Hydrol. Earth Syst. Sci. Discuss., 10, C77–C78, 2013 www.hydrol-earth-syst-sci-discuss.net/10/C77/2013/© Author(s) 2013. This work is distributed under the Creative Commons Attribute 3.0 License.



HESSD

10, C77-C78, 2013

Interactive Comment

Interactive comment on "The effect of watershed scale on HEC-HMS calibrated parameters: a case study in the Clear Creek watershed in Iowa, USA" by H. L. Zhang et al.

Anonymous Referee #1

Received and published: 14 February 2013

- 1) Page 10, Line 16-17: "Fig.4 illustrates that the mean of drainage density tends to decrease as the mean of sub-watershed area increases, while the average longest flow length increases." This statement is inconsistent with Fig.3 in which it showed that the flow length increases while the sub-watershed area decreases. And the Fig. 4(b) may be wrong, please check carefully.
- 2) It is not clear how the author calibrated the model parameters. Was the value of model parameter for each sub-catchment the same or different?
- 3) If the model used the same parameter value for all sub-catchments, it is not supersize that the model performances at the Coralville and Oxford gauge were different.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



This difference might be caused by the differences in the landscape conditions, e.g., the land uses.

4) If the model used the same parameter value for all sub-catchments, is the scaling property of model parameter meaningful?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 965, 2013.

HESSD

10, C77-C78, 2013

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

