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Hydrological investigation of the catastrophic flood event in Mandra, Western Attica

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A recent storm event, of substantial yet unknown local intensity, in Western Attica (west of Athens, Greece) has caused a flash flood with many fatalities in the city of Mandra as well as material damages. After this incident a debate started on whether the devastating results were due to the extreme nature of the rainfall event or to the poor flood protection works. In this study, we present information gathered from several sources (including hydrometric data from a neighboring catchment, point rainfall data from the broader area of interest, satellite observations and audiovisual material) in an attempt to represent the rainfall-runoff event. We further analyze the available data to approximately estimate the return period of the storm event. Finally, we discuss on the feasibility of the prediction of this storm.

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