



September flash floods In Polish Western Carpathian region on the basis of historical data

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September rainfalls in the Polish Western Carpathian region were characterised by a high variability in time. Analysis of the data collected from the pre-instrumental period, and systematic measurements showed positive trend of rainfalls in September, most visible at the break of the 20th and 21st century. Most of the information about the September floods genetically classifies them as autumn floods, as a result of long-term rainfalls. Floods in September 1996 and September 2007 were breaking this pattern, since it occurred at atmospheric pressure systems typical of the summer period. In the Carpathians strong summer rainfall are caused by low pressure centers which are moving from the Mediterranean and northern Italy along the VB track (Van Bebber nomenclature), through Italy, Hungary, and north-east Poland, sometimes through the Black Sea. Those atmospheric pressure center leads to advection of moist air masses from North and are causing heavy rainfalls in Polish Western Carpathians, which often cause catastrophic flooding.