



## **Erosion-critical triggering rainfall threshold at the hillslope scale for desertification risk assessment**

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Desertification risk assessment requires the knowledge of several indexes depending on climate and land use factors as well as on the general exposition of the interested area. Among such indexes, the erosion factors plays a relevant role in the evaluation of the vulnerability level of the study area and the linked literature set up the critical value for the beginning of soil loss at an empiric value of rainfall intensity. The paper deals the evaluation of soil loss at the hillslope scale performed on some sample areas, in Basilicata region, interested by desertification process. Mainly, the aim of the study is to appraise the erosion-critical triggering rainfall threshold basing on geo-chemical, morphological and land use factors. To achieve such objective, several data have been acquired from monitoring activity, in site on different hillslopes, rainfall time-series of gauge-stations and soil physical from laboratory analyses.