Interactive comment on “Trend analysis by a piecewise linear regression model applied to surface air temperatures in Southeastern Spain (1973–2014)” by P. Campra and M. Morales

Anonymous Referee #2

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The paper is interesting the authors present the use a nonlinear regression model to analyze the trends of climate data. It is no completely new but there are few Works that use this techniques. In my opinion the paper is too center in the statistical analysis and more explanation about the possible reasons or justifications of these breakpoints in the periods observed are necessary in a climatic sense. Could be the breakpoint observed in 1996 with climate shift? The reasons of the breakpoints should be look for in the possible changes of atmospheric circulation. The authors show some reasons like the Pinatubo eruption but more discussion in this sense is necessary in order to justify the use of this method instead of a simple regression trend. Also would interesting if the authors could say why the method work different in Tmean that in Tmax or Tmin if they observed the table 2 the differences between piecewise and linear regression methods are less in Tmean.