



Seasonal persistency in monthly mean temperatures in Croatia

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In recent years, an effort has been made to homogenize long time-series of temperature in Croatia. Here, these time-series are used to investigate the persistency of monthly mean temperatures, which is of interest for general description of the climate as well as an aspect of seasonal forecasting.

Data from weather stations at the coast, in the mountains as well as in the continental part of Croatia indicate strong persistency of monthly mean temperatures during the warmest part of the year, i.e. a warm July is likely to be followed by a warm August. There is hardly any persistency in the early winter, but some persistency in the latter part of winter.

Possible reasons for the persistency of monthly mean temperatures are the long memory of the soil: a completely dry soil after a warm July favours a warm August through high Bowen ratio. In the late winter, great snow cover during a cold month increases the albedo and contributes to continuing low temperatures.