

Using monitoring data from a water-level gauging network, this paper proposed a means of forecasting inundation levels. By ARMAX, water-level forecast models were used cumulative rainfall and water level data as input variables from other gauging stations in the network.

A case study was conducted y, Taiwan in which optimal water-level forecast models were established for each of the four water-level gauging stations in the area. Test results from the Xinnan area of Yilan County Taiwan demonstrate that the model is able to satisfy PE exhibited significant time shift, which also provide accurate forecasts of inundations.

I think the methodology in this paper is very useful for the water-level forecasting and future engineering practices.

However, in figure 1 I cannot see the river and basin in this study basin. The author can improve the sketch of the watershed.

In figure 6, comparing model predictions (3-hr lead time) with measured ones, the results by modes display significant fluctuations of the hydrographs. Can the author explain more detailed inside?