Hydrol. Earth Syst. Sci. Discuss., 9, C4317-C4318, 2012

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Interactive comment on "Informal uncertainty analysis (GLUE) of continuous flow simulation in a hybrid sewer system with infiltration inflow – consistency of containment ratios in calibration and validation?" by A. Breinholt et al.

Anonymous Referee #2

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GENERAL COMMENTS The paper addresses the issue of uncertainty in a hybrid sewer system via the GLUE methodology; it is therefore within the scope of HESS, and of interest to its readership. The paper focuses on the performance and consistency of the GLUE methodology when used in calibration and validation. The method is applied to a lumped sewer model with infiltration in Denmark. The method adopted and its assumptions are clearly outlined; the conclusions are however mixed in that the desired level of consistency is not achieved in validation. Yet the authors excluded

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"faulty input data and observations" as outlined in the description of their methodology. The authors should discuss the implications of their results on the quality of the original data. The title and abstract reflect adequately the contents of the paper. The paper structure, subdivision into sections, and language are sound; the paper cannot be shortened significantly, nor requires extensive editing. The reference section is broad.

SPECIFIC COMMENTS/SUGGESTIONS

1. The rationale for substituting the distributed model with the lumped one should be more clearly outlined, and its limitations explained. 2. The choice of likelihood measures introduced in (1) (linear and exponential) should be motivated and contrasted with other possible choices. The same holds for the choice of a multiplicative form of the overall likekihood (2); 3. A definition of "faulty input data and observation" should be provided.

TECHNICAL CORRECTIONS

Please check for consistency or typos the following sentences: - Title of Tables 5-6 is the same; - p. 8593, line 26, check "allthough".

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 8579, 2012.