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## Interactive comment on "Improving flood forecasting capability of physically based distributed hydrological model by parameter optimization" by Y. Chen et al.

## **Anonymous Referee #1**

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This manuscript presents a methodology to calibrate or optimize the parameters for highly distributed models. It fits well within the scope of this journal. However, I feel that the authors should try harder to bring out the innovative aspects of this work. For example, "improved PSO" is mentioned. But it is hard to tell whether the improvements were proposed by the authors themselves, or simply adopted from other studies. If the latter is the case, then the authors should not claim "improved" in this study. The writing is ok, but still a lot of room to improve, as listed (limited examples only) below.

1. P10604, L6, introduce "PBDHM" immediately after "physically based distributed hydrological models". 2. P10607, L24, "requirrment" -> "requirement". 3. P10608,

C5077

L1-2. L 2-6. Long sentences. Please break into a few short ones for better readability.

4. P10609, L5. "ease" -> "easy". 5. P10612, L21-25. "kinematical" -> "kinematic". Rephrase this part for better readability.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 10603, 2015.