Hydrology and Earth System Sciences Discussions

Interactive comment on "Multi-criteria validation of artificial neural network rainfall-runoff modeling" *by* R. Modarres

J. Liu (Editor)

water21water@yahoo.com

Received and published: 18 February 2009

This is an interesting paper on a multi-criteria validation to evaluate the performance of artificial neural networks for the simulation of rainfall-runoff relations. It fits well into the scope of the HESS journal.

Two reviewers have given several valuable comments. Although the author responded to all the comments, he did not pay sufficient attention to some of them (particularly some comments from Referee2). I suggest the author further address the issues listed below, and submit a revised version as well as a Response to reviewers. Without paying sufficient attention to these issues may lead to delay of the publication of the paper.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

Comments from Referee #2

Comment 2: Distribution of rain gauge network should be included in the map to give a first impression of the locations of these stations. Hydrographs are also necessary as suggested by the referee. The author needs to address both the issues in the revised version.

Comment 4: The author needs to respond to this comment in the revised version. The author should provide information on the concept and background of randomizing the data sets to avoid the issue of over training of ANN model. Both the advantages and disadvantages of randomizing the data sets should be mentioned.

Comment 5: This is a good comment. The author should address this issue in the revised version.

Comments from Referee #1

Comment 3: In addition to the texts provided by Referee #1, please also add the following sentence: Liu et al. (2003) validated the results of the ANN models with root mean square error and determination coefficient. [Reference: Liu, J., Savenije, H.H.G. and Xu, J.: Forecast of water demand in Weinan City in China using artificial neural networks, Phys. Chem. Earth, 28 (4-5), 219-224, 2003.]

Comment 6: The author should either re-arrange the table as suggested by the reviewer, or make the statement clear.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 5, 3449, 2008.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper