

HEAVY RAINS AND FLOODS IN WEST MEDITERRANEAN AREAS: A CLIMATIC FEATURE

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In 1962 an extraordinary flash flood event was produced in Catalonia, Spain, producing 815 casualties. In the last century more than 1500 casualties have been produced in Spain as a consequence of heavy rains and floods, 155 of them, between 1996-1999. However, these events can show very different features: from the very intense rainfalls (instantaneous rainfall rate above 5 mm/min, but very located and short duration (less than 30') until those related with low or moderate rainfall but with a long duration. Some heavy rain events affects simultaneously Spain and France (November 1988, October 1940,...), and sometimes the perturbation arrives until Italy (September, 1992). For those reasons, to improve their management and forecasting they have to be classified. The present work shows a climatology of heavy rain events produced in Spain and their impact (mainly in the Mediterranean coast). Their convective features are also analysed using the information provided by the automatic raingauges network and, sometimes, radar information. Besides this, the storm tracking of convective systems from Spain to the South of France and North/Central Italy are showed for some cases. The work proposes a classification of those events. Finally, the lacks and research lines to improve the knowledge of those events, their prevention, forecasting and management are included.