



The Tecuci, Eastern Romania, flash flood of 5 September 2007

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On 5 September 2007, a flash flood (235 mm of rain in 12 hours), occurred in the city of Tecuci (eastern Romania), causing fatalities and numerous properties damages. Analyses of conventional weather station, radar and high resolution visible satellite imagery, together with ALADIN model analysis, are used to describe the synoptic and mesoscale weather patterns associated with the flash flood. Surface analysis and high resolution visible satellite imagery identified a convergence line that acted to focus thunderstorm development in a limited area. Radar reflectivity indicated that rapid cell generation occurred where the convergent line existed, just north of the Tecuci city, and existence of a strong southerly low level jet, focused the most active convection over the same area during several hours. The aim of this paper is to identify the different mesoscale processes leading to continuous regeneration of convection in the same area that contributes to the heavy rain accumulation in a short period of time in the small watershed located in eastern part of Romania.