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Mediterranean storms and impact analysis on people of Calabria region (Italy)

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Mediterranean storms are a source of multiple hazards because they can trigger several types of damaging phenomena which may cause different types of impacts on a complex of natural and manmade elements in an incredible wide range of circumstances.

Phenomena which occur during and after Mediterranean storms can be roughly sorted in some main groups: landslides, floods, erosion processes and sea storms. Each type of phenomenon is characterized by a proper dynamic and, according to the social and economical framework in which develops, it can cause different impacts. Despite during Mediterranean storms all these phenomena occur at the same time (or in a short while), often strongly amplifying damage and hinting emergency management, studies available in literature tend to analyze each type of phenomenon (and its impact) separately, supplying a fragmentary framework of effects.

In the present work, basing on a 40-year dataset concerning effects of storms in Calabria (southern Italy), a classification of effects on people affected by the different types of phenomena triggered by rainfall is carried out. The results is a schematization of main circumstances during which the different types of phenomenon triggered by storms can hit, in some way, people, and the amount of damage reported. This kind of result can be useful in education programs for people living in risk prone areas, in order promote more conscious life-style and to avoid unnecessary risk-taking behavior.