

Interactive comment on “Endless cold: a seasonal reconstruction of temperature and precipitation in the Burgundian Low Countries during the 15th century based on documentary evidence” by C. Camenisch

Anonymous Referee #2

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In this paper temperature and precipitation in the fifteenth-century Burgundian Low Countries are studied with the help of information from a broad variety of documentary sources. The work is very thorough and well contextualised in the wider framework of historical climatology of medieval Europe. The paper is appreciative of the potential problems of medieval documentary sources for the use of climate reconstruction and thereby demonstrates why historians are indispensable for working with such material. However, the source chapters appears somewhat general and would benefit by being more specifically aimed at the Burgundian Low Countries. In the paper the –

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for the Middle Ages – very high amount of information allows for the reconstruction of temperature and precipitation for each of the four seasons; temporal resolution and data density are unusually good for the pre-1500 period. As the author hints in the conclusion, the reconstruction will provide a good basis for impact research.

A lot of work went into the creation of good quality indices, but then the paper stops short on capitalising on this work by omitting any analysis. Even though a direct calibration of the reconstructed fifteenth century meteorological conditions is not possible, at least winter conditions would allow a rough comparison to modern meteorological observations and an evaluation of the frequency of extremely cold winters in fifteenth and twentieth century (the classification of such winters being based on (bio-) physical proxies like frozen water bodies and the destruction of winter crops). The title ‘Endless cold’ seems to indicate overall conditions colder than in modern times and therefore fitting the Little Ice Age. This subject should be elaborated to a higher degree in the paper.

The introduction mentions the documentary based climate indices for the Low Countries by van Engelen and Buisman, which go back into medieval times and overlap time-wise and spatially with the indices presented in this paper. Even though the scale of the indices and the definition of the seasons differ in the two reconstructions, a comparison of both index series would be of high interest to the reader and should be included. If a direct correlation is not possible due to gaps in the series or the abovementioned problems, a comparison of (temperature) extremes should still be attempted.

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