

General answers to reviewer 2:

G1) Link to the previous article of the authors (throughout the article and mentioned in LINES 62/354/361 & S1):

The article is rewritten in a stand-alone form. References to Domej et al. (2017) are made only in the context of database citation and at the end, where results are compared to preliminary findings.

G2) References and new contribution (throughout the article and mentioned in LINES 45-48/58-59 & S3):

Relevant references to previous studies, their inventories, their analyzed parameters as well as correlations are added where needed. The new contribution via this publication is explained.

G3) Applicability of the equation of half an ellipsoid (mentioned in *b):

It is true that the equation of Cruden & Varnes (1996) better fits rotational landslides and that one could expect misestimations for other landslide types. However, tests using all landslides showing a reported and a calculated volume throughout the database, show that the ratio between both volume types oscillates around 1 and volumes do not notably differ – at least not in this study. This fact, together with the lower recurrence (60%) for reported volumes, lead to the choice of the calculated volume (V_{equ}) to be the first parameter of correlation. Comments on the applicability of the equation are added.

G4) Rupture zones containing different materials (mentioned in LINE 129):

As mentioned (cf. “all classic landslides throughout the database not displaying local features of other mass movement types (Varnes, 1987)”) we consider landslides according to the classification of Varnes (1987); i.e., actual sliding mechanisms on a sliding surface (thus, no falling, toppling or flowing mass movements). It should be noted that the focus of this work is on the shapes and dimensions of rupture zones, and not on what material this rupture zones can contain nor on what mechanism triggered individual landslides. Also the database does not primarily focus on landslide material; however, it roughly distinguishes soil, rock and debris, or a mixed form, also according to Varnes (1987). A distinctive analysis of rupture zones consisting of different materials would require different filtering (cf. TAB 2) in order to examine if a scaling difference can be observed through material filtering. – It might be a good starting point for a new study.

Specific answers to reviewer 2:

(Indications “LINE ...”, “FIG ...” and “TAB ...” refer to the reviewed article as the 2nd reviewer received it. Comments – except those already mentioned in the general comments – are shown below.)

S1)	(cf. G1 & S2)
S2)	The argumentation on the importance of the volume assessment is moved to the introduction.
S3)	(cf. G2)
S4)	correction lapsed as the article is rewritten in a stand-alone form
LINES 43-44	Since the population on the planet grows, people need more space, and agglomerations expands – also to areas that are endangered by landslide activity. A comment on climate change is now added.
LINE 45	The word “phenomenon” is clarified in the text body.
LINES 45-48	(cf. G2 & S2)
LINE 51	phrase split in two
LINES 58-59	(cf. G2) To establish a better link in the reading flow, the last and the second last preceding paragraph are inverted.
LINE 59	“Assessing” is here used in an idiomatic context of the English language to express the “wish” to gather all necessary information about landslides in order to manage their danger potential.
LINE 64	The database with its construction and major contents is now presented at the beginning of section 2.
LINE 65	correction lapsed as the article is rewritten in a stand-alone form
LINES 76-79	The database with its construction and major contents is now presented at the beginning of section 2.
LINE 104	correction lapsed as the article is rewritten in a stand-alone form
LINE 105	correction lapsed as the article is rewritten in a stand-alone form
LINE 110	correction lapsed as the article is rewritten in a stand-alone form
LINE 113	The equation of half an ellipsoid approximating landslides was proposed by Cruden and Varnes (1996). A comment is made in the text body; the equation appears in FIG 4 and in TAB 1 together with other used equations for indirect parameters.
LINES 114-116	(cf. S2)
LINE 129	(cf. G4) The definition of classic landslides is now added to the text body.
LINE 131	The distinction between rotational, translational and roto-translational landslides is exemplarily given

		by (the newly-ordered) FIG 4 and (the newly-ordered) FIG 5 and commented in the text body.
LINES	131-133	rephrased
LINE	137	The lack of data for TCS related parameters is now commented in the text body.
LINES	142-147	The entire analysis is based on rupture zones, not on deposit zones. Therefore the question does not apply for length parameters (L or L_h). Areas are excluded due to the next argumentation (cf. LINES 148-159).
LINES	148-150	Areas – as parameters – cannot be used in the analyses, when areas should become reconstructable through the analyses.
LINE	229	“More sophisticated filtering” means that – since a ratio need two dimension-related parameters – One more filter has to be applied to account for the second dimension-related parameter.
LINES	233-234	(cf. LINES 142-147)
LINE	264	The right ratio (w_{av5}/L) is now cited instead of d_{av5}/w_{av5} . The “short” and “long” refer to the length.
LINES	269-271	As argued in the respective paragraph, the median does not bring more information. For reasons of “printed-paper-economies”, we have not added a column with medians.
LINE	284	“Being of interest” is here used in an idiomatic context of the English language to express the “wish” to compare the closeness of regressions. The regression for earthquake-triggered landslide is the red one in the plots.
LINES	295-297	Comparisons are based on the entire regressions and in particular on the regression parameters (i.e., constants (c) and factors (a)); the phrase is more explicit now. Comparisons are not limited to the shaded area, as the shading is explained in the following paragraph as being a “rather visually subjective feature”.
LINE	297	From geological experience, it seems evident that landslides are rarely very short (L_h) and high (H_{0E}); If this is the case, and the rupture zone consists of rock, we would rather speak of a rockfall or a topple; if the rupture zone consists of weaker material (soil or debris), it would probably not reach a high H_{0E}/L_h -ratio.
LINES	300-301	The readability of the plots is improved. The parameters in question in FIG 5 are maximum length (L) and maximum width (W); the respective ratios that compare both parameters are for the set “full” $W/L=1.17$ and for the average regression of the six sets $W/L=1.22$ (TAB 4 and 5c). The ratios for w_{av5}/L are indeed smaller than 1 (“full”: 0.82; “average of six sets”: 0.84) and the ratios for w_{av3}/L are approaching 1 (“full”: 0.95, “average of six sets”: 0.97). It seems, therefore, that – if considering all width-to-length-ratios – landslides are almost as long as wide. Adaptions are made in the text body.
LINES	306-311	The implication of the overlap is given in the second sentence of the paragraph.
LINES	335-336	“surprisingly” removed from the text body
LINES	354-336	correction lapsed as the article is rewritten in a stand-alone form
LINES	367	The broader spectrum of use is explained in the two paragraphs following this phrase. In the corrected version of the manuscript, there is also a third paragraph related to numerical modeling.
a*		Without questioning the analyses by Stark & Guzzetti (2009) and Jeandet et al. (2019), who link landslide size distribution via probability approaches to Mohr-Coulomb stability analysis, the here presented study does not seem to allow for such implications – especially as this work does not account for rupture propagation nor PDFs on size distribution.
b*		(cf. G3)

FIG 1		The division in four parts (for points 1-E) is indicated in the figure. Depths (d_0 - d_3) are vertical because it is easier to measure from a horizontal plane while establishing numerical models; the maximum depth (D) is inclined as proposed by the IAEG (1990). The depth below point 0 (d_0) can have a value when the landslide detaches with a trench. The latter two issues are now commented in either form in the text body. LCS are located as given in respective publications by authors (cf. “Direct parameters are those that are measured from LCS, TCS and/or maps published per respective landslide.”) in the text body.
FIG 2		A ratio curve in the plot (a) would be indeed useful. However, the figure (a) has disappeared in the course of transforming the article into a stand-alone form.
FIG 3		The layout of the plots is more adequately done.
FIG 5		The layout of the plots is more adequately done. An insert with juxtapositions does not show more than very close overlaps that are already visible in the entire regressions.
FIG 6		Captions are now in the plots and averages per set represented in a correct way.
c*		All multi-plot-figures are now labeled with letters (a-d) and called in the text body.