

# Introducing SlideforMap; a probabilistic finite slope approach for modelling shallow landslide probability in forested situations

## - Supplementary material

Van Zadelhoff Feiko<sup>1</sup>, Albaba Adel<sup>1</sup>, Cohen Denis<sup>2</sup>, Phillips Chris<sup>3</sup>, Schaepli Bettina<sup>4,5</sup>, Dorren Luuk<sup>1,6</sup>, and Schwarz Massimiliano<sup>1,6</sup>

<sup>1</sup>Bern University of Applied Sciences - HAFL, Länggasse 85, CH-3052 Zollikofen, Switzerland

<sup>2</sup>COSCI Ltd.

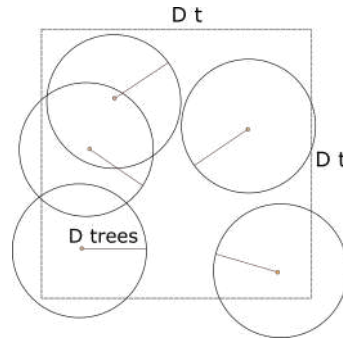
<sup>3</sup>Manaaki Whenua - Landcare Research, Lincoln, New Zealand

<sup>4</sup>Institute of Geography (GIUB), University of Bern, 3012 Bern, Switzerland

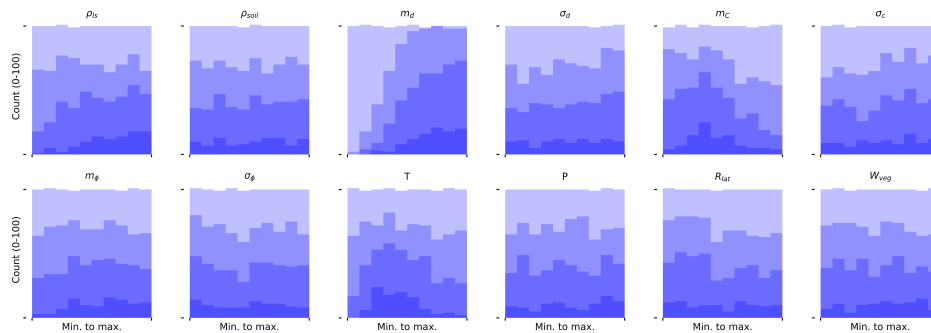
<sup>5</sup>Oeschger Centre for Climate Change Research (OCCR), University of Bern, 3012 Bern, Switzerland

<sup>6</sup>Int. ecorisQ Association, P.O. Box 2348, 1211 Geneva 2, Switzerland

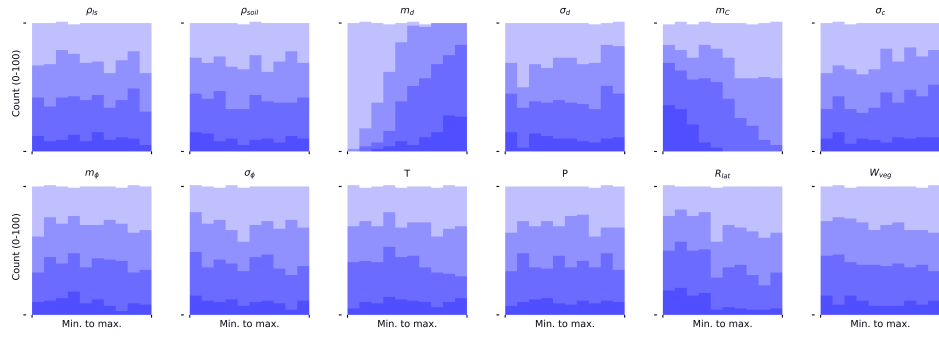
**Correspondence:** Van Zadelhoff F.B. (feiko.vanzadelhoff@bfh.ch)



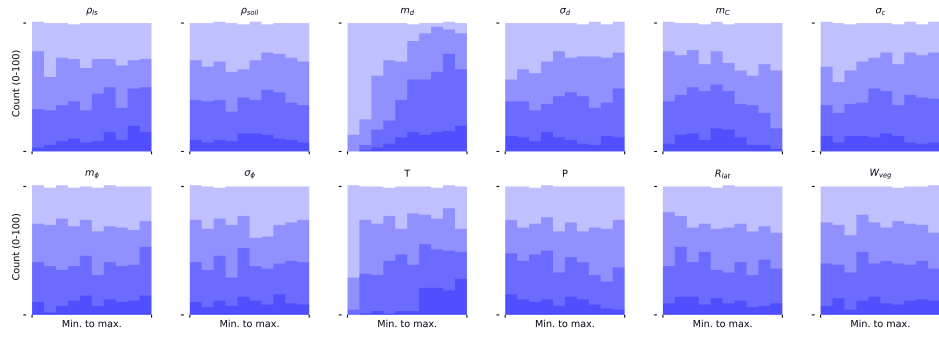
**Figure S 1.** Visualization of the circular approach to compute the mean maximum distance to a tree in a raster cell. It is assumed that the surface area of the raster cell equals the sum of surface areas of the circles around the trees.



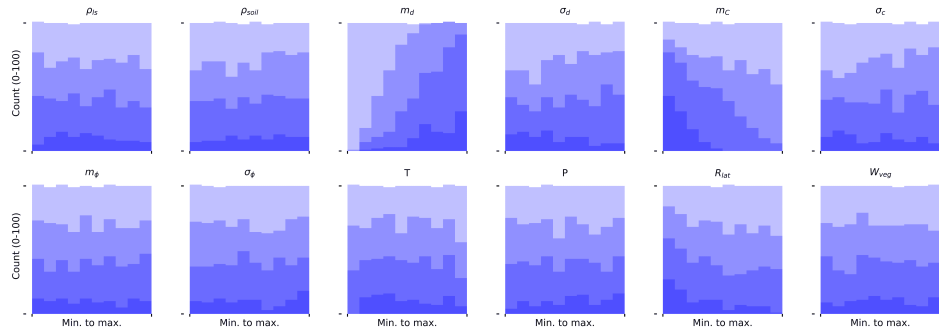
**Figure S 2.** Histograms of different subsamples of the LHS parameter sets for the Eriz study area. The shading (from light to dark) corresponds to subsamples retaining only the  $x\%$  best parameter sets in terms of AUC; the shown fractions are: 1, 0.7, 0.4, 0.1.



**Figure S 3.** Histograms of different subsamples of the LHS parameter sets for the Eriz study area. The shading (from light to dark) corresponds to subsamples retaining only the  $x\%$  best parameter sets in terms of Unstable ratio; the shown fractions are: 1, 0.7, 0.4, 0.1.



**Figure S 4.** Histograms of different subsamples of the LHS parameter sets for the StA study area. The shading (from light to dark) corresponds to subsamples retaining only the  $x\%$  best parameter sets in terms of AUC; the shown fractions are: 1, 0.7, 0.4, 0.1.



**Figure S 5.** Histograms of different subsamples of the LHS parameter sets for the StA study area. The shading (from light to dark) corresponds to subsamples retaining only the  $x\%$  best parameter sets in terms of Unstable ratio; the shown fractions are: 1, 0.7, 0.4, 0.1.