

## *Interactive comment on* "Convective rainfall in dry climate: relations with synoptic systems and flash-flood generation in the Dead Sea region" by Idit Belachsen et al.

## Anonymous Referee #2

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This is a well written paper from a strong research team. My specific comments below are in the order I read the paper in: p3I3 - not sure how formative properties can be assessed using rainfall data alone? Anyway, look forward to finding out later in the paper. p5I1 - interesting logic to identify rain cells. I wonder if the authors have seen this paper that is used a fair bit for cell identification - Steiner, M., R. A. Houze, Jr., and S. E. Yuter, 1995: Climatological characterization of three-dimensional storm structure from operational radar and rain gauge data. J. Appl. Meteor., 34, 1978-2007. Some comment on how their approach compares to this one will be of use. Results - I found these to be comprehensive and well presented. I was left with a feeling that this study has skirted off an obvious question pertaining to the results, which is whether rising

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temperatures are increasing such convective cells (and flash flood causing cells) or not. I feel for this paper to be complete, some discussion to this effect should be included as there is considerable evidence out there that such storms are increasing in terms of their intensity as well as there spatial and temporal attributes.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2017-235, 2017.