

## *Interactive comment on* "Identification of catchment functional units by time series of thermal remote sensing images" *by* B. Müller et al.

## Anonymous Referee #2

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I agree with the first reviewer comments, for example on the need for a stronger and more clearly explained rationale for why these methods in particular were selected. In the main the author responses have addressed these, so I will not repeat them here, but I do urge the authors to be very clear in explaining why they have done what they have done. Thus overall I find the paper well written and very interesting. I have only a few minor comments:

I think the paper would be stronger with a little bit more context about why HRUs are so important in hydrology, and how they work and what they mean for improving prediction. What is the background for spatial pattern analysis in addition? A further paragraph in the literature review would much improve this context and thus also help to highlight the importance of this work for hydrological prediction. I think the importance could C4535

also be further highlighted in the abstract and conclusions. Don't undersell your work!

Linked to this I think the authors could give more explicit ideas on how their techniques can be practically turned into improvements in the "conceptualization and parameterization of land surface models and the planning of observational networks within a catchment" Can you suggest some suggested future experiments to make this a reality?

Please provide more details on the hydrological, ecological and climatological regime of the test site, then link this further to the section where you discuss the transferability of the technique.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 7019, 2014.