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Extreme precipitation in the Polish Carpathians in the 20th century in the context of last 500 years

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Extreme weather phenomena together with their exceptional course and intensity have always been dangerous for people. In the historical documents such phenomena were marked as basic disasters. First notes about weather phenomena were made in Polish lands in the 10th century. Most information concerns floods caused by intensive rains. Using the data base created within the Millennium project, extreme precipitation cases exceeding 100 mm were analysed. In each case, the intensive precipitation was followed by a summer flood in the Polish Carpathians in the Upper Vistula River basin. Data from the period of instrumental measurements in the 20th century were studied in detail by the analysis of the frequency of occurrence and the spatial and temporal distribution. The results were referred to last 500 years. The information obtained gives approximate image of extreme precipitation in the historical times in Polish lands. All available multi-proxy data were used. Newspapers' notes concerning described phenomena from 1848-1850 published in Kraków were used to complete and verify the quality of data from the early instrumental period and also to complete the data from the period of the Second World War.