

Clim. Past Discuss., author comment AC4  
<https://doi.org/10.5194/cp-2021-5-AC4>, 2021  
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## Reply on RC3

Michael Kempf

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Author comment on "Monitoring landcover change and desertification processes in northern China and Mongolia using historical written sources and modern vegetation indices" by Michael Kempf, Clim. Past Discuss., <https://doi.org/10.5194/cp-2021-5-AC4>, 2021

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Reply to comments: **RC3**: 'Reply on AC2', Anonymous Referee #2, 14 Apr 2021

Many thanks for your comments! Please find my reply in italics following your original question

1 From these route reconstructions, a cross-validation of hermeneutic sources and modern landcover and climate data was derived.

Here, do you mean that by cross-validation, palaeo-climate and current climate data, and historical surface cover and modern surface cover data, were got, respectively?

*Yes, that is basically what I meant. The reconstructed route is based on the diary and serves as basis from which the (almost) daily palaeoenvironmental information was extracted. That includes a temporal axis and not only provides spatial data. That is why the temporal shift in the data needs to be considered as well.*

As I know, from route reconstructions, by cross-validation you can get data of palaeo-climate and historical surface cover. Otherwise, I missed something.

*Yes, that is what I did...*

2 Results show that decreasing precipitation and temperature records led to increased land degradation during the late 17 th century.

Does this sentence mean that land degradation has occurred the late 17th century?

*Yes, that is totally what it says.*

Please also note the supplement to this comment:

<https://cp.copernicus.org/preprints/cp-2021-5/cp-2021-5-AC4-supplement.pdf>