

Interactive comment on “Trends in rainfall and temperature extremes in Morocco” by K. Khomsi et al.

Anonymous Referee #3

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The manuscript evaluates trends of a number of climate extreme indices over two regions in Morocco. It uses observed data in some meteorological stations and checks the significance of the calculated trends. It gives an idea about observed climate evolution in the region and tries to give some explanations. There is however need for a revision of the work to enhance scientific quality and the consistency of the paper: 1) The authors checked the homogeneity of data but do not show any result of this aspect which is important for the right consideration of the trends. It is then recommended to give a clear idea about the founded discontinuities and the method used even there no enough metadata. 2) The data used do not cover the same period for all the stations and then the trends have been calculated for different periods which make the comparisons less evident. So it is important to add also the trends on the common period

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include it in the analysis of the results. 3) The authors use the threshold of 3 days for the cold and hot spells instead of 6 as used for example by the ETCCDI. It is recommended to give more idea about the reasons of this choice and the expected added value. 4) Part 3 focuses on values and statistical significance of trends and shows the calculated values. However most of the text seems to be more a reproduction of the tables (2-6) instead of summarizing the results. Particular values could be; however, cited in the text but without duplicating most of tables content. Part 3 should include more comparison with previous studies over the country and the region and should also arise clearly the homogeneity aspect which can be a source of differences in the sign of trends in addition to the period.

5) A recent paper “Trends in indices of daily temperature and precipitations extremes in Morocco” of Filahi et al (2015) focuses on the observed trends in 20 Moroccan meteorological stations. It is recommended to include comparison and discussion related to their findings. 6) In order to allow more differentiation between the subjects of the two manuscripts, it is suggested to more adapt the title of this manuscript to the topic by mentioning the two regions it focuses on.

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