Interactive comment on “Landslide susceptibility mapping of Cekmece area (Istanbul, Turkey) by conditional probability” by T. Y. Duman et al.

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The reply of the authors for the comment written by J. Siebert is as follow:

As can be known, \( P(A|Bi) \) value denotes the occurrence of a landslide on sub-classes of each parameter and \( P(Bi) \) indicates the occurrence of each of sub-classes of each parameters in the study area. Conditional probability values, \( P(A) \), defining the probability of landsliding under the certain conditions of sub-classes for each parameter is obtained from the multiplication of these two probability values mentioned above (Eq. 7 in the manuscript).

Using this equation 7, \( P(A) \) values of each sub-classes of each parameter are calculated (Table 1 in the manuscript). To produce the final susceptibility map, the \( P(A) \) values have to be integrated into a data matrix including all data of this study in row and column format. Then, summing the \( P(A) \) values of each data row, total \( P(A) \) is obtained. Consequently, these total \( P(A) \) values on each row are the susceptibility val-
ues of landsliding in the study area. Finally, the resultant susceptibility map is produced using this total $P(A)$ value column.

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