

Interactive comment on “Droughts in the Czech Lands, 1090–2012 AD” by R. Brázdil et al.

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Received and published: 6 June 2013

General comments The paper analyses the frequencies of droughts in the Czech Lands during the 1090–2012 AD period. It is mostly based on documentary data, but also includes modern instrumental measurements and makes use of three different drought indices. One of the strengths of the paper is the intense debate about the uncertainties of documentary data analysis. The authors divide their data into three periods: Droughts before 1500 AD, droughts after 1500 AD, droughts during the instrumental period. They use different methods to make comparable at least the data of the period from 1501 to 2012 AD. The paper is well written and demonstrates (again!) the complex multi-decadal frequency structure of drought events. The text is rather long, and I asked me whether it would be possible to sort out some of the text and to add it in form of a supplement. The authors do not discuss dynamic aspects. It is recommended to do so in a future paper. It would be interesting to study the weather types and their

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dynamics being responsible for the modern drought events, and to ask e.g. the question whether or not the state of the adjacent moisture sources (e.g. the sea surface temperatures of the North Atlantic Ocean) can explain a significant amount of drought variability. I recommend accepting the paper for publication in CP after minor revisions.

Specific comments Page 2435, line 9: I regret that Figure 5 is not discussed in more detail, despite of the length of the paper, because the modern data allow drawing possible conclusions about dynamic aspects of drought formation. Concerning the uncertainties during the documentary period: I agree Figure 8 offers one opportunity for the estimation of the uncertainties during the instrumental period. What about the period with documentary data? Would it not make sense to develop a statistical uncertainty measure, e.g., to calculate a measure representing data quality, expected data frequency, and the spatial distribution of the data? Even it is very difficult this would possibly offer an opportunity to enlarge the length of the time series? Section 5.1.3., page 2443 and Figure 9: In this section you mention the importance of the pressure systems, but then you present one example with the anomalies of only one year. Would it not make more sense to present a map with the spatial representation of the coefficient of variation (CV) e.g., during the period with best instrumental measurements?

Formal aspects Page 2427, line 5: You just cite Brázdil. Why not a few other important papers? Page 2428, line 20: Write “prepares” Page 2429, line 5: What means “had travel”? Page 2429, line 22: Write “removes” Page 2431, line 1: Write “A(n) SPEI” Page 2446, line 16: Write “values” Page 2449, line 21: Write “presents” I am not a native English speaker but I have the impression that, in several cases, you missed the articles prior to a noun or a time period, e.g. on page 2447, line 4: Similarly, the reconstructed. . . .

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