



Representation of the extreme precipitation totals depending on the length of the period, indicated by the Estonian time series in 1957–2009

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Values of the extreme wet and dry conditions for a day or month depend on the observed agrometeorological, hydrological or socio-economical object. Thus a wet or a dry day is a day with too much or too little precipitation up to that day in a specified time period for a specific object. To assess the extreme high and low totals of precipitation for any object in an area we present the graphs with the y-axis showing the maximum and the minimum of the moving total of precipitation depending on the number of days (or months) in the observed period, indicated on the x-axis. The two highest curves on the daily graph show the greatest and smallest maximum totals over the meteorological stations of this area depending on the number of days. Correspondingly, the minimum curves show the smallest and greatest minimum totals of precipitation over the stations. Such graphs have been calculated over time series at 51 Estonian meteorological stations in 1957–2009 and serve as one of the precipitation regime characteristics for Estonia. To show the same totals for longer periods, similar graphs have been built also for monthly data. Such graphs could be one of the basic sources to characterise of the water balance extremes in the region.

This method allows us to show also the extreme precipitation totals up to some particular date (for example for 1 June). For that purpose the selected date is separated from the moving totals and the precipitation values in different time intervals up to that date are presented.