

Hist. Geo Space. Sci. Discuss., author comment AC1 https://doi.org/10.5194/hgss-2021-17-AC1, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

## Reply on RC1

Mustafa Efe Ates

Author comment on "Pioneers of the ice age models: a brief history from Agassiz to Milankovitch" by M. Efe Ateş, Hist. Geo Space. Sci. Discuss., https://doi.org/10.5194/hgss-2021-17-AC1, 2022

Below are my responses/comments to the Reviewer 1. My responses/comments are in regular font, Reviewer's are in italics.

General comments: This is a well written and enlightening article, which explains some pretty hard concepts in an easily understandable way, especially in the first half of the text regarding almost a century of scientific history. It is, consequently, a substantial contribution to science history within the scope of History of Geo- and Space Sciences. It also cleverly answers even the small questions it itself raises, such as: why do we not live in a notably colder climate compared to our current condition, since we live in the Quaternary, in an ice age period? (Answer: it seems that the Earth is currently in an interglacial period that started about 15 000 years ago, a blink for the Earth before it goes into a deep freeze again.)

I would like to thank the Reviewer for reading my manuscript and also for the kind words. The Reviewer's general comments summarize this paper's aim in a concise manner.

Specific comments addressing individual scientific questions/issues: The scientific and historical approach is valid, but the author may want to expand and deconstruct equations (6) and (7) to more elaborately and clearly explain the model before this early concluding, yet incomplete stage.

I agree with the Reviewer's comment. Additionally, this comment is largely in agreement with the second Reviewer's concerns (Andreas Schmittner) and with the community commentator's (Z. Bora Ön) suggestions as well. Having all these in mind, I decided to eliminate the equations (from 2 to 9) entirely. To enhance the accessibility of the text for readers who want to be broadly informed about the issue, I will explain the equations in words. Consequently, part of the text (lines 300-380) will be rewritten accordingly in the final revised manuscript.

Technical corrections – typing errors, etc: The results and conclusions are presented in a clear and concise way. The overall presentation is well structured. I could also not find any typing errors in the article, but the annus mirabilis should probably be anni mirabiles (for plural, in the sense of "marvelous years" or "years of wonders", since we are talking about a century or so).

Done. I thank the Reviewer for the correction and the comment.