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Landsliding, topographic variables and location of cultural terraces in Slovenia

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For a large number of people living in hilly regions of Slovenia cultural terraces are important landscape elements. We know from previous studies that as many as half of vineyard terraces are built in areas which are highly susceptible to landslides, and a quarter in low landslide susceptibility areas. The contribution will present links between landslide susceptibility in terraced areas in Slovenia.
Landslides are frequent element of cultural terraces-landscape. In Slovenia they are frequent in hilly and mountainous regions. The position of landslide areas is strongly influenced by the topography and thus indirectly by the construction of cultural terraces. They trigger during and after terraces construction when the drainage system is altered. Thus, agricultural activity leads to instability of slopes, and increases the production costs.
Links between landsliding (Zorn and Komac 2004; 2008; 2009) and cultural terraces were determined using the geographic information systems. For the territory of Slovenia, we have already created landslide susceptibility map (Zorn and Komac 2004; 2008), while here we determined the correlation between landslides, topographic variables and location of cultural terraces. To achieve this aim, all areas of cultural terraces in Slovenia were digitized at the scale of 1:10,000.

References

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