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Discussions

Interactive comment on "Controls on the development and persistence of soil moisture drought across Southwestern Germany" *by* Erik Tijdeman and Lucas Menzel

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It is interesting to read the entitled paper "Controls on the development and persistence of soil moisture drought across Southwestern Germany". The manuscript is well-written and well-organized. I have a few suggestions regarding the method.

It seems the authors used the linear correlation and regression models to identify the individual contribution from different controls on SM drought features. However, these two approaches can not differ the co-influencing between the controls (i.e., the soil properties and climate settings). Probably, the partial least squares regression (PLSR) and the partial correlation analysis could be more efficient to identify the individual

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impacts for each control by excluding other controls' effect. Kindly see the R function, e.g., plsr and pcor.test in R program. The results based on the PLSR and partial correlation could be different from the current results. The Authors could make some tests based on their sample data. It is only a suggestion.

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