

Interactive comment on “Rankings of extreme and widespread dry and wet events in the Iberian Peninsula between 1901–2016” by Margarida L. R. Liberato et al.

Anonymous Referee #2

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The main goal of this study is to characterize and rank the most extreme, widespread drought (wet) events in the Iberian Peninsula between 1901–2016. The method used is based on the multiscalar Standardized Precipitation Evapotranspiration Index (SPEI) from CRU. Besides, different time scales (6, 12, 18 and 24 months) were considered in ranking. The topic is quite interesting, but there is a lack of further discussion of the results. It is also necessary to include some validation of the most severe drought events identified in the study area.

General Comments:

Abstract: The authors could bring more highlights about the results in the abstract.

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Introduction: Line 57: It is not correct to say that drought indices have been developed in recent years. The PDSI, for example, was created more than 50 years ago. Please modify the sentence. Lines 106-109: Perhaps these sentences can be removed. I do not think it is necessary to describe the topics of the article. The authors could add more details in the introduction about the reason for using SPEI instead other indices, pointing out the main advantages and disadvantages. Extensive extreme droughts during the period 1901-2016: How the major negative societal impacts related to severe droughts was measured? Please, add some examples in the manuscript. Please consider including some information on the possible causes (climate) of the most severe drought events in the study area. In addition, it is necessary to quantify the droughts impacts on agricultural production and reservoirs, as a validation of the ranking of drought. Figure 1 - What information is presented by the color scale in figure 1? Please specify if it is a physical variable (elevation, etc.).

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