Climate
of the Past

Discussions

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Interactive comment on "The climate in south-east Moravia, Czech Republic, 1803–1830, based on daily weather records kept by the Reverend Šimon Hausner" *by* Rudolf Brázdil et al.

Anonymous Referee #2

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This is an interesting paper that provides a new meteorological record for a number of parameters for a region and period where none currently exists. It follows a relatively standard methodology and provides some interesting findings that can be built on in the future to create a more systematic climatological record for the region. I'm happy for it to be published, although I would like the following three points to be addressed:

1. The significance of the missing datapoints is not clearly addressed, and figures 5-7 and 13 erroneously use exact numbers of days, despite the missing data. I would like to see a discussion of the distribution of the missing days and - unless the distribution of missing days makes this invalid - the exact days in these figures to be translated

into percentages 2. There is nothing to show to the reader how the 7-point index figures were arrived at. I'd like to see some kind of calibration table, and/or examples of years under each classification, and/or a comparison of classifications assigned between the different researchers and a discussion of how the final classification was arrived at (assuming this was done) 3. It would be good if the authors could provide possible climatological reasons for the difference in values between the reconstruction and contemporary period.

Detailed comments are below: Section 3.2. Can you give details of the distribution of missing days? Also this isn't really statistical analysis, instead it's a discussion of the methodology used to generate weather indices, so the title should be changed. I'd also like more detail. What descriptors would produce a rank of -2, as opposed to -3, for instance? Some kind of table that details terms or conditions related to each category are necessary, and/or examples of years falling under each category.

Page 6 lines 5-6-9. To what extent is this a relic of the reconstruction methodology, rather than a 'true' representation of the variability? This seems to be the same for the wetness indicators (lines 33-35)

Sections 4.1.2-4 and Figures 5-7. I'm not sure about the suitability of using absolute counts of days, given that the number of recorded days is so variable. Perhaps percentages would be better? This will depend of course on the distribution of missing days – if they are relatively regularly spaced through the year this would give a stronger justification for using percentages.

Section 5.2 and figure 9. I think this is in the wrong place in the argument, and should come in the opening sections (before the methodology). This is describing the context of the Hausner diaries, not anything within the diaries themselves.

Page 10 lines 15-24. Can you give any climatological suggestion for the substantially larger temperature increase to the modern period in winter compared to summer? Also, why do we see such a variation in both quantity and stdev of precipitation in August?

Can this be explained by one or two years with particularly heavy rainfall during this month?

Page 10 lines 47-49. Needs a reference

Page 11 – up to line 26. These comparisons are invalid, given the number of missing days in Hausner's records. Again, the use of percentages would be better, if this can be justified due to the distribution of the missing days. Also – as with the section above – can you suggest any climatological reason for the variation observed? It is true that location of the meteorological stations is likely to have an impact, but you are also looking at datasets separated by 130 years of a changing climate.

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