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Climate of the Past Discussions

Interactive comment on "The climate of Granada (southern Spain) during the first third of the 18th century (1706–1730) according to documentary sources" *by* Fernando S. Rodrigo et al.

Anonymous Referee #1

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General comments

The discussion paper titled "The climate of Granada (southern Spain) during the first third of the 18th century (1706-1730) according to documentary sources" is very stimulating and makes a valuable contribution to historical climatology. This article is undoubtedly within the scientific field of CP.

The major contribution and novelty of this paper is the reconstruction of the climatic mean conditions during the first third of the 18th century in southern Spain based on new documentary data and an early and original meteorological data series. In addition, the author uses a relatively recent statistical method to exploit data.

Title and summary reflects the content of the article. Many references to previous researches are used and relevant. Contributions of various authors are clearly outlined. The overall presentation is clear and well structured with a fluent and precise language (for a non-native english reader). Substantial conclusions are reached and based on a reproductible methodology and calculations.

Specific comments

As a historian, my comments are principally focused on this matter and may not be relevant on other subjects:

1) The summary reflects the content of the article but should perhaps more clearly highlight its main contribution and novelty, i.e. applying a methodology alternative to Pfister-indices to a new and original set of documentary data.

2) Documentary data are available for a period inferior to three decades. As climatological normals are used as baseline to evaluate climate events and provide context for year-to-year variability, is it a weakness for analysis and statistical comparisons?

3) Before using the methodology alternative to Pfister-indices, would it not be useful to establish the robustness of Navarrete's observations by comparing the indices drawn from his work with other available series?

4) In the same logic, after application of the method proposed by Rodrigo (2008), would a cross comparison between the reconstruction made and another series (1906-1930 and 1976-2000) not be useful to strenghten the evidence?

5) Is the observation program established by Navarrete in 1737 original and how does it fit into the cultural context of the time?

Technical corrections

- Page 2, line 25: "Precursor" or "Archetype" rather "A precedent"?

- Page 4, line 28: "All the correlation coefficients were significant at the 95% confidence

level." A statement to reformulate?

- Page 8, line 1: "a period of certain recovery", is the medical metaphor relevant? Perhaps "transition to a new phase after the cold Maunder Minimum period."?

- Page 8, lines 9-10: A stronger conclusion would be useful to highlight the contribution of the article on a poorly documented period for Spain?

- Table 1: Addition of a temporal comparison with another space or very precises rogations series available (https://www.clim-past-discuss.net/cp-2018-67/ for exemple) is perhaps relevant?

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