

Dear Dr. Dimitri Solomatine,

Thank you very much for your attention on our paper.

Please refer to the 'Revision Notes' below for our reply to the referees' comments. The comments have been incorporated in the revised paper; we herein submit it again for a possible publication.

Thank you for your kind consideration.  
We look forward to hearing from you.

Yours sincerely,  
Yabin Sun

## Revision Notes (Manuscript Number: hess-2015-294)

<b>Anonymous Referee # 1</b>		
<b>No.</b>	<b>Comments</b>	<b>Authors' Response</b>
01	<p>For final publication, the manuscript should be accepted subject to minor revisions.</p> <p>The authors have addressed most of my general and detailed comments, so I believe that this technical note should be accepted—provided that the following minor comments are taken into account:</p>	
02	<p>Line 21-23. This sentence overstates the performance of the ANN—the RMSE increases significantly when adopting a 3- or 7-day ahead prediction horizon. This performance, which is in line with the available data and model, should be clearly reported in the abstract.</p>	<p>Agree.</p> <p>The sentence is revised to “The results reveal that ANN is able to produce accurate forecast with a leading time of 1 day, whereas the performance decreases when leading time increases to 3 days and 7 days.</p>
03	<p>Line 84-85. One reference is needed for RNNs.</p>	<p>One reference is added for RNN, i.e., Graves et al., 2009.</p>
04	<p>Line 99-100. I think that Figure 1 is not necessary. The architecture of MLPs is very well known.</p>	<p>Agree.</p> <p>Figure 1 is removed.</p>
05	<p>Line 109-112. Please explain why the Universal Approximation theorem is important in the context of this study.</p>	<p>The universal approximation theorem forms the basis for the selection of one hidden layer with 10 neurons.</p> <p>Please refer to Line 159 in the revised manuscript.</p>
06	<p>Line 148. Replace ‘exclude’ with ‘excluded’.</p>	<p>Corrected.</p> <p>Please refer to Line 147 in the revised manuscript.</p>
07	<p>Line 149-150. As already suggested, report the time-lags adopted in the study.</p>	<p>The time-lags are reported.</p> <p>Please refer to Line 150-151 in the revised manuscript.</p>
08	<p>Line 182-183. A short comment on the comparison against the linear model is needed. Please also report the performance (RMSE and r) of the linear model.</p>	<p>The forecasting results from a multiple linear regression model are presented and compared with the ANN model.</p> <p>Please refer to Line 180-187 in the revised manuscript.</p>
09	<p>Line 208-224. This is a summary of the paper. It is not needed for such a short technical note (the abstract serves this purpose).</p>	<p>Agree.</p> <p>These two paragraphs are shortened and merged into one to highlight the key findings/contributions.</p> <p>Please refer to Line 209-215 in the revised manuscript.</p>
10	<p>Line 225-234. This part should be slightly expanded to accurately discuss the limitations of the study.</p>	<p>This part is expanded.</p> <p>Please refer to Line 216-226 in the revised manuscript.</p>

<b>Anonymous Referee # 2</b>		
<b>No.</b>	<b>Comments</b>	<b>Authors' Response</b>
01	For final publication, the manuscript should be accepted as is.	