

# **The Contribution to the regional Rainfall Distribution for Slovakia**

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It is well known that heavy rains or intensive rains of several days' durations could cause very significant problems in economical and social spheres of the countries. The important damages could be suffered to the environment. In the contribution there are investigated annual maximum rains lasting one day and several days from set of 557 raingauge stations from Slovakia for the period 1951 - 2005. The statistical processing of one-day rains shows the considerable time variation with the inhibition of rain activity in the period 1975 - 1989. There was selected the mountain area in the northern part of Slovakia, where the orographical effect to the precipitation regime occurs. In this region the relation between maximum one-day and several days' rains was investigated. The time variability of statistical characteristics of the annual sets of daily sums of precipitation higher than 1 mm for the period 1901 - 2005 was studied using the collection of representative stations. There are shown the common variation caused by the circulation circumstances and the different position of stations.