Interactive comment on "An improved logistic probability prediction model for water shortage risk in situations with insufficient data" *by* L. Qian et al.

Anonymous Referee #2

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The manuscript ' An improved logistic prediction model for water shortage risk in situations with insufficient data ' Quian et al. is focused on the very important issue of water shortage prediction in a large metropolitan area as Beijing. The authors propose the approach of maximum entropy to estimate the parameters of a logistic model. Despite the indubitable interest of the issue, and the worth of the basical idea of the authors to refer to maximum entropy concept (to overcome the limitation of other approaches), the overall quality of the manuscript is rather poor. The presentation of the method is superficial, not well framed in the state of art of the existing risk assessment methods, and in particular for those that refer to the maximum entropy approach. The formalization of the approach is rather rough and results are not

described with sufficient detail to support the reliability of the proposed approach. Therefore, in my opinion the paper can not be accepted for pubblication in the present form. At the same time , I think that the idea is interesting and it is worth to be further elaborate on. Therefore I suggest to the authors to improve the quality of the manuscript and submit it again. My detailed suggestions can be found in the attached file.

Please also note the supplement to this comment:
https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2018-56/nhess-2018-56-RC2-supplement.pdf

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2018-56, 2018.