

Interactive comment on "Characteristics of rainfall events in RCM simulations for the Czech Republic" by V. Svoboda et al.

V. Svoboda et al.

vsvoboda@fzp.czu.cz

Received and published: 28 September 2016

Referee #2 general comments:

The paper compares the characteristics of heavy rainfall events from 23 RCMs with those of point and area-averaged observations in Czech Republic. The methods used to identify heavy rainfall characteristics and to average point observations are new and able to increase our insight about both simulated and observational rainfall events in the country. In general, the paper is well organized and simple to read but difficult to understand some of the approaches used by the authors. As I think the most interesting part of the paper for non-local readers are the methods used in the present study, I suggest the authors to clarify Sections 3.1 and 3.3. For example, the sentences "Alternatively, the minimum event depth of a heavy rainfall event is chosen such that

C1

the number of heavy events is on average the same as for observations (=15 %). This approach is similar to the quantile mapping method used frequently for bias correction." given in Section 3.1 is not clear. Or you might add a figure to section 3.3 showing the generated neighbourhoods for stations corresponding to at least one of the RCMs.

Our response to general comments:

We agree that the methods and key findings are more relevant for international readers than the detailed results. Therefore we believe that the manuscript can be improved by revisiting and clarification of the methods description (possibly including a visual illustration of the methods) and also by presentation of results in a more concise way without less important details.

Minor points:

Page 2 line 2: Please add more recent studies such as: Danandeh Mehr, A. and Kahya, E. (2016). Grid-based performance evaluation of GCM-RCM combinations for rainfall reproduction. Theoretical and Applied Climatology (in press) Page 3 line 5: Please provide full expression before the abbreviation a.s.l. Page 3 line 6: Please replace "the 1961-2000 period" with "the period 1961-2000"

Our response to minor points:

Thank you for these suggestions, we will consider them in the revised version of the manuscript.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-283, 2016.