in their assessment of bg-2014-104, the authors have approached me to provide guidance on how to respond to the reviewer comments. Reviewers #1 and #3 suggested minor revisions, which should be straightforward to address, while reviewer #3 suggested major revisions which the authors in their reply only partially aim at addressing. In the following I address those issues raised by reviewer #2 that I feel need to be addressed (or in a different fashion compared to what the authors suggest in their reply) and make several additional comments

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which I ask the authors to address before submitting a revised manuscript.

Main point #3 by reviewer #2 - the issue of objectives vs. main focus of the paper: This issue results in my view from a poor statement of objectives, which is this single sentence on p. 5561 l. 9-11 that reviewer #2 critiques. I too see this point and I think in addition to the semantic change suggested by the authors, they should expand their objectives to a statement that is commensurate with their detailed analysis.

Definition of acronyms/abbreviations: abstract and main text should stand for themselves and I thus suggest to spell out any acronyms/abbreviations upon first mentioning and later use the abbreviated form both in the abstract and main text

Section 3.7: indeed, l. 4-9 should be moved to the Materials & Methods section - this is where the reader expects to find this kind of material

Conclusion section is fine in my view.

Table 1 and 2: while tables are formatted by the typesetting department, it is the authors responsibility to check the correct formatting - in Tables 1 and 2 it appears to me that several entries are shifted by one line

Additional comments: (1) p. 5558, l. 13: NEE is not the acronym for "annual CO₂ source" - reformulate sentence to include "net ecosystem CO₂ exchange" (2) p. 5567, l. 1: this section actually just deals with CO₂, thus the subtitle "GHG flux modelling" is not appropriate (3) p. 5573, l. 9 and throughout the paper: as detailed in section 2.2 the vegetation at the study sites is composed both of graminoid and forb species, thus the terminology grass production or grass height or grass biomass or similar is not appropriate; use appropriate terminology, e.g. canopy height or biomass production throughout the ms (including figures and figure legends) (4) section 4.5: results of EF's should be first introduced in section 3; these are original results of this study and should be first mentioned in the Results section (5) Fig. 1: y-axis text "Canopy height"; change figure legend accordingly (6) Fig. 2: panel number "(a)" missing in upper panel; units

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of y-axis of upper panel should be "s-1" instead of "sec-1" (7) Fig. 4: units of y-axis should be "h-1" instead of "hr-1" (8) Fig. 5: y-axis text needs a caption, not just units; e.g. CO₂ flux or similar (9) Fig. 6: replace "grass" in y-axis and legend (10) Fig. 7: replace "grass" in y-axis and legend; put units on y-axis in parenthesis (11) Fig. 8: y-axis text needs a caption, not just units; put units on y-axis in parenthesis; "h-1" instead of "hr-1" (12) Fig. 9: y-axis text needs a caption, not just units; put units on y-axis in parenthesis (13) Fig. 10: "Water table depth"; Fig. 10 needs to be referenced in Results section first, not only in Discussion

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