

## **The Large-Scale Atmospheric Circulation and Extreme Temperature Events in Serbia**

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The aim of this study was analysis of the connection between large-scale atmospheric circulation and extreme temperature events in Serbia for the period 1949-2009. We have used SynopVis Grosswetterlagen (SVG) system for classifying European synoptic regimes in order to determine the atmospheric circulation patterns that are favorable for extreme warm and cold events. The SVG system is based on NCEP-Reanalyses and using MSLP, Z500 and T850 for 29 objective calculated Hess-Brezowsky circulation types. The case analysis for the observed absolute maximum and minimum temperatures for 17 stations in Serbia shows the favorite circulation types for these events. In most of cases the warm temperature events were observed during the western, northwestern and southwestern circulation types. These situations are characterized by cyclonic conditions over Central Europe and high pressure in Mediterranean area with penetrations of warm air from the south and southwest directions. The northern and eastern circulation types are dominant for extreme cold events and they are characterized by invasion of cold air from the north, northeast and east directions and anticyclonic conditions almost the whole of Europe. Finally, the trends for these events and the frequency of circulation types were discussed for the analyzed time period.