

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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Received and published: 9 December 2013

This manuscript is well written (no editing needed) and presents a nice application of data mining techniques in the domain of landslide monitoring. The technique combines the genetic algorithm and support vector machine and would allow automatic prediction of landslide movements based on continuous survey data. The results achieved are excellent, but the input data structure is (relatively) simple and a correlation between groundwater level and landslide movements is obvious (in this case). Prediction of future movements of the landslide based on groundwater level data does not require sophisticated data mining tools (in this case). Therefore, significance of the outcomes of the methodological development can only be proved if the technique is applied to a

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more complex data set. However, the scientific quality of this manuscript is high and the paper is of major interest for all landslide researchers working on monitoring and automatic detection/prediction of slope instability/failure/deformation and catastrophic mass movements. What is partly missing, is a discussion on the quality of the monitoring data - which to me is much more important than the technique used to analyse them.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 5295, 2013.