Interactive comment on “Direct or indirect recharge on groundwater in the middle-latitude desert of Otindag, China?” by Bing-Qi Zhu and Xiao-Zong Ren

Anonymous Referee #1

Received and published: 22 May 2018

The manuscript describes interesting results about the recharge mechanisms of arid zones in China, especially considering the importance of the topic. Despite the multi-disciplinary approach, which is very useful in groundwater recharge studies, there are many weak points which have to be improved for a publication in HESS. The main points are listed below: 1) The datasets belong to sampling campaigns carried out in different moments (years) and seasons and for this reason in my opinion cannot be discussed together, without a clear distinction between the different phases. 2) A reconstruction of the piezometric morphology as well as a stratigraphy of the considered study areas should be reported. This could help also the discussion of the groundwater preferential pathways. 3) The organization of the paper is still at a draft level, since
there is not a clear distinction between the results and discussion paragraphs. Many paragraphs need to be summarized and better explained. 4) The number of figures should be reduced (probably putting together some and deleting others). 5) The English is very poor and there are many typo errors. The reported delta notation is wrong. Due to the consideration of these main points the manuscript can be accepted only if major revision will be reported.