

Interactive comment on “Soil Moisture Estimation Based on Probabilistic Inversion over Heterogeneous Vegetated Fields Using Airborne PLMR Brightness Temperature” by Chunfeng Ma et al.

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Received and published: 9 April 2017

Dear Referee,

Thank you for your valuable comments and suggestions for our manuscript. Your comments and suggestions are very helpful for improving our manuscript. We revised the manuscript item by item according to your suggestions. 1. We discussed the multi-parameter estimation in literatures as well as the use of PLMR data. 2. We described the PLMR data processing in detail. 3. We extended the description of L-MEB model and its inputs. 4. We added new a subsection (3.1) to introduce the Bayesian PI. 5.

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As you suggested, the averaging of brightness temperatures at three incidence angles is not reasonable. This suggestion is undergoing a new scheme. We are conducting new numerical experiment. 6. We revised the editing and grammatical mistakes point-by-point according to your very careful and valuable suggestions.

Overall, we thank your comments very much. We have finished revising the major part of the manuscript. But the suggestion 5 is undergoing revision, we are afraid that we cannot upload the fully revised manuscript this time.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2017-34, 2017.

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