

Interactive comment on “Identifying a Transition Climate Zone in an Arid River Basin using a Hydrological Drought Index” by Libo Zhang et al.

Anonymous Referee #1

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Drought is the most severe natural disaster in the northwestern inland area of China. The research on drought is essential for scientific disciplines from geography to ecology. Drought research has traditionally focused on the regional features. However, there are new demands for more attentions to the local features due to the rapid changes in land cover and land use. This study addresses the demand by examining the capacity of drought indices in identifying the local climate regimes in a mountain region the northwestern China. It should provide valuable information for the research of other scientific disciplines in the dry area.

I have a couple of suggestions that may improve this manuscript. First, a multiple-disciplinary comprehensive research project has been conducted in the Heihe River basin. Please discuss the implications of the findings for the research of other scien-

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tific disciplines in the study area. Secondly, there are many drought indices available. Please provide a brief review on these indices.

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