

Interactive comment on “Central Europe, 1531–1540 CE: The driest summer decade of the past five centuries?” by Rudolf Brázdil et al.

Anonymous Referee #1

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General comments:

This is an excellent paper that brings together a range of data sources and datasets in order to analyse the characteristics and significance of the 1530s, which the authors have previously shown to be the driest summer decade of the period 1501-2015 period in the Czech lands. Here, the authorship team expand their analysis of this decade to the wider Central European region, and convincingly demonstrate its climatological and societal significance using documentary data and gridded climate reconstructions. My comments and suggestions are therefore of a minor nature.

Specific comments:

Section 3 - I think it would be helpful if the maps in the supplementary material were in-

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cluded here (if space permits) or at least referred to in the first sentence of the methods section. This would help the reader place the results described in Section 4.

p. 6 lines 3-8 - here it is claimed that “documentary-based reconstructions were considered in the light of the corresponding European maps. . .”; however in my view the paper seems to lack an explicit comparative discussion between the documentary data discussed in sections 4.1.1 to 4.1.10 and the maps, which are merely referred to in the subheadings. It would be helpful to the reader offer a more blended discussion of the selected written reports and the extent/severity of precipitation shown in the maps in question, given that the integration of these forms of data is a - if not the - unique aspect of the paper.

p. 14 lines 27-29 - I would suggest adding clarification/interpretation here on how the weaker uniqueness of the 1531-1540 decade in the OWDA can be explained. Is this, as the authors later write in the conclusion, due to the two reconstructions representing different hydroclimatic variables?

p. 14 lines 10-11 - it is stated that there are no indications that the more severe impacts were of multi-country or multi-year natures. Can the authors offer any thoughts on why this may have been? For example, could this be partly because individual dry years in this decade were generally broken by normal or wetter years rather than a prevalence of back-to-back drought events? I do not doubt that this question could be the topic of an entire paper, however some expansion on this point would add a greater interpretive element to ‘impacts’ sections.

Technical corrections:

p. 1 line 21 - remove ‘the’ before ‘documentary evidence’

p. 2 lines 31-33 - suggest rewriting in an active voice, e.g. ‘This study aims to utilise and analyse. . .’

p. 5 lines 7-13 - it would read better if points (i) and (iii) were given a header (e.g.

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Drought indices) to match the points that follow, rather than starting with a citation.

p. 18 line 2 - check that the end of this sentence reads ok.

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2020-92>, 2020.