

Interactive comment on “Rainstorms able to induce flash floods in a Mediterranean-climate region (Calabria, southern Italy)” by O. G. Terranova and S. L. Gariano

Anonymous Referee #3

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General comments

The manuscript “Rainstorms able to induce flash floods in a Mediterranean-climate region (Calabria, southern Italy)” by O. G. Terranova and S. L. Gariano is focused on the application of one method, based on a previous paper by one of the authors, in order to classify rainstorms that affect the Calabria region and induce flash floods, according to their temporal structure and spatial distribution.

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The topic is interesting, the study contributes to better understand these storms and can benefit rainfall-runoff watershed models. The title and the abstract are clear, pertinent, easy to understand and summarize well content of the paper. The paper is mostly well-written and fluent reading, and the quality of figures is good enough.

The first part of the article is described in great detail, instead of the results and conclusions can be completed; in particular a summary of the results is missing. The chosen criteria are supported by adequate bibliographic references, although some reference in Italian are not easily accessible (Iaquinta and Terranova, 2009, Iovine et al. 2009, Versace et al. 1989, ...)

Specific comments

Pag. 2050, line 26: ‘... because the climate change.’. According to the references, in this categorical sentence any term may be included to indicate probability or relationship between these events and climate change rather than cause and effect.

Pag. 2054, line 10: Please, give some details on these three regions.

Pag. 2054, line 18: This paragraph can be reduced.

Pag. 2055, line 20-23: Please define abbreviations D_{env} and E_j .

Pag. 2057, line 5: Spells out information ‘several times’.

Pag. 2061, line 11: Would be interesting to complete the information about the BSC

C1153

structure corresponding to each event in Table 2, is it possible?

Pag. 2061, Conclusions section: A summary of results about the selected erosive events can improve understanding and highlight the usefulness of the work.

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