AUTHOR RESPONSES- NPG 2021-37

1- The first four paragraphs have been rewritten to make the article easier to read.

2- Grammar, spelling and font errors have been corrected with the help of a linguist.

3- Mathematical equations have been separated from text.

4- Acronyms were not so numerous to justify an acronym table and their meanings were specified when they first appeared in the text.

5- The analysis of a second time series was introduced in the article to validate the proposed method.

6- The code associated with the EAWD approach is an experimental beta version more like a toolkit. It has been tested on about 70 time series of rain, temperature and Ozone concentration.

The code worked satisfactorily on 50 runs. On the remaining 20, it was necessary to modify the MLTAB matrix (figure 2 of the manuscript) by moving one or two local maxima from one line to the other.

To converge towards a definitive version of the code, it is necessary to add a module responsible for checking the correct distribution of the local maxima in the MLTAB matrix. It is planned to create an R package on the modeling of the dynamics underlying the observation time series and this algorithm will be part of it

7- The French words in figures 1, 2, 3 have been translated into English.

8- The units relative to the axes in the graphs have been standardized the x axis in years and the y axis in Dobson for the first time series and in millimeters of rain for the second time series