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Interactive comment on "The predictability of reported drought events and impacts in the Ebro Basin using six different remote sensing data sets" *by* Clara Linés et al.

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General comments:

The paper is very well written. The sentences are clear and the graphs are well presented. It is an interesting piece of research, with a good description of the paper elements. The paper can be beneficial for drought management and early warning. It explores the performance of some indicators in early drought identification. The paper does not derive drought threshold values but assesses the potential of remote sensing datasets for drought threshold derivation. The cross correlation function used in this research for drought anticipation, assumes stationary and ergodic data. It is not clear from the paper how the data was tested for the aforementioned criteria.

Specific comment:

1- You have used the newspaper data as benchmark data for drought occurrence. Could you please elaborate on why you decided to choose newspaper data? How reliable do you think the newspaper data is? What is the false alarm rate?

2- For the daily remote sensing data, you have used "monthly aggregate". Could you please explain more on how the aggregate was obtained?

3- You have used the cross-correlation function as expressed by (Chatfield, 2004), which assumes the bivariate data is stationary and ergodic (on page 122 of Chatfiled, 2004). How did you test if your data was stationary and ergodic?

4- You have used the cross-correlation function as a method of drought anticipation. Can the same technique be applied for foreseeing the end of droughts?

5- As you explained in figure 3 and 4, the values on the left side of (negative side) of the central line, show how early the remote sensing data have anticipated the newspaper headlines on droughts, or anticipated the decline in crop yield. Could you please explain what the values on the right side (positive side) of the central line show?

6- Following from the previous comment, regarding figures 3 and 4, could you please explain what the values on both extremes of the graphs mean? They mostly seem to be happening around lag -24 and lag 24.

Technical suggestions:

1- I suggest signposting the paper early in the introduction. The reason is that the introduction although being an interesting read, is rather long.

2- It would be easier for the reader to have the zone numbers on the map in figure 1.

3- On page 7 line 19, it would be interesting to state briefly why the 2nd largest newspaper in the Aragon region selected, and not the 1st largest? Is it because unlike all the other newspapers in the region, it had an online record?

4- On page 8 line 9, why only "winter" cereal crops are selected?

5- On page 11, line 8, I think it would be an easier read if the lag example values appear with negative sign as they belong to the times before the central line.

6- I would have changed "this side of the central line" on page 11 line 8 to the "left" side of the central line to make it clearer.

7- Page 11, line 18, I think 0.6 should have a negative sign as it is referring to a negative correlation (as depicted in pink in figures 3 and 4).

8- On page 13 in the header, 3.3 is repeated twice.