Interactive comment on “Analysis of water use strategies of the desert riparian forest plant community in inland rivers of two arid regions in northwestern China” by Y. N. Chen et al.

Anonymous Referee #1

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In this study, the authors have analyzed and compared the water use characteristics of two typical woody species (Populus euphratica and Tamarix ramosissima) in two desert riparian forests, China. Because water is the most important limiting factor for plant growth and distribution in dry land, evaluation of these characteristics is extremely important in plant physiological ecology and forest hydrology. However, I found the very weak points in demonstration of the authors’ object for following reasons:

(1) In two regions of Heihe and Tarim, although comparing various parameters, it is very questionable whether the data can be evaluated as a representative (specific) value of the site. It should be carefully evaluated the response characteristics in a wide range under variations in the environmental conditions in each region. From such a point,
rather than the data for just one or few days, and should be evaluated by a long-term measurement.

(2) Considerations are mixed in the result. In addition, to the contents of the considerations is a little redundant, interpretation is often leap. To begin with, in the value of each parameter are different between the two sites, either due the environmental conditions at the time of the measurement is different, or the measured environmental conditions are substantially the same or response itself differs, is not clear. As for this point, it has not been clearly demonstrated in this experiment design, it is not logically discussed properly.

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