Interactive comment on “Debris-flow hazard assessment at regional scale by combining susceptibility mapping and radar rainfall” by M. Berenguer et al.

Anonymous Referee #1

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This is a very well written, organized, and technically sound paper that should be accepted with minor revision. I have a few comments:

It would be helpful for the authors to elaborate on how/if their model accommodates different initiation mechanisms of debris flows (landslide vs. runoff). There is a mention that the Papa et al. (2013) model fails to include runoff initiated debris flows. Some text dedicated to addressing how the model presented improves upon this limitation. Or, if the model presented is not applicable to runoff initiated debris flows, then this should be emphasized in the discussion and conclusion.
A sentence identifying how debris floods and debris flows are distinguished using geophone data would be helpful in section 4.2, line 25.

The case study section may benefit from a table that shows the hazard level in one column and the resulting runoff result in the second column.

as an example:

<table>
<thead>
<tr>
<th>warning level</th>
<th>response</th>
<th>low</th>
<th>no response</th>
<th>moderate</th>
<th>likely debris flow</th>
<th>high debris flow</th>
<th>mod - high debris flow</th>
</tr>
</thead>
</table>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 6295, 2014.