

Interactive comment on “Application of GA-SVM method with parameter optimization for landslide development prediction” by X. Z. Li and J. M. Kong

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We thank the referee for the high evaluation and constructive comments that are very helpful for us to revise and improve our manuscript, as well as the important guide significance to our researches. The landslide listed in our manuscript is a complicated large-scale landslide. Its development process is affected by many factors, such as rain, reservoir water, groundwater and human activity except for the natural features of the landslide body. Moreover, the factors interrelate and interact on each other. GA-SVM is a new machine learning method that has been proved to be an effective method to solve the complicated problems in other fields. So, we tried to use the method in the prediction of the complicated landslide. As the referee said, in view of

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the close relationship between groundwater flow and landslide movement, the future movement of the landslide may also be predicted by some other methods, such as physically-based models and statistical techniques. In the future, we will try to use different methods to study the complicated landslide and comparatively analysis their prediction effects in order to better serves practice. We agree with the referee that the discussion on the quality of the monitoring data is necessary. In the revised manuscript, we have discussed the quality of the monitoring data, including monitoring items, monitoring accuracy and other related content. The revised portion has been marked in red in sect.5 of the manuscript.

Please also note the supplement to this comment:

<http://www.nat-hazards-earth-syst-sci-discuss.net/1/C1927/2013/nhessd-1-C1927-2013-supplement.pdf>

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