

Interactive comment on “Dendrochronologically dated pine stumps document phase wise bog expansion at a northwest German site between c. 6700 BC and c. 3400 BC” by Inke Elisabeth Maïke Achterberg et al.

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Response to Referee #1

Thank you for your time and effort! The aspects you pointed out are addressed below.

- I will revise the manuscript to make the text more clear.
- As suggested, I will get a native speaker proofreading.
- I had meant to point out that the investigated signal (water table rise) is not reflect-

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ing precipitation directly/alone, but also is affected by the variations of water-output (evapotranspiration). I will rephrase it, to make it more clear.

- I will point out the implications of the study for the understanding of past climate more clearly.

- You state that "The discussion on past climate changes seems to be quite general, and too marginal compared to the aspects of peat development.". → I will revise the section. → Even though I am not certain what exactly your statement about comparison of the discussion of climate change with aspects of peat development is aiming at (Do you suggest (a) comparison with other peat-related studies? Or (b) more extended evaluation of climatic indications in our peat stratigraphical data? Or (c) a more extended discussion of the ecological context and succession? Or (d) a more extended discussion of the climatic conditions affecting conservation?), I will pay more attention to aspects of peat development in the discussion.

- As suggested, I will include the possibility of Neolithic anthropogenic influence in the discussion. The largely contemporaneous occurrence of the tree die-off phases in the various bogs of the region (e.g. Eckstein et al. 2011, Achterberg et al. 2015) strongly supports the interpretation of a climatic trigger being most relevant, though.

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