Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-168-AC5, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "HESS Opinions: Deep learning as a promising avenue toward knowledge discovery in water sciences" by Chaopeng Shen et al.

## Chaopeng Shen et al.

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Thanks to all reviewers and commentators for their comments. Overall, although there are some criticisms, we feel three RCs all expressed agreement with the big message to some extent. They have encouraged us, not without some reservations, to refine the message and improve content, rather than rejecting the messages. For example, in RC3, Dr. Sawicz mentioned "With thoughtful revision, I believe that this paper can serve the community well to help show the utility of deep learning techniques". In RC2, Dr. McCabe mentioned "It's my hope that the authors can consider some of my comments in adapting their opinion piece — and ultimately attract the impact such a

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topic deserves". RC1 mentioned that "I would consider being more cautious about that as the understanding of the specific properties of DL models compared to more traditional statistical learning models is still an active area of research."

We agree with many of the reviewers' comments. We will do our due diligence to revise very carefully. Our earlier response in SC3 and its attachment has summarized how we would like to make the revision. Therefore, our hope is that the editor grant us the opportunity to revise.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-168, 2018.