



Analysis of precipitation trends detected in the Carpathian Basin during the 20th century

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Decadal trends of several precipitation indices have been analyzed for the Carpathian Basin based on the guidelines suggested by the joint WMO-CCI/CLIVAR Working Group on climate change detection. These climate indices have been determined from daily precipitation amounts and they are related mostly to extreme precipitation conditions. The analysis has been accomplished for the 20th century, focusing on the second half of the period. The statistical trend analysis includes the evaluation of extreme precipitation indices, e.g., the number of wet days (using several threshold values defining extremes), the maximum number of consecutive dry days, the highest 1-day precipitation amount, the greatest 5-day rainfall total, the annual fraction due to extreme precipitation events, etc. The results suggest that regional intensity and frequency of extreme precipitation increased in the Carpathian Basin, while the total precipitation decreased in the region and the mean climate became drier.