

General comments: The manuscript “Atmospheric Conditions Leading to an Exceptional Fatal Flash Flood in the Negev Desert, Israel” by Uri Dayan et al. deals with a high-impact severe weather situation across Israel. During the slow passage of an unseasonably intense cut-off trough, a three-day active weather period was observed what is not typical for this time of the year. Rain was produced by both stratiform and convective processes, with the convective storms in the southern portions yielding the highest impact. The authors describe the large-scale situation and present backward trajectories that indicate the advection of moist air masses towards Israel.

The manuscript improved significantly. However, there are still a few aspects that can be elaborated further.

First, the analysis and discussion on the development of instability can be more focused. From the manuscript, the main focus seems to be unseasonable cold mid-level air what is also associated with the intensity of the upper cut-off trough. As strong diurnal heating took place prior to convection initiation, one can argue that this diabatic heating lead to steep lapse rates. In the next step, the overlap of these lapse rates with the rich moisture can be analysed. Finally, indices like CAPE, KI and MKI might be presented to highlight the area of instability.

Second, lift that causes the storms to initiate needs to be addressed. Mesoscale circulations need to be taken into account and it is important to discuss if baroclinic circulations (fronts, outflow boundaries) were present or not. Then, the influence of the topography can be addressed as already presented (lines 323-324). Are there indications that storms moved along such a boundary where low-level convergence is maximized?

Third, next to convection initiation, the potential for storms to produce high amounts of rain needs to be discussed. The amount of rain is dependent on rain intensity (that is also dependent of rain efficiency) and rain duration. From the radar images, it looks like the individual storms were not too large. Given the very localized rain maxima, it may be possible that the slow storm motion contributed to the high rain accumulations. The slow storm motion might be connected to the position of the cut-off trough as the trough center was located over the area of severe storms. The rain efficiency can be also discussed, e.g. with respect to limited entrainment given a relatively moist profile (with a history of deep moist convection in the days before) and the vertical distribution of CAPE (i.e. skinny CAPE profiles that allow for slow ascent and much time for the rain production process). Moreover, the data can be used to discuss the potential for a warm rain process within a deep warm cloud layer, e.g. due to the high temperature at low levels and the rich moisture content at both low- and mid-levels.