Clim. Past Discuss., 9, C3359–C3361, 2014
www.clim-past-discuss.net/9/C3359/2014/

Climate of the Past Discussions

Interactive comment on "Comparing modelled fire dynamics with charcoal records for the Holocene" *by* T. Brücher et al.

Anonymous Referee #3

Received and published: 6 February 2014

The manuscript entitled "Comparing modelled ïňĄre dynamics with charcoal records for the Holocene" by T. Brücher and co-authors presents an interesting and greatly needed model-data comparison of Holocene global fire history. This manuscript leverages the considerable resources of the GCD and provides a solid foundation for future work. Overall, the methodological approach is sound and the results are worthy of publication. If the following edits can be addressed, this manuscript will make a welcomed addition to the literature.

General comments:

1. This manuscript stands to benefit from a thorough language edit. However, these issues could easily be resolved.

Full Screen / Esc
Printer-friendly Version
Interactive Discussion
Discussion Paper

2. I agree with Reviewer #2 that the recently published paper by Molinari and co-authors (2013) should be drawn into the manuscript. Further, a recently published fire data-model paper by Feurdean and co-authors (2013) should also be compared against the results presented here.

Feurdean, A., Liakka, J., Vannière, B., Marinova, E., Hutchinson, S. M., Mosburgger, V., & Hickler, T. (2013). 12,000-Years of fire regime drivers in the lowlands of Transylvania (Central-Eastern Europe): a data-model approach. Quaternary Science Reviews, 81, 48-61.

3. Aside from a few minor grammatical issues, I appreciate that the authors state their research questions in the Introductory of the manuscript. I encourage the authors to revisit (and answer) their questions in the Conclusions as well.

Minor comments:

Page 6430 Lines 10-11 The word 'trend' occurs three times. Is there an alternate word choice to avoid this repetition? Line 24-25 change to 11 000

Page 6431 Line 5 In the first full paragraph, consider including a recent vegetation data-model comparison study:

Fang, K., Morris, J. L., Salonen, J. S., Miller, P. A., Renssen, H., Sykes, M. T., & SeppÓŞ, H. (2013). How robust are Holocene treeline simulations? A model–data comparison in the European Arctic treeline region. Journal of Quaternary Science, 28, 595-604.

Page 6432 Line 17 The topic sentence of the second paragraph could be re-written to improve clarity. In its present form, the research questions – while interesting – are bit muddled.

Page 6439 Line 8 Delete the word 'will'

Page 6440 Line 14 Requires rewording

CPD

9, C3359–C3361, 2014

Page 6441 Line 19-20 But also not Northern Europe? Palaeo reconstructions indicate that latitudinal treeline also advanced in this region (see Fang and co-authors (2013) as above)

Page 6442 Line 19 In the reference list, Krause et al. is listed as submitted.

Page 6444 Line 13 It would be appropriate to supply a representative citation to support this generalization of modeling efforts in the southern hemisphere.

Page 6447 Line 11 . . . the model accounts for . . . Line 17-18 This sentence requires rewording.

Page 6451 Line 23 Please update the Krause citation accordingly.

Page 6447 Line 3 Why not simply say 1750 AD? Line 24 Suggested rewording: . . . by the increasing concentration of atmospheric CO2 . . . Lines 25-29 The word 'due' is used five times. Perhaps consider alternate word choice to avoid redundancy.

Page 6448 Line 8 The analysis of a four . . . Line 13 . . . which are sparsely covered . . .

Interactive comment on Clim. Past Discuss., 9, 6429, 2013.