Interactive comment on “The benefit of high-resolution operational weather forecasts for flash flood warning” by J. Younis et al.

Anonymous Referee #4

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Flash floods are one of the most devastating hazards and they are difficult or almost impossible to predict. For ungauged catchments the situation is still worse. The results of the study indicate that high resolution operational weather forecasting combined with a rainfall-runoff model could be useful to determine flash floods more than 24 hours in advance. The case study is promising for operational forecasting although the six months period for the statistical assessment of hits and false alarms was not long enough.

I am not an expert in English, but I think the language could be improved.

Specific Comments:

p. 346, 11: replace ground "truth" with ground measurements
p. 347, 11-12: There are many studies nowadays showing that the occurrence of floods and also flash floods are results of climate changes. I suggest that the authors try to find some and use as evidence in the paper.

p. 348, 3: Numerous studies have already done with radar estimated precipitation (Borga, 2002, etc.) and radar data is becoming more and more applicable in now-casting.

p. 353, 13: The methodology of discharge threshold exceedances could be presented more clearly, especially the determination of critical values. p. 354, 8: The meanings of Qobs and Qcritical obs, Qsim and Qcritical sim are not very clear. Is the accuracy of the simulated discharges critical for the comparison or not? Did the authors make the sensitive analysis?

Technical Comments:

p. 347, 14: A full stop is missing at the end of the statement.

p. 349, 16: A full stop is missing at the end of the statement.

p. 350, 4: ... over the Gard). There is no need to be a bracket after Gard.

p. 350, 7: The citation should be the following: For more detail on the event refer to Delrieu et al. (2005).

p. 356, 28: This is has been observed... (without 'is')

p. 369, Fig. 1. Red circles in the legend show synoptic meteorological stations

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