



Trends in indices of daily precipitation extremes in Romania, 1961-2005

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Trends in indices of daily precipitation extremes are studied on the basis of daily series of precipitation observations from 120 meteorological stations in Romania for the period 1961-2005. A core set of six extreme precipitation indices were selected (90th percentile of rainday amounts (mm/day), greatest 5-day total rainfall, simple daily intensity, max no. consecutive dry days, % of total rainfall from events > long-term P90, no. of events > long-term 90th percentile of raindays) and seasonally calculated with the STARDEX extremes indices software. Trends in an index were calculated by a simple model of least squares fit and trend significance was tested using a Student's t test. To better understand how precipitation extremes relate to changes in mean climate the trends of seasonal precipitation totals were also calculated. Major findings arising from this analysis may be summarized as widespread significant negative trends of precipitation totals in all seasons except autumn. This characteristic is mostly observed in the south and south-western part of Romania in winter and summer. As for the extreme precipitation the results show that increase of extreme precipitation is observed mostly during spring and summer.