

Review of manuscript ESSD-2023-61: “ITALICA, an extensive and accurate spatio-temporal catalogue of rainfall-induced landslides in Italy” By: Silvia Peruccacci, Stefano Luigi Gariano, Massimo Melillo, Monica Solimano, Fausto Guzzetti, Maria Teresa Brunetti

Dear Editor and Authors.

Thank you for your valuable and detailed presentation and examination of the ITALICA dataset. I feel this is a good paper that clearly presents the difficulties, resources, and data variability available in compiling such an inventory. The focus of the work is clearly defined, and the steps/ methodologies adhered to in order to compile such a dataset are clearly established.

I found the paper to be engaging and comprehensive, with questions arising mostly being answered as the paper progressed. The Figures and Tables all support the text and are positioned well to support the narrative.

I have a few very minor comments that I would like to see addressed to support the paper, most of which appear to fit with the Background section. Please see comments supplied.

I would recommend this paper be accepted for publication with very minor edits.

Section 2: Background

Lines 66 – 133 Whilst presenting a good background of inventories, could this section be restructured slightly either as a list or by geographic area. E.g. Italian databases are mentioned at the beginning and the end, Nicaragua in between two Italian databases. May I suggest reviewing this section and formatting along the lines of *Italy > Europe > rest of the world example > Global*.

- I would suggest that the authors review if they are stating examples or offering comparisons of contents.
- The text should clearly define the time limited databases and those which are still being updated. This is not always well presented.
 - L84 Change “included” to “to date includes” – the GB database is being updated constantly and is not a static inventory. It also is different to some of the other databases presented as it includes historic (preglacial) undated landslide event deposits not just present day (hence 17000)
 - L85 Poland details until April 2014 but from when – is this time stamped.
 - L94 Slovenia – ongoing but from when.
- Line 84 suggest an edit “with capability to include” – data is only added where it is available although the fields are present as stated in references.

Section 4: Data and Models

Table 1 Geographic accuracy, the text is described “as geographic accuracy based on the area which the landslides realistically occurred described as radius from the coordinates” however the examples are presented as area. The approximate radius is mentioned later in the text (L235-239) but it would be helpful to the reader if the radius could also be included in the table along with the area to assist interpretation.

Section 7: Remarks and conclusions

L375 I would suggest the authors consider L375-377 “the catalogue...” should be reordered to the end of the paper as the introduction line to the beginning of the summary for the future of the inventory and follow on work. and included in the final paragraph beginning L394.

Technical notes:

There are many areas where there are single sentence paragraphs. I strongly suggest these are reviewed and removed.

L30 “catastrophes” change to disasters

L148 “along the length of the peninsula”

L160 “non- anthropized areas” suggest “areas not subjected to any anthropogenic change”.

L394 Natural disasters – This can be a controversial term in some current natural hazard/ social science circles. If authors agree I would strongly suggest change to “natural hazards”. This is supported in the context of the sentence.

L308 Colloquial “on the other hand” should be removed.

L332 Colloquial “on the other hand” should be removed.

L273 Caption for Figure 2 mud flow abbreviation is presented as MD – presented as MF in table 1 and L219 and L268. Please check.

L385 Colloquial “on the other hand” should be removed.