Interactive comment on “Wetter environment and increased grazing reduced the area burned in northern Eurasia: 2002–2016” by Wei Min Hao et al.

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Review of Wetter environment and increased grazing reduced the area burned in northern Eurasia: 2002 – 2016 by Hao et al.

The manuscript by Hao et al. relates a data set of burned areas to potential driving forces like the development of livestock population and droughts. It is an interesting topic for Biogeosciences and beyond. However, I have the impression that it just scratches at the surface of the topic in a very general manner and that the whole analysis is oversimplified. E.g., when describing the burned area data set, the authors refer to previous work without briefly explaining the underlying method with few sentences.

Similarly, for the drought index and biomass data sets the underlying methodology is not explained or even mentioned. This is absolutely necessary to evaluate the results of the analysis. The authors lay more emphasis on mentioning where the data can be downloaded and which R packages are used than describing the origins and the functions itself. Also the statistics is oversimplified. The discussion replies well-known facts rather than really going into the details of the selected data sets and their links and feedbacks. One example: “In our study, we showed the strong impact of political events (here the collapse of the political regime) on grazing intensity and the subsequent effect on fire activity.” The study period was 2002-2016, the political changes they refer to occurred in 1990/1991. In the conclusions just bullet points with statistics are given rather than a real interpretation of the results and maybe an outlook. From this general evaluation I recommend rejecting the manuscript. More detailed comments can be given as soon as the main issues are solved.