

Interactive comment on “Epistemic uncertainties and natural hazard risk assessment – Part 2: Different natural hazard areas” by K. J. Beven et al.

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I've read your manuscript and I've found it very interesting. It provides interesting food for thoughts. The question of epistemic uncertainties and natural hazard risk assessment and forecasting is still an open problem.

Since you included a part related to rainfall induced landslides and epistemic uncertainties (page 15, line 10-21), I would like to suggest a paper I have co-authored: Gariano et al., 2105.

Our work deals with the epistemic uncertainty due to the lack of information on landslide occurrence, in a validation procedure of regional rainfall thresholds. We have investigated the consequences of the lack of information on the contingency table and the related skill scores usually used to evaluate the forecasting performance of a thresh-

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old in an early warning system. We found that even a small (1%) underestimation in the number of the considered landslides could result in a significant decrease in the performance of the system.

I hope it can be useful for your work.

Reference:

Gariano S.L., Brunetti M.T., Iovine G., Melillo M., Peruccacci S., Terranova O.G., Vennari C., Guzzetti F. (2015), Calibration and validation of rainfall thresholds for shallow landslide forecasting in Sicily, Southern Italy, *Geomorphology*, 228, 653-665, doi:10.1007/s11069-014-1129-0.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2015-295, 2016.

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