

Interactive comment on “Contrasting rainfall-runoff characteristics of floods in Desert and Mediterranean basins” by Davide Zoccatelli et al.

Anonymous Referee #2

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HESS-2018-550 Title: Contrasting rainfall-runoff characteristics of floods in Desert and Mediterranean basins Authors: Zoccatelli, D. et al.

GENERAL COMMENT The paper presents an analysis of moderate floods in 30 watersheds in Israel. Thirteen (13) watersheds are characterized as Mediterranean, 14 are desert watersheds and three (3) are mixed watersheds. The analysis is based on high resolution radar rainfall data calibrated and verified with data from meteorological stations and streamflow data. The data length is 24 years. The paper identifies through correlation analysis the rainfall, storm and antecedent rainfall factors affecting the hydrograph parameters.

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The paper is well organized, written and comprehensive. However, there are a few minor points that should be clarified and addressed. Overall, the paper merits publication in the HESS after the comments are properly addressed.

SPECIFIC COMMENTS 1) The paper presents the analysis of rainfall-runoff characteristics of floods. All 30 study basins are located in Israel and this should be indicated in the title, abstract and introduction of the paper. 2) Table 1. Value ranges should be denoted by '-' instead of commas. Please correct. 3) Although the dimensionless statistics $\Delta 1$ and $\Delta 2$, and the method of base-flow separation have been presented in other papers and there is reference of those papers in the paper, the authors should present minimum information about them in the paper for clarity and completeness. 4) The return period of flood hydrographs analyzed in the paper is small to moderate. Most of the floods analyzed have a return period smaller than 2-year return period (Fig. 5g). The authors should present and discuss qualitative results for floods of larger return period.

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