

Interactive comment on “Miocene basement exhumation in the Central Alps recorded by detrital garnet geochemistry in foreland basin deposits” by Laura Stutenbecker et al.

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The manuscript by Stutenbecker et al. with the title “Miocene basement exhumation in the Central Alps recorded by detrital garnet geochemistry in foreland basin deposits” is an Alpine provenance study based on garnet. The authors use the produced data to reveal source areas that have not been considered before, with implications for the exhumation history in the area. I have no scientific objections to the methodology, results quality or interpretations. My comments rather consider the text structure and how to improve the figures. Therefore, I estimate that only minor modifications are needed before publication in Solid Earth can be considered.

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Below are my main comments. More detailed comments are in the manuscript file itself. I just realised that I somehow have managed to delete all my comments (not text modifications) up til Figure 3, so I have tried to reconstruct the most important ones. . .

1. Direct references to figures in the text The authors refer directly to figures in the normal text flow. This may cause a break in the reading. Therefore, I recommend rephrasing the text such that it rather focusses on the chemical composition of the analysed garnet than on discrimination fields in specific plots, see my example directly in the text.

2. Results in the Discussion chapter Some results are repeated in the Discussion chapter. This is unnecessary. Here, only the data should be interpreted, not presented again. I have marked such result entries in the Discussion chapter with green directly in the manuscript.

All other comments (n = 30) are written directly in the .doc manuscript file. This includes comments on the figures and the table. If you cannot read the file, please contact me (carita.augustsson@uis.no).

Although I am not a native English speaker, I have made some linguistic suggestions. I apologise if I have introduced any grammatical errors.

Please also note the supplement to this comment:
<https://www.solid-earth-discuss.net/se-2019-98/se-2019-98-RC1-supplement.zip>

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2019-98>, 2019.

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