HESS-2013-588 (submitted on 13 Dec 2013)

Selection of intense rainfall events based on intensity thresholds and lightning data in Switzerland L. Gaal, P. Molnar, and J. Szolgay

The following revisions were made to the final version of the manuscript as requested by the reviewers and the handling editor:

- (1) In Section 2.3 a sentence was added to explain the use of Pearson correlation for the autocorrelogram.
- (2) In Section 4.3 a paragraph was added to explain the use of the nonparametric Spearman coefficient for the multivariate analysis of storm properties.
- (3) A new section 5 was added titled "Discussion of selection methodology and extremes" in which we explain the context of our selection method with respect to traditional analysis of rainfall extremes. We also compare the results for our four stations with those reported in the Hydrological Atlas of Switzerland for a single return period for illustration. The text in this new section follows closely the response to reviewers posted in HESSD.
- (4) Seven references were added: Chvila et al. (2005) as another example using convective stratiform division based on a threshold intensity; Genest and Favre (2007) on copula applications; Jensen et al. (1997) for comparison of the annual extremes estimated in the HADES Atlas of Switzerland; Katz et al. (2002) on frequency analysis of rainfall extremes; Koutsoyiannis et al. (1998) on DDF methodology; and Overeem et al. (2008) and (2009) as examples of DDF applications with station and radar data.
- (5) General editing of the text was conducted with some minor grammar corrections across the paper.

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