

Interactive comment on “Effects of ecological factors and human activities on nonpoint source pollution in the upper reach of the Yangtze River and its management strategies” by X. W. Ding et al.

Anonymous Referee #2

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The authors investigated the effects of ecological and human activities factors on the loading of nonpoint source pollution in a large watershed in China. The improved export coefficient model and the revised universal soil loss equation model were used for simulating pollutant transport. In general, the topic is of interest and importance for watershed management. The presented research represents a valuable and original contribution to the watershed nonpoint source pollution modeling studies. I suggest that this paper be accepted with minor revisions: (1) There are a number of typos and grammatical errors in the paper. (2) “Introduction” section: The methods previously

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used for examining the impacts of ecological and anthropogenic factors on watershed nonpoint source pollution should be reviewed. The improved export coefficient model and the revised universal soil loss equation model seemed to be the main tools used in this study. Their applications for investigating nonpoint source pollution should also be briefly reviewed. (3) “Materials and methods” section: the same symbols were used in different equations to represent different parameters and have different units. For example, “A” represents “catchment area” in Eq. 1, but it represents “soil loss per unit area” in Eq. 7, while in Eq. 9 it represents soil loss in year j ; “p” represents “input of nutrients from atmospheric deposition” in Eq. 1, but it represents “annual precipitation” in Eq. 13. Please check the entire manuscript to fix such inconsistency. (4) “2.3 Data collection and preparation” section: more efforts should be made to describe how to obtain the data or empirical equations of modeling parameters so that the presented methods can be applied to other watersheds. (5) “Results and discussion”: the advantage and disadvantage of the proposed models can be discussed so that the extension of this work to other watersheds can be understood. (6) “Conclusions”: this section is a bit wordy and should be shortened.

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