Interactive comment on “Diurnal pattern of the drying front in the desert and its application for determining the effective infiltration” by Y. Zeng et al.

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We thank the reviewer a lot for his helpful comments. According to the comments, we have the responses as followed:

1. Response to the general comment on the conclusions We have noticed this point. And, the last paragraph is the most important point in our conclusions is: the direct recharge to the groundwater from the precipitation is small; and, there is a need to establish a long term observation station to investigate more detail the infiltration process of rainfall on sand dune. In coming research, we are going to present more interesting conclusions. And, as the reviewer said, the undulated conditions would also be considered.

2. Response to the specific comments: 1) P. 1026, paragraph 4: January become -10 should be -10°C Response: This has been revised in the manuscript. 2) P. 1026, paragraph 10: measurements of soil water content, soil temperature and soil matric potential were conducted, may be rewritten as soil water content, temperature and matric potential were measured. Response: This has been revised in the manuscript. 3) P. 1026, paragraph: at no. of places the precipitation range has been given e.g. 84 mm to 120 mm. It may be as 84 to 120 mm. Response: This has been revised in the manuscript.

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