

Review of: "Flood Prediction Using Artificial Neural Networks: A Case Study in Temerloh, Pahang"

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Potential competing interests: No potential competing interests to declare.

The study in this paper conducts a comprehensive survey of machine-learning-based techniques in flood prediction and applies ANNs for flood prediction in the area of Temerloh, Pahang.

The abstract can be shortened to state the problem and highlight the key achievements of this paper.

The feature engineering details are missing. I think the authors can state the reasons for using the four features (rainfall, streamflow, water level, and temperature data) for flood prediction.

The architecture of the ANN used is not clearly explained as activation functions are not specified, and a diagram is needed. Also, how the hyperparameters are selected is missing from the paper. The dataset looks rather small, and a 4-layer ANN may be too complex. Would it be possible to further reduce the number of neurons or layers?

According to Fig. 3, in the first few epochs, the training loss is higher than the validation loss, but an explanation is missing. Also, it would be better if the authors could re-run the experiments multiple times with different initial points or perform cross-validation.

Comparisons between ANNs and other conventional machine learning techniques (logistic regression, SVM, etc.) are missing. Since the inputs are time series, I would suggest trying RNNs.