

## Interactive comment on "Climatic information of Western Sahel (1535–1793 AD) in original documentary sources" by V. Millán and F. S. Rodrigo

## **Anonymous Referee #1**

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The paper by Millán and Rodrigo presents and analyses the new documentary data for Western Sahel in AD 1535–1793. Because this region is much scarce by such type of climatic evidence compare to other parts of the world like Europe, South America or Eastern Asia, it is a good topic to be published in Climate of the Past. The presented knowledge might be enhanced if it will be joined with other data coming from Africa. The reviewer proposes to the authors to take into account following general and specific comments.

General comments: 1. There is very detail Appendix A related to data sources. I understand that the quality of data is extremely important and that the list of sources might be important for scientist working in this area. On the other hand I propose C1665

to authors to consider some shortening and simplification of this appendix or publish it full extent rather as a supplementary material. 2. I suppose authors are aware of the incompleteness of existing evidence typical generally for many documentary data which cannot be simply attributed to not any occurring particular weather/climatic events but rather to sources that survived up to now. From this reason it would be more correct to classify years with index 0 as "without data" or "missing data". As "0" should be classified only a year, in which we have documentary evidence, but not any particular events are mentioned there. This concerns also Figure 2 where joining of individual indices with continuous line and smoothing them by 11-year running means is very problematic. I propose to express it rather in the form of separated points or the best as columns. 3. I would recommend the other form of Table 1, which is in some way complementary with the same information which is presented in Figure 2. It would be better to cancel category 0 and change it to the form "year - index - word characteristics - short description of events" (i.e. why you classified it by corresponding index values). For example, it could be like 1537 - -2 - severe drought - dry from April to June, bad harvest, lack of water. Of course, only years with -2, -1, +1 and +2 should be included in such table. Because of potential readers and users of this article it would be quit important.

Specific comments: 1. Page 3878, line 8: replace interesting by important 2. Line 17: use only "in the 1730s" 3. Lines 19-21: you are repeating more or less the same sentence as in the abstract – please correct 4. Several lines: why you write directions with capital letters like West, but not only west? 5. Page 3879, line 3: from the late 1960s 6. Line 4: the century-long mean 7. Line 12: records in Africa 8. Line 12: late 1880s). 9. Line 29 and next: again repetition with abstract 10. Page 3881, line 5: they can difference? 11. Line 7: inundation instead of owerflows? 12. Page 3882, lines 6-7: please try to formulate this sentence more understandable. 13. Line 11: to temperature regime 14. Line 22: edition, further as AE ... please use instead of Arabic edition only AE 15. Line 26: ate dead 16. Page 3884, line 16: use instead of using? 17. Lines 24-26: I do not know why you join information about floods with thunderstorm occurring

with a day delay. Is there not a mistake in dating? 18. Page 3885, lines 11-13: how much this message could be related to the fact that some chronicles were written on the order of a ruler to show his positive features and present him as a good person? 19. Line 16: a mean value 20. Page 3886, line 7: a first attempt to express the time evolution 21. Line 16: episodes of aridity and droughts? 22. Line 23: similitudes or similarities? 23. Line 25: events that occurred 24. Page 3887, line 3: 18th century. 25. Line 14: sahelian latitudes? 26. Page 3887, lines 24-26 and page 3888, lines 11-13: repetition of the same? 27. Page 3888, line 6: link to SST in 28. A map in Figure 1 is of poor quality and needs an improvement. Scale is missing, as well as identification of longitude (W, E?) and latitude (N). The schematic map of the whole Africa is not necessary, there is OK to have e.g. only its northern half.

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