

The revised manuscript includes a complete revision of the introduction including more information of the state of research and findings of the studies mentioned in the earlier version of the manuscript. The included references in the introduction were revised with recently published papers.

The description of the research area now includes detailed description of drainage density and soil information.

In the methods section the data used in this study and the source of the different datasets are described in more detail. We also added two tables with information on the land use at the soil moisture measurement sites and detailed information of the eight sub-catchments. Figure 2 has been updated according to the recommendations of the referees. The part describing the random forest model was updated with a more detailed description. We added figures showing the correlations among predictors in the supplements.

The results section has revised figures with minor changes as suggested by the referees. Only few suggestions could not be included. Figure 4 now includes stars indicating the significance of the t-test, but the number of sub-plots was not reduced, as we refer to most of them in the further discussion. Figure 6 does now include an indication of the events, we referring to in the description. The complete results text was revised including the suggested changes of the referees.

The supplement now has detailed plots of the predictor correlation at each site as well as site specific plots of the variable split of the soil moisture variables in the random forest models in the sites on slate.

The discussion was revised including now a broader discussion in the context of the intermittent streams research. We removed/shortened the detailed discussion about the misrepresented site in the Foulshchterbaach catchment as it was taking too much room without improving the gained information on streamflow intermittency.

For a detailed view of the changes please result the marked-up version of the revised manuscript as the whole text did undergo major revisions.