

Summary of changes related to RC1 and RC2.

This is a summary of the changes implemented in the new version of the manuscript, for more details please go to AC1 and AC2:

<https://doi.org/10.5194/egusphere-2025-2467-AC1>

<https://doi.org/10.5194/egusphere-2025-2467-AC2>

1. We have modified Figs. 4 and 7 according to RC1's first major comment about the proxies employed.
2. We have included a paragraph in the discussion related to Clark et al. (2025) following RC1's second major comment.
3. We added a sentence in Section 3.1 about our underestimation of the ice volume prior to the MPT following comments from RC1 and RC2.
4. We included RC1 suggestions on lines 205-207.
5. We included Appendix C that shows a figure of the wavelet transform of some TREND-C experiments.
6. A clarification in line 266 has been added following RC1's comment.
7. Line 289 has been changed according to RC1' comment.
8. Pérez-Montero et al. (2025) reference has been updated.
9. Comment from RC2 about the limitations of the spatial heterogeneity
10. We have included a sentence justifying the choice of SSI and figure RC2.1 in appendix B.
11. We expanded the discussion with a comparison with previous results
12. We included a reference to Verbitsky et al. (2018) in the discussion section.
13. We have added a sentence about the limitation of the lack of spatial variability in PACCO regarding the CO2 conclusions.
14. We have expanded the discussion on the potential implications of the hydrological component related with the Clark et al. (2025) reconstruction.
15. The title has been changed to "Exploring the Mid-Pleistocene transition with a simple physical model" following RC2's suggestion.
16. Abstract has been modified to include the suggestions of RC2.
17. In line 21 we now employ Shackleton (1987), Lisiecki and Raymo (2005) and Clark et al. (2006) as references to the MPT as suggested by RC2.
18. Line 23 was modified according to RC2.
19. Line 31 now contains more references according to RC2's comments.
20. The paragraph that starts in line 23 has been divided in two following RC2's comment.
21. Line 50 has been modified to include a more extensive description of the work.
22. Lines 53 to 55 have been removed according to RC2's comments.

Note: Some minor corrections have been made to ensure that the figures are suitable for colorblind individuals and to correct typographical errors.