

Interactive comment on “Climate simulations and pollen data reveal the distribution and connectivity of temperate tree populations in eastern Asia during the Last Glacial Maximum” by Suzanne Alice Ghislaine Leroy et al.

Anonymous Referee #1

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General comments: This manuscript focuses on the combined use of climate model simulations and observed fossil pollen data to investigate the distribution and the connectivity of temperate tree populations in eastern Asia during the Last Glacial Maximum. The approach followed in this work was validated in the European area and published by the same authors. Here, it is applied for the first time in eastern Asia, a geographical area very rich in biodiversity, and for the LGM, that was an important time interval for the dynamics of the temperate flora in this region. This manuscript provides new insights and perspectives into the debate around the northern limit

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of temperate deciduous trees during the LGM and it is certainly of interest for the scientific community and within the scope of CP. The structure of the manuscript is clear and well organized. The introduction is explicit and not too long. In the material and methods section, the different climate models available and the one used in this work, are introduced and discussed in an understandable way. The fossil pollen data used are selected from recent publications allowing new considerations. A specific section describes the differences between the modern and LGM climate of Eastern Asia through the analysis of climatological grids and model outputs. This section helps and supports the following interpretations. The results obtained and presented as distribution maps well support the interpretations and conclusions. Supplementary material is detailed. References are exhaustive and up-to-date.

Please also note the supplement to this comment:

<https://www.clim-past-discuss.net/cp-2020-2/cp-2020-2-RC1-supplement.pdf>

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2020-2>, 2020.

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