

## **Interactive comment on: Determining spatial variability of dry spells; Markov based method, applied to the Makanya catchment, Tanzania by B. M. C. Fischer, M. L. Mul and H. H. G. Savenije**

Hereby we would like to thank the anonymous Referee #1 for his/her review and for appreciating our efforts in developing spatially distributed critical dry spell maps.

Regarding the comment on the threshold used in the study, there are several studies using different thresholds:

- Zimbabwe, threshold of 0.1 mm (de Groen, 2002)
- Tanzania, threshold of 0.05 mm (Madamombe, 1994)
- Sudan, threshold of 0.1 mm (El-Seed, 1987)
- Tanzania, threshold of 0.8 mm (Enfors and Gordon, 2007)

In this study we used the threshold of 0.1 mm, similar to de Groen (2002); Madamombe (1994) and El-Seed (1987). This threshold was used as we focussed on the meteorological dry spells. In future applications the threshold set should be compatible with the field of application and their end users (e.g. for agricultural applications a threshold of 1 mm is more appropriate).

In the final version of the manuscript we will correct the references as pointed out by reviewer #1.