

Interactive comment on “Landscape analysis for multi-hazard prevention in Orco and Soana valleys, North-Western Italy” by L. Turconi et al.

Anonymous Referee #2

Received and published: 5 May 2015

The manuscript seems to derive from a professional work done by the Authors (maybe some of them) to arrange a civil protection plan of the investigated area. They used aerial photo interpretation and feel survey as well as an analysis of historical archives in order to delineate the major hazards affecting the area. Moreover a rainfall analysis of a 82 years time series has been carried out to "evaluate the critical range of rainfall volume that lead to instability and trigger slope failure". A quite relevant data base has been compiled and some maps combining different layers have been produced. The used methodology does not show any innovative approach and would be suitable for a degree or PhD thesis not for a scientific journal. There is an evident lack of information about rainfall analysis (no any numerical date have been reported, no information about the statistical model employed in such analysis), data base structure

C586

and specific outcomes. Moreover there is some confusion in using a correct terminology (e.g., complex and composite landslide or process) and some terms are not properly explained or even obscure (e.g., gigantic landslide system, GSD). The section of the manuscript dealing with different type of hazards is quite poor and not exhaustive (few lines for each type of hazards). Some statements like “debris flows are most frequent during exceptional rainfall events” (lines 18 page 2227); “our reserach finds that events of a given magnitude and process recur periodically in the same localities.....” (line13 page 2235) and others, are quite banal and predictable and prove that the activity illustrated in the manuscript is merely a service for some local authorities which outcomes are generally internal reports. The structure of the manuscript would need a better arrangement too: some chapters (i.e. chapter 2) are too long reporting useless information (for the scope of the paper); some other are too short (see above) and the references seem not up to date being most of them more than 10 years old.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 2221, 2015.

C587