

Reply to Mr. Andreas Link *Thank you for the response on our article. We are grateful for all your constructive suggestions, which have helped us improving the manuscript. Below you can see our answers. The line numbers are from the revised manuscript*

Comments

The authors wrote that earlier studies focused more on the regional or basin-scale water budget analysis and perhaps miss two studies within this field, which were conducted on a global scale: One of these studies refers to a publication at which I worked with other researcher on the global fate of land evaporation ("The fate of land evaporation - A global dataset"): ESSD - The fate of land evaporation - a global dataset (copernicus.org). The other one, in turn, refers to the following publication: "High-resolution global atmospheric moisture connections from evaporation to precipitation" ESSD - High-resolution global atmospheric moisture connections from evaporation to precipitation (copernicus.org) While other global studies are available, one point of improvement could be to put the determined results into the context of those. Some of the determined patterns/ key numbers could, for instance, directly be compared and discussed to those studies. The work of Tuinenburg et al., for instance, determined that 70% of global land evaporation rains down over land, which is the range of the author's work. Our work, however, determined a recycling ratio over land of appr. 59%. Perhaps, a comparison of some key numbers would generally be interesting.

Answer : Thank you for your input. We have now modified the sentences and included the suggested references in line no: 254- 257. The global land recycling estimates achieved in the present study has now been compared with the previous studies and discussed in line no: 220 - 230.

Figure 6 of the work provides the average residence time in days for

water travelling from specific types of source to receptor regions. Is it perhaps possible to put them into context of resident times which have been determined in previous studies (e.g. overall residence time in atmosphere independent from its source: 8 days as estimated by Shiklomanov and Rodda; Shiklomanov, I. A.; Rodda, J. C. *World Water Resources at the Beginning of the Twenty-First Century*. International Hydrology Series; Cambridge University of Press, 2004.).

Answer : Thank you for your suggestion. The global atmospheric water residence time maps and global average water residence time are now included in the supplementary material and also in line no: 202 -207.