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Discussions

Interactive comment on "Crops' sensitivity and adaptive capacity to drought occurrence" *by* Catarina Alonso et al.

Anonymous Referee #1

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The present article proposes an interesting comparison between two methodologies to identify vulnerable agricultural areas to drought in Portugal for the period 1986-2015 by using a complete dataset. The methodology relies on a PCA and the definition of three components that define the more or less vulnerability of the analysed scenario to drought, namely Exposure, Sensitivity and Adaptive Capacity. The method also includes the use of a climatic drought index (SPEI) and a satellite-derived index (VHI). In general, the paper is very well-structured, clear and helpful for management purposes, national and regional stakeholders. Not finding major issues, I highly recommend it for publishing before assessing the following minor revisions:

L41 .- Please provide more references that support this statement.

L51. – Please re-write 'indexes' as 'indices'.

Please clarify in section 2 the exact period of time the analysis covers. Authors mention in L-134 that the work covers the period 1981-2019 however agricultural data is only available from 1986-2015. Probably I am missing something but from my point of view it is not too clear.

L182.- Please delete the repeated sentence: ' The thresholds used to...'.

L184. – Are authors then using the 4km resolution as the unique one? In addition, regarding the groundwater model (L153), Is it a gridded model generated from the WTD and the other variables (climate, terrain, sea level)? In that case, Did authors use the same spatial resolution (4km)?

L261.- Please re-write 'Xmax is the minimum value of...' as 'Xmax is the maximum value of...'

L301.- Please re-write 'Fig 4' as 'Figure 4'

A suggestion for some of the figures: Please clarify the units of the scales.