

Interactive comment on "GIS-based Real-time Framework of Debris Flow Hazard Assessment for Expressways in Korea" by C. K. Chung et al.

Anonymous Referee #2

Received and published: 22 February 2016

Authors developed a simple method (but not limited to its current one) to assess debris flow hazard for expressway management. To my knowledge, this has never been tried in Korea and the method has limitations due to the wide coverage area and usage of available data throughout the whole expressway constructed in Korea.

I agree with the first anonymous refree#1 regarding the scoring system. However, I would rather focus on the virtue of rapid decision making and wide coverage (or management system for the whole expressway system in Korea). I think the current method has permanent values that the GIS system is used for the expressway management system with the available dataset including rainfall intensity and the slope angle. The system has potential to be upgraded with more data accumulation and more case histories. I guess the scoring system itself would be updated with more case histories and dataset. I strongly recommend that the discussion on the current limitation of the

C.

system and how the program can be developed better with more precision.

The current system might not be perfect but I, personally think that once the system is applied to the Korean expressway management system and the accumulation of data with upgrade of the scoring system, it can be a powerful tool.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2016-2, 2016.