



New 1981–2010 climatological normal and comparison to previous 1961–1990 and 1971–2000 normals for temperature, precipitation and humidity in Croatia

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Average values of climate parameters over 30-year period (climatological normal) provide an insight into the climate characteristics of the region. Comparison of climate normals for different 30-year periods can gain an insight into the stability of climate conditions of some area or their variability may be an indication of climate change. In this paper, daily data from 20 meteorological stations in Croatia are used to calculate climatological normals for different meteorological parameters (temperature, precipitation and relative humidity) and three 30-year periods (1961–1990, 1971–2000 and 1981–2010). Although Croatia is relatively small country, large topographic variety, openness towards Pannonian Plain and position along the Adriatic Sea define different regions, so selection of the stations is in accordance with that. Spatial distribution of climatological normals of chosen parameters for the latest period 1981–2010 and relative changes with regard to previous two 30-year periods are shown. Important temperature and precipitation indices, like number of cold or warm days and number of day above some precipitation threshold, as well as number of days with some of the weather phenomena (fog, hail and frost) are discussed in the climate change context.